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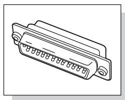
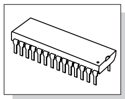
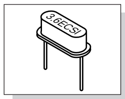
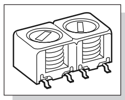
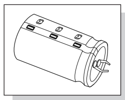
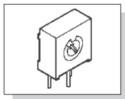
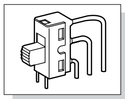
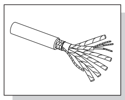
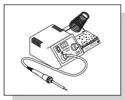
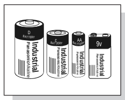
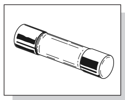
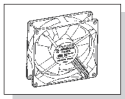
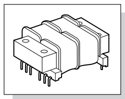
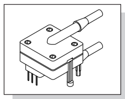
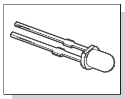
	Connectors, Cable Assemblies, IC Sockets	16-227	INCLUDES SMT	A
	Semiconductors, ICs, Transistors, Diodes, Rectifiers	228-503	INCLUDES SMT	B
	Crystals, Oscillators	504-527	INCLUDES SMT	C
	Inductors, Coils, Filters	528-574	INCLUDES SMT	D
	Capacitors	575-663	INCLUDES SMT	E
	Resistors, Potentiometers, Thermistors, ZNRs	664-726	INCLUDES SMT	F
	Switches, Relays, Electromechanical	727-811	INCLUDES SMT	G
	Wire, Cable & Access., Buzzers, Mics, Speakers	812-836		H
	Prototyping, Tools, Solder, Test Equipment	837-891	INCLUDES SMT	I
	Batteries	892-901	INCLUDES SMT	J
	Fuses	902-919	INCLUDES SMT	K
	Fans	920-931		L
	Transformers, Power Supplies	932-959	INCLUDES SMT	M
	Sensors and Industrial Controls	960-995	INCLUDES SMT	N
	Optoelectronics, LEDs, LCDs, Lasers, Displays	996-1040	INCLUDES SMT	O

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Conversion Chart

inch	*to*	mm	inch x 25.4
mm	*to*	inch	mm ÷ 25.4
inch	*to*	cm	inch x 2.54
cm	*to*	inch	cm x .3937
feet	*to*	meters	foot x .3048
meters	*to*	feet	meter x 3.28084
ounce	*to*	grams	oz. x 28.349
pounds	*to*	kilograms	lb. x .4536
µf	*to*	pf	.1µf = 100,000pf
µf	*to*	nf	.1µf = 100nf
pf	*to*	nf	100,000pf = 100nf
nf	*to*	µf	100nf = .1µf
celsius	*to*	fahrenheit	c x 1.8 + 32
fahrenheit	*to*	celsius	f – 32 ÷ 1.8

VA = volt x amps
watt = volt x amps

MAIL/FAX ORDER FORM

#T023

www.Digi-Key.com®

701 Brooks Ave. South
P.O. Box 677
Thief River Falls, MN 56701-0677

	No. of Pages:
To:	**From:**
Co.: *Digi-Key Corporation*	**Co.:**
Dept.: *Order Department*	**Phone No:**
Fax No: *218-681-3380*	**Fax No:**

(Please Check One)
Payment Method: ☐ Credit Card ☐ COD ☐ Check or MO ☐ Open Acct.

Card Number: ☐☐☐☐-☐☐☐☐-☐☐☐☐-☐☐☐☐
☐MC ☐VISA
☐AmEx ☐Discover

Expiration Date ☐☐ ☐☐
Mo. Yr.

Security Code *(See back of card.)* ☐☐☐☐

Credit Card Holder's Name (Please Print Clearly) ____________________

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Quantity		Digi-Key Part No.	Description (brief)	Price/Unit	Total Price
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
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14					
15					
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17					
18					
19					
20					

Ship Via: ____________________

Are substitutions acceptable?
☐ Yes ☐ No

Are backorders acceptable?
☐ Yes ☐ No

Backordered for a period of ______ days.

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Confirmation required?
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Our friendly sales representatives are ready to serve you from 7:30a.m. to 11:00p.m. Central Time Monday through Friday. For most efficient service, please have ready a list of quantities and part numbers and, if paying by credit card, your MasterCard, VISA, American Express or Discover card.

Note: Calls may be recorded or monitored for quality and training purposes.

☐ By Fax: 218-681-3380

Digi-Key Fax lines can be accessed 24-hours a day, 7-days a week, 365-days a year. Depending on the shipping method; fax orders will be processed and shipped according to the "Orders entered by times" listed below under ***Shipment***. Orders received after these cutoff times will be processed and shipped the next business day. Please include your daytime telephone number and/or e-mail address in case we have any questions about your order.

☐ By Internet: www.digikey.com

Order on-line 24-hours a day, 7 days a week, 365 days a year. Digi-Key's Top Rated website receives hundreds-of-thousands of orders each year. Internet orders received after normal business hours are promptly processed and shipped the next business day.

☐ By Mail: Simply Mail Your Order To:

Digi-Key Corporation
701 Brooks Avenue South
P.O. Box 677
Thief River Falls, MN 56701-0677

International customers please see "International Orders" below for additional information.

Ordering Information

Prices/Quantities:

Digi-Key makes every effort to present current and accurate pricing in its catalog and on its Web site. However, prices are subject to change without notice and quantities may be limited. All orders are subject to current pricing at time of acceptance by Digi-Key. Digi-Key country specific websites offer alternative currencies. No trade in other currencies will be accepted.

Shipment:

Digi-Key's offices and warehouse are open and staffed Monday through Friday, 7:30a.m.-11:00p.m. Central Time (subject to holidays). Orders are shipped only on these business days. Orders and correspondence received on Saturday and Sunday will be addressed/shipped on the following Monday and included in that day's business.

Digi-Key's cut-off times for Same-Day Shipment Monday-Friday are as follows:

- Orders entered by 6:00 p.m. CT*–All USPS Options (Express Mail delayed 1 day).
- Orders entered by 7:00 p.m. CT*–All FedEx air options.
- Orders entered by 8:00 p.m. CT*–All UPS air and surface options.

Shipping Charges:

Shipping or freight charges and insurance will be paid by the customer*. All sales are made FOB point (as defined by the INCOTERMS 2000) in Thief River Falls, MN, USA. Shipping or freight charges from Digi-Key's warehouse in Thief River Falls, MN are prepaid and added to the invoice, billed collect or billed to a 3rd party.

* When a check or money order accompanies your order, Digi-Key pays all shipping and insurance (our choice for method of shipping) to all addresses in the U.S.A. and Canada, unless such charges exceed 10% on orders of $200 or less, or 5% on orders greater than $200. Digi-Key will notify you prior to shipment if these conditions exist.

Handling Charge:

- A $5.00 handling charge applies to all orders less than $25.00.
- A $6.50 processing fee will be applied to all International orders, excluding Canada.

Sales Tax:

Only Minnesota residents need to remit 6.5% sales tax. Digi-Key does not remit sales tax to states other than Minnesota. Any sales tax due that is not collected by Digi-Key is the responsibility of the customer.

Payment:

Digi-Key offers a number of convenient payment methods:
For United States customers we offer check, money order, MasterCard, VISA, American Express, Discover, and C.O.D. as well as open account credit to qualified institutions and businesses.

For Canadian customers we offer all of the above payment options except C.O.D.

For International customers see "International Orders" below.

To obtain a credit application for open account credit contact any sales representative by calling 800-344-4539 (U.S. & Canada) or 218-681-6674 or faxing your request to 218-681-3380. Or, you may go to www.digikey.com and click on "Contact Us", which will bring you to the "Digi-Key Communications" page. Then click on "Net 30 Credit Application" in the "Accounting" box. Please allow sufficient time for the credit approval process. To avoid delay on your initial order you may elect an alternative payment method.

Dishonored Check Policy:

If a check you give us for payment is dishonored for any reason by the bank or other institution on which it is drawn, you agree to pay us $20.00 as a service charge (if the check cannot be redeposited) pursuant to Minnesota Statutes § 332.50. In addition, you agree to pay any other reasonable charges imposed by any check verification company or collection agency that we may use for collection.

Out-Of-Stock:

On orders paid by check, money order or credit card items not available for immediate shipment will be shipped as they become available. Items not available at the end of 30 days will be cancelled and refunded/credited in cases of prepayment. The number of backorder days may be extended beyond 30 days at customer's request. If a refund check is issued, the cancelled item can be re-entered without a handling charge if the check and cancellation notice are returned to us.

On orders billed to customers with open account credit items not available for immediate shipment will be shipped and billed as they become available. Items not available at the end of 90 days will be cancelled. The number of backorder days may be extended beyond 90 days at customers request.

International Orders:

In addition to the United States and its territories, Digi-Key accepts international orders. All orders of international origin are exported from the U.S. in accordance with the Export Administration Regulations. Diversion contrary to U.S. Law is prohibited. An additional handling charge of $6.00 will be included for processing and invoicing. All duties and taxes will be the responsibility of the customer.

Payment options for International customers: MasterCard, VISA, American Express, Discover, cashier's check in U.S. funds, as well as open account credit to qualified institutions and businesses. We cannot accept personal checks or certified personal checks. Money orders can result in significant delays. Use of Letters of Credit must be approved in advance by Digi-Key's Accounting Department.

To obtain a credit application for open account credit contact any sales representative by calling 218-681-6674 or faxing your request to 218-681-3380. Or, you may go to www.digikey.com and click on "Contact Us", which will bring you to the "Digi-Key Communications" page. Then click on "Net 30 Credit Application" in the "Accounting" box. Please allow sufficient time for the credit approval process. To avoid delay on your initial order you may elect an alternative payment method.

Customer Service:

Voice: 800-858-3616 in (U.S. & Canada) or 218-681-6674

Fax: 218-681-3380

Internet: www.digikey.com (click "Contact Us")

Mail: Digi-Key Corporation
Attn: Customer Service
P.O. Box 677
Thief River Falls, MN 56701-0677

A friendly, competent staff of customer service representatives is available Monday through Friday, 7:30 a.m. to 11:00 p.m. Central Time to assist you. Please have your sales order or invoice number available when you call.

Freight Damage:

If you receive merchandise that has been damaged in transit, it is important to keep the shipping carton, packing material and parts intact. Please contact a Digi-Key Customer Service representative immediately to initiate a claim. See "Customer Service" above for contact information.

Return Policy:

Digi-Key accepts merchandise returns subject to the terms outlined below and will replace the product or refund your money at your option.
To facilitate processing of returned merchandise:

- Please contact a Customer Service Representative to obtain an RMA (Returned Merchandise Authorization) number prior to returning product. See "Customer Service" above for contact information.
- All returns should be made within 30 days of date of invoice and be accompanied by the original invoice number and a brief explanation of the reason for the return.
- Return freight charge must be prepaid. Sorry, C.O.D. returns cannot be accepted.
- Returned merchandise must be in original packaging and resalable condition.
- Parts returned due to customer error may by subject to a restocking charge. "Not-in Catalog Items" and parts specified as "Non-Cancelable/Non-Returnable" at time of quote or sale are not returnable.
- Defective merchandise may be returned within 90 days of the original invoice date and need not be in original packaging.

Duplicate Mailings:

If you receive more than one catalog with the same name and address, please return the labels to Digi-Key and pass the catalog along to a friend. Also, if you do not require multiple copies to the same company address, contact a sales representative to verify your mailing information. A forms based communications method for catalog issues (Receive, Remove, Change of Address) can be accessed at www.digikey.com by clicking "Contact Us", which brings you to the "Digi-Key Communications" page. Then click "Catalog Mailing List" and scroll to "Service Out Options" to note your preferences. Alternatively, you may mail, telephone or fax Digi-Key your request.

Environmental Note:

Anti-static packing peanuts used by Digi-Key contain no CFC's and are biodegradable. Digi-Key's catalogs are printed on recycled paper using vegetable-based ink.

Privacy Policy:

Your privacy preferences as a Digi-Key customer are important to us. Although we occasionally make the names and addresses of our customer list available to selected companies that offer products or services that may be of interest to you, you may request to "opt out" of these mailings by going to www.digikey.com and clicking "Contact Us", which brings you to the "Digi-Key Communications" page. Then click "Remove from the List" in the "Catalog Mailing List" box. This brings you to the "Digi-Key Catalog Request" page which offers a number of "Service Opt Out Options". Alternatively, you may mail, telephone or fax Digi-Key your request.

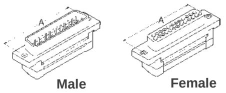
ISO 9002 Certified:

Digi-Key's operations from order entry through shipping have been fully ISO certified since March 17,1994 and are recertified on an annual basis. Copies of our quality manual are available at www.digikey.com or upon verbal or written request. A copy of Digi-Key Corporation's ISO Certification is also available by request.

ISO
9002
CERTIFIED

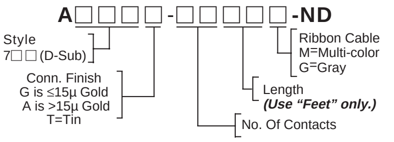
AMP tyco Electronics **Authorized Distributor**

D-Subminiature Connectors



Material and Finish: Plastic Shell: Housing, Cover & Cable Stabilizer — 94V-0 rated thermoplastic, black **Metal Shell: Front Shell —** Steel, tin plated **Housing, Cover & Cable Stabilizer —** 94V-0 rated thermoplastic, black **Contacts —** Phosphor bronze, duplex plated 30µ" gold on mating end, tin-lead on termination end, with entire contact nickel underplated **Threaded Inserts —** Brass, unplated **Mounting Holes: Standard —** .120" (3.05mm) Dia. • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
• Certified by Canadian Standards Assoc., File No. LR 46568

No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	AMP Part No.
Male D-Sub Conn., Plastic Shell						
9	Gold	.984 (24.99)	AMS09G-ND	6.45	30.94	747321-4
15	Gold	1.312 (33.32)	AMS15G-ND	7.51	36.03	747321-3
25	Gold	1.852 (47.04)	AMS25G-ND	9.36	44.93	747321-2
37	Gold	2.500 (63.50)	AMS37G-ND	12.80	61.46	747321-1
Male D-Sub Conn., Metal Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AML09K-ND	8.74	41.96	747043-4
15	Gold	1.312 (33.32)	AML15K-ND	9.80	47.05	747043-3
25	Gold	1.852 (47.04)	AML25K-ND	11.75	56.38	747043-2
37	Gold	2.500 (63.50)	AML37K-ND	15.01	72.06	747043-1
Female D-Sub Conn., Plastic Shell						
9	Gold	.984 (24.99)	AFS09G-ND	6.45	30.94	747318-4
15	Gold	1.312 (33.32)	AFS15G-ND	7.51	36.03	747318-3
25	Gold	1.852 (47.04)	AFS25G-ND	9.36	44.93	747318-2
37	Gold	2.500 (63.50)	AFS37G-ND	12.80	61.46	747318-1
Female D-Sub Conn., Metal Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AFL09K-ND	8.74	41.96	747052-4
15	Gold	1.312 (33.32)	AFL15K-ND	9.80	47.05	747052-3
25	Gold	1.852 (47.04)	AFL25K-ND	11.75	56.38	747052-2
37	Gold	2.500 (63.50)	AFL37K-ND	15.01	72.06	747052-1
Male D-Sub Conn., Metal Shell						
9	Gold	.984 (24.99)	AMR09G-ND	6.98	33.49	747306-4
15	Gold	1.312 (33.32)	AMR15G-ND	7.95	38.15	747306-3
25	Gold	1.852 (47.04)	AMR25G-ND	9.89	47.48	747306-2
37	Gold	2.500 (63.50)	AMR37G-ND	13.25	63.58	747306-1
50	Gold	2.406 (61.11)	AMR50G-ND	10.85	88.35	746790-1
Male D-Sub Conn., Plastic Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AMV09K-ND	8.30	39.85	747053-4
15	Gold	1.312 (33.32)	AMV15K-ND	9.36	44.93	747053-3
25	Gold	1.852 (47.04)	AMV25K-ND	11.22	53.83	747053-2
37	Gold	2.500 (63.50)	AMV37K-ND	14.57	69.94	747053-1
Female D-Sub Conn., Metal Shell						
9	Gold	.984 (24.99)	AFR09G-ND	6.98	33.49	747303-4
15	Gold	1.312 (33.32)	AFR15G-ND	7.95	38.15	747303-3
25	Gold	1.852 (47.04)	AFR25G-ND	9.89	47.48	747303-2
37	Gold	2.500 (63.50)	AFR37G-ND	13.25	63.58	747303-1
50	Gold	2.406 (61.11)	AFR50G-ND	12.39	100.89	746789-1
Female D-Sub Conn., Plastic Shell, w/Threaded Inserts						
9	Gold	.984 (24.99)	AFV09K-ND	8.30	39.85	747051-4
15	Gold	1.312 (33.32)	AFV15K-ND	9.36	44.93	747051-3
25	Gold	1.852 (47.04)	AFV25K-ND	11.22	53.83	747051-2
37	Gold	2.500 (63.50)	AFV37K-ND	14.57	69.94	747051-1
Cable Strain Relief/Stabilizer						
9	—	—	ADSR09-ND	.32	2.52	747275-4
15	—	—	ADSR15-ND	.36	2.84	747275-3
25	—	—	ADSR25-ND	.40	3.15	747275-2
37	—	—	ADSR37-ND	.48	3.79	747275-1
50	—	—	ADSR50-ND	1.00	7.89	746785-1



D-Subminiature Cable Assemblies

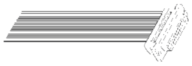
Single Ended — Male

* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7MXG-0906M-ND	8.53	69.44
	Gold	6 (1.83)	GR	A7MXG-0906G-ND	8.27	67.30
	Gold	10 (3.05)	MC	A7MXG-0910M-ND	9.50	77.39
	Gold	10 (3.05)	GR	A7MXG-0910G-ND	9.07	73.83
15	Gold	6 (1.83)	MC	A7MXG-1506M-ND	10.78	87.80
	Gold	6 (1.83)	GR	A7MXG-1506G-ND	9.96	81.14
	Gold	10 (3.05)	MC	A7MXG-1510M-ND	12.53	102.05
	Gold	10 (3.05)	GR	A7MXG-1510G-ND	11.17	90.94
25	Gold	6 (1.83)	MC	A7MXG-2506M-ND	14.24	115.96
	Gold	6 (1.83)	GR	A7MXG-2506G-ND	13.08	106.51
	Gold	10 (3.05)	MC	A7MXG-2510M-ND	16.99	138.33
	Gold	10 (3.05)	GR	A7MXG-2510G-ND	15.05	122.58
37	Gold	6 (1.83)	MC	A7MXG-3706M-ND	19.73	160.67
	Gold	6 (1.83)	GR	A7MXG-3706G-ND	18.24	148.53
	Gold	10 (3.05)	MC	A7MXG-3710M-ND	23.75	193.42
	Gold	10 (3.05)	GR	A7MXG-3710G-ND	21.27	173.19

Also available in the following configuration:
A7PX□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Single Ended — Female

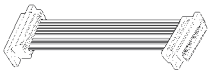


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7FXG-0906M-ND	8.56	69.72
	Gold	6 (1.83)	GR	A7FXG-0906G-ND	8.30	67.58
	Gold	10 (3.05)	MC	A7FXG-0910M-ND	9.54	77.67
	Gold	10 (3.05)	GR	A7FXG-0910G-ND	9.10	74.11
15	Gold	6 (1.83)	MC	A7FXG-1506M-ND	11.65	94.88
	Gold	6 (1.83)	GR	A7FXG-1506G-ND	10.83	88.21
	Gold	10 (3.05)	MC	A7FXG-1510M-ND	13.40	109.13
	Gold	10 (3.05)	GR	A7FXG-1510G-ND	12.04	98.01
25	Gold	6 (1.83)	MC	A7FXG-2506M-ND	14.82	120.70
	Gold	6 (1.83)	GR	A7FXG-2506G-ND	13.66	111.26
	Gold	10 (3.05)	MC	A7FXG-2510M-ND	17.57	143.07
	Gold	10 (3.05)	GR	A7FXG-2510G-ND	15.64	127.34
37	Gold	6 (1.83)	MC	A7FXG-3706M-ND	21.21	172.71
	Gold	6 (1.83)	GR	A7FXG-3706G-ND	19.72	160.57
	Gold	10 (3.05)	MC	A7FXG-3710M-ND	25.23	205.46
	Gold	10 (3.05)	GR	A7FXG-3710G-ND	22.75	185.22

Also available in the following configuration:
A7SX□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Male to Male

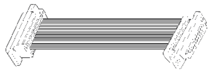


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7MMG-0906M-ND	15.59	126.95
	Gold	6 (1.83)	GR	A7MMG-0906G-ND	15.33	124.82
	Gold	10 (3.05)	MC	A7MMG-0910M-ND	16.57	134.91
	Gold	10 (3.05)	GR	A7MMG-0910G-ND	16.13	131.34
15	Gold	6 (1.83)	MC	A7MMG-1506M-ND	18.94	154.23
	Gold	6 (1.83)	GR	A7MMG-1506G-ND	18.12	147.56
	Gold	10 (3.05)	MC	A7MMG-1510M-ND	20.69	168.48
	Gold	10 (3.05)	GR	A7MMG-1510G-ND	19.33	157.37
25	Gold	6 (1.83)	MC	A7MMG-2506M-ND	24.36	198.35
	Gold	6 (1.83)	GR	A7MMG-2506G-ND	23.20	188.91
	Gold	10 (3.05)	MC	A7MMG-2510M-ND	27.11	220.73
	Gold	10 (3.05)	GR	A7MMG-2510G-ND	25.17	204.98
37	Gold	6 (1.83)	MC	A7MMG-3706M-ND	35.81	291.56
	Gold	6 (1.83)	GR	A7MMG-3706G-ND	21.44	174.59
	Gold	10 (3.05)	MC	A7MMG-3710M-ND	37.45	304.98
	Gold	10 (3.05)	GR	A7MMG-3710G-ND	34.97	284.74

Also available in the following configuration:
A7PP□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Female to Female

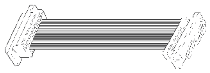


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7FFG-0906M-ND	15.66	127.51
	Gold	6 (1.83)	GR	A7FFG-0906G-ND	15.40	125.37
	Gold	10 (3.05)	MC	A7FFG-0910M-ND	15.48	126.06
	Gold	10 (3.05)	GR	A7FFG-0910G-ND	16.20	131.90
15	Gold	6 (1.83)	MC	A7FFG-1506M-ND	20.68	168.38
	Gold	6 (1.83)	GR	A7FFG-1506G-ND	19.86	161.71
	Gold	10 (3.05)	MC	A7FFG-1510M-ND	22.43	182.63
	Gold	10 (3.05)	GR	A7FFG-1510G-ND	21.06	171.51
25	Gold	6 (1.83)	MC	A7FFG-2506M-ND	25.53	207.85
	Gold	6 (1.83)	GR	A7FFG-2506G-ND	24.36	198.39
	Gold	10 (3.05)	MC	A7FFG-2510M-ND	28.27	230.22
	Gold	10 (3.05)	GR	A7FFG-2510G-ND	26.34	214.46
37	Gold	6 (1.83)	MC	A7FFG-3706M-ND	36.39	296.31
	Gold	6 (1.83)	GR	A7FFG-3706G-ND	34.90	284.17
	Gold	10 (3.05)	MC	A7FFG-3710M-ND	40.41	329.06
	Gold	10 (3.05)	GR	A7FFG-3710G-ND	37.93	308.83

Also available in the following configuration:
A7SS□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

Male to Female



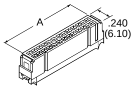
* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length Feet (Meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
9	Gold	6 (1.83)	MC	A7MFG-0906M-ND	15.62	127.23
	Gold	6 (1.83)	GR	A7MFG-0906G-ND	15.36	125.09
	Gold	10 (3.05)	MC	A7MFG-0910M-ND	16.60	135.18
	Gold	10 (3.05)	GR	A7MFG-0910G-ND	16.16	131.62
15	Gold	6 (1.83)	MC	A7MFG-1506M-ND	19.81	161.31
	Gold	6 (1.83)	GR	A7MFG-1506G-ND	18.99	154.64
	Gold	10 (3.05)	MC	A7MFG-1510M-ND	21.56	175.56
	Gold	10 (3.05)	GR	A7MFG-1510G-ND	20.20	164.45
25	Gold	6 (1.83)	MC	A7MFG-2506M-ND	23.78	193.65
	Gold	6 (1.83)	GR	A7MFG-2506G-ND	23.75	193.40
	Gold	10 (3.05)	MC	A7MFG-2510M-ND	27.69	225.47
	Gold	10 (3.05)	GR	A7MFG-2510G-ND	25.76	209.72
37	Gold	6 (1.83)	MC	A7MFG-3706M-ND	34.91	284.27
	Gold	6 (1.83)	GR	A7MFG-3706G-ND	33.42	272.13
	Gold	10 (3.05)	MC	A7MFG-3710M-ND	38.93	317.02
	Gold	10 (3.05)	GR	A7MFG-3710G-ND	36.45	296.78

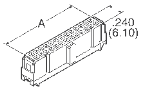
Also available in the following configuration:
A7PS□-□□□□□-ND – With Metal Shell Connector.
Call for complete part number and pricing!

AMP tyco Electronics **Authorized Distributor**

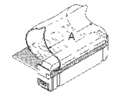
Socket Connectors



Socket Connector



Socket Connector with Central Polarizing Key



Permanent Pull-Tabs To Be Used With Strain Relief Version

Material and Finish:

- **Housing, Cover & Strain Relief —** Black thermoplastic, 94V-0 rated
- **Gold Finish: Contacts —** Phosphor bronze, duplex 15µ" gold or 30µ" gold on post/pin mating end, 100µ"-200µ" bright tin-lead on termination end, with entire contact underplated 50µ" nickel

No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	AMP Part No.
Socket Connector Only (Strain Reliefs Sold Separately)						
10	15µ" AU	.68 (17.27)	ASC10G-ND	1.11	5.24	499997-1
14	15µ" AU	.88 (22.35)	ASC14G-ND	1.62	7.66	499997-2
16	15µ" AU	.98 (24.89)	ASC16G-ND	1.70	8.07	499997-3
20	15µ" AU	1.18 (29.97)	ASC20G-ND	1.79	8.47	499997-4
24	15µ" AU	1.38 (35.05)	ASC24G-ND	2.21	10.49	499997-5
26	15µ" AU	1.48 (37.59)	ASC26G-ND	2.21	10.49	499997-6
30	15µ" AU	1.68 (42.67)	ASC30G-ND	2.47	11.70	499997-7
34	15µ" AU	1.88 (47.75)	ASC34G-ND	2.47	11.70	499997-8
40	15µ" AU	2.18 (55.37)	ASC40G-ND	2.72	12.91	499997-9
50	15µ" AU	2.68 (68.07)	ASC50G-ND	3.32	15.73	1-499997-0
60	15µ" AU	3.18 (80.77)	ASC60G-ND	4.25	20.17	1-499997-1
64	15µ" AU	3.38 (85.85)	ASC64G-ND	4.68	22.18	1-499997-2
10	30µ" AU	.680 (17.27)	ASN10A-ND	1.36	6.45	746290-1
14	30µ" AU	.880 (22.35)	ASN14A-ND	1.79	8.47	746290-2
16	30µ" AU	.980 (24.89)	ASN16A-ND	1.87	8.87	746290-3
20	30µ" AU	1.180 (29.97)	ASN20A-ND	1.96	9.28	746290-4
24	30µ"AU	1.380 (35.05)	ASN24A-ND	2.21	10.49	746290-5
26	30µ" AU	1.480 (37.59)	ASN26A-ND	2.21	10.49	746290-6
30	30µ" AU	1.680 (42.67)	ASN30A-ND	2.55	12.10	746290-7
34	30µ" AU	1.880 (47.75)	ASN34A-ND	2.81	13.31	746290-8
40	30µ" AU	2.180 (55.37)	ASN40A-ND	3.32	15.73	746290-9
50	30µ" AU	2.670 (68.07)	ASN50A-ND	4.00	18.96	1-746290-0
60	30µ" AU	3.180 (80.77)	ASN60A-ND	4.93	23.39	1-746290-1
64	30µ" AU	3.380 (85.85)	ASN64A-ND	5.44	25.81	1-746290-2
Socket Connector With Polarizing Key						
10	15µ" AU	.68 (17.27)	AKC10G-ND	1.11	5.24	746285-1
14	15µ" AU	.88 (22.35)	AKC14G-ND	1.62	7.66	746285-2
16	15µ" AU	.98 (24.89)	AKC16G-ND	1.70	8.07	746285-3
20	15µ" AU	1.18 (29.97)	AKC20G-ND	1.79	8.47	746285-4
24	15µ" AU	1.38 (35.05)	AKC24G-ND	2.21	10.49	746285-5
26	15µ" AU	1.48 (37.59)	AKC26G-ND	2.21	10.49	746285-6
30	15µ" AU	1.68 (42.67)	AKC30G-ND	2.47	11.70	746285-7
34	15µ" AU	1.88 (47.75)	AKC34G-ND	2.47	11.70	746285-8
40	15µ" AU	2.18 (55.37)	AKC40G-ND	2.72	12.91	746285-9
50	15µ" AU	2.68 (68.07)	AKC50G-ND	3.32	15.73	1-746285-0
60	15µ" AU	3.18 (80.77)	AKC60G-ND	4.25	20.17	1-746285-1
64	15µ" AU	3.38 (85.85)	AKC64G-ND	4.68	22.18	1-746285-2
10	30µ" AU	.680 (17.27)	AKN10A-ND	1.36	6.45	746288-1
14	30µ" AU	.880 (22.35)	AKN14A-ND	1.79	8.47	746288-2
16	30µ" AU	.980 (24.89)	AKN16A-ND	1.87	8.87	746288-3
20	30µ" AU	1.180 (29.97)	AKN20A-ND	1.96	9.28	746288-4
24	30µ" AU	1.380 (35.05)	AKN24A-ND	2.21	10.49	746288-5
26	30µ" AU	1.480 (37.59)	AKN26A-ND	2.21	10.49	746288-6
30	30µ" AU	1.680 (42.67)	AKN30A-ND	2.81	13.31	746288-7
34	30µ" AU	1.880 (47.75)	AKN34A-ND	2.81	13.31	746288-8
40	30µ" AU	2.180 (55.37)	AKN40A-ND	3.32	15.73	746288-9
44	30µ" AU	2.380 (60.45)	AKN44A-ND	3.91	18.55	1-746288-3
50	30µ" AU	2.670 (68.07)	AKN50A-ND	4.00	18.96	1-746288-0
60	30µ" AU	3.180 (80.77)	AKN60A-ND	4.93	23.39	1-746288-1
64	30µ" AU	3.380 (85.85)	AKN64A-ND	5.44	25.81	1-746288-2
Strain Relief For Socket Connectors						
10	—	.68 (17.27)	ASSR10-ND	.19	1.72	499252-5
14	—	.88 (22.35)	ASSR14-ND	.19	1.72	499252-9
16	—	.98 (24.89)	ASSR16-ND	.19	1.72	499252-8
20	—	1.18 (29.97)	ASSR20-ND	.19	1.72	499252-2
24	—	1.38 (35.05)	ASSR24-ND	.23	2.06	1-499252-0
26	—	1.48 (37.59)	ASSR26-ND	.23	2.06	499252-3
30	—	1.68 (42.67)	ASSR30-ND	.23	2.06	1-499252-2
34	—	1.88 (47.75)	ASSR34-ND	.23	2.06	499252-6
40	—	2.18 (55.37)	ASSR40-ND	.27	2.41	499252-1
44	—	2.38 (60.45)	ASSR44-ND	.31	2.75	1-499252-1
50	—	2.68 (68.07)	ASSR50-ND	.31	2.75	499252-4
60	—	3.18 (80.77)	ASSR60-ND	.35	3.09	499252-7
64	—	3.38 (85.85)	ASSR64-ND	.42	3.78	1-499252-3
Permanent Pull Tabs (For Conn. w/Strain Reliefs)						
10	—	.44 (11.18)	ASPT10-ND	.13	1.17	88450-2
14	—	.64 (16.26)	ASPT14-ND	.14	1.25	88450-3
16	—	.74 (18.80)	ASPT16-ND	.14	1.28	88450-4
20	—	.88 (22.35)	ASPT20-ND	.16	1.41	88450-5
24	—	1.08 (27.43)	ASPT24-ND	.17	1.54	88450-6
26	—	1.18 (29.97)	ASPT26-ND	.18	1.61	88450-7
30	—	1.38 (35.05)	ASPT30-ND	.19	1.74	1-88450-2
34	—	1.58 (40.13)	ASPT34-ND	.21	1.87	88450-8
40	—	1.82 (46.23)	ASPT40-ND	.23	2.07	88450-9
50	—	2.32 (58.93)	ASPT50-ND	.27	2.40	1-88450-0
60	—	2.80 (71.12)	ASPT60-ND	.31	2.73	1-88450-1
Continous strip no positions		120.0 (3048.0)	ASPT01-ND	18.59	166.45	88450-1
Keying Plug For Socket Connectors						
Keying Plugs			ASKP01-ND	.30	2.67	499712-1
Keying Plugs 10/Comb			ASKP02-ND	.93	8.38	104072-1

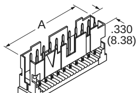
(Continued)

AMP tyco Electronics **Authorized Distributor**

Socket Connectors *(Cont.)*

No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	AMP Part No.
Snap-In Polarizer						
For Pin Connectors, Universal Pin, Pinless Headers and Low Profile Pin Headers			A24195-ND	1.12	10.08	499991-2
Socket Connector Only (Strain Reliefs Sold Separately)						
16	30µ” AU	.980 (24.89)	ASC16A-ND	1.44	11.69	111634-3
60	30µ” AU	3.180 (80.77)	ASC60A-ND	3.40	27.65	1-111634-1
Socket Connector With Polarizing Key						
14	30µ” AU	.880 (22.35)	AKC14A-ND	1.33	10.83	111633-2
Strain Relief						
14	—	.880 (22.35)	ASSU14-ND	.20	1.78	111564-9
16	—	.980 (24.89)	ASSU16-ND	.20	1.84	111564-8
60	—	3.180 (80.77)	ASSU60-ND	.37	3.36	111564-7
64	—	3.380 (85.85)	ASSU64-ND	.41	3.71	1-111564-3

Pin Connectors

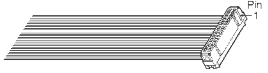


Material and Finish: Housing & Cover – Black thermoplastic, 94V-0 rated **Electrical Characteristics –** Contact current rating: 1 amp. **Operating temp:** -55°C to +105°C **Dielectric Withstanding Voltage:** receptacles- 1000 volts, RMS, pin connectors- 500 volts, RMS. **Contacts –** Phosphor bronze, duplex plated .000015 gold pin end; .000100- .000200 bright tin-lead on cable termination end; entire contact underplated with .000050 nickel • Recognized under Component Program of Underwriters Laboratories Inc. File No. E28476 • Certified by Canadian Standards Association File No. LR16455

No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	AMP Part No.
Pin Connectors (Strain Reliefs Sold Separately)						
16	Gold	1.172 (29.77)	APK16G-ND	8.26	67.26	111445-3
34	Gold	2.072 (52.63)	APK34G-ND	10.08	82.08	111445-8
40	Gold	2.372 (60.25)	APK40G-ND	10.64	86.64	111445-9
60	Gold	3.372 (85.65)	APK60G-ND	14.00	114.00	1-111445-2
Strain Reliefs For Pin Connectors						
26	—	—	APSR26-ND	2.47	22.20	111547-6

Termination Jumpers

Socket Connector — Single Ended

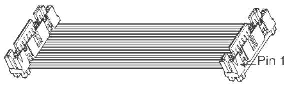


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Gold	36 (91.44)	MC	A1AXG-1036M-ND	1.92	15.67
	Gold	36 (91.44)	GR	A1AXG-1036G-ND	1.67	13.58
14	Gold	36 (91.44)	MC	A1AXG-1436M-ND	2.77	22.52
	Gold	36 (91.44)	GR	A1AXG-1436G-ND	2.41	19.65
16	Gold	36 (91.44)	MC	A1AXG-1636M-ND	3.01	24.54
	Gold	36 (91.44)	GR	A1AXG-1636G-ND	2.60	21.20
20	Gold	36 (91.44)	MC	A1AXG-2036M-ND	3.57	29.09
	Gold	36 (91.44)	GR	A1AXG-2036G-ND	3.06	24.94
26	Gold	36 (91.44)	MC	A1AXG-2636M-ND	4.35	35.38
	Gold	36 (91.44)	GR	A1AXG-2636G-ND	3.69	30.06
34	Gold	36 (91.44)	MC	A1AXG-3436M-ND	5.25	42.74
	Gold	36 (91.44)	GR	A1AXG-3436G-ND	4.40	35.81
40	Gold	36 (91.44)	MC	A1AXG-4036M-ND	6.01	48.92
	Gold	36 (91.44)	GR	A1AXG-4036G-ND	4.99	40.65
50	Gold	36 (91.44)	MC	A1AXG-5036M-ND	8.09	65.88
	Gold	36 (91.44)	GR	A1AXG-5036G-ND	6.81	55.49
60	Gold	36 (91.44)	MC	A1AXG-6036M-ND	10.01	81.52
	Gold	36 (91.44)	GR	A1AXG-6036G-ND	8.50	69.19

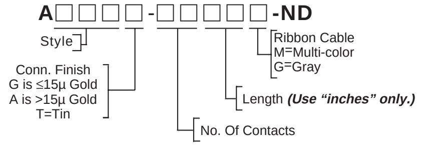
Also available in the following versions:
A1BXG-☐☐☐☐☐-ND — Socket Connector with Strain Relief
A1CXG-☐☐☐☐☐-ND — Socket Connector with Central Polarizing Key
A1DXG-☐☐☐☐☐-ND — Socket Connector w/Strain Relief & Central Polarizing Key
Call for complete part number and pricing!

Pin Connector to Pin Connector

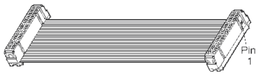


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Gold	6 (15.24)	MC	A3KKG-1006M-ND	10.80	87.98
	Gold	6 (15.24)	GR	A3KKG-1006G-ND	10.76	87.63
	Gold	18 (45.72)	MC	A3KKG-1018M-ND	11.08	90.20
	Gold	18 (45.72)	GR	A3KKG-1018G-ND	10.95	89.16
	Gold	36 (91.44)	MC	A3KKG-1036M-ND	11.49	93.54
	Gold	36 (91.44)	GR	A3KKG-1036G-ND	11.23	91.44
14	Gold	6 (15.24)	MC	A3KKG-1406M-ND	16.22	132.09
	Gold	6 (15.24)	GR	A3KKG-1406G-ND	16.16	131.61
	Gold	18 (45.72)	MC	A3KKG-1418M-ND	16.60	135.21
	Gold	18 (45.72)	GR	A3KKG-1418G-ND	16.43	133.78
	Gold	36 (91.44)	MC	A3KKG-1436M-ND	17.18	139.89
	Gold	36 (91.44)	GR	A3KKG-1436G-ND	16.83	137.03
16	Gold	6 (15.24)	MC	A3KKG-1606M-ND	16.74	136.30
	Gold	6 (15.24)	GR	A3KKG-1606G-ND	16.67	135.75
	Gold	18 (45.72)	MC	A3KKG-1618M-ND	17.18	139.86
	Gold	18 (45.72)	GR	A3KKG-1618G-ND	16.97	138.20
	Gold	36 (91.44)	MC	A3KKG-1636M-ND	17.83	145.21
	Gold	36 (91.44)	GR	A3KKG-1636G-ND	17.42	141.87
20	Gold	6 (15.24)	MC	A3KKG-2006M-ND	17.63	143.59
	Gold	6 (15.24)	GR	A3KKG-2006G-ND	17.55	142.90
	Gold	18 (45.72)	MC	A3KKG-2018M-ND	18.18	148.05
	Gold	18 (45.72)	GR	A3KKG-2018G-ND	17.93	145.98
	Gold	36 (91.44)	MC	A3KKG-2036M-ND	19.00	154.74
	Gold	36 (91.44)	GR	A3KKG-2036G-ND	18.49	150.59
26	Gold	6 (15.24)	MC	A3KKG-2606M-ND	19.68	160.22
	Gold	6 (15.24)	GR	A3KKG-2606G-ND	19.57	159.33
	Gold	18 (45.72)	MC	A3KKG-2618M-ND	20.39	166.01
	Gold	18 (45.72)	GR	A3KKG-2618G-ND	20.06	163.35
	Gold	36 (91.44)	MC	A3KKG-2636M-ND	21.45	174.70
	Gold	36 (91.44)	GR	A3KKG-2636G-ND	20.80	169.38
34	Gold	6 (15.24)	MC	A3KKG-3406M-ND	20.62	167.94
	Gold	6 (15.24)	GR	A3KKG-3406G-ND	20.48	166.78
	Gold	18 (45.72)	MC	A3KKG-3418M-ND	21.55	175.49
	Gold	18 (45.72)	GR	A3KKG-3418G-ND	21.13	172.03
	Gold	36 (91.44)	MC	A3KKG-3436M-ND	22.94	186.82
	Gold	36 (91.44)	GR	A3KKG-3436G-ND	22.09	179.89
40	Gold	6 (15.24)	MC	A3KKG-4006M-ND	21.83	177.74
	Gold	6 (15.24)	GR	A3KKG-4006G-ND	21.66	176.36
	Gold	18 (45.72)	MC	A3KKG-4018M-ND	22.92	186.66
	Gold	18 (45.72)	GR	A3KKG-4018G-ND	22.42	182.52
	Gold	36 (91.44)	MC	A3KKG-4036M-ND	24.57	200.04
	Gold	36 (91.44)	GR	A3KKG-4036G-ND	23.55	191.77
50	Gold	6 (15.24)	MC	A3KKG-5006M-ND	24.65	200.75
	Gold	6 (15.24)	GR	A3KKG-5006G-ND	24.44	199.02
	Gold	18 (45.72)	MC	A3KKG-5018M-ND	26.02	211.90
	Gold	36 (91.44)	MC	A3KKG-5036M-ND	28.08	228.64
	Gold	36 (91.44)	GR	A3KKG-5036G-ND	26.80	218.25
60	Gold	6 (15.24)	MC	A3KKG-6006M-ND	28.82	234.66
	Gold	6 (15.24)	GR	A3KKG-6006G-ND	28.57	232.61
	Gold	18 (45.72)	MC	A3KKG-6018M-ND	30.45	247.99
	Gold	18 (45.72)	GR	A3KKG-6018G-ND	29.70	241.82
	Gold	36 (91.44)	MC	A3KKG-6036M-ND	32.91	267.97
	Gold	36 (91.44)	GR	A3KKG-6036G-ND	31.39	255.64



Socket Connector to Socket Connector

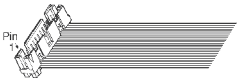


* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Gold	6 (15.24)	MC	A3AAG-1006M-ND	2.35	19.12
	Gold	6 (15.24)	GR	A3AAG-1006G-ND	2.30	18.77
	Gold	18 (45.72)	MC	A3AAG-1018M-ND	2.62	21.34
	Gold	18 (45.72)	GR	A3AAG-1018G-ND	2.49	20.29
	Gold	36 (91.44)	MC	A3AAG-1036M-ND	3.03	24.67
	Gold	36 (91.44)	GR	A3AAG-1036G-ND	2.77	22.58
14	Gold	6 (15.24)	MC	A3AAG-1406M-ND	3.42	27.87
	Gold	6 (15.24)	GR	A3AAG-1406G-ND	3.36	27.40
	Gold	18 (45.72)	MC	A3AAG-1418M-ND	3.81	30.99
	Gold	18 (45.72)	GR	A3AAG-1418G-ND	3.63	29.56
	Gold	36 (91.44)	MC	A3AAG-1436M-ND	4.38	35.68
	Gold	36 (91.44)	GR	A3AAG-1436G-ND	4.11	33.49
16	Gold	6 (15.24)	MC	A3AAG-1606M-ND	3.62	29.48
	Gold	6 (15.24)	GR	A3AAG-1606G-ND	3.55	28.92
	Gold	18 (45.72)	MC	A3AAG-1618M-ND	4.06	33.04
	Gold	18 (45.72)	GR	A3AAG-1618G-ND	3.85	31.38
	Gold	36 (91.44)	MC	A3AAG-1636M-ND	4.71	38.39
	Gold	36 (91.44)	GR	A3AAG-1636G-ND	4.30	35.05
20	Gold	6 (15.24)	MC	A3AAG-2006M-ND	4.13	33.64
	Gold	6 (15.24)	GR	A3AAG-2006G-ND	4.05	32.95
	Gold	18 (45.72)	MC	A3AAG-2018M-ND	4.68	38.10
	Gold	18 (45.72)	GR	A3AAG-2018G-ND	4.42	36.03
	Gold	36 (91.44)	MC	A3AAG-2036M-ND	5.50	44.79
	Gold	36 (91.44)	GR	A3AAG-2036G-ND	4.99	40.64
26	Gold	6 (15.24)	MC	A3AAG-2606M-ND	4.78	38.90
	Gold	6 (15.24)	GR	A3AAG-2606G-ND	4.67	38.02
	Gold	18 (45.72)	MC	A3AAG-2618M-ND	5.49	44.70
	Gold	18 (45.72)	GR	A3AAG-2618G-ND	5.16	42.04
	Gold	36 (91.44)	MC	A3AAG-2636M-ND	6.56	53.39
	Gold	36 (91.44)	GR	A3AAG-2636G-ND	5.90	48.06
34	Gold	6 (15.24)	MC	A3AAG-3406M-ND	5.40	43.94
	Gold	6 (15.24)	GR	A3AAG-3406G-ND	5.22	42.49
	Gold	18 (45.72)	GR	A3AAG-3418G-ND	5.90	48.03
	Gold	36 (91.44)	MC	A3AAG-3436M-ND	7.71	62.82
	Gold	36 (91.44)	GR	A3AAG-3436G-ND	6.86	55.89
40	Gold	6 (15.24)	MC	A3AAG-4006M-ND	5.99	48.78
	Gold	6 (15.24)	GR	A3AAG-4006G-ND	5.82	47.40
	Gold	18 (45.72)	MC	A3AAG-4018M-ND	7.09	57.70
	Gold	18 (45.72)	GR	A3AAG-4018G-ND	6.96	56.69
	Gold	36 (91.44)	MC	A3AAG-4036M-ND	8.73	71.08
	Gold	36 (91.44)	GR	A3AAG-4036G-ND	7.71	62.81
50	Gold	6 (15.24)	MC	A3AAG-5006M-ND	8.83	71.91
	Gold	6 (15.24)	GR	A3AAG-5006G-ND	8.43	68.66
	Gold	18 (45.72)	MC	A3AAG-5018M-ND	10.02	81.55
	Gold	18 (45.72)	GR	A3AAG-5018G-ND	9.56	77.83
	Gold	36 (91.44)	MC	A3AAG-5036M-ND	12.07	98.29
	Gold	36 (91.44)	GR	A3AAG-5036G-ND	10.79	87.90
60	Gold	6 (15.24)	MC	A3AAG-6006M-ND	11.02	89.76
	Gold	6 (15.24)	GR	A3AAG-6006G-ND	10.77	87.70
	Gold	18 (45.72)	MC	A3AAG-6018M-ND	12.66	103.08
	Gold	18 (45.72)	GR	A3AAG-6018G-ND	11.90	96.91
	Gold	36 (91.44)	MC	A3AAG-6036M-ND	15.11	123.07
	Gold	36 (91.44)	GR	A3AAG-6036G-ND	13.60	110.73

Also available in the following versions:
A3BBG-☐☐☐☐☐-ND — Socket Connector with Strain Relief.
A3CCG-☐☐☐☐☐-ND — Socket Connector with Central Polarizing Key.
A3DDG-☐☐☐☐☐-ND — Socket Connector w/Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!

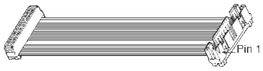
Pin Connector — Single Ended



* MC = Multi-Color
GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Gold	36 (91.44)	MC	A1KXG-1036M-ND	6.15	50.10
	Gold	36 (91.44)	GR	A1KXG-1036G-ND	5.90	48.01
14	Gold	36 (91.44)	MC	A1KXG-1436M-ND	9.16	74.63
	Gold	36 (91.44)	GR	A1KXG-1436G-ND	8.81	71.76
16	Gold	36 (91.44)	MC	A1KXG-1636M-ND	9.57	77.95
	Gold	36 (91.44)	GR	A1KXG-1636G-ND	9.16	74.61
20	Gold	36 (91.44)	MC	A1KXG-2036M-ND	10.32	84.06
	Gold	36 (91.44)	GR	A1KXG-2036G-ND	9.81	79.91
26	Gold	36 (91.44)	MC	A1KXG-2636M-ND	11.79	96.04
	Gold	36 (91.44)	GR	A1KXG-2636G-ND	11.14	90.72
34	Gold	36 (91.44)	MC	A1KXG-3436M-ND	12.86	104.74
	Gold	36 (91.44)	GR	A1KXG-3436G-ND	12.01	97.81
40	Gold	36 (91.44)	MC	A1KXG-4036M-ND	13.93	113.40
	Gold	36 (91.44)	GR	A1KXG-4036G-ND	12.91	105.13
50	Gold	36 (91.44)	MC	A1KXG-5036M-ND	16.09	131.06
60	Gold	36 (91.44)	MC	A1KXG-6036M-ND	18.91	153.97
	Gold	36 (91.44)	GR	A1KXG-6036G-ND	17.39	141.64

Socket Connector to Pin Connector



* MC = Multi-Color
GR = Gray

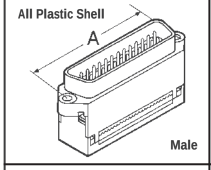
No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Gold	6 (15.24)	MC	A3AKG-1006M-ND	6.58	53.55
	Gold	6 (15.24)	GR	A3AKG-1006G-ND	6.53	53.20
	Gold	18 (45.72)	MC	A3AKG-1018M-ND	6.85	55.77
	Gold	18 (45.72)	GR	A3AKG-1018G-ND	6.72	54.72
	Gold	36 (91.44)	MC	A3AKG-1036M-ND	7.26	59.11
	Gold	36 (91.44)	GR	A3AKG-1036G-ND	7.00	57.01
14	Gold	6 (15.24)	MC	A3AKG-1406M-ND	9.82	79.98
	Gold	6 (15.24)	GR	A3AKG-1406G-ND	9.76	79.50
	Gold	18 (45.72)	MC	A3AKG-1418M-ND	10.21	83.10
	Gold	18 (45.72)	GR	A3AKG-1418G-ND	10.03	81.67
	Gold	36 (91.44)	MC	A3AKG-1436M-ND	10.78	87.78
	Gold	36 (91.44)	GR	A3AKG-1436G-ND	10.43	84.92
16	Gold	6 (15.24)	MC	A3AKG-1606M-ND	10.18	82.89
	Gold	6 (15.24)	GR	A3AKG-1606G-ND	10.11	82.33
	Gold	18 (45.72)	MC	A3AKG-1618M-ND	10.62	86.45
	Gold	18 (45.72)	GR	A3AKG-1618G-ND	10.41	84.79
	Gold	36 (91.44)	MC	A3AKG-1636M-ND	11.27	91.80
	Gold	36 (91.44)	GR	A3AKG-1636G-ND	10.86	88.46
20	Gold	6 (15.24)	MC	A3AKG-2006M-ND	10.88	88.62
	Gold	6 (15.24)	GR	A3AKG-2006G-ND	10.80	87.92
	Gold	18 (45.72)	MC	A3AKG-2018M-ND	11.43	93.08
	Gold	18 (45.72)	GR	A3AKG-2018G-ND	11.18	91.00
	Gold	36 (91.44)	MC	A3AKG-2036M-ND	12.25	99.77
	Gold	36 (91.44)	GR	A3AKG-2036G-ND	11.74	95.62
26	Gold	6 (15.24)	MC	A3AKG-2606M-ND	12.23	99.56
	Gold	6 (15.24)	GR	A3AKG-2606G-ND	12.12	98.67
	Gold	18 (45.72)	MC	A3AKG-2618M-ND	12.94	105.35
	Gold	18 (45.72)	GR	A3AKG-2618G-ND	12.61	102.69
	Gold	36 (91.44)	MC	A3AKG-2636M-ND	14.01	114.04
	Gold	36 (91.44)	GR	A3AKG-2636G-ND	13.35	108.72
34	Gold	6 (15.24)	MC	A3AKG-3406M-ND	12.50	101.78
	Gold	6 (15.24)	GR	A3AKG-3406G-ND	12.87	104.78
	Gold	18 (45.72)	MC	A3AKG-3418M-ND	13.94	113.49
	Gold	18 (45.72)	GR	A3AKG-3418G-ND	13.51	110.03
	Gold	36 (91.44)	MC	A3AKG-3436M-ND	15.33	124.82
	Gold	36 (91.44)	GR	A3AKG-3436G-ND	14.48	117.89
40	Gold	6 (15.24)	MC	A3AKG-4006M-ND	13.91	113.26
	Gold	6 (15.24)	GR	A3AKG-4006G-ND	13.74	111.88
	Gold	18 (45.72)	MC	A3AKG-4018M-ND	15.00	122.18
	Gold	18 (45.72)	GR	A3AKG-4018G-ND	14.50	118.04
	Gold	36 (91.44)	MC	A3AKG-4036M-ND	16.65	135.56
	Gold	36 (91.44)	GR	A3AKG-4036G-ND	15.63	127.29
50	Gold	6 (15.24)	MC	A3AKG-5006M-ND	16.65	135.57
	Gold	6 (15.24)	GR	A3AKG-5006G-ND	16.44	133.84
	Gold	18 (45.72)	MC	A3AKG-5018M-ND	18.02	146.73
	Gold	18 (45.72)	GR	A3AKG-5018G-ND	17.38	141.53
	Gold	36 (91.44)	MC	A3AKG-5036M-ND	20.07	163.46
	Gold	36 (91.44)	GR	A3AKG-5036G-ND	18.80	153.08
60	Gold	6 (15.24)	MC	A3AKG-6006M-ND	19.92	162.21
	Gold	6 (15.24)	GR	A3AKG-6006G-ND	19.67	160.15
	Gold	18 (45.72)	MC	A3AKG-6018M-ND	21.56	175.53
	Gold	18 (45.72)	GR	A3AKG-6018G-ND	20.80	169.37
	Gold	36 (91.44)	MC	A3AKG-6036M-ND	24.01	195.52
	Gold	36 (91.44)	GR	A3AKG-6036G-ND	22.50	183.19

Also available in the following version:
A3CKG-☐☐☐☐☐-ND — Socket Connector with Central Polarizing Key.
Call for complete part number and pricing!

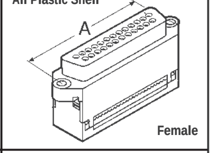
CW INDUSTRIES

D-Subminiature Connectors

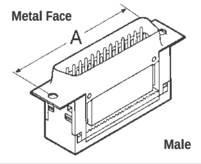
All Plastic Shell



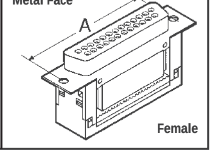
All Plastic Shell



Metal Face



Metal Face



Specifications: • Contacts: phosphor bronze • Contact Plating: Gold –10µ in. gold (in mating area) over 50µ in. nickel; Tin -100µ in. tin-lead • Insulator material: UL 94V-0 flame-retardant thermoplastic • Cover pull-off force 226.79 grams/contact minimum (force applied along contacts' primary axis) • Withdrawal force 56.70g – 226.79g/contact, typical • Color: blue • Operating temp.: –55° to +125°C • Current 1A (max.) per contact • Dielectric Withstand Voltage: 500Vdc (sea level) • Insulation resistance: 5 x 10^9 ohms

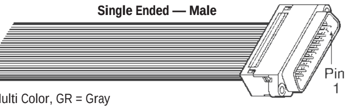
No. of Contacts	Contact Finish	Dim. A In. (mm)	Digi-Key Part No.	Pricing		
				1	10	100
Male D-Subminiature Connectors, Plastic Shell						
9	Gold	.984 (24.99)	CMP09G-ND	3.35	25.38	194.40
9	Tin	.984 (24.99)	CMP09T-ND	2.85	21.62	165.60
15	Gold	1.312 (33.32)	CMP15G-ND	4.40	33.37	255.60
15	Tin	1.312 (33.32)	CMP15T-ND	3.75	28.44	217.80
25	Gold	1.852 (47.04)	CMP25G-ND	5.92	44.89	343.80
25	Tin	1.852 (47.04)	CMP25T-ND	5.02	38.07	291.60
37	Gold	2.500 (63.50)	CMP37G-ND	8.74	66.27	507.60
37	Tin	2.500 (63.50)	CMP37T-ND	7.44	56.40	432.00
Female D-Subminiature Connectors, Plastic Shell						
9	Gold	.984 (24.99)	CFP09G-ND	3.84	29.14	223.20
9	Tin	.984 (24.99)	CFP09T-ND	3.26	24.68	189.00
15	Gold	1.312 (33.32)	CFP15G-ND	5.02	38.07	291.60
15	Tin	1.312 (33.32)	CFP15T-ND	4.28	32.43	248.40
25	Gold	1.852 (47.04)	CFP25G-ND	6.82	51.70	396.00
25	Tin	1.852 (47.04)	CFP25T-ND	5.80	43.95	336.60
37	Gold	2.500 (63.50)	CFP37G-ND	10.08	76.38	585.00
37	Tin	2.500 (63.50)	CFP37T-ND	8.56	64.86	496.80
Male D-Subminiature Connectors, Metal Face						
9	Gold	.984 (24.99)	CMM09G-ND	3.66	27.73	212.40
9	Tin	.984 (24.99)	CMM09T-ND	3.11	23.57	180.54
15	Gold	1.312 (33.32)	CMM15G-ND	4.81	36.43	279.00
15	Tin	1.312 (33.32)	CMM15T-ND	4.08	30.96	237.15
25	Gold	1.852 (47.04)	CMM25G-ND	6.51	49.35	378.00
25	Tin	1.852 (47.04)	CMM25T-ND	5.53	41.95	321.30
37	Gold	2.500 (63.50)	CMM37G-ND	9.64	73.09	559.80
37	Tin	2.500 (63.50)	CMM37T-ND	8.19	62.12	475.83
Female D-Subminiature Connectors, Metal Face						
9	Gold	.984 (24.99)	CFM09G-ND	4.25	32.20	246.60
9	Tin	.984 (24.99)	CFM09T-ND	3.61	27.37	209.61
15	Gold	1.312 (33.32)	CFM15G-ND	5.52	41.83	320.40
15	Tin	1.312 (33.32)	CFM15T-ND	4.69	35.56	272.34
25	Gold	1.852 (47.04)	CFM25G-ND	7.47	56.64	433.80
25	Tin	1.852 (47.04)	CFM25T-ND	6.35	48.14	368.73
37	Gold	2.500 (63.50)	CFM37G-ND	11.10	84.13	644.40
37	Tin	2.500 (63.50)	CFM37T-ND	9.43	71.51	547.74

C□□□□-□□□□□-ND

Style
7□□ (D-Sub)
Conn. Finish
G=Gold
T=Tin
No. Of Contacts
Length (*Use "Feet" only.*)
Ribbon Cable
M=Multi-color
G=Gray

D-Subminiature Cable Assemblies

Single Ended — Male

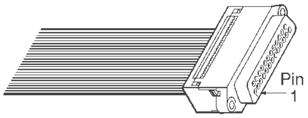


* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7MXG-0906M-ND	4.65	35.21
	Tin	6 (1.83)	MC	C7MXT-0906M-ND	4.14	31.41
	Gold	6 (1.83)	GR	C7MXG-0906G-ND	4.41	33.45
	Tin	6 (1.83)	GR	C7MXT-0906G-ND	3.91	29.65
	Gold	10 (3.05)	MC	C7MXG-0910M-ND	5.51	41.77
	Tin	10 (3.05)	MC	C7MXT-0910M-ND	5.01	37.96
	Gold	10 (3.05)	GR	C7MXG-0910G-ND	5.12	38.83
	Tin	10 (3.05)	GR	C7MXT-0910G-ND	4.62	35.03
15	Gold	6 (1.83)	MC	C7MXG-1506M-ND	6.73	51.00
	Tin	6 (1.83)	MC	C7MXT-1506M-ND	6.07	45.99
	Gold	6 (1.83)	GR	C7MXG-1506G-ND	6.00	45.50
	Tin	6 (1.83)	GR	C7MXT-1506G-ND	5.34	40.49
	Gold	10 (3.05)	MC	C7MXG-1510M-ND	8.28	62.75
	Tin	10 (3.05)	MC	C7MXT-1510M-ND	7.62	57.74
	Gold	10 (3.05)	GR	C7MXG-1510G-ND	7.07	53.58
	Tin	10 (3.05)	GR	C7MXT-1510G-ND	6.41	48.57
25	Gold	6 (1.83)	MC	C7MXG-2506M-ND	9.57	72.56
	Tin	6 (1.83)	MC	C7MXT-2506M-ND	8.68	65.82
	Gold	6 (1.83)	GR	C7MXG-2506G-ND	8.54	64.77
	Tin	6 (1.83)	GR	C7MXT-2506G-ND	7.66	58.03
	Gold	10 (3.05)	MC	C7MXG-2510M-ND	12.00	91.00
	Tin	10 (3.05)	MC	C7MXT-2510M-ND	11.12	84.27
	Gold	10 (3.05)	GR	C7MXG-2510G-ND	10.29	78.02
	Tin	10 (3.05)	GR	C7MXT-2510G-ND	9.40	71.29
37	Gold	6 (1.83)	MC	C7MXG-3706M-ND	14.08	106.77
	Tin	6 (1.83)	MC	C7MXT-3706M-ND	12.77	96.83
	Gold	6 (1.83)	GR	C7MXG-3706G-ND	12.76	96.76
	Tin	6 (1.83)	GR	C7MXT-3706G-ND	11.45	86.82
	Gold	10 (3.05)	MC	C7MXG-3710M-ND	17.65	133.77
	Tin	10 (3.05)	MC	C7MXT-3710M-ND	16.34	123.83
	Gold	10 (3.05)	GR	C7MXG-3710G-ND	15.45	117.09
	Tin	10 (3.05)	GR	C7MXT-3710G-ND	14.13	107.15

Also available in the following configuration:
C7PX□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Single Ended — Female

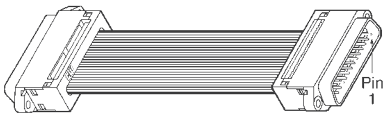


* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7FXG-0906M-ND	5.14	38.97
	Tin	6 (1.83)	MC	C7FXT-0906M-ND	4.56	34.60
	Gold	6 (1.83)	GR	C7FXG-0906G-ND	4.91	37.21
	Tin	6 (1.83)	GR	C7FXT-0906G-ND	4.33	32.84
	Gold	10 (3.05)	MC	C7FXG-0910M-ND	6.01	45.53
	Tin	10 (3.05)	MC	C7FXT-0910M-ND	5.43	41.16
	Gold	10 (3.05)	GR	C7FXG-0910G-ND	5.62	42.59
	Tin	10 (3.05)	GR	C7FXT-0910G-ND	5.04	38.22
15	Gold	6 (1.83)	MC	C7FXG-1506M-ND	7.35	55.70
	Tin	6 (1.83)	MC	C7FXT-1506M-ND	6.59	49.98
	Gold	6 (1.83)	GR	C7FXG-1506G-ND	6.62	50.20
	Tin	6 (1.83)	GR	C7FXT-1506G-ND	5.87	44.49
	Gold	10 (3.05)	MC	C7FXG-1510M-ND	8.90	67.45
	Tin	10 (3.05)	MC	C7FXT-1510M-ND	8.14	61.73
	Gold	10 (3.05)	GR	C7FXG-1510G-ND	7.69	58.28
	Tin	10 (3.05)	GR	C7FXT-1510G-ND	6.93	52.57
25	Gold	6 (1.83)	MC	C7FXG-2506M-ND	10.47	79.37
	Tin	6 (1.83)	MC	C7FXT-2506M-ND	9.45	71.62
	Gold	6 (1.83)	GR	C7FXG-2506G-ND	9.44	71.58
	Tin	6 (1.83)	GR	C7FXT-2506G-ND	8.42	63.83
	Gold	10 (3.05)	MC	C7FXG-2510M-ND	12.90	97.82
	Tin	10 (3.05)	MC	C7FXT-2510M-ND	11.88	90.06
	Gold	10 (3.05)	GR	C7FXG-2510G-ND	11.19	84.84
	Tin	10 (3.05)	GR	C7FXT-2510G-ND	10.17	77.08
37	Gold	6 (1.83)	MC	C7FXG-3706M-ND	15.42	116.88
	Tin	6 (1.83)	MC	C7FXT-3706M-ND	13.91	105.42
	Gold	6 (1.83)	GR	C7FXG-3706G-ND	14.10	106.87
	Tin	6 (1.83)	GR	C7FXT-3706G-ND	12.59	95.41
	Gold	10 (3.05)	MC	C7FXG-3710M-ND	18.98	143.88
	Tin	10 (3.05)	MC	C7FXT-3710M-ND	17.47	132.42
	Gold	10 (3.05)	GR	C7FXG-3710G-ND	16.78	127.19
	Tin	10 (3.05)	GR	C7FXT-3710G-ND	15.27	115.74

Also available in the following configuration:
C7SX□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Male to Male

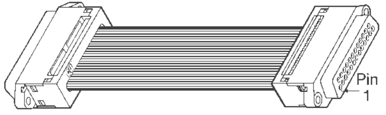


* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7MMG-0906M-ND	7.99	60.59
	Tin	6 (1.83)	MC	C7MMT-0906M-ND	6.99	52.98
	Gold	6 (1.83)	GR	C7MMG-0906G-ND	7.76	58.83
	Tin	6 (1.83)	GR	C7MMT-0906G-ND	6.76	51.22
	Gold	10 (3.05)	MC	C7MMG-0910M-ND	8.86	67.15
	Tin	10 (3.05)	MC	C7MMT-0910M-ND	7.85	59.54
	Gold	10 (3.05)	GR	C7MMG-0910G-ND	8.47	64.21
	Tin	10 (3.05)	GR	C7MMT-0910G-ND	7.47	56.60
15	Gold	6 (1.83)	MC	C7MMG-1506M-ND	11.13	84.37
	Tin	6 (1.83)	MC	C7MMT-1506M-ND	9.81	74.35
	Gold	6 (1.83)	GR	C7MMG-1506G-ND	10.40	78.87
	Tin	6 (1.83)	GR	C7MMT-1506G-ND	9.08	68.86
	Gold	10 (3.05)	MC	C7MMG-1510M-ND	12.68	96.12
	Tin	10 (3.05)	MC	C7MMT-1510M-ND	11.36	86.10
	Gold	10 (3.05)	GR	C7MMG-1510G-ND	11.47	86.95
	Tin	10 (3.05)	GR	C7MMT-1510G-ND	10.15	76.94
25	Gold	6 (1.83)	MC	C7MMG-2506M-ND	15.49	117.44
	Tin	6 (1.83)	MC	C7MMT-2506M-ND	13.72	103.98
	Gold	6 (1.83)	GR	C7MMG-2506G-ND	14.46	109.65
	Tin	6 (1.83)	GR	C7MMT-2506G-ND	12.69	96.19
	Gold	10 (3.05)	MC	C7MMG-2510M-ND	17.93	135.89
	Tin	10 (3.05)	MC	C7MMT-2510M-ND	16.15	122.42
	Gold	10 (3.05)	GR	C7MMG-2510G-ND	16.21	122.91
	Tin	10 (3.05)	GR	C7MMT-2510G-ND	14.44	109.44
37	Gold	6 (1.83)	MC	C7MMG-3706M-ND	22.83	173.04
	Tin	6 (1.83)	MC	C7MMT-3706M-ND	20.20	153.16
	Gold	6 (1.83)	GR	C7MMG-3706G-ND	21.51	163.03
	Tin	6 (1.83)	GR	C7MMT-3706G-ND	18.88	143.15
	Gold	10 (3.05)	MC	C7MMG-3710M-ND	26.39	200.04
	Tin	10 (3.05)	MC	C7MMT-3710M-ND	23.77	180.16
	Gold	10 (3.05)	GR	C7MMG-3710G-ND	24.19	183.36
	Tin	10 (3.05)	GR	C7MMT-3710G-ND	21.57	163.48

Also available in the following configuration:
C7PP□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Female to Female

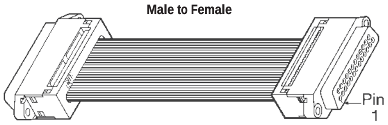


* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7FFG-0906M-ND	8.99	68.11
	Tin	6 (1.83)	MC	C7FFT-0906M-ND	7.83	59.37
	Gold	6 (1.83)	GR	C7FFG-0906G-ND	8.75	66.35
	Tin	6 (1.83)	GR	C7FFT-0906G-ND	7.60	57.61
	Gold	10 (3.05)	MC	C7FFG-0910M-ND	9.85	74.67
	Tin	10 (3.05)	MC	C7FFT-0910M-ND	8.70	65.93
	Gold	10 (3.05)	GR	C7FFG-0910G-ND	9.46	71.73
	Tin	10 (3.05)	GR	C7FFT-0910G-ND	8.31	62.99
15	Gold	6 (1.83)	MC	C7FFG-1506M-ND	12.37	93.77
	Tin	6 (1.83)	MC	C7FFT-1506M-ND	10.86	82.34
	Gold	6 (1.83)	GR	C7FFG-1506G-ND	11.64	88.27
	Tin	6 (1.83)	GR	C7FFT-1506G-ND	10.14	76.85
	Gold	10 (3.05)	MC	C7FFG-1510M-ND	13.92	105.52
	Tin	10 (3.05)	MC	C7FFT-1510M-ND	12.41	94.09
	Gold	10 (3.05)	GR	C7FFG-1510G-ND	12.71	96.35
	Tin	10 (3.05)	GR	C7FFT-1510G-ND	11.20	84.93
25	Gold	6 (1.83)	MC	C7FFG-2506M-ND	17.30	131.15
	Tin	6 (1.83)	MC	C7FFT-2506M-ND	15.24	115.56
	Gold	6 (1.83)	GR	C7FFG-2506G-ND	16.26	123.28
	Tin	6 (1.83)	GR	C7FFT-2506G-ND	14.22	107.77
	Gold	10 (3.05)	MC	C7FFG-2510M-ND	19.72	149.52
	Tin	10 (3.05)	MC	C7FFT-2510M-ND	17.68	134.01
	Gold	10 (3.05)	GR	C7FFG-2510G-ND	18.01	136.54
	Tin	10 (3.05)	GR	C7FFT-2510G-ND	15.97	121.03
37	Gold	6 (1.83)	MC	C7FFG-3706M-ND	25.49	193.25
	Tin	6 (1.83)	MC	C7FFT-3706M-ND	22.47	170.34
	Gold	6 (1.83)	GR	C7FFG-3706G-ND	24.17	183.24
	Tin	6 (1.83)	GR	C7FFT-3706G-ND	21.15	160.33
	Gold	10 (3.05)	MC	C7FFG-3710M-ND	29.05	220.25
	Tin	10 (3.05)	MC	C7FFT-3710M-ND	26.03	197.34
	Gold	10 (3.05)	GR	C7FFG-3710G-ND	26.85	203.57
	Tin	10 (3.05)	GR	C7FFT-3710G-ND	23.83	180.66

Also available in the following configuration:
C7SS□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

Male to Female



* MC = Multi-Color, GR = Gray

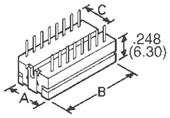
No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
Using Plastic Shell Connectors						
9	Gold	6 (1.83)	MC	C7MFG-0906M-ND	8.49	64.35
	Tin	6 (1.83)	MC	C7MFT-0906M-ND	7.41	56.18
	Gold	6 (1.83)	GR	C7MFG-0906G-ND	8.26	62.59
	Tin	6 (1.83)	GR	C7MFT-0906G-ND	7.18	54.41
	Gold	10 (3.05)	MC	C7MFG-0910M-ND	9.35	70.91
	Tin	10 (3.05)	MC	C7MFT-0910M-ND	8.28	62.73
	Gold	10 (3.05)	GR	C7MFG-0910G-ND	8.97	67.97
	Tin	10 (3.05)	GR	C7MFT-0910G-ND	7.89	59.80
15	Gold	6 (1.83)	MC	C7MFG-1506M-ND	11.75	89.07
	Tin	6 (1.83)	MC	C7MFT-1506M-ND	10.34	78.35
	Gold	6 (1.83)	GR	C7MFG-1506G-ND	11.02	83.57
	Tin	6 (1.83)	GR	C7MFT-1506G-ND	9.61	72.85
	Gold	10 (3.05)	MC	C7MFG-1510M-ND	13.30	100.82
	Tin	10 (3.05)	MC	C7MFT-1510M-ND	11.89	90.10
	Gold	10 (3.05)	GR	C7MFG-1510G-ND	12.09	91.65
	Tin	10 (3.05)	GR	C7MFT-1510G-ND	10.68	80.93
25	Gold	6 (1.83)	MC	C7MFG-2506M-ND	16.39	124.26
	Tin	6 (1.83)	MC	C7MFT-2506M-ND	14.48	109.77
	Gold	6 (1.83)	GR	C7MFG-2506G-ND	15.36	116.47
	Tin	6 (1.83)	GR	C7MFT-2506G-ND	13.45	101.98
	Gold	10 (3.05)	MC	C7MFG-2510M-ND	18.82	142.70
	Tin	10 (3.05)	MC	C7MFT-2510M-ND	16.91	128.22
	Gold	10 (3.05)	GR	C7MFG-2510G-ND	17.11	129.72
	Tin	10 (3.05)	GR	C7MFT-2510G-ND	15.20	115.23
37	Gold	6 (1.83)	MC	C7MFG-3706M-ND	24.16	183.15
	Tin	6 (1.83)	MC	C7MFT-3706M-ND	21.34	161.75
	Gold	6 (1.83)	GR	C7MFG-3706G-ND	22.84	173.14
	Tin	6 (1.83)	GR	C7MFT-3706G-ND	20.02	151.74
	Gold	10 (3.05)	MC	C7MFG-3710M-ND	27.72	210.15
	Tin	10 (3.05)	MC	C7MFT-3710M-ND	24.90	188.75
	Gold	10 (3.05)	GR	C7MFG-3710G-ND	25.52	193.46
	Tin	10 (3.05)	GR	C7MFT-3710G-ND	22.70	172.07

Also available in the following configuration:
C7PS□-□□□□□-ND — With Metal Face Connector.
Call for complete part number and pricing!

CW INDUSTRIES

DIP Connectors

No. of Pins	Dimensions – In. (mm) A	B	C
14	.42 (10.67)	.754 (19.15)	.300 (7.62)
16	.42 (10.67)	.854 (21.69)	.300 (7.62)
24	.72 (18.29)	1.264 (32.11)	.600 (15.24)
40	.72 (18.29)	2.067 (52.50)	.600 (15.24)



SPECIFICATIONS: • **Contacts:** phosphor bronze • C**ontact Plating:** Gold – 10µ in. gold over 50µ in. nickel Tin – 100µ in. tin-lead • **Insulator Material:** UL 94V 0 retardant glass-filled thermoplastic • **Strain Relief Strap Material:** Tin-plated steel • **Color:** Blue • **Operating Temperature:** -55°C to -125°C • **Current Rating:** 1A (maximum) per contact • **Dielectric Withstand Voltage:** Greater than 500Vdc at sea level • **Insulation Resistance:** Greater than 5 x 109 ohms • Mates with .050" (1.27mm) centered round conductor flat cable and standard Dip socket with .100" x .300" or .100" x .600" (2.54mm x 7.62mm or 2.54mm x 15.24mm) contact spacing • Cover pull-off force, with strain relief 20 lb. (7.46kg) minimum (force along contacts' primary axis)

No. of Contacts	Contact Finish	Digi-Key Part No.	Pricing 1	10	100	1,000
DIP Connectors — .175" (4.44mm) Pin Length						
14	Gold	CDP14G-ND	1.61	12.22	93.60	676.00
14	Tin	CDP14T-ND	1.37	10.39	79.56	574.60
16	Gold	CDP16G-ND	1.71	12.93	99.00	715.00
16	Tin	CDP16T-ND	1.45	10.99	84.15	607.75
24	Gold	CDP24G-ND	2.82	21.39	163.80	1183.00
24	Tin	CDP24T-ND	2.40	18.18	139.23	1005.55
40	Gold	CDP40G-ND	4.06	30.79	235.80	1703.00
40	Tin	CDP40T-ND	3.45	26.17	200.43	1447.55
Strain Relief Straps For DIP Connectors						
14	—	CDSR14-ND	.16	1.18	9.00	65.00
16	—	CDSR16-ND	.19	1.41	10.80	78.00
24	—	CDSR24-ND	.22	1.65	12.60	91.00
40	—	CDSR40-ND	.25	1.88	14.40	104.00

C□□□□-□□□□□-ND

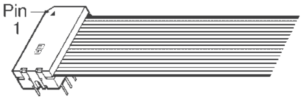
Style
2□□ = Single-Ended
4□□ = Single-Ended
6□□ = Double-Ended
8□□ = Double-Ended
0□□ = Double-Ended

Conn. Finish
G = Gold
T = Tin

No. of Contacts

Length *(Use "Inches" only.)*

Ribbon Cable
M = Multi-Color
G = Gray

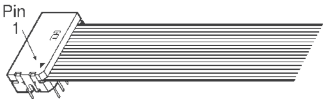


Single Ended — Style 2

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C2PXG-1406M-ND	1.78	13.51
	Tin	6 (15.24)	MC	C2PXT-1406M-ND	1.54	11.67
	Gold	6 (15.24)	GR	C2PXG-1406G-ND	1.73	13.11
	Tin	6 (15.24)	GR	C2PXT-1406G-ND	1.49	11.28
	Gold	18 (45.72)	MC	C2PXG-1418M-ND	2.12	16.08
	Tin	18 (45.72)	MC	C2PXT-1418M-ND	1.88	14.25
	Gold	18 (45.72)	GR	C2PXG-1418G-ND	1.97	14.90
	Tin	18 (45.72)	GR	C2PXT-1418G-ND	1.72	13.07
	Gold	36 (91.44)	MC	C2PXG-1436M-ND	2.63	19.94
	Tin	36 (91.44)	MC	C2PXT-1436M-ND	2.39	18.11
	Gold	36 (91.44)	GR	C2PXG-1436G-ND	2.32	17.58
	Tin	36 (91.44)	GR	C2PXT-1436G-ND	2.08	15.75
16	Gold	6 (15.24)	MC	C2PXG-1606M-ND	1.90	14.39
	Tin	6 (15.24)	MC	C2PXT-1606M-ND	1.64	12.46
	Gold	6 (15.24)	GR	C2PXG-1606G-ND	1.84	13.94
	Tin	6 (15.24)	GR	C2PXT-1606G-ND	1.58	12.00
	Gold	18 (45.72)	MC	C2PXG-1618M-ND	2.29	17.33
	Tin	18 (45.72)	MC	C2PXT-1618M-ND	2.03	15.39
	Gold	18 (45.72)	GR	C2PXG-1618G-ND	2.10	15.96
	Tin	18 (45.72)	GR	C2PXT-1618G-ND	1.85	14.02
	Gold	36 (91.44)	MC	C2PXG-1636M-ND	2.87	21.74
	Tin	36 (91.44)	MC	C2PXT-1636M-ND	2.61	19.80
	Gold	36 (91.44)	GR	C2PXG-1636G-ND	2.50	18.99
	Tin	36 (91.44)	GR	C2PXT-1636G-ND	2.25	17.05
24	Gold	6 (15.24)	MC	C2PXG-2406M-ND	3.11	23.59
	Tin	6 (15.24)	MC	C2PXT-2406M-ND	2.69	20.39
	Gold	6 (15.24)	GR	C2PXG-2406G-ND	3.02	22.90
	Tin	6 (15.24)	GR	C2PXT-2406G-ND	2.60	19.69
	Gold	18 (45.72)	MC	C2PXG-2418M-ND	3.70	28.01
	Tin	18 (45.72)	MC	C2PXT-2418M-ND	3.27	24.80
	Gold	18 (45.72)	GR	C2PXG-2418G-ND	3.42	25.93
	Tin	18 (45.72)	GR	C2PXT-2418G-ND	3.00	22.72
	Gold	36 (91.44)	MC	C2PXG-2436M-ND	4.57	34.64
	Tin	36 (91.44)	MC	C2PXT-2436M-ND	4.15	31.43
	Gold	36 (91.44)	GR	C2PXG-2436G-ND	4.02	30.48
	Tin	36 (91.44)	GR	C2PXT-2436G-ND	3.60	27.27
40	Gold	6 (15.24)	MC	C2PXG-4006M-ND	4.55	34.46
	Tin	6 (15.24)	MC	C2PXT-4006M-ND	3.94	29.85
	Gold	6 (15.24)	GR	C2PXG-4006G-ND	4.40	33.33
	Tin	6 (15.24)	GR	C2PXT-4006G-ND	3.79	28.71
	Gold	18 (45.72)	MC	C2PXG-4018M-ND	5.52	41.82
	Tin	18 (45.72)	MC	C2PXT-4018M-ND	4.91	37.20
	Gold	18 (45.72)	GR	C2PXG-4018G-ND	5.07	38.41
	Tin	18 (45.72)	GR	C2PXT-4018G-ND	4.46	33.79
	Gold	36 (91.44)	MC	C2PXG-4036M-ND	6.97	52.85
	Tin	36 (91.44)	MC	C2PXT-4036M-ND	6.36	48.23
	Gold	36 (91.44)	GR	C2PXG-4036G-ND	6.07	46.03
	Tin	36 (91.44)	GR	C2PXT-4036G-ND	5.46	41.41

Also available in the following version:
C2RX□-□□□□□-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

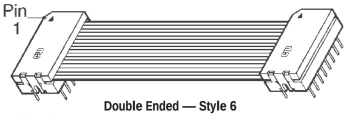


Single Ended — Style 4

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C4PXG-1406M-ND	1.78	13.51
	Tin	6 (15.24)	MC	C4PXT-1406M-ND	1.54	11.67
	Gold	6 (15.24)	GR	C4PXG-1406G-ND	1.73	13.11
	Tin	6 (15.24)	GR	C4PXT-1406G-ND	1.49	11.28
	Gold	18 (45.72)	MC	C4PXG-1418M-ND	2.12	16.08
	Tin	18 (45.72)	MC	C4PXT-1418M-ND	1.88	14.25
	Gold	18 (45.72)	GR	C4PXG-1418G-ND	1.97	14.90
	Tin	18 (45.72)	GR	C4PXT-1418G-ND	1.72	13.07
	Gold	36 (91.44)	MC	C4PXG-1436M-ND	2.63	19.94
	Tin	36 (91.44)	MC	C4PXT-1436M-ND	2.39	18.11
	Gold	36 (91.44)	GR	C4PXG-1436G-ND	2.32	17.58
	Tin	36 (91.44)	GR	C4PXT-1436G-ND	2.08	15.75
16	Gold	6 (15.24)	MC	C4PXG-1606M-ND	1.90	14.39
	Tin	6 (15.24)	MC	C4PXT-1606M-ND	1.64	12.46
	Gold	6 (15.24)	GR	C4PXG-1606G-ND	1.84	13.94
	Tin	6 (15.24)	GR	C4PXT-1606G-ND	1.58	12.00
	Gold	18 (45.72)	MC	C4PXG-1618M-ND	2.29	17.33
	Tin	18 (45.72)	MC	C4PXT-1618M-ND	2.03	15.39
	Gold	18 (45.72)	GR	C4PXG-1618G-ND	2.10	15.96
	Tin	18 (45.72)	GR	C4PXT-1618G-ND	1.85	14.02
	Gold	36 (91.44)	MC	C4PXG-1636M-ND	2.87	21.74
	Tin	36 (91.44)	MC	C4PXT-1636M-ND	2.61	19.80
	Gold	36 (91.44)	GR	C4PXG-1636G-ND	2.50	18.99
	Tin	36 (91.44)	GR	C4PXT-1636G-ND	2.25	17.05
24	Gold	6 (15.24)	MC	C4PXG-2406M-ND	3.11	23.59
	Tin	6 (15.24)	MC	C4PXT-2406M-ND	2.69	20.39
	Gold	6 (15.24)	GR	C4PXG-2406G-ND	3.02	22.90
	Tin	6 (15.24)	GR	C4PXT-2406G-ND	2.60	19.69
	Gold	18 (45.72)	MC	C4PXG-2418M-ND	3.70	28.01
	Tin	18 (45.72)	MC	C4PXT-2418M-ND	3.27	24.80
	Gold	18 (45.72)	GR	C4PXG-2418G-ND	3.42	25.93
	Tin	18 (45.72)	GR	C4PXT-2418G-ND	3.00	22.72
	Gold	36 (91.44)	MC	C4PXG-2436M-ND	4.57	34.64
	Tin	36 (91.44)	MC	C4PXT-2436M-ND	4.15	31.43
	Gold	36 (91.44)	GR	C4PXG-2436G-ND	4.02	30.48
	Tin	36 (91.44)	GR	C4PXT-2436G-ND	3.60	27.27
40	Gold	6 (15.24)	MC	C4PXG-4006M-ND	4.55	34.46
	Tin	6 (15.24)	MC	C4PXT-4006M-ND	3.94	29.85
	Gold	6 (15.24)	GR	C4PXG-4006G-ND	4.40	33.33
	Tin	6 (15.24)	GR	C4PXT-4006G-ND	3.79	28.71
	Gold	18 (45.72)	MC	C4PXG-4018M-ND	5.52	41.82
	Tin	18 (45.72)	MC	C4PXT-4018M-ND	4.91	37.20
	Gold	18 (45.72)	GR	C4PXG-4018G-ND	5.07	38.41
	Tin	18 (45.72)	GR	C4PXT-4018G-ND	4.46	33.79
	Gold	36 (91.44)	MC	C4PXG-4036M-ND	6.97	52.85
	Tin	36 (91.44)	MC	C4PXT-4036M-ND	6.36	48.23
	Gold	36 (91.44)	GR	C4PXG-4036G-ND	6.07	46.03
	Tin	36 (91.44)	GR	C4PXT-4036G-ND	5.46	41.41

Also available in the following version:
C4RX□-□□□□□-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

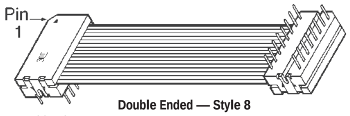


Double Ended — Style 6

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C6PPG-1406M-ND	3.39	25.73
	Tin	6 (15.24)	MC	C6PPT-1406M-ND	2.91	22.06
	Gold	6 (15.24)	GR	C6PPG-1406G-ND	3.34	25.33
	Tin	6 (15.24)	GR	C6PPT-1406G-ND	2.86	21.67
	Gold	18 (45.72)	MC	C6PPG-1418M-ND	3.73	28.30
	Tin	18 (45.72)	MC	C6PPT-1418M-ND	3.25	24.64
	Gold	18 (45.72)	GR	C6PPG-1418G-ND	3.58	27.12
	Tin	18 (45.72)	GR	C6PPT-1418G-ND	3.09	23.45
	Gold	36 (91.44)	MC	C6PPG-1436M-ND	4.24	32.16
	Tin	36 (91.44)	MC	C6PPT-1436M-ND	3.76	28.49
	Gold	36 (91.44)	GR	C6PPG-1436G-ND	3.93	29.80
	Tin	36 (91.44)	GR	C6PPT-1436G-ND	3.45	26.13
16	Gold	6 (15.24)	MC	C6PPG-1606M-ND	3.60	27.32
	Tin	6 (15.24)	MC	C6PPT-1606M-ND	3.09	23.44
	Gold	6 (15.24)	GR	C6PPG-1606G-ND	3.54	26.86
	Tin	6 (15.24)	GR	C6PPT-1606G-ND	3.03	22.98
	Gold	18 (45.72)	MC	C6PPG-1618M-ND	4.01	30.41
	Tin	18 (45.72)	MC	C6PPT-1618M-ND	3.48	26.38
	Gold	18 (45.72)	GR	C6PPG-1618G-ND	3.81	28.88
	Tin	18 (45.72)	GR	C6PPT-1618G-ND	3.30	25.00
	Gold	36 (91.44)	MC	C6PPG-1636M-ND	4.57	34.66
	Tin	36 (91.44)	MC	C6PPT-1636M-ND	4.06	30.79
	Gold	36 (91.44)	GR	C6PPG-1636G-ND	4.21	31.91
	Tin	36 (91.44)	GR	C6PPT-1636G-ND	3.70	28.04
24	Gold	6 (15.24)	MC	C6PPG-2406M-ND	5.93	44.98
	Tin	6 (15.24)	MC	C6PPT-2406M-ND	5.09	38.56
	Gold	6 (15.24)	GR	C6PPG-2406G-ND	5.84	44.29
	Tin	6 (15.24)	GR	C6PPT-2406G-ND	5.00	37.87
	Gold	18 (45.72)	MC	C6PPG-2418M-ND	6.52	49.40
	Tin	18 (45.72)	MC	C6PPT-2418M-ND	5.67	42.98
	Gold	18 (45.72)	GR	C6PPG-2418G-ND	6.24	47.32
	Tin	18 (45.72)	GR	C6PPT-2418G-ND	5.40	40.90
	Gold	36 (91.44)	MC	C6PPG-2436M-ND	7.39	56.02
	Tin	36 (91.44)	MC	C6PPT-2436M-ND	6.54	49.61
	Gold	36 (91.44)	GR	C6PPG-2436G-ND	6.84	51.86
	Tin	36 (91.44)	GR	C6PPT-2436G-ND	6.00	45.45
40	Gold	6 (15.24)	MC	C6PPG-4006M-ND	8.61	65.25
	Tin	6 (15.24)	MC	C6PPT-4006M-ND	7.39	56.01
	Gold	6 (15.24)	GR	C6PPG-4006G-ND	8.46	64.11
	Tin	6 (15.24)	GR	C6PPT-4006G-ND	7.24	54.87
	Gold	18 (45.72)	MC	C6PPG-4018M-ND	9.58	72.60
	Tin	18 (45.72)	MC	C6PPT-4018M-ND	8.36	63.37
	Gold	18 (45.72)	GR	C6PPG-4018G-ND	9.13	69.19
	Tin	18 (45.72)	GR	C6PPT-4018G-ND	7.91	59.96
	Gold	36 (91.44)	MC	C6PPG-4036M-ND	11.03	83.64
	Tin	36 (91.44)	MC	C6PPT-4036M-ND	9.81	74.40
	Gold	36 (91.44)	GR	C6PPG-4036G-ND	10.13	76.82
	Tin	36 (91.44)	GR	C6PPT-4036G-ND	8.91	67.58

Also available in the following version:
C6RR□-□□□□□-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

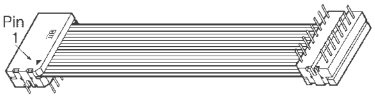


Double Ended — Style 8

* MC = Multi Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C8PPG-1406M-ND	3.39	25.73
	Tin	6 (15.24)	MC	C8PPT-1406M-ND	2.91	22.06
	Gold	6 (15.24)	GR	C8PPG-1406G-ND	3.34	25.33
	Tin	6 (15.24)	GR	C8PPT-1406G-ND	2.86	21.67
	Gold	18 (45.72)	MC	C8PPG-1418M-ND	3.73	28.30
	Tin	18 (45.72)	MC	C8PPT-1418M-ND	3.25	24.64
	Gold	18 (45.72)	GR	C8PPG-1418G-ND	3.58	27.12
	Tin	18 (45.72)	GR	C8PPT-1418G-ND	3.09	23.45
	Gold	36 (91.44)	MC	C8PPG-1436M-ND	4.24	32.16
	Tin	36 (91.44)	MC	C8PPT-1436M-ND	3.76	28.49
	Gold	36 (91.44)	GR	C8PPG-1436G-ND	3.93	29.80
	Tin	36 (91.44)	GR	C8PPT-1436G-ND	3.45	26.13
16	Gold	6 (15.24)	MC	C8PPG-1606M-ND	3.60	27.32
	Tin	6 (15.24)	MC	C8PPT-1606M-ND	3.09	23.44
	Gold	6 (15.24)	GR	C8PPG-1606G-ND	3.54	26.86
	Tin	6 (15.24)	GR	C8PPT-1606G-ND	3.03	22.98
	Gold	18 (45.72)	MC	C8PPG-1618M-ND	3.99	30.26
	Tin	18 (45.72)	MC	C8PPT-1618M-ND	3.48	26.38
	Gold	18 (45.72)	GR	C8PPG-1618G-ND	3.81	28.88
	Tin	18 (45.72)	GR	C8PPT-1618G-ND	3.30	25.00
	Gold	36 (91.44)	MC	C8PPG-1636M-ND	4.57	34.66
	Tin	36 (91.44)	MC	C8PPT-1636M-ND	4.06	30.79
	Gold	36 (91.44)	GR	C8PPG-1636G-ND	4.21	31.91
	Tin	36 (91.44)	GR	C8PPT-1636G-ND	3.70	28.04
24	Gold	6 (15.24)	MC	C8PPG-2406M-ND	5.93	44.98
	Tin	6 (15.24)	MC	C8PPT-2406M-ND	5.09	38.56
	Gold	6 (15.24)	GR	C8PPG-2406G-ND	5.84	44.29
	Tin	6 (15.24)	GR	C8PPT-2406G-ND	5.00	37.87
	Gold	18 (45.72)	MC	C8PPG-2418M-ND	6.52	49.40
	Tin	18 (45.72)	MC	C8PPT-2418M-ND	5.67	42.98
	Gold	18 (45.72)	GR	C8PPG-2418G-ND	6.24	47.32
	Tin	18 (45.72)	GR	C8PPT-2418G-ND	5.40	40.90
	Gold	36 (91.44)	MC	C8PPG-2436M-ND	7.39	56.02
	Tin	36 (91.44)	MC	C8PPT-2436M-ND	6.54	49.61
	Gold	36 (91.44)	GR	C8PPG-2436G-ND	6.84	51.86
	Tin	36 (91.44)	GR	C8PPT-2436G-ND	6.00	45.45
40	Gold	6 (15.24)	MC	C8PPG-4006M-ND	8.61	65.25
	Tin	6 (15.24)	MC	C8PPT-4006M-ND	7.39	56.01
	Gold	6 (15.24)	GR	C8PPG-4006G-ND	8.46	64.11
	Tin	6 (15.24)	GR	C8PPT-4006G-ND	7.24	54.87
	Gold	18 (45.72)	MC	C8PPG-4018M-ND	9.58	72.60
	Tin	18 (45.72)	MC	C8PPT-4018M-ND	8.36	63.37
	Gold	18 (45.72)	GR	C8PPG-4018G-ND	9.13	69.19
	Tin	18 (45.72)	GR	C8PPT-4018G-ND	7.91	59.96
	Gold	36 (91.44)	MC	C8PPG-4036M-ND	11.03	83.64
	Tin	36 (91.44)	MC	C8PPT-4036M-ND	9.81	74.40
	Gold	36 (91.44)	GR	C8PPG-4036G-ND	10.13	76.82
	Tin	36 (91.44)	GR	C8PPT-4036G-ND	8.91	67.58

Also available in the following version:
C8RR□-□□□□□-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!



Double Ended — Style 0

* MC = Multi Color, GR = Gray

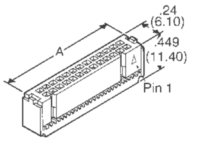
No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing	
					1	10
14	Gold	6 (15.24)	MC	C0PPG-1406M-ND	3.39	25.73
	Tin	6 (15.24)	MC	C0PPT-1406M-ND	2.91	22.06
	Gold	6 (15.24)	GR	C0PPG-1406G-ND	3.34	25.33
	Tin	6 (15.24)	GR	C0PPT-1406G-ND	2.86	21.67
	Gold	18 (45.72)	MC	C0PPG-1418M-ND	3.73	28.30
	Tin	18 (45.72)	MC	C0PPT-1418M-ND	3.25	24.64
	Gold	18 (45.72)	GR	C0PPG-1418G-ND	3.58	27.12
	Tin	18 (45.72)	GR	C0PPT-1418G-ND	3.09	23.45
	Gold	36 (91.44)	MC	C0PPG-1436M-ND	4.24	32.16
	Tin	36 (91.44)	MC	C0PPT-1436M-ND	3.76	28.49
	Gold	36 (91.44)	GR	C0PPG-1436G-ND	3.93	29.80
	Tin	36 (91.44)	GR	C0PPT-1436G-ND	3.45	26.13
16	Gold	6 (15.24)	MC	C0PPG-1606M-ND	3.60	27.32
	Tin	6 (15.24)	MC	C0PPT-1606M-ND	3.09	23.44
	Gold	6 (15.24)	GR	C0PPG-1606G-ND	3.54	26.86
	Tin	6 (15.24)	GR	C0PPT-1606G-ND	3.03	22.98
	Gold	18 (45.72)	MC	C0PPG-1618M-ND	3.99	30.26
	Tin	18 (45.72)	MC	C0PPT-1618M-ND	3.48	26.38
	Gold	18 (45.72)	GR	C0PPG-1618G-ND	3.81	28.88
	Tin	18 (45.72)	GR	C0PPT-1618G-ND	3.30	25.00
	Gold	36 (91.44)	MC	C0PPG-1636M-ND	4.57	34.66
	Tin	36 (91.44)	MC	C0PPT-1636M-ND	4.06	30.79
	Gold	36 (91.44)	GR	C0PPG-1636G-ND	4.21	31.91
	Tin	36 (91.44)	GR	C0PPT-1636G-ND	3.70	28.04
24	Gold	6 (15.24)	MC	C0PPG-2406M-ND	5.93	44.98
	Tin	6 (15.24)	MC	C0PPT-2406M-ND	5.09	38.56
	Gold	6 (15.24)	GR	C0PPG-2406G-ND	5.84	44.29
	Tin	6 (15.24)	GR	C0PPT-2406G-ND	5.00	37.87
	Gold	18 (45.72)	MC	C0PPG-2418M-ND	6.52	49.40
	Tin	18 (45.72)	MC	C0PPT-2418M-ND	5.67	42.98
	Gold	18 (45.72)	GR	C0PPG-2418G-ND	6.24	47.32
	Tin	18 (45.72)	GR	C0PPT-2418G-ND	5.40	40.90
	Gold	36 (91.44)	MC	C0PPG-2436M-ND	7.39	56.02
	Tin	36 (91.44)	MC	C0PPT-2436M-ND	6.54	49.61
	Gold	36 (91.44)	GR	C0PPG-2436G-ND	6.84	51.86
	Tin	36 (91.44)	GR	C0PPT-2436G-ND	6.00	45.45
40	Gold	6 (15.24)	MC	C0PPG-4006M-ND	8.61	65.25
	Tin	6 (15.24)	MC	C0PPT-4006M-ND	7.39	56.01
	Gold	6 (15.24)	GR	C0PPG-4006G-ND	8.46	64.11
	Tin	6 (15.24)	GR	C0PPT-4006G-ND	7.24	54.87
	Gold	18 (45.72)	MC	C0PPG-4018M-ND	9.58	72.60
	Tin	18 (45.72)	MC	C0PPT-4018M-ND	8.36	63.37
	Gold	18 (45.72)	GR	C0PPG-4018G-ND	9.13	69.19
	Tin	18 (45.72)	GR	C0PPT-4018G-ND	7.91	59.96
	Gold	36 (91.44)	MC	C0PPG-4036M-ND	11.03	83.64
	Tin	36 (91.44)	MC	C0PPT-4036M-ND	9.81	74.40
	Gold	36 (91.44)	GR	C0PPG-4036G-ND	10.13	76.82
	Tin	36 (91.44)	GR	C0PPT-4036G-ND	8.91	67.58

Also available in the following version:
C0RR□-□□□□□-ND — Dip Connector with Strain Relief Strap.
Call for complete part number and pricing!

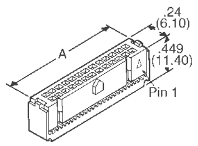
CW INDUSTRIES

Socket Connectors

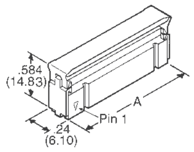
Socket Connector



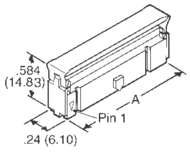
Socket Connector with Central Polarizing Key



Socket Connector with Strain Relief



Socket Connector with Strain Relief and Central Polarizing Key

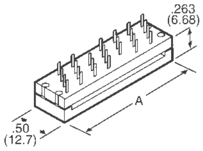


• **Contacts:** Phosphor bronze • **Contact Plating:** Gold – 10µ in. gold (in mating area) over 50µ in. nickel. Tin – 100µ in. tin-lead • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic • **Strain Relief Strap Material:** Insulated stainless steel • **Color:** Blue • **Operating Temperature:** -55°C to +125°C • **Current Rating:** 1A (maximum) per contact • **Dielectric Withstand Voltage:** Greater than 500 Vdc at sea level • **Insulation Resistance:** Greater than 5x10^9 ohms • Withdrawal force 56.70g – 226.79g/contact, typical. • Cover pull-off force 226.79g/contact, minimum (force along contacts' primary axis)

No. of Cont.	Cont. Finish	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100
Socket Connector						
10	Gold	.677 (17.20)	CSC10G-ND	1.12	.85	.65
	Tin	.677 (17.20)	CSC10T-ND	.95	.72	.56
14	Gold	.877 (22.28)	CSC14G-ND	1.58	1.20	.92
	Tin	.877 (22.28)	CSC14T-ND	1.34	1.02	.79
16	Gold	.977 (24.82)	CSC16G-ND	1.83	1.39	1.07
	Tin	.977 (24.82)	CSC16T-ND	1.55	1.18	.91
20	Gold	1.177 (29.90)	CSC20G-ND	1.92	1.46	1.12
	Tin	1.177 (29.90)	CSC20T-ND	1.63	1.24	.95
26	Gold	1.477 (37.52)	CSC26G-ND	2.29	1.74	1.34
	Tin	1.477 (37.52)	CSC26T-ND	1.95	1.48	1.14
34	Gold	1.877 (47.68)	CSC34G-ND	2.82	2.14	1.64
	Tin	1.877 (47.68)	CSC34T-ND	2.40	1.82	1.40
40	Gold	2.177 (55.30)	CSC40G-ND	3.10	2.35	1.80
	Tin	2.177 (55.30)	CSC40T-ND	2.64	2.00	1.53
50	Gold	2.677 (68.00)	CSC50G-ND	3.72	2.82	2.16
	Tin	2.677 (68.00)	CSC50T-ND	3.16	2.40	1.84
60	Gold	3.177 (80.70)	CSC60G-ND	4.53	3.44	2.63
	Tin	3.177 (80.70)	CSC60T-ND	3.85	2.92	2.24
Socket Connector With Strain Relief						
10	Gold	.677 (17.20)	CSR10G-ND	1.36	1.04	.80
	Tin	.677 (17.20)	CSR10T-ND	1.16	.88	.68
14	Gold	.877 (22.28)	CSR14G-ND	1.83	1.39	1.07
	Tin	.877 (22.28)	CSR14T-ND	1.55	1.18	.91
16	Gold	.977 (24.82)	CSR16G-ND	2.05	1.56	1.19
	Tin	.977 (24.82)	CSR16T-ND	1.74	1.32	1.01
20	Gold	1.177 (29.90)	CSR20G-ND	2.14	1.63	1.25
	Tin	1.177 (29.90)	CSR20T-ND	1.82	1.38	1.06
26	Gold	1.477 (37.52)	CSR26G-ND	2.48	1.88	1.44
	Tin	1.477 (37.52)	CSR26T-ND	2.11	1.60	1.23
34	Gold	1.877 (47.68)	CSR34G-ND	3.04	2.31	1.77
	Tin	1.877 (47.68)	CSR34T-ND	2.58	1.96	1.50
40	Gold	2.177 (55.30)	CSR40G-ND	3.29	2.50	1.91
	Tin	2.177 (55.30)	CSR40T-ND	2.79	2.12	1.63
50	Gold	2.677 (68.00)	CSR50G-ND	3.94	2.99	2.29
	Tin	2.677 (68.00)	CSR50T-ND	3.35	2.54	1.95
60	Gold	3.177 (80.70)	CSR60G-ND	4.77	3.62	2.78
	Tin	3.177 (80.70)	CSR60T-ND	4.06	3.08	2.36
Socket Connector With Polarizing Key						
10	Gold	.677 (17.20)	CKC10G-ND	1.12	.85	.65
	Tin	.677 (17.20)	CKC10T-ND	.95	.72	.56
14	Gold	.877 (22.28)	CKC14G-ND	1.58	1.20	.92
	Tin	.877 (22.28)	CKC14T-ND	1.34	1.02	.79
16	Gold	.977 (24.82)	CKC16G-ND	1.83	1.39	1.07
	Tin	.977 (24.82)	CKC16T-ND	1.55	1.18	.91
20	Gold	1.177 (29.90)	CKC20G-ND	1.92	1.46	1.12
	Tin	1.177 (29.90)	CKC20T-ND	1.63	1.24	.95
26	Gold	1.477 (37.52)	CKC26G-ND	2.29	1.74	1.34
	Tin	1.477 (37.52)	CKC26T-ND	1.95	1.48	1.14

No. of Cont.	Cont. Finish	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100
Socket Connector with Polarizing Key (Cont.)						
34	Gold	1.877 (47.68)	CKC34G-ND	2.82	2.14	1.64
	Tin	1.877 (47.68)	CKC34T-ND	2.40	1.82	1.40
40	Gold	2.177 (55.30)	CKC40G-ND	3.10	2.35	1.80
	Tin	2.177 (55.30)	CKC40T-ND	2.64	2.00	1.53
50	Gold	2.677 (68.00)	CKC50G-ND	3.72	2.82	2.16
	Tin	2.677 (68.00)	CKC50T-ND	3.16	2.40	1.84
60	Gold	3.177 (80.70)	CKC60G-ND	4.53	3.44	2.63
	Tin	3.177 (80.70)	CKC60T-ND	3.85	2.92	2.24
Socket Connector w/Polarizing Key and Strain Relief						
10	Gold	.677 (17.20)	CKR10G-ND	1.36	1.04	.80
	Tin	.677 (17.20)	CKR10T-ND	1.16	.88	.68
14	Gold	.877 (22.28)	CKR14G-ND	1.83	1.39	1.07
	Tin	.877 (22.28)	CKR14T-ND	1.55	1.18	.91
16	Gold	.977 (24.82)	CKR16G-ND	2.05	1.56	1.19
	Tin	.977 (24.82)	CKR16T-ND	1.74	1.32	1.01
20	Gold	1.177 (29.90)	CKR20G-ND	2.14	1.63	1.25
	Tin	1.177 (29.90)	CKR20T-ND	1.82	1.38	1.06
26	Gold	1.477 (37.52)	CKR26G-ND	2.48	1.88	1.44
	Tin	1.477 (37.52)	CKR26T-ND	2.11	1.60	1.23
34	Gold	1.877 (47.68)	CKR34G-ND	3.04	2.31	1.77
	Tin	1.877 (47.68)	CKR34T-ND	2.58	1.96	1.50
40	Gold	2.177 (55.30)	CKR40G-ND	3.29	2.50	1.91
	Tin	2.177 (55.30)	CKR40T-ND	2.79	2.12	1.63
50	Gold	2.677 (68.00)	CKR50G-ND	3.94	2.99	2.29
	Tin	2.677 (68.00)	CKR50T-ND	3.35	2.54	1.95
60	Gold	3.177 (80.70)	CKR60G-ND	4.77	3.62	2.78
	Tin	3.177 (80.70)	CKR60T-ND	4.06	3.08	2.36
Polarizing Key			PK-1-ND	.22/2	.86/10	6.30/100

PCB Connectors

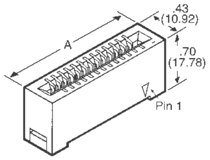


• **Contacts:** Phosphor bronze • **Contact Plating:** Tin – 100µ in tin-lead • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic • **Color:** Blue • **Op Temperature:** -55°C to +125°C • **Current Rating:** 1A (max.) per contact • **Dielectric Withstand Voltage:** Greater than 500 VDC at sea level • **Insulation Resistance:** Greater than 5 x 10^9 ohms. Cover pull-off force, without strain relief, 5.60kg. min. (force along contacts' primary axis)

No. of Cont.	Cont. Finish	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100
PCB Connectors						
10	Tin	.700 (17.78)	CPC10T-ND	1.24	.94	.72
•20	Tin	1.200 (30.48)	CPC20T-ND	1.46	1.11	.85
26	Tin	1.500 (38.10)	CPC26T-ND	1.86	1.41	1.08
34	Tin	1.900 (48.26)	CPC34T-ND	2.26	1.72	1.32
•40	Tin	2.200 (55.88)	CPC40T-ND	2.60	1.98	1.52
50	Tin	2.700 (68.58)	CPC50T-ND	3.22	2.45	1.88
•60	Tin	3.200 (81.28)	CPC60T-ND	3.72	2.82	2.16

• Full row version. ("Special Center" version shown above).

Card Edge Connectors

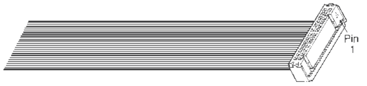


• **Contacts:** Phosphor bronze • **Contact Plating:** Gold – 10µ in. gold (in mating area) over 50µ in. nickel. Tin – 100µ in. tin-lead • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic • **Color:** Blue • **Op Temperature:** -55°C to +125°C • **Current Rating:** 1 A (max.) per contact • **Dielectric Withstand Voltage:** Greater than 500 Vdc at sea level • **Insulation Resistance:** Greater than 5x10^9 ohms • Cover pull-off force 226.79g./contact min. (force along contacts' primary axis)

No. of Cont.	Contact Finish	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100
Card Edge Connectors						
10	Gold	.976 (24.79)	CCE10G-ND	2.42	1.84	1.41
10	Tin	.976 (24.79)	CCE10T-ND	2.05	1.56	1.19
20	Gold	1.476 (37.49)	CCE20G-ND	3.22	2.45	1.88
20	Tin	1.476 (37.49)	CCE20T-ND	2.73	2.07	1.59
26	Gold	1.776 (45.11)	CCE26G-ND	3.88	2.94	2.25
26	Tin	1.776 (45.11)	CCE26T-ND	3.29	2.50	1.91
34	Gold	2.176 (55.27)	CCE34G-ND	4.81	3.65	2.79
34	Tin	2.176 (55.27)	CCE34T-ND	4.09	3.11	2.38
40	Gold	2.476 (62.89)	CCE40G-ND	5.61	4.26	3.26
40	Tin	2.476 (62.89)	CCE40T-ND	4.77	3.62	2.78
50	Gold	2.976 (75.59)	CCE50G-ND	6.32	4.80	3.68
50	Tin	2.976 (75.59)	CCE50T-ND	5.36	4.07	3.12
Polarizing Key			PK-2-ND	.22/2	.86/10	6.30/100

Termination Jumpers

Socket Connector — Single Ended

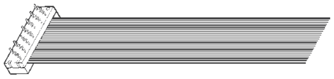


* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length Inch (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	36 (91.44)	MC	C1AXG-1036M-ND	1.84	1.40
	Tin	36 (91.44)	MC	C1AXT-1036M-ND	1.67	1.27
	Gold	36 (91.44)	GR	C1AXG-1036G-ND	1.61	1.23
	Tin	36 (91.44)	GR	C1AXT-1036G-ND	1.45	1.10
14	Gold	36 (91.44)	MC	C1AXG-1436M-ND	2.60	1.97
	Tin	36 (91.44)	MC	C1AXT-1436M-ND	2.36	1.80
	Gold	36 (91.44)	GR	C1AXG-1436G-ND	2.29	1.74
	Tin	36 (91.44)	GR	C1AXT-1436G-ND	2.05	1.56
16	Gold	36 (91.44)	MC	C1AXG-1636M-ND	2.99	2.27
	Tin	36 (91.44)	MC	C1AXT-1636M-ND	2.72	2.06
	Gold	36 (91.44)	GR	C1AXG-1636G-ND	2.63	2.00
	Tin	36 (91.44)	GR	C1AXT-1636G-ND	2.35	1.79
20	Gold	36 (91.44)	MC	C1AXG-2036M-ND	3.38	2.56
	Tin	36 (91.44)	MC	C1AXT-2036M-ND	3.09	2.35
	Gold	36 (91.44)	GR	C1AXG-2036G-ND	2.93	2.22
	Tin	36 (91.44)	GR	C1AXT-2036G-ND	2.64	2.00
26	Gold	36 (91.44)	MC	C1AXG-2636M-ND	4.18	3.18
	Tin	36 (91.44)	MC	C1AXT-2636M-ND	3.84	2.92
	Gold	36 (91.44)	GR	C1AXG-2636G-ND	3.61	2.74
	Tin	36 (91.44)	GR	C1AXT-2636G-ND	3.26	2.48
34	Gold	36 (91.44)	MC	C1AXG-3436M-ND	5.29	4.01
	Tin	36 (91.44)	MC	C1AXT-3436M-ND	4.86	3.69
	Gold	36 (91.44)	GR	C1AXG-3436G-ND	4.53	3.44
	Tin	36 (91.44)	GR	C1AXT-3436G-ND	4.11	3.12
40	Gold	36 (91.44)	MC	C1AXG-4036M-ND	6.01	4.56
	Tin	36 (91.44)	MC	C1AXT-4036M-ND	5.55	4.21
	Gold	36 (91.44)	GR	C1AXG-4036G-ND	5.11	3.88
	Tin	36 (91.44)	GR	C1AXT-4036G-ND	4.65	3.53
50	Gold	36 (91.44)	MC	C1AXG-5036M-ND	7.36	5.58
	Tin	36 (91.44)	MC	C1AXT-5036M-ND	6.80	5.16
	Gold	36 (91.44)	GR	C1AXG-5036G-ND	6.23	4.73
	Tin	36 (91.44)	GR	C1AXT-5036G-ND	5.67	4.31
60	Gold	36 (91.44)	MC	C1AXG-6036M-ND	8.87	6.73
	Tin	36 (91.44)	MC	C1AXT-6036M-ND	8.19	6.22
	Gold	36 (91.44)	GR	C1AXG-6036G-ND	7.53	5.71
	Tin	36 (91.44)	GR	C1AXT-6036G-ND	6.85	5.20

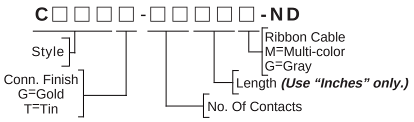
Also available in the following versions:
C1BX□-□□□□□-ND – Socket Connector with Strain Relief.
C1CX□-□□□□□-ND – Socket Connector with Central Polarizing Key.
C1DX□-□□□□□-ND – Socket Connector w. Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!

PCB Connector – Single Ended



* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length Inch (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	36 (91.44)	MC	C1PXT-1036M-ND	1.97	1.49
	Tin	36 (91.44)	GR	C1PXT-1036G-ND	1.74	1.32
20	Tin	36 (91.44)	MC	C1PXT-2036M-ND	2.91	2.21
	Tin	36 (91.44)	GR	C1PXT-2036G-ND	2.46	1.87
26	Tin	36 (91.44)	MC	C1PXT-2636M-ND	3.75	2.85
	Tin	36 (91.44)	GR	C1PXT-2636G-ND	3.17	2.41
34	Tin	36 (91.44)	MC	C1PXT-3436M-ND	4.73	3.59
	Tin	36 (91.44)	GR	C1PXT-3436G-ND	3.97	3.02
40	Tin	36 (91.44)	MC	C1PXT-4036M-ND	5.51	4.19
	Tin	36 (91.44)	GR	C1PXT-4036G-ND	4.62	3.50
50	Tin	36 (91.44)	MC	C1PXT-5036M-ND	6.86	5.21
	Tin	36 (91.44)	GR	C1PXT-5036G-ND	5.74	4.35
60	Tin	36 (91.44)	MC	C1PXT-6036M-ND	5.59	4.24
	Tin	36 (91.44)	GR	C1PXT-6036G-ND	4.25	3.22



Digi-Key® Custom Cable Assemblies Available

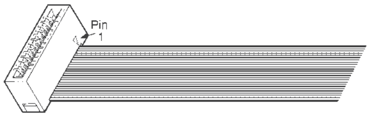
Call Toll Free: 1-800-344-4539

(Continued)

CW INDUSTRIES

Termination Jumpers *(Cont.)*

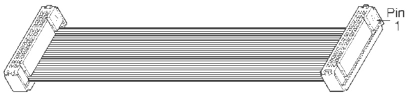
Card Edge Connector – Single Ended



* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	36 (91.44)	MC	C1EXG-1036M-ND	3.14	2.39
	Tin	36 (91.44)	MC	C1EXT-1036M-ND	2.78	2.11
	Gold	36 (91.44)	GR	C1EXG-1036G-ND	2.92	2.21
	Tin	36 (91.44)	GR	C1EXT-1036G-ND	2.55	1.94
20	Gold	36 (91.44)	MC	C1EXG-2036M-ND	4.68	3.55
	Tin	36 (91.44)	MC	C1EXT-2036M-ND	4.20	3.19
	Gold	36 (91.44)	GR	C1EXG-2036G-ND	4.23	3.21
	Tin	36 (91.44)	GR	C1EXT-2036G-ND	3.74	2.84
26	Gold	36 (91.44)	MC	C1EXG-2636M-ND	5.77	4.38
	Tin	36 (91.44)	MC	C1EXT-2636M-ND	5.18	3.93
	Gold	36 (91.44)	GR	C1EXG-2636G-ND	5.19	3.94
	Tin	36 (91.44)	GR	C1EXT-2636G-ND	4.61	3.50
34	Gold	36 (91.44)	MC	C1EXG-3436M-ND	7.27	5.52
	Tin	36 (91.44)	MC	C1EXT-3436M-ND	6.55	4.97
	Gold	36 (91.44)	GR	C1EXG-3436G-ND	6.52	4.94
	Tin	36 (91.44)	GR	C1EXT-3436G-ND	5.80	4.40
40	Gold	36 (91.44)	MC	C1EXG-4036M-ND	8.52	6.46
	Tin	36 (91.44)	MC	C1EXT-4036M-ND	7.68	5.83
	Gold	36 (91.44)	GR	C1EXG-4036G-ND	7.62	5.78
	Tin	36 (91.44)	GR	C1EXT-4036G-ND	6.78	5.14
50	Gold	36 (91.44)	MC	C1EXG-5036M-ND	9.96	7.56
	Tin	36 (91.44)	MC	C1EXT-5036M-ND	9.02	6.84
	Gold	36 (91.44)	GR	C1EXG-5036G-ND	8.84	6.70
	Tin	36 (91.44)	GR	C1EXT-5036G-ND	7.89	5.98

Socket Connector-to-Socket Connector



* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	6 (15.24)	MC	C3AAG-1006M-ND	2.35	1.79
	Tin	6 (15.24)	MC	C3AAT-1006M-ND	2.02	1.53
	Gold	6 (15.24)	GR	C3AAG-1006G-ND	2.32	1.76
	Tin	6 (15.24)	GR	C3AAT-1006G-ND	1.98	1.51
	Gold	18 (45.72)	MC	C3AAG-1018M-ND	2.59	1.97
	Tin	18 (45.72)	MC	C3AAT-1018M-ND	2.26	1.72
	Gold	18 (45.72)	GR	C3AAG-1018G-ND	2.48	1.89
	Tin	18 (45.72)	GR	C3AAT-1018G-ND	2.15	1.63
	Gold	36 (91.44)	MC	C3AAG-1036M-ND	2.96	2.25
	Tin	36 (91.44)	MC	C3AAT-1036M-ND	2.62	1.99
	Gold	36 (91.44)	GR	C3AAG-1036G-ND	2.73	2.07
	Tin	36 (91.44)	GR	C3AAT-1036G-ND	2.39	1.82
14	Gold	6 (15.24)	MC	C3AAG-1406M-ND	3.33	2.53
	Tin	6 (15.24)	MC	C3AAT-1406M-ND	2.86	2.17
	Gold	6 (15.24)	GR	C3AAG-1406G-ND	3.28	2.49
	Tin	6 (15.24)	GR	C3AAT-1406G-ND	2.81	2.13
	Gold	18 (45.72)	MC	C3AAG-1418M-ND	3.67	2.79
	Tin	18 (45.72)	MC	C3AAT-1418M-ND	3.20	2.43
	Gold	18 (45.72)	GR	C3AAG-1418G-ND	3.52	2.67
	Tin	18 (45.72)	GR	C3AAT-1418G-ND	3.04	2.31
	Gold	36 (91.44)	MC	C3AAG-1436M-ND	4.18	3.17
	Tin	36 (91.44)	MC	C3AAT-1436M-ND	3.71	2.81
	Gold	36 (91.44)	GR	C3AAG-1436G-ND	3.87	2.94
	Tin	36 (91.44)	GR	C3AAT-1436G-ND	3.39	2.58
16	Gold	6 (15.24)	MC	C3AAG-1606M-ND	3.85	2.92
	Tin	6 (15.24)	MC	C3AAT-1606M-ND	3.30	2.51
	Gold	6 (15.24)	GR	C3AAG-1606G-ND	3.79	2.88
	Tin	6 (15.24)	GR	C3AAT-1606G-ND	3.24	2.46
	Gold	18 (45.72)	MC	C3AAG-1618M-ND	4.24	3.22
	Tin	18 (45.72)	MC	C3AAT-1618M-ND	3.69	2.80
	Gold	18 (45.72)	GR	C3AAG-1618G-ND	4.06	3.08
	Tin	18 (45.72)	GR	C3AAT-1618G-ND	3.51	2.66
	Gold	36 (91.44)	MC	C3AAG-1636M-ND	4.82	3.66
	Tin	36 (91.44)	MC	C3AAT-1636M-ND	4.27	3.24
	Gold	36 (91.44)	GR	C3AAG-1636G-ND	4.46	3.38
	Tin	36 (91.44)	GR	C3AAT-1636G-ND	3.91	2.97

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
20	Gold	6 (15.24)	MC	C3AAG-2006M-ND	4.09	3.10
	Tin	6 (15.24)	MC	C3AAT-2006M-ND	3.51	2.67
	Gold	6 (15.24)	GR	C3AAG-2006G-ND	4.01	3.05
	Tin	6 (15.24)	GR	C3AAT-2006G-ND	3.43	2.61
	Gold	18 (45.72)	MC	C3AAG-2018M-ND	4.57	3.47
	Tin	18 (45.72)	MC	C3AAT-2018M-ND	4.00	3.03
	Gold	18 (45.72)	GR	C3AAG-2018G-ND	4.35	3.30
	Tin	18 (45.72)	GR	C3AAT-2018G-ND	3.77	2.86
	Gold	36 (91.44)	MC	C3AAG-2036M-ND	5.30	4.02
	Tin	36 (91.44)	MC	C3AAT-2036M-ND	4.72	3.58
	Gold	36 (91.44)	GR	C3AAG-2036G-ND	4.85	3.68
	Tin	36 (91.44)	GR	C3AAT-2036G-ND	4.27	3.24
26	Gold	6 (15.24)	MC	C3AAG-2606M-ND	4.90	3.72
	Tin	6 (15.24)	MC	C3AAT-2606M-ND	4.21	3.20
	Gold	6 (15.24)	GR	C3AAG-2606G-ND	4.81	3.65
	Tin	6 (15.24)	GR	C3AAT-2606G-ND	4.12	3.13
	Gold	18 (45.72)	MC	C3AAG-2618M-ND	5.53	4.20
	Tin	18 (45.72)	MC	C3AAT-2618M-ND	4.84	3.68
	Gold	18 (45.72)	GR	C3AAG-2618G-ND	5.24	3.98
	Tin	18 (45.72)	GR	C3AAT-2618G-ND	4.56	3.46
	Gold	36 (91.44)	MC	C3AAG-2636M-ND	6.48	4.92
	Tin	36 (91.44)	MC	C3AAT-2636M-ND	5.79	4.39
	Gold	36 (91.44)	GR	C3AAG-2636G-ND	5.90	4.48
	Tin	36 (91.44)	GR	C3AAT-2636G-ND	5.21	3.95
34	Gold	6 (15.24)	MC	C3AAG-3406M-ND	6.05	4.59
	Tin	6 (15.24)	MC	C3AAT-3406M-ND	5.21	3.95
	Gold	6 (15.24)	GR	C3AAG-3406G-ND	5.93	4.50
	Tin	6 (15.24)	GR	C3AAT-3406G-ND	5.08	3.86
	Gold	18 (45.72)	MC	C3AAG-3418M-ND	6.87	5.22
	Tin	18 (45.72)	MC	C3AAT-3418M-ND	6.03	4.57
	Gold	18 (45.72)	GR	C3AAG-3418G-ND	6.50	4.93
	Tin	18 (45.72)	GR	C3AAT-3418G-ND	5.65	4.29
	Gold	36 (91.44)	MC	C3AAG-3436M-ND	8.11	6.15
	Tin	36 (91.44)	MC	C3AAT-3436M-ND	7.26	5.51
	Gold	36 (91.44)	GR	C3AAG-3436G-ND	7.35	5.58
	Tin	36 (91.44)	GR	C3AAT-3436G-ND	6.51	4.94
40	Gold	6 (15.24)	MC	C3AAG-4006M-ND	6.69	5.07
	Tin	6 (15.24)	MC	C3AAT-4006M-ND	5.76	4.37
	Gold	6 (15.24)	GR	C3AAG-4006G-ND	6.54	4.96
	Tin	6 (15.24)	GR	C3AAT-4006G-ND	5.61	4.25
	Gold	18 (45.72)	MC	C3AAG-4018M-ND	7.66	5.81
	Tin	18 (45.72)	MC	C3AAT-4018M-ND	6.73	5.10
	Gold	18 (45.72)	GR	C3AAG-4018G-ND	7.21	5.47
	Tin	18 (45.72)	GR	C3AAT-4018G-ND	6.28	4.76
	Gold	36 (91.44)	MC	C3AAG-4036M-ND	9.11	6.91
	Tin	36 (91.44)	MC	C3AAT-4036M-ND	8.18	6.21
	Gold	36 (91.44)	GR	C3AAG-4036G-ND	8.21	6.23
	Tin	36 (91.44)	GR	C3AAT-4036G-ND	7.28	5.52
50	Gold	6 (15.24)	MC	C3AAG-5006M-ND	8.05	6.10
	Tin	6 (15.24)	MC	C3AAT-5006M-ND	6.93	5.26
	Gold	6 (15.24)	GR	C3AAG-5006G-ND	7.86	5.96
	Tin	6 (15.24)	GR	C3AAT-5006G-ND	6.74	5.12
	Gold	18 (45.72)	MC	C3AAG-5018M-ND	9.26	7.02
	Tin	18 (45.72)	MC	C3AAT-5018M-ND	8.14	6.18
	Gold	18 (45.72)	GR	C3AAG-5018G-ND	8.70	6.60
	Tin	18 (45.72)	GR	C3AAT-5018G-ND	7.58	5.75
	Gold	36 (91.44)	MC	C3AAG-5036M-ND	11.08	8.40
	Tin	36 (91.44)	MC	C3AAT-5036M-ND	9.96	7.56
	Gold	36 (91.44)	GR	C3AAG-5036G-ND	9.95	7.55
	Tin	36 (91.44)	GR	C3AAT-5036G-ND	8.84	6.70
60	Gold	6 (15.24)	MC	C3AAG-6006M-ND	9.78	7.42
	Tin	6 (15.24)	MC	C3AAT-6006M-ND	8.42	6.39
	Gold	6 (15.24)	GR	C3AAG-6006G-ND	9.55	7.25
	Tin	6 (15.24)	GR	C3AAT-6006G-ND	8.20	6.22
	Gold	18 (45.72)	MC	C3AAG-6018M-ND	11.23	8.51
	Tin	18 (45.72)	MC	C3AAT-6018M-ND	9.87	7.49
	Gold	18 (45.72)	GR	C3AAG-6018G-ND	10.56	8.01
	Tin	18 (45.72)	GR	C3AAT-6018G-ND	9.20	6.98
	Gold	36 (91.44)	MC	C3AAG-6036M-ND	13.40	10.16
	Tin	36 (91.44)	MC	C3AAT-6036M-ND	12.04	9.13
	Gold	36 (91.44)	GR	C3AAG-6036G-ND	12.06	9.15
	Tin	36 (91.44)	GR	C3AAT-6036G-ND	10.70	8.12

Also available in the following versions:

C3BB□-□□□□□-ND — Socket Connector with Strain Relief.
C3CC□-□□□□□-ND — Socket Connector with Central Polarizing Key.
C3DD□-□□□□□-ND — Socket Connector w. Strain Relief & Central Polarizing Key.

Call for complete part number and pricing!

C□□□□-□□□□□-ND

Style
Conn. Finish
G=Gold
T=Tin
No. Of Contacts
Length ***(Use "Inches" only.)***
Ribbon Cable
M=Multi-color
G=Gray

Digi-Key® Custom Cable Assemblies Available

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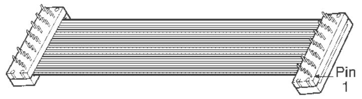
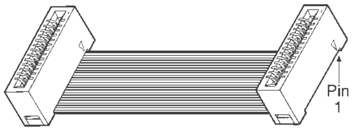
PCB Connector to PCB Connector



* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	6 (15.24)	MC	C3PPT-1006M-ND	2.60	1.98
	Tin	6 (15.24)	GR	C3PPT-1006G-ND	2.56	1.95
	Tin	18 (45.72)	MC	C3PPT-1018M-ND	2.84	2.16
	Tin	18 (45.72)	GR	C3PPT-1018G-ND	2.73	2.07
	Tin	36 (91.44)	MC	C3PPT-1036M-ND	3.21	2.43
	Tin	36 (91.44)	GR	C3PPT-1036G-ND	2.98	2.26
20	Tin	6 (15.24)	MC	C3PPT-2006M-ND	3.16	2.40
	Tin	6 (15.24)	GR	C3PPT-2006G-ND	3.08	2.34
	Tin	18 (45.72)	MC	C3PPT-2018M-ND	3.64	2.77
	Tin	18 (45.72)	GR	C3PPT-2018G-ND	3.42	2.59
	Tin	36 (91.44)	MC	C3PPT-2036M-ND	4.37	3.32
	Tin	36 (91.44)	GR	C3PPT-2036G-ND	3.92	2.97
26	Tin	6 (15.24)	MC	C3PPT-2606M-ND	4.03	3.06
	Tin	6 (15.24)	GR	C3PPT-2606G-ND	3.94	2.99
	Tin	18 (45.72)	MC	C3PPT-2618M-ND	4.67	3.54
	Tin	18 (45.72)	GR	C3PPT-2618G-ND	4.38	3.32
	Tin	36 (91.44)	MC	C3PPT-2636M-ND	5.61	4.26
	Tin	36 (91.44)	GR	C3PPT-2636G-ND	5.03	3.82
34	Tin	6 (15.24)	MC	C3PPT-3406M-ND	4.94	3.75
	Tin	6 (15.24)	GR	C3PPT-3406G-ND	4.81	3.65
	Tin	18 (45.72)	MC	C3PPT-3418M-ND	5.76	4.37
	Tin	18 (45.72)	GR	C3PPT-3418G-ND	5.38	4.08
	Tin	36 (91.44)	MC	C3PPT-3436M-ND	6.99	5.30
	Tin	36 (91.44)	GR	C3PPT-3436G-ND	6.24	4.73
40	Tin	6 (15.24)	MC	C3PPT-4006M-ND	5.69	4.32
	Tin	6 (15.24)	GR	C3PPT-4006G-ND	5.54	4.21
	Tin	18 (45.72)	MC	C3PPT-4018M-ND	6.66	5.06
	Tin	18 (45.72)	GR	C3PPT-4018G-ND	6.21	4.71
	Tin	36 (91.44)	MC	C3PPT-4036M-ND	8.12	6.16
	Tin	36 (91.44)	GR	C3PPT-4036G-ND	7.22	5.48
50	Tin	6 (15.24)	MC	C3PPT-5006M-ND	7.05	5.35
	Tin	6 (15.24)	GR	C3PPT-5006G-ND	6.87	5.21
	Tin	18 (45.72)	MC	C3PPT-5018M-ND	8.27	6.27
	Tin	18 (45.72)	GR	C3PPT-5018G-ND	7.70	5.84
	Tin	36 (91.44)	MC	C3PPT-5036M-ND	10.09	7.65
	Tin	36 (91.44)	GR	C3PPT-5036G-ND	8.96	6.80
60	Tin	6 (15.24)	MC	C3PPT-6006M-ND	8.16	6.19
	Tin	6 (15.24)	GR	C3PPT-6006G-ND	7.94	6.02
	Tin	18 (45.72)	MC	C3PPT-6018M-ND	9.61	7.29
	Tin	18 (45.72)	GR	C3PPT-6018G-ND	8.94	6.78
	Tin	36 (91.44)	MC	C3PPT-6036M-ND	11.79	8.94
	Tin	36 (91.44)	GR	C3PPT-6036G-ND	10.45	7.92

Card Edge to Card Edge



* MC = Multi-Color, GR = Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	6 (15.24)	MC	C3EEG-1006M-ND	4.96	3.76
	Tin	6 (15.24)	MC	C3EET-1006M-ND	4.23	3.21
	Gold	6 (15.24)	GR	C3EEG-1006G-ND	4.92	3.73
	Tin	6 (15.24)	GR	C3EET-1006G-ND	4.19	3.18
	Gold	18 (45.72)	MC	C3EEG-1018M-ND	5.20	3.95
	Tin	18 (45.72)	MC	C3EET-1018M-ND	4.47	3.40
	Gold	18 (45.72)	GR	C3EEG-1018G-ND	5.08	3.86
	Tin	18 (45.72)	GR	C3EET-1018G-ND	4.36	3.31
	Gold	36 (91.44)	MC	C3EEG-1036M-ND	5.56	4.22
	Tin	36 (91.44)	MC	C3EET-1036M-ND	4.84	3.67
	Gold	36 (91.44)	GR	C3EEG-1036G-ND	5.33	4.05
	Tin	36 (91.44)	GR	C3EET-1036G-ND	4.61	3.50
20	Gold	6 (15.24)	MC	C3EEG-2006M-ND	6.69	5.08
	Tin	6 (15.24)	MC	C3EET-2006M-ND	5.72	4.34
	Gold	6 (15.24)	GR	C3EEG-2006G-ND	6.62	5.02
	Tin	6 (15.24)	GR	C3EET-2006G-ND	5.65	4.29
	Gold	18 (45.72)	MC	C3EEG-2018M-ND	7.18	5.44
	Tin	18 (45.72)	MC	C3EET-2018M-ND	6.21	4.71
	Gold	18 (45.72)	GR	C3EEG-2018G-ND	6.95	5.27
	Tin	18 (45.72)	GR	C3EET-2018G-ND	5.98	4.54
	Gold	36 (91.44)	MC	C3EEG-2036M-ND	7.90	6.00
	Tin	36 (91.44)	MC	C3EET-2036M-ND	6.94	5.26
	Gold	36 (91.44)	GR	C3EEG-2036G-ND	7.45	5.65
	Tin	36 (91.44)	GR	C3EET-2036G-ND	6.49	4.92

(Continued)

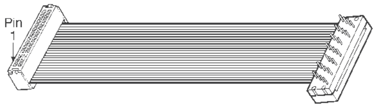
CW INDUSTRIES

Termination Jumpers

Card Edge to Card Edge *(Cont.)*

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
26	Gold	6 (15.24)	MC	C3EEG-2606M-ND	8.06	6.12
	Tin	6 (15.24)	MC	C3EET-2606M-ND	6.90	5.24
	Gold	6 (15.24)	GR	C3EEG-2606G-ND	7.97	6.05
	Tin	6 (15.24)	GR	C3EET-2606G-ND	6.81	5.16
	Gold	18 (45.72)	MC	C3EEG-2618M-ND	8.70	6.60
	Tin	18 (45.72)	MC	C3EET-2618M-ND	7.53	5.71
	Gold	18 (45.72)	GR	C3EEG-2618G-ND	8.41	6.38
	Tin	18 (45.72)	GR	C3EET-2618G-ND	7.24	5.50
	Gold	36 (91.44)	MC	C3EEG-2636M-ND	9.64	7.31
	Tin	36 (91.44)	MC	C3EET-2636M-ND	8.48	6.43
	Gold	36 (91.44)	GR	C3EEG-2636G-ND	9.06	6.87
	Tin	36 (91.44)	GR	C3EET-2636G-ND	7.90	5.99
34	Gold	6 (15.24)	MC	C3EEG-3406M-ND	10.02	7.60
	Tin	6 (15.24)	MC	C3EET-3406M-ND	8.58	6.51
	Gold	6 (15.24)	GR	C3EEG-3406G-ND	9.90	7.51
	Tin	6 (15.24)	GR	C3EET-3406G-ND	8.45	6.41
	Gold	18 (45.72)	MC	C3EEG-3418M-ND	10.84	8.22
	Tin	18 (45.72)	MC	C3EET-3418M-ND	9.40	7.13
	Gold	18 (45.72)	GR	C3EEG-3418G-ND	10.47	7.94
	Tin	18 (45.72)	GR	C3EET-3418G-ND	9.02	6.85
	Gold	36 (91.44)	MC	C3EEG-3436M-ND	12.07	9.16
	Tin	36 (91.44)	MC	C3EET-3436M-ND	10.63	8.07
	Gold	36 (91.44)	GR	C3EEG-3436G-ND	11.32	8.59
	Tin	36 (91.44)	GR	C3EET-3436G-ND	9.88	7.49
40	Gold	6 (15.24)	MC	C3EEG-4006M-ND	11.71	8.88
	Tin	6 (15.24)	MC	C3EET-4006M-ND	10.02	7.60
	Gold	6 (15.24)	GR	C3EEG-4006G-ND	11.56	8.77
	Tin	6 (15.24)	GR	C3EET-4006G-ND	9.87	7.49
	Gold	18 (45.72)	MC	C3EEG-4018M-ND	12.68	9.61
	Tin	18 (45.72)	MC	C3EET-4018M-ND	10.99	8.34
	Gold	18 (45.72)	GR	C3EEG-4018G-ND	12.23	9.27
	Tin	18 (45.72)	GR	C3EET-4018G-ND	10.54	8.00
	Gold	36 (91.44)	MC	C3EEG-4036M-ND	14.13	10.72
	Tin	36 (91.44)	MC	C3EET-4036M-ND	12.45	9.44
	Gold	36 (91.44)	GR	C3EEG-4036G-ND	13.23	10.04
	Tin	36 (91.44)	GR	C3EET-4036G-ND	11.55	8.76
50	Gold	6 (15.24)	MC	C3EEG-5006M-ND	13.25	10.05
	Tin	6 (15.24)	MC	C3EET-5006M-ND	11.36	8.61
	Gold	6 (15.24)	GR	C3EEG-5006G-ND	13.07	9.91
	Tin	6 (15.24)	GR	C3EET-5006G-ND	11.17	8.47
	Gold	18 (45.72)	MC	C3EEG-5018M-ND	14.47	10.97
	Tin	18 (45.72)	MC	C3EET-5018M-ND	12.57	9.53
	Gold	18 (45.72)	GR	C3EEG-5018G-ND	13.90	10.54
	Tin	18 (45.72)	GR	C3EET-5018G-ND	12.01	9.11
	Gold	36 (91.44)	MC	C3EEG-5036M-ND	16.29	12.35
	Tin	36 (91.44)	MC	C3EET-5036M-ND	14.39	10.91
	Gold	36 (91.44)	GR	C3EEG-5036G-ND	15.16	11.50
	Tin	36 (91.44)	GR	C3EET-5036G-ND	13.26	10.06

Socket Connector to PCB Connector

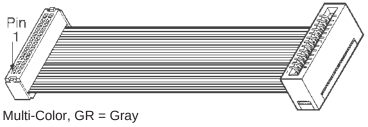


* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	6 (15.24)	MC	C3APT-1006M-ND	2.02	1.53
	Tin	6 (15.24)	GR	C3APT-1006G-ND	1.98	1.51
	Tin	18 (45.72)	MC	C3APT-1018M-ND	2.26	1.72
	Tin	18 (45.72)	GR	C3APT-1018G-ND	2.15	1.63
	Tin	36 (91.44)	MC	C3APT-1036M-ND	2.62	1.99
	Tin	36 (91.44)	GR	C3APT-1036G-ND	2.39	1.82
20	Tin	6 (15.24)	MC	C3APT-2006M-ND	3.33	2.53
	Tin	6 (15.24)	GR	C3APT-2006G-ND	3.26	2.47
	Tin	18 (45.72)	MC	C3APT-2018M-ND	3.82	2.90
	Tin	18 (45.72)	GR	C3APT-2018G-ND	3.59	2.73
	Tin	36 (91.44)	MC	C3APT-2036M-ND	4.55	3.45
	Tin	36 (91.44)	GR	C3APT-2036G-ND	4.10	3.11
26	Tin	6 (15.24)	MC	C3APT-2606M-ND	4.12	3.13
	Tin	6 (15.24)	GR	C3APT-2606G-ND	4.03	3.06
	Tin	18 (45.72)	MC	C3APT-2618M-ND	4.76	3.61
	Tin	18 (45.72)	GR	C3APT-2618G-ND	4.47	3.39
	Tin	36 (91.44)	MC	C3APT-2636M-ND	5.70	4.33
	Tin	36 (91.44)	GR	C3APT-2636G-ND	5.12	3.89
34	Tin	6 (15.24)	MC	C3APT-3406M-ND	5.07	3.85
	Tin	6 (15.24)	GR	C3APT-3406G-ND	4.95	3.75
	Tin	18 (45.72)	MC	C3APT-3418M-ND	5.89	4.47
	Tin	18 (45.72)	GR	C3APT-3418G-ND	5.52	4.19
	Tin	36 (91.44)	MC	C3APT-3436M-ND	7.13	5.41
	Tin	36 (91.44)	GR	C3APT-3436G-ND	6.37	4.83
40	Tin	6 (15.24)	MC	C3APT-4006M-ND	5.72	4.34
	Tin	6 (15.24)	GR	C3APT-4006G-ND	5.57	4.23
	Tin	18 (45.72)	MC	C3APT-4018M-ND	6.69	5.08
	Tin	18 (45.72)	GR	C3APT-4018G-ND	6.24	4.74
	Tin	36 (91.44)	MC	C3APT-4036M-ND	8.15	6.18
	Tin	36 (91.44)	GR	C3APT-4036G-ND	7.25	5.50
50	Tin	6 (15.24)	MC	C3APT-5006M-ND	6.99	5.31
	Tin	6 (15.24)	GR	C3APT-5006G-ND	6.80	5.16
	Tin	18 (45.72)	MC	C3APT-5018M-ND	8.21	6.23
	Tin	18 (45.72)	GR	C3APT-5018G-ND	7.64	5.80
	Tin	36 (91.44)	MC	C3APT-5036M-ND	10.03	7.61
	Tin	36 (91.44)	GR	C3APT-5036G-ND	8.90	6.75
60	Tin	6 (15.24)	MC	C3APT-6006M-ND	8.29	6.29
	Tin	6 (15.24)	GR	C3APT-6006G-ND	8.07	6.12
	Tin	18 (45.72)	MC	C3APT-6018M-ND	9.74	7.39
	Tin	18 (45.72)	GR	C3APT-6018G-ND	9.07	6.88
	Tin	36 (91.44)	MC	C3APT-6036M-ND	11.91	9.04
	Tin	36 (91.44)	GR	C3APT-6036G-ND	10.57	8.02

Also available in the following versions:
C3BP□-□□□□□-ND — Socket Connector with Strain Relief.
C3CP□-□□□□□-ND — Socket Connector with Central Polarizing Key.
C3DP□-□□□□□-ND — Socket Connector w. Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!

Socket Connector to Card Edge Connector

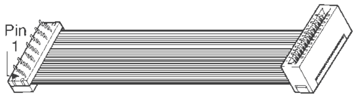


* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length In (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Gold	6 (15.24)	MC	C3AEG-1006M-ND	3.65	2.78
	Tin	6 (15.24)	MC	C3AET-1006M-ND	3.12	2.37
	Gold	6 (15.24)	GR	C3AEG-1006G-ND	3.62	2.75
	Tin	6 (15.24)	GR	C3AET-1006G-ND	3.09	2.34
	Gold	18 (45.72)	MC	C3AEG-1018M-ND	3.90	2.96
	Tin	18 (45.72)	MC	C3AET-1018M-ND	3.37	2.56
	Gold	18 (45.72)	GR	C3AEG-1018G-ND	3.78	2.87
	Tin	18 (45.72)	GR	C3AET-1018G-ND	3.25	2.47
	Gold	36 (91.44)	MC	C3AEG-1036M-ND	4.26	3.23
	Tin	36 (91.44)	MC	C3AET-1036M-ND	3.73	2.83
	Gold	36 (91.44)	GR	C3AEG-1036G-ND	4.03	3.06
	Tin	36 (91.44)	GR	C3AET-1036G-ND	3.50	2.66
20	Gold	6 (15.24)	MC	C3AEG-2006M-ND	5.39	4.09
	Tin	6 (15.24)	MC	C3AET-2006M-ND	4.62	3.50
	Gold	6 (15.24)	GR	C3AEG-2006G-ND	5.31	4.03
	Tin	6 (15.24)	GR	C3AET-2006G-ND	4.54	3.45
	Gold	18 (45.72)	MC	C3AEG-2018M-ND	5.87	4.46
	Tin	18 (45.72)	MC	C3AET-2018M-ND	5.10	3.87
	Gold	18 (45.72)	GR	C3AEG-2018G-ND	5.65	4.29
	Tin	18 (45.72)	GR	C3AET-2018G-ND	4.88	3.70
	Gold	36 (91.44)	MC	C3AEG-2036M-ND	6.60	5.01
	Tin	36 (91.44)	MC	C3AET-2036M-ND	5.83	4.42
	Gold	36 (91.44)	GR	C3AEG-2036G-ND	6.15	4.67
	Tin	36 (91.44)	GR	C3AET-2036G-ND	5.38	4.08
26	Gold	6 (15.24)	MC	C3AEG-2606M-ND	6.48	4.92
	Tin	6 (15.24)	MC	C3AET-2606M-ND	5.56	4.22
	Gold	6 (15.24)	GR	C3AEG-2606G-ND	6.39	4.85
	Tin	6 (15.24)	GR	C3AET-2606G-ND	5.46	4.15
	Gold	18 (45.72)	MC	C3AEG-2618M-ND	7.11	5.40
	Tin	18 (45.72)	MC	C3AET-2618M-ND	6.19	4.70
	Gold	18 (45.72)	GR	C3AEG-2618G-ND	6.82	5.18
	Tin	18 (45.72)	GR	C3AET-2618G-ND	5.90	4.48
	Gold	36 (91.44)	MC	C3AEG-2636M-ND	8.06	6.11
	Tin	36 (91.44)	MC	C3AET-2636M-ND	7.13	5.41
	Gold	36 (91.44)	GR	C3AEG-2636G-ND	7.48	5.68
	Tin	36 (91.44)	GR	C3AET-2636G-ND	6.55	4.97
34	Gold	6 (15.24)	MC	C3AEG-3406M-ND	8.04	6.10
	Tin	6 (15.24)	MC	C3AET-3406M-ND	6.89	5.23
	Gold	6 (15.24)	GR	C3AEG-3406G-ND	7.91	6.00
	Tin	6 (15.24)	GR	C3AET-3406G-ND	6.77	5.13
	Gold	18 (45.72)	MC	C3AEG-3418M-ND	8.86	6.72
	Tin	18 (45.72)	MC	C3AET-3418M-ND	7.71	5.85
	Gold	18 (45.72)	GR	C3AEG-3418G-ND	8.48	6.43
	Tin	18 (45.72)	GR	C3AET-3418G-ND	7.34	5.57
	Gold	36 (91.44)	MC	C3AEG-3436M-ND	10.09	7.65
	Tin	36 (91.44)	MC	C3AET-3436M-ND	8.95	6.79
	Gold	36 (91.44)	GR	C3AEG-3436G-ND	9.34	7.08
	Tin	36 (91.44)	GR	C3AET-3436G-ND	8.19	6.22
40	Gold	6 (15.24)	MC	C3AEG-4006M-ND	9.20	6.98
	Tin	6 (15.24)	MC	C3AET-4006M-ND	7.89	5.99
	Gold	6 (15.24)	GR	C3AEG-4006G-ND	9.05	6.86
	Tin	6 (15.24)	GR	C3AET-4006G-ND	7.74	5.87
	Gold	18 (45.72)	MC	C3AEG-4018M-ND	10.17	7.71
	Tin	18 (45.72)	MC	C3AET-4018M-ND	8.86	6.72
	Gold	18 (45.72)	GR	C3AEG-4018G-ND	9.72	7.37
	Tin	18 (45.72)	GR	C3AET-4018G-ND	8.41	6.38
	Gold	36 (91.44)	MC	C3AEG-4036M-ND	11.62	8.81
	Tin	36 (91.44)	MC	C3AET-4036M-ND	10.32	7.82
	Gold	36 (91.44)	GR	C3AEG-4036G-ND	10.72	8.13
	Tin	36 (91.44)	GR	C3AET-4036G-ND	9.42	7.14
50	Gold	6 (15.24)	MC	C3AEG-5006M-ND	10.65	8.08
	Tin	6 (15.24)	MC	C3AET-5006M-ND	9.14	6.94
	Gold	6 (15.24)	GR	C3AEG-5006G-ND	10.46	7.94
	Tin	6 (15.24)	GR	C3AET-5006G-ND	8.96	6.79
	Gold	18 (45.72)	MC	C3AEG-5018M-ND	11.86	9.00
	Tin	18 (45.72)	MC	C3AET-5018M-ND	10.36	7.86
	Gold	18 (45.72)	GR	C3AEG-5018G-ND	11.30	8.57
	Tin	18 (45.72)	GR	C3AET-5018G-ND	9.79	7.43
	Gold	36 (91.44)	MC	C3AEG-5036M-ND	13.68	10.38
	Tin	36 (91.44)	MC	C3AET-5036M-ND	12.18	9.24
	Gold	36 (91.44)	GR	C3AEG-5036G-ND	12.56	9.52
	Tin	36 (91.44)	GR	C3AET-5036G-ND	11.05	8.38

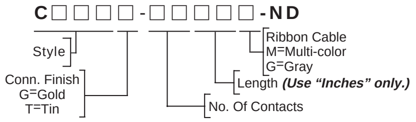
Also available in the following versions:
C3BE□-□□□□□-ND — Socket Connector with Strain Relief.
C3CE□-□□□□□-ND — Socket Connector with Central Polarizing Key.
C3DE□-□□□□□-ND — Socket Connector w. Strain Relief & Central Polarizing Key.
Call for complete part number and pricing!

PCB Connector to Card Edge Connector



* MC = Multi-Color, GR = Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Price Each 1	10
10	Tin	6 (15.24)	MC	C3PET-1006M-ND	3.42	2.59
	Tin	6 (15.24)	GR	C3PET-1006G-ND	3.38	2.57
	Tin	18 (45.72)	MC	C3PET-1018M-ND	3.66	2.78
	Tin	18 (45.72)	GR	C3PET-1018G-ND	3.54	2.69
	Tin	36 (91.44)	MC	C3PET-1036M-ND	4.02	3.05
	Tin	36 (91.44)	GR	C3PET-1036G-ND	3.79	2.88
20	Tin	6 (15.24)	MC	C3PET-2006M-ND	4.44	3.37
	Tin	6 (15.24)	GR	C3PET-2006G-ND	4.36	3.31
	Tin	18 (45.72)	MC	C3PET-2018M-ND	4.93	3.74
	Tin	18 (45.72)	GR	C3PET-2018G-ND	4.70	3.57
	Tin	36 (91.44)	MC	C3PET-2036M-ND	5.65	4.29
	Tin	36 (91.44)	GR	C3PET-2036G-ND	5.20	3.95
26	Tin	6 (15.24)	MC	C3PET-2606M-ND	5.47	4.15
	Tin	6 (15.24)	GR	C3PET-2606G-ND	5.37	4.08
	Tin	18 (45.72)	MC	C3PET-2618M-ND	6.10	4.63
	Tin	18 (45.72)	GR	C3PET-2618G-ND	5.81	4.41
	Tin	36 (91.44)	MC	C3PET-2636M-ND	7.04	5.34
	Tin	36 (91.44)	GR	C3PET-2636G-ND	6.47	4.91
34	Tin	6 (15.24)	MC	C3PET-3406M-ND	6.76	5.13
	Tin	6 (15.24)	GR	C3PET-3406G-ND	6.63	5.03
	Tin	18 (45.72)	MC	C3PET-3418M-ND	7.58	5.75
	Tin	18 (45.72)	GR	C3PET-3418G-ND	7.20	5.46
	Tin	36 (91.44)	MC	C3PET-3436M-ND	8.81	6.68
	Tin	36 (91.44)	GR	C3PET-3436G-ND	8.06	6.11
40	Tin	6 (15.24)	MC	C3PET-4006M-ND	7.86	5.96
	Tin	6 (15.24)	GR	C3PET-4006G-ND	7.71	5.85
	Tin	18 (45.72)	MC	C3PET-4018M-ND	8.83	6.70
	Tin	18 (45.72)	GR	C3PET-4018G-ND	8.38	6.36
	Tin	36 (91.44)	MC	C3PET-4036M-ND	10.28	7.80
	Tin	36 (91.44)	GR	C3PET-4036G-ND	9.38	7.12
50	Tin	6 (15.24)	MC	C3PET-5006M-ND	9.21	6.98
	Tin	6 (15.24)	GR	C3PET-5006G-ND	9.02	6.84
	Tin	18 (45.72)	MC	C3PET-5018M-ND	10.42	7.90
	Tin	18 (45.72)	GR	C3PET-5018G-ND	9.85	7.48
	Tin	36 (91.44)	MC	C3PET-5036M-ND	12.24	9.28
	Tin	36 (91.44)	GR	C3PET-5036G-ND	11.11	8.43



Digi-Key® Custom Cable Assemblies Available

Call Toll Free: 1-800-344-4539

rikei

50-Conductor Ribbon Cable (.635mm Pitch)

(For NANO IDC Connector System)

RIBBON CABLE: 0.635mm (25MIL) pitch flat gray cable with 30AWG (7/0.1mm) conductors is designed to allow terminations to a High Density IDC connector.

Features: • **Capacitance:** Approx. 105pF/m • **Inductance:** Approx. 0.48µH/m • **Impedance:** • Approx. 71Ω • **Propagation Delay Time:** Approx. 5.4ns/m

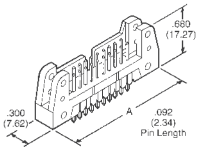
Description	Digi-Key Part No.	Price Each
5 Foot (1.52 Meter) Length	R9029-5-ND	13.00
10 Foot (3.05 Meter) Length	R9029-10-ND	23.20
50 Foot (15.24 Meter) Length	R9029-50-ND	104.00
100 Foot (30.48 Meter) Length	R9029-100-ND	192.00
200 Foot (60.96 Meter) Length	R9029-200-ND	352.00

CW INDUSTRIES

Protected Headers

Straight-Lead

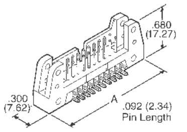
No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
26	2.06 (52.32)
34	2.46 (62.48)
40	2.76 (70.10)
50	3.26 (82.80)
60	3.76 (95.50)



Lock Ejector Hooks, two required per connector, sold separately (see below).

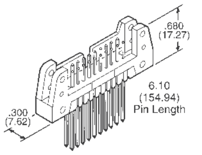
Right-Angle

No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
26	2.06 (52.32)
34	2.46 (62.48)
40	2.76 (70.10)
50	3.26 (82.80)
60	3.76 (95.50)



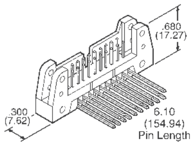
Lock Ejector Hooks, two required per connector, sold separately (see below).

Straight-Lead Wire Wrap



Lock Ejector Hooks, two required per connector, sold separately (see below)

Right-Angle Wire Wrap



Lock Ejector Hooks, two required per connector, sold separately (see below)

SPECIFICATIONS: • **Contacts:** phosphor bronze, standard. • **Contact Plating:** 10µ in. gold (in mating area) over 50µ in. nickel. • **Insulator Material:** UL 94V-0 flame-retardant thermoplastic. • **Color:** blue. • **Operating Temperature:** -55°C to +125°C. • **Current Rating:** 1A (maximum) per contact. • **Dielectric Withstand Voltage:** greater than 500 Vdc at sea level. • **Insulation Resistance:** greater than 5 x 10^9 ohms. • U.S. Defense Department Mil-C-83503/20, 21, approved.

No. of Contacts	Description	Digi-Key Part No.	Price Each 1	10	100	1,000
Protected Headers - Gold Finish						
10	Straight-Lead	CHS10G-ND	.99	.76	.58	.42
	Right-Angle	CHR10G-ND	.99	.76	.58	.42
	Straight-Lead WW	CHW10G-ND	2.08	1.58	1.21	.88
	Right-Angle WW	CHA10G-ND	2.08	1.58	1.21	.88
14	Straight-Lead	CHS14G-ND	1.30	.99	.76	.55
	Right-Angle	CHR14G-ND	1.30	.99	.76	.55
	Straight-Lead WW	CHW14G-ND	2.64	2.00	1.53	1.11
	Right-Angle WW	CHA14G-ND	2.64	2.00	1.53	1.11
16	Straight-Lead	CHS16G-ND	1.46	1.11	.85	.62
	Right-Angle	CHR16G-ND	1.46	1.11	.85	.62
	Straight-Lead WW	CHW16G-ND	2.98	2.26	1.73	1.25
	Right-Angle WW	CHA16G-ND	2.98	2.26	1.73	1.25
20	Straight-Lead	CHS20G-ND	1.52	1.16	.89	.64
	Right-Angle	CHR20G-ND	1.52	1.16	.89	.64
	Straight-Lead WW	CHW20G-ND	3.10	2.35	1.80	1.30
	Right-Angle WW	CHA20G-ND	3.10	2.35	1.80	1.30
26	Straight-Lead	CHS26G-ND	1.86	1.41	1.08	.78
	Right-Angle	CHR26G-ND	1.86	1.41	1.08	.78
	Straight-Lead WW	CHW26G-ND	3.72	2.82	2.16	1.56
	Right-Angle WW	CHA26G-ND	3.72	2.82	2.16	1.56
34	Straight-Lead	CHS34G-ND	2.23	1.70	1.30	.94
	Right-Angle	CHR34G-ND	2.23	1.70	1.30	.94
	Straight-Lead WW	CHW34G-ND	4.46	3.39	2.60	1.88
	Right-Angle WW	CHA34G-ND	4.46	3.39	2.60	1.88
40	Straight-Lead	CHS40G-ND	2.73	2.07	1.59	1.15
	Right-Angle	CHR40G-ND	2.73	2.07	1.59	1.15
	Straight-Lead WW	CHW40G-ND	5.43	4.12	3.15	2.28
	Right-Angle WW	CHA40G-ND	5.43	4.12	3.15	2.28
50	Straight-Lead	CHS50G-ND	3.04	2.31	1.77	1.28
	Right-Angle	CHR50G-ND	3.04	2.31	1.77	1.28
	Straight-Lead WW	CHW50G-ND	6.11	4.63	3.55	2.57
	Right-Angle WW	CHA50G-ND	6.11	4.63	3.55	2.57
60	Straight-Lead ST* (Shrouded)	CHB60G-ND	5.08	3.86	2.96	2.14
	Straight-Lead WW* (Shrouded)	CHC60G-ND	5.08	3.86	2.96	2.14
	Right-Angle ST* (Shrouded)	CHD60G-ND	3.72	2.82	2.16	1.56
	Right-Angle WW* (Shrouded)	CHE60G-ND	5.08	3.86	2.96	2.14

CLKS01-ND Lock Ejector Hooks-Short (2 required per connector) . . **$.22/2**
CLKS02-ND Lock Ejector Hooks: Long - with strain relief; (2 required per connector) . . . . **$.22/2**

* Lock ejector hooks included.

AMP tyco Electronics **Authorized Distributor**

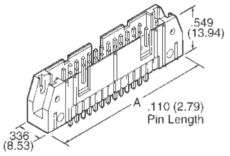
Protected Headers

Specifications:

- Connectors recognized under component program of Underwriters Laboratories Inc. File No. E28476.
- Connectors certified by Canadian Standards Association File No. LR16455.
- .025" (.64mm) Sq. Posts, .240" (6.10mm) Mating Post Length.
- Material and Finish: Housing and Latches — Black thermoplastic, 94V-0 rated.
- Contact Finish: 15µ or 30µ gold on post/pin mating end, .000100-.000200 bright tin-lead on termination end, with entire contact underplated .000050 nickel.

Straight-Lead

No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
24	1.96 (49.78)
26	2.06 (52.32)
30	2.26 (57.40)
34	2.46 (62.48)
40	2.76 (70.10)
44	2.96 (75.18)
50	3.26 (82.80)
60	3.76 (95.50)
64	3.96 (100.58)



Lock Ejector Hooks, two required per connector, sold separately (see below).

No. of Contacts	Cont. Gold Plat.	Post Length Inch (mm)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Pin Header Without Latches						
10	15µ"	.110 (2.79)	AHS10G-ND	1.02	.85	102153-1
	30µ"	.110 (2.79)	AHS10K-ND	1.11	.93	102154-1
	15µ"	.155 (3.94)	AHJ10G-ND	1.11	.93	102155-1
14	15µ"	.110 (2.79)	AHS14G-ND	1.34	1.12	102153-2
	30µ"	.110 (2.79)	AHS14K-ND	1.43	1.20	102154-2
	15µ"	.155 (3.94)	AHJ14G-ND	1.43	1.20	102155-2
	30µ"	.155 (3.94)	AHJ14K-ND	1.62	1.35	102156-2
16	15µ"	.110 (2.79)	AHS16G-ND	1.53	1.27	102153-3
	30µ"	.110 (2.79)	AHS16K-ND	1.76	1.47	102154-3
	15µ"	.155 (3.94)	AHJ16G-ND	1.76	1.47	102155-3
	30µ"	.155 (3.94)	AHJ16K-ND	1.94	1.62	102156-3
20	15µ"	.110 (2.79)	AHS20G-ND	1.90	1.58	102153-4
	30µ"	.110 (2.79)	AHS20K-ND	2.08	1.74	102154-4
	15µ"	.155 (3.94)	AHJ20G-ND	2.08	1.74	102155-4
	30µ"	.155 (3.94)	AHJ20K-ND	2.31	1.93	102156-4
24	15µ"	.110 (2.79)	AHS24G-ND	2.22	1.85	102153-5
	30µ"	.110 (2.79)	AHS24K-ND	2.45	2.04	102154-5
	15µ"	.155 (3.94)	AHJ24G-ND	2.45	2.04	102155-5
	30µ"	.155 (3.94)	AHJ24K-ND	2.68	2.24	102156-5
26	15µ"	.110 (2.79)	AHS26G-ND	2.41	2.01	102153-6
	30µ"	.110 (2.79)	AHS26K-ND	2.55	2.12	102154-6
	15µ"	.155 (3.94)	AHJ26G-ND	2.55	2.12	102155-6
	30µ"	.155 (3.94)	AHJ26K-ND	2.78	2.31	102156-6
30	15µ"	.110 (2.79)	AHS30G-ND	2.78	2.31	102153-7
	30µ"	.110 (2.79)	AHS30K-ND	2.87	2.39	102154-7
	15µ"	.155 (3.94)	AHJ30G-ND	2.87	2.39	102155-7
34	15µ"	.110 (2.79)	AHS34G-ND	3.05	2.54	102153-8
	30µ"	.110 (2.79)	AHS34K-ND	3.15	2.62	102154-8
	15µ"	.155 (3.94)	AHJ34G-ND	3.15	2.62	102155-8
	30µ"	.155 (3.94)	AHJ34K-ND	3.33	2.77	102156-8
40	15µ"	.110 (2.79)	AHS40G-ND	3.52	2.93	102153-9
	30µ"	.110 (2.79)	AHS40K-ND	3.61	3.01	102154-9
	15µ"	.155 (3.94)	AHJ40G-ND	3.61	3.01	102155-9
	30µ"	.155 (3.94)	AHJ40K-ND	3.84	3.20	102156-9
44	30µ"	.110 (2.79)	AHS44K-ND	3.79	3.16	1-102154-3
50	15µ"	.110 (2.79)	AHS50G-ND	4.16	3.47	1-102153-0
	30µ"	.110 (2.79)	AHS50K-ND	4.26	3.54	1-102154-0
	15µ"	.155 (3.94)	AHJ50G-ND	4.26	3.54	1-102155-0
	30µ"	.155 (3.94)	AHJ50K-ND	4.66	3.87	1-102156-0
60	15µ"	.110 (2.79)	AHS60G-ND	4.87	4.05	1-102153-1
	30µ"	.110 (2.79)	AHS60K-ND	4.97	4.14	1-102154-1
	15µ"	.155 (3.94)	AHJ60G-ND	4.97	4.14	1-102155-1
	30µ"	.155 (3.94)	AHJ60K-ND	5.18	4.31	1-102156-1
64	15µ"	.110 (2.79)	AHS64G-ND	5.01	4.17	1-102153-2
	30µ"	.110 (2.79)	AHS64K-ND	5.11	4.25	1-102154-2
	15µ"	.155 (3.94)	AHJ64G-ND	5.11	4.25	1-102155-2
	30µ"	.155 (3.94)	AHJ64K-ND	5.32	4.43	1-102156-2
Pin Header With ACTION PIN Contacts						
10	30µ"	.174 (4.42)	AHA10A-ND	1.76	1.47	499582-1
14	30µ"	.174 (4.42)	AHA14A-ND	2.41	2.01	499582-2
16	30µ"	.174 (4.42)	AHA16A-ND	2.68	2.24	499582-3
20	30µ"	.174 (4.42)	AHA20A-ND	3.15	2.62	499582-4
24	30µ"	.174 (4.42)	AHA24A-ND	3.79	3.16	499582-5
26	30µ"	.174 (4.42)	AHA26A-ND	3.98	3.31	499582-6
30	30µ"	.174 (4.42)	AHA30A-ND	4.49	3.74	499582-7
34	30µ"	.174 (4.42)	AHA34A-ND	4.94	4.11	499582-8
40	30µ"	.174 (4.42)	AHA40A-ND	5.46	4.54	499582-9
50	30µ"	.174 (4.42)	AHA50A-ND	6.02	5.01	1-499582-0
60	30µ"	.174 (4.42)	AHA60A-ND	6.69	5.56	1-499582-1
64	30µ"	.174 (4.42)	AHA64A-ND	8.19	6.81	1-499582-2

No. of Contacts	Cont. Gold Plat.	Post Length Inch (mm)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Pin Header With Latches - Without Strain Relief						
10	15µ"	.110 (2.79)	AHE10G-ND	1.62	1.35	499910-1
	30µ"	.110 (2.79)	AHE10A-ND	1.71	1.43	499160-1
	30µ"	.155 (3.94)	AHG10A-ND	1.71	1.43	499374-1
14	15µ"	.110 (2.79)	AHE14G-ND	2.22	1.85	499910-2
	30µ"	.155 (3.94)	AHG14A-ND	2.36	1.97	499374-2
16	15µ"	.110 (2.79)	AHE16G-ND	2.45	2.04	499910-3
	30µ"	.110 (2.79)	AHE16A-ND	2.64	2.20	499160-3
	30µ"	.155 (3.94)	AHG16A-ND	2.64	2.20	499374-3
20	15µ"	.110 (2.79)	AHE20G-ND	3.01	2.51	499910-4
	30µ"	.110 (2.79)	AHE20A-ND	5.25	4.37	499160-4
	30µ"	.155 (3.94)	AHG20A-ND	3.19	2.66	499374-4
24	15µ"	.110 (2.79)	AHE24G-ND	3.47	2.89	499910-5
	30µ"	.110 (2.79)	AHE24A-ND	3.79	3.16	499160-5
	30µ"	.155 (3.94)	AHG24A-ND	3.79	3.16	499374-5
26	15µ"	.110 (2.79)	AHE26G-ND	3.70	3.08	499910-6
	30µ"	.110 (2.79)	AHE26A-ND	3.98	3.31	499160-6
	30µ"	.155 (3.94)	AHG26A-ND	3.98	3.31	499374-6
30	15µ"	.110 (2.79)	AHE30G-ND	4.16	3.47	499910-7
	30µ"	.110 (2.79)	AHE30A-ND	4.49	3.74	499160-7
34	15µ"	.110 (2.79)	AHE34G-ND	4.58	3.81	499910-8
	30µ"	.110 (2.79)	AHE34A-ND	4.97	4.14	499160-8
	30µ"	.155 (3.94)	AHG34A-ND	4.97	4.14	499374-8
40	15µ"	.110 (2.79)	AHE40G-ND	5.25	4.37	499910-9
	30µ"	.110 (2.79)	AHE40A-ND	5.71	4.75	499160-9
	30µ"	.155 (3.94)	AHG40A-ND	5.71	4.75	499374-9
50	15µ"	.110 (2.79)	AHE50G-ND	6.37	5.30	1-499910-0
	30µ"	.110 (2.79)	AHE50A-ND	6.93	5.77	1-499160-0
	30µ"	.155 (3.94)	AHG50A-ND	6.93	5.77	1-499374-0
60	15µ"	.110 (2.79)	AHE60G-ND	7.49	6.23	1-499910-1
	30µ"	.110 (2.79)	AHE60A-ND	8.09	6.73	1-499160-1
	30µ"	.155 (3.94)	AHG60A-ND	8.09	6.73	1-499374-1
64	15µ"	.110 (2.79)	AHE64G-ND	7.81	6.49	1-499910-2
	30µ"	.110 (2.79)	AHE64A-ND	8.40	6.99	1-499160-2
Pin Header With Latches - With Strain Relief						
10	15µ"	.110 (2.79)	AHK10G-ND	1.62	1.35	499922-1
	30µ"	.110 (2.79)	AHK10A-ND	1.62	1.35	499206-1
	15µ"	.155 (3.94)	AHL10G-ND	3.50	2.91	499923-1
	30µ"	.155 (3.94)	AHL10A-ND	1.71	1.43	102321-1
14	15µ"	.110 (2.79)	AHK14G-ND	2.22	1.85	499922-2
	30µ"	.110 (2.79)	AHK14A-ND	2.36	1.97	499206-2
	30µ"	.155 (3.94)	AHL14A-ND	2.36	1.97	102321-2
16	15µ"	.110 (2.79)	AHK16G-ND	2.45	2.04	499922-3
	30µ"	.110 (2.79)	AHK16A-ND	2.64	2.20	499206-3
	15µ"	.155 (3.94)	AHL16G-ND	2.45	2.04	499923-3
	30µ"	.155 (3.94)	AHL16A-ND	2.64	2.20	102321-3
20	15µ"	.110 (2.79)	AHK20G-ND	3.01	2.51	499922-4
	30µ"	.110 (2.79)	AHK20A-ND	3.19	2.66	499206-4
	15µ"	.155 (3.94)	AHL20G-ND	2.98	2.48	499923-4
	30µ"	.155 (3.94)	AHL20A-ND	3.19	2.66	102321-4
24	15µ"	.110 (2.79)	AHK24G-ND	3.47	2.89	499922-5
	30µ"	.110 (2.79)	AHK24A-ND	3.79	3.16	499206-5
	30µ"	.155 (3.94)	AHL24A-ND	3.79	3.16	102321-5
26	15µ"	.110 (2.79)	AHK26G-ND	3.70	3.08	499922-6
	30µ"	.110 (2.79)	AHK26A-ND	3.24	2.70	499206-6
	15µ"	.155 (3.94)	AHL26G-ND	3.71	3.09	499923-6
	30µ"	.155 (3.94)	AHL26A-ND	3.98	3.31	102321-6
30	30µ"	.110 (2.79)	AHK30A-ND	4.49	3.74	499206-7
	15µ"	.155 (3.94)	AHL30G-ND	4.17	3.47	499923-7
	30µ"	.155 (3.94)	AHL30A-ND	4.49	3.74	102321-7
34	15µ"	.110 (2.79)	AHK34G-ND	4.58	3.81	499922-8
	30µ"	.110 (2.79)	AHK34A-ND	4.97	4.14	499206-8
	15µ"	.155 (3.94)	AHL34G-ND	4.59	3.82	499923-8
	30µ"	.155 (3.94)	AHL34A-ND	4.97	4.14	102321-8
40	15µ"	.110 (2.79)	AHK40G-ND	5.25	4.37	499922-9
	30µ"	.110 (2.79)	AHK40A-ND	5.71	4.75	499206-9
	15µ"	.155 (3.94)	AHL40G-ND	5.29	4.40	499923-9
	30µ"	.155 (3.94)	AHL40A-ND	5.71	4.75	102321-9
50	15µ"	.110 (2.79)	AHK50G-ND	6.37	5.30	1-499922-0
	30µ"	.110 (2.79)	AHK50A-ND	5.95	4.95	1-499206-0
	15µ"	.155 (3.94)	AHL50G-ND	6.41	5.33	1-499923-0
	30µ"	.155 (3.94)	AHL50A-ND	6.93	5.77	1-102321-0
60	15µ"	.110 (2.79)	AHK60G-ND	7.49	6.23	1-499922-1
	30µ"	.110 (2.79)	AHK60A-ND	8.09	6.73	1-499206-1
	15µ"	.155 (3.94)	AHL60G-ND	7.49	6.23	1-499923-1
	30µ"	.155 (3.94)	AHL60A-ND	8.09	6.73	1-102321-1
64	15µ"	.110 (2.79)	AHK64G-ND	7.81	6.49	1-499922-2
	30µ"	.110 (2.79)	AHK64A-ND	8.40	6.99	1-499206-2
	15µ"	.155 (3.94)	AHL64G-ND	7.77	6.46	1-499923-2
	30µ"	.155 (3.94)	AHL64A-ND	8.40	6.99	1-102321-2
Lock Ejector Hooks (2 Required per Connector)						
Short			ALSN01-ND	$.47/2		102312-1
Long w/o Push Tabs			ALLN01-ND	$.47/2		102320-1
*Pin Header Mounting Kit **						
Bolt and Nut, 2 each/kit			A26333-ND	1.53	—	102198-1

* 2-56 bolts and nuts may be used to mount pin headers with and w/out latches. If latches are to be used, the bolts must be positioned in the pin header before the latches are installed.

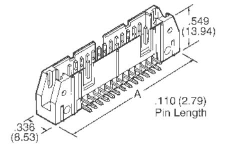
(Continued)

AMP tyco Electronics Authorized Distributor

Protected Headers *(Cont.)*

Right-Angle

No. of Pins	Dim. A In. (mm)
10	1.26 (32.00)
14	1.46 (37.08)
16	1.56 (39.62)
20	1.76 (44.70)
24	1.96 (49.78)
26	2.06 (52.32)
30	2.26 (57.40)
34	2.46 (62.48)
40	2.76 (70.10)
50	3.26 (82.80)
60	3.76 (95.50)
64	3.96 (100.58)



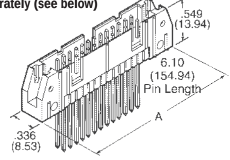
Lock Ejector Hooks, two required per connector, sold separately.

No.of Con-tacts	Cont. Gold Plat.	Post Length Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
Right-Angle Pin Headers Without Latches						
10	15µ"	.110 (2.79)	AHR10G-ND	1.11	.93	102159-1
	30µ"	.110 (2.79)	AHR10K-ND	1.30	1.08	102160-1
14	15µ"	.110 (2.79)	AHR14G-ND	1.43	1.20	102159-2
	30µ"	.110 (2.79)	AHR14K-ND	1.62	1.35	102160-2
	15µ"	.155 (3.94)	AHZ14G-ND	1.99	1.66	102161-2
	30µ"	.155 (3.94)	AHZ14K-ND	1.85	1.54	102162-2
16	15µ"	.110 (2.79)	AHR16G-ND	1.76	1.47	102159-3
	30µ"	.110 (2.79)	AHR16K-ND	2.17	1.81	102160-3
	15µ"	.155 (3.94)	AHZ16G-ND	2.22	1.85	102161-3
20	15µ"	.110 (2.79)	AHR20G-ND	2.08	1.74	102159-4
	30µ"	.110 (2.79)	AHR20K-ND	2.31	1.93	102160-4
	15µ"	.155 (3.94)	AHZ20G-ND	2.73	2.27	102161-4
	30µ"	.155 (3.94)	AHZ20K-ND	2.45	2.04	102162-4
24	30µ"	.110 (2.79)	AHR24K-ND	2.68	2.24	102160-5
	15µ"	.155 (3.94)	AHZ24G-ND	3.19	2.66	102161-5
26	15µ"	.110 (2.79)	AHR26G-ND	2.55	2.12	102159-6
	30µ"	.110 (2.79)	AHR26K-ND	2.78	2.31	102160-6
	15µ"	.155 (3.94)	AHZ26G-ND	3.38	2.81	102161-6
	30µ"	.155 (3.94)	AHZ26K-ND	3.01	2.51	102162-6
30	15µ"	.110 (2.79)	AHR30G-ND	2.87	2.39	102159-7
	30µ"	.110 (2.79)	AHR30K-ND	3.05	2.54	102160-7
	15µ"	.155 (3.94)	AHZ30G-ND	3.79	3.16	102161-7
	30µ"	.155 (3.94)	AHZ30K-ND	3.38	2.81	102162-7
34	15µ"	.110 (2.79)	AHR34G-ND	3.15	2.62	102159-8
	30µ"	.110 (2.79)	AHR34K-ND	3.33	2.77	102160-8
	15µ"	.155 (3.94)	AHZ34G-ND	4.21	3.51	102161-8
	30µ"	.155 (3.94)	AHZ34K-ND	3.75	3.12	102162-8
40	15µ"	.110 (2.79)	AHR40G-ND	3.61	3.01	102159-9
	30µ"	.110 (2.79)	AHR40K-ND	3.84	3.20	102160-9
	30µ"	.155 (3.94)	AHZ40K-ND	4.26	3.54	102162-9
50	15µ"	.110 (2.79)	AHR50G-ND	4.26	3.54	1-102159-0
	30µ"	.110 (2.79)	AHR50K-ND	4.66	3.87	1-102160-0
	15µ"	.155 (3.94)	AHZ50G-ND	5.92	4.92	1-102161-0
	30µ"	.155 (3.94)	AHZ50K-ND	5.18	4.31	1-102162-0
60	15µ"	.110 (2.79)	AHR60G-ND	4.97	4.12	1-102159-1
	30µ"	.110 (2.79)	AHR60K-ND	5.18	4.31	1-102160-1
	15µ"	.155 (3.94)	AHZ60G-ND	6.93	5.77	1-102161-1
	30µ"	.155 (3.94)	AHZ60K-ND	5.95	4.95	1-102162-1
64	15µ"	.110 (2.79)	AHR64G-ND	5.11	4.25	1-102159-2
	30µ"	.110 (2.79)	AHR64K-ND	5.32	4.43	1-102160-2
	15µ"	.155 (3.94)	AHZ64G-ND	7.21	6.00	1-102161-2
	30µ"	.155 (3.94)	AHZ64K-ND	6.20	5.16	1-102162-2
Headers With Short Latches						
10	15µ"	.110 (2.79)	AHB10G-ND	1.71	1.43	499913-1
	30µ"	.110 (2.79)	AHB10K-ND	3.93	3.27	499345-1
14	15µ"	.110 (2.79)	AHB14G-ND	2.36	1.97	499913-2
	30µ"	.110 (2.79)	AHB14K-ND	4.66	3.87	499345-2
16	15µ"	.110 (2.79)	AHB16G-ND	2.64	2.20	499913-3
	30µ"	.110 (2.79)	AHB16K-ND	2.87	2.39	499345-3
20	15µ"	.110 (2.79)	AHB20G-ND	3.19	2.66	499913-4
	30µ"	.110 (2.79)	AHB20K-ND	3.52	2.93	499345-4
24	15µ"	.110 (2.79)	AHB24G-ND	3.79	3.16	499913-5
	30µ"	.110 (2.79)	AHB24K-ND	4.16	3.47	499345-5
26	15µ"	.110 (2.79)	AHB26G-ND	3.98	3.31	499913-6
	30µ"	.110 (2.79)	AHB26K-ND	4.40	3.66	499345-6
30	15µ"	.110 (2.79)	AHB30G-ND	4.49	3.74	499913-7
34	15µ"	.110 (2.79)	AHB34G-ND	4.97	4.14	499913-8
	30µ"	.110 (2.79)	AHB34K-ND	5.46	4.54	499345-8
40	15µ"	.110 (2.79)	AHB40G-ND	5.15	4.28	499913-9
	30µ"	.110 (2.79)	AHB40K-ND	6.23	5.18	499345-9
50	15µ"	.110 (2.79)	AHB50G-ND	6.93	5.77	1-499913-0
	30µ"	.110 (2.79)	AHB50K-ND	7.63	6.35	1-499345-0
60	15µ"	.110 (2.79)	AHB60G-ND	8.09	6.73	1-499913-1
	30µ"	.110 (2.79)	AHB60K-ND	8.93	7.43	1-499345-1
64	15µ"	.110 (2.79)	AHB64G-ND	8.40	6.99	1-499913-2
	30µ"	.110 (2.79)	AHB64K-ND	9.31	7.75	1-499345-2
Headers With Long Latches						
10	15µ"	.110 (2.79)	AHC10G-ND	1.71	1.43	499786-1
	30µ"	.110 (2.79)	AHC10K-ND	1.90	1.58	499141-1
	30µ"	.155 (3.94)	AHT10K-ND	2.08	1.74	102322-1
14	15µ"	.110 (2.79)	AHC14G-ND	2.36	1.97	499786-2
	30µ"	.110 (2.79)	AHC14K-ND	2.59	2.16	499141-2
	30µ"	.155 (3.94)	AHT14K-ND	2.87	2.39	102322-2
16	15µ"	.110 (2.79)	AHC16G-ND	2.64	2.20	499786-2
	30µ"	.110 (2.79)	AHC16K-ND	2.87	2.39	499141-3
	30µ"	.155 (3.94)	AHT16K-ND	3.15	2.62	102322-3
20	15µ"	.110 (2.79)	AHC20G-ND	3.19	2.66	499786-4
	30µ"	.110 (2.79)	AHC20K-ND	3.52	2.93	499141-4
	30µ"	.155 (3.94)	AHT20K-ND	3.89	3.24	102322-4
24	15µ"	.110 (2.79)	AHC24G-ND	3.79	3.16	499786-5
	30µ"	.110 (2.79)	AHC24K-ND	4.16	3.47	499141-5
26	15µ"	.110 (2.79)	AHC26G-ND	3.98	3.31	499786-6
	30µ"	.110 (2.79)	AHC26K-ND	4.40	3.66	499141-6
	30µ"	.155 (3.94)	AHT26K-ND	4.83	4.02	102322-6
30	15µ"	.110 (2.79)	AHC30G-ND	4.49	3.74	499786-7
	30µ"	.110 (2.79)	AHC30K-ND	8.54	7.10	499141-7
34	15µ"	.110 (2.79)	AHC34G-ND	4.97	4.14	499786-8
	30µ"	.110 (2.79)	AHC34K-ND	5.46	4.54	499141-8
	30µ"	.155 (3.94)	AHT34K-ND	5.95	4.95	102322-8
40	15µ"	.110 (2.79)	AHC40G-ND	5.71	4.75	499786-9
	30µ"	.110 (2.79)	AHC40K-ND	6.23	5.18	499141-9
	30µ"	.155 (3.94)	AHT40K-ND	6.93	5.77	102322-9
50	15µ"	.110 (2.79)	AHC50G-ND	6.93	5.77	1-499786-0
	30µ"	.110 (2.79)	AHC50K-ND	7.63	6.35	1-499141-0
	30µ"	.155 (3.94)	AHT50K-ND	8.40	6.99	1-102322-0
60	15µ"	.110 (2.79)	AHC60G-ND	10.68	8.88	1-499786-1
	30µ"	.110 (2.79)	AHC60K-ND	8.93	7.43	1-499141-1
	30µ"	.155 (3.94)	AHT60K-ND	9.80	8.15	1-102322-1
64	15µ"	.110 (2.79)	AHC64G-ND	8.40	6.99	1-499786-2
	30µ"	.110 (2.79)	AHC64K-ND	9.31	7.75	1-499141-2
	30µ"	.155 (3.94)	AHT64K-ND	10.26	8.53	1-102322-2

Straight-Lead Wire-Wrap

Lock Ejector Hooks, two required per connector, sold separately (see below)

No. of Pins	Dim. A In. (mm)
60	3.76 (95.50)



No.of Con-tacts	Contact Gold Plating	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
Protected Headers - Gold Finish					
60	15µ"	AHW60G-ND	28.63	23.32	1-102158-1
Lock Ejector Hooks (2 Required per Connector)					
Short		ALSN01-ND		$.47/2	102312-1
Long w/o Push Tabs		ALLN01-ND		$.47/2	102320-1

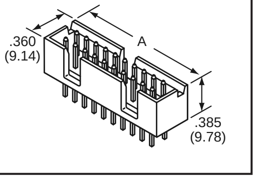
AMP tyco Electronics Authorized Distributor

Low Profile - 4 Sided Protective Headers - .100 x .100 Centers

Specifications:

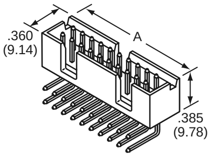
- .025" (.64mm) Sq. Posts, .240" (6.10mm) Mating Post Length.
- Material and Finish: Housing and Latches — Black thermoplastic, 94V-0 rated.
- Contact Finish: 15µ or 30µ gold on post/pin mating end, 100µ-200µ bright tin-lead on termination end, with entire contact underplated 50µ nickel.

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)
60	3.30 (83.82)



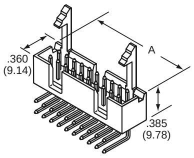
No.of Contacts	Contact Gold Plating	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with .150" (3.81mm) End Dimension Double Row - Straight Post					
10	15µ"	A26267-ND	.44	.36	103308-1
	30µ"	A26268-ND	.53	.43	103309-1
14	15µ"	A26269-ND	.58	.48	103308-2
	30µ"	A26270-ND	.82	.67	103309-2
16	15µ"	A26271-ND	.82	.67	103308-3
	30µ"	A26272-ND	.90	.74	103309-3
20	15µ"	A26273-ND	.78	.63	103308-5
	30µ"	A26274-ND	.94	.77	103309-5
26	15µ"	A26275-ND	.92	.75	103308-6
	30µ"	A26276-ND	1.11	.90	103309-6
34	15µ"	A26277-ND	1.19	.97	103308-7
	30µ"	A26278-ND	1.28	1.04	103309-7
40	15µ"	A26279-ND	1.39	1.13	103308-8
	30µ"	A26280-ND	5.12	4.15	103309-8
50	15µ"	A26281-ND	1.33	1.08	1-103308-0
	30µ"	A26282-ND	1.69	1.38	1-103309-0
60	15µ"	A26283-ND	2.42	1.96	1-103308-2
	30µ"	A26284-ND	2.86	2.32	1-103309-2

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)



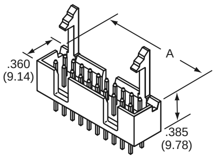
No.of Contacts	Contact Gold Plating	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with .150" (3.81mm) End Dimension Double Row - Right-Angle Post					
10	15µ"	A26285-ND	.59	.48	103310-1
	30µ"	A26286-ND	.65	.53	103311-1
14	15µ"	A26287-ND	.78	.63	103310-2
	30µ"	A26288-ND	1.41	1.14	103311-2
16	15µ"	A26289-ND	.65	.53	103310-3
	30µ"	A26290-ND	.95	.77	103311-3
20	15µ"	A26291-ND	1.03	.84	103310-5
	30µ"	A26292-ND	1.00	.81	103311-5
26	15µ"	A26293-ND	1.24	1.01	103310-6
	30µ"	A26294-ND	1.39	1.13	103311-6
34	15µ"	A26295-ND	1.58	1.28	103310-7
	30µ"	A26296-ND	1.79	1.45	103311-7
40	15µ"	A26297-ND	4.73	3.83	103310-8
	30µ"	A26298-ND	1.83	1.49	103311-8
50	15µ"	A26299-ND	1.94	1.58	1-103310-0
	30µ"	A26300-ND	2.39	1.94	1-103311-0

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)



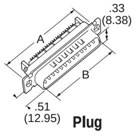
No.of Con-tacts	Contact Gold Plating	Latching Height Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with Ejection Latches and .150" (3.81mm) End Dimension Double Row - RIght Angle Post						
10	30µ"	.585 (14.9)	A26301-ND	2.01	1.63	104130-1
	30µ"	.435 (11.0)	A26302-ND	2.00	1.62	104315-1
14	30µ"	.585 (14.9)	A26303-ND	2.18	1.77	104130-2
16	30µ"	.585 (14.9)	A26304-ND	2.29	1.86	104130-3
20	30µ"	.585 (14.9)	A26305-ND	6.62	5.36	104130-4
26	30µ"	.585 (14.9)	A26306-ND	2.79	2.27	104130-5
	30µ"	.435 (11.0)	A26307-ND	2.75	2.23	104315-5
34	30µ"	.585 (14.9)	A26308-ND	3.13	2.54	104130-6
40	30µ"	.585 (14.9)	A26309-ND	3.34	2.71	104130-7
	30µ"	.435 (11.0)	A26310-ND	8.93	7.23	104315-7
50	30µ"	.585 (14.9)	A26311-ND	3.78	3.06	104130-9
	30µ"	.435 (11.0)	A26312-ND	3.74	3.03	104315-9

No. of Pins	Dim. A In. (mm)
10	.800 (20.32)
14	1.00 (25.40)
16	1.10 (27.94)
20	1.30 (33.02)
26	1.60 (40.64)
34	2.00 (50.80)
40	2.30 (58.42)
50	2.80 (71.12)
60	3.30 (83.82)

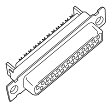


No.of Con-tacts	Contact Gold Plating	Latching Height Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 100	AMP Part No.
Shrouded with Ejection Latches and .150" (3.81mm) End Dimension Double Row - Straight Post						
10	30µ"	.585 (14.9)	A26313-ND	1.92	1.56	104128-1
	30µ"	.435 (11.0)	A26314-ND	1.92	1.56	104313-1
14	30µ"	.585 (14.9)	A26315-ND	2.16	1.76	104128-2
	30µ"	.435 (11.0)	A26316-ND	2.16	1.76	104313-2
16	30µ"	.585 (14.9)	A26317-ND	2.25	1.82	104128-3
	30µ"	.435 (11.0)	A26318-ND	2.25	1.82	104313-3
20	30µ"	.585 (14.9)	A26319-ND	2.42	1.96	104128-4
	30µ"	.435 (11.0)	A26320-ND	2.42	1.96	104313-4
26	30µ"	.585 (14.9)	A26321-ND	2.56	2.08	104128-5
	30µ"	.435 (11.0)	A26322-ND	2.69	2.18	104313-5
34	30µ"	.585 (14.9)	A26323-ND	3.05	2.47	104128-6
	30µ"	.435 (11.0)	A26324-ND	3.05	2.47	104313-6
40	30µ"	.585 (14.9)	A26325-ND	8.72	7.06	104128-7
	30µ"	.435 (11.0)	A26326-ND	3.28	2.66	104313-7
50	30µ"	.585 (14.9)	A26327-ND	3.65	2.96	104128-9
	30µ"	.435 (11.0)	A26328-ND	3.65	2.96	104313-9
60	30µ"	.585 (14.9)	A26329-ND	1.93	1.57	1-104128-0
	30µ"	.435 (11.0)	A26330-ND	4.20	3.40	1-104313-0

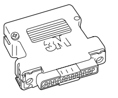
3M D-Subminiature Connectors



Plug



Receptacle



Backshell

Wire Accommodation: 26 & 28 AWG solid and stranded.
Order strain reliefs separately.

Physical: • Contact Material: Beryllium Copper Plating • Underplate: 50µ" Nickel — QQ-N-290, Class 2 • Wiping Area: 30µ" Gold — MIL-G-45204, Type II, Grade C • Shell Material: Steel, Plating: Tin • Strain Relief Material: Stainless Steel .016" (.41mm) Thick • Marking: 3M logo and Contact Position Numbers. **Electrical:** • Current Rating: 1 amp. • Insulation Resistance: >1x10^9 Ω @ 500 VDC. • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
Plugs with flange, thru-hole style, Male						
9	.98 (24.89)	.67 (17.02)	MMR09K-ND	5.01	42.18	8209-6000
15	1.31 (33.27)	1.00 (25.40)	MMR15K-ND	5.70	47.95	8215-6000
25	1.85 (46.99)	1.54 (39.12)	MMR25K-ND	6.47	54.43	8225-6000
37	2.50 (63.50)	2.18 (55.37)	MMR37K-ND	8.36	70.35	8237-6000
Plugs with 4-40 threaded insert, Male						
9	.98 (24.89)	.67 (17.02)	MML09K-ND	6.14	51.63	8209-6003
15	1.31 (33.27)	1.00 (25.40)	MML15K-ND	6.82	57.40	8215-6003
25	1.85 (46.99)	1.54 (39.12)	MML25K-ND	7.36	61.95	8225-6003
37	2.50 (63.50)	2.18 (55.37)	MML37K-ND	9.13	76.83	8237-6003
50	2.40 (60.96)	2.074 (52.68)	MML50K-ND	18.20	153.13	8250-6005
Receptacles with flange, thru-hole style, Female						
9	.98 (24.89)	.67 (17.02)	MFR09K-ND	5.14	43.23	8309-6000
15	1.31 (33.27)	.97 (24.64)	MFR15K-ND	5.91	49.70	8315-6000
25	1.85 (46.99)	1.51 (38.35)	MFR25K-ND	6.57	55.30	8325-6000
37	2.50 (63.50)	2.16 (54.86)	MFR37K-ND	8.49	71.40	8337-6000
Receptacles with 4-40 threaded insert, Female						
9	.98 (24.89)	.67 (17.02)	MFL09K-ND	6.26	52.68	8309-6003
15	1.31 (33.27)	.97 (24.64)	MFL15K-ND	7.03	59.15	8315-6003
25	1.85 (46.99)	1.51 (38.35)	MFL25K-ND	7.47	62.83	8325-6003
37	2.50 (63.50)	2.16 (54.86)	MFL37K-ND	9.13	76.83	8337-6003
50	2.40 (60.96)	2.068(52.53)	MFL50K-ND	18.20	153.13	8350-6005
Backshells						
9	—	—	MDBF09-ND	3.12	26.25	3485-2100F
15	—	—	MDBF15-ND	3.12	26.25	3485-2200F
25	—	—	MDBF25-ND	3.12	26.25	3485-2300F
37	—	—	MDBF37-ND	3.12	26.25	3485-2400F
50	—	—	MDBF50-ND	3.12	26.25	3485-2500F
Strain Relief						
9	—	—	MDSR09-ND	.25	2.10	3448-8D09A
15	—	—	MDSR15-ND	.25	2.10	3448-8D15A
25	—	—	MDSR25-ND	.25	2.10	3448-8D25A
37	—	—	MDSR37-ND	.25	2.10	3448-8D37A
50	—	—	MDSR50-ND	.25	2.10	3448-8D50A

Series 89
D-Subminiature Connectors

We've designed these standard-performance D-Sub connectors to reduce costs and save assembly time.

Physical Specifications: • Insulation Material: Glass reinforced polyester (PBT) • Flammability rating: UL94V-0 • Color: Gray • Marking: Molded figures 3M Logo, part identification number and contact position number • Shell Material: Steel • Plating: Tin • Design: Pin Connector with dimples • Fastening: Through Hole and 4-40 Insert • Contact Material: Copper Alloy • Contact Plating: Wipe area 15µ" average gold over nickel • Wire Accommodation: 26 & 28 AWG Solid or Stranded. **Electrical Specifications:** • Current Rating: 1A • Insulation Resistance: >1 x 10Ω @ 500 VDC • Withstanding Voltage: 1000V_{RMS} @ Sea Level. **Environmental Specifications:** • Operating Temperature: -55°C to +105°C

No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
D-Sub Connectors, Male						
9	.98 (24.89)	.67 (17.02)	MMR09G-ND	4.59	37.34	89809-8000
15	1.31 (33.27)	1.00 (25.40)	MMR15G-ND	5.92	48.17	89815-8000
25	1.85 (46.99)	1.54 (39.12)	MMR25G-ND	6.41	52.16	89825-8000
37	2.50 (63.50)	2.18 (55.37)	MMR37G-ND	8.68	70.68	89837-8000
D-Sub Connectors, Male, Insert						
9	.98 (24.89)	.67 (17.02)	MML09G-ND	5.08	41.33	89809-8003
15	1.31 (33.27)	1.00 (25.40)	MML15G-ND	6.34	51.59	89815-8003
25	1.85 (46.99)	1.54 (39.12)	MML25G-ND	6.79	55.29	89825-8003
37	2.50 (63.50)	2.18 (55.37)	MML37G-ND	8.96	72.96	89837-8003
D-Sub Connectors, Female						
9	.98 (24.89)	.67 (17.02)	MFR09G-ND	4.24	34.49	89909-8000
15	1.31 (33.27)	1.00 (25.40)	MFR15G-ND	5.25	42.75	89915-8000
25	1.85 (46.99)	1.54 (39.12)	MFR25G-ND	5.74	46.74	89925-8000
37	2.50 (63.50)	2.18 (55.37)	MFR37G-ND	7.39	60.14	89937-8000
D-Sub Connectors, Female, Insert						
9	.98 (24.89)	.67 (17.02)	MFL09G-ND	4.38	35.63	89909-8003
15	1.31 (33.27)	1.00 (25.40)	MFL15G-ND	5.71	46.46	89915-8003
25	1.85 (46.99)	1.54 (39.12)	MFL25G-ND	6.16	50.16	89925-8003
37	2.50 (63.50)	2.18 (55.37)	MFL37G-ND	7.77	63.27	89937-8003
Strain Relief						
9	—	—	MDSR09-ND	.25	—	3448-8D09A
15	—	—	MDSR15-ND	.25	—	3448-8D15A
25	—	—	MDSR25-ND	.25	—	3448-8D25A
37	—	—	MDSR37-ND	.25	—	3448-8D37A

M□□□□-□□□□□-ND

Style
7□□ (D-Sub)

Conn. Finish
G = Gold ≤15µ
K = Gold >15µ Gold- Copper beryllium pin plating

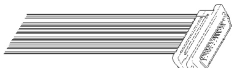
No. Of Contacts

Length *(Use "Feet" only.)*

Ribbon Cable
R=Multi-color
J=Gray

D-Sub Cable Assemblies

Single Ended Male

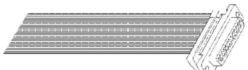


*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7PXK-0906R-ND	11.40	100.01
	Au 15µ"	6 (1.83)	MC	M7PXG-0906R-ND	7.63	66.95
	Au 30µ"	6 (1.83)	GR	M7PXK-0906J-ND	10.42	91.41
	Au 15µ"	6 (1.83)	GR	M7PXG-0906J-ND	6.65	58.35
	Au 30µ"	10 (3.05)	MC	M7PXK-0910R-ND	13.53	118.61
	Au 15µ"	10 (3.05)	MC	M7PXG-0910R-ND	9.76	85.55
	Au 30µ"	10 (3.05)	GR	M7PXK-0910J-ND	11.89	104.27
	Au 15µ"	10 (3.05)	GR	M7PXG-0910J-ND	8.12	71.21
15	Au 30µ"	6 (1.83)	MC	M7PXK-1506R-ND	14.52	127.32
	Au 15µ"	6 (1.83)	MC	M7PXG-1506R-ND	10.85	95.12
	Au 30µ"	6 (1.83)	GR	M7PXK-1506J-ND	12.95	113.53
	Au 15µ"	6 (1.83)	GR	M7PXG-1506J-ND	9.27	81.33
	Au 30µ"	10 (3.05)	MC	M7PXK-1510R-ND	17.92	157.10
	Au 15µ"	10 (3.05)	MC	M7PXG-1510R-ND	14.24	124.90
	Au 30µ"	10 (3.05)	GR	M7PXK-1510J-ND	15.29	134.12
	Au 15µ"	10 (3.05)	GR	M7PXG-1510J-ND	11.62	101.92
25	Au 30µ"	6 (1.83)	MC	M7PXK-2506R-ND	18.77	164.62
	Au 15µ"	6 (1.83)	MC	M7PXG-2506R-ND	14.32	125.57
	Au 30µ"	6 (1.83)	GR	M7PXK-2506J-ND	16.22	142.25
	Au 15µ"	6 (1.83)	GR	M7PXG-2506J-ND	11.77	103.20
	Au 30µ"	10 (3.05)	MC	M7PXK-2510R-ND	24.29	212.99
	Au 15µ"	10 (3.05)	MC	M7PXG-2510R-ND	19.84	173.94
	Au 30µ"	10 (3.05)	GR	M7PXK-2510J-ND	20.04	175.71
	Au 15µ"	10 (3.05)	GR	M7PXG-2510J-ND	15.58	136.67
37	Au 30µ"	6 (1.83)	MC	M7PXK-3706R-ND	25.46	223.24
	Au 15µ"	6 (1.83)	MC	M7PXG-3706R-ND	20.06	175.93
	Au 30µ"	6 (1.83)	GR	M7PXK-3706J-ND	21.83	191.41
	Au 15µ"	6 (1.83)	GR	M7PXG-3706J-ND	16.43	144.10
	Au 30µ"	10 (3.05)	MC	M7PXK-3710R-ND	33.31	292.08
	Au 15µ"	10 (3.05)	MC	M7PXG-3710R-ND	27.91	244.77
	Au 30µ"	10 (3.05)	GR	M7PXK-3710J-ND	27.26	239.03
	Au 15µ"	10 (3.05)	GR	M7PXG-3710J-ND	21.86	191.72

Also available in the following configurations:
M7NX□-□□□□□-ND – Metal Shell Connector with Threaded Insert.
M7VX□-□□□□□-ND – Metal Shell Connector with Threaded Insert & Strain Relief.
Call for complete part number and pricing!

Single Ended Female

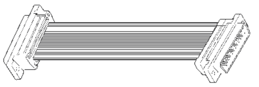


*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7SXK-0906R-ND	11.60	101.72
	Au 15µ"	6 (1.83)	MC	M7SXG-0906R-ND	7.31	64.10
	Au 30µ"	6 (1.83)	GR	M7SXK-0906J-ND	10.62	93.12
	Au 15µ"	6 (1.83)	GR	M7SXG-0906J-ND	6.33	55.50
	Au 30µ"	10 (3.05)	MC	M7SXK-0910R-ND	13.72	120.32
	Au 15µ"	10 (3.05)	MC	M7SXG-0910R-ND	9.43	82.70
	Au 30µ"	10 (3.05)	GR	M7SXK-0910J-ND	12.09	105.98
	Au 15µ"	10 (3.05)	GR	M7SXG-0910J-ND	7.80	68.36
15	Au 30µ"	6 (1.83)	MC	M7SXK-1506R-ND	14.84	130.17
	Au 15µ"	6 (1.83)	MC	M7SXG-1506R-ND	10.26	89.99
	Au 30µ"	6 (1.83)	GR	M7SXK-1506J-ND	13.27	116.38
	Au 15µ"	6 (1.83)	GR	M7SXG-1506J-ND	8.69	76.20
	Au 30µ"	10 (3.05)	MC	M7SXK-1510R-ND	18.24	159.95
	Au 15µ"	10 (3.05)	MC	M7SXG-1510R-ND	13.66	119.77
	Au 30µ"	10 (3.05)	GR	M7SXK-1510J-ND	15.62	136.97
	Au 15µ"	10 (3.05)	GR	M7SXG-1510J-ND	11.04	96.79
25	Au 30µ"	6 (1.83)	MC	M7SXK-2506R-ND	18.93	166.04
	Au 15µ"	6 (1.83)	MC	M7SXG-2506R-ND	13.73	120.44
	Au 30µ"	6 (1.83)	GR	M7SXK-2506J-ND	16.38	143.67
	Au 15µ"	6 (1.83)	GR	M7SXG-2506J-ND	11.18	98.07
	Au 30µ"	10 (3.05)	MC	M7SXK-2510R-ND	24.45	214.41
	Au 15µ"	10 (3.05)	MC	M7SXG-2510R-ND	19.25	168.81
	Au 30µ"	10 (3.05)	GR	M7SXK-2510J-ND	20.20	177.14
	Au 15µ"	10 (3.05)	GR	M7SXG-2510J-ND	15.00	131.54
37	Au 30µ"	6 (1.83)	MC	M7SXK-3706R-ND	25.65	224.95
	Au 15µ"	6 (1.83)	MC	M7SXG-3706R-ND	19.49	170.90
	Au 30µ"	6 (1.83)	GR	M7SXK-3706J-ND	22.02	193.12
	Au 15µ"	6 (1.83)	GR	M7SXG-3706J-ND	15.86	139.07
	Au 30µ"	10 (3.05)	MC	M7SXK-3710R-ND	33.50	293.79
	Au 15µ"	10 (3.05)	MC	M7SXG-3710R-ND	27.34	239.74
	Au 30µ"	10 (3.05)	GR	M7SXK-3710J-ND	27.45	240.74
	Au 15µ"	10 (3.05)	GR	M7SXG-3710J-ND	21.29	186.69

Also available in the following configurations:
M7OX□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert.
M7WX□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.
Call for complete part number and pricing!

Male to Male

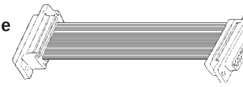


*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7PPK-0906R-ND	19.63	172.11
	Au 15µ"	6 (1.83)	MC	M7PPG-0906R-ND	12.09	105.99
	Au 30µ"	6 (1.83)	GR	M7PPK-0906J-ND	18.65	163.51
	Au 15µ"	6 (1.83)	GR	M7PPG-0906J-ND	11.11	97.39
	Au 30µ"	10 (3.05)	MC	M7PPK-0910R-ND	21.75	190.71
	Au 15µ"	10 (3.05)	MC	M7PPG-0910R-ND	14.21	124.59
	Au 30µ"	10 (3.05)	GR	M7PPK-0910J-ND	20.11	176.38
	Au 15µ"	10 (3.05)	GR	M7PPG-0910J-ND	12.57	110.26
15	Au 30µ"	6 (1.83)	MC	M7PPK-1506R-ND	23.94	209.97
	Au 15µ"	6 (1.83)	MC	M7PPG-1506R-ND	16.60	145.56
	Au 30µ"	6 (1.83)	GR	M7PPK-1506J-ND	22.37	196.18
	Au 15µ"	6 (1.83)	GR	M7PPG-1506J-ND	15.03	131.77
	Au 30µ"	10 (3.05)	MC	M7PPK-1510R-ND	27.34	239.75
	Au 15µ"	10 (3.05)	MC	M7PPG-1510R-ND	20.00	175.34
	Au 30µ"	10 (3.05)	GR	M7PPK-1510J-ND	24.72	216.77
	Au 15µ"	10 (3.05)	GR	M7PPG-1510J-ND	17.37	152.36
25	Au 30µ"	6 (1.83)	MC	M7PPK-2506R-ND	29.27	256.67
	Au 15µ"	6 (1.83)	MC	M7PPG-2506R-ND	20.36	178.58
	Au 30µ"	6 (1.83)	GR	M7PPK-2506J-ND	26.72	234.30
	Au 15µ"	6 (1.83)	GR	M7PPG-2506J-ND	17.81	156.21
	Au 30µ"	10 (3.05)	MC	M7PPK-2510R-ND	34.79	305.04
	Au 15µ"	10 (3.05)	MC	M7PPG-2510R-ND	25.88	226.95
	Au 30µ"	10 (3.05)	GR	M7PPK-2510J-ND	30.53	267.77
	Au 15µ"	10 (3.05)	GR	M7PPG-2510J-ND	21.63	189.68
37	Au 30µ"	6 (1.83)	MC	M7PPK-3706R-ND	39.14	343.23
	Au 15µ"	6 (1.83)	MC	M7PPG-3706R-ND	28.35	248.61
	Au 30µ"	6 (1.83)	GR	M7PPK-3706J-ND	35.51	311.40
	Au 15µ"	6 (1.83)	GR	M7PPG-3706J-ND	24.72	216.78
	Au 30µ"	10 (3.05)	MC	M7PPK-3710R-ND	46.99	412.06
	Au 15µ"	10 (3.05)	MC	M7PPG-3710R-ND	36.20	317.44
	Au 30µ"	10 (3.05)	GR	M7PPK-3710J-ND	40.94	359.01
	Au 15µ"	10 (3.05)	GR	M7PPG-3710J-ND	30.15	264.39

Also available in the following configurations:
M7NN□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert.
M7VV□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.
Call for complete part number and pricing!

Female to Female



*MC = 3M Multi-Color, GR = 3M Gray

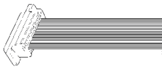
No. of Contacts	Conn. Finish	Length Feet (Meters)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7SSK-0906R-ND	20.02	175.53
	Au 15µ"	6 (1.83)	MC	M7SSG-0906R-ND	11.44	100.29
	Au 30µ"	6 (1.83)	GR	M7SSK-0906J-ND	19.04	166.93
	Au 15µ"	6 (1.83)	GR	M7SSG-0906J-ND	10.46	91.69
	Au 30µ"	10 (3.05)	MC	M7SSK-0910R-ND	22.14	194.13
	Au 15µ"	10 (3.05)	MC	M7SSG-0910R-ND	13.56	118.89
	Au 30µ"	10 (3.05)	GR	M7SSK-0910J-ND	20.50	179.80
	Au 15µ"	10 (3.05)	GR	M7SSG-0910J-ND	11.92	104.56
15	Au 30µ"	6 (1.83)	MC	M7SSK-1506R-ND	24.59	215.67
	Au 15µ"	6 (1.83)	MC	M7SSG-1506R-ND	15.43	135.30
	Au 30µ"	6 (1.83)	GR	M7SSK-1506J-ND	23.02	201.88
	Au 15µ"	6 (1.83)	GR	M7SSG-1506J-ND	13.86	121.51
	Au 30µ"	10 (3.05)	MC	M7SSK-1510R-ND	27.99	245.45
	Au 15µ"	10 (3.05)	MC	M7SSG-1510R-ND	18.83	165.08
	Au 30µ"	10 (3.05)	GR	M7SSK-1510J-ND	25.37	222.47
	Au 15µ"	10 (3.05)	GR	M7SSG-1510J-ND	16.20	142.10
25	Au 30µ"	6 (1.83)	MC	M7SSK-2506R-ND	29.59	259.52
	Au 15µ"	6 (1.83)	MC	M7SSG-2506R-ND	19.19	168.32
	Au 30µ"	6 (1.83)	GR	M7SSK-2506J-ND	27.04	237.15
	Au 15µ"	6 (1.83)	GR	M7SSG-2506J-ND	16.64	145.95
	Au 30µ"	10 (3.05)	MC	M7SSK-2510R-ND	35.11	307.89
	Au 15µ"	10 (3.05)	MC	M7SSG-2510R-ND	24.71	216.69
	Au 30µ"	10 (3.05)	GR	M7SSK-2510J-ND	30.86	270.62
	Au 15µ"	10 (3.05)	GR	M7SSG-2510J-ND	20.46	179.42
37	Au 30µ"	6 (1.83)	MC	M7SSK-3706R-ND	39.53	346.65
	Au 15µ"	6 (1.83)	MC	M7SSG-3706R-ND	27.20	238.55
	Au 30µ"	6 (1.83)	GR	M7SSK-3706J-ND	35.90	314.82
	Au 15µ"	6 (1.83)	GR	M7SSG-3706J-ND	23.57	206.72
	Au 30µ"	10 (3.05)	MC	M7SSK-3710R-ND	47.38	415.48
	Au 15µ"	10 (3.05)	MC	M7SSG-3710R-ND	35.05	307.39
	Au 30µ"	10 (3.05)	GR	M7SSK-3710J-ND	41.33	362.43
	Au 15µ"	10 (3.05)	GR	M7SSG-3710J-ND	29.00	254.34

Also available in the following configurations:
M7OO□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert.
M7WW□-□□□□□-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.
Call for complete part number and pricing!

(Continued)

3M D-Sub Cable Assemblies *(Cont.)*

Male to Female



***MC = 3M Multi-Color, GR = 3M Gray**

No. of Con-tacts	Conn. Finish	Length Feet (meters)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
9	Au 30µ"	6 (1.83)	MC	M7PSK-0906R-ND	19.82	173.82
	Au 15µ"	6 (1.83)	MC	M7PSG-0906R-ND	11.76	103.14
	Au 30µ"	6 (1.83)	GR	M7PSK-0906J-ND	18.84	165.22
	Au 15µ"	6 (1.83)	GR	M7PSG-0906J-ND	10.78	94.54
	Au 30µ"	10 (3.05)	MC	M7PSK-0910R-ND	21.94	192.42
	Au 15µ"	10 (3.05)	MC	M7PSG-0910R-ND	13.88	121.74
	Au 30µ"	10 (3.05)	GR	M7PSK-0910J-ND	20.31	178.09
	Au 15µ"	10 (3.05)	GR	M7PSG-0910J-ND	12.25	107.41
15	Au 30µ"	6 (1.83)	MC	M7PSK-1506R-ND	24.27	212.82
	Au 15µ"	6 (1.83)	MC	M7PSG-1506R-ND	16.01	140.43
	Au 30µ"	6 (1.83)	GR	M7PSK-1506J-ND	22.70	199.03
	Au 15µ"	6 (1.83)	GR	M7PSG-1506J-ND	14.44	126.64
	Au 30µ"	10 (3.05)	MC	M7PSK-1510R-ND	27.67	242.60
	Au 15µ"	10 (3.05)	MC	M7PSG-1510R-ND	19.41	170.21
	Au 30µ"	10 (3.05)	GR	M7PSK-1510J-ND	25.04	219.62
	Au 15µ"	10 (3.05)	GR	M7PSG-1510J-ND	16.79	147.23
25	Au 30µ"	6 (1.83)	MC	M7PSK-2506R-ND	29.43	258.10
	Au 15µ"	6 (1.83)	MC	M7PSG-2506R-ND	19.78	173.45
	Au 30µ"	6 (1.83)	GR	M7PSK-2506J-ND	26.88	235.73
	Au 15µ"	6 (1.83)	GR	M7PSG-2506J-ND	17.23	151.08
	Au 30µ"	10 (3.05)	MC	M7PSK-2510R-ND	34.95	306.47
	Au 15µ"	10 (3.05)	MC	M7PSG-2510R-ND	25.30	221.82
	Au 30µ"	10 (3.05)	GR	M7PSK-2510J-ND	30.70	269.19
	Au 15µ"	10 (3.05)	GR	M7PSG-2510J-ND	21.04	184.55
37	Au 30µ"	6 (1.83)	MC	M7PSK-3706R-ND	39.33	344.94
	Au 15µ"	6 (1.83)	MC	M7PSG-3706R-ND	27.78	243.58
	Au 30µ"	6 (1.83)	GR	M7PSK-3706J-ND	35.71	313.11
	Au 15µ"	6 (1.83)	GR	M7PSG-3706J-ND	24.15	211.75
	Au 30µ"	10 (3.05)	MC	M7PSK-3710R-ND	47.18	413.77
	Au 15µ"	10 (3.05)	MC	M7PSG-3710R-ND	35.63	312.42
	Au 30µ"	10 (3.05)	GR	M7PSK-3710J-ND	41.14	360.72
	Au 15µ"	10 (3.05)	GR	M7PSG-3710J-ND	29.58	259.37

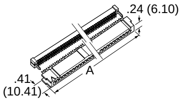
Also available in the following configurations:

M7NO☐-☐☐☐☐☐-ND – Metal Shell Connector w/ Threaded Insert.

M7VW☐-☐☐☐☐☐-ND – Metal Shell Connector w/ Threaded Insert & Strain Relief.

Call for complete part number and pricing!

3M .100" x .100" (2.54mm x 2.54mm) Socket Connectors



Wire Accommodation: 26, 28, 30 AWG solid or stranded.

Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0 • Color: Gray • Contact Material: Beryllium copper • Plating: 30µ" gold • Wire Accommodation: 26 & 28 AWG solid or stranded, 30 AWG solid • Marking: 3M logo, Part Identification Number and Orientation Triangle. **Electrical:** • Current Rating: 1A • Insulation Resistance: >1x10⁹Ω @ 500 VDC • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temp. Rating: -55°C to +105°C. UL File No.: E68080; CSA File No.: LR-40971.

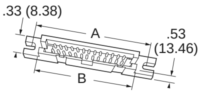
No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	3M Part No.
Polarizing Slots (Open End)					
10	.68 (17.27)	MSC10K-ND	1.93	16.28	3473-6000
14	.88 (22.35)	MSC14K-ND	2.35	19.78	3385-6000
16	.98 (24.89)	MSC16K-ND	2.56	21.53	3452-6000
20	1.18 (29.97)	MSC20K-ND	2.83	23.80	3421-6000
24	1.38 (35.05)	MSC24K-ND	3.39	28.53	3626-6000
26	1.48 (37.59)	MSC26K-ND	3.66	30.80	3399-6000
30	1.68 (42.67)	MSC30K-ND	4.20	35.35	3419-6000
34	1.88 (47.75)	MSC34K-ND	4.76	40.08	3414-6000
40	2.18 (55.37)	MSC40K-ND	5.60	47.08	3417-6000
50	2.68 (68.07)	MSC50K-ND	6.99	58.80	3425-6000
60	3.18 (80.77)	MSC60K-ND	8.65	72.80	3334-6000
Center-Bumped Polarizing (Open End)					
10	.68 (17.27)	MKC10K-ND	1.93	16.28	3473-6600
14	.88 (22.35)	MKC14K-ND	2.35	19.78	3385-6600
16	.98 (24.89)	MKC16K-ND	2.56	21.53	3452-6600
20	1.18 (29.97)	MKC20K-ND	2.83	23.80	3421-6600
24	1.38 (35.05)	MKC24K-ND	3.39	28.53	3626-6600
26	1.48 (37.59)	MKC26K-ND	3.66	30.80	3399-6600
30	1.68 (42.67)	MKC30K-ND	4.20	35.35	3419-6600
34	1.88 (47.75)	MKC34K-ND	4.76	40.08	3414-6600
40	2.18 (55.37)	MKC40K-ND	5.60	47.08	3417-6600
50	2.68 (68.07)	MKC50K-ND	6.99	58.80	3425-6600
60	3.18 (80.77)	MKC60K-ND	8.65	72.80	3334-6600
Center-Bumped Polarizing (Closed End)					
10	.68 (17.27)	MSD10K-ND	2.06	17.33	3473-7600
14	.88 (22.35)	MSD14K-ND	2.58	21.70	3385-7600
16	.98 (24.89)	MSD16K-ND	2.70	22.75	3452-7600
20	1.18 (29.97)	MSD20K-ND	2.97	25.03	3421-7600
24	1.38 (35.05)	MSD24K-ND	3.56	29.93	3626-7600
26	1.48 (37.59)	MSD26K-ND	3.85	32.38	3399-7600
30	1.68 (42.67)	MSD30K-ND	4.41	37.10	3419-7600
34	1.88 (47.75)	MSD34K-ND	4.97	41.83	3414-7600
40	2.18 (55.37)	MSD40K-ND	5.82	49.00	3417-7600
50	2.68 (68.07)	MSD50K-ND	7.26	61.08	3425-7600
60	3.18 (80.77)	MSD60K-ND	8.99	75.60	3334-7600
Cable Strain Relief/Stabilizer					
10	—	MSSR10-ND	.25	2.10	3448-3010
14	—	MSSR14-ND	.25	2.10	3448-3014
16	—	MSSR16-ND	.25	2.10	3448-3016
20	—	MSSR20-ND	.25	2.10	3448-3020
24	—	MSSR24-ND	.25	2.10	3448-3024
26	—	MSSR26-ND	.25	2.10	3448-3026
30	—	MSSR30-ND	.25	2.10	3448-3030
34	—	MSSR34-ND	.25	2.10	3448-3034
40	—	MSSR40-ND	.25	2.10	3448-3040
50	—	MSSR50-ND	.25	2.10	3448-3050
60	—	MSSR60-ND	.25	2.10	3448-3060

3M Series 89, .100" x .100" (2.54mm x 2.54mm) Socket Connectors

These high-quality, standard-performance IDC sockets minimize applied assembly costs without sacrificing reliability. The Series 89 IDC socket is part of a new line of standard-performance interconnects specifically designed to help electronic equipment manufacturers hold down applied assembly costs. These interconnects also offer the quality and reliability you'd expect from 3M. They have been engineered with a "systems" approach that has a positive impact on your process and product costs. **Physical Specifications:** • Insulation Material: Glass filled polyester (PBT), flammability rating: UL94V-0 • Color: Gray • Marking: Molded figures: 3M Logo and Orientation Triangle • Pins are Phosphor Bronze • Contact Plating: Wipe Area: 30µ" Gold: - MIL-G-45204. Type 11, Grade C. Under Plate: 100µ" Nickel-QQ-N-290, Class 2 • Wire Accommodation: 28 AWG Stranded. **Electrical Specifications:** • Current Rating: 1A • Insulation Resistance: >1x10⁹Ω @ 500 VDC • Withstanding Voltage: 1000V$_{RMS}$ @ Sea Level. **Environmental Specifications:** • Operating Temperature: -55°C to +105°C. **UL File No.:** E68080, **CSA File No.:** LR40971

No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	3M Part No.
IDC Socket Gold					
10	.68 (17.27)	MSC10A-ND	.53	4.28	89110-0001
14	.88 (22.35)	MSC14A-ND	.74	5.99	89114-0001
16	.98 (24.89)	MSC16A-ND	.84	6.84	89116-0001
20	1.18 (29.97)	MSC20A-ND	1.05	8.55	89120-0001
24	1.38 (35.05)	MSC24A-ND	1.26	10.26	89124-0001
26	1.48 (37.59)	MSC26A-ND	1.37	11.12	89126-0001
30	1.68 (42.67)	MSC30A-ND	1.58	12.83	89130-0001
34	1.88 (47.75)	MSC34A-ND	1.79	14.54	89134-0001
40	2.18 (55.37)	MSC40A-ND	2.10	17.10	89140-0001
50	2.68 (68.07)	MSC50A-ND	2.63	21.38	89150-0001
60	3.18 (80.77)	MSC60A-ND	3.15	25.65	89160-0001
IDC Socket Gold, Polarizing					
10	.68 (17.27)	MKC10A-ND	.53	4.28	89110-0101
14	.88 (22.35)	MKC14A-ND	.74	5.99	89114-0101
16	.98 (24.89)	MKC16A-ND	.84	6.84	89116-0101
20	1.18 (29.97)	MKC20A-ND	1.05	8.55	89120-0101
24	1.38 (35.05)	MKC24A-ND	1.26	10.26	89124-0101
26	1.48 (37.59)	MKC26A-ND	1.37	11.12	89126-0101
30	1.68 (42.67)	MKC30A-ND	1.58	12.83	89130-0101
34	1.88 (47.75)	MKC34A-ND	1.79	14.54	89134-0101
40	2.18 (55.37)	MKC40A-ND	2.10	17.10	89140-0101
50	2.68 (68.07)	MKC50A-ND	2.63	21.38	89150-0101
60	3.18 (80.77)	MKC60A-ND	3.15	25.65	89160-0101
Strain Relief					
10	—	MKSR10-ND	.21	1.71	3448-89110
14	—	MKSR14-ND	.21	1.71	3448-89114
16	—	MKSR16-ND	.21	1.71	3448-89116
20	—	MKSR20-ND	.21	1.71	3448-89120
24	—	MKSR24-ND	.21	1.71	3448-89124
26	—	MKSR26-ND	.21	1.71	3448-89126
30	—	MKSR30-ND	.21	1.71	3448-89130
34	—	MKSR34-ND	.21	1.71	3448-89134
40	—	MKSR40-ND	.21	1.71	3448-89140
50	—	MKSR50-ND	.21	1.71	3448-89150
60	—	MKSR60-ND	.21	1.71	3448-89160

3M .100" x .100" (2.54mm x 2.54mm) Plug Connectors

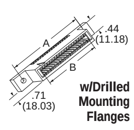


Wire Accommodation: 26 & 28 AWG solid or stranded, 30 AWG solid.

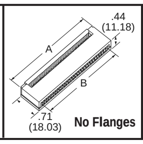
Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0. • Color: Gray. • Contact Material: Flat Cable Connectors are Beryllium Copper • Plating: 30µ" Gold. Latch Eject Headers are Copper Alloy. **Electrical:** • Current Rating: 1 amp. • Insulation Resistance: >1x10⁹ Ω @ 500 VDC. • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
With Slotted Mounting Flanges						
10	1.20 (30.48)	.90 (22.86)	MPL10K-ND	2.81	23.63	4610-6050
14	1.40 (35.56)	1.10 (27.94)	MPL14K-ND	3.89	32.73	4614-6000
16	1.50 (38.10)	1.20 (30.48)	MPL16K-ND	4.41	37.10	4616-6000
20	1.70 (43.18)	1.40 (35.56)	MPL20K-ND	5.14	43.23	4620-6000
24	1.90 (48.26)	1.60 (40.64)	MPL24K-ND	5.66	47.60	4624-6000
26	2.00 (50.80)	1.70 (43.18)	MPL26K-ND	5.84	49.18	4626-6000
30	2.20 (55.88)	1.90 (48.26)	MPL30K-ND	6.43	54.08	4630-6000
34	2.40 (60.96)	2.10 (53.34)	MPL34K-ND	7.26	61.08	4634-6000
36	2.50 (63.50)	2.20 (55.88)	MPL36K-ND	7.68	64.58	4636-6000
40	2.70 (68.58)	2.40 (60.96)	MPL40K-ND	8.05	67.73	4640-6000
50	3.20 (81.28)	2.90 (73.66)	MPL50K-ND	8.72	73.33	4650-6000
60	3.70 (93.98)	3.40 (86.36)	MPL60K-ND	10.28	86.45	4660-6000
64	3.90 (99.06)	3.60 (91.44)	MPL64K-ND	10.96	92.23	4664-6000
Without Mounting Flanges						
10	1.20 (30.48)	.90 (22.86)	MPK10K-ND	2.81	23.63	4610-6051
14	1.40 (35.56)	1.10 (27.94)	MPK14K-ND	3.89	32.73	4614-6001
16	1.50 (38.10)	1.20 (30.48)	MPK16K-ND	4.41	37.10	4616-6001
20	1.70 (43.18)	1.40 (35.56)	MPK20K-ND	5.14	43.23	4620-6001
24	1.90 (48.26)	1.60 (40.64)	MPK24K-ND	5.66	47.60	4624-6001
26	2.00 (50.80)	1.70 (43.18)	MPK26K-ND	5.84	49.18	4626-6001
30	2.20 (55.88)	1.90 (48.26)	MPK30K-ND	6.43	54.08	4630-6001
34	2.40 (60.96)	2.10 (53.34)	MPK34K-ND	7.26	61.08	4634-6001
36	2.50 (63.50)	2.20 (55.88)	MPK36K-ND	7.68	64.58	4636-6001
40	2.70 (68.58)	2.40 (60.96)	MPK40K-ND	8.05	67.73	4640-6001
50	3.20 (81.28)	2.90 (73.66)	MPK50K-ND	8.72	73.33	4650-6001
60	3.70 (93.98)	3.40 (86.36)	MPK60K-ND	10.28	86.45	4660-6001
64	3.90 (99.06)	3.60 (91.44)	MPK64K-ND	10.96	92.23	4664-6001
Strain Reliefs						
10	—	—	MPSR10-ND	.46	3.85	3448-4610
14	—	—	MPSR14-ND	.46	3.85	3448-4614
16	—	—	MPSR16-ND	.46	3.85	3448-4616
20	—	—	MPSR20-ND	.46	3.85	3448-4620
24	—	—	MPSR24-ND	.46	3.85	3448-4624
26	—	—	MPSR26-ND	.46	3.85	3448-4626
30	—	—	MPSR30-ND	.46	3.85	3448-4630
34	—	—	MPSR34-ND	.46	3.85	3448-4634
36	—	—	MPSR36-ND	.46	3.85	3448-4636
40	—	—	MPSR40-ND	.46	3.85	3448-4640
50	—	—	MPSR50-ND	.46	3.85	3448-4650
60	—	—	MPSR60-ND	.46	3.85	3448-4660
64	—	—	MPSR64-ND	.46	3.85	3448-4664
Lock Eject. Hooks (Short)			MDLKS1-ND	.29/2	1.23	3505-16
Lock Eject. Hooks (Long)			MDLKS2-ND	.33/2	1.40	3505-17

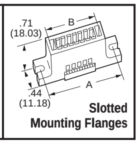
3M .100" (2.54mm) Card Edge Connectors



w/Drilled Mounting Flanges



No Flanges



Slotted Mounting Flanges

Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0 • Color: Gray • Contact Material: Beryllium copper • Plating: 30µ" Gold • Marking: 3M logo, Part Identification Number. **Electrical:** • Current Rating: 1 amp • Insulation Resistance: >1x10⁹Ω @ 500VDC • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971.

Wire Accommodation: 26AWG solid or stranded, 28AWG solid or stranded, 30 AWG solid. *Order strain reliefs separately.*

No. of Cont.	Dim. – Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
With Drilled Mounting Flanges						
10	1.40 (35.56)	.612 (15.54)	MCF10K-ND	3.02	25.38	3358-0000
16	1.70 (43.18)	.912 (23.16)	MCF16K-ND	3.72	31.33	3368-0000
20	1.90 (48.26)	1.112 (28.24)	MCF20K-ND	4.62	38.85	3461-0000
26	2.20 (55.88)	1.412 (35.86)	MCF26K-ND	5.47	46.03	3462-0000
34	2.60 (66.04)	1.812 (46.02)	MCF34K-ND	6.36	53.55	3463-0000
40	2.90 (73.66)	2.112 (53.64)	MCF40K-ND	7.80	65.63	3464-0000
50	3.40 (86.36)	2.612 (66.34)	MCF50K-ND	8.03	67.55	3415-0000
60	3.90 (99.06)	3.112 (79.04)	MCF60K-ND	10.11	85.05	3666-0000
64	4.10 (104.14)	3.312 (84.12)	MCF64K-ND	10.28	86.45	3403-0000
Without Flanges						
10	.96 (24.38)	.612 (15.54)	MCE10K-ND	3.02	25.38	3358-0001
16	1.26 (32.00)	.912 (23.16)	MCE16K-ND	3.72	31.33	3368-0001
20	1.46 (37.08)	1.112 (28.24)	MCE20K-ND	4.62	38.85	3461-0001
26	1.76 (44.70)	1.412 (35.86)	MCE26K-ND	5.47	46.03	3462-0001
34	2.16 (54.86)	1.812 (46.02)	MCE34K-ND	6.36	53.55	3463-0001
40	2.46 (62.48)	2.112 (53.64)	MCE40K-ND	7.80	65.63	3464-0001
50	2.96 (75.18)	2.612 (66.34)	MCE50K-ND	8.03	67.55	3415-0001
60	3.46 (87.88)	3.112 (79.04)	MCE60K-ND	10.11	85.05	3666-0001
64	3.66 (92.96)	3.312 (84.12)	MCE64K-ND	10.28	86.45	3403-0001
With Slotted Mounting Flanges						
10	1.30 (33.02)	.612 (15.54)	MCS10K-ND	3.02	25.38	3358-0002
16	1.60 (40.64)	.912 (23.16)	MCS16K-ND	3.72	31.33	3368-0002
20	1.80 (45.72)	1.112 (28.24)	MCS20K-ND	4.62	38.85	3461-0002
26	2.10 (53.34)	1.412 (35.86)	MCS26K-ND	5.47	46.03	3462-0002
34	2.50 (63.50)	1.812 (46.02)	MCS34K-ND	6.36	53.55	3463-0002
40	2.80 (71.12)	2.112 (53.64)	MCS40K-ND	7.80	65.63	3464-0002
50	3.30 (83.82)	2.612 (66.34)	MCS50K-ND	8.03	67.55	3415-0002
60	3.80 (96.52)	3.112 (79.04)	MCS60K-ND	10.11	85.05	3666-0002
64	4.00 (101.60)	3.312 (84.12)	MCS64K-ND	10.28	86.45	3403-0002
Strain Reliefs						
10	—	—	MCSR10-ND	1.02	8.58	3448-52
16	—	—	MCSR16-ND	1.02	8.58	3448-53
20	—	—	MCSR20-ND	1.02	8.58	3448-54
26	—	—	MCSR26-ND	1.02	8.58	3448-55
34	—	—	MCSR34-ND	1.02	8.58	3448-56
40	—	—	MCSR40-ND	1.02	8.58	3448-57
50	—	—	MCSR50-ND	1.02	8.58	3448-58
60	—	—	MCSR60-ND	2.60	21.88	3448-31
64	—	—	MCSR64-ND	1.02	8.58	3448-59

M☐☐☐☐-☐☐☐☐☐-ND

Style
1☐☐ Single Ended
3☐☐ Double Ended

Conn. Finish
A = Gold >15µ phosphor bronze
G = Gold ≤15µphosphor bronze
K = Gold >15µ Gold- Copper beryllium pin plating

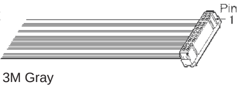
No. Of Contacts

Length *(Use "Inches" only.)*

Ribbon Cable
R=Multi-color
J=Gray
K=Twisted Pair

3M Termination Jumpers

Single Ended Socket Connector



***MC = 3M Multi-Color, GR = 3M Gray**

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ"	36 (91.44)	MC	M1AXK-1036R-ND	4.61	40.46
	Au 15µ"	36 (91.44)	MC	M1AXA-1036R-ND	2.08	18.23
	Au 30µ"	36 (91.44)	GR	M1AXK-1036J-ND	4.12	36.16
	Au 15µ"	36 (91.44)	GR	M1AXA-1036J-ND	1.59	13.93
14	Au 30µ"	36 (91.44)	MC	M1AXK-1436R-ND	5.90	51.74
	Au 15µ"	36 (91.44)	MC	M1AXA-1436R-ND	2.91	25.52
	Au 30µ"	36 (91.44)	GR	M1AXK-1436J-ND	5.21	45.72
	Au 15µ"	36 (91.44)	GR	M1AXA-1436J-ND	2.22	19.50
16	Au 30µ"	36 (91.44)	MC	M1AXK-1636R-ND	6.54	57.39
	Au 15µ"	36 (91.44)	MC	M1AXA-1636R-ND	3.33	29.18
	Au 30µ"	36 (91.44)	GR	M1AXK-1636J-ND	5.76	50.50
	Au 15µ"	36 (91.44)	GR	M1AXA-1636J-ND	2.54	22.28
20	Au 30µ"	36 (91.44)	MC	M1AXK-2036R-ND	7.60	66.66
	Au 15µ"	36 (91.44)	MC	M1AXA-2036R-ND	4.16	36.45
	Au 30µ"	36 (91.44)	GR	M1AXK-2036J-ND	6.62	58.07
	Au 15µ"	36 (91.44)	GR	M1AXA-2036J-ND	3.18	27.86

(Continued)

3M Termination Jumpers

Single Ended Socket Connector *(Cont.)*

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
24	Au 30µ”	36 (91.44)	MC	M1AXK-2436R-ND	9.12	79.94
	Au 15µ”	36 (91.44)	MC	M1AXA-2436R-ND	4.99	43.75
	Au 30µ”	36 (91.44)	GR	M1AXK-2436J-ND	7.94	69.62
	Au 15µ”	36 (91.44)	GR	M1AXA-2436J-ND	3.81	33.42
26	Au 30µ”	36 (91.44)	MC	M1AXK-2636R-ND	9.86	86.44
	Au 15µ”	36 (91.44)	MC	M1AXA-2636R-ND	5.40	47.40
	Au 30µ”	36 (91.44)	GR	M1AXK-2636J-ND	8.58	75.26
	Au 15µ”	36 (91.44)	GR	M1AXA-2636J-ND	4.13	36.21
30	Au 30µ”	36 (91.44)	MC	M1AXK-3036R-ND	11.97	105.00
	Au 15µ”	36 (91.44)	MC	M1AXA-3036R-ND	6.87	60.25
	Au 30µ”	36 (91.44)	GR	M1AXK-3036J-ND	10.31	90.39
	Au 15µ”	36 (91.44)	GR	M1AXA-3036J-ND	5.20	45.64
34	Au 30µ”	36 (91.44)	MC	M1AXK-3436R-ND	12.85	112.69
	Au 15µ”	36 (91.44)	MC	M1AXA-3436R-ND	7.07	61.96
	Au 30µ”	36 (91.44)	GR	M1AXK-3436J-ND	11.18	98.08
	Au 15µ”	36 (91.44)	GR	M1AXA-3436J-ND	5.40	47.35
40	Au 30µ”	36 (91.44)	MC	M1AXK-4036R-ND	15.11	132.47
	Au 15µ”	36 (91.44)	MC	M1AXA-4036R-ND	8.31	72.91
	Au 30µ”	36 (91.44)	GR	M1AXK-4036J-ND	13.15	115.27
	Au 15µ”	36 (91.44)	GR	M1AXA-4036J-ND	6.35	55.71
50	Au 30µ”	36 (91.44)	MC	M1AXK-5036R-ND	18.87	165.52
	Au 15µ”	36 (91.44)	MC	M1AXA-5036R-ND	10.39	91.13
	Au 30µ”	36 (91.44)	GR	M1AXK-5036J-ND	16.42	144.02
	Au 15µ”	36 (91.44)	GR	M1AXA-5036J-ND	7.94	69.63
60	Au 30µ”	36 (91.44)	MC	M1AXK-6036R-ND	23.07	202.27
	Au 15µ”	36 (91.44)	MC	M1AXA-6036R-ND	12.47	109.36
	Au 30µ”	36 (91.44)	GR	M1AXK-6036J-ND	20.12	176.47
	Au 15µ”	36 (91.44)	GR	M1AXA-6036J-ND	9.53	83.56

Also available in the following configurations:
M1BX□-□□36□-ND – Standard Open End w/ Strain Relief.
M1CX□-□□36□-ND – Standard Open End w/ Polarizing Key.
M1DX□-□□36□-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M1TXK-□□36□-ND – Standard Closed End w/ Polarizing Key.
M1UXK-□□36□-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

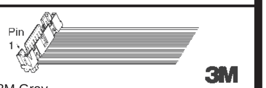
Single Ended Socket Connector

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Au 30µ”	40 (101.60)	TW	M1AXK-1040K-ND	4.99	43.80
	Au 15µ”	40 (101.60)	TW	M1AXA-1040K-ND	2.46	21.57
14	Au 30µ”	40 (101.60)	TW	M1AXK-1440K-ND	6.43	56.41
	Au 15µ”	40 (101.60)	TW	M1AXA-1440K-ND	3.44	30.19
16	Au 30µ”	40 (101.60)	TW	M1AXK-1640K-ND	7.15	62.72
	Au 15µ”	40 (101.60)	TW	M1AXA-1640K-ND	3.93	34.50
20	Au 30µ”	40 (101.60)	TW	M1AXK-2040K-ND	8.36	73.34
	Au 15µ”	40 (101.60)	TW	M1AXA-2040K-ND	4.92	43.13
26	Au 30µ”	40 (101.60)	TW	M1AXK-2640K-ND	10.85	95.11
	Au 15µ”	40 (101.60)	TW	M1AXA-2640K-ND	6.39	56.07
34	Au 30µ”	40 (101.60)	TW	M1AXK-3440K-ND	14.15	124.05
	Au 15µ”	40 (101.60)	TW	M1AXA-3440K-ND	8.36	73.32
40	Au 30µ”	40 (101.60)	TW	M1AXK-4040K-ND	16.63	145.83
	Au 15µ”	40 (101.60)	TW	M1AXA-4040K-ND	9.84	86.26
50	Au 30µ”	40 (101.60)	TW	M1AXK-5040K-ND	20.78	182.21
	Au 15µ”	40 (101.60)	TW	M1AXA-5040K-ND	12.30	107.82
60	Au 30µ”	40 (101.60)	TW	M1AXK-6040K-ND	25.35	222.30
	Au 15µ”	40 (101.60)	TW	M1AXA-6040K-ND	14.76	129.39

Also available in the following configurations:
M1BX□-□□40K-ND – Standard Open End w/ Strain Relief.
M1CX□-□□40K-ND – Standard Open End w/ Polarizing Key.
M1DX□-□□40K-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M1TXK-□□40K-ND – Standard Closed End w/ Polarizing Key.
M1UXK-□□40K-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

Plug Connector Single Ended



*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Au 30µ”	36 (91.44)	MC	M1KXK-1036R-ND	5.98	52.43
	Au 30µ”	36 (91.44)	GR	M1KXK-1036J-ND	5.49	48.13
14	Au 30µ”	36 (91.44)	MC	M1KXK-1436R-ND	8.31	72.83
	Au 30µ”	36 (91.44)	GR	M1KXK-1436J-ND	7.62	66.81
16	Au 30µ”	36 (91.44)	MC	M1KXK-1636R-ND	9.44	82.76
	Au 30µ”	36 (91.44)	GR	M1KXK-1636J-ND	8.65	75.86
20	Au 30µ”	36 (91.44)	MC	M1KXK-2036R-ND	11.21	98.30
	Au 30µ”	36 (91.44)	GR	M1KXK-2036J-ND	10.23	89.70
24	Au 30µ”	36 (91.44)	MC	M1KXK-2436R-ND	12.66	111.01
	Au 30µ”	36 (91.44)	GR	M1KXK-2436J-ND	11.48	100.68
26	Au 30µ”	36 (91.44)	MC	M1KXK-2636R-ND	13.27	116.37
	Au 30µ”	36 (91.44)	GR	M1KXK-2636J-ND	11.99	105.18
30	Au 30µ”	36 (91.44)	MC	M1KXK-3036R-ND	15.45	135.49
	Au 30µ”	36 (91.44)	GR	M1KXK-3036J-ND	13.78	120.88
34	Au 30µ”	36 (91.44)	MC	M1KXK-3436R-ND	16.75	146.89
	Au 30µ”	36 (91.44)	GR	M1KXK-3436J-ND	15.08	132.28
36	Au 30µ”	36 (91.44)	MC	M1KXK-3636R-ND	17.88	156.79
	Au 30µ”	36 (91.44)	GR	M1KXK-3636J-ND	16.07	140.88
40	Au 30µ”	36 (91.44)	MC	M1KXK-4036R-ND	18.94	166.10
	Au 30µ”	36 (91.44)	GR	M1KXK-4036J-ND	16.98	148.90
50	Au 30µ”	36 (91.44)	MC	M1KXK-5036R-ND	21.57	189.17
	Au 30µ”	36 (91.44)	GR	M1KXK-5036J-ND	19.12	167.67
60	Au 30µ”	36 (91.44)	MC	M1KXK-6036R-ND	25.60	224.50
	Au 30µ”	36 (91.44)	GR	M1KXK-6036J-ND	22.66	198.70
64	Au 30µ”	36 (91.44)	MC	M1KXK-6436R-ND	27.31	239.48
	Au 30µ”	36 (91.44)	GR	M1KXK-6436J-ND	24.17	211.97

Also available in the following configurations:
M1RXK-□□36□-ND – Pin Connector w/o Flange w/ PK & Strain Relief.
M1WXK-□□36□-ND – Pin Connector with Flange w/ Polarizing Key.
M1YXK-□□36□-ND – Pin Connector w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

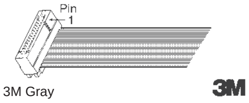
Plug Connector — Single Ended

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Au 30µ”	40 (101.60)	TW	M1KXK-1040K-ND	6.36	55.77
14	Au 30µ”	40 (101.60)	TW	M1KXK-1440K-ND	8.84	77.50
16	Au 30µ”	40 (101.60)	TW	M1KXK-1640K-ND	10.04	88.08
20	Au 30µ”	40 (101.60)	TW	M1KXK-2040K-ND	11.97	104.97
26	Au 30µ”	40 (101.60)	TW	M1KXK-2640K-ND	14.26	125.04
34	Au 30µ”	40 (101.60)	TW	M1KXK-3440K-ND	18.05	158.25
40	Au 30µ”	40 (101.60)	TW	M1KXK-4040K-ND	20.46	179.46
50	Au 30µ”	40 (101.60)	TW	M1KXK-5040K-ND	23.48	205.86
60	Au 30µ”	40 (101.60)	TW	M1KXK-6040K-ND	27.89	244.53
64	Au 30µ”	40 (101.60)	TW	M1KXK-6440K-ND	29.75	260.85

Also available in the following configurations:
M1RXK-□□40K-ND – Standard Open End without Flange, with Polarizing Key & Strain Relief.
M1WXK-□□40K-ND – Standard Open End with Flange, with Polarizing Key.
M1YXK-□□40K-ND – Standard Open End with Flange, with Polarizing Key and Strain Relief.
Call for complete part number and pricing!

Single Ended Card Edge Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Au 30µ”	36 (91.44)	MC	M1EXK-1036R-ND	5.82	51.00
	Au 30µ”	36 (91.44)	GR	M1EXK-1036J-ND	5.33	46.70
16	Au 30µ”	36 (91.44)	MC	M1EXK-1636R-ND	8.36	73.35
	Au 30µ”	36 (91.44)	GR	M1EXK-1636J-ND	7.58	66.46
20	Au 30µ”	36 (91.44)	MC	M1EXK-2036R-ND	10.40	91.17
	Au 30µ”	36 (91.44)	GR	M1EXK-2036J-ND	9.42	82.58
26	Au 30µ”	36 (91.44)	MC	M1EXK-2636R-ND	12.68	111.24
	Au 30µ”	36 (91.44)	GR	M1EXK-2636J-ND	11.41	100.05
34	Au 30µ”	36 (91.44)	MC	M1EXK-3436R-ND	15.35	134.64
	Au 30µ”	36 (91.44)	GR	M1EXK-3436J-ND	13.69	120.03
40	Au 30µ”	36 (91.44)	MC	M1EXK-4036R-ND	18.55	162.68
	Au 30µ”	36 (91.44)	GR	M1EXK-4036J-ND	16.59	145.48
50	Au 30µ”	36 (91.44)	MC	M1EXK-5036R-ND	20.50	179.77
	Au 30µ”	36 (91.44)	GR	M1EXK-5036J-ND	18.05	158.27
60	Au 30µ”	36 (91.44)	MC	M1EXK-6036R-ND	25.34	222.22
	Au 30µ”	36 (91.44)	GR	M1EXK-6036J-ND	22.40	196.42
64	Au 30µ”	36 (91.44)	MC	M1EXK-6436R-ND	26.24	230.07
	Au 30µ”	36 (91.44)	GR	M1EXK-6436J-ND	23.10	202.56

Also available in the following configurations:
M1FXK-□□36□-ND – Card Edge Connector w/ Flange.
M1GXK-□□36□-ND – Card Edge Connector w/ Slotted Flange.
M1MXK-□□36□-ND – Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

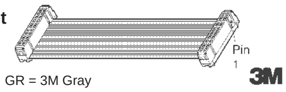
Single Ended Card Edge Connector

***Twisted Pair Cable Finished Length is Approximate**

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Au 30µ”	40 (101.60)	TW	M1EXK-1040K-ND	6.20	54.34
16	Au 30µ”	40 (101.60)	TW	M1EXK-1640K-ND	8.97	78.68
20	Au 30µ”	40 (101.60)	TW	M1EXK-2040K-ND	11.16	97.85
26	Au 30µ”	40 (101.60)	TW	M1EXK-2640K-ND	13.67	119.91
34	Au 30µ”	40 (101.60)	TW	M1EXK-3440K-ND	16.65	146.00
40	Au 30µ”	40 (101.60)	TW	M1EXK-4040K-ND	20.07	176.04
50	Au 30µ”	40 (101.60)	TW	M1EXK-5040K-ND	22.40	196.46
60	Au 30µ”	40 (101.60)	TW	M1EXK-6040K-ND	27.63	242.25
64	Au 30µ”	40 (101.60)	TW	M1EXK-6440K-ND	28.67	251.45

Also available in the following configurations:
M1FXK-□□40K-ND – Card Edge Connector w/ Flange.
M1GXK-□□40K-ND – Card Edge Connector w/ Slotted Flange.
M1MXK-□□40K-ND – Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

Socket to Socket Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Contacts	Conn. Finish	Length In. (cm)	Ribbon* Cable	Digi-Key Part No.	Pricing 1	Pricing 10
10	Au 30µ”	6 (15.24)	MC	M3AAK-1006R-ND	6.31	55.34
	Au 15µ”	6 (15.24)	MC	M3AAA-1006R-ND	1.24	10.88
	Au 30µ”	6 (15.24)	GR	M3AAK-1006J-ND	6.23	54.62
	Au 15µ”	6 (15.24)	GR	M3AAA-1006J-ND	1.16	10.16
10	Au 30µ”	18 (45.72)	MC	M3AAK-1018R-ND	6.84	59.99
	Au 15µ”	18 (45.72)	MC	M3AAA-1018R-ND	1.77	15.53
	Au 30µ”	18 (45.72)	GR	M3AAK-1018J-ND	6.60	57.84
	Au 15µ”	18 (45.72)	GR	M3AAA-1018J-ND	1.53	13.38
10	Au 30µ”	36 (91.44)	MC	M3AAK-1036R-ND	7.64	66.96
	Au 15µ”	36 (91.44)	MC	M3AAA-1036R-ND	2.57	22.50
	Au 30µ”	36 (91.44)	GR	M3AAK-1036J-ND	7.15	62.66
	Au 15µ”	36 (91.44)	GR	M3AAA-1036J-ND	2.08	18.20
14	Au 30µ”	6 (15.24)	MC	M3AAK-1406R-ND	7.72	67.67
	Au 15µ”	6 (15.24)	MC	M3AAA-1406R-ND	1.74	15.23
	Au 30µ”	6 (15.24)	GR	M3AAK-1406J-ND	7.60	66.66
	Au 15µ”	6 (15.24)	GR	M3AAA-1406J-ND	1.62	14.22
14	Au 30µ”	18 (45.72)	MC	M3AAK-1418R-ND	8.46	74.18
	Au 15µ”	18 (45.72)	MC	M3AAA-1418R-ND	2.48	21.74
	Au 30µ”	18 (45.72)	GR	M3AAK-1418J-ND	8.12	71.17
	Au 15µ”	18 (45.72)	GR	M3AAA-1418J-ND	2.14	18.73
14	Au 30µ”	36 (91.44)	MC	M3AAK-1436R-ND	9.57	83.95
	Au 15µ”	36 (91.44)	MC	M3AAA-1436R-ND	3.59	31.51
	Au 30µ”	36 (91.44)	GR	M3AAK-1436J-ND	8.89	77.92
	Au 15µ”	36 (91.44)	GR	M3AAA-1436J-ND	2.91	25.48
16	Au 30µ”	6 (15.24)	MC	M3AAK-1606R-ND	8.42	73.83
	Au 15µ”	6 (15.24)	MC	M3AAA-1606R-ND	1.98	17.40
	Au 30µ”	6 (15.24)	GR	M3AAK-1606J-ND	8.29	72.68
	Au 15µ”	6 (15.24)	GR	M3AAA-1606J-ND	1.85	16.22
16	Au 30µ”	18 (45.72)	MC	M3AAK-1618R-ND	9.27	81.28
	Au 15µ”	18 (45.72)	MC	M3AAA-1618R-ND	2.83	24.85
	Au 30µ”	18 (45.72)	GR	M3AAK-1618J-ND	8.88	77.83
	Au 15µ”	18 (45.72)	GR	M3AAA-1618J-ND	2.44	21.40
16	Au 30µ”	36 (91.44)	MC	M3AAK-1636R-ND	10.54	92.45
	Au 15µ”	36 (91.44)	MC	M3AAA-1636R-ND	4.11	36.02
	Au 30µ”	36 (91.44)	GR	M3AAK-1636J-ND	9.76	85.55
	Au 15µ”	36 (91.44)	GR	M3AAA-1636J-ND	3.32	29.12
20	Au 30µ”	6 (15.24)	MC	M3AAK-2006R-ND	9.37	82.17
	Au 15µ”	6 (15.24)	MC	M3AAA-2006R-ND	2.48	21.75
	Au 30µ”	6 (15.24)	GR	M3AAK-2006J-ND	9.21	80.74
	Au 15µ”	6 (15.24)	GR	M3AAA-2006J-ND	2.32	20.32
20	Au 30µ”	18 (45.72)	MC	M3AAK-2018R-ND	10.43	91.47
	Au 15µ”	18 (45.72)	MC	M3AAA-2018R-ND	3.54	31.05
	Au 30µ”	18 (45.72)	GR	M3AAK-2018J-ND	9.94	87.17
	Au 15µ”	18 (45.72)	GR	M3AAA-2018J-ND	3.05	26.75
20	Au 30µ”	36 (91.44)	MC	M3AAK-2036R-ND	12.02	105.42
	Au 15µ”	36 (91.44)	MC	M3AAA-2036R-ND	5.13	45.00
	Au 30µ”	36 (91.44)	GR	M3AAK-2036J-ND	11.04	96.83
	Au 15µ”	36 (91.44)	GR	M3AAA-2036J-ND	4.15	36.41
24	Au 30µ”	6 (15.24)	MC	M3AAK-2406R-ND	11.23	98.49
	Au 15µ”	6 (15.24)	MC	M3AAA-2406R-ND	2.98	26.10
	Au 30µ”	6 (15.24)	GR	M3AAK-2406J-ND	11.04	96.77
	Au 15µ”	6 (15.24)	GR	M3AAA-2406J-ND	2.78	24.38
24	Au 30µ”	18 (45.72)	MC	M3AAK-2418R-ND	12.50	109.65
	Au 15µ”	18 (45.72)	MC	M3AAA-2418R-ND	4.25	37.26
	Au 30µ”	18 (45.72)	GR	M3AAK-2418J-ND	11.92	104.49
	Au 15µ”	18 (45.72)	GR	M3AAA-2418J-ND	3.66	32.10
24	Au 30µ”	36 (91.44)	MC	M3AAK-2436R-ND	14.41	126.40
	Au 15µ”	36 (91.44)	MC	M3AAA-2436R-ND	6.16	54.01
	Au 30µ”	36 (91.44)	GR	M3AAK-2436J-ND	13.24	116.07
	Au 15µ”	36 (91.44)	GR	M3AAA-2436J-ND	4.98	43.68
26	Au 30µ”	6 (15.24)	MC	M3AAK-2606R-ND	12.13	106.37
	Au 15µ”	6 (15.24)	MC	M3AAA-2606R-ND	3.22	28.28
	Au 30µ”	6 (15.24)	GR	M3AAK-2606J-ND	11.92	104.50
	Au 15µ”	6 (15.24)	GR	M3AAA-2606J-ND	3.01	26.41
26	Au 30µ”	18 (45.72)	MC	M3AAK-2618R-ND	13.51	118.46
	Au 15µ”	18 (45.72)	MC	M3AAA-2618R-ND	4.60	40.37
	Au 30µ”	18 (45.72)	GR	M3AAK-2618J-ND	12.87	112.87
	Au 15µ”	18 (45.72)	GR	M3AAA-2618J-ND	3.97	34.78
26	Au 30µ”	36 (91.44)	MC	M3AAK-2636R-ND	15.58	136.60
	Au 15µ”	36 (91.44)	MC	M3AAA-2636R-ND	6.67	58.51
	Au 30µ”	36 (91.44)	GR	M3AAK-2636J-ND	14.30	125.42
	Au 15µ”	36 (91.44)	GR	M3AAA-2636J-ND	5.40	47.33
30	Au 30µ”	6 (15.24)	MC	M3AAK-3006R-ND	14.03	123.05
	Au 15µ”	6 (15.24)	MC	M3AAA-3006R-ND	3.83	33.56
	Au 30µ”	6 (15.24)	GR	M3AAK-3006J-ND	13.75	120.61
	Au 15µ”	6 (15.24)	GR	M3AAA-3006J-ND	3.55	31.12
30	Au 30µ”	18 (45.72)	MC	M3AAK-3018R-ND	15.83	138.85
	Au 15µ”	18 (45.72)	MC	M3AAA-3018R-ND	5.63	49.36
	Au 30µ”	18 (45.72)	GR	M3AAK-3018J-ND	15.00	131.55
	Au 15µ”	18 (45.72)	GR	M3AAA-3018J-ND	4.80	42.06
30	Au 30µ”	36 (91.44)	MC	M3AAK-3036R-ND	18.54	162.57
	Au 15µ”	36 (91.44)	MC	M3AAA-3036R-ND	8.33	73.08
	Au 30µ”	36 (91.44)	GR	M3AAK-3036J-ND	16.87	147.96
	Au 15µ”	36 (91.44)	GR	M3AAA-3036J-ND	6.67	58.47
34	Au 30µ”	6 (15.24)	MC	M3AAK-3406R-ND	15.79	138.44
	Au 15µ”	6 (15.24)	MC	M3AAA-3406R-ND	4.22	36.98
	Au 30µ”	6 (15.24)	GR	M3AAK-3406J-ND	15.51	136.00
	Au 15µ”	6 (15.24)	GR	M3AAA-3406J-ND	3.94	34.54
34	Au 30µ”	18 (45.72)	MC	M3AAK-3418R-ND	17.59	154.24
	Au 15µ”	18 (45.72)	MC	M3AAA-3418R-ND	6.02	52.78
	Au 30µ”	18 (45.72)	GR	M3AAK-3418J-ND	16.76	146.94
	Au 15µ”	18 (45.72)	GR	M3AAA-3418J-ND	5.19	45.48
34	Au 30µ”	36 (91.44)	MC	M3AAK-3436R-ND	20.29	177.96
	Au 15µ”	36 (91.44)	MC	M3AAA-3436R-ND	8.72	76.50
	Au 30µ”	36 (91.44)	GR	M3AAK-3436J-ND	18.63	163.35
	Au 15µ”	36 (91.44)	GR	M3AAA-3436J-ND	7.07	62.02
40	Au 30µ”	6 (15.24)	MC	M3AAK-4006R-ND	18.55	162.63
	Au 15µ”	6 (15.24)	MC	M3AAA-4006R-ND	4.96	43.50
	Au 30µ”	6 (15.24)	GR	M3AAK-4006J-ND	18.22	159.76
	Au 15µ”	6 (15.24)	GR	M3AAA-4006J-ND	4.63	40.63
40	Au 30µ”	18 (45.72)	MC	M3AAK-4018R-ND	20.67	181.23
	Au 15µ”	18 (45.72)	MC	M3AAA-4018R-ND	7.08	62.10
	Au 30µ”	18 (45.72)	GR	M3AAK-4018J-ND	19.69	172.63
	Au 15µ”	18 (45.72)	GR	M3AAA-4018J-ND	6.10	53.50
40	Au 30µ”	36 (91.44)	MC	M3AAK-4036R-ND	23.85	209.14
	Au 15µ”	36 (91.44)	MC	M3AAA-4036R-ND	10.26	90.01
	Au 30µ”	36 (91.44)	GR	M3AAK-4036J-ND	21.89	191.94
	Au 15µ”	36 (91.44)	GR	M3AAA-4036J-ND	8.30	72.81
50	Au 30µ”	6 (15.24)	MC	M3AAK-5006R-ND	23.16	203.09
	Au 15µ”	6 (15.24)	MC	M3AAA-5006R-ND	6.20	54.38
	Au 30µ”	6 (15.24)	GR	M3AAK-5006J-ND	22.76	199.56
	Au 15µ”	6 (15.24)	GR	M3AAA-5006J-ND	5.79	50.79
50	Au 30µ”	18 (45.72)	MC	M3AAK-5018R-ND	25.82	226.40
	Au 15µ”	18 (45.72)	MC	M3AAA-5018R-ND	8.85	77.63
	Au 30µ”	18 (45.72)	GR	M3AAK-5018J-ND	24.59	215.65
	Au 15µ”	18 (45.72)	GR	M3AAA-5018J-ND	7.63	66.88
50	Au 30µ”	36 (91.44)	MC	M3AAK-5036R-ND	29.79	261.28
	Au 15µ”	36 (91.44)	MC	M3AAA-5036R-ND	12.83	112.51
	Au 30µ”	36 (91.44)	GR	M3AAK-5036J-ND	27.34	239.78
	Au 15µ”	36 (91.44)	GR	M3AAA-5036J-ND	10.38	91.01
60	Au 30µ”	6 (15.24)	MC	M3AAK-6006R-ND	28.63	251.07
	Au 15µ”	6 (15.24)	MC	M3AAA-6006R-ND	7.44	65.25
	Au 30µ”	6 (15.24)	GR	M3AAK-6006J-ND	28.14	246.77
	Au 15µ”	6 (15.24)	GR	M3AAA-6006J-ND	6.95	60.95

(Continued)

3M Termination Jumpers

Socket to Socket Connector *(Cont.)*

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
60	Au 30µ"	18 (45.72)	MC	M3AAK-6018R-ND	31.81	278.98
	Au 15µ"	18 (45.72)	MC	M3AAA-6018R-ND	10.62	93.16
	Au 30µ"	18 (45.72)	GR	M3AAK-6018J-ND	30.34	266.08
	Au 15µ"	18 (45.72)	GR	M3AAA-6018J-ND	9.15	80.26
60	Au 30µ"	36 (91.44)	MC	M3AAK-6036R-ND	36.59	320.83
	Au 15µ"	36 (91.44)	MC	M3AAA-6036R-ND	15.40	135.01
	Au 30µ"	36 (91.44)	GR	M3AAK-6036J-ND	33.64	295.03
	Au 15µ"	36 (91.44)	GR	M3AAA-6036J-ND	12.45	109.21

Also available in the following configurations:

M3BB□-□□□□□-ND – Standard Open End w/ Strain Relief.
M3CC□-□□□□□-ND – Standard Open End w/ Polarizing Key.
M3DD□-□□□□□-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M3TTK-□□□□□-ND – Standard Closed End w/ Polarizing Key.
M3UUK-□□□□□-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

Socket to Socket Connector

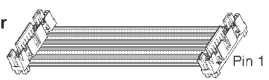
***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ"	20 (50.80)	TW	M3AAK-1020K-ND	7.03	61.65
	Au 15µ"	20 (50.80)	TW	M3AAA-1020K-ND	1.96	17.19
	Au 30µ"	40 (101.60)	TW	M3AAK-1040K-ND	8.02	70.30
	Au 15µ"	40 (101.60)	TW	M3AAA-1040K-ND	2.95	25.84
	Au 30µ"	60 (152.40)	TW	M3AAK-1060K-ND	9.00	78.95
	Au 15µ"	60 (152.40)	TW	M3AAA-1060K-ND	3.93	34.49
14	Au 30µ"	20 (50.80)	TW	M3AAK-1420K-ND	8.73	76.51
	Au 15µ"	20 (50.80)	TW	M3AAA-1420K-ND	2.75	24.07
	Au 30µ"	40 (101.60)	TW	M3AAK-1440K-ND	10.11	88.62
	Au 15µ"	40 (101.60)	TW	M3AAA-1440K-ND	4.13	36.18
	Au 30µ"	60 (152.40)	TW	M3AAK-1460K-ND	11.49	100.72
	Au 15µ"	60 (152.40)	TW	M3AAA-1460K-ND	5.51	48.28
16	Au 30µ"	20 (50.80)	TW	M3AAK-1620K-ND	9.57	83.94
	Au 15µ"	20 (50.80)	TW	M3AAA-1620K-ND	3.14	27.51
	Au 30µ"	40 (101.60)	TW	M3AAK-1640K-ND	11.15	97.77
	Au 15µ"	40 (101.60)	TW	M3AAA-1640K-ND	4.71	41.34
	Au 30µ"	60 (152.40)	TW	M3AAK-1660K-ND	12.73	111.61
	Au 15µ"	60 (152.40)	TW	M3AAA-1660K-ND	6.29	55.18
20	Au 30µ"	20 (50.80)	TW	M3AAK-2020K-ND	10.81	94.81
	Au 15µ"	20 (50.80)	TW	M3AAA-2020K-ND	3.92	34.39
	Au 30µ"	40 (101.60)	TW	M3AAK-2040K-ND	12.78	112.10
	Au 15µ"	40 (101.60)	TW	M3AAA-2040K-ND	5.89	51.68
	Au 30µ"	60 (152.40)	TW	M3AAK-2060K-ND	14.76	129.39
	Au 15µ"	60 (152.40)	TW	M3AAA-2060K-ND	7.87	68.97
26	Au 30µ"	20 (50.80)	TW	M3AAK-2620K-ND	14.00	122.80
	Au 15µ"	20 (50.80)	TW	M3AAA-2620K-ND	5.10	44.71
	Au 30µ"	40 (101.60)	TW	M3AAK-2640K-ND	16.57	145.27
	Au 15µ"	40 (101.60)	TW	M3AAA-2640K-ND	7.66	67.18
	Au 30µ"	60 (152.40)	TW	M3AAK-2660K-ND	19.13	167.75
	Au 15µ"	60 (152.40)	TW	M3AAA-2660K-ND	10.22	89.66
34	Au 30µ"	20 (50.80)	TW	M3AAK-3420K-ND	18.24	159.92
	Au 15µ"	20 (50.80)	TW	M3AAA-3420K-ND	6.67	58.46
	Au 30µ"	40 (101.60)	TW	M3AAK-3440K-ND	21.59	189.32
	Au 15µ"	40 (101.60)	TW	M3AAA-3440K-ND	10.02	87.86
	Au 30µ"	60 (152.40)	TW	M3AAK-3460K-ND	24.94	218.71
	Au 15µ"	60 (152.40)	TW	M3AAA-3460K-ND	13.37	117.25
40	Au 30µ"	20 (50.80)	TW	M3AAK-4020K-ND	21.43	187.91
	Au 15µ"	20 (50.80)	TW	M3AAA-4020K-ND	7.84	68.78
	Au 30µ"	40 (101.60)	TW	M3AAK-4040K-ND	25.37	222.49
	Au 15µ"	40 (101.60)	TW	M3AAA-4040K-ND	11.79	103.36
	Au 30µ"	60 (152.40)	TW	M3AAK-4060K-ND	29.32	257.07
	Au 15µ"	60 (152.40)	TW	M3AAA-4060K-ND	15.73	137.94
50	Au 30µ"	20 (50.80)	TW	M3AAK-5020K-ND	26.77	234.75
	Au 15µ"	20 (50.80)	TW	M3AAA-5020K-ND	9.80	85.98
	Au 30µ"	40 (101.60)	TW	M3AAK-5040K-ND	31.70	277.97
	Au 15µ"	40 (101.60)	TW	M3AAA-5040K-ND	14.73	129.20
	Au 30µ"	60 (152.40)	TW	M3AAK-5060K-ND	36.63	321.20
	Au 15µ"	60 (152.40)	TW	M3AAA-5060K-ND	19.66	172.43
60	Au 30µ"	20 (50.80)	TW	M3AAK-6020K-ND	32.96	288.99
	Au 15µ"	20 (50.80)	TW	M3AAA-6020K-ND	11.77	103.17
	Au 30µ"	40 (101.60)	TW	M3AAK-6040K-ND	38.87	340.86
	Au 15µ"	40 (101.60)	TW	M3AAA-6040K-ND	17.68	155.04
	Au 30µ"	60 (152.40)	TW	M3AAK-6060K-ND	44.79	392.73
	Au 15µ"	60 (152.40)	TW	M3AAA-6060K-ND	23.60	206.91

Also available in the following configurations:

M3BB□-□□□□K-ND – Standard Open End w/ Strain Relief.
M3CC□-□□□□K-ND – Standard Open End w/ Polarizing Key.
M3DD□-□□□□K-ND – Standard Open End w/ Polarizing Key & Strain Relief.
M3TTK-□□□□K-ND – Standard Closed End w/ Polarizing Key.
M3UUK-□□□□K-ND – Standard Closed End w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

Plug Connector to Plug Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ"	6 (15.24)	MC	M3KKK-1006R-ND	9.04	79.28
	Au 30µ"	6 (15.24)	GR	M3KKK-1006J-ND	8.96	78.56
	Au 30µ"	18 (45.72)	MC	M3KKK-1018R-ND	9.57	83.93
	Au 30µ"	18 (45.72)	GR	M3KKK-1018J-ND	9.33	81.78
	Au 30µ"	36 (91.44)	MC	M3KKK-1036R-ND	10.37	90.90
	Au 30µ"	36 (91.44)	GR	M3KKK-1036J-ND	9.88	86.60
14	Au 30µ"	6 (15.24)	MC	M3KKK-1406R-ND	12.53	109.85
	Au 30µ"	6 (15.24)	GR	M3KKK-1406J-ND	12.41	108.84
	Au 30µ"	18 (45.72)	MC	M3KKK-1418R-ND	13.27	116.36
	Au 30µ"	18 (45.72)	GR	M3KKK-1418J-ND	12.93	113.35
	Au 30µ"	36 (91.44)	MC	M3KKK-1436R-ND	14.38	126.13
	Au 30µ"	36 (91.44)	GR	M3KKK-1436J-ND	13.70	120.10
16	Au 30µ"	6 (15.24)	MC	M3KKK-1606R-ND	14.20	124.56
	Au 30µ"	6 (15.24)	GR	M3KKK-1606J-ND	14.07	123.41
	Au 30µ"	18 (45.72)	MC	M3KKK-1618R-ND	15.05	132.01
	Au 30µ"	18 (45.72)	GR	M3KKK-1618J-ND	14.66	128.56
	Au 30µ"	36 (91.44)	MC	M3KKK-1636R-ND	16.33	143.18
	Au 30µ"	36 (91.44)	GR	M3KKK-1636J-ND	15.54	136.28
20	Au 30µ"	6 (15.24)	MC	M3KKK-2006R-ND	16.59	145.44
	Au 30µ"	6 (15.24)	GR	M3KKK-2006J-ND	16.42	144.01
	Au 30µ"	18 (45.72)	MC	M3KKK-2018R-ND	17.65	154.74
	Au 30µ"	18 (45.72)	GR	M3KKK-2018J-ND	17.16	150.44
	Au 30µ"	36 (91.44)	MC	M3KKK-2036R-ND	19.24	168.69
	Au 30µ"	36 (91.44)	GR	M3KKK-2036J-ND	18.26	160.10
24	Au 30µ"	6 (15.24)	MC	M3KKK-2406R-ND	18.32	160.62
	Au 30µ"	6 (15.24)	GR	M3KKK-2406J-ND	18.12	158.90
	Au 30µ"	18 (45.72)	MC	M3KKK-2418R-ND	19.59	171.78
	Au 30µ"	18 (45.72)	GR	M3KKK-2418J-ND	19.00	166.62
	Au 30µ"	36 (91.44)	MC	M3KKK-2436R-ND	21.50	188.53
	Au 30µ"	36 (91.44)	GR	M3KKK-2436J-ND	20.32	178.20
26	Au 30µ"	6 (15.24)	MC	M3KKK-2606R-ND	18.95	166.22
	Au 30µ"	6 (15.24)	GR	M3KKK-2606J-ND	18.74	164.35
	Au 30µ"	18 (45.72)	MC	M3KKK-2618R-ND	20.33	178.31
	Au 30µ"	18 (45.72)	GR	M3KKK-2618J-ND	19.70	172.72
	Au 30µ"	36 (91.44)	MC	M3KKK-2636R-ND	22.40	196.45
	Au 30µ"	36 (91.44)	GR	M3KKK-2636J-ND	21.13	185.27
30	Au 30µ"	6 (15.24)	MC	M3KKK-3006R-ND	20.99	184.04
	Au 30µ"	6 (15.24)	GR	M3KKK-3006J-ND	20.71	181.60
	Au 30µ"	18 (45.72)	MC	M3KKK-3018R-ND	22.79	199.84
	Au 30µ"	18 (45.72)	GR	M3KKK-3018J-ND	21.96	192.54
	Au 30µ"	36 (91.44)	MC	M3KKK-3036R-ND	25.49	223.56
	Au 30µ"	36 (91.44)	GR	M3KKK-3036J-ND	23.83	208.95
34	Au 30µ"	6 (15.24)	MC	M3KKK-3406R-ND	23.59	206.84
	Au 30µ"	6 (15.24)	GR	M3KKK-3406J-ND	23.31	204.40
	Au 30µ"	18 (45.72)	MC	M3KKK-3418R-ND	25.39	222.64
	Au 30µ"	18 (45.72)	GR	M3KKK-3418J-ND	24.56	215.34
	Au 30µ"	36 (91.44)	MC	M3KKK-3436R-ND	28.09	246.36
	Au 30µ"	36 (91.44)	GR	M3KKK-3436J-ND	26.43	231.75
36	Au 30µ"	6 (15.24)	MC	M3KKK-3606R-ND	24.97	218.93
	Au 30µ"	6 (15.24)	GR	M3KKK-3606J-ND	24.66	216.28
	Au 30µ"	18 (45.72)	MC	M3KKK-3618R-ND	26.93	236.14
	Au 30µ"	18 (45.72)	GR	M3KKK-3618J-ND	26.02	228.19
	Au 30µ"	36 (91.44)	MC	M3KKK-3636R-ND	29.87	261.96
	Au 30µ"	36 (91.44)	GR	M3KKK-3636J-ND	28.06	246.04
40	Au 30µ"	6 (15.24)	MC	M3KKK-4006R-ND	26.22	229.89
	Au 30µ"	6 (15.24)	GR	M3KKK-4006J-ND	25.89	227.02
	Au 30µ"	18 (45.72)	MC	M3KKK-4018R-ND	28.34	248.49
	Au 30µ"	18 (45.72)	GR	M3KKK-4018J-ND	27.36	239.89
	Au 30µ"	36 (91.44)	MC	M3KKK-4036R-ND	31.52	276.40
	Au 30µ"	36 (91.44)	GR	M3KKK-4036J-ND	29.56	259.20
50	Au 30µ"	6 (15.24)	MC	M3KKK-5006R-ND	28.56	250.46
	Au 30µ"	6 (15.24)	GR	M3KKK-5006J-ND	28.15	246.87
	Au 30µ"	18 (45.72)	MC	M3KKK-5018R-ND	31.21	273.71
	Au 30µ"	18 (45.72)	GR	M3KKK-5018J-ND	29.99	262.96
	Au 30µ"	36 (91.44)	MC	M3KKK-5036R-ND	35.19	308.59
	Au 30µ"	36 (91.44)	GR	M3KKK-5036J-ND	32.74	287.09
60	Au 30µ"	6 (15.24)	MC	M3KKK-6006R-ND	33.70	295.53
	Au 30µ"	6 (15.24)	GR	M3KKK-6006J-ND	33.21	291.23
	Au 30µ"	18 (45.72)	MC	M3KKK-6018R-ND	36.88	323.44
	Au 30µ"	18 (45.72)	GR	M3KKK-6018J-ND	35.41	310.54
	Au 30µ"	36 (91.44)	MC	M3KKK-6036R-ND	41.66	365.29
	Au 30µ"	36 (91.44)	GR	M3KKK-6036J-ND	38.71	339.49
64	Au 30µ"	6 (15.24)	MC	M3KKK-6406R-ND	35.95	315.27
	Au 30µ"	6 (15.24)	GR	M3KKK-6406J-ND	35.43	310.69
	Au 30µ"	18 (45.72)	MC	M3KKK-6418R-ND	39.35	345.03
	Au 30µ"	18 (45.72)	GR	M3KKK-6418J-ND	37.78	331.28
	Au 30µ"	36 (91.44)	MC	M3KKK-6436R-ND	44.44	389.67
	Au 30µ"	36 (91.44)	GR	M3KKK-6436J-ND	41.30	362.16

Also available in the following configurations:

M3RRK-□□□□□-ND – Pin Connector w/o Flange, w/ Polarizing Key & Strain Relief.
M3WWK-□□□□□-ND – Pin Connector with Flange, w/ Polarizing Key.
M3YYK-□□□□□-ND – Pin Connector with Flange, w/ Polarizing Key & Strain Relief.
Call for complete part number and pricing!

Plug Connector to Plug Connector

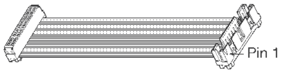
***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ"	20 (50.80)	TW	M3KKK-1020K-ND	9.76	85.59
	Au 30µ"	40 (101.60)	TW	M3KKK-1040K-ND	10.75	94.24
14	Au 30µ"	20 (50.80)	TW	M3KKK-1420K-ND	13.54	118.69
	Au 30µ"	40 (101.60)	TW	M3KKK-1440K-ND	14.92	130.80
16	Au 30µ"	20 (50.80)	TW	M3KKK-1620K-ND	15.36	134.67
	Au 30µ"	40 (101.60)	TW	M3KKK-1640K-ND	16.93	148.50
20	Au 30µ"	20 (50.80)	TW	M3KKK-2020K-ND	18.03	158.08
	Au 30µ"	40 (101.60)	TW	M3KKK-2040K-ND	20.00	175.37
20	Au 30µ"	20 (50.80)	TW	M3KKK-2620K-ND	20.83	182.65
	Au 30µ"	40 (101.60)	TW	M3KKK-2640K-ND	23.39	205.12
34	Au 30µ"	20 (50.80)	TW	M3KKK-3420K-ND	26.04	228.32
	Au 30µ"	40 (101.60)	TW	M3KKK-3440K-ND	29.39	257.72
40	Au 30µ"	20 (50.80)	TW	M3KKK-4020K-ND	29.10	255.17
	Au 30µ"	40 (101.60)	TW	M3KKK-4040K-ND	33.04	289.75
50	Au 30µ"	20 (50.80)	TW	M3KKK-5020K-ND	32.16	282.06
	Au 30µ"	40 (101.60)	TW	M3KKK-5040K-ND	37.09	325.28
60	Au 30µ"	20 (50.80)	TW	M3KKK-6020K-ND	38.03	333.45
	Au 30µ"	40 (101.60)	TW	M3KKK-6040K-ND	43.94	385.32
64	Au 30µ"	20 (50.80)	TW	M3KKK-6420K-ND	40.56	355.72
	Au 30µ"	40 (101.60)	TW	M3KKK-6440K-ND	46.87	411.05

Also available in the following configurations:

M3RRK-□□□□K-ND – Pin Connector without Flange, with Polarizing Key and Strain Relief.
M3WWK-□□□□K-ND – Pin Connector with Flange, with Polarizing Key.
M3YYK-□□□□K-ND – Pin Connector with Flange, with Polarizing Key and Strain Relief.
Call for complete part number and pricing!

Socket Connector to Plug Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ"	6 (15.24)	MC	M3AKK-1006R-ND	7.68	67.31
	Au 30µ"	6 (15.24)	GR	M3AKK-1006J-ND	7.59	66.59
	Au 30µ"	18 (45.72)	MC	M3AKK-1018R-ND	8.21	71.96
	Au 30µ"	18 (45.72)	GR	M3AKK-1018J-ND	7.96	69.81
	Au 30µ"	36 (91.44)	MC	M3AKK-1036R-ND	9.00	78.93
	Au 30µ"	36 (91.44)	GR	M3AKK-1036J-ND	8.51	74.63
16	Au 30µ"	6 (15.24)	MC	M3AKK-1606R-ND	11.31	99.20
	Au 30µ"	6 (15.24)	GR	M3AKK-1606J-ND	11.18	98.05
	Au 30µ"	18 (45.72)	MC	M3AKK-1618R-ND	12.16	106.64
	Au 30µ"	18 (45.72)	GR	M3AKK-1618J-ND	11.77	103.20
	Au 30µ"	36 (91.44)	MC	M3AKK-1636R-ND	13.43	117.81
	Au 30µ"	36 (91.44)	GR	M3AKK-1636J-ND	12.65	110.92
20	Au 30µ"	6 (15.24)	MC	M3AKK-2006R-ND	12.98	113.81
	Au 30µ"	6 (15.24)	GR	M3AKK-2006J-ND	12.81	112.37
	Au 30µ"	18 (45.72)	MC	M3AKK-2018R-ND	14.04	123.11
	Au 30µ"	18 (45.72)	GR	M3AKK-2018J-ND	13.55	118.81
	Au 30µ"	36 (91.44)	MC	M3AKK-2036R-ND	15.63	137.06
	Au 30µ"	36 (91.44)	GR	M3AKK-2036J-ND	14.65	128.46
24	Au 30µ"	6 (15.24)	MC	M3AKK-2406R-ND	14.77	129.56
	Au 30µ"	6 (15.24)	GR	M3AKK-2406J-ND	14.58	127.84
	Au 30µ"	18 (45.72)	MC	M3AKK-2418R-ND	16.05	140.72
	Au 30µ"	18 (45.72)	GR	M3AKK-2418J-ND	15.46	135.56
	Au 30µ"	36 (91.44)	MC	M3AKK-2436R-ND	17.96	157.46
	Au 30µ"	36 (91.44)	GR	M3AKK-2436J-ND	16.78	147.14
26	Au 30µ"	6 (15.24)	MC	M3AKK-2606R-ND	15.54	136.29
	Au 30µ"	6 (15.24)	GR	M3AKK-2606J-ND	15.33	134.43
	Au 30µ"	18 (45.72)	MC	M3AKK-2618R-ND	16.92	148.39
	Au 30µ"	18 (45.72)	GR	M3AKK-2618J-ND	16.28	142.79
	Au 30µ"	36 (91.44)	MC	M3AKK-2636R-ND	18.99	166.53
	Au 30µ"	36 (91.44)	GR	M3AKK-2636J-ND	17.71	155.34
30	Au 30µ"	6 (15.24)	MC	M3AKK-3006R-ND	17.51	153.54
	Au 30µ"	6 (15.24)	GR	M3AKK-3006J-ND	17.23	151.10
	Au 30µ"	18 (45.72)	MC	M3AKK-3018R-ND	19.31	169.35
	Au 30µ"	18 (45.72)	GR	M3AKK-3018J-ND	18.48	162.04
	Au 30µ"	36 (91.44)	MC	M3AKK-3036R-ND	22.02	193.06
	Au 30µ"	36 (91.44)	GR	M3AKK-3036J-ND	20.35	178.45
34	Au 30µ"	6 (15.24)	MC	M3AKK-3406R-ND	19.69	172.64
	Au 30µ"	6 (15.24)	GR	M3AKK-3406J-ND	19.41	170.20
	Au 30µ"	18 (45.72)	MC	M3AKK-3418R-ND	21.49	188.44
	Au 30µ"	18 (45.72)	GR	M3AKK-3418J-ND	20.66	181.14
	Au 30µ"	36 (91.44)	MC	M3AKK-3436R-ND	24.19	212.16
	Au 30µ"	36 (91.44)	GR	M3AKK-3436J-ND	22.53	197.55
40	Au 30µ"	6 (15.24)	MC	M3AKK-4006R-ND	22.38	196.26
	Au 30µ"	6 (15.24)	GR	M3AKK-4006J-ND	22.05	193.39
	Au 30µ"	18 (45.72)	MC	M3AKK-4018R-ND	24.50	214.86
	Au 30µ"	18 (45.72)	GR	M3AKK-4018J-ND	23.52	206.26
	Au 30µ"	36 (91.44)	MC	M3AKK-4036R-ND	27.68	242.77
	Au 30µ"	36 (91.44)	GR	M3AKK-4036J-ND	25.72	225.57
50	Au 30µ"	6 (15.24)	MC	M3AKK-5006R-ND	25.86	226.80
	Au 30µ"	6 (15.24)	GR	M3AKK-5006J-ND	25.45	223.22
	Au 30µ"	18 (45.72)	MC	M3AKK-5018R-ND	28.51	250.05
	Au 30µ"	18 (45.72)	GR	M3AKK-5018J-ND	27.29	239.30
50	Au 30µ"	36 (91.44)	MC	M3AKK-5036R-ND	32.49	284.93
	Au 30µ"	36 (91.44)	GR	M3AKK-5036J-ND	30.04	263.43
60	Au 30µ"	6 (15.24)	MC	M3AKK-6006R-ND	31.17	273.30
	Au 30µ"	6 (15.24)	GR	M3AKK-6006J-ND	30.68	269.00
	Au 30µ"	18 (45.72)	MC	M3AKK-6018R-ND	34.35	301.21
	Au 30µ"	18 (45.72)	GR	M3AKK-6018J-ND	32.88	288.31
	Au 30µ"	36 (91.44)	MC	M3AKK-6036R-ND	39.12	343.06
	Au 30µ"	36 (91.44)	GR	M3AKK-6036J-ND	36.18	317.26

Also available in the following configurations:

M3AW□-□□□□□-ND – Socket Connector w/Polarizing Key & Strain Relief.
M3BR□-□□□□□-ND – Socket Connector with SR, Pin Connector without Flange with PK and SR.
M3BY□-□□□□□-ND – Socket Connector with SR, Pin Connector with Flange with PK and SR.
M3CK□-□□□□□-ND – Socket Connector Open with Polarizing Key.
M3CW□-□□□□□-ND – Socket Connector with PK, Pin Connector with Flange w/ PK.
M3DR□-□□□□□-ND – Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.
M3DY□-□□□□□-ND – Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.
M3TK□-□□□□□-ND – Socket Connector Closed with Polarizing Key.
M3UR□-□□□□□-ND – Socket Connector Closed End with PK and SR, Pin Connector without Flange with PK and SR.
M3UY□-□□□□□-ND – Socket Connector Closed End with PK and SR, Pin Connector with Flange with PK & SR.
Call for complete part number and pricing!

Socket Connector to Plug Connector

***Twisted Pair Cable Finished Length is Approximate**

No. of Con-tacts	Conn. Finish	Length In. (cm)	Rib-bon* Cable	Digi-Key Part No.	Pricing	
					1	10
10	Au 30µ"	20 (50.80)	TW	M3AKK-1020K-ND	8.40	73.62
	Au 30µ"	40 (101.60)	TW	M3AKK-1040K-ND	9.38	82.27
	Au 30µ"	60 (152.40)	TW	M3AKK-1060K-ND	10.37	90.92
16	Au 30µ"	20 (50.80)	TW	M3AKK-1620K-ND	12.46	109.31
	Au 30µ"	40 (101.60)	TW	M3AKK-1640K-ND	14.04	123.14
	Au 30µ"	60 (152.40)	TW	M3AKK-1660K-ND	15.62	136.97
20	Au 30µ"	20 (50.80)	TW	M3AKK-2020K-ND	14.42	126.45
	Au 30µ"	40 (101.60)	TW	M3AKK-2040K-ND	16.39	143.73
	Au 30µ"	60 (152.40)	TW	M3AKK-2060K-ND	18.36	161.03
26	Au 30µ"	20 (50.80)	TW	M3AKK-2620K-ND	17.42	152.72
	Au 30µ"	40 (101.60)	TW	M3AKK-2640K-ND	19.98	175.20
	Au 30µ"	60 (152.40)	TW	M3AKK-2660K-ND	22.54	197.68
34	Au 30µ"	20 (50.80)	TW	M3AKK-3420K-ND	22.14	194.12
	Au 30µ"	40 (101.60)	TW	M3AKK-3440K-ND	25.49	223.52
	Au 30µ"	60 (152.40)	TW	M3AKK-3460K-ND	28.84	252.91
40	Au 30µ"	20 (50.80)	TW	M3AKK-4020K-ND	25.26	221.54
	Au 30µ"	40 (101.60)	TW	M3AKK-4040K-ND	29.21	256.12
	Au 30µ"	60 (152.40)	TW	M3AKK-4060K-ND	33.15	290.70

(Continued)

3M Termination Jumpers

Socket to Plug Connector *(Cont.)*

No. of Con- tacts	Conn. Finish	Length In. (cm)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
50	Au 30µ”	20 (50.80)	TW	M3AKK-5020K-ND	29.47	258.40
	Au 30µ”	40 (101.60)	TW	M3AKK-5040K-ND	34.40	301.62
	Au 30µ”	60 (152.40)	TW	M3AKK-5060K-ND	39.33	344.85
60	Au 30µ”	20 (50.80)	TW	M3AKK-6020K-ND	35.49	311.22
	Au 30µ”	40 (101.60)	TW	M3AKK-6040K-ND	41.41	363.09
	Au 30µ”	60 (152.40)	TW	M3AKK-6060K-ND	47.32	414.96

Also available in the following configurations:
M3AW□-□□□□K-ND – Socket Connector/Pin Connector w/ Flange w/ PK.
M3BR□-□□□□K-ND – Socket Connector with SR, Pin Connector without Flange with PK and SR.
M3BY□-□□□□K-ND – Socket Connector with SR, Pin Connector with Flange with PK and SR.
M3CK□-□□□□K-ND – Socket Connector with PK, Pin Connector without Flange with PK.
M3CW□-□□□□K-ND – Socket Connector with PK, Pin Connector with Flange with PK.
M3DR□-□□□□K-ND – Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.
M3DY□-□□□□K-ND – Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.
M3TK□-□□□□K-ND – Closed End Socket Connector with PK, Pin Connector without Flange with PK.
M3UR□-□□□□K-ND – Closed End Socket Connector with PK and SR, Pin Connector without Flange with PK and SR.
M3UY□-□□□□K-ND – Closed End Socket Connector with PK and SR, Pin Connector with Flange with PK and SR.
Call for complete part number and pricing!

M□□□□-□□□□□-ND

Style
1□ □ Single Ended
3□ □ Double Ended

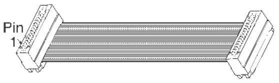
Conn. Finish
G = Gold ≤15µ
K = Gold >15µ Gold- Copper beryllium pin plating

No. Of Contacts

Length ***(Use “Inches” only.)***

Ribbon Cable
R=Multi-color
J=Gray
K=Twisted Pair

Card Edge to Card Edge



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con- tacts	Conn. Finish	Length In. (cm)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ”	6 (15.24)	MC	M3EEK-1006R-ND	8.72	76.43
	Au 30µ”	6 (15.24)	GR	M3EEK-1006J-ND	8.63	75.71
	Au 30µ”	18 (45.72)	MC	M3EEK-1018R-ND	9.25	81.08
	Au 30µ”	18 (45.72)	GR	M3EEK-1018J-ND	9.00	78.93
	Au 30µ”	36 (91.44)	MC	M3EEK-1036R-ND	10.04	88.05
	Au 30µ”	36 (91.44)	GR	M3EEK-1036J-ND	9.55	83.75
16	Au 30µ”	6 (15.24)	MC	M3EEK-1606R-ND	12.06	105.75
	Au 30µ”	6 (15.24)	GR	M3EEK-1606J-ND	11.93	104.60
	Au 30µ”	18 (45.72)	MC	M3EEK-1618R-ND	12.91	113.20
	Au 30µ”	18 (45.72)	GR	M3EEK-1618J-ND	12.52	109.75
	Au 30µ”	36 (91.44)	MC	M3EEK-1636R-ND	14.18	124.37
	Au 30µ”	36 (91.44)	GR	M3EEK-1636J-ND	13.40	117.47
20	Au 30µ”	6 (15.24)	MC	M3EEK-2006R-ND	14.96	131.19
	Au 30µ”	6 (15.24)	GR	M3EEK-2006J-ND	14.80	129.76
	Au 30µ”	18 (45.72)	MC	M3EEK-2018R-ND	16.02	140.49
	Au 30µ”	18 (45.72)	GR	M3EEK-2018J-ND	15.53	136.19
	Au 30µ”	36 (91.44)	MC	M3EEK-2036R-ND	17.61	154.44
	Au 30µ”	36 (91.44)	MC	M3EEK-2036J-ND	16.63	145.85
26	Au 30µ”	6 (15.24)	MC	M3EEK-2606R-ND	17.78	155.96
	Au 30µ”	6 (15.24)	GR	M3EEK-2606J-ND	17.57	154.09
	Au 30µ”	18 (45.72)	MC	M3EEK-2618R-ND	19.16	168.05
	Au 30µ”	18 (45.72)	GR	M3EEK-2618J-ND	18.53	162.46
	Au 30µ”	36 (91.44)	MC	M3EEK-2636R-ND	21.23	186.19
	Au 30µ”	36 (91.44)	GR	M3EEK-2636J-ND	19.96	175.01
34	Au 30µ”	6 (15.24)	MC	M3EEK-3406R-ND	20.79	182.33
	Au 30µ”	6 (15.24)	GR	M3EEK-3406J-ND	20.51	179.89
	Au 30µ”	18 (45.72)	MC	M3EEK-3418R-ND	22.59	198.13
	Au 30µ”	18 (45.72)	GR	M3EEK-3418J-ND	21.76	190.83
	Au 30µ”	36 (91.44)	MC	M3EEK-3436R-ND	25.30	221.85
	Au 30µ”	36 (91.44)	GR	M3EEK-3436J-ND	23.63	207.24
40	Au 30µ”	6 (15.24)	MC	M3EEK-4006R-ND	25.44	223.05
	Au 30µ”	6 (15.24)	GR	M3EEK-4006J-ND	25.11	220.18
	Au 30µ”	18 (45.72)	MC	M3EEK-4018R-ND	27.56	241.65
	Au 30µ”	18 (45.72)	GR	M3EEK-4018J-ND	26.58	233.05
	Au 30µ”	36 (91.44)	MC	M3EEK-4036R-ND	31.18	273.46
	Au 30µ”	36 (91.44)	GR	M3EEK-4036J-ND	28.78	252.36
50	Au 30µ”	6 (15.24)	MC	M3EEK-5006R-ND	26.42	231.65
	Au 30µ”	6 (15.24)	GR	M3EEK-5006J-ND	26.01	228.06
	Au 30µ”	18 (45.72)	MC	M3EEK-5018R-ND	29.07	254.90
	Au 30µ”	18 (45.72)	GR	M3EEK-5018J-ND	27.84	244.15
	Au 30µ”	36 (91.44)	MC	M3EEK-5036R-ND	33.04	289.78
	Au 30µ”	36 (91.44)	GR	M3EEK-5036J-ND	30.59	268.28
60	Au 30µ”	6 (15.24)	MC	M3EEK-6006R-ND	33.18	290.97
	Au 30µ”	6 (15.24)	GR	M3EEK-6006J-ND	32.69	286.67
	Au 30µ”	18 (45.72)	MC	M3EEK-6018R-ND	36.36	318.88
	Au 30µ”	18 (45.72)	GR	M3EEK-6018J-ND	34.89	305.98
	Au 30µ”	36 (91.44)	MC	M3EEK-6036R-ND	41.14	360.73
	Au 30µ”	36 (91.44)	GR	M3EEK-6036J-ND	38.19	334.93
64	Au 30µ”	6 (15.24)	MC	M3EEK-6406R-ND	33.81	296.46
	Au 30µ”	6 (15.24)	GR	M3EEK-6406J-ND	33.28	291.88
	Au 30µ”	18 (45.72)	MC	M3EEK-6418R-ND	37.20	326.22
	Au 30µ”	18 (45.72)	GR	M3EEK-6418J-ND	35.63	312.47
	Au 30µ”	36 (91.44)	MC	M3EEK-6436R-ND	42.29	370.86
	Au 30µ”	36 (91.44)	GR	M3EEK-6436J-ND	39.15	343.35

Also available in the following configurations:
M3FFK-□□□□□-ND – Card Edge Connector w/ Flange.
M3GGK-□□□□□-ND – Card Edge Connector w/ Slotted Flange.
M3MMK-□□□□□-ND – Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

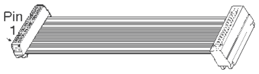
Card Edge to Card Edge

***Twisted Pair Cable Finished Length is Approximate**

No. of Con- tacts	Conn. Finish	Length In. (cm)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ”	20 (50.80)	TW	M3EEK-1020K-ND	9.44	82.74
	Au 30µ”	40 (101.60)	TW	M3EEK-1040K-ND	10.42	91.39
	Au 30µ”	60 (152.40)	TW	M3EEK-1060K-ND	11.41	100.04
16	Au 30µ”	20 (50.80)	TW	M3EEK-1620K-ND	13.21	115.86
	Au 30µ”	40 (101.60)	TW	M3EEK-1640K-ND	14.79	129.69
	Au 30µ”	60 (152.40)	TW	M3EEK-1660K-ND	16.37	143.53
20	Au 30µ”	20 (50.80)	TW	M3EEK-2020K-ND	16.40	143.83
	Au 30µ”	40 (101.60)	TW	M3EEK-2040K-ND	18.37	161.12
	Au 30µ”	60 (152.40)	TW	M3EEK-2060K-ND	20.35	178.41
26	Au 30µ”	20 (50.80)	TW	M3EEK-2620K-ND	19.66	172.39
	Au 30µ”	40 (101.60)	TW	M3EEK-2640K-ND	22.22	194.86
	Au 30µ”	60 (152.40)	TW	M3EEK-2660K-ND	24.78	217.34
34	Au 30µ”	20 (50.80)	TW	M3EEK-3420K-ND	23.24	203.81
	Au 30µ”	40 (101.60)	TW	M3EEK-3440K-ND	26.59	233.21
	Au 30µ”	60 (152.40)	TW	M3EEK-3460K-ND	29.95	262.60
40	Au 30µ”	20 (50.80)	TW	M3EEK-4020K-ND	28.32	248.33
	Au 30µ”	40 (101.60)	TW	M3EEK-4040K-ND	32.26	282.91
	Au 30µ”	60 (152.40)	TW	M3EEK-4060K-ND	36.21	317.49
50	Au 30µ”	20 (50.80)	TW	M3EEK-5020K-ND	30.02	263.25
	Au 30µ”	40 (101.60)	TW	M3EEK-5040K-ND	34.95	306.47
	Au 30µ”	60 (152.40)	TW	M3EEK-5060K-ND	39.88	349.70
60	Au 30µ”	20 (50.80)	TW	M3EEK-6020K-ND	37.51	328.89
	Au 30µ”	40 (101.60)	TW	M3EEK-6040K-ND	43.42	380.76
	Au 30µ”	60 (152.40)	TW	M3EEK-6060K-ND	49.34	432.63
64	Au 30µ”	20 (50.80)	TW	M3EEK-6420K-ND	38.42	336.91
	Au 30µ”	40 (101.60)	TW	M3EEK-6440K-ND	44.73	392.24
	Au 30µ”	60 (152.40)	TW	M3EEK-6460K-ND	51.04	447.56

Also available in the following configurations:
M3FFK-□□□□K-ND – with Flange.
M3GGK-□□□□K-ND – with Slotted Flange.
Call for complete part number and pricing!

Socket Connector to Card Edge Connector



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con- tacts	Conn. Finish	Length In. (cm)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ”	6 (15.24)	MC	M3AEK-1006R-ND	7.51	65.88
	Au 30µ”	6 (15.24)	GR	M3AEK-1006J-ND	7.43	65.16
	Au 30µ”	18 (45.72)	MC	M3AEK-1018R-ND	8.04	70.53
	Au 30µ”	18 (45.72)	GR	M3AEK-1018J-ND	7.80	68.38
	Au 30µ”	36 (91.44)	MC	M3AEK-1036R-ND	8.84	77.51
	Au 30µ”	36 (91.44)	GR	M3AEK-1036J-ND	8.35	73.21
16	Au 30µ”	6 (15.24)	MC	M3AEK-1606R-ND	10.24	89.79
	Au 30µ”	6 (15.24)	GR	M3AEK-1606J-ND	10.11	88.64
	Au 30µ”	18 (45.72)	MC	M3AEK-1618R-ND	11.09	97.24
	Au 30µ”	18 (45.72)	GR	M3AEK-1618J-ND	10.70	93.79
	Au 30µ”	36 (91.44)	MC	M3AEK-1636R-ND	12.36	108.41
	Au 30µ”	36 (91.44)	GR	M3AEK-1636J-ND	11.58	101.51
20	Au 30µ”	6 (15.24)	MC	M3AEK-2006R-ND	12.17	106.68
	Au 30µ”	6 (15.24)	GR	M3AEK-2006J-ND	12.00	105.25
	Au 30µ”	18 (45.72)	MC	M3AEK-2018R-ND	13.23	115.98
	Au 30µ”	18 (45.72)	GR	M3AEK-2018J-ND	12.74	111.68
	Au 30µ”	36 (91.44)	MC	M3AEK-2036R-ND	14.82	129.93
	Au 30µ”	36 (91.44)	GR	M3AEK-2036J-ND	13.84	121.34
26	Au 30µ”	6 (15.24)	MC	M3AEK-2606R-ND	14.96	131.16
	Au 30µ”	6 (15.24)	GR	M3AEK-2606J-ND	14.74	129.30
	Au 30µ”	18 (45.72)	MC	M3AEK-2618R-ND	16.34	143.26
	Au 30µ”	18 (45.72)	GR	M3AEK-2618J-ND	15.70	137.66
	Au 30µ”	36 (91.44)	MC	M3AEK-2636R-ND	18.40	161.40
	Au 30µ”	36 (91.44)	GR	M3AEK-2636J-ND	17.13	150.21
34	Au 30µ”	6 (15.24)	MC	M3AEK-3406R-ND	18.29	160.38
	Au 30µ”	6 (15.24)	GR	M3AEK-3406J-ND	18.01	157.94
	Au 30µ”	18 (45.72)	MC	M3AEK-3418R-ND	20.09	176.19
	Au 30µ”	18 (45.72)	GR	M3AEK-3418J-ND	19.26	168.88
	Au 30µ”	36 (91.44)	MC	M3AEK-3436R-ND	22.80	199.90
	Au 30µ”	36 (91.44)	GR	M3AEK-3436J-ND	21.13	185.29
40	Au 30µ”	6 (15.24)	MC	M3AEK-4006R-ND	21.99	192.84
	Au 30µ”	6 (15.24)	GR	M3AEK-4006J-ND	21.66	189.97
	Au 30µ”	18 (45.72)	MC	M3AEK-4018R-ND	24.11	211.44
	Au 30µ”	18 (45.72)	GR	M3AEK-4018J-ND	23.13	202.84
	Au 30µ”	36 (91.44)	MC	M3AEK-4036R-ND	27.29	239.35
	Au 30µ”	36 (91.44)	GR	M3AEK-4036J-ND	25.33	222.15
50	Au 30µ”	6 (15.24)	MC	M3AEK-5006R-ND	24.79	217.40
	Au 30µ”	6 (15.24)	GR	M3AEK-5006J-ND	24.38	213.81
	Au 30µ”	18 (45.72)	MC	M3AEK-5018R-ND	27.44	240.65
	Au 30µ”	18 (45.72)	GR	M3AEK-5018J-ND	26.22	229.90
	Au 30µ”	36 (91.44)	MC	M3AEK-5036R-ND	31.42	275.53
	Au 30µ”	36 (91.44)	GR	M3AEK-5036J-ND	28.97	254.03
60	Au 30µ”	6 (15.24)	MC	M3AEK-6006R-ND	30.91	271.02
	Au 30µ”	6 (15.24)	GR	M3AEK-6006J-ND	30.42	266.72
	Au 30µ”	18 (45.72)	MC	M3AEK-6018R-ND	34.09	298.93
	Au 30µ”	18 (45.72)	GR	M3AEK-6018J-ND	32.62	286.03
	Au 30µ”	36 (91.44)	MC	M3AEK-6036R-ND	38.86	340.78
	Au 30µ”	36 (91.44)	GR	M3AEK-6036J-ND	35.92	314.98

Also available in the following configurations:
M3AFK-□□□□□-ND – Socket Connector/Card Edge Connector w/ Flange.
M3AGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3AMK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Strain Relief.
M3BEK-□□□□□-ND – Socket Connector/Card Edge Connector
M3BFK-□□□□□-ND – Socket Connector/Card Edge Connector w/ Flange.
M3BGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3BMK-□□□□□-ND – Socket Connector with Strain Relief./Card Edge Connector with Strain Relief.
M3CEK-□□□□□-ND – Socket Connector/Card Edge Connector.
M3CFK-□□□□□-ND – Socket Connector/Card Edge Connector w/ Flange.
M3CGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3CMK-□□□□□-ND – Socket Conn. Open End w/ Strain Relief/Card Edge Connector with Strain Relief.
M3DEK-□□□□□-ND – Socket Connector/Card Edge Connector .
M3DFK-□□□□□-ND – Socket Connector/Card Edge Connector w/Flange.
M3DGK-□□□□□-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3DMK-□□□□□-ND – Socket Conn. Open End w/ PK & Strain Relief/ Card Edge Conn. with Strain Relief.
M3TEK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector Standard.
M3TFK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector with Flange.
M3TGK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector with Slotted Flange.
M3TMK-□□□□□-ND – Socket Connector Closed End with PK/Card Edge Connector with Strain Relief.
M3UEK-□□□□□-ND – Socket Connector Closed End with PK & SR/Card Edge Connector Standard.
M3UFK-□□□□□-ND – Socket Connector Closed End with PK & SR/Card Edge Connector with Flange.
M3UGK-□□□□□-ND – Socket Connector Closed End with PK & SR/Card Edge Connector with Slotted Flange.
M3UMK-□□□□□-ND – Socket Connector Closed End with PK & Strain Relief/Card Edge Connector w/ Strain Relief.
Call for complete part number and pricing!

Socket Connector to Card Edge

***Twisted Pair Cable Finished Length is Approximate**

No. of Con- tacts	Conn. Finish	Length In. (cm)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
10	Au 30µ”	20 (50.80)	TW	M3AEK-1020K-ND	8.23	72.20
	Au 30µ”	40 (101.60)	TW	M3AEK-1040K-ND	9.22	80.85
	Au 30µ”	60 (152.40)	TW	M3AEK-1060K-ND	10.21	89.49
16	Au 30µ”	20 (50.80)	TW	M3AEK-1620K-ND	11.39	99.90
	Au 30µ”	40 (101.60)	TW	M3AEK-1640K-ND	12.97	113.73
	Au 30µ”	60 (152.40)	TW	M3AEK-1660K-ND	14.55	127.57
20	Au 30µ”	20 (50.80)	TW	M3AEK-2020K-ND	13.61	119.32
	Au 30µ”	40 (101.60)	TW	M3AEK-2040K-ND	15.58	136.61
	Au 30µ”	60 (152.40)	TW	M3AEK-2060K-ND	17.55	153.90
26	Au 30µ”	20 (50.80)	TW	M3AEK-2620K-ND	16.83	147.59
	Au 30µ”	40 (101.60)	TW	M3AEK-2640K-ND	19.39	170.07
	Au 30µ”	60 (152.40)	TW	M3AEK-2660K-ND	21.96	192.55
34	Au 30µ”	20 (50.80)	TW	M3AEK-3420K-ND	20.74	181.87
	Au 30µ”	40 (101.60)	TW	M3AEK-3440K-ND	24.09	211.26
	Au 30µ”	60 (152.40)	TW	M3AEK-3460K-ND	27.44	240.65
40	Au 30µ”	20 (50.80)	TW	M3AEK-4020K-ND	24.87	218.12
	Au 30µ”	40 (101.60)	TW	M3AEK-4040K-ND	28.82	252.70
	Au 30µ”	60 (152.40)	TW	M3AEK-4060K-ND	32.76	287.28
50	Au 30µ”	20 (50.80)	TW	M3AEK-5020K-ND	28.39	249.00
	Au 30µ”	40 (101.60)	TW	M3AEK-5040K-ND	33.32	292.22
	Au 30µ”	60 (152.40)	TW	M3AEK-5060K-ND	38.25	335.45
60	Au 30µ”	20 (50.80)	TW	M3AEK-6020K-ND	35.23	308.94
	Au 30µ”	40 (101.60)	TW	M3AEK-6040K-ND	41.15	360.81
	Au 30µ”	60 (152.40)	TW	M3AEK-6060K-ND	47.06	412.68

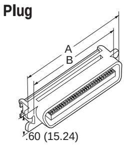
Also available in the following configurations:
M3AFK-□□□□K-ND – Socket Connector/Card Edge Connector w/ Flange.
M3AGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3AMK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Strain Relief.
M3BEK-□□□□K-ND – Socket Connector/Card Edge Connector.
M3BFK-□□□□K-ND – Socket Connector/Card Edge Connector w/ Flange.
M3BGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3BMK-□□□□K-ND – Socket Connector with Strain Relief/Card Edge Connector with Strain Relief.
M3CEK-□□□□K-ND – Socket Connector/Card Edge Connector.
M3CFK-□□□□K-ND – Socket Connector/Card Edge Conn. w/ Flange.
M3CGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3CMK-□□□□K-ND – Socket Connector Open End with PK/Card Edge Connector with Strain Relief.
M3DEK-□□□□K-ND – Socket Connector/Card Edge Connector.
M3DFK-□□□□K-ND – Socket Connector/Card Edge Connector w/ Flange.
M3DGK-□□□□K-ND – Socket Conn./Card Edge Conn. w/ Slotted Flange.
M3DMK-□□□□K-ND – Socket Conn. Open End w/ PK & Strain Relief/ Card Edge Conn. w/ Strain Relief.
M3TEK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector Stand.
M3TFK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector w/ Flange.
M3TGK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector w/ Slotted Flange.
M3TMK-□□□□K-ND – Socket Connector Closed End w/ PK/Card Edge Connector w/ Strain Relief.
M3UEK-□□□□K-ND – Socket Connector Closed End w/ PK & SR/Card Edge Connector Standard.
M3UFK-□□□□K-ND – Socket. Conn. Closed End w/ PK & SR/Card Edge Connector Flange.
M3UGK-□□□□K-ND – Socket Conn. Closed End w/ PK & SR/Card Edge Connector w/ Slotted Flange.
M3UMK-□□□□K-ND – Socket Conn. Closed End w/ PK & Strain Relief/ Card Edge Connector w/Strain Relief.
Call for complete part number and pricing!

3M Delta Flat Ribbon Cable Connectors

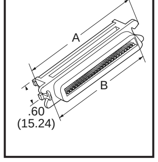
Physical: • Insulation Material: Glass reinforced polyester. Flammability rating: UL 94V-0 • Color: Gray • Contact Material: Flat cable connectors are beryllium copper; Latch eject headers are copper alloy • Plating: 30µ" gold. **Electrical:** • Current Rating: 1A • Insulation Resistance: >1x10^9 Ω @ 500 VDC • Withstanding Voltage: 1000VRMS @ sea level. **Environmental:** • Temperature Rating: -55°C to +105°C. UL File No.: E68080, CSA File No.: LR-40971

3 mounting designs available. Those with **Prefix MDA** on Digi-Key part number: combination mount, which is a universal mount type that accepts both bail and screw mount hardware. **Prefix MDC:** bail mount, which can be used as a standard I/O connector for various electronic applications. Positive latching and easy disconnect. **Prefix MDB:** screw mount, which have #4-40 threaded insert that simplifies mounting when a more permanent connection is desired • Wire Accommodation: 26-30 AWG stranded

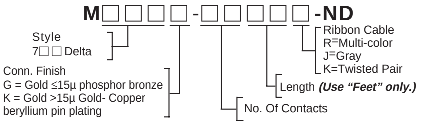
Plug



Socket

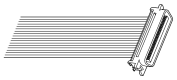


No. of Cont.	Dim. – In. (mm) A	B	Digi-Key Part No.	Pricing 1	10	3M Part No.
			Plugs			
14	1.75 (44.45)	1.42 (36.07)	MDA14K-ND	4.41	37.10	3572-1000
	1.58 (40.13)	1.20 (30.48)	MDC14K-ND	4.60	38.68	3572-1001
	1.75 (44.45)	1.42 (36.07)	MDB14K-ND	4.70	39.55	3572-1002
24	2.17 (55.12)	1.84 (46.74)	MDA24K-ND	5.22	43.93	3548-1000
	2.00 (50.80)	1.63 (41.40)	MDC24K-ND	5.45	45.85	3548-1001
	2.17 (55.12)	1.84 (46.74)	MDB24K-ND	5.55	46.73	3548-1002
36	2.68 (68.07)	2.35 (59.69)	MDA36K-ND	6.43	54.08	3366-1000
	2.52 (64.01)	2.14 (54.36)	MDC36K-ND	6.74	56.70	3366-1001
	2.68 (68.07)	2.35 (59.69)	MDB36K-ND	6.88	57.93	3366-1002
50	3.27 (83.06)	2.95 (74.93)	MDA50K-ND	7.65	64.40	3564-1000
	3.11 (78.99)	2.73 (69.34)	MDC50K-ND	8.26	69.48	3564-1001
	3.27 (83.06)	2.95 (74.93)	MDB50K-ND	8.47	71.23	3564-1002
			Sockets			
14	1.75 (44.45)	1.42 (36.07)	MDD14K-ND	4.41	37.10	3573-1000
	1.58 (40.13)	1.20 (30.48)	MDF14K-ND	4.60	38.68	3573-1001
	1.75 (44.45)	1.42 (36.07)	MDE14K-ND	4.70	39.55	3573-1002
24	2.17 (55.12)	1.84 (46.74)	MDD24K-ND	5.22	43.93	3549-1000
	2.00 (50.80)	1.63 (41.40)	MDF24K-ND	5.45	45.85	3549-1001
	2.17 (55.12)	1.84 (46.74)	MDE24K-ND	5.55	46.73	3549-1002
36	2.68 (68.07)	2.35 (59.69)	MDD36K-ND	6.43	54.08	3367-1000
	2.52 (64.01)	2.14 (54.36)	MDF36K-ND	6.74	56.70	3367-1001
	2.68 (68.07)	2.35 (59.69)	MDE36K-ND	6.88	57.93	3367-1002
50	3.27 (83.06)	2.95 (74.93)	MDD50K-ND	7.65	64.40	3565-1000
	3.11 (78.99)	2.73 (69.34)	MDF50K-ND	8.26	69.48	3565-1001
	3.27 (83.06)	2.95 (74.93)	MDE50K-ND	8.47	71.23	3565-1002
			Backshells			
50	—	—	MDBF50-ND	3.12	26.25	3485-2500
			Metal Strain Reliefs			
14	—	—	MDSF14-ND	.44	3.68	3448-60
24	—	—	MDSF24-ND	.44	3.68	3448-61
36	—	—	MDSF36-ND	.44	3.68	3448-62
50	—	—	MDSF50-ND	.44	3.68	3448-63



Delta Cable Assemblies

Single Ended — Male



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7KXK-1406R-ND	12.00	105.19
	Au 30µ"	6 (1.83)	GR	M7KXK-1406J-ND	10.62	93.14
	Au 30µ"	10 (3.05)	MC	M7KXK-1410R-ND	14.97	131.24
	Au 30µ"	10 (3.05)	GR	M7KXK-1410J-ND	12.68	111.16
24	Au 30µ"	6 (1.83)	MC	M7KXK-2406R-ND	16.48	144.50
	Au 30µ"	6 (1.83)	GR	M7KXK-2406J-ND	14.12	123.85
	Au 30µ"	10 (3.05)	MC	M7KXK-2410R-ND	21.57	189.15
	Au 30µ"	10 (3.05)	GR	M7KXK-2410J-ND	17.65	154.74
36	Au 30µ"	6 (1.83)	MC	M7KXK-3606R-ND	22.53	197.59
	Au 30µ"	6 (1.83)	GR	M7KXK-3606J-ND	18.90	165.76
	Au 30µ"	10 (3.05)	MC	M7KXK-3610R-ND	30.38	266.43
	Au 30µ"	10 (3.05)	GR	M7KXK-3610J-ND	24.33	213.38
50	Au 30µ"	6 (1.83)	MC	M7KXK-5006R-ND	28.62	250.95
	Au 30µ"	6 (1.83)	GR	M7KXK-5006J-ND	23.71	207.95
	Au 30µ"	10 (3.05)	MC	M7KXK-5010R-ND	39.22	343.96
	Au 30µ"	10 (3.05)	GR	M7KXK-5010J-ND	31.05	272.30

Also available in the following configuration:
M7LX□-□□□□□-ND – Male Delta w/ Insert.
M7QX□-□□□□□-ND – Male Delta w/ Bail Lock.
Call for complete part number and pricing!

Single Ended — Male

***Twisted Pair Cable Finished Length is Approximate**

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7KXK-1405K-ND	11.68	102.43
	Au 30µ"	10 (3.05)	TW	M7KXK-1410K-ND	15.82	138.74
24	Au 30µ"	5 (1.52)	TW	M7KXK-2405K-ND	14.76	129.39
	Au 30µ"	10 (3.05)	TW	M7KXK-2410K-ND	20.67	181.26
36	Au 30µ"	5 (1.52)	TW	M7KXK-3605K-ND	21.40	187.70
	Au 30µ"	10 (3.05)	TW	M7KXK-3610K-ND	32.05	281.07
50	Au 30µ"	5 (1.52)	TW	M7KXK-5005K-ND	27.50	241.11
	Au 30µ"	10 (3.05)	TW	M7KXK-5010K-ND	42.28	370.79

Also available in the following configurations:
M7LX□-□□□□K-ND – Male Delta with Insert.
M7QX□-□□□□K-ND – Male Delta with Bail Lock.
Call for complete part number and pricing!

Single Ended — Female

*MC = 3M Multi-Color, GR = 3M Gray

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7RXK-1406R-ND	12.00	105.19
	Au 30µ"	6 (1.83)	GR	M7RXK-1406J-ND	10.62	93.14
	Au 30µ"	10 (3.05)	MC	M7RXK-1410R-ND	14.97	131.24
	Au 30µ"	10 (3.05)	GR	M7RXK-1410J-ND	12.68	111.16
24	Au 30µ"	6 (1.83)	MC	M7RXK-2406R-ND	16.48	144.50
	Au 30µ"	6 (1.83)	GR	M7RXK-2406J-ND	14.12	123.85
	Au 30µ"	10 (3.05)	MC	M7RXK-2410R-ND	21.57	189.15
	Au 30µ"	10 (3.05)	GR	M7RXK-2410J-ND	17.65	154.74
36	Au 30µ"	6 (1.83)	MC	M7RXK-3606R-ND	22.53	197.59
	Au 30µ"	6 (1.83)	GR	M7RXK-3606J-ND	18.90	165.76
	Au 30µ"	10 (3.05)	MC	M7RXK-3610R-ND	30.38	266.43
	Au 30µ"	10 (3.05)	GR	M7RXK-3610J-ND	24.33	213.38
50	Au 30µ"	6 (1.83)	MC	M7RXK-5006R-ND	28.62	250.95
	Au 30µ"	6 (1.83)	GR	M7RXK-5006J-ND	23.71	207.95
	Au 30µ"	10 (3.05)	MC	M7RXK-5010R-ND	39.22	343.96
	Au 30µ"	10 (3.05)	GR	M7RXK-5010J-ND	31.05	272.30

Also available in the following configurations:
M7TX□-□□□□□-ND – Female Delta with Insert.
M7UX□-□□□□□-ND – Female Delta with Bail Lock.
Call for complete part number and pricing!

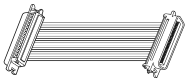
Single Ended — Female

***Twisted Pair Cable Finished Length is Approximate**

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7RXK-1405K-ND	11.68	102.43
	Au 30µ"	10 (3.05)	TW	M7RXK-1410K-ND	15.82	138.74
24	Au 30µ"	5 (1.52)	TW	M7RXK-2405K-ND	14.76	129.39
	Au 30µ"	10 (3.05)	TW	M7RXK-2410K-ND	20.67	181.26
36	Au 30µ"	5 (1.52)	TW	M7RXK-3605K-ND	21.40	187.70
	Au 30µ"	10 (3.05)	TW	M7RXK-3610K-ND	32.05	281.07
50	Au 30µ"	5 (1.52)	TW	M7RXK-5005K-ND	27.50	241.11
	Au 30µ"	10 (3.05)	TW	M7RXK-5010K-ND	42.28	370.79

Also available in the following configuration:
M7TX□-□□□□K-ND – Female Delta w/ Insert.
M7UX□-□□□□K-ND – Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Male



*MC = 3M Multi-Color, GR = 3M Gray

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7KKK-1406R-ND	19.54	171.31
	Au 30µ"	6 (1.83)	GR	M7KKK-1406J-ND	18.16	159.26
	Au 30µ"	10 (3.05)	MC	M7KKK-1410R-ND	22.51	197.36
	Au 30µ"	10 (3.05)	GR	M7KKK-1410J-ND	20.22	177.28
24	Au 30µ"	6 (1.83)	MC	M7KKK-2406R-ND	25.32	222.02
	Au 30µ"	6 (1.83)	GR	M7KKK-2406J-ND	22.96	201.37
	Au 30µ"	10 (3.05)	MC	M7KKK-2410R-ND	30.41	266.67
	Au 30µ"	10 (3.05)	GR	M7KKK-2410J-ND	26.49	232.26
36	Au 30µ"	6 (1.83)	MC	M7KKK-3606R-ND	33.29	291.93
	Au 30µ"	6 (1.83)	GR	M7KKK-3606J-ND	29.66	260.10
	Au 30µ"	10 (3.05)	MC	M7KKK-3610R-ND	41.14	360.76
	Au 30µ"	10 (3.05)	GR	M7KKK-3610J-ND	35.09	307.71
50	Au 30µ"	6 (1.83)	MC	M7KKK-5006R-ND	41.32	362.38
	Au 30µ"	6 (1.83)	GR	M7KKK-5006J-ND	36.42	319.39
	Au 30µ"	10 (3.05)	MC	M7KKK-5010R-ND	51.93	455.39
	Au 30µ"	10 (3.05)	GR	M7KKK-5010J-ND	43.76	383.73

Also available in the following configuration:
M7LL□-□□□□□-ND – Double Ended Male Delta w/ Insert.
M7QQ□-□□□□□-ND – Double Ended Male Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Male

***Twisted Pair Cable Finished Length is Approximate**

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7KKK-1405K-ND	19.22	168.55
	Au 30µ"	10 (3.05)	TW	M7KKK-1410K-ND	23.36	204.86
36	Au 30µ"	5 (1.52)	TW	M7KKK-3605K-ND	32.16	282.04
	Au 30µ"	10 (3.05)	TW	M7KKK-3610K-ND	42.81	375.40
50	Au 30µ"	5 (1.52)	TW	M7KKK-5005K-ND	40.20	352.55
	Au 30µ"	10 (3.05)	TW	M7KKK-5010K-ND	54.99	482.22

Also available in the following configuration:
M7LL□-□□□□K-ND – Double Ended Male Delta w/ Insert.
M7QQ□-□□□□K-ND – Double Ended Male Delta w/ Bail Lock.
Call for complete part number and pricing!

Female to Female

*MC = 3M Multi-Color, GR = 3M Gray

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7RRK-1406R-ND	19.54	171.31
	Au 30µ"	6 (1.83)	GR	M7RRK-1406J-ND	18.16	159.26
	Au 30µ"	10 (3.05)	MC	M7RRK-1410R-ND	22.51	197.36
	Au 30µ"	10 (3.05)	GR	M7RRK-1410J-ND	20.22	177.28
24	Au 30µ"	6 (1.83)	MC	M7RRK-2406R-ND	25.32	222.02
	Au 30µ"	6 (1.83)	GR	M7RRK-2406J-ND	22.96	201.37
	Au 30µ"	10 (3.05)	MC	M7RRK-2410R-ND	30.41	266.67
	Au 30µ"	10 (3.05)	GR	M7RRK-2410J-ND	26.49	232.26
36	Au 30µ"	6 (1.83)	MC	M7RRK-3606R-ND	33.29	291.93
	Au 30µ"	6 (1.83)	GR	M7RRK-3606J-ND	29.66	260.10
	Au 30µ"	10 (3.05)	MC	M7RRK-3610R-ND	41.14	360.76
	Au 30µ"	10 (3.05)	GR	M7RRK-3610J-ND	35.09	307.71
50	Au 30µ"	6 (1.83)	MC	M7RRK-5006R-ND	41.32	362.38
	Au 30µ"	6 (1.83)	GR	M7RRK-5006J-ND	36.42	319.39
	Au 30µ"	10 (3.05)	MC	M7RRK-5010R-ND	51.93	455.39
	Au 30µ"	10 (3.05)	GR	M7RRK-5010J-ND	43.76	383.73

Also available in the following configuration:
M7TT□-□□□□□-ND – Double Ended Female Delta w/ Insert.
M7UU□-□□□□□-ND – Double Ended Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Female to Female

***Twisted Pair Cable Finished Length is Approximate**

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7RRK-1405K-ND	19.22	168.55
	Au 30µ"	10 (3.05)	TW	M7RRK-1410K-ND	23.36	204.86
36	Au 30µ"	5 (1.52)	TW	M7RRK-3605K-ND	32.16	282.04
	Au 30µ"	10 (3.05)	TW	M7RRK-3610K-ND	42.81	375.40
50	Au 30µ"	5 (1.52)	TW	M7RRK-5005K-ND	40.20	352.55
	Au 30µ"	10 (3.05)	TW	M7RRK-5010K-ND	54.99	482.22

Also available in the following configuration:
M7TT□-□□□□K-ND – Double Ended Female Delta w/ Insert.
M7UU□-□□□□K-ND – Double Ended Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Female

*MC = 3M Multi-Color, GR = 3M Gray

No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	6 (1.83)	MC	M7KRK-1406R-ND	19.54	171.31
	Au 30µ"	6 (1.83)	GR	M7KRK-1406J-ND	18.16	159.26
	Au 30µ"	10 (3.05)	MC	M7KRK-1410R-ND	22.51	197.36
	Au 30µ"	10 (3.05)	GR	M7KRK-1410J-ND	20.22	177.28
24	Au 30µ"	6 (1.83)	MC	M7KRK-2406R-ND	25.32	222.02
	Au 30µ"	6 (1.83)	GR	M7KRK-2406J-ND	22.96	201.37
	Au 30µ"	10 (3.05)	MC	M7KRK-2410R-ND	30.41	266.67
	Au 30µ"	10 (3.05)	GR	M7KRK-2410J-ND	26.49	232.26
36	Au 30µ"	6 (1.83)	MC	M7KRK-3606R-ND	33.29	291.93
	Au 30µ"	6 (1.83)	GR	M7KRK-3606J-ND	29.66	260.09
	Au 30µ"	10 (3.05)	MC	M7KRK-3610R-ND	41.14	360.76
	Au 30µ"	10 (3.05)	GR	M7KRK-3610J-ND	35.09	307.71
50	Au 30µ"	6 (1.83)	MC	M7KRK-5006R-ND	41.32	362.38
	Au 30µ"	6 (1.83)	GR	M7KRK-5006J-ND	36.42	319.39
	Au 30µ"	10 (3.05)	MC	M7KRK-5010R-ND	51.93	455.39
	Au 30µ"	10 (3.05)	GR	M7KRK-5010J-ND	43.76	383.73

Also available in the following configuration:
M7LT□-□□□□□-ND – Male Delta/Female Delta w/ Insert.
M7QU□-□□□□□-ND – Male Delta/Female Delta w/ Bail Lock.
Call for complete part number and pricing!

Male to Female

***Twisted Pair Cable Finished Length is Approximate**

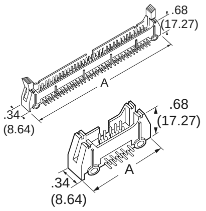
No. of Con- tacts	Conn. Finish	Length Feet (Meters)	Rib- bon* Cable	Digi-Key Part No.	Pricing 1	10
14	Au 30µ"	5 (1.52)	TW	M7KRK-1405K-ND	19.22	168.55
	Au 30µ"	10 (3.05)	TW	M7KRK-1410K-ND	23.36	204.86
36	Au 30µ"	5 (1.52)	TW	M7KRK-3605K-ND	32.16	282.04
	Au 30µ"	10 (3.05)	TW	M7KRK-3610K-ND	42.81	375.40
50	Au 30µ"	5 (1.52)	TW	M7KRK-5005K-ND	40.20	352.55
	Au 30µ"	10 (3.05)	TW	M7KRK-5010K-ND	54.99	482.22

Also available in the following configuration:
M7LT□-□□□□K-ND – Male Delta/Female Delta w/ Insert.
M7QU□-□□□□K-ND – Male Delta/Female Delta w/ Bail Lock.
Call for complete part number and pricing!

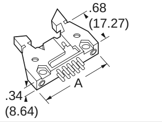
3M Latch/Eject Headers .100” x .100” (2.54mm x 2.54mm)

Four-wall shrouded housing to protect against physical and chemical pin damage. *Order optional ejector latches separately below.*

Right Angle Headers



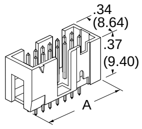
Straight Header



No. of Cont.	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	100	500	3M Part No.
Right Angle						
10	1.26 (32.00)	MHR10K-ND	1.54	116.92	529.10	3793-5002
14	1.46 (37.08)	MHR14K-ND	1.71	129.56	586.30	3314-5002
16	1.56 (39.62)	MHR16K-ND	1.77	134.30	607.75	3408-5002
20	1.76 (44.70)	MHR20K-ND	1.98	150.10	679.25	3428-5002
24	1.96 (49.78)	MHR24K-ND	2.18	165.90	750.75	3627-5002
26	2.06 (52.32)	MHR26K-ND	2.33	176.96	800.80	3429-5002
30	2.26 (57.40)	MHR30K-ND	2.68	203.82	922.35	3440-5002
34	2.46 (62.48)	MHR34K-ND	3.02	229.10	1036.75	3431-5002
40	2.76 (70.10)	MHR40K-ND	3.45	262.28	1186.90	3432-5002
50	3.26 (82.80)	MHR50K-ND	4.16	316.00	1430.00	3433-5002
60	3.76 (95.50)	MHR60K-ND	5.12	388.68	1758.90	3372-5002
Straight						
10	1.26 (32.00)	MHS10K-ND	1.54	116.92	529.10	3793-6002
14	1.46 (37.08)	MHS14K-ND	1.71	129.56	586.30	3314-6002
16	1.56 (39.62)	MHS16K-ND	1.77	134.30	607.75	3408-6002
20	1.76 (44.70)	MHS20K-ND	1.89	143.78	650.65	3428-6002
24	1.96 (49.78)	MHS24K-ND	2.18	165.90	750.75	3627-6002
26	2.06 (52.32)	MHS26K-ND	2.33	176.96	800.80	3429-6002
30	2.26 (57.40)	MHS30K-ND	2.68	203.82	922.35	3440-6002
34	2.46 (62.48)	MHS34K-ND	3.02	229.10	1036.75	3431-6002
40	2.76 (70.10)	MHS40K-ND	3.45	262.28	1186.90	3432-6002
50	3.26 (82.80)	MHS50K-ND	4.16	316.00	1430.00	3433-6002
60	3.76 (95.50)	MHS60K-ND	5.12	388.68	1758.90	3372-6002
Optional Ejector Latches for Connectors						
Short		MLKS01-ND*	.21/2	7.90	35.75	3505-2
Long		MLKS02-ND†	.21/2	7.90	35.75	3505-3

* Use without strain relief; † Use with strain relief

3M Low Profile Headers (Protected Headers)



Physical Specifications: Insulation: • Material: Glass filled Polyester (PBT) • Flammability: UL94V-0 • Color: Gray • Marking: 3M logo and Orientation Triangle **Contact:** • Material: Phosphor Bronze (C510) **Plating:** • Underplate: 100µ” Nickel--QQ-N-290, Class 2 • Wiping Area: Gold--MIL-G-45204, Type II, Grade C • Solder Tails: 200µ” 60/40 Tin Lead--MIL-P-81728 • Wrap Tails: Gold Flash

Electrical Specifications: • Current Rating: 2A • Insulation Resistance: >1x10^{9}Ω @ 500Vdc • Withstanding voltage: 1000Vrms at Sea Level

Environmental Specification:
• Temperature Rating: -55°C to +105°C

UL File No.: E68080
CSA File No.: LR 40971

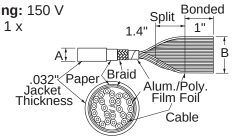
No. of Cont.	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	100	500	3M Part No.
Straight Solder Tail						
10	0.79 (20.07)	MHB10K-ND	1.33	101.12	457.60	2510-6002UB
14	0.99 (22.15)	MHB14K-ND	1.37	104.28	471.90	2514-6002UB
16	1.09 (27.69)	MHB16K-ND	1.54	116.92	529.10	2516-6002UB
20	1.29 (32.77)	MHB20K-ND	1.60	121.66	550.55	2520-6002UB
24	1.49 (37.85)	MHB24K-ND	1.68	127.98	579.15	2524-6002UB
26	1.59 (40.39)	MHB26K-ND	1.71	129.56	586.30	2526-6002UB
30	1.79 (45.47)	MHB30K-ND	1.98	150.10	679.25	2530-6002UB
34	1.99 (50.55)	MHB34K-ND	2.06	156.42	707.85	2534-6002UB
40	2.29 (58.17)	MHB40K-ND	2.20	167.48	757.90	2540-6002UB
50	2.79 (70.87)	MHB50K-ND	2.72	206.98	936.65	2550-6002UB
60	3.29 (83.57)	MHB60K-ND	3.27	248.06	1122.55	2560-6002UB
Right Angle Solder Tail						
10	0.79 (20.07)	MHD10K-ND	1.48	112.18	507.65	2510-5002UB
14	0.99 (22.15)	MHD14K-ND	1.52	115.34	521.95	2514-5002UB
16	1.09 (27.69)	MHD16K-ND	1.68	127.98	579.15	2516-5002UB
20	1.29 (32.77)	MHD20K-ND	1.77	134.30	607.75	2520-5002UB
24	1.49 (37.85)	MHD24K-ND	1.85	140.62	636.35	2524-5002UB
26	1.59 (40.39)	MHD26K-ND	1.87	142.20	643.50	2526-5002UB
30	1.79 (45.47)	MHD30K-ND	2.54	192.76	872.30	2530-5002UB
34	1.99 (50.55)	MHD34K-ND	2.25	170.64	772.20	2534-5002UB
40	2.29 (58.17)	MHD40K-ND	2.41	183.28	829.40	2540-5002UB
50	2.79 (70.87)	MHD50K-ND	3.00	227.52	1029.60	2550-5002UB
60	3.29 (83.57)	MHD60K-ND	3.60	273.34	1236.95	2560-5002UB

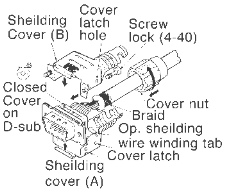
3M Round Jacketed/Shielded Flat Cable 3659 Series

PHYSICAL: • **Insulation Material:** Polyvinyl Chloride (PVC) • **Flammability Rating:** UL VW-1 • **Color:** Black • **Inner Cable:** Scotchflex Product No. 3365; 28 AWG 7 x 36 Conductors; UL Style: 2651 • **Shielding:** 0.001” (.03mm) and 90% Optical Coverage Tinned Copper Braid

ELECTRICAL: • **Volt. Rating:** 150 V • **Insulation Resistance:** > 1 x 10^{10}Ω/ 10 ft.

ENVIRONMENTAL:
• **Temperature Rating:**
-4°F to +176°F
(-20°C to +80°C)

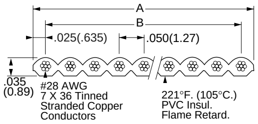




No. of Con-tacts	Dim. (Inch) “A”	“B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.
15	.29	.700	MC15R-X-ND	11.54	21.43	47.81	82.44	131.90
20	.30	.950	MC20R-X-ND	12.43	23.08	51.49	88.78	142.04
24	.35	1.150	MC24R-X-ND	13.32	24.73	55.17	95.11	152.18
25	.35	1.200	MC25R-X-ND	13.73	25.50	56.89	98.09	156.94
26	.35	1.250	MC26R-X-ND	14.20	26.38	58.84	101.45	162.32
34	.39	1.650	MC34R-X-ND	15.98	29.68	66.20	114.14	182.62
36	.41	1.750	MC36R-X-ND	16.42	30.50	68.04	117.31	187.70
37	.41	1.800	MC37R-X-ND	16.87	31.32	69.88	120.48	192.76
40	.41	1.950	MC40R-X-ND	17.31	32.15	71.72	123.65	197.84
50	.50	2.450	MC50R-X-ND	19.97	37.09	82.74	142.66	228.26
60	.53	2.950	MC60R-X-ND	22.39	41.58	92.76	159.94	255.90
64	.54	3.150	MC64R-X-ND	23.53	43.69	97.46	168.04	268.86

No. of Contacts	Digi-Key Part No.	Pricing 1	100	500	1,000	3M Part No.
D-Sub Backshells						
9	MDBS09-ND	3.12	237.00	1072.50	1950.00	3357-9209
15	MDBS15-ND	4.26	323.90	1465.75	2665.00	3357-9215
25	MDBS25-ND	4.58	347.60	1573.00	2860.00	3357-9225
37	MDBS37-ND	6.45	489.80	2216.50	4030.00	3357-9237
50	MDBS50-ND	10.77	818.44	3703.70	6734.00	3357-9250

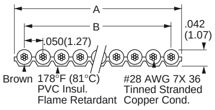
3M Gray Flat Cable 3365 Series



PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1 • Color: Gray • Marking: Red Edge • Conductors: 28 AWG 7x36 Tinned Stranded Copper
ELECTRICAL: • Voltage Rating: 300 V • Insulation Resistance: >1 x 10^{10}Ω/ 10 ft.
ENVIRONMENTAL: • Temperature Rating: -4°F to +221°F (-20°C to +105°C)

No. of Contacts	Dimensions Inch (mm) “A”	“B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.	300 ft.
10	.500 (12.70)	.450 (11.43)	MC10G-X-ND	1.98	3.67	8.18	14.11	25.40	67.72
14	.700 (17.78)	.650 (16.51)	MC14G-X-ND	2.77	5.14	11.46	19.75	35.56	94.82
16	.800 (20.32)	.750 (19.05)	MC16G-X-ND	3.16	5.87	13.09	22.58	40.64	108.36
20	1.000 (25.40)	.950 (24.13)	MC20G-X-ND	3.95	7.34	16.37	28.23	50.81	135.48
24	1.200 (30.48)	1.150 (29.21)	MC24G-X-ND	4.74	8.81	19.64	33.87	60.96	162.56
26	1.300 (33.02)	1.250 (31.75)	MC26G-X-ND	5.14	9.54	21.28	36.69	66.04	176.12
34	1.700 (43.18)	1.650 (41.91)	MC34G-X-ND	6.72	12.47	27.83	47.98	86.36	230.30
37	1.850 (46.99)	1.800 (45.72)	MC37G-X-ND	7.31	13.58	30.28	52.21	93.98	250.62
40	2.000 (50.80)	1.950 (49.53)	MC40G-X-ND	7.90	14.68	32.74	56.45	101.60	270.94
50	2.500 (63.50)	2.450 (62.23)	MC50G-X-ND	9.88	18.34	40.92	70.55	127.00	338.66
60	3.000 (76.20)	2.950 (74.93)	MC60G-X-ND	11.85	22.01	49.11	84.67	152.40	406.40
64	3.200 (81.28)	3.150 (80.01)	MC64G-X-ND	12.64	23.48	52.38	90.31	162.56	433.50

3M Color Coded Flat Cable 3302 Series

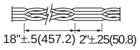


PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1 • Color: 10 Color Repeat, Clear Carrier • Conductors: 28 AWG 7 x 36 Tinned Stranded Copper. **ELECTRICAL:** • Voltage Rating: 300 V • Insulation Resistance: > 1 x 10^{9}Ω/ 10 ft. **ENVIRONMENTAL:** • Temperature Rating: -4°F to +176°F (-20°C to +80°C)

No. of Contacts	Dimensions Inch (mm) “A”	“B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.	300 ft.
10	.500 (12.70)	.450 (11.43)	MC10M-X-ND	3.06	5.67	12.66	21.83	39.29	104.76
14	.700 (17.78)	.650 (16.51)	MC14M-X-ND	4.28	7.95	17.73	30.56	55.01	146.70
16	.800 (20.32)	.750 (19.05)	MC16M-X-ND	4.89	9.08	20.27	34.94	62.89	167.72
20	1.000 (25.40)	.950 (24.13)	MC20M-X-ND	6.11	11.35	25.32	43.65	78.57	209.52
24	1.200 (30.48)	1.150 (29.21)	MC24M-X-ND	7.33	13.62	30.38	52.39	94.30	251.46
26	1.300 (33.02)	1.250 (31.75)	MC26M-X-ND	7.95	14.76	32.92	56.75	102.16	272.42
34	1.700 (43.18)	1.650 (41.91)	MC34M-X-ND	10.39	19.29	43.03	74.20	133.55	356.14
37	1.850 (46.99)	1.800 (45.72)	MC37M-X-ND	11.31	21.00	46.84	80.76	145.37	387.66
40	2.000 (50.80)	1.950 (49.53)	MC40M-X-ND	12.22	22.70	50.63	87.30	157.14	419.04
50	2.500 (63.50)	2.450 (62.23)	MC50M-X-ND	15.27	28.37	63.28	109.10	196.38	523.78
60	3.000 (76.20)	2.950 (74.93)	MC60M-X-ND	18.33	34.05	75.95	130.95	235.71	628.56
64	3.200 (81.28)	3.150 (80.01)	MC64M-X-ND	19.55	36.31	81.01	139.67	251.41	670.42

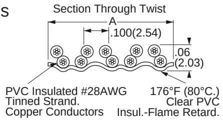
3M Twisted Pair Flat Cable 1700 Series

PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Flammability Rating: UL VW-1.
ELECTRICAL: • Voltage Rating: 300 V • Insulation Resistance: >1 x 10^{9}Ω/ 10ft.
ENVIRONMENTAL: • Temperature Rating: -4°F to +176°F (-20°C to +80°C)



Standard product has alt. 18” (45.72cm) twisted sections and 2” (5.08cm) flat sections.

Section Through Twist



No. of Contacts	Dimensions Inch (mm) “A”	“B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.†
10	.50 (12.70)	.450 (11.43)	MC10F-X-ND	2.74	5.10	11.37	19.60	31.36
14	.70 (17.78)	.650 (16.51)	MC14F-X-ND	3.84	7.13	15.91	27.44	43.90
16	.80 (20.32)	.750 (19.05)	MC16F-X-ND	4.39	8.15	18.19	31.36	50.18
20	1.00 (25.40)	.950 (24.13)	MC20F-X-ND	5.49	10.19	22.74	39.20	62.72
26	1.30 (33.02)	1.250 (31.75)	MC26F-X-ND	7.13	13.25	29.56	50.96	81.54
34	1.70 (43.18)	1.650 (41.91)	MC34F-X-ND	9.33	17.33	38.65	66.64	106.62
36	1.80 (45.72)	1.750 (44.45)	MC36F-X-ND	9.88	18.35	40.93	70.56	112.90
40	2.00 (50.80)	1.950 (49.53)	MC40F-X-ND	10.98	20.38	45.47	78.40	125.44
50	2.50 (63.50)	2.450 (62.23)	MC50F-X-ND	13.72	25.48	56.84	98.00	156.80
60	3.00 (76.20)	2.950 (74.93)	MC60F-X-ND	15.73	29.21	65.16	112.35	179.76
64	3.20 (81.28)	3.150 (80.01)	MC64F-X-ND	17.56	32.61	72.75	125.44	200.70

† If ordered in full reel size, may contain a splice. Comes in unreel box.

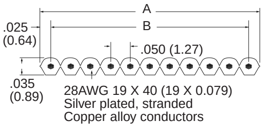
3M High Flex Life Cable 3319 Series

19 strands of high strength copper alloy provide the longest flex life available for dynamic applications.

PHYSICAL: • Insulation Material: Polyvinyl Chloride (PVC) • Color: Black • Marking, Standard: None • CSA Option: UL AWM 2651 105C 300V VW1, 3M NU, CSA AWM 1A 105C 300V FT1 • Conductors: 28 AWG 19x40 (19x0.079) Silver Plated Stranded Copper Alloy (89% conductivity)

ELECTRICAL: • Voltage Rating: 300 V • Insulation Resistance: >1 x 10^{10}Ω/ 10ft. (3m)

ENVIRONMENTAL: • Temperature Rating: -4°F to +221°F (-20°C to +105°C) • Flammability Rating: UL: VW-1, CSA: FT1



No. of Contacts	Dimensions Inch (mm) “A”	“B”	Digi-Key Part No.	Note: X In Part No. = Ft. Per Roll *Price Per Roll 5 ft.	10 ft.	25 ft.	50 ft.	100 ft.
10	.50 (12.70)	.45 (11.43)	MC10H-X-ND	18.99	35.26	78.66	135.63	217.00
14	.70 (17.78)	.65 (16.51)	MC14H-X-ND	26.58	49.37	110.13	189.88	303.80
16	.80 (20.32)	.75 (19.05)	MC16H-X-ND	30.38	56.42	125.86	217.00	347.20
20	1.00 (25.40)	.95 (24.13)	MC20H-X-ND	37.98	70.53	157.33	271.25	434.00
24	1.20 (30.48)	1.15 (29.21)	MC24H-X-ND	45.57	84.63	188.79	325.50	520.80
26	1.30 (33.02)	1.25 (31.75)	MC26H-X-ND	49.37	91.68	204.52	352.63	564.20
34	1.70 (43.18)	1.65 (41.91)	MC34H-X-ND	64.56	119.89	267.45	461.13	737.80
37	1.85 (46.99)	1.80 (45.72)	MC37H-X-ND	70.25	130.47	291.05	501.81	802.90
40	2.00 (50.80)	1.95 (49.53)	MC40H-X-ND	75.95	141.05	314.65	542.50	868.00
50	2.50 (63.50)	2.45 (62.23)	MC50H-X-ND	94.94	176.31	393.31	678.13	1085.00
60	3.00 (76.20)	2.95 (74.93)	MC60H-X-ND	113.93	211.58	471.98	813.75	1302.00
64	3.20 (81.28)	3.15 (80.01)	MC64H-X-ND	121.52	225.67	503.43	867.98	1388.76

ASSMANN Computer Cable Assemblies

Fig. 1 — Parallel Extension

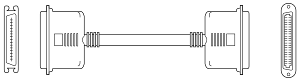


Fig. 2 — Parallel Printer (Snap Hood)

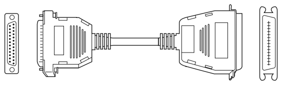


Fig. 3 — Parallel Printer (Molded Hood)

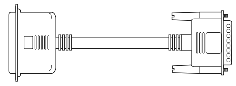


Fig. 4 — Right Angle Parallel Printer

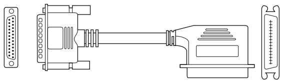


Fig. 5 — Serial Printer (Snap Hoods)

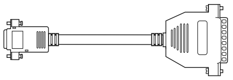


Fig. 6 — IEEE 1284 Bi-Directional Printer

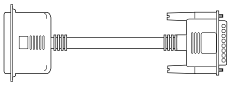


Fig. 7 — IEEE 1284 Bi-Directional Connection

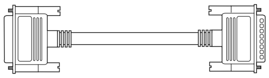


Fig. 8 — IEEE 1284 Bi-Directional Extension

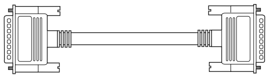


Fig. 9 — Connection Cable, 25-Pin Interface Serial/Parallel

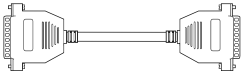


Fig. 10 — 25-Pin Interface Extension

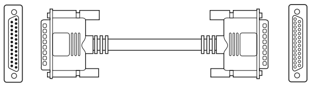


Fig. 11 — 9-Pin Interface Extension

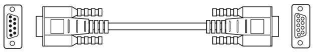


Fig. 12 — VGA Monitor Extension

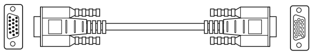


Fig. 13 — Premium VGA Monitor Extension

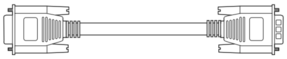


Fig. 14— PC/XT/AT Keyboard Extension

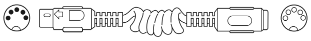


Fig. 15 — PS/2 Keyboard Extension - Spiral

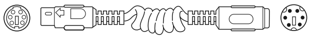


Fig. 16 — PS/2 Keyboard Extension – Straight

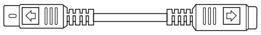


Fig. 17 — PS/2 Keyboard Cable - Straight

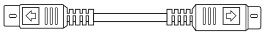


Fig. 18 — Disk Drive Power Splitters

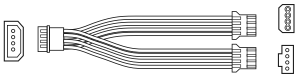


Fig. 19 — Stereo Extension Cable

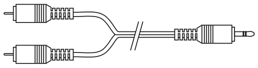


Fig. 20 — Stereo Extension Cable

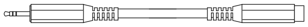


Fig. No.	Length Feet (Meters)	Lines	Description	Digi-Key Part No.	Price Each			Assmann Part No.
					1	10	25	
Molded Extension for 36-Pin Centronics Interfaces								
1	6.56 ft. (2m) 9.84 ft. (3m)	36	2x Centronics 36-Pin Female to Female	AE1000-ND AE1001-ND	12.38 16.50	10.88 14.50	9.75 13.00	AK155-2 AK434-3
1	6.56 ft. (2m) 9.84 ft. (3m)	36	2x Centronics 36-Pin Male to Male	AE1002-ND AE1003-ND	10.73 15.02	9.43 13.20	8.45 11.83	AK138-2 AK426-3
1	6.56 ft. (2m) 9.84 ft. (3m)	36	2x Centronics 36-Pin Male to Female	AE1004-ND AE1005-ND	11.55 15.68	10.15 13.78	9.10 12.35	AK140-2 AK430-3
Parallel Printer Cable, IBM PC & Compatibles								
2	5.90 ft (1.8m) 9.84 ft. (3m) 16.40 ft. (5m) 22.96 ft. (7m)	25	D-Sub 25-Pin Male to Centronics 36-Pin Male, Snap-Hoods	AE1006-ND AE1007-ND AE1099-ND AE1100-ND	4.79 7.99 7.06 8.94	4.21 7.02 6.21 7.86	3.77 6.30 5.57 7.05	AK101-1.8 AK102-3 AK103-5 AK104-7
3	6.56 ft. (2m) 9.84 ft. (3m) 22.96 ft. (7m)	25	D-Sub 25-Pin Male to Centronics 36-Pin Male, Molded Hoods	AE1101-ND AE1102-ND AE1104-ND	4.59 5.81 9.47	4.04 5.11 8.33	3.62 4.58 7.47	AK108-2 AK127-3 AK159-7
4	6.56 ft. (2m) 6.56 ft. (2m)	25	D-Sub 25-Pin Male to Right Angle Centronics 36-Pin Male D-Sub 25-Pin Male to Left Angle Centronics 36-Pin Male	AE1008-ND AE1009-ND	8.25 8.25	7.25 7.25	6.50 6.50	AK525-2 AK525-L2
Parallel Printer Cable, IBM PC & Compatibles								
5	9.84 ft. (3m)	8	D-Sub 9-Pin Female to D-Sub 25-Pin Male, Snap-Hoods	AE1103-ND	3.27	2.88	2.58	AK150-3
IEEE 1284 Bi-Directional Cable - Molded Hoods								
6	5.90 ft. (1.8m) 9.84 ft. (3m) 16.40 ft. (5m)	25	D-Sub 25-Pin Male to Centronics 36-Pin Male, Printer	AE1105-ND AE1106-ND AE1107-ND	10.26 13.79 18.65	9.02 12.13 16.39	8.09 10.87 14.69	AK711-1.8 AK712-3 AK713-5
7	5.90 ft. (1.8m) 9.84 ft. (3m) 16.40 ft. (5m)	25	D-Sub 25-Pin Male to D-Sub 25-Pin Female, Connection	AE1108-ND AE1109-ND AE1110-ND	10.82 14.59 20.53	9.52 12.82 18.04	8.53 11.50 16.18	AK733-1.8 AK734-3 AK735-5
8	5.90 ft. (1.8m) 9.84 ft. (3m) 16.40 ft. (5m)	25	D-Sub 25-Pin Male to D-Sub 25-Pin Male, Extension	AE1112-ND AE1113-ND AE1114-ND	10.63 13.93 20.66	9.34 12.24 18.16	8.38 10.98 16.28	AK736-1.8 AK737-3 AK738-5
Snap-Hood Connection for 25-Pin Interface								
9	6.56 ft. (2m)	25	D-Sub 25-Pin Male to D-Sub 25-Pin Male, Snap-Hoods	AE1111-ND	3.83	3.37	3.02	AK401-2
Molded Extension for 25-Pin Interfaces								
10	6.56 ft. (2m) 9.84 ft. (3m)	25	2x D-Sub 25-Pin Male to Male	AE1010-ND AE1011-ND	6.93 8.58	6.09 7.54	5.46 6.76	AK137-2 AK162-3
10	6.56 ft. (2m) 9.84 ft. (3m)	25	2x D-Sub 25-Pin Male to Female	AE1012-ND AE1013-ND	7.06 8.58	6.21 7.54	5.57 6.76	AK135-2 AK166-3
10	6.56 ft. (2m) 9.84 ft. (3m)	25	2x D-Sub 25-Pin Female to Female	AE1014-ND AE1015-ND	7.23 10.03	6.36 8.82	5.70 7.91	AK133-2 AK170-3
Molded Extension for 9-Pin Interfaces								
11	6.56 ft. (2m) 9.84 ft. (3m)	9	2x D-Sub 9-Pin Male to Male	AE1018-ND AE1019-ND	5.35 6.01	4.70 5.28	4.22 4.74	AK129-2 AK174-3
11	6.56 ft. (2m) 9.84 ft. (3m)	9	2x D-Sub 9-Pin Male to Female	AE1020-ND AE1021-ND	5.35 6.01	4.70 5.28	4.22 4.74	AK131-2 AK178-3
11	6.56 ft. (2m) 9.84 ft. (3m)	9	2x D-Sub 9-Pin Female to Female	AE1016-ND AE1017-ND	5.35 6.11	4.70 5.37	4.22 4.81	AK152-2 AK182-3
VGA Monitor Extension Cable - IBM PS/2								
12	6.56 ft. (2m)	—	2x H/D D-Sub 15-Pin Male to Female	AE1022-ND	6.01	5.28	4.74	AK322-2
Molded VGA to 5 x BNC, Monitor Cable								
—	6.56 ft. (2m)	—	HD D-Sub 15-Pin Male to 5 x BBNC Male	AE1116-ND	17.23	15.14	13.58	AK553-2
Molded Premium VGA Monitor Extension Cable								
13	5.90 ft. (1.8m)	—	HD D-Sub 15-Pin Male to HD D-Sub 15-Pin Female	AE1117-ND	10.13	8.91	7.99	AK3220-1.8
IBM PC-XT/AT Keyboard Extension								
14	6.56 ft. (2m) 16.4 ft. (5m)	5	5-Pin Standard Din Male to Female	AE1023-ND AE1024-ND	4.29 8.75	3.77 7.69	3.38 6.89	AK306-2 AK307-5
Molded PS/2 Keyboard Extension								
15	6.56 ft. (2m) 16.4 ft. (5m)	6	6-Pin Mini Din Male to Female, Spiral	AE1025-ND AE1026-ND	5.84 10.73	5.14 9.43	4.61 8.45	AK323-2 AK528-5
16	6.56 ft. (2m)	6	MiniDIN 6-Pin Male to MiniDIN 6-Pin Female, Straight	AE1118-ND	2.48	2.18	1.95	AK323/G-2
PS/2 Keyboard Cable - Straight								
17	6.56 ft. (2m)	6	MiniDIN 6-Pin Male to MiniDIN 6-Pin Male, Molded	AE1119-ND	2.41	2.12	1.90	AK678-2

(Continued)

Computer Cable Assemblies *(Cont.)*

Fig. 21 — Stereo Extension Cable

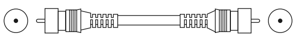


Fig. 22 — Stereo Extension Cable

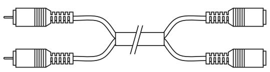
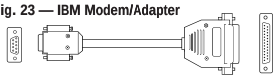
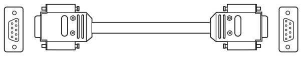


Fig. 23 — IBM Modem/Adapter



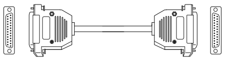
AE1115-ND & AE1030-ND : 1-8, 2-3, 3-2, 4-20, 5-7, 6-6, 7-4, 8-5, 9-22, S-S
AE1031-ND & AE1032-ND: 1-8, 2-2, 3-3, 4-6, 5-7, 6-20, 7-5, 8-4, 9-22, shell-shell

Fig. 24 — Null Modem Cross-Over Cable



AE1033-ND & AE1034-ND: 1-4, 2-3, 3-2, 4-1, 5-5, 7-8, 8-7, 9-9, shell-shell

Fig. 25 — Null Modem Serial Cable



AE1035-ND: 1-1; 2-3; 3-2; 4-5; 5-4; 7-7; 8-20; 15,17-8, 24-15.
AE1036-ND: 2-15, 3-13, 4-12, 5-10, 6-11, 10-5, 11-6, 12-4, 13-3, 15-2, 25-25.
AE1037-ND: 1-1, 2-3, 3-2, 4-5, 5-4, (6+8)-20, 7-7, 20-(6+8).

Fig. 26 — PS/2 Keyboard Adapter

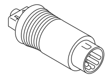
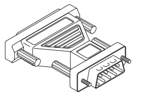


Fig. 27 — D-Sub Adapter



Adapter to assist in the installation of interface systems, using standard cables.

Fig. 28 — PS/2 Mouse Adapter

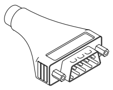


Fig. 29 — PS/2 Mouse-Cable Adapter

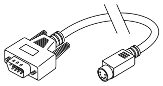
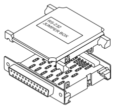
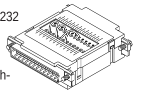


Fig. 30 — Jumper Box



Adapter for special matching of RS 232 interfaces. The link wires included give an easy economical way of permanently reconfiguring pin functions without rewiring cable assemblies.

Fig. 31 — Wiring Box



Adapter for special matching of RS 232 interfaces, with the high quality contacts and wire bridges. This adapter can be used many times for the reconfiguration of cables without the need for soldering.

Fig. 32 — Y-Power Cord

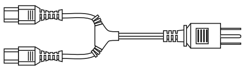


Fig. 33 — Power Cord, Straight/Angled

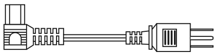


Fig. 34 — Power Cord, Straight/Straight

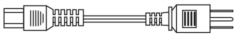


Fig. 35 — Power Cord, Straight/8-Device

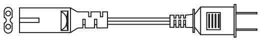


Fig. 36 — Power Cord Extension

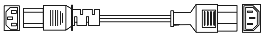


Fig. 37 — Modular Plug

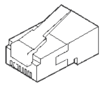


Fig. No.	Length Feet (Meters)	Lines	Description	Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.
			Power Splitter Cables					
18	.66 ft. (.2m)	4	Power Cable for 2 - 5 1/4" Drives	AE1027-ND	1.98	1.74	1.56	AK319-.2
	.66 ft. (.2m)	4	Power Cable for 2 - 3 1/2" Drives	AE1028-ND	1.98	1.74	1.56	AK520-.2
	.66 ft. (.2m)	4	Power Cable for 3 1/2" and 5 1/4" Drives	AE1029-ND	1.98	1.74	1.56	AK521-.2
			Multi Media Cables					
19	6.56 ft. (2m)	—	3.5mm Stereo Cable, 2 Phono Plugs	AE1042-ND	6.77	5.95	5.33	AK243-2
20	8.2 ft. (2.5m)	—	3.5mm Stereo Cable, Plug/Jack	AE1043-ND	3.60	3.17	2.84	AK203-2.5
21	6.56 ft. (2m)	—	RCA Cable, Phono Plug/Plug	AE1044-ND	1.81	1.59	1.43	AK-302-2
22	6.56 ft. (2m)	—	RCA Cable, Double Phono Plug/Jack	AE1045-ND	2.44	2.14	1.92	AK3030-2
			PC Modem (AT Adapter Cable)					
23	.82 ft. (.25m)	9	D-Sub 9-Pin Female to D-Sub 25-Pin Male	AE1115-ND	1.72	1.51	1.36	AK128-0.25
	6.56 ft. (2m)	9	D-Sub 9-Pin Female to D-Sub 25-Pin Male	AE1030-ND	4.72	4.15	3.72	AK125-2
			Null Modem Cables					
23	9.84 ft. (3m)	9	D-Sub 9-Pin Female to D-Sub 25-Pin Male	AE1031-ND	5.05	4.44	3.98	AK149-3
	9.84 ft. (3m)	9	D-Sub 9-Pin Female to D-Sub 25-Pin Female	AE1032-ND	5.28	4.64	4.16	AK124-3
			Null Modem , Cross-Cables					
24	9.84 ft. (3m)	9	D-Sub 9-Pin Female to D-Sub 9-Pin Female	AE1033-ND	5.68	4.99	4.48	AK143-3
	9.84 ft. (3m)	9	D-Sub 9-Pin Male to D-Sub 9-Pin Female	AE1034-ND	5.68	4.99	4.48	AK142-3
			Null Modem, Serial Cables					
25	9.84 ft. (3m)	25	D-Sub 25-Pin Female to D-Sub 25-Pin Female	AE1035-ND	4.39	3.86	3.46	AK144-3
	9.84 ft. (3m)	25	D-Sub 25-Pin Male to D-Sub 25-Pin Female	AE1036-ND	7.49	6.59	5.91	AK250-3
	9.84 ft. (3m)	25	D-Sub 25-Pin Female to D-Sub 25-Pin Female	AE1037-ND	4.39	3.86	3.46	AK251-3
			PS/2 Keyboard Adapters					
26	—	—	1 x MiniDIN, 6-Pin Female to 1 x DIN 5-Pin Male	AE1046-ND	3.93	3.46	3.10	AB961
	—	—	1 x MiniDIN, 6-Pin Male to DIN 5-Pin Female	AE1047-ND	3.04	2.67	2.40	AB440
			D-Sub Adapters					
27	—	—	9-Pin Male to 25-Pin Male	AE1048-ND	3.04	2.67	2.40	AB913
	—	—	9-Pin Female to 25-Pin Male	AE1049-ND	3.04	2.67	2.40	AB914
	—	—	9-Pin Male to 25-Pin Female	AE1050-ND	3.04	2.67	2.40	AB914F
	—	—	9-Pin Female to 25-Pin Female	AE1051-ND	3.04	2.67	2.40	AB915
			PS/2 Mouse Adapters					
28	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Male	AE1052-ND	3.00	2.64	2.37	AB401
	—	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Female	AE1053-ND	6.01	5.28	4.74	AB450
	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 25-Pin Male	AE1054-ND	6.30	5.54	4.97	AB402
	—	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Male	AE1055-ND	2.77	2.44	2.19	AB405
	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Female	AE1156-ND	2.08	1.83	1.64	AB406
	—	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 25-Pin Female	AE1056-ND	7.26	6.38	5.72	AB441
			PS/2 Mouse-Cable Adapters					
29	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Male	AE1154-ND	2.28	2.01	1.80	AB401K
	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Female	AE1158-ND	2.08	1.83	1.64	AB450K
	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Male to 1 x D-Sub 9-Pin Male	AE1155-ND	2.28	2.01	1.80	AB405K
	.5 ft. (.15m)	—	1 x MiniDIN, 6-Pin Female to 1 x D-Sub 9-Pin Female	AE1157-ND	2.28	2.01	1.80	AB406K
			Jumper Box					
30	—	—	1 x Male, 1 x Female, 25-Pin, Plastic	AE1038-ND	7.39	6.50	5.83	AB972
	—	—	1 x Male, 1 x Female, 25-Pin, Metallized	AE1039-ND	7.82	6.88	6.17	AB973
			Wiring Box					
31	—	—	1 x Male, 1 x Female, 25-Pin, Plastic	AE1040-ND	14.12	12.42	11.13	AB946
	—	—	1 x Male, 1 x Female, 25-Pin, Metallized	AE1041-ND	14.62	12.85	11.52	AB947
			Y-Power Cord					
32	6.56 ft. (2m)	—	1 x Power Plug to 2 x Straight Connector, 10A, 125V	AE1120-ND	6.40	5.63	5.05	AK500/Y-U-2
			Power Cords					
33	6.56 ft. (2m)	—	Power Plug, Straight to IEC Connector, Angled, 10A, 125V	AE1121-ND	3.43	3.02	2.71	AK500/U-1-2
34	6.56 ft. (2m)	—	Power Plug, Straight to IEC Connector, Straight, 10A, 125V	AE1122-ND	3.43	3.02	2.71	AK500/U-2-2
35	6.56 ft. (2m)	—	Power Plug, Straight to Figure 8 Device Connector, Straight	AE1123-ND	2.15	1.89	1.69	AK500/U-3-2
			Power Cord Extension					
36	6.56 ft. (2m)	—	IEC Plug, Straight to IEC Socket, Straight, 10A, 125V	AE1124-ND	3.73	3.28	2.94	AK500/U-4-2
			Modular Plugs					
37	—	—	4P4C, Unshielded, for Flat Cable	AE1194-ND	.13	.12	.11	A-MO-4/4-SF
	—	—	6P4C, Unshielded, for Flat Cable	AE1196-ND	.13	.12	.11	A-MO-6/4-SF
	—	—	6P6C, Unshielded, for Flat Cable	AE1198-ND	.20	.18	.16	A-MO-6/6-SF
	—	—	8P8C, Unshielded, for Flat Cable	AE1200-ND	.30	.27	.24	A-MO-8/8-SF
	—	—	8P8C, Shielded, for Flat Cable, CAT5	AE1201-ND	1.52	1.34	1.20	A-MO-8/8-SFS
37	—	—	4P4C, Unshielded, for Round Cable	AE1195-ND	.13	.12	.11	A-MO-4/4-SR
	—	—	6P4C, Unshielded, for Round Cable	AE1197-ND	.13	.12	.11	A-MO-6/4-SR
	—	—	6P6C, Unshielded, for Round Cable	AE1199-ND	.20	.18	.16	A-MO-6/6-SR
	—	—	8P8C, Unshielded, for Round Cable	AE1202-ND	.30	.27	.24	A-MO-8/8-SR
	—	—	8P8C, Shielded, for Round Cable, CAT5	AE1203-ND	1.52	1.34	1.20	A-MO-8/8-SRS

ASSMANN SCSI, USB & CAT5 Computer Cable Assemblies

Fig. 1 — Internal Adapter, Molding

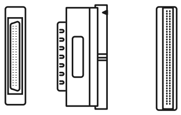


Fig. 2 — Internal Adapter, Assembly

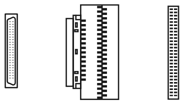


Fig. 3 — Low Profile Adapter

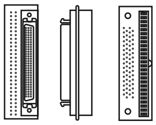


Fig. 4 — SCSI-3 M-F Adapter

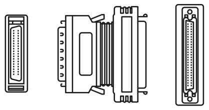


Fig. 5 — SCSI-3 F-F Adapter

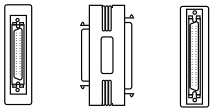


Fig. 6 — SCSI-3 M-M Adapter

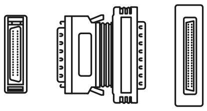


Fig. 7 — SCSI-3 M-F Adapter

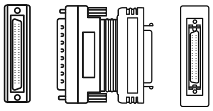


Fig. 8 — Centronic 50 Male

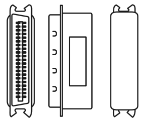


Fig. 9 — Box Header 50 Male

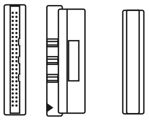


Fig. 10 — Box Header 50 M/F

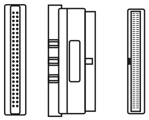


Fig. 11 — D-Sub 50 Male with Latch

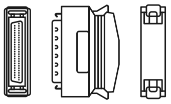


Fig. 12 — D-Sub 68 Male with Latch

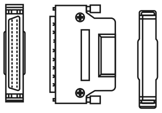


Fig. 13 — SCSI-2 Extension Cable

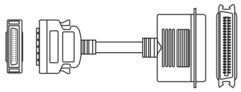


Fig. 14 — SCSI-3 Extension Cable

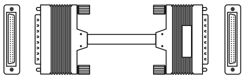


Fig. 15 — SCSI-3 Adapter Cable

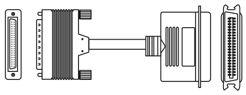


Fig.	Length Meters	Lines	Description	Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.
			SCSI Series, Internal Adapter					
1	—	—	HP D-sub 68 Male to Box Header 50 Male	AE1057-ND	13.99	12.30	11.03	AB-Y1007
2	—	—	HP D-sub 68 Female to Socket 50 Female	AE1058-ND	18.68	16.42	14.72	AB-Y1008
			SCSI Series, Low Profile Adapter					
3	—	50	HPD68 Female to IDC 50 Female	AE1059-ND	20.00	17.58	15.76	AB-Y1014
			SCSI-3 Series, Adapter					
4	—	50	HP D-sub 50 Male to HP D-sub 68 Female	AE1060-ND	26.93	23.67	21.22	AB-Y334
5	—	50	HP D-sub 50 Female to HP D-sub 68 Female	AE1061-ND	25.81	22.68	20.34	AB-Y335
6	—	50	HP D-sub 50 Male to HP D-sub 68 Male	AE1062-ND	29.34	25.79	23.12	AB-Y344
7	—	50	HP D-sub 68 Male to HP D-sub 50 Female	AE1063-ND	27.98	24.60	22.05	AB-Y345
			SCSI-1 Series, Terminator					
8	—	50	Centronic 50 Male, A Cable, Active	AE1064-ND	15.35	13.49	12.09	AB-Y102T
9	—	50	Box Header 50 Male, A Cable, Active	AE1066-ND	16.47	14.48	12.98	AB-Y130T
10	—	50	Box Header 50 M/F, A Cable, Active	AE1065-ND	20.00	17.58	15.76	AB-Y126T
			SCSI-2 Series, Terminator					
11	—	50	HP D-sub 50 Male with Latch, A Cable, Active	AE1067-ND	20.00	17.58	15.76	AB-Y201L
			SCSI-3 Series, Terminator					
12	—	68	HP D-sub 68 Male with Latch, P Cable, Passive	AE1068-ND	22.28	19.58	17.55	AB-Y315T
			SCSI-2 Series, Round Cable					
13	.91	50	Half-pitch D-sub 50 Male to Centronic 50 Male, A Cable	AE1069-ND	16.60	14.59	13.08	AK-Y1202
			SCSI-3 Series, Round Cable					
14	.91	68	Half-pitch D-sub 68 Male X 2, A Cable	AE1070-ND	29.60	26.02	23.33	AK-Y1301
15	.91	50	Half-pitch D-sub 68 Male to Centronic 50 Male, A Cable	AE1071-ND	18.94	16.65	14.93	AK-Y1302
16	.91	50	Half-pitch D-sub 68 Male to Half-pitch D-sub 50 Male, A Cable	AE1072-ND	21.62	19.00	17.03	AK-Y1303
17	.91	25	Half-pitch D-sub 68 Male to D-sub 25 Male, A Cable	AE1073-ND	15.94	14.01	12.56	AK-Y1304
			SCSI Series, Flat Cable					
18	2	50	UL 2651, 50 pins, 1.27mm pitch, IDC 50 X 8, P Cable	AE1074-ND	7.06	6.21	5.57	AK-Y2110
			SCSI-3 Series, Flat Cable					
19	.45	68	.635mm HP D-sub 68 Male X 2, P Cable	AE1075-ND	13.33	11.72	10.51	AK-Y2301
20	60	68	.635mm HP D-sub 68 Male X 3, P Cable	AE1076-ND	21.32	18.74	16.80	AK-Y2302
21	1.2	68	.635mm HP D-sub 68 Male X 5, P Cable	AE1077-ND	29.67	26.08	23.38	AK-Y2303
22	2.0	68	.635mm HP D-sub 68 Male X 8, P Cable	AE1078-ND	43.33	38.08	34.14	AK-Y2304
23	1.6	68	.635mm HP D-sub 68 Female X 2 to .635mm HP D-sub 68 Male X 8	AE1079-ND	59.73	52.49	47.06	AK-Y2310
			FAST SCSI 2 to SCSI 2 Cable, Shielded, UL 2919					
24	.90	50	D-Sub 50, HP, Male, Clip to D-Sub 50, HP, Male, Clip	AE1163-ND	18.71	16.45	14.75	AK579/F-1
24	2.0	50	D-Sub 50, HP, Male, Clip to D-Sub 50, HP, Male, Clip	AE1164-ND	25.01	21.99	19.71	AK579/F-2
			IEEE1394 Cable Double Shielded					
25	1.8	6	6-Pin Male to 6-Pin Male	AE1125-ND	18.25	16.04	14.38	AK1394-18
25	3.0	6	6-Pin Male to 6-Pin Male	AE1128-ND	24.02	21.12	18.93	AK1394-30
25	5.0	6	6-Pin Male to 6-Pin Male	AE1131-ND	34.22	30.08	26.97	AK1394-50
25	1.8	4	6-Pin Male to 4-Pin Male	AE1126-ND	21.81	19.17	17.19	AK1394-184
25	3.0	4	6-Pin Male to 4-Pin Male	AE1129-ND	26.70	23.47	21.04	AK1394-304
25	5.0	4	6-Pin Male to 4-Pin Male	AE1132-ND	34.88	30.66	27.49	AK1394-504
25	1.8	4	4-Pin Male to 4-Pin Male	AE1127-ND	28.05	24.65	22.10	AK1394-1844
25	3.0	4	4-Pin Male to 4-Pin Male	AE1130-ND	32.93	28.95	25.95	AK1394-3044
25	5.0	4	4-Pin Male to 4-Pin Male	AE1133-ND	41.12	36.14	32.40	AK1394-5044
			IEEE 1394 & USB Connectors					
26	—	—	IEEE 1394 Horizontal SMT	AE7348-ND	2.00	1.76	1.58	A-IE-S-SMT
27	—	—	IEEE Conn. 1394 Horizontal PCB	AE7347-ND	1.90	1.67	1.50	A-IE-S-DIP
28	—	—	IEEE Conn. 1394 Vertical PCB	AE7346-ND	1.90	1.67	1.50	A-IE-E-DIP
29	—	4	USB 4P Female Dip, Type A	AE1083-ND	1.26	1.11	1.00	AU-Y1005
30	—	4	USB 4P Female Type A	AE1084-ND	1.26	1.11	1.00	AU-Y1006
31	—	4	USB 4P Male Dip, Type B	AE1085-ND	1.93	1.70	1.52	AU-Y1007
32	—	4	USB 4P Female Dual Port, Type A	AE1086-ND	2.34	2.06	1.85	AU-Y1008
			USB Plugs and Hoods					
33	—	—	USB A-Male, Solder Version	AE1134-ND	.92	.82	.73	A-USBPA
33	—	—	USB B-Male, Solder Version	AE1136-ND	1.06	.93	.84	A-USBPB
33	—	—	Hood for USB A Male	AE1135-ND	.43	.38	.34	A-USBPA-HOOD
33	—	—	Hood for USB B Male	AE1137-ND	.43	.38	.34	A-USBPB-HOOD

Fig. 16 — SCSI-3 Adapter Cable

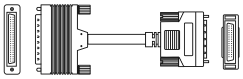


Fig. 17 — SCSI-3 Adapter Cable

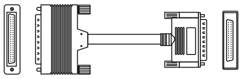


Fig. 18 — SCSI Internal RAID Flat Cable

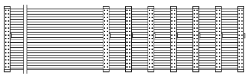


Fig. 19 — SCSI-3 Internal Flat Cable

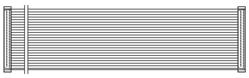


Fig. 20 — SCSI-3 Internal Flat Cable

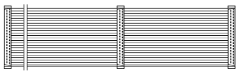


Fig. 21 — SCSI-3 Internal RAID Flat Cable

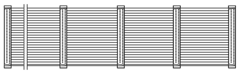


Fig. 22 — SCSI-3 Internal RAID Flat Cable

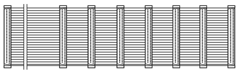


Fig. 23 — SCSI-3 Internal RAID Flat Cable

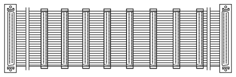


Fig. 24 — SCSI 2 to SCSI 2 Round Cable

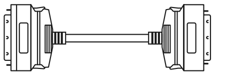


Fig. 25 — IEEE 1394 Cable

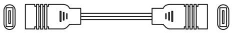


Fig. 26

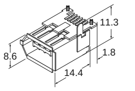


Fig. 27

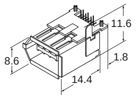


Fig. 28

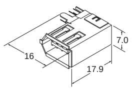


Fig. 29 — USB 4P Female Rt. Angle Dip Connector

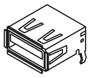


Fig. 30 — USB 4P Female SMT Dip Connector

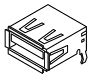


Fig. 31 — USB 4P Male Right Angle Connector

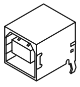


Fig. 32 — USB 4P Female Dual Port Right Angle Dip Connector

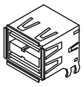
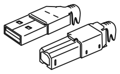


Fig. 33 — USB Plugs and Hoods



(Continued)

ASSMANN SCSI, USB & CAT5 Computer Cable Assemblies *(Cont.)*

Fig.	Length Meters	Lines	Description	Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.
USB Extension Cable								
34	1.5	4	High Speed, USB4P Male (A) to (A)	AE1081-ND	3.93	3.46	3.10	AU-Y1001
35	1.5	4	High Speed, USB4P Male (A) to Male (B)	AE1082-ND	3.99	3.51	3.15	AU-Y1002A
36	1.8	4	USB A Male to USB A Female, Dbl. Shield	AE1138-ND	5.28	4.64	4.16	AK669-18
36	3.0	4	USB A Male to USB A Female, Dbl. Shield	AE1139-ND	6.50	5.72	5.13	AK669-30
36	5.0	4	USB A Male to USB A Female, Dbl. Shield	AE1140-ND	7.62	6.70	6.01	AK669-50
USB Cable Double Shielded								
34	2.0	4	USB A Male to USB B Male, iMac blue	AE1146-ND	4.95	4.35	3.90	AK672MB
34	2.0	4	USB A Male to USB B Male, iMac purple	AE1147-ND	4.95	4.35	3.90	AK672MG
34	2.0	4	USB A Male to USB B Male, iMac green	AE1148-ND	4.95	4.35	3.90	AK672ML
34	2.0	4	USB A Male to USB B Male, iMac red	AE1149-ND	4.95	4.35	3.90	AK672MS
34	2.0	4	USB A Male to USB B Male, iMac orange	AE1150-ND	4.95	4.35	3.90	AK672MT
34	2.0	4	USB A Male to USB A Male	AE1141-ND	4.82	4.24	3.80	AK670
34	5.0	4	USB A Male to USB A Male	AE1142-ND	7.79	6.85	6.14	AK670-5
37	2.0	4	USB A to Open End	AE1143-ND	3.17	2.79	2.50	AK670-OE
37	2.0	4	USB B to Open End	AE1153-ND	3.23	2.85	2.55	AK673-OE
35	2.0	4	USB A Male to USB B Male	AE1144-ND	4.82	4.24	3.80	AK672
35	5.0	4	USB A Male to USB B Male	AE1145-ND	7.26	6.38	5.72	AK672-5
38	2.0	4	USB B Male to USB B Male	AE1151-ND	4.95	4.35	3.90	AK673
38	5.0	4	USB B Male to USB B Male	AE1152-ND	7.95	6.99	6.27	AK673-5
USB Adapters — Internal/External on Slot Bracket, Double Shielded								
39	0.25	—	2 x USB-A Female to 2 x 5-Pin, 2.54mm Socket Conn.	AE1161-ND	7.10	6.24	5.59	AK674
39	0.25	—	2 x USB-A Female to 1 x 8-Pin, 2.54mm Socket Conn.	AE1162-ND	7.49	6.59	5.91	AK674-8
USB Adapters — Molded								
40	—	4	USB Adapter, A Type, Female	AE1080-ND	2.94	2.59	2.32	AU-Y1000-A
40	—	4	USB-A Female to USB-B Male	AE1159-ND	6.73	5.92	5.31	A-USB-2
40	—	4	USB-A Male to USB-B Female	AE1160-ND	6.73	5.92	5.31	A-USB-3

Fig. 34 — USB Extension Cable, A to A

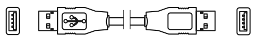


Fig. 35 — USB Extension Cable, A to B

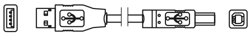


Fig. 36 — USB Extension Cable

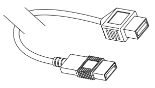


Fig. 37 — USB Cable, A to Open End

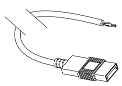


Fig. 38 — USB Cable, B to B

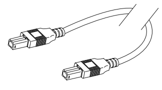


Fig.39 — USB Adapter on Slot Bracket

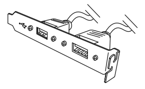


Fig. 40 — USB A-Type F Connector

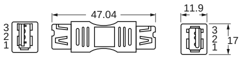


Fig. 41 — CAT 5(e) Patch Cable

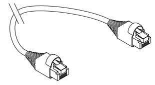
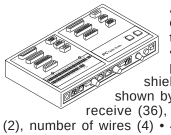


Fig.	Length Meter	Description	Unshielded Version (UTP) Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.	Shielded Version (FTP) Digi-Key Part No.	Price Each 1	10	25	Assmann Part No.
PVC Cable Assembly CAT5, RJ45 — Assembled												
41	0.5	CAT 5, Patch Cable, Gray	AE1087-ND	2.05	1.80	1.62	A-MCU 80005-APGRAY	AE1090-ND	4.39	3.86	3.46	A-MCS 80005-APGRAY
41	1.0	CAT 5, Patch Cable, Gray	AE1088-ND	2.57	2.27	2.03	A-MCU 80010-APGRAY	AE1091-ND	5.05	4.44	3.98	A-MCS 80010-APGRAY
41	2.0	CAT 5, Patch Cable, Gray	AE1089-ND	3.53	3.11	2.79	A-MCU 80020-APGRAY	AE1092-ND	6.30	5.54	4.97	A-MCS 80020-APGRAY
PVC Cable Assembly CAT5, RJ45 — Molded												
41	0.5	CAT 5, Patch Cable, Gray	AE1093-ND	2.51	2.21	1.98	A-MCU 80005-MPGRAY	AE1096-ND	4.85	4.27	3.83	A-MCS 80005-MPGRAY
41	1.0	CAT 5, Patch Cable, Gray	AE1094-ND	3.00	2.64	2.37	A-MCU 80010-MPGRAY	AE1097-ND	5.51	4.85	4.35	A-MCS 80010-MPGRAY
41	2.0	CAT 5, Patch Cable, Gray	AE1095-ND	3.73	3.28	2.94	A-MCU 80020-MPGRAY	AE1098-ND	6.73	5.92	5.31	A-MCS 80020-MPGRAY
41	3.0	CAT 5, Patch Cable, Gray	AE1184-ND	3.86	3.39	3.04	A-MCU-80030	AE1169-ND	6.01	5.28	4.74	A-MCS-80030
41	5	CAT 5, Patch Cable, Gray	AE1189-ND	5.44	4.78	4.29	A-MCU-80050	AE1174-ND	8.15	7.17	6.43	A-MCS-80050
41	2.0	CAT 5, Patch Cable, Blue	AE1180-ND	3.10	2.73	2.45	A-MCU-80020/B	AE1165-ND	4.93	4.34	3.89	A-MCS 80020/B
41	3.0	CAT 5, Patch Cable, Blue	AE1185-ND	3.86	3.39	3.04	A-MCU-80030/B	AE1170-ND	6.01	5.28	4.74	A-MCS-80030/B
41	5	CAT 5, Patch Cable, Blue	AE1190-ND	5.44	4.78	4.29	A-MCU-80050/B	AE1175-ND	4.85	4.27	3.83	A-MCS-80050/B
41	2.0	CAT 5, Patch Cable, Green	AE1181-ND	3.10	2.73	2.45	A-MCU-80020/G	AE1166-ND	4.93	4.34	3.89	A-MCS 80020/G
41	3.0	CAT 5, Patch Cable, Green	AE1186-ND	3.86	3.39	3.04	A-MCU-80030/G	AE1171-ND	6.01	5.28	4.74	A-MCS-80030/G
41	5	CAT 5, Patch Cable, Green	AE1191-ND	5.44	4.78	4.29	A-MCU-80050/G	AE1176-ND	8.15	7.17	6.43	A-MCS-80050/G
41	2.0	CAT 5, Patch Cable, Red	AE1182-ND	3.10	2.73	2.45	A-MCU-80020/R	AE1167-ND	4.93	4.34	3.89	A-MCS 80020/R
41	3.0	CAT 5, Patch Cable, Red	AE1187-ND	3.86	3.39	3.04	A-MCU-80030/R	AE1172-ND	6.01	5.28	4.74	A-MCS-80030/R
41	5	CAT 5, Patch Cable, Red	AE1192-ND	5.44	4.78	4.29	A-MCU-80050/R	AE1177-ND	8.15	7.17	6.43	A-MCS-80050/R
41	2.0	CAT 5, Patch Cable, Yellow	AE1183-ND	3.10	2.73	2.45	A-MCU-80020/Y	AE1168-ND	4.93	4.34	3.89	A-MCS 80020/Y
41	3.0	CAT 5, Patch Cable, Yellow	AE1188-ND	3.86	3.39	3.04	A-MCU-80030/Y	AE1173-ND	6.01	5.28	4.74	A-MCS-80030/Y
41	5	CAT 5, Patch Cable, Yellow	AE1193-ND	5.44	4.78	4.29	A-MCU-80050/Y	AE1178-ND	8.15	7.17	6.43	A-MCS-80050/Y
PVC Cable Assembly CAT5(e), RJ45 — Molded												
41	1.0	CAT .5e, Patch Cable, Gray	AE1208-ND	2.75	2.42	2.17	A-MCUP 80010	AE1233-ND	4.59	4.04	3.62	A-MCSP 80010
41	2.0	CAT .5e, Patch Cable, Gray	AE1213-ND	3.67	3.23	2.89	A-MCUP 80020	AE1238-ND	5.96	5.24	4.70	A-MCSP 80020
41	3.0	CAT .5e, Patch Cable, Gray	AE1218-ND	4.84	4.26	3.82	A-MCUP 80030	AE1243-ND	7.52	6.62	5.93	A-MCSP 80030
41	5	CAT .5e, Patch Cable, Gray	AE1223-ND	6.86	6.04	5.41	A-MCUP 80050	AE1248-ND	7.52	6.62	5.93	A-MCSP 80050
41	10	CAT .5e, Patch Cable, Gray	AE1228-ND	11.68	10.26	9.20	A-MCUP 80100	AE1253-ND	17.19	15.11	13.55	A-MCSP 80100
41	1.0	CAT .5e, Patch Cable, Red	AE1209-ND	2.75	2.42	2.17	A-MCUP 80010/R	AE1234-ND	4.59	4.04	3.62	A-MCSP 80010/R
41	2.0	CAT .5e, Patch Cable, Red	AE1214-ND	3.67	3.23	2.89	A-MCUP 80020/R	AE1239-ND	5.96	5.24	4.70	A-MCSP 80020/R
41	3.0	CAT .5e, Patch Cable, Red	AE1219-ND	4.84	4.26	3.82	A-MCUP 80030/R	AE1244-ND	7.52	6.62	5.93	A-MCSP 80030/R
41	5	CAT .5e, Patch Cable, Red	AE1224-ND	6.86	6.04	5.41	A-MCUP 80050/R	AE1249-ND	10.36	9.11	8.17	A-MCSP 80050/R
41	10	CAT .5e, Patch Cable, Red	AE1229-ND	11.68	10.26	9.20	A-MCUP 80100/R	AE1254-ND	17.19	15.11	13.55	A-MCSP 80100/R
41	1.0	CAT .5e, Patch Cable, Blue	AE1210-ND	2.75	2.42	2.17	A-MCUP 80010/B	AE1235-ND	4.59	4.04	3.62	A-MCSP 80010/B
41	2.0	CAT .5e, Patch Cable, Blue	AE1215-ND	3.67	3.23	2.89	A-MCUP 80020/B	AE1240-ND	5.96	5.24	4.70	A-MCSP 80020/B
41	3.0	CAT .5e, Patch Cable, Blue	AE1220-ND	4.84	4.26	3.82	A-MCUP 80030/B	AE1245-ND	7.52	6.62	5.93	A-MCSP 80030/B
41	5	CAT .5e, Patch Cable, Blue	AE1225-ND	6.86	6.04	5.41	A-MCUP 80050/B	AE1250-ND	10.36	9.11	8.17	A-MCSP 80050/B
41	10	CAT .5e, Patch Cable, Blue	AE1230-ND	11.68	10.26	9.20	A-MCUP 80100/B	AE1255-ND	17.19	15.11	13.55	A-MCSP 80100/B
41	1.0	CAT .5e, Patch Cable, Yellow	AE1211-ND	2.75	2.42	2.17	A-MCUP 80010/Y	AE1236-ND	4.59	4.04	3.62	A-MCSP 80010/Y
41	2.0	CAT .5e, Patch Cable, Yellow	AE1216-ND	3.67	3.23	2.89	A-MCUP 80020/Y	AE1241-ND	5.96	5.24	4.70	A-MCSP 80020/Y
41	3.0	CAT .5e, Patch Cable, Yellow	AE1221-ND	4.84	4.26	3.82	A-MCUP 80030/Y	AE1246-ND	7.52	6.62	5.93	A-MCSP 80030/Y
41	5	CAT .5e, Patch Cable, Yellow	AE1226-ND	6.86	6.04	5.41	A-MCUP 80050/Y	AE1251-ND	10.36	9.11	8.17	A-MCSP 80050/Y
41	10	CAT .5e, Patch Cable, Yellow	AE1231-ND	11.68	10.26	9.20	A-MCUP 80100/Y	AE1256-ND	17.19	15.11	13.55	A-MCSP 80100/Y
41	1.0	CAT .5e, Patch Cable, Green	AE1212-ND	2.75	2.42	2.17	A-MCUP 80010/G	AE1237-ND	4.59	4.04	3.62	A-MCSP 80010/G
41	2.0	CAT .5e, Patch Cable, Green	AE1217-ND	3.67	3.23	2.89	A-MCUP 80020/G	AE1242-ND	5.96	5.24	4.70	A-MCSP 80020/G
41	3.0	CAT .5e, Patch Cable, Green	AE1222-ND	4.84	4.26	3.82	A-MCUP 80030/G	AE1247-ND	7.52	6.62	5.93	A-MCSP 80030/G
41	5	CAT .5e, Patch Cable, Green	AE1227-ND	6.86	6.04	5.41	A-MCUP 80050/G	AE1252-ND	10.36	9.11	8.17	A-MCSP 80050/G
41	10	CAT .5e, Patch Cable, Green	AE1232-ND	11.68	10.26	9.20	A-MCUP 80100/G	AE1257-ND	17.19	15.11	13.55	A-MCSP 80100/G

Cable Testers

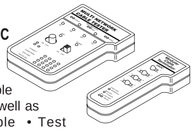
PC Cable Tester, Standalone



All suitable PC cable can be tested with this tester. • Checks: connection, pin allocation and shielding • Pin allocation shown by LEDs: transmit (25), receive (36), battery (1), shielding (2), number of wires (4) • 4 Buttons: Test, auto/manual, speed, on/off • Automatic and manual test run • Connectors: DSub-9 M/F, DSub-15 M/F, DSub-15 HD M/F, DSub-25 M/F Centronics 36 female, BNC male, RJ45 female, USB A+B female, IEEE 1394 female • Power supply by 9V block battery, 9V/150mA external power supply optional • Dimensions (WxDxH): 250mm x 130mm x 35mm

AE1207-ND PC Cable Tester, Standalone (ACT-PC-SO) **$335.25**

Network Cable Tester, RJ45, BNC

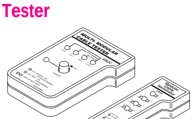


• Cable tester for shielded and un-shielded CAT5 cable with RJ45 plug as well as for BNC-coax cable • Test function for cable with RJ45 UTP/STP and BNC plug, patch panels and modular wall plates • Fast test function by auto-scanning • Tests: connection, allocation, pairs according to EIA/TIA 356A, 568A, 568B, Token Ring • Main device with one RJ45 and one BNC female, remote unit with one RJ45 female • With remote unit for testing of installed cable • LEDs for status display • Operation with 9V block battery • Includes artificial leather bag

AE1206-ND Network Cable Tester (ACT-MN) **$130.94**

Modular Cable Tester

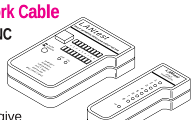
RJ45 / RJ11 / RJ12



- Modular cable tester for cable with RJ45, RJ12 and RJ11 plug
- Fast test function by auto-scanning
- Test: connection, allocation and pairs
- Main device with two RJ45 female; remote unit with one RJ45 female
- Installed cable can be tested with remote unit
- LEDs for status display
- Operation with 9V block battery
- Includes artificial leather bag

AE1204-ND Modular Cable Tester (ACT-MM). **$131.64**

Premium Network Cable Tester RJ45, BNC



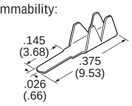
• Total of 18 LEDs (for each wire and for shielding) show the allocation and give a fast, exact test result • Operation with 9V block battery • Test function for cable with RJ45/11 UTP/STP & BNC plugs, patch panels and modular wall plates • Includes BNC cable adapter for coax cable test • Manual or automatic test run • Tests: connection, allocation, pairs according to EIA/TIA 356A, 568A, 568B, Token Ring • Main device with two RJ45 female, remote unit with one RJ45 female • Installed cable can be tested with remote unit • Includes artificial leather bag

AE1205-ND Premium Network Cable Tester (ACT-LAN) **$217.90**

AMP tyco Electronics
Authorized Distributor

.100” (2.54mm) Flat Flex Cable Assemblies

.100 (2.54mm) Flat Flex Cable Material: • Conductors: Un-plated copper per QQ-C-502 • Insulation: Flame retardant polyester film **Performance Characteristics:** • Current Rating: 2 amperes (28AWG equivalent) • Voltage Rating: 300 volts • Temperature Rating: -20°C to +105°C • Insulation Resistance: 5000 megohms (min.) • Insulation Flammability: Polyester, self-extinguishing per UL Flame Test VW-1



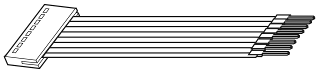
Solder Tab pin

Solder Tab to Solder Tab

No. of Contacts	Length in.(mm)	Digi-Key Part No.	Pricing		
			1	10	100
2	2 (50.80)	A9AAT-0202F-ND	.64	5.22	38.43
	3 (76.20)	A9AAT-0203F-ND	.76	6.16	45.36
	4 (101.60)	A9AAT-0204F-ND	.87	7.10	52.29
	5 (127.00)	A9AAT-0205F-ND	.99	8.04	59.22
	6 (152.40)	A9AAT-0206F-ND	1.10	8.98	66.15
	8 (203.20)	A9AAT-0208F-ND	1.33	10.83	79.80
3	2 (50.80)	A9AAT-0302F-ND	.83	6.75	49.77
	3 (76.20)	A9AAT-0303F-ND	.95	7.72	56.91
	4 (101.60)	A9AAT-0304F-ND	1.07	8.72	64.26
	5 (127.00)	A9AAT-0305F-ND	1.19	9.72	71.61
	6 (152.40)	A9AAT-0306F-ND	1.31	10.69	78.75
	8 (203.20)	A9AAT-0308F-ND	1.56	12.68	93.45
4	2 (50.80)	A9AAT-0402F-ND	.99	8.09	59.64
	3 (76.20)	A9AAT-0403F-ND	1.12	9.12	67.20
	4 (101.60)	A9AAT-0404F-ND	1.25	10.15	74.76
	5 (127.00)	A9AAT-0405F-ND	1.37	11.17	82.32
	6 (152.40)	A9AAT-0406F-ND	1.50	12.20	89.88
	8 (203.20)	A9AAT-0408F-ND	1.75	14.25	105.00
5	2 (50.80)	A9AAT-0502F-ND	1.14	9.32	68.67
	3 (76.20)	A9AAT-0503F-ND	1.27	10.37	76.44
	4 (101.60)	A9AAT-0504F-ND	1.40	11.43	84.21
	5 (127.00)	A9AAT-0505F-ND	1.54	12.51	92.19
	6 (152.40)	A9AAT-0506F-ND	1.67	13.57	99.96
	8 (203.20)	A9AAT-0508F-ND	1.93	15.70	115.71
6	2 (50.80)	A9AAT-0602F-ND	1.30	10.57	77.91
	3 (76.20)	A9AAT-0603F-ND	1.45	11.77	86.73
	4 (101.60)	A9AAT-0604F-ND	1.59	12.94	95.34
	5 (127.00)	A9AAT-0605F-ND	1.74	14.14	104.16
	6 (152.40)	A9AAT-0606F-ND	1.88	15.33	112.98
	8 (203.20)	A9AAT-0608F-ND	2.18	17.73	130.62
8	2 (50.80)	A9AAT-0802F-ND	1.63	13.28	97.86
	3 (76.20)	A9AAT-0803F-ND	1.81	14.76	108.78
	4 (101.60)	A9AAT-0804F-ND	1.99	16.22	119.49
	5 (127.00)	A9AAT-0805F-ND	2.17	17.67	130.20
	6 (152.40)	A9AAT-0806F-ND	2.35	19.12	140.91
	8 (203.20)	A9AAT-0808F-ND	2.71	22.06	162.54
9	2 (50.80)	A9AAT-0902F-ND	1.81	14.71	108.36
	3 (76.20)	A9AAT-0903F-ND	2.03	16.53	121.80
	4 (101.60)	A9AAT-0904F-ND	2.25	18.35	135.24
	5 (127.00)	A9AAT-0905F-ND	2.48	20.18	148.68
	6 (152.40)	A9AAT-0906F-ND	2.70	22.00	162.12
	8 (203.20)	A9AAT-0908F-ND	3.15	25.65	189.00
10	2 (50.80)	A9AAT-1002F-ND	1.89	15.42	113.61
	3 (76.20)	A9AAT-1003F-ND	2.12	17.27	127.26
	4 (101.60)	A9AAT-1004F-ND	2.35	19.12	140.91
	5 (127.00)	A9AAT-1005F-ND	2.58	20.98	154.56
	6 (152.40)	A9AAT-1006F-ND	2.81	22.86	168.42
	8 (203.20)	A9AAT-1008F-ND	3.26	26.56	195.72
11	2 (50.80)	A9AAT-1102F-ND	1.80	14.62	107.73
	3 (76.20)	A9AAT-1103F-ND	2.03	16.50	121.59
	4 (101.60)	A9AAT-1104F-ND	2.26	18.41	135.66
	5 (127.00)	A9AAT-1105F-ND	2.50	20.32	149.73
	6 (152.40)	A9AAT-1106F-ND	2.73	22.20	163.59
	8 (203.20)	A9AAT-1108F-ND	3.19	25.99	191.52
12	2 (50.80)	A9AAT-1202F-ND	2.08	16.90	124.53
	3 (76.20)	A9AAT-1203F-ND	2.39	19.47	143.43
	4 (101.60)	A9AAT-1204F-ND	2.70	22.00	162.12
	5 (127.00)	A9AAT-1205F-ND	3.02	24.57	181.02
	6 (152.40)	A9AAT-1206F-ND	3.33	27.10	199.71
	8 (203.20)	A9AAT-1208F-ND	3.96	32.21	237.30
13	2 (50.80)	A9AAT-1302F-ND	2.21	17.96	132.30
	3 (76.20)	A9AAT-1303F-ND	2.52	20.55	151.41
	4 (101.60)	A9AAT-1304F-ND	2.84	23.14	170.52
	5 (127.00)	A9AAT-1305F-ND	3.16	25.74	189.63
	6 (152.40)	A9AAT-1306F-ND	3.48	28.33	208.74
	8 (203.20)	A9AAT-1308F-ND	4.12	33.52	246.96
14	2 (50.80)	A9AAT-1402F-ND	2.34	19.04	140.28
	3 (76.20)	A9AAT-1403F-ND	2.66	21.66	159.60
	4 (101.60)	A9AAT-1404F-ND	2.98	24.28	178.92
	5 (127.00)	A9AAT-1405F-ND	3.30	26.90	198.24
	6 (152.40)	A9AAT-1406F-ND	3.63	29.55	217.77
	8 (203.20)	A9AAT-1408F-ND	4.27	34.80	256.41
15	2 (50.80)	A9AAT-1502F-ND	2.47	20.12	148.26
	3 (76.20)	A9AAT-1503F-ND	2.80	22.80	168.00
	4 (101.60)	A9AAT-1504F-ND	3.13	25.48	187.74
	5 (127.00)	A9AAT-1505F-ND	3.46	28.16	207.48
	6 (152.40)	A9AAT-1506F-ND	3.79	30.84	227.22
	8 (203.20)	A9AAT-1508F-ND	4.45	36.20	266.70
16	2 (50.80)	A9AAT-1602F-ND	2.60	21.18	156.03
	3 (76.20)	A9AAT-1603F-ND	2.93	23.88	175.98
	4 (101.60)	A9AAT-1604F-ND	3.27	26.62	196.14
	5 (127.00)	A9AAT-1605F-ND	3.60	29.33	216.09
	6 (152.40)	A9AAT-1606F-ND	3.93	32.03	236.04
	8 (203.20)	A9AAT-1608F-ND	4.60	37.48	276.15
18	2 (50.80)	A9AAT-1802F-ND	3.31	26.93	198.45
	3 (76.20)	A9AAT-1803F-ND	3.87	31.55	232.47
	4 (101.60)	A9AAT-1804F-ND	4.44	36.17	266.49
	5 (127.00)	A9AAT-1805F-ND	5.01	40.78	300.51
	6 (152.40)	A9AAT-1806F-ND	5.58	45.40	334.53
	8 (203.20)	A9AAT-1808F-ND	6.71	54.61	402.36
20	2 (50.80)	A9AAT-2002F-ND	3.57	29.07	214.20
	3 (76.20)	A9AAT-2003F-ND	4.15	33.80	249.06
	4 (101.60)	A9AAT-2004F-ND	4.73	38.50	283.71
	5 (127.00)	A9AAT-2005F-ND	5.31	43.21	318.36
	6 (152.40)	A9AAT-2006F-ND	5.88	47.91	353.01
	8 (203.20)	A9AAT-2008F-ND	7.04	57.34	422.52

Single-Row Receptacle Housing to Solder Tab

Mates with single row .025 (.64mm) square pin, .100 (2.54mm) headers.



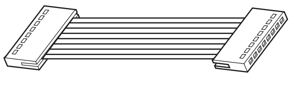
Housing Contacts — Material and Finish: Phosphor bronze; plated gold duplex or bright tin-lead overall. Duplex plated 15µ gold or 30µ gold on mating area. A9BAG – □□□□F-ND = 15µ gold, A9BAA – □□□□F-ND = 30µ gold.

No. of Contacts	Length in.(mm)	Digi-Key Part No.	Pricing		
			1	10	100
2	2 (50.80)	A9BAG-0202F-ND	1.94	15.76	116.13
	3 (76.20)	A9BAG-0203F-ND	2.05	16.70	123.06
	4 (101.60)	A9BAG-0204F-ND	2.17	17.64	129.99
	5 (127.00)	A9BAG-0205F-ND	2.28	18.55	136.71
	6 (152.40)	A9BAG-0206F-ND	2.39	19.49	143.64
	8 (203.20)	A9BAG-0208F-ND	2.63	21.38	157.50
3	2 (50.80)	A9BAG-0302F-ND	2.23	18.15	133.77
	3 (76.20)	A9BAG-0303F-ND	2.35	19.15	141.12
	4 (101.60)	A9BAG-0304F-ND	2.47	20.12	148.26
	5 (127.00)	A9BAG-0305F-ND	2.59	21.12	155.61
	6 (152.40)	A9BAG-0306F-ND	2.71	22.09	162.75
	8 (203.20)	A9BAG-0308F-ND	2.96	24.08	177.45
4	2 (50.80)	A9BAG-0402F-ND	2.52	20.49	150.99
	3 (76.20)	A9BAG-0403F-ND	2.64	21.52	158.55
	4 (101.60)	A9BAG-0404F-ND	2.77	22.54	166.11
	5 (127.00)	A9BAG-0405F-ND	2.89	23.57	173.67
	6 (152.40)	A9BAG-0406F-ND	3.02	24.60	181.23
	8 (203.20)	A9BAG-0408F-ND	3.27	26.65	196.35
5	2 (50.80)	A9BAG-0502F-ND	2.79	22.69	167.16
	3 (76.20)	A9BAG-0503F-ND	2.92	23.74	174.93
	4 (101.60)	A9BAG-0504F-ND	3.05	24.82	182.91
	5 (127.00)	A9BAG-0505F-ND	3.18	25.88	190.68
	6 (152.40)	A9BAG-0506F-ND	3.31	26.93	198.45
	8 (203.20)	A9BAG-0508F-ND	3.57	29.07	214.20
6	2 (50.80)	A9BAG-0602F-ND	3.07	25.02	184.38
	3 (76.20)	A9BAG-0603F-ND	3.22	26.19	192.99
	4 (101.60)	A9BAG-0604F-ND	3.36	27.39	201.81
	5 (127.00)	A9BAG-0605F-ND	3.51	28.59	210.63
	6 (152.40)	A9BAG-0606F-ND	3.66	29.78	219.45
	8 (203.20)	A9BAG-0608F-ND	3.95	32.18	237.09
8	2 (50.80)	A9BAG-0802F-ND	3.66	29.81	219.66
	3 (76.20)	A9BAG-0803F-ND	3.84	31.26	230.37
	4 (101.60)	A9BAG-0804F-ND	4.02	32.75	241.29
	5 (127.00)	A9BAG-0805F-ND	4.20	34.20	252.00
	6 (152.40)	A9BAG-0806F-ND	4.38	35.65	262.71
	8 (203.20)	A9BAG-0808F-ND	4.74	38.59	284.34
9	2 (50.80)	A9BAG-0902F-ND	4.00	32.58	240.03
	3 (76.20)	A9BAG-0903F-ND	4.22	34.40	253.47
	4 (101.60)	A9BAG-0904F-ND	4.45	36.22	266.91
	5 (127.00)	A9BAG-0905F-ND	4.67	38.05	280.35
	6 (152.40)	A9BAG-0906F-ND	4.89	39.84	293.58
	8 (203.20)	A9BAG-0908F-ND	5.34	43.49	320.46
10	2 (50.80)	A9BAG-1002F-ND	4.24	34.54	254.52
	3 (76.20)	A9BAG-1003F-ND	4.47	36.39	268.17
	4 (101.60)	A9BAG-1004F-ND	4.70	38.25	281.82
	5 (127.00)	A9BAG-1005F-ND	4.92	40.10	295.47
	6 (152.40)	A9BAG-1006F-ND	5.16	41.98	309.33
	8 (203.20)	A9BAG-1008F-ND	5.61	45.69	336.63
11	2 (50.80)	A9BAG-1102F-ND	4.39	35.77	263.55
	3 (76.20)	A9BAG-1103F-ND	4.62	37.65	277.41
	4 (101.60)	A9BAG-1104F-ND	4.86	39.56	291.48
	5 (127.00)	A9BAG-1105F-ND	5.09	41.47	305.55
	6 (152.40)	A9BAG-1106F-ND	5.32	43.35	319.41
	8 (203.20)	A9BAG-1108F-ND	5.79	47.14	347.34
12	2 (50.80)	A9BAG-1202F-ND	4.83	39.33	289.80
	3 (76.20)	A9BAG-1203F-ND	5.14	41.87	308.49
	4 (101.60)	A9BAG-1204F-ND	5.46	44.43	327.39
	5 (127.00)	A9BAG-1205F-ND	5.77	46.97	346.08
	6 (152.40)	A9BAG-1206F-ND	6.08	49.53	364.98
	8 (203.20)	A9BAG-1208F-ND	6.71	54.63	402.57
13	2 (50.80)	A9BAG-1302F-ND	5.10	41.50	305.76
	3 (76.20)	A9BAG-1303F-ND	5.41	44.09	324.87
	4 (101.60)	A9BAG-1304F-ND	5.73	46.68	343.98
	5 (127.00)	A9BAG-1305F-ND	6.05	49.28	363.09
	6 (152.40)	A9BAG-1306F-ND	6.37	51.87	382.20
	8 (203.20)	A9BAG-1308F-ND	7.01	57.06	420.42
14	2 (50.80)	A9BAG-1402F-ND	5.36	43.66	321.72
	3 (76.20)	A9BAG-1403F-ND	5.68	46.28	341.04
	4 (101.60)	A9BAG-1404F-ND	6.01	48.91	360.36
	5 (127.00)	A9BAG-1405F-ND	6.33	51.53	379.68
	6 (152.40)	A9BAG-1406F-ND	6.65	54.18	399.21
	8 (203.20)	A9BAG-1408F-ND	7.30	59.42	437.85
15	2 (50.80)	A9BAG-1502F-ND	5.84	47.57	350.49
	3 (76.20)	A9BAG-1503F-ND	6.17	50.25	370.23
	4 (101.60)	A9BAG-1504F-ND	6.50	52.92	389.97
	5 (127.00)	A9BAG-1505F-ND	6.83	55.60	409.71
	6 (152.40)	A9BAG-1506F-ND	7.16	58.28	429.45
	8 (203.20)	A9BAG-1508F-ND	7.82	63.64	468.93
16	2 (50.80)	A9BAG-1602F-ND	6.18	50.33	370.86
	3 (76.20)	A9BAG-1603F-ND	6.52	53.07	391.02
	4 (101.60)	A9BAG-1604F-ND	6.85	55.77	410.97
	5 (127.00)	A9BAG-1605F-ND	7.18	58.48	430.92
	6 (152.40)	A9BAG-1606F-ND	7.52	61.22	451.08
	8 (203.20)	A9BAG-1608F-ND	8.19	66.66	491.19
18	2 (50.80)	A9BAG-1802F-ND	7.31	59.54	438.69
	3 (76.20)	A9BAG-1803F-ND	7.88	64.15	472.71
	4 (101.60)	A9BAG-1804F-ND	8.45	68.77	506.73
	5 (127.00)	A9BAG-1805F-ND	9.01	73.39	540.75
	6 (152.40)	A9BAG-1806F-ND	9.58	78.00	574.77
	8 (203.20)	A9BAG-1808F-ND	10.71	87.21	642.60
20	2 (50.80)	A9BAG-2002F-ND	8.00	65.12	479.85
	3 (76.20)	A9BAG-2003F-ND	8.58	69.83	514.50
	4 (101.60)	A9BAG-2004F-ND	9.15	74.53	549.15
	5 (127.00)	A9BAG-2005F-ND	9.73	79.23	583.80
	6 (152.40)	A9BAG-2006F-ND	10.31	83.96	618.66
	8 (203.20)	A9BAG-2008F-ND	11.47	93.37	687.96

Also available in 30µ Gold, A9BAA – □□□□F-ND
Call for complete part number and pricing.

Single-Row Receptacle Housing to Single-Row Receptacle Housing

Mates with single row .025 (.64mm) square pin, .100 (2.54mm) headers.



Plain Style Housing — Material: Black thermoplastic, flame retardant, 94V-0 rated. Duplex plated contacts. A9BBG – □□□□F-ND = 15µ gold, A9BBA – □□□□F-ND = 30µ gold

No. of Contacts	Length in.(mm)	Digi-Key Part No.	Pricing		
			1	10	100
2	2 (50.80)	A9BBG-0202F-ND	3.23	26.31	193.83
	3 (76.20)	A9BBG-0203F-ND	3.35	27.25	200.76
	4 (101.60)	A9BBG-0204F-ND	3.46	28.16	207.48
	5 (127.00)	A9BBG-0205F-ND	3.57	29.10	214.41
	6 (152.40)	A9BBG-0206F-ND	3.69	30.04	221.34
	8 (203.20)	A9BBG-0208F-ND	3.92	31.92	235.20
3	2 (50.80)	A9BBG-0302F-ND	3.63	29.55	217.77
	3 (76.20)	A9BBG-0303F-ND	3.75	30.55	225.12
	4 (101.60)	A9BBG-0304F-ND	3.87	31.52	232.26
	5 (127.00)	A9BBG-0305F-ND	3.99	32.52	239.61
	6 (152.40)	A9BBG-0306F-ND	4.12	33.52	246.96
	8 (203.20)	A9BBG-0308F-ND	4.36	35.48	261.45
4	2 (50.80)	A9BBG-0402F-ND	4.04	32.86	242.13
	3 (76.20)	A9BBG-0403F-ND	4.16	33.89	249.69
	4 (101.60)	A9BBG-0404F-ND	4.29	34.91	257.25
	5 (127.00)	A9BBG-0405F-ND	4.41	35.94	264.81
	6 (152.40)	A9BBG-0406F-ND	4.54	36.96	272.37
	8 (203.20)	A9BBG-0408F-ND	4.79	39.02	287.49
5	2 (50.80)	A9BBG-0502F-ND	4.43	36.08	265.86
	3 (76.20)	A9BBG-0503F-ND	4.56	37.14	273.63
	4 (101.60)	A9BBG-0504F-ND	4.69	38.19	281.40
	5 (127.00)	A9BBG-0505F-ND	4.82	39.27	289.38
	6 (152.40)	A9BBG-0506F-ND	4.95	40.33	297.15
	8 (203.20)	A9BBG-0508F-ND	5.22	42.47	312.90
6	2 (50.80)	A9BBG-0602F-ND	4.84	39.44	290.64
	3 (76.20)	A9BBG-0603F-ND	4.99	40.64	299.46
	4 (101.60)	A9BBG-0604F-ND	5.14	41.84	308.28
	5 (127.00)	A9BBG-0605F-ND	5.29	43.04	317.10
	6 (152.40)	A9BBG-0606F-ND	5.43	44.23	325.92
	8 (203.20)	A9BBG-0608F-ND	5.73	46.63	343.56
8	2 (50.80)	A9BBG-0802F-ND	5.69	46.34	341.46
	3 (76.20)	A9BBG-0803F-ND	5.87	47.79	352.17
	4 (101.60)	A9BBG-0804F-ND	6.05	49.25	362.88
	5 (127.00)	A9BBG-0805F-ND	6.23	50.73	373.80
	6 (152.40)	A9BBG-0806F-ND	6.41	52.18	384.51
	8 (203.20)	A9BBG-0808F-ND	6.77	55.12	406.14
9	2 (50.80)	A9BBG-0902F-ND	6.19	50.42	371.49
	3 (76.20)	A9BBG-0903F-ND	6.42	52.24	384.93
	4 (101.60)	A9BBG-0904F-ND	6.64	54.06	398.37
	5 (127.00)	A9BBG-0905F-ND	6.86	55.89	411.81
	6 (152.40)	A9BBG-0906F-ND	7.09	57.71	425.25
	8 (203.20)	A9BBG-0908F-ND	7.54	61.36	452.13
10	2 (50.80)	A9BBG-1002F-ND	6.59	53.67	395.43
	3 (76.20)	A9BBG-1003F-ND	6.82	55.52	409.08
	4 (101.60)	A9BBG-1004F-ND	7.05	57.37	422.73
	5 (127.00)	A9BBG-1005F-ND	7.27	59.22	436.38
	6 (152.40)	A9BBG-1006F-ND	7.50	61.10	450.24
	8 (203.20)	A9BBG-1008F-ND	7.96	64.81	477.54
11	2 (50.80)	A9BBG-1102F-ND	6.99	56.91	419.37
	3 (76.20)	A9BBG-1103F-ND	7.22	58.80	433.23
	4 (101.60)	A9BBG-1104F-ND	7.46	60.71	447.30
	5 (127.00)	A9BBG-1105F-ND	7.69	62.61	461.37
	6 (152.40)	A9BBG-1106F-ND	7.92	64.50	475.23
	8 (203.20)	A9BBG-1108F-ND	8.39	68.29	503.16
12	2 (50.80)	A9BBG-1202F-ND	7.58	61.73	454.86
	3 (76.20)	A9BBG-1203F-ND	7.90	64.30	473.76
	4 (101.60)	A9BBG-1204F-ND	8.21	66.86	492.66
	5 (127.00)	A9BBG-1205F-ND	8.52	69.40	511.35
	6 (152.40)	A9BBG-1206F-ND	8.84	71.96	530.25
	8 (203.20)	A9BBG-1208F-ND	9.46	77.06	567.84
13	2 (50.80)	A9BBG-1302F-ND	7.99	65.04	479.22
	3 (76.20)	A9BBG-1303F-ND	8.31	67.63	498.33
	4 (101.60)	A9BBG-1304F-ND	8.62	70.22	517.44
	5 (127.00)	A9BBG-1305F-ND	8.94	72.82	536.55
	6 (152.40)	A9BBG-1306F-ND	9.26	75.41	555.66
	8 (203.20)	A9BBG-1308F-ND	9.89	80.57	593.67
14	2 (50.80)	A9BBG-1402F-ND	8.39	68.29	503.16
	3 (76.20)	A9BBG-1403F-ND	8.71	70.91	522.48
	4 (101.60)	A9BBG-1404F-ND	9.03	73.53	541.80
	5 (127.00)	A9BBG-1405F-ND	9.35	76.15	561.12
	6 (152.40)	A9BBG-1406F-ND	9.68	78.80	580.65
	8 (203.20)	A9BBG-1408F-ND	10.32	84.05	619.29
15	2 (50.80)	A9BBG-1502F-ND	9.21	75.01	552.72
	3 (76.20)	A9BBG-1503F-ND	9.54	77.69	572.46
	4 (101.60)	A9BBG-1504F-ND	9.87	80.37	592.20
	5 (127.00)	A9BBG-1505F-ND	10.20	83.05	611.94
	6 (152.40)	A9BBG-1506F-ND	10.53	85.73	631.68
	8 (203.20)	A9BBG-1508F-ND	11.19	91.09	671.16
16	2 (50.80)	A9BBG-1602F-ND	9.77	79.52	585.90
	3 (76.20)	A9BBG-1603F-ND	10.10	82.22	605.85
	4 (101.60)	A9BBG-1604F-ND	10.43	84.93	625.80
	5 (127.00)	A9BBG-1605F-ND	10.77	87.67	645.96
	6 (152.40)	A9BBG-1606F-ND	11.10	90.37	665.91
	8 (203.20)	A9BBG-1608F-ND	11.77	95.82	706.02
18	2 (50.80)	A9BBG-1802F-ND	11.32	92.14	678.93
	3 (76.20)	A9BBG-1803F-ND	11.88	96.76	712.95
	4 (101.60)	A9BBG-1804F-ND	12.45	101.37	746.97
	5 (127.00)	A9BBG-1805F-ND	13.02	105.99	780.99
	6 (152.40)	A9BBG-1806F-ND	13.58	110.58	814.80
	8 (203.20)	A9BBG-1808F-ND	14.71	119.81	882.84
20	2 (50.80)	A9BBG-2002F-ND	12.42	101.15	745.29
	3 (76.20)	A9BBG-2003F-ND	13.00	105.85	779.94
	4 (101.60)	A9BBG-2004F-ND	13.58	110.58	814.80
	5 (127.00)	A9BBG-2005F-ND	14.16	115.28	849.45
	6 (152.40)	A9BBG-2006F-ND	14.74	119.99	884.10
	8 (203.20)	A9BBG-2008F-ND	15.89	129.39	953.40

Also available in 30µ Gold, A9BBA – □□□□F-ND
Call for complete part number and pricing.

.100” (2.54mm) Flat Flex Cable

Material:
- Conductors: Unplated copper per QQ-C502
- Insulation: Flame retardant polyester film

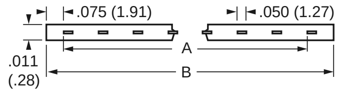
Performance Characteristics:
- Current Rating: 2 amperes (28 AWG equivalent)
- Voltage Rating: 300 volts
- Temperature Rating: -55° to +105°C
- Insulation Resistance: 5000 megohms (min.)

- Insulation Flammability: Polyester, self-extinguishing per UL Flame Test VW-1
- UL Style 2643

Typical Electrical Values:
- Resistance: 55Ω/1000 feet (304.8 meters) max.
- Capacitance: 10.8 pf/ft (max.)
- Impedance: 128 ohms

Flex Cable

No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
2	AF02-X-ND	5.36	9.57	23.10	44.55	82.50
3	AF03-X-ND	5.85	10.44	25.20	48.60	90.00
4	AF04-X-ND	6.18	11.02	26.60	51.30	95.00
5	AF05-X-ND	6.34	11.31	27.30	52.65	97.50
6	AF06-X-ND	6.83	12.18	29.40	56.70	105.00
8	AF08-X-ND	7.64	13.63	32.90	63.45	117.50
9	AF09-X-ND	8.78	15.66	37.80	72.90	135.00
10	AF10-X-ND	9.10	16.24	39.20	75.60	140.00
11	AF11-X-ND	9.43	16.82	40.60	78.30	145.00
12	AF12-X-ND	9.75	17.40	42.00	81.00	150.00
13	AF13-X-ND	10.08	17.98	43.40	83.70	155.00
14	AF14-X-ND	10.40	18.56	44.80	86.40	160.00
15	AF15-X-ND	10.73	19.14	46.20	89.10	165.00
16	AF16-X-ND	11.70	20.88	50.40	97.20	180.00
18	AF18-X-ND	13.49	24.07	58.10	112.05	207.50
20	AF20-X-ND	15.44	27.55	66.50	128.25	237.50



Conductors	Dim. – Inch (mm) “A”	“B”
2	.100 (2.54)	.300 (7.62)
3	.200 (5.08)	.400 (10.16)
4	.300 (7.62)	.500 (12.70)
5	.400 (10.16)	.600 (15.24)
6	.500 (12.70)	.700 (17.78)
8	.700 (17.78)	.900 (22.86)
9	.800 (20.32)	1.000 (25.40)
10	.900 (22.86)	1.100 (27.94)
11	1.000 (25.40)	1.200 (30.48)
12	1.100 (27.94)	1.300 (33.02)
13	1.200 (30.48)	1.400 (35.56)
14	1.300 (33.02)	1.500 (38.10)
15	1.400 (35.56)	1.600 (40.64)
16	1.500 (38.10)	1.700 (43.18)
18	1.700 (43.18)	1.900 (48.26)
20	1.900 (48.26)	2.100 (53.34)

Ribbon Cable

Insulation Material: PVC, UL VW-1.
Capacitance pf1ft.: 12.6.
Color: Color-coded is standard 10 color repeat (brown, red, orange, yellow, green, blue, purple, gray, white, black). Gray has single-edge strip for pin one orientation.
Inductance μH/ft.: 20.
Edge Marking: None.
Propagation Delay ns1ft.: 1.4.
Center Spacing - Inch (mm): .050” (1.27mm).
Insulation Resistance: 1x10^{10} ohms 110 ft. 10f (3m) sample used, measured at 500 V.
Conductor: Stranded copper, tinned.
Rise Time ns: 3.
Conductor Size: #28 AWG 7x36.
Voltage Rating: 300 V RMS.
Impedance, ohms: 100. Impedance, capacitance, inductance, and propagation delay were measured Ground-Signal-Ground on a time-domain reflectometer.
Temperature Rating: -20°C to + 105°C. Maximum storage temperature for unterminated bulk cable is 120°F (50°C).
UL Style Number: 2651.

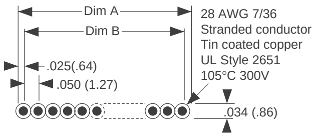
Multi-Color Ribbon Cable*

With Standard 10 Color Repeat Sequence

No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
9	R012-X-ND	1.13	2.02	4.88	9.42	17.44
10	R000-X-ND	1.27	2.26	5.46	10.53	19.50
14	R001-X-ND	1.78	3.18	7.67	14.78	27.38
16	R002-X-ND	2.03	3.63	8.75	16.88	31.25
20	R003-X-ND	2.54	4.54	10.96	21.13	39.13
24	R004-X-ND	3.06	5.45	13.16	25.38	47.00
25	R011-X-ND	3.19	5.69	13.74	26.49	49.06
26	R005-X-ND	3.30	5.89	14.23	27.44	50.81
34	R006-X-ND	4.31	7.69	18.55	35.78	66.25
36	R010-X-ND	5.48	9.77	23.59	45.50	84.25
37	R013-X-ND	4.67	8.33	20.11	38.78	71.81
40	R007-X-ND	5.09	9.08	21.91	42.26	78.25
50	R008-X-ND	6.36	11.35	27.41	52.85	97.88
60	R009-X-ND	7.60	13.56	32.73	63.11	116.88
64	R014-X-ND	8.09	14.44	34.86	67.23	124.50

** Cable available in 200 ft reel , Please call for pricing*

Physical Specifications (Dimensions)



Conductors	Dim. – Inch (mm) “A”	“B”
10	.500 (12.70)	.450 (11.43)
14	.700 (17.78)	.650 (16.51)
16	.800 (20.32)	.750 (19.05)
20	1.000 (25.40)	.950 (24.13)
24	1.200 (30.48)	1.150 (29.21)
26	1.300 (33.02)	1.250 (31.75)
34	1.700 (43.18)	1.650 (41.91)
36	1.800 (45.72)	1.750 (44.45)
40	2.000 (50.80)	1.950 (49.53)
50	2.500 (63.50)	2.450 (62.23)
60	3.000 (76.20)	2.950 (74.93)
64	3.200 (81.28)	3.150 (80.01)

Gray Ribbon Cable*

With Single Edge Red Strip For Pin One Orientation

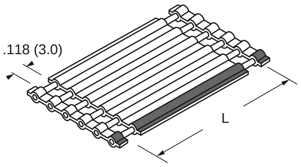
No. of Con-tacts	Digi-Key Part No.	(Note: “X” in Digi-Key Part No. Represents No. of Feet) Pricing 5	10	25	50	100
9	R019-X-ND	.93	1.66	4.01	7.73	14.31
10	R020-X-ND	.87	1.55	3.75	7.22	13.38
14	R021-X-ND	1.24	2.20	5.32	10.26	19.00
16	R022-X-ND	1.40	2.49	6.02	11.61	21.50
20	R023-X-ND	1.76	3.13	7.56	14.58	27.00
24	R024-X-ND	2.10	3.74	9.03	17.42	32.25
26	R025-X-ND	2.29	4.09	9.87	19.04	35.25
34	R026-X-ND	2.99	5.34	12.88	24.84	46.00
40	R027-X-ND	3.51	6.27	15.14	29.19	54.06
50	R028-X-ND	4.39	7.83	18.90	36.45	67.50
60	R029-X-ND	5.25	9.37	22.63	43.64	80.81
64	R030-X-ND	10.08	17.98	43.40	83.70	155.00

** Cable available in 200 ft reel , Please call for pricing*

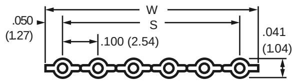
.100” (2.54mm) Round Conductor Flat Cable in Precut Lengths

26 AWG (7 x 34) Stranded, Topcoat

Features:
- Gray PVC insulation
- U.L. temperature rating -20°C to 105°C
- U.L. voltage 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA certification (File #LL61126)



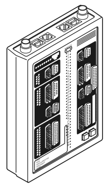
Digi-Key Part No.	Dimension L In. (mm)
XXXX-02-ND	2” (50.80)
XXXX-04-ND	4” (101.6)
XXXX-06-ND	6” (152.4)



No. of Positions	Dim. S In. (mm)	Dim. W (Ref.) In. (mm)
3	.200 (5.08)	.300 (7.62)
4	.300 (7.62)	.400 (10.16)
5	.400 (10.16)	.500 (12.70)
6	.500 (12.70)	.600 (15.24)
7	.600 (15.24)	.700 (17.78)
8	.700 (17.78)	.800 (20.32)
9	.800 (20.32)	.900 (22.86)
10	.900 (22.86)	1.000 (25.40)

Pos.	Digi-Key Part No.	Pricing 1	10	Molex Part No.
3	WM03-02-ND	.38	3.33	28100-0264
3	WM03-04-ND	.46	4.02	28100-0265
3	WM03-06-ND	.55	4.89	28100-0266
4	WM04-02-ND	.53	4.67	28100-0268
4	WM04-04-ND	.66	5.80	28100-0269
4	WM04-06-ND	.82	7.20	28100-0270
5	WM05-02-ND	.55	4.83	28100-0272
5	WM05-04-ND	.69	6.06	28100-0273
5	WM05-06-ND	.86	7.63	28100-0274
6	WM06-02-ND	.57	5.00	28100-0276
6	WM06-04-ND	.72	6.34	28100-0277
6	WM06-06-ND	.91	8.06	28100-0278
7	WM07-02-ND	.58	5.10	28100-0280
7	WM07-04-ND	.75	6.66	28100-0281
7	WM07-06-ND	.96	8.49	28100-0282
8	WM08-02-ND	.60	5.27	28100-0284
8	WM08-04-ND	.79	6.99	28100-0285
8	WM08-06-ND	1.02	8.97	28100-0286
9	WM09-02-ND	.61	5.43	28100-0288
9	WM09-04-ND	.82	7.25	28100-0289
9	WM09-06-ND	1.07	9.40	28100-0290
10	WM10-02-ND	.63	5.58	28100-0292
10	WM10-04-ND	.86	7.63	28100-0293
10	WM10-06-ND	1.13	9.93	28100-0294

PC Cable Tester



Tests continuity of PC cables. Identifies open, shorted and cross connected wires. Tests combinations of coax: RG 58, 59, 62 BNC; RJ45 and RJ11 telephone cables; D-Sub 9 Pin (male/female); D-Sub 15 Pin (including H.D. and male/female); D-Sub 25 Pin (male/female). Tests shield continuity. Battery included.

Now has USB connections.

PAL1570-ND **$179.99**

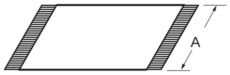
Parlex
CORPORATION

0.5mm and 1mm Flat Flex Cable

Parlex custom jumper cables are available with flat conductors of desired length, stripped at both ends. The insulation has been stripped from one side only, exposing one surface of the conductors. Conductors have been pre-tinned for direct insertion into connectors.

Features:
• Superior Mechanical and Shielding Performance • Meets FCC, CIS PR/VDE effectivity requirements for inter connects • High flexibility rating of 10 million flex cycles on a .6” (15.24mm) radius with optimum design layout • Superior mechanical and abrasion resistance

Cable Characteristics:
• **Conductors:** Cu., tin/lead plated • **Current Rating:** 0.5A (0.5mm); 1.50A (1mm) • **Voltage Rating:** 90 volts • **Insulation:** polyester • **Temperature Rating:** -55°C to 105°C • **Dielectric Strength:** 2500 volts/mil • **U.L. Flame Rating:** VW-1 • **U.L. Styles:** 20890 & 20566



0.5mm Flat Flex Cable

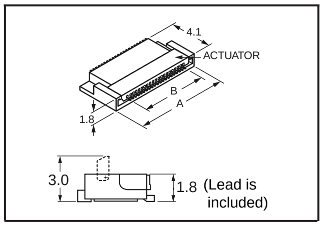
No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Pricing				Parlex Part No.
			1	10	100	250	
2” (5.08cm) Unshielded Flat Flex Cable							
10	5.5	HFF-10U-02-ND	3.60	30.00	220.00	466.00	0.5MM-10-2-B
20	10.5	HFF-20U-02-ND	3.74	31.13	228.25	483.48	0.5MM-20-2-B
24	12.5	HFF-24U-02-ND	3.78	31.50	231.00	489.30	0.5MM-24-2-B
30	15.5	HFF-30U-02-ND	3.83	31.88	233.75	495.13	0.5MM-30-2-B
36	18.5	HFF-36U-02-ND	3.87	32.25	236.50	500.95	0.5MM-36-2-B
40	20.5	HFF-40U-02-ND	3.92	32.63	239.25	506.78	0.5MM-40-2-B
50	25.5	HFF-50U-02-ND	4.05	33.75	247.50	524.25	0.5MM-50-2-B
4” (10.16cm) Unshielded Flat Flex Cable							
10	5.5	HFF-10U-04-ND	4.05	33.75	247.50	524.25	0.5MM-10-4-B
20	10.5	HFF-20U-04-ND	4.28	35.63	261.25	553.38	0.5MM-20-4-B
24	12.5	HFF-24U-04-ND	4.37	36.38	266.75	565.03	0.5MM-24-4-B
30	15.5	HFF-30U-04-ND	4.50	37.50	275.00	582.50	0.5MM-30-4-B
36	18.5	HFF-36U-04-ND	4.64	38.63	283.25	599.98	0.5MM-36-4-B
40	20.5	HFF-40U-04-ND	4.73	39.38	288.75	611.63	0.5MM-40-4-B
50	25.5	HFF-50U-04-ND	4.95	41.25	302.50	640.75	0.5MM-50-4-B
6” (15.24cm) Unshielded Flat Flex Cable							
10	5.5	HFF-10U-06-ND	4.50	37.50	275.00	582.50	0.5MM-10-6-B
20	10.5	HFF-20U-06-ND	4.95	41.25	302.50	640.75	0.5MM-20-6-B
24	12.5	HFF-24U-06-ND	5.18	43.13	316.25	669.88	0.5MM-24-6-B
30	15.5	HFF-30U-06-ND	5.40	45.00	330.00	699.00	0.5MM-30-6-B
36	18.5	HFF-36U-06-ND	5.54	46.13	338.25	716.48	0.5MM-36-6-B
40	20.5	HFF-40U-06-ND	5.63	46.88	343.75	728.13	0.5MM-40-6-B
50	25.5	HFF-50U-06-ND	5.85	48.75	357.50	757.25	0.5MM-50-6-B

1mm Flat Flex Cable

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Pricing				Parlex Part No.
			1	10	100	250	
2” (5.08cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-02-ND	2.25	18.75	137.50	291.25	1.00MM-6-2-B
8	9.15	HF08U-02-ND	2.48	20.63	151.25	320.38	1.00MM-8-2-B
10	11.15	HF10U-02-ND	2.70	22.50	165.00	349.50	1.00MM-10-2-B
12	13.15	HF12U-02-ND	2.93	24.38	178.75	378.63	1.00MM-12-2-B
14	15.15	HF14U-02-ND	3.15	26.25	192.50	407.75	1.00MM-14-2-B
16	17.15	HF16U-02-ND	3.38	28.13	206.25	436.88	1.00MM-16-2-B
18	19.15	HF18U-02-ND	3.60	30.00	220.00	466.00	1.00MM-18-2-B
20	21.15	HF20U-02-ND	3.83	31.88	233.75	495.13	1.00MM-20-2-B
22	23.15	HF22U-02-ND	4.05	33.75	247.50	524.25	1.00MM-22-2-B
24	25.15	HF24U-02-ND	4.28	35.63	261.25	553.38	1.00MM-24-2-B
26	27.15	HF26U-02-ND	4.50	37.50	275.00	582.50	1.00MM-26-2-B
28	29.15	HF28U-02-ND	4.73	39.38	288.75	611.63	1.00MM-28-2-B
30	31.15	HF30U-02-ND	4.95	41.25	302.50	640.75	1.00MM-30-2-B
3” (7.62cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-03-ND	2.48	20.63	151.25	320.38	1.00MM-6-3-B
8	9.15	HF08U-03-ND	2.70	22.50	165.00	349.50	1.00MM-8-3-B
10	11.15	HF10U-03-ND	2.93	24.38	178.75	378.63	1.00MM-10-3-B
12	13.15	HF12U-03-ND	3.15	26.25	192.50	407.75	1.00MM-12-3-B
14	15.15	HF14U-03-ND	3.38	28.13	206.25	436.88	1.00MM-14-3-B
16	17.15	HF16U-03-ND	3.60	30.00	220.00	466.00	1.00MM-16-3-B
18	19.15	HF18U-03-ND	3.83	31.88	233.75	495.13	1.00MM-18-3-B
20	21.15	HF20U-03-ND	4.05	33.75	247.50	524.25	1.00MM-20-3-B
22	23.15	HF22U-03-ND	4.28	35.63	261.25	553.38	1.00MM-22-3-B
24	25.15	HF24U-03-ND	4.50	37.50	275.00	582.50	1.00MM-24-3-B
26	27.15	HF26U-03-ND	4.73	39.38	288.75	611.63	1.00MM-26-3-B
28	29.15	HF28U-03-ND	4.95	41.25	302.50	640.75	1.00MM-28-3-B
30	31.15	HF30U-03-ND	5.18	43.13	316.25	669.88	1.00MM-30-3-B
4” (10.16cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-04-ND	2.70	22.50	165.00	349.50	1.00MM-6-4-B
8	9.15	HF08U-04-ND	2.93	24.38	178.75	378.63	1.00MM-8-4-B
10	11.15	HF10U-04-ND	3.15	26.25	192.50	407.75	1.00MM-10-4-B
12	13.15	HF12U-04-ND	3.38	28.13	206.25	436.88	1.00MM-12-4-B
14	15.15	HF14U-04-ND	3.60	30.00	220.00	466.00	1.00MM-14-4-B
16	17.15	HF16U-04-ND	3.83	31.88	233.75	495.13	1.00MM-16-4-B
18	19.15	HF18U-04-ND	4.05	33.75	247.50	524.25	1.00MM-18-4-B
20	21.15	HF20U-04-ND	4.28	35.63	261.25	553.38	1.00MM-20-4-B
22	23.15	HF22U-04-ND	4.50	37.50	275.00	582.50	1.00MM-22-4-B
24	25.15	HF24U-04-ND	4.73	39.38	288.75	611.63	1.00MM-24-4-B
26	27.15	HF26U-04-ND	4.95	41.25	302.50	640.75	1.00MM-26-4-B
28	29.15	HF28U-04-ND	5.18	43.13	316.25	669.88	1.00MM-28-4-B
30	31.15	HF30U-04-ND	5.40	45.00	330.00	699.00	1.00MM-30-4-B
5” (12.70cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-05-ND	2.93	24.38	178.75	378.63	1.00MM-6-5-B
8	9.15	HF08U-05-ND	3.15	26.25	192.50	407.75	1.00MM-8-5-B
10	11.15	HF10U-05-ND	3.38	28.13	206.25	436.88	1.00MM-10-5-B
12	13.15	HF12U-05-ND	3.60	30.00	220.00	466.00	1.00MM-12-5-B
14	15.15	HF14U-05-ND	3.83	31.88	233.75	495.13	1.00MM-14-5-B
16	17.15	HF16U-05-ND	4.05	33.75	247.50	524.25	1.00MM-16-5-B
18	19.15	HF18U-05-ND	4.28	35.63	261.25	553.38	1.00MM-18-5-B
20	21.15	HF20U-05-ND	4.50	37.50	275.00	582.50	1.00MM-20-5-B
22	23.15	HF22U-05-ND	4.73	39.38	288.75	611.63	1.00MM-22-5-B
24	25.15	HF24U-05-ND	4.95	41.25	302.50	640.75	1.00MM-24-5-B
26	27.15	HF26U-05-ND	5.18	43.13	316.25	669.88	1.00MM-26-5-B
28	29.15	HF28U-05-ND	5.40	45.00	330.00	699.00	1.00MM-28-5-B
30	31.15	HF30U-05-ND	5.63	46.88	343.75	728.13	1.00MM-30-5-B
6” (15.24cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-06-ND	3.15	26.25	192.50	407.75	1.00MM-6-6-B
8	9.15	HF08U-06-ND	3.38	28.13	206.25	436.88	1.00MM-8-6-B
10	11.15	HF10U-06-ND	3.60	30.00	220.00	466.00	1.00MM-10-6-B
12	13.15	HF12U-06-ND	3.83	31.88	233.75	495.13	1.00MM-12-6-B
14	15.15	HF14U-06-ND	4.05	33.75	247.50	524.25	1.00MM-14-6-B
16	17.15	HF16U-06-ND	4.28	35.63	261.25	553.38	1.00MM-16-6-B
18	19.15	HF18U-06-ND	4.50	37.50	275.00	582.50	1.00MM-18-6-B
20	21.15	HF20U-06-ND	4.73	39.38	288.75	611.63	1.00MM-20-6-B
22	23.15	HF22U-06-ND	4.95	41.25	302.50	640.75	1.00MM-22-6-B
24	25.15	HF24U-06-ND	5.18	43.13	316.25	669.88	1.00MM-24-6-B
26	27.15	HF26U-06-ND	5.40	45.00	330.00	699.00	1.00MM-26-6-B
28	29.15	HF28U-06-ND	5.63	46.88	343.75	728.13	1.00MM-28-6-B
30	31.15	HF30U-06-ND	5.85	48.75	357.50	757.25	1.00MM-30-6-B
8” (20.32cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-08-ND	3.60	30.00	220.00	466.00	1.00MM-6-8-B
8	9.15	HF08U-08-ND	3.83	31.88	233.75	495.13	1.00MM-8-8-B
10	11.15	HF10U-08-ND	4.05	33.75	247.50	524.25	1.00MM-10-8-B
12	13.15	HF12U-08-ND	4.28	35.63	261.25	553.38	1.00MM-12-8-B
14	15.15	HF14U-08-ND	4.50	37.50	275.00	582.50	1.00MM-14-8-B
16	17.15	HF16U-08-ND	4.73	39.38	288.75	611.63	1.00MM-16-8-B
18	19.15	HF18U-08-ND	4.95	41.25	302.50	640.75	1.00MM-18-8-B
20	21.15	HF20U-08-ND	5.18	43.13	316.25	669.88	1.00MM-20-8-B
22	23.15	HF22U-08-ND	5.40	45.00	330.00	699.00	1.00MM-22-8-B
24	25.15	HF24U-08-ND	5.63	46.88	343.75	728.13	1.00MM-24-8-B
26	27.15	HF26U-08-ND	5.85	48.75	357.50	757.25	1.00MM-26-8-B
28	29.15	HF28U-08-ND	6.08	50.63	371.25	786.38	1.00MM-28-8-B
30	31.15	HF30U-08-ND	6.30	52.50	385.00	815.50	1.00MM-30-8-B
10” (25.40cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-10-ND	4.05	33.75	247.50	524.25	1.00MM-6-10-B
8	9.15	HF08U-10-ND	4.28	35.63	261.25	553.38	1.00MM-8-10-B
10	11.15	HF10U-10-ND	4.50	37.50	275.00	582.50	1.00MM-10-10-B
12	13.15	HF12U-10-ND	4.73	39.38	288.75	611.63	1.00MM-12-10-B
14	15.15	HF14U-10-ND	4.95	41.25	302.50	640.75	1.00MM-14-10-B
16	17.15	HF16U-10-ND	5.18	43.13	316.25	669.88	1.00MM-16-10-B
18	19.15	HF18U-10-ND	5.40	45.00	330.00	699.00	1.00MM-18-10-B
20	21.15	HF20U-10-ND	5.63	46.88	343.75	728.13	1.00MM-20-10-B
22	23.15	HF22U-10-ND	5.85	48.75	357.50	757.25	1.00MM-22-10-B
24	25.15	HF24U-10-ND	6.08	50.63	371.25	786.38	1.00MM-24-10-B
26	27.15	HF26U-10-ND	6.30	52.50	385.00	815.50	1.00MM-26-10-B
28	29.15	HF28U-10-ND	6.53	54.38	398.75	844.63	1.00MM-28-10-B
30	31.15	HF30U-10-ND	6.75	56.25	412.50	873.75	1.00MM-30-10-B
12” (30.48cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-12-ND	4.50	37.50	275.00	582.50	1.00MM-6-12-B
8	9.15	HF08U-12-ND	4.73	39.38	288.75	611.63	1.00MM-8-12-B
10	11.15	HF10U-12-ND	4.95	41.25	302.50	640.75	1.00MM-10-12-B
12	13.15	HF12U-12-ND	5.18	43.13	316.25	669.88	1.00MM-12-12-B
14	15.15	HF14U-12-ND	5.40	45.00	330.00	699.00	1.00MM-14-12-B
16	17.15	HF16U-12-ND	5.63	46.88	343.75	728.13	1.00MM-16-12-B
18	19.15	HF18U-12-ND	5.85	48.75	357.50	757.25	1.00MM-18-12-B
20	21.15	HF20U-12-ND	6.08	50.63	371.25	786.38	1.00MM-20-12-B
22	23.15	HF22U-12-ND	6.30	52.50	385.00	815.50	1.00MM-22-12-B
24	25.15	HF24U-12-ND	6.53	54.38	398.75	844.63	1.00MM-24-12-B
26	27.15	HF26U-12-ND	6.75	56.25	412.50	873.75	1.00MM-26-12-B
28	29.15	HF28U-12-ND	6.98	58.13	426.25	902.88	1.00MM-28-12-B
30	31.15	HF30U-12-ND	7.20	60.00	440.00	932.00	1.00MM-30-12-B
18” (45.72cm) Unshielded Flat Flex Cable							
6	7.15	HF06U-18-ND	5.85	48.75	357.50	757.25	1.00MM-6-18-B
8	9.15	HF08U-18-ND	6.08	50.63	371.25	786.38	1.00MM-8-18-B
10	11.15	HF10U-18-ND	6.30	52.50	385.00	815.50	1.00MM-10-18-B
12	13.15	HF12U-18-ND	6.53	54.38	398.75	844.63	1.00MM-12-18-B
14	15.15	HF14U-18-ND	6.75	56.25	412.50	873.75	1.00MM-14-18-B
16	17.15	HF16U-18-ND	6.98	58.13	426.25	902.88	1.00MM-16-18-B
18	19.15	HF18U-18-ND	7.20	60.00	440.00	932.00	1.00MM-18-18-B
20	21.15	HF20U-18-ND	7.43	61.88	453.75	961.13	1.00MM-20-18-B
22	23.15	HF22U-18-ND	7.65	63.75	467.50	990.25	1.00MM-22-18-B
24	25.15	HF24U-18-ND	7.88	65.63	481.25	1019.38	1.00MM-24-18-B
26	27.15	HF26U-18-ND	8.10	67.50	495.00	1048.50	1.00MM-26-18-B
28	29.15	HF28U-18-ND	8.33	69.38	508.75	1077.63	1.00MM-28-18-B
30	31.15	HF30U-18-ND	8.55	71.25	522.50	1106.75	1.00MM-30-18-B

HIROSE ELECTRIC CO.,LTD.

0.3mm Flex Connectors Low Profile - FH18 Series



Features: Contact spacing (pitch) 0.3mm. Flexible printed circuits (FPC) with contact spacing of 0.3mm are used with increased frequency. These connectors occupy less board space and are lighter than comparable connectors with contacts spaced at 0.5mm.

Applications: Consumer electronics, portable equipment, cameras, PDA's and other devices where board space and component packaging requires ultra small interconnection.

Ratings: Current: 0.15A Temp. range: -40°C to +70°C. Volt: 30V AC

No. of Pos.	Dimensions (mm) A	B	Digi-Key Part No.	Cut Tape Price Each 1	25	100	250	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000	10,000	Hirose Part No.
17	7.6	4.8	HFM17CT-ND	1.86	1.35	1.11	.94	HFM17TR-ND	637.00/M	624.75/M	612.50/M	FH18-17S-0.3SHW
21	8.8	6.0	HFM21CT-ND	1.63	1.25	1.00	.83	HFM21TR-ND	637.50/M	625.00/M	612.50/M	FH18-21S-0.3SHW
25	10.0	7.2	HFM25CT-ND	1.82	1.40	1.12	.93	HFM25TR-ND	714.00/M	700.00/M	686.00/M	FH18-25S-0.3SHW
27	10.6	7.8	HFM27CT-ND	1.82	1.40	1.12	.93	HFM27TR-ND	714.00/M	700.00/M	686.00/M	FH18-27S-0.3SHW
39	14.2	11.4	HFM39CT-ND	2.08	1.60	1.28	1.07	HFM39TR-ND	816.00/M	800.00/M	784.00/M	FH18-39S-0.3SHW
51	17.8	15.0	HFM51CT-ND	2.34	1.80	1.44	1.20	HFM51TR-ND	918.00/M	900.00/M	882.00/M	FH18-51S-0.3SHW

HIROSE ELECTRIC CO.,LTD.

0.5mm Flex Connectors

“Flip-Lock” SMT/ZIF Type Flexible Printed Circuit Board Connectors

The FH12 Series of miniature connectors for FPC/FFC use brings form to the newly developed “flip-lock” concept and can be used with SMT (surface mount technology) to eliminate the problems of the contemporary slide-lock system. These connectors have a contact spacing of 0.5mm, are suited to high density mounting, and are based on a single-action ZIF (zero insertion force) structure for easy connections. Types with top or bottom contacts, and vertical mounting are available to suit your applications.

Materials/Finish:

• Insulation: Polyimide resin, beige; PPS resin, dark brown (UL94V-0) • Contacts: Phosphor bronze, solder plating.

Electrical:

• Rated Current: 0.4A • Insulation Resistance: 500MΩ or greater at 100V DC • Withstand Voltage: 150V AC for one minute • Contact Resistance: 50mΩ or less (Note: When all conductors are to continuously carry the rated current, set the current to 70% of the rated current value.

Fig. 1

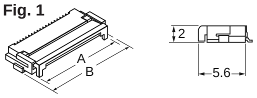


Fig. 2

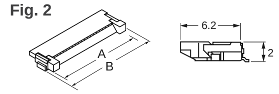


Fig. 3

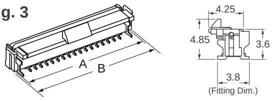


Fig.	No. of Pos.	Dimensions (mm) A	B	Digi-Key Part No.	Cut Tape Price Each 1	10	100	250	Digi-Key Part No.	Tape & Reel Pricing 1,000	2,000	6,000	Hirose Part No.
Horizontal Mount — Bottom Contact Type													
1	10	8.1	9.1	HFJ10CT-ND	1.55	1.21	.92	.78	HFJ10TR-ND	—	529.10/M	518.93/M	FH12-10S-0.5SH
	20	13.1	14.1	HFJ20CT-ND	1.90	1.48	1.13	.95	HFJ20TR-ND	—	648.70/M	636.23/M	FH12-20S-0.5SH
	24	15.1	16.1	HFJ24CT-ND	1.75	1.46	1.08	.90	HFJ24TR-ND	—	686.59/M	673.13/M	FH12-24S-0.5SH
	30	18.1	19.1	HFJ30CT-ND	1.92	1.60	1.19	.99	HFJ30TR-ND	—	753.53/M	738.75/M	FH12-30S-0.5SH
	40	23.1	24.1	HFJ40CT-ND	2.35	1.96	1.45	1.20	HFJ40TR-ND	—	921.19/M	903.13/M	FH12-40S-0.5SH
	50	28.1	29.1	HFJ50CT-ND	2.65	2.20	1.63	1.36	HFJ50TR-ND	—	1037.85/M	1017.50/M	FH12-50S-0.5SH
Horizontal Mount — Top Contact Type													
2	10	8.35	9.1	HFK10CT-ND	1.20	.93	.71	.60	HFK10TR-ND	—	409.50/M	401.63/M	FH12A-10S-0.5SH
	20	13.35	14.1	HFK20CT-ND	1.55	1.21	.92	.78	HFK20TR-ND	—	529.10/M	518.93/M	FH12A-20S-0.5SH
	24	15.35	16.1	HFK24CT-ND	1.70	1.32	1.01	.85	HFK24TR-ND	—	580.45/M	569.29/M	FH12A-24S-0.5SH
	30	18.35	19.1	HFK30CT-ND	1.66	1.39	1.03	.85	HFK30TR-ND	—	652.80/M	640.00/M	FH12A-30S-0.5SH
	40	23.35	24.1	HFK40CT-ND	2.01	1.67	1.24	1.03	HFK40TR-ND	—	786.68/M	771.25/M	FH12A-40S-0.5SH
	50	28.35	29.1	HFK50CT-ND	2.35	1.96	1.45	1.20	HFK50TR-ND	—	921.19/M	903.13/M	FH12A-50S-0.5SH
Vertical Mount													
3	10	6.5	8.2	HFL10CT-ND	1.20	.93	.71	.60	HFL10TR-ND	418.95	409.50/M	—	FH12-10S-0.5SV
	20	11.5	13.2	HFL20CT-ND	1.60	1.24	.95	.80	HFL20TR-ND	558.60	546.00/M	—	FH12-20S-0.5SV
	24	13.5	15.2	HFL24CT-ND	1.75	1.36	1.04	.88	HFL24TR-ND	611.80	598.00/M	—	FH12-24S-0.5SV
	30	16.5	18.2	HFL30CT-ND	1.71	1.42	1.05	.88	HFL30TR-ND	698.25	669.38/M	—	FH12-30S-0.5SV
	40	21.5	23.2	HFL40CT-ND	2.09	1.74	1.29	1.07	HFL40TR-ND	855.19	819.83/M	—	FH12-40S-0.5SV
	50	26.5	28.2	HFL50CT-ND	2.43	2.03	1.50	1.25	HFL50TR-ND	996.17	954.98/M	—	FH12-50S-0.5SV

HIROSE ELECTRIC CO.,LTD.

1mm Flex Connectors

1mm Pitch Flexible Printed Circuit Connectors (Figures 1 and 2)

Features: • High-density packaging achieved by 1 mm pitch contacts • Dual-side contact construction allows FPC and FFC conductors to be inserted in either direction • Enhanced contact reliability through high contact pressure • Applicable to 0.25mm to 0.35mm thick flexible printed circuit boards • Uses PBT (UL94V-0) insulating materials which are highly resistant to solvents and high temperature • Kinked dip posts for board retention during wave soldering **Material/Finish:** • Insulator: Polybutylene phthalate, black • Contacts: Phosphor bronze, tin-lead plated **Electrical:** • Rated Current: 0.5A • Insulation Resistance: At 100V DC, 500MΩ min. • Withstanding Voltage: 150V AC for 1 minute • Contact Resistance: 40mΩ max.

SMT ZIF Type Flexible PCB Connectors (Figures 3 and 4)

Features: • Low profile type with 3mm packaged height; 1mm pitch permits high-density packaging • Excellent workability is offered by the ZIF structure which provides positive contact by only lightly inserting FPC/FFC and then pushing in the movable locking flap • Recommended thickness of flexible circuit board is 0.25mm to 0.30mm • PPS (UL94V-0) with excellent solvent resistance and high temperature resistance is used for the insulation material • The SMT type connectors permit high density and automatic packaging on circuit boards • Also available in embossed tape packaging **Material/Finish:** • Insulator: PPS resin, natural finish • Contact: Phosphor bronze, tin plating **Electrical:** • Rated Current: 0.5A • Insulator Resistance: 500MΩ at 100VDC min. • Withstanding Voltage: 150V AC for 1 minute at specified value • Contact Resistance: 25mΩ max.

Fig. 1

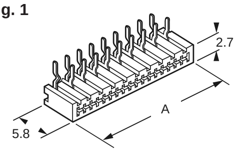


Fig. 2

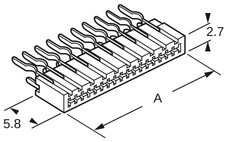


Fig. 3

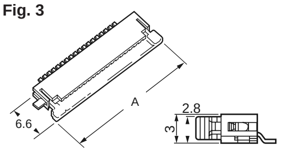


Fig. 4

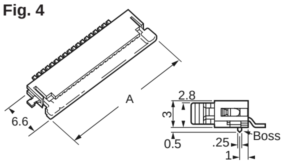
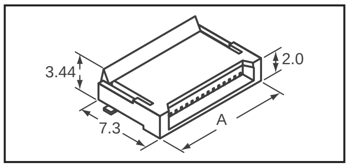


Fig.	No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Hirose Part No.
Right Angle								
1	6	8	HFG06T-ND	.60	.42	.29	.24	FH21-6S-1DS
	8	10	HFG08T-ND	.70	.49	.33	.28	FH21-8S-1DS
	10	12	HFG10T-ND	.68	.56	.41	.35	FH21-10S-1DS
	12	14	HFG12T-ND	.76	.62	.45	.38	FH21-12S-1DS
	14	16	HFG14T-ND	.87	.72	.52	.44	FH21-14S-1DS
	16	18	HFG16T-ND	.99	.77	.59	.50	FH21-16S-1DS
	18	20	HFG18T-ND	1.06	.83	.63	.54	FH21-18S-1DS
	20	22	HFG20T-ND	1.22	.95	.72	.61	FH21-20S-1DS
	22	24	HFG22T-ND	1.25	.98	.75	.63	FH21-22S-1DS
	24	26	HFG24T-ND	1.37	1.07	.81	.69	FH21-24S-1DS
	26	28	HFG26T-ND	1.48	1.16	.88	.75	FH21-26S-1DS
	28	30	HFG28T-ND	1.63	1.27	.97	.82	FH21-28S-1DS
	30	32	HFG30T-ND	1.67	1.30	.99	.84	FH21-30S-1DS
Straight								
2	6	8	HFF06T-ND	.55	.39	.26	.22	FH21-6S-1DSA
	8	10	HFF08T-ND	.65	.46	.31	.26	FH21-8S-1DSA
	10	12	HFF10T-ND	.61	.50	.36	.31	FH21-10S-1DSA
	12	14	HFF12T-ND	.68	.56	.41	.35	FH21-12S-1DSA
	14	16	HFF14T-ND	.76	.62	.45	.38	FH21-14S-1DSA
	16	18	HFF16T-ND	.87	.72	.52	.44	FH21-16S-1DSA
	18	20	HFF18T-ND	.95	.78	.57	.48	FH21-18S-1DSA
	20	22	HFF20T-ND	1.10	.86	.66	.56	FH21-20S-1DSA
	22	24	HFF22T-ND	1.14	.89	.68	.57	FH21-22S-1DSA
	24	26	HFF24T-ND	1.22	.95	.72	.61	FH21-24S-1DSA
	26	28	HFF26T-ND	1.29	1.01	.77	.65	FH21-26S-1DSA
	28	30	HFF28T-ND	1.44	1.13	.86	.73	FH21-28S-1DSA
	30	32	HFF30T-ND	1.48	1.16	.88	.75	FH21-30S-1DSA

Fig.	No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Hirose Part No.
SMT Flex Without Board Mount Boss								
3	6	12.2	HFE06F-ND	1.03	.80	.61	.52	FH10A-6S-1SH
	8	14.2	HFE08F-ND	1.18	.92	.70	.59	FH10A-8S-1SH
	10	16.2	HFE10F-ND	1.29	1.01	.77	.65	FH10A-10S-1SH
	12	18.2	HFE12F-ND	1.41	1.10	.84	.71	FH10A-12S-1SH
	14	20.2	HFE14F-ND	1.48	1.16	.88	.75	FH10A-14S-1SH
	16	22.2	HFE16F-ND	1.67	1.30	.99	.84	FH10A-16S-1SH
	18	24.2	HFE18F-ND	1.82	1.42	1.08	.92	FH10A-18S-1SH
	20	26.2	HFE20F-ND	1.63	1.35	1.00	.83	FH10A-20S-1SH
	22	28.2	HFE22F-ND	1.69	1.41	1.04	.87	FH10A-22S-1SH
	24	30.2	HFE24F-ND	1.76	1.46	1.08	.90	FH10A-24S-1SH
	26	31.2	HFE26F-ND	2.05	1.71	1.26	1.05	FH10A-26S-1SH
	28	34.2	HFE28F-ND	2.11	1.76	1.30	1.08	FH10A-28S-1SH
	30	36.2	HFE30F-ND	2.18	1.81	1.34	1.12	FH10A-30S-1SH
SMT Flex With Board Mount Boss								
4	6	12.2	HFH06T-ND	1.03	.80	.61	.52	FH10A-6S-1SHB
	8	14.2	HFH08T-ND	1.18	.92	.70	.59	FH10A-8S-1SHB
	10	16.2	HFH10T-ND	1.29	1.01	.77	.65	FH10A-10S-1SHB
	12	18.2	HFH12T-ND	1.41	1.10	.84	.71	FH10A-12S-1SHB
	14	20.2	HFH14T-ND	1.48	1.16	.88	.75	FH10A-14S-1SHB
	16	22.2	HFH16T-ND	1.67	1.30	.99	.84	FH10A-16S-1SHB
	18	24.2	HFH18T-ND	1.82	1.42	1.08	.92	FH10A-18S-1SHB
	20	26.2	HFH20T-ND	1.63	1.35	1.00	.83	FH10A-20S-1SHB
	22	28.2	HFH22T-ND	1.69	1.41	1.04	.87	FH10A-22S-1SHB
	24	30.2	HFH24T-ND	1.76	1.46	1.08	.90	FH10A-24S-1SHB
	26	32.2	HFH26T-ND	2.05	1.71	1.26	1.05	FH10A-26S-1SHB
	28	34.2	HFH28T-ND	2.11	1.76	1.30	1.08	FH10A-28S-1SHB
	30	36.2	HFH30T-ND	2.18	1.81	1.34	1.12	FH10A-30S-1SHB

OMRON NEW! 0.5mm-Pitch Rotary-Lock FPC Connector

SMT ZIF (Zero Insertion Force) Improves Assembly Reliability and Manufacturing Efficiency



Specifications:

Rated Current: 0.5A, **Rated Voltage:** 50 VDC, **Withstand Voltage:** 250 VAC for 1 min., **Insertion Tolerance:** 20 times.

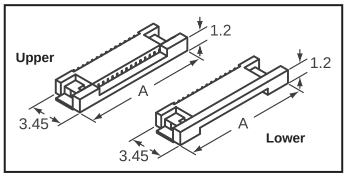
Features:

• Rotary-lock at rear instead of front simplifies assembly, provides secure connection even if cable flexes upward • FPC housing design ensures reliable alignment of circuits during assembly, unaffected by rotary-lock • Double-sided contacts can be used wherever top or bottom connection is needed, reducing part numbers on bill of materials • Connector is supplied with rotary-lock in the open position, eliminating a step during assembly, improving productivity • Low profile, measures only 2mm maximum above the circuit board.

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Cut Tape Price Each 1	25	50	100	Digi-Key Part No.	Tape and Reel Pricing 1,500	6,000	Omron Part No.
10	9.1	OR639CT-ND	.85	.77	.68	.62	OR639TR-ND	425.00/M	408.00/M	XF2H-1015-1
12	10.1	OR640CT-ND	.90	.81	.72	.65	OR640TR-ND	450.00/M	432.00/M	XF2H-1215-1
13	10.6	OR641CT-ND	.95	.86	.76	.69	OR641TR-ND	475.00/M	456.00/M	XF2H-1315-1
14	11.1	OR642CT-ND	1.03	.93	.82	.74	OR642TR-ND	512.50/M	492.00/M	XF2H-1415-1
18	13.1	OR643CT-ND	1.08	.97	.86	.78	OR643TR-ND	537.50/M	516.00/M	XF2H-1815-1
20	14.1	OR644CT-ND	1.13	1.02	.90	.81	OR644TR-ND	562.50/M	540.00/M	XF2H-2015-1
21	14.6	OR645CT-ND	1.18	1.06	.94	.85	OR645TR-ND	587.50/M	564.00/M	XF2H-2115-1
22	15.1	OR646CT-ND	1.20	1.08	.96	.87	OR646TR-ND	600.00/M	576.00/M	XF2H-2215-1
24	16.1	OR647CT-ND	1.25	1.13	1.00	.90	OR647TR-ND	625.00/M	600.00/M	XF2H-2415-1
26	17.1	OR648CT-ND	1.33	1.20	1.06	.96	OR648TR-ND	662.50/M	636.00/M	XF2H-2615-1
30	19.1	OR649CT-ND	1.38	1.24	1.10	.99	OR649TR-ND	687.50/M	660.00/M	XF2H-3015-1
32	20.1	OR650CT-ND	1.43	1.29	1.14	1.03	OR650TR-ND	712.50/M	684.00/M	XF2H-3215-1
33	20.6	OR651CT-ND	1.50	1.35	1.20	1.08	OR651TR-ND	750.00/M	720.00/M	XF2H-3315-1
34	21.1	OR652CT-ND	1.55	1.40	1.24	1.12	OR652TR-ND	775.00/M	744.00/M	XF2H-3415-1
35	21.6	OR653CT-ND	1.60	1.44	1.28	1.16	OR653TR-ND	800.00/M	768.00/M	XF2H-3515-1
36	22.1	OR654CT-ND	1.63	1.47	1.30	1.17	OR654TR-ND	812.50/M	780.00/M	XF2H-3615-1
38	23.1	OR655CT-ND	1.65	1.49	1.32	1.19	OR655TR-ND	825.00/M	792.00/M	XF2H-3815-1
40	24.1	OR656CT-ND	1.68	1.51	1.34	1.21	OR656TR-ND	837.50/M	804.00/M	XF2H-4015-1
45	26.6	OR657CT-ND	1.78	1.60	1.42	1.28	OR657TR-ND	887.50/M	852.00/M	XF2H-4515-1
50	29.1	OR658CT-ND	1.85	1.67	1.48	1.34	OR658TR-ND	925.00/M	888.00/M	XF2H-5015-1

NEW! 0.5mm-Pitch Slide-Lock FPC Connector

Low Profile SMT ZIF (Zero Insertion Force) Connectors Small Footprint Reduces Space on Circuit Boards



Specifications:

Rated Current: 0.5A, **Rated Voltage:** 50 VDC, **Withstand Voltage:** 250 VAC for 1 min., **Insertion Tolerance:** 20 times.

Features:

• Low profile, measures 1.2 mm maximum above the board • Top and bottom contact styles have identical dimensions, utilize the same PCB layout for board design • Hold down terminal improves connection stability during soldering • Slide mechanism locks securely • Connectors supplied on tape reels for automatic insertion; color coded slide identifies top and bottom contact versions to avoid mix-ups during production.

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Cut Tape Price Each 1	25	50	100	Digi-Key Part No.	Tape and Reel Pricing 3,000	6,000	Omron Part No.
4	6.9	OR675CT-ND	.73	.66	.58	.53	OR675TR-ND	362.50/M	348.00/M	XF2L-0425-1
5	7.4	OR676CT-ND*	.75	.68	.60	.54	OR676TR-ND*	375.00/M	360.00/M	XF2L-0535-1
6	7.9	OR677CT-ND	.78	.70	.62	.56	OR677TR-ND	387.50/M	372.00/M	XF2L-0625-1
7	8.4	OR678CT-ND	.83	.75	.66	.60	OR678TR-ND	412.50/M	396.00/M	XF2L-0725-1
7	8.4	OR679CT-ND*	.83	.75	.66	.60	OR679TR-ND*	412.50/M	396.00/M	XF2L-0735-1
8	8.9	OR680CT-ND	.85	.77	.68	.62	OR680TR-ND	425.00/M	408.00/M	XF2L-0825-1
8	8.9	OR681CT-ND*	.85	.77	.68	.62	OR681TR-ND*	425.00/M	408.00/M	XF2L-0835-1
10	9.9	OR682CT-ND	.93	.84	.74	.67	OR682TR-ND	462.50/M	444.00/M	XF2L-1025-1
12	10.9	OR683CT-ND*	.98	.88	.78	.71	OR683TR-ND*	487.50/M	468.00/M	XF2L-1235-1
13	11.4	OR684CT-ND	1.03	.93	.82	.74	OR684TR-ND	512.50/M	492.00/M	XF2L-1325-1
13	11.4	OR685CT-ND*	1.03	.93	.82	.74	OR685TR-ND*	512.50/M	492.00/M	XF2L-1335-1
15	12.4	OR686CT-ND*	1.05	.95	.84	.76	OR686TR-ND*	525.00/M	504.00/M	XF2L-1535-1
18	13.9	OR687CT-ND*	1.23	1.11	.98	.89	OR687TR-ND*	612.50/M	588.00/M	XF2L-1835-1
20	14.9	OR688CT-ND*	1.25	1.13	1.00	.90	OR688TR-ND*	625.00/M	600.00/M	XF2L-2035-1
21	15.4	OR689CT-ND	1.30	1.17	1.04	.94	OR689TR-ND	650.00/M	624.00/M	XF2L-2125-1
22	15.9	OR690CT-ND*	1.33	1.20	1.06	.96	OR690TR-ND*	662.50/M	636.00/M	XF2L-2235-1
26	17.9	OR691CT-ND	1.45	1.31	1.16	1.05	OR691TR-ND	725.00/M	696.00/M	XF2L-2625-1
30	19.9	OR692CT-ND	1.60	1.44	1.28	1.16	OR692TR-ND	800.00/M	768.00/M	XF2L-3025-1
30	19.9	OR693CT-ND*	1.60	1.44	1.28	1.16	OR693TR-ND*	800.00/M	768.00/M	XF2L-3035-1

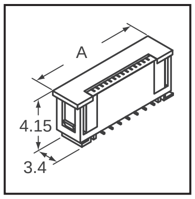
* Bottom Contact Type

NEW! 0.5mm-Pitch Vertical Slide-Lock FPC Connector

SMT ZIF (Zero Insertion Force) Connector with Low Profile, Top Entry Ideal for Automated Assembly Processes

Specifications:

Rated Current: 0.5A, **Rated Voltage:** 50 VDC, **Withstand Voltage:** 250VAC for 1 min., **Insertion Tolerance:** 30 times.



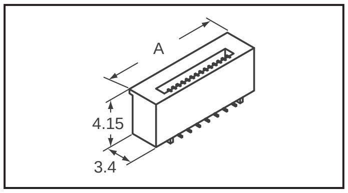
Features:

• Enlarged surface area on slide bar makes automatic assembly easier • Vertical slide mechanism locks flex circuit securely in place • Low-profile, measures only 4.15 mm above the circuit board • Hold down terminal improves connection stability during soldering • Connectors supplied on tape reels for automatic insertion.

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Cut Tape Price Each 1	25	50	100	Digi-Key Part No.	Tape and Reel Pricing 1,000	5,000	Omron Part No.
6	7.5	OR659CT-ND	.58	.52	.46	.42	OR659TR-ND	287.50	276.00/M	XF2J-0624-11
8	8.5	OR660CT-ND	.68	.61	.54	.49	OR660TR-ND	337.50	324.00/M	XF2J-0824-11
10	9.5	OR661CT-ND	.73	.66	.58	.53	OR661TR-ND	362.50	348.00/M	XF2J-1024-11
12	10.5	OR662CT-ND	.80	.72	.64	.58	OR662TR-ND	400.00	384.00/M	XF2J-1224-11
14	11.5	OR663CT-ND	.88	.79	.70	.63	OR663TR-ND	437.50	420.00/M	XF2J-1424-11
16	12.5	OR664CT-ND	.93	.84	.74	.67	OR664TR-ND	462.50	444.00/M	XF2J-1624-11
18	13.5	OR665CT-ND	.98	.88	.78	.71	OR665TR-ND	487.50	468.00/M	XF2J-1824-11
20	14.5	OR666CT-ND	1.03	.93	.82	.74	OR666TR-ND	512.50	492.00/M	XF2J-2024-11
22	15.5	OR667CT-ND	1.05	.95	.84	.76	OR667TR-ND	525.00	504.00/M	XF2J-2224-11
24	16.5	OR668CT-ND	1.13	1.02	.90	.81	OR668TR-ND	562.50	540.00/M	XF2J-2424-11
26	17.5	OR669CT-ND	1.20	1.08	.96	.87	OR669TR-ND	600.00	576.00/M	XF2J-2624-11
28	18.5	OR670CT-ND	1.25	1.13	1.00	.90	OR670TR-ND	625.00	600.00/M	XF2J-2824-11
30	19.5	OR671CT-ND	1.30	1.17	1.04	.94	OR671TR-ND	650.00	624.00/M	XF2J-3024-11

NEW! 0.5mm-Pitch Vertical FPC Connector

SMT Non-ZIF (Zero Insertion Force) Connector Offers a Low-Cost Top Entry Alternative to Locking Types



Specifications: Rated Current: 0.5A, **Rated Voltage:** 50VDC, **Withstand Voltage:** 250 VAC for 1 min., **Insertion Tolerance:** 10 times

Features: • Enlarged top surface area makes automatic assembly easier • Low profile • Measures only 4.15mm above the circuit board • Hold-down terminal improves connection stability during soldering • Connectors supplied on tape reels for automatic insertion

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Cut Tape Price Each 1	25	50	100	Digi-Key Part No.	Tape and Reel Pricing 1,000	5,000	Omron Part No.
6	4.9	OR672CT-ND	.40	.36	.32	.29	OR672TR-ND	200.00	192.00/M	XF2G-0614-11
14	8.9	OR673CT-ND	.60	.54	.48	.44	OR673TR-ND	300.00	288.00/M	XF2G-1414-11
16	9.9	OR674CT-ND	.70	.63	.56	.51	OR674TR-ND	350.00	336.00/M	XF2G-1614-11

molex GC/Waldom

1mm FFC/FPC Connectors

Features: • **Vertical:** For use with 0.30mm thick FFC/FPC. Tuning fork contacts assure stable, low contact resistance. Optional cable retention barbs provide cable strain relief and assure full retention of cable. Optional polarizing peg assures proper orientation to PCB and kinked outer solder tails offer PCB retention. SMT compatible. Material: Housing 4/6 nylon, UL 94V-0. Actuator: LCP, UL 94V-0. Contact: Phosphor Bronze Alloy. Plating: Tin/Lead, 90/10. Temp: -20 to +80°C. Electrical: Volt: 125V Current 1.0A. Contact Resistance: 20 MOhm max. Dielectric Withstanding Volt: 500V AC/1 min. Insulation Resistance: 100MOhm min. • **Right Angle:** For 0.30mm thick FFC/FPC. Metal solder tabs provide PCB hold-down and strain relief for SMT tails. Material: 4/6 nylon, UL 94V-0 Actuator: PPS, UL 94V-0 Contact: Phosphor Bronze. Plating: Tin Solder Tabs: Phosphor Bronze, Tin Plating Temp.: -20 to +85°C. Electrical: Volt.: 125V Current: 1.0A Contact Resistance: 20MOhm Max. Dielectric Withstanding Volt: 500V AC/1 min.

Fig. 1

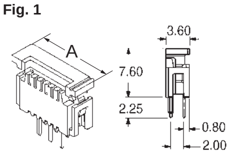


Fig. 2

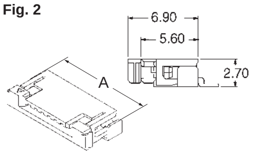
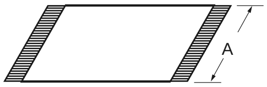


Fig.	No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Molex Part No.
Vertical, ZIF - No Pegs								
1	4	.366 (9.30)	WM5300-ND	.99	.81	.62	.50	71226-0425
	6	.445 (11.30)	WM5301-ND	1.18	.97	.74	.60	71226-0625
	8	.524 (13.30)	WM5302-ND	1.38	1.13	.87	.69	71226-0825
	10	.602 (15.30)	WM5303-ND	1.58	1.28	.99	.79	71226-1025
	12	.681 (17.30)	WM5304-ND	1.78	1.45	1.12	.90	71226-1225
	14	.760 (19.30)	WM5305-ND	1.97	1.61	1.24	.99	71226-1425
	16	.839 (21.30)	WM5306-ND	2.17	1.77	1.36	1.09	71226-1625
	18	.917 (23.30)	WM5307-ND	2.37	1.93	1.48	1.19	71226-1825
	20	.996 (25.30)	WM5308-ND	2.56	2.09	1.61	1.29	71226-2025
	22	1.075 (27.30)	WM5309-ND	2.76	2.25	1.73	1.38	71226-2225
	24	1.154 (29.30)	WM5310-ND	2.95	2.40	1.85	1.48	71226-2425
	26	1.232 (31.30)	WM5311-ND	3.15	2.56	1.97	1.58	71226-2625
	28	1.311 (33.30)	WM5312-ND	3.35	2.73	2.10	1.68	71226-2825
	30	1.390 (35.30)	WM5313-ND	3.55	2.89	2.23	1.78	71226-3025

Fig.	No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	250	Digi-Key Part No.	Tape & Reel Pricing 1,000	Molex Part No.
Right Angle, SMT, ZIF Top Contact Style										
2	4	.405 (10.30)	WM5700CT-ND	1.09	.93	.73	.67	WM5700TR-ND	422.80	52207-0490
	6	.484 (12.30)	WM5701CT-ND	.92	.79	.62	.57	WM5701TR-ND	357.53	52207-0690
	8	.562 (14.30)	WM5702CT-ND	1.20	1.03	.81	.74	WM5702TR-ND	467.43	52207-0890
	10	.641 (16.30)	WM5703CT-ND	1.47	1.27	.99	.91	WM5703TR-ND	573.13	52207-1090
	12	.720 (18.30)	WM5704CT-ND	1.73	1.48	1.16	1.06	WM5704TR-ND	671.83	52207-1290
	14	.799 (20.30)	WM5705CT-ND	1.96	1.68	1.31	1.21	WM5705TR-ND	763.70	52207-1490
	16	.877 (22.30)	WM5706CT-ND	2.18	1.87	1.46	1.34	WM5706TR-ND	848.05	52207-1690
	18	.956 (24.30)	WM5707CT-ND	2.39	2.05	1.60	1.47	WM5707TR-ND	930.30	52207-1890
	20	1.035 (26.30)	WM5708CT-ND	2.59	2.22	1.73	1.59	WM5708TR-ND	1005.55	52207-2090
	22	1.114 (28.30)	WM5709CT-ND	2.58	2.21	1.72	1.58	WM5709TR-ND	1001.88	52207-2290
	24	1.192 (30.30)	WM5710CT-ND	2.92	2.51	1.95	1.79	WM5710TR-ND	1137.33	52207-2490
	26	1.271 (32.30)	WM5711CT-ND	3.08	2.64	2.06	1.88	WM5711TR-ND	1195.95	52207-2690
	28	1.350 (34.30)	WM5712CT-ND	3.23	2.77	2.16	1.98	WM5712TR-ND	1257.03	52207-2890
	30	1.430 (36.30)	WM5713CT-ND	3.39	2.90	2.26	2.08	WM5713TR-ND	1317.93	52207-3090

1.00mm (.039”) Pitch Standard Length Jumpers



Features and Specifications: Molex introduces a complete line of 1.00 (.039”) pitch Flat Flex Cable jumpers. These jumpers are used to connect 2 PC boards and terminate to either ZIF or Non-ZIF FFC Connectors • Reference Information: UL Style No.: 2896. Mates with: Any 1.00mm (.039”) Pitch Molex FFC/FPC Connector. Designed in: Millimeters. • Electrical: Voltage: 30V. Current: 1.3A • Physical: Strip Length: 4.0mm (.157”). Reinforcement Length: 8.00mm (.315”). Conductor Width: 0.70mm (.028”). Conductor Thickness: 0.10mm (.004”). End Thickness: 0.30±0.05mm (.012±.002”). Temperature: -40° to 80° C • Contacts on same side

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Molex Part No.
2” (5.08cm) Unshielded Flat Flex Cable							
6	7.15	WM10000-ND	2.45	2.04	1.50	1.27	21039-0203
8	9.15	WM10001-ND	2.64	2.20	1.62	1.37	21039-0225
10	11.15	WM10002-ND	2.90	2.42	1.78	1.51	21039-0247
12	13.15	WM10003-ND	3.16	2.64	1.93	1.64	21039-0269
14	15.15	WM10004-ND	3.31	2.76	2.03	1.72	21039-0291
16	17.15	WM10005-ND	3.40	2.84	2.08	1.77	21039-0313
18	19.15	WM10006-ND	3.52	2.94	2.16	1.83	21039-0335
20	21.15	WM10007-ND	3.66	3.05	2.24	1.90	21039-0357
22	23.15	WM10008-ND	3.70	3.09	2.27	1.92	21039-0379
24	25.15	WM10009-ND	3.90	3.26	2.39	2.03	21039-0401
26	27.15	WM10010-ND	3.94	3.29	2.41	2.04	21039-0423
28	29.15	WM10011-ND	3.96	3.31	2.43	2.06	21039-0445
30	31.15	WM10012-ND	4.00	3.33	2.45	2.07	21039-0467
3” (7.62cm) Unshielded Flat Flex Cable							
6	7.15	WM10013-ND	2.64	2.20	1.62	1.37	21039-0205
8	9.15	WM10014-ND	2.90	2.42	1.78	1.51	21039-0227
10	11.15	WM10015-ND	3.12	2.60	1.91	1.62	21039-0249
12	13.15	WM10016-ND	3.42	2.85	2.09	1.77	21039-0271
14	15.15	WM10017-ND	3.36	2.80	2.06	1.74	21039-0293
16	17.15	WM10018-ND	3.47	2.90	2.13	1.80	21039-0315
18	19.15	WM10019-ND	3.63	3.03	2.22	1.88	21039-0337
20	21.15	WM10020-ND	3.82	3.19	2.34	1.98	21039-0359
22	23.15	WM10021-ND	3.87	3.23	2.37	2.01	21039-0381
24	25.15	WM10022-ND	4.14	3.45	2.53	2.15	21039-0403
26	27.15	WM10023-ND	4.18	3.49	2.56	2.17	21039-0425
28	29.15	WM10024-ND	4.22	3.52	2.58	2.19	21039-0447
30	31.15	WM10025-ND	4.26	3.55	2.61	2.21	21039-0469
4” (10.16cm) Unshielded Flat Flex Cable							
6	7.15	WM10026-ND	2.77	2.31	1.70	1.44	21039-0207
8	9.15	WM10027-ND	2.91	2.43	1.78	1.51	21039-0229
10	11.15	WM10028-ND	3.04	2.54	1.86	1.58	21039-0251
12	13.15	WM10029-ND	3.20	2.67	1.96	1.66	21039-0273
14	15.15	WM10030-ND	3.33	2.78	2.04	1.73	21039-0295
16	17.15	WM10031-ND	3.47	2.90	2.13	1.80	21039-0317
18	19.15	WM10032-ND	3.65	3.05	2.24	1.90	21039-0339
20	21.15	WM10033-ND	3.89	3.24	2.38	2.02	21039-0361
22	23.15	WM10034-ND	3.93	3.28	2.41	2.04	21039-0383
24	25.15	WM10035-ND	4.26	3.55	2.61	2.21	21039-0405
26	27.15	WM10036-ND	4.30	3.59	2.64	2.23	21039-0427
28	29.15	WM10037-ND	4.36	3.63	2.67	2.26	21039-0449
30	31.15	WM10038-ND	4.40	3.67	2.69	2.28	21039-0471
5” (12.70cm) Unshielded Flat Flex Cable							
6	7.15	WM10039-ND	2.76	2.30	1.69	1.43	21039-0209
8	9.15	WM10040-ND	2.91	2.43	1.78	1.51	21039-0231
10	11.15	WM10041-ND	3.06	2.55	1.88	1.59	21039-0253
12	13.15	WM10042-ND	3.24	2.71	1.99	1.68	21039-0275
14	15.15	WM10043-ND	3.40	2.83	2.08	1.76	21039-0297
16	17.15	WM10044-ND	3.56	2.97	2.18	1.85	21039-0319
18	19.15	WM10045-ND	3.77	3.15	2.31	1.96	21039-0341
20	21.15	WM10046-ND	4.04	3.37	2.47	2.10	21039-0363
22	23.15	WM10047-ND	4.10	3.42	2.51	2.13	21039-0385
24	25.15	WM10048-ND	4.49	3.74	2.75	2.33	21039-0407
26	27.15	WM10049-ND	4.54	3.78	2.78	2.35	21039-0429
28	29.15	WM10050-ND	4.59	3.83	2.81	2.38	21039-0451
30	31.15	WM10051-ND	4.64	3.87	2.84	2.41	21039-0473

No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Molex Part No.
6” (15.24cm) Unshielded Flat Flex Cable							
6	7.15	WM10052-ND	2.83	2.36	1.73	1.47	21039-0211
8	9.15	WM10053-ND	2.80	2.34	1.72	1.46	21039-0233
10	11.15	WM10054-ND	3.18	2.66	1.95	1.65	21039-0255
12	13.15	WM10055-ND	3.40	2.83	2.08	1.76	21039-0277
14	15.15	WM10056-ND	3.57	2.98	2.19	1.85	21039-0299
16	17.15	WM10057-ND	3.76	3.14	2.30	1.95	21039-0321
18	19.15	WM10058-ND	4.01	3.34	2.45	2.08	21039-0343
20	21.15	WM10059-ND	4.32	3.61	2.65	2.24	21039-0365
22	23.15	WM10060-ND	4.39	3.66	2.69	2.28	21039-0387
24	25.15	WM10061-ND	4.83	4.03	2.96	2.51	21039-0409
26	27.15	WM10062-ND	4.90	4.09	3.00	2.54	21039-0431
28	29.15	WM10063-ND	4.96	4.14	3.04	2.57	21039-0453
30	31.15	WM10064-ND	5.03	4.19	3.08	2.61	21039-0475
8” (20.32cm) Unshielded Flat Flex Cable							
6	7.15	WM10065-ND	3.00	2.50	1.84	1.56	21039-0215
8	9.15	WM10066-ND	3.22	2.69	1.97	1.67	21039-0237
10	11.15	WM10067-ND	3.43	2.87	2.10	1.78	21039-0259
12	13.15	WM10068-ND	3.72	3.10	2.28	1.93	21039-0281
14	15.15	WM10069-ND	3.93	3.28	2.41	2.04	21039-0303
16	17.15	WM10070-ND	4.18	3.49	2.56	2.17	21039-0325
18	19.15	WM10071-ND	4.49	3.75	2.75	2.33	21039-0347
20	21.15	WM10072-ND	4.90	4.09	3.00	2.54	21039-0369
22	23.15	WM10073-ND	4.98	4.16	3.05	2.58	21039-0391
24	25.15	WM10074-ND	5.55	4.63	3.40	2.88	21039-0413
26	27.15	WM10075-ND	5.63	4.69	3.44	2.92	21039-0435
28	29.15	WM10076-ND	5.70	4.76	3.49	2.96	21039-0457
30	31.15	WM10077-ND	5.79	4.83	3.54	3.00	21039-0479
10” (25.40cm) Unshielded Flat Flex Cable							
6	7.15	WM10078-ND	3.19	2.66	1.95	1.66	21039-0219
8	9.15	WM10079-ND	3.46	2.89	2.12	1.80	21039-0241
10	11.15	WM10080-ND	3.72	3.11	2.28	1.93	21039-0263
12	13.15	WM10081-ND	4.06	3.39	2.49	2.11	21039-0285
14	15.15	WM10082-ND	4.32	3.61	2.65	2.24	21039-0307
16	17.15	WM10083-ND	4.63	3.86	2.83	2.40	21039-0329
18	19.15	WM10084-ND	5.00	4.17	3.06	2.59	21039-0351
20	21.15	WM10085-ND	5.50	4.59	3.36	2.85	21039-0373
22	23.15	WM10086-ND	5.59	4.67	3.42	2.90	21039-0395
24	25.15	WM10087-ND	6.30	5.25	3.85	3.26	21039-0417
26	27.15	WM10088-ND	6.39	5.33	3.91	3.31	21039-0439
28	29.15	WM10089-ND	6.48	5.41	3.97	3.36	21039-0461
30	31.15	WM10090-ND	6.58	5.49	4.03	3.41	21039-0483
12” (30.48cm) Unshielded Flat Flex Cable							
6	7.15	WM10091-ND	3.39	2.83	2.08	1.76	21039-0221
8	9.15	WM10092-ND	3.70	3.09	2.27	1.92	21039-0243
10	11.15	WM10093-ND	4.01	3.34	2.45	2.08	21039-0265
12	13.15	WM10094-ND	4.40	3.67	2.69	2.28	21039-0287
14	15.15	WM10095-ND	4.72	3.94	2.89	2.45	21039-0309
16	17.15	WM10096-ND	5.07	4.23	3.11	2.63	21039-0331
18	19.15	WM10097-ND	5.52	4.61	3.38	2.86	21039-0353
20	21.15	WM10098-ND	6.10	5.09	3.73	3.16	21039-0375
22	23.15	WM10099-ND	6.22	5.19	3.81	3.22	21039-0397
24	25.15	WM10100-ND	7.05	5.88	4.31	3.66	21039-0419
26	27.15	WM10101-ND	7.16	5.97	4.38	3.71	21039-0441
28	29.15	WM10102-ND	7.26	6.06	4.44	3.77	21039-0463
30	31.15	WM10103-ND	7.38	6.15	4.51	3.83	21039-0485

Micro-Miniature 1.25mm Connectors

1.25mm CONNECTORS: Physical Specifications: • Housing: PBTP, UL 94V-0 • Temperature: -40° to +85°C. UL File No.: E29179 CSA File No.: LR19980 **1.25mm CRIMP TERMINAL: Electrical Specifications:** • Voltage: 125V • Current: 1.0A (0.8A for 32AWG) • Contact Resistance: 20mΩ max. • Dielectric Withstanding Volt.: 250V AC/1 min. • Insulation Resistance: 100MΩ min. **Physical Specifications:** • Contact: Phosphor Bronze • Plating: Tin • Wire Range: 28 to 32 AWG • Insulation Range: 1.00mm dia. max. • Strip Length: 1.40 to 1.90mm

Fig. 1 – 1.25mm Receptacle Housing

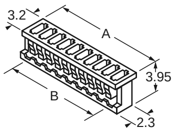


Fig. 2 – 1.25mm Straight Header

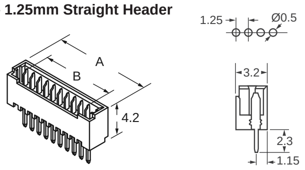


Fig. 3 – 1.25mm Right Angle Header

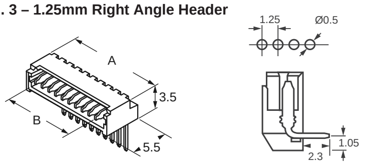


Fig. 4 – 1.25mm SMT Straight Header

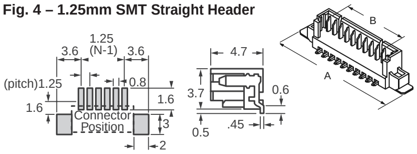


Fig. 5 – 1.25mm SMT Right Angle Header

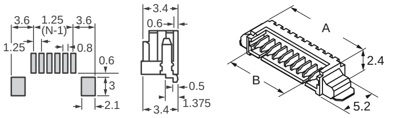


Fig. 6 – Crimp Terminal (Female)

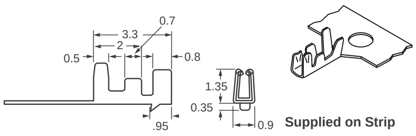


Fig.	Circuits	Dimension (mm)		Digi-Key Part No.	Price Each				Molex Part No.
		A	B		1	10	100	500	
Receptacle Housing									
1	2	4.25	1.25	WM1720-ND	.34	.28	.20	.16	51021-0200
	3	5.50	2.50	WM1721-ND	.38	.32	.23	.18	51021-0300
	4	6.75	3.75	WM1722-ND	.42	.38	.25	.20	51021-0400
	5	8.00	5.00	WM1723-ND	.47	.42	.28	.23	51021-0500
	6	9.25	6.25	WM1724-ND	.51	.43	.31	.25	51021-0600
	7	10.50	7.50	WM1725-ND	.56	.46	.33	.27	51021-0700
	8	11.75	8.75	WM1726-ND	.60	.53	.36	.29	51021-0800
	9	13.00	10.00	WM1727-ND	.64	.57	.38	.31	51021-0900
	10	14.25	11.25	WM1728-ND	.68	.57	.41	.33	51021-1000
	11	15.50	12.50	WM1729-ND	.73	.60	.43	.35	51021-1100
	12	16.75	13.75	WM1730-ND	.77	.64	.46	.37	51021-1200
	13	18.00	15.00	WM17000-ND	.81	.72	.48	.39	51021-1300
	14	19.25	16.25	WM17001-ND	.85	.76	.51	.41	51021-1400
	15	20.50	17.50	WM17002-ND	.89	.79	.53	.42	51021-1500
Straight Header									
2	2	4.25	1.25	WM1731-ND	.42	.35	.25	.20	53047-0210
	3	5.50	2.50	WM1732-ND	.52	.46	.31	.25	53047-0310
	4	6.75	3.75	WM1733-ND	.60	.53	.36	.29	53047-0410
	5	8.00	5.00	WM1734-ND	.75	.63	.45	.36	53047-0510
	6	9.25	6.25	WM1735-ND	.79	.66	.47	.38	53047-0610
	7	10.50	7.50	WM1736-ND	.96	.80	.57	.46	53047-0710
	8	11.75	8.75	WM1737-ND	1.06	.87	.63	.50	53047-0810
	9	13.00	10.00	WM1738-ND	1.08	.96	.64	.51	53047-0910
	10	14.25	11.25	WM1739-ND	1.22	1.08	.72	.58	53047-1010
	11	15.50	12.50	WM1740-ND	1.36	1.20	.80	.64	53047-1110
	12	16.75	13.75	WM1741-ND	1.37	1.22	.81	.65	53047-1210
	13	18.00	15.00	WM17003-ND	1.46	1.30	.87	.69	53047-1310
	14	19.25	16.25	WM17004-ND	1.57	1.39	.93	.74	53047-1410
	15	20.50	17.50	WM17005-ND	1.73	1.53	1.02	.82	53047-1510
Right Angle Header									
3	2	4.25	1.25	WM1742-ND	.48	.42	.28	.23	53048-0210
	3	5.50	2.50	WM1743-ND	.57	.51	.34	.28	53048-0310
	4	6.75	3.75	WM1744-ND	.75	.66	.44	.36	53048-0410
	5	8.00	5.00	WM1745-ND	.84	.70	.50	.40	53048-0510
	6	9.25	6.25	WM1746-ND	.87	.77	.52	.41	53048-0610
	7	10.50	7.50	WM1747-ND	1.04	.92	.62	.50	53048-0710
	8	11.75	8.75	WM1748-ND	1.06	.94	.63	.50	53048-0810
	9	13.00	10.00	WM1749-ND	1.23	1.09	.73	.58	53048-0910
3	10	14.25	11.25	WM1750-ND	1.33	1.18	.79	.63	53048-1010
	11	15.50	12.50	WM1751-ND	1.43	1.27	.85	.68	53048-1110
	12	16.75	13.75	WM1752-ND	1.53	1.35	.90	.72	53048-1210
	13	18.00	15.00	WM17006-ND	1.63	1.44	.96	.77	53048-1310
	14	19.25	16.25	WM17007-ND	1.73	1.53	1.02	.82	53048-1410
	15	20.50	17.50	WM17008-ND	1.84	1.63	1.09	.87	53048-1510
SMT Straight Header									
4	2	7.65	1.25	WM1764-ND	1.25	1.11	.74	.59	53398-0290
	3	8.90	2.50	WM1765-ND	1.49	1.32	.88	.71	53398-0390
	4	10.15	3.75	WM1766-ND	1.65	1.46	.97	.78	53398-0490
	5	11.40	5.00	WM1767-ND	1.82	1.61	1.07	.86	53398-0590
	6	12.65	6.25	WM1768-ND	1.95	1.73	1.15	.92	53398-0690
	7	13.90	7.50	WM1769-ND	2.11	1.74	1.24	1.00	53398-0790
	8	15.15	8.75	WM1770-ND	2.25	1.99	1.33	1.06	53398-0890
	9	16.40	10.00	WM1771-ND	2.40	2.12	1.42	1.13	53398-0990
	10	17.65	11.25	WM1772-ND	2.54	2.25	1.50	1.20	53398-1090
	11	18.90	12.50	WM1773-ND	2.69	2.38	1.59	1.27	53398-1190
	12	20.15	13.75	WM1774-ND	2.85	2.52	1.68	1.35	53398-1290
	13	21.40	15.00	WM17009-ND	3.04	2.69	1.79	1.44	53398-1390
	14	22.65	16.25	WM17010-ND	3.16	2.79	1.86	1.49	53398-1490
	15	23.90	17.50	WM17011-ND	3.23	2.66	1.90	1.52	53398-1590
SMT Right Angle Header									
5	2	7.65	1.25	WM1753-ND	1.31	1.16	.78	.62	53261-0290
	3	8.90	2.50	WM1754-ND	1.57	1.39	.93	.75	53261-0390
	4	10.15	3.75	WM1755-ND	1.71	1.52	1.01	.81	53261-0490
	5	11.40	5.00	WM1756-ND	1.88	1.66	1.11	.89	53261-0590
	6	12.65	6.25	WM1757-ND	2.01	1.78	1.19	.95	53261-0690
	7	13.90	7.50	WM1758-ND	2.16	1.91	1.27	1.02	53261-0790
	8	15.15	8.75	WM1759-ND	2.28	2.02	1.35	1.08	53261-0890
	9	16.40	10.00	WM1760-ND	2.46	2.18	1.45	1.16	53261-0990
	10	17.65	11.25	WM1761-ND	2.60	2.30	1.54	1.23	53261-1090
	11	18.90	12.50	WM1762-ND	2.75	2.43	1.62	1.30	53261-1190
	12	20.15	13.75	WM1763-ND	2.91	2.57	1.71	1.37	53261-1290
	14	22.65	16.25	WM17012-ND	3.22	2.84	1.90	1.52	53261-1490
	15	23.90	17.50	WM17013-ND	3.35	2.96	1.98	1.58	53261-1590
6	Crimp Term., 28-32 AWG			WM1775-ND	—	.06	.05	.04	50058-8000
Prototype Crimp Tool (Molex)				WM9931-ND	170.20 each				63811-0200
Production Crimp Tool (Molex)				WM9932-ND	448.50 each				63811-0000
Contact Extraction Tool (Molex)				WM9933-ND	120.20 each				57072-6000
Housing Extraction Tool (Molex)				WM9934-ND	128.72 each				11-03-0045

Panel Mate 1.25mm Connectors Ultra Low Profile

Physical Specifications:
• Housing: PBTP, UL 94V-0 • Temperature: -40 to +85°C • Contact: Phosphor Bronze • Plating: Gold (Tin/Lead on SMT tails) • Solder Tabs: Phosphor Bronze, Tin/Lead plating

Electrical Specifications:
• Voltage: 125V • Current: 1.0A • Contact Resistance: 20M ohm max. • Dielectric Withstanding Volt: 250V AC • Insulation Resistance: 100M ohm min.

Fig. 1

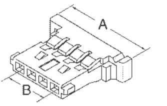


Fig. 2

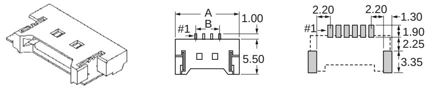


Fig.	Circuits	Dim. (mm)		Digi-Key Part No.	Price Each			Molex Part No.
		A	B		1	10	100	
Receptacle Housing - Ultra Low Profile								
1	2	5.72	1.25	WM5400-ND	.76	.67	.45	51146-0200
	3	6.97	2.50	WM5401-ND	.83	.74	.50	51146-0300
	4	8.22	3.75	WM5402-ND	.93	.82	.55	51146-0400
	5	9.47	5.00	WM5403-ND	1.00	.89	.59	51146-0500
	6	10.72	6.25	WM5404-ND	1.08	.96	.64	51146-0600
	7	11.97	7.50	WM5405-ND	1.19	1.06	.71	51146-0700
	9	14.47	10.00	WM5406-ND	1.38	1.22	.82	51146-0900
	14	20.72	16.25	WM5407-ND	1.83	1.62	1.08	51146-1400

Fig.	Circuits	Dim. (mm)		Digi-Key Part No.	Price Each			Molex Part No.
		A	B		1	10	100	
Right Angle, SMT 1.90mm Profile Header								
2	2	7.65	1.25	WM5500-ND	1.61	1.43	.95	53780-0290
	3	8.90	2.50	WM5501-ND	2.24	1.98	1.32	53780-0390
	5	11.40	5.00	WM5502-ND	2.80	2.48	1.65	53780-0590
	6	12.65	6.25	WM5503-ND	2.94	2.60	1.73	53780-0690
	7	13.90	7.50	WM5504-ND	3.20	2.83	1.89	53780-0790
	9	16.40	10.00	WM5505-ND	3.45	3.05	2.04	53780-0990
Crimp Terminal AWG 28-30				WM5506-ND	.42	.38	.25	50641-8141
Hand Crimper				WM9963-ND	541.30 each			57352-5000

DF12 and DF17 Surface Mount Connectors

DF12 Series - 0.5mm Pitch

Features: • Connectors furnished with reinforcement fittings to prevent peeling of the solder joints (due to mechanical stress) are also available and these can be mounted to FPC with confidence • A specification with convenient guide posts for manual work is available as well as one without guide posts for automatic mounting.

Specifications: • Current Capacity: 0.3A/pin • Rated Voltage: 50V AC/pin • Insulation Resistance: 100V DC, 500 MΩ min. • Withstand Voltage: 1 min. at rated value, 150V AC • Contact Resistance: 100 mA DC, 50 mΩ max.

Material (receptacle/header): • Insulation: Heat-resistant resin, beige (natural), UL94V-0 • Contacts: Copper alloy with gold plating • Fittings: Copper alloy with solder plating.

Fig. 1

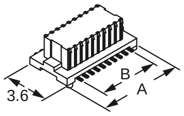


Fig. 2

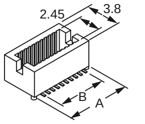


Fig. 3

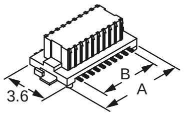


Fig. 4

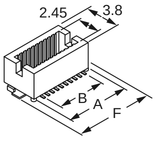


Fig.	No. of Contacts	Description	Dim. (mm) A	Dim. (mm) B	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	Hirose Part No.
Receptacles									
3mm Stacking Height									
1	32	With Guide Posts	10.1	7.5	H2735-ND	1.75	1.27	1.04	DF12A(3.0)-32DS-0.5V(80)
	50		14.6	12.0	H2736-ND	2.15	1.65	1.32	DF12A(3.0)-50DS-0.5V(80)
	60		17.1	14.5	H2737-ND	2.34	1.80	1.44	DF12A(3.0)-60DS-0.5V(80)
3mm Stacking Height									
3	32	With Guide Posts & Reinforced Fittings	11.0	7.5	H1508-ND	1.82	1.32	1.08	DF12A(3.0)-32DS-0.5V(80)
	50		15.5	12.0	H1509-ND	2.18	1.68	1.34	DF12A(3.0)-50DS-0.5V(80)
	60		18.0	14.5	H1510-ND	2.34	1.80	1.44	DF12A(3.0)-60DS-0.5V(80)
3.5 To 5.0mm Stacking Height									
1	20	With Guide Posts	7.1	4.5	H2740-ND	1.56	1.13	.93	DF12A-20DS-0.5V(80)
	30		9.6	7.0	H2741-ND	1.66	1.28	1.02	DF12A-30DS-0.5V(80)
	36		11.1	8.5	H2742-ND	1.82	1.40	1.12	DF12A-36DS-0.5V(80)
	40		12.1	9.5	H2743-ND	1.95	1.50	1.20	DF12A-40DS-0.5V(80)
	50		14.6	12.0	H2744-ND	2.21	1.70	1.36	DF12A-50DS-0.5V(80)
3	20	With Guide Posts & Reinforced Fittings	8.0	4.5	H2745-ND	1.60	1.16	.95	DF12-20DS-0.5V(80)
	30		10.5	7.0	H2746-ND	1.69	1.30	1.04	DF12-30DS-0.5V(80)
	36		12.0	8.5	H2747-ND	1.85	1.43	1.14	DF12-36DS-0.5V(80)
	40		13.0	9.5	H2748-ND	1.95	1.50	1.20	DF12-40DS-0.5V(80)
	50		15.5	12.0	H2749-ND	2.28	1.75	1.40	DF12-50DS-0.5V(80)
Headers									
3mm Stacking Height									
2	32	With Guide Posts	10.2	7.5	H2750-ND	1.69	1.30	1.04	DF12D(3.0)-32DP-0.5V(80)
	50		14.7	12.0	H2751-ND	2.18	1.68	1.34	DF12D(3.0)-50DP-0.5V(80)
	60		17.2	14.5	H2752-ND	2.41	1.85	1.48	DF12D(3.0)-60DP-0.5V(80)
4	32	With Guide Posts & Reinforced Fittings	11.0	7.5	H2753-ND	1.82	1.32	1.08	DF12(3.0)-32DP-0.5V(80)
	50		15.5	12.0	H2754-ND	2.18	1.68	1.34	DF12(3.0)-50DP-0.5V(80)
	60		18.0	14.5	H2755-ND	2.41	1.85	1.48	DF12(3.0)-60DP-0.5V(80)
3.5mm Stacking Height									
2	20	With Guide Posts	7.2	4.5	H2756-ND	1.33	.97	.79	DF12D(3.5)-20DP-0.5V(80)
	36		11.2	8.5	H2757-ND	1.72	1.33	1.06	DF12D(3.5)-36DP-0.5V(80)
	40		12.2	9.5	H2758-ND	1.85	1.43	1.14	DF12D(3.5)-40DP-0.5V(80)
	50		14.7	12.0	H2759-ND	2.18	1.68	1.34	DF12D(3.5)-50DP-0.5V(80)
4	20	With Guide Posts & Reinforced Fittings	8.0	4.5	H2760-ND	1.41	1.02	.84	DF12(3.5)-20DP-0.5V(80)
	36		12.0	8.5	H2761-ND	1.79	1.38	1.10	DF12(3.5)-36DP-0.5V(80)
	40		13.0	9.5	H2762-ND	1.92	1.48	1.18	DF12(3.5)-40DP-0.5V(80)
	50		15.5	12.0	H2763-ND	2.18	1.68	1.34	DF12(3.5)-50DP-0.5V(80)
4.0mm Stacking Height									
2	30	With Guide Posts	9.7	7.0	H2764-ND	1.82	1.32	1.08	DF12D(4.0)-30DP-0.5V(80)
	36		11.2	8.5	H2765-ND	1.72	1.33	1.06	DF12D(4.0)-36DP-0.5V(80)
	40		12.2	9.5	H2766-ND	1.85	1.43	1.14	DF12D(4.0)-40DP-0.5V(80)
	50		14.7	12.0	H2767-ND	2.18	1.68	1.34	DF12D(4.0)-50DP-0.5V(80)
4	30	With Guide Posts & Reinforced Fittings	10.5	7.0	H2768-ND	1.86	1.35	1.11	DF12(4.0)-30DP-0.5V(80)
	36		12.0	8.5	H2769-ND	1.79	1.38	1.10	DF12(4.0)-36DP-0.5V(80)
	40		13.0	9.5	H2770-ND	1.92	1.48	1.18	DF12(4.0)-40DP-0.5V(80)
	50		15.5	12.0	H2771-ND	2.18	1.68	1.34	DF12(4.0)-50DP-0.5V(80)
5.0mm Stacking Height									
2	20	With Guide Posts	7.2	4.5	H2772-ND	1.56	1.13	.93	DF12D(5.0)-20DP-0.5V(80)
	50		14.7	12.0	H2773-ND	2.44	1.88	1.50	DF12D(5.0)-50DP-0.5V(80)
4	20	With Guide Posts & Reinforced Fittings	8.0	4.5	H2774-ND	1.33	.97	.79	DF12(5.0)-20DP-0.5V
	50		15.5	12.0	H2775-ND	2.47	1.90	1.52	DF12(5.0)-50DP-0.5V

DF17 Series - 0.5mm Pitch

Features: • Developed for portable electronic and mobile telecommunications equipment • Designed specifically for mobile electronic devices, these connectors withstand the shock and resist breakage and disconnection that can occur when subjected to drop impact.

Applications: Suited to a wide variety of mobile applications such as LCD-related equipment, miniature portable remote terminals, as well as portable telephones.

Specifications: • Rated Current: 0.3A • Rated Voltage: AC50 • Temperature Range: -35°C to +85°C • Storage Temperature: -10°C to +60°C • Humidity Range: 40-80% • Storage Humidity: 40-70% • Insulation Resistance: 500MΩ or more • Contact Resistance: 50mΩ or less • Vibration Resistance: No instantaneous electric disconnection of 1 µS or more • Humidity Resistance: Contact; 50mΩ or less, Insulation; 250MΩ or more • Temp. Cycle: Contact Resistance; 50mΩ or less, Insulation Resistance; 500MΩ or more • Duration Against Plugging/Unplugging: Contact resistance 50mΩ or less • Heat Resistance of Soldering: No fusion of resin section affecting performance.

Material (receptacle/header): • Insulator: Nylon resin, white, UL94V-0 • Contacts: Phosphor bronze, gold plating • Metal Fittings: Copper Alloy, solder plating.

Fig. 1

Shown with reinforced fittings

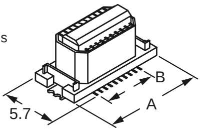


Fig. 2

Shown with reinforced fittings

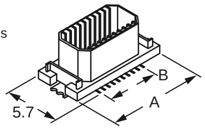


Fig.	No. of Contacts	Description	Dim. (mm) A	Dim. (mm) B	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 25	Cut Tape Price Each 100	T & R* Pricing 1,000	Hirose Part No.
Receptacles										
3mm Stacking Height										
1	20	With Guide Posts & Without Reinforced Fittings	8.2	4.5	H2354CT-ND	1.67	1.21	.99	585.00	DF17A(3.0)-20DS-0.5V(51)
	30		10.7	7.0	H2355CT-ND	1.79	1.38	1.10	732.00	DF17A(3.0)-30DS-0.5V(51)
	40		13.2	9.5	H2356CT-ND	2.11	1.63	1.30	865.00	DF17A(3.0)-40DS-0.5V(51)
	50		15.7	12.0	H2357CT-ND	2.44	1.88	1.50	998.00	DF17A(3.0)-50DS-0.5V(51)
	60		18.2	14.5	H2358CT-ND	2.80	2.15	1.72	1144.00	DF17A(3.0)-60DS-0.5V(51)
	70		20.7	17.0	H2359CT-ND	3.15	2.43	1.94	1290.00	DF17A(3.0)-70DS-0.5V(51)
	80		23.2	19.5	H2360CT-ND	3.10	2.41	1.93	1391.00	DF17A(3.0)-80DS-0.5V(51)
4mm Stacking Height										
1	20	With Guide Posts & Without Reinforced Fittings	8.2	4.5	H2361CT-ND	1.63	1.19	.97	572.00	DF17A(4.0)-20DS-0.5V(51)
	30		10.7	7.0	H2362CT-ND	1.69	1.30	1.04	692.00	DF17A(4.0)-30DS-0.5V(51)
	40		13.2	9.5	H2363CT-ND	2.02	1.55	1.24	825.00	DF17A(4.0)-40DS-0.5V(51)
	50		15.7	12.0	H2364CT-ND	1.63	1.19	.97	572.00	DF17A(4.0)-50DS-0.5V(51)
	60		18.2	14.5	H2365CT-ND	1.69	1.30	1.04	692.00	DF17A(4.0)-60DS-0.5V(51)
	70		20.7	17.0	HR2738CT-ND	3.13	2.43	1.95	1404.00	DF17A(4.0)-70DS-0.5V(51)
	80		23.2	19.5	H2366CT-ND	2.90	2.25	1.80	1300.00	DF17A(4.0)-80DS-0.5V(51)
3mm Stacking Height										
1	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2367CT-ND	1.75	1.27	1.04	612.00	DF17(3.0)-20DS-0.5V(51)
	30		12.5	7.0	H2368CT-ND	1.82	1.40	1.12	745.00	DF17(3.0)-30DS-0.5V(51)
	40		15.0	9.5	H2369CT-ND	2.15	1.65	1.32	878.00	DF17(3.0)-40DS-0.5V(51)
	50		17.5	12.0	H2370CT-ND	2.50	1.93	1.54	1024.00	DF17(3.0)-50DS-0.5V(51)
	60		20.0	14.5	H2371CT-ND	2.83	2.18	1.74	1157.00	DF17(3.0)-60DS-0.5V(51)
	70		22.5	17.0	H2372CT-ND	3.19	2.45	1.96	1303.00	DF17(3.0)-70DS-0.5V(51)
	80		25.0	19.5	H2373CT-ND	3.13	2.43	1.95	1404.00	DF17(3.0)-80DS-0.5V(51)
4mm Stacking Height										
1	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2374CT-ND	1.67	1.21	.99	585.00	DF17(4.0)-20DS-0.5V(51)
	30		12.5	7.0	H2375CT-ND	1.76	1.35	1.08	718.00	DF17(4.0)-30DS-0.5V(51)
	40		15.0	9.5	H2376CT-ND	2.05	1.58	1.26	838.00	DF17(4.0)-40DS-0.5V(51)
	50		17.5	12.0	H2377CT-ND	2.34	1.80	1.44	958.00	DF17(4.0)-50DS-0.5V(51)
	60		20.0	14.5	H2378CT-ND	2.67	2.05	1.64	1091.00	DF17(4.0)-60DS-0.5V(51)
	80		25.0	19.5	H2379CT-ND	2.93	2.28	1.82	1313.00	DF17(4.0)-80DS-0.5V(51)
Headers										
2mm Stacking Height										
2	20	With Guide Posts & Without Reinforced Fittings	8.2	4.5	H2380CT-ND	1.79	1.30	1.06	625.00	DF17A(2.0)-20DP-0.5V(51)
	30		10.7	7.0	H2381CT-ND	1.89	1.45	1.16	771.00	DF17A(2.0)-30DP-0.5V(51)
	40		13.2	9.5	H2382CT-ND	2.24	1.73	1.38	918.00	DF17A(2.0)-40DP-0.5V(51)
	50		15.7	12.0	H2383CT-ND	2.60	2.00	1.60	1064.00	DF17A(2.0)-50DP-0.5V(51)
	60		18.2	14.5	H2384CT-ND	2.96	2.28	1.82	1210.00	DF17A(2.0)-60DP-0.5V(51)
	70		20.7	17.0	H2385CT-ND	2.99	2.32	1.86	1339.00	DF17A(2.0)-70DP-0.5V(51)
	80		23.2	19.5	H2386CT-ND	3.31	2.57	2.06	1482.00	DF17A(2.0)-80DP-0.5V(51)
4mm Stacking Height										
2	20	With Guide Posts & Without Reinforced Fittings	8.2	4.5	H2387CT-ND	1.86	1.35	1.11	652.00	DF17A(4.0)-20DP-0.5V(51)
	30		10.7	7.0	H2388CT-ND	1.95	1.50	1.20	798.00	DF17A(4.0)-30DP-0.5V(51)
	40		13.2	9.5	H2389CT-ND	2.34	1.80	1.44	958.00	DF17A(4.0)-40DP-0.5V(51)
	50		15.7	12.0	H2390CT-ND	2.86	2.20	1.76	1170.00	DF17A(4.0)-50DP-0.5V(51)
	60		18.2	14.5	H2391CT-ND	3.09	2.38	1.90	1264.00	DF17A(4.0)-60DP-0.5V(51)
	70		20.7	17.0	H2392CT-ND	3.13	2.43	1.95	1404.00	DF17A(4.0)-70DP-0.5V(51)
	80		23.2	19.5	H2393CT-ND	3.45	2.68	2.15	1547.00	DF17A(4.0)-80DP-0.5V(51)
2mm Stacking Height										
2	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2394CT-ND	1.86	1.35	1.11	652.00	DF17(2.0)-20DP-0.5V(51)
	30		12.5	7.0	H2395CT-ND	1.95	1.50	1.20	798.00	DF17(2.0)-30DP-0.5V(51)
	40		15.0	9.5	H2396CT-ND	2.31	1.78	1.42	944.00	DF17(2.0)-40DP-0.5V(51)
	50		17.5	12.0	H2397CT-ND	2.67	2.05	1.64	1091.00	DF17(2.0)-50DP-0.5V(51)
	60		20.0	14.5	H2398CT-ND	3.02	2.33	1.86	1237.00	DF17(2.0)-60DP-0.5V(51)
	70		22.5	17.0	H2399CT-ND	3.02	2.34	1.88	1352.00	DF17(2.0)-70DP-0.5V(51)
	80		25.0	19.5	H2400CT-ND	3.34	2.59	2.07	1495.00	DF17(2.0)-80DP-0.5V(51)
4mm Stacking Height										
2	20	With Guide Posts & With Reinforced Fittings	10.0	4.5	H2401CT-ND	1.63	1.25	1.00	665.00	DF17(4.0)-20DP-0.5V(51)
	30		12.5	7.0	H2402CT-ND	2.02	1.55	1.24	825.00	DF17(4.0)-30DP-0.5V(51)
	40		15.0	9.5	H2403CT-ND	2.37	1.83	1.46	971.00	DF17(4.0)-40DP-0.5V(51)
	50		17.5	12.0	H2404CT-ND	2.93	2.25	1.80	1197.00	DF17(4.0)-50DP-0.5V(51)
	60		20.0	14.5	H2405CT-ND	3.12	2.40	1.92	1277.00	DF17(4.0)-60DP-0.5V(51)
	70		22.5	17.0	H2406CT-ND	3.16	2.46	1.97	1417.00	DF17(4.0)-70DP-0.5V(51)
	80		25.0	19.5	H2407CT-ND	3.51	2.73	2.18	1573.00	DF17(4.0)-80DP-0.5V(51)

* For Tape and Reel Part No., change “CT-ND” to “TR-ND”.

HIROSE ELECTRIC CO.,LTD.

FX6 Series - Surface Mount

0.8mm Connectors

Fig. 1

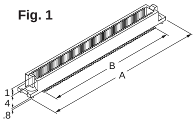
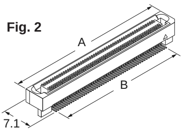


Fig. 2



Features: This small-sized, lightweight type has approximately one quarter the weight and one half the mounting volume compared to half-pitch connectors (1.27mm Pitch) available until now. Stacking height can be set from 5 to 9mm in 1mm steps. Though these are low profile type connectors, the effective length of engagement is long at 1.7mm, which affords a fit with leeway.
Applications: Notebook computers, personal terminals and other office automation equipment. Equipment that calls for miniaturization and lighter weight.
Material: • Insulator: PPS resign, Light brown, UL94V-0 **• Header/Recept. pins:** Phosphor bronze **• Contacts:** Gold plating **• Leads:** Tin plating
Electrical: • Current capacity: 0.5 A **• Rated voltage:** 100 V AC **• Insulation resistance:** 250 V DC, 1,000 MΩ or more • Withstand voltage for 1 minute at specified value 300V AC **• Contact resistance:** 100 mA DC 40mΩ or less

Fig.	No. of Pins	Dimensions (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
4mm Vertical Header with Positioning Boss								
1	20	15.8	7.2	H2408-ND	2.15	1.65	1.32	FX6-20P-0.8SV
	40	23.8	15.2	H2409-ND	3.06	2.35	1.88	FX6-40P-0.8SV
	50	27.8	19.2	H2410-ND	3.00	2.40	1.86	FX6-50P-0.8SV
	60	31.8	23.2	H2411-ND	3.38	2.71	2.10	FX6-60P-0.8SV
	80	39.8	31.2	H2412-ND	4.10	3.28	2.54	FX6-80P-0.8SV
	100	47.8	39.2	H2413-ND	4.90	3.92	3.03	FX6-100P-0.8SV
4mm Vertical Header without Positioning Boss								
1	20	15.8	7.2	H2438-ND	2.15	1.65	1.32	FX6A-20P-0.8SV
	40	23.8	15.2	H2439-ND	3.06	2.35	1.88	FX6A-40P-0.8SV
	50	27.8	19.2	H2440-ND	3.00	2.40	1.86	FX6A-50P-0.8SV
	60	31.8	23.2	H2441-ND	3.38	2.71	2.10	FX6A-60P-0.8SV
	80	39.8	31.2	H2442-ND	4.10	3.28	2.54	FX6A-80P-0.8SV
	100	47.8	39.2	H2443-ND	4.90	3.92	3.03	FX6A-100P-0.8SV
5mm Vertical Header with Positioning Boss								
1	60	31.8	23.2	H2417-ND	4.13	3.30	2.55	FX6-60P-0.8SV1
5mm Vertical Header without Positioning Boss								
1	20	15.8	7.2	H2444-ND	2.89	2.23	1.78	FX6A-20P-0.8SV1
	40	23.8	15.2	H2445-ND	3.30	2.64	2.04	FX6A-40P-0.8SV1
	60	31.8	23.2	H2447-ND	4.13	3.30	2.55	FX6A-60P-0.8SV1
6mm Vertical Header with Positioning Boss								
1	100	47.8	39.2	H2425-ND	5.78	4.62	3.57	FX6-100P-0.8SV2
6mm Vertical Header without Positioning Boss								
1	50	27.8	19.2	H2452-ND	3.71	2.97	2.30	FX6A-50P-0.8SV2
	60	31.8	23.2	H2453-ND	4.13	3.30	2.55	FX6A-60P-0.8SV2
4mm Vertical Receptacle with Positioning Boss								
2	20	15.8	7.2	H2426-ND	2.31	1.78	1.42	FX6-20S-0.8SV
	40	23.8	15.2	H2427-ND	2.81	2.25	1.74	FX6-40S-0.8SV
	50	27.8	19.2	H2428-ND	3.22	2.58	1.99	FX6-50S-0.8SV
	60	31.8	23.2	H2429-ND	3.63	2.91	2.25	FX6-60S-0.8SV
	80	39.8	31.2	H2430-ND	4.51	3.61	2.79	FX6-80S-0.8SV
	100	47.8	39.2	H2431-ND	5.34	4.27	3.30	FX6-100S-0.8SV
4mm Vertical Receptacle without Positioning Boss								
2	20	15.8	7.2	H2456-ND	2.31	1.78	1.42	FX6A-20S-0.8SV
	40	23.8	15.2	H2457-ND	2.81	2.25	1.74	FX6A-40S-0.8SV
	50	27.8	19.2	H2458-ND	3.22	2.58	1.99	FX6A-50S-0.8SV
	60	31.8	23.2	H2459-ND	3.63	2.91	2.25	FX6A-60S-0.8SV
	80	39.8	31.2	H2460-ND	4.51	3.61	2.79	FX6A-80S-0.8SV
	100	47.8	39.2	H2461-ND	5.34	4.27	3.30	FX6A-100S-0.8SV
6mm Vertical Receptacle with Positioning Boss								
2	20	15.8	7.2	H2432-ND	3.08	2.47	1.91	FX6-20S-0.8SV2
	40	23.8	15.2	H2433-ND	3.99	3.19	2.47	FX6-40S-0.8SV2
	50	27.8	19.2	H2434-ND	4.43	3.55	2.74	FX6-50S-0.8SV2
	60	31.8	23.2	H2435-ND	4.90	3.92	3.03	FX6-60S-0.8SV2
	80	39.8	31.2	H2436-ND	5.78	4.62	3.57	FX6-80S-0.8SV2
	100	47.8	39.2	H2437-ND	6.71	5.37	4.15	FX6-100S-0.8SV2
6mm Vertical Receptacle without Positioning Boss								
2	40	23.8	15.2	H2463-ND	3.99	3.19	2.47	FX6A-40S-0.8SV2
	50	27.8	19.2	H2464-ND	4.43	3.55	2.74	FX6A-50S-0.8SV2
	60	31.8	23.2	H2465-ND	4.90	3.92	3.03	FX6A-60S-0.8SV2
	80	39.8	31.2	H2466-ND	5.78	4.62	3.57	FX6A-80S-0.8SV2
	100	47.8	39.2	H2467-ND	6.71	5.37	4.15	FX6A-100S-0.8SV2

HIROSE ELECTRIC CO.,LTD.

FX11L Series -Surface Mount

0.5mm Conn. with Ground Plate for 2mm Board-to-Board Connections

Fig.1

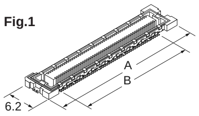
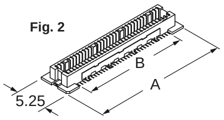


Fig. 2



Features: Low Profile Design. The board-to-board mating height of 2mm suits smaller, thinner case designs. Improved transmission efficiency between boards. Transmission characteristics have been improved through a design that fixes ground plates to both sides of the header and receptacle. Signal and ground are arranged in a ratio of 10:1 with the ground plate SMT connected to the board. The ground stability achieved serves to reduce noise. Suited to High-Density Applications. The signal contact pitch of 0.5mm produces a smaller connector utilizing less board area for mounting.
Applications: Notebook computers, PDA, and other miniature electronic equipment.
Material: • Insulator: LCP resign, Beige, UL94V-0 **• Contacts:** Copper alloy **• Header:** Phosphor bronze **• Receptacle:** Engagement area: Gold plating of 0.1 µm Termination Area: Flash plating Ground plate: Phosphor bronze solder plating **• Reinforced fitting/plate:** Phosphor bronze, Tin plating
Electrical: • Rated current: 0.3 A, operating temperature range -55 to 80°C **• Rated voltage:** 50 V AC **• Operating humidity range**: Relative humidity 95% or less (No condensation)

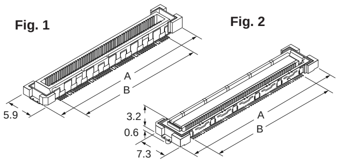
Fig.	No. of Contacts Signal	Ground	Dimensions (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Headers with Ground Plate, with Guideposts									
2	60	6	22.6	17.5	H2517-ND	4.29	3.44	2.66	FX11LA-60P/6-SV
	80	8	28.6	23.5	H2518-ND	4.76	3.81	2.95	FX11LA-80P/8-SV
	100	10	34.6	29.5	H2519-ND	5.23	4.18	3.23	FX11LA-100P/10-SV
	120	12	40.6	35.5	H2520-ND	5.72	4.58	3.54	FX11LA-120P/12-SV
Headers with Ground Plate, without Guideposts									
2	60	6	22.6	17.5	H2521-ND	4.29	3.44	2.66	FX11LB-60P/6-SV
	80	8	28.6	23.5	H2522-ND	4.76	3.81	2.95	FX11LB-80P/8-SV
	100	10	34.6	29.5	H2523-ND	5.23	4.18	3.23	FX11LB-100P/10-SV
	120	12	40.6	35.5	H2524-ND	5.72	4.58	3.54	FX11LB-120P/12-SV
Headers without Ground Plate, with Guideposts									
2	68	–	22.6	16.5	H2533-ND	3.38	2.71	2.10	FX11LA-68P-SV
	92	–	28.6	22.5	H2534-ND	3.80	3.04	2.35	FX11LA-92P-SV
	116	–	34.6	28.5	H2535-ND	4.18	3.35	2.59	FX11LA-116P-SV
	140	–	40.6	34.5	H2536-ND	4.59	3.68	2.84	FX11LA-140P-SV
Headers without Ground Plate, without Guideposts									
2	68	–	22.6	16.5	H2537-ND	3.38	2.71	2.10	FX11LB-68P-SV
	92	–	28.6	22.5	H2538-ND	3.80	3.04	2.35	FX11LB-92P-SV
	116	–	34.6	28.5	H2539-ND	4.18	3.35	2.59	FX11LB-116P-SV
	140	–	40.6	34.5	H2540-ND	4.59	3.68	2.84	FX11LB-140P-SV
Receptacles with Ground Plate, with Guideposts									
1	60	6	25	17.5	H2525-ND	4.48	3.59	2.78	FX11LA-60S/6-SV
	80	8	31	23.5	H2526-ND	4.95	3.96	3.06	FX11LA-80S/8-SV
	100	10	37	29.5	H2527-ND	5.45	4.36	3.37	FX11LA-100S/10-SV
	120	12	43	35.5	H2528-ND	5.94	4.76	3.68	FX11LA-120S/12-SV
Receptacles with Ground Plate, without Guideposts									
1	60	6	25	17.5	H2529-ND	4.48	3.59	2.78	FX11LB-60S/6-SV
	80	8	31	23.5	H2530-ND	4.95	3.96	3.06	FX11LB-80S/8-SV
	100	10	37	29.5	H2531-ND	5.45	4.36	3.37	FX11LB-100S/10-SV
	120	12	43	35.5	H2532-ND	5.94	4.76	3.68	FX11LB-120S/12-SV
Receptacles without Ground Plate, with Guideposts									
1	68	–	25	16.5	H2541-ND	4.07	3.26	2.52	FX11LA-68S-SV
	92	–	31	22.5	H2542-ND	4.51	3.61	2.79	FX11LA-92S-SV
	116	–	37	28.5	H2543-ND	5.01	4.01	3.10	FX11LA-116S-SV
	140	–	43	34.5	H2544-ND	5.47	4.38	3.39	FX11LA-140S-SV
Receptacles without Ground Plate, without Guideposts									
1	68	–	25	16.5	H2545-ND	4.07	3.26	2.52	FX11LB-68S-SV
	92	–	31	22.5	H2546-ND	4.51	3.61	2.79	FX11LB-92S-SV
	116	–	37	28.5	H2547-ND	5.01	4.01	3.10	FX11LB-116S-SV
	140	–	43	34.5	H2548-ND	5.47	4.38	3.39	FX11LB-140S-SV

HIROSE ELECTRIC CO.,LTD.

FX6 Series - Surface Mount 0.5mm Conn. with Ground Plate for Board-to-Board Connectors

Fig. 1

Fig. 2



Features: Transmission characteristics have been improved through a design that fixes ground plates to both sides of the header and receptacle.
Signal and ground are arranged in a ratio of 10:1 with the ground plate SMT connected to the board. The ground stability achieved serves to reduce noise. Suited to high-density applications. The single contact pitch of 0.5mm produces a smaller connector utilizing less board area for mounting. Board-to-Board dimensions of 4mm and 5mm are available.
Materials: • Insulator: LCP resin, Beige, UL94V-0 **• Contacts:** Phosphor bronze **• Header Engagement Area:** Gold plating of 0.1µm **• Termination Area:** Solder plating **• Receptacle Engagement Area:** Gold plating of 0.1m **• Termination Area:** Flash plating Ground plate: Phosphor bronze, solder plating **• Reinforced fitting:** Phosphor bronze, Tin plating
Electrical: • Rated current: 0.3A **• Operating temp.:** range -55 to 85°C **• Rated voltage:** 50 V AC **• Operating humidity range:** Relative humidity 95% or less (No condensation)
Note: The thickness of the solder paste is not included in the stack height.

Fig.	No. of Contacts Signal	Ground	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.	Digi-Key Part No.	T&R Pricing 1,000	Hirose Part No.
Headers 4mm Mounting Height with Guidepost												
1	80	8	31.1	23.5	H2476-ND	5.94	4.76	3.68	FX10A- 80P/8-SV	H2476TR-ND	2288.00	FX10A- 80P/8-SV(21)
	100	10	37.1	29.5	H2477-ND	6.57	5.26	4.07	FX10A-100P/10-SV	H2477TR-ND	2535.00	FX10A-100P/10-SV(21)
	120	12	43.1	35.5	H2478-ND	4.43	3.55	2.74	FX10A-120P/12-SV	H2478TR-ND	2769.00	FX10A-120P/12-SV(21)
	140	14	49.1	41.5	H2479-ND	7.13	5.99	4.71	FX10A-140P/14-SV	H2479TR-ND	3042.00	FX10A-140P/14-SV(21)
Headers 4mm Mounting Height without Guidepost												
1	80	8	31.1	23.5	H2480-ND	5.94	4.76	3.68	FX10B- 80P/8-SV	H2480TR-ND	2288.00	FX10B- 80P/8-SV(21)
	100	10	37.1	29.5	H2481-ND	6.57	5.26	4.07	FX10B-100P/10-SV	H2481TR-ND	2535.00	FX10B-100P/10-SV(21)
	120	12	43.1	35.5	H2482-ND	6.53	5.49	4.31	FX10B-120P/12-SV	H2482TR-ND	2769.00	FX10B-120P/12-SV(21)
	140	14	49.1	41.5	H2483-ND	7.13	5.99	4.71	FX10B-140P/14-SV	H2483TR-ND	3029.00	FX10B-140P/14-SV(21)
Headers 5mm Mounting Height with Guidepost												
1	80	8	31.1	23.5	H2484-ND	5.94	4.76	3.68	FX10A- 80P/8-SV1	H2484TR-ND	2288.00	FX10A- 80P/8-SV1(21)
	100	10	37.1	29.5	H2485-ND	6.57	5.26	4.07	FX10A-100P/10-SV1	H2485TR-ND	2535.00	FX10A-100P/10-SV1(21)
	120	12	43.1	35.5	H2486-ND	6.53	5.49	4.31	FX10A-120P/12-SV1	H2486TR-ND	2769.00	FX10A-120P/12-SV1(21)
	140	14	49.1	41.5	H2487-ND	7.13	5.99	4.71	FX10A-140P/14-SV1	H2487TR-ND	3042.00	FX10A-140P/14-SV1(21)
Headers 5mm Mounting Height without Guidepost												
1	80	8	31.1	23.5	H2488-ND	5.94	4.76	3.68	FX10B- 80P/8-SV1	H2488TR-ND	2288.00	FX10B- 80P/8-SV1(21)
	100	10	37.1	29.5	H2489-ND	6.57	5.26	4.07	FX10B-100P/10-SV1	H2489TR-ND	2535.00	FX10B-100P/10-SV1(21)
	120	12	43.1	35.5	H2490-ND	6.53	5.49	4.31	FX10B-120P/12-SV1	H2490TR-ND	2769.00	FX10B-120P/12-SV1(21)
	140	14	49.1	41.5	H2491-ND	7.13	5.99	4.71	FX10B-140P/14-SV1	H2491TR-ND	3042.00	FX10B-140P/14-SV1(21)
Receptacles with Guidepost												
2	80	8	31.1	23.5	H2468-ND	5.97	4.78	3.69	FX10A-80S/8-SV	H2468TR-ND	2314.00	FX10A-80S/8-SV(21)
	100	10	37.1	29.5	H2469-ND	6.68	5.35	4.14	FX10A-100S/10-SV	H2469TR-ND	2574.00	FX10A-100S/10-SV(21)
	120	12	43.1	35.5	H2470-ND	6.80	5.72	4.49	FX10A-120S/12-SV	H2470TR-ND	2873.00	FX10A-120S/12-SV(21)
	140	14	49.1	41.5	H2471-ND	7.48	6.28	4.94	FX10A-140S/14-SV	H2471TR-ND	3172.00	FX10A-140S/14-SV(21)
Receptacles without Guidepost												
2	80	8	31.1	23.5	H2472-ND	5.97	4.78	3.69	FX10B- 80S/8-SV	H2472TR-ND	2314.00	FX10B- 80S/8-SV(21)
	100	10	37.1	29.5	H2473-ND	6.68	5.35	4.14	FX10B-100S/10-SV	H2473TR-ND	2574.00	FX10B-100S/10-SV(21)
	120	12	43.1	35.5	H2474-ND	6.71	5.37	4.15	FX10B-120S/12-SV	H2474TR-ND	2873.00	FX10B-120S/12-SV(21)
	140	14	49.1	41.5	H2475-ND	7.48	6.28	4.94	FX10B-140S/14-SV	H2475TR-ND	3172.00	FX10B-140S/14-SV(21)

HIROSE
ELECTRIC
CO.,LTD.

1.25mm Connectors

DF13 Series

DF13 Series is 1.25mm pitch, compact "PCB-to-Wire" Nylon Connectors best suited for high density applications requiring reduced cost production, and light-weight.

Electrical Specifications: • Current Capacity: 1A • Rated Voltage: AC150V • Insulation Resistance: Condition: DC100, Standard Value: Minimum 500MΩ • Withstanding Voltage: Condition: At specified value, Standard Value: AC500V. • Contact Resistance: Condition: At DC0.1A, Standard Value: Max. 30mΩ.

Material & Finish: Pin Header Insulator: Polyimide resin, beige, UL94V-0. Pin Header Contact: Brass, tin plating. Pin Header Hardware: Brass, tin plating. Crimp Socket Insulator: Polyimide resin, beige, UL94V-0. Crimp Socket Contact: Phosphor bronze, tin plating.

Fig. 1

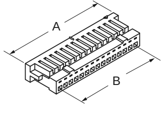


Fig. 2

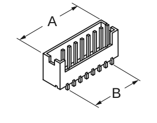


Fig. 3

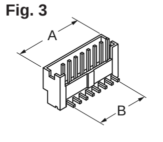


Fig. 4 — SMT

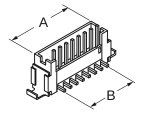


Fig. 5 — SMT

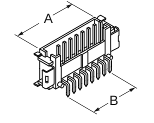


Fig. 6

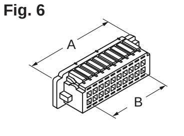


Fig. 7 — SMT

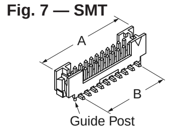


Fig. 8 — SMT

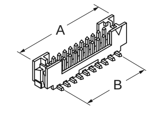
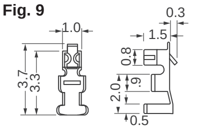


Fig. 9



No. of Pins	Dim. (mm) A	B	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.
Fig. 1 — Single Row Crimp Socket Connectors							
2	4.15	1.25	H2179-ND	.33	3.57	10.07	DF13-2S-1.25C
3	5.40	2.50	H2180-ND	.34	3.73	10.53	DF13-3S-1.25C
4	6.65	3.75	H2181-ND	.34	4.06	12.13	DF13-4S-1.25C
5	7.90	5.00	H2182-ND	.35	4.24	12.65	DF13-5S-1.25C
6	9.15	6.25	H2183-ND	.37	4.39	13.10	DF13-6S-1.25C
7	10.40	7.50	H2184-ND	.38	4.54	13.55	DF13-7S-1.25C
8	11.65	8.75	H2185-ND	.55	6.52	19.48	DF13-8S-1.25C
10	14.15	11.25	H2186-ND	.41	6.14	19.22	DF13-10S-1.25C
11	15.40	12.50	H2187-ND	.43	6.49	20.33	DF13-11S-1.25C
12	16.65	13.75	H2188-ND	.44	6.63	20.77	DF13-12S-1.25C
14	19.15	16.25	H2189-ND	.48	7.18	22.49	DF13-14S-1.25C
15	20.40	17.50	H2259-ND	.49	7.31	22.89	DF13-15S-1.25C
Fig. 2 — Single Row Connectors — Vertical Pin Header							
2	4.15	1.25	H2191-ND	.44	5.27	15.73	DF13-2P-1.25DSA
3	5.40	2.50	H2192-ND	.54	6.43	19.20	DF13-3P-1.25DSA
4	6.65	3.75	H2193-ND	.50	7.55	23.64	DF13-4P-1.25DSA
5	7.90	5.00	H2194-ND	.57	8.56	26.81	DF13-5P-1.25DSA
6	9.15	6.25	H2195-ND	.64	9.59	30.03	DF13-6P-1.25DSA
7	10.40	7.50	H2196-ND	.71	10.63	33.30	DF13-7P-1.25DSA
8	11.65	8.75	H2197-ND	.67	12.11	39.65	DF13-8P-1.25DSA
10	14.15	11.25	H2198-ND	.77	13.99	45.79	DF13-10P-1.25DSA
12	16.65	13.75	H2320-ND	1.03	18.63	60.98	DF13-12P-1.25DSA
14	19.15	16.25	H2321-ND	1.07	19.40	63.50	DF13-14P-1.25DSA
15	20.40	17.50	H2322-ND	1.22	22.05	72.16	DF13-15P-1.25DSA
Fig. 3 — Single Row Connectors — Right Angle Pin Header							
2	4.15	1.25	H2199-ND*	.48	5.78	17.25	DF13-2P-1.25DS(20)
3	5.40	2.50	H2260-ND*	.43	6.45	20.21	DF13-3P-1.25DS(20)
4	6.65	3.75	H2201-ND*	.56	8.40	26.32	DF13-4P-1.25DS(20)
5	7.90	5.00	H2202-ND*	.64	9.60	30.08	DF13-5P-1.25DS(20)
6	9.15	6.25	H2203-ND*	.72	10.80	33.84	DF13-6P-1.25DS(20)
7	10.40	7.50	H2204-ND*	.61	11.00	36.00	DF13-7P-1.25DS(20)
8	11.65	8.75	H2205-ND*	.74	13.48	44.10	DF13-8P-1.25DS(20)
10	14.15	11.25	H2206-ND*	.87	15.68	51.30	DF13-10P-1.25DS(20)
12	16.65	13.75	H2323-ND*	1.01	18.22	59.63	DF13-12P-1.25DS(20)
14	19.15	16.25	H2324-ND*	1.12	20.35	66.60	DF13-14P-1.25DS(20)
15	20.40	17.50	H2325-ND*	1.18	21.31	69.75	DF13-15P-1.25DS(20)
Fig. 4 — Single Row Connectors — SMT-Compatible Vertical Pin Header							
2	4.15	1.25	H2207-ND*	.69	10.28	32.20	DF13-2P-1.25V(20)
3	5.40	2.50	H2208-ND*	.71	10.65	33.37	DF13-3P-1.25V(20)
4	6.65	3.75	H2209-ND*	.60	10.86	35.55	DF13-4P-1.25V(20)
5	7.90	5.00	H2210-ND*	.62	11.21	36.68	DF13-5P-1.25V(20)
6	9.15	6.25	H2211-ND*	.69	12.44	40.73	DF13-6P-1.25V(20)
7	10.40	7.50	H2212-ND*	.76	13.68	44.78	DF13-7P-1.25V(20)
8	11.65	8.75	H2213-ND*	.90	16.36	53.55	DF13-8P-1.25V(20)
10	14.15	11.25	H2214-ND*	1.04	18.84	61.65	DF13-10P-1.25V(20)
11	15.40	12.50	H2215-ND*	1.12	20.28	66.38	DF13-11P-1.25V(20)
12	16.65	13.75	H2216-ND*	1.19	21.59	70.65	DF13-12P-1.25V(20)
14	19.15	16.25	H2217-ND*	1.35	24.34	79.65	DF13-14P-1.25V(20)
15	20.40	17.50	H2218-ND*	1.41	25.51	83.48	DF13-15P-1.25V(20)
Fig. 5 — Single Row Connectors — SMT-Compatible Right Angle Pin Header							
2	4.15	1.25	H2219-ND*	.53	7.95	24.91	DF13-2P-1.25H(20)
3	5.40	2.50	H2220-ND*	.60	8.93	27.97	DF13-3P-1.25H(20)
4	6.65	3.75	H2221-ND*	.71	10.65	33.37	DF13-4P-1.25H(20)
5	7.90	5.00	H2222-ND*	.59	10.66	34.88	DF13-5P-1.25H(20)
6	9.15	6.25	H2223-ND*	.65	11.83	38.70	DF13-6P-1.25H(20)
7	10.40	7.50	H2224-ND*	.71	12.93	42.30	DF13-7P-1.25H(20)
8	11.65	8.75	H2225-ND*	.86	15.54	50.85	DF13-8P-1.25H(20)
10	14.15	11.25	H2226-ND*	.99	17.94	58.73	DF13-10P-1.25H(20)
11	15.40	12.50	H2227-ND*	1.03	18.56	60.75	DF13-11P-1.25H(20)
12	16.65	13.75	H2228-ND*	1.13	20.49	67.05	DF13-12P-1.25H(20)
14	19.15	16.25	H2229-ND*	1.28	23.10	75.60	DF13-14P-1.25H(20)
15	20.40	17.50	H2230-ND*	1.33	24.13	78.98	DF13-15P-1.25H(20)
Fig. 6 — Dual Row Crimp Socket Connectors							
10	10.40	5.00	H2231-ND	.30	3.58	10.68	DF13-10DS-1.25C
20	16.65	11.25	H2232-ND	.36	4.35	12.98	DF13-20DS-1.25C
30	22.90	17.50	H2233-ND	.43	5.12	15.28	DF13-30DS-1.25C
40	29.15	23.75	H2234-ND	.49	5.83	17.40	DF13-40DS-1.25C
Fig. 7 — Dual Row Sockets, Straight Pin Headers with Guide Posts - SMT (gold)							
10	12.10	5.00	H2235-ND*	1.23	22.28	72.90	DF13-10DP-1.25V(50)
20	18.35	11.25	H2236-ND*	1.76	33.81	108.20	DF13-20DP-1.25V(50)
30	24.60	17.50	H2237-ND*	2.36	45.31	145.00	DF13-30DP-1.25V(50)
40	30.85	23.75	H2238-ND*	3.04	58.38	186.80	DF13-40DP-1.25V(50)
Fig. 8 — Dual Row Sockets, Straight Pin Headers with Guide Posts - SMT (gold)							
10	12.10	5.00	H2239-ND*	1.23	22.28	72.90	DF13A-10DP-1.25V(50)
20	18.35	11.25	H2240-ND*	1.76	33.81	108.20	DF13A-20DP-1.25V(50)
30	24.60	17.50	H2241-ND*	2.36	45.31	145.00	DF13A-30DP-1.25V(50)
40	30.85	23.75	H2242-ND*	3.04	58.38	186.80	DF13A-40DP-1.25V(50)
Fig. 9 — Socket Crimp Terminal							
Socket Crimp Contacts, Tin Plating, AWG 26-30			H9992-ND		3.56/100		DF13-2630SCF
Socket Crimp Contacts, Gold Plating, AWG 26-30			H9991-ND		5.49/100		DF13-2630SCFA
Crimp Tool for DF13			H9994-ND		973.08 ea.		DF13-TB2630HC

* (20) indicates tin plating; (50) indicates gold plating.

1mm Connectors

DF9 Series

SMT (w/Reinforced Hardware) 1mm Center Line Board-to-Board Connector

Fig. 1

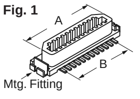
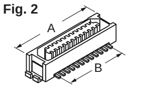


Fig. 2



• 4.3mm mated height between PCBs. Insulator is manufactured from polyimide to withstand the high temperatures resulting from VPS, IR, and Heat blow soldering. PCB contact is a "Gull-Wing" type design to ensure reliable performance. Designed to control and accept dimensional changes by thermo-elasticity. Reinforcement hardware is provided to eliminate mechanical stress to solder joints during mating and unmating cycles.

Electrical: • Rated Current: 0.5A • Rated Voltage: AC150V • Insulation Resistance: Condition: DC100V, Standard Value: Min. 500MΩ • Withstanding Voltage: Condition: At standard value, Standard Value: 50m or less • Contact Resistance: Condition: At 0.1 ADC, Standard Value: 50m or less.

Material & Finish: • Receptacle Header Insulator: Polyimide resin, beige (natural), UL94V-0 • Receptacle Header Connector: Phosphor bronze, tin plating • Receptacle Header Fitting: Brass, tin plating.

No. of Pins	Dim. (mm) A	B	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.*
Fig. 1 — Receptacle with Guide Post							
9	8.30	3.00	H2152-ND	1.76	33.75	108.00	DF9-9S-1V(20)
11	9.30	4.00	H2153-ND	1.69	32.50	104.00	DF9-11S-1V(20)
13	10.30	5.00	H2154-ND	1.98	38.13	122.00	DF9-13S-1V(20)
15	11.30	6.00	H2155-ND	1.79	32.31	105.75	DF9-15S-1V(20)
17	12.30	7.00	H2156-ND	2.24	43.13	138.00	DF9-17S-1V(20)
19	13.30	8.00	H2157-ND	2.31	44.38	142.00	DF9-19S-1V(20)
21	14.30	9.00	H2158-ND	2.18	41.88	134.00	DF9-21S-1V(20)
23	15.30	10.00	H2159-ND	1.76	33.75	108.00	DF9-23S-1V(20)
25	16.30	11.00	H2160-ND	2.37	45.63	146.00	DF9-25S-1V(20)
31	19.30	14.00	H2161-ND	1.88	36.13	115.60	DF9-31S-1V(20)
41	24.30	19.00	H2162-ND	2.91	55.94	179.00	DF9-41S-1V(20)
51	29.30	24.00	H2163-ND	3.93	78.65	243.10	DF9-51S-1V(54)
31	19.30	14.00	H2176-ND	2.18	41.88	134.00	DF9B-31S-1V(20)
41	24.30	19.00	H2177-ND	2.54	48.75	156.00	DF9B-41S-1V(20)
Fig. 2 — Pin Header with Reinforced Hardware							
9	8.30	3.00	H2258-ND	1.79	34.38	110.00	DF9-9P-1V(20)
11	9.30	4.00	H2165-ND	1.72	33.13	106.00	DF9-11P-1V(20)
13	10.30	5.00	H2166-ND	1.48	26.81	87.75	DF9-13P-1V(20)
15	11.30	6.00	H2167-ND	2.15	41.25	132.00	DF9-15P-1V(20)
17	12.30	7.00	H2168-ND	2.28	43.75	140.00	DF9-17P-1V(20)
19	13.30	8.00	H2169-ND	2.34	45.00	144.00	DF9-19P-1V(20)
21	14.30	9.00	H2170-ND	2.22	42.75	136.80	DF9-21P-1V(20)
23	15.30	10.00	H2171-ND	2.54	48.75	156.00	DF9-23P-1V(20)
25	16.30	11.00	H2172-ND	2.61	50.13	160.40	DF9-25P-1V(20)
31	19.30	14.00	H2173-ND	2.26	43.44	139.00	DF9-31P-1V(20)
41	24.30	19.00	H2174-ND	2.91	55.94	179.00	DF9-41P-1V(20)
51	29.30	24.00	H2175-ND	3.93	78.65	243.10	DF9-51P-1V(54)

* (20) indicates tin plating; (54) indicates gold plating.

1.27mm Connectors

FX2 Series – Surface Mount

Fig. 1

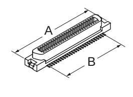


Fig. 2

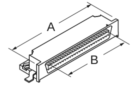
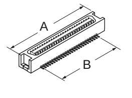


Fig. 3



FX2 Series is a 1.27mm mil spacing, 2 piece connector for use in board-to-board application • High performance PPS resin insulator is compatible to VPS, IR and hot air reflow • Gull wing-shaped lead is used for ease of checking soldered connection • Use of positioning boss for substrate packaging offers improved handling capability • Solder-fixing reinforcement bracket, which disperses inserting/extracting stress, is available for optional specification.

Electrical: • Rated Current: 0.5A • Rated Voltage: 125VAC • Insulation Resistance: More than 100MΩ at 250VDC • Withstanding Voltage: 300VAC • Contact Resistance: Less than 45 mΩ at 100mA DC • Durability: 500 times mating cycles.

Insulator Material & Finish: • Dip Type: Black polyimide resin, UL94V-0 • SMT Type: Light Brawn PPS resin, UL94V-0 • Socket: Black PBT resin and polyimide resin, UL94V-0.

Contact Material & Finish: • Receptacle Header: Phosphor bronze with selective gold plating • Socket: Beryllium copper with selective gold plating.

No. of Pins	Dim. (mm) A	B	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.
Fig. 1 — Straight Type Receptacle							
20	22.75	11.43	H2248-ND	3.25	64.90	200.60	FX2-20S-1.27SV
40	35.45	24.13	H2249-ND	4.15	83.05	256.70	FX2-40S-1.27SV
52	43.07	31.75	H2250-ND	4.70	94.05	290.70	FX2-52S-1.27SV
60	48.15	36.83	H2251-ND	5.06	101.20	312.80	FX2-60S-1.27SV
80	60.85	49.53	H2252-ND	5.78	115.50	357.00	FX2-80S-1.27SV
Fig. 2 — Right Angle Header							
20	22.75	12.065	H2243-ND	2.28	43.75	140.00	FX2-20P-0.635SH
40	35.45	24.765	H2244-ND	3.02	58.13	186.00	FX2-40P-0.635SH
52	43.07	32.385	H2245-ND	3.00	59.95	185.30	FX2-52P-0.635SH
60	48.15	37.465	H2246-ND	3.25	64.90	200.60	FX2-60P-0.635SH
80	60.85	50.165	H2247-ND	3.96	79.20	244.80	FX2-80P-0.635SH
Fig. 3 — Straight Header							
20	22.75	11.43	H2253-ND	3.11	62.15	192.10	FX2-20P-1.27SV
40	35.45	24.13	H2254-ND	3.93	78.65	243.10	FX2-40P-1.27SV
52	43.07	31.75	H2255-ND	4.48	89.65	277.10	FX2-52P-1.27SV
60	48.15	36.83	H2256-ND	4.81	96.25	297.50	FX2-60P-1.27SV
80	60.85	49.53	H2257-ND	5.67	113.30	350.20	FX2-80P-1.27SV

0.6mm Connectors

FX8 Series – Surface Mount

Fig. 1

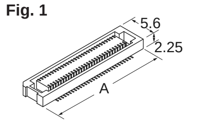
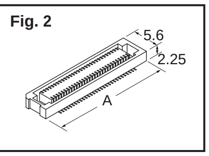


Fig. 2



The FX8 Series of 0.6mm pitch board mounting SMT connectors can be used with 3mm or greater distance between the boards. They are designed with the objectives of miniaturization, space-saving, and multiple contacts for internal mounting.

Features: • 3mm stacking height • The engagement portion is designed to prevent erroneous insertion and a bellows structure that is not susceptible to twisting has been used in the contacts. • The SMT soldering lead portion protrudes about 0.7mm beyond the outer surface of the housing, enabling image processing for automatic mounting and affording excellent repair qualities • Connectors are equipped with board positioning bosses which prevent incorrect insertion to the board by means of boss position and boss diameter.

Electrical: • Current Capacity: 0.4A per pin • Rated Voltage: 100V AC • Insulation Resistance: 100MΩ or greater at 250V DC • Withstand Voltage: 300V AC r.m.s. for one minute at specified value • Contact Resistance: 45mΩ or less at 100mA DC

Material and Finish: • Insulation: PPS resin, light brown, UL94V-0 • Header Contacts: Phosphor bronze, gold-plated contacts, solder-plated leads • Receptacle Contacts: Phosphor bronze, gold-plated contacts and leads

No. of Pins	Dim. A	Digi-Key Part No.	Pricing 1	25	100	Hirose Part No.
Fig. 1 — Single Row Vertical Pin Header						
60	24.60	H2326-ND	2.73	52.50	168.00	FX8-60P-SV
80	30.60	H2327-ND	3.15	60.63	194.00	FX8-80P-SV
90	33.60	H2328-ND	2.89	57.75	178.50	FX8-90P-SV
100	36.60	H2329-ND	3.08	61.60	190.40	FX8-100P-SV
120	42.60	H2330-ND	3.44	68.75	212.50	FX8-120P-SV
140	48.60	H2331-ND	3.82	76.45	236.30	FX8-140P-SV
Fig. 2 — Single Row Receptacles						
60	24.60	H2332-ND	3.03	60.50	187.00	FX8-60S-SV
80	30.60	H2333-ND	3.60	72.05	222.70	FX8-80S-SV
90	33.60	H2334-ND	3.91	78.10	241.40	FX8-90S-SV
100	36.60	H2335-ND	4.18	83.60	258.40	FX8-100S-SV
120	42.60	H2336-ND	4.73	94.60	292.40	FX8-120S-SV
140	48.60	H2337-ND	5.34	106.70	329.80	FX8-140S-SV

HIROSE ELECTRIC CO.,LTD.

DF4 and MDF7 Series Connectors

DF4 Series - 2mm Pitch Board-in Connector

Features: • Extractable socket and board-in connector provided with the dual-sided harness eliminate one of the two headers required for a dual-sided socket harness, with the board separating function remaining unchanged • Compact and multicontact • Temporary board fixing structure

Applications: • Notebook computers, compact OA equipment

Specifications: • Rated Current: Crimping - 24AWG: 3A, 26AWG: 2A, 28AWG: 1A. ID Termination - wire size 26/28AWG:1A • Operating Temperature: -30°C to 85°C • Rated Voltage: Crimping - AC250V ID termination - AC100V

Material: • Crimp Plug: Insulation, polyamide resin, black, UL94V-0 • Crimp Terminal for Plug: Terminal, brass, tin-plated • ID Termination Plug: • Insulation: Polyamide resin, black, UL94V-0 • Terminal: Phosphor bronze, tin-plated

Fig. 1

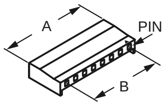


Fig. 2

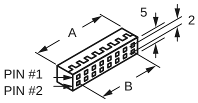


Fig.	No. of Contacts	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Single-Row Crimp Plug								
1	2	4.5	2.0	H2582-ND	.30	.13	.10	DF4- 2P-2C
	3	6.5	4.0	H2583-ND	.31	.14	.10	DF4- 3P-2C
	4	8.5	6.0	H2584-ND	.32	.14	.10	DF4- 4P-2C
	5	10.5	8.0	H2585-ND	.38	.17	.12	DF4- 5P-2C
	6	12.5	10.0	H2586-ND	.34	.15	.11	DF4- 6P-2C
	7	14.5	12.0	H2587-ND	.35	.16	.11	DF4- 7P-2C
	8	16.5	14.0	H2588-ND	.28	.14	.11	DF4- 8P-2C
	9	18.5	16.0	H2589-ND	.29	.14	.11	DF4- 9P-2C
	10	20.5	18.0	H2590-ND	.30	.15	.11	DF4-10P-2C
	11	22.5	20.0	H2591-ND	.31	.15	.11	DF4-11P-2C
	12	24.5	22.0	H2592-ND	.31	.15	.12	DF4-12P-2C
	13	26.5	24.0	H2593-ND	.32	.16	.12	DF4-13P-2C
	14	28.5	26.0	H2594-ND	.33	.16	.12	DF4-14P-2C
	15	30.0	28.0	H2595-ND	.34	.17	.13	DF4-15P-2C
Double-Row Crimp Plug								
2	4	4.8	2.0	H2596-ND	.44	.22	.16	DF4- 4DP-2C
	6	6.8	4.0	H2597-ND	.45	.22	.17	DF4- 6DP-2C
	8	8.8	6.0	H2598-ND	.46	.23	.17	DF4- 8DP-2C
	10	10.8	8.0	H2599-ND	.47	.23	.17	DF4-10DP-2C
	12	12.8	10.0	H2600-ND	.48	.24	.18	DF4-12DP-2C
	14	14.8	12.0	H2601-ND	.53	.26	.19	DF4-14DP-2C
	16	16.8	14.0	H2602-ND	.54	.26	.20	DF4-16DP-2C
	18	18.8	16.0	H2603-ND	.55	.27	.20	DF4-18DP-2C
	20	20.8	18.0	H2604-ND	.44	.27	.21	DF4-20DP-2C
	22	22.8	20.0	H2605-ND	.45	.27	.22	DF4-22DP-2C
	24	24.8	22.0	H2606-ND	.46	.28	.22	DF4-24DP-2C
	26	26.8	24.0	H2607-ND	.46	.28	.22	DF4-26DP-2C
	28	28.8	26.0	H2608-ND	.50	.30	.24	DF4-28DP-2C
	30	30.8	28.0	H2609-ND	.52	.32	.25	DF4-30DP-2C
	32	32.8	30.0	H2610-ND	.53	.32	.25	DF4-32DP-2C

Crimp Terminal

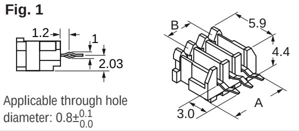
Description	Digi-Key Part No.	*Loose Piece* Pricing 100	Hirose Part No.	*Cut Tape*** Pricing 10	50	100	*Tape & Reel †* Pricing 10,000	Hirose Part No.
24-28 AWG Tin Pltg.	H2612-ND	4.22	DF4-2428PC	.68	1.84	3.00	12.36/M	DF4-2428PCF
Tool								
Manual Crimper for Loose Contacts	H9993-ND				935.40 each			DF4-TA2428HC

* For Cut Tape, add “CT” to the Digi-Key Part No. (H2612CT-ND)

† For Tape & Reel, add “TR” to the Digi-Key Part No. (H2612TR-ND)

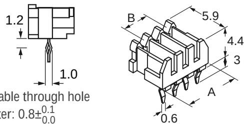
Termination Plugs

Fig. 1



Applicable through hole diameter: $0.8\pm^{0.1}_{0.0}$

Fig. 2



Applicable through hole diameter: $0.8\pm^{0.1}_{0.0}$

Fig.	No. of Contacts	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Straight ID								
26 AWG								
1	2	6.0	2.0	H2613-ND	.52	.26	.19	DF4- 2P-2R26
	3	8.0	4.0	H2614-ND	.45	.28	.22	DF4- 3P-2R26
	4	10.0	6.0	H2615-ND	.53	.33	.26	DF4- 4P-2R26
	5	12.0	8.0	H2616-ND	.66	.40	.32	DF4- 5P-2R26
	6	14.0	10.0	H2617-ND	.57	.42	.34	DF4- 6P-2R26
	7	16.0	12.0	H2618-ND	.63	.46	.38	DF4- 7P-2R26
	8	18.0	14.0	H2619-ND	.69	.51	.41	DF4- 8P-2R26
	9	20.0	16.0	H2620-ND	.75	.55	.45	DF4- 9P-2R26
	10	22.0	18.0	H2621-ND	.81	.59	.49	DF4-10P-2R26
	11	24.0	20.0	H2622-ND	.96	.70	.58	DF4-11P-2R26
	12	26.0	22.0	H2623-ND	1.02	.75	.61	DF4-12P-2R26
	13	28.0	24.0	H2624-ND	1.09	.79	.65	DF4-13P-2R26
	14	30.0	26.0	H2625-ND	1.15	.84	.69	DF4-14P-2R26
	15	32.0	28.0	H2626-ND	1.21	.88	.72	DF4-15P-2R26
28 AWG								
1	2	6.0	2.0	H2627-ND	.52	.26	.19	DF4- 2P-2R28
	3	8.0	4.0	H2628-ND	.45	.28	.22	DF4- 3P-2R28
	4	10.0	6.0	H2629-ND	.53	.33	.26	DF4- 4P-2R28
	5	12.0	8.0	H2630-ND	.66	.40	.32	DF4- 5P-2R28
	6	14.0	10.0	H2631-ND	.57	.42	.34	DF4- 6P-2R28
	7	16.0	12.0	H2632-ND	.63	.46	.38	DF4- 7P-2R28
	8	18.0	14.0	H2633-ND	.69	.51	.41	DF4- 8P-2R28
	9	20.0	16.0	H2634-ND	.75	.55	.45	DF4- 9P-2R28
	10	22.0	18.0	H2635-ND	.81	.59	.49	DF4-10P-2R28
28 AWG (cont.)								
1	11	24.0	20.0	H2636-ND	.96	.70	.58	DF4-11P-2R28
	12	26.0	22.0	H2637-ND	1.02	.75	.61	DF4-12P-2R28
	13	28.0	24.0	H2638-ND	1.09	.79	.65	DF4-13P-2R28
	14	30.0	26.0	H2639-ND	1.15	.84	.69	DF4-14P-2R28
	15	32.0	28.0	H2640-ND	1.21	.88	.72	DF4-15P-2R28
Right-Angle ID								
26 AWG								
2	2	6.0	2.0	H2641-ND	.55	.27	.20	DF4- 2PA-2R26
	3	8.0	4.0	H2642-ND	.44	.27	.21	DF4- 3PA-2R26
	4	10.0	6.0	H2643-ND	.52	.32	.25	DF4- 4PA-2R26
	5	12.0	8.0	H2644-ND	.51	.31	.25	DF4- 5PA-2R26
	6	14.0	10.0	H2645-ND	.73	.45	.35	DF4- 6PA-2R26
	7	16.0	12.0	H2646-ND	.61	.45	.37	DF4- 7PA-2R26
	8	18.0	14.0	H2647-ND	.67	.49	.40	DF4- 8PA-2R26
	9	20.0	16.0	H2648-ND	.73	.53	.43	DF4- 9PA-2R26
	10	22.0	18.0	H2649-ND	.79	.58	.47	DF4-10PA-2R26
	11	24.0	20.0	H2650-ND	.94	.68	.56	DF4-11PA-2R26
	12	26.0	22.0	H2651-ND	1.00	.73	.59	DF4-12PA-2R26
	13	28.0	24.0	H2652-ND	1.05	.77	.63	DF4-13PA-2R26
	14	30.0	26.0	H2653-ND	1.11	.81	.66	DF4-14PA-2R26
	15	32.0	28.0	H2654-ND	1.16	.85	.69	DF4-15PA-2R26
28 AWG								
2	2	6.0	2.0	H2655-ND	.51	.25	.19	DF4- 2PA-2R28
	3	8.0	4.0	H2656-ND	.44	.27	.21	DF4- 3PA-2R28
	4	10.0	6.0	H2657-ND	.52	.32	.25	DF4- 4PA-2R28
	5	12.0	8.0	H2658-ND	.65	.39	.31	DF4- 5PA-2R28
	6	14.0	10.0	H2659-ND	.73	.45	.35	DF4- 6PA-2R28
	7	16.0	12.0	H2660-ND	.61	.45	.37	DF4- 7PA-2R28
	8	18.0	14.0	H2661-ND	.67	.49	.40	DF4- 8PA-2R28
	9	20.0	16.0	H2662-ND	.73	.53	.43	DF4- 9PA-2R28
	10	22.0	18.0	H2663-ND	.82	.60	.49	DF4-10PA-2R28
	11	24.0	20.0	H2664-ND	.94	.68	.56	DF4-11PA-2R28
	12	26.0	22.0	H2665-ND	1.00	.73	.59	DF4-12PA-2R28
	13	28.0	24.0	H2666-ND	1.05	.77	.63	DF4-13PA-2R28
	14	30.0	26.0	H2667-ND	1.03	.75	.61	DF4-14PA-2R28
	15	32.0	28.0	H2668-ND	1.16	.85	.69	DF4-15PA-2R28

MDF7 Series - 2.54mm Pitch Bottom Entry Connector

Features: • Board-to-board distance can be freely set. Pass-through construction header pins and many header variations allow you set the board-to-board steplessly • Arrangement of components sides. Components sides of two boards can be arranged on the same side, without facing each other.

Applications: Telephones, internal connections of OA/FA equipment, connection of IPM and IGBT to boards.

Specifications: • Rated Current: 3A • Rated Voltage: AC250V • Operating Temperature: -35°C to 85°C • Insulation Resistance: 1,000MΩ or more • Contact Resistance: 30 mΩ or less • Insertion and withdrawals force: MIN 0.4N (40gf), MAX 4.4N (450gf)

Materials: • Receptacle: Insulation; Polyamide resin, black, UL94V-0 and Terminal; Phosphor bronze, gold-plated • Pin Header: Insulation; PBT resin, Main body - Black / Locator: Grey, UL94V-0 and Terminal; Brass with gold-plated

Fig. 1

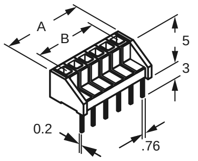


Fig. 2

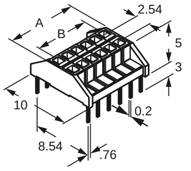


Fig.	No. of Contacts	Dimension (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Receptacle - Straight Dip								
Single Row								
1	3	7.62	5.08	H2549-ND	.95	.69	.57	MDF7- 3S-2.54DSA
	5	12.70	10.16	H2550-ND	1.11	.81	.66	MDF7- 5S-2.54DSA
	6	15.24	12.70	H2551-ND	1.17	.85	.70	MDF7- 6S-2.54DSA
	7	17.78	15.24	H2552-ND	1.24	.90	.74	MDF7- 7S-2.54DSA
	8	20.32	17.78	H2553-ND	1.31	.95	.78	MDF7- 8S-2.54DSA
	9	22.86	20.32	H2554-ND	1.38	1.00	.82	MDF7- 9S-2.54DSA
	10	25.40	22.86	H2555-ND	1.55	1.13	.92	MDF7-10S-2.54DSA
	11	27.94	25.40	H2556-ND	1.62	1.17	.96	MDF7-11S-2.54DSA
	12	30.48	27.94	H2557-ND	1.68	1.22	1.00	MDF7-12S-2.54DSA
	13	33.02	30.48	H2558-ND	1.70	1.23	1.01	MDF7-13S-2.54DSA
	14	35.56	33.02	H2559-ND	1.72	1.25	1.02	MDF7-14S-2.54DSA
	15	38.10	35.56	H2560-ND	1.77	1.29	1.05	MDF7-15S-2.54DSA
	16	40.64	38.10	H2561-ND	1.86	1.35	1.10	MDF7-16S-2.54DSA
	17	43.18	40.64	H2562-ND	1.65	1.27	1.02	MDF7-17S-2.54DSA
	18	45.72	43.18	H2563-ND	1.77	1.36	1.09	MDF7-18S-2.54DSA
	19	48.26	45.72	H2564-ND	1.79	1.38	1.11	MDF7-19S-2.54DSA
	20	50.80	48.26	H2565-ND	1.82	1.40	1.12	MDF7-20S-2.54DSA
	21	53.34	50.80	H2566-ND	1.93	1.49	1.19	MDF7-21S-2.54DSA
	22	55.88	53.34	H2567-ND	1.98	1.53	1.23	MDF7-22S-2.54DSA
	23	58.42	55.88	H2568-ND	2.04	1.58	1.26	MDF7-23S-2.54DSA
	24	60.96	58.42	H2569-ND	2.10	1.62	1.30	MDF7-24S-2.54DSA
	25	63.50	60.96	H2570-ND	2.27	1.75	1.40	MDF7-25S-2.54DSA
Double Row								
2	12	15.24	12.70	H2571-ND	2.80	2.16	1.73	MDF7-12D-2.54DSA
	14	17.78	15.24	H2572-ND	3.17	2.45	1.96	MDF7-14D-2.54DSA
	16	20.32	17.78	H2573-ND	2.88	2.31	1.79	MDF7-16D-2.54DSA
	20	25.40	22.86	H2574-ND	3.30	2.65	2.05	MDF7-20D-2.54DSA
	22	27.94	25.40	H2575-ND	3.39	2.72	2.10	MDF7-22D-2.54DSA
	26	33.02	30.48	H2577-ND	3.88	3.11	2.40	MDF7-26D-2.54DSA
	30	38.10	35.56	H2578-ND	4.42	3.54	2.74	MDF7-30D-2.54DSA
	34	43.18	40.64	H2579-ND	5.06	4.05	3.13	MDF7-34D-2.54DSA
	40	50.80	48.26	H2580-ND	5.83	4.67	3.61	MDF7-40D-2.54DSA
	46	58.42	55.88	H2581-ND	6.65	5.32	4.11	MDF7-46D-2.54DSA

2mm Connectors (interconnect wire available)

DF3 SERIES - Single Row Connectors

Specifications • Current Capacity: 3A with AWG24 cable • Rated Voltage: 250VAC • Insulation Res.: Min. 1000MΩ at 500VDC • Withstand Voltage: 650VAC • Contact Res.: Max. 30MΩ at 0.1ADC

Fig. 1

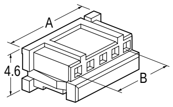
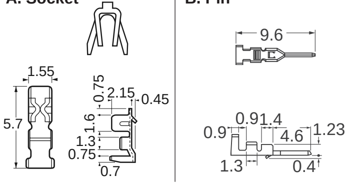


Fig. 2



A. Socket

B. Pin

Fig. 3

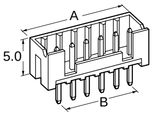


Fig. 4

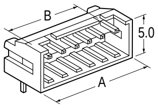


Fig. 5 — Surface Mount

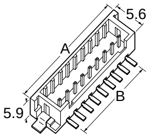


Fig. 6 — Surface Mount

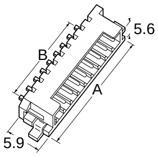


Fig.	No. of Pins	Dimensions (mm) A	Dimensions (mm) B	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 100	Hirose Part No.
Single Row Crimp Socket								
1	2	6.0	2.0	H2083-ND	.26	2.83	7.98	DF3-2S-2C
	3	8.0	4.0	H2084-ND	.28	3.02	8.53	DF3-3S-2C
	4	10.0	6.0	H2085-ND	.28	3.02	8.53	DF3-4S-2C
	5	12.0	8.0	H2086-ND	.30	3.22	9.08	DF3-5S-2C
	6	14.0	10.0	H2087-ND	.31	3.32	9.35	DF3-6S-2C
	7	16.0	12.0	H2088-ND	.32	3.51	9.90	DF3-7S-2C
	8	18.0	14.0	H2089-ND	.32	3.51	9.90	DF3-8S-2C
	9	20.0	16.0	H2146-ND	.28	3.35	10.00	DF3-9S-2C
	10	22.0	18.0	H2091-ND	.29	3.52	10.50	DF3-10S-2C
	11	24.0	20.0	H2092-ND	.30	3.60	10.75	DF3-11S-2C
	12	26.0	22.0	H2093-ND	.32	3.77	11.25	DF3-12S-2C
	13	28.0	24.0	H2290-ND	.32	3.77	11.25	DF3-13S-2C
	14	30.0	26.0	H2291-ND	.35	4.19	12.50	DF3-14S-2C
	15	32.0	28.0	H2292-ND	.35	4.19	12.50	DF3-15S-2C
2A	Crimp Contact for DF3 Socket, Tin			H2138-ND	—	—	3.57	DF3-2428SC
	Crimp Contact for DF3 Socket, Gold			H2305-ND	—	—	10.67	DF3-2428SCC
2B	Crimp Contact for DF3 Pin, Tin			H2306-ND	—	—	4.87	DF3-EP2428PC
	Crimp Contact for DF3 Pin, Gold			H2307-ND	—	—	19.88	DF3-EP2428PCA
—	Crimp Tool for DF3 Socket			H9997-ND	665.13	—	—	DF3-TA2428HC
	Crimp Tool for DF3 Pin			H2308-ND	797.39	—	—	DF3EP-TA2428HC
Vertical Protected Header								
3	2	6.0	2.0	H2094-ND	.24	2.58	7.27	DF3A-2P-2DSA
	3	8.0	4.0	H2095-ND	.28	3.08	8.69	DF3A-3P-2DSA
	4	10.0	6.0	H2096-ND	.33	3.54	9.98	DF3A-4P-2DSA
	5	12.0	8.0	H2097-ND	.34	4.08	12.17	DF3A-5P-2DSA
	6	14.0	10.0	H2098-ND	.35	4.20	12.55	DF3A-6P-2DSA
	7	16.0	12.0	H2099-ND	.37	4.37	13.06	DF3A-7P-2DSA
	8	18.0	14.0	H2147-ND	.52	6.16	18.40	DF3A-8P-2DSA
	9	20.0	16.0	H2101-ND	.40	6.05	18.96	DF3A-9P-2DSA
	10	22.0	18.0	H2102-ND	.43	6.39	20.03	DF3A-10P-2DSA
	11	24.0	20.0	H2103-ND	.43	6.52	20.41	DF3A-11P-2DSA
	12	26.0	22.0	H2104-ND	.45	6.68	20.92	DF3A-12P-2DSA
	13	28.0	24.0	H2293-ND	1.77	32.11	105.08	DF3-13P-2DSA
	14	30.0	26.0	H2294-ND	1.86	33.62	110.03	DF3-14P-2DSA
	15	32.0	28.0	H2295-ND	1.66	31.94	102.20	DF3-15P-2DSA
Right Angle Protected Header								
4	2	6.0	2.0	H2105-ND	.38	4.52	13.50	DF3-2P-2DS
	3	8.0	4.0	H2106-ND	.44	5.28	15.75	DF3-3P-2DS
	4	10.0	6.0	H2107-ND	.48	5.78	17.25	DF3-4P-2DS
	5	12.0	8.0	H2108-ND	.42	6.23	19.51	DF3-5P-2DS
	6	14.0	10.0	H2109-ND	.44	6.60	20.68	DF3-6P-2DS
4	7	16.0	12.0	H2110-ND	.48	7.13	22.33	DF3-7P-2DS
	8	18.0	14.0	H2111-ND	.50	7.50	23.50	DF3-8P-2DS
	9	20.0	16.0	H2112-ND	.57	8.48	26.56	DF3-9P-2DS
	10	22.0	18.0	H2113-ND	.60	8.93	27.97	DF3-10P-2DS
	11	24.0	20.0	H2114-ND	.70	10.50	32.90	DF3-11P-2DS
	12	26.0	22.0	H2115-ND	.73	10.95	34.31	DF3-12P-2DS
	13	28.0	24.0	H2310-ND	.58	10.45	34.20	DF3-13P-2DS
	14	30.0	26.0	H2311-ND	.60	10.93	35.78	DF3-14P-2DS
	15	32.0	28.0	H2312-ND	.63	11.34	37.13	DF3-15P-2DS
Surface Mount Vertical Header								
5	2	8.5	2.0	H2116-ND	.62	9.30	29.14	DF3-2P-2V(20)
	3	10.5	4.0	H2117-ND	.65	9.75	30.55	DF3-3P-2V(20)
	4	12.5	6.0	H2118-ND	.68	10.20	31.96	DF3-4P-2V(20)
	5	14.5	8.0	H2119-ND	.73	10.88	34.08	DF3-5P-2V(20)
	6	16.5	10.0	H2148-ND	.57	10.38	33.98	DF3-6P-2V(20)
	7	18.5	12.0	H2121-ND	.59	10.73	35.10	DF3-7P-2V(20)
	8	20.5	14.0	H2122-ND	.62	11.14	36.45	DF3-8P-2V(20)
	9	22.5	16.0	H2123-ND	.68	12.31	40.28	DF3-9P-2V(20)
	10	24.5	18.0	H2124-ND	.70	12.72	41.63	DF3-10P-2V(20)
	11	26.5	20.0	H2125-ND	.76	13.82	45.23	DF3-11P-2V(20)
	12	28.5	22.0	H2126-ND	.79	14.23	46.58	DF3-12P-2V(20)
	13	30.5	24.0	H2313-ND	.85	15.33	50.18	DF3-13P-2V(20)
	14	32.5	26.0	H2314-ND	.89	16.02	52.43	DF3-14P-2V(20)
	15	34.5	28.0	H2315-ND	.93	16.91	55.35	DF3-15P-2V(20)
Surface Mount Horizontal Right Angle Header								
6	2	8.5	2.0	H2127-ND	.63	9.45	29.61	DF3-2P-2H(20)
	3	10.5	4.0	H2128-ND	.66	9.90	31.02	DF3-3P-2H(20)
	4	12.5	6.0	H2129-ND	.69	10.35	32.43	DF3-4P-2H(20)
	5	14.5	8.0	H2130-ND	.74	11.03	34.55	DF3-5P-2H(20)
	6	16.5	10.0	H2131-ND	.58	10.52	34.43	DF3-6P-2H(20)
	7	18.5	12.0	H2149-ND	.60	10.93	35.78	DF3-7P-2H(20)
	8	20.5	14.0	H2133-ND	.63	11.34	37.13	DF3-8P-2H(20)
	9	22.5	16.0	H2134-ND	.69	12.51	40.95	DF3-9P-2H(20)
	10	24.5	18.0	H2135-ND	.71	12.93	42.30	DF3-10P-2H(20)
	11	26.5	20.0	H2136-ND	.78	14.09	46.13	DF3-11P-2H(20)
	12	28.5	22.0	H2137-ND	.80	14.44	47.25	DF3-12P-2H(20)
	13	30.5	24.0	H2316-ND	.86	15.61	51.08	DF3-13P-2H(20)
	14	32.5	26.0	H2317-ND	.90	16.29	53.33	DF3-14P-2H(20)
	15	34.5	28.0	H2318-ND	.95	17.26	56.48	DF3-15P-2H(20)

A3B/A4B SERIES - Crimp Connectors

Specifications: • Current Rating: 2A at 1P • Voltage: 200VAC at 1P • Insulation Res.: 1000MΩ or more at 500VDC • Withstanding Voltage: 650VAC r.m.s. for 1 minute • Contact Res.: 15mΩ or less at 100mADC.

Fig. 1

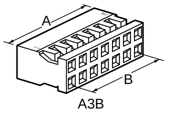


Fig. 2

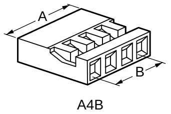


Fig. 3

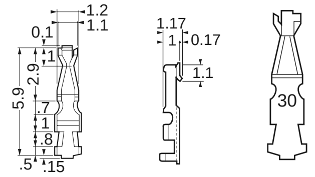


Fig. 4 ***Note:*** For use with all series.

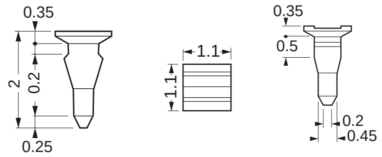


Fig.	No. of Pins	Dimensions (mm) A	Dimensions (mm) B	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 100	Hirose Part No.
Dual Row Crimp Socket								
1	4	4.0	2.0	H2001-ND	.47	5.61	16.75	A3B-4D-2C
	6	6.0	4.0	H2002-ND	.50	5.95	17.75	A3B-6D-2C
	8	8.0	6.0	H2003-ND	.53	6.28	18.75	A3B-8D-2C
	10	10.0	8.0	H2004-ND	.55	6.62	19.75	A3B-10D-2C
	12	12.0	10.0	H2005-ND	.42	6.23	19.51	A3B-12D-2C
	14	14.0	12.0	H2006-ND	.44	6.53	20.45	A3B-14D-2C
	18	18.0	16.0	H2007-ND	.46	6.90	21.62	A3B-18D-2C
	20	20.0	18.0	H2008-ND	.48	7.20	22.56	A3B-20D-2C
	24	24.0	22.0	H2009-ND	.51	7.65	23.97	A3B-24D-2C
	28	28.0	26.0	H2010-ND	.54	8.03	25.15	A3B-28D-2C

Fig.	No. of Pins	Dimensions (mm) A	Dimensions (mm) B	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 100	Hirose Part No.
Single Row Crimp Socket								
2	2	4.0	2.0	H2011-ND	.46	5.44	16.25	A4B-2S-2C
	3	6.0	4.0	H2012-ND	.46	5.53	16.50	A4B-3S-2C
	4	8.0	6.0	H2013-ND	.47	5.61	16.75	A4B-4S-2C
	5	10.0	8.0	H2014-ND	.48	5.70	17.00	A4B-5S-2C
	6	12.0	10.0	H2015-ND	.48	5.78	17.25	A4B-6S-2C
	8	16.0	14.0	H2016-ND	.50	6.03	18.00	A4B-8S-2C
	10	20.0	18.0	H2017-ND	.52	6.20	18.50	A4B-10S-2C
	12	24.0	22.0	H2018-ND	.53	6.37	19.00	A4B-12S-2C
3	Crimp Terminal for A3B-A4B Type			H9999-ND	—	—	7.32	A3B-2630SCC
	Crimp Tool for A3B-A4B Type			H9998-ND	958.40	—	—	A3B-TA2630HC
4	Polarizing Key for Socket Connectors			H2000-ND	3.23/10	—	18.58	A3-GPIN(A)

(Continued)

HIROSE ELECTRIC CO.,LTD.

2mm Connectors (interconnect wire available) *(Cont.)*

DF11 SERIES - Dual Row Connectors

Specifications: • Current Capacity: 3A with AWG24 cable • Rated Voltage: 250VAC • Insulation Res.: Min. 1000MΩ at 500VDC • Withstand Voltage: 650VAC • Contact Res.: Max. 30MΩ at 0.1ADC

Fig. 1

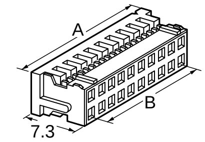
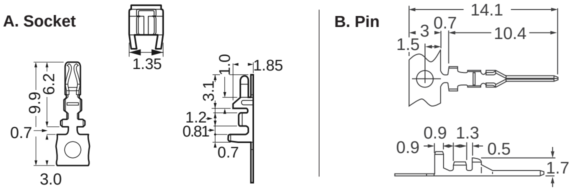


Fig. 2


A. Socket

B. Pin

Fig. 3

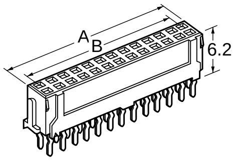


Fig. 4 — Surface Mount

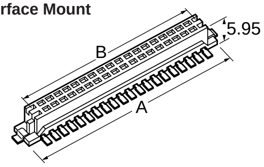


Fig. 5

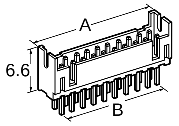


Fig. 6

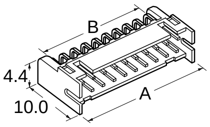


Fig. 7 — Surface Mount

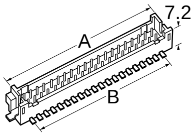


Fig.	No. of Pins	Dimensions (mm)		Digi-Key Part No.	Pricing			Hirose Part No.
		A	B		1	25	100	
Dual Row Crimp Socket								
1	4	6.0	2.0	H2019-ND	.44	5.28	15.75	DF11-4DS-2C
	6	8.0	4.0	H2021-ND	.50	5.95	17.75	DF11-6DS-2C
	8	10.0	6.0	H2022-ND	.48	5.78	17.25	DF11-8DS-2C
	10	12.0	8.0	H2023-ND	.40	6.00	18.80	DF11-10DS-2C
	12	14.0	10.0	H2024-ND	.54	6.45	19.25	DF11-12DS-2C
	14	16.0	12.0	H2140-ND	.40	6.00	18.80	DF11-14DS-2C
	16	18.0	14.0	H2025-ND	.41	4.86	14.50	DF11-16DS-2C
	18	20.0	16.0	H2026-ND	.44	6.53	20.45	DF11-18DS-2C
	20	22.0	18.0	H2027-ND	.43	5.11	15.25	DF11-20DS-2C
	22	24.0	20.0	H2028-ND	.49	7.28	22.80	DF11-22DS-2C
	24	26.0	22.0	H2029-ND	.50	7.50	23.50	DF11-24DS-2C
	26	28.0	24.0	H2261-ND	.52	7.80	24.44	DF11-26DS-2C
	28	30.0	26.0	H2262-ND	.54	8.10	25.38	DF11-28DS-2C
	30	32.0	28.0	H2263-ND	.56	8.40	26.32	DF11-30DS-2C
	32	34.0	30.0	H2264-ND	.58	8.63	27.03	DF11-32DS-2C
2A	Crimp Contact for DF11 Socket, Tin			H2139-ND	—	—	3.63	DF11-2428SC
	Crimp Contact for DF11 Socket, Gold			H2300-ND	—	—	10.98	DF11-2428SCA
2B	Crimp Contact for DF11 Pin, Tin			H2301-ND	—	—	9.46	DF11-EP2428PC
	Crimp Contact for DF11 Pin, Gold			H2302-ND	—	—	12.70	DF11-EP2428PCA
—	Crimp Tool for DF11 Socket			H9995-ND	828.06	—	—	DF11-TA2428HC
	Crimp Tool for DF11 Pin			H2304-ND	958.40	—	—	DF11EP-TA2428HC
	Extraction Tool for DF11 Socket			H9996-ND	9.91	—	—	DF-C-PO(B)
Vertical PCB Socket								
3	8	10.0	6.0	H2030-ND	1.07	19.39	63.45	DF11-8DS-2DSA
	10	12.0	8.0	H2031-ND	1.17	21.11	69.08	DF11-10DS-2DSA
	12	14.0	10.0	H2141-ND	1.27	22.89	74.93	DF11-12DS-2DSA
	14	16.0	12.0	H2033-ND	1.36	24.68	80.78	DF11-14DS-2DSA
	16	18.0	14.0	H2034-ND	1.49	27.02	88.43	DF11-16DS-2DSA
	18	20.0	16.0	H2035-ND	1.59	28.81	94.28	DF11-18DS-2DSA
	20	22.0	18.0	H2036-ND	1.73	31.35	102.60	DF11-20DS-2DSA
	22	24.0	20.0	H2037-ND	1.83	33.14	108.45	DF11-22DS-2DSA
	24	26.0	22.0	H2038-ND	1.65	31.75	101.60	DF11-24DS-2DSA
	26	28.0	24.0	H2265-ND	1.74	33.38	106.80	DF11-26DS-2DSA
	28	30.0	26.0	H2266-ND	1.43	27.50	88.00	DF11-28DS-2DSA
	30	32.0	28.0	H2267-ND	1.89	36.44	116.60	DF11-30DS-2DSA
	32	34.0	30.0	H2268-ND	1.99	38.19	122.20	DF11-32DS-2DSA
Surface Mount Vertical Socket								
4	4	8.5	2.0	H2039-ND	.96	17.39	56.93	DF11-4DS-2V(20)
	6	10.5	4.0	H2040-ND	1.08	19.46	63.68	DF11-6DS-2V(20)
	8	12.5	6.0	H2041-ND	1.20	21.66	70.88	DF11-8DS-2V(20)
	10	14.5	8.0	H2042-ND	1.31	23.65	77.40	DF11-10DS-2V(20)
	12	16.5	10.0	H2043-ND	1.44	25.99	85.05	DF11-12DS-2V(20)
	14	18.5	12.0	H2142-ND	1.55	27.98	91.58	DF11-14DS-2V(20)
	16	20.5	14.0	H2045-ND	1.68	30.39	99.45	DF11-16DS-2V(20)
	18	22.5	16.0	H2046-ND	1.79	32.45	106.20	DF11-18DS-2V(20)
	20	24.5	18.0	H2047-ND	1.63	31.38	100.40	DF11-20DS-2V(20)
	22	26.5	20.0	H2048-ND	1.73	33.19	106.20	DF11-22DS-2V(20)
4	24	28.5	22.0	H2049-ND	1.82	35.06	112.20	DF11-24DS-2V(20)
	26	30.5	24.0	H2270-ND	1.94	37.38	119.60	DF11-26DS-2V(20)
	28	32.5	26.0	H2271-ND	2.04	39.25	125.60	DF11-28DS-2V(20)
	30	34.5	28.0	H2272-ND	2.14	41.13	131.60	DF11-30DS-2V(20)
	32	36.5	30.0	H2273-ND	2.23	42.94	137.40	DF11-32DS-2V(20)
Vertical Protected Header								
5	4	6.0	2.0	H2143-ND	.54	8.03	25.15	DF11-4DP-2DSA(20)
	6	8.0	4.0	H2051-ND	.60	9.00	28.20	DF11-6DP-2DSA(20)
	8	10.0	6.0	H2052-ND	.64	9.60	30.08	DF11-8DP-2DSA(20)
	10	12.0	8.0	H2053-ND	.73	10.88	34.08	DF11-10DP-2DSA(20)
	12	14.0	10.0	H2054-ND	.62	11.14	36.45	DF11-12DP-2DSA(20)
	14	16.0	12.0	H2055-ND	.68	12.24	40.05	DF11-14DP-2DSA(20)
	16	18.0	14.0	H2056-ND	.59	10.66	34.88	DF11-16DP-2DSA(20)
	18	20.0	16.0	H2057-ND	.80	14.51	47.48	DF11-18DP-2DSA(20)
	20	22.0	18.0	H2058-ND	.75	13.54	44.33	DF11-20DP-2DSA(20)
	22	24.0	20.0	H2059-ND	.97	17.53	57.38	DF11-22DP-2DSA(20)
	24	26.0	22.0	H2060-ND	1.02	18.49	60.53	DF11-24DP-2DSA(20)
	26	28.0	24.0	H2275-ND	1.08	19.46	63.68	DF11-26DP-2DSA(20)
	28	30.0	26.0	H2276-ND	1.13	20.49	67.05	DF11-28DP-2DSA(20)
	30	32.0	28.0	H2277-ND	.95	17.19	56.25	DF11-30DP-2DSA(20)
	32	34.0	30.0	H2278-ND	1.25	22.62	74.03	DF11-32DP-2DSA(20)
Right Angle Protected Header								
6	4	6.0	2.0	H2061-ND	.58	8.70	27.26	DF11-4DP-2DS(22)
	6	8.0	4.0	H2062-ND	.66	9.90	31.02	DF11-6DP-2DS(22)
	8	10.0	6.0	H2063-ND	.71	10.58	33.14	DF11-8DP-2DS(22)
	10	12.0	8.0	H2145-ND	.60	10.93	35.78	DF11-10DP-2DS(22)
	12	14.0	10.0	H2065-ND	.68	12.38	40.50	DF11-12DP-2DS(22)
	14	16.0	12.0	H2066-ND	.75	13.54	44.33	DF11-14DP-2DS(22)
	16	18.0	14.0	H2067-ND	.68	12.31	40.28	DF11-16DP-2DS(22)
	18	20.0	16.0	H2068-ND	.90	16.23	53.10	DF11-18DP-2DS(22)
	20	22.0	18.0	H2069-ND	.98	17.67	57.83	DF11-20DP-2DS(22)
	22	24.0	20.0	H2070-ND	1.09	19.80	64.80	DF11-22DP-2DS(22)
	24	26.0	22.0	H2071-ND	1.16	20.90	68.40	DF11-24DP-2DS(22)
	26	28.0	24.0	H2280-ND	1.22	22.07	72.23	DF11-26DP-2DS(22)
	28	30.0	26.0	H2281-ND	1.28	23.17	75.83	DF11-28DP-2DS(22)
	30	32.0	28.0	H2282-ND	1.35	24.41	79.88	DF11-30DP-2DS(22)
	32	34.0	30.0	H2283-ND	1.41	25.51	83.48	DF11-32DP-2DS(22)
Surface Mount Protected Header								
7	4	2.0	8.5	H2072-ND	1.08	19.46	63.68	DF11-4DP-2V(20)
	6	4.0	10.5	H2073-ND	1.20	21.79	71.33	DF11-6DP-2V(20)
	8	6.0	12.5	H2074-ND	1.28	23.10	75.60	DF11-8DP-2V(20)
	10	8.0	14.5	H2075-ND	1.37	24.75	81.00	DF11-10DP-2V(20)
	12	10.0	16.5	H2076-ND	1.44	26.13	85.50	DF11-12DP-2V(20)
	14	12.0	18.5	H2077-ND	1.54	27.78	90.90	DF11-14DP-2V(20)
	16	14.0	20.5	H2078-ND	1.62	29.29	95.85	DF11-16DP-2V(20)
	18	16.0	22.5	H2079-ND	1.71	31.01	101.48	DF11-18DP-2V(20)
	20	18.0	24.5	H2080-ND	1.77	32.04	104.85	DF11-20DP-2V(20)
	22	20.0	26.5	H2081-ND	1.86	33.69	110.25	DF11-22DP-2V(20)
	24	22.0	28.5	H2082-ND	1.67	32.13	102.80	DF11-24DP-2V(20)
	26	24.0	30.5	H2285-ND	1.75	33.69	107.80	DF11-26DP-2V(20)
	28	26.0	32.5	H2286-ND	2.04	39.25	125.60	DF11-28DP-2V(20)
	30	28.0	34.5	H2287-ND	2.14	41.13	131.60	DF11-30DP-2V(20)
	32	30.0	36.5	H2288-ND	1.93	37.19	119.00	DF11-32DP-2V(20)

HRS HIROSE ELECTRIC CO.,LTD.

DF7 and DF22 Series Connectors

DF7 Series - 3.96mm Pitch Miniature Connectors for Secondary Power Supplies (C-UL and TÜV Approved Items)

Features: • Positive locking feature; a complete locking function utilizing an internal system is used in these connectors. This prevents release due to external shock • Usable at maximum current capacity. A maximum current carrying capacity of 10A is permitted when 16AWG wire is used.

Applications: Secondary power supply circuits of a wide variety of electronic, office, industrial, and consumer equipment.

Specifications: • Rated Current: 22AWG: 4A, 20AWG: 5A, 18AWG: 7A and 16AWG: 10A • Rated Voltage: C-UL; AC600V. TÜV; 7.92mm pitch - AC600V, 3.96mm pitch - AC300V • File No. C-UL: E52653 TUV: R9750437 • Contact Resistance: 10mΩ or less (initial) • Insulation Resistance: 1,000m Ω or greater • Single Unit Insertion & Withdrawal Life: 0.3 N min., 4.5 N max. • Insertion/ Withdrawal Life: 20 mΩ or less.

Materials: • Sockets: Insulation, polyimide resin, natural (white , UL94V-0 • Headers: Insulation, polyimide (glass strengthened product), natural (beige), UL94V-0. Contacts, brass, solder plating • In-Line Plugs: Insulation, polyimide resin, natural (white), UL94V-0 • Retainers: Insulation, polyimide resin, black, UL94V-0 • Crimp Terminals: Contacts, copper alloy, tin plating.

Fig. 1

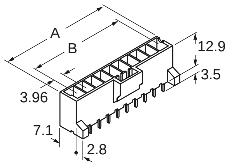


Fig. 2

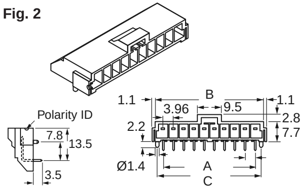


Fig. 3

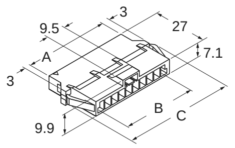


Fig. 4

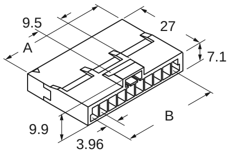


Fig. 5

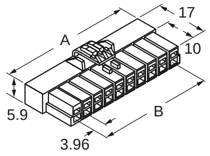


Fig. 6

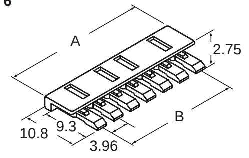


Fig.	No. of Contacts	Dimensions (mm)			Digi-Key Part No.	Price Each			Hirose Part No.
		A	B	C		1	25	100	
Pin Headers									
Straight									
1	2	10.40	3.96	—	H2669-ND	.47	.29	.23	DF7-2P-3.96DSA
	3	14.36	7.92	—	H2670-ND	.56	.34	.27	DF7-3P-3.96DSA
	4	18.32	11.88	—	H2671-ND	.66	.40	.32	DF7-4P-3.96DSA
	5	22.28	15.84	—	H2672-ND	.62	.45	.37	DF7-5P-3.96DSA
	6	26.24	19.80	—	H2673-ND	.69	.51	.42	DF7-6P-3.96DSA
	7	30.20	23.76	—	H2674-ND	.77	.56	.46	DF7-7P-3.96DSA
	8	34.16	27.72	—	H2675-ND	.93	.68	.56	DF7-8P-3.96DSA
	9	38.12	31.68	—	H2676-ND	1.01	.73	.60	DF7-9P-3.96DSA
	10	42.08	35.64	—	H2677-ND	1.09	.80	.65	DF710P-3.96DSA
	2*	14.36	7.92	—	H2678-ND	.56	.34	.27	DF7-2P-7.92DSA
	3*	22.28	15.84	—	H2679-ND	.58	.43	.35	DF7-3P-7.92DSA
Right-Angle									
2	2	3.96	10.40	8.40	H2680-ND	.55	.33	.26	DF7-2P-3.96DS
	3	7.92	14.36	12.36	H2681-ND	.65	.40	.31	DF7-3P-3.96DS
	4	11.88	18.32	16.32	H2682-ND	.58	.42	.35	DF7-4P-3.96DS
	5	15.84	22.28	20.28	H2683-ND	.71	.52	.43	DF7-5P-3.96DS
	6	19.80	26.24	24.24	H2684-ND	.79	.58	.47	DF7-6P-3.96DS
	7	23.76	30.20	28.20	H2685-ND	.88	.64	.52	DF7-7P-3.96DS
	8	27.72	34.16	32.16	H2686-ND	1.07	.78	.64	DF7-8P-3.96DS
	9	31.68	38.12	36.12	H2687-ND	1.15	.84	.69	DF7-9P-3.96DS
	10	35.64	42.08	40.08	H2688-ND	1.23	.90	.73	DF7-10P-3.96DS
	2†	7.92	14.36	12.36	H2689-ND	.68	.41	.33	DF7-2P-7.92DS
	3†	15.84	22.28	20.28	H2690-ND	.71	.52	.43	DF7-3P-7.92DS
Plugs									
In-Line — Panel Lock Type									
3	2	10.40	3.96	17.40	H2691-ND	.34	.17	.13	DF7-2EP-3.96C
	3	14.36	7.92	21.36	H2692-ND	.39	.19	.14	DF7-3EP-3.96C
	4	18.32	11.88	25.32	H2693-ND	.45	.22	.17	DF7-4EP-3.96C
	5	22.28	15.84	29.28	H2694-ND	.65	.47	.39	DF7-5EP-3.96C
	6	26.24	19.80	33.24	H2695-ND	.70	.51	.42	DF7-6EP-3.96C
	7	30.20	23.76	37.20	H2696-ND	.75	.54	.45	DF7-7EP-3.96C
	8	34.16	27.72	41.16	H2697-ND	.79	.58	.47	DF7-8EP-3.96C
	9	38.12	31.68	45.12	H2698-ND	.84	.61	.50	DF7-9EP-3.96C
	10	42.08	35.64	49.08	H2699-ND	.88	.64	.53	DF7-10EP-3.96C
In-Line									
4	2	10.40	3.96	—	H2700-ND	.34	.17	.13	DF7A-2EP-3.96C
	3	14.36	7.92	—	H2701-ND	.39	.19	.14	DF7A-3EP-3.96C
	4	18.32	11.88	—	H2702-ND	.45	.22	.17	DF7A-4EP-3.96C
	5	22.28	15.84	—	H2703-ND	.65	.47	.39	DF7A-5EP-3.96C
	6	26.24	19.80	—	H2704-ND	.80	.58	.48	DF7A -6EP-3.96C
	7	30.20	23.76	—	H2705-ND	.75	.54	.45	DF7A-7EP-3.96C
	9	38.12	31.68	—	H2707-ND	.84	.61	.50	DF7A-9EP-3.96C
Sockets									
5	2	10.00	3.96	—	H2709-ND	.33	.15	.11	DF7-2S-3.96C
	3	13.96	7.92	—	H2710-ND	.30	.15	.11	DF7-3S-3.96C
	4	17.92	11.88	—	H2711-ND	.35	.17	.13	DF7-4S-3.96C
	5	21.88	15.84	—	H2712-ND	.49	.24	.18	DF7-5S-3.96C
	6	25.84	19.80	—	H2713-ND	.53	.26	.20	DF7-6S-3.96C
	8	33.76	27.72	—	H2715-ND	.36	.16	.11	DF7-8S-3.96C
	9	37.72	31.68	—	H2716-ND	.65	.39	.31	DF7-9S-3.96C
	10	41.68	35.64	—	H2717-ND	.70	.42	.33	DF7-10S-3.96C
Retainers for both Sockets and In-Line Plugs									
6	2	10.00	3.96	—	H2718-ND	.33	.15	.10	DF7-2RS/P-3.96
	3	13.96	7.92	—	H2719-ND	.28	.14	.11	DF7-3RS/P-3.96
	4	17.92	11.88	—	H2720-ND	.31	.15	.12	DF7-4RS/P-3.96
	5	21.88	15.84	—	H2721-ND	.47	.23	.17	DF7-5RS/P-3.96
	6	25.84	19.80	—	H2722-ND	.51	.25	.19	DF7-6RS/P-3.96
	8	33.76	27.72	—	H2724-ND	.43	.26	.21	DF7-8RS/P-3.96
	9	37.72	31.68	—	H2725-ND	.46	.28	.22	DF7-9RS/P-3.96

* DF7-2P-7.92DSA is DF7-3P-3.96DSA with No. 2 pin removed and the number of contacts are indicated as 2. DF7-3P-7.92DSA is DF7-5P-3.96DSA with No.2 & 4 pins removed and the number of contacts are indicated as 3.

† DF7-2P-7.92DS is DF7-3P-3.96DS with No. 2 pin removed and the number of contacts are indicated as 2. DF7-3P-7.92DS is DF7-5P-3.96DS with No. 2 and 4 pins removed and the number of contacts are indicated as 3.

Crimp Terminal

Description	Digi-Key Part No.	*Loose Piece* Price Each 100	Hirose Part No.	*Cut Tape** Price Each			*Tape & Reel* † Pricing 3,000	Hirose Part No.
				10	50	100		
Female - Tin Plating								
16-18	H2728-ND	.10	DF7-1618SC	.28	.15	.13	32.34/M	DF7-1618SCF
20-22	H2730-ND	.10	DF7-2022SC	.28	.15	.13	32.34/M	DF7-2022SCF
Male - Tin Plating								
16-18	H2732-ND	.10	DF7-1618PC	.25	.15	.13	37.09/M	DF7-1618PCF
20-22	H2734-ND	.10	DF7-2022PC	.25	.15	.13	37.09/M	DF7-2022PCF
Tool								
Manual Crimper for DF7 Series 16-18 AWG	H9986-ND	1520.10 each						HT104/DF7-1618
Manual Crimper for DF7 Series 20-22 AWG	H9987-ND	1520.10 each						HT104/DF7-2022

* For Cut Tape, add “CT” to the Digi-Key Part No. (H2728CT-ND)

† For Tape & Reel, add “TR” to the Digi-Key Part No. (H2728TR-ND)

DF22 Series - 7.92mm Pitch Connectors for High-Current Internal Power Supplies

No. of Contact	Rated Current		
	12AWG	14AWG	16AWG
2	20A	18A	15A
3	20A	18A	15A
4	18A	15A	13A
5	18A	15A	13A

Features: • 20A maximum current capacity. The connector can carry a maximum current of 20A with 12AWG wire • Complete Lock Function: Secure latch mechanism the fully shrouded latch mechanism is resistant to accidental unlatching from shock, and vibration.

Applications: Consumer-electronics and power supplies for electronic devices, business machines, and industrial machinery.

Specifications: • Operating Temperature Range: -35°C to 85°C • Contact Resistance: 5mΩ or less (initial) • Insulation Resistance: 1,000MΩ or more.

Material: • Crimp Socket: Insulation, polyimide resin, natural (white),UL94V-0 † Polarization options are color coded: DF22R is black and DF22L is red • Female Crimp Contact: Terminal, high conductivity copper alloy, tin (whiskers free) • Header Insulation: Polyimide resin (glass reinforced), natural (beige)†, UL94V-0 • Header Terminal: High-conductivity copper alloy, tin (whiskers free).

Fig. 1

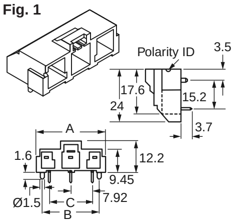


Fig. 2

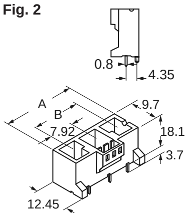


Fig. 3

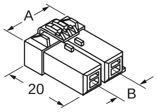


Fig.	No. of Contacts	Dimension (mm)			Digi-Key Part No.	Price Each			Hirose Part No.
		A	B	C		1	25	100	
Pin Headers									
Right-Angle									
1	2	19.80	15.00	7.92	H2776-ND	.70	.51	.42	DF22-2P-7.92DS
	3	27.72	22.92	15.84	H2777-ND	.95	.69	.57	DF22-3P-7.92DS
	4	35.64	30.84	23.76	H2778-ND	1.15	.83	.68	DF22-4P-7.92DS
	5	43.56	38.76	31.68	H2779-ND	1.34	.97	.80	DF22-5P-7.92DS
Straight									
2	2	17.22	7.92	—	H2780-ND	.71	.52	.42	DF22-2P-7.92DSA
	3	25.14	15.84	—	H2781-ND	.97	.70	.58	DF22-3P-7.92DSA
	4	33.06	23.76	—	H2782-ND	1.16	.85	.69	DF22-4P-7.92DSA
	5	40.98	31.68	—	H2783-ND	1.36	.99	.81	DF22-5P-7.92DSA
Crimp Socket Housing									
3	2	15.50	7.92	—	H2784-ND	.39	.19	.15	DF22-2S-7.92C
	3	23.42	15.84	—	H2785-ND	.48	.29	.23	DF22-3S-7.92C
	4	31.34	23.76	—	H2786-ND	.56	.34	.27	DF22-4S-7.92C
	5	39.26	31.68	—	H2787-ND	.64	.39	.30	DF22-5S-7.92C

Contacts

Description	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel* Pricing	Hirose Part No.
		10	50	100		
14-16 AWG	H2788CT-ND	.22	.13	.11	134.58/2,500	DF22-1416SCF
12 AWG	H2789CT-ND	.18	.12	.11	111.35/2,000	DF22A-1416SCF

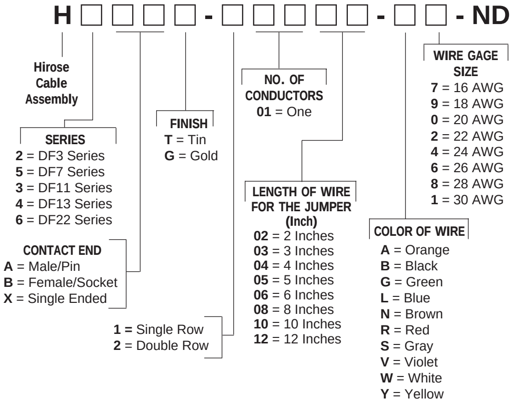
* For Tape and Reel Part Number change CT-ND to TR-ND

HIROSE ELECTRIC CO.,LTD.

DF3, DF7, DF11, DF13, DF22 Interconnect Wire (housing available)

CONTACT SPECIFICATIONS: • Rated Current: **DF3:** *24AWG:* 3A, *26 AWG:* 2A, *28AWG:* 1A **DF11:** *24-26 AWG:* 2A, *28 AWG:* 1A • Operating Temperature: -30°C to +85°C • Rated Voltage: AC250V • Insulation Resistance: 1000 MΩ or more • Contact Resistance: 30 mΩ or less • Insertion / Withdrawals Force: Min. 0.3 N (30gf), Max. 4.4 N (450gf) • Material (crimp terminal for socket): Phosphor bronze with tin or gold plating. **Safety Standards:** UL: E52653 and CSA: LR95109.

WIRE SPECIFICATIONS: • Stranded tinned copper conductor • Color coded PVC insulation • Flammability: Passes UL VW-1 flame test • Wire is ordered per EIA-359-A color specifications which allows for some variation in shade • Operating Temperature: -40°C to +90°C (CSA TR-64), -40°C to +80°C (UL AWM 1007)



H □□□□ - □□□□□ - □□ - ND

Hirose Cable Assembly

SERIES
2 = DF3 Series
5 = DF7 Series
3 = DF11 Series
4 = DF13 Series
6 = DF22 Series

CONTACT END
A = Male/Pin
B = Female/Socket
X = Single Ended

FINISH
T = Tin
G = Gold

1 = Single Row
2 = Double Row

NO. OF CONDUCTORS
01 = One

LENGTH OF WIRE FOR THE JUMPER (Inch)
02 = 2 Inches
03 = 3 Inches
04 = 4 Inches
05 = 5 Inches
06 = 6 Inches
08 = 8 Inches
10 = 10 Inches
12 = 12 Inches

COLOR OF WIRE
A = Orange
B = Black
G = Green
L = Blue
N = Brown
R = Red
S = Gray
V = Violet
W = White
Y = Yellow

WIRE GAGE SIZE
7 = 16 AWG
9 = 18 AWG
0 = 20 AWG
2 = 22 AWG
4 = 24 AWG
6 = 26 AWG
8 = 28 AWG
1 = 30 AWG

Fig. 1 — Socket to Socket

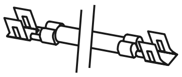


Fig. 2 — Pin to Socket

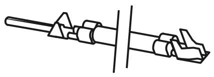


Fig. 3 — Pin to Pin

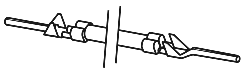


Fig. 4 — Socket Single End

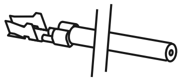
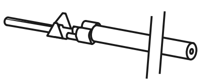


Fig. 5 — Pin Single End



* For □ in Digi-Key Part No. choose letter which represents color of your choice: **A** = Orange **B** = Black **G** = Green **L** = Blue **N** = Brown **R** = Red **S** = Gray **V** = Violet **W** = White **Y** = Yellow

Fig.	Cable Length (in.)	Digi-Key Part No.	Price Each		
			10	100	250
DF3 - TIN PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBT-10102-□4-ND	.54	.40	.35
	3	H2BBT-10103-□4-ND	.55	.41	.35
	4	H2BBT-10104-□4-ND	.55	.41	.35
	5	H2BBT-10105-□4-ND	.56	.41	.36
	6	H2BBT-10106-□4-ND	.56	.42	.36
	8	H2BBT-10108-□4-ND	.57	.42	.37
	10	H2BBT-10110-□4-ND	.58	.43	.37
	12	H2BBT-10112-□4-ND	.59	.44	.38
Fig. 2 (Pin to Socket)	2	H2ABT-10102-□4-ND	.55	.41	.35
	3	H2ABT-10103-□4-ND	.56	.41	.36
	4	H2ABT-10104-□4-ND	.56	.42	.36
	5	H2ABT-10105-□4-ND	.57	.42	.36
	6	H2ABT-10106-□4-ND	.58	.43	.37
	8	H2ABT-10108-□4-ND	.59	.43	.37
	10	H2ABT-10110-□4-ND	.60	.44	.38
	12	H2ABT-10112-□4-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H2AAT-10102-□4-ND	.57	.42	.36
	3	H2AAT-10103-□4-ND	.57	.42	.37
	4	H2AAT-10104-□4-ND	.58	.43	.37
	5	H2AAT-10105-□4-ND	.58	.43	.37
	6	H2AAT-10106-□4-ND	.59	.43	.37
	8	H2AAT-10108-□4-ND	.60	.44	.38
	10	H2AAT-10110-□4-ND	.61	.45	.39
	12	H2AAT-10112-□4-ND	.62	.46	.39
Fig. 4 (Socket Single End)	2	H2BXT-10102-□4-ND	.52	.39	.33
	3	H2BXT-10103-□4-ND	.53	.39	.34
	4	H2BXT-10104-□4-ND	.53	.39	.34
	5	H2BXT-10105-□4-ND	.54	.40	.34
	6	H2BXT-10106-□4-ND	.54	.40	.35
	8	H2BXT-10108-□4-ND	.55	.41	.35
	10	H2BXT-10110-□4-ND	.56	.42	.36
	12	H2BXT-10112-□4-ND	.57	.42	.37
Fig. 5 (Pin Single End)	2	H2AXT-10102-□4-ND	.53	.39	.34
	3	H2AXT-10103-□4-ND	.54	.40	.34
	4	H2AXT-10104-□4-ND	.54	.40	.35
	5	H2AXT-10105-□4-ND	.55	.41	.35
	6	H2AXT-10106-□4-ND	.55	.41	.35
	8	H2AXT-10108-□4-ND	.56	.42	.36
	10	H2AXT-10110-□4-ND	.57	.42	.37
	12	H2AXT-10112-□4-ND	.58	.43	.37
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBT-10102-□6-ND	.54	.40	.35
	3	H2BBT-10103-□6-ND	.55	.41	.35
	4	H2BBT-10104-□6-ND	.55	.41	.35
	5	H2BBT-10105-□6-ND	.56	.41	.36
	6	H2BBT-10106-□6-ND	.56	.42	.36
	8	H2BBT-10108-□6-ND	.57	.42	.37
	10	H2BBT-10110-□6-ND	.58	.43	.37
	12	H2BBT-10112-□6-ND	.59	.44	.38
Fig. 2 (Pin to Socket)	2	H2ABT-10102-□6-ND	.55	.41	.35
	3	H2ABT-10103-□6-ND	.56	.41	.36
	4	H2ABT-10104-□6-ND	.56	.42	.36
	5	H2ABT-10105-□6-ND	.57	.42	.36
	6	H2ABT-10106-□6-ND	.57	.42	.37
	8	H2ABT-10108-□6-ND	.58	.43	.37
	10	H2ABT-10110-□6-ND	.59	.44	.38
	12	H2ABT-10112-□6-ND	.60	.45	.38
Fig. 3 (Pin to Pin)	2	H2AAT-10102-□6-ND	.57	.42	.36
	3	H2AAT-10103-□6-ND	.57	.42	.36
	4	H2AAT-10104-□6-ND	.58	.43	.37
	5	H2AAT-10105-□6-ND	.58	.43	.37
	6	H2AAT-10106-□6-ND	.58	.43	.37
	8	H2AAT-10108-□6-ND	.59	.44	.38
	10	H2AAT-10110-□6-ND	.60	.45	.39
	12	H2AAT-10112-□6-ND	.61	.45	.39
	2	H2BXT-10102-□6-ND	.52	.39	.33
Fig. 4 (Socket Single End)	3	H2BXT-10103-□6-ND	.53	.39	.34
	4	H2BXT-10104-□6-ND	.53	.39	.34
	5	H2BXT-10105-□6-ND	.54	.40	.34
	6	H2BXT-10106-□6-ND	.54	.40	.35
	8	H2BXT-10108-□6-ND	.55	.41	.35
	10	H2BXT-10110-□6-ND	.56	.41	.36
	12	H2BXT-10112-□6-ND	.57	.42	.36
Fig. 5 (Pin Single End)	2	H2AXT-10102-□6-ND	.53	.39	.34
	3	H2AXT-10103-□6-ND	.54	.40	.34
	4	H2AXT-10104-□6-ND	.54	.40	.35
	5	H2AXT-10105-□6-ND	.55	.40	.35
	6	H2AXT-10106-□6-ND	.55	.41	.35
	8	H2AXT-10108-□6-ND	.56	.41	.36
	10	H2AXT-10110-□6-ND	.57	.42	.36
	12	H2AXT-10112-□6-ND	.58	.43	.37
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBT-10102-□8-ND	.54	.40	.35
	3	H2BBT-10103-□8-ND	.55	.41	.35
	4	H2BBT-10104-□8-ND	.56	.41	.36
	5	H2BBT-10105-□8-ND	.56	.41	.36
	6	H2BBT-10106-□8-ND	.57	.42	.36
	8	H2BBT-10108-□8-ND	.58	.43	.37
	10	H2BBT-10110-□8-ND	.59	.43	.38
	12	H2BBT-10112-□8-ND	.60	.44	.38
Fig. 2 (Pin to Socket)	2	H2ABT-10102-□8-ND	.56	.41	.36
	3	H2ABT-10103-□8-ND	.56	.41	.36
	4	H2ABT-10104-□8-ND	.57	.42	.36
	5	H2ABT-10105-□8-ND	.57	.42	.37
	6	H2ABT-10106-□8-ND	.58	.43	.37
	8	H2ABT-10108-□8-ND	.59	.43	.38
	10	H2ABT-10110-□8-ND	.60	.44	.38
	12	H2ABT-10112-□8-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H2AAT-10102-□8-ND	.57	.42	.36
	3	H2AAT-10103-□8-ND	.57	.42	.37
	4	H2AAT-10104-□8-ND	.58	.43	.37
	5	H2AAT-10105-□8-ND	.58	.43	.37
	6	H2AAT-10106-□8-ND	.59	.44	.38
	8	H2AAT-10108-□8-ND	.60	.44	.38
	10	H2AAT-10110-□8-ND	.61	.45	.39
	12	H2AAT-10112-□8-ND	.62	.46	.40
Fig. 4 (Socket Single End)	2	H2BXT-10102-□8-ND	.52	.39	.33
	3	H2BXT-10103-□8-ND	.53	.39	.34
	4	H2BXT-10104-□8-ND	.53	.39	.34
	5	H2BXT-10105-□8-ND	.54	.40	.34
	6	H2BXT-10106-□8-ND	.54	.40	.35
	8	H2BXT-10108-□8-ND	.55	.41	.35
	10	H2BXT-10110-□8-ND	.57	.42	.36
	12	H2BXT-10112-□8-ND	.58	.43	.37
Fig. 5 (Pin Single End)	2	H2AXT-10102-□8-ND	.53	.39	.34
	3	H2AXT-10103-□8-ND	.54	.40	.34
	4	H2AXT-10104-□8-ND	.54	.40	.35
	5	H2AXT-10105-□8-ND	.55	.41	.35
	6	H2AXT-10106-□8-ND	.55	.41	.35
	8	H2AXT-10108-□8-ND	.57	.42	.36
	10	H2AXT-10110-□8-ND	.58	.43	.37
	12	H2AXT-10112-□8-ND	.59	.43	.38
DF3 - 15µ GOLD PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBG-10102-□4-ND	.61	.45	.39
	3	H2BBG-10103-□4-ND	.62	.45	.39
	4	H2BBG-10104-□4-ND	.62	.46	.40
	5	H2BBG-10105-□4-ND	.63	.46	.40
	6	H2BBG-10106-□4-ND	.63	.47	.40
	8	H2BBG-10108-□4-ND	.64	.47	.41
	10	H2BBG-10110-□4-ND	.65	.48	.42
	12	H2BBG-10112-□4-ND	.66	.49	.42
Fig. 2 (Pin to Socket)	2	H2ABG-10102-□4-ND	.67	.49	.43
	3	H2ABG-10103-□4-ND	.67	.50	.43
	4	H2ABG-10104-□4-ND	.68	.50	.43
	5	H2ABG-10105-□4-ND	.68	.50	.43
	6	H2ABG-10106-□4-ND	.69	.51	.44
	8	H2ABG-10108-□4-ND	.70	.51	.44
	10	H2ABG-10110-□4-ND	.71	.52	.45
	12	H2ABG-10112-□4-ND	.72	.53	.46
Fig. 3 (Pin to Pin)	2	H2AAG-10102-□4-ND	.72	.53	.46
	3	H2AAG-10103-□4-ND	.73	.54	.46
	4	H2AAG-10104-□4-ND	.73	.54	.47
	5	H2AAG-10105-□4-ND	.74	.54	.47
	6	H2AAG-10106-□4-ND	.74	.55	.47
	8	H2AAG-10108-□4-ND	.75	.55	.48
	10	H2AAG-10110-□4-ND	.76	.56	.49
	12	H2AAG-10112-□4-ND	.77	.57	.49
Fig. 4 (Socket Single End)	2	H2BXG-10102-□4-ND	.55	.41	.35
	3	H2BXG-10103-□4-ND	.56	.41	.36
	4	H2BXG-10104-□4-ND	.56	.42	.36
	5	H2BXG-10105-□4-ND	.57	.42	.36
	6	H2BXG-10106-□4-ND	.57	.43	.37
	8	H2BXG-10108-□4-ND	.58	.43	.37
	10	H2BXG-10110-□4-ND	.59	.44	.38
	12	H2BXG-10112-□4-ND	.60	.45	.39
Fig. 5 (Pin Single End)	2	H2AXG-10102-□4-ND	.61	.45	.39
	3	H2AXG-10103-□4-ND	.61	.45	.39
	4	H2AXG-10104-□4-ND	.62	.46	.40
	5	H2AXG-10105-□4-ND	.62	.46	.40
	6	H2AXG-10106-□4-ND	.63	.47	.40
	8	H2AXG-10108-□4-ND	.64	.47	.41
	10	H2AXG-10110-□4-ND	.65	.48	.42
	12	H2AXG-10112-□4-ND	.66	.49	.42
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBG-10102-□6-ND	.61	.45	.39
	3	H2BBG-10103-□6-ND	.61	.45	.39
	4	H2BBG-10104-□6-ND	.62	.46	.40
	5	H2BBG-10105-□6-ND	.62	.46	.40

(Continued)

HRS HIROSE ELECTRIC CO.,LTD. DF3, DF7, DF11, DF13, DF22 Interconnect Wire (housing available) *(Cont.)*

* For □ in Digi-Key Part No. choose letter which represents color of your choice: **A** = Orange **B** = Black **G** = Green **L** = Blue **N** = Brown **R** = Red **S** = Gray **V** = Violet **W** = White **Y** = Yellow

Fig.	Cable Length (In.)	Digi-Key Part No.	Price Each		
			10	100	250
Fig. 1 (Socket to Socket)	6	H2BBG-10106-□6-ND	.63	.46	.40
	8	H2BBG-10108-□6-ND	.64	.47	.41
	10	H2BBG-10110-□6-ND	.65	.48	.41
	12	H2BBG-10112-□6-ND	.66	.49	.42
Fig. 2 (Pin to Socket)	2	H2ABG-10102-□6-ND	.66	.49	.42
	3	H2ABG-10103-□6-ND	.67	.49	.43
	4	H2ABG-10104-□6-ND	.67	.50	.43
	5	H2ABG-10105-□6-ND	.68	.50	.43
	6	H2ABG-10106-□6-ND	.68	.51	.44
	8	H2ABG-10108-□6-ND	.69	.51	.44
	10	H2ABG-10110-□6-ND	.70	.52	.45
	12	H2ABG-10112-□6-ND	.71	.53	.46
Fig. 3 (Pin to Pin)	2	H2AAG-10102-□6-ND	.72	.53	.46
	3	H2AAG-10103-□6-ND	.72	.54	.46
	4	H2AAG-10104-□6-ND	.73	.54	.47
	5	H2AAG-10105-□6-ND	.73	.54	.47
	6	H2AAG-10106-□6-ND	.74	.55	.47
	8	H2AAG-10108-□6-ND	.75	.55	.48
	10	H2AAG-10110-□6-ND	.76	.56	.48
	12	H2AAG-10112-□6-ND	.77	.57	.49
Fig. 4 (Socket Single End)	2	H2BXG-10102-□6-ND	.55	.41	.35
	3	H2BXG-10103-□6-ND	.56	.41	.36
	4	H2BXG-10104-□6-ND	.56	.42	.36
	5	H2BXG-10105-□6-ND	.57	.42	.36
	6	H2BXG-10106-□6-ND	.57	.42	.37
	8	H2BXG-10108-□6-ND	.58	.43	.37
	10	H2BXG-10110-□6-ND	.59	.44	.38
	12	H2BXG-10112-□6-ND	.60	.44	.38
Fig. 5 (Pin Single End)	2	H2AXG-10102-□6-ND	.61	.45	.39
	3	H2AXG-10103-□6-ND	.61	.45	.39
	4	H2AXG-10104-□6-ND	.62	.46	.40
	5	H2AXG-10105-□6-ND	.62	.46	.40
	6	H2AXG-10106-□6-ND	.63	.46	.40
	8	H2AXG-10108-□6-ND	.64	.47	.41
	10	H2AXG-10110-□6-ND	.65	.48	.41
	12	H2AXG-10112-□6-ND	.66	.49	.42
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H2BBG-10102-□8-ND	.61	.45	.39
	3	H2BBG-10103-□8-ND	.62	.46	.39
	4	H2BBG-10104-□8-ND	.62	.46	.40
	5	H2BBG-10105-□8-ND	.63	.46	.40
	6	H2BBG-10106-□8-ND	.63	.47	.40
	8	H2BBG-10108-□8-ND	.64	.48	.41
	10	H2BBG-10110-□8-ND	.65	.48	.42
	12	H2BBG-10112-□8-ND	.66	.49	.42
Fig. 2 (Pin to Socket)	2	H2ABG-10102-□8-ND	.67	.49	.43
	3	H2ABG-10103-□8-ND	.67	.50	.43
	4	H2ABG-10104-□8-ND	.68	.50	.43
	5	H2ABG-10105-□8-ND	.68	.50	.44
	6	H2ABG-10106-□8-ND	.69	.51	.44
	8	H2ABG-10108-□8-ND	.70	.52	.45
	10	H2ABG-10110-□8-ND	.71	.52	.45
	12	H2ABG-10112-□8-ND	.72	.53	.46
Fig. 3 (Pin to Pin)	2	H2AAG-10102-□8-ND	.72	.53	.46
	3	H2AAG-10103-□8-ND	.73	.54	.46
	4	H2AAG-10104-□8-ND	.73	.54	.47
	5	H2AAG-10105-□8-ND	.74	.55	.47
	6	H2AAG-10106-□8-ND	.74	.55	.47
	8	H2AAG-10108-□8-ND	.75	.56	.48
	10	H2AAG-10110-□8-ND	.76	.56	.49
	12	H2AAG-10112-□8-ND	.78	.57	.50
Fig. 4 (Socket Single End)	2	H2BXG-10102-□8-ND	.56	.41	.36
	3	H2BXG-10103-□8-ND	.56	.41	.36
	4	H2BXG-10104-□8-ND	.57	.42	.36
	5	H2BXG-10105-□8-ND	.57	.42	.37
	6	H2BXG-10106-□8-ND	.58	.43	.37
	8	H2BXG-10108-□8-ND	.59	.43	.38
	10	H2BXG-10110-□8-ND	.60	.44	.38
	12	H2BXG-10112-□8-ND	.61	.45	.39
Fig. 5 (Pin Single End)	2	H2AXG-10102-□8-ND	.61	.45	.39
	3	H2AXG-10103-□8-ND	.62	.46	.39
	4	H2AXG-10104-□8-ND	.62	.46	.40
	5	H2AXG-10105-□8-ND	.63	.46	.40
	6	H2AXG-10106-□8-ND	.63	.47	.40
	8	H2AXG-10108-□8-ND	.64	.48	.41
	10	H2AXG-10110-□8-ND	.65	.48	.42
	12	H2AXG-10112-□8-ND	.66	.49	.42

Fig.	Cable Length (In.)	Digi-Key Part No.	Price Each		
			10	100	250
DF11 - TIN PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBT-10102-□4-ND	.55	.40	.35
	3	H3BBT-10103-□4-ND	.55	.41	.35
	4	H3BBT-10104-□4-ND	.56	.41	.36
	5	H3BBT-10105-□4-ND	.56	.42	.36
	6	H3BBT-10106-□4-ND	.57	.42	.36
	8	H3BBT-10108-□4-ND	.58	.43	.37
	10	H3BBT-10110-□4-ND	.59	.43	.38
	12	H3BBT-10112-□4-ND	.60	.44	.38
Fig. 2 (Pin to Socket)	2	H3ABT-10102-□4-ND	.56	.41	.36
	3	H3ABT-10103-□4-ND	.56	.42	.36
	4	H3ABT-10104-□4-ND	.57	.42	.36
	5	H3ABT-10105-□4-ND	.57	.42	.37
	6	H3ABT-10106-□4-ND	.58	.43	.37
	8	H3ABT-10108-□4-ND	.59	.44	.38
	10	H3ABT-10110-□4-ND	.60	.44	.38
	12	H3ABT-10112-□4-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H3AAT-10102-□4-ND	.57	.42	.36
	3	H3AAT-10103-□4-ND	.57	.42	.37
	4	H3AAT-10104-□4-ND	.58	.43	.37
	5	H3AAT-10105-□4-ND	.58	.43	.37
	6	H3AAT-10106-□4-ND	.59	.44	.38
	8	H3AAT-10108-□4-ND	.60	.44	.38
	10	H3AAT-10110-□4-ND	.61	.45	.39
	12	H3AAT-10112-□4-ND	.62	.46	.40
Fig. 4 (Socket Single End)	2	H3BXT-10102-□4-ND	.52	.39	.33
	3	H3BXT-10103-□4-ND	.53	.39	.34
	4	H3BXT-10104-□4-ND	.53	.39	.34
	5	H3BXT-10105-□4-ND	.54	.40	.34
	6	H3BXT-10106-□4-ND	.54	.40	.35
	8	H3BXT-10108-□4-ND	.55	.41	.35
	10	H3BXT-10110-□4-ND	.56	.42	.36
	12	H3BXT-10112-□4-ND	.57	.42	.37
Fig. 5 (Pin Single End)	2	H3AXT-10102-□4-ND	.53	.40	.34
	3	H3AXT-10103-□4-ND	.54	.40	.34
	4	H3AXT-10104-□4-ND	.54	.40	.35
	5	H3AXT-10105-□4-ND	.55	.41	.35
	6	H3AXT-10106-□4-ND	.55	.41	.35
	8	H3AXT-10108-□4-ND	.56	.42	.36
	10	H3AXT-10110-□4-ND	.57	.42	.37
	12	H3AXT-10112-□4-ND	.58	.43	.37
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBT-10102-□6-ND	.55	.40	.35
	3	H3BBT-10103-□6-ND	.55	.41	.35
	4	H3BBT-10104-□6-ND	.56	.41	.36
	5	H3BBT-10105-□6-ND	.56	.41	.36
	6	H3BBT-10106-□6-ND	.57	.42	.36
	8	H3BBT-10108-□6-ND	.58	.43	.37
	10	H3BBT-10110-□6-ND	.58	.43	.37
	12	H3BBT-10112-□6-ND	.59	.44	.38
Fig. 2 (Pin to Socket)	2	H3ABT-10102-□6-ND	.56	.41	.36
	3	H3ABT-10103-□6-ND	.56	.42	.36
	4	H3ABT-10104-□6-ND	.57	.42	.36
	5	H3ABT-10105-□6-ND	.57	.42	.37
	6	H3ABT-10106-□6-ND	.58	.43	.37
	8	H3ABT-10108-□6-ND	.59	.43	.37
	10	H3ABT-10110-□6-ND	.60	.44	.38
	12	H3ABT-10112-□6-ND	.60	.45	.39
Fig. 3 (Pin to Pin)	2	H3AAT-10102-□6-ND	.57	.42	.36
	3	H3AAT-10103-□6-ND	.57	.42	.37
	4	H3AAT-10104-□6-ND	.58	.43	.37
	5	H3AAT-10105-□6-ND	.58	.43	.37
	6	H3AAT-10106-□6-ND	.59	.43	.38
	8	H3AAT-10108-□6-ND	.60	.44	.38
	10	H3AAT-10110-□6-ND	.61	.45	.39
	12	H3AAT-10112-□6-ND	.62	.46	.39
Fig. 4 (Socket Single End)	2	H3BXT-10102-□6-ND	.52	.39	.33
	3	H3BXT-10103-□6-ND	.53	.39	.34
	4	H3BXT-10104-□6-ND	.53	.39	.34
	5	H3BXT-10105-□6-ND	.54	.40	.34
	6	H3BXT-10106-□6-ND	.54	.40	.35
	8	H3BXT-10108-□6-ND	.55	.41	.35
	10	H3BXT-10110-□6-ND	.56	.41	.36
	12	H3BXT-10112-□6-ND	.57	.42	.36
Fig. 5 (Pin Single End)	2	H3AXT-10102-□6-ND	.53	.39	.34
	3	H3AXT-10103-□6-ND	.54	.40	.34
	4	H3AXT-10104-□6-ND	.54	.40	.35
	5	H3AXT-10105-□6-ND	.55	.41	.35
	6	H3AXT-10106-□6-ND	.55	.41	.35
	8	H3AXT-10108-□6-ND	.56	.42	.36
	10	H3AXT-10110-□6-ND	.57	.42	.37
	12	H3AXT-10112-□6-ND	.58	.43	.37

Fig.	Cable Length (In.)	Digi-Key Part No.	Price Each		
			10	100	250
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBT-10102-□8-ND	.55	.41	.35
	3	H3BBT-10103-□8-ND	.55	.41	.35
	4	H3BBT-10104-□8-ND	.56	.41	.36
	5	H3BBT-10105-□8-ND	.56	.42	.36
	6	H3BBT-10106-□8-ND	.57	.42	.36
	8	H3BBT-10108-□8-ND	.58	.43	.37
	10	H3BBT-10110-□8-ND	.59	.44	.38
	12	H3BBT-10112-□8-ND	.60	.45	.38
Fig. 2 (Pin to Socket)	2	H3ABT-10102-□8-ND	.56	.41	.36
	3	H3ABT-10103-□8-ND	.56	.42	.36
	4	H3ABT-10104-□8-ND	.57	.42	.36
	5	H3ABT-10105-□8-ND	.58	.43	.37
	6	H3ABT-10106-□8-ND	.58	.43	.37
	8	H3ABT-10108-□8-ND	.59	.44	.38
	10	H3ABT-10110-□8-ND	.60	.45	.38
	12	H3ABT-10112-□8-ND	.61	.45	.39
Fig. 3 (Pin to Pin)	2	H3AAT-10102-□8-ND	.57	.42	.36
	3	H3AAT-10103-□8-ND	.58	.43	.37
	4	H3AAT-10104-□8-ND	.58	.43	.37
	5	H3AAT-10105-□8-ND	.59	.43	.37
	6	H3AAT-10106-□8-ND	.59	.44	.38
	8	H3AAT-10108-□8-ND	.60	.45	.38
	10	H3AAT-10110-□8-ND	.61	.45	.39
	12	H3AAT-10112-□8-ND	.62	.46	.40
Fig. 4 (Socket Single End)	2	H3BXT-10102-□8-ND	.52	.39	.34
	3	H3BXT-10103-□8-ND	.53	.39	.34
	4	H3BXT-10104-□8-ND	.53	.40	.34
	5	H3BXT-10105-□8-ND	.54	.40	.35
	6	H3BXT-10106-□8-ND	.55	.40	.35
	8	H3BXT-10108-□8-ND	.56	.41	.36
	10	H3BXT-10110-□8-ND	.57	.42	.36
	12	H3BXT-10112-□8-ND	.58	.43	.37
Fig. 5 (Pin Single End)	2	H3AXT-10102-□8-ND	.53	.40	.34
	3	H3AXT-10103-□8-ND	.54	.40	.35
	4	H3AXT-10104-□8-ND	.55	.40	.35
	5	H3AXT-10105-□8-ND	.55	.41	.35
	6	H3AXT-10106-□8-ND	.56	.41	.36
	8	H3AXT-10108-□8-ND	.57	.42	.36
	10	H3AXT-10110-□8-ND	.58	.43	.37
	12	H3AXT-10112-□8-ND	.59	.44	.38
DF11 - 15µ GOLD PLATED CONTACTS					
24 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBG-10102-□4-ND	.69	.51	.44
	3	H3BBG-10103-□4-ND	.70	.52	.45
	4	H3BBG-10104-□4-ND	.70	.52	.45
	5	H3BBG-10105-□4-ND	.71	.52	.45
	6	H3BBG-10106-□4-ND	.71	.53	.46
	8	H3BBG-10108-□4-ND	.72	.54	.46
	10	H3BBG-10110-□4-ND	.73	.54	.47
	12	H3BBG-10112-□4-ND	.75	.55	.48
Fig. 2 (Pin to Socket)	2	H3ABG-10102-□4-ND	.71	.53	.46
	3	H3ABG-10103-□4-ND	.72	.53	.46
	4	H3ABG-10104-□4-ND	.72	.54	.46
	5	H3ABG-10105-□4-ND	.73	.54	.47
	6	H3ABG-10106-□4-ND	.73	.54	.47
	8	H3ABG-10108-□4-ND	.74	.55	.48
	10	H3ABG-10110-□4-ND	.75	.56	.48
	12	H3ABG-10112-□4-ND	.76	.56	.49
Fig. 3 (Pin to Pin)	2	H3AAG-10102-□4-ND	.73	.54	.47
	3	H3AAG-10103-□4-ND	.74	.55	.47
	4	H3AAG-10104-□4-ND	.74	.55	.47
	5	H3AAG-10105-□4-ND	.75	.55	.48
	6	H3AAG-10106-□4-ND	.75	.56	.48
	8	H3AAG-10108-□4-ND	.76	.56	.49
	10	H3AAG-10110-□4-ND	.77	.57	.49
	12	H3AAG-10112-□4-ND	.78	.58	.50
Fig. 4 (Socket Single End)	2	H3BXG-10102-□4-ND	.60	.44	.38
	3	H3BXG-10103-□4-ND	.60	.45	.38
	4	H3BXG-10104-□4-ND	.61	.45	.39
	5	H3BXG-10105-□4-ND	.61	.45	.39
	6	H3BXG-10106-□4-ND	.62	.46	.39
	8	H3BXG-10108-□4-ND	.63	.46	.40
	10	H3BXG-10110-□4-ND	.64	.47	.41
	12	H3BXG-10112-□4-ND	.65	.48	.41
Fig. 5 (Pin Single End)	2	H3AXG-10102-□4-ND	.62	.46	.39
	3	H3AXG-10103-□4-ND	.62	.46	.40
	4	H3AXG-10104-□4-ND	.63	.46	.40
	5	H3AXG-10105-□4-ND	.63	.47	.40
	6	H3AXG-10106-□4-ND	.64	.47	.41
	8	H3AXG-10108-□4-ND	.65	.48	.41
	10	H3AXG-10110-□4-ND	.66	.49	.42
	12	H3AXG-10112-□4-ND	.67	.49	.43

(Continued)

DF3, DF7, DF11, DF13, DF22 Interconnect Wire **(housing available)** *(Cont.)*

* For ☐ in Digi-Key Part No. choose letter which represents color of your choice: **A** = Orange **B** = Black **G** = Green **L** = Blue **N** = Brown **R** = Red **S** = Gray **V** = Violet **W** = White **Y** = Yellow

Fig.	Cable Length (in.)	Digi-Key Part No.	Price Each		
			10	100	250
26 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBG-10102-☐6-ND	.69	.51	.44
	3	H3BBG-10103-☐6-ND	.70	.52	.45
	4	H3BBG-10104-☐6-ND	.70	.52	.45
	5	H3BBG-10105-☐6-ND	.71	.52	.45
	6	H3BBG-10106-☐6-ND	.71	.53	.46
	8	H3BBG-10108-☐6-ND	.72	.53	.46
	10	H3BBG-10110-☐6-ND	.73	.54	.47
	12	H3BBG-10112-☐6-ND	.74	.55	.47
Fig. 2 (Pin to Socket)	2	H3ABG-10102-☐6-ND	.71	.53	.46
	3	H3ABG-10103-☐6-ND	.72	.53	.46
	4	H3ABG-10104-☐6-ND	.72	.53	.46
	5	H3ABG-10105-☐6-ND	.73	.54	.46
	6	H3ABG-10106-☐6-ND	.73	.54	.47
	8	H3ABG-10108-☐6-ND	.74	.55	.47
	10	H3ABG-10110-☐6-ND	.75	.56	.48
	12	H3ABG-10112-☐6-ND	.76	.56	.49
Fig. 3 (Pin to Pin)	2	H3AAG-10102-☐6-ND	.73	.54	.47
	3	H3AAG-10103-☐6-ND	.74	.54	.47
	4	H3AAG-10104-☐6-ND	.74	.55	.47
	5	H3AAG-10105-☐6-ND	.75	.55	.48
	6	H3AAG-10106-☐6-ND	.75	.56	.48
	8	H3AAG-10108-☐6-ND	.76	.56	.49
	10	H3AAG-10110-☐6-ND	.77	.57	.49
	12	H3AAG-10112-☐6-ND	.78	.58	.50
Fig. 4 (Socket Single End)	2	H3BXG-10102-☐6-ND	.60	.44	.38
	3	H3BXG-10103-☐6-ND	.60	.44	.38
	4	H3BXG-10104-☐6-ND	.61	.45	.39
	5	H3BXG-10105-☐6-ND	.61	.45	.39
	6	H3BXG-10106-☐6-ND	.62	.46	.39
	8	H3BXG-10108-☐6-ND	.62	.46	.40
	10	H3BXG-10110-☐6-ND	.63	.47	.41
	12	H3BXG-10112-☐6-ND	.64	.48	.41
Fig. 5 (Pin Single End)	2	H3AXG-10102-☐6-ND	.62	.46	.39
	3	H3AXG-10103-☐6-ND	.62	.46	.40
	4	H3AXG-10104-☐6-ND	.63	.46	.40
	5	H3AXG-10105-☐6-ND	.63	.47	.40
	6	H3AXG-10106-☐6-ND	.63	.47	.41
	8	H3AXG-10108-☐6-ND	.64	.48	.41
	10	H3AXG-10110-☐6-ND	.65	.48	.42
	12	H3AXG-10112-☐6-ND	.66	.49	.42
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H3BBG-10102-☐8-ND	.70	.51	.44
	3	H3BBG-10103-☐8-ND	.70	.52	.45
	4	H3BBG-10104-☐8-ND	.71	.52	.45
	5	H3BBG-10105-☐8-ND	.71	.53	.45
	6	H3BBG-10106-☐8-ND	.72	.53	.46
	8	H3BBG-10108-☐8-ND	.73	.54	.46
	10	H3BBG-10110-☐8-ND	.74	.55	.47
	12	H3BBG-10112-☐8-ND	.75	.55	.48
Fig. 2 (Pin to Socket)	2	H3ABG-10102-☐8-ND	.71	.53	.46
	3	H3ABG-10103-☐8-ND	.72	.53	.46
	4	H3ABG-10104-☐8-ND	.73	.54	.46
	5	H3ABG-10105-☐8-ND	.73	.54	.47
	6	H3ABG-10106-☐8-ND	.74	.54	.47
	8	H3ABG-10108-☐8-ND	.75	.55	.48
	10	H3ABG-10110-☐8-ND	.76	.56	.48
	12	H3ABG-10112-☐8-ND	.77	.57	.49
Fig. 3 (Pin to Pin)	2	H3AAG-10102-☐8-ND	.73	.54	.47
	3	H3AAG-10103-☐8-ND	.74	.55	.47
	4	H3AAG-10104-☐8-ND	.74	.55	.48
	5	H3AAG-10105-☐8-ND	.75	.55	.48
	6	H3AAG-10106-☐8-ND	.76	.56	.48
	8	H3AAG-10108-☐8-ND	.77	.57	.49
	10	H3AAG-10110-☐8-ND	.78	.57	.50
	12	H3AAG-10112-☐8-ND	.79	.58	.50
Fig. 4 (Socket Single End)	2	H3BXG-10102-☐8-ND	.60	.44	.38
	3	H3BXG-10103-☐8-ND	.60	.45	.39
	4	H3BXG-10104-☐8-ND	.61	.45	.39
	5	H3BXG-10105-☐8-ND	.61	.45	.39
	6	H3BXG-10106-☐8-ND	.62	.46	.40
	8	H3BXG-10108-☐8-ND	.63	.47	.40
	10	H3BXG-10110-☐8-ND	.64	.47	.41
	12	H3BXG-10112-☐8-ND	.65	.48	.42
Fig. 5 (Pin Single End)	2	H3AXG-10102-☐8-ND	.62	.46	.39
	3	H3AXG-10103-☐8-ND	.62	.46	.40
	4	H3AXG-10104-☐8-ND	.63	.46	.40
	5	H3AXG-10105-☐8-ND	.63	.47	.40
	6	H3AXG-10106-☐8-ND	.64	.47	.41
	8	H3AXG-10108-☐8-ND	.65	.48	.41
	10	H3AXG-10110-☐8-ND	.66	.49	.42
	12	H3AXG-10112-☐8-ND	.67	.50	.43
DF7- TIN PLATED CONTACTS					
16 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H5BBT-10102-☐7-ND	.63	.47	.40
	3	H5BBT-10103-☐7-ND	.64	.47	.41
	4	H5BBT-10104-☐7-ND	.64	.48	.41
	5	H5BBT-10105-☐7-ND	.65	.48	.42
	6	H5BBT-10106-☐7-ND	.66	.49	.42
	8	H5BBT-10108-☐7-ND	.67	.49	.43
	10	H5BBT-10110-☐7-ND	.68	.50	.44
	12	H5BBT-10112-☐7-ND	.70	.51	.44
Fig. 4 (Socket Single End)	2	H5BXT-10102-☐7-ND	.57	.42	.36
	3	H5BXT-10103-☐7-ND	.57	.42	.37
	4	H5BXT-10104-☐7-ND	.58	.43	.37
	5	H5BXT-10105-☐7-ND	.59	.43	.37
	6	H5BXT-10106-☐7-ND	.59	.44	.38
	8	H5BXT-10108-☐7-ND	.61	.45	.39
	10	H5BXT-10110-☐7-ND	.62	.46	.40
	12	H5BXT-10112-☐7-ND	.63	.47	.40
18 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H5BBT-10102-☐9-ND	.63	.47	.40
	3	H5BBT-10103-☐9-ND	.64	.47	.41
	4	H5BBT-10104-☐9-ND	.64	.48	.41
	5	H5BBT-10105-☐9-ND	.65	.48	.42
	6	H5BBT-10106-☐9-ND	.66	.49	.42
	8	H5BBT-10108-☐9-ND	.67	.49	.43
	10	H5BBT-10110-☐9-ND	.68	.50	.44
	12	H5BBT-10112-☐9-ND	.70	.51	.44
Fig. 4 (Socket Single End)	2	H5BXT-10102-☐9-ND	.57	.42	.36
	3	H5BXT-10103-☐9-ND	.57	.42	.37
	4	H5BXT-10104-☐9-ND	.58	.43	.37
	5	H5BXT-10105-☐9-ND	.59	.43	.37
	6	H5BXT-10106-☐9-ND	.59	.44	.38
	8	H5BXT-10108-☐9-ND	.61	.45	.39
	10	H5BXT-10110-☐9-ND	.62	.46	.40
	12	H5BXT-10112-☐9-ND	.63	.47	.40
20 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H5BBT-10102-☐0-ND	.63	.47	.40
	3	H5BBT-10103-☐0-ND	.64	.47	.41
	4	H5BBT-10104-☐0-ND	.64	.48	.41
	5	H5BBT-10105-☐0-ND	.65	.48	.42
	6	H5BBT-10106-☐0-ND	.66	.49	.42
	8	H5BBT-10108-☐0-ND	.67	.49	.43
	10	H5BBT-10110-☐0-ND	.68	.50	.44
	12	H5BBT-10112-☐0-ND	.70	.51	.44
Fig. 4 (Socket Single End)	2	H5BXT-10102-☐0-ND	.57	.42	.36
	3	H5BXT-10103-☐0-ND	.57	.42	.37
	4	H5BXT-10104-☐0-ND	.58	.43	.37
	5	H5BXT-10105-☐0-ND	.59	.43	.37
	6	H5BXT-10106-☐0-ND	.59	.44	.38
	8	H5BXT-10108-☐0-ND	.61	.45	.39
	10	H5BXT-10110-☐0-ND	.62	.46	.40
	12	H5BXT-10112-☐0-ND	.63	.47	.40
22 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H5BBT-10102-☐2-ND	.63	.47	.40
	3	H5BBT-10103-☐2-ND	.64	.47	.41
	4	H5BBT-10104-☐2-ND	.64	.48	.41
	5	H5BBT-10105-☐2-ND	.65	.48	.42
	6	H5BBT-10106-☐2-ND	.66	.49	.42
	8	H5BBT-10108-☐2-ND	.67	.49	.43
	10	H5BBT-10110-☐2-ND	.68	.50	.44
	12	H5BBT-10112-☐2-ND	.70	.51	.44
Fig. 4 (Socket Single End)	2	H5BXT-10102-☐2-ND	.57	.42	.36
	3	H5BXT-10103-☐2-ND	.57	.42	.37
	4	H5BXT-10104-☐2-ND	.58	.43	.37
	5	H5BXT-10105-☐2-ND	.59	.43	.37
	6	H5BXT-10106-☐2-ND	.59	.44	.38
	8	H5BXT-10108-☐2-ND	.61	.45	.39
	10	H5BXT-10110-☐2-ND	.62	.46	.40
	12	H5BXT-10112-☐2-ND	.63	.47	.40
DF13 - TIN PLATED CONTACTS					
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H4BBT-10102-☐8-ND	.57	.42	.36
	3	H4BBT-10103-☐8-ND	.57	.42	.37
	4	H4BBT-10104-☐8-ND	.58	.43	.37
	5	H4BBT-10105-☐8-ND	.59	.43	.38
	6	H4BBT-10106-☐8-ND	.59	.44	.38
	8	H4BBT-10108-☐8-ND	.61	.45	.39
	10	H4BBT-10110-☐8-ND	.62	.46	.40
	12	H4BBT-10112-☐8-ND	.63	.47	.41
Fig. 4 (Socket Single End)	2	H4BXT-10102-☐8-ND	.54	.40	.34
	3	H4BXT-10103-☐8-ND	.54	.40	.35
	4	H4BXT-10104-☐8-ND	.55	.41	.35
	5	H4BXT-10105-☐8-ND	.56	.41	.36
	6	H4BXT-10106-☐8-ND	.56	.42	.36
	8	H4BXT-10108-☐8-ND	.57	.43	.37
	10	H4BXT-10110-☐8-ND	.59	.44	.38
	12	H4BXT-10112-☐8-ND	.60	.44	.38
30 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H4BBT-10102-☐1-ND	.57	.42	.36
	3	H4BBT-10103-☐1-ND	.57	.42	.37
	4	H4BBT-10104-☐1-ND	.58	.43	.37
	5	H4BBT-10105-☐1-ND	.59	.43	.38
	6	H4BBT-10106-☐1-ND	.59	.44	.38
	8	H4BBT-10108-☐1-ND	.61	.45	.39
	10	H4BBT-10110-☐1-ND	.62	.46	.40
	12	H4BBT-10112-☐1-ND	.63	.47	.41
Fig. 4 (Socket Single End)	2	H4BXT-10102-☐1-ND	.54	.40	.34
	3	H4BXT-10103-☐1-ND	.54	.40	.35
	4	H4BXT-10104-☐1-ND	.55	.41	.35
	5	H4BXT-10105-☐1-ND	.56	.41	.36
	6	H4BXT-10106-☐1-ND	.56	.42	.36
	8	H4BXT-10108-☐1-ND	.57	.43	.37
	10	H4BXT-10110-☐1-ND	.59	.44	.38
	12	H4BXT-10112-☐1-ND	.60	.44	.38
DF13 - GOLD PLATED CONTACTS					
28 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H4BBG-10102-☐8-ND	.60	.45	.39
	3	H4BBG-10103-☐8-ND	.61	.45	.39
	4	H4BBG-10104-☐8-ND	.62	.46	.39
	5	H4BBG-10105-☐8-ND	.62	.46	.40
	6	H4BBG-10106-☐8-ND	.63	.47	.40
	8	H4BBG-10108-☐8-ND	.64	.48	.41
	10	H4BBG-10110-☐8-ND	.66	.49	.42
	12	H4BBG-10112-☐8-ND	.67	.50	.43
Fig. 4 (Socket Single End)	2	H4BXG-10102-☐8-ND	.55	.41	.35
	3	H4BXG-10103-☐8-ND	.56	.41	.36
	4	H4BXG-10104-☐8-ND	.57	.42	.36
	5	H4BXG-10105-☐8-ND	.57	.42	.37
	6	H4BXG-10106-☐8-ND	.58	.43	.37
	8	H4BXG-10108-☐8-ND	.59	.44	.38
	10	H4BXG-10110-☐8-ND	.61	.45	.39
	12	H4BXG-10112-☐8-ND	.62	.46	.40
30 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H4BBG-10102-☐1-ND	.60	.45	.39
	3	H4BBG-10103-☐1-ND	.61	.45	.39
	4	H4BBG-10104-☐1-ND	.62	.46	.39
	5	H4BBG-10105-☐1-ND	.62	.46	.40
	6	H4BBG-10106-☐1-ND	.63	.47	.40
	8	H4BBG-10108-☐1-ND	.64	.48	.41
	10	H4BBG-10110-☐1-ND	.66	.49	.42
	12	H4BBG-10112-☐1-ND	.67	.50	.43
Fig. 4 (Socket Single End)	2	H4BXG-10102-☐1-ND	.55	.41	.35
	3	H4BXG-10103-☐1-ND	.56	.41	.36
	4	H4BXG-10104-☐1-ND	.57	.42	.36
	5	H4BXG-10105-☐1-ND	.57	.42	.37
	6	H4BXG-10106-☐1-ND	.58	.43	.37
	8	H4BXG-10108-☐1-ND	.59	.44	.38
	10	H4BXG-10110-☐1-ND	.61	.45	.39
	12	H4BXG-10112-☐1-ND	.62	.46	.40
DF22 - TIN PLATED CONTACTS					
16 AWG WIRE					
Fig. 1 (Socket to Socket)	2	H6BBT-10102-☐7-ND	.72	.53	.46
	3	H6BBT-10103-☐7-ND	.73	.54	.47
	4	H6BBT-10104-☐7-ND	.73	.54	.47
	5	H6BBT-10105-☐7-ND	.74	.55	.47
	6	H6BBT-10106-☐7-ND	.75	.55	.48
	8	H6BBT-10108-☐7-ND	.76	.56	.49
	10	H6BBT-10110-☐7-ND	.77	.57	.49
	12	H6BBT-10112-☐7-ND	.79	.58	.50
Fig. 4 (Socket Single End)	2	H6BXT-10102-☐7-ND	.61	.45	.39
	3	H6BXT-10103-☐7-ND	.62	.46	.40
	4	H6BXT-10104-☐7-ND	.63	.46	.40
	5	H6BXT-10105-☐7-ND	.63	.47	.40
	6	H6BXT-10106-☐7-ND	.64	.47	.41
	8	H6BXT-10108-☐7-ND	.65	.48	.42
	10	H6BXT-10110-☐7-ND	.67	.49	.43
	12	H6BXT-10112-☐7-ND	.68	.50	.43

NEW! Power Supply Connectors – PX Series

Features: • Power supply connector for high-current withstands voltage of 2200V AC max. and 10A/contact (60A/6 contacts) of rated current • Housing design prevents incorrect insertion; opening section is designed to prevent reverse insertion and mating direction is easily checked. The opening section is keyed to prevent misalignment of plugs in parallel applications. • Reliable contact structure; three point contact, gold plated contacts (standard) with high-level environmental resistance, contact spring guard structure, structure prevents retainer deformation.

Specifications: • **Temp. Range:** -55°C to +105°C • **Voltage:** AC600V • **Current:** 10A • **Contact Resistance:** 10mø max. measured at 100mA • **Insulation Resistance:** 1000Mø min. measured at DC 500V **Material:** • Contacts: Copper alloy, gold plating • Insulator: PBT resin (UL94V-0) • Metal Fixture: Copper alloy, solder plating

Fig. 1 - Receptacle

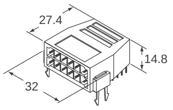


Fig. 2 - Plug

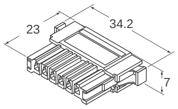


Fig. 3 - Plug Holder Cover

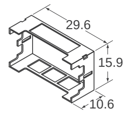


Fig.	No. of Circuits	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	8 12	H10068-ND H10069-ND	5.08 5.42	4.20 4.49	3.50 3.74	PX10-AD4WP PX10-AF6WP
2	4 6	H10071-ND H10072-ND	2.02 2.44	1.68 2.03	1.40 1.69	PX50-AD4S PX50-AF6S
3	4 6	H10070-ND H10074-ND	1.82 2.44	1.52 2.03	1.26 1.69	PX-4WS-CV PX-6WS-CV
—	Female Terminal, 16-18AWG	H10073-ND	—	.50	.41	PX50-SC-131

NEW! Connectors – QR/P1 Series

QR/P1 series connectors are small and compact high 8, 12, 16, 24 and 32 way. Crimp terminals assure density versions of original OR/P series. Available in positive and reliable termination with minimum labor.

Features: • The coupling mechanism assures stable and reliable contact pressure through point and blade contact, in addition to smooth coupling that is sufficiently capable of dealing with variations in the coupling length specific to the plug-in connection. • One opposed pair (in 12 contacts), 2 pairs (in 8, 16, and 24 contacts), and 3 pairs (in 32 contacts) can be used as power supply contacts. They are spaced further apart than the others so as to have enough creeping distance to withstand a high voltage. Fire-retardant insulation materials (UL94-0) are used. • The Guide Pin is made of steel nickel plated to be strong enough against accidental coupling shock. • The mount of a receptacle housing is done through floating bushes. Thus, they may help to give more smooth coupling of connectors by self-adjusting function.

Specifications: • Operating Temp. Range: -10°C to +60°C • **Voltage**: *Power Terminal*: AC 250V; *Signal Terminal:* AC 125V • **Current**: *Power Unit*: 13A max. (AWG 14 use); *Signal Unit*: 3A • **Withstand Voltage**: *Power Terminal*: AC 1000V; *Signal Terminal*: AC 500V • **Insulation Resistance**: 5000M Ω higher at DC 500V • **Contact Resistance**: *Power Unit*: 10m Ω or less at DC1A; *Signal Unit*: 15m Ω or less at DC1A • **Material**: *Insulator*: Polyethylene terephtalate, black; *Terminal*: Phosphor bronze, selective gold plating with nickel underplating

Fig. 1 - Plug Housing

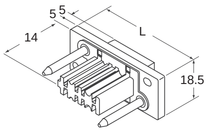


Fig. 2 - Socket Housing

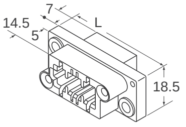


Fig.	No. of Circuits	Dimension L (mm)	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	8	46.4	H10083-ND	4.52	3.75	3.12	QR/P1-8P-C(01)
	12	51	H10075-ND	4.96	4.11	3.42	QR/P1-12P-C(01)
	16	57.6	H10077-ND	5.34	4.42	3.68	QR/P1-16P-C(01)
	24	68.8	H10079-ND	5.77	4.78	3.98	QR/P1-24P-C(01)
	32	85.5	H10081-ND	6.81	5.77	4.85	QR/P1-32P-C(01)
2	8	46.4	H10084-ND	5.25	4.35	3.62	QR/P1-8S-C(01)
	12	51	H10076-ND	5.77	4.78	3.98	QR/P1-12S-C(01)
	16	57.6	H10078-ND	6.18	5.12	4.26	QR/P1-16S-C(01)
	24	68.8	H10080-ND	6.70	5.55	4.62	QR/P1-24S-C(01)
	32	85.5	H10082-ND	7.62	6.45	5.43	QR/P1-32S-C(01)
Male Contact, 14-16AWG			H10086-ND	—	.87	.70	QR/P1-PC1B-121
Male Contact, 18-24AWG			H10085-ND	—	.62	.50	QR/P1-PC1A-111
Female Contact, 14-16AWG			H10090-ND	—	.84	.67	QR/P1-SC1B-121
Female Contact, 18-24AWG			H10089-ND	—	.58	.47	QR/P1-SC1A-111
Male Contact, 20-24AWG			H10088-ND	—	.49	.40	QR/P1-PC2B-121
Male Contact, 24-28AWG			H10087-ND	—	.50	.39	QR/P1-PC2A-111
Female Contact, 20-24AWG			H10092-ND	—	.60	.49	QR/P1-SC2B-121
Female Contact, 24-28AWG			H10091-ND	—	.48	.38	QR/P1-SC2A-111
Hand Crimp Tool for H10086-ND			H10123-ND	770.06	—	—	TC-QR/P1-PC1B
Hand Crimp Tool for H10085-ND			H10122-ND	742.05	—	—	TC-QR/P1-PC1A
Hand Crimp Tool for H10090-ND			H10127-ND	770.06	—	—	TC-QR/P1-SC1B
Hand Crimp Tool for H10089-ND			H10126-ND	742.05	—	—	TC-QR/P1-SC1A
Hand Crimp Tool for H10088-ND			H10125-ND	770.06	—	—	TC-QR/P1-PC2B
Hand Crimp Tool for H10087-ND			H10124-ND	587.29	—	—	TC-QR/P1-PC2A
Hand Crimp Tool for H10092-ND			H10129-ND	770.06	—	—	TC-QR/P1-SC2B
Hand Crimp Tool for H10091-ND			H10128-ND	587.29	—	—	TC-QR/P1-SC2A
Extraction Tool			H10121-ND	10.65	—	—	TC-QR/P1-21

NEW! Connectors – QR/P4 and P6 Series

QR/P4 series is a series of small connectors for rack and panel application. This is a smaller rectangular size version of the QR/P and QR/P1 series. Available in 8, 12, 16, 24, 32 and 40 contacts. Wires are connected to the connectors without solder for easier connection and higher reliability.

QR/P6 series are miniaturized versions of the QR/P and QR/P1 series. Rectangular multi-contact rack and panel connectors for plug-in connection. Available in 6, 12, 16, and 24 contacts for highly efficient and reliable crimp termination.

Features: • Offers smooth insertion/extraction and stable contact pressure through point-blade contact, and allows for the deviations in contact length specific to plug-in connection. • Miniaturized by separating power contacts from signal contacts. • Miniaturized using guide pins integral with the insulator. • The connectors of the series have passed UL, CSA and TUV standards.

Applications: • PPC • Transmission, automation, reception and data communication equipment • Vending machines • Measuring instruments • Switch boards

QR/P4 Specifications: • **Operating Temp:** -10°C to +60°C • **Rated Voltage:** *Power:* AC 300V; *Signal:* AC 250V • **Rated Current:** *Power:* 3A; *Signal:* 1A • **Withstand Voltage:** *Power:* AC 2000V; *Signal:* AC 500V • **Insulation Resistance**: Min. 5000M Ω at DC 500V • **Contact Resistance**: *Power*: Max. 15mΩ at DC1A; *Signal:* Max. 15mΩ at DC1A • **Material:** *Insulator:* PBT resin (UL94V-0), Black; *Contact:* Phosphor bronze, Selective gold plated over nickel

QR/P6 Specifications: • **Operating Temp.:** -10°C to +60°C • **Rated Voltage:** AC 120V • **Rated Current:** *Power Terminal:* 10A; *Signal Terminal:* 1A • **Withstand Voltage** (for 1 min.): *Power Unit:* AC 1000V; *Signal Unit:* AC 500V • **Insulation Resistance:** 5000M Ω or less at DC 500V • **Contact Resistance:** *Power Terminal:* 10m Ω or less at DC1A: *Signal Terminal:* 15m Ω or less at DC1A • **Materials:** *Insulator:* PBT resin (UL94V-0), Black; *Terminal:* Phosphor bronze, selective gold plating with nickel underplating

Fig. 1 - QR/P4 Male Housing use with QR/P1 Male Contacts

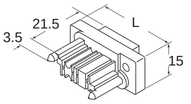


Fig. 2 - QR/P4 Female Housing use with QR/P1 Female Contacts

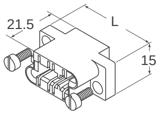


Fig. 3 - QR/P6 Male Housing use with QR/P1 Male Contacts

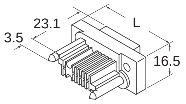


Fig. 4 - QR/P6 Female Housing use with QR/P1 Female Contacts

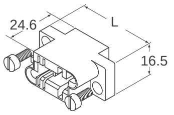


Fig.	No. of Circuits	Dimension L (mm)	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
QR/P4 Series							
1	8	34.68	H10103-ND	3.28	2.72	2.26	QR/P4-8P-C(01)
	12	39.8	H10093-ND	4.12	3.41	2.84	QR/P4-12P-C(01)
	16	44.84	H10095-ND	4.96	4.11	3.42	QR/P4-16P-C(01)
	24	55	H10097-ND	5.34	4.42	3.68	QR/P4-24P-C(01)
	32	67.7	H10099-ND	5.77	4.78	3.98	QR/P4-32P-C(01)
	40	77.86	H10101-ND	6.18	5.12	4.26	QR/P4-40P-C(01)
2	8	34.68	H10104-ND	3.68	3.05	2.54	QR/P4-8S-C(01)
	12	39.8	H10094-ND	3.97	3.29	2.74	QR/P4-12S-C(01)
	16	44.84	H10096-ND	5.74	4.76	3.96	QR/P4-16S-C(01)
	24	55	H10098-ND	6.18	5.12	4.26	QR/P4-24S-C(01)
	32	67.7	H10100-ND	6.61	5.48	4.56	QR/P4-32S-C(01)
	40	77.86	H10102-ND	7.02	5.81	4.84	QR/P4-40S-C(01)
QR/P6 Series							
3	6	32.67	H10111-ND	2.99	2.49	2.07	QR/P6-6P-C(01)
	12	41.47	H10105-ND	2.90	2.40	2.00	QR/P6-12P-C(01)
	16	46.55	H10107-ND	2.99	2.49	2.07	QR/P6-16P-C(01)
	24	56.71	H10109-ND	3.28	2.72	2.26	QR/P6-24P-C(01)
4	6	32.67	H10112-ND	3.28	2.72	2.26	QR/P6-6S-C(01)
	12	41.47	H10106-ND	3.42	2.84	2.36	QR/P6-12S-C(01)
	16	46.55	H10108-ND	4.35	3.60	3.00	QR/P6-16S-C(01)
	24	56.71	H10110-ND	4.12	3.41	2.84	QR/P6-24S-C(01)

NEW! Connectors – QR/P8 Series

QR/P8 series is a series of small connectors for rack and panel application. This is a smaller rectangular size version of the QR/P and QR/P1 series. Electrodes available are 8, 12 and 20. Wires are connected to the connectors without solder for easier connection and higher reliability.

Features: • The connector of this series is about 20% smaller in length than that of the QR/P4 series with the same number of electrodes. • Wires of AWG 20-28 can be connected with the two pairs of terminals on the two sides, while wires of AWG 24-28 can be connected with the terminals for signals. • The pins give stable contact pressure because of their point contact with the receptacle blades, and have a larger allowance for the variation of connection length. • The connectors have passed UL, CSA and TUV standards.

Application: • PPC • Transmission, automation, reception and data communication equipment • Vending machines • Measuring instruments • Switchboards

Specifications: • **Operating Temp.:** -10°C to 60°C • **Withstand Voltage** (for 1 min.): *Power Supply*: AC 2000V; *Signal Unit*: AC 500V • **Insulation Resistance:** 1000M Ω or less at DC 500V • **Contact Resistance:** 30m Ω or less at DC1A • **Material:** *Insulator:* Polycarbonate resin UL94V-0, Black; *Contact:* Phosphor bronze, selective gold plated over nickel

Fig. 1 - Male Housing

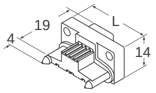


Fig. 2 - Female Housing

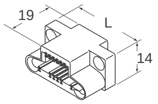


Fig.	No. of Circuits	Dimension L (mm)	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	8	27	H10116-ND	2.80	2.33	1.94	QR/P8-8P-C(01)
	12	31	H10002-ND	2.90	2.40	2.00	QR/P8-12P-C(01)
	20	39	H10114-ND	3.42	2.84	2.36	QR/P8-20P-C(01)
2	8	27	H10117-ND	2.93	2.43	2.02	QR/P8-8S-C(01)
	12	31	H10113-ND	3.28	2.72	2.26	QR/P8-12S-C(01)
	20	39	H10115-ND	3.83	3.17	2.64	QR/P8-20S-C(01)
Male Contact, 20-24AWG			H10118-ND	—	.24	.20	QR/P8-PC-111
Female Contact, 20-24AWG			H10119-ND	—	.24	.20	QR/P8-SC-111
Male Contact, 24-28AWG			H10003-ND	—	.24	.20	QR/P8-PC-121
Female Contact, 24-28AWG			H10120-ND	—	.24	.20	QR/P8-SC-121

Sullins 2mm Connectors

SPECIFICATIONS: **Current Rating**: 1 Amp **Contact Resistance:** 20 milli Ohm Max. **Dielectric Withstanding**: 500 VAC **Operating Temperature:** -40°C to +105°C **Contact Material**: Headers: Brass, Receptacles: Phosphor Bronze. **Insulator Material:** Polyester, UL 94V-0 **Contact Finish:** Selective Plating, Gold/Tin

Fig. 1

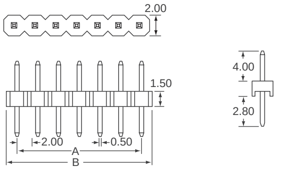


Fig. 2

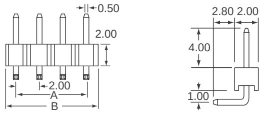


Fig. 3

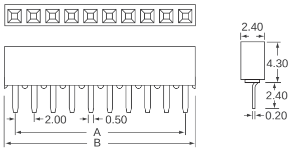


Fig. 4

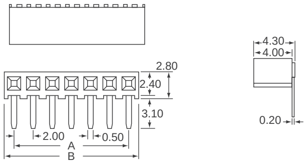


Fig. 5

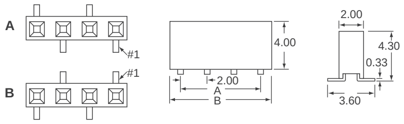


Fig. 6

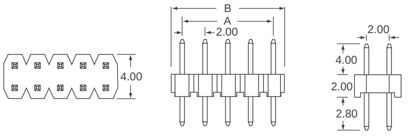


Fig. 7

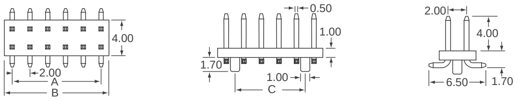


Fig. 8

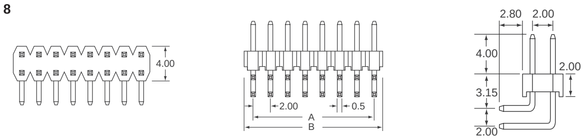


Fig.	Cir-cuits	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Sullins Part No.
Single Row Header, Straight								
1	2	2.00	4.00	S2105-02-ND	.44	.38	.33	PRPN021PAEN
	3	4.00	6.00	S2105-03-ND	.46	.40	.34	PRPN031PAEN
	4	6.00	8.00	S2105-04-ND	.48	.42	.36	PRPN041PAEN
	5	8.00	10.00	S2105-05-ND	.50	.44	.37	PRPN051PAEN
	6	10.00	12.00	S2105-06-ND	.52	.45	.39	PRPN061PAEN
	7	12.00	14.00	S2105-07-ND	.54	.47	.40	PRPN071PAEN
	8	14.00	16.00	S2105-08-ND	.56	.49	.41	PRPN081PAEN
	9	16.00	18.00	S2105-09-ND	.58	.51	.43	PRPN091PAEN
	10	18.00	20.00	S2105-10-ND	.60	.52	.44	PRPN101PAEN
	11	20.00	22.00	S2105-11-ND	.62	.54	.46	PRPN111PAEN
	12	22.00	24.00	S2105-12-ND	.64	.56	.47	PRPN121PAEN
	13	24.00	26.00	S2105-13-ND	.66	.58	.49	PRPN131PAEN
	14	26.00	28.00	S2105-14-ND	.68	.59	.50	PRPN141PAEN
	15	28.00	30.00	S2105-15-ND	.70	.61	.52	PRPN151PAEN
	16	30.00	32.00	S2105-16-ND	.72	.63	.53	PRPN161PAEN
	17	32.00	34.00	S2105-17-ND	.74	.64	.55	PRPN171PAEN
	18	34.00	36.00	S2105-18-ND	.76	.66	.56	PRPN181PAEN
	19	36.00	38.00	S2105-19-ND	.78	.68	.58	PRPN191PAEN
	20	38.00	40.00	S2105-20-ND	.80	.70	.59	PRPN201PAEN
	21	40.00	42.00	S2105-21-ND	.82	.71	.61	PRPN211PAEN
	22	42.00	44.00	S2105-22-ND	.84	.73	.62	PRPN221PAEN
	23	44.00	46.00	S2105-23-ND	.86	.75	.63	PRPN231PAEN
	24	46.00	48.00	S2105-24-ND	.88	.77	.65	PRPN241PAEN
	25	48.00	50.00	S2105-25-ND	.90	.78	.66	PRPN251PAEN
	26	50.00	52.00	S2105-26-ND	.92	.80	.68	PRPN261PAEN
	27	52.00	54.00	S2105-27-ND	.94	.82	.69	PRPN271PAEN
	28	54.00	56.00	S2105-28-ND	.96	.84	.71	PRPN281PAEN
	29	56.00	58.00	S2105-29-ND	.98	.85	.72	PRPN291PAEN
	30	58.00	60.00	S2105-30-ND	1.00	.87	.74	PRPN301PAEN
	31	60.00	62.00	S2105-31-ND	1.02	.89	.75	PRPN311PAEN
	32	62.00	64.00	S2105-32-ND	1.04	.90	.77	PRPN321PAEN
	33	64.00	66.00	S2105-33-ND	1.06	.92	.78	PRPN331PAEN
	34	66.00	68.00	S2105-34-ND	1.08	.94	.80	PRPN341PAEN
	35	68.00	70.00	S2105-35-ND	1.10	.96	.81	PRPN351PAEN
	36	70.00	72.00	S2105-36-ND	1.12	.97	.83	PRPN361PAEN
	37	72.00	74.00	S2105-37-ND	1.14	.99	.84	PRPN371PAEN
	38	74.00	76.00	S2105-38-ND	1.16	1.01	.85	PRPN381PAEN
	39	76.00	78.00	S2105-39-ND	1.18	1.03	.87	PRPN391PAEN
	40	78.00	80.00	S2105-40-ND	1.11	.97	.82	PRPN401PAEN
Single Row Header, Right Angle								
2	2	2.00	4.00	S2106-02-ND	.38	.34	.29	PRPN021PARN
	3	4.00	6.00	S2106-03-ND	.41	.36	.31	PRPN031PARN
	4	6.00	8.00	S2106-04-ND	.44	.39	.33	PRPN041PARN
	5	8.00	10.00	S2106-05-ND	.47	.41	.35	PRPN051PARN
	6	10.00	12.00	S2106-06-ND	.50	.44	.37	PRPN061PARN
	7	12.00	14.00	S2106-07-ND	.53	.47	.40	PRPN071PARN
	8	14.00	16.00	S2106-08-ND	.56	.49	.42	PRPN081PARN
	9	16.00	18.00	S2106-09-ND	.59	.52	.44	PRPN091PARN
	10	18.00	20.00	S2106-10-ND	.62	.54	.46	PRPN101PARN
	11	20.00	22.00	S2106-11-ND	.65	.57	.48	PRPN111PARN
	12	22.00	24.00	S2106-12-ND	.68	.60	.51	PRPN121PARN
	13	24.00	26.00	S2106-13-ND	.71	.62	.53	PRPN131PARN
	14	26.00	28.00	S2106-14-ND	.74	.65	.55	PRPN141PARN
	15	28.00	30.00	S2106-15-ND	.77	.67	.57	PRPN151PARN
	16	30.00	32.00	S2106-16-ND	.80	.70	.59	PRPN161PARN
	17	32.00	34.00	S2106-17-ND	.83	.73	.62	PRPN171PARN
	18	34.00	36.00	S2106-18-ND	.86	.75	.64	PRPN181PARN
	19	36.00	38.00	S2106-19-ND	.89	.78	.66	PRPN191PARN
	20	38.00	40.00	S2106-20-ND	.92	.80	.68	PRPN201PARN
	21	40.00	42.00	S2106-21-ND	.95	.83	.70	PRPN211PARN
	22	42.00	44.00	S2106-22-ND	.98	.86	.73	PRPN221PARN
	23	44.00	46.00	S2106-23-ND	1.01	.88	.75	PRPN231PARN
	24	46.00	48.00	S2106-24-ND	1.04	.91	.77	PRPN241PARN
	25	48.00	50.00	S2106-25-ND	1.07	.93	.79	PRPN251PARN
	26	50.00	52.00	S2106-26-ND	1.10	.96	.81	PRPN261PARN
	27	52.00	54.00	S2106-27-ND	1.13	.99	.84	PRPN271PARN
	28	54.00	56.00	S2106-28-ND	1.16	1.01	.86	PRPN281PARN
	29	56.00	58.00	S2106-29-ND	1.19	1.04	.88	PRPN291PARN
	30	58.00	60.00	S2106-30-ND	1.22	1.06	.90	PRPN301PARN
	31	60.00	62.00	S2106-31-ND	1.25	1.09	.92	PRPN311PARN
	32	62.00	64.00	S2106-32-ND	1.28	1.12	.95	PRPN321PARN
	33	64.00	66.00	S2106-33-ND	1.31	1.14	.97	PRPN331PARN
	34	66.00	68.00	S2106-34-ND	1.34	1.17	.99	PRPN341PARN
	35	68.00	70.00	S2106-35-ND	1.37	1.19	1.01	PRPN351PARN
	36	70.00	72.00	S2106-36-ND	1.40	1.22	1.03	PRPN361PARN
	37	72.00	74.00	S2106-37-ND	1.43	1.25	1.06	PRPN371PARN
	38	74.00	76.00	S2106-38-ND	1.46	1.27	1.08	PRPN381PARN
	39	76.00	78.00	S2106-39-ND	1.49	1.30	1.10	PRPN391PARN
	40	78.00	80.00	S2106-40-ND	1.41	1.23	1.04	PRPN401PARN
Single Row Receptacle Straight								
3	4	6.00	8.50	S2103-04-ND	.60	.50	.32	PPPN041BFCN
	5	8.00	10.50	S2103-05-ND	.63	.53	.34	PPPN051BFCN
	6	10.00	12.50	S2103-06-ND	.67	.56	.36	PPPN061BFCN
	7	12.00	14.50	S2103-07-ND	.70	.58	.37	PPPN071BFCN
	8	14.00	16.50	S2103-08-ND	.77	.64	.41	PPPN081BFCN
	9	16.00	18.50	S2103-09-ND	.81	.67	.43	PPPN091BFCN
	10	18.00	20.50	S2103-10-ND	.84	.70	.45	PPPN101BFCN
	11	20.00	22.50	S2103-11-ND	.91	.76	.49	PPPN111BFCN
	12	22.00	24.50	S2103-12-ND	.98	.82	.52	PPPN121BFCN
	15	28.00	30.50	S2103-15-ND	1.23	1.02	.65	PPPN151BFCN
	18	34.00	36.50	S2103-18-ND	1.51	1.25	.80	PPPN181BFCN
	22	42.00	44.50	S2103-22-ND	1.82	1.51	.97	PPPN221BFCN
	25	48.00	50.50	S2103-25-ND	2.07	1.72	1.10	PPPN251BFCN
	30	58.00	60.50	S2103-30-ND	2.49	2.06	1.32	PPPN301BFCN
	36	70.00	72.50	S2103-36-ND	2.98	2.47	1.58	PPPN361BFCN
	40	78.00	80.50	S2103-40-ND	3.29	2.73	1.74	PPPN401BFCN
Single Row Receptacle, Right Angle								
4	4	6.00	8.50	S2104-04-ND	.84	.70	.45	PPPN041FGGN
	5	8.00	10.50	S2104-05-ND	.88	.73	.47	PPPN051FGGN
	6	10.00	12.50	S2104-06-ND	.95	.79	.50	PPPN061FGGN
	7	12.00	14.50	S2104-07-ND	1.05	.87	.56	PPPN071FGGN
	8	14.00	16.50	S2104-08-ND	1.12	.93	.60	PPPN081FGGN
	9	16.00	18.50	S2104-09-ND	1.16	.96	.62	PPPN091FGGN
	10	18.00	20.50	S2104-10-ND	1.19	.99	.63	PPPN101FGGN
	12	22.00	24.50	S2104-12-ND	1.40	1.16	.74	PPPN121FGGN
	15	28.00	30.50	S2104-15-ND	1.79	1.48	.95	PPPN151FGGN
	17	32.00	34.50	S2104-17-ND	2.00	1.66	1.06	PPPN171FGGN
Single Row Recept. SMT Contacts, Pin 1 on Left Hand Side								
5A	4	6.00	8.50	S2101-04-ND	.70	.58	.37	PPPN041BFLC
	5	8.00	10.50	S2101-05-ND	.77	.64	.41	PPPN051BFLC
	6	10.00	12.50	S2101-06-ND	.84	.70	.45	PPPN061BFLC
	7	12.00	14.50	S2101-07-ND	.91	.76	.49	PPPN071BFLC
	8	14.00	16.50	S2101-08-ND	1.02	.85	.54	PPPN081BFLC
	9	16.00	18.50	S2101-09-ND	1.09	.90	.58	PPPN091BFLC
	10	18.00	20.50	S2101-10-ND	1.12	.93	.60	PPPN101BFLC
	12	22.00	24.50	S2101-12-ND	1.33	1.11	.71	PPPN121BFLC
	15	28.00	30.50	S2101-15-ND	1.68	1.40	.89	PPPN151BFLC
	18	34.00	36.50	S2101-18-ND	2.03	1.69	1.08	PPPN181BFLC
	20	38.00	40.50	S2101-20-ND	2.24	1.86	1.19	PPPN201BFLC
	22	42.00	44.50	S2101-22-ND	2.49	2.06	1.32	PPPN221BFLC
	25	48.00	50.50	S2101-25-ND	2.80	2.32	1.48	PPPN251BFLC
Single Row Recept. SMT Contacts, Pin 1 on Right Hand Side								
5B	4	6.00	8.50	S2102-04-ND	.70	.58	.37	PPPN041BFLD
	5	8.00	10.50	S2102-05-ND	.77	.64	.41	PPPN051BFLD
	6	10.00	12.50	S2102-06-ND	.84	.70	.45	PPPN061BFLD
	7	12.00	14.50	S2102-07-ND	.91	.76	.49	PPPN071BFLD
	8	14.00	16.50	S2102-08-ND	1.02	.85	.54	PPPN081BFLD
	9	16.00	18.50	S2102-09-ND	1.09	.90	.58	PPPN091BFLD
	10	18.00	20.50	S2102-10-ND	1.12	.93	.60	PPPN101BFLD
	12	22.00	24.50	S2102-12-ND	1.33	1.11	.71	PPPN121BFLD
	13	24.00	26.50	S2102-13-ND	1.47	1.22	.78	PPPN131BFLD
	15	28.00	30.50	S2102-15-ND	1.68	1.40	.89	PPPN151BFLD
	18	34.00	36.50	S2102-18-ND	2.03	1.69	1.08	PPPN181BFLD
	20	38.00	40.50	S2102-20-ND	2.24	1.86	1.19	PPPN201BFLD
	22	42.00	44.50	S2102-22-ND	2.49	2.06	1.32	PPPN221BFLD
	25	48.00	50.50	S2102-25-ND	2.80	2.32	1.48	PPPN251BFLD
Dual Row Headers, Straight								
6	4	2.00	4.00	S2210-02-ND	.11	.10	.09	PRPN022PAEN
	6	4.00	6.00	S2210-03-ND	.17	.15	.13	PRPN032PAEN
	8	6.00	8.00	S2210-04-ND	.96	.83	.71	PRPN042PAEN
	10	8.00	10.00	S2210-05-ND	1.00	.87	.74	PRPN052PAEN
	12	10.00	12.00	S2210-06-ND	1.04	.90	.77	PRPN062PAEN
	14	12.00	14.00	S2210-07-ND	1.08	.94	.80	PRPN072PAEN
	16	14.00	16.00	S2210-08-ND	1.12	.97	.82	PRPN082PAEN
	18	16.00	18.00	S2210-09-ND	1.16	1.01	.85	PRPN092PAEN
	20	18.00	20.00	S2210-10-ND	1.20	1.04	.88	PRPN102PAEN
	22	20.00	22.00	S2210-11-ND	1.24	1.08	.91	PRPN112PAEN
	24	22.00	24.00	S2210-12-ND	1.28	1.11	.94	PRPN122PAEN
	26	24.00	26.00	S2210-13-ND	1.32	1.15	.97	PRPN132PAEN
	28	26.00	28.00	S2210-14-ND	1.36	1.18	1.00	PRPN142PAEN
	30	28.00	30.00	S2210-15-ND	1.40	1.22	1.03	PRPN152PAEN
	32	30.00	32.00	S2210-16-ND	1.44	1.25	1.06	PRPN162PAEN
	36	34.00	36.00	S2210-18-ND	1.52	1.32	1.12	PRPN182PAEN
	38	36.00	38.00	S2210-19-ND	1.56	1.35	1.15	PRPN192PAEN
	40	38.00	40.00	S2210-20-ND	1.60	1.39	1.18	PRPN202PAEN
	42	40.00	42.00	S2210-21-ND	1.64	1.42	1.21	PRPN212PAEN
	44	42.00	44.00	S2210-22-ND	1.68	1.46	1.24	PRPN222PAEN
	46	44.00	46.00	S2210-23-ND	1.72	1.49	1.26	PRPN232PAEN
	48	46.00	48.00	S2210-24-ND	1.76	1.53	1.29	PRPN242PAEN
	50	48.00	50.00	S2210-25-ND	1.80	1.56	1.32	PRPN252PAEN
	60	58.00	60.00	S2210-30-ND	2.00	1.74	1.47	PRPN302PAEN
	72	70.00	72.00	S2210-36-ND	2.24	1.94	1.65	PRPN362PAEN
	80	78.00	80.00	S2210-40-ND	2.22	1.93	1.63	PRPN402PAEN
Dual Row Headers, SMT, without Locating Peg								
7	4	2.00	4.00	S2209-02-ND	.60	.50	.32	PRPN022MAMS
	6	4.00	6.00	S2209-03-ND	.88	.73	.47	PRPN032MAMS
	8	6.00	8.00	S2209-04-ND	1.12	.93	.60	PRPN042MAMS
	10	8.00	10.00	S2209-05-ND	1.30	1.08	.69	PRPN052MAMS
	12	10.00	12.00	S2209-06-ND	1.47	1.22	.78	PRPN062MAMS
	14	12.00	14.00	S2209-07-ND	1.68	1.40	.89	PRPN072MAMS
	16	14.00	16.00	S2209-08-ND	1.79	1.48	.95	PRPN082MAMS
	18	16.00	18.00	S2209-09-ND	1.86	1.54	.99	PRPN092MAMS
	20	18.00	20.00	S2209-10-ND	1.96	1.63	1.04	PRPN102MAMS
	22	20.00	22.00	S2209-11-ND	2.14	1.77	1.13	PRPN112MAMS
	24	22.00	24.00	S2209-12-ND	2.35	1.95	1.24	PRPN122MAMS
	26	24.00	26.00	S2209-13-ND	2.52	2.09	1.34	PRPN132MAMS
	28	26.00	28.00	S2209-14-ND	2.73	2.27	1.45	PRPN142MAMS
	30	28.00	30.00	S2209-15-ND	2.91	2.41	1.54	PRPN152MAMS
	32	30.00	32.00	S2209-16-ND	3.12	2.59	1.65	PRPN162MAMS
	34	32.00	34.00	S2209-17-ND	3.33	2.76	1.76	PRPN172MAMS
	36	34.00	36.00	S2209-18-ND	3.50	2.90	1.85	PRPN182MAMS

(Continued)

Sullins 2mm Connectors *(Cont.)*

Fig. 9

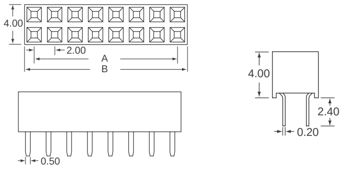


Fig. 10

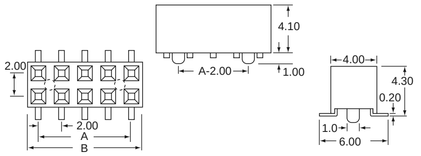


Fig. 11

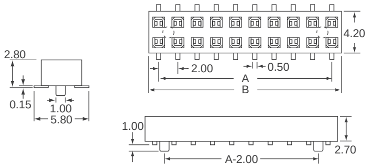


Fig. 12

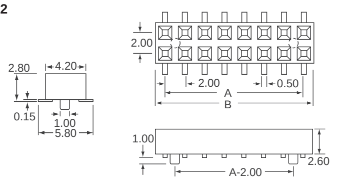


Fig. 13

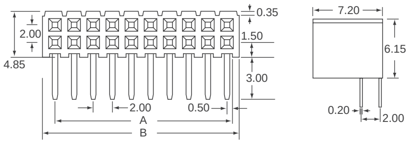


Fig. 14

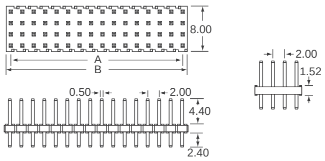


Fig. 15

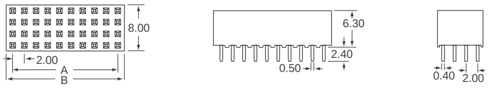


Fig. 16

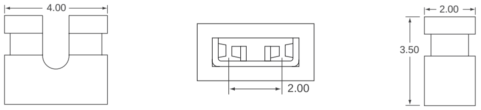


Fig.	Cir-cuits	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Sullins Part No.
7	38	36.00	38.00	S2209-19-ND	3.71	3.08	1.97	PRPN192MAMS
	40	38.00	40.00	S2209-20-ND	3.89	3.22	2.06	PRPN202MAMS
	42	40.00	42.00	S2209-21-ND	4.10	3.40	2.17	PRPN212MAMS
	44	42.00	44.00	S2209-22-ND	4.27	3.54	2.26	PRPN222MAMS
	46	44.00	46.00	S2209-23-ND	4.48	3.72	2.37	PRPN232MAMS
	48	46.00	48.00	S2209-24-ND	4.69	3.89	2.48	PRPN242MAMS
	50	48.00	50.00	S2209-25-ND	4.87	4.04	2.58	PRPN252MAMS
Dual Row Headers, SMT, with Locating Peg								
7	4	2.00	4.00	S2208-02-ND	.60	.50	.32	PRPN022MAMP
	6	4.00	6.00	S2208-03-ND	.88	.73	.47	PRPN032MAMP
	8	6.00	8.00	S2208-04-ND	1.12	.93	.60	PRPN042MAMP
	10	8.00	10.00	S2208-05-ND	1.30	1.08	.69	PRPN052MAMP
	12	10.00	12.00	S2208-06-ND	1.47	1.22	.78	PRPN062MAMP
	14	12.00	14.00	S2208-07-ND	1.68	1.40	.89	PRPN072MAMP
	16	14.00	16.00	S2208-08-ND	1.79	1.48	.95	PRPN082MAMP
	18	16.00	18.00	S2208-09-ND	1.86	1.54	.99	PRPN092MAMP
	20	18.00	20.00	S2208-10-ND	1.96	1.63	1.04	PRPN102MAMP
	24	22.00	24.00	S2208-12-ND	2.35	1.95	1.24	PRPN122MAMP
	30	28.00	30.00	S2208-15-ND	2.91	2.41	1.54	PRPN152MAMP
	36	34.00	36.00	S2208-18-ND	3.50	2.90	1.85	PRPN182MAMP
	44	42.00	44.00	S2208-22-ND	4.27	3.54	2.26	PRPN222MAMP
	50	48.00	50.00	S2208-25-ND	4.87	4.04	2.58	PRPN252MAMP
Dual Row Headers, Right Angle								
8	4	2.00	4.00	S2200-02-ND	1.32	1.15	.97	PRPN022PARN
	6	4.00	6.00	S2200-03-ND	1.38	1.20	1.01	PRPN032PARN
	8	6.00	8.00	S2200-04-ND	1.44	1.25	1.06	PRPN042PARN
	10	8.00	10.00	S2200-05-ND	1.50	1.30	1.10	PRPN052PARN
	12	10.00	12.00	S2200-06-ND	1.56	1.35	1.15	PRPN062PARN
	14	12.00	14.00	S2200-07-ND	1.62	1.41	1.19	PRPN072PARN
	16	14.00	16.00	S2200-08-ND	1.68	1.46	1.23	PRPN082PARN
	18	16.00	18.00	S2200-09-ND	1.74	1.51	1.28	PRPN092PARN
	20	18.00	20.00	S2200-10-ND	1.80	1.56	1.32	PRPN102PARN
	22	20.00	22.00	S2200-11-ND	1.86	1.61	1.37	PRPN112PARN
	24	22.00	24.00	S2200-12-ND	1.92	1.67	1.41	PRPN122PARN
	26	24.00	26.00	S2200-13-ND	1.98	1.72	1.45	PRPN132PARN
	28	26.00	28.00	S2200-14-ND	2.04	1.77	1.50	PRPN142PARN
	30	28.00	30.00	S2200-15-ND	2.10	1.82	1.54	PRPN152PARN
	32	30.00	32.00	S2200-16-ND	2.16	1.87	1.59	PRPN162PARN
	34	32.00	34.00	S2200-17-ND	2.22	1.93	1.63	PRPN172PARN
	36	34.00	36.00	S2200-18-ND	2.28	1.98	1.67	PRPN182PARN
	38	36.00	38.00	S2200-19-ND	2.34	2.03	1.72	PRPN192PARN
	40	38.00	40.00	S2200-20-ND	2.40	2.08	1.76	PRPN202PARN
	42	40.00	42.00	S2200-21-ND	2.46	2.13	1.81	PRPN212PARN
	44	42.00	44.00	S2200-22-ND	2.52	2.19	1.85	PRPN222PARN
	46	44.00	46.00	S2200-23-ND	2.58	2.24	1.89	PRPN232PARN
	48	46.00	48. 00	S2200-24-ND	2.64	2.29	1.94	PRPN242PARN
	50	48.00	50.00	S2200-25-ND	2.70	2.34	1.98	PRPN252PARN
	60	58.00	60.00	S2200-30-ND	3.00	2.60	2.20	PRPN302PARN
	80	78.00	80.00	S2200-40-ND	3.33	2.89	2.45	PRPN402PARN
Dual Row Receptacle Straight								
9	6	4.00	6.00	S2201-03-ND	.88	.73	.47	PPWN032AFCN
	8	6.00	8.00	S2201-04-ND	1.12	.93	.60	PPWN042AFCN
	10	8.00	10.00	S2201-05-ND	1.19	.99	.63	PPWN052AFCN
	12	10.00	12.00	S2201-06-ND	1.26	1.05	.67	PPWN062AFCN
	14	12.00	14.00	S2201-07-ND	1.37	1.14	.73	PPWN072AFCN
	16	14.00	16.00	S2201-08-ND	1.47	1.22	.78	PPWN082AFCN
	18	16.00	18.00	S2201-09-ND	1.58	1.31	.84	PPWN092AFCN
	20	18.00	20.00	S2201-10-ND	1.61	1.34	.86	PPWN102AFCN
	22	20.00	22.00	S2201-11-ND	1.79	1.48	.95	PPWN112AFCN
	24	22.00	24.00	S2201-12-ND	1.96	1.63	1.04	PPWN122AFCN
	26	24.00	26.00	S2201-13-ND	2.10	1.74	1.11	PPWN132AFCN
	30	28.00	30.00	S2201-15-ND	2.45	2.03	1.30	PPWN152AFCN

Fig.	Cir-cuits	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Sullins Part No.
9	40	38.00	40.00	S2201-20-ND	2.98	2.47	1.58	PPWN202AFCN
	44	42.00	44.00	S2201-22-ND	3.29	2.73	1.74	PPWN222AFCN
	50	48.00	50.00	S2201-25-ND	3.75	3.11	1.98	PPWN252AFCN
	60	58.00	60.00	S2201-30-ND	4.48	3.72	2.37	PPWN302AFCN
	80	78.00	80.00	S2201-40-ND	5.99	4.96	3.17	PPWN402AFCN
Dual Row Receptacle SMT without Locating Peg								
10	6	4.00	6.00	S2202-03-ND	.98	.82	.52	PPPN032FFKS
	8	6.00	8.00	S2202-04-ND	1.12	.93	.60	PPPN042FFKS
	10	8.00	10.00	S2202-05-ND	1.30	1.08	.69	PPPN052FFKS
	12	10.00	12.00	S2202-06-ND	1.47	1.22	.78	PPPN062FFKS
	14	12.00	14.00	S2202-07-ND	1.68	1.40	.89	PPPN072FFKS
	16	14.00	16.00	S2202-08-ND	1.89	1.57	1.00	PPPN082FFKS
	18	16.00	18.00	S2202-09-ND	2.14	1.77	1.13	PPPN092FFKS
	20	18.00	20.00	S2202-10-ND	2.24	1.86	1.19	PPPN102FFKS
	24	22.00	24.00	S2202-12-ND	2.70	2.24	1.43	PPPN122FFKS
	26	24.00	26.00	S2202-13-ND	2.91	2.41	1.54	PPPN132FFKS
	30	28.00	30.00	S2202-15-ND	3.36	2.79	1.78	PPPN152FFKS
	40	38.00	40.00	S2202-20-ND	4.48	3.72	2.37	PPPN202FFKS
	44	42.00	44.00	S2202-22-ND	4.94	4.09	2.61	PPPN222FFKS
	50	48.00	50.00	S2202-25-ND	5.60	4.64	2.96	PPPN252FFKS
	60	58.00	60.00	S2202-30-ND	6.72	5.57	3.56	PPPN302FFKS
Dual Row Receptacle SMT with Locating Peg								
10	6	4.00	6.00	S2203-03-ND	.98	.82	.52	PPPN032FFKP
	8	6.00	8.00	S2203-04-ND	1.12	.93	.60	PPPN042FFKP
	10	8.00	10.00	S2203-05-ND	1.30	1.08	.69	PPPN052FFKP
	12	10.00	12.00	S2203-06-ND	1.47	1.22	.78	PPPN062FFKP
	14	12.00	14.00	S2203-07-ND	1.68	1.40	.89	PPPN072FFKP
	16	14.00	16.00	S2203-08-ND	1.89	1.57	1.00	PPPN082FFKP
	18	16.00	18.00	S2203-09-ND	2.14	1.77	1.13	PPPN092FFKP
	24	22.00	24.00	S2203-12-ND	2.70	2.24	1.43	PPPN122FFKP
	30	28.00	30.00	S2203-15-ND	3.36	2.79	1.78	PPPN152FFKP
	44	42.00	44.00	S2203-22-ND	4.94	4.09	2.61	PPPN222FFKP
	50	48.00	50.00	S2203-25-ND	5.60	4.64	2.96	PPPN252FFKP
	60	58.00	60.00	S2203-30-ND	6.72	5.57	3.56	PPPN302FFKP
Dual Row Recep. Bottom Entry, SMT, with Locating Peg								
11	10	8.00	10.00	S2205-05-ND	1.82	1.51	.97	PPPN052GHNP
	12	10.00	12.00	S2205-06-ND	2.10	1.74	1.11	PPPN062GHNP
	14	12.00	14.00	S2205-07-ND	2.38	1.98	1.26	PPPN072GHNP
	16	14.00	16.00	S2205-08-ND	2.49	2.06	1.32	PPPN082GHNP
	18	16.00	18.00	S2205-09-ND	2.56	2.12	1.36	PPPN092GHNP
	20	18.00	20.00	S2205-10-ND	2.59	2.15	1.37	PPPN102GHNP
	24	22.00	24.00	S2205-12-ND	3.12	2.59	1.65	PPPN122GHNP
	26	24.00	26.00	S2205-13-ND	3.36	2.79	1.78	PPPN132GHNP
	30	28.00	30.00	S2205-15-ND	3.89	3.22	2.06	PPPN152GHNP
	36	34.00	36.00	S2205-18-ND	4.69	3.89	2.48	PPPN182GHNP
	44	42.00	44.00	S2205-22-ND	5.71	4.73	3.02	PPPN222GHNP
	56	54.00	56.00	S2205-28-ND	7.11	5.89	3.76	PPPN282GHNP
	60	58.00	60.00	S2205-30-ND	7.63	6.33	4.04	PPPN302GHNP
Dual Row Recept. SMT, Top Entry Low Profile w/Locating Peg								
12	10	8.00	10.40	S2206-05-ND	1.82	1.51	.97	PPPN052GFNP
	12	10.00	12.40	S2206-06-ND	2.10	1.74	1.11	PPPN062GFNP
	14	12.00	14.40	S2206-07-ND	2.38	1.98	1.26	PPPN072GFNP
	16	14.00	16.40	S2206-08-ND	2.49	2.06	1.32	PPPN082GFNP
	18	16.00	18.40	S2206-09-ND	2.56	2.12	1.36	PPPN092GFNP
	20	18.00	20.40	S2206-10-ND	2.59	2.15	1.37	PPPN102GFNP
	24	22.00	24.40	S2206-12-ND	3.12	2.59	1.65	PPPN122GFNP
	30	28.00	30.40	S2206-15-ND	3.89	3.22	2.06	PPPN152GFNP
	36	34.00	36.40	S2206-18-ND	4.69	3.89	2.48	PPPN182GFNP
	44	42.00	44.40	S2206-22-ND	5.71	4.73	3.02	PPPN222GFNP
	56	54.00	56.40	S2206-28-ND	7.11	5.89	3.76	PPPN282GFNP
	60	58.00	60.40	S2206-30-ND	7.63	6.33	4.04	PPPN302GFNP
	70	68.00	70.40	S2206-35-ND	8.89	7.37	4.70	PPPN352GFNP
	80	78.00	80.40	S2206-40-ND	10.15	8.41	5.37	PPPN402GFNP

Fig.	Cir-cuits	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Sullins Part No.
Dual Row Recept. SMT, Top Entry Low Profile w/o Locating Peg								
12	8	6.00	8.40	S2207-04-ND	1.51	1.25	.80	PPPN042GFNS
	10	8.00	10.40	S2207-05-ND	1.82	1.51	.97	PPPN052GFNS
	12	10.00	12.40	S2207-06-ND	2.10	1.74	1.11	PPPN062GFNS
	14	12.00	14.40	S2207-07-ND	2.38	1.98	1.26	PPPN072GFNS
	16	14.00	16.40	S2207-08-ND	2.49	2.06	1.32	PPPN082GFNS
	18	16.00	18.40	S2207-09-ND	2.56	2.12	1.36	PPPN092GFNS
	20	18.00	20.40	S2207-10-ND	2.59	2.15	1.37	PPPN102GFNS
	24	22.00	24.40	S2207-12-ND	3.12	2.59	1.65	PPPN122GFNS
	30	28.00	30.40	S2207-15-ND	3.89	3.22	2.06	PPPN152GFNS
	36	34.00	36.40	S2207-18-ND	4.69	3.89	2.48	PPPN182GFNS
	44	42.00	44.40	S2207-22-ND	5.71	4.73	3.02	PPPN222GFNS
	56	54.00	56.40	S2207-28-ND	7.11	5.89	3.76	PPPN282GFNS
	60	58.00	60.40	S2207-30-ND	7.63	6.33	4.04	PPPN302GFNS
	70	68.00	70.40	S2207-35-ND	8.89	7.37	4.70	PPPN352GFNS
	80	78.00	80.40	S2207-40-ND	10.15	8.41	5.37	PPPN402GFNS
Dual Row Receptacle Right Angle								
13	6	4.00	6.50	S2204-03-ND	.88	.73	.47	PPWN032FJFN
	8	6.00	8.50	S2204-04-ND	1.12	.93	.60	PPWN042FJFN
	10	8.00	10.50	S2204-05-ND	1.19	.99	.63	PPWN052FJFN
	12	10.00	12.50	S2204-06-ND	1.26	1.05	.67	PPWN062FJFN
	14	12.00	14.50	S2204-07-ND	1.37	1.14	.73	PPWN072FJFN
	16	14.00	16.50	S2204-08-ND	1.47	1.22	.78	PPWN082FJFN
	18	16.00	18.50	S2204-09-ND	1.58	1.31	.84	PPWN092FJFN
	20	18.00	20.50	S2204-10-ND	1.61	1.34	.86	PPWN102FJFN
	22	20.00	22.50	S2204-11-ND	1.79	1.48	.95	PPWN112FJFN
	24	22.00	24.50	S2204-12-ND	1.96	1.63	1.04	PPWN122FJFN
	26	24.00	26.50	S2204-13-ND	2.10	1.74	1.11	PPWN132FJFN
	28	26.00	28.50	S2204-14-ND	2.28	1.89	1.21	PPWN142FJFN
	30	28.00	30.50	S2204-15-ND	2.45	2.03	1.30	PPWN152FJFN
	32	30.00	32.50	S2204-16-ND	2.38	1.98	1.26	PPWN162FJFN
	34	32.00	34.50	S2204-17-ND	2.56	2.12	1.36	PPWN172FJFN
	36	34.00	36.50	S2204-18-ND	2.70	2.24	1.43	PPWN182FJFN
	38	36.00	38.50	S2204-19-ND	2.84	2.35	1.50	PPWN192FJFN
	40	38.00	40.50	S2204-20-ND	2.98	2.47	1.58	PPWN202FJFN
	42	40.00	42.50	S2204-21-ND	3.15	2.61	1.67	PPWN212FJFN
	44	42.00	44.50	S2204-22-ND	3.29	2.73	1.74	PPWN222FJFN
	46	44.00	46.50	S2204-23-ND	3.43	2.85	1.82	PPWN232FJFN
	48	46.00	48.50	S2204-24-ND	3.57	2.96	1.89	PPWN242FJFN
	50	48.00	50.50	S2204-25-ND	3.75	3.11	1.98	PPWN252FJFN
	60	58.00	60.50	S2204-30-ND	4.48	3.72	2.37	PPWN302FJFN
Headers - Quad Row, Straight								
14	24	10.00	12.00	S2401-06-ND	8.06	6.99	5.91	PRPN064RCCN
	40	18.00	20.00	S2401-10-ND	8.22	7.13	6.03	PRPN104RCCN
	48	22.00	24.00	S2401-12-ND	8.30	7.19	6.09	PRPN124RCCN
	60	28.00	30.00	S2401-15-ND	8.42	7.30	6.18	PRPN154RCCN
	72	34.00	36.00	S2401-18-ND	8.54	7.40	6.26	PRPN184RCCN
	84	40.00	42.00	S2401-21-ND	8.66	7.51	6.35	PRPN214RCCN
	96	46.00	48.00	S2401-24-ND	8.78	7.61	6.44	PRPN244RCCN
	120	58.00	60.00	S2401-30-ND	9.02	7.82	6.62	PRPN304RCCN
Quad Row, Receptacle Straight								
15	24	10.00	12.40	S2402-06-ND	2.73	2.27	1.45	PPRN064EFCN
	40	18.00	20.40	S2402-10-ND	4.55	3.77	2.41	PPRN104EFCN
	48	22.00	24.40	S2402-12-ND	5.46	4.53	2.89	PPRN124EFCN
	60	28.00	30.40	S2402-15-ND	6.83	5.66	3.61	PPRN154EFCN
	72	34.00	36.40	S2402-18-ND	8.19	6.79	4.33	PPRN184EFCN
	84	40.00	42.40	S2402-21-ND	9.56	7.92	5.06	PPRN214EFCN
	96	46.00	48.40	S2402-24-ND	10.92	9.05	5.78	PPRN244EFCN
	120	58.00	60.40	S2402-30-ND	13.65	11.31	7.22	PPRN304EFCN
Shunt, Open Top								
16	2	Tin		S9003-ND	1.05/10		8.75/100	STN02SYBN
	2	Gold		S9004-ND	1.05/10		8.75/100	SPN02SYBN

molex GC/Waldom

2mm Milli-Grid™ Connectors

HEADERS: Electrical: • Current: 2.0A • Dielectric Withstanding Voltage: 500V (Shrouded Vertical, SMT, and Right Angle: 1000V) • Insulation Resistance: 1000MΩ min. **Physical:** • Housing: 4/6 nylon, UL 94V-0 (Right Angle: Black glass-filled polyester, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55 to +105°C

RECEPTACLE: Electrical: • Voltage: 125V • Current: 1.0A • Contact Resistance: 25mΩ max. (Side Entry, Side Entry SMT, and Top/Bottom Entry: 15mΩ max.) • Dielectric Withstanding Voltage: 500V AC (Top/Bottom Entry: 1000V) • Insulation Resistance: 1000M Ω min. **Physical:** • Housing: Black glass-filled LCP, UL 94V-0 (Top/Bottom Entry: Black LCP, UL 94V-O, Side Entry and Side Entry SMT: Black nylon, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55 to +105°C

CRIMP TERMINAL: Electrical: • Voltage: 125V • Current: **26AWG:** 1.5, **28AWG:** 1.0, and **30AWG:** 0.5 • Contact Resistance: 40mΩ max. **Physical:** • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -40 to +105°C • Wire Range: 26-30AWG • Insulation Range: 1.40mm diameter max.

CRIMP HOUSING: Physical: • Housing: Black glass-filled polyester, UL 94V-0 • Temperature: -55 to +105°C

Fig. 1 – Vertical

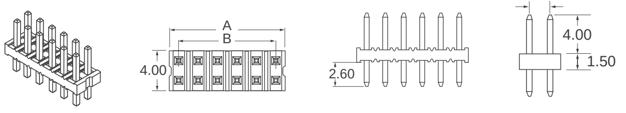


Fig. 4 – Shrouded Right Angle

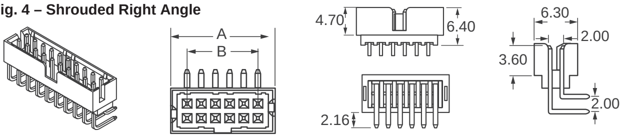


Fig. 2 – Right Angle

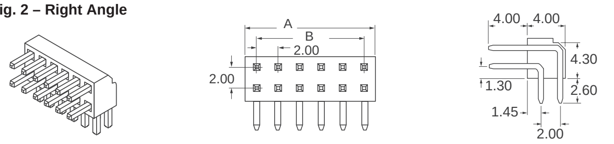


Fig. 5 – Shrouded SMT

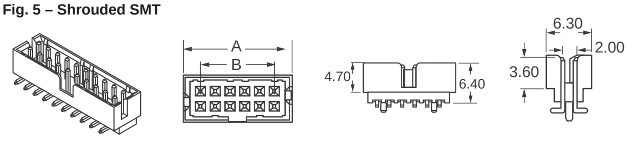


Fig. 3 – Shrouded Vertical

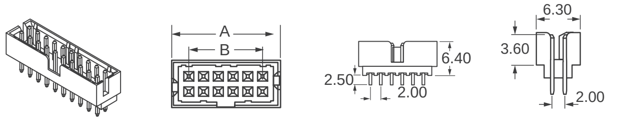


Fig. 6– Vertical SMT

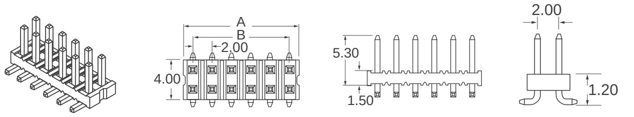


Fig.	Cir-cuits	Dimension (mm)		Digi-Key Part No.	Pricing			Molex Part No.
		A	B		1	10	100	
Headers — Vertical								
1	4	3.90	2.00	WM18201-ND	.57	4.99	33.28	87089-0416
	6	5.90	4.00	WM18202-ND	.76	6.71	44.75	87089-0616
	8	7.90	6.00	WM18203-ND	.87	7.69	51.25	87089-0816
	10	9.90	8.00	WM18204-ND	.98	8.61	57.38	87089-1016
	12	11.90	10.00	WM18205-ND	1.21	10.66	71.08	87089-1216
	14	13.90	12.00	WM18206-ND	1.23	10.82	72.15	87089-1416
	16	15.90	14.00	WM18207-ND	1.37	12.11	80.70	87089-1616
	18	17.90	16.00	WM18208-ND	1.54	13.56	90.40	87089-1816
	20	19.90	18.00	WM18209-ND	1.73	15.28	101.88	87089-2016
	22	21.90	20.00	WM18210-ND	1.91	16.86	112.43	87089-2216
	24	23.90	22.00	WM18211-ND	2.03	17.91	119.38	87089-2416
	26	25.90	24.00	WM18212-ND	2.31	20.37	135.83	87089-2616
	28	27.90	26.00	WM18213-ND	2.48	21.88	145.88	87089-2816
	30	29.90	28.00	WM18214-ND	2.53	22.31	148.73	87089-3016
	32	31.90	30.00	WM18215-ND	2.53	22.29	148.63	87089-3216
	34	33.90	32.00	WM18216-ND	2.57	22.68	151.20	87089-3416
	36	35.90	34.00	WM18217-ND	3.16	27.84	185.63	87089-3616
	38	37.90	36.00	WM18218-ND	2.87	25.31	168.73	87089-3816
	40	39.90	38.00	WM18219-ND	3.04	26.78	178.55	87089-4016
	42	41.90	40.00	WM18220-ND	3.23	28.49	189.90	87089-4216
	44	43.90	42.00	WM18221-ND	3.37	29.78	198.50	87089-4416
	46	45.90	44.00	WM18222-ND	3.53	31.11	207.43	87089-4616
	48	47.90	46.00	WM18223-ND	3.67	32.40	216.03	87089-4816
	50	49.90	48.00	WM18224-ND	3.38	29.85	199.03	87089-5016
Headers — Right Angle								
2	4	4.00	2.00	WM18112-ND	.59	5.20	34.65	87049-0416
	6	6.00	4.00	WM18113-ND	.63	5.52	36.78	87049-0616
	8	8.00	6.00	WM18114-ND	.80	7.03	46.88	87049-0816
	10	10.00	8.00	WM18115-ND	1.19	10.50	69.98	87049-1016
	12	12.00	10.00	WM18116-ND	1.21	10.65	70.98	87049-1216
	14	14.00	12.00	WM18117-ND	1.34	11.84	78.93	87049-1416
	16	16.00	14.00	WM18118-ND	1.34	11.78	78.55	87049-1616
	18	18.00	16.00	WM18119-ND	1.57	13.88	92.53	87049-1816
	20	20.00	18.00	WM18120-ND	1.56	13.79	91.90	87049-2016
	22	22.00	20.00	WM18121-ND	1.91	16.82	112.10	87049-2216
	24	24.00	22.00	WM18122-ND	1.80	15.92	106.10	87049-2416
	26	26.00	24.00	WM18123-ND	2.15	18.99	126.63	87049-2616
	28	28.00	26.00	WM18124-ND	2.39	21.13	140.88	87049-2816
	30	30.00	28.00	WM18125-ND	2.34	18.99	131.45	87049-3016
	32	32.00	30.00	WM18126-ND	2.49	20.27	140.31	87049-3216
	34	34.00	32.00	WM18127-ND	2.55	20.73	143.53	87049-3416
	36	36.00	34.00	WM18128-ND	2.54	20.62	142.79	87049-3616
	38	38.00	36.00	WM18129-ND	2.83	24.99	166.63	87049-3816
	40	40.00	38.00	WM18130-ND	2.82	24.86	165.75	87049-4016
	42	42.00	40.00	WM18131-ND	2.95	26.07	173.80	87049-4216
	44	44.00	42.00	WM18132-ND	2.95	26.03	173.53	87049-4416
	46	46.00	44.00	WM18133-ND	3.08	27.15	180.98	87049-4616
	48	48.00	46.00	WM18134-ND	3.14	27.72	184.80	87049-4816
	50	50.00	48.00	WM18135-ND	2.76	24.32	162.13	87049-5016
Headers — Shrouded Vertical								
3	4	6.65	2.00	WM18058-ND	.89	7.83	52.23	87331-0420
	6	8.65	4.00	WM18059-ND	.97	8.60	57.30	87331-0620
	8	10.65	6.00	WM18060-ND	.84	7.45	49.68	87331-0820
	10	12.65	8.00	WM18061-ND	1.04	9.18	61.18	87331-1020
	12	14.65	10.00	WM18062-ND	1.25	11.00	73.35	87331-1220
	14	16.65	12.00	WM18063-ND	1.46	12.87	85.83	87331-1420
	16	18.65	14.00	WM18064-ND	1.57	13.85	92.33	87331-1620
	18	20.65	16.00	WM18065-ND	2.18	19.25	128.35	87331-1820
	20	22.65	18.00	WM18066-ND	2.08	18.36	122.43	87331-2020
	22	24.65	20.00	WM18067-ND	2.29	20.24	134.95	87331-2220
Headers — Shrouded Vertical (cont.)								
3	24	26.65	22.00	WM18068-ND	2.50	22.08	147.23	87331-2420
	30	32.65	28.00	WM18069-ND	3.13	27.57	183.83	87331-3020
	40	42.65	38.00	WM18070-ND	4.18	36.87	245.78	87331-4020
	44	46.65	42.00	WM18071-ND	4.60	40.55	270.33	87331-4420
	50	52.65	48.00	WM18072-ND	5.22	46.06	307.05	87331-5020
Headers — Shrouded Right Angle								
4	4	6.65	2.00	WM18088-ND	1.01	8.94	59.60	87333-0420
	6	8.65	4.00	WM18089-ND	1.09	9.60	64.00	87333-0620
	8	10.65	6.00	WM18090-ND	1.12	9.87	65.78	87333-0820
	10	12.65	8.00	WM18091-ND	1.15	10.18	67.88	87333-1020
	12	14.65	10.00	WM18092-ND	1.38	12.21	81.40	87333-1220
	14	16.65	12.00	WM18093-ND	1.62	14.29	95.25	87333-1420
	16	18.65	14.00	WM18094-ND	1.85	16.31	108.75	87333-1620
	18	20.65	16.00	WM18095-ND	2.08	18.35	122.33	87333-1820
	20	22.65	18.00	WM18096-ND	2.31	20.38	135.85	87333-2020
	22	24.65	20.00	WM18097-ND	2.55	22.46	149.73	87333-2220
	24	26.65	22.00	WM18098-ND	2.78	24.50	163.30	87333-2420
	30	32.65	28.00	WM18099-ND	3.47	30.60	203.98	87333-3020
	40	42.65	38.00	WM18100-ND	4.64	40.90	272.65	87333-4020
	44	46.65	42.00	WM18101-ND	5.10	44.98	299.85	87333-4420
	50	52.65	48.00	WM18102-ND	5.80	51.14	340.93	87333-5020
Headers — Shrouded SMT								
5	4	6.65	2.00	WM18073-ND	1.19	10.50	70.00	87332-0420
	6	8.65	4.00	WM18074-ND	1.49	13.13	87.50	87332-0620
	8	10.65	6.00	WM18075-ND	1.63	14.35	95.65	87332-0820
	10	12.65	8.00	WM18076-ND	1.56	12.70	87.95	87332-1020
	12	14.65	10.00	WM18077-ND	1.86	16.39	109.28	87332-1220
	14	16.65	12.00	WM18078-ND	2.01	17.71	118.08	87332-1420
	16	18.65	14.00	WM18079-ND	2.20	19.44	129.58	87332-1620
	18	20.65	16.00	WM18080-ND	2.61	23.03	153.50	87332-1820
	20	22.65	18.00	WM18081-ND	2.53	22.29	148.60	87332-2020
	22	24.65	20.00	WM18082-ND	3.05	26.94	179.58	87332-2220
	24	26.65	22.00	WM18083-ND	3.10	27.36	182.43	87332-2420
	30	32.65	28.00	WM18084-ND	3.71	32.71	218.08	87332-3020
	40	42.65	38.00	WM18085-ND	4.64	40.90	272.65	87332-4020
	44	46.65	42.00	WM18086-ND	5.10	44.98	299.85	87332-4420
	50	52.65	48.00	WM18087-ND	5.80	51.14	340.93	87332-5020
Headers — Vertical SMT								
6	8	7.90	6.00	WM18158-ND	1.47	12.99	86.58	87267-0850
	10	9.90	8.00	WM18159-ND	1.66	14.63	97.55	87267-1050
	12	11.90	10.00	WM18160-ND	1.92	16.94	112.93	87267-1250
	14	13.90	12.00	WM18161-ND	1.98	17.45	116.35	87267-1450
	16	15.90	14.00	WM18162-ND	2.16	19.08	127.20	87267-1650
	18	17.90	16.00	WM18163-ND	2.25	18.31	126.79	87267-1850
	20	19.90	18.00	WM18164-ND	2.31	18.80	130.19	87267-2050
	22	21.90	20.00	WM18165-ND	2.77	24.46	163.08	87267-2250
	24	23.90	22.00	WM18166-ND	2.77	22.52	155.93	87267-2450
	26	25.90	24.00	WM18167-ND	3.01	24.42	169.04	87267-2650
	28	27.90	26.00	WM18168-ND	3.30	26.78	185.40	87267-2850
	30	29.90	28.00	WM18169-ND	3.50	30.89	205.95	87267-3050
	32	31.90	30.00	WM18170-ND	3.80	33.51	223.43	87267-3250
	34	33.90	32.00	WM18171-ND	3.73	30.34	210.04	87267-3450
	36	35.90	34.00	WM18172-ND	4.20	37.07	247.10	87267-3650
	38	37.90	36.00	WM18173-ND	4.48	39.50	263.30	87267-3850
	40	39.90	38.00	WM18174-ND	9.53	84.11	560.73	87267-4050
	42	41.90	40.00	WM18175-ND	4.70	41.43	276.20	87267-4250
	44	43.90	42.00	WM18176-ND	4.86	42.90	286.03	87267-4450
	46	45.90	44.00	WM18177-ND	4.03	35.52	236.80	87267-4650
	48	47.90	46.00	WM18178-ND	4.26	37.56	250.40	87267-4850
	50	49.90	48.00	WM18179-ND	5.57	49.16	327.73	87267-5050

(Continued)

2mm Milli-Grid™ Connectors *(Cont.)*

Fig. 7 – Vertical, Dual Row Through-Hole

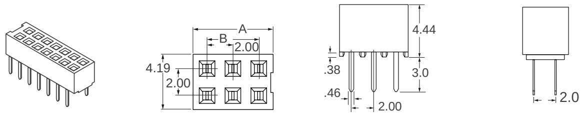


Fig. 10 – Top/Bottom Entry SMT (VLPR2)

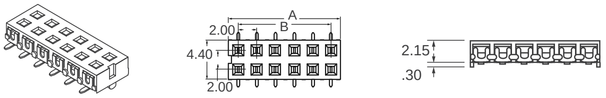


Fig. 8 –Side Entry

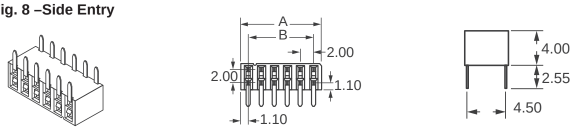


Fig. 11 – Vertical, Dual Row Top/Bottom Entry, SMT

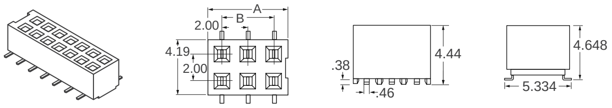


Fig. 9 – Side Entry SMT

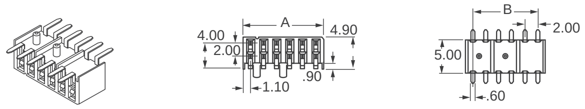


Fig. 12 – Crimp Housing

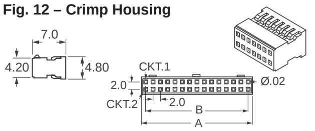


Fig. 13 – Crimp Terminal

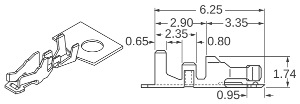
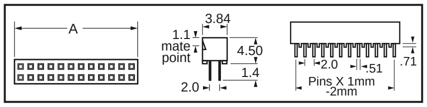


Fig.	Circuits	Dimension (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
				Board-to-Board Receptacle Vertical, Dual Row Through-Hole				
7	4	4.19	2.00	WM18000-ND	1.54	12.54	86.83	79107-0001
	6	6.19	4.00	WM18001-ND	1.85	16.35	109.00	79107-0002
	8	8.19	6.00	WM18002-ND	1.92	16.98	113.23	79107-0003
	10	10.19	8.00	WM18003-ND	2.20	19.41	129.38	79107-0004-TB54
	12	12.19	10.00	WM18004-ND	2.49	21.99	146.60	79107-0005
	14	14.19	12.00	WM18005-ND	3.00	26.51	176.73	79107-0006
	16	16.19	14.00	WM18006-ND	2.88	25.37	169.13	79107-0007
	18	18.19	16.00	WM18007-ND	2.91	23.62	163.53	79107-0008
	20	20.19	18.00	WM18008-ND	3.17	27.95	186.33	79107-0009
	22	22.19	20.00	WM18009-ND	3.31	29.21	194.70	79107-0010
	24	24.19	22.00	WM18010-ND	3.67	32.40	216.03	79107-0011
	30	30.19	28.00	WM18011-ND	4.52	39.86	265.73	79107-0014
	40	40.19	38.00	WM18012-ND	6.01	53.03	353.50	79107-0019
	44	44.19	42.00	WM18013-ND	6.64	58.59	390.63	79107-0021
	50	50.19	48.00	WM18014-ND	7.55	66.59	443.95	79107-0024
				Receptacle — Side Entry				
8	8	8.20	6.00	WM18136-ND	2.13	18.81	125.38	87264-0850
	10	10.20	8.00	WM18137-ND	2.33	20.60	137.30	87264-1050
	12	12.20	10.00	WM18138-ND	2.62	23.15	154.33	87264-1250
	14	14.20	12.00	WM18139-ND	2.82	24.89	165.93	87264-1450
	16	16.20	14.00	WM18140-ND	3.03	26.72	178.10	87264-1650
	18	18.20	16.00	WM18141-ND	3.23	28.49	189.90	87264-1850
	20	20.20	18.00	WM18142-ND	3.37	29.70	197.98	87264-2050
	22	22.20	20.00	WM18143-ND	3.64	32.08	213.88	87264-2250
	24	24.20	22.00	WM18144-ND	3.84	33.91	226.08	87264-2450
	26	26.20	24.00	WM18145-ND	4.28	37.72	251.48	87264-2650
	28	28.20	26.00	WM18146-ND	4.39	38.75	258.33	87264-2850
	30	30.20	28.00	WM18147-ND	4.62	40.80	272.00	87264-3050
	32	32.20	30.00	WM18148-ND	4.60	37.35	258.55	87264-3250
	34	34.20	32.00	WM18149-ND	4.79	38.93	269.53	87264-3450
	36	36.20	34.00	WM18150-ND	5.24	46.22	308.15	87264-3650
	38	38.20	36.00	WM18151-ND	5.50	48.51	323.43	87264-3850
	40	40.20	38.00	WM18152-ND	5.70	50.29	335.28	87264-4050
	42	42.20	40.00	WM18153-ND	5.90	52.06	347.08	87264-4250
	44	44.20	42.00	WM18154-ND	6.06	53.48	356.53	87264-4450
	46	46.20	44.00	WM18155-ND	6.31	55.65	371.03	87264-4650
	48	48.20	46.00	WM18156-ND	6.51	57.48	383.20	87264-4850
	50	50.20	48.00	WM18157-ND	6.68	58.91	392.73	87264-5050
				Receptacle — Side Entry SMT				
9	10	10.20	8.00	WM18180-ND	3.68	32.51	216.73	87368-1020
	12	12.20	10.00	WM18181-ND	4.33	38.24	254.90	87368-1220
	14	14.20	12.00	WM18182-ND	4.57	40.30	268.68	87368-1420
	16	16.20	14.00	WM18183-ND	4.85	42.75	285.03	87368-1620
	18	18.20	16.00	WM18184-ND	4.82	39.14	270.99	87368-1820
	20	20.20	18.00	WM18185-ND	5.18	45.66	304.43	87368-2020
	22	22.20	20.00	WM18186-ND	5.32	46.90	312.68	87368-2220
	24	24.20	22.00	WM18187-ND	5.74	50.64	337.63	87368-2420
	26	26.20	24.00	WM18188-ND	6.00	52.97	353.13	87368-2620
	28	28.20	26.00	WM18189-ND	6.18	54.53	363.53	87368-2820
	30	30.20	28.00	WM18190-ND	6.48	57.21	381.43	87368-3020
	32	32.20	30.00	WM18191-ND	6.75	59.59	397.25	87368-3220
	34	34.20	32.00	WM18192-ND	7.40	65.27	435.13	87368-3420
	36	36.20	34.00	WM18193-ND	8.01	70.64	470.93	87368-3620
	38	38.20	36.00	WM18194-ND	8.61	76.01	506.73	87368-3820
	40	40.20	38.00	WM18195-ND	8.61	76.01	506.73	87368-4020
	42	42.20	40.00	WM18196-ND	9.22	81.39	542.58	87368-4220
	44	44.20	42.00	WM18197-ND	9.83	86.75	578.33	87368-4420
	46	46.20	44.00	WM18198-ND	11.01	97.17	647.80	87368-4620
	48	48.20	46.00	WM18199-ND	11.49	101.36	675.70	87368-4820
	50	50.20	48.00	WM18200-ND	11.96	105.54	703.63	87368-5020

Fig.	Circuits	Dimension (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
				Receptacle — Top/Bottom Entry SMT (VLPR2)				
10	4	4.00	2.00	WM18103-ND	1.15	10.17	67.80	87340-0422
	6	6.00	4.00	WM18104-ND	1.45	12.77	85.13	87340-0622
	8	8.00	6.00	WM18105-ND	2.02	17.79	118.58	87340-0822
	10	10.00	8.00	WM18106-ND	2.32	20.49	136.58	87340-1022
	12	12.00	10.00	WM18107-ND	2.79	24.60	164.00	87340-1222
	14	14.00	12.00	WM18108-ND	3.85	34.00	226.68	87340-1422
	16	16.00	14.00	WM18109-ND	4.30	37.92	252.80	87340-1622
	18	18.00	16.00	WM18110-ND	4.66	41.10	274.03	87340-1822
	20	20.00	18.00	WM18111-ND	4.90	43.23	288.23	87340-2022
				Board-to-Board Receptacle Vertical, Dual Row Top/Bottom Entry, SMT				
11	4	4.19	2.00	WM18015-ND	1.61	13.10	90.72	79109-0001
	6	6.19	4.00	WM18016-ND	1.95	17.18	114.53	79109-0002
	8	8.19	6.00	WM18017-ND	2.18	19.24	128.28	79109-0003
	10	10.19	8.00	WM18018-ND	2.28	18.49	128.03	79109-0004
	12	12.19	10.00	WM18019-ND	2.72	24.02	160.10	79109-0005
	14	14.19	12.00	WM18020-ND	2.82	24.92	166.15	79109-0006
	16	16.19	14.00	WM18021-ND	3.08	27.15	181.00	79109-0007
	18	18.19	16.00	WM18022-ND	3.32	29.27	195.10	79109-0008
	20	20.19	18.00	WM18023-ND	3.48	30.71	204.70	79109-0009
	22	22.19	20.00	WM18024-ND	3.42	27.82	192.60	79109-0010
	24	24.19	22.00	WM18025-ND	3.79	30.83	213.46	79109-0011
	30	30.19	28.00	WM18026-ND	4.68	41.32	275.45	79109-0014
	40	40.19	38.00	WM18027-ND	6.64	58.55	390.33	79109-0019
	44	44.19	42.00	WM18028-ND	6.89	55.96	387.43	79109-0021
	50	50.19	48.00	WM18029-ND	7.81	63.49	439.54	79109-0024
				Crimp Housing — Standard				
12	4	4.20	2.00	WM18030-ND	.32	2.82	18.78	51110-0450
	6	6.20	4.00	WM18031-ND	.39	3.19	22.05	51110-0650
	8	8.20	6.00	WM18032-ND	.45	3.95	26.30	51110-0850
	10	10.20	8.00	WM18033-ND	.44	3.60	24.95	51110-1050
	12	12.20	10.00	WM18034-ND	.49	4.32	28.80	51110-1250
	14	14.20	12.00	WM18035-ND	.56	4.91	32.73	51110-1450
	16	16.20	14.00	WM18036-ND	.60	4.91	34.00	51110-1650
	18	18.20	16.00	WM18037-ND	.69	6.09	40.63	51110-1850
	20	20.20	18.00	WM18038-ND	.76	6.68	44.53	51110-2050
	22	22.20	20.00	WM18039-ND	.82	7.28	48.50	51110-2250
	24	24.20	22.00	WM18040-ND	.89	7.86	52.43	51110-2450
	26	26.20	24.00	WM18041-ND	.95	8.40	56.00	51110-2650
	28	28.20	26.00	WM18042-ND	1.02	9.00	59.98	51110-2850
	30	30.20	28.00	WM18043-ND	1.09	9.59	63.90	51110-3050
				Crimp Housing — With Polarization Keys				
12	8	8.20	6.00	WM18044-ND	.45	3.95	26.30	51110-0851
	10	10.20	8.00	WM18045-ND	.47	4.16	27.73	51110-1051
	12	12.20	10.00	WM18046-ND	.49	4.32	28.80	51110-1251
	14	14.20	12.00	WM18047-ND	.56	4.91	32.73	51110-1451
	16	16.20	14.00	WM18048-ND	.64	5.67	37.78	51110-1651
	18	18.20	16.00	WM18049-ND	.69	6.09	40.63	51110-1851
	20	20.20	18.00	WM18050-ND	.76	6.68	44.53	51110-2051
	22	22.20	20.00	WM18051-ND	.82	7.28	48.50	51110-2251
	24	24.20	22.00	WM18052-ND	.89	7.86	52.43	51110-2451
	26	26.20	24.00	WM18053-ND	.95	8.40	56.00	51110-2651
	28	28.20	26.00	WM18054-ND	1.02	9.00	59.98	51110-2851
	30	30.20	28.00	WM18055-ND	1.09	9.59	63.90	51110-3051
13	Crimp Terminal (26-30AWG)			WM18056-ND	—	1.35	10.77	50394-8100
Hand Tool for 2mm Crimp Contacts				WM18057-ND	170.12	—	—	11-01-0204

2mm x 2mm Vertical Socket

Dimensions in mm



Features: • High temperature dielectric • IR, vapor and wave solder compatible • Available in thru hole • Industry standard compatible • Minimizes PC board stacking heights • End stackable feature • Side stackable feature

Physical Specifications: • Insulation Material: High Temperature Glass Filled Polyester (PCT) • Color: Natural • **Marking:** Molded orientation delta • **Contact Material:** Beryllium copper • **Contact Plating:** • Wiping area: 30µ” gold plate • Solder Tails: 100µ” 90/10 SnPb plate • Underplate: 50µ” nickel

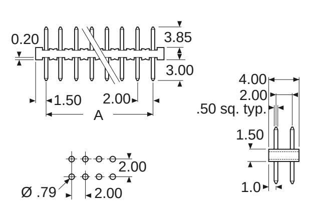
Electrical Specifications: • Current Rating: 1.5Amp • Insulation Resistance: 5000 Megohms @ 250 volts min. • Withstanding Voltage: 500 VDC @ Sea level

Environmental Specifications: • Operating Temp.: -55° to +105°C

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each			3M Part No.
			1	100	500	
Socket Vertical PC Mount						
8	.310 (7.87)	3M1008-ND	1.89	1.44	1.31	150208-6002-TB
10	.389 (9.88)	3M1010-ND	2.00	1.52	1.38	150210-6002-TB
12	.467 (11.86)	3M1012-ND	2.04	1.55	1.41	150212-6002-TB
20	.782 (19.86)	3M1020-ND	2.31	1.76	1.59	150220-6002-TB
24	.940 (23.88)	3M1024-ND	2.43	1.85	1.68	150224-6002-TB
30	1.176 (29.87)	3M1030-ND	2.70	2.06	1.86	150230-6002-TB
40	1.570 (39.88)	3M1040-ND	2.97	2.26	2.05	150240-6002-TB
44	1.727 (43.87)	3M1044-ND	3.10	2.36	2.14	150244-6002-TB
50	1.964 (49.88)	3M1050-ND	3.31	2.52	2.28	150250-6002-TB
60	2.357 (59.87)	3M1060-ND	3.64	2.77	2.51	150260-6002-TB

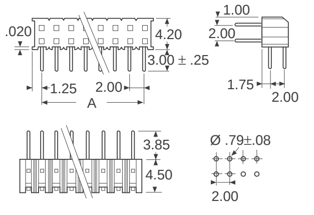
2mm x 2mm Pin Strip Headers

Dual Row – Straight Header



Dimensions in mm

Dual Row – Right Angle Header



Dimensions in mm

Features: • Industry standard compatible • High temperature dielectric • IR, vapor and wave solder compatible • Straight Solder Tail • Maximizes use of PC board space • Mates with boardmount and wiremount products • End stackable feature • Side stackable feature

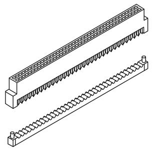
Physical Specifications: • Contact Plating: • Wiping area: Gold - MIL-G-45204, Type II, Grade C • Solder Tails: 200µ” 90/10 Tin Lead - MIL-P-81728 • Underplate: 100µ” nickel - QQ-N-290, Class 2 • **Contact Material:** Copper Alloy • **Insulation Material:** • Right Angle: Glass Filled Polyester (PCT) • Straight: Liquid Crystal Polymer (LCP) • Flammability: UL 94V-0 • **Color:** • Natural

Electrical Specifications: • Current Rating: 1.5Amp • Insulation Resistance: >5x10^9 Ohms @ 250 VDC • Withstanding Voltage: 500 VDC @ Sea level

Environmental Specifications: • Operating Temperature: -55° to +105°C

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each			3M Part No.
			1	100	500	
Dual Row Straight Header						
8	.295 (7.49)	3M1108-ND	.96	.73	.66	151208-8422-TB
10	.374 (9.50)	3M1110-ND	1.06	.81	.73	151210-8422-TB
12	.453 (11.51)	3M1112-ND	1.16	.89	.81	151212-8422-TB
20	.768 (19.51)	3M1120-ND	1.56	1.19	1.08	151220-8422-TB
24	.925 (23.50)	3M1124-ND	1.79	1.36	1.23	151224-8422-TB
30	1.162 (29.51)	3M1130-ND	2.06	1.57	1.42	151230-8422-TB
40	1.556 (39.52)	3M1140-ND	2.45	1.87	1.69	151240-8422-TB
44	1.714 (43.54)	3M1144-ND	2.64	2.01	1.82	151244-8422-TB
50	1.950 (49.53)	3M1150-ND	2.91	2.22	2.01	151250-8422-TB
60	2.344 (59.54)	3M1160-ND	3.37	2.56	2.32	151260-8422-TB
Dual Row Right Angle Header						
8	.295 (7.49)	3M1208-ND	.62	.48	.43	151208-7422-TB
10	.374 (9.50)	3M1210-ND	.71	.54	.49	151210-7422-TB
12	.453 (11.51)	3M1212-ND	.77	.59	.53	151212-7422-TB
20	.768 (19.51)	3M1220-ND	1.04	.79	.72	151220-7422-TB
24	.925 (23.50)	3M1224-ND	1.21	.92	.83	151224-7422-TB
30	1.162 (29.51)	3M1230-ND	1.39	1.06	.96	151230-7422-TB
40	1.556 (39.52)	3M1240-ND	1.87	1.43	1.29	151240-7422-TB
44	1.714 (43.54)	3M1244-ND	2.00	1.52	1.38	151244-7422-TB
50	1.950 (49.53)	3M1250-ND	2.18	1.66	1.51	151250-7422-TB
60	2.344 (59.54)	3M1260-ND	2.50	1.90	1.72	151260-7422-TB

2mm Wiremount Socket



2mm Wiremount Socket – 1mm Pitch Cable

Features: • Industry standard compatible • Mates with 2mm x 2mm grid pin strips • Low profile • Preassembled covers • Available with and without strain relief **Physical Specifications:** • **Insulation Material:** Glass Filled Polyester (PBT), Flammability: UL94 V-0 • Color: Gray • **Contact Material:** Beryllium copper • **Contact Plating:** • Underplate and U-slot: 50-150µ” Nickel, QQ-N-290, Class 2 • Wiping area: Gold Mil-G-45204, Type II, Grade C • **Marking:** Orientation triangle and 3M logo **Electrical Specifications:** • Current Rating: 1Amp • Insulation Resistance: >1x10Ω at 500 Vdc • Withstanding Voltage: 1000Vrms at Sea Level **Environmental Specifications:** • Operating Temperature Rating: -55° to +105°C **Rating:** UL File No. E86982, CSA File No. LR#48869

1.0mm Round Conductor Flat Cable – 28AWG Stranded, PVC

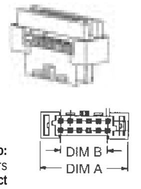
Features: • Close spacing permits high signal density • 28AWG wire on 1mm centers permits mass termination to 2 mm connectors • Zippable for branching or discrete termination • Stranded wire provides flexibility and extended product life **Physical Specifications:** • Insulation Material: Polyvinyl Chloride (PVC) • Color: Gray • Marking: Red Edge • Conductors: 28 AWG, 7 x 36 Tinned Stranded Copper **Electrical Specifications:** • Voltage Rating: 300V • Insulation Resistance: >1x10^{10}Ω/3m (10 ft) • Characteristic Impedance: 92Ω Unbalanced, 146Ω Balanced • Capacitance: 55.50 pF/m Unbalanced, 32.77 pF/m Balanced • Inductance: 0.47 µH/m Unbalanced, 0.70 µH/m Balanced • Propagation Delay: 4.95 ns/m Unbalanced, 4.78 ns/m Balanced **Environmental Specifications:** • Temperature Rating Operating: -20°C to +105°C • Flammability Rating: UL: VW-1, CSA: FT1 **Rating:** UL File No. E42769, Style 2651 CSA File No. LL 53649 (optional)

No. of Pos.	Digi-Key Part No.	Price Each			3M Part No.
		1	100	500	
IDC Socket Gold					
10	MSA10A-ND	3.14	2.39	2.12	152210-0100-GB
12	MSA12A-ND	3.18	2.42	2.19	152212-0100-GB
44	MSA44A-ND	4.49	3.42	3.09	152244-0100-GB
50	MSA50A-ND	4.58	3.48	3.15	152250-0100-GB
IDC Socket Gold with Strain Relief					
10	MSE10A-ND	3.64	2.77	2.51	152210-0103-GB
12	MSE12A-ND	3.83	2.91	2.64	152212-0103-GB
44	MSE44A-ND	5.05	3.84	3.48	152244-0103-GB
50	MSE50A-ND	5.14	3.91	3.54	152250-0103-GB

No. of Pos.	(NOTE: “X” in Part No. Represents No. of Meters)						3M Part No.
	Digi-Key Part No.	Price Per Meters					
		5	10	25	50	100	
Ribbon Cable Gray							
10	MC10L-X-ND	7.81	14.50	32.35	55.78	89.24	3625/10 100M
12	MC12L-X-ND	9.37	17.40	38.82	66.93	107.08	3625/12 100M
44	MC44L-X-ND	34.58	64.22	143.26	247.00	395.20	3625/44 100M
50	MC50L-X-ND	39.29	72.96	162.76	280.63	449.00	3625/50 100M

100m reel quantity may contain splices. Splice position will be marked on the reel.

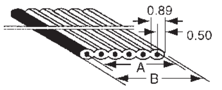
2mm Cable-to-Board Receptacle



UL2651, UL2678 **UL File No:** E29179 CSA **File No:** LR19980 **Mates With:** Milli-Grid 2.00mm Headers **Electrical: Voltage:** 125V DC **Current:** 1.0A **Contact Res.:** 30mΩ max. **Dielectric Withstanding Volt:** 500V AC **Insulation Res.:** 5000MΩ min. **Physical: Housing:** High Thermoplastic, UL 94V-0 **Contact:** Copper Alloy **Plating Contact Area:** (15µ") Gold **Operating Temp:** -20 to +85ºC **Cable:** 1.00mm Flat Cable, 7 Strands, 28 AWG

No. of Pos.	Dim. (mm) A	B	Digi-Key Part No.	Price Each			Molex Part No.
				1	10	25	
Dual Row, IDT w/out Polarization and Locking Ramp							
10	16.65	8.00	WM1410-ND	2.48	1.98	1.65	87568-1061
12	18.65	10.00	WM1412-ND	2.75	2.20	1.83	87568-1261
14	20.65	12.00	WM1414-ND	3.17	2.54	2.11	87568-1461
16	22.65	14.00	WM1416-ND	3.39	2.72	2.26	87568-1661
20	26.65	18.00	WM1420-ND	3.53	2.83	2.36	87568-2061
22	28.65	20.00	WM1422-ND	3.89	3.11	2.59	87568-2261
24	30.65	22.00	WM1424-ND	4.23	3.39	2.83	87568-2461
26	32.65	24.00	WM1426-ND	4.32	3.63	2.88	87568-2661
30	36.65	28.00	WM1430-ND	4.56	3.65	3.04	87568-3061
34	40.65	32.00	WM1434-ND	4.80	4.04	3.21	87568-3461
40	46.65	38.00	WM1440-ND	5.22	4.39	3.49	87568-4061
44	50.65	42.00	WM1444-ND	5.44	4.57	3.63	87568-4461
50	56.65	48.00	WM1450-ND	6.00	5.04	4.00	87568-5061
Dual Row, IDT with Single Locking Ramp							
10	16.65	8.00	WM14010-ND	2.48	2.08	1.65	87568-1071
12	18.65	10.00	WM14012-ND	2.75	2.20	1.83	87568-1271
Dual Row, IDT with Polarization and Locking Ramp							
14	20.65	12.00	WM14114-ND	3.17	2.54	2.11	87568-1491
16	22.65	14.00	WM14116-ND	3.39	2.72	2.26	87568-1691
20	26.65	18.00	WM14120-ND	3.53	2.83	2.36	87568-2091
22	28.65	20.00	WM14122-ND	3.89	3.11	2.59	87568-2291
24	30.65	22.00	WM14124-ND	4.23	3.39	2.83	87568-2491
26	32.65	24.00	WM14126-ND	4.32	3.46	2.88	87568-2691
30	36.65	28.00	WM14130-ND	4.56	3.65	3.04	87568-3091
34	40.65	32.00	WM14134-ND	4.80	3.85	3.21	87568-3491
40	46.65	38.00	WM14140-ND	5.22	4.18	3.49	87568-4091
44	50.65	42.00	WM14144-ND	5.44	4.35	3.63	87568-4491
50	56.65	48.00	WM14150-ND	6.00	4.80	4.00	87568-5091

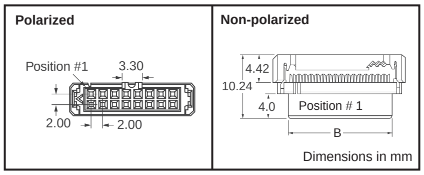
1mm Round Conductor Flat Cable



UL File No: E61522, UL Style No. 2678 **CSA File No:** LL61126 **Electrical: Voltage:** 150V **Physical: Flammability:** VW-1 **Operating Temp.:** -20 to +105ºC **Insulation:** Gray PVC **Edge Mark:** Black, 28AWG Stranded, Tinned

Circuits	Dim. (mm) A	B	(NOTE: "X" in Part No. Represents No. of Feet)					
			Digi-Key Part No.	Price Per Feet				
				5	10	25	50	100
10	10.00	9.00	WM11-X-ND	3.28	6.18	13.51	23.16	38.59
20	20.00	19.00	WM12-X-ND	6.39	12.03	26.32	45.11	75.19
24	24.00	23.00	WM13-X-ND	7.67	14.44	31.58	54.13	90.22
40	40.00	39.00	WM14-X-ND	14.06	26.46	57.88	99.23	165.38
44	44.00	43.00	WM15-X-ND	15.46	29.11	63.68	109.16	181.94
50	50.00	49.00	WM16-X-ND	15.97	30.07	65.78	112.76	187.94

2mm Ribbon Connectors



Dimensions in mm

The new 2.0 (.079) AMP-LATCH® receptacle connector family features contacts on a true 2.0 x 2.0 (.079 x .079) mating grid for 1.0 (.039) pitch ribbon. These receptacles feature insulation displacement contacts (IDC) with a top/bottom single beam contact orientation. Contacts are beryllium copper, duplex plated 30µ” gold in the mating area and 100µ” min. tin-lead on termination end all over 50µ” nickel underplating. Contact mating area is 1.54 (.061) from the face of the housing and they accept 0.50mm (.0197) round or square posts.

Product Facts:

- True hard metric 2.0 x 2.0 mating grid for 1.0 pitch ribbon cable
- Insulation displacement (IDC), beryllium copper contacts, duplex plated gold-over-nickel
- U.L. 94V-0 rated thermoplastic components

Performance Data:

- Durability: 150 cycles
- Termination Resistance: 25 milliohms max.
- Mating Force: 1.67 N max.
- Unmating Force: 0.14 N min.
- Operating Temp. : -65°C to +105°C

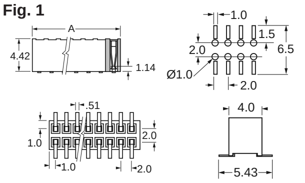
No. of Pos.	Dimensions A	B	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
Recept.-Feed Thru Cover Polarized						
10	15.16	10.41	AKA10K-ND	2.18	1.37	111623-1
14	19.18	14.40	AKA14K-ND	2.21	1.39	111623-2
16	21.18	16.41	AKA16K-ND	2.28	1.44	111623-3
20	25.17	20.40	AKA20K-ND	2.35	1.48	111623-4
24	29.18	24.41	AKA24K-ND	2.67	1.68	111623-5
26	31.17	26.42	AKA26K-ND	2.73	1.72	111623-6
30	35.18	30.40	AKA30K-ND	2.78	1.75	111623-7
40	45.19	40.41	AKA40K-ND	3.41	2.14	111623-9
44	49.17	44.40	AKA44K-ND	3.42	2.15	1-111623-0
50	55.17	50.39	AKA50K-ND	3.63	2.28	1-111623-1
Recept.-Feed Thru Cover Non-Polarized						
8	13.18	8.41	ASA08K-ND	2.51	1.58	1-111626-6
10	15.16	10.41	ASA10K-ND	2.18	1.37	111626-1
14	19.18	14.40	ASA14K-ND	2.21	1.39	111626-2
16	21.18	16.41	ASA16K-ND	2.28	1.44	111626-3
20	25.17	20.40	ASA20K-ND	2.35	1.48	111626-4
22	27.18	22.40	ASA22K-ND	2.29	1.44	1-111626-5
24	29.18	24.41	ASA24K-ND	2.67	1.68	111626-5
26	31.17	26.42	ASA26K-ND	2.73	1.72	111626-6
30	35.18	30.40	ASA30K-ND	2.69	1.69	111626-7
34	39.17	34.42	ASA34K-ND	2.89	1.82	111626-8
40	45.19	40.41	ASA40K-ND	3.41	2.14	1-111626-9
44	49.17	44.40	ASA44K-ND	3.42	2.15	1-111626-0
50	55.17	50.39	ASA50K-ND	3.63	2.28	1-111626-1

DELPHI
Connection Systems

SPECIALTY ELECTRONICS

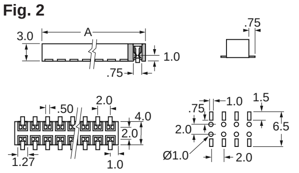
2mm SMT Headers / Receptacles

Fig. 1



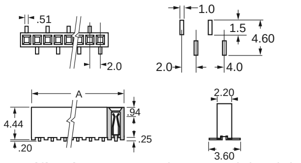
Specifications: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O. • Color: Natural • Contact Material: Phosphor Bronze.

Fig. 2



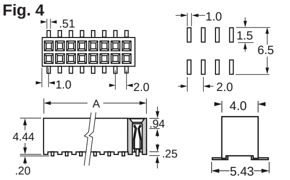
Specifications: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O. • Color: Natural • Contact Material: Beryllium copper.

Fig. 3



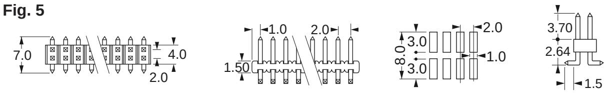
Specifications: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O • Color: Natural • Contact Material: Phosphor Bronze.

Fig. 4



Specifications: • Housing Material: High temperature thermoplastic, UL flammability rating 94 V-O • Color: Natural • Contact Material: Phosphor Bronze.

Fig. 5

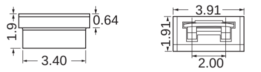


Specifications: • Housing Material: High temp. thermoplastic, UL flammability rating 94 V-O • Color: Black • Pin Material: Phosphor Bronze, drawn wire.

Fig.	No. of Pos.	Dim. "A"	Finish	Digi-Key Part No.	Price Each 1	10	100	500	Manufacturer Part No.
Dual Row, Bottom Entry (Receptacle)									
1	8	8.026	15µ Gold	SPE1017-ND	1.34	1.20	.99	.79	203-04-15-01
	12	12.040	15µ Gold	SPE1018-ND	1.85	1.66	1.37	1.08	203-06-15-01
	16	16.053	15µ Gold	SPE1019-ND	2.39	2.15	1.77	1.40	203-08-15-01
	20	20.066	15µ Gold	SPE1020-ND	2.91	2.61	2.15	1.70	203-10-15-01
	24	24.079	15µ Gold	SPE1021-ND	3.42	3.06	2.52	2.00	203-12-15-01
	26	26.086	15µ Gold	SPE1022-ND	3.71	3.32	2.73	2.16	203-13-15-01
	30	30.099	15µ Gold	SPE1023-ND	4.22	3.78	3.11	2.46	203-15-15-01
Dual Row, Bottom Entry, Ultra Low Profile (Receptacle)									
2	8	8.026	15µ Gold	SPE1010-ND	1.11	1.00	.82	.65	233-0433-01
	12	12.040	15µ Gold	SPE1011-ND	1.51	1.36	1.12	.88	233-0633-01
	16	16.053	15µ Gold	SPE1012-ND	1.94	1.74	1.43	1.13	233-0833-01
	20	20.066	15µ Gold	SPE1013-ND	2.34	2.10	1.73	1.37	233-1033-01
	24	24.079	15µ Gold	SPE1014-ND	2.74	2.45	2.02	1.60	233-1233-01
	26	26.086	15µ Gold	SPE1015-ND	2.96	2.66	2.19	1.73	233-1333-01
	30	30.099	15µ Gold	SPE1016-ND	3.36	3.01	2.48	1.96	233-1533-01
Single Row, Top Entry (Receptacle)									
3	4	8.026	15µ Gold	SPE1024-ND	.80	.72	.59	.47	204-04-15-01
	6	12.040	15µ Gold	SPE1025-ND	1.08	.97	.80	.64	204-06-15-01
	8	16.053	15µ Gold	SPE1026-ND	1.34	1.20	.99	.79	204-08-15-01
	10	20.066	15µ Gold	SPE1027-ND	1.60	1.43	1.18	.93	204-10-15-01
	12	24.079	15µ Gold	SPE1028-ND	1.85	1.66	1.37	1.08	204-12-15-01
	13	26.086	15µ Gold	SPE1029-ND	2.00	1.79	1.47	1.17	204-13-15-01
	15	30.099	15µ Gold	SPE1030-ND	2.25	2.02	1.66	1.32	204-15-15-01
Dual Row, Top Entry (Receptacle)									
4	8	8.026	15µ Gold	SPE1031-ND	1.34	1.20	.99	.79	205-04-1501
	12	12.040	15µ Gold	SPE1032-ND	1.85	1.66	1.37	1.08	205-06-1501
	16	16.053	15µ Gold	SPE1033-ND	2.39	2.15	1.77	1.40	205-08-1501
	20	20.066	15µ Gold	SPE1034-ND	2.91	2.61	2.15	1.70	205-10-1501
	24	24.079	15µ Gold	SPE1035-ND	3.42	3.06	2.52	2.00	205-12-1501
	26	26.086	15µ Gold	SPE1036-ND	3.71	3.32	2.73	2.16	205-13-1501
	30	30.099	15µ Gold	SPE1037-ND	2.60	2.34	1.92	1.52	205-15-1501
36 Position, Dual Row									
5	—	—	Gold	SPE1211-ND	2.34	2.10	1.73	1.37	SM2MD18S15-01
	—	—	Tin	SPE1212-ND	1.62	1.46	1.20	.95	SM2MD18S02-01

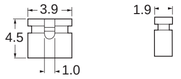
2mm Shunts

Fig. 1



ULTRA LOW PROFILE: • Housing Material: Glass filled thermoplastic, UL flammability rating 94 V-O • Color: Black • Contact Material: Beryllium Copper

Fig. 2



STANDARD PROFILE: • Housing Material: Glass filled thermoplastic, UL flammability rating 94 V-O • Contact Material: Phosphor Bronze

Fig.	Finish	Digi-Key Part No.	Price Each 1	10	100	500	Manufacturer Part No.
1	Low Profile, Tin Low Profile, Gold*	SPE1303-ND SPE1304-ND	.26 .52	.23 .46	.20 .39	.19 .38	2MS-19-02-01 2MS-19-33-01
2	Standard Profile, Gold*	SPE1302-ND	.14	.13	.11	.09	2JM-G

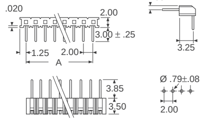
*30µ" gold plated

NorComp

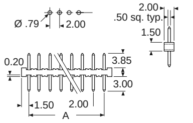
2mm Headers

Features: • 15 microinches selective gold plating • Insulator is glass filled thermoplastic UL Rating 94V0 • Color: Black • Contact material is phosphor bronze • "Post plated" contacts; no bare edges.

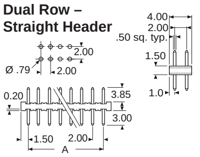
Single Row – Right Angle Header



Single Row – Straight Header



Dual Row – Straight Header



Manufacturer's Full Length Headers and Receptacles Available in Multiple Pin Versions

Dim. (mm) A	Digi-Key Part No.	Pricing 1	10	100	NorComp Part No.
Header Single Row Straight – 36 Pins					
70.0	2163S-36-ND	2.80	25.05	206.32	2163-36-01-P2
Header Single Row Right Angle – 36 Pins					
70.0	2163R-36-ND	2.84	25.41	209.26	2163-36-02-P2
Header Dual Row Straight – 72 Pins					
70.0	2164S-36-ND	5.41	48.41	398.63	2164-72-01-P2

Digi-Key's Cut Length to your Specification

Digi-Key Part No.	Base Price	Pin Adder
2163S-XX-ND	1.00	.05
2163R-XX-ND	1.04	.05
2164S-XX-ND	1.45	.11

How to Order 2mm Headers — 4 Easy Steps

Q. How do I order an 2163S header with 16 pins?

A. Call Digi-Key where you'll happily receive the price or determine the cost yourself.

Step 1. Select needed "Digi-Key Part Number" and number of pins desired.
Step 2. Begin with appropriate "Base Price" of your selected Part Number (refer to chart).
Step 3. Multiply the number of pins you desire by "Pin Adder" of your selected Part Number (refer to chart).
Step 4. Add Step 2 and Step 3 together for Final Cost.

2 ❑ ❑ ❑ ❑ - ❑ ❑ - ND

Base Part Number
Number of Desired Pins Per Row

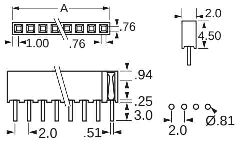
OUR EXAMPLE		***YOUR DIGI-KEY PART NUMBER***	
Step 1.	2163S-16-ND	Step 1.	2 _ _ _ _ - _ _ - ND
Step 2.	1.00	Step 2.	_____
Step 3.	16 x .05 = .80	Step 3.	x = _____
Step 4.	Your Cost = $1.80	Step 4.	Your Cost = _____

NOTE: For Quantities of 10 or More, Call 1-800-DIGI-KEY

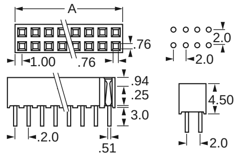
2mm Receptacles

Features: • Printed Circuit Board Mounted Receptacle • .079" (2mm) centers for real estate savings • Single and Dual Row Offerings • 15 microinches selective gold • Insulator, housing, material is glass filled thermoplastic, UL Rating 94VO • Color: Black • Contact material is phosphor bronze

Single Row – Vertical Receptacle



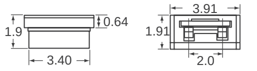
Dual Row – Vertical Receptacle



No. of Pos.	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Receptacle Single Row Vertical					
3	2063S-03-ND	1.43	1.28	1.05	2063-03-01-P2
4	2063S-04-ND	1.57	1.41	1.16	2063-04-01-P2
5	2063S-05-ND	1.71	1.53	1.26	2063-05-01-P2
6	2063S-06-ND	1.85	1.66	1.37	2063-06-01-P2
7	2063S-07-ND	2.02	1.82	1.50	2063-07-01-P2
8	2063S-08-ND	2.19	1.97	1.62	2063-08-01-P2
9	2063S-09-ND	2.34	2.10	1.73	2063-09-01-P2
10	2063S-10-ND	2.51	2.25	1.85	2063-10-01-P2
11	2063S-11-ND	2.65	2.38	1.96	2063-11-01-P2
12	2063S-12-ND	2.82	2.53	2.08	2063-12-01-P2
Receptacle Dual Row Vertical					
6	2064S-03-ND	1.88	1.69	1.39	2064-06-01-P2
8	2064S-04-ND	2.19	1.97	1.62	2064-08-01-P2
10	2064S-05-ND	2.51	2.25	1.85	2064-10-01-P2
12	2064S-06-ND	2.82	2.53	2.08	2064-12-01-P2
14	2064S-07-ND	3.14	2.81	2.31	2064-14-01-P2
16	2064S-08-ND	3.45	3.09	2.55	2064-16-01-P2
18	2064S-09-ND	3.79	3.40	2.80	2064-18-01-P2
20	2064S-10-ND	4.10	3.68	3.03	2064-20-01-P2
22	2064S-11-ND	4.42	3.96	3.26	2064-22-01-P2
24	2064S-12-ND	4.76	4.26	3.51	2064-24-01-P2

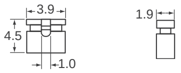
NEW! 2mm Shunts

Fig. 1



LOW PROFILE: • Housing Material: Glass filled thermoplastic, UL flammability rating 94V-O • Color: Black • Contact Material: High Performance Copper Alloy

Fig. 2



STANDARD PROFILE: • Housing Material: Glass filled thermoplastic, UL flammability rating 94V-O • Color: Black • Contact Material: High Performance Copper Alloy

Fig.	Finish	Digi-Key Part No.	Pricing 1	10	100	500	NorComp Part No.
1	Low Profile, Tin Low Profile, Gold*	LP1-006-ND LP1-001-ND	.23 .46	2.01 4.08	16.59 33.60	57.28 116.00	800-002-LP1-006 800-002-LP1-001
2	Standard Profile, Gold*	SP2-001-ND	.14	1.28	10.50	36.25	800-002-SP2-001

*30µ" gold plated

MTA .100” (2.54mm) Receptacles and Post Headers

IDC RECEPTACLES: • Wire-to-post connectors preloaded with dual beam contacts • Connectors and headers are end-to-end stackable • Connectors preloaded with IDC contact • All contacts are slotted for insulation displacement (IDC) terminal technique • Contacts are lubricated to prevent fretting corrosion • Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only) • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association

PERFORMANCE DATA: Voltage Rating: 250 vac. **Current Rating:** 4 amp max. **Low-Level Resistance:** 5 mΩ max. initial **Dielectric Withstanding Voltage:** 750 vac./1 min. **Insulation Resistance:** 5000 MΩ min. initial. **Operating Temperature:** -55°C to +105°C**. MATERIAL AND FINISH: Receptacles:** UL94V-2 rated (unless otherwise noted), type 6/6 nylon (28 AWG - Green; 26 AWG - Blue; 24 AWG - White; 22 AWG - Red). **Contacts:** Phosphor bronze, post tin plated, 30µ.

REPLACEMENT IDC CONTACTS: MATERIAL AND FINISH: Phosphor bronze, post tin plated; 30µ.

CST-100 CRIMP CONTACTS AND HOUSINGS: • High current rating • Mates with MTA and similar competitive notched headers • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189. **PERFORMANCE DATA: Voltage Rating:** 250 vac. **Current Rating:** 4 amp max. **Low-Level Resistance:** 6 mΩ max. initial, 10 mΩ max. final. **Insulation Resistance:** 1000 MΩ min. initial, 100 MΩ min. final. **Operating Temperature:** -55°C to +105°C**. MATERIAL AND FINISH:** Selective gold, 30µ gold over 127µ nickel or bright tin-lead on entire contact. **Wire Range:** 22-26 AWG. **Max. Ins. Diameter:** .065

KEYING PLUG WITH CARRIER STRIP (10 plugs per strip): Material: UL94V-2 rated, type 6/6 nylon, natural color

LED CONNECTORS: Designed to mate with .36mm-.51mm diameter posts or square leads. **MATERIAL AND FINISH: Receptacles:** UL94V-2 rated, type 6/6 nylon (28 AWG - Green; 26 AWG - Blue; 24 AWG - White; 22 AWG - Red). **Contacts:** Phosphor bronze, post tin plated, 30µ.

REPLACEMENT LED CONTACTS: MATERIAL AND FINISH: Phosphor bronze, post tin plated; 30µ.

POST HEADERS: Material For Housing: Polyester UL94V-0 rated, natural. **Posts:** Tin plated copper alloy.

Fig. 1 Housing

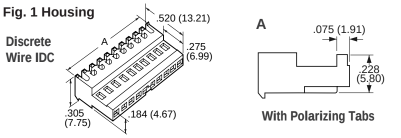


Fig. 2 IDC & LED Contacts

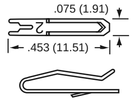


Fig. 3 CST-100 Housing

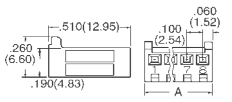


Fig. 4 CST-100 Crimp Contact

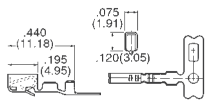


Fig. 5 Keying Plug

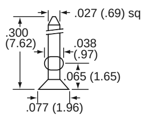


Fig. 6 Strain Relief Cover - Closed End

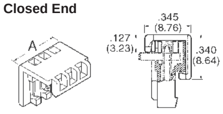


Fig. 7 Dust Cover - Closed End

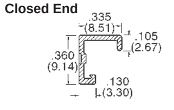


Fig. 8 Strain Relief Cover - Feed-Thru

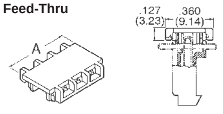


Fig. 9 Dust Cover - Feed-Thru

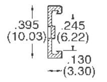


Fig. 10

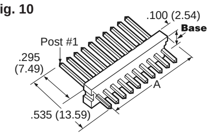


Fig. 11

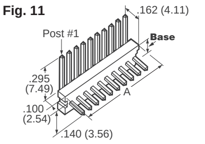


Fig. 12

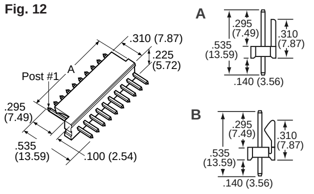


Fig. 13

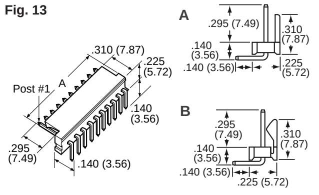


Fig. 14

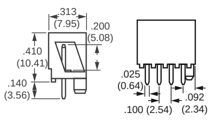


Fig. 15

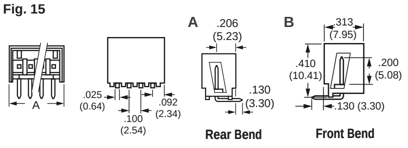


Fig.	Description	Cir-cuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
			Receptacles, .100” (2.54mm) Centers				
1	Closed End with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19050-ND	.12	.06	640443-2
		3	.300 (7.62)	A19051-ND	.12	.07	640443-3
		4	.400 (10.16)	A19052-ND	.20	.12	640443-4
		5	.500 (12.70)	A19053-ND	.26	.15	640443-5
		6	.600 (15.24)	A19054-ND	.28	.16	640443-6
		7	.700 (17.78)	A19055-ND	.33	.18	640443-7
		8	.800 (20.32)	A19056-ND	.37	.21	640443-8
		9	.900 (22.86)	A19057-ND	.92	.83	640443-9
		10	1.000 (25.40)	A19058-ND	.46	.26	1-640443-0
		11	1.100 (27.94)	A19059-ND	1.12	1.01	1-640443-1
		12	1.200 (30.48)	A19060-ND	.60	.33	1-640443-2
		13	1.300 (33.02)	A19061-ND	1.33	1.20	1-640443-3
		14	1.400 (35.56)	A19062-ND	1.43	1.29	1-640443-4
		15	1.500 (38.1)	A26193-ND	.98	.89	1-640443-5
1A	Closed End with Lock, with Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A23773-ND	.12	.10	643816-2
		3	.300 (7.62)	A23774-ND	.14	.12	643816-3
		4	.400 (10.16)	A23775-ND	.20	.19	643816-4
		5	.500 (12.7)	A23776-ND	.26	.24	643816-5
		6	.600 (15.24)	A23777-ND	.28	.26	643816-6
		7	.700 (17.78)	A23778-ND	.33	.30	643816-7
		8	.800 (20.32)	A23779-ND	.37	.34	643816-8
		10	1.00 (25.4)	A23780-ND	.46	.42	1-643816-0
		12	1.200 (30.48)	A23781-ND	.60	.54	1-643816-2
		15	1.500 (38.1)	A23782-ND	.98	.89	1-643816-5
1	Feed-Thru with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19132-ND	.20	.10	640623-2
		3	.300 (7.62)	A19133-ND	.19	.11	640623-3
		4	.400 (10.16)	A19134-ND	.20	.12	640623-4
		5	.500 (12.70)	A19135-ND	.26	.15	640623-5
		6	.600 (15.24)	A19136-ND	.28	.16	640623-6
		7	.700 (17.78)	A19137-ND	.33	.18	640623-7
		8	.800 (20.32)	A19138-ND	.37	.21	640623-8
		9	.900 (22.86)	A19139-ND	.92	.83	640623-9
		10	1.000 (25.40)	A19140-ND	.46	.26	1-640623-0
		11	1.100 (27.94)	A19141-ND	1.12	1.01	1-640623-1
		12	1.200 (30.48)	A19142-ND	.60	.33	1-640623-2
		13	1.300 (33.02)	A19143-ND	1.33	1.20	1-640623-3
		14	1.400 (35.56)	A19144-ND	1.43	1.29	1-640623-4
		15	1.500 (38.1)	A26194-ND	.98	.89	1-640623-5
1A	Feed-Thru with Lock, with Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A23783-ND	.17	.16	644565-2
		3	.300 (7.62)	A23784-ND	.19	.17	644565-3
		4	.400 (10.16)	A23785-ND	.20	.19	644565-4
		5	.500 (12.7)	A23786-ND	.26	.24	644565-5
		6	.600 (15.24)	A23787-ND	.28	.26	644565-6
		7	.700 (17.78)	A23788-ND	.33	.30	644565-7
		8	.800 (20.32)	A23789-ND	.37	.34	644565-8
		10	1.00 (25.4)	A23790-ND	.46	.42	1-644565-0
		12	1.200 (30.48)	A23791-ND	.60	.54	1-644565-2
		15	1.500 (38.1)	A23792-ND	.98	.89	1-644565-5
1	Closed End with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19030-ND	.12	.06	640442-2
		3	.300 (7.62)	A19031-ND	.12	.07	640442-3
		4	.400 (10.16)	A19032-ND	.20	.12	640442-4
		5	.500 (12.70)	A19033-ND	.26	.15	640442-5
		6	.600 (15.24)	A19034-ND	.28	.16	640442-6
		7	.700 (17.78)	A19035-ND	.33	.18	640442-7
		8	.800 (20.32)	A19036-ND	.37	.21	640442-8
		9	.900 (22.86)	A19037-ND	.92	.83	640442-9
		10	1.000 (25.40)	A19038-ND	.46	.26	1-640442-0
		11	1.100 (27.94)	A19039-ND	1.12	1.01	1-640442-1
		12	1.200 (30.48)	A19040-ND	.60	.33	1-640442-2
		13	1.300 (33.02)	A19041-ND	1.33	1.20	1-640442-3
		13	1.300 (33.02)	A26195-ND†	.75	.68	1-643828-3
		14	1.400 (35.56)	A19042-ND	1.43	1.29	1-640442-4
		15	1.500 (38.1)	A26196-ND	.98	.89	1-640442-5
1A	Closed End with Lock, with Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A23793-ND	.12	.10	643815-2
		3	.300 (7.62)	A23794-ND	.14	.12	643815-3
		4	.400 (10.16)	A23795-ND	.20	.19	643815-4
		5	.500 (12.7)	A23796-ND	.26	.24	643815-5
		6	.600 (15.24)	A23797-ND	.28	.26	643815-6
		7	.700 (17.78)	A23798-ND	.33	.30	643815-7
		8	.800 (20.32)	A23799-ND	.37	.34	643815-8
		10	1.00 (25.4)	A23800-ND	.46	.42	1-643815-0
		12	1.200 (30.48)	A23801-ND	.60	.54	1-643815-2
		13	1.300 (33.02)	A23802-ND†	.75	.68	1-644313-3
		15	1.500 (38.1)	A23803-ND	.98	.89	1-643815-5
1	Feed-Thru with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19112-ND	.20	.10	640622-2
		3	.300 (7.62)	A19113-ND	.19	.11	640622-3
		4	.400 (10.16)	A19114-ND	.20	.12	640622-4
		5	.500 (12.70)	A19115-ND	.26	.15	640622-5
		6	.600 (15.24)	A19116-ND	.28	.16	640622-6
		7	.700 (17.78)	A19117-ND	.33	.18	640622-7
		8	.800 (20.32)	A19118-ND	.37	.21	640622-8
		9	.900 (22.86)	A19119-ND	.92	.83	640622-9
		10	1.000 (25.40)	A19120-ND	1.02	.92	1-640622-0
		11	1.100 (27.94)	A19121-ND	1.12	1.01	1-640622-1
		12	1.200 (30.48)	A19122-ND	.60	.33	1-640622-2
		13	1.300 (33.02)	A19130-ND	1.33	1.20	1-640622-3
		13	1.300 (33.02)	A26197-ND†	.75	.68	1-644577-3
		14	1.400 (35.56)	A19131-ND	1.43	1.29	1-640622-4
		15	1.500 (38.1)	A26198-ND	.98	.89	1-640622-5
1A	Feed-Thru with Lock, with Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A23804-ND	.17	.16	644564-2
		3	.300 (7.62)	A23805-ND	.19	.18	644564-3
		4	.400 (10.16)	A23806-ND	.20	.19	644564-4
		5	.500 (12.7)	A23807-ND	.26	.24	644564-5
		6	.600 (15.24)	A23808-ND	.28	.26	644564-6
		7	.700 (17.78)	A23809-ND	.33	.30	644564-7
		8	.800 (20.32)	A23810-ND	.37	.34	644564-8
		12	1.200 (30.48)	A23811-ND	.60	.54	1-644564-2
		13	1.300 (33.02)	A23812-ND†	.75	.68	1-644497-3
		15	1.500 (38.1)	A23813-ND	.98	.89	1-644564-5
1	Closed End with Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A1901-ND	.12	.06	640441-2
		3	.300 (7.62)	A19020-ND	.12	.07	640441-3
		4	.400 (10.16)	A1902-ND	.12	.07	640441-4
		5	.500 (12.70)	A19021-ND	.26	.15	640441-5
		6	.600 (15.24)	A1903-ND	.28	.16	640441-6
		7	.700 (17.78)	A19022-ND	.33	.18	640441-7
		8	.800 (20.32)	A1904-ND	.37	.21	640441-8
		9	.900 (22.86)	A19023-ND	.92	.83	640441-9
		10	1.000 (25.40)	A1905-ND	.46	.26	1-640441-0
		11	1.100 (27.94)	A19024-ND	1.12	1.01	1-640441-1
		12	1.200 (30.48)	A19025-ND	.60	.33	1-640441-2
		13	1.300 (33.02)	A19026-ND	1.33	1.20	1-640441-3
		13	1.300 (33.02)	A26199-ND†	.75	.68	1-644574-3
		14	1.400 (35.56)	A19027-ND	1.43	1.29	1-640441-4
		15	1.500 (38.1)	A23767-ND	.98	.89	1-640441-5
1A	Closed End with Lock, with Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A23814-ND	.12	.10	643814-2
		3	.300 (7.62)	A23815-ND	.14	.12	643814-3
		4	.400 (10.16)	A23816-ND	.20	.19	643814-4
		5	.500 (12.7)	A23817-ND	.26	.24	643814-5
		6	.600 (15.24)	A23818-ND	.28	.26	643814-6
		7	.700 (17.78)	A23819-ND	.33	.30	643814-7
		8	.800 (20.32)	A23820-ND	.37	.34	643814-8
		10	1.00 (25.4)	A23821-ND	.46	.42	1-643814-0
		12	1.200 (30.48)	A23822-ND	.60	.54	1-643814-2
		13	1.300 (33.02)	A23823-ND†	.75	.68	1-644312-3
		15	1.500 (38.1)	A23824-ND	.98	.89	1-643814-5

† UL94V-0 – Black Housing

(Continued)

MTA .100” (2.54mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Feed-Thru with Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A19091-ND	.19	.10	640621-2
		3	.300 (7.62)	A19092-ND	.19	.11	640621-3
		4	.400 (10.16)	A19093-ND	.20	.12	640621-4
		5	.500 (12.70)	A19094-ND	.26	.15	640621-5
		6	.600 (15.24)	A19095-ND	.28	.16	640621-6
		7	.700 (17.78)	A19096-ND	.33	.18	640621-7
		8	.800 (20.32)	A19097-ND	.37	.21	640621-8
		9	.900 (22.86)	A19098-ND	1.77	1.59	640621-9
		10	1.000 (25.40)	A19099-ND	.46	.26	1-640621-0
		11	1.100 (27.94)	A19100-ND	1.12	1.01	1-640621-1
		12	1.200 (30.48)	A19101-ND	.60	.33	1-640621-2
		13	1.300 (33.02)	A19110-ND	1.33	1.20	1-640621-3
		13	1.300 (33.02)	A23768-ND†	.75	.68	1-644576-3
		14	1.400 (35.56)	A19111-ND	1.43	1.29	1-640621-4
		15	1.500 (38.1)	A23769-ND	.98	.89	1-640621-5
1A	Feed-Thru with Lock, w/ Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A23826-ND	.17	.16	644563-2
		3	.300 (7.62)	A23827-ND	.18	.17	644563-3
		4	.400 (10.16)	A23828-ND	.20	.19	644563-4
		5	.500 (12.7)	A23829-ND	.26	.24	644563-5
		6	.600 (15.24)	A23830-ND	.28	.26	644563-6
		7	.700 (17.78)	A23831-ND	.33	.30	644563-7
		8	.800 (20.32)	A23832-ND	.37	.34	644563-8
		10	1.00 (25.4)	A23833-ND	.46	.42	1-644563-0
		12	1.200 (30.48)	A23834-ND	.60	.54	1-644563-2
		13	1.300 (33.02)	A23835-ND†	.75	.68	1-644579-3
		15	1.500 (38.1)	A23836-ND	.98	.89	1-644563-5
1	Closed End with Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A1906-ND	.12	.06	640440-2
		3	.300 (7.62)	A19010-ND	.12	.07	640440-3
		4	.400 (10.16)	A1907-ND	.20	.12	640440-4
		5	.500 (12.70)	A19011-ND	.26	.15	640440-5
		6	.600 (15.24)	A1908-ND	.28	.16	640440-6
		7	.700 (17.78)	A19012-ND	.33	.18	640440-7
		8	.800 (20.32)	A1909-ND	.37	.21	640440-8
		9	.900 (22.86)	A19013-ND	.92	.83	640440-9
		10	1.000 (25.40)	A1910-ND	.46	.26	1-640440-0
		11	1.100 (27.94)	A19014-ND	1.12	1.01	1-640440-1
		12	1.200 (30.48)	A19015-ND	.60	.33	1-640440-2
		13	1.300 (33.02)	A19016-ND	1.33	1.20	1-640440-3
		14	1.400 (35.56)	A19017-ND	1.43	1.29	1-640440-4
		15	1.500 (38.1)	A23770-ND	.98	.89	1-640440-5
1A	Closed End with Lock, with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A23837-ND	.12	.10	643813-2
		2	.200 (5.08)	A29084-ND†	.32	.30	644083-2
		3	.300 (7.62)	A29085-ND†	.81	.73	644083-3
		4	.400 (10.16)	A23838-ND	.20	.19	643813-4
		5	.500 (12.7)	A23839-ND	.26	.24	643813-5
		7	.700 (17.78)	A23840-ND	.33	.30	643813-7
		8	.800 (20.32)	A23841-ND	.37	.34	643813-8
		10	1.00 (25.4)	A23842-ND	.46	.42	1-643813-0
		11	1.100 (27.94)	A23843-ND	2.16	1.95	1-643813-1
		12	1.200 (30.48)	A23844-ND	.60	.54	1-643813-2
		13	1.300 (33.02)	A23845-ND†	.75	.68	1-644083-3
		15	1.500 (38.1)	A23846-ND	.98	.89	1-643813-5
1	Feed-Thru with Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A19070-ND	.20	.10	640620-2
		3	.300 (7.62)	A19071-ND	.19	.11	640620-3
		4	.400 (10.16)	A19072-ND	.20	.12	640620-4
		5	.500 (12.70)	A19073-ND	.26	.15	640620-5
		6	.600 (15.24)	A19074-ND	.28	.16	640620-6
		7	.700 (17.78)	A19075-ND	.33	.18	640620-7
		8	.800 (20.32)	A19076-ND	.37	.21	640620-8
		9	.900 (22.86)	A19077-ND	.92	.83	640620-9
		10	1.000 (25.40)	A19078-ND	.46	.26	1-640620-0
		11	1.100 (27.94)	A19079-ND	1.12	1.01	1-640620-1
		12	1.200 (30.48)	A19080-ND	.60	.33	1-640620-2
		13	1.300 (33.02)	A19081-ND	1.33	1.20	1-640620-3
		13	1.300 (33.02)	A23771-ND†	.75	.68	1-644575-3
		14	1.400 (35.56)	A19090-ND	1.43	1.29	1-640620-4
		15	1.500 (38.1)	A23772-ND	.98	.89	1-640620-5
1A	Feed-Thru with Lock, with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A23847-ND	.17	.16	644540-2
		3	.300 (7.62)	A23848-ND	.19	.18	644540-3
		4	.400 (10.16)	A23849-ND	.20	.19	644540-4
		5	.500 (12.7)	A23850-ND	.26	.24	644540-5
		6	.600 (15.24)	A23851-ND	.28	.26	644540-6
		7	.700 (17.78)	A23852-ND	.33	.30	644540-7
		8	.800 (20.32)	A23853-ND	.37	.34	644540-8
		10	1.00 (25.4)	A23854-ND	.46	.42	1-644540-0
		12	1.200 (30.48)	A23855-ND	.60	.54	1-644540-2
		13	1.300 (33.02)	A23856-ND†	.75	.68	1-644578-3
		15	1.500 (38.1)	A23857-ND	.98	.89	1-644540-5
Replacement IDC Contacts							
2	Std. 28 AWG, Tin Plated	—	—	A19313-ND	1.40/25	2.49/50	640639-1
	Std. 26 AWG, Tin Plated	—	—	A19290-ND	1.58/25	2.81/50	640638-2
	Std. 24 AWG, Tin Plated	—	—	A19312-ND	1.58/25	2.81/50	640637-1
	Std. 22 AWG, Tin Plated	—	—	A19311-ND	1.58/25	2.81/50	640636-1
CST-100 Crimp Housings (Contacts Sold Separately)							
3	22-26 AWG White, Tin Plated	2	.220 (5.59)	A19490-ND	.26	.11	770602-2
		3	.320 (8.13)	A19491-ND	.27	.17	770602-3
		4	.420 (10.67)	A19492-ND	.28	.22	770602-4
		5	.520 (13.21)	A19493-ND	.30	.28	770602-5
		6	.620 (15.75)	A19494-ND	.36	.33	770602-6
		7	.720 (18.29)	A19495-ND	.42	.39	770602-7
		8	.820 (20.83)	A19496-ND	.48	.44	770602-8
		9	.920 (23.37)	A19497-ND	.54	.49	770602-9
		10	1.020 (25.91)	A19498-ND	.61	.55	1-770602-0
		11	1.120 (28.45)	A19499-ND	.67	.60	1-770602-1
		12	1.220 (30.99)	A19500-ND	.73	.66	1-770602-2
		13	1.320 (33.53)	A19510-ND	.79	.71	1-770602-3
		14	1.420 (36.07)	A19511-ND	.85	.77	1-770602-4
		15	1.520 (38.61)	A23961-ND	.91	.82	1-770602-5
CST-100 Crimp Contact							
4	Tin Plated, Loose	—	—	A19520-ND	1.63/25	2.90/50	770666-1
	Gold Plated, Loose	—	—	A23962-ND	9.73/25	17.29/50	770666-2
	Gold Plated, Strip	—	—	A23963-ND	5.07/25	9.00/50	770601-2
LED Receptacles (mate with .36 - .51mm diameter posts), .100” (2.54mm) centers							
1	Closed End with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19180-ND	.12	.06	641537-2
		3	.300 (7.62)	A19181-ND	.12	.07	641537-3
	Feed-Thru with Lock, w/out Polarizing Tabs, 28 AWG Green, Tin Plated	2	.200 (5.08)	A19220-ND	.20	.10	641656-2
		3	.300 (7.62)	A19221-ND	.19	.11	641656-3
	Closed End with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19170-ND	.12	.06	641536-2
		3	.300 (7.62)	A19171-ND	.12	.07	641536-3
1	Feed-Thru with Lock, w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.200 (5.08)	A19210-ND	.20	.10	641655-2
		3	.300 (7.62)	A19211-ND	.19	.11	641655-3
	Closed End with Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A19160-ND	.12	.06	641535-2
		3	.300 (7.62)	A19161-ND	.12	.07	641535-3
		5	.500 (12.7)	A23920-ND	.26	.24	641535-5
		6	.600 (15.24)	A23921-ND	.28	.26	641535-6
1A	Closed End w/Lock, w/Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A23922-ND	.12	.10	644795-2
1	Feed-Thru w/ Lock, w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.200 (5.08)	A19200-ND	.19	.10	641654-2
		3	.300 (7.62)	A19201-ND	.19	.11	641654-3
	Closed End w/ Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A19150-ND	.12	.06	641534-2
		3	.300 (7.62)	A19151-ND	.12	.07	641534-3
		8	.800 (20.32)	A23923-ND	.37	.34	641534-8
	Feed-Thru w/ Lock, w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.200 (5.08)	A19190-ND	.20	.10	641653-2
		3	.300 (7.62)	A19191-ND	.19	.11	641653-3
		8	.800 (20.32)	A23924-ND	.37	.34	641653-8
Replacement LED Contacts							
2	28 AWG, Tin Plated	—	—	A19317-ND	1.58/25	2.81/50	641646-1
	26 AWG, Tin Plated	—	—	A19316-ND	1.58/25	2.81/50	641645-1
	24 AWG, Tin Plated	—	—	A19315-ND	1.58/25	2.81/50	641644-1
	22 AWG, Tin Plated	—	—	A19314-ND	1.58/25	2.81/50	641643-1
Keying Plugs with Carrier Strip							
5	10 Plugs per Strip	—	—	A19310-ND	.52	.29	641994-1
Accessories, .100” (2.54mm) Centers							
6	Closed End Strain Relief Covers, White	2	.200 (5.08)	A19230-ND	.30	.17	643075-2
		3	.300 (7.62)	A19231-ND	.99	.90	643075-3
		4	.400 (10.16)	A19232-ND	.33	.19	643075-4
		5	.500 (12.70)	A19233-ND	1.00	.90	643075-5
		6	.600 (15.24)	A19234-ND	.34	.19	643075-6
		7	.700 (17.78)	A19235-ND	1.01	.91	643075-7
		8	.800 (20.32)	A19236-ND	1.01	.91	643075-8
		9	.900 (22.86)	A19237-ND	1.01	.92	643075-9
		10	1.000 (25.40)	A19238-ND	1.02	.92	1-643075-0
		11	1.100 (27.94)	A19239-ND	1.02	.92	1-643075-1
		12	1.200 (30.48)	A19240-ND	1.02	.93	1-643075-2
		13	1.300 (33.02)	A19241-ND	.98	.88	1-643075-3
		14	1.400 (35.56)	A19242-ND	1.03	.93	1-643075-4
		15	1.500 (38.1)	A23892-ND	1.04	.94	1-643075-5
7	Closed End Dust Covers, White	2	.200 (5.08)	A19250-ND	.11	.10	640550-2
		3	.300 (7.62)	A19251-ND	.29	.13	640550-3
		4	.400 (10.16)	A19252-ND	.33	.15	640550-4
		5	.500 (12.70)	A19253-ND	.39	.18	640550-5
		6	.600 (15.24)	A19254-ND	.40	.20	640550-6
		7	.700 (17.78)	A19255-ND	.43	.22	640550-7
		8	.800 (20.32)	A19256-ND	.45	.25	640550-8
		9	.900 (22.86)	A19257-ND	.49	.27	640550-9
		10	1.000 (25.40)	A19258-ND	.53	.29	1-640550-0
		11	1.100 (27.94)	A19259-ND	.57	.31	1-640550-1
		12	1.200 (30.48)	A19260-ND	.63	.35	1-640550-2
		13	1.300 (33.02)	A19261-ND	.66	.36	1-640550-3
		14	1.400 (35.56)	A19262-ND	.71	.39	1-640550-4
		15	1.500 (38.1)	A23893-ND	.45	.41	1-640550-5
8	Feed-Thru Strain Relief Covers, White	2	.200 (5.08)	A19270-ND	.45	.41	643077-2
		3	.300 (7.62)	A19271-ND	.15	.14	643077-3
		4	.400 (10.16)	A19272-ND	.40	.37	643077-4
		5	.500 (12.70)	A19273-ND	.50	.46	643077-5
		6	.600 (15.24)	A19274-ND	.55	.50	643077-6
		7	.700 (17.78)	A19275-ND	.57	.52	643077-7
		8	.800 (20.32)	A19276-ND	.65	.59	643077-8
		9	.900 (22.86)	A19277-ND	1.09	.98	643077-9
		10	1.000 (25.40)	A19278-ND	1.02	.92	1-643077-0
		11	1.100 (27.94)	A19279-ND	1.02	.92	1-643077-1
		12	1.200 (30.48)	A19280-ND	1.02	.93	1-643077-2
		13	1.300 (33.02)	A19281-ND	1.03	.93	1-643077-3
		14	1.400 (35.56)	A19282-ND	1.03	.93	1-643077-4
		15	1.500 (38.1)	A23894-ND	1.04	.94	1-643077-5
9	Feed-Thru Dust Covers, White	3	.300 (7.62)	A19291-ND	.16	.07	640642-3
		4	.400 (10.16)	A19292-ND	.16	.09	640642-4
		5	.500 (12.70)	A19293-ND	.18	.10	640642-5
		6	.600 (15.24)	A19294-ND	.36	.20	640642-6
		7	.700 (17.78)	A19295-ND	.40	.22	640642-7
		8	.800 (20.32)	A19296-ND	.45	.25	640642-8
		9	.900 (22.86)	A19297-ND	.49	.27	640642-9
		10	1.000 (25.40)	A19298-ND	.53	.29	1-640642-0
		11	1.100 (27.94)	A19299-ND	.57	.31	1-640642-1
		12	1.200 (30.48)	A19300-ND	.63	.35	1-640642-2
		13	1.300 (33.02)	A19301-ND	.66	.36	1-640642-3
		14	1.400 (35.56)	A19302-ND	.71	.39	1-640642-4
		15	1.500 (38.1)	A23895-ND	.45	.41	1-640642-5
Post Headers, .100 (2.54mm) Centers (.200 (5.08) Wide Base)							
10	Straight Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1911-ND	.23	.18	640452-2
		3	.300 (7.62)	A19330-ND	.23	.18	640452-3
		4	.400 (10.16)	A1912-ND	.27	.24	640452-4
		5	.500 (12.70)	A19331-ND	.33	.30	640452-5
		6	.600 (15.24)	A1913-ND	.36	.33	640452-6
		7	.700 (17.78)	A19332-ND	.42	.39	640452-7
		8	.800 (20.32)	A1914-ND	.48	.44	640452-8
		9	.900 (22.86)	A19333-ND	.54	.49	640452-9
		10	1.000 (25.40)	A1915-ND	.60	.55	1-640452-0
		15	1.500 (38.1)	A24931-ND	1.13	1.02	1-640452-5
11	Right Angle Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1916-ND	.21	.13	640453-2
		3	.300 (7.62)	A19340-ND	.24	.19	640453-3
		4	.400 (10.16)	A1917-ND	.28	.25	640453-4
		5	.500 (12.70)	A19341-ND	.35	.32	640453-5
		6	.600 (15.24)	A1918-ND	.38	.34	640453-6
		7	.700 (17.78)	A19342-ND	.44	.40	640453-7
		8	.800 (20.32)	A1919-ND	.50	.46	640453-8
		9	.900 (22.86)	A19343-ND	.57	.51	640453-9
		10	1.000 (25.40)	A1920-ND	.63	.57	1-640453-0
		12	1.200 (30.48)	A23927-ND	.75	.68	1-640453-2
		15	1.500 (38.1)	A23896-ND	3.26	2.94	1-640453-5
Narrow Base Post Headers, .100” (2.54mm) Centers (2.34mm Wide Base)							
10	Straight Post .64 (.025) Square w/o Retentive Legs, Tin Plated	2	.188 (4.78)	A19350-ND	.22	.15	644456-2
		3	.288 (7.32)	A19351-ND	.23	.18	644456-3
		4	.388 (9.86)	A19352-ND	.27	.24	644456-4
		5	.488 (12.40)	A19353-ND	.33	.30	644456-5
		6	.588 (14.94)	A19354-ND	.36	.33	644456-6

† UL94V-0 – Black Housing

(Continued)

MTA .100” (2.54mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
10	Straight Post .64 (.025) Square w/o Retentive Legs, Tin Plated (cont.)	7	.688 (17.48)	A19355-ND	.42	.39	644456-7
		8	.788 (20.02)	A19356-ND	.48	.44	644456-8
		9	.888 (22.56)	A19357-ND	.54	.49	644456-9
		10	.988 (25.10)	A19358-ND	.60	.55	1-644456-0
		11	1.088 (27.64)	A19359-ND	.66	.60	1-644456-1
		12	1.188 (30.18)	A19360-ND	.73	.66	1-644456-2
		13	1.288 (32.72)	A19361-ND	.79	.71	1-644456-3
		14	1.388 (35.26)	A19362-ND	.85	.77	1-644456-4
	Straight Post .64 (.025) Square with Retentive Legs, Tin Plated	2	.200 (5.08)	A19370-ND	.21	.16	644695-2
		3	.300 (7.62)	A19371-ND	.19	.18	644695-3
		4	.400 (10.16)	A19372-ND	.29	.27	644695-4
		5	.500 (12.70)	A19373-ND	.37	.33	644695-5
		6	.600 (15.24)	A19374-ND	.40	.36	644695-6
		7	.700 (17.78)	A19375-ND	.47	.42	644695-7
		8	.800 (20.32)	A19376-ND	.53	.48	644695-8
		9	.900 (22.86)	A19377-ND	.60	.54	644695-9
		10	1.000 (25.40)	A19378-ND	.66	.60	1-644695-0
		11	1.100 (27.94)	A19379-ND	.73	.66	1-644695-1
		12	1.200 (30.48)	A19380-ND	2.21	1.99	1-644695-2
		13	1.300 (33.02)	A19381-ND	.86	.78	1-644695-3
		14	1.400 (35.56)	A19382-ND	.93	.84	1-644695-4
11	Right Angle Post .64 (.025) Square w/o Retentive Legs, Tin Plated	2	.200 (5.08)	A19390-ND	.21	.13	644457-2
		3	.300 (7.62)	A19391-ND	.21	.17	644457-3
		4	.400 (10.16)	A19392-ND	.28	.25	644457-4
		5	.500 (12.70)	A19393-ND	.35	.32	644457-5
		6	.600 (15.24)	A19394-ND	.38	.34	644457-6
		7	.700 (17.78)	A19395-ND	1.22	1.10	644457-7
		8	.800 (20.32)	A19396-ND	.50	.46	644457-8
		9	.900 (22.86)	A19397-ND	.57	.51	644457-9
		10	1.000 (25.40)	A19398-ND	.63	.57	1-644457-0
		11	1.100 (27.94)	A19399-ND	.69	.63	1-644457-1
		12	1.200 (30.48)	A19400-ND	.75	.68	1-644457-2
		13	1.300 (33.02)	A19401-ND	.82	.74	1-644457-3
		14	1.400 (35.56)	A19402-ND	.88	.80	1-644457-4
	Right Angle Post .64 (.025) Square with Retentive Legs, Tin Plated	2	.200 (5.08)	A19410-ND	.18	.12	644694-2
		3	.300 (7.62)	A19411-ND	.20	.18	644694-3
		4	.400 (10.16)	A19412-ND	.30	.28	644694-4
		5	.500 (12.70)	A19413-ND	.38	.35	644694-5
		6	.600 (15.24)	A19414-ND	.41	.38	644694-6
		7	.700 (17.78)	A19415-ND	.48	.44	644694-7
		8	.800 (20.32)	A19416-ND	.55	.50	644694-8
		9	.900 (22.86)	A19417-ND	.62	.56	644694-9
		10	1.000 (25.40)	A19418-ND	.69	.63	1-644694-0
		11	1.100 (27.94)	A19419-ND	.76	.69	1-644694-1
		12	1.200 (30.48)	A19420-ND	.83	.75	1-644694-2
		13	1.300 (33.02)	A19421-ND	.90	.81	1-644694-3
		14	1.400 (35.56)	A19422-ND	.97	.88	1-644694-4

Polarized Headers, .100” (2.54mm) Centers

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
12A	Straight Post .64 (.025) Square, TIn Plated	2	.200 (5.08)	A19423-ND	.10	.04	640454-2
		3	.300 (7.62)	A19430-ND	.09	.06	640454-3
		4	.400 (10.16)	A19431-ND	.12	.07	640454-4
		5	.500 (12.70)	A19432-ND	.15	.09	640454-5
		6	.600 (15.24)	A19433-ND	.17	.10	640454-6
		7	.700 (17.78)	A19434-ND	.19	.11	640454-7
		8	.800 (20.32)	A19435-ND	.20	.12	640454-8
		9	.900 (22.86)	A19436-ND	.60	.54	640454-9
		10	1.000 (25.40)	A19437-ND	.24	.14	1-640454-0
		11	1.100 (27.94)	A19438-ND	.73	.66	1-640454-1
		12	1.200 (30.48)	A19439-ND	.37	.21	1-640454-2
		13	1.300 (33.02)	A19440-ND	.86	.78	1-640454-3
		14	1.400 (35.56)	A19441-ND	.93	.84	1-640454-4
		15	1.500 (38.1)	A23929-ND	1.25	1.13	1-640454-5
	Straight Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A23897-ND	.44	.40	641213-2
		3	.300 (7.62)	A23898-ND	.68	.62	641213-3
		4	.400 (10.16)	A23899-ND	.84	.76	641213-4
		5	.500 (12.7)	A23900-ND	.80	.73	641213-5
		6	.600 (15.24)	A23901-ND	1.16	1.05	641213-6
		7	.700 (17.78)	A23902-ND	1.29	1.16	641213-7
		8	.800 (20.32)	A23931-ND	.80	.73	641213-8
		9	.900 (22.86)	A23903-ND	1.62	1.46	641213-9
		10	1.00 (25.4)	A23904-ND	1.69	1.52	1-641213-0
		11	1.100 (27.94)	A23905-ND	1.96	1.77	1-641213-1
		12	1.200 (30.48)	A23906-ND	2.06	1.86	1-641213-2
		13	1.300 (33.02)	A23907-ND	2.26	2.04	1-641213-3
		14	1.400 (35.56)	A23908-ND	2.40	2.16	1-641213-4
		15	1.500 (38.1)	A23909-ND	2.46	2.22	1-641213-5
13A	Right Angle Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A19450-ND	.10	.04	640455-2
		3	.300 (7.62)	A19451-ND	.09	.06	640455-3
		4	.400 (10.16)	A19452-ND	.12	.07	640455-4
		5	.500 (12.70)	A19453-ND	.15	.09	640455-5
		6	.600 (15.24)	A19454-ND	.17	.10	640455-6
		7	.700 (17.78)	A19455-ND	.19	.11	640455-7
		8	.800 (20.32)	A19456-ND	.20	.12	640455-8
		9	.900 (22.86)	A19457-ND	.60	.54	640455-9
		10	1.000 (25.40)	A19458-ND	.24	.14	1-640455-0
		11	1.100 (27.94)	A19459-ND	.73	.66	1-640455-1
		12	1.200 (30.48)	A19460-ND	.37	.21	1-640455-2
		13	1.300 (33.02)	A19461-ND	.86	.78	1-640455-3
		14	1.400 (35.56)	A19462-ND	.93	.84	1-640455-4
		15	1.500 (38.1)	A23932-ND	1.25	1.13	1-640455-5
	Right Angle Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A23910-ND	.74	.67	641214-2
		3	.300 (7.62)	A23911-ND	1.01	.92	641214-3
		4	.400 (10.16)	A23912-ND	1.25	1.13	641214-4
		5	.500 (12.7)	A23913-ND	1.45	1.31	641214-5
		6	.600 (15.24)	A23914-ND	1.65	1.49	641214-6
		7	.700 (17.78)	A23915-ND	1.79	1.61	641214-7
		8	.800 (20.32)	A23933-ND	.80	.73	641214-8
		9	.900 (22.86)	A23916-ND	1.96	1.77	641214-9
		10	1.00 (25.4)	A23917-ND	2.04	1.84	1-641214-0
		11	1.100 (27.94)	A23918-ND	2.13	1.92	1-641214-1
		12	1.200 (30.48)	A23919-ND	2.29	2.07	1-641214-2
		13	1.300 (33.02)	A24927-ND	2.53	2.28	1-641214-3
		14	1.400 (35.56)	A24928-ND	2.63	2.37	1-641214-4
		15	1.500 (38.1)	A24929-ND	2.66	2.40	1-641214-5

Post Headers, .100” (2.54mm) Centers, Friction Lock Header

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
12B	Straight Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1921-ND	.10	.04	640456-2
		3	.300 (7.62)	A19470-ND	.09	.06	640456-3
		4	.400 (10.16)	A1922-ND	.12	.07	640456-4
		5	.500 (12.70)	A19471-ND	.15	.09	640456-5
		6	.600 (15.24)	A1923-ND	.17	.10	640456-6
		7	.700 (17.78)	A19472-ND	.19	.11	640456-7

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
12B	Straight Post .64 (.025) Square, Tin Plated (cont.)	8	.800 (20.32)	A1924-ND	.20	.12	640456-8
		9	.900 (22.86)	A19473-ND	.60	.54	640456-9
		10	1.000 (25.40)	A1925-ND	.24	.14	1-640456-0
		11	1.100 (27.94)	A19474-ND	.73	.66	1-640456-1
		12	1.200 (30.48)	A19475-ND	.37	.21	1-640456-2
		13	1.300 (33.02)	A19476-ND	.86	.78	1-640456-3
		14	1.400 (35.56)	A19477-ND	.93	.84	1-640456-4
		15	1.500 (38.1)	A24930-ND	1.25	1.13	1-640456-5
12A	Straight Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A24932-ND	.45	.41	641215-2
		3	.300 (7.62)	A24933-ND	.68	.61	641215-3
		4	.400 (10.16)	A24934-ND	.84	.76	641215-4
		5	.500 (12.7)	A24935-ND	1.09	.99	641215-5
		6	.600 (15.24)	A24936-ND	1.22	1.10	641215-6
		7	.700 (17.78)	A24937-ND	1.35	1.22	641215-7
		8	.800 (20.32)	A23941-ND	.80	.73	641215-8
		9	.900 (22.86)	A24938-ND	1.61	1.45	641215-9
		10	1.00 (25.4)	A24939-ND	1.70	1.54	1-641215-0
		11	1.100 (27.94)	A24940-ND	1.96	1.77	1-641215-1
		12	1.200 (30.48)	A24941-ND	2.06	1.86	1-641215-2
		14	1.400 (35.56)	A24942-ND	2.41	2.17	1-641215-4
		15	1.500 (38.1)	A24943-ND	2.64	2.38	1-641215-5
13B	Right Angle Post .64 (.025) Square, Tin Plated	2	.200 (5.08)	A1926-ND	.10	.04	640457-2
		3	.300 (7.62)	A19480-ND	.09	.06	640457-3
		4	.400 (10.16)	A1927-ND	.12	.07	640457-4
		5	.500 (12.70)	A19481-ND	.15	.09	640457-5
		6	.600 (15.24)	A1928-ND	.17	.10	640457-6
		7	.700 (17.78)	A19482-ND	.19	.11	640457-7
		8	.800 (20.32)	A1929-ND	.20	.12	640457-8
		9	.900 (22.86)	A19483-ND	.60	.54	640457-9
		10	1.000 (25.40)	A1930-ND	.24	.14	1-640457-0
		11	1.100 (27.94)	A19484-ND	.73	.66	1-640457-1
		12	1.200 (30.48)	A19485-ND	.37	.21	1-640457-2
		13	1.300 (33.02)	A19486-ND	.86	.78	1-640457-3
		14	1.400 (35.56)	A19487-ND	.93	.84	1-640457-4
	Right Angle Post .64 (.025) Square, 30µ Gold Plated	2	.200 (5.08)	A24944-ND	.68	.61	641216-2
		3	.300 (7.62)	A24945-ND	.93	.84	641216-3
		4	.400 (10.16)	A23943-ND	1.13	1.02	641216-4
		5	.500 (12.7)	A24946-ND	1.35	1.22	641216-5
		6	.600 (15.24)	A24947-ND	1.48	1.34	641216-6
		7	.700 (17.78)	A24948-ND	1.54	1.39	641216-7
		8	.800 (20.32)	A23944-ND	.80	.73	641216-8
		9	.900 (22.86)	A24949-ND	1.70	1.54	641216-9
		10	1.00 (25.4)	A24950-ND	1.90	1.71	1-641216-0
		11	1.100 (27.94)	A24951-ND	2.06	1.86	1-641216-1
		12	1.200 (30.48)	A24952-ND	2.53	2.28	1-641216-2
		13	1.300 (33.02)	A24953-ND	2.44	2.20	1-641216-3
		14	1.400 (35.56)	A24954-ND	2.60	2.35	1-641216-4
		15	1.500 (38.1)	A24955-ND	2.66	2.40	1-641216-5

Shrouded Headers, .100” (2.54mm)

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
14	Straight Post .64 (.025) Square w/ Pegs, TIn Plated	2	.284 (7.21)	A23945-ND	.38	.34	644486-2
		3	.384 (9.75)	A23946-ND	.43	.39	644486-3
		4	.484 (12.29)	A23925-ND	.73	.66	644486-4
		5	.584 (14.83)	A23926-ND	.91	.83	644486-5
		6	.684 (17.37)	A23928-ND	1.00	.90	644486-6
		7	.784 (19.91)	A23930-ND	1.16	1.05	644486-7
		8	.884 (22.45)	A23957-ND	.59	.54	644486-8
		9	.984 (24.99)	A23934-ND	1.42	1.28	644486-9
		10	1.084 (27.53)	A23935-ND	1.66	1.50	1-644486-0
		11	1.184 (30.07)	A23936-ND	1.83	1.65	1-644486-1
		12	1.284 (32.61)	A23937-ND	1.99	1.80	1-644486-2
		13	1.384 (35.15)	A23938-ND	2.16	1.95	1-644486-3
		14	1.484 (37.69)	A23939-ND	2.33	2.10	1-644486-4
	Straight Post .64 (.025) Square w/out Pegs, Tin Plated	2	.284 (7.21)	A23958-ND	.45	.41	644861-2
		3	.384 (9.75)	A23959-ND	.64	.58	644861-3
		4	.484 (12.29)	A23940-ND	.73	.66	644861-4
		5	.584 (14.83)	A23825-ND	.91	.83	644861-5
		6	.684 (17.37)	A23858-ND	1.00	.90	644861-6
		7	.784 (19.91)	A23859-ND	1.11	1.00	644861-7
		8	.884 (22.45)	A23960-ND	.59	.54	644861-8
		9	.984 (24.99)	A23860-ND	1.80	1.63	644861-9
		10	1.084 (27.53)	A23861-ND	1.66	1.50	1-644861-0
		11	1.184 (30.07)	A23862-ND	1.83	1.65	1-644861-1
		12	1.284 (32.61)	A23863-ND	1.99	1.80	1-644861-2
		13	1.384 (35.15)	A23864-ND	2.16	1.95	1-644861-3
		14	1.484 (37.69)	A23865-ND	2.33	2.10	1-644861-4
15A	Right-Angle Posts .64 (.025) Square, Front Bend w/out Pegs, Tin Plated	2	.284 (7.21)	A23866-ND	.77	.69	644488-2
		3	.384 (9.75)	A23867-ND	.77	.69	644488-3
		4	.484 (12.29)	A23868-ND	.76	.69	644488-4
		5	.584 (14.83)	A23869-ND	1.01	.91	644488-5
		6	.684 (17.37)	A23870-ND	1.03	.93	644488-6
		7	.784 (19.91)	A23871-ND	1.20	1.09	644488-7
		8	.884 (22.45)	A23872-ND	1.38	1.24	644488-8
		9	.984 (24.99)	A23873-ND	1.55	1.40	644488-9
		10	1.084 (27.53)	A23874-ND	1.72	1.55	1-644488-0
		11	1.184 (30.07)	A23875-ND	1.89	1.71	1-644488-1
		12	1.284 (32.61)	A23876-ND	2.06	1.86	1-644488-2
		13	1.384 (35.15)	A23877-ND	2.24	2.02	1-644488-3
		14	1.484 (37.69)	A23878-ND	2.42	2.18	1-644488-4
15B	Right-Angle Posts .64 (.025) Square, Rear Bend w/out Pegs, Tin Plated	2	.284 (7.21)	A23879-ND	.77	.69	644803-2
		3	.384 (9.75)	A23880-ND	.77	.69	644803-3
		4	.484 (12.29)	A23881-ND	.76	.69	644803-4
		5	.584 (14.83)	A23882-ND	.61	.55	644803-5
		6	.684 (17.37)	A23883-ND	1.03	.93	644803-6
		7	.784 (19.91)	A23884-ND	1.58	1.43	644803-7
		8	.884 (22.45)	A23885-ND	1.38	1.24	644803-8
		9	.984 (24.99)	A23886-ND	1.55	1.40	644803-9
		10	1.084 (27.53)	A23887-ND	1.72	1.55	1-644803-0
		11	1.184 (30.07)	A23888-ND	1.89	1.71	1-644803-1
		12	1.284 (32.61)	A23889-ND	2.06	1.86	1-644803-2
		13	1.384 (35.15)	A23890-ND	2.24	2.02	1-644803-3
		14	1.484 (37.69)	A23891-ND	2.42	2.18	1-644803-4

A9982-ND	T-Handle Tool for MTA .100” (2.54mm)	**$16.28 each**	59803-1
A1998-ND	Crimp Die for MTA .100” (2.54mm) IDC Receptacles (Must be used with handle A2031-ND) use with Fig. 1	**$103.74 each**	58246-1
A2031-ND	Manual Pistol Grip Handle for Metal & All-Plastic Shell Connectors. (Must order crimp die separately) use with Fig. 1	**$55.50 each**	58074-1
A19530-ND	Crimp Tool for CST-100 w/Die	**$201.00 each**	58517-1
A19531-ND	Die Set for CST-100 (use with A9996)	**$159.00 each**	58517-2
A9996-ND	Crimp Tool Handle for CST-100	**$75.00 each**	354940-1

MTA .156” (3.96mm) Receptacles and Post Headers

IDC CONNECTORS: • Wire-to-post connectors preloaded with dual beam contacts • Connectors and headers are end-to-end stackable • Connectors preloaded with IDC contacts • All contacts are slotted for insulation displacement (IDC) terminal technique • Contacts are lubricated to prevent fretting corrosion • Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only) • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189. **PERFORMANCE DATA: Voltage Rating:** 250 VAC. **Current Rating:** 5 amp max. for Connector. **Low-Level Resistance:** 3 mΩ max. initial. **Dielectric Withstanding Voltage:** 1250 VAC/1 min. **Insulation Resistance:** 5000 MΩ min. initial. **Operating Temperature:** -55°C to +105°C. **MATERIAL AND FINISH – Housing:** UL94V-2 rated, type 6/6 nylon (24 AWG - White; 22 AWG - Red: 20 AWG - Yellow; 18 AWG - Orange). **Contacts:** Phosphor bronze, post tin plated, 30µ.

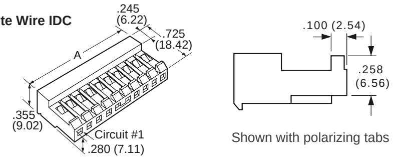
REPLACEMENT IDC CONTACTS: MATERIAL AND FINISH: Phosphor bronze, post tin plated; 30µ.

SL-156 CRIMP CONTACTS AND HOUSINGS: • High current rating • Mates with MTA and similar competitive notched headers • Rugged wire-to-board interconnection to mate with .045 square or round post headers • Housing made of flame retardant 6/6 nylon • Connectors are end-to-end stackable • Wire-to-board system offers polarization with friction lock for positive mating • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189. **PERFORMANCE DATA: Voltage Rating:** 250 VAC. **Current Rating:** 10 amp max. @ 250 VAC. **Low-Level Resistance:** 3.0 mΩ max. initial. **Dielectric Withstanding Voltage:** 2000 VAC/1 min. **Insulation Resistance:** 1000 MΩ min. initial. **Operating Temperature:** -55°C to +105°C. **MATERIAL AND FINISH (CONTACTS):** Bright tin plated brass or phosphor bronze; .012 (0.3) pre-tin or 30µ over nickel. **Wire Range:** 18-24 AWG. **Max. Insulation Diameter:** .110 (2.79mm).

KEYING PLUG WITH CARRIER STRIP (10 plugs per strip): MATERIAL: UL94V-2 rated, type 6/6 nylon, natural color

POST HEADERS: Material For Housing: Polyester 94V-0 rated, white. **Posts:** Copper alloy.

Fig. 1
Discrete Wire IDC



Shown with polarizing tabs

Fig. 2

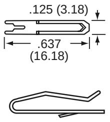


Fig. 3

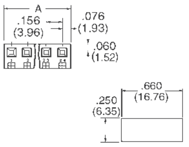


Fig. 4

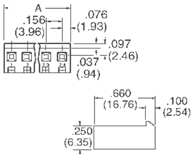


Fig. 5

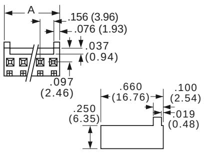


Fig. 6 High Force

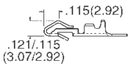


Fig. 7 Low Force

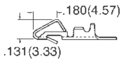


Fig. 8 Hooded

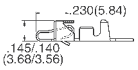


Fig. 9 Strain Relief Cover - Closed End

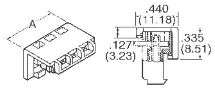


Fig. 10 Dust Cover - Closed End

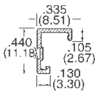


Fig. 11 Strain Relief Cover - Feed Thru

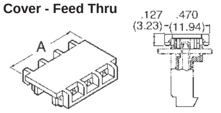


Fig. 12 Dust Cover - Feed Thru

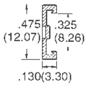


Fig. 13

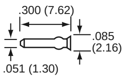


Fig. 14

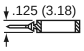


Fig. 15

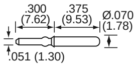


Fig. 16

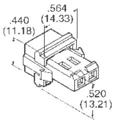


Fig. 17

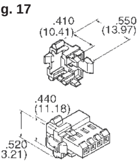


Fig. 18

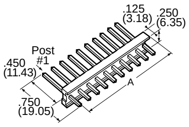


Fig. 19

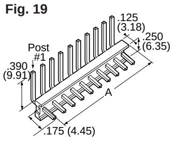


Fig. 20

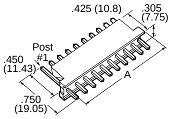


Fig. 21

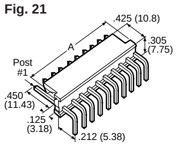
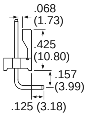


Fig. 22



Description	Digi-Key Part No.	Price Each	AMP Part No.
Tools			
Crimp Tool w/Die	A19996-ND	400.28	90123-5
T-Handle Tool for MTA .156” (3.96mm)	A9981-ND	16.28	59804-1
Crimp Die for MTA .156” (3.96mm) Receptacles (Must be used with handle A2031-ND.)	A1999-ND	103.74	58247-1
Manual Pistol Grip Tool for Metal & All-Plastic Shell Connectors. (Must order crimp die separately.)	A2031-ND	55.50	58074-1

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
	Receptacles, .156” (3.96mm) centers						
1	Closed End with Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A23988-ND	.54	.49	640430-2
		3	.468 (11.89)	A23964-ND	.25	.13	640430-3
		4	.624 (15.85)	A23965-ND	.26	.24	640430-4
		5	.780 (19.81)	A23995-ND	.52	.48	640430-5
		6	.936 (23.77)	A23966-ND	.34	.31	640430-6
		7	1.092 (27.74)	A24019-ND	.67	.60	640430-7
		8	1.248 (31.7)	A24131-ND	.76	.69	640430-8
		9	1.404 (35.66)	A24132-ND	.86	.78	640430-9
		10	1.560 (39.62)	A24133-ND	.95	.86	1-640430-0
		11	1.716 (43.59)	A24134-ND	1.05	.95	1-640430-1
		12	1.872 (47.55)	A24135-ND	1.14	1.03	1-640430-2
		17	2.652 (67.36)	A23967-ND	.76	.69	1-640430-7
1	Closed End with Lock with Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24136-ND	.21	.19	643821-2
		3	.468 (11.89)	A23968-ND	.25	.13	643821-3
		4	.624 (15.85)	A23969-ND	.27	.25	643821-4
		5	.780 (19.81)	A24137-ND	.52	.48	643821-5
		6	.936 (23.77)	A23970-ND	.34	.31	643821-6
		7	1.092 (27.74)	A24138-ND	.67	.60	643821-7
		8	1.248 (31.7)	A26135-ND	.76	.69	643821-8
		9	1.404 (35.66)	A24829-ND	1.11	1.01	643821-9
		10	1.560 (39.62)	A26041-ND	.95	.86	1-643821-0
		11	1.716 (43.59)	A26042-ND	1.05	.95	1-643821-1
		12	1.872 (47.55)	A26043-ND	1.14	1.03	1-643821-2
		17	2.652 (67.36)	A23971-ND	.76	.69	1-643821-7
1	Closed End w/out Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24044-ND	.15	.14	640435-2
		3	.468 (11.89)	A23972-ND	.25	.13	640435-3
		4	.624 (15.85)	A23973-ND	.26	.24	640435-4
		5	.780 (19.81)	A26045-ND	.52	.48	640435-5
		6	.936 (23.77)	A23974-ND	.34	.31	640435-6
		7	1.092 (27.74)	A26046-ND	.67	.60	640435-7
		8	1.248 (31.7)	A26048-ND	.76	.69	640435-8
		9	1.404 (35.66)	A26049-ND	.86	.78	640435-9
		10	1.560 (39.62)	A26050-ND	.95	.86	1-640435-0
		11	1.716 (43.59)	A26051-ND	1.05	.95	1-640435-1
		12	1.872 (47.55)	A26052-ND	1.14	1.03	1-640435-2
		17	2.652 (67.36)	A23975-ND	.76	.69	1-640435-7
1	Feed-Thru with Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24098-ND	.15	.14	640595-2
		3	.468 (11.89)	A24045-ND	.24	.22	640595-3
		4	.624 (15.85)	A24046-ND	.27	.25	640595-4
		5	.780 (19.81)	A24099-ND	.52	.48	640595-5
		6	.936 (23.77)	A24047-ND	.34	.31	640595-6
		7	1.092 (27.74)	A24100-ND	.67	.60	640595-7
		8	1.248 (31.7)	A24101-ND	.76	.69	640595-8
		9	1.404 (35.66)	A24102-ND	.86	.78	640595-9
		10	1.560 (39.62)	A24103-ND	.95	.86	1-640595-0
		11	1.716 (43.59)	A24104-ND	1.05	.95	1-640595-1
		12	1.872 (47.55)	A24105-ND	1.14	1.03	1-640595-2
		17	2.652 (67.36)	A24048-ND	.76	.69	1-640595-7
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 26 AWG Blue, Tin Plated	2	.312 (7.92)	A24106-ND	.15	.14	640608-2
		3	.468 (11.89)	A24049-ND	.24	.22	640608-3
		4	.624 (15.85)	A24050-ND	.27	.25	640608-4
		5	.780 (19.81)	A24107-ND	.52	.48	640608-5
		6	.936 (23.77)	A24051-ND	.34	.31	640608-6
		7	1.092 (27.74)	A24956-ND	.67	.60	640608-7
		8	1.248 (31.7)	A24957-ND	.76	.69	640608-8
		9	1.404 (35.66)	A24958-ND	.86	.78	640608-9
		10	1.560 (39.62)	A24959-ND	.95	.86	1-640608-0
		11	1.716 (43.59)	A24960-ND	1.05	.95	1-640608-1
		12	1.872 (47.55)	A24961-ND	1.14	1.03	1-640608-2
		17	2.652 (67.36)	A24052-ND	.76	.69	1-640608-7
1	Closed End with Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A19630-ND	.21	.19	640429-2
		3	.468 (11.89)	A19631-ND	.25	.08	640429-3
		4	.624 (15.85)	A19632-ND	.26	.15	640429-4
		5	.780 (19.81)	A19633-ND	1.26	1.14	640429-5
		6	.936 (23.77)	A19634-ND	.34	.19	640429-6
		7	1.092 (27.74)	A19635-ND	.67	.60	640429-7
		8	1.248 (31.70)	A19636-ND	1.01	.91	640429-8
		9	1.404 (35.66)	A19637-ND	.86	.78	640429-9
		10	1.560 (39.62)	A19638-ND	.95	.86	1-640429-0
		11	1.716 (43.59)	A19639-ND	1.05	.95	1-640429-1
		12	1.872 (47.55)	A19640-ND	1.14	1.03	1-640429-2
		17	2.652 (67.36)	A23976-ND	.76	.69	1-640429-7
1	Closed End with Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A26053-ND	.21	.19	643820-2
		3	.468 (11.89)	A23977-ND	.26	.14	643820-3
		4	.624 (15.85)	A23978-ND	.26	.24	643820-4
		5	.780 (19.81)	A26054-ND	.52	.48	643820-5
		6	.936 (23.77)	A23979-ND	.34	.31	643820-6
		7	1.092 (27.74)	A26055-ND	.67	.60	643820-7
		8	1.248 (31.7)	A26056-ND	.76	.69	643820-8
		9	1.404 (35.66)	A26057-ND	.86	.78	643820-9
		10	1.560 (39.62)	A26058-ND	.95	.86	1-643820-0
		11	1.716 (43.59)	A26059-ND	1.05	.95	1-643820-1
		12	1.872 (47.55)	A26060-ND	1.14	1.03	1-643820-2
		17	2.652 (67.36)	A23980-ND	.76	.69	1-643820-7
1	Closed End w/out Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A26061-ND	.15	.14	640434-2
		3	.468 (11.89)	A23981-ND	.25	.13	640434-3
		4	.624 (15.85)	A23982-ND	.26	.24	640434-4
		5	.780 (19.81)	A26062-ND	.52	.48	640434-5
		6	.936 (23.77)	A23983-ND	.34	.31	640434-6
		7	1.092 (27.74)	A26063-ND	1.60	1.45	640434-7
		8	1.248 (31.7)	A26064-ND	.76	.69	640434-8
		9	1.404 (35.66)	A26065-ND	.86	.78	640434-9
		10	1.560 (39.62)	A26066-ND	.95	.86	1-640434-0
		11	1.716 (43.59)	A26067-ND	1.05	.95	1-640434-1
		12	1.872 (47.55)	A26068-ND	1.14	1.03	1-640434-2
		17	2.652 (67.36)	A23984-ND	.76	.69	1-640434-7

(Continued)

MTA .156” (3.96mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Receptacles, .156” (3.96mm) centers (Cont.)							
1	Closed End w/out Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A26069-ND	.21	.19	644464-2
		3	.468 (11.89)	A23985-ND	.23	.21	644464-3
		4	.624 (15.85)	A23986-ND	.26	.24	644464-4
		5	.780 (19.81)	A26070-ND	.52	.48	644464-5
		6	.936 (23.77)	A23987-ND	.34	.31	644464-6
		7	1.092 (27.74)	A26071-ND	.67	.60	644464-7
		8	1.248 (31.7)	A26072-ND	.76	.69	644464-8
		9	1.404 (35.66)	A26073-ND	.86	.78	644464-9
		10	1.560 (39.62)	A26074-ND	.95	.86	1-644464-0
		11	1.716 (43.59)	A26075-ND	1.05	.95	1-644464-1
		12	1.872 (47.55)	A26076-ND	1.14	1.03	1-644464-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A19720-ND	.17	.16	640602-2
		3	.468 (11.89)	A19721-ND	.24	.14	640602-3
		4	.624 (15.85)	A19722-ND	.26	.15	640602-4
		5	.780 (19.81)	A19723-ND	.52	.48	640602-5
		6	.936 (23.77)	A19724-ND	.34	.19	640602-6
		7	1.092 (27.74)	A19725-ND	.67	.60	640602-7
		8	1.248 (31.70)	A19726-ND	.76	.69	640602-8
		9	1.404 (35.66)	A19727-ND	.86	.78	640602-9
		10	1.560 (39.62)	A19728-ND	.95	.86	1-640602-0
		11	1.716 (43.59)	A19729-ND	1.05	.95	1-640602-1
		12	1.872 (47.55)	A19730-ND	1.14	1.03	1-640602-2
		17	2.652 (67.36)	A24053-ND	.76	.69	1-640602-7
1	Feed-Thru with Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A24962-ND	.21	.19	644468-2
		3	.468 (11.89)	A24054-ND	.23	.22	644468-3
		4	.624 (15.85)	A24055-ND	.26	.24	644468-4
		5	.780 (19.81)	A24963-ND	.52	.48	644468-5
		6	.936 (23.77)	A24056-ND	.34	.31	644468-6
		7	1.092 (27.74)	A24964-ND	.67	.60	644468-7
		8	1.248 (31.7)	A24965-ND	.76	.69	644468-8
		9	1.404 (35.66)	A24966-ND	.86	.78	644468-9
		10	1.560 (39.62)	A24967-ND	.95	.86	1-644468-0
		11	1.716 (43.59)	A24968-ND	1.05	.95	1-644468-1
		12	1.872 (47.55)	A24969-ND	1.14	1.03	1-644468-2
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 24 AWG White, Tin Plated,	2	.312 (7.92)	A24970-ND	.15	.14	640607-2
		3	.468 (11.89)	A24057-ND	.24	.22	640607-3
		4	.624 (15.85)	A24058-ND	.26	.24	640607-4
		5	.780 (19.81)	A24971-ND	.52	.48	640607-5
		6	.936 (23.77)	A24059-ND	.34	.31	640607-6
		7	1.092 (27.74)	A24972-ND	.67	.60	640607-7
		8	1.248 (31.7)	A24973-ND	.76	.69	640607-8
		10	1.560 (39.62)	A24974-ND	.95	.86	1-640607-0
		12	1.872 (47.55)	A24975-ND	1.14	1.03	1-640607-2
		17	2.652 (67.36)	A24060-ND	.76	.69	1-640607-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 24 AWG White, Tin Plated	2	.312 (7.92)	A24976-ND	.21	.19	644472-2
		3	.468 (11.89)	A24061-ND	.24	.22	644472-3
		4	.624 (15.85)	A24062-ND	.27	.24	644472-4
		5	.780 (19.81)	A24977-ND	.52	.48	644472-5
		6	.936 (23.77)	A24063-ND	.34	.31	644472-6
		7	1.092 (27.74)	A24978-ND	.67	.60	644472-7
		8	1.248 (31.7)	A24979-ND	.76	.69	644472-8
		9	1.404 (35.66)	A24980-ND	.86	.78	644472-9
		10	1.560 (39.62)	A24981-ND	.95	.86	1-644472-0
		11	1.716 (43.59)	A24982-ND	1.05	.95	1-644472-1
		12	1.872 (47.55)	A24983-ND	1.14	1.03	1-644472-2
1	Closed End with Lock w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A19610-ND	.21	.19	640428-2
		3	.468 (11.89)	A19611-ND	.25	.08	640428-3
		4	.624 (15.85)	A19612-ND	.26	.15	640428-4
		5	.780 (19.81)	A19613-ND	.52	.48	640428-5
		6	.936 (23.77)	A19614-ND	.34	.19	640428-6
		7	1.092 (27.74)	A19615-ND	1.60	1.45	640428-7
		8	1.248 (31.70)	A19616-ND	.76	.69	640428-8
		9	1.404 (35.66)	A19617-ND	.86	.78	640428-9
		10	1.560 (39.62)	A19618-ND	.95	.86	1-640428-0
		11	1.716 (43.59)	A19619-ND	1.05	.95	1-640428-1
		12	1.872 (47.55)	A19620-ND	1.14	1.03	1-640428-2
		17	2.652 (67.36)	A23990-ND	.78	.70	1-640428-7
1	Closed End with Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A26077-ND	.21	.19	643819-2
		3	.468 (11.89)	A23991-ND	.25	.13	643819-3
		4	.624 (15.85)	A23992-ND	.26	.24	643819-4
		5	.780 (19.81)	A26078-ND	1.26	1.14	643819-5
		6	.936 (23.77)	A23993-ND	.34	.31	643819-6
		7	1.092 (27.74)	A23994-ND	1.14	1.03	643819-7
		8	1.248 (31.7)	A26079-ND	.76	.69	643819-8
		9	1.404 (35.66)	A26080-ND	.86	.78	643819-9
		10	1.560 (39.62)	A26081-ND	.95	.86	1-643819-0
		11	1.716 (43.59)	A26082-ND	1.05	.95	1-643819-1
		12	1.872 (47.55)	A26083-ND	1.14	1.03	1-643819-2
		17	2.652 (67.36)	A23996-ND	.78	.70	1-643819-7
1	Closed End w/out Lock without Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A26084-ND	.21	.19	640433-2
		3	.468 (11.89)	A23997-ND	.25	.13	640433-3
		4	.624 (15.85)	A23998-ND	.26	.24	640433-4
		5	.780 (19.81)	A26085-ND	.52	.48	640433-5
		6	.936 (23.77)	A23999-ND	.34	.31	640433-6
		7	1.092 (27.74)	A26086-ND	.67	.60	640433-7
		8	1.248 (31.7)	A24000-ND	1.03	.93	640433-8
		9	1.404 (35.66)	A26087-ND	.86	.78	640433-9
		10	1.560 (39.62)	A24001-ND	1.18	1.07	1-640433-0
		11	1.716 (43.59)	A26088-ND	1.05	.95	1-640433-1
		12	1.872 (47.55)	A24002-ND	1.38	1.25	1-640433-2
		17	2.652 (67.36)	A24003-ND	1.27	1.15	1-640433-7
1	Closed End w/out Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A26089-ND	.21	.19	644463-2
		3	.468 (11.89)	A24004-ND	.24	.23	644463-3
		4	.624 (15.85)	A24005-ND	.26	.24	644463-4
		5	.780 (19.81)	A26090-ND	.52	.48	644463-5
		6	.936 (23.77)	A24006-ND	.34	.31	644463-6
		7	1.092 (27.74)	A26091-ND	.67	.60	644463-7
		8	1.248 (31.7)	A26092-ND	.76	.69	644463-8
		9	1.404 (35.66)	A26093-ND	.86	.78	644463-9
		10	1.560 (39.62)	A26094-ND	.95	.86	1-644463-0
		11	1.716 (43.59)	A26096-ND	1.05	.95	1-644463-1
		12	1.872 (47.55)	A26097-ND	1.14	1.03	1-644463-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A19700-ND	.65	.59	640601-2
		3	.468 (11.89)	A19701-ND	.24	.14	640601-3
		4	.624 (15.85)	A19702-ND	.27	.15	640601-4
		5	.780 (19.81)	A19703-ND	1.03	.93	640601-5
		6	.936 (23.77)	A19704-ND	.34	.19	640601-6
		7	1.092 (27.74)	A19705-ND	.67	.60	640601-7
		8	1.248 (31.70)	A19706-ND	.76	.69	640601-8
		9	1.404 (35.66)	A19707-ND	.86	.78	640601-9
		10	1.560 (39.62)	A19708-ND	1.39	1.26	1-640601-0
		11	1.716 (43.59)	A19709-ND	1.05	.95	1-640601-1
		12	1.872 (47.55)	A19710-ND	1.14	1.03	1-640601-2
		17	2.652 (67.36)	A24064-ND	.78	.70	1-640601-7
1	Feed-Thru with Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A24984-ND	.21	.19	644467-2
		3	.468 (11.89)	A24065-ND	.24	.23	644467-3
		4	.624 (15.85)	A24066-ND	.27	.25	644467-4
		5	.780 (19.81)	A24985-ND	.52	.48	644467-5
		6	.936 (23.77)	A24067-ND	.34	.31	644467-6
		7	1.092 (27.74)	A24986-ND	.67	.60	644467-7
		8	1.248 (31.7)	A24987-ND	.76	.69	644467-8
		9	1.404 (35.66)	A24988-ND	.86	.78	644467-9
		10	1.560 (39.62)	A24989-ND	.95	.86	1-644467-0
		11	1.716 (43.59)	A24990-ND	1.05	.95	1-644467-1
		12	1.872 (47.55)	A24991-ND	1.14	1.03	1-644467-2
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A24992-ND	.17	.16	640606-2
		3	.468 (11.89)	A24068-ND	.25	.23	640606-3
		4	.624 (15.85)	A24069-ND	.27	.25	640606-4
		5	.780 (19.81)	A24993-ND	.52	.48	640606-5
		6	.936 (23.77)	A24070-ND	.34	.31	640606-6
		7	1.092 (27.74)	A24994-ND	.67	.60	640606-7
		8	1.248 (31.7)	A24995-ND	.76	.69	640606-8
		9	1.404 (35.66)	A24996-ND	.86	.78	640606-9
		10	1.560 (39.62)	A24997-ND	.95	.86	1-640606-0
		11	1.716 (43.59)	A24998-ND	1.05	.95	1-640606-1
		12	1.872 (47.55)	A24999-ND	1.82	1.64	1-640606-2
		17	2.652 (67.36)	A24071-ND	.78	.70	1-640606-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 22 AWG Red, Tin Plated	2	.312 (7.92)	A24199-ND	.21	.19	644471-2
		3	.468 (11.89)	A24072-ND	.25	.23	644471-3
		4	.624 (15.85)	A24073-ND	.27	.25	644471-4
		5	.780 (19.81)	A24139-ND	.52	.48	644471-5
		6	.936 (23.77)	A24074-ND	.34	.31	644471-6
		7	1.092 (27.74)	A24140-ND	.67	.60	644471-7
		8	1.248 (31.7)	A24141-ND	.76	.69	644471-8
		9	1.404 (35.66)	A24142-ND	.86	.78	644471-9
		10	1.560 (39.62)	A24143-ND	.95	.86	1-644471-0
		11	1.716 (43.59)	A24144-ND	1.05	.95	1-644471-1
		12	1.872 (47.55)	A24145-ND	1.14	1.03	1-644471-2
1	Closed End with Lock w/out Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A19590-ND	.21	.19	640427-2
		3	.468 (11.89)	A19591-ND	.25	.08	640427-3
		4	.624 (15.85)	A19592-ND	.26	.15	640427-4
		5	.780 (19.81)	A19593-ND	.52	.48	640427-5
		6	.936 (23.77)	A19594-ND	.37	.21	640427-6
		7	1.092 (27.74)	A19595-ND	.67	.60	640427-7
		8	1.248 (31.70)	A19596-ND	.76	.69	640427-8
		9	1.404 (35.66)	A19597-ND	1.10	.99	640427-9
		10	1.560 (39.62)	A19598-ND	.95	.86	1-640427-0
		11	1.716 (43.59)	A19599-ND	1.05	.95	1-640427-1
		12	1.872 (47.55)	A19600-ND	1.14	1.03	1-640427-2
		17	2.652 (67.36)	A24007-ND	.78	.70	1-640427-7
1	Closed End with Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26098-ND	.21	.19	643818-2
		3	.468 (11.89)	A24008-ND	.25	.13	643818-3
		4	.624 (15.85)	A24009-ND	.26	.24	643818-4
		5	.780 (19.81)	A26099-ND	.52	.48	643818-5
		6	.936 (23.77)	A24010-ND	.34	.31	643818-6
		7	1.092 (27.74)	A26100-ND	.67	.60	643818-7
		8	1.248 (31.7)	A26101-ND	.76	.69	643818-8
		9	1.404 (35.66)	A26102-ND	.86	.78	643818-9
		10	1.560 (39.62)	A26103-ND	1.18	1.07	1-643818-0
		11	1.716 (43.59)	A26104-ND	1.05	.95	1-643818-1
		12	1.872 (47.55)	A26105-ND	1.14	1.03	1-643818-2
		17	2.652 (67.36)	A24011-ND	.99	.89	1-643818-7
1	Closed End w/out Lock without Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A24012-ND	.65	.59	640432-2
		3	.468 (11.89)	A26106-ND	.25	.13	640432-3
		4	.624 (15.85)	A24013-ND	.26	.24	640432-4
		5	.780 (19.81)	A26107-ND	.52	.48	640432-5
		6	.936 (23.77)	A24014-ND	.34	.31	640432-6
		7	1.092 (27.74)	A26108-ND	.67	.60	640432-7
		8	1.248 (31.7)	A26109-ND	.76	.69	640432-8
		9	1.404 (35.66)	A26110-ND	.86	.78	640432-9
		10	1.560 (39.62)	A26111-ND	.95	.86	1-640432-0
		11	1.716 (43.59)	A26112-ND	1.05	.95	1-640432-1
		12	1.872 (47.55)	A26113-ND	1.14	1.03	1-640432-2
		17	2.652 (67.36)	A24015-ND	.78	.70	1-640432-7

(Continued)

MTA .156” (3.96mm) Receptacles and Post Headers *(Cont.)*

Receptacles, .156” (3.96mm) centers (Cont.)

Fig.	Description	Circuits	Dim. "A"	Digi-Key	Price Each		AMP
			Inch (mm)	Part No.	1	25	Part No.
1	Closed End w/out Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26114-ND	.21	.19	644462-2
		3	.468 (11.89)	A24016-ND	.25	.23	644462-3
		4	.624 (15.85)	A24017-ND	.26	.24	644462-4
		5	.780 (19.81)	A26115-ND	.52	.48	644462-5
		6	.936 (23.77)	A24018-ND	.34	.31	644462-6
		7	1.092 (27.74)	A26116-ND	.67	.60	644462-7
		8	1.248 (31.7)	A26117-ND	.76	.69	644462-8
		9	1.404 (35.66)	A26118-ND	.86	.78	644462-9
		10	1.560 (39.62)	A26119-ND	.95	.86	1-644462-0
		11	1.716 (43.59)	A26120-ND	1.05	.95	1-644462-1
		12	1.872 (47.55)	A26121-ND	1.14	1.03	1-644462-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A19680-ND	.65	.59	640600-2
		3	.468 (11.89)	A19681-ND	.25	.14	640600-3
		4	.624 (15.85)	A19682-ND	.27	.15	640600-4
		5	.780 (19.81)	A19683-ND	.52	.48	640600-5
		6	.936 (23.77)	A19684-ND	.34	.19	640600-6
		7	1.092 (27.74)	A19685-ND	.67	.60	640600-7
		8	1.248 (31.70)	A19686-ND	.76	.69	640600-8
		9	1.404 (35.66)	A19687-ND	1.31	1.19	640600-9
		10	1.560 (39.62)	A19688-ND	.95	.86	1-640600-0
		11	1.716 (43.59)	A19689-ND	1.05	.95	1-640600-1
		12	1.872 (47.55)	A19690-ND	1.14	1.03	1-640600-2
		17	2.652 (67.36)	A24075-ND	.78	.70	1-640600-7
1	Feed-Thru with Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A24146-ND	.21	.19	644466-2
		3	.468 (11.89)	A24076-ND	.25	.23	644466-3
		4	.624 (15.85)	A24077-ND	.27	.25	644466-4
		5	.780 (19.81)	A24147-ND	.52	.48	644466-5
		6	.936 (23.77)	A24078-ND	.34	.31	644466-6
		7	1.092 (27.74)	A24148-ND	.67	.60	644466-7
		8	1.248 (31.7)	A24149-ND	.76	.69	644466-8
		9	1.404 (35.66)	A24150-ND	.86	.78	644466-9
		10	1.560 (39.62)	A24151-ND	.95	.86	1-644466-0
		11	1.716 (43.59)	A26000-ND	1.05	.95	1-644466-1
		12	1.872 (47.55)	A26001-ND	1.14	1.03	1-644466-2
1	Feed-Thru w/out Lock w/out Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26002-ND	.17	.16	640605-2
		3	.468 (11.89)	A24079-ND	.24	.22	640605-3
		4	.624 (15.85)	A24080-ND	.27	.25	640605-4
		5	.780 (19.81)	A26003-ND	.52	.48	640605-5
		6	.936 (23.77)	A24081-ND	.34	.31	640605-6
		7	1.092 (27.74)	A26047-ND	.67	.60	640605-7
		8	1.248 (31.7)	A26004-ND	.76	.69	640605-8
		9	1.404 (35.66)	A26005-ND	.86	.78	640605-9
		10	1.560 (39.62)	A26006-ND	.95	.86	1-640605-0
		11	1.716 (43.59)	A26007-ND	1.05	.95	1-640605-1
		12	1.872 (47.55)	A26008-ND	1.14	1.03	1-640605-2
		17	2.652 (67.36)	A24082-ND	.78	.70	1-640605-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 20 AWG Yellow, Tin Plated	2	.312 (7.92)	A26009-ND	.21	.19	644470-2
		3	.468 (11.89)	A24083-ND	.24	.22	644470-3
		4	.624 (15.85)	A24084-ND	.26	.24	644470-4
		5	.780 (19.81)	A26010-ND	.52	.48	644470-5
		6	.936 (23.77)	A24085-ND	.34	.31	644470-6
		7	1.092 (27.74)	A26011-ND	.67	.60	644470-7
		8	1.248 (31.7)	A26012-ND	.76	.69	644470-8
		9	1.404 (35.66)	A26013-ND	.86	.78	644470-9
		10	1.560 (39.62)	A26014-ND	.95	.86	1-644470-0
		11	1.716 (43.59)	A26015-ND	1.05	.95	1-644470-1
		12	1.872 (47.55)	A26016-ND	1.14	1.03	1-644470-2
1	Closed End with Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A1951-ND	.21	.19	640426-2
		3	.468 (11.89)	A19580-ND	.38	.12	640426-3
		4	.624 (15.85)	A1952-ND	.38	.22	640426-4
		5	.780 (19.81)	A19581-ND	.52	.48	640426-5
		6	.936 (23.77)	A1953-ND	.34	.19	640426-6
		7	1.092 (27.74)	A19582-ND	.67	.60	640426-7
		8	1.248 (31.70)	A1954-ND	.76	.69	640426-8
		9	1.404 (35.66)	A19583-ND	.86	.78	640426-9
		10	1.560 (39.62)	A1955-ND	.95	.86	1-640426-0
		11	1.716 (43.59)	A19584-ND	1.05	.95	1-640426-1
		12	1.872 (47.55)	A19585-ND	1.14	1.03	1-640426-2
		17	2.652 (67.36)	A24020-ND	.76	.69	1-640426-7
1	Closed End with Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26122-ND	.37	.19	643817-2
		3	.468 (11.89)	A24021-ND	.25	.13	643817-3
		4	.624 (15.85)	A24022-ND	.26	.24	643817-4
		5	.780 (19.81)	A26123-ND	.52	.48	643817-5
		6	.936 (23.77)	A24023-ND	.34	.31	643817-6
		7	1.092 (27.74)	A24024-ND	1.12	1.02	643817-7
		8	1.248 (31.7)	A26124-ND	.76	.69	643817-8
		9	1.404 (35.66)	A24025-ND	1.07	.97	643817-9
		10	1.560 (39.62)	A26125-ND	.95	.86	1-643817-0
		11	1.716 (43.59)	A26126-ND	1.45	1.31	1-643817-1
		12	1.872 (47.55)	A24026-ND	1.36	1.23	1-643817-2
		17	2.652 (67.36)	A24027-ND	.76	.69	1-643817-7
1	Closed End w/out Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A1956-ND	.21	.19	640431-2
		3	.468 (11.89)	A19650-ND	.25	.08	640431-3
		4	.624 (15.85)	A1957-ND	.26	.15	640431-4
		5	.780 (19.81)	A19651-ND	.52	.48	640431-5
		6	.936 (23.77)	A1958-ND	.34	.19	640431-6
		7	1.092 (27.74)	A19652-ND	.67	.60	640431-7
		8	1.248 (31.70)	A1959-ND	.76	.69	640431-8
1	Closed End w/out Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated (cont.)	9	1.404 (35.66)	A19653-ND	.86	.78	640431-9
		10	1.560 (39.62)	A1960-ND	.95	.86	1-640431-0
		11	1.716 (43.59)	A19654-ND	1.05	.95	1-640431-1
		12	1.872 (47.55)	A19655-ND	1.14	1.03	1-640431-2
		17	2.652 (67.36)	A24028-ND	.76	.69	1-640431-7
1	Closed End w/out Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26127-ND	.21	.19	644461-2
		3	.468 (11.89)	A24029-ND	.24	.22	644461-3
		4	.624 (15.85)	A24030-ND	.26	.24	644461-4
		5	.780 (19.81)	A26128-ND	.52	.48	644461-5
		6	.936 (23.77)	A24031-ND	.34	.31	644461-6
		7	1.092 (27.74)	A26129-ND	.67	.60	644461-7
		8	1.248 (31.7)	A26130-ND	.76	.69	644461-8
		9	1.404 (35.66)	A26131-ND	.86	.78	644461-9
		10	1.560 (39.62)	A26132-ND	.95	.86	1-644461-0
		11	1.716 (43.59)	A26133-ND	1.05	.95	1-644461-1
		12	1.872 (47.55)	A26134-ND	1.14	1.03	1-644461-2
1	Feed-Thru with Lock w/out Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A19660-ND	.21	.19	640599-2
		3	.468 (11.89)	A19661-ND	.24	.14	640599-3
		4	.624 (15.85)	A19662-ND	.27	.15	640599-4
		5	.780 (19.81)	A19663-ND	.52	.48	640599-5
		6	.936 (23.77)	A19664-ND	.34	.19	640599-6
		7	1.092 (27.74)	A19665-ND	1.12	1.02	640599-7
		8	1.248 (31.70)	A19666-ND	.76	.69	640599-8
		9	1.404 (35.66)	A19667-ND	.86	.78	640599-9
		10	1.560 (39.62)	A19668-ND	.95	.86	1-640599-0
		11	1.716 (43.59)	A19669-ND	1.45	1.31	1-640599-1
		12	1.872 (47.55)	A19670-ND	1.14	1.03	1-640599-2
		17	2.652 (67.36)	A24086-ND	.76	.69	1-640599-7
1	Feed-Thru with Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26017-ND	.21	.19	644465-2
		3	.468 (11.89)	A24087-ND	.24	.22	644465-3
		4	.624 (15.85)	A24088-ND	.27	.25	644465-4
		5	.780 (19.81)	A26018-ND	.52	.48	644465-5
		6	.936 (23.77)	A24089-ND	.34	.31	644465-6
		7	1.092 (27.74)	A26019-ND	.67	.60	644465-7
		8	1.248 (31.7)	A26020-ND	.76	.69	644465-8
		9	1.404 (35.66)	A26021-ND	.86	.78	644465-9
		10	1.560 (39.62)	A26022-ND	.95	.86	1-644465-0
		11	1.716 (43.59)	A26023-ND	1.05	.95	1-644465-1
		12	1.872 (47.55)	A26024-ND	1.14	1.03	1-644465-2
1	Feed-Thru w/out Lock without Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26025-ND	.17	.16	640604-2
		3	.468 (11.89)	A24090-ND	.24	.22	640604-3
		4	.624 (15.85)	A24091-ND	.27	.25	640604-4
		5	.780 (19.81)	A24092-ND	1.01	.92	640604-5
		6	.936 (23.77)	A24093-ND	.34	.31	640604-6
		7	1.092 (27.74)	A26026-ND	.67	.60	640604-7
		8	1.248 (31.7)	A26027-ND	1.22	1.10	640604-8
		9	1.404 (35.66)	A26028-ND	.86	.78	640604-9
		10	1.560 (39.62)	A26029-ND	.95	.86	1-640604-0
		11	1.716 (43.59)	A26030-ND	1.05	.95	1-640604-1
		12	1.872 (47.55)	A24031-ND	.34	.31	1-640604-2
		17	2.652 (67.36)	A24094-ND	.76	.69	1-640604-7
1	Feed-Thru w/out Lock with Polarizing Tabs, 18 AWG Orange, Tin Plated	2	.312 (7.92)	A26032-ND	.21	.19	644469-2
		3	.468 (11.89)	A24095-ND	.24	.22	644469-3
		4	.624 (15.85)	A24096-ND	.27	.25	644469-4
		5	.780 (19.81)	A26033-ND	.52	.48	644469-5
		6	.936 (23.77)	A24097-ND	.34	.31	644469-6
		7	1.092 (27.74)	A26034-ND	.67	.60	644469-7
		8	1.248 (31.7)	A26035-ND	.76	.69	644469-8
		9	1.404 (35.66)	A26036-ND	.86	.78	644469-9
		10	1.560 (39.62)	A26037-ND	.95	.86	1-644469-0
		11	1.716 (43.59)	A26038-ND	1.05	.95	1-644469-1
		12	1.872 (47.55)	A26039-ND	1.14	1.03	1-644469-2

Replacement IDC Contacts, .156” (3.96mm) Centers

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
2	Tin Plated, 18 AWG	—	—	A19820-ND	.26	.10	640631-2
	Tin Plated, 20 AWG	—	—	A19825-ND	.26	.10	640632-2
	Tin Plated, 22 AWG	—	—	A19830-ND	.26	.10	640633-2
	Tin Plated, 24 AWG	—	—	A19835-ND	.26	.10	640634-2

SL-156 Crimp Housings (Contacts Sold Separately)

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
3	Without Lock Ramp Without Polarizing Tabs, UL94V-0 White	2	.308 (7.82)	A19970-ND	.32	.13	640251-2
		3	.465 (11.81)	A19971-ND	.29	.15	640251-3
		4	.620 (15.75)	A19972-ND	.32	.20	640251-4
		5	.777 (19.74)	A19973-ND	.36	.25	640251-5
		6	.933 (23.70)	A19974-ND	.27	.13	640251-6
		7	1.090 (27.69)	A19975-ND	.44	.34	640251-7
		8	1.246 (31.65)	A19976-ND	.47	.39	640251-8
		9	1.402 (35.61)	A19977-ND	.49	.44	640251-9
		10	1.558 (39.57)	A19978-ND	.54	.49	1-640251-0
		11	1.715 (43.56)	A19979-ND	.59	.54	1-640251-1
		12	1.871 (47.52)	A19980-ND	1.01	.91	1-640251-2
		13	2.027 (51.49)	A24128-ND	.70	.64	1-640251-3
		14	2.183 (55.45)	A24129-ND	.75	.68	1-640251-4
		16	2.496 (63.40)	A24130-ND	.86	.78	1-640251-6
4	With Lock Ramp Without Polarizing Tabs, UL94V-0 White	2	.308 (7.82)	A19950-ND	.32	.13	640250-2
		3	.465 (11.81)	A19951-ND	.18	.06	640250-3
		4	.620 (15.75)	A19952-ND	.32	.20	640250-4
		5	.777 (19.74)	A19953-ND	.22	.10	640250-5
		6	.933 (23.70)	A19954-ND	.23	.11	640250-6

(Continued)

MTA .156” (3.96mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
SL-156 Crimp Housings (Contacts Sold Separately) Continued							
4	With Lock Ramp Without Polarizing Tabs, UL94V-0 White (cont.)	7	1.090 (27.69)	A19955-ND	.24	.12	640250-7
		8	1.246 (31.65)	A19956-ND	.29	.15	640250-8
		9	1.402 (35.61)	A19957-ND	.49	.44	640250-9
		10	1.558 (39.57)	A19958-ND	.54	.49	1-640250-0
		11	1.715 (43.56)	A19959-ND	.59	.54	1-640250-1
		12	1.871 (47.52)	A19960-ND	.40	.22	1-640250-2
		13	2.027 (51.49)	A28761-ND	.70	.64	1-640250-3
		14	2.183 (55.45)	A24126-ND	.75	.68	1-640250-4
		16	2.496 (63.40)	A24127-ND	.86	.78	1-640250-6
5	With Lock Ramp With Polarizing Tabs, UL94V-0 White	2	.308 (7.82)	A24111-ND	.32	.13	770849-2
		3	.465 (11.81)	A24112-ND	.24	.15	770849-3
		4	.620 (15.75)	A24113-ND	.22	.20	770849-4
		5	.777 (19.74)	A24114-ND	.18	.16	770849-5
		6	.933 (23.70)	A24115-ND	.32	.30	770849-6
		7	1.090 (27.69)	A24116-ND	.38	.34	770849-7
		8	1.246 (31.65)	A24117-ND	.43	.39	770849-8
		9	1.402 (35.61)	A24118-ND	.49	.44	770849-9
		10	1.558 (39.57)	A24119-ND	.54	.49	1-770849-0
		11	1.715 (43.56)	A24120-ND	.59	.54	1-770849-1
		12	1.871 (47.52)	A24121-ND	.65	.59	1-770849-2
		13	2.027 (51.49)	A24122-ND	.70	.64	1-770849-3
		14	2.183 (55.45)	A24123-ND	.75	.68	1-770849-4
		16	2.496 (63.40)	A24124-ND	.86	.78	1-770849-6

Fig.	Description	Digi-Key Part No.	Loose Pc. Price Each 1	25	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	3,000	Amp Part No.
SL-156 Crimp Contacts									
6	Brass, Tin Plated, 6.5 A	A19990-ND	.31	.23	640706-1	A24200-ND	22.34	18.15/M	640252-1
	Brass, Pre-Tin Pltd., 6.5 A	A19991-ND	.26	.17	640706-2	A24201-ND	17.89	14.54/M	640252-2
7	Brass, Tin Plated, 6.5 A	A19992-ND	.32	.22	640707-1	A24202-ND	22.34	18.15/M	350980-1
	Brass, Pre-Tin Pltd. 6.5 A	—	—	—	—	A24203-ND	17.89	14.54/M	350980-2
	Brass, Gold Plated, 6.5 A	A24205-ND	.60	.41	770258-1	A24204-ND	108.64	88.27/M	350980-3
8	Phosphor Bronze, Tin Plated, Hooded, 10 A	A19993-ND	.32	.22	770522-1	A24206-ND	24.53	19.93/M	770476-1
	Phosphor Bronze, Gold Plated, Hooded, 10 A	A24208-ND	.38	.26	770522-2	A24207-ND	69.87	56.77/M	770476-2

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
SL-156 Keying Plugs and Pins							
—	Plug, Keying	—	—	A19994-ND	.21	.05	640254-1
—	Pin, Keying	—	—	A19995-ND	.23	.08	640255-1
Accessories, .156” (3.96mm) Centers							
9	Closed End Strain Relief Covers, White	2	.312 (7.92)	A19740-ND	.33	.19	643067-2
		3	.468 (11.89)	A19741-ND	1.06	.96	643067-3
		4	.624 (15.85)	A19742-ND	1.06	.96	643067-4
		5	.780 (19.81)	A19743-ND	1.07	.97	643067-5
		6	.936 (23.77)	A19744-ND	1.07	.97	643067-6
		7	1.092 (27.74)	A19745-ND	1.08	.97	643067-7
		8	1.248 (31.70)	A19746-ND	1.08	.98	643067-8
		9	1.404 (35.66)	A19747-ND	1.08	.98	643067-9
		10	1.560 (39.62)	A19748-ND	1.09	.98	1-643067-0
		11	1.716 (43.59)	A19749-ND	1.17	1.06	1-643067-1
		12	1.872 (47.55)	A19750-ND	1.10	.99	1-643067-2
		13	2.028 (51.51)	A24108-ND	1.18	1.06	1-643067-3
		17	2.652 (67.36)	A24109-ND	1.11	1.01	1-643067-7
10	Closed End Dust Covers, White	2	.312 (7.92)	A19760-ND	.25	.12	640551-2
		3	.468 (11.89)	A19761-ND	.29	.15	640551-3
		4	.624 (15.85)	A19762-ND	.34	.18	640551-4
		5	.780 (19.81)	A19763-ND	.26	.20	640551-5
		6	.936 (23.77)	A19764-ND	.28	.23	640551-6
		7	1.092 (27.74)	A19765-ND	.29	.26	640551-7
		8	1.248 (31.70)	A19766-ND	.31	.29	640551-8
		9	1.404 (35.66)	A19767-ND	.35	.32	640551-9
		10	1.560 (39.62)	A19768-ND	.38	.34	1-640551-0
		11	1.716 (43.59)	A19769-ND	.40	.37	1-640551-1
		12	1.872 (47.55)	A19770-ND	.43	.39	1-640551-2
11	Feed-Thru Strain Relief Covers, White	2	.312 (7.92)	A19780-ND	.24	.22	643071-2
		3	.468 (11.89)	A19781-ND	.35	.32	643071-3
		4	.624 (15.85)	A19782-ND	.47	.43	643071-4
		5	.780 (19.81)	A19783-ND	.88	.80	643071-5
		6	.936 (23.77)	A19784-ND	.57	.52	643071-6
		7	1.092 (27.74)	A19785-ND	1.12	1.01	643071-7
		8	1.248 (31.70)	A19786-ND	.71	.65	643071-8
		9	1.404 (35.66)	A19787-ND	.75	.68	643071-9
		10	1.560 (39.62)	A19788-ND	1.17	1.06	1-643071-0
		11	1.716 (43.59)	A19789-ND	1.09	.99	1-643071-1
		12	1.872 (47.55)	A19790-ND	1.17	1.06	1-643071-2
		15	2.340 (59.44)	A24110-ND	1.19	1.07	1-643071-5
		17	2.652 (67.36)	A26040-ND	1.11	1.01	1-643071-7
12	Feed-Thru Dust Covers, White	3	.468 (11.89)	A19801-ND	.26	.15	640643-3
		4	.624 (15.85)	A19802-ND	.28	.18	640643-4
		5	.780 (19.81)	A19803-ND	.32	.20	640643-5
		6	.936 (23.77)	A19804-ND	.19	.14	640643-6
		7	1.092 (27.74)	A19805-ND	.38	.26	640643-7
		8	1.248 (31.70)	A19806-ND	.24	.17	640643-8
		9	1.404 (35.66)	A19807-ND	.46	.32	640643-9
		10	1.560 (39.62)	A19808-ND	.50	.34	1-640643-0
		11	1.716 (43.59)	A19809-ND	.54	.37	1-640643-1
		12	1.872 (47.55)	A19810-ND	.58	.39	1-640643-2

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Keying Plugs							
13	Loose Piece, Flush Used w/Keyed Headers	—	—	A19845-ND	.26	.13	640629-1
14	On Carrier Strip, Flush 10 per Strip	—	—	A19840-ND	2.59	1.21	641623-1
15	Long Nose Used with Staked Post	—	—	A19850-ND	.24	.12	640630-1
Panel Mount End Caps							
16	Black Nylon	2	—	A19860-ND	.48	.43	641533-1
17	Black Nylon	3-24	—	A19855-ND	.66	.60	641440-1
Flat Post Headers, .156” (3.96mm) Centers							
18	Straight Post .045” (1.14mm) Square, Standard UL94V-0, Tin Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A1961-ND	.25	.15	640383-2
		3	.468 (11.89)	A19870-ND	.53	.41	640383-3
		4	.624 (15.85)	A1962-ND	.31	.29	640383-4
		5	.780 (19.81)	A19871-ND	.39	.36	640383-5
		6	.936 (23.77)	A1963-ND	.43	.39	640383-6
		7	1.092 (27.74)	A19872-ND	.50	.45	640383-7
		8	1.248 (31.70)	A1964-ND	.57	.52	640383-8
		9	1.404 (35.66)	A19873-ND	.64	.58	640383-9
		10	1.560 (39.62)	A1965-ND	.71	.65	1-640383-0
		11	1.716 (43.59)	A19874-ND	.79	.71	1-640383-1
		12	1.872 (47.55)	A19875-ND	.86	.78	1-640383-2
		17	2.652 (67.36)	A26167-ND	1.52	1.37	1-640383-7
18	Straight Post .045” (1.14mm) Round, Standard UL94V-0, Tin Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A26168-ND	.30	.28	640384-2
		3	.468 (11.89)	A26169-ND	.24	.22	640384-3
		4	.624 (15.85)	A24152-ND	.60	.55	640384-4
		5	.780 (19.81)	A26170-ND	.39	.36	640384-5
		6	.936 (23.77)	A26171-ND	.82	.75	640384-6
		7	1.092 (27.74)	A26172-ND	.50	.45	640384-7
		8	1.248 (31.7)	A24153-ND	1.10	.99	640384-8
		9	1.404 (35.66)	A26173-ND	1.24	1.12	640384-9
		10	1.560 (39.62)	A24154-ND	1.37	1.24	1-640384-0
		12	1.872 (47.55)	A26174-ND	.93	.84	1-640384-2
19	Right Angle Post .045” (1.14mm) Square, Standard UL94V-0, Tin Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A1966-ND	.10	.05	640385-2
		3	.468 (11.89)	A19876-ND	.10	.06	640385-3
		4	.624 (15.85)	A1967-ND	.14	.08	640385-4
		5	.780 (19.81)	A19877-ND	.18	.11	640385-5
		6	.936 (23.77)	A1968-ND	.21	.12	640385-6
		7	1.092 (27.74)	A19878-ND	.23	.13	640385-7
		8	1.248 (31.70)	A1969-ND	.29	.17	640385-8
		9	1.404 (35.66)	A19879-ND	.86	.78	640385-9
		10	1.560 (39.62)	A1970-ND	.33	.19	1-640385-0
		11	1.716 (43.59)	A19880-ND	1.05	.95	1-640385-1
		12	1.872 (47.55)	A19881-ND	.40	.22	1-640385-2
18	Right Angle Post .045” (1.14mm) Square, Standard UL94V-0, Tin Plated, .175” (4.45mm) Soldertail, White	2	.312 (7.92)	A24155-ND	.09	.08	644751-2
		3	.468 (11.89)	A24156-ND	.10	.09	644751-3
		4	.624 (15.85)	A24157-ND	.14	.13	644751-4
		5	.780 (19.81)	A24158-ND	.18	.17	644751-5
		6	.936 (23.77)	A24159-ND	.21	.20	644751-6
		7	1.092 (27.74)	A24160-ND	.23	.21	644751-7
		8	1.248 (31.7)	A24161-ND	.29	.27	644751-8
		10	1.560 (39.62)	A24162-ND	.33	.31	1-644751-0
		12	1.872 (47.55)	A24163-ND	.40	.36	1-644751-2
Straight Post Headers, .156” (3.96mm) Centers, Friction Lock Header							
20	Square Post .045” (1.14mm) Square, Standard UL94V-0, Tin Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A1971-ND	.10	.05	640445-2
		3	.468 (11.89)	A19890-ND	.10	.06	640445-3
		4	.624 (15.85)	A1972-ND	.14	.08	640445-4
		5	.780 (19.81)	A19891-ND	.18	.11	640445-5
		6	.936 (23.77)	A1973-ND	.21	.12	640445-6
		7	1.092 (27.74)	A19892-ND	.23	.13	640445-7
		8	1.248 (31.70)	A1974-ND	.29	.17	640445-8
		9	1.404 (35.66)	A19893-ND	.86	.78	640445-9
		10	1.560 (39.62)	A1975-ND	.33	.19	1-640445-0
		11	1.716 (43.59)	A19894-ND	1.05	.95	1-640445-1
		12	1.872 (47.55)	A19895-ND	.40	.22	1-640445-2
20	Square Post .045” (1.14mm) Square, Standard UL94V-0, Tin Plated, .175” (4.45mm) Soldertail, White	2	.312 (7.92)	A24164-ND	.10	.09	644752-2
		3	.468 (11.89)	A24165-ND	.10	.09	644752-3
		4	.624 (15.85)	A24166-ND	.14	.13	644752-4
		5	.780 (19.81)	A24167-ND	.18	.17	644752-5
		6	.936 (23.77)	A24168-ND	.21	.20	644752-6
		7	1.092 (27.74)	A24169-ND	.23	.21	644752-7
		8	1.248 (31.7)	A24170-ND	.29	.27	644752-8
		9	1.404 (35.66)	A26175-ND	.86	.78	644752-9
		10	1.560 (39.62)	A24171-ND	.33	.31	1-644752-0
		12	1.872 (47.55)	A24172-ND	.40	.36	1-644752-2
20	Square Post .045” (1.14mm) Square, Standard UL94V-0, 30µ Gold Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A24173-ND	.94	.85	641208-2
		3	.468 (11.89)	A26176-ND	1.06	.96	641208-3
		4	.624 (15.85)	A26177-ND	1.38	1.25	641208-4
		5	.780 (19.81)	A26178-ND	1.77	1.60	641208-5
		6	.936 (23.77)	A26179-ND	2.15	1.94	641208-6
		7	1.092 (27.74)	A26180-ND	2.44	2.20	641208-7
		8	1.248 (31.70)	A26181-ND	2.83	2.55	641208-8
		9	1.404 (35.66)	A26182-ND	3.18	2.87	641208-9
		10	1.560 (39.62)	A26183-ND	3.50	3.16	1-641208-0
		11	1.716 (43.59)	A26184-ND	3.86	3.48	1-641208-1
		12	1.872 (47.55)	A26185-ND	4.21	3.79	1-641208-2
		17	2.652 (67.36)	A26186-ND	6.07	5.47	1-641208-7

(Continued)

AMP tyco Electronics Authorized Distributor

MTA .156” (3.96mm) Receptacles and Post Headers *(Cont.)*

Fig.	Description	Circuits	Dim. "A" Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Straight Post Headers, .156” (3.96mm) Centers, Friction Lock Header							
20	Round Post .045” (1.14mm) Square, Standard UL94V-0, Tin Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A19900-ND	.10	.05	640388-2
		3	.468 (11.89)	A19901-ND	.10	.06	640388-3
		4	.624 (15.85)	A19902-ND	.14	.08	640388-4
		5	.780 (19.81)	A19903-ND	.18	.11	640388-5
		6	.936 (23.77)	A19904-ND	.21	.12	640388-6
		7	1.092 (27.74)	A19905-ND	.23	.13	640388-7
		8	1.248 (31.70)	A19906-ND	.29	.17	640388-8
		9	1.404 (35.66)	A19907-ND	.86	.78	640388-9
		10	1.560 (39.62)	A19908-ND	.33	.19	1-640388-0
		11	1.716 (43.59)	A19909-ND	2.01	1.82	1-640388-1
		12	1.872 (47.55)	A19910-ND	.40	.22	1-640388-2
20	Round Post .045” (1.14mm) Square, Standard UL94V-0, Tin Plated, .175” (4.45mm) Soldertail, White	2	.312 (7.92)	A24176-ND	.09	.08	644753-2
		3	.468 (11.89)	A24177-ND	.10	.09	644753-3
		4	.624 (15.85)	A24178-ND	.14	.13	644753-4
		5	.780 (19.81)	A24179-ND	.18	.17	644753-5
		6	.936 (23.77)	A24180-ND	.21	.20	644753-6
		7	1.092 (27.74)	A24181-ND	.23	.21	644753-7
		8	1.248 (31.7)	A24182-ND	.29	.27	644753-8
		10	1.560 (39.62)	A24183-ND	.33	.31	1-644753-0
		12	1.872 (47.55)	A24184-ND	.40	.36	1-644753-2
Right Angle Post Headers, .156” (3.96mm) Centers, Friction Lock Header							
21	Right Angle Post 045 (1.14mm) Square, Front Bend, Standard UL94V-0, Tin-Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A1976-ND	.31	.29	640389-2
		3	.468 (11.89)	A19920-ND	.47	.43	640389-3
		4	.624 (15.85)	A1977-ND	.63	.57	640389-4
		5	.780 (19.81)	A19921-ND	.79	.71	640389-5
		6	.936 (23.77)	A1978-ND	.86	.78	640389-6
		7	1.092 (27.74)	A19922-ND	1.00	.90	640389-7
		8	1.248 (31.70)	A1979-ND	1.14	1.03	640389-8
		9	1.404 (35.66)	A19923-ND	1.29	1.16	640389-9
		10	1.560 (39.62)	A1980-ND	1.43	1.29	1-640389-0
		11	1.716 (43.59)	A19924-ND	1.57	1.42	1-640389-1
		12	1.872 (47.55)	A19925-ND	1.71	1.55	1-640389-2
21	Right Angle Post .045” (1.14mm) Square, Front Bend, Standard UL94V-0, 30µ Gold Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A24174-ND	1.05	.95	641210-2
		3	.468 (11.89)	A24175-ND	1.22	1.10	641210-3
		4	.624 (15.85)	A26187-ND	1.57	1.42	641210-4
		5	.780 (19.81)	A26188-ND	1.90	1.71	641210-5
		6	.936 (23.77)	A26189-ND	2.31	2.09	641210-6
		8	1.248 (31.70)	A26190-ND	2.96	2.67	641210-8
		9	1.404 (35.66)	A26191-ND	3.28	2.95	641210-9
		10	1.560 (39.62)	A24186-ND	3.48	3.14	1-641210-0
		12	1.872 (47.55)	A26192-ND	4.40	3.97	1-641210-2
22	Right Angle Post .045” (1.14mm) Square, Rear Bend, Standard UL94V-0, Tin-Plated, .125” (3.18mm) Soldertail, White	2	.312 (7.92)	A19930-ND	.60	.55	640387-2
		3	.468 (11.89)	A19931-ND	.47	.43	640387-3
		4	.624 (15.85)	A19932-ND	.63	.57	640387-4
		5	.780 (19.81)	A19933-ND	.79	.71	640387-5
		6	.936 (23.77)	A19934-ND	.86	.78	640387-6
		7	1.092 (27.74)	A19935-ND	1.00	.90	640387-7
		8	1.248 (31.70)	A19936-ND	1.14	1.03	640387-8
		9	1.404 (35.66)	A19937-ND	1.29	1.16	640387-9
		10	1.560 (39.62)	A19938-ND	1.43	1.29	1-640387-0
		11	1.716 (43.59)	A19939-ND	1.57	1.42	1-640387-1
		12	1.872 (47.55)	A19940-ND	1.71	1.55	1-640387-2

AMP tyco Electronics Authorized Distributor

2-Position, Low Profile Post Shunts

Material: Housing: Glass-filled thermoplastic, 94V-0 rated **Contact:** Beryllium copper or phosphor bronze **Finish:** (50µ) nickel with gold plate in contact area or tin plate overall

Fig. 1

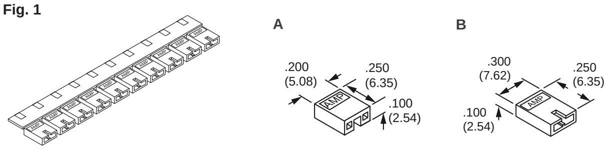


Fig. 2

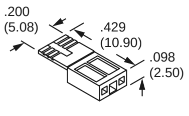


Fig. 3

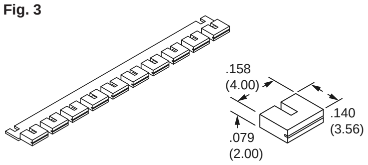


Fig.	Description	Housing Color	Digi-Key Part No.	Price Each 10	50	AMP Part No.
Economy, .100 (2.54) Centerline						
1A	Strip of 10, Gold Flash, (5µ) over Nickel	Black	A26228-ND	.09	.08	382811-8
	Strip of 10, Gold Plate, (15µ) over Nickel	Blue	A26226-ND	.33	.26	382811-2
	Strip of 10, Gold Plate, (15µ) over Nickel	Black	A26227-ND	.09	.07	382811-6
	Strip of 10, Gold Plate, (15µ) over Nickel	Red	A26230-ND	.12	.09	382811-9
	Loose Piece, Gold Plate, (15µ) over Nickel	Black	A26231-ND	.34	.27	1-382811-6
	Strip of 10, Tin Plate, (100µ) over Nickel	Black	A26229-ND	.10	.08	382811-5
Standard Housing, .200 (5.08) Centerline						
1B	Strip of 10, Gold Plate, (15µ) over Nickel	Black	A26232-ND	.49	.40	531230-2
	Strip of 10, Gold Plate, (30µ) over Nickel	Black	A26233-ND	.57	.45	531230-3
	Strip of 10, Tin Plate, (100µ) over Nickel	Black	A26234-ND	.42	.33	531230-1
Handle, .100 (2.54) Centerline						
2	Open Top & Gold Plate, (30µ) over Nickel	Black	A26242-ND	.12	.10	881545-2
	Open Top & Tin Plate, (100µ) over Nickel	Black	A26243-ND	.13	.11	881545-4
2mm Mini-Shunt, .079 (2.00) Centerline						
3	Strip of 10, Gold Plate, (15µ) over Nickel	Black	A26244-ND	.26	.21	382575-2

3M Board Mount Interconnect Products

Finish Options: • 10-microinch selective gold over 50-microinch nickel on contact post; 100-microinch 90/10 solder plate on tail portion • 100-microinch 90/0 solder plate on posts and tails

2400 Series:
• Material: Glass filled polyester • Flammability: UL94V-O • Color: Gray • Phosphor bronze plating • 100-microinch nickel underplating • Gold wiping area • 200-microinch 60/40 tin on solder tails • Current Rating: 3 Amps • Withstanding Voltage: 100 Vac. • Temperature Rating: -55°C to +105°C • UL File No. E88080, CSA File No. LR 40971

Fig.	No. of Posts	Dimensions (Inch) L	A(ref)	B	C	D	Solder Plated Digi-Key Part No.	Price Each	Gold Plated Digi-Key Part No.	Price Each
1	36	.235	.480	.145	—	—	N/A	—	929647-09-36-ND	2.23
			.545	.210	—	—	929834-02-36-ND	1.31	929647-02-36-ND	2.41
			.745	.410	—	—	929834-03-36-ND	1.58	929647-03-36-ND	3.00
			.845	.510	—	—	929834-04-36-ND	1.75	929647-04-36-ND	3.85
			.945	.610	—	—	929834-05-36-ND	1.77	929647-05-36-ND	3.56
			12.45	.910	—	—	929834-07-36-ND	2.02	929647-07-36-ND	4.14
	36	.295	.535	.130	—	—	929400-01-36-ND	1.31	929450-01-36-ND	2.33
2	72	.235	.480	.145	—	—	929836-09-36-ND	2.48	929665-09-36-ND	3.60
			.545	.210	—	—	929836-02-36-ND	2.14	929665-02-36-ND	3.91
			.645	.310	—	—	929836-08-36-ND	2.77	929665-08-36-ND	4.22
			.745	.410	—	—	N/A	—	929665-03-36-ND	4.83
			.845	.510	—	—	929836-04-36-ND	2.83	929665-04-36-ND	6.20
			.945	.610	—	—	929836-05-36-ND	2.68	929665-05-36-ND	6.68
	72	.318	.593	.175	—	—	929710-10-36-ND	2.25	929715-10-36-ND	4.12
			.828	.410	—	—	929710-03-36-ND	3.20	929715-03-36-ND	5.37
3	36	.235	.180	.105	.070	.075	929835-01-36-ND	1.33	N/A	—
4	72	.235	.215	.140	.070	.075	929838-04-36-ND	2.75	929667-04-36-ND	5.16
			.480	.405	.070	.075	929838-02-36-ND	2.77	929667-02-36-ND	6.20
5	36	.295	3.600	—	—	—	929500-01-36-ND	1.46	929550-01-36-ND	2.89
6	36	N/A	—	.125	—	—	929974-01-36-ND	1.87	929850-01-36-ND	2.41
7	72	N/A	—	—	—	—	929975-01-36-ND	3.24	929852-01-36-ND	4.62
8	2	N/A	***SHUNTS!!***				929950-00-ND	1.46 per 10	929955-06-ND (10µ in. gold) 929957-08-ND (30µ in. gold)	1.87 per 10 2.08 per 10

Fig. 1 – Straight, Single Row Male

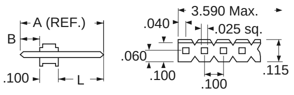


Fig. 2 – Straight, Dual Row Male (.1” x .1” Matrix)

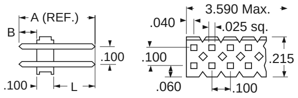


Fig. 3 – Right Angle, Single Row Male

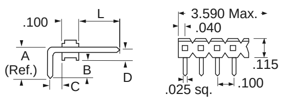


Fig. 4 – Right Angle, Dual Row Male (.1” x .1” Matrix)

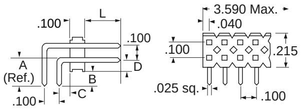


Fig. 5 – Right Angle, Polarized Male (36 Circuits)

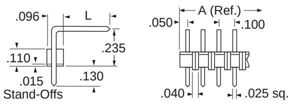


Fig. 6 – Straight, Single Row Female

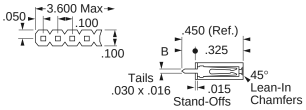


Fig. 7 – Straight, Dual Row Female (.1” x .1” Matrix)

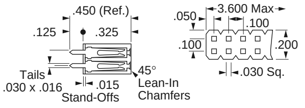
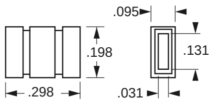
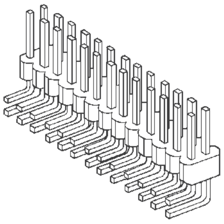


Fig. 8 – Shorting Jumpers



Sullins .025” (.64mm) Square Headers



Available in 1 to 36 Pin Versions!

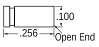
Features

- Available in 36-pin version or 1 to 35 size to meet your application.
- Temperature: -65°C to + 125°C.
- UL Flammability Rating: 94V-0.
- Current Rating: 3 amperes.

Materials

- Insulator Material: Black thermoplastic polyester.
- Contact Material: CA510, phosphor bronze.
- Contact Plating: Gold — .000010 Gold (Head Only); Tin — .000100 Tin.

TO PURCHASE A 36 PIN HEADER...

Contact Finish	Dimensions Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	Sullins Part No.
Single Row Straight (36 Pins)							
Tin	.230 (5.84)	.120 (3.05)	S1012-36-ND	1.03	9.18	75.60	PTC36SAAN
	.230 (5.84)	.220 (5.59)	S1022-36-ND	1.77	15.81	130.20	PTC36SABN
	.230 (5.84)	.320 (8.13)	S1032-36-ND	1.91	17.09	140.70	PTC36SACN
	.230 (5.84)	.420 (10.67)	S1042-36-ND	2.08	18.62	153.30	PTC36SADN
	.230 (5.84)	.520 (13.21)	S1052-36-ND	2.22	19.89	163.80	PTC36SAEN
	.230 (5.84)	.620 (15.75)	S1062-36-ND	2.76	24.74	203.70	PTC36SAFN
	.230 (5.84)	.720 (18.29)	S1072-36-ND	2.94	26.27	216.30	PTC36SAGN
	.230 (5.84)	.820 (20.83)	S1082-36-ND	3.11	27.80	228.90	PTC36SAHN
	.318 (8.08)	.120 (3.05)	S1212-36-ND	1.28	11.48	94.50	PTC36SFAN
	.318 (8.08)	.220 (5.59)	S1222-36-ND	2.11	18.87	155.40	PTC36SFBN
	.318 (8.08)	.320 (8.13)	S1232-36-ND	2.28	20.40	168.00	PTC36SFCN
	.318 (8.08)	.420 (10.67)	S1242-36-ND	2.45	21.93	180.60	PTC36SFDN
	.318 (8.08)	.520 (13.21)	S1252-36-ND	3.31	29.58	243.60	PTC36SFEN
Gold	.230 (5.84)	.120 (3.05)	S1011-36-ND	1.28	11.48	94.50	PZC36SAAN
	.230 (5.84)	.220 (5.59)	S1021-36-ND	2.14	19.13	157.50	PZC36SABN
	.230 (5.84)	.320 (8.13)	S1031-36-ND	2.59	23.49	198.45	PZC36SACN
	.230 (5.84)	.420 (10.67)	S1041-36-ND	2.45	21.93	180.60	PZC36SADN
	.230 (5.84)	.520 (13.21)	S1051-36-ND	2.62	23.46	193.20	PZC36SAEN
	.230 (5.84)	.620 (15.75)	S1061-36-ND	3.19	28.56	235.20	PZC36SAFN
	.230 (5.8 4)	.720 (18.29)	S1071-36-ND	3.36	30.09	247.80	PZC36SAGN
	.230 (5.84)	.820 (20.83)	S1081-36-ND	3.53	31.62	260.40	PZC36SAHN
	.318 (8.08)	.120 (3.05)	S1211-36-ND	1.62	14.54	119.70	PZC36SFAN
	.318 (8.08)	.220 (5.59)	S1221-36-ND	2.59	23.21	191.10	PZC36SFBN
	.318 (8.08)	.320 (8.13)	S1231-36-ND	2.76	24.74	203.70	PZC36SFCN
	.318 (8.08)	.420 (10.67)	S1241-36-ND	2.94	26.27	216.30	PZC36SFDN
	.318 (8.08)	.520 (13.21)	S1251-36-ND	3.85	34.43	283.50	PZC36SFEN
Single Row Right-Angle (36 Pins)							
Tin	.230 (5.84)	.100 (2.54)	S1112-36-ND	1.51	13.52	111.30	PTC36SBAN
	.230 (5.84)	.200 (5.08)	S1122-36-ND	1.94	17.34	142.80	PTC36SBBN
	.230 (5.84)	.300 (7.62)	S1132-36-ND	2.79	24.99	205.80	PTC36SBCN
	.230 (5.84)	.400 (10.16)	S1142-36-ND	3.76	33.66	277.20	PTC36SBDN
	.230 (5.84)	.500 (12.70)	S1152-36-ND	4.02	35.96	296.10	PTC36SBEN
	.318 (8.08)	.100 (2.54)	S1312-36-ND	1.94	17.34	142.80	PTC36SGAN
	.318 (8.08)	.200 (5.08)	S1322-36-ND	3.48	31.11	256.20	PTC36SGBN
Gold	.230 (5.84)	.100 (2.54)	S1111-36-ND	1.82	16.32	134.40	PZC36SBAN
	.230 (5.84)	.200 (5.08)	S1121-36-ND	2.28	20.40	168.00	PZC36SBBN
	.230 (5.84)	.300 (7.62)	S1131-36-ND	3.22	28.82	237.30	PZC36SBCN
	.230 (5.84)	.400 (10.16)	S1141-36-ND	4.25	38.00	312.90	PZC36SBDN
	.230 (5.84)	.500 (12.70)	S1151-36-ND	4.50	40.29	331.80	PZC36SBEN
	.318 (8.08)	.100 (2.54)	S1311-36-ND	2.34	20.91	172.20	PZC36SGAN
	.318 (8.08)	.200 (5.08)	S1321-36-ND	4.02	35.96	296.10	PZC36SGBN
Dual Row Straight (72 Pins)							
Tin	.230 (5.84)	.120 (3.05)	S2012-36-ND	1.85	16.58	136.50	PTC36DAAN
	.230 (5.84)	.220 (5.59)	S2022-36-ND	2.76	24.74	203.70	PTC36DABN
	.230 (5.84)	.320 (8.13)	S2032-36-ND	3.96	35.45	291.90	PTC36DACN
	.230 (5.84)	.420 (10.67)	S2042-36-ND	4.30	38.51	317.10	PTC36DADN
	.230 (5.84)	.520 (13.21)	S2052-36-ND	4.65	41.57	342.30	PTC36DAEN
	.230 (5.84)	.620 (15.75)	S2062-36-ND	5.96	53.30	438.90	PTC36DAFN
	.230 (5.84)	.720 (18.29)	S2072-36-ND	6.33	56.61	466.20	PTC36DAGN
	.230 (5.84)	.820 (20.83)	S2082-36-ND	6.70	59.93	493.50	PTC36DAHN
	.318 (8.08)	.120 (3.05)	S2212-36-ND	2.34	20.91	172.20	PTC36DFAN
	.318 (8.08)	.220 (5.59)	S2222-36-ND	3.65	32.64	268.80	PTC36DFBN
	.318 (8.08)	.320 (8.13)	S2232-36-ND	3.99	35.70	294.00	PTC36DFCN
	.318 (8.08)	.420 (10.67)	S2242-36-ND	4.33	38.76	319.20	PTC36DFDN
	.318 (8.08)	.520 (13.21)	S2252-36-ND	5.59	49.98	411.60	PTC36DFEN
Gold	.230 (5.84)	.120 (3.05)	S2011-36-ND	2.37	21.17	174.30	PZC36DAAN
	.230 (5.84)	.220 (5.59)	S2021-36-ND	3.48	31.11	256.20	PZC36DABN
	.230 (5.84)	.320 (8.13)	S2031-36-ND	4.82	43.10	354.90	PZC36DACN
	.230 (5.84)	.420 (10.67)	S2041-36-ND	5.16	46.16	380.10	PZC36DADN
	.230 (5.84)	.520 (13.21)	S2051-36-ND	5.50	49.22	405.30	PZC36DAEN
	.230 (5.84)	.620 (15.75)	S2061-36-ND	6.90	61.71	508.20	PZC36DAFN
	.230 (5.84)	.720 (18.29)	S2071-36-ND	7.27	65.03	535.50	PZC36DAGN
	.230 (5.84)	.820 (20.83)	S2081-36-ND	7.67	68.60	564.90	PZC36DAHN
	.318 (8.08)	.120 (3.05)	S2211-36-ND	3.02	27.03	222.60	PZC36DFAN
	.318 (8.08)	.220 (5.59)	S2221-36-ND	4.62	41.31	340.20	PZC36DFBN
	.318 (8.08)	.320 (8.13)	S2231-36-ND	4.96	44.37	365.40	PZC36DFCN
	.318 (8.08)	.420 (10.67)	S2241-36-ND	5.30	47.43	390.60	PZC36DFDN
	.318 (8.08)	.520 (13.21)	S2251-36-ND	6.67	59.67	491.40	PZC36DFEN
Dual Row Right-Angle (72 Pins)							
Tin	.230 (5.84)	.120 (3.05)	S2112-36-ND	2.79	24.99	205.80	PTC36DBAN
	.230 (5.84)	.220 (5.59)	S2122-36-ND	4.05	36.21	298.20	PTC36DBBN
	.230 (5.84)	.320 (8.13)	S2132-36-ND	6.10	54.57	449.40	PTC36DBCN
	.230 (5.84)	.420 (10.67)	S2142-36-ND	6.70	59.93	493.50	PTC36DBDN
	.230 (5.84)	.520 (13.21)	S2152-36-ND	7.30	65.28	537.60	PTC36DBEN
	.318 (8.08)	.120 (3.05)	S2312-36-ND	5.33	47.69	392.70	PTC36DGAN
	.318 (8.08)	.220 (5.59)	S2322-36-ND	6.58	58.91	485.10	PTC36DGBN
Gold	.230 (5.84)	.120 (3.05)	S2111-36-ND	3.42	30.60	252.00	PZC36DBAN
	.230 (5.84)	.220 (5.59)	S2121-36-ND	4.79	42.84	352.80	PZC36DBBN
	.230 (5.84)	.320 (8.13)	S2131-36-ND	7.07	63.24	520.80	PZC36DBCN
	.230 (5.84)	.420 (10.67)	S2141-36-ND	7.64	68.34	562.80	PZC36DBDN
	.230 (5.84)	.520 (13.21)	S2151-36-ND	8.24	73.70	606.90	PZC36DBEN
	.318 (8.08)	.120 (3.05)	S2311-36-ND	6.30	56.36	464.10	PZC36DGAN
	.318 (8.08)	.220 (5.59)	S2321-36-ND	7.67	68.60	564.90	PZC36DGBN
Shorting Jumpers							
Tin	 .100 .256 Open End		S9000-ND	—	.93	—	STC02SYAN
Au Flash			S9001-ND	—	1.16	—	SPC02SYAN
Gold			S9002-ND	—	1.31	—	SSC02SYAN

TO PURCHASE A 1-35 PIN HEADER...

STEP 1 Digi-Key Part No.	STEP 2 Base Price	STEP 3 Pin Adder
Single Row Straight (36 Pins)		
S1012-XX-ND	.39	.02
S1022-XX-ND	.83	.03
S1032-XX-ND	.98	.03
S1042-XX-ND	.81	.04
S1052-XX-ND	.96	.04
S1062-XX-ND	1.18	.05
S1072-XX-ND	1.38	.05
S1082-XX-ND	1.20	.06
S1212-XX-ND	.66	.02
S1222-XX-ND	.84	.04
S1232-XX-ND	1.02	.04
S1242-XX-ND	1.21	.04
S1252-XX-ND	1.41	.06
S1011-XX-ND	.66	.02
S1021-XX-ND	.87	.04
S1031-XX-ND	1.05	.04
S1041-XX-ND	1.21	.04
S1051-XX-ND	1.03	.05
S1061-XX-ND	1.29	.06
S1071-XX-ND	1.47	.06
S1081-XX-ND	1.65	.06
S1211-XX-ND	.67	.03
S1221-XX-ND	1.00	.05
S1231-XX-ND	1.18	.05
S1241-XX-ND	1.38	.05
S1251-XX-ND	1.64	.07
Single Row Right-Angle (36 Pins)		
S1112-XX-ND	.55	.03
S1122-XX-ND	.66	.04
S1132-XX-ND	1.21	.05
S1142-XX-ND	1.54	.07
S1152-XX-ND	1.82	.07
S1312-XX-ND	.66	.04
S1322-XX-ND	1.60	.06
S1111-XX-ND	.89	.03
S1121-XX-ND	1.02	.04
S1131-XX-ND	1.32	.06
S1141-XX-ND	1.71	.08
S1151-XX-ND	1.98	.08
S1311-XX-ND	1.09	.04
S1321-XX-ND	1.82	.07
Dual Row Straight (72 Pins)		
S2012-XX-ND	.92	.03
S2022-XX-ND	1.18	.05
S2032-XX-ND	1.76	.07
S2042-XX-ND	1.76	.08
S2052-XX-ND	2.14	.08
S2062-XX-ND	2.48	.11
S2072-XX-ND	2.52	.12
S2082-XX-ND	2.92	.12
S2212-XX-ND	1.09	.04
S2222-XX-ND	1.42	.07
S2232-XX-ND	1.79	.07
S2242-XX-ND	1.80	.08
S2252-XX-ND	2.44	.10
S2011-XX-ND	1.12	.04
S2021-XX-ND	1.60	.06
S2031-XX-ND	1.97	.09
S2041-XX-ND	2.33	.09
S2051-XX-ND	2.34	.10
S2061-XX-ND	2.77	.13
S2071-XX-ND	3.17	.13
S2081-XX-ND	3.24	.14
S2211-XX-ND	1.46	.05
S2221-XX-ND	2.11	.08
S2231-XX-ND	2.12	.09
S2241-XX-ND	2.12	.10
S2251-XX-ND	2.88	.12
Dual Row Right-Angle (72 Pins)		
S2112-XX-ND	1.21	.05
S2122-XX-ND	1.85	.07
S2132-XX-ND	2.63	.11
S2142-XX-ND	2.92	.12
S2152-XX-ND	3.20	.13
S2312-XX-ND	2.16	.10
S2322-XX-ND	2.79	.12
S2111-XX-ND	1.53	.06
S2121-XX-ND	1.93	.09
S2131-XX-ND	2.96	.13
S2141-XX-ND	3.21	.14
S2151-XX-ND	3.50	.15
S2311-XX-ND	2.84	.11
S2321-XX-ND	3.24	.14

HOW TO ORDER - 4 EASY STEPS

How do I order an S1012 header with 16 pins?

Call Digi-Key where you’ll happily receive the price.

or

Determine the cost yourself

S ❑ ❑ ❑ ❑ - ❑ ❑ - ND

Base Part Number

Number of Desired Pins per row

Step 1. Select needed “Digi-Key Part Number” and number of pins desired.

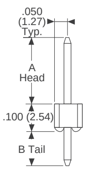
Step 2. Begin with appropriate “Base Price” of your selected Part Number (refer to chart).

Step 3. Multiply the number of pins you desire by “Pin Adder” of your selected Part Number (refer to chart).

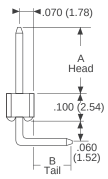
Step 4. Add Step 2 & Step 3 together for Final Cost!

	Our Example	Your Digi-Key Part Number
Step 1.	S1012-16-ND	S __ __ __ __ - __ __ - ND
Step 2.	.39	_______
Step 3.	16 x .02 = .32	____ x ____ = _______
Step 4.	Your Cost = $.71	Your Cost = $______

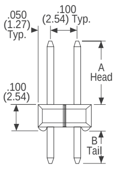
NOTE: For quantities of 10 or more, call 1-800-DIGI-KEY.



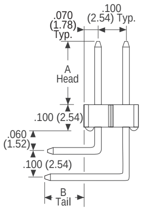
Single Straight



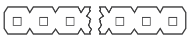
Single Right Angle



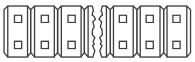
Dual Straight



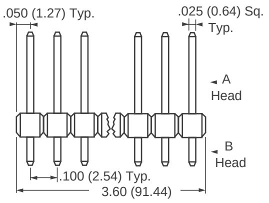
Dual Right Angle



Single Row



Dual Row



molex GC/Waldom P.C. Board Connectors

.100 (2.54mm) P.C. Board Connectors

94V-O Material, Mates with .025" (.64mm) square pins, end-to-end stackable.

Fig. 1 – Side Entry

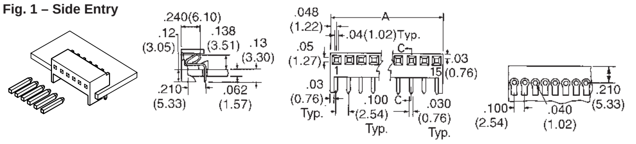


Fig. 2 – Bottom Entry

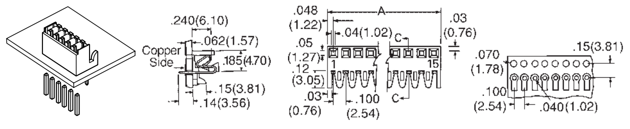


Fig. 3 – Top Entry

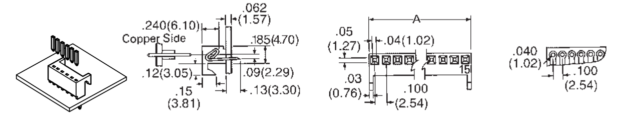


Fig.	Cir-	Dim. A	Digi-Key		Pricing		Molex
	cuits	Inch (mm)	Part No.	1	10	100	Part No.
.100 (2.54mm) P.C. Board Connectors							
1	2	.196 (4.98)	WM3000-ND	.33	2.96	19.70	22-15-2026
	3	.296 (7.52)	WM3001-ND	.36	3.20	21.30	22-15-2036
	4	.396 (10.06)	WM3002-ND	.57	5.02	33.48	22-15-2046
	5	.496 (12.60)	WM3003-ND	.68	6.04	40.28	22-15-2056
	6	.596 (15.14)	WM3004-ND	.81	7.11	47.40	22-15-2066
	7	.696 (17.68)	WM3005-ND	.84	7.43	49.50	22-15-2076
	8	.796 (20.22)	WM3006-ND	.97	8.55	57.03	22-15-2086
	9	.896 (22.76)	WM3007-ND	1.08	9.53	63.53	22-15-2096
	10	.996 (25.30)	WM3008-ND	1.20	10.61	70.75	22-15-2106
	11	1.096 (27.84)	WM3009-ND	1.40	12.32	82.13	22-15-2116
	12	1.196 (30.38)	WM3010-ND	1.46	12.89	85.93	22-15-2126
2	2	.196 (4.98)	WM3100-ND	.34	3.03	20.20	22-14-2024
	3	.296 (7.52)	WM3101-ND	.47	4.11	27.38	22-14-2034
	4	.396 (10.06)	WM3102-ND	.59	5.24	34.90	22-14-2044
	5	.496 (12.60)	WM3103-ND	.72	6.31	42.08	22-14-2054
	6	.596 (15.14)	WM3104-ND	.84	7.44	49.58	22-14-2064
	7	.696 (17.68)	WM3105-ND	.96	8.51	56.73	22-14-2074
	8	.796 (20.22)	WM3106-ND	1.10	9.68	64.50	22-14-2084
	9	.896 (22.76)	WM3107-ND	1.21	10.71	71.40	22-14-2094
	10	.996 (25.30)	WM3108-ND	1.26	11.15	74.35	22-14-2104
	11	1.096 (27.84)	WM3109-ND	1.39	12.24	81.60	22-14-2114
	12	1.196 (30.38)	WM3110-ND	1.59	14.04	93.60	22-14-2124
3	2	.196 (4.98)	WM3200-ND	.24	2.15	14.30	22-02-2025
	3	.296 (7.52)	WM3201-ND	.45	3.95	26.30	22-02-2035
	4	.396 (10.06)	WM3202-ND	.49	4.30	28.68	22-02-2045
	5	.496 (12.60)	WM3203-ND	.61	5.35	35.68	22-02-2055
	6	.596 (15.14)	WM3204-ND	.73	6.02	43.00	22-02-2065
	7	.696 (17.68)	WM3205-ND	.92	8.13	54.23	22-02-2075
	8	.796 (20.22)	WM3206-ND	.96	8.49	56.60	22-02-2085
	9	.896 (22.76)	WM3207-ND	1.16	9.55	68.20	22-02-2095
	10	.996 (25.30)	WM3208-ND	1.22	10.73	71.53	22-02-2105
	11	1.096 (27.84)	WM3209-ND	1.32	10.88	77.70	22-02-2115
	12	1.196 (30.38)	WM3210-ND	1.45	11.95	85.38	22-02-2125
.100 (2.54mm) P.C. Board Connectors - Gold							
1	2	.196 (4.98)	WM3211-ND	.39	3.23	23.08	22-16-2020
	3	.296 (7.52)	WM3212-ND	.54	4.75	31.68	22-16-2030
	4	.396 (10.06)	WM3213-ND	.68	6.04	40.28	22-16-2040
	5	.496 (12.60)	WM3214-ND	.83	7.32	48.83	22-16-2050
	6	.596 (15.14)	WM3215-ND	.99	8.70	58.03	22-16-2060
	7	.696 (17.68)	WM3216-ND	1.13	9.99	66.60	22-16-2070
	8	.796 (20.22)	WM3217-ND	1.21	10.64	70.95	22-16-2080
	9	.896 (22.76)	WM3218-ND	1.42	11.70	83.58	22-16-2090
	10	.996 (25.30)	WM3219-ND	1.58	13.92	92.78	22-16-2100
	11	1.096 (27.84)	WM3220-ND	1.72	14.16	101.13	22-16-2110
	12	1.196 (30.38)	WM3221-ND	1.80	14.84	106.03	22-16-2120
2	2	.196 (4.98)	WM3222-ND	.41	3.36	24.00	22-17-3022
	3	.296 (7.52)	WM3223-ND	.56	4.58	32.73	22-17-3032
	4	.396 (10.06)	WM3224-ND	.72	5.89	42.08	22-17-3042
	5	.496 (12.60)	WM3225-ND	.87	7.65	51.00	22-17-3052
	6	.596 (15.14)	WM3226-ND	1.03	8.44	60.30	22-17-3062
	7	.696 (17.68)	WM3227-ND	1.10	9.07	64.75	22-17-3072
	8	.796 (20.22)	WM3228-ND	1.34	11.79	78.58	22-17-3082
	9	.896 (22.76)	WM3229-ND	1.49	13.13	87.53	22-17-3092
	10	.996 (25.30)	WM3230-ND	1.65	13.56	96.83	22-17-3102
	11	1.096 (27.84)	WM3231-ND	2.17	19.19	127.93	22-17-3112
	12	1.196 (30.38)	WM3232-ND	1.96	17.26	115.08	22-17-3122
3	2	.196 (4.98)	WM3233-ND	.39	3.23	23.08	22-18-2021
	3	.296 (7.52)	WM3234-ND	.54	4.43	31.68	22-18-2031
	4	.396 (10.06)	WM3235-ND	.68	5.64	40.28	22-18-2041
	5	.496 (12.60)	WM3236-ND	.83	6.87	49.08	22-18-2051

.156 (3.96mm) P.C. Board Connectors

94V-2 Nylon Housing. Mates with .045" (1.14mm) pins.

Fig. 4 – Side Entry

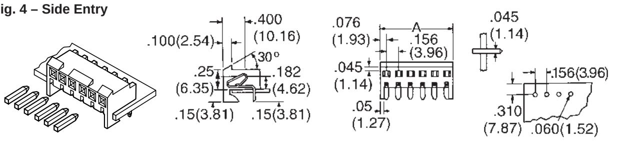


Fig. 5 – Bottom Entry

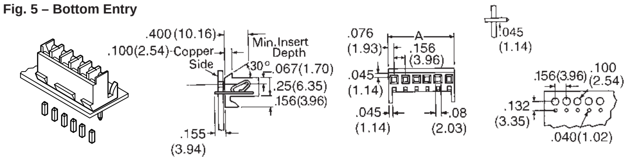


Fig. 6 – Top Entry

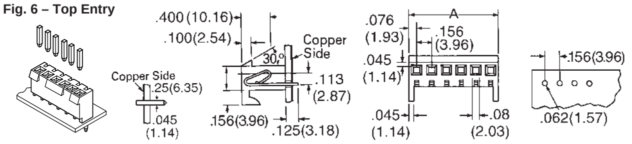
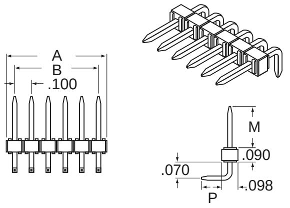


Fig.	Cir-	Dim. A	Digi-Key		Pricing		Molex
	cuits	Inch (mm)	Part No.	1	10	100	Part No.
3	6	.596 (15.14)	WM3237-ND	.91	7.48	53.45	22-18-2061
	7	.696 (17.68)	WM3238-ND	1.13	9.96	66.38	22-18-2071
	8	.796 (20.22)	WM3239-ND	1.27	11.25	74.98	22-18-2081
	9	.896 (22.76)	WM3240-ND	1.34	11.05	78.95	22-18-2091
	10	.996 (25.30)	WM3241-ND	1.50	12.39	88.50	22-18-2101
	11	1.096 (27.84)	WM3242-ND	1.72	14.16	101.13	22-18-2111
	12	1.196 (30.38)	WM3243-ND	1.87	15.36	109.73	22-18-2121
.156 (3.96mm) P.C. Board Connectors							
4	3	.46 (11.68)	WM3300-ND	.52	4.28	30.60	09-52-3031
	4	.62 (15.75)	WM3301-ND	.67	5.88	39.20	09-52-3041
	5	.78 (19.81)	WM3302-ND	.72	5.90	42.15	09-52-3051
	6	.93 (23.62)	WM3303-ND	.94	8.30	55.30	09-52-3061
	7	1.09 (27.69)	WM3304-ND	1.09	9.62	64.13	09-52-3071
	8	1.24 (31.50)	WM3305-ND	1.15	10.13	67.55	09-52-3081
	9	1.40 (35.56)	WM3306-ND	1.38	12.14	80.93	09-52-3091
	10	1.56 (39.62)	WM3307-ND	1.52	13.38	89.20	09-52-3101
	11	1.71 (43.43)	WM3308-ND	1.65	14.58	97.18	09-52-3111
	12	1.87 (47.50)	WM3309-ND	1.80	15.90	106.00	09-52-3121
5	3	.46 (11.68)	WM3400-ND	.54	4.75	31.68	09-52-3032
	4	.62 (15.75)	WM3401-ND	.69	6.09	40.63	09-52-3042
	5	.78 (19.81)	WM3402-ND	.84	7.38	49.23	09-52-3052
	6	.93 (23.62)	WM3403-ND	.98	8.67	57.80	09-52-3062
	7	1.09 (27.69)	WM3404-ND	1.25	11.03	73.53	09-52-3072
	8	1.24 (31.50)	WM3405-ND	1.29	11.36	75.70	09-52-3082
	9	1.40 (35.56)	WM3406-ND	1.43	12.64	84.28	09-52-3092
	10	1.56 (39.62)	WM3407-ND	1.59	13.99	93.28	09-52-3102
	12	1.87 (47.50)	WM3409-ND	1.89	16.65	111.00	09-52-3122
6	3	.46 (11.68)	WM3500-ND	.52	4.59	30.60	09-52-3033
	4	.62 (15.75)	WM3501-ND	.60	5.27	35.13	09-52-3043
	5	.78 (19.81)	WM3502-ND	.80	7.06	47.08	09-52-3053
	6	.93 (23.62)	WM3503-ND	.87	7.64	50.90	09-52-3063
	7	1.09 (27.69)	WM3504-ND	1.09	9.62	64.13	09-52-3073
	8	1.24 (31.50)	WM3505-ND	1.15	10.13	67.55	09-52-3083
	9	1.40 (35.56)	WM3506-ND	1.38	12.14	80.93	09-52-3093
	10	1.56 (39.62)	WM3507-ND	1.44	12.70	84.68	09-52-3103
	11	1.71 (43.43)	WM3508-ND	1.65	14.58	97.18	09-52-3113
	12	1.87 (47.50)	WM3509-ND	1.80	15.90	106.00	09-52-3123
.156 (3.96mm) P.C. Board Connectors - Gold							
4	3	.46 (11.68)	WM3510-ND	.79	6.96	46.38	09-62-3031
	4	.62 (15.75)	WM3511-ND	.94	8.25	55.03	09-62-3041
	5	.78 (19.81)	WM3512-ND	1.19	10.52	70.15	09-62-3051
	6	.93 (23.62)	WM3513-ND	1.42	12.53	83.55	09-62-3061
	7	1.09 (27.69)	WM3514-ND	1.72	15.15	101.00	09-62-3071
	8	1.24 (31.50)	WM3515-ND	1.95	17.21	114.73	09-62-3081
	10	1.56 (39.62)	WM3517-ND	2.42	21.35	142.30	09-62-3101
	12	1.87 (47.50)	WM3519-ND	2.82	24.91	166.08	09-62-3121
5	3	.46 (11.68)	WM3520-ND	.82	7.28	48.50	09-62-3032
	4	.62 (15.75)	WM3521-ND	1.07	9.42	62.83	09-62-3042
	6	.93 (23.62)	WM3523-ND	1.56	13.75	91.68	09-62-3062
	7	1.09 (27.69)	WM3524-ND	1.80	15.87	105.78	09-62-3072
	8	1.24 (31.50)	WM3525-ND	2.04	18.02	120.10	09-62-3082
	10	1.56 (39.62)	WM3527-ND	2.53	22.36	149.08	09-62-3102
6	3	.46 (11.68)	WM3530-ND	.79	6.96	46.38	09-62-3033
	4	.62 (15.75)	WM3531-ND	1.02	9.00	59.98	09-62-3043
	5	.78 (19.81)	WM3532-ND	1.26	11.09	73.90	09-62-3053
	6	.93 (23.62)	WM3533-ND	1.41	12.43	82.85	09-62-3063
	7	1.09 (27.69)	WM3534-ND	1.91	16.90	109.00	09-62-3073
	8	1.24 (31.50)	WM3535-ND	1.95	17.21	114.73	09-62-3083
	10	1.56 (39.62)	WM3537-ND	2.42	21.35	142.30	09-62-3103
	11	1.71 (43.43)	WM3538-ND	3.01	26.63	171.80	09-62-3113
	12	1.87 (47.50)	WM3539-ND	2.78	24.54	163.60	09-62-3123

molex GC/Waldom .100 KK® and .100 C-Grid® Breakaway Headers

Fig. 1 — KK® Breakaway Header – Right Angle

Features: • 250V • 4.0A • Contact Res.: 20mΩ max. • Dielectric Withstanding Volt: 1500V • Insulation Res.: 50K MΩ min. • Housing: Glass-filled nylon, UL94V-0 • Contact: Phosphor Bronze, 0.64mm (.025") square • Temp.: 0°C to +75°C • UL File No.: E29179 • CSA File No.: LR19980

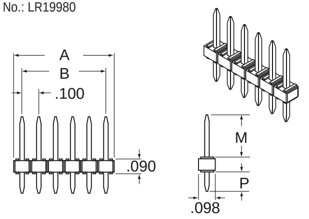


Mating End M (Inch)	PC Tail P (Inch)	Part No.
.244	.120	22-28-8XX0* 22-28-8XX2*
.324	.120	22-28-8XX1* 22-28-8XX3*

*Replace XX with no. of circuits, 02-36.

Fig. 2 — KK® Breakaway Header – Vertical

Features: • 250V • 4.0A • Contact Res.: 20mΩ max. • Dielectric Withstanding Volt: 1500V • Insulation Res.: 50K MΩ min. • Housing: Glass-filled nylon, UL94V-0 • Contact: Phosphor Bronze, 0.64mm (.025") square • Temp.: 0°C to +75°C • UL File No.: E29179 • CSA File No.: LR19980



Mating End M (Inch)	PC Tail P (Inch)	Part No.
.240	.125	22-28-4XX0* 22-28-4XX3*
.320	.130	22-28-4XX1* 22-28-4XX4*

*Replace XX with no. of circuits, 02-36.

Fig. 3 — C-Grid® Breakaway Header – Dual Row, Vertical

Features: • 250V • 3.0A • Contact Res.: 15mΩ max. • Dielectric Withstanding Volt: 600V • Insulation Res.: 1000 MΩ min. • Housing: Glass-filled polyester, UL94V-0 • Contact: Phosphor Bronze • Temp.: -40°C to +105°C • UL File No.: E29179 (G) • CSA File No.: LR19980A

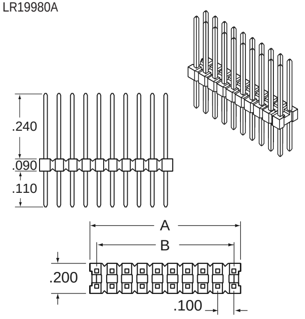
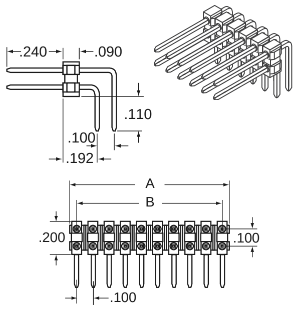


Fig. 4 — C-Grid® Breakaway Header – Low Profile, Dual Row Right Angle

Features: • 250V • 3.0A • Contact Res.: 15mΩ max. • Dielectric Withstanding Volt: 600V • Insulation Res.: 1000 MΩ min. • Housing: Glass-filled polyester, UL94V-0 • Contact: Phosphor Bronze • Temp.: -40°C to +105°C • UL File No.: E29179 (H)



Circuits	Dim. Inch A	Dim. Inch B	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Molex Part No.
.100 KK® Breakaway Header							
Fig. 1 — Single Row, Right Angle - Tin							
2	.200	.100	WM6002-ND	.26	.24	.21	22-28-8020
3	.300	.200	WM6003-ND	.30	.28	.25	22-28-8030
4	.400	.300	WM6004-ND	.35	.33	.29	22-28-8040
5	.500	.400	WM6005-ND	.39	.37	.33	22-28-8050
6	.600	.500	WM6006-ND	.44	.41	.36	22-28-8060
7	.700	.600	WM6007-ND	.49	.45	.40	22-28-8070
8	.800	.700	WM6008-ND	.53	.50	.44	22-28-8080
9	.900	.800	WM6009-ND	.58	.54	.48	22-28-8090
10	1.000	.900	WM6010-ND	.63	.58	.51	22-28-8100
11	1.100	1.000	WM6011-ND	.67	.62	.55	22-28-8110
12	1.200	1.100	WM6012-ND	.72	.67	.59	22-28-8120
13	1.300	1.200	WM6013-ND	1.11	1.03	.91	22-28-8130
14	1.400	1.300	WM6014-ND	.81	.75	.67	22-28-8140
15	1.500	1.400	WM6015-ND	.86	.80	.70	22-28-8150
16	1.600	1.500	WM6016-ND	1.23	1.07	.91	22-28-8160
17	1.700	1.600	WM6017-ND	1.30	1.13	.96	22-28-8170
18	1.800	1.700	WM6018-ND	1.00	.92	.82	22-28-8180
19	1.900	1.800	WM6019-ND	1.04	.97	.85	22-28-8190
20	2.000	1.900	WM6020-ND	1.09	1.01	.89	22-28-8200
21	2.100	2.000	WM6021-ND	1.13	1.05	.93	22-28-8210
22	2.200	2.100	WM6022-ND	1.18	1.09	.97	22-28-8220
23	2.300	2.200	WM6023-ND	1.23	1.14	1.01	22-28-8230
24	2.400	2.300	WM6024-ND	1.27	1.18	1.04	22-28-8240
25	2.500	2.400	WM6025-ND	1.32	1.22	1.08	22-28-8250
26	2.600	2.500	WM6026-ND	1.37	1.27	1.12	22-28-8260
27	2.700	2.600	WM6027-ND	1.41	1.31	1.16	22-28-8270
28	2.800	2.700	WM6028-ND	1.46	1.35	1.19	22-28-8280
29	2.900	2.800	WM6029-ND	1.51	1.39	1.23	22-28-8290
30	3.000	2.900	WM6030-ND	1.55	1.44	1.27	22-28-8300
31	3.100	3.000	WM6031-ND	1.60	1.48	1.31	22-28-8310
32	3.200	3.100	WM6032-ND	1.64	1.52	1.35	22-28-8320
33	3.300	3.200	WM6033-ND	1.69	1.56	1.38	22-28-8330
34	3.400	3.300	WM6034-ND	1.74	1.61	1.42	22-28-8340
35	3.500	3.400	WM6035-ND	1.78	1.65	1.46	22-28-8350
36	3.600	3.500	WM6036-ND	2.11	1.78	1.41	22-28-8360
Fig. 1 — Single Row, Right Angle - 15µ Select Gold							
2	.200	.100	WM6102-ND	.28	.26	.23	22-28-8022
3	.300	.200	WM6103-ND	.34	.31	.28	22-28-8032
4	.400	.300	WM6104-ND	.39	.37	.33	22-28-8042
5	.500	.400	WM6105-ND	.45	.42	.37	22-28-8052
6	.600	.500	WM6106-ND	.51	.47	.42	22-28-8062
7	.700	.600	WM6107-ND	.57	.53	.47	22-28-8072
8	.800	.700	WM6108-ND	.62	.58	.51	22-28-8082
9	.900	.800	WM6109-ND	.68	.63	.56	22-28-8092
10	1.000	.900	WM6110-ND	.74	.69	.61	22-28-8102
11	1.100	1.000	WM6111-ND	.80	.74	.65	22-28-8112
12	1.200	1.100	WM6112-ND	.85	.79	.70	22-28-8122
13	1.300	1.200	WM6113-ND	1.35	1.26	1.11	22-28-8132
14	1.400	1.300	WM6114-ND	.97	.90	.79	22-28-8142
15	1.500	1.400	WM6115-ND	1.03	.95	.84	22-28-8152
16	1.600	1.500	WM6116-ND	1.50	1.31	1.11	22-28-8162
17	1.700	1.600	WM6117-ND	1.59	1.38	1.17	22-28-8172
18	1.800	1.700	WM6118-ND	1.20	1.11	.98	22-28-8182
19	1.900	1.800	WM6119-ND	1.26	1.16	1.03	22-28-8192
20	2.000	1.900	WM6120-ND	1.31	1.22	1.08	22-28-8202
21	2.100	2.000	WM6121-ND	1.37	1.27	1.12	22-28-8212
22	2.200	2.100	WM6122-ND	1.43	1.32	1.17	22-28-8222
23	2.300	2.200	WM6123-ND	1.49	1.38	1.22	22-28-8232
24	2.400	2.300	WM6124-ND	1.54	1.43	1.26	22-28-8242
25	2.500	2.400	WM6125-ND	1.60	1.48	1.31	22-28-8252
26	2.600	2.500	WM6126-ND	1.66	1.54	1.36	22-28-8262
27	2.700	2.600	WM6127-ND	1.72	1.59	1.40	22-28-8272
28	2.800	2.700	WM6128-ND	1.77	1.64	1.45	22-28-8282
29	2.900	2.800	WM6129-ND	1.83	1.70	1.50	22-28-8292
30	3.000	2.900	WM6130-ND	1.89	1.75	1.55	22-28-8302
31	3.100	3.000	WM6131-ND	1.95	1.80	1.59	22-28-8312
32	3.200	3.100	WM6132-ND	2.00	1.85	1.64	22-28-8322
33	3.300	3.200	WM6133-ND	2.06	1.91	1.69	22-28-8332
34	3.400	3.300	WM6134-ND	2.12	1.96	1.73	22-28-8342
35	3.500	3.400	WM6135-ND	2.18	2.01	1.78	22-28-8352
36	3.600	3.500	WM6136-ND	2.58	2.17	1.72	22-28-8362
Fig. 1 — Single Row, Right Angle - Tin							
2	.200	.100	WM6202-ND	.25	.23	.21	22-28-8021
3	.300	.200	WM6203-ND	.29	.27	.24	22-28-8031
4	.400	.300	WM6204-ND	.33	.31	.28	22-28-8041
5	.500	.400	WM6205-ND	.38	.35	.31	22-28-8051
6	.600	.500	WM6206-ND	.42	.39	.35	22-28-8061
7	.700	.600	WM6207-ND	.46	.43	.38	22-28-8071
8	.800	.700	WM6208-ND	.51	.47	.42	22-28-8081
9	.900	.800	WM6209-ND	.55	.51	.45	22-28-8091
10	1.000	.900	WM6210-ND	.59	.55	.49	22-28-8101
11	1.100	1.000	WM6211-ND	.64	.59	.52	22-28-8111
12	1.200	1.100	WM6212-ND	.68	.63	.56	22-28-8121
13	1.300	1.200	WM6213-ND	.72	.67	.59	22-28-8131
14	1.400	1.300	WM6214-ND	.77	.71	.63	22-28-8141
15	1.500	1.400	WM6215-ND	.81	.75	.66	22-28-8151
16	1.600	1.500	WM6216-ND	.85	.79	.70	22-28-8161
17	1.700	1.600	WM6217-ND	.90	.83	.73	22-28-8171
18	1.800	1.700	WM6218-ND	.94	.87	.77	22-28-8181
19	1.900	1.800	WM6219-ND	.98	.91	.81	22-28-8191
20	2.000	1.900	WM6220-ND	1.02	.95	.84	22-28-8201
21	2.100	2.000	WM6221-ND	1.07	.99	.88	22-28-8211
22	2.200	2.100	WM6222-ND	1.11	1.03	.91	22-28-8221
23	2.300	2.200	WM6223-ND	1.15	1.07	.95	22-28-8231
24	2.400	2.300	WM6224-ND	1.20	1.11	.98	22-28-8241
25	2.500	2.400	WM6225-ND	1.24	1.15	1.02	22-28-8251
26	2.600	2.500	WM6226-ND	1.28	1.19	1.05	22-28-8261
27	2.700	2.600	WM6227-ND	1.33	1.23	1.09	22-28-8271
28	2.800	2.700	WM6228-ND	1.37	1.27	1.12	22-28-8281
29	2.900	2.800	WM6229-ND	1.41	1.31	1.16	22-28-8291
30	3.000	2.900	WM6230-ND	1.46	1.35	1.19	22-28-8301
31	3.100	3.000	WM6231-ND	1.50	1.39	1.23	22-28-8311
32	3.200	3.100	WM6232-ND	1.54	1.43	1.26	22-28-8321
33	3.300	3.200	WM6233-ND	1.59	1.47	1.30	22-28-8331
34	3.400	3.300	WM6234-ND	1.63	1.51	1.33	22-28-8341
35	3.500	3.400	WM6235-ND	1.67	1.55	1.37	22-28-8351
36	3.600	3.500	WM6236-ND	1.98	1.67	1.32	22-28-8361
Fig. 1 — Single Row, Right Angle - 15µ Select Gold							
2	.200	.100	WM6302-ND	.28	.26	.23	22-28-8023
3	.300	.200	WM6303-ND	.34	.31	.28	22-28-8033
4	.400	.300	WM6304-ND	.39	.37	.33	22-28-8043
5	.500	.400	WM6305-ND	.45	.42	.37	22-28-8053
6	.600	.500	WM6306-ND	.51	.47	.42	22-28-8063
7	.700	.600	WM6307-ND	.57	.53	.47	22-28-8073
8	.800	.700	WM6308-ND	.62	.58	.51	22-28-8083
9	.900	.800	WM6309-ND	.68	.63	.56	22-28-8093
10	1.000	.900	WM6310-ND	.74	.69	.61	22-28-8103
11	1.100	1.000	WM6311-ND	.80	.74	.65	22-28-8113
12	1.200	1.100	WM6312-ND	.85	.79	.70	22-28-8123
13	1.300	1.200	WM6313-ND	.91	.85	.75	22-28-8133
14	1.400	1.300	WM6314-ND	.97	.90	.79	22-28-8143
15	1.500	1.400	WM6315-ND	1.03	.95	.84	22-28-8153
16	1.600	1.500	WM6316-ND	1.08	1.00	.89	22-28-8163
17	1.700	1.600	WM6317-ND	1.14	1.06	.94	22-28-8173
18	1.800	1.700	WM6318-ND	1.20	1.11	.98	22-28-8183
19	1.900	1.800	WM6319-ND	1.26	1.16	1.03	22-28-8193
20	2.000	1.900	WM6320-ND	1.31	1.22	1.08	22-28-8203
21	2.100	2.000	WM6321-ND	1.37	1.27	1.12	22-28-8213
22	2.200	2.100	WM6322-ND	1.43	1.32	1.17	22-28-8223
23	2.300	2.200	WM6323-ND	1.49	1.38	1.22	22-28-8233
24	2.400	2.300	WM6324-ND	1.54	1.43	1.26	22-28-8243
25	2.500	2.400	WM6325-ND	1.60	1.48	1.31	22-28-8253
26	2.600	2.500	WM6326-ND	1.66	1.54	1.36	22-28-8263
27	2.700	2.600	WM6327-ND	1.72	1.59	1.40	22-28-8273
28	2.800	2.700	WM6328-ND	1.77	1.64	1.45	22-28-8283
29	2.900	2.800	WM6329-ND	1.83	1.70	1.50	22-28-8293
30	3.000	2.900	WM6330-ND	1.89	1.75	1.55	22-28-8303
31	3.100	3.000	WM6331-ND	1.95	1.80	1.59	22-28-8313
32	3.200	3.100	WM6332-ND	2.00	1.85	1.64	22-28-8323
33	3.300	3.200	WM6333-ND	2.06	1.91	1.69	22-28-8333
34	3.400	3.300	WM6334-ND	2.12	1.96	1.73	22-28-8343
35	3.500	3.400	WM6335-ND	2.18	2.01	1.78	22-28-8353
36	3.600	3.500	WM6336-ND	2.58	2.17	1.72	22-28-8363
Fig. 2 — Single Row, Vertical - Tin							
2	.200	.100	WM6402-ND	.21	.20	.18	22-28-4020
3	.300	.200	WM6403-ND	.24	.23	.20	22-28-4030
4	.400	.300	WM6404-ND	.27	.25	.22	22-28-4040
5	.500	.400	WM6405-ND	.29	.28	.24	22-28-4050
6	.600	.500	WM6406-ND	.32	.30	.27	22-28-4060
7	.700	.600	WM6407-ND	.35	.32	.29	22-28-4070
8	.800	.700	WM6408-ND	.37	.35	.31	22-28-4080
9	.900	.800	WM6409-ND	.40	.37	.33	22-28-4090
10	1.000	.900	WM6410-ND	.42	.40	.35	22-28-4100
11	1.100	1.000	WM6411-ND	.45	.42	.37	22-28-4110
12	1.200	1.100	WM6412-ND	.48	.44	.39	22-28-4120
13	1.300	1.200	WM6413-ND	.50	.47	.41	22-28-4130
14	1.400	1.300	WM6414-ND	.53	.49	.44	22-28-4140
15	1.500	1.400	WM6415-ND	.56	.52	.46	22-28-4150
16	1.600	1.500	WM6416-ND	.58	.54	.48	22-28-4160
17	1.700	1.600	WM6417-ND	.61	.57	.50	22-28-4170
18	1.800	1.700	WM6418-ND	.63	.59	.52	22-28-4180
19	1.900	1.800	WM6419-ND	.66	.61	.54	22-28-4190
20	2.000	1.900	WM6420-ND	.69	.64	.56	22-28-4200
21	2.100	2.000	WM6421-ND	.71	.66	.59	22-28-4210
22	2.200	2.100	WM6422-ND	.74	.69	.61	22-28-4220
23	2.300	2.200	WM6423-ND	.76	.71	.63	22-28-4230
24	2.400	2.300	WM6424-ND	.79	.73	.65	22-28-4240
25	2.500	2.400	WM6425-ND	.82	.76	.67	22-28-4250
26	2.600	2.500	WM6426-ND	.84	.78	.69	22-28-4260
27	2.700	2.600	WM6427-ND	.87	.81	.71	22-28-4270
28	2.800	2.700	WM6428-ND	.90	.83	.73	22-28-4280
29	2.900	2.800	WM6429-ND	.92	.86	.76	22-28-4290
30	3.000	2.900	WM6430-ND	.95	.88	.78	22-28-4300
31	3.100	3.000	WM6431-ND	.97	.90	.80	22-28-4310
32	3.200	3.100	WM6432-ND	1.00	.93	.82	22-28-4320
33	3.300	3.200	WM6433-ND	1.03	.95	.84	22-28-4330
34	3.400	3.300	WM6434-ND	1.05	.98	.86	22-28-4340
35	3.500	3.400	WM6435-ND	1.08	1.00	.88	22-28-4350
36	3.600	3.500	WM6436-ND	1.27	1.08	.85	22-28-4360
Fig. 2 — Single Row, Vertical - 15µ Select Gold							
2	.200	.100	WM6502-ND	.24	.22	.20	22-28-4023
3	.300	.200	WM6503-ND	.27	.25	.23	22-28-4033
4	.400	.300	WM6504-ND	.31	.29	.26	22-28-4043
5	.500	.400	WM6505-ND	.34	.32	.29	22-28-4053
6	.600	.500	WM6506-ND	.38	.36	.31	22-28-4063
7	.700	.600	WM6507-ND	.42	.39	.34	22-28-4073
8	.800	.700	WM6508-ND	.45	.42	.37	22-28-4083
9	.900	.800	WM6509-ND	.49	.46	.40	22-28-4093
10	1.000	.900	WM6510-ND	.52	.49	.43	22-28-4103
11	1.100	1.000	WM6511-ND	.56	.52	.46	22-28-4113

(Continued)

molex GC/Waldom .100 KK® and .100 C-Grid® Breakaway Headers *(Cont.)*

Cir-cuits	Dim. Inch A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Fig. 2 — Single Row, Vertical - 15µ Select Gold							
12	1.200	1.100	WM6512-ND	.60	.56	.49	22-28-4123
13	1.300	1.200	WM6513-ND	.63	.59	.52	22-28-4133
14	1.400	1.300	WM6514-ND	.67	.62	.55	22-28-4143
15	1.500	1.400	WM6515-ND	.71	.66	.58	22-28-4153
16	1.600	1.500	WM6516-ND	.74	.69	.61	22-28-4163
17	1.700	1.600	WM6517-ND	.78	.72	.64	22-28-4173
18	1.800	1.700	WM6518-ND	.81	.76	.67	22-28-4183
19	1.900	1.800	WM6519-ND	.85	.79	.70	22-28-4193
20	2.000	1.900	WM6520-ND	.89	.82	.73	22-28-4203
21	2.100	2.000	WM6521-ND	.92	.86	.76	22-28-4213
22	2.200	2.100	WM6522-ND	.96	.89	.79	22-28-4223
23	2.300	2.200	WM6523-ND	1.00	.92	.82	22-28-4233
24	2.400	2.300	WM6524-ND	1.03	.96	.85	22-28-4243
25	2.500	2.400	WM6525-ND	1.07	.99	.88	22-28-4253
26	2.600	2.500	WM6526-ND	1.10	1.02	.91	22-28-4263
27	2.700	2.600	WM6527-ND	1.14	1.06	.94	22-28-4273
28	2.800	2.700	WM6528-ND	1.18	1.09	.96	22-28-4283
29	2.900	2.800	WM6529-ND	1.21	1.12	.99	22-28-4293
30	3.000	2.900	WM6530-ND	1.25	1.16	1.02	22-28-4303
31	3.100	3.000	WM6531-ND	1.29	1.19	1.05	22-28-4313
32	3.200	3.100	WM6532-ND	1.32	1.23	1.08	22-28-4323
33	3.300	3.200	WM6533-ND	1.36	1.26	1.11	22-28-4333
34	3.400	3.300	WM6534-ND	1.39	1.29	1.14	22-28-4343
35	3.500	3.400	WM6535-ND	1.43	1.33	1.17	22-28-4353
36	3.600	3.500	WM6536-ND	1.69	1.43	1.13	22-28-4363
Fig. 2 — Single Row, Vertical - Tin							
2	.200	.100	WM6602-ND	.24	.22	.20	22-28-4021
3	.300	.200	WM6603-ND	.27	.25	.23	22-28-4031
4	.400	.300	WM6604-ND	.31	.29	.26	22-28-4041
5	.500	.400	WM6605-ND	.34	.32	.29	22-28-4051
6	.600	.500	WM6606-ND	.38	.36	.31	22-28-4061
7	.700	.600	WM6607-ND	.42	.39	.34	22-28-4071
8	.800	.700	WM6608-ND	.45	.42	.37	22-28-4081
9	.900	.800	WM6609-ND	.49	.46	.40	22-28-4091
10	1.000	.900	WM6610-ND	.52	.49	.43	22-28-4101
11	1.100	1.000	WM6611-ND	.56	.52	.46	22-28-4111
12	1.200	1.100	WM6612-ND	.60	.56	.49	22-28-4121
13	1.300	1.200	WM6613-ND	.63	.59	.52	22-28-4131
14	1.400	1.300	WM6614-ND	.67	.62	.55	22-28-4141
15	1.500	1.400	WM6615-ND	.71	.66	.58	22-28-4151
16	1.600	1.500	WM6616-ND	.74	.69	.61	22-28-4161
17	1.700	1.600	WM6617-ND	.78	.72	.64	22-28-4171
18	1.800	1.700	WM6618-ND	.81	.76	.67	22-28-4181
19	1.900	1.800	WM6619-ND	.85	.79	.70	22-28-4191
20	2.000	1.900	WM6620-ND	.89	.82	.73	22-28-4201
21	2.100	2.000	WM6621-ND	.92	.86	.76	22-28-4211
22	2.200	2.100	WM6622-ND	.96	.89	.79	22-28-4221
23	2.300	2.200	WM6623-ND	1.00	.92	.82	22-28-4231
24	2.400	2.300	WM6624-ND	1.03	.96	.85	22-28-4241
25	2.500	2.400	WM6625-ND	1.07	.99	.88	22-28-4251
26	2.600	2.500	WM6626-ND	1.10	1.02	.91	22-28-4261
27	2.700	2.600	WM6627-ND	1.14	1.06	.94	22-28-4271
28	2.800	2.700	WM6628-ND	1.18	1.09	.96	22-28-4281
29	2.900	2.800	WM6629-ND	1.21	1.12	.99	22-28-4291
30	3.000	2.900	WM6630-ND	1.25	1.16	1.02	22-28-4301
31	3.100	3.000	WM6631-ND	1.29	1.19	1.05	22-28-4311
32	3.200	3.100	WM6632-ND	1.32	1.23	1.08	22-28-4321
33	3.300	3.200	WM6633-ND	1.36	1.26	1.11	22-28-4331
34	3.400	3.300	WM6634-ND	1.39	1.29	1.14	22-28-4341
35	3.500	3.400	WM6635-ND	1.43	1.33	1.17	22-28-4351
36	3.600	3.500	WM6636-ND	1.69	1.43	1.13	22-28-4361
Fig. 2 — Single Row, Vertical - 15µ Select Gold							
2	.200	.100	WM6702-ND	.25	.24	.21	22-28-4024
3	.300	.200	WM6703-ND	.30	.28	.25	22-28-4034
4	.400	.300	WM6704-ND	.34	.32	.28	22-28-4044
5	.500	.400	WM6705-ND	.39	.36	.32	22-28-4054
6	.600	.500	WM6706-ND	.43	.40	.36	22-28-4064
7	.700	.600	WM6707-ND	.48	.44	.39	22-28-4074
8	.800	.700	WM6708-ND	.52	.49	.43	22-28-4084
9	.900	.800	WM6709-ND	.57	.53	.47	22-28-4094
10	1.000	.900	WM6710-ND	.61	.57	.50	22-28-4104
11	1.100	1.000	WM6711-ND	.66	.61	.54	22-28-4114
12	1.200	1.100	WM6712-ND	.70	.65	.58	22-28-4124
13	1.300	1.200	WM6713-ND	.75	.69	.61	22-28-4134
14	1.400	1.300	WM6714-ND	.79	.74	.65	22-28-4144
15	1.500	1.400	WM6715-ND	.84	.78	.69	22-28-4154
16	1.600	1.500	WM6716-ND	.88	.82	.72	22-28-4164
17	1.700	1.600	WM6717-ND	.93	.86	.76	22-28-4174
18	1.800	1.700	WM6718-ND	.97	.90	.80	22-28-4184
19	1.900	1.800	WM6719-ND	1.02	.94	.83	22-28-4194
20	2.000	1.900	WM6720-ND	1.06	.98	.87	22-28-4204
21	2.100	2.000	WM6721-ND	1.11	1.03	.91	22-28-4214
22	2.200	2.100	WM6722-ND	1.15	1.07	.94	22-28-4224
23	2.300	2.200	WM6723-ND	1.20	1.11	.98	22-28-4234
24	2.400	2.300	WM6724-ND	1.24	1.15	1.02	22-28-4244
25	2.500	2.400	WM6725-ND	1.29	1.19	1.05	22-28-4254
26	2.600	2.500	WM6726-ND	1.33	1.23	1.09	22-28-4264
27	2.700	2.600	WM6727-ND	1.38	1.28	1.13	22-28-4274
28	2.800	2.700	WM6728-ND	1.42	1.32	1.16	22-28-4284
29	2.900	2.800	WM6729-ND	1.47	1.36	1.20	22-28-4294
30	3.000	2.900	WM6730-ND	1.51	1.40	1.24	22-28-4304
31	3.100	3.000	WM6731-ND	1.56	1.44	1.27	22-28-4314
32	3.200	3.100	WM6732-ND	1.60	1.48	1.31	22-28-4324
33	3.300	3.200	WM6733-ND	1.65	1.52	1.35	22-28-4334
34	3.400	3.300	WM6734-ND	1.69	1.57	1.38	22-28-4344
35	3.500	3.400	WM6735-ND	1.74	1.61	1.42	22-28-4354
36	3.600	3.500	WM6736-ND	2.06	1.73	1.37	22-28-4364
.100 C-Grid® Breakaway Header							
Fig. 3 — Dual Row - Vertical - 15µ min. Select Gold							
4	.190	.100	WM6804-ND	.32	.30	.27	10-89-1041
6	.290	.200	WM6806-ND	.40	.38	.33	10-89-1061
8	.390	.300	WM6808-ND	.49	.45	.40	10-89-1081
10	.490	.400	WM6810-ND	.57	.53	.47	10-89-1101
12	.590	.500	WM6812-ND	.65	.60	.53	10-89-1121
14	.690	.600	WM6814-ND	.73	.68	.60	10-89-1141
16	.790	.700	WM6816-ND	.81	.75	.66	10-89-1161
18	.890	.800	WM6818-ND	.89	.83	.73	10-89-1181
20	.990	.900	WM6820-ND	.97	.90	.80	10-89-1201
22	1.090	1.000	WM6822-ND	1.05	.97	.86	10-89-1221
24	1.190	1.100	WM6824-ND	1.13	1.05	.93	10-89-1241
26	1.290	1.200	WM6826-ND	1.21	1.12	.99	10-89-1261
28	1.390	1.300	WM6828-ND	1.29	1.20	1.06	10-89-1281
30	1.490	1.400	WM6830-ND	1.37	1.27	1.12	10-89-1301
32	1.590	1.500	WM6832-ND	1.45	1.35	1.19	10-89-1321
34	1.690	1.600	WM6834-ND	1.53	1.42	1.26	10-89-1341
36	1.790	1.700	WM6836-ND	1.62	1.50	1.32	10-89-1361
38	1.890	1.800	WM6838-ND	1.70	1.57	1.39	10-89-1381
40	1.990	1.900	WM6840-ND	1.78	1.64	1.45	10-89-1401
42	2.090	2.000	WM6842-ND	1.86	1.72	1.52	10-89-1421
44	2.190	2.100	WM6844-ND	1.94	1.79	1.59	10-89-1441
46	2.290	2.200	WM6846-ND	2.02	1.87	1.65	10-89-1461
48	2.390	2.300	WM6848-ND	2.10	1.94	1.72	10-89-1481
50	2.490	2.400	WM6850-ND	2.18	2.02	1.78	10-89-1501
52	2.590	2.500	WM6852-ND	2.26	2.09	1.85	10-89-1521
54	2.690	2.600	WM6854-ND	2.34	2.17	1.91	10-89-1541
56	2.790	2.700	WM6856-ND	2.42	2.24	1.98	10-89-1561
58	2.890	2.800	WM6858-ND	2.50	2.32	2.05	10-89-1581
60	2.990	2.900	WM6860-ND	2.58	2.39	2.11	10-89-1601
62	3.090	3.000	WM6862-ND	2.66	2.46	2.18	10-89-1621
64	3.190	3.100	WM6864-ND	2.75	2.54	2.24	10-89-1641
66	3.290	3.200	WM6866-ND	2.83	2.61	2.31	10-89-1661
68	3.390	3.300	WM6868-ND	2.91	2.69	2.38	10-89-1681
70	3.490	3.400	WM6870-ND	2.99	2.76	2.44	10-89-1701
72	3.590	3.500	WM6872-ND	3.07	2.84	2.51	10-89-1721
74	3.690	3.600	WM6874-ND	3.15	2.91	2.57	10-89-1741
76	3.790	3.700	WM6876-ND	3.23	2.99	2.64	10-89-1761
78	3.890	3.800	WM6878-ND	3.31	3.06	2.70	10-89-1781
80	3.990	3.900	WM6880-ND	3.91	3.29	2.61	10-89-1801
Fig. 3 — Dual Row - Vertical - 150µ Tin/Lead, Nickel Overall							
4	.190	.100	WM6904-ND	.30	.29	.25	10-88-1041
6	.290	.200	WM6906-ND	.38	.35	.31	10-88-1061
8	.390	.300	WM6908-ND	.45	.42	.37	10-88-1081
10	.490	.400	WM6910-ND	.52	.48	.43	10-88-1101
12	.590	.500	WM6912-ND	.59	.55	.48	10-88-1121
14	.690	.600	WM6914-ND	.66	.61	.54	10-88-1141
16	.790	.700	WM6916-ND	.73	.68	.60	10-88-1161
18	.890	.800	WM6918-ND	.80	.74	.66	10-88-1181
20	.990	.900	WM6920-ND	.87	.81	.72	10-88-1201
22	1.090	1.000	WM6922-ND	.94	.87	.77	10-88-1221
24	1.190	1.100	WM6924-ND	1.01	.94	.83	10-88-1241
26	1.290	1.200	WM6926-ND	1.08	1.01	.89	10-88-1261
28	1.390	1.300	WM6928-ND	1.16	1.07	.95	10-88-1281
30	1.490	1.400	WM6930-ND	1.23	1.14	1.00	10-88-1301
32	1.590	1.500	WM6932-ND	1.30	1.20	1.06	10-88-1321
34	1.690	1.600	WM6934-ND	1.37	1.27	1.12	10-88-1341
36	1.790	1.700	WM6936-ND	1.44	1.33	1.18	10-88-1361
38	1.890	1.800	WM6938-ND	1.51	1.40	1.24	10-88-1381
40	1.990	1.900	WM6940-ND	1.58	1.46	1.29	10-88-1401
42	2.090	2.000	WM6942-ND	1.65	1.53	1.35	10-88-1421
44	2.190	2.100	WM6944-ND	1.72	1.59	1.41	10-88-1441
46	2.290	2.200	WM6946-ND	1.79	1.66	1.47	10-88-1461
48	2.390	2.300	WM6948-ND	1.86	1.73	1.52	10-88-1481
50	2.490	2.400	WM6950-ND	1.93	1.79	1.58	10-88-1501
52	2.590	2.500	WM6952-ND	2.01	1.86	1.64	10-88-1521
54	2.690	2.600	WM6954-ND	2.08	1.92	1.70	10-88-1541
56	2.790	2.700	WM6956-ND	2.15	1.99	1.76	10-88-1561
58	2.890	2.800	WM6958-ND	2.22	2.05	1.81	10-88-1581
60	2.990	2.900	WM6960-ND	2.29	2.12	1.87	10-88-1601
62	3.090	3.000	WM6962-ND	2.36	2.18	1.93	10-88-1621
64	3.190	3.100	WM6964-ND	2.43	2.25	1.99	10-88-1641
66	3.290	3.200	WM6966-ND	2.50	2.31	2.05	10-88-1661
68	3.390	3.300	WM6968-ND	2.57	2.38	2.10	10-88-1681
70	3.490	3.400	WM6970-ND	2.64	2.45	2.16	10-88-1701
72	3.590	3.500	WM6972-ND	2.71	2.51	2.22	10-88-1721
74	3.690	3.600	WM6974-ND	2.79	2.58	2.28	10-88-1741
76	3.790	3.700	WM6976-ND	2.86	2.64	2.33	10-88-1761
78	3.890	3.800	WM6978-ND	2.93	2.71	2.39	10-88-1781
80	3.990	3.900	WM6980-ND	3.46	2.91	2.31	10-88-1801
Fig. 4 — Dual Row, Low Profile - Right Angle, 15µ min. Select Gold							
4	.190	.100	WM7004-ND	.50	.47	.41	10-89-1046
6	.290	.200	WM7006-ND	.67	.62	.55	10-89-1066
8	.390	.300	WM7008-ND	.84	.78	.69	10-89-1086
10	.490	.400	WM7010-ND	1.01	.94	.83	10-89-1106
12	.590	.500	WM7012-ND	1.18	1.10	.97	10-89-1126
14	.690	.600	WM7014-ND	1.35	1.25	1.11	10-89-1146
16	.790	.700	WM7016-ND	1.52	1.41	1.25	10-89-1166
18	.890	.800	WM7018-ND	1.69	1.57	1.38	10-89-1186
20	.990	900	WM7020-ND	1.86	1.72	1.52	10-89-1206
22	1.090	1.000	WM7022-ND	2.03	1.88	1.66	10-89-1226
24	1.190	1.100	WM7024-ND	2.20	2.04	1.80	10-89-1246
26	1.290	1.200	WM7026-ND	2.37	2.19	1.94	10-89-1266
28	1.390	1.300	WM7028-ND	2.54	2.35	2.08	10-89-1286
30	1.490	1.400	WM7030-ND	2.71	2.51	2.21	10-89-1306
32	1.590	1.500	WM7032-ND	2.88	2.66	2.35	10-89-1326
34	1.690	1.600	WM7034-ND	3.05	2.82	2.49	10-89-1346
36	1.790	1.700	WM7036-ND	3.22	2.98	2.63	10-89-1366
38	1.890	1.800	WM7038-ND	3.39	3.13	2.77	10-89-1386
40	1.990	1.900	WM7040-ND	3.56	3.29	2.91	10-89-1406
42	2.090	2.000	WM7042-ND	3.73	3.45	3.05	10-89-1426
44	2.190	2.100	WM7044-ND	3.90	3.60	3.18	10-89-1446
46	2.290	2.200	WM7046-ND	4.07	3.76	3.32	10-89-1466
48	2.390	2.300	WM7048-ND	4.24	3.92	3.46	10-89-1486
50	2.490	2.400	WM7050-ND	4.41	4.07	3.60	10-89-1506
52	2.590	2.500	WM7052-ND	4.58	4.23	3.74	10-89-1526
54	2.690	2.600	WM7054-ND	4.75	4.39	3.88	10-89-1546
56	2.790	2.700	WM7056-ND	4.92	4.54	4.01	10-89-1566
58	2.890	2.800	WM7058-ND	5.09	4.70	4.15	10-89-1586
60	2.990	2.900	WM7060-ND	5.26	4.86	4.29	10-89-1606
62	3.090	3.000	WM7062-ND	5.43	5.01	4.43	10-89-1626
64	3.190	3.100	WM7064-ND	5.60	5.17	4.57	10-89-1646
66	3.290	3.200	WM7066-ND	5.77	5.33	4.71	10-89-1666
68	3.390	3.300	WM7068-ND	5.94	5.48	4.85	10-89-1686
70	3.490	3.400	WM7070-ND	6.11	5.64	4.98	10-89-1706
72	3.590	3.500	WM7072-ND	6.28	5.80	5.12	10-89-1726
74	3.690	3.600	WM7074-ND	6.45	5.96	5.26	10-89-1746
76	3.790	3.700	WM7076-ND	6.62	6.11	5.40	10-89-1766
78	3.890	3.800	WM7078-ND	6.79	6.27	5.54	10-89-1786
80	3.990	3.900	WM7080-ND	8.03	6.75	5.36	10-89-1806
Fig. 4 — Dual Row, Low Profile - Right Angle, 150µ Tin/Lead, Nickel Overall							
4	.190	.100	WM7104-ND	.33	.31	.28	10-88-1045
6	.290	.200	WM7106-ND	.42	.39	.35	10-88-1065
8	.390	.300	WM7108-ND	.51	.47	.42	10-88-1085
10	.490	.400	WM7110-ND	.59	.55	.49	10-88-1105
12	.590	.500	WM7112-ND	.68	.63	.56	10-88-1125
14	.690	.600	WM7114-ND	.76	.71	.63	10-88-1145
16	.790	.700	WM7116-ND	.85	.79	.70	10-88-1165
18	.890	.800	WM7118-ND	.94	.87	.77	10-88-1185
20	.990	.900	WM7120-ND	1.02	.95	.84	10-88-1205
22	1.090	1.000	WM7122-ND	1.11	1.03	.91	10-88-1225
24	1.190	1.100	WM7124-ND	1.19	1.11	.98	10-88-1245
26	1.290	1.200	WM7126-ND	1.28	1.18	1.05	10-88-1265
28	1.390	1.300	WM7128-ND	1.36	1.26	1.12	10-88-1285
30	1.490	1.400	WM7130-ND	1.45	1.34	1.19	10-88-1305
32	1.590	1.500	WM7132-ND	1.54	1.42	1.26	10-88-1325
34	1.690	1.600	WM7134-ND	1.62	1.50	1.33	10-88-1345
36	1.790	1.700	WM7136-ND	1.71	1.58	1.40	10-88-1365
38	1.890	1.800	WM7138-ND	1.79	1.66	1.47	10-88-1385
40	1.990	1.900	WM7140-ND	1.88	1.74	1.54	10-88-1405
42	2.090	2.000	WM7142-ND	1.97	1.82	1.61	10-88-1425
44	2.190	2.100	WM7144-ND	2.05	1.90	1.68	10-88-1445
46	2.290	2.200	WM7146-ND	2.14	1.98	1.75	10-88-1465
48	2.390	2.300	WM7148-ND	2.22	2.06	1.82	10-88-1485
50	2.490	2.400	WM7150-ND	2.31	2.14	1.89	10-88-1505
52	2.590	2.500	WM7152-ND	2.39	2.21	1.96	10-88-1525
54	2.690	2.600	WM7154-ND	2.48	2.29	2.03	10-88-1545
56	2.790	2.700	WM7156-ND	2.57	2.37	2.10	10-88-1565
58	2.890	2.800	WM7158-ND	2.65	2.45	2.17	10-88-1585
60	2.990	2.900	WM7160-ND	2.74	2.53	2.24	10-88-1605
62	3.090	3.000	WM7162-ND	2.82	2.61	2.31	10-88-1625
64	3.190	3.100	WM7164-ND	2.91	2.69	2.38	10-88-1645
66	3.290	3.200	WM7166-ND	3.00	2.77	2.45	10-88-1665
68	3.390	3.300	WM7168-ND	3.08	2.85	2.52	10-88-1685
70	3.490	3.400	WM7170-ND	3.17	2.93	2.59	10-88-1705
72	3.590	3.500	WM7172-ND	3.25	3.01	2.66	10-88-1725
74	3.690	3.600	WM7174-ND	3.34	3.09	2.73	10-88-1745
76	3.790	3.700	WM7176-ND	3.42	3.17	2.80	10-88-1765
78	3.890	3.800	WM7178-ND	3.51	3.24	2.87	10-88-1785
80	3.990	3.900	WM7180-ND	4.15	3.49	2.77	10-88-1805

molex GC/Waldom

.100" (2.54mm) Center Headers

.025" (.64mm) Square Pins The Molex KK® Concept utilizes a double cantilever contact design in mating with P.C. board pins. UL Recognized (File #29179), CSA Recognized (File 19980). **Voltage Rating:** 250 VAC Max. **Current Rating:** Up to 2.5 Amps (w/22 AWG wire) **Resistance:** 20 milliohms max. **Dielectric Withstanding Voltage:** 1500 VAC for 60 seconds **Storage Temp.:** -40°C to 105°C **Material:** 94V-0

Fig. 1 - Straight Header

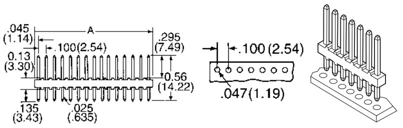


Fig. 2 - Right Angle Header

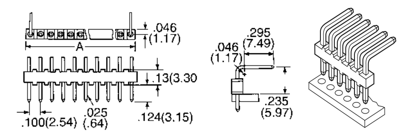


Fig. 3 - Straight-Friction Lock Header

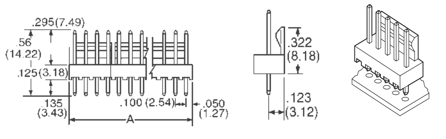


Fig. 4 - Right Angle-Friction Lock Header

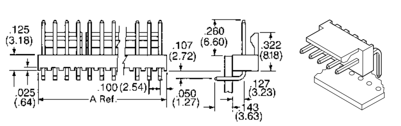


Fig. 5 - Center Crimp Terminal Housing
(contacts sold separately)

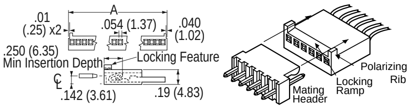


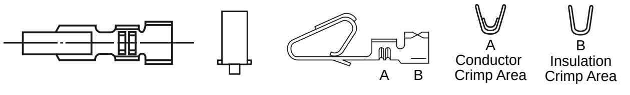
Fig.	Cir-cuits	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Molex Part No.
.100" (2.54mm) Center Headers Tin Plating									
1	2	.190 (4.83)	WM4000-ND	.24	1.98	14.13	56.50	93.79	22-03-2021
	3	.290 (7.37)	WM4001-ND	.36	3.14	20.90	83.60	138.78	22-03-2031
	4	.390 (9.91)	WM4002-ND	.44	3.89	25.93	103.70	172.14	22-03-2041
	5	.490 (12.45)	WM4003-ND	.53	4.64	30.93	123.70	205.34	22-03-2051
	6	.590 (14.99)	WM4004-ND	.61	5.40	35.98	143.90	238.87	22-03-2061
	7	.690 (17.53)	WM4005-ND	.70	6.20	41.33	165.30	274.40	22-03-2071
	8	.790 (20.07)	WM4006-ND	.70	6.20	41.33	165.30	274.40	22-03-2081
	9	.890 (22.61)	WM4007-ND	.78	6.88	45.88	183.50	304.61	22-03-2091
	10	.990 (25.15)	WM4008-ND	.78	6.90	45.98	183.90	305.27	22-03-2101
	11	1.090 (27.69)	WM4009-ND	.86	7.58	50.50	202.00	335.32	22-03-2111
	12	1.190 (30.23)	WM4010-ND	.93	8.19	54.58	218.30	362.38	22-03-2121
2	2	.190 (4.83)	WM4100-ND	.29	2.55	17.00	68.00	112.88	22-05-2021
	3	.290 (7.37)	WM4101-ND	.38	3.35	22.33	89.30	148.24	22-05-2031
	4	.390 (9.91)	WM4102-ND	.48	4.21	28.08	112.30	186.42	22-05-2041
	5	.490 (12.45)	WM4103-ND	.57	5.07	33.80	135.20	224.43	22-05-2051
	6	.590 (14.99)	WM4104-ND	.67	5.93	39.53	158.10	262.45	22-05-2061
	7	.690 (17.53)	WM4105-ND	.76	6.74	44.93	179.70	298.30	22-05-2071
	8	.790 (20.07)	WM4106-ND	.87	7.65	51.00	204.00	338.64	22-05-2081
	9	.890 (22.61)	WM4107-ND	.97	8.55	56.98	227.90	378.31	22-05-2091
	10	.990 (25.15)	WM4108-ND	.97	8.57	57.10	228.40	379.14	22-05-2101
	11	1.090 (27.69)	WM4109-ND	1.06	9.37	62.48	249.90	414.83	22-05-2111
	12	1.190 (30.23)	WM4110-ND	1.14	10.07	67.10	268.40	445.54	22-05-2121
3	2	.200 (5.08)	WM4200-ND	.29	2.55	17.00	68.00	112.88	22-23-2021
	3	.300 (7.62)	WM4201-ND	.37	3.24	21.63	86.50	143.59	22-23-2031
	4	.400 (10.16)	WM4202-ND	.44	3.89	25.93	103.70	172.14	22-23-2041
	5	.500 (12.70)	WM4203-ND	.51	4.49	29.90	119.60	198.54	22-23-2051
	6	.600 (15.24)	WM4204-ND	.57	5.02	33.48	133.90	222.27	22-23-2061
	7	.700 (17.78)	WM4205-ND	.65	5.77	38.48	153.90	255.47	22-23-2071
	8	.800 (20.32)	WM4206-ND	.74	6.53	43.50	174.00	288.84	22-23-2081
	9	.900 (22.86)	WM4207-ND	.82	7.22	48.13	192.50	319.55	22-23-2091
	10	1.000 (25.40)	WM4208-ND	.82	7.28	48.50	194.00	322.04	22-23-2101
	11	1.100 (27.94)	WM4209-ND	.90	7.95	53.03	212.10	352.09	22-23-2111
	12	1.200 (30.48)	WM4210-ND	.97	8.57	57.10	228.40	379.14	22-23-2121
4	2	.200 (5.08)	WM4300-ND	.47	4.16	27.73	110.90	184.09	22-05-3021
	3	.300 (7.62)	WM4301-ND	.61	5.40	35.98	143.90	238.87	22-05-3031
	4	.400 (10.16)	WM4302-ND	.76	6.68	44.53	178.10	295.65	22-05-3041
	5	.500 (12.70)	WM4303-ND	.82	7.22	48.13	192.50	319.55	22-05-3051
	6	.600 (15.24)	WM4304-ND	.90	7.97	53.13	212.50	352.75	22-05-3061
	7	.700 (17.78)	WM4305-ND	1.04	9.19	61.28	245.10	406.87	22-05-3071
	8	.800 (20.32)	WM4306-ND	1.08	8.89	63.53	254.10	421.81	22-05-3081
	9	.900 (22.86)	WM4307-ND	1.12	9.85	65.68	262.70	436.08	22-05-3091
	10	1.000 (25.40)	WM4308-ND	1.13	9.96	66.38	265.50	440.73	22-05-3101
	11	1.100 (27.94)	WM4309-ND	1.23	10.87	72.48	289.90	481.23	22-05-3111
	12	1.200 (30.48)	WM4310-ND	1.26	10.40	74.28	297.10	493.19	22-05-3121
.100" (2.54mm) Center Header Gold Plating									
1	2	.190 (4.83)	WM2722-ND	.53	4.70	31.30	125.20	207.83	22-10-2021
	3	.290 (7.37)	WM2723-ND	.73	6.04	43.13	172.50	286.35	22-10-2031
	4	.390 (9.91)	WM2724-ND	.95	7.79	55.68	222.70	369.68	22-10-2041
	5	.490 (12.45)	WM2725-ND	1.16	10.23	68.20	272.80	452.85	22-10-2051
	6	.590 (14.99)	WM2726-ND	1.37	12.06	80.38	321.50	533.69	22-10-2061
	7	.690 (17.53)	WM2727-ND	1.51	13.35	88.98	355.90	590.79	22-10-2071
	8	.790 (20.07)	WM2728-ND	1.72	15.17	101.13	404.50	671.47	22-10-2081
	9	.890 (22.61)	WM2729-ND	1.92	16.98	113.18	452.70	751.48	22-10-2091
	10	.990 (25.15)	WM2730-ND	2.12	18.72	124.80	499.20	828.67	22-10-2101
	11	1.090 (27.69)	WM2731-ND	2.34	20.62	137.48	549.90	912.83	22-10-2111
	12	1.190 (30.23)	WM2732-ND	2.53	22.35	148.98	595.90	989.19	22-10-2121

Fig.	Cir-cuits	Dim. A In. (mm)	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Molex Part No.
2	2	.190 (4.83)	WM2733-ND	.56	4.63	33.10	132.40	219.78	22-12-2021
	3	.290 (7.37)	WM2734-ND	.78	6.84	45.63	182.50	302.95	22-12-2031
	4	.390 (9.91)	WM2735-ND	.97	8.57	57.10	228.40	379.14	22-12-2041
	5	.490 (12.45)	WM2736-ND	1.19	10.50	69.98	279.90	464.63	22-12-2051
	6	.590 (14.99)	WM2737-ND	1.41	12.48	83.23	332.90	552.61	22-12-2061
	7	.690 (17.53)	WM2738-ND	1.63	14.42	96.10	384.40	638.10	22-12-2071
	8	.790 (20.07)	WM2739-ND	1.86	16.38	109.23	436.90	725.25	22-12-2081
	9	.890 (22.61)	WM2740-ND	2.08	18.33	122.23	488.90	811.57	22-12-2091
	10	.990 (25.15)	WM2741-ND	2.29	20.22	134.78	539.10	894.91	22-12-2101
	11	1.090 (27.69)	WM2742-ND	2.51	22.14	147.63	590.50	980.23	22-12-2111
	12	1.190 (30.23)	WM2743-ND	2.68	23.67	157.80	631.20	1047.79	22-12-2121
3	2	.200 (5.08)	WM2700-ND	.59	5.18	34.53	138.10	229.25	22-11-2022
	3	.300 (7.62)	WM2701-ND	.90	7.92	52.78	211.10	350.43	22-11-2032
	4	.400 (10.16)	WM2702-ND	.92	8.13	54.23	216.90	360.05	22-11-2042
	5	.500 (12.70)	WM2703-ND	1.27	11.19	74.63	298.50	495.51	22-11-2052
	6	.600 (15.24)	WM2704-ND	1.39	12.27	81.80	327.20	543.15	22-11-2062
	7	.700 (17.78)	WM2705-ND	1.60	14.15	94.30	377.20	626.15	22-11-2072
	8	.800 (20.32)	WM2706-ND	1.67	14.74	98.28	393.10	652.55	22-11-2082
	9	.900 (22.86)	WM2707-ND	1.87	16.51	110.08	440.30	730.90	22-11-2092
	10	1.000 (25.40)	WM2708-ND	2.07	18.23	121.53	486.10	806.93	22-11-2102
	11	1.100 (27.94)	WM2709-ND	2.27	20.00	133.33	533.30	885.28	22-11-2112
	12	1.200 (30.48)	WM2710-ND	2.46	21.72	144.80	579.20	961.47	22-11-2122
4	2	.200 (5.08)	WM2711-ND	.99	8.78	58.53	234.10	388.61	22-12-2024
	3	.300 (7.62)	WM2712-ND	1.25	11.03	73.53	294.10	488.21	22-12-2034
	4	.400 (10.16)	WM2713-ND	1.46	12.92	86.10	344.40	571.70	22-12-2044
	5	.500 (12.70)	WM2714-ND	1.60	14.15	94.30	377.20	626.15	22-12-2054
	6	.600 (15.24)	WM2715-ND	1.74	15.33	102.20	408.80	678.61	22-12-2064
	7	.700 (17.78)	WM2716-ND	1.89	16.65	111.00	444.00	737.04	22-12-2074
	8	.800 (20.32)	WM2717-ND	1.96	16.17	115.48	461.90	766.75	22-12-2084
	9	.900 (22.86)	WM2718-ND	2.20	19.39	129.28	517.10	858.39	22-12-2094
	10	1.000 (25.40)	WM2719-ND	2.43	21.45	143.00	572.00	949.52	22-12-2104
	11	1.100 (27.94)	WM2720-ND	2.67	21.96	156.88	627.50	1041.65	22-12-2114
	12	1.200 (30.48)	WM2721-ND	2.90	23.91	170.80	683.20	1134.11	22-12-2124
.100" (2.54mm) Center Crimp Terminal Housing (Contacts Sold Separately Below) With Locking Ramp and Polarizing Ribs									
5	2	.220 (5.59)	WM2000-ND	.22	1.91	12.70	50.80	84.33	22-01-3027
	3	.320 (8.13)	WM2001-ND	.27	2.39	15.90	63.60	105.58	22-01-3037
	4	.420 (10.67)	WM2002-ND	.33	2.92	19.48	77.90	129.31	22-01-3047
	5	.520 (13.21)	WM2003-ND	.39	3.46	23.08	92.30	153.22	22-01-3057
	6	.620 (15.75)	WM2004-ND	.45	3.99	26.63	106.50	176.79	22-01-3067
	7	.720 (18.29)	WM2005-ND	.51	4.53	30.23	120.90	200.69	22-01-3077
	8	.820 (20.83)	WM2006-ND	.58	5.16	34.38	137.50	228.25	22-01-3087
	9	.920 (23.37)	WM2007-ND	.63	5.55	37.03	148.10	245.85	22-01-3097
	10	1.020 (25.91)	WM2008-ND	.70	6.15	40.98	163.90	272.07	22-01-3107
	11	1.120 (28.45)	WM2009-ND	.75	6.63	44.20	176.80	293.49	22-01-3117
	12	1.220 (30.99)	WM2010-ND	.81	7.11	47.40	189.60	314.74	22-01-3127
With Locking Ramp									
5	2	.220 (5.59)	WM2011-ND	.20	1.74	11.60	46.40	77.02	22-01-2027
	3	.320 (8.13)	WM2012-ND	.25	2.22	14.83	59.30	98.44	22-01-2037
	4	.420 (10.67)	WM2013-ND	.30	2.66	17.70	70.80	117.53	22-01-2047
	5	.520 (13.21)	WM2014-ND	.36	3.14	20.90	83.60	138.78	22-01-2057
	6	.620 (15.75)	WM2015-ND	.40	3.57	23.78	95.10	157.87	22-01-2067
	7	.720 (18.29)	WM2016-ND	.46	4.09	27.28	109.10	181.11	22-01-2077
	8	.820 (20.83)	WM2017-ND	.51	4.53	30.23	120.90	200.69	22-01-2087
	9	.920 (23.37)	WM2018-ND	.56	4.97	33.10	132.40	219.78	22-01-2097
	10	1.020 (25.91)	WM2019-ND	.62	5.49	36.58	146.30	242.86	22-01-2107
	11	1.120 (28.45)	WM2020-ND	.67	5.91	39.43	157.70	261.78	22-01-2117
	12	1.220 (30.99)	WM2021-ND	.72	6.39	42.63	170.50	283.03	22-01-2127
Polarizing Key for .100" Housings			WM2400-ND		1.64/10	10.90/100	43.60/500		15-04-9209
Polarizing Peg for .100" Housings			WM2401-ND		1.64/10	10.90/100	43.60/500		15-04-9210

molex GC/Waldom

Crimp Terminals For .100" (2.54mm) Center Housings

Material: Brass, Plating: 200-300µ inch Hot-Tin Dip tin plating.

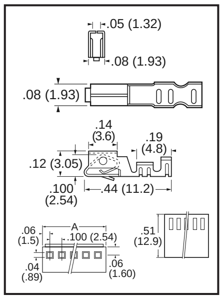


Description	Wire Size	Insulation Dia. (Inch)	Finish	Digi-Key Part No.	Pricing 10	100	500	Molex Part No.
For .100" Housings	22-30 22-30	.062 Max. .062 Max.	Tin Gold	WM2200-ND WM2312-ND	.63 2.40	5.04 19.17	21.00 79.88	08-50-0114 08-55-0102
Universal Crimp Tool (Molex)...............				WM9999-ND		36.19 each		63811-1000
Production Tool (Molex).....................				WM9915-ND		170.12 each		11-01-0185
Extraction Tool (Molex)......................				WM9927-ND		8.57 each		11-03-0022

molex GC/Waldom

.100" (2.54mm) High Pressure Terminal Housings

- Standard with locking ramp
- 94V-0 material
- Mates with .025" (0.64mm) Pins
- Up to 425 grams normal force
- Multiple contacting points
- Patented double cantilever with box shroud
- Accepts #22 to 30 AWG wire, .062" insulation dia.



Circuits	Dim. A Inch (mm)	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
1	.120 (3.05)	WM2600-ND	.25	2.08	14.83	10-11-2013
2	.220 (5.59)	WM2601-ND	.20	1.80	11.98	10-11-2023
3	.320 (8.13)	WM2602-ND	.26	2.13	15.20	10-11-2033
4	.420 (10.67)	WM2603-ND	.32	2.82	18.78	10-11-2043
5	.520 (13.21)	WM2604-ND	.37	3.30	22.00	10-11-2053
6	.620 (15.75)	WM2605-ND	.43	3.78	25.20	10-11-2063
7	.720 (18.29)	WM2606-ND	.48	4.27	28.48	10-11-2073
8	.820 (20.83)	WM2607-ND	.54	4.75	31.68	10-11-2083
9	.920 (23.37)	WM2608-ND	.59	5.24	34.90	10-11-2093
10	1.020 (25.91)	WM2609-ND	.65	5.77	38.48	10-11-2103
11	1.120 (28.45)	WM2610-ND	.71	6.26	41.70	10-11-2113
12	1.220 (30.99)	WM2611-ND	.76	6.74	44.93	10-11-2123
Crimp Terminal, 22-30, Tin/Copper Plating		WM2612-ND	—	1.68	13.47	08-50-0005

molex GC/Waldom

.156” Center Headers

.045” Square Pins

Dimensions Shown in Inches

The Molex KK® Concept utilizes a double cantilever contact design in mating with P.C. board pins. UL Recognized (File #29179), CSA Recognized (File 19980).

Voltage Rating: 250 VAC Max.
Current Rating: Up to 7 Amps (w/18 AWG wire)
Resistance: 20 milliohms max.

Dielectric Withstanding Voltage: 1500 VAC for 60 seconds
Storage Temperature: -40°C to 105°C
Material: 94V-0

Fig. 1 - **Straight Header**

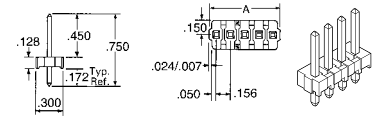


Fig. 2 - **Right Angle Header**

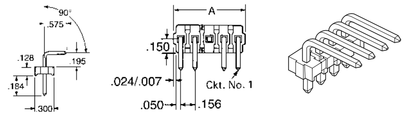


Fig. 3 - **Straight-Friction Lock Header for use with Locking Ramp only**

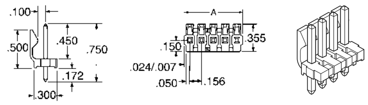


Fig. 4 - **Right Angle-Friction Lock Header for use with Locking Ramp only**

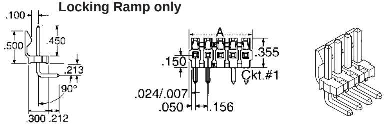


Fig. 5 - **Straight Friction Lock Header for use with Locking Ramp & Polarizing Ribs**

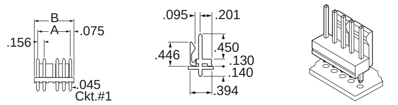


Fig. 6 - **Right Angle Friction Lock Header for use with Locking Ramp & Polarizing Ribs**

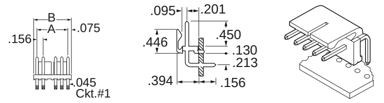


Fig. 7 - **Center Crimp Terminal Housing (contacts sold separately)**

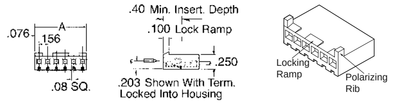
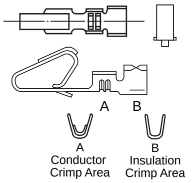


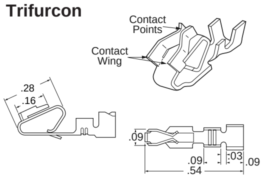
Fig.	Cir-cuits	Dim. (Inch) A	Dim. (Inch) B	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Molex Part No.
.156” Center Headers								
1	2	.267	—	WM4400-ND	.25	1.26	7.56	26-48-1021
	3	.423	—	WM4401-ND	.26	1.92	11.52	26-48-1031
	4	.579	—	WM4402-ND	.29	2.58	15.48	26-48-1041
	5	.735	—	WM4403-ND	.36	3.21	19.26	26-48-1051
	6	.891	—	WM4404-ND	.44	3.87	23.22	26-48-1061
	7	1.047	—	WM4405-ND	.51	4.53	27.18	26-48-1071
	8	1.203	—	WM4406-ND	.58	5.13	30.78	26-48-1081
	9	1.359	—	WM4407-ND	.66	5.85	35.10	26-48-1091
	10	1.515	—	WM4408-ND	.74	6.51	39.06	26-48-1101
	11	1.671	—	WM4409-ND	.81	7.11	42.66	26-48-1111
	12	1.827	—	WM4410-ND	.88	7.77	46.62	26-48-1121
2	2	.267	—	WM4500-ND	.25	1.47	8.82	26-48-1022
	3	.423	—	WM4501-ND	.25	2.19	13.14	26-48-1032
	4	.579	—	WM4502-ND	.33	2.94	17.64	26-48-1042
	5	.735	—	WM4503-ND	.41	3.60	21.60	26-48-1052
	6	.891	—	WM4504-ND	.50	4.38	26.28	26-48-1062
	7	1.047	—	WM4505-ND	.58	5.10	30.60	26-48-1072
	8	1.203	—	WM4506-ND	.66	5.85	35.10	26-48-1082
	9	1.359	—	WM4507-ND	.74	6.57	39.42	26-48-1092
	10	1.515	—	WM4508-ND	.83	7.32	43.92	26-48-1102
	11	1.671	—	WM4509-ND	.91	8.04	48.24	26-48-1112
	12	1.827	—	WM4510-ND	1.00	8.79	52.74	26-48-1122
3	2	.310	—	WM4600-ND	.25	1.62	9.72	26-48-1025
	3	.466	—	WM4601-ND	.28	2.43	14.58	26-48-1035
	4	.622	—	WM4602-ND	.37	3.24	19.44	26-48-1045
	5	.778	—	WM4603-ND	.47	4.11	24.66	26-48-1055
	6	.934	—	WM4604-ND	.56	4.92	29.52	26-48-1065
	7	1.090	—	WM4605-ND	.65	5.76	34.56	26-48-1075
	8	1.246	—	WM4606-ND	.75	6.60	39.60	26-48-1085
	9	1.402	—	WM4607-ND	.84	7.41	44.46	26-48-1095
	10	1.558	—	WM4608-ND	.94	8.25	49.50	26-48-1105
	11	1.714	—	WM4609-ND	1.03	9.06	54.36	26-48-1115
	12	1.870	—	WM4610-ND	1.12	9.87	59.22	26-48-1125
4	2	.310	—	WM4700-ND	.25	1.13	6.77	26-48-1026
	3	.466	—	WM4701-ND	.32	2.79	16.74	26-48-1036
	4	.622	—	WM4702-ND	.43	3.75	22.50	26-48-1046
	5	.778	—	WM4703-ND	.53	4.68	28.08	26-48-1056
	6	.934	—	WM4704-ND	.63	5.58	33.48	26-48-1066
	7	1.090	—	WM4705-ND	.75	6.60	39.60	26-48-1076
	8	1.246	—	WM4706-ND	.85	7.53	45.18	26-48-1086
	9	1.402	—	WM4707-ND	.96	8.49	50.94	26-48-1096
	10	1.558	—	WM4708-ND	1.07	9.42	56.52	26-48-1106
	11	1.714	—	WM4709-ND	1.18	10.38	62.28	26-48-1116
	12	1.870	—	WM4710-ND	1.28	11.28	67.68	26-48-1126
5	2	.156	.306	WM4620-ND	.25	2.02	14.02	26-60-4020
	3	.312	.462	WM4621-ND	.35	3.09	20.58	26-60-4030
	4	.468	.618	WM4622-ND	.44	3.84	25.60	26-60-4040
	5	.624	.774	WM4623-ND	.52	4.59	30.60	26-60-4050
	6	.780	.930	WM4624-ND	.61	5.34	35.60	26-60-4060
	7	.936	1.086	WM4625-ND	.69	6.09	40.63	26-60-4070
	8	1.092	1.242	WM4626-ND	.78	6.84	45.63	26-60-4080
	9	1.248	1.398	WM4627-ND	.86	7.60	50.68	26-60-4090
	10	1.404	1.554	WM4628-ND	.95	8.35	55.68	26-60-4100
	11	1.560	1.710	WM4629-ND	1.03	9.10	60.68	26-60-4110
	12	1.716	1.866	WM4630-ND	1.12	9.85	65.68	26-60-4120
6	2	.156	.306	WM4640-ND	.28	2.44	16.28	26-60-5020
	3	.312	.462	WM4641-ND	.37	3.24	21.63	26-60-5030
	4	.468	.618	WM4642-ND	.46	4.05	27.03	26-60-5040
6	5	.624	.774	WM4643-ND	.55	4.86	32.38	26-60-5050
	6	.780	.930	WM4644-ND	.71	6.26	41.70	26-60-5060
	7	.936	1.086	WM4645-ND	.73	6.47	43.13	26-60-5070
	8	1.092	1.242	WM4646-ND	.82	7.28	48.50	26-60-5080
	9	1.248	1.398	WM4647-ND	.92	8.08	53.88	26-60-5090
	10	1.404	1.554	WM4648-ND	1.01	8.88	59.23	26-60-5100
	11	1.560	1.710	WM4649-ND	1.10	9.69	64.60	26-60-5110
	12	1.716	1.866	WM4650-ND	1.19	10.50	69.98	26-60-5120
.156” Center Headers - Gold								
1	2	.267	—	WM5002-ND	.66	5.85	35.10	26-48-2021
	3	.423	—	WM5003-ND	.99	8.70	52.20	26-48-2031
	4	.579	—	WM5004-ND	1.32	11.64	69.84	26-48-2041
	5	.735	—	WM5005-ND	1.65	14.55	87.30	26-48-2051
	6	.891	—	WM5006-ND	1.98	17.49	104.94	26-48-2061
	7	1.047	—	WM5007-ND	2.31	20.40	122.40	26-48-2071
	8	1.203	—	WM5008-ND	2.64	23.28	139.68	26-48-2081
	9	1.359	—	WM5009-ND	2.97	26.19	157.14	26-48-2091
	10	1.515	—	WM5010-ND	3.30	29.13	174.78	26-48-2101
	11	1.671	—	WM5011-ND	3.63	32.04	192.24	26-48-2111
	12	1.827	—	WM5012-ND	3.96	34.98	209.88	26-48-2121
2	2	.267	—	WM5102-ND	.79	6.96	41.76	26-48-2022
	3	.423	—	WM5103-ND	1.19	10.47	62.82	26-48-2032
	4	.579	—	WM5104-ND	1.58	13.92	83.52	26-48-2042
	5	.735	—	WM5105-ND	1.98	17.43	104.58	26-48-2052
	6	.891	—	WM5106-ND	2.37	20.91	125.46	26-48-2062
	7	1.047	—	WM5107-ND	2.77	24.42	146.52	26-48-2072
	8	1.203	—	WM5108-ND	3.15	27.81	166.86	26-48-2082
	9	1.359	—	WM5109-ND	3.55	31.32	187.92	26-48-2092
	10	1.515	—	WM5110-ND	3.94	34.77	208.62	26-48-2102
	11	1.671	—	WM5111-ND	4.34	38.28	229.68	26-48-2112
	12	1.827	—	WM5112-ND	4.74	41.79	250.74	26-48-2122
3	2	.310	—	WM5200-ND	.68	6.00	36.00	26-48-2025
	3	.466	—	WM5201-ND	1.02	9.00	54.00	26-48-2035
	4	.622	—	WM5202-ND	1.37	12.06	72.36	26-48-2045
	5	.778	—	WM5203-ND	1.71	15.06	90.36	26-48-2055
	6	.934	—	WM5204-ND	2.04	18.00	108.00	26-48-2065
	7	1.090	—	WM5205-ND	2.39	21.06	126.36	26-48-2075
	8	1.246	—	WM5206-ND	2.73	24.06	144.36	26-48-2085
	9	1.402	—	WM5207-ND	3.06	27.00	162.00	26-48-2095
	10	1.558	—	WM5208-ND	3.41	30.06	180.36	26-48-2105
	11	1.714	—	WM5209-ND	3.75	33.06	198.36	26-48-2115
	12	1.870	—	WM5210-ND	4.09	36.09	216.54	26-48-2125
4	2	.310	—	WM5212-ND	.91	8.04	48.24	26-48-2026
	3	.466	—	WM5213-ND	1.36	12.00	72.00	26-48-2036
	4	.622	—	WM5214-ND	1.82	16.02	96.12	26-48-2046
	5	.778	—	WM5215-ND	2.26	19.98	119.88	26-48-2056
	6	.934	—	WM5216-ND	2.73	24.06	144.36	26-48-2066
	7	1.090	—	WM5217-ND	3.18	28.02	168.12	26-48-2076
	8	1.246	—	WM5218-ND	3.62	31.98	191.88	26-48-2086
	9	1.402	—	WM5219-ND	4.08	36.00	216.00	26-48-2096
	10	1.558	—	WM5220-ND	4.54	40.02	240.12	26-48-2106
	11	1.714	—	WM5221-ND	4.98	43.98	263.88	26-48-2116
	12	1.870	—	WM5222-ND	5.44	48.00	288.00	26-48-2126
5	2	.156	.306	WM5224-ND	.89	7.82	52.10	26-61-4020
	3	.312	.462	WM5225-ND	1.27	11.25	74.98	26-61-4030
	4	.468	.618	WM5226-ND	1.62	14.25	95.03	26-61-4040
	5	.624	.774	WM5227-ND	2.00	17.67	117.80	26-61-4050
	6	.780	.930	WM5228-ND	2.38	21.00	139.98	26-61-4060
	7	.936	1.086	WM5229-ND	2.76	24.38	162.53	26-61-4070
5	8	1.092	1.242	WM5230-ND	3.12	27.57	183.80	26-61-4080
	9	1.248	1.398	WM5231-ND	3.50	30.90	206.00	26-61-4090
	10	1.404	1.554	WM5232-ND	3.89	34.28	228.55	26-61-4100
	11	1.560	1.710	WM5233-ND	4.26	37.61	250.75	26-61-4110
	12	1.716	1.866	WM5234-ND	4.66	41.08	273.88	26-61-4120
6	2	.156	.306	WM5235-ND	1.01	8.91	59.43	26-61-5020
	3	.312	.462	WM5236-ND	1.45	12.80	85.35	26-61-5030
	4	.468	.618	WM5237-ND	1.85	16.35	108.98	26-61-5040
	5	.624	.774	WM5238-ND	2.28	20.16	134.38	26-61-5050
	6	.780	.930	WM5239-ND	2.73	24.08	160.55	26-61-5060
	7	.936	1.086	WM5240-ND	3.17	27.98	186.50	26-61-5070
	8	1.092	1.242	WM5241-ND	3.60	31.79	211.90	26-61-5080
	9	1.248	1.398	WM5242-ND	4.04	35.63	237.50	26-61-5090
	10	1.404	1.554	WM5243-ND	4.48	39.52	263.48	26-61-5100
	11	1.560	1.710	WM5244-ND	4.91	43.31	288.70	26-61-5110
	12	1.716	1.866	WM5245-ND	5.35	47.17	314.45	26-61-5120
.156” Center Crimp Terminal Housing (Contacts Sold Separately Below) w/Locking Ramp – 94V-2 Nylon								
7	2	.310	—	WM2100-ND	.22	1.78	12.70	09-50-3021
	3	.460	—	WM2101-ND	.28	2.28	16.28	09-50-3031
	4	.620	—	WM2102-ND	.34	2.98	19.88	09-50-3041
	5	.780	—	WM2103-ND	.40	3.51	23.43	09-50-3051
	6	.930	—	WM2104-ND	.46	4.05	27.03	09-50-3061
	7	1.090	—	WM2105-ND	.52	4.59	30.60	09-50-3071
	8	1.240	—	WM2106-ND	.58	5.13	34.18	09-50-3081
	9	1.400	—	WM2107-ND	.64	5.67	37.78	09-50-3091
	10	1.560	—	WM2108-ND	.72	6.37	42.48	09-50-3101
	11	1.710	—	WM2109-ND	.76	6.74	44.93	09-50-3111
	12	1.870	—	WM2110-ND	.84	7.45	49.65	09-50-3121
With Locking Ramp and Polarizing Ribs – 94V-0 Polyester								
7	2	.340	—	WM2111-ND	.23	1.93	13.78	09-50-8023
	3	.500	—	WM2112-ND	.31	2.71	18.08	09-50-8033
	4	.650	—	WM2113-ND	.37	3.30	22.00	09-50-8043
	5	.810	—	WM2114-ND	.45	3.68	26.30	09-50-8053
	6	.970	—	WM2115-ND	.51	4.53	30.23	09-50-8063
	7	1.120	—	WM2116-ND	.59	5.18	34.53	09-50-8073
	8	1.280	—	WM2117-ND	.65	5.72	38.10	09-50-8083
	9	1.430	—	WM2118-ND	.72	6.36	42.40	09-50-8093
	10	1.600	—	WM2119-ND	.79	6.96	46.38	09-50-8103
	11	1.750	—	WM2120-ND	.86	7.60	50.68	09-50-8113
	12	1.900	—	WM2121-ND	.93	8.25	54.98	09-05-8123
With Locking Ramp – 94V-0 Polyester								
7	2	.340	—	WM2122-ND	.22	1.82	13.03	09-50-8021
	3	.500	—	WM2123-ND	.29	2.43	17.33	09-50-8031
	4	.650	—	WM2124-ND	.36	3.14	20.90	09-50-8041
	5	.810	—	WM2125-ND	.42	3.73	24.88	09-50-8051
	6	.970	—	WM2126-ND	.48	4.27	28.48	09-50-8061
	7	1.120	—	WM2127-ND	.56	4.91	32.73	09-50-8071
	8	1.280	—	WM2128-ND	.62	5.45	36.33	09-50-8081
	9	1.430	—	WM2129-ND	.68	6.04	40.28	09-50-8091
	10	1.600	—	WM2130-ND	.75	6.57	43.83	09-50-8101
	11	1.750	—	WM2131-ND	.81	7.17	47.80	09-50-8111
	12	1.900	—	WM2132-ND	.88	7.76	51.70	09-50-8121
Polarizing Key for .156” Housings				WM2402-ND	.23/1	2.07/10		15-04-0219
Polarizing Peg for .156” Housings				WM2403-ND	.23/1	2.07/10		15-04-0220
Polarizing Key for .156” Friclock Housings				WM2404-ND	.22/1	1.95/10		15-04-0297

Crimp Terminals for .156” Center Housings

Plating: 200-300µ” Hot-Tin Dip tin plating or 15µ” of Select Gold



Trifurcon



Description	Material	Wire Size	Insulation Dia. (Inch)	Finish	Digi-Key Part No.	Pricing 10	Pricing 100	Pricing 500	Molex Part No.
For .156” Housings	Brass	18-24	.110 Max.	Tin	WM2300-ND*	.60	4.83	20.13	08-50-0106
	Brass	22-26	.065 Max.	Tin	WM2301-ND*	.48	3.81	15.88	08-50-0108
	Bronze	18-24	.110	Tin	WM2302-ND*	.81	6.48	27.00	08-52-0072
	Bronze	22-26	.065	Tin	WM2303-ND*	.60	4.77	19.88	08-50-0134
	Brass	18-24	.110	Gold	WM2305-ND*	6.44	51.48	214.50	08-56-0106
	Brass	22-26	.065	Gold	WM2306-ND*	6.44	51.48	214.50	08-56-0108
	Bronze	18-20	.110	Gold	WM2304-ND*	6.66	53.28	222.00	08-58-0122
	Bronze	22-26	.065	Gold	WM2307-ND*	6.66	53.28	222.00	08-58-0126
	Trifurcon	18-20	.110	Tin	WM2313-ND†	.87	6.93	28.88	08-52-0113
	Trifurcon	22-26	.065	Tin	WM2314-ND†	.88	7.02	29.25	08-52-0125
Hand Tool (Waldom)					WM9903-ND		12.48 each		W-HT-1919
Universal Crimp Tool (Molex)					WM9999-ND		36.19 each		63811-1000
Extraction Tool (Molex)					WM9928-ND		8.57 each		11-03-0016
Production Tool (Molex)					WM9926-ND *NEW!*		170.32 each		63811-2200
Production Tool (Molex)					WM9914-ND *NEW!*		170.32 each		63811-2300

*For use with WM9926-ND crimp tool.

†For use with WM9914-ND crimp tool.

molex GC/Waldom "Toy Car" Battery Connector

Fig. 1 – Plug

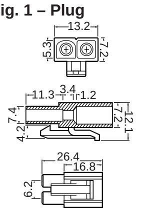


Fig. 2 – Socket

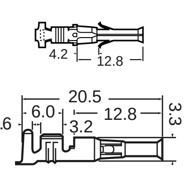


Fig. 3 – Receptacle

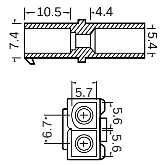
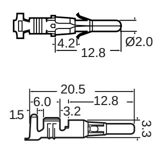


Fig. 4 – Pin

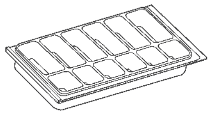


- 15 Amp current rating per circuit
- 300V voltage rating
- 14-20 AWG wire range
- Nylon 6/6 housing 94V-2
- Industry standard product for radio controlled toy cars

Fig.	Digi-Key Part No.	Pricing 1	10	50	100	Molex Part No.
1	WM2308-ND	.41	3.87	16.92	24.18	351-43-0201
2	WM2311-ND	.09	.88	3.87	5.53	357-28-0201
3	WM2309-ND	.40	3.75	16.40	23.43	351-41-0201
4	WM2310-ND	.11	1.01	4.41	6.30	357-27-0201

WM9999-ND Universal Crimp Tool (Waldom) .... **$36.19 each**

molex GC/Waldom Crimp Terminal Connector Kits



WM9803 Kit Qty.	Item	WM9804 Kit Qty.
36	Crimp Terminal Housings	48
18	Straight Headers	24
18	Right Angle Headers	24
10	Shunts	—
100	Crimp Term (22-30 AWG)	—
—	Crimp Term (18-24 AWG)	100
—	Crimping Tool HT-1919	1
1	Crimping Tool HT-1921	—
1	Extractor Tool HT-1884	1

Description	Digi-Key Part No.	Price	Molex Part No.
.100" Connector Kit	WM9803-ND	36.50	KK-100
.156" Connector Kit	WM9804-ND	36.75	KK-156

molex GC/Waldom C-Grid™ SL .100 Pocket Headers

• **Plating:** 15 microinches min. gold. **MATERIAL:** • **Pins:** .025"square, phosphor bronze. • **Insulator**: UL 94V-0 glass filled PCT, black; Vapor phase and infrared process compatible. **ELECTRICAL**: • **Current Rating**: 3 amps. • **Insulation Resistance:** 1,000 megaohms. • **Dielectric Strength:** 600 VAC r.m.s for 1 minute. **ENVIRONMENTAL**: • **Operating Temperature:** -40°C to +125°C. • UL Listed & CSA Certified.

Fig. 1 – Straight Header,
Mates with "G" Version

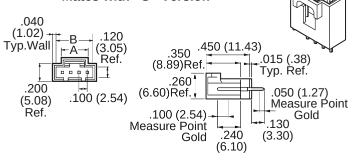


Fig. 2 – Right Angle Header,
Mates with "G" Version

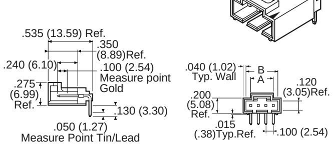


Fig. 3 – "G" Version, End-to-End Stackable (Use C-Grid Crimp Terminals sold below)

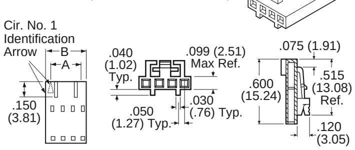


Fig. 4 – "A" Version (Use C-Grid Crimp Terminals sold below)

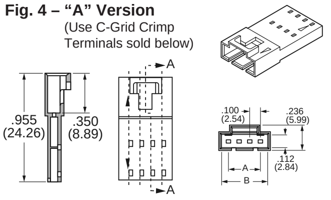


Fig.	Circuits	Dim. – Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part. No.
1	2	.100 (2.54)	.210 (5.33)	WM4800-ND	.84	7.05	55.93	223.70	705-43-0001
	3	.200 (5.08)	.320 (8.13)	WM4801-ND	.84	7.02	55.68	222.70	705-43-0002
	4	.300 (7.62)	.420 (10.67)	WM4802-ND	.90	7.58	60.13	240.50	705-43-0003
	5	.400 (10.16)	.520 (13.21)	WM4803-ND	1.04	8.73	69.33	277.30	705-43-0004
	6	.500 (12.70)	.620 (15.75)	WM4804-ND	1.05	8.83	70.10	280.40	705-43-0005
	7	.600 (15.24)	.720 (18.29)	WM4805-ND	1.30	10.37	86.38	345.50	705-43-0006
	8	.700 (17.78)	.820 (20.83)	WM4806-ND	1.39	11.66	92.55	370.20	705-43-0007
	9	.800 (20.32)	.920 (23.37)	WM4807-ND	1.48	12.44	98.73	394.90	705-43-0008
	10	.900 (22.86)	1.020 (25.91)	WM4808-ND	1.57	13.22	104.93	419.70	705-43-0009
2	2	.100 (2.54)	.210 (5.33)	WM4900-ND	.71	5.95	47.20	188.80	705-53-0001
	3	.200 (5.08)	.320 (8.13)	WM4901-ND	.93	7.78	61.73	246.90	705-53-0002
	4	.300 (7.62)	.420 (10.67)	WM4902-ND	.96	8.08	64.15	256.60	705-53-0003
	5	.400 (10.16)	.520 (13.21)	WM4903-ND	1.11	9.36	74.33	297.30	705-53-0004
	6	.500 (12.70)	.620 (15.75)	WM4904-ND	1.12	9.38	74.45	297.80	705-53-0005
	7	.600 (15.24)	.720 (18.29)	WM4905-ND	1.30	10.88	86.38	345.50	705-53-0006
	8	.700 (17.78)	.820 (20.83)	WM4906-ND	1.39	11.66	92.55	370.20	705-53-0007
	9	.800 (20.32)	.920 (23.37)	WM4907-ND	1.48	12.44	98.73	394.90	705-53-0008
	10	.900 (22.86)	1.020 (25.91)	WM4908-ND	1.57	12.59	104.93	419.70	705-53-0009
3	2	.100 (2.54)	.199 (5.05)	WM2900-ND	.51	4.49	29.90	119.60	50-57-9402
	3	.200 (5.08)	.299 (7.59)	WM2901-ND	.68	5.99	39.90	159.60	50-57-9403
	4	.300 (7.62)	.399 (10.13)	WM2902-ND	.50	4.38	29.18	116.70	50-57-9404
	5	.400 (10.16)	.499 (12.67)	WM2903-ND	.61	5.40	35.98	143.90	50-57-9405
	6	.500 (12.70)	.599 (15.21)	WM2904-ND	.70	6.20	41.33	165.30	50-57-9406
	7	.600 (15.24)	.699 (17.75)	WM2905-ND	.79	7.01	46.70	186.80	50-57-9407
	8	.700 (17.78)	.799 (20.29)	WM2906-ND	.85	7.54	50.28	201.10	50-57-9408
	9	.800 (20.32)	.899 (22.83)	WM2907-ND	.87	7.65	51.00	204.00	50-57-9409
	10	.900 (22.86)	.999 (25.37)	WM2908-ND	.87	7.71	51.38	205.50	50-57-9410
4	2	.100 (2.54)	.220 (5.59)	WM2533-ND	.95	8.40	56.00	224.00	70107-0001
	3	.200 (5.08)	.320 (8.13)	WM2534-ND	.96	8.51	56.73	226.90	70107-0002
	4	.300 (7.62)	.420 (10.67)	WM2535-ND	.99	8.73	58.18	232.70	70107-0003
	5	.400 (10.16)	.520 (13.21)	WM2536-ND	1.13	9.96	66.38	265.50	70107-0004
	6	.500 (12.70)	.620 (15.75)	WM2537-ND	1.46	12.92	86.10	344.40	70107-0005
	7	.600 (15.24)	.720 (18.29)	WM2538-ND	1.48	13.07	87.13	348.50	70107-0006
	8	.700 (17.78)	.820 (20.83)	WM2539-ND	1.52	13.41	89.43	357.70	70107-0007
	9	.800 (20.32)	.920 (23.37)	WM2540-ND	1.55	13.67	91.10	364.40	70107-0008
	10	.900 (22.86)	1.020 (25.91)	WM2541-ND	1.61	14.21	94.70	378.80	70107-0009

molex GC/Waldom C-Grid™ Crimp Connector Housings

Fig. 1 – "A" Version

"A" Version, Non-Polarized, End-to-End & Side-by-Side Stackable. Mates w/ Unshrouded Headers.

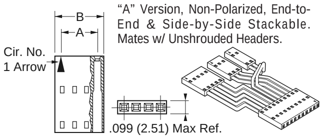


Fig. 2 – "A" Version

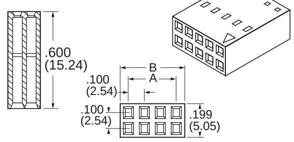


Fig.	Circuits	Dim. – Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part. No.
1	2	.100 (2.54)	.199 (5.05)	WM2800-ND	.54	4.80	32.03	128.10	50-57-9002
	3	.200 (5.08)	.299 (7.59)	WM2801-ND	.68	5.99	39.90	159.60	50-57-9003
	4	.300 (7.62)	.399 (10.13)	WM2802-ND	.70	6.20	41.33	165.30	50-57-9004
	5	.400 (10.16)	.499 (12.67)	WM2803-ND	.74	6.49	43.25	173.00	50-57-9005
	6	.500 (12.70)	.599 (15.21)	WM2804-ND	.77	6.79	45.28	181.10	50-57-9006
	7	.600 (15.24)	.699 (17.75)	WM2805-ND	.81	7.17	47.80	191.20	50-57-9007
	8	.700 (17.78)	.799 (20.29)	WM2806-ND	.85	7.54	50.28	201.10	50-57-9008
	9	.800 (20.32)	.899 (22.83)	WM2807-ND	.91	8.03	53.53	214.10	50-57-9009
	10	.900 (22.86)	.999 (25.37)	WM2808-ND	.95	8.40	56.00	224.00	50-57-9010
2	4	.100 (2.54)	.199 (5.05)	WM2519-ND	1.87	16.46	109.73	438.90	22-55-2041
	6	.200 (5.08)	.299 (7.59)	WM2520-ND	1.62	14.25	95.03	380.10	22-55-2061
	8	.300 (7.62)	.399 (10.13)	WM2521-ND	2.04	18.02	120.10	480.40	22-55-2081
	10	.400 (10.16)	.499 (12.67)	WM2522-ND	2.13	18.81	125.43	501.70	22-55-2101
	12	.500 (12.70)	.599 (15.21)	WM2523-ND	2.22	19.57	130.48	521.90	22-55-2121
	14	.600 (15.24)	.699 (17.75)	WM2524-ND	2.31	20.37	135.83	543.30	22-55-2141
	16	.700 (17.78)	.799 (20.29)	WM2525-ND	2.39	21.08	140.50	562.00	22-55-2161
	18	.800 (20.32)	.899 (22.83)	WM2526-ND	2.47	21.83	145.50	582.00	22-55-2181
	20	.900 (22.86)	.999 (25.37)	WM2527-ND	2.57	22.64	150.90	603.60	22-55-2201
	22	1.000 (25.40)	1.099 (27.91)	WM2528-ND	2.65	23.39	155.90	623.60	22-55-2221
	24	1.100 (27.95)	1.199 (30.45)	WM2529-ND	2.74	24.19	161.28	645.10	22-55-2241
	30	1.400 (35.56)	1.499 (38.07)	WM2530-ND	2.97	26.23	174.88	699.50	22-55-2301
	40	1.900 (48.26)	1.999 (50.77)	WM2531-ND	3.44	30.31	202.08	808.30	22-55-2401
	50	2.400 (60.96)	2.499 (63.47)	WM2532-ND	3.87	34.13	227.50	910.00	22-55-2501

molex GC/Waldom C-Grid™ Box Crimp Terminals

Loose Form. • **Terminal Material:** Phosphor Bronze. • **Current Rating:** 3.0 Amps (24AWG) 30°C Rise Over Ambient, UL Listed & CSA Certified.

Fig. 1

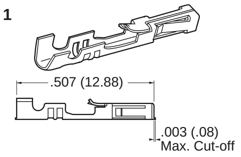


Fig. 2

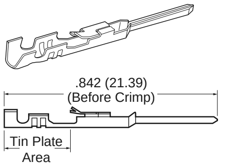


Fig.	Wire Range	Insul. Dia. Inch (mm)	Plating	Digi-Key Part No.	Pricing 10	100	500	1,000	Molex Part No.
1	22-24	.064 (1.63)	Tin‡	WM2510-ND	.85	7.05	28.20	46.81	16-02-0102
	24-30	.060 (1.52)	Tin‡	WM2511-ND	.85	7.05	28.20	46.81	16-02-0096
	22-24	.064 (1.63)	Gold†	WM2512-ND	1.26	10.53	42.10	69.89	16-02-0103
	24-30	.060 (1.52)	Gold†	WM2513-ND	1.26	10.53	42.10	69.89	16-02-0097
	22-24	.064 (1.63)	Tin‡	WM2556-ND*	1.13	9.38	37.50	62.25	16-02-1114
	24-30	.060 (1.52)	Tin‡	WM2557-ND*	1.13	9.38	37.50	62.25	16-02-1116
	22-24	.064 (1.63)	Gold†	WM2554-ND*	1.78	14.85	59.40	98.60	16-02-1125
	24-30	.060 (1.52)	Gold†	WM2555-ND*	1.78	14.85	59.40	98.60	16-02-1109
2	22-24	.064 (1.63)	Tin‡	WM2517-ND	.85	7.05	28.20	46.81	16-02-0114
	24-30	.060 (1.52)	Tin‡	WM2518-ND	.85	7.05	28.20	46.81	16-02-0108
	22-24	.064 (1.63)	Gold†	WM2515-ND	1.36	11.33	45.30	75.20	16-02-0115
	24-30	.060 (1.52)	Gold†	WM2516-ND	1.35	11.25	45.00	74.70	16-02-0109
Universal Crimp Tool (Molex)				WM9999-ND	36.19 each				63811-1000
C-Grid Hand Crimper 22-24 & 32-36 AWG				WM9917-ND	170.12 each				11-01-0208
C-Grid Hand Crimper 24 - 30 AWG				WM9919-ND	170.12 each				11-01-0209
Insertion Tool				WM9911-ND	8.76 each				11-02-0022

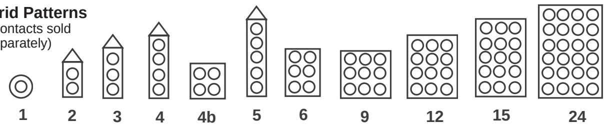
‡ 150 µ in. tin/lead over 50 µ in. nickel overall.
† 15 µ in. min. gold in select area over 50 µ in. min. nickel overall with 75 µ in. min. tin/lead in select area.
* High pressure type for low pin count.

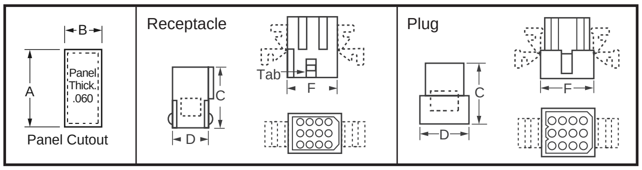
molex GC/Waldom Power Connectors

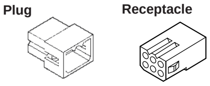
.062” Diameter Connectors

• UL File Number E-29179; CSA File Number LR-19980 • Up to 5 amperes per circuit* • 250 Volt rating*
• Friction lock • Standard color is natural (**Ratings based on fully loaded housings.)*

Grid Patterns
(Contacts sold separately)







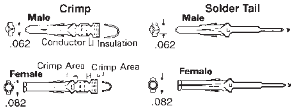
Cable Connector Designer Kit
WM9800-ND — Contains all parts needed to assemble male and female connectors from single-circuit to 36-circuit designs (250V and up to 5A/circuit); totals 56 connectors. All have pin terminal size .062" dia. with crimping tool, pin terminal ejector and case **$34.69**

Grid. Space	Circ. (a)	Type	Max. Amp	Max. V.	Dimensions (Inch) A	B	C	D	F	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
.062” Diameter Connector Housings — with Detent Only, Free Hanging														
.145"	1	Plug	5	250	—	—	.750	—	—	WM1201-ND	.25	2.03	14.48	03-06-2011
		Receptacle	5	250	—	—	.780	—	.183	WM1200-ND	.26	2.15	15.38	03-06-1011
	2	Plug	5	250	.609	.318	.780	.300	.440	WM1220-ND	.27	2.19	15.63	03-06-2023
		Receptacle	5	250	.505	.265	.810	.192	.340	WM1230-ND	.34	2.77	19.80	03-06-1023
	3	Plug	5	250	.754	.318	.750	.300	.590	WM1221-ND	.39	3.23	23.08	03-06-2032
		Receptacle	5	250	.650	.265	.780	.192	.484	WM1231-ND	.41	3.36	23.98	03-06-1032
	4	Plug	5	250	.865	.312	.750	.295	.730	WM1222-ND	.51	4.23	30.23	03-06-2042
		Receptacle	5	250	.785	.260	.780	.192	.630	WM1232-ND	.51	4.23	30.23	03-06-1042
	4 (b)	Plug	5	250	.615	.465	.750	.442	.442	WM1223-ND	.51	4.23	30.23	03-06-2044
		Receptacle	5	250	.506	.400	.750	.339	.339	WM1233-ND	.51	4.23	30.23	03-06-1044
	5	Plug	5	250	1.044	.318	.750	.310	.890	WM1224-ND	.52	4.26	30.43	03-06-2055
		Receptacle	5	250	.940	.265	.780	.192	.775	WM1234-ND	.63	5.19	37.08	03-06-1056
	6	Plug	5	250	.615	.607	.750	.600	.450	WM1225-ND	.64	5.29	37.78	03-06-2061
		Receptacle	5	250	.552	.505	.780	.494	.344	WM1235-ND	.64	5.29	37.78	03-06-1062
	9	Plug	5	250	.752	.615	.750	.590	.590	WM1226-ND	.65	5.39	38.53	03-06-2092
		Receptacle	5	250	.650	.552	.780	.494	.489	WM1236-ND	.65	5.39	38.53	03-06-1092
	12	Plug	5	250	.903	.614	.750	.590	.740	WM1227-ND	.67	5.49	39.23	03-06-2122
		Receptacle	5	250	.795	.563	.780	.494	.634	WM1237-ND	.67	5.49	39.23	03-06-1122
	15	Plug	5	250	1.042	.614	.750	.590	.880	WM1228-ND	.79	6.49	46.38	03-06-2152
		Receptacle	5	250	.934	.563	.780	.487	.776	WM1238-ND	.79	6.49	46.38	03-06-1152
	24	Plug	5	250	1.182	.765	.750	.740	1.040	WM1229-ND	1.86	15.32	109.43	03-06-2242
.062” Diameter Connector Housings – with Mounting Ears & Detent, Panel Mount														
.145"	2	Plug	5	250	.609	.318	.780	.300	.440	WM1203-ND	.33	2.73	19.48	03-06-2024
		Receptacle	5	250	.505	.265	.810	.192	.340	WM1202-ND	.33	2.73	19.48	03-06-1022
	3	Plug	5	250	.754	.318	.750	.300	.590	WM1205-ND	.39	3.23	23.08	03-06-2033
		Receptacle	5	250	.650	.265	.780	.192	.484	WM1204-ND	.41	3.36	23.98	03-06-1038
	4	Plug	5	250	.865	.312	.750	.295	.730	WM1207-ND	.51	4.23	30.23	03-06-2041
		Receptacle	5	250	.785	.260	.780	.192	.630	WM1206-ND	.53	4.36	31.13	03-06-1041
	4 (b)	Plug	5	250	.615	.465	.750	.442	.442	WM1209-ND	.51	4.23	30.23	03-06-2043
		Receptacle	5	250	.506	.400	.750	.339	.339	WM1208-ND	.51	4.23	30.23	03-06-1043
	5	Plug	5	250	1.044	.318	.750	.310	.890	WM1240-ND	.63	5.19	37.08	03-06-2054
		Receptacle	5	250	.940	.265	.780	.192	.775	WM1241-ND	.63	5.19	37.08	03-06-1055
	6	Plug	5	250	.615	.607	.750	.600	.450	WM1211-ND	.64	5.29	37.78	03-06-2062
		Receptacle	5	250	.552	.505	.780	.494	.344	WM1210-ND	.64	5.29	37.78	03-06-1061
	9	Plug	5	250	.752	.615	.750	.590	.590	WM1213-ND	.65	5.39	38.53	03-06-2091
		Receptacle	5	250	.650	.552	.780	.494	.489	WM1212-ND	.65	5.39	38.53	03-06-1091
	12	Plug	5	250	.903	.614	.750	.590	.740	WM1215-ND	.67	5.49	39.23	03-06-2121
		Receptacle	5	250	.795	.563	.780	.494	.634	WM1214-ND	.67	5.49	39.23	03-06-1121
	15	Plug	5	250	1.042	.614	.750	.590	.880	WM1217-ND	.79	6.49	46.38	03-06-2151
	24	Plug	5	250	1.182	.765	.750	.740	1.040	WM1219-ND	1.86	15.32	109.43	03-06-2241
		Receptacle	5	250	1.079	.715	.750	.634	.918	WM1218-ND	1.80	14.82	105.83	03-06-1241

(a) Electrical ratings are per circuit. (b) 4 circuits in square grid pattern.

.062” Terminals

Use with .062" housings. **Temperature Range:** -40°C to 105°C • .008" stock 70/30 brass. **High Volt. Test:** Withstands 1500 volts RMS for 60 seconds. **Current Rating:** Amperage rating 5 amps. **Storage Temp. Range:** -40°C to 125°C. **Plating:** 200-300µ Hot-Tin Dip tin plating.



Description	Wire Size	Insulation Dia. (Inch)	Digi-Key Part No.	Pricing 10	100	500	Molex Part No.
Male, Crimp Type	18-24	.060/.120	WM1000-ND	.69	5.52	23.00	02-06-2103
Female, Crimp Type	18-24	.060/.120	WM1001-ND	.73	5.82	24.25	02-06-1103
Male, Crimp Type	24-30	.040/.090	WM1002-ND	.69	5.52	23.00	02-06-2132
Female, Crimp Type	24-30	.040/.090	WM1003-ND	.69	5.52	23.00	02-06-1132
Male, PCB Solder-Tail	—	—	WM1004-ND	1.38	11.04	46.00	02-06-8103
Female, PCB Solder-Tail	—	—	WM1005-ND	1.38	11.04	46.00	02-06-7103
Male, Crimp Type	18-24	.060/.120	WM1006-ND*	5.09	40.74	169.75	02-06-6103
Male, Crimp Type	24-30	.040/.090	WM1007-ND*	5.09	40.74	169.75	02-06-6135
Female, Crimp Type	18-24	.060/.120	WM1008-ND*	5.09	40.74	169.75	02-06-5103
Female, Crimp Type	24-30	.040/.090	WM1009-ND*	5.09	40.74	169.75	02-06-5135
Male, PCB	—	—	WM1010-ND*	6.28	50.22	209.25	02-06-6122
Female, PCB	—	—	WM1011-ND*	6.28	50.22	209.25	02-06-7104
Hand Tool (Waldom)	—	—	WM9900-ND	12.48 each			W-HT-1921
Universal Crimp Tool (Molex)	—	—	WM9999-ND	36.19 each			63811-1000
Production Tool (Molex)	—	—	WM9922-ND	170.14 each			11-01-0008
Extraction Tool (Molex)	—	—	WM9929-ND	17.14 each			11-03-0002

*15µ Select Gold Finish

.084” Power Connectors

Features: • Intermateable, intermountable, and interchangeable with industry standard versions • Cross tested to assure industry compatibility • UL recognized, CSA certified • Up to 13.5 amperes per circuit (30°C rise)* • 600 Volt rating* • Positive locks • Fully isolated contacts • Circuit I.D. grooves to reduce assembly errors • Anti-stress positioning tabs to reduce breakage

Grid Pattern

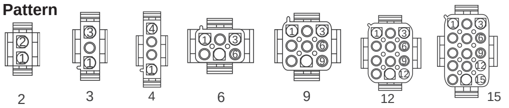


Fig. 1 - Plug

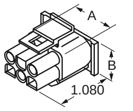


Fig. 2 - Cap

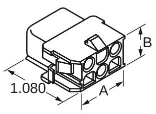
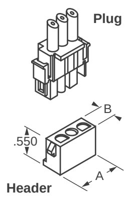
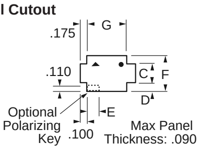


Fig. 3 - Vertical Header

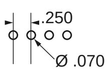


Cap Panel Cutout

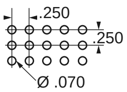


▲ - Circuit #1 location when using polarizing key option with 2, 3, and 4 circuit housing.
● - Circuit #1 location when using polarizing key option with 6, 9, 12 and 15 circuit housing.

2, 3, & 4 Position Vertical Header P.C. Board Layout Dim.



6, 9, 12, & 15 Position Header Assemblies

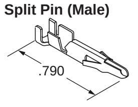


Pos.	Des.	Amperes/ Circuit (Max.)*	Voltage Rating (Max.)*	Panel Cutout Dimension (Inch) A	B	C††	D	E	F	G	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part No.
Fig. 1 – Plug																
2	Plug	13.5	600	.300	.550	—	—	—	—	—	WM1242-ND	.51	4.49	29.90	119.60	50-84-1020
3	Plug	13.5	600	.300	.800	—	—	—	—	—	WM1244-ND	.52	4.59	30.60	122.40	50-84-1030
4	Plug	13.5	600	.300	1.050	—	—	—	—	—	WM1246-ND	.55	4.86	32.38	129.50	50-84-1040
6	Plug	11.0	600	.800	.550	—	—	—	—	—	WM1248-ND	.64	5.67	37.78	151.10	50-84-1060
9	Plug	11.0	600	.800	.800	—	—	—	—	—	WM1250-ND	.75	6.63	44.20	176.80	50-84-1090
12	Plug	—	600	.800	.800	—	—	—	—	—	WM1252-ND	1.24	10.98	73.20	292.80	50-84-1120
15	Plug	—	600	.800	1.050	—	—	—	—	—	WM1254-ND	1.30	11.46	76.43	305.70	50-84-1150
Fig. 2 – Cap																
2	Cap	13.5	600	.300	.550	.340	.095	.250	.530	.565	WM1243-ND	.57	5.07	33.80	135.20	50-84-2020
3	Cap	13.5	600	.300	.800	.340	.095	.250	.530	.815	WM1245-ND	.56	4.97	33.10	132.40	50-84-2030
9	Cap	11.0	600	.800	.800	.480	.275	.250	1.030	.815	WM1251-ND	.84	7.38	49.20	196.80	50-84-2090
12	Cap	—	600	.800	1.050	.480	.275	.350	1.030	1.065	WM1253-ND	1.43	12.59	83.93	335.70	50-84-2120
15	Cap	—	600	.800	1.300	.480	.275	.350	1.030	1.315	WM1255-ND	1.52	13.40	89.33	357.30	50-84-2150
Fig. 3 – Vertical Header																
2	Male	—	—	.300	.550	—	—	—	—	—	WM1256-ND	.89	7.82	52.10	208.40	10-84-4020
2	Female	—	—	.300	.550	—	—	—	—	—	WM1263-ND	.84	7.38	49.23	196.90	10-84-4022
3	Male	—	—	.300	.800	—	—	—	—	—	WM1257-ND	1.01	8.88	59.23	236.90	10-84-4030
3	Female	—	—	.300	.800	—	—	—	—	—	WM1264-ND	.97	8.57	57.10	228.40	10-84-4032
4	Male	—	—	.300	1.050	—	—	—	—	—	WM1258-ND	1.19	10.50	69.98	279.90	10-84-4040
4	Female	—	—	.300	1.050	—	—	—	—	—	WM1265-ND	1.15	10.17	67.80	271.20	10-84-4042
6	Male	—	—	.800	.550	—	—	—	—	—	WM1259-ND	1.56	13.75	91.68	366.70	10-84-4060
6	Female	—	—	.800	.550	—	—	—	—	—	WM1266-ND	1.62	14.25	95.03	380.10	10-84-4062
9	Male	—	—	.800	.800	—	—	—	—	—	WM1260-ND	1.98	17.48	116.50	466.00	10-84-4090
9	Female	—	—	.800	.800	—	—	—	—	—	WM1267-ND	2.28	20.16	134.40	537.60	10-84-4092
12	Male	—	—	.800	1.050	—	—	—	—	—	WM1261-ND	2.35	20.70	138.00	552.00	10-84-4120
12	Female	—	—	.800	1.050	—	—	—	—	—	WM1268-ND	2.89	25.53	170.23	680.90	10-84-4122
15	Male	—	—	.800	1.300	—	—	—	—	—	WM1262-ND	2.90	25.62	170.83	683.30	10-84-4150
15	Female	—	—	.800	1.300	—	—	—	—	—	WM1269-ND	3.16	27.92	186.13	744.50	10-84-4152

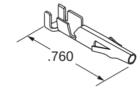
* Ratings are per circuit, based on fully loaded housings.
†† Cap housing should be installed into panel in the same direction as the panel cutout is punched.

.084” Terminals

Split Pin (Male)



Socket (Female)

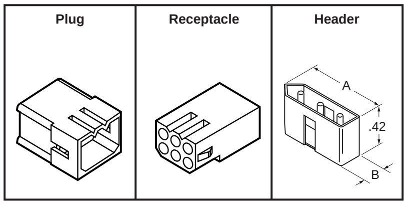


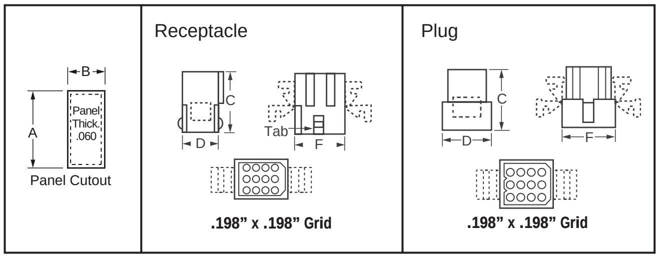
Description	Wire Size AWG Tin Plated	Insulation Dia. (Inch) Min.	Max.	Digi-Key Part No.	Pricing 10	100	500	1,000	Molex Part No.
Male Crimp	14-20	.060	.130	WM1270-ND	.92	7.35	30.63	49.00	02-08-2004
Female Crimp	14-20	.060	.130	WM1271-ND	.94	7.50	31.25	50.00	02-08-1002
Hand Tool	14-20	—	—	WM9925-ND	160.11 each				63811-3500
Extraction Tool	14-20	—	—	WM9921-ND	51.42 each				11-01-0168

molex GC/Waldom Power Connectors

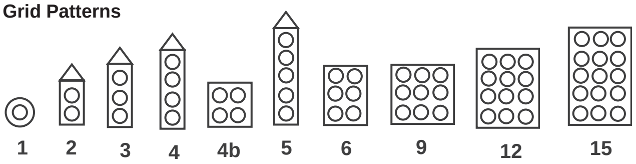
.093” Diameter Connectors

- UL File Number E-29179; CSA File Number LR-19980.
- Up to 12 amperes per circuit (ratings based on fully loaded housings).
- 250 Volt rating for 03-09 series; 600 Volt rating for 19-09 series
- Friction lock for 03-09 series; Positive lock for 19-09 series





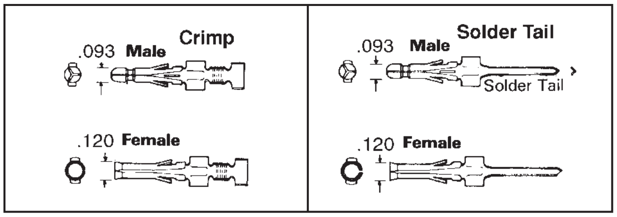
Grid Patterns



Contacts sold separately)

.093” Terminals

- Use with .093" housing
- **Temperature Range:** 40°C to 105°C • .010" stock 70/30 brass
- **High Voltage Test:** Withstands 1500 volts RMS for 60 seconds min. applied between adjacent terminals
- **Current Rating:** Amperage rating up to 12 amps on some sizes
- **Storage Temperature Range:** -40°C to 125°C
- **Plating:** 200-300µ Inch Hot-Tin Dip tin plating



Description	Wire Size	Insulation Dia. (Inch)	Digi-Key Part No.	Pricing 10	100	500	Molex Part No.
Male, Crimp Type	14-20	.065/.160	WM1100-ND	.74	5.94	24.75	02-09-2103
Female, Crimp Type	14-20	.065/.160	WM1101-ND	.73	5.85	24.38	02-09-1104
Male, Crimp Type	18-22	.060/.120	WM1102-ND	.77	6.15	25.63	02-09-2118
Female, Crimp Type	18-22	.060/.120	WM1103-ND	.73	5.85	24.38	02-09-1119
Male, Solder-Tail	—	—	WM1104-ND	1.70	13.56	56.50	02-09-2133
Female, Solder-Tail	—	—	WM1105-ND	1.70	13.59	56.63	02-09-1134
Male, Crimp Type	18-22	.060/.120	WM1106-ND*	8.88	71.07	296.13	02-09-6123
Female, Crimp Type	18-22	.060/.120	WM1107-ND*	8.88	71.07	296.13	02-09-5142
Male, Crimp Type	24-30	.030/.060	WM1108-ND*	10.04	80.34	334.75	02-09-6145
Female, Crimp Type	24-30	.030/.060	WM1109-ND*	10.04	80.34	334.75	02-09-5147
Male, Solder-Tail	—	—	WM1110-ND*	12.38	99.03	412.63	02-09-6132
Female, Solder-Tail	—	—	WM1111-ND*	13.26	106.08	442.00	02-09-5132
Hand Tool (Waldom)	—	—	WM9903-ND	12.48 each			W-HT-1919
(14-22 AWG) (Molex)	—	—	WM9923-ND	170.12 each			11-01-0084
Universal Crimp Tool (Molex)	—	—	WM9999-ND	36.19 each			63811-1000
Production Tool							
(24-30 AWG) (Molex)	—	—	WM9924-ND	139.19 each			11-01-0006
Extraction Tool (Molex)	—	—	WM9930-ND	17.14 each			11-03-0006

* 15µ Select Gold Finish

Cable Connector Designer Kits

WM9801-ND — Contains same as WM9800-ND but covers from single to 15-circuit designs (250V and up to 12A/circuit. 45 complete connectors with .093" (2.36mm) dia. pin size. Crimping tool, pin terminal ejector and case included **$30.35**

Grid Space	Circ. (a)	Type	Max. Amps	Max. Volts	Dimensions (Inch) A	B	C	D	F	Digi-Key Part No.	Pricing 1	10	100	Molex Part No.
.093” Diameter Connector Housings — With Detent Only, Free Hanging														
.198”	1	Plug	12	5000	—	—	2.250	.437	—	WM1301-ND	.40	3.28	23.43	03-09-2014
		Receptacle	12	5000	—	—	1.859	.312	—	WM1300-ND	.40	3.29	23.53	03-09-1014
	1	Plug	12	250	—	—	1.000	.358	—	WM1303-ND	.22	1.78	12.70	03-09-2011
		Receptacle	12	250	—	—	1.000	.234	—	WM1302-ND	.22	1.78	12.70	03-09-1011
	2	Plug	12	250	.800	.375	1.000	.352	.639	WM1324-ND	.31	2.59	18.50	03-09-2022
		Receptacle	12	250	.725	.312	1.030	.250	.536	WM1331-ND	.34	2.78	19.88	03-09-1022
	3	Plug	12	250	.933	.375	.970	.340	.770	WM1325-ND	.40	3.33	23.78	03-09-2032
		Receptacle	12	250	.840	.312	1.015	.236	.670	WM1332-ND	.42	3.48	24.88	03-09-1032
	4	Plug	12	250	1.131	.375	1.000	.338	.971	WM1326-ND	.45	3.68	26.30	03-09-2042
		Receptacle	12	250	1.038	.312	1.000	.236	.868	WM1333-ND	.45	3.73	26.63	03-09-1042
	4(c)	Plug	12	250	.555	.695	1.024	.538	.538	WM1327-ND	.66	5.42	38.70	03-09-2049
		Receptacle	12	250	.500	.600	1.000	.434	.434	WM1334-ND	.64	5.24	37.40	03-09-1049
	5(d)	Plug	12	250	—	—	.969	.350	1.170	WM1315-ND	.72	5.89	42.08	03-09-2057
		Receptacle	12	250	—	—	1.000	.240	1.070	WM1314-ND	.69	5.66	40.43	03-09-1057
	6	Plug	9	250	.750	.695	1.000	.733	.536	WM1328-ND	.59	4.89	34.93	03-09-2062
		Receptacle	9	250	.718	.600	1.015	.632	.434	WM1335-ND	.59	4.89	34.93	03-09-1064
	9(e)	Plug	9	250	.937	.660	.970	.730	.770	WM1329-ND	.70	5.79	41.38	03-09-2092
		Receptacle	9	250	.828	.725	1.015	.625	.666	WM1336-ND	.75	6.20	44.25	03-09-1094
	12	Plug	7.5	250	1.155	.760	1.000	.737	.770	WM1330-ND	.76	6.29	44.95	03-09-2121
		Receptacle	7.5	250	1.050	.655	1.015	.633	.871	WM1337-ND	.78	6.39	45.68	03-09-1126
.248”	2(b)	Plug	12	600	—	—	1.031	.359	.656	WM1401-ND	.54	4.43	31.68	03-09-2028
		Receptacle	12	600	—	—	1.063	.265	.531	WM1400-ND	.51	4.23	30.23	03-09-1028
	4(b)	Plug	9	600	—	—	1.031	.359	1.156	WM1405-ND	.65	5.39	38.48	03-09-2048
		Receptacle	9	600	—	—	1.063	.265	1.032	WM1404-ND	.64	5.24	37.40	03-09-1047
.093” Diameter Connector Housings — With Mounting Ears & Detent, Panel Mount														
.198”	3	Plug	12	250	.933	.375	.970	.340	.770	WM1307-ND	.46	3.78	27.03	03-09-2031
		Receptacle	12	250	.840	.312	1.015	.236	.670	WM1338-ND	.44	3.63	25.93	03-09-1081
	4	Plug	12	250	1.131	.375	.969	.338	.971	WM1309-ND	.47	3.88	27.73	03-09-2041
		Receptacle	12	250	1.038	.312	1.000	.236	.868	WM1308-ND	.45	3.73	26.63	03-09-1041
	4(c)	Plug	12	250	.555	.695	.969	.538	.538	WM1311-ND	.65	5.39	38.48	03-09-2040
		Receptacle	12	250	.500	.600	1.000	.434	.434	WM1310-ND	.64	5.24	37.40	03-09-1040
	6	Plug	9	250	.750	.695	.969	.733	.536	WM1317-ND	.62	5.09	36.35	03-09-2061
		Receptacle	9	250	.718	.600	1.015	.632	.434	WM1316-ND	.62	5.09	36.35	03-09-1061
	9(e)	Plug	9	250	.937	.660	.970	.730	.770	WM1319-ND	.72	5.94	42.45	03-09-2091
		Receptacle	9	250	.828	.725	1.015	.625	.666	WM1318-ND	.72	5.94	42.45	03-09-1091
	12	Plug	7.5	250	1.155	.760	.969	.737	.975	WM1321-ND	.76	6.29	44.95	03-09-2122
		Receptacle	7.5	250	1.050	.665	1.015	.633	.871	WM1320-ND	.78	6.39	45.68	03-09-1125
	15	Receptacle	7.5	250	1.240	.655	1.015	.632	1.066	WM1322-ND	1.04	8.55	61.08	03-09-1154
.248”	2(b)	Plug	12	250	.800	.375	.968	.352	.639	WM1305-ND	.36	2.93	20.90	03-09-2021
		Receptacle	12	250	.725	.312	1.000	.250	.536	WM1304-ND	.34	2.78	19.88	03-09-1027
.250”	3	Plug	11	600	1.022	.365	1.100	.350	.862	WM1501-ND	.72	6.31	42.08	19-09-2031
		Receptacle	11	600	.920	.310	1.140	.250	.760	WM1776-ND	.72	5.89	42.08	19-09-1030
	4	Receptacle	9	600	1.168	.311	1.140	.250	.760	WM1502-ND	.76	6.68	44.53	19-09-1041
	6	Plug	9	600	1.048	.658	1.100	.640	.886	WM1505-ND	.82	7.22	48.13	19-09-2061
		Receptacle	9	600	.946	.608	1.140	.540	.790	WM1504-ND	.82	7.22	48.13	19-09-1061
	9	Plug	8	600	1.048	.910	1.100	.890	.890	WM1507-ND	1.10	9.68	64.50	19-09-2091
		Receptacle	8	600	.948	.850	1.140	.790	.790	WM1506-ND	1.09	9.64	64.28	19-09-1091
	12	Plug	6	600	1.300	.910	1.100	.890	1.140	WM1509-ND	1.16	10.23	68.20	19-09-2122
		Receptacle	6	600	1.094	.850	1.140	.790	1.034	WM1508-ND	1.64	14.47	96.48	19-09-1121
	15	Plug	6	600	1.552	.910	1.100	.890	1.388	WM1511-ND	2.08	18.39	122.60	19-09-2153
		Receptacle	6	600	1.422	.850	1.140	.790	1.282	WM1510-ND	2.08	18.33	122.23	19-09-1151
.264”	1	Plug	12	600	.485	.343	.320	.320	.320	WM1601-ND	.36	2.98	21.30	19-09-2018
		Receptacle	12	600	—	—	—	.300	.400	WM1600-ND•	.36	2.98	21.30	19-09-1019
	2	Plug	12	600	.800	.365	.635	.320	.580	WM1603-ND	.53	4.33	30.93	19-09-2028
		Receptacle	12	600	—	—	—	.300	.560	WM1602-ND•	.53	4.33	30.93	19-09-1029
	3	Plug	11	600	1.022	.365	.862	.320	.848	WM1605-ND	.50	4.08	29.18	19-09-2038
		Receptacle	11	600	—	—	—	.300	.830	WM1604-ND•	.51	4.23	30.23	19-09-1039
	4	Plug	9	600	1.270	.365	1.109	.321	1.110	WM1607-ND	.59	4.89	34.90	19-09-2048
		Receptacle	9	600	—	—	—	.300	1.090	WM1606-ND•	.60	4.94	35.28	19-09-1049
	6	Plug	9	600	1.048	.658	.888	.604	.850	WM1609-ND	.66	5.47	39.05	19-09-2068
		Receptacle	9	600	—	—	—	.560	.830	WM1608-ND•	.65	5.32	38.00	19-09-1069
	9	Plug	8	600	1.048	.909	.883	.868	.850	WM1611-ND	.74	6.09	43.50	19-09-2098
		Receptacle	8	600	—	—	—	.560	.830	WM1610-ND•	.74	6.12	43.73	19-09-1099
	12	Plug	7	600	1.100	.910	1.140	.668	1.112	WM1613-ND	.98	8.09	57.80	19-09-2128
		Receptacle	7	600	—	—	—	.830	.900	WM1612-ND•	.83	6.84	48.88	19-09-1129
	15	Plug	6	600	1.552	.910	1.392	.868	1.380	WM1615-ND	1.16	9.59	68.50	19-09-2158
		Receptacle	6	600	—	—	—	.868	1.380	WM1614-ND•	1.16	9.52	68.03	19-09-1159
.093” Diameter Shrouded Male Pin Header														
.198”	3	Header	5	250	.770	.330	—	—	—	WM1625-ND	1.98	17.48	116.50	10-18-1032
	4	Header	5	250	.970	.330	—	—	—	WM1626-ND	2.26	19.92	132.83	10-18-1041
	6	Header	5	250	.740	.540	—	—	—	WM1627-ND	2.39	21.13	140.88	10-18-1061
	9	Header	5	250	.770	.730	—	—	—	WM1628-ND	3.08	27.15	180.98	10-18-1090
	12	Header	5	250	.980	.740	—	—	—	WM1629-ND	4.49	39.59	263.90	10-18-1120

- **These Receptacles do not have mounting ears.**

(a) Electrical ratings are per circuit.

(b) Center spacing .248” (6.30mm) will accommodate: 14, 16,and 18 AWG with 1/32” (.79mm) insulation – 16 with 18 AWG (double crimp), each with 1/32” (.79mm) insulation. WM1400-WM1405 housing have positive locking rather than detent lock.

(c) 4 circuits in square grid pattern.

(d) Has positive lock rather than detent lock.

(e) Mounting ears are molded flush with back edge of wire end. Not centered on side.

molex GC/Waldom 7.50 Pitch Sabre™ Connectors

Features and Benefits: • Patented new integral Terminal Position Assurance (TPA) on mated male and female terminal • Virtually eliminates terminal backout • Wire-to-wire and wire-to-board connector system • Polarized housing assures proper mating • Terminals are fully isolated in housing • Positive latch reduces accidental disengagement from plug **Electrical Specifications:** • **Voltage:** 1000V • **Current:** 18A • **Contact Resistance:** 10mΩ max. • **Dielectric Withstanding Voltage:** 6000V • **Insulation Resistance:** 1000 mΩ min. **Mechanical:** • **Contact Insertion Force:** 2 lb. max. • **Contact Retention to Housing:** 20 lb. min. • **Wire Pull-Out Force:** 20 lb. min. • **Mating Force:** 3 lb. max. • **Unmating Force:** 1 lb. min. • **Normal Force:** 3 lb. nominal • **Durability:** 25 cycles **Physical:** • **Housing:** Nylon, 94V-0 • **Temperature:** -40°C to +75°C **Approvals:** UL File No.: E29179 and Ul1950; CSA File No.: LR19980

Fig. 1 – Receptacle

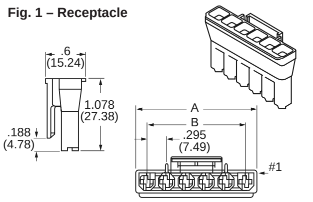


Fig. 2 – Wire-to-Wire Plug

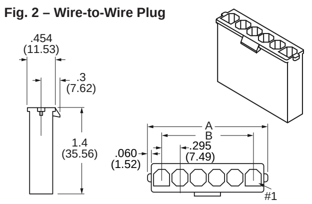
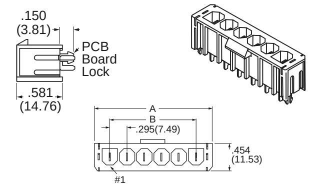
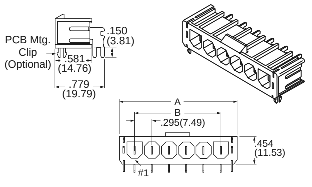


Fig. 3 – Vertical Wire-to-Board Header



.002" (.062mm) PCB thickness on headers with board lock

Fig. 4 – Right Angle Wire-to-Board Header



.002" (.062mm) PCB thickness on headers with board lock

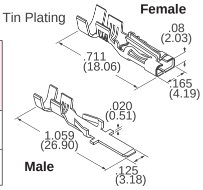
Fig.	Cir-cuits	Dimensions Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
				Single Row Receptacle				
1	2	.623 (15.82)	.295 (7.49)	WM18463-ND	.88	.73	.52	44441-2002
	3	.918 (23.32)	.590 (14.99)	WM18464-ND	1.02	.85	.61	44441-2003
	4	1.213 (30.81)	.885 (22.48)	WM18465-ND	1.16	.96	.69	44441-2004
	5	1.508 (38.30)	1.180 (29.97)	WM18466-ND	1.36	1.12	.80	44441-2005
	6	1.803 (45.80)	1.475 (37.47)	WM18467-ND	1.53	1.27	.91	44441-2006
				Single Row Plug				
2	2	.745 (18.92)	.295 (7.49)	WM18468-ND	.87	.72	.52	43680-2002
	3	1.040 (26.42)	.590 (14.99)	WM18469-ND	1.03	.85	.61	43680-2003
	4	1.335 (33.91)	.885 (22.48)	WM18470-ND	1.17	.97	.69	43680-2004
	5	1.630 (41.40)	1.180 (29.97)	WM18471-ND	1.36	1.12	.80	43680-2005
	6	1.925 (48.90)	1.475 (37.47)	WM18472-ND	1.53	1.35	.91	43680-2006
				Vertical Header, SMC — Without Board Lock				
3	2	.830 (21.08)	.295 (7.49)	WM18473-ND	1.71	1.41	1.01	43160-0102
	3	1.125 (28.58)	.590 (14.99)	WM18474-ND	2.35	1.94	1.38	43160-0103
	4	1.420 (36.07)	.885 (22.48)	WM18475-ND	2.46	2.03	1.45	43160-0104
	5	1.715 (43.56)	1.180 (29.97)	WM18476-ND	2.85	2.35	1.68	43160-0105
	6	2.010 (51.05)	1.475 (37.47)	WM18477-ND	3.22	2.65	1.90	43160-0106
				Vertical Header, SMC — With Board Lock				
3	2	.830 (21.08)	.295 (7.49)	WM18478-ND	1.90	1.57	1.12	43160-2102
	3	1.125 (28.58)	.590 (14.99)	WM18479-ND	2.29	1.89	1.35	43160-2103
	4	1.420 (36.07)	.885 (22.48)	WM18480-ND	2.77	2.29	1.64	43160-2104
	5	1.715 (43.56)	1.180 (29.97)	WM18481-ND	3.18	2.62	1.87	43160-2105
	6	2.010 (51.05)	1.475 (37.47)	WM18482-ND	3.56	2.94	2.10	43160-2106
				Right Angle Header, SMC — Without Board Lock				
4	2	.830 (21.08)	.295 (7.49)	WM18483-ND	1.88	1.56	1.11	43160-1102
	3	1.125 (28.58)	.590 (14.99)	WM18484-ND	2.29	1.89	1.35	43160-1103
	4	1.420 (36.07)	.885 (22.48)	WM18485-ND	2.69	2.22	1.59	43160-1104
	5	1.715 (43.56)	1.180 (29.97)	WM18486-ND	3.10	2.56	1.83	43160-1105
	6	2.010 (51.05)	1.475 (37.47)	WM18487-ND	3.51	2.89	2.07	43160-1106
				Right Angle Header, SMC — With Board Lock				
4	2	.830 (21.08)	.295 (7.49)	WM18488-ND	2.13	1.76	1.26	43160-3102
	3	1.125 (28.58)	.590 (14.99)	WM18489-ND	2.56	2.12	1.51	43160-3103
	4	1.420 (36.07)	.885 (22.48)	WM18490-ND	3.00	2.48	1.77	43160-3104
	5	1.715 (43.56)	1.180 (29.97)	WM18491-ND	3.39	2.79	2.00	43160-3105
	6	2.010 (51.05)	1.475 (37.47)	WM18492-ND	3.75	3.09	2.21	43160-3106

Sabre™ Tools

Description	Digi-Key Part No.	Price Each	Molex Part No.
Crimp Tool for Power Connectors - Female	WM9907-ND	159.49	63811-0400
Crimp Tool for Power Connectors - Male	WM9908-ND	160.11	63811-0600
Extraction Tool - Female	WM9909-ND	24.20	63813-0500
Extraction Tool - Male	WM9910-ND	167.39	63813-0800

7.50 Pitch Sabre™ Terminals

Desc.	Wire Size	Maximum Insulation Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Female	AWG 14-18	.130 (3.30)	WM18493-ND	.14	.12	.09	43375-0001
Male	AWG 14-18	.130 (3.30)	WM18495-ND	.17	.15	.11	43178-1002
Female	AWG 14-18	.180 (4.57)	WM18494-ND	.14	.12	.09	43375-1001
Male	AWG 14-18	.180 (4.57)	WM18496-ND	.17	.15	.11	43178-2002



Firewire 1394 I/O Connectors

Fig. 1 – Right Angle Flat Header

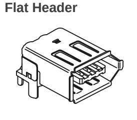
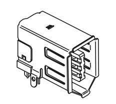


Fig. 2 – Right Angle Upright Header

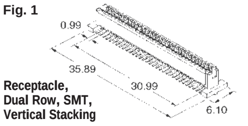


Headers are offered in high temperature plastic for true SMT processing. Full metal shielding design supports ESD protection. Rugged gold plated leaf contacts withstands up to 1500 cycles.

Fig.	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	WM17300-ND	4.01	3.54	2.36	53462-0611
2	WM17301-ND	8.64	7.62	5.09	53460-0611

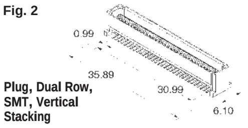
Mezzanine IEEE 1386 Connectors

Fig. 1



Receptacle, Dual Row, SMT, Vertical Stacking

Fig. 2



Plug, Dual Row, SMT, Vertical Stacking

Electrical: Voltage: 250V. **Current:** 0.5A. **Contact Resistance:** 30mΩ max. **Dielectric Withstanding Voltage:** 250V. **Insulation Resistance:** 1000 MΩ min.

Mechanical: Contact Retention to Housing: 0.4kgf min. **Mating Force:** 60g max. per contact. **Unmating Force:** 35g min. per contact. **Durability:** 100 cycles.

Physical: Housing: Glass-filled LCP, UL 94V-O. **Contact:** Phosphor bronze. **Plating:** 0.76µm (30µ") Gold min. **Temperature:** -15°C to +85°C.

Features: Mated height on these parts are only 10 millimeters.

Fig.	Cir-cuits	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	64	WM17201-ND	6.29	5.56	3.71	71439-0164
2	64	WM17200-ND	6.86	6.06	4.04	71436-2164

USB Connectors

USB Standard Features: • Broad industry support from computer and telecom leaders • 12 Mbit/sec low-cost data transfer rates • Provides PC/telephone integration and digital connectivity • Standard serial port connector for all devices • Supports daisy chaining and up to 127 devices • Windows '95 Operating Driver support **Applications:** • Desktop and Notebook PCs • Peripherals • Keyboard, Mouse • Telephony, ISDN, PBX's, Handsets

PCB Receptacle Features (Series A): • Right-angle single, dual-stack • Positive polarization • 1,500 mating cycles • Metal shielding • Four positions with gold-plated contacts: Two for signal on 2mm centerline and two for power on 2.5 mm centerline • Rated for 1.0 Amp max. per contact

USB Receptacles: • **Electrical: Voltage:** 30V **Current:** 1.0A **Contact Resistance:** 30mΩ max. **Dielectric Withstanding Volt:** 750V AC **Insulation Resistance:** 1000MΩ min. • **Housing:** (Type A) Glass fiber-filled nylon. (Type B) Glass fiber-filled polyester, UL94V-0 **Contact:** Phosphor Bronze **Metal Shell**: (Type A) Steel Alloy. (Type B) Copper Alloy • **Plating:** Gold Flash **Temp**: 0 to +40ºC

Fig. 1

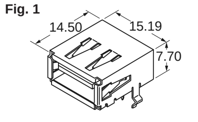


Fig. 2

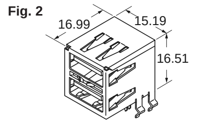


Fig. 3

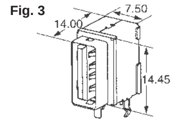


Fig. 4

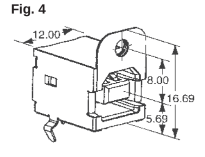


Fig. 5

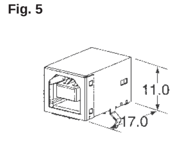


Fig. 6

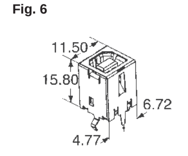
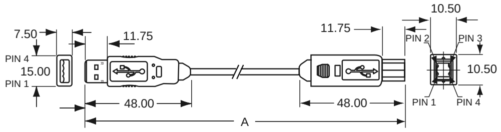


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	Single PCB Receptacle	WM17100-ND	1.05	.93	.62	87531-0001
2	Stacked PCB Receptacle	WM17101-ND	3.03	2.68	1.79	87525-0001
3	Type 'A' Single Upright, Right Angle	WM17106-ND	1.80	1.60	1.07	89485-0000
4	Type 'B' Single Right Angle, Short Body, with Screw Flange	WM17107-ND	1.83	1.62	1.08	67285-0000
5	Type 'B' Single Right Angle, Black	WM17108-ND	1.95	1.73	1.15	67068-0000
	Type 'B' Single Right Angle, White	WM17109-ND	1.69	1.50	1.00	67068-1000
6	Type 'B' Vertical with Paired Boardlocks and Grounding Pins	WM17110-ND	1.59	1.40	.94	67265-0000

USB Cable Assemblies and Connectors

Fig. 1



Features: Fully-shielded and polarized plugs. Friction grip on over-molded body facilitates easy mating/ unmating **Electrical: Voltage:** 30V **Current:** 1.0A **Contact Resistance:** 30mΩ max. **Dielectric Withstanding Volt:** 750V AC **Insulation Resistance:** 1000MΩ min. **Mechanical: Mating Force:** 35N max. **Withdrawal Force:** 10N min. **Durability:** 1500 cycles min.

Fig. 2

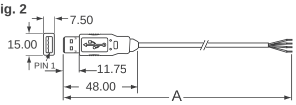


Fig.	Dim. A Inches (mm)	Description	Digi-Key Part No.	Price Each 1	10	25	Molex Part No.
1	2090 (82.28)	USB Type 'A-to-B' Full-Rated	WM17103-ND	4.89	3.92	3.26	88732-9200
2	2080 (81.89)	USB Type 'A-to-Pigtail' Full-Rated	WM17104-ND	4.33	3.47	2.89	88728-3400
	2080 (81.89)	USB Type 'A-to-Pigtail' Sub-Channel	WM17105-ND	3.05	2.44	2.04	88738-8200

molex GC/Waldom

Mini-Fit Jr. Connectors

Positive Locking Hi-Density Power Connector

Current Carrying Capabilities: The Mini-Fit, Jr. can handle standard equipment I/O currents despite its small size. For example, the 2 circuit PCB connector can handle up to 9 amps at 250 volts.
Features: • UL recognized, CSA certified, and TUV licensed • Up to 9 amperes/circuit • 250 volt rating
Specifications: • **Material:** Terminal: Brass; Plating: Tin; Housing: UL 94V-2 nylon 6/6 • **Voltage Current:** 250V (Vertical Header with Pegs: 600V) • **Contact Resistance:** 10mΩ max. • **Insulation Resistance:** 1,000MΩ min. • **Dielectric Strength:** 1,500V AC

Fig. 1 – Receptacle Housing

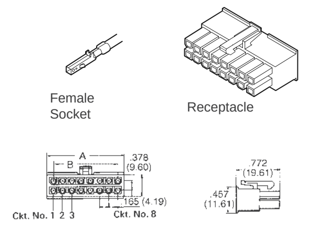


Fig. 2 – Plug Housing

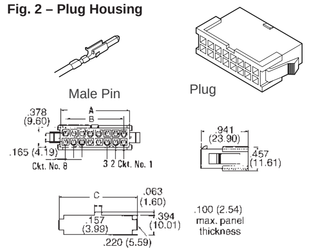


Fig. 3 – Vertical Header Assembly

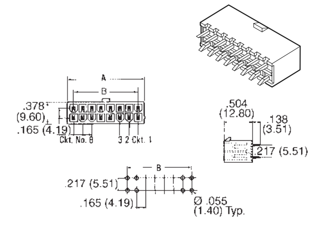


Fig. 4 – Right Angle Header

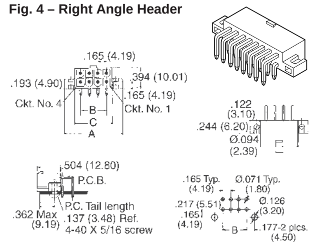


Fig. 5 – Single Row Receptacle

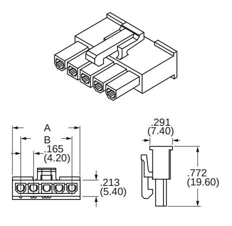
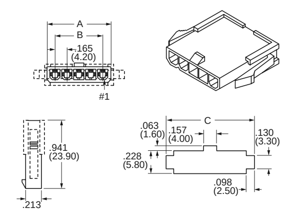
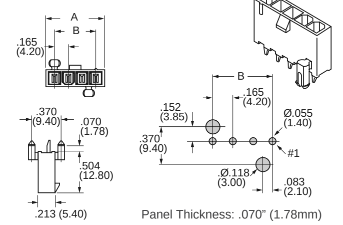


Fig. 6 – Single Row Plug



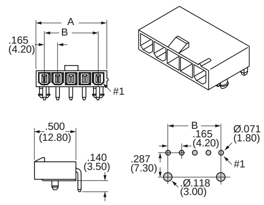
Max. Panel Thickness: .079" (2.00mm)

Fig. 7 – Vertical Header with Pegs



Panel Thickness: .070" (1.78mm)

Fig. 8 – Right Angle Header with Pegs



Panel Thickness: .070" (1.78mm)

Fig. 9 – Strain Relief use with 5557 Receptacle Series

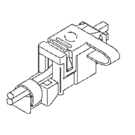


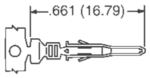
Fig.	Cir-cuits	Amps	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	2	9	.213 (5.40)	—	—	WM3700-ND	.40	.36	.24	39-01-2020
	4	8	.378 (9.60)	.165 (4.20)	—	WM3701-ND	.44	.39	.26	39-01-2040
	6	8	.543 (13.80)	.331 (8.40)	—	WM3702-ND	.53	.47	.31	39-01-2060
	8	7	.709 (18.00)	.496 (12.60)	—	WM3703-ND	.58	.48	.35	39-01-2080
	10	7	.874 (22.20)	.661 (16.80)	—	WM3704-ND	.68	.60	.40	39-01-2100
	12	6	1.039 (26.40)	.827 (21.00)	—	WM3705-ND	.75	.67	.45	39-01-2120
	14	6	1.205 (30.60)	.992 (25.20)	—	WM3706-ND	.90	.80	.53	39-01-2140
	16	6	1.370 (34.80)	1.158 (29.40)	—	WM3707-ND	.91	.81	.54	39-01-2160
	18	6	1.535 (39.00)	1.323 (33.60)	—	WM3708-ND	1.04	.93	.62	39-01-2180
	20	6	1.701 (43.20)	1.488 (37.80)	—	WM3709-ND	1.14	.94	.67	39-01-2200
	22	6	1.866 (47.40)	1.654 (42.00)	—	WM3710-ND	1.87	1.66	1.11	39-01-2220
	24	6	2.031 (51.60)	1.819 (46.20)	—	WM3711-ND	1.24	1.10	.74	39-01-2240
2	2	9	.213 (5.40)	—	.425 (10.80)	WM3600-ND	.47	.42	.28	39-01-2021
	4	8	.378 (9.60)	.165 (4.20)	.591 (15.00)	WM3601-ND	.51	.46	.31	39-01-2041
	6	8	.543 (13.80)	.331 (8.40)	.756 (19.20)	WM3602-ND	.54	.48	.33	39-01-2061
	8	7	.709 (18.00)	.496 (12.60)	.921 (23.40)	WM3603-ND	.58	.52	.35	39-01-2081
	10	7	.874 (22.20)	.661 (16.80)	1.087 (27.60)	WM3604-ND	.68	.60	.40	39-01-2101
	12	6	1.039 (26.40)	.827 (21.00)	1.252 (31.80)	WM3605-ND	.69	.57	.41	39-01-2121
	14	6	1.205 (30.60)	.992 (25.20)	1.417 (36.00)	WM3606-ND	.93	.77	.55	39-01-2141
	16	6	1.370 (34.80)	1.158 (29.40)	1.583 (40.20)	WM3607-ND	1.20	1.06	.71	39-01-2161
Tin Plated										
3	2	9	.210 (5.40)	—	—	WM3800-ND	.79	.71	.47	39-28-1023
	4	8	.380 (9.60)	.170 (4.20)	—	WM3801-ND	1.01	.89	.60	39-28-1043
	6	8	.540 (13.80)	.330 (8.40)	—	WM3802-ND	1.31	1.16	.78	39-28-1063
	8	7	.710 (18.00)	.500 (12.60)	—	WM3803-ND	1.49	1.32	.88	39-28-1083
	10	7	.870 (22.20)	.660 (16.80)	—	WM3804-ND	1.92	1.70	1.13	39-28-1103
	12	6	1.040 (26.40)	.825 (20.96)	—	WM3805-ND	1.86	1.64	1.10	39-28-1123
	14	6	1.200 (31.60)	.990 (25.20)	—	WM3806-ND	2.47	2.18	1.46	39-28-1143
	16	6	1.370 (34.80)	1.160 (29.40)	—	WM3807-ND	2.74	2.42	1.61	39-28-1163
	18	6	1.540 (39.00)	1.320 (33.60)	—	WM3808-ND	3.44	3.04	2.03	39-28-1183
	20	6	1.700 (43.20)	1.490 (37.80)	—	WM3809-ND	3.77	3.11	2.22	39-28-1203
	22	6	1.870 (47.40)	1.650 (42.00)	—	WM3810-ND	4.10	3.62	2.42	39-28-1223
	24	6	2.030 (51.60)	1.820 (46.20)	—	WM3811-ND	4.06	3.34	2.39	39-28-1243
30 Gold Plated										
3	2	9	.210 (5.40)	—	—	WM3820-ND	1.81	1.50	1.07	39-29-0023
	4	8	.380 (9.60)	.170 (4.20)	—	WM3821-ND	2.82	2.32	1.66	39-29-0043
	6	8	.540 (13.80)	.330 (8.40)	—	WM3822-ND	3.84	3.40	2.27	39-29-0063
	8	7	.710 (18.00)	.500 (12.60)	—	WM3823-ND	4.85	4.00	2.86	39-29-0083
	10	7	.870 (22.20)	.660 (16.80)	—	WM3824-ND	5.80	4.78	3.42	39-29-0103
	12	6	1.040 (26.40)	.830 (21.00)	—	WM3825-ND	6.76	5.97	3.98	39-29-0123
	14	6	1.200 (30.60)	.990 (25.20)	—	WM3826-ND	7.88	6.96	4.64	39-29-0143
	16	6	1.370 (34.80)	1.160 (29.40)	—	WM3827-ND	8.89	7.85	5.24	39-29-0163
	18	6	1.540 (39.00)	1.320 (33.60)	—	WM3828-ND	9.95	8.78	5.86	39-29-0183
	20	6	1.700 (43.20)	1.490 (37.80)	—	WM3829-ND	11.00	9.71	6.48	39-29-0203
	22	6	1.870 (47.40)	1.650 (42.00)	—	WM3830-ND	12.05	9.93	7.10	39-29-0223
	24	6	2.030 (51.60)	1.820 (46.20)	—	WM3831-ND	13.11	10.80	7.71	39-29-0243

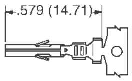
Fig.	Cir-cuits	Amps	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Tin Plated										
4	2	9	.606 (15.40)	—	.213 (5.40)	WM3900-ND	.90	.75	.54	39-29-1028
	4	8	.772 (19.60)	.165 (4.20)	.378 (9.60)	WM3901-ND	1.15	.95	.68	39-29-1048
	6	8	.937 (23.80)	.331 (23.80)	.543 (13.80)	WM3902-ND	1.41	1.16	.83	39-29-1068
	8	7	1.102 (28.00)	12.60 (.496)	.709 (18.00)	WM3903-ND	1.69	1.40	1.00	39-29-1088
	10	7	1.268 (32.20)	.661 (16.80)	.874 (22.20)	WM3904-ND	2.02	1.67	1.19	39-29-1108
	12	6	1.433 (36.40)	.827 (21.00	1.039 (26.40)	WM3905-ND	2.36	1.95	1.40	39-29-1128
	14	6	1.598 (40.60)	.992 (25.20)	1.205 (30.60)	WM3906-ND	2.77	2.29	1.64	39-29-1148
	16	6	1.764 (44.80)	1.158 (29.40)	1.370 (34.80)	WM3907-ND	3.20	2.64	1.89	39-29-1168
	18	6	1.929 (49.00)	1.323 (33.60)	1.535 (39.00)	WM3908-ND	3.71	3.06	2.19	39-29-1188
	20	6	2.094 (53.20)	1.488 (37.80)	1.701 (43.20)	WM3909-ND	4.25	3.51	2.51	39-29-1208
	22	6	2.260 (57.40)	1.654 (42.00)	1.866 (47.40)	WM3910-ND	4.84	3.99	2.85	39-29-1228
	24	6	2.425 (61.60)	1.819 (46.20)	2.031 (51.60)	WM3911-ND	5.35	4.41	3.15	39-29-1248
Gold Plated										
4	2	9	.606 (15.40)	—	.213 (5.40)	WM3920-ND	2.18	1.80	1.28	39-29-5023
	4	8	.772 (19.60)	.165 (4.20)	.378 (9.60)	WM3921-ND	2.58	2.13	1.52	39-29-5043
	6	8	.937 (23.80)	.331 (8.40)	.543 (13.80)	WM3922-ND	3.10	2.56	1.83	39-29-5063
	8	7	1.102 (28.00)	.496 (12.60)	.709 (18.00)	WM3923-ND	3.68	3.03	2.17	39-29-5083
	10	7	1.268 (32.20)	.661 (16.80)	.874 (22.20)	WM3924-ND	4.32	3.57	2.55	39-29-5103
	12	6	1.433 (36.40)	.827 (21.00)	1.039 (26.40)	WM3925-ND	5.02	4.14	2.96	39-29-5123
	14	6	1.598 (40.60)	.992 (25.20)	1.205 (30.60)	WM3926-ND	5.83	4.81	3.44	39-29-5143
	16	6	1.764 (44.80)	1.158 (29.40)	1.370 (34.80)	WM3927-ND	6.69	5.52	3.94	39-29-5163
	18	6	1.929 (49.00)	1.323 (33.60)	1.535 (39.00)	WM3928-ND	7.69	6.34	4.53	39-29-5183
	20	6	2.094 (53.20)	1.488 (37.80)	1.701 (43.20)	WM3929-ND	8.77	7.23	5.17	39-29-5203
	22	6	2.260 (57.40)	1.654 (42.00)	1.866 (47.40)	WM3930-ND	9.85	8.12	5.80	39-29-5223
	24	6	2.425 (61.60)	1.819 (46.20)	2.031 (51.60)	WM3931-ND	10.98	9.04	6.46	39-29-5243
5	3	9	.543 (13.80)	.331 (8.40)	—	WM18434-ND*	.46	.38	.28	39-01-4030
	4	8	.709 (18.01)	.496 (12.60)	—	WM18435-ND	.54	.45	.32	39-01-4040
	5	8	.874 (22.20)	.661 (16.80)	—	WM18436-ND	.57	.48	.34	39-01-4050
6	3	9	.543 (13.80)	.331 (8.40)	.756 (19.20)	WM18437-ND*†	.50	.45	.30	39-01-4032
	3	9	.543 (13.80)	.331 (8.40)	.756 (19.20)	WM18439-ND*§	.50	.41	.30	39-01-4036
	4	8	.709 (18.01)	.496 (12.60)	.921 (23.40)	WM18440-ND§	.53	.44	.32	39-01-4046
	5	8	.874 (22.20)	.661 (16.80)	1.087 (27.60)	WM18438-ND†	.56	.46	.33	39-01-4052
	5	8	.874 (22.20)	.661 (16.80)	1.087 (27.60)	WM18441-ND§	.56	.46	.33	39-01-4056
7	3	9	.543 (13.80)	.331 (8.40)	—	WM18442-ND	1.01	.83	.60	39-30-1039
	3	9	.543 (13.80)	.331 (8.40)	—	WM18443-ND	1.01	.89	.60	39-30-2035
	4	8	.709 (18.01)	.496 (12.60)	—	WM18444-ND	1.59	1.31	.94	39-30-2045
	5	8	.874 (22.20)	.661 (16.80)	—	WM18445-ND	1.76	1.55	1.04	39-30-2056
8	3	9	.543 (13.80)	.331 (8.40)	—	WM18446-ND	1.20	1.06	.71	39-30-3035
	4	8	.709 (18.01)	.496 (12.60)	—	WM18447-ND	1.41	1.16	.83	39-30-3045
	5	8	.874 (22.20)	.661 (16.80)	—	WM18448-ND	1.62	1.43	.96	39-30-3055
Strain Relief (use with Fig. 1)										
9	6	—	—	—	—	WM13702-ND	2.38	—	—	15-04-0296
	8	—	—	—	—	WM13703-ND	2.02	—	—	15-04-0343
	12	—	—	—	—	WM13705-ND	2.57	—	—	15-04-0345

* 3-circuit receptacle designed for first-mate/last-break applications † Panel Mount § Free-Hanging

Mini-Fit Jr. Terminals

Plating: Tin Plated Brass († High copper alloy)





Description	Wire Size	Insulation Dia. Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Male	16	.071 - .122 (1.80 - 3.10)	WM1911-ND†	.32	.27	.19	44478-3112
Female	16	.071 - .122 (1.80 - 3.10)	WM1913-ND†	.32	.27	.19	44476-3112
Male	16	.071 - .122 (1.80 - 3.10)	WM18520-ND‡§	.86	.71	.51	39-00-0224
Female	16	.071 - .122 (1.80 - 3.10)	WM18517-ND‡§	.86	.71	.51	39-00-0186
Male	18-24	.051 - .118 (1.30 - 3.00)	WM2500-ND	—	.07	.05	39-00-0041
Female	18-24	.051 - .118 (1.30 - 3.00)	WM2501-ND	—	.09	.06	39-00-0039
Male	18-24	.051 - .122 (1.30 - 3.10)	WM18521-ND‡§	.86	.71	.51	39-00-0220
Female	18-24	.051 - .122 (1.30 - 3.10)	WM18518-ND‡§	.74	.62	.44	39-00-0182

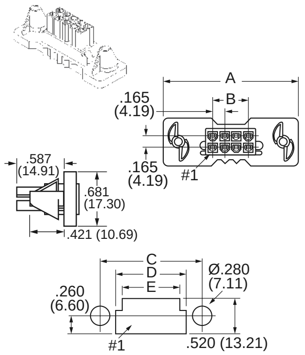
Description	Wire Size	Insulation Dia. Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Male	18-24	.051 - .122 (1.30 - 3.10)	WM1912-ND†	.32	.27	.19	44478-1112
Female	18-24	.051 - .122 (1.30 - 3.10)	WM1914-ND†	.32	.27	.19	44476-1112
Female	18-24	.060 - .120 (1.52 - 3.05)	WM18523-ND‡§	.92	.76	.55	44485-1212
Male	18-24	.051 - .122 (1.30 - 3.10)	WM3940-ND*	.27	.23	.16	30490-2012
Male	18-24	.051 - .122 (1.30 - 3.10)	WM3941-ND*§	1.23	1.01	.73	30490-1012
Male	22-28	.035 - .071 (.89 - 1.80)	WM2502-ND	—	.07	.05	39-00-0049
Female	22-28	.035 - .071 (.89 - 1.80)	WM2503-ND	—	.07	.05	39-00-0047
Male	22-28	.035 - .071 (.90 - 1.80)	WM18522-ND‡§	.82	.68	.49	39-00-0222
Female	22-28	.035 - .071 (.90 - 1.80)	WM18519-ND‡§	.74	.62	.44	39-00-0184
Universal Crimp Tool (Molex)			WM9999-ND	36.19	—	—	63811-1000
Mini-Fit Jr. Crimp Tool, 16 AWG			WM9964-ND	160.11	—	—	11-01-0199
Mini-Fit Jr. Crimp Tool, 18-24 AWG			WM9912-ND	170.12	—	—	11-01-0197
Mini-Fit Jr. Crimp Tool, 22-28 AWG			WM9913-ND	170.20	—	—	11-01-0198
Extraction Tool			WM9918-ND	17.33	—	—	11-03-0044

† High copper alloy plating — offers another 3 amps of current * Grounding pin § Gold
‡ Phosphor Bronze, Post-plated Gold over Nickel

molex GC/Waldom

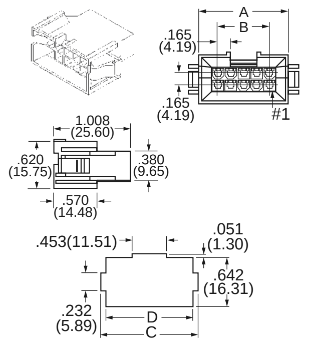
Mini-Fit BMI Connectors

Fig. 1 - Receptacle with Panel Mount Ears



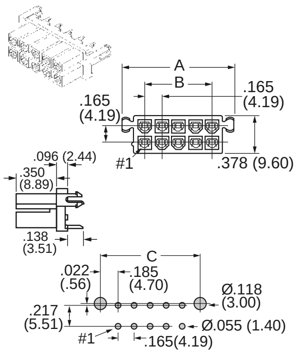
PCB Thickness: .050 (1.27)
PCB Cutout

Fig. 2 - Plug with Panel Mount Ears



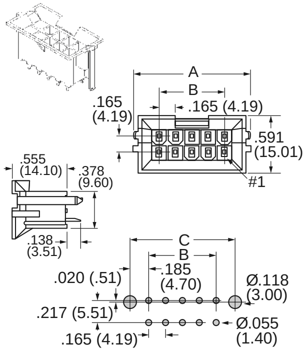
PCB Thickness: .063 (1.60)
PCB Cutout

Fig. 3 - Vertical Receptacle Header



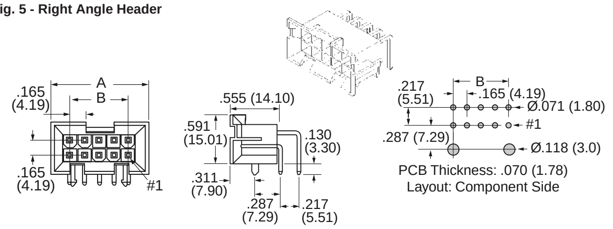
PCB Thickness: .070 (1.78)
Layout: Component Side

Fig. 4 - Vertical Header



PCB Thickness: .070 (1.78)
Layout: Component Side

Fig. 5 - Right Angle Header



PCB Thickness: .070 (1.78)
Layout: Component Side

Features and Benefits: • Blind mating • Will mate with Mini-Fit, Jr. • Fully isolated terminals to protect contacts from damage • Uses standard Mini-Fit series terminals • UL File No.: E29179 • CSA File No.: LR19980 • TUV License No.: R75142

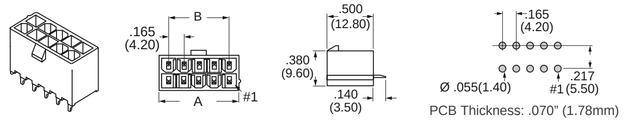
Specifications: • **Voltage:** 600V • **Current:** 9.0A • **Contact Resistance:** 10mΩ min. • **Dielectric Withstanding Voltage:** 1500V • **Insulation Resistance:** 1000 mΩ min.

Physical: • **Housing:** 6/6 nylon, UL 94V-2 • **Temperature:** -40°C to +105°C

Fig.	Cir-cuits	Dimensions – Inch (mm) A	B	C	D	E	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Receptacle with Panel Mount Ears											
1	4	1.583 (40.21)	.165 (4.19)	1.150 (29.21)	.693 (17.60)	.508 (12.90)	WM17500-ND	.79	.66	.47	15-06-0040
	6	1.748 (44.40)	.331 (8.41)	1.315 (33.40)	.858 (21.79)	.673 (17.09)	WM17501-ND	.78	.64	.46	15-06-0060
	10	2.078 (52.78)	.661 (16.79)	1.645 (41.78)	1.189 (30.20)	1.004 (25.50)	WM17502-ND	1.17	.97	.69	15-06-0100
	14	2.409 (61.19)	.992 (25.20)	1.976 (50.19)	1.520 (38.61)	1.335 (33.91)	WM17503-ND	1.57	1.30	.93	15-06-0140
Plug with Panel Mount Ears											
2	4	.622 (15.80)	.165 (4.19)	.779 (19.79)	.642 (16.31)	—	WM17700-ND	.63	.52	.37	15-06-0045
	6	.787 (19.99)	.331 (8.41)	.945 (20.50)	.807 (20.50)	—	WM17701-ND	.71	.63	.42	15-06-0065
	10	1.118 (52.78)	.661 (16.79)	1.276 (28.91)	1.138 (28.91)	—	WM17702-ND	.83	.74	.49	15-06-0105
	14	1.449 (36.80)	.992 (25.20)	1.606 (38.61)	1.469 (37.31)	—	WM17703-ND	1.13	.93	.67	15-06-0145
Vertical Receptacle Header											
3	4	.615 (15.62)	.165 (4.19)	.535 (13.59)	—	—	WM17600-ND	1.83	1.62	1.08	15-24-7040
	6	.780 (19.81)	.331 (8.41)	.701 (17.81)	—	—	WM17601-ND	2.17	1.79	1.28	15-24-7060
	10	1.111 (28.22)	.661 (16.79)	1.031 (26.19)	—	—	WM17602-ND	3.04	2.51	1.79	15-24-7100
	14	1.442 (36.63)	.992 (25.20)	1.362 (34.59)	—	—	WM17603-ND	3.46	2.85	2.04	15-24-7140
Vertical Header											
4	4	.685 (17.40)	.170 (4.32)	.535 (13.59)	—	—	WM17900-ND	1.68	1.39	.99	15-24-6046
	10	1.181 (30.00)	.660 (16.76)	1.031 (26.19)	—	—	WM17901-ND	2.65	2.19	1.57	15-24-6106
4	14	1.512 (38.40)	.990 (25.15)	1.362 (34.59)	—	—	WM17902-ND	3.41	2.82	2.01	15-24-6146
Right Angle Header											
5	4	.165 (4.19)	.590 (14.99)	—	—	—	WM17800-ND	1.62	1.34	.96	15-24-6040
	6	.760 (19.30)	.331 (8.41)	—	—	—	WM17801-ND	2.26	1.87	1.33	15-24-6060
	10	1.090 (27.69)	.661 (16.79)	—	—	—	WM17802-ND	3.19	2.82	1.88	15-24-6100
	14	1.420 (36.07)	.992 (25.20)	—	—	—	WM17803-ND	3.67	3.24	2.16	15-24-6140

Mini-Fit, HCS Connectors

Dual Row, Vertical, Without Pegs



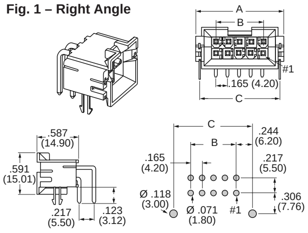
PCB Thickness: .070” (1.78mm)

Cir-cuits	Amps	Dimensions Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
2	12	.210 (5.40)	—	WM18449-ND	1.10	.98	.65	44472-0254
4	11	.380 (9.60)	.170 (4.20)	WM18450-ND	1.66	1.38	.98	44472-0454
6	11	.540 (13.80)	.330 (8.40)	WM18451-ND	2.22	1.96	1.31	44472-0654
8	10	.710 (18.00)	.500 (12.60)	WM18452-ND	3.15	2.60	1.86	44472-0854
10	10	.870 (22.20)	.660 (16.80)	WM18453-ND	3.32	2.74	1.96	44472-1054
12	9	1.040 (26.40)	.830 (21.00)	WM18454-ND	3.60	2.97	2.12	44472-1254
14	9	1.200 (30.60)	.990 (25.20)	WM18455-ND	4.43	3.65	2.61	44472-1454
16	9	1.370 (34.80)	1.160 (29.40)	WM18456-ND	4.98	4.10	2.93	44472-1654

Mini-Fit, SMC Connectors

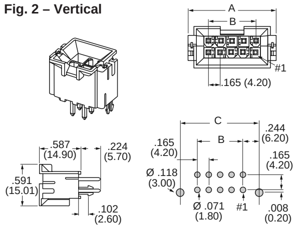
Surface Mount Compatible Headers, Dual Row

Fig. 1 – Right Angle



PCB Thickness: .063” (1.60mm)

Fig. 2 – Vertical



PCB Thickness: .063” (1.60mm)

Fig.	Cir-cuits	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	4	.740 (18.81)	.165 (4.20)	.653 (16.60)	WM18457-ND	3.64	3.21	2.14	43810-0001
	6	.906 (23.01)	.331 (8.40)	.819 (20.80)	WM18458-ND	4.55	3.76	2.68	43810-0002
	10	1.237 (31.41)	.661 (16.80)	1.150 (29.20)	WM18459-ND	6.49	5.73	3.82	43810-0004
2	4	.740 (18.81)	.165 (4.20)	.653 (16.60)	WM18460-ND	3.28	2.71	1.94	44068-0001
	6	.906 (23.01)	.331 (8.40)	.819 (20.80)	WM18461-ND	4.11	3.39	2.42	44068-0002
	10	1.237 (31.41)	.661 (16.80)	1.150 (29.20)	WM18462-ND	5.85	4.82	3.45	44068-0004

5.08mm Disk Drive Power Connection System

Fig. 1 - IDT Plug

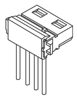


Fig. 2 - Receptacle Housing

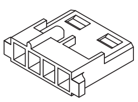


Fig. 3 - Pin Housing

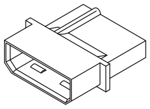


Fig. 4 - Veritcal Header

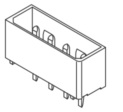


Fig.	Cir-Cuit	Description	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	4	Connector Plug w/Strain Relief IDT	WM6981-ND	1.67	1.48	.99	15-24-3030
2	4	Receptacle Housing	WM6982-ND	.75	.67	.45	15-24-4048
3	4	Pin Housing	WM6985-ND	.83	.74	.49	15-24-4047
4	4	Vertical Header	WM6986-ND	1.94	1.71	1.14	15-24-4157

Power Connection Terminals

Description	Wire Size	Max. Insulation Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Female	AWG 14-20	.133 (3.39)	WM6983-ND	.21	.19	.13	02-08-1202
Male	AWG 14-20	.133 (3.39)	WM6984-ND	.21	.19	.13	02-08-1235
Universal Crimp Tool (Molex)			WM9999-ND	36.19 each			63811-1000

molex GC/Waldom

Micro-Fit 3.0™ Connectors

Features: • Fully isolated contacts • Fully polarized to mating receptacle • Integral pull tabs for ease in unmating **Electrical:** 250V *Current:* 5.0A max. *Contact Res.:* 10mΩ max. *Dielectric Withstanding Volt:* 1500V AC *Insulation Res.:* 1,000MΩ min. **Physical:** *Housing:* Polyester, UL 94V-0 *Contact:* Phosphor Bronze *Plating:* Tin or Gold

BMI Features and Benefits: Connectors float in panel cutout up to 1.27mm (.050") in any direction. Use standard Micro-Fit terminals. Innovative panel mounting design holds connectors firmly in place. Fully isolated contacts prevent terminal damage. Fully polarized to completely prevent mismating.

Fig. 1

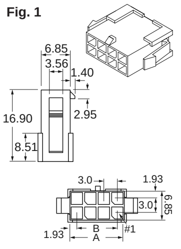


Fig. 2

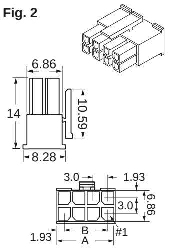


Fig. 3

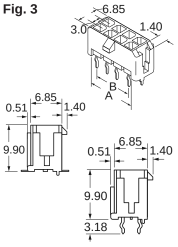


Fig. 4

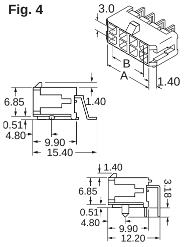


Fig. 5

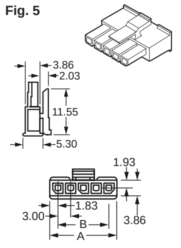


Fig. 6

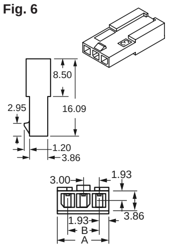


Fig. 7

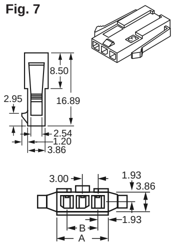


Fig. 8

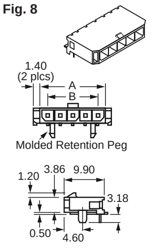


Fig. 9

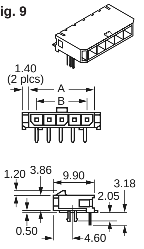


Fig. 10

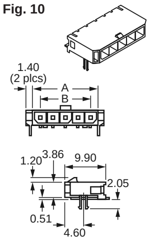


Fig. 11

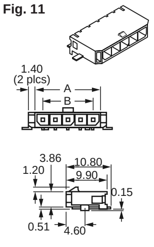


Fig. 12

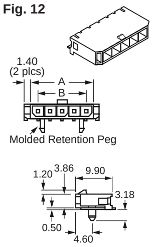


Fig. 13

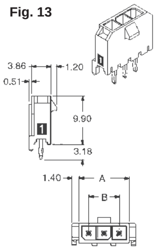


Fig. 14

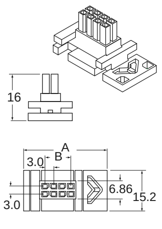


Fig. 15

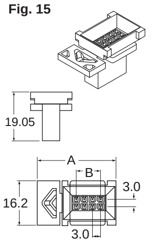


Fig.	Cir-cuits	Dim. (mm)		Plating	Digi-Key Part No.	Price Each			Molex Part No.
		A	B			1	10	100	
Plug - Panel Mount (uses male terminal)									
1	2	3.85	—	—	WM1777-ND	.49	.41	.29	43020-0200
	4	6.85	3.00	—	WM1778-ND	.55	.46	.33	43020-0400
	6	9.85	6.00	—	WM1779-ND	.65	.54	.39	43020-0600
	8	12.85	9.00	—	WM1780-ND	.72	.60	.43	43020-0800
	10	15.85	12.00	—	WM1781-ND	.83	.74	.49	43020-1000
	12	18.85	15.00	—	WM1782-ND	.96	.85	.57	43020-1200
Receptacle (uses female terminal)									
2	2	3.85	—	—	WM1783-ND	.49	.44	.29	43025-0200
	4	6.85	3.00	—	WM1784-ND	.55	.49	.33	43025-0400
	6	9.85	6.00	—	WM1785-ND	.65	.58	.39	43025-0600
	8	12.85	9.00	—	WM1786-ND	.72	.64	.43	43025-0800
	10	15.85	12.00	—	WM1787-ND	.83	.74	.49	43025-1000
	12	18.85	15.00	—	WM1788-ND	.96	.85	.57	43025-1200
Vertical Header - Through-Hole with Offset Terminal Retention									
3	2	3.85	—	Tin	WM1789-ND	.95	.79	.56	43045-0212
	4	6.85	3.00	Tin	WM1790-ND	1.20	.99	.71	43045-0412
	6	9.85	6.00	Tin	WM1791-ND	1.52	1.25	.90	43045-0612
	8	12.85	9.00	Tin	WM1792-ND	1.84	1.52	1.09	43045-0812
	10	15.85	12.00	Tin	WM1793-ND	2.16	1.78	1.28	43045-1012
	12	18.85	15.00	Tin	WM1794-ND	2.30	1.90	1.36	43045-1212
3	2	3.85	—	Gold, 30µ"	WM1795-ND	1.42	1.17	.84	43045-0214
	4	6.85	3.00	Gold, 30µ"	WM1796-ND	1.89	1.67	1.11	43045-0414
	6	9.85	6.00	Gold, 30µ"	WM1797-ND	2.40	1.98	1.42	43045-0614
	8	12.85	9.00	Gold, 30µ"	WM1798-ND	2.90	2.56	1.71	43045-0814
	10	15.85	12.00	Gold, 30µ"	WM1799-ND	3.46	3.05	2.04	43045-1014
	12	18.85	15.00	Gold, 30µ"	WM1800-ND	3.90	3.22	2.30	43045-1214
Vertical Header - SMT with Fitting Nail									
3	2	3.85	—	Tin	WM1801-ND	2.65	2.34	1.56	43045-0218
	4	6.85	3.00	Tin	WM1802-ND	3.06	2.52	1.80	43045-0418
	6	9.85	6.00	Tin	WM1803-ND	3.83	3.16	2.26	43045-0618
	8	12.85	9.00	Tin	WM1804-ND	3.95	3.25	2.33	43045-0818
	10	15.85	12.00	Tin	WM1805-ND	4.34	3.83	2.56	43045-1018
	12	18.85	15.00	Tin	WM1806-ND	4.73	4.17	2.78	43045-1218
3	2	3.85	—	Gold, 30µ"	WM1807-ND	3.26	2.88	1.92	43045-0220
	4	6.85	3.00	Gold, 30µ"	WM1808-ND	3.91	3.45	2.30	43045-0420
	6	9.85	6.00	Gold, 30µ"	WM1809-ND	4.53	4.00	2.67	43045-0620
	8	12.85	9.00	Gold, 30µ"	WM1810-ND	5.26	4.64	3.10	43045-0820
	10	15.85	12.00	Gold, 30µ"	WM1811-ND	5.88	5.19	3.46	43045-1020
	12	18.85	15.00	Gold, 30µ"	WM1812-ND	6.49	5.73	3.82	43045-1220
Right Angle Header - Through-Hole									
4	2	3.85	—	Tin	WM1813-ND	1.14	1.01	.67	43045-0200
	4	6.85	3.00	Tin	WM1814-ND	1.44	1.28	.85	43045-0400
	6	9.85	6.00	Tin	WM1815-ND	1.83	1.62	1.08	43045-0600
	8	12.85	9.00	Tin	WM1816-ND	2.23	1.97	1.32	43045-0800
	10	15.85	12.00	Tin	WM1817-ND	2.61	2.31	1.54	43045-1000
	12	18.85	15.00	Tin	WM1818-ND	3.00	2.65	1.77	43045-1200
4	2	3.85	—	Gold, 30µ"	WM1819-ND	1.66	1.47	.98	43045-0202
	4	6.85	3.00	Gold, 30µ"	WM1820-ND	2.27	2.01	1.34	43045-0402
	6	9.85	6.00	Gold, 30µ"	WM1821-ND	2.89	2.55	1.70	43045-0602
	8	12.85	9.00	Gold, 30µ"	WM1822-ND	3.58	3.16	2.11	43045-0802
	10	15.85	12.00	Gold, 30µ"	WM1823-ND	4.16	3.68	2.45	43045-1002
	12	18.85	15.00	Gold, 30µ"	WM1824-ND	4.77	4.22	2.81	43045-1202
Right Angle Header - SMT with Fitting Nail									
4	2	3.85	—	Tin	WM1825-ND	2.57	2.27	1.52	43045-0209
	4	6.85	3.00	Tin	WM1826-ND	3.09	2.73	1.82	43045-0409
	6	9.85	6.00	Tin	WM1827-ND	3.57	2.95	2.11	43045-0609
	8	12.85	9.00	Tin	WM1828-ND	4.17	3.68	2.46	43045-0809
	10	15.85	12.00	Tin	WM1829-ND	4.64	3.83	2.73	43045-1009
	12	18.85	15.00	Tin	WM1830-ND	5.11	4.51	3.01	43045-1209
4	2	3.85	—	Gold, 30µ"	WM1831-ND	3.31	2.73	1.95	43045-0211
	4	6.85	3.00	Gold, 30µ"	WM1832-ND	4.11	3.39	2.43	43045-0411
	6	9.85	6.00	Gold, 30µ"	WM1833-ND	4.85	4.00	2.86	43045-0611
	8	12.85	9.00	Gold, 30µ"	WM1834-ND	5.74	4.73	3.38	43045-0811
	10	15.85	12.00	Gold, 30µ"	WM1835-ND	6.48	5.34	3.82	43045-1011
	12	18.85	15.00	Gold, 30µ"	WM1836-ND	7.24	5.97	4.27	43045-1211
Micro-Fit Receptacle									
5	2	6.85	3.00	—	WM1845-ND	.49	.44	.29	43645-0200
	3	9.85	6.00	—	WM1846-ND	.52	.43	.31	43645-0300
	4	12.85	9.00	—	WM1847-ND	.55	.46	.33	43645-0400
	5	15.85	12.00	—	WM1848-ND	.61	.50	.36	43645-0500
	6	18.85	15.00	—	WM1849-ND	.65	.54	.39	43645-0600
Micro-Fit Plug without Panel Mounts									
6	2	6.85	3.00	—	WM1855-ND	.49	.41	.29	43640-0201
	3	9.85	6.00	—	WM1856-ND	.52	.43	.31	43640-0301
	4	12.85	9.00	—	WM1857-ND	.55	.46	.33	43640-0401
	5	15.85	12.00	—	WM1858-ND	.61	.50	.36	43640-0501
	6	18.85	15.00	—	WM1859-ND	.65	.54	.39	43640-0601
Micro-Fit Plug with Panel Mounts									
7	2	6.85	3.00	—	WM1850-ND	.49	.41	.29	43640-0200
	3	9.85	6.00	—	WM1851-ND	.53	.44	.31	43640-0300
	4	12.85	9.00	—	WM1852-ND	.55	.46	.33	43640-0400
	5	15.85	12.00	—	WM1853-ND	.61	.50	.36	43640-0500
	6	18.85	15.00	—	WM1854-ND	.65	.54	.39	43640-0600
Micro-Fit Header - Right Angle									
8	2	6.85	3.00	Tin	WM1860-ND	1.06	.88	.63	43650-0200
	3	9.85	6.00	Tin	WM1861-ND	1.26	1.04	.75	43650-0300
	4	12.85	9.00	Tin	WM1862-ND	1.46	1.21	.86	43650-0400
	5	15.85	12.00	Tin	WM1863-ND	1.72	1.42	1.01	43650-0500
	6	18.85	15.00	Tin	WM1864-ND	1.90	1.57	1.12	43650-0600
8	2	6.85	3.00	Gold	WM1865-ND	1.40	1.16	.83	43650-0201
	3	9.85	6.00	Gold	WM1866-ND	1.57	1.29	.93	43650-0301
	4	12.85	9.00	Gold	WM1867-ND	1.80	1.49	1.07	43650-0401
	5	15.85	12.00	Gold	WM1868-ND	2.06	1.70	1.22	43650-0501
	6	18.85	15.00	Gold	WM1869-ND	2.33	1.92	1.38	43650-0601
Micro-Fit Header - Right Angle with Retention Clip									
9	2	6.85	3.00	Tin	WM1870-ND	1.32	1.09	.78	43650-0203
	3	9.85	6.00	Tin	WM1871-ND	1.51	1.25	.90	43650-0303
	4	12.85	9.00	Tin	WM1872-ND	1.71	1.51	1.01	43650-0403
	5	15.85	12.00	Tin	WM1873-ND	1.90	1.57	1.12	43650-0503
	6	18.85	15.00	Tin	WM1874-ND	2.08	1.72	1.23	43650-0603
9	2	6.85	3.00	Gold	WM1875-ND	1.58	1.31	.93	43650-0204
	3	9.85	6.00	Gold	WM1876-ND	1.75	1.45	1.04	43650-0304
	4	12.85	9.00	Gold	WM1877-ND	2.00	1.65	1.18	43650-0404
	5	15.85	12.00	Gold	WM1878-ND	2.30	1.90	1.36	43650-0504
	6	18.85	15.00	Gold	WM1879-ND	2.47	2.04	1.46	43650-0604
Micro-Fit Header - Right Angle, SMT with Retention Clip									
10	2	6.85	3.00	Tin	WM1880-ND	2.44	2.02	1.44	43650-0209
	3	9.85	6.00	Tin	WM1881-ND	2.70	2.23	1.60	43650-0309
	4	12.85	9.00	Tin	WM1882-ND	2.97	2.45	1.75	43650-0409
	5	15.85	12.00	Tin	WM1883-ND	3.20	2.64	1.89	43650-0509
	6	18.85	15.00	Tin	WM1884-ND	3.44	2.84	2.03	43650-0609
10	2	6.85	3.00	Gold	WM1885-ND	2.78	2.29	1.64	43650-0210
	3	9.85	6.00	Gold	WM1886-ND	3.09	2.55	1.83	43650-0310
	4	12.85	9.00	Gold	WM1887-ND	3.43	3.03	2.02	43650-0410
	5	15.85	12.00	Gold	WM1888-ND	3.71	3.06	2.19	43650-0510
	6	18.85	15.00	Gold	WM1889-ND	4.01	3.31	2.36	43650-0610
Micro-Fit Header - Right Angle, SMT with Fitting Nail									
11	2	6.85	3.00	Tin	WM1890-ND	2.57	2.12	1.52	43650-0212
	3	9.85	6.00	Tin	WM1891-ND	2.83	2.33	1.67	43650-0312
	4	12.85	9.00	Tin	WM1892-ND	3.11	2.56	1.83	43650-0412
	5	15.85	12.00	Tin	WM1893-ND	3.33	2.74	1.96	43650-0512
	6	18.85	15.00	Tin	WM1894-ND	3.56	2.94	2.10	43650-0612
11	2	6.85	3.00	Gold	WM1895-ND	2.89	2.39	1.71	43650-0213
	3	9.85	6.00	Gold	WM1896-ND	3.22	2.85	1.90	43650-0313
	4	12.85	9.00	Gold	WM1897-ND	3.54	3.12	2.09	43650-0413
	5	15.85	12.00	Gold	WM1898-ND	3.83	3.16	2.26	43650-0513
	6	18.85	15.00	Gold	WM1899-ND	4.13	3.65	2.43	43650-0613
Micro-Fit Header - Right Angle, SMT with Retention Peg									
12	3	9.85	6.00	Tin	WM1901-ND	2.53	2.09	1.50	43650-0306
	4	12.85	9.00	Tin	WM1902-ND	2.80	2.31	1.65	43650-0406
	5	15.85	12.00	Tin	WM1903-ND	3.05	2.52	1.80	43650-0506
	6	18.85	15.00	Tin	WM1904-ND	3.27	2.70	1.93	43650-0606

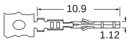
(Continued)

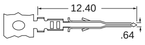
Micro-Fit 3.0™ Connectors *(Cont.)*

Fig.	Cir-cuits	Dim. (mm)		Plating	Digi-Key	Price Each			Molex
		A	B		Part No.	1	10	100	Part No.
Micro-Fit Header - Right Angle, SMT with Retention Peg									
12	2	6.85	3.00	Gold	WM1905-ND	2.60	2.15	1.54	43650-0207
	3	9.85	6.00	Gold	WM1906-ND	2.92	2.41	1.72	43650-0307
	4	12.85	9.00	Gold	WM1907-ND	3.03	2.50	1.79	43650-0407
	5	15.85	12.00	Gold	WM1908-ND	3.54	2.92	2.09	43650-0507
	6	18.85	15.00	Gold	WM1909-ND	3.84	3.17	2.26	43650-0607
Micro-Fit Header - Vertical, Wire-to-Board									
13	2	6.85	3.00	Tin	WM1917-ND	.87	.72	.51	43650-0215
	3	9.85	6.00	Tin	WM1918-ND	1.19	.98	.71	43650-0315
	4	12.85	9.00	Tin	WM1919-ND	1.28	1.06	.76	43650-0415
	5	15.85	12.00	Tin	WM1920-ND	1.37	1.13	.81	43650-0515
	6	18.85	15.00	Tin	WM1921-ND	1.52	1.26	.90	43650-0615
13	2	6.85	3.00	Gold, 15µ"	WM1922-ND	1.09	.90	.65	43650-0216
	3	9.85	6.00	Gold, 15µ"	WM1923-ND	1.29	1.07	.76	43650-0316
	4	12.85	9.00	Gold, 15µ"	WM1924-ND	1.50	1.24	.89	43650-0416
	5	15.85	12.00	Gold, 15µ"	WM1925-ND	1.71	1.41	1.01	43650-0516
	6	18.85	15.00	Gold, 15µ"	WM1926-ND	1.94	1.60	1.14	43650-0616
BMI Receptacle - Panel-to-Panel									
14	4	24.60	3.00	—	WM3712-ND	.66	.59	.39	44133-0400
	6	27.70	6.00	—	WM3713-ND	.69	.62	.41	44133-0600
	8	30.70	9.00	—	WM3714-ND	.90	.80	.53	44133-0800
	10	33.80	12.00	—	WM3715-ND	1.05	.93	.62	44133-1000
	12	36.80	15.00	—	WM3716-ND	1.24	1.10	.73	44133-1200
	14	39.90	18.00	—	WM3717-ND	1.45	1.29	.86	44133-1400
	16	42.90	21.00	—	WM3718-ND	1.68	1.39	.99	44133-1600
	18	46.00	24.00	—	WM3719-ND	1.88	1.67	1.11	44133-1800
	20	49.00	27.00	—	WM3720-ND	2.10	1.73	1.24	44133-2000
	22	51.80	30.00	—	WM3721-ND	2.30	1.90	1.36	44133-2200
	24	54.90	33.00	—	WM3722-ND	2.52	2.08	1.49	44133-2400

Fig.	Cir-cuits	Dim. (mm)		Plating	Digi-Key	Price Each			Molex
		A	B		Part No.	1	10	100	Part No.
BMI Plug - Panel-to-Panel									
15	4	22.84	3.00	—	WM3608-ND	.66	.55	.39	44300-0400
	6	25.84	6.00	—	WM3609-ND	.79	.66	.47	44300-0600
	8	28.84	9.00	—	WM3610-ND	.90	.75	.53	44300-0800
	10	31.84	12.00	—	WM3611-ND	1.05	.87	.62	44300-1000
	12	34.84	15.00	—	WM3612-ND	1.24	1.03	.73	44300-1200
	14	37.84	18.00	—	WM3613-ND	1.45	1.20	.86	44300-1400
	16	40.84	21.00	—	WM3614-ND	1.68	1.39	.99	44300-1600
	18	43.84	24.00	—	WM3615-ND	1.89	1.56	1.12	44300-1800
	20	46.84	27.00	—	WM3616-ND	2.10	1.73	1.24	44300-2000
	22	49.84	30.00	—	WM3617-ND	2.30	2.04	1.36	44300-2200
	24	52.84	33.00	—	WM3618-ND	2.52	2.23	1.49	44300-2400

Micro-Fit 3.0™ Terminals





Description	Wire Size AWG	Insul. Dia. (mm)	Digi-Key	Price Each			Molex
			Part No.	10	100	500	Part No.
Loose Female-Tin	20-24	1.85	WM1837-ND	.16	.10	.08	43030-0007
Loose Female-Tin	26-30	1.27	WM1838-ND	.16	.10	.08	43030-0010
Loose Female-30µ" Gold	20-24	1.85	WM1839-ND	.17	.11	.09	43030-0009
Loose Female-30µ" Gold	26-30	1.27	WM1840-ND	.23	.14	.12	43030-0012
Loose Male-Tin	20-24	1.85	WM1841-ND	.16	.10	.08	43031-0007
Loose Male-Tin	26-30	1.27	WM1842-ND	.16	.10	.08	43031-0010
Loose Male-30µ" Gold	20-24	1.85	WM1843-ND	.25	.16	.13	43031-0009
Loose Male-30µ" Gold	26-30	1.27	WM1844-ND	.25	.16	.13	43031-0012
Universal Crimp Tool (Molex)........................			WM9999-ND	36.19 each			63811-1000
Crimp Tool			WM9935-ND	170.12 each			63811-2800
Extraction Tool.......................................			WM9937-ND	17.14 each			11-03-0043

Mini-Fit, Sr.™ Connectors (50 Amps)

Features: • High current (50 amp) • Fully polarized • Positive locks • Low engagement force • Wire-to-wire, wire-to-board. **Electrical:** *Voltage:* 600V *Current:* 50A max. **Physical:** *Housing:* Polyester *Contact:* Copper alloy *Plating:* Tin/lead over nickel *Temperature:* -40°C to +105°C **Approvals:** UL File No.: E29179, CSA File No.: LR19980, TUV License No.: R9751144

Fig. 1

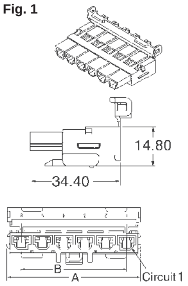


Fig. 2

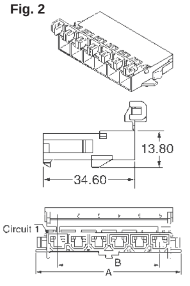


Fig. 3

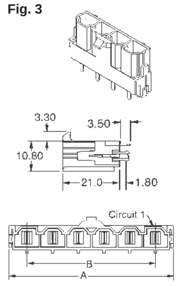


Fig. 4

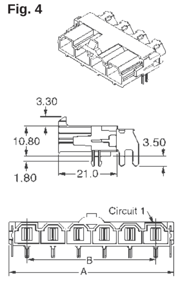


Fig.	Cir-cuits	Dim. (mm)		Plating	Digi-Key	Price Each			Molex
		A	B		Part No.	1	10	100	Part No.
Mini-Fit, Sr. Receptacle Housing									
1	2	23.50	10.00	Tin	WM1927-ND	1.56	1.29	.92	42816-0212
	3	33.50	20.00	Tin	WM1928-ND	1.74	1.44	1.03	42816-0312
	4	43.50	30.00	Tin	WM1929-ND	1.93	1.59	1.14	42816-0412
	5	53.50	40.00	Tin	WM1930-ND	2.11	1.74	1.25	42816-0512
	6	63.50	50.00	Tin	WM1931-ND	2.31	1.91	1.36	42816-0612
Mini-Fit, Sr. Plug Housing — Panel Mount									
2	2	31.30	10.00	Tin	WM1932-ND	1.57	1.30	.93	42818-0212
	3	41.30	20.00	Tin	WM1933-ND	1.74	1.44	1.03	42818-0312
	4	51.30	30.00	Tin	WM1934-ND	1.93	1.59	1.14	42818-0412
	5	61.30	40.00	Tin	WM1935-ND	2.11	1.74	1.25	42818-0512
	6	71.30	50.00	Tin	WM1936-ND	2.28	1.89	1.35	42818-0612
Mini-Fit, Sr. Header — Vertical with Metal Clip Mount, SMC									
3	2	23.82	10.00	Tin	WM1937-ND	3.36	2.77	1.98	42819-2212
	3	33.82	20.00	Tin	WM1938-ND	4.33	3.57	2.55	42819-3212
	4	43.82	30.00	Tin	WM1939-ND	5.12	4.22	3.02	42819-4212
	5	53.82	40.00	Tin	WM1940-ND	5.80	4.78	3.42	42819-5212
	6	63.82	50.00	Tin	WM1941-ND	6.85	5.65	4.03	42819-6212
Mini-Fit, Sr. Header — Right Angle with Metal Clip Mount, SMC									
4	2	23.82	10.00	Tin	WM1942-ND	4.57	3.77	2.69	42820-2212
	3	33.82	20.00	Tin	WM1943-ND	6.18	5.10	3.64	42820-3212
	4	43.82	30.00	Tin	WM1944-ND	7.44	6.13	4.38	42820-4212
	5	53.82	40.00	Tin	WM1945-ND	8.57	7.06	5.04	42820-5212
	6	63.82	50.00	Tin	WM1946-ND	10.20	8.41	6.01	42820-6212

Mini-Fit, Sr.™ Terminals

Fig. 1

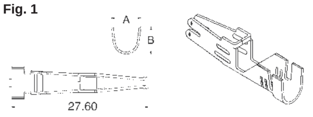


Fig. 2

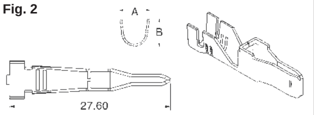


Fig.	Wire Size AWG	Dim. (mm)		Plating	Digi-Key	Price Each			Molex
		A	B		Part No.	1	10	100	Part No.
Mini-Fit, Sr. Terminal — Female									
1	12 and 10	5.90	6.60	Tin	WM1947-ND	.67	.55	.40	42815-0011
	8	6.00	5.50	Tin	WM1915-ND	.67	.55	.40	42815-0031
Mini-Fit, Sr. Terminal — Male									
2	12 and 10	5.90	6.60	Tin	WM1948-ND	.67	.55	.40	42817-0011
	8	6.00	5.50	Tin	WM1916-ND	.67	.55	.40	42817-0031
Crimp Tool, 8 AWG......................					WM9960-ND	348.19	—	—	63811-1500
Crimp Tool, 10-12 AWG.................					WM9962-ND	348.19	—	—	63811-1600
Extraction Tool..........................					WM9961-ND	68.81	—	—	63813-0400

MicroCross™ DVI (Digital Visual Interface) Connector System

Fig. 1

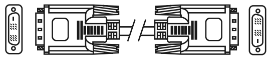


Fig. 2

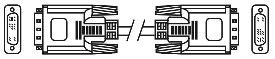


Fig. 3

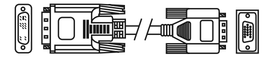


Fig. 4

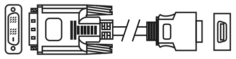


Fig. 5

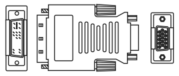


Fig. 6

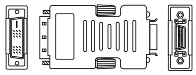


Fig. 7

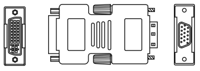


Fig. 8

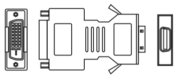


Fig. 9

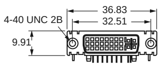
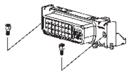
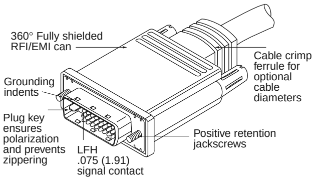


Fig. 10




360° Fully shielded RFI/EMI can
Cable crimp ferrule for optional cable diameters
Grounding indents
Plug key ensures polarization and prevents zippering
LFH .075 (1.91) signal contact
Positive retention jackscrews

The MicroCross DVI I/O Connectors from Molex are leading the way in support of the DDWG (Digital Display Working Group) DVI interface standard. MicroCross DVI has been chosen by the DDWG as the standard digital interface for connecting a host device and display device to support high-resolution video applications. Supporting one or two digital channels driven by TMDS (Transition Minimized Differential Signaling) and/or a high bandwidth analog interface, the MicroCross was chosen by the DDWG for its size, performance and cost. No other interface in the industry compares. The innovative crossing ground blade design and LFH™ (Low Force Helix) contact interface design provides the industry with a video interface design that will support over 1.65Gb/s per differential pair (for a total 9.9Gb/s over a dual link implementation) and 2.5GHz support for the analog interface. This provides the industry the performance head room it needs for future growth and development of video products.This innovative approach addresses the problem of an industry in transition. By providing a single high performance interface, precious board I/O space is saved and lower system costs are achieved. The interface provides added benefits of a high cycle life interface for mobile applications and the improved EMI performance needed for high speed links. The EMI performance is achieved through the 360° shielding of the MicroCross DVI cable and connector design. The MicroCross DVI connector system and the DVI standard are moving the graphics industry to the next level by providing unmatched electrical and mechanical performance while allowing for low cost implementation.

Fig.	Description	Digi-Key	Price Each			Molex
		Part No.	1	25	50	Part No.
1	DVI-Digital to DVI-Digital, Single Link......	WM18509-ND	32.08	29.41	26.74	88741-8000
2	DVI-Analog to DVI-Analog	WM18510-ND	31.93	29.27	26.61	88741-8200
3	DVI-Analog to VGA........................	WM18511-ND	26.13	23.96	21.78	88741-8300
4	DVI-Digital to DFP.........................	WM18512-ND	34.72	31.83	28.94	88741-8600
5	DVI-Analog Plug to VGA Receptacle	WM18513-ND	9.10	8.34	7.59	88741-8700
6	DVI-Digital Plug to DFP Receptacle........	WM18514-ND	14.65	13.44	12.22	88741-8800
7	DVI-I-Analog/Digital Recept. to VGA Plug .	WM18515-ND	16.87	15.47	14.06	88741-9100
8	DVI-Digital Receptacle to DFP Plug........	WM18516-ND	19.66	18.03	16.39	88741-9300
9	DVI-I R/Angle Recept, Gold Flash	WM5600-ND	4.46	4.10	3.73	74320-1004
10	DVI-D R/Angle Recept, Gold Flash	WM5601-ND	3.91	3.59	3.26	74320-4004

Commercial MATE-N-LOK® Connectors

Fig. 1

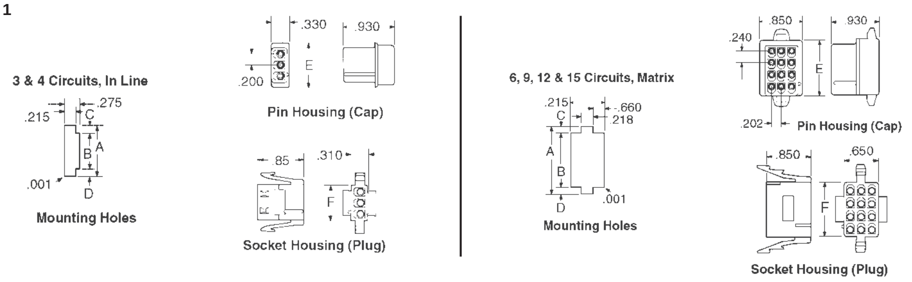


Fig. 2

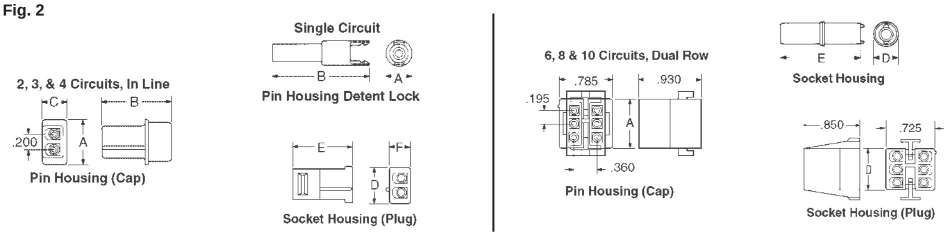
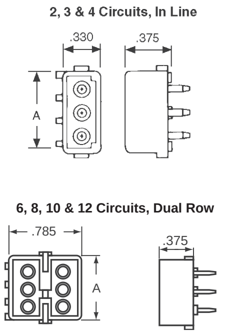


Fig. 3



Mate with Free Hanging Socket Connectors

Housing Material: Natural nylon

Pin Material: Copper alloy.

Note: *Use standard pin for .062" (1.57 mm) thick PC board. Use long tail for .125" (3.18 mm) thick PC board.*

No. of Cir.	Description	Dimensions – Inch						Digi-Key Part No.	Pricing		AMP Part No.
		A	B	C	D	E	F		1	100	
Fig.1 – Panel-Mount Rectangular Connectors (Contacts Sold Separately)											
3	Pin Housing	.890	.645	.123	.123	.810	—	A1400-ND	.18	14.05	1-480305-0
	Socket Housing	.890	.645	.123	.123	—	.630	A1401-ND	.21	16.31	1-480304-0
4	Pin Housing	1.090	.845	.123	.123	1.010	—	A1402-ND	.22	17.06	1-480426-0
	Socket Housing	1.090	.845	.123	.123	—	.830	A1403-ND	.46	37.23	1-480425-0
6	Pin Housing	.850	.575	.138	.138	.655	—	A1404-ND	.36	28.16	1-480276-0
	Socket Housing	.850	.575	.138	.138	—	.565	A1405-ND	.58	47.20	1-480273-0
9	Pin Housing	1.085	.815	.135	.135	.905	—	A1406-ND	.62	50.10	1-480277-0
	Socket Housing	1.085	.815	.135	.135	—	.805	A1407-ND	.69	56.18	1-480274-0
12	Pin Housing	1.320	1.050	.135	.135	1.145	—	A1424-ND	.74	59.86	1-480278-0
	Socket Housing	1.320	1.050	.135	.135	—	1.045	A1425-ND	.80	64.83	1-480275-0
15	Pin Housing	1.555	1.290	.133	.133	1.382	—	A1426-ND	1.04	84.51	1-480324-0
	Socket Housing	1.555	1.290	.133	.133	—	1.280	A1427-ND	1.17	95.04	1-480323-0
Fig. 2 – Free-Hanging Rectangular Connectors (Contacts Sold Separately)											
1	Pin Housing Detent Lock	.300	1.200	—	—	—	—	A1204-ND	.09	7.48	1-480350-0
	Pin Housing	.300	1.240	—	—	—	—	A1408-ND	.08	6.16	1-480351-0
	Socket Housing	—	—	—	2.60	.870	—	A1409-ND	.08	6.16	1-480349-0
	Pin Housing Detent Lock	.300	1.325	—	—	—	—	A25388-ND*	.24	19.26	1-480401-0
	Socket Housing	—	—	—	.260	.995		A25389-ND*	.10	8.05	1-480400-0
2	Pin Housing	.610	.930	.330	—	—	—	A1410-ND	.10	7.83	1-480319-0
	Socket Housing	—	—	—	.530	.860	.295	A1411-ND	.10	7.80	1-480318-0
	Pin Housing Detent Lock	.610	.930	.330	—	—	—	A25756-ND*	.44	35.48	1-480498-1
	Socket Housing	—	—	—	.530	.860	.295	A25757-ND*	.42	34.19	1-480393-1
3	Pin Housing	.810	.930	.325	—	—	—	A1400-ND	.18	14.05	1-480305-0
	Socket Housing	—	—	—	.825	.850	.290	A1429-ND	.19	14.74	1-480303-0
	Pin Housing Detent Lock	.810	.930	.325	—	—	—	A25414-ND*	.39	31.19	1-480387-0
	Socket Housing	—	—	—	.825	.850	.290	A25415-ND*	.42	33.90	1-480388-0
4	Pin Housing	1.010	.930	.330	—	—	—	A1402-ND	.22	17.06	1-480426-0
	Socket Housing	—	—	—	1.030	.850	.310	A1431-ND	.18	14.36	1-480424-0
	Pin Housing Detent Lock	1.010	.930	.330	—	—	—	A25416-ND†	1.06	85.77	794132-1
	Socket Housing	—	—	—	1.030	.850	.310	A25417-ND†	.30	24.67	770827-1
6	Pin Housing	.705	—	—	—	—	—	A1412-ND	.52	41.69	1-480340-0
	Socket Housing	—	—	—	.610	—	—	A1413-ND	.36	28.75	1-480270-0
8	Pin Housing	.900	—	—	—	—	—	A1206-ND	.56	45.73	1-480345-0
	Socket Housing	—	—	—	—	.805	—	A1207-ND	.38	30.14	1-480283-0
10	Pin Housing	1.095	—	—	—	—	—	A1414-ND	.65	52.42	1-480339-0
	Socket Housing	—	—	—	1.00	—	—	A1415-ND	.73	59.00	1-480285-0

No. of Cir.	Description	Dim. – Inch		Digi-Key Part No.	Pricing		AMP Part No.
		A	B		1	100	
Fig. 3 – Printed Circuit Board Pin Header Assemblies – Mate Socket Housing							
2	Pre-Tin with Detent Lock	.515	—	A1208-ND	.32	25.05	350209-1
	Gold with Detent Lock	.515	—	A1209-ND	1.07	86.72	350209-2
	Pre-Tin Positive Lock	.515	—	A14364-ND	.42	33.00	350539-1
	Gold Positive Lock	.515	—	A14365-ND	1.28	103.82	350539-2
	Pre-Tin with Positive Lock Long Tail	.515	—	A14366-ND	.90	73.21	350540-1
	Pre-Tin Detent Lock Long Tail	.515	—	A14367-ND	.55	44.51	350422-1
3	Pre-Tin with Detent Lock	.715	—	A1210-ND	.50	39.85	350210-1
	Gold with Detent Lock	.715	—	A1211-ND	1.63	132.06	350210-2
	Pre-Tin Positive Lock	.715	—	A14368-ND	.96	77.44	350541-1
	Gold Positive Lock	.715	—	A14369-ND	1.84	149.16	350541-2
	Pre-Tin Detent Lock Long Tail	.715	—	A14370-ND	.72	58.28	350423-1
4	Pre-Tin with Detent Lock	.915	—	A1212-ND	.47	37.33	350211-1
	Gold with Detent Lock	.915	—	A1213-ND	1.30	103.03	350211-2
	Pre-Tin Positive Lock	.915	—	A14371-ND	.91	72.26	350543-1
	Gold Positive Lock	.915	—	A14372-ND	2.53	204.89	350543-2
	Pre-Tin Positive Lock Long Tail	.915	—	A14373-ND	1.62	131.04	350544-1
	Pre-Tin Detent Lock Long Tail	.915	—	A14374-ND	.84	68.17	350424-1
	Gold Detent Lock Long Tail	.915	—	A14375-ND	4.31	348.50	350424-2
6	Pre-Tin Positive Lock Dual Row	.705	—	A1214-ND	.65	51.18	1-380999-0
	Gold Positive Lock Dual Row	.705	—	A1215-ND	2.74	222.02	2-380999-0
	Pre-Tin Positive Lock Long Tail Dual Row	.705	—	A14376-ND	1.01	81.79	350425-1
8	Pre-Tin Positive Lock Dual Row	.900	—	A1216-ND	.75	59.40	350212-1
	Pre-Tin Positive Lock Long Tail	.900	—	A14377-ND	1.14	92.53	350426-1
	Gold Positive Lock Dual Row	.900	—	A1217-ND	3.15	255.37	350212-2
10	Pre-Tin Positive Lock Dual Row	1.095	—	A1218-ND	.89	70.08	1-380991-0
	Gold Positive Lock Dual Row	1.095	—	A1219-ND	4.16	337.09	2-380991-0
	Pre-Tin Positive Lock Long Tail	1.095	—	A14378-ND	1.64	132.87	350219-1
12	Pre-Tin Positive Lock	1.290	—	A14379-ND	1.66	134.49	350213-1
	Pre-Tin Positive Lock Long Tail	1.290	—	A14380-ND	1.73	140.31	350220-1
16	Pre-Tin Positive Lock	1.680	—	A14381-ND	2.05	165.79	350214-1
	Pre-Tin Positive Lock Long Tail	1.680	—	A14382-ND	2.68	216.65	350427-1
Fig. 3 – PC Board Vertical Pin Header – Mate w/Socket Housing – UL94V-2							
4	Pre-Tin, with Detent Lock	.915	—	A25420-ND	.61	49.31	770328-1
	Pre-Tin, with Detent Lock Housing Mat'l UL94V-0	.915	—	A25422-ND	.52	41.71	794236-1
12	Gold, with Positive Lock	1.290	—	A25423-ND	4.79	387.89	350213-2
Fig. 3 – PC Board Vertical Socket Header – Mate w/Pin Housing – UL94V-2							
4	Pre-Tin, In-Line, SMT Compatible	1.000	—	A25425-ND	.98	79.30	794287-1
6	Pre-Tin, Matrix	.720	—	A25763-ND	.88	71.36	350641-1
9	Pre-Tin, Matrix	.960	—	A25764-ND	1.22	98.54	350642-1
12	Pre-Tin, Matrix	1.200	—	A25426-ND	1.66	134.22	350643-1
15	Pre-Tin, Matrix	1.440	—	A25765-ND	2.03	164.24	350644-1
Fig. 4 – Positive Lock Socket Housing							
2	Socket Housing (Plug)	.435	—	A14357-ND	.32	24.93	1-480720-0
3	Socket Housing (Plug)	.630	—	A14358-ND	.66	53.37	1-480721-0
4	Socket Housing (Plug)	.830	—	A14359-ND	.72	58.25	1-480722-0
Fig. 5 – Motor Mount Housing (Positive Lock)							
6	Pin Housing (Cap)	.705	—	A14361-ND	.54	43.58	1-480271-0
6	Socket Housing (Plug)	—	.610	A1413-ND	.36	28.75	1-480270-0
8	Pin Housing (Cap)	.900	—	A25410-ND	.90	73.16	1-480284-0
10	Pin Housing (Cap)	1.095	—	A25411-ND	1.04	83.81	1-480286-0
12	Pin Housing (Cap)	1.290	—	A25413-ND	1.13	91.61	1-480288-0
12	Socket Housing (Plug)	—	1.195	A25412-ND	.80	64.83	1-480287-0
16	Pin Housing (Cap)	1.680	—	A14363-ND	.90	73.02	1-480439-0
16	Socket Housing (Plug)	—	1.585	A14362-ND	1.18	95.60	1-480438-0

* UV Stable Black Color † Housing Material: UL94V-0 Rated

(Continued)

Fig. 4

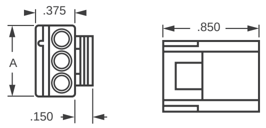


Fig. 5

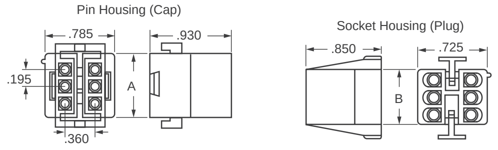


Fig. 6

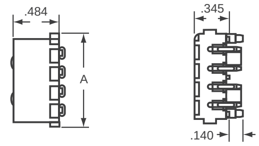


Fig. 7

Mating parts include socket housings, a vertical PC Board socket header and the insulation displacement connnectors (IDC) **Specifications:** • Pre-Tin Solder Tail: width .052" (1.32mm) • Housing Material: Nylon, black • Flammability Rating: UL94V-2 • Contact: Phosphor bronze • Pin Material: Copper alloy

Recommended PC Board Layout: .061" (1.57mm) thick PC Board.

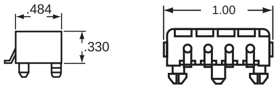


Fig. 8

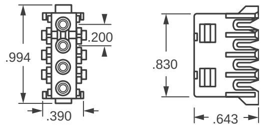
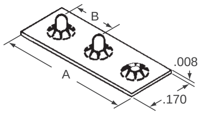


Fig. 9



No. of Cir.	Description	Dim. – Inch A	Dim. – Inch B	Digi-Key Part No.	Pricing 1	Pricing 100	AMP Part No.
Fig. 6 – PC Board Right Angle Pin Headers - Mates with Socket Housing							
2	UL94V-2, Nylon, Natural	.600	—	A25753-ND	1.03	83.54	794120-1
3	UL94V-0, Nylon	.800	—	A25429-ND	1.41	113.99	643488-1
4	UL94V-2, Nylon, Natural	1.000	—	A25430-ND	.77	62.53	641737-1
4	UL94V-2, Nylon, Natural, Surface Mount Compatible	1.000	—	A25431-ND	1.25	101.39	770846-1
4	UL94V-0, Nylon	1.000	—	A25432-ND	1.17	95.02	1-641737-1
Fig. 7 – PC Board Surface Mount Pin Header							
4	Pin Header, In-Line	—	—	A25424-ND	1.12	90.97	770829-1
Fig. 8 – Insulation Displacement Connector (IDC)							
	Pre-Tin, 22AWG, Red, UL94V-2			A14383-ND	.47	37.48	770156-2
	Pre-Tin, 22AWG, Red, UL94V-0			A25433-ND	.68	54.80	794036-3
	Pre-Tin Pin Finish 20AWG, Yellow, UL94V-2			A14384-ND	.47	37.48	770156-4
	Pre-Tin, 20AWG, Yellow, UL94V-0			A25434-ND	.68	54.80	794036-2
	Pre-Tin Pin Finish 18AWG, Orange, UL94V-2			A14385-ND	.47	37.48	770156-3
	Pre-Tin, 18AWG, Orange, UL94V-0			A25435-ND	.84	67.94	794036-1
	Pre-Tin, 16AWG, Blue, UL94V-2			A25436-ND	.73	59.38	770156-5
	Pre-Tin, 16AWG, Blue, UL94V-0			A25437-ND	.68	54.80	794036-4

Description	Dim. – Inch A	Dim. – Inch B	Digi-Key Part No.	Pricing 1	Pricing 100	AMP Part No.
Dust Covers for IDC Parts - UL94V-2						
For Feed to Wiring, Polyester, White	—	—	A25438-ND	.14	11.61	770232-1
For Feed Through Wiring, Poly, White	—	—	A25439-ND	.15	12.03	770233-1
Fig. 9 – Commoning Tabs - Use With Pin Housing						
2 Holes, Brass, Tin Plated	.377	.203	A25427-ND	.05	3.70	60843-1
3 Holes, Brass, Tin Plated	.579	.203	A25428-ND	.05	4.05	60842-1
Tools						
MATE-N-LOK® Crimp Tool for 24-18AWG			A9974-ND *NEW!*	426.93/1		91512-1
MATE-N-LOK® Crimp Tool for 20-14AWG			A9908-ND *NEW!*	393.68/1		91504-1
PRO-CRIMPER II Hand Tool Without Dies			A9996-ND	75.00/1		354940-1
Die Set 18-24AWG			A9940-ND	105.00/1		90574-2
Die Set 14-20AWG			A9939-ND	105.00/1		90575-2
Pin Extraction Tool			A1419-ND	14.36/1		465644-1
Pin Insertion Tool			A9998-ND	16.45/1		91002-1
Contact Insertion Tool			A1444-ND	27.20/1		455830-1
Hand Tool Crimp w/Die for .043-.075 Insulation Diameter			A19996-ND	400.28/1		90123-5
CERTI-CRIMP 26-24AWG			A9918-ND	382.20/1		90066-7
Pro-Crimper II Hand Tool, Without Dies			A25418-ND	162.00/1		90574-1
Pro-Crimper II Hand Tool, Without Dies, 20-14AWG			A25419-ND	162.00/1		90575-1

Contacts

Fig. 1

- Carries up to 15 amps maximum (based on 30°C temperature rise)
- Low insertion/extraction forces
- UL recognized for 250 volts, AC/DC
- CSA certified

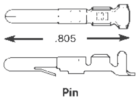
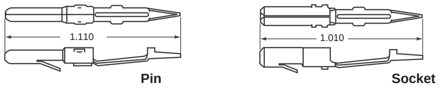


Fig. 2

For PC board with the following specifications:
- Board Thickness: .062" (1.57mm)
- Board Hole Size: .057" (1.45mm)



Description	Insulation Dia. Range Inch	Digi-Key Part No.	Pricing 10	Pricing 100	AMP Part No.	Digi-Key Part No.	Tape & Reel* Size	Tape & Reel* Pricing	AMP Part No.
Fig. 1 – Crimp Contacts (Pins & Sockets)									
Pin, Brass, Pre-Tin	30-22AWG .040 - .075	A25547-ND	1.51	10.16	61174-1	A25547TR-ND	8,000	24.86/M	350079-1
Socket, Brass, Pre-Tin		A25548-ND	1.51	10.16	61173-1	A25548TR-ND	6,500	24.86/M	350078-1
Pin, Phosphor Bronze, Pre-Tin		—	—	—	—	A25549TR-ND	8,000	55.56/M	350079-4
Socket, Phosphor Bronze, Pre-Tin		A25550-ND	2.40	16.11	61173-4	A25550TR-ND	6,500	51.32/M	350078-4
Pin, Brass, Gold		A25552-ND	11.84	79.66	61174-5	A25552TR-ND	8,000	366.18/M	350079-5
Socket, Brass, Gold		A25767-ND	11.84	79.66	61173-5	—	—	—	—
Pin, Brass, Pre-Tin	24-18AWG .060 - .100	A1422-ND	1.02	6.89	60618-1	—	—	—	—
Socket, Brass, Pre-Tin		A1423-ND	1.01	6.80	60617-1	—	—	—	—
Pin, Phosphor Bronze, Pre-Tin		A25554-ND	2.23	15.01	60618-4	A25554TR-ND	8,000	51.32/M	61116-4
Socket, Phosphor Bronze, Pre-Tin		A25555-ND	2.23	15.01	60617-4	A25555TR-ND	7,000	38.42/M	61314-4
Pin, Brass, Gold		A1432-ND	9.67	58.39	60618-5	—	—	—	—
Socket, Brass, Gold		A1433-ND	9.67	65.07	60617-5	A1433TR-ND	7,000	366.63/M	61314-5
Pin, Phosphor Bronze, Select Gold		A25558-ND	11.68	78.55	60618-6	—	—	—	—
Socket, Phosphor Bronze, Select Gold		A25559-ND	9.97	67.06	60617-6	A25559TR-ND	7,000	314.81/M	61314-6
Pin, Brass, Select Gold		—	—	—	—	A25560TR-ND	8,000	206.96/M	61116-7
Pin, Brass, Pre-Tin	20-14AWG .100 - .130	A1420-ND	1.01	6.80	60620-1	—	—	—	—
Socket, Brass, Pre-Tin		A1421-ND	1.01	6.80	60619-1	—	—	—	—
Pin, Phosphor Bronze, Pre-Tin		A25561-ND	2.23	15.01	60620-4	—	—	—	—
Socket, Phosphor Bronze, Pre-Tin		A25562-ND	2.23	15.01	60619-4	—	—	—	—
Pin, Brass, Gold		A1434-ND	11.84	79.66	60620-5	A1434TR-ND	5,000	366.18/M	61118-5
Socket, Brass, Gold		A1435-ND	9.67	58.39	60619-5	—	—	—	—
Socket, Phosphor Bronze, Gold		A25565-ND	11.10	74.67	60619-7	A25565TR-ND	5,000	435.71/M	61117-6
Pin, (2)18 or (1)18 and (1)16AWG, Brass, Pre-Tin	.115 Max. (stacked)	A25568-ND	1.51	10.16	350639-1	A25568TR-ND	3,000	39.52/M	350558-1
Socket, (2)18 or (1)18 and (1)16AWG, Brass, Pre-Tin		—	—	—	—	A25567TR-ND	3,000	39.52/M	350557-1
Pin, (2)18 or (1)18 and (1)16AWG, Phos. Brz., Pre-Tin		—	—	—	—	A25769TR-ND	3,000	73.92/M	350558-4
Socket, (2)18 or (1)18 and (1)16AWG, Phos. Brz., Pre-Tin		A25570-ND	2.23	15.00	350638-4	A25570TR-ND	3,000	73.92/M	350557-4
Fig. 2 – PC Board Contacts									
Pin, Phosphor Bronze, Pre-Tin	—	A24727-ND	1.82	16.05	61518-1	—	—	—	—
Socket, Phosphor Bronze, Pre-Tin	—	A24728-ND	1.92	16.92	61320-1	—	—	—	—
Keying Plug									
Nylon, Natural UL94V-2	—	A16066-ND	—	10.65	200821-1	—	—	—	—

Gold Finish - Plated with .000030 min. gold in mating area and inside wire barrel over .000050 min. nickel
Select Gold Finish - Plated with .000030 min. gold in mating area over .000050 min. nickel
*The TR are also available in CT

Soft Shell Connectors

Fig. 1 – Universal MATE-N-LOK® Connectors

• Pins and sockets can be intermixed in the same housing • Positive polarization • Pin or socket contact can be hot • Positive locking housings • Removable, crimp snap-in contacts • Low contact mating force • Dual locking lances provide optimum contact stability • Panel-mount or free-hanging • Harness to PC board capability using pin or socket header assemblies

Features: • Rated to 600 volts • Insulation capacity to .200" (5.08 mm) dia. • Contacts are on .250" (6.35 mm) centerline spacing • Housing Material: UL rated 94V-2, natural nylon.

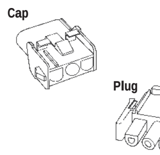


Fig. 2 – Plug Housing Strain Relief

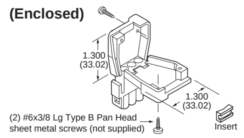

(Enclosed)
1.300
(33.02)
1.300
(33.02)
(2) #6x3/8 Lg Type B Pan Head
sheet metal screws (not supplied)
Insert

Fig. 3 – Plug Housing Strain Relief

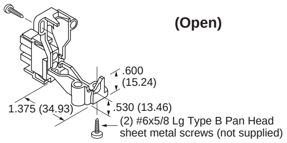

(Open)
.600
(15.24)
1.375 (34.93)
.530 (13.46)
(2) #6x5/8 Lg Type B Pan Head
sheet metal screws (not supplied)

Fig. 4 – Printed Circuit Board Pin Header Assemblies

Housing: 94V-2 rating, natural color. **Contact:** Phosphor bronze pre-tin plated or .000030 (0.0008 mm) min. gold over .000050 (0.0013 mm) min. nickel.

Fig. 4A – 2, 3, 4
In-Line Circuits

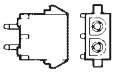


Fig. 4B – 6, 9, 12 & 15
Multiple Row Circuits

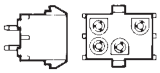


Fig. 5 – Printed Circuit Board Socket Header Assemblies

Fig. 5A – 2, 3, 4
In-Line Circuits

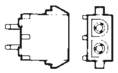


Fig. 5B – 6, 9, 12, & 15
Multiple Row Circuits

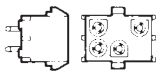


Fig. 6 – Right-Angle Pin Header Assemblies

Contact: Phosphor bronze.
Housing: 94V-2 rated, natural nylon.

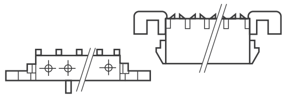


Fig. 7 – Contacts

(Pins & Sockets)

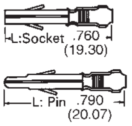


Fig.	No. of Circuits	Description	Mates With	Digi-Key Part No.	Pricing 1	Pricing 100	AMP Part No.
Universal MATE-N-LOK® UL 94V-2 Connectors (Contacts Sold Separately)							
1	1	Plug In-Line	A14271-ND	A14270-ND	.09	7.40	1-350867-0
	1	Cap In-Line	A14270-ND	A14271-ND	.10	7.80	770421-1
	2	Plug In-Line	A1449-ND	A1448-ND	.17	13.22	1-480698-0
	2	Cap In-Line	A1448-ND	A1449-ND	.15	12.07	1-480699-0
	3	Plug In-Line	A1451-ND	A1450-ND	.16	12.63	1-480700-0
	3	Cap In-Line	A1450-ND	A1451-ND	.17	13.24	1-480701-0
	4	Plug In-Line	A1453-ND	A1452-ND	.17	13.57	1-480702-0
	4	Cap In-Line	A1452-ND	A1453-ND	.17	13.44	1-480703-0
	5	Plug In-Line	A1455-ND	A1454-ND	.21	16.87	1-480763-0
	5	Cap In-Line	A1454-ND	A1455-ND	.24	19.03	1-480764-0
	6	Plug Matrix	A1457-ND	A1456-ND	.21	16.44	1-480704-0
	6	Cap Matrix	A1456-ND	A1457-ND	.20	15.68	1-480705-0
	6	Plug In-Line	A14273-ND	A14272-ND	.42	33.48	640585-1
	6	Cap In-Line	A14272-ND	A14273-ND	.71	57.41	926307-1
	8	Plug In-Line	A14275-ND	A14274-ND	.64	51.55	640586-1
	8	Cap In-Line	A14274-ND	A14275-ND	1.08	87.53	926308-1
	9	Plug Matrix	A1459-ND	A1458-ND	.24	18.66	1-480706-0
	9	Cap Matrix	A1458-ND	A1459-ND	.21	16.79	1-480707-0
	12	Plug Matrix	A1461-ND	A1460-ND	.27	21.58	1-480708-0
	12	Cap Matrix	A1460-ND	A1461-ND	.24	19.03	1-480709-0
	15	Plug Matrix	A1463-ND	A1462-ND	.40	31.32	1-480710-0
	15	Cap Matrix	A1462-ND	A1463-ND	.35	27.95	1-480711-0
Universal MATE-N-LOK® UL 94V-0 Connectors (Contacts Sold Separately)							
1	1	Plug In-Line	A14277-ND	A14276-ND	.24	19.22	350865-1
	1	Cap In-Line	A14276-ND	A14276-ND	.24	19.22	350866-1
	2	Plug In-Line	A14279-ND	A14278-ND	.28	22.43	350777-1
	2	Cap In-Line	A14278-ND	A14279-ND	.33	25.88	350778-1
	3	Plug In-Line	A14281-ND	A14280-ND	.28	21.91	350766-1
	3	Cap In-Line	A14280-ND	A14281-ND	.33	26.40	350767-1
	4	Plug In-Line	A14283-ND	A14282-ND	.29	22.85	350779-1
	4	Cap In-Line	A14282-ND	A14283-ND	.37	28.93	350780-1
	5	Plug In-Line	A14285-ND	A14284-ND	.31	24.41	350809-1
	5	Cap In-Line	A14284-ND	A14285-ND	.37	29.50	350810-1
	6	Plug In-Line	A14287-ND	A14286-ND	.66	51.88	640581-1
	6	Cap In-Line	A14286-ND	A14287-ND	1.71	138.08	926307-3
	6	Plug Matrix	A14289-ND	A14288-ND	.41	32.78	350715-1
	6	Cap Matrix	A14288-ND	A14289-ND	.37	28.89	350781-1
	8	Plug In-Line	A14291-ND	A14290-ND	.56	42.73	640582-1
	8	Cap In-Line	A14290-ND	A14291-ND	1.74	141.03	926308-3
	9	Plug Matrix	A14293-ND	A14292-ND	.36	28.43	350720-1
	9	Cap Matrix	A14292-ND	A14293-ND	.44	35.09	350782-1
	12	Plug Matrix	A14295-ND	A14294-ND	.46	36.30	350735-1
	12	Cap Matrix	A14294-ND	A14295-ND	.54	42.98	350783-1
	15	Plug Matrix	A14297-ND	A14296-ND	.59	46.64	350736-1
	15	Cap Matrix	A14296-ND	A14297-ND	.90	73.15	350784-1
	Keying Plug 94V-2			A14304-ND	.19	15.35	1-640415-1
	Keying Plug 94V-0			A14305-ND	.20	15.99	1-640415-0

Fig.	No. of Circuits	Description	Insert Supplied	Digi-Key Part No.	Pricing 1	Pricing 100	AMP Part No.
Enclosed Plug Housing Strain Relief UL94V-2							
2	2	Nylon, Natural	Yes	A14348-ND•	.81	64.31	1-640719-0
	3	Nylon, Natural	Yes	A14349-ND•	.82	66.65	1-640720-0
	3	Nylon, Natural	No	A14350-ND•	1.26	112.63	641763-1
	4	Nylon, Natural	No	A14351-ND•	1.35	121.17	641775-2
	5	Nylon, Natural	No	A14352-ND•	.84	68.24	643030-2
	6	Nylon, Natural	Yes	A14353-ND•	.85	67.36	1-640721-0
	9	Nylon, Natural	Yes	A14354-ND•	.88	71.40	1-640722-0
	12	Nylon, Natural	Yes	A14355-ND•	.91	73.78	1-640723-0
	15	Nylon, Natural	Yes	A14356-ND•	.94	76.16	1-640724-0
Enclosed Plug Housing Strain Relief UL94V-0							
2	2	Nylon	Yes	A14338-ND•	.90	73.10	640713-1
	3	Nylon	Yes	A14339-ND•	.84	66.51	640714-1
	4	Nylon	Yes	A14340-ND•	.92	74.86	641776-1
	5	Nylon	Yes	A14341-ND•	.94	75.75	643030-1
	6	Nylon	Yes	A14342-ND•	.95	76.62	643313-1
	8	Nylon	Yes	A14343-ND•	.97	78.26	643314-1
	6	Nylon	Yes	A14344-ND•	.87	68.54	640715-1
	9	Nylon	Yes	A14345-ND•	.90	71.23	640716-1
	12	Nylon	Yes	A14346-ND•	1.01	81.90	640717-1
	15	Nylon	Yes	A14347-ND•	1.00	79.21	640718-1
Open Plug Housing Strain Reliefs							
3	2, 3, 4, 5, 6 and 8 Circuit, In-Line			A14336-ND•	.50	40.44	350811-1
	6, 9, 12 and 15 Circuit, Matrix			A14337-ND•	.57	46.50	350812-1
—	Contact Insertion Tool			A1444-ND	27.20	—	455830-1

• Note: Two strain reliefs required per housing.

Fig.	No. of Circuits	Plating	Material	Digi-Key Part No.	Pricing 1	Pricing 100	AMP Part No.
Pin Header Assemblies — PCB Mount							
4A	2	Pre-Tin	UL94V-2	A1466-ND	.25	19.80	350428-1
	2	Gold	UL94V-2	A1467-ND	1.14	92.16	350428-2
	2	Pre-Tin	UL94V-0	A14314-ND	.41	32.55	350786-1
	3	Pre-Tin	UL94V-2	A1468-ND	.32	25.30	350429-1
	3	Pre-Tin	UL94V-0	A14315-ND	.50	39.67	350789-1
	4	Pre-Tin	UL94V-2	A1470-ND	.42	33.00	350430-1
	4	Gold	UL94V-2	A1471-ND	1.99	161.10	350430-2
	4	Pre-Tin	UL94V-0	A14316-ND	.59	46.79	350792-1
4B	5	Pre-Tin	UL94V-2	A14317-ND	.64	50.78	640466-1
	5	Pre-Tin	UL94V-0	A14318-ND	.95	74.97	640900-1
	6	Pre-Tin	UL94V-2	A1472-ND	.41	32.21	350431-1
	6	Gold	UL94V-2	A1473-ND	2.81	227.65	350431-2
	6	Pre-Tin	UL94V-2	A14319-ND	2.30	206.25	641832-1
	6	Pre-Tin	UL94V-0	A14322-ND	.97	77.01	350711-1
	6	Gold	UL94V-0	A14323-ND	2.78	220.01	350711-2
	8	Pre-Tin	UL94V-2	A14320-ND	1.65	133.30	641825-1
	8	Pre-Tin	UL94V-0	A14321-ND	3.42	306.35	641828-1
	9	Pre-Tin	UL94V-2	A1474-ND	.75	59.40	350432-1
	9	Gold	UL94V-2	A1475-ND	3.95	319.64	350432-2
	9	Pre-Tin	UL94V-0	A14324-ND	.91	71.94	350712-1
	12	Pre-Tin	UL94V-2	A1476-ND	.90	71.50	350433-1
	12	Gold	UL94V-2	A1477-ND	5.11	413.53	350433-2
	12	Pre-Tin	UL94V-0	A14325-ND	1.10	86.81	350713-1
	12	Gold	UL94V-0	A14326-ND	3.76	297.02	350713-2
	15	Pre-Tin	UL94V-2	A1478-ND	.99	78.11	350434-1
	15	Gold	UL94V-2	A1479-ND	6.32	511.96	350434-2
	15	Pre-Tin	UL94V-0	A14327-ND	1.38	108.91	350714-1
Socket Header Assemblies — PCB Mount							
5A	2	Pre-Tin	UL94V-2	A1490-ND	.35	28.37	350759-4
	2	Gold	UL94V-2	A1491-ND	.97	78.89	350759-3
	3	Pre-Tin	UL94V-2	A1492-ND	.44	35.80	350760-4
	3	Gold	UL94V-2	A1493-ND	1.79	144.63	350760-3
	3	Pre-Tin	UL94V-0	A14328-ND	.47	37.43	350825-1
	4	Pre-Tin	UL94V-2	A1494-ND	.37	29.48	350761-4
	4	Gold	UL94V-2	A1495-ND	2.29	206.86	350761-3
	4	Pre-Tin	UL94V-0	A14329-ND	.64	50.65	350826-1
5B	6	Pre-Tin	UL94V-2	A1496-ND	.61	48.18	350762-4
	6	Gold	UL94V-2	A1497-ND	3.40	275.44	350762-3
	6	Pre-Tin	UL94V-0	A14330-ND	.87	68.58	350827-1
	9	Pre-Tin	UL94V-2	A1498-ND	.70	55.51	350763-4
	9	Pre-Tin	UL94V-0	A14331-ND	.97	76.29	350828-1
	12	Pre-Tin	UL94V-2	A1200-ND	1.02	80.39	350764-4
	12	Gold	UL94V-2	A1201-ND	4.80	388.27	350764-3
	12	Pre-Tin	UL94V-0	A14332-ND	1.29	101.72	350829-1
	12	Gold	UL94V-0	A14333-ND	5.09	412.36	350829-2
	15	Pre-Tin	UL94V-2	A1202-ND	1.59	128.35	350765-4
	15	Pre-Tin	UL94V-0	A14334-ND	1.57	123.80	350830-1
	15	Gold	UL94V-0	A14335-ND	6.22	503.35	350830-2
Pin Header Assemblies, Right-Angle — PCB Mount							
6	2	Pre-Tin	UL94V-0	A14306-ND	1.03	81.37	1-350942-0
	2	Gold	UL94V-0	A1481-ND	1.80	142.41	2-350942-0
	3	Pre-Tin	UL94V-0	A14307-ND	1.05	83.00	1-350943-0
	3	Gold	UL94V-0	A14308-ND	2.76	223.06	2-350943-0
	4	Pre-Tin	UL94V-0	A1484-ND	1.07	84.73	1-350944-0
	4	Gold	UL94V-0	A14309-ND	2.73	215.64	2-350944-0
	5	Pre-Tin	UL94V-0	A1486-ND	1.29	101.72	1-350945-0
	5	Gold	UL94V-0	A14310-ND	3.44	278.70	2-350945-0
	6	Pre-Tin	UL94V-0	A14311-ND	1.96	155.32	640583-1
	8	Pre-Tin	UL94V-0	A14312-ND	2.10	166.15	640584-1
	8	Gold	UL94V-0	A14313-ND	5.25	415.36	640584-2
Contacts (Pins & Sockets) — For Use With Universal MATE-N-LOK® Connectors							
7	Pin, 24-18AWG, Brass - Pre-Tin			A1436-ND	1.02/10	6.86	350706-1
	Socket, 24-18AWG, Brass - Pre-Tin			A1437-ND†	.95/10	6.38	350689-1
	Pin, 24-18AWG, Brass - Gold			A1438-ND	7.12/10	47.88	350706-2
	Socket, 24-18AWG, Brass - Gold			A1439-ND†	7.65/10	46.18	350689-2
	Pin, 20-14AWG, Brass - Pre-Tin			A1440-ND	.95/10	6.38	350705-1
	Socket, 20-14AWG, Brass - Pre-Tin			A1441-ND	.84/10	5.64	350550-1
	Pin, 20-14AWG, Brass - Gold			A1442-ND	7.12/10	47.88	350705-2
	Socket, 20-14AWG, Brass - Gold			A1443-ND	8.09/10	54.42	350550-2
	Pin, 24-18AWG, Brass - Pre-Tin 20.07mm			A14298-ND	.89/10	5.40	350690-1
	Pin, 24-18AWG, Brass - Gold 20.07mm			A14299-ND	7.47/10	45.08	350690-2
	Pin, 20-14AWG, Brass - Pre-Tin 20.07mm			A14300-ND	.87/10	5.88	350547-1
	Pin, 20-14AWG, Brass - Gold 20.07mm			A14301-ND	7.94/10	53.44	350547-2
	Pin, 20-14AWG, Brass - Pre-Tin 20.57mm			A14303-ND	1.10/10	7.39	350552-1
	Socket, 20-14AWG, Brass - Pre-Tin 19.81mm			A14302-ND	1.24/10	8.36	350551-1
	Universal MATE-N-LOK® Crimp Tool for 24-18AWG			A9985-ND	415.77	—	90300-2
	Universal MATE-N-LOK® Crimp Tool for 20-14AWG			A9907-ND *NEW!*	426.93	—	91500-1
	PRO-CRIMPER II Hand Tool w/o Dies			A9996-ND	75.00	—	354940-1
	Die Set 14-20 AWG			A9943-ND	127.50	—	90546-2
	Die Set 18-24 AWG			A9944-ND	127.50	—	90548-2

† Socket Contact - .010" (.25mm) stock thickness.

Universal MATE-N-LOK II® Connectors

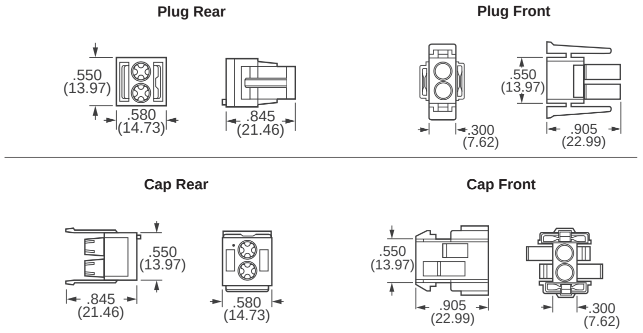
Product Facts:

- Ultimate reliability
- Pins and sockets can be intermixed in the same housing
- Available in 2 thru 15 Circuit sizes for free hanging or panel mount wire-to-wire connection
- Polarized housings available in UL94V-0 flammability rated material
- Crimp terminals accept 10-24AWG wire sizes, 10 Amps
- Tin or duplex gold plated contacts
- Contacts are on .250" (6.35mm) centerline spacing
- Recognized under the Component Program of Underwriters Laboratories, Inc. File No. E28476
- Certified by Canadian Standards Association File No. LR 16455-113
- Passed test by VDE under their Test Report No. 4751-1431-4016/A8E

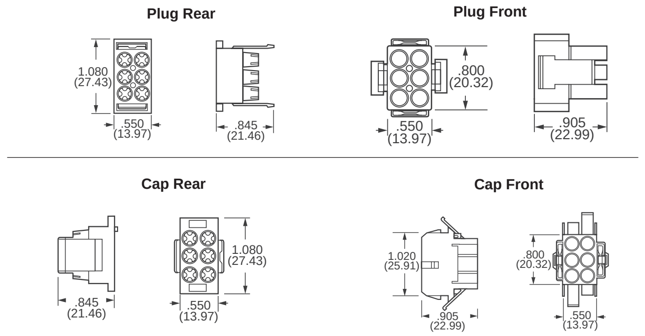
Performance Characteristics:

- **Dielectric Withstanding Voltage:** 5.0 KVAC or 10 KVDC between adjacent circuits
- **Insulation Resistance:** 1000 megohms minimum between adjacent circuits
- **Voltage Rating:** 600V AC or DC
- **Connector Mating:** Split Pin — 1.5 lb. max. per circuit
- **Connector Unmating:** Split Pin — .5 lb min. per circuit
- **Contact Insertion Force:** 3.0 lb max. per contact unassembled
- **Contact Retention:** 35 lb min. per contact
- **Durability:** 50 cycles, mating and unmating

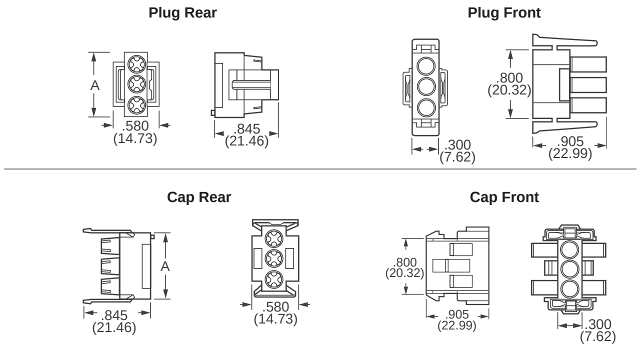
2 Circuit, In-Line



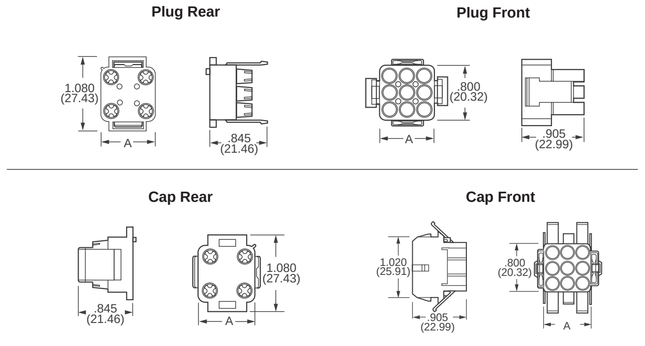
6 Circuit, Matrix



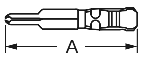
3, 4 Circuit, In-Line



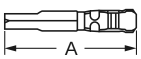
9, 12 and 15 Circuit, Matrix



Pin Connector



Socket Connector



No. of Circuits	Description	Dim. A Inch (mm)	Digi-Key Part No.	Pricing 1	100	AMP Part No.
Connector Housing Kits						
2	Plug	—	A14240-ND	.46	36.74	770017-1
2	Cap	—	A14247-ND	.47	37.49	770024-1
3	Plug	.800 (20.32)	A14241-ND	.51	40.15	770018-1
3	Cap	.800 (20.32)	A14248-ND	.56	44.56	770025-1
4	Plug	1.050 (26.67)	A14242-ND	.57	45.41	770019-1
4	Cap	1.050 (26.67)	A14249-ND	.61	48.43	770026-1
6	Plug	—	A14243-ND	.65	51.74	770020-1
6	Cap	—	A14250-ND	.64	50.89	770027-1
9	Plug	.800 (20.32)	A14244-ND	.70	55.05	770021-1
9	Cap	.800 (20.32)	A14251-ND	.69	54.45	770028-1
12	Plug	1.050 (26.67)	A14245-ND	1.24	100.42	770022-1
12	Cap	1.050 (26.67)	A14252-ND	1.20	96.77	770029-1
15	Plug	1.300 (33.02)	A14246-ND	1.02	80.34	770023-1
15	Cap	1.300 (33.02)	A14253-ND	.97	76.54	770030-1
Contact Insertion Tool.................			A1444-ND	27.20	—	455830-1

Description	Ins. Diameter Range Inch (mm)	Dim. A Inch (mm)	Digi-Key Part No.	Pricing 10	100	AMP Part No.
Pin Contacts						
24-18AWG — Brass, Pre-Tin	.040-.100 (1.02-2.54)	1.005 (25.53)	A14254-ND	1.47	9.86	770252-1
24-18AWG — Brass, Gold	.040-.100 (1.02-2.54)	1.005 (25.53)	A14255-ND	6.72	45.22	770252-2
20-14AWG — Brass, Pre-Tin	.060-.130 (1.52-3.30)	1.005 (25.53)	A14256-ND	1.47	9.86	770250-1
20-14AWG — Brass, Gold	.060-.130 (1.52-3.30)	1.005 (25.53)	A14257-ND	6.72	45.22	770250-2
20-14AWG — Brass, Pre-Tin	.130-.200 (3.30-5.08)	.995 (25.27)	A14258-ND	1.93	12.99	770248-1
20-14AWG — Brass, Gold	.130-.200 (3.30-5.08)	.995 (25.27)	A14259-ND	8.15	54.82	770248-2
12-10AWG — Brass, Pre-Tin	.200 max. (5.08 max.)	1.005 (25.53)	A14260-ND	3.09	20.78	770246-3
12-10AWG — Brass, Gold	.200 max. (5.08 max.)	1.005 (25.53)	A14261-ND	14.66	98.62	770246-4
Socket Contacts						
24-18AWG — Brass, Pre-Tin	.040-.100 (1.02-2.54)	.980 (24.89)	A14262-ND	1.70	11.42	770253-3
24-18AWG — Brass, Gold	.040-.100 (1.02-2.54)	.980 (24.89)	A14263-ND	10.49	70.55	770253-4
20-14AWG — Brass, Pre-Tin	.060-.130 (1.52-3.30)	.980 (24.89)	A14264-ND	1.79	12.01	770251-3
20-14AWG — Brass, Gold	.060-.130 (1.52-3.30)	.980 (24.89)	A14265-ND	11.04	74.27	770251-4
20-14AWG — Brass, Pre-Tin	.130-.200 (3.30-5.08)	.970 (24.64)	A14266-ND	2.33	15.71	770249-3
20-14AWG — Brass, Gold	.130-.200 (3.30-5.08)	.970 (24.64)	A14267-ND	13.42	90.28	770249-4
12-10AWG — Brass, Pre-Tin	.200 max. (5.08 max.)	.980 (24.89)	A14268-ND	3.09	20.78	770247-3
12-10AWG — Brass, Gold	.200 max. (5.08 max.)	.980 (24.89)	A14269-ND	14.86	99.98	770247-4
PRO-CRIMPER II Hand Tool without Dies..................................			A9996-ND	75.00 each		354940-1
Die Set AWG 24-18...			A9944-ND	127.50 each		90548-2
Die Set AWG 20-14, 1.52mm-3.30mm......................................			A9943-ND	127.50 each		90546-2
Die Set AWG 20-14, 3.30mm-5.08mm......................................			A9924-ND	127.50 each		90547-2
Die Set AWG 12-10...			A9923-ND	127.50 each		58530-2

AMP tyco Electronics Authorized Distributor .062” (1.57mm) Soft-Shell Commercial Pin and Socket Connectors

Product Facts:

• Polarized • Cavity Identification • Low contact-mating force • Detent and positive locking • Tin plating • Free-hanging styles • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189

AMP .062” (1.57mm) Soft-Shell Commercial Pin and Socket connectors form a total system of economical commercial-grade connectors and offer compatibility with competitive soft shells.

General Specifications:

• **Thermal Shock:** -55°C to +105°C • **Temperature-Humidity Cycling:** +25°C to +65°C at 90-95% RH • **Durability:** 50 mating cycles • **Dielectric Withstanding Voltage:** 1.0kVAC • **Insulation Resistance:** 1000 megohms minimum initial • **Voltage Rating:** 250VAC • **Contact Rating:** • Connector: 24-30AWG — .5-1.5 Amps, 18-24AWG — 1.5-6 Amps • Contacts may be used in either plug or receptacle housings.

Fig. 1 — 1 Circuit, In-line

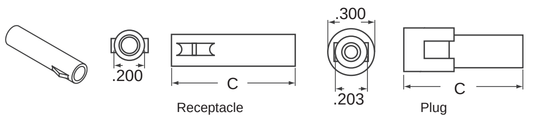


Fig. 2 — 2, 3, and 4 Circuit, In-line

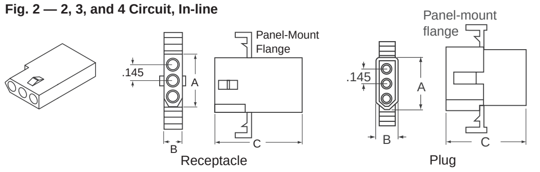


Fig. 3

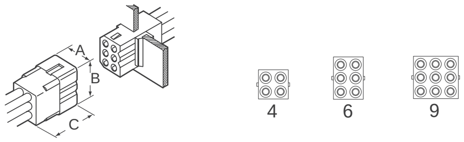


Fig.	No of Circuits	Description	Dim. (Inch) A	B	C	Digi-Key Part No.	Pricing 10	50	AMP Part No.
.062” (1.57mm) Diameter Housings									
1	1	Receptacle, with Detent, In-line	—	—	.785	A14001-ND	.96	3.74	770277-1
2	2	Receptacle, with Detent, In-line	.340	.199	.820	A14002-ND	1.50	4.30	770342-1
2	2	Receptacle, Positive, In-line	.340.	.199	.820	A25484-ND	3.99	15.49	770419-1
2	3	Receptacle, with Detent, In-line	.490	.199	.785	A14003-ND	1.49	5.79	770333-1
2	4	Receptacle, with Detent, In-line	.635	.199	.785	A14004-ND	7.06	27.40	770274-1
3	4	Receptacle, with Detent, Matrix	.345	.345	.878	A14005-ND	3.32	12.87	770442-1
3	6	Receptacle, with Detent, Matrix	.345	.495	.785	A14006-ND	3.11	12.08	770356-1
3	9	Receptacle, with Detent, Matrix	.490	.495	.790	A14007-ND	3.52	13.65	770429-1
1	1	Plug, with Detent, In-line	—	—	.750	A14008-ND	1.12	4.33	770278-1
2	2	Plug, with Detent, In-line	.440	.300	.780	A14009-ND	1.13	3.23	770340-1
2	3	Plug, with Detent, In-line	.590	.300	.750	A14010-ND	2.04	7.91	770331-1
2	4	Plug, with Detent, In-line	.733	.300	.750	A14011-ND	7.12	27.61	770275-1
3	4	Plug, with Detent, Matrix	.445	.445	.868	A14012-ND	3.32	12.87	770433-1
3	6	Plug, with Detent, Matrix	.445	.600	.750	A14013-ND	2.67	10.34	770355-1
3	9	Plug, with Detent, Matrix	.590	.600	.750	A14014-ND	3.09	12.00	770428-1
Panel Mount Housings — UL94V-2									
2	2	Receptacle, with Detent, In-line	.340	.199	.820	A25485-ND	4.05	15.73	770343-1
2	3	Receptacle, with Detent, In-line	.490	.199	.785	A25486-ND	4.86	18.84	770326-1
2	4	Receptacle, with Detent, In-line	.635	.199	.785	A25487-ND	7.06	27.40	770335-1
3	4	Receptacle, with Detent, Matrix	.345	.345	.878	A25488-ND	3.32	12.89	770441-1
3	6	Receptacle, with Detent, Matrix	.345	.495	.785	A25489-ND	7.24	28.08	770354-1
3	9	Receptacle, with Detent, Matrix	.490	.495	.790	A25758-ND	3.51	13.63	770427-1
2	2	Plug, with Detent, In-line	.440	.300	.780	A25490-ND	3.69	14.31	770341-1
2	3	Plug, with Detent, In-line	.590	.300	.750	A25491-ND	2.04	7.91	770332-1
2	4	Plug, with Detent, In-line	.733	.300	.750	A25759-ND	7.12	27.61	770334-1
3	4	Plug, with Detent, Matrix	.445	.445	.868	A25492-ND	9.11	35.34	770443-1
3	6	Plug, with Detent, Matrix	.445	.600	.750	A25760-ND	7.27	28.20	770353-1
3	9	Plug, with Detent, Matrix	.590	.600	.750	A25761-ND	3.09	12.00	770426-1

Description	Digi-Key Part No.	Price Each	AMP Part No.
Tools			
Contact Insertion Tool	A9998-ND	16.45	91002-1
Contact Extraction Tool	A25483-ND	103.50	318831-1
Crimp Tool 30AWG with Die	A9819-ND	162.00	90870-1
Crimp Tool 24AWG with Die	A9820-ND	162.00	90869-1
PRO-CRIMPER Hand Tool without Die	A9996-ND	75.00	354940-1
Die Set 18-24AWG, Use with A9996	A9957-ND	105.00	90869-2
Die Set 24-30AWG, Use with A9996	A9956-ND	105.00	90870-2

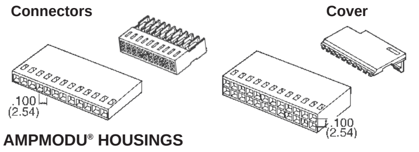
Description	Ins. Dia. Range Inch (mm)	Digi-Key Part No.	Loose Piece Pricing 100	500	AMP Part No.	Digi-Key Part No. †	Tape and Reel Size	Price	AMP Part No.
.062” (1.57mm) Contacts									
Pin, 24-30AWG — Brass, Pre-tin	.060 (1.524)	A14016-ND	4.08	17.65	794018-1	A14016TR-ND	10,000	17.91/M	640391-1
Socket, 24-30AWG — Brass, Pre-tin	.060 (1.524)	A14048-ND	4.08	17.65	794019-1	A14048TR-ND	10,000	13.67/M	640392-1
Socket, 24-30AWG — Brass, Pre-tin	.060 (1.524)	—	—	—	—	A25477TR-ND⁎	10,000	14.00/M	794046-1⁎
Pin, 18-24AWG — Brass, Pre-tin	.050-.110 (1.27-2.794)	A14015-ND	4.08	17.65	794017-1	A14015TR-ND	6,000	24.35/M	770983-1
Socket, 18-24AWG — Brass Pre-tin	.050-.110 (1.27-2.794)	A14049-ND	4.08	17.65	794016-1	A14049TR-ND	6,500	15.18/M	350628-1
Socket, 18-24AWG — Phosphor Bronze, Pre-tin	.050-.110 (1.27-2.794)	—	—	—	—	A25480TR-ND	6,500	23.46/M	350628-2
Pin, 18-24AWG — Brass, Select Gold	.050-.110 (1.27-2.794)	—	—	—	—	A25481TR-ND	6,000	136.91/M	350629-5
Socket, 18-24AWG — Brass, Select Gold	.050-.110 (1.27-2.794)	—	—	—	—	A25482TR-ND	6,500	131.09/M	350628-5

⁎ Lanceless socket for overmolding.

† Tape and Reel (TR) is also available in Cut Tape.

MT Connectors

DOUBLE ROW MT RECEPTACLE CONNECTORS .100" (2.54mm) CENTERS. H**ousings Preloaded with Standard Pressure Contacts.** **Insulation Diameter:** .050" (1.27mm) **Mating Post Length:** .222-.273" (5.64-6.94mm) max. Housing and Cover: Black thermoplastic, flame retardant. **Contacts:** Copper alloy **HOUSING FEATURES:** • Capable of connecting up to 100 wires simultaneously. • Available in single and double row configurations in .100” (2.54mm) centerline spacing.

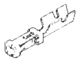


No. of Positions	Digi-Key Part No.	Pricing 1	25	AMP Part No.
AMPMODU® MT Connectors – IDC Crimp Type				
6	A3047-ND	2.01	45.60	102398-1
8	A3048-ND	2.28	51.60	102398-2
10	A3049-ND	2.78	63.00	102398-3
12	A3050-ND	3.31	75.00	102398-4
14	A3051-ND	3.84	87.00	102398-5
16	A3052-ND	3.88	86.51	102398-6
18	A3053-ND	4.44	91.98	102398-7
20	A3054-ND	5.49	124.20	102398-8
24	A3055-ND	6.63	150.00	1-102398-0
34	A3057-ND	9.33	211.20	1-102398-5
40	A3058-ND	8.16	184.80	1-102398-8
50	A3059-ND	9.65	218.40	2-102398-3
60	A3060-ND	11.37	257.40	2-102398-8
64	A3061-ND	17.60	398.40	3-102398-0
A2031-ND Man. Pistol GripTool for use with Head Assembly.....**$55.50 each**				
A2040-ND Head Assembly Tool for AMP MT Conn. ....**$162.26 each**				

No. of Positions	Digi-Key Part No.	Pricing 1	25	AMP Part No.
AMPMODU® MT Covers – 2 Required for each Connector				
6	A3062-ND	1.89/2	42.76/50	102396-1
8	A3063-ND	2.22/2	50.26/50	102396-2
10	A3064-ND	1.12/2	25.37/50	102396-3
12	A3065-ND	1.69/2	38.19/50	102396-4
14	A3066-ND	3.98/2	90.19/50	102396-5
16	A3067-ND	1.69/2	38.16/50	102396-6
20	A3069-ND	3.06/2	69.18/50	102396-8
24	A3070-ND	3.41/2	77.10/50	1-102396-0
34	A3072-ND	2.20/2	49.79/50	1-102396-5
40	A3073-ND	2.58/2	58.51/50	1-102396-8
50	A3074-ND	4.58/2	103.73/50	2-102396-3
64	A3076-ND	2.93/2	66.38/50	3-102396-0
Keying Plug	A3077-ND	1.46/10	4.57/50	86286-1
AMPMODU® Housings – Single Row (Order Contacts Sep.)				
2	A3011-ND	.84	13.14	87499-3
3	A3012-ND	.59	9.30	87499-5
4	A3013-ND	.52	8.21	87499-7
5	A3014-ND	.42	6.57	87499-9
6	A3015-ND	.52	8.21	1-87499-1
7	A3016-ND	.70	10.95	87499-1
8	A3017-ND	.61	9.49	1-87499-3
9	A3018-ND	.73	11.49	1-87499-5
10	A3019-ND	.66	10.40	1-87499-7
11	A3020-ND	1.57	24.63	1-87499-9
12	A3021-ND	.70	10.95	2-87499-1
13	A3022-ND	.94	14.78	2-87499-3
14	A3023-ND	.84	13.14	2-87499-5
15	A3024-ND	.87	13.68	2-87499-7
16	A3025-ND	.91	14.23	2-87499-9
18	A3027-ND	.94	14.78	3-87499-4
20	A3029-ND	1.08	16.97	3-87499-7

No. of Positions	Digi-Key Part No.	Pricing 1	25	AMP Part No.
AMPMODU® Housings – Double Row (Order Contacts Sep.)				
4	A3031-ND	.87	13.68	4-87456-9
6	A3032-ND	.94	14.78	87456-1
8	A3033-ND	1.01	15.87	87456-3
10	A3034-ND	1.12	17.51	87456-6
12	A3035-ND	1.19	18.61	87456-8
14	A3036-ND	1.22	19.16	1-87456-0
16	A3037-ND	1.29	20.25	1-87456-2
18	A3038-ND	1.85	29.01	1-87456-4
20	A3039-ND	1.54	24.08	1-87456-6
24	A3040-ND	1.99	31.20	2-87456-0
26	A3041-ND	1.82	28.46	2-87456-2
28	A3042-ND	1.99	31.20	2-87456-4
34	A3043-ND	2.41	37.77	3-87456-0
40	A3044-ND	2.73	42.69	3-87456-6
50	A3045-ND	3.29	51.45	4-87456-0
60	A3046-ND	3.66	57.27	5-87456-2

CONTACTS



SPECIFICATIONS: Contact Current Rating: 3 amperes. **Terminal Resistance:** 12 milliohms max. **Contact Material:** Be-Cu. **CONTACT FEATURES:** Available in a variety of platings and contact pressures; Dual cantilever contact beam with built-in overstress assures reliable connection.

Wire Size (AWG)	Insul. Dia. (Max.)	Plating	Con. Pres. Type	Digi-Key Part No.	Pricing 10	100	AMP Part No.
22-26	.061” (1.55mm)	Nickel	Stand.	A3000-ND	3.24	28.53	87667-3
		Gold	Stand.	A3001-ND	4.61	40.57	87667-2
		Nickel	High	A3003-ND	2.50	21.96	102128-2
		Gold	High	A3004-ND	2.27	18.83	102128-1
20-24	.069” (1.75mm)	Nickel	Intermed.	A3005-ND	3.88	34.11	87046-4
		Gold	Intermed.	A3006-ND	2.97	25.26	87046-3
		Nickel	High	A3007-ND	1.43	12.12	1-87309-3
		Gold	High	A3008-ND	2.32	19.23	1-87309-4
Crimp Tool MT Conn. 22-26AWG....				A9983-ND	478.10 each		90418-1
Crimp Tool MT Conn. 20-24AWG....				A9978-ND	478.10 each		90202-2
Keying Plug.........................				A3077-ND	1.46	—	86286-1

.093” (2.36mm) Soft-Shell Commercial Pin and Socket Connectors

Product Facts:

• Polarized • Cavity Identification • Low contact-mating force • Detent and positive locking • Tin plating • Free-hanging styles • Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 • Certified by Canadian Standards Association, File No. LR7189

AMP.093” (2.36mm) Soft-Shell Commercial Pin and Socket connectors form a total system of economical commercial-grade connectors and offer compatibility with competitive soft shells.

General Specifications:

• **Thermal Shock:** -55°C to +105°C • **Temperature-Humidity Cycling:** +25°C to +65°C at 90-95% RH • **Durability:** 50 mating cycles • **Dielectric Withstanding Voltage:** 1.0kVAC • **Insulation Resistance:** 1000 megohms minimum initial • **Voltage Rating:** 250VAC • **Contact Rating:** • .093” (2.36mm) Connector: AWG 14-24 — 2.0-10.0 Amps • **Material:** • **Housing**: Nylon, natural color. Flammability Rating: UL94V-2 • **Contacts**: .010” (0.25mm) stock thickness. Select Gold is .000030min. gold over nickel. Phosphor bronze contact should be used in high-temp./humidity cycling applications.

Fig. 1 — 1 Circuit In-Line

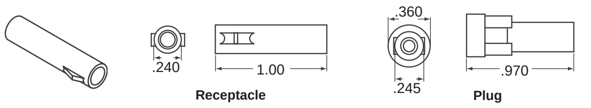


Fig. 2 — 2, 3, and 4 Circuit, In-Line

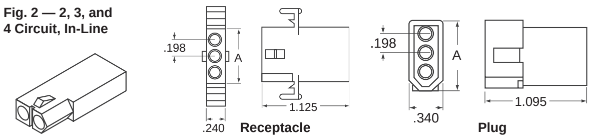


Fig. 3 — 5 Circuit, In-Line

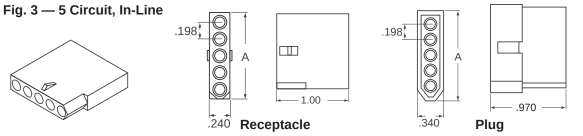


Fig. 4 — 4, 6, 9, 12, and 15 Circuit, Matrix

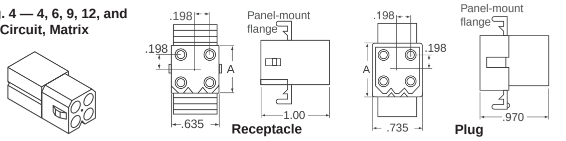


Fig. 5 — 3 Circuit, In-Line

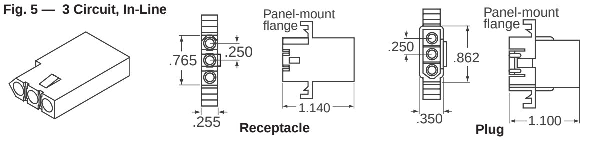


Fig. 6 — 4 Circuit, In-Line

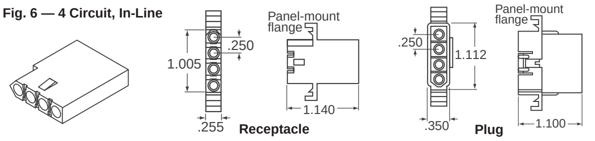


Fig. 7 — 6 Circuit, Matrix

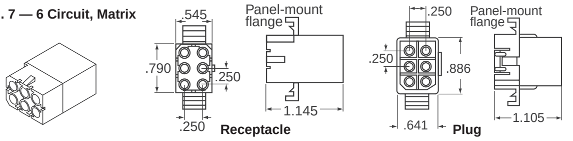


Fig. 8 — 2, 3 and 4 Circuit, In-Line

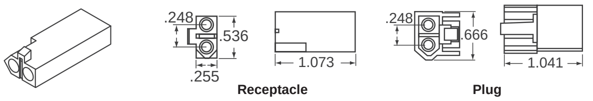


Fig.	No. of Circuits	Description	Inch (mm)	Digi-Key Part No.	Pricing 10	Pricing 50	AMP Part No.
Free Hanging Housing — .198” (5.03mm) Centerline Spacing							
1	1	Receptacle, with Detent	—	A14050-ND	.93	3.60	770063-1
2	2	Receptacle, with Detent	.540 (13.72)	A14051-ND	1.38	3.96	770065-1
2	3	Receptacle, with Detent	.670 (17.02)	A14052-ND	2.41	9.35	770070-1
2	4	Receptacle, with Detent	.870 (22.10)	A14053-ND	2.75	10.66	770075-1
4	4	Receptacle, Square with Detent	.443 (11.25)	A14054-ND	5.47	21.23	770843-1
3	5	Receptacle, with Detent	1.070 (27.18)	A14055-ND	2.78	7.94	770083-1
4	6	Receptacle, with Detent	.435 (11.05)	A14056-ND	3.21	12.45	770086-1
4	6	Receptacle, without Detents	.435 (11.05)	A25538-ND	3.21	12.45	770088-1
4	9	Receptacle, with Detent	.670 (17.02)	A14057-ND	4.04	15.67	770092-1
4	12	Receptacle, with Detents	.870 (22.10)	A25528-ND	4.16	16.16	770098-1
4	15	Receptacle, without Detents	1.070 (27.18)	A25529-ND	6.35	24.64	770105-1
1	1	Plug, without Mount Ears	—	A14058-ND	1.19	4.61	770064-1
2	2	Plug, without Mount Ears	.640 (16.26)	A14059-ND	2.47	7.06	770069-1
2	3	Plug, without Mount Ears	.770 (19.56)	A14060-ND	2.34	9.09	770074-1
2	4	Plug, without Mount Ears	.970 (24.64)	A14061-ND	2.61	10.12	770078-1
4	4	Plug Square, without Mount Ears	.540(13.71)	A14062-ND	9.00	34.90	770842-1
3	5	Plug, without Mount Ears	1.170 (29.72)	A14063-ND	2.13	6.10	770084-1
4	6	Plug, without Mount Ears	.535 (13.59)	A14064-ND	3.63	14.06	770090-1
4	9	Plug, without Mount Ears	.770 (19.56)	A14065-ND	3.97	15.42	770096-1
4	12	Plug, without Mount Ears	.970 (24.64)	A25536-ND	4.15	16.10	770102-1
4	15	Plug, without Mount Ears	1.170 (29.72)	A25537-ND	5.73	22.23	770107-1
Panel-Mount — .198” (5.03mm) Centerline Spacing							
2	2	Receptacle, with Detents	.540 (13.72)	A14386-ND	1.81	7.02	770066-1
2	3	Receptacle, with Detents	.670 (17.02)	A14388-ND	2.54	9.84	770071-1
2	4	Receptacle, with Detents	.870 (22.10)	A14389-ND	2.75	10.66	770076-1
4	6	Receptacle, with Detents	.435 (11.05)	A25524-ND	10.53	40.84	770087-1
4	9	Receptacle, with Detents	.670 (17.02)	A25525-ND	4.24	16.46	770093-1
4	12	Receptacle, with Detents	.870 (22.10)	A25526-ND	8.85	34.31	770099-1
4	15	Receptacle, without Detents	1.070 (27.18)	A25527-ND	6.35	24.64	770103-1
2	2	Plug, without Mount Ears	.640 (16.26)	A14387-ND	5.74	22.28	770068-1
2	3	Plug, without Mount Ears	.770 (19.56)	A25530-ND	2.49	9.65	770073-1
2	4	Plug, without Mount Ears	.970 (24.64)	A25531-ND	2.61	10.12	770077-1
4	6	Plug, without Mount Ears	.535 (13.59)	A25532-ND	3.26	12.67	770089-1
4	9	Plug, with Mount Ears at Wire End	.770 (19.56)	A25533-ND	10.89	42.23	770095-1
4	12	Plug, without Mount Ears	.970 (24.64)	A25534-ND	10.06	39.04	770101-1
4	15	Plug, without Mount Ears	1.170 (29.72)	A25535-ND	9.80	38.03	770106-1
Free Hanging Housing — .250” (6.35mm) Centerline Spacing							
5	3	Receptacle, In-line	—	A25771-ND	3.84	14.89	770339-1
6	4	Receptacle, In-line	—	A25519-ND	5.54	21.50	770337-1
7	6	Receptacle, Matrix	—	A25772-ND	8.92	34.61	770360-1
8	2	Receptacle, Positive Lock, In-line	—	A25513-ND	2.10	8.15	770424-1
8	3	Receptacle, Positive Lock, In-line	—	A25514-ND	4.01	15.55	770785-1
8	4	Receptacle, Positive Lock, In-line	—	A25754-ND	7.36	28.56	770784-1
5	3	Plug, In-line	—	A25774-ND	2.89	11.22	770276-1
6	4	Plug, In-line	—	A25522-ND	5.39	20.91	770336-1
7	6	Plug, Matrix	—	A25523-ND	3.89	15.10	770361-1
8	2	Plug, Positive Lock, In-line	—	A25515-ND	2.75	10.65	770425-1
8	3	Plug, Positive Lock, In-line	—	A25516-ND	4.20	16.29	770783-1
8	4	Plug, Positive Lock, In-line	—	A25755-ND	8.86	34.38	770810-1
Panel-Mount — .250” (6.35mm) Centerline Spacing							
5	3	Receptacle, In-line	—	A25770-ND	2.83	10.98	770269-1
6	4	Receptacle, In-line	—	A25517-ND	5.54	21.50	770329-1
7	6	Receptacle, Matrix	—	A25518-ND	4.79	18.60	770372-1
5	3	Plug, In-line	—	A25773-ND	7.79	30.24	770338-1
6	4	Plug, In-line	—	A25520-ND	5.39	20.91	770330-1
7	6	Plug, Matrix	—	A25521-ND	4.04	15.68	770373-1

Description	Digi-Key Part No.	Price Each	AMP Part No.
Tools			
Contact Insertion Tool	A9998-ND	16.45	91002-1
Contact Extraction Tool	A9950-ND	38.60	318837-1
Crimp Tool 24AWG with Die	A9817-ND	162.00	90872-1
Crimp Tool 20AWG with Die	A9818-ND	162.00	90871-1
PRO-CRIMPER Hand Tool without Die	A9996-ND	75.00	354940-1
Die Set 14-20AWG use with A9996	A9953-ND	105.00	90871-2
Die Set 18-24AWG use with A9996	A9952-ND	105.00	90872-2

Description	Ins. Dia. Range In. (mm)	Digi-Key Part No.	Loose Piece Pricing 100	Loose Piece Pricing 500	AMP Part No.	Digi-Key Part No. †	Tape and Reel Size	Tape and Reel Price	AMP Part No.
.093” (2.36mm) Contacts — May be used in either plug or receptacle housings.									
Pin, 18-24AWG, Brass, Pre-tin	.110 (2.79)	A14098-ND	4.12	17.82	770147-1	—	—	—	—
Socket, 18-24AWG, Brass, Pre-tin	.110 (2.79)	A14096-ND	4.12	17.82	770146-1	—	—	—	—
Pin, 18-24AWG, Brass, Select Gold	.110 (2.79)	A25775-ND	20.17	87.23	770147-5	—	—	—	—
Socket, 18-24AWG, Brass, Select Gold	.110 (2.79)	A25776-ND	17.75	76.76	770146-5	—	—	—	—
Pin, 14-20AWG, Brass, Pre-tin	.140 (3.56)	A14099-ND	4.12	17.82	770145-1	A14099TR-ND	4,000	19.22/M	350416-1
Socket, 14-20AWG, Brass, Pre-tin	.140 (3.56)	A14097-ND	4.12	17.82	770144-1	A14097TR-ND	4,000	19.22/M	350415-1
Pin, 14-20AWG, Brass, Select Gold	.140 (3.56)	A25778-ND	20.17	87.23	770145-5	A25778TR-ND	4,000	215.10/M	350416-5
Socket, 14-20AWG, Brass, Select Gold	.140 (3.56)	A25779-ND	17.75	76.76	770144-5	A25779TR-ND	4,000	207.64/M	350415-5
Socket, 14-20AWG, Phosphor Bronze, Pre-tin	.140 (3.56)	—	—	—	—	A25509TR-ND	4,000	36.10/M	350415-6
Pin, 14-20AWG, Brass, Pre-tin	.180 (4.57)	—	—	—	—	A25510TR-ND⋆	3,750	22.07/M	770530-1
Socket, 14-20AWG, Brass, Pre-tin	.180 (4.57)	—	—	—	—	A25511TR-ND⋆	3,750	22.07/M	770529-1
Pin, 14-18 or (2)18AWG, Brass, Pre-tin	.180 (4.57)	—	—	—	—	A25512TR-ND‡	1,200	57.20/M	770385-1
Socket, 14-18 or (2)18AWG, Phosphor Bronze, Pre-tin	.180 (4.57)	—	—	—	—	A25780TR-ND‡	1,200	60.20/M	770383-1

† Tape and Reel (TR) are also available in Cut Tape.

⋆ Contact length is .875.

‡ 0.013” (.33mm) stock thickness and accept two wires, each with maximum .180” insulation diameter

(MR) Miniature Rectangular Connectors

Product Facts: • Housings positively lock to prevent accidental disengagement • Either cap or plug housing can be mounted in same rectangular panel cutout without additional hardware • Brick red UL94V-0 housings • Plug and cap design includes molded-in polarizing feature to assure proper mating • High density achieved through .165" (4.19mm) contact centerline spacing • Recognized under the Component Program of Underwriters Laboratories, Inc. File No. E28476 • Certified by Canadian Standards Association File No. LR 7189 • Commoning bars can be used to common adjacent pin contacts in any column or row. Maximum stack per pin is two. Use the mating socket housing to assemble the Commoning Bar unto the pins. Illustration is the proper insertion of the Commoning Bar.

Performance Characteristics:

• **Dielectric Withstanding Voltage:** 2.5 KVAC between adjacent circuits • **Insulation Resistance:** 1500 megohms minimum initial between adjacent circuits • **Voltage Rating:** 250V AC • **Contact Rating:** AWG 26-18 — Test Current 1-6 Amps

Fig. 1

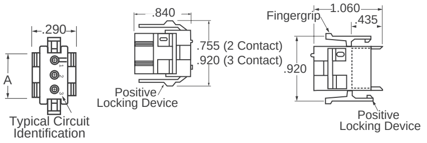


Fig. 2

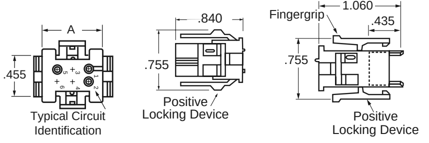


Fig. 3

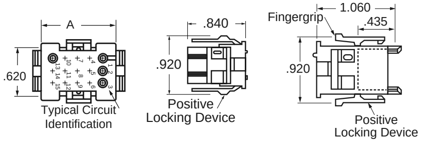


Fig. 4

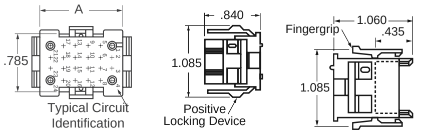


Fig. 5

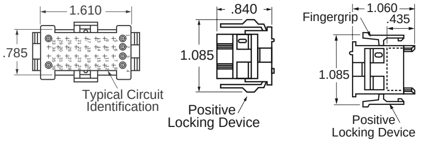


Fig. 6 - Strain Relief

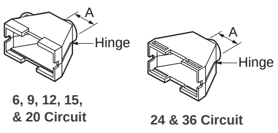


Fig. 7 - Grommet

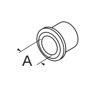


Fig. 8 *NEW!*

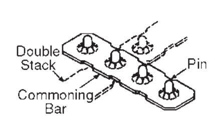


Fig. 9

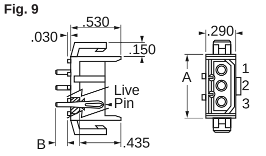


Fig. 10

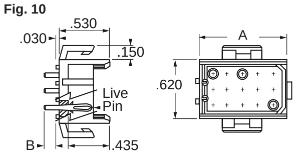


Fig. 11

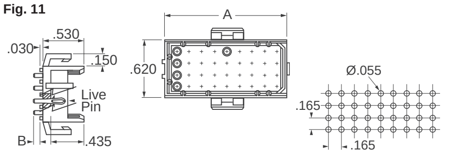


Fig. 12 - Pin

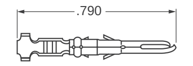


Fig. 13 - Socket

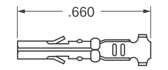


Fig. 14

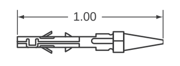


Fig. 15

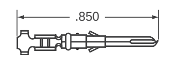


Fig. 16 Keying Plug

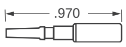


Fig.	No. of Pos.	Type	Dim. A (Inch)	Digi-Key Part No.	Pricing		AMP Part No.
					1	25	
In-Line Housing (Contacts Sold Separately)							
1	2	Cap	.455	A14100-ND	.47	10.18	1-640507-0
	3	Cap	.620	A14101-ND	.69	14.98	1-640508-0
	2	Plug	.455	A14110-ND	.38	8.51	1-640517-0
	3	Plug	.620	A14111-ND	.68	14.76	1-640518-0
Matrix Housing (Contacts Sold Separately)							
2	4	Cap	.455	A14102-ND	.75	16.17	1-640509-0
	6	Cap	.620	A14103-ND	.85	18.29	1-640510-0
	4	Plug	.455	A14112-ND	.71	15.98	1-640519-0
	6	Plug	.620	A14113-ND	.62	13.89	1-640520-0
3	9	Cap	.620	A14104-ND	.91	19.59	1-640511-0
	12	Cap	.785	A14105-ND	1.01	21.80	1-640512-0
	15	Cap	.950	A14106-ND	1.11	24.01	1-640513-0
	9	Plug	.620	A14114-ND	.92	20.64	1-640521-0
	12	Plug	.785	A14115-ND	1.01	21.70	1-640522-0
	15	Plug	.950	A14116-ND	1.08	23.28	1-640523-0
4	20	Cap	.950	A14107-ND	1.76	37.95	1-640514-0
	24	Cap	1.115	A14108-ND	1.87	40.35	1-640515-0
	20	Plug	.950	A14117-ND	1.76	37.98	1-640524-0
	24	Plug	1.115	A14118-ND	1.88	40.47	1-640525-0
5	36	Cap	—	A14109-ND	2.35	50.57	1-640516-0
	36	Plug	—	A14119-ND	1.94	41.92	1-640526-0

Fig.	No. of Pos.	Dim. A (Inch)	Digi-Key Part No.	Pricing		AMP Part No.
				1	25	
Strain Relief (Grommet - Sold Separately)						
6	6	.374	A14120-ND	2.08	44.87	350373-1
	9	.420	A14121-ND	1.37	29.60	350522-1
	12	.420	A14122-ND	1.73	37.32	350374-1
	15	.420	A14123-ND	2.63	56.71	350523-1
	20	.560	A14124-ND	2.72	58.62	480634-1
	24	.560	A14125-ND	2.78	59.90	350524-1
	36	.560	A14126-ND	3.65	78.75	480594-1
Adapting Grommet (Flexible PVC - Black)						
7	6	.156	A14130-ND	1.01	21.79	1-350377-0
		.218	A14131-ND	1.20	25.82	1-350376-0
		.296	A14132-ND	.97	20.83	1-350375-0
7	9, 12, 15	.218	A14133-ND	.99	21.31	1-350378-1
		.250	A14134-ND	.98	21.13	1-350379-1
		.281	A14135-ND	1.24	26.79	1-350380-1
7	20, 24, 36	.437	A14136-ND	1.08	23.17	1-380935-0
		.375	A14137-ND	1.03	22.19	1-380936-0
		.312	A14138-ND	1.47	31.72	1-380937-0

Fig.	Description	Length	Digi-Key Part No.	Pricing		AMP Part No.
				1	25	
Commoning Bar						
8	2 Circuit, Brass, Pre-tin	.305	A25449-ND	.08	1.63	350020-1
	3 Circuit, Brass, Pre-tin	.470	A25450-ND	.08	1.83	350021-1
	4 Circuit, Brass, Pre-tin	.635	A25451-ND	.08	1.83	350022-1

Fig.	No. of Pos.	Plating	Dim. (Inch) A	B	Digi-Key Part No.	Pricing		AMP Part No.
						1	25	
PCB Board Vertical Headers, .062" (1.57mm) Board Thickness								
9	2	Tin	.455	.120	A14200-ND	.63	13.52	640497-1
	2	Gold	.455	.120	A14201-ND	1.77	38.09	640497-2
	3	Tin	.620	.120	A14202-ND	.94	20.17	640498-1
	3	Gold	.620	.120	A14203-ND	2.62	56.45	640498-2
	4	Tin	.455	.120	A14204-ND	1.72	37.14	640499-1
	4	Gold	.455	.120	A14205-ND	3.27	70.50	640499-2
9	6	Tin	.620	.120	A14206-ND	1.72	36.99	640500-1
	6	Gold	.620	.120	A14207-ND	4.49	96.76	640500-2
10	9	Tin	.620	.120	A14208-ND	2.23	48.05	640501-1
	9	Gold	.620	.120	A14209-ND	6.23	134.23	640501-2
	12	Tin	.785	.120	A14210-ND	2.86	61.74	640502-1
	12	Gold	.785	.120	A14211-ND	8.11	181.49	640502-2
	15	Tin	.950	.120	A14212-ND	3.51	75.54	640503-1
	15	Gold	.950	.120	A14213-ND	10.98	245.74	640503-2
11	20	Tin	.950	.120	A14214-ND	4.55	98.05	640504-1
	20	Gold	.950	.120	A14215-ND	12.92	278.38	640504-2
	24	Tin	1.115	.120	A14216-ND	5.06	109.14	640505-1
	24	Gold	1.115	.120	A14217-ND	14.34	308.97	640505-2
	36	Tin	1.610	.120	A14218-ND	8.20	176.80	640506-1
	36	Gold	1.610	.120	A14219-ND	30.49	682.61	640506-2
PCB Board Vertical Headers, .120" (3.05mm) Board Thickness								
9	2	Tin	.455	.180	A14220-ND	1.42	30.67	640497-3
	2	Gold	.455	.180	A14221-ND	1.77	38.09	640497-4
	3	Tin	.620	.180	A14222-ND	1.50	32.36	640498-3
	3	Gold	.620	.180	A14223-ND	2.62	56.45	640498-4
	4	Tin	.455	.180	A14224-ND	1.75	37.80	640499-3
	4	Gold	.455	.180	A14225-ND	3.27	70.50	640499-4
	6	Tin	.620	.180	A14226-ND	1.72	36.99	640500-3
	6	Gold	.620	.180	A14227-ND	4.49	96.76	640500-4
10	9	Tin	.620	.180	A14228-ND	2.23	48.05	640501-3
	9	Gold	.620	.180	A14229-ND	5.74	128.49	640501-4
	12	Tin	.785	.180	A14230-ND	2.86	61.74	640502-3
	12	Gold	.785	.180	A14231-ND	8.08	174.07	640502-4
	15	Tin	.950	.180	A14232-ND	3.51	75.54	640503-3
	15	Gold	.950	.180	A14233-ND	9.83	211.87	640503-4
11	20	Tin	.950	.180	A14234-ND	4.55	98.05	640504-3
	20	Gold	.950	.180	A14235-ND	12.92	278.38	640504-4
	24	Tin	1.115	.180	A14236-ND	5.06	109.14	640505-3
	24	Gold	1.115	.180	A14237-ND	14.54	325.56	640505-4
	36	Tin	1.610	.180	A14238-ND	8.20	176.80	640506-3
	36	Gold	1.610	.180	A14239-ND	30.49	682.61	640506-4

Fig.	Description	Ins. Dia. Range Inches	Digi-Key Part No.	Pricing		AMP Part No.
				25	100	
Contacts (Pins and Sockets)						
12	Live Split Pin, 24-26AWG, Phos. Brz., Pre-tin	.025-.050	A14234-ND	5.40	13.32	640579-1
13	Std. Socket, 24-26AWG, Phos. Brz., Pre-tin	.025-.050	A25441-ND	5.18	12.79	794001-1
12	Live Split Pin, 24-26AWG, Phos. Brz., Select Gold	.025-.050	A25444-ND	21.34	52.63	640579-2
13	Std. Socket, 24-26AWG, Phos. Brz., Select Gold	.025-.050	A25445-ND	20.52	50.61	794001-2
12	Live Split Pin, 18-26AWG, Phos. Brz., Pre-tin	.050-.115	A14199-ND	5.40	13.32	640545-1
13	Std. Socket, 18-26AWG, Phos. Brz., Pre-tin	.050-.115	A14197-ND	5.08	12.54	641300-1
12	Live Split Pin, 18-26AWG, Phos. Brz., Select Gold	.050-.115	A14198-ND	11.51	28.39	640545-2
13	Std. Socket, 18-26AWG, Phos. Brz., Select Gold	.050-.115	A14196-ND	10.60	26.14	641300-2
14	Solder Tail Socket, Phos. Brz., Pre-tin	—	A25447-ND*	5.70	14.07	350838-1
15	Grounding Pin, Phos. Brz., Pre-tin	.050-.115	A25442-ND	5.40	13.32	640580-1
	Grounding Pin, Phos. Brz., Select Gold	.050-.115	A25446-ND	21.58	53.24	640580-2
Keying Plug						
16	—		A14195-ND	—	42.25	350591-1

Tools			
Die Set MR, Use with A9996	A9949-ND	120.00 each	58514-2
PRO-CRIMPER Hand Tool	A9996-ND	75.00 each	354940-1
Extraction Tool	A9954-ND	17.78 each	455822-2
CERTI-CRIMP Tool MR	A9936-ND	523.76 each	90325-1
Contact Insertion Tool	A1444-ND	27.20 each	455830-1
Pro-Crimper II Hand Tool	A25448-ND	182.25 each	58514-1

* Recommended for use with MR Socket Housings.

Board Mount Headers – .050” (1.27mm) Spacing

Board Mount Headers (*Figures 1 & 2 mate with Figure 3*)

Fig. 1

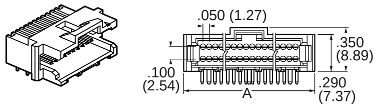


Fig. 2

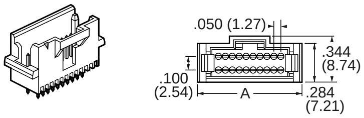
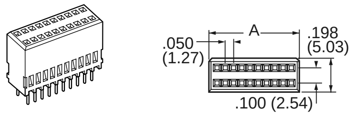


Fig. 3



Housing: Black thermoplastic, 94V-0 rated. **Contacts:** Copper alloy, plated gold in mating area.

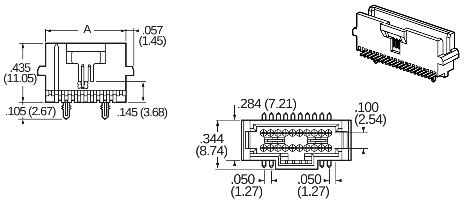
Fig.	Description	No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Board Mount Headers (Figures 1 and 2 Mate with Figure 3)							
1	Protected Dual Row Right Angle Header	24	.730 (18.54)	A24196-ND	5.20	4.66	1-104069-2
	Protected Dual Row Right Angle Header	30	.880 (22.35)	A3205-ND	5.79	5.18	104069-5
	Protected Dual Row Right Angle Header	40	1.130 (28.70)	A3206-ND	7.44	6.65	104069-6
	Protected Dual Row Right Angle Header	50	1.380 (35.05)	A3207-ND	9.00	8.07	104069-2
	Protected Dual Row Right Angle Header	60	1.630 (41.40)	A3208-ND	9.46	8.47	104069-7
	Protected Dual Row Right Angle Header	80	2.130 (54.10)	A24197-ND	13.33	11.94	104069-3
	Protected Dual Row Right Angle Header	100	2.630 (66.80)	A3209-ND	15.67	14.03	1-104069-7
2	Protected Dual Row Vertical Header	16	.530 (13.46)	A24198-ND	3.97	3.56	1-104068-0
	Protected Dual Row Vertical Header	20	.630 (16.00)	A3210-ND	4.08	3.66	104068-1
	Protected Dual Row Vertical Header	24	.730 (18.54)	A24832-ND	4.75	4.25	1-104068-1
	Protected Dual Row Vertical Header	30	.880 (22.35)	A3211-ND	5.59	4.99	104068-3
	Protected Dual Row Vertical Header	40	1.130 (28.70)	A3212-ND	6.76	6.06	104068-4
	Protected Dual Row Vertical Header	50	1.380 (35.05)	A3213-ND	8.19	7.34	104068-5
	Protected Dual Row Vertical Header	60	1.630 (41.40)	A3214-ND	9.46	8.47	104068-6
	Protected Dual Row Vertical Header	68	1.830 (46.48)	A24833-ND	11.31	10.13	1-104068-8
	Protected Dual Row Vertical Header	80	2.130 (54.10)	A24834-ND	13.98	12.52	1-104068-6
	Protected Dual Row Vertical Header	100	2.630 (66.80)	A3215-ND	14.40	12.90	1-104068-7
3	Dual Row Vertical Receptacle	20	.544 (13.82)	A3216-ND	3.98	3.60	104078-1
	Dual Row Vertical Receptacle	30	.794 (20.17)	A3217-ND	5.43	4.92	104078-4
	Dual Row Vertical Receptacle	40	1.044 (26.52)	A3218-ND	6.60	5.98	104078-2
	Dual Row Vertical Receptacle	50	1.294 (32.87)	A3219-ND	8.00	7.25	104078-5
	Dual Row Vertical Receptacle	60	1.544 (39.22)	A3220-ND	9.25	8.38	104078-6
	Dual Row Vertical Receptacle	100	2.544 (64.62)	A3221-ND	14.10	12.77	104078-8

AMP

SMT Headers and Receptacles – .050” (1.27mm) Spacing

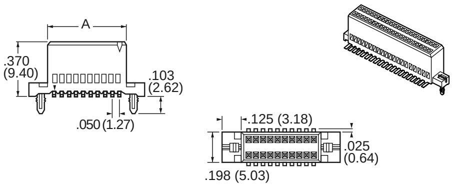
Housing: Glass filled, black thermoplastic, 94V-0 rated.
Contacts: Phosphor bronze, plated gold in mating area.

Vertical Dual Row Surface Mount Header



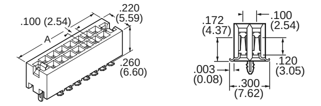
No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Vertical Dual Row Surface Mount Headers					
20	.630 (16.00)	A3250-ND	4.21	3.78	104549-2
30	.880 (22.35)	A3252-ND	6.76	6.06	104549-5
40	1.130 (28.70)	A3254-ND	6.79	6.09	104549-6
50	1.380 (35.05)	A3256-ND	10.14	9.08	104549-7
100	2.630 (66.80)	A3260-ND	12.32	11.16	1-104549-0

Vertical Dual Row Surface Mount Receptacle



No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Vertical Dual Row Surface Mount Receptacles					
20	.544 (13.82)	A3250-ND	4.24	3.84	104550-2
30	.794 (20.17)	A3253-ND	5.75	5.21	104550-4
40	1.044 (26.52)	A3255-ND	6.97	6.32	104550-5
50	1.294 (32.87)	A3257-ND	8.40	7.61	104550-6
100	2.544 (64.62)	A3261-ND	17.01	15.73	104550-9

AMPMODU® SMT Receptacles – .100” (2.54mm) Spacing



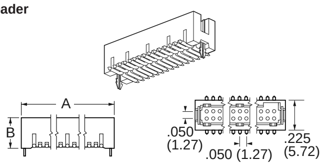
Housing: Black polyphenylene sulfide, 94V-0 rated.
Contacts: Phosphor bronze, duplex plated min. gold on contact area.

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Vertical Mount, Bottom Entry with Holddowns					
10	.700 (17.78)	A3100-ND	4.05	3.68	535959-1
20	1.200 (30.48)	A3101-ND	5.04	4.56	535959-3
26	1.500 (38.10)	A3102-ND	5.72	5.19	535959-2

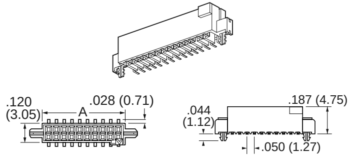
AMPMODU® .050” (1.27mm) Grid SMT Connectors

Housing: Black glass filled thermoplastic, 94V-0 rated.
Contacts: Phosphor bronze (headers), beryllium copper (receptacles), both with duplex plated gold in mating area.

Header



Receptacle



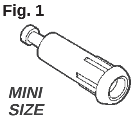
No. of Pos.	Dim. – Inch (mm) A	Dim. – Inch (mm) B*	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Vertical Dual Row Surface Mount Headers						
20	.622 (15.80)	.250 (6.35)	A3107-ND	4.40	3.99	104655-3
50	1.372 (34.85)	.250 (6.35)	A3108-ND	4.43	4.01	104655-6
70	1.872 (47.55)	.250 (6.35)	A3109-ND	8.19	7.42	104655-8
100	2.622 (66.60)	.250 (6.35)	A3110-ND	6.63	6.00	1-104655-1
20	.622 (15.80)	.320 (8.13)	A3111-ND	4.40	3.99	104656-2
50	1.372 (34.85)	.320 (8.13)	A3112-ND	7.21	6.53	104656-5
70	1.872 (47.55)	.320 (8.13)	A3113-ND	5.04	4.56	104656-7
100	2.622 (66.60)	.320 (8.13)	A3114-ND	10.76	9.75	1-104656-0
20	.622 (15.80)	.390 (9.91)	A3115-ND	2.73	2.48	104693-2
50	1.372 (34.85)	.390 (9.91)	A3116-ND	4.43	4.01	104693-5
70	1.872 (47.55)	.390 (9.91)	A3117-ND	8.19	7.42	104693-7
100	2.622 (66.60)	.390 (9.91)	A3118-ND	8.16	7.31	1-104693-0
Vertical Dual Row Surface Mount Receptacles						
20	.516 (13.11)	—	A3103-ND	3.38	3.03	104652-2
50	1.266 (32.16)	—	A3104-ND	7.05	6.32	104652-5
70	1.766 (44.86)	—	A3105-ND	8.55	7.68	104652-7
100	2.516 (63.91)	—	A3106-ND	10.43	9.35	1-104652-0

* Mated Height

JOHNSON Components™

Plugs and Jacks

Fig. 1



MINI SIZE

Fig. 2

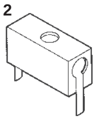


Fig. 3

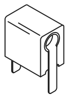


Fig. 4

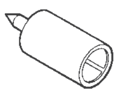


Fig. 5

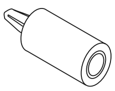


Fig. 6

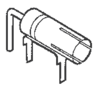


Fig. 7

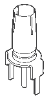
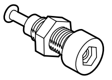


Fig. 8



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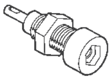

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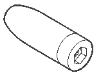
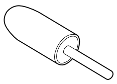


Fig. 11



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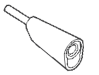

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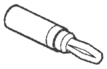

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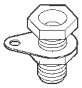

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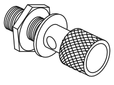

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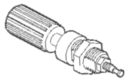
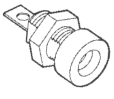


Fig. 17



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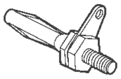

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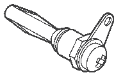


Fig. 20

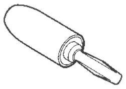


Fig. 21

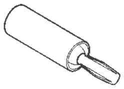


Fig. 22

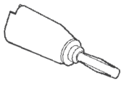


Fig.	Color	Digi-Key Part No.	Pricing						Johnson Part No.
			1	10	100	250	500	1,000	
Tip Jacks – for Standard Tip Plug: 2.03mm									
1	White	J330-ND	.97	8.66	68.59	144.40	270.75	505.40	105-1041-001
	Red	J124-ND	.97	8.66	68.59	144.40	270.75	505.40	105-1042-001
	Black	J125-ND	.97	8.66	68.59	144.40	270.75	505.40	105-1043-001
	Green	J331-ND	.97	8.66	68.59	144.40	270.75	505.40	105-1044-001
	Yellow	J333-ND	.97	8.66	68.59	144.40	270.75	505.40	105-1047-001
	Blue	J126-ND	.97	8.66	68.59	144.40	270.75	505.40	105-1050-001
Horizontal Test Jacks – for Standard Tip Plug: 2.03mm									
2	White	J108-ND	.35	3.12	24.70	52.00	97.50	182.00	105-0751-001
	Red	J109-ND*	.35	3.12	24.70	52.00	97.50	182.00	105-0752-001
	Black	J110-ND*	.35	3.12	24.70	52.00	97.50	182.00	105-0753-001
	Green	J111-ND	.35	3.12	24.70	52.00	97.50	182.00	105-0754-001
	Orange	J112-ND	.35	3.12	24.70	52.00	97.50	182.00	105-0756-001
	Yellow	J113-ND	.35	3.12	24.70	52.00	97.50	182.00	105-0757-001
	Brown	J114-ND	.35	3.12	24.70	52.00	97.50	182.00	105-0758-001
	Blue	J115-ND	.35	3.12	24.70	52.00	97.50	182.00	105-0760-001
	Violet	J116-ND	.35	3.12	24.70	52.00	97.50	182.00	105-0762-001
Horizontal Insulated Miniature Test Jacks – for Standard Tip Plug: 2.03mm									
3	White	J575-ND	.34	3.05	24.13	50.80	95.25	177.80	105-1101-001
	Red	J576-ND	.34	3.05	24.13	50.80	95.25	177.80	105-1102-001
	Black	J577-ND	.34	3.05	24.13	50.80	95.25	177.80	105-1103-001
	Green	J578-ND	.34	3.05	24.13	50.80	95.25	177.80	105-1104-001
	Yellow	J579-ND	.34	3.05	24.13	50.80	95.25	177.80	105-1107-001
	Blue	J580-ND	.34	3.05	24.13	50.80	95.25	177.80	105-1110-001
Vertical Test Jacks – for Standard Tip Plug: 2.03mm									
4	White	J119-ND	.53	4.68	37.05	78.00	146.25	273.00	105-0851-001
	Red	J120-ND	.53	4.68	37.05	78.00	146.25	273.00	105-0852-001
	Black	J121-ND	.53	4.68	37.05	78.00	146.25	273.00	105-0853-001
	Green	J122-ND	.53	4.68	37.05	78.00	146.25	273.00	105-0854-001
	Yellow	J123-ND	.53	4.68	37.05	78.00	146.25	273.00	105-0857-001
	Blue	J312-ND	.53	4.68	37.05	78.00	146.25	273.00	105-0860-001
Vertical Insulated Formed Contact Test Jacks – for Standard Tip Plug: 2.03mm									
5	White	J581-ND	.48	4.22	33.44	70.40	132.00	246.40	105-2201-201
	Red	J582-ND	.48	4.22	33.44	70.40	132.00	246.40	105-2202-201
	Black	J583-ND	.48	4.22	33.44	70.40	132.00	246.40	105-2203-201
	Green	J584-ND	.48	4.22	33.44	70.40	132.00	246.40	105-2204-201
	Yellow	J585-ND	.48	4.22	33.44	70.40	132.00	246.40	105-2207-201
	Blue	J586-ND	.43	3.86	30.59	64.40	120.75	225.40	105-2210-201
Shielded Test Jack – Horizontal									
6	Tin	J463-ND	3.65	32.47	257.07	541.20	1014.75	1894.20	129-0701-301
	Gold	J571-ND	4.50	39.50	291.06	623.70	1039.50	—	129-0701-302
Shielded Test Jack – Vertical									
7	Tin	J462-ND	3.56	31.68	250.80	528.00	990.00	1848.00	129-0701-201
	Gold	J570-ND	4.40	38.56	284.13	608.85	1014.75	—	129-0701-202
Tip Jacks – Insulated Deluxe									
8	White	J105-ND	1.02	9.07	71.82	151.20	283.50	529.20	105-0601-001
	Red	J106-ND	1.02	9.07	71.82	151.20	283.50	529.20	105-0602-001
	Black	J107-ND	1.02	9.07	71.82	151.20	283.50	529.20	105-0603-001
	Green	J337-ND	1.02	9.07	71.82	151.20	283.50	529.20	105-0604-001
	Yellow	J338-ND	1.02	9.07	71.82	151.20	283.50	529.20	105-0607-001
	Blue	J339-ND	1.02	9.07	71.82	151.20	283.50	529.20	105-0610-001
Tip Jacks – Insulated Standard Type 6.35mm									
9	White	J320-ND	.59	5.21	41.23	86.80	162.75	303.80	105-0801-001
	Red	J117-ND*	.59	5.21	41.23	86.80	162.75	303.80	105-0802-001
	Black	J118-ND*	.59	5.21	41.23	86.80	162.75	303.80	105-0803-001
	Green	J321-ND	.59	5.21	41.23	86.80	162.75	303.80	105-0804-001
	Yellow	J323-ND	.59	5.21	41.23	86.80	162.75	303.80	105-0807-001
	Blue	J325-ND	.59	5.21	41.23	86.80	162.75	303.80	105-0810-001
Tip Jacks with Sleeve Assembly									
10	White	J450-ND	1.21	10.75	85.12	179.20	336.00	627.20	105-0701-001
	Red	J451-ND	1.21	10.75	85.12	179.20	336.00	627.20	105-0702-001
	Black	J452-ND	1.21	10.75	85.12	179.20	336.00	627.20	105-0703-001

Fig.	Color	Digi-Key Part No.	Pricing						Johnson Part No.
			1	10	100	250	500	1,000	
Tip Plugs – Insulated Solderless Type									
11	White	J300-ND	.71	6.31	49.97	105.20	197.25	368.20	105-0301-001
	Red	J103-ND*	.71	6.31	49.97	105.20	197.25	368.20	105-0302-001
	Black	J104-ND*	.71	6.31	49.97	105.20	197.25	368.20	105-0303-001
	Green	J301-ND	.71	6.31	49.97	105.20	197.25	368.20	105-0304-001
	Blue	J305-ND	.71	6.31	49.97	105.20	197.25	368.20	105-0310-001
Tip Plugs – Insulated Stacking Single Type									
12	Red	J454-ND	2.43	21.60	171.00	360.00	675.00	1260.00	105-1202-001
	Black	J455-ND	2.43	21.60	171.00	360.00	675.00	1260.00	105-1203-001
Miniature Banana Plugs – Insulated Solder Type									
13	Red	J457-ND	1.41	12.53	99.18	208.80	391.50	730.80	108-1002-001
	Black	J458-ND	1.41	12.53	99.18	208.80	391.50	730.80	108-1003-001
For Standard Banana Plug 4.44mm Across Flats									
14	—	J147-ND*	1.13	10.01	79.23	166.80	312.75	583.80	108-0740-001
Uninsulated w/Knurled Thumb Nut For Standard Banana Plug 4.44mm Across Flats									
15	—	J587-ND	1.92	17.04	134.90	284.00	532.50	994.00	111-2223-001
Binding Posts – Insulated Standard									
16	White	J370-ND	1.54	13.70	108.49	228.40	428.25	799.40	111-0101-001
	Red	J164-ND*	1.54	13.70	108.49	228.40	428.25	799.40	111-0102-001
	Black	J165-ND*	1.54	13.70	108.49	228.40	428.25	799.40	111-0103-001
	Green	J371-ND	1.70	15.10	119.51	251.60	471.75	880.60	111-0104-001
	Yellow	J372-ND	1.54	13.70	108.49	228.40	428.25	799.40	111-0107-001
Banana Jacks – Insulated Solder Terminal									
17	White	J150-ND*	.45	3.98	31.54	66.40	124.50	232.40	108-0901-001
	Red	J151-ND*	.45	3.98	31.54	66.40	124.50	232.40	108-0902-001
	Black	J152-ND*	.45	3.98	31.54	66.40	124.50	232.40	108-0903-001
	Green	J153-ND	.50	4.44	35.15	74.00	138.75	259.00	108-0904-001
	Orange	J356-ND	.45	3.98	31.54	66.40	124.50	232.40	108-0906-001
	Yellow	J154-ND	.45	3.98	31.54	66.40	124.50	232.40	108-0907-001
	Brown	J357-ND	.50	4.44	35.15	74.00	138.75	259.00	108-0908-001
	Blue	J155-ND	.45	3.98	31.54	66.40	124.50	232.40	108-0910-001
	Violet	J358-ND	.50	4.44	35.15	74.00	138.75	259.00	108-0912-001
Banana Plug – Uninsulated Panel Mount Threaded Stud									
18	—	J148-ND	1.19	10.61	83.98	176.80	331.50	618.80	108-0750-001
Banana Plug – Uninsulated Panel Mount Screw Type									
19	—	J149-ND	1.03	9.17	72.58	152.80	286.50	534.80	108-0753-001
Banana Plugs – Insulated Solderless Tapered Handle									
20	White	J144-ND*	.96	8.50	67.26	141.60	265.50	495.60	108-0301-001
	Red	J145-ND*	.96	8.50	67.26	141.60	265.50	495.60	108-0302-001
	Black	J146-ND*	.96	8.50	67.26	141.60	265.50	495.60	108-0303-001
	Green	J340-ND	.96	8.50	67.26	141.60	265.50	495.60	108-0304-001
	Orange	J341-ND	.96	8.50	67.26	141.60	265.50	495.60	108-0306-001
	Yellow	J342-ND	.96	8.50	67.26	141.60	265.50	495.60	108-0307-001
	Brown	J343-ND	.96	8.50	67.26	141.60	265.50	495.60	108-0308-001
	Blue	J344-ND	.96	8.50	67.26	141.60	265.50	495.60	108-0310-001
	Violet	J345-ND	.96	8.50	67.26	141.60	265.50	495.60	108-0312-001
Banana Plugs – Insulated Round Body Solder Stud									
21	Red	J156-ND	1.92	17.06	135.09	284.40	533.25	995.40	108-1722-101
	Black	J157-ND	1.92	17.06	135.09	284.40	533.25	995.40	108-1723-101
Banana Plugs – Insulated Round Body Solderless									
21	Red	J158-ND	1.46	12.94	102.41	215.60	404.25	754.60	108-1722-103
	Black	J159-ND	1.46	12.94	102.41	215.60	404.25	754.60	108-1723-103
Banana Plugs – Insulated Stacking Single Type									
22	White	J459-ND	1.59	14.11	111.72	235.20	441.00	823.20	108-1081-001
	Red	J460-ND	1.59	14.11	111.72	235.20	441.00	823.20	108-1082-001
	Black	J461-ND	1.59	14.11	111.72	235.20	441.00	823.20	108-1083-001

J100-KIT-ND ***Digi-Key® Plug & Jack Kit*** Contains 10 each of the plugs or jacks as denoted (*) on chart. Price includes compartment divided plastic box for easy storage and quick access **$76.95**

KEYSTONE ELECTRONICS CORP.

Standardized Phono-plugs

Fig. 1

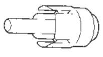


Fig. 2

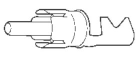


Fig. 3

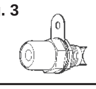


Fig. 4

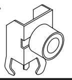


Fig.	Description	Digi-Key Part No.	Pricing		
			1	10	100
1	Conventional Type	561K-ND	.55	4.55	41.09
2	Strain Relief Lug Crimps to Wire Insulation	565K-ND	.74	6.12	52.43
3	Panel Mount Jack Hex Base Type	576K-ND	1.82	15.07	134.21
4	Snap-Fit 90° PC Phono Jack	901K-ND	1.15	9.50	85.59

HIROSE ELECTRIC CO.,LTD. *NEW!* High Density I/O Connectors

DXM series high-density I/O connectors with bellow contacts have an interconnect design to ensure positive locking, effortless coupling, terminal protection and EMI reduction in a miniaturized and rugged package. DXM series offer one of the most varied and complete lines of High-Density connectors in the world.

Applications: Office, factory and home automation, computers, measurement, communication and control equipment, and other commercial applications needing high density interconnections.

Features: • 1.27mm (0.050") contact spacing conserves valuable board space and permits ultra-high density designs • Bellow contacts create smooth and precise mating • Unique shell design assures first make/last break grounding and overall noise protection • IDC termination allows quick and low cost termination to AWG #28 wires • Backshell and receptacle shell are made of diecast zinc alloy or stainless steel to reduce the penetration of external EMI noise • Overmold backshell provided for EDS protection is available in "one-touch" locking and "screw" locking • Termination methods are available in IDC, soldering, right angle dip, straight dip and SMT

Specifications: • Current capacity: 0.5A • Rated voltage: AC125V • Insulation resistance: 250MΩ or less at DC100mA • Withstanding voltage: AC 300Vr.m.s. for 1 minute

Fig. 1 – Plug Discrete IDC

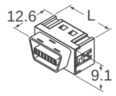


Fig. 2 – Plug Solder Type

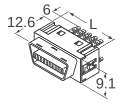


Fig. 3 – Board Lock Pin Harpoon Type

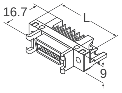


Fig. 4 – Receptacle Straight Type

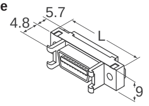


Fig. 5 – Board Screw on Type

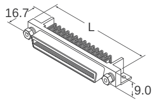


Fig. 6 – Board Lock Pin, Round Type

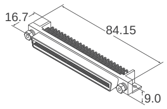


Fig. 7 – Board Lock Pin Harpoon Type

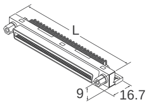


Fig. 8 – Receptacle Straight Type

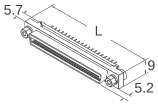


Fig. 9 – Backshell Stainless Steel

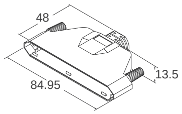


Fig. 10 – Backshell Plastic, Beige

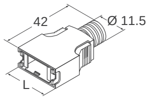


Fig. 11 – Terminator

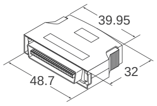


Fig.	No. Contacts	Dimension L (mm)	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	14	17.09	H10049-ND	8.92	7.55	5.66	DX30AM-14P
	20	20.90	H10050-ND	8.11	6.87	5.15	DX30AM-20P
	26	24.71	H10001-ND	8.76	7.42	5.57	DX30AM-26P
	36	31.06	H10051-ND	9.18	7.98	6.39	DX30AM-36P
	50	39.95	H10052-ND	10.74	9.34	7.48	DX30AM-50P
	68	51.38	H10053-ND	12.84	11.88	9.96	DX30AM-68P
	80	59.00	H10054-ND	13.67	12.87	11.26	DX30AM-80P
	100	71.70	H10048-ND	14.52	13.67	11.96	DX30AM-100P
2	20	20.90	H10063-ND	9.32	8.10	6.48	DX40M-20P
	26	24.71	H10064-ND	10.19	8.86	7.09	DX40M-26P
	36	31.06	H10065-ND	10.10	9.35	7.83	DX40M-36P
	50	39.95	H10066-ND	11.72	10.85	9.09	DX40M-50P
	100	71.70	H10062-ND	18.23	17.62	15.80	DX40M-100P
3	14	29.54	H10027-ND	4.70	3.89	2.92	DX10G1M-14S
	20	33.35	H10035-ND	4.99	4.13	3.10	DX10GM-20S
	26	37.16	H10029-ND	5.08	4.20	3.15	DX10G1M-26S
	36	43.51	H10031-ND	5.25	4.35	3.26	DX10G1M-36S
	50	52.40	H10033-ND	5.97	4.95	3.71	DX10G1M-50S
	68	63.83	H10037-ND	7.85	6.65	4.99	DX10GM-68S
	14	29.54	H10028-ND*	3.97	3.29	2.47	DX10G1M-14SE
	20	33.35	H10036-ND	4.99	4.13	3.10	DX10GM-20SE
	26	37.16	H10030-ND*	3.97	3.29	2.47	DX10G1M-26SE
	36	43.51	H10032-ND*	4.15	3.44	2.58	DX10G1M-36SE
	50	52.40	H10034-ND*	5.25	4.35	3.26	DX10G1M-50SE
	68	63.83	H10038-ND	7.85	6.65	4.99	DX10GM-68SE
4	14	29.54	H10042-ND	8.42	7.13	5.35	DX20M-14S
	20	33.35	H10043-ND	8.46	7.36	5.89	DX20M-20S
	26	37.16	H10044-ND	8.88	7.72	6.18	DX20M-26S
	36	43.51	H10045-ND	9.45	8.22	6.58	DX20M-36S
	50	52.40	H10046-ND	10.47	9.10	7.28	DX20M-50S
	68	63.83	H10047-ND	10.48	9.70	8.13	DX20M-68S
5	68	63.83	H10025-ND	13.84	12.81	10.73	DX10BM-68S
	80	71.45	H10026-ND	13.04	12.28	10.74	DX10BM-80S
	100	84.15	H10023-ND	14.30	13.46	11.78	DX10BM-100S
6	100	—	H10024-ND	14.52	13.67	11.96	DX10BM-100SE
7	100	84.15	H10022-ND	11.22	10.38	8.70	DX10AM-100SE2
	100	84.15	H10021-ND	11.22	10.38	8.70	DX10AM-100SE1
8	68	63.83	H10040-ND	13.22	12.23	10.25	DX20BM-68S
	80	71.45	H10041-ND	13.34	12.34	10.34	DX20BM-80S
	100	84.15	H10039-ND	14.30	13.46	11.78	DX20BM-100S
9	100	—	H10055-ND	11.22	10.38	8.70	DX30M-100-CV1
10	14	25.79	H10056-ND	5.08	4.20	3.15	DX30M-14-CV(10)
	20	29.60	H10057-ND	4.58	3.80	2.85	DX30M-20-CV(10)
	26	33.50	H10058-ND	5.22	4.32	3.24	DX30M-26-CV(10)
	36	39.80	H10059-ND	5.22	4.32	3.24	DX30M-36-CV(10)
	50	48.70	H10060-ND	5.77	4.78	3.59	DX30M-50-CV(10)
	68	60.13	H10061-ND	6.15	5.09	3.82	DX30M-68-CV(10)
11	50	—	H10067-ND	17.76	17.17	15.40	DX70M-50P(TB)CV

* With Board Locks

EDAC INC Rack and Panel Connectors — 516 Series

Features:
• UL Recognized • Plug and receptacle in 20, 38, 56, 90 or 120 contact sizes • Contact termination options include crimp, P.C. tail, wire hole and wire wrap • Mating and unmating simplified with use of actuating screws • Contacts suitable for either plug or receptacle

Specifications:
• Insulator Material: Diallyl Phthalate, Color: Green, or Polycarbonate Color: Grey • Contact Material: Phosphor Bronze Alloy CA-510 • Contact Plating: Gold over nickel for entire contact • Cover Material: Diecast zinc, finished with grey enamel paint • Current Rating: 8.5 Amperes • Contact Resistance: 10 Milliohms maximum • Dielectric Withstanding Voltage: 2000 V AC rms at sea level • Insulation Resistance: 5000 Megohms minimum • Operating Temperature: -65°C to +125°C • Insertion and Withdrawal Force: 2 to 16 oz. (0.56 to 4.45 N) per contact position

Fig. 1 – 20 Pin Plug and Receptacle, Grey

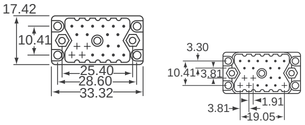


Fig. 2 – 38 Pin Plug and Receptacle, Grey

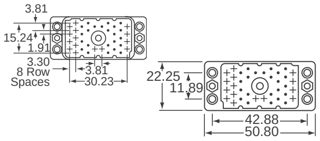


Fig. 3 – 56 Pin Plug and Receptacle, Grey

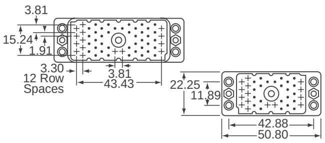


Fig. 4 – 90 Pin Plug and Receptacle, Grey

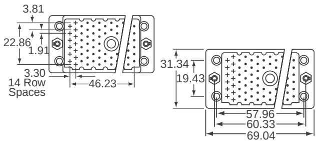


Fig. 5 – 120 Pin Plug and Receptacle, Green

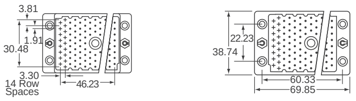
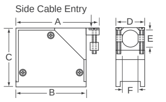


Fig. 6 – Metal Connector Cover



No. of Cont.	Dimensions A	B	C	D	E	F
20	39.09	33.66	23.01	17.42	11.33	12.45
38	56.03	50.95	39.78	22.23	18.29	14.61
56	71.17	66.09	39.78	22.23	18.29	14.61
90	79.20	69.04	45.09	31.34	22.35	22.86
120	80.65	69.85	51.31	38.89	22.61	27.43

Fig. 7 – Contacts

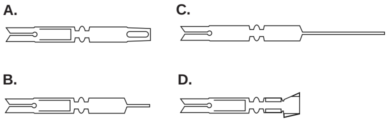


Fig.	No. Con-tacts	Description	Digi-Key Part No.	Price Each 1	25	EDAC Part No.
1	20	Plug with Screw	151-1024-ND	8.00	6.00	516-020-000-301
	20	Plug with Nut	151-1025-ND	5.81	4.36	516-020-000-302
	20	Receptcale with Screw	151-1026-ND	7.62	5.71	516-020-000-401
	20	Receptcale with Nut	151-1027-ND	5.71	4.29	516-020-000-402
2	38	Plug with Screw	151-1028-ND	8.10	6.08	516-038-000-301
	38	Plug with Nut	151-1029-ND	5.71	4.29	516-038-000-302
	38	Receptcale with Screw	151-1030-ND	8.00	6.00	516-038-000-401
	38	Receptcale with Nut	151-1031-ND	5.52	4.14	516-038-000-402
3	56	Plug with Screw	151-1032-ND	8.10	6.08	516-056-000-301
	56	Plug with Nut	151-1033-ND	5.90	4.43	516-056-000-302
	56	Receptcale with Screw	151-1034-ND	8.10	6.07	516-056-000-401
	56	Receptcale with Nut	151-1035-ND	5.71	4.29	516-056-000-402
4	90	Plug with Screw	151-1036-ND	15.71	11.79	516-090-000-301
	90	Plug with Nut	151-1037-ND	7.14	5.36	516-090-000-302
	90	Receptcale with Screw	151-1038-ND	15.43	11.57	516-090-000-401
	90	Receptcale with Nut	151-1039-ND	6.95	5.21	516-090-000-402
5	120	Plug with Screw	151-1040-ND	18.38	13.79	516-120-000-101
	120	Plug with Nut	151-1041-ND	9.52	7.14	516-120-000-102
	120	Receptcale with Screw	151-1042-ND	18.76	14.07	516-120-000-201
	120	Receptcale with Nut	151-1043-ND	9.90	7.43	516-120-000-202
6	—	Cover for 20 Position	151-1044-ND	13.05	9.79	516-230-520
	—	Cover for 38 Position	151-1045-ND	14.00	10.50	516-230-538
	—	Cover for 56 Position	151-1046-ND	15.33	11.50	516-230-556
	—	Cover for 90 Position	151-1047-ND	15.71	11.79	516-230-590
	—	Cover for 120 Position	151-1048-ND	17.33	11.93	516-230-512
7A	—	Solder Eyelet	151-1049-ND	—	3.39	516-290-500
7B	—	Soldertail	151-1050-ND	—	3.21	516-290-520
7C	—	Wirewrap	151-1051-ND	—	4.11	516-290-541
7D	—	Crimp Type	151-1052-ND	—	3.75	516-290-590
—	—	Crimp Tool	151-1058-ND	159.00	—	516-280-201
—	—	Extraction Tool	151-1059-ND	49.00	—	516-280-300

.050” (1.27mm) Connectors

Fig. 1

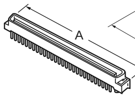


Fig. 2

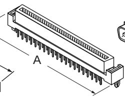


Fig. 3

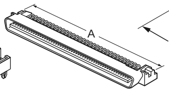
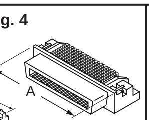
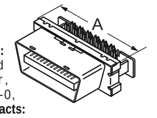


Fig. 4



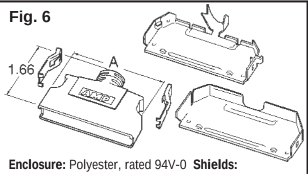
Housing & Tine Plate: Glass-filled nylon, rated 94V-0, black for standard, LCP, rated 94V-0, black for High Temp. **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Retention Leg (Board Lock):** Brass, tin-lead plated

Fig. 5



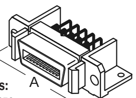
Housing: Glass-filled polyester, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Retention Leg (Board Lock):** Brass, tin-lead plated

Fig. 6



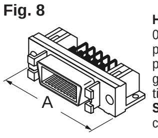
Enclosure: Polyester, rated 94V-0 **Shields:** Brass, nickel plated **Locking Spring:** Stainless Steel

Fig. 7



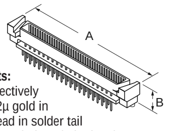
Housing: Glass-filled polyester, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Retention Leg (Board Lock):** Brass, tin-lead plated

Fig. 8



Housing: LCP, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 30µ gold in mating area and tin-lead in solder tail area **Shield:** Carbon steel, tin-cobalt plated

Fig. 9



Housing: Glass filled nylon, rated 94V-0, black **Contacts:** Phosphor bronze, selectively plated with min. of 12µ gold in mating area and tin-lead in solder tail area **Shield:** Carbon steel, tin-cobalt plated

Fig. 10

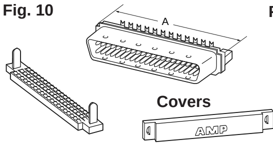
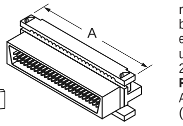
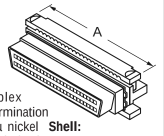


Fig. 11



Housing and Covers: Thermoplastic, 94V-0 rated, black or gray **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 50µ tin-lead on termination end; all underplated 50µ nickel **Shell:** Steel, plated 20µ bright tin-lead over 50µ copper **Recommended Wire Size:** 28 AWG or 30 AWG, solid or stranded, with a .029-.036 (0.74-0.89) insulation diameter

Fig. 12



Housing and Covers: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, duplex plated 30µ tin-lead on termination end; all underplated 50µ nickel **Shell:** Steel, plated 200µ bright tin-lead over 50µ copper

Fig. 13

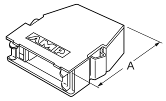


Fig. 14

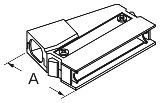
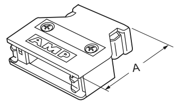
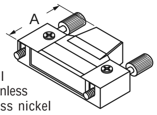


Fig. 15



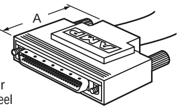
Backshell: Zinc, plated nickel over copper **Spring Latch:** Stainless steel **2-56 Screws:** Stainless steel **Strain Relief Staple:** Steel, plated tin-lead over nickel

Fig. 16



Backshell: Zinc, plated nickel over copper **Jackscrews:** Stainless steel or steel, black electroless nickel plated **Jackscrew Caps:** Polyolefin or PVC, black **2-56 Screws:** Stainless steel Strain Relief Staple: Steel, plated tin-lead over nickel

Fig. 17



Backshells: Zinc **Boot:** PVC, Black **Jackscrews:** Stainless steel and PVC, black **Staple:** Carbon steel, plated 50µ tin-lead over 50µ nickel **2-56 Screws:** Stainless steel

Fig. 18

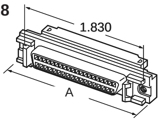


Fig. 19

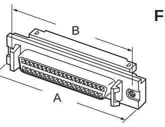
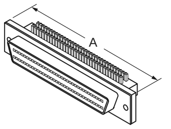


Fig. 20



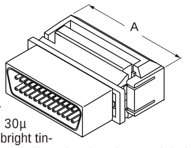
Covers: Thermoplastic, 94V-0 rated, black **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 50µ bright tin-lead in termination area, all underplated 50µ nickel

Fig.	No. of Pos.	Description	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
CHAMP® .050” (1.27mm) Series I (VESA Media Bus Standard)							
1	20	Vert. Plug, w/ Locks, Standard	.949 (24.05)	A26151-ND	4.49	3.63	5-175473-1
1	40	Vert. Plug, w/ Locks, High Temp.	1.447 (36.75)	A26152-ND	1.95	1.58	557102-5
1	50	Vert. Plug, w/ Locks, Standard	1.697 (43.10)	A26153-ND	6.82	5.51	5-175473-6
1	68	Vertical Plug	2.147 (54.53)	A15022-ND	3.54	3.17	1-557102-7
1	80	Vert. Plug, w/ Locks, Standard	2.447 (62.15)	A26154-ND	8.20	6.64	5-175473-9
1	80	Vert. Plug, w/ Locks, High Temp.	2.947 (74.85)	A15020-ND	3.54	3.18	2-557102-1
2	80	Vert. Recept., w/ Locks, High Temp.	2.447 (62.15)	A26157-ND	2.23	1.81	2-557103-1
1	100	Vert. Recept., w/ Locks, High Temp.	2.947 (74.85)	A26155-ND	10.25	8.29	6-175473-0
1	100	Vert. Plug, w/ Locks, High Temp.	2.947 (74.85)	A26156-ND	3.34	2.70	2-557102-5
2	100	Vert. Recept. w/ Locks, Standard	2.947 (74.85)	A26158-ND	10.25	8.29	6-175475-0
2	100	Vert. Recept. w/ Locks, High Temp.	2.947 (74.85)	A26159-ND	4.65	3.77	2-557103-5
3	40	Right Angle Plug, High Temp.	1.391 (35.33)	A26160-ND	1.79	1.45	557100-5
4	40	Right Angle Recept., High Temp.	1.391 (35.33)	A26161-ND	2.00	1.62	557101-5
3	50	Right Angle Plug, High Temp.	1.641 (41.68)	A26149-ND	1.97	1.60	557100-9
4	50	Right Angle Plug, Standard	1.641 (41.68)	A24225-ND	7.50	6.07	5-175474-6
4	50	Right Angle Recept., High Temp.	1.641 (41.68)	A26150-ND	2.19	1.77	557101-9
3	68	Right Angle Plug, Standard	2.091 (53.11)	A26162-ND	7.64	6.18	5-175472-8
3	68	Right Angle Plug, High Temp.	2.091 (53.11)	A15023-ND	3.25	2.90	1-557100-7
3	80	Right Angle Plug, High Temp.	2.391 (60.73)	A15021-ND	3.71	3.32	2-557100-1
4	80	Right Angle Recept., High Temp.	2.391 (60.73)	A24228-ND	2.37	1.92	2-557101-1
3	100	Right Angle Plug, High Temp.	2.891 (73.43)	A24229-ND	3.36	2.72	2-557100-5
4	100	Right Angle Recept., High Temp.	2.891 (73.43)	A24230-ND	3.15	2.55	2-557101-5
4	140	Right Angle Recept., High Temp.	3.891 (98.83)	A24231-ND	4.56	3.69	4-557101-9
CHAMP® .050” (1.27mm) Series II (Wire-To-Board)							
5	26	Plug Cable Connector	1.024 (26.00)	A26163-ND	5.19	4.20	2-175677-4
5	50	Plug Cable Connector	1.626 (41.30)	A26164-ND	8.01	6.48	2-175677-7
6	26	Enclosure Kits	1.319 (33.50)	A26138-ND	4.42	3.58	176793-4
7	14	Right Angle Recept., Board Lock	1.163 (29.54)	A26139-ND	4.02	3.25	2-178238-1
7	20	Right Angle Recept., Board Lock	1.313 (33.35)	A26140-ND	4.16	3.37	2-178238-2
7	26	Right Angle Recept., Board Lock	1.463 (37.16)	A26141-ND	5.05	4.09	2-178238-4
7	50	Right Angle Recept., Board Lock	2.063 (52.40)	A26142-ND	6.91	5.59	2-178238-7
7	68	Right Angle Recept., Board Lock	2.513 (63.83)	A26143-ND	8.06	6.52	2-178238-8
8	14	Right Angle Recept., High Temp.	1.163 (29.54)	A26144-ND	5.03	4.07	557153-3
CHAMP® .050” (1.27mm) FH Connectors							
9	60	Vert. Recept., 18mm, B=.62 (15.70)	1.953 (49.60)	A26145-ND	13.94	11.27	176378-2
9	80	Vert. Recept., 12mm, B=.38 (9.70)	2.453 (62.30)	A26146-ND	10.29	8.33	176372-3
9	80	Vert. Recept., 13mm, B=.42 (10.70)	2.453 (62.30)	A26147-ND	10.50	8.50	176373-3
9	100	Vert. Recept., 16mm, B=.54 (13.70)	2.953 (75.00)	A26148-ND	13.89	11.23	176376-4
AMPLIMITE® .050 (1.27mm) Series (SCSI-2, SCSI-3, IPI-2, HIPPI)							
Cable Plug Connectors							
10	26	w/ Wire Lacing Term. Covers, Black	.979 (24.87)	A23677-ND	7.03	5.62	750913-2
10	26	w/ Wire Lacing Term. Covers. Gray	.979 (24.87)	A26136-ND	7.03	5.62	1-750913-2
10	50	w/ Wire Lacing Term. Covers, Black	1.579 (40.11)	A23678-ND	6.95	5.56	750913-5
10	50	w/ Wire Lacing Term. Covers, Gray	1.579 (40.11)	A3302-ND	7.25	6.49	1-750913-5
10	68	w/ Wire Lacing Term. Covers, Black	2.029 (51.54)	A23679-ND	5.80	4.64	750913-7
10	68	w/ Wire Lacing Term. Covers, Gray	2.029 (51.54)	A3305-ND	7.54	6.76	1-750913-7
10	100	w/ Wire Lacing Term. Covers, Gray	2.829 (71.86)	A23676-ND	17.98	14.38	1-750913-9
10	20	w/ Assembled Terminal Covers	.829 (21.06)	A23687-ND	4.70	3.76	749111-1
10	26	w/ Assembled Terminal Covers	.979 (24.87)	A23686-ND	6.40	5.12	1-749111-0
10	26	w/o Assembled Terminal Covers	.979 (24.87)	A23690-ND	4.70	3.76	749621-2
10	28	w/o Assembled Terminal Covers	1.029 (26.14)	A23691-ND	7.25	5.80	749621-3
10	40	w/o Assembled Terminal Covers	1.329 (33.76)	A23692-ND	4.70	3.76	749621-4
10	50	w/ Assembled Terminal Covers	1.579 (40.11)	A15029-ND	4.37	3.54	749111-4
10	50	w/o Assembled Terminal Covers	1.579 (40.11)	A3301-ND	5.62	5.04	749621-5
10	68	w/ Assembled Terminal Covers	2.029 (51.54)	A3303-ND	6.50	5.20	749111-6
10	68	w/o Assembled Terminal Covers	2.029 (51.54)	A3304-ND	6.11	5.46	749621-7
10	80	w/ Assembled Terminal Covers	2.329 (59.16)	A23688-ND	14.58	11.66	749111-7
10	80	w/o Assembled Terminal Covers	2.329 (59.16)	A23693-ND	14.05	11.24	749621-8
10	100	w/ Assembled Terminal Covers	2.829 (71.86)	A23689-ND	17.98	14.38	749111-8
10	100	w/o Assembled Terminal Covers	2.829 (71.86)	A23694-ND	12.50	10.00	749621-9
10	26	w/ Wire Lacing Term. Covers, Gray	.965(24.51)	A23680-ND	.45	.36	1-750877-2
10	50	w/ Wire Lacing Term. Covers, Black	1.565 (39.75)	A23684-ND	.40	.32	750877-5
10	50	w/ Wire Lacing Term. Covers, Gray	1.565 (39.75)	A23681-ND	.40	.32	1-750877-5
10	68	w/ Wire Lacing Term. Covers, Black	2.015 (51.18)	A23685-ND	.48	.38	750877-7
10	68	w/ Wire Lacing Term. Covers, Gray	2.015 (51.18)	A23682-ND	.48	.38	1-750877-7
10	100	w/ Wire Lacing Term. Covers, Gray	2.815 (71.50)	A23683-ND	.53	.42	1-750877-9
11	50	w/ Assembled Terminal Covers	1.579 (40.11)	A23695-ND	6.25	5.00	749925-3
11	68	w/ Assembled Terminal Covers	2.029 (51.54)	A23696-ND	8.30	6.64	749925-5
Shielded Receptacles							
12	40	w/o Assembled Terminal Covers	1.329 (33.76)	A23699-ND	9.58	7.66	749699-4
12	50	w/ Assembled Terminal Covers	1.579 (40.11)	A23697-ND	7.48	5.98	749210-5
12	50	w/o Assembled Terminal Covers	1.579 (40.11)	A23700-ND	7.48	5.98	749699-5
12	68	w/ Assembled Terminal Covers	2.029 (51.54)	A23698-ND	9.28	7.42	749210-7
12	68	w/o Assembled Terminal Covers	2.029 (51.54)	A23701-ND	6.25	5.00	749699-7
12	68	w/ Wire Lacing Assort. Term. Covers	2.029 (51.54)	A23703-ND	7.20	5.76	786860-7
12	100	w/o Assembled Terminal Covers	2.829 (71.86)	A23702-ND	19.40	15.52	749699-8
Straight and Angled Exit RFI/EMI Shielded Backshell Kits							
13	20	Straight with Spring Latches	1.290 (32.77)	A23546-ND	8.23	6.58	749190-1
14	20	Angled with Spring Latches	1.290 (32.77)	A23551-ND	7.98	6.38	749199-1
15	26	Straight with Spring Latches	1.290 (32.77)	A23589-ND	5.08	4.06	749608-1
14	26	Angled with Spring Latches	1.290 (32.77)	A23590-ND	9.30	7.44	749609-1
13	40	Straight with Spring Latches	1.290 (32.77)	A23547-ND	9.48	7.58	749192-1
13	50	Straight w/ Spring Latches, ø.355 (9.02)	1.395 (35.43)	A23548-ND	6.85	5.48	749193-1
13	50	Straight w/ Spring Latches, ø.400 (10.16)	1.395 (35.43)	A3306-ND	6.21	5.56	749193-2
14	50	Angled with Spring Latches	1.395 (35.43)	A23552-ND	10.15	8.12	749202-2
15	50	Straight with Spring Latches	1.800 (45.72)	A3307-ND	8.09	7.28	749889-3
14	68	Angled with Spring Latches	1.405 (35.69)	A23585-ND	11.83	9.46	749204-1
13	68	Straight with Spring Latches	1.405 (35.69)	A3308-ND	10.99	9.84	749195-2
14	68	Angled with Spring Latches	1.405 (35.69)	A23586-ND	12.00	9.60	749204-2
14	80	Angled with Spring Latches	1.600 (40.64)	A23587-ND	13.05	10.44	749205-1
13	80	Straight with Spring Latches	1.600 (40.64)	A23549-ND	11.30	9.04	749196-2
13	100	Straight with Spring Latches	1.725 (43.82)	A23550-ND	13.40	10.72	749197-1
14	100	Angled with Spring Latches	1.725 (43.82)	A23588-ND	14.73	11.78	749206-1
Shielded Backshell Kits							
16	50	Straight w/ Male #2-56 Jackscrews	1.270 (32.26)	A23543-ND	11.73	9.38	749080-1
17	68	Straight w/ Male #2-56 Jackscrews	1.887 (47.93)	A3309-ND	16.19	14.55	750752-1
17	68	Straight w/ Female #4-40 Jackscrews	1.887 (47.93)	A23591-ND	13.38	10.70	750752-2
16	100	Straight w/ Male #2-56 Jackscrews	1.695 (43.05)	A23544-ND	14.93	11.94	749081-1
16	100	Straight w/ Male #2-56 Jackscrews	2.082 (52.88)	A23545-ND	14.93	11.94	749654-1
Panel Mount Receptacle Assemblies							
18	26	With Rails, 2-56 Threaded Holes	1.465 (37.21)	A23619-ND	7.98	6.38	749611-1
18	50	With Rails, 2-56 Threaded Holes	2.065 (52.45)	A3310-ND	11.65	9.32	749611-5
18	50	With Rails, 4-40 Threaded Holes	2.065 (52.45)	A3311-ND	10.21	9.14	750450-1
19	50	w/o Rails, 2-56 Threaded Holes Unassembled Wire Lacing B: 1.830” (46.48mm)	2.065 (52.45)	A23620-ND	7.15	5.72	786862-5
19	68	w/o Rails, 2-56 Threaded Holes Assembled Standard B: 2.280” (57.91mm)	2.515 (63.88)	A23624-ND	14.43	11.54	749656-7
19	50	w/o Rails, 2-56 Threaded Holes B: 1.830” (46.48mm)	2.065 (52.45)	A3312-ND	9.39	8.41	749656-5
19	50	w/o Rails, 4-40 Threaded Holes B: 1.830” (46.48mm)	2.065 (52.45)	A3313-ND	7.68	6.14	750640-1
20	68	Without Rails and Latch Blocks	2.515 (63.88)	A26137-ND	13.20	10.56	749877-7
20	100	Without Rails and Latch Blocks	3.315 (84.20)	A23724-ND	20.48	16.38	749877-9
20	50	Without Rails and Latch Blocks, Plug	2.065 (52.45)	A23725-ND	24.50	19.60	749879-5

(Continued)

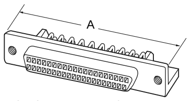
.050” (1.27mm) Connectors *(Cont.)*

Fig. 21



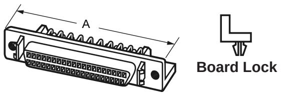
Covers: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 50µ bright tin-lead in termination area, all underplated 50µ nickel **Recommended Wire Size:** .025 (.64) centerline, 30 AWG solid or stranded, PVC, flat ribbon cable

Fig. 22



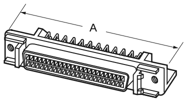
Housing: Thermoplastic, 94V-0 rated, black, SMT compatible **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 120µ tin-lead on solder end; all underplated 50µ nickel

Fig. 23



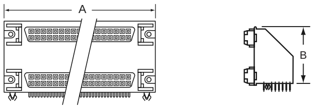
Housing: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, duplex plated 8µ gold on contact area; 2540µ tin-lead on solder area; all underplated 50µ nickel

Fig. 24



Housing: Thermoplastic, 94V-0 rated, black, SMT compatible **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 120µ tin-lead on solder end; all underplated 50µ nickel

Fig. 25



Housing: Thermoplastic, 94V-0 rated, black, SMT compatible **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end; 120µ tin-lead on solder end; all underplated 50µ nickel

Fig. 26

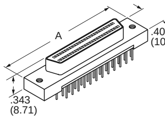


Fig. 27

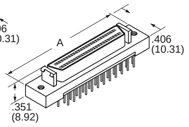
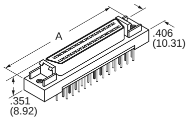
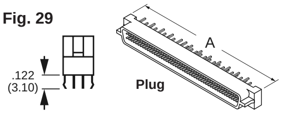


Fig. 28



Housing: Thermoplastic, 94V-0 rated, black, SMT compatible **Shell:** Steel, plated 200µ bright tin over 50µ copper **Bracket:** Zinc, plated nickel over copper **Contacts:** Phosphor bronze, duplex plated 30µ gold on mating end, 120µ (for .125) 150 (for .173) tin-lead on solder end; all underplated 50µ nickel

Fig. 29



High density interface PCB mount connectors meet the requirements of Versa Module Europe (VME) bussing per SBus standards. Available in configurations for parallel board stacking as required by SBus specifications.

Housing: Thermoplastic, 94V-0 rated, black **Contacts:** Phosphor bronze, plated; 30µ gold on mating end, 150µ tin-lead on solder tail, all over 50µ nickel underplating

Fig.	No. of Pos.	Description	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
		Unshielded Plug Assemblies and Backshell Kit					
21	68	Unshielded for .025 (0.64) Centerline Ribbon Cable	2.023 (51.30)	A23711-ND	3.18	2.55	786090-7
		Right Angle Receptacle Headers					
22	40	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	1.815 (46.10)	A23726-ND	5.73	4.58	787170-4
22	50	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A3320-ND	5.55	4.44	787169-5
22	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A23727-ND	6.13	4.90	787170-5
22	50	Without Rails, with Boardlocks, .120 (3.05) Solder Tails	2.065 (52.45)	A23728-ND	8.38	6.70	787362-5
22	68	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	2.515 (63.88)	A23729-ND	5.33	4.26	787169-7
22	68	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.515 (63.88)	A3324-ND	6.76	6.06	787170-7
22	100	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	3.315 (84.20)	A3325-ND	14.85	13.30	787169-9
22	100	Without Rails, with Boardlocks, .120 (3.05) Solder Tails	3.315 (84.20)	A23730-ND	12.53	10.02	787362-9
23	26	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	1.465 (37.21)	A3314-ND	6.57	5.88	787082-2
23	28	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	1.515 (38.48)	A23731-ND	6.98	5.58	787082-3
23	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A3316-ND	4.16	3.76	787082-5
23	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.065 (52.45)	A3317-ND	7.15	6.41	787394-5
23	50	Without Rails, with Boardlocks, .100 (2.54) Solder Tails, 4-40 Threaded Holes	2.065 (52.45)	A23732-ND	4.90	3.92	787395-5
23	68	Without Rails, with Boardlocks, .100 (2.54) Solder Tails	2.515 (63.88)	A3321-ND	6.70	6.00	787082-7
23	68	Without Rails, without Boardlocks, .100 (2.54) Solder Tails	2.515 (63.88)	A3322-ND	7.10	5.68	787394-7
23	68	With Self Retaining Posts, 8µ Gold	2.100 (53.20)	A23705-ND	6.03	4.82	3-174682-7
23	68	With Self Retaining Posts, 30µ Gold	2.100 (53.20)	A23706-ND	8.40	6.72	8-174682-7
24	26	With Rails, with Boardlocks	1.465 (37.21)	A23733-ND	5.80	4.64	787171-2
24	40	With Rails, with Boardlocks	1.815 (46.10)	A23734-ND	5.95	4.76	787171-4
24	50	With Rails, with Boardlocks	2.065 (52.45)	A3318-ND	7.54	6.76	787171-5
24	26	With Rails, without Boardlocks	1.465 (37.21)	A3315-ND	4.78	3.82	787190-2
24	50	With Rails, with Boardlocks	2.065 (52.45)	A3319-ND	7.28	6.55	787190-5
24	50	With Rails, with Boardlocks, 4-40 Threaded Holes	2.065 (52.45)	A23735-ND	6.03	4.82	787266-5
24	68	With Rails, without Boardlocks	2.515 (63.88)	A23736-ND	7.48	5.98	787190-7
24	68	With Rails, with Boardlocks	2.515 (63.88)	A3323-ND	8.35	7.48	787171-7
25	50/50	Right Angle Stacked with Rails, B: .906 (23.01)	2.065 (52.45)	A23737-ND	20.68	16.54	787656-1
25	68/68	Right Angle Stacked with Rails, B: 1.156 (29.36)	2.515 (63.88)	A23738-ND	33.88	27.10	787678-1
25	68/68	Right Angle Stacked with Rails, Flat Top, B: 1.156 (29.36)	2.515 (63.88)	A23739-ND	36.03	28.82	787679-1
		Vertical Receptacle Headers Without Rails and Latch Blocks					
26	50	.125 (3.18) Solder Tail	2.065 (52.45)	A23740-ND	6.58	5.26	749070-5
26	50	.173 (4.39) ACTION PIN Tail	2.065 (52.45)	A23741-ND	9.03	7.22	786555-5
26	68	.125 (3.18) Solder Tail	2.515 (63.88)	A23742-ND	6.73	5.38	749070-7
26	68	.173 (4.39) ACTION PIN Tail	2.515 (63.88)	A23743-ND	9.55	7.64	786555-7
26	68	.280 (7.11) ACTION PIN Tail	2.515 (63.88)	A23744-ND	18.03	14.42	786557-7
26	100	.125 (3.18) Solder Tail	3.315 (84.20)	A23745-ND	13.50	10.80	749070-9
26	100	.173 (4.39) ACTION PIN Tail	3.315 (84.20)	A23746-ND	26.05	20.84	786555-9
		Vertical Receptacle Headers Without Rails and With Latch Blocks					
27	28	.125 (3.18) Solder Tail	1.515 (38.48)	A23747-ND	5.55	4.44	749721-3
27	50	.125 (3.18) Solder Tail	2.065 (52.45)	A23748-ND	7.38	5.90	749721-5
27	68	.125 (3.18) Solder Tail	2.515 (63.88)	A23749-ND	5.68	4.54	749721-7
27	68	.173 (4.39) ACTION PIN Tail	2.515 (63.88)	A23750-ND	8.58	6.86	786155-7
		Vertical Receptacle Headers With Rails and Latch Blocks					
28	20	.173 (4.39) ACTION PIN Tail	1.315 (33.40)	A23751-ND	5.95	4.76	786554-1
28	26	.125 (3.18) Solder Tail	1.465 (37.21)	A23752-ND	5.38	4.30	749069-2
28	26	.173 (4.39) ACTION PIN Tail	1.465 (37.21)	A23753-ND	6.13	4.90	786554-2
28	50	.125 (3.18) Solder Tail	2.065 (52.45)	A23754-ND	6.43	5.14	749069-5
28	50	.173 (4.39) ACTION PIN Tail	2.065 (52.45)	A23755-ND	7.90	6.32	786554-5
28	68	.125 (3.18) Solder Tail	2.515 (63.88)	A23756-ND	7.38	5.90	749069-7
28	68	.173 (4.39) ACTION PIN Tail	2.515 (63.88)	A23757-ND	11.50	9.20	786554-7
28	68	.280 (7.11) ACTION PIN Tail	2.515 (63.88)	A23758-ND	18.05	14.44	786556-7
28	100	.125 (3.18) Solder Tail	3.315 (84.20)	A23759-ND	13.50	10.80	749069-9
		SBUS Connectors					
29	96	Receptacle Header w/o Polarization	2.795 (70.99)	A23704-ND	14.33	11.46	750350-2
29	96	Plug Header without Polarization	2.80 (71.00)	A23618-ND	9.20	7.36	174683-8

Shielded .050” (1.27mm) Slimline Connectors Right-Angle Headers

Fig. 1

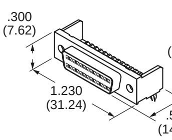
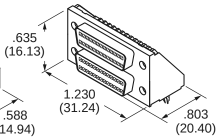


Fig. 2



Housing: UL 94V-0 rated thermoplastic, black **Contact Footprints:** .100 x .050 (2.54 x 1.27) staggered centerlines **Bracket:** Zinc, plated 200µ min. tin or tin-lead over 200µ min. copper **Metal-Shell:** Carbon steel, plated 200µ min. tin over 50µ min. copper **Boardlocks:** Copper alloy, tin-lead plated **Contacts:** Phosphor bronze, duplex plated 30µ min. gold on mating end, tin-lead plated 120µ min. on solder end, all over 50µ min. nickel

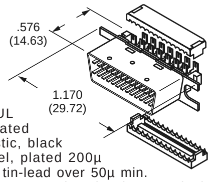
Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	26	Receptacle	A23760-ND	14.26	11.54	750823-1
2	26/26	Stacked Receptacle w/o Rear Contact Shield, Unkeyed	A23761-ND*	31.09	25.14	786200-1
	26/26	Stacked Receptacle with Rear Contact Shield, Keyed	A23762-ND†	18.66	15.09	750821-1
	26/26	Stacked Receptacle with Rear Contact Shield, Unkeyed	A23763-ND*	18.80	15.20	750820-1

* Both headers unkeyed with 4-40 threaded holes.

† Lower header unkeyed with 4-40 threaded holes, upper header keyed in keying position 1.

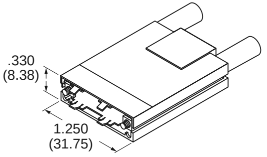
Shielded .050” (1.27mm) Slimline Cable Connectors, Plug

Fig. 1



Covers: UL 94V-0 rated thermoplastic, black **Shell:** Steel, plated 200µ min. bright tin-lead over 50µ min. copper **Contacts:** Phosphor bronze, duplex plated 30µ min. gold on mating end, 50µ min. bright tin-lead on termination end, all underplated 50µ nickel **Bracket:** Zinc, plated 200µ min. nickel over 200µ min. copper **Recommended Wire Size:** 28 AWG, PVC or polyolefin insulation

Fig. 2 Connector shown partially assembled. Given dimensions reflect full assembly.



Backshells: Copper-nickel alloy **Jackscrews:** Steel, plated 100µ min. tin over 50µ min. copper, handles covered with ABS, gray **Inserts:** Zinc, plated 200µ min. tin over 200µ min. copper **Outside Covers:** Gray and black

Fig. No.	Description	Cable Dia. Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Plug Connector	w/max. O.D. .032 (0.813)	A23764-ND	10.06	8.14	750833-1
2	Backshell Kit, Unkeyed	.250-.280 (6.35-7.11)	A23765-ND	11.28	9.12	750850-1
	Backshell Kit, Unkeyed	.280-.310 (7.11-7.87)	A23766-ND	9.92	8.02	750850-3

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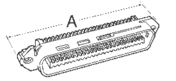
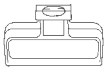
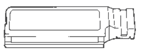
CHAMP® Parallel Interface Connectors

For Discrete Wire Termination



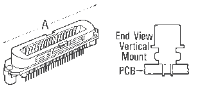

180° Strain Relief


90° Strain Relief

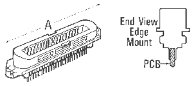
No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
		22 AWG, Solid or Stranded				
14	1.750 (44.45)	Plug, Screw Lock	A24234-ND	2.39	1.83	552300-1
24	2.175 (55.25)	Plug, Screw Lock	A24235-ND	3.13	2.40	552301-1
		Plug, Bail Lock	A24236-ND	2.63	2.02	552317-1
36	2.685 (68.20)	Plug, Bail Lock	A24237-ND	2.66	2.04	552318-1
50	3.280 (83.31)	Plug, Screw Lock	A24238-ND	2.48	1.90	552173-1
		Plug, Bail Lock	A24239-ND	4.14	3.18	552319-1
		Receptacle, Screw or Bail Lock	A24240-ND	2.75	2.11	552064-1
64	3.875 (98.43)	Plug, Screw Lock	A24241-ND	3.80	2.92	552303-1
		Receptacle, Screw or Bail Lock	A24242-ND	3.60	2.76	552307-1
		Large Insulation Wire Connectors, 22 AWG Solid or Stranded				
36	2.685 (68.20)	Receptacle, Screw or Bail Lock	A24257-ND	3.33	2.56	5-555037-1
50	3.280 (83.31)	Plug, Screw Lock	A24258-ND	3.80	2.92	556039-1
		Receptacle, Screw or Bail Lock	A24259-ND	3.80	2.92	555227-1
64	3.671 (93.24)	Plug, Bail Lock	A24260-ND	4.64	3.56	555753-1
	3.875 (98.43)	Receptacle, Panel Mt., Screw or Bail Lock	A24261-ND	6.12	4.70	555151-1
		24-26 AWG, Solid or 24 AWG Stranded				
14	1.750 (44.45)	Plug, Screw Lock	A24243-ND	2.39	1.83	552282-1
		Plug, Bail Lock	A24244-ND	2.18	1.68	552270-1
		Receptacle, Screw or Bail Lock	A24245-ND	2.14	1.64	552312-1
		Receptacle, Panel Mt., Screw or Bail Lock	A24246-ND	2.43	1.87	2-552271-1
24	2.175 (55.25)	Plug, Screw Lock	A24247-ND	3.33	2.56	552283-1
		Plug, Bail Lock	A1502-ND	2.94	2.38	552272-1
		Receptacle, Screw or Bail Lock	A24248-ND	3.67	2.82	552313-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1508-ND	2.56	2.08	2-552273-1
36	2.685 (68.20)	Plug, Screw Lock	A24249-ND	2.75	2.11	552284-1
		Plug, Bail Lock	A1503-ND	4.37	3.91	552274-1
		Receptacle, Screw or Bail Lock	A24250-ND	2.66	2.04	552314-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1509-ND	2.77	2.25	2-552275-1
50	3.280 (83.31)	Plug, Screw Lock, Thick Flange	A1540-ND	2.79	2.51	229974-1
		Receptacle, Screw Lock, Thick Flange	A1541-ND	2.79	2.51	229975-1
		Plug, Bail Lock	A1542-ND	2.78	2.50	552032-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1543-ND	3.28	2.94	2-552001-1
64	3.875 (98.43)	Plug, Screw Lock	A24252-ND	3.38	2.59	552285-1
		Plug, Bail Lock	A24253-ND	3.67	2.82	552276-1
		Receptacle, Screw or Bail Lock	A24254-ND	4.14	3.18	552315-1
		Receptacle, Panel Mt., Screw or Bail Lock	A24255-ND	3.69	2.83	2-552277-1
		26-28 AWG, Stranded				
24	3.875 (98.43)	Plug, Screw Lock	A1530-ND	2.45	1.89	552443-1
		Plug, Bail Lock	A1531-ND	4.43	3.40	552469-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1533-ND	6.84	5.25	2-552474-1
36	2.685 (68.20)	Plug, Screw Lock	A1534-ND	4.37	3.35	552444-1
		Plug, Bail Lock	A1535-ND	2.66	2.04	552470-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1537-ND	5.31	4.08	2-552475-1
50	3.280 (83.31)	Plug, Screw Lock, Thick Flange	A1544-ND	2.72	2.18	552390-1
		Receptacle, Screw Lock, Thick Flange	A1545-ND	2.70	2.16	552391-1
		Plug, Bail Lock	A1546-ND	2.75	2.20	552471-1
		Receptacle, Panel Mt., Screw or Bail Lock	A1547-ND	3.48	2.78	2-552476-1
64	3.875 (98.43)	Plug, Screw Lock	A24256-ND	6.26	4.80	552488-1
		Accessories				
		Integral Locking Latch, Preassembled				
50	3.280 (83.31)	Receptacle, Black	A24262-ND	2.09	1.61	553921-1
50	3.280 (83.31)	Receptacle, Gray	A24251-ND	2.68	2.06	553921-2
64	3.875 (98.43)	Receptacle	A24263-ND	4.01	3.08	554381-2
		Dust Covers				
24	—	Position, Receptacle, Red	A24285-ND	.52	.41	229969-4
36	—	Position, Receptacle, Red	A24286-ND	.52	.41	229969-3
50	—	Position, Receptacle, Red	A24287-ND	.12	.10	229969-1
64	—	Position, Receptacle, Red	A24289-ND	.62	.48	229969-2
24	—	Position, Plug, Blue	A24192-ND	.80	.65	229968-4
36	—	Position, Plug, Blue	A24193-ND	.58	.47	229968-3
50	—	Position, Plug, Blue	A24194-ND	.14	.11	229968-1
64	—	Position, Plug, Blue	A24288-ND	.62	.48	229968-2
		Hardware Kits				
		Screw Lock Hardware Kit	A1525-ND	2.21	1.70	552568-1
		Bail Lock Hardware Kit	A1526-ND	2.05	1.57	552567-1
		Bent Bail Lock Hardware Kit use w/90° Strain Relief Cover	A24224-ND	1.91	1.47	552567-2
		CHAMP-LOK Hardware Kit for 36 & 50 Pos. Thin Flange	A24226-ND	2.41	1.85	553359-1
		Tools				
		Insertion Tool for CHAMP IDC Connector	A1528-ND	174.90	—	229764-2
		T-Handle Wire Insertion Tool	A1529-ND	8.82	—	229384-1
		Portable Hand Operated Tool (MI-1)	A24382-ND	806.65	—	229378-1
		Palm Grip Tool	A24383-ND	131.00	—	229451-1

No. of Positions	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
	Strain Relief Covers				
	180° Snap-On				
14	.175 - .220 (4.45 - 5.59)	A24264-ND	.92	.71	552079-1
	.265 - .310 (6.73 - 7.87)	A24265-ND	1.71	1.32	2-552079-1
24	.230 - .280 (5.84 - 7.11)	A24266-ND	1.37	1.05	552076-1
	.280 - .320 (7.11 - 8.13)	A1506-ND	1.80	1.38	1-552076-1
	.320 - .380 (8.13 - 9.65)	A24267-ND	1.59	1.22	2-552076-1
36	.290 - .360 (7.37 - 9.14)	A24268-ND	1.59	1.22	552073-1
	.360 -.430 (9.14 - 10.92)	A1507-ND	1.58	1.21	552073-5
	.430 - .500 (10.92 - 12.70)	A24269-ND	1.60	1.23	552073-6
50	.330 - .380 (8.38 - 9.65)	A24270-ND	2.23	1.71	3-552008-1
	.380 - .430 (9.65 - 10.92)	A24271-ND	1.38	1.06	2-552008-1
	.430 -.490 (10.92 - 12.45)	A1548-ND	1.90	1.71	552008-1
	.480 - .550 (12.19 - 13.97)	A24272-ND	1.38	1.06	4-552008-1
	.430 - .500 (10.92 - 12.70)	A24273-ND	2.17	1.67	552003-1
64	.480 - .540 (12.19 - 13.72)	A24274-ND	1.96	1.51	552082-1
	90° Snap-On				
14	.185 - .230 (4.70 - 5.84)	A24275-ND	2.10	1.61	552412-1
	.250 - .300 (6.35 - 7.62)	A24276-ND	1.12	.86	1-552412-1
24	.250 - .300 (6.35 - 7.62)	A1538-ND	.95	.73	552413-1
	.305 - .360 (7.75 - 9.14)	A24277-ND	2.01	1.55	1-552413-1
36	.305 - .360 (7.75 - 9.14)	A1539-ND	.89	.69	552414-1
	.330 - .380 (8.38 - 9.65)	A24278-ND	2.22	1.71	3-552414-1
50	.340 - .400 (8.64 - 10.16)	A24279-ND	.93	.72	552014-1
	.315 - .415 (8.00 - 10.54)	A24280-ND	.69	.53	1-552011-1
	.415 - .465 (10.54 - 11.81)	A1549-ND	.53	.43	552011-1
	.475 - .540 (12.07 - 13.72)	A24281-ND	.84	.65	552731-1
64	.410 - .475 (10.41 - 12.07)	A24282-ND	.94	.72	552496-1
	.475 - .540 (12.07 - 13.72)	A24283-ND	1.36	1.05	1-552496-1
	.540 - .605 (13.72 - 15.37)	A24284-ND	1.36	1.05	2-552496-1
No. of Positions	**Description**	**Digi-Key Part No.**	**Price Each 1**	**Price Each 25**	**AMP Part No.**
	Cable to Panel Mount (2 required per assembly)				
24	Snap-On	A24290-ND	1.07	.83	1-552298-1
50	Snap-On	A24291-ND	.28	.22	1-552027-1
64	Snap-On	A24292-ND	.59	.46	1-552296-1
50	Snap-In	A24293-ND	.43	.33	552962-3

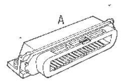
Vertical Mount



Edge Mount



Right Angle



No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
		Vertical Mount Connectors				
14	1.750 (44.45)	Receptacle, Screw or Bail Lock	A26165-ND	7.73	6.18	552212-1
24	2.175 (55.25)	Plug, Screw Lock	A24350-ND	7.38	5.90	552221-1
		Receptacle, Screw or Bail Lock	A1510-ND	5.01	4.49	552224-1
36	2.685 (68.20)	Receptacle, Screw or Bail Lock	A1511-ND	8.00	6.40	522235-1
50	3.280 (83.31)	Plug, Screw Lock	A1550-ND	5.95	5.33	552116-1
		Receptacle, Screw or Bail Lock	A1552-ND	5.98	5.36	552118-1
64	3.875 (98.43)	Plug, Screw Lock	A24351-ND	11.28	9.02	552243-1
		Receptacle, Screw or Bail Lock	A24352-ND	9.90	7.92	552246-1
		Edge Mount Connectors				
24	2.175 (55.25)	Receptacle, Screw or Bail Lock	A1512-ND	7.28	5.82	552230-1
36	2.685 (68.20)	Receptacle, Screw or Bail Lock	A1513-ND	7.83	6.26	552241-1
50	3.280 (83.31)	Receptacle, Screw or Bail Lock	A1553-ND	8.20	6.56	552130-1
		Edge Mount With ACTION PIN Connectors				
36	2.685 (68.20)	Plug	A24388-ND	10.38	8.30	553444-3
		Receptacle	A24389-ND	8.78	7.02	553443-3
50	3.280 (83.31)	Receptacle	A24390-ND	4.85	3.88	553443-4
		Plug	A24392-ND	4.85	3.88	553444-4
		Recept., Self-Retained Terminals	A24393-ND	5.45	4.36	554753-1
		Plug, Self-Retained Terminals	A24394-ND	6.15	4.92	554758-1
		Receptacle, Shielded for Screw Lock	A24395-ND	8.68	6.94	557984-1
64	3.875 (98.43)	Plug	A24396-ND	13.13	10.50	554759-1
		Receptacle	A24397-ND	10.05	8.04	553443-5
		Right-Angle Mount Connectors				
14	1.750 (44.45)	Receptacle, Standard, Self-Tapping	A24353-ND	7.90	6.32	552738-1
24	2.175 (55.25)	Receptacle, Standard, Self-Tapping	A1514-ND	7.55	6.04	552740-1
		Receptacle, Standard, Self-Tapping	A24354-ND*	5.68	4.54	552791-1
		Plug, Standard, Self-Tapping	A24355-ND	8.03	6.42	552741-1
		Receptacle, Reverse, Self-Tapping	A24356-ND	7.85	6.28	552740-2
36	2.685 (68.20)	Receptacle, Standard, Self-Tapping	A1515-ND	7.13	5.70	552742-1
50	3.280 (83.31)	Plug, Standard, Self-Tapping	A1555-ND	8.27	6.14	552726-1
		Receptacle, Standard, Self-Tapping	A1554-ND	8.30	6.84	552725-1
		Receptacle, Reverse, Self-Tapping	A24357-ND	5.68	4.54	552725-3
		Plug, Reverse, Self-Tapping	A24358-ND	7.10	5.68	552726-3
		Receptacle, Standard, Thru-Bolt	A24359-ND	7.90	6.32	552725-2
64	3.875 (98.43)	Receptacle, Standard, Self-Tapping	A24360-ND	9.48	7.58	552744-1
		Plug, Standard, Self-Tapping	A24361-ND	17.73	14.18	552745-1
No. of Pos.	**Cable Range Inch (mm)**	**Description**	**Digi-Key Part No.**	**Price Each 1**	**Price Each 25**	**AMP Part No.**
		90° Slide-On Strain Relief Cover Kits & Accessories				
50	.425 - .500 (10.80 - 12.70)	Tapered Cover Kit	A24341-ND	1.92	1.54	552560-5
		Cable Clamp	A24342-ND	.21	.18	1-229910-1
	.350 - .425 (8.89 - 10.80)	Standard Cover Kit	A24343-ND	1.53	1.23	552960-2
		Tapered Cover Kit	A24344-ND	.49	.40	552560-1
	.500 - .550 (12.70 - 13.97)	Standard Cover Kit	A24345-ND	1.33	1.07	552960-5
		Cable Clamp	A24346-ND	.48	.39	4-229910-1
	.425 - .550 (10.80 - 13.97)	90° Slide-On Cover	A24347-ND	.57	.46	552617-1
	.425 Max. (10.80)	Std. Slide-On Cvr. use w/Adj. Clamp	A24348-ND	.66	.53	552760-1
		Adjustable Cable Clamp,	A24349-ND	.37	.30	552763-1
		Hardware Kits				
		Screw Lock Hardware Kit, Vertical Mount	A1523-ND	3.45	2.76	552563-1
		Bail Lock Hardware Kit, Vertical Mount	A1520-ND	1.88	1.50	552562-1
		J-Hook Screw Lock, Vertical Mount Kit	A24364-ND	4.45	3.56	552690-1
		Screw Lock Hardware Kit, Edge Mount	A1521-ND	4.75	3.80	552675-1
		Bail Lock Hardware Kit, Edge Mount	A1522-ND	5.58	4.46	552676-1
		Screw Lock Hardware Kit, Right Angle Mount	A1524-ND	1.60	1.28	552631-1
		Metric Front Mount Kit, Right Angle	A24362-ND	4.10	3.28	552633-3
		Metric Rear Mount Kit, Right Angle	A24363-ND	4.10	3.28	552633-4
		Bent Bail Lock, use with 90° Strain Relief	A24340-ND	1.76	1.43	552561-4
		Bail Lock, with Hex Nut 4-40	A24232-ND	1.25	1.00	552561-6
		Bail Lock, 90° Bail Clip	A24233-ND	1.90	1.52	552561-8
		Accessories				
		Metric Standoff Studs	A24381-ND	2.04	1.64	552634-3
		Standoff Mounting Studs 4-40, Length .640 (16.26)	A24398-ND	.60	.48	229995-2
		Standoff Mounting Studs 4-40, Length 1.000 (25.40)	A24399-ND	.79	.64	552113-1
		4-40 Pan Head Screw - Length .425” (10.80)	A26166-ND	.11	.06	229996-2
		4-40 Pan Head Screw - Length .350” (8.89)	A24385-ND	.13	.07	229996-3
		J-Hook Latch for Panel Mount Recpt. to 90° Cable	A24386-ND	.53	.43	552655-1
		4-40 Mounting Screw	A1516-ND	.95/10		229911-1

* For IEEE-488 applications † Mounting holes .125” (3.175)

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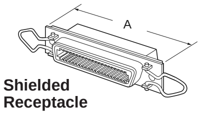
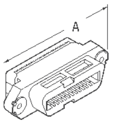
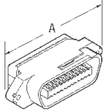
CHAMP® Latch Parallel Interface and Ribbon Cable Connectors


Shielded Receptacle

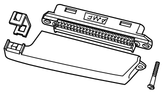

Receptacle

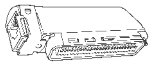

Plug

No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
CHAMP® Latch Low Profile Connectors - Plastic						
Screw Lock						
14	1.750 (44.45)	Plug	A24213-ND	5.80	5.27	553596-1
14	1.750 (44.45)	Receptacle	A24214-ND	5.80	5.27	553597-1
24	2.175 (55.25)	Plug	A1559-ND	6.12	5.56	553598-1
24	2.175 (55.25)	Receptacle	A1561-ND	5.87	5.33	553599-1
36	2.685 (68.20)	Plug	A1563-ND	6.64	6.04	553600-1
36	2.685 (68.20)	Receptacle	A1565-ND	6.64	6.04	553601-1
50	3.280 (83.31)	Plug	A1567-ND	9.75	8.73	553602-1
50	3.280 (83.31)	Receptacle	A1569-ND	5.40	4.91	553603-1
64	3.875 (98.43)	Plug	A24220-ND	22.99	20.88	552837-1
64	3.875 (98.43)	Receptacle	A24190-ND	22.99	20.88	552838-1
Bail Lock						
24	2.175 (55.25)	Receptacle	A1561-ND	5.87	5.33	553599-1
36	2.685 (68.20)	Plug	A1564-ND	6.01	5.47	554084-1
36	2.685 (68.20)	Receptacle	A1565-ND	6.64	6.04	553601-1
50	3.280 (83.31)	Receptacle	A1569-ND	5.40	4.91	553603-1
64	3.651 (92.74)	Plug	A24221-ND	22.90	20.80	552933-1
64	3.875 (98.43)	Receptacle	A24190-ND	22.99	20.88	552838-1
Panel Mount						
24	2.175 (55.25)	Plug	A24215-ND	5.98	5.43	554103-1
24	2.175 (55.25)	Receptacle	A24216-ND	6.25	5.68	554088-1
36	2.685 (68.20)	Receptacle	A1566-ND	6.17	5.61	554089-1
50	3.280 (83.31)	Receptacle	A1570-ND	8.16	7.28	554090-1
64	3.875 (98.43)	Receptacle	A24191-ND	38.30	30.64	552843-1
Shielded CHAMP® Latch Panel Mount Connectors - Plastic						
Screw Lock, Preassembled						
24	2.205 (56.01)	Receptacle, 6-32	A1556-ND	8.35	7.59	554434-1
50	3.310 (84.07)	Receptacle, 4-40	A1557-ND	15.80	14.15	554436-2
Bail Lock, Preassembled						
36	2.715 (68.96)	Receptacle, 4-40	A1575-ND	8.30	7.54	554346-2
36	2.715 (68.96)	Receptacle, 4-40	A24218-ND*	8.69	7.90	555983-1
50	3.310 (84.07)	Receptacle, 4-40	A24219-ND*	4.75	4.32	554902-1
Screw Lock, Loose Pieces						
24	2.380 (60.45)	Receptacle	A1558-ND	6.80	6.19	554349-1
36	2.380 (60.45)	Receptacle	A24217-ND	8.57	7.79	554348-1
50	3.475 (88.27)	Receptacle	A1574-ND	9.07	8.25	554350-1
Hardware Kits						
		Bail Lock, 4-40 UNC x .625"(15.88)	A24384-ND	1.84	1.67	552567-3
		Ball Lock, 4-40 UNC x .500"(12.70)	A1517-ND	2.03	1.69	552561-3
		Front Panel Mount Metric Screw Lock	A24222-ND	2.21	2.02	553636-2
		Rear Panel Mount Metric Screw Lock	A24223-ND	3.58	3.26	553636-3
		Shielded Screw Lock, Rear Mount 4-40	A1578-ND	1.76	1.61	554272-1
		Shielded Screw Lock, Rear Mount Metric	A1579-ND	3.06	2.74	554808-1
Accessories						
		Latch Cable Strain Relief Clip, 50 Pos. for Low Profile	A24227-ND	1.94	1.77	554099-1

***** Does not have boss feature. Boss is a .040" (1.02) shoulder on front of shield.

CHAMP® Connector Kits




Modular Adapter

Cable Range Inch (mm)	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
50 Position with Tapered Cover Solid and Stranded Kits					
0.550 max. (13.97)	Plug, Black	A24324-ND	3.50	2.84	552382-1
0.550 max. (13.97)	Receptacle, Black	A24325-ND	3.22	2.61	552383-1
.350 - .425 (8.89 - 10.80)	Plug, Black	A1571-ND	3.47	3.17	229912-1
.350 - .425 (8.89 - 10.80)	Receptacle, Black	A1572-ND	3.47	3.17	229913-1
.350 - .425 (8.89 - 10.80)	Plug, Gray	A24326-ND	2.84	2.30	229912-4
.350 - .425 (8.89 - 10.80)	Receptacle, Gray	A24327-ND	2.84	2.30	229913-4
.350 - .425 (8.89 - 10.80)	Plug with Dust Cover, Black	A24328-ND	2.65	2.15	1-229912-1
.350 - .425 (8.89 - 10.80)	Recept. with Dust Cover, Black	A24329-ND	2.65	2.15	1-229913-1
.350 - .425 (8.89 - 10.80)	Recept. with Dust Cover, Gray	A24330-ND	2.94	2.38	1-229912-4
.350 - .425 (8.89 - 10.80)	Recept. with Dust Cover, Gray	A24331-ND	2.91	2.36	1-229913-4
.425 - .500 (10.80 - 12.70)	Plug, Black	A24332-ND	2.84	2.30	2-229912-1
.425 - .500 (10.80 - 12.70)	Receptacle, Black	A24333-ND	2.84	2.30	2-229913-1
.425 - .500 (10.80 - 12.70)	Plug with Dust Cover, Black	A24334-ND	2.91	2.36	3-229912-1
.425 - .500 (10.80 - 12.70)	Receptacle with Dust Cover, Black	A24335-ND	2.91	2.36	3-229913-1
.350 - .425 (8.89 - 10.80)	Plug, Black	A24336-ND	3.85	3.12	552402-1
.350 - .425 (8.89 - 10.80)	Receptacle, Black	A24337-ND	4.51	3.65	552403-1
50 Position CHAMP System 5 Connectors					
.51 (12.95)	Plug, 24 AWG Solid, Red	A24365-ND	14.71	11.90	1-558693-1
.350 - .680 (8.89 - 17.27)	120° Strain Relief, Light Almond	A24366-ND	2.16	1.75	569336-1
.350 - .680 (8.89 - 17.27)	120° Strain Relief, Black	A24367-ND	2.16	1.75	569336-3
.650 - .750 (16.51 - 19.05)	90° Strain Relief, Lt. Almond Cvr.	A24368-ND	3.53	2.85	569335-1
50 Position CHAMP Connector With Crimp Cable Clamp					
—	Plug , 24-26 AWG Solid or Stranded	A24369-ND	2.57	2.08	553213-3
—	Recept., 24-26 AWG Solid or Strand.	A24370-ND	2.57	2.08	553212-3
—	Recept., 24-26 AWG Solid or Strand.	A24371-ND†	3.17	2.57	554886-2
—	Wear Adapter (Plug to Recept. Assy.)	A24372-ND	15.60	12.62	552705-1
CHAMP-LOK Hardware Kits					
	Locking Latch, 36 or 50 Positions	A24338-ND	.37	.30	552723-1
	Locking Latch, 14 or 24 Positions	A24339-ND	.82	.66	552723-2

† Integral locking latch

Cable Range Inch (mm)	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Back-to-Back Connector Assembly					
.380 - .400 (9.65 - 10.16)	24 AWG Cable to Cable Kit, 50 Pos.	A24373-ND	24.70	19.97	553257-1
.300 - .375 (7.62 - 9.53)	Back to Back Kit, 24 Pos.	A24374-ND	18.59	15.03	555182-1
.300 - .375 (7.62 - 9.53)	Snap-on-Cover, 24 Pos.	A24375-ND	3.36	2.72	554831-1
Interface Bus Connector					
—	24 Position with 2 Jackscrews	A24376-ND	10.74	8.69	554815-1
50 Positions Gender Menders					
—	Receptacle with J-Hook Hardware	A24377-ND	15.32	12.39	554875-1
—	Receptacle w/out J-Hook Hardware	A24378-ND	17.08	13.82	554875-2
—	Plug with J-Hook Hardware	A24379-ND	30.41	24.59	554876-1
—	Plug w/out J-Hook Hardware	A24380-ND	22.35	18.07	554876-2

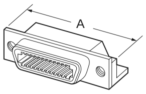
Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Modular Champ Adapter - Prewired Assembly* (conn. / 90° cover / hardware)	A1573-ND*	10.88	8.80	552789-1

*Wiring is as follows: Pin 1 – Green; Pin 2 – Black; Pin 26 – Red; Pin 27 – Yellow.

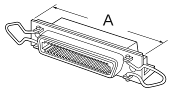
CHAMP® Shielded Connectors

Terminals: Selectively plated gold over nickel plated high strength copper alloy, tin plated tails. **Housing & Cover Material:** Thermoplastic, black

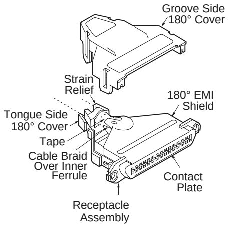
Screw-Lock



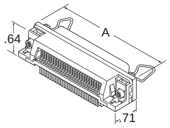
Bail Lock



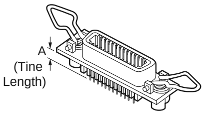
Cable Connector Kits



Board Lock Grounding



Vertical Mount



No. of Pos.	Dim. A Inch (mm)	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Right Angle, Preassembled Screw Lock						
24	2.205 (56.01)	Receptacle, Standard, 6-32	A15016-ND	9.85	8.79	553811-1
24	2.205 (56.01)	Receptacle, Reverse, 6-32	A24294-ND	25.00	20.00	553811-2
50	3.305 (83.95)	Receptacle, Reverse, 4-40	A24295-ND	8.83	7.06	553813-4
50	3.305 (83.95)	Receptacle, Standard, 4-40	A15001-ND	9.52	8.53	553813-3
Right Angle, Preassembled Bail Lock						
36	2.710 (68.83)	Receptacle, Standard, 4-40	A24298-ND	16.65	13.32	555233-1
50	3.305 (83.95)	Receptacle, Standard, 4-40	A15002-ND	8.95	7.16	554901-1
Right Angle, Board Lock Grounding						
24	2.205 (56.01)	Screw Lock, 6-32, Standard	A24299-ND	7.38	5.90	554923-2
24	2.205 (56.01)	Screw Lock, 6-32, Reverse	A24300-ND	8.43	6.74	554923-1
24	2.205 (56.01)	Screw Lock, 6-32, Low Pro., Reverse	A24301-ND	11.58	9.26	555139-1
24	2.205 (56.01)	Screw Lock, 6-32, Low Profile, Std.	A24302-ND	29.73	23.78	555139-2
36	2.715 (68.96)	Bail Lock, 4-40, Standard	A24303-ND	6.93	5.54	555119-1
36	2.715 (68.96)	Bail Lock, 4-40, Standard	A15004-ND*	6.40	5.12	555520-2
50	3.320 (84.33)	Bail Lock, 4-40, Standard	A15003-ND	9.73	7.78	555057-1
50	3.320 (84.33)	Screw Lock, 4-40, Standard	A24304-ND	12.03	9.62	557932-2
50	3.310 (84.07)	IBM Compatible, Bail Lock, 4-40	A15005-ND	11.38	10.19	555149-1
Vertical Mount						
24	.150 (3.81)	Screw Lock, 6-32	A24305-ND	11.15	8.92	554501-1
24	.215 (5.46)	Screw Lock, 6-32	A24306-ND	15.10	12.08	554501-2
36	.215 (5.46)	Bail Lock, 4-40	A24307-ND	10.45	8.36	554145-4
50	.135 (3.43)	Bail Lock, 4-40	A15008-ND	13.65	12.23	554216-3
50	.200 (5.08)	Screw Lock, 4-40	A24308-ND	10.93	8.74	554217-4
Cover Kits & Accessories						
24	—	180° Cover	A15013-ND	7.80	6.24	554944-1
36	—	180° Cover	A15014-ND	3.28	2.62	554945-1
50	—	180° Cover - Cab. dia. ≤ .500 (12.70)	A15015-ND	3.40	3.05	554946-1
50	—	180° Cover - Cab. dia. ≥ .500 (12.70)	A24320-ND	2.38	1.91	554946-2
—	—	Cap. Pan Head Screw, 4-40 (2 req.)	A24321-ND	.15	.13	554726-1
—	—	Inner Ferrule .350 (8.89) Inside Dia.	A24322-ND	.30	.25	554725-3
—	—	Inner Ferrule .500 (12.7) Inside Dia.	A24323-ND	.33	.27	554725-6
Hardware Kits						
—	—	Bail Lock, Short, 4-40UNC-2Ax.25"	A24296-ND	1.88	1.50	554818-2
—	—	Bail Lock, Short, 4-40UNC-2Ax.50"	A24297-ND	3.85	3.08	554818-1
—	—	Vert. Mt., Pan Head Screws (2 req.)	A24309-ND	3.25	2.60	554043-2
—	—	Vert. Mt., Metric Standoff Screws (panhead screw & standoff)	A24310-ND	6.15	4.92	554858-1

***** Has drawn metal shield

No. of Pos.	Cable Range Inch (mm)	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Cable Connector Kits						
Plug — Solid or Stranded						
24	.250 - .500 (6.35 - 12.70)	Screw Lock, 24-26 AWG	A24311-ND	6.55	5.24	554948-4
24	.250 - .500 (6.35 - 12.70)	Screw Lock, 26-28 AWG	A15009-ND	13.68	10.94	554948-3
24	.250 - .500 (6.35 - 12.70)	Bail Lock, 24-26 AWG	A24312-ND	5.35	4.28	554947-2
36	.250 - .500 (6.35 - 12.70)	Screw Lock, 24-26 AWG	A24313-ND	15.05	12.04	554951-2
36	.250 - .500 (6.35 - 12.70)	Bail Lock, 24-26 AWG	A24314-ND	5.18	4.14	554950-2
36	.250 - .500 (6.35 - 12.70)	Bail Lock, 26-28 AWG	A15010-ND	6.05	4.84	554950-1
50	.350 - .625 (8.89 - 15.88)	Screw Lock, 24-26 AWG	A24315-ND	6.63	5.30	554954-2
50	.350 - .625 (8.89 - 15.88)	Screw Lock, 26-28 AWG	A15012-ND	6.50	5.20	554954-1
50	.350 - .625 (8.89 - 15.88)	Bail Lock, 26-28 AWG	A15011-ND	6.18	5.53	554953-1
50	.350 - .625 (8.89 - 15.88)	Bail Lock, 24-26 AWG	A24316-ND	5.93	4.74	554953-2
Receptacle — Solid or Stranded						
50	.350 - .625 (8.89 - 15.88)	Screw or Bail Lock, 24-26 AWG	A24317-ND	14.58	11.66	554955-2
50	.350 - .625 (8.89 - 15.88)	Screw or Bail Lock, 26-28 AWG	A24318-ND	6.23	4.98	554955-1
50	.370 max. (9.40)	Bail Lock, 90° Exit, Gray	A24319-ND	7.30	5.84	5-555012-2

AMP tyco Electronics
Authorized Distributor

1mm Card Edge Connectors

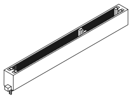
Slot 1 / AGP / NLX

1mm Standard Edge Connectors have been developed specifically to meet the interconnection requirements for the latest technological advances in personal computers. These include Intel's Pentium II™ processor (Slot 1), Accelerated Graphics Port (AGP), and the new NLX Form Factor motherboard.

FEATURES:
• 1mm contact spacing compatible with latest interconnection technology for Slot 1, AGP and NLX • High temperature housings suitable for surface mount reflow processes • Pivoting board lock feature offering connector centering before contacts enter pc board holes • Certified by Canadian Standards Association to Canadian and United States Requirements • Produced under a Quality Management System certified to ISO 9001

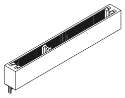
PERFORMANCE CHARACTERISTICS:
• **Operating Temp.:** 0°C to 85°C • **Voltage:** 250 VAC • **Characteristic Impedance:** 35<20<80 ohms • **Termination Resistance:** 20mΩ max. (initial) • **Insulation Resistance:** 1000MΩ min. • **Dielectric Withstanding Voltage:** 400VAC @ sea level • **Durability:** 50 cycles min. • **Engaging Force:** 3.3 oz. (.917 N) max. average per contact pair • **Separating Force:** 1.98 to .35 oz. (.550 to .097N) per contact pair

Fig. 1



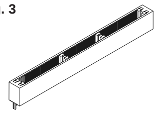
Fully compatible with Intel Pentium II processor module

Fig. 2



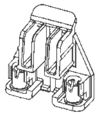
Brings high performance 3-D graphics and full motion video to the desktop

Fig. 3



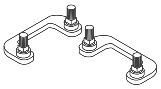
Riser Card Interconnect for new NLX Form Factor motherboard

Fig. 4



Complete 2 module kit. Required for one processor.

Fig. 5



Housing: Nylon, black. **Hardware:** Brass, copper alloy finish.

Fig. 6

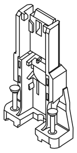


Fig. 7

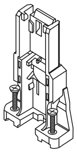


Fig. 8

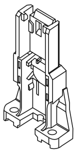


Fig. 9

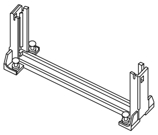


Fig. 10

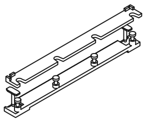


Fig.	Description	Solder Tail Length	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
	1mm Standard Edge Connector					
1	242 Pos. Slot 1 Connector for Pentium II and Celeron Processors	.100 (2.54)	A15102-ND	5.33	4.76	145251-2
2	124 Pos. AGP (Accelerated Graphics Port) Connector for AGP Card	.085 (2.16) .100 (2.54)	A15103-ND A15104-ND	3.84 3.84	3.43 3.44	145263-1 145263-2
3	340 Pos. NLX Riser Card Interconnect	.100 (2.16)	A15106-ND	7.25	6.47	145275-2
	Celeron Retention Modules					
4	Module Kit with Captive Brass Fasteners, 2 pieces (Use with 145312-1 Bridge/Stud Assembly)		A15108-ND	4.21	2.11	145342-1
5	Bridge/Stud Assembly for #145342-1. One Bridge/Stud Assembly Required for Each Retention Module		A15109-ND	2.67	1.61	145312-1
	Universal Retention Modules (URM)					
6	URM with Straight Pin Plastic Fasteners. Compatible with .159" (4.04mm) Holes, 2 pieces		A15115-ND	2.06	1.18	145417-2
7	URM with Screw Down Fasteners. Compatible with .140 (3.56mm) or .159" (4.04mm) Holes, 2 pieces		A15116-ND	2.20	1.27	145418-2
8	URM with Clearance Hole for #6 Screw. Customer Supplies Fastener Hardware, 2 pieces		A15117-ND	2.20	1.27	145419-2
	Integrated Retention Modules					
9	Pentium II Retention Module w/Fastex Plastic Fasteners Pentium II Retention Module w/Slotted, Captive Nuts		A15113-ND A15118-ND	5.48 5.37	2.75 2.69	145327-1 145286-1
	Heat Sink Support Kit					
10	Heat Sink Support Base with Plastic Fasteners for use with Integrated Retention Module #145327-1		A15114-ND	6.87	3.44	145308-1

SCSI Terminators

Fig. 1

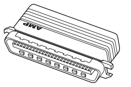


Fig. 2

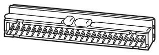


Fig. 3

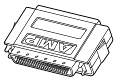


Fig. 4

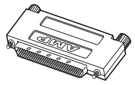


Fig. 5

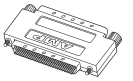


Fig. 6

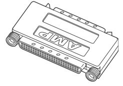
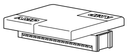


Fig. 7



SCSI TYPES:

Single-Ended: Allows up to 5 megabytes per second **A. Passive:** 220/330Ω; for lower data transmission rates • Termination of each signal consists of 220Ω to Term Power Line and 330Ωto ground • 36 resistors • Ideal impedance match, 132Ω **B. Active:** Also referred to as "Regulated" or "Boulay." These terminators include a voltage regulator along with resistors and capacitors. They support applications requiring longer cable lengths and faster data transmission rates. • Eighteen 110Ω resistors • 3 or more capacitors • 2 voltage reference resistors • One voltage regulator

Differential: Allows up to 10 megabytes per second, cable lengths up to 25 meter • Requires more powerful drivers than single-ended • Ideal impedance match, 122Ω

Force Perfect: Use with near non-SCSI applications wherein the larger bandwidth and faster risetimes create special problems; compensates for variances by averaging the impedance mismatches through diode switching and biasing techniques. Circuitry: Thick film resistors and/or discreet components on aluminum substrate or plastic laminate

Active Negation: Used by SCSI-2 and SCSI-3 Drivers and Receivers in single ended active applications to help ensure clean, noise-free transitions of the signals. These terminators can source as well as sink current, thereby maintaining voltage control.

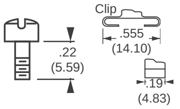
Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
		Single Ended Passive				
1	50	CHAMP® Style Plug, Mate with .085" (2.16mm) Center-Line SCSI-1	A15032-ND	36.61	29.61	556578-1
2	50	Plug, Mate w/ribbon cable socket connectors	A15034-ND	20.05	16.21	869587-1
3	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Low Profile, ABS	A15036-ND	32.60	29.19	750881-1
3	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Zinc	A23538-ND	45.80	37.04	749535-2
		Single Ended Active				
3	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Zinc	A23540-ND	60.42	48.85	750381-1
3	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2, Low Profile, ABS	A15037-ND	52.03	46.59	869546-1
4	68	AMPLIMITE® .050" (1.27mm) Series Plug; "P&Q" Cable SCSI-3	A15039-ND	49.21	44.06	869516-1
5 6	68 68	Plug Feed-Thru To 68 Position Receptacle Receptacle Feed-Thru To 50 Position Plug	A15043-ND A15045-ND	87.40 71.63	70.67 57.92	869684-1 869680-1
		Differential				
1	50	CHAMP® Style Plug, Mate with .085" (2.16mm) Center-Line SCSI-1	A15033-ND	75.55	61.09	555867-1
3	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2	A15038-ND	57.58	46.55	869545-1
4	68	AMPLIMITE® .050" (1.27mm) Series Plug; "P&Q" Cable SCSI-3	A15040-ND	39.98	35.80	869515-1
5 6	68 68	Plug Feed-Thru To 68 Position Receptacle Receptacle Feed-Thru To 50 Position Plug	A15044-ND A15046-ND	82.65 63.76	74.01 51.55	869682-1 869678-1
3	50	AMPLIMITE® .050" (1.27mm) Series Plug; "A" Cable SCSI-2	A23539-ND	57.72	46.67	749541-1
4	68	AMPLIMITE® .050" (1.27mm) Series Plug; "P&Q" Cable SCSI-2	A23542-ND	45.94	37.15	750897-1
		Force Perfect				
4	68	.050" (1.27mm) Series Plug	A23541-ND	46.77	37.81	869867-1
		Active Negation Compatible				
7	68	.050" (1.27mm) Center-Line Ribbon Cable SCSI-3	A24211-ND	44.11	35.67	869725-1

3M

D-Sub Mounting Hardware

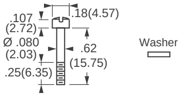
Fig.	Description	Digi-Key Part No.	Price Each			3M Part No.
			1	100	500	
1	Jack Screw Kit	MDVS22-ND	1.00	.76	.69	3342-1
2	Jack Screw Kit	MDVS62-ND	1.04	.79	.72	3342-2
3	Jack Screw Kit	MDVS35-ND	.71	.54	.49	3342-4
4	Screw Mount Kit	MDSMK1-ND	.79	.61	.55	3342-3
5	Jack Socket Kit	MDVS44-ND	1.77	1.35	1.22	3341-1S
6	Jack Socket Kit	MDVS73-ND	1.60	1.22	1.11	3341-2
7	Jack Socket Kit	MDVS50-ND	1.77	1.35	1.22	3341-1L
8	Jack Socket Kit	MDVS81-ND	1.85	1.41	1.28	3341-4

Fig. 1 – Jack Screw Kit



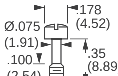
Kit includes 2 screws and 2 clips.

Fig. 2 – Jack Screw Kit



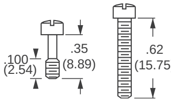
Kit includes 2 screws and 2 flat washers.

Fig. 3 – Jack Screw Kit



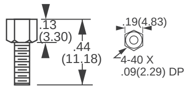
Kit includes 2 screws.

Fig. 4 – Screw Mount Kit



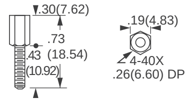
Kit includes 2 screws.

Fig. 5 – Jack Socket Kit



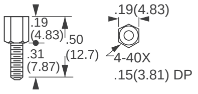
Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

Fig. 6 – Jack Socket Kit



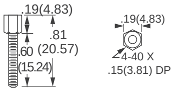
Kit includes 2 sockets, 2 lock washers, and 2 nuts.

Fig. 7 – Jack Socket Kit



Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

Fig. 8 – Jack Socket Kit



Kit includes 2 sockets, 4 flat washers, 2 lock washers, and 2 nuts.

AMPLIMITE® D-Sub Connectors

All connectors are preloaded with size 20 DF posted contacts; plugs with pin contacts and receptacles with socket contacts.

Steel Tin Plated Shell HD-20 Series (Figure 1): • Contact Mating Area Plating: 30µ gold • Eyelets: Brass, Tin Plated • Threaded Inserts: Zinc • Female Screwlock: Zinc • Boardlocks: Copper Alloy, Tin-Lead Plated • Pin Contacts: Brass

Zinc Plated Shell HDP-20 Series Crimp Snap (Figure 2): • Contact Mating Area Plating: Gold Flash • Grounding Indents: Without • Recommended PCB Thickness: .062 (1.57mm)

Steel Tin Plated Shell HD-20 Series Solder Cup (Figure 2): • Contact Mating Area Plating: 30µ gold • Grounding Indents: On Male Plug • Recommended PCB Thickness: .093 (2.36mm)

Fig. 1

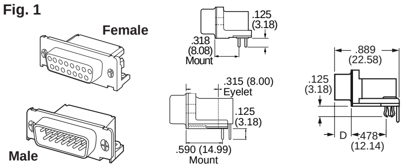


Fig. 2

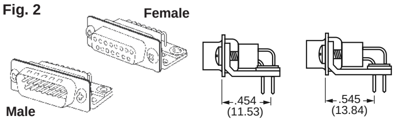


Fig.	No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Steel, Tin Plated Shell, .318" (8.08mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Male	A2096-ND*	2.72	2.44	747250-4
	9	Female	A2100-ND*	2.36	2.12	745781-4
	9	Male	A23272-ND‡	2.76	2.30	747250-3
	9	Female	A23292-ND‡	2.67	2.23	745781-3
	15	Male	A2097-ND*	3.03	2.42	747236-4
	15	Female	A2101-ND*	2.89	2.59	745782-4
	25	Male	A2098-ND*	4.84	4.34	747238-4
	25	Female	A2102-ND*	3.42	3.06	745783-4
	25	Female	A23297-ND‡	3.18	2.65	745783-3
	37	Male	A2099-ND*	6.15	4.92	747252-4
	37	Female	A2103-ND*	4.93	3.94	745784-4
Steel, Tin Plated Shell, .318" (8.08mm) Mount, Without Boardlocks, With Standard Mounting Holes						
1	9	Female	A23291-ND*	2.85	2.38	745781-2
	15	Male	A23270-ND*	4.65	3.88	747236-2
	15	Female	A23294-ND*	3.33	2.78	745782-2
	25	Male	A23271-ND*	5.22	4.35	747238-2
	25	Female	A23296-ND*	3.99	3.33	745783-2
	37	Male	A23274-ND*	7.11	5.93	747252-2
Steel, Tin Plated Shell, .318" (8.08mm) Mount, Without Boardlocks, With Fixed Female Screwlocks						
1	9	Male	A23273-ND*	3.15	2.63	747250-6
	9	Female	A23293-ND‡	3.06	2.55	745781-6
	15	Female	A23295-ND*	3.57	2.98	745782-6
	25	Female	A23299-ND*	4.23	3.53	745783-6
	25	Female	A23298-ND‡	2.23	1.86	745783-5
	37	Female	A23300-ND*	7.98	6.65	745784-6
Steel, Tin Plated Shell, .318" (8.08mm) Mount With Boardlocks, With Standard Mounting Holes						
1	9	Male	A23275-ND*	3.15	2.63	747840-2
	9	Female	A23301-ND*	1.94	1.62	747844-2
	25	Male	A23283-ND*	4.29	3.58	747842-2
	25	Female	A23310-ND*	3.64	3.04	747846-2
	37	Male	A23288-ND*	7.44	6.20	747843-2
Steel, Tin Plated Shell, .318" (8.08mm) Mount, With Boardlocks, With Threaded Inserts						
1	9	Male	A23277-ND*	1.64	1.37	747840-4
	9	Female	A23303-ND*	1.94	1.62	747844-4
	9	Male	A23276-ND‡	2.04	1.70	747840-3
	9	Female	A23302-ND‡	2.03	1.70	747844-3
	15	Male	A23281-ND*	2.13	1.78	747841-4
	15	Female	A23307-ND*	1.68	1.40	747845-4
	15	Female	A23723-ND*#	7.50	6.25	748876-4
1	15	Male	A23280-ND‡	3.18	2.65	747841-3
	15	Female	A23306-ND‡	1.60	1.34	747845-3
	25	Male	A23285-ND*	3.73	3.11	747842-4
	25	Female	A23312-ND*	2.98	2.49	747846-4
	25	Male	A23284-ND‡	3.42	2.85	747842-3
	25	Female	A23311-ND‡	2.66	2.22	747846-3
	37	Male	A23289-ND*	4.17	3.48	747843-4
	37	Female	A23315-ND*	5.91	4.93	747847-4
Steel, Tin Plated Shell, .318" (8.08mm) Mount, With Boardlocks, With Fixed Female Screwlocks						
1	9	Male	A23279-ND*	2.33	1.95	747840-6
	9	Female	A23305-ND*	1.94	1.62	747844-6
	9	Male	A23278-ND‡	2.94	2.45	747840-5
	9	Female	A23304-ND‡	2.03	1.70	747844-5
	15	Male	A23282-ND*	2.13	1.78	747841-6
	15	Female	A23309-ND*	3.75	3.13	747845-6
	15	Female	A23308-ND‡	3.15	2.63	747845-5
	25	Male	A23287-ND*	4.47	3.73	747842-6
	25	Female	A23314-ND*	2.98	2.49	747846-6
	25	Male	A23286-ND‡	3.42	2.85	747842-5
	25	Female	A23313-ND‡	2.46	2.06	747846-5
	37	Male	A23290-ND*	7.71	6.43	747843-6
	37	Female	A23316-ND*	5.91	4.93	747847-6
All-Plastic .318" (8.08mm) Mount, With Boardlocks, With Threaded Inserts						
1	25	Female	A23342-ND*	6.45	5.38	748901-1
All-Plastic .318" (8.08mm) Mount, With Boardlocks, With Fixed Female Screwlocks						
1	9	Female	A23343-ND*	8.22	6.85	748979-1
All-Plastic .318" (8.08mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Female	A23338-ND*	5.46	4.55	745394-2
	25	Female	A23337-ND*	6.57	5.48	745392-2
All-Plastic .318" (8.08mm) Mount, Without Boardlocks, With Fixed Female Screwlocks						
1	9	Female	A23339-ND*	6.12	5.10	745395-2
	15	Female	A23340-ND*	6.90	5.75	745396-2
	25	Female	A23341-ND*	7.50	6.25	745397-2
All-Plastic .318" (8.08mm) Mount, Without Boardlocks, With Standard Mounting Holes						
1	9	Female	A23334-ND‡	4.23	3.53	745131-1
	15	Female	A23336-ND*	5.16	4.30	745271-2
	25	Female	A23335-ND*	5.64	4.70	745132-2
Steel, Tin Plated Shell .478" (12.14mm) Mount, With Boardlocks, With Threaded Inserts						
1	9	Female	A23384-ND*	12.87	10.73	747852-4
	25	Female	A23385-ND*	23.94	19.95	747854-4
Steel, Tin Plated .590" (14.99mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Male	A2104-ND*	8.60	6.88	745990-4
	9	Female	A2108-ND*	12.70	10.16	745988-4
	9	Male	A23344-ND‡	12.81	10.68	745990-3
	15	Female	A2109-ND*	14.55	11.64	745984-4
	25	Male	A2106-ND*	15.43	12.34	745994-4
	25	Female	A2110-ND*	16.80	13.44	745992-4
	25	Female	A23349-ND‡	16.53	13.78	745992-3
	37	Female	A2111-ND*	19.65	15.72	745996-4
Steel, Tin Plated .590" (14.99mm) Mount, With Boardlocks, With Threaded Inserts						
1	9	Male	A23346-ND*	3.66	3.05	747832-4
	9	Female	A23351-ND*	3.60	3.00	747836-4
	9	Male	A23345-ND‡	13.41	11.18	747832-3
	9	Female	A23350-ND‡	13.23	11.03	747836-3
	15	Male	A2105-ND*	3.48	2.78	747833-4
	25	Male	A23348-ND*	4.89	4.08	747834-4
	25	Female	A23354-ND*	4.20	3.50	747838-4
	25	Female	A23353-ND‡	17.16	14.30	747838-3
	37	Male	A2107-ND*	6.68	5.34	747835-4
Steel, Tin Plated .590" (14.99mm) Mount, With Boardlocks, With Fixed Female Screwlocks						
1	9	Male	A23347-ND*	16.14	13.45	747832-6
	9	Female	A23352-ND*	6.93	5.78	747836-6
	25	Female	A23355-ND*	19.11	15.93	747838-6

Fig.	No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
All-Plastic .590" (14.99mm) Mount, Without Boardlocks, With Threaded Inserts						
1	9	Male	A23375-ND*	5.46	4.55	747467-4
	9	Female	A23359-ND*	5.46	4.55	747459-4
	9	Female	A23358-ND‡	5.16	4.30	747459-3
	15	Female	A23363-ND*	6.15	5.13	747460-4
	15	Female	A23371-ND‡	5.58	4.65	747460-3
	25	Male	A23381-ND*	8.04	6.70	748873-1
	25	Female	A23366-ND‡	6.09	5.08	747461-3
All-Plastic .590" (14.99mm) Mount, Without Boardlocks, With Fixed Female Screwlocks						
1	9	Female	A23370-ND*	6.30	5.25	747459-6
	9	Female	A23360-ND‡	5.82	4.85	747459-5
	15	Male	A23382-ND*	8.43	7.03	748952-1
	25	Female	A23368-ND*	7.50	6.25	747461-6
	25	Female	A23367-ND‡	7.02	5.85	747461-5
All-Plastic .590" (14.99mm) Mount, Without Boardlocks, With Standard Mounting Holes						
1	9	Male	A23374-ND*	4.95	4.13	747467-2
	9	Female	A23357-ND*	4.68	3.90	747459-2
	9	Male	A23373-ND‡	4.23	3.53	747467-1
	9	Female	A23356-ND‡	4.32	3.60	747459-1
	15	Male	A23376-ND*	5.19	4.33	747468-2
	15	Female	A23362-ND*	5.19	4.33	747460-2
	15	Female	A23361-ND‡	4.68	3.90	747460-1
	25	Male	A23379-ND*	6.84	5.70	748826-1
	25	Female	A23365-ND*	5.64	4.70	747461-2
	25	Male	A23380-ND‡	3.45	2.88	748826-2
	25	Female	A23364-ND‡	5.13	4.28	747461-1
	37	Male	A23378-ND*	7.05	5.88	747470-2
	37	Female	A23369-ND*	7.05	5.88	747462-2
All-Plastic .590" (14.99mm) Mount, With Boardlocks, With Threaded Inserts						
1	25	Male	A23372-ND‡	7.02	5.85	748913-2
Steel, Tin Plated Shell, .454" (11.53mm) Mount						
2	9	Male	A23386-ND	17.70	14.75	745434-8
	15	Female	A23390-ND	20.58	17.15	745439-4
	25	Female	A23391-ND	24.81	20.68	745440-4
	37	Female	A23392-ND	29.94	24.95	745441-4
	37	Male	A23388-ND‡	27.00	22.50	745437-3
Zinc Plated Shell, .545" (13.84mm) Mount						
2	9	Male	A1020-ND	11.48	9.18	205865-1
	9	Female	A1021-ND	12.38	9.90	205866-1
	15	Female	A1023-ND	14.03	11.22	205868-1
	25	Male	A1024-ND*	15.45	12.36	205857-1
	25	Female	A1025-ND†	16.70	13.36	205858-1
	37	Male	A1026-ND†	18.38	14.70	205859-1
	37	Female	A1027-ND	19.83	15.86	205860-1
Steel, Tin Plated Shell, .545" (13.84mm) Mount, With Standard Mounting Screws						
2	15	Male	A1022-ND	14.30	11.44	745352-4
	15	Female	A23399-ND	17.52	14.60	745113-2
	25	Male	A23393-ND	20.55	17.13	745353-4
	25	Female	A23401-ND	21.12	17.60	745114-2
	37	Male	A23394-ND	24.60	20.50	745354-4
	37	Female	A23402-ND	25.47	21.23	745115-2
	50	Male	A23395-ND	31.26	26.05	745355-4
	50	Female	A23404-ND	33.60	28.00	745116-2
	50	Female	A23403-ND‡	30.18	25.15	745116-1
Steel, Tin Plated Shell, .545" (13.84mm) Mount, With Female Screwlocks						
2	9	Male	A23397-ND	17.79	14.83	747197-4
	9	Female	A23406-ND	16.83	14.03	747020-2
	15	Female	A23407-ND	20.22	16.85	747021-2
	25	Male	A23396-ND	23.22	19.35	747022-2
	25	Female	A23405-ND	23.40	19.50	745536-2
	50	Male	A23398-ND	33.84	28.20	747497-4
	50	Female	A23409-ND	34.95	29.13	747193-2
	50	Female	A23408-ND‡	32.73	27.28	747193-1

* 30µ Gold † Tin shell ‡ Gold flash on mating end

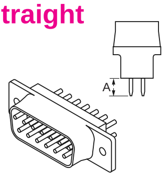
# Housing 94V-0 rated thermoplastic compatible with standard wave, vapor phase, and infra-red reflow (SMT) soldering, black

AMP tyco Electronics
Authorized Distributor

AMPLIMITE®

D-Sub Connectors

HD-20 All-Plastic Straight Posted

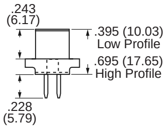


Material and Finish: Housing: 94V-0 rated thermoplastic, black **Threaded Inserts:** Brass, unplated **Female Screwlocks:** Brass, nickel plated **Pin Contacts:** Brass plated, tin-lead on termination end, with entire contact 50µ (min.) nickel underplated

No. of Pos.	Sex	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
With Standard Mounting Holes						
9	Male	.125 (3.18)	A23218-ND*	3.93	3.28	208006-2
9	Female	.125 (3.18)	A23238-ND*	4.08	3.40	207826-4
9	Male	.125 (3.18)	A23217-ND‡	3.63	3.03	208006-1
9	Female	.125 (3.18)	A23237-ND‡	3.81	3.18	207826-3
15	Male	.125 (3.18)	A23220-ND*	4.77	3.98	208007-2
15	Female	.125 (3.18)	A23240-ND*	5.01	4.18	207827-4
15	Female	.125 (3.18)	A23239-ND‡	4.47	3.73	207827-3
15	Female	.170 (4.32)	A23241-ND*	5.01	4.18	207827-6
25	Male	.125 (3.18)	A23222-ND*	6.27	5.23	208008-2
25	Female	.125 (3.18)	A23243-ND*	6.60	5.50	207828-4
25	Male	.125 (3.18)	A23221-ND‡	5.46	4.55	208008-1
25	Female	.125 (3.18)	A23242-ND‡	5.85	4.88	207828-3
37	Female	.125 (3.18)	A23245-ND*	9.87	8.23	207829-4
37	Male	.125 (3.18)	A23223-ND‡	7.77	6.48	208009-1
37	Female	.125 (3.18)	A23244-ND‡	10.53	8.78	207829-3
50	Male	.125 (3.18)	A23225-ND*	11.67	9.73	208010-2
50	Female	.125 (3.18)	A23246-ND*	12.51	10.43	207830-4
With Threaded Inserts						
9	Female	.125 (3.18)	A23248-ND*	5.58	4.65	207841-4
9	Female	.125 (3.18)	A23247-ND‡	5.28	4.40	207841-3
15	Male	.125 (3.18)	A23227-ND*	6.30	5.25	745052-2
15	Female	.125 (3.18)	A23250-ND*	6.63	5.53	745057-4
15	Male	.125 (3.18)	A23226-ND‡	5.79	4.83	745052-1
15	Female	.125 (3.18)	A23249-ND‡	6.03	5.03	745057-3
25	Male	.125 (3.18)	A23228-ND*	7.86	6.55	745053-2
25	Female	.125 (3.18)	A23252-ND*	8.25	6.88	745058-4
25	Female	.125 (3.18)	A23251-ND‡	7.44	6.20	745058-3
25	Female	.170 (4.32)	A23253-ND*	8.46	7.05	745058-6
With Fixed Female Screwlocks						
9	Male	.125 (3.18)	A23230-ND*	6.09	5.08	745071-2
9	Female	.125 (3.18)	A23255-ND*	5.58	4.65	745076-4
9	Male	.125 (3.18)	A23229-ND‡	5.79	4.83	745071-1
9	Female	.125 (3.18)	A23254-ND‡	4.86	4.05	745076-3
9	Male	.170 (4.32)	A23231-ND*	6.09	5.08	745071-4
9	Female	.170 (4.32)	A23256-ND*	6.24	5.20	745076-6
15	Female	.125 (3.18)	A23258-ND*	7.17	5.98	745077-4
15	Female	.125 (3.18)	A23257-ND‡	6.69	5.58	745077-3
15	Male	.170 (4.32)	A23232-ND*	6.90	5.75	745072-4
15	Female	.170 (4.32)	A23259-ND‡	7.08	5.90	745077-5
25	Male	.125 (3.18)	A23234-ND*	8.49	7.08	745073-2
25	Female	.125 (3.18)	A23261-ND*	8.52	7.10	745078-4
25	Male	.125 (3.18)	A23233-ND‡	7.71	6.43	745073-1
25	Female	.125 (3.18)	A23260-ND‡	7.14	5.95	745078-3
25	Female	.170 (4.32)	A23264-ND*	8.88	7.40	745078-6
25	Female	.170 (4.32)	A23263-ND‡	8.07	6.73	745078-5
37	Female	.125 (3.18)	A23265-ND*	11.91	9.93	745079-4
37	Male	.170 (4.32)	A23236-ND*	14.64	12.20	745074-4
37	Female	.170 (4.32)	A23266-ND*	11.91	9.93	745079-6

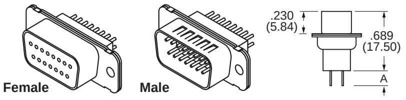
⁎ 30µ gold on mating end
‡ Gold flash on mating end

HD-20 All-Plastic Straight Posted With ACTION PIN



No. of Pos.	Sex	Profile	Digi-Key Part No.	Price Each 1	25	AMP Part No.
With Standard Mounting Holes						
37	Female	Low	A23135-ND	12.33	10.28	745337-2
With Fixed Female Screwlocks						
9	Female	Low	A23136-ND	7.02	5.85	745454-2
25	Female	Low	A23137-ND	11.04	9.20	745458-2
25	Female	High	A23134-ND	11.46	9.55	745031-2
37	Female	Low	A23138-ND	14.16	11.80	745459-2

HD-20 Full Metal-Shell Straight Posted

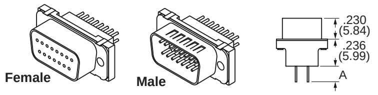


Material and Finish: Shell: Steel, tin plated **Insert:** 94V-0 rated thermoplastic, black **Pin Contacts:** Brass plated, tin-lead on termination end, with entire contact 50µ (min.) nickel underplated

No. of Pos.	Sex	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Without Grounding Indents						
9	Male	.125 (3.18)	A23139-ND‡	4.17	3.48	745182-2
25	Male	.125 (3.18)	A23140-ND‡	6.84	5.70	745186-2
With Grounding Indents						
9	Male	.125 (3.18)	A23141-ND*	4.95	4.13	745410-1
9	Male	.188 (4.78)	A23142-ND*	5.01	4.18	745410-7
25	Male	.125 (3.18)	A23143-ND*	5.31	4.43	745412-1
25	Male	.188 (4.78)	A23144-ND*	8.04	6.70	745412-7
37	Male	.125 (3.18)	A23145-ND*	11.73	9.78	745413-1
50	Male	.125 (3.18)	A23146-ND*	15.93	13.28	745414-1
50	Male	.188 (4.78)	A23147-ND*	14.88	12.40	745414-7
With .120” (3.05mm) Mounting Holes						
9	Female	.125 (3.18)	A23149-ND‡	4.80	4.00	745183-2
9	Female	.188 (4.78)	A23150-ND*	5.04	4.20	745183-7
15	Female	.188 (4.78)	A23148-ND*	6.33	5.28	745185-7
25	Female	.125 (3.18)	A23151-ND*	8.37	6.98	745187-1
25	Female	.188 (4.78)	A23152-ND*	8.40	7.00	745187-7
25	Female	.188 (4.78)	A23153-ND‡	7.71	6.43	745187-8
37	Female	.125 (3.18)	A23154-ND*	12.30	10.25	745189-1
37	Female	.188 (4.78)	A23155-ND*	12.27	10.23	745189-7
50	Female	.125 (3.18)	A23156-ND*	15.63	13.03	745191-1
50	Female	.188 (4.78)	A23157-ND*	15.66	13.05	745191-7
With Clinch Nuts						
9	Female	.125 (3.18)	A23164-ND*	6.90	5.75	747190-2
9	Female	.125 (3.18)	A23163-ND‡	6.84	5.70	747190-1
9	Female	.188 (4.78)	A23165-ND*	7.08	5.90	747190-4
15	Female	.125 (3.18)	A23158-ND*	8.34	6.95	745820-1
15	Female	.125 (3.18)	A23159-ND‡	7.95	6.63	745820-2
15	Female	.188 (4.78)	A23160-ND*	13.92	11.60	745820-7
25	Female	.125 (3.18)	A23161-ND*	9.63	8.03	745886-1
25	Female	.125 (3.18)	A23162-ND‡	9.72	8.10	745886-2
37	Female	.125 (3.18)	A23167-ND*	13.59	11.33	747315-1
50	Female	.125 (3.18)	A23166-ND*	17.82	14.85	747302-1

⁎ 30µ gold on mating end
‡ Gold flash on mating end

HD-20 Front Metal-Shell Straight Posted



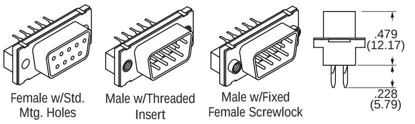
Material and Finish: Shell: Steel, tin plated **Housing:** 94V-0 rated thermoplastic, black **Threaded Inserts:** Brass, unplated **Female Screwlocks:** Zinc **Pin Contacts:** Brass plated, tin-lead on termination end, with entire contact 50µ (min.) nickel underplated

No. of Pos.	Sex	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
With Standard Mounting Holes						
9	Male	.125 (3.18)	A23183-ND*	3.66	3.05	747871-2
9	Female	.125 (3.18)	A23206-ND*	3.78	3.15	747150-2
9	Female	.170 (4.32)	A23207-ND*	8.91	7.43	747150-4
15	Female	.125 (3.18)	A23211-ND*	4.50	3.75	747299-2
15	Male	.170 (4.32)	A23185-ND*	4.41	3.68	747872-4
25	Male	.125 (3.18)	A23177-ND*	5.67	4.73	745968-2
25	Female	.125 (3.18)	A23203-ND*	6.18	5.15	745967-2
25	Male	.170 (4.32)	A23178-ND*	5.67	4.73	745968-4
37	Male	.125 (3.18)	A23181-ND*	8.85	7.38	747375-2
37	Female	.125 (3.18)	A23214-ND*	10.86	9.05	747301-2
With 4-40 Threaded Inserts						
9	Male	.125 (3.18)	A23184-ND*	4.98	4.15	747871-8
9	Female	.125 (3.18)	A23209-ND*	4.68	3.90	747150-8
9	Female	.125 (3.18)	A23208-ND‡	3.27	2.73	747150-7
9	Female	.170 (4.32)	A23210-ND‡	4.77	3.98	747150-9
15	Male	.125 (3.18)	A23186-ND*	5.64	4.70	747872-8
15	Female	.125 (3.18)	A23213-ND*	5.85	4.88	747299-8
15	Female	.125 (3.18)	A23212-ND‡	5.46	4.55	747299-7
15	Female	.170 (4.32)	A23195-ND*	5.88	4.90	1-747299-0
25	Male	.125 (3.18)	A23180-ND*	6.93	5.78	745968-8
25	Female	.125 (3.18)	A23205-ND*	7.26	6.05	745967-8
25	Male	.125 (3.18)	A23179-ND‡	6.21	5.18	745968-7
25	Female	.125 (3.18)	A23204-ND‡	6.03	5.03	745967-7
25	Female	.170 (4.32)	A23188-ND*	6.84	5.70	1-745967-0
37	Male	.125 (3.18)	A23182-ND*	12.00	10.00	747375-8
37	Female	.125 (3.18)	A23216-ND*	10.80	9.00	747301-8
37	Female	.125 (3.18)	A23215-ND‡	9.66	8.05	747301-7
With Retention 4-40 Inserts (for .062” [1.58mm] PCB)						
9	Male	.125 (3.18)	A23176-ND*	4.29	3.58	2-748003-0
9	Female	.125 (3.18)	A23199-ND*	4.68	3.90	2-747706-0
15	Female	.125 (3.18)	A23200-ND*	4.50	3.75	2-747707-0
25	Male	.125 (3.18)	A23175-ND*	5.85	4.88	2-747704-0
25	Female	.125 (3.18)	A23201-ND*	6.84	5.70	2-747708-0
37	Female	.125 (3.18)	A23202-ND*	10.80	9.00	2-747709-0
With Fixed Female Screwlocks						
9	Male	.125 (3.18)	A23172-ND*	5.46	4.55	1-747871-4
9	Female	.125 (3.18)	A23193-ND*	5.67	4.73	1-747150-4
9	Male	.125 (3.18)	A23171-ND‡	5.25	4.38	1-747871-3
9	Female	.125 (3.18)	A23192-ND‡	5.37	4.48	1-747150-3
9	Female	.170 (4.32)	A23194-ND*	5.46	4.55	1-747150-6
9	Male	.170 (4.32)	A23173-ND*	5.49	4.58	1-747871-6
15	Female	.125 (3.18)	A23196-ND*	5.85	4.88	1-747299-4
15	Male	.170 (4.32)	A23174-ND*	6.21	5.18	1-747872-6
15	Female	.170 (4.32)	A23197-ND*	6.27	5.23	1-747299-6
25	Male	.125 (3.18)	A23169-ND*	7.50	6.25	1-745968-4
25	Female	.125 (3.18)	A23189-ND*	5.85	4.88	1-745967-4
25	Male	.125 (3.18)	A23168-ND‡	6.78	5.65	1-745968-3
25	Male	.170 (4.32)	A23170-ND*	7.50	6.25	1-745968-6
25	Female	.170 (4.32)	A23191-ND*	7.02	5.85	1-745967-6
25	Female	.170 (4.32)	A23190-ND‡	7.17	5.98	1-745967-5
37	Female	.170 (4.32)	A23198-ND*	13.35	11.13	1-747301-6
With Retention 4-40 Screwlocks (for .062” [1.58mm] PCB)						
25	Male	.125 (3.18)	A23187-ND*	9.12	7.60	748027-1

⁎ 30µ gold on mating end
‡ Gold flash on mating end

HD-20 Front Metal-Shell Straight Posted w/ACTION PIN

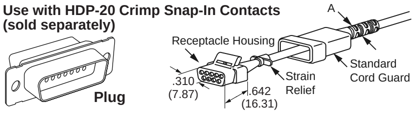
Material and Finish: Front Shell: Steel, tin plated **Housing:** 94V-0 rated thermoplastic, black **Threaded Inserts:** Brass, unplated **Female Screwlocks:** Zinc **Action Pin Contacts:** Copper alloy duplex plated **Plating (except 749892-1):** 30µ gold on mating end, tin-lead on Action Pin post surface, with entire contact 50µ (min.) nickel underplated; **Plating for 749892-1 only:** Gold flash on mating end, tin-lead on Action Pin post surface, with entire contact 50µ (min.) nickel underplated


Female w/Std. Mtg. Holes
Male w/Threaded Insert
Male w/Fixed Female Screwlock

No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	25	AMP Part No.
With Standard Mounting Holes					
9	Female	A23116-ND	6.03	5.03	747089-2
15	Female	A23119-ND	8.67	7.23	747140-2
37	Female	A23125-ND	15.00	12.50	747713-2
50	Female	A23122-ND	21.36	17.80	747143-2
With Threaded Inserts					
9	Female	A23117-ND	5.31	4.43	747090-2
9	Male	A23132-ND	13.02	10.85	786830-1
15	Female	A23120-ND	7.98	6.65	747141-2
25	Female	A23114-ND	7.80	6.50	745925-2
25	Male	A23128-ND	26.88	22.40	748146-4
37	Female	A23126-ND	14.13	11.78	747714-2
37	Male	A23131-ND	34.68	28.90	786534-1
50	Female	A23123-ND	16.23	13.53	747144-2
50	Male	A23130-ND	21.96	18.30	749892-1
With Fixed Female Screwlocks					
9	Female	A23118-ND	7.77	6.48	747091-2
15	Female	A23121-ND	8.58	7.15	747142-2
15	Male	A23133-ND	13.50	11.25	787177-1
25	Female	A23115-ND	8.37	6.98	745928-2
25	Male	A23129-ND	12.36	10.30	748146-6
37	Female	A23127-ND	13.89	11.58	747715-2
50	Female	A23124-ND	17.52	14.60	747145-2

HDJ-20 All Plastic Jacketed Cable Connector

Use with HDP-20 Crimp Snap-In Contacts (sold separately)

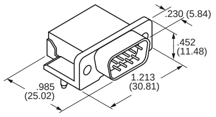


No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
9	Receptacle	A23471-ND*	.79	.66	207752-3
9	Plug	A23472-ND	2.58	2.15	745018-1
—	Steel Stain Relief	A23464-ND	.15	.13	61831-1

No. of Pos.	Dim. Inch (mm) A	Digi-Key Part No.	Price Each 1	25	AMP Part No.
HDJ-20 Standard Cord Guards - Black Thermoplastic					
9	.234 (5.94)	A23465-ND	.86	.72	207753-1
HDJ-20 Squeeze-to-Release Cord Guards - Black Thermoplastic					
9	.200 (5.08)	A23466-ND	1.18	.99	745002-1
9	.265 (6.73)	A23467-ND	.87	.73	745002-2

* 94V-0 rated thermoplastic black

Plug Assemblies



HDJ-20 All-Plastic Plug Assemblies with Right-Angle Posted Contacts

Material and Finish: Housing and Post Spacer: Black thermoplastic, 94V-2 rated **Pin Contacts (Posted):** Brass, plated as follows: **A:** Gold flash on mating end, tin-lead on solder posts, entire contact nickel underplated

No. of Positions	Plating Type	Digi-Key Part No.	Price Each 1	25	AMP Part No.
9	A	A23474-ND	7.32	6.10	745001-3

AMP tyco Electronics
Authorized Distributor

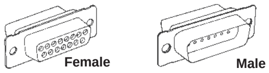
AMPLIMITE®

D-Sub Connectors

HDP-20 Zinc and Tin Plated Metal Shell

Crimp Type

Pins and Sockets Sold Separately



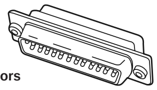
Material and Finish: Shell: Steel, zinc or tin plated **Insert:** 94V-0 rated thermoplastic, black **Mounting Holes: Standard:** .120” (3.05mm) Dia. **Clinch Nut:** 4-40 threads with self-locking feature

Mounting Method: 1: Standard; **2:** Clinch Nut; **3:** Floating Bushing

No. of Pos.	Sex	Mtg. Meth.	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Zinc Plated Shell						
9	Male	1	A1000-ND	1.01	.91	205204-1
9	Female	1	A1001-ND	1.18	1.06	205203-1
9	Female	3	A23410-ND	6.24	5.20	205439-1
15	Male	1	A1002-ND	1.47	1.32	205206-1
15	Female	1	A1003-ND	1.31	1.18	205205-1
25	Male	1	A1004-ND	1.30	1.17	205208-1
25	Female	1	A1005-ND	1.13	1.02	205207-1
37	Male	1	A1006-ND	1.83	1.58	205210-1
37	Female	1	A1007-ND	1.83	1.58	205209-1
50	Male	1	A2037-ND	2.23	1.93	205212-1
50	Female	1	A2041-ND	2.23	1.93	205211-1
Tin Plated Shell Without Grounding Indents						
9	Male	1	A1030-ND	1.35	1.21	205204-3
9	Female	1	A1031-ND	.84	.76	205203-3
9	Female	2	A23416-ND	4.09	3.42	745907-1
15	Male	1	A1032-ND	1.57	1.35	205206-2
15	Female	1	A1033-ND	.93	.84	205205-2
15	Female	2	A23417-ND	3.93	3.28	745909-1
25	Male	1	A1034-ND	.99	.86	207464-1
25	Female	1	A1035-ND	1.05	.95	207463-1
25	Female	2	A23411-ND	3.90	3.25	207516-3
37	Male	1	A1036-ND	1.83	1.58	205210-2
37	Female	1	A1037-ND	1.26	1.14	205209-2
37	Female	2	A23412-ND	5.61	4.68	207661-3
50	Male	1	A2038-ND	4.99	4.30	205212-2
50	Female	1	A2042-ND	2.23	1.93	205211-2
Tin Plated Shell With Grounding Indents						
9	Male	1	A1038-ND	.88	.80	205204-4
9	Male	2	A23415-ND	3.82	3.19	745906-2
15	Male	1	A1039-ND	1.05	.95	205206-3
25	Male	1	A1040-ND	.93	.83	207464-2
25	Male	2	A23413-ND	5.10	4.25	745036-2
37	Male	2	A23414-ND	5.19	4.33	745135-2
37	Male	1	A1041-ND	1.77	1.59	205210-3
50	Male	1	A2039-ND	1.89	1.70	205212-3

Series 109 Connectors for Crimp, Snap-In Contacts

(Per MIL-C-24308 Qualified Connectors)



Class G steel shell has cadmium plating per ASTM-B633.

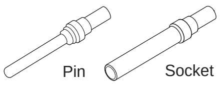
Pins and Sockets Sold Separately
Only use sockets for Series 109 Connectors

No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Crimp Type					
9	Male	A2150-ND	4.79	4.13	205162-1
9	Female	A2155-ND	4.35	3.75	205161-1
15	Male	A2151-ND	4.79	4.13	205164-1
15	Female	A2156-ND	5.28	4.55	205163-1
25	Male	A2152-ND	5.51	4.75	205166-1
25	Female	A2157-ND	5.51	4.75	205165-1
37	Male	A2153-ND	7.11	6.13	205168-1
37	Female	A2158-ND	7.11	6.13	205167-1
50	Male	A2154-ND	8.56	7.38	205170-1
50	Female	A2159-ND	8.56	7.38	205169-1

Series 109 Screw-Machined Pins & Sockets

CRIMP TYPE

Pin Diameter: .040” (1.02mm)



MATERIAL: • **Pin Body** – Copper Alloy • **Socket Body** – Beryllium Copper • **Finish:** 50µ Gold • **Contact Size:** 20 DM • **Pin Diameter:** .040” (1.02mm) • **Test Current:** 7.5 amperes

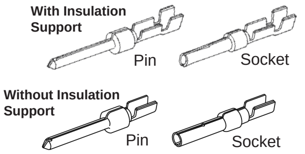
Description	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
50µ Gold				
Pin (24-20 AWG)	A2160-ND	.99	.61	205089-1
Socket (24-20 AWG)	A2161-ND	1.47	.91	205090-1

Description	Digi-Key Part No.	Price Each	AMP Part No.
Insertion/Extraction Tool for Series 109 D-Sub Crimp Contacts	A9979-ND	15.75	91285-1
Hand Crimping Tool for Screw-Machined Contacts (20DM)	A9977-ND	453.53	601966-1
Positioner (Use with A9977-ND)	A9797-ND	112.50	601966-5

HDP-20 Pins & Sockets

Crimp Type

Pin Dia.: .040” (1.02mm)



Material: Pin: Brass – Phosphor bronze per QQ-B-750

Plated: A: Select – Gold flash over nickel on entire contact, with additional 30µ gold on mating end; **B:** Duplex – 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated; **C:** Gold flash over nickel on entire contact; **D:** Duplex – Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

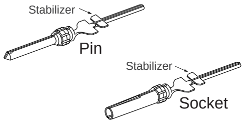
Desc.	AWG (mm)	Ins.Dia. In. (mm)	Cont. Fin.	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	AMP Part No.
With Insulation Support										
Pin	28-24	.040 (1.02)	A	A1630-ND	.20	.14	66507-9	A23713-ND	53.89	66507-3
Socket	28-24	.040 (1.02)	A	A1632-ND	.34	.24	66505-9	A23718-ND	58.03	66505-3
Pin	28-24	.040 (1.02)	B	A23039-ND	.27	.19	5-66507-7	A23020-ND	39.71	3-66507-0
Socket	28-24	.040 (1.02)	B	—	—	—	6-66505-2	A23024-ND	51.98	6-66505-0
Pin	28-24	.040 (1.02)	C	A23004-ND	.27	.19	1-66507-0	A23714-ND	51.98	66507-4
Socket	28-24	.040 (1.02)	C	A23003-ND	.20	.14	1-66505-0	A23022-ND	72.54	66505-4
Pin	28-24	.040 (1.02)	D	—	—	—	—	A23021-ND	33.26	3-66507-1
Socket	28-24	.040 (1.02)	D	—	—	—	—	A23040-ND	51.98	5-66505-7
Pin	28-24	.060 (1.52)	A	A23027-ND	.31	.22	66682-4	A23026-ND	43.52	66682-2
Socket	28-24	.060 (1.52)	A	A23031-ND	.34	.24	66683-4	A23030-ND	82.21	66683-2
Pin	28-24	.060 (1.52)	B	—	—	—	1-66682-1	A23029-ND	66.38	66682-9
Socket	28-24	.060 (1.52)	B	—	—	—	—	A23005-ND	96.64	1-66683-0
Pin	28-24	.060 (1.52)	D	—	—	—	—	A23028-ND	57.14	66682-6
Socket	28-24	.060 (1.52)	D	—	—	—	—	A23053-ND	69.55	66683-7
Pin	26-22	.050 (1.27)	A	A24209-ND	.31	.22	745254-6	A24210-ND	67.90	745254-2
Socket	26-22	.050 (1.27)	A	A23722-ND	.32	.23	745253-6	A23034-ND	96.50	745253-2
Pin	26-22	.050 (1.27)	B	A23015-ND	.28	.20	1-745254-6	A23014-ND	115.47	1-745254-4
Socket	26-22	.050 (1.27)	B	A23011-ND	.30	.21	1-745253-6	A23010-ND	90.42	1-745253-4
Pin	26-22	.050 (1.27)	C	A23038-ND	.28	.20	745254-7	A23037-ND	81.55	745254-3
Socket	26-22	.050 (1.27)	C	A23036-ND	.30	.21	745253-7	A23035-ND	98.66	745253-3
Pin	26-22	.050 (1.27)	D	A23013-ND	.25	.18	1-745254-3	A23012-ND	57.14	1-745254-1
Socket	26-22	.050 (1.27)	D	—	—	—	—	A23008-ND	83.74	1-745253-1
Pin	24-20	.060 (1.52)	A	A1679-ND	.18	.17	66506-9	A23715-ND	42.29	66506-3
Socket	24-20	.060 (1.52)	A	A1680-ND	.19	.17	66504-9	A23719-ND	58.03	66504-3
Pin	24-20	.060 (1.52)	B	A23042-ND	.27	.19	5-66506-7	A23716-ND	38.26	2-66506-4
Socket	24-20	.060 (1.52)	B	A23023-ND	.30	.21	6-66504-0	A23720-ND	43.66	5-66504-9
Pin	24-20	.060 (1.52)	C	A1008-ND	.18	.17	1-66506-0	A23717-ND	62.37	66506-4
Socket	24-20	.060 (1.52)	C	A1009-ND	.19	.17	1-66504-0	A23721-ND	40.19	66504-4
Pin	24-20	.060 (1.52)	D	A23043ND	.24	.17	5-66506-9	A23044-ND	35.34	2-66506-5
Socket	24-20	.060 (1.52)	D	—	—	—	—	A23606-ND	39.50	5-66504-6

Desc.	AWG (mm)	Ins.Dia. In. (mm)	Cont. Fin.	Digi-Key Part No.	Strip Form Pricing 10	Strip Form Pricing 100	AMP Part No.
Without Insulation Support							
Pin	28-24	.068 (1.73)	A	A23019-ND	1.65	11.50	205310-2
Socket	28-24	.068 (1.73)	A	A23055-ND	3.45	24.09	205311-3
Pin	24-20	.068 (1.73)	A	A23017-ND	1.65	11.51	205202-2
Socket	24-20	.068 (1.73)	A	A23016-ND	1.96	13.68	205201-3
Pin	24-20	.068 (1.73)	C	A23018-ND	1.57	11.00	205202-6
Socket	24-20	.068 (1.73)	C	A23054-ND	1.66	11.63	205201-6
Pin	22-18	.068 (1.73)	A	A23032-ND	1.65	11.51	745229-2
Socket	22-18	.068 (1.73)	A	A23033-ND	1.48	10.32	745230-2
Pin	22-18	.068 (1.73)	B	A23006-ND	1.27	8.84	1-745229-1
Socket	22-18	.068 (1.73)	B	A23007-ND	1.98	13.83	1-745230-1

Description	Digi-Key Part No.	Price Each	AMP Part No.
Crimp Tool for D-Sub Contacts w/Die	A9990-ND	154.50	58448-2
Die Set for D-Sub Contacts, use w/A9996	A9814-ND	117.00	58448-3
Pro-Crimper II Hand Tool w/o Die	A9996-ND	75.00	354940-1
Pin Insertion/Extraction Tool for Snap-In Contacts	A1010-ND	5.88	91067-2

HDP-20 Solder Post Pins & Sockets

.025” (0.64mm) Square Posted, Snap-In, Precision Formed
Pin Dia.: .040” (1.02mm)



Material: Pin: Brass **Socket:** Phosphor bronze

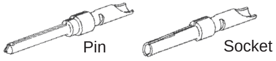
Plated: A: Duplex plated 30µ gold on mating end with entire contact 50µ min. nickel underplated; **B:** Duplex plated gold flash on mating end with entire contact 50µ min. nickel underplated

Desc.	Cont. Fin.	Post Length*	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Pin	A	.125” (3.18mm)	A23056-ND	.33	.23	745287-4
Socket	A	.125” (3.18mm)	A23048-ND	.33	.24	745288-4
Socket	B	.188” (4.78mm)	A23047-ND	.29	.21	1-745288-8
Pin	A	.427” (10.85mm)	A23058-ND	.32	.23	745287-8
Socket	A	.427” (10.85mm)	A23050-ND	.37	.26	745288-8
Pin	B	.427” (10.85mm)	A23057-ND	.26	.19	745287-6
Socket	B	.427” (10.85mm)	A23049-ND	.33	.23	745288-6
Pin	A	.651” (16.54mm)	A23059-ND	.35	.25	1-745287-2
Socket	A	.651” (16.54mm)	A23046-ND	.40	.28	1-745288-2
Pin	B	.651” (16.54mm)	A23045-ND	.27	.19	1-745287-0
Socket	B	.651” (16.54mm)	A23060-ND	.32	.23	1-745288-0

* Length of post extending from rear of HDP-20 metal-shell Connector.

HDP-20 Solder Cup Type Pins & Sockets

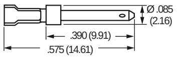
Pin Diameter: .040” (1.02mm)



Material: Pin – Brass per MIL-C-50; Socket – Phosphor bronze per QQ-B-750
Finish: Selective gold, 30µ gold over 30µ nickel

Description	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Pin, 24-20 AWG	A1028-ND	.25	.15	66570-3
Socket, 24-20 AWG	A1029-ND	.29	.27	66569-3
Pin Insertion/Extraction Tool for Snap-In Contacts	A1010-ND	5.88 Each		91067-2

HDP-20 Front Connector Pins



Precision Formed

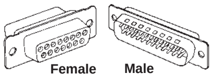
Material: Brass **Finish:** Duplex plated 10µ min. gold in the mating area, 30µ min. tin in the termination area, all over 30µ min. nickel underplating

AWG (mm)	Ins Dia. In. (mm)	Digi-Key Part No.	Pricing 10	Pricing 100	AMP Part No.
28-24	.040 (1.02)	A23052-ND	.87	6.06	6-66507-2
24-20	.060 (1.52)	A23051-ND	.57	3.96	6-66506-2

HD-20 Solder Cup

Connector comes complete with pins & sockets.

Accepts 20 AWG or smaller solid or stranded wire.



Material and Finish: Shell: Steel, tin or zinc plated **Insert:** 94V-0 rated thermoplastic, black **Contacts:** Phosphor bronze; duplex plated with gold flash on mating end, tin-lead on solder cup, with entire contact nickel underplated

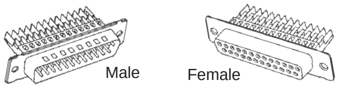
No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Tin Plated Shell					
9	Male	A2043-ND	1.83	1.64	747904-2
9	Female	A2047-ND	2.47	2.21	747905-2
15	Male	A2044-ND	2.97	2.66	747908-2
15	Female	A2048-ND	3.65	3.15	747909-2
25	Male	A2045-ND	3.47	3.11	747912-2
25	Female	A2049-ND	4.34	3.89	747913-2
37	Male	A2046-ND	5.68	4.90	747916-2
37	Female	A2050-ND	6.99	6.03	747917-2
Zinc Plated Shell					
9	Male	A23108-ND	2.01	1.68	747904-4
9	Female	A23109-ND	2.79	2.33	747905-4
15	Male	A23110-ND	2.79	2.33	747908-4
25	Male	A23111-ND	3.93	3.28	747912-4
25	Female	A23112-ND	5.04	4.20	747913-4
37	Male	A23113-ND	5.76	4.80	747916-4

AMP tyco Electronics
Authorized Distributor

AMPLIMITE®

D-Sub Connectors

HDE-20 IDC Discrete Wire Type, Metal/Plastic Shell



Material and Finish: Metal Shell: Steel, tin plated **Insert:** 94V-0 rated thermoplastic, black **Contacts:** Phosphor bronze

Plastic Housing: 94V-0 rated thermoplastic, black **Contacts:** Phosphor bronze

Contact Finish: Duplex plated; **A:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated; **B:** Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated; **C:** 50µ gold on mating end

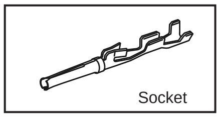
No. of Pos.	Sex	Cont. Fin.	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Metal Shell for 30-26 AWG Wire						
9	Male	A	A23081-ND	2.85	2.38	745492-1
9	Female	A	A23095-ND	3.60	3.00	745491-1
15	Male	A	A23085-ND	4.92	4.10	745494-1
15	Female	A	A23099-ND	8.19	6.83	745493-1
25	Male	A	A23088-ND	4.95	4.13	745496-1
25	Female	A	A23101-ND	6.63	5.53	745495-1
25	Male	B	A23090-ND	5.55	4.63	745496-4
37	Male	A	A23093-ND	9.18	7.65	745498-1
37	Female	A	A23105-ND	8.25	6.88	745497-1
Metal Shell for 26-22 AWG Wire						
9	Male	A	A1042-ND	3.16	2.84	745492-2
9	Female	A	A1043-ND	3.13	2.80	745491-2
9	Male	B	A23083-ND	2.61	2.18	745492-5
9	Female	B	A23097-ND	3.39	2.83	745491-5
9	Male	C	A23079-ND	4.29	3.58	1-745492-3
15	Male	A	A1044-ND	4.32	3.86	745494-2
15	Female	A	A1045-ND	4.32	3.86	745493-2
15	Male	B	A23086-ND	3.99	3.33	745494-5
15	Female	B	A23100-ND	4.38	3.65	745493-5
25	Male	A	A1046-ND	4.42	3.98	745496-2
25	Female	A	A1047-ND	6.86	6.14	745495-2
25	Male	B	A23091-ND	4.68	3.90	745496-5
25	Female	B	A23103-ND*	6.33	5.28	745495-5
25	Male	B	A23106-ND†	2.85	2.38	747740-1
25	Female	B	A23107-ND	4.95	4.13	747741-1
25	Female	C	A23080-ND	8.40	7.00	1-745495-4
37	Male	A	A1048-ND	6.89	6.17	745498-2
37	Female	A	A1049-ND	7.51	6.48	745497-2
37	Male	B	A23094-ND	6.48	5.40	745498-5
Metal Shell for 22-20 AWG Wire						
9	Male	A	A23082-ND	3.54	2.95	745492-3
9	Female	A	A23096-ND	3.93	3.28	745491-3
9	Male	B	A23084-ND	3.93	3.28	745492-6
15	Male	B	A23087-ND	4.08	3.40	745494-6
25	Male	A	A23089-ND	5.97	4.98	745496-3
25	Female	A	A23102-ND	5.64	4.70	745495-3
25	Male	B	A23092-ND	6.90	5.75	745496-6
25	Female	B	A23104-ND	9.21	7.68	745495-6
Plastic Shell for 30-26 AWG Wire						
9	Male	A	A23074-ND	3.36	2.80	745203-1
25	Male	A	A23076-ND	5.01	4.18	745211-1
Plastic Shell for 26-22 AWG Wire						
9	Male	A	A2000-ND	2.92	2.62	745203-2
9	Female	A	A2001-ND	2.96	2.55	745201-2
15	Male	A	A2002-ND	4.70	4.05	745207-2
15	Female	A	A2003-ND	3.89	3.35	745205-2
15	Male	B	A23075-ND	3.36	2.80	745207-5
25	Male	A	A2004-ND	4.84	4.18	745211-2
25	Female	A	A2005-ND	5.48	4.73	745209-2
25	Male	B	A23077-ND	4.68	3.90	745211-5
25	Female	B	A23078-ND	12.00	10.00	745209-5
37	Male	A	A2006-ND	6.67	5.75	745215-2
37	Female	A	A2007-ND	13.17	11.35	745213-2

* 20µ gold on mating end
† Without grounding indents

Description	Digi-Key Part No.	Price Each	AMP Part No.
T-Handle Tool for IDC D-Subs	A9980-ND	5.10	91287-1
Manual Pistol Grip Tool for Metal & All-Plastic Shell Connectors	A2031-ND	55.50	58074-1
Head Assembly Tool for D-Sub IDC Connectors	A2032-ND	175.56	58063-2
Contact Extraction Tool for Metal and All-Plastic Shell Connectors	A2033-ND	10.58	91232-1

HDE-20 Socket

Interchangeable Contacts, Crimp Snap-In Precision Formed



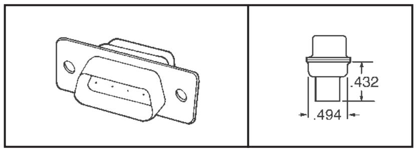
Material: Phosphor bronze **Finish:** Duplex plated 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated **Wire Size:** 22-18 AWG **Insulation Diameter:** Single Wire: .075" (1.91mm), Two Wire: .054" (1.37mm)

Desc.	Digi-Key Part No.	Strip Form Pricing 10	Strip Form Pricing 100	Strip Form Pricing 1,000	AMP Part No.
Socket	A23002-ND	1.55	10.80	76.11	745270-2

High Density D-Sub Connectors

HDP-22 Crimp Type Tin Plated Shell

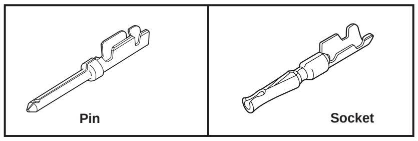
ELECTRICAL CHAR.: • Contact Rating: 5.0 amperes **• Dielectric Strength:** 1000 VAC min. **• Insulation Resist.:** 5000 megohms min.
MECHANICAL CHAR.: • Contact Insertion Force: 3 lb. max. **• Durability:** 30µ gold – 500 cycles; Gold Flash - 100 cycles



No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
15	Male	A2076-ND	2.53	2.27	748364-1
15	Female	A2081-ND	2.74	2.46	748565-1
26	Male	A2077-ND	5.07	4.54	748365-1
26	Female	A2082-ND	5.69	5.10	748566-1
44	Male	A2078-ND	5.66	5.07	748366-1
44	Female	A2083-ND	6.41	5.53	748567-1
62	Male	A2079-ND	5.49	4.92	748367-1
62	Female	A2084-ND	7.51	6.48	748568-1
78	Male	A2080-ND	6.34	5.68	748368-1
78	Female	A2085-ND	7.83	6.75	748569-1

HDP-22 Pins & Sockets

CRIMP TYPE **Pin Diameter: .030" (.76mm)**



Material: Pin – Brass **Socket –** Phosphor bronze **Finish: 30µ Gold –** Duplex plated 30µ gold on mating end, tin-lead on crimp barrel, with entire contact nickel underplated **Gold Flash –** Duplex plated gold flash on mating end, tin-lead on crimp barrel, with entire contact nickel underplated

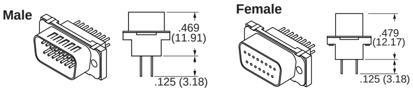
Description	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Pin (22-28 AWG), 30µ Gold	A2088-ND	.15	.09	748333-4
Socket (22-28 AWG), 30µ Gold	A2089-ND	.24	.15	748610-4
Pin (22-28 AWG), Gold Flash	A2086-ND	.18	.12	748333-7
Socket (22-28 AWG), Gold Flash	A2090-ND	.27	.17	748610-7
Socket (22-28 AWG), Gold Flash	A23000-ND*	.15	.11	748610-5

Description	Digi-Key Part No.	Price Each	AMP Part No.
Insertion/Extraction Tool for High Density D-Sub Crimp Contacts	A9979-ND	15.75	91285-1
Crimp Tool for High Density D-Sub w/Die	A9815-ND	174.75	90800-1
Die Set for High Density D-Sub Crimp Contact, use w/A9996	A9816-ND	131.25	90800-2
Pro-Crimper II Hand Tool w/o Die	A9996-ND	75.00	354940-1
Crimp Tool for High Density D-Sub Pins & Sockets	A2112-ND	428.48	90430-1

* Strip Form only.

HD-22 Front Metal-Shell Straight Posted

• **Shell:** steel, tin plated • **Housing:** 94V-O rated thermoplastic, black • **Pin Contacts (Posted) Brass:** .30µ gold on mating end, tin-lead, with entire contact 50µ min. nickel underplated

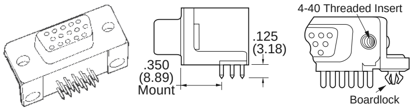


No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
4-40 Threaded Inserts					
15	Male	A23071-ND	8.10	6.75	749798-1
26	Female	A23073-ND	16.71	13.93	749030-1
62	Female	A23072-ND	28.29	23.58	747786-6

High Density D-Sub Connectors

HD-22 Right Angle

ELECTRICAL CHARACTERISTICS: • Single Contact Current Rating: 2.0 amperes **• Dielectric Withstanding Voltage:** 1000 VAC min.
MATERIAL AND FINISH: • Front Shell: Steel, tin plated **• Housing:** 94 V-0 rated **• Socket Contacts:** Phosphor bronze **• Contact Finish:** Duplex Plated: 30µ gold mating end, tin-lead on termination end, with entire contact nickel underplated



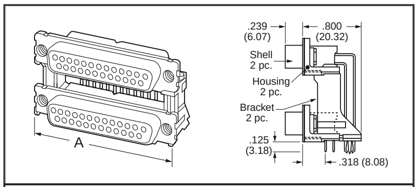
No. of Pos.	Sex	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Threaded Inserts With Boardlocks					
15	Female	A2091-ND	3.07	2.94	748390-5
26	Female	A2092-ND	9.03	7.79	748481-5
44	Female	A2093-ND	5.31	4.58	748482-5
62	Female	A2094-ND	12.01	10.35	748394-5
78	Female	A23067-ND	23.40	19.50	748483-5
15	Male	A23070-ND	2.72	2.27	749767-1
62	Male	A23069-ND	11.76	9.80	749639-1
Screwlocks With Boardlocks					
26	Female	A23066-ND	15.60	13.00	748481-6
62	Female	A23065-ND	11.73	9.78	748394-6
Threaded Inserts Without Boardlocks					
26	Female	A23063-ND*	16.14	13.45	1-748481-9

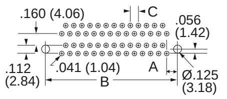
* .125" (3.18mm) diameter holes

HD-20 Right-Angle Stacked

Front Shells and Brackets: Steel, tin plated **Housings**: 94V-0 rated thermoplastic, black **PC Board**: 94V-0 flame retardant glass/epoxy

Socket: Phosphor Bronze **Contacts:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated





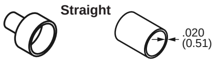
No.of Contacts	PC Board Dimensions Inch (mm) A	B	C
50	.274 (6.96)	1.852 (47.04)	.109 (2.77)

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
25-25 F-F	2.090 (53.09)	A1582-ND*	17.32	15.52	750589-4

* With Threaded Inserts

AMPLIMITE®

Die Sets and Ferrules for Shielding Hardware Kits



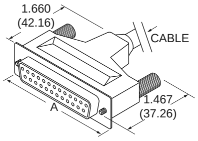
Material and Finish:
Steel (annealed), tin plated

Cable Diameter Inch (mm)	Dimension - Length Inch (mm)	Digi-Key Part No.	Price Each		AMP Part No.
			1	25	
Stepped Ferrules					
.165 - .246 (4.19 - 6.25)	.440 (11.18)	A23558-ND	.32	.27	747579-8
.230 - .265 (5.84 - 6.73)	.625 (15.88)	A23557-ND	1.32	1.10	1-747580-0
.246 - .324 (6.25 - 8.23)	.440 (11.18)	A23553-ND	.24	.20	1-747579-0
.324 - .375 (8.23 - 9.53)	.440 (11.18)	A23554-ND	.26	.22	1-747579-1
.375 - .432 (9.53 - 10.97)	.625 (15.88)	A23559-ND	.48	.40	747580-4
.422 - .490 (10.72 - 12.45)	.625 (15.88)	A23560-ND	.48	.40	747580-5
Straight Ferrules					
.375 - .435 (9.53 - 11.05)	.440 (11.18)	A23555-ND	.33	.28	1-747579-2
.400 - .455 (10.16 - 11.56)	.440 (11.18)	A23556-ND	.42	.35	1-747579-4
.480 - .562 (12.19 - 14.28)	.625 (15.88)	A23561-ND	.48	.40	747580-6

Cable Diameter Inch (mm)	Dimension - Length Inch (mm)	Digi-Key Part No.	Price Each	AMP Part No.
Crimp Tooling Stepped Ferrule Die Sets				
.165 - .190 (4.19 - 4.83)	.440 (11.18)	A23577-ND	455.85	543424-3
.190 - .217 (4.83 - 5.51)	.440 (11.18)	A23578-ND	455.85	543424-2
.217 - .246 (5.51 - 6.25)	.440 (11.18)	A23579-ND	455.85	543424-8
.246 - .284 (6.25 - 7.21)	.440 (11.18)	A23580-ND	455.85	543424-1
.284 - .324 (7.21 - 8.23)	.440 (11.18)	A23581-ND	455.85	543424-7
.324 - .375 (8.23 - 9.53)	.440 (11.18)	A23582-ND	455.85	543424-6
Crimp Tooling Straight Ferrule Die Sets				
.375 - .435 (9.53 - 11.05)	.440 (11.18)	A23583-ND	455.85	543424-5
.400 - .455 (10.16 - 11.56)	.440 (11.18)	A23584-ND	455.85	543424-4
Hand Crimping Tool (for above die sets)		A23576-ND	672.00	543344-1

Shielding Hardware Kits

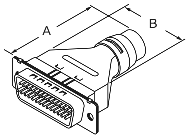
HD-20 Shielding Hardware Enclosure Kits - Solder Cup:



Kit Contents (unassembled): Connector with preloaded, nonremovable contacts, inner shield, outer shield, enclosure, and two jackscrews **(ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy • Contacts: Phosphor bronze.

No. of Pos.	Cable Insulation Dia. Inch (mm)	Max. Cable Dia. Inch (mm) †	Sex	Dimension A Inch (mm)	Digi-Key Part No.	Price Each		AMP Part No.
						1	25	
9	.190 - .375 (4.83 - 9.53)	.350 (8.89)	Male	1.350 (34.29)	A23513-ND	8.85	7.38	748046-1
15	.190 - .375 (4.83 - 9.53)	.350 (8.89)	Male	1.680 (42.67)	A23514-ND	9.84	8.20	748048-1
15	.190 - .375 (4.83 - 9.53)	.350 (8.89)	Female	1.680 (42.67)	A23515-ND	10.71	8.93	748049-1
25	.217 - .435 (5.51 - 11.05)	.350 (8.89)	Male	2.205 (56.01)	A23516-ND	11.16	9.30	748050-1
25	.217 - .435 (5.51 - 11.05)	.350 (8.89)	Female	2.205 (56.01)	A23517-ND	12.21	10.18	748051-1

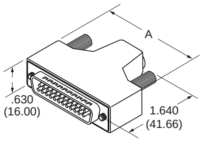
HDE-20 Basic Shielding Hardware Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield **(ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Contacts: Phosphor bronze • Contact Finish- Duplex Plated: **A:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated. **B:** Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated.

No. of Pos.	Max. Cable Diameter Inch (mm)†	Sex	Contact Finish	AWG	Dimensions - Inch (mm)		Digi-Key Part No.	Price Each		AMP Part No.
					A	B		1	25	
9	.350 (8.89)	Male	A	26-22	1.520 (38.61)	.678 (17.22)	A23518-ND	5.10	4.25	747515-2
9	.350 (8.89)	Female	A	26-22	1.520 (38.61)	.678 (17.22)	A23522-ND	5.40	4.50	747516-2
15	.350 (8.89)	Male	A	26-22	1.520 (38.61)	1.002 (25.45)	A23519-ND	6.18	5.15	747531-2
25	.350 (8.89)	Male	A	26-22	1.520 (38.61)	1.550 (39.37)	A23520-ND	7.98	6.65	747547-2
25	.350 (8.89)	Female	A	26-22	1.520 (38.61)	1.550 (39.37)	A23523-ND	8.61	7.18	747548-2
25	.350 (8.89)	Male	B	26-22	1.520 (38.61)	1.550 (39.37)	A23521-ND	7.53	6.28	747547-5
25	.350 (8.89)	Female	B	26-22	1.520 (38.61)	1.550 (39.37)	A23524-ND	7.08	5.90	747548-5
37	.450 (11.43)	Female	B	26-22	1.867 (47.42)	2.205 (56.01)	A23525-ND	11.22	9.35	747564-5

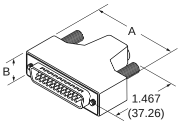
HDE-20 Basic Shielding Hardware Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield, enclosure, two jackscrews **(ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy • Contacts: Phosphor bronze • Contact Finish - Duplex Plated: **A:** 30µ gold on mating end, tin-lead on termination end, with entire contact nickel underplated **B:** Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated.

No. of Pos.	Max. Cable Dia. Inch (mm) †	Sex	Contact Finish	AWG	Dimension A Inch (mm)	Digi-Key Part No.	Price Each		AMP Part No.
							1	25	
9	.350 (8.89)	Male	A	26-22	1.355 (34.42)	A23526-ND	9.18	7.65	747944-2
9	.350 (8.89)	Male	B	26-22	1.355 (34.42)	A23527-ND	9.06	7.55	747944-5
9	.350 (8.89)	Female	A	30-26	1.355 (34.42)	A23533-ND	9.39	7.83	747943-1
9	.350 (8.89)	Female	A	26-22	1.355 (34.42)	A23534-ND	9.39	7.83	747943-2
15	.350 (8.89)	Male	A	30-26	1.685 (42.80)	A23528-ND	12.18	10.15	747946-1
15	.350 (8.89)	Male	B	26-22	1.685 (42.80)	A23529-ND	10.29	8.58	747946-5
15	.350 (8.89)	Female	A	30-26	1.685 (42.80)	A23535-ND	10.47	8.73	747945-1
25	.350 (8.89)	Male	A	30-26	2.210 (56.13)	A23530-ND	5.73	4.78	747948-1
25	.350 (8.89)	Male	A	26-22	2.210 (56.13)	A23531-ND	11.91	9.93	747948-2
25	.350 (8.89)	Male	B	26-22	2.210 (56.13)	A23532-ND	10.08	8.40	747948-5
25	.350 (8.89)	Female	A	26-22	2.210 (56.13)	A23536-ND	12.45	10.38	747947-2
25	.350 (8.89)	Female	B	26-22	2.210 (56.13)	A23537-ND	12.00	10.00	747947-5

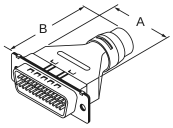
HDP-20 Shielding Hardware Enclosure Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield, enclosure, two jackscrews **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy.

No. of Pos.	Max. Cable Dia. Inch (mm) †	Sex	Dimensions - Inch (mm)		Digi-Key Part No.	Price Each		AMP Part No.
			A	B		1	25	
9	.350 (8.89)	Male	1.355 (34.42)	.630 (16.00)	A23488-ND	6.21	5.18	747952-1
9	.350 (8.89)	Female	1.355 (34.42)	.630 (16.00)	A23487-ND	6.81	5.68	747951-1
15	.350 (8.89)	Male	1.685 (42.80)	.630 (16.00)	A23490-ND	6.21	5.18	747954-1
15	.350 (8.89)	Female	1.685 (42.80)	.630 (16.00)	A23489-ND	6.69	5.58	747953-1
25	.350 (8.89)	Male	2.210 (56.13)	.630 (16.00)	A23492-ND	7.77	6.48	747956-1
25	.350 (8.89)	Female	2.210 (56.13)	.630 (16.00)	A23491-ND	8.37	6.98	747955-1
37	.450 (11.43)	Male	2.865 (72.77)	.730 (18.54)	A23494-ND	9.75	8.13	747958-1
37	.450 (11.43)	Female	2.865 (72.77)	.730 (18.54)	A23493-ND	9.84	8.20	747957-1
50	.450 (11.43)	Male	2.775 (70.49)	.730 (18.54)	A23496-ND	11.16	9.30	747960-1
50	.450 (11.43)	Female	2.775 (70.49)	.730 (18.54)	A23495-ND	15.54	12.95	747959-1

HDP-20 Basic Shielding Hardware Kits:



Kit Contents (unassembled): Connector, inner shield, outer shield **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated.

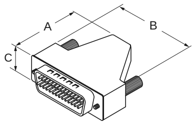
No. of Pos.	Max. Cable Diameter Inch (mm) †	Sex	Mounting Method	Dimensions - Inch (mm)		Digi-Key Part No.	Price Each		AMP Part No.
				A	B		1	25	
9	.350(8.89)	Male	Standard	.700 (17.78)	1.535 (38.99)	A23475-ND	1.75	1.46	747522-1
9	.350 (8.89)	Female	Standard	.700 (17.78)	1.535 (38.99)	A23476-ND	1.55	1.30	747523-1
9	.350 (8.89)	Male	Clinch Nut	.700 (17.78)	1.535 (38.99)	A23485-ND	6.90	5.75	748526-1
15	.350 (8.89)	Male	Standard	1.024 (26.01)	1.535 (38.99)	A23477-ND	1.87	1.56	748538-1
15	.350 (8.89)	Female	Standard	1.024 (26.01)	1.535 (38.99)	A23478-ND	1.95	1.63	747539-1
25	.350 (8.89)	Male	Standard	1.576 (40.03)	1.535 (38.99)	A23479-ND	1.94	1.62	747554-1
25	.350 (8.89)	Female	Standard	1.576 (40.03)	1.535 (38.99)	A23480-ND	1.94	1.62	747555-1
25	.350 (8.89)	Female	Clinch Nut	1.576 (40.03)	1.535 (38.99)	A23486-ND	7.20	6.00	749763-1
37	.450 (11.43)	Male	Standard	2.215 (56.26)	1.892 (48.03)	A23481-ND	3.12	2.60	747570-1
37	.450 (11.43)	Female	Standard	2.215 (56.26)	1.892 (48.03)	A23482-ND	4.65	3.88	747571-1
50	.450 (11.43)	Male	Standard	2.120 (53.85)	1.876 (47.65)	A23483-ND	5.34	4.45	747577-1
50	.450 (11.43)	Female	Standard	2.120 (53.85)	1.876 (47.65)	A23484-ND	6.21	5.18	747578-1

HDP-20 Basic Shielding Hardware Kit:

Preassembled connector kits are available in Subminiature D, shell size 2, 15-position configuration and accept crimp, snap-in HD-20 contacts. Contacts are available separately and allow for selective positioning.

No. of Pos.	Max. Cable Diameter Inch (mm) †	Sex	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
15	.0350 (8.89)	Female	A23497-ND	10.65	8.88	749246-1

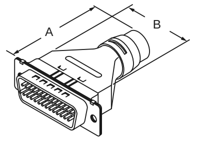
HDP-22 Shielding Hardware Enclosure Kits - Crimp Snap-In Contact Connectors:



Kit Contents (unassembled): Connector, inner shield, outer shield, enclosure, two jackscrews **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated • Enclosure: PVC, black • Jackscrews: Zinc alloy.
Plugs accept size 22 DF pin contacts and receptacles accept size 22 DF socket contacts.

No. of Pos.	Max. Cable Diameter Inch (mm) †	Sex	Dimensions - Inch (mm)			Digi-Key Part No.	Price Each		AMP Part No.
			A	B	C		1	25	
15	.350 (8.89)	Male	1.640 (41.66)	1.355 (34.42)	.630 (16.00)	A23506-ND	10.08	8.40	748473-1
15	.350 (8.89)	Female	1.640 (41.66)	1.355 (34.42)	.630 (16.00)	A23510-ND	10.89	9.08	748639-1
26	.350 (8.89)	Male	1.640 (41.66)	1.685 (42.80)	.630 (16.00)	A23507-ND	10.92	9.10	748474-1
26	.350 (8.89)	Female	1.640 (41.66)	1.685 (42.80)	.630 (16.00)	A23511-ND	11.79	9.83	748640-1
62	.450 (11.43)	Male	2.010 (51.05)	2.860 (72.64)	.730 (18.54)	A23508-ND	14.22	11.85	748476-1
62	.450 (11.43)	Female	2.010 (51.05)	2.860 (72.64)	.730 (72.64)	A23512-ND	15.27	12.73	748642-1
78	.450 (11.43)	Male	2.010 (51.05)	2.770 (70.36)	.730 (18.54)	A23509-ND	15.48	12.90	748477-1

HDP-22 Basic Shielding Hardware Kits - Crimp Snap-In Contact Connectors:

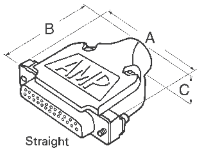


Kit Contents (unassembled): Connector, inner shield, outer shield **(contacts and ferrules must be purchased separately). Material and FInish:** • Connector Shell: Steel, tin plated • Connector Insert: 94V-0 rated thermoplastic, black • Shield: Steel, tin plated.
Plugs accept size 22 DF pin contacts and receptacles accept size 22 DF socket contacts.

No. of Pos.	Max. Cable Dia. Inch (mm) †	Sex	Dimensions - Inch (mm)		Digi-Key Part No.	Price Each		AMP Part No.
			A	B		1	25	
15	.350 (8.89)	Male	1.535 (38.99)	.700 (17.78)	A23498-ND	1.87	1.56	748468-1
15	.350 (8.89)	Female	1.535 (38.99)	.700 (17.78)	A23503-ND	2.61	2.18	748634-1
26	.350 (8.89)	Male	1.535 (38.99)	1.024 (26.01)	A23499-ND	7.35	6.13	748469-1
26	.350 (8.89)	Female	1.535 (38.99)	1.024 (26.01)	A23504-ND	8.31	6.93	748635-1
44	.350 (8.89)	Male	1.535 (38.99)	1.576 (40.03)	A23500-ND	8.37	6.98	748470-1
62	.450 (11.43)	Male	1.892 (48.06)	2.215 (56.26)	A23501-ND	10.08	8.40	748471-1
78	.450 (11.43)	Male	1.876 (47.65)	2.120 (53.85)	A23502-ND	10.50	8.75	748472-1
78	.450 (11.43)	Female	1.876 (47.65)	2.120 (53.85)	A23505-ND	22.35	18.63	748638-1

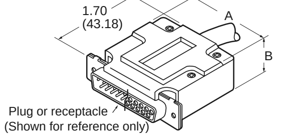
† Maximum cable diameter after jacket and braid removed.

Fig. 1



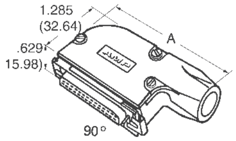
Die Cast Shield: Zinc alloy, plated nickel over copper. **Metal-Plated Plastic Shield:** Thermoplastic, plated nickel over copper. **Plastic Shield:** Thermoplastic, black.

Fig. 2



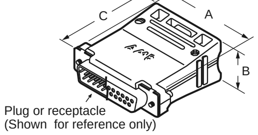
Cable Clamp Housing: Thermoplastic, black with textured finish. **Gates:** Thermoplastic, black. **Flat Head Screws:** Steel, black, zinc plated.

Fig. 3



ETHERNET Slide-locking hood. 90° exit RFI/EMI die cast shields. **Shield:** Zinc alloy, plated nickel over copper.

Fig. 4



Cable Clamp Housing: Thermoplastic **4-40 Mounting Screws:** Steel, zinc plated. **Flat 4-40 Housing Screws:** Steel, zinc plated.

Fig. 5

Plastic Shield: Each kit contains: 1-Hinged Plastic Clamp, 2-Retention Screws, 2-Retention Clips, 1-Cable Gate Plug, 1-Strain Relief Clip, 2-Self Tapping Screws, 1-Connector and Contacts. **Material and Finish: Cover:** Polypropylene, black. **Retention/Self-Tapping Screws:** Steel, zinc plated. **Retention Clips/Strain Relief Clip:** Stainless steel. **Cable Gate Plug:** Polypropylene.

Plastic Shield w/ Connector: Each kit contains: 1-Hinged Plastic Clamp, 2-Self Tapping Screws, 1-Strain Relief Clip, 1-Cable exit gate plug (used to close unused exit). **Material and Finish: Cover:** Polypropylene, black. **Strain Relief Clip:** Stainless steel. **Retainer Clip:** Stainless steel. **Screws:** Carbon steel, zinc plated.

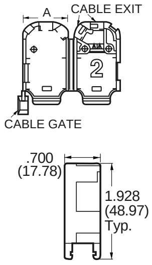
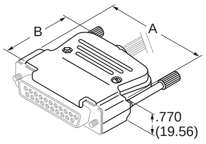
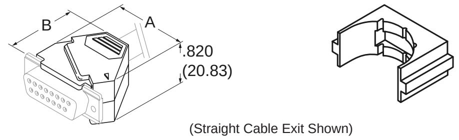


Fig. 6



Cable Clamp Housing: Polyester, black. **4-40 Fillister Head Screws & Hex Nuts:** Steel, clear zinc plated. **Jackscews:** Steel, black zinc plated

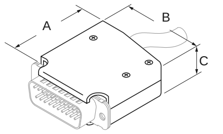
Fig. 7



(Straight Cable Exit Shown)

Straight/90° Exit Cable Clamps can be used on a plug or receptacle and will not interfere with commonly used mating hardware. Their three-piece construction allows easy assembly to a cable harness. Also, the same cable clamp components are used for both straight and 90° cable exit applications. This is accomplished by simply positioning the Male and Female Panels on the Yoke for the desired angle. **Material:** Thermoplastic, black.

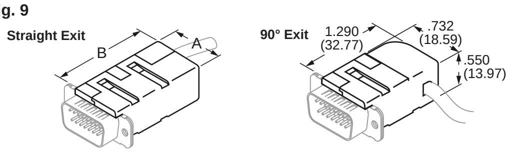
Fig. 8



Straight/45° Exit Cable Clamps can be used on either a plug or receptacle and will not interfere with commonly used hardware, such as Male Screw Retainers, Female Screw-locks or Spring Latches and Latching Blocks. Their hinged construction allows easy assembly to a harness. Also, the straight or 45° angle of the cable exit is achieved by merely positioning the Cable Support Gate for the desired angle prior to installing the assembly onto the plug or receptacle.

Material and Finish: Cable Clamp Housing: Thermoplastic, black with textured finish. **Gates:** Thermoplastic, black. **Pan Head Screw, 6-32 Set Screw and 6-32 Square Nut:** Steel, zinc plated (9 & 15 positions include self-tapping screws only).

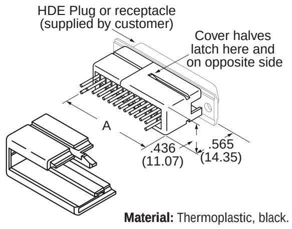
Fig. 9



Low Profile Cable Clamps feature a two piece construction which allows the two cover halves to be snapped together, no hardware is required for assembly. They can be used on plugs or receptacles and will not interfere with commonly used mating hardware. Sufficient Cable Support Gates (or a Cable Support Latch) are supplied with each cable clamp kit to achieve adjustable clamping over a wide range of jacketed cable diameters. **Material:** Thermoplastic, black.

Note: To be used with HDE connectors only.

Fig. 10



Material: Thermoplastic, black.

Fig.	No. of Pos.	Dimensions Inch (mm) A	B	C	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Shielded Straight Shell with Grommets (Hardware Included)										
1	9	1.215	1.910	.550	.320	Die Cast	A2061-ND†	5.98	5.38	748676-1
		(30.86)	(48.51)	(13.97)	(8.13)	Metal Plated	A2066-ND†	3.90	3.50	748677-1
	15	1.545	1.910	.620	.320	Die Cast	A2062-ND†	5.98	5.38	748676-2
		(39.24)	(48.51)	(15.75)	(8.13)	Metal Plated	A2067-ND†	5.92	5.10	748677-2
	25	2.090	1.920	.680	.470	Metal Plated	A2068-ND†	4.12	3.69	748677-3
		(53.09)	(48.77)	(17.27)	(11.94)	Die Cast	A2063-ND†	6.21	5.58	748676-3
	37	2.738	1.920	.800	.470	Die Cast	A2064-ND†	8.97	8.04	748676-4
		(69.55)	(48.77)	(20.32)	(11.94)	Metal Plated	A2069-ND†	9.43	8.13	748677-4
	50	2.644	1.920	.900	.470	Die Cast	A2065-ND†	10.12	8.73	748676-5
		(67.16)	(48.77)	(22.86)	(11.94)	Metal Plated	A2070-ND†	15.60	13.45	748677-5
Shielded Straight Shell (Must Order Ferrule & Grommets Separately)										
1	9	1.215	1.910	.550	.200	Die Cast	A2008-ND	7.05	6.32	745171-2
		(30.86)	(48.51)	(13.97)	(5.08)	Metal Plated	A23656-ND	4.23	3.53	745854-5
					.250	Die Cast	A2009-ND	6.27	5.62	745171-1
					(6.35)	Metal Plated	A23655-ND	3.80	3.17	745854-3
					.370	Die Cast	A23637-ND	7.41	6.18	745171-5
					(9.40)	Metal Plated	A23654-ND	4.20	3.50	745854-1
	15	1.545	1.910	.620	.225	Die Cast	A2012-ND	7.28	6.50	745172-3
		(39.24)	(48.51)	(15.75)	(5.72)	Metal Plated	A23662-ND	5.82	4.85	747099-7
					.300	Die Cast	A2013-ND	8.03	7.22	745172-2
					(7.62)	Metal Plated	A23661-ND	5.82	4.85	747099-5
					.375	Die Cast	A2014-ND	6.96	6.21	745172-1
					(9.53)	Metal Plated	A23660-ND	4.11	3.43	747099-3
					.430	Die Cast	A23638-ND	6.90	5.75	1-745172-3
					(10.92)	Metal Plated	A23659-ND	5.82	4.85	747099-1
		1.545	1.805	.620	.300 (7.72)	Die Cast	A23674-ND	9.42	7.85	745919-3
		(39.24)	(45.85)	(15.75)	.375 (9.53)	Die Cast	A23673-ND	7.83	6.53	745919-2
	25	2.090	1.920	.680	.280	Die Cast	A2020-ND	8.42	7.54	745173-5
		(53.09)	(48.77)	(17.27)	(7.11)	Metal Plated	A23653-ND	3.80	3.17	745833-9
					.350	Die Cast	A2021-ND	6.63	5.96	745173-4
					(8.89)	Metal Plated	A23652-ND	4.38	3.65	745833-7
					.430	Die Cast	A2022-ND	6.63	5.96	745173-3
					(10.92)	Metal Plated	A23651-ND	4.23	3.53	745833-5
					.480	Die Cast	A23640-ND	8.13	6.78	745173-2
					(12.19)	Metal Plated	A23650-ND	5.88	4.90	745833-3
					.530 (13.46)	Metal Plated	A23649-ND	5.97	4.98	745833-1
Shielded Straight Shell (Must Order Ferrule & Grommets Separately) cont.										
1	37	2.738	1.920	.800	.350	Die Cast	A2028-ND	6.63	5.94	745174-5
		(69.55)	(48.77)	(20.32)	(8.89)	Metal Plated	A23667-ND	8.85	7.38	747100-9
					.425	Die Cast	A2029-ND	8.97	8.04	745174-4
					(10.80)	Metal Plated	A23666-ND	6.03	5.03	747100-7
					.500	Die Cast	A2030-ND	5.17	4.63	745174-3
					(12.70)	Metal Plated	A23665-ND	6.90	5.75	747100-5
					.530 (13.46)	Die Cast	A23639-ND	10.44	8.70	2-745174-7
					.575	Die Cast	A23642-ND	8.22	6.85	745174-2
					(14.61)	Metal Plated	A23664-ND	8.79	7.33	747100-3
					.650	Die Cast	A23641-ND	8.28	6.90	745174-1
					(16.51)	Metal Plated	A23663-ND	6.03	5.03	747100-1
	50	2.644	1.920	.900	.375 (9.53)	Die Cast	A23648-ND	8.37	6.98	745175-6
		(67.16)	(48.77)	(22.86)	.450	Die Cast	A23647-ND	8.61	7.18	745175-5
					.525 (13.34)	Die Cast	A23646-ND	8.43	7.03	745175-4
					.600	Die Cast	A23645-ND	8.61	7.18	745175-3
					(15.24)	Metal Plated	A23657-ND	6.21	5.18	747098-5
					.675 (17.15)	Die Cast	A23644-ND	8.52	7.10	745175-2
					.750 (19.05)	Die Cast	A23643-ND	8.37	6.98	745175-1
Straight Shield with Grommets (Hardware Included)										
1	9	1.215 (30.86)	1.910 (48.51)	.570 (14.48)	.320 (8.13)	Plastic, Black	A2071-ND†	3.22	2.89	748678-1
	15	1.545 (39.24)	1.910 (48.51)	.620 (15.75)	.320 (8.13)	Plastic, Black	A2072-ND†	4.38	3.78	748678-2
	25	2.090 (53.09)	1.920 (48.77)	.680 (17.27)	.470 (11.94)	Plastic, Black	A2073-ND†	3.44	3.08	748678-3
	37	2.738 (69.55)	1.920 (48.77)	.800 (20.32)	.470 (11.94)	Plastic, Black	A2074-ND†	3.65	3.15	748678-4
	50	2.644 (67.16)	1.920 (48.77)	.900 (22.86)	.470 (11.94)	Plastic, Black	A2075-ND†	6.26	5.40	748678-5

† Sold as a kit; complete with Ferrule and Grommets.

(Continued)

Hoods *(Cont.)*

Fig.	No. of Pos.	Dimensions Inch (mm) A	Dimensions Inch (mm) B	Max. Cable Diameter Inch (mm)	Descrip. (Type)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Straight / 90° Shield (Hardware Included)									
2	9	.755 (19.18)	.635 (16.13)	.160 (4.06)	Plastic	A9001-ND	2.78	2.50	207467-1
	15	1.078 (27.38)	.635 (16.13	.320 (8.13)	Plastic	A9002-ND	3.43	3.07	207470-1
	25	1.620 (41.15)	.770 (19.56)	.390 (9.91)	Plastic	A9003-ND	3.51	3.15	207345-1
	37	2.268 (57.61)	.770 (19.56)	.640 (16.26) Straight .405 (10.29) 90°	Plastic Plastic	A9004-ND	2.11	1.92	207473-1
	50	2.178 (55.32)	.880 (22.35)	.490 (12.45)		A2060-ND	3.25	2.80	207476-1
Plastic Shield with Male Screw Retainers (Hardware Included)									
2	9	.755 (19.18)	.635 (16.13)	.160 (4.06)	Plastic	A23621-ND	2.97	2.48	207908-1
	15	1.078 (27.38)	.635 (16.13	.320 (8.13)	Plastic	A23622-ND	3.73	3.11	207908-4
	25	1.620 (41.15)	.770 (19.56)	.390 (9.91)	Plastic	A23623-ND	3.37	2.81	207908-7
	37	2.268 (57.61)	.770 (19.56)	.640 (16.26) Straight .405 (10.29) 90°	Plastic	A23617-ND	3.93	3.28	1-207908-0

Fig.	No. of Pos.	Dimension Inch (mm) A	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
90° Shell - Hardware Included (Must Order Ferrule Separately)								
3	15	2.310 (58.67)	.225 (5.72)	Die Cast	A2015-ND	11.12	9.95	745652-4
			.300 (7.62)	Die Cast	A2016-ND	8.13	7.28	745652-3
			.375 (9.53)	Die Cast	A2017-ND	8.17	7.31	745652-2
			.430 (10.92)	Die Cast	A2036-ND	7.94	7.11	745652-1
	25	2.850 (72.39)	.280 (7.11)	Die Cast	A2023-ND	9.67	8.66	745653-5
			.355 (9.02)	Die Cast	A2024-ND	9.71	8.69	745653-4
			.430 (10.92)	Die Cast	A2025-ND	16.41	14.70	745653-3
			.480 (12.19)	Die Cast	A23672-ND	17.01	14.18	745653-2
			.530 (13.46)	Die Cast	A23671-ND	15.27	12.73	745653-1
90° Shell without Slide Latch (Must Order Ferrule Separately)								
3	15	2.310 (58.67)	.375 (9.53)	Die Cast	A23670-ND	8.88	7.40	745918-2

Fig.	No. of Pos.	Dimensions Inch (mm) A	Dimensions Inch (mm) B	Dimensions Inch (mm) C	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Straight / 90° Shield (Hardware Included)										
4	15	1.550 (39.37)	.826 (20.98)	1.750 (44.45)	.350 (8.89)	Plastic, Gray	A2055-ND	3.36	2.90	206471-1
	25	2.090 (53.09)	.826 (20.98)	1.750 (44.45)	.335 (8.51)	Plastic, Gray	A2056-ND	3.36	2.90	206472-1
		2.090 (53.09)	.826 (20.98)	1.750 (44.45)	.460 (11.68)	Plastic, Gray	A2057-ND	3.34	2.88	745134-1
		2.090 (53.09)	.740 (18.80)	2.100 (53.34)	.530 (13.46)	Plastic, Black	A23636-ND	5.76	4.80	747824-1
	37	2.738 (69.55)	.826 (20.98)	1.750 (44.45)	.675 (17.15)	Plastic, Gray	A2058-ND	3.51	3.03	745081-1
	50	2.644 (67.16)	.938 (23.83)	1.750 (44.45)	.775 (19.69)	Plastic, Gray	A2059-ND	3.65	3.15	745082-1

Fig.	No. of Pos.	Dimension Inch (mm) A	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Plastic Shield (Hardware Included)								
5	9	.782 (19.86)	.250 (6.35)	w/Screws	A2051-ND	1.74	1.50	749914-2
				w/out Screws	A23608-ND	2.37	1.98	750100-1
	15	1.105 (28.07)	.380 (9.65)	w/Screws	A2052-ND	1.71	1.48	749915-2
				w/out Screws	A23609-ND	2.40	2.00	750101-1
	25	1.650 (41.91)	.460 (11.68)	w/Screws	A2053-ND	1.77	1.53	749626-2
				w/out Screws	A23607-ND	1.35	1.13	750078-1
	37	2.296 (58.32)	.550 (13.97)	w/Screws	A2054-ND	2.44	2.10	749916-2
Plastic Shield with Connector (Hardware Included)								
5	9	.782 (19.86)	.250 (6.35)	Plug/HDP-20	A23610-ND	6.18	5.15	749808-4
	15	1.105 (28.07)	.380 (9.65)	Plug/HDE-20	A23613-ND	10.17	8.48	749809-2
	25	1. 650 (41.91)	.460 (11.68)	Plug/HDP-20	A23612-ND	6.54	5.45	749808-6
				Recept./HDP-20	A23615-ND	4.44	3.70	749812-3
				Plug/HDE-20	A23614-ND	5.85	4.88	749809-3
				Recept./HDE-20	A23616-ND	5.94	4.95	749813-3

Fig.	No. of Pos.	Dimensions Inch (mm) A	Dimensions Inch (mm) B	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Unshielded Dataphone									
6	15	1.575 (40.01)	1.312 (33.32)	.400 (10.16)	Straight	A23603-ND	9.54	7.95	745122-2
	25	2.115 (53.72)	1.421 (36.09)	.500 (12.7)	Straight	A23602-ND	8.46	7.05	745121-2
7	25	1.906 (48.41) 2.066 (52.48)	1.672 (42.47) 1.396 (35.46)	.550 (13.97) .550 (13.97)	Straight 90°	A23604-ND	4.20	3.50	745306-1
	37	2.424 (61.57) 2.638 (67.01)	1.820(46.23) 1.596 (40.54)	.750 (19.05) .750 (19.05)	Straight 90°	A23605-ND	10.62	8.85	745311-1

Fig.	No. of Pos.	Dimensions Inch (mm) A	Dimensions Inch (mm) B	Dimensions Inch (mm) C	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Straight / 45° Exit Unshielded Shell (Hardware Included)										
8	9	1.625 (41.28)	.750 (19.05)	.620 (15.75)	.256 (6.50)	Plastic	A23627-ND	2.37	1.98	205729-1
	15	1.250 (31.75)	1.073 (27.25)	.580 (14.73)	.320 (8.13)	Plastic	A23632-ND	3.69	3.08	206393-1
	15	1.625 (41.28)	1.073 (27.25)	.620 (15.75)	.320 (8.13)	Plastic	A23628-ND	2.88	2.40	205730-1
	25	1.250 (31.75)	1.615 (41.02)	.580 (14.73)	.420 (10.67)	Plastic	A23631-ND	3.60	3.00	206390-1
	25	1.625 (41.28)	1.615 (41.02)	.620 (15.75)	.420 (10.67)	Plastic	A23626-ND	2.17	1.82	205718-1
	37	1.625 (41.28)	2.263 (57.48)	.620 (15.75)	.490 (12.45)	Plastic	A23629-ND	3.00	2.50	205731-1
	50	1.625 (41.28)	2.168 (55.07)	.730 (18.54)	.600 (15.24)	Plastic	A23630-ND	3.33	2.78	205732-1
Straight / 45° Exit Shell with Male Screw Retainers (Hardware Included)										
8	9	1.625 (41.28)	.750 (19.05)	.620 (15.75)	.256 (6.50)	Plastic	A23633-ND	2.45	2.05	206478-1
	25	1.250 (31.75)	1.615 (41.02)	.580 (14.73)	.420 (10.67)	Plastic	A23625-ND	4.14	3.45	1-206478-2
	25	1.625 (41.28)	1.615 (41.02)	.620 (15.75)	.420 (10.67)	Plastic	A23635-ND	2.57	2.15	206478-3

Fig.	No. of Pos.	Dimensions Inch (mm) A	Dimensions Inch (mm) B	Max. Cable Diameter Inch (mm)	Description (Type)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Unshielded Low Profile for Jacketed Cable									
9	9	.732 (18.59)	1.582 (40.18)	.330 (8.38)	Straight	A23592-ND‡	6.93	5.78	745547-1
		—	—	.330 (8.38)	90°	A23594-ND‡	3.06	2.55	745550-1
	15	1.056 (26.82)	1.582 (40.18)	.425 (10.80)	Straight	A23595-ND‡	9.15	7.63	745553-1
	25	1.604 (40.74)	1.700 (43.18)	.550 (13.97)	Straight	A23596-ND‡	2.88	2.40	745560-1

‡ To be used with HDE connectors only.

Fig.	No. of Positions	Dimension Inch (mm) A	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Unshielded Plastic Slide-On Back Covers						
10	9	.610 (15.49)	A23598-ND	1.54	1.29	745530-1
	15	.934 (23.72)	A23599-ND	4.29	3.58	745530-2
	25	1.482 (37.64)	A23600-ND	4.35	3.63	745530-3
	37	2.134 (54.20)	A23601-ND	4.42	3.69	745530-4

AMPLIMITE® Ferrules For Metal Shell Hoods

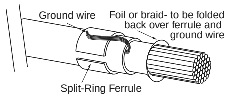
Split-Ring Ferrules for Foil or Braided Cable Shield
- Material: Aluminum

Crimp Ferrules for Braided Cable Shield
- Material and Finish:
  Outer Ferrule: Copper, plated 100µ min. tin
  Inner Ferrule: .023" (0.58mm) thick brass, plated 50µ tin over copper

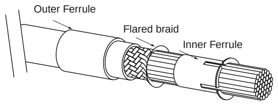
No. of Pos.	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Split-Ring Ferrules					
9	.200 (5.08)	A2010-ND	.22	.20	745508-2
9/15	.225 - .240 (5.72 - 6.10)	A2011-ND	.22	.21	745508-3
9/15/50	.370 - .375 (9.40 - 9.53)	A2019-ND	.22	.21	745508-6
15/25	.280 - .300 (7.11 - 7.62)	A2026-ND	.22	.21	745508-4
25/37	.350 (8.89)	A2027-ND	.22	.21	745508-5
15/25/37	.430 (10.92)	A2034-ND	.38	.35	745508-1
25/37	.480 - .500 (12.19 - 12.70)	A2035-ND	.22	.21	745508-8
50	.525 (13.34)	A23575-ND	1.22	1.02	745508-9

No. of Pos.	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Inner Crimp Ferrules					
9/50	.240 (6.10)	A23564-ND	1.19	1.00	1-745129-8
9	.280 (7.11)	A23572-ND	1.39	1.17	3-745129-4
9/50	.365 - .370 (9.27 - 9.40)	A23563-ND	1.96	1.63	1-745129-7
15/37	.350 (8.90)	A23570-ND	.61	.51	2-745129-0
15/37	.430 (10.92)	A23565-ND	1.26	1.05	1-745129-9
37	.525 (13.34)	A23597-ND	2.80	2.34	2-745129-6
Outer Crimp Ferrules					
9/50	.240 (6.10)	A23573-ND	.81	.68	745130-8
9/15/37	.280 (7.11)	A23569-ND	.91	.76	1-745130-6
9/50	.365 - .370 (9.27 - 9.40)	A23566-ND	1.86	1.55	1-745130-0
15/37	.350 (8.90)	A23574-ND	.55	.47	745130-9
15/37/50	.430 (10.92)	A23567-ND	.72	.61	1-745130-1
37	.240 (6.10)	A23562-ND	.48	.40	747580-8
37	.650 (16.51)	A23568-ND	1.46	1.22	1-745130-3

SPLIT RING FERRULE


Ground wire
Foil or braid- to be folded back over ferrule and ground wire
Split-Ring Ferrule

CRIMP FERRULE



AMP tyco Electronics
Authorized Distributor

AMPLIMITE®

Accessories / Hardware

(Sold In Packages of 2 unless otherwise noted)

Fig. 1

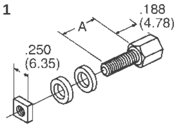


Fig. 2

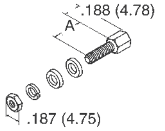
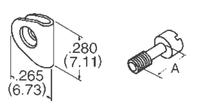


Fig. 3



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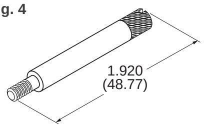


Fig. 5

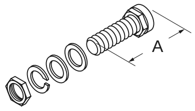


Fig. 6

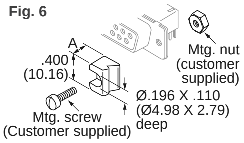


Fig. 7

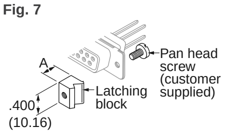


Fig. 8

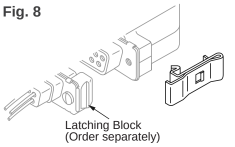


Fig. 9

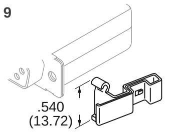


Fig. 10

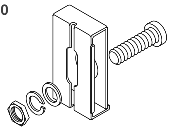
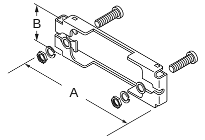


Fig. 11



Style 1: Can be used with cable clamps that do not extend beyond the front flange of the connector or on connectors without cable clamps.

Style 2: Can be used with any cable clamp that has the mounting ear configuration.

Style 3: Can be used on connectors without cable clamps or with cable clamps that do not have the mounting ear configuration.

Fig. 12

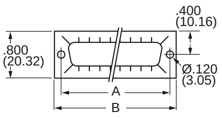


Fig. 13

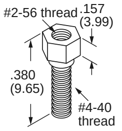


Fig. 14

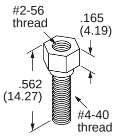


Fig. 15

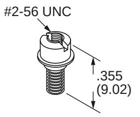


Fig. 16

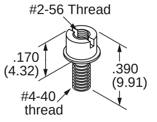


Fig. 17

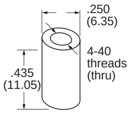


Fig.	Connector Used w/ AMP Series	Finish	Thread	Dim. – A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Female Screw Locks - Steel, Zinc Plated								
1	HD Plastic	Yellow Chromate	4-40	.250 (6.35)	A9005-ND	1.58	1.42	207952-1
2	HDE	Yellow Chromate	4-40	.250 (6.35)	A23427-ND	1.78	1.49	745563-1
	HDE	Clear Chromate	4-40	.250 (6.35)	A23428-ND	1.59	1.33	745563-3
	HDP/HDF	Yellow Chromate	4-40	.312 (7.92)	A9006-ND	1.41	1.27	205817-1
	HDP/HDF	Clear Chromate	4-40	.312 (7.92)	A23422-ND	1.31	1.10	205817-3
	HDP/HDF	Yellow Chromate	4-40, MIL-C24308	.312 (7.92)	A24835-ND	.79	.67	205817-8
	HDP/HDF	Yellow Chromate	M3 (Metric)	.312 (7.92)	A23424-ND	1.92	1.60	207872-1
	HDP/HDF	Clear Chromate	M3 (Metric)	.312 (7.92)	A23425-ND	2.88	2.40	207872-3
	HD/HDF	Yellow Chromate	4-40	.560 (14.22)	A9007-ND	1.71	1.54	207719-1
	HD/HDF	Clear Chromate	4-40	.560 (14.22)	A23423-ND	1.51	1.26	207719-3
	HD/HDF	Clear Chromate	2-56 Male (4-40 Female)	.560 (14.22)	A23429-ND	2.61	2.18	747223-3
Individual Screwlocks - Steel, Zinc Plated (washers and nuts not included)								
1	HD	Clear Chromate	4-40	.250 (6.35)	A23426-ND	1.41	1.18	207952-3
2	HDP/HDF	Clear Chromate	M2.6 (Metric) Female, (4-40 Male)	.312 (7.92)	A23432-ND	.96	.80	749765-3
	HDP/HDF	Clear Chromate	4-40	.312 (7.92)	A23430-ND	.91	.76	748270-2
	HDP/HDF	Clear Chromate	4-40	.312 (7.92)	A23431-ND†	442.50/500		748558-4
Male Screw Retainers for Plastic Shell Connectors - Steel, Zinc Plated (material)								
3	HDE	Yellow Chromate	4-40	.220 (5.59)	A1236-ND	.41	.38	745647-1
Male Screw Retainers for Metal Shell Connectors - Steel, Zinc Plated (material)								
3	HDE/ HDP	Yellow Chromate	4-40	.220 (5.59)	A9008-ND	.60	.54	205980-1
		Yellow Chromate	4-40	.200 (5.08)	A23420-ND	1.07	.90	745136-1
		Yellow Chromate	M3 (Metric)	.225 (5.72)	A23419-ND	1.92	1.60	207871-1
		Clear Chromate	4-40	.220 (5.59)	A23418-ND	.67	.56	205980-4
		Clear Chromate	4-40	.200 (5.08)	A23421-ND	1.07	.90	745136-3
Male Jack Screw - Steel, Zinc Plated								
4	HDE/HDP	Clear Chromate	4-40	—	A23593-ND†	2.57	2.15	747784-3
Locking Post Assembly - Steel, Zinc Plated (2 complete assemblies)								
5	HD/HDE HDF/HDP	Yellow Chromate	4-40	.410 (10.41)	A23439-ND	2.37	1.98	206514-1
		Clear Chromate	4-40	.410 (10.41)	A24836-ND	2.25	1.88	206514-4
		Yellow Chromate	4-40	.560 (14.22)	A23440-ND	2.53	2.11	206514-6
		Yellow Chromate	2-56	.615 (15.62)	A23442-ND	2.25	1.88	747242-1
		Clear Chromate	2-56	.615 (15.62)	A23443-ND	2.25	1.88	747242-3

† Bulk packed and with captivated star washer. No additional hardware included.

Fig.	No. Of Positions	Description	Thread	Dim. – A Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Latching Blocks - Slot Recess & Thru-Hole - Zinc								
6	9-37	Rear-Panel Latching	—	.160 (4.06)	A23453-ND	4.03	3.36	747080-2
	9-37	Rear-Panel Latching	—	.190 (4.83)	A23451-ND	.80	.67	745245-2
	9-37	Front-Panel Latching	—	.250 (6.35)	A23452-ND	.77	.64	745286-2
Latching Blocks - Threaded Hole - Zinc								
7	9-37	Rear-Panel Latching	4-40	.190 (4.83)	A23449-ND	2.44	2.04	745403-8
	9-37	Rear-Panel Latching	4-40	.220 (5.59)	A23450-ND	6.47	5.40	747717-2
	9-37	Front-Panel Latching	M3	.250 (6.35)	A23447-ND	1.18	.99	208101-1
	9-37	Front-Panel Latching	4-40	.250 (6.35)	A23448-ND	1.18	.99	208101-8

Fig.	No. Of Positions	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Spring Latches - Stainless Steel						
8	—	With Mounting Ears	A23445-ND	1.50	1.26	745255-2
9	9-37	Spring Latch	A23446-ND	1.58	1.32	745779-2
Slide Latch Clips - Steel, Zinc Plated (clip stainless steel, screws/washers/nuts - steel, zinc plated)						
10	—	Thread 4-40, Screw Length .415 (10.54mm)	A23441-ND	2.13	1.78	206942-1
	—	Thread 2-56, Screw Length .547 (13.89mm)	A23444-ND	4.86	4.05	748078-1

Fig.	No. Of Positions	Style #	Thread Size	Dimensions Inches (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Slide Latch Clips - Stainless Steel (screws/washers/nuts - steel, zinc plated)									
11	9	1	4-40	1.397 (35.48)	.490 (12.45)	A23433-ND	2.97	2.48	745404-1
	15	2	2-56	1.725 (43.82)	.470 (11.94)	A23436-ND	4.38	3.65	745583-1
	15	2	4-40	1.725 (43.82)	.470 (11.94)	A24837-ND	4.17	3.48	745583-7
	25	2	2-56	2.265 (57.53)	.470 (11.94)	A23437-ND	7.17	5.98	745584-1
	25	3	4-40	2.265 (57.53)	.470 (11.94)	A23438-ND	3.99	3.33	745584-3
	37	1	4-40	2.913 (73.99)	.490 (12.45)	A23434-ND	4.80	4.00	745407-1
	50	3	4-40	2.819 (71.60)	.575 (14.61)	A23435-ND	6.33	5.28	745578-3

Fig.	No. Of Positions	Dimensions Inches (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
EMI/RFI Gaskets - Brass .006" (0.15mm) Thick, Bright Tin Plated							
12	9	.984 (24.99)	1.220 (30.99)	A23457-ND	1.20	1.00	747024-3
	15	1.312 (33.32)	1.555 (39.50)	A23458-ND	1.23	1.03	747025-3
	25	1.852 (47.04)	2.100 (53.34)	A23455-ND	1.32	1.10	745776-3
	37	2.500 (63.50)	2.730 (69.34)	A23456-ND	1.50	1.25	745777-3
13	Screwlock Kits for .050 Series, stainless steel			A23468-ND*	1.84	1.54	749087-2
14	Screwlock Kits for .050 Series, stainless steel			A24212-ND*	4.41	3.68	749087-4
15	Screwlock Kits for .050 Series, stainless steel, Thread 4-40			A23469-ND	2.51	2.10	750644-1
15	Screwlock Kits for .050 Series, stainless steel, Thread 2-56			A23470-ND	2.50	2.09	786585-2
16	Screwlock Kits for .050 Series, stainless steel			A23675-ND	3.78	3.15	750831-1
17	Standoff Bushings, Aluminum			A23454-ND	.71	.60	205933-4
—	Grommet Set (4 per set), 9-15 positions			A23668-ND	.72	.60	747746-1
—	Grommet Set (4 per set), 25-50 positions			A23669-ND	.81	.68	747973-1

* Recommended for right-angle board mount connectors.

KEYSTONE ELECTRONICS CORP.

Connector Hardware

Material: Steel, Zinc Plate and Gold Iridite.
Threads: 4-40

Fig.	Description	Digi-Key Part No.	Price Each 1	5	50	Keystone Part No.
1	Jack Screws 4/40 thread, (1 pkg. = 2 screws) 2 pc. required per connector	2073K-ND	5.93	5.34	3.32	2073
2	Jack Screws 4/40 thd. slim line, 1.25", (1 pkg. = 2 screws) 2 pc. required per connector	2069K-ND	4.58	4.13	2.57	2069
2	Jack Screws 4/40 thd. slim line, 1.75", (1 pkg. = 2 screws) 2 pc. required per connector	2071K-ND	4.82	4.34	2.70	2071
3	Jack Screws 4/40 x 250" (10 pcs. = 4 flat washers, 2 lock washers, 2 nuts, 2 jack screws)	7229K-ND	.80	.72	.43	7229
3	Jack Screws 4/40 x 312" (10 pcs. = 4 flat washers, 2 lock washers, 2 nuts, 2 jack screws)	7231K-ND	.73	.66	.39	7231
3	Jack Screws 4/40 x .625" (10 pcs. = 4 flat washes, 2 lock washers, 2 nuts, 2 jack screws)	7233K-ND	1.61	1.45	.86	7233
3	Jack screw .312" L 4-40 thread, clear chromate, (1 pkg. = 2 jack screws) 2 pc. required per connector	7230-5K-ND	.52	.47	.32	7230-5
3	Sems jack screw .285" L 4-40 thread, (1 pkg. = 2 screws) 2 pc. required per connector	7235K-ND	.72	.66	.44	7235
4	"U" Clip Set (4 pieces = 2 screws and 2 clips)	2062K-ND	.88	.79	.50	2062
5	Saddle Washer Set (4 pieces = 2 screws and 2 clips)	2063K-ND	.99	.89	.56	2063
6	4/40 x .250" Bow Tie Clip Set (4 pieces = 2 screws and 2 clips)	2060K-ND	1.10	.99	.62	2060
6	4/40 x .562" Bow Tie Clip Set (4 pieces = 2 Screws and 2 clips)	2061K-ND	1.21	1.09	.68	2061

Fig. 1

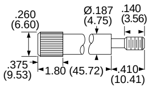


Fig. 2

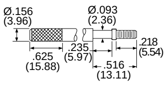


Fig. 3

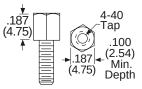


Fig. 4

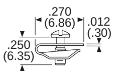


Fig. 5

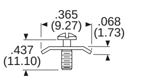
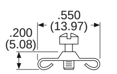


Fig. 6

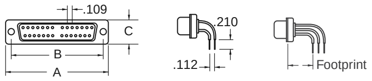


NORCOMP Right Angle D-Sub Connectors

173, 174, 175 and 176 Series:

Materials:
- **Shell:** Steel, zinc plated with yellow chromate
- **Insulator:** Glass-filled thermoplastic, UL rated 94V-0
- **Machined Contacts:** Male: Brass; Female: Phosphor bronze
- **Plating:** Gold flash on entire contact

Connector Size	Dimensions (Inch) A	B	C
9	1.213	.984	.494
15	1.541	1.312	.494
25	2.088	1.852	.494
37	2.729	2.50	.494
50	2.635	2.406	.605



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
*173 Series (.283" Footprint) - Yellow Chromate **						
9	Male	173-09M-ND	5.34	4.60	3.13	173-009-111-141
9	Female	173-09F-ND	6.53	5.63	3.83	173-009-211-141
15	Male	173-15M-ND	9.54	8.23	5.60	173-015-111-141
15	Female	173-15F-ND	10.09	8.70	5.92	173-015-211-141
25	Male	173-25M-ND	9.63	8.30	5.65	173-025-111-141
25	Female	173-25F-ND	13.46	11.60	7.89	173-025-211-141
37	Male	173-37M-ND	13.11	11.30	7.69	173-037-111-141
37	Female	173-37F-ND	18.71	16.13	10.97	173-037-211-141
50	Male	173-50M-ND	16.18	13.95	9.49	173-050-111-141
50	Female	173-50F-ND	25.61	22.08	15.02	173-050-211-141
173 Series (.283" Footprint) - Tin						
9	Male	173-109M-ND	5.16	4.45	3.03	173-009-112-141
9	Female	173-109F-ND	12.47	10.75	7.31	173-009-212-141
15	Male	173-115M-ND	6.35	5.48	3.73	173-015-112-141
15	Female	173-115F-ND	12.24	10.55	7.18	173-015-212-141
25	Male	173-125M-ND	6.79	5.85	3.98	173-025-112-141
25	Female	173-125F-ND	17.37	14.98	10.19	173-025-212-141
37	Male	173-137M-ND	8.70	7.50	5.10	173-037-112-141
37	Female	173-137F-ND	15.52	13.38	9.10	173-037-212-141
50	Male	173-150M-ND	9.31	8.03	5.46	173-050-112-141
50	Female	173-150F-ND	24.13	20.80	14.15	173-050-212-141
*174 Series (.370" Footprint) - Yellow Chromate **						
9	Male	174-09M-ND	5.34	4.60	3.13	174-009-111-141
9	Female	174-09F-ND	6.76	5.83	3.97	174-009-211-141
15	Male	174-15M-ND	7.08	6.10	4.15	174-015-111-141
15	Female	174-15F-ND	8.82	7.60	5.17	174-015-211-141
37	Male	174-37M-ND	12.91	11.13	7.57	174-037-111-141
37	Female	174-37F-ND	16.21	13.98	9.51	174-037-211-141
50	Male	174-50M-ND	16.36	14.10	9.59	174-050-111-141
50	Female	174-50F-ND	21.66	18.68	12.70	174-050-211-141
174 Series (.370" Footprint) - Tin						
9	Male	174-109M-ND	4.96	4.28	2.91	174-009-112-141
9	Female	174-109F-ND	10.90	9.40	6.40	174-009-212-141
15	Male	174-115M-ND	6.12	5.28	3.59	174-015-112-141
15	Female	174-115F-ND	11.98	10.33	7.03	174-015-212-141
25	Male	174-125M-ND	6.58	5.68	3.86	174-025-112-141
25	Female	174-125F-ND	9.89	8.53	5.80	174-025-212-141
37	Male	174-137M-ND	8.18	7.05	4.80	174-037-112-141
37	Female	174-137F-ND	15.28	13.18	8.96	174-037-212-141
50	Male	174-150M-ND	9.11	7.85	5.34	174-050-112-141
50	Female	174-150F-ND	20.36	17.55	11.94	174-050-212-141
175 Series (.454" Footprint) - Yellow Chromate †						
15	Male	175-15M-ND	8.27	7.13	4.85	175-015-111-151
15	Female	175-15F-ND	9.60	8.28	5.63	175-015-211-151
25	Male	175-25M-ND	12.09	10.43	7.09	175-025-111-151
25	Female	175-25F-ND	14.59	12.58	8.56	175-025-211-151
37	Male	175-37M-ND	16.91	14.58	9.92	175-037-111-151
37	Female	175-37F-ND	20.88	18.00	12.24	175-037-211-151
50	Male	175-50M-ND	18.21	15.70	10.68	175-050-111-151
50	Female	175-50F-ND	27.17	23.43	15.93	175-050-211-151
175 Series (.454" Footprint) - Tin						
9	Male	175-109M-ND	5.77	4.98	3.39	175-009-112-151
9	Female	175-109F-ND	13.51	11.65	7.93	175-009-212-151
15	Male	175-115M-ND	6.53	5.63	3.83	175-015-112-151
15	Female	175-115F-ND	15.75	13.58	9.24	175-015-212-151
25	Male	175-125M-ND	8.03	6.93	4.71	175-025-112-151
25	Female	175-125F-ND	19.78	17.05	11.60	175-025-212-151
37	Male	175-137M-ND	9.37	8.08	5.50	175-037-112-151
37	Female	175-137F-ND	17.17	14.80	10.07	175-037-212-151
50	Male	175-150M-ND	11.60	10.00	6.80	175-050-112-151
50	Female	175-150F-ND	25.78	22.23	15.12	175-050-212-151
176 Series (.545" Footprint) - Yellow Chromate †						
9	Male	176-09M-ND	5.34	4.60	3.13	176-009-111-151
9	Female	176-09F-ND	6.58	5.68	3.86	176-009-211-151
15	Male	176-15M-ND	7.08	6.10	4.15	176-015-111-151
15	Female	176-15F-ND	8.82	7.60	5.17	176-015-211-151
25	Male	176-25M-ND	9.57	8.25	5.61	176-025-111-151
25	Female	176-25F-ND	12.24	10.55	7.18	176-025-211-151
37	Male	176-37M-ND	13.17	11.35	7.72	176-037-111-151
37	Female	176-37F-ND	17.11	14.75	10.03	176-037-211-151
50	Male	176-50M-ND	17.08	14.73	10.02	176-050-111-151
50	Female	176-50F-ND	24.07	20.75	14.11	176-050-211-151
176 Series (.545" Footprint) - Tin						
9	Male	176-109M-ND	4.96	4.28	2.91	176-009-112-151
9	Female	176-109F-ND	11.37	9.80	6.67	176-009-212-151
15	Male	176-115M-ND	6.12	5.28	3.59	176-015-112-151
15	Female	176-115F-ND	12.30	10.60	7.21	176-015-212-151
25	Male	176-125M-ND	6.61	5.70	3.88	176-025-112-151
25	Female	176-125F-ND	15.89	13.70	9.32	176-025-212-151
37	Male	176-137M-ND	8.18	7.05	4.80	176-037-112-151
37	Female	176-137F-ND	15.92	13.73	9.34	176-037-212-151
50	Male	176-150M-ND	9.25	7.98	5.43	176-050-112-151
50	Female	176-150F-ND	22.68	19.55	13.30	176-050-212-151

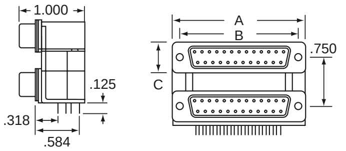
* Short mounting bracket attached with 4-40 female screw lock.
† Long mounting bracket attached with 4-40 female screw lock.

NORCOMP Dual Port Right Angle D-Sub Connectors

178, 179 and 189 Series

Materials:
- **Shell:** Steel, zinc with tin plating
- **Contacts:** Gold flash over brass plating.
- **Insulator:** Glass-filled thermoplastic, UL 94V-0 rated, black .

Conn. Size	Dim. (Inch) A	B	C
9	1.204	.984	.494
15	1.535	1.312	.494
25	2.078	1.850	.494
37	2.724	2.500	.494



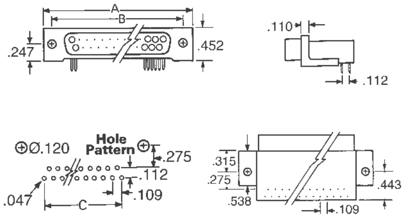
No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
.625 Centers						
9/9	M/M	1009MM-ND	5.48	4.73	3.22	189-009-612-571
15/15	M/M	1015MM-ND	8.24	7.10	4.83	189-015-612-571
25/25	M/M	1025MM-ND	8.85	7.63	5.19	189-025-612-571
37/37	M/M	1037MM-ND	13.40	11.55	7.86	189-037-612-571
9/9	M/F	1009MF-ND	5.48	4.73	3.22	189-009-412-571
15/15	M/F	1015MF-ND	8.24	7.10	4.83	189-015-412-571
25/25	M/F	1025MF-ND	8.85	7.63	5.19	189-025-412-571
37/37	M/F	1037MF-ND	13.40	11.55	7.86	189-037-412-571
9/9	F/F	1009FF-ND	5.48	4.73	3.22	189-009-512-571
15/15	F/F	1015FF-ND	8.24	7.10	4.83	189-015-512-571
25/25	F/F	1025FF-ND	8.85	7.63	5.19	189-025-512-571
37/37	F/F	1037FF-ND	13.40	11.55	7.86	189-037-512-571
9/9	F/M	1009FM-ND	5.48	4.73	3.22	189-009-312-571
15/15	F/M	1015FM-ND	8.24	7.10	4.83	189-015-312-571
25/25	F/M	1025FM-ND	8.85	7.63	5.19	189-025-312-571
37/37	F/M	1037FM-ND	13.40	11.55	7.86	189-037-312-571
.750 Centers						
9/9	M/M	1109MM-ND	5.48	4.73	3.22	178-009-612-571
15/15	M/M	1115MM-ND	8.24	7.10	4.83	178-015-612-571
25/25	M/M	1125MM-ND	8.85	7.63	5.19	178-025-612-571
37/37	M/M	1137MM-ND	13.40	11.55	7.86	178-037-612-571
9/9	M/F	1109MF-ND	5.48	4.73	3.22	178-009-412-571
15/15	M/F	1115MF-ND	8.24	7.10	4.83	178-015-412-571
25/25	M/F	1125MF-ND	8.85	7.63	5.19	178-025-412-571
37/37	M/F	1137MF-ND	13.40	11.55	7.86	178-037-412-571
9/9	F/F	1109FF-ND	5.48	4.73	3.22	178-009-512-571
15/15	F/F	1115FF-ND	8.24	7.10	4.83	178-015-512-571
25/25	F/F	1125FF-ND	8.85	7.63	5.19	178-025-512-571
37/37	F/F	1137FF-ND	13.40	11.55	7.86	178-037-512-571
9/9	F/M	1109FM-ND	5.48	4.73	3.22	178-009-312-571
15/15	F/M	1115FM-ND	8.24	7.10	4.83	178-015-312-571
25/25	F/M	1125FM-ND	8.85	7.63	5.19	178-025-312-571
37/37	F/M	1137FM-ND	13.40	11.55	7.86	178-037-312-571
.900 Centers						
9/9	M/M	1209MM-ND	5.48	4.73	3.22	179-009-612-571
15/15	M/M	1215MM-ND	8.24	7.10	4.83	179-015-612-571
25/25	M/M	1225MM-ND	8.85	7.63	5.19	179-025-612-571
37/37	M/M	1237MM-ND	13.40	11.55	7.86	179-037-612-571
9/9	M/F	1209MF-ND	5.48	4.73	3.22	179-009-412-571
15/15	M/F	1215MF-ND	8.24	7.10	4.83	179-015-412-571
25/25	M/F	1225MF-ND	8.85	7.63	5.19	179-025-412-571
37/37	M/F	1237MF-ND	13.40	11.55	7.86	179-037-412-571
9/9	F/F	1209FF-ND	5.48	4.73	3.22	179-009-512-571
15/15	F/F	1215FF-ND	8.24	7.10	4.83	179-015-512-571
25/25	F/F	1225FF-ND	8.85	7.63	5.19	179-025-512-571
37/37	F/F	1237FF-ND	13.40	11.55	7.86	179-037-512-571
9/9	F/M	1209FM-ND	5.48	4.73	3.22	179-009-312-571
15/15	F/M	1215FM-ND	8.24	7.10	4.83	179-015-312-571
25/25	F/M	1225FM-ND	8.85	7.63	5.19	179-025-312-571
37/37	F/M	1237FM-ND	13.40	11.55	7.86	179-037-312-571

NORCOMP Right Angle D-Sub Connectors

177 Series

Materials:
- **Shell:** Steel, zinc with tin plating; or plastic
- **Insulator:** Glass-filled thermoplastic, UL rated 94V-0
- **Stamped Contacts:** Cupro-nickel alloys
- **Plating:** Gold over nickel on mating area, tin/lead on solder tails

Connector Size	Dimensions (Inch) A	B	C
9	1.228	.984	.436
15	1.556	1.312	.763
25	2.100	1.852	1.308
37	2.742	2.500	1.962



No. of Pins	Type	Digi-Key Part No.	Price Each			NorComp Part No.
			1	10	100	
177 Series (.590 Footprint) (Metal Shell with Inside Ground Straps and .120" Diameter Hole)						
9	Male	177-709M-ND	7.19	6.20	4.22	177-009-112-161
9	Female	177-709F-ND	7.83	6.75	4.59	177-009-212-161
15	Male	177-715M-ND	8.29	7.15	4.87	177-015-112-161
15	Female	177-715F-ND	8.87	7.65	5.21	177-015-212-161
25	Male	177-725M-ND	9.28	8.00	5.44	177-025-112-161
25	Female	177-725F-ND	10.47	9.03	6.14	177-025-212-161
37	Male	177-737M-ND	10.44	9.00	6.12	177-037-112-161
37	Female	177-737F-ND	13.05	11.25	7.65	177-037-212-161
177 Series (.590" Footprint) (Metal Shell with Inside Ground Straps and 4-40 Flush Insert)						
9	Male	309M-ND	4.96	4.28	2.91	177-009-112-171
9	Female	309F-ND	5.48	4.73	3.22	177-009-212-171
15	Male	315M-ND	5.80	5.00	3.40	177-015-112-171
15	Female	315F-ND	6.38	5.50	3.74	177-015-212-171
25	Male	325M-ND	6.99	6.03	4.10	177-025-112-171
25	Female	325F-ND	7.71	6.65	4.53	177-025-212-171
37	Male	337M-ND	9.02	7.78	5.29	177-037-112-171
37	Female	337F-ND	9.89	8.53	5.80	177-037-212-171
177 Series (.590 Footprint) (Metal Shell with Inside Ground Straps and 4-40 Hex Standoff)						
9	Male	177-809M-ND	5.22	4.50	3.06	177-009-112-181
9	Female	177-809F-ND	5.74	4.95	3.37	177-009-212-181
15	Male	177-815M-ND	6.26	5.40	3.68	177-015-112-181
15	Female	177-815F-ND	6.67	5.75	3.91	177-015-212-181
25	Male	177-825M-ND	7.19	6.20	4.22	177-025-112-181
25	Female	177-825F-ND	7.95	6.85	4.66	177-025-212-181
37	Male	177-837M-ND	8.70	7.50	5.10	177-037-112-181
37	Female	177-837F-ND	10.15	8.75	5.95	177-037-212-181
177 Series (.590 Footprint) (Plastic Shell with .120" Diameter Hole)						
9	Male	177-509M-ND	2.76	2.38	1.62	177-009-110-061
9	Female	177-509F-ND	3.05	2.63	1.79	177-009-210-061
15	Male	177-515M-ND	3.51	3.03	2.06	177-015-110-061
15	Female	177-515F-ND	4.58	3.95	2.69	177-015-210-061
25	Male	177-525M-ND	5.19	4.48	3.05	177-025-110-061
25	Female	177-525F-ND	5.25	4.53	3.08	177-025-210-061
37	Male	177-537M-ND	6.41	5.53	3.76	177-037-110-061
37	Female	177-537F-ND	6.90	5.95	4.05	177-037-210-061
177 Series (.590 Footprint) (Plastic Shell with 4-40 Hex Standoff)						
9	Male	409M-ND	4.06	3.50	2.38	177-009-110-071
9	Female	409F-ND	4.61	3.98	2.71	177-009-210-071
15	Male	415M-ND	4.96	4.28	2.91	177-015-110-071
15	Female	415F-ND	5.48	4.73	3.22	177-015-210-071
25	Male	425M-ND	6.29	5.43	3.69	177-025-110-071
25	Female	425F-ND	6.93	5.98	4.07	177-025-210-071
37	Male	437M-ND	7.60	6.55	4.46	177-037-110-071
37	Female	437F-ND	8.38	7.23	4.92	177-037-210-071
177 Series (.590 Footprint) (Plastic Shell with 4-40 Flush Insert)						
9	Male	177-609M-ND	4.50	3.88	2.64	177-009-110-081
9	Female	177-609F-ND	5.02	4.33	2.95	177-009-210-081
15	Male	177-615M-ND	5.22	4.50	3.06	177-015-110-081
15	Female	177-615F-ND	5.95	5.13	3.49	177-015-210-081
25	Male	177-625M-ND	6.55	5.65	3.85	177-025-110-081
25	Female	177-625F-ND	7.05	6.08	4.14	177-025-210-081
37	Male	177-637M-ND	7.63	6.58	4.48	177-037-110-081
37	Female	177-637F-ND	8.79	7.58	5.16	177-037-210-081

NORCOMP

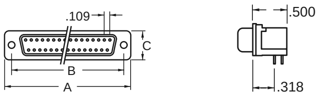
Right Angle D-Sub Connectors

182 Economy Series

Materials:
- **Shell:** Steel, tin plating
- **Insulator:** Glass-filled thermoplastic, UL rated 94V-0
- **Stamped Contacts:** Brass
- **Plating:** Gold flash on entire contact

Connector Size	Dim. (Inch) A	B	C
9	1.213	.984	.494
15	1.541	1.312	.494
25	2.088	1.852	.494
37	2.729	2.500	.494

182 Series



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
182 Series (.318" Footprint) (Metal Shell with Inside Ground Straps and .120" Diameter Hole)						
9	Male	182-709M-ND	1.04	.90	.62	182-009-112-161
9	Female	182-709F-ND	1.10	.95	.65	182-009-212-161
15	Male	182-715M-ND	1.33	1.15	.79	182-015-112-161
15	Female	182-715F-ND	1.45	1.25	.85	182-015-212-161
25	Male	182-725M-ND	1.65	1.43	.97	182-025-112-161
25	Female	182-725F-ND	1.71	1.48	1.01	182-025-212-161
37	Male	182-737M-ND	2.15	1.85	1.26	182-037-112-161
37	Female	182-737F-ND	2.26	1.95	1.33	182-037-212-161
182 Series (.318" Footprint) (Metal Shell with Inside Ground Straps and 4-40 Flush Insert)						
9	Male	182-909M-ND	1.04	.90	.62	182-009-112-171
9	Female	182-909F-ND	1.10	.95	.65	182-009-212-171
15	Male	182-915M-ND	1.33	1.15	.79	182-015-112-171
15	Female	182-915F-ND	1.45	1.25	.85	182-015-212-171
25	Male	182-925M-ND	1.65	1.43	.97	182-025-112-171
25	Female	182-925F-ND	1.71	1.48	1.01	182-025-212-171
37	Male	182-937M-ND	2.15	1.85	1.26	182-037-112-171
37	Female	182-937F-ND	2.26	1.95	1.33	182-037-212-171
182 Series (.318" Footprint) (Metal Shell with Inside Ground Straps and 4-40 Hex Standoff)						
9	Male	182-809M-ND	1.16	1.00	.68	182-009-112-181
9	Female	182-809F-ND	1.22	1.05	.72	182-009-212-181
15	Male	182-815M-ND	1.39	1.20	.82	182-015-112-181
15	Female	182-815F-ND	1.57	1.35	.92	182-015-212-181
25	Male	182-825M-ND	1.77	1.53	1.04	182-025-112-181
25	Female	182-825F-ND	1.83	1.58	1.08	182-025-212-181
37	Male	182-837M-ND	2.26	1.95	1.33	182-037-112-181
37	Female	182-837F-ND	2.38	2.05	1.40	182-037-212-181
182 Series (.318" Footprint) (Metal Shell Fork Board Locks in Front Hole and 4-40 Flush Insert)						
9	Male	182-09M-ND	.81	.70	.48	182-009-112-531
9	Female	182-09F-ND	.81	.70	.48	182-009-212-531
15	Male	182-15M-ND	.96	.83	.57	182-015-112-531
15	Female	182-15F-ND	1.04	.90	.62	182-015-212-531
25	Male	182-25M-ND	1.10	.95	.65	182-025-112-531
25	Female	182-25F-ND	1.04	.90	.62	182-025-212-531
37	Male	182-37M-ND	1.86	1.60	1.09	182-037-112-531
37	Female	182-37F-ND	1.86	1.60	1.09	182-037-212-531

NORCOMP

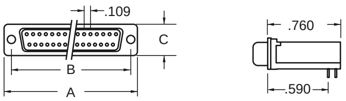
Right Angle D-Sub Connectors

183 Economy Series

Materials:
- **Shell:** Steel, tin plating
- **Insulator:** Glass-filled thermoplastic, UL rated 94V-0
- **Stamped Contacts:** Brass
- **Plating:** Gold flash on entire contact

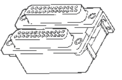
Connector Size	Dim. (Inch) A	B	C
9	1.213	.984	.494
15	1.541	1.312	.494
25	2.088	1.852	.494
37	2.729	2.500	.494

183 Series



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
183 Series (.590" Footprint) (Metal Shell with Inside Ground Straps and .120" Diameter Hole)						
9	Male	183-709M-ND	1.62	1.40	.96	183-009-112-161
9	Female	183-709F-ND	1.71	1.48	1.01	183-009-212-161
15	Male	183-715M-ND	2.32	2.00	1.36	183-015-112-161
15	Female	183-715F-ND	2.41	2.08	1.42	183-015-212-161
25	Male	183-725M-ND	2.78	2.40	1.64	183-025-112-161
25	Female	183-725F-ND	2.87	2.48	1.69	183-025-212-161
37	Male	183-737M-ND	4.21	3.63	2.47	183-037-112-161
37	Female	183-737F-ND	4.35	3.75	2.55	183-037-212-161
183 Series (.590" Footprint) (Metal Shell with Inside Ground Straps and 4-40 Flush Insert)						
9	Male	183-909M-ND	1.62	1.40	.96	183-009-112-171
9	Female	183-909F-ND	1.71	1.48	1.01	183-009-212-171
15	Male	183-915M-ND	2.32	2.00	1.36	183-015-112-171
15	Female	183-915F-ND	2.41	2.08	1.42	183-015-212-171
25	Male	183-925M-ND	2.78	2.40	1.64	183-025-112-171
25	Female	183-925F-ND	2.87	2.48	1.69	183-025-212-171
37	Male	183-937M-ND	4.21	3.63	2.47	183-037-112-171
37	Female	183-937F-ND	4.35	3.75	2.55	183-037-212-171
183 Series (.590" Footprint) (Metal Shell with Inside Ground Straps and 4-40 Hex Standoff)						
9	Male	183-809M-ND	1.94	1.68	1.14	183-009-112-181
9	Female	183-809F-ND	2.03	1.75	1.19	183-009-212-181
15	Male	183-815M-ND	2.52	2.18	1.48	183-015-112-181
15	Female	183-815F-ND	2.64	2.28	1.55	183-015-212-181
25	Male	183-825M-ND	2.90	2.50	1.70	183-025-112-181
25	Female	183-825F-ND	2.99	2.58	1.76	183-025-212-181
37	Male	183-837M-ND	4.44	3.83	2.61	183-037-112-181
37	Female	183-837F-ND	4.64	4.00	2.72	183-037-212-181
183 Series (.590" Footprint) (Metal Shell Fork Board Locks in Front Hole and 4-40 Flush Insert)						
9	Male	183-09M-ND	1.48	1.28	.87	183-009-112-531
9	Female	183-09F-ND	1.48	1.28	.87	183-009-212-531
15	Male	183-15M-ND	1.94	1.68	1.14	183-015-112-531
15	Female	183-15F-ND	2.20	1.90	1.30	183-015-212-531
25	Male	183-25M-ND	2.26	1.95	1.33	183-025-112-531
25	Female	183-25F-ND	2.49	2.15	1.47	183-025-212-531
37	Male	183-37M-ND	3.63	3.13	2.13	183-037-112-531
37	Female	183-37F-ND	3.63	3.13	2.13	183-037-212-531

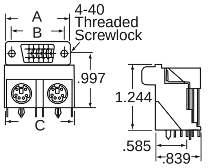
Dual-Port D-Sub Connector



T2325-ND **$12.71/1**
$109.60/10
$745.28/100

999 Series - High Density over (2)PS/2

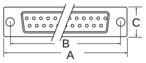
Materials:
- **Shell:** Steel
- **Insulator:** PBT UL rated 94V-0
- **Contacts:** Brass
- **Platings:** Gold Flash contacts, Nickel plated shells



Conn. Size	Dimensions (Inch) A	B	C
15	1.213	.984	1.284

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
15	Female	999-H15F-ND	7.98	6.88	4.68	999-H15-PS2-571

NORCOMP

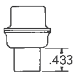


Series 170 Crimp and Poke D-Sub Connectors

Conn. Size	Dimensions (Inch) A	B	C
9	1.213	.984	.496
15	1.541	1.312	.496
25	2.087	1.852	.496
37	2.732	2.500	.496
50	2.638	2.406	.602

Uses Snap-In Contacts (sold separately)

Features: • Available in 5 industry sizes/positions • Low cost commercial version of military standard • Tin or Yellow Chromate shells • Allows for easy loading of only the positions required using Crimp and Snap-in contacts • Tin-plated connector shells have indents to provide grounding and additional retention • Nylon insulator has a minimum contact retention of 10 lbs. • Contact current rating: 5 amps **Materials:** • Shell: Steel, zinc-plated with yellow chromate or bright tin plating • Insulator: Glass-filled thermoplastic, UL rated 94V-0



Snap-In Contacts for Crimp D-Sub Connectors

Features: Low cost and high performance stamped contacts features insulation support for increased holding power • Contact range: 20-24 AWG • Contacts are commercial quality stamped and are compatible with industry tooling. **Material:** • Male Pins: Brass • Female Pins: Phosphor bronze

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Tin Shells – Crimp D-Sub Standard						
9	Male	709M-ND	.67	.58	.40	170-009-172-000
9	Female	709F-ND	.67	.58	.40	170-009-272-000
15	Male	715M-ND	.78	.68	.46	170-015-172-000
15	Female	715F-ND	.86	.75	.51	170-015-272-000
25	Male	725M-ND	.78	.68	.46	170-025-172-000
25	Female	725F-ND	.84	.72	.49	170-025-272-000
37	Male	737M-ND	1.54	1.33	.91	170-037-172-000
37	Female	737F-ND	1.62	1.40	.96	170-037-272-000
50	Male	750M-ND	2.08	1.79	1.22	170-050-172-000
50	Female	750F-ND	2.12	1.83	1.25	170-050-272-000
Tin Shell Crimp with .065" Clinch Nuts, Board Side						
9	Male	5709M-ND	1.71	1.48	1.01	170-009-172-010
9	Female	5709F-ND	1.71	1.48	1.01	170-009-272-010
15	Male	5715M-ND	1.83	1.58	1.08	170-015-172-010
15	Female	5715F-ND	1.94	1.68	1.14	170-015-272-010
25	Male	5725M-ND	1.83	1.58	1.08	170-025-172-010
25	Female	5725F-ND	1.89	1.63	1.11	170-025-272-010
37	Male	5737M-ND	2.76	2.38	1.62	170-037-172-010
37	Female	5737F-ND	2.73	2.35	1.60	170-037-272-010
50	Male	5750M-ND	3.54	3.05	2.08	170-050-172-010
50	Female	5750F-ND	3.19	2.75	1.87	170-050-272-010
Tin Shell Crimp with .250" Clinch Nuts, Board Side						
9	Male	6709M-ND	1.71	1.48	1.01	170-009-172-020
9	Female	6709F-ND	1.71	1.48	1.01	170-009-272-020
15	Male	6715M-ND	1.83	1.58	1.08	170-015-172-020
15	Female	6715F-ND	1.94	1.68	1.14	170-015-272-020
25	Male	6725M-ND	1.83	1.58	1.08	170-025-172-020
25	Female	6725F-ND	1.89	1.63	1.11	170-025-272-020
37	Male	6737M-ND	2.76	2.38	1.62	170-037-172-020
37	Female	6737F-ND	2.73	2.35	1.60	170-037-272-020
50	Male	6750M-ND	3.54	3.05	2.08	170-050-172-020
50	Female	6750F-ND	3.19	2.75	1.87	170-050-272-020
Tin Shell Crimp with .250" Clinch Nuts, Mating Side						
9	Male	7709M-ND	1.71	1.48	1.01	170-009-172-030
9	Female	7709F-ND	1.71	1.48	1.01	170-009-272-030
15	Male	7715M-ND	1.83	1.58	1.08	170-015-172-030
15	Female	7715F-ND	1.94	1.68	1.14	170-015-272-030
25	Male	7725M-ND	1.83	1.58	1.08	170-025-172-030
25	Female	7725F-ND	1.89	1.63	1.11	170-025-272-030
37	Male	7737M-ND	2.76	2.38	1.62	170-037-172-030
37	Female	7737F-ND	2.73	2.35	1.60	170-037-272-030
50	Male	7750M-ND	3.54	3.05	2.08	170-050-172-030
50	Female	7750F-ND	3.19	2.75	1.87	170-050-272-030
Yellow Chromate – Crimp D-Sub Standard						
9	Male	1709M-ND	1.25	1.08	.74	170-009-171-000
9	Female	1709F-ND	1.36	1.18	.80	170-009-271-000
15	Male	1715M-ND	1.39	1.20	.82	170-015-171-000
15	Female	1715F-ND	1.36	1.18	.80	170-015-271-000
25	Male	1725M-ND	1.45	1.25	.85	170-025-171-000
25	Female	1725F-ND	1.51	1.30	.89	170-025-271-000
37	Male	1737M-ND	1.89	1.63	1.11	170-037-171-000
37	Female	1737F-ND	2.00	1.73	1.18	170-037-271-000
50	Male	1750M-ND	1.74	1.50	1.02	170-050-171-000
50	Female	1750F-ND	1.89	1.63	1.11	170-050-271-000
Yellow Chromate Crimp with .065" Clinch Nuts, Board Side						
9	Male	2709M-ND	2.12	1.83	1.25	170-009-171-010
9	Female	2709F-ND	2.23	1.93	1.31	170-009-271-010
15	Male	2715M-ND	2.26	1.95	1.33	170-015-171-010
15	Female	2715F-ND	2.23	1.93	1.31	170-015-271-010
25	Male	2725M-ND	2.32	2.00	1.36	170-025-171-010
25	Female	2725F-ND	2.38	2.05	1.40	170-025-271-010
37	Male	2737M-ND	2.76	2.38	1.62	170-037-171-010
37	Female	2737F-ND	2.87	2.48	1.69	170-037-271-010
50	Male	2750M-ND	2.61	2.25	1.53	170-050-171-010
50	Female	2750F-ND	2.76	2.38	1.62	170-050-271-010
Yellow Chromate Crimp with .250" Clinch Nuts, Board Side						
9	Male	3709M-ND	2.12	1.83	1.25	170-009-171-020
9	Female	3709F-ND	2.23	1.93	1.31	170-009-271-020
15	Male	3715M-ND	2.26	1.95	1.33	170-015-171-020
15	Female	3715F-ND	2.23	1.93	1.31	170-015-271-020
25	Male	3725M-ND	2.32	2.00	1.36	170-025-171-020
25	Female	3725F-ND	2.38	2.05	1.40	170-025-271-020
37	Male	3737M-ND	2.76	2.38	1.62	170-037-171-020
37	Female	3737F-ND	2.87	2.48	1.69	170-037-271-020
50	Male	3750M-ND	2.61	2.25	1.53	170-050-171-020
50	Female	3750F-ND	2.76	2.38	1.62	170-050-271-020
Yellow Chromate Crimp with .250" Clinch Nuts, Mating Side						
9	Male	4709M-ND	2.12	1.83	1.25	170-009-171-030
9	Female	4709F-ND	2.23	1.93	1.31	170-009-271-030
15	Male	4715M-ND	2.26	1.95	1.33	170-015-171-030
15	Female	4715F-ND	2.23	1.93	1.31	170-015-271-030
25	Male	4725M-ND	2.32	2.00	1.36	170-025-171-030
25	Female	4725F-ND	2.38	2.05	1.40	170-025-271-030
37	Male	4737M-ND	2.76	2.38	1.62	170-037-171-030
37	Female	4737F-ND	2.87	2.48	1.69	170-037-271-030
50	Male	4750M-ND	2.61	2.25	1.53	170-050-171-030
50	Female	4750F-ND	2.76	2.38	1.62	170-050-271-030
Contacts						
—	Pin	82P-ND	—	.16	.11	170-001-170-002
—	Socket	82S-ND	—	.18	.13	170-002-170-002
—	Pin	82PSF-ND*	—	.12	.08	170-001-170-001
—	Socket	82SSF-ND*	—	.14	.10	170-002-170-001

Tools

Desciption	Digi-Key Part No.	Price Each	NorComp Part No.
Insertion/Removal Tool	T1010-ND	6.38	170-901-170-000
Hand Crimping Tool for Stamped Contacts	T1000S-ND	435.00	170-701-170-000
Hand Crimp Tool for Screw Machined Contacts	T1000M-ND	986.00	170-702-170-000

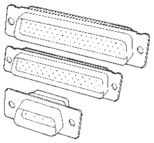
*Pins and Sockets are selectively gold plated

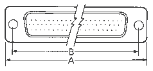
NorComp

High Density D-Sub Connectors

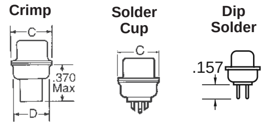
• Compatible with new generation systems from several computer manufacturers • Shells have bright tin finish for EMI/RFI shielding • Male connector shells have grounding indents • Reliable crimp snap-in contacts feature insulation grip for increased holding power • Contacts compatible with industry standard crimp tools.

Materials: Shell: Steel, with bright tin over nickel. Insulator: Glass-filled thermoplastic, UL rated 94V-0. Male Pin: Brass. Female Contact: Phosphor bronze. Contact Plating: gold over nickel (gold flash on entire contact for solder cup and dip solder)

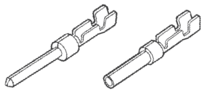




Contacts Sold Separately Below



Stamped Contacts For High Density D-Sub Connectors
Pin Dia: .030"
(.76mm)



Wire Size: 22-26 AWG.

No. of Pins	Shell Size	Dimensions (Inch)			
		A	B	C	D
15	DB-9	1.213	.984	.496	.422
26	DB-15	1.543	1.312	.496	.422
44	DB-25	2.087	1.852	.496	.422
62	DB-37	2.732	2.500	.496	.422
78	DB-50	2.638	2.406	.606	.550

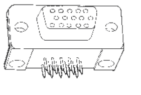
Note: Contacts sold separately (below) for Crimp Type.

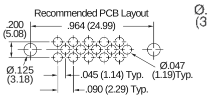
No. of Pins	Type	Digi-Key Part No.	Price Each					NorComp Part No.
			1	10	100	500	1,000	
Crimp								
15	Male	815M-ND	1.91	1.65	1.13	.96	.83	180-015-172-000
15	Female	815F-ND	1.91	1.65	1.13	.96	.83	180-015-272-000
26	Male	826M-ND	5.90	5.09	3.46	2.95	2.55	180-026-172-000
26	Female	826F-ND	6.39	5.51	3.75	3.20	2.76	180-026-272-000
44	Male	844M-ND	6.87	5.93	4.03	3.44	2.97	180-044-172-000
44	Female	844F-ND	6.99	6.03	4.10	3.50	3.02	180-044-272-000
62	Male	862M-ND	8.76	7.55	5.14	4.38	3.78	180-062-172-000
62	Female	862F-ND	8.35	7.20	4.90	4.18	3.60	180-062-272-000
78	Male	878M-ND	15.65	13.49	9.18	7.83	6.75	180-078-172-000
78	Female	878F-ND	10.72	9.25	6.29	5.37	4.63	180-078-272-000
Crimp with .065" Clinch Nuts, Board Side								
15	Male	1815M-ND	3.02	2.60	1.77	1.51	1.30	180-015-172-010
15	Female	1815F-ND	3.02	2.60	1.77	1.51	1.30	180-015-272-010
26	Male	1826M-ND	7.48	6.45	4.39	3.75	3.23	180-026-172-010
26	Female	1826F-ND	7.74	6.68	4.54	3.88	3.34	180-026-272-010
44	Male	1844M-ND	8.27	7.13	4.85	4.14	3.57	180-044-172-010
44	Female	1844F-ND	8.27	7.13	4.85	4.14	3.57	180-044-272-010
62	Male	1862M-ND	10.21	8.80	5.99	5.11	4.40	180-062-172-010
62	Female	1862F-ND	10.21	8.80	5.99	5.11	4.40	180-062-272-010
78	Male	1878M-ND	18.39	15.85	10.78	9.20	7.93	180-078-172-010
78	Female	1878F-ND	14.09	12.15	8.27	7.05	6.08	180-078-272-010
Crimp with .250" Clinch Nuts, Board Side								
15	Male	2815M-ND	3.02	2.60	1.77	1.51	1.30	180-015-172-020
15	Female	2815F-ND	3.02	2.60	1.77	1.51	1.30	180-015-272-020
26	Male	2826M-ND	7.48	6.45	4.39	3.75	3.23	180-026-172-020
26	Female	2826F-ND	7.74	6.68	4.54	3.88	3.34	180-026-272-020
44	Male	2844M-ND	8.27	7.13	4.85	4.14	3.57	180-044-172-020
44	Female	2844F-ND	8.27	7.13	4.85	4.14	3.57	180-044-272-020
62	Male	2862M-ND	10.21	8.80	5.99	5.11	4.40	180-062-172-020
62	Female	2862F-ND	10.21	8.80	5.99	5.11	4.40	180-062-272-020
78	Male	2878M-ND	18.39	15.85	10.78	9.20	7.93	180-078-172-020
78	Female	2878F-ND	14.09	12.15	8.27	7.05	6.08	180-078-272-020
Crimp with .250" Clinch Nuts, Mating Side								
15	Male	3815M-ND	3.02	2.60	1.77	1.51	1.30	180-015-172-030
15	Female	3815F-ND	3.02	2.60	1.77	1.51	1.30	180-015-272-030
26	Male	3826M-ND	7.48	6.45	4.39	3.75	3.23	180-026-172-030
26	Female	3826F-ND	7.74	6.68	4.54	3.88	3.34	180-026-272-030
44	Male	3844M-ND	8.27	7.13	4.85	4.14	3.57	180-044-172-030
44	Female	3844F-ND	8.27	7.13	4.85	4.14	3.57	180-044-272-030
62	Male	3862M-ND	10.21	8.80	5.99	5.11	4.40	180-062-172-030
62	Female	3862F-ND	10.21	8.80	5.99	5.11	4.40	180-062-272-030
78	Male	3878M-ND	18.39	15.85	10.78	9.20	7.93	180-078-172-030
78	Female	3878F-ND	14.09	12.15	8.27	7.05	6.08	180-078-272-030
Contacts								
—	Pin	85P-ND	—	.13	.09	.08	.07	180-001-170-001
—	Socket	85S-ND	—	.13	.09	.08	.07	180-002-170-001
Insertion/Removal Tool		T2020-ND	8.76	7.55	5.14	4.38	3.78	180-901-170-000
Solder Cup								
15	Male	T815M-ND	2.13	1.84	1.25	1.07	.92	180-015-102-001
15	Female	T815F-ND	2.45	2.12	1.44	1.23	1.06	180-015-202-001
26	Male	T826M-ND	6.92	5.97	4.06	3.47	2.99	180-026-102-001
26	Female	T826F-ND	7.35	6.34	4.31	3.68	3.17	180-026-202-001
44	Male	T844M-ND	8.35	7.20	4.90	4.18	3.60	180-044-102-001
44	Female	T844F-ND	9.67	8.34	5.67	4.84	4.17	180-044-202-001
62	Male	T862M-ND	10.40	8.97	6.10	5.20	4.49	180-062-102-001
62	Female	T862F-ND	11.74	10.13	6.89	5.88	5.07	180-062-202-001
Solder Cup with .065" Clinch Nuts, Board Side								
15	Male	4815M-ND	3.28	2.83	1.93	1.64	1.42	180-015-102-011
15	Female	4815F-ND	3.63	3.13	2.13	1.82	1.57	180-015-202-011
26	Male	4826M-ND	11.51	9.93	6.75	5.76	4.97	180-026-102-011
26	Female	4826F-ND	9.11	7.85	5.34	4.56	3.93	180-026-202-011
44	Male	4844M-ND	10.21	8.80	5.99	5.11	4.40	180-044-102-011
44	Female	4844F-ND	11.69	10.08	6.86	5.85	5.04	180-044-202-011
62	Male	4862M-ND	12.53	10.80	7.35	6.27	5.40	180-062-102-011
62	Female	4862F-ND	17.63	15.20	10.34	8.82	7.60	180-062-202-011
78	Male	4878M-ND	17.63	15.20	10.34	8.82	7.60	180-078-102-011
78	Female	4878F-ND	18.42	15.88	10.80	9.21	7.94	180-078-202-011
Solder Cup with .250" Clinch Nuts, Board Side								
15	Male	5815M-ND	3.28	2.83	1.93	1.64	1.42	180-015-102-021
15	Female	5815F-ND	3.63	3.13	2.13	1.82	1.57	180-015-202-021
26	Male	5826M-ND	11.51	9.93	6.75	5.76	4.97	180-026-102-021
26	Female	5826F-ND	9.11	7.85	5.34	4.56	3.93	180-026-202-021
44	Male	5844M-ND	10.21	8.80	5.99	5.11	4.40	180-044-102-021
44	Female	5844F-ND	11.69	10.08	6.86	5.85	5.04	180-044-202-021
62	Male	5862M-ND	12.53	10.80	7.35	6.27	5.40	180-062-102-021
62	Female	5862F-ND	17.63	15.20	10.34	8.82	7.60	180-062-202-021
78	Male	5878M-ND	17.63	15.20	10.34	8.82	7.60	180-078-102-021
78	Female	5878F-ND	18.42	15.88	10.80	9.21	7.94	180-078-202-021
Solder Cup with .250" Clinch Nuts, Mating Side								
15	Male	6815M-ND	3.28	2.83	1.93	1.64	1.42	180-015-102-031
15	Female	6815F-ND	3.63	3.13	2.13	1.82	1.57	180-015-202-031
26	Male	6826M-ND	11.51	9.93	6.75	5.76	4.97	180-026-102-031
26	Female	6826F-ND	9.11	7.85	5.34	4.56	3.93	180-026-202-031
44	Male	6844M-ND	10.21	8.80	5.99	5.11	4.40	180-044-102-031
44	Female	6844F-ND	11.69	10.08	6.86	5.85	5.04	180-044-202-031
62	Male	6862M-ND	12.53	10.80	7.35	6.27	5.40	180-062-102-031
62	Female	6862F-ND	17.63	15.20	10.34	8.82	7.60	180-062-202-031
78	Male	6878M-ND	17.63	15.20	10.34	8.82	7.60	180-078-102-031
78	Female	6878F-ND	18.42	15.88	10.80	9.21	7.94	180-078-202-031
Dip Solder High Density								
15	Male	180-15M-ND	2.38	2.05	1.40	1.19	1.03	180-015-112-001
15	Female	180-15F-ND	2.00	1.73	1.18	1.01	.87	180-015-212-001
26	Male	180-26M-ND	3.68	3.18	2.16	1.85	1.59	180-026-112-001
26	Female	180-26F-ND	4.18	3.60	2.45	2.09	1.80	180-026-212-001
44	Male	180-44M-ND	6.55	5.65	3.85	3.28	2.83	180-044-112-001
44	Female	180-44F-ND	6.53	5.63	3.83	3.27	2.82	180-044-212-001
62	Male	180-62M-ND	8.90	7.68	5.22	4.46	3.84	180-062-112-001
62	Female	180-62F-ND	9.02	7.78	5.29	4.51	3.89	180-062-212-001
78	Male	180-78M-ND	13.05	11.25	7.65	6.53	5.63	180-078-112-001
78	Female	180-78F-ND	12.76	11.00	7.48	6.38	5.50	180-078-212-001
Dip Solder High Density with .065" Clinch Nuts, Board Side								
15	Male	7815M-ND	3.48	3.00	2.04	1.74	1.50	180-015-112-011
15	Female	7815F-ND	3.07	2.65	1.81	1.54	1.33	180-015-212-011
26	Male	7826M-ND	4.90	4.23	2.88	2.46	2.12	180-026-112-011
26	Female	7826F-ND	5.45	4.70	3.20	2.73	2.35	180-026-212-011
44	Male	7844M-ND	8.06	6.95	4.73	4.04	3.48	180-044-112-011
44	Female	7844F-ND	8.03	6.93	4.71	4.02	3.47	180-044-212-011
62	Male	7862M-ND	10.64	9.18	6.24	5.33	4.59	180-062-112-011
62	Female	7862F-ND	10.79	9.30	6.33	5.40	4.65	180-062-212-011
78	Male	7878M-ND	15.23	13.13	8.93	7.62	6.57	180-078-112-011
78	Female	7878F-ND	14.88	12.83	8.73	7.44	6.42	180-078-212-011
Dip Solder High Density with .250" Clinch Nuts, Board Side								
15	Male	8815M-ND	3.48	3.00	2.04	1.74	1.50	180-015-112-021
15	Female	8815F-ND	3.07	2.65	1.81	1.54	1.33	180-015-212-021
26	Male	8826M-ND	4.90	4.23	2.88	2.46	2.12	180-026-112-021
26	Female	8826F-ND	5.45	4.70	3.20	2.73	2.35	180-026-212-021
44	Male	8844M-ND	8.06	6.95	4.73	4.04	3.48	180-044-112-021
44	Female	8844F-ND	8.03	6.93	4.71	4.02	3.47	180-044-212-021
62	Male	8862M-ND	10.64	9.18	6.24	5.33	4.59	180-062-112-021
62	Female	8862F-ND	10.79	9.30	6.33	5.40	4.65	180-062-212-021
78	Male	8878M-ND	15.23	13.13	8.93	7.62	6.57	180-078-112-021
78	Female	8878F-ND	14.88	12.83	8.73	7.44	6.42	180-078-212-021
Dip Solder High Density with .250" Clinch Nuts, Mating Side								
15	Male	9815M-ND	3.48	3.00	2.04	1.74	1.50	180-015-112-031
15	Female	9815F-ND	3.07	2.65	1.81	1.54	1.33	180-015-212-031
26	Male	9826M-ND	4.90	4.23	2.88	2.46	2.12	180-026-112-031
26	Female	9826F-ND	5.45	4.70	3.20	2.73	2.35	180-026-212-031
44	Male	9844M-ND	8.06	6.95	4.73	4.04	3.48	180-044-112-031
44	Female	9844F-ND	8.03	6.93	4.71	4.02	3.47	180-044-212-031
62	Male	9862M-ND	10.64	9.18	6.24	5.33	4.59	180-062-112-031
62	Female	9862F-ND	10.79	9.30	6.33	5.40	4.65	180-062-212-031
78	Male	9878M-ND	15.23	13.13	8.93	7.62	6.57	180-078-112-031
78	Female	9878F-ND	14.88	12.83	8.73	7.44	6.42	180-078-212-031

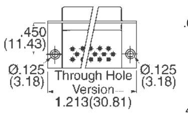
NorComp

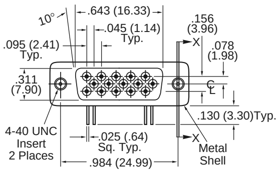
High Density 90° PC Mount D-Sub Connector

SPECIFICATIONS:
- **Contact Rating:** 5 Amps
- **Dielectric Strength:** 1000V AC RMS
- **Insulation Resistance:** 1000 meg ohms
- **Contact Material:** Phosphor Bronze
- **Contact Finish:** Gold over Nickel
- **Operating Temperature:** -55°C to 150°C
- **Shell Material:** Steel, Tin Plated
- **Insulations Material:** Glass-Filled Polyester (UL 94V-0)
- **Gender:** Receptacle (female)







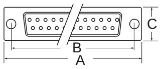


No. of Pins	Type	Digi-Key Part No.	Price Each					NorComp Part No.
			1	10	100	500	1,000	
181 Series (.590" Footprint)								
15	Female	815RF-ND	2.91	2.51	1.71	1.46	1.26	181-015-212-171
26	Female	826RF-ND	8.45	7.29	4.96	4.23	3.65	181-026-212-171
44	Female	844RF-ND	9.13	7.88	5.36	4.57	3.94	181-044-212-171
62	Female	862RF-ND	12.17	10.50	7.14	6.09	5.25	181-062-212-171

NORCOMP

D-Sub Connectors

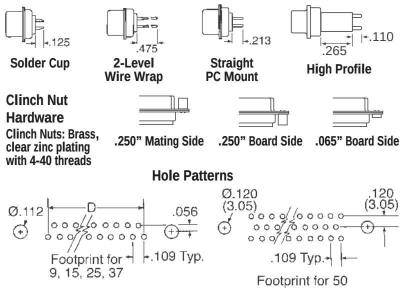
Series 171 – Stamped Contacts
Series 172 – Machined Contacts



Features: • Available in 5 industry sizes/positions • Non-removable contacts • Tin or Yellow Chromate shells available • Tin shells have indents to provide grounding and additional retention • Screw machine contacts offer high reliability. **Materials:** • Shell: Steel, zinc plated with yellow chromate or bright tin over nickel • Insulator: Glass-filled thermoplastic, UL rated 94V-O • Contacts: Brass male pins; Phosphor bronze female pins • Plating: Gold flash on entire contact

Conn. Size	Dim. (Inch) A	B	C
9	1.213	.984	.494
15	1.541	1.312	.494
25	2.088	1.852	.494
37	2.729	2.500	.494
50	2.635	2.406	.605

Original D-Subminiature



Series 171 — Stamped Contacts

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Tin Shells – Solder Cup						
9	Male	209M-ND	.63	.55	.38	171-009-102-001
9	Female	209F-ND	.67	.58	.40	171-009-202-001
15	Male	215M-ND	.92	.79	.54	171-015-102-001
15	Female	215F-ND	1.13	.98	.67	171-015-202-001
25	Male	225M-ND	1.08	.93	.64	171-025-102-001
25	Female	225F-ND	1.26	1.09	.75	171-025-202-001
37	Male	237M-ND	1.94	1.68	1.14	171-037-102-001
37	Female	237F-ND	2.29	1.98	1.35	171-037-202-001
50	Male	250M-ND	4.07	3.51	2.39	171-050-102-001
50	Female	250F-ND	4.42	3.81	2.60	171-050-202-001
Tin Shells with .065" Clinch Nuts, Board Side – Solder Cup						
9	Male	1209M-ND	1.57	1.35	.92	171-009-102-011
9	Female	1209F-ND	1.62	1.40	.96	171-009-202-011
15	Male	1215M-ND	1.91	1.65	1.13	171-015-102-011
15	Female	1215F-ND	2.15	1.85	1.26	171-015-202-011
25	Male	1225M-ND	2.09	1.80	1.23	171-025-102-011
25	Female	1225F-ND	2.32	2.00	1.36	171-025-202-011
37	Male	1237M-ND	3.05	2.63	1.79	171-037-102-011
37	Female	1237F-ND	3.48	3.00	2.04	171-037-202-011
50	Male	1250M-ND	5.42	4.68	3.18	171-050-102-011
50	Female	1250F-ND	5.83	5.03	3.42	171-050-202-011
Tin Shells with .250" Clinch Nuts, Board Side –Solder Cup						
9	Male	2209M-ND	1.57	1.35	.92	171-009-102-021
9	Female	2209F-ND	1.62	1.40	.96	171-009-202-021
15	Male	2215M-ND	1.91	1.65	1.13	171-015-102-021
15	Female	2215F-ND	2.15	1.85	1.26	171-015-202-021
25	Male	2225M-ND	2.09	1.80	1.23	171-025-102-021
25	Female	2225F-ND	2.32	2.00	1.36	171-025-202-021
37	Male	2237M-ND	3.05	2.63	1.79	171-037-102-021
37	Female	2237F-ND	3.48	3.00	2.04	171-037-202-021
50	Male	2250M-ND	5.42	4.68	3.18	171-050-102-021
50	Female	2250F-ND	5.83	5.03	3.42	171-050-202-021
Tin Shells with .250" Clinch Nuts, Mating Side – Solder Cup						
9	Male	3209M-ND	1.57	1.35	.92	171-009-102-031
9	Female	3209F-ND	1.62	1.40	.96	171-009-202-031
15	Male	3215M-ND	1.91	1.65	1.13	171-015-102-031
15	Female	3215F-ND	2.15	1.85	1.26	171-015-202-031
25	Male	3225M-ND	2.09	1.80	1.23	171-025-102-031
25	Female	3225F-ND	2.32	2.00	1.36	171-025-202-031
37	Male	3237M-ND	3.05	2.63	1.79	171-037-102-031
37	Female	3237F-ND	3.48	3.00	2.04	171-037-202-031
50	Male	3250M-ND	5.42	4.68	3.18	171-050-102-031
50	Female	3250F-ND	5.83	5.03	3.42	171-050-202-031
Tin Shells – Dip Solder						
9	Male	4209M-ND	1.13	.98	.67	171-009-112-001
9	Female	4209F-ND	1.28	1.10	.75	171-009-212-001
15	Male	4215M-ND	1.80	1.55	1.06	171-015-112-001
15	Female	4215F-ND	1.39	1.20	.82	171-015-212-001
25	Male	4225M-ND	2.52	2.18	1.48	171-025-112-001
25	Female	4225F-ND	1.77	1.53	1.04	171-025-212-001
37	Male	4237M-ND	4.32	3.73	2.54	171-037-112-001
37	Female	4237F-ND	2.87	2.48	1.69	171-037-212-001
50	Male	4250M-ND	4.55	3.93	2.67	171-050-112-001
50	Female	4250F-ND	4.38	3.78	2.57	171-050-212-001
Tin Shells with .065" Clinch Nuts, Board Side –Dip Solder						
9	Male	5209M-ND	2.00	1.73	1.18	171-009-112-011
9	Female	5209F-ND	2.15	1.85	1.26	171-009-212-011
15	Male	5215M-ND	2.67	2.30	1.57	171-015-112-011
15	Female	5215F-ND	2.26	1.95	1.33	171-015-212-011
25	Male	5225M-ND	3.39	2.93	1.99	171-025-112-011
25	Female	5225F-ND	2.64	2.28	1.55	171-025-212-011
37	Male	5237M-ND	5.19	4.48	3.05	171-037-112-011
37	Female	5237F-ND	3.74	3.23	2.20	171-037-212-011
50	Male	5250M-ND	5.42	4.68	3.18	171-050-112-011
50	Female	5250F-ND	5.25	4.53	3.08	171-050-212-011
Tin Shells with .250" Clinch Nuts, Board Side – Dip Solder						
9	Male	6209M-ND	2.00	1.73	1.18	171-009-112-021
9	Female	6209F-ND	2.15	1.85	1.26	171-009-212-021
15	Male	6215M-ND	2.67	2.30	1.57	171-015-112-021
15	Female	6215F-ND	2.26	1.95	1.33	171-015-212-021
25	Male	6225M-ND	3.39	2.93	1.99	171-025-112-021
25	Female	6225F-ND	2.64	2.28	1.55	171-025-212-021
37	Male	6237M-ND	5.19	4.48	3.05	171-037-112-021
37	Female	6237F-ND	3.74	3.23	2.20	171-037-212-021
50	Male	6250M-ND	5.42	4.68	3.18	171-050-112-021
50	Female	6250F-ND	5.25	4.53	3.08	171-050-212-021
Tin Shells with .250" Clinch Nuts, Mating Side – Dip Solder						
9	Male	7209M-ND	2.00	1.73	1.18	171-009-112-031
9	Female	7209F-ND	2.15	1.85	1.26	171-009-212-031
15	Male	7215M-ND	2.67	2.30	1.57	171-015-112-031
15	Female	7215F-ND	2.26	1.95	1.33	171-015-212-031
25	Male	7225M-ND	3.39	2.93	1.99	171-025-112-031
25	Female	7225F-ND	2.64	2.28	1.55	171-025-212-031
37	Male	7237M-ND	5.19	4.48	3.05	171-037-112-031
37	Female	7237F-ND	3.74	3.23	2.20	171-037-212-031
50	Male	7250M-ND	5.42	4.68	3.18	171-050-112-031
50	Female	7250F-ND	5.25	4.53	3.08	171-050-212-031

Series 172 — Machined Contacts

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Tin Shells – Solder Cup						
9	Male	1109M-ND	2.09	1.80	1.23	172-009-102-001
9	Female	1109F-ND	2.41	2.08	1.42	172-009-202-001
15	Male	1115M-ND	2.67	2.30	1.57	172-015-102-001
15	Female	1115F-ND	3.22	2.78	1.89	172-015-202-001
25	Male	1125M-ND	3.45	2.98	2.03	172-025-102-001
25	Female	1125F-ND	4.76	4.10	2.79	172-025-202-001
37	Male	1137M-ND	4.61	3.98	2.71	172-037-102-001
37	Female	1137F-ND	6.44	5.55	3.78	172-037-202-001
50	Male	1150M-ND	5.83	5.03	3.42	172-050-102-001
50	Female	1150F-ND	8.61	7.43	5.05	172-050-202-001
Tin Shells with .065" Clinch Nuts, Board Side – Solder Cup						
9	Male	2109M-ND	2.96	2.55	1.74	172-009-102-011
9	Female	2109F-ND	3.28	2.83	1.93	172-009-202-011
15	Male	2115M-ND	3.54	3.05	2.08	172-015-102-011
15	Female	2115F-ND	4.09	3.53	2.40	172-015-202-011
25	Male	2125M-ND	4.32	3.73	2.54	172-025-102-011
25	Female	2125F-ND	5.63	4.85	3.30	172-025-202-011
37	Male	2137M-ND	5.48	4.73	3.22	172-037-102-011
37	Female	2137F-ND	7.31	6.30	4.29	172-037-202-011
50	Male	2150M-ND	6.70	5.78	3.93	172-050-102-011
50	Female	2150F-ND	9.48	8.18	5.56	172-050-202-011
Tin Shells with .250" Clinch Nuts, Board Side – Solder Cup						
9	Male	3109M-ND	2.96	2.55	1.74	172-009-102-021
9	Female	3109F-ND	3.28	2.83	1.93	172-009-202-021
15	Male	3115M-ND	3.54	3.05	2.08	172-015-102-021
15	Female	3115F-ND	4.09	3.53	2.40	172-015-202-021
25	Male	3125M-ND	4.32	3.73	2.54	172-025-102-021
25	Female	3125F-ND	5.63	4.85	3.30	172-025-202-021
37	Male	3137M-ND	5.48	4.73	3.22	172-037-102-021
37	Female	3137F-ND	7.31	6.30	4.29	172-037-202-021
50	Male	3150M-ND	6.70	5.78	3.93	172-050-102-021
50	Female	3150F-ND	9.48	8.18	5.56	172-050-202-021
Tin Shells with .250" Clinch Nuts, Mating Side – Solder Cup						
9	Male	4109M-ND	2.96	2.55	1.74	172-009-102-031
9	Female	4109F-ND	3.28	2.83	1.93	172-009-202-031
15	Male	4115M-ND	3.54	3.05	2.08	172-015-102-031
15	Female	4115F-ND	4.09	3.53	2.40	172-015-202-031
25	Male	4125M-ND	4.32	3.73	2.54	172-025-102-031
25	Female	4125F-ND	5.63	4.85	3.30	172-025-202-031
37	Male	4137M-ND	5.48	4.73	3.22	172-037-102-031
37	Female	4137F-ND	7.31	6.30	4.29	172-037-202-031
50	Male	4150M-ND	6.70	5.78	3.93	172-050-102-031
50	Female	4150F-ND	9.48	8.18	5.56	172-050-202-031
Yellow Chromate – Solder Cup						
9	Male	109M-ND	1.75	1.51	1.03	172-009-101-001
9	Female	109F-ND	2.13	1.84	1.25	172-009-201-001
15	Male	115M-ND	2.26	1.96	1.33	172-015-101-001
15	Female	115F-ND	2.99	2.58	1.76	172-015-201-001
25	Male	125M-ND	3.05	2.63	1.79	172-025-101-001
25	Female	125F-ND	4.42	3.81	2.60	172-025-201-001
37	Male	137M-ND	4.42	3.81	2.60	172-037-101-001
37	Female	137F-ND	6.14	5.30	3.60	172-037-201-001
50	Male	150M-ND	4.87	4.20	2.86	172-050-101-001
50	Female	150F-ND	7.41	6.39	4.35	172-050-201-001
Yellow Chromate with .065" Clinch Nuts, Board Side – Solder Cup						
9	Male	5109M-ND	2.84	2.45	1.67	172-009-101-011
9	Female	5109F-ND	3.28	2.83	1.93	172-009-201-011
15	Male	5115M-ND	3.42	2.95	2.01	172-015-101-011
15	Female	5115F-ND	4.23	3.65	2.49	172-015-201-011
25	Male	5125M-ND	4.29	3.70	2.52	172-025-101-011
25	Female	5125F-ND	5.83	5.03	3.42	172-025-201-011
37	Male	5137M-ND	5.83	5.03	3.42	172-037-101-011
37	Female	5137F-ND	7.77	6.70	4.56	172-037-201-011
50	Male	5150M-ND	6.47	5.58	3.80	172-050-101-011
50	Female	5150F-ND	9.16	7.90	5.38	172-050-201-011
Yellow Chromate with .250" Clinch Nuts, Board Side – Solder Cup						
9	Male	6109M-ND	2.84	2.45	1.67	172-009-101-021
9	Female	6109F-ND	3.28	2.83	1.93	172-009-201-021
15	Male	6115M-ND	3.42	2.95	2.01	172-015-101-021
15	Female	6115F-ND	4.23	3.65	2.49	172-015-201-021
25	Male	6125M-ND	4.29	3.70	2.52	172-025-101-021
25	Female	6125F-ND	5.83	5.03	3.42	172-025-201-021
37	Male	6137M-ND	5.83	5.03	3.42	172-037-101-021
37	Female	6137F-ND	7.77	6.70	4.56	172-037-201-021
50	Male	6150M-ND	6.47	5.58	3.80	172-050-101-021
50	Female	6150F-ND	9.16	7.90	5.38	172-050-201-021
Yellow Chromate with .250" Clinch Nuts, Mating Side – Solder Cup						
9	Male	7109M-ND	2.84	2.45	1.67	172-009-101-031
9	Female	7109F-ND	3.28	2.83	1.93	172-009-201-031
15	Male	7115M-ND	3.42	2.95	2.01	172-015-101-031
15	Female	7115F-ND	4.23	3.65	2.49	172-015-201-031
25	Male	7125M-ND	4.29	3.70	2.52	172-025-101-031
25	Female	7125F-ND	5.83	5.03	3.42	172-025-201-031
37	Male	7137M-ND	5.83	5.03	3.42	172-037-101-031
37	Female	7137F-ND	7.77	6.70	4.56	172-037-201-031
50	Male	7150M-ND	6.47	5.58	3.80	172-050-101-031
50	Female	7150F-ND	9.16	7.90	5.38	172-050-201-031
Straight PCB Mount						
9	Male	509M-ND	1.73	1.49	1.02	172-009-111-001
9	Female	509F-ND	2.51	2.16	1.47	172-009-211-001
15	Male	515M-ND	2.21	1.91	1.30	172-015-111-001
15	Female	515F-ND	3.50	3.02	2.06	172-015-211-001
25	Male	525M-ND	3.07	2.65	1.81	172-025-111-001
25	Female	525F-ND	4.81	4.15	2.83	172-025-211-001
37	Male	537M-ND	4.55	3.93	2.67	172-037-111-001
37	Female	537F-ND	6.96	6.00	4.08	172-037-211-001
50	Male	550M-ND	5.39	4.65	3.17	172-050-111-001
50	Female	550F-ND	9.43	8.13	5.53	172-050-211-001
Tin Shells – Dip Solder						
9	Male	1509MN-ND	2.18	1.88	1.28	172-009-112-001
9	Female	1509FN-ND	2.73	2.35	1.60	172-009-212-001
15	Male	1515MN-ND	2.84	2.45	1.67	172-015-112-001
15	Female	1515FN-ND	3.80	3.28	2.23	172-015-212-001
25	Male	1525MN-ND	3.63	3.13	2.13	172-025-112-001
25	Female	1525FN-ND	5.66	4.88	3.32	172-025-212-001
37	Male	1537MN-ND	4.96	4.28	2.91	172-037-112-001
37	Female	1537FN-ND	7.98	6.88	4.68	172-037-212-001
50	Male	1550MN-ND	6.26	5.40	3.68	172-050-112-001
50	Female	1550FN-ND	10.70	9.23	6.28	172-050-212-001
Tin Shells with .065" Clinch Nuts, Board Side – Dip Solder						
9	Male	2509M-ND	3.05	2.63	1.79	172-009-112-011
9	Female	2509F-ND	3.60	3.10	2.11	172-009-212-011
15	Male	2515M-ND	3.71	3.20	2.18	172-015-112-011
15	Female	2515F-ND	4.67	4.03	2.74	172-015-212-011
25	Male	2525M-ND	4.50	3.88	2.64	172-025-112-011
25	Female	2525F-ND	6.53	5.63	3.83	172-025-212-011
37	Male	2537M-ND	5.83	5.03	3.42	172-037-112-011
37	Female	2537F-ND	8.85	7.63	5.19	172-037-212-011
50	Male	2550M-ND	7.13	6.15	4.19	172-050-112-011
50	Female	2550F-ND	11.57	9.98	6.79	172-050-212-011
Tin Shells with .250" Clinch Nuts, Board Side – Dip Solder						
9	Male	3509M-ND	3.05	2.63	1.79	172-009-112-021
9	Female	3509F-ND	3.60	3.10	2.11	172-009-212-021
15	Male	3515M-ND	3.71	3.20	2.18	172-015-112-021
15	Female	3515F-ND	4.67	4.03	2.74	172-015-212-021
25	Male	3525M-ND	4.50	3.88	2.64	172-025-112-021
25	Female	3525F-ND	6.53	5.63	3.83	172-025-212-021
37	Male	3537M-ND	5.83	5.03	3.42	172-037-112-021
37	Female	3537F-ND	8.85	7.63	5.19	172-037-212-021
50	Male	3550M-ND	7.13	6.15	4.19	172-050-112-021
50	Female	3550F-ND	11.57	9.98	6.79	172-050-212-021
Tin Shells with .250" Clinch Nuts, Mating Side – Dip Solder						
9	Male	4509M-ND	3.05	2.63	1.79	172-009-112-031
9	Female	4509F-ND	3.60	3.10	2.11	172-009-212-031
15	Male	4515M-ND	3.71	3.20	2.18	172-015-112-031
15	Female	4515F-ND	4.67	4.03	2.74	172-015-212-031
25	Male	4525M-ND	4.50	3.88	2.64	172-025-112-031
25	Female	4525F-ND	6.53	5.63	3.83	172-025-212-031
37	Male	4537M-ND	5.83	5.03	3.42	172-037-112-031
37	Female	4537F-ND	8.85	7.63	5.19	172-037-212-031
50	Male	4550M-ND	7.13	6.15	4.19	172-050-112-031
50	Female	4550F-ND	11.57	9.98	6.79	172-050-212-031
Yellow Chromate with .065" Clinch Nuts, Board Side – Dip Solder						
9	Male	5509M-ND	2.84	2.45	1.67	172-009-111-011
9	Female	5509F-ND	3.68	3.18	2.16	172-009-211-011
15	Male	5515M-ND	3.36	2.90	1.98	172-015-111-011
15	Female	5515F-ND	4.52	3.90	2.66	172-015-211-011
25	Male	5525M-ND	4.21	3.63	2.47	172-025-111-011
25	Female	5525F-ND	6.24	5.38	3.66	172-025-211-011
37	Male	5537M-ND	6.00	5.18	3.52	172-037-111-011
37	Female	5537F-ND	8.67	7.48	5.09	172-037-211-011
50	Male	5550M-ND	6.96	6.00	4.08	172-050-111-011
50	Female	5550F-ND	11.25	9.70	6.60	172-050-211-011
Yellow Chromate with .250" Clinch Nuts, Board Side – Dip Solder						
9	Male	6509M-ND	2.84	2.45	1.67	172-009-111-021
9	Female	6509F-ND	3.68	3.18	2.16	172-009-211-021
15	Male	6515M-ND	3.36	2.90	1.98	172-015-111-021
15	Female	6515F-ND	4.52	3.90	2.66	172-015-211-021
25	Male	6525M-ND	4.21	3.63	2.47	172-025-111-021
25	Female	6525F-ND	6.24	5.38	3.66	172-025-211-021
37	Male	6537M-ND	6.00	5.18	3.52	172-037-111-021
37	Female	6537F-ND	8.67	7.48	5.09	172-037-211-021
50	Male	6550M-ND	6.96	6.00	4.08	172-050-111-021
50	Female	6550F-ND	11.25	9.70	6.60	172-050-211-021
Yellow Chromate with .250" Clinch Nuts, Mating Side – Dip Solder						
9	Male	7509M-ND	2.84	2.45	1.67	172-009-111-031
9	Female	7509F-ND	3.68	3.18	2.16	172-009-211-031

(Continued)

NORCOMP D-Sub Connectors *(Cont.)*

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
15	Male	7515M-ND	3.36	2.90	1.98	172-015-111-031
15	Female	7515F-ND	4.52	3.90	2.66	172-015-211-031
25	Male	7525M-ND	4.21	3.63	2.47	172-025-111-031
25	Female	7525F-ND	6.24	5.38	3.66	172-025-211-031
37	Male	7537M-ND	6.00	5.18	3.52	172-037-111-031
37	Female	7537F-ND	8.67	7.48	5.09	172-037-211-031
50	Male	7550M-ND	6.96	6.00	4.08	172-050-111-031
50	Female	7550F-ND	11.25	9.70	6.60	172-050-211-031
Yellow Chromate with .065" Clinch Nuts, Board Side – Wire Wrap						
9	Male	5609M-ND	3.77	3.25	2.21	172-009-141-011
9	Female	5609F-ND	4.44	3.83	2.61	172-009-241-011
15	Male	5615M-ND	5.86	5.05	3.44	172-015-141-011
15	Female	5615F-ND	6.35	5.48	3.73	172-015-241-011
25	Male	5625M-ND	7.48	6.45	4.39	172-025-141-011
25	Female	5625F-ND	9.22	7.95	5.41	172-025-241-011
37	Male	5637M-ND	10.38	8.95	6.09	172-037-141-011
37	Female	5637F-ND	13.08	11.28	7.67	172-037-241-011
50	Male	5650M-ND	13.49	11.63	7.91	172-050-141-011
50	Female	5650F-ND	17.08	14.73	10.02	172-050-241-011
Yellow Chromate with .250" Clinch Nuts, Board Side – Wire Wrap						
9	Male	6609M-ND	3.77	3.25	2.21	172-009-141-021
9	Female	6609F-ND	4.44	3.83	2.61	172-009-241-021
15	Male	6615M-ND	5.86	5.05	3.44	172-015-141-021
15	Female	6615F-ND	6.35	5.48	3.73	172-015-241-021
25	Male	6625M-ND	7.48	6.45	4.39	172-025-141-021
25	Female	6625F-ND	9.22	7.95	5.41	172-025-241-021
37	Male	6637M-ND	10.38	8.95	6.09	172-037-141-021
37	Female	6637F-ND	13.08	11.28	7.67	172-037-241-021
50	Male	6650M-ND	13.49	11.63	7.91	172-050-141-021
50	Female	6650F-ND	17.08	14.73	10.02	172-050-241-021
Yellow Chromate with .250" Clinch Nuts, Mating Side – Wire Wrap						
9	Male	7609M-ND	3.77	3.25	2.21	172-009-141-031
9	Female	7609F-ND	4.44	3.83	2.61	172-009-241-031
15	Male	7615M-ND	5.86	5.05	3.44	172-015-141-031
15	Female	7615F-ND	6.35	5.48	3.73	172-015-241-031
25	Male	7625M-ND	7.48	6.45	4.39	172-025-141-031
25	Female	7625F-ND	9.22	7.95	5.41	172-025-241-031
37	Male	7637M-ND	10.38	8.95	6.09	172-037-141-031
37	Female	7637F-ND	13.08	11.28	7.67	172-037-241-031
50	Male	7650M-ND	13.49	11.63	7.91	172-050-141-031
50	Female	7650F-ND	17.08	14.73	10.02	172-050-241-031
Yellow Chromate Shells – Wire Wrap						
9	Male	609M-ND	2.58	2.23	1.52	172-009-141-001
9	Female	609F-ND	3.15	2.72	1.85	172-009-241-001
15	Male	615M-ND	3.83	3.30	2.25	172-015-141-001
15	Female	615F-ND	4.71	4.07	2.77	172-015-241-001
25	Male	625M-ND	6.55	5.65	3.85	172-025-141-001
25	Female	625F-ND	7.27	6.27	4.27	172-025-241-001
37	Male	637M-ND	8.38	7.23	4.92	172-037-141-001
37	Female	637F-ND	10.88	9.38	6.38	172-037-241-001
50	Male	650M-ND	10.32	8.90	6.05	172-050-141-001
50	Female	650F-ND	13.87	11.96	8.14	172-050-241-001
Tin Shells – Wire Wrap						
9	Male	1609MN-ND	3.07	2.65	1.81	172-009-142-001
9	Female	1609FN-ND	3.71	3.20	2.18	172-009-242-001
15	Male	1615MN-ND	4.73	4.08	2.78	172-015-142-001
15	Female	1615FN-ND	5.54	4.78	3.25	172-015-242-001
25	Male	1625MN-ND	6.82	5.88	4.00	172-025-142-001
25	Female	1625FN-ND	10.96	9.45	6.43	172-025-242-001
37	Male	1637MN-ND	9.74	8.40	5.72	172-037-142-001
37	Female	1637FN-ND	12.21	10.53	7.16	172-037-242-001
50	Male	1650MN-ND	12.76	11.00	7.48	172-050-142-001
50	Female	1650FN-ND	16.65	14.35	9.76	172-050-242-001

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Tin Shells with .065" Clinch Nuts, Board Side – Wire Wrap						
9	Male	2609M-ND	3.94	3.40	2.32	172-009-142-011
9	Female	2609F-ND	4.58	3.95	2.69	172-009-242-011
15	Male	2615M-ND	5.60	4.83	3.29	172-015-142-011
15	Female	2615F-ND	6.41	5.53	3.76	172-015-242-011
25	Male	2625M-ND	7.69	6.63	4.51	172-025-142-011
25	Female	2625F-ND	11.83	10.20	6.94	172-025-242-011
37	Male	2637M-ND	10.61	9.15	6.23	172-037-142-011
37	Female	2637F-ND	13.08	11.28	7.67	172-037-242-011
50	Male	2650M-ND	13.63	11.75	7.99	172-050-142-011
50	Female	2650F-ND	17.52	15.10	10.27	172-050-242-011
Tin Shells with .250" Clinch Nuts, Board Side – Wire Wrap						
9	Male	3609M-ND	3.94	3.40	2.32	172-009-142-021
9	Female	3609F-ND	4.58	3.95	2.69	172-009-242-021
15	Male	3615M-ND	5.60	4.83	3.29	172-015-142-021
15	Female	3615F-ND	6.41	5.53	3.76	172-015-242-021
25	Male	3625M-ND	7.69	6.63	4.51	172-025-142-021
25	Female	3625F-ND	11.83	10.20	6.94	172-025-242-021
37	Male	3637M-ND	10.61	9.15	6.23	172-037-142-021
37	Female	3637F-ND	13.08	11.28	7.67	172-037-242-021
50	Male	3650M-ND	13.63	11.75	7.99	172-050-142-021
50	Female	3650F-ND	17.52	15.10	10.27	172-050-242-021
Tin Shells with .250" Clinch Nuts, Mating Side – Wire Wrap						
9	Male	4609M-ND	3.94	3.40	2.32	172-009-142-031
9	Female	4609F-ND	4.58	3.95	2.69	172-009-242-031
15	Male	4615M-ND	5.60	4.83	3.29	172-015-142-031
15	Female	4615F-ND	6.41	5.53	3.76	172-015-242-031
25	Male	4625M-ND	7.69	6.63	4.51	172-025-142-031
25	Female	4625F-ND	11.83	10.20	6.94	172-025-242-031
37	Male	4637M-ND	10.61	9.15	6.23	172-037-142-031
37	Female	4637F-ND	13.08	11.28	7.67	172-037-242-031
50	Male	4650M-ND	13.63	11.75	7.99	172-050-142-031
50	Female	4650F-ND	17.52	15.10	10.27	172-050-242-031

Series 172
High Profile — Machined Contacts

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Yellow Chromate						
9	Male	8609M-ND	3.77	3.25	2.21	172-009-181-001
9	Female	8609F-ND	4.41	3.80	2.59	172-009-281-001
15	Male	8615M-ND	5.42	4.68	3.18	172-015-181-001
15	Female	8615F-ND	6.90	5.95	4.05	172-015-281-001
25	Male	8625M-ND	8.03	6.93	4.71	172-025-181-001
25	Female	8625F-ND	10.67	9.20	6.26	172-025-281-001
37	Male	8637M-ND	11.48	9.90	6.74	172-037-181-001
37	Female	8637F-ND	15.28	13.18	8.96	172-037-281-001
50	Male	8650M-ND	14.65	12.63	8.59	172-050-181-001
50	Female	8650F-ND	19.95	17.20	11.70	172-050-281-001
Yellow Chromate w/ .065" Clinch Nuts, Board Side						
9	Male	9609M-ND	4.64	4.00	2.72	172-009-181-011
9	Female	9609F-ND	5.28	4.55	3.10	172-009-281-011
15	Male	9615M-ND	6.29	5.43	3.69	172-015-181-011
15	Female	9615F-ND	7.77	6.70	4.56	172-015-281-011
25	Male	9625M-ND	8.90	7.68	5.22	172-025-181-011
25	Female	9625F-ND	11.54	9.95	6.77	172-025-281-011
37	Male	9637M-ND	12.35	10.65	7.25	172-037-181-011
37	Female	9637F-ND	16.15	13.93	9.47	172-037-281-011
50	Male	9650M-ND	15.52	13.38	9.10	172-050-181-011
50	Female	9650F-ND	20.82	17.95	12.21	172-050-281-011

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
Yellow Chromate w/ .250" Clinch Nuts, Board Side						
9	Male	10609M-ND	4.64	4.00	2.72	172-009-181-021
9	Female	10609F-ND	5.28	4.55	3.10	172-009-281-021
15	Male	10615M-ND	6.29	5.43	3.69	172-015-181-021
15	Female	10615F-ND	7.77	6.70	4.56	172-015-281-021
25	Male	10625M-ND	8.90	7.68	5.22	172-025-181-021
25	Female	10625F-ND	11.54	9.95	6.77	172-025-281-021
37	Male	10637M-ND	12.35	10.65	7.25	172-037-181-021
37	Female	10637F-ND	16.15	13.93	9.47	172-037-281-021
50	Male	10650M-ND	15.52	13.38	9.10	172-050-181-021
50	Female	10650F-ND	20.82	17.95	12.21	172-050-281-021
Yellow Chromate w/ .250" Clinch Nuts, Mating Side						
9	Male	11609M-ND	4.64	4.00	2.72	172-009-181-031
9	Female	11609F-ND	5.28	4.55	3.10	172-009-281-031
15	Male	11615M-ND	6.29	5.43	3.69	172-015-181-031
15	Female	11615F-ND	7.77	6.70	4.56	172-015-281-031
25	Male	11625M-ND	8.90	7.68	5.22	172-025-181-031
25	Female	11625F-ND	11.54	9.95	6.77	172-025-281-031
37	Male	11637M-ND	12.35	10.65	7.25	172-037-181-031
37	Female	11637F-ND	16.15	13.93	9.47	172-037-281-031
50	Male	11650M-ND	15.52	13.38	9.10	172-050-181-031
50	Female	11650F-ND	20.82	17.95	12.21	172-050-281-031
Tin Shells						
9	Male	12609M-ND	3.31	2.85	1.94	172-009-182-001
9	Female	12609F-ND	4.35	3.75	2.55	172-009-282-001
15	Male	12615M-ND	4.90	4.23	2.88	172-015-182-001
15	Female	12615F-ND	6.44	5.55	3.78	172-015-282-001
25	Male	12625M-ND	7.48	6.45	4.39	172-025-182-001
25	Female	12625F-ND	10.06	8.68	5.90	172-025-282-001
37	Male	12637M-ND	15.11	13.03	8.86	172-037-182-001
37	Female	12637F-ND	14.85	12.80	8.71	172-037-282-001
50	Male	12650M-ND	14.88	12.83	8.73	172-050-182-001
50	Female	12650F-ND	19.95	17.20	11.70	172-050-282-001
Tin Shells with .065" Clinch Nuts, Board Side						
9	Male	13609M-ND	4.18	3.60	2.45	172-009-182-011
9	Female	13609F-ND	5.22	4.50	3.06	172-009-282-011
15	Male	13615M-ND	5.77	4.98	3.39	172-015-182-011
15	Female	13615F-ND	7.31	6.30	4.29	172-015-282-011
25	Male	13625M-ND	8.35	7.20	4.90	172-025-182-011
25	Female	13625F-ND	10.93	9.43	6.41	172-025-282-011
37	Male	13637M-ND	15.98	13.78	9.37	172-037-182-011
37	Female	13637F-ND	15.72	13.55	9.22	172-037-282-011
50	Male	13650M-ND	15.75	13.58	9.24	172-050-182-011
50	Female	13650F-ND	20.82	17.95	12.21	172-050-282-011
Tin Shells with .250" Clinch Nuts, Board Side						
9	Male	14609M-ND	4.18	3.60	2.45	172-009-182-021
9	Female	14609F-ND	5.22	4.50	3.06	172-009-282-021
15	Male	14615M-ND	5.77	4.98	3.39	172-015-182-021
15	Female	14615F-ND	7.31	6.30	4.29	172-015-282-021
25	Male	14625M-ND	8.35	7.20	4.90	172-025-182-021
25	Female	14625F-ND	10.93	9.43	6.41	172-025-282-021
37	Male	14637M-ND	15.98	13.78	9.37	172-037-182-021
37	Female	14637F-ND	15.72	13.55	9.22	172-037-282-021
50	Male	14650M-ND	15.75	13.58	9.24	172-050-182-021
50	Female	14650F-ND	20.82	17.95	12.21	172-050-282-021
Tin Shells with .250" Clinch Nuts, Mating Side						
9	Male	15609M-ND	4.18	3.60	2.45	172-009-182-031
9	Female	15609F-ND	5.22	4.50	3.06	172-009-282-031
15	Male	15615M-ND	5.77	4.98	3.39	172-015-182-031
15	Female	15615F-ND	7.31	6.30	4.29	172-015-282-031
25	Male	15625M-ND	8.35	7.20	4.90	172-025-182-031
25	Female	15625F-ND	10.93	9.43	6.41	172-025-282-031
37	Male	15637M-ND	15.98	13.78	9.37	172-037-182-031
37	Female	15637F-ND	15.72	13.55	9.22	172-037-282-031
50	Male	15650M-ND	15.75	13.58	9.24	172-050-182-031
50	Female	15650F-ND	20.82	17.95	12.21	172-050-282-031

Parallel Interface Connectors (Centronics Type)

Fig. 1

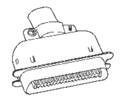


Fig. 2

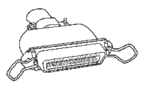


Fig. 3

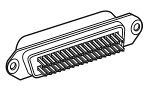


Fig. 4

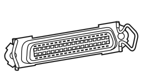


Fig. 5

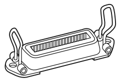


Fig. 6

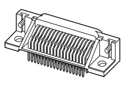
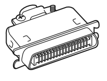


Fig. 7



Material: Insulator: Glass filled thermoplastic, UL rated 94V-0. Shell: Nickel plated steel. Contacts: Copper alloy, 10µ gold over 30µ nickel.

Male Cable Plug (Fig. 1):
• Compatible with industry standard • Solder Cup • Complete with cable boot, shell and hardware

Female Cable Receptacle (Fig. 2):
• Compatible with industry standard • Complete with spring latches and cable boot • Solder Cup • Can be used as panel mount

Panel Mount Male Plug (Fig. 3):
• 0.103" (2.62mm) Mounting hole accepts #3 screw (not included) • Compatible with industry standard • Solder Cup • Insulator color: Blue

Panel Mount Female Receptacle (Fig. 4):
• Compatible with industry standard • Complete with spring latches • Solder Cup • Insulator color: Blue

Straight DIP Solder (Fig. 5):
• For standard .062" (1.57mm) PC mount • Latch locks standard • Insulator color: Blue

Right Angle PCB Mount (Fig. 6):
• Compatible with industry standard • Metal shell for EMI/RFI shielding • Insulator color: Blue

Discrete Wire IDC Solderless (Fig. 7):
• Compatible with standard terminating tools • Quick solderless termination for #24 or 26 AWG • Insulator color: Gray

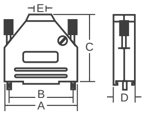
Fig.	No. of Con-tacts	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
1	14	Male	T1501-ND	3.48	3.00	2.04	110-014-103-001
	24	Male	T1502-ND	5.66	4.88	3.32	110-024-103-001
	36	Male	T1503-ND	3.56	3.07	2.09	110-036-103-001
	50	Male	T1504-ND	6.30	5.44	3.70	110-050-103-001
2	14	Female	T1507-ND	4.00	3.45	2.35	110-014-203-001
	24	Female	T1508-ND	4.45	3.84	2.61	110-024-203-001
	36	Female	T1509-ND	4.66	4.02	2.74	110-036-203-001
	50	Female	T1510-ND	7.00	6.04	4.11	110-050-203-001
3	14	Male	1014M-ND	2.51	2.16	1.47	111-014-103-001
	24	Male	1024M-ND	2.69	2.33	1.58	111-024-103-001
	36	Male	1036M-ND	2.61	2.26	1.54	111-036-103-001
	50	Male	1050M-ND	3.96	3.42	2.33	111-050-103-001
4	14	Female	1014F-ND	2.64	2.28	1.55	111-014-203-001
	24	Female	1024F-ND	4.26	3.68	2.50	111-024-203-001
	36	Female	1036F-ND	3.05	2.63	1.79	111-036-203-001
	50	Female	1050F-ND	4.93	4.25	2.89	111-050-203-001
5	14	Male	1014PM-ND	2.97	2.57	1.75	111-014-113-001
	24	Male	1024PM-ND	4.52	3.90	2.66	111-024-113-001
	36	Male	1036PM-ND	4.88	4.21	2.86	111-036-113-001
	50	Male	1050PM-ND	5.39	4.65	3.17	111-050-113-001
	14	Female	1014PF-ND	2.75	2.37	1.61	111-014-213-001
	24	Female	1024PF-ND	2.97	2.57	1.75	111-024-213-001
	36	Female	1036PF-ND	4.38	3.78	2.57	111-036-213-001
	50	Female	1050PF-ND	6.78	5.85	3.98	111-050-213-001
6	14	Male	1014RM-ND	3.18	2.74	1.87	112-014-113-001
	24	Male	1024RM-ND	3.58	3.09	2.10	112-024-113-001
	36	Male	1036RM-ND	5.31	4.58	3.12	112-036-113-001
	50	Male	1050RM-ND	6.39	5.51	3.75	112-050-113-001
	14	Female	1014RF-ND	3.69	3.19	2.17	112-014-213-001
	24	Female	1024RF-ND	3.66	3.16	2.15	112-024-213-001
	36	Female	1036RF-ND	4.66	4.02	2.74	112-036-213-001
	50	Female	1050RF-ND	6.68	5.76	3.92	112-050-213-001
7	36	Male	1036CM-ND	10.18	8.78	5.97	110-036-193-001
	36	Female	1036CF-ND	8.53	7.35	5.00	110-036-293-001

NorComp

D-Sub Backshells

970 Series — Straight/Top Entry: • Die Cast: Lightweight zinc. Plating: Nickel over copper or black • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 • Hardware: Nickel plated steel

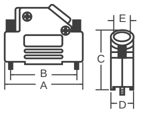
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.228	.984	1.571	.610	.465
15	1.555	1.312	1.634	.610	.465
25	2.102	1.852	1.913	.610	.465
37	2.744	2.500	2.110	.610	.465



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Die Cast Nickel	970-09N-ND	5.80	5.00	3.40	970-009-030-121
15		970-15N-ND	6.90	5.95	4.05	970-015-030-121
25		970-25N-ND	6.90	5.95	4.05	970-025-030-121
37		970-37N-ND	10.56	9.10	6.19	970-037-030-121
9	Black Die Cast	970-09BC-ND	7.34	6.33	4.31	970-009-040-011
15		970-15BC-ND	8.44	7.28	4.95	970-015-040-011
25		970-25BC-ND	8.44	7.28	4.95	970-025-040-011
37		970-37BC-ND	11.22	9.68	6.58	970-037-040-011
9	Metalized Plastic	970-09MP-ND	5.42	4.68	3.18	970-009-020-121
15		970-15MP-ND	5.63	4.85	3.30	970-015-020-121
25		970-25MP-ND	5.86	5.05	3.44	970-025-020-121
37		970-37MP-ND	6.53	5.63	3.83	970-037-020-121
9	Black Plastic	970-09BP-ND	2.64	2.28	1.55	970-009-010-011
15		970-15BP-ND	2.64	2.28	1.55	970-015-010-011
25		970-25BP-ND	2.76	2.38	1.62	970-025-010-011
37		970-37BP-ND	2.87	2.48	1.69	970-037-010-011

971 Series — 45° Entry: • Die Cast: Lightweight zinc. Plating: Nickel over copper or black • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 • Hardware: Nickel plated steel

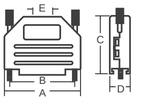
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.220	.984	1.496	.610	.465
15	1.595	1.312	1.618	.610	.465
25	2.114	1.852	1.646	.610	.465
37	2.748	2.500	1.646	.610	.465



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Nickel	971-09N45-ND	5.80	5.00	3.40	971-009-030-121
15		971-15N45-ND	6.90	5.95	4.05	971-015-030-121
25		971-25N45-ND	6.90	5.95	4.05	971-025-030-121
37		971-37N45-ND	10.56	9.10	6.19	971-037-030-121
9	Black Die Cast	971-09CB45-ND	7.34	6.33	4.31	971-009-040-011
15		971-15CB45-ND	8.44	7.28	4.95	971-015-040-011
25		971-25CB45-ND	8.44	7.28	4.95	971-025-040-011
37		971-37CB45-ND	11.22	9.68	6.58	971-037-040-011
9	Metalized Plastic	971-09MP45-ND	5.42	4.68	3.18	971-009-020-121
15		971-15MP45-ND	5.63	4.85	3.30	971-015-020-121
25		971-25MP45-ND	5.86	5.05	3.44	971-025-020-121
37		971-37MP45-ND	6.53	5.63	3.83	971-037-020-121
9	Black Plastic	971-09BP45-ND	2.64	2.28	1.55	971-009-010-011
15		971-15BP45-ND	2.64	2.28	1.55	971-015-010-011
25		971-25BP45-ND	2.76	2.38	1.62	971-025-010-011
37		971-37BP45-ND	2.87	2.48	1.69	971-037-010-011

972 Series — Colored Clam Shell Style: • High temperature plastic UL rated 94V-2 (various colors) • Hardware: Nickel plated steel

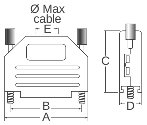
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.378	.984	2.106	.669	.331
15	1.614	1.312	2.106	.630	.472
25	2.145	1.852	2.106	.591	.472
37	2.795	2.500	2.106	.669	.551



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Black Plastic	972-09B-ND	2.64	2.28	1.55	972-009-010-011
15		972-15B-ND	2.64	2.28	1.55	972-015-010-011
25		972-25B-ND	2.64	2.28	1.55	972-025-010-011
37		972-37B-ND	3.10	2.68	1.82	972-037-010-011
9	Grey Plastic	972-09G-ND	2.64	2.28	1.55	972-009-010-031
15		972-15G-ND	2.64	2.28	1.55	972-015-010-031
25		972-25G-ND	2.64	2.28	1.55	972-025-010-031
37		972-37G-ND	3.10	2.68	1.82	972-037-010-031
9	Red Plastic	972-09R-ND	2.64	2.28	1.55	972-009-010-061
15		972-15R-ND	2.64	2.28	1.55	972-015-010-061
25		972-25R-ND	2.64	2.28	1.55	972-025-010-061
37		972-37R-ND	3.10	2.68	1.82	972-037-010-061
9	Yellow Plastic	972-09Y-ND	2.64	2.28	1.55	972-009-010-081
15		972-15Y-ND	2.64	2.28	1.55	972-015-010-081
25		972-25Y-ND	2.64	2.28	1.55	972-025-010-081
37		972-37Y-ND	3.10	2.68	1.82	972-037-010-081

NEW! **972 Series — Slim-Line Clam Shell Style:** • High temperature ABS plastic UL94V-2

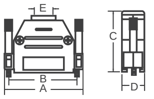
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.240	.984	1.339	.591	.453
15	1.575	1.312	1.339	.591	.453
25	2.106	1.852	1.575	.591	.453
37	2.795	2.500	1.575	.591	.453



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Grey Plastic	972-09SG-ND	3.16	2.73	1.86	972-009-01S-031
15		972-15SG-ND	3.34	2.88	1.96	972-015-01S-031
25		972-25SG-ND	3.51	3.03	2.06	972-025-01S-031
37		972-37SG-ND	3.68	3.18	2.16	972-037-01S-031
9	Black Plastic	972-09SB-ND	3.16	2.73	1.86	972-009-01S-011
15		972-15SB-ND	3.34	2.88	1.96	972-015-01S-011
25		972-25SB-ND	3.51	3.03	2.06	972-025-01S-011
37		972-37SB-ND	3.68	3.18	2.16	972-037-01S-011

973 Series — Straight/Top Entry: • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 (black) • Hardware: Nickel plated steel

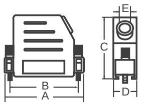
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.240	.984	1.221	.598	.335
15	1.575	1.312	1.378	.598	.335
25	2.106	1.852	1.496	.598	.433
37	2.756	2.500	1.575	.598	.433



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Metalized Plastic	973-09MP-ND	7.25	6.25	4.25	973-009-020-121
15		973-15MP-ND	7.51	6.48	4.41	973-015-020-121
25		973-25MP-ND	7.69	6.63	4.51	973-025-020-121
37		973-37MP-ND	10.41	8.98	6.11	973-037-020-121
9	Black Plastic	973-09BP-ND	3.86	3.33	2.27	973-009-010-011
15		973-15BP-ND	4.03	3.48	2.37	973-015-010-011
25		973-25BP-ND	4.23	3.65	2.49	973-025-010-011
37		973-37BP-ND	5.13	4.43	3.01	973-037-010-011

974 Series — 40° Entry: • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-0 (black) • Hardware: Nickel plated steel

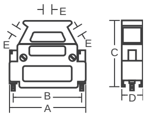
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.240	.984	1.457	.598	.335
15	1.575	1.312	1.457	.598	.335
25	2.106	1.852	1.614	.598	.433
37	2.756	2.500	1.614	.598	.433



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Metalized Plastic	974-09MP40-ND	7.25	6.25	4.25	974-009-020-121
15		974-15MP40-ND	7.51	6.48	4.41	974-015-020-121
25		974-25MP40-ND	7.69	6.63	4.51	974-025-020-121
37		974-37MP40-ND	10.41	8.98	6.11	974-037-020-121
9	Black Plastic	974-09BP40-ND	3.86	3.33	2.27	974-009-010-011
15		974-15BP40-ND	4.03	3.48	2.37	974-015-010-011
25		974-25BP40-ND	4.23	3.65	2.49	974-025-010-011
37		974-37BP40-ND	5.13	4.43	3.01	974-037-010-011

975 Series — 3-Way Entry: • Metalized Plastic: High temperature plastic UL 94V-0. Plating: Nickel over copper • Plastic: High temperature plastic UL 94V-2 (black) • Hardware: Nickel plated steel

Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.213	.984	1.800	.600	.300
15	1.541	1.312	1.800	.600	.335
25	2.088	1.852	1.800	.600	.375
37	2.735	2.500	1.800	.600	.400

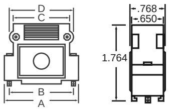


No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
25	Metalized Plastic	975-25MP-ND	7.69	6.63	4.51	975-025-020-121
37		975-37MP-ND	10.41	8.98	6.11	975-037-020-121
9	Black Plastic	975-09BP-ND*	6.09	5.25	3.57	975-009-010-011
15		975-15BP-ND	6.09	5.25	3.57	975-015-010-011
25		975-25BP-ND	6.09	5.25	3.57	975-025-010-011
37		975-37BP-ND	8.29	7.15	4.87	975-037-010-011

* Digi-Key Part# 975-09BP-ND does not have the side cable exits.

976 Series — Plastic, Flat Ribbon: • ABS high temperature plastic 94HB. Complete with 4-40 mating screws, housing screws, and housing nuts.

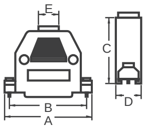
Conn.	Dimensions (Inch)			
Size	A	B	C	D
9	1.319	.984	.758	.946
15	1.622	1.312	1.102	1.289
25	2.157	1.852	1.642	1.874
37	2.815	2.500	2.283	2.470



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Plastic Grey	976-09RP-ND	1.39	1.20	.82	976-009-010-031
15		976-15RP-ND	1.57	1.35	.92	976-015-010-031
25		976-25RP-ND	1.86	1.60	1.09	976-025-010-031
37		976-37RP-ND	1.97	1.70	1.16	976-037-010-031

977 Series — Plastic or Metalized: • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60 dB shielding • Materials: Shell – Thermoplastic polyester; UL rated 94V-0; Screw locks – brass; EMI/RFI plating – Electroplated with nickel over copper

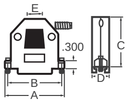
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.213	.984	1.594	.646	.275
15	1.563	1.312	1.453	.646	.400
25	2.165	1.852	1.752	.646	.435
37	2.736	2.500	2.096	.984	.535
50	2.640	2.406	1.750	.731	.450



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Shielded Metalized Plastic (for EMI/RFI)	909GM-ND	.75	.65	.45	977-009-020-121
15		915GM-ND	.89	.77	.53	977-015-020-121
25		925GM-ND	.89	.77	.53	977-025-020-121
37		937GM-ND	2.23	1.93	1.31	977-037-020-121
50		950GM-ND	1.75	1.51	1.03	977-050-020-121
9	Plain Plastic	909GP-ND	.54	.47	.32	977-009-010-031
15		915GP-ND	.67	.58	.40	977-015-010-031
25		925GP-ND	.73	.63	.43	977-025-010-031
37		937GP-ND	1.00	.86	.59	977-037-010-031
50		950GP-ND	1.51	1.30	.89	977-050-010-031

978 Series — Plastic or Metalized: • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60 dB shielding • EMI/RFI Plating - Electroplated with nickel over copper • Materials: Shell – Thermoplastic polyester; UL rated 94V-0; Screw locks – brass

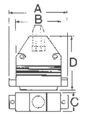
Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.220	.984	1.693	.655	.276
15	1.535	1.312	1.693	.655	.315
25	2.118	1.852	1.929	.655	.374
37	2.756	2.500	1.929	.655	.433
50	2.650	2.406	1.909	.655	.551



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Un-shielded	909C-ND	1.10	.96	.65	978-009-010-031
15		915C-ND	1.19	1.03	.70	978-015-010-031
25		925C-ND	1.24	1.07	.73	978-025-010-031
37		937C-ND	1.73	1.49	1.02	978-037-010-031
50		950C-ND	1.75	1.51	1.03	978-050-010-031
9	Shielded	909CA-ND	1.37	1.19	.81	978-009-020-121
15		915CA-ND	1.54	1.33	.91	978-015-020-121
25		925CA-ND	1.67	1.44	.98	978-025-020-121

979 Series — Die-Cast Zinc: • Rubber grommet/ strain relief for complete EMI/RFI shielding (over 70db) • Solid die-cast ZINC construction • Supplied complete with rubber grommet kit and male screw locks.

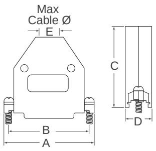
Conn.	Dimensions (Inch)				Max.
Size	A	B	C	D	Cable Dia.
9	1.22	.79	.63	1.9	.42
15	1.55	1.11	.63	1.9	.42
25	2.10	1.64	.63	1.9	.42
37	2.73	2.27	.63	1.9	.43
50	2.64	2.18	.77	1.9	.73



No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Die Cast Zinc	909Z-ND	2.64	2.28	1.55	979-009-030-121
15		915Z-ND	3.10	2.68	1.82	979-015-030-121
25		925Z-ND	3.91	3.37	2.29	979-025-030-121
37		937Z-ND	5.28	4.55	3.10	979-037-030-121
50		950Z-ND	7.22	6.23	4.24	979-050-030-121

NEW! **979 Series — Plastic or Metalized Backshell:** • ABS high temperature plastic UL94HB • Chrome plating

Conn.	Dimensions (Inch)				
Size	A	B	C	D	E
9	1.232	.984	1.913	.656	.354
15	1.555	1.312	1.895	.669	.374
25	2.100	1.852	1.900	.655	.397
37	2.748	2.500	1.900	.655	.512
50	2.697	2.406	1.900	.770	.512



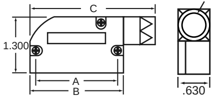
No. of		Digi-Key	Price Each			NorComp
Pins	Type	Part No.	1	10	100	Part No.
9	Plastic Grey	979-09PG-ND	1.22	1.05	.72	979-009-010-031
15		979-15PG-ND	1.31	1.13	.77	979-015-010-031
25		979-25PG-ND	1.39	1.20	.82	979-025-010-031
37		979-37PG-ND	2.61	2.25	1.53	979-037-010-031
50		979-50PG-ND	2.78	2.40	1.64	979-050-010-031
9	Metalized Plastic	979-09MP-ND	1.71	1.48	1.01	979-009-020-121
15		979-15MP-ND	1.86	1.60	1.09	979-015-020-121
25		979-25MP-ND	2.12	1.83	1.25	979-025-020-121
37		979-37MP-ND	3.57	3.08	2.10	979-037-020-121
50		979-50MP-ND	3.86	3.33	2.27	979-050-020-121

(Continued)

NorComp D-Sub Backshells *(Cont.)*

980 / 981 Series — Ethernet: • **Material:** Die-cast zinc alloy, nickel plated. Complete with housing screws and housing nuts.

Conn. Size	Dimensions (Inch) A	B	C
9	.984	1.240	1.850
15	1.312	1.555	2.323
25	1.852	2.106	2.835

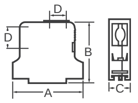


(Series 981 - Right Angle shown)

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
15	Series 980 Straight	915ES-ND	4.01	3.46	2.36	980-015-030-121
9	Series 981 Right Angle	909ER-ND	4.09	3.53	2.40	981-009-030-121
15		915ER-ND	4.36	3.76	2.56	981-015-030-121
25		925ER-ND	4.29	3.70	2.52	981-025-030-121

982 Series — Plastic or Metalized: • Cable Exit Top or Side • Available in both plain plastic and metalized for EMI/RFI suppression • Over 60dB shielding • Operating Temperature: -35°C to +95°C • Materials: Shell: Thermoplastic polyester; UL rated 94V-0; Screw locks: brass; EMI/RFI plating: Electroplated with nickel over copper. Electroplated parts not UL rated

Connector Size	Dimensions (Inch) A	B	C	D
9⋆	1.23	1.38	.630	.350
15	1.56	1.61	.630	.374
25	2.10	1.81	.630	.444
37	2.74	1.81	.630	.444
50	2.65	1.81	.735	.543

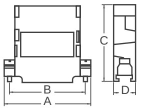


No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
9	Gray Plastic	909U-ND⋆	3.39	2.93	1.99	982-009-010-031
15		915U-ND	3.39	2.93	1.99	982-015-010-031
25		925U-ND	3.66	3.16	2.15	982-025-010-031
37		937U-ND	4.28	3.70	2.52	982-037-010-031
50		950U-ND	5.12	4.42	3.01	982-050-010-031
9	Shielded Metalized Plastic	909UA-ND⋆	6.39	5.51	3.75	982-009-020-121
15		915UA-ND	6.50	5.60	3.81	982-015-020-121
25		925UA-ND	6.92	5.97	4.06	982-025-020-121
37		937UA-ND	8.05	6.95	4.73	982-037-020-121
50		950UA-ND	8.83	7.62	5.18	982-050-020-121

⋆ Part Number 909U-ND and 909UA-ND does not have a side cable exit.

983 Series — Plain Plastic or Metalized Plastic: • May be used as a "Gender Changer," pin-out changer, or standard backshell • Snap-together assembly • Half-clamp with self-tapping screws provides positive strain-relief • Available in plain plastic or metalized for EMI/RFI shielding

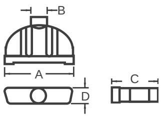
Conn. Size	Dimensions (Inch) A	B	C	D	Max. Cable Dia.
9	1.28	.80	1.77	.65	.27
15	1.63	1.13	1.77	.65	.47
25	2.10	1.67	1.77	.65	.47
37	2.79	2.32	1.77	.65	.47
50	2.64	2.22	1.77	.47	.75



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
50	Shielded Plastic Fiber (for EMI/RFI)	950M-ND	4.21	3.63	2.47	TT50NA
9	Plain Plastic	909P-ND	1.13	.98	.67	983-009-010-031
15		915P-ND	1.37	1.19	.81	983-015-010-031
25		925P-ND	1.71	1.48	1.01	983-025-010-031
37		937P-ND	2.78	2.40	1.64	983-037-010-031
50		950P-ND	2.93	2.53	1.72	983-050-010-031
9	Metalized Plastic	909M2-ND	1.73	1.50	1.02	983-009-020-121
15		915M2-ND	1.86	1.60	1.09	983-015-020-121
25		925M2-ND	2.37	2.05	1.39	983-025-020-121
37		937M2-ND	3.07	2.65	1.81	983-037-020-121
50		950M2-ND	3.77	3.25	2.21	983-050-020-121

986 Series — One-Piece Overmold Cans: • Cold rolled steel • Plating: Tin

Conn. Size	Dimensions (Inch) A	B	C	D
15	1.150	.410	1.200	.490
25	1.690	.410	1.200	.490
37	2.340	.610	1.650	.490
50	2.240	.580	1.650	.600

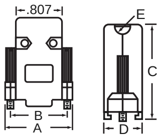


No. of Pins	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
15	986-15T-ND	.93	.80	.55	986-015-020-121
25	986-25T-ND	.99	.85	.58	986-025-020-121
37	986-37T-ND	2.76	2.38	1.62	986-037-020-121
50	986-50T-ND	3.51	3.03	2.06	986-050-020-121

993 Series — 45° Economy: • **Material:** Metalized Plastic and Plastic: ABS high temperature plastic, 94HB. Metalized Plating: Chrome.

Includes housing screws, housing nuts, 4-40 thumbscrews, strain relief clamps, and strain relief screws.

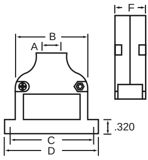
Conn. Size	Dimensions (Inch) A	B	C	D	E
9	1.213	.984	1.595	.630	.260
25	2.165	1.852	2.095	.641	.400



No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
9	Metalized Plastic	993-09MP45-ND	1.86	1.60	1.09	993-009-020-121
25		993-25MP45-ND	2.00	1.73	1.18	993-025-020-121
9	Plastic	993-109P45-ND	1.31	1.13	.77	993-009-010-031
25		993-125P45-ND	1.45	1.25	.85	993-025-010-031

994 Series — Die Cast, Ethernet:

- **Material:** Die cast zinc alloy, nickel plated. Included are housing screw and housing nuts.



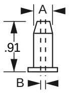
Conn. Size	Dimensions (Inch) A	B	C	D	E	F
9	.433	.790	.984	1.244	1.82	.614
15	.433	1.135	1.312	1.575	1.82	.665
25	.433	1.640	1.852	2.106	1.82	.630

No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
9	Straight	994-09DC-ND	3.31	2.85	1.94	994-009-030-121
15		994-15DC-ND	3.57	3.08	2.10	994-015-030-121
25		994-25DC-ND	3.94	3.40	2.32	994-025-030-121

A

Non-Conductive Rubber Grommet Sets: For better EMI/RFI Shielding and/or strain relief. For use with D-Sub Backshells. **Note:** Grom-9/25 and Grom-50 have four grommets per set and Grom-37 has three per set.

Digi-Key Part No.	Outside Dia. A (Inch)	Inside Diameter B (Inch)			
901G-ND	.400	.185	.248	.290	.335
902G-ND	.620	.320	.410	.500	—
903G-ND	.730	.340	.425	.495	.650



Description	Digi-Key Part No.	Price Each 5	25	100	NorComp Part No.
DB 9/25 Grom. Set	901G-ND	.40	.34	.24	162-000-925-000
DB 37 Grom. Set	902G-ND	1.06	.92	.63	162-000-037-000
DB 50 Grom. Set	903G-ND	1.45	1.25	.85	162-000-050-000

112 Series – Solder Cup with Right Angle Backshell (Centronics Type):

- **Material:** Insulator: Glass-filled thermoplastic, UL Rated 94V-0. Contacts: Copper alloy. Shell: Steel, nickel plated. Contact Plating: Gold plated.

Fig. 1

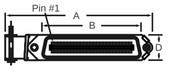


Fig. 2

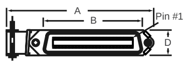


Fig. 3

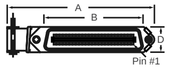
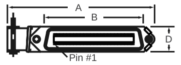
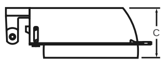


Fig. 4





Conn. Size	Dimensions (Inch) A	B	C	D
36	3.178	1.943	1.075	.646
50	3.780	2.538	1.325	.646

Fig.	No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
1	50	Male	1550RM-ND	9.19	7.93	5.39	112-050-103-011
2	50	Female	1550RF-ND	9.19	7.93	5.39	112-050-203-011
3	50	Male	1550LM-ND	9.19	7.93	5.39	112-050-103-021
4	50	Female	1550LF-ND	9.19	7.93	5.39	112-050-203-021

Hardware

Fig. 1

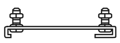


Fig. 2

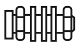


Fig. 3

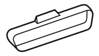


Fig. 4

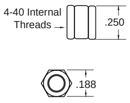


Fig. 5

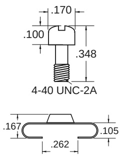


Fig. 6

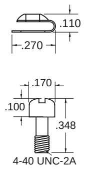


Fig. 7

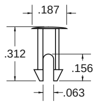


Fig. 8

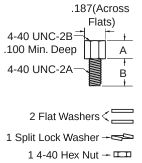
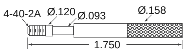


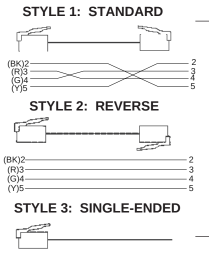
Fig. 9



T2020-ND Insertion/Removal Tool .... **$8.76 each**

Fig.	Description	Dim. (Inch) A	B	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
	Slide Lock Posts for Ethernet Hoods (994 Series)							
1	9-Pin, D-Sub, or Ethernet	—	—	160-09SL-ND	1.77	1.53	1.04	160-009-002-031
	15-Pin, D-Sub, or Ethernet			T2040-ND	1.29	1.12	.76	160-015-003-031
	25-Pin, D-Sub, or Ethernet			160-25SL-ND	2.15	1.85	1.26	160-025-004-031
2	2 Connectors Required	—	—	T2042-ND	1.34/2	.58	.40	160-000-005-041
	Dust Covers							
3	Female, 9-Position D-Sub	—	—	909DC-ND	.52	.45	.31	160-000-209-00
	Female, 15-Position D-Sub	—	—	915DC-ND	.52	.45	.31	160-000-215-00
	Female, 25-Position D-Sub	—	—	925DC-ND	.52	.45	.31	160-000-225-00
	Male, 9-Position D-Sub	—	—	160-09M-ND	.55	.48	.33	160-000-109-000
	Male, 15-Position D-Sub	—	—	160-15M-ND	.55	.48	.33	160-000-115-000
	Male, 25-Position D-Sub	—	—	160-25M-ND	.55	.48	.33	160-000-125-000
	4-40 Female Coupling Nut							
4	Brass, Plating Yellow Chromate	—	—	160-06YC-ND	.25	.15	.11	160-000-006-042
	Brass, Plating Nickel	—	—	160-06N-ND	.25	.15	.11	160-000-006-032
	4-40 Male Screwlock with Slip-On Retainer							
5	Steel, Plating Tin	—	—	160-01MT-ND	.87	.75	.51	160-000-001-051
	Steel, Plating Yellow Chromate	—	—	160-01MYC-ND	.81	.70	.48	160-000-001-041
	4-40 Male Screwlock with Clip-On Retainer (2 screws, 2 clips)							
6	Screw - Steel, Tin Plating Clip - Stainless Steel	— —	— —	160-02M-ND	.81	.70	.48	160-000-002-051
	Plastic Clips for Retaining Connectors to PC .062" Board							
7	Nylon	—	—	163-01P-ND	.25	.15	.11	163-001-000-000
	4-40 Female Screwlock Assembly							
8	Steel, Plating Yellow Chromate	.187	.312	160-10F-ND	.70	.60	.41	160-000-010-041
	Steel, Plating Nickel	.187	.625	160-11F-ND	.99	.85	.58	160-000-011-041
	Steel, Plating Nickel	.250	.156	160-12F-ND	.81	.70	.48	160-000-012-041
	Steel, Plating Yellow Chromate	.197	.197	160-13F-ND	.55	.48	.33	160-000-013-041
	Steel, Plating Yellow Chromate	.197	.323	160-15F-ND	.55	.48	.33	160-000-015-041
	Steel, Plating Yellow Chromate	.197	.433	160-16F-ND	.64	.55	.38	160-000-016-041
	Steel, Plating Yellow Chromate	.197	.520	160-17F-ND	.67	.58	.40	160-000-017-041
	Steel, Plating Yellow Chromate	.197	.669	160-18F-ND	.70	.60	.41	160-000-018-041
	4-40 Thumbscrew - Nickel Plated Steel Finish							
9	For 977/978/979 Series Backshells			160-02TS-ND	.26	.23	.16	160-000-050-031
	2.6mm Thumbscrew - Nickel Plated Steel Finish							
9	For 970/972 Series Backshells			160-03TS-ND	.70	.60	.41	160-000-060-031

IDC Modular Cable Assemblies



H☐☐☐☐-☐☐☐-ND

Wire Type:
(Color)
1 = White
2 = Black
3 = Silver Satin

C = Designates Coil Cord

CONNECTOR(S):
44 = 4-Position, 4-Contact (Black on Pin 1)
64 = 6-Position, 4-Contact (Black on Pin 1)
66 = 6-Position, 6-Contact (White on Pin 1)
88 = 8-Position, 8-Contact (Gray on Pin 1)

LENGTH* *(Use "Feet" Only)*
07 = 7 Feet (2.13 Meters)
14 = 14 Feet (4.27 Meters) Straight
25 = 25 Feet (7.62 Meters)

05 = 5 Feet (1.52 Meters)
07 = 7 Feet (2.13 Meters)
10 = 10 Feet (3.05 Meters) Coiled
14 = 14 Feet (4.27 Meters)

**All cable lengths are ± 1%*

Straight Cable Assembly

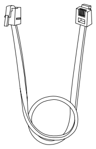
Example: H 1 4 4 1 - 0 7 - ND
Style 1
4-Position 4-Contact
White Wire
7 Feet Long (2.13 Meters)

Coil Cord Assembly

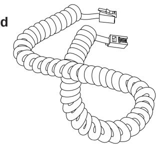
Example: H 1 4 4 1 - 1 0 C - ND
Style 1
4-Position 4-Contact
White Wire
10 Feet Long (3.05 M)
Optimum Extended Length

HOW TO ORDER: 1) You choose your part number simply by substituting the corresponding code to indicate the following: Style, Connector(s), Wire Type, and Length (*in feet – not meters*).

Straight



Coiled



Straight Cable Assemblies

Style	Digi-Key* Part No.	Price Each 1	10	50	100
4-Position, 4-Contact Assemblies					
1	H144☐-07-ND	1.98	1.69	1.43	1.22
	H144☐-14-ND	2.37	2.02	1.71	1.46
	H144☐-25-ND	2.99	2.54	2.15	1.84
2	H244☐-07-ND	1.98	1.69	1.43	1.22
	H244☐-14-ND	2.37	2.02	1.71	1.46
	H244☐-25-ND	2.99	2.54	2.15	1.84
3	H344☐-07-ND	1.19	1.01	.86	.73
	H344☐-14-ND	1.58	1.34	1.14	.97
	H344☐-25-ND	2.19	1.86	1.57	1.35
6-Position, 4-Contact Assemblies					
1	H164☐-07-ND	2.62	2.23	1.88	1.61
	H164☐-14-ND	3.04	2.59	2.19	1.87
	H164☐-25-ND	3.58	3.05	2.57	2.20
2	H264☐-07-ND	2.58	2.20	1.86	1.59
	H264☐-14-ND	2.97	2.53	2.13	1.83
	H264☐-25-ND	3.58	3.05	2.57	2.20
3	H364☐-07-ND	1.49	1.27	1.07	.92
	H364☐-14-ND	1.87	1.60	1.35	1.15
	H364☐-25-ND	2.49	2.12	1.79	1.53
6-Position, 6-Contact Assemblies					
1	H166☐-07-ND	3.08	2.62	2.21	1.89
	H166☐-14-ND	3.68	3.13	2.64	2.26
	H166☐-25-ND	4.63	3.93	3.32	2.84
2	H266☐-07-ND	3.08	2.62	2.21	1.89
	H266☐-14-ND	3.68	3.13	2.64	2.26
	H266☐-25-ND	4.63	3.93	3.32	2.84
3	H366☐-07-ND	1.84	1.57	1.32	1.13
	H366☐-14-ND	2.44	2.08	1.76	1.50
	H366☐-25-ND	3.39	2.88	2.44	2.08
8-Position, 8-Contact Assemblies					
1	H188☐-07-ND	4.20	3.57	3.02	2.58
	H188☐-14-ND	5.02	4.26	3.60	3.08
	H188☐-25-ND	6.30	5.35	4.52	3.87
2	H288☐-07-ND	4.20	3.57	3.02	2.58
	H288☐-14-ND	5.02	4.26	3.60	3.08
	H288☐-25-ND	6.30	5.35	4.52	3.87
3	H388☐-07-ND	2.51	2.13	1.80	1.54
	H388☐-14-ND	3.32	2.83	2.39	2.04
	H388☐-25-ND	4.61	3.92	3.31	2.83

***1**= White, **2** = Black, **3** = Silver Satin.
Note: Custom length also availble — minimum order required.

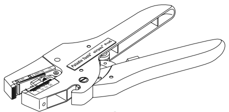
Coil Cord Assemblies

Style	Digi-Key* Part No.	Price Each 1	10	50	100
4-Position, 4-Contact Assemblies					
1	H144☐-05C-ND	3.37	2.87	2.42	2.07
	H144☐-07C-ND	3.82	3.25	2.74	2.35
	H144☐-10C-ND	4.62	3.92	3.31	2.84
	H144☐-14C-ND	6.07	5.16	4.36	3.73
2	H244☐-05C-ND	3.37	2.87	2.42	2.07
	H244☐-07C-ND	3.82	3.25	2.74	2.35
	H244☐-10C-ND	4.62	3.92	3.31	2.84
	H244☐-14C-ND	6.07	5.16	4.36	3.73
3	H344☐-05C-ND	2.57	2.19	1.85	1.58
	H344☐-07C-ND	3.02	2.57	2.17	1.86
	H344☐-10C-ND	3.82	3.25	2.74	2.35
	H344☐-14C-ND	5.28	4.48	3.79	3.24
6-Position, 4-Contact Assemblies					
1	H164☐-05C-ND	3.97	3.37	2.85	2.44
	H164☐-07C-ND	4.42	3.76	3.17	2.71
	H164☐-10C-ND	5.21	4.43	3.74	3.20
	H164☐-14C-ND	6.67	5.67	4.79	4.09
2	H264☐-05C-ND	3.97	3.37	2.85	2.44
	H264☐-07C-ND	4.42	3.76	3.17	2.71
	H264☐-10C-ND	5.21	4.43	3.74	3.20
	H264☐-14C-ND	6.67	5.67	4.79	4.09
3	H364☐-05C-ND	2.87	2.44	2.06	1.77
	H364☐-07C-ND	3.32	2.82	2.39	2.04
	H364☐-10C-ND	4.12	3.50	2.96	2.53
	H364☐-14C-ND	5.57	4.74	4.00	3.42
6-Position, 6-Contact Assemblies					
1	H166☐-05C-ND	4.73	4.02	3.39	2.90
	H166☐-07C-ND	5.02	4.27	3.60	3.08
	H166☐-10C-ND	6.26	5.32	4.50	3.85
	H166☐-14C-ND	7.30	6.20	5.24	4.48
2	H266☐-05C-ND	4.73	4.02	3.39	2.90
	H266☐-07C-ND	5.02	4.27	3.60	3.08
	H266☐-10C-ND	6.26	5.32	4.50	3.85
	H266☐-14C-ND	7.30	6.20	5.24	4.48
3	H366☐-05C-ND	3.49	2.97	2.51	2.15
	H366☐-07C-ND	3.78	3.22	2.72	2.32
	H366☐-10C-ND	5.03	4.27	3.61	3.09
	H366☐-14C-ND	6.06	5.15	4.35	3.72
8-Position, 8-Contact Assemblies					
1	H188☐-05C-ND	7.52	6.39	5.40	4.61
	H188☐-07C-ND	7.28	6.19	5.22	4.47
	H188☐-10C-ND	9.16	7.78	6.57	5.62
	H188☐-14C-ND	9.88	8.39	7.09	6.06
2	H288☐-05C-ND	7.52	6.39	5.40	4.61
	H288☐-07C-ND	7.28	6.19	5.22	4.47
	H288☐-10C-ND	9.16	7.78	6.57	5.62
	H288☐-14C-ND	9.88	8.39	7.09	6.06
3	H388☐-05C-ND	5.83	4.95	4.18	3.58
	H388☐-07C-ND	5.59	4.75	4.01	3.43
	H388☐-10C-ND	7.47	6.35	5.36	4.58
	H388☐-14C-ND	8.18	6.95	5.87	5.02

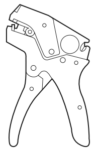
*** 1** = White, **2** = Black, **3** = Silver Satin.

Paladin Tools® Tools

Cable Tester: The modular cable tester is a hand held instrument designed to test telephone (RJ11) and computer data-link (RJ45) wiring.
Wire Strippers: Stripping and cutting wires in the range of 28-12AWG • Solid and fine stranded conductors with all grades of PVC insulation hardness • P.T.F.E. insulation • Stranded conductors (even several conductors in one work cycle) • Self-adjusting cable cutter • Strips both modular and discrete wires
Stripax ® Pro 6 Strippers: The new stripax performs powerful stripping of standard and industrial insulations including PVC, THHN, THHW, silicone and polyethylene. Stripping blades are composed of 68 individual spring-compression blades to adjust precisely to the insulation. Not for Teflon or Kapton hard insulations.
LAN ProNavigator™: Two-piece tester includes main unit and remote with test results at both ends. One-button, simple testing (PASS/FAIL or fault find). Detects opens, shorts, crossed wires and split pairs. Cable types, RG58, RG59, RG6, RG6 Quad, Belden 8281, RG8, RG11, CAT-5, CAT 5e or CAT-6 (UTP/STP) cable.

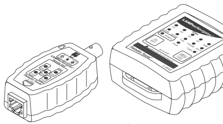


Stripax® Pro 6



Mini-Stripax® Plus

Cable Tester



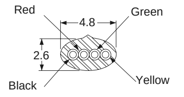
LAN ProNavigator Test Set

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Modular Cable Tester	PAL1529-ND	67.99	1529
Sure Strip™ 4.0 (AWG 20-12)	PA904893-ND	56.99	904893
Mini-Stripax® Plus (AWG 28-18)	PAL1115-ND	82.94	1115P
Replacement Blade for PAL1115-ND	PAL2108-ND	21.07	2108
Stripax® Pro 6 (AWG 28-10)	PAL1113.1-ND	75.48	1113.1
LAN ProNavigator test set (main and remote), 2 RJ45 patch cords, 2 belt clips	PAL1543.1-ND	124.99	1543

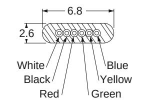
Modular Cable

Flat modular line cord is available in either straight or coiled. **Straight:** H004 is sold in hanks of 100, 500 and 1,000 feet, spools of 2,000 feet; H006, H008 and H010 are sold in hanks of 100 and 500 feet, spools of 1,000 feet. **Coiled:** Hxx4☐C, Hxx6☐C, Hxx8☐C and Hxx10 are sold in 5, 7, 10 and 14 feet approximate optimum extended lengths. Extension beyond the optimum extended length can degrade the retractability of the cord. Both types are available in three colors—white (designated by 1 for ☐ in part number), black (designated by 2 for ☐ in part number) and silver satin (designated by 3 for ☐ in part number).

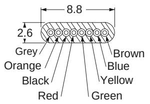
View Ridge Up
4-Conductor Cable



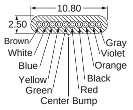
View Ridge Up
6-Conductor Cable



View Ridge Up
8-Conductor Cable



View Ridge Up
10-Conductor Cable



No. of Cond.	Length Ft.(Meter)	Digi-Key* Part No.	Price Each 1	10	100
Coiled Line Cord — 5 ft. (1.52 meter), 7 ft. (2.13 meter), 10 ft. (3.05 meter) and 14 ft. (4.27 meter) approximate extended lengths					
4	5 (1.52)	H054☐C-ND	2.01	1.81	1.61
4	7 (2.13)	H074☐C-ND	2.52	2.27	2.02
4	10 (3.05)	H104☐C-ND	3.42	3.08	2.74
4	14 (4.27)	H144☐C-ND	5.07	4.57	4.06
6	5 (1.52)	H056☐C-ND	2.55	2.30	2.04
6	7 (2.13)	H076☐C-ND	2.88	2.60	2.31
6	10 (3.05)	H106☐C-ND	4.29	3.87	3.44
6	14 (4.27)	H146☐C-ND	5.46	4.92	4.37
8	5 (1.52)	H058☐C-ND	4.68	4.22	3.75
8	7 (2.13)	H078☐C-ND	4.41	3.97	3.53
8	10 (3.05)	H108☐C-ND	6.54	5.89	5.24
8	14 (4.27)	H148☐C-ND	7.35	6.62	5.88
10	5 (1.52)	H0510☐C-ND	5.37	4.84	4.30
10	7 (2.13)	H0710☐C-ND	5.58	5.03	4.47
10	10 (3.05)	H1010☐C-ND	7.14	6.43	5.72
10	14 (4.27)	H1410☐C-ND	7.95	7.16	6.36

(Note: "X" in Digi-Key Part No. Represents Number of Feet)

No. of Cond.	Digi-Key* Part No.	Pricing 100 ft.	500 ft.	1,000 ft.	2,000 ft.
Straight Line Cord — 26 AWG					
4	H004☐-X-ND	6.30	28.88	52.50	84.00
6	H006☐-X-ND	9.75	44.69	65.00	—
8	H008☐-X-ND	13.20	60.50	88.00	—
10	H010☐-X-ND	18.90	86.63	126.00	—

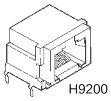
*** 1** = White, **2** = Black, **3** = Silver Satin

HIROSE ELECTRIC CO.,LTD.

Data-Link Shielded Jack & Cable Assembly

FEATURES: Plug; • One piece body struct. of the shell and cable clamp make perfect "EMI" protection • A metal shell offers "ESD" protection and a plastic cover is provided for enhanced aesthetics • Using the specified tooling, will provide quick and easy cable assembly. **Jack;** • In order to protect the circuit inside the equip., the jack is constructed to allow the shielding to engage first upon mating.

TM11 "EMI" protection connector is designed to fulfill the requirement of noise and "ESD" protection. The design is in conformance with the F.C.C. regulation as specified in "476 C.F.R., Part 68, subpart F."



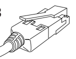
H9200

Shielded Jack — PCB Mount

Positions-Contacts	Digi-Key Part No.	Price Each 1	10	100
8-8	H9200-ND	4.48	3.92	2.78

Standard Style Cable Assemblies

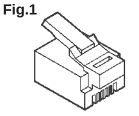
H9102 - H9103



Positions-Contacts	Length Ft. (M)	Cable Type	Termination	Digi-Key Part No.	Price Each
8-8	4 (1.22)	Straight	Double-Ended	H9102-ND	18.21
8-8	7 (2.13)	Straight	Double-Ended	H9103-ND	18.29

HIROSE ELECTRIC CO.,LTD.

“TM” Modular Connectors

Fig.1

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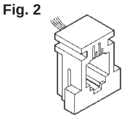
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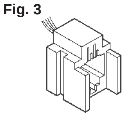
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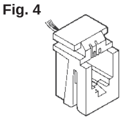
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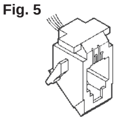
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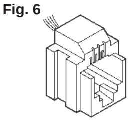
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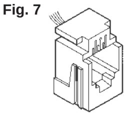
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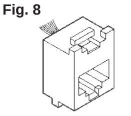
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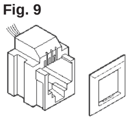
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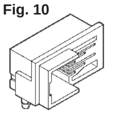
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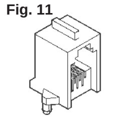
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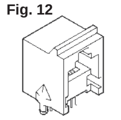
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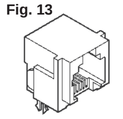
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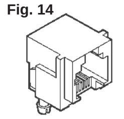
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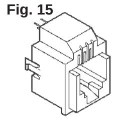
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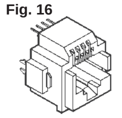
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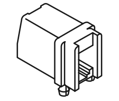
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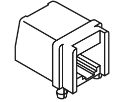
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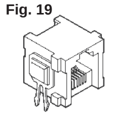
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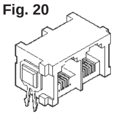
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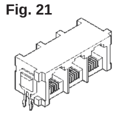
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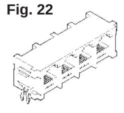
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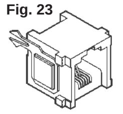
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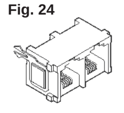
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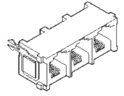
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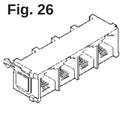
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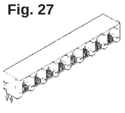
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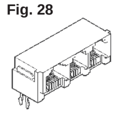
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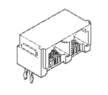
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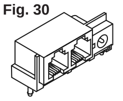
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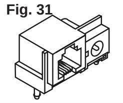
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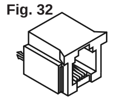
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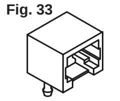
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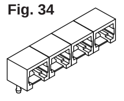
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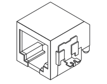
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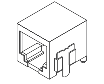
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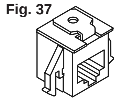
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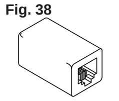
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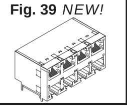


Fig.	Positions-Contacts	Description	Dimensions (mm) W	H	D	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
Plugs (for IDC Termination with Flat Line Cord)										
1	4-4	Plug	7.7	6.6	13.4	H9091-ND	.76	.62	.45	TM3P-44P
	6-4		9.7	6.6	13.4	H9092-ND	.76	.62	.45	TM3P-64P
	6-6		9.7	6.6	13.4	H9093-ND	.95	.78	.57	TM3P-66P
	8-8		11.7	6.6	22.5	H9094-ND	1.60	1.24	.95	TM8P-88P
Receptacles — with 6” (152.4mm) Wire Leads; Color: Gray										
2	4-4	Receptacle	17.5	20.5	10.2	H9001-ND	2.02	1.68	1.24	TM1R-616B44-35S-150
3	4-4		12.4	17.4	14.3	H9002-ND	2.08	1.73	1.28	TM1R-616M44-35S-150A
4	4-4		12.4	21.3	12.5	H9003-ND	2.02	1.68	1.24	TM1R-616P44-35S-150
5	4-4		15.3	20.5	10.2	H9018-ND	2.57	2.14	1.58	TM1R-616W44-4S-150
6	6-4		14.9	18.3	13.7	H9009-ND⋆	2.08	1.73	1.28	TM1RV-623K64-35S-150
7	6-4	Receptacle	12.4	21.4	12.5	H9010-ND⋆	2.15	1.79	1.32	TM1RV-623P64-35S-150
6	6-6		14.9	18.3	13.7	H9015-ND⋆	1.95	1.62	1.20	TM1RV-623K66-35S-150
7	6-6		12.4	21.4	12.5	H9016-ND⋆	2.70	2.25	1.66	TM1RV-623P66-35S-150
8	8-8		16.0	18.4	12.5	H9021-ND⋆	4.48	3.92	2.78	TM1RV-647AF88-35S150
Receptacles — Panel Mount w/ 6” (152.4mm) Wire Leads (Bezel Included); Color: Brown										
9	6-2	Receptacle	14.9	18.3	13.7	H9061-ND	2.31	1.92	1.42	TM2RG-L62-5S-150
	6-4		14.9	18.3	13.7	H9062-ND	2.96	2.46	1.82	TM2RG-L64-5S-150
	6-6		14.9	18.3	13.7	H9063-ND	2.89	2.52	1.79	TM2RG-L66-5S-150
Receptacles — P.C. Board Mount; Color: Gray										
10	4-4	Receptacle	20.0	11.0	10.5	H9031-ND	1.85	1.54	1.14	TM5RF-44
	6-4		24.6	13.0	14.0	H9032-ND	2.41	2.00	1.48	TM5RF-64
	6-6		24.6	13.0	14.0	H9033-ND	2.34	1.95	1.44	TM5RF-66
11	4-4	Receptacle	18.0	18.6	14.3	H9041-ND	1.82	1.52	1.12	TM5RC-44
11	6-4		18.0	21.1	14.3	H9042-ND	1.92	1.60	1.18	TM5RC-64
11	6-6		18.0	21.1	14.3	H9043-ND	2.11	1.76	1.30	TM5RC-66(01)
12	8-8		18.1	21.2	17.5	H9044-ND	2.81	2.45	1.74	TM5RC-88
13	4-4	Receptacle	12.8	14.0	14.0	H9081-ND	1.69	1.41	1.04	TM5RJ3-44
	6-4	Receptacle	14.8	14.0	14.0	H9082-ND	1.95	1.62	1.20	TM5RJ1-64
	6-6	Receptacle	14.8	14.0	14.0	H9083-ND	2.24	1.87	1.38	TM5RJ1-66
	8-8	Receptacle (Keyed)	19.2	14.0	16.0	H9084-ND	3.09	2.57	1.90	TM5RJ1-88
14	6-4	Receptacle	14.8	14.0	14.0	H9126-ND	1.98	1.65	1.22	TM5RJ2-64
	6-6	Receptacle	14.8	14.0	14.0	H9127-ND	2.34	1.95	1.44	TM5RJ2-66
	8-8	Receptacle (Keyed)	19.2	14.0	16.0	H9085-ND	2.89	2.41	1.78	TM5RJ-88
	8-8	Receptacle (Keyed)	18.6	14.0	14.0	H9128-ND	3.19	2.79	1.98	TM5RJ2-88
17	6-2	Receptacle	13.0	14.5	18.0	H9122-ND	1.59	1.33	.98	TM5RE1-62(50)
17	4-4		13.0	14.5	18.0	H9123-ND	2.08	1.73	1.28	TM5RE1-44
17	6-4		15.0	14.5	18.0	H9124-ND	2.11	1.76	1.30	TM5RE1-64
18	6-6		15.0	14.5	18.0	H9125-ND	2.47	2.06	1.52	TM5RE1-66
Receptacles — Top Entry P.C. Board Mount; Color: White										
15	4-4	Low Profile	12.9	18.3	15.0	H9071-ND	2.11	1.76	1.30	TM3RA-44
15	6-4		14.9	18.3	15.0	H9072-ND	2.11	1.76	1.30	TM3RA-64
15	6-6		14.9	18.3	15.0	H9073-ND	2.34	1.95	1.44	TM3RA-66
16	8-8		16.9	18.3	15.0	H9074-ND	2.81	2.45	1.74	TM3RA-88
Receptacles — P.C. Board Mount with Tin Hold-Down Tabs; Color: Gray										
10	4-4	PC Mount	20.0	11.0	10.5	H9034-ND	2.08	1.73	1.28	TM5RF1-44
19	6-2		18.0	15.4	16.0	H9064-ND	2.76	2.30	1.70	TM2REA-0602
19	6-4		18.0	15.4	16.0	H9057-ND	3.12	2.60	1.92	TM2REA-0604
19	6-6		18.0	15.4	16.0	H9058-ND	2.92	2.55	1.81	TM2REA-0606

⋆ 50µ Gold Plating

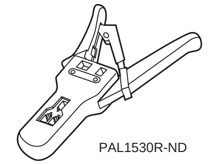
Fig.	Positions-Contacts	Description	Dimensions (mm) W	H	D	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
20	2 x 6-2	PC Mount	28.2	15.4	16.0	H9051-ND	3.08	2.69	1.91	TM2REA-1204
	2 x 6-4		28.2	15.4	16.0	H9052-ND	3.69	3.22	2.28	TM2REA-1208
	2 x 6-6		28.2	15.4	16.0	H9065-ND	4.48	3.92	2.78	TM2REA-1212
21	3 x 6-2	PC Mount	39.2	15.4	16.0	H9053-ND	3.77	3.29	2.33	TM2REA-1806
	3 x 6-4		39.2	15.4	16.0	H9054-ND	4.70	4.11	2.91	TM2REA-1812
	3 x 6-6		39.2	15.4	16.0	H9066-ND	5.91	5.16	3.66	TM2REA-1818
22	4 x 6-2	PC Mount	50.2	15.4	16.0	H9055-ND	4.37	3.82	2.71	TM2REA-2408
	4 x 6-4		50.2	15.4	16.0	H9056-ND	6.13	5.36	3.80	TM2REA-2416
	4 x 6-6		50.2	15.4	16.0	H9059-ND	7.33	6.45	4.84	TM2REA-2424
23	6-2	PC Top Entry	17.2	16.0	15.4	H9110-ND	2.80	2.33	1.72	TM2RE-0602
	6-4		17.2	16.0	15.4	H9111-ND	3.02	2.52	1.86	TM2RE-0604
	6-6		17.2	16.0	15.4	H9112-ND	3.22	2.68	1.98	TM2RE-0606
24	2 x 6-2	PC Top Entry	28.2	16.0	15.4	H9113-ND	3.00	2.62	1.86	TM2RE-1204
	2 x 6-4		28.2	16.0	15.4	H9114-ND	3.82	3.34	2.37	TM2RE-1208
	2 x 6-6		28.2	16.0	15.4	H9115-ND	4.70	4.11	2.91	TM2RE-1212
25	3 x 6-2	PC Top Entry	39.2	16.0	15.4	H9116-ND	3.60	3.15	2.23	TM2RE-1806
	3 x 6-4		39.2	16.0	15.4	H9117-ND	4.79	4.18	2.96	TM2RE-1812
	3 x 6-6		39.2	16.0	15.4	H9118-ND	6.08	5.31	3.76	TM2RE-1818
26	4 x 6-2	PC Top Entry	50.2	16.0	15.4	H9119-ND	4.70	4.11	2.91	TM2RE-2408
	4 x 6-4		50.2	16.0	15.4	H9120-ND	6.44	5.62	3.98	TM2RE-2416
	4 x 6-6		50.2	16.0	15.4	H9121-ND	6.58	5.79	4.34	TM2RE-2424
27	8 x 6-6	Side Entry 8 x 6-6	93.0	14.0	14.0	H9086-ND	11.76	10.29	7.84	TM5RJ1-4848
28	3 x 8-8	3 x 8-8	43.3	14.0	14.7	H9075-ND	7.78	6.85	5.14	TM5RSA-2424
28	—	3 x (1) 8-8, (2) 6-6	30	14	13.5	H9076-ND	7.03	6.19	4.64	TM5RQ-2020
29	—	2 x (1) 8-8, (1) 6-6	28	14	13.5	H9077-ND	6.11	5.33	3.78	TM5RQ-1414
30	2 x 6-2	with Power Plug	35	15	13.7	H9129-ND	2.75	2.40	1.70	TM5RT-1204PWJ
	2 x 6-2		35	15	13.7	H9130-ND	2.75	2.40	1.70	TM5RT1-1204PWJ
31	6-2	with Power Plug	24	15	13.7	H9131-ND	2.76	2.30	1.70	TM5RT-62PWJ
	6-2		24	15	13.7	H9132-ND	2.76	2.30	1.70	TM5RT1-62PWJ
	6-4		24	15	13.7	H9133-ND	3.03	2.64	1.87	TM5RT1-64PWJ
	6-6		24	15	13.7	H9134-ND	2.83	2.48	1.76	TM5RT1-66PWJ
32	4-4	Top Entry SMT	13	17	12.5	H9135-ND	2.31	1.92	1.42	TM15R-44(30)
	6-4		14	17	12.5	H9136-ND	2.63	2.19	1.62	TM15R-64(30)
33	8-8	Receptacle	14	11.7	17	H9138-ND	3.16	2.76	1.96	TM5RL-88
34	4 x 8-8		56	11.7	17	H9139-ND	7.05	6.21	4.66	TM5RL-3232
NEW! Receptacles — Right Angle, SMT NEW!										
35	6-2	Receptacle	13.6	11.3	13.5	H10131-ND	2.93	2.43	1.82	TM18R-62
	6-4		13.6	11.3	13.5	H10132-ND	3.05	2.52	1.89	TM18R-64
	8-8		15.6	11.3	14.5	H10133-ND	4.29	3.56	2.67	TM18R-88
36	6-2	Receptacle	13.6	11.3	14.2	H10134-ND	2.24	1.87	1.38	TM18RA-FT-62
	6-2		13.6	11.3	14.2	H10135-ND	2.24	1.87	1.38	TM18RA-IB-62
	6-2		13.6	11.3	13.5	H10136-ND	3.92	3.24	2.43	TM18R-DL-62
	6-2		15.6	12.3	14.5	H10137-ND	3.92	3.24	2.43	TM18R-TO-62
	8-8		15.6	12.3	14.5	H10138-ND	4.12	3.41	2.56	TM18R-TO-88
“TM” Modular Connectors										
34	4 x 8-8	with Light Pipes	59.2	15.3	25.9	H9005-ND	14.04	13.22	11.57	TM21R-5A-3232-LP
37	8-8	Wire Lead 12”	24	20	15	H9140-ND	6.60	5.81	4.36	TM11R-88-35S-300
38	8-8	Adapter Recept. to Receptacle	18.6	17	37.5	H9141-ND	11.05	9.74	8.16	TM5RL-88-JJ
39	8 x 8-8	Receptacle w/ LED’s	59.2	28	32.5	H10139-ND *NEW!*	18.23	17.62	15.80	TM21R-5B-3232D-LP

Paladin Tools®

Crimp Tools

• Fully ratcheting cycle • Adjustable crimp tension • Hardened dies for long life • Crimp 4, 6, and 8 position • Cuts and strips cable • RJ45, RJ11

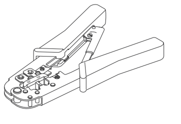
PAL1530R-ND	Modular Crimp Tool	**124.58**
PAL2530-ND	Replacement Blade Set (for 1530R)	**10.34**



PAL1530R-ND

All-in-One Telephone Tool

• Ratcheted design • 6 position, (RJ11/RJ12), 8-position, (RJ45) modular telephone plugs • Cuts, strips, and crimps 28-24 AWG telephone and data cables



PAL1545.1-ND	All-in-One Telephone Tool	**39.71**

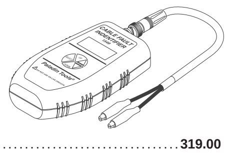
DataShark Network Termination Kit

Modular plug crimper for RJ45 and RJ11/12 connectors. Universal stripper for twisted pair and flat cable. Non-impact punchdown tool with 110 blade, 10 pieces of RJ45 modular plug connectors. Detailed instruction for cable assembly

PAL70007.1-ND	Network Tool Kit	**41.99**

Cable Tester

Tester displays: length of cable, cable remaining on spool, distance to short, distance to open, and injects tone into cable. The most accurate true TDR technology with ±1.5% accuracy. Measures to 3200’. Built-in tone generator with warble tone. Scroll through pre-programmed NVP values for common cable types. Fast 1 second tests. Detects live voltage. Easy-to-read large display. Push-button controls. BNC-to-Alligator clips adapter make testing fast. Requires only one 9V battery, included.



PAL1549.1-ND	Cable Fault Identifier TDR Tester	**319.00**

Modular Connectors and Jacks

PRODUCT FACTS: • Meets or exceeds FCC Part 68 rules and regulations; REA PE-76; and UL 1863, Communication Circuit Accessories • Meets 1000 volt dielectric requirement • Designed for direct mounting on pc boards • Designed for ease of soldering and board cleaning • Selectively gold plated contacts for lower cost • Surface mount jacks compatible with vapor phase environment • All jacks are flame retardant polyester, standard color black, unless specified otherwise • Listed by Underwriters Laboratories Inc., File No. E81956 • Certified by Canadian Standards Association File No. LR82669

ELECTRICAL SPECIFICATIONS: • Current Rating – 1.5 amp max. @ 25°C, derated to 0.2 amp max. @ 70°C ambient • Voltage Rating – 150 volts ac max. • Dielectric Withstanding Voltage – 1000 VAC, RMS, 60 Hz, 1 min. • Insulation Resistance – 500 megaohms min. • Surge Test – to 1000 volts **MECHANICAL SPECIFICATIONS:** • PC Board Retention – will not dislodge from pc board when subjected to 1 lb. (4.4 N) pull before soldering and 10 lbs. (44 N) pull after soldering • Durability – 750 mating cycles **MATERIAL AND FINISH:** • Housing – Thru-hole: Polyester, UL 94V-0 rated surface mount: Polyphenylene Sulfide, UL 94V-0 rated • Contact – .014 (0.36) thick phosphor bronze; plated .50µ gold in contact area and 150µ tin-lead on solder tails, over .50µ nickel underplate

FIG. 2 PRODUCT FACTS: • True mass displacement termination of jacketed cable with tinsel, solid or stranded conductors • Available for round or flat-oval cable • One piece construction with preloaded contacts • FCC and EIA/TIA industry standard size and performance • Selectively gold plated terminals • Recognized by Underwriters Laboratories Inc., File No. E81956 • Certified by Canadian Standards Association Certificate No. LR 7189A

MATERIAL AND FINISH: • Housing: Polycarbonate, UL 94V-2 flammability rating • Terminal: .014 (.36) thick, phosphor bronze; underplated with 100 µin nickel and plated with 50 µin gold in contact region and gold flash on remainder of terminal **ELECTRICAL SPECIFICATIONS:** • Applications: 150 VAC max. at 1.5 A @ 25°C, derated to .2 A @ 70°C • Dielectric Withstanding Voltage: 100 Volts AC • Insulation Resistance: 500 Megaohms. **MECHANICAL SPECIFICATIONS:** • Cable-to-Plug Tensile Strength: 17 lbs (76N) min. • Durability: 750 mating cycles

EXTERNAL STRAIN RELIEF: • Positively engaged to the plug housing • Improved shield contact path redundant contact points • 360° wrap on cable jacket and shield foil, extraordinary strain relief • Improved shield coverage at housing

FIG. 9 PRODUCT FACTS: • Performance exceeds Near End Crosstalk (NEXT) requirements of -40dB at 100 MHz per EIA/TIA 568A • Available in single port or multiple port configurations, shielded or unshielded • Eliminate need for customized printed circuit board compensation to achieve high performance

MATERIAL AND FINISH: • Housing: Polyester, black UL 94V-0 rated • Contact: Phosphor bronze, gold over nickel plated in contact area, tin-lead over nickel in solder area • Shield: Brass, bright tin-lead plated **SPECIFICATIONS:** • Current: 1.5 amp max. @ 25°C • Voltage: 150 VAC maximum • Operating Temperature: -40°C to 70°C • Mating/Unmating Forces: 5 pounds maximum

Fig. 1

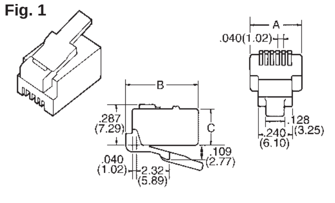


Fig. 2

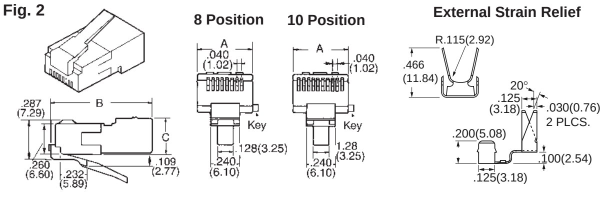


Fig. 3

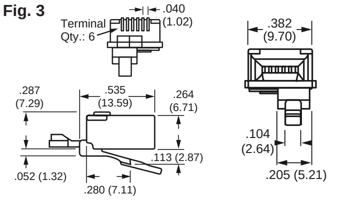


Fig. 4 – Side Entry

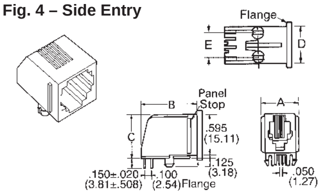


Fig. 5 – Top Entry

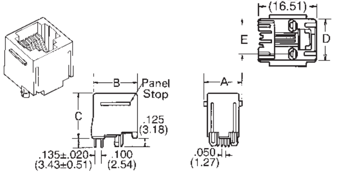


Fig. 6 – Side Entry, Low Profile

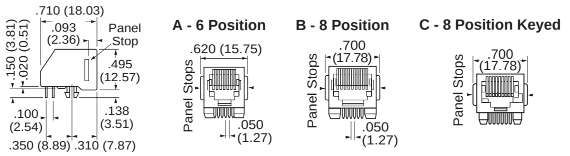


Fig.	Description	Positions Contacts	Dimensions - Inch (mm)					Digi-Key Part No.	Price Each		AMP Part No.
			A	B	C	D	E		1	25	
1	Plug, Handset, Stranded, Flat Oval	4-4	.300 (7.62)	.525 (13.33)	.260 (6.60)	—	—	A9091-ND	.32	.30	5-641334-3
	Plug, Stranded, Flat Oval	6-4	.380 (9.65)	.525 (13.33)	.260 (6.60)	—	—	A9092-ND	.32	.30	5-641335-3
	Plug, Solid, Flat Oval	6-4	.380 (9.65)	.525 (13.33)	.260 (6.60)	—	—	A9116-ND	.40	.32	5-556384-3
	Plug, Stranded, Flat Oval	6-6	.380 (9.65)	.525 (13.33)	.260 (6.60)	—	—	A9093-ND	.38	.35	5-641337-3
	Plug, Solid, Flat Oval	6-6	.380 (9.65)	.525 (13.33)	.325 (8.25)	—	—	A9118-ND	.40	.33	5-555042-3
	Plug, Stranded, Round	6-6	.380 (9.65)	.525 (13.33)	.325 (8.25)	—	—	A9117-ND	.33	.27	5-554710-3
	Plug, Small Solid, Flat Oval	6-6	.380 (9.65)	.525 (13.33)	.325 (8.25)	—	—	A9119-ND	.61	.49	5-557970-3
	Plug, Long Body, Solid, Flat Oval	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9120-ND	.81	.66	5-555426-3
	Plug, Stranded, Flat Oval, Long	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9121-ND	.76	.61	5-555176-3
	Plug, Stranded, Round Long	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9122-ND	.76	.61	5-555177-3
	Plug, Stranded, Shielded, Round Long	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9128-ND	1.94	1.55	5-555175-3
	Plug, Shielded, Long Body, Oval	6-6	.380 (9.65)	.900 (22.86)	.325 (8.25)	—	—	A9027-ND	1.94	1.76	5-555174-2
	Plug, Stranded, Flat Oval	6-2	.384 (9.76)	.530 (13.47)	.264 (6.71)	—	—	A24921-ND	.28	.23	5-641333-2
	Plug, Solid, Flat Oval, Small	6-4	.384 (9.76)	.530 (13.47)	.264 (6.71)	—	—	A24922-ND†	.77	.62	5-557965-2
2	Plug, Stranded, Flat Oval	8-8	.460 (11.68)	.845(21.46)	.312 (7.92)	—	—	A9094-ND	.73	.69	5-554739-3
	Plug, Keyed, Stranded, Flat Oval	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9058-ND	.57	.46	5-554743-3
	Plug, Solid, Flat Oval	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9126-ND	.61	.49	5-554720-3
	Plug, Solid, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9123-ND	.61	.49	5-557315-3
	Plug, Stranded, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9125-ND	.57	.46	5-554169-3
	Plug, Stranded, Small, Round, Cable	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24923-ND	.40	.32	5-557961-2
	Plug, Solid, Round, Keyed	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9127-ND	.57	.46	5-554170-3
	Plug, High Performance, Stranded, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9059-ND	.84	.68	5-558530-3
	Plug, Stranded, Shielded, High Performance, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9111-ND	2.03	1.63	5-569552-3
	Plug, Solid, Shielded, High Performance, Round	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9112-ND	2.17	1.74	5-569550-3
	Plug, Solid, Unshielded, High Performance	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24920-ND	.90	.72	5-569278-3
	Plug, Solid, Flat Oval, Small	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24924-ND†	.61	.49	5-557972-2
	Plug, Stranded, Flat Oval, Small	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24925-ND†	.63	.51	5-557973-3
	Plug, Solid Keyed, Flat Oval	8-8	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A24926-ND	1.41	1.14	5-555417-2
	Plug, Stranded, Shielded, Flat Oval	8-8	.464 (11.79)	.915(23.24)	.330 (8.38)	—	—	A9113-ND	1.93	1.55	5-569542-3
	Plug, Stranded, Shielded, Round Long	8-8	.464 (11.79)	.915(23.24)	.330 (8.38)	—	—	A9114-ND	1.93	1.55	5-569532-3
	Plug, Solid, Shielded, Round	8-8	.464 (11.79)	.915(23.24)	.330 (8.38)	—	—	A9115-ND	1.93	1.55	5-569530-3
	Plug, Stranded, Round	10-10	.464 (11.79)	.895(22.73)	.314 (7.98)	—	—	A9129-ND	1.63	1.31	5-557963-3
	External Strain Relief Modular Connector	—	—	—	—	—	—	A9130-ND	—	.76	558527-1
	Crimp Tool Assembly, External Strain Relief	—	—	—	—	—	—	A9800-ND	192.75	—	224928-1
	Die Set, Strain Relief Modular, use with A9996	—	—	—	—	—	—	A9801-ND	140.25	—	224928-2
	Pro-Crimper II Hand Tool Without Die	—	—	—	—	—	—	A9996-ND	75.00	—	354940-1
3	Plug With Offset Latch	6-6	.382 (9.70)	.535 (13.59)	.264 (6.71)	—	—	A9057-ND	.85	.68	5-555237-2
	Plug, Round, Stranded, Offset	6-6	.382 (9.70)	.535 (13.59)	.264 (6.71)	—	—	A24918-ND	.74	.60	5-555238-2
	Plug, Flat Oval, Solid, Offset	6-6	.382 (9.70)	.535 (13.59)	.264 (6.71)	—	—	A24919-ND	.74	.59	5-555236-2
4	Jack, Side Entry With Panel Stops	4-4	.540 (13.72)	.810 (20.57)	.630 (16.00)	.440 (11.18)	.300 (7.62)	A9041-ND	1.14	1.08	520249-2
	Jack, Side Entry With Panel Stops	6-2	.620 (15.75)	.815 (20.70)	.630 (16.00)	.520 (13.21)	.400 (10.16)	A9082-ND	.68	.55	520250-1
	Jack, Side Entry With Panel Stops	6-4	.620 (15.75)	.815 (20.70)	.630 (16.00)	.520 (13.21)	.400 (10.16)	A9042-ND	.70	.64	520250-2
	Jack, Side Entry With Panel Stops	6-6	.620 (15.75)	.815 (20.70)	.630 (16.00)	.520 (13.21)	.400 (10.16)	A9043-ND	.72	.66	520250-3
	Jack, Side Entry With Panel Stops	8-8	.700 (17.78)	.810 (20.57)	.630 (16.00)	.600 (15.24)	.450 (11.43)	A9044-ND	.74	.68	520251-4
	Jack, Side Entry With Panel Stops, Keyed	8-8	.700 (17.78)	.810 (20.57)	.630 (16.00)	.600 (15.24)	.450 (11.43)	A9046-ND	.74	.60	520252-4
	Jack, Side Entry With Flange	4-4	.570 (14.48)	.810 (20.57)	.680 (17.27)	.440 (11.18)	.300 (7.62)	A9077-ND	.89	.72	520241-2
	Jack, Side Entry With Flange	6-4	.650 (16.51)	.810 (20.57)	.680 (17.27)	.520 (13.21)	.400 (10.16)	A9078-ND	1.91	1.53	520242-2
	Jack, Side Entry With Flange	6-6	.650 (16.51)	.810 (20.57)	.680 (17.27)	.520 (13.21)	.400 (10.16)	A9079-ND	.70	.57	520242-3
	Jack, Side Entry With Flange	8-8	.730 (18.54)	.810 (20.57)	.680 (17.27)	.600 (15.24)	.450 (11.43)	A9080-ND	1.38	1.11	520243-4
	Jack Without Panel Stops and Flange	4-4	.440 (11.18)	.810 (20.57)	.630 (16.00)	—	.300 (7.62)	A9047-ND	.70	.56	555980-1
	Jack Without Panel Stops and Flange	6-4	.520 (13.21)	.810 (20.57)	.630 (16.00)	—	.400 (10.16)	A9048-ND	.71	.64	555979-1
	Jack Without Panel Stops and Flange	6-6	.520 (13.21)	.815 (20.70)	.630 (16.00)	—	.400 (10.16)	A9049-ND	.75	.61	520470-3
	Jack Without Panel Stops and Flange	8-8	.600 (15.24)	.810 (20.57)	.630 (16.00)	—	.450 (11.43)	A9050-ND	.80	.64	520426-4
	Jack Without Panel Stops and Flange, Keyed	8-8	.600 (15.24)	.810 (20.57)	.630 (16.00)	—	.450 (11.43)	A9051-ND	1.54	1.23	554517-1

† Small conductor products are for .029 - .034 (.737 - .864) OD conductors. Small conductor product housings are tinted blue to differentiate from standard product.

(Continued)

Fig. 7

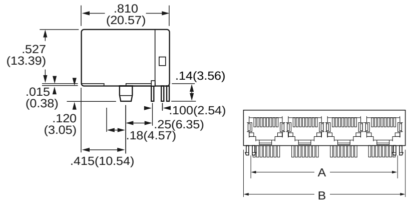


Fig. 8

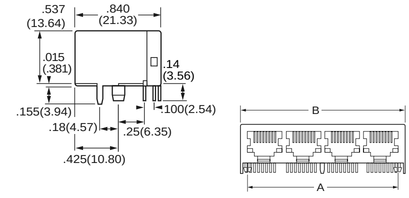


Fig. 9 – Side Entry with Panel Stops

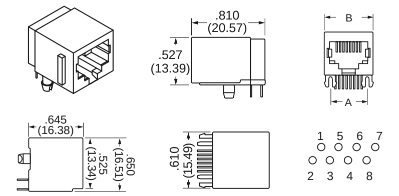


Fig. 10 – Modular Jack

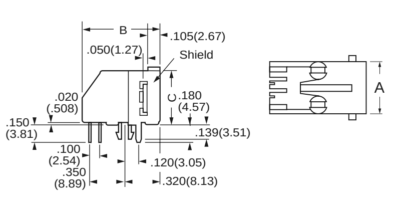


Fig. 11 – Surface Mount

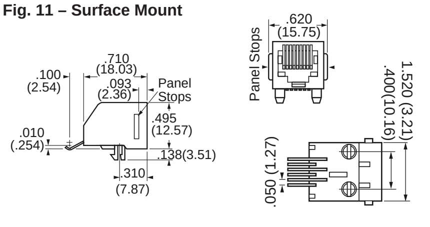


Fig. 12 – Surface Mount

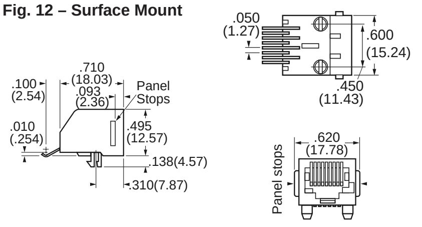


Fig.	Description	Positions Contacts	Dimensions - Inch (mm)					Digi-Key Part No.	Price Each		AMP Part No.
			A	B	C	D	E		1	25	
5	Jack With Stops	4-4	.550 (13.97)	.625 (15.88)	.645 (16.38)	.450 (11.43)	—	A9071-ND	.66	.60	520257-2
	Jack With Stops	6-4	.630 (16.00)	.625 (15.88)	.645 (16.38)	.530 (13.46)	—	A9072-ND	.70	.64	520258-2
	Jack With Panel Stops	6-6	.630 (16.00)	.625 (15.88)	.645 (16.38)	.530 (13.46)	—	A9073-ND	.72	.66	520258-3
	Jack With Stops	8-8	.710 (18.03)	.625 (15.88)	.645 (16.38)	.610 (15.49)	—	A9074-ND	.74	.68	520259-4
	Jack With Stops, Keyed	8-8	.710 (18.03)	.625 (15.88)	.645 (16.38)	.610 (15.49)	—	A9052-ND	.74	.60	520260-4
	Jack, Top Entry Without Stops	4-4	.455 (11.43)	.630 (16.00)	.650 (16.51)	—	.300 (7.62)	A24915-ND	.66	.53	558872-1
	Jack, Top Entry Without Stops	6-4	.530 (13.46)	.625 (15.88)	.645 (16.38)	—	.400 (10.16)	A9083-ND	1.25	1.00	520425-2
	Jack, Top Entry Without Stops	6-6	.530 (13.46)	.625 (15.88)	.645 (16.38)	—	.400 (10.16)	A9084-ND	.73	.66	520425-3
	Jack, Top Entry Without Stops	8-8	.615 (15.62)	.630 (16.00)	.645 (16.38)	—	.450 (11.43)	A9085-ND	.75	.68	556416-1
	Jack, Top Entry Without Stops, Keyed	8-8	.615 (15.62)	.630 (16.00)	.645 (16.38)	—	.450 (11.43)	A9086-ND	1.01	.81	555799-1
	Jack, Top Entry With Stops, Shielded	8-8	.710 (18.03)	.625 (15.88)	.645 (16.38)	.610 (15.49)	.450 (11.43)	A9087-ND	1.13	.91	557969-1
	Jack, Top Entry With Stops, Shielded, Keyed	8-8	.715 (18.17)	.660 (16.77)	.660 (16.77)	.650 (16.51)	.450 (11.43)	A24916-ND	1.13	.91	557730-1
6A	Jack With Stops	6-6	—	—	—	—	—	A9010-ND	.96	.90	555163-1
6A	Jack With Stops	6-4	—	—	—	—	—	A9011-ND	1.58	1.49	555163-2
6B	Jack With Stops	8-8	—	—	—	—	—	A9012-ND	1.01	.95	555162-1
6C	Jack With Stops, Keyed	8-8	—	—	—	—	—	A9034-ND	.83	.75	555166-1
6A	Jack Without Stops	6-6	—	—	—	—	—	A9031-ND	.77	.70	555165-1
6A	Jack Without Stops	6-4	—	—	—	—	—	A9032-ND	.75	.68	555165-2
6A	Jack Without Stops	6-2	—	—	—	—	—	A24907-ND	.95	.90	555165-5
6A	Jack Without Stops	6-6	—	—	—	—	—	A24908-ND	1.13	1.06	569026-1
6B	Jack Without Stops	8-8	—	—	—	—	—	A9033-ND	.83	.75	555164-1
6B	Jack Without Stops, Keyed	8-6	—	—	—	—	—	A24909-ND	1.22	1.15	569118-1
6C	Jack Without Stops, Keyed	8-8	—	—	—	—	—	A9035-ND	.83	.75	555167-1
7	Jack, 2 Position, Unshielded	8-8	1.00 (25.40)	1.200 (30.48)	—	—	—	A9013-ND	1.77	1.24	557560-1
	Jack, 3 Position, Unshielded	8-8	1.550 (39.37)	1.750 (44.45)	—	—	—	A9014-ND	2.65	1.84	557561-1
	Jack, 4 Position, Unshielded	8-8	2.100 (53.34)	2.300 (58.42)	—	—	—	A9015-ND	3.54	2.47	557562-1
	Jack, 5 Position, Unshielded	8-8	2.650 (67.31)	2.850 (72.39)	—	—	—	A9016-ND	4.39	3.06	557563-1
	Jack, 6 Position, Unshielded	8-8	3.200 (81.28)	3.400 (86.36)	—	—	—	A9017-ND	5.29	3.68	557564-1
	Jack, 8 Position, Unshielded	8-8	4.300 (109.22)	4.500 (114.30)	—	—	—	A9019-ND	7.04	4.90	557566-1
	Jack, 1 Position, Unshielded	8-8	.450 (11.43)	.595 (15.11)	—	—	—	A9063-ND	1.23	.98	557785-1
	Jack, 1 Position, Unshielded	10-10	.450 (11.43)	.595 (15.11)	—	—	—	A9064-ND	2.11	1.69	558065-1
	Jack, 1 Position, Unshielded, Keyed	10-10	.450 (11.43)	.595 (15.11)	—	—	—	A9065-ND	2.63	2.11	558066-1
8	Jack, 6 Position, Shielded, PCB Ground	8-8	3.200 (81.28)	3.430 (87.12)	—	—	—	A9022-ND	6.83	4.76	557572-1
	Jack, 10 Position, Shielded, Keyed, PCB Ground	8-8	.450 (11.43)	.625(15.88)	—	—	—	A9132-ND	4.19	3.36	558068-1
	Jack, 1 Position, Shielded, PCB Ground	10-10	.450 (11.43)	.625(15.88)	—	—	—	A9067-ND	3.35	2.69	558067-1
	Jack, 1 Position, Shielded, Panel Ground	10-10	.450 (11.43)	.625(15.88)	—	—	—	A9068-ND	4.19	3.36	558070-1
	Jack, 6 Position, Shielded, Panel Ground	8-8	3.20 (81.28)	3.43 (87.12)	—	—	—	A9075-ND	8.52	7.63	557572-3
	Jack, 8 Position, Shielded, Panel Ground	8-8	4.30 (109.22)	4.53 (115.06)	—	—	—	A9076-ND	10.34	9.26	557573-2
9	Jack, 1 Position, Unshielded With Panel Stops	8-8	.625 (15.88)	.840 (21.34)	.537 (13.64)	—	—	A9088-ND	2.58	2.06	558343-1
	Jack, 1 Position, Unshielded Without Panel Stops	8-8	.625 (15.88)	.840 (21.34)	.537 (13.64)	—	—	A9089-ND	1.73	1.38	558341-1
	Jack, 4 Position, Unshielded Without Panel Stops	8-8	2.3 (58.42)	.810 (20.57)	.527 (13.39)	—	—	A9096-ND	8.38	6.70	558500-1
	Jack, 6 Position, Unshielded Without Panel Stops	8-8	3.40 (86.36)	.810 (20.57)	.527 (13.39)	—	—	A9099-ND	9.65	7.72	558501-1
	Jack, 8 Position, Unshielded Without Panel Stops	8-8	4.50 (114.30)	.810 (20.57)	.527 (13.39)	—	—	A9102-ND	12.33	9.86	558502-1
	Jack, 1 Position, Shielded, PC Ground	8-8	.625 (15.875)	.840 (21.34)	.537 (13.64)	—	—	A9090-ND	2.11	1.70	558342-1
	Jack, 1 Position, Shielded, Panel Ground	8-8	.625 (15.875)	.840 (21.34)	.537 (13.64)	—	—	A9095-ND	2.70	2.16	558344-1
	Jack, 4 Position, Shielded, PC Ground	8-8	2.33 (59.18)	.840 (21.34)	.537 (13.64)	—	—	A9097-ND	10.43	8.34	558503-1
	Jack, 4 Position, Shielded, Panel Ground	8-8	2.33 (59.18)	.840 (21.34)	.537 (13.64)	—	—	A9098-ND	10.43	8.34	558524-1
	Jack, 6 Position, Shielded, PC Ground	8-8	3.43 (87.12)	.840 (21.34)	.537 (13.64)	—	—	A9100-ND	9.83	7.86	558504-1
	Jack, 6 Position, Shielded, Panel Ground	8-8	3.40 (86.36)	.810 (20.57)	.527 (13.39)	—	—	A9101-ND	12.00	9.60	558525-1
	Jack, 8 Position, Shielded, PC Ground	8-8	4.53 (115.06)	.840 (21.34)	.537 (13.64)	—	—	A9103-ND	12.58	10.06	558505-1
	Jack, 8 Position, Shielded, Panel Ground	8-8	4.53 (115.06)	.840 (21.34)	.537 (13.64)	—	—	A9104-ND	15.98	12.78	558526-1
10	Jack, PC Ground	6-6	.537 (13.64)	.720 (18.29)	.495 (12.57)	—	—	A9024-ND	1.11	1.01	555154-1
	Jack, PC Ground	6-4	.537 (13.64)	.720 (18.29)	.495 (12.57)	—	—	A9025-ND	.92	.64	555154-2
	Jack, PC Ground	8-8	.625 (15.88)	.720 (18.29)	.495 (12.57)	—	—	A9026-ND	1.19	1.09	555153-1
	Jack, PC Ground, Keyed	8-8	.625 (15.88)	.720 (18.29)	.495 (12.57)	—	—	A9056-ND	1.21	.97	556591-1
	Jack, Panel Ground	6-6	.545 (13.84)	.720 (18.29)	.495 (12.57)	—	—	A9053-ND	1.03	.82	555140-1
	Jack, Panel Ground	6-4	.545 (13.84)	.720 (18.29)	.495 (12.57)	—	—	A9054-ND	1.03	.82	555140-2
	Jack, Panel Ground	8-8	.625 (15.88)	.720 (18.29)	.495 (12.57)	—	—	A9055-ND	1.21	1.09	555141-1
11	Jack With Stops	6-6	—	—	—	—	—	A9036-ND	1.39	1.12	555077-1
	Jack With Stops	6-4	—	—	—	—	—	A9037-ND	1.38	1.11	555077-2
	Jack Without Stops	6-6	—	—	—	—	—	A24910-ND	1.39	1.12	557314-1
12	Jack, 8 Position With Stops	8-8	—	—	—	—	—	A9039-ND	1.47	1.18	555248-1
	Jack, 8 Position With Stops, Keyed	8-8	—	—	—	—	—	A9038-ND	1.84	1.48	555078-1
	Jack, 8 Position Without Stops	8-8	—	—	—	—	—	A9045-ND	1.47	1.18	555764-1
	Jack, 8 Position With Stops, Keyed, Shielded	8-8	—	—	—	—	—	A9131-ND	2.00	1.60	558178-1

† Small conductor products are for .029 - .034 (.737 - .864) OD conductors. Small conductor product housings are tinted blue to differentiate from standard product.

AMP tyco Electronics
Authorized Distributor

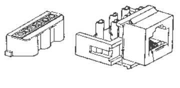
Four Position Data Connector for the IEEE 802.5 Local Area Network

Kit Description:
Connector (top and bottom cover assemblies), stuffer box, ferrule, dust cover, latch lock and strain relief bushings for 45, 90 and 180 degree cable exit.

Cableless Balun Kit:
A four position cableless balun kit is available which allows the customer to assemble his own electronic components which are required to convert the balanced twisted-pair cable to unbalanced coaxial cables. This kit contains a single BNC jack receptacle, but will accept a second BNC receptacle which can be ordered separately to provide the dual port version.

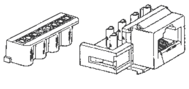
Material for A9105 and A9106:
Stuffer Cap: Clear polycarbonate. **AMP-BARREL Terminal:** Tin plated phosphor bronze. **Label:** Adhesive backed polyester. **Contacts:** Nickel plated high strength copper alloy having selective gold plating in contact area and selective tin plating in AMP-BARREL terminal area. **Housing:** Black thermoplastic, 94V-0 rated. **Conductor Type:** Solid or stranded having .048 max. insulation O.D.

Fig. 1 A4004



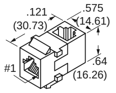
Three Pair Modular Jack
(6 Pos.) IBM Equivalent
P/N: 831575

Fig. 2 A4005



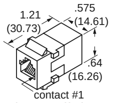
Four Pair Modular Jack
(8 Pos.) IBM Equivalent
P/N: 6091030

Fig. 3



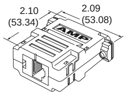
Compact couplers for two modular plugs; couplers snap into 0.585" x 0.765" (14.86mm x 19.43mm) rectangular wallplate cutouts. Wired one-to-one.

Fig. 4



Compact couplers for two modular plugs; couplers snap into 0.585" x 0.765" (14.86mm x 19.43mm) rectangular wallplate cutouts. Wired one-to-one.

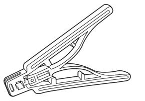
Fig. 5



These versatile connectors convert a 25 position plug or receptacle interface to modular jack interface. Transition Connectors are used most often with data, data-over-voice, and on the dropside or output device side of mainframes, personal or business computers.

Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Category 3 Modular Telephone Jack						
1	6	IBM	A4004-ND	6.57	5.88	553983-1
2	8	IBM	A4005-ND	5.01	3.49	554546-1
1	6	Commercial	A9105-ND	5.15	4.12	554171-1
2	8	Commercial	A9106-ND	5.38	4.30	554578-1
Category 3 Panel Mount Coupler						
3	6	Right Angle	A9107-ND	4.15	3.32	555049-1
	8	Right Angle	A9108-ND	4.43	3.54	555051-1
4	6	In-Line	A9109-ND	4.10	3.28	555050-1
	8	In-Line	A9110-ND	4.88	4.37	555052-1
RS-232 to Modular Jack						
5	6	DB25P to RJ11 (6-6)	A23462-ND	11.92	10.43	748100-1
	6	DB25S to RJ11 (6-6)	A23463-ND	34.72	30.38	748152-1
	8	DB25P to RJ45 (8-8)	A23460-ND	18.30	15.25	747772-1
	8	DB25S to RJ45 (8-8)	A23461-ND	12.14	10.63	747868-1

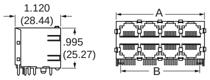
Modular Plugs Tooling



• Strips and terminates cable • Lightweight • Low cost

A9988-ND	Crimp Tool for 4-Position Handset Plugs	**$24.48**
A9989-ND	Crimp Tool for RJ-11(2, 4, & 6) Position Modular Plugs	**$24.48**

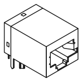
Stacked Modular Jacks



Housing: Polysulfone, black, UL 94V-0 rated **Contact:** .013 (0.33) phosphor bronze; plated .000050 (0.00127) gold in localized area and .00150 (0.00381) tin-lead on solder tails, over .000050 (0.00127) nickel underplate **Shield:** .010 (0.25) copper alloy tin-lead plated terminals per port: 8 X 8

Description	Ports Terminals	Dimensions Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Shielded With Panel Ground							
2x1 Ports	2-8	.68 (17.27)	.45 (11.43)	A24917-ND	7.85	6.28	569381-1
2x3 Ports	6-8	1.78 (45.21)	1.55 (39.37)	A24189-ND	14.90	11.92	569261-1
2x4 Ports	8-8	2.33 (59.18)	2.10 (53.34)	A24911-ND	12.10	9.68	569262-1
2x6 Ports	12-8	3.43 (87.12)	3.20 (81.28)	A24912-ND	14.68	11.74	569263-1
2x8 Ports	16-8	4.53 (115.06)	4.30 (109.22)	A24913-ND	23.15	18.52	569264-1

Modular Jack with Shorting Bar

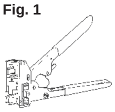


Housing: Polysulfone, black, UL 94V-0 rated **Contact:** .013 (0.33) phosphor bronze; plated .000050 (0.00127) gold in localized area and .00150 (0.00381) tin-lead on solder tails, over .000050 (0.00127) nickel underplate **Shield:** .010 (0.25) copper Alloy tin-lead plated

Description	Shorting Configurations	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Shielded PCB Ground Jack					
8-Position RJ-48-X	1 to 4 & 2 to 5	A24914-ND	6.88	5.50	557789-1

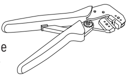
Modular Crimp Tooling

Fig. 1



Cuts, strips, crimps and terminates modular plug connectors. Features: color-coded dies, a cable jacket stripper, smooth ratcheting action to assure positive connector termination and spring-actuated and cushioned handles for fatigue-free use. Available as entire crimping tool, or dies may be purchased separately. Overall size: 7"

Fig. 2



Ratchet control provides complete termination cycle Interchangeable die sets.

Fig.	Description	Digi-Key Part No.	Price Each	AMP Part No.
1	Modular Plug Crimp Tool without Dieset	A9931-ND	83.39	2-231652-0
	Modular Plug Crimp Tool with 4-6 Dieset	A9902-ND	113.99	1-231652-3
	Modular Plug Crimp Tool with 6-6 Dieset	A9901-ND	113.99	2-231652-8
	Mod. Plug Crimp Tool w/ 6-6 Long Body Dieset	A9029-ND	113.99	2-9231652-7
	Modular Plug Crimp Tool with 6-6 Offset Dieset	A9930-ND	113.99	2-231652-6
	Modular Plug Crimp Tool with 8-8 Dieset	A9900-ND	113.99	2-231652-1
	Mod. Plug Crimp Tool w/ 8-8 High Perfor. Dieset	A9929-ND	113.99	3-231652-0
—	4-Position Handset Dieset	A9906-ND	38.25	853400-3
	4-6 Position Die Set	A9905-ND	38.25	853400-8
	6-6 Position Long Body Die Set	A9030-ND	38.25	853400-7
	6-6 Position Offset Die Set	A9927-ND	38.25	853400-6
	8-8 Position Die Set	A9904-ND	38.25	853400-1
	8-8 Position High Perform. Die Set	A9926-ND	38.25	1-853400-0
—	Replacement Wire Strip. Blade Set Kit	A9976-ND	34.43	231662-4
	Wire Strip. Replacement Blades	A9928-ND	4.65	231662-5
2	Pro-Crimper II Hand Tool without Dies	A9996-ND	75.00	354940-1
	10-Position, Pro-Crimper II	A9798-ND	201.00	58560-1
—	10-Position Die Set Only, Pro-Crimper II (Use with A9996-ND)	A9799-ND	168.00	58560-2
—	Crimp Tool, External Strain Relief, Pro-Crimper II	A9800-ND	192.75	224928-1
	Die Set, External Strain Relief (for A9996-ND)	A9801-ND	140.25	224928-2

Hand Tool Kit

Contents include: Carrying case with frame; RJ-11 (4-&-6) RJ-45 (8)-Position die sets, blade replacement kit and small screwdriver.

A9040-ND Production Tool Kit **$178.39**

Production Tool Kit

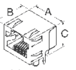
Carrying case with frame; 4-Position handset, RJ-11 (4-&-6) RJ-45 (8)-Position die sets, blade replacements kit and small screwdriver.

A9967-ND Production Tool Kit............ **$210.95**

molex GC/Waldom

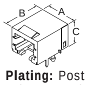
Modular Jacks

Fig. 1



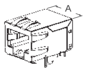
Housing: Black glass-filled high temperature nylon, UL 94V-0 **Contact:** Gold per FCC 68.5 Specification **Plating:** 1.27 (50µ")min. Gold in contact area and 1.27µm (50µ") Tin/Lead in tail area both over nickel overall **Temperature:** -40 to +80°C

Fig. 2



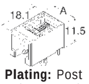
Housing: Black glass-filled nylon, UL 94V-0 **Contact:** Phosphor Bronze **Plating:** Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area,1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over nickel overall **Temperature:** -40 to +80°C

Fig. 3



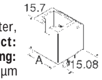
Housing: Black glass-filled nylon, UL 94V-0 **Contact:** Phosphor Bronze **Plating:** Post plate 1.27 to 1.52µm (50 to 60µ") Gold in contact area,1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over nickel overall **Temperature:** -40 to +80°C

Fig. 4



Housing: Black polyester, UL 94V-0 **Contact:** Phosphor Bronze **Plating:** Post plate 1.27 to 1.52 µm (50 to 60µ") Gold in contact area, 1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over nickel overall **Temperature:** -40 to +80°C

Fig. 5



Housing: Gray polyester, UL 94V-0 **Contact:** Phosphor Bronze **Plating:** Post plate 1.27 to 1.52 µm (50 to 60µ") Gold in contact area, 1.90µm (75µ") min. (90/10) Tin/Lead in tail area both over nickel overall **Temperature:** -40 to +80°C **Note:** Panel Cut out SMT are Black polyester, UL 94V-0

Fig.	Circuits-Contacts	Dimensions (Inch) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Right Angle, Low Profile Shielded with Lightpipes									
1	8-8	.645	—	—	WM1637-ND	3.41	2.77	2.13	43860-0010-TR80
Right Angle, Low Profile - Inverted Unshielded									
1	6-4	—	13.21	—	WM5430-ND	1.36	1.11	.85	43860-0003
	6-6	—	13.21	—	WM5431-ND	1.60	1.30	1.00	43860-0002
	8-8	—	13.21	—	WM5432-ND	1.52	1.24	.95	43860-0001
Right Angle, Low Profile - Inverted Shielded with All Panel Grounding Tabs									
1	6-4	16.18	13.53	—	WM5433-ND	2.88	2.35	1.81	43860-0015
	6-6	16.18	13.53	—	WM5434-ND	2.95	2.40	1.85	43860-0014
	8-8	16.18	13.53	—	WM5435-ND	3.07	2.50	1.92	43860-0013
Right Angle, Low Profile - Inverted Shielded with Offset Panel Grounding Tabs									
1	6-4	16.18	13.53	—	WM5436-ND	2.88	2.35	1.81	43860-0006
	6-6	16.18	13.53	—	WM5437-ND	2.95	2.40	1.85	43860-0005
	8-8	16.18	13.53	—	WM5438-ND	3.07	2.50	1.92	43860-0004
Right Angle, Low Profile Unshielded									
2	4-4	11.18	18.03	11.58	WM5439-ND	1.67	1.36	1.05	43202-4101
	6-2	13.21	18.03	11.58	WM5440-ND	1.51	1.23	.95	43202-6107
	6-4	13.21	18.03	11.58	WM5441-ND	1.60	1.31	1.01	43202-6105
	6-6	13.21	18.03	11.58	WM5442-ND	1.79	1.46	1.12	43202-6101
	8-4	15.24	18.03	11.58	WM5443-ND	1.77	1.45	1.11	43202-8119
	8-6	15.24	18.03	11.58	WM5444-ND	1.86	1.52	1.17	43202-8116
	8-8	15.24	18.03	11.58	WM5445-ND	1.90	1.55	1.19	43202-8104
	8-10	15.24	18.03	11.58	WM5446-ND	1.93	1.58	1.21	43202-8101
Right Angle, Low Profile									
3	8-8	.624	—	—	WM1635-ND*	2.95	2.40	1.85	43202-8816-TR80
	8-8	.624	—	—	WM1636-ND**	2.95	2.40	1.85	43202-8817-TR80

Fig.	Circuits-Contacts	Key	Dim. (Inch) A	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Right Angle - Low Profile								
4	4-4	no	11.18	WM5410-ND	1.14	.93	.72	95001-2441
	6-4	no	13.21	WM5411-ND	1.42	1.16	.89	95001-2641
	6-6	no	13.21	WM5412-ND	1.32	1.07	.83	95001-2661
	8-8	no	15.24	WM5414-ND	1.39	1.13	.87	95001-2881
	8-8	yes	15.24	WM5415-ND	2.37	1.93	1.48	95001-2882
Right Angle - Low Profile SMT								
4	4-4	no	11.18	WM5416-ND	2.24	1.82	1.40	95001-6441
	6-4	no	13.21	WM5417-ND	2.57	2.09	1.61	95001-6641
	6-6	no	13.21	WM5418-ND	2.77	2.26	1.74	95001-6661
	8-8	no	15.24	WM5419-ND	2.98	2.42	1.86	95001-6881
	8-8	yes	15.24	WM5420-ND	3.31	2.70	2.08	95001-6882
Vertical, Standard Profile with Small Panel Cutout								
5	4-4	no	11.18	WM5421-ND	1.14	.93	.72	95003-2441
	6-4	no	13.21	WM5422-ND	1.42	1.16	.89	95003-2641
	6-6	no	13.21	WM5423-ND	1.49	1.21	.93	95003-2661
	8-8	no	15.24	WM5424-ND	1.69	1.38	1.06	95003-2881
	8-8	yes	15.24	WM5425-ND	2.19	1.79	1.38	95003-2882
Vertical, Standard Profile with Small Panel Cutout SMT								
5	4-4	no	11.18	WM5426-ND	1.69	1.38	1.06	95003-6441
	6-4	no	13.21	WM5427-ND	1.76	1.43	1.10	95003-6641
	6-6	no	13.21	WM5428-ND	1.83	1.49	1.15	95003-6661
	8-8	no	15.24	WM5429-ND	1.61	1.31	1.01	95003-6881-TB36

*No Top or Side Tabs **Top Tabs

Modular Connectors

Fig. 1 — Series SI, 64, 70, 71

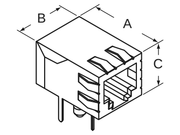


Fig. 2 — Series SI

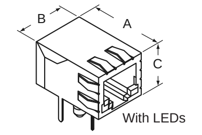


Fig. 3 — Series 30

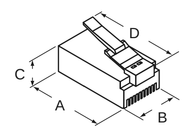


Fig. 4 — Series 30, 36, 37, 39

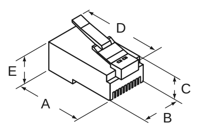
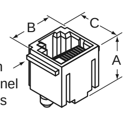


Fig. 5 — Series 65, 71



Shown with optional panel stop flanges

Fig. 6 — Series 66

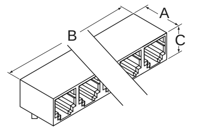


Fig. 7 — Series 68

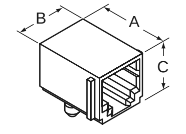


Fig. 8 — Series 71

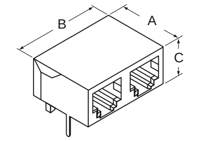


Fig. 9 — Series 71

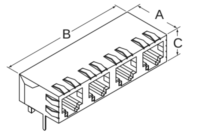


Fig. 10 — Series 73

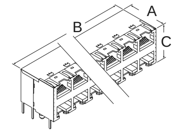
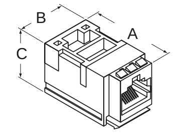
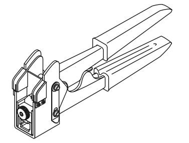


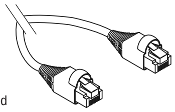
Fig. 11 — Series 80



CRIMP TOOL



CAT5 & CAT6 Jumpers Available Through Digi-Key®



Enhanced CAT-5 Cords: Enhanced patch cords built using high performance Stewart 37 Series plugs optimized for consistent, reliable performance in high speed networking applications. **CAT-6 Cords:** Patch cords built using high performance Stewart 39 Series plugs which are designed and manufactured to meet or exceed the current EIA/TIA CAT-6 draft specifications.

Descrip. Ft. (Meter)	Digi-Key Part No.	Price Each
Cat-5 — Enhanced		
3' (.914)	380-1064-ND	8.22
5' (1.524)	380-1066-ND	8.98
7' (2.134)	380-1068-ND	9.77
10' (3.048)	380-1070-ND	10.92
15' (4.572)	380-1072-ND	12.84
20' (6.096)	380-1074-ND	15.35
25' (7.62)	380-1076-ND	17.99

Descrip. Ft. (Meter)	Digi-Key Part No.	Price Each
Cat-6		
3' (.914)	380-1063-ND	12.51
5' (1.524)	380-1065-ND	13.66
7' (2.134)	380-1067-ND	14.85
10' (3.048)	380-1069-ND	16.63
15' (4.572)	380-1071-ND	19.97
20' (6.096)	380-1073-ND	23.66
25' (7.62)	380-1075-ND	27.56

Crimp Tools and Die Sets

Description	Digi-Key Part No.	Price Each	Stewart Part No.
Crimp Tool W/4 Position Die Set	380-1055-ND	82.50	2990001-01
Crimp Tool W/6 Position Die Set	380-1056-ND	82.50	2990002-01
Crimp Tool W/8 Position Die Set	380-1057-ND	82.50	2990003-01
Crimp Tool W/10 Position Die Set	380-1058-ND	82.50	2990007-01
4 Position Die Set Modular	380-1059-ND	18.00	2990004-01
6 Position Die Set Modular	380-1060-ND	18.00	2990005-01
8 Position Die Set Modular	380-1061-ND	18.00	2990006-01
10 Position Die Set Modular	380-1062-ND	18.00	2990008-01

Plugs and Jacks:

SI Series: MagJack® Modular Jacks with Integrated Magnetics. The SI Series MagJack connectors offers filtering capabilities for your high-speed network and telecom applications. By integrating the magnetics into the jack body, MagJack high-speed connectors improve our signal while saving you board space.

30 Series: Unshielded modular plugs offer superior performance for voice, data, and high-speed networking applications. With mirror-smooth contact surfaces and locking strain relief, these plugs deliver an optimum number of mating cycles.

36 Series: Shielded modular plugs provide a highly reliable connection to jacks for high-speed networking applications. Each plug is designed for ease of assembly and termination. Superior shielding characteristics make the 36 Series plugs ideal for environments that require protection from EMI.

Series 37: Category 5 modular plugs are designed to provide exceptional performance in high-speed communication applications. All 37 Series plugs use electropolished, 50-microinch gold-plated contacts for the most reliable, long-lasting performance. Each plug is designed to be terminated with our standard hand or bench tools.

Series 39: The high performance modular plug for cutting edge premises wiring applications.

Series 64, 65, & 70: Stewart Connector's modular jacks are designed to meet the demanding requirements of high-performance communication environments. Available in a wide variety of height configurations, the 64 and 70 Series jacks provide versatile and reliable right-angle solutions for your networking applications. For vertical-mount applications, the 65 Series modular jacks offer many of the same design options of the right-angle versions.

Series 66: Our extensive line of single-row harmonica jacks offers shielded and unshielded solutions for twisted-pair networking environments. Most networking systems that use unshielded twisted-pair cable also use shielded harmonica jacks to block EMI leakage from the enclosure. The contacts are fully enclosed for maximum efficiency and long life.

Series 68: SOF-LOK™ posts use metal tabs to lock the jack tightly to the board with min. impact. The pogo-action contacts provide uniform pressure to the solder pads and absorb the shock of repeated mating cycles for max. durability.

Series 71: Our high-performance modular jacks are designed for fast installation into high-speed applications. The industry-standard, eight-position design is an easy drop-in replacement for Category 3 jacks. They are available in right-angle and vertical configurations, and both shielded and unshielded versions.

Series 73: Our space-saving StackJack and High-Performance StackJack multiport connectors offer the most features for maximum performance and reliability. Enhanced shielding provides optimum protection against EMI, and our unique panel tabs provide high normal force for superior shielding effectiveness. The longer springs allow repeated insertions/withdrawals from a panel, and prevent "fish hooking" on the panel if overinserted. High-Performance StackJack connectors are designed for demanding Category 5 applications.

Series 80: The rugged design of our cable-ready jacks is ideal for telco, data, mobile, and coupling applications. Available with built-in strain relief.

Series	Fig.	Description	Positions Contacts	Dimensions - Inch (mm)					Digi-Key Part No.	Price Each		Stewart Part No.
				A	B	C	D	E		1	25	
SI	1	MagJack RJ45 W/EMI Shielding	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1077-ND	5.82	5.46	SI-10021
		MagJack RJ45 W/EMI Shielding, Common Mode Choke	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1011-ND	5.82	5.46	SI-20140
	2	MagJack RJ45 W/EMI Shielding, Yellow LED on Left, Green on Right	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1012-ND	14.46	13.56	SI-40138
		MagJack RJ45 W/EMI Shielding, Green/Yellow Bi-Color LED on Both Sides	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1013-ND	15.94	14.94	SI-40141
30	3	Plug, Unshielded, Stranded/Solid	6-2	.525 (13.33)	.380 (9.65)	.260 (6.60)	.534 (13.57)	—	380-1001-ND	.19	.18	940-SP-3026
		Plug, Handset, Unshielded, Stranded/Solid	4-4	.525 (13.33)	.300 (7.62)	.260 (6.60)	.485 (12.32)	—	380-1002-ND	.22	.21	940-SP-3044
		Plug, Unshielded, Stranded/Solid	6-4	.525 (13.33)	.380 (9.65)	.260 (6.60)	.534 (13.57)	—	380-1003-ND	.22	.21	940-SP-3046
		Plug, Unshielded, Stranded/Solid	6-6	.525 (13.33)	.260 (6.60)	.260 (6.60)	.534 (13.57)	—	380-1004-ND	.26	.24	940-SP-3066
	4	Plug, Unshielded, Stranded/Solid	10-10	.885 (22.48)	.460 (11.68)	.260 (6.60)	.622 (15.80)	.312 (7.92)	380-1000-ND	.58	.54	940-SP-301010R
		Plug, Unshielded, Stranded/Solid, .038" (.965mm) OD Cable	8-8	.885 (22.48)	.460 (11.68)	.260 (6.60)	.622 (15.80)	.312 (7.92)	380-1005-ND	.38	.36	940-SP-3088R
		Plug, Unshielded, Stranded/Solid, .040" (1.02mm) OD Cable	8-8	.885 (22.48)	.460 (11.68)	.260 (6.60)	.622 (15.80)	.312 (7.92)	380-1006-ND	.42	.39	940-SP-3088R-A133
36	4	Plug, Shielded, Stranded/Solid	8-8	1.046 (26.57)	.460 (11.68)	.260 (6.60)	—	.360 (9.14)	380-1007-ND	1.09	1.02	940-SP-360808-A108
37	4	Plug, CAT-5	8-8	.884 (22.46)	.460 (11.68)	.260 (6.60)	.622 (15.80)	.312 (7.92)	380-1008-ND	.48	.45	943-SP-370808M2-A264
		Plug, CAT-5, Shielded	8-8	.884 (22.46)	.460 (11.68)	.260 (6.60)	—	.360 (9.14)	380-1009-ND	1.34	1.26	943-SP-370808SM2A264
39	4	Plug, CAT-6	8-8	.884 (22.46)	.460 (11.68)	.260 (6.60)	.622 (15.80)	.312 (7.92)	380-1014-ND	2.08	1.95	SS-39100-002
64	1	Jack, Unshielded Without Stops	10-10	.815 (20.70)	.605 (15.36)	.505 (12.83)	—	—	380-1015-ND	1.06	.99	SS-641010-NF
		Jack, 1pc Shield Without Stops	10-10	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1016-ND	1.76	1.65	SS-641010S-A-NF
		Jack, Unshielded Without Stops	4-4	.815 (20.70)	.445 (11.30)	.505 (12.83)	—	—	380-1017-ND	.77	.72	SS-6444-NF
		Jack, Unshielded Without Stops	6-4	.815 (20.70)	.530 (13.46)	.505 (12.83)	—	—	380-1018-ND	.93	.87	SS-6446-NF
		Jack, Unshielded Without Stops	6-6	.815 (20.70)	.530 (13.46)	.505 (12.83)	—	—	380-1019-ND	.93	.87	SS-6466-NF
		Jack, Shielded Without Stops	6-6	.850 (21.59)	.545 (13.84)	.545 (13.84)	—	—	380-1020-ND	1.63	1.53	SS-6466S-A-PG4-BA-50
		Jack, Unshielded With Stops	8-8	.815 (20.70)	.605 (15.36)	.505 (12.82)	—	—	380-1021-ND	.86	.81	SS-6488-FLS
		Jack, Unshielded Without Stops	8-8	.815 (20.70)	.605 (15.36)	.505 (12.82)	—	—	380-1022-ND	.86	.81	SS-6488-NF
		Jack, 1pc Shield With Stops	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1023-ND	1.57	1.47	SS-6488S-A-FLS
		Jack, 1pc Shield Without Stops	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1024-ND	1.86	1.74	SS-6488S-A-NF
		Jack, 1pc Shield Without Stops, Standard Shield Ground Tail	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1025-ND	1.86	1.74	SS-6488S-A-PG4-BA
65	5	Jack, Unshielded Without Stops	10-8	.650 (16.51)	.615 (15.62)	.627 (15.93)	—	—	380-1026-ND	.86	.81	SS-650810-A-NF
		Jack, 1pc Shield With Stops	10-8	.670 (17.02)	.640 (16.26)	.670 (17.02)	—	—	380-1027-ND	2.27	2.13	SS-650810S-A-FLS
		Jack, 1pc Shield Without Stops	10-8	.670 (17.02)	.640 (16.26)	.670 (17.02)	—	—	380-1028-ND	2.27	2.13	SS-650810S-A-NF
		Jack, Unshielded Without Stops	10-10	.650 (16.51)	.615 (15.62)	.627 (15.93)	—	—	380-1029-ND	1.70	1.59	SS-651010-A-NF
		Jack, Unshielded Without Stops	4-4	.650 (16.51)	.455 (11.56)	.650 (16.51)	—	—	380-1030-ND	1.76	1.65	SS-6544-NF
66	6	Jack, Unshielded, 2 Port Without Stops	6-6	.815 (20.70)	.848 (21.54)	.503 (12.78)	—	—	380-1031-ND	3.71	3.48	SS-666602-NF
		Jack, Unshielded, 4 Port Without Stops	6-6	.815 (20.70)	1.744 (44.30)	.503 (12.78)	—	—	380-1032-ND	4.93	4.62	SS-666604-NF
		Jack, Shielded, 4 Port Without Stops	8-8	.865 (21.97)	2.100 (53.34)	.545 (13.84)	—	—	380-1035-ND	6.50	6.09	SS-668804S-A-PG4-AC
		Jack, Unshielded, 6 Port Without Stops	6-6	.815 (20.70)	2.640 (67.06)	.503 (12.78)	—	—	380-1033-ND	11.17	10.47	SS-666606-NF
		Jack, Unshielded, 4 Port Without Stops	8-8	.815 (20.70)	4.300 (109.22)	.523 (13.28)	—	—	380-1034-ND	3.20	3.00	SS-668804-NF
		Jack, Shielded, 8 Port Without Stops	8-8	.865 (21.97)	4.300 (109.22)	.545 (13.84)	—	—	380-1036-ND	11.23	10.53	SS-668808S-A-PG4-AC
68	7	Jack, Unshielded, With Stops	6-6	.725 (18.42)	.526 (13.34)	.505 (12.83)	—	—	380-1037-ND	2.88	2.70	SS6866B-FLS-C40
70	1	Jack, Unshielded Without Stops	10-8	.712 (18.08)	.600 (15.24)	.453 (11.51)	—	—	380-1038-ND	1.09	1.02	SS-700810-NF
		Jack, 1pc Shield Without Stops, Alternate Style Shield Ground Tail	10-8	.738 (18.74)	.626 (15.90)	.475 (12.06)	—	—	380-1039-ND	2.43	2.28	SS-700810S-A-PG4-1-BA
		Jack, 1pc Shield Without Stops	10-8	.738 (18.74)	.626 (15.90)	.475 (12.06)	—	—	380-1040-ND	2.43	2.28	SS-700810S-A-PG4-BA
		Jack, Unshielded Without Stops	6-2	.712 (18.08)	.525 (13.33)	.453 (11.51)	—	—	380-1041-ND	1.47	1.38	SS-7026-NF
		Jack, Unshielded Without Stops	6-4	.712 (18.08)	.525 (13.33)	.453 (11.51)	—	—	380-1042-ND	1.54	1.44	SS-7046-NF
		Jack, Unshielded Without Stops	6-6	.712 (18.08)	.525 (13.33)	.453 (11.51)	—	—	380-1043-ND	1.63	1.53	SS-7066-NF
71	1	Jack, Unshielded Without Stops	8-8	.815 (20.70)	.605 (15.36)	.505 (12.82)	—	—	380-1046-ND	1.02	.96	SS-7188-NF
		Jack, 1pc Shield Without Stops, Without Panel Stop Flanges	8-8	.815 (20.70)	.605 (15.36)	.505 (12.82)	—	—	380-1047-ND	1.98	1.86	SS-7188S-A-NF
		Jack, 1pc Shield Without Stops, Alternate Style Shield Ground Tail	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1048-ND	1.98	1.86	SS-7188S-A-PG4-1-BA
		Jack, 1pc Shield Without Stops, Standard Shield Ground Tail	8-8	.850 (21.59)	.635 (16.13)	.550 (13.97)	—	—	380-1049-ND	1.98	1.86	SS-7188S-A-PG4-BA
	5	Jack, Unshielded Without Stops	8-8	.650 (16.51)	.615 (15.62)	.644 (16.36)	—	—	380-1050-ND	.93	.87	SS-7188V-A-NF
		Jack, Standard Shield Without Stops	8-8	.670 (17.02)	.640 (16.26)	.670 (17.02)	—	—	380-1051-ND	2.62	2.46	SS-7188VS-A-NF
	8	Jack, 1pc Shield, 2 Port Without Stops	8-8	.815 (20.70)	1.205 (30.61)	.523 (13.28)	—	—	380-1044-ND	7.97	7.47	SS-718802S-A-NF
	9	Jack, 1pc Shield, 4 Port	8-8	.815 (20.70)	2.305 (58.55)	.523 (13.28)	—	—	380-1045-ND	9.44	8.85	SS-718804S-A-PG4-AC
73	10	Jack, Shielded, 12 Port Without Stops	8-8	1.103 (28.02)	1.190 (30.23)	1.004 (25.50)	—	—	380-1052-ND	16.80	15.75	SS-73100-046
		Jack, Shielded, 16 Port Without Stops	8-8	1.103 (28.02)	1.190 (30.23)	1.004 (25.50)	—	—	380-1053-ND	24.00	22.50	SS-73100-047
80	11	Jack, Unshielded, Cable Ready	10-8	1.300 (33.02)	.750 (19.05)	.780 (19.81)	—	—	380-1078-ND	6.24	5.85	SS-800810SB-SP50-040-250

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Filtered Modular Jacks

Jack design and component selection compatible with equipment registered under FCC Part 68. UL Recognized. CSA Certified. U.S. Patent No. 4,695,115 and U.S. Patent No. 4,772,224 and a variety of international patents. **RJ11 / RJ45 SERIES, Shielded:** The metal shield provides additional protection, and is available with RFI gasket style spring fingers to provide a low impedance ground path across the interface.

Fig. 1

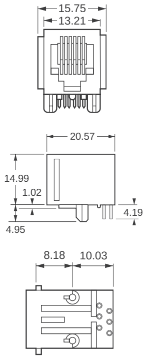


Fig. 2

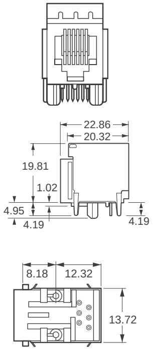


Fig. 3

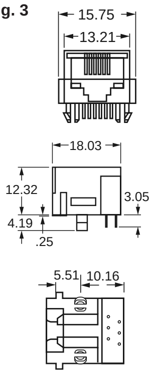


Fig. 4

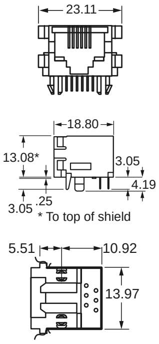


Fig. 5

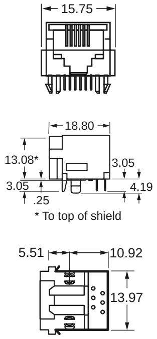


Fig. 6

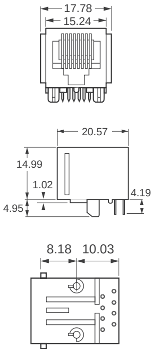


Fig. 7

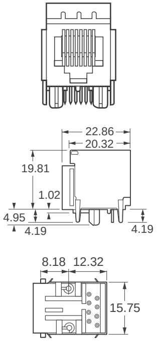


Fig. 8

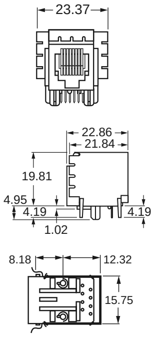


Fig. 9

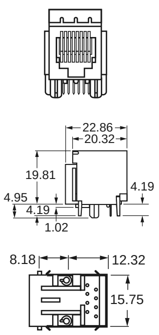


Fig. 10

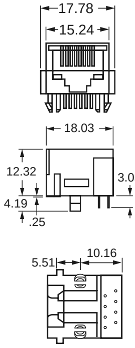


Fig. 11

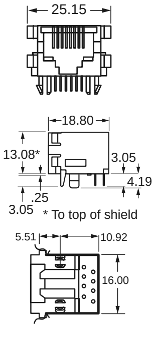


Fig. 12

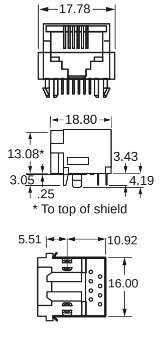


Fig. 13

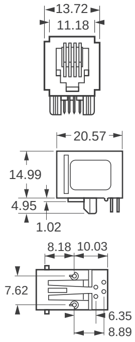


Fig.	Description	Position Con- tacts	Ferrites	Digi-Key Part No.	Price Each 1	25	100	Corcom Part No.
				RJ11 Series				
1	Unshielded	6-2	Sleeves	CCM9000-ND	2.57	1.80	1.50	RJ11-2L-S
	Unshielded	6-4	Sleeves	CCM9001-ND	2.86	2.00	1.67	RJ11-4L-S
	Unshielded	6-6	Sleeves	CCM9002-ND	3.15	2.20	1.84	RJ11-6L-S
	Unshielded	6-2	Block	CCM9003-ND	2.72	1.90	1.59	RJ11-2L-B
	Unshielded	6-4	Block	CCM9004-ND	2.86	2.00	1.67	RJ11-4L-B
	Unshielded	6-6	Block	CCM9005-ND	3.00	2.10	1.75	RJ11-6L-B
2	Shielded	6-4	Sleeves*	CCM9010-ND	3.80	2.66	2.22	RJ11-4L2-S
	Shielded	6-6	Sleeves*	CCM9011-ND	4.09	2.86	2.39	RJ11-6L2-S
	Shielded	6-4	Block*	CCM9012-ND	3.80	2.66	2.22	RJ11-4L2-B
	Shielded	6-6	Block*	CCM9013-ND	3.95	2.76	2.30	RJ11-6L2-B
3	Unshielded	6-6	Block	CCM1394-ND	2.63	1.84	1.54	RJ11-6N-B
	Unshielded	6-6	Sleeves	CCM1395-ND	2.80	1.96	1.64	RJ11-6N-S
4	Shielded	6-6	Block	CCM1396-ND	3.09	2.16	1.80	RJ11-6N3-B
	Shielded	6-6	Sleeves	CCM1397-ND	3.23	2.26	1.89	RJ11-6N3-S
5	Shielded	6-6	Block	CCM1398-ND	3.09	2.16	1.80	RJ11-6N4-B
	Shielded	6-6	Sleeves	CCM1399-ND	3.23	2.26	1.89	RJ11-6N4-S

Fig.	Description	Position Con- tacts	Ferrites	Digi-Key Part No.	Price Each 1	25	100	Corcom Part No.
				RJ45 Series				
6	Unshielded	8-8	Sleeves	CCM9050-ND	3.66	2.56	2.14	RJ45-8L-S
	Unshielded	8-8	Block	CCM9052-ND	3.32	2.32	1.94	RJ45-8L-B
7	Shielded	8-8	Sleeves*	CCM9051-ND	4.80	3.36	2.81	RJ45-8L2-S
	Shielded	8-8	Block*	CCM9053-ND	4.49	3.14	2.62	RJ45-8L2-B
8	Shielded	8-8	Sleeves	CCM1390-ND	9.35	6.54	5.46	RJ45-8LCT1-S
	Shielded	8-8	Block	CCM1391-ND	9.04	6.32	5.28	RJ45-8LCT1-B
9	Shielded	8-8	Sleeves	CCM1392-ND	9.35	6.54	5.46	RJ45-8LCT2-S
	Shielded	8-8	Block	CCM1393-ND	9.04	6.32	5.28	RJ45-8LCT2-B
10	Unshielded	8-8	Block	CCM1500-ND	2.63	1.84	1.54	RJ45-8N-B
	Unshielded	8-8	Sleeves	CCM1501-ND	3.00	2.10	1.75	RJ45-8N-S
11	Shielded	8-8	Block	CCM1502-ND	3.09	2.16	1.80	RJ45-8N3-B
	Shielded	8-8	Sleeves	CCM1503-ND	3.55	2.48	2.07	RJ45-8N3-S
12	Shielded	8-8	Block	CCM1504-ND	3.09	2.16	1.80	RJ45-8N4-B
	Shielded	8-8	Sleeves	CCM1505-ND	3.55	2.48	2.07	RJ45-8N4-S
				RJH Series				
13	Filtered	4-4	Block	CCM9060-ND	2.92	2.04	1.70	RJH-4L-B

* Board Ground (pins only).

Note: LCT Version incorporates 82Pf capacitors.

CUI INC

Modular Components

Fig. 1

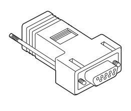


Fig. 2

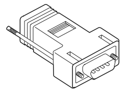


Fig. 3

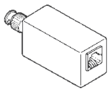


Fig. 4

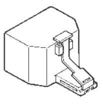


Fig. 5

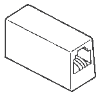


Fig. 6

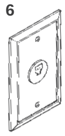


Fig. 7

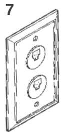


Fig.	Description	Digi-Key Part No.	Pricing 1	10	50	100	1,000
2	DB9P to RJ45 Jack (8-8)	046-0000-ND*	4.13	37.13	165.00	288.75	2062.50
1	DB9S to RJ45 Jack (8-8)	046-0001-ND*	4.13	37.13	165.00	288.75	2062.50
2	DB9P to RJ11 Jack (6-6)	046-0002-ND*	4.13	37.13	165.00	288.75	2062.50
1	DB9S to RJ11 Jack (6-6)	046-0003-ND*	4.13	37.13	165.00	288.75	2062.50
2	DB15P to RJ45 (8-8)	046-0004-ND*	4.63	41.63	185.00	323.75	2312.50
1	DB15S to RJ45 (8-8)	046-0005-ND*	4.63	41.63	185.00	323.75	2312.50
2	DB25P to RJ11 (6-6)	046-0008-ND*	4.38	39.38	175.00	306.25	2187.50
1	DB25S to RJ11 (6-6)	046-0009-ND*	4.38	39.38	175.00	306.25	2187.50
2	DB25P to RJ45 (8-8)	046-0010-ND*	4.38	39.38	175.00	306.25	2187.50
1	DB25S to RJ45 (8-8)	046-0011-ND*	4.38	39.38	175.00	306.25	2187.50
2	DB15P to RJ11 (6-6)	046-0016-ND*	4.63	41.63	185.00	323.75	2312.50
1	DB15S to RJ11 (6-6)	046-0017-ND*	4.63	41.63	185.00	323.75	2312.50
3	BNC RG62 to RJ11 Converter (6-6)	048-0000-ND	16.58	149.18	663.00	1160.25	8287.50
4	4 Wire TEE Adapter 1M-2F	048-0050-ND	2.00	18.00	80.00	140.00	1000.00
4	6 Wire TEE Adapter 1M-2F	048-0051-ND	2.98	26.78	119.00	208.25	1487.50
5	6-6 Modular Coupling (crossed) #1 to #6	048-0056-ND	1.50	13.50	60.00	105.00	750.00
5	6-6 Modular Coupling (straight) #1 to #1	048-0103-ND	1.50	13.50	60.00	105.00	750.00
6	4 Wire Wall Plate (6-4)	048-0059-ND	1.73	15.53	69.00	120.75	862.50
7	6 Wire Dual Wall Plate (6-6)	048-0060-ND	2.53	22.73	101.00	176.75	1262.50
6	6 Wire Wall Plate (6-6)	048-0061-ND	2.70	24.30	108.00	189.00	1350.00
6	8 Wire Wall Plate (8-8)	048-0062-ND	3.35	30.15	134.00	234.50	1675.00

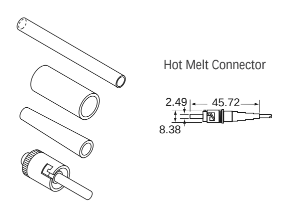
* User Configurable

3M Fiber Optics

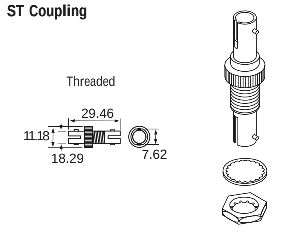
ST* Connectors and Accessories

The design of the 3M ST* Connector product line is compatible with AT&T ST* Connectors, Systimax* components, and other ST* connector products. The 3M products are made with a high quality PC finish on zirconia ceramic ferrules.

ST Connector Hot Melt



ST Coupling



ST* Bayonet Connectors

Mode	Type	Fiber Size (µm)	Attenuation	Reflection	Digi-Key Part No.	Price Each 1	10	25
Multi	Hot Melt	125	<0.2 dB typ.	≤-25 dB typ.	MF6100-ND	9.11	8.10	6.08
Multi	Crimplok	125	<0.2 dB typ.	≤-29 dB typ.	MF6901-ND	9.63	8.25	7.70

ST* Couplings

- **Operating Temperature:** -40°C to 85°C/-40°F to 185°F • **Housing Material:** Nickel Plated Zinc

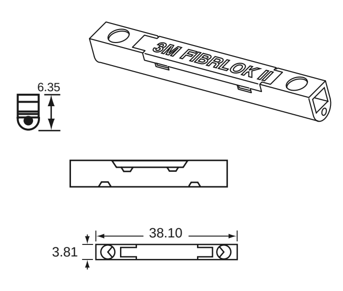
Mode	Description	Sleeve Material	Digi-Key Part No.	Price Each 1	10
Multi	Threaded Coupling w/Panel Nut & Lock Washer	Beryllium Copper	MF6112-ND	2.36	2.10
Multi	Duplex Threaded	Beryllium Copper	MF6113-ND	5.06	4.50
Single	Threaded Coupling w/Panel Nut & Lock Washer	Zirconia Ceramic	MF8119-ND	8.44	7.50

Universal Optical Fiber Splice

The Fibrlok II 2529 Universal Optical Fiber Splice can be used with either single-mode or multimode fibers with a (nominal) glass cladding diameter of 125 microns. The 2529 splice can be used with any combination of fibers with coating diameters from 250 to 900 microns.

Specifications:

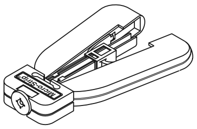
- **Fiber Diameter:** 125µm
- **Mean Insertion Loss:** <0.1 dB
- **Reflectance:** <-35 dB from -40° to 80°C (-40°F to 176°F)
- **Tensile Strength:** 1.0 lb. (.45kg) min.; >3.0 lbs. (1.36kg) typical



Description	Digi-Key Part No.	Price Each
Universal Optical Fiber Splice	MF2529-ND	12.25
Fiber Optic Assembly Tool	MF2501-ND	85.75

Division of OK International

Fiber Optic Strippers and Scissors



Description	Digi-Key Part No.	Price Each	OK Inter. Part No.
Strippers / Scissors			
Stripper, 125-135µm Cladding, 250µm Coating	K487-ND	43.00	FS-06S-13
Stripper, 125-175µm Cladding, 900µm Buffer	K488-ND	43.00	FS-08S-40
Stripper, 3mm Jacket	K489-ND	42.00	FS-54S-D2
Kevlar Scissors For Fiber Optic Stripping	K493-ND	19.50	FSKS
Replacement Blade Sets			
Purple, for K487-ND	K490-ND	41.00	FS-B-06S
Red, for K488-ND	K491-ND	41.00	FS-B-08S
Natural, for K489-ND	K492-ND	39.00	FS-B-J54
Stripper Kit			
125/250µm, 125/900 Stripper, 2.5 or 3.0mm Jacket, Kevlar Scissors	K494-ND	230.00	FSK-2

SC Connectors and Accessories

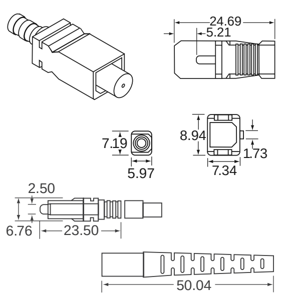
SC Connectors comply with NTT, JIS, ISO/IEC, and TIA/EIA component and ISO/IEC, CENELEC, ANSI, TIA/EIA-568A and BISCI system and cabling level standards.

Epoxy SC Connectors are available in single-mode and multimode utilizing epoxy adhesive.

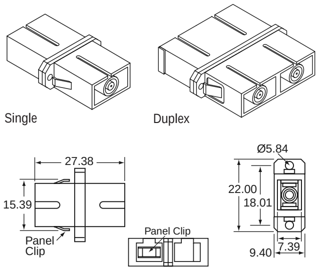
Hot-Melt SC Connectors are available in multimode, preloaded with hot melt adhesive, enabling a field termination in less than two minutes for multiple terminations.

Crimplok SC Connectors combine the speed of non-adhesive connectors with the performance characteristics of epoxy and hot-melt connectors. They are the ideal solution for emergency restoration work or for quickly making fiber connections at a desk.

SC Connector



SC Coupling



(Dimensions shown for Single Coupling)

SC Connectors

Mode	Type	Fiber Size (µm)	Attenuation	Reflection	Digi-Key Part No.	Price Each 1	10	25
Multi	Hot Melt	125	<0.2 dB typ.	≤-25 dB typ.	MF6300-ND	9.11	8.10	6.08
Multi	Crimplok	125	<0.3 dB typ.	≤-27 dB typ.	MF6900-ND	11.38	9.75	9.10
Single	Epoxy	126	<0.3 dB typ.	≤-45 dB typ.	MF8306-ND	11.48	10.20	7.65
Single	Epoxy	127	<0.3 dB typ.	≤-45 dB typ.	MF8307-ND	16.31	14.50	10.88

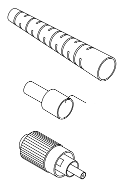
SC Couplings

Description	Operating Temperature	Digi-Key Part No.	Price Each 1	10	25
Standard Density	-40°C – 85°C / -40°F – 185°F	MF8310-ND	7.20	6.40	4.80
Duplex, Standard Density	-40°C – 75°C / -40°F – 167°F	MF8313-ND	16.88	15.00	11.25

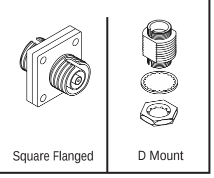
MF6955-ND Crimplok Field Termination Kit for SC Connectors **$532.00**

FC/PC Connectors and Accessories

The 3M PC/FC Connector is designed for advanced fiber optic systems requiring exceptional stability and low reflections. It is a field mountable, pull-proof connector that is fully compatible with all PC connectors adhering to NTT specifications.



FC/PC Coupling



FC/PC Connectors

Mode	Type	Fiber Size (µm)	Attenuation	Reflection	Digi-Key Part No.	Price Each 1	10	25
Multi	Hot Melt	125	<0.2 dB typ.	≤-25 dB typ.	MF6200-ND	12.15	10.80	8.10
Single	Epoxy	126	<0.3 dB typ.	≤-45 dB typ.	MF8203-ND	13.50	12.00	9.00

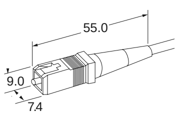
FC/PC Couplings

Mode	Housing Design	Operating Temperature	Digi-Key Part No.	Price Each 1	10	25
Multi	Square Flanged	-40° to 85°C/-40° to 185°F	MF6210-ND	9.00	8.00	6.00
Single	Square Flanged	-40° to 85°C/-40° to 185°F	MF8210-ND	10.13	9.00	6.75
Single	D-Mount	-40° to 85°C/-40° to 185°F	MF8211-ND	10.13	9.00	6.75

Amphenol® Fiber Optic Connectors

- **Connection Loss:** 0.27 dB typical; single mode

Description	Digi-Key Part No.	Pricing 1	10	50
954 SC Series Connector				
SC Ceramic, 125µm hole dia.	AFP1011-ND	7.80	75.00	360.00

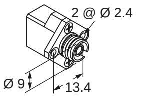


HIROSE ELECTRIC CO.,LTD.

Fiber Optics

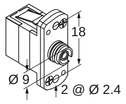
Adapters - Split Sleeve

Fig. 1



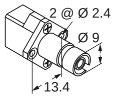
(Cut-out Dim)

Fig. 2



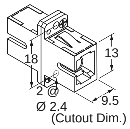
(Cutout Dim.)

Fig. 3



(Cut-out Dim)

Fig. 4



(Cutout Dim.)

Fig. 5

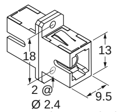


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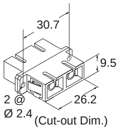
Fig. 6



(Cut-out Dim.)

Fig. 7

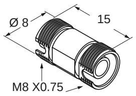
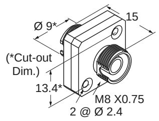


Fig. 8



(*Cut-out Dim.)

Fig.	Description	External Color	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	SC Hybrid SC/FC, Angled	—	H2492-ND	13.50	12.71	11.52	HSCJ-HRFCJ-B
2	SC Hybrid SC/FC, Straight	—	H2493-ND	15.52	14.61	13.24	HSCJ-HRFCJ-C
3	SC Hybrid SC/ST, Angled	—	H2494-ND	17.06	16.49	15.35	HSCJ-HSTJ-B
4	Panel Mount, Die Cast, Zirconia	—	H2495-ND	13.60	12.80	11.60	HSC-A2-D1
5	Panel Mount, Plastic, Zirconia	Blue	H2496-ND	9.05	7.92	7.17	HSC-A3-D1(02)
6	F-type, Zirconia	Blue	H2497-ND	15.25	14.36	13.01	HSCF-2A-D(P)
7	Non-Flange, Phosphor Bronze	—	H2498-ND	14.03	12.36	11.09	HRFC-A2-SF(01)
8	Cost-Effective, Phosphor Bronze	—	H2499-ND	10.69	9.42	8.45	HRFC-PA11-G1

Terminator

Fig. 1

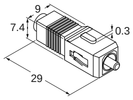


Fig. 2

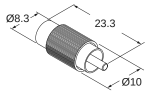


Fig.	Description	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	Plug, SC type	H2512-ND	57.34	54.48	52.23	HSC-TM-P1
2	Plug, FC type	H2513-ND	66.91	63.57	60.94	HRFC-TM-P1

MU Connectors and Adapters

Fig. 1

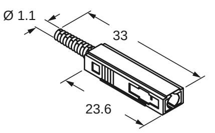


Fig. 2

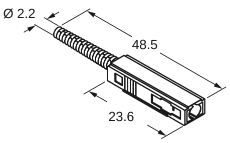


Fig. 3

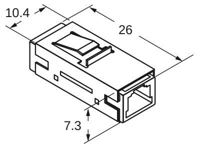


Fig. 4

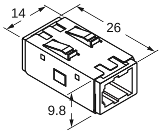


Fig.	Description	Boot Color	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	Simplex Plug for 0.9 Buffered fiber	Blue	H2500-ND	6.83	6.01	5.33	HMUA-P1-H1
2	Simplex Plug for 2 Cable	Blue	H2501-ND	6.83	6.01	5.33	HMUA-P2-H1
3	Simplex Patch Panel Mount Adapter	—	H2502-ND	12.77	12.02	10.89	HMUA-A-3
4	Duplex Patch Panel Mount Adapter	—	H2503-ND	15.35	14.45	13.10	HMUA-2A-3

Attenuators (Maximum Input Power 10mW)

Fig. 1

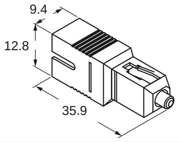


Fig. 2

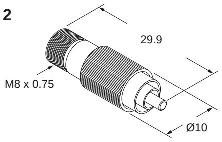
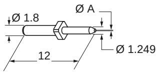


Fig.	Description	Attenuation =1.31 m	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	SC Attenuator	5dB	H2504-ND	91.76	87.17	83.57	HSC-AT8K-A05A
	SC Attenuator	10dB	H2505-ND	91.76	87.17	83.57	HSC-AT8K-A10A
	SC Attenuator	15dB	H2506-ND	91.76	87.17	83.57	HSC-AT8K-A15A
	SC Attenuator	20dB	H2507-ND	91.76	87.17	83.57	HSC-AT8K-A20A
2	FC Attenuator	5dB	H2508-ND	124.25	118.04	113.16	HRFC-AT5K-A05A
	FC Attenuator	10dB	H2509-ND	124.25	118.04	113.16	HRFC-AT5K-A10A
	FC Attenuator	15dB	H2510-ND	124.25	118.04	113.16	HRFC-AT5K-A15A
	FC Attenuator	20dB	H2511-ND	124.25	118.04	113.16	HRFC-AT5K-A20A

Ferrule

Dimension A	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
0.125	H2514-ND	6.53	5.75	5.09	HMUA-F3-A125
0.1255	H2515-ND	6.53	5.75	5.09	HMUA-F3-A1255
0.126	H2516-ND	6.53	5.75	5.09	HMUA-F3-A126



AMP tyco Electronics
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Dimensions in mm.

Fiber Optics OPTIMATE® DNP (Dry Non-Polish) Connectors

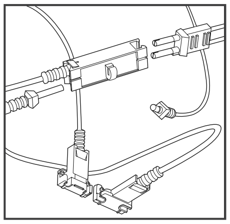


Fig. 1
Single Position Plug Assembly

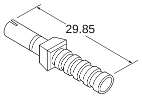


Fig. 2
Single Position Device Mounts

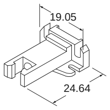
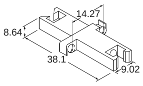


Fig. 3
Single Position Bulkhead Receptacle



2.39 Dia. - 2 Holes

Fig. 4
Dual Position Plug Assembly

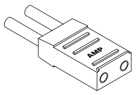


Fig. 5
Dual Position Bulkhead Receptacle

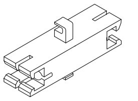
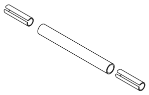


Fig. 6
Splice and Retention Clip



Optical Characteristics: • Insertion Loss: 2dB • Ref.: FOTP 34 Method C
Environmental Characteristics: • Temperature Range: -40°C to +60°C
Mechanical Characteristics: • Insertion Force: 13.34N [3 lb] (plug to receptacle) • Cable retention plug: 8.89N [12 lb.]

Materials: • Retention Clip: Copper alloy, plated • Splice: Copper alloy, plated • Connectors: Thermoplastic

The economics of using fiber-optic systems is a complex subject. Comparisons of the costs of fiber-optic systems and copper-wired systems are difficult and open to debate. Proper evaluations must be based on the users' needs.

Widespread application of fiber-optic technology will depend on its providing performance equal to or superior to copper cable, and at a lower cost. That fiber-optics can outperform cable in some areas seems established. That it can do so more cheaply, is not the rule. As with many new technologies, the prices of fiber-optic components have been dropping, often dramatically. Better products at cheaper prices have been introduced continually, and manufacturers' volume production and maturity of experience are combining to produce significant price reductions. In contrast, prices have been rising for copper cable and associated hardware. Although the point at which fiber-optic systems become less expensive than copper cable systems depends on the application, fiber-optics are becoming more attractive every day.

Users evaluating fiber-optics should consider costs beyond those for the components themselves. Considerations include the education needed to design a fiber-optic system and the costs of training craftsmen and technicians to handle, install, and maintain fiber-optic systems. On the other hand, the small size, light weight, and flexibility may present offsetting cost advantages. Handling, storage, and installation costs may be reduced.

Fig.	Description	Digi-Key Part No.	Pricing 1	25	AMP Part No.
1	Single Position Plug Assembly	A1703-ND	1.09	23.50	228087-1
2	Single Position Device Mounts	A1705-ND	.96	20.77	228043-1
3	Single Position Bulkhead Receptacle	A1707-ND	1.69	36.56	228042-1
4	Dual Position Plug Assembly	A20128-ND	2.39	51.75	228088-1
5	Dual Position Bulkhead Receptacle	A20129-ND	1.74	37.69	228045-1
6	Plastic Fiber Retention Clip	A20131-ND	.23	4.07	228046-1

Description	Digi-Key Part No.	Pricing 1	5	AMP Part No.
Hot Knife, Plastic Fiber	A99100-ND	63.35	271.50	228085-1
Single Position Plastic Cutting Fixture	A99102-ND	87.01	372.90	228837-1
Plastic Fiber Designer Kit	A9824-ND	621.78	2664.75	501218-1

A1799-ND Technicians Guide to Fiber Optics -
For more information on the technical aspect of fiber optics **$43.04**

Note: X in Part No. = Meter Per Roll
FIBER OPTIC CABLE (O.D. = .089)

Digi-Key Part No.	Price (Meter) 5	10	15	25	50	100
A1700-X-ND	11.37	21.11	30.24	48.72	81.20	146.16

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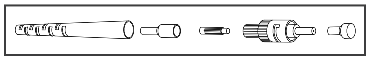
Fiber Optic Connectors

ST Style LightCrimp XTC Connectors

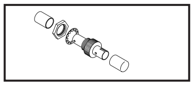


Features: • Singlemode or multimode • Just crimp it on the fiber • 2-minute termination • Epoxyless or quick-cure epoxy types • Pre-radiused PC finish (epoxy type) • Body Material: Epoxyless - aluminum; Epoxy - polymer • Coupling Nut Material: multimode epoxyless - polymer; Singlemode Epoxyless - die cast; Epoxy - die cast zinc • Storage Temp. Range: -40°C to +85°C

Fiber Size (µm)	Mode Type	Ferrule Material	Insertion Loss dB, Avg.	Oper. Temp. Range (°C)	Durability cycles, <.20 (dB) change	Digi-Key Part No.	Price Each 1	10	AMP Part No.
LightCrimp Epoxyless ST Style Connectors									
125	Multi	Plastic	0.4	-40° to +65°	500	A20100-ND	9.63	8.56	492168-1
125	Multi	St. Steel	0.4	-10° to +65°	500	A20101-ND	12.42	11.04	504034-1
125	Multi	Ceramic	0.4	-40° to +65°	1000	A20102-ND	15.05	13.38	504001-1
126	Single	Ceramic	0.2	-40° to +65°	1000	A20103-ND	36.61	32.54	504000-1
Epoxy ST Style Connectors									
125	Multi	Ceramic	0.4	-20° to +75°	1000	A20104-ND	8.08	7.18	501380-1
125	Multi	Ceramic	0.4	-20° to +75°	1000	A20105-ND	3.96	3.52	503571-1
125,140	Multi	St. Steel	0.3	-20° to +75°	500	A20106-ND	8.01	7.12	504008-3
125	Multi	Composite	0.3	-20° to +75°	5000	A20107-ND	3.13	2.78	503415-1
126	Single	Zircon/Ceramic	0.3	-20° to +75°	200	A20108-ND	6.68	5.94	502579-2

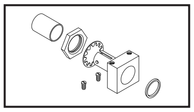
ST Style Coupling Receptacles

Free-Hanging or Panel Mount Design



Type	Sleeve Material	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Multimode	Composite	A20109-ND	2.21	1.96	501381-1
Single- or Multimode	Metal	A20110-ND	3.24	2.88	504021-1
Single- or Multimode	Ceramic	A20111-ND	6.35	5.64	502750-1

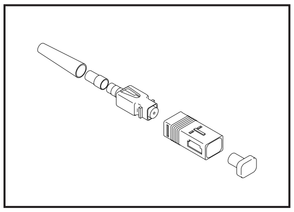
ST Style Active Device Mounts



Designed to accept multimode TO-18, TO-46, and TO-52 active devices • Nickel plated, die cast zinc • Mount to PCB or through panel • Includes positioning ring

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Standard Height	A20142-ND	8.57	7.62	501474-1
Low Profile	A20143-ND	8.39	7.46	502585-2

SC Style Connectors



LightCrimp Epoxyless Type

Features: • Innovative crimp design • Compliant with EIA/TIA 568A • No epoxy or adhesives • Shorter assembly time • Reduced polishing time • Lower installed cost • Secure repeatable matings • No need for curing oven or power supply • Consistent performance over a wide range of temperatures **Specifications:** • **Attenuation @1300 nm:** Mean 0.12 dB • **Operational Temperature Cable Dependent:** 40°C to 65°C **Materials:** • **Connector Ferrule:** Zirconia Ceramic • **Connector Body:** Thermoplastic • **Strain Relief:** Thermoplastic

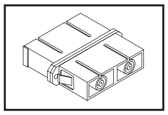
Epoxy Type

Features: • Easy to install • Singlemode or Multimode • Two versions available to match various assembly techniques • Compliant with Bellcore 326, JIS C-5973, Fibre Channel, TIA 568 • Pre-radiused ferrules **Performance Characteristics:** • **Insertion Loss:** 0.2dB typ. Return Loss: <-59dB typ. • **Temperature Range:** -40°C to +85°C; 0.1dB change typ. • **Durability:** Singlemode: 0.1dB typ. change after 200 cycles; Multimode: <0.1dB typ. change after 500 cycles

Description	Fiber Size (µm)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
LightCrimp Epoxyless SC Style Connectors — 3.0mm Cable Dia.					
Simplex Multimode Connector	125	A20117-ND	17.37	15.44	503692-1
Duplex Multimode Connector	125	A20118-ND	36.18	32.16	503693-1
Epoxy SC Style Connectors — 3.0mm Cable Dia.					
Simplex Multimode Connector	125	A20112-ND	4.50	4.00	503948-1
Simplex Singlemode Connector	125	A20113-ND	7.22	6.42	504646-1
Simplex Singlemode Connector	126	A20114-ND	9.47	8.42	504646-2
Duplex Multimode Connector	125	A20115-ND	10.35	9.20	504657-1
Duplex Singlemode Connector	126	A20116-ND	14.81	13.16	504655-1

SC Coupling Adapters

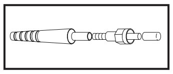
Features: • Suitable for any SC Type connector • Choice of housing colors • Metal Alignment Sleeve



Description	Color	Digi-Key Part No.	Price Each 1	10	AMP Part No.
SC Simplex Adapter	Blue	A20144-ND	6.37	5.66	502632-8
SC Simplex Adapter	Beige	A20145-ND	6.37	5.66	502632-9
SC Duplex Adapter	Blue	A20146-ND	9.90	8.80	502776-8
SC Duplex Adapter	Beige	A20147-ND	9.90	8.80	502776-9

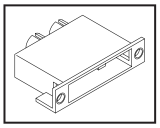
FSMA Connectors

Features: • Industry compatible with 905 and 906 style connectors • Design parameters conform to NATO and IEC interface standards • **Ferrule Material:** Stainless steel • **Connector Body Material:** Nickel-Plated brass • **Fiber Diameter:** 125µm **Performance Characteristics:** • **Insertion Loss:** 1.5dB typical • **Temperature Range:** -55°C to +105°C • **Durability:** 200 mating cycles



Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
FSMA Connector (905)	A20126-ND	15.01	13.34	504566-1
FSMA Connector (906)	A20127-ND	17.03	15.14	504014-1

FSD Style Connectors



FSD Connector **Specifications:** • Multimode • Meets specifications of FDDI PMD – ANSI X3.166 • **Insertion Loss:** typ. 0.5dB Ceramic Ferrule, 0.5 dB Polymer Ferrule • **Durability:** Ceramic Ferrule ≤0.2dB Change after 500 cycles; Polymer Ferrule ≤0.2 dB Change after 250 cycles • **Operating Temperature:** -40°C to +85°C

FSD-MC Connector Plug **Specifications:** • **Insertion Loss:** typ. 0.5dB • **Durability:** typ. ≤0.2dB Change after 500 cycles • **Operating Temperature:** -40°C to +85°C

Fiber Size (µm)	Ferrule Material	Digi-Key Part No.	Price Each 1	10	AMP Part No.
FSD Connector - Multimode - Duty Dual ZIP Cable					
125	Ceramic	A20119-ND	22.84	20.30	502015-1
125	Polymer Composite	A20120-ND	22.12	19.66	503347-5
FSD-MC Connector Plug - Singlemode - Zipcord Cable					
125	Steel/Ceramic	A20121-ND	41.67	37.04	503345-2
Field Keyable FSD-ST Receptacles					
Metal Multimode Receptacle		A20122-ND	20.39	18.12	502808-2
Ceramic Singlemode Receptacle		A20123-ND	28.28	25.14	502809-1

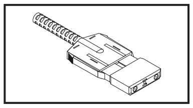
Loopback Connectors

SC Low Loss Loopback Connector **Features:** • Multimode • Use for equipment testing • 0.6 dB Insertion loss • 0.5" (12.7mm) Ferrule centerline

FSD Low Loss Loopback Connector, 1.5 dB Max. The FSD Loopback connector connects the transmit side of the FDDI transceiver to the receive side. The ceramic ferrules and glass fiber provide a maximum loss of 1.5 dB. This device is used as a test unit in a fiber-to-fiber application.

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
SC Loopback Connector..................	A20140-ND	65.86	58.54	503141-1
FSD Loopback Connector	A20141-ND	98.78	87.80	502556-1

RSD (Retractable Shroud Duplex) Connectors



RSD Connector **Features:** • Designed to meet the requirements of the SBCON section of the ANSI X3Ts11 Fiber Channel specification currently under development • Designed to meet the intermateability details defined in the IBM Enterprise Systems Architecture/390, ESCON I/O Interface, Physical Layer specification SA23-0394-01

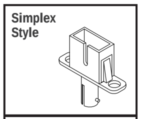
RSD Connector Plug Kit **Features:** • Multimode • Compatible with IBM ESCON connector system • Simple field assembly. **Performance Characteristics:** • **Insertion Loss:** typical 0.5dB • **Durability:** ≤0.2dB change after 500 cycles • **Temperature Range:** -20°C to +70°C

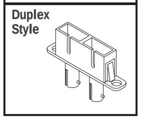
Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ESCON Multimode DUALAN Connector Kit	A20124-ND	35.82	31.84	492181-1
ESCON Curing Fixture Kit	A9823-ND	18.27	16.24	492236-2
RSD-ST Style Receptacle	A20125-ND*	31.97	28.42	502826-2

* Inter-mateable with IBM ESCON type connectors

Hybrid Adapters

Features: • Use for Multimode or Singlemode • Available with mounting screws • Adapt various connector interfaces • Metal alignment sleeve





Description	Housing Material	Housing Color	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Simplex Style						
SC to ST	Plastic	Black	A20148-ND	6.37	5.66	502780-1
SC to ST	Plastic	Blue	A20149-ND	6.37	5.66	502780-2
SC to ST	Plastic	Beige	A20150-ND	6.37	5.66	502780-3
SC to ST	Nickel Plated	Die Cast	A20151-ND	10.06	8.94	503638-1
SC to FC	Plastic	Black	A20152-ND	6.68	5.94	502781-1
SC to FC	Plastic	Blue	A20153-ND	6.68	5.94	502781-2
SC to FC	Plastic	Beige	A20154-ND	6.68	5.94	502781-3
SC to FC	Nickel Plated	Die Cast	A20155-ND	13.66	12.14	503480-1
Duplex Style						
SC to ST	Plastic	Black	A20157-ND	9.90	8.80	503137-1
SC to ST	Plastic	Blue	A20158-ND	9.90	8.80	503137-2
SC to ST	Plastic	Beige	A20159-ND	9.90	8.80	503137-3
SC to FC	Plastic	Beige	A20162-ND	18.36	16.32	503135-3

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Fiber Optic Cable

Fig.	Cable Type	Cable Style	Installation Tensile Load Lb. (Kg)	Long Term Tensile Load Lb. (Kg)	Installation Bend Radius Inch (mm)	Long Term Bend Radius Inch (mm)	Digi-Key Part No.	*Note:* "X" In Part No.= Ft. Per Roll Price Per Roll 500 ft.	1,000 ft.	AMP Part No.
Multi Cable										
1	Plenum	Dualan	316 (143.34)	135 (61.24)	2.80 (71.12)	1.90 (48.26)	AG401-X-ND	291.81	583.63	502987-1
2	Plenum	4 Fiber	316 (143.34)	135 (61.24)	2.80 (71.12)	1.90 (48.26)	AG402-X-ND	520.19	—	502988-1

Fig. 1 — Dualan Cable

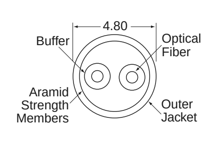
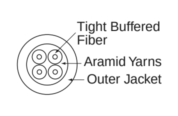


Fig. 2 — 4-Fiber Cable



Kits, Tools and Accessories

Termination Kits

For AMP SC, FSMA, ST Style, and FSD Styles

Termination kits provide all the materials and tools (except epoxy) required to terminate a particular type of fiber optic connector. Tools are conveniently packaged in a handy carrying case. The kits contain polishing materials for approximately 60 connectors. The consumable items in the kit can be purchased separately.

For LightCrimp ST Style

Termination Kits include all the tools required to prepare and terminate all LightCrimp ST Style connectors.

Polishing (Lapping) Film Packets

Polishing film sheets are used with polishing bushings for hand polishing of fiber optic connectors. Most part numbers consist of a packet of ten 8.5" x 11.0" (21.59cm x 27.94cm) sheets. Each packet will polish between 60 and 80 connectors.

Consumables Kits

Contains all consumable supplies for at least 100 connectors. Epoxy (general purpose), polish film, epoxy applicators and polish pad.

Inspection Microscope Kits

The complete microscope kit includes a handy carrying case, tripod stand, AC adapter and all adapters needed to inspect the FSMA, FSD, ST Style and SC Type Connectors.

Features: • Pre-centered adapter mount provides quick, easy focusing, and changing of connectors • Kg-3 infrared filter to protect the user • Durable, lightweight A.B.S. plastic microscope body • Lockable, high density polyethylene, double-well carrying case with antistatic foam cut-outs

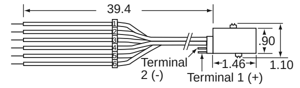
Description	Digi-Key Part No.	Price Each	AMP Part No.
LightCrimp Epoxy Type Termination Kits (Epoxy Sold Separately)			
ST Style	A9828-ND	785.56	503746-1
FSMA	A9835-ND	786.24	503746-2
FSD	A9834-ND	1227.47	503746-6
SC	A9829-ND	845.67	503746-7
LightCrimp XTC Termination Tool Kit			
Mini Tool Kit	A9825-ND	619.33	492322-1
Tool Kit Without Microscope	A9826-ND	996.29	503330-1
Tool Kit With Premium Microscope	A9827-ND	2377.25	503330-2
LightCrimp SC Style Termination Tool Kit			
LightCrimp SC Termination Kit Without Microscope	A9830-ND	1232.12	503706-1
Microscope Adapter (Universal 2.5mm)	A20215-ND	42.63	502977-1
LightCrimp SC/Ceramic With Inspection Microscope	A9831-ND	2508.01	503706-2
LightCrimp SC (Upgrade) Kit (Add to an ST Style Kit for SC Terminations)	A9832-ND	680.38	503707-1
Scribing Tools			
Sapphire-Tipped Scribe Tool	A99109-ND	58.68	504064-1
Replacement Blades for A99109-ND	A99110-ND	46.32	504290-1
Pro-Crimper II Hand Tool			
For use with FSMA – With Die Set	A99108-ND	151.38	58551-1
For use with FSMA – Die Set Only (hex die)	A20218-ND	73.50	58552-1
For use with ST and SC Style – With Die Set	A99105-ND	136.50	58433-4
For use with ST Style – Die Set Only	A20214-ND	52.50	58424-1
For use with FSD (ceramic) – With Die Set	A99107-ND	291.38	58519-1
For use with FSD (ceramic) – Die Set Only	A20217-ND	215.25	58510-1
For LightCrimp XTC (ST) – With Die Set	A99104-ND	270.81	503568-1
For LightCrimp XTC (ST) – Die Set Only	A20213-ND	206.40	503567-1
For LightCrimp SC (ceramic) – With Die Set	A99106-ND	318.38	503699-1
For LightCrimp SC (ceramic) – Die Set Only	A20216-ND	246.82	503698-1
Crimp Tool – Handle Only	A9996-ND	75.00	354940-1
Polishing Bushing			
For ST Style (Polymer Composite) - Beige Polymer	A99111-ND	6.88	503304-2
For ST Style (Ceramic, Stainless Steel) - Black Polymer	A99112-ND	6.14	503304-1
Duplex Curing Fixture Kit w/Polishing Bushing	A9833-ND	145.92	501795-1
Polishing (Lapping) Film Packets			
FSMA, FSD, RSD – 5µm, Lt. Gray, (pkg. of 10)	A20221-ND	16.87	228433-8
FC Type, D4 Type – 1µm, Green, (pkg. of 10)	A20222-ND	16.87	228433-7
ST Style, AMP SC – 0.3µm, White (pkg. of 10)	A20223-ND	16.87	228433-5
Consumables Kits			
FSMA, FSD, ST Style	A9836-ND	253.63	502306-1
FC Type, D4 Type, AMP SC, Singlemode ST Style	A9837-ND	349.55	502306-2
LightCrimp	A9838-ND	106.14	502306-3
Epoxy Curing Oven			
110 VAC Oven w/Adapter Block - Universal Block*	A20220-ND	736.70	502134-1
Microscope Kits			
100x Microscope (10x Eyepiece)	A20224-ND	1452.82	502970-1
FSMA Adapter	A20228-ND	31.97	504086-1

* Universal block 12 single and 4 FSD Connectors

Fiber Optic Multimode Switches

Low Profile Fiber Optic Switches are miniature, board mountable devices that permit the switching of an optical signal from one fiber to another. Switching is accomplished by a slight pivoting motion of a spherical mirror which reflects the optical signal to the appropriate fiber. This patented imaging technology provides very low optical loss. Fiber Optic Switches can be terminated with any fiber optic connector.

Specifications: • **Switching Speed:** 5 msec typ. • **Operating wavelength:** 750-1450 nm • **Insertion loss at 1300nm:** 0.5 dB typical, 0.8 dB max. per FOTP-34 • **Crosstalk:** -45 dB typical per FOTP-42 • **Switch Driver:** 5V at 80mA max., 12V option available • **Fiber Type:** Graded Index 62.5/125 • **Lead Length:** 1 meter • **Operating Temperature Range:** -10°C to +65°C per FOTP-3, C2 • **Connector Style:** ST Style • **Durability:** >1 million cycles



Switch	Fiber Leads Used
1x2 SPDT	1, 2, 3
Dual 1x2 DPDT	1, 2, 3, 4, 5, 6

Switch Type	Circuit	Electrical Interface	Fiber Connector	Digi-Key Part No.	Price Each	AMP Part No.
1 x 2	SPDT	Straight Pin	ST Style	A20163-ND	691.25	99427-2
Dual 1 x 2	DPDT	Straight Pin	ST Style	A20164-ND	691.25	99982-2

FDDI 2000 Bypass Switches

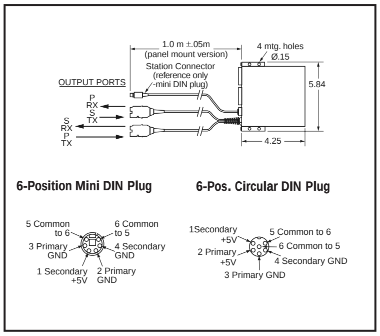
The FDDI 2000 bypass switch is a second-generation device that allows a dual-attach station to be bypassed without loss of ring integrity. The switch module contains two fully reversing optical bypass switches that direct the optical signals to the appropriate fiber according to signals on the device's electrical interface.

Features:

• Increases reliability of mission-critical network applications • Meets or exceeds all ANSI standards • Low insertion loss — 1.1 dB typical, including connectors • Meets ANSI FDDI power output specification of -20 dBm

Specifications:

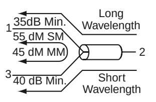
• **Switching Speed:** 10 ms max. • **Operating Wavelength:** 750-1450 nm • **Insertion Loss:** 1.1 dB typ., 1.8 dB max. (FOTP-34, Method B – Long Launch) • **Crosstalk:** -45 dB typical (FOTP-42) • **Switch Driver:** 5V at 160mA • **Fiber Type:** 62.5/125 µm • **Operating Temp. Range:** -10°C to +65°C • **Durability:** >1 million cycles



Description	Port Interface	Mounting	Digi-Key Part No.	Price Each	AMP Part No.
6-Pos. Shielded Mini Circular DIN Plug	FSD MIC	Panel	A20166-ND	1439.38	209161-4
6-Pos. Shielded Circular DIN Plug	FSD MIC	Panel	A20168-ND	1439.38	209161-2

Multiplexers and Demultiplexers

Multiplexers allow use of a single fiber for simultaneous transmission of two signals of different wavelengths. Demultiplexers separate the combined wavelengths from the single fiber into individual fibers. Both the multiplexers and demultiplexers are available for multimode as well as singlemode applications.



1 = Transmitter; 2 = Trunk Line; 3 = Receiver

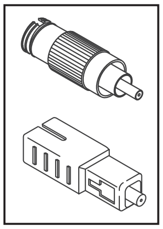
Multimode Specifications: • **Insertion Loss:** MUX: 0.9dB typ., 1.2dB max.; DEMUX: 0.9dB typ., 1.3dB max. (per FOTP-34, Method A) • **Directivity:** >55dB typ. • **Wavelength Bandpass:** 120 nm typ. • **Return Loss (Reflectance):** MUX: 35dB Min.; DEMUX: Port 1 – ≤-13dB; Port 2 – ≤-15dB; Port 3 – ≤-35dB • **Isolation:** Bi-Directional MUX and DEMUX: 35dB Min., 42dB typ.; Unidirectional MUX and DEMUX: 35 dB Min., 42dB typ. • **Operating Temperature:** -40°C to +65°C

Singlemode Specifications: • **Insertion Loss:** DEMUX: 0.9dB typ., 1.3dB max. (per FOTP-180) • **Directivity:** >65dB typ. • **Wavelength Bandpass:** 120 nm typ. • **Return Loss (Reflectance):** DEMUX: Port 1 – ≤-40dB; Ports 2 & 3 – ≤-55dB • **Isolation:** Unidirectional DEMUX: 35 dB Min., 42dB typ. • **Polarization Sensitivity:** <0.1dB • **Operating Temperature:** -20°C to +60°C

Fiber	Mode	.5m Cable Length	Connector	nm	Digi-Key Part No.	Price Each	AMP Part No.
62.5/125	Multimode	3mm	ST Style	850/1310	A20169-ND	358.75	99102-3
62.5/125	Multimode	3mm	ST Style	1310/1550	A20170-ND	358.75	99105-3
9/125	Singlemode	3mm	FC/SPC	1310/1550	A20171-ND	588.00	99717-6
9/125	Singlemode	3mm	SC/SPC	1310/1550	A20172-ND	588.00	99717-8

Singlemode Fiber Optic Attenuators

Singlemode High Performance Attenuators utilize unique all fiber mechanisms to increase the loss of an optical signal. These designs minimize reflectance. High Performance Attenuators use no filters, air-gaps, or core mismatches. **Specifications:** • **Fixed Attenuation Values:** 3- 20dB • **Reflectance:** ≤-45 dB, -50, -55 and -60dB • **Operating Temperature:** -40°C to +75°C • **Vibration Resistance:** ≤0.1 x attenuation



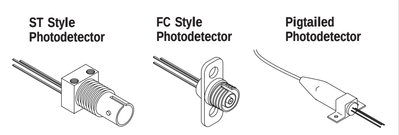
Attenuation (dB)	Digi-Key Part No.	Price Each	AMP Part No.
FC Dual Window Attenuators			
3	A20173-ND	112.50	209948-3
5	A20174-ND	112.50	209948-5
10	A20175-ND	112.50	1-209948-0
15	A20176-ND	112.50	1-209948-5
20	A20177-ND	112.50	2-209948-0
SC Dual Window Attenuators			
3	A20178-ND	112.50	209943-3
5	A20179-ND	112.50	209943-5
10	A20180-ND	112.50	1-209943-0
15	A20181-ND	112.50	1-209943-5
20	A20182-ND	112.50	2-209943-0

Fiber Optic Cable Assemblies and Accessories

Multimode InGaAs Photodetector

ST Style: The multimode design using InGaAs PIN photodetectors offer high responsitivity for nearly all digital and analog fiber optic applications. The unique design balances high-speed performance with noise-free linear output. Spectral response has been optimized for the long wavelength region of 1150 nm to 1600 nm.

Features: • High reliability passivated planar structure • High responsitivity • Low dark current • Low capacitance • Hermetically sealed TO-18 style package installed in industry standard ADMs • -40° to +85°C operating temperature range **Pigtailed:** Pigtailed InGaAs PIN photodetectors offer high responsitivity for nearly all digital and analog fiber optic applications. Spectral response has been optimized for the long wavelength region of 1150 nm to 1600 nm. The modules are designed for board mounting.

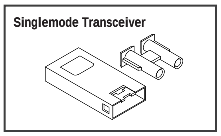


Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ST Style				
Multimode, Standard	A20197-ND	87.21	77.52	259013-1
Multimode, Premium	A20198-ND	94.10	83.64	259013-2
Singlemode, Elite	A20199-ND	96.39	85.68	259013-3
Multimode, High Responsitivity	A20201-ND	107.87	95.88	259013-6
FC Style				
Multimode, Standard	A20202-ND	87.21	77.52	259015-1
Multimode, Premium	A20203-ND	94.10	83.64	259015-2
Pigtailed				
Singlemode, SC Style	A20207-ND	243.27	151.37	269046-3

1300nm Transceivers

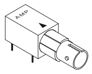
9-Pin Singlemode FDDI Laser Transceiver

Features:
125 Mb/s FDDI SMF PMD Category 1 • Compatible with all standard FDDI chipsets



Color	Digi-Key Part No.	Price Each 1	5	AMP Part No.
Black	A20191-ND	211.75	181.50	269087-1
Blue	A20192-ND	211.75	181.50	269087-2

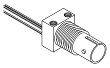
Short Wavelength PIN/Preamp Receiver



This receiver is a low cost solution for high speed short wavelength fiber optic communication designs. The lensing of the device optimizes response for fiber sizes between 50 and 100µm. The output of the receiver is an analog, low impedance, emitter follower voltage source capable of driving an amplifier or level translating circuitry. The device can be used in either the analog mode or translated to ECL/TTL levels for use in a digital mode at data rates up to 155MBaud. **Features:** • Data rates up to 155 MBd • Link distances up to 4 km • ST-style ports • Wave solderable

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ST Board Mount	A20211-ND	30.53	27.14	269111-1
ST Panel Mount	A20212-ND	30.53	27.14	269111-2

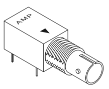
1.3µm LED



ST Style: The InGaAsP SLED products offer high coupled powers for digital fiber optic transmission applications. Compatible with industry standards, the LED ADMs consist of hermetically sealed TO-18 style SLEDs which have been actively aligned for maximum coupled power. The ST connectors are suitable for both panel/bulk-head and PC board mounting. **Features:** • High coupled power, typ. 75 µW into 62.5 µm fiber • High reliability MTTW 2.3 x 10^8 hours • Wavelength centered at 1320 nm • Hermetically sealed TO-18 style package installed in industry standard ADMs

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Standard	A20193-ND	94.10	83.64	259012-1
Premium	A20194-ND	100.98	89.76	259012-2

Short Wavelength LED Transmitter



This transmitter contains a high speed 840 nm GaAIAs LED. This LED in conjunction with the package lensing is designed to efficiently couple light into optical fibers ranging in size from 50/125µm up to 200 µm PCS. These devices were designed to work together with the 125 MHz PIN/Preamp Receiver to make up a complete high speed fiber optic link. **Features:** • ST-Style port • Wave solderable

Description	Digi-Key Part No.	Price Each 1	10	AMP Part No.
ST Board Mt., High Speed	A20209-ND	24.73	21.98	269110-1
ST Panel Mt., High Speed	A20210-ND	25.97	23.08	269110-2

Fiber Optic Cable Assemblies

- Multimode
- 62.5/125 Micron Fiber Size
- Orange

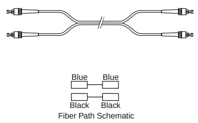


Fig. 1 — ST-ST Zip Style Cable. Duplex Connector

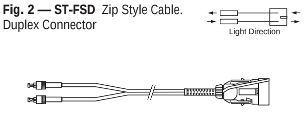


Fig. 2 — ST-FSD Zip Style Cable. Duplex Connector

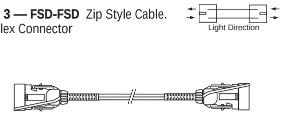


Fig. 3 — FSD-FSD Zip Style Cable. Duplex Connector

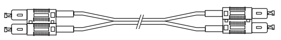


Fig. 4 — SC-SC Zip Style Cable. Duplex Connector

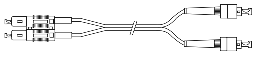


Fig. 5 — SC-ST Zip Style Cable. Duplex Connector

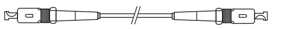


Fig. 6 — SC-SC Riser Rated Cable. Simplex Connector

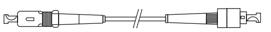


Fig. 7 — SC-ST Riser Rated Cable. Simplex Connector

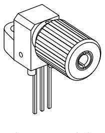
Fig.	Length (meter)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
1	1	A11BBC-0201D-ND*	29.61	26.32	503995-1
	2	A11BBC-0202D-ND*	33.35	29.64	503995-2
	3	A11BBC-0203D-ND*	34.04	30.26	503995-3
	5	A11BBC-0205D-ND*	40.23	35.76	503995-4
	10	A11BBC-0210D-ND*	52.43	46.60	503995-5
1	1	A11BBP-0201D-ND†	28.98	25.76	503994-1
	2	A11BBP-0202D-ND†	30.65	27.24	503994-2
	3	A11BBP-0203D-ND†	32.99	29.32	503994-3
	5	A11BBP-0205D-ND†	36.97	32.86	503994-4
	10	A11BBP-0210D-ND†	46.71	41.52	503994-5
2	1	A11BFC-0201D-ND*	63.83	56.74	504610-1
	5	A11BFC-0205D-ND*	77.58	68.96	504610-4
	10	A11BFC-0210D-ND*	94.77	84.24	504610-5
3	1	A11FFC-0201D-ND*	77.60	68.98	504626-1
	2	A11FFC-0202D-ND*	81.09	72.08	504626-2
	3D	A11FFC-0203D-ND*	84.60	75.20	504626-3
	5	A11FFC-0205D-ND*	91.55	81.38	504626-4
	10	A11FFC-0210D-ND*	108.99	96.88	504626-5
	1	A11FFP-0201D-ND†	66.04	58.70	504625-1
	2	A11FFP-0202D-ND†	69.55	61.82	504625-2
	3	A11FFP-0203D-ND†	73.04	64.92	504625-3
	5	A11FFP-0205D-ND†	80.01	71.12	504625-4
	10	A11FFP-0210D-ND†	97.45	86.62	504625-5

Fig.	Length (meter)	Digi-Key Part No.	Price Each 1	10	AMP Part No.
4	1	A11DDC-0201D-ND*	48.49	43.10	504971-1
	2	A11DDC-0202D-ND*	50.69	45.06	504971-2
	3	A11DDC-0203D-ND*	52.90	47.02	504971-3
	5	A11DDC-0205D-ND*	57.31	50.94	504971-4
	10	A11DDC-0210D-ND*	68.33	60.74	504971-5
5	1	A11DBC-0201D-ND*	34.25	30.44	504958-1
	2	A11DBC-0202D-ND*	31.88	28.34	504958-2
	3	A11DBC-0203D-ND*	37.37	33.22	504958-3
	5	A11DBC-0205D-ND*	41.18	36.60	504958-4
	10	A11DBC-0210D-ND*	49.59	44.08	504958-5
6	1	A11DDC-0101B-ND*	17.24	15.32	504970-1
	2	A11DDC-0102B-ND*	18.43	16.38	504970-2
	3	A11DDC-0103B-ND*	19.62	17.44	504970-3
	5	A11DDC-0105B-ND*	22.01	19.56	504970-4
	10	A11DDC-0110B-ND*	27.97	24.86	504970-5
7	1	A11DBC-0101B-ND*	17.24	15.32	504972-1
	2	A11DBC-0102B-ND*	18.43	16.38	504972-2
	3	A11DBC-0103B-ND*	19.62	17.44	504972-3
	5	A11DBC-0105B-ND*	22.01	19.56	504972-4
	10	A11DBC-0110B-ND*	27.97	24.86	504972-5

* Ceramic † Polymer Composite

Industrial Fiber Optics

Fiber Optic LEDs and Detectors



Fiber Optic family of low-cost, medium frequency, short distance fiber optic LEDs and photo detectors.

- Connector-less interface
- No optical design required
- Simple fiber termination and connection.

Each LED and detector consists of a PBT housing, an internal active element such as an LED or photodetector, and a cinch nut to hold the fiber in place. The PBT housing retains the active element and the cinch nut while optimizing coupling between the active element and the jacketed 1000µm plastic fiber.

Shared Ratings:

Maximum Ratings and Characteristics (T_A=25°C): Operating and Storage Temperature Range (T_{OP},T_{STG}): -40° to 85°C. De-rated above 25°C: 1.33mW/°C.

• Use Fiber Optic Cable, Digi-Key part #A1700-X-ND (X = 5, 10, 15, 25, 50 & 100 meters).

Description	Reverse Voltage V_R	Power Dissipation P_{TOT} T_A=25°C	Forward Current DC I_F	Rise/Fall Time tr,tf †	Typ. Photo–sensitivity PEAK	Typ. Output Power Coupled*	Digi-Key Part No.	Price Each	IFO Part No.
Plastic Fiber Optic Infrared LED	3.0V	1P00mW	50mA	1.0/1.0 µs	950nm	100µW	FB118-ND	3.48	IF-E91A
Plastic Fiber Optic 100 Mbps Infrared LED	3.0V	60mW	60mA	7.0/7.0 ns	870nm	300µW	FB134-ND	5.25	IF-E91D
Plastic Fiber Optic Blue LED	5.0V	60mW	35mA	0.5/0.5 µs	430nm	25µW	FB125-ND	14.38	IF-E92A
Plastic Fiber Optic Blue LED	5.0V	60mW	35mA	0.6/0.6 µs	470nm	75µW	FB126-ND	14.38	IF-E92B
Plastic Fiber Optic Green LED	5.0V	60mW	35mA	3.5/16 ns	530nm	75µW	FB127-ND	10.63	IF-E93
Plastic Fiber Optic Red LED	5.0V	60mW	35mA	0.1/0.1 µs	660nm	<50µW	FB128-ND	4.88	IF-E96
Plastic Fiber Optic Super-Bright LED	5.0V	100mW	40mA	0.5/0.5 µs	660nm	<100µW	FB129-ND	6.50	IF-E97
Plastic Fiber Optic 50 Mbps Red LED	5.0V	100mW	40mA	8.0/8.0 ns	650nm	>100µW	FB135-ND	14.00	IF-E98
Plastic Fiber Optic 155 Mbps Red LED	5.0V	100mW	40mA	—	650nm	-1.5µW	FB136-ND	37.50	IF-E99

Description	Rise/Fall Time tr, tf †	Total Capacitance CT	Dark Current (VR=30 Volts, EE=0) ID	Reverse Breakdown Voltage B(BR)R	Max. Photo–sensitivity PEAK	Power Dissipa–tion P_{TOT}	Digi-Key Part No.	Price Each	IFO Part No.
Active Photodiode	5/5 ns	4pF	<60nA	60.0V	880nm	100mW	FB120-ND	4.18	IF-D91

Description	Rise/Fall Time tr,tf †	Collector Emitter Voltage VCEO	Emitter Collector Voltage VECO	Collector Current IC	Collector Peak Current ICM t=1ms	Max. Photo–sensitivity PEAK	Digi-Key Part No.	Price Each	IFO Part No.
Active Phototransister	20/20 µs	30.0V	5.0V	50mA	100mA	870nm	FB121-ND	3.65	IF-D92
Active Photodarlington	5/2.5 ms	15.0V	5.0V	50mA	100mA	850nm	FB122-ND	5.65	IF-D93

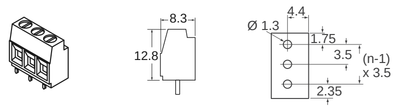
Description	Rise/Fall Time tr,tf †	Supply Voltages VS	Voltage@ Output Lead	Propagation delay time tP	Max. Photo–sensitivity PEAK	Power Dissipa–tion P_{TOT}	Digi-Key Part No.	Price Each	IFO Part No.
Photologic Detector w/Totem-Pole Output	70/70 ns	18.0V	—	8 µs	800nm	100mW	FB123-ND	6.55	IF-D95T
Photologic Detector w/Open Collector Output	0.1/0.1 µs	18.0V	35.0V	8 µs	800nm	100mW	FB124-ND	6.55	IF-D95OC
Photologic Detector w/Open Collector Output	—	7.0V	18.0V	65 ns	850nm	40mW	FB132-ND	10.63	IF-D96
Photologic Detector w/Totem-Pole Output	0.1/0.1 µs	7.0V	—	12 ns	800nm	100mW	FB133-ND	18.75	IF-D97
Photologic Detector w/Totem-Pole Output	3/3 ns	7.0V	3.4V	3.5 ns	1050nm	250mW	FB137-ND	31.00	IF-D98

* Into plastic fiber (1mm core dia.). Distance lens to fiber <0.1 mm, 10cm polished fiber, IF=10mA † Rise time and fall times–measured from the 10% to 90% to 10% points respectively.

Weidmüller Terminal Blocks

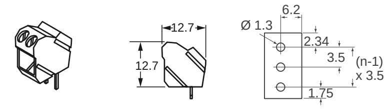
Dimensions in mm

Fig. 1 LM 3.5/90



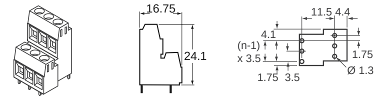
Specifications:
- Screw Clamp • UL: 300V @ 10A • 14AWG • Pin Length: 4.5mm

Fig. 2 LM 3.5/135



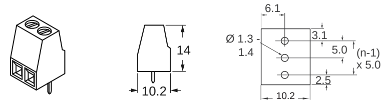
Specifications:
- Screw Clamp • UL: 300V @ 10A • 14AWG • Pin Length: 4.5mm

Fig. 3 LM2N 3.5/90 *NEW!*



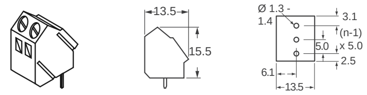
Specifications:
- Screw Clamp • UL: 300V @ 10A • 14AWG • Pin Length: 4.5mm

Fig. 4 LM 5.00/90



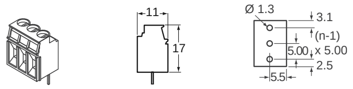
Specifications:
- Screw Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 5 LM 5.00/135



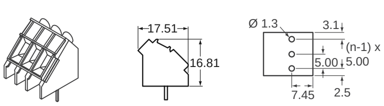
Specifications:
- Screw Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 6 LP 5.00/90 *NEW!*



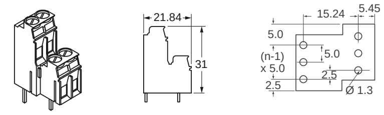
Specifications:
- Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm

Fig. 7 LP 5.00/135 *NEW!*



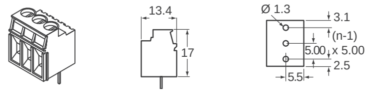
Specifications:
- Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm

Fig. 8 LP 2N/5.00



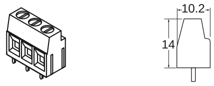
Specifications:
- Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm

Fig. 9 LPP 5.00/90 *NEW!*



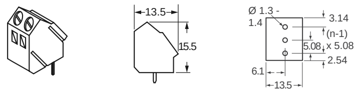
Specifications:
- Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm • Test Point

Fig. 10 LM 5.08/90



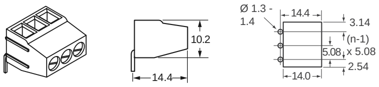
Specifications:
- Screw Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 11 LM 5.08/135



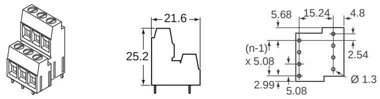
Specifications:
- Screw Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 12 LM 5.08/180



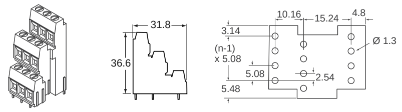
Specifications:
- Screw Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 13 LM2N 5.08/90 *NEW!*



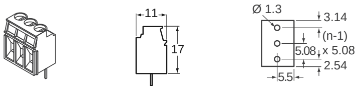
Specifications:
- Screw Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 14 LM3R 5.08/90 *NEW!*



Specifications:
- Screw Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 15 LP 5.08/90 *NEW!*

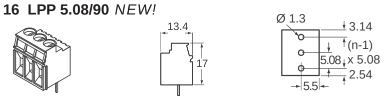


Specifications:
- Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm

Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
3.5mm Pin Spacing – PCB Terminal Blocks							
1	2	Black	281-1400-ND	.72	.65	.58	1699670000
	3		281-1401-ND	1.08	.98	.87	1699680000
	4		281-1402-ND	1.52	1.37	1.22	9967700000
	6		281-1403-ND	2.27	2.04	1.82	9967720000
	8		281-1404-ND	3.02	2.72	2.42	9967740000
	10		281-1405-ND	3.78	3.41	3.03	9967760000
	12		281-1406-ND	4.55	4.10	3.64	9967780000
2	2	Black	281-1407-ND	.86	.77	.69	1715010000
	3		281-1408-ND	1.28	1.15	1.02	1715050000
	4		281-1409-ND	1.70	1.53	1.36	9995680000
	6		281-1410-ND	2.54	2.29	2.03	9995700000
	8		281-1411-ND	3.41	3.07	2.73	9995720000
	10		281-1412-ND	4.23	3.81	3.39	9995740000
	12		281-1413-ND	5.09	4.58	4.07	9995760000
3	4	Black	281-1670-ND *NEW!*	2.27	2.04	1.82	1720000000
	6		281-1671-ND *NEW!*	3.42	3.08	2.74	1720010000
	8		281-1672-ND *NEW!*	4.56	4.11	3.65	1720020000
	10		281-1673-ND *NEW!*	5.69	5.12	4.55	1720030000
	12		281-1674-ND *NEW!*	6.81	6.13	5.45	1720040000
	16		281-1675-ND *NEW!*	9.11	8.20	7.29	1720060000
	20		281-1676-ND *NEW!*	11.37	10.24	9.10	1720080000
	24		281-1677-ND *NEW!*	13.65	12.29	10.92	1720100000
5.00mm Pin Spacing – PCB Terminal Blocks							
4	2	Black	281-1414-ND	.57	.52	.46	1715250000
	3		281-1415-ND	.86	.77	.69	1715260000
	4		281-1416-ND	1.14	1.03	.92	9993300000
	6		281-1417-ND	1.71	1.54	1.37	9993320000
	8		281-1418-ND	2.28	2.06	1.83	9993340000
	10		281-1419-ND	2.85	2.57	2.28	9993360000
	12		281-1420-ND	3.42	3.08	2.74	9993380000
5	2	Black	281-1421-ND	.62	.56	.50	1715290000
	3		281-1422-ND	.93	.84	.75	1715300000
	4		281-1423-ND	1.25	1.13	1.00	9993510000
	6		281-1424-ND	1.86	1.68	1.49	9993530000
	8		281-1425-ND	2.49	2.25	2.00	9993550000
	10		281-1426-ND	3.11	2.80	2.49	9993570000
	12		281-1427-ND	3.74	3.37	2.99	9993590000
6	2	Black	281-1876-ND *NEW!*	.75	.68	.60	1696060000
	3		281-1877-ND *NEW!*	1.11	1.00	.89	1696070000
7	2	Black	281-1880-ND *NEW!*	.80	.72	.64	1697180000
	3		281-1881-ND *NEW!*	1.20	1.08	.96	1697190000
8	4	Orange	281-1456-ND	1.94	1.75	1.55	1635170000
	6		281-1457-ND	2.90	2.61	2.32	1625570000
	8		281-1458-ND	3.86	3.47	3.09	1596440000
	10		281-1459-ND	4.83	4.35	3.87	1596480000
	12		281-1460-ND	5.79	5.22	4.64	1632710000
9	2	Black	281-1878-ND *NEW!*	1.10	.99	.88	1697140000
	3		281-1879-ND *NEW!*	1.62	1.46	1.30	1697150000
5.08mm Pin Spacing – PCB Terminal Blocks							
10	2	Black	281-1435-ND	.57	.52	.46	1716020000
	3		281-1436-ND	.86	.77	.69	1716030000
	4		281-1437-ND	1.14	1.03	.92	9993920000
	6		281-1438-ND	1.71	1.54	1.37	9993940000
	8		281-1439-ND	2.28	2.06	1.83	9993960000
	10		281-1440-ND	2.85	2.57	2.28	9993980000
	12		281-1441-ND	3.42	3.08	2.74	9994000000
11	2	Black	281-1442-ND	.62	.56	.50	1716060000
	3		281-1443-ND	.93	.84	.75	1716070000
	4		281-1444-ND	1.25	1.13	1.00	9994340000
	6		281-1445-ND	1.86	1.68	1.49	9994360000
	8		281-1446-ND	2.49	2.25	2.00	9994380000
	10		281-1447-ND	3.11	2.80	2.49	9994400000
	12		281-1448-ND	3.74	3.37	2.99	9994420000
12	2	Black	281-1449-ND	.62	.56	.50	1716040000
	3		281-1450-ND	.93	.84	.75	1716050000
	4		281-1451-ND	1.25	1.13	1.00	9994760000
	6		281-1452-ND	1.86	1.68	1.49	9994780000
	8		281-1453-ND	2.49	2.25	2.00	9994800000
	10		281-1454-ND	3.11	2.80	2.49	9994820000
	12		281-1455-ND	3.74	3.37	2.99	9994840000
13	4	Black	281-1564-ND *NEW!*	1.79	1.62	1.44	1769080000
	6		281-1565-ND *NEW!*	2.69	2.43	2.16	1769090000
	8		281-1566-ND *NEW!*	3.59	3.23	2.88	1769100000
	10		281-1567-ND *NEW!*	4.49	4.04	3.59	1769110000
	12		281-1568-ND *NEW!*	5.38	4.85	4.31	1769120000
	16		281-1569-ND *NEW!*	6.26	5.63	5.01	1769140000
	20		281-1570-ND *NEW!*	8.97	8.08	7.18	1769160000
	24		281-1571-ND *NEW!*	10.76	9.69	8.62	1769180000
14	6	Black	281-1572-ND *NEW!*	3.15	2.84	2.52	1769930000
	9		281-1573-ND *NEW!*	4.73	4.26	3.78	1769940000
	12		281-1574-ND *NEW!*	6.30	5.67	5.04	1769950000
14	15	Black	281-1575-ND *NEW!*	7.88	7.09	6.30	1769960000
	18		281-1576-ND *NEW!*	9.45	8.51	7.56	1769970000
	24		281-1577-ND *NEW!*	12.60	11.34	10.08	1769990000
	30		281-1578-ND *NEW!*	15.75	14.18	12.60	1770010000
	36		281-1579-ND *NEW!*	18.90	17.01	15.12	1770030000
15	2	Black	281-1870-ND *NEW!*	.75	.68	.60	1696040000
	3		281-1871-ND *NEW!*	1.11	1.00	.89	1696050000
16	2	Black	281-1872-ND *NEW!*	1.10	.99	.88	1697120000
	3		281-1873-ND *NEW!*	1.62	1.46	1.30	1697130000
17	2	Black	281-1874-ND *NEW!*	.80	.72	.64	1676740000
	3		281-1875-ND *NEW!*	1.20	1.08	.96	1676750000
18	4	Orange	281-1461-ND	1.94	1.75	1.55	1635150000
	6		281-1462-ND	2.90	2.61	2.32	1625550000
	8		281-1463-ND	3.86	3.47	3.09	1596470000
	10		281-1464-ND	4.83	4.35	3.87	1596500000
	12		281-1465-ND	5.79	5.22	4.64	1632560000
19	1	Black	281-1735-ND *NEW!*	3.90	3.51	3.12	1755190000
20	2	Black	281-1882-ND *NEW!*	.33	.30	.27	1760510000
	3		281-1883-ND *NEW!*	.50	.45	.40	1760520000
21	2	Black	281-1678-ND *NEW!*	.74	.67	.59	1721640000
	3		281-1679-ND *NEW!*	1.04	.94	.83	1721650000
	4		281-1680-ND *NEW!*	1.37	1.23	1.10	1721660000
	5		281-1681-ND *NEW!*	1.70	1.53	1.36	1721670000
	6		281-1682-ND *NEW!*	1.95	1.76	1.56	1721680000
	8		281-1683-ND *NEW!*	2.54	2.29	2.03	1721700000
	10		281-1684-ND *NEW!*	3.18	2.87	2.55	1721720000
	12		281-1685-ND *NEW!*	3.80	3.42	3.04	1721740000
22	2	Black	281-1686-ND *NEW!*	.74	.67	.59	1734220000
	3		281-1687-ND *NEW!*	1.04	.94	.83	1734230000
	4		281-1688-ND *NEW!*	1.37	1.23	1.10	1734240000
	5		281-1689-ND *NEW!*	1.70	1.53	1.36	1734250000
	6		281-1690-ND *NEW!*	1.95	1.76	1.56	1734260000
	8		281-1691-ND *NEW!*	2.54	2.29	2.03	1734280000
	10		281-1692-ND *NEW!*	3.18	2.87	2.55	1734300000
	12		281-1693-ND *NEW!*	3.80	3.42	3.04	1734320000
23	2	Black	281-1694-ND *NEW!*	.74	.67	.59	1722400000
	3		281-1695-ND *NEW!*	1.04	.94	.83	1722410000
	4		281-1996-ND *NEW!*	4.41	3.97	3.53	1722420000
	5		281-1697-ND *NEW!*	1.70	1.53	1.36	1722430000
	6		281-1698-ND *NEW!*	1.95	1.76	1.56	1722440000

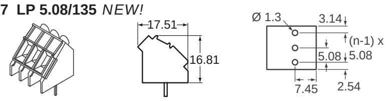
(Continued)

Fig. 16 LPP 5.08/90 *NEW!*



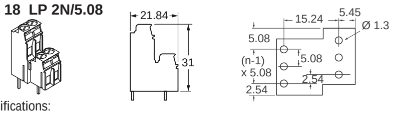
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm • Test Point

Fig. 17 LP 5.08/135 *NEW!*



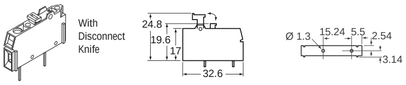
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm

Fig. 18 LP 2N/5.08



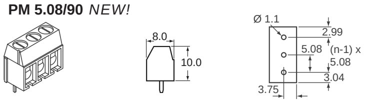
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG •Pin Length: 4.5mm

Fig. 19 LPTR 5.08/90 *NEW!*



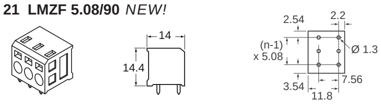
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG • Pin Length: 4.5mm

Fig. 20 PM 5.08/90 *NEW!*



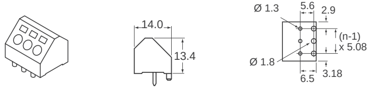
Specifications:
• Leaf Spring Screw Clamp • UL: 300V @ 16A • 14AWG • Pin Length: 3.5mm

Fig. 21 LMZF 5.08/90 *NEW!*



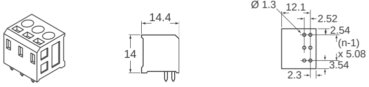
Specifications:
• Tension Clamp • UL: 300V @ 10A • 14AWG • Pin Length: 4.1mm

Fig. 22 LMZF 5.08/135 *NEW!*



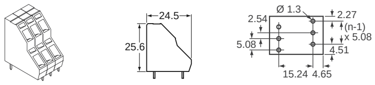
Specifications:
• Tension Clamp • UL: 300V @ 10A • 14AWG • Pin Length: 4.5mm

Fig. 23 LMZF 5.08/180 *NEW!*



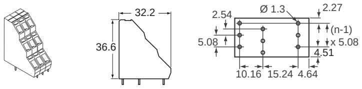
Specifications:
• Tension Clamp • UL: 300V @ 10A • 14AWG • Pin Length: 4.5mm

Fig. 24 LM2NZF 5.08/135 *NEW!*



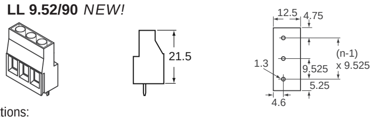
Specifications:
• Tension Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 25 LM3RZF 5.08/135 *NEW!*



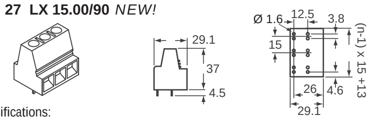
Specifications:
• Tension Clamp • UL: 300V @ 10A • 12AWG • Pin Length: 3.5mm

Fig. 26 LL 9.52/90 *NEW!*



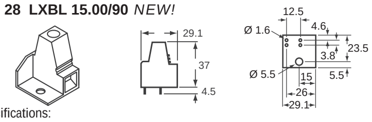
Specifications:
• Screw Clamp • UL: 300V @ 30A • 10AWG • Pin Length: 5.0mm

Fig. 27 LX 15.00/90 *NEW!*



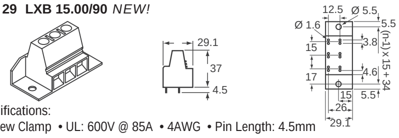
Specifications:
• Screw Clamp • UL: 600V @ 85A • 4AWG • Pin Length: 4.5mm

Fig. 28 LXBL 15.00/90 *NEW!*



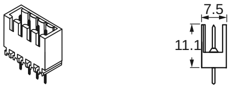
Specifications:
• Screw Clamp • UL: 600V @ 85A • 4AWG • Pin Length: 4.5mm

Fig. 29 LXB 15.00/90 *NEW!*



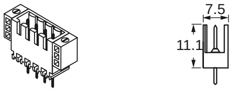
Specifications:
• Screw Clamp • UL: 600V @ 85A • 4AWG • Pin Length: 4.5mm

Fig. 30 SL 3.5/180/…G



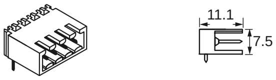
Specifications:
• UL: 300V @ 10A • Pin Length: 4.5mm

Fig. 31 SL 3.5/180/…F



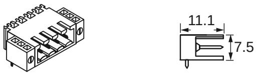
Specifications:
• UL: 300V @ 10A • Pin Length: 4.5mm

Fig. 32 SL 3.5/90/…G



Specifications:
• UL: 300V @ 10A • Pin Length: 4.5mm

Fig. 33 SL 3.5/90/…F



Specifications:
• UL: 300V @ 10A • Pin Length: 4.5mm

Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each			Weidmuller Part No.
				1	10	100	
23	8	Black	281-1699-ND *NEW!*	2.54	2.29	2.03	1722460000
	10		281-1700-ND *NEW!*	3.18	2.87	2.55	1722480000
	12		281-1701-ND *NEW!*	3.80	3.42	3.04	1722500000
24	4	Orange	281-1582-ND *NEW!*	2.22	2.00	1.78	1764810000
	6		281-1583-ND *NEW!*	3.47	3.12	2.78	1764820000
	8		281-1584-ND *NEW!*	4.43	3.99	3.54	1764830000
	10		281-1585-ND *NEW!*	5.54	4.99	4.43	1764840000
	12		281-1586-ND *NEW!*	6.65	5.99	5.32	1764850000
	16		281-1587-ND *NEW!*	8.87	7.98	7.10	1764870000
	20		281-1580-ND *NEW!*	11.07	9.97	8.86	1758020000
	24		281-1588-ND *NEW!*	13.29	11.97	10.64	1764900000
25	6	Orange	281-1589-ND *NEW!*	3.60	3.24	2.88	1764910000
	9		281-1590-ND *NEW!*	4.98	4.49	3.99	1764920000
	12		281-1591-ND *NEW!*	6.65	5.99	5.32	1764930000
	15		281-1592-ND *NEW!*	8.31	7.48	6.65	1764940000
	18		281-1593-ND *NEW!*	9.98	8.98	7.98	1764950000
	24		281-1594-ND *NEW!*	13.29	11.97	10.64	1764960000
	36		281-1595-ND *NEW!*	19.94	17.95	15.95	1764990000
	48		281-1581-ND *NEW!*	26.58	23.93	21.27	1758050000
9.52mm Pin Spacing – PCB Terminal Blocks							
26	2	Black	281-1596-ND *NEW!*	1.04	.94	.83	1724700000
	3		281-1597-ND *NEW!*	1.53	1.38	1.23	1724710000
15.00mm Pin Spacing – PCB Terminal Blocks							
27	1	Grey	281-1598-ND *NEW!*	4.50	4.05	3.60	1783660000
	2		281-1599-ND *NEW!*	8.00	7.20	6.40	1783670000
	3		281-1600-ND *NEW!*	11.99	10.79	9.59	1783680000
	4		281-1601-ND *NEW!*	15.99	14.40	12.80	1783690000
	5		281-1602-ND *NEW!*	19.98	17.99	15.99	1806460000
28	1	Grey	281-1603-ND *NEW!*	4.56	4.11	3.65	1783700000
29	2	Grey	281-1604-ND *NEW!*	8.12	7.31	6.50	1783710000
	3		281-1605-ND *NEW!*	12.12	10.91	9.70	1783720000
	4		281-1606-ND *NEW!*	16.11	14.50	12.89	1783730000
	5		281-1607-ND *NEW!*	20.12	18.11	16.10	1806470000
	6		281-1608-ND *NEW!*	24.11	21.70	19.29	1783740000
	8		281-1609-ND *NEW!*	32.10	28.89	25.68	1783750000
3.5mm Pitch Omnimate – PCB Pin Headers							
30	2	Black	281-1144-ND	.54	.49	.44	1614240000
	3		281-1145-ND	.81	.73	.65	1616020000
	4		281-1146-ND	1.11	1.00	.89	1616030000
	6		281-1147-ND	1.64	1.48	1.31	1616050000
	8		281-1148-ND	2.19	1.98	1.76	1614250000
	10		281-1149-ND	2.73	2.46	2.19	1616080000
	12		281-1150-ND	3.29	2.96	2.63	1616100000
	16		281-1151-ND	4.37	3.93	3.50	1614260000
	24		281-1152-ND	6.56	5.90	5.25	1618680000

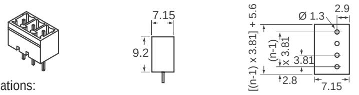
Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each			Weidmuller Part No.
				1	10	100	
31	2	Black	281-1153-ND	.63	.57	.51	1616140000
	3		281-1154-ND	.95	.86	.76	1616150000
	4		281-1155-ND	1.26	1.14	1.01	1616160000
	6		281-1156-ND	1.89	1.71	1.52	1616180000
	8		281-1157-ND	2.52	2.27	2.02	1614270000
	10		281-1158-ND	3.15	2.84	2.52	1616210000
	12		281-1159-ND	3.77	3.39	3.02	1616230000
	16		281-1160-ND	5.03	4.53	4.02	1616270000
	24		281-1161-ND	7.53	6.78	6.03	1618980000
32	2	Black	281-1117-ND	.54	.49	.44	1614160000
	3		281-1118-ND	.81	.73	.65	1615420000
	4		281-1119-ND	1.11	1.00	.89	1615430000
	6		281-1120-ND	1.64	1.48	1.31	1615440000
	8		281-1121-ND	2.19	1.98	1.76	1614180000
	10		281-1122-ND	2.73	2.46	2.19	1615470000
	12		281-1123-ND	3.23	2.91	2.58	1615490000
	16		281-1124-ND	4.37	3.93	3.50	1614190000
	24		281-1125-ND	6.56	5.90	5.25	1618050000
33	2	Black	281-1126-ND	.63	.57	.51	1615530000
	3		281-1127-ND	.95	.86	.76	1615540000
	4		281-1128-ND	1.26	1.14	1.01	1615550000
	6		281-1129-ND	1.89	1.71	1.52	1615570000
	8		281-1130-ND	2.52	2.27	2.02	1614200000
	10		281-1131-ND	3.15	2.84	2.52	1615600000
	12		281-1132-ND	3.77	3.39	3.02	1615620000
3.81mm Pitch Omnimate – PCB Pin Headers							
34	2	Green	281-1948-ND *NEW!*	.54	.49	.44	1793610000
	3		281-1949-ND *NEW!*	.81	.73	.65	1793620000
	4		281-1950-ND *NEW!*	1.11	1.00	.89	1793630000
	5		281-1951-ND *NEW!*	1.37	1.23	1.10	1793640000
	6		281-1952-ND *NEW!*	1.64	1.48	1.31	1793650000
	8		281-1953-ND *NEW!*	2.19	1.98	1.76	1793660000
	10		281-1954-ND *NEW!*	2.73	2.46	2.19	1793670000
	12		281-1955-ND *NEW!*	3.29	2.96	2.63	1793680000
	16		281-1956-ND *NEW!*	4.37	3.93	3.50	1793690000
35	2	Green	281-1957-ND*NEW!*	.63	.57	.51	1793790000
	3		281-1958-ND *NEW!*	.95	.86	.76	1793800000
	4		281-1959-ND *NEW!*	1.26	1.14	1.01	1793810000
	5		281-1960-ND *NEW!*	1.55	1.40	1.24	1793820000
	6		281-1961-ND *NEW!*	1.89	1.71	1.52	1793830000
	8		281-1962-ND *NEW!*	2.52	2.27	2.02	1793840000
	10		281-1963-ND *NEW!*	3.15	2.84	2.52	1793850000
	12		281-1964-ND *NEW!*	3.77	3.39	3.02	1793860000
	16		281-1965-ND *NEW!*	5.03	4.53	4.02	1793870000
36	2	Green	281-1930-ND *NEW!*	.54	.49	.44	1793240000
	3		281-1931-ND *NEW!*	.81	.73	.65	1793250000
	4		281-1932-ND *NEW!*	1.11	1.00	.89	1793260000
	5		281-1933-ND *NEW!*	1.37	1.23	1.10	1793270000

Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each			Weidmuller Part No.
				1	10	100	
36	6	Green	281-1934-ND *NEW!*	1.64	1.48	1.31	1793280000
	8		281-1935-ND *NEW!*	2.19	1.98	1.76	1793290000
	10		281-1936-ND *NEW!*	2.73	2.46	2.19	1793300000
	12		281-1937-ND *NEW!*	3.23	2.91	2.58	1793310000
	16		281-1938-ND *NEW!*	4.37	3.93	3.50	1793320000
37	2	Green	281-1939-ND *NEW!*	.63	.57	.51	1793420000
	3		281-1940-ND *NEW!*	.95	.86	.76	1793430000
	4		281-1941-ND *NEW!*	1.26	1.14	1.01	1793440000
	5		281-1942-ND *NEW!*	1.58	1.42	1.26	1793450000
	6		281-1943-ND *NEW!*	1.89	1.71	1.52	1793460000
	8		281-1944-ND *NEW!*	2.52	2.27	2.02	1793470000
	10		281-1945-ND *NEW!*	3.15	2.84	2.52	1793480000
	12		281-1946-ND *NEW!*	3.77	3.39	3.02	1793490000
	16		281-1947-ND *NEW!*	5.03	4.53	4.02	1793500000
5.00mm Pitch Omnimate – PCB Pin Headers							
38	2	Black	281-1234-ND	.46	.42	.36	1626620000
	3		281-1235-ND	.68	.61	.53	1626630000
	4		281-1236-ND	.89	.80	.69	1596130000
	6		281-1237-ND	1.31	1.18	1.02	1626650000
	8		281-1238-ND	1.79	1.60	1.38	1596140000
	10		281-1239-ND	2.19	1.97	1.69	1626680000
	12		281-1240-ND	2.66	2.39	2.06	1603310000
	16		281-1241-ND	3.57	3.20	2.76	1626730000
	24		281-1242-ND	5.21	4.67	4.02	1626810000
39	2	Black	281-1216-ND	.46	.42	.36	1626210000
	3		281-1217-ND	.68	.61	.53	1626220000
	4		281-1218-ND	.91	.82	.70	1596150000
	6		281-1219-ND	1.31	1.18	1.02	1626240000
	8		281-1220-ND	1.74	1.57	1.35	1626250000
	10		281-1221-ND	2.23	2.00	1.73	1596170000
	12		281-1222-ND	2.66	2.39	2.06	1603320000
	16		281-1223-ND	3.57	3.20	2.76	1603330000
5.08mm Pitch Omnimate – PCB Pin Headers							
40	2	Black	281-1297-ND	.46	.42	.36	1524110000
	3		281-1298-ND	.68	.61	.53	1524210000
	4		281-1299-ND	.91	.82	.70	1524310000
	6		281-1300-ND	1.35	1.22	1.05	1524510000
	8		281-1301-ND	1.79	1.60	1.38	1524710000
	10		281-1302-ND	2.23	2.00	1.73	1524910000
	12		281-1303-ND	2.66	2.39	2.06	1525110000
	16		281-1304-ND	3.57	3.20	2.76	1525510000
41	4	Black	281-1893-ND *NEW!*	1.73	1.56	1.38	1726970000
	6		281-1894-ND *NEW!*	2.60	2.34	2.08	1726980000
	8		281-1895-ND *NEW!*	3.45	3.11	2.76	1726990000
	10		281-1896-ND *NEW!*	4.32	3.89	3.46	1727000000
	12		281-1897-ND *NEW!*	5.18	4.66	4.14	1727010000
	16		281-1898-ND *NEW!*	6.90	6.21	5.52	1727030000

NOTE: All Omnimate pin headers mate with Omnimate socket blocks. All Minimate pin headers mate with Minimate socket blocks.

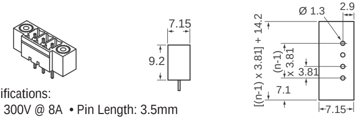
(Continued)

Fig. 34 SL 3.81/180G *NEW!*



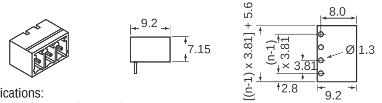
Specifications:
- UL: 300V @ 8A • Pin Length: 3.5mm

Fig. 35 SL 3.81/180F *NEW!*



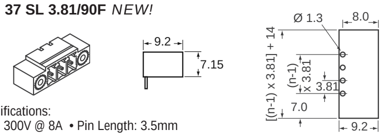
Specifications:
- UL: 300V @ 8A • Pin Length: 3.5mm

Fig. 36 SL3.81/90G *NEW!*



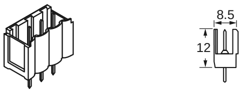
Specifications:
- UL: 300V @ 8A • Pin Length: 3.5mm

Fig. 37 SL 3.81/90F *NEW!*



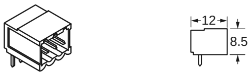
Specifications:
- UL: 300V @ 8A • Pin Length: 3.5mm

Fig. 38 SL 5.00/180/…B



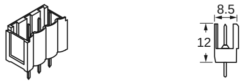
Specifications:
- UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 39 SL 5.00/90/…B



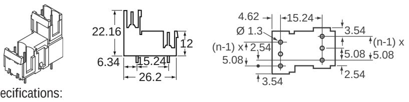
Specifications:
- UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 40 SL 5.08/180/…B



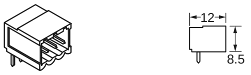
Specifications:
- UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 41 SLD 5.08V/180B *NEW!*



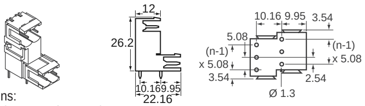
Specifications:
- UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 42 SL 5.08/90



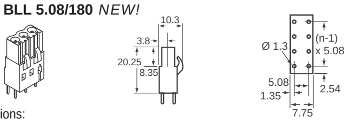
Specifications:
- UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 43 SLD 5.08V/90B *NEW!*



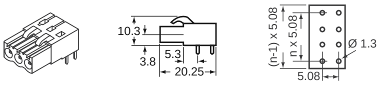
Specifications:
- UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 44 BLL 5.08/180 *NEW!*



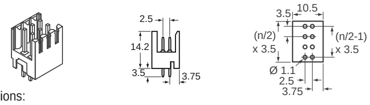
Specifications:
- Solder connection • UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 45 BLL 5.08/90 *NEW!*



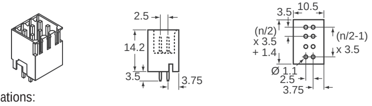
Specifications:
- Solder connection • UL: 300V @ 15A • Pin Length: 4.5mm

Fig. 46 S2L 3.5/180 - Double Density *NEW!*



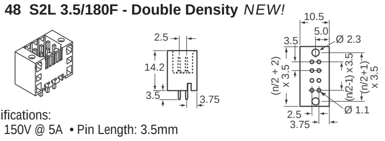
Specifications:
- UL: 150V @ 5A • Pin Length: 3.5mm

Fig. 47 S2L 3.5/180G - Double Density *NEW!*



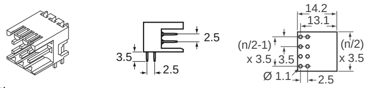
Specifications:
- UL: 150V @ 5A • Pin Length: 3.5mm

Fig. 48 S2L 3.5/180F - Double Density *NEW!*



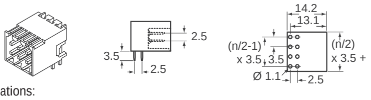
Specifications:
- UL: 150V @ 5A • Pin Length: 3.5mm

Fig. 49 S2L 3.5/90 - Double Density *NEW!*



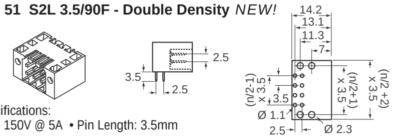
Specifications:
- UL: 150V @ 5A • Pin Length: 3.5mm

Fig. 50 S2L 3.5/90G - Double Density *NEW!*



Specifications:
- UL: 150V @ 5A • Pin Length: 3.5mm

Fig. 51 S2L 3.5/90F - Double Density *NEW!*



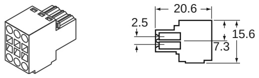
Specifications:
- UL: 150V @ 5A • Pin Length: 3.5mm

Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
41	24	Black	281-1899-ND *NEW!*	10.35	9.32	8.28	1727070000
	32		281-1900-ND *NEW!*	13.82	12.44	11.06	1727110000
	48		281-1901-ND *NEW!*	20.72	18.65	16.58	1727190000
42	2	Black	281-1279-ND	.46	.42	.36	1514910000
	3		281-1280-ND	.68	.61	.53	1515010000
	4		281-1281-ND	.91	.82	.70	1515110000
	6		281-1282-ND	1.35	1.22	1.05	1515310000
	8		281-1283-ND	1.79	1.60	1.38	1515510000
	10		281-1284-ND	2.23	2.00	1.73	1515710000
	12		281-1285-ND	2.66	2.39	2.06	1515910000
	16		281-1286-ND	3.57	3.20	2.76	1516310000
43	4	Black	281-1884-ND *NEW!*	1.73	1.56	1.38	1726510000
	6		281-1885-ND *NEW!*	2.60	2.34	2.08	1726520000
	8		281-1886-ND *NEW!*	3.45	3.11	2.76	1726530000
	10		281-1887-ND *NEW!*	4.32	3.89	3.46	1726540000
	12		281-1888-ND *NEW!*	5.18	4.66	4.14	1726550000
	16		281-1889-ND *NEW!*	6.90	6.21	5.52	1726570000
	24		281-1890-ND *NEW!*	10.35	9.32	8.28	1726610000
	32		281-1891-ND *NEW!*	13.82	12.44	11.06	1726650000
	48		281-1892-ND *NEW!*	20.72	18.65	16.58	1726730000
5.08mm Pitch Omnimate – PCB Socket Headers							
44	2	Black	281-1745-ND *NEW!*	1.16	1.04	.93	1646250000
	3		281-1746-ND *NEW!*	1.74	1.57	1.40	1646260000
	4		281-1747-ND *NEW!*	2.31	2.08	1.85	1646270000
	6		281-1748-ND *NEW!*	3.48	3.14	2.79	1646290000
	8		281-1749-ND *NEW!*	4.64	4.18	3.71	1646310000
	10		281-1750-ND *NEW!*	5.79	5.22	4.64	1646330000
	12		281-1751-ND *NEW!*	6.95	6.26	5.56	1646350000
	16		281-1752-ND *NEW!*	9.27	8.35	7.42	1649170000
	24		281-1753-ND *NEW!*	13.89	12.51	11.12	1649250000
45	2	Black	281-1736-ND *NEW!*	1.16	1.04	.93	1646030000
	3		281-1737-ND *NEW!*	1.74	1.57	1.40	1646040000
	4		281-1738-ND *NEW!*	2.31	2.08	1.85	1646050000
	6		281-1739-ND *NEW!*	3.48	3.14	2.79	1646070000
	8		281-1740-ND *NEW!*	4.64	4.18	3.71	1646090000
	10		281-1741-ND *NEW!*	5.79	5.22	4.64	1646110000
	12		281-1742-ND *NEW!*	6.95	6.26	5.56	1646130000
	16		281-1743-ND *NEW!*	9.27	8.35	7.42	1648810000
	24		281-1744-ND *NEW!*	13.89	12.51	11.12	1648890000
3.5mm Minimate Double Density – PCB Pin Headers							
46	6	Black	281-1828-ND *NEW!*	1.61	1.45	1.29	1729270000
	8		281-1829-ND *NEW!*	2.15	1.94	1.72	1729280000
	10		281-1830-ND *NEW!*	2.69	2.42	2.15	1729290000
	12		281-1831-ND *NEW!*	3.21	2.89	2.57	1729300000
46	16	Black	281-1832-ND *NEW!*	4.29	3.87	3.44	1729320000
	20		281-1833-ND *NEW!*	5.36	4.82	4.29	1729340000
	24		281-1834-ND *NEW!*	6.42	5.78	5.14	1729360000
47	6	Black	281-1835-ND *NEW!*	1.61	1.45	1.29	1728950000
	8		281-1836-ND *NEW!*	2.15	1.94	1.72	1728960000
	10		281-1837-ND *NEW!*	2.69	2.42	2.15	1728970000
	12		281-1838-ND *NEW!*	3.21	2.89	2.57	1728980000
	16		281-1839-ND *NEW!*	4.29	3.87	3.44	1729000000
	20		281-1840-ND *NEW!*	5.36	4.82	4.29	1729020000
	24		281-1841-ND *NEW!*	6.42	5.78	5.14	1729040000
48	6	Black	281-1842-ND *NEW!*	2.09	1.88	1.67	1729590000
	8		281-1843-ND *NEW!*	2.61	2.35	2.09	1729600000
	10		281-1844-ND *NEW!*	3.15	2.84	2.52	1729610000
	12		281-1845-ND *NEW!*	3.69	3.33	2.96	1729620000
	16		281-1846-ND *NEW!*	4.76	4.28	3.81	1729640000
	20		281-1847-ND *NEW!*	5.82	5.24	4.66	1729660000
	24		281-1848-ND *NEW!*	6.90	6.21	5.52	1729680000
49	6	Black	281-1807-ND *NEW!*	1.61	1.45	1.29	1728310000
	8		281-1808-ND *NEW!*	2.15	1.94	1.72	1728320000
	10		281-1809-ND *NEW!*	2.69	2.42	2.15	1728330000
	12		281-1810-ND *NEW!*	3.21	2.89	2.57	1728340000
	16		281-1811-ND *NEW!*	4.29	3.87	3.44	1728360000
	20		281-1812-ND *NEW!*	5.36	4.82	4.29	1728380000
	24		281-1813-ND *NEW!*	6.42	5.78	5.14	1728400000
50	6	Black	281-1814-ND *NEW!*	1.61	1.45	1.29	1727990000
	8		281-1815-ND *NEW!*	2.15	1.94	1.72	1728000000
	10		281-1816-ND *NEW!*	2.69	2.42	2.15	1728010000
	12		281-1817-ND *NEW!*	3.21	2.89	2.57	1728020000
	16		281-1818-ND *NEW!*	4.29	3.87	3.44	1728040000
	20		281-1819-ND *NEW!*	5.36	4.82	4.29	1728060000
	24		281-1820-ND *NEW!*	6.42	5.78	5.14	1728080000
51	6	Black	281-1821-ND *NEW!*	2.09	1.88	1.67	1728630000
	8		281-1822-ND *NEW!*	2.61	2.35	2.09	1728640000
	10		281-1823-ND *NEW!*	3.15	2.84	2.52	1728650000
	12		281-1824-ND *NEW!*	3.69	3.33	2.96	1728660000
	16		281-1825-ND *NEW!*	4.76	4.28	3.81	1728680000
	20		281-1826-ND *NEW!*	5.82	5.24	4.66	1728700000
	24		281-1827-ND *NEW!*	6.90	6.21	5.52	1728720000
3.50mm Minimate Double Density – Socket Blocks							
52	6	Black	281-1849-ND *NEW!*	4.97	4.47	3.98	1727640000
	8		281-1850-ND *NEW!*	6.62	5.96	5.30	1727650000
	10		281-1851-ND *NEW!*	8.27	7.44	6.62	1727660000
	12		281-1852-ND *NEW!*	9.90	8.91	7.92	1727670000
52	16	Black	281-1853-ND *NEW!*	13.23	11.91	10.59	1727690000
	20		281-1854-ND *NEW!*	16.52	14.87	13.22	1727710000
	24		281-1855-ND *NEW!*	19.80	17.82	15.84	1747940000
53	6	Black	281-1856-ND *NEW!*	5.22	4.70	4.18	1748170000
	8		281-1857-ND *NEW!*	7.07	6.36	5.66	1748180000
	10		281-1858-ND *NEW!*	8.84	7.96	7.07	1748190000
	12		281-1859-ND *NEW!*	10.61	9.55	8.49	1748200000
	16		281-1860-ND *NEW!*	14.15	12.74	11.32	1748220000
	20		281-1861-ND *NEW!*	17.66	15.89	14.13	1748240000
	24		281-1862-ND *NEW!*	21.21	19.09	16.97	1748260000
54	6	Black	281-1863-ND *NEW!*	6.38	5.74	5.10	1748490000
	8		281-1864-ND *NEW!*	8.18	7.36	6.54	1748500000
	10		281-1865-ND *NEW!*	9.96	8.97	7.97	1748510000
	12		281-1866-ND *NEW!*	11.78	10.60	9.42	1748520000
	16		281-1867-ND *NEW!*	15.39	13.86	12.32	1748540000
	20		281-1868-ND *NEW!*	19.01	17.11	15.21	1748560000
	24		281-1869-ND *NEW!*	22.62	20.36	18.10	1748580000
3.50mm Omnimate – Socket Blocks							
55	2	Black	281-1054-ND	1.58	1.42	1.26	1615670000
	3		281-1055-ND	2.36	2.12	1.89	1615680000
	4		281-1056-ND	3.14	2.83	2.51	1615690000
	6		281-1057-ND	4.73	4.26	3.78	1610180000
	8		281-1058-ND	6.30	5.67	5.04	1615700000
	10		281-1059-ND	7.88	7.09	6.30	1610200000
	12		281-1060-ND	9.44	8.50	7.55	1615730000
	16		281-1061-ND	12.59	11.33	10.07	1615770000
	24		281-1062-ND	18.86	16.97	15.09	1620440000
56	2	Black	281-1063-ND	1.65	1.49	1.32	1615780000
	3		281-1064-ND	2.48	2.23	1.98	1615790000
	4		281-1065-ND	3.30	2.97	2.64	1615800000
	6		281-1066-ND	4.97	4.47	3.98	1615820000
	8		281-1067-ND	6.72	6.05	5.38	1615840000
	10		281-1068-ND	8.42	7.58	6.74	1615860000
	12		281-1069-ND	10.10	9.09	8.08	1615880000
	16		281-1070-ND	13.47	12.13	10.78	1615920000
	24		281-1071-ND	20.19	18.18	16.16	1620910000
57	2	Black	281-1018-ND	1.65	1.49	1.32	1638780000
	3		281-1019-ND	2.48	2.23	1.98	1638790000
	4		281-1020-ND	3.30	2.97	2.64	1638800000
	6		281-1021-ND	4.95	4.46	3.96	1638820000
	8		281-1022-ND	6.60	5.94	5.28	1638840000
	10		281-1023-ND	8.25	7.43	6.60	1638860000
	12		281-1024-ND	9.90	8.91	7.92	1638880000
	16		281-1025-ND	13.20	11.88	10.56	1638920000
	24		281-1026-ND	19.80	17.82	15.84	1639000000

NOTE: All Omnimate pin headers mate with Omnimate socket blocks. All Minimate pin headers mate with Minimate socket blocks.

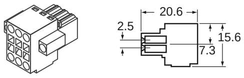
(Continued)

Fig. 52 B2L 3.5 *NEW!*



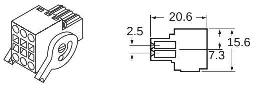
Specifications:
• Tension Clamp • UL: 150V @ 5A • 16AWG

Fig. 53 B2L 3.5F *NEW!*



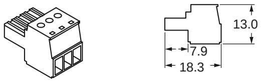
Specifications:
• Tension Clamp • UL: 150V @ 5A • 16AWG

Fig. 54 B2L 3.5LH *NEW!*



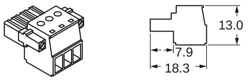
Specifications:
• Tension Clamp • UL: 150V @ 5A • 16AWG

Fig. 55 BL 3.5



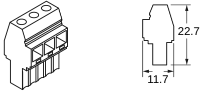
Specifications:
• Screw Clamp • UL: 300V @ 10A • 14AWG

Fig. 56 BL 3.5/…F



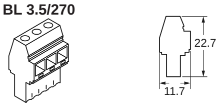
Specifications:
• Screw Clamp • UL: 300V @ 10A • 14AWG

Fig. 57 BL 3.5/90



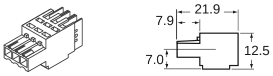
Specifications:
• Screw Clamp • UL: 300V @ 10A • 14AWG

Fig. 58 BL 3.5/270



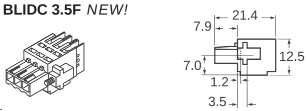
Specifications:
• Screw Clamp • UL: 300V @ 10A • 14AWG

Fig. 59 BLIDC 3.5 *NEW!*



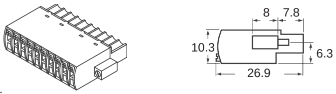
Specifications:
• IDC connection • UL: 300V @ 7A • 20AWG

Fig. 60 BLIDC 3.5F *NEW!*



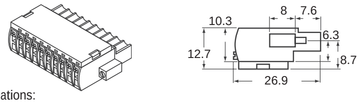
Specifications:
• IDC connection • UL: 300V @ 7A • 20AWG

Fig. 61 BL-I/O 3.5/10F *NEW!*



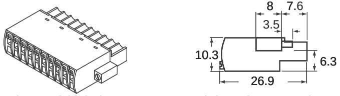
Specifications:
• Push-In Spring connection • UL: 50V @ 5A • 16AWG

Fig. 62 BL-I/O 3.5/10F LED *NEW!*



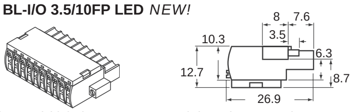
Specifications:
• Push-In Spring connection • UL: 24V @ 5A • 16AWG • Integrated LEDs

Fig. 63 BL-I/O 3.5/10FP *NEW!*



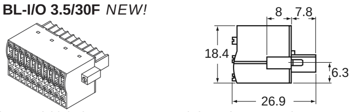
Specifications: • Field device connector • Push-in Spring connection
• UL: 50V @ 5A • 16AWG • Offset Flanges

Fig. 64 BL-I/O 3.5/10FP LED *NEW!*



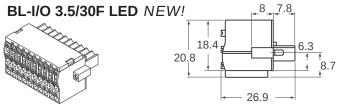
Specifications: • Field device connector • Push-in Spring connection
• UL: 24V @ 5A • 16AWG • Offset Flanges • Integrated LEDs

Fig. 65 BL-I/O 3.5/30F *NEW!*



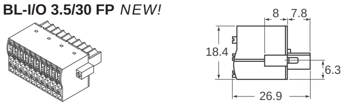
Specifications: • Field device connector • Push-in Spring connection
• UL: 50V @ 5A • 16AWG

Fig. 66 BL-I/O 3.5/30F LED *NEW!*



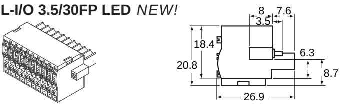
Specifications: • Field device connector • Push-in Spring connection
• UL: 24V @ 5A • 16AWG • Integrated LEDs

Fig. 67 BL-I/O 3.5/30 FP *NEW!*



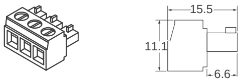
Specifications: • Field device connector • Push-in Spring connection
• UL: 50V @ 5A • 16AWG • Offset Flanges

Fig. 68 BL-I/O 3.5/30FP LED *NEW!*



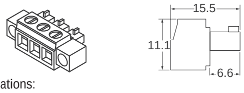
Specifications: • Field device connector • Push-in Spring connection
• UL: 24V @ 5A • 16AWG • Offset Flanges • Integrated LEDs

Fig. 69 BL3.81 *NEW!*



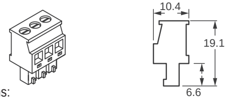
Specifications:
• Clamping Yoke • UL 300V @ 8A • 16AWG

Fig. 70 BL 3.81F *NEW!*



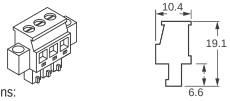
Specifications:
• Clamping Yoke • UL: 300V @ 8A • 16AWG

Fig. 71 BL 3.81/90 *NEW!*



Specifications:
• Clamping Yoke • UL 300V @ 8A • 16AWG

Fig. 72 BL 3.81/90F *NEW!*



Specifications:
• Clamping Yoke • UL: 300V @ 8A • 16AWG

Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
58	2	Black	281-1036-ND	1.65	1.49	1.32	1639700000
	3		281-1037-ND	2.48	2.23	1.98	1639710000
	4		281-1038-ND	3.30	2.97	2.64	1639720000
	6		281-1039-ND	4.95	4.46	3.96	1639740000
	8		281-1040-ND	6.60	5.94	5.28	1639760000
	10		281-1041-ND	8.25	7.43	6.60	1639780000
	12		281-1042-ND	9.90	8.91	7.92	1639800000
	16		281-1043-ND	13.20	11.88	10.56	1639840000
	24		281-1044-ND	19.80	17.82	15.84	1639920000
59	2	Black	281-1702-ND *NEW!*	1.82	1.64	1.46	1770940000
	3		281-1703-ND *NEW!*	2.72	2.45	2.18	1770950000
	4		281-1704-ND *NEW!*	3.63	3.27	2.91	1770960000
	6		281-1705-ND *NEW!*	5.45	4.91	4.36	1770980000
	8		281-1706-ND *NEW!*	7.26	6.54	5.81	1771000000
	10		281-1707-ND *NEW!*	9.08	8.17	7.26	1771020000
	12		281-1708-ND *NEW!*	10.89	9.81	8.72	1771040000
	16		281-1709-ND *NEW!*	14.52	13.07	11.62	1771080000
	2	Black	281-1718-ND* *NEW!*	1.91	1.72	1.53	1770670000
	3		281-1719-ND* *NEW!*	2.85	2.57	2.28	1770680000
	4		281-1720-ND* *NEW!*	3.81	3.43	3.05	1770690000
	6		281-1721-ND* *NEW!*	5.72	5.15	4.58	1770710000
	8		281-1722-ND* *NEW!*	7.62	6.86	6.10	1770730000
60	2	Black	281-1710-ND *NEW!*	1.95	1.76	1.56	1771090000
	3		281-1711-ND *NEW!*	2.93	2.64	2.34	1771100000
	4		281-1712-ND *NEW!*	3.87	3.49	3.10	1771110000
	6		281-1713-ND *NEW!*	5.82	5.24	4.66	1771130000
	8		281-1714-ND *NEW!*	7.76	6.98	6.21	1771150000
	10		281-1715-ND *NEW!*	9.72	8.75	7.78	1771170000
	12		281-1716-ND *NEW!*	11.66	10.49	9.33	1771190000
	16		281-1717-ND *NEW!*	15.54	13.99	12.44	1771230000
	2	Black	281-1723-ND* *NEW!*	2.04	1.84	1.64	1770740000
	3		281-1724-ND* *NEW!*	3.08	2.77	2.46	1770750000
	4		281-1725-ND* *NEW!*	4.07	3.66	3.26	1770760000
	6		281-1726-ND* *NEW!*	6.11	5.50	4.89	1770780000
	8		281-1727-ND* *NEW!*	7.98	7.19	6.39	1770800000
3.50 mm Omnimate – BLI/O Socket Blocks							
61	10	Black	281-1803-ND *NEW!*	6.72	6.05	5.38	1779880000
62	10	Black	281-1804-ND *NEW!*	21.38	19.24	17.10	1789090000
63	10	Black	281-1805-ND *NEW!*	6.72	6.05	5.38	1779870000
64	10	Black	281-1806-ND *NEW!*	21.38	19.24	17.10	1789080000
65	30	Black	281-1799-ND *NEW!*	28.55	25.70	22.84	1779920000
66	30	Black	281-1800-ND *NEW!*	43.20	38.88	34.56	1789110000
67	30	Black	281-1801-ND *NEW!*	28.55	25.70	22.84	1779910000
68	30	Black	281-1802-ND *NEW!*	43.20	38.88	34.56	1789100000
3.81mm Omnimate – Socket Blocks							
69	2	Green	281-1912-ND *NEW!*	1.58	1.42	1.26	1792860000
	3		281-1913-ND *NEW!*	2.36	2.12	1.89	1792870000
	4		281-1914-ND *NEW!*	3.14	2.83	2.51	1792880000
	5		281-1915-ND *NEW!*	3.92	3.53	3.14	1792890000
	6		281-1916-ND *NEW!*	4.73	4.26	3.78	1792900000
	8		281-1917-ND *NEW!*	6.30	5.67	5.04	1792910000
	10		281-1918-ND *NEW!*	7.88	7.09	6.30	1792920000
	12		281-1919-ND *NEW!*	9.44	8.50	7.55	1792930000
	16		281-1920-ND *NEW!*	12.59	11.33	10.07	1792940000
70	2	Green	281-1921-ND *NEW!*	1.65	1.49	1.32	1793040000
	3		281-1922-ND *NEW!*	2.48	2.23	1.98	1793050000
	4		281-1923-ND *NEW!*	3.30	2.97	2.64	1793060000
	5		281-1924-ND *NEW!*	4.22	3.80	3.38	1793070000
	6		281-1925-ND *NEW!*	4.97	4.47	3.98	1793080000
	8		281-1926-ND *NEW!*	6.72	6.05	5.38	1793090000
	10		281-1927-ND *NEW!*	8.42	7.58	6.74	1793100000
	12		281-1928-ND *NEW!*	10.10	9.09	8.08	1793110000
	16		281-1929-ND *NEW!*	13.47	12.13	10.78	1793120000
71	2	Green	281-1966-ND *NEW!*	1.65	1.49	1.32	1798680000
	3		281-1967-ND *NEW!*	2.48	2.23	1.98	1798690000
	4		281-1968-ND *NEW!*	3.30	2.97	2.64	1798710000
	5		281-1969-ND *NEW!*	4.13	3.72	3.30	1798720000
	6		281-1970-ND *NEW!*	4.95	4.46	3.96	1798730000
	8		281-1971-ND *NEW!*	6.60	5.94	5.28	1798740000
	10		281-1972-ND *NEW!*	8.25	7.43	6.60	1798750000
	12		281-1973-ND *NEW!*	9.90	8.91	7.92	1798760000
	16		281-1974-ND *NEW!*	13.20	11.88	10.56	1798770000
72	2	Green	281-1975-ND *NEW!*	1.77	1.60	1.42	1798850000
	3		281-1976-ND *NEW!*	2.66	2.39	2.13	1798860000
	4		281-1977-ND *NEW!*	3.53	3.18	2.82	1798870000
	5		281-1978-ND *NEW!*	4.41	3.97	3.53	1798880000
	6		281-1979-ND *NEW!*	5.30	4.77	4.24	1798890000
	8		281-1980-ND *NEW!*	7.05	6.35	5.64	1798900000
	10		281-1981-ND *NEW!*	8.84	7.96	7.07	1798910000
	12		281-1982-ND *NEW!*	10.61	9.55	8.49	1798920000
	16		281-1983-ND *NEW!*	14.13	12.72	11.31	1798930000
73	2	Green	281-1984-ND *NEW!*	1.65	1.49	1.32	1799010000
	3		281-1985-ND *NEW!*	2.48	2.23	1.98	1799020000
	4		281-1986-ND *NEW!*	3.30	2.97	2.64	1799030000
	5		281-1987-ND *NEW!*	4.13	3.72	3.30	1799040000
	6		281-1988-ND *NEW!*	4.95	4.46	3.96	1799050000
	8		281-1989-ND *NEW!*	6.60	5.94	5.28	1799060000
	10		281-1990-ND *NEW!*	8.25	7.43	6.60	1799070000
	12		281-1991-ND *NEW!*	9.90	8.91	7.92	1799080000
	16		281-1992-ND *NEW!*	13.20	11.88	10.56	1799090000
74	2	Green	281-1993-ND *NEW!*	1.77	1.60	1.42	1799170000
	3		281-1994-ND *NEW!*	2.66	2.39	2.13	1799180000
	4		281-1995-ND *NEW!*	3.53	3.18	2.82	1799190000
	5		281-1996-ND *NEW!*	4.41	3.97	3.53	1799200000
	6		281-1997-ND *NEW!*	5.30	4.77	4.24	1799210000
	8		281-1998-ND *NEW!*	7.05	6.35	5.64	1799220000
	10		281-1999-ND *NEW!*	8.84	7.96	7.07	1799230000
	12		281-2000-ND *NEW!*	10.61	9.55	8.49	1799240000
	16		281-2001-ND *NEW!*	14.13	12.72	11.31	1799250000
5.00mm Omnimate – Socket Blocks							
75	2	Black	281-1180-ND	1.15	1.04	.89	1625610000
	3		281-1181-ND	1.71	1.54	1.33	1625620000
	4		281-1182-ND	2.26	2.03	1.75	1596080000
	6		281-1183-ND	3.40	3.05	2.62	1596090000
	8		281-1184-ND	4.62	4.15	3.57	1596110000
	10		281-1185-ND	5.76	5.16	4.44	1596120000
	12		281-1186-ND	7.50	6.73	5.79	1602990000
	16		281-1187-ND	10.02	8.98	7.73	1603300000
	24		281-1188-ND	15.00	13.45	11.57	1611470000
76	2	Black	281-1189-ND	1.28	1.15	.99	1636890000
	3		281-1190-ND	1.96	1.76	1.51	1636900000
	4		281-1191-ND	2.61	2.34	2.01	1636910000
	6		281-1192-ND	3.82	3.42	2.95	1636930000
	8		281-1193-ND	5.10	4.57	3.93	1636950000
	10		281-1194-ND	6.34	5.68	4.89	1636970000
	12		281-1195-ND	7.60	6.82	5.87	1636990000
	16		281-1196-ND	10.14	9.09	7.82	1637030000
5.08mm Omnimate – Socket Blocks							
77	2	Black	281-1243-ND	1.17	1.05	.90	1526410000
	3		281-1244-ND	1.76	1.58	1.36	1526510000
	4		281-1245-ND	2.32	2.08	1.79	1526610000
	6		281-1246-ND	3.46	3.10	2.67	1526810000
	8		281-1247-ND	4.62	4.15	3.57	1527010000
	10		281-1248-ND	5.76	5.16	4.44	1527210000
	12		281-1249-ND	6.90	6.18	5.32	1527410000
	16		281-1250-ND	9.01	8.08	6.95	1527810000
	24		281-1251-ND	13.81	12.38	10.65	1528610000
78	2	Black	281-1902-ND *NEW!*	3.56	3.20	2.85	1499510000
	3		281-1903-ND *NEW!*	5.33	4.80	4.26	1499610000
	4		281-1904-ND *NEW!*	7.11	6.40	5.69	1499710000
	5		281-1905-ND *NEW!*	8.87	7.98	7.10	1499810000
	6		281-1906-ND *NEW!*	10.86	9.78	8.69	1499910000
	8		281-1907-ND *NEW!*	14.16	12.75	11.33	1500110000
	10		281-1908-ND *NEW!*	17.72	15.95	14.18	1500310000
	12		281-1909-ND *NEW!*	21.72	19.55	17.38	1500510000
	16		281-1910-ND *NEW!*	28.32	25.49	22.66	1500910000
	24		281-1911-ND *NEW!*	44.69	40.22	35.75	1501710000

* Bus Version

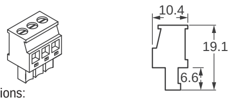
NOTE: All Omnimate pin headers mate with Omnimate socket blocks. All Minimate pin headers mate with Minimate socket blocks.

(Continued)

Weidmüller Terminal Blocks *(Cont.)*

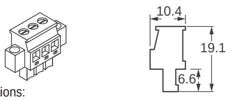
SL-SMT Series: • Stable at 500°F (260°C) compatible with all reflow soldering processes
• Pick and place compatible • 10 times greater strength than standard “Gull Wing” SMT pins

Fig. 73 BL 3.81/270 *NEW!*



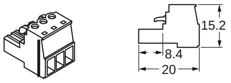
Specifications:
• Clamping Yoke • UL: 300V @ 8A •16AWG

Fig. 74 BL 3.81/270F *NEW!*



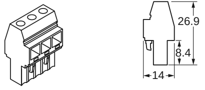
Specifications:
• Clamping Yoke • UL: 300V @ 8A •16AWG

Fig. 75 BLZ 5.00



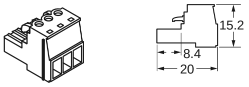
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG

Fig. 76 BLZ 5.00/90



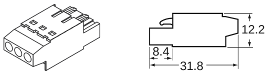
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG

Fig. 77 BLZ 5.08



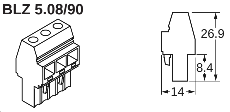
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG

Fig. 78 BLT 5.08/180 *NEW!*



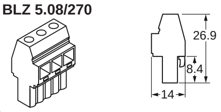
Specifications:
• Top connection • UL 300V @ 15A • 12AWG

Fig. 79 BLZ 5.08/90



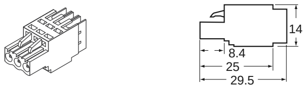
Specification:
• Screw Clamp • UL: 300V @ 15A • 12AWG

Fig. 80 BLZ 5.08/270



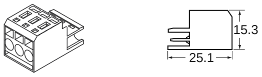
Specifications:
• Screw Clamp • UL: 300V @ 15A • 12AWG

Fig. 81 BLIDC 5.08 *NEW!*



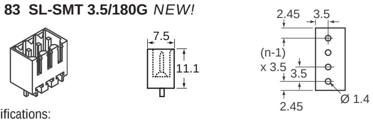
Specifications:
• IDC connection • UL: 300V @ 8A • 20AWG

Fig. 82 SLZF 5.08/180 *NEW!*



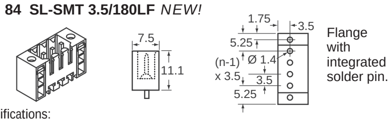
Specifications:
• Tension Clamp • UL: 300V @ 10A • 12AWG

Fig. 83 SL-SMT 3.5/180G *NEW!*



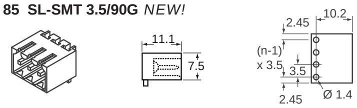
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 10A • Pin Length: 1.5mm

Fig. 84 SL-SMT 3.5/180LF *NEW!*



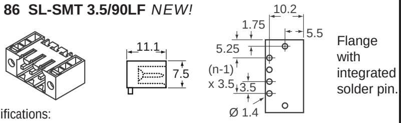
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 10A • Pin Length: 1.5mm

Fig. 85 SL-SMT 3.5/90G *NEW!*



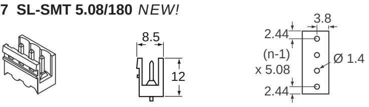
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 10A • Pin Length: 1.5mm

Fig. 86 SL-SMT 3.5/90LF *NEW!*



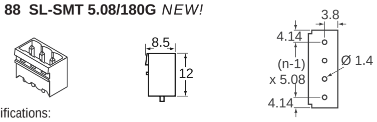
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 10A • Pin Length: 1.5mm

Fig. 87 SL-SMT 5.08/180 *NEW!*



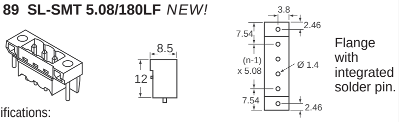
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 15A • Pin Length: 1.5mm

Fig. 88 SL-SMT 5.08/180G *NEW!*



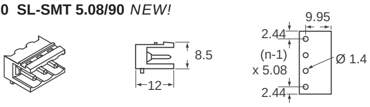
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 15A • Pin Length: 1.5mm

Fig. 89 SL-SMT 5.08/180LF *NEW!*



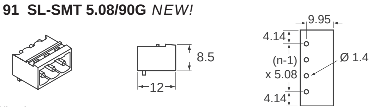
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 15A • Pin Length: 1.5mm

Fig. 90 SL-SMT 5.08/90 *NEW!*



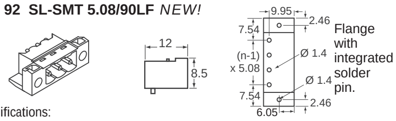
Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 15A • Pin Length: 1.5mm

Fig. 91 SL-SMT 5.08/90G *NEW!*



Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 15A • Pin Length: 1.5mm

Fig. 92 SL-SMT 5.08/90LF *NEW!*



Specifications:
• Thru-hole Reflow Solder connection • UL: 300V @ 15A • Pin Length: 1.5mm

Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
79	2	Black	281-1252-ND	1.32	1.19	1.03	1552710000
	3		281-1253-ND	1.96	1.76	1.51	1552810000
	4		281-1254-ND	2.61	2.34	2.01	1552910000
	6		281-1255-ND	3.89	3.49	3.00	1553110000
	8		281-1256-ND	5.20	4.66	4.01	1553310000
	10		281-1257-ND	6.48	5.81	5.00	1553510000
	12		281-1258-ND	7.78	6.97	6.00	1553710000
	16		281-1259-ND	10.37	9.29	8.00	1554110000
	24		281-1260-ND	15.42	13.82	11.89	1554910000
80	2	Black	281-1261-ND	1.28	1.15	.99	1557310000
	3		281-1262-ND	1.92	1.72	1.48	1557410000
	4		281-1263-ND	2.61	2.34	2.01	1557510000
	6		281-1264-ND	3.82	3.42	2.95	1557710000
	8		281-1265-ND	5.20	4.66	4.01	1557910000
	10		281-1266-ND	6.34	5.68	4.89	1558110000
	12		281-1267-ND	7.78	6.97	6.00	1558310000
	16		281-1268-ND	10.37	9.29	8.00	1558710000
81	2	Black	281-1728-ND *NEW!*	1.76	1.58	1.41	1759390000
	3		281-1729-ND *NEW!*	2.64	2.38	2.12	1759400000
	4		281-1730-ND *NEW!*	3.51	3.16	2.81	1759410000
	6		281-1731-ND *NEW!*	5.27	4.74	4.22	1759430000
	8		281-1732-ND *NEW!*	7.04	6.34	5.63	1759450000
	10		281-1733-ND *NEW!*	8.79	7.92	7.04	1759470000
	12		281-1734-ND *NEW!*	10.53	9.48	8.43	1759490000
5.08mm Omnimate – Pin Plugs							
82	2	Black	281-1790-ND *NEW!*	4.53	4.08	3.63	1709600000
	3		281-1791-ND *NEW!*	2.10	1.89	1.68	1709610000
	4		281-1792-ND *NEW!*	2.57	2.31	2.06	1709620000
	6		281-1793-ND *NEW!*	3.48	3.14	2.79	1709640000
	8		281-1794-ND *NEW!*	4.53	4.08	3.63	1709660000
	10		281-1795-ND *NEW!*	5.45	4.91	4.36	1709680000
	12		281-1796-ND *NEW!*	6.38	5.74	5.10	1709700000
	16		281-1797-ND *NEW!*	8.15	7.34	6.52	1709740000
	24		281-1798-ND *NEW!*	12.00	10.80	9.60	1709820000
3.5mm Omnimate – SMT Compatible PCB Pin Headers							
83	2	Black	281-1772-ND *NEW!*	.60	.54	.48	1752982001
	3		281-1773-ND *NEW!*	.90	.81	.72	1752992001
	4		281-1774-ND *NEW!*	1.23	1.11	.99	1753002001
	6		281-1775-ND *NEW!*	1.83	1.65	1.47	1753022001
	8		281-1776-ND *NEW!*	2.39	2.15	1.91	1753042001
	10		281-1777-ND *NEW!*	3.03	2.73	2.43	1753062001
	12		281-1778-ND *NEW!*	3.59	3.23	2.87	1753082001
	16		281-1779-ND *NEW!*	4.86	4.38	3.89	1753122001
	24		281-1780-ND *NEW!*	7.16	6.44	5.73	1753202001

Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
84	2	Black	281-1781-ND *NEW!*	.72	.65	.58	1760962001
	3		281-1782-ND *NEW!*	1.10	.99	.88	1760972001
	4		281-1783-ND *NEW!*	1.40	1.26	1.12	1760982001
	6		281-1784-ND *NEW!*	2.10	1.89	1.68	1761002001
	8		281-1785-ND *NEW!*	2.81	2.53	2.25	1761022001
	10		281-1786-ND *NEW!*	3.50	3.15	2.80	1761042001
	12		281-1787-ND *NEW!*	4.19	3.77	3.35	1761062001
	16		281-1788-ND *NEW!*	5.60	5.04	4.48	1761102001
	24		281-1789-ND *NEW!*	8.36	7.52	6.69	1761182001
85	2	Black	281-1754-ND *NEW!*	.60	.54	.48	1761542001
	3		281-1755-ND *NEW!*	.90	.81	.72	1761552001
	4		281-1756-ND *NEW!*	1.23	1.11	.99	1761562001
	6		281-1757-ND *NEW!*	1.83	1.65	1.47	1761582001
	8		281-1758-ND *NEW!*	2.39	2.15	1.91	1761602001
	10		281-1759-ND *NEW!*	3.03	2.73	2.43	1761622001
	12		281-1760-ND *NEW!*	3.59	3.23	2.87	1761642001
	16		281-1761-ND *NEW!*	4.86	4.38	3.89	1761682001
	24		281-1762-ND *NEW!*	7.16	6.44	5.73	1761762001
86	2	Black	281-1763-ND *NEW!*	.72	.65	.58	1762002001
	3		281-1764-ND *NEW!*	1.10	.99	.88	1762012001
	4		281-1765-ND *NEW!*	1.40	1.26	1.12	1762022001
	6		281-1766-ND *NEW!*	2.10	1.89	1.68	1762042001
	8		281-1767-ND *NEW!*	2.81	2.53	2.25	1762062001
	10		281-1768-ND *NEW!*	3.50	3.15	2.80	1762082001
	12		281-1769-ND *NEW!*	4.19	3.77	3.35	1762102001
	16		281-1770-ND *NEW!*	5.60	5.04	4.48	1762142001
	24		281-1771-ND *NEW!*	8.36	7.52	6.69	1762222001
5.08mm Omnimate – SMT Compatible PCB Pin Headers							
87	2	Black	281-1610-ND *NEW!*	.53	.48	.42	1775522001
	3		281-1611-ND *NEW!*	.78	.71	.63	1775572001
	4		281-1612-ND *NEW!*	1.04	.94	.83	1775592001
	5		281-1613-ND *NEW!*	1.29	1.17	1.04	1775632001
	6		281-1614-ND *NEW!*	1.55	1.40	1.24	1775642001
	8		281-1615-ND *NEW!*	2.04	1.84	1.64	1775662001
	10		281-1616-ND *NEW!*	2.57	2.31	2.06	1775682001
	12		281-1617-ND *NEW!*	3.06	2.76	2.45	1775702001
	16		281-1618-ND *NEW!*	4.10	3.69	3.28	1775742001
	24		281-1619-ND *NEW!*	5.97	5.38	4.78	1775822001
88	2	Black	281-1620-ND *NEW!*	.53	.48	.42	1775922001
	3		281-1621-ND *NEW!*	.78	.71	.63	1775932001
	4		281-1622-ND *NEW!*	1.04	.94	.83	1775942001
	5		281-1623-ND *NEW!*	1.29	1.17	1.04	1775952001
	6		281-1624-ND *NEW!*	1.55	1.40	1.24	1775962001
	8		281-1625-ND *NEW!*	2.04	1.84	1.64	1775982001
	10		281-1626-ND *NEW!*	2.57	2.31	2.06	1776002001

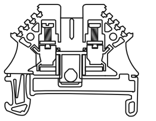
Fig.	No. of Poles	Color	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
88	12	Black	281-1627-ND *NEW!*	3.06	2.76	2.45	1776022001
	16		281-1628-ND *NEW!*	4.10	3.69	3.28	1776272001
	24		281-1629-ND *NEW!*	5.97	5.38	4.78	1776352001
89	2	Black	281-1630-ND *NEW!*	.86	.77	.69	1776362001
	3		281-1631-ND *NEW!*	1.04	.94	.83	1776372001
	4		281-1632-ND *NEW!*	1.26	1.14	1.01	1776382001
	5		281-1633-ND *NEW!*	1.49	1.34	1.19	1776392001
	6		281-1634-ND *NEW!*	1.71	1.54	1.37	1776402001
	8		281-1635-ND *NEW!*	2.25	2.03	1.80	1776422001
	10		281-1636-ND *NEW!*	2.82	2.54	2.26	1776442001
	12		281-1637-ND *NEW!*	3.36	3.03	2.69	1776462001
	16		281-1638-ND *NEW!*	4.50	4.05	3.60	1776502001
	24		281-1639-ND *NEW!*	6.57	5.92	5.26	1776592001
90	2	Black	281-1640-ND *NEW!*	.53	.48	.42	1774762001
	3		281-1641-ND *NEW!*	.78	.71	.63	1774772001
	4		281-1642-ND *NEW!*	1.04	.94	.83	1774782001
	5		281-1643-ND *NEW!*	1.29	1.17	1.04	1774792001
	6		281-1644-ND *NEW!*	1.55	1.40	1.24	1774802001
	8		281-1645-ND *NEW!*	2.04	1.84	1.64	1774822001
	10		281-1646-ND *NEW!*	2.57	2.31	2.06	1774842001
	12		281-1647-ND *NEW!*	3.06	2.76	2.45	1774862001
	16		281-1648-ND *NEW!*	4.10	3.69	3.28	1774902001
	24		281-1649-ND *NEW!*	5.97	5.38	4.78	1774982001
91	2	Black	281-1660-ND *NEW!*	.53	.48	.42	1775002001
	3		281-1661-ND *NEW!*	.78	.71	.63	1775012001
	4		281-1662-ND *NEW!*	1.04	.94	.83	1775022001
	5		281-1663-ND *NEW!*	1.29	1.17	1.04	1775032001
	6		281-1664-ND *NEW!*	1.55	1.40	1.24	1775042001
	8		281-1665-ND *NEW!*	2.04	1.84	1.64	1775062001
	10		281-1666-ND *NEW!*	2.57	2.31	2.06	1775082001
	12		281-1667-ND *NEW!*	3.06	2.76	2.45	1775102001
	16		281-1668-ND *NEW!*	4.10	3.69	3.28	1775142001
	24		281-1669-ND *NEW!*	5.97	5.38	4.78	1775222001
92	2	Black	281-1650-ND *NEW!*	.86	.77	.69	1775232001
	3		281-1651-ND *NEW!*	1.04	.94	.83	1775242001
	4		281-1652-ND *NEW!*	1.26	1.14	1.01	1775252001
	5		281-1653-ND *NEW!*	1.49	1.34	1.19	1775262001
	6		281-1654-ND *NEW!*	1.71	1.54	1.37	1775272001
	8		281-1655-ND *NEW!*	2.25	2.03	1.80	1775292001
	10		281-1656-ND *NEW!*	2.82	2.54	2.26	1775312001
	12		281-1657-ND *NEW!*	3.36	3.03	2.69	1775332001
	16		281-1658-ND *NEW!*	4.50	4.05	3.60	1775372001
	24		281-1659-ND *NEW!*	6.57	5.92	5.26	1775452001

281-1376-ND Screwdriver for 3.5mm Plugs $11.76

NOTE: All Omnimate pin headers mate with Omnimate socket blocks. All Minimate pin headers mate with Minimate socket blocks.

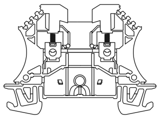
Weidmüller DIN Rail - Mounted Terminal Blocks and Accessories

Fig. 1 - WDU 2.5N



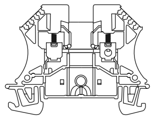
- Termination Block Width: 5mm
- Wire Size (UL): 24-12 AWG
- Voltage Approval (UL): 300V
- Current Approval (UL): 25A

Fig. 2 - WDU 2.5



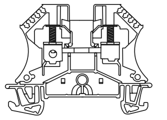
- Termination Block Width: 5mm
- Wire Size (UL): 22-12 AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 25A

Fig. 3 - WDU 4



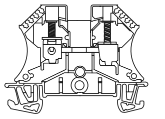
- Termination Block Width: 6mm
- Wire Size (UL): 22-10 AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 35A

Fig. 4- WDU 6



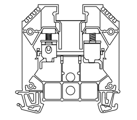
- Termination Block Width: 8mm
- Wire Size (UL): 20-8: AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 45A

Fig. 5 - WDU 10



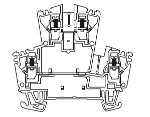
- Term. Block Width: 10mm
- Wire Size (UL): 16-6 AWG
- Voltage Approval (UL): 1000V
- Current Approval (UL): 65A

Fig. 6 - WDU 16



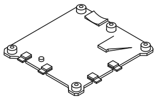
- Termination Block Width: 12mm
- Wire Size (UL): 14-6 AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 70A

Fig. 7 - WDK 2.5N



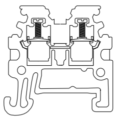
- Termination Block Width: 5mm
- Wire Size (UL): 22-12 AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 20A

Fig. 8 - WDK 2.5 DU-PE



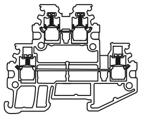
- Termination Block Width: 5mm
- Wire Size (UL): 22-12 AWG
- Voltage Approval (UL): 300V
- Current Approval (UL): 20A

Fig. 9 - WDU 1.5/R 3.5



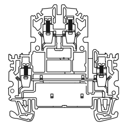
- Termination Block Width: 3.5mm
- Wire Size (UL): 26-14 AWG
- Voltage Approval (UL): 300V
- Current Approval (UL): 15A

Fig. 10 - WDK 1.5/R 3.5



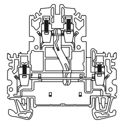
- Termination Block Width: 3.5mm
- Wire Size (UL): 26-14 AWG
- Voltage Approval (UL): 300V
- Current Approval (UL): 15A

Fig. 11 - WDK 4N



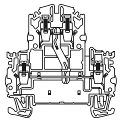
- Termination Block Width: 6mm
- Wire Size (UL): 22-10 AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 35A

Fig. 12 - WDK 4NV



- Termination Block Width: 6mm
- Wire Size (UL): 22-10 AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 35A

Fig.13 - WDK 2.5 NV



- Termination Block Width: 5mm
- Wire Size (UL): 26-12 AWG
- Voltage Approval (UL): 600V
- Current Approval (UL): 20A

TERMINAL BLOCKS							ACCESSORIES (See Descriptions and Prices Below)							
Fig.	Series	Digi-Key Part No.	Price Each			Weidmuller Part No.	Grounding Blocks	End Plates	End Brackets	Partitions	Jumpers/ Jumper Links	Notching Tools	DIN Rail	Marking Tags
			1	10	100									
1	WDU 2.5N	281-1466-ND	1.38	1.25	1.11	1040800000	281-1490-ND	281-1499-ND	281-1503-ND	—	281-1505-ND	281-1533-ND	281-1534-ND	281-1550-ND
2	WDU 2.5	281-1467-ND	1.13	1.02	.90	1020000000	281-1491-ND	281-1500-ND	281-1503-ND	—	281-1505-ND	281-1533-ND	281-1534-ND	281-1550-ND
3	WDU 4	281-1468-ND	1.23	1.11	.99	1020100000	281-1492-ND	281-1500-ND	281-1503-ND	—	281-1514-ND	281-1533-ND	281-1534-ND	281-1551-ND
4	WDU 6	281-1469-ND	1.65	1.49	1.32	1020200000	281-1493-ND	281-1500-ND	281-1503-ND	—	281-1518-ND 281-1521-ND	281-1533-ND	281-1534-ND	—
5	WDU 10	281-1470-ND	2.19	1.98	1.76	1020300000	281-1494-ND	281-1500-ND	281-1503-ND	—	281-1522-ND 281-1525-ND	281-1533-ND	281-1534-ND	—
6	WDU 16	281-1471-ND	4.79	4.31	3.83	1020400000	281-1495-ND	—	281-1502-ND	—	281-1526-ND 281-1529-ND	281-1533-ND	281-1534-ND	—
7	WDK 2.5N	281-1472-ND	3.51	3.16	2.81	1041100000	281-1496-ND	—	281-1502-ND	281-1501-ND	281-1505-ND 281-1506-ND	281-1533-ND	281-1534-ND	281-1550-ND
8	WDK 2.5 DU-PE	281-1555-ND	5.21	4.69	4.17	1036400000	281-1496-ND	—	281-1502-ND	281-1501-ND	—	281-1533-ND	281-1534-ND	281-1550-ND
9	WDU 1.5/R 3.5	281-1476-ND	1.43	1.29	1.14	1753280000	—	281-1478-ND	281-1480-ND	—	281-1481-ND 281-1482-ND	281-1533-ND	281-1535-ND	281-1536-ND 281-1537-ND
10	WDK 1.5/R 3.5	281-1477-ND	3.15	2.84	2.52	1753290000	—	281-1479-ND	281-1480-ND —	—	281-1481-ND 281-1482-ND	281-1533-ND	281-1535-ND	281-1536-ND 281-1537-ND
11	WDK 4N	281-1473-ND	4.88	4.39	3.90	1041900000	281-1497-ND	—	281-1502-ND	281-1501-ND	281-1514-ND 281-1515-ND	281-1533-ND	281-1534-ND	281-1550-ND
12	WDK 4NV	281-1474-ND	7.20	6.48	5.76	1041910000	281-1497-ND	—	281-1502-ND	281-1501-ND	281-1514-ND 281-1515-ND	281-1533-ND	281-1534-ND	281-1550-ND
13	WDK 2.5 NV	281-1475-ND	7.16	6.44	5.73	1041610000	281-1497-ND	—	281-1502-ND	281-1501-ND	281-1505-ND 281-1506-ND	281-1533-ND	281-1534-ND	281-1550-ND

Accessories

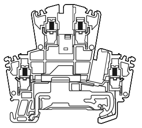
Description	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
Grounding Blocks					
WPE 2.5N	281-1490-ND	5.46	4.92	4.37	1016200000
WPE 2.5	281-1491-ND	5.70	5.13	4.56	1010000000
WPE 4	281-1492-ND	5.85	5.27	4.68	1010100000
WPE 6	281-1493-ND	6.36	5.73	5.09	1010200000
WPE 10	281-1494-ND	6.68	6.01	5.34	101 0300000
WPE 16	281-1495-ND	8.36	7.52	6.69	1010400000
WDK 2.5N DU-PE	281-1496-ND*	6.24	5.62	5.00	1041650000
WDK 4N PE	281-1497-ND†	7.08	6.38	5.67	1041920000
End Plates					
WAP WDU 1.5/R 3.5	281-1478-ND	.30	.27	.24	1754190000
WAP WDK 1.5/R 3.5	281-1479-ND	.81	.73	.65	1754200000
WAP WDU 1.5	281-1499-ND	.72	.65	.58	1060000000
WAP WDU 2.5	281-1500-ND	.75	.68	.60	1050000000
End Brackets					
EW 15	281-1480-ND	.66	.60	.53	3828600000
WEW 35/1	281-1502-ND	4.02	3.62	3.22	1061200000
WEW 35/2	281-1503-ND	2.07	1.87	1.66	1059000000
Partitions					
WTW	281-1501-ND	4.17	3.76	3.34	1058800000
Jumpers					
ZQV 1.5/R 3.5/2 GE	281-1481-ND	.45	.41	.36	1754210000
ZQV 1.5/R 3.5/3 GE	281-1482-ND	.92	.83	.74	1754220000
ZQV 2.5N/2	281-1505-ND	.50	.45	.40	1693800000
ZQV 2.5N/3	281-1506-ND	.95	.86	.76	1693810000
ZQV 4N/2	281-1514-ND	1.07	.96	.86	1758250000
ZQV 4N/3	281-1515-ND	1.59	1.44	1.28	1762630000
ZQV 4N/4	281-1516-ND	2.10	1.89	1.68	1762620000
ZQV 4N/10	281-1517-ND	5.21	4.69	4.17	1758260000

Description	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
Jumper Links					
WQV 6/2	281-1518-ND	1.58	1.42	1.26	1052360000
WQV 6/3	281-1519-ND	2.31	2.08	1.85	1054760000
WQV 6/4	281-1520-ND	3.02	2.72	2.42	1054860000
WQV 6/10	281-1521-ND	7.22	6.50	5.78	1052260000
WQV 10/2	281-1522-ND	1.65	1.49	1.32	1052560000
WQV 10/3	281-1523-ND	2.31	2.08	1.85	1054960000
WQV 10/4	281-1524-ND	3.02	2.72	2.42	1055060000
WQV 10/10	281-1525-ND	7.22	6.50	5.78	1052460000
WQV 16/2	281-1526-ND	1.65	1.49	1.32	1053260000
WQV 16/3	281-1527-ND	2.31	2.08	1.85	1055160000
WQV 16/4	281-1528-ND	3.18	2.87	2.55	1055260000
WQV 16/10	281-1529-ND	7.56	6.81	6.05	1053360000
Notching Tool					
Cutting Tool WAW 1	281-1533-ND	39.48	—	—	900450
Screwdrivers					
0.6 x 3.5	281-1530-ND	9.77	8.79	7.82	9008330000
0.8 x 4.0	281-1531-ND	13.23	11.91	10.59	900834
1.0 x 5.5	281-1532-ND	18.00	16.20	14.40	900835
DIN Rail - Slotted 1M					
TS 35 x 7.5mm	281-1534-ND	11.60	10.44	9.28	51451
TS 15 x 5.5mm	281-1535-ND	9.95	8.96	7.96	11751
Marking Pen					
STI - Black	281-1554-ND	7.14	6.43	5.72	508401694
Outlet Modules					
AC, Single	281-1560-ND	15.75	14.40	11.25	9915480000
AC, Duplex	281-1561-ND	25.20	23.04	18.00	9915490000
Fuse Block					
With Indicator	281-1562-ND	12.15	11.11	8.68	67601493

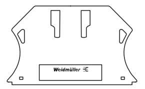
* Single level + ground † Double level grounding block

Description	Digi-Key Part No.	Price Each 1	10	100	Weidmuller Part No.
Marker Strips					
DEK 5/3.5 MC Blank (unprinted)	281-1536-ND	8.40	7.56	6.72	1755270000
DEK 5/3.5 FS 1-10 Premarked (printed)	281-1537-ND	8.40	7.56	6.72	1762320001
WS 10/5 Blank (unprinted)	281-1547-ND	1.44	1.30	1.16	1060860000
WS 10/6 Blank (unprinted)	281-1548-ND	1.49	1.34	1.19	1060960000
DEK 5/5 Blank (unprinted)	281-1550-ND	2.43	2.19	1.95	47336
DEK 5/6 Blank (unprinted)	281-1551-ND	2.43	2.19	1.95	46856
DEK 5/8 Blank (unprinted)	281-1553-ND	2.58	2.33	2.07	1277060000

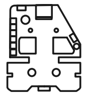
Grounding Blocks Grounds connected wires to DIN rail



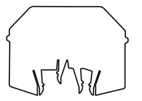
End Plates - Covers open end of terminal block



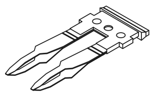
End Brackets - Clamps blocks into place on Rail



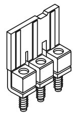
Partitions - WTW



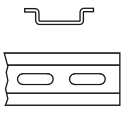
Jumpers - For cross connection ZQV



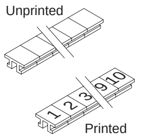
Jumper Links - For cross connection WQV



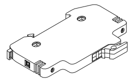
DIN Rail-with mounting holes



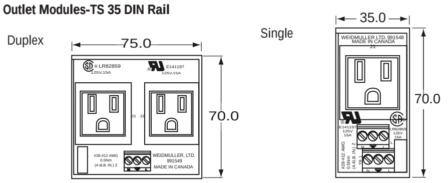
Marker Strips-Will mark termination points



Fuse Block TS 35 DIN Rail with neon indicator



Outlet Modules-TS 35 DIN Rail



AMERICAN ELECTRICAL INC.

DIN Rail

Features: • Steel Design • CE Approved • Zinc Chromate Plating • No Markings on Rail

PART NUMBERING SYSTEM

ADR□□□□-□□□□□-ND

A = AMERICAN ELECTRICAL INC

DR = DIN RAIL

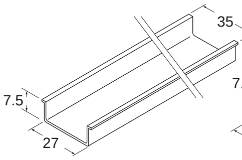
Width and height in MM
3575 = 35MM X 7.55MM
3515 = 35MM X 15MM

S = Slotted
U = Unslotted

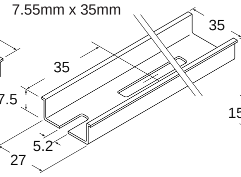
Length in inches with an implied decimal point after the second digit. Example: 3 IN = 0300

Note: Lengths exceeding 48" may incur additional shipping charges.

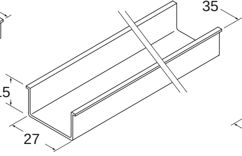
Unslotted
7.55mm x 35mm



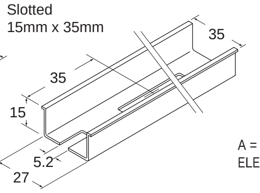
Slotted
7.55mm x 35mm



Unslotted
15mm x 35mm



Slotted
15mm x 35mm



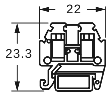
Length (In.)	Digi-Key Part No.	"U" Price Each			"S" Price Each		
		1	10	100	1	10	100
	U = Unslotted S = Slotted						
3	ADR3575-□0300-ND	1.44	1.08	.75	1.44	1.08	.75
4	ADR3575-□0400-ND	1.61	1.22	.88	1.61	1.22	.88
5	ADR3575-□0500-ND	1.63	1.26	.94	1.63	1.26	.94
6	ADR3575-□0600-ND	1.88	1.45	1.09	1.88	1.45	1.09
7	ADR3575-□0700-ND	2.15	1.66	1.25	2.15	1.66	1.25
8	ADR3575-□0800-ND	2.40	1.87	1.40	2.40	1.87	1.40
9	ADR3575-□0900-ND	2.65	2.07	1.55	2.65	2.07	1.55
10	ADR3575-□1000-ND	2.89	2.25	1.69	2.89	2.25	1.69
11	ADR3575-□1100-ND	3.11	2.44	1.83	3.11	2.44	1.83
12	ADR3575-□1200-ND	3.32	2.61	1.96	3.32	2.61	1.96
13	ADR3575-□1300-ND	3.52	2.77	2.08	3.52	2.77	2.08
14	ADR3575-□1400-ND	3.71	2.93	2.20	3.71	2.93	2.20
15	ADR3575-□1500-ND	3.88	3.08	2.31	3.88	3.08	2.31
16	ADR3575-□1600-ND	4.04	3.22	2.42	4.04	3.22	2.42
17	ADR3575-□1700-ND	4.20	3.36	2.52	4.20	3.36	2.52
18	ADR3575-□1800-ND	4.34	3.48	2.61	4.34	3.48	2.61
19	ADR3575-□1900-ND	4.48	3.59	2.69	4.48	3.59	2.69
20	ADR3575-□2000-ND	4.61	3.69	2.77	4.61	3.69	2.77
21	ADR3575-□2100-ND	4.73	3.79	2.84	4.73	3.79	2.84
22	ADR3575-□2200-ND	4.84	3.88	2.91	4.84	3.88	2.91
23	ADR3575-□2300-ND	4.94	3.95	2.97	4.94	3.95	2.97
24	ADR3575-□2400-ND	5.02	4.02	3.02	5.02	4.02	3.02
25	ADR3575-□2500-ND	5.10	4.09	3.07	5.10	4.09	3.07
26	ADR3575-□2600-ND	5.17	4.14	3.10	5.17	4.14	3.10
27	ADR3575-□2700-ND	5.27	4.22	3.17	5.27	4.22	3.17
28	ADR3575-□2800-ND	5.42	4.34	3.26	5.42	4.34	3.26
29	ADR3575-□2900-ND	5.58	4.47	3.36	5.58	4.47	3.36
30	ADR3575-□3000-ND	5.73	4.59	3.45	5.73	4.59	3.45
31	ADR3575-□3100-ND	5.88	4.70	3.54	5.88	4.70	3.54
32	ADR3575-□3200-ND	6.02	4.82	3.63	6.02	4.82	3.63
33	ADR3575-□3300-ND	6.16	4.93	3.72	6.16	4.93	3.72
34	ADR3575-□3400-ND	6.30	5.05	3.81	6.30	5.05	3.81
35	ADR3575-□3500-ND	6.44	5.16	3.90	6.44	5.16	3.90
36	ADR3575-□3600-ND	6.57	5.26	3.98	6.57	5.26	3.98
37	ADR3575-□3700-ND	6.71	5.37	4.06	6.71	5.37	4.06
38	ADR3575-□3800-ND	6.83	5.47	4.15	6.83	5.47	4.15
39	ADR3575-□3900-ND	6.96	5.57	4.23	6.96	5.57	4.23
40	ADR3575-□4000-ND	7.08	5.67	4.30	7.08	5.67	4.30
41	ADR3575-□4100-ND	7.20	5.77	4.38	7.20	5.77	4.38
42	ADR3575-□4200-ND	7.32	5.86	4.46	7.32	5.86	4.46
43	ADR3575-□4300-ND	7.44	5.95	4.53	7.44	5.95	4.53
44	ADR3575-□4400-ND	7.55	6.04	4.61	7.55	6.04	4.61
45	ADR3575-□4500-ND	7.66	6.13	4.68	7.66	6.13	4.68
46	ADR3575-□4600-ND	7.77	6.22	4.75	7.77	6.22	4.75
47	ADR3575-□4700-ND	7.87	6.30	4.82	7.87	6.30	4.82
48	ADR3575-□4800-ND	7.97	6.38	4.88	7.97	6.38	4.88
49	ADR3575-□4900-ND	8.07	6.46	4.95	8.07	6.46	4.95
50	ADR3575-□5000-ND	8.17	6.54	5.01	8.17	6.54	5.01
51	ADR3575-□5100-ND	8.26	6.61	5.07	8.26	6.61	5.07
52	ADR3575-□5200-ND	8.35	6.68	5.14	8.35	6.68	5.14
53	ADR3575-□5300-ND	8.44	6.75	5.20	8.44	6.75	5.20
54	ADR3575-□5400-ND	8.55	6.84	5.27	8.55	6.84	5.27
55	ADR3575-□5500-ND	8.67	6.93	5.34	8.67	6.93	5.34
56	ADR3575-□5600-ND	8.79	7.02	5.41	8.79	7.02	5.41
57	ADR3575-□5700-ND	8.91	7.11	5.49	8.91	7.11	5.49
58	ADR3575-□5800-ND	9.02	7.20	5.56	9.02	7.20	5.56
59	ADR3575-□5900-ND	9.14	7.29	5.63	9.14	7.29	5.63
60	ADR3575-□6000-ND	9.25	7.38	5.70	9.25	7.38	5.70
61	ADR3575-□6100-ND	9.36	7.46	5.77	9.36	7.46	5.77
62	ADR3575-□6200-ND	9.47	7.54	5.83	9.47	7.54	5.83
63	ADR3575-□6300-ND	9.58	7.62	5.90	9.58	7.62	5.90
64	ADR3575-□6400-ND	9.69	7.71	5.97	9.69	7.71	5.97
65	ADR3575-□6500-ND	9.80	7.79	6.03	9.80	7.79	6.03
66	ADR3575-□6600-ND	9.90	7.86	6.10	9.90	7.86	6.10
67	ADR3575-□6700-ND	10.01	7.94	6.16	10.01	7.94	6.16
68	ADR3575-□6800-ND	10.11	8.02	6.22	10.11	8.02	6.22
69	ADR3575-□6900-ND	10.21	8.09	6.29	10.21	8.09	6.29
70	ADR3575-□7000-ND	10.31	8.16	6.35	10.31	8.16	6.35
71	ADR3575-□7100-ND	10.41	8.24	6.41	10.41	8.24	6.41
72	ADR3575-□7200-ND	10.50	8.31	6.47	10.50	8.31	6.47
73	ADR3575-□7300-ND	10.60	8.38	6.53	10.60	8.38	6.53
74	ADR3575-□7400-ND	10.69	8.44	6.58	10.69	8.44	6.58
75	ADR3575-□7500-ND	10.79	8.51	6.64	10.79	8.51	6.64
76	ADR3575-□7600-ND	10.88	8.58	6.70	10.88	8.58	6.70
77	ADR3575-□7700-ND	10.97	8.64	6.75	10.97	8.64	6.75
78	ADR3575-□7800-ND	11.06	8.70	6.80	11.06	8.70	6.80
—	**ADR3575-□7874-ND***	11.12	8.75	6.84	11.12	8.75	6.84

Length (In.)	Digi-Key Part No.	"U" Price Each			"S" Price Each		
		1	10	100	1	10	100
	U = Unslotted S = Slotted						
3	ADR3515-□0300-ND	1.51	1.14	.80	1.51	1.14	.80
4	ADR3515-□0400-ND	1.64	1.25	.91	1.64	1.25	.91
5	ADR3515-□0500-ND	1.74	1.34	1.01	1.74	1.34	1.01
6	ADR3515-□0600-ND	2.05	1.58	1.19	2.05	1.58	1.19
7	ADR3515-□0700-ND	2.34	1.81	1.36	2.34	1.81	1.36
8	ADR3515-□0800-ND	2.61	2.03	1.53	2.61	2.03	1.53
9	ADR3515-□0900-ND	2.87	2.24	1.68	2.87	2.24	1.68
10	ADR3515-□1000-ND	3.12	2.44	1.83	3.12	2.44	1.83
11	ADR3515-□1100-ND	3.35	2.63	1.98	3.35	2.63	1.98
12	ADR3515-□1200-ND	3.57	2.81	2.11	3.57	2.81	2.11
13	ADR3515-□1300-ND	3.77	2.98	2.24	3.77	2.98	2.24
14	ADR3515-□1400-ND	3.96	3.15	2.36	3.96	3.15	2.36
15	ADR3515-□1500-ND	4.13	3.30	2.47	4.13	3.30	2.47
16	ADR3515-□1600-ND	4.29	3.44	2.58	4.29	3.44	2.58
17	ADR3515-□1700-ND	4.45	3.56	2.68	4.45	3.56	2.68
18	ADR3515-□1800-ND	4.60	3.68	2.76	4.60	3.68	2.76
19	ADR3515-□1900-ND	4.73	3.79	2.84	4.73	3.79	2.84
20	ADR3515-□2000-ND	4.85	3.88	2.91	4.85	3.88	2.91
21	ADR3515-□2100-ND	4.95	3.97	2.98	4.95	3.97	2.98
22	ADR3515-□2200-ND	5.05	4.04	3.03	5.05	4.04	3.03
23	ADR3515-□2300-ND	5.13	4.11	3.08	5.13	4.11	3.08
24	ADR3515-□2400-ND	5.20	4.16	3.12	5.20	4.16	3.12
25	ADR3515-□2500-ND	5.36	4.29	3.22	5.36	4.29	3.22
26	ADR3515-□2600-ND	5.53	4.43	3.33	5.53	4.43	3.33
27	ADR3515-□2700-ND	5.70	4.56	3.43	5.70	4.56	3.43
28	ADR3515-□2800-ND	5.86	4.69	3.53	5.86	4.69	3.53
29	ADR3515-□2900-ND	6.02	4.82	3.63	6.02	4.82	3.63
30	ADR3515-□3000-ND	6.18	4.95	3.73	6.18	4.95	3.73
31	ADR3515-□3100-ND	6.33	5.07	3.83	6.33	5.07	3.83
32	ADR3515-□3200-ND	6.48	5.19	3.92	6.48	5.19	3.92
33	ADR3515-□3300-ND	6.63	5.31	4.02	6.63	5.31	4.02
34	ADR3515-□3400-ND	6.77	5.42	4.11	6.77	5.42	4.11
35	ADR3515-□3500-ND	6.92	5.54	4.20	6.92	5.54	4.20
36	ADR3515-□3600-ND	7.05	5.65	4.28	7.05	5.65	4.28
37	ADR3515-□3700-ND	7.19	5.75	4.37	7.19	5.75	4.37
38	ADR3515-□3800-ND	7.32	5.86	4.45	7.32	5.86	4.45
39	ADR3515-□3900-ND	7.44	5.96	4.54	7.44	5.96	4.54
40	ADR3515-□4000-ND	7.57	6.06	4.62	7.57	6.06	4.62
41	ADR3515-□4100-ND	7.69	6.15	4.69	7.69	6.15	4.69
42	ADR3515-□4200-ND	7.80	6.25	4.77	7.80	6.25	4.77
43	ADR3515-□4300-ND	7.92	6.34	4.85	7.92	6.34	4.85
44	ADR3515-□4400-ND	8.03	6.43	4.92	8.03	6.43	4.92
45	ADR3515-□4500-ND	8.13	6.51	4.99	8.13	6.51	4.99
46	ADR3515-□4600-ND	8.24	6.59	5.06	8.24	6.59	5.06
47	ADR3515-□4700-ND	8.34	6.67	5.13	8.34	6.67	5.13
48	ADR3515-□4800-ND	8.43	6.75	5.19	8.43	6.75	5.19
49	ADR3515-□4900-ND	8.56	6.85	5.27	8.56	6.85	5.27
50	ADR3515-□5000-ND	8.69	6.95	5.36	8.69	6.95	5.36
51	ADR3515-□5100-ND	8.83	7.05	5.44	8.83	7.05	5.44
52	ADR3515-□5200-ND	8.95	7.15	5.52	8.95	7.15	5.52
53	ADR3515-□5300-ND	9.08	7.25	5.59	9.08	7.25	5.59
54	ADR3515-□5400-ND	9.21	7.34	5.67	9.21	7.34	5.67
55	ADR3515-□5500-ND	9.33	7.44	5.75	9.33	7.44	5.75
56	ADR3515-□5600-ND	9.45	7.53	5.82	9.45	7.53	5.82
57	ADR3515-□5700-ND	9.58	7.62	5.90	9.58	7.62	5.90
58	ADR3515-□5800-ND	9.69	7.71	5.97	9.69	7.71	5.97
59	ADR3515-□5900-ND	9.81	7.80	6.04	9.81	7.80	6.04
60	ADR3515-□6000-ND	9.93	7.88	6.11	9.93	7.88	6.11
61	ADR3515-□6100-ND	10.04	7.97	6.18	10.04	7.97	6.18
62	ADR3515-□6200-ND	10.15	8.05	6.25	10.15	8.05	6.25
63	ADR3515-□6300-ND	10.26	8.13	6.32	10.26	8.13	6.32
64	ADR3515-□6400-ND	10.37	8.21	6.39	10.37	8.21	6.39
65	ADR3515-□6500-ND	10.48	8.29	6.45	10.48	8.29	6.45
66	ADR3515-□6600-ND	10.59	8.37	6.52	10.59	8.37	6.52
67	ADR3515-□6700-ND	10.69	8.44	6.58	10.69	8.44	6.58
68	ADR3515-□6800-ND	10.79	8.51	6.64	10.79	8.51	6.64
69	ADR3515-□6900-ND	10.89	8.59	6.70	10.89	8.59	6.70
70	ADR3515-□7000-ND	10.99	8.66	6.77	10.99	8.66	6.77
71	ADR3515-□7100-ND	11.09	8.73	6.83	11.09	8.73	6.83
72	ADR3515-□7200-ND	11.18	8.79	6.88	11.18	8.79	6.88
73	ADR3515-□7300-ND	11.28	8.86	6.94	11.28	8.86	6.94
74	ADR3515-□7400-ND	11.37	8.92	7.00	11.37	8.92	7.00
75	ADR3515-□7500-ND	11.46	8.99	7.05	11.46	8.99	7.05
76	ADR3515-□7600-ND	11.55	9.05	7.11	11.55	9.05	7.11
77	ADR3515-□7700-ND	11.64	9.11	7.16	11.64	9.11	7.16
78	ADR3515-□7800-ND	11.72	9.17	7.21	11.72	9.17	7.21
—	**ADR3515-□7874-ND***	11.78	9.21	7.25	11.78	9.21	7.25

Note: □ S = Slotted, U = Unslotted **Note:** Sold in 1" increments from 3 to 78". Call for custom lengths and pricing!
***** 2 meter length

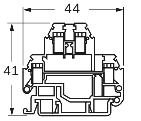
PHOENIX CONTACT DIN Rail-Mounted Terminal Blocks and Accessories

Fig. 1 — MT 1.5



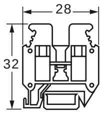
• Termination Block Width: 4.2mm • Terminations per Linear Meter: 476 • Wire Size (UL): 30-14 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 15A

Fig. 2 — MTTB 1.5



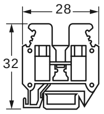
• Termination Block Width: 4.2mm • Terminations per Linear Meter: 952 • Wire Size (UL): 30-14 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 15A

Fig. 3 — MBK 3/E-Z



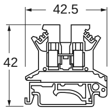
• Termination Block Width: 5.2mm • Terminations per Linear Meter: 384 • Wire Size (UL): 28-12 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 20A

Fig. 4 — MBK 5/E-Z



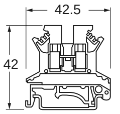
• Termination Block Width: 6.2mm • Terminations per Linear Meter: 322 • Wire Size (UL): 26-10 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 30A

Fig. 5 — UK 1.5 N



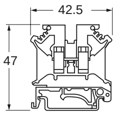
• Termination Block Width: 4.2mm • Terminations per Linear Meter: 476 • Wire Size (UL): 30-14 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 15A

Fig. 6 — UK 2.5 N



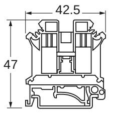
• Term. Block Width: 5.2mm • Terminations/Linear Meter: 384 • Wire Size (UL): 30-12 AWG • Voltage Approval (UL): 300V • Current Approval (UL): 20A

Fig. 7 — UK 5 N



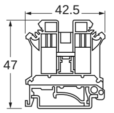
• Term. Block Width: 6.2mm • Terminations/Linear Meter: 322 • Wire Size (UL): 30-10 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 30A

Fig. 8 — UK 6 N



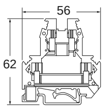
• Term. Block Width: 8.2mm • Terminations/Linear Meter: 242 • Wire Size (UL): 26-8 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 50A

Fig. 9 — UK 10 N



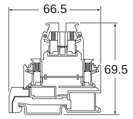
• Term. Block Width: 10.2mm • Terminations per Linear Meter: 196 • Wire Size (UL): 24-6 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 65A

Fig. 10 — UKK 5



• Term. Block Width: 6.2mm • Terminations/Linear Meter: 644 • Wire Size (UL): 26-10 AWG • Voltage Approval (UL): 600V • Current Approval (UL): 30A

Fig. 11 — SLKK 5

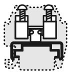


• Term. Block Width: 6.2mm • Terminations/Linear Meter: 805 • Wire Size (UL): 26-10 AWG • Volt. Approval (UL): 600V • Current Approval (UL): 30A

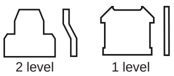
TERMINAL BLOCKS							*ACCESSORIES (See Descriptions and Prices Below)*											
Fig.	Series	Digi-Key Part No.	Price Each 1	10	100	Phoenix-Contact Part No.	Grounding Block	End Cover	Spacer Cover	Spacer Plate	Fixed Bridge	Insertion Bridge	Marker Strip (See Styles Below) Unprinted	Printed	Marker Pen	Screwdriver	End Bracket	DIN Rail
1	MT 1.5	277-1506-ND	1.93	1.74	1.54	3100305	277-1507-ND	277-1508-ND	—	—	277-1494-ND	—	A	B	277-1474-ND	277-1477-ND	277-1485-ND	277-1509-ND
2	MTTB 1.5	277-1483-ND	4.73	4.26	3.79	1414129	—	277-1495-ND	277-1496-ND	277-1497-ND	277-1494-ND	—	A	B	277-1474-ND	277-1477-ND	277-1485-ND 277-1523-ND	277-1509-ND 277-1510-ND
3	MBK 3/E-Z	277-1481-ND	2.35	2.12	1.89	1413036	277-1482-ND	277-1484-ND	—	—	277-1488-ND	277-1486-ND	D	H, L	277-1474-ND	277-1478-ND	277-1485-ND	277-1509-ND
4	MBK 5/E-Z	277-1480-ND	2.26	2.03	1.81	1402940	277-1520-ND	277-1484-ND	—	—	277-1514-ND	277-1511-ND	E	I, M	277-1474-ND	277-1478-ND	277-1485-ND	277-1509-ND
5	UK 1.5 N	277-1504-ND	1.58	1.43	1.27	3005837	277-1505-ND	277-1493-ND	—	—	277-1494-ND	—	C	P, Q	277-1474-ND	277-1477-ND	277-1523-ND	277-1510-ND
6	UK 2.5 N	277-1499-ND	1.51	1.37	1.21	3003347	277-1517-ND	277-1493-ND	—	—	277-1488-ND	277-1486-ND	D	H, L	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND
7	UK 5 N	277-1501-ND	1.68	1.51	1.35	3004362	277-1518-ND	277-1498-ND	—	—	277-1514-ND	277-1511-ND	E	I, M	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND
8	UK 6 N	277-1502-ND	2.15	1.94	1.72	3004524	277-1519-ND	277-1498-ND	—	—	277-1515-ND	277-1512-ND	F	J, N	277-1474-ND	277-1479-ND	277-1523-ND	277-1510-ND
9	UK 10 N	277-1503-ND	2.74	2.47	2.19	3005073	277-1500-ND	277-1498-ND	—	—	277-1516-ND	277-1513-ND	G	K, O	277-1474-ND	277-1479-ND	277-1523-ND	277-1510-ND
10	UKK 5	277-1491-ND	4.28	3.85	3.43	2774017	277-1492-ND	277-1487-ND	277-1490-ND	277-1489-ND	277-1514-ND	277-1511-ND	E	I, M	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND
11	SLKK 5	277-1521-ND	7.99	7.19	6.40	0461018	—	277-1487-ND	277-1490-ND	277-1489-ND	277-1514-ND	277-1511-ND	E	I, M	277-1474-ND	277-1478-ND	277-1523-ND	277-1510-ND

Accessories

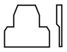
Grounding Block — Grounds connected wires to DIN rail



End Cover — Covers open end of terminal block

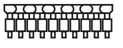


Spacer Cover — Covers open end of 2 level terminal block and compensates for level offset

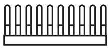


Spacer Plate — Compensates for level offset on closed end of 2 level terminal block

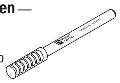
Fixed Bridge — For cross connections between terminal blocks in terminal center bridging cavity, 10 position, divisible



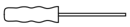
Insertion Bridge — For cross connections between terminal blocks in wire entry cavity, 10 position, divisible



Marker Pen — To label the unprinted marker strip

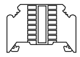


Screwdriver — Fully insulated blade shaft, straight blade design



End Bracket — Clamps terminal blocks into place on DIN rail

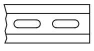
For 15mm wide DIN rail



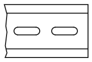
For 35mm wide DIN rail

DIN Rail — with elongated mounting holes

15mm wide
5.5mm deep
1 meter long

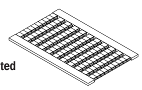


35mm wide
7.5mm deep
1 meter long



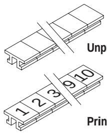
Marker Strip — Unprinted or printed, will mark termination points

ZBFM Type



(Unprinted shown)

ZB Type



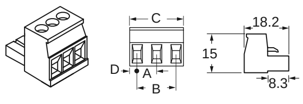
Description, Width	Digi-Key Part No.	Price Each 1	10	100	Phoenix-Contact Part No.
Grounding Blocks					
MT 1.5-PE, 4.2mm	277-1507-ND	6.06	5.46	4.86	3100318
MBK 3/E-Z-PE, 5.2mm	277-1482-ND	5.45	4.91	4.36	1413117
MBK 5/E-Z-PE, 6.2mm	277-1520-ND	5.87	5.29	4.70	0452043
USLKG 1.5 N, 4.2mm	277-1505-ND	5.29	4.77	4.24	3005853
USLKG 2.5 N, 5.2mm	277-1517-ND	6.12	5.51	4.90	0441119
USLKG 5, 6.2mm	277-1518-ND	6.02	5.42	4.82	0441504
USLKG 6 N, 8.2mm	277-1519-ND	6.59	5.93	5.27	0442079
USLKG 10 N, 10.2mm	277-1500-ND	7.18	6.46	5.75	3003923
UKK 5-PE, 6.2mm	277-1492-ND	13.45	12.11	10.76	2774211
End Covers					
D-MT 1.5, 1mm	277-1508-ND	.54	.49	.43	3100321
D-MTTB 1.5, 1mm	277-1495-ND	.84	.76	.68	3002665
D-MBK/E, 1mm	277-1484-ND	.65	.59	.52	1415021
D-UK 2.5, 1.5mm	277-1493-ND	.87	.78	.70	3001022
D-UK 4/10, 1.5mm	277-1498-ND	.89	.81	.72	3003020
D-UKK 3/5, 2.5mm	277-1487-ND	1.33	1.20	1.07	2770024
Spacer Covers					
DG-MTTB 1.5, 2mm	277-1496-ND	1.00	.91	.81	3002678
DG-UKK 3/5, 2.5mm	277-1490-ND	1.46	1.32	1.17	2770817
Spacer Plates					
DP-MTTB 1.5, 2mm	277-1497-ND	.95	.86	.76	3002681
DP-UKK 3/5, 2.5mm	277-1489-ND	.98	.88	.79	2770794

Description, Width	Digi-Key Part No.	Price Each 1	10	100	Phoenix-Contact Part No.
Fixed Bridge					
FBRN 10-4 N	277-1494-ND	5.64	5.08	4.51	3001624
FBRI 10-5 N	277-1488-ND	7.78	7.01	6.23	2770642
FBI 10-6	277-1514-ND	6.64	5.98	5.32	0203250
FBI 10-8	277-1515-ND	7.76	6.98	6.21	0203263
FBI 10-10	277-1516-ND	10.05	9.05	8.05	0203276
Insertion Bridge					
EBL 10-5	277-1486-ND	2.31	2.08	1.85	2303132
EB 10-6	277-1511-ND	3.70	3.33	2.96	0201139
EB 10-8	277-1512-ND	4.58	4.13	3.67	0202138
EB 10-10	277-1513-ND	6.15	5.54	4.92	0203137
Marker Pen					
M-PEN, black	277-1474-ND	12.73	11.46	10.19	1051993
Screwdrivers					
SZS 0.4 x 2.5	277-1477-ND	13.33	12.00	10.66	1205037
SZS 0.6 x 3.5	277-1478-ND	13.33	12.00	10.66	1205053
SZS 1.0 x 4.0	277-1479-ND	20.17	18.15	16.14	1205066
End Brackets					
E/MK 1, 6mm	277-1485-ND	.84	.76	.68	1421659
E/NS 35 N, 9.5mm	277-1523-ND	1.25	1.13	1.01	0800886
DIN Rail					
NS 15 PERF 1 METER	277-1509-ND	8.13	7.32	6.50	5602099
NS 35/7.5 PERF 1 METER	277-1510-ND	9.75	8.78	7.80	5602100

Style	Description	Digi-Key Part No.	Price Each 1	10	100	Phoenix-Contact Part No.
	Marker Strips					
A	ZBFM 4/WH: UNPRINTED — Unprinted, will mark 100 termination points	277-1524-ND	8.59	7.74	6.88	0803579
B	ZBFM 4/WH, LGS: 1-100 — Preprinted 1-100, will mark 100 termination points	277-1522-ND	12.05	10.85	9.64	0800268
C	ZB 4: UNPRINTED — Unprinted, will mark 10 termination points	277-1525-ND	.92	.83	.74	0805001
D	ZB 5: UNPRINTED — Unprinted, will mark 10 termination points	277-1472-ND	.92	.83	.74	1050004
E	ZB 6: UNPRINTED — Unprinted, will mark 10 termination points	277-1473-ND	.92	.83	.74	1051003
F	ZB 8: UNPRINTED — Unprinted, will mark 10 termination points	277-1475-ND	.92	.83	.74	1052002
G	ZB 10: UNPRINTED — Unprinted, will mark 10 termination points	277-1476-ND	.92	.83	.74	1053001
H	ZB 5, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1528-ND	1.28	1.16	1.03	1050017:0001
I	ZB 6, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1530-ND	1.28	1.16	1.03	1051016:0001
J	ZB 8, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1532-ND	1.28	1.16	1.03	1052015:0001
K	ZB 10, LGS: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1534-ND	1.28	1.16	1.03	1053014:0001
L	ZB 5, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1529-ND	1.28	1.16	1.03	1050017:0011
M	ZB 6, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1531-ND	1.28	1.16	1.03	1051016:0011
N	ZB 8, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1533-ND	1.28	1.16	1.03	1052015:0011
O	ZB 10, LGS: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1535-ND	1.28	1.16	1.03	1053014:0011
P	ZB 4, QR: 1-10 — Preprinted 1-10, will mark 10 termination points	277-1526-ND	1.28	1.16	1.03	0805807:0001
Q	ZB 4, QR: 11-20 — Preprinted 11-20, will mark 10 termination points	277-1527-ND	1.28	1.16	1.03	0805807:0011

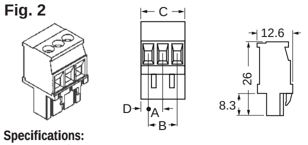
Terminal Blocks — PCB Plugs and Headers

Fig. 1



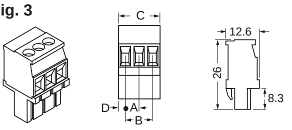
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 12 A. 12-24 AWG. **Color:** Green

Fig. 2



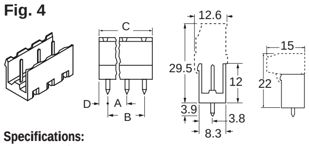
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 12 A. 12-24 AWG. **Color:** Green

Fig. 3



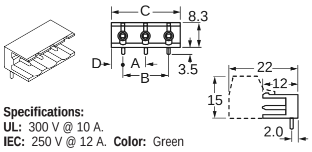
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 12 A. 12-24 AWG. **Color:** Green

Fig. 4



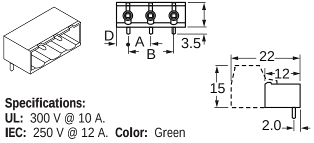
Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 5



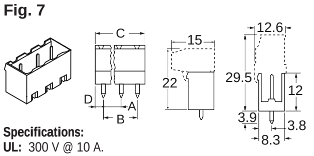
Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 6



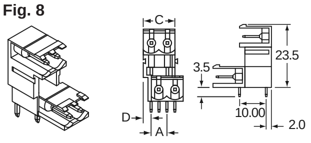
Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 7



Specifications:
UL: 300 V @ 10 A.
IEC: 250 V @ 12 A. **Color:** Green

Fig. 8



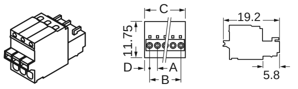
Specifications:
UL: 300 V @ 10 A. **IEC:** 250 V @ 10 A. **Color:** Green

No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 1 — 5mm Connector Terminal Block Plug										
2	5.0	5	10	2.5	277-1000-ND	1.38	1.24	1.11	MSTB 2.5/2-ST	1754449
3	5.0	10	15	2.5	277-1001-ND	2.07	1.86	1.66	MSTB 2.5/3-ST	1754465
4	5.0	15	20	2.5	277-1002-ND	2.76	2.48	2.21	MSTB 2.5/4-ST	1754481
5	5.0	20	25	2.5	277-1003-ND	3.42	3.08	2.74	MSTB 2.5/5-ST	1754504
6	5.0	25	30	2.5	277-1004-ND	4.11	3.70	3.29	MSTB 2.5/6-ST	1754520
7	5.0	30	35	2.5	277-1005-ND	4.81	4.33	3.85	MSTB 2.5/7-ST	1754546
8	5.0	35	40	2.5	277-1006-ND	5.46	4.92	4.37	MSTB 2.5/8-ST	1754562
9	5.0	40	45	2.5	277-1007-ND	6.18	5.56	4.94	MSTB 2.5/9-ST	1754588
10	5.0	45	50	2.5	277-1008-ND	6.86	6.18	5.50	MSTB 2.5/10-ST	1754601
11	5.0	50	55	2.5	277-1009-ND	7.53	6.78	6.03	MSTB 2.5/11-ST	1754627
12	5.0	55	60	2.5	277-1010-ND	8.22	7.40	6.58	MSTB 2.5/12-ST	1754643
Fig. 1 — 5.08mm Connector Terminal Block Plug										
2	5.08	5.08	10.16	2.54	277-1011-ND	1.38	1.24	1.11	MSTB 2.5/2-ST-5.08	1757019
3	5.08	10.16	15.24	2.54	277-1012-ND	2.07	1.86	1.66	MSTB 2.5/3-ST-5.08	1757022
4	5.08	15.24	20.32	2.54	277-1013-ND	2.76	2.48	2.21	MSTB 2.5/4-ST-5.08	1757035
5	5.08	20.32	25.40	2.54	277-1014-ND	3.42	3.08	2.74	MSTB 2.5/5-ST-5.08	1757048
6	5.08	25.40	30.48	2.54	277-1015-ND	4.11	3.70	3.29	MSTB 2.5/6-ST-5.08	1757051
7	5.08	30.48	35.56	2.54	277-1016-ND	4.81	4.33	3.85	MSTB 2.5/7-ST-5.08	1757064
8	5.08	35.56	40.64	2.54	277-1017-ND	5.46	4.92	4.37	MSTB 2.5/8-ST-5.08	1757077
9	5.08	40.64	45.72	2.54	277-1018-ND	6.18	5.56	4.94	MSTB 2.5/9-ST-5.08	1757080
10	5.08	45.72	50.80	2.54	277-1019-ND	6.86	6.18	5.50	MSTB 2.5/10-ST-5.08	1757093
11	5.08	50.80	55.88	2.54	277-1020-ND	7.53	6.78	6.03	MSTB 2.5/11-ST-5.08	1757103
12	5.08	55.88	60.96	2.54	277-1021-ND	8.22	7.40	6.58	MSTB 2.5/12-ST-5.08	1757116
Fig. 2 — 5mm Connector Terminal Block Plug										
2	5.0	5	10	2.5	277-1029-ND	1.59	1.43	1.27	MVSTBR 2.5/2-ST	1792016
3	5.0	10	15	2.5	277-1030-ND	2.34	2.11	1.88	MVSTBR 2.5/3-ST	1792029
4	5.0	15	20	2.5	277-1031-ND	3.16	2.85	2.53	MVSTBR 2.5/4-ST	1792032
5	5.0	20	25	2.5	277-1032-ND	3.95	3.56	3.17	MVSTBR 2.5/5-ST	1792045
6	5.0	25	30	2.5	277-1033-ND	4.75	4.28	3.80	MVSTBR 2.5/6-ST	1792058
7	5.0	30	35	2.5	277-1034-ND	5.54	4.99	4.44	MVSTBR 2.5/7-ST	1792061
8	5.0	35	40	2.5	277-1035-ND	6.31	5.68	5.05	MVSTBR 2.5/8-ST	1792074
9	5.0	40	45	2.5	277-1036-ND	7.11	6.40	5.69	MVSTBR 2.5/9-ST	1792087
10	5.0	45	50	2.5	277-1037-ND	7.88	7.09	6.31	MVSTBR 2.5/10-ST	1792090
11	5.0	50	55	2.5	277-1038-ND	8.68	7.82	6.95	MVSTBR 2.5/11-ST	1792100
12	5.0	55	60	2.5	277-1039-ND	9.46	8.52	7.58	MVSTBR 2.5/12-ST	1792113
Fig. 2 — 5.08mm Connector Terminal Block Plug										
2	5.08	5.08	10.16	2.54	277-1040-ND	1.59	1.43	1.27	MVSTBR 2.5/2-ST-5.08	1792249
3	5.08	10.16	15.24	2.54	277-1041-ND	2.34	2.11	1.88	MVSTBR 2.5/3-ST-5.08	1792252
4	5.08	15.24	20.32	2.54	277-1042-ND	3.16	2.85	2.53	MVSTBR 2.5/4-ST-5.08	1792265
5	5.08	20.32	25.40	2.54	277-1043-ND	3.95	3.56	3.17	MVSTBR 2.5/5-ST-5.08	1792278
6	5.08	25.40	30.48	2.54	277-1044-ND	4.75	4.28	3.80	MVSTBR 2.5/6-ST-5.08	1792281
7	5.08	30.48	35.56	2.54	277-1045-ND	5.54	4.99	4.44	MVSTBR 2.5/7-ST-5.08	1792294
8	5.08	35.56	40.64	2.54	277-1046-ND	6.31	5.68	5.05	MVSTBR 2.5/8-ST-5.08	1792304
9	5.08	40.64	45.72	2.54	277-1047-ND	7.11	6.40	5.69	MVSTBR 2.5/9-ST-5.08	1792317
10	5.08	45.72	50.80	2.54	277-1048-ND	7.88	7.09	6.31	MVSTBR 2.5/10-ST-5.08	1792320
11	5.08	50.80	55.88	2.54	277-1049-ND	8.68	7.82	6.95	MVSTBR 2.5/11-ST-5.08	1792333
12	5.08	55.88	60.96	2.54	277-1050-ND	9.46	8.52	7.58	MVSTBR 2.5/12-ST-5.08	1792346
Fig. 3 — 5mm Connector Terminal Block Plug										
2	5.0	5	10	2.5	277-1051-ND	1.59	1.43	1.27	MVSTBW 2.5/2-ST	1792524
3	5.0	10	15	2.5	277-1052-ND	2.34	2.11	1.88	MVSTBW 2.5/3-ST	1792537
4	5.0	15	20	2.5	277-1053-ND	3.16	2.85	2.53	MVSTBW 2.5/4-ST	1792540
5	5.0	20	25	2.5	277-1054-ND	3.95	3.56	3.17	MVSTBW 2.5/5-ST	1792553
6	5.0	25	30	2.5	277-1055-ND	4.75	4.28	3.80	MVSTBW 2.5/6-ST	1792566
7	5.0	30	35	2.5	277-1056-ND	5.54	4.99	4.44	MVSTBW 2.5/7-ST	1792579
8	5.0	35	40	2.5	277-1057-ND	6.31	5.68	5.05	MVSTBW 2.5/8-ST	1792582
9	5.0	40	45	2.5	277-1058-ND	7.11	6.40	5.69	MVSTBW 2.5/9-ST	1792595
10	5.0	45	50	2.5	277-1059-ND	7.88	7.09	6.31	MVSTBW 2.5/10-ST	1792605
11	5.0	50	55	2.5	277-1060-ND	8.68	7.82	6.95	MVSTBW 2.5/11-ST	1792618
12	5.0	55	60	2.5	277-1061-ND	9.46	8.52	7.58	MVSTBW 2.5/12-ST	1792621
Fig. 3 — 5.08mm Connector Terminal Block Plug										
2	5.08	5.08	10.16	2.54	277-1062-ND	1.59	1.43	1.27	MVSTBW 2.5/2-ST-5.08	1792757
3	5.08	10.16	15.24	2.54	277-1063-ND	2.34	2.11	1.88	MVSTBW 2.5/3-ST-5.08	1792760
4	5.08	15.24	20.32	2.54	277-1064-ND	3.16	2.85	2.53	MVSTBW 2.5/4-ST-5.08	1792773
5	5.08	20.32	25.40	2.54	277-1065-ND	3.95	3.56	3.17	MVSTBW 2.5/5-ST-5.08	1792786
6	5.08	25.40	30.48	2.54	277-1066-ND	4.75	4.28	3.80	MVSTBW 2.5/6-ST-5.08	1792799
7	5.08	30.48	35.56	2.54	277-1067-ND	5.54	4.99	4.44	MVSTBW 2.5/7-ST-5.08	1792809
8	5.08	35.56	40.64	2.54	277-1068-ND	6.31	5.68	5.05	MVSTBW 2.5/8-ST-5.08	1792812
9	5.08	40.64	45.72	2.54	277-1069-ND	7.11	6.40	5.69	MVSTBW 2.5/9-ST-5.08	1792825
10	5.08	45.72	50.80	2.54	277-1070-ND	7.88	7.09	6.31	MVSTBW 2.5/10-ST-5.08	1792838
11	5.08	50.80	55.88	2.54	277-1071-ND	8.68	7.82	6.95	MVSTBW 2.5/11-ST-5.08	1792841
12	5.08	55.88	60.96	2.54	277-1072-ND	9.46	8.52	7.58	MVSTBW 2.5/12-ST-5.08	1792854
Fig. 4 — 5mm Connector Header — Vertical										
2	5.0	5	10	2.5	277-1073-ND	.48	.44	.39	MSTBV 2.5/2-G	1753437
3	5.0	10	15	2.5	277-1074-ND	.72	.65	.58	MSTBV 2.5/3-G	1753453
4	5.0	15	20	2.5	277-1075-ND	.96	.87	.77	MSTBV 2.5/4-G	1753479
5	5.0	20	25	2.5	277-1076-ND	1.20	1.08	.96	MSTBV 2.5/5-G	1753495
6	5.0	25	30	2.5	277-1077-ND	1.43	1.29	1.15	MSTBV 2.5/6-G	1753518
7	5.0	30	35	2.5	277-1078-ND	1.66	1.50	1.34	MSTBV 2.5/7-G	1753534
8	5.0	35	40	2.5	277-1079-ND	1.90	1.71	1.52	MSTBV 2.5/8-G	1753550
9	5.0	40	45	2.5	277-1080-ND	2.15	1.94	1.72	MSTBV 2.5/9-G	1753576
10	5.0	45	50	2.5	277-1081-ND	2.38	2.15	1.91	MSTBV 2.5/10-G	1753592
11	5.0	50	55	2.5	277-1082-ND	2.63	2.37	2.11	MSTBV 2.5/11-G	1753615
12	5.0	55	60	2.5	277-1083-ND	2.86	2.58	2.29	MSTBV 2.5/12-G	1753631
Fig. 4 — 5.08mm Connector Header — Vertical										
2	5.08	5.08	10.16	2.54	277-1128-ND	.48	.44	.39	MSTBV 2.5/2-G-5.08	1758018
3	5.08	10.16	15.24	2.54	277-1129-ND	.72	.65	.58	MSTBV 2.5/3-G-5.08	1758021
4	5.08	15.24	20.32	2.54	277-1130-ND	.96	.87	.77	MSTBV 2.5/4-G-5.08	1758034
5	5.08	20.32	25.40	2.54	277-1131-ND	1.20	1.08	.96	MSTBV 2.5/5-G-5.08	1758047
6	5.08	25.40	30.48	2.54	277-1132-ND	1.43	1.29	1.15	MSTBV 2.5/6-G-5.08	1758050
7	5.08	30.48	35.56	2.54	277-1133-ND	1.66	1.50	1.34	MSTBV 2.5/7-G-5.08	1758063
8	5.08	35.56	40.64	2.54	277-1134-ND	1.90	1.71	1.52	MSTBV 2.5/8-G-5.08	1758076
9	5.08	40.64	45.72	2.54	277-1135-ND	2.15	1.94	1.72	MSTBV 2.5/9-G-5.08	1758089
10	5.08	45.72	50.80	2.54	277-1136-ND	2.38	2.15	1.91	MSTBV 2.5/10-G-5.08	1758092
11	5.08	50.80	55.88	2.54	277-1137-ND	2.63	2.37	2.11	MSTBV 2.5/11-G-5.08	1758102
12	5.08	55.88	60.96	2.54	277-1138-ND	2.86	2.58	2.29	MSTBV 2.5/12-G-5.08	1758115
Fig. 5 — 5mm Connector Header — Right Angle										
2	5.0	5	10	2.5	277-1084-ND	.48	.44	.39	MSTB 2.5/2-G	1754436
3	5.0	10	15	2.5	277-1085-ND	.72	.65	.58	MSTB 2.5/3-G	1754452
4	5.0	15	20	2.5	277-1086-ND	.96	.87	.77	MSTB 2.5/4-G	1754478
5	5.0	20	25	2.5	277-1087-ND	1.20	1.08	.96	MSTB 2.5/5-G	1754494
6	5.0	25	30	2.5	277-1088-ND	1.43	1.29	1.15	MSTB 2.5/6-G	1754517
7	5.0	30	35	2.5	277-1089-ND	1.66	1.50	1.34	MSTB 2.5/7-G	1754533
8	5.0	35	40	2.5	277-1090-ND	1.90	1.71	1.52	MSTB 2.5/8-G	1754559
9	5.0	40	45	2.5	277-1091-ND	2.15	1.94	1.72	MSTB 2.5/9-G	1754575
10	5.0	45	50	2.5	277-1092-ND	2.38	2.15	1.91	MSTB 2.5/10-G	1754591
11	5.0	50	55	2.5	277-1093-ND	2.63	2.37	2.11	MSTB 2.5/11-G	1754614
12	5.0	55	60	2.5	277-1094-ND	2.86	2.58	2.29	MSTB 2.5/12-G	1754630
Fig. 5 — 5.08mm Connector Header — Right Angle										
2	5.08	5.08	10.16	2.54	277-1095-ND	.48	.44	.39	MSTB 2.5/2-G-5.08	1759017
3	5.08	10.16	15.24	2.54	277-1096-ND	.72	.65	.58	MSTB 2.5/3-G-5.08	1759020
4	5.08	15.24	20.32	2.54	277-1097-ND	.96	.87	.77	MSTB 2.5/4-G-5.08	1759033
5	5.08	20.32	25.40	2.54	277-1098-ND	1.20	1.08	.96	MSTB 2.5/5-G-5.08	1759046
6	5.08	25.40	30.48	2.54	277-1099-ND	1.43	1.29	1.15	MSTB 2.5/6-G-5.08	1759059
7	5.08	30.48	35.56	2.54	277-1100-ND	1.66	1.50	1.34	MSTB 2.5/7-G-5.08	1759062
8	5.08	35.56	40.64	2.54	277-1101-ND	1.90	1.71	1.52	MSTB 2.5/8-G-5.08	1759075
9	5.08	40.64	45.72	2.54	277-1102-ND	2.15	1.94	1.72	MSTB 2.5/9-G-5.08	1759088
10	5.08	45.72	50.80	2.54	277-1103-ND	2.38	2.15	1.91	MSTB 2.5/10-G-5.08	1759091
11	5.08	50.80	55.88	2.54	277-1104-ND	2.63	2.37	2.11	MSTB 2.5/11-G-5.08	1759101
12	5.08	55.88	60.96	2.54	277-1105-ND	2.86	2.58	2.29	MSTB 2.5/12-G-5.08	1759114
Fig. 6 — 5mm Connector Header — Right Angle										
2	5.0	5	12	3.5	277-1117-ND	.48	.44	.39	MSTBA 2.5/2-G	1757475
3	5.0	10	17	3.5	277-1118-ND	.72	.65	.58	MSTBA 2.5/3-G	1757488
4	5.0	15	22	3.5	277-1119-ND	.96	.87	.77	MSTBA 2.5/4-G	1757491
5	5.0	20	27	3.5	277-1120-ND	1.20	1.08	.96	MSTBA 2.5/5-G	1757501
6	5.0	25	32	3.5	277-1121-ND	1.43	1.29	1.15	MSTBA 2.5/6-G	1757514
7	5.0	30	37	3.5	277-1122-ND	1.66	1.50	1.34	MSTBA 2.5/7-G	1755493
8	5.0	35	42	3.5	277-1123-ND	1.90	1.71	1.52	MSTBA 2.5/8-G	1757527
9	5.0	40	47	3.5	277-1124-ND	2.15	1.94	1.72	MSTBA 2.5/9-G	1757530
10	5.0	45	52	3.5	277-1125-ND	2.38	2.15	1.91	MSTBA 2.5/10-G	1757543
11	5.0	50	57	3.5	277-1126-ND	2.63	2.37	2.11	MSTBA 2.5/11-G	1757556
12	5.0	55	62	3.5	277-1127-ND	2.86	2.58	2.29	MSTBA 2.5/12-G	1757569
Fig. 6 — 5.08mm Connector Header — Right Angle										
2	5.08	5.08	12.16	3.54	277-1106-ND	.48	.44	.39	MSTBA 2.5/2-G-5.08	1757242
3	5.08	10.16	17.24	3.54	277-1107-ND	.72	.65	.58	MSTBA 2.5/3-G-5.08	1757255
4	5.08	15.24	22.32	3.54	277-1108-ND	.96	.87	.77	MSTBA 2.5/4-G-5.08	1757268
5	5.08	20.32	27.40	3.54	277-1109-ND	1.20	1.08	.96	MSTBA 2.5/5-G-5.08	1757271
6	5.08	25.40	32.48	3.54	277-1110-ND	1.43	1.29	1.15	MSTBA 2.5/6-G-5.08	1757284
7	5.08	30.48	37.56	3.54	277-1111-ND	1.66	1.50	1.34	MSTBA 2.5/7-G-5.08	1757297
8	5.08	35.56	42.64	3.54	277-1112-ND	1.90	1.71	1.52	MSTBA 2.5/8-G-5.08	1757307
9	5.08	40.64	47.72	3.54	277-1113-ND	2.15	1.94	1.72	MSTBA 2.5/9-G-5.08	1757310
10	5.08	45.72	52.80	3.54	277-1114-ND	2.38	2.15	1.91	MSTBA 2.5/10-G-5.08	1757323
11	5.08	50.80	57.88	3.54	277-1115-ND	2.63	2.37	2.11	MSTBA 2.5/11-G-5.08	1757336
12	5.08	55.88	62.96	3.54	277-1116-ND	2.86	2.58	2.29	MSTBA 2.5/12-G-5.08	1757349
Fig. 7 — 5mm Connector Header — Vertical										
2	5.0	5	12	3.5	277-1140-ND	.48	.44	.39	MSTBVA 2.5/2-G	1755516
3	5.0	10	17	3.5	277-1141-ND	.72	.65	.58	MSTBVA 2.5/3-G	1755529
4	5.0	15	22	3.5	277-1142-ND	.96	.87	.77	MSTBVA 2.5/4-G	1755532
5	5.0	20	27	3.5	277-1143-ND	1.20	1.08	.96	MSTBVA 2.5/5-G	1755545
6	5.0	25	32	3.5	277-1144-ND	1.43	1.29	1.15	MSTBVA 2.5/6-G	1755558
7	5.0	30	37	3.5	277-1145-ND	1.66	1.50	1.34	MSTBVA 2.5/7-G	1755561
8	5.0	35	42	3.5	277-1146-ND	1.90	1.71	1.52	MSTBVA 2.5/8-G	1755574
9	5.0	40	47	3.5	277-1147-ND	2.15	1.94	1.72	MSTBVA 2.5/9-G	1755587
10	5.0	45	52	3.5	277-1139-ND	2.38	2.15	1.91	MSTBVA 2.5/10-G	1755503
11	5.0	50	57	3.5	277-1148-ND	2.63	2.37	2.11	MSTBVA 2.5/11-G	1755590
12	5.0	55	62	3.5	277-1149-ND	2.86	2.58	2.29	MSTBVA 2.5/12-G	1755600

(Continued)

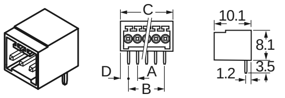
Terminal Blocks — PCB Plugs and Headers *(Cont.)*

Fig. 9



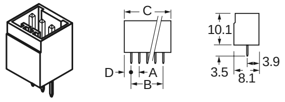
Specifications:
UL: 125 V @ 4 A, 20-28 AWG.
IEC: 100 V @ 4 A, 20-28 AWG. **Color:** Green

Fig. 10



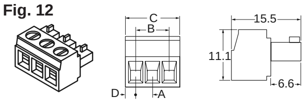
Specifications:
UL: 125 V @ 4 A. **IEC:** 80 V @ 4 A. **Color:** Green

Fig. 11



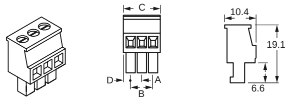
Specifications:
UL: 125 V @ 4 A. **IEC:** 80 V @ 4 A. **Color:** Green

Fig. 12



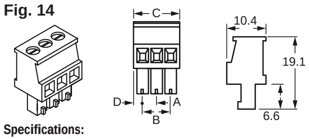
Specifications:
UL: 300 V @ 8 A. 14-30 AWG.
IEC: 125 V @ 8 A. 16-28 AWG. **Color:** Green

Fig. 13



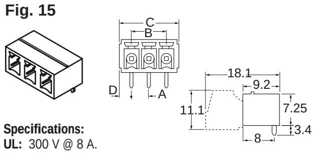
Specifications:
UL: 300 V @ 8 A. 14-30 AWG.
IEC: 125 V @ 8 A. 16-28 AWG. **Color:** Green

Fig. 14



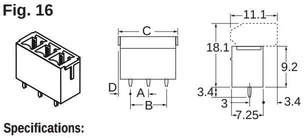
Specifications:
UL: 300 V @ 8 A. 14-30 AWG.
IEC: 125 V @ 8 A. 16-28 AWG. **Color:** Green

Fig. 15



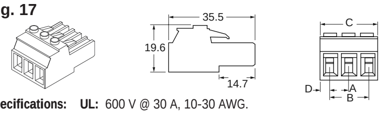
Specifications:
UL: 300 V @ 8 A.
IEC: 125 V @ 8 A. **Color:** Green

Fig. 16



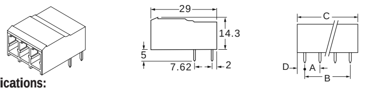
Specifications:
UL: 300 V @ 8 A.
IEC: 125 V @ 8 A. **Color:** Green

Fig. 17



Specifications: **UL:** 600 V @ 30 A, 10-30 AWG.
IEC: 800 V @ 20 A, 10-24 AWG. **Color:** Green

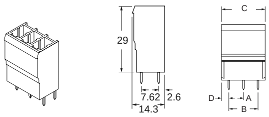
Fig. 18



Specifications:
UL: 600 V @ 30 A. **IEC:** 400 V @ 20 A. **Color:** Green

Fig. 19

Specifications:
UL: 600 V @ 30 A.
IEC: 400 V @ 20 A.
Color: Green



No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 7 — 5.08mm Connector Header — Vertical										
2	5.08	5.08	12.16	3.54	277-1150-ND	.48	.44	.39	MSTBVA 2.5/2-G-5.08	1755736
3	5.08	10.16	17.24	3.54	277-1151-ND	.72	.65	.58	MSTBVA 2.5/3-G-5.08	1755749
4	5.08	15.24	22.32	3.54	277-1152-ND	.96	.87	.77	MSTBVA 2.5/4-G-5.08	1755752
5	5.08	20.32	27.40	3.54	277-1153-ND	1.20	1.08	.96	MSTBVA 2.5/5-G-5.08	1755765
6	5.08	25.40	32.48	3.54	277-1154-ND	1.43	1.29	1.15	MSTBVA 2.5/6-G-5.08	1755778
7	5.08	30.48	37.56	3.54	277-1155-ND	1.66	1.50	1.34	MSTBVA 2.5/7-G-5.08	1755781
8	5.08	35.56	42.64	3.54	277-1156-ND	1.90	1.71	1.52	MSTBVA 2.5/8-G-5.08	1755794
9	5.08	40.64	47.72	3.54	277-1157-ND	2.15	1.94	1.72	MSTBVA 2.5/9-G-5.08	1755804
10	5.08	45.72	52.80	3.54	277-1158-ND	2.38	2.15	1.91	MSTBVA 2.5/10-G-5.08	1755817
11	5.08	50.80	57.88	3.54	277-1159-ND	2.63	2.37	2.11	MSTBVA 2.5/11-G-5.08	1755820
12	5.08	55.88	62.96	3.54	277-1160-ND	2.86	2.58	2.29	MSTBVA 2.5/12-G-5.08	1755833
Fig. 8 — 5.0mm & 5.08mm Double Level PCB Header without Side Panels										
2	5.00	—	10.00	2.50	277-1379-ND	1.74	1.57	1.40	MDSTB 2.5/2-G	1762046
3	5.00	—	15.00	2.50	277-1380-ND	2.50	2.25	2.00	MDSTB 2.5/3-G	1762059
2	5.08	—	10.16	2.54	277-1381-ND	1.74	1.57	1.40	MDSTB 2.5/2-G-5.08	1762062
3	5.08	—	15.24	2.54	277-1382-ND	2.50	2.25	2.00	MDSTB 2.5/3-G-5.08	1762075
Fig. 9 — 2.5mm Spring Cage Terminal Block Plug										
2	2.5	2.5	5.6	1.55	277-1430-ND	2.56	2.31	2.05	FK-MC 0.5/2-ST-2.5	1881325
3	2.5	5.0	8.1	1.55	277-1431-ND	3.46	3.12	2.77	FK-MC 0.5/3-ST-2.5	1881338
4	2.5	7.5	10.6	1.55	277-1432-ND	4.37	3.94	3.50	FK-MC 0.5/4-ST-2.5	1881341
5	2.5	10.0	13.1	1.55	277-1433-ND	5.23	4.71	4.19	FK-MC 0.5/5-ST-2.5	1881354
6	2.5	12.5	15.6	1.55	277-1434-ND	6.15	5.54	4.92	FK-MC 0.5/6-ST-2.5	1881367
7	2.5	15.0	18.1	1.55	277-1435-ND	7.03	6.33	5.63	FK-MC 0.5/7-ST-2.5	1881370
8	2.5	17.5	20.6	1.55	277-1436-ND	7.98	7.19	6.39	FK-MC 0.5/8-ST-2.5	1881383
9	2.5	20.0	23.1	1.55	277-1437-ND	8.84	7.96	7.08	FK-MC 0.5/9-ST-2.5	1881396
10	2.5	22.5	25.6	1.55	277-1438-ND	9.76	8.79	7.82	FK-MC 0.5/10-ST-2.5	1881406
11	2.5	25.0	28.1	1.55	277-1439-ND	10.62	9.56	8.50	FK-MC 0.5/11-ST-2.5	1881419
12	2.5	27.5	30.6	1.55	277-1440-ND	11.56	10.41	9.25	FK-MC 0.5/12-ST-2.5	1881422
Fig. 10 — 2.5mm Connector Header - Right Angle										
2	2.5	2.5	6.9	2.2	277-1441-ND	.61	.55	.49	MC 0.5/2-G-2.5	1881448
3	2.5	5.0	9.4	2.2	277-1442-ND	.87	.79	.70	MC 0.5/3-G-2.5	1881451
4	2.5	7.5	11.9	2.2	277-1443-ND	1.14	1.03	.92	MC 0.5/4-G-2.5	1881464
5	2.5	10.0	14.4	2.2	277-1444-ND	1.42	1.28	1.14	MC 0.5/5-G-2.5	1881477
6	2.5	12.5	16.9	2.2	277-1445-ND	1.68	1.51	1.35	MC 0.5/6-G-2.5	1881480
7	2.5	15.0	19.4	2.2	277-1446-ND	1.94	1.75	1.55	MC 0.5/7-G-2.5	1881493
8	2.5	17.5	21.9	2.2	277-1447-ND	2.21	1.99	1.77	MC 0.5/8-G-2.5	1881503
9	2.5	20.0	24.4	2.2	277-1448-ND	2.47	2.23	1.98	MC 0.5/9-G-2.5	1881516
10	2.5	22.5	26.9	2.2	277-1449-ND	2.76	2.48	2.21	MC 0.5/10-G-2.5	1881529
11	2.5	25.0	29.4	2.2	277-1450-ND	3.00	2.71	2.41	MC 0.5/11-G-2.5	1881532
12	2.5	27.5	31.9	2.2	277-1451-ND	3.28	2.95	2.63	MC 0.5/12-G-2.5	1881545
Fig. 11 — 2.5mm Connector Header - Vertical										
2	2.5	2.5	6.9	2.2	277-1452-ND	.61	.55	.49	MCV 0.5/2-G-2.5	1881558
3	2.5	5.0	9.4	2.2	277-1453-ND	.87	.79	.70	MCV 0.5/3-G-2.5	1881561
4	2.5	7.5	11.9	2.2	277-1454-ND	1.14	1.03	.92	MCV 0.5/4-G-2.5	1881574
5	2.5	10.0	14.4	2.2	277-1455-ND	1.42	1.28	1.14	MCV 0.5/5-G-2.5	1881587
6	2.5	12.5	16.9	2.2	277-1456-ND	1.68	1.51	1.35	MCV 0.5/6-G-2.5	1881590
7	2.5	15.0	19.4	2.2	277-1457-ND	1.94	1.75	1.55	MCV 0.5/7-G-2.5	1881600
8	2.5	17.5	21.9	2.2	277-1458-ND	2.21	1.99	1.77	MCV 0.5/8-G-2.5	1881613
9	2.5	20.0	24.4	2.2	277-1459-ND	2.47	2.23	1.98	MCV 0.5/9-G-2.5	1881626
10	2.5	22.5	26.9	2.2	277-1460-ND	2.76	2.48	2.21	MCV 0.5/10-G-2.5	1881639
11	2.5	25.0	29.4	2.2	277-1461-ND	3.00	2.71	2.41	MCV 0.5/11-G-2.5	1881642
12	2.5	27.5	31.9	2.2	277-1462-ND	3.28	2.95	2.63	MCV 0.5/12-G-2.5	1881655
Fig. 12 — 3.81mm Connector Terminal Block Plug										
2	3.81	3.81	8.41	2.3	277-1161-ND	1.63	1.47	1.30	MC 1.5/2-ST-3.81	1803578
3	3.81	7.62	12.22	2.3	277-1162-ND	2.41	2.17	1.93	MC 1.5/3-ST-3.81	1803581
4	3.81	11.43	16.03	2.3	277-1163-ND	3.20	2.88	2.56	MC 1.5/4-ST-3.81	1803594
5	3.81	15.24	19.84	2.3	277-1164-ND	4.04	3.64	3.24	MC 1.5/5-ST-3.81	1803604
6	3.81	19.05	23.65	2.3	277-1165-ND	4.82	4.35	3.86	MC 1.5/6-ST-3.81	1803617
7	3.81	22.86	27.46	2.3	277-1166-ND	5.63	5.07	4.51	MC 1.5/7-ST-3.81	1803620
8	3.81	26.67	31.27	2.3	277-1167-ND	6.41	5.77	5.13	MC 1.5/8-ST-3.81	1803633
9	3.81	30.48	35.08	2.3	277-1168-ND	7.23	6.51	5.79	MC 1.5/9-ST-3.81	1803646
10	3.81	34.29	38.89	2.3	277-1169-ND	8.03	7.24	6.43	MC 1.5/10-ST-3.81	1803659
11	3.81	38.10	42.70	2.3	277-1170-ND	8.83	7.95	7.07	MC 1.5/11-ST-3.81	1803662
12	3.81	41.91	46.51	2.3	277-1171-ND	9.62	8.66	7.70	MC 1.5/12-ST-3.81	1803675
13	3.81	45.72	50.32	2.3	277-1172-ND	10.44	9.40	8.36	MC 1.5/13-ST-3.81	1803688
14	3.81	49.53	54.13	2.3	277-1173-ND	11.25	10.13	9.00	MC 1.5/14-ST-3.81	1803691
15	3.81	53.34	57.94	2.3	277-1174-ND	12.04	10.84	9.64	MC 1.5/15-ST-3.81	1803701
16	3.81	57.15	61.75	2.3	277-1175-ND	12.83	11.55	10.27	MC 1.5/16-ST-3.81	1803714
Fig. 13 — 3.81mm Connector Terminal Block Plug										
2	3.81	3.81	8.41	2.3	277-1176-ND	1.74	1.57	1.40	MCVW 1.5/2-ST-3.81	1826979
3	3.81	7.62	12.22	2.3	277-1177-ND	2.59	2.33	2.07	MCVW 1.5/3-ST-3.81	1826982
4	3.81	11.43	16.03	2.3	277-1178-ND	3.45	3.11	2.76	MCVW 1.5/4-ST-3.81	1826995
5	3.81	15.24	19.84	2.3	277-1179-ND	4.33	3.90	3.47	MCVW 1.5/5-ST-3.81	1827004
6	3.81	19.05	23.65	2.3	277-1180-ND	5.19	4.67	4.15	MCVW 1.5/6-ST-3.81	1827017
7	3.81	22.86	27.46	2.3	277-1181-ND	6.05	5.45	4.84	MCVW 1.5/7-ST-3.81	1827020
8	3.81	26.67	31.27	2.3	277-1182-ND	6.92	6.23	5.54	MCVW 1.5/8-ST-3.81	1827033
9	3.81	30.48	35.08	2.3	277-1183-ND	7.80	7.02	6.24	MCVW 1.5/9-ST-3.81	1827046
10	3.81	34.29	38.89	2.3	277-1184-ND	8.63	7.77	6.91	MCVW 1.5/10-ST-3.81	1827059
11	3.81	38.10	42.70	2.3	277-1185-ND	9.52	8.57	7.62	MCVW 1.5/11-ST-3.81	1827062
12	3.81	41.91	46.51	2.3	277-1186-ND	10.40	9.36	8.32	MCVW 1.5/12-ST-3.81	1827075
13	3.81	45.72	50.32	2.3	277-1187-ND	11.25	10.13	9.00	MCVW 1.5/13-ST-3.81	1827088
14	3.81	49.53	54.13	2.3	277-1188-ND	12.12	10.91	9.70	MCVW 1.5/14-ST-3.81	1827091
15	3.81	53.34	57.94	2.3	277-1189-ND	12.99	11.69	10.39	MCVW 1.5/15-ST-3.81	1827101
16	3.81	57.15	61.75	2.3	277-1190-ND	13.85	12.47	11.08	MCVW 1.5/16-ST-3.81	1827114
Fig. 14 — 3.81mm Connector Terminal Block Plug										
2	3.81	3.81	8.41	2.3	277-1191-ND	1.74	1.57	1.40	MCVR 1.5/2-ST-3.81	1827127
3	3.81	7.62	12.22	2.3	277-1192-ND	2.59	2.33	2.07	MCVR 1.5/3-ST-3.81	1827130
4	3.81	11.43	16.03	2.3	277-1193-ND	3.45	3.11	2.76	MCVR 1.5/4-ST-3.81	1827143
5	3.81	15.24	19.84	2.3	277-1194-ND	4.33	3.90	3.47	MCVR 1.5/5-ST-3.81	1827156
6	3.81	19.05	23.65	2.3	277-1195-ND	5.19	4.67	4.15	MCVR 1.5/6-ST-3.81	1827169
7	3.81	22.86	27.46	2.3	277-1196-ND	6.05	5.45	4.84	MCVR 1.5/7-ST-3.81	1827172
8	3.81	26.67	31.27	2.3	277-1197-ND	6.92	6.23	5.54	MCVR 1.5/8-ST-3.81	1827185
9	3.81	30.48	35.08	2.3	277-1198-ND	7.80	7.02	6.24	MCVR 1.5/9-ST-3.81	1827198
10	3.81	34.29	38.89	2.3	277-1199-ND	8.63	7.77	6.91	MCVR 1.5/10-ST-3.81	1827208
11	3.81	38.10	42.70	2.3	277-1200-ND	9.52	8.57	7.62	MCVR 1.5/11-ST-3.81	1827211
12	3.81	41.91	46.51	2.3	277-1201-ND	10.40	9.36	8.32	MCVR 1.5/12-ST-3.81	1827224
13	3.81	45.72	50.32	2.3	277-1202-ND	11.25	10.13	9.00	MCVR 1.5/13-ST-3.81	1827237
14	3.81	49.53	54.13	2.3	277-1203-ND	12.12	10.91	9.70	MCVR 1.5/14-ST-3.81	1827240
15	3.81	53.34	57.94	2.3	277-1204-ND	12.99	11.69	10.39	MCVR 1.5/15-ST-3.81	1827253
16	3.81	57.15	61.75	2.3	277-1205-ND	13.85	12.47	11.08	MCVR 1.5/16-ST-3.81	1827266
Fig. 15 — 3.81mm Connector Header — Right Angle										
2	3.81	3.81	9.01	2.6	277-1206-ND	.56	.51	.45	MC 1.5/2-G-3.81	1803277
3	3.81	7.62	12.82	2.6	277-1207-ND	.85	.77	.68	MC 1.5/3-G-3.81	1803280
4	3.81	11.43	16.63	2.6	277-1208-ND	1.12	1.01	.90	MC 1.5/4-G-3.81	1803293
5	3.81	15.24	20.44	2.6	277-1209-ND	1.39	1.26	1.12	MC 1.5/5-G-3.81	1803303
6	3.81	19.05	24.25	2.6	277-1210-ND	1.68	1.51	1.35	MC 1.5/6-G-3.81	1803316
7	3.81	22.86	28.06	2.6	277-1211-ND	1.95	1.76	1.56	MC 1.5/7-G-3.81	1803329
8	3.81	26.67	31.87	2.6	277-1212-ND	2.22	2.01	1.78	MC 1.5/8-G-3.81	1803332
9	3.81	30.48	35.68	2.6	277-1213-ND	2.54	2.29	2.03	MC 1.5/9-G-3.81	1803345
10	3.81	34.29	39.49	2.6	277-1214-ND	2.81	2.53	2.25	MC 1.5/10-G-3.81	1803358
11	3.81	38.10	43.30	2.6	277-1215-ND	3.07	2.77	2.46	MC 1.5/11-G-3.81	1803361
12	3.81	41.91	47.11	2.6	277-1216-ND	3.37	3.03	2.70	MC 1.5/12-G-3.81	1803374
13	3.81	45.72	50.92	2.6	277-1217-ND	3.63	3.27	2.91	MC 1.5/13-G-3.81	1803387
14	3.81	49.53	54.73	2.6	277-1218-ND	3.90	3.51	3.12	MC 1.5/14-G-3.81	1803390
15	3.81	53.34	58.54	2.6	277-1219-ND	4.19	3.77	3.35	MC 1.5/15-G-3.81	1803400
16	3.81	57.15	62.35	2.6	277-1220-ND	4.46	4.02	3.57	MC 1.5/16-G-3.81	1803413
Fig. 16 — 3.81mm Connector Header — Vertical										
2	3.81	3.81	9.01	2.6	277-1221-ND	.56	.51	.45	MCV 1.5/2-G-3.81	1803426
3	3.81	7.62	12.82	2.6	277-1222-ND	.85	.77	.68	MCV 1.5/3-G-3.81	1803439
4	3.81	11.43	16.63	2.6	277-1223-ND	1.12	1.01	.90	MCV 1.5/4-G-3.81	1803442
5	3.81	15.24	20.44	2.6	277-1224-ND	1.39	1.26	1.12	MCV 1.5/5-G-3.81	1803455
6	3.81	19.05	24.25	2.6	277-1225-ND	1.68	1.51	1.35	MCV 1.5/6-G-3.81	1803468
7	3.81	22.86	28.06	2.6	277-1226-ND	1.95	1.76	1.56	MCV 1.5/7-G-3.81	1803471
8	3.81	26.67	31.87	2.6	277-1227-ND	2.22	2.01	1.78	MCV 1.5/8-G-3.81	1803484
9	3.81	30.48	35.68	2.6	277-1228-ND	2.54	2.29	2.03	MCV 1.5/9-G-3.81	1803497
10	3.81	34.29	39.49	2.6	277-1229-ND	2.81	2.53	2.25	MCV 1.5/10-G-3.81	1803507
11	3.81	38.10	43.30	2.6	277-1230-ND	3.07	2.77	2.46	MCV 1.5/11-G-3.81	1803510
12	3.81	41.91	47.11	2.6	277-1231-ND	3.37	3.03	2.70	MCV 1.5/12-G-3.81	1803523
13	3.81	45.72	50.92	2.6	277-1232-ND	3.63	3.27	2.91	MCV 1.5/13-G-3.81	1803536
14	3.81	49.53	54.73	2.6	277-1233-ND	3.90	3.51	3.12	MCV 1.5/14-G-3.81	1803549
15	3.81	53.34	58.54	2.6	277-1234-ND	4.19	3.77	3.35	MCV 1.5/15-G-3.81	1803552
16	3.81	57.15	62.35	2.6	277-1235-ND	4.46	4.02	3.57	MCV 1.5/16-G-3.81	1803565
Fig. 17 — 7.62mm Connector Terminal Block Plug										
2	7.62	7.62	15.22	3.8	277-1463-ND	3.89	3.50	3.11	PC 4 HV/2-ST-7.62	1848892
3	7.62	15.24	22.84	3.8	277-1464-ND	5.85	5.27	4.68	PC 4 HV/3-ST-7.62	1848902
4	7.62	22.86	30.46	3.8	277-1465-ND	7.77	7.00	6.22	PC 4 HV/4-ST-7.62	1848915
Fig. 18 — 7.62mm Connector Header - Right Angle										
2	7.62	7.62	15.22	3.8	277-1466-ND	2.52	2.27	2.02	PC 4/2-G-7.62	1804797
3	7.62	15.24	22.84	3.8	277-1467-ND	3.78	3.41	3.03	PC 4/3-G-7.62	1804807
4	7.62	22.86	30.46	3.8	277-1468-ND	4.99	4.50	4.00	PC 4/4-G-7.62	1804810
Fig. 19 — 7.62mm Connector Header - Vertical										
2	7.62	7.62	15.22	3.8	277-1469-ND	2.52	2.27	2.02	PCV 4/2-G-7.62	1804687
3	7.62	15.24	22.84	3.8	277-1470-ND	3.78	3.41	3.03	PCV 4/3-G-7.62	1804690
4	7.62	22.86	30.46	3.8	277-1471-ND	4.99	4.50	4.00	PCV 4/4-G-7.62	1804700

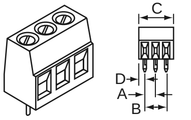
PHOENIX CONTACT

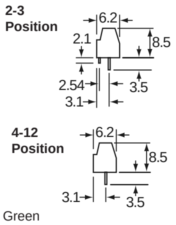
Terminal Blocks

Micro-Pitch Terminal Blocks: The MPT 0.5 is the smallest screw terminal block available. With a micro-pitch of 2.54mm, the MPT 0.5 is ideal for high density applications.

Press Fit Terminal Blocks: The Press-Fit printed circuit board terminal block line is the perfect solution when wave soldering is not an option. The Press-Fit line is available in both fixed and pluggable styles.

Fig. 1

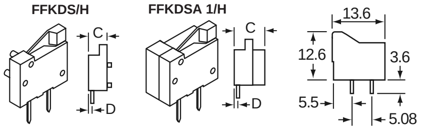




NOTE: The 2 and 3 position versions have an additional locating pin to support the mechanical load.

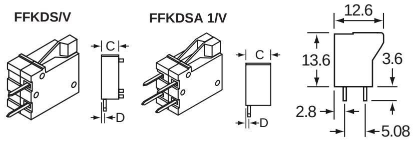
Specifications:
UL: 125 V @ 6 A, 30-20 AWG.
IEC: 63 V @ 6 A, 26-20 AWG. **Color:** Green

Fig. 2



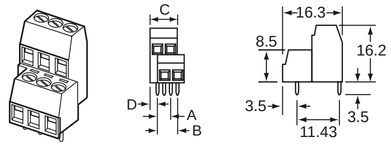
Specifications:
UL: 150 V @ 6 A, 26-20 AWG. **IEC:** 63 V @ 6 A, 26-20 AWG.
Color: Green

Fig. 3



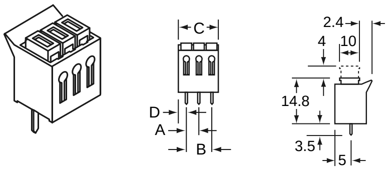
Specifications:
UL: 150 V @ 6 A, 26-20 AWG. **IEC:** 63 V @ 6 A, 26-20 AWG.
Color: Green

Fig. 4



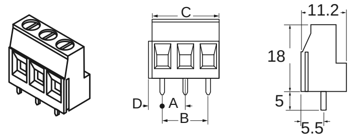
Specifications:
UL: 300 V @ 10 A. 30-16 AWG. **IEC:** 125 V @ 10 A. 26-16 AWG.
Color: Green

Fig. 5



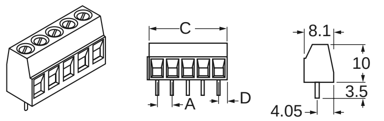
Specifications:
UL: 300 V @ 5 A. 28-22 AWG.
IEC: 125 V @ 5 A. 26-22 AWG. **Color:** Green

Fig. 6



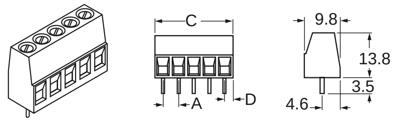
Specifications:
UL: 300 V @ 10 A. 12-30 AWG.
IEC: 250 V @ 32 A. 12-24 AWG. **Color:** Green

Fig. 7



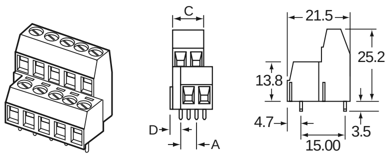
Specifications:
UL: 300 V @ 10 A. 14-30 AWG.
IEC: 250 V @ 16 A. 16-26 AWG. **Color:** Green

Fig. 8



Specifications:
UL: 300 V @ 15 A. 14-30 AWG.
IEC: 250 V @ 24 A. 14-26 AWG. **Color:** Green

Fig. 9



Specifications:
UL: 300 V @ 10 A. 30-14 AWG. **IEC:** 250 V @ 24 A. 26-14 AWG.
Color: Green

No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 1 — 2.54mm Micro-Pitch Terminal Blocks										
2	2.54	2.54	5.54	1.50	277-1273-ND	1.07	.96	.86	MPT 0.5/2-2.54	1725656
3	2.54	5.08	8.08	1.50	277-1274-ND	1.59	1.43	1.27	MPT 0.5/3-2.54	1725669
4	2.54	7.62	10.62	1.50	277-1275-ND	2.15	1.94	1.72	MPT 0.5/4-2.54	1725672
5	2.54	10.16	13.16	1.50	277-1276-ND	2.67	2.40	2.14	MPT 0.5/5-2.54	1725685
6	2.54	12.70	15.70	1.50	277-1277-ND	3.20	2.88	2.56	MPT 0.5/6-2.54	1725698
7	2.54	15.24	18.24	1.50	277-1278-ND	3.71	3.34	2.97	MPT 0.5/7-2.54	1725708
8	2.54	17.78	20.78	1.50	277-1279-ND	4.26	3.84	3.42	MPT 0.5/8-2.54	1725711
9	2.54	20.32	23.32	1.50	277-1280-ND	4.78	4.31	3.83	MPT 0.5/9-2.54	1725724
10	2.54	22.86	25.86	1.50	277-1281-ND	5.33	4.80	4.27	MPT 0.5/10-2.54	1725737
11	2.54	25.40	28.40	1.50	277-1282-ND	5.86	5.28	4.70	MPT 0.5/11-2.54	1725740
12	2.54	27.94	30.94	1.50	277-1283-ND	6.41	5.77	5.13	MPT 0.5/12-2.54	1725753
Fig. 2 — Modular 2.54mm PCB Spring Cage Fixed Terminal Block - Horizontal Wire Entry										
1	—	—	2.54	0.90	277-1310-ND	.72	.65	.58	FFKDS/H-2.54	1791826
Fig. 2 — End Terminal Block for FFKDS/H-2.54										
1	—	—	5.08	0.90	277-1311-ND	1.14	1.03	.92	FFKDSA 1/H-5.08	1791868
Fig. 3 — Modular 2.54mm PCB Spring Cage Fixed Terminal Block - Vertical Wire Entry										
1	—	—	2.54	0.90	277-1312-ND	.72	.65	.58	FFKDS/V-2.54	1791813
Fig. 3 — End Terminal Block for FFKDS/V-2.54										
1	—	—	5.08	0.90	277-1313-ND	1.09	.99	.88	FFKDSA 1/V-5.08	1791855
Fig. 4 — 3.81mm Double Level Terminal Blocks										
2	3.81	3.81	7.62	1.90	277-1356-ND	2.65	2.39	2.13	MKKDS 1/2-3.81	1708026
3	3.81	7.62	11.43	1.90	277-1357-ND	3.97	3.57	3.18	MKKDS 1/3-3.81	1708039
4	3.81	11.43	15.24	1.90	277-1358-ND	5.30	4.78	4.25	MKKDS 1/4-3.81	1708042
5	3.81	15.24	19.05	1.90	277-1359-ND	6.62	5.96	5.30	MKKDS 1/5-3.81	1708055
6	3.81	19.05	22.86	1.90	277-1360-ND	7.94	7.15	6.36	MKKDS 1/6-3.81	1708068
7	3.81	22.86	26.67	1.90	277-1361-ND	9.28	8.36	7.43	MKKDS 1/7-3.81	1708071
8	3.81	26.67	30.48	1.90	277-1362-ND	10.61	9.55	8.49	MKKDS 1/8-3.81	1708084
9	3.81	30.48	34.29	1.90	277-1363-ND	11.93	10.75	9.55	MKKDS 1/9-3.81	1708107
10	3.81	34.29	38.10	1.90	277-1364-ND	13.26	11.94	10.61	MKKDS 1/10-3.81	1708110
11	3.81	38.10	41.91	1.90	277-1365-ND	14.59	13.13	11.67	MKKDS 1/11-3.81	1708123
12	3.81	41.91	45.72	1.90	277-1366-ND	15.91	14.33	12.73	MKKDS 1/12-3.81	1708136

No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 5 — 3.81mm Insulation Displacement Terminal Blocks										
2	3.81	3.81	8.81	2.50	277-1417-ND	.82	.74	.66	IDC 0.3/2-3.81	1706170
3	3.81	7.62	12.62	2.50	277-1418-ND	1.17	1.06	.94	IDC 0.3/3-3.81	1706183
4	3.81	11.43	16.43	2.50	277-1419-ND	1.50	1.35	1.20	IDC 0.3/4-3.81	1706196
5	3.81	15.24	20.24	2.50	277-1420-ND	1.86	1.68	1.49	IDC 0.3/5-3.81	1706206
6	3.81	19.06	24.05	2.50	277-1421-ND	2.18	1.97	1.75	IDC 0.3/6-3.81	1706219
7	3.81	22.86	27.86	2.50	277-1422-ND	2.55	2.30	2.04	IDC 0.3/7-3.81	1706222
8	3.81	26.67	31.67	2.50	277-1423-ND	2.87	2.59	2.30	IDC 0.3/8-3.81	1706235
9	3.81	30.48	35.48	2.50	277-1424-ND	3.22	2.91	2.58	IDC 0.3/9-3.81	1706248
10	3.81	34.29	39.29	2.50	277-1425-ND	3.56	3.21	2.85	IDC 0.3/10-3.81	1706251
11	3.81	38.10	43.10	2.50	277-1426-ND	3.91	3.53	3.14	IDC 0.3/11-3.81	1706264
12	3.81	41.91	46.91	2.50	277-1427-ND	4.25	3.83	3.41	IDC 0.3/12-3.81	1706277
Fig. 6 — 5mm PCB Connector Terminal Block										
2	5.0	5	10	2.5	277-1022-ND	1.35	1.22	1.09	MKDS 3/2	1711026
3	5.0	10	15	2.5	277-1023-ND	2.05	1.85	1.65	MKDS 3/3	1711039
4	5.0	15	20	2.5	277-1024-ND	2.72	2.45	2.18	MKDS 3/4	1711042
8	5.0	35	40	2.5	277-1025-ND	5.43	4.90	4.35	MKDS 3/8	1711084
12	5.0	55	60	2.5	277-1026-ND	8.11	7.31	6.49	MKDS 3/12	1711123
Fig. 7 — 5mm PCB Connector Terminal Block										
2	5.0	—	10	2.5	277-1236-ND	.72	.65	.58	MKDSN 1.5/2	1729018
3	5.0	—	15	2.5	277-1237-ND	1.09	.99	.88	MKDSN 1.5/3	1729021
4	5.0	—	20	2.5	277-1238-ND	1.46	1.31	1.17	MKDSN 1.5/4	1729034
5	5.0	—	25	2.5	277-1239-ND	1.81	1.63	1.45	MKDSN 1.5/5	1729047
6	5.0	—	30	2.5	277-1240-ND	2.17	1.96	1.74	MKDSN 1.5/6	1729050
7	5.0	—	35	2.5	277-1241-ND	2.55	2.30	2.04	MKDSN 1.5/7	1729063
8	5.0	—	40	2.5	277-1242-ND	2.90	2.61	2.32	MKDSN 1.5/8	1729076
9	5.0	—	45	2.5	277-1243-ND	3.26	2.94	2.62	MKDSN 1.5/9	1729089
10	5.0	—	50	2.5	277-1244-ND	3.63	3.27	2.91	MKDSN 1.5/10	1729092
11	5.0	—	55	2.5	277-1245-ND	3.98	3.58	3.19	MKDSN 1.5/11	1729102
12	5.0	—	60	2.5	277-1246-ND	4.36	3.92	3.49	MKDSN 1.5/12	1729115
Fig. 8 — 5mm PCB Connector Terminal Block										
2	5.0	—	10	2.5	277-1258-ND	.86	.78	.69	MKDS 1.5/2	1715022
3	5.0	—	15	2.5	277-1259-ND	1.29	1.16	1.03	MKDS 1.5/3	1715035
4	5.0	—	20	2.5	277-1260-ND	1.73	1.56	1.39	MKDS 1.5/4	1715048
8	5.0	—	40	2.5	277-1261-ND	3.42	3.08	2.74	MKDS 1.5/8	1715080
12	5.0	—	60	2.5	277-1262-ND	5.17	4.66	4.14	MKDS 1.5/12	1715129

(Continued)

Terminal Blocks *(Cont.)*

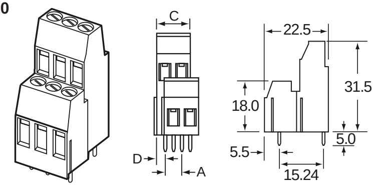
Multi-Level Terminal Blocks:

With their small pitch, the two and three level MKKDS and MK3DS are ideal solutions due to the increasing packing and connection density on printed circuit boards.

Insulation Displacement Terminal Blocks:

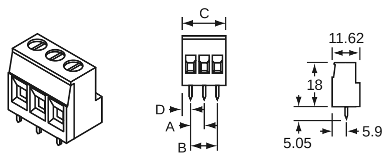
The IDC printed circuit board terminal blocks mass terminate insulated conductors quickly without the need for tools.

Fig. 10



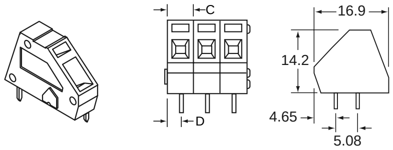
Specifications:
UL: 300 V @ 10 A. 30-12 AWG.
IEC: 250 V @ 32 A. 24-12 AWG. **Color:** Green

Fig. 11



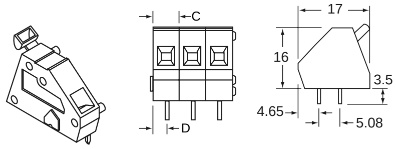
Specifications:
UL: 300 V @ 10 A, 30-12 AWG. **IEC:** 250 V @ 12 A, 28-14 AWG.
Color: Green

Fig. 12



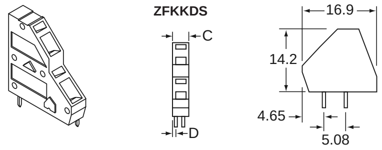
Specifications:
UL: 300 V @ 6 A. **IEC:** 250 V @ 6 A. **Color:** Green

Fig. 13



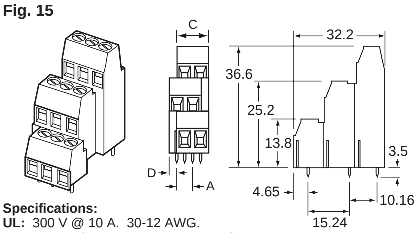
Specifications:
UL: 300 V @ 6 A. **IEC:** 250 V @ 6 A. **Color:** Green

Fig. 14



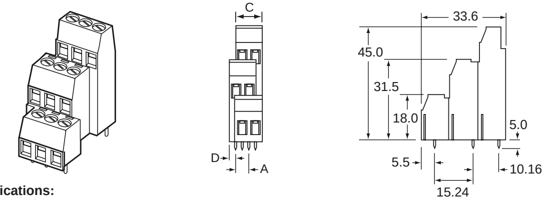
Specifications:
UL: 300 V @ 10 A, 26-12 AWG.
IEC: 250 V @ 12 A, 24-14 AWG. **Color:** Green

Fig. 15



Specifications:
UL: 300 V @ 10 A. 30-12 AWG.
IEC: 250 V @ 22 A. 26-14 AWG. **Color:** Green

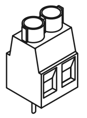
Fig. 16



Specifications:
UL: 300 V @ 10 A. 30-12 AWG.
IEC: 250 V @ 32 A. 24-12 AWG. **Color:** Green

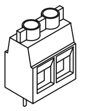
Fig. 17

A

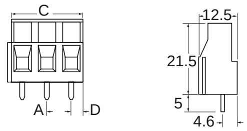


Specifications:
UL: 300 V @ 10 A. 10-30 AWG.
IEC: 500 V @ 32 A. 10-24 AWG. **Color:** Green

B



Specifications:
UL: 300 V @ 30 A, 10-30 AWG; and 600 V @ 5A
IEC: 690 V @ 32 A. 10-24 AWG. **Color:** Green



No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 9 — 5.0mm & 5.08mm Double Level Terminal Blocks										
2	5.00	—	10.00	2.50	277-1367-ND	2.05	1.85	1.65	MKKDS 1.5/2	1725012
3	5.00	—	15.00	2.50	277-1368-ND	3.07	2.77	2.46	MKKDS 1.5/3	1725025
2	5.08	—	10.16	2.54	277-1369-ND	2.05	1.85	1.65	MKKDS 1.5/2-5.08	1725038
3	5.08	—	15.24	2.54	277-1370-ND	3.07	2.77	2.46	MKKDS 1.5/3-5.08	1725041
Fig. 10 — 5.0mm and 5.08mm Double Level Terminal Blocks										
2	5.00	—	10.00	2.50	277-1371-ND	3.47	3.13	2.78	MKKDS 3/2	1721029
3	5.00	—	15.00	2.50	277-1372-ND	5.21	4.70	4.18	MKKDS 3/3	1721032
2	5.08	—	10.16	2.54	277-1373-ND	3.47	3.13	2.78	MKKDS 3/2-5.08	1721728
3	5.08	—	15.24	2.54	277-1374-ND	5.21	4.70	4.18	MKKDS 3/3-5.08	1721731
Fig. 11 — 5.08mm Press-Fit PCB Terminal Blocks										
2	5.08	5.08	11.34	3.13	277-1284-ND	1.56	1.41	1.25	EMKDS 2.5/2-5.08	1730612
3	5.08	10.16	16.42	3.13	277-1285-ND	2.33	2.10	1.87	EMKDS 2.5/3-5.08	1730625
4	5.08	15.24	21.50	3.13	277-1286-ND	3.13	2.82	2.51	EMKDS 2.5/4-5.08	1730638
5	5.08	20.32	26.58	3.13	277-1287-ND	3.90	3.51	3.12	EMKDS 2.5/5-5.08	1730641
6	5.08	25.40	31.66	3.13	277-1288-ND	4.69	4.23	3.76	EMKDS 2.5/6-5.08	1730654
7	5.08	30.48	36.74	3.13	277-1289-ND	5.46	4.92	4.37	EMKDS 2.5/7-5.08	1730667
8	5.08	35.56	41.82	3.13	277-1290-ND	6.21	5.60	4.98	EMKDS 2.5/8-5.08	1730670
9	5.08	40.64	46.90	3.13	277-1291-ND	7.03	6.33	5.63	EMKDS 2.5/9-5.08	1730683
10	5.08	45.72	51.98	3.13	277-1292-ND	7.79	7.01	6.23	EMKDS 2.5/10-5.08	1730696
11	5.08	50.80	57.06	3.13	277-1293-ND	8.59	7.74	6.88	EMKDS 2.5/11-5.08	1730706
12	5.08	55.88	62.14	313	277-1294-ND	9.37	8.44	7.50	EMKDS 2.5/12-5.08	1730719
Fig. 6 — 5.08mm PCB Connector Terminal Block										
2	5.08	5.08	10.16	2.54	277-1027-ND	1.35	1.22	1.09	MKDS 3/2-5.08	1711725
3	5.08	10.16	15.24	2.54	277-1028-ND	2.05	1.85	1.65	MKDS 3/3-5.08	1711738
Fig. 7 — 5.08mm PCB Connector Terminal Block										
2	5.08	—	10.16	2.54	277-1247-ND	.72	.65	.58	MKDSN 1.5/2-5.08	1729128
3	5.08	—	15.24	2.54	277-1248-ND	1.09	.99	.88	MKDSN 1.5/3-5.08	1729131
4	5.08	—	20.32	2.54	277-1249-ND	1.46	1.31	1.17	MKDSN 1.5/4-5.08	1729144
5	5.08	—	25.40	2.54	277-1250-ND	1.81	1.63	1.45	MKDSN 1.5/5-5.08	1729157
6	5.08	—	30.48	2.54	277-1251-ND	2.17	1.96	1.74	MKDSN 1.5/6-5.08	1729160
7	5.08	—	35.56	2.54	277-1252-ND	2.55	2.30	2.04	MKDSN 1.5/7-5.08	1729173
8	5.08	—	40.64	2.54	277-1253-ND	2.90	2.61	2.32	MKDSN 1.5/8-5.08	1729186
9	5.08	—	45.72	2.54	277-1254-ND	3.26	2.94	2.62	MKDSN 1.5/9-5.08	1729199
10	5.08	—	50.80	2.54	277-1255-ND	3.63	3.27	2.91	MKDSN 1.5/10-5.08	1729209
11	5.08	—	55.88	2.54	277-1256-ND	3.98	3.58	3.19	MKDSN 1.5/11-5.08	1729212
12	5.08	—	60.96	2.54	277-1257-ND	4.36	3.92	3.49	MKDSN 1.5/12-5.08	1729225

No. of Pos.	Dimensions (mm)				Digi-Key Part No.	Price Each			Phoenix Contact Type No.	Phoenix Contact Part No.
	A	B	C	D		1	10	100		
Fig. 8 — 5.08mm PCB Connector Terminal Block										
2	5.08	—	10.16	2.54	277-1263-ND	.86	.78	.69	MKDS 1.5/2-5.08	1715721
3	5.08	—	15.24	2.54	277-1264-ND	1.29	1.16	1.03	MKDS 1.5/3-5.08	1715734
4	5.08	—	20.32	2.54	277-1265-ND	1.73	1.56	1.39	MKDS 1.5/4-5.08	1715747
8	5.08	—	40.64	2.54	277-1266-ND	3.42	3.08	2.74	MKDS 1.5/8-5.08	1715789
10	5.08	—	50.80	2.54	277-1267-ND	4.32	3.89	3.46	MKDS 1.5/10-5.08	1715802
12	5.08	—	60.96	2.54	277-1268-ND	5.17	4.66	4.14	MKDS 1.5/12-5.08	1715828
Fig. 12 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Single Level without Lever										
1	—	—	5.08	2.54	277-1314-ND	.31	.29	.25	ZFKDS 1.5-5.08	1706701
Fig. 12 — End Terminal Block for ZFKDS 1.5-5.08										
1	—	—	7.62	2.54	277-1315-ND	.44	.40	.36	ZFKDSA1.5-7.62	1706727
Fig. 13 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Single Level with Lever										
1	—	—	5.08	2.54	277-1316-ND	.39	.36	.32	ZFKDS 1.5-W-5.08	1706714
Fig. 13 — End Terminal Block for ZFKDS 1.5-W-5.08										
1	—	—	7.62	2.54	277-1317-ND	.51	.46	.41	ZFKDSA 1.5-W-7.62	1706730
Fig. 14 — Modular 5.08mm PCB Spring Cage Fixed Terminal Block - Double Level without Lever										
1	—	—	5.08	1.27	277-1318-ND	.86	.78	.69	ZFKKDS 1.5-5.08	1704402
Fig. 15 — 5.08mm Triple Level Terminal Blocks										
2	5.08	—	10.16	2.54	277-1375-ND	5.42	4.88	4.34	MK3DS 1.5/2-5.08	1724013
3	5.08	—	15.24	2.54	277-1376-ND	8.14	7.33	6.52	MK3DS 1.5/3-5.08	1724026
Fig. 16 — 5.08mm Triple Level Terminal Blocks										
2	5.08	—	10.16	2.54	277-1377-ND	4.90	4.42	3.93	MK3DS 3/2-5.08	1723014
3	5.08	—	15.24	2.54	277-1378-ND	7.37	6.64	5.90	MK3DS 3/3-5.08	1723027
Fig. 17A — 6.35mm PCB Connector Terminal Block										
2	6.35	—	12.69	3.17	277-1269-ND	1.37	1.23	1.10	MKDS 5/2-6.35	1714955
3	6.35	—	19.04	3.17	277-1270-ND	1.91	1.72	1.53	MKDS 5/3-6.35	1714968
Fig. 17B — 9.52mm PCB Connector Terminal Block										
2	9.52	—	19.02	4.76	277-1271-ND	1.37	1.23	1.10	MKDS 5/2-9.5	1714971
3	9.52	—	28.52	4.76	277-1272-ND	2.00	1.81	1.61	MKDS 5/3-9.5	1714984

ON-SHORE TECHNOLOGY, INC.

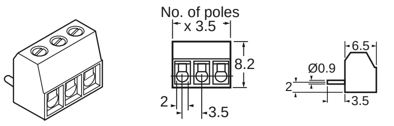
Terminal Blocks

UL# E101811, 86ME2081

CSA# 068503X0000

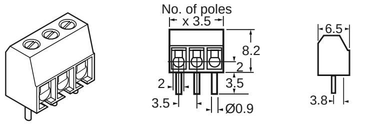
These On-Shore Technology Terminal Blocks are Stackable for any number of contacts. 4.5mm Lead Length.

Fig. 1



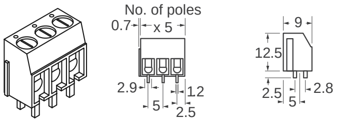
SPECIFICATIONS: • Rated Voltage: 125V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 2



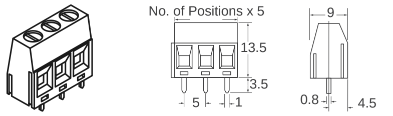
SPECIFICATIONS: • Rated Voltage: 125V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 3



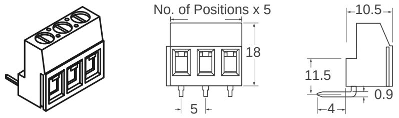
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 4



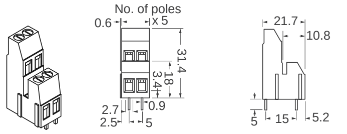
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 16A • Wire Size: 28-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 5



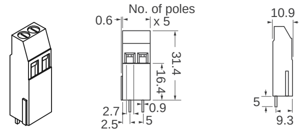
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 6



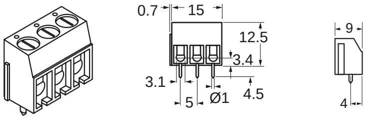
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 30-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 7



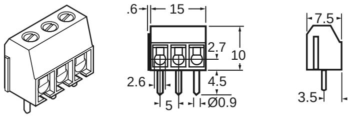
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 30-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 8



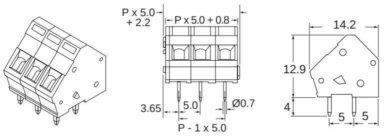
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: AWG 22-14 • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 9



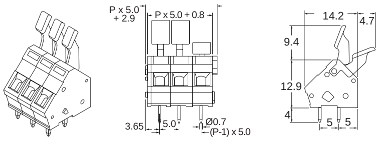
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: AWG 22-14 • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 10



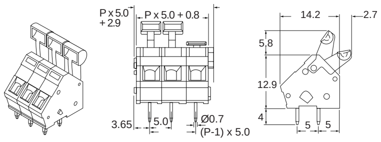
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 11



SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 12

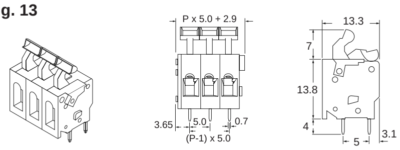


SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each		
				1	10	100
3.5mm Lead Spacing - Terminal Blocks						
1	2	7.0	ED1501-ND	.40	.36	.32
	3	10.5	ED1502-ND	.60	.54	.48
	4	14.0	ED1503-ND	.80	.72	.64
	5	17.5	ED1504-ND	1.00	.90	.80
	6	21.0	ED1505-ND	1.20	1.08	.96
	7	24.5	ED1506-ND	1.40	1.26	1.12
	8	28.0	ED1507-ND	1.60	1.44	1.28
	9	31.5	ED1508-ND	1.80	1.62	1.44
	10	35.0	ED1509-ND	2.00	1.80	1.60
	11	38.5	ED1510-ND	2.20	1.98	1.76
	12	42.0	ED1511-ND	2.40	2.16	1.92
	14	49.0	ED1512-ND	2.80	2.52	2.24
	16	56.0	ED1513-ND	3.20	2.88	2.56
2	2	7.0	ED1514-ND	.40	.36	.32
	3	10.5	ED1515-ND	.60	.54	.48
	4	14.0	ED1516-ND	.80	.72	.64
	5	17.5	ED1517-ND	1.00	.90	.80
	6	21.0	ED1518-ND	1.20	1.08	.96
	7	24.5	ED1519-ND	1.40	1.26	1.12
	8	28.0	ED1520-ND	1.60	1.44	1.28
	9	31.5	ED1521-ND	1.80	1.62	1.44
	10	35.0	ED1522-ND	2.00	1.80	1.60
	11	38.5	ED1523-ND	2.20	1.98	1.76
	12	42.0	ED1524-ND	2.40	2.16	1.92
	14	49.0	ED1525-ND	2.80	2.52	2.24
	16	56.0	ED1526-ND	3.20	2.88	2.56
5.0mm Lead Spacing - Terminal Blocks						
3	2	10.0	ED1556-ND	.78	.70	.62
	3	15.0	ED1557-ND	1.16	1.05	.93
	4	20.0	ED1558-ND	1.55	1.40	1.24
3	5	25.0	ED1559-ND	1.94	1.75	1.55
	6	30.0	ED1560-ND	2.33	2.10	1.86
	7	35.0	ED1561-ND	2.71	2.45	2.17
	8	40.0	ED1562-ND	3.10	2.79	2.48
	9	45.0	ED1563-ND	3.49	3.14	2.79
	10	50.0	ED1564-ND	3.88	3.49	3.10
	11	55.0	ED1565-ND	4.26	3.84	3.41
	12	60.0	ED1566-ND	4.65	4.19	3.72
4	2	10.0	ED1930-ND	.63	.57	.51
	3	15.0	ED1931-ND	.94	.85	.75
5	2	10.0	ED1932-ND	1.02	.92	.82
	3	15.0	ED1933-ND	1.52	1.37	1.22
6	2	10.0	ED1578-ND	2.20	1.98	1.76
	4	20.0	ED1580-ND	4.40	3.96	3.52
	5	25.0	ED1581-ND	5.50	4.95	4.40
	6	30.0	ED1582-ND	6.60	5.94	5.28
	7	35.0	ED1583-ND	7.70	6.93	6.16
	8	40.0	ED1584-ND	8.80	7.92	7.04
	9	45.0	ED1585-ND	9.90	8.91	7.92
	10	50.0	ED1586-ND	11.00	9.90	8.80
	11	55.0	ED1587-ND	11.21	10.09	8.97
	12	60.0	ED1588-ND	13.20	11.88	10.56
7	2	10.0	ED1589-ND	1.35	1.22	1.08
	4	20.0	ED1591-ND	2.70	2.43	2.16
	6	30.0	ED1593-ND	4.05	3.65	3.24
	8	40.0	ED1595-ND	5.40	4.86	4.32
	10	50.0	ED1597-ND	6.75	6.08	5.40
	12	60.0	ED1599-ND	8.10	7.29	6.48
8	2	10.0	ED1601-ND	.34	.31	.28
	3	15.0	ED1602-ND	.51	.47	.41
	4	20.0	ED2233-ND	.69	.63	.56
	6	30.0	ED2234-ND	1.04	.94	.83
8	8	40.0	ED2235-ND	1.38	1.25	1.11
	12	60.0	ED2236-ND	2.07	1.87	1.66
9	2	10.0	ED1623-ND	.37	.34	.30
	3	15.0	ED1624-ND	.56	.51	.45
	4	20.0	ED2221-ND	.74	.67	.60
	5	25.0	ED2222-ND	.93	.84	.74
	6	30.0	ED2223-ND	1.11	1.00	.89
	7	35.0	ED2224-ND	1.30	1.17	1.04
	10	50.0	ED2225-ND	1.85	1.67	1.48
	12	60.0	ED2226-ND	2.22	2.00	1.78
10	2	10.0	ED2237-ND	.65	.59	.52
	3	15.0	ED2238-ND	.98	.88	.78
	4	20.0	ED2239-ND	1.30	1.17	1.04
	5	25.0	ED2240-ND	1.63	1.47	1.30
	6	30.0	ED2241-ND	1.95	1.76	1.56
	7	35.0	ED2242-ND	2.28	2.05	1.82
	8	40.0	ED2243-ND	2.60	2.34	2.08
	9	45.0	ED2244-ND	2.93	2.64	2.34
	10	50.0	ED2245-ND	3.25	2.93	2.60
	11	55.0	ED2246-ND	3.58	3.22	2.86
	12	60.0	ED2247-ND	3.90	3.51	3.12
11	2	10.0	ED2248-ND	.80	.72	.64
	3	15.0	ED2249-ND	1.20	1.08	.96
	4	20.0	ED2250-ND	1.60	1.44	1.28
	5	25.0	ED2251-ND	2.00	1.80	1.60
	6	30.0	ED2252-ND	2.40	2.16	1.92
	7	35.0	ED2253-ND	2.80	2.52	2.24
	8	40.0	ED2254-ND	3.20	2.88	2.56
	9	45.0	ED2255-ND	3.60	3.24	2.88
	10	50.0	ED2256-ND	4.00	3.60	3.20
	11	55.0	ED2257-ND	4.40	3.96	3.52
	12	60.0	ED2258-ND	4.80	4.32	3.84

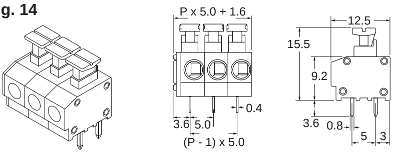
(Continued)

Fig. 13



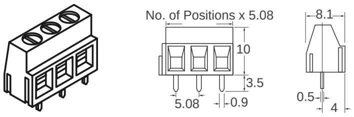
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 14



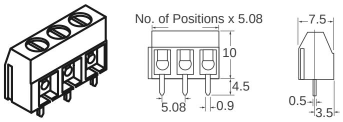
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 10A • Wire Size: 20-14AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 15



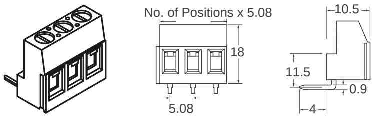
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 28-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 16



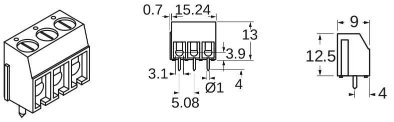
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 17



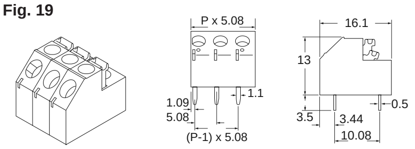
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 20A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig. 18



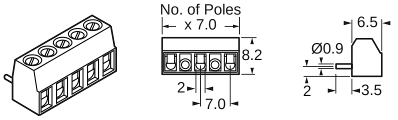
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Blue

Fig. 19



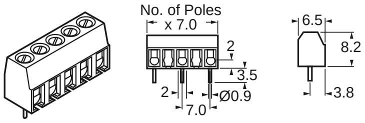
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-15AWG • Temp.: -30°C/+105°C • Flammability: UL94V-O • Color: Slade Gray

Fig. 20



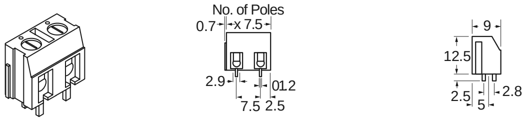
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 21



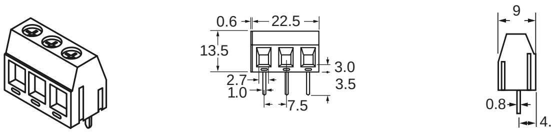
SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 6A • Wire Size: 28-16AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 22



SPECIFICATIONS: • Rated Voltage: 300V • Rated Current: 15A • Wire Size: 22-14AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Grey

Fig. 23



SPECIFICATIONS: • Rated Voltage: 600V • Rated Current: 16A • Wire Size: 22-12AWG • Temperature: -30°C/+105°C • Flammability: UL94V-O • Color: Green

Fig.	No. of Pos.	Block Length (mm)	Digi-Key Part No.	Price Each		
				1	10	100
12	2	10.0	ED2259-ND	.80	.72	.64
	3	15.0	ED2260-ND	1.20	1.08	.96
	4	20.0	ED2261-ND	1.60	1.44	1.28
	5	25.0	ED2262-ND	2.00	1.80	1.60
	6	30.0	ED2263-ND	2.40	2.16	1.92
	7	35.0	ED2265-ND	2.80	2.52	2.24
	8	40.0	ED2266-ND	3.20	2.88	2.56
	9	45.0	ED2267-ND	3.60	3.24	2.88
	10	50.0	ED2268-ND	4.00	3.60	3.20
	11	55.0	ED2269-ND	4.40	3.96	3.52
	12	60.0	ED2270-ND	4.80	4.32	3.84
13	2	10.0	ED2293-ND	.75	.68	.60
	3	15.0	ED2294-ND	1.13	1.02	.90
	4	20.0	ED2295-ND	1.50	1.35	1.20
	5	25.0	ED2296-ND	1.88	1.69	1.50
	6	30.0	ED2297-ND	2.25	2.03	1.80
	7	35.0	ED2298-ND	2.63	2.37	2.10
	8	40.0	ED2299-ND	3.00	2.70	2.40
	9	45.0	ED2300-ND	3.38	3.04	2.70
	10	50.0	ED2301-ND	3.75	3.38	3.00
	11	55.0	ED2302-ND	4.13	3.72	3.30
	12	60.0	ED2303-ND	4.50	4.05	3.60
14	2	10.0	ED2315-ND	.80	.72	.64
	3	15.0	ED2316-ND	1.20	1.08	.96
	4	20.0	ED2317-ND	1.60	1.44	1.28
	5	25.0	ED2318-ND	2.00	1.80	1.60
	6	30.0	ED2319-ND	2.40	2.16	1.92
	7	35.0	ED2320-ND	2.80	2.52	2.24
	8	40.0	ED2321-ND	3.20	2.88	2.56
	9	45.0	ED2322-ND	3.60	3.24	2.88
14	10	50.0	ED2323-ND	4.00	3.60	3.20
	11	55.0	ED2324-ND	4.40	3.96	3.52
	12	60.0	ED2325-ND	4.80	4.32	3.84
5.08mm Lead Spacing - Terminal Blocks						
15	2	10.16	ED1973-ND	.70	.63	.56
	3	15.24	ED1974-ND	1.05	.95	.84
16	2	10.16	ED1975-ND	.40	.36	.32
	3	15.24	ED1976-ND	.60	.54	.48
17	2	10.16	ED1977-ND	1.02	.92	.82
	3	15.24	ED1978-ND	1.52	1.37	1.22
18	2	10.16	ED1609-ND	.37	.34	.30
	3	15.24	ED1610-ND	.55	.50	.45
	4	20.32	ED2227-ND	.74	.67	.60
	5	25.40	ED2228-ND	.93	.84	.74
	6	30.48	ED2229-ND	1.11	1.00	.89
	7	35.56	ED2230-ND	1.30	1.17	1.04
	10	50.80	ED2231-ND	1.85	1.67	1.48
	12	60.96	ED2232-ND	2.22	2.00	1.78
19	2	10.16	ED2326-ND	.85	.77	.68
	3	15.24	ED2327-ND	1.28	1.15	1.02
	4	20.32	ED2328-ND	1.70	1.53	1.36
	5	25.40	ED2329-ND	2.13	1.92	1.70
	6	30.48	ED2330-ND	2.55	2.30	2.04
	7	35.56	ED2331-ND	2.98	2.68	2.38
7.0mm Lead Spacing - Terminal Blocks						
20	2	14.0	ED1527-ND	.44	.40	.36
	3	21.0	ED1528-ND	.66	.60	.53
	4	28.0	ED1529-ND	.88	.80	.71
	5	35.0	ED1530-ND	1.10	.99	.88
	7	49.0	ED1532-ND	1.54	1.39	1.24
	8	56.0	ED1533-ND	1.76	1.59	1.41
21	2	14.0	ED1534-ND	.44	.40	.36
	3	21.0	ED1535-ND	.66	.60	.53
	4	28.0	ED1536-ND	.88	.80	.71
	5	35.0	ED1537-ND	1.10	.99	.88
	6	42.0	ED1538-ND	1.32	1.19	1.06
	7	49.0	ED1539-ND	1.54	1.39	1.24
	8	56.0	ED1540-ND	1.76	1.59	1.41
7.5mm Lead Spacing - Terminal Blocks						
22	2	15.0	ED1567-ND	.88	.79	.70
	3	22.5	ED1568-ND	1.31	1.19	1.05
	4	30.0	ED1569-ND	1.75	1.58	1.40
	5	37.5	ED1570-ND	2.19	1.97	1.75
	6	45.0	ED1571-ND	2.63	2.37	2.10
	7	52.5	ED1572-ND	3.06	2.76	2.45
	8	60.0	ED1573-ND	3.50	3.15	2.80
	9	67.5	ED1574-ND	3.94	3.55	3.15
	10	75.0	ED1575-ND	4.38	3.94	3.50
	11	82.5	ED1576-ND	4.81	4.34	3.85
	12	90.0	ED1577-ND	5.25	4.73	4.20
23	2	15.0	ED2354-ND	.80	.72	.64
	3	22.5	ED2355-ND	1.20	1.08	.96
	4	30.0	ED2356-ND	1.60	1.44	1.28
	5	37.5	ED2357-ND	2.00	1.80	1.60
	6	45.0	ED2358-ND	2.40	2.16	1.92
	7	52.5	ED2359-ND	2.80	2.52	2.24
	8	60.0	ED2360-ND	3.20	2.88	2.56
	9	67.5	ED2361-ND	3.60	3.24	2.88
	10	75.0	ED2362-ND	4.00	3.60	3.20
	11	82.5	ED2363-ND	4.40	3.96	3.52
	12	90.0	ED2364-ND	4.80	4.32	3.84

ON-SHORE TECHNOLOGY, INC.

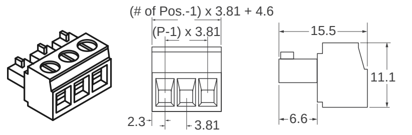
Two-Piece Terminal Blocks

FEATURES

• Modularity:
Fixed and Pluggable PCB Terminals are available in both metric and inch pin spacings. The key feature of our modular terminal housings is their tongue and groove joint design that permits individual 2 or 3 pole terminal modules to be joined together to produce multi-pole terminal assemblies.

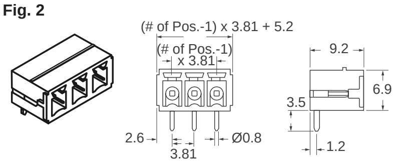
• Housings:
PCB Mini-Terminal Block housings are precision molded from self-extinguishing 6.6 polyimide (nylon) molding material. All housings have funnel shaped wire entry guides to prevent wire fraying and minimize misconnections.

Fig. 1



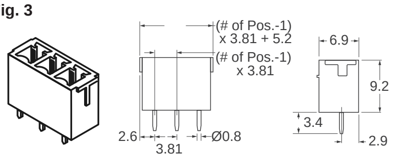
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 8A • **Wire Size:** 28-16AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 2



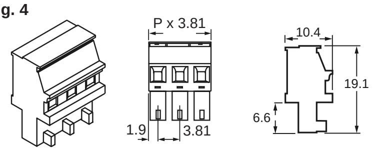
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 8A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 3



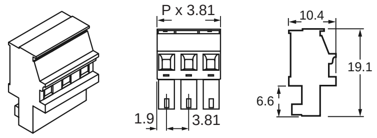
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 8A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 4



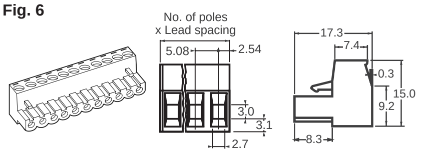
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 8A • **Wire Size:** 28-16AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 5



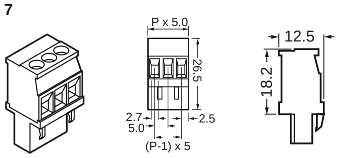
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 8A • **Wire Size:** 28-16AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 6



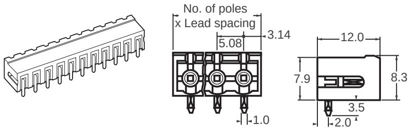
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-12AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 7



SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-10AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 8



SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flame Class:** UL 94 V-0 • **Color:** Green

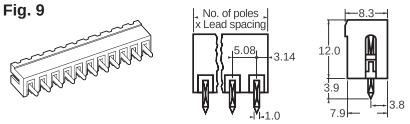
Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each 1	10	100
3.81mm Lead Spacing – Plugs						
1	2	8.41	ED1960-ND	1.30	1.17	1.04
	3	12.22	ED1961-ND	1.95	1.76	1.56
	4	16.03	ED1962-ND	2.60	2.34	2.08
	5	19.84	ED1963-ND	3.25	2.93	2.60
	6	23.65	ED1964-ND	3.90	3.51	3.12
	7	27.46	ED1965-ND	4.55	4.10	3.64
	8	31.27	ED1966-ND	5.20	4.68	4.16
	9	35.08	ED1967-ND	5.85	5.27	4.68
	10	38.89	ED1968-ND	6.50	5.85	5.20
	11	42.70	ED1969-ND	7.15	6.44	5.72
	12	46.51	ED1970-ND	7.80	7.02	6.24
	14	54.13	ED1971-ND	9.10	8.19	7.28
	16	61.75	ED1972-ND	10.40	9.36	8.32
3.81mm Lead Spacing — Horiz. Header						
2	2	9.01	ED1934-ND	.60	.54	.48
	3	12.82	ED1935-ND	.90	.81	.72
	4	16.63	ED1936-ND	1.20	1.08	.96
	5	20.44	ED1937-ND	1.50	1.35	1.20
	6	24.25	ED1938-ND	1.80	1.62	1.44
	7	28.06	ED1939-ND	2.10	1.89	1.68
	8	31.87	ED1940-ND	2.40	2.16	1.92
	9	35.68	ED1941-ND	2.70	2.43	2.16
	10	39.49	ED1942-ND	3.00	2.70	2.40
	11	43.30	ED1943-ND	3.30	2.97	2.64
	12	47.11	ED1944-ND	3.60	3.24	2.88
	14	54.73	ED1945-ND	4.20	3.78	3.36
	16	63.35	ED1946-ND	4.80	4.32	3.84
3.81mm Lead Spacing — Vert. Header						
3	2	9.01	ED1947-ND	.60	.54	.48
	3	12.82	ED1948-ND	.90	.81	.72
	4	16.63	ED1949-ND	1.20	1.08	.96
	5	20.44	ED1950-ND	1.50	1.35	1.20
	6	24.25	ED1951-ND	1.80	1.62	1.44
	7	28.06	ED1952-ND	2.10	1.89	1.68
	8	31.87	ED1953-ND	2.40	2.16	1.92
	9	35.68	ED1954-ND	2.70	2.43	2.16
	10	39.49	ED1955-ND	3.00	2.70	2.40
	11	43.30	ED1956-ND	3.30	2.97	2.64
	12	47.11	ED1957-ND	3.60	3.24	2.88
	14	54.73	ED1958-ND	4.20	3.78	3.36
	16	63.35	ED1959-ND	4.80	4.32	3.84
3.81mm Lead Spacing — Plugs						
4	2	7.62	ED2454-ND	1.00	.90	.80
	3	11.43	ED2455-ND	1.50	1.35	1.20
	4	15.24	ED2456-ND	2.00	1.80	1.60
	5	19.05	ED2457-ND	2.50	2.25	2.00
	6	22.86	ED2458-ND	3.00	2.70	2.40
	7	26.67	ED2459-ND	3.50	3.15	2.80
	8	30.48	ED2460-ND	4.00	3.60	3.20
	9	34.29	ED2461-ND	4.50	4.05	3.60
	10	38.10	ED2462-ND	5.00	4.50	4.00
	12	45.72	ED2463-ND	6.00	5.40	4.80
	14	53.34	ED2464-ND	7.00	6.30	5.60
	16	60.96	ED2465-ND	8.00	7.20	6.40
3.81mm Lead Spacing — Plugs						
5	2	7.62	ED2466-ND	1.00	.90	.80
	3	11.43	ED2467-ND	1.50	1.35	1.20
	4	15.24	ED2468-ND	2.00	1.80	1.60
	5	19.05	ED2469-ND	2.50	2.25	2.00
	6	22.86	ED2470-ND	3.00	2.70	2.40
	7	26.67	ED2471-ND	3.50	3.15	2.80
	8	30.48	ED2472-ND	4.00	3.60	3.20
	9	34.29	ED2473-ND	4.50	4.05	3.60
	10	38.10	ED2474-ND	5.00	4.50	4.00
	12	45.72	ED2475-ND	6.00	5.40	4.80
	14	53.34	ED2476-ND	7.00	6.30	5.60
	16	60.96	ED2477-ND	8.00	7.20	6.40
5mm Lead Spacing — Plugs						
6	2	10	ED1701-ND*	1.05	.94	.82
	3	15	ED1702-ND*	1.58	1.41	1.23
	4	20	ED1703-ND*	1.80	1.62	1.44
	5	25	ED1704-ND*	2.25	2.03	1.80
	6	30	ED1705-ND*	2.70	2.43	2.16
	7	35	ED1706-ND*	3.15	2.84	2.52
	8	40	ED1707-ND*	3.60	3.24	2.88
	9	45	ED1708-ND*	4.05	3.65	3.24
	10	50	ED1709-ND*	4.50	4.05	3.60
	11	55	ED1710-ND*	4.95	4.46	3.96
	12	60	ED1711-ND*	5.40	4.86	4.32
	14	70	ED1712-ND*	6.30	5.67	5.04
	16	80	ED1713-ND*	7.20	6.48	5.76
	18	90	ED1714-ND*	8.10	7.29	6.48
	20	100	ED1715-ND*	9.00	8.10	7.20
	24	120	ED1716-ND*	10.80	9.72	8.64
5mm Lead Spacing — Plugs						
7	2	10	ED2376-ND	1.40	1.26	1.12
	3	15	ED2377-ND	2.10	1.89	1.68
	4	20	ED2378-ND	2.80	2.52	2.24
	5	25	ED2379-ND	3.50	3.15	2.80
	6	30	ED2380-ND	4.20	3.78	3.36
	7	35	ED2381-ND	4.90	4.41	3.92
	8	40	ED2382-ND	5.60	5.04	4.48
	9	45	ED2383-ND	6.30	5.67	5.04
	10	50	ED2384-ND	7.00	6.30	5.60
	12	60	ED2385-ND	8.40	7.56	6.72
	14	70	ED2386-ND	9.80	8.82	7.84
	16	80	ED2387-ND	11.20	10.08	8.96
5mm Lead Spacing — Horiz. Headers						
8	2	10	ED1801-ND†	.37	.33	.29
	3	15	ED1802-ND†	.56	.50	.44
	4	20	ED1803-ND†	.74	.66	.58
	5	25	ED1804-ND†	.93	.83	.73
	6	30	ED1805-ND†	1.11	.99	.87
	7	35	ED1806-ND†	1.30	1.16	1.02
	8	40	ED1807-ND†	1.48	1.32	1.16
	9	45	ED1808-ND†	1.67	1.49	1.31
	10	50	ED1809-ND†	1.85	1.65	1.45
	11	55	ED1810-ND†	2.04	1.82	1.60
	12	60	ED1811-ND†	2.22	1.98	1.74
	14	70	ED1812-ND†	2.59	2.31	2.03
	16	80	ED1813-ND†	2.96	2.64	2.32
	18	90	ED1814-ND†	3.33	2.97	2.61
	20	100	ED1815-ND†	3.70	3.30	2.90
	24	120	ED1816-ND†	4.44	3.96	3.48
5mm Lead Spacing — Vert. Headers ‡						
9	2	10	ED1833-ND†	.37	.33	.29
	3	15	ED1834-ND†	.56	.50	.44
	4	20	ED1835-ND†	.74	.66	.58
	5	25	ED1836-ND†	.93	.83	.73
	6	30	ED1837-ND†	1.11	.99	.87
	7	35	ED1838-ND†	1.30	1.16	1.02
	8	40	ED1839-ND†	1.48	1.32	1.16
	9	45	ED1840-ND†	1.67	1.49	1.31
	10	50	ED1841-ND†	1.85	1.65	1.45
	11	55	ED1842-ND†	2.04	1.82	1.60
	12	60	ED1843-ND†	2.22	1.98	1.74
	14	70	ED1844-ND†	2.59	2.31	2.03
	16	80	ED1845-ND†	2.96	2.64	2.32
	18	90	ED1846-ND†	3.33	2.97	2.61
	20	100	ED1847-ND†	3.70	3.30	2.90
	24	120	ED1848-ND†	4.44	3.96	3.48
5.08mm Lead Spacing — Plugs						
6	2	10.16	ED1717-ND*	1.05	.94	.82
	3	15.24	ED1718-ND*	1.58	1.41	1.23
	4	20.32	ED1719-ND*	2.10	1.87	1.64
	5	25.40	ED1720-ND*	2.63	2.34	2.05
	6	30.48	ED1721-ND*	3.15	2.81	2.46
	7	35.56	ED1722-ND*	3.68	3.28	2.87
	8	40.64	ED1723-ND*	4.20	3.74	3.28
	9	45.72	ED1724-ND*	4.73	4.21	3.69
	10	50.80	ED1725-ND*	5.25	4.68	4.10
	11	55.88	ED1726-ND*	5.78	5.15	4.51
	12	60.96	ED1727-ND*	6.30	5.61	4.92
	14	71.12	ED1728-ND*	7.35	6.47	5.74
	16	81.28	ED1729-ND*	8.40	7.40	6.56
	18	91.44	ED1730-ND*	9.45	8.32	7.38
	20	101.60	ED1731-ND*	10.50	9.25	8.20
	24	121.92	ED1732-ND*	12.60	11.09	9.84
5.08mm Lead Spacing — Plugs						
10	2	20.32	ED1717-ND	1.40	1.26	1.12
	3	25.40	ED2410-ND	2.10	1.89	1.68
	4	30.48	ED2411-ND	2.80	2.52	2.24
	5	35.56	ED2412-ND	3.50	3.15	2.80
	6	40.64	ED2413-ND	4.20	3.78	3.36
	7	45.72	ED2414-ND	4.90	4.41	3.92
	8	50.80	ED2415-ND	5.60	5.04	4.48
	9	55.88	ED2416-ND	6.30	5.67	5.04
	10	60.96	ED2417-ND	7.00	6.30	5.60
5.08mm Lead Spacing — Horiz. Headers						
8	2	10.16	ED1817-ND†	.37	.33	.29
	3	15.24	ED1818-ND†	.56	.50	.44
	4	20.32	ED1819-ND†	.74	.66	.58
	5	25.40	ED1820-ND†	.93	.83	.73
	6	30.48	ED1821-ND†	1.11	.99	.87
	7	35.56	ED1822-ND†	1.30	1.16	1.02
	8	40.64	ED1823-ND†	1.48	1.32	1.16
	9	45.72	ED1824-ND†	1.67	1.49	1.31
	10	50.80	ED1825-ND†	1.85	1.65	1.45
	11	55.88	ED1826-ND†	2.04	1.82	1.60
	12	60.96	ED1827-ND†	2.22	1.98	1.74
	14	71.12	ED1828-ND†	2.59	2.31	2.03
	16	81.28	ED1829-ND†	2.96	2.64	2.32
	18	91.44	ED1830-ND†	3.33	2.97	2.61
	20	101.60	ED1831-ND†	3.70	3.30	2.90
	24	121.92	ED1832-ND†	4.44	3.96	3.48
5.08mm Lead Spacing — Horiz. Headers						
11	2	20.32	ED2427-ND	1.10	.99	.88
	3	25.40	ED2428-ND	1.65	1.49	1.32
	4	30.48	ED2429-ND	2.20	1.98	1.76
	5	35.56	ED2430-ND	2.75	2.48	2.20

* Use Keying Star ED1901-ND † Use Keying Star ED1902-ND
‡ Drawing shows 5.08 pitch

(Continued)

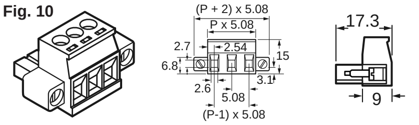
Two-Piece Terminal Blocks *(Cont.)*

Fig. 9



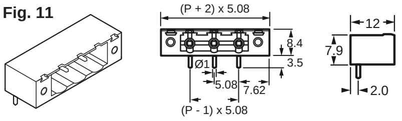
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 10



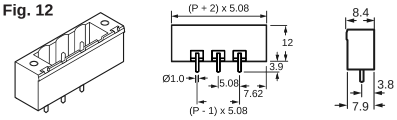
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 28-12AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 11



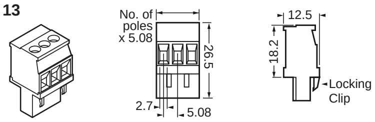
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 12



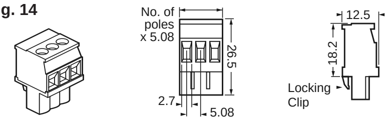
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 13



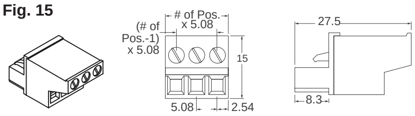
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-10AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 14



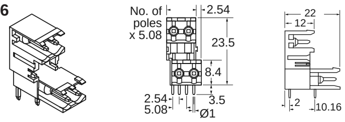
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-10AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94 V-0 • **Color:** Green

Fig. 15



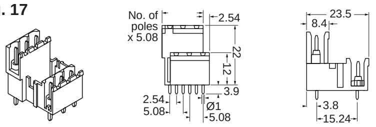
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-12AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 16



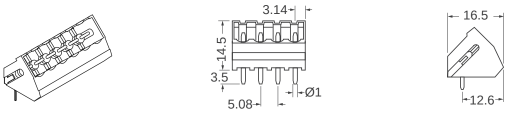
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 17



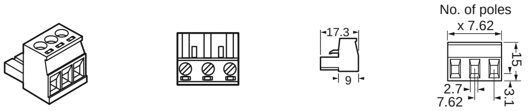
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** U 94V-0 • **Color:** Green

Fig. 18



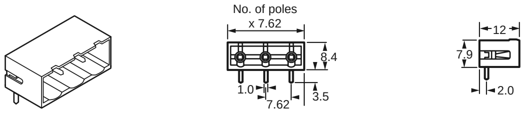
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-0 • **Color:** Green

Fig. 19



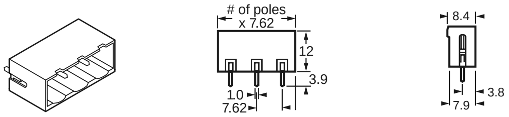
SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Wire Size:** 22-12AWG • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 20



SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig. 21



SPECIFICATIONS: • **Rated Voltage:** 300V • **Rated Current:** 15A • **Temperature:** -30°C/+105°C • **Flammability:** UL94V-O • **Color:** Green

Fig.	No. of Poles	Block Length (mm)	Digi-Key Part No.	Price Each		
				1	10	100
11	6	40.64	ED2431-ND	3.30	2.97	2.64
	7	45.72	ED2432-ND	3.85	3.47	3.08
	8	50.80	ED2433-ND	4.40	3.96	3.52
	9	55.88	ED2434-ND	4.95	4.46	3.96
	10	60.96	ED2435-ND	5.50	4.95	4.40
5.08mm Lead Spacing — Vert. Headers						
9	2	10.16	ED1849-ND†	.37	.33	.29
	3	15.24	ED1850-ND†	.56	.50	.44
	4	20.32	ED1851-ND†	.74	.66	.58
	5	25.40	ED1852-ND†	.93	.83	.73
	6	30.48	ED1853-ND†	1.11	.99	.87
	7	35.56	ED1854-ND†	1.30	1.16	1.02
	8	40.64	ED1855-ND†	1.48	1.32	1.16
	9	45.72	ED1856-ND†	1.67	1.49	1.31
	10	50.80	ED1857-ND†	1.85	1.65	1.45
	11	55.88	ED1858-ND†	2.04	1.82	1.60
	12	60.96	ED1859-ND†	2.22	1.98	1.74
	14	71.12	ED1860-ND†	2.59	2.31	2.03
	16	81.28	ED1861-ND†	2.96	2.64	2.32
	18	91.44	ED1862-ND†	3.33	2.97	2.61
	20	101.60	ED1863-ND†	3.70	3.30	2.90
	24	121.92	ED1864-ND†	4.44	3.96	3.48
5.08mm Lead Spacing — Vert. Headers						
12	2	20.32	ED2445-ND	1.10	.99	.88
	3	25.40	ED2446-ND	1.65	1.49	1.32
	4	30.48	ED2447-ND	2.20	1.98	1.76
	5	35.56	ED2448-ND	2.75	2.48	2.20
	6	40.64	ED2449-ND	3.30	2.97	2.64
	7	45.72	ED2450-ND	3.85	3.47	3.08
	8	50.80	ED2451-ND	4.40	3.96	3.52
	9	55.88	ED2452-ND	4.95	4.46	3.96
	10	60.96	ED2453-ND	5.50	4.95	4.40
5.08mm Lead Spacing — Vert. Plug						
13	2	10.16	ED1746-ND†	1.48	1.33	1.18
	3	15.24	ED1747-ND†	2.21	2.00	1.77
	4	20.32	ED1748-ND†	2.95	2.66	2.36
	5	25.40	ED1749-ND†	3.68	3.31	2.94
	6	30.48	ED1750-ND†	4.43	3.99	3.54
	7	35.56	ED1751-ND†	5.15	4.64	4.12
	8	40.64	ED1752-ND†	5.90	5.31	4.72
	9	45.72	ED1753-ND†	6.63	5.97	5.30
	10	50.80	ED1754-ND†	7.38	6.64	5.90
	11	55.88	ED1755-ND†	8.10	7.29	6.48
	12	60.96	ED1756-ND†	8.85	7.97	7.08
	14	71.12	ED1757-ND†	10.33	9.30	8.26
	16	81.28	ED1758-ND†	11.80	10.62	9.44
5.08mm Lead Spacing — Vert. Plug						
14	2	10.16	ED1759-ND†	1.48	1.33	1.18
	3	15.24	ED1760-ND†	2.21	2.00	1.77
	4	20.32	ED1761-ND†	2.95	2.66	2.36
	5	25.40	ED1762-ND†	3.68	3.31	2.94
	6	30.48	ED1763-ND†	4.43	3.99	3.54
	7	35.56	ED1764-ND†	5.15	4.64	4.12
	8	40.64	ED1765-ND†	5.90	5.31	4.72
	9	45.72	ED1766-ND†	6.63	5.97	5.30
	10	50.80	ED1767-ND†	7.38	6.64	5.90
	11	55.88	ED1768-ND†	8.10	7.29	6.48
	12	60.96	ED1769-ND†	8.85	7.97	7.08
	14	71.12	ED1770-ND†	10.33	9.30	8.26
	16	81.28	ED1771-ND†	11.80	10.62	9.44
5.08mm Lead Spacing – Plugs						
15	2	5.08	ED1983-ND	2.20	1.98	1.76
	3	10.16	ED1984-ND	3.30	2.97	2.64
	4	15.24	ED1985-ND	4.40	3.96	3.52
	5	20.32	ED1986-ND	5.50	4.95	4.40
	6	25.40	ED1987-ND	6.60	5.94	5.28
	7	30.48	ED1988-ND	7.70	6.93	6.16
	8	35.56	ED1989-ND	8.80	7.92	7.04
	9	40.64	ED1990-ND	9.90	8.91	7.92
	10	45.72	ED1991-ND	11.00	9.90	8.80
	11	50.80	ED1992-ND	12.10	10.89	9.68
	12	55.88	ED1993-ND	13.20	11.88	10.56
	14	66.04	ED1994-ND	15.40	13.86	12.32
	16	76.20	ED1995-ND	17.60	15.84	14.08
	18	86.36	ED1996-ND	19.80	17.82	15.84
	20	96.52	ED1997-ND	22.00	19.80	17.60
	24	116.84	ED1998-ND	26.40	23.76	21.12
5.08mm Lead Spacing — Horiz. Headers						
16	4	5.08	ED1903-ND	1.70	1.53	1.36
	6	10.16	ED1904-ND	2.55	2.30	2.04
5.08mm Lead Spacing — Vert. Headers						
17	4	5.08	ED1905-ND	1.70	1.53	1.36
	6	10.16	ED1906-ND	2.55	2.30	2.04
5.08mm Lead Spacing — 45° Header						
18	2	5.08	ED1907-ND	.50	.45	.40
	3	10.16	ED1908-ND	.75	.68	.60
	4	15.24	ED1909-ND	1.00	.90	.80
	5	20.32	ED1910-ND	1.25	1.13	1.00
	6	25.40	ED1911-ND	1.50	1.35	1.20
	7	30.48	ED1912-ND	1.75	1.58	1.40
	8	35.56	ED1913-ND	2.00	1.80	1.60
	9	40.64	ED1914-ND	2.25	2.03	1.80
	10	45.72	ED1915-ND	2.50	2.25	2.00
	11	50.80	ED1916-ND	2.75	2.48	2.20
	12	55.88	ED1917-ND	3.00	2.70	2.40
	13	60.96	ED1918-ND	3.25	2.93	2.60
	14	66.04	ED1919-ND	3.50	3.15	2.80
	15	71.12	ED1920-ND	3.75	3.38	3.00
	16	76.20	ED1921-ND	4.00	3.60	3.20
	17	81.28	ED1922-ND	4.25	3.83	3.40
	18	86.36	ED1923-ND	4.50	4.05	3.60
	19	91.44	ED1924-ND	4.75	4.28	3.80
	20	96.52	ED1925-ND	5.00	4.50	4.00
	21	101.60	ED1926-ND	5.25	4.73	4.20
	22	106.68	ED1927-ND	5.50	4.95	4.40
	23	111.76	ED1928-ND	5.75	5.18	4.60
	24	116.84	ED1929-ND	6.00	5.40	4.80
7.62mm Lead Spacing — Plugs						
19	2	15.24	ED1733-ND*	1.47	1.32	1.18
	3	22.86	ED1734-ND*	2.20	1.98	1.76
	4	30.48	ED1735-ND*	2.93	2.64	2.34
	5	38.10	ED1736-ND*	3.65	3.29	2.92
	6	45.72	ED1737-ND*	4.40	3.96	3.52
	7	53.34	ED1738-ND*	5.13	4.62	4.10
	8	60.96	ED1739-ND*	5.85	5.27	4.68
	9	68.58	ED1740-ND*	6.60	5.94	5.28
	10	76.20	ED1741-ND*	7.33	6.60	5.86
	11	83.82	ED1742-ND*	8.05	7.25	6.44
	12	91.44	ED1743-ND*	8.80	7.92	7.04
	14	106.68	ED1744-ND*	10.25	9.23	8.20
	16	121.92	ED1745-ND*	11.73	10.56	9.38
7.62mm Lead Spacing — Horiz. Header						
20	2	15.24	ED1865-ND†	.48	.43	.38
	3	22.86	ED1866-ND†	.71	.65	.57
	4	30.48	ED1867-ND†	.95	.86	.76
	5	38.10	ED1868-ND†	1.19	1.07	.95
	6	45.72	ED1869-ND†	1.43	1.29	1.14
	7	53.34	ED1870-ND†	1.66	1.50	1.33
	8	60.96	ED1871-ND†	1.90	1.71	1.52
	9	68.58	ED1872-ND†	2.14	1.93	1.71
	10	76.20	ED1873-ND†	2.38	2.14	1.90
	11	83.82	ED1874-ND†	2.60	2.34	2.08
	12	91.44	ED1875-ND†	2.85	2.57	2.28
	14	106.68	ED1876-ND†	3.33	3.00	2.66
	16	121.92	ED1877-ND†	3.80	3.42	3.04
7.62mm Lead Spacing — Vert. Header						
21	2	15.24	ED1878-ND†	.48	.43	.38
	3	22.86	ED1879-ND†	.71	.65	.57
	4	30.48	ED1880-ND†	.95	.86	.76
	5	38.10	ED1881-ND†	1.19	1.07	.95
	6	45.72	ED1882-ND†	1.43	1.29	1.14
	7	53.34	ED1883-ND†	1.66	1.50	1.33
	8	60.96	ED1884-ND†	1.90	1.71	1.52
	9	68.58	ED1885-ND†	2.14	1.93	1.71
	10	76.20	ED1886-ND†	2.38	2.14	1.90
	11	83.82	ED1887-ND†	2.61	2.36	2.09
	12	91.44	ED1888-ND†	2.85	2.57	2.28
	14	106.68	ED1890-ND†	3.33	3.00	2.66
	16	121.92	ED1891-ND†	3.80	3.42	3.04
Keying Star			ED1901-ND	.70	.63	.56
Keying Star			ED1902-ND	.70	.63	.56

* Use Keying Star ED1901-ND † Use Keying Star ED1902-ND

ON-SHORE TECHNOLOGY, INC.

Pluggable Terminal Blocks and Pin Headers

• **Recommended Hole Diameter in Printed Circuit Board:** 1.5mm • **Spacing:** 5mm • **Rated Voltage:** 300V • **Rated Current:** 10A • **Rated Temperature:** -30°C/+105°C • **Flame Class:** 94V-0 • **Rated Cross Section:** 1.5mm^2 • **Terminal Plating:** tin • **Resistance to Tracking:** KB380 • **Wire Guard Material:** BeCu • **Wire Size:** 22-14AWG

Fig. 1

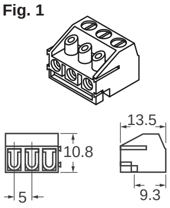
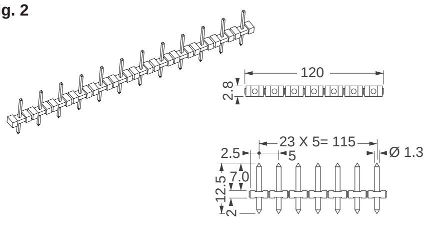


Fig. 2



No. of Pos.	Digi-Key Part No.	Pricing 1	10	100
Fig.1 – Pluggable Terminal Blocks				
2	ED1613-ND	.62	5.56	49.40
3	ED1614-ND	.93	8.33	74.00
4	ED2214-ND	1.24	11.16	99.20
5	ED2215-ND	1.55	13.95	124.00
6	ED2216-ND	1.86	16.74	148.80
7	ED2217-ND	2.17	19.53	173.60
10	ED2218-ND	3.10	27.90	248.00
12	ED2219-ND	3.72	33.48	297.60
Fig.2 – Pin Headers				
2	ED1660-ND	.28	2.50	22.25
3	ED1661-ND	.31	2.77	24.58
4	ED1662-ND	.34	3.06	27.16
5	ED1663-ND	.38	3.38	30.02
6	ED1664-ND	.41	3.73	33.17
7	ED1665-ND	.46	4.12	36.65
8	ED1666-ND	.51	4.56	40.50
9	ED1667-ND	.56	5.03	44.75
10	ED1668-ND	.62	5.56	49.44
11	ED1669-ND	.68	6.15	54.63
12	ED1670-ND	.75	6.79	60.37
13	ED1671-ND	.83	7.50	66.71
14	ED1672-ND	.92	8.29	73.71
15	ED1673-ND	1.02	9.16	81.45
16	ED1674-ND	1.12	10.12	90.00
17	ED1675-ND	1.24	11.19	99.44
18	ED1676-ND	1.37	12.36	109.88
19	ED1677-ND	1.52	13.66	121.42
20	ED1678-ND	1.68	15.09	134.16
21	ED1679-ND	1.85	16.68	148.24
22	ED1680-ND	2.05	18.43	163.81
23	ED1681-ND	2.26	20.36	181.00
24	ED1682-ND	2.50	22.50	200.00

Terminal Blocks

UL# E101811, 86ME2081 CSA# 068503X0000

SPECIFICATIONS:

• **Rated Current:** 16A • **Insulator:** PA 6 GV/PBTP • **Temperature Range:** -30°C to +105°C • **Flame Class:** 94V-0

Fig. 1
Cable Inlet: Front

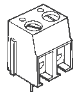


Fig. 2
Cable Inlet: Top

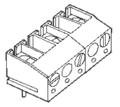


Fig. 3
Cable Inlet: 45°

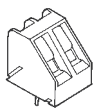
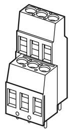


Fig. 4
Double Terminal Block



These On-Shore Technology Terminal Blocks are Stackable for any number of contacts. 4.5mm Lead Length.

Fig.	No. Of Pos.	Lead Spacing (mm)	Rated Volt. (V-) VDE 0110	Terminal Plating	Block Length (mm)	Digi-Key Part No.	Pricing 1	10	100
1	2	5.0	250	Nickel	10	ED1631-ND	.75	6.75	60.00
	2	5.08	300	Tin	10.16	ED1643-ND	.63	5.69	50.60
	2	7.5	380	Tin	15	ED1605-ND	.53	4.73	42.00
	2	10.0	500	Tin	15	ED1615-ND	.53	4.73	42.00
	2	10.0	250	Tin	15	ED1627-ND	.53	4.73	42.00
	2	10.0	500	Nickel	15	ED1633-ND	.80	7.20	64.00
1	3	5.0	250	Nickel	15	ED1632-ND	1.13	10.13	90.00
	3	5.08	300	Tin	15.24	ED1644-ND	.94	8.44	75.00
	3	7.5	380	Tin	22.5	ED1606-ND	.79	7.09	63.00
	3	10.0	500	Tin	25	ED1616-ND	.79	7.09	63.00
	3	10.0	250	Tin	25	ED1628-ND	.79	7.09	63.00
	3	10.0	500	Nickel	25	ED1634-ND	1.20	10.80	96.00
2	2	5.0	250	Tin	10	ED1603-ND	.53	4.73	42.00
	2	5.0	125	Tin	10	ED1625-ND	.53	4.73	42.00
	2	5.08	250	Tin	10.16	ED1611-ND	.53	4.73	42.00
2	2	7.5	380	Tin	15	ED1607-ND	.60	5.40	48.00
	2	10.0	250	Tin	15	ED1617-ND	.60	5.40	48.00
	2	10.0	250	Tin	15	ED1629-ND	.60	5.40	48.00
2	3	5.0	250	Tin	15	ED1604-ND	.79	7.09	63.00
	3	5.0	125	Tin	15	ED1626-ND	.79	7.09	63.00
	3	5.08	250	Tin	15.25	ED1612-ND	.79	7.09	63.00
	3	7.5	380	Tin	22.5	ED1608-ND	.90	8.10	72.00
	3	10.0	250	Tin	25	ED1618-ND	.90	8.10	72.00
	3	10.0	250	Tin	25	ED1630-ND	.90	8.10	72.00
3	2	5.0	250	Nickel	10	ED1619-ND	.59	5.27	46.80
	2	10.0	250	Nickel	15	ED1621-ND	.75	6.75	60.00
3	3	5.0	250	Nickel	15	ED1620-ND	.88	7.88	70.00
	3	10.0	250	Nickel	25	ED1622-ND	1.13	10.13	90.00
4	2	5.0	300	Tin	10	ED1653-ND	1.41	12.71	113.00
4	3	5.0	300	Tin	15	ED1654-ND	2.13	19.17	170.40

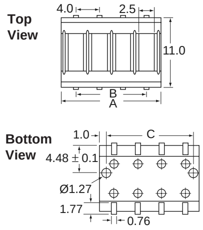
BOURNS INC

70AD Modular Contacts

The **Model 70AD Modular Contact** is a low profile modular design connector that makes a high integrity, yet quickly removable connection. **Applications:** Rechargeable batteries and battery packs, battery chargers, cellular and portable phones, two-way radios, laptop computers, etc. **Materials and Finishes: Insulator:** Glass reinforced thermoplastic; UL 94V-0 rated, black **Contact:** Copper alloy **Finish Underplating:** Nickel **Finish Contact Area:** 30µ in. Au over Ni (male), Precious metal (female) **Finish Termination:** Tin alloy (meets MIL-STD202, method 208) **Electrical Operating Characteristics: Current Rating:** DC 3A/contact **Voltage Rating:** DC 30V (male) **Contact Resistance:** 25mΩ max **Dielectric Voltage:** AC 500V **Insulating Resistance:** 400MΩ min. (male), 500MΩ min. (female) **Operating Temperature:** -55°C to 125°C **Mechanical Characteristics: Normal Force:** 100 grams min. (male) **Durability:** 5,000 cycles

Fig.	No. of Pos.	Digi-Key Part No.	Price Each 1	10	50	100	Bourns Part No.
Female SMT							
1	2	70ADJ-2-F-ND	1.23	.98	.76	.72	70ADJ-002-FL0
	3	70ADJ-3-F-ND	1.45	1.16	.90	.85	70ADJ-003-FL0
	4	70ADJ-4-F-ND	1.83	1.46	1.13	1.06	70ADJ-004-FL0
	5	70ADJ-5-F-ND	2.18	1.74	1.34	1.27	70ADJ-005-FL0
	6	70ADJ-6-F-ND	2.55	2.04	1.57	1.48	70ADJ-006-FL0
Female SMT w/Locator Pin							
1	2	70ADJ-2-F1-ND	1.23	.98	.76	.72	70ADJ-002-FL1
	3	70ADJ-3-F1-ND	1.45	1.16	.90	.85	70ADJ-003-FL1
	4	70ADJ-4-F1-ND	1.83	1.46	1.13	1.06	70ADJ-004-FL1
	5	70ADJ-5-F1-ND	2.18	1.74	1.34	1.27	70ADJ-005-FL1
	6	70ADJ-6-F1-ND	2.55	2.04	1.57	1.48	70ADJ-006-FL1
Female Through-Hole							
2	2	70ADH-2-F-ND	1.23	.98	.76	.72	70ADH-002-FL0
	3	70ADH-3-F-ND	1.45	1.16	.90	.85	70ADH-003-FL0
	4	70ADH-4-F-ND	1.83	1.46	1.13	1.06	70ADH-004-FL0
	5	70ADH-5-F-ND	2.18	1.74	1.34	1.27	70ADH-005-FL0
	6	70ADH-6-F-ND	2.55	2.04	1.57	1.48	70ADH-006-FL0
Male SMT							
3	2	70ADJ-2-M-ND	1.30	1.04	.80	.76	70ADJ-002-ML0
	3	70ADJ-3-M-ND	1.63	1.30	1.00	.95	70ADJ-003-ML0
	4	70ADJ-4-M-ND	2.03	1.62	1.25	1.18	70ADJ-004-ML0
	5	70ADJ-5-M-ND	2.45	1.96	1.51	1.43	70ADJ-005-ML0
	6	70ADJ-6-M-ND	2.85	2.28	1.76	1.66	70ADJ-006-ML0
Male SMT w/Locator Pin							
3	2	70ADJ-2-M1-ND	1.30	1.04	.80	.76	70ADJ-002-ML1
	3	70ADJ-3-M1-ND	1.63	1.30	1.00	.95	70ADJ-003-ML1
	4	70ADJ-4-M1-ND	2.03	1.62	1.25	1.18	70ADJ-004-ML1
	5	70ADJ-5-M1-ND	2.45	1.96	1.51	1.43	70ADJ-005-ML1
	6	70ADJ-6-M1-ND	2.85	2.28	1.76	1.66	70ADJ-006-ML1
Male Through-Hole							
4	2	70ADH-2-M-ND	1.30	1.04	.80	.76	70ADH-002-ML0
	3	70ADH-3-M-ND	1.63	1.30	1.00	.95	70ADH-003-ML0
	4	70ADH-4-M-ND	2.03	1.62	1.25	1.18	70ADH-004-ML0
	5	70ADH-5-M-ND	2.45	1.96	1.51	1.43	70ADH-005-ML0
	6	70ADH-6-M-ND	2.85	2.28	1.76	1.66	70ADH-006-ML0

Female Modular Contact



No. of Contacts	Dim. (mm) A	B	C
2	9.0	4.0	7.0
3	13.0	8.0	11.0
4	17.0	12.0	15.0
5	21.0	16.0	19.0
6	25.0	20.0	23.0

Fig. 1 - Female Surface Mount

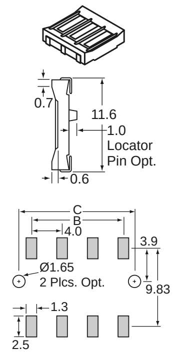
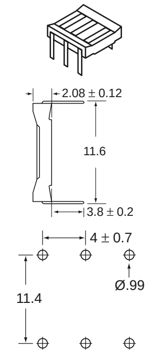
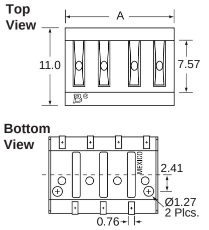


Fig. 2 - Female Through Hole



Male Modular Contact



No. of Contacts	Dim. (mm) A	B
2	7.7	5.11
3	11.7	9.11
4	15.7	13.11
5	19.7	17.11
6	23.7	21.11

Fig. 3 - Male Surface Mount

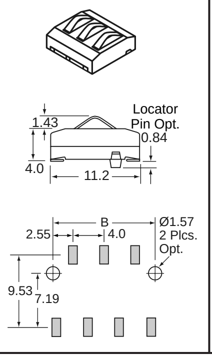
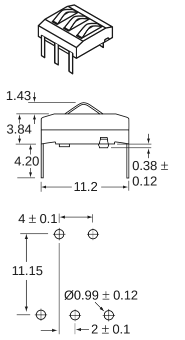


Fig. 4 - Male Through Hole



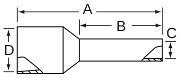
American Electrical Inc.

Crimp Wire Ferrules

For Use with European Style Terminal Blocks

CE

Wire Ferrules – Insulated



Material: Copper/Plastic. Surface: Tin-plated.

Size mm^2	AWG	Type	Color Code	Dimensions (mm)				Digi-Key	Pricing			AE
				A	B	C	D	Part No.	10	50	100	Part No.
0.14	26	DIN	Gray	10.5	6	0.8	2.0	288-1001-ND*	2.32	10.15	17.40	1161014
				12.5	8	0.8	2.0	288-1002-ND*	2.48	10.85	18.60	1181014
		W	Gray	10.5	6	0.8	2.0	288-1039-ND*	2.32	10.15	17.40	1162014
				12.5	8	0.8	2.0	288-1040-ND*	2.48	10.85	18.60	1182014
0.25	24	DIN	Yellow	10.5	6	0.8	2.0	288-1003-ND*	2.32	10.15	17.40	11610025
				12.5	8	0.8	2.0	288-1004-ND*	2.48	10.85	18.60	11810025
		W	Blue	10.5	6	0.8	2.0	288-1041-ND*	2.32	10.15	17.40	11620025
				12.5	8	0.8	2.0	288-1042-ND*	2.48	10.85	18.60	11820025
0.34	22	DIN	Turquoise	10.5	6	0.8	2.0	288-1005-ND*	2.32	10.15	17.40	1161034
				12.5	8	0.8	2.0	288-1006-ND*	2.48	10.85	18.60	1181034
		W	Turquoise	10.5	6	0.8	2.0	288-1043-ND*	2.32	10.15	17.40	1162034
				12.5	8	0.8	2.0	288-1044-ND*	2.48	10.85	18.60	1182034
0.50	20	DIN	White	11.5	6	1.1	2.5	288-1007-ND	1.68	7.35	12.60	1161050
				13.5	8	1.1	2.5	288-1008-ND	1.20	5.25	9.00	1181050
				15.5	10	1.1	2.5	288-1009-ND	1.68	7.35	12.60	11101050
		W	Orange	11.5	6	1.1	2.5	288-1045-ND	1.68	7.35	12.60	1162050
				13.5	8	1.1	2.5	288-1046-ND	1.20	5.25	9.00	1182050
				15.5	10	1.1	2.5	288-1047-ND	1.68	7.35	12.60	11102050
0.75	20	DIN	Gray	12.0	6	1.3	2.8	288-1010-ND	1.76	7.70	13.20	1161075
				14.0	8	1.3	2.8	288-1011-ND	1.20	5.25	9.00	1181075
				16.0	10	1.3	2.8	288-1012-ND	1.76	7.70	13.20	11101075
				18.0	12	1.3	2.8	288-1013-ND	1.76	7.70	13.20	11121075
		W	White	12.0	6	1.3	2.8	288-1048-ND	1.76	7.70	13.20	1162075
				14.0	8	1.3	2.8	288-1049-ND	1.20	5.25	9.00	1182075
				16.0	10	1.3	2.8	288-1050-ND	1.76	7.70	13.20	11102075
				18.0	12	1.3	2.8	288-1051-ND	1.76	7.70	13.20	11122075
1.00	18	DIN	Red	12.5	6	1.5	3.0	288-1014-ND	2.00	8.75	15.00	1161010
				14.5	8	1.5	3.0	288-1015-ND	1.28	5.60	9.60	1181010
				16.5	10	1.5	3.0	288-1016-ND	2.00	8.75	15.00	11101010
				18.5	12	1.5	3.0	288-1017-ND	2.00	8.75	15.00	11121010
		W	Yellow	12.5	6	1.5	3.0	288-1052-ND	2.00	8.75	15.00	1162010
				14.5	8	1.5	3.0	288-1053-ND	1.28	5.60	9.60	1182010
				16.5	10	1.5	3.0	288-1054-ND	2.00	8.75	15.00	11102010
				18.5	12	1.5	3.0	288-1055-ND	2.00	8.75	15.00	11122010
1.50	16	DIN	Black	12.5	6	1.8	3.4	288-1018-ND*	2.80	12.25	21.00	1161015
				14.5	8	1.8	3.4	288-1019-ND	1.76	7.70	13.20	1181015
				16.5	10	1.8	3.4	288-1020-ND	2.80	12.25	21.00	11101015
				18.5	12	1.8	3.4	288-1021-ND	2.80	12.25	21.00	11121015
				24.5	18	1.8	3.4	288-1022-ND	2.80	12.25	21.00	11181015
		W	Red	12.5	6	1.8	3.4	288-1056-ND*	2.80	12.25	21.00	1162015
				14.5	8	1.8	3.4	288-1057-ND	1.76	7.70	13.20	1182015
				16.5	10	1.8	3.4	288-1058-ND	2.80	12.25	21.00	11102015
				18.5	12	1.8	3.4	288-1059-ND	2.80	12.25	21.00	11122015
				24.5	18	1.8	3.4	288-1060-ND	2.80	12.25	21.00	11182015
2.08	14	DIN	Yellow	14.5	8	2.05	3.6	288-1023-ND*	2.20	9.63	16.50	1181208
		W	Yellow	14.5	8	2.05	3.6	288-1061-ND*	2.20	9.63	16.50	1182208
2.50	14	DIN	Blue	15.0	8	2.3	4.2	288-1024-ND	1.76	7.70	13.20	1181025
				19.0	12	2.3	4.2	288-1025-ND	2.40	10.50	18.00	11121025
				25.0	18	2.3	4.2	288-1026-ND	3.20	14.00	24.00	11181025
		W	Blue	15.0	8	2.3	4.2	288-1062-ND	1.76	7.70	13.20	1182025
				19.0	12	2.3	4.2	288-1063-ND	2.40	10.50	18.00	11122025
				25.0	18	2.3	4.2	288-1064-ND	3.20	14.00	24.00	11182025
4.00	12	DIN	Gray	17.5	10	2.9	4.8	288-1027-ND	2.88	12.60	21.60	11101040
				20.0	12	2.9	4.8	288-1028-ND	2.88	12.60	21.60	11121040
				26.0	18	2.9	4.8	288-1029-ND	3.68	13.80	18.40	11181040
		W	Gray	17.5	10	2.9	4.8	288-1065-ND	2.88	10.80	14.40	11102040
				20.0	12	2.9	4.8	288-1066-ND	2.88	10.80	14.40	11122040
				26.0	18	2.9	4.8	288-1067-ND	3.68	13.80	18.40	11182040
6.00	10	DIN	Yellow	20.0	12	3.6	6.2	288-1030-ND	3.80	14.25	19.00	11121060
				25.0	18	3.6	6.2	288-1031-ND	4.40	16.50	22.00	11181060
		W	Black	20.0	12	3.6	6.2	288-1068-ND	3.80	14.25	19.00	11122060
				25.0	18	3.6	6.2	288-1069-ND	4.40	16.50	22.00	11182060
10.00	8	DIN	Red	21.0	12	4.6	7.5	288-1032-ND	3.80	14.25	19.00	11121100
				27.0	18	4.6	7.5	288-1033-ND	6.40	24.00	32.00	11181100
		W	Ivory	21.0	12	4.6	7.5	288-1070-ND	3.80	14.25	19.00	11122100
				27.0	18	4.6	7.5	288-1071-ND	6.40	24.00	32.00	11182100
16.00	6	DIN	Blue	23.0	12	6.0	8.8	288-1034-ND	5.20	19.50	26.00	11121160
				29.0	18	6.0	8.8	288-1035-ND	8.00	30.00	40.00	11181160
		W	Green	23.0	12	6.0	8.8	288-1072-ND	5.20	19.50	26.00	11122160
				29.0	18	6.0	8.8	288-1073-ND	8.00	30.00	40.00	11182160
25.00	4	DIN	Yellow	29.0	16	7.5	11.0	288-1036-ND	13.20	49.50	66.00	11161250
				31.0	18	7.5	11.0	288-1037-ND	13.20	49.50	66.00	11181250
				35.0	22	7.5	11.0	288-1038-ND	18.00	67.50	90.00	11221250
		W	Brown	29.0	16	7.5	11.0	288-1074-ND	13.20	49.50	66.00	11162250
				31.0	18	7.5	11.0	288-1075-ND	13.20	49.50	66.00	11182250
				35.0	22	7.5	11.0	288-1076-ND	18.00	67.50	90.00	11222250

* Does not conform to DIN 46228 Part 4

Assortment Boxes

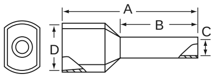
Assortment Box 1	Assortment Box 2	Assortment Box 3
150 pieces	**400 pieces**	**100 pieces**
(30 pieces each of sizes 0.25, 0.34, 0.50, 0.75, and 1.00)	(50 pieces each of sizes 0.50 and 2.50; 100 pieces each of sizes 0.75, 1.00, and 1.50)	(50 pieces each of size 4.00; 20 pieces each of sizes 6.00 and 10.00, 10 pieces of size 16.00)
DIN Type	**DIN Type**	**DIN Type**
288-1147-ND **$50.00**	288-1148-ND **$75.00**	288-1149-ND **$62.50**
W Type	**W Type**	**W Type**
288-1153-ND **$50.00**	288-1154-ND **$75.00**	288-1155-ND **$62.50**

Crimp Tools

288-1163-ND	Prototype Tool For 10-22 AWG Ferrules (AE Part # Trap 22-10)	**$43.73**
288-1158-ND	For 10-24 AWG Ferrules (AE Part # TRAP 24-10)	**$175.00**
288-1159-ND	For 4-8 AWG Ferrules (AE Part #. TRAP 8-4)	**$188.46**
288-1161-ND	For 10-28 AWG Ferrules (AE Part # SQ 28-10)	**$210.00**
288-1162-ND	For 8-12 AWG Ferrules (AE Part # TRAP 12-8 TW)	**$250.72**

Twin-Wire Ferrules for Two Wires

Material: Copper/Plastic.
Surface: Tin-plated.



Size mm^2	AWG	Color	Dimensions (mm)				Digi-Key	Pricing			AE
			A	B	C	D	Part No.	10	50	100	Part No.
2 x 0.50	2 x 20	White	15.0	8.0	1.5	2.3 / 4.5	288-1124-ND	1.60	7.00	12.00	1381050
2 x 0.75	2 x 20	Gray	15.0	8.0	1.8	2.6 / 5.1	288-1125-ND	1.60	7.00	12.00	1381075
2 x 0.75	2 x 20	Gray	17.0	10.0	1.8	2.6 / 5.1	288-1126-ND	2.04	8.93	15.30	13101075
2 x 1.00	2 x 18	Red	15.0	8.0	2.05	3.2 / 5.1	288-1127-ND	1.88	8.23	14.10	1381010
2 x 1.00	2 x 18	Red	17.0	10.0	2.05	3.2 / 5.1	288-1128-ND	2.60	11.38	19.50	13101010
2 x 1.50	2 x 16	Black	16.0	8.0	2.3	3.5 / 6.4	288-1129-ND	2.24	9.80	16.80	1381015
2 x 1.50	2 x 16	Black	20.0	12.0	2.3	3.5 / 6.4	288-1130-ND	3.20	14.00	24.00	13121015
2 x 2.50	2 x 14	Blue	18.5	10.0	2.9	4.0 / 7.5	288-1131-ND	3.20	14.00	24.00	13101025
2 x 2.50	2 x 14	Blue	21.5	13.0	2.9	4.0 / 7.5	288-1132-ND	3.20	14.00	24.00	13131025
2 x 4.00	2 x 12	Gray	23.0	12.0	3.8	4.9 / 8.6	288-1133-ND	5.80	21.75	29.00	13121040
2 x 6.00	2 x 10	Yellow	25.0	14.0	4.9	5.8 / 9.6	288-1134-ND	6.20	23.25	31.00	13141060
2 x 10.0	2 x 8	Red	26.0	14.0	6.5	7.0 / 12.6	288-1135-ND	7.60	28.50	38.00	13141100
2 x 16.0	2 x 6	Blue	31.0	16.0	8.5	8.8 / 16.6	288-1136-ND	20.00	87.50	150.00	13161160

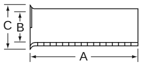
Assortment Boxes

288-1150-ND	**Asst. Box 4 — 200 pieces** (50 pieces each of sizes 0.50, 0.75, 1.00, 1.50)	**$50.00**
288-1151-ND	**Asst. Box 5 — 200 pieces** (50 pieces each of sizes 0.50, 1.00, 1.50, 2.50)	**$55.00**
288-1152-ND	**Asst. Box 6 — 90 pieces** (30 pieces each of sizes 1.50 and 2.50, 20 pieces of size 4.00, 10 pieces of size 6.00)	**$62.50**

Wire Ferrules on Strips

Size mm^2	AWG	Type	Color Code	Digi-Key Part No.	Pricing			AE Part No.
					10	50	100	
0.50	20	DIN	White	288-1142-ND	1.50	6.56	11.25	101050
		W	Orange	288-1137-ND	1.50	6.56	11.25	102050
0.75	20	DIN	Gray	288-1143-ND	1.50	6.56	11.25	101075
		W	White	288-1138-ND	1.50	6.56	11.25	102075
1.00	18	DIN	Red	288-1144-ND	1.60	7.00	12.00	101100
		W	Yellow	288-1139-ND	1.60	7.00	12.00	102100
1.50	16	DIN	Black	288-1145-ND	2.20	9.63	16.50	101150
		W	Red	288-1140-ND	2.20	9.63	16.50	102150
2.50	14	DIN	Blue	288-1146-ND	2.20	9.63	16.50	101250
		W	Blue	288-1141-ND	2.20	9.63	16.50	102250

Wire Ferrules – Non-Insulated



Material: Copper. Surface: Tin-plated.

Size mm^2	AWG	Dimensions (mm)			Digi-Key	Pricing			AE
		A	B	C	Part No.	10	50	100	Part No.
0.25	24	5	0.8	1.7	288-1077-ND*	.60	2.63	4.50	12510025
		7	0.8	1.7	288-1078-ND*	.60	2.63	4.50	12710025
0.34	22	5	0.9	1.8	288-1079-ND*	.64	2.80	4.80	12510034
		7	0.9	1.8	288-1080-ND*	.64	2.80	4.80	12710034
0.50	20	6	1.0	2.1	288-1081-ND	.68	2.98	5.10	12610050
		8	1.0	2.1	288-1082-ND*	.72	3.15	5.40	12810050
		10	1.0	2.1	288-1083-ND	.72	3.15	5.40	121010050
0.75	20	6	1.2	2.3	288-1084-ND	.84	3.68	6.30	12610075
		8	1.2	2.3	288-1085-ND*	.84	3.68	6.30	12810075
		10	1.2	2.3	288-1086-ND	.88	3.85	6.60	121010075
		12	1.2	2.3	288-1087-ND	.96	4.20	7.20	121210075
1.00	18	6	1.4	2.5	288-1088-ND	.88	3.85	6.60	12610100
		7	1.4	2.5	288-1089-ND	.88	3.85	6.60	12710100
		8	1.4	2.5	288-1090-ND*	.88	3.85	6.60	12810100
		10	1.4	2.5	288-1091-ND	.88	3.85	6.60	121010100
		12	1.4	2.5	288-1092-ND*	1.00	4.38	7.50	121210100
1.50	16	7	1.7	2.8	288-1093-ND	.92	4.03	6.90	12710150
		8	1.7	2.8	288-1094-ND	.92	4.03	6.90	12810150
		10	1.7	2.8	288-1095-ND	.96	4.20	7.20	121010150
		12	1.7	2.8	288-1096-ND	1.08	4.73	8.10	121210150
		15	1.7	2.8	288-1097-ND*	1.08	4.73	8.10	121510150
		18	1.7	2.8	288-1098-ND	1.12	4.90	8.40	121810150
2.50	14	7	2.2	3.4	288-1099-ND	1.16	5.08	8.70	12710250
		8	2.2	3.4	288-1100-ND	1.16	5.08	8.70	12810250
		10	2.2	3.4	288-1101-ND	1.16	5.08	8.70	121010250
		12	2.2	3.4	288-1102-ND	1.16	5.08	8.70	121210250
		15	2.2	3.4	288-1103-ND*	1.28	5.60	9.60	121510250
		18	2.2	3.4	288-1104-ND	1.28	5.60	9.60	121810250
4.00	12	9	2.8	4.0	288-1105-ND	1.12	4.90	8.40	12910400
		10	2.8	4.0	288-1106-ND	1.12	4.90	8.40	121010400
		12	2.8	4.0	288-1107-ND	1.00	4.38	7.50	121210400
		15	2.8	4.0	288-1108-ND	1.28	5.60	9.60	121510400
		18	2.8	4.0	288-1109-ND	1.32	5.78	9.90	121810400
6.00	10	10	3.5	4.7	288-1110-ND	2.24	9.80	16.80	121010600
		12	3.5	4.7	288-1111-ND	2.24	9.80	16.80	121210600
		15	3.5	4.7	288-1112-ND	2.40	10.50	18.00	121510600
		18	3.5	4.7	288-1113-ND	2.40	10.50	18.00	121810600
10.00	8	12	4.5	5.8	288-1114-ND	2.00	8.75	15.00	1212110
		15	4.5	5.8	288-1115-ND	2.00	8.75	15.00	1215110
		18	4.5	5.8	288-1116-ND	2.40	10.50	18.00	1218110
		20	4.5	5.8	288-1117-ND*	2.40	10.50	18.00	1220110
16.00	6	12	5.8	7.5	288-1118-ND	2.88	12.60	21.60	1212116
		15	5.8	7.5	288-1119-ND	2.88	12.60	21.60	1215116
		18	5.8	7.5	288-1120-ND	2.88	12.60	21.60	1218116
25.00	4	12	7.3	9.5	288-1121-ND*	10.40	45.50	78.00	1212125
		15	7.3	9.5	288-1122-ND	10.40	45.50	78.00	1215125
		18	7.3	9.5	288-1123-ND	10.40	45.50	78.00	1218125

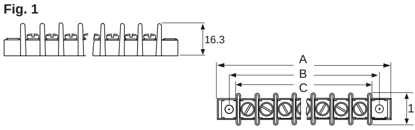
* Does not conform to DIN 46228 Part 1

Assortment Boxes

288-1156-ND	**Assortment Box 7 — 1,800 pieces** (500 pieces of size 0.50; 400 pieces each of sizes 0.75 and 1.00; 300 pieces of size 1.50; 200 pieces of Size 2.50)	**$87.50**
288-1157-ND	**Assortment Box 8 — 370 pieces** (150 pieces of size 4.00; 100 pieces of size 6.00; 80 pieces of size 10.00; 40 pieces of size 16.00)	**$75.00**

Barrier Terminal Blocks

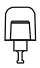
Fig. 1



A

No PC Terminal

B

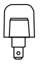


Insul. Solder Turret

C

PC Mount

D



Insul. Quick Connect

Fig. 2

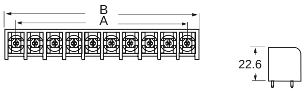


Fig. 3

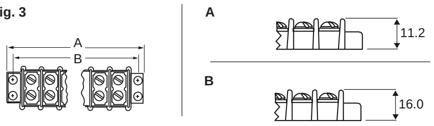


Fig. 4

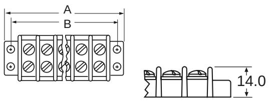


Fig. 5

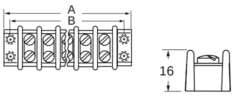
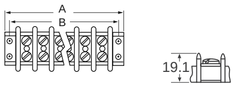


Fig. 6



.375" PCB Single Barrier Terminal Strip
Ratings: #6-32 Binding Head Screw: UL: Class B - 15Amps @ 300V 14AWG. Class C - 15 Amps @ 150V 14AWG. CSA: Class B & C - 20 Amps @ 300V 14AWG, Mechanical: Torque - 12 in-lbs. Strip length - 5/16". Wire range - 12 to 24AWG, Materials: Insulator: Thermoplastic, UL94V-0, black. Terminal: Brass, tin-lead plate. Screws: #6-32, phillips/slotted, steel, zinc chromate plate

Tri-Barrier and Double Row Barrier Terminal Strips
PCB Tri-Barrier Terminal Strip, 600V
Ratings: M4 Wire Clamp Screw: UL & CSA: Class B & C: 45 Amps @ 600V 8 AWG Mechanical: Torque - 16 in-lbs. Wire Range: 8 to 18 AWG Strip length - 5/16" Insulator : Thermoplastic, UL94V-0, black. Terminal: High copper brass, tin-lead plate. Screws: M4, steel, zinc chromate plate with clamp washer. UL File No. E48521, CSA File No. 025562 for all the Tri-Barrier, Double Row and Single Row

.375" Double Row Low Profile Barrier Terminal Strip
Ratings: #6-32 Binding Head Screw: UL: Class B - 15Amps @ 300V 14 AWG, Class C - 15Amps @ 150V 14 AWG. CSA: Class B & C - 20 Amps @ 150V 14AWG Mechanical: Torque - 8in-lbs. Strip length - 5/16" Wire range - 12 to 24 AWG Insulator: Thermoplastic, UL94V0, black. Terminal: Brass, nickel plate. Screws: #6-32, phillips/slotted, steel, zinc chromate plate

.375" Double Row Barrier Terminal Strip
Same as the Low Profile except the CSA ratings Class B & C: 20 Amps @ 300V 14AWG

.478" Double Row Barrier Terminal Strip
Ratings: #6-32 Binding Head Screw. UL: Class B & C 15 Amps @ 300V 14AWG CSA: Class B & C 20 Amps @ 300V 14AWG Mechanical: Torque - 8in-lbs. Strip length - 5/16: Wire range - 12 to 24AWG Material: Same as the .375" Terminal Strips

.563" Double Row Phenolic Barrier Terminal Strip
Ratings: #8-32 Binding Head Screw: UL & CSA: Class B & C: 30Amps @ 300V 10AWG Mechanical: Torque - 16in-lbs. Strip length - 5/16" Wire range - 10 to 18AWG Materials: Insulator: General purpose phenolic, UL94V-0, black. Terminal: Brass, nickel plate. Screws: #8-32, phillips/slotted, steel, zinc chromate plate

.688" Double Row Phenolic Barrier Terminal Strip
Ratings: #10-32 Screw UL: Class B - 50 Amps @ 300V 6AWG (lugged). Class C - 50 Amps @ 150V, 6AWG (lugged). CSA: Class B - 50 Amps @ 300V 6AWG (lugged). Mechanical: Torque - 20 in-lbs. Torque - 22 in-lbs. Strip length - 5/16" Wire range - 6AWG lugged. Max. Materials: Same as the .562" except the screw size which is #10-32

Fig.	No. of Contacts	Dim.– Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
.375" Single Row, PCB Barrier Terminal Strip									
1A	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5720-ND	2.24	1.98	1.32	72102
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5721-ND	2.77	2.45	1.63	72103
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5722-ND	3.14	2.77	1.85	72104
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5723-ND	3.68	3.25	2.17	72105
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5724-ND	8.73	7.70	5.14	72106
	8	3.83 (97.3)	3.38 (85.7)	3.08 (78.3)	WM5725-ND	5.06	4.47	2.98	72108
	10	4.58 (116)	4.13 (105)	3.83 (97.3)	WM5726-ND	6.04	5.33	3.55	72110
	12	5.33 (135)	4.88 (124)	4.58 (116)	WM5727-ND	6.88	6.07	4.05	72112
1B	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5728-ND	2.57	2.27	1.52	72202
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5729-ND	3.24	2.87	1.91	72203
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5730-ND	3.91	3.45	2.30	72204
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5731-ND	4.51	3.98	2.65	72205
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5732-ND	5.06	4.47	2.98	72206
	7	3.46 (87.8)	3.00 (76.2)	2.71 (68.8)	WM5733-ND	5.65	4.99	3.33	72207
	8	3.83 (97.3)	3.38 (85.7)	3.08 (78.3)	WM5734-ND	6.33	5.59	3.73	72208
	10	4.58 (116)	4.13 (105)	3.83 (97.3)	WM5735-ND	7.64	6.75	4.50	72210
	11	4.96 (126)	4.50 (114)	4.21 (107)	WM5736-ND	8.19	7.23	4.82	72211
	12	5.33 (135)	4.88 (124)	4.58 (116)	WM5737-ND	8.84	7.80	5.20	72212
1C	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5738-ND	2.36	2.09	1.39	72502
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5739-ND	2.92	2.58	1.72	72503
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5740-ND*	2.41	2.13	1.42	72503-C
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5741-ND	3.37	2.98	1.99	72504
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5742-ND*	2.82	2.49	1.66	72504-C
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5743-ND	4.01	3.54	2.36	72505
	5	2.71 (68.8)	2.25 (57.2)	1.96 (49.7)	WM5744-ND*	3.40	3.01	2.01	72505-C
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5745-ND	4.50	3.97	2.65	72506
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5746-ND*	3.88	3.42	2.28	72506-C
	8	3.83 (97.3)	3.38 (85.7)	3.08 (78.3)	WM5747-ND	5.61	4.95	3.30	72508
	10	4.58 (116)	4.13 (105)	3.83 (97.3)	WM5748-ND	6.72	5.94	3.96	72510
1D	2	1.58 (78.3)	1.13 (28.6)	.83 (21.1)	WM5749-ND	2.41	2.13	1.42	72902
	3	1.96 (49.7)	1.50 (38.1)	1.21 (30.7)	WM5750-ND	3.01	2.66	1.77	72903
	4	2.33 (59.2)	1.88 (47.6)	1.58 (40.2)	WM5751-ND	3.49	3.08	2.05	72904
	6	3.08 (78.3)	2.63 (66.7)	2.33 (59.2)	WM5752-ND	4.64	4.10	2.73	72906

*No mounting ends

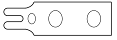
Fig.	No. of Contacts	Dim.– Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
.500" Single Row, PCB Tri-Barrier Terminal Strip, 600V								
2	3	1.00 (25.4)	1.61 (40.9)	WM5754-ND	8.12	7.17	4.78	66503
	4	1.50 (38.1)	2.11 (53.6)	WM5755-ND	10.17	8.97	5.98	66504
	5	2.00 (50.8)	2.61 (66.3)	WM5756-ND	12.22	10.79	7.19	66505
	6	2.50 (63.5)	3.11 (79.0)	WM5757-ND	14.28	12.60	8.40	66506
	7	3.00 (76.2)	3.61 (91.7)	WM5758-ND	16.33	14.42	9.61	66507
.375" Double Row Low Profile Barrier Terminal Strip								
3A	2	1.41 (35.8)	1.13 (28.7)	WM5759-ND	2.11	1.86	1.24	77002
	3	1.78 (45.2)	1.50 (38.1)	WM5760-ND	2.29	2.03	1.35	77003
	4	2.16 (54.9)	1.88 (47.8)	WM5761-ND	2.68	2.37	1.58	77004
	5	2.53 (64.3)	23.25 (57.2)	WM5762-ND	3.34	2.95	1.97	77005
	6	2.91 (73.9)	2.63 (66.8)	WM5763-ND	3.81	3.36	2.24	77006
	7	3.28 (83.3)	3.00 (76.3)	WM5764-ND	3.98	3.51	2.34	77007
	8	3.66 (93.1)	3.38 (85.9)	WM5765-ND	4.65	4.10	2.74	77008
	10	4.41 (112)	4.13 (105)	WM5766-ND	5.50	4.86	3.24	77010
	12	5.16 (131)	4.88 (124)	WM5767-ND	6.15	5.43	3.62	77012
	13	5.53 (140)	5.25 (133)	WM5768-ND	6.71	5.93	3.95	77013
	14	5.91 (150)	5.63 (143)	WM5769-ND	7.20	6.35	4.24	77014
	16	6.66 (169)	6.38 (162)	WM5770-ND	8.01	7.07	4.72	77016
	18	7.41 (188)	7.13 (181)	WM5771-ND	8.78	7.76	5.17	77018
	20	8.16 (207)	7.88 (200)	WM5772-ND	9.81	8.66	5.77	77020
	30	11.91 (303)	11.63 (295)	WM5773-ND	14.08	12.43	8.29	77030
.375" Double Row Barrier Terminal Strip								
3B	2	1.41 (35.8)	1.13 (28.7)	WM5774-ND	2.11	1.86	1.24	76002
	3	1.78 (45.2)	1.50 (38.1)	WM5775-ND	2.29	2.03	1.35	76003

Fig.	No. of Contacts	Dim.– Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
3B	4	2.16 (54.9)	1.88 (47.8)	WM5776-ND	2.69	2.38	1.59	76004
	5	2.53 (64.3)	23.25 (57.2)	WM5777-ND	3.34	2.95	1.97	76005
	6	2.91 (73.9)	2.63 (66.8)	WM5778-ND	3.81	3.36	2.24	76006
	7	3.28 (83.3)	3.00 (76.3)	WM5779-ND	3.98	3.51	2.34	76007
	8	3.66 (93.1)	3.38 (85.9)	WM5780-ND	4.63	4.09	2.73	76008
	10	4.41 (112)	4.13 (105)	WM5781-ND	5.50	4.86	3.24	76010
	12	5.16 (131)	4.88 (124)	WM5782-ND	6.15	5.43	3.62	76012
	14	5.91 (150)	5.63 (143)	WM5783-ND	7.63	6.74	4.49	76014
	16	6.66 (169)	6.38 (162)	WM5784-ND	8.01	7.07	4.72	76016
	18	7.41 (188)	7.13 (181)	WM5785-ND	8.78	7.76	5.17	76018
	20	8.16 (207)	7.88 (200)	WM5786-ND	9.81	8.66	5.77	76020
	22	8.91 (226)	8.63 (219)	WM5787-ND	10.39	9.17	6.12	76022
	24	9.66 (245)	9.38 (238)	WM5788-ND	11.50	10.15	6.77	76024
	30	11.91 (303)	11.63 (295)	WM5789-ND	14.45	12.75	8.50	76030
.438" Double Row Barrier Terminal Strip								
4	2	1.63 (41.4)	1.31 (33.3)	WM5790-ND	2.15	1.90	1.27	78002
	3	2.06 (52.3)	1.75 (44.5)	WM5791-ND	2.60	2.30	1.53	78003
	4	2.50 (63.5)	2.19 (55.6)	WM5792-ND	3.43	3.03	2.02	78004
	5	2.94 (74.7)	2.63 (66.8)	WM5793-ND	3.79	3.35	2.23	78005
	6	3.38 (85.9)	3.06 (77.7)	WM5794-ND	4.34	3.83	2.55	78006
	7	3.81 (96.8)	3.50 (88.9)	WM5795-ND	5.15	4.55	3.03	78007
	8	4.25 (108)	3.94 (100)	WM5796-ND	5.43	4.79	3.20	78008
	10	5.13 (130)	4.81 (122)	WM5797-ND	6.43	5.67	3.78	78010
	12	6.00 (152)	5.69 (145)	WM5798-ND	7.62	6.73	4.49	78012
	14	6.88 (175)	6.56 (167)	WM5799-ND	8.79	7.76	5.18	78014
	16	7.75 (197)	7.44 (189)	WM5800-ND	9.70	8.57	5.71	78016
	18	8.63 (219)	8.31 (211)	WM5801-ND	10.60	9.36	6.24	78018
	20	9.50 (241)	9.19 (233)	WM5802-ND	11.52	10.17	6.78	78020
.563" Double Row Phenolic Barrier Terminal Strip with Closed Bottom								
5	2	2.09 (53.9)	1.69 (42.9)	WM5803-ND	3.10	2.74	1.83	21002-CB
	3	2.66 (67.6)	2.25 (57.2)	WM5804-ND	4.36	3.86	2.57	21003-CB
	4	3.22 (81.8)	2.81 (71.4)	WM5805-ND	5.14	4.54	3.03	21004-CB
	5	3.78 (96.0)	3.38 (85.9)	WM5806-ND	6.30	5.57	3.71	21005-CB
	6	4.34 (110)	3.94 (100)	WM5807-ND	7.22	6.37	4.25	21006-CB
	7	4.91 (125)	4.50 (114)	WM5808-ND	7.82	6.90	4.60	21007-CB
	8	5.47 (139)	5.06 (129)	WM5809-ND	8.48	7.49	4.99	21008-CB
	10	6.59 (167)	6.19 (157)	WM5810-ND	10.79	9.52	6.35	21010-CB
	12	7.72 (196)	7.31 (186)	WM5811-ND	12.98	11.46	7.64	21012-CB
	16	9.97 (253)	9.56 (243)	WM5812-ND	16.83	14.85	9.90	21016-CB
	20	12.22 (310)	11.81 (300)	WM5813-ND	20.97	18.51	12.34	21020-CB
	24	14.47 (368)	14.06 (357)	WM5814-ND	24.82	21.90	14.60	21024-CB
.688" Double Row Phenolic Barrier Terminal Strip								
6	2	2.50 (63.5)	2.06 (52.4)	WM5815-ND	6.23	5.51	3.67	28002
	3	3.19 (81)	2.75 (69.9)	WM5816-ND	8.25	7.28	4.85	28003
	4	3.88 (98.4)	3.44 (87.3)	WM5817-ND	10.65	9.40	6.27	28004
	5	4.56 (116)	4.13 (105)	WM5818-ND	12.96	11.44	7.63	28005
	6	5.25 (133)	4.81 (122)	WM5819-ND	16.05	14.16	9.44	28006
	8	6.63 (168)	6.19 (157)	WM5820-ND	19.95	17.61	11.74	28008
	10	8.00 (203)	7.56 (192)	WM5821-ND	21.18	18.69	12.46	28010
	12	9.38 (238)	8.94 (227)	WM5822-ND	29.37	25.92	17.28	28012

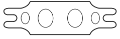
Style 1, 2, and 3 Solder Terminals

Series	Style	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
.375	1	WM5918-ND	.25	.22	.15	141
	2	WM5919-ND	.32	.29	.19	142
	3	WM5920-ND	.14	.13	.09	143
.438	1	WM5921-ND	.32	.29	.19	181
	2	WM5922-ND	.41	.37	.25	182
	3	WM5923-ND	.27	.24	.16	183
.563	1	WM5924-ND	.57	.51	.34	211
	2	WM5925-ND	.57	.51	.34	212
	3	WM5926-ND	.60	.54	.36	213

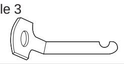
Style 1



Style 2



Style 3



Barrier Terminal Blocks

Fig. 1

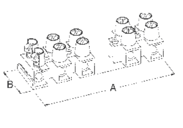


Fig. 2

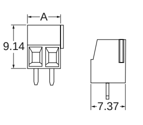


Fig. 3

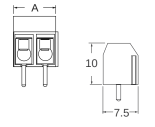


Fig. 4

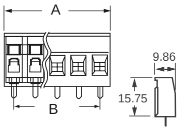


Fig. 5

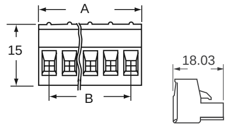


Fig. 6

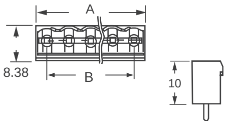


Fig. 7

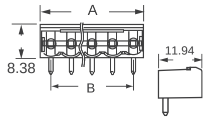


Fig. 8

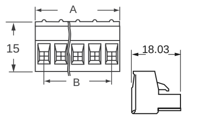


Fig. 9

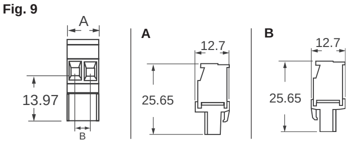


Fig. 10

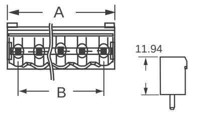
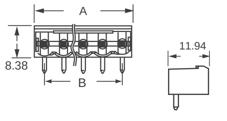


Fig. 11



8.0mm Two-Screw Terminal Strip
Ratings UL: Class B: 10Amps @ 250V 12AWG Class C: 10Amps @ 300V 12AWG CSA: Class B & C: 10Amps @300 V 12AWG Safety Agencies: UL File No. E82573 CSA: Files No. 25562 Mechanical: Torque - 4 in-lbs. Wire range - 12 to 24 AWG Materials: Insulator - Nylon 6.6, UL94V-2, white. Inserts - Brass, chemically tinned. Wire protector - 18/18 stainless band steel. Screws - Zinc-plated steel. Terminals - Nickel-plated brass

10.0mm Two-Screw Terminal Strip
Ratings UL: Class B: 16 Amps @ 250V 10AWG Class C: 16Amps @ 300V 10AWG CSA: Class B & Class C - 25Amps @300V 10AWG Safety Agencies: UL: File No. E82573 CSA: File No. 25562 Mechanical: Torque - 5in-lbs. Wire Range - 10 to 24 AWG Materials: Same as 8.00mm

12.0mm Two-Screw Terminal Strip
Ratings UL & CSA - Class B & C - 25Amps @ 600V 8AWG Mechanical: Torque 10 in-lbs. Wire Range 8 to 24 AWG Materials: Same as 8.00mm & 10.0mm

3.5mm Eurostyle Fixed PCB Terminal Block
Ratings: UL: Class B: 8 Amps @ 150V 16AWG CSA: Same as the UL Safety Agencies: UL & CSA are pending Mechanical: Torque - 2in-lbs. Strip length - .250" (6mm). Wire Range - 16 to 26AWG. Materials: Insulator: Polyimide, UL94V-0, green. Terminal: Brass, tin plate. Clamp: Brass, nickel plate. Screws: Steel, zinc chromate plate

5.0mm Eurostyle Economy Screw Terminal Block
Ratings: UL: Class B: 15Amps @ 250V 14AWG. Class C: 10Amps @ 300V 14AWG. CSA: 15Amps @300V 14AWG. Safety Agencies: UL: File No. E150931 Mechanical: Torque - 3in-lbs. Strip length - .250" (6mm). Wire Range - 14 to 24AWG Materials: Insulator: Polyimide, UL94V-0, grey. Terminal: Brass, tin plate. Wire Protector: Phosphor bronze, tin plate. Screws: Steel, zinc chromate plate

Fig.	No. of Contacts	Dim. – Inch (mm)		Digi-Key Part No.	Price Each			Molex Part No.
		A	B		1	10	100	
8.0mm Two-Screw Terminal Strip, with Wire Protector								
1	2	.54 (13.8)	.630 (16.0)	WM5900-ND	2.15	1.90	1.27	C1502-151
	3	.86 (21.8)	.630 (16.0)	WM5901-ND	2.88	2.55	1.70	C1503-151
	4	1.17 (29.8)	.630 (16.0)	WM5902-ND	3.62	3.20	2.13	C1504-151
	5	1.49 (37.8)	.630 (16.0)	WM5903-ND	5.07	4.47	2.98	C1505-151
	6	1.80 (45.8)	.630 (16.0)	WM5904-ND	5.07	4.47	2.98	C1506-151
	6	1.80 (45.8)	.630 (16.0)	WM5905-ND*	3.66	3.23	2.16	C1506-L
	8	2.43 (61.8)	.630 (16.0)	WM5906-ND	6.53	5.76	3.84	C1508-151
	12	3.69 (93.8)	.630 (16.0)	WM5907-ND	8.90	7.85	5.24	C1512-151
10.0mm Two-Screw Terminal Strip, with Wire Protector								
1	3	1.04 (26.5)	.787 (20.0)	WM5908-ND	2.98	2.63	1.76	C4003-401
	3	1.04 (26.5)	.787 (20.0)	WM5909-ND*	2.91	2.57	1.72	C4003-L-401
	4	1.44 (36.5)	.787 (20.0)	WM5910-ND	3.17	2.81	1.87	C4004-401
	5	1.83 (46.5)	.787 (20.0)	WM5911-ND	5.26	4.64	3.10	C4005-401
	6	2.22 (56.5)	.787 (20.0)	WM5912-ND	5.26	4.64	3.10	C4006-401
	8	3.01 (76.5)	.787 (20.0)	WM5913-ND	6.77	5.98	3.99	C4008-401
	10	3.80 (96.5)	.787 (20.0)	WM5914-ND	9.61	8.48	5.65	C4010-401
	12	4.59 (116.5)	.787 (20.0)	WM5915-ND	9.25	8.16	5.44	C4012-401
12.0mm Two-Screw Terminal Strip, with Wire Protector								
1	10	4.57 (116)	.944 (24.0)	WM5916-ND	13.62	12.02	8.01	C6010-601
	12	5.51 (140)	.944 (24.0)	WM5917-ND	13.09	11.56	7.71	C6012-601

* Low Profile

Fig.	No. of Contacts	Dim. – Inch (mm)		Digi-Key Part No.	Price Each			Molex Part No.
		A	B		1	10	100	
3.5mm Fixed PCB Terminal Block								
2	2	.275 (7)	—	WM5823-ND	2.05	1.81	1.21	830502
	3	.413 (10.5)	—	WM5824-ND	2.81	2.49	1.66	830503
5.0mm Economy Screw Terminal Block								
3	2	.394 (10)	—	WM5825-ND	1.52	1.34	.90	840502
	3	.591 (15)	—	WM5826-ND	2.02	1.79	1.19	840503
5.08mm Single-Piece (Fixed) Block								
4	2	.42 (10.7)	.20 (5.1)	WM5892-ND	1.91	1.69	1.13	880502
	3	.62 (15.7)	.40 (10.2)	WM5893-ND	2.60	2.30	1.53	880503
	4	.82 (20.8)	.60 (15.2)	WM5894-ND	3.29	2.91	1.94	880504
	5	1.02 (25.9)	.80 (20.3)	WM5895-ND	4.00	3.53	2.35	880505
	6	1.22 (31)	1.00 (25.4)	WM5896-ND	4.69	4.14	2.76	880506
	8	1.62 (41.1)	1.40 (35.6)	WM5897-ND	6.08	5.37	3.58	880508
	10	2.02 (51.3)	1.80 (45.7)	WM5898-ND	7.48	6.60	4.40	880510
5.0mm Pluggable PCB Terminal Block								
5	2	.39 (9.9)	.20 (5)	WM5862-ND	2.30	2.04	1.36	870502
	3	.59 (14.9)	.39 (10)	WM5863-ND	3.74	3.30	2.20	870503
	4	.78 (19.9)	.59 (15)	WM5864-ND	4.81	4.25	2.83	870504
	5	.98 (24.9)	.79 (20)	WM5865-ND	5.75	5.08	3.39	870505
	6	1.18 (29.9)	.99 (25)	WM5866-ND	6.95	6.14	4.09	870506
	7	1.37 (34.9)	1.18 (30)	WM5867-ND	8.03	7.09	4.73	870507
	8	1.57 (39.9)	1.38 (35)	WM5868-ND	9.10	8.04	5.36	870508
	9	1.77 (44.9)	1.58 (40)	WM5869-ND	10.17	8.98	5.99	870509
	10	1.97 (49.9)	1.77 (45)	WM5870-ND	11.25	9.93	6.62	870510
	12	2.36 (59.9)	2.17 (55)	WM5871-ND	13.80	12.18	8.12	870512
5.00mm Pluggable PCB Header, Closed Ends, Vert.								
6	2	.45 (11.3)	.20 (5)	WM5872-ND	.88	.78	.52	871602
	3	.64 (16.3)	.39 (10)	WM5873-ND	1.31	1.16	.78	871603
	4	.84 (21.3)	.59 (15)	WM5874-ND	1.76	1.55	1.04	871604
	5	1.04 (26.3)	.79 (20)	WM5875-ND	2.20	1.94	1.30	871605

5.08mm Eurostyle Pluggable PCB Terminal Block
Ratings UL: Class B: 15Amps @ 300V 12AWG Class C: 10Amps @ 300V 12AWG CSA: Class B: 15Amps @ 300V 12AWG. Safety Agencies: UL: File No. E48521 CSA: File No. 025562 Mechanical: Torque - 5in-lbs. Strip length - .250" (6mm). Wire Range - 12 to 26AWG Materials: Insulator: Polyimide, UL94V-0, black. Pressure clamp: Brass, nickel plate. Contacts: Phosphor bronze, tin plate. Header pins: Brass, tin plate. Screws: 2.5mm, steel, zinc chromate plate

5.08mm Eurostyle Pluggable PCB Header, Closed Ends
Ratings: UL and CSA - Class B: 15Amps @ 300V UL: Class C: 10 Amps @ 300V
File No. Same as the other 5.08mm
Materials: Nylon 6.6, UL94V-0, black. Header pins: Brass, tin plate

5.0mm Eurostyle Pluggable PCB Terminal Block
Everything the same as 5.08mm pluggables

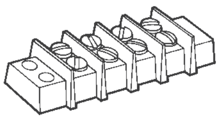
5.0mm Eurostyle Pluggable PCB Header, Closed Ends
Everything the same as 5.08mm pluggable header, closed ends

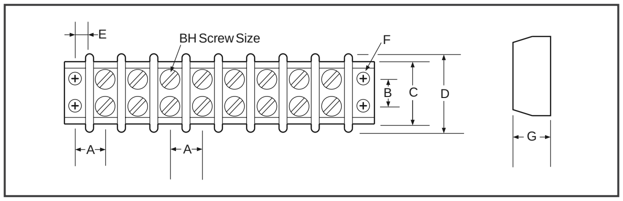
5.08mm Eurostyle Single-Piece (Fixed) Block
Ratings: UL: Class B: 20 Amps @ 300V 12AWG Class C: 10 Amps @ 300V 12AWG CSA: 15 Amps @ 300V 12AWG Mechanical: Torque - 5in-lbs. Strip length-1/4" (6mm) Wire Range - 12 to 26 AWG Materials: Insulator: Polyimide, UL94V-0, black. Pressure Clamp: Brass, nickel plate. Contacts: Phosphor bronze, hot tin dip. Screws: Steel, zinc chromate plate

Fig.	No. of Contacts	Dim. – Inch (mm)		Digi-Key Part No.	Price Each			Molex Part No.
		A	B		1	10	100	
6	6	1.23 (31.3)	.99 (25)	WM5876-ND	2.64	2.33	1.55	871606
	7	1.45 (36.9)	1.18 (30)	WM5877-ND	3.07	2.72	1.81	871607
	8	1.65 (41.9)	1.38 (35)	WM5878-ND	3.51	3.11	2.07	871608
	9	1.85 (46.9)	1.58 (40)	WM5879-ND	3.95	3.49	2.33	871609
	10	2.05 (51.9)	1.77 (45)	WM5880-ND	4.39	3.88	2.59	871610
	12	2.44 (62.0)	2.17 (55)	WM5881-ND	5.27	4.65	3.10	871612
5.00mm Pluggable PCB Header, Closed Ends, Right-Angle								
7	2	.45 (11.3)	.20 (5)	WM5882-ND	.88	.78	.52	871902
	3	.64 (16.3)	.39 (10)	WM5883-ND	1.32	1.17	.78	871903
	4	.84 (21.3)	.59 (15)	WM5884-ND	1.76	1.55	1.04	871904
	5	1.04 (26.3)	.79 (20)	WM5885-ND	2.20	1.94	1.30	871905
	6	1.23 (31.3)	.99 (25)	WM5886-ND	2.64	2.33	1.55	871906
	7	1.45 (36.9)	1.18 (30)	WM5887-ND	3.07	2.72	1.81	871907
	8	1.65 (41.9)	1.38 (35)	WM5888-ND	3.51	3.11	2.07	871908
	9	1.85 (46.9)	1.58 (40)	WM5889-ND	3.95	3.49	2.33	871909
	10	2.05 (51.9)	1.77 (45)	WM5890-ND	4.39	3.88	2.59	871910
	12	2.44 (62.0)	2.17 (55)	WM5891-ND	5.27	4.65	3.10	871912
5.08mm Pluggable PCB Terminal Block, Right-Angle								
8	2	.39 (10)	.20 (5.1)	WM5827-ND	2.66	2.36	1.57	860502
	3	.59 (15.1)	.40 (10.2)	WM5828-ND	3.74	3.30	2.20	860503
	4	.79 (20.2)	.60 (15.2)	WM5829-ND	4.81	4.25	2.83	860504
	5	.99 (25.3)	.80 (20.3)	WM5830-ND	5.88	5.19	3.46	860505
	6	1.19 (30.4)	1.00 (25.4)	WM5831-ND	6.95	6.14	4.09	860506
	8	1.59 (40.5)	1.40 (35.6)	WM5832-ND	9.10	8.04	5.36	860508
	10	1.99 (50.7)	1.80 (45.7)	WM5833-ND	11.25	9.93	6.62	860510
	12	2.39 (60.8)	2.20 (55.9)	WM5834-ND	13.39	11.82	7.88	860512
5.08mm Pluggable PCB Terminal Block, Vert.								
9A	2	.395 (10)	.20 (5.1)	WM5835-ND	2.98	2.64	1.76	860802
	3	.595 (15.1)	.40 (10.2)	WM5836-ND	4.22	3.72	2.48	860803
	4	.795 (20.2)	.60 (15.2)	WM5837-ND	5.45	4.81	3.21	860804
	5	.995 (25.3)	.80 (20.3)	WM5838-ND	6.69	5.91	3.94	860805
	6	1.19 (30.4)	1.00 (25.4)	WM5839-ND	7.91	6.99	4.66	860806
	8	1.59 (40.5)	1.40 (35.6)	WM5840-ND	10.39	9.17	6.11	860808
	10	1.99 (50.7)	1.80 (45.7)	WM5841-ND	12.86	11.35	7.57	860810
9B	2	.395 (10)	.200 (5.1)	WM5842-ND	2.98	2.64	1.76	860902
	3	.595 (15.1)	.400 (10.2)	WM5843-ND	4.22	3.72	2.48	860903
	4	.795 (20.2)	.600 (15.2)	WM5844-ND	5.45	4.81	3.21	860904
	6	1.19 (30.4)	1.00 (25.4)	WM5845-ND	7.91	6.99	4.66	860906
5.08mm Pluggable PCB Header, Closed Ends, Vert.								
10	2	.45 (11.4)	.20 (5.1)	WM5846-ND	1.33	1.18	.79	861602
	3	.65 (16.5)	.40 (10.2)	WM5847-ND	1.74	1.54	1.03	861603
	4	.85 (21.6)	.60 (15.2)	WM5848-ND	2.15	1.90	1.27	861604
	5	1.05 (26.7)	.80 (20.3)	WM5849-ND	2.57	2.27	1.51	861605
	6	1.25 (31.8)	1.00 (25.4)	WM5850-ND	2.98	2.63	1.75	861606
	8	1.67 (42.5)	1.40 (35.6)	WM5851-ND	3.80	3.35	2.24	861608
	10	2.07 (52.7)	1.80 (45.7)	WM5852-ND	4.61	4.07	2.72	861610
	12	2.47 (62.8)	2.20 (55.9)	WM5853-ND	5.43	4.80	3.20	861612
5.08mm Pluggable PCB Header, Closed Ends, Right-Angle								
11	2	.45 (11.4)	.20 (5.1)	WM5854-ND	1.33	1.18	.79	861902
	3	.65 (16.5)	.40 (10.2)	WM5855-ND	1.74	1.54	1.03	861903
	4	.85 (21.6)	.60 (15.2)	WM5856-ND	2.15	1.90	1.27	861904
	5	1.05 (26.7)	.80 (20.3)	WM5857-ND	2.57	2.27	1.51	861905
	6	1.25 (31.8)	1.00 (25.4)	WM5858-ND	2.98	2.63	1.75	861906
	8	1.67 (42.5)	1.40 (35.6)	WM5859-ND	3.80	3.35	2.24	861908
	10	2.07 (52.7)	1.80 (45.7)	WM5860-ND	4.61	4.07	2.72	861910
	12	2.47 (62.8)	2.20 (55.9)	WM5861-ND	5.43	4.80	3.20	861912

CINCH/GC/Waldom

Barrier Blocks



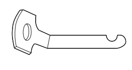


Terminal Spacing	Dimensions – Inch (mm)							BH Screw Size
	A	B	C	D	E	F	G	
.375 (9.52)	.375 (9.52)	.313 (7.95)	.688 (17.48)	.875 (22.23)	.141 (3.58)	.160 (4.06)	.406 (10.31)	5-40x3/16
.438 (11.13)	.438 (11.13)	.422 (10.72)	.875 (22.23)	1.125 (28.58)	.156 (3.96)	.175/.180 (4.44/4.57)	.500 (12.70)	6-32x1/4
.563 (14.30)	.563 (14.30)	.500 (12.70)	1.062 (26.97)	1.312 (33.32)	.203 (5.16)	.209 (5.31)	.625 (15.88)	8-32x5/16

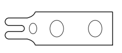
Features:
• Interposing barriers between terminals • Can be equipped with binder head screws only, or with binder head screws and W, 3/4W and Y solder terminals • UL recognized

Performance Data:
Insulation Material: Molded monoblock, general purpose phenolic
Eyelet Material: Brass
Eyelet Plating: Nickel
Screw Material: Steel or brass
Screw Plating: Nickel over copper flash
Solder Terminal Material: Brass
Solder Terminal Plating: Tin
Operating Temperature: -55°F to +300°F (-48°C to +149°C)
Maximum Wire Size: .375” (9.53mm) - #16; .438” (11.13mm) - #15; .563” (14.30mm) - #10
Voltage Rating: .375” and .438” (9.53mm and 11.13mm) - 1100VAC rms max.; .563” (14.30mm) - 1600VAC rms max.
Current Rating: .375” (9.53mm) - 15A max.; .438” (11.13mm) - 20A max.; .563” (14.30mm) - 30A max.
Max. Watts per Terminal: .375” (9.53mm) – 3750; .438” (11.13mm) – 5000; .563” (14.30mm) – 7500

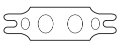
Y Type



3/4W Type



W Type



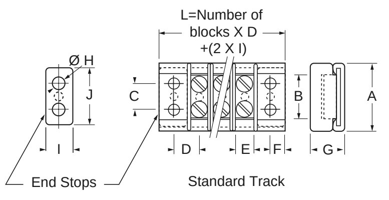
Terminal Spacing	No. of Contacts	Digi-Key Part No.	Pricing 1	25	50	100	250	500	Cinch Part No.
.375” (9.53 mm)	2	CBB102-ND	1.13	21.54	39.18	70.80	168.15	313.88	2-140
	3	CBB103-ND	1.49	28.29	51.46	93.00	220.88	412.30	3-140
	4	CBB104-ND	1.61	30.57	55.61	100.50	238.69	445.55	4-140
	5	CBB105-ND	1.48	28.20	51.29	92.70	220.16	410.97	5-140
	6	CBB106-ND	2.32	44.12	80.26	145.05	344.49	643.06	6-140
	7	CBB107-ND	2.50	47.54	86.49	156.30	371.21	692.93	7-140
	8	CBB108-ND	2.86	54.29	98.77	178.50	423.94	791.35	8-140
	9	CBB109-ND	3.28	62.32	113.38	204.90	486.64	908.39	9-140
	10	CBB110-ND	3.63	69.03	125.58	226.95	539.01	1006.15	10-140
	11	CBB111-ND	4.13	78.43	142.68	257.85	612.39	1143.14	11-140
	12	CBB112-ND	4.17	79.34	144.34	260.85	619.52	1156.44	12-140
.438” (11.13 mm)	2	CBB202-ND	1.02	19.35	35.19	63.60	151.05	281.96	2-141
	3	CBB203-ND	1.80	34.22	62.25	112.50	267.19	498.75	3-141
	4	CBB204-ND	1.80	34.22	62.25	112.50	267.19	498.75	4-141
	5	CBB205-ND	2.04	38.74	70.47	127.35	302.46	564.59	5-141
	6	CBB206-ND	2.33	44.30	80.59	145.65	345.92	645.72	6-141
	7	CBB207-ND	2.87	54.57	99.27	179.40	426.08	795.34	7-141
	8	CBB208-ND	3.01	57.31	104.25	188.40	447.45	835.24	8-141
	9	CBB209-ND	3.41	64.74	117.78	212.85	505.52	943.64	9-141
	10	CBB210-ND	3.56	67.62	123.01	222.30	527.96	985.53	10-141
	11	CBB211-ND	3.89	73.91	134.46	243.00	577.13	1077.30	11-141
	12	CBB212-ND	4.23	80.35	146.16	264.15	627.36	1171.07	12-141
.563” (14.30 mm)	2	CBB302-ND	1.67	31.71	57.69	104.25	247.59	462.18	2-142
	3	CBB303-ND	2.00	38.01	69.14	124.95	296.76	553.95	3-142
	4	CBB304-ND	2.30	43.75	79.60	143.85	341.64	637.74	4-142
	5	CBB305-ND	3.33	63.33	115.20	208.20	494.48	923.02	5-142
	6	CBB306-ND	4.77	90.70	165.00	298.20	708.23	1322.02	6-142
	7	CBB307-ND	5.21	99.10	180.28	325.80	773.78	1444.38	7-142
	8	CBB308-ND	5.44	103.43	188.16	340.05	807.62	1507.56	8-142
	9	CBB309-ND	8.33	158.32	288.01	520.50	1236.19	2307.55	9-142
	10	CBB310-ND	8.75	166.26	302.45	546.60	1298.18	2423.26	10-142
	11	CBB311-ND	9.15	173.92	316.40	571.80	1358.03	2534.98	11-142
	12	CBB312-ND	9.19	174.70	317.81	574.35	1364.08	2546.29	12-142

W, 3/4W and Y Solder Terminals

Series	Type	Digi-Key Part No.	Pricing 1	25	50	100	250	500	Cinch Part No.
.375” (9.53mm)	Y	CBB001-ND	.40	7.67	13.94	25.20	59.85	111.72	Y-140
	3/4W	CBB002-ND	.36	6.89	12.53	22.65	53.79	100.42	3/4W-140
	W	CBB003-ND	.40	7.67	13.94	25.20	59.85	111.72	W-140
.438” (11.13mm)	Y	CBB004-ND	.66	12.50	22.74	41.10	97.61	182.21	Y-141
	3/4W	CBB005-ND	.50	9.54	17.35	31.35	74.46	138.99	3/4W-141
	W	CBB006-ND	.56	10.59	19.26	34.80	82.65	154.28	W-141
.563” (14.30mm)	Y	CBB007-ND	.76	14.51	26.39	47.70	113.29	211.47	Y-142
	3/4W	CBB008-ND	.69	13.05	23.74	42.90	101.89	190.19	3/4W-142
	W	CBB009-ND	.76	14.51	26.39	47.70	113.29	211.47	W-142

AMP tyco Electronics
Authorized Distributor

FLEXI-BLOCK® Terminal Block System

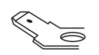


Accessories

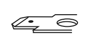
Jumper Tab

90° Tab

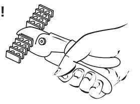
45° Tab



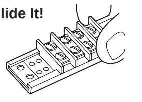
Flat Tab



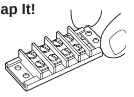
Snip It!



Slide It!



Snap It!



Product Specifications: • Blocks and End Stops: Nylon • Track: NORYL EN 265 • FASTON Tab and Jumper Tab: Tin plated brass • Screws: Nickel plated brass Ratings: • 6000 Breakdown voltage, rms line-to-line • 6000 Breakdown voltage, rms line-to-ground • Operating Temperature: 105°C Max.

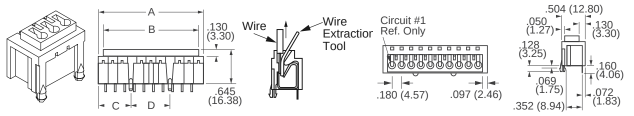
Max. Size	Max. Amps	Volts	Wire Range	Dimensions (Inch) A	B	C	D	E	F	G	H	I	J
6	15	300	22-14	1.125	.750	.422	.438	.343	.219	.563	.171	.437	.96
8	30	600	22-10	1.312	.875	.500	.563	.437	.281	.656	.203	.557	1.15

Size	Description	Digi-Key Part No.	Pricing 1	10	AMP Part No.
6	#6 Block Assembly, 100pcs/pkg	A0130-ND	45.94/pkg (100 pcs/pkg)		1-604102-1
8	#8 Block Assembly, 100pcs/pkg	A0131-ND	52.08/pkg (100 pcs/pkg)		1-604152-1
6	Track 36” long, 80 positions	A0132-ND	6.33	56.93	1-601805-1
8	Track 36” long, 60 positions	A0133-ND	5.85	52.65	1-601806-1
6	End Stop, 2 required per assembly	A0134-ND	—	.87	604111-1
8	End Stop, 2 required per assembly	A0135-ND	—	1.19	604161-1
6, 8	Flat Tab	A0136-ND	—	12.00	601989-1
6, 8	45° Tab	A0137-ND	—	10.46	601989-2
6, 8	90° Tab	A0138-ND	—	7.13	601989-3
6	Jumper Tab	A0139-ND	—	2.20	601985-2
8	Jumper Tab	A0140-ND	—	3.10	604591-1
6	#6 Terminal Block Kit	A0150-ND*	88.58	797.18	601804-8
8	#8 Terminal Block Kit	A0151-ND†	117.78	1059.98	604336-1
6, 8	Cutting Tool (Track & Tape)	A9958-ND	91.35	—	604008-1

* Kit consists of 1 ea. 100-block assembly, 25 end stops, 2 tracks
† Kit consists of 1 ea. 100-block assembly, 50 end stops, 8 tracks

molex GC/Waldom

Wire Trap - LITE



FEATURES: • Allows fast interconnect to PCB • Mounting pegs for PCB polarization • Wire insertion/extraction from vertical direction • Accommodates 16-20 AWG wire (see chart for wire types) • Can be robotically inserted into PCB

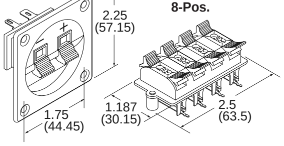
SPECIFICATIONS: Physical: • Terminal: Phosphor bronze • Plating: Tin • Housing: 94V-0 Polyester. **Mechanical:** • Temperature Rise: 30°C max. (per U.L. specifications) • Storage Temperature: -40°C to +105°C max. • Wire pullout force: 10 lbs. min (18 AWG wire) • Wire Insertion/Extraction cycles: 5 max. **Electrical:** • Voltage Rating: 600V (RMS) • Current Rating: 6.0 amperes per circuit (18 AWG wire) • Contact Resistance: 10 milliohm max. • Insulation Resistance: 1,000 Megohm min. • Dielectric Strength: 1,500VAC. **Agency Approvals:** UL file #: E29179. CSA File #: LR19980. **Wire Types:** • Conductor Diameter Range: .038” – .060” (.97mm – 1.52mm). Insulation Outside Dia. Range: .079” – .118” (2.01mm – 3.00mm). **Suggested Wire Types:** 16 AWG. 18 AWG solid or standard with top coat. 20 AWG stranded with top coat.

Pos.	Dimension – Inch (mm) A	B	C	D	Digi-Key Part No.	Pricing 1	10	100	500	Molex Part No.
3	.714 (18.14)	.520 (13.21)	.067 (1.70)	.580 (14.73)	WM1272-ND	1.41	12.42	82.83	331.30	22-45-4036
4	.894 (22.71)	.700 (17.78)	.067 (1.70)	.720 (18.29)	WM1273-ND	1.73	15.27	101.83	407.30	22-45-4046
5	1.074 (27.28)	.800 (20.32)	.247 (6.27)	.720 (18.29)	WM1274-ND	1.98	17.48	116.50	466.00	22-45-4056
6	1.254 (31.85)	1.060 (26.92)	.247 (6.27)	.720 (18.29)	WM1275-ND	2.20	19.41	129.40	517.60	22-45-4066
8	1.614 (41.00)	1.420 (36.07)	.427 (10.85)	.720 (18.29)	WM1276-ND	2.88	25.40	169.30	677.20	22-45-4086
10	1.974 (50.14)	1.780 (45.21)	.607 (15.42)	.720 (18.29)	WM1277-ND	3.27	28.83	192.23	768.90	22-45-4106

The power should be removed before servicing the product.

GC ELECTRONICS™

Spring Push Terminals



These terminals have spring loaded posts for easy connection with Red and Black color codes. Designed for various audio applications such as surround sound and speaker connections, amplifiers and more.

GC399-ND	2 Pos. for panel mounting to speakers, mounts in 2” (50.80mm) hole	**$1.76**
GC400-ND	4 Pos. for mounting directly to chassis or panels	**$1.73**
GC401-ND	8 Pos. with right angle PCB terminals, with Mounting. Ears	**$2.61**

Amphenol® Smart Card Connectors

PUSHMATIC® II With or Without Locking Arms

Fig.1

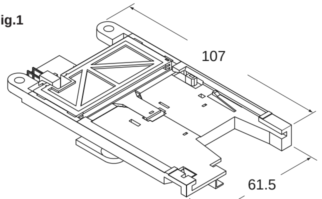


Fig. 2

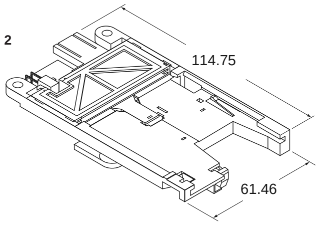


Fig. 3

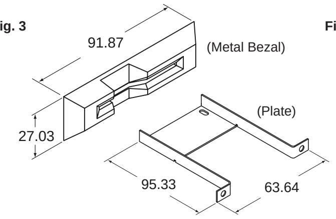
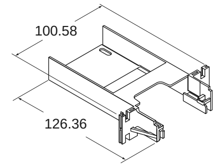


Fig. 4



Applications: • Payment and security systems **Design Features:** • Anti-vandal Smart Card Connector for unattended terminals • Miniaturized style, suitable for mobile interface devices • Card accessible during power failure • Card presence switch, also can be used for system wake up • Card end position switch also acts as card locking sensor • Additional sensor for card active position detects abnormal termination of the transaction • Self retracting and self cleaning data contacts provide protection against vandalism • SCC meets the requirements as specified in document EMV 96 (Europay Mastercard Visa/Integrated Circuit Card Specification for Payment Systems) • Housing bottom features a large debris slot allowing the egress of coins, paper, as well as cut in half cards • 16 way interface header allows for custom cabling **Assembly Instructions:** • PUSHMATIC® II can be used with mounting adapter and bezels according to customer design.

Standard Style Smart Card Connectors

Fig. 5

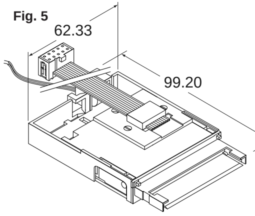


Fig. 6

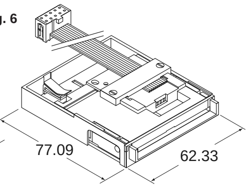
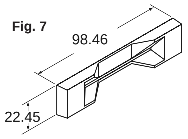


Fig. 7



Note: Use only with Fig. 6
C702 10M008 5142
C702 10M008 5222

Applications: • Unattended Point of Sale systems • Vending equipment • Access control **Design Features:** • High numbers of card insertion cycles, due to the principle of landing contacts • Designed for harsh applications and environments • Modular system with several operating methods from manual handling to automatic card ejection • Bezel Accessory **Assembly Instructions:** • Please make sure that interface cables are unrestricted and free to move after assembly.

Superflat Style Smart Card Connectors

Fig. 8

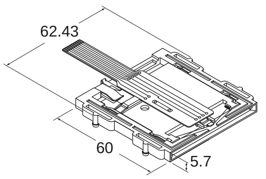
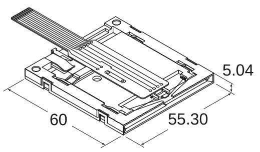


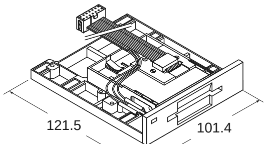
Fig. 9



Applications: • Point of Sale systems • Mobile devices • Access control • Keyboards **Design Features:** • Miniature size ideally suited for mobile devices **Assembly Instructions:** • Please make sure that flexprints remain free and unrestricted after assembly.

Disk Drive Slot Smart Card Connectors

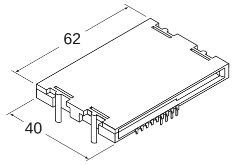
Fig. 10



Design Features: • A Smart Card Connector (C702-1) with Push Pull card handling • Mounted on a 3.5 high inch disk drive frame (tan color: RAL 7032) with a bicolor LED (red/green) • Mounting screws are included **Assembly Instructions:** • Please make sure that interface cables are unrestricted and free to move after assembly.

PCB Mount Wiping Contact Smart Card Connectors

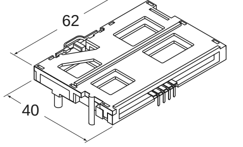
Fig. 11



Applications: • Set top boxes • Toll road transpoders • Parking meters • Utility metering systems **Design Features:** • Termination: dip solder pins • Special shape of wiping contacts minimize card scratching and wear • Smart Card Connector meets the requirements as specified in document ISO 7816 **Soldering Conditions:** • Wave soldering: 260°C; 10s max.

PCB Mount Wiping Contact Smart Card Connectors

Fig. 12



C702 10M008 2724

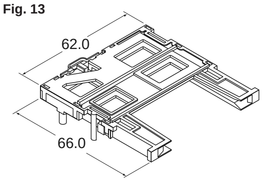
C702 10M008 2554 with 3mm Standoffs

These acceptors are low cost and provide direct sliding contact between the acceptor and the chip card. These acceptors have NC closed card present switches which open when the card is fully inserted.

Applications: • Set top boxes • Toll road transponders • Parking meters • Utility metering systems **Design Features:** • Termination: dip solder pins • Special shape of wiping contacts minimize card scratching and wear • Smart Card Connector meets the requirements as specified in document EMV 96 (Europay Mastercard Visa/Integrated Circuit Card Specification for Payment Systems) Includes 3mm stand-offs **Soldering Conditions:** • Wave soldering: 260°C; 10s max.

PCB Mounting Contact Smart Card Connectors with 3mm Standoffs

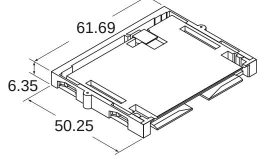
Fig. 13



Applications: • TV/Satellite decoders • Point of Sale systems • Computer networks and energy meters • Also suitable for applications with permanently inserted cards under changing temperatures **Design Features:** • Meets the EMV Integrated Circuit Card Specification for Payment Systems (Europay Mastercard Visa) • Has a switch which indicates whether a card is in the reading position

Landing Card PCB Mount Smart Card Connectors

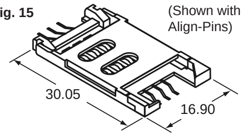
Fig. 14



Design Features: • High number of mating cycles due to minimized wiping distance on card contacts • Contact self-cleaning effect • Short card insertion depth **Soldering Conditions:** • Wave soldering: 260°C; 10s max.

SIMLOCK®

Fig. 15



(Shown with Align-Pins)

Applications: • Designed for mini SIM/SAM card **Design features:** • Size: same footprint as SIM card • Reliable function in locked state during mobile use • Polarization notch does not allow incorrect card positioning • Suitable for automatic assembly processes (Pick & Place, Tape & Reel, and Reflow) **Soldering Conditions:** • Infrared reflow: 245°C; 10s max.

SIMBLOCK®

Fig. 16

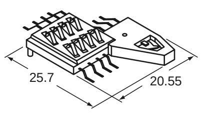
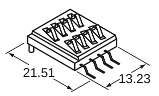


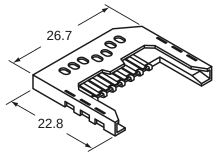
Fig. 17



Applications: • Handsets • E-Purses **Design Features:** • Contacts chip cards according to ISO 7816 and Plug in SIM-Cards • Low height (2mm standard) • High co-planarity accuracy • SMT-Version with 6 contacts especially designed for GSM 11.11 interfaces **Soldering Conditions:** • Infrared reflow: 245°C; 10s max.

MMC Connectors

Fig. 18



Applications: • Audio • Video • PC • Automotive • Telecom Designed according to latest MMCA specification. Cut out for mechanical and electrical contact tests. Underneath contact design.

Fig.	Description	Digi-Key Part No.	Price Each 1	25	100	T&R Pricing 800	Amphenol Part No.
1	Pushmatic® II, 12V	361-1005-ND	30.81	28.76	26.71	—	C702 10M008 9042
	Pushmatic® II, 5V	361-1007-ND	30.81	28.76	26.71	—	C702 10M008 9062
2	Pushmatic® II, 12V, with Locking Arms	361-1006-ND	34.70	32.39	30.07	—	C702 10M008 9052
	Pushmatic® II, 5V, with Locking Arms	361-1008-ND	35.48	33.11	30.75	—	C702 10M008 9072
3	Metal Bezel for Pushmatic® II	361-1009-ND	10.72	8.86	7.46	—	C702 G46 000 G2
	Metal Mounting Plate for Pushmatic® II	361-1010-ND	4.67	3.63	2.90	—	C702 G51 012 E2
4	Plastic Adapter for Deep Bezel	361-1011-ND	10.35	8.55	7.20	—	C702 N25 040 E2
5	Pushmatic®, 12V, ISO	361-1001-ND	19.68	18.37	17.06	—	C702 10M008 7002
	Pushmatic®, 5V, ISO	361-1002-ND	19.68	18.37	17.06	—	C702 10M008 7012
6	Push Pull, ISO	361-1003-ND	12.85	11.76	10.59	—	C702 10M008 5142
	Push Pull, Afnor	361-1004-ND	17.09	15.95	14.81	—	C702 10M008 5222
7	Plastic Bezel, Black, Standard Style	361-1012-ND	11.68	10.22	9.06	—	C702 N11 141 E2
8	Superflat Snap-In, EMV Compatible	361-1014-ND	8.76	7.08	5.57	—	C702 10M008 0664
9	Superflat	361-1015-ND	10.58	8.74	7.36	—	C702 10M008 0014

Fig.	Description	Digi-Key Part No.	Price Each 1	25	100	T&R Pricing 800	Amphenol Part No.
10	Disk Drive Slot, Desktop	361-1022-ND	35.01	32.68	30.35	—	C705 10M008 0195
11	ISO Wiping Contact, Snap-In	361-1016-ND	2.54	1.95	1.56	—	C702 10M008 2064
12	ISO Wiping Contact, EMV, Snap-In	361-1018-ND	2.11	1.63	1.30	—	C702 10M008 2724
	ISO Wiping Contact EMV, with Standoffs	361-1019-ND	2.28	1.75	1.40	—	C702 10M008 2554
13	ISO Wiping Contact w/Rails, w/Standoffs	361-1017-ND	2.37	1.83	1.46	—	C702 10M008 2834
14	ISO Landing PCB	361-1013-ND	6.24	4.84	3.87	—	C702 10M008 1214
15	SIMLOCK® without Align-Pins, Black	361-1020-1-ND*	2.18	1.68	1.34	—	C707 10M006 5002
	SIMLOCK® without Align-Pins, Black	361-1020-2-ND	—	—	—	750.40	C707 10M006 5002
	SIMLOCK® with Align-Pins, Black	361-1021-1-ND*	2.18	1.68	1.34	—	C707 10M006 0492
	SIMLOCK® with Align-Pins, Black	361-1021-2-ND	—	—	—	750.40	C707 10M006 0492
16	SIMBLOCK® with NC Switch	361-1023-ND	2.99	2.32	1.86	—	C707 10M006 0532
17	SIMBLOCK® without Switch	361-1024-ND	2.73	2.10	1.68	—	C707 10M006 0522
18	Multimedia Card Push Pull	361-1025-ND	1.95	1.50	1.20	—	C709 10A007 1001

* Denotes Cut Tape

3M Terminals, Tools, Lugs and Connectors

Insulated

Fig. 1

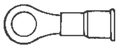


Fig. 2

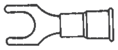


Fig. 3

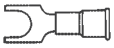


Fig. 4

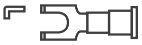


Fig. 5

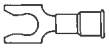
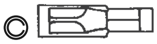
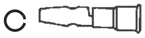


Fig. 6



Round

Fig. 7



Round

Fig. 8

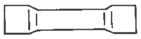


Fig. 9

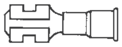


Fig. 10

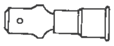


Fig. 11

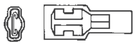


Fig. 12

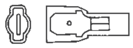
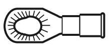


Fig. 13 — Multi-Stud



Uninsulated

Fig. 14

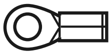


Fig. 15

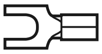


Fig. 16

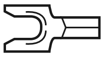


Fig. 17

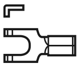


Fig. 18

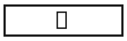


Fig. 19

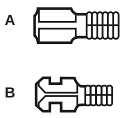


Fig. 20

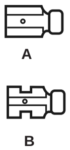
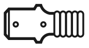


Fig. 21



Heat Shrink

Fig. 22

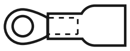


Fig. 23

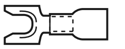


Fig. 24

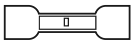


Fig. 25

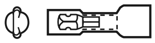
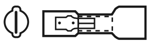


Fig. 26



Miscellaneous

Fig. 27 – Female T-Tap Connector

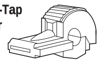


Fig. 28

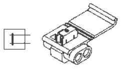


Fig. 29

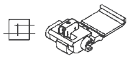


Fig. 30

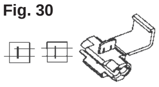


Fig. 31

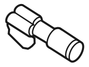


Fig. 32

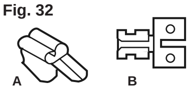


Fig. 33 – Closed End

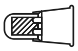


Fig. 34 – Electrical Spring Connector

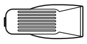


Fig. 35

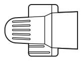


Fig.	AWG	Stud Size	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each				3M Part No.
					10	50	100	500	
Insulated									
1	26-24 Yellow	#2	.145 (3.68)	920010-30-ND	1.05	.94	.78	.61	MNG24-2RK
		#4	.145 (3.68)	920010-31-ND	1.05	.94	.78	.61	MNG24-4RK
		#6	.145 (3.68)	920010-32-ND	1.05	.94	.78	.61	MNG24-6RK
		#8	.145 (3.68)	920010-33-ND	1.05	.94	.78	.61	MNG24-8RK
		#10	.145 (3.68)	920010-34-ND	1.05	.94	.78	.61	MNG24-10RK
11	26-20 Yellow	—	.145 (3.68)	920044-17-ND	.54	.48	.40	.31	MNU20-110DFIK
1	22-18 Red	#4	.145 (3.68)	920010-35-ND	.29	.26	.21	.17	MVU18-4R/SK
		#6	.145 (3.68)	920010-01-ND	.29	.26	.21	.17	MVU18-6R/SK
		#8	.145 (3.68)	920010-02-ND	.29	.26	.21	.17	MVU18-8R/LK
		#10	.145 (3.68)	920010-03-ND	.29	.26	.21	.17	MVU18-10R/LK
		1/4	.145 (3.68)	920010-04-ND	.33	.30	.25	.20	MVU18-14R/SK
1		5/16	.145 (3.68)	920010-36-ND	.42	.38	.31	.25	MVU18-516R/SK
1		3/8	.145 (3.68)	920010-37-ND	.42	.38	.31	.25	MVU18-38RK
3		#4	.145 (3.68)	920020-16-ND	.29	.26	.21	.17	MVU18-4FB/SK
3		#6	.145 (3.68)	920022-01-ND	.29	.26	.21	.17	MVU18-6FB/SK
3		#8	.145 (3.68)	920022-02-ND	.29	.26	.21	.17	MVU18-8FBK
3		#10	.145 (3.68)	920020-17-ND	.29	.26	.21	.17	MVU18-10FBK
4		#6	.145 (3.68)	920022-14-ND	.33	.30	.25	.20	MVU18-6FFBK
4		#8	.145 (3.68)	920022-15-ND	.33	.30	.25	.20	MVU18-8FFBK
4		#10	.145 (3.68)	920022-16-ND	.33	.30	.25	.20	MVU18-10FFBK
5		#4	.145 (3.68)	920024-01-ND	.31	.28	.23	.18	MVU18-4FLK
5		#6	.145 (3.68)	920024-02-ND	.31	.28	.23	.18	MVU18-6FLK
5		#8	.145 (3.68)	920024-03-ND	.31	.28	.23	.18	MVU18-8FLK
5		#10	.145 (3.68)	920024-10-ND	.31	.28	.23	.18	MVU18-10FLK
7		.156"	.145 (3.68)	920050-01-ND	.31	.27	.23	.18	MVU18-156DMK
8		—	.145 (3.68)	920030-01-ND	.30	.27	.23	.18	MVU18-BCK
9		.187"	.145 (3.68)	920040-01-ND	.30	.27	.22	.18	MVU18-187DFK
9		.250"	.145 (3.68)	920040-02-ND	.30	.27	.22	.18	MVU18-250DFK
10		.187"	.145 (3.68)	920042-01-ND	.30	.27	.22	.17	MVU18-187DMK
10		.250"	.145 (3.68)	920042-02-ND	.28	.25	.21	.16	MVU18-250DMK
11		.187"	.145 (3.68)	920044-01-ND	.44	.39	.32	.26	MNU18-187DFIK
11		.250"	.145 (3.68)	920044-02-ND	.44	.39	.32	.26	MNU18-250DFIK
11		.250"	.145 (3.68)	920044-23-ND	.43	.39	.32	.25	FDI18-250C
12		.187"	.145 (3.68)	920046-01-ND	.49	.44	.36	.29	MNU18-187DMIK
12		.250"	.145 (3.68)	920046-02-ND	.49	.44	.36	.29	MNU18-250DMIK
13		6/8/10	.145 (3.68)	920010-57-ND	.39	.35	.29	.23	MV18-610R
1	16-14 Blue	#4	.170 (4.32)	920010-38-ND	.29	.26	.21	.17	MVU14-4R/SK
		#8	.170 (4.32)	920010-39-ND	.29	.26	.21	.17	MVU14-8RK
		#6	.170 (4.32)	920010-05-ND	.29	.26	.21	.17	MVU14-6R/SK
		#8	.170 (4.32)	920010-06-ND	.29	.26	.21	.17	MVU14-8R/SK
		#10	.170 (4.32)	920010-07-ND	.29	.26	.21	.17	MVU14-10RK
1		1/4	.170 (4.32)	920010-08-ND	.33	.30	.25	.20	MVU14-14R/SK
1		5/16	.170 (4.32)	920010-40-ND	.42	.38	.31	.25	MVU14-516R/SK
1		3/8	.170 (4.32)	920010-41-ND	.42	.38	.31	.25	MVU14-38RK
2		#6	.170 (4.32)	920020-01-ND	.29	.26	.21	.17	MVU14-6FK
2		#8	.170 (4.32)	920020-02-ND	.29	.26	.21	.17	MVU14-8FK
3		#4	.170 (4.32)	920020-18-ND	.29	.26	.21	.17	MVU14-4FB/SK
3		#6	.170 (4.32)	920022-03-ND	.29	.26	.21	.17	MVU14-6FB/SK
3		#8	.170 (4.32)	920022-04-ND	.29	.26	.21	.17	MVU14-8FBK
3		#10	.170 (4.32)	920020-19-ND	.29	.26	.21	.17	MVU14-10FBK
4		#6	.170 (4.32)	920022-17-ND	.33	.30	.25	.20	MVU14-6FFBK
4		#8	.170 (4.32)	920022-18-ND	.33	.30	.25	.20	MVU14-8FFBK
4		#10	.170 (4.32)	920022-19-ND	.33	.30	.25	.20	MVU14-10FFBK
5		#4	.170 (4.32)	920024-11-ND	.31	.28	.23	.18	MVU14-4FLK
5		1/4	.170 (4.32)	920024-12-ND	.38	.34	.28	.22	MVU14-14FLK
5		#6	.170 (4.32)	920024-04-ND	.31	.28	.23	.18	MVU14-6FLK
5		#8	.170 (4.32)	920024-05-ND	.31	.28	.23	.18	MVU14-8FLK
5		#10	.170 (4.32)	920024-06-ND	.31	.28	.23	.18	MVU14-10FLK
6		—	.170 (4.32)	920048-02-ND	.49	.44	.36	.28	MNU14-156DFIK
7		—	.170 (4.32)	920050-02-ND	.31	.27	.23	.18	MVU14-156DMK
8		—	.170 (4.32)	920030-02-ND	.30	.27	.23	.18	MVU14-BCK
9		.187"	.170 (4.32)	920040-03-ND	.30	.27	.22	.18	MVU14-187DFK
9		.250"	.170 (4.32)	920040-04-ND	.30	.27	.22	.18	MVU14-250DFK
10		.187"	.170 (4.32)	920042-03-ND	.30	.27	.22	.17	MVU14-187DMK
10		.250"	.170 (4.32)	920042-04-ND	.30	.27	.22	.17	MVU14-250DMK
11		.187"	.170 (4.32)	920044-03-ND	.44	.39	.32	.26	MNU14-187DFIK
11		.250"	.170 (4.32)	920044-04-ND	.44	.39	.32	.26	MNU14-250DFIK
11		.250"	.170 (4.32)	920044-22-ND	.43	.39	.32	.25	FDI14-250C
12		.187"	.170 (4.32)	920046-03-ND	.49	.44	.36	.29	MNU14-187DMIK
12		.250"	.170 (4.32)	920046-04-ND	.49	.44	.36	.29	MNU14-250DMIK
13		6/8/10	.170 (4.32)	920010-58-ND	.39	.35	.29	.23	MV14-610R
1	12-10 Yellow	#4	.250 (6.35)	920010-42-ND	.35	.31	.26	.20	MVU10-4R/SK
		#6	.250 (6.35)	920010-43-ND	.35	.31	.26	.20	MVU10-6RK
		#8	.250 (6.35)	920010-09-ND	.35	.31	.26	.20	MVU10-8RK
		#10	.250 (6.35)	920010-10-ND	.35	.31	.26	.20	MVU10-10RK
		1/4	.250 (6.35)	920010-11-ND	.46	.42	.34	.27	MVU10-14R/SK
1		5/16	.250 (6.35)	920010-44-ND	.46	.42	.34	.27	MVU10-516R/SK
1		3/8	.250 (6.35)	920010-12-ND	.46	.42	.34	.27	MVU10-38R/SK
2		#6	.250 (6.35)	920020-03-ND	.35	.31	.26	.20	MVU10-6FK
2		#8	.250 (6.35)	920020-04-ND	.35	.31	.26	.20	MVU10-8FK
2		#10	.250 (6.35)	920020-05-ND	.35	.31	.26	.20	MVU10-10FK
4		#6	.250 (6.35)	920022-20-ND	.41	.36	.30	.24	MVU10-6FFBK
4		#8	.250 (6.35)	920022-21-ND	.41	.36	.30	.24	MVU10-8FFBK
4		#10	.250 (6.35)	920022-22-ND	.41	.36	.30	.24	MVU10-10FFBK
5		#6	.250 (6.35)	920024-07-ND	.44	.40	.33	.26	MVU10-6FLK
5		#8	.250 (6.35)	920024-08-ND	.44	.40	.33	.26	MVU10-8FLK
5		#10	.250 (6.35)	920024-09-ND	.44	.40	.33	.26	MVU10-10FLK
5		1/4	.250 (6.35)	920024-13-ND	.51	.46	.38	.30	MVU10-14FLK
8		—	.250 (6.35)	920030-03-ND	.37	.34	.28	.22	MVU10BCK
9		.250"	.250 (6.35)	920040-06-ND	.56	.50	.41	.33	MVI10-250DFK
10		.250"	.250 (6.35)	920042-05-ND	.37	.33	.27	.22	MVU10-250DMK
11		.250"	.250 (6.35)	920044-21-ND	.61	.55	.45	.36	MNI10-250DFIK
12		.250"	.250 (6.35)	920046-05-ND	.66	.59	.49	.39	MNU10-250DMIK
13		6/8/10	.250 (6.35)	920010-59-ND	.51	.46	.38	.30	MV10-610R
Uninsulated									
14	22-18	#4	—	920010-13-ND	.15	.14	.11	.09	MU18-4R/SK
		#6	—	920010-14-ND	.15	.14	.11	.09	MU18-6R/SK
		#8	—	920010-15-ND	.15	.14	.11	.09	MU18-8R/LK
		#10	—	920010-16-ND	.14	.13	.11	.08	MU18-10R/LK
		1/4	—	920010-17-ND	.23	.21	.17	.14	MU18-14R/SK
14		3/8	—	920010-18-ND	.26	.23	.19	.15	MU18-38RK
15		#4	—	920020-06-ND	.15	.14	.11	.09	MU18-4FB/SK
15		#6	—	920020-07-ND	.15	.14	.11	.09	MU18-6FB/SK
15		#8	—	920020-08-ND	.15	.14	.11	.09	MU18-8FBK
15		#10	—	920020-09-ND	.15	.14	.11	.09	MU18-10FBK
16		#4	—	920024-14-ND	.16	.14	.12	.09	MU18-4FLK
16		#6	—	920024-15-ND	.16	.14	.12	.09	MU18-6FLK
16		#8	—	920024-16-ND	.16	.14	.12	.09	MU18-8FLK
16		#10	—	920024-17-ND	.16	.14	.12	.09	MU18-10FLK
17		#6	—	920022-05-ND	.16	.14	.12	.09	MU18-6FFBK
17		#10	—	920022-07-ND	.16	.14	.12	.09	MU18-10FFBK
18		—	—	920030-07-ND	.24	.21	.18	.14	M18BCK

(Continued)

3M Terminals, Tools, Lugs and Connectors *(Cont.)*

Fig.	AWG	Stud Size	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each				3M Part No.
					10	50	100	500	
14	**16-14**	#4	—	920010-19-ND	.15	.14	.11	.09	MU14-4R/SK
		#6	—	920010-20-ND	.15	.14	.11	.09	MU14-6R/SK
		#8	—	920010-21-ND	.15	.14	.11	.09	MU14-8R/LK
		#10	—	920010-22-ND	.15	.14	.11	.09	MU14-10RK
		1/4	—	920010-23-ND	.23	.21	.17	.14	MU14-14R/SK
15		#4	—	920020-10-ND	.15	.14	.11	.09	MU14-4FB/SK
15		#8	—	920020-11-ND	.15	.14	.11	.09	MU14-8FBK
15		#10	—	920020-12-ND	.15	.14	.11	.09	MU14-10FBK
16		#4	—	920024-18-ND	.16	.14	.12	.09	MU14-4FLK
16		#6	—	920024-19-ND	.16	.14	.12	.09	MU14-6FLK
16		#8	—	920024-20-ND	.16	.14	.12	.09	MU14-8FLK
16		#10	—	920024-21-ND	.16	.14	.12	.09	MU14-10FLK
16		1/4	—	920024-22-ND	.25	.23	.19	.15	MU14-14FLK
17		#6	—	920022-08-ND	.16	.14	.12	.09	MU14-6FFBK
17		#8	—	920022-09-ND	.16	.14	.12	.09	MU14-8FFBK
17		#10	—	920022-10-ND	.16	.14	.12	.09	MU14-10FFBK
18		—	—	920030-08-ND	.24	.21	.18	.14	M14BCK
14	**12-10**	#4	—	920010-24-ND	.23	.20	.17	.13	MU10-4R/SK
		#6	—	920010-25-ND	.23	.20	.17	.13	MU10-6RK
		#8	—	920010-26-ND	.23	.20	.17	.13	MU10-8RK
		#10	—	920010-27-ND	.23	.20	.17	.13	MU10-10RK
		1/4	—	920010-28-ND	.27	.24	.20	.16	MU10-14R/SK
14		5/16	—	920010-29-ND	.27	.24	.20	.16	MU10-516R/SK
15		#6	—	920020-13-ND	.23	.20	.17	.13	MU10-6FBK
15		#8	—	920020-14-ND	.23	.20	.17	.13	MU10-8FBK
15		#10	—	920020-15-ND	.23	.20	.17	.13	MU10-10FBK
16		#6	—	920024-23-ND	.22	.20	.16	.13	MU10-6FLK
16		#8	—	920024-24-ND	.22	.20	.16	.13	MU10-8FLK
16		#10	—	920024-25-ND	.22	.20	.16	.13	MU10-10FLK
16		1/4	—	920024-26-ND	.38	.34	.28	.22	MU10-14FLK
17		#6	—	920022-11-ND	.23	.20	.17	.13	MU10-6FFBK
17		#8	—	920022-12-ND	.23	.20	.17	.13	MU10-8FFBK
17		#10	—	920022-13-ND	.23	.20	.17	.13	MU10-10FFBK
18		—	—	920030-09-ND	.36	.32	.26	.21	M10BCK
19A	**26-20**	.110”	—	920044-06-ND	.16	.15	.12	.10	MU20-110/32DFK
19B	**22-18**	.187”	—	920044-07-ND	.16	.15	.12	.10	MU18-187DFK
19A		.250”	—	920044-08-ND	.16	.15	.12	.10	MU18-250DFK
19A	**16-14**	.110”	—	920044-09-ND	.16	.15	.12	.10	MU14-110DFK
19B		.187”	—	920044-10-ND	.16	.15	.12	.10	MU14-187DFK
19A		.250”	—	920044-11-ND	.16	.15	.12	.10	MU14-250DFK
20A	**22-18**	.187”	—	920044-12-ND	.20	.18	.15	.12	MU18-187DF/FLAGK
20B		.250”	—	920044-13-ND	.20	.18	.15	.12	MU18-250DF/FLAGK
20A	**16-14**	.187”	—	920044-14-ND	.20	.18	.15	.12	MU14-187DF/FLAGK
20B		.250”	—	920044-15-ND	.20	.18	.15	.12	MU14-250DF/FLAGK
20A	**12-10**	.250”	—	920044-16-ND	.39	.35	.29	.23	MU10-250DF/FLAGK
21	**22-18**	.187”	—	920042-06-ND	.16	.14	.12	.09	MU18-187DMK
		.250”	—	920042-07-ND	.15	.14	.11	.09	MU18-250DMK
21	**16-14**	.187”	—	920042-08-ND	.16	.14	.12	.09	MU14-187DMK
		.250”	—	920042-09-ND	.16	.14	.12	.09	MU14-250DMK
21	**12-10**	.250”	—	920042-10-ND	.21	.19	.15	.12	MU10-250DMK
				Multi-Stack Adapters					
31	**22-18**	.250”	—	920084-01-ND	.50	.45	.37	.29	MVU18-250DMFK
	16-14	.250”	—	920084-02-ND	.50	.45	.37	.29	MVU14-250DMFK
32A	—	.250”	—	920082-01-ND	.40	.36	.29	.23	MA250DMFMK
32B		.250”	—	920082-02-ND	.27	.24	.20	.16	MA250DMMFK

Fig.	AWG	Stud Size	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each				3M Part No.
					1	10	50	100	
				Heat Shrink Insulated					
22	**22-18 Red**	#6	.145 (3.68)	920010-45-ND	1.31	1.18	.97	.76	MH18-6R/LK
22		#8	.145 (3.68)	920010-46-ND	1.31	1.18	.97	.76	MH18-8R/LK
22		#10	.145 (3.68)	920010-47-ND	1.31	1.18	.97	.76	MH18-10R/LK
23		#6	.145 (3.68)	920024-27-ND	1.31	1.18	.97	.76	MH18-6FLK
23		#8	.145 (3.68)	920024-28-ND	1.31	1.18	.97	.76	MH18-8FLK
23		#10	.145 (3.68)	920024-29-ND	1.31	1.18	.97	.76	MH18-10FLK
24		—	.145 (3.68)	920030-10-ND	1.84	1.65	1.36	1.07	MH18BCK
25		—	.145 (3.68)	920044-18-ND	1.86	1.67	1.38	1.08	MNHU18-250DFIK
26		—	.145 (3.68)	920042-11-ND	1.83	1.64	1.36	1.07	MNHU18-250DMIK
22	**16-14 Blue**	#6	.170 (4.32)	920010-48-ND	1.31	1.18	.97	.76	MH14-6R/LK
		#8	.170 (4.32)	920010-49-ND	1.31	1.18	.97	.76	MH14-8R/LK
		#10	.170 (4.32)	920010-50-ND	1.31	1.18	.97	.76	MH14-10R/LK
		1/4	.170 (4.32)	920010-51-ND	1.42	1.28	1.05	.83	MH14-14R/SK
		5/16	.170 (4.32)	920010-52-ND	1.42	1.28	1.05	.83	MH14-516R/SK
22		3/8	.170 (4.32)	920010-53-ND	1.42	1.28	1.05	.83	MH14-38RK
23		#6	.170 (4.32)	920024-30-ND	1.31	1.18	.97	.76	MH14-6FLK
23		#8	.170 (4.32)	920024-31-ND	1.31	1.18	.97	.76	MH14-8FLK
23		#10	.170 (4.32)	920024-32-ND	1.31	1.18	.97	.76	MH14-10FLK
23		1/4	.170 (4.32)	920024-33-ND	1.42	1.28	1.05	.83	MH14-14FLK
24		—	.170 (4.32)	920030-11-ND	1.84	1.65	1.36	1.07	MH14BCK
25		—	.170 (4.32)	920044-19-ND	1.86	1.67	1.38	1.08	MNHU14-250DFIK
26		—	.170 (4.32)	920042-12-ND	1.83	1.64	1.36	1.07	MNHU14-250DMIK
22	**12-10 Yellow**	#10	.250 (6.35)	920010-54-ND	1.52	1.36	1.12	.88	MH10-10RK
22		1/4	.250 (6.35)	920010-55-ND	1.77	1.59	1.31	1.03	MH10-14RK
22		3/8	.250 (6.35)	920010-56-ND	1.77	1.59	1.31	1.03	MH10-38RK
23		#8	.250 (6.35)	920024-34-ND	1.65	1.48	1.22	.96	MH10-8FLK
23		#10	.250 (6.35)	920024-35-ND	1.65	1.48	1.22	.96	MH10-10FLK
23		1/4	.250 (6.35)	920024-36-ND	1.82	1.64	1.35	1.06	MH10-14FLK
24		—	.250 (6.35)	920030-12-ND	1.99	1.79	1.47	1.16	MH10BCK
25		—	.250 (6.35)	920044-20-ND	2.02	1.81	1.49	1.17	MNHU10-250DFIK
26		—	.250 (6.35)	920042-13-ND	2.02	1.81	1.49	1.17	MNHU10-250DMIK
27	**22-18**	—	.150 (3.81)	920074-01-ND	.35	.32	.26	.21	951K
	18-14	—	.150 (3.81)	920074-02-ND	.35	.32	.26	.21	952K
	12	—	.150 (3.81)	920074-03-ND	.38	.34	.28	.22	953K
28	**22-16 Red**	—	.120 (3.05)	920074-06-ND	.51	.46	.38	.30	557 (BOXED)
29		—	.120 (3.05)	920074-07-ND	.53	.48	.40	.31	558 (BOXED)
30	**18-14 Blue**	—	.145 (3.68)	920074-08-ND	.32	.29	.24	.19	560 (BOXED)
923000-I-ND	3M Insulated Terminal Kit — 650 assorted terminals (14 sizes), 200 cable ties (100 each, 2 sizes), one wire marker dispenser, one crimping tool, one reusable metal box, one reordering information card........**$108.08**								

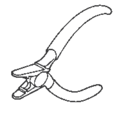
Fig.	AWG	Description	Digi-Key Part No.	Price Each				3M Part No.
				10	50	100	500	
			Scotchlok Connectors					
33	**22-14**	Closed End Electrical Connector	920030-13-ND	.28	.25	.21	.16	MN14CEC/STK
33	**18-10**		920030-14-ND	.29	.26	.21	.17	MN10CEC/STK (Bulk)
34	**8-14**		920090-01-ND	.70	.63	.52	.41	GK (Gray)
34	**10-18**		920090-02-ND	.32	.28	.23	.19	RK (Red)
35	**8-12**	Spring Connector	920090-04-ND	.87	.78	.64	.51	B/G (Box)
	12-22		920090-05-ND	.21	.19	.15	.12	O/B (Box)
	8-18		920090-06-ND	.33	.29	.24	.19	R/Y (Box)
34	**12-22**	Nylon Spring Connector	920074-04-ND	.24	.22	.18	.14	312 (Yellow)
	10-18		920074-05-ND	.31	.28	.23	.18	512 (Red)

3M Scotchlok™ Discrete Connectors and Tools

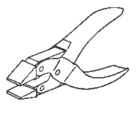
3M Insulated Terminal Kit — 650 assorted terminals (14 sizes), 200 cable ties (100 each, 2 sizes), one wire marker dispenser, one crimping tool, one reusable metal box, one reordering information card.

923000-I-ND..**$108.08**

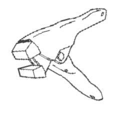
E-9Y-ND



E-9E-ND



E-9BM-ND



E-9C-ND

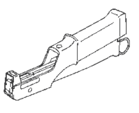


Fig. 1

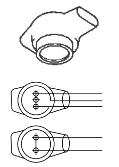


Fig. 2

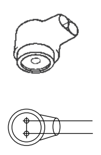


Fig. 3

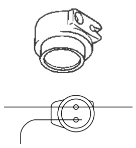


Fig. 4

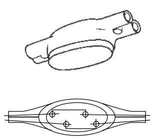


Fig.	Color	Max. Insul. O.D. (mm)	Cable Type			How Pkg.	Digi-Key Part No.	Price Each			E-9Y-ND $32.34	E-9E-ND $29.58	E-9BM-ND $73.16	E-9C-ND $144.33
			PIC-Unfilled AWG	PIC-Filled AWG	Pulp or Paper AWG			1	10	100				
1	Red	1.67	19-26	22-26*	19-26	Loose	UR20074-ND	.35	.27	.20	√ (2 Wire)	√ (3 Wire)	—	—
	Grey	2.08 (out.)	19-24	19-24	19-24	Loose	UAL27827-ND	.53	.41	.29	√ (2 Wire)	√ (3 Wire)	√	√
	Grey	1.93 (cntr.)	17-20	19-24	19-24	Cartridge	UAL27828-ND	—	.45	.33	—	—	—	√
2	Yellow	1.52	22-26	22-26	22-26	Loose	UY14911-ND	.32	.25	.17	√	√	√	√
3	Green	1.67	19-26	22-26	19-26	Loose	UG20082-ND	.48	.37	.27	√	√	√	—
4	Red	3.18	19-24	19-24	19-24	Loose	U1R20017-ND	3.38	2.93	2.54	—	—	√	—

* Can be used on 19AWG (.9mm) Foam Insulated Cable.

PIDG Ring Terminals

PIDG (Pre-Insulated Diamond Grip) Terminals: Meet or exceed the requirements of MIL-T-7928, Type II, Class 1 and 2. **Product Facts:** • **Temperature Rating:** 105°C Max. • **AMP Wire:** Solid or Stranded • **Terminal Material:** The basic terminal is conducted of fine grade high conductivity copper per ASTM B-152 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphor bronze per ASTM B-139 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes. • **Copper Sleeve:** The specially designed copper sleeve, fitted over the terminal barrel, provides circumferential insulation support to the wire and allows the wire to be bent in any direction, without fraying the wire's insulation or breaking the conductor. • **Nylon Insulation (unless otherwise noted):** Nylon sleeve assures high dielectric strength.

PIDG Insulation Restricting Terminals: **Material:** • Insulation: Nylon • Terminal Body and Metallic Sleeve: Copper per ASTM B-152 • Plating: Nickel per QQ-N-290 or Tin per MIL-T-10727. Insulation Restriction Terminals prevent the insulation of thin-wall insulation wire from entering the terminal's wire crimp area during the crimping process.

PIDG Radiation Resistant: **Temp. Rating:** 150°C Max. **Material:** • Insulation: Polyvinylidene Fluoride (PVF$_2$) • Terminal, Splice Body & Metallic Sleeve: Copper per ASTM B-152 • Plating: Tin per MIL-T-10727.

Fig. 1

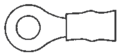


Fig. 2

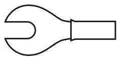
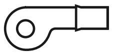


Fig. 3



PIDG - Ring

Fig.	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Reel Size	Tape & Reel Pricing	AMP Part No.
					10	100			500	1,000				
26-24 AWG Yellow														
1	4	.203 x .736	.105	A27492-ND	1.29	1.14	52189	—	—	—	—	—	—	—
	6	.250 x .792	.105	A27493-ND	.35	.31	53073	—	—	—	—	—	—	—
26-22 AWG Yellow														
1	0	.140 x .525	.082	A27224-ND	.83	.73	321013	—	—	—	—	—	—	—
	2	.140 x .525	.082	A0879-ND	.23	.20	323912	A0879CT-ND *NEW!*	—	200.00	A0879TR-ND *NEW!*	4,000	160.00/M	2-323912-1
		.140 x .615		A27225-ND	.26	.23	329951	—	—	—	—	—	—	—
	4	.203 x .646	.082	A0880-ND	.23	.21	323914	—	—	—	—	—	—	—
	6	.203 x .646	.082	A0881-ND	.23	.20	323915	—	—	—	—	—	—	—
		.250 x .740		A27226-ND	.23	.21	326875	A27226CT-ND *NEW!*	—	176.70	A27226TR-ND *NEW!*	4,000	142.82/M	2-326875-1
	8	.250 x .740	.082	A0882-ND	.27	.24	323916	A0882CT-ND *NEW!*	—	353.35	A0882TR-ND *NEW!*	4,000	285.62/M	2-323916-1
	10	.250 x .740	.082	A0883-ND	.31	.27	324075	—	—	—	—	—	—	—
24-20 AWG Natural														
1	2	.160 x .589	.100	A27495-ND	1.30	1.14	329636	—	—	—	—	—	—	—
	6	.281 x .774		A27496-ND	.28	.25	323986	—	—	—	—	—	—	—
	8	.312 x .821		A27497-ND	.28	.25	323989	—	—	—	—	—	—	—
	10	.312 x .821		A27498-ND	.32	.28	323990	—	—	—	—	—	—	—
22-16 AWG Red														
1	2	.182 x .669	.125	A27499-ND	.83	.73	324158	—	—	—	—	—	—	—
		.182 x .669	.140	A27500-ND	.23	.20	320773	—	—	—	—	—	—	—
		.218 x .672	.125	A0884-ND	.23	.20	328657	—	—	—	—	—	—	—
	4	.182 x .669	.140	A27228-ND	.22	.20	320882	A27228CT-ND *NEW!*	—	258.98	A27228TR-ND *NEW!*	5,000	207.18/M	2-320882-1
		.218 x .672	.125	A27227-ND	.23	.21	320553	A27227CT-ND *NEW!*	—	176.70	A27227TR-ND *NEW!*	5,000	142.82/M	2-320553-2
		.218 x .672	.140	A1087-ND	.23	.21	31880	A1087CT-ND *NEW!*	—	176.70	A1087TR-ND *NEW!*	5,000	142.82/M	2-31880-1
		.250 x .844	.125	A27229-ND	.32	.28	323758	A27229CT-ND *NEW!*	—	433.83	A27229TR-ND *NEW!*	5,000	347.06/M	2-323758-1
		.250 x .844	.140	A27230-ND	.32	.28	330648	—	—	—	—	—	—	—
	6	.218 x .672	.125	A27231-ND	.23	.21	36149	A27231CT-ND *NEW!*	—	176.70	A27231TR-ND *NEW!*	5,000	142.82/M	2-36149-2
		.218 x .672	.140	A27232-ND	.23	.21	36150	A27232CT-ND *NEW!*	—	176.70	A27232TR-ND *NEW!*	5,000	142.82/M	2-36150-1
		.250 x .782	.125	A27233-ND	.16	.15	51863	A27233CT-ND *NEW!*	—	121.80	A27233TR-ND *NEW!*	5,000	99.58/M	51863-1
		.281 x .797	.125	A27234-ND	.16	.14	36151	A27234CT-ND *NEW!*	—	171.25	A27234TR-ND *NEW!*	5,000	138.42/M	2-36151-2
		.281 x .797	.140	A1060-ND*	.16	.08	36152	A1060CT-ND* *NEW!*	—	118.03	A1060TR-ND* *NEW!*	5,000	96.50/M	2-36152-1
		.312 x .844	.125	A27235-ND	.28	.25	323008	A27235CT-ND *NEW!*	—	171.25	A27235TR-ND *NEW!*	5,000	138.42/M	2-323008-1
		.312 x .844	.140	A27236-ND	.23	.20	326878	—	—	—	—	—	—	—
	8	.281 x .797	.125	A27239-ND	.23	.20	320554	A27239CT-ND *NEW!*	—	171.25	A27239TR-ND *NEW!*	5,000	138.42/M	2-320554-1
		.281 x .797	.140	A27238-ND	.23	.20	31886	A27238CT-ND *NEW!*	—	125.43	A27238TR-ND *NEW!*	5,000	102.54/M	2-31886-2
		.312 x .844	.140	A1061-ND	.16	.08	31890	A1061CT-ND *NEW!*	—	121.80	A1061TR-ND *NEW!*	5,000	99.58/M	2-31890-1
		.312 x .844	.125	A27511-ND	.23	.20	31888	—	—	—	—	—	—	—
		.312 x .844	.125	A27237-ND	.16	.15	320551	A27237CT-ND *NEW!*	—	121.80	A27237TR-ND *NEW!*	5,000	99.58/M	1-320551-1
		.344 x .876	.140	A27240-ND	1.03	.91	32835	—	—	—	—	—	—	—
	10	.281 x .797	.125	A27243-ND	.23	.20	320552	A27243CT-ND *NEW!*	—	171.25	A27243TR-ND *NEW!*	5,000	138.42/M	2-320552-1
		.281 x .797	.140	A27242-ND	.20	.18	31887	A27242CT-ND *NEW!*	—	171.25	A27242TR-ND *NEW!*	5,000	138.42/M	2-31887-1
		.312 x .844	.125	A27241-ND	.16	.15	36153	A27241CT-ND *NEW!*	—	121.80	A27241TR-ND *NEW!*	5,000	99.58/M	2-36153-2
		.312 x .844	.140	A1062-ND*	.16	.08	36154	A1062CT-ND* *NEW!*	—	121.80	A1062TR-ND* *NEW!*	5,000	99.58/M	2-36154-2
		.344 x .876	.125	A27244-ND	1.02	.90	32836	—	—	—	—	—	—	—
		.344 x .876	.140	A27245-ND	.22	.19	32837	—	—	—	—	—	—	—
	1/4	.469 x 1.078	.125	A27246-ND	.27	.24	320571	A27246CT-ND *NEW!*	—	203.78	A27246TR-ND *NEW!*	5,000	164.72/M	2-320571-2
		.469 x 1.078	.140	A0885-ND	.27	.24	31894	A0885CT-ND *NEW!*	—	140.48	A0885TR-ND *NEW!*	5,000	114.86/M	2-31894-2
	5/16	.469 x 1.078	.125	A27247-ND	.27	.24	320572	—	—	—	—	—	—	—
		.469 x 1.078	.140	A0886-ND	.26	.23	31895	A0886CT-ND *NEW!*	—	203.78	A0886TR-ND *NEW!*	5,000	164.72/M	2-31895-1
	3/8	.531 x 1.218	.140	A0887-ND	.33	.29	31897	—	—	—	—	—	—	—
		.531 x 1.218	.125	A27248-ND	.28	.25	320573	—	—	—	—	—	—	—
	1/2	.713 x 1.293	.140	A0888-ND	.69	.61	328975	—	—	—	—	—	—	—
16-14 AWG Blue														
1	4	.250 x .703	.150	A27249-ND	.26	.23	324159	A27249CT-ND *NEW!*	—	171.25	A27249TR-ND *NEW!*	5,000	138.42/M	2-324159-2
		.250 x .703	.170	A1091-ND	.23	.20	328996	A1091CT-ND *NEW!*	—	171.23	A1091TR-ND *NEW!*	5,000	138.40/M	2-328996-1
		.250 x .813	.150	A27502-ND	1.32	1.17	323676	—	—	—	—	—	—	—
	6	.250 x .703	.150	A27253-ND	.23	.21	320561	A27253CT-ND *NEW!*	—	176.70	A27253TR-ND *NEW!*	5,000	142.82/M	2-320561-2
		.250 x .703	.170	A1070-ND	.16	.08	320619	—	—	—	—	—	—	—
		.250 x .813	.170	A27504-ND	.36	.31	50881	—	—	—	—	—	—	—
		.312 x .813	.170	A27254-ND	.23	.20	326882	A27254CT-ND *NEW!*	—	171.25	A27254TR-ND *NEW!*	5,000	138.42/M	2-326882-1
		.312 x .844	.150	A27250-ND	.23	.21	51864	A27250CT-ND *NEW!*	—	176.70	A27250TR-ND *NEW!*	5,000	142.82/M	51864-3
		.343 x .859	.150	A27251-ND	.23	.20	36157	A27251CT-ND *NEW!*	—	171.25	A27251TR-ND *NEW!*	5,000	138.42/M	2-36157-2
		.343 x .859	.170	A27252-ND	.23	.20	36158	A27252CT-ND *NEW!*	—	171.25	A27252TR-ND *NEW!*	5,000	138.42/M	2-36158-1
	8	.312 x .813	.170	A27257-ND	.34	.30	53941-1	A27257CT-ND *NEW!*	—	340.53	A27257TR-ND *NEW!*	5,000	275.26/M	53941-2
		.312 x .844	.150	A27255-ND	.23	.21	51864-1	A27255CT-ND *NEW!*	—	176.70	A27255TR-ND *NEW!*	5,000	142.82/M	51864-5
		.343 x .859	.150	A27256-ND	.23	.20	320560	A27256CT-ND *NEW!*	—	171.25	A27256TR-ND *NEW!*	5,000	138.42/M	2-320561-1
		.343 x .859	.170	A1071-ND	.16	.08	320565	A1071CT-ND *NEW!*	—	118.03	A1071TR-ND *NEW!*	5,000	96.50/M	2-320565-1
	10	.312 x.844	.150	—	—	—	—	A28118CT-ND* *NEW!*	—	153.06	A28118TR-ND* *NEW!*	5,000	156.98/M	51861-4
		.312 x .813	.170	A27260-ND	.23	.20	53942-1	A27260CT-ND *NEW!*	—	171.25	A27260TR-ND *NEW!*	5,000	138.42/M	53942-2
		.312 x .844	.150	A27258-ND	.23	.21	51864-2	—	—	—	—	—	—	—
		.343 x .859	.150	A27259-ND	.23	.20	320574	A27259CT-ND *NEW!*	—	171.25	A27259TR-ND *NEW!*	5,000	138.42/M	2-320574-2
		.343 x .859	.170	A1072-ND	.16	.08	36160	A1072CT-ND *NEW!*	—	118.03	A1072TR-ND *NEW!*	5,000	96.50/M	2-36160-1
		.343 x .859	.170	A27512-ND*	.26	.23	31903	—	—	—	—	—	—	—
		.469 x 1.078	.170	A27261-ND	.44	.39	324533	—	—	—	—	—	—	—
	1/4	.469 x 1.078	.150	A27262-ND	.27	.24	320563	A27262CT-ND *NEW!*	—	203.78	A27262TR-ND *NEW!*	4,000	164.72/M	2-320563-2
		.469 x 1.078	.170	A0889-ND	.18	.09	321045	A0889CT-ND *NEW!*	—	197.53	A0889TR-ND *NEW!*	4,000	159.66/M	2-321045-1

*Vinyl Insulation † Heavy duty for extra mechanical strength.

(Continued)

PIDG Ring Terminals *(Cont.)*

Fig.	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.	Digi-Key Part No.	Cut Tape Pricing 500	Cut Tape Pricing 1,000	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	AMP Part No.
16-14 AWG Blue (cont.)														
1	5/16	.469 x 1.078	.150	A27263-ND	.27	.24	320575	—	—	—	—	—	—	—
			.170	A0890-ND	.26	.23	328998	—	—	—	—	—	—	—
	3/8	.531 x 1.218	.150	A27264-ND	.28	.25	320564	—	—	—	—	—	—	—
			.170	A0891-ND	.31	.27	328999	—	—	—	—	—	—	—
	1/2	.713 x 1.293	.150	A27265-ND	.87	.76	328976	—	—	—	—	—	—	—
			.170	A0892-ND	.84	.74	328849	—	—	—	—	—	—	—
16-14 AWG Yellow/Black †														
1	6	.281 x .953	.230	A27267-ND	.39	.34	320631	—	—	—	—	—	—	—
			.250	A27266-ND	.49	.43	35634	—	—	—	—	—	—	—
	8	.343 x 1.046	.230	A09035-ND	.38	.34	320627	A09035CT-ND *NEW!*	178.15	323.90	A09035TR-ND *NEW!*	2,500	259.12/M	1-320627-0
			.250	A27268-ND	.42	.37	35106	A27268CT-ND *NEW!*	133.35	242.45	A27268TR-ND *NEW!*	2,500	193.96/M	2-35106-1
	10	.343 x 1.046	.230	A09036-ND	.48	.42	320630	A09036CT-ND *NEW!*	170.94	310.80	A09036TR-ND *NEW!*	2,500	251.24/M	2-320630-2
			.250	A27269-ND	.43	.38	34805	—	—	—	—	—	—	—
	1/4	.500 x 1.188	.230	A27270-ND	.39	.34	34974	—	—	—	—	—	—	—
		.500 x 1.188	.250	A27506-ND	.54	.48	323682	A27506CT-ND *NEW!*	230.29	418.70	A27506TR-ND *NEW!*	2,500	338.46/M	2-323682-1
		.531 x 1.296	.230	A27271-ND	.29	.26	327743	—	—	—	—	—	—	—
		.531 x 1.296	.250	A09037-ND	.47	.42	34806	—	—	—	—	—	—	—
	5/16	.531 x 1.296	.250	A27507-ND	.53	.46	34810	—	—	—	—	—	—	—
	3/4	1.25 x 2.219	.250	A27509-ND	1.83	1.61	322724	—	—	—	—	—	—	—
	3/8	.531 x 1.296	.230	A27508-ND	.55	.48	330896	—	—	—	—	—	—	—
	1/2	.750 x 1.594	.250	A09038-ND	.76	.67	35316	—	—	—	—	—	—	—
12-10 AWG Yellow														
1	4	.281 x .953	.250	A27272-ND	.47	.42	35148	—	—	—	—	—	—	—
	6	.281 x .953	.230	A27273-ND	.33	.29	320634	—	—	—	—	—	—	—
		.281 x .953	.250	A0893-ND	.29	.26	35149	—	—	—	—	—	—	—
		.312 x 1.052	.230	A27274-ND	.43	.38	326886	—	—	—	—	—	—	—
		.375 x 1.083	.230	A27276-ND	.30	.27	320567	A27276CT-ND *NEW!*	125.70	228.55	A27276TR-ND *NEW!*	2,500	184.74/M	2-320567-2
		.375 x 1.083	.250	A27275-ND	.30	.27	35107	—	—	—	—	—	—	—
	8	.312 x 1.031	.230	A27277-ND	.33	.29	35787	—	—	—	—	—	—	—
		.312 x 1.052	.230	A27278-ND	.44	.38	324915	—	—	—	—	—	—	—
		.375 x 1.083	.230	A27280-ND	.30	.27	320568	A27280CT-ND *NEW!*	125.70	228.55	A27280TR-ND *NEW!*	2,500	184.74/M	2-320568-1
		.375 x 1.083	.250	A1081-ND	.21	.10	35108	—	—	—	—	—	—	—
		.375 x 1.172	.300	A27279-ND*	1.07	.95	35605	—	—	—	A27279TR-ND* *NEW!*	1,000	350.44/M	2-35605-2
	10	.312 x 1.052	.230	A27282-ND	.43	.38	324918	—	—	—	—	—	—	—
		.343 x 1.046	.230	A27281-ND	.33	.29	32883	A27281CT-ND *NEW!*	436.62	793.85	A27281TR-ND *NEW!*	2,500	641.70/M	1-32883-0
		.375 x 1.083	.230	A27284-ND	.21	.18	36161	A27284CT-ND *NEW!*	83.56	151.93	A27284TR-ND *NEW!*	2,500	124.22/M	2-36161-2
		.375 x 1.083	.250	A1082-ND	.21	.10	35109	A1082CT-ND *NEW!*	83.56	151.93	A1082TR-ND *NEW!*	2,500	124.22/M	2-35109-1
		.375 x 1.172	.300	A27283-ND*	.62	.55	35364	—	—	—	—	—	—	—
	1/4	.500 x 1.188	.230	A27285-ND	.32	.29	35273	A27285CT-ND *NEW!*	265.72	483.13	A27285TR-ND *NEW!*	2,500	390.52/M	2-35273-2
		.500 x 1.277	.300	A27286-ND*	1.15	1.01	323763	—	—	—	—	—	—	—
		.531 x 1.322	.230	A27288-ND	.35	.31	320569	A27288CT-ND *NEW!*	144.72	263.13	A27288TR-ND *NEW!*	2,500	212.70/M	2-320569-3
		.531 x 1.322	.250	A1083-ND	.35	.28	35110	A1083CT-ND *NEW!*	144.72	263.13	A1083TR-ND *NEW!*	2,500	212.70/M	2-35110-1
		.531 x 1.416	.300	A27287-ND*	.67	.59	35345	—	—	—	—	—	—	—
	3/8	.593 x 1.414	.250	A1084-ND	.35	.28	35112	—	—	—	—	—	—	—
		.593 x 1.414	.230	A27291-ND	.35	.31	320577	—	—	—	—	—	—	—
		.593 x 1.510	.300	A28077-ND*	1.21	1.07	35478	—	—	—	A28077TR-ND* *NEW!*	750	408.18	1-35478-0
		.750 x 1.594	.250	A27510-ND	1.04	.92	35150	—	—	—	—	—	—	—
	1/2	.750 x 1.594	.250	A0894-ND	.55	.48	35151	—	—	—	—	—	—	—
	5/16	.531 x 1.322	.250	A1095-ND	.35	.28	35111	A1095CT-ND *NEW!*	144.72	263.13	A1095TR-ND *NEW!*	2,500	212.70/M	2-35111-1
		.531 x 1.322	.230	A27290-ND	.35	.31	320576	—	—	—	—	—	—	—
		.531 x 1.416	.300	A27289-ND*	1.15	1.01	35346	—	—	—	—	—	—	—

*Vinyl Insulation † Heavy duty for extra mechanical strength.

PIDG Slotted Ring Tongue

Fig.	AWG	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.	Digi-Key Part No.	Cut Tape Pricing 1,000	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	AMP Part No.
2	26-22 Yellow	6	.250 x .719	.082	A27448-ND	.26	.23	323011	A27448CT-ND *NEW!*	193.73	A27448TR-ND *NEW!*	4,000	156.60/M	2-323011-2
	22-16 Red	8	.281 x .770	.140	A27449-ND	.96	.85	36954	—	—	—	—	—	—

PIDG Ring Tongue Insulation Restricting Terminals

Fig.	AWG	Stud Size	Dim. – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
1	22 Red/Green	4	.218 x .734	.038 - .110	A27334-ND	.32	.28	52273
		6	.250 x .844		A27335-ND	.32	.28	51863-2
		8	.312 x .906		A27336-ND	.32	.28	1-320551-2
		10	.312 x .906		A27337-ND	.32	.28	2-36153-3
	20 Red/Red	4	.218 x .734	.046 - .110	A27338-ND	.28	.25	52273-1
		6	.218 x .734		A27339-ND	.32	.28	2-36149-4
		6	.250 x .844		A27340-ND	.32	.28	51863-3
		8	.312 x .906		A27341-ND	.32	.28	1-320551-3
		10	.312 x .906		A27342-ND	.32	.28	2-36153-4
	18 Red/White	6	.218 x .734	.056 - .110	A27343-ND	.32	.28	2-36149-5
		6	.250 x .844		A27344-ND	.32	.28	51863-4
		8	.312 x .906		A27345-ND	.32	.28	1-320551-4
		10	.312 x .906		A27346-ND	.32	.28	2-36153-5
	16 Blue/Blue	6	.250 x .765	.063 - .130	A27347-ND	.36	.32	2-320561-3
		6	.312 x .906		A27348-ND	.32	.28	51864-6
		8	.312 x .906		A27349-ND	.36	.32	1-51864-0
		10	.312 x .906		A27350-ND	.28	.25	51864-7
		1/4	.469 x 1.140		A27513-ND	.60	.53	2-320563-3
	14 Blue/Green	6	.312 x .906	.078 - .130	A27351-ND	1.18	1.04	51864-8
		8	.312 x .906		A27352-ND	.28	.25	1-51864-1
		10	.312 x .906		A27353-ND	.32	.28	51864-9
		1/4	.469 x 1.140		A27514-ND	.50	.44	2-320563-4
	12 Yellow/Yellow	6	.375 x 1.148	.095 - .200	A27354-ND	.55	.49	2-36161-5
		8	.375 x 1.148		A27355-ND	.42	.37	2-320568-2
		10	.375 x 1.148		A27356-ND	.42	.37	2-36161-3
		1/4	.531 x 1.392		A27515-ND	1.10	.97	2-320569-5
	10 Yellow/Brown	8	.375 x 1.148	.119 - .200	A27357-ND	.48	.42	2-320568-3
		10	.375 x 1.148		A27358-ND	.50	.44	2-36161-4
		1/4	.531 x 1.392		A27516-ND	1.96	1.73	2-320569-6
		5/16	.531 x 1.392		A27517-ND	.69	.61	2-320576-3

PIDG Ring Tongue Radiation Resistant

Fig.	AWG	Stud Size	Dimensions - Inch W x L	Insul. Dia. Inch (mm)	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
1	22-16 Red	6	.218 x .672	.125	A27292-ND	.36	.32	53406-1
		6	.250 x .782		A27293-ND	.36	.32	53407-1
		8	.312 x .844		A27294-ND	.41	.36	53408-1
		10	.312 x .844		A27295-ND	.41	.36	53409-1
	16-14 Blue	6	.250 x .703	.150	A27296-ND	.42	.37	53415-1
		6	.312 x .844		A27297-ND	.40	.35	53416-1
		8	.312 x .844		A27298-ND	.45	.40	53417-1
		10	.312 x .844		A27299-ND	.41	.36	53418-1
	12-10 Yellow	8	.375 x 1.083	.230	A27300-ND	.68	.60	53424-1
		10	.375 x 1.083		A27301-ND	.64	.56	53425-1

PIDG Offset Ring Tongue Terminals

Fig.	AWG	Stud Size	Dim. – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
3	22-16 Red	6	.375 x .906	.125	A27526-ND	.37	.32	323039
		10			A27527-ND	.51	.45	324011
	16-14 Blue	6	.375 x .906	.150	A27528-ND	.51	.45	323817
		10			A27529-ND	.47	.41	323818

Tools

A9996-ND	PRO-CRIMPER II Hand Tool without Dies	**$75.00**
A9991-ND	Die Set for Insulated Terminals, use with A9996	**$45.00**
A9811-ND	Crimp Tool, Insulated Terminals with Die Set	**$92.25**
A9821-ND	PIDG and PLASTI-GRIP Connector Kit (includes hand tool A9811-ND, 225 insulated ring and spade terminals in 12-10, 16-14 and 22-16 AWG wire sizes)	**$112.50**

PIDG Spade Terminals

PIDG (Pre-Insulated Diamond Grip) Terminals: Meet or exceed the requirements of MIL-T-7928, Type II, Class 1 and 2. **Product Facts: • Temperature Rating:** 105°C Max. • **AMP Wire:** Solid or Stranded • **Terminal Material:** The basic terminal is conducted of fine grade high conductivity copper per ASTM B-152 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphor bronze per ASTM B-139 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes. • **Copper Sleeve:** The specially designed copper sleeve, fitted over the terminal barrel, provides circumferential insulation support to the wire and allows the wire to be bent in any direction, without fraying the wire's insulation or breaking the conductor. • **Nylon Insulation (unless otherwise noted):** Nylon sleeve assures high dielectric strength.

Fig. 1

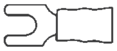


Fig. 2

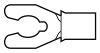
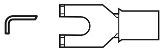


Fig. 3



PIDG Spade Tongue

Fig.	AWG	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.	Digi-Key Part No.	Cut Tape Pricing 500	Cut Tape Pricing 1,000	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	AMP Part No.
1	26-22 Yellow	4	.203 x .627	.082	A27415-ND	.24	.21	321035	—	—	—	—	—	—	—
	22-16 Red	2	.182 x .727	.140	A0895-ND	.23	.20	328394	—	—	—	—	—	—	—
		4	.218 x .674		A0896-ND	.27	.24	327717	—	—	—	—	—	—	—
		6	.250 x .846	.140	A1063-ND	.16	.08	34541	A1063CT-ND *NEW!*	—	171.25	A1063TR-ND *NEW!*	5,000	138.42/M	2-34541-1
			.297 x .753	.125	A27416-ND	.23	.20	34080	A27416CT-ND *NEW!*	—	171.25	A27416TR-ND *NEW!*	5,000	138.42/M	2-34080-1
			.297 x .753	.140	A27417-ND	.23	.20	326861	—	—	—	—	—	—	—
		8	.375 x .908	.125	A27418-ND	.31	.27	32050	A27418CT-ND *NEW!*	—	392.40	A27418TR-ND *NEW!*	5,000	313.92/M	2-32050-1
			.375 x .908	.140	A1064-ND	.23	.20	32053	—	—	—	—	—	—	—
		10	.375 x .908	.125	A27419-ND	1.00	.88	32051	—	—	—	—	—	—	—
			.375 x .908	.140	A1065-ND	.23	.20	32054	—	—	—	—	—	—	—
	16-14 Blue	6	.244 x .846	.170	A27421-ND	.24	.21	328281	A27421CT-ND *NEW!*	—	448.50	A27421TR-ND *NEW!*	5,000	358.80/M	1-328281-1
			.297 x .753		A1073-ND	.23	.20	35559	A1073CT-ND *NEW!*	—	171.25	A1073TR-ND *NEW!*	5,000	138.42/M	2-35559-1
			.385 x .908		A27420-ND	.23	.20	32058	—	—	—	—	—	—	—
		8	.297 x .753	.170	A1074-ND	.26	.23	321233	A1074CT-ND *NEW!*	—	196.23	A1074TR-ND *NEW!*	5,000	156.98/M	2-321233-1
			.312 x 1.034	.170	A27519-ND	.30	.26	325199	—	—	—	—	—	—	—
			.385 x .908	.150	A27422-ND	.40	.35	32056	—	—	—	—	—	—	—
			.385 x .908	.170	A0897-ND	.23	.20	32059	—	—	—	—	—	—	—
		10	.385 x .908	.150	A27520-ND	.41	.37	32057	—	—	—	—	—	—	—
			.385 x .908	.170	A1075-ND	.26	.23	32060	A1075CT-ND *NEW!*	—	342.45	A1075TR-ND *NEW!*	5,000	276.82/M	2-32060-1
	12-10 Yellow	6	.290 x .954	.230	A27423-ND	.47	.42	322985	—	—	—	—	—	—	—
			.312 x 1.095		A27424-ND	.45	.39	326859	A27424CT-ND *NEW!*	368.54	670.08	A27424TR-ND *NEW!*	2,500	536.06/M	2-326859-1
		8	.406 x 1.095	.230	A0898-ND	.33	.29	32588	—	—	—	—	—	—	—
		10	.406 x 1.095	.230	A1085-ND	.33	.27	32589	—	—	—	—	—	—	—

PIDG Spring Spade Tongue

Fig.	AWG	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.	Digi-Key Part No.	Cut Tape Pricing 500	Cut Tape Pricing 1,000	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	AMP Part No.
Short															
2	26-22 Yellow	4	.203 x .695	.082	A27434-ND	.40	.35	52922	A27434CT-ND *NEW!*	—	443.93	A27434TR-ND *NEW!*	5,000	355.14/M	52922-1
		6	.250 x .679		A27435-ND	.26	.23	52924	A27435CT-ND *NEW!*	—	246.55	A27435TR-ND *NEW!*	4,000	149.48/M	52924-1
		8	.375 x .787		A27436-ND	1.24	1.09	52925	—	—	—	—	—	—	—
	22-16 Red	4	.203 x .799	.125	A0902-ND	.23	.20	52927	—	—	—	—	—	—	—
		5	.250 x .799	.125	A27437-ND	.35	.31	52928	A27437CT-ND *NEW!*	—	193.73	A27437TR-ND *NEW!*	5,000	156.60/M	52928-1
		6	.250 x .799	.125	A1067-ND	.26	.23	52929	A1067CT-ND *NEW!*	—	133.55	A1067TR-ND *NEW!*	5,000	109.18/M	52929-1
		6	.250 x .799	.140	—	—	—	—	A28004CT-ND *NEW!*	—	221.98	A28004TR-ND *NEW!*	5,000	177.58/M	52929-3
		8	.375 x .860	.125	A1089-ND	.26	.23	52930	A1089CT-ND *NEW!*	—	221.98	A1089TR-ND *NEW!*	5,000	177.58/M	52930-1
		10	.406 x .908	.125	A1099-ND	.37	.33	52931	A1099CT-ND *NEW!*	—	193.73	A1099TR-ND *NEW!*	5,000	156.60/M	52931-1
	16-14 Blue	5	.250 x .799	.170	A28166-ND	.37	.32	52934	A28166CT-ND *NEW!*	—	387.43	A28166TR-ND *NEW!*	5,000	313.18/M	52934-1
		6	.250 x .799	.170	A1078-ND	.26	.23	52935	—	—	—	—	—	—	—
		6	.250 x .799	.182	A27438-ND	.26	.23	52935-2	—	—	—	—	—	—	—
		8	.375 x .860	.170	A1093-ND	.29	.26	52936	A1093CT-ND *NEW!*	—	193.73	A1093TR-ND *NEW!*	5,000	156.60/M	52936-1
		8	.375 x.860	.182	A28167-ND	.44	.39	52936-2	A28167CT-ND *NEW!*	—	387.43	A28167TR-ND *NEW!*	5,000	313.18/M	52936-3
		10	.406 x .908	.170	A1094-ND	.29	.26	52937	—	—	—	—	—	—	—
		10	.406 x .908	.182	A28168-ND	.95	.84	52937-2	—	—	—	—	—	—	—
	12-10 Yellow	6	.250 x .959	.250	A1096-ND	.33	.27	52941	A1096CT-ND *NEW!*	137.01	249.10	A1096TR-ND *NEW!*	2,500	201.36/M	52941-1
		8	.375 x 1.052		A1097-ND	.38	.30	52942	A1097CT-ND *NEW!*	137.01	249.10	A1097TR-ND *NEW!*	2,500	201.36/M	52942-1
		10	.406 x 1.100		A1098-ND	.38	.30	52943	—	—	—	—	—	—	—
		1/4	.625 x 1.225		A27439-ND	.77	.68	52945	—	—	—	—	—	—	—
Long															
2	22-16 Red	6	.250 x .933	.125	A09040-ND	.47	.41	52409	—	—	—	—	—	—	—
		6	.250 x .933	.140	A28156-ND	.46	.40	52409-2	—	—	—	—	—	—	—
		8	.281 x .979	.125	A09041-ND	.41	.36	52410	A09041CT-ND *NEW!*	—	193.73	A09041TR-ND *NEW!*	5,000	156.60/M	52410-1
		10	.343 x 1.005	.125	A09042-ND	.95	.84	52411	—	—	—	—	—	—	—
	16-14 Blue	6	.250 x .933	.150	A09043-ND	.29	.26	52420	A09043CT-ND *NEW!*	—	443.93	A09043TR-ND *NEW!*	5,000	355.14/M	52420-2
		6	.250 x .933	.170	A27446-ND	.55	.48	52420-1	A27446CT-ND *NEW!*	—	221.98	A27446TR-ND *NEW!*	5,000	177.58/M	52420-3
		8	.281 x .979	.150	A0944-ND	.49	.43	52421	—	—	—	—	—	—	—
		8	.281 x .979	.170	A27447-ND	.29	.26	52421-1	—	—	—	—	—	—	—
		10	.343 x 1.005	.170	A09045-ND	.29	.26	52422-1	—	—	—	—	—	—	—
	12-10 Yellow	6	.312 x 1.131	.250	A27521-ND	.59	.52	52430-1	—	—	—	—	—	—	—
		8	.375 x 1.174		A27522-ND	.61	.53	52431-1	—	—	—	—	—	—	—
		10	.375 x 1.219		A27523-ND	.70	.62	52432-1	A27523CT-ND *NEW!*	359.30	653.28	A27523TR-ND *NEW!*	2,500	528.06/M	52432-3
		1/4	.437 x 1.289		A27524-ND	.65	.58	52433-1	—	—	—	—	—	—	—

PIDG Flanged Spade Tongue

Fig.	AWG	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.	Digi-Key Part No.	Cut Tape Pricing 500	Cut Tape Pricing 1,000	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	AMP Part No.
1	26-22 Yellow	4	.203 x .627	.082	A27415-ND	.24	.21	321035	—	—	—	—	—	—	—
3	26-22 Yellow	2	.182 x .649	.082	A27426-ND	.69	.61	324597	—	—	—	—	—	—	—
		4	.196 x .649		A27427-ND	1.92	1.69	52369	—	—	—	—	—	—	—
		6	.250 x .649		A27428-ND	.60	.53	51874	—	—	—	—	—	—	—
	22-16 Red	2	.182 x .727	.125	A27429-ND	1.09	.96	2-324608-2	—	—	—	—	—	—	—
		2	.182 x .727	.140	A0899-ND	.29	.26	324608	—	—	—	—	—	—	—
		6	.250 x .737	.125	A27431-ND	.25	.22	322777	A27431CT-ND *NEW!*	—	186.88	A27431TR-ND *NEW!*	5,000	151.04/M	2-322777-1
		6	.296 x .737	.125	A27430-ND	.25	.22	32561	A27430CT-ND *NEW!*	—	186.88	A27430TR-ND *NEW!*	5,000	151.04/M	2-32561-1
		6	.296 x .737	.140	A1066-ND	.25	.22	32562	A1066CT-ND *NEW!*	—	186.88	A1066TR-ND *NEW!*	5,000	151.04/M	2-32562-1
		8	.416 x .830	.140	A1088-ND	.53	.47	32498	A1088CT-ND *NEW!*	—	484.90	A1088TR-ND *NEW!*	5,000	391.96/M	2-32498-1
	16-14 Blue	6	.294 x .737	.170	A1076-ND	.25	.22	320861	A1076CT-ND *NEW!*	—	186.88	A1076TR-ND *NEW!*	5,000	151.04/M	2-320861-1
		8	.294 x .737		A1077-ND	.25	.22	320862	A1077CT-ND *NEW!*	—	214.13	A1077TR-ND *NEW!*	5,000	171.30/M	2-320862-1
		8	.416 x .830		A27518-ND	1.20	1.06	33156	—	—	—	—	—	—	—
		10	.294 x .737		A1092-ND	.24	.21	320863	A1092CT-ND *NEW!*	—	214.13	A1092TR-ND *NEW!*	5,000	171.30/M	2-320863-2
	12-10 Yellow	6	.296 x 1.017	.250	A0900-ND	.64	.57	325150	—	—	—	—	—	—	—
		6	.328 x 1.017	.230	A27432-ND	.73	.64	324587	—	—	—	—	—	—	—
		8	.416 x 1.017	.230	A09039-ND	.32	.29	32510	A09039CT-ND *NEW!*	242.01	440.03	A09039TR-ND *NEW!*	2,500	355.68/M	2-32510-1
		10	.416 x 1.017	.250	A0901-ND	1.18	1.04	324015	A0901CT-ND *NEW!*	190.91	347.10	A0901TR-ND *NEW!*	2,500	280.58/M	2-324015-1

Tools

A9996-ND	PRO-CRIMPER II Hand Tool without Dies	**$75.00**
A9991-ND	Die Set for Insulated Terminals, use with A9996	**$45.00**
A9811-ND	Crimp Tool, Insulated Terminals with Die Set	**$92.25**
A9821-ND	PIDG and PLASTI-GRIP Connector Kit (includes hand tool A9811-ND, 225 insulated ring and spade terminals in 12-10, 16-14 and 22-16 AWG wire sizes)	**$112.50**

PIDG Knife Disconnect & Butt Splices

PIDG (Pre-Insulated Diamond Grip) Terminals: Meet or exceed the requirements of MIL-T-7928, Type II, Class 1 and 2. **Product Facts:** • **Temperature Rating:** 105°C Max. • **AMP Wire:** Solid or Stranded • **Terminal Material:** The basic terminal is conducted of fine grade high conductivity copper per ASTM B-152 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphor bronze per ASTM B-139 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes. • **Copper Sleeve:** The specially designed copper sleeve, fitted over the terminal barrel, provides circumferential insulation support to the wire and allows the wire to be bent in any direction, without fraying the wire's insulation or breaking the conductor. • **Nylon Insulation (unless otherwise noted):** Nylon sleeve assures high dielectric strength.

PIDG - Spare Wire Caps: **Material:** Copper Tin Plated, Insulation: Nylon

PIDG - Butt Splice Step Down Adapter Inserts: **Material:** • Adapter Body: Copper per ASTM B-152 • Plating: Zinc/DyeChromate

Fig. 1

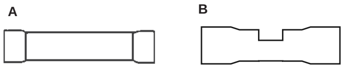


Fig. 2

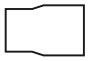
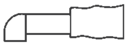


Fig. 3

For Unstripped Wire   For Stripped Wire

Fig. 4



PIDG Butt Splices

Fig.	AWG Color	Dim. - Inch Length	Ins. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	Amp Part No.	Digi-Key Part No.	Cut Strip Pricing 500	Cut Strip Pricing 1,000	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	Amp Part No.
1a	26-22 Yellow	—	.082	A0913-ND	.58	.51	2-323994-2	—	—	—	—	—	—	—
	22-16 Red‡	1.265	.125	A1069-ND	.57	.27	320559	A1069CT-ND *NEW!*	221.93	403.50	A1069TR-ND *NEW!*	2,500	322.80/M	2-320559-4
	16-14 Blue	1.265	.150	A1080-ND	.57	.27	320562	A1080CT-ND *NEW!*	338.14	614.80	A1080TR-ND *NEW!*	2,500	491.84/M	2-320562-3
	12-10 Yellow	1.656	.220	A1086-ND	.95	.46	320570	—	—	—	—	—	—	—
1b	26-22 Yellow†	.890	.082	A27450-ND	.56	.50	323994	—	—	—	—	—	—	—
	24-20 Natural	1.035	.100	A27451-ND	.45	.39	323975	—	—	—	—	—	—	—
Step Down Type (with adapter insert)														
1b	16-14 to 22-18 Blue	1.265	.150/.115	A27452-ND*	1.08	.95	327583	A27452CT-ND* *NEW!*	624.59	1135.63	A27452TR-ND* *NEW!*	2,500	908.50/M	2-320562-3
	12-10 to 16-14 Yellow	1.656	.220/.170	A27453-ND	1.66	1.46	327638	—	—	—	—	—	—	—
	12-10 to 22-16 Yellow	1.656	.220/.140	A27454-ND	2.01	1.77	327639	—	—	—	—	—	—	—
Radiation Resistant														
1b	22-16 Red Stripe	1.265	.125	A27455-ND	1.03	.91	53548-1	—	—	—	—	—	—	—
	16-14 Blue Stripe	1.265	.150	A27456-ND	1.03	.91	53549-1	—	—	—	—	—	—	—
	12-10 Yellow Stripe	1.656	.220	A27457-ND	1.56	1.38	53550-1	—	—	—	—	—	—	—

* Includes adapter insert † 26-22 splices are 26-24 range in accordance with MIL-T-7928 ‡ 22-16 splices are 22-18 range in accordance with MIL-T-7928

PIDG - Spare Wire Caps

Fig.	AWG	Insulation Diameter Inch	Cap Insulation Color	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Unstripped Wire							
3	—	.048 - .075	Transparent	A27478-ND	.25	.22	324484
		.080 - .115	Red	A27479-ND	.27	.24	324485
		.120 - .145	Blue	A27480-ND	.31	.28	324486
		.080 - .115	Red	A27569-ND*	.39	.35	324694
		.120 - .145	Blue	A27570-ND*	.40	.36	324695
Stripped Wire							
3	22-18	.124	Red	A27481-ND	.29	.26	328307
	16-14	.149	Blue	A27482-ND	.37	.32	328308
	12-10	.210	Yellow	A27483-ND	.41	.36	328309

* Moisture Resistant

PIDG - Butt Splice Step Down Adapter Inserts

Fig.	AWG	Use With Butt Splices	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
2	22-18 Red	A1080-ND	A27458-ND	.21	.19	327635
	22-18 Red	A1086-ND	A27459-ND	.58	.51	327636
	16-14 Blue	A1086-ND	A27460-ND	.37	.33	327637

PIDG Knife Disconnect Splices

Fig.	AWG	Dim. - Inch Length	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
4	22-16 Red	.878	.125	A27473-ND	.49	.43	320555
			.140	A1068-ND	.44	.31	32446
	16-14 Blue	.878	.150	A27474-ND	.49	.43	320566
			.170	A1079-ND	.44	.31	32448
	12-10 Yellow	1.260	.250	A09046-ND	1.33	1.17	35762

Tools

A9996-ND	PRO-CRIMPER II Hand Tool without Dies	**$75.00**
A9991-ND	Die Set for Insulated Terminals, use with A9996	**$45.00**
A9811-ND	Crimp Tool, Insulated Terminals with Die Set	**$92.25**
A09093-ND	Sealed Splice Connector Kit (includes 10 [12-10 AWG] splice, 15 [22-18 AWG] splice, 25 [16-14 AWG] splice, molded case and crimping tool	**$111.18**
A9821-ND	PIDG and PLASTI-GRIP Connector Kit (includes hand tool A9811-ND, 225 insulated ring and spade terminals in 12-10, 16-14 and 22-16 AWG wire sizes)	**$112.50**
A27484-ND	Long Handle Tool for PIDG Spare Wire Caps (22-18 AWG)	**$261.11**
A27485-ND	Heavy Head Tool for PIDG Spare Wire Caps (12-10 AWG)	**$557.87**
A27486-ND	T-Head Tool for PIDG Spare Wire Caps (22-18 and 16-14 AWG)	**$848.21**

ELECTRO-TAP Connectors and Closed End Splices

ELECTRO-TAP Cable Connector/Splice

• **Housing Material:** Nylon • **Contact Material:** Brass • **Contact Plating:** Tin

Fig.	AWG	Insul. Dia. Inch	Dimension – Inch L	W	H	Color	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
1	22-18	.160	.687	.484	.444	Red	A1050-ND	.40	.32	53440-2
	14-18					Blue	A1051-ND	.40	.32	53440-1

Fig. 1

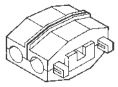


Fig. 2

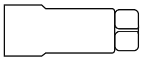
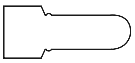


Fig. 3



Closed End Splices

• For single and multiple wire applications • Nylon or vinyl or PVF² insulated • Temperature Ratings of 90°C, 105°C, 150°C • 300V, 600V or 1000V rated • Crescent crimp configuration • Covers wire ranges from 24 to 6 AWG (0.2 to =16 mm²); 509 to 42, 700 CMA • Copper or steel splice material • Plated or unplated • Solid or stranded copper wire • UL and CSA approved

Fig.	AWG	Insul. Color	Mat'l.	Open. Dia. Inch	Length Inch	Splice Mark*	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.	Digi-Key Part No.	Cut Strip Pricing 500	Cut Strip Pricing 1,000	Digi-Key Part No.	Reel Size	Tape & Reel Pricing	Amp Part No.
Vinyl BOMB-TAIL Splices																	
2	22-16	Blue	Copper	.173	.750	VS	A09052-ND	.24	.21	34306	—	—	—	—	—	—	—
		Blue	Copper	.215	.800	VS	A27567-ND	.23	.21	34864	—	—	—	—	—	—	—
		Trans.	Steel	.265	1.000	ECV	A27476-ND	.14	.12	328890	—	—	—	—	—	—	—
		Trans.	Steel	.265	.825	ECV	A09053-ND	.11	.10	330021	—	—	—	—	—	—	—
	22-14	Red	Copper	.156	.729	VS	A09054-ND	.24	.21	34304	—	—	—	—	—	—	—
		Purple		.187	.740	VS	A09055-ND	.09	.04	36964	A09055CT-ND *NEW!*	58.25	105.90	A09055TR-ND *NEW!*	2,500	63.54/M	2-36964-2
		Purple		.235	.775	VS	A27475-ND	.12	.11	2-328375-3	—	—	—	—	—	—	—
		Purple		.235	.900	ECV	A27568-ND	.15	.13	55843-1	—	—	—	—	—	—	—
	22-12	Trans.	Copper	.360	1.500	ECV	A09056-ND	.14	.12	53234-1	—	—	—	—	—	—	—
					1.125		A27571-ND	.13	.11	329251	—	—	—	—	—	—	—
	22-10	Yellow	Copper	.235	.975	VS	A09059-ND	.27	.23	34308	—	—	—	—	—	—	—
		Yellow		.300	1.010	VS	A09060-ND	.96	.85	34865	—	—	—	—	—	—	—
		Purple		.312	1.010	VS	A09057-ND	.13	.12	36965	A09057CT-ND *NEW!*	62.93	114.43	A09057TR-ND *NEW!*	1,500	68.66/M	1-36965-1
		Purple		.360	1.125	ECV	A09058-ND	.10	.05	321519	—	—	—	—	—	—	—
	18-8	Green	Copper	.500	1.575	ECV	A09061-ND	.40	.35	320788	—	—	—	—	—	—	—
Nylon Molded Splices																	
2	22-14	Trans.	Copper	.250	.680	ECN	A09062-ND	.13	.06	35115	A09062CT-ND *NEW!*	67.42	122.58	A09062TR-ND *NEW!*	2,500	98.06/M	1-35115-0
3	22-10	Trans.	Copper	.375	.775	ECN	A09063-ND	.12	.06	35653	A09063CT-ND *NEW!*	74.17	134.85	A09063TR-ND *NEW!*	1,500	107.88/M	2-35653-1
					.970	EC	A09064-ND	.16	.15	53915-1	A09064CT-ND *NEW!*	111.97	203.58	A09064TR-ND *NEW!*	1,500	122.15/M	53915-2
					.720	EC	A27477-ND	.11	.09	328730	A27477CT-ND *NEW!*	55.23	100.43	A27477TR-ND *NEW!*	1,500	60.26/M	2-328730-1

* **VS** = 300V, 90°C **ECV** = 600V max. Building Wiring, 1000V max. Fixtures and Signs, 105°C UL, 90°C CSA **ECN** = 300V, 105°C **EC** = 600V max. Building Wiring, 1000V max. Fixtures and Signs, 105°C

Plasti-Grip™ Terminals and Splices

Temperature Rating: 90°C Max. **Material:** • Insulation: Vinyl • Terminal Body: Copper per ASTM B-152 • Plating: Tin per MIL-T-10727 (spring spade terminals are phosphor bronze per ASTM B-139 or brass per ASTM B-36 and tin-plated per MIL-T-10727) **Voltage:** 600V Max (1000V Fixture or Sign).

Recognized under the component program of Underwriters Laboratories Incorporated File No. E13288.

Fig. 1

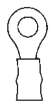


Fig. 2

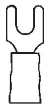


Fig. 3

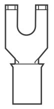


Fig. 4

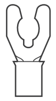


Fig. 5

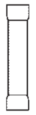


Fig. 6 *NEW!*

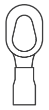


Fig. 7 *NEW!*

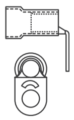


Fig. 8 *NEW!*

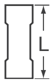
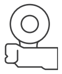


Fig. 9 *NEW!*



Ring Tongue Terminals

Fig.	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Tape & Reel		AMP Part No.
					10	100			500	1,000		Size	Pricing	
22-16 AWG Red														
1	2	.218 x .684	.140	A0954-ND	.21	.18	34140	—	—	—	—	—	—	—
	4	.218 x .684	.125	A27302-ND *NEW!*	.21	.18	32944	—	—	—	—	—	—	—
	4	.218 x .684	.140	A0955-ND	.21	.18	34141	A0955CT-ND *NEW!*	—	154.93	A0955TR-ND *NEW!*	5,000	123.94/M	2-34141-1
	4	.281 x .809	.140	A28199-ND *NEW!*	.27	.24	34143	—	—	—	—	—	—	—
	6	.218 x .684	.125	A27303-ND *NEW!*	.21	.18	32945	A27303CT-ND *NEW!*	—	161.15	A27303TR-ND *NEW!*	5,000	128.92/M	2-32945-1
	6	.218 x .684	.140	A09016-ND[1]	.21	.18	34142	—	—	—	—	—	—	—
	6	.281 x .809	.125	A27304-ND *NEW!*	.21	.18	32947	A27304CT-ND *NEW!*	—	154.93	A27304TR-ND *NEW!*	5,000	123.94/M	2-32947-1
	6	.281 x .809	.140	A0956-ND[2]	.21	.18	34144	A0956CT-ND *NEW!*	—	86.55	A0956TR-ND *NEW!*	5,000	80.98/M	2-34144-1
	6	.312 x .856	.125	A27305-ND *NEW!*	.21	.18	32950	A27305CT-ND *NEW!*	—	161.15	A27305TR-ND *NEW!*	5,000	128.92/M	2-32950-1
	6	.312 x .856	.140	A27306-ND *NEW!*	.21	.18	34147	A27306CT-ND *NEW!*	—	154.93	A27306TR-ND *NEW!*	5,000	123.94/M	2-34147-1
	8	.281 x .809	.125	A27308-ND *NEW!*	.21	.18	32948	A27308CT-ND *NEW!*	—	294.70	A27308TR-ND *NEW!*	5,000	235.76/M	2-32948-1
	8	.281 x .809	.140	A09017-ND[1]	.12	.06	34145	A09017CT-ND *NEW!*	—	154.93	A09017TR-ND *NEW!*	5,000	123.94/M	2-34145-1
	8	.312 x .856	.125	A27307-ND *NEW!*	.21	.18	32951	A27307CT-ND *NEW!*	—	161.15	A27307TR-ND *NEW!*	5,000	128.92/M	2-32951-1
	8	.312 x .856	.140	A0957-ND[2]	.12	.06	34148	A0957CT-ND *NEW!*	—	154.93	A0957TR-ND *NEW!*	5,000	123.94/M	2-34148-1
	10	.281 x .809	.125	A28192-ND *NEW!*	.21	.18	32949	A28192CT-ND *NEW!*	—	276.20	A28192TR-ND *NEW!*	5,000	220.96/M	2-32949-1
	10	.281 x .809	.140	A09018-ND[1]	.21	.18	34146	—	—	—	—	—	—	—
	10	.312 x .856	.125	A09019-ND	.21	.18	32952	A09019CT-ND *NEW!*	—	154.93	A09019TR-ND *NEW!*	5,000	123.94/M	2-32952-1
	10	.312 x .856	.140	A0958-ND[2]	.20	.18	34149	A0958CT-ND *NEW!*	—	99.05	A0958TR-ND *NEW!*	5,000	80.98/M	2-34149-1
	1/4	.469 x 1.090	.125	A27309-ND *NEW!*	.27	.24	32953	A27309CT-ND *NEW!*	—	370.78	A27309TR-ND *NEW!*	5,000	296.62/M	2-32953-1
	1/4	.469 x 1.090	.140	A0959-ND	.24	.21	34150	A0959CT-ND *NEW!*	—	178.28	A0959TR-ND *NEW!*	5,000	142.62/M	2-34150-1
	5/16	.469 x 1.090	.140	A0960-ND	.24	.21	34151	A0960CT-ND *NEW!*	—	178.28	A0960TR-ND *NEW!*	5,000	142.62/M	2-34151-1
	3/8	.531 x 1.230	.140	A0961-ND	.25	.22	34152	—	—	—	—	—	—	—
16-14 AWG Blue														
1	4	.250 x .715	.170	A0962-ND	.27	.24	34157	—	—	—	—	—	—	—
	6	.250 x .715	.170	A09020-ND[1]	.21	.18	34158	—	—	—	—	—	—	—
	6	.343 x .871	.170	A0963-ND[2]	.21	.18	34159	A0963CT-ND *NEW!*	—	161.15	A0963TR-ND *NEW!*	5,000	128.92/M	2-34159-1
	8	.312 x .825	.170	A27311-ND *NEW!*	.21	.18	328527	—	—	—	—	—	—	—
	8	.343 x .871	.145	A27310-ND *NEW!*	.21	.18	32959	A27310CT-ND *NEW!*	—	316.68	A27310TR-ND *NEW!*	5,000	253.34/M	2-32959-1
	8	.343 x .871	.170	A0964-ND	.12	.06	34160	A0964CT-ND *NEW!*	—	154.93	A0964TR-ND *NEW!*	5,000	123.94/M	2-34160-1
	10	.343 x .871	.145	A09021-ND	.21	.18	32960	A09021CT-ND *NEW!*	—	154.93	A09021TR-ND *NEW!*	5,000	123.94/M	2-32960-1
	10	.343 x .871	.170	A0965-ND	.20	.18	34161	A0965CT-ND *NEW!*	—	99.05	A0965TR-ND *NEW!*	5,000	80.98/M	2-34161-1
	1/4	.469 x 1.090	.145	A27312-ND *NEW!*	.36	.31	32961	—	—	—	—	—	—	—
	1/4	.469 x 1.090	.170	A0966-ND	.13	.07	34162	—	—	—	—	—	—	—
	5/16	.469 x 1.090	.170	A0967-ND	.24	.21	34163	—	—	—	—	—	—	—
	3/8	.531 x 1.248	.170	A0968-ND	.27	.24	34164	—	—	—	—	—	—	—
NEW! 16-14HD AWG Yellow/Black NEW!														
1	10	.343 x 1.046	.250	A28193-ND	.38	.34	321518	A28193CT-ND	155.79	283.25	A28193TR-ND	2,500	226.60/M	2-321518-1
	1/4	.531 x 1.296	.200	A27555-ND	.40	.35	34824	—	—	—	—	—	—	—
12-10 AWG Yellow														
1	6	.281 x .953	.250	A27313-ND *NEW!*	.27	.24	34852	—	—	—	—	—	—	—
	6	.375 x 1.098	.230	A28194-ND *NEW!*	.27	.24	34168	A28194CT-ND *NEW!*	116.52	211.85	A28194TR-ND *NEW!*	2,500	169.48/M	2-34168-1
	8	.375 x 1.098	.230	A27314-ND *NEW!*	.19	.17	34169	A27314CT-ND *NEW!*	112.05	203.73	A27314TR-ND *NEW!*	2,500	162.98/M	2-34169-1
	8	.375 x 1.098	.250	A0969-ND	.27	.24	34853	A0969CT-ND *NEW!*	116.52	211.85	A0969TR-ND *NEW!*	2,500	169.48/M	2-34853-1
	10	.375 x 1.098	.230	A09022-ND	.27	.24	34170	A09022CT-ND *NEW!*	63.20	114.90	A09022TR-ND *NEW!*	2,500	93.94/M	2-34170-1
	10	.375 x 1.098	.250	A0970-ND[2]	.26	.23	34854	A0970CT-ND *NEW!*	63.20	114.90	A0970TR-ND *NEW!*	2,500	93.94/M	2-34854-1
	1/4	.400 x 1.373	.300	A28195-ND *NEW!*	.30	.27	55678-1	A28195CT-ND *NEW!*	204.67	372.13	A28195TR-ND *NEW!*	1,500	297.70/M	55678-2
	1/4	.531 x 1.327	.230	A27315-ND *NEW!*	.32	.28	34171	A27315CT-ND *NEW!*	127.15	231.18	A27315TR-ND *NEW!*	2,500	184.94/M	2-34171-1
	1/4	.531 x 1.327	.250	A0971-ND	.31	.28	34855	A0971CT-ND *NEW!*	127.15	231.18	A0971TR-ND *NEW!*	2,500	184.94/M	2-34855-1
	5/16	.531 x 1.327	.230	A27316-ND *NEW!*	1.01	.89	34172	A27316CT-ND *NEW!*	264.44	480.80	A27316TR-ND *NEW!*	2,500	384.64/M	2-34172-1
	5/16	.531 x 1.327	.250	A0972-ND	.21	.19	34856	—	—	—	—	—	—	—
	3/8	.593 x 1.421	.230	A0973-ND	.31	.28	34173	—	—	—	—	—	—	—
	2	.750 x 1.594	.250	A09023-ND[1]	.55	.48	34837	—	—	—	—	—	—	—
NEW! 8 AWG Red NEW!														
1	8	.478 x 1.586	.360	A27530-ND	.84	.74	52041	—	—	—	—	—	—	—
	10	.431 x 1.556	.360	A27318-ND	.55	.49	52263	—	—	—	A27318TR-ND	500	168.21	52263-2
	10	.431 x 1.576	.330	A27317-ND	.55	.49	52263-1	—	—	—	—	—	—	—
	1/4	.431 x 1.561	.360	A28196-ND	1.33	1.17	55621-1	—	—	—	—	—	—	—
	1/4	.478 x 1.586	.360	A27320-ND	.84	.74	52041-1	—	—	—	A27320TR-ND	500	469.50	52041-7
	1/4	.478 x 1.600	.330	A27319-ND	.83	.73	52041-3	—	—	—	A27319TR-ND	500	461.85	52041-9
	5/16	.587 x 1.696	.360	A27321-ND	.90	.79	52291	—	—	—	—	—	—	—
	3/8	.587 x 1.696	.360	A27531-ND	.86	.76	52291-1	—	—	—	—	—	—	—
	1/2	.875 x 1.860	.330	A27532-ND	1.48	1.30	52262-1	—	—	—	—	—	—	—
NEW! 6 AWG Blue NEW!														
1	8	.500 x 1.869	.360	A27322-ND	1.67	1.47	52042-2	—	—	—	—	—	—	—
	10	.468 x 1.719	.436	A27323-ND	.88	.77	52265	—	—	—	—	—	—	—
	10	.500 x 1.844	.436	A27533-ND	1.67	1.47	52042-4	—	—	—	—	—	—	—
	1/4	.398 x 1.846	.450	A28197-ND	1.06	.93	55679-1	—	—	—	—	—	—	—
	1/4	.500 x 1.844	.436	A27325-ND	.94	.83	52042-1	—	—	—	—	—	—	—
	1/4	.500 x 1.869	.360	A27324-ND	.98	.86	52042-3	—	—	—	A27324TR-ND	500	499.77	52042-9
	5/16	.625 x 1.906	.450	A27326-ND	1.04	.91	52264	—	—	—	—	—	—	—
	3/8	.625 x 1.906	.450	A27534-ND	1.81	1.60	52264-1	—	—	—	—	—	—	—
	1/2	.815 x 1.851	.436	A27535-ND	2.26	1.99	52350	—	—	—	—	—	—	—
NEW! 4 AWG Yellow NEW!														
1	10	.546 x 1.948	.450	A27327-ND	1.23	1.08	52043-2	—	—	—	—	—	—	—
	1/4	.546 x 1.948	.450	A27328-ND	1.94	1.71	52043-3	—	—	—	—	—	—	—
	1/4	.546 x 1.948	.515	A27329-ND	1.11	.98	52043-1	—	—	—	—	—	—	—
	5/16	.679 x 2.014	.450	A27330-ND	2.62	2.31	52266-3	—	—	—	—	—	—	—
	5/16	.679 x 2.014	.515	A27331-ND	1.96	1.72	52266	—	—	—	—	—	—	—
	3/8	.679 x 2.014	.450	A27536-ND	1.93	1.70	52266-4	—	—	—	—	—	—	—
NEW! 2 AWG Red NEW!														
1	1/4	.675 x 2.071	.560	A27332-ND	2.55	2.25	52267-1	—	—	—	—	—	—	—
	5/16	.711 x 2.089	.560	A27537-ND	2.53	2.23	52044-4	—	—	—	—	—	—	—
	5/16	.711 x 2.089	.632	A27538-ND	1.68	1.48	52044-1	—	—	—	—	—	—	—
	3/8	.711 x 2.089	.632	A27539-ND	2.56	2.25	52044-2	—	—	—	—	—	—	—
NEW! 1/0 AWG Blue NEW!														
1	5/16	.807 x 2.447	.684	A27333-ND	2.12	1.86	52045-1	—	—	—	—	—	—	—
	3/8	.807 x 2.447	.665	A27540-ND	2.12	1.86	52045-5	—	—	—	—	—	—	—

[1] Short; [2] Long

(Continued)

Plasti-Grip™ Terminals and Splices *(Cont.)*

Spade Tongue Terminals

Fig.	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Tape & Reel		AMP Part No.
					10	100			500	1,000		Size	Pricing	
22-16 AWG Red														
2	6	.250 x .858	.140	A27425-ND *NEW!*	.21	.18	327043	A27425CT-ND *NEW!*	—	161.15	A27425TR-ND *NEW!*	5,000	128.92/M	2-327043-1
	6	.297 x .765	.125	A27572-ND *NEW!*	.26	.23	327735	A27572CT-ND *NEW!*	—	149.95	A27572TR-ND *NEW!*	5,000	119.96/M	2-327735-1
	6	.297 x .765	.140	A0974-ND	.21	.18	320665	—	—	—	—	—	—	—
	8	.375 x .920	.125	A27573-ND *NEW!*	.28	.25	32981	A27573CT-ND *NEW!*	—	322.25	A27573TR-ND *NEW!*	5,000	193.35/M	2-32981-1
	8	.375 x .920	.140	A0975-ND	.21	.18	34155	—	—	—	—	—	—	—
	10	.375 x .920	.140	A0976-ND	.21	.18	34156	—	—	—	—	—	—	—
16-14 AWG Blue														
2	6	.297 x .765	.145	A0977-ND	.21	.18	322994	—	—	—	—	—	—	—
	8	.385 x .920	.170	A0978-ND	.21	.18	34166	—	—	—	—	—	—	—
	10	.385 x .920	.170	A0979-ND	.21	.18	34167	—	—	—	—	—	—	—
12-10 AWG Yellow														
2	8	.406 x 1.095	.250	A0980-ND	1.01	.89	35152	—	—	—	—	—	—	—
	10	.406 x 1.095	.230	A0981-ND	.27	.24	34176	A0981CT-ND *NEW!*	233.04	423.70	A0981TR-ND *NEW!*	2,500	338.96/M	2-34176-1

Flanged Spade

Fig.	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Tape & Reel		AMP Part No.
					10	100			500	1,000		Size	Pricing	
22-16 AWG Red														
3	6	.328 x .749	.140	A28249-ND *NEW!*	.45	.39	324560	A28249CT-ND *NEW!*	—	463.25	A28249TR-ND *NEW!*	5,000	370.60/M	2-324560-1
	6	.296 x .749		A0982-ND	.23	.20	322249	A0982CT-ND *NEW!*	—	168.75	A0982TR-ND *NEW!*	5,000	135.00/M	1-322249-1
	8	.416 x .842		A0983-ND	.77	.68	324169	—	—	—	—	—	—	—
	8	.296 x .749		A27433-ND *NEW!*	.30	.26	1-322249-0	A27433CT-ND *NEW!*	—	405.08	A27433TR-ND *NEW!*	5,000	324.06/M	1-322249-9
	10	.296 x .749		A0984-ND	.45	.39	328516	—	—	—	—	—	—	—
16-14 AWG Blue														
3	6	.294 x .749	.170	A0985-ND	.23	.20	324165	A0985CT-ND *NEW!*	—	168.75	A0985TR-ND *NEW!*	5,000	135.00/M	2-324165-1
	8	.294 x .749		A09024-ND	.33	.29	53874-1	A09024CT-ND *NEW!*	—	254.83	A09024TR-ND *NEW!*	5,000	203.86/M	53874-2
12-10 AWG Yellow														
3	6	.296 x 1.017	.230	A0986-ND	.50	.44	324581	A0986CT-ND *NEW!*	283.75	515.90	A0986TR-ND *NEW!*	2,500	412.72/M	1-324581-1
	8	.416 x 1.017	.230	A0987-ND	.81	.72	324172	—	—	—	—	—	—	—
	10	.416 x 1.017	.250	A09025-ND	.30	.27	52856	—	—	—	—	—	—	—

Spring Spade Tongue

Fig.	Stud Size	Dim. - Inch W x L	Ins. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Tape & Reel		AMP Part No.
					10	100			500	1,000		Size	Pricing	
Short														
22-16 AWG Red														
4	4	.203 x .811	.140	A0988-ND	.24	.21	52947	A0988CT-ND *NEW!*	—	375.85	A0988TR-ND *NEW!*	5,000	300.68/M	52947-1
	6	.234 x .811		A27440-ND *NEW!*	.24	.21	53240-1	A27440CT-ND *NEW!*	—	187.93	A27440TR-ND *NEW!*	5,000	112.76/M	53240-2
	6	.250 x .811		A0989-ND	.23	.21	52949	A0989CT-ND *NEW!*	—	115.53	A0989TR-ND *NEW!*	5,000	94.46/M	52949-1
	8	.244 x .872		A27441-ND *NEW!*	.32	.28	53241-1	A27441CT-ND *NEW!*	—	180.70	A27441TR-ND *NEW!*	5,000	144.56/M	53241-2
	8	.375 x .872		A0990-ND	.29	.26	52950	A0990CT-ND *NEW!*	—	375.85	A0990TR-ND *NEW!*	5,000	225.51/M	52950-1
	10	.294 x .920		A27442-ND *NEW!*	.19	.16	53242-1	—	—	—	—	—	—	—
	10	.406 x .920		A0991-ND	.35	.31	52951	A0991CT-ND *NEW!*	—	361.40	A0991TR-ND *NEW!*	5,000	216.84/M	52951-1
16-14 AWG Blue														
4	6	.250 x .811	.170	A0992-ND	.23	.21	52955	A0992CT-ND *NEW!*	—	180.70	A0992TR-ND *NEW!*	5,000	144.56/M	52955-1
	6	.250 x .860	.250	A27575-ND *NEW!*	.32	.28	52955-2	—	—	—	—	—	—	—
	8	.244 x .872	.170	A27443-ND *NEW!*	.27	.24	53244-1	—	—	—	—	—	—	—
	8	.375 x .872	.170	A0993-ND	.28	.25	52956	A0993CT-ND *NEW!*	—	187.93	A0993TR-ND *NEW!*	5,000	150.34/M	52956-1
	10	.294 x .920	.170	A27576-ND *NEW!*	.32	.28	53245-1	—	—	—	—	—	—	—
	10	.406 x .920	.170	A0994-ND	.24	.21	52957	A0994CT-ND *NEW!*	—	180.70	A0994TR-ND *NEW!*	5,000	108.42/M	52957-1
NEW! 12-10 AWG Yellow NEW!														
4	6	.250 x .959	.200	A27577-ND	.42	.37	52961	A27577CT-ND	200.46	364.48	A27577TR-ND	2,500	293.69/M	52961-1
	6	.250 x .959	.250	A27444-ND	.42	.37	53246-1	—	—	—	—	—	—	—
	8	.312 x 1.052	.250	A27541-ND	.44	.39	53247-1	—	—	—	—	—	—	—
	8	.375 x 1.052	.200	A27578-ND	.45	.39	52962	—	—	—	—	—	—	—
	10	.406 x 1.100	.200	A27445-ND	.46	.40	52963	—	—	—	—	—	—	—
Long														
22-16 AWG Red														
4	6	.250 x .945	.140	A09027-ND	.41	.36	52453	—	—	—	—	—	—	—
	8	.281 x .991		A09028-ND	.40	.36	52454	—	—	—	—	—	—	—
	10	.343 x 1.017		A09029-ND	.34	.30	52455	—	—	—	—	—	—	—
16-14 AWG Blue														
4	6	.250 x .945	.170	A09030-ND	.39	.34	52463	—	—	—	—	—	—	—
	8	.281 x .991		A09031-ND	.41	.36	52464	A09031CT-ND *NEW!*	—	375.85	A09031TR-ND *NEW!*	5,000	225.51/M	52464-1
	10	.343 x 1.017		A09032-ND	.49	.43	52465	—	—	—	—	—	—	—

Butt Splices

Fig.	Dim. L Max. Inch	Ins. Dia. Inch	Digi-Key Part No.	Price Each		Digi-Key Part No.	Cut Tape Pricing		Tape & Reel†	
				10	100		500	1,000	Size	Pricing
26-22 AWG Yellow (26-24 per MIL-T-7928)										
5	.620	.080	A27461-ND *NEW!*	.22	.20	—	—	—	—	—
22-16 AWG Red (22-18 per MIL-T-7928)										
5	1.065	.120	A09033-ND	.24	.21	—	—	—	—	—
	1.065	.170	A27462-ND *NEW!*	.25	.22	—	—	—	—	—
	1.076	.140	A0997-ND	.14	.07	A0997CT-ND *NEW!*	100.40	182.55	2,500	146.04/M
	1.065	.083 x .171	A27463-ND *NEW!*	.25	.22	—	—	—	—	—
16-14 AWG Blue										
5	1.065	.140	A27464-ND *NEW!*	.36	.31	—	—	—	—	—
	1.065	.170	A0998-ND	.14	.07	A0998CT-ND *NEW!*	56.62	102.95	2,500	84.16/M
	1.065	.215	A27465-ND *NEW!*	.25	.22	—	—	—	—	—
	1.105	.170	A28185-ND *NEW!*	.73	.65	—	—	—	—	—
	1.065	.135 x .245	A09034-ND	.84	.74	—	—	—	—	—
16-14 AWG Natural w/Blue Stripes										
5	1.065	.170	A27542-ND *NEW!*	.25	.22	—	—	—	—	—
12-10 AWG Yellow										
5	1.160	.200	A27466-ND *NEW!*	.41	.36	—	—	—	—	—
		.230	A0999-ND	.23	.11	—	—	—	—	—
		.250	A27467-ND *NEW!*	.53	.47	—	—	—	—	—

† For Tape and Reel Part Number change CT-ND to TR-ND

NEW! Multiple Stud Terminals

Fig.	AWG Color	Stud Size	Insul. Dia. Inch	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Tape & Reel 5,000	AMP Part No.
					10	100			
6	22-16 Red	6-8-10	.125	A27556CT-ND	3.35	29.49	A27556TR-ND	191.52/M	54774-2

NEW! Ring Tongue 90° Bend Terminal

Fig.	AWG Color	Stud Size	Insul. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
7	8 Red	10	.360	A27563-ND	1.71	1.50	55654-1
	6 Blue	1/4	.436	A27564-ND	2.53	2.23	54754-1
	4 Yellow	1/4	.515	A27565-ND	2.92	2.57	322894

NEW! Parallel Splices

Fig.	AWG Color	Dim. L Max. Inch	Insul. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
8	22-16 Red	.760	.120	A27468-ND	.27	.24	34131
	22-16 Red	.760	.140	A27574-ND	.21	.19	34132
	16-14 Blue	.760	.140	A27469-ND	.15	.14	34133
	16-14 Blue	.760	.170	A27470-ND	.73	.64	34134
	12-10 Yellow	.843	.200	A27471-ND	.42	.37	34135
	12-10 Yellow	.870	.230	A27472-ND	.23	.20	34136

NEW! Ring Flag Tongue

Fig.	AWG Color	Stud Size	Insul. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
9	16-14 Blue	14	.170	A27557-ND	1.20	1.06	322310
	16-14HD Black		.230	A27558-ND	1.42	1.25	322313
	12-10 Yellow		.230	A27559-ND	1.93	1.70	322316

A9996-ND	PRO-CRIMPER II Hand Tool without Dies	**$75.00**
A9991-ND	Die Set for Insulated Terminals, use with A9996	**$45.00**
A9811-ND	Crimp Tool, Insulated Terminals with Die Set	**$92.25**
A9821-ND	PIDG and PLASTI-GRIP Connector Kit (includes hand tool A9811-ND, 225 insulated ring and spade terminals in 12-10, 16-14 and 22-16 AWG wire sizes)	**$112.50**

FASTONS

Fig. 1

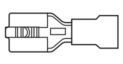


Fig. 2 *NEW!*

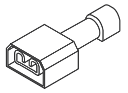
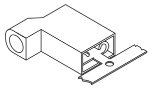


Fig. 3 *NEW!*



PIDG FASTON: Receptacle material is brass unless otherwise noted.

ULTRA-FAST FASTON RECEPTACLES: Fully Insulated FASTON Receptacles offer all the advantages of the standard Ultra-Fast product plus an insulation crimp. Ultra-Fast Plus Receptacles are preinsulated assemblies featuring a co-molded housing produced from two different nylon materials. The receptacle and wire barrel portions of the housing are molded from type 6/6 nylon material with a +125°C UL temperature rating. The insulation barrel is molded from a premium grade nylon. Material:
• Housing: Nylon Type 6/6 • Terminal: Tin-Plated, Copper alloy • Base : Brass

NEW! PIDG FASTONS

Fig.	AWG	Insulation Color	Fits Tab Size (Inch)	Insul. Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	Digi-Key Part. No.	Cut Tape Pricing 500	Cut Tape Pricing 1,000	Tape & Reel† Size	Tape & Reel† Pricing	Digi-Key Part No.	Cut Strip Pricing 500	Cut Strip Pricing 1,000	Strip & Reel‡ Size	Strip & Reel‡ Pricing
.110 Low Insertion																	
1	22-18	Red	.110 x .012	.140	—	—	—	—	—	—	—	—	A27941TR-ND	—	—	5,000	164.92/M
	22-18	Red	.110 x .016	.140	A27944-ND	.23	.21	A27944CT-ND	—	229.23	5,000	189.56/M	—	—	—	—	—
	22-18	Red	.110 x .020	.140	A09050-ND	.23	.11	A09050CT-ND	—	173.65	5,000	143.62/M	—	—	—	—	—
	22-18	Red	.110 x .032	.140	A09051-ND	.23	.11	A09051CT-ND	—	173.65	5,000	143.62/M	A27952CT-ND	—	165.15	5,000	132.12/M
	16-14	Blue	.110 x .020	.170	A0912-ND	.23	.11	A0912CT-ND	—	173.65	4,000	143.62/M	—	—	—	—	—
	16-14	Blue	.110 x .032	.170	A27967-ND	.23	.21	A27967CT-ND	—	173.65	4,000	143.62/M	—	—	—	—	—
	16-14	Blue	.110 x .016	.170	A27964-ND	.23	.21	A27964CT-ND	—	173.65	4,000	143.62/M	—	—	—	—	—
.110 Standard																	
1	22	Red/Green	.110 x .016	.040 - 0.80	A28002-ND#	.62	.55	—	—	—	—	—	—	—	—	—	—
	22-18	Trans.	.110 x .016	.110	A27942-ND§	.25	.22	A27942CT-ND§	—	270.05	5,000	223.32/M	—	—	—	—	—
	22-18	Trans.	.110 x .020	.100	A09049-ND§	.25	.12	A09049CT-ND§	—	186.45	5,000	154.20/M	A27947CT-ND§	—	178.28	5,000	142.62/M
	22-18	Trans.	.110 x .032	.100	A0911-ND§	.25	.12	A0911CT-ND§	—	186.45	5,000	154.20/M	A28001TR-ND§	—	—	5,000	295.72/M
.187 Series																	
1	26-24	Yellow	.187 x .020	.082	A27940-ND§	.18	.09	A27940CT-ND§	—	229.23	5,000	142.17/M	A28000TR-ND§	—	—	4,000	256.70/M
	22-18	Red		.135	A0909-ND	.18	.09	A0909CT-ND	—	141.48	4,000	116.98/M	A27954CT-ND	90.83	165.15	3,500	132.12/M
	16-14	Blue		.170	A0910-ND	.23	.11	A0910CT-ND	—	173.65	4,000	143.62/M	—	—	—	—	—
.205 Series																	
1	22-18	Red	.205 x .020	.135	A09047-ND	.23	.11	A09047CT-ND	—	173.65	4,000	143.62/M	—	—	—	—	—
	22-18	Red/Black	.205 x .020	.140	A27955-ND	.49	.43	—	—	—	—	—	—	—	—	—	—
	22-18	Red	.205 x .032	.135	A0907-ND	.23	.11	A0907CT-ND	—	173.65	4,000	143.62/M	—	—	—	—	—
	16-14	Blue	.205 x .020	.170	A09048-ND	.23	.11	A09048CT-ND	—	229.23	4,000	189.56/M	—	—	—	—	—
	16-14	Blue	.205 x .032	.170	A0908-ND	.23	.11	A0908CT-ND	—	229.23	4,000	189.56/M	—	—	—	—	—
.250 Series																	
1	22-18	Red	.250 x .032	.140	A0903-ND	.18	.09	A0903CT-ND	—	141.48	4,000	116.98/M	—	—	—	—	—
	22-18	Red		.140	A27957-ND*	.28	.25	A27957CT-ND*	—	232.73	4,000	192.44/M	—	—	—	—	—
	16-14	Blue		.170	A0904-ND	.18	.09	A0904CT-ND	77.81	141.48	3,500	116.98/M	A27974CT-ND	90.83	165.15	3,500	132.12/M
	14-12	Green		.250	A0905-ND§	.33	.16	A0905CT-ND§	135.18	245.78	2,500	203.24/M	A27976TR-ND§	—	—	2,000	253.40/M
	14-12	Green		.250	A27977-ND§◊	.36	.32	—	—	—	—	—	—	—	—	—	—
	12-10	Yellow		.250	A0906-ND	.26	.12	A0906CT-ND	108.83	197.88	2,500	163.64/M	A27963CT-ND	—	236.00	2,000	188.80/M
	12-10	Yellow		250	A27978-ND	.67	.59	—	—	—	—	—	—	—	—	—	—

† For Tape and Reel Part No. change CT-ND to TR-ND ‡ For Strip and Reel Part No. change CT-ND to TR-ND § Not UL or CSA approved or listed # Insulation restricted *Unplated receptacle body ◊ Receptable material is phosphur bronze

NEW! Ultra-Fast FASTON Receptacles

Fig.	AWG Color	Insulation Diameter	Mating Tab	Digi-Key Part No.	Price Each 10	Price Each 100	Amp Part No.	Digi-Key Part No.	Cut Strip Pricing 500	Cut Strip Pricing 1,000	Digi-Key Part No.	Strip & Reel Size	Strip & Reel Pricing	Amp Part No.
Ultra-Fast Plus Fully Insulated														
.110 Series														
2	22-18 Red	.060-.120	.020	—	—	—	—	A27844CT-ND	57.17	85.10	A27844TR-ND	3,000	90.14/M	2-520932-2
.187 Series														
2	22-18 Red	.060-.135	.020	A27846-ND	.23	.20	2-520409-2	A27846CT-ND	61.15	111.18	A27846TR-ND	2,500	91.84/M	2-520401-2
	22-18 Red	.060-.135	.032	A27848-ND	.23	.20	2-520411-2	A27848CT-ND	61.15	111.18	A27848TR-ND	2,500	91.84/M	2-520403-2
	16-14 Blue	.090-.160	.020	A27850-ND	.23	.20	3-520410-2	A27850CT-ND	—	111.18	A27850TR-ND	2,200	91.85/M	3-520402-2
	16-14 Blue	.090-.160	.032	A27852-ND	.23	.20	3-520412-2	A27852CT-ND	—	111.18	A27852TR-ND	2,000	91.84/M	3-520404-2
.250 Series														
2	22-18 Red	.060-.135	.032	A27854-ND	.25	.22	2-520407-2	A27854CT-ND	67.13	122.05	A27854TR-ND	2,200	100.85/M	2-520405-2
	16-14 Blue	.090-.160		A27856-ND	.25	.22	3-520408-2	A27856CT-ND	67.13	122.05	A27856TR-ND	2,200	100.85/M	3-520406-2
Ultra-Fast Fully Insulated														
.110 Series														
2	26-22 Violet	.100	.020	A27793-ND	.19	.17	7-520366-2	A27793CT-ND	—	103.95	A27793TR-ND	3,000	85.88/M	7-520365-2
	22-18 Red	.120	.016	A27795-ND	.19	.17	2-520081-2	A27795CT-ND	—	103.95	A27795TR-ND	3,000	85.88/M	2-520080-2
	22-18 Red	.120	.020	A27797-ND	.17	.15	2-520084-2	A27797CT-ND	—	103.95	A27797TR-ND	3,000	85.88/M	2-520083-2
	22-18 Red	.120	.032	A27799-ND	.19	.17	2-520273-2	A27799CT-ND	—	103.95	A27799TR-ND	3,000	85.88/M	2-520272-2
	22-18 Red	.230	.020	—	—	—	—	A27800CT-ND	61.06	90.89	A27800TR-ND	2,000	96.26/M	2-520306-2
	22-18 Red	.230	.032	—	—	—	—	A27801CT-ND	61.06	90.89	A27801TR-ND	2,000	96.26/M	2-520310-2
	16-14 Blue	.260	.020	—	—	—	—	A27802CT-ND	61.06	90.89	A27802TR-ND	2,000	96.26/M	3-520370-2
.187 Series														
2	22-18 Red	.135	.020	A27804-ND	.16	.14	2-520182-2	A27804CT-ND	52.88	96.15	A27804TR-ND	2,500	79.42/M	2-520181-2
	22-18 Red	.135	.032	A27806-ND	.18	.16	2-520194-2	A27806CT-ND	52.88	96.15	A27806TR-ND	2,700	79.42/M	2-520193-2
	22-18 Red	.230	.020	—	—	—	—	A27807CT-ND	56.45	84.03	A27807TR-ND	2,000	89.00/M	2-520261-2
	22-18 Red	.230	.032	A27809-ND	.20	.18	2-520275-2	A27809CT-ND	—	119.15	A27809TR-ND	2,000	98.42/M	2-520274-2
	16-14 Blue	.160	.020	A27811-ND	.18	.16	3-350816-2	A27811CT-ND	52.88	96.15	A27811TR-ND	2,200	79.42/M	3-350815-2
	16-14 Blue	.160	.032	A27813-ND	.18	.16	3-520125-2	A27813CT-ND	52.88	96.15	A27813TR-ND	2,200	79.42/M	3-520124-2
	16-14 Blue	.260	.020	A27815-ND	.20	.18	3-520151-2	A27815CT-ND	—	107.73	A27815TR-ND	2,000	89.00/M	3-520150-2
.250 Series														
2	22-18 Red	.135	.032	A27817-ND	.17	.15	2-520184-2	A27817CT-ND	58.05	105.55	A27817TR-ND	2,200	87.20/M	2-520183-2
	22-18 Red	.135		A27819-ND†	.27	.24	2-520184-4	A27819CT-ND†	—	138.83	A27819TR-ND†	2,000	114.68/M	2-520183-4
	22-18 Red	.230		A27821-ND	.22	.19	2-520264-2	A27821CT-ND	—	118.28	A27821TR-ND	2,000	97.70/M	2-520263-2
	22-18 Red	.230		—	—	—	—	A27822CT-ND†	81.48	121.29	A27822TR-ND†	2,000	128.46/M	2-520263-4
	16-14 Blue	.160		A27824-ND	.17	.15	3-350820-2	A27824CT-ND	58.05	105.55	A27824TR-ND	2,200	87.20/M	3-350819-2
	16-14 Blue	.160		A27826-ND†	.27	.24	3-520117-2	A27826CT-ND†	—	138.25	A27826TR-ND†	2,000	114.68/M	3-520116-2
	16-14 Blue	.260		A27828-ND	.19	.17	3-520141-2	A27828CT-ND	—	118.28	A27828TR-ND	2,000	97.70/M	3-520140-2
	16-14 Blue	.260		—	—	—	—	A27829CT-ND†	81.48	121.29	A27829TR-ND†	2,000	128.46/M	3-520140-4
	12-10 Yellow	.320		A27831-ND	.24	.22	4-520448-2	A27831CT-ND	74.88	136.15	A27831TR-ND	1,500	112.48/M	4-520447-2
Ultra-Fast Fully Insulated Faston Flag Receptacles														
.187 Series														
3	22-18 Red	.165	.020	A27833-ND	.30	.27	2-520335-2	A27833CT-ND	—	178.10	A27833TR-ND	2,000	147.14/M	2-520334-2
	22-18 Red	.165	.032	A27835-ND	.30	.27	2-520337-2	A27835CT-ND	—	178.10	A27835TR-ND	2,200	147.15/M	2-520336-2
	16-14 Blue	.185	.020	A27837-ND	.30	.27	3-520339-2	A27837CT-ND	—	178.10	A27837TR-ND	2,000	147.14/M	3-520338-2
	16-14 Blue	.185	.032	—	—	—	—	A27838CT-ND	93.32	141.41	A27838TR-ND	2,200	147.15/M	3-520340-2
.250 Series														
3	22-18 Red	.165	.032	A27840-ND	.29	.25	2-520129-2	A27840CT-ND	—	191.68	A27840TR-ND	2,000	158.34/M	2-520128-2
	22-18 Red	.230		—	—	—	—	—	—	—	A27841TR-ND	1,700	168.36/M	2-520856-2
	16-14 Blue	.185		A27843-ND	.29	.25	3-520133-2	A27843CT-ND	108.86	—	A27843TR-ND	2,100	158.34/M	3-520132-2

† Terminal base material is phosphur bronze

A28005-ND	Hand Tool for Fastons (without dies)	**$330.00**
A27992-ND	*NEW!* TETRA-CRIMP Hand Tool for PIDG Faston Receptacles	**$441.00**
A28009-ND	Ultra-Fast Die Set for.187 and .250 Series (22-18 AWG), use with A28005-ND	**$441.00**
A28010-ND	Ultra-Fast Die Set for.187 and .250 Series (16-14 AWG), use with A28005-ND	**$441.00**

PLASTI-BOND Ring Tongue

Temperature Rating: 85°C Max. **Material:** • Insulation: Vinyl • Terminal Body and Metallic Sleeve: Copper per ASTM B-152 • Plating: Tin per MIL-T-10727.

AWG	Stud Size	Insulation Diameter Inch	Digi-Key Part No.	Price Each		AMP Part No.
				10	100	
20-16	14	.170	A27549-ND	.83	.73	36273
		.200	A27550-ND	1.59	1.40	320699
16-14	14	.190	A27551-ND	1.11	.98	35626
	1/4	.215	A27552-ND	1.06	.94	35628
12-10	1/4	.230	A27553-ND	1.57	1.38	35627

NEW! AMPLI-BOND Ring Tongue

Temperature Rating: 105°C Max.

Material:

- Insulation: Vinyl
- Terminal Body: Copper per ASTM B-152
- Insulation Support Ring: Steel per ASTM-A-109
- Plating: Tin per MIL-T-10727

Fig. 1

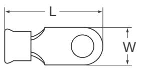
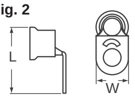
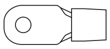


Fig. 2



AWG	Stud Size	Dimensions W x L	Insul. Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
Straight - Fig. 1							
8 Red	8	.375 x 1.549	.298	A27543-ND	1.43	1.26	330600
	8	.478 x 1.586	.298	A27359-ND	1.43	1.26	322047
	10	.375 x 1.315	.298	A28019-ND	2.52	2.22	54739-1
	10	.375 x 1.579	.298	A27544-ND	1.43	1.26	323974
	10	.406 x 1.328	.298	A27360-ND	1.43	1.26	323197
	10	.431 x 1.562	.298	A27361-ND	1.47	1.30	322128
	10	.431 x 1.562	.377	A28021-ND	3.37	2.97	322154
	10	.478 x 1.586	.298	A27545-ND	1.43	1.26	322048
	10	.587 x 1.702	.298	A28022-ND	2.04	1.80	322002
	1/4	.478 x 1.586	.298	A27362-ND	1.47	1.30	322049
	1/4	.478 x 1.586	.377	A28024-ND	2.01	1.77	327268
	1/4	.587 x 1.702	.298	A28026-ND	2.52	2.22	321669
	5/16	.587 x 1.702	.298	A27363-ND	1.47	1.30	322003
	5/16	.587 x 1.702	.377	A27546-ND	3.40	2.99	328525
	3/8	.587 x 1.702	.298	A27364-ND	2.04	1.80	322004
	1/2	.875 x 1.846	.298	A28023-ND	2.25	1.98	328463
6 Blue	10	.468 x 1.727	.377	A27365-ND	1.87	1.64	322153
	10	.500 x 1.852		A28027-ND	1.86	1.63	322050
	1/4	.500 x 1.852		A27367-ND	1.87	1.64	322051
	5/16	.625 x 1.914		A27547-ND	1.87	1.64	322006
	3/8	.625 x 1.914		A27369-ND	1.87	1.64	322007
4 Yellow	10	.546 x 1.908	.436	A27370-ND	2.21	1.95	322052
	10	.679 x 1.974		A28028-ND	2.50	2.20	322009
	1/4	.546 x 1.908		A27371-ND	2.28	2.01	322053
	1/4	.679 x 1.974		A28030-ND	4.55	4.00	321671
	5/16	.679 x 1.974		A27373-ND	2.28	2.01	322010
	3/8	.679 x 1.974		A27374-ND	2.28	2.01	322011
	1/2	.679 x 1.974		A28029-ND	4.53	3.98	328221
2 Red	1/4	.675 x 2.050	.505	A27375-ND	2.69	2.37	322125
	1/4	.675 x 2.112	.632	A28035-ND	2.79	2.46	322157
	5/16	.711 x 2.068	.505	A27548-ND	4.96	4.37	322074
	5/16	.711 x 2.130	.632	A28037-ND	3.55	3.13	326896
	3/8	.711 x 2.068	.505	A27376-ND	2.69	2.37	322055
2/0 Yel.	3/8	.926 x 2.540	.684	A27377-ND	9.76	8.59	322090
Right Angle - Fig. 2							
8 Red	8	.375 x .318	.298	A28018-ND	2.25	1.98	54575-1
	10	.431 x .318		A28020-ND	2.63	2.31	322880
	1/4	.587 x .381		A28025-ND	3.58	3.16	323869
6 Blue	10	.500 x .317	.377	A27366-ND	3.86	3.40	322887
	1/4	.500 x .379		A27368-ND	2.39	2.10	322888
4 Yellow	1/4	.546 x .377	.436	A27565-ND	2.92	2.57	322894
	5/16	.679 x .470		A28032-ND	3.10	2.73	322897
	3/8	.679 x .470		A28031-ND	2.92	2.57	322898
2 Red	1/4	.610 x .343	.505	A28033-ND	3.10	2.73	52097
	1/4	.675 x .371		A28034-ND	4.01	3.53	322900
	5/16	.711 x .465		A28036-ND	3.64	3.20	322134

TERMINYL Ring Tongue



These terminals have been designed to provide insulated terminals and splices for large wire sizes, many of which are used in airborne and ground support applications. **Temperature Rating:** 105°C Max. **Material:** Insulation: Nylon Terminal Body: ASTM B-152 • Plating: Tin per MIL-T-10727

AWG	Stud Size	Dimensions – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
8 Red	8	.478 x 1.425	.256	A27378-ND	1.31	1.15	53041
	10	.431 x 1.402		A27379-ND	1.23	1.08	324043
	1/4	.478 x 1.425		A27380-ND	1.40	1.23	324082
	5/16	.587 x 1.542		A27381-ND	1.32	1.17	324044
	3/8	.587 x 1.542		A27382-ND	1.30	1.14	324045
6 Blue	10	.468 x 1.575	.314	A27383-ND	1.53	1.35	324046
	10	.398 x 1.700		A27384-ND	1.79	1.58	53119-1
	1/4	.500 x 1.700		A27385-ND	1.53	1.35	324047
	5/16	.625 x 1.762		A27386-ND	1.53	1.35	324048
	3/8	.625 x 1.762		A28015-ND	1.28	1.13	324049
4 Yellow	8	.437 x 1.376	.382	A27387-ND	1.99	1.75	331456
	10	.546 x 1.812		A27388-ND	2.03	1.79	324111
	10	.437 x 1.376		A27554-ND	3.10	2.73	1-331456-0
	1/4	.546 x 1.812		A27389-ND	1.85	1.63	324050
	5/16	.679 x 1.878		A27390-ND	1.85	1.63	324051
	3/8	.679 x 1.878		A27391-ND	2.11	1.85	324052
	1/2	.679 x 1.878		A28016-ND	2.13	1.87	324114
2 Red	10	.711 x 2.063	.468	A28017-ND	3.00	2.64	328655
	1/4	.679 x 2.045		A27392-ND	2.41	2.12	324053
	5/16	.711 x 2.063		A27393-ND	2.85	2.51	324112
	3/8	.711 x 2.063		A27394-ND	2.41	2.12	324054
1/0 Blue	1/4	.807 x 2.426	.580	A27395-ND	4.81	4.24	324056
	3/8			A27396-ND	3.28	2.89	324057

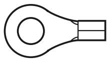
DIAMOND GRIP

These terminals are designed for complete uniform reliability under the most critical conditions of vibrations, thermal shock, corrosion, tensions and current overload.

Material: Terminal Body and Metallic Sleeve: Copper per QQ-C-576 • Plating: Tin per MIL-T-10727 **AMP Wire:** Stranded **Temperature Rating:** 170°C Max.

AWG	Stud Size	Dimensions – Inch W x L	Insulation Dia. Inch	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
26-22	0	.140 x .464	.082	A28038-ND	.39	.34	31516
	2	.140 x .464		A27397-ND	.39	.34	31518
	4	.203 x .585		A28039-ND	.39	.34	31679
	6	.250 x .679		A28040-ND	.39	.34	32861
22-16	4	.218 x .603	.125	A28041-ND	.40	.36	31094
	6	.218 x .603	.125	A27398-ND	.40	.36	31096
	6	.281 x .728	.125	A28042-ND	.39	.34	31269
	6	.281 x .728	.140	A28043-ND	.39	.34	31396
	8	.312 x .775	.125	A27399-ND	.39	.34	30996
	8	.312 x .775	.140	A28044-ND	.39	.34	31160
	8	.281 x .728	.125	A28045-ND	.39	.34	31270
	8	.281 x .728	.140	A28046-ND	.51	.45	31397
	10	.312 x .775	.125	A27400-ND	.40	.36	30997
	10	281 x .728	.140	A27401-ND	.39	.34	31398
16-14	6	.250 x .634	.170	A28047-ND	.51	.45	32190
	8	.343 x .790	.170	A28048-ND	.39	.34	30927
	10	.343 x .790	.150	A28049-ND	.40	.36	30993
	10	.343 x .790	.170	A28050-ND	.39	.34	30928
12-10	10	.375 x 1.007	.230	A27402-ND	.55	.48	31771
	1/4	.531 x 1.251		A28051-ND	.62	.54	31772
	3/8	.593 x 1.345		A28052-ND	.64	.56	31828

NEW! BUDGET - Ring Tongue



Budget Terminals are primarily the same as SOLISTRAND products except for the absence of the brazed seam in the wire barrel. This terminal is ideal for applications where extreme vibration and tension in the wire are not present.

• **Temperature Rating:** 170°C Max • **Material:** Terminal & Splice Body: Copper per ASTM B-152. Plating: Tin per MIL-T-10727 • **AMP Wire Range:** 22-16 Stranded, 16-14 Stranded, 12-10 Stranded • **UL Listed**

AWG	Stud Size	Dimensions – Inch W x L	Digi-Key Part No.	Price Each		AMP Part No.
				10	100	
26-22	0	.140 x .329	A28255-ND	.08	.07	31423
	2	.140 x .329	A27147-ND	.08	.07	31425
	2	.203 x .450	A28257-ND	.08	.07	33695
	2	.140 x .419	A28256-ND	.08	.07	322771
	4	.203 x .450	A27148-ND	.08	.07	31428
	6	.203 x .450	A27149-ND	.08	.07	31430
	6	.250 x .544	A28258-ND	.26	.23	32858
	8	.250 x .544	A28259-ND	.08	.07	32859
	10	.250 x .544	A28260-ND	.08	.07	32860
22-16	1	.218 x .449	A28261-ND	.09	.08	31087
	2	.218 x .499	A28263-ND	.09	.08	31088
	2	.182 x .446	A28262-ND	.09	.08	320677
	4	.218 x .449	A28265-ND	.09	.08	31089
	4	.182 x .446	A28264-ND	.33	.29	36189
	4	.250 x .621	A28266-ND	.09	.08	322418
	5	.218 x .449	A27150-ND	.09	.08	31090
	6	.218 x .449	A28267-ND	.09	.08	31091
	6	.281 x .574	A28269-ND	.09	.08	31264
	6	.312 x .621	A28270-ND	.09	.08	30691
	8	.312 x .621	A28273-ND	.09	.08	30692
	8	.281 x .574	A28272-ND	.09	.08	31265
	8	.344 x .653	A28274-ND	.09	.08	32823
	10	.312 x .621	A28276-ND	.09	.08	30693
	10	.281 x .574	A28275-ND	.09	.08	31266
	10	.344 x .653	A28277-ND	.33	.29	32824
	12	.312 x .621	A28278-ND	.09	.08	30694
	1/4	.469 x .856	A27151-ND	.38	.34	31172
	5/16	.469 x .856	A28281-ND	.11	.10	31173
	5/16	.531 x .995	A28282-ND	.22	.20	324124
	3/8	.531 x .995	A28280-ND	.22	.20	31498
	1/2	.713 x 1.070	A28279-ND	.31	.28	328970
16-14	2	.180 x .445	A28284-ND	.09	.08	326854
	4	.250 x .480	A28285-ND	.09	.08	32185
	6	.343 x .636	A28286-ND	.09	.08	30695
	6	.250 x .480	A28287-ND	.09	.08	32186
	6	.312 x .590	A28288-ND	.09	.08	321683
	8	.343 x .636	A28289-ND	.09	.08	30696
	8	.312 x .590	A28290-ND	.09	.08	322235
	10	.312 x .621	A28291-ND	.09	.08	51872-5
	10	.343 x .636	A27152-ND	.09	.08	30697
	12	.469 x .855	A28292-ND	.11	.10	31163
	14	.468 x .730	A28293-ND	.11	.10	34896
	1/4	.469 x .855	A28294-ND	.11	.10	31164
	5/16	.469 x .855	A28295-ND	.11	.10	31165
	3/8	.531 x .995	A28296-ND	.22	.20	31499
	1/2	.713 x 1.070	A28297-ND	.31	.28	328971
12-10	4	.281 x .630	A28299-ND	.15	.13	34891
	6	.281 x .630	A28300-ND	.15	.13	34892
	6	.375 x .765	A28301-ND	.15	.13	31112
	8	.312 x .708	A28302-ND	.15	.13	34404
	8	.375 x .765	A28303-ND	.15	.13	31113
	10	.343 x .723	A28304-ND	.15	.13	32882
	10	.375 x .765	A27153-ND	.15	.13	31114
	10	.500 x .865	A28305-ND	.17	.15	34964
	1/4	.500 x .865	A28307-ND	.17	.15	34965
	1/4	.531 x 1.004	A28308-ND	.17	.15	31122
	5/16	.531 x 1.004	A28312-ND	.17	.15	31123
	3/8	.593 x 1.098	A28309-ND	.17	.15	30972
	3/8	.750 x 1.271	A28310-ND	.33	.29	34833
	1/2	.715 x 1.102	A28306-ND	.33	.29	52269-1

A9996-ND	PRO-CRIMPER II Hand Tool without Dies	**$75.00**
A9991-ND	Die Set for Insulated Terminals, use with A9996	**$45.00**
A9811-ND	Crimp Tool, Insulated Terminals with Die Set	**$92.25**
A9812-ND	Crimp Tool, Uninsulated Terminals with Die Set	**$168.00**
A9821-ND	PIDG and PLASTI-GRIP Connector Kit	**$112.50**

Solistrand Ring Tongue Terminals

SOLISTRAND terminals and splices are specially designed to terminate solid and stranded wire. The barrel is completely closed and the seam is brazed for uniform metal strength around the entire barrel area.

Temperature Rating: 170°C Max.

Material: • Terminal Body: copper per ASTM B-152
• Plating: Tin per MIL-T-10727

UL Listed. CSA Certified. Military Approval.

Fig. 1

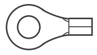


Fig. 2 *NEW!*

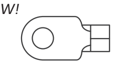


Fig.	AWG	Stud Size	Dim. Inch W x L	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
1	26-22	2	.140 X .419	A27000-ND *NEW!*	.29	.25	50334
	22-16	2	.182 X .446	A27002-ND *NEW!*	.16	.14	322927
		2	.218 X .449	A27001-ND *NEW!*	.16	.14	34103
		4	.182 X .446	A27003-ND *NEW!*	.42	.37	36467
		4	.218 x .449	A0914-ND	.12	.11	34104
		4	.250 X .621	A28055-ND *NEW!*	.67	.59	323096
		6	.218 X .449	A0915-ND	.10	.05	34105
		6	.281 X .574	A27006-ND *NEW!*	.12	.11	34107
		6	.312 X .621	A27008-ND *NEW!*	.12	.11	34110
		8	.281 x .574	A0916-ND	.12	.11	34108
		8	.312 X .621	A27009-ND *NEW!*	.12	.11	34111
		10	.281 x .574	A0917-ND	.12	.11	34109
		10	.312 X .621	A27012-ND *NEW!*	.12	.11	34112
		10	.344 X .653	A27015-ND *NEW!*	.22	.19	323087
		1/4	.469 X .856	A0918-ND	.14	.12	34113
		1/2	.713 X 1.070	A27019-ND *NEW!*	.35	.31	329966
		5/16	.469 x .856	A0919-ND	.14	.13	34114
		3/8	.531 x .995	A0920-ND	.15	.13	34115
	16-14	4	.250 X .480	A27020-ND *NEW!*	.43	.38	34119
		6	.343 X .636	A27021-ND *NEW!*	.12	.11	34121
		6	.250 X .480	A0921-ND	.12	.11	34120
		6	.312 X .590	A27023-ND *NEW!*	.12	.11	321684
		8	.343 X .636	A0922-ND	.12	.11	34122
		8	.343 x .723	A27154-ND•	.27	.24	35432
		8	.312 X .590	A27025-ND *NEW!*	.17	.15	324955
		10	.343 X .636	A0923-ND	.12	.11	34123
		10	.312 X .669	A27028-ND *NEW!*	.16	.14	320093
		10	.343 x .723	A27155-ND•	.23	.20	34567
		1/4	.469 x .855	A0924-ND	.14	.12	34124
		1/4	.500 x .865	A27157-ND•	.30	.26	35775
		1/2	.750 X 1.184	A27031-ND *NEW!*	.35	.31	50981
		1/2	.750 x 1.271	A27160-ND•	1.57	1.39	321165
		5/16	.469 x .855	A0925-ND	.14	.13	34125
		5/16	.500 x .865	A27158-ND•	.34	.30	35776
		3/8	.531 x .995	A0152-ND	.17	.15	34126
		3/8	.750 x 1.271	A27159-ND•	.50	.44	327732
2	14-12	10	.421 X .739	A27032-ND *NEW!*	.22	.19	34484
		10	.312 X .685	A27033-ND *NEW!*	.24	.22	321828
		3/8	.687 X 1.120	A27034-ND *NEW!*	.61	.54	34486
1	12-10	4	.281 X .630	A27035-ND *NEW!*	.17	.15	322447
		6	.281 x .630	A0926-ND	.17	.15	35476
		6	.375 X .765	A27036-ND *NEW!*	.13	.12	33456
		8	.312 X .708	A27038-ND *NEW!*	.23	.20	322454
		8	.375 x .765	A0927-ND	.17	.15	32994
		10	.343 X .723	A27040-ND *NEW!*	.20	.18	322455
		10	.375 X .765	A0928-ND	.14	.07	33457
		10	.375 X .808	A27042-ND *NEW!*	.48	.43	31805
		10	.500 X .865	A27043-ND *NEW!*	.62	.55	35771
		1/4	.500 X .865	A27045-ND *NEW!*	.19	.17	35772
		1/4	.531 X 1.004	A0929-ND	.19	.17	33458
		5/16	.531 x 1.004	A0930-ND	.20	.18	33459
		3/8	.593 x 1.098	A0931-ND	.20	.18	33220
		1/2	.750 X 1.271	A27049-ND *NEW!*	.37	.33	35135
		1/2	1.250 X 1.896	A27050-ND *NEW!*	1.43	1.26	320763
		5/8	1.250 X 1.896	A27051-ND *NEW!*	1.43	1.26	320764
		1	1.250 X 1.896	A27052-ND *NEW!*	1.69	1.49	1-320765-0
	8	8	.406 X .949	A27053-ND *NEW!*	.43	.38	324061
		8	.469 X .933	A27054-ND *NEW!*	.42	.37	32996
		10	.469 X .933	A27055-ND *NEW!*	.42	.37	33460
		10	.406 X .949	A27057-ND *NEW!*	.43	.38	31807
		1/4	.469 X .933	A27059-ND *NEW!*	.36	.31	33461
		1/4	.594 X 1.168	A27061-ND *NEW!*	.57	.50	35247
		5/16	.594 X 1.168	A27062-ND *NEW!*	.57	.50	33462
		5/16	.562 X 1.074	A27063-ND *NEW!*	1.26	1.11	31808
		3/8	.594 X 1.168	A27064-ND *NEW!*	.59	.52	33463
		1/2	1.250 X 1.965	A27065-ND *NEW!*	1.44	1.27	35664
		5/8	1.250 X 1.965	A27066-ND *NEW!*	1.88	1.65	35665
	6	10	.406 X 1.181	A27067-ND *NEW!*	.62	.55	52197
		10	.406 X 1.181	A27068-ND *NEW!*	.77	.68	53106-1
		10	.625 X 1.246	A27069-ND *NEW!*	.62	.55	33464
		10	.468 X 1.168	A27070-ND *NEW!*	.64	.57	321298
		1/4	.625 X 1.246	A27071-ND *NEW!*	.39	.34	33465
		1/4	.468 X 1.168	A27073-ND *NEW!*	.53	.47	321598
		5/16	.625 X 1.246	A27074-ND *NEW!*	.53	.47	33466
		3/8	.625 X 1.246	A27076-ND *NEW!*	.53	.47	33467
		1/2	.875 X 1.840	A27077-ND *NEW!*	1.11	.98	320344
		1/2	1.250 X 2.033	A27078-ND *NEW!*	2.33	2.05	36808
		5/8	1.250 X 2.033	A27079-ND *NEW!*	1.19	1.05	36809
		3/4	1.250 X 2.033	A27080-ND *NEW!*	1.88	1.65	36810
	4	10	.656 X 1.314	A27081-ND *NEW!*	.89	.78	33468
		10	.500 X 1.199	A27082-ND *NEW!*	.92	.81	33114
		1/4	.656 X 1.314	A27083-ND *NEW!*	.73	.64	33469

Fig.	AWG	Stud Size	Dim. Inch W x L	Digi-Key Part No.	Price Each		AMP Part No.
					10	100	
1	4	1/4	.500 X 1.199	A27084-ND *NEW!*	.92	.81	31811
		5/16	.656 X 1.314	A27085-ND *NEW!*	.73	.64	33470
		5/16	.565 X 1.324	A27086-ND *NEW!*	1.23	1.08	33115
		3/8	.656 X 1.314	A27087-ND *NEW!*	.89	.78	33471
		3/8	.656 X 1.324	A27088-ND *NEW!*	1.23	1.08	31812
		1/2	1.250 X 2.090	A27089-ND *NEW!*	1.42	1.25	35668
		1/2	.875 X 1.902	A27090-ND *NEW!*	1.47	1.29	327175
		5/8	1.250 X 2.090	A27091-ND *NEW!*	1.42	1.25	35669
		3/4	1.250 X 2.090	A27092-ND *NEW!*	2.58	2.27	35670
	2	1/4	.890 X 1.657	A27095-ND *NEW!*	1.34	1.18	320138
		5/16	.890 X 1.657	A27096-ND *NEW!*	2.08	1.83	35183
		3/8	.890 X 1.657	A27099-ND *NEW!*	1.34	1.18	35184
		7/16	.890 X 1.657	A27100-ND *NEW!*	1.35	1.19	320741
		1/2	.890 X 1.657	A27101-ND *NEW!*	2.08	1.83	35185
		1/2	1.250 X 2.516	A27102-ND *NEW!*	6.20	5.45	323291
		5/8	1.250 X 2.516	A27103-ND *NEW!*	4.23	3.72	320754
2	2	10	.625 X 1.527	A27093-ND *NEW!*	1.62	1.42	330301
		1/4	.625 X 1.527	A27094-ND *NEW!*	1.20	1.06	320383
		5/16	.625 X 1.527	A27097-ND *NEW!*	1.08	.95	322870
		3/8	.625 X 1.527	A27098-ND *NEW!*	1.21	1.07	321600
1	1/0	1/4	.875 x 1.956	A27104-ND *NEW!*	2.05	1.80	36915
		1/4	.807 x 1.925	A27105-ND *NEW!*	2.11	1.86	321866
		5/16	.875 x 1.956	A27106-ND *NEW!*	2.05	1.80	36916
		5/16	.807 x 1.925	A27107-ND *NEW!*	2.11	1.86	321867
		3/8	.875 x 1.956	A27108-ND *NEW!*	1.82	1.60	36917
		3/8	.807 x 1.925	A27109-ND *NEW!*	2.11	1.86	321868
		7/16	.875 x 1.956	A27110-ND *NEW!*	3.44	3.03	36918
		1/2	.875 x 1.956	A27111-ND *NEW!*	2.11	1.86	36919
		1/2	1.265 x 2.678	A27112-ND *NEW!*	4.11	3.61	322291
		5/8	1.265 x 2.678	A27113-ND *NEW!*	4.16	3.66	320744
		3/4	1.265 x 2.678	A27114-ND *NEW!*	4.16	3.66	320748
	2/0	1/4	.946 X 2.000	A27115-ND *NEW!*	2.59	2.28	36921
		5/16	.926 X 1.930	A27116-ND *NEW!*	2.67	2.35	321870
		5/16	.946 X 2.000	A27117-ND *NEW!*	2.59	2.28	36922
		3/8	.926 X 1.930	A27118-ND *NEW!*	2.67	2.35	321871
		3/8	.946 X 2.000	A27119-ND *NEW!*	2.59	2.28	36923
		1/2	.926 X 1.930	A27120-ND *NEW!*	2.67	2.35	321873
		1/2	.946 X 2.000	A27121-ND *NEW!*	2.59	2.28	36925
		5/8	1.270 X 2.671	A27122-ND *NEW!*	5.91	5.20	322224
	3/0	5/8	1.270 X 2.699	A27129-ND *NEW!*	6.72	5.92	322222
2	3/0	5/16	1.020 X 2.112	A27123-ND *NEW!*	4.74	4.17	321874
		3/8	1.020 X 2.112	A27124-ND *NEW!*	3.04	2.68	321875
		3/8	1.082 X 2.143	A27125-ND *NEW!*	3.14	2.77	36927
		7/16	1.020 X 2.112	A27126-ND *NEW!*	4.74	4.17	321876
		1/2	1.082 X 2.143	A27127-ND *NEW!*	4.90	4.31	36929
		1/2	1.020 X 2.112	A27128-ND *NEW!*	4.74	4.17	321877
1	4/0	5/8	1.275 X 2.732	A27136-ND *NEW!*	9.28	8.17	322227
		3/4	1.275 X 2.732	A27137-ND *NEW!*	9.57	8.43	322228
2	4/0	5/16	1.150 X 2.537	A27130-ND *NEW!*	4.73	4.17	321271
		3/8	1.150 X 2.206	A27131-ND *NEW!*	3.24	2.86	36932
		3/8	1.087 X 2.178	A27132-ND *NEW!*	3.65	3.21	321878
		1/2	1.087 X 2.178	A27133-ND *NEW!*	5.69	5.01	321880
		1/2	1.150 X 2.206	A27134-ND *NEW!*	3.24	2.86	36934
		5/8	1.150 X 2.206	A27135-ND *NEW!*	5.22	4.59	36935
	250-300 MCM	3/8	1.435 X 2.602	A27138-ND *NEW!*	9.52	8.38	322252
		7/16	1.435 X 2.602	A27139-ND *NEW!*	9.52	8.38	322253
		1/2	1.435 X 2.602	A27140-ND *NEW!*	9.52	8.38	322254
	300-350 MCM	1/2	1.545 X 2.671	A27141-ND *NEW!*	9.68	8.52	322259
		1/2	1.545 X 3.422	A28760-ND *NEW!*	15.11	13.30	322764
	400 MCM	3/8	1.749 X 2.790	A27142-ND *NEW!*	7.84	6.90	322262
		1/2	1.749 X 2.790	A27143-ND *NEW!*	14.93	13.14	322264
	500-600 MCM	3/8	2.015 X 3.187	A27144-ND *NEW!*	23.64	20.81	322267
		1/2	2.015 X 3.187	A27145-ND *NEW!*	32.67	28.75	322269
		1/2	2.015 X 4.176	A27146-ND *NEW!*	38.40	33.80	322773

• Heavy Duty

NEW! Cut Tape and Tape & Reel Product

Fig.	AWG	Stud Size	Dim. Inch W x L	Digi-Key Part No.	Cut Tape Pricing		Tape & Reel†		AMP Part No.
					500	1,000	Size	Pricing	
1	22-16	4	.250 X .621	A28055CT-ND	—	129.55	5,000	103.64/M	2-323096-2
		6	.218 X .449	A0915CT-ND	—	196.30	5,000	157.04/M	2-34105-2
		6	.281 X .574	A27006CT-ND	—	98.15	5,000	78.52/M	2-34107-2
		10	.312 X .621	A27012CT-ND	—	101.28	5,000	81.02/M	2-34112-2
		1/4	.469 X .856	A0918CT-ND	—	112.05	5,000	89.64/M	2-34113-2
	16-14	6	.250 X .480	A0921CT-ND	—	196.30	5,000	157.04/M	2-34120-1
		8	.343 X .636	A0922CT-ND	—	98.15	5,000	78.52/M	2-34122-1
		8	.312 X .590	A27025CT-ND	—	82.98	5,000	66.38/M	2-324955-1
		10	.343 X .723	A27155CT-ND	202.66	368.48	2,500	294.78/M	2-34567-1
		10	.343 X .636	A0923CT-ND	—	98.15	5,000	78.52/M	2-34123-1
	12-10	10	.375 X .765	A0928CT-ND	85.79	155.98	2,500	124.78/M	2-33457-2
		10	.500 X .865	A27043CT-ND	214.87	390.68	2,500	312.54/M	2-35771-1
		1/4	.531 X 1.004	A0929CT-ND	84.22	153.13	2,500	122.50/M	2-33458-3

† For Tape and Reel Part Number change CT-ND to TR-ND

Tools

A27223-ND	Crimp Tool for all Solistrand (except Flag Tongue Terminals)	**$187.50**
A9996-ND	PRO-CRIMPER II Hand Tool without Dies	**$75.00**
A9813-ND	Die Set for Uninsulated Terminals, use with A9996	**$117.75**
A9812-ND	Crimp Tool, Uninsulated Terminals with Die Set	**$168.00**

Solistrand Terminals and Splices

SOLISTRAND terminals and splices are specially designed to terminate solid and stranded wire. The barrel is completely closed and the seam is brazed for uniform metal strength around the entire barrel area.

Temperature Rating: 170°C Max. **Material:** • Terminal Body: copper per ASTM B-152 • Plating: Tin per MIL-T-10727 UL Listed. CSA Certified. Military Approval.

Uninsulated Ring Tongue and Splices: **Temperature Rating:** 343°C **Material:** • Terminal and Splice Body: copper per QQ-C-576 • Plating: Nickel per QQ-N-290 • Metallic Sleeve: nickel/silver per QQ-C-585

Parallel Splices: **Material:** • Splice Body: copper per ASTMB-152

Fig. 1 *NEW!*

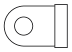


Fig. 2 *NEW!*

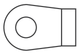


Fig. 3 *NEW!*

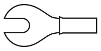


Fig. 4

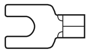


Fig. 5

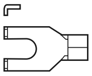


Fig. 6

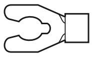


Fig. 7 *NEW!*

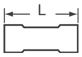


Fig. 8 *NEW!*

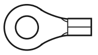


Fig. 9 *NEW!*

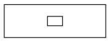


Fig. 10 *NEW!*

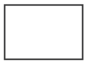
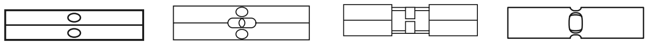


Fig. 11



A – Standard

B – Sight Hole

C – Strap

D

NEW! Flag Ring Tongue Terminals

Fig.	AWG	Stud Size	Dim. - Inch W x L	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
1	16-14	8	.312 x .579	A28056-ND	.59	.52	325069
		10		A27177-ND	.52	.46	322819
	12-10	6	.375 X .702	A28057-ND	.71	.63	36269
		8		A27178-ND	.73	.65	36270
		10		A27179-ND	.52	.46	36271
		1/4		A28058-ND	.70	.62	36272
2	8	10	.500 X .791	A28059-ND	2.85	2.51	321051
		10	.500 X .918	A28060-ND	2.58	2.27	321441
		1/4	.609 X 1.130	A28061-ND	1.91	1.68	322727
1	6	10	.500 X .841	A27180-ND	2.13	1.88	323196
		1/4	.500 X .960	A27181-ND	3.77	3.32	321576
2		3/8	.625 X 1.200	A27182-ND	4.21	3.70	322204
1	4	10	.546 x 1.048	A27183-ND	2.49	2.19	321059
		1/4	.546 x 1.048	A27184-ND	2.20	1.94	321275
2		5/16	.685 x 1.278	A27185-ND	2.35	2.07	321060
2	2	10	.713 x 1.437	A27186-ND	2.77	2.44	321063
		1/4		A27187-ND	4.75	4.18	321201
		5/16		A27188-ND	2.38	2.09	321064

NEW! Slotted Ring Tongue

Fig.	AWG	Stud Size	Dim. - Inch W x L	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
3	22-16	4	.182 x .425	A28614-ND	.20	.18	321288

Solistrand - Spade Terminals

Fig.	Stud Size	Dimensions - Inch W x L	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
22-16 AWG						
4	2	.182 x .504	A0932-ND	.19	.17	53555-1
	4	.218 x .451	A09000-ND	.22	.20	321463
	6	.297 x .530	A09001-ND[1]	.12	.11	36195
	6	.250 x .623	A0933-ND[2]	.12	.10	323127
	8	.375 x .685	A0934-ND	.28	.25	34117
	10	.375 x .685	A0935-ND	.12	.11	34118
5	2	.182 x .504	A0939-ND	.46	.40	324605
	6	.296 x .514	A0940-ND[2]	.46	.40	320749
	6	.250 x .514	A09006-ND[1]	.46	.40	323136
	8	.296 x .514	A0941-ND[1]	.46	.40	52730
	8	.416 x .607	A09007-ND[2]	.14	.13	323124
6	4	.203 x .576	A0943-ND	.15	.14	53175-1
	8	.244 x .637	A09005-ND	.54	.47	53831-1
16-14 AWG						
4	6	.297 x .530	A09002-ND	.12	.11	322996
	6	.244 x .623	A27163-ND	.80	.71	330827
	8	.385 x .685	A09003-ND	.30	.26	34128
	10	.385 x .764	A27164-ND	.16	.14	33219
	10	.385 x .685	A09004-ND	.42	.37	34129
5	6	.294 x .514	A09008-ND	.46	.40	320855
	8		A0942-ND	.14	.12	320856
	10		A09009-ND	.25	.22	320857
6	8	.375 x .637	A0946-ND	.15	.14	53124-1
12-10 AWG						
4	6	.282 x .631	A0936-ND	.23	.21	322451
	8	.406 x .772	A0937-ND	.20	.17	32995
	10	.406 x .772	A27165-ND	.17	.15	33479
	10	.375 x .772	A0938-ND	.83	.73	35495
6	6	.250 x .636	A0948-ND	.21	.19	53126-1
	8	.375 x .729	A0949-ND	.69	.61	53127-1
Flanged Spade Tongue						
NEW! 12-10 AWG NEW!						
5	6	.296 X .694	A28062-ND	.24	.22	324578
	8	.416 X .694	A27175-ND	.29	.25	323143
	10	.416 X .694	A28063-ND	.24	.22	323144

[1] Short; [2] Long

Short Spring Spade Tongue

Fig.	Stud Size	Dim. Inch W x L	Digi-Key Part No.	Price Each 10	Price Each 100	Digi-Key Part No.	Cut Tape Pricing 500	Cut Tape Pricing 1,000	Tape & Reel† Size	Tape & Reel† Pricing
22-16 AWG										
6	6	.250 x .576	A0944-ND	.54	.47	A0944CT-ND *NEW!*	—	122.73	5,000	98.18/M
	8	.375 x .637	A27167-ND *NEW!*	9.28	8.17	—	—	—	—	—
16-14 AWG										
6	6	.250 x .576	A0945-ND	.15	.14	A0945CT-ND *NEW!*	—	122.73	5,000	98.18/M
	10	.406 X .685	A0947-ND	.15	.14	A0947CT-ND *NEW!*	—	122.73	5,000	98.18/M
12-10 AWG										
6	8	.312 X .729	A27170-ND *NEW!*	.21	.19	—	—	—	—	—
	10	.406 X .777	A0950-ND	.22	.19	A0950CT-ND *NEW!*	91.18	165.78	2,500	132.62/M
	10	.312 X .777	A28064-ND *NEW!*	.21	.19	A28064CT-ND *NEW!*	91.18	165.78	2,500	132.62/M

† For Tape and Reel Part Number change CT-ND to TR-ND

NEW! Parallel Splices

Fig.	AWG	Dimension - Inch Length	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
7	22-16	.301	A27193-ND	.09	.08	34130
	16-14	.301	A27194-ND	.09	.08	34137
	12-10	.343	A27195-ND	.12	.10	34138
	8	.375	A27196-ND	.22	.20	34318
	6	.437	A27197-ND	.38	.33	34319
	4	.531	A27198-ND	.48	.43	34320
	2	.640	A27199-ND	.77	.68	35187
	1/0	.734	A27200-ND	1.15	1.01	36946
	2/0	.734	A27201-ND	1.20	1.05	36948
	3/0	.749	A27202-ND	1.76	1.55	36909
	4/0	.765	A27203-ND	1.93	1.70	36951
	250-300	1.062	A27204-ND	5.13	4.52	322275
	300-350	1.124	A27205-ND	5.24	4.61	322276
	400	1.249	A27206-ND	6.92	6.09	322277
	500-600	1.421	A27566-ND	9.96	8.77	322278

NEW! Uninsulated Ring Tongue

Fig.	AWG	Stud Size	Dim. - Inch W x L	Insulation Support For	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
8	22-16	4	.218 X .603	.105 TO .140	A27403-ND	.79	.69	322363
		6	.281 X .728	.105 TO .140	A27404-ND	1.22	1.07	323199
		6	.282 X .574	Non-Insulation	A28053-ND	.28	.25	323219
		6	.218 x .449	Non-Insulation	A27405-ND	.30	.27	322797
		8	.281 x .574	Non-Insulation	A27406-ND	.30	.27	322798
		10	.281 X .728	.105 TO .140	A27407-ND	.79	.69	322366
		10	.281 x .574	Non-Insulation	A27408-ND	.30	.27	322799
	16-14	10	.343 X .800	.140 to .195	A27409-ND	1.28	1.13	322375
			.343 x .636	Non-Insulation	A27410-ND	.35	.31	322695
	12-10	8	.375 X .760	Non-Insulation	A27411-ND	.49	.43	323061
		10	.375 X 1.007	.150 to .250	A27412-ND	1.52	1.34	325154
		10	.375 X .760	Non-Insulation	A27413-ND	.49	.43	323062
		1/4	.531 X 1.004	Non-Insulation	A27414-ND	.63	.55	323063

NEW! Uninsulated Splices

Fig.	AWG	Length Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
9	22-16	.578	A27487-ND	.43	.38	323796
10		.301	A27488-ND	.32	.28	323030
9	16-14	.572	A27489-ND	.43	.38	323795
10		.301	A27490-ND	.32	.28	323794
9	12-10	.567	A28054-ND	.64	.56	323755
10		.333	A27491-ND	.39	.34	323754

Solistrand - Butt Splices

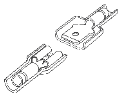
Fig.	AWG	Length Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
11C	26-22	.385	A09010-ND	.17	.15	321198
	24-20	.490	A09011-ND	.19	.17	324001
11A	22-16	.578	A0951-ND	.14	.07	31818
11B			A09012-ND	.24	.21	33067
11-A	16-14	.567	A0952-ND	.17	.15	31819
11-B		.567	A09014-ND	.27	.24	330368
11-C		.591	A27207-ND	.24	.21	322459
11-C		.591	A09013-ND	.30	.27	327025
11B	14-12	.690	A27209-ND	.30	.26	321280
11A	12-10	.565	A0953-ND	.20	.10	32151
11B		.567	A09015-ND	.80	.71	330369
11C		.765	A27210-ND	.37	.32	324893
11A	8	.827	A27211-ND	.46	.40	34321
11B			A27212-ND	.55	.49	36906
11A	6	1.015	A27213-ND	.80	.70	34322
11B			A27214-ND	1.14	1.00	36886
11A	4	1.140	A27215-ND	1.31	1.15	34323
11A	2	1.265	A27216-ND	2.33	2.05	35189
11B			A27217-ND	3.96	3.48	322246
11D	1/0	1.412	A27218-ND	3.55	3.13	36957
	2/0	1.437	A27219-ND	4.21	3.71	36958
	3/0	1.480	A27220-ND	5.01	4.41	36959
	4/0	1.484	A27221-ND	4.37	3.84	36960
	250-300	2.093	A27222-ND	10.04	8.84	322279

Tools

A27223-ND	Crimp Tool for all Solistrand (except Flag Tongue Terminals)	**$187.50**
A9996-ND	PRO-CRIMPER II Hand Tool without Dies	**$75.00**
A9813-ND	Die Set for Uninsulated Terminals, use with A9996	**$117.75**
A9812-ND	Crimp Tool, Uninsulated Terminals with Die Set	**$168.00**

Terminals, Tools, Lugs & Connectors

Insulation Types:
Insulkrimp®: PVC Insulated
Avikrimp®: Nylon Insulated
Krimptite®: Non-Insulated

Fig. 1

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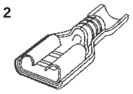
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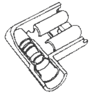
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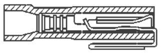
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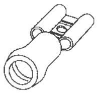
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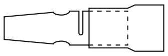
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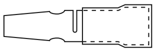
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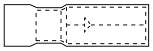
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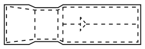
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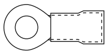
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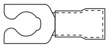
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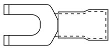
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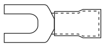
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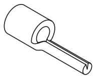
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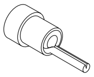
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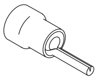
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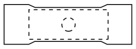
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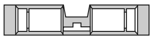
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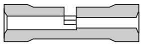
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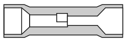
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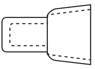
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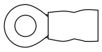
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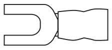
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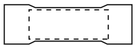
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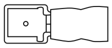
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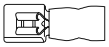


Fully-Insulated Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Avikrimp® - Male									
1	22-18	15	.250 (6.35)	.140 (3.56)	WM18225-ND	.51	.41	.34	19001-0001
	Red	16	.187 (4.75)	.140 (3.56)	WM18226-ND	.49	.39	.33	19001-0003
	16-14	15	.250 (6.35)	.170 (4.32)	WM18227-ND	.43	.35	.29	19001-0006
	Blue	16	.187 (4.75)	.170 (4.32)	WM18228-ND	.43	.35	.29	19001-0008
	12-10 Yellow	4	.250 (6.35)	.230 (5.84)	WM18229-ND	.48	.39	.33	19001-0010
Avikrimp® - Female									
1	22-18	16	.250 (6.35)	.125 (3.18)	WM18230-ND	.23	.18	.15	19002-0001
	Red	16	.187 (4.75)	.125 (3.18)	WM18231-ND	.43	.35	.29	19002-0005
	16-14	16	.250 (6.35)	.155 (3.94)	WM18232-ND	.24	.19	.16	19002-0024
	Blue	16	.187 (4.75)	.155 (3.94)	WM18233-ND	.30	.24	.20	19002-0028
	12-10 Yellow	16	.250 (6.35)	.245 (6.22)	WM18234-ND	.40	.32	.27	19002-0044
Insulkrimp® - Female (Standard Flare)									
2	26-24	5	.250 (6.35)	.075 (1.91)	WM18235-ND	.18	.15	.12	19003-0071
	Yellow	5	.187 (4.75)	.075 (1.91)	WM18236-ND	.18	.15	.12	19003-0064
	22-18	16	.250 (6.35)	.135 (3.43)	WM18237-ND	.23	.19	.16	19003-0001
	Red	16	.187 (4.75)	.135 (3.43)	WM18238-ND	.23	.19	.16	19003-0011
	16-14	16	.250 (6.35)	.145 (3.68)	WM18239-ND	.23	.19	.16	19003-0040
	Blue	16	.187 (4.75)	.160 (4.06)	WM18240-ND	.17	.13	.11	19003-0050
Insulkrimp® - Female (Expanded Flare)									
2	12-10 Yellow	16	.250 (6.35)	.275 (6.98)	WM18241-ND	.30	.24	.20	19005-0010

Avikrimp® Fully Pre-Insulated Quick Disconnect Flags

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
3	22-18	12	.250 (6.35)	.150 (3.81)	WM18242-ND	.41	.33	.27	19006-0001
	Red	12	.187 (4.75)	.150 (3.81)	WM18245-ND	.41	.33	.27	19006-0005
	16-14	12	.250 (6.35)	.170 (4.32)	WM18243-ND	.50	.40	.33	19006-0011
	Blue	12	.187 (4.75)	.170 (4.32)	WM18246-ND	.50	.40	.33	19006-0015
	12-10 Yellow	13	.250 (6.35)	.248 (6.30)	WM18244-ND	.80	.64	.54	19006-0019

Insulkrimp® Fully-Insulated Flag Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
3	22-18	14	.250 (6.35)	.175 (4.44)	WM18247-ND	.23	.18	.15	19007-0001
	Red	14	.187 (4.75)	.175 (4.44)	WM18250-ND	.20	.16	.14	19007-0009
	16-14	14	.250 (6.35)	.200 (5.08)	WM18248-ND	.23	.18	.15	19007-0021
	Blue	14	.187 (4.75)	.200 (5.08)	WM18251-ND	.31	.25	.21	19007-0029
	12-10 Yellow	13	.250 (6.35)	.262 (6.65)	WM18249-ND	.80	.64	.53	19007-0040

Piggyback QD's Fully-Insulated Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
4	22-18	11	.250 (6.35)	.060 (1.52)	WM18252-ND	.59	.48	.40	19013-0001
	16-14	11	.250 (6.35)	.145 (3.68)	WM18253-ND	.76	.61	.51	19013-0005
	12-10	11	.250 (6.35)	.150 (3.81)	WM18254-ND	.85	.68	.57	19013-0018

Avikrimp® Nylon Insulated with Vibration Support Quick Disconnects

Fig.	AWG	Crimp Tool #	Tab Size in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Female									
5	22-18	16	.250 x.032 (6.3 x 0.8)	.115 (2.9)	WM18255-ND	.17	.14	.12	19019-0012
		16	.187 x .020 (4.7 x 0.5)	.115 (2.9)	WM18257-ND	.19	.16	.13	19019-0006
		16	.110 x .032 (2.8 x 0.8)	.115 (2.9)	WM18259-ND	.19	.15	.13	19019-0004
		16	.110 x .020 (2.8 x 0.5)	.115 (2.9)	WM18260-ND	.19	.15	.13	19019-0001
	16-14	16	.250 x .032 (6.3 x 0.8)	.138 (3.5)	WM18262-ND	.19	.16	.13	19019-0031
		16	.187 x .020 (4.7 x 0.5)	.138 (3.5)	WM18258-ND	.19	.15	.13	19019-0027
		16	.110 x .020 (2.8 x 0.5)	.138 (3.5)	WM18261-ND	.25	.20	.17	19019-0022
	12-10	16	.250 x .032 (6.3 x 0.8)	.225 (5.7)	WM18256-ND	.38	.31	.26	19019-0037

Snap Plugs

Fig.	AWG	Crimp Tool #	Dia. in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Insulkrimp® (PVC Insulation)									
6	22-18	18	.156 (3.96)	.140 (3.6)	WM18263-ND	.15	.12	.10	19034-0005
	16-14	19	.156 (3.96)	.175 (4.4)	WM18264-ND	.19	.15	.13	19034-0009
Avikrimp® (Nylon Insulation)									
7	22-18	18	.156 (3.96)	.140 (3.6)	WM18267-ND	.24	.20	.16	19036-0003
	16-14	9	.156 (3.96)	.170 (4.3)	WM18268-ND	.33	.27	.22	19036-0008

Snap Plug Receptacles

Fig.	AWG	Crimp Tool #	Snap Plug Dia. in. (mm)	Max. Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Insulkrimp® (PVC Insulation)									
8	22-18	20	.156 (3.9)	.140 (3.5)	WM18265-ND	.19	.16	.13	19038-0001
	16-14	21	.156 (3.9)	.170 (4.3)	WM18266-ND	.19	.16	.13	19038-0007
Avikrimp® (Nylon Insulation)									
9	22-18	20	.156 (3.9)	.125 (3.2)	WM18269-ND	.30	.24	.20	19039-0001
	16-14	21	.156 (3.9)	.150 (3.8)	WM18270-ND	.30	.24	.20	19039-0006

Standard Ring Tongue

Fig.	AWG	Crimp Tool #	Stud Size	Max. Width in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Insulkrimp® (PVC Insulation)									
10	22-18	17	1-2	.235 (6.0)	WM18271-ND	.13	.11	.09	19070-0005
		17	3-4	.235 (6.0)	WM18272-ND	.13	.11	.09	19070-0007
		17	5-6	.264 (6.7)	WM18273-ND	.19	.15	.13	19070-0040
		17	8	.322 (8.2)	WM18274-ND	.13	.11	.09	19070-0013
		17	10	.322 (8.2)	WM18275-ND	.13	.11	.09	19070-0015
		17	1/4	.477 (12.1)	WM18276-ND	.21	.17	.15	19070-0023
		17	5/16	.477 (12.1)	WM18277-ND	.22	.17	.15	19070-0026
		17	3/8	.544 (13.8)	WM18278-ND	.23	.18	.15	19070-0033
	16-14	15	3-4	.260 (6.6)	WM18279-ND	.18	.15	.12	19070-0067
		15	5-6	.260 (6.6)	WM18280-ND	.13	.11	.09	19070-0069
		15	8	.322 (8.2)	WM18281-ND	.13	.11	.09	19070-0086
		15	10	.322 (8.2)	WM18282-ND	.19	.15	.13	19070-0090
		15	1/4	.477 (12.1)	WM18283-ND	.18	.15	.13	19070-0075
		15	5/16	.477 (12.1)	WM18284-ND	.21	.17	.14	19070-0078
		15	3/8	.544 (13.8)	WM18285-ND	.24	.19	.16	19070-0059
	12-10	15	5-6	.292 (7.4)	WM18286-ND	.17	.14	.12	19070-0143
		15	8	.292 (7.4)	WM18287-ND	.17	.14	.12	19070-0145
		15	10	.385 (9.8)	WM18288-ND	.17	.14	.12	19070-0123
		15	1/4	.540 (13.7)	WM18289-ND	.20	.16	.13	19070-0132
		15	5/16	.540 (13.7)	WM18290-ND	.20	.16	.13	19070-0136
		15	3/8	.598 (15.2)	WM18291-ND	.20	.16	.14	19070-0153
		10	1/2	.760 (19.3)	WM18292-ND	.35	.28	.23	19070-0109
Avikrimp® (Nylon Insulation)									
10	22-18	17	1-2	.235 (6.0)	WM18293-ND	.24	.19	.16	19073-0005
		17	3-4	.235 (6.0)	WM18294-ND	.20	.16	.14	19073-0007
		17	5-6	.264 (6.7)	WM18295-ND	.24	.20	.17	19073-0038
		17	8	.322 (8.2)	WM18296-ND	.20	.16	.14	19073-0013
		17	10	.322 (8.2)	WM18297-ND	.20	.16	.14	19073-0017
		17	1/4	.477 (12.1)	WM18298-ND	.25	.20	.17	19073-0024
		17	5/16	.477 (12.1)	WM18299-ND	.27	.22	.18	19073-0027
		17	3/8	.544 (13.8)	WM18300-ND	.31	.25	.21	19073-0032
	16-14	15	3-4	.260 (6.6)	WM18301-ND	.25	.20	.17	19073-0065
		15	5-6	.260 (6.6)	WM18302-ND	.20	.16	.14	19073-0067
		15	8	.322 (8.2)	WM18303-ND	.26	.21	.18	19073-0085
		15	10	.322 (8.2)	WM18304-ND	.20	.16	.14	19073-0087
		15	1/4	.477 (12.1)	WM18305-ND	.25	.20	.17	19073-0076
		15	5/16	.477 (12.1)	WM18306-ND	.28	.22	.19	19073-0079
		15	3/8	.544 (13.8)	WM18307-ND	.30	.24	.20	19073-0059
	12-10	15	5-6	.292 (7.4)	WM18308-ND	.25	.20	.17	19073-0216
		15	8	.292 (7.4)	WM18309-ND	.25	.20	.17	19073-0222
		15	10	.385 (9.8)	WM18310-ND	.26	.21	.17	19073-0170
		15	1/4	.540 (13.7)	WM18311-ND	.27	.21	.18	19073-0188
		15	5/16	.540 (13.7)	WM18312-ND	.27	.22	.18	19073-0200
		15	3/8	.598 (15.2)	WM18313-ND	.25	.21	.17	19073-0236
		15	1/2	.760 (19.3)	WM18314-ND	.44	.35	.30	19073-0145

(Continued)

Snap Spade Terminals

Fig.	AWG	Crimp Tool #	Stud Size	Max Wire Insul. Dia. in. (mm)	Max. Width in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Insulkrimp® (PVC Insulation)										
11	22-18 Red	17	5-6	.145 (3.7)	.260 (6.6)	WM18315-ND	.15	.12	.10	19099-0009
		15	8	.145 (3.7)	.300 (7.6)	WM18316-ND	.15	.12	.10	19099-0003
		17	10	.145 (3.7)	.340 (8.6)	WM18317-ND	.15	.12	.10	19099-0015
	16-14 Blue	15	5-6	.175 (4.4)	.260 (6.6)	WM18318-ND	.19	.15	.13	19099-0027
		15	8	.175 (4.4)	.320 (8.1)	WM18319-ND	.20	.16	.14	19099-0032
		15	10	.175 (4.4)	.340 (8.6)	WM18320-ND	.15	.12	.10	19099-0034
	12-10 Yellow	15	5-6	.250 (6.4)	.260 (6.6)	WM18321-ND	.28	.23	.19	19099-0044
		15	8	.250 (6.4)	.330 (8.4)	WM18322-ND	.25	.20	.17	19099-0038
		15	10	.250 (6.4)	.340 (8.6)	WM18323-ND	.20	.16	.13	19099-0050
Avikrimp® (Nylon Insulation)										
11	22-18 Red	17	5-6	.140 (3.6)	.260 (6.6)	WM18324-ND	.21	.17	.14	19115-0009
		17	5-6	.140 (3.6)	.270 (6.8)	WM18325-ND	.20	.16	.14	19115-0001
		17	8	.140 (3.6)	.300 (7.6)	WM18326-ND	.21	.17	.14	19115-0003
		17	8	.140 (3.6)	.320 (8.1)	WM18327-ND	.26	.21	.18	19115-0012
		17	10	.140 (3.6)	.340 (8.6)	WM18328-ND	.21	.17	.14	19115-0014
	16-14 Blue	15	5-6	.170 (4.3)	.260 (6.6)	WM18329-ND	.26	.21	.18	19115-0024
		15	5-6	.170 (4.3)	.270 (6.8)	WM18330-ND	.21	.17	.14	19115-0016
		15	8	.170 (4.3)	.320 (8.1)	WM18331-ND	.21	.17	.14	19115-0079
		15	10	.170 (4.3)	.340 (8.6)	WM18332-ND	.21	.17	.14	19115-0031
	12-10 Yellow	15	5-6	.225 (5.7)	.260 (6.6)	WM18333-ND	.48	.38	.32	19115-0042
		15	8	.225 (5.7)	.330 (8.4)	WM18334-ND	.26	.21	.17	19115-0035
		15	10	.225 (5.7)	.340 (8.6)	WM18335-ND	.27	.22	.18	19115-0048

Flanged Spade Terminals

Fig.	AWG	Crimp Tool #	Stud Size	Max Wire Insul. Dia. in. (mm)	Max. Width in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Insulkrimp® (PVC Insulation)										
12	22-18 Red	15	5-6	.145 (3.7)	.301 (7.6)	WM18336-ND	.21	.17	.14	19121-0005
		15	8	.145 (3.7)	.301 (7.6)	WM18337-ND	.13	.11	.09	19121-0007
		15	10	.145 (3.7)	.301 (7.6)	WM18338-ND	.19	.15	.13	19121-0009
	16-14 Blue	15	5-6	.175 (4.4)	.301 (7.6)	WM18339-ND	.18	.15	.12	19121-0026
		15	8	.175 (4.4)	.301 (7.6)	WM18340-ND	.13	.11	.09	19121-0028
		15	10	.175 (4.4)	.301 (7.6)	WM18341-ND	.13	.11	.09	19121-0030
	12-10 Yellow	15	8	.250 (6.4)	.385 (9.8)	WM18342-ND	.15	.12	.10	19121-0053
		15	10	.250 (6.4)	.385 (9.8)	WM18343-ND	.15	.12	.10	19121-0056
Avikrimp® (Nylon Insulation)										
12	22-18	17	5-6	.140 (3.6)	.301 (7.6)	WM18344-ND	.25	.20	.17	19127-0007
		17	10	.140 (3.6)	.301 (7.6)	WM18346-ND	.25	.20	.17	19127-0012
	16-14 Blue	15	5-6	.170 (4.3)	.301 (7.6)	WM18347-ND	.25	.20	.17	19127-0039
		15	8	.170 (4.3)	.301 (7.6)	WM18348-ND	.25	.20	.17	19127-0042
		15	10	.170 (4.3)	.301 (7.6)	WM18349-ND	.25	.20	.17	19127-0099
	12-10 Yellow	15	8	.225 (5.7)	.385 (9.8)	WM18350-ND	.40	.32	.27	19127-0086
		15	10	.225 (5.7)	.385 (9.8)	WM18351-ND	.40	.32	.27	19127-0089

Spade Tongue Terminals

Fig.	AWG	Crimp Tool #	Stud Size	Max Wire Insul. Dia. in. (mm)	Max. Width in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Insulkrimp® (PVC Insulation)										
13	22-18 Red	17	5-6	.145 (3.7)	.326 (8.3)	WM18352-ND	.13	.11	.09	19144-0001
		17	8	.145 (3.7)	.326 (8.3)	WM18353-ND	.13	.11	.09	19144-0003
		17	10	.145 (3.7)	.326 (8.3)	WM18354-ND	.19	.15	.13	19144-0005
	16-14 Blue	15	5-6	.175 (4.4)	.305 (7.7)	WM18355-ND	.15	.12	.10	19144-0018
		15	8	.175 (4.4)	.305 (7.7)	WM18356-ND	.15	.12	.10	19144-0020
		15	8	.175 (4.4)	.372 (9.4)	WM18357-ND	.13	.11	.09	19144-0024
		15	10	.175 (4.4)	.372 (9.4)	WM18358-ND	.13	.11	.09	19144-0026
	12-10 Yellow	15	5-6	.250 (6.4)	.385 (9.8)	WM18359-ND	.15	.12	.10	19144-0037
		15	8	.250 (6.4)	.385 (9.8)	WM18360-ND	.30	.24	.20	19144-0039
		15	10	.250 (6.4)	.385 (9.8)	WM18361-ND	.15	.12	.10	19144-0042
		15	1/4	.250 (6.4)	.543 (13.8)	WM18362-ND	.27	.22	.19	19144-0046
Avikrimp® (Nylon Insulation)										
13	22-18 Red	17	5-6	.140 (3.6)	.326 (8.3)	WM18363-ND	.26	.21	.18	19198-0070
		17	8	.140 (3.6)	.326 (8.3)	WM18364-ND	.26	.21	.18	19198-0004
		17	10	.140 (3.6)	.326 (8.3)	WM18365-ND	.26	.21	.18	19198-0006
	16-14 Blue	15	5-6	.170 (4.3)	.305 (7.7)	WM18366-ND	.25	.20	.17	19198-0016
		15	8	.170 (4.3)	.305 (7.7)	WM18367-ND	.22	.18	.15	19198-0019
		15	10	.170 (4.3)	.372 (9.4)	WM18369-ND	.22	.18	.15	19198-0025
	12-10 Yellow	15	5-6	.225 (5.7)	.385 (9.8)	WM18370-ND	.25	.20	.17	19198-0044
		15	8	.225 (5.7)	.385 (9.8)	WM18371-ND	.25	.20	.17	19198-0047
		15	10	.225 (5.7)	.385 (9.8)	WM18372-ND	.37	.30	.25	19198-0050
		15	1/4	.225 (5.7)	.543 (13.8)	WM18373-ND	.38	.31	.26	19198-0056

Wire Pin Terminals

Fig.	AWG	Crimp Tool #	Pin Dia. in. (mm)	Max Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Krimptite® (Non-insulated)									
14	22-18	22	.08 (2.03)	—	WM18374-ND	.14	.11	.10	19211-0003
	16-14	22	.08 (2.03)	—	WM18375-ND	.14	.11	.10	19211-0005
	12-10	22	.12 (3.05)	—	WM18376-ND	.19	.15	.13	19211-0001
Insulkrimp® (PVC Insulation)									
15	22-18 Red	15	.08 (2.03)	.145 (3.68)	WM18377-ND	.24	.19	.16	19212-0003
	16-14 Blue	15	.08 (2.03)	.175 (4.44)	WM18378-ND	.16	.13	.11	19212-0005
	12-10 Yellow	15	.12 (3.05)	.25 (6.35)	WM18379-ND	.21	.17	.15	19212-0001
Avikrimp® (Nylon Insulation)									
16	22-18 Red	15	.08 (2.03)	.14 (3.56)	WM18380-ND	.30	.24	.20	19213-0009
	16-14 Blue	15	.08 (2.03)	.17 (4.32)	WM18381-ND	.30	.24	.20	19213-0011
	12-10 Yellow	15	.12 (3.05)	.225 (5.71)	WM18382-ND	.37	.29	.25	19213-0007

Butt Splices

Fig.	AWG	Crimp Tool #	O.D. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Insulkrimp® (PVC Insulation)								
17	22-18	18	.135 (3.4)	WM18383-ND	.12	.10	.08	19154-0004
	16-14	9	.160 (4.1)	WM18384-ND	.12	.10	.08	19154-0015
	12-10	15	.220 (5.6)	WM18385-ND	.20	.16	.13	19154-0028

Window Butt Splices

Fig.	AWG	Crimp Tool #	Max Wire Insul. Dia. in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
18	22-18 Red	15	.140 (3.56)	WM18386-ND	.36	.29	.24	19199-0007
	16-14 Blue	15	.170 (4.32)	WM18387-ND	.37	.30	.25	19199-0009
	12-10 Yellow	15	.228 (5.79)	WM18388-ND	.51	.41	.35	19199-0011

Step Down Butt Connectors

Fig.	AWG	Crimp Tool #	Insulation Color	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
19	16/14 to 22/18	17	Non-Insulated	WM18389-ND	.79	.63	.53	19215-0013
	12/10 to 16/14	17	Non-Insulated	WM18390-ND	.87	.69	.58	19215-0023
20	16/14 to 22/18	9	Blue w/Red Stripe	WM18391-ND	.76	.61	.51	19154-0022
	12/10 to 16/14	10	Yellow w/Blue Stripe	WM18392-ND	1.00	.81	.67	19154-0035

Nylon-Insulated, Closed-End Connectors

Fig.	AWG	Crimp Tool #	Outside Diameter in. (mm)	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
21	22-14	6	.31 (7.8)	WM18393-ND	.11	.09	.07	19160-0012
	22-12	7	.35 (8.9)	WM18394-ND	.11	.09	.08	19160-0009
	16-10	6	.44 (11.2)	WM18395-ND	.15	.13	.11	19160-0002
	8	8	.56 (14.2)	WM18396-ND	.29	.24	.20	19160-0024

Perma-Seal - All Weather, Heat-Sealable Nylon Terminals and Splices

Fig.	AWG	Crimp Tool #	Stud Size	Digi-Key Part No.	Price Each 10	100	500	Molex Part No.
Ring								
22	22/18	1	6	WM18397-ND	.66	.53	.44	19164-0085
		1	8	WM18398-ND	.74	.59	.49	19164-0086
		1	10	WM18399-ND	.66	.53	.44	19164-0003
		1	1/4	WM18400-ND	.66	.53	.44	19164-0004
		1	3/8	WM18401-ND	.74	.59	.49	19164-0005
	16/14	1	6	WM18402-ND	.77	.62	.52	19164-0032
		1	8	WM18403-ND	.77	.62	.52	19164-0033
		1	10	WM18404-ND	.68	.55	.46	19164-0034
		1	1/4	WM18405-ND	.70	.56	.47	19164-0026
		1	5/16	WM18406-ND	.70	.56	.47	19164-0027
		1	3/8	WM18407-ND	.77	.62	.52	19164-0020
	12/10	1	6	WM18408-ND	.83	.66	.55	19164-0061
		1	8	WM18409-ND	.83	.66	.55	19164-0062
		1	10	WM18410-ND	.83	.66	.55	19164-0065
		1	1/4	WM18411-ND	.76	.61	.51	19164-0066
		1	5/16	WM18412-ND	.83	.66	.55	19164-0067
		1	3/8	WM18413-ND	.83	.66	.55	19164-0068
		1	1/2	WM18414-ND	.83	.66	.55	19164-0058
Spade								
23	22/18	1	6	WM18415-ND	.74	.59	.49	19164-0006
		1	8	WM18416-ND	.66	.53	.44	19164-0007
		1	10	WM18417-ND	.74	.59	.49	19164-0008
	16/14	1	6	WM18418-ND	.77	.62	.52	19164-0028
		1	8	WM18419-ND	.77	.62	.52	19164-0029
		1	10	WM18420-ND	.77	.62	.52	19164-0030
	12/10	1	6	WM18421-ND	.83	.66	.55	19164-0069
		1	8	WM18422-ND	.83	.66	.55	19164-0070
		1	10	WM18423-ND	.83	.66	.55	19164-0072
		1	1/4	WM18424-ND	.83	.66	.55	19164-0073
Butt Splices								
24	22-18	1	—	WM18425-ND	1.01	.81	.67	19164-0013
	16-14	1	—	WM18426-ND	1.01	.81	.67	19164-0044
	12-10	1	—	WM18427-ND	.86	.69	.57	19164-0056
Fig.	**AWG**	**Crimp Tool #**	**Tab Size in. (mm)**	**Digi-Key Part No.**	**Price Each 10**	**100**	**500**	**Molex Part No.**
Quick Disconnect Couplers - Male								
25	22/18	3	.250 (6.35)	WM18428-ND	.76	.61	.51	19164-0015
	16/14	3	.250 (6.35)	WM18430-ND	.80	.64	.53	19164-0048
	12/10	2	.250 (6.35)	WM18432-ND	.86	.69	.57	19164-0075
Quick Disconnect Couplers - Female								
26	22/18	3	.250 (6.35)	WM18429-ND	.76	.61	.51	19164-0017
	16/14	3	.250 (6.35)	WM18431-ND	.80	.64	.53	19164-0050
	12/10	2	.250 (6.35)	WM18433-ND	.86	.69	.57	19164-0076

Crimp Tools

WM9938-ND	**#1**	Sealed Ring, Spade and Butt	**$97.76**
WM9939-ND	**#2**	Sealed, 10-12 AWG .250" (6.35mm)	**$347.61**
WM9940-ND	**#3**	Sealed, 14-22 AWG .250" (6.35mm)	**$76.64**
WM9941-ND	**#4**	10-12 AWG .250" (6.35mm)	**$292.30**
WM9942-ND	**#5**	24-26 AWG .187" (4.75mm) and .250" (6.35mm)	**$292.30**
WM9943-ND	**#6**	Splice 14-22 and 10-16 AWG	**$230.44**
WM9944-ND	**#7**	Splice 12-22 AWG	**$230.44**
WM9945-ND	**#8**	Splice 8 AWG	**$292.30**
WM9946-ND	**#9**	Butt Splice 14-16 AWG	**$292.29**
WM9947-ND	**#10**	Butt Splice 10-12 AWG	**$292.30**
WM9948-ND	**#11**	Piggyback .250" QD	**$289.20**
WM9949-ND	**#12**	Flag QD's .187" (4.75mm) and .250" (6.35mm)	**$309.31**
WM9950-ND	**#13**	Flag QD's .250" (6.35mm)10-12 AWG	**$468.86**
WM9951-ND	**#14**	Flag QD's .187" (4.75mm)	**$181.57**
WM9952-ND	**#15**	Terminals/Splices 10-22 AWG	**$292.30**
WM9954-ND	**#17**	Terminals/Splices 10-22 AWG	**$292.30**
WM9955-ND	**#18**	Snap Plug 18-22 AWG	**$292.30**
WM9956-ND	**#19**	Snap Plug 14-16 AWG	**$292.30**
WM9957-ND	**#20**	Snap Plug 18-22 AWG	**$292.30**
WM9958-ND	**#21**	Snap Plug14-16 AWG	**$214.96**
WM9959-ND	**#22**	Wire Pins 10-22 AWG	**$214.97**

Amphenol®

Circular PT Bayonet Lock Connectors

with Solder Contacts (MIL-C-26482 Series 1 Type)

Aluminum shell components. Standard olive drab, electrically conductive cadmium plated. Dependable 5 key/keyway polarization with bayonet lock coupling assures positive mating. Spring tension provided by a wave washer in the coupling nut ensures maintenance of interfacial seal between mating halves. Insert and main joint gasket molded from resilient neoprene. **Solder contacts** are installed. Pins and sockets are copper alloy/gold plated. **Strain relief** is included on plug.

PT solder series is UL recognized under file #E115497, Section 5

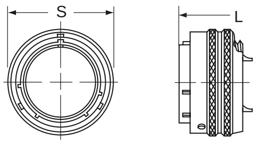


Fig. 1A

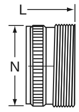


Fig. 1B

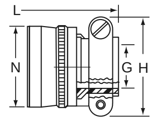


Fig. 1C

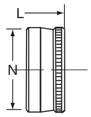
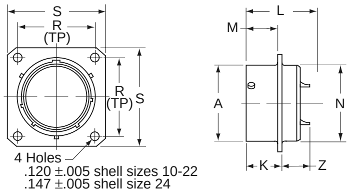


Fig. 2



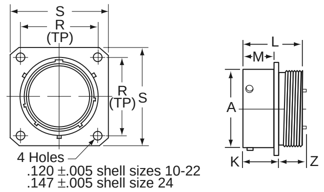


Fig. 3A

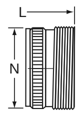


Fig. 3B

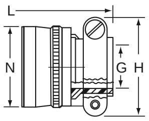


Fig. 3C

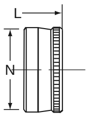
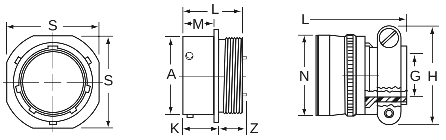


Fig. 4



CONTACT LEGEND
● 20
○ 16

Insert Patterns ***(Front face of pin insert shown. Drawings not to scale.)***

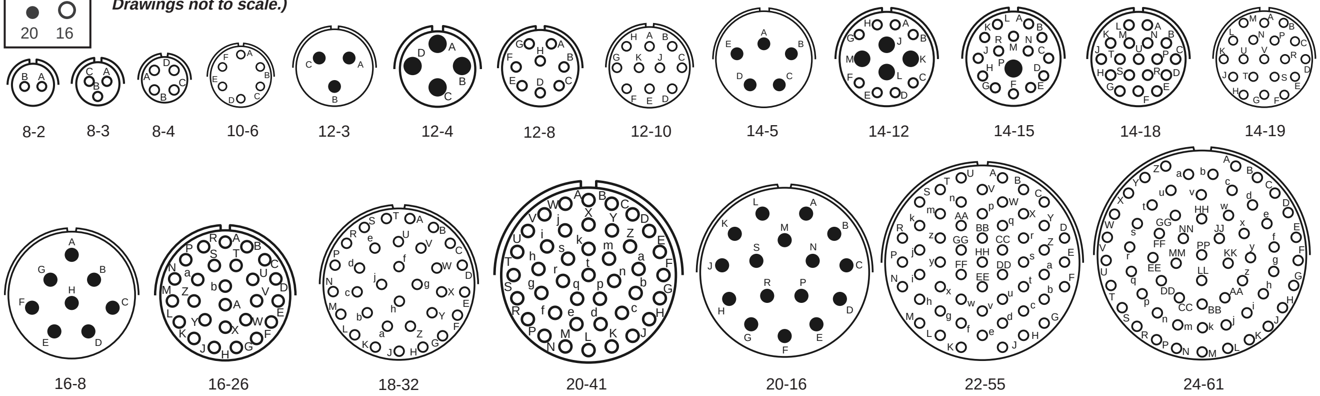


Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches										Amphenol Part No.
					1	10	50	A Dia. +.001 –.005	G ±.010	H Max.	K +.020 –.010	L Max.	M +.010 –.000	N Dia. Max.	R (TP)	S Dia. Max.	Z Max.	
1B	8-4	4/20	Plug w/pins	PT06E8-4P(SR)-ND*	26.59	17.03	15.08	—	.125	.812	—	1.906	—	—	—	.750	—	PT06E8-4P(SR)
1B			Plug w/sockets	PT06E8-4S(SR)-ND*	26.63	17.05	15.10	—	.125	.812	—	1.906	—	—	—	.750	—	PT06E8-4S(SR)
2			Recept. w/pins	PT02A8-4P-ND	10.85	6.51	5.07	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A8-4P
2			Recept. w/sockets	PT02A8-4S-ND	10.06	7.05	5.24	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A8-4S
1B	10-6	6/20	Plug w/pins	PT06E10-6P(SR)-ND*	28.58	18.30	16.20	—	.188	.875	—	1.906	—	—	—	.869	—	PT06E10-6P(SR)
1B			Plug w/sockets	PT06E10-6S(SR)-ND*	29.97	19.18	16.99	—	.188	.875	—	1.906	—	—	—	.869	—	PT06E10-6S(SR)
2			Recept. w/pins	PT02A10-6P-ND	11.68	7.01	5.45	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02A10-6P
2			Recept. w/sockets	PT02A10-6S-ND	11.69	8.18	6.08	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02A10-6S
1B	12-3	3/16	Plug w/pins	PT06E12-3P(SR)-ND*	27.75	17.76	15.73	—	.312	1.000	—	1.906	—	—	—	1.013	—	PT06E12-3P(SR)
1B			Plug w/sockets	PT06E12-3S(SR)-ND*	29.67	18.99	16.82	—	.312	1.000	—	1.906	—	—	—	1.013	—	PT06E12-3S(SR)
2			Recept. w/pins	PT02A12-3P-ND	17.50	11.43	9.59	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT06A12-3P
2			Recept. w/sockets	PT02A12-3S-ND	19.53	12.75	10.70	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT06A12-3S
1B	12-10	10/20	Plug w/pins	PT06E12-10P(SR)-ND*	27.16	17.39	15.40	—	.312	1.000	—	1.906	—	—	—	.1.013	—	PT06E12-10P(SR)
1B			Plug w/sockets	PT06E12-10S(SR)-ND*	29.57	18.93	16.76	—	.312	1.000	—	1.906	—	—	—	1.013	—	PT06E12-10S(SR)
2			Recept. w/pins	PT02A12-10P-ND	16.65	10.87	9.12	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT06A12-10P
2			Recept. w/sockets	PT02A12-10S-ND	19.19	12.53	10.51	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT06A12-10S
1B	14-5	5/16	Plug w/pins	PT06E14-5P(SR)-ND*	32.05	20.51	18.16	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-5P(SR)
1B			Plug w/sockets	PT06E14-5S(SR)-ND*	31.21	21.85	19.51	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-5S(SR)
2			Recept. w/pins	PT02A14-5P-ND	15.15	10.61	7.88	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-5P
2			Recept. w/sockets	PT02A14-5S-ND	17.63	11.51	9.66	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-5S
1B	14-19	19/20	Plug w/pins	PT06E14-19P(SR)-ND*	31.36	21.95	19.60	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-19P(SR)
1B			Plug w/sockets	PT06E14-19S(SR)-ND*	31.46	22.02	19.66	—	.375	1.125	—	1.906	—	—	—	1.156	—	PT06E14-19S(SR)
2			Recept. w/pins	PT02A14-19P-ND	14.11	9.88	7.34	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-19P
2			Recept. w/sockets	PT02A14-19S-ND	14.12	9.89	7.35	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A14-19S
1B	16-8	8/16	Plug w/pins	PT06E16-8P(SR)-ND*	35.10	24.57	21.94	—	.500	1.188	—	2.047	—	—	—	1.281	—	PT06E16-8P(SR)
1B			Plug w/sockets	PT06E16-8S(SR)-ND*	39.58	27.71	24.74	—	.500	1.188	—	2.047	—	—	—	1.281	—	PT06E16-8S(SR)
2			Recept. w/pins	PT02A16-8P-ND	18.08	11.80	9.90	1.00	—	—	.493	.825	.431	.949	.969	1.219	.465	PT02A16-8P
2			Recept. w/sockets	PT02A16-8S-ND	23.39	15.27	12.81	1.00	—	—	.493	.825	.431	.949	.969	1.219	.465	PT02A16-8S
1B	20-16	16/16	Plug w/pins	PT06E20-16P(SR)-ND*	46.70	32.69	29.19	—	.625	1.438	—	2.250	—	—	—	1.531	—	PT06E20-16P(SR)
1B			Plug w/sockets	PT06E20-16S(SR)-ND*	56.73	39.71	35.46	—	.625	1.438	—	2.250	—	—	—	1.531	—	PT06E20-16S(SR)
2			Recept. w/pins	PT02A20-16P-ND	24.41	15.63	13.84	1.250	—	—	.650	1.076	.556	1.199	1.156	1.438	.526	PT02A20-16P
2			Recept. w/sockets	PT02A20-16S-ND	31.73	22.22	19.84	1.250	—	—	.650	1.076	.556	1.199	1.156	1.438	.526	PT02A20-16S
1B	22-55	55/20	Plug w/pins	PT06E22-55P(SR)-ND*	56.73	39.72	35.46	—	.750	1.625	—	2.250	—	—	—	1.656	—	PT06E22-55P(SR)
1B			Plug w/sockets	PT06E22-55S(SR)-ND*	60.83	42.59	38.03	—	.750	1.625	—	2.250	—	—	—	1.656	—	PT06E22-55S(SR)
2			Recept. w/pins	PT02A22-55P-ND	30.31	21.22	18.95	1.375	—	—	.650	1.076	.556	1.323	1.250	1.562	.526	PT02A22-55P
2			Recept. w/sockets	PT02A22-55S-ND	34.41	24.09	21.51	1.375	—	—	.650	1.076	.556	1.323	1.250	1.562	.526	PT02A22-55S

*(SR) at end of part number designates that a strain relief is included

(Continued)

Circular PT Bayonet Lock Connectors

with Solder Contacts (MIL-C-26482 Series 1 Type) *(Cont.)*

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches										Amphenol Part No.*
					1	10	50	A Dia. +.001 –.005	G ±.010	H Max.	K +.020 –.010	L Max.	M +.010 –.000	N Dia. Max.	R (TP)	S Dia. Max.	Z Max.	
1B	8-2	2/20	Plug w/sockets	PT06A-8-2S(SR)-ND*	21.07	13.75	11.54	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-2S(SR)
2			Recept. w/pins	PT02A-8-2P-ND	10.55	7.39	5.49	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A-8-2P
1B	8-3	3/20	Plug w/sockets	PT06A-8-3S(SR)-ND*	22.09	14.42	12.09	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-3S(SR)
1B			Plug w/sockets	PT06E-8-3S(SR)-ND*	22.73	14.55	12.88	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06E-8-3S(SR)
2			Recept. w/pins	PT02A-8-3P-ND	11.83	8.28	6.15	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02A-8-3P
2			Recept. w/pins	PT02E-8-3P-ND	10.05	6.03	4.69	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02E-8-3P
1B	8-4	4/20	Plug w/pins	PT06A-8-4P(SR)-ND*	19.76	12.90	10.82	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-4P(SR)
1B			Plug w/sockets	PT06A-8-4S(SR)-ND*	20.19	13.18	11.05	—	.125	.812	—	1.906	—	.550	—	.750	—	PT06A-8-4S(SR)
1A			Plug w/sockets	PT06A-8-4S-ND	15.83	11.08	8.23	—	—	—	—	1.609	—	.590	—	.750	—	PT06A-8-4S
1C			Plug w/sockets	PT06E-8-4S-ND	16.74	10.93	9.17	—	—	—	—	1.266	—	.560	—	.750	—	PT06E-8-4S
2			Recept. w/pins	PT02E-8-4P-ND	11.85	7.11	5.53	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02E-8-4P
2			Recept. w/sockets	PT02E-8-4S-ND	10.86	6.52	5.07	.473	—	—	.493	.825	.431	.449	.594	.812	.465	PT02E-8-4S
1B	10-6	6/20	Plug w/pins	PT06A-10-6P(SR)-ND*	19.97	13.04	10.94	—	.188	.875	—	1.906	—	.675	—	.859	—	PT06A-10-6P(SR)
1B			Plug w/sockets	PT06A-10-6S(SR)-ND*	23.27	14.89	13.19	—	.188	.875	—	1.906	—	.675	—	.859	—	PT06A-10-6S(SR)
3A			Recept. w/pins	PT00A-10-6P-ND	11.58	8.11	6.02	.590	—	—	.493	1.553	.431	.717	.719	.938	.468	PT00A-10-6P
3C			Recept. w/pins	PT00E-10-6P-ND	17.72	11.57	9.70	.590	—	—	.493	1.266	.431	.685	.719	.938	.468	PT00E-10-6P
4			Recept. w/pins	PT01A-10-6P(SR)-ND*	19.19	12.53	10.51	.590	.188	.875	.494	1.922	.400	.675	—	.938	.948	PT01A-10-6P(SR)
2			Recept. w/pins	PT02E-10-6P-ND	11.38	7.97	5.92	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02E-10-6P
2			Recept. w/sockets	PT02E-10-6S-ND	14.45	10.12	7.52	.590	—	—	.493	.825	.431	.573	.719	.938	.465	PT02E-10-6S
1B	12-3	3/16	Plug w/pins	PT06A-12-3P(SR)-ND*	20.47	13.37	11.21	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-3P(SR)
1A			Plug w/sockets	PT06A-12-3S-ND	14.83	10.38	7.71	—	—	—	—	1.609	—	.834	—	1.013	—	PT06A-12-3S
1B			Plug w/sockets	PT06A-12-3S(SR)-ND*	21.07	13.75	11.54	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-3S(SR)
2			Recept. w/pins	PT02E-12-3P-ND	9.54	5.73	4.46	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-3P
1B	12-4	4/16	Plug w/pins	PT06A-12-4P(SR)-ND*	22.82	14.61	12.93	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-4P(SR)
2			Recept. w/sockets	PT02E-12-4S-ND	15.80	11.06	8.22	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-4S
1A	12-8	8/20	Plug w/pins	PT06A-12-8P-ND	19.90	12.99	10.90	—	—	—	—	1.609	—	.834	—	1.013	—	PT06A-12-8P
1A			Plug w/sockets	PT06A-12-8S-ND	18.29	11.94	10.01	—	—	—	—	1.609	—	.834	—	1.013	—	PT06A-12-8S
1B			Plug w/pins	PT06E-12-8P(SR)-ND*	22.63	14.78	12.39	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06E-12-8P(SR)
1B			Plug w/sockets	PT06E-12-8S(SR)-ND*	26.39	16.90	14.96	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06E-12-8S(SR)
2			Recept. w/pins	PT02E-12-8P-ND	10.90	7.63	5.67	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-8P
1B	12-10	10/20	Plug w/pins	PT06A-12-10P(SR)-ND*	17.45	12.22	9.08	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-10P(SR)
1B			Plug w/sockets	PT06A-12-10S(SR)-ND*	16.23	11.36	8.44	—	.312	1.000	—	1.906	—	.803	—	1.013	—	PT06A-12-10S(SR)
2			Recept. w/pins	PT02E-12-10P-ND	11.33	7.93	5.89	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-10P
2			Recept. w/sockets	PT02E-12-10S-ND	12.35	8.65	6.43	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	PT02E-12-10S
1B	14-5	5/16	Plug w/sockets	PT06A-14-5S(SR)-ND*	24.68	15.80	13.99	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06A-14-5S(SR)
2			Recept. w/pins	PT02E-14-5P-ND	11.25	7.88	5.85	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-5P
1B	14-12	8/#20 4/#16	Plug w/pins	PT06A-14-12P(SR)-ND*	22.86	14.63	12.96	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06A-14-12P(SR)
1B			Plug w/sockets	PT06E-14-12S(SR)-ND*	22.71	14.82	12.43	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06E-14-12S(SR)
2			Recept. w/pins	PT02E-14-12P-ND	11.53	8.07	6.00	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-12P
2			Recept. w/sockets	PT02E-14-12S-ND	18.83	12.30	10.31	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-12S
2			Recept. w/sockets	PT02A-14-12S-ND	17.08	11.15	9.35	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A-14-12S
2	14-15	14/#20 1/#16	Recept. w/pins	PT02A-14-15P-ND	11.35	7.95	5.91	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A-14-15P
1A	14-18	18/20	Plug w/pins	PT06A-14-18P-ND	16.68	11.68	8.68	—	—	—	—	1.609	—	.970	—	1.156	—	PT06A-14-18P
1B			Plug w/sockets	PT06E-14-18S(SR)-ND*	27.02	17.30	15.32	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06E-14-18S(SR)
2			Recept. w/pins	PT02A-14-18P-ND	15.05	10.54	7.83	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02A-14-18P
2			Recept. w/sockets	PT02E-14-18S-ND	16.79	10.96	9.20	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	PT02E-14-18S
1B	14-19	19/20	Plug w/pins	PT06A-14-19P(SR)-ND*	24.53	15.70	13.90	—	.375	1.125	—	1.906	—	.920	—	1.156	—	PT06A-14-19P(SR)
2	16-26	26/20	Recept. w/pins	PT02A-16-26P-ND	19.81	12.93	10.85	1.000	—	—	.493	.825	.431	.949	.969	1.219	.465	PT02A-16-26P
1A	24-61	61/20	Plug w/pins	PT06A-24-61P-ND	29.66	18.98	16.81	—	—	—	—	1.750	—	1.587	—	1.776	—	PT06A-24-61P
1A			Plug w/sockets	PT06A-24-61S-ND	30.20	19.33	17.12	—	—	—	—	1.750	—	1.587	—	1.776	—	PT06A-24-61S

*(SR) at end of part number designates that a strain relief is included

Circular MS Bayonet Lock Connectors

with Solder Contacts (MIL-C-26482 Series 1 Type)

Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches										Amphenol Part No.
					1	10	50	A Dia. +.001 –.005	G ±.010	H Max.	K +.020 –.010	L Max.	M +.010 –.000	N Dia. Max.	R (TP)	S Dia. Max.	Z Max.	
1B	8-2	2/20	Plug w/sockets	MS3116F-8-2S-ND†	18.17	11.86	9.95	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-2S
1C			Plug w/sockets	MS3116E-8-2S-ND*	14.18	9.93	7.38	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-2S
2			Recept. w/pins	MS3112E-8-2P-ND*	5.36	3.04	2.24	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-2P
1C	8-3	3/20	Plug w/pins	MS3116E-8-3P-ND*	14.13	9.89	7.35	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-3P
1C			Plug w/sockets	MS3116E-8-3S-ND*	14.95	10.47	7.78	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-3S
1B			Plug w/sockets	MS3116F-8-3S-ND†	19.21	12.54	10.52	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-3S
2			Recept. w/pins	MS3112E-8-3P-ND*	10.50	6.30	4.90	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-3P
2			Recept. w/sockets	MS3112E-8-3S-ND	8.88	5.33	4.15	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-3S
1B	8-4	4/20	Plug w/pins	MS3116F-8-4P-ND†	18.03	11.77	9.87	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-4P
1C			Plug w/sockets	MS3116E-8-4S-ND*	15.78	11.05	8.21	—	—	—	—	1.266	—	.560	—	.750	—	MS3116E-8-4S
1B			Plug w/sockets	MS3116F-8-4S-ND†	20.24	13.21	11.08	—	.125	.812	—	1.906	—	.550	—	.750	—	MS3116F-8-4S
2			Recept. w/pins	MS3112E-8-4P-ND*	9.87	5.93	4.61	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-4P
2			Recept. w/sockets	MS3112E-8-4S-ND*	11.90	8.33	6.19	.473	—	—	.493	.825	.431	.449	.594	.812	.465	MS3112E-8-4S
1B	10-6	6/20	Plug w/pins	MS3116F-10-6P-ND†	17.20	11.23	9.42	—	.188	.875	—	1.906	—	.675	—	.859	—	MS3116F-10-6P
1B			Plug w/sockets	MS3116F-10-6S-ND†	18.45	12.05	10.11	—	.188	.875	—	1.906	—	.675	—	.859	—	MS3116F-10-6S
3B			Recept. w/pins	MS3110F-10-6P-ND†	19.29	12.59	10.56	.590	.188	.875	.493	1.922	.431	.675	.719	.938	.468	MS3110F-10-6P
3B			Recept. w/sockets	MS3110F-10-6S-ND†	18.57	12.13	10.17	.590	.188	.875	.493	1.922	.431	.675	.719	.938	.468	MS3110F-10-6S
2			Recept. w/pins	MS3112E-10-6P-ND*	10.89	6.54	5.09	.590	—	—	.493	.825	.431	.573	.719	.938	.465	MS3112E-10-6P
2			Recept. w/sockets	MS3112E-10-6S-ND*	10.40	7.28	5.41	.590	—	—	.493	.825	.431	.573	.719	.938	.465	MS3112E-10-6S
1C			Plug w/sockets	MS3116E-10-6S-ND*	17.05	11.94	8.87	—	—	—	—	1.266	—	.685	—	.859	—	MS3116E-10-6S
1B	12-3	3/16	Plug w/pins	MS3116F-12-3P-ND†	16.65	11.66	8.66	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-3P
1B			Plug w/sockets	MS3116F-12-3S-ND†	20.38	13.30	11.16	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-3S
2			Recept. w/pins	MS3112E-12-3P-ND*	11.19	6.72	5.23	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-3P
2			Recept. w/sockets	MS3112E-12-3S-ND*	10.89	6.54	5.09	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-3S
1B	12-10	10/20	Plug w/pins	MS3116F-12-10P-ND†	21.02	13.72	11.51	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-10P
1B			Plug w/sockets	MS3116F-12-10S-ND†	19.05	12.44	10.43	—	.312	1.000	—	1.906	—	.803	—	1.013	—	MS3116F-12-10S
2			Recept. w/pins	MS3112E-12-10P-ND*	10.05	7.04	5.23	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-10P
2			Recept. w/sockets	MS3112E-12-10S-ND*	17.86	11.66	9.78	.750	—	—	.493	.825	.431	.699	.812	1.031	.465	MS3112E-12-10S
1B	14-12	8/#20 4/#16	Plug w/sockets	MS3116F-14-12S-ND†	25.54	16.35	14.48	—	.375	1.125	—	1.906	—	.920	—	1.156	—	MS3116F-14-12S
2			Recept. w/pins	MS3112E-14-12P-ND*	16.40	11.48	8.53	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	MS3112E-14-12P
1B	14-18	18/20	Plug w/sockets	MS3116F-14-18S-ND†	32.47	20.78	18.40	—	.375	1.125	—	1.906	—	.920	—	1.156	—	MS3116F-14-18S
2			Recept. w/pins	MS3112E-14-18P-ND*	17.72	11.57	9.70	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	MS3112E-14-18P
1B	14-19	19/20	Plug w/sockets	MS3116F-14-19S-ND†	32.04	20.51	18.16	—	.375	1.125	—	1.906	—	.920	—	1.156	—	MS3116F-14-19S
2			Recept. w/pins	MS3112E-14-19P-ND*	16.65	11.66	8.66	.875	—	—	.493	.825	.431	.823	.906	1.125	.465	MS3112E-14-19P
1B	16-26	26/20	Plug w/sockets	MS3116F-16-26S-ND†	31.44	22.01	19.65	—	.500	1.188	—	2.047	—	1.047	—	1.281	—	MS3116F-16-26S
2			Recept. w/pins	MS3112E-16-26P-ND*	15.15	10.61	7.88	1.000	—	—	.493	.825	.431	.949	.969	1.219	.465	MS3112E-16-26P
1B	18-32	32/20	Plug w/pins	MS3116F-18-32P-ND†	35.90	25.13	22.44	—	.625	1.438	—	2.078	—	1.165	—	1.319	—	MS3116F-18-32P
1B	20-41	41/20	Plug w/pins	MS3116F-20-41S-ND†	36.98	25.89	23.12	—	.625	1.438	—	2.250	—	1.290	—	1.531	—	MS3116F-20-41S
1B	22-55	55/20	Plug w/pins	MS3116F22-55P-ND†	25.61	16.39	14.51	—	.750	1.625	—	2.250	—	1.418	—	1.656	—	MS3116F22-55P
2			Recept. w/pins	MS3112E-22-55P-ND*	24.98	15.99	14.16	1.375	—	—	.650	1.076	.556	1.323	1.250	1.562	.526	MS3112E-22-55P

* Environmental resistant supplied with a multi-holed grommet and clamping nut for moisture-proofing individual open wires † Grommet seal with strain relief clamp

Amphenol®

Circular PT-SE Bayonet Lock Connectors

with Crimp Contacts (MIL-C-26482 Series 1 Type)

Aluminum shell components. Standard olive drab, electrically conductive cadmium plated. Dependable 5 key/keyway polarization with bayonet lock coupling assures positive mating. Spring tension provided by a wave washer in the coupling nut ensures maintenance of interfacial seal between mating halves. Insert and main joint gasket molded from resilient neoprene.

Crimp contacts are included, but not installed. (See contact hand crimping tools and contact installation/removal tools recommended below). Pins and sockets are copper alloy/gold plated.

Strain relief is included on plug.

Fig. 1

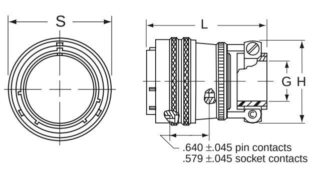


Fig. 2

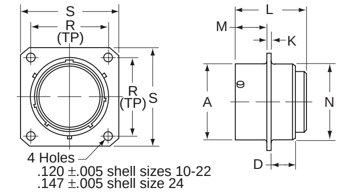
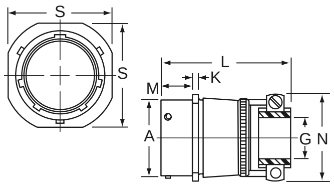


Fig. 4



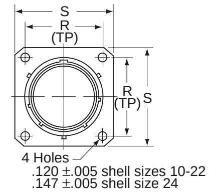


Fig. 3A

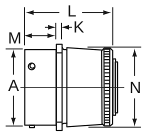


Fig. 3B

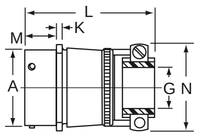
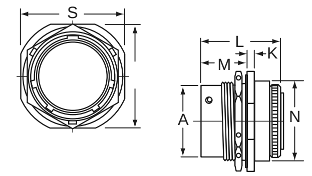
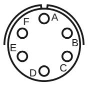


Fig. 5



CONTACT
LEGEND
● ○
20 16

Insert Patterns *(Front face of pin insert shown. Drawings not to scale.)*



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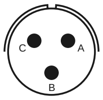

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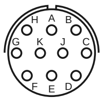

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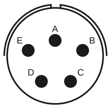

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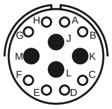

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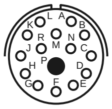

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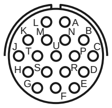

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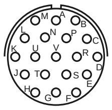

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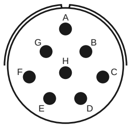

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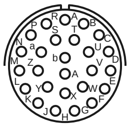

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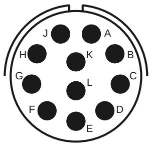

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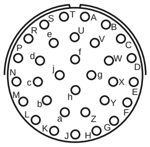

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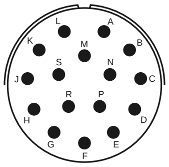

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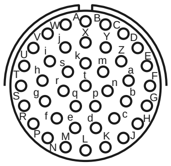

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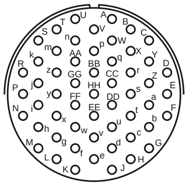

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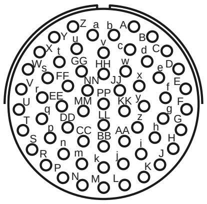


24-61

								Dimensions in Inches										
Fig.	Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	+.001 –.005	A Dia. D Max.	G Max.	H Max.	K ±.016	L Max.	M +.010 -.000	N Dia. +.010. -.000	R (TP)	S Max.	Amphenol Part No.*
1	10-6	6/20	Plug w/pins	PT06SE10-6P(SR)-ND*	31.23	19.99	17.70	—	—	.188	.891	—	2.413	—	—	—	.859	PT06SE10-6P(SR)
1			Plug w/sockets	PT06SE10-6S(SR)-ND*	30.06	21.05	18.80	—	—	.188	.891	—	2.413	—	—	—	.859	PT06SE10-6S(SR)
2			Recept. w/pins	PT02SE10-6P-ND	28.85	18.47	16.35	.590	.312	—	—	.062	1.296	.431	.562	.719	.954	PT02SE10-6P
2			Recept. w/sockets	PT02SE10-6S-ND	31.21	19.98	17.69	.590	.312	—	—	.062	1.296	.431	.562	.719	.954	PT02SE10-6S
1	12-10	10/20	Plug w/pins	PT06SE12-10P(SR)-ND*	31.64	22.15	19.78	—	—	.312	1.016	—	2.413	—	—	—	1.031	PT06SE12-10P(SR)
1			Plug w/sockets	PT06SE12-10S(SR)-ND*	34.73	24.31	21.71	—	—	.312	1.016	—	2.413	—	—		1.031	PT06SE12-10S(SR)
2			Recept. w/pins	PT02SE12-10P-ND	30.27	19.38	17.16	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	PT02SE12-10P
2			Recept. w/sockets	PT02SE12-10S-ND	33.74	21.60	19.12	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	PT02SE12-10S
1	16-8	8/16	Plug w/pins	PT06SE16-8P(SR)-ND*	45.88	32.12	28.68	—	—	.500	1.203	—	2.528	—	—	—	1.281	PT06SE16-8P(SR)
1			Plug w/sockets	PT06SE16-8S(SR)-ND*	51.32	35.93	32.08	—	—	.500	1.203	—	2.528	—	—	—	1.281	PT06SE16-8S(SR)
2			Recept. w/pins	PT02SE16-8P-ND	40.70	28.49	25.44	1.000	.312	—	—	.062	1.296	.431	.938	.969	1.234	PT02SE16-8P
2			Recept. w/sockets	PT02SE16-8S-ND	46.13	32.29	28.83	1.000	.312	—	—	.062	1.296	.431	.938	.969	1.234	PT02SE16-8S
1	18-32	32/20	Plug w/pins	PT06SE18-32P(SR)-ND*	53.92	37.75	33.70	—	—	.625	1.469	—	2.528	—	—	—	1.391	PT06SE18-32P(SR)
1			Plug w/sockets	PT06SE18-32S(SR)-ND*	63.94	44.76	39.97	—	—	.625	1.469	—	2.528	—	—	—	1.391	PT06SE18-32S(SR)
2			Recept. w/pins	PT02SE18-32P-ND	49.18	34.43	30.74	1.125	.312	—	—	.062	1.296	.431	1.062	1.062	1.328	PT02SE18-32P
2			Recept. w/sockets	PT02SE18-32S-ND	59.19	41.43	37.00	1.125	.312	—	—	.062	1.296	.431	1.062	1.062	1.328	PT02SE18-32S
1	20-16	16/16	Plug w/pins	PT06SE20-16P(SR)-ND*	55.75	39.03	34.85	—	—	.625	1.469	—	2.753	—	—	—	1.531	PT06SE20-16P(SR)
1			Plug w/sockets	PT06SE20-16S(SR)-ND*	66.19	46.34	41.37	—	—	.625	1.469	—	2.753	—	—	—	1.531	PT06SE20-16S(SR)
2			Recept. w/pins	PT02SE20-16P-ND	48.93	34.25	30.58	1.250	.406	—	—	.094	1.358	.556	1.188	1.156	1.453	PT02SE20-16P
2			Recept. w/sockets	PT02SE20-16S-ND	59.35	41.55	37.10	1.250	.406	—	—	.094	1.358	.556	1.188	1.156	1.453	PT02SE20-16S
1	22-55	55/20	Plug w/pins	PT06SE22-55P(SR)-ND*	74.37	52.07	46.49	—	—	.750	1.656	—	2.753	—	—	—	1.656	PT06SE22-55P(SR)
1			Plug w/sockets	PT06SE22-55S(SR)-ND*	91.77	64.24	57.36		—	.750	1.656	—	2.753	—	—	—	1.656	PT06SE22-55S(SR)
2			Recept. w/pins	PT02SE22-55P-ND	66.05	46.24	41.28	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	PT02SE22-55P
2			Recept. w/sockets	PT02SE22-55S-ND	83.42	58.40	52.14	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	PT02SE22-55S
1	24-61	61/20	Plug w/pins	PT06SE24-61P(SR)-ND*	83.15	58.21	51.98	—	—	.800	1.750	—	2.830	—	—	—	1.777	PT06SE24-61P(SR)
1			Plug w/sockets	PT06SE24-61S(SR)-ND*	101.99	71.39	63.75	—	—	.800	1.750	—	2.830	—	—	—	1.777	PT06SE24-61S(SR)
2			Recept. w/pins	PT02SE24-61P-ND	75.19	52.64	47.00	1.500	.406	—	—	.094	1.358	.589	1.438	1.375	1.703	PT02SE24-61P
2			Recept. w/sockets	PT02SE24-61S-ND	94.00	65.80	58.75	1.500	.406	—	—	.094	1.358	.589	1.438	1.375	1.703	PT02SE24-61S

* (SR) at end of part number designates that a strain relief is included.

Amphenol

Circular MS Bayonet Lock Connectors

with Crimp Contacts (MIL-C-26482 Series 1 Type)

Fig.	Shell Size/ Insert Arrange- ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches										Amphenol Part No.
					1	10	50	A Dia.	D Max.	G Max.	H Max.	K	L Max.	M	N Max.	R (TP)	S Max.	
1	10-6	6/20	Plug w/pins	MS3126F-10-6P-ND	17.00	11.90	8.84	—	—	.188	.891	—	2.413	—	—	—	—	MS3126F-10-6P
1			Plug w/sockets	MS3126F-10-6S-ND	18.83	12.30	10.31	—	—	.188	.891	—	2.413	—	—	—	—	MS3126F-10-6S
3B			Recept. w/pins	MS3120F-10-6P-ND	14.28	10.00	7.43	.590	—	.188	—	.062	2.422	.431	.844	.719	.954	MS3120F-10-6P
3B			Recept. w/sockets	MS3120F-10-6S-ND	15.43	10.80	8.03	.590	—	.188	—	.062	2.422	.431	.844	.719	.954	MS3120F-10-6S
2			Recept. w/pins	MS3122E-10-6P-ND	21.35	13.94	11.69	.590	.312	—	—	.062	1.296	.431	.562	.719	.954	MS3122E-10-6P
4			Recept. w/sockets	MS3121F-10-6S-ND	17.17	11.21	9.40	.590	—	.188	—	.094	2.422	.431	.891	—	.955	MS3121F-10-6S
1	12-3	3/16	Plug w/sockets	MS3126F-12-3S-ND	22.09	14.42	12.09	—	—	.312	1.016	—	2.413	—	—	—	1.031	MS3126F-12-3S
3B			Recept. w/pins	MS3120F-12-3P-ND	15.08	10.56	7.84	.750	—	.312	—	.062	2.422	.431	.969	.812	1.047	MS3120F-12-3P
2			Recept. w/pins	MS3122E-12-3P-ND	24.14	15.46	13.69	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	MS3122E-12-3P
1	12-10	10/20	Plug w/pins	MS3126F-12-10P-ND	23.06	15.06	12.63	—	—	.312	1.016	—	2.413	—	—	—	1.031	MS3126F-12-10P
1			Plug w/sockets	MS3126F-12-10S-ND	20.83	13.60	11.41	—	—	.312	1.016	—	2.413	—	—	—	1.031	MS3126F-12-10S
3A			Recept. w/pins	MS3120E-12-10P-ND	22.14	14.45	12.12	.750	—	.312	—	.062	1.328	.431	.969	.812	1.047	MS3120E-12-10P
2			Recept. w/pins	MS3122E-12-10P-ND	19.97	13.04	10.94	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	MS3122E-12-10P
2			Recept. w/sockets	MS3122E-12-10S-ND	24.66	15.79	13.98	.750	.312	—	—	.062	1.296	.431	.688	.812	1.047	MS3122E-12-10S
1	14-5	5/16	Plug w/sockets	MS3126F-14-5S-ND	25.90	16.58	14.68	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-5S
2			Recept. w/pins	MS3122E-14-5P-ND	19.10	12.47	10.46	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-5P
1	14-12	8/#20 4/#16	Plug w/sockets	MS3126F-14-12S-ND	33.94	23.76	21.22	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-12S
2			Recept. w/pins	MS3122E-14-12P-ND	27.54	17.63	15.61	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-12P
1	14-15	14/#20 1/#16	Plug w/sockets	MS3126F-14-15S-ND	26.21	16.78	14.86	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-15S
1	14-18	18/20	Plug w/sockets	MS3126F-14-18S-ND	31.62	22.14	19.77	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-18S
2			Recept. w/pins	MS3122E-14-18P-ND	32.04	22.43	20.03	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-18P
1	14-19	19/20	Plug w/pins	MS3126F-14-19P-ND	22.93	14.68	13.00	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-19P
1			Plug w/sockets	MS3126F-14-19S-ND	30.33	19.42	17.19	—	—	.375	1.141	—	2.413	—	—	—	1.156	MS3126F-14-19S
2			Recept. w/pins	MS3122E-14-19P-ND	25.25	16.16	14.31	.875	.312	—	—	.062	1.296	.431	.812	.906	1.141	MS3122E-14-19P
3B			Recept. w/sockets	MS3120F-14-19S-ND	16.38	11.47	8.52	.875	—	.375	—	.062	2.422	.431	1.094	.906	1.141	MS3120F-14-19S
5			Recept. w/sockets	MS3124E-14-19S-ND	25.83	16.54	14.64	.942	—	—	—	.125	1.438	.696	1.124	—	1.391	MS3124E-14-19S
1	16-8	8/16	Plug w/pins	MS3126F-16-8P-ND	21.21	13.85	11.61	—	—	.500	1.203	—	2.528	—	—	—	1.281	MS3126F-16-8P
1	16-26	26/20	Plug w/pins	MS3126F-16-26P-ND	31.92	22.35	19.95	—	—	.500	1.203	—	2.528	—	—	—	1.281	MS3126F-16-26P
1			Plug w/sockets	MS3126F-16-26S-ND	31.86	20.39	18.06	—	—	.500	1.203	—	2.528	—	—	—	1.281	MS3126F-16-26S
2			Recept. w/pins	MS3122E-16-26P-ND	29.00	18.57	16.44	1.000	.312	—	—	.062	1.296	.431	.938	.969	1.234	MS3122E-16-26P
1	18-11	11/16	Plug w/sockets	MS3126F-18-11S-ND	25.07	16.05	14.21	—	—	.625	1.469	—	2.528	—	—	—	1.391	MS3126F-18-11S
1	20-16	16/16	Plug w/sockets	MS3126F-20-16S-ND	22.02	14.37	12.06	—	—	.625	1.469	—	2.753	—	—	—	1.531	MS3126F-20-16S
1	20-41	41/20	Plug w/sockets	MS3126F-20-41S-ND	34.10	23.87	21.32	—	—	.625	1.469	—	2.753	—	—	—	1.531	MS3126F-20-41S
3B			Recept. w/sockets	MS3120F-20-41S-ND	27.20	17.41	15.42	1.250	—	.625	—	.094	2.824	.556	1.406	1.156	1.453	MS3120F-20-41S
2			Recept. w/pins	MS3122E-20-41P-ND	36.64	25.65	22.90	1.250	.406	—	—	.094	1.358	.556	1.188	1.156	1.453	MS3122E-20-41P
1	22-55	55/20	Plug w/sockets	MS3126F-22-55S-ND	48.50	33.95	30.32	—	—	.750	1.656	—	2.753	—	—	—	1.656	MS3126F-22-55S
2			Recept. w/pins	MS3122E-22-55P-ND	32.20	22.54	20.13	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	MS3122E-22-55P
2			Recept. w/sockets	MS3122E-22-55S-ND	17.08	11.15	9.35	1.375	.406	—	—	.094	1.358	.556	1.312	1.250	1.578	MS3122E-22-55S
1	24-61	61/20	Plug w/sockets	MS3126F-24-61S-ND	46.22	32.36	28.89	—	—	.800	1.750	—	2.830	—	—	—	1.777	MS3126F-24-61S

ASTRO TOOL CORP.
CONNECTOR ASSEMBLY TOOLING

TOOLS

Contact Size	Hand Crimping Tool MS Tool Part No.				Insertion Tool						Removal Tool			
	Tool Frame	Price Each	Turret Head	Price Each	Production Metal Pliers	Price Each	Prototype Plastic	Price Each	MS Part No.	Price Each	Prototype	Price Each	MS Part No.	Price Each
20	M22520/1-01	214.86	M22520/1-02	82.33	11-8107-20	146.83	11-7401-20	20.48	M81969/17-03	23.08	11-7880-20	29.73	M81969/19B-06	30.32
16	M22520/1-01	214.86	M22520/1-02	82.33	11-8107-16	146.83	11-7401-16	29.73	M81969/17-04	22.61	11-7880-16	29.73	M81969/19B-01	45.22

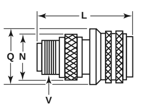
Circular 97 Series Threaded Connectors

with Solder Contacts (MIL-C-5015 Type)

Underwriters Laboratories approved recognition File E115497. Canadian Standard Association Certification File LR69183

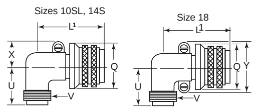
Low cost, general duty, non-environmental MIL-C-5015 type connectors. Available in either A solid or B split shell styles. Used extensively in the machine tool industry, welding industry and numerous other commercial applications. • Single key/keyway polarization • Threaded coupling • Hard dielectric inserts made of diallyl-phthalate • Aluminum alloy components with a conductive cadmium plate finish and olive chromate after-treatment • Contacts are solder type, silver plated with pre-tinned solder cups • Cable clamps are zinc alloy with olive drab/green chromate finish

MS3106A Straight Plug (97 Series)



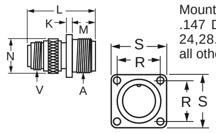
Coupling ring machined from solid aluminum bar stock for high tensile strength. Mates with all types of 97 series receptacles. Front shell includes polarization keyway. Solid shell. Threaded backshell.

MS3108B Angle Plug (97 Series)



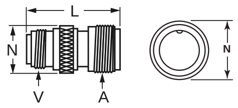
Shell is split longitudinally for convenient solder or inspection. Front shell is keyed to allow the 90 degree angle housing to be rotated and locked at any 45 degree increment.

MS3100A Wall Mount Receptacle



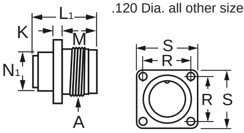
Mounting Holes .147 Dia. sizes 24,28.120 Dia. all other sizes

MS3101A Cable Receptacle

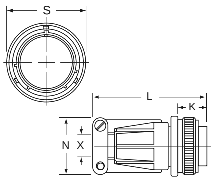


MS3102A Box Mount Receptacle

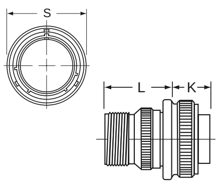
Mounting Holes .147 Dia. sizes 24,28 .120 Dia. all other sizes



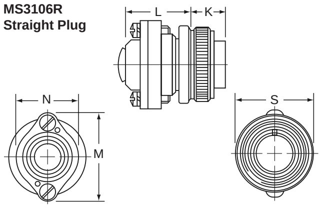
MS3106E/F Straight Plug



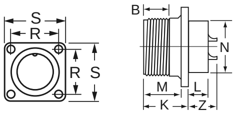
MS3106A Straight Plug



MS3106R Straight Plug



MS3102E/R Straight Plug



Insert Patterns
(Front face of pin insert shown. Drawings not to scale.)

CONTACT LEGEND

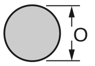
●	⊕	◉
16	12	8

SERVICE RATING:

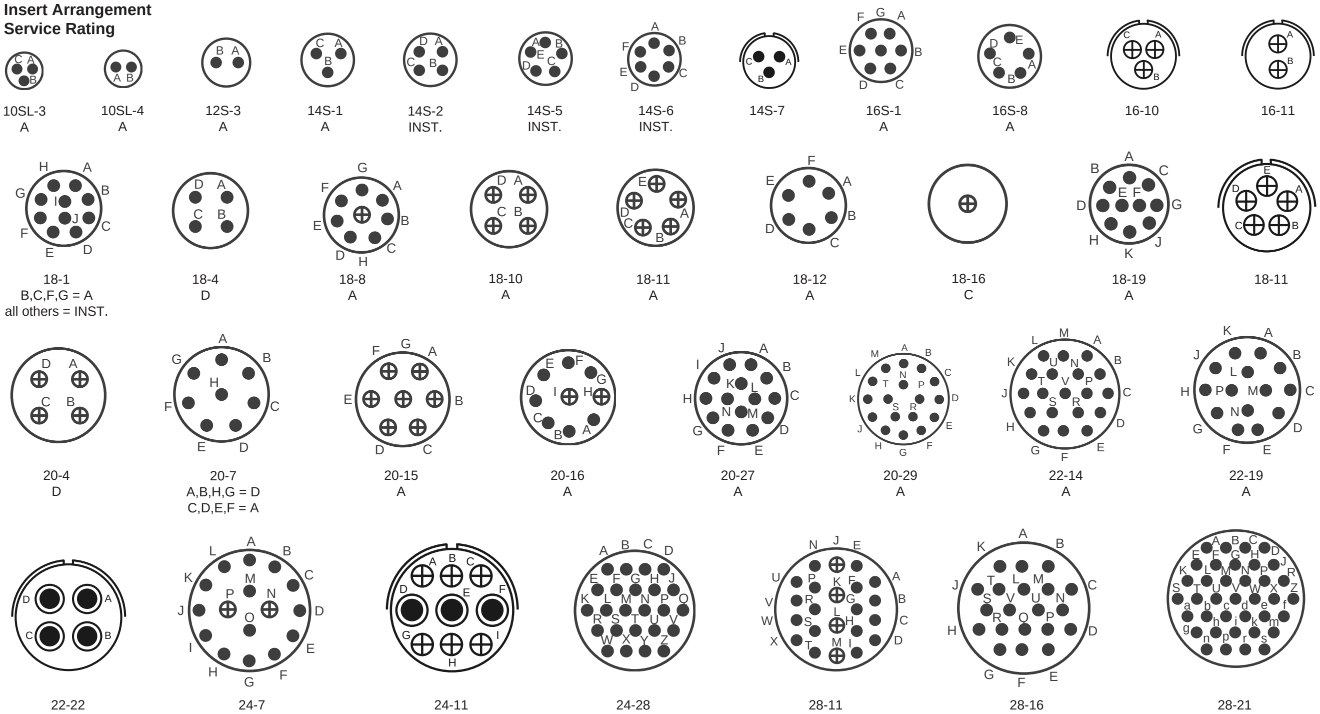
		INST	A	D	E	B	C
Limited Operating	DC	250	700	1250	1750	2450	4200
Voltages at Sea Level	AC(rms)	200	500	900	1250	1750	3000

TEST CURRENT: Contact Size 16 = 13 amperes, Contact Size 12 = 23 amperes
NOTE: Transients were not considered in calculating these values.
NOTE: Limiting operating voltage at 50,000 feet altitude are approx. 25% of the sea level values.

Panel Opening



Insert Arrangement Service Rating



97 Series Plugs

Shell Size/ Insert Arrangement No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches L Max.	L1 Max.	N Ref.	Q Max.	U Ref.	V Fitting Thread	X Ref.	Y Ref.	Amphenol Part No.
Straight Plugs with Solid Shells															
10SL-3	3/16	Straight Plug w/Socket	97-3106A-10SL-3S-ND	12.00	8.40	6.24	1-3/8	—	3/4	7/8	—	5/8-24	—	—	97-3106A-10SL-3S
10SL-4	2/16	Straight Plug w/Socket	97-3106A-10SL-4S-ND	11.35	7.95	5.91									97-3106A-10SL-4S
12S-3	2/16	Straight Plug w/Pins	97-3106A-12S-3P-ND	10.40	7.28	5.41	1-7/16	—	25/32	1	—	5/8-24	—	—	97-3106A-12S-3P
		Straight Plug w/Socket	97-3106A-12S-3S-ND	11.13	7.79	5.79									97-3106A-12S-3S
14S-1	3/16	Straight Plug w/Pins	97-3106A-14S-1P-ND	10.43	7.30	5.43	1-15/32	—	7/8	1-1/8	—	3/4-20	—	—	97-3106A-14S-1P
		Straight Plug w/Socket	97-3106A-14S-1S-ND	12.30	8.61	6.40									97-3106A-14S-1S
14S-2	4/16	Straight Plug w/Pins	97-3106A-14S-2P-ND	10.38	7.27	5.40									97-3106A-14S-2P
		Straight Plug w/Socket	97-3106A-14S-2S-ND	12.88	9.02	6.70									97-3106A-14S-2S

(Continued)

Amphenol® Circular 97 Series Threaded Connectors with Solder Contacts (MIL-C-5015 Type) *(Cont.)*

Shell Size/ Insert Arrange-ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches								Amphenol Part No.
				1	10	50	L Max.	L1 Max.	N Ref.	Q Max.	U Ref.	V Fitting Thread	X Ref.	Y Ref.	
14S-5	5/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-14S-5P-ND 97-3106A-14S-5S-ND	11.60 13.83	8.12 9.68	6.04 7.19	1-15/32	—	7/8	1-1/8	—	3/4-20	—	—	97-3106A-14S-5P 97-3106A-14S-5S
14S-6	6/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-14S-6P-ND 97-3106A-14S-6S-ND	12.03 13.95	8.42 9.77	6.26 7.26									97-3106A-14S-6P 97-3106A-14S-6S
16S-1	7/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-16S-1P-ND 97-3106A-16S-1S-ND	12.03 15.40	8.42 10.78	6.26 8.01	1-15/32	—	1	1-1/4	—	7/8-20	—	—	97-3106A-16S-1P 97-3106A-16S-1S
16S-8	5/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-16S-8P-ND 97-3106A-16S-8S-ND	13.43 13.93	9.40 9.75	6.99 7.25									97-3106A-16S-8P 97-3106A-16S-8S
18-1	10/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-1P-ND 97-3106A-18-1S-ND	15.78 17.45	11.05 12.22	8.21 9.08	1-31/32	—	1-1/8	1-11/32	—	1-20	—	—	97-3106A-18-1P 97-3106A-18-1S
18-4	4/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-4P-ND 97-3106A-18-4S-ND	14.60 15.75	10.22 11.03	7.60 8.19									97-3106A-18-4P 97-3106A-18-4S
18-8	4/1#12, 4/7#16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-8P-ND 97-3106A-18-8S-ND	17.24 18.62	11.26 12.16	9.44 10.20									97-3106A-18-8P 97-3106A-18-8S
18-10	4/12	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-10P-ND 97-3106A-18-10S-ND	17.48 18.62	12.24 12.16	9.09 10.20									97-3106A-18-10P 97-3106A-18-10S
18-11	5/12	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-11P-ND 97-3106A-18-11S-ND	17.48 17.24	12.24 11.26	9.09 9.44									97-3106A-18-11P 97-3106A-18-11S
18-12	6/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-12P-ND 97-3106A-18-12S-ND	14.33 17.48	10.03 12.24	7.45 9.09									97-3106A-18-12P 97-3106A-18-12S
18-16	1/12	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-16P-ND 97-3106A-18-16S-ND	17.48 19.64	12.24 12.82	9.09 10.76									97-3106A-18-16P 97-3106A-18-16S
18-19	10/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-18-19P-ND 97-3106A-18-19S-ND	22.52 19.21	14.42 12.54	12.77 10.52									97-3106A-18-19P 97-3106A-18-19S
20-4	4/12	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-20-4P-ND 97-3106A-20-4S-ND	20.16 26.35	13.16 16.87	11.04 14.94	1-7/8	—	1-1/4	1-15/32	—	1-3/16-18	—	—	97-3106A-20-4P 97-3106A-20-4S
20-7	8/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-20-7P-ND 97-3106A-20-7S-ND	20.16 21.66	13.16 14.14	11.04 11.86									97-3106A-20-7P 97-3106A-20-7S
20-15	7/12	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-20-15P-ND 97-3106A-20-15S-ND	22.09 27.70	14.42 17.73	12.09 15.70									97-3106A-20-15P 97-3106A-20-15S
20-16	9/2#12, 9/7#16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-20-16P-ND 97-3106A-20-16S-ND	22.11 22.50	14.44 14.40	12.11 12.75									97-3106A-20-16P 97-3106A-20-16S
20-27	14/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-20-27P-ND 97-3106A-20-27S-ND	19.78 23.18	12.92 14.84	10.83 13.14									97-3106A-20-27P 97-3106A-20-27S
20-29	17/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-20-29P-ND 97-3106A-20-29S-ND	21.07 25.45	13.75 16.29	11.54 14.43									97-3106A-20-29P 97-3106A-20-29S
22-14	19/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-22-14P-ND 97-3106A-22-14S-ND	24.05 27.32	15.40 17.49	13.63 15.48	1-31/32	—	1-3/8	1-19/32	—	1-3/16-18	—	—	97-3106A-22-14P 97-3106A-22-14S
22-19	14/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-22-19P-ND 97-3106A-22-19S-ND	23.58 24.05	15.10 15.40	13.37 13.63									97-3106A-22-19P 97-3106A-22-19S
24-7	16/2 #12, 16/14 #16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-24-7P-ND 97-3106A-24-7S-ND	28.46 30.83	18.22 19.73	16.13 17.47	2-1/4	—	1-1/2	1-23/32	—	1-7/16-18	—	—	97-3106A-24-7P 97-3106A-24-7S
24-28	24/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-24-28P-ND 97-3106A-24-28S-ND	29.77 33.71	19.06 21.58	16.87 19.10									97-3106A-24-28P 97-3106A-24-28S
28-11	22/4#12, 22/18#16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-28-11P-ND 97-3106A-28-11S-ND	32.27 34.66	20.65 24.27	18.29 21.67	2-1/4	—	1-3/4	1-31/32	—	1-7/16-18	—	—	97-3106A-28-11P 97-3106A-28-11S
28-16	20/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-28-16P-ND 97-3106A-28-16S-ND	33.23 33.66	21.27 21.55	18.84 19.08									97-3106A-28-16P 97-3106A-28-16S
28-21	37/16	Straight Plug w/Pins Straight Plug w/Socket	97-3106A-28-21P-ND 97-3106A-28-21S-ND	34.54 38.94	24.18 27.26	21.59 24.34									97-3106A-28-21P 97-3106A-28-21S
Angle Plugs with Split Shell															
10SL-3	3/16	Angle Plug w/Socket	97-3108B-10SL-3S-ND	16.03	11.22	8.34	—	1-1/2	—	7/8	1	5/8-24	—	—	97-3108B-10SL-3S
10SL-4	2/16	Angle Plug w/Socket	97-3108B-10SL-4S-ND	15.30	10.71	7.96									97-3108B-10SL-4S
14S-1	3/16	Angle Plug w/Pins Angle Plug w/Socket	97-3108B-14S-1P-ND 97-3108B-14S-1S-ND	13.93 14.28	9.75 10.00	7.25 7.43	—	1-23/32	—	1-1/8	1-1/16	3/4-20	21/32	—	97-3108B-14S-1P 97-3108B-14S-1S
14S-2	4/16	Angle Plug w/Pins Angle Plug w/Socket	97-3108B-14S-2P-ND 97-3108B-14S-2S-ND	13.80 14.90	9.66 10.43	7.18 7.75									97-3108B-14S-2P 97-3108B-14S-2S
14S-5	5/16	Angle Plug w/Pins Angle Plug w/Socket	97-3108B-14S-5P-ND 97-3108B-14S-5S-ND	15.13 15.55	10.59 10.89	7.87 8.09									97-3108B-14S-5P 97-3108B-14S-5S
14S-6	6/16	Angle Plug w/Pins Angle Plug w/Socket	97-3108B-14S-6P-ND 97-3108B-14S-6S-ND	15.55 15.98	10.89 11.19	8.09 8.31									97-3108B-14S-6P 97-3108B-14S-6S
18-1	10/16	Angle Plug w/Pins Angle Plug w/Socket	97-3108B-18-1P-ND 97-3108B-18-1S-ND	22.02 24.08	14.37 15.41	12.06 13.65	—	2-5/32	—	1-11/32	1-3/16	1-20	1-41/64	1-41/64	97-3108B-18-1P 97-3108B-18-1S
18-4	4/16	Angle Plug w/Pins Angle Plug w/Socket	97-3108B-18-4P-ND 97-3108B-18-4S-ND	18.50 19.74	12.08 12.89	10.13 10.81									97-3108B-18-4P 97-3108B-18-4S

(Continued)

Amphenol Circular 97 Series Threaded Connectors with Solder Contacts (MIL-C-5015 Type) *(Cont.)*

Shell Size/ Insert Arrangement No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches								Amphenol Part No.
				1	10	50	L Max.	L1 Max.	N Ref.	Q Max.	U Ref.	V Fitting Thread	X Ref.	Y Ref.	
18-8	4/1#12, 4/7#16	Angle Plug w/Pins	97-3108B-18-8P-ND	22.02	14.37	12.06	—	2-5/32	—	1-11/32	1-3/16	1-20	1-41/64	1-41/64	97-3108B-18-8P
		Angle Plug w/Socket	97-3108B-18-8S-ND	23.39	15.27	12.81									97-3108B-18-8S
18-10	4/12	Angle Plug w/Pins	97-3108B-18-10P-ND	21.38	13.95	11.70									97-3108B-18-10P
		Angle Plug w/Socket	97-3108B-18-10S-ND	23.39	15.27	12.81									97-3108B-18-10S
18-11	5/12	Angle Plug w/Pins	97-3108B-18-11P-ND	21.38	13.95	11.70									97-3108B-18-11P
		Angle Plug w/Socket	97-3108B-18-11S-ND	22.02	14.37	12.06									97-3108B-18-11S
18-12	6/16	Angle Plug w/Pins	97-3108B-18-12P-ND	20.26	13.23	11.09									97-3108B-18-12P
		Angle Plug w/Socket	97-3108B-18-12S-ND	21.38	13.95	11.70									97-3108B-18-12S
18-16	1/12	Angle Plug w/Pins	97-3108B-18-16P-ND	22.04	14.39	12.07									97-3108B-18-16P
		Angle Plug w/Socket	97-3108B-18-16S-ND	24.10	15.43	13.66									97-3108B-18-16S
18-19	10/16	Angle Plug w/Pins	97-3108B-18-19P-ND	27.14	17.37	15.38									97-3108B-18-19P
		Angle Plug w/Socket	97-3108B-18-19S-ND	22.70	14.53	12.87									97-3108B-18-19S

Amphenol MS/Standard Cylindrical

with Solder Contacts (MIL-C-5015 Series 1 Type)

Shell Size/ Insert Arrange- ment No.	No. of Contacts/ Size	Description	Digi-Key Part No.	Price Each			Dimensions in Inches									Amphenol Part No.
				1	10	50	B Min Full Thread	K	L	M	N Dia.	R	S	X Min Cable Dim.	Z	
10SL-3	3/16	Plug w/Socket	MS3106E-10SL-3S-ND*	14.70	10.29	7.65	—	.531	2.129	—	.896	—	.946	.281	—	MS3106E-10SL-30S
	3/16	Plug w/Socket	MS3106F-10SL-3S-ND†	16.70	11.69	8.69	—	.531	2.129	—	.896	—	.946	.281	—	MS3106F-10SL-3S
	3/16	Plug w/Socket	MS3106R-10SL-3S-ND‡	15.25	10.68	7.93	—	.531	1.057	1.120	.807	—	.946	—	—	MS3106R-10SL-3S
	3/16	Recept. w/Pins	MS3102E-10SL-3P-ND*	7.24	4.11	3.03	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102E-10SL-3P
	3/16	Recept. w/Pins	MS3102R-10SL-3P-ND‡	6.47	3.67	2.71	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102R-10SL-3P
10SL-4	2/16	Plug w/Socket	MS3106A-10SL-4S-ND	15.08	10.56	7.84	—	.531	.937	—	—	—	.946	—	—	MS3106A-10SL-4S
	2/16	Plug w/Socket	MS3106E-10SL-4S-ND*	16.78	11.75	8.73	—	.531	2.129	—	.896	—	.946	.281	—	MS3106E-10SL-4S
	2/16	Plug w/Socket	MS3106F-10SL-4S-ND†	14.88	10.42	7.74	—	.531	2.129	—	.896	—	.946	.281	—	MS3106F-10SL-4S
	2/16	Recept. w/Pins	MS3102E-10SL-4P-ND*	6.60	3.75	2.76	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102E-10SL-4P
	2/16	Recept. w/Pins	MS3102R-10SL-4P-ND‡	5.86	3.33	2.45	.391	.672	.297	.562	.625	.719	1.000	—	.422	MS3102R-10SL-4P
14S-2	4/16	Plug w/Pins	MS3106F-14S-2P-ND†	12.80	8.96	6.66	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-2P
	4/16	Plug w/Socket	MS3106A-14S-2S-ND	11.70	8.19	6.09	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-2S
	4/16	Plug w/Socket	MS3106F-14S-2S-ND†	16.91	11.04	9.26	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-2S
	4/16	Recept. w/Pins	MS3102E-14S-2P-ND*	8.82	5.30	4.12	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-2P
	4/16	Recept. w/Socket	MS3102E-14S-2S-ND*	8.74	4.96	3.66	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-2S
	4/16	Recept. w/Pins	MS3102R-14S-2P-ND‡	5.93	3.37	2.48	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-2P
	4/16	Recept. w/Socket	MS3102R-14S-2S-ND‡	8.84	5.02	3.70	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-2S
14S-5	5/16	Plug w/Pins	MS3106A-14S-5P-ND	11.58	8.11	6.02	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-5P
	5/16	Plug w/Socket	MS3106A-14S-5S-ND	13.00	9.10	6.76	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-5S
	5/16	Recept. w/Pins	MS3102E-14S-5P-ND*	7.67	4.36	3.21	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-5P
	5/16	Recept. w/Pins	MS3102R-14S-5P-ND‡	9.08	5.15	3.80	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-5P
14S-6	6/16	Plug w/Socket	MS3106A-14S-6S-ND	13.00	9.10	6.76	—	.531	.937	—	—	—	1.123	—	—	MS3106A-14S-6S
	6/16	Plug w/Socket	MS3106F-14S-6S-ND†	16.80	11.76	8.74	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-6S
	6/16	Recept. w/Pins	MS3102E-14S-6P-ND*	7.84	4.45	3.28	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-6P
	6/16	Recept. w/Socket	MS3102E-14S-6S-ND*	9.84	5.91	4.60	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102E-14S-6S
	6/16	Recept. w/Pins	MS3102R-14S-6P-ND‡	5.49	3.12	2.30	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-6P
	6/16	Recept. w/Socket	MS3102R-14S-6S-ND‡	9.01	5.12	3.77	.450	.672	.297	.562	.750	.906	1.188	—	.422	MS3102R-14S-6S
14S-7	3/16	Plug w/Socket	MS3106F-14S-7S-ND†	17.05	11.13	9.34	—	.531	2.201	—	1.021	—	1.123	.406	—	MS3106F-14S-7S
16S-1	7/16	Plug w/Socket	MS3106A-16S-1S-ND	15.48	10.84	8.05	—	.531	.937	—	—	—	1.250	—	—	MS3106A-16S-1S
	7/16	Plug w/Socket	MS3106F-16S-1S-ND†	23.18	15.13	12.69	—	.531	2.201	—	1.151	—	1.250	.500	—	MS3106F-16S-1S
	7/16	Recept. w/Pins	MS3102E-16S-1P-ND*	8.49	5.10	3.97	.450	.672	.297	.562	.875	.969	1.281	—	.422	MS3102E-16S-1P
	7/16	Recept. w/Pins	MS3102R-16S-1P-ND‡	6.80	3.86	2.85	.450	.672	.297	.562	.875	.969	1.281	—	.422	MS3102R-16S-1P
16-10	3/12	Plug w/Socket	MS3106A-16-10S-ND	16.53	11.57	8.60	—	.719	1.124	—	—	—	1.250	—	—	MS3106A-16-10S
	3/12	Plug w/Socket	MS3106F-16-10S-ND†	23.00	14.72	13.04	—	.719	2.524	—	1.151	—	1.250	.500	—	MS3106F-16-10S
16-11	2/12	Recept. w/Pins	MS3102R-16-11P-ND‡	6.83	3.88	2.86	.625	.860	.484	.750	.875	.969	1.281	—	.672	MS3102R-16-11P
18-1	10/16	Recept. w/Pins	MS3102E-18-1P-ND*	10.20	6.12	4.76	.625	.891	.453	.750	1.000	1.062	1.375	—	.641§	MS3102E-18-1P
	10/16	Recept. w/Pins	MS3102R-18-1P-ND‡	10.14	6.09	4.74	.625	.891	.453	.750	1.000	1.062	1.375	—	.641§	MS3102R-18-1P
	10/16	Plug w/Socket	MS3106A-18-1S-ND	18.12	11.83	9.92	—	.719	1.219	—	—	—	1.333	—	—	MS3106A-18-1S
18-11	5/12	Recept. w/Pins	MS3102E-18-11P-ND*	8.68	4.93	3.63	.625	.891	.453	.750	1.000	1.062	1.375	—	.641§	MS3102E-18-11P
20-27	14/16	Recept. w/Pins	MS3102R-20-27P-ND‡	10.80	6.48	5.04	.625	.891	.453	.750	1.125	1.156	1.500	—	.641§	MS3102R-20-27P
22-14	19/16	Recept. w/Pins	MS3102E-22-14P-ND*	11.43	6.86	5.34	.625	.891	.453	.750	1.250	1.250	1.625	—	.641§	MS3102E-22-14P
22-19	14/16	Recept. w/Socket	MS3102E-22-19S-ND*	12.00	8.40	6.24	.625	.891	.453	.750	1.250	1.250	1.625	—	.641§	MS3102E-22-19S
22-22	4/8	Recept. w/Pins	MS3102E-22-22P-ND*	14.90	10.43	7.75	.625	.891	.453	.750	1.250	1.250	1.625	—	.641§	MS3102E-22-22P
24-11	3/#8 6/#12	Recept. w/Pins	MS3102R-24-11P-ND‡	11.65	8.16	6.06	.625	.953	.453	.812	1.375	1.375	1.750	—	.578§	MS3102R-24-11P
	3/#8 6/#12	Plug w/Socket	MS3106R-24-11S-ND‡	23.83	15.25	13.51	—	.719	1.291	1.994	1.557	—	1.715	—	—	MS3106R-24-11S

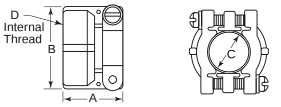
* Environmental resisting
† Environmental resisting with strain relief (MS part number only)
‡ Lightweight environmental resisting
§ Increase Z dimension by .312 for size "0" contact only.

Amphenol®

Accessories For 97 Series Connectors

Cable Clamp

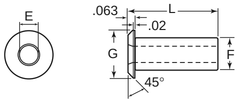
MS3075A Type



For jacketed cable or wires protected by tubing. Both clamping halves float for maximum strain relief. For unjacketed cable or wires, use corresponding MS3420 bushing. Clamp and bushing can be ordered together. Two telescoping bushings are furnished with shell sizes 24 and larger.

Bushing

MS3420 Type



Rubber bushing specifically designed for MS3057A type cable clamp. Can also be used as a reducing bushing. Order separately or with cable clamp.

Shell Size	Max. O.D. Cable	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches A	B	C Dia.	D. Internal Thread	E	F	G	L	Amphenol Part No.
10SL, 12S	5/16	Cable Clamp	97-3057-1004-ND	5.76	3.27	2.41	.795	.842	5/16	5/8-24	—	—	—	—	97-3057-1004
		Bushing	97-79-513-3-ND	1.12	.67	.44	—	—	—	—	.130	.210	.374	2.875	9779-513-3
		Bushing	97-79-513-4-ND	1.31	.79	.51	—	—	—	—	.220	.302	.500	2.750	9779-513-4
		Cable Clamp w/Bushing	97-3057-1004-1-ND*	7.00	3.98	2.93	.795	.842	5/16	5/8-24	.220	.302	.500	2.750	97-3057-1004-1*
12SL, 14S	7/16	Cable Clamp	97-3057-1007-ND	5.58	3.34	2.18	.850	.995	7/16	3/4-20	—	—	—	—	97-3057-1007
		Bushing	97-79-513-6-ND	1.27	.76	.50	—	—	—	—	.312	.427	.614	2.625	9779-513-6
		Cable Clamp w/Bushing	97-3057-1007-1-ND	7.07	4.01	2.96	.850	.995	7/16	3/4-20	.312	.427	.614	2.625	97-3057-1007-1
16,16S	9/16	Cable Clamp	97-3057-1008-ND	6.40	3.63	2.68	.920	1.120	9/16	7/8-20	—	—	—	—	97-3057-1008-1
		Bushing	97-79-513-8-ND	1.04	.63	.41	—	—	—	—	.437	.552	.739	2.500	9779-513-8
		Cable Clamp w/Bushing	97-3057-1008-1-ND	7.47	4.24	3.13	.920	1.120	9/16	7/8-20	.437	.552	.739	2.500	97-3057-1008-1
18	5/8	Cable Clamp	97-3057-1010-ND	5.43	3.08	2.27	.920	1.216	5/8	1-20	—	—	—	—	97-3057-1010
		Bushing	97-79-513-10-ND	1.12	.67	.44	—	—	—	—	.562	.615	.889	2.375	9779-513-10
		Cable Clamp w/Bushing	97-3057-1010-1-ND	6.37	3.61	2.66	.920	1.216	5/8	1-20	.562	.615	.889	2.375	97-3057-1010-1
20,22	3/4	Cable Clamp	97-3057-1012-ND	5.43	3.08	2.27	.927	1.403	3/4	1-3/16-18	—	—	—	—	97-3057-1012
		Bushing	97-79-513-12-ND	1.23	.74	.48	—	—	—	—	.625	.740	1.084	2.250	9779-513-12
		Cable Clamp w/Bushing	97-3057-1012-1-ND	6.50	3.69	2.72	.927	1.403	3/4	1-3/16-18	.625	.740	1.084	2.250	97-3057-1012-1
24,28	15/16	Cable Clamp	97-3057-1016-ND**	5.90	3.35	2.47	1.015	1.683	15/16	1-7/16-18	—	—	—	—	97-3057-1016**
		Bushing	97-79-513-12-ND	1.23	.74	.48	—	—	—	—	.625	.740	1.084	2.250	9779-513-12
		Bushing	97-79-513-16-ND	1.66	.99	.65	—	—	—	—	.750	.927	1.309	2.125	9779-513-16
		Cable Clamp w/Bushing	97-3057-1016-1-ND**	8.38	4.75	3.50	1.015	1.683	15/16	1-7/16-18	—	—	—	—	97-3057-1016-1**

* When Clamp and bushing are ordered together for shell sizes 10SL and 12S, bushing 97-79-513-4 will be furnished.
**Two telescoping bushings (97-79-513-12 and 97-79-513-16) are furnished with each cable clamp for shell sizes 24 and 28.

97 Series Receptacles

Shell Size Insert Arrange-ment No.	No. of Con-tacts/ Size	Description	Digi-Key Part No.	Price Each 1	10	50	Dimensions in Inches A Coupling Thread	K Ref.	L Max.	L1 Max.	M Ref.	N Ref.	N1 Ref.	O Ref.	R Ref.	S Ref.	V Fitting Thread	Amphenol Part No.
Receptacles With Solid Shells																		
10SL-3	3/16	Cable recept. w/pins	97-3101A-10SL-3P-ND	14.08	9.86	7.32	5/8-24	5/64	1-9/32	61.64	9/16	3/4	11/16	.812	23/32	1	5/8-24	97-3101A-10SL-3P
		Box mount recept. w/pins	97-3102A-10SL-3P-ND	9.69	5.82	4.53												97-3102A-10SL-3P
10SL-4	2/16	Cable recept. w/pins	97-3101A-10SL-4P-ND	13.43	9.40	6.99												97-3101A-10SL-4P
		Box mount recept. w/pins	97-3102A-10SL-4P-ND	8.91	5.35	4.16												97-3102A-10SL-4P
12S-3	2/16	Box mount recept. w/pins	97-3102A-12S-3P-ND	8.27	4.70	3.46	3/4-20	5/64	1-15/32	31/32	9/16	25/32	11/16	.812	13/16	1-3/32	5/8-24	97-3102A-12S-3P
		Box mount recept. w/socket	97-3102A-12S-3S-ND	8.88	5.04	3.71												97-3102A-12S-3S
14S-1	3/16	Wall mount recept. w/pins	97-3100A-14S-1P-ND	12.00	8.40	6.24	7/8-20	5/64	1-15/32	61/64	9/16	7/8	3/4	.938	29/32	1-3/16	3/4-20	97-3100A-14S-1P
		Wall mount recept. w/socket	97-3100A-14S-1S-ND	12.30	8.61	6.40												97-3100A-14S-1S
		Cable recept. w/pins	97-3101A-14S-1P-ND	14.78	10.35	7.69												97-3101A-14S-1P
		Cable recept. w/socket	97-3101A-14S-1S-ND	15.00	10.50	7.80												97-3101A-14S-1S
14S-2	4/16	Wall mount recept. w/pins	97-3100A-14S-2P-ND	13.35	9.35	6.95												97-3100A-14S-2P
		Wall mount recept. w/socket	97-3100A-14S-2S-ND	12.58	8.81	6.54												97-3100A-14S-2S
		Cable recept. w/pins	97-3101A-14S-2P-ND	14.70	10.29	7.65												97-3101A-14S-2P
		Cable recept. w/socket	97-3101A-14S-2S-ND	15.55	10.89	8.09												97-3101A-14S-2S
14S-5	5/16	Wall mount recept. w/pins	97-3100A-14S-5P-ND	13.35	9.35	6.95												97-3100A-14S-5P
		Wall mount recept. w/socket	97-3100A-14S-5S-ND	12.03	8.42	6.26												97-3100A-14S-5S
		Cable recept. w/pins	97-3101A-14S-5P-ND	15.85	11.10	8.25												97-3101A-14S-5P
		Cable recept. w/socket	97-3101A-14S-5S-ND	16.55	11.59	8.61												97-3101A-14S-5S
14S-6	6/16	Wall mount recept. w/pins	97-3100A-14S-6P-ND	12.03	8.42	6.26												97-3100A-14S-6P
		Wall mount recept. w/socket	97-3100A-14S-6S-ND	13.83	9.68	7.19												97-3100A-14S-6S
		Cable recept. w/pins	97-3101A-14S-6P-ND	16.55	11.59	8.61												97-3101A-14S-6P
		Cable recept. w/socket	97-3101A-14S-6S-ND	16.93	11.85	8.81												97-3101A-14S-6S
16S-1	7/16	Box mount recept. w/pins	97-3102A-16S-1P-ND	11.67	7.01	5.45	1-20	5/64	1-15/32	61/64	9/16	1	7/8	1.062	31/32	1-9/32	7/8-20	97-3102A-16S-1P
		Box mount recept. w/socket	97-3102A-16S-1S-ND	11.88	7.13	5.55												97-3102A-16S-1S
16S-8	5/16	Box mount recept. w/pins	97-3102A-16S-8P-ND	11.52	6.92	5.38												97-3102A-16S-8P
		Box mount recept. w/socket	97-3102A-16S-8S-ND	11.97	7.19	5.59												97-3102A-16S-8S
18-1	10/16	Box mount recept. w/pins	97-3102A-18-1P-ND	13.25	9.28	6.89	1-1/8-18	1/8	1-63/64	1-3/8	3/4	1-1/8	1	1.188	1-1/16	1-3/8	1-20	97-3102A-18-1P
		Box mount recept. w/socket	97-3102A-18-1S-ND	12.78	8.95	6.65												97-3102A-18-1S
18-4	4/16	Box mount recept. w/pins	97-3102A-18-4P-ND	11.52	6.92	5.38												97-3102A-18-4P
		Box mount recept. w/socket	97-3102A-18-4S-ND	10.40	7.28	5.41												97-3102A-18-4S
18-8	4/1#12, 4/7#16	Box mount recept. w/pins	97-3102A-18-8P-ND	13.25	9.28	6.89												97-3102A-18-8P
		Box mount recept. w/socket	97-3102A-18-8S-ND	14.48	10.14	7.53												97-3102A-18-8S
18-10	4/12	Box mount recept. w/pins	97-3102A-18-10P-ND	12.30	8.61	6.40												97-3102A-18-10P
		Box mount recept. w/socket	97-3102A-18-10S-ND	14.48	10.14	7.53												97-3102A-18-10S
18-11	5/12	Box mount recept. w/pins	97-3102A-18-11P-ND	12.30	8.61	6.40												97-3102A-18-11P
		Box mount recept. w/socket	97-3102A-18-11S-ND	11.53	8.07	6.00												97-3102A-18-11S
18-12	6/16	Box mount recept. w/pins	97-3102A-18-12P-ND	11.20	7.84	5.83												97-3102A-18-12P
		Box mount recept. w/socket	97-3102A-18-12S-ND	10.70	7.49	5.57												97-3102A-18-12S
18-16	1/12	Box mount recept. w/pins	97-3102A-18-16P-ND	11.73	8.21	6.10												97-3102A-18-16P
		Box mount recept. w/socket	97-3102A-18-16S-ND	15.00	10.50	7.80												97-3102A-18-16S
18-19	10/16	Box mount recept. w/pins	97-3102A-18-19P-ND	19.07	12.45	10.44												97-3102A-18-19P
		Box mount recept. w/socket	97-3102A-18-19S-ND	13.05	9.14	6.79												97-3102A-18-19S
20-4	4/12	Box mount recept. w/pins	97-3102A-20-4P-ND	12.00	8.40	6.24	1-1/4-18	1/8	1-57/64	1-3/8	3/4	1-1/4	1-1/8	1.312	1-5/32	1-1/2	1-3/16-18	97-3102A-20-4P
		Box mount recept. w/socket	97-3102A-20-4S-ND	14.78	10.35	7.69												97-3102A-20-4S
20-7	8/16	Box mount recept. w/pins	97-3102A-20-7P-ND	12.00	8.40	6.24												97-3102A-20-7P
		Box mount recept. w/socket	97-3102A-20-7S-ND	13.83	9.68	7.19												97-3102A-20-7S
20-15	7/12	Box mount recept. w/pins	97-3102A-20-15P-ND	16.05	11.24	8.35												97-3102A-20-15P
		Box mount recept. w/socket	97-3102A-20-15S-ND	20.66	13.49	11.31												97-3102A-20-15S
20-16	9/2#12, 9/7#16	Box mount recept. w/pins	97-3102A-20-16P-ND	14.48	10.14	7.53												97-3102A-20-16P
		Box mount recept. w/socket	97-3102A-20-16S-ND	15.75	11.03	8.19												97-3102A-20-16S
20-27	14/16	Box mount recept. w/pins	97-3102A-20-27P-ND	14.78	10.35	7.69												97-3102A-20-27P
		Box mount recept. w/socket	97-3102A-20-27S-ND	14.75	10.33	7.67												97-3102A-20-27S
20-29	17/16	Box mount recept. w/pins	97-3102A-20-29P-ND	16.60	11.62	8.64												97-3102A-20-29P
		Box mount recept. w/socket	97-3102A-20-29S-ND	18.05	11.78	9.88												97-3102A-20-29S
22-14	19/16	Box mount recept. w/pins	97-3102A-22-14P-ND	17.24	11.26	9.44	1-3/8-18	1/8	1-63/64	1-3/8	3/4	1-3/8	1-1/4	1.438	1-1/4	1-5/8	1-3/16-18	97-3102A-22-14P
		Box mount recept. w/socket	97-3102A-22-14S-ND	21.00	13.71	11.50												97-3102A-22-14S
22-19	14/16	Box mount recept. w/pins	97-3102A-22-19P-ND	16.91	11.04	9.26												97-3102A-22-19P
		Box mount recept. w/socket	97-3102A-22-19S-ND	17.24	11.26	9.44												97-3102A-22-19S
24-7	16/2#12, 16/14#16	Box mount recept. w/pins	97-3102A-24-7P-ND	20.28	13.24	11.11	1-1/2-18	1/8	2-1/4	1-3/8	13/16	1-1/2	1-3/8	1.562	1-3/8	1-3/4	1-7/16-18	97-3102A-24-7P
		Box mount recept. w/socket	97-3102A-24-7S-ND	22.75	14.85	12.46												97-3102A-24-7S
24-28	24/16	Box mount recept. w/pins	97-3102A-24-28P-ND	22.06	14.40	12.08												97-3102A-24-28P
		Box mount recept. w/socket	97-3102A-24-28S-ND	24.50	15.69	13.89												97-3102A-24-28S
28-11	22/4#12, 22/18#16	Box mount recept. w/pins	97-3102A-28-11P-ND	22.93	14.68	13.00	1-3/4-18	1/8	2-1/4	1-3/8	13/16	1-3/4	1-5/8	1.812	1-9/16	2	1-7/16-18	97-3102A-28-11P
		Box mount recept. w/socket	97-3102A-28-11S-ND	29.48	18.87	16.71												97-3102A-28-11S
28-16	20/16	Box mount recept. w/pins	97-3102A-28-16P-ND	24.05	15.40	13.63												97-3102A-28-16P
		Box mount recept. w/socket	97-3102A-28-16S-ND	24.23	15.51	13.74												97-3102A-28-16S
28-21	37/16	Box mount recept. w/pins	97-3102A-28-21P-ND	29.27	18.74	16.59												97-3102A-28-21P
		Box mount recept. w/socket	97-3102A-28-21S-ND	30.68	21.48	19.18												97-3102A-28-21S

A

HIROSE ELECTRIC CO.,LTD.

Circular Connectors

HR10 Series

7mm Push-Pull Connectors GOLD PLATED CONTACTS

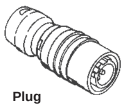
Features:

The most compact HR10 series with well balanced, simplified layout in limited space; Easy “Push-Pull” Operation; Polarization – Five-key system permits only one way of coupling.

Electrical Specifications:

- Current Rating: 2A
- Insulation Resistance: 1000MΩ or more at DC100V
- Contact Resistance: 10mΩ or less at DC1A.

No. of Pins	Digi-Key Part No.	Dim. (mm)	
		A	B
4	HR200, HR203	14.00	8.89
6	HR201, HR204	14.00	8.89
12	HR202, HR205	16.00	11.91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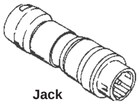
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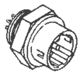
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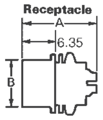
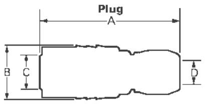
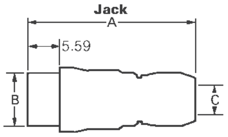






No. of Pins	Digi-Key Part No.	Dimensions (mm)			
		A	B	C	D
4	HR100, HR103	28.50	11.00	7.01	5.21
6	HR101, HR104	28.50	11.00	7.01	5.21
12	HR102, HR105	32.51	14.00	9.50	7.19

No. of Pins	Digi-Key Part No.	Dimensions (mm)		
		A	B	C
4	HR300, HR303	28.50	8.89	5.21
6	HR301, HR304	28.50	8.89	5.21
12	HR302, HR305	32.51	11.91	7.19

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
	HR10 Series					
4	Plug with Pin Insert	HR100-ND	12.41	10.94	9.17	HR10-7P-4P
6	Plug with Pin Insert	HR101-ND	14.07	12.40	10.39	HR10-7P-6P
12	Plug with Pin Insert	HR102-ND	14.06	13.24	11.58	HR10-10P-12P
4	Plug with Socket Insert	HR103-ND	14.07	12.40	10.39	HR10-7P-4S
6	Plug with Socket Insert	HR104-ND	15.16	13.36	11.20	HR10-7P-6S
12	Plug with Socket Insert	HR105-ND	16.85	15.86	13.88	HR10-10P-12S
4	Receptacle with Pin Insert	HR200-ND	7.23	6.36	4.77	HR10-7R-4P
6	Receptacle with Pin Insert	HR201-ND	7.88	6.93	5.20	HR10-7R-6P
12	Receptacle with Pin Insert	HR202-ND	10.08	8.82	6.72	HR10-10R-12P
4	Receptacle with Socket Insert	HR203-ND	8.83	7.73	5.89	HR10-7R-4S
6	Receptacle with Socket Insert	HR204-ND	11.35	9.94	7.57	HR10-7R-6S
12	Receptacle with Socket Insert	HR205-ND	14.07	12.40	10.39	HR10-10R-12S
4	Jack with Pin Insert	HR300-ND	11.66	10.21	7.78	HR10-7J-4P
6	Jack with Pin Insert	HR301-ND	11.03	9.72	8.14	HR10-7J-6P
12	Jack with Pin Insert	HR302-ND	13.23	11.66	9.77	HR10-10J-12P
4	Jack with Socket Insert	HR303-ND	12.14	10.70	8.96	HR10-7J-4S
6	Jack with Socket Insert	HR304-ND	13.80	12.16	10.19	HR10-7J-6S
12	Jack with Socket Insert	HR305-ND	15.52	14.61	12.79	HR10-10J-12S

HR10A Series

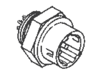
“Snap-In” Connectors SILVER PLATED CONTACTS

Features:

- Compatible with current HR10 series: Cable crimping tool maintains consistent cable clamp force
- To prevent from slipping, HR10A series are accompanied with ruled-off-squares roulette.

Electrical Specifications:

- Current Rating: 2A
- Insulation Resistance: min. 1,000MΩ
- Contact Resistance: max. 10mΩ.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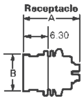

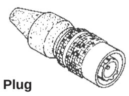
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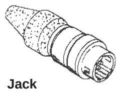
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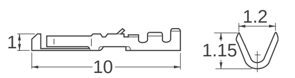
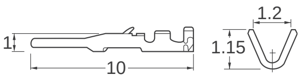
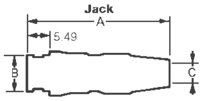


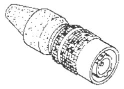
FEMALE SOCKET



MALE PIN

No. of Pins	Digi-Key Part No.	Dim. (mm)	
		A	B
4	HR210, HR213 HR232 HR237	14.00 12.19 11.99	8.89 8.89 8.89
5	HR218, HR219	14.00	8.89
6	HR211, HR214 HR233 HR238	14.00 12.19 11.99	8.89 8.89 8.89
10	HR216, HR217 HR234 HR239	16.00 12.19 11.99	14.00 11.91 11.91
12	HR212, HR215 HR235 HR240	16.00 12.19 11.99	11.89 11.91 11.91
20	HR236, HR241	14.99	15.39





No. of Pins	Digi-Key Part No.	Dimensions (mm)		
		A	B	C
4	HR310, HR313 HR332, HR337	34.98	8.89	4.98
6	HR311, HR314 HR333, HR338	34.98	8.89	4.98
10	HR316, HR317 HR334, HR339	43.00	11.91	7.01
12	HR312, HR315 HR335, HR340	42.98	11.91	7.01
20	HR336, HR341	58.50	15.39	7.01

No. of Pins	Digi-Key Part No.	Dimensions (mm)			
		A	B	C	D
4	HR110, HR113 HR160, HR165	34.98	11.48	6.99	4.99
5	HR118, HR119	34.98	11.48	6.99	4.99
6	HR111, HR114 HR161, HR166	34.98	11.48	6.99	4.99
10	HR116, HR117 HR162, HR167	43.00	14.71	9.50	7.01
12	HR112, HR115 HR163, HR168	42.98	14.71	9.50	7.01
20	HR164, HR169	58.78	19.00	13.00	7.01

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
	HR10A Series, Solder Cup					
4	Plug with Pin Insert	HR110-ND	10.88	9.59	8.03	HR10A-7P-4P
5	Plug with Pin Insert	HR118-ND	11.74	10.35	8.67	HR10A-7P-5P
6	Plug with Pin Insert	HR111-ND	11.09	9.77	8.19	HR10A-7P-6P
10	Plug with Pin Insert	HR116-ND	14.68	12.94	10.84	HR10A-10P-10P
12	Plug with Pin Insert	HR112-ND	15.35	13.53	11.34	HR10A-10P-12P
4	Plug with Socket Insert	HR113-ND	11.64	10.19	7.76	HR10A-7P-4S
5	Plug with Socket Insert	HR119-ND	10.65	9.38	7.86	HR10A-7P-5S
6	Plug with Socket Insert	HR114-ND	10.88	9.59	8.03	HR10A-7P-6S
10	Plug with Socket Insert	HR117-ND	14.05	12.38	10.37	HR10A-10P-10S
12	Plug with Socket Insert	HR115-ND	14.26	12.57	10.53	HR10A-10P-12S
4	Receptacle with Pin Insert	HR210-ND	6.73	5.92	4.44	HR10A-7R-4P
5	Receptacle with Pin Insert	HR218-ND	8.45	7.44	5.58	HR10A-7R-5P
6	Receptacle with Pin Insert	HR211-ND	7.28	6.41	4.81	HR10A-7R-6P
10	Receptacle with Pin Insert	HR217-ND	10.37	9.08	6.92	HR10A-10R-10P
12	Receptacle with Pin Insert	HR212-ND	11.02	9.64	7.35	HR10A-10R-12P
4	Receptacle with Socket Insert	HR213-ND	6.65	5.86	4.39	HR10A-7R-4S
5	Receptacle with Socket Insert	HR219-ND	6.85	6.03	4.53	HR10A-7R-5S
6	Receptacle with Socket Insert	HR214-ND	7.68	6.76	5.07	HR10A-7R-6S
10	Receptacle with Socket Insert	HR216-ND	10.20	8.93	6.80	HR10A-10R-10S
12	Receptacle with Socket Insert	HR215-ND	10.66	9.33	7.11	HR10A-10R-12S
4	Jack with Pin Insert	HR310-ND	9.62	8.43	6.42	HR10A-7J-4P
6	Jack with Pin Insert	HR311-ND	10.18	8.91	6.79	HR10A-7J-6P
10	Jack with Pin Insert	HR317-ND	12.68	11.18	9.37	HR10A-10J-10P
12	Jack with Pin Insert	HR312-ND	13.65	12.03	10.08	HR10A-10J-12P
4	Jack with Socket Insert	HR313-ND	9.60	8.40	6.40	HR10A-7J-4S
6	Jack with Socket Insert	HR314-ND	10.15	8.89	6.77	HR10A-7J-6S
10	Jack with Socket Insert	HR316-ND	12.08	10.64	8.92	HR10A-10J-10S
12	Jack with Socket Insert	HR315-ND	12.33	10.86	9.10	HR10A-10J-12S
	HR10A Series, Crimp Type (contacts sold separately)					
4	Plug for Pin Insert, Crimp Type	HR160-ND	11.86	10.38	7.91	HR10A-7P-4PC
6	Plug for Pin Insert, Crimp Type	HR161-ND	11.86	10.38	7.91	HR10A-7P-6PC
10	Plug for Pin Insert, Crimp Type	HR162-ND	13.38	11.79	9.88	HR10A-10P-10PC
12	Plug for Pin Insert, Crimp Type	HR163-ND	13.38	11.79	9.88	HR10A-10P-12PC
20	Plug for Pin Insert, Crimp Type	HR164-ND	23.52	22.74	20.39	HR10A-13P-20PC
4	Plug for Socket Insert, Crimp Type	HR165-ND	10.54	9.29	7.79	HR10A-7P-4SC
6	Plug for Socket Insert, Crimp Type	HR166-ND	10.54	9.29	7.79	HR10A-7P-6SC
10	Plug for Socket Insert, Crimp Type	HR167-ND	13.65	12.03	10.08	HR10A-10P-10SC
12	Plug for Socket Insert, Crimp Type	HR168-ND	13.65	12.03	10.08	HR10A-10P-12SC
20	Plug for Socket Insert, Crimp Type	HR169-ND	23.52	22.74	20.39	HR10A-13P-20SC
4	Recept. for Pin Insert, Crimp Type	HR232-ND	6.35	5.55	3.93	HR10A-7R-4PC
6	Recept. for Pin Insert, Crimp Type	HR233-ND	6.35	5.55	3.93	HR10A-7R-6PC
10	Recept. for Pin Insert, Crimp Type	HR234-ND	7.98	7.02	5.27	HR10A-10R-10PC
12	Recept. for Pin Insert, Crimp Type	HR235-ND	7.98	7.02	5.27	HR10A-10R-12PC
20	Recept. for Pin Insert, Crimp Type	HR236-ND	14.38	13.54	11.85	HR10A-13R-20PC
4	Recept. for Socket Insert, Crimp Type	HR237-ND	6.52	5.69	4.03	HR10A-7R-4SC
6	Recept. for Socket Insert, Crimp Type	HR238-ND	6.52	5.69	4.03	HR10A-7R-6SC
10	Recept. for Socket Insert, Crimp Type	HR239-ND	8.30	7.31	5.48	HR10A-10R-10SC
12	Recept. for Socket Insert, Crimp Type	HR240-ND	8.30	7.31	5.48	HR10A-10R-12SC
20	Recept. for Socket Insert, Crimp Type	HR241-ND	14.38	13.54	11.85	HR10A-13R-20SC
4	Jack for Pin Insert, Crimp Type	HR332-ND	11.02	9.64	7.35	HR10A-7J-4PC
6	Jack for Pin Insert, Crimp Type	HR333-ND	11.02	9.64	7.35	HR10A-7J-6PC
10	Jack for Pin Insert, Crimp Type	HR334-ND	13.57	11.96	10.02	HR10A-10J-10PC
12	Jack for Pin Insert, Crimp Type	HR335-ND	13.57	11.96	10.02	HR10A-10J-12PC
20	Jack for Pin Insert, Crimp Type	HR336-ND	23.84	23.05	20.66	HR10A-13J-20PC
4	Jack for Socket Insert, Crimp Type	HR337-ND	11.16	9.77	7.44	HR10A-7J-4SC
6	Jack for Socket Insert, Crimp Type	HR338-ND	11.16	9.77	7.44	HR10A-7J-6SC
10	Jack for Socket Insert, Crimp Type	HR339-ND	13.84	12.20	10.22	HR10A-10J-10SC
12	Jack for Socket Insert, Crimp Type	HR340-ND	13.84	12.20	10.22	HR10A-10J-12SC
20	Jack for Socket Insert, Crimp Type	HR341-ND	23.84	23.05	20.66	HR10A-13J-20SC
—	Male Pin, Crimped, Gold	HR450-ND	—	.29	.17	HR10-PC-111
—	Female Socket, Crimped, Gold	HR452-ND	—	.29	.17	HR12-SC-111
—	Male Pin, Crimped, Silver	HR451-ND	—	.23	.14	HR10-PC-112
—	Female Socket, Crimped, Silver	HR453-ND	—	.23	.14	HR12-SC-112
—	Hand Crimp Tool for HR10A Series	HR497-ND	508.30	—	—	HR12-SC-TC
—	Extraction Tool for Female Sockets	HR498-ND	12.64	—	—	HR12-SC-TP
—	Extraction Tool for Male Pins	HR499-ND	8.47	—	—	RP6-SC-TP

(Continued)

KMC Series

9mm Bayonet Lock Connectors
WATER RESISTANT

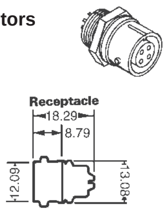
Features:

Five-key mechanism between two metal shells assures error-free polarization in coupling • Bayonet lock offers easier coupling with higher reliability than thread lock.

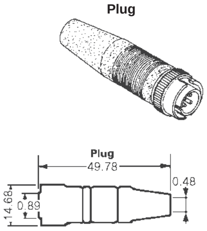
Electrical Specifications:

• Current Rating: 2A • Insulation Resistance: min. 2000MΩ at DC100V • Contact Resistance: max. 10mΩ at DC1A.

Receptacle

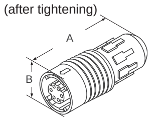


Plug

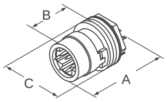


Contacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
KMC Series						
4	Plug with Pin Insert	HR400-ND	15.71	13.84	11.60	KMC-9BPD-4P
6	Plug with Pin Insert	HR401-ND	15.45	14.55	12.73	KMC-9BPD-6P
4	Receptacle with Socket Insert	HR402-ND	9.91	8.68	6.61	KMC-9BRD-4S
6	Receptacle with Socket Insert	HR403-ND	13.00	11.46	9.60	KMC-9BRD-6S

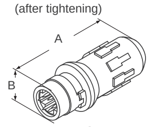
HR30 Series Miniature Waterproof Plastic Connectors



Plug



Receptacle



Jack

Features: Miniature and compact design: The HR30 allows for a maximum outside diameter of 12.6mm in the 3 and 6 positions, and 15.5mm for the 10 and 12 position connectors. The compact design yields a mated length from the panel of only 32.3mm for the 3 and 6 position version and 42.1mm for the 10 and 12 position. Water-tight connection: Meets the IP67 standard, when in the mated position. Push-pull lock-Using Hirose"s unique lock mechanism, the HR30 connector has a reliable, robust "push-pull" lock that is easy to operate. Light-weight and corrosion free.

Applications: Test and measurement equipment, communication equipment, and other miniature electronic devices. **Specifications:** Rated Current: 5A (3 pos.), 2A (6, 10, 12 pos.). Operation Temp. Range: -25ºC~+85ºC. Rated Voltage: AC100V, DC140V (3, 6 pos.), AC30V, DC42V (10, 12 pos.). Storage Temp. Range: -25ºC~+85ºC. Contact Resistance: 5mΩ max. (3 pos.) 15mΩ max. (6, 10, 12 pos.) measured at 1A DC. Insulation Resistance: 1000MΩmin. measured at 100 VDC. Waterproof Performance: Water must not penetrate inside the connector. While mated with a applicable connector, leave under water at a depth of 1m for half hour.

Material: ***Plug:*** Insulator: PPS and PBT, black, UL94V-0, polyacetal, natural. Gasket: SIR/CR, red/black. Contacts: Brass, phosphor bronze, gold plating. Spring: Stainless steel. ***Receptacles:*** Insulator: PPS, black, UL94V-0. Gasket: CR, black. Contacts: Brass, phosphor bronze, gold plating. Hexagonal nut: Zinc alloy, chromate. Washer: Phosphor bronze, nickel plating. ***Crimp contacts:*** Contacts: Phosphor bronze, selective gold plating.

Digi-Key Part No.	Cable Diameter	Dim. A	Dim. B	Dim. C
HR855-ND	4.2~5	29.8	12.6	—
HR856-ND	4.2~5	29.8	12.6	—
HR857-ND	4.2~5	30.3	12.6	—
HR858-ND	3.5~4.3	29.8	12.6	—
HR859-ND	3.5~4.3	29.8	12.6	—
HR860-ND	3.5~4.3	30.3	12.6	—
HR861-ND	6.2~7	39.8	15.5	—
HR862-ND	6.2~7	39.8	15.5	—
HR863-ND	6.2~7	39.8	15.5	—
HR864-ND	—	16	8.3	12
HR865-ND	—	16	8.3	12
HR866-ND	—	18.4	8.3	12
HR867-ND	—	15.5	9.3	15
HR868-ND	—	15.5	9.3	15
HR869-ND	—	15.5	9.3	15
HR870-ND	4.2~5	28.9	12	—
HR871-ND	3.5~4.3	28.9	12	—
HR872-ND	6.2~7	38	15	—
HR873-ND	6.2~7	38	15	—
HR874-ND	6.2~7	38	15	—

Contacts	Description	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
3	Plug, Solder Female Contact	HR855-ND	9.89	8.60	7.74	6.88	HR30-6P-3S
6	Plug, Solder Female Contact	HR856-ND	7.22	5.98	4.98	4.49	HR30-6P-6S
6	Plug, Solder Male Contact	HR857-ND	7.12	6.03	5.07	4.53	HR30-6P-6P
3	Plug, Solder, Fine Wire, Female Contact	HR858-ND	11.18	9.72	8.75	7.78	HR30-6PA-3S
6	Plug, Solder, Fine Wire, Female Contact	HR859-ND	7.22	5.98	4.98	4.49	HR30-6PA-6S
6	Plug, Solder, Fine Wire, Male Contact	HR860-ND	8.11	6.87	5.78	5.15	HR30-6PA-6P
10	Plug, Crimp, Female Contact	HR861-ND	6.70	5.55	4.62	4.16	HR30-7P-10SC
12	Plug, Crimp, Female Contact	HR862-ND	6.70	5.55	4.62	4.16	HR30-7P-12SC
12	Plug, Crimp, Male Contact	HR863-ND	6.70	5.55	4.62	4.16	HR30-8P-12PC
3	Receptacle, Solder, Male Contact	HR864-ND	7.46	6.32	5.31	4.74	HR30-6R-3P
6	Receptacle, Solder, Male Contact	HR865-ND	5.97	4.95	4.12	3.71	HR30-6R-6P
6	Receptacle, Solder, Female Contact	HR866-ND	6.66	5.64	4.74	4.23	HR30-6R-6S
10	Receptacle, Crimp, Male Contact	HR867-ND	4.70	3.89	3.24	2.92	HR30-7R-10PC
12	Receptacle, Crimp, Male Contact	HR868-ND	4.70	3.89	3.24	2.92	HR30-7R-12PC
12	Receptacle, Crimp, Female Contact	HR869-ND	4.70	3.89	3.24	2.92	HR30-8R-12SC
6	Jack, Solder, Male Contact	HR870-ND	6.81	5.77	4.85	4.33	HR30-6J-6P
6	Jack, Solder, Fine Wire, Male Contact	HR871-ND	7.77	6.58	5.54	4.94	HR30-6JA-6P
10	Jack, Crimp, Male Contact	HR872-ND	6.32	5.24	4.36	3.93	HR30-7J-10PC
12	Jack, Crimp, Male Contact	HR873-ND	6.32	5.24	4.36	3.93	HR30-7J-12PC
12	Jack, Crimp, Female Contact	HR874-ND	6.32	5.24	4.36	3.93	HR30-8J-12SC
—	Dust Cap for Plugs - Solder	HR875-ND	2.24	1.87	1.56	1.38	HR30-6P-C
—	Dust Cap for Plugs - Crimp	HR876-ND	2.24	1.87	1.56	1.38	HR30-7P-C
—	Dust Cap for Plugs - Crimp	HR877-ND	2.24	1.87	1.56	1.38	HR30-8P-C
—	Dust Cap for Solder Type Receptacle	HR878-ND	2.24	1.87	1.56	1.38	HR30-6R-C
—	Dust Cap for Crimp Type Receptacle	HR879-ND	2.24	1.87	1.56	1.38	HR30-7R-C
Tools							
	Wiring Jig for Solder Plugs	H9950-ND	214.86 each				HR30-6P-6S-T01
	Wiring Jig for Receptacle and Jack	H9951-ND	214.86 each				HR30-6R-6P-T01
	Back Shell Tightening Collar	H9952-ND	136.09 each				HR30-6P-T02
	Manual Crimping Tool	H9953-ND	1141.09 each				HT-102/HR30-1

Description	Digi-Key Part No.	Loose Piece Price Each 100	Hirose Part No.	Cut Tape* Price Each 10	50	100	Tape & Reel† Pricing 10,000	Hirose Part No.
Contacts - Male - Phosphor Bronze with Selective Gold Plating								
26-30AWG	HR880-ND	.19	HR30-PC-111	.25	.17	.15	70.13/M	HR30-PC-211
Contacts - Female - Phosphor Bronze with Selective Gold Plating								
26-30AWG	HR881-ND	.19	HR30-SC-111	.25	.17	.15	70.13/M	HR30-SC-211

* For Cut Tape, add "CT" to the Digi-Key Part No. (HR880CT-ND)

† For Tape & Reel, add "TR" to the Digi-Key Part No. (HR880TR-ND)

MXR Series - Circular Connectors

Miniature Push-Pull Connectors with Ground Function

MXR type connectors are miniature, lightweight, push-pull lock connectors with a ground function which has been developed for use with VTR camera and system camera interfaces.

Features: • The single action push-pull lock function allows quick connections and disconnections as well as high density mounting • Verification of a secure engagement is afforded by a click sound which exemplifies the fine feel of this lock system • Use of aluminum alloy for the shell has contributed to the lightweight design • One of the three conductors makes contact before the others in this sequenced design. **Specifications:** • **Withstand Voltage:** 300V AC for 1 minute • **Current Capacity:** 2A • **Insulation Resistance:** 1000 MΩ or greater at 100V DC • **Contact Resistance:** 20 mΩ or less at 1A AC • **Solder Pot Diameter:** 0.9 mm dia. **Applications:** VTR cameras, system cameras, audio equipment, etc. **Materials:** • **Shell:** Aluminum alloy, nickel plating • **Insulation:** PBT resin, black, UL94V-0 • **Male Pins:** Brass, gold plating • **Female Pins:** Phosphor bronze, partial gold plating

Fig. 1 – Plug

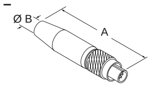


Fig. 2 – Solder Cup

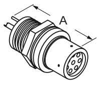


Fig. 3 – Solder Pin

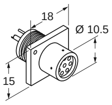


Fig.	No. of Contacts	Description	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
Plug										
1	3	Bushing, Black	47	5	HR603-ND	14.86	13.99	12.68	12.24	MXR-8PA-3PB
	4	Bushing, Black	47	5	HR604-ND	15.10	14.21	12.88	12.44	MXR-8PA-4PB
	6	Bushing, Black	47	5	HR606-ND	15.56	14.64	13.27	12.81	MXR-8PA-6PB
	8	Bushing, Black	50	8	HR608-ND	16.01	15.08	13.66	13.19	MXR-8P-8P
	8	Bushing, White	50	8	HR610-ND	16.25	15.30	13.87	13.39	MXR-8P-8P(01)
Receptacles										
2	3	Solder Cup	19.3	—	HR613-ND	8.52	7.46	6.75	5.68	MXR-8RA-3S
	4		19.3	—	HR614-ND	8.86	7.75	7.02	5.91	MXR-8RA-4S
	6		19.3	—	HR616-ND	9.34	8.17	7.40	6.23	MXR-8RA-6S
	8		20.4	—	HR618-ND	9.84	8.61	7.79	6.56	MXR-8RA-8S
3	3	Solder Pin	—	—	HR623-ND	8.52	7.46	6.75	5.68	MXR-8R-3SA
	4		—	—	HR624-ND	8.86	7.75	7.02	5.91	MXR-8R-4SA
	6		—	—	HR626-ND	9.34	8.17	7.40	6.23	MXR-8R-6SA
	8		—	—	HR628-ND	9.84	8.61	7.79	6.56	MXR-8R-8SA
Tools										
		Tool, Tightening Jig - MXR Series			H9988-ND	272.38 each				MXR-8P-T01
		Tool, Cable Crimper - MXR Series			H9989-ND	328.16 each				HR10A-TC-04

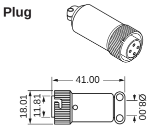
RM Series 12mm Video Connectors

Does not have rubber boot.

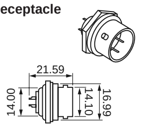
Features: • Pipe shaped socket contact for long life reliable operation • UL94V-0 diallyl phthalate molding material for excellent electrical & mechanical characteristics • Sleek design with grainy matte finish • Bayonet type coupling for easy operation • Reversible pin & socket insert • 2,3,4,5,6, & 7 pin available in the common diecasting body • Jack available for cable extension program

Specifications: • Operating Voltage: AC600V (2 pin) AC500V (3 & 4 pin) AC350V (5,6 & 7 pin) • Current rating: 5 amps • Insulation resistance: min. 1,000MΩ at DC500V • Contact resistance: max. 4mΩ • Solder cup diameter: 1.1mm (.043") • Temp. cycling: -55°C to +85°C • Contact durability: 2000 times at max. 8mΩ

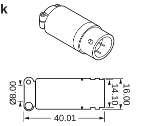
Plug



Receptacle



Jack



No. of Contacts	Description	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
2	Plug with Pin Insert	HR120-ND	8.28	7.29	6.46	5.47	RM12BPG-2PH
3	Plug with Pin Insert	HR122-ND	8.45	7.44	6.60	5.58	RM12BPG-3PH
5	Plug with Socket Insert	HR127-ND	9.77	8.55	7.74	6.52	RM12BPG-5S(07)
2	Plug with Pin Insert	HR882-ND	8.32	7.04	5.92	5.28	RM12BPE-2PH
2	Plug with Socket Insert	HR883-ND	8.58	7.26	6.11	5.45	RM12BPE-2S
3	Plug with Pin Insert	HR884-ND	8.42	7.13	6.00	5.35	RM12BPE-3PH
3	Plug with Socket Insert	HR885-ND	8.71	7.37	6.20	5.53	RM12BPE-3S
4	Plug with Pin Insert	HR886-ND	8.53	7.22	6.07	5.42	RM12BPE-4PH
4	Plug with Socket Insert	HR887-ND	8.81	7.66	6.90	6.13	RM12BPE-4S
5	Plug with Pin Insert	HR888-ND	8.68	7.35	6.18	5.52	RM12BPE-5PH
5	Plug with Socket Insert	HR889-ND	8.23	7.16	6.45	5.73	RM12BPE-5S
6	Plug with Pin Insert	HR890-ND	8.92	7.55	6.35	5.66	RM12BPE-6PH
6	Plug with Socket Insert	HR891-ND	8.35	7.26	6.54	5.81	RM12BPE-6S
7	Plug with Pin Insert	HR892-ND	8.14	7.08	6.38	5.67	RM12BPE-7PH
7	Plug with Socket Insert	HR893-ND	8.63	7.50	6.75	6.00	RM12BPE-7S
2	Receptacle with Pin Insert	HR221-ND	4.21	3.68	3.06	2.61	RM12BRD-2PH
3	Receptacle with Pin Insert	HR223-ND	4.29	3.75	3.12	2.66	RM12BRD-3PH
4	Receptacle with Pin Insert	HR225-ND	4.46	3.89	3.24	2.76	RM12BRD-4PH
5	Receptacle with Pin Insert	HR227-ND	4.70	4.11	3.42	2.91	RM12BRD-5PH
6	Receptacle with Pin Insert	HR229-ND	4.95	4.32	3.60	3.06	RM12BRD-6PH
7	Receptacle with Pin Insert	HR231-ND	5.31	4.64	3.86	3.29	RM12BRD-7PH
2	Receptacle with Socket Insert	HR220-ND	5.06	4.42	3.68	3.13	RM12BRD-2S
3	Receptacle with Socket Insert	HR222-ND	5.28	4.61	3.84	3.27	RM12BRD-3S
4	Receptacle with Socket Insert	HR224-ND	5.53	4.83	4.02	3.42	RM12BRD-4S
5	Receptacle with Socket Insert	HR226-ND	6.13	5.36	4.46	3.80	RM12BRD-5S
6	Receptacle with Socket Insert	HR228-ND	6.33	5.52	4.60	3.91	RM12BRD-6S
7	Receptacle with Socket Insert	HR230-ND	6.85	5.98	4.98	4.24	RM12BRD-7S
2	Jack with Pin Insert	HR321-ND	6.63	5.79	4.82	4.10	RM12BJB-2PH
3	Jack with Pin Insert	HR323-ND	6.25	5.50	4.88	4.13	RM12BJB-3PH
4	Jack with Pin Insert	HR325-ND	6.33	5.57	4.94	4.18	RM12BJB-4PH
5	Jack with Pin Insert	HR327-ND	6.43	5.66	5.02	4.25	RM12BJB-5PH
6	Jack with Pin Insert	HR329-ND	6.58	5.79	5.13	4.34	RM12BJB-6PH
7	Jack with Pin Insert	HR331-ND	6.83	6.01	5.33	4.51	RM12BJB-7PH
2	Jack with Socket Insert	HR320-ND	8.62	7.54	6.83	5.75	RM12BJB-2S(07)
3	Jack with Socket Insert	HR322-ND	8.93	7.82	7.07	5.96	RM12BJB-3S(07)
4	Jack with Socket Insert	HR324-ND	9.29	8.13	7.36	6.20	RM12BJB-4S(07)
5	Jack with Socket Insert	HR326-ND	9.62	8.43	7.62	6.42	RM12BJB-5S(07)
6	Jack with Socket Insert	HR328-ND	10.01	8.76	7.93	6.68	RM12BJB-6S(07)
7	Jack with Socket Insert	HR330-ND	10.30	9.01	8.16	6.87	RM12BJB-7S(07)

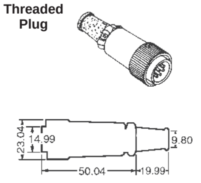
(Continued)

RM Series

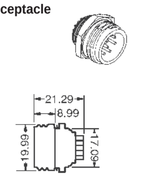
15mm Video Connectors

Specifications: • Operating Voltage: AC350V, DC490V • Current Rating: 5A • Insulation Resistance: 1000MΩ min. at DC500V • Contact Resistance: 14mΩ max. at DC1A • Temp. Cycling: -55°C to +85°C • Applicable Cable Dia.: 8m/m max. • Plugs and jacks include rubber boot.

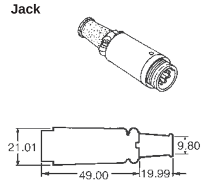
Threaded Plug



Receptacle



Jack



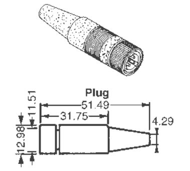
Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
10	Plug with Pin Insert	HR106-ND	10.13	8.87	6.76	RM15TPD-10P
12	Plug with Pin Insert	HR107-ND	10.68	9.35	7.12	RM15TPD-12P
10	Plug with Socket Insert	HR108-ND	11.47	10.04	7.65	RM15TPD-10S
12	Plug with Socket Insert	HR109-ND	10.54	9.29	7.79	RM15TPD-12S
10	Receptacle with Pin Insert	HR206-ND	6.93	6.10	4.58	RM15TRD-10P
12	Receptacle with Pin Insert	HR207-ND	7.40	6.52	4.89	RM15TRD-12P
10	Receptacle with Socket Insert	HR208-ND	6.38	5.61	4.21	RM15TRD-10S
12	Receptacle with Socket Insert	HR209-ND	6.70	5.90	4.43	RM15TRD-12S
10	Jack Extension with Pin Insert	HR306-ND	9.53	8.34	6.36	RM15TJD-10P
12	Jack Extension with Pin Insert	HR307-ND	10.03	8.78	6.69	RM15TJD-12P
10	Jack Extension with Socket Insert	HR308-ND	9.14	8.01	6.10	RM15TJD-10S
12	Jack Extension with Socket Insert	HR309-ND	9.36	8.19	6.24	RM15TJD-12S

SR30 Series

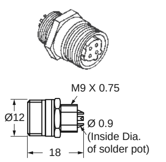
10mm Min. Microphone Connectors

Features: Standard applicable cable size is the outer diameter 4.2. Male pin: brass + gold plated or silver plated; Female pin: copper alloy + gold plated or silver plated.

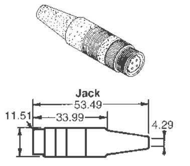
Specifications: • Rated Voltage: AC100V, DC140V • Current Rating: 1A • Insulation Resistance: 200MΩ min. at DC100V • Contact Resistance: 10mΩ max. at DC1A.



Plug



Receptacle



Jack

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
4	Plug with Pin Insert	HR500-ND	8.08	7.11	5.33	SR30-10PE-4P
6	Plug with Pin Insert	HR501-ND	8.05	7.09	5.32	SR30-10PE-6P
7	Plug with Pin Insert	HR510-ND	8.70	7.66	5.75	SR30-10PF-7P
4	Receptacle with Socket Insert	HR503-ND	6.58	5.79	4.34	SR30-10R-4S
6	Receptacle with Socket Insert	HR504-ND	6.80	5.99	4.49	SR30-10R-6S
7	Receptacle with Socket Insert	HR505-ND	5.69	4.97	3.52	SR30-10R-7S
4	Jack with Socket Insert	HR506-ND	10.99	9.62	7.33	SR30-10JE-4S
6	Jack with Socket Insert	HR507-ND	10.99	9.62	7.33	SR30-10JE-6S
7	Jack with Socket Insert	HR508-ND	10.39	9.10	6.93	SR30-10JF-7S
—	Cable Clamp for SR30 Series	HR509-ND	.45	.32	.22	SR30-P

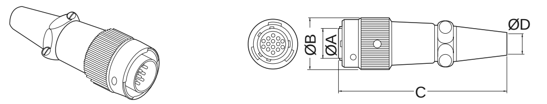
JR Series

Video Connectors Aluminum

Features: JR series connectors offer you excellent performances both electrically and mechanically, having five keys in the fitting section to assure quite smooth coupling.

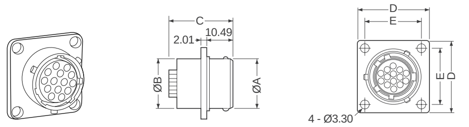
Specifications:
- Withstand Voltage: AC1000V a minute
- Insulation Resistance: 1000MΩ min.
- Contact Resistance: 5mΩ max.

Plug



No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C	D
7	HR138-ND, HR139-ND	16.31	26.97	78.49	11.00
10	HR140-ND, HR141-ND	16.31	26.97	78.49	11.00
14	HR142-ND, HR143-ND	16.31	26.97	78.49	11.00
26	HR144-ND, HR145-ND	20.50	30.99	97.99	12.19

Receptacle



No. of Pins	Digi-Key Part No.	Dimensions (mm) A	B	C	D	E
7	HR146-ND	22.00	19.99	26.49	29.01	23.01
7	HR147-ND	22.00	19.99	27.69	29.01	23.01
10	HR148-ND, HR149-ND	22.00	19.99	26.49	29.01	23.01
14	HR150-ND	22.00	19.99	26.59	29.01	23.01
14	HR151-ND	22.00	19.99	25.78	29.01	23.01
26	HR152-ND	25.81	23.90	26.80	31.98	26.01
26	HR153-ND	25.81	23.90	27.99	31.98	26.01

Con-tacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
7	Plug with Pin Insert	HR138-ND	16.32	15.36	13.44	JRC16BP-7P
10	Plug with Pin Insert	HR140-ND	16.47	15.51	13.57	JRC16BP-10P
14	Plug with Pin Insert	HR142-ND	15.33	14.44	12.63	JRC16BP-14P
26	Plug with Pin Insert	HR144-ND	24.23	23.42	21.00	JRC21BPA-26P
7	Plug with Socket Insert	HR139-ND	16.00	15.06	13.18	JRC16BP-7S
10	Plug with Socket Insert	HR141-ND	16.26	15.72	14.10	JRC16BP-10S
14	Plug with Socket Insert	HR143-ND	14.96	14.08	12.32	JRC16BP-14S
26	Plug with Socket Insert	HR145-ND	21.56	20.84	18.69	JRC21BP-26S
7	Receptacle with Pin Insert	HR146-ND	10.58	9.27	7.06	JRC16BR-7P
10	Receptacle with Pin Insert	HR148-ND	10.87	9.52	7.25	JRC16BR-10P
14	Receptacle with Pin Insert	HR150-ND	10.94	9.58	7.30	JRC16BR-14P
26	Receptacle with Pin Insert	HR152-ND	13.90	12.25	10.27	JRC21BR-26P
7	Receptacle with Socket Insert	HR147-ND	10.39	9.10	6.93	JRC16BR-7S
10	Receptacle with Socket Insert	HR149-ND	12.26	10.81	9.06	JRC16BR-10S
14	Receptacle with Socket Insert	HR151-ND	10.56	9.24	7.04	JRC16BR-14S
26	Receptacle with Socket Insert	HR153-ND	12.68	11.18	9.37	JRC21BRA-26S

HR25 Series

World's Smallest Round Type Multiple Contact Connectors

The HR25 is the world's smallest high-density round type connector. It was developed using Hirose Electric's long experience with miniaturization technology in answer to the continuing need for the ever greater miniaturization and high-density construction of a wide variety of electronic equipment. The voltage used should be less than 30V AC or 42V DC. Wire AWG #30.

Applications: • CCD cameras, measuring instruments, wide variety of sensors, mobile radio, medical equipment.

Material: • Insulation: PPS resin, black • Contacts: Phosphor bronze, Gold and partial gold plating • Shell: Brass and zinc alloy, Nickel plating

Ratings: • Current capacity 1A • Insulation resistance 1000 MΩ or greater • Contact resistance 30 mΩ • Solder pot inside diameter 0.5 mm

Fig. 1

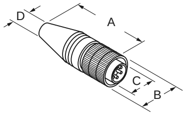


Fig. 2

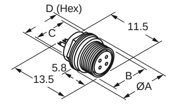


Fig. 3

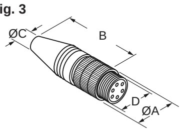


Fig. 4

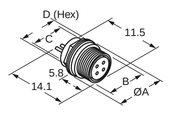


Fig. 5

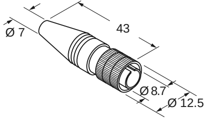


Fig. 6

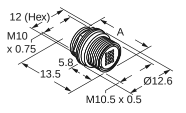


Fig. 7

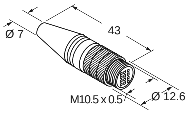


Fig. 8

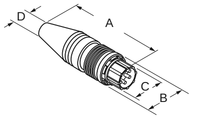


Fig. 9

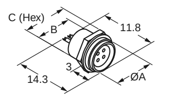


Fig. 10

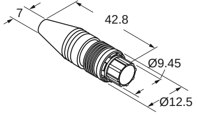


Fig. 11

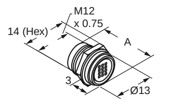
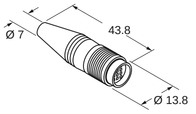


Fig. 12



# of Cont.	Shell Size	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
Fig. 1 Plugs Screw Lock - Male Solder Type											
4	7	35	10.5	6.7	5	HR700-ND	16.18	15.24	13.81	13.33	HR25-7TP-4P
6	7	35	10.5	6.7	5	HR701-ND	15.77	15.24	14.19	13.67	HR25-7TP-6P
8	7	35	10.5	6.7	5	HR702-ND	16.80	16.24	15.12	14.56	HR25-7TP-8P
12	9	43	12.5	8.7	7	HR703-ND	28.07	27.13	25.26	24.33	HR25-9TP-12P
16	9	43	12.5	8.7	7	HR704-ND	30.11	29.11	27.10	26.10	HR25-9TP-16P
20	9	43	12.5	8.7	7	HR705-ND	32.25	31.18	29.03	27.95	HR25-9TP-20P

(Continued)

Circular Connectors HR25 Series *(Cont.)*

# of Cont.	Shell Size	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
Fig. 1 Plugs Screw Lock - Female Solder Type											
4	7	35	10.5	6.7	5	HR706-ND	15.84	14.92	13.52	13.05	HR25-7TP-4S
6	7	35	10.5	6.7	5	HR707-ND	15.06	14.56	13.56	13.06	HR25-7TP-6S
8	7	35	10.5	6.7	5	HR708-ND	17.61	17.03	15.85	15.27	HR25-7TP-8S
12	9	43	12.5	8.7	7	HR709-ND	22.13	21.39	19.92	19.18	HR25-9TP-12S
16	9	43	12.5	8.7	7	HR710-ND	23.04	22.28	20.74	19.97	HR25-9TP-16S
20	9	43	12.5	8.7	7	HR711-ND	23.87	23.07	21.48	20.69	HR25-9TP-20S
Fig. 2 Receptacles Screw Lock - Male Solder Cup Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR712-ND	14.91	13.14	11.79	11.01	HR25-7TR-4P
6	7	10.6	M8.5x0.5	M8x0.5	10	HR713-ND	13.11	12.34	11.18	10.80	HR25-7TR-6P
8	9	10.6	M8.5x0.5	M8x0.5	10	HR714-ND	14.28	13.44	12.18	11.76	HR25-7TR-8P
16	9	12.6	M10.5x0.5	M10x0.75	12	HR716-ND	19.56	18.91	17.61	16.96	HR25-9TR-16P
20	9	12.6	M10.5x0.5	M10x0.75	12	HR717-ND	20.88	20.19	18.80	18.10	HR25-9TR-20P
Fig. 2 Receptacles Screw Lock - Female Solder Cup Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR718-ND	14.47	12.75	11.44	10.68	HR25-7TR-4S
6	7	10.6	M8.5x0.5	M8x0.5	10	HR719-ND	15.20	13.40	12.02	11.23	HR25-7TR-6S
8	7	10.6	M8.5x0.5	M8x0.5	10	HR720-ND	12.89	12.13	11.00	10.62	HR25-7TR-8S
12	9	12.6	M10.5x0.5	M10x0.75	12	HR721-ND	12.61	11.88	10.76	10.39	HR25-9TR-12S
16	9	12.6	M10.5x0.5	M10x0.75	12	HR722-ND	13.62	12.82	11.62	11.22	HR25-9TR-16S
20	9	12.6	M10.5x0.5	M10x0.75	12	HR723-ND	15.08	14.20	12.87	12.42	HR25-9TR-20S
Fig. 3 Jacks Screw Lock - Male Solder Type											
4	7	10.6	35	5	M8.5x0.5	HR724-ND	16.83	15.84	14.36	13.86	HR25-7TJ-4P
6	7	10.6	35	5	M8.5x0.5	HR725-ND	15.77	15.24	14.19	13.67	HR25-7TJ-6P
8	7	10.6	35	5	M8.5x0.5	HR726-ND	16.80	16.24	15.12	14.56	HR25-7TJ-8P
12	9	12.6	43	7	M10.5x0.5	HR727-ND	28.07	27.13	25.26	24.33	HR25-9TJ-12P
16	9	12.6	43	7	M10.5x0.5	HR728-ND	30.11	29.11	27.10	26.10	HR25-9TJ-16P
20	9	12.6	43	7	M10.5x0.5	HR729-ND	32.25	31.18	29.03	27.95	HR25-9TJ-20P
Fig. 3 Jacks Screw Lock - Female Solder Type											
4	7	10.6	35	5	M8.5x0.5	HR730-ND	15.05	14.16	12.84	12.39	HR25-7TJ-4S
6	7	10.6	35	5	M8.5x0.5	HR731-ND	15.06	14.56	13.56	13.06	HR25-7TJ-6S
8	7	10.6	35	5	M8.5x0.5	HR732-ND	15.57	15.06	14.02	13.50	HR25-7TJ-8S
12	9	12.6	43	7	M10.5x0.5	HR733-ND	22.13	21.39	19.92	19.18	HR25-9TJ-12S
16	9	12.6	43	7	M10.5x0.5	HR734-ND	23.04	22.28	20.74	19.97	HR25-9TJ-16S
20	9	12.6	43	7	M10.5x0.5	HR735-ND	23.87	23.07	21.48	20.69	HR25-9TJ-20S
Fig. 4 Receptacles Screw Lock - Male PCB Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR736-ND	14.91	13.14	11.79	11.01	HR25-7TR-4PA
6	7	10.6	M8.5x0.5	M8x0.5	10	HR737-ND	13.11	12.34	11.18	10.80	HR25-7TR-6PA
8	7	10.6	M8.5x0.5	M8x0.5	10	HR738-ND	14.28	13.44	12.18	11.76	HR25-7TR-8PA
12	9	12.6	M10.5x0.5	M10x0.75	12	HR739-ND	17.51	16.93	15.76	15.18	HR25-9TR-12PA
16	9	12.6	M10.5x0.5	M10x0.75	12	HR740-ND	19.56	18.91	17.61	16.96	HR25-9TR-16PA
20	9	12.6	M10.5x0.5	M10x0.75	12	HR741-ND	21.71	20.99	19.54	18.82	HR25-9TR-20PA
Fig. 4 Receptacles Screw Lock - Female PCB Type											
4	7	10.6	M8.5x0.5	M8x0.5	10	HR742-ND	14.47	12.75	11.44	10.68	HR25-7TR-4SA
6	7	10.6	M8.5x0.5	M8x0.5	10	HR743-ND	15.20	13.40	12.02	11.23	HR25-7TR-6SA
8	7	10.6	M8.5x0.5	M8x0.5	10	HR744-ND	12.89	12.13	11.00	10.62	HR25-7TR-8SA
12	9	12.6	M10.5x0.5	M10x0.75	12	HR745-ND	13.11	12.34	11.18	10.80	HR25-9TR-12SA
16	9	12.6	M10.5x0.5	M10x0.75	12	HR746-ND	14.16	13.33	12.08	11.67	HR25-9TR-16SA
20	9	12.6	M10.5x0.5	M10x0.75	12	HR747-ND	15.08	14.20	12.87	12.42	HR25-9TR-20SA
Fig. 5 Plugs Screw Lock - Male Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR748-ND	20.58	19.90	18.53	17.84	HR25-9TP-12PC
16	9	—	—	—	—	HR749-ND	20.90	20.20	18.81	18.11	HR25-9TP-16PC
20	9	—	—	—	—	HR750-ND	21.20	20.49	19.08	18.37	HR25-9TP-20PC
Fig. 5 Plugs Screw Lock - Female Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR751-ND	20.58	19.90	18.53	17.84	HR25-9TP-12SC
16	9	—	—	—	—	HR752-ND	20.90	20.20	18.81	18.11	HR25-9TP-16SC
20	9	—	—	—	—	HR753-ND	21.20	20.49	19.08	18.37	HR25-9TP-20SC
Fig. 6 Receptacles Screw Lock - Male Crimp Type (Contacts sold separately)											
12	9	13	—	—	—	HR754-ND	14.05	12.38	11.11	10.37	HR25-9TR-12PC
16	9	13	—	—	—	HR755-ND	14.47	12.75	11.44	10.68	HR25-9TR-16PC
20	9	13	—	—	—	HR756-ND	14.91	13.14	11.79	11.01	HR25-9TR-20PC
Fig. 6 Receptacles Screw Lock - Female Crimp Type (Contacts sold separately)											
12	9	11.5	—	—	—	HR757-ND	14.05	12.38	11.11	10.37	HR25-9TR-12SC
16	9	11.5	—	—	—	HR758-ND	14.47	12.75	11.44	10.68	HR25-9TR-16SC
20	9	11.5	—	—	—	HR759-ND	14.91	13.14	11.79	11.01	HR25-9TR-20SC
Fig. 7 Jacks Screw Lock - Male Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR760-ND	20.58	19.90	18.53	17.84	HR25-9TJ-12PC
16	9	—	—	—	—	HR761-ND	20.90	20.20	18.81	18.11	HR25-9TJ-16PC
20	9	—	—	—	—	HR762-ND	21.20	20.49	19.08	18.37	HR25-9TJ-20PC
Fig. 7 Jacks Screw Lock - Female Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR763-ND	20.58	19.90	18.53	17.84	HR25-9TJ-12SC
16	9	—	—	—	—	HR764-ND	20.90	20.20	18.81	18.11	HR25-9TJ-16SC
20	9	—	—	—	—	HR765-ND	21.20	20.49	19.08	18.37	HR25-9TJ-20SC
Fig. 8 Plugs Push Pull Lock- Male Solder Type											
4	7	34.8	10.5	7.45	5	HR766-ND	19.16	18.52	17.24	16.61	HR25-7P-4P
6	7	34.8	10.5	7.45	5	HR767-ND	20.07	19.41	18.07	17.40	HR25-7P-6P
8	7	34.8	10.5	7.45	5	HR768-ND	21.09	20.39	18.99	18.28	HR25-7P-8P
12	9	42.8	12.5	9.45	7	HR769-ND	30.42	29.41	27.38	26.37	HR25-9P-12P
16	9	42.8	12.5	9.45	7	HR770-ND	32.46	31.38	29.22	28.14	HR25-9P-16P
20	9	42.8	12.5	9.45	7	HR771-ND	34.61	33.46	31.15	30.00	HR25-9P-20P
Fig. 8 Plugs Push Pull Lock - Female Solder Type											
4	7	34.8	10.5	7.45	5	HR772-ND	18.03	17.43	16.23	15.63	HR25-7P-4S
6	7	34.8	10.5	7.45	5	HR773-ND	19.25	18.61	17.33	16.68	HR25-7P-6S
8	7	34.8	10.5	7.45	5	HR774-ND	19.77	19.12	17.80	17.14	HR25-7P-8S
12	9	42.8	12.5	9.45	7	HR775-ND	24.48	23.67	22.04	21.22	HR25-9P-12S
16	9	42.8	12.5	9.45	7	HR776-ND	25.40	24.55	22.86	22.01	HR25-9P-16S
20	9	42.8	12.5	9.45	7	HR777-ND	26.22	25.35	23.60	22.73	HR25-9P-20S
Fig. 9 Receptacles Push Pull Lock- Male Solder Cup Type											
4	7	11	M10x0.75	12	—	HR778-ND	12.89	12.13	11.00	10.62	HR25-7R-4P
6	7	11	M10x0.75	12	—	HR779-ND	13.92	13.11	11.88	11.47	HR25-7R-6P
8	7	11	M10x0.75	12	—	HR780-ND	15.08	14.20	12.87	12.42	HR25-7R-8P
12	9	13	M13x0.75	14	—	HR781-ND	20.07	19.41	18.07	17.40	HR25-9R-12P
16	9	13	M13x0.75	14	—	HR782-ND	22.13	21.39	19.92	19.18	HR25-9R-16P
20	9	13	M13x0.75	14	—	HR783-ND	24.27	23.47	21.85	21.04	HR25-9R-20P
Fig. 9 Receptacles Push Pull Lock - Female Solder Cup Type											
4	7	11	M10x0.75	12	—	HR784-ND	15.33	13.51	12.12	11.32	HR25-7R-4S
6	7	11	M10x0.75	12	—	HR785-ND	13.01	12.24	11.10	10.71	HR25-7R-6S
8	7	11	M10x0.75	12	—	HR786-ND	13.58	12.79	11.59	11.19	HR25-7R-8S
12	9	13	M13x0.75	14	—	HR787-ND	16.01	15.08	13.66	13.19	HR25-9R-12S
16	9	13	M13x0.75	14	—	HR788-ND	15.06	14.56	13.56	13.06	HR25-9R-16S
20	9	13	M13x0.75	14	—	HR789-ND	15.87	15.35	14.29	13.76	HR25-9R-20S
Fig. 10 Plugs Push Pull Lock - Male Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR790-ND	22.94	22.18	20.65	19.88	HR25-9P-12PC
16	9	—	—	—	—	HR791-ND	23.25	22.48	20.93	20.15	HR25-9P-16PC
20	9	—	—	—	—	HR792-ND	23.55	22.77	21.20	20.41	HR25-9P-20PC
Fig. 10 Plugs Push Pull Lock - Female Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR793-ND	22.94	22.18	20.65	19.88	HR25-9P-12SC
16	9	—	—	—	—	HR794-ND	23.25	22.48	20.93	20.15	HR25-9P-16SC
20	9	—	—	—	—	HR795-ND	23.55	22.77	21.20	20.41	HR25-9P-20SC
Fig. 11 Receptacles Push Pull Lock - Male Crimp Type (Contacts sold separately)											
12	9	13.8	—	—	—	HR520-ND	14.28	13.44	12.18	11.76	HR25-9R-12PC
16	9	13.8	—	—	—	HR521-ND	14.62	13.76	12.47	12.04	HR25-9R-16PC
20	9	13.8	—	—	—	HR522-ND	14.98	14.10	12.78	12.34	HR25-9R-20PC
Fig. 11 Receptacles Push Pull Lock - Female Crimp Type (Contacts sold separately)											
12	9	11.8	—	—	—	HR523-ND	14.28	13.44	12.18	11.76	HR25-9R-12SC
16	9	11.8	—	—	—	HR524-ND	14.62	13.76	12.47	12.04	HR25-9R-16SC
20	9	11.8	—	—	—	HR525-ND	14.98	14.10	12.78	12.34	HR25-9R-20SC
Fig. 12 Jacks Push Pull Lock - Male Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR526-ND	22.94	22.18	20.65	19.88	HR25-9J-12PC
16	9	—	—	—	—	HR527-ND	23.25	22.48	20.93	20.15	HR25-9J-16PC
20	9	—	—	—	—	HR528-ND	23.55	22.77	21.20	20.41	HR25-9J-20PC
Fig. 12 Jacks Push Pull Lock - Female Crimp Type (Contacts sold separately)											
12	9	—	—	—	—	HR529-ND	22.94	22.18	20.65	19.88	HR25-9J-12SC
16	9	—	—	—	—	HR530-ND	23.25	22.48	20.93	20.15	HR25-9J-16SC
20	9	—	—	—	—	HR531-ND	23.55	22.77	21.20	20.41	HR25-9J-20SC

Des-crip-tion	Digi-Key Part No.	*Loose Piece* Price Each 100	Hirose Part No.	*Cut Tape*∗ Price Each 1	10	50	*Tape & Reel* † Pricing 10,000	Hirose Part No.
Crimp -Style Contacts - Male								
30-32	HR532-ND	.19	HR25-PC-111	.58	.36	.24	80.22/M	HR25-PC-211
Crimp -Style Contacts - Female								
30-32	HR536-ND	.19	HR25-5C-111	.58	.36	.24	80.22/M	HR25-5C-211
Tool for HR25 Series								
Manual Crimp Tool			H9975-ND	1344.10 each				HR25-TA3032HC

∗ For Cut Tape, add “CT” to the Digi-Key Part No. (HR532CT-ND)
† For Tape & Reel, add “TR” to the Digi-Key Part No. (HR532TR-ND)

HR22 Series High-Performance Compact Circular

The HR22 Series are 20-pin compact circular connectors developed as an interface between machine tool motors and operation panels. With a screw coupling type locking mechanism to prevent unlocking due to motor vibration. **Features:** • Anti-Loosening Locking Mechanism. The locking mechanism has an anti-loosening spring in a screw coupling. **Two Types of Termination:** Crimp and Solder Easy Receptacle Mounting. A receptacle may be mounted quickly on a panel by tightening a nut. • **Pin allocation and Major Functions:** • **Withstand voltage:** AC300V for 1 minimum. • **Current capacity:** 2A • **Insulation resistance:** 1000MΩ or more at DC100V. • **Contact resistance:** 20mΩ or less. • **Solder pot inner diameter:** 0.8

Fig. 1

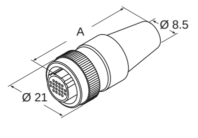


Fig. 2

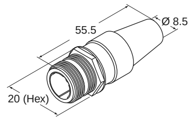


Fig.	No. of Pins	Description	Dim. mm A	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	20	Plug - Female Crimp	—	HR176-ND	14.45	13.60	12.33	HR22-12TPD-20SC
	20	Plug - Male Crimp	53.5	HR177-ND	14.98	14.10	12.78	HR22-12TPD-20PC
	20	Plug - Female Solder	—	HR179-ND	28.11	27.18	25.30	HR22-12TPD-20S
	20	Plug - Male Solder	—	HR180-ND	15.33	14.82	13.80	HR22-12TPD-20P
2	20	Jack - Male Crimp	—	HR181-ND	15.37	14.47	13.11	HR22-12TJD-20PC
	20	Jack - Male Solder	—	HR182-ND	15.06	14.56	13.56	HR22-12TJD-20P
	20	Jack - Female Solder	—	HR183-ND	33.75	32.63	30.38	HR22-12TJD-20S
Contact Male Pin AWG 24-28 – Crimp				HR184-ND	.38	.24	.16	HR22-PC-122
Contact Female Pin AWG 24-28 – Crimp				HR185-ND	.41	.26	.17	HR22-SC-122
Tools								
Assembly Wiring Jig for HR22 Series				H9959-ND	201.97 each			HR22-12P-T01
Manual Crimping Tool for HR22 Series - AWG 24-28				H9960-ND	798.06 each			HR22-TA2428HC
Cable Crimping Tool - Wire Dim. 8.5 mm				H9989-ND	328.16 each			HR10A-TC-04

(Continued)

HRS HIROSE ELECTRIC CO.,LTD. Circular Connectors *(Cont.)*

RP13A Series

Push-Pull Lock Connectors

Performance:

Withstanding voltage: AC 300 minimum
Current rating: 2A (AWG #24)
Insulation: 1000 MΩ max (DC250V)
Contact: 15 mΩ minimum (DC 1A)

Features: Single motion push-pull locking mechanism provides improved quick inserting/extracting capability. Multi-slot key mating guide prevents mis-insertion. Outer shell, made of strong glass fiber polycarbonate resin, is lightweight yet rigid. As the cable connection method, crimping is used for plug, and crimping and PCB dip for receptacle.

Fig. 1

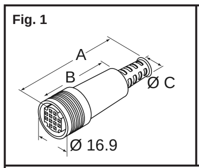


Fig. 2

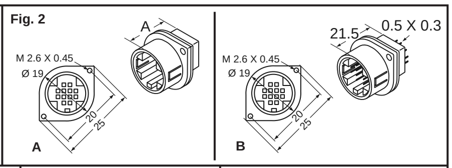


Fig. 3

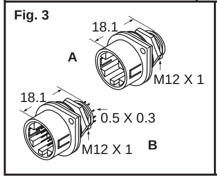


Fig. 4

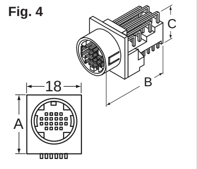
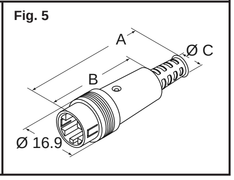


Fig. 5



# of Pins	Dimensions (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
Fig. 1 - Plug with Female Terminal – Crimp								
13	47.2	32	6.1	HR242-ND	4.96	4.11	3.42	RP13A-12PA-13SC
13	47.2	32	5.7	HR243-ND	4.96	4.11	3.42	RP13A-12PB-13SC
13	52.2	37	6.1	HR244-ND	5.13	4.25	3.54	RP13A-12PD-13SC
13	47.2	32	6.4	HR245-ND	5.13	4.25	3.54	RP13A-12PE-13SC
13	52.2	37	7.1	HR246-ND	4.70	3.89	3.24	RP13A-12PK-13SC
13	52.2	37	8.1	HR247-ND	4.70	3.89	3.24	RP13A-12PS-13SC
15	52.2	37	6.1	HR248-ND	4.99	4.13	3.44	RP13A-12PD-15SC
15	52.2	37	7.1	HR249-ND	4.99	4.13	3.44	RP13A-12PK-15SC
15	52.2	37	7.5	HR250-ND	4.99	4.13	3.44	RP13A-12PP-15SC
20	52.2	37	6.1	HR251-ND	7.62	6.45	5.43	RP13A-12PD-20SC
20	52.2	37	7.5	HR252-ND	7.62	6.45	5.43	RP13A-12PG-20SC
20	47.2	32	6.4	HR253-ND	7.46	6.32	5.31	RP13A-12PH-20SC
20	52.2	37	7.1	HR254-ND	7.62	6.45	5.43	RP13A-12PK-20SC
20	47.2	32	4.7	HR255-ND	7.46	6.32	5.31	RP13A-12PO-20SC
20	52.2	37	8.1	HR256-ND	8.19	6.93	5.83	RP13A-12PS-20SC
Fig. 2A - Receptacle (Flange Type) with Male Terminal - Crimp								
13	18.1	—	—	HR257-ND	2.31	1.92	1.60	RP13A-12RA-13PC
15	18.1	—	—	HR258-ND	2.41	2.00	1.67	RP13A-12RA-15PC
20	16	—	—	HR259-ND	4.58	3.80	3.16	RP13A-12RA-20PC
Fig. 2B - Receptacle (Flange Type) with Male Terminal - Dip								
13	—	—	—	HR260-ND	4.38	3.63	3.02	RP13A-12RA-13PA
15	—	—	—	HR261-ND	5.97	4.95	4.12	RP13A-12RA-15PA
Fig. 3A - Receptacle (Jam Nut Fastening Type) with Male Terminal - Crimp								
13	—	—	—	HR262-ND	2.28	1.89	1.58	RP13A-12RB-13PC
Fig. 3B - Receptacle (Jam Nut Fastening Type) with Male Terminal - Dip								
13	—	—	—	HR263-ND	4.15	3.44	2.86	RP13A-12RB-13PA
Fig. 4 - Right Angle Dip with Male Terminal								
13	17.5	23.5	13	HR264-ND	8.11	6.87	5.78	RP13A-12RC-13PB
20	19.5	31.5	15	HR265-ND	8.60	7.48	6.74	RP13A-12RC-20PB
Fig. 5 - Jack with Male Terminal – Crimp								
13	49.1	34.6	6.1	HR266-ND	6.09	5.04	4.20	RP13A-12J-13PC
15	54.1	39.6	6.1	HR267-ND	6.32	5.24	4.36	RP13A-12JD-15PC
15	54.1	39.6	7.1	HR268-ND	6.32	5.24	4.36	RP13A-12JK-15PC
20	52.6	37.4	7.4	HR269-ND	10.72	9.92	8.90	RP13A-12JG-20PC
Pins For 13 and 15 Contacts								
Male - Gold Plating, 24-28 AWG				HR270-ND	.60	.38	.25	RP13-PC-121
Male - Silver Plating, 24-28 AWG				HR271-ND	.41	.26	.18	RP13-PC-122
Female - Gold Plating, 24-28 AWG				HR272-ND	.43	.31	.24	RP13A-SC-121
Female - Silver Plating, 24-28 AWG				HR273-ND	.44	.28	.19	RP13A-SC-122
Pins for Size 13 Superthick Wires								
Male - Silver Plating, 18-22 AWG				HR274-ND	.38	.24	.16	RP13-PC-112
Female - Silver Plating, 18-22 AWG				HR275-ND	.44	.28	.19	RP13A-SC-112
Pins for 20 Contact								
Male - Silver Plating 18-22 AWG				HR276-ND	.35	.22	.15	RP19-PC-112
Female - Silver Plating 18-22 AWG				HR277-ND	.35	.22	.15	RP19-SC-112
Male - Gold Plating 24-30 AWG				HR278-ND	.44	.31	.24	RP19-PC-121
Female - Gold Plating 24-30 AWG				HR279-ND	.44	.31	.24	RP19-SC-121
Male - Silver Plating 24-30 AWG				HR280-ND	.35	.22	.15	RP19-PC-122
Female - Silver Plating 24-30 AWG				HR281-ND	.35	.22	.15	RP19-SC-122

Description	Digi-Key Part No.	Price Each	Hirose Part No.
Tools			
Manual Crimping Tool for RP13A Series 18-22 AWG	H9973-ND	487.02	RP13-TC-11
Manual Crimping Tool for RP13A Series 24-28 AWG	H9972-ND	487.02	RP13-TC-12
Manual Crimping Tool for RP13A Series 18-22 AWG	H9971-ND	487.02	RP13A-TC-11
Manual Crimping Tool for RP13A Series 24-28 AWG	H9970-ND	487.02	RP13A-TC-12
Manual Crimping Tool for RP19 Series 18-22 AWG	H9969-ND	615.94	RP19-TC-11
Manual Crimping Tool for RP19 Series 24-30 AWG	H9968-ND	615.94	RP19-TC-12
Cable Crimping Tool for RP13A Series - Wire Dim. 7.3-8.3 mm	H9967-ND	601.61	RP13A-TC-01
Cable Crimping Tool for RP13A Series - Wire Dim. 7.5-8.6 mm	H9966-ND	601.61	RP13A-TC-02
Extractor - Male Term. RP13 Extractor - Female Term. RP13A	H9965-ND H9964-ND	6.09 4.06	RP13-PC-TP RP13A-SC-TP

RP17 Series

Push-Pull Lock Connectors

Contact Arrangement:

- **Withstanding Voltage:** AC 1000V for 1 minimum
- **Current Capacity:** 5A (AWG18-22) Fits contact No. 2,11, 12 2A (AWG24-30) Fits contact #1, 3, 4, 5, 6, 7, 8, 9, 10
- **Insulation Resistance:** 1000 MΩ minimum at DC500V
- **Contact Resistance:** 15mΩ max at DC1A
- **Applicable Wire:** AWG18-22 (Large barrel) AWG24-30 (Small barrel)

Features: One touch "push-pull lock" coupling mechanism assures easy and quick connection and disconnection. Use applicable cable • AWG18-22 (shielded outer diameter. 1.7mm under) to 3 pins among 12 pins and other applicable cable • AWG24-30 (shielded outer diameter. 1.2mm under) to be usable due to crimp terminal. Mating guide keys is multiple polarizing to be ensured specified position. Simple and slender appearance with internal installed cable clamp. External appearance is matte finish black color. Mating position mark is located with white color, assures easy and quick connection and disconnection.

Fig. 1

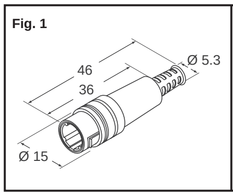


Fig. 2

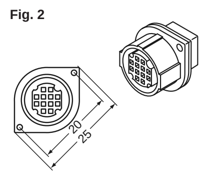


Fig. 3

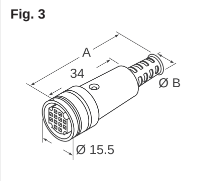


Fig.	No. of Pins	Description	Dim. mm A	B	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	12	Plug - Male Crimp	—	—	HR282-ND	4.70	3.89	3.24	RP17-13P-12PC
	12	Plug, (ESD) Male Crimp	—	—	HR283-ND	5.77	4.78	3.98	RP17A-13P-12PC
2	12	Recept. - Female Crimp	—	—	HR284-ND	1.82	1.52	1.26	RP17-13R-12SC
	12	Recept. - Female Dip	—	—	HR285-ND	4.70	3.89	3.24	RP17-13RA-12SD
	12	Recept. (ESD) Female Dip	—	—	HR286-ND	5.42	4.49	3.74	RP17A-13RA-12SD
3	12	Jack - Female Crimp	44	5.3	HR287-ND	7.22	5.98	4.98	RP17-13J-12SC
	12	Jack - Female Crimp	49	5.1	HR288-ND	6.87	5.69	4.74	RP17-13JA-12SC
Contacts									
Male Pin AWG 18-22					HR289-ND	.44	.28	.19	RP17-PC-112
Male Pin AWG 24-30					HR290-ND	.44	.28	.19	RP17-PC-122
Female Pin AWG 18-22					HR291-ND	.48	.30	.20	RP17-SC-112
Female Pin AWG 24-30					HR292-ND	.51	.32	.22	RP17-SC-122
Tools									
Manual Crimping Tool for AWG 18-22					H9963-ND	487.02			RP17-TC-11
Manual Crimping Tool for AWG 24-30					H9962-ND	487.02			RP17-TC-12
Cable Crimping Tool					H9961-ND	290.06			RP17-TC-01

RP Series Plastic Connectors

12mm Connectors Panel Mount

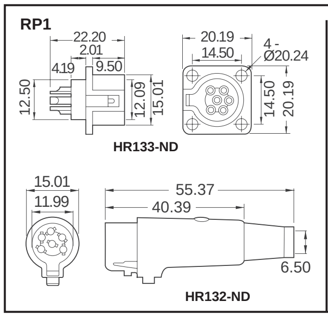
Specifications:

- Operating Voltage: AC150V (6, 7 pin), AC250V (3 pin)
- Current Rating: 5A
- Contact Resistance: 5mΩ max. at DC1A

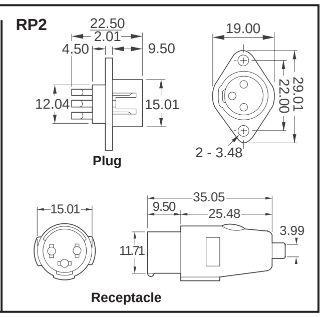
Materials:

- Male Pin: Brass and silver plating
- Female Pin: Phosphor bronze and silver plating

RP1



RP2



Contacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
RP1 Series, 12mm						
6	Plug with Pin Insert	HR133-ND	2.31	1.92	1.42	RPC1-12RB-6P
6	Receptacle with Socket Insert	HR132-ND	4.87	4.25	3.01	RPC1-12P-6S(03)
RP2 Series, 12mm						
3	Plug with Pin Insert	HR135-ND	1.86	1.45	1.11	RPC2-12RB-3P(01)
7	Plug with Pin Insert	HR137-ND	2.83	2.35	1.74	RPC2-12RB-7P(01)
3	Receptacle with Socket Insert	HR134-ND	2.83	2.35	1.74	RPC2-12P-3S
7	Receptacle with Socket Insert	HR136-ND	3.63	3.17	2.25	RPC2-12P-7S

(Continued)

RP34 Series

Compact Plastic Connector for AC Adapter

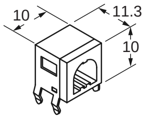
A compact, lightweight, 3-pole plastic connector specially designed for the AC adapter interface for notebook type personal computers. Plug is available in either straight type or right-angle type. Receptacle is very compact with a 10mm sq. mating surface and 11.3mm depth.

• Snap-lock locking and D-shaped mating section for easy insertion and disconnection • One of the three poles is designed for grounding terminal • Snap-fit assembling method for plug eliminates use of screws • External appearance is simplified cubical shape and fits well to any equipment.

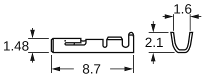
Materials:

• Main Frame and Insulator: Polycarbonate resin containing glass, and PBT resin UL94V-0, black • Male Terminal: Brass with silver plating • Female Terminal: Phosphor bronze with silver plating

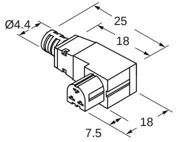
Receptacle



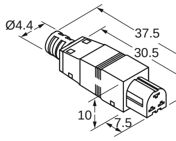
Contact (Female Terminal)



Rt. Angle Plug



Straight Plug



Contacts	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
3	Plug with Socket, Straight	HR170-ND†	2.89	2.41	1.78	RP34-8SP-3SC
4	Plug with Socket, Straight	HR171-ND†	2.54	2.11	1.56	RP34-8SP-4SC
3	Plug with Socket, Right Angle	HR172-ND†	3.25	2.70	2.00	RP34-8P-3SC
3	Receptacle with Pin, PC Mount	HR173-ND	3.19	2.79	1.98	RP34-8R-3PDL
4	Receptacle with Pin, PC Mount	HR174-ND	2.15	1.79	1.32	RP34-8R-4PDL
—	Contact, Female Terminal, Crimped, Tin	HR175-ND	.69	.57	.41	RP34-SC-112

† Contact not included and must be ordered separately (Digi-Key Part No. HR175-ND).

RP34L Series

Connectors for Low Profile Power Supply

Features: Low profile: These receptacles are designed with their installation heights to be shorter than those of conventional RP34 series, such as 6.1mm (for 2-core type) and 5mm (for 3-core type).

Applications: Notebook PCs, portable remote terminals, AV equipment.

Fig. 1

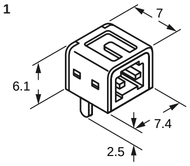


Fig. 2

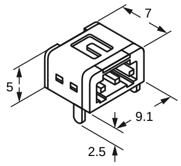
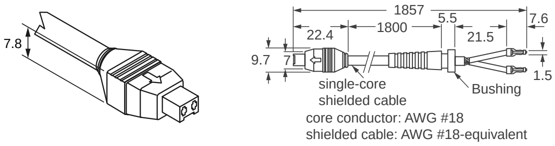


Fig. 3



single-core shielded cable
core conductor: AWG #18
shielded cable: AWG #18-equivalent

Fig. 4

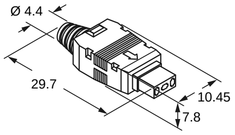


Fig. 5

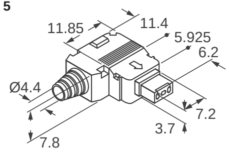


Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
1	2	Receptacle, Dip-Solder Male Terminal	H2348-ND	3.11	2.49	1.93	RP34L-5R-2PD
2	3	Receptacle, Dip-Solder Male Terminal	H2349-ND	2.56	2.05	1.59	RP34L-5R-3PD
3	2	Cable-Integrated Forming Straight Plug, Crimp-Style Female Terminal	H2350-ND	14.86	13.60	12.24	RP34L-5PA-2SC(1857)
4	3	Assembled Straight Plug, Crimp-Style Female Terminal	H2351-ND	3.05	2.45	1.89	RP34L-5P-3SC
		Assembled Straight Plug, Crimp-Style Female Terminal	H2810-ND *NEW!*	3.22	2.50	2.00	RP34L-5PA-3SC
5	3	Assembled Right Angle Plug, Crimp-Style Female Terminal	H2352-ND	3.80	3.04	2.35	RP34L-5LP-3SC
—	—	Crimp Terminal - #18-22 AWG	H2353-ND	2.00	1.54	1.23	RP34L-SC1-212(01)

MQ172 Series SMT

Micro-Miniature Interface Connectors for Power Supply/Signaling

Features: Ultra Miniature/Low Profile SMT Design. **Dimensions:** 3.9mm (H) x 6.4mm (W) x 6mm (D) for the 3 contact type, this series is ideal for today's miniature, lightweight electronic products.

Applications: Portable remote terminals, portable telephones, PHS (personal handy phone system), Notebook PCs, Electronic measuring instruments. **Ratings:** Rated Current: 3A (4-contact type, rated current is 2A, or 3A for optional 2 terminals and 0.5A for other 2 terminals.) Temp. Range: -30°C to +75°C. Rated Volt: DC 30V or less AC 40V or less.

Fig. 1

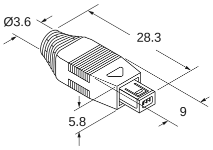


Fig. 2

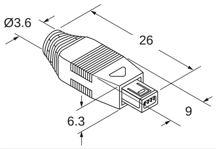


Fig. 3

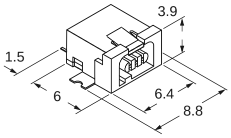


Fig. 4

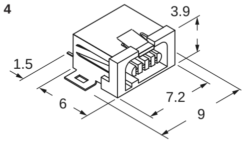


Fig.	No. of Contacts	Description	Digi-Key Part No.	Price Each 1	10	50	100	Hirose Part No.
1	3	Plug, Unshielded	H2790-ND	2.83	2.35	2.01	1.74	MQ172-3SA-CV
2	4	Plug, Shielded	H2791-ND	2.81	2.45	2.04	1.74	MQ172X-4SA-CV
3	3	Receptacle, Unshielded, Loose	H2792-ND	1.95	1.62	1.38	1.20	MQ172-3PA

Fig.	No. of Contacts	Digi-Key Part No.	*Loose Piece* Price Each 100	Hirose Part No.	*Cut Tape*∗ Price Each 10	50	100	*Tape & Reel* † Pricing 1,000	Hirose Part No.
Shielded — Receptacle									
4	4	H2794-ND	1.52	MQ172X-4PA	2.23	1.86	1.65	877.80	MQ172X-4PA(11)

∗ For Cut Tape, add “CT” to the Digi-Key Part No. (H2794CT-ND)
† For Tape & Reel, add “TR” to the Digi-Key Part No. (H2794TR-ND)

NEW! 3200 Series SMT

Fig. 1 — Receptacle

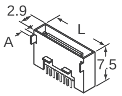
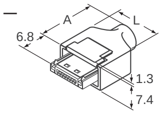


Fig. 2 — Plug



Applications: Portable personal computers, electronic notebooks, various OA equipment, and portable mobile communication equipment.

Specifications: Rated Current: 500mA. Rated Voltage: AC125V. Insulation Voltage: 250 MΩ or more at DC100V. Withstanding Voltage: At AC300V rms for 1 minute.

Materials: *Receptacle:* Insulation: Synthetic resin, Black. Contacts: Copper alloy, Selective gold-plated. Shell: Stainless steel, Solder-plated. ***Plug:*** Insulation: Synthetic resin, Black. Contacts: Copper alloy, Selective gold-plated. Shell: Copper alloy, Solder-plated. Cover: Synthetic resin, Black color.

Fig.	No. of Contacts	Dimensions (mm) A	L	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	8	0.5	12.6	H10011-ND	2.96	2.45	2.04	3260-8S1
	8	1.0	12.6	H10012-ND	2.89	2.41	2.01	3260-8S2
	8	1.5	12.6	H10013-ND	2.96	2.45	2.04	3260-8S3
	10	0.5	14.2	H10007-ND	3.25	2.69	2.24	3260-10S1
	10	1.0	14.2	H10008-ND	3.25	2.69	2.24	3260-10S2
	10	1.5	14.2	H10009-ND	3.25	2.69	2.24	3260-10S3
	12	1.5	14.2	H10010-ND	2.96	2.45	2.04	3260B-12S3(01)
2	8	18	15.1	H10006-ND	2.99	2.48	2.06	3240-8P-C
	10	21	16.7	H10004-ND	5.08	4.20	3.50	3240-10P-C
	12	21	16.7	H10005-ND	5.08	4.20	3.50	3240-12P-TO-C

NEW! 3500 Series SMT

Fig. 1 — Forward Receptacle

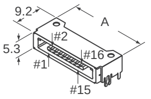


Fig. 2 — Reverse Receptacle

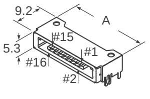


Fig. 3 — SMT Plug

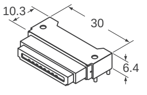
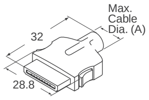


Fig. 4 — Plug



Applications: Hand-held terminals, PDA equipment, notebook computers, mobile communications equipment, office automation equipment, measuring instruments.

Specifications: Rated Voltage: 125VAC. Rated Current: 1A. Operating Temp.: -40°C to +85°C. Insulation Resistance: 1,000 MΩ or greater/ 250VDC. Withstand Voltage: 350 VAC for 1 minute. Contact Resistance: 40 mΩ or less. Insertion/Removal Life: 20,000 times.

Materials: *Receptacles:* Insulation: Synthetic resin, Black color UL94V-0. Contacts: Copper alloy, Selective gold plating 0.2µm over palladium plating. Shell: Stainless steel, Solder plating. ***Plug:*** Insulation: Synthetic resin, Black color UL94V-0. Contacts: Copper alloy, Selective gold plating 0.2µm over palladium plating. Shell: Stainless steel. Lock Spring: Stainless steel. Cover: Synthetic resin, Black color.

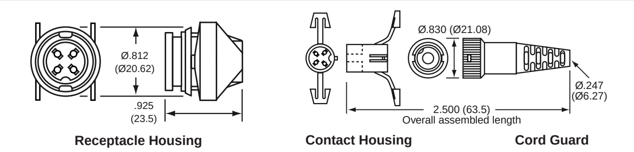
Fig.	No. of Contacts	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	50	Hirose Part No.
1	10	20.8	H10015-ND	5.42	4.49	3.74	3560-10S
	16	25.6	H10018-ND	6.70	5.55	4.62	3560-16S
2	10	20.8	H10016-ND	5.42	4.49	3.74	3560-10SR
	16	25.6	H10019-ND	6.15	5.09	4.24	3560-16SR
	16	25.6	H10020-ND	6.70	5.55	4.62	3560-16SR1
3	16	—	H10017-ND	6.66	5.64	4.74	3560-16P-PG
4	10	ø5.3	H10014-ND	8.58	7.26	6.11	3540-10P-CV
	16	ø6.2	H10000-ND	12.34	11.42	10.25	3540-16P-CV

AMP tyco Electronics
Authorized Distributor

Audio / Instrument Connectors (DIN Type)

Audio/Instrument connectors are economical, quick connect/disconnect attachments for audio and instrument cable having small, flexible, stranded wire conductors. These versatile connectors are ideally suited for application in citizens' band (CB) radios, test equipment, computer input terminals and industrial control equipment.

Material & Finish: Plug/Receptacle: Thermoplastic, black Contacts: Brass, plated. Tin over nickel.



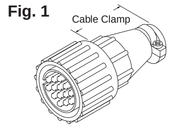
Receptacle Housing   Contact Housing   Cord Guard

No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	50	AMP Part No.
	Plug Assemblies					
4	Contact Housing	A25074-ND	1.55	1.44	1.26	207313-1
5	Contact Housing	A25075-ND	1.08	1.00	.88	207488-1
6	Contact Housing	A25076-ND	2.04	1.89	1.65	207332-1
—	Cord Guard	A25077-ND	1.24	1.15	1.01	207314-1
	Receptacle					
4	Receptacle Housing	A25078-ND	2.23	2.07	1.81	207316-1
5	Receptacle Housing	A25079-ND	2.38	2.21	1.93	207487-1
6	Receptacle Housing	A25080-ND	2.23	2.07	1.81	207333-1
	Crimp Contacts — 22-28 AWG					
—	Pin, Diameter .058" (1.47mm), Loose	A25082-ND	.28	.26	.23	207438-3
—	Socket, Loose	A25083-ND	.30	.28	.25	207437-3
	Tool					
—	Contact Extraction Tool	A25081-ND	55.41	—	—	91136-1

MIL-C-5015 Style Circular Plastic Connectors - Shell Size 20-14

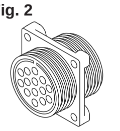
UL File No. E28476   CSA File No. LR7189

Fig. 1



Reverse Sex

Fig. 2



Reverse Sex

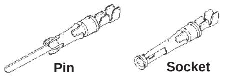
Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.
Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

Fig.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
	Plug Kit, Unassembled				
1	Reverse Sex w/o Cable Clamp Standard Sex w/o Cable Clamp	A25015-ND A25016-ND	11.97 12.08	11.34 11.45	213571-2 213652-1
	Cable Clamps - Shell Size 17				
1	O.D. .453" (11.51mm), for use with 213652-1 O.D. .703" (17.86mm), for use with 213571-2	A1332-ND A1689-ND	2.39 2.70	2.27 2.56	206070-1 206322-1
	Receptacle, Square Flange				
2	Reverse Sex Standard Sex	A25017-ND A25018-ND	6.95 6.82	6.59 6.47	213570-1 213651-1

MIL-C-5015 Style Contacts

Crimp Style, Type III+

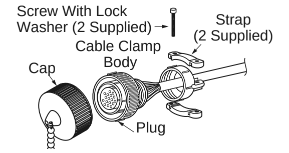
Contact Finish: A: 30µ gold on the electrical engagement area over 50µ nickel **B:** Tin **C:** 30µ selective gold over 30µ nickel



Pin   Socket

Desc.	AWG mm	Ins. Dia. Range Inch	Con. Fin.	Digi-Key Part No.	Loose Pc. Price Each 10	100	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	AMP Part No.
Pin	24-20	.060-.135 (1.52-3.43)	B	—	—	—	—	A25009-ND	193.82	213605-1
Socket	24-20		B	—	—	—	—	A25002-ND	183.22	66563-6
Socket	24-20		B	A25007-ND	.57	.40	66565-2	—	—	—
Socket	24-20		A	—	—	—	—	A25006-ND	244.70	66563-8
Socket	24-20		A	A25008-ND	.64	.45	66565-4	—	—	—
Pin	18-14	110-.150. (2.79-3.81)	B	—	—	—	—	A25011-ND	193.82	213603-1
Socket	18-14		B	—	—	—	—	A25503-ND	148.38	66598-1
Pin	18-14		A	A25131-ND	.55	.38	66602-2	—	—	—
Socket	18-14		A	A25130-ND	.43	.30	66601-1	—	—	—

CPC Connector Accessories, Metal-Shell



Cable clamps are used to prevent excessive strain on cable or wire from being transmitted to the contacts inside the connector housings.
Material: Zinc alloy, nickel plated

Shell Size	Cable Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
	Cable Clamps				
14	.225 - .562 (5.71 - 14.27)	A1626-ND	7.66	7.26	208945-5
22	.325 - .750 (8.26 - 19.05)	A1627-ND	12.54	11.88	208945-7
28	.450 - .938 (11.43 - 23.83)	A1628-ND	16.59	15.72	208945-8
	Protective Caps				
14	—	A25047-ND	12.24	11.60	213823-2
22	—	A1633-ND	23.75	22.50	211903-1
28	—	A1634-ND	21.22	20.11	211904-1

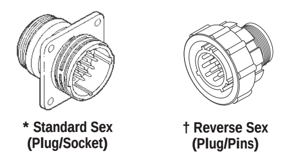
Circular Metal Shell Connectors

Note: Shell Only. Material and Finish: Receptacle: Insert: Black thermoplastic; **Outer Shell:** Aluminum alloy, zinc plated or unplated. **Plug: Insert:** Black thermoplastic; **Outer Shell and Coupling Ring:** Aluminum alloy, zinc plated; **Retainer Ring:** Stainless steel.

Note: Contacts (pins and sockets) must be ordered separately.

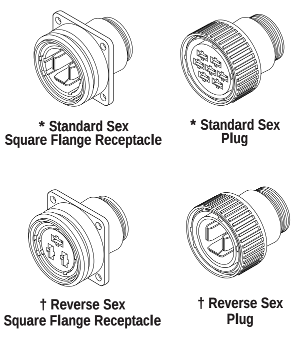
Component Diameter	
Arrangement/ Shell Size	**Overall Dia. Inch (mm)**
14	1.225 (31.12)
22	1.750 (44.45)
28	2.170 (55.12)

Series 1 & 2



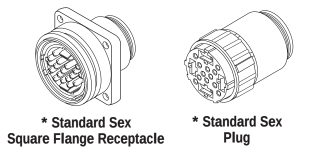
* Standard Sex (Plug/Socket)   † Reverse Sex (Plug/Pins)

Series 3



* Standard Sex Square Flange Receptacle   * Standard Sex Plug
† Reverse Sex Square Flange Receptacle   † Reverse Sex Plug

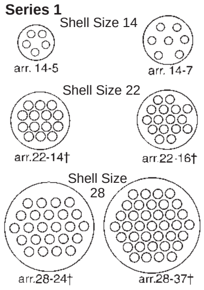
Series 4



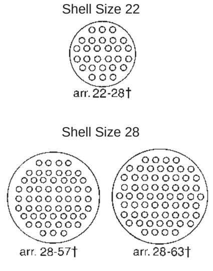
* Standard Sex Square Flange Receptacle   * Standard Sex Plug

* Standard Sex: Pin contacts in receptacle housings; socket contacts in plug housings.
† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.

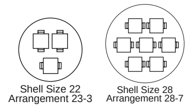
Series 1



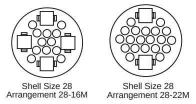
Series 2



Series 3



Series 4



Arrangement No.	Sex	Description (Shell Only)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
		Series 1				
14-5	Standard	Receptacle-Sq. Flanged Plug	A1600-ND A1601-ND	15.27 40.02	14.16 37.09	208719-1 208718-1
	Reverse	Receptacle-Sq. Flanged Plug	A1602-ND A1603-ND	17.40 27.24	16.14 25.26	208721-1 208720-1
14-7	Standard	Receptacle-Sq. Flanged Plug	A1604-ND A1605-ND	17.40 30.55	16.14 28.31	208715-1 208714-1
	Reverse	Receptacle-Sq. Flanged Plug	A1606-ND A1607-ND	19.13 29.87	17.73 27.69	208717-1 208716-1
22-14	Reverse	Receptacle-Sq. Flanged Plug Plug with Tetraseals	A1608-ND A1609-ND A25051-ND‡	20.48 26.90 35.69	18.99 24.93 33.08	208487-1 208486-1 208486-3
22-16	Standard	Receptacle-Sq. Flanged Plug	A1610-ND A1611-ND	22.86 25.87	21.19 23.98	208489-1 208488-1
28-24	Standard	Receptacle-Sq. Flanged Plug	A1612-ND A1613-ND	28.80 36.37	26.70 33.71	208459-1 208457-1
28-37	Standard	Receptacle-Sq. Flanged Plug	A1614-ND A1615-ND	28.78 36.37	26.68 33.71	208471-1 208470-1
	Reverse	Receptacle-Sq. Flanged Plug	A1616-ND A1617-ND	26.18 31.69	24.27 29.38	208473-1 208472-1
		Series 2				
22-28	Standard	Receptacle-Sq. Flanged Plug	A1618-ND# A1619-ND	17.40 69.68	16.14 64.59	208491-1 208490-1
	Reverse	Receptacle-Sq. Flanged Plug	A1620-ND# A1621-ND	16.75 77.33	15.53 71.67	208493-1 208492-1
28-57	Reverse	Receptacle-Sq. Flanged Plug	A1622-ND# A1623-ND	25.58 103.36	23.72 95.80	208475-1 208474-1
28-63	Standard	Receptacle-Sq. Flanged Plug	A1624-ND# A1625-ND	25.58 97.05	23.72 89.95	208477-1 208476-1
		Series 3				
22-3	Standard	Receptacle-Sq. Flanged Plug	A16070-ND A16071-ND	25.01 34.50	23.18 31.98	208495-1 208494-1
	Reverse	Plug	A25052-ND	31.65	29.34	208496-1
28-7	Standard	Receptacle-Sq. Flanged Plug	A16072-ND A16073-ND	22.78 36.76	21.11 34.07	208483-1 208482-1
28-7	Reverse	Receptacle-Sq. Flanged Plug	A16074-ND A16075-ND	27.31 32.23	25.31 29.87	208485-1 208484-1
		Series 4				
28-16	Standard	Receptacle-Sq. Flanged Plug	A16076-ND A16077-ND	28.00 40.47	25.96 37.51	208479-1 208478-1
28-22	Standard	Receptacle-Sq. Flanged Plug	A16078-ND A16079-ND	28.00 38.66	25.96 35.84	208481-1 208480-1

# Aluminum alloy, unplated.   ‡ Tetraseal provides splash-proof sealing between mating metal shells.

AMP tyco Electronics
Authorized Distributor

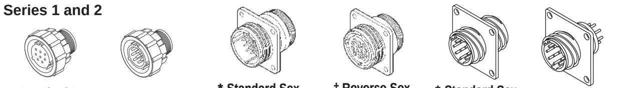
Circular Plastic Connectors

• Lightweight, all-plastic connectors • CPC connectors made of UL recognized, high-grade black thermoplastic material • 94V-1 rated, heat-stabilized, fire-resistant, self-extinguishing • Two connector series for different connection needs: **Series 1** — Standard density applications with Multimate contacts. **Series 2** — High-density applications with size 20 DM and 20 DF contacts, .040" (1.02 mm) dia. • Available in panel-mount, chassis-mount and free hanging versions • Quick-connect/disconnect capability with thread assist, positive detent coupling • Built-in pin and socket protection. Plug or socket half can be "hot", depending on connector sex • 5-key polarization for proper mating of connector halves • Full complement of optional accessories

Component Diameter	
Arrangement/ Shell Size	**Overall Dia. Inch (mm)**
11	.942 (23.93)
13	1.070 (27.18)
17	1.315 (33.40)
23	1.743 (44.2)

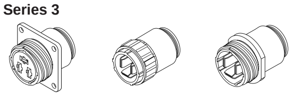
Note: Contacts (pins and sockets) must be ordered separately, unless otherwise noted.

Series 1 and 2



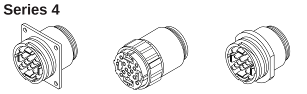
*** Standard Sex (Plug/Socket)** · **† Reverse Sex (Plug/Pins)** · *** Standard Sex Square-Flange Receptacle** · **† Reverse Sex Square-Flange Receptacle** · *** Standard Sex Feed-Thru Receptacle** · *** Standard Sex PC Mount**

Series 3



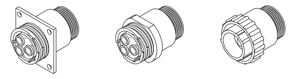
† Reverse Sex Square Flange Receptacle · **† Reverse Sex Plug** · *** Standard Sex Free-Hanging Receptacle**

Series 4



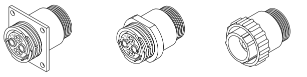
*** Standard Sex Square Flange Receptacle** · *** Standard Sex Plug** · *** Standard Sex Free-Hanging Receptacle**

Series 5



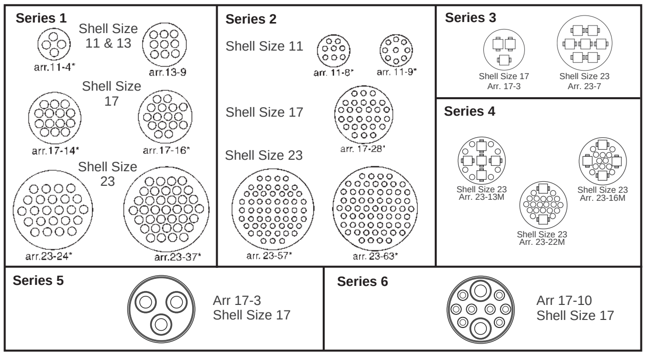
† Rev Sex Square Flange Receptacle · **† Rev Sex Free-Hanging Receptacle** · **† Reverse Sex Plug**

Series 6



† Rev Sex Square Flange Receptacle · **† Rev Sex Free-Hanging Receptacle** · **† Reverse Sex Plug**

*** Standard Sex:** Pin contacts in receptacle housings; socket contacts in plug housings.
† Reverse Sex: Socket contacts in receptacle housings; pin contacts in plug housings.



Series 1 (Shell Only)

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	4	Rev.	Receptacle-Square Flanged	A1360-ND	1.58	1.47	206430-1
			Receptacle-Free Hanging	A1361-ND	1.58	1.47	206430-2
			Recept.-Square Flanged w/Inserts	A25053-ND	3.59	3.33	211102-1
			Plug	A1357-ND	1.93	1.79	206429-1
		Std.	Receptacle-Square Flanged	A1301-ND	1.54	1.43	206061-1
			Receptacle-Free Hanging	A1351-ND	1.58	1.47	206153-1
			Plug	A1300-ND	1.91	1.77	206060-1
13	9	Std.	Receptacle-Square Flanged	A1303-ND	1.66	1.54	206705-1
			Receptacle-Free Hanging	A1352-ND	1.70	1.58	206705-2
			Plug	A1302-ND	2.09	1.94	206708-1
17	14	Rev.	Receptacle-Square Flanged	A1362-ND	1.74	1.62	206043-1
			Receptacle-Free Hanging	A1363-ND	2.19	2.04	206043-3
			Plug	A1358-ND	2.15	2.00	206044-1
	16	Std.	Receptacle-Square Flanged	A1305-ND	1.74	1.62	206036-1
			Receptacle-Free Hanging	A1353-ND	1.74	1.62	206036-3
			Receptacle-Feed-Thru	A25058-ND	32.96	30.56	206552-1
			Plug-Reverse Numbering	A25057-ND	3.77	3.50	206554-1
			Plug	A1304-ND	2.15	2.00	206037-1
23	24	Std.	Receptacle-Square Flanged	A1354-ND	2.15	2.00	206838-1
			Receptacle-Free Hanging	A1355-ND	2.95	2.74	206838-2
			Plug	A1350-ND	2.81	2.61	206837-1
	37	Rev.	Receptacle-Square Flanged	A1364-ND	1.99	1.85	206306-1
			Receptacle-Free Hanging	A1365-ND	2.77	2.57	206306-2
			Plug	A1359-ND	2.52	2.34	206305-1
		Std.	Receptacle-Square Flanged	A1307-ND	1.99	1.85	206151-1
			Receptacle-Free Hanging	A1356-ND	2.17	2.02	206151-2
			Plug	A1306-ND	2.52	2.34	206150-1

Series 1 (Shell & Contacts) - PC Mount with .025" (.64mm) Sq. Sol. Tails

Contact Finish: Duplex plated gold flash on entire contact with 30µ min. gold on contact engagement area, tin-lead on the termination area, all over .50µ min. nickel under plating.

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	4	Rev.	Receptacle	A25054-ND	6.40	5.93	208283-1
13	9	Std.	Receptacle	A25055-ND	5.25	4.87	208223-1
17	16	Std.	Receptacle	A25056-ND	9.16	8.50	207303-3

Series 1 (Shell Only) - VDE Tested Connectors

Designed to meet requirements of VDE as shown in DIN Specification 57627. Recognized under the Component Program of UL for 600VAC & 600VDC service, File No. E28476. Certified by CSA, File No. LR7189.

Shell Size	No. of Contacts	Sex	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
13	7	Std.	Receptacle-Square Flanged	A1635-ND	2.81	2.61	211401-1
			Plug	A1638-ND	2.54	2.36	211399-1
		Rev.	Receptacle-Square Flanged	A1641-ND	2.48	2.30	211398-1
			Plug	A1644-ND	2.93	2.72	211400-1
17	9	Std.	Receptacle-Square Flanged	A1636-ND	2.58	2.40	211767-1
			Plug	A1639-ND	3.40	3.16	211766-1
		Rev.	Receptacle-Square Flanged	A1642-ND	3.28	3.04	211769-1
			Plug	A1645-ND	3.03	2.82	211768-1
23	19	Std.	Receptacle-Square Flanged	A1637-ND	3.36	3.12	211771-1
			Plug	A1640-ND	4.10	3.80	211770-2
		Rev.	Receptacle-Square Flanged	A1643-ND	2.85	2.65	211773-1
			Plug	A1646-ND	3.44	3.20	211772-1

Series 1 (Shell Only) - Sealed Connectors

Sealed CPC connectors are designed to meet the requirements of UL, CSA, and VDE for environmentally sealed connectors used in industrial applications. **Operating Temperature Range:** -50°C - 125°C. **Voltage Rating:** 600 V (AC or DC), **Contacts:** 13 amps., single contact rating at 30°C T-Rise. **Flammability Rating:** UL 94V-0 rated. **Sealing Capability:** Per IP66 and IP67. **Housing Material:** Black, high strength, impact resistant thermoplastic. **Seal:** Gray Elastomer. **Fluid Resistance:** Diesel fuel, gear and engine fuel, gasoline, anti-freeze, hydraulic fluid, water.

Shell Size	No. of Contacts	Sex	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	4	Rev.	Square Flange	A1675-ND	2.71	2.51	206430-3
			Free-Hanging	A1676-ND	5.92	5.50	206430-4
		Std.	Square Flange	A25038-ND	5.78	5.36	206061-2
13	9	Std.	Square Flange	A1669-ND	2.71	2.51	206705-3
			Free-Hanging	A1670-ND	2.77	2.57	206705-4
17	14	Rev.	Square Flange	A1677-ND	2.77	2.57	206043-4
			Free-Hanging	A1678-ND	6.36	5.89	206043-5
	16	Std.	Square Flange	A1671-ND	3.26	3.03	206036-4
			Free-Hanging	A1672-ND	2.85	2.65	206036-5
23	24	Std.	Square Flange	A1673-ND	3.32	3.08	206838-3
			Free-Hanging	A1674-ND	4.49	4.17	206838-4
	37		Square Flange	A25049-ND	7.03	6.52	206151-3

Series 2 (Shell Only) - Sealed Connectors

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	8	Std.	Receptacle-Square Flanged	A1366-ND	2.87	2.66	205841-1
			Receptacle-Free Hanging	A1367-ND	2.85	2.65	205841-2
			Plug	A1368-ND	3.49	3.23	205838-1
			Receptacle-Feed-Thru	A25048-ND	26.98	25.01	206458-1
		Rev.	Receptacle-Square Flanged	A1369-ND	2.91	2.70	206433-1
			Receptacle-Free Hanging	A1370-ND	2.91	2.70	206433-2
			Plug	A1371-ND	3.49	3.23	206434-1
	9	Std.	Receptacle-Square Flanged	A1372-ND	2.81	2.61	206486-1
			Receptacle-Free Hanging	A1373-ND	2.91	2.70	206486-2
			Plug	A1374-ND	3.40	3.16	206485-1
17	28	Std.	Receptacle-Square Flanged	A1375-ND	3.10	2.87	205840-3
			Receptacle-Free Hanging	A1376-ND	3.67	3.41	206152-1
			Receptacle-Feed-Thru	A25046-ND	36.00	33.37	206127-1
			Plug - Dia. 1.349 (34.26) max.	A1377-ND	3.67	3.41	205839-3
			Plug - Dia. 1.315 (33.40) max.	A25044-ND	6.60	6.12	206125-1
		Rev.	Receptacle-Square Flanged	A1378-ND	3.01	2.80	206038-1
			Receptacle-Free Hanging	A1379-ND	3.71	3.44	206038-2
			Plug	A1380-ND	3.61	3.35	206039-1
			Plug-Reverse Numbering	A25045-ND	6.60	6.12	206126-1
23	57	Rev.	Receptacle-Square Flanged	A1381-ND	4.78	4.43	206438-1
			Receptacle-Free Hanging	A1382-ND	7.65	7.09	206438-2
			Plug	A1383-ND	4.92	4.56	206437-1
	63	Std.	Receptacle-Square Flanged	A1384-ND	4.59	4.26	205843-1
			Receptacle-Free Hanging	A1385-ND	4.86	4.51	205843-2
			Plug	A1386-ND	4.88	4.53	205842-1

Series 2 (Shell & Contacts) - PC Mount with .025" (.64mm) Sq. Sol. Tails

Shell Size	No. of Cont.	Sex	Cont. Finish	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
11	8	Rev.	A	Receptacle-Square Flanged	A25040-ND	6.31	5.86	208657-1
11	9	Std.	A	Receptacle-Square Flanged	A25041-ND	6.48	6.01	206852-2
17	28	Rev.	B	Receptacle-Square Flanged	A25042-ND	11.01	10.21	207216-2
23	63	Std.	A	Receptacle-Square Flanged	A25043-ND	21.83	20.24	206455-2

A - Duplex plated gold flash on entire contact with 30µ min. gold on contact engagement area, tin-lead on the termination area, all over 50µ min. nickel under plating. **B** - Plated gold flash on the entire contact, tin-lead on the termination area.

Series 3 and 4 (Shell Only)

Shell Size	No. of Contacts	Sex	Description	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Series 3							
17	3	Std.	Receptacle-Square Flanged	A1681-ND	2.26	2.09	206036-2
			Receptacle-Free Hanging	A1683-ND	2.26	2.09	206207-1
			Plug	A1685-ND	2.93	2.72	206037-2
		Rev.	Receptacle-Square Flanged	A16015-ND	2.26	2.09	206425-1
			Receptacle-Free Hanging	A16017-ND	3.05	2.84	206425-2
			Plug	A16019-ND	4.04	3.75	206426-1
23	7	Std.	Receptacle-Square Flanged	A1682-ND	3.46	3.22	206137-1
			Receptacle-Free Hanging	A1684-ND	3.55	3.29	206137-2
			Plug	A1686-ND	3.20	2.97	206136-1
		Rev.	Receptacle-Square Flanged	A16016-ND	2.81	2.61	206227-1
			Receptacle-Free Hanging	A16018-ND	3.87	3.60	206227-2
			Plug	A16020-ND	3.26	3.03	206226-1
Series 4							
23	13	Std.	Receptacle-Square Flanged	A16029-ND	4.14	3.84	211825-1
			Receptacle-Free Hanging	A16032-ND	3.44	3.20	211825-2
			Plug	A16035-ND	7.18	6.65	211824-1
	16	Std.	Receptacle-Square Flanged	A16030-ND	2.71	2.51	207486-1
			Receptacle-Free Hanging	A16033-ND	3.87	3.60	207486-2
			Plug	A16036-ND	3.14	2.91	207485-1
	22	Std.	Receptacle-Square Flanged	A16031-ND	2.62	2.44	206613-1
			Receptacle-Free Hanging	A16034-ND	3.57	3.31	206613-3
			Plug	A16037-ND	3.75	3.48	206612-1

(Continued)

AMP tyco Electronics Authorized Distributor

Series 5 and 6 Sealed Circular Plastic Connector *(Cont.)*

Sealed CPC connectors are the latest additions to the growing family of Circular Plastic Connectors. Sealed CPC connectors were developed as part of the Series 5 and 6 product line. Sealed CPC connectors are designed to meet the requirements of UL, CSA, and VDE. Sealed CPC connectors incorporated the latest technology in thermoplastic design and use the POWERBAND precision formed high current contact.

Shell Size	No. of Cont.	Sex	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
			Series 5				
17	3	Rev	Square Flange, Recept.	A25781-ND	3.96	3.67	213889-2
17	3	Rev	Free-Hanging, Recept.	A25782-ND	3.96	3.67	213890-2
17	3	Rev	Plug Assembly	A25783-ND	6.97	6.46	213905-1
			Series 6				
17	10	Rev	Square Flange, Recept.	A25785-ND	3.75	3.48	213893-2
17	10	Rev	Free-Hanging, Recept.	A25786-ND	4.53	4.20	213894-2
17	10	Rev	Plug Assembly	A25787-ND	8.59	7.97	213906-1

Accessories

Fig. 1

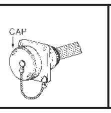


Fig. 2

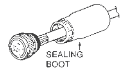


Fig. 3

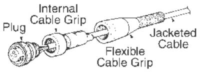


Fig. 4

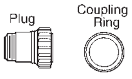


Fig. 5

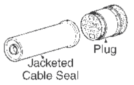


Fig. 6

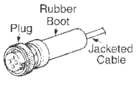


Fig. 7

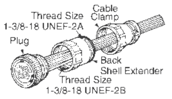


Fig. 8

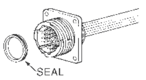


Fig. 9

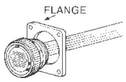
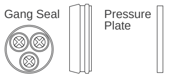


Fig.	Description	Shell Size	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Sealing Cap for Receptacles, Plastic Strap	11	A16038-ND	2.71	2.51	206903-1
		13	A16039-ND	2.44	2.27	211870-1
		17	A16040-ND	2.91	2.70	207445-1
		23	A16041-ND	3.34	3.10	207446-1
1	Sealing Cap for Receptacles, Metal Bead Chain	11	A16042-ND	4.49	4.17	208800-1
		13	A16043-ND	5.33	4.94	213485-1
		17	A16044-ND	4.33	4.01	208652-1
		23	A16045-ND	5.21	4.83	208680-1
		23	A20537-ND†	6.68	6.20	208680-2
2	Cable Entry Seal, Heat Shrinkable Sealing Boots	11	A16046-ND	6.15	5.70	54010-1
		13	A16047-ND	6.77	6.27	54123-1
		17	A16048-ND	6.66	6.18	54011-1
		23	A16049-ND	7.48	6.94	54012-1
3	Flexible Cable Boot, Black Thermoplastic	11	A16050-ND	1.78	1.66	207489-1
		17	A16052-ND	3.20	2.97	207241-1
3	Internal Cable Grip, Black Thermoplastic	11	A16051-ND	1.93	1.79	207490-1
	Internal Cable Grip, Blk. Thermoplastic 8.25mm	17	A16053-ND	2.69	2.49	207387-1
	Internal Cable Grip, Blk. Thermoplastic 9.78mm	17	A16054-ND	2.56	2.38	207387-2
4	Replacement Coupling Ring	11	A16055-ND	.75	.70	213811-1
		13	A16056-ND	1.06	.99	213813-1
		17	A16057-ND	.85	.79	213810-1
		23	A16058-ND	1.35	1.26	213812-1
5	Jacketed Cable Seals, Cable Dia. 7.62mm	23	A16063-ND	12.30	11.40	207052-1
	Jacketed Cable Seals, Cable Dia. 11.43mm	23	A16064-ND	17.51	16.23	207052-2
	Jacketed Cable Seals, Cable Dia. 15.24mm	23	A16065-ND	9.76	9.05	207052-3
6	Rubber Boots	11	A16059-ND*	3.44	3.19	206304-1
7	Back Shell Extenders	23	A16062-ND	3.20	2.97	207055-1
8	Peripheral Seals for Receptacles Only	11	A1335-ND	.58	.47	206403-1
		13	A1336-ND	.86	.69	206403-4
		17	A1337-ND	.66	.53	206403-2
		23	A1338-ND	1.20	.96	206403-3
9	Panel Mount Flanges for Plugs Only	11	A25003-ND	3.15	2.99	207299-1
		13	A25004-ND	2.89	2.74	207299-2
		17	A25019-ND	3.04	2.88	207299-3
		23	A25020-ND	1.98	1.88	207299-4
	Flange Gasket	17	A25784-ND	.89	.83	81665-2
	Keying Plug, Series 1 & 4		A16066-ND	.15	.14	200821-1
	Keying Plug, Series 2		A16067-ND	.35	.33	206509-1
	Keying Plug, Series 3 & 4 (Socket Cavities)		A16068-ND	.55	.51	206508-1
	Keying Plug, Series 3 & 4 (Pin Cavities)		A16069-ND	1.59	1.48	207597-1

* Rubber boots are used with jacketed cable to provide splashproof connections for Series 1 & 3 connectors. Black neoprene.

† For use with series 2 only.

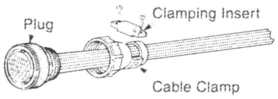
Wire Entry Seal Kits



Includes one Gang Seal and one pressure plate marked for cavity identification. **Material and Finish:** Seal - Elastomer, red iron oxide. Pressure Plate - Nylon, black

Shell Size	Insulation Dia. Inch (mm)	Seal Dia. Inch (mm)	Digi-Key Part No.	Price Each 1	25	50	AMP Part No.
			Kit for Pins				
13-9	.075 - .125 (1.91 - 3.18)	.681 (17.30)	A25059-ND	3.75	3.48	3.04	213926-1
17-3	.178 - .265 (4.52 - 6.73)	.790 (20.07)	A25060-ND	5.56	5.15	4.50	213899-1
17-10	.150 - .265 (3.81 - 6.73)	.790 (20.07)	A25788-ND	3.55	3.29	2.88	213900-1
17-14	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25061-ND	3.83	3.56	3.11	213919-2
17-16	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25062-ND	3.83	3.56	3.11	213920-2
			Kit for Sockets				
13-9	.075 - .125 (1.91 - 3.18)	.681 (17.30)	A25063-ND	3.75	3.48	3.04	213925-1
17-3	.178 - .265 (4.52 - 6.73)	.790 (20.07)	A25060-ND	5.56	5.15	4.50	213899-1
17-10	.150 - .265 (3.81 - 6.73)	.790 (20.07)	A25788-ND	3.55	3.29	2.88	213900-1
17-14	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25064-ND	5.25	4.87	4.25	213919-1
17-16	.075 - .125 (1.91 - 3.18)	.790 (20.07)	A25065-ND	9.08	8.42	7.36	213920-1

Cable Clamps – Plastic Shell

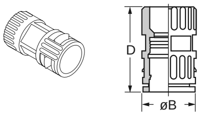


Cable clamps are used to prevent excessive strain on cable or wire from being transmitted to the contacts inside the connector housings. These may be used on all receptacles and plugs. Two screws included.

Shell Size	Cable Outer Dia. Inch (mm)	Screw Length Inch (mm)	Digi-Key Part No.	Price Each 1	25	AMP Part No.
11	.329 (8.36)	.375 (9.53)	A1330-ND	2.38	2.25	206062-1
11	.329 (8.36)	.500 (12.7)	A25021-ND	2.38	2.25	206062-3
13	.453 (11.51)	.500 (12.7)	A1331-ND	2.39	2.27	206966-1
17	.453 (11.51)	.500 (12.7)	A1332-ND	2.39	2.27	206070-1
23	.703 (17.86)	.625 (15.88)	A1334-ND	2.51	2.38	206138-1
11	.453 (11.51)	.500 (12.7)	A1687-ND	2.38	2.25	206358-1
13	.703 (17.86)	.625 (15.88)	A1688-ND	2.55	2.42	207008-1
17	.703 (17.86)	.625 (15.88)	A1689-ND	2.70	2.56	206322-1
23	1.125 (28.58)	.625 (15.88)	A1690-ND	3.15	2.99	206512-1
23	1.125 (28.58)	1.00 (25.4)	A16061-ND*	3.98	3.69	207774-1

* Self-Centering

Flexible Tubing Connectors To be used with all circular plastic connectors



Characteristics: • One-piece plastic quick screw connection with UNEF-inner thread • **Material:** High-quality, impact resistant plastic material (PA); Sealing: Santoprene® • **Properties:** Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions • **Temperature Range:** From approx. -30°C up to +100°C • **Color:** Black

Shell Size	Trade Size Tubing Outer – Dia.	Inner Thread UNEF	Dimensions (mm) Largest Outer øB	Total Length D	Digi-Key Part No.	Price Each 1	25	AMP Part No.
11	0.51” (13.0mm)	5/8” - 24	20.6	36.6	A16102-ND	2.80	2.45	1-969807-2
13	0.62” (15.8mm)	3/4” - 20	23.6	41.7	A16103-ND	2.94	2.58	1-969809-3
17	0.83” (21.2mm)	15/16” - 20	30.1	50.3	A16104-ND	3.34	2.93	1-969811-4
23	1.12” (28.5mm)	1” - 20	37.0	54.0	A16105-ND	5.26	4.61	2-969813-5

NOTE: Must also be used with Flexible Corrugated Tubing (Mfg. #s 969789-2, 969789-3, 969789-4 & 969789-5).

AMP tyco Electronics Authorized Distributor

Flexible Corrugated Tubing and Connectors

Fig. 1 - All-plastic Tubing

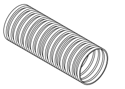


Fig. 2 - Straight Tubing Connections

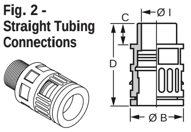
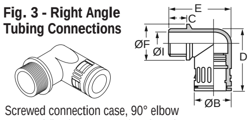


Fig. 3 - Right Angle Tubing Connections



Screwed connection case, 90° elbow type and fixed PG connecting thread DIN 40430

PLASTIC TUBING: • **Properties:** Air- and liquid-tight, oil resistant up to +80°C, benzine resistant, highly resistant to acids and solvents, ozone resistant, free of silicon, cadmium and halogen, self-extinguishing and flame retarding • **Temperature Range:** Approximately -40°C to +115°C, temporarily withstands temperatures up to approx. +150°C • **Color:** Black • UL File No. E86359, GGVS certified

CONNECTIONS: • One-piece plastic quick screw connection with PG-thread acc. to DIN 40430 for corrugated tubings • **Material:** High-quality, impact resistant plastic material (PA); Sealing: Santoprene® • **Properties:** Easy to assemble due to one-piece screw connection with push-in lock. Simple disconnect by displacing the snap-in sleeve. Smallest outer dimensions to be used under confined conditions • **Temperature Range:** From approximately -30°C up to +100°C • **Color:** Black • GGVS certified

Trade Size Tubing Outer Dia. - In. (mm)	Bending Radius (mm) ±10%	Digi-Key Part No.	Note: X in Part No. = Meters Per Roll Price Per Roll 5 meter	10 meter	25 meter	50 meter	AMP Part No.
		Fig. 1 — All-Plastic Tubing					
0.51 (13.0)	20	A16090-X-ND	12.45	22.83	51.88	83.00	969789-2
0.62 (15.8)	35	A16091-X-ND	15.75	28.88	65.63	105.00	969789-3
0.83 (21.2)	45	A16092-X-ND	25.65	47.03	106.88	171.00	969789-4
1.12 (28.5)	55	A16093-X-ND	40.35	73.98	168.13	269.00	969789-5

Trade Size Tubing Outer – Dia. Inch (mm)	Thread DIN 40430 PG	Smallest Inner øI	Dimensions (mm) Largest Inner øB	Thread Length C	Total Length D	Total Height E	Connection øF	Digi-Key Part No.	Price Each 1	25	AMP Part No.
				Fig. 2 — Panel Mount Straight Tubing Connections							
0.51 (13.0)	9	10.0	20.0	10	35.0	—	—	A16094-ND	1.78	1.71	969803-2
0.62 (15.8)	11	12.5	23.0	10	37.0	—	—	A16095-ND	1.82	1.75	969803-3
0.83 (21.2)	16	17.0	29.5	12	43.5	—	—	A16096-ND	1.90	1.83	969803-4
1.12 (28.5)	21	23.5	37.0	12	46.0	—	—	A16097-ND	3.33	3.20	969803-5
				Fig. 3 — Panel Mount Right Angle Tubing Connections							
0.51 (13.0)	9	12.0	20.0	10	36.0	34.0	20.0	A16098-ND	3.25	3.13	969817-2
0.62 (15.8)	11	15.5	23.0	10	42.0	37.5	23.0	A16099-ND	3.38	3.26	969817-3
0.83 (21.2)	16	18.0	29.5	12	50.0	47.0	27.0	A16100-ND	3.46	3.34	969817-4
1.12 (28.5)	21	24.0	37.0	12	57.0	55.0	34.0	A16101-ND	5.78	5.56	969817-5

Note: Must order counternuts and seals separately.

Thread	Dimensions (mm) Thickness	Hex Width	Height	Outer Dia.	Inner Dia.	Digi-Key Part No.	Price Each 1	25	AMP Part No.
				Counternuts					
9	5.0	22	—	—	—	A16106-ND	.23	.21	796260-2
11	5.0	24	—	—	—	A16107-ND	.24	.22	796260-3
16	6.0	30	—	—	—	A16108-ND	.26	.25	796260-5
21	7.0	36	—	—	—	A16109-ND	.41	.39	796260-6
				Flat O-Ring Seal					
9	—	—	1.6	19	15	A16110-ND	.42	.40	796257-2
11	—	—	1.8	23	18	A16111-ND	.46	.44	796255-2
16	—	—	1.8	27	21.5	A16112-ND	.49	.47	796255-3
21	—	—	2.2	43	34	A16113-ND	.82	.77	796258-6

Contacts (Pins and Sockets)

Fig. 1 – Crimp

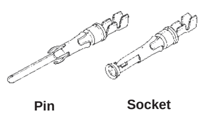


Fig. 2 – Solder Type

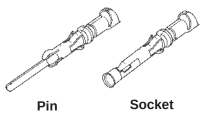


Fig. 3 – Solder Tab

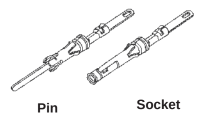


Fig. 4 – Crimp With Insulation Support

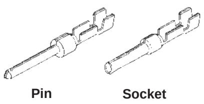


Fig. 5 – Solder Cup

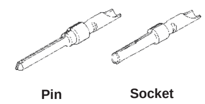
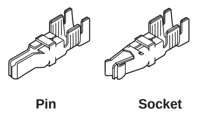


Fig. 6 – Power Contacts



CONTACT FINISH:

A Selective gold, gold flash with 30µ gold on electrical engagement area over 50µ nickel on entire contact.
B Duplex plated 30µ gold in mating area over 50µ nickel on contact body; bright tin-lead on solder tab.
C 15µ gold in the mating area over 50µ nickel.
D Selective gold, 30µ gold over 30µ nickel.
E .000100 (0.00254) silver plated contacts with lubricant added.
F Bright tin-lead on entire contact.

Series 1 Signal, Type III+, Precision Formed

Pin Diameter: .062 (1.57mm) **Crimp Contacts:** Brass **Test Current:** 13 Ampere **Solder Contacts & Grounding Pin:** Copper alloy, plated tin or gold **Spring:** Stainless Steel

Desc.	Wire Size AWG	Ins. Dia. Inch	Cont. Fin.	Digi-Key Part No.	Loose Pc. Price Each 10	100	AMP Part No.	Digi-Key Part No.	Strip Form Pricing 1,000	AMP Part No.
Crimp, Fig. 1										
Pin	30-26	.040-.060	F	—	—	—	—	A25084-ND	144.66	66425-6
Socket			F	—	—	—	—	A25085-ND	186.67	66424-6
Pin			C	—	—	—	—	A25086-ND	186.86	66425-7
Socket			C	—	—	—	—	A25087-ND	232.14	66424-7
Pin			C	A25088-ND	.96	.67	66429-3	—	—	—
Socket			C	A25089-ND	1.33	.93	66428-3	—	—	—
Pin			A	—	—	—	—	A25090-ND	196.69	66425-8
Socket			A	—	—	—	—	A25091-ND	244.40	66424-8
Pin			A	A25092-ND	1.01	.70	66429-4	—	—	—
Socket			A	A25093-ND	1.58	1.10	66428-4	—	—	—
Pin	30-26	.014-.030	C	—	—	—	—	A25094-ND	186.67	66393-7
Pin			A	—	—	—	—	A25095-ND	196.50	66393-8
Socket			A	—	—	—	—	A25096-ND	244.19	66394-8
Pin			A	A25097-ND	.84	.59	66406-4	—	—	—
Socket			A	A25098-ND	1.03	.72	66405-4	—	—	—
Pin	26-24	.035-.055	F	—	—	—	—	A25099-ND	116.02	66106-6
Socket			F	—	—	—	—	A25100-ND	183.20	66108-6
Pin			F	A1324-ND	.37	.26	66107-2	—	—	—
Socket			F	A1654-ND	.66	.46	66109-2	—	—	—
Pin			C	—	—	—	—	A25101-ND	186.67	66106-7
Socket			C	—	—	—	—	A25102-ND	232.00	66108-7
Pin			C	A25103-ND	.52	.36	66107-3	—	—	—
Socket			C	A25104-ND	.62	.43	66109-3	—	—	—
Pin			A	—	—	—	—	A25105-ND	196.50	66106-8
Socket			A	—	—	—	—	A25106-ND	244.19	66108-8
Pin			A	A1344-ND	.54	.38	66107-4	—	—	—
Socket			A	A1345-ND	.65	.46	66109-4	—	—	—
Pin	24-20	.040-.080	F	—	—	—	—	A25022-ND	118.56	66102-7
Socket			F	—	—	—	—	A25023-ND	148.38	66104-7
Pin			F	A1322-ND	.36	.25	66103-2	—	—	—
Socket			F	A1323-ND	.43	.30	66105-2	—	—	—
Pin			C	—	—	—	—	A25024-ND	186.86	66102-8
Socket			C	—	—	—	—	A25025-ND	232.14	66104-8
Pin			C	A25107-ND	.52	.36	66103-3	—	—	—
Socket			C	A25108-ND	.62	.43	66105-3	—	—	—
Pin			A	—	—	—	—	A25026-ND	196.69	66102-9
Socket			A	—	—	—	—	A25027-ND	244.40	66104-9
Pin			A	A1342-ND	.55	.38	66103-4	—	—	—
Socket			A	A1343-ND	.65	.46	66105-4	—	—	—
Pin	24-20	.060-.120	F	—	—	—	—	A25109-ND	144.66	66564-6
Socket			F	—	—	—	—	A25002-ND	183.22	66563-6
Pin			F	A25111-ND	.36	.25	66566-2	—	—	—
Socket			F	A25007-ND	.57	.40	66565-2	—	—	—
Pin			A	—	—	—	—	A25113-ND	198.96	66564-8
Socket			A	—	—	—	—	A25006-ND	244.70	66563-8
Pin			A	A25115-ND	.56	.39	66566-4	—	—	—
Socket			A	A25008-ND	.64	.45	66565-4	—	—	—
Pin	24-20	.080-.100	F	—	—	—	—	A25117-ND	137.50	66332-5
Socket			F	—	—	—	—	A25118-ND	148.38	66331-5
Pin			F	A1647-ND	.36	.25	66400-1	—	—	—
Socket			F	A1656-ND	.43	.30	66399-1	—	—	—
Pin			C	—	—	—	—	A25119-ND	187.17	66332-7
Socket			C	—	—	—	—	A25120-ND	232.14	66331-7
Pin			C	A25121-ND	.52	.36	66400-3	—	—	—
Socket			C	A25122-ND	.62	.43	66399-3	—	—	—
Pin			A	—	—	—	—	A25028-ND	197.04	66332-8
Socket			A	—	—	—	—	A25029-ND	244.40	66331-8
Pin			A	A1648-ND	.55	.38	66400-4	—	—	—
Socket			A	A1661-ND	.65	.46	66399-4	—	—	—
Crimp, Fig. 1 (Cont.)										
Pin	18-16	.080-.100	F	—	—	—	—	A25030-ND	118.56	66098-7
Socket			F	—	—	—	—	A25493-ND	137.06	66100-7
Pin			F	A1649-ND	.36	.25	66099-2	—	—	—
Socket			F	A1665-ND	.43	.30	66101-2	—	—	—
Pin			C	—	—	—	—	A25494-ND	187.17	66098-8
Socket			C	—	—	—	—	A25495-ND	232.45	66100-8
Pin			C	A25123-ND	.61	.43	66099-3	—	—	—
Socket			C	A25124-ND	.62	.43	66101-3	—	—	—
Pin			A	—	—	—	—	A25496-ND	197.04	66098-9
Socket			A	—	—	—	—	A25497-ND	244.70	66100-9
Pin			A	A1340-ND	.55	.38	66099-4	—	—	—
Socket			A	A16080-ND	.65	.46	66101-4	—	—	—
Pin	18-14	.080-.100	F	—	—	—	—	A25498-ND	118.56	66359-6
Socket			F	—	—	—	—	A25499-ND	148.38	66358-6
Pin			F	A1320-ND	.36	.25	66361-2	—	—	—
Socket			F	A1321-ND	.42	.30	66360-2	—	—	—
Pin			C	—	—	—	—	A25125-ND	178.45	66359-9
Socket			C	—	—	—	—	A25126-ND	232.27	66358-9
Pin			C	A25127-ND	.52	.37	66361-3	—	—	—
Socket			C	A25128-ND	.77	.54	66360-3	—	—	—
Pin			A	—	—	—	—	A25500-ND	187.89	1-66359-0
Socket			A	—	—	—	—	A25501-ND	244.50	1-66358-0
Pin			A	A1650-ND	.55	.39	66361-4	—	—	—
Socket			A	A1341-ND	.81	.57	66360-4	—	—	—
Pin	18-14	.110-.150	F	—	—	—	—	A25502-ND	118.56	66597-1
Socket			F	—	—	—	—	A25503-ND	148.38	66598-1
Pin			F	A25129-ND	.36	.25	66602-1	—	—	—
Socket			F	A25130-ND	.43	.30	66601-1	—	—	—
Pin			A	—	—	—	—	A25504-ND	197.34	66597-2
Socket			A	—	—	—	—	A25505-ND	241.90	66598-2
Pin			A	A25131-ND	.55	.38	66602-2	—	—	—
Socket			A	A25012-ND	.61	.43	66601-2	—	—	—
Grounding Pin (make first - break last)										
Pin	24-20	.045-.070	A	A25133-ND	1.92	1.34	164163-2	—	—	—
Pin	18-16	.078-.098	A	A25134-ND	1.28	.89	164161-4	—	—	—
Pin			A	A25600-ND	1.42	.99	164164-2	—	—	—
Solder Type, Fig. 2										
Pin	26-20	.005-.024	A	A25136-ND	.87	.61	66182-1	—	—	—
Socket			D	A25137-ND	1.09	.76	66183-1	—	—	—
Pin	18-16	.03-.055	A	A25138-ND	.87	.61	66180-1	—	—	—
Socket			D	A25139-ND	1.09	.76	66181-1	—	—	—
Solder Tab, Fig. 3										
Pin	—	—	B	A16081-ND	1.45	1.01	202236-1	—	—	—
Socket	—	—	B	A1668-ND	1.61	1.13	202237-1	—	—	—
Pin	—	—	F	A1629-ND	.82	.57	202236-2	—	—	—
Socket	—	—	F	A1631-ND	.90	.63	202237-2	—	—	—

Series 2

Pin Diameter: .040 (1.02mm) **Test Current:** 7.5 Ampere **Material: Pin Body** - Brass, **Socket** - Phosphor bronze

Desc.	Wire Size AWG	Ins. Dia. Inch	Contact Finish	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Crimp, Fig. 4							
Pin	28-24	.040 max.	A	A1630-ND	.20	.14	66507-9
Socket			A	A1632-ND	.34	.24	66505-9
Pin			D	A25000-ND	.25	.15	5-66507-9
Socket			D	A25001-ND	.27	.17	5-66505-9
Pin	24-20	.050 max.	A	A1679-ND	.18	.17	66506-9
Socket			A	A1680-ND	.19	.17	66504-9
Pin			D	A1008-ND	.18	.17	1-66506-0
Socket			A	A1009-ND	.19	.17	1-66504-0
Socket			D	A25005-ND	.18	.12	5-66504-7
Solder, Fig. 5							
Pin	24-20	.040 max.	D	A1028-ND	.25	.15	66570-3
Socket			D	A1029-ND	.29	.27	66569-3

Series 3

Desc.	Wire Size AWG	Ins. Dia. Inch	Contact Finish	Digi-Key Part No.	Price Each 10	100	AMP Part No.
Crimp, Fig. 6							
Pin	16-12	.135-.160	F	A16021-ND	1.92	1.34	66261-1
Socket			F	A16025-ND	3.49	2.44	66740-8
Pin			D	A16022-ND	4.81	3.36	66261-2
Socket			D	A16026-ND	5.94	4.15	66740-6
Pin			D	A25031-ND§	5.45	3.81	66262-2
Pin			E	A25032-ND#	2.42	1.69	66261-4
Socket			E	A25033-ND#	4.07	2.84	66740-2
Pin			E	A25034-ND§#	5.02	3.51	66262-4
Pin	10	.190-.220	F	A16023-ND	1.92	1.34	66259-1
Socket			F	A16027-ND	4.53	3.17	66741-8
Pin			D	A16024-ND	4.94	3.45	66259-2
Socket			D	A16028-ND	6.58	4.60	66741-6
Pin			E	A25035-ND#	2.42	1.69	66259-4
Socket			E	A25036-ND#	5.49	3.84	66741-2

# Recommended for high current/vibration applications where corrosion is a problem.
§ Ground contacts

(Continued)

AMP tyco Electronics Authorized Distributor

Contacts (Pins and Sockets) *(Cont.)*

Series 4 – Crimp (Series 4 requires a combination of Fig. 1 & 6.)

Descrip.	Wire Size AWG	Insul. Dia. Inch	Contact Finish	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Crimp, Requires a Combination of Fig. 1 & Fig. 6							
Pin	18-14	.080-.100	F	A1320-ND	.36	.25	66361-2
Socket			F	A1321-ND	.42	.30	66360-2
Socket			A	A1341-ND	.81	.57	66360-4
Pin			A	A1650-ND	.55	.39	66361-4
Pin	18-16	.080-.100	A	A1340-ND	.55	.38	66099-4
Socket			A	A16080-ND	.65	.46	66101-4
Pin			F	A1649-ND	.36	.25	66099-2
Socket			F	A1665-ND	.43	.30	66101-2
Pin	24-20	.080-.100	A	A1648-ND	.55	.38	66400-4
Socket			A	A1661-ND	.65	.46	66399-4
Pin			F	A1647-ND	.36	.25	66400-1
Socket			F	A1656-ND	.43	.30	66399-1
Socket	26-24	.035-.055	F	A1654-ND	.66	.46	66109-2
Pin	24-20	.040-.080	F	A1322-ND	.36	.25	66103-2
Pin			A	A1342-ND	.55	.38	66103-4
Socket			F	A1323-ND	.43	.30	66105-2
Socket			A	A1343-ND	.65	.46	66105-4
Pin	26-24	.035-.055	F	A1324-ND	.37	.26	66107-2
Pin			A	A1344-ND	.54	.38	66107-4
Socket			A	A1345-ND	.65	.46	66109-4

AMP tyco Electronics Authorized Distributor

Series 1 Coaxial, Subminiature, Precision Formed, Crimp

Outer Shell: Brass per MIL-C-50

Center Conductor: Beryllium copper per QQ-C-553 (Pin); Brass per QQ-B-626 (Socket)

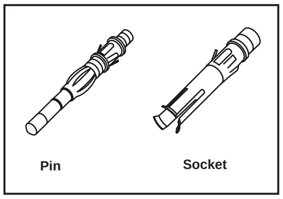
Inner Dielectric: Polypropylene

Retention Spring: Stainless steel per QQ-S-766

Ferrule: Tin-lead per MIL-T-10727 over Copper per QQ-C-576

Contact Finish: Gold/Nickel; Gold/Copper (30µ gold over 50µ nickel–outer shell and socket center conductor; 30µ gold over 100µ copper–pin center conductor)

NOTE: **A ferrule is required for each pin and socket.**



Coaxial Cable

Description	Cable Size RG/U	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Contacts					
Pin	178, 196 196 (Double Braid)	A25144-ND	12.65	8.84	226537-2
Socket	178, 196 196 (Double Braid)	A25147-ND	9.69	6.77	51565-2
Pin	174, 188, 316 174 (Double Braid) 179, 187 187 (Double Braid), 161	A25145-ND	8.71	6.09	226537-1
Socket	174, 188, 316 174 (Double Braid) 179, 187 187 (Double Braid), 161	A25148-ND	7.38	5.16	51565-1
Ferrules					
178, 196 RG/U		A25150-ND	.39	.28	1-332057-0
174, 188, 316, 179, 187, 161 RG/U		A25151-ND	.64	.45	1-332056-0

Twisted Pair and Shielded Wire

Description	Cable Size RG/U	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Contacts					
Pin	30, 28 (Twisted Pair, Solid) 28 (Twisted Pair, Stranded .005 Dia.) 26 (Twisted Pair, Solid or Stranded .063 Dia.)	A25146-ND	10.01	7.00	226537-3
Socket	30, 28 (Twisted Pair, Solid) 28 (Twisted Pair, Stranded .005 Dia.) 26 (Twisted Pair, Solid or Stranded .063 Dia.)	A25149-ND	11.31	7.90	51565-3
Pin	26 (Shielded, .075 Max. O.D.)	A25145-ND	8.71	6.09	226537-1
Socket	26 (Shielded, .075 Max. O.D.)	A25148-ND	7.38	5.16	51565-1
Ferrule					
Use for Twisted Pair and Shielded Wire		A25150-ND	.39	.28	1-332057-0

Series 1 Signal, Type II, Screw Machined, Crimp

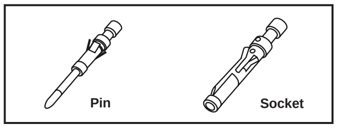
Pin Diameter: 1.57

Test Current: 13 Ampere

Contact Body: Brass

Retention Spring: Stainless steel

Contact Finish: 30µ gold over 50µ nickel. Gold thickness controlled on socket O.D.



Descrip.	Wire Size AWG	Insulation Dia. Inch	Digi-Key Part No.	Price Each 10	Price Each 100	AMP Part No.
Crimp						
Pin	28-24	.035-.055	A25110-ND	2.64	1.85	201611-1
Socket			A25112-ND	2.12	1.48	201613-1
Pin	24-20	.040-.062	A25114-ND	1.49	1.04	201578-1
Socket			A25116-ND	1.91	1.34	201580-1
Pin		.055-.088	A25132-ND	1.57	1.10	201330-1
Socket			A25541-ND	2.01	1.41	201328-1
Pin	18 (Two)	No Ins. Support	A25544-ND	5.58	3.90	202725-1
Socket			A25135-ND	12.55	8.77	202726-1
Pin	18-16	.080-.105	A25542-ND	1.68	1.17	202507-1
Socket			A25543-ND	2.50	1.75	202508-1
Pin		No Ins. Support	A25540-ND	1.83	1.28	200336-1
Socket			A25539-ND	2.03	1.42	200333-1
Pin		No Ins. Support	A25140-ND†	2.18	1.52	204219-1
Pin	14	No Ins. Support	A25141-ND	1.67	1.17	201570-1
Socket			A25142-ND	1.92	1.34	201568-1
Pin		No Ins. Support	A25143-ND*†	4.03	2.82	212618-1

* Grounding pin is used to provide a make-first/break-last condition when mating and unmating connector halves.
† Pin length is .630 on these two pins.

.125 POWERBAND Contacts for Sealed Connectors

Test Current: 45 amps

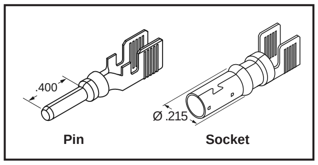
Pin Diameter: .125

Contact Body: Copper with beryllium copper spring

Contact Finish:

A: Post plated 30µ in mating area with 5µ min. gold on remainder of contact, all over 100µ min. nickel;

B: Post plated 200µ silver in mating area with 5µ min. gold on remainder of contact, all over 100µ min. nickel



Descrip.	Wire Size AWG	Contact Finish	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
Pin	12-14	A	A25066-ND	2.36	2.19	213845-4
Socket			A25067-ND	3.67	3.41	213847-4
Pin		B	A25068-ND	1.93	1.79	213845-3
Socket			A25069-ND	2.97	2.76	213847-3
Pin	8-10	A	A25070-ND	2.36	2.19	213841-4
Socket			A25071-ND	3.67	3.41	213843-4
Pin		B	A25072-ND	1.93	1.79	213841-3
Socket			A25073-ND	2.97	2.76	213843-3

Tools

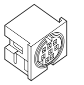
Description	Digi-Key Part No.	Price Each	AMP Part No.
Series 1 Contacts			
Hand Tool, Procrimper, Handle Only, w/o Dies	A9996-ND	75.00	354940-1
Die Set CPC Conn)	A9919-ND	101.25	58495-2
Contact Extraction Tool	A1329-ND	16.80	305183
Crimp Tool, Procrimper II w/Dies	A9920-ND	136.99	58495-1
Crimp Tool, 18-14 AWG Certified – Crimp	A9913-ND	465.09	90310-3
Crimp Tool, 18-16 AWG Certified – Crimp	A25050-ND	461.96	90067-4
Crimp Tool, 24-20 AWG Certified – Crimp	A9917-ND	409.60	90067-5
Crimp Tool, 30-26 AWG Certified – Crimp	A9918-ND	382.20	90066-7
Series 1 & MIL-C-5015 Contacts			
Crimp Tool, 24-20 AWG	A25013-ND	455.78	90331-1
Crimp Tool, 18-14 AWG	A25014-ND	524.54	90310-2
Series 2 Contacts			
Contact Insertion / Extraction Tool	A1010-ND	5.88	91067-2
Crimp Tool, 26-22	A25039-ND	655.86	90406-1
Crimp Tool for CPC Contacts with Die	A9990-ND	154.50	58448-2
Die Set for CPC Contacts, use with A9996	A9814-ND	117.00	58448-3
Pro-Crimper II Hand Tool without Die	A9996-ND	75.00	354940-1
Series 3 Contacts			
Contact Extraction Tool	A9912-ND	143.96	91019-3
Crimp Tool, 10 AWG	A9910-ND	627.39	90384-1
Crimp Tool, 12-16 AWG	A9911-ND	627.39	90382-2
Coaxial			
Cable Size - RU/U 178 and 196	A25152-ND	1267.88	69656-2
Cable Size - RU/U 174, 188 and 316	A25153-ND	1623.83	69656-3

CUI INC Miniature DIN Connectors

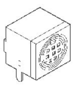
APPLICATIONS: Because of their compact size and durable design, mini-DIN connectors are ideal for signal applications where space is at a premium. A variety of configurations including vertical, horizontal and in-line models allows for most requirements. Their concentric, cylindrical ground shell make these connectors an excellent choice where EMI/RFI is a concern. Typical applications include computers, peripheral devices, office, audio and video equipment.

GENERAL SPECIFICATIONS:
- **Rating:** 100V AC 1A MAX, 12V DC 2A MAX
- **Insulation Resistance:** MIN 50 MEGΩ @ 250V DC
- **Voltage Withstand:** 250V AC, 1 minute
- **Contact Resistance:** Pins - 30 mΩ MAX, Shell - 50 mΩ MAX (All accessories included)

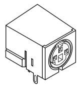
RT Angle Recept.



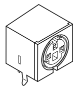
Shielded Right Angle Recept.



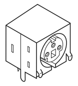
Shielded w/Switch



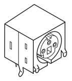
Shielded w/Kinked Pins



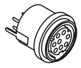
Shielded w/GND Tabs



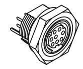
Shielded w/GND and Kinked Pins

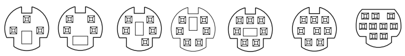


Vert., PCB

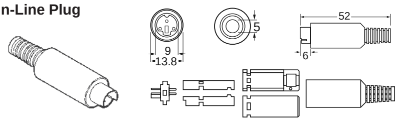


Vert., PCB Threaded w/Hex Nut

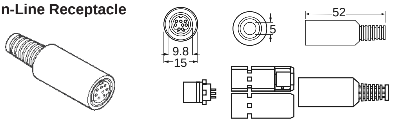


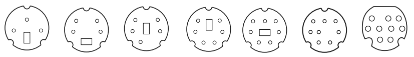


In-Line Plug



In-Line Receptacle



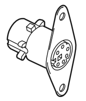


No. of Pos.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
Shielded Right Angle Receptacles					
3	CP-2230-ND	.99	.86	.66	MD-30SM
4	CP-2240-ND	1.02	.89	.68	MD-40SM
5	CP-2250-ND	1.05	.91	.70	MD-50SM
6	CP-2260-ND	1.11	.97	.74	MD-60SM
7	CP-2270-ND	1.23	1.07	.82	MD-70SM
8	CP-2280-ND	1.32	1.15	.88	MD-80SM
9	CP-2290-ND	1.65	1.43	1.10	MD-90SM
Right Angle PCB Mount Receptacles					
3	CP-2430-ND	.78	.68	.52	MD-30S
4	CP-2440-ND	.81	.71	.54	MD-40S
5	CP-2450-ND	.86	.75	.57	MD-50S
6	CP-2460-ND	.90	.78	.60	MD-60S
7	CP-2470-ND	1.02	.89	.68	MD-70S
8	CP-2480-ND	1.11	.97	.74	MD-80S
9	CP-2490-ND	1.53	1.33	1.02	MD-90S
Shielded Female with Switch					
3	CP-3030-ND	2.01	1.75	1.34	MD-30SMW
4	CP-3040-ND	2.10	1.82	1.40	MD-40SMW
5	CP-3050-ND	2.19	1.90	1.46	MD-50SMW
6	CP-3060-ND	2.31	2.01	1.54	MD-60SMW
7	CP-3070-ND	2.40	2.08	1.60	MD-70SMW
8	CP-3080-ND	2.46	2.14	1.64	MD-80SMW
Shielded Female with Kinked Pins					
3	CP-4030-ND	.99	.86	.66	MD-30SMK
4	CP-4040-ND	1.02	.89	.68	MD-40SMK
5	CP-4050-ND	1.05	.91	.70	MD-50SMK
6	CP-4060-ND	1.11	.97	.74	MD-60SMK
7	CP-4070-ND	1.23	1.07	.82	MD-70SMK
8	CP-4080-ND	1.32	1.15	.88	MD-80SMK
Shielded with GND Tabs					
3	CP-5030-ND	1.17	1.02	.78	MD-30SG
4	CP-5040-ND	1.20	1.04	.80	MD-40SG
5	CP-5050-ND	1.23	1.07	.82	MD-50SG
6	CP-5060-ND	1.29	1.12	.86	MD-60SG
8	CP-5080-ND	1.50	1.30	1.00	MD-80SG

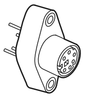
No. of Pos.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
Shielded with GND Tabs and Kinked Pins					
3	CP-6030-ND	1.17	1.02	.78	MD-30SGK
4	CP-6040-ND	1.20	1.04	.80	MD-40SGK
5	CP-6050-ND	1.23	1.07	.82	MD-50SGK
6	CP-6060-ND	1.29	1.12	.86	MD-60SGK
8	CP-6080-ND	1.50	1.30	1.00	MD-80SGK
Vertical, PCB Mount					
3	CP-2730-ND	1.02	.89	.68	MD-30SV
4	CP-2740-ND	1.08	.94	.72	MD-40SV
5	CP-2750-ND	1.14	.99	.76	MD-50SV
6	CP-2760-ND	1.17	1.02	.78	MD-60SV
8	CP-2780-ND	1.29	1.12	.86	MD-80SV
Vert. PCB Mount Threaded with Hex Nut					
3	CP-2830-ND	1.41	1.23	.94	MD-30CV
4	CP-2840-ND	1.47	1.28	.98	MD-40CV
5	CP-2850-ND	1.50	1.30	1.00	MD-50CV
6	CP-2860-ND	1.56	1.36	1.04	MD-60CV
8	CP-2880-ND	1.65	1.43	1.10	MD-80CV
In-Line Plug					
3	CP-2030-ND	.87	.76	.58	MD-30
4	CP-2040-ND	.93	.81	.62	MD-40
5	CP-2050-ND	.99	.86	.66	MD-50
6	CP-2060-ND	1.05	.91	.70	MD-60
7	CP-2070-ND	1.11	.97	.74	MD-70
8	CP-2080-ND	1.17	1.02	.78	MD-80
9	CP-2090-ND	1.56	1.36	1.04	MD-90
In-Line Receptacle					
3	CP-2130-ND	1.08	.94	.72	MD-30J
4	CP-2140-ND	1.14	.99	.76	MD-40J
5	CP-2150-ND	1.20	1.04	.80	MD-50J
6	CP-2160-ND	1.26	1.10	.84	MD-60J
7	CP-2170-ND	1.32	1.15	.88	MD-70J
8	CP-2180-ND	1.38	1.20	.92	MD-80J
9	CP-2190-ND	1.83	1.59	1.22	MD-90J
Crimp Pin	CP-9999-ND	—	.09	.05	T-0006

Mini-DIN Panel Mount Connectors

Panel Mount Receptacle, Metal



Panel Mount Receptacle, Plastic



Description	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
Panel Mount Mini-DIN Connectors — Metal					
3 Position	CP-2530-ND	1.02	.89	.68	MD-30SN
4 Position	CP-2540-ND	1.08	.94	.72	MD-40SN
5 Position	CP-2550-ND	1.17	1.02	.78	MD-50SN
6 Position	CP-2560-ND	1.29	1.12	.86	MD-60SN
7 Position	CP-2570-ND	1.35	1.17	.90	MD-70SN
8 Position	CP-2580-ND	1.38	1.20	.92	MD-80SN
9 Position	CP-2590-ND	1.47	1.28	.98	MD-90SN
Panel Mount Mini-DIN Connectors — Plastic					
3 Position	CP-2630-ND	1.08	.94	.72	MD-30SP
4 Position	CP-2640-ND	1.17	1.04	.78	MD-40SP
5 Position	CP-2650-ND	1.23	1.07	.82	MD-50SP
6 Position	CP-2660-ND	1.38	1.20	.92	MD-60SP
7 Position	CP-2670-ND	1.44	1.28	.96	MD-70SP
8 Position	CP-2680-ND	1.53	1.33	1.02	MD-80SP

13-Position DIN Connectors

Fig.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
1	CP-1013-ND	1.65	1.43	1.10	SD-130
2	CP-1113-ND	3.75	3.25	2.50	SD130J
3	CP-2313-ND	2.85	2.47	1.90	SDD-130J
4	CP-3313-ND	2.97	2.58	1.98	SDF-130J

Fig. 1 13-Pos. Male In-Line Plug

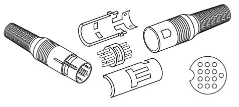


Fig. 2 13-Pos. Female In-Line Plug

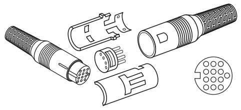


Fig. 3 Female PCB Right Angle Receptacle

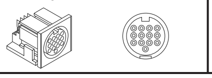
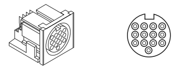


Fig. 4 Female PCB Shielded In-Line Jack

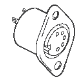


Circular DIN Connectors

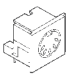
APPLICATIONS:
Circular DIN connectors combine low contact resistance with relatively high ampacity which make them an excellent choice for signal or power applications. Ideal for use with computers, peripheral devices, office equipment, power supplies, etc., their low cost and compact, durable design have made them a proven value.

GENERAL SPECIFICATIONS:
- **Ratings:** 100V AC 2A MAX
- **Insulation Resistance:** MIN 100 MEGΩ @ 500V DC
- **Voltage WIthstand:** 1000V AC, 1 minute
- **Contact Resistance:** Pins - 10 mΩ @ MAX, Shell - 50 mΩ MAX (All accessories included)

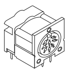
Panel Mount Receptacle



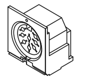
Right Angle Receptacle

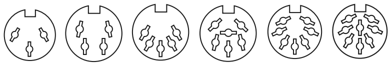


Front Shielded Right Angle Receptacle

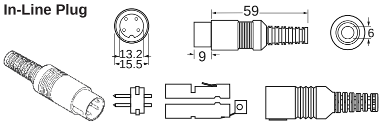


Right Angle SMT Receptacle

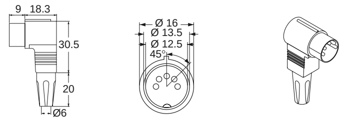




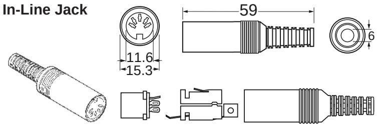
In-Line Plug



In-Line Plug RT Angle



In-Line Jack



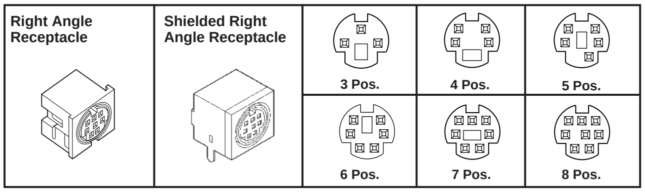
No. of Pos.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
Panel Mount Receptacles					
3	CP-1230-ND	.62	.54	.41	SD-30SN
4	CP-1240-ND	.65	.56	.43	SD-40SN
5	CP-1250-ND	.70	.61	.47	SD-50SN
6	CP-1260-ND	.74	.64	.49	SD-60SN
7	CP-1270-ND	.80	.70	.54	SD-70SN
8	CP-1280-ND	.86	.75	.58	SD-80SN
Right Angle Receptacles					
3	CP-2330-ND	.69	.60	.46	SDS-30J
4	CP-2340-ND	.72	.63	.48	SDS-40J
5	CP-2350-ND	.72	.63	.48	SDS-50J
6	CP-2360-ND	1.08	.94	.72	SDS-60J
7	CP-2370-ND	1.20	1.04	.80	SDS-70J
8	CP-2380-ND	1.32	1.15	.88	SDS-80J
Right Angle Front Shielded Receptacles					
3	CP-7030-ND	.75	.65	.50	SDF-30J
4	CP-7040-ND	.90	.78	.60	SDF-40J
5	CP-7050-ND	.90	.78	.60	SDF-50J
6	CP-7060-ND	1.23	1.07	.82	SDF-60J
7	CP-7070-ND	1.32	1.15	.88	SDF-70J
8	CP-7080-ND	1.50	1.30	1.00	SDF-80J
Right Angle Surface Mount Receptacles					
4	CP-1000-ND	1.26	1.10	.84	SDS-40J-SMT
8	CP-1001-ND	1.53	1.33	1.02	SDS-80J-SMT
In-Line Plug					
3	CP-1030-ND	.53	.46	.35	SD-30
4	CP-1040-ND	.54	.47	.36	SD-40
5	CP-1050-ND	.61	.53	.41	SD-50
6	CP-1060-ND	.64	.56	.43	SD-60
7	CP-1070-ND	.72	.63	.49	SD-70
8	CP-1080-ND	.76	.66	.51	SD-80
In-Line Plug Right Angle					
3	CP-1330-ND	2.28	1.98	1.52	SDR-30
5	CP-1350-ND	2.49	2.16	1.66	SDR-50
6	CP-1360-ND	2.55	2.21	1.70	SDR-60
7	CP-1370-ND	2.73	2.37	1.82	SDR-70
8	CP-1380-ND	2.82	2.45	1.88	SDR-80
In-Line Jack					
3	CP-1130-ND	.65	.56	.43	SD-30J
4	CP-1140-ND	.71	.62	.47	SD-40J
5	CP-1150-ND	.73	.63	.49	SD-50J
6	CP-1160-ND	.77	.67	.51	SD-60J
7	CP-1170-ND	.83	.72	.56	SD-70J
8	CP-1180-ND	.89	.78	.60	SD-80J

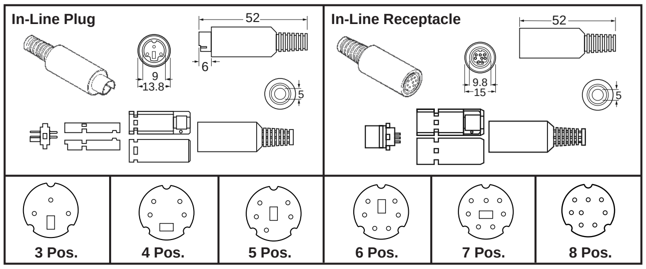
SINGATRON

Mini DIN Connectors

APPLICATIONS: Because of their compact size and durable design, mini-DIN connectors are ideal for signal applications where space is at a premium. A variety of configurations including vertical, horizontal and in-line models allows for most requirements. Their concentric, cylindrical ground shell make these connectors an excellent choice where EMI/RFI is a concern. Typical applications include computers, peripheral devices, office, audio and video equipment.

GENERAL SPECIFICATIONS: • Rating: 100V AC 1A MAX, 12V DC 2A MAX. **• Insulation Resistance:** MIN 50 MEGΩ @ 250V DC **• Voltage Withstand:** 250V AC, 1 minute **• Contact Resistance:** Pins - 30 mΩ MAX, Shell - 50 mΩ MAX (All accessories included)

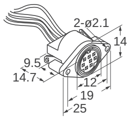




Description	Digi-Key Part No.	Pricing 1	10	100	Singatron Part No.
Right Angle PCB Mount Receptacles					
3-Pos. Right Angle Receptacle	275-1040-ND	.81	7.02	54.60	2MJ-0001A110
4-Pos. Right Angle Receptacle	275-1041-ND	.84	7.29	56.70	2MJ-0002A110
5-Pos. Right Angle Receptacle	275-1042-ND	.88	7.70	59.85	2MJ-0003A110
6-Pos. Right Angle Receptacle	275-1043-ND	.93	8.10	63.00	2MJ-0004A110
7-Pos. Right Angle Receptacle	275-1044-ND	1.05	9.18	71.40	2MJ-0005A110
8-Pos. Right Angle Receptacle	275-1045-ND	1.15	9.99	77.70	2MJ-0006A110
Shielded Right Angle Receptacles					
3-Pos. Right Angle Receptacle	275-1046-ND	1.02	8.91	69.30	2MJ-0101A120
4-Pos. Right Angle Receptacle	275-1047-ND	1.05	9.18	71.40	2MJ-0102A120
5-Pos. Right Angle Receptacle	275-1048-ND	1.09	9.45	73.50	2MJ-0103A120
6-Pos. Right Angle Receptacle	275-1049-ND	1.15	9.99	77.70	2MJ-0104A120
7-Pos. Right Angle Receptacle	275-1050-ND	1.27	11.07	86.10	2MJ-0105A120
8-Pos. Right Angle Receptacle	275-1051-ND	1.36	11.88	92.40	2MJ-0106A120
In-Line Plug					
3-Pos. In-Line Plug	275-1028-ND	.93	8.10	63.00	62000-3P
4-Pos. In-Line Plug	275-1029-ND	.99	8.64	67.20	62000-4P
5-Pos. In-Line Plug	275-1030-ND	1.05	9.18	71.40	62000-5P
6-Pos. In-Line Plug	275-1031-ND	1.12	9.72	75.60	62000-6P
7-Pos. In-Line Plug	275-1032-ND	1.18	10.26	79.80	62000-7P
8-Pos. In-Line Plug	275-1033-ND	1.24	10.80	84.00	62000-8P
In-Line Receptacle					
3-Pos. In-Line Jack	275-1034-ND	1.15	9.99	77.70	63000-3P
4-Pos. In-Line Jack	275-1035-ND	1.21	10.53	81.90	63000-4P
5-Pos. In-Line Jack	275-1036-ND	1.27	11.07	86.10	63000-5P
6-Pos. In-Line Jack	275-1037-ND	1.33	11.61	90.30	63000-6P
7-Pos. In-Line Jack	275-1038-ND	1.40	12.15	94.50	63000-7P
8-Pos. In-Line Jack	275-1039-ND	1.46	12.69	98.70	63000-8P

Description	Digi-Key Part No.	Pricing 1	10	100	Singatron Part No.
Panel Mount Mini-DIN Connectors With 6” (15.24cm) Lead WIre (26AWG)					
3-Pos. Recept.	275-1100-ND	1.71	14.85	115.50	2MJ-20116000
4-Pos. Recept.	275-1101-ND	1.95	17.01	132.30	2MJ-20216000
5-Pos. Recept.	275-1102-ND	2.14	18.63	144.90	2MJ-20316000
6-Pos. Recept.	275-1103-ND	2.33	20.25	157.50	2MJ-20416000
7-Pos. Recept.	275-1104-ND	2.42	21.06	163.80	2MJ-20516000
8-Pos. Recept.	275-1105-ND	2.42	21.06	163.80	2MJ-20616000

Panel Mount Recept., Plastic

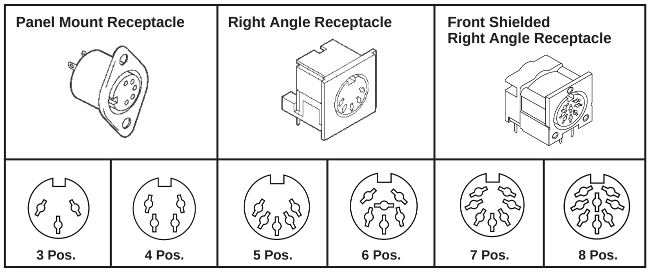


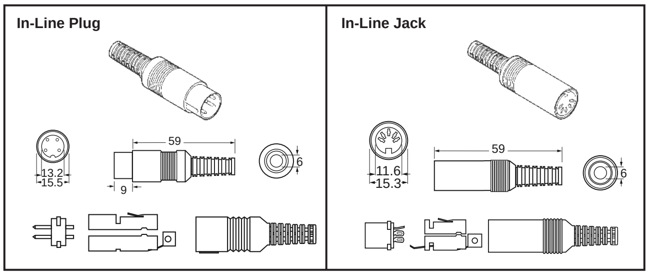
SINGATRON

Circular DIN Connectors

APPLICATIONS: Circular DIN connectors combine low contact resistance with relatively high ampacity which make them an excellent choice for signal or power applications. Ideal for use with computers, peripheral devices, office equipment, power supplies, etc., their low cost and compact, durable design have made them a proven value.

GENERAL SPECIFICATIONS: • Ratings: 100V AC 2A MAX **• Insulation Resistance:** MIN 100 MEGΩ @ 500V DC **• Voltage WIthstand:** 1000V AC, 1 minute **• Contact Resistance:** Pins - 10 mΩ @ MAX, Shell - 50 mΩ MAX (All accessories included)





Description	Digi-Key Part No.	Pricing 1	10	100	Singatron Part No.
Panel Mount Receptacles					
3-Pos. Panel Mount Receptacle	275-1012-ND	.64	5.54	43.05	YE-1363
4-Pos. Panel Mount Receptacle	275-1013-ND	.67	5.81	45.15	YE-1364
5-Pos. Panel Mount Receptacle	275-1014-ND	.72	6.26	48.72	YE-1365A
6-Pos. Panel Mount Receptacle	275-1015-ND	.76	6.62	51.45	YE-1366
7-Pos. Panel Mount Receptacle	275-1016-ND	.82	7.16	55.65	YE-1367
8-Pos. Panel Mount Receptacle	275-1017-ND	.88	7.70	59.85	YE-1368A
Right Angle Receptacles					
5-Pos. Right Angle Receptacle	275-1019-ND	.78	6.75	52.50	2DJ-00600003
6-Pos. Right Angle Receptacle	275-1020-ND	1.24	10.80	84.00	2DJ-0196PA02
7-Pos. Right Angle Receptacle	275-1021-ND	1.33	11.61	90.30	2DJ-0077PA03
8-Pos. Right Angle Receptacle	275-1022-ND	1.43	12.42	96.60	2DJ-0108PA03
Right Angle Front Shielded Receptacles					
4-Pos. Right Angle Front Shielded	275-1023-ND	1.24	10.80	84.00	DJ-037-4PS(A)
5-Pos. Right Angle Front Shielded	275-1024-ND	1.09	9.45	73.50	2DJ-0065PSA2
6-Pos. Right Angle Front Shielded	275-1025-ND	1.43	12.42	96.60	2DJ-0196PSA2
7-Pos. Right Angle Front Shielded	275-1026-ND	1.52	13.23	102.90	2DJ-0077PSA2
8-Pos. Right Angle Front Shielded	275-1027-ND	1.71	14.85	115.50	2DJ-0108PSA2
In-Line Plug					
3-Pos. In-Line Plug	275-1000-ND	.53	4.59	35.70	YE-1153
4-Pos. In-Line Plug	275-1001-ND	.56	4.86	37.80	YE-1154
5-Pos. In-Line Plug	275-1002-ND	.59	5.13	39.90	YE-1155A
6-Pos. In-Line Plug	275-1003-ND	.62	5.40	42.00	YE-1156
7-Pos. In-Line Plug	275-1004-ND	.68	5.94	46.20	YE-1157
8-Pos. In-Line Plug	275-1005-ND	.74	6.48	50.40	YE-1158A
In-Line Jack					
3-Pos. In-Line Jack	275-1006-ND	.67	5.81	45.15	YE-1333
4-Pos. In-Line Jack	275-1007-ND	.73	6.35	49.35	YE-1334
5-Pos. In-Line Jack	275-1008-ND	.74	6.48	50.40	YE-1335A
6-Pos. In-Line Jack	275-1009-ND	.79	6.89	53.55	YE-1336
7-Pos. In-Line Jack	275-1010-ND	.85	7.43	57.75	YE-1337
8-Pos. In-Line Jack	275-1011-ND	.91	7.97	61.95	YE-1338A

AMP tyco Electronics **Authorized Distributor**

Shielded DIN Connectors

Features:

Crimp, snap-in contacts; Designed for ease of post molding; Pre-molded cord guard; Tin plated brass contacts; Ferrule crimps onto shield for reliable termination; Meets or exceeds DIN specification 41524 for 4-and-8-position plugs: 45322; UL recognized under the Component Program. File No E28476; CSA certified, File No. LR-35510.

Housings:

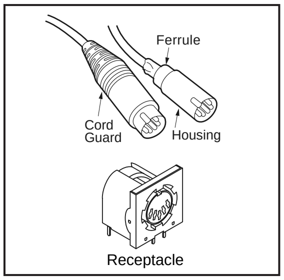
Black nylon 94V-O.

Ferrule and Shield: Brass, tin plated.

Cord Guard: Thermoplastic polymer, black.

Contacts: Brass, tin plated.

Pin Contacts: Copper alloy;
.00050" tin over .000100" nickel plating.



Description	Digi-Key Part No.	Pricing 1	25	AMP Part No.
4-Pos. Housing	A1651-ND	3.22	76.13	212437-2
5-Pos. Housing	A1652-ND	1.76	41.56	212437-3
6-Pos. Housing	A1653-ND	1.76	41.56	212437-4
8-Pos. Housing	A1655-ND	1.91	45.06	212437-6
Ferrule, 5.08mm-6.35mm Cable Dia.	A1657-ND	1.25	25.00	212435-8
Cord Guard, 4.19mm-6.35mm Cable Dia.	A1659-ND	1.93	38.50	212800-1
5-Pos. Receptacle	A1663-ND	2.63	58.58	212044-1
6-Pos. Receptacle	A1664-ND	3.24	72.63	212045-1
8-Pos. Receptacle	A1666-ND	3.50	78.44	212047-1
Pin Contact, 28-22 AWG	A1667-ND	7.08/10	49.46/100	66728-5
Contact Insertion Tool	A9998-ND	16.45	—	91002-1
Contact Extraction Tool	A9997-ND	171.93	—	91144-1

Amphenol RF SMA & SMB Connectors

Fig. 1

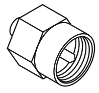


Fig. 2

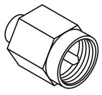


Fig. 3

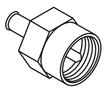
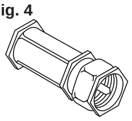


Fig. 4



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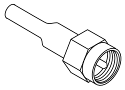

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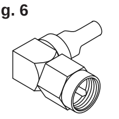

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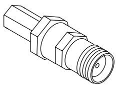
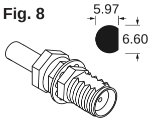


Fig. 8



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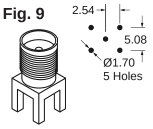

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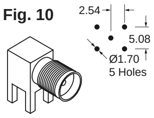

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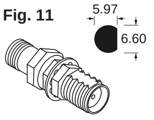

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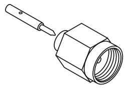

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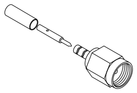

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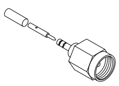

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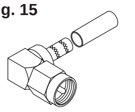

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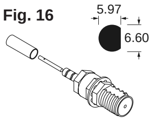

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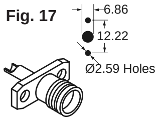

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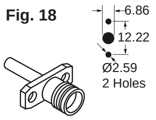

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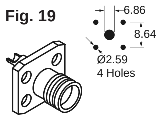

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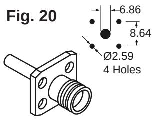

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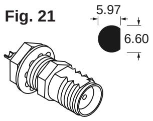

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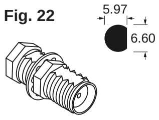

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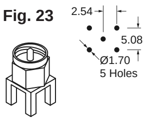

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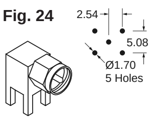

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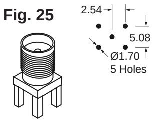

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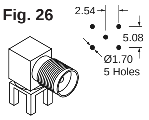

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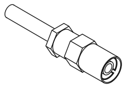

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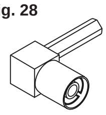

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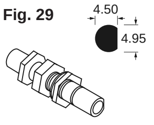

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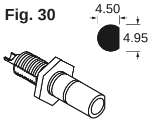

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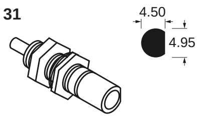

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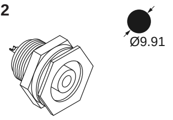
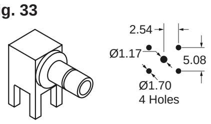


Fig. 33



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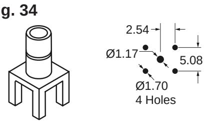


SMA Coaxial Connectors

Fig.	Description	Cable Group RG/U	Plating	Cable Attachment		Digi-Key Part No.	Pricing			Amphenol Part No.
				Outer	Inner		1	25	100	
1	Plug, Straight	.085" (2.2mm) RG-405 (M17/133)	Passivated Nut	Solder	Plugable	ARF1184-ND	6.33	105.50	316.00	901-9723
2	Plug, Straight	.141" (3.6mm) RG-402 (M17/130)	Gold Nut	Solder	Plugable	ARF1185-ND	6.66	111.00	333.00	901-9808
3	Plug, Straight	.085" (2.2mm) RG-405 (M17/133)	Passivated Nut	Solder	Plugable	ARF1186-ND	6.90	115.00	344.00	901-9805-HP
4	Plug, Straight	55, 58, 141, 142, 223	—	Clamp	Solder	ARF1187-ND*	63.12	1052.00	3156.00	901-103
4	Plug, Straight	174, 316	—	Clamp	Solder	ARF1188-ND*	43.86	731.00	2189.29	901-128-11
5	Plug, Straight	55B, 142B, 223, 400	Gold	Crimp	Solder	ARF1189-ND	9.90	165.00	495.00	901-9511-1
5	Plug, Straight	55B, 142B, 223, 400	Passivated	Crimp	Solder	ARF1190-ND	7.65	127.50	438.00	901-9511-1SF
5	Plug, Straight	174, 178, 187, 188, 316	Gold	Crimp	Solder	ARF1191-ND	8.73	145.50	436.00	901-9511-3
5	Plug, Straight	174, 178, 187, 188, 316	Passivated	Crimp	Solder	ARF1192-ND	7.20	120.00	359.00	901-9511-3SF
5	Plug, Straight	Dbl. Braid RG-188, 316	Passivated	Crimp	Solder	ARF1193-ND	7.92	132.00	396.00	901-9511-12SF
6	Plug, Right Angle	55, 141, 142, 223	Gold	Crimp	Solder	ARF1194-ND	13.44	224.00	671.00	901-9531-1
6	Plug, Right Angle	SF 142B, Times AA-2423	Passivated	Crimp	Solder	ARF1195-ND	9.60	160.00	464.00	901-9531-1SF
6	Plug, Right Angle	174, 179, 187, 188, 316	Gold	Crimp	Solder	ARF1196-ND	14.01	233.50	699.00	901-9531-3
6	Plug, Right Angle	174, 179, 187, 188, 316	Passivated	Crimp	Solder	ARF1197-ND	9.60	160.00	480.00	901-9531-3SF
6	Plug, Right Angle	Double Braid RG-316	Gold	Crimp	Solder	ARF1198-ND	14.52	242.00	725.00	901-9531-12
6	Plug, Right Angle	Double Braid RG-316	Passivated	Crimp	Solder	ARF1199-ND	9.36	156.00	468.00	901-9531-12SF
7	Jacks	174, 179, 187, 188, 316	Gold	Crimp	Solder	ARF1200-ND	51.66	861.00	2579.26	901-9602-3
7	Jacks	174, 179, 187, 188, 316	Passivated	Crimp	Solder	ARF1201-ND	53.25	887.50	2658.79	901-9602-3SF
8	Jacks, Bulkhead	55, 142, 223, 400	Passivated	Crimp	Solder	ARF1202-ND	26.91	448.50	1342.95	901-9610-1SF
8	Jacks, Bulkhead	174, 179, 187, 188, 316	Gold	Crimp	Solder	ARF1203-ND	20.67	344.50	1031.00	901-9610-3
8	Jacks, Bulkhead	174, 179, 187, 188, 316	Passivated	Crimp	Solder	ARF1204-ND	16.92	282.00	845.00	901-9610-3SF
9	Jacks, Printed Circuit Board, Panel	—	Gold	—	—	ARF1205-ND	10.44	174.00	650.00	901-144
10	Jacks, Printed Circuit Board, Angle	—	Gold	—	—	ARF1206-ND	13.02	217.00	813.00	901-143
11	Adapters, Bulkhead Jack-Jack, Front or Rear Mt.	—	Gold	—	—	ARF1207-ND	16.74	279.00	836.00	901-9209A
11	Adapters, Bulkhead Jack-Jack, Front or Rear Mt.	—	Passivated	—	—	ARF1208-ND	14.64	244.00	731.00	901-9209-ASF

* Safety wire holes.

SMA Brass Coaxial Connectors

Fig.	Description	Cable Group RG/U	Plating	Cable Attachment		Digi-Key Part No.	Pricing			Amphenol Part No.
				Outer	Inner		1	25	100	
12	Plug, Straight	.141" (3.6mm) S/R	Gold	Solder	Solder	ARFX1209-ND	3.99	66.50	199.00	901-9868-RFX
12	Plug, Straight	.085" (2.16mm) S/R	Gold	Solder	Solder	ARF1210-ND	3.15	52.50	158.00	901-9867-RFX
13	Plug, Straight	58	Gold	Crimp	Solder	ARF1211-ND	6.00	100.00	299.00	901-9870
13	Plug, Straight	141, 223	Gold	Crimp	Solder	ARF1212-ND	6.27	104.50	313.00	901-9871
13	Plug, Straight	58	NIckel	Crimp	Solder	ARFX1213-ND	3.39	56.50	170.00	901-9876-RFX
14	Plug, Straight	174, 188, 316	Nickel	Crimp	Solder	ARFX1214-ND	3.39	56.50	170.00	901-9877-RFX
14	Plug, Straight	174, 188, 316	Gold	Crimp	Solder	ARF1215-ND	5.97	99.50	298.00	901-9916
15	Plug, Right Angle	174, 188, 316	Gold	Crimp	Solder	ARF1216-ND	10.08	168.00	588.00	901-9872
15	Plug, Right Angle	58	Gold	Crimp	Solder	ARF1217-ND	10.95	182.50	548.00	901-9873
15	Plug, Right Angle	141, 223	Gold	Crimp	Solder	ARF1218-ND	10.08	168.00	538.00	901-9874
15	Plug, Right Angle	58	Nickel	Crimp	Solder	ARFX1219-ND	5.70	95.00	285.00	901-9880-RFX
15	Plug, Right Angle	174, 188, 316	Nickel	Crimp	Solder	ARFX1220-ND	5.46	91.00	280.00	901-9881-RFX
16	Bulkhead Jack	174, 188, 316	Gold	Crimp	Solder	ARF1221-ND	9.75	162.50	486.00	901-9875
16	Bulkhead Jack	174, 188, 316	Nickel	Crimp	Solder	ARFX1222-ND	7.59	126.50	413.00	901-9879-RFX
17	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1223-ND	5.58	93.00	279.00	901-9893-RFX
18	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1224-ND	7.83	130.50	391.00	901-9891-RFX
19	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1225-ND	5.79	96.50	337.75	901-9892-RFX
20	Panel Receptacle, Jack	—	Nickel	—	—	ARFX1226-ND	8.37	139.50	418.00	901-9887-RFX
21	Bulkhead Recep. Front Mt.	—	Nickel	—	—	ARFX1227-ND	4.80	80.00	240.00	901-9889-RFX
22	Bulkhead Recep. Rear Mt.	—	Nickel	—	—	ARFX1228-ND	4.80	80.00	240.00	901-9890-RFX
23	Plug Straight PCB Recep.	—	Gold	—	—	ARFX1229-ND	4.47	74.50	223.00	901-9895-RFX
24	Plug Rt. Angle PCB Recep.	—	Gold	—	—	ARFX1230-ND	8.31	138.50	415.00	901-9894-RFX
25	Receptacle,Straight PCB	—	Gold	—	—	ARFX1231-ND	3.87	64.50	194.00	901-144-8RFX
26	Recep., Right Angle PCB	—	Gold	—	—	ARFX1232-ND	6.60	110.00	330.00	901-143-6RFX

SMB Coaxial Connectors

Fig.	Description	Cable Group RG/U	Plating	Cable Attachment		Digi-Key Part No.	Pricing			Amphenol Part No.
				Outer	Inner		1	25	100	
27	Plug, Straight	RG-174, 179, 187,188, 316	Nickel	Crimp	Solder	ARF1233-ND	6.75	112.50	336.00	903-370P-51S
28	Plug, Right Angle	RG-174, 179, 187,188, 316	Nickel	Crimp	Solder	ARF1235-ND	4.14	69.00	208.00	903-367P-51A2
28	Plug, Right Angle	RG-178, 196	Gold	Crimp	Solder	ARF1236-ND	5.94	99.00	298.00	903-291P-51A1
28	Plug, Right Angle	RG-178, 196	Nickel	Crimp	Solder	ARF1237-ND	4.62	77.00	231.00	903-368P-51A1
29	Bulkhead Jack	RG-174, 179, 187, 188, 316	Nickel	Crimp	Solder	ARF1238-ND	7.32	122.00	366.00	903-505J-51S
29	Bulkhead Jack	Dbl. Shield 316	Nickel	Crimp	Solder	ARF1239-ND	7.05	117.50	353.00	903-505J-51S1

Fig.	Description	Plating	Digi-Key Part No.	Pricing			Amphenol Part No.
				1	25	100	
30	Bulkhead, Recept. Front Mount Solder Cup Terminal	Gold	ARF1240-ND	6.30	105.00	314.00	903-406J-51R
31	Bulkhead, Recept. Front Mount Blunt Post Terminal	Gold	ARF1241-ND	5.19	86.50	338.00	903-402J-51R
32	Bulkhead Jack, Recept. Recessed, Solder Cup Term.	Gold	ARF1242-ND	15.87	264.50	791.85	903-407J-51R
33	Jack Right Angle	Tin Lead (Body & Legs) Gold (Interface & Term.)	ARF1243-ND	7.08	118.00	443.00	903-373J-51A
34	Jack Straight	Gold	ARF1244-ND	4.32	72.00	215.00	903-499J-51P2

Amphenol® RF "FAKRA" SMB Connectors

With recent advancements in communications technology and increased consumer demand for a diverse array of on-board telematics services, RF communications systems have become indispensable components of the modern automobile.

To keep RF interconnection costs low and ensure high levels of electrical and mechanical performance the German and American automotive industries have standardized a high-performing, cost-effective RF connector based on the FAKRA and USCAR standards.

Utilizing a standard metal SMB connector embedded within a plastic housing that can be designed with multiple colored codes for easy identification, FAKRA connectors are designed to perform up to 4 GHz and meet the particular mechanical and environmental requirements of the automobile industry.

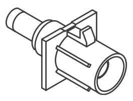
FEATURES:

Electrical: Impedance - 50Ω. Frequency Range-DC–4GHz. Performance Spec-SAE/USCAR-17. Insulation Resistance-1000MΩ min. Center Contact Resistance-center contact <20 mΩ, outer contact <10 mΩ. Dielectric Withstanding Voltage-at sea level >1000VRMS.

Mechanical: Durability (matings)-100 min. Plastic Housing – Engagement Force- ≤ 20 N. Plastic Housing – Disengagement Force-≥ 25 N. Coding-13 mechanical and colored codings. Operating Temperature Range- –40°C/+115°C.

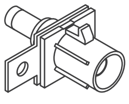
Materials: Plastic Housing-PBT with 15% Glass Fiber. Secondary Locking Clip-PBT with 15% Glass Fiber. Center Contact-female: Beryllium Copper, male: Brass. Body-Brass. Barrel-Brass. Retainer Ring-Beryllium Copper. Ferrule-Copper. Insulator-TFE. Plating: Center Contact-Gold. Body, Barrel and Ferrule-Nickel.

Fig. 1



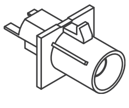
Single Male

Fig. 2



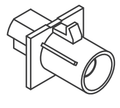
Single Male with Bracket

Fig. 3



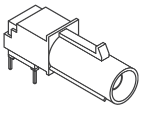
Single Male Edgecard with Support Legs

Fig. 4



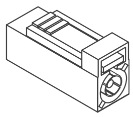
Single Male Edgecard without Support Legs

Fig. 5



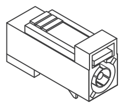
Single Male R/A PCB with Extended Housing

Fig. 6



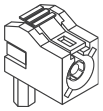
Single Female

Fig. 7



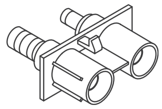
Single Female with Clip Provision at 6 o'clock

Fig. 8



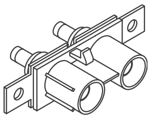
Single R/A Female

Fig. 9



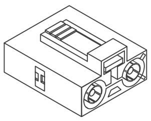
Dual Male

Fig. 10



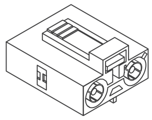
Dual Male with Bracket

Fig. 11



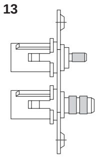
Dual Female

Fig. 12



Dual Female with Clip Provision at 6 o'clock

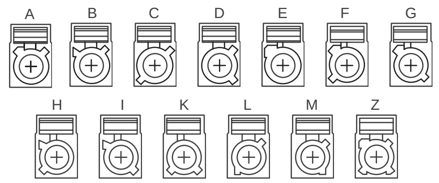
Fig. 13



Twin SMB Crimp Plug

FAKRA Keying Codes

Female Housings



Mechanical and Color Coding

Coding	Rib Combination	Color	Similar RAL No.
A	A - B1	Deep Black	9005
B	A - B2	Signal White	9003
C	A - C	Signal Blue	5005
D	A - D	Bordeaux Violet	4004
E	B1 - B2	Leaf Green	6002
F	B1 - C	Brown	8011
G	B1 - D	Blue Grey	7031
H	B2 - C	Heather Violet	4003
I	B2 - D	Beige	1001
K	C - D	Curry Yellow	1027
L	A - E	Dahlia Yellow	1033
M	A - F	Pastel Green	6019
Z	Neutral Coding	Water Blue	5021

Male Housings

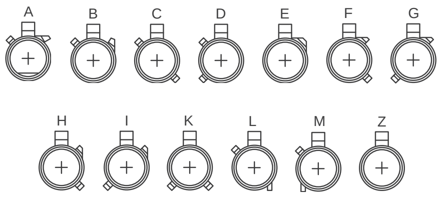


Fig.	Cable Group RG/U	Digi-Key Part No.	Price Each 1	10	25	100	Amphenol Part No.
FAKRA Coding "A" (Deep Black)							
1	RG-174, 188, 316	ARF1253-ND	3.21	2.68	1.73	1.61	FA1-NASP-C01-1
	RG-58, 141	ARF1255-ND	3.38	2.82	1.83	1.70	FA1-NASP-C04-1
2	5RG-174, 188, 316	ARF1252-ND	3.48	2.91	1.88	1.75	FA1-NASP-C01-0
	RG-58, 141	ARF1254-ND	3.62	3.02	1.96	1.82	FA1-NASP-C04-0
3	—	ARF1256-ND	3.28	2.74	1.77	1.64	FA1-NASP-PCB-0
4	—	ARF1257-ND	3.35	2.79	1.81	1.68	FA1-NASP-PCB-1
5	—	ARF1274-ND	2.73	2.28	1.47	1.37	FA1-NARP-PCB-9
6	Cables with .057 OD	ARF1250-ND	4.11	3.43	2.22	2.06	FA1-NASJ-C09-0
	RG-178, .071 OD Cables	ARF1251-ND	4.11	3.43	2.22	2.06	FA1-NASJ-C10-0
	RG-174, 188, 316	ARF1266-ND	3.59	2.99	1.94	1.80	FA1-NASJ-C01-0
	RG-58, 141	ARF1268-ND	3.69	3.08	1.99	1.85	FA1-NASJ-C04-0
7	RG-174, 188, 316	ARF1267-ND	3.69	3.08	1.99	1.85	FA1-NASJ-C01-6
	RG-58, 141	ARF1269-ND	3.80	3.17	2.05	1.90	FA1-NASJ-C04-6
8	RG-174, 188, 316	ARF1272-ND	4.11	3.43	2.22	2.06	FA1-NARJ-C01-0
	RG-58, 141	ARF1273-ND	4.31	3.60	2.33	2.16	FA1-NARJ-C04-0
9	RG-58/RG-174 Combo Design	ARF1263-ND	6.87	5.73	3.70	3.44	FA2-NASP-C00-9
	RG-174, 188, 316	ARF1270-ND	6.73	5.61	3.63	3.37	FA2-NASP-C01-9
	RG-58, 141	ARF1271-ND	6.80	5.67	3.66	3.40	FA2-NASP-C04-9
10	RG-58/RG-174 Combo Design	ARF1262-ND	7.21	6.01	3.89	3.61	FA2-NASP-C00-0
	RG-174, 188, 316	ARF1264-ND	7.07	5.90	3.81	3.54	FA2-NASP-C01-0
	RG-58, 141	ARF1265-ND	7.14	5.96	3.85	3.58	FA2-NASP-C04-0
11	RG-174, 188, 316	ARF1258-ND	7.76	6.47	4.18	3.89	FA2-NASJ-C01-0
	RG-58, 141	ARF1260-ND	7.90	6.59	4.26	3.96	FA2-NASJ-C04-0
12	RG-174, 188, 316	ARF1259-ND	7.90	6.59	4.26	3.96	FA2-NASJ-C01-6
	RG-58, 141	ARF1261-ND	8.07	6.73	4.35	4.04	FA2-NASJ-C04-6
FAKRA Coding "B" (Signal White)							
1	RG-174, 188, 316	ARF1278-ND	3.21	2.68	1.73	1.61	FA1-NBSP-C01-1
	RG-58, 141	ARF1280-ND	3.38	2.82	1.83	1.70	FA1-NBSP-C04-1
2	RG-174, 188, 316	ARF1277-ND	3.48	2.91	1.88	1.75	FA1-NBSP-C01-0
	RG-58, 141	ARF1279-ND	3.62	3.02	1.96	1.82	FA1-NBSP-C04-0
3	—	ARF1281-ND	3.28	2.74	1.77	1.64	FA1-NBSP-PCB-0
4	—	ARF1282-ND	3.35	2.79	1.81	1.68	FA1-NBSP-PCB-1
5	—	ARF1286-ND	2.73	2.28	1.47	1.37	FA1-NBRP-PCB-9
6	RG-174, 188, 316	ARF1287-ND	3.59	2.99	1.94	1.80	FA1-NBSJ-C01-0
	RG-58, 141	ARF1289-ND	3.69	3.08	1.99	1.85	FA1-NBSJ-C04-0
	Cables with .057 OD	ARF1291-ND	4.11	3.43	2.22	2.06	FA1-NBSJ-C09-0
	RG-178, .071 OD Cables	ARF1292-ND	4.11	3.43	2.22	2.06	FA1-NBSJ-C10-0
7	RG-174, 188, 316	ARF1288-ND	3.69	3.08	1.99	1.85	FA1-NBSJ-C01-6
	RG-58, 141	ARF1290-ND	3.80	3.17	2.05	1.90	FA1-NBSJ-C04-6
8	RG-174, 188, 316	ARF1275-ND	4.11	3.43	2.22	2.06	FA1-NBRJ-C01-0
	RG-58, 141	ARF1276-ND	4.31	3.60	2.33	2.16	FA1-NBRJ-C04-0
9	RG-58/RG-174 Combo Design	ARF1297-ND	6.87	5.73	3.70	3.44	FA2-NBSP-C00-9
	RG-174, 188, 316	ARF1298-ND	6.73	5.61	3.63	3.37	FA2-NBSP-C01-9
	RG-58, 141	ARF1299-ND	6.80	5.67	3.66	3.40	FA2-NBSP-C04-9
10	RG-58/RG-174 Combo Design	ARF1283-ND	7.21	6.01	3.89	3.61	FA2-NBSP-C00-0
	RG-174, 188, 316	ARF1284-ND	7.07	5.90	3.81	3.54	FA2-NBSP-C01-0
	RG-58, 141	ARF1285-ND	7.14	5.96	3.85	3.58	FA2-NBSP-C04-0
11	RG-174, 188, 316	ARF1293-ND	7.76	6.47	4.18	3.89	FA2-NBSJ-C01-0
	RG-58, 141	ARF1295-ND	7.90	6.59	4.26	3.96	FA2-NBSJ-C04-0
12	RG-174, 188, 316	ARF1294-ND	7.90	6.59	4.26	3.96	FA2-NBSJ-C01-6
	RG-58, 141	ARF1296-ND	8.07	6.73	4.35	4.04	FA2-NBSJ-C04-6
FAKRA Coding "C" (Signal Blue)							
1	RG-174, 188, 316	ARF1316-ND	3.21	2.68	1.73	1.61	FA1-NCSP-C01-1
	RG-58, 141	ARF1317-ND	3.38	2.82	1.83	1.70	FA1-NCSP-C04-1
2	RG-174, 188, 316	ARF1300-ND	3.48	2.91	1.88	1.75	FA1-NCSP-C01-0
	RG-58, 141	ARF1301-ND	3.62	3.02	1.96	1.82	FA1-NCSP-C04-0
3	—	ARF1302-ND	3.28	2.74	1.77	1.64	FA1-NCSP-PCB-0
4	—	ARF1303-ND	3.35	2.79	1.81	1.68	FA1-NCSP-PCB-1
5	—	ARF1309-ND	2.73	2.28	1.47	1.37	FA1-NCRP-PCB-9
6	RG-174, 188, 316	ARF1310-ND	3.59	2.99	1.94	1.80	FA1-NCSJ-C01-0
	RG-58, 141	ARF1312-ND	3.69	3.08	1.99	1.85	FA1-NCSJ-C04-0
	Cables with .057 OD	ARF1314-ND	4.11	3.43	2.22	2.06	FA1-NCSJ-C09-0
	RG-178, .071 OD Cables	ARF1315-ND	4.11	3.43	2.22	2.06	FA1-NCSJ-C10-0
7	RG-174, 188, 316	ARF1311-ND	3.69	3.08	1.99	1.85	FA1-NCSJ-C01-6
	RG-58, 141	ARF1313-ND	3.80	3.17	2.05	1.90	FA1-NCSJ-C04-6
8	RG-174, 188, 316	ARF1307-ND	4.11	3.43	2.22	2.06	FA1-NCRJ-C01-0
	RG-58, 141	ARF1308-ND	4.31	3.60	2.33	2.16	FA1-NCRJ-C04-0
9	RG-58/RG-174 Combo Design	ARF1322-ND	6.87	5.73	3.70	3.44	FA2-NCSP-C00-9
	RG-174, 188, 316	ARF1323-ND	6.73	5.61	3.63	3.37	FA2-NCSP-C01-9
	RG-58, 141	ARF1324-ND	6.80	5.67	3.66	3.40	FA2-NCSP-C04-9
10	RG-58/RG-174 Combo Design	ARF1304-ND	7.21	6.01	3.89	3.61	FA2-NCSP-C00-0
	RG-174, 188, 316	ARF1305-ND	7.07	5.90	3.81	3.54	FA2-NCSP-C01-0
	RG-58, 141	ARF1306-ND	7.14	5.96	3.85	3.58	FA2-NCSP-C04-0
11	RG-174, 188, 316	ARF1318-ND	7.76	6.47	4.18	3.89	FA2-NCSJ-C01-0
	RG-58, 141	ARF1320-ND	7.90	6.59	4.26	3.96	FA2-NCSJ-C04-0
12	RG-174, 188, 316	ARF1319-ND	7.90	6.59	4.26	3.96	FA2-NCSJ-C01-6
	RG-58, 141	ARF1321-ND	8.07	6.73	4.35	4.04	FA2-NCSJ-C04-6
13	RG-58/RG-174 Combo Design	ARF1325-ND	6.80	5.67	3.66	3.40	FC2-NCDSP-C00-0

(*Continued*)

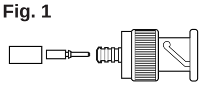
Amphenol®RF “FAKRA” SMB Connectors *(Cont.)*

Fig.	Cable Group RG/U	Digi-Key Part No.	Price Each				Amphenol Part No.
			1	10	25	100	
FAKRA Coding “D” (Bordeaux Violet)							
1	RG-174, 188, 316	ARF1343-ND	3.21	2.68	1.73	1.61	FA1-NDSP-C01-1
	RG-58, 141	ARF1344-ND	3.38	2.82	1.83	1.70	FA1-NDSP-C04-1
2	RG-174, 188, 316	ARF1331-ND	3.48	2.91	1.88	1.75	FA1-NDSP-C01-0
	RG-58, 141	ARF1332-ND	3.62	3.02	1.96	1.82	FA1-NDSP-C04-0
3	—	ARF1333-ND	3.28	2.74	1.77	1.64	FA1-NDSP-PCB-0
4	—	ARF1334-ND	3.35	2.79	1.81	1.68	FA1-NDSP-PCB-1
5	—	ARF1328-ND	2.73	2.28	1.47	1.37	FA1-NDRP-PCB-9
6	Cables with .057 OD	ARF1329-ND	4.11	3.43	2.22	2.06	FA1-NDSJ-C09-0
	RG-178, .071 OD Cables	ARF1330-ND	4.11	3.43	2.22	2.06	FA1-NDSJ-C10-0
	RG-174, 188, 316	ARF1339-ND	3.59	2.99	1.94	1.80	FA1-NDSJ-C01-0
	RG-58, 141	ARF1341-ND	3.69	3.08	1.99	1.85	FA1-NDSJ-C04-0
7	RG-174, 188, 316	ARF1340-ND	3.69	3.08	1.99	1.85	FA1-NDSJ-C01-6
	RG-58, 141	ARF1342-ND	3.80	3.17	2.05	1.90	FA1-NDSJ-C04-6
8	RG-174, 188, 316	ARF1337-ND	4.11	3.43	2.22	2.06	FA1-NDRJ-C01-0
	RG-58, 141	ARF1338-ND	4.31	3.60	2.33	2.16	FA1-NDRJ-C04-0
9	RG-58/RG-174 Combo Design	ARF1349-ND	6.87	5.73	3.70	3.44	FA2-NDSP-C00-9
	RG-174, 188, 316	ARF1351-ND	6.73	5.61	3.63	3.37	FA2-NDSP-C01-9
	RG-58, 141	ARF1352-ND	6.80	5.67	3.66	3.40	FA2-NDSP-C04-9
10	RG-58/RG-174 Combo Design	ARF1335-ND	7.21	6.01	3.89	3.61	FA2-NDSP-C00-0
	RG-58, 141	ARF1336-ND	7.14	5.96	3.85	3.58	FA2-NDSP-C04-0
	RG-174, 188, 316	ARF1350-ND	7.07	5.90	3.81	3.54	FA2-NDSP-C01-0
11	RG-174, 188, 316	ARF1345-ND	7.76	6.47	4.18	3.89	FA2-NDSJ-C01-0
	RG-58, 141	ARF1347-ND	7.90	6.59	4.26	3.96	FA2-NDSJ-C04-0
12	RG-174, 188, 316	ARF1346-ND	7.90	6.59	4.26	3.96	FA2-NDSJ-C01-6
	RG-58, 141	ARF1348-ND	8.07	6.73	4.35	4.04	FA2-NDSJ-C04-6
FAKRA Coding “E” (Leaf Green)							
1	RG-174, 188, 316	ARF1356-ND	3.21	2.68	1.73	1.61	FA1-NESP-C01-1
	RG-58, 141	ARF1358-ND	3.38	2.82	1.83	1.70	FA1-NESP-C04-1
2	RG-174, 188, 316	ARF1355-ND	3.48	2.91	1.88	1.75	FA1-NESP-C01-0
	RG-58, 141	ARF1357-ND	3.62	3.02	1.96	1.82	FA1-NESP-C04-0
3	—	ARF1359-ND	3.28	2.74	1.77	1.64	FA1-NESP-PCB-0
4	—	ARF1360-ND	3.35	2.79	1.81	1.68	FA1-NESP-PCB-1
5	—	ARF1371-ND	2.73	2.28	1.47	1.37	FA1-NERP-PCB-9
6	RG-174, 188, 316	ARF1372-ND	3.59	2.99	1.94	1.80	FA1-NESJ-C01-0
	RG-58, 141	ARF1374-ND	3.69	3.08	1.99	1.85	FA1-NESJ-C04-0
	Cables with .057 OD	ARF1376-ND	4.11	3.43	2.22	2.06	FA1-NESJ-C09-0
	RG-178, .071 OD Cables	ARF1377-ND	4.11	3.43	2.22	2.06	FA1-NESJ-C10-0
7	RG-174, 188, 316	ARF1373-ND	3.69	3.08	1.99	1.85	FA1-NESJ-C01-6
	RG-58, 141	ARF1375-ND	3.80	3.17	2.05	1.90	FA1-NESJ-C04-6
8	RG-174, 188, 316	ARF1353-ND	4.11	3.43	2.22	2.06	FA1-NERJ-C01-0
	RG-58, 141	ARF1354-ND	4.31	3.60	2.33	2.16	FA1-NERJ-C04-0
9	RG-58/RG-174 Combo Design	ARF1366-ND	6.87	5.73	3.70	3.44	FA2-NESP-C00-9
	RG-174, 188, 316	ARF1368-ND	6.73	5.61	3.63	3.37	FA2-NESP-C01-9
	RG-58, 141	ARF1370-ND	6.80	5.67	3.66	3.40	FA2-NESP-C04-9
10	RG-58/RG-174 Combo Design	ARF1365-ND	7.21	6.01	3.89	3.61	FA2-NESP-C00-0
	RG-174, 188, 316	ARF1367-ND	7.07	5.90	3.81	3.54	FA2-NESP-C01-0
	RG-58, 141	ARF1369-ND	7.14	5.96	3.85	3.58	FA2-NESP-C04-0
11	RG-174, 188, 316	ARF1361-ND	7.76	6.47	4.18	3.89	FA2-NESJ-C01-0
	RG-58, 141	ARF1363-ND	7.90	6.59	4.26	3.96	FA2-NESJ-C04-0
12	RG-174, 188, 316	ARF1362-ND	7.90	6.59	4.26	3.96	FA2-NESJ-C01-6
	RG-58, 141	ARF1364-ND	8.07	6.73	4.35	4.04	FA2-NESJ-C04-6
FAKRA Coding “F” (Brown)							
1	RG-174, 188, 316	ARF1384-ND	3.21	2.68	1.73	1.61	FA1-NFSP-C01-1
	RG-58, 141	ARF1386-ND	3.38	2.82	1.83	1.70	FA1-NFSP-C04-1
2	RG-174, 188, 316	ARF1383-ND	3.48	2.91	1.88	1.75	FA1-NFSP-C01-0
	RG-58, 141	ARF1385-ND	3.62	3.02	1.96	1.82	FA1-NFSP-C04-0
3	—	ARF1387-ND	3.28	2.74	1.77	1.64	FA1-NFSP-PCB-0
4	—	ARF1388-ND	3.35	2.79	1.81	1.68	FA1-NFSP-PCB-1
5	—	ARF1380-ND	2.73	2.28	1.47	1.37	FA1-NFRP-PCB-9
6	Cables with .057 OD	ARF1381-ND	4.11	3.43	2.22	2.06	FA1-NFSJ-C09-0
	RG-178, .071 OD Cables	ARF1382-ND	4.11	3.43	2.22	2.06	FA1-NFSJ-C10-0
	RG-174, 188, 316	ARF1399-ND	3.59	2.99	1.94	1.80	FA1-NFSJ-C01-0
	RG-58, 141	ARF1401-ND	3.69	3.08	1.99	1.85	FA1-NFSJ-C04-0
7	RG-174, 188, 316	ARF1400-ND	3.69	3.08	1.99	1.85	FA1-NFSJ-C01-6
	RG-58, 141	ARF1402-ND	3.80	3.17	2.05	1.90	FA1-NFSJ-C04-6
8	RG-174, 188. 316	ARF1378-ND	4.11	3.43	2.22	2.06	FA1-NFRJ-C01-0
	RG-58, 141	ARF1379-ND	4.31	3.60	2.33	2.16	FA1-NFRJ-C04-0
9	RG-58/RG-174 Combo Design	ARF1394-ND	6.87	5.73	3.70	3.44	FA2-NFSP-C00-9
	RG-174, 188, 316	ARF1396-ND	6.73	5.61	3.63	3.37	FA2-NFSP-C01-9
	RG-58, 141	ARF1398-ND	6.80	5.67	3.66	3.40	FA2-NFSP-C04-9
10	RG-58/RG-174 Combo Design	ARF1393-ND	7.21	6.01	3.89	3.61	FA2-NFSP-C00-0
	RG-174, 188, 316	ARF1395-ND	7.07	5.90	3.81	3.54	FA2-NFSP-C01-0
	RG-58, 141	ARF1397-ND	7.14	5.96	3.85	3.58	FA2-NFSP-C04-0
11	RG-174, 188, 316	ARF1389-ND	7.76	6.47	4.18	3.89	FA2-NFSJ-C01-0
	RG-58, 141	ARF1391-ND	7.90	6.59	4.26	3.96	FA2-NFSJ-C04-0
12	RG-174, 188, 316	ARF1390-ND	7.90	6.59	4.26	3.96	FA2-NFSJ-C01-6
	RG-58, 141	ARF1392-ND	8.07	6.73	4.35	4.04	FA2-NFSJ-C04-6
FAKRA Coding “G” (Blue Grey)							
1	RG-174, 188, 316	ARF1408-ND	3.21	2.68	1.73	1.61	FA1-NGSP-C01-1
	RG-58, 141	ARF1410-ND	3.38	2.82	1.83	1.70	FA1-NGSP-C04-1
2	RG-174, 188, 316	ARF1407-ND	3.48	2.91	1.88	1.75	FA1-NGSP-C01-0
	RG-58, 141	ARF1409-ND	3.62	3.02	1.96	1.82	FA1-NGSP-C04-0
3	—	ARF1411-ND	3.28	2.74	1.77	1.64	FA1-NGSP-PCB-0
4	—	ARF1412-ND	3.35	2.79	1.81	1.68	FA1-NGSP-PCB-1
5	—	ARF1405-ND	2.73	2.28	1.47	1.37	FA1-NGRP-PCB-9
6	Cables with .057 OD	ARF1406-ND	4.11	3.43	2.22	2.06	FA1-NGSJ-C09-0
	RG-174, 188, 316	ARF1413-ND	3.59	2.99	1.94	1.80	FA1-NGSJ-C01-0
	RG-58, 141	ARF1415-ND	3.69	3.08	1.99	1.85	FA1-NGSJ-C04-0
	RG-178, .071 OD Cables	ARF1417-ND	4.11	3.43	2.22	2.06	FA1-NGSJ-C10-0
7	RG-174, 188, 316	ARF1414-ND	3.69	3.08	1.99	1.85	FA1-NGSJ-C01-6
	RG-58, 141	ARF1416-ND	3.80	3.17	2.05	1.90	FA1-NGSJ-C04-6
8	RG-174, 188, 316	ARF1403-ND	4.11	3.43	2.22	2.06	FA1-NGRJ-C01-0
	RG-58, 141	ARF1404-ND	4.31	3.60	2.33	2.16	FA1-NGRJ-C04-0
FAKRA Coding “H” (Heather Violet)							
1	RG-174, 188, 316	ARF1423-ND	3.21	2.68	1.73	1.61	FA1-NHSP-C01-1
	RG-58, 141	ARF1425-ND	3.38	2.82	1.83	1.70	FA1-NHSP-C04-1
2	RG-174, 188, 316	ARF1422-ND	3.48	2.91	1.88	1.75	FA1-NHSP-C01-0
	RG-58, 141	ARF1424-ND	3.62	3.02	1.96	1.82	FA1-NHSP-C04-0
3	—	ARF1426-ND	3.28	2.74	1.77	1.64	FA1-NHSP-PCB-0
4	—	ARF1427-ND	3.35	2.79	1.81	1.68	FA1-NHSP-PCB-1
5	—	ARF1420-ND	2.73	2.28	1.47	1.37	FA1-NHRP-PCB-9
6	Cables with .057 OD	ARF1421-ND	4.11	3.43	2.22	2.06	FA1-NHSJ-C09-0
	RG-174, 188, 316	ARF1428-ND	3.59	2.99	1.94	1.80	FA1-NHSJ-C01-0
	RG-58, 141	ARF1430-ND	3.69	3.08	1.99	1.85	FA1-NHSJ-C04-0
	RG-178, .071 OD Cables	ARF1432-ND	4.11	3.43	2.22	2.06	FA1-NHSJ-C10-0
7	RG-174, 188, 316	ARF1429-ND	3.69	3.08	1.99	1.85	FA1-NHSJ-C01-6
	RG-58, 141	ARF1431-ND	3.80	3.17	2.05	1.90	FA1-NHSJ-C04-6
8	RG-174, 188, 316	ARF1418-ND	4.11	3.43	2.22	2.06	FA1-NHRJ-C01-0
	RG-58, 141	ARF1419-ND	4.31	3.60	2.33	2.16	FA1-NHRJ-C04-0
FAKRA Coding “I” (Beige)							
1	RG-174, 188, 316	ARF1439-ND	3.21	2.68	1.73	1.61	FA1-NISP-C01-1
	RG-58, 141	ARF1441-ND	3.38	2.82	1.83	1.70	FA1-NISP-C04-1
2	RG-174, 188, 316	ARF1438-ND	3.48	2.91	1.88	1.75	FA1-NISP-C01-0
	RG-58, 141	ARF1440-ND	3.62	3.02	1.96	1.82	FA1-NISP-C04-0
3	—	ARF1442-ND	3.28	2.74	1.77	1.64	FA1-NISP-PCB-0
4	—	ARF1443-ND	3.35	2.79	1.81	1.68	FA1-NISP-PCB-1
5	—	ARF1435-ND	2.73	2.28	1.47	1.37	FA1-NIRP-PCB-9
6	Cables with .057 OD	ARF1436-ND	4.11	3.43	2.22	2.06	FA1-NISJ-C09-0
	RG-178, .071 OD Cables	ARF1437-ND	4.11	3.43	2.22	2.06	FA1-NISJ-C10-0
	RG-174, 188, 316	ARF1444-ND	3.59	2.99	1.94	1.80	FA1-NISJ-C01-0
	RG-58, 141	ARF1446-ND	3.69	3.08	1.99	1.85	FA1-NISJ-C04-0
7	RG-174, 188, 316	ARF1445-ND	3.69	3.08	1.99	1.85	FA1-NISJ-C01-6
	RG-58, 141	ARF1447-ND	3.80	3.17	2.05	1.90	FA1-NISJ-C04-6
8	RG-174, 188, 316	ARF1433-ND	4.11	3.43	2.22	2.06	FA1-NIRJ-C01-0
	RG-58, 141	ARF1434-ND	4.31	3.60	2.33	2.16	FA1-NIRJ-C04-0
FAKRA Coding “K” (Curry Yellow)							
1	RG-174, 188, 316	ARF1481-ND	3.21	2.68	1.73	1.61	FA1-NKSP-C01-1
	RG-58, 141	ARF1483-ND	3.38	2.82	1.83	1.70	FA1-NKSP-C04-1
2	RG-174, 188, 316	ARF1480-ND	3.48	2.91	1.88	1.75	FA1-NKSP-C01-0
	RG-58, 141	ARF1482-ND	3.62	3.02	1.96	1.82	FA1-NKSP-C04-0
3	—	ARF1484-ND	3.28	2.74	1.77	1.64	FA1-NKSP-PCB-0
4	—	ARF1485-ND	3.35	2.79	1.81	1.68	FA1-NKSP-PCB-1
5	—	ARF1486-ND	2.73	2.28	1.47	1.37	FA1-NKRP-PCB-9
6	RG-174, 188, 316	ARF1487-ND	3.59	2.99	1.94	1.80	FA1-NKSJ-C01-0
	RG-58, 141	ARF1489-ND	3.69	3.08	1.99	1.85	FA1-NKSJ-C04-0
	Cables with .057 OD	ARF1491-ND	4.11	3.43	2.22	2.06	FA1-NKSJ-C09-0
	RG-178, .071 OD Cables	ARF1492-ND	4.11	3.43	2.22	2.06	FA1-NKSJ-C10-0
7	RG-174, 188, 316	ARF1488-ND	3.69	3.08	1.99	1.85	FA1-NKSJ-C01-6
	RG-58, 141	ARF1490-ND	3.80	3.17	2.05	1.90	FA1-NKSJ-C04-6
8	RG-174, 188, 316	ARF1478-ND	4.11	3.43	2.22	2.06	FA1-NKRJ-C01-0
	RG-58, 141	ARF1479-ND	4.31	3.60	2.33	2.16	FA1-NKRJ-C04-0
FAKRA Coding “L” (Dahlia Yellow)							
1	RG-174, 188, 316	ARF1503-ND	3.21	2.68	1.73	1.61	FA1-NLSP-C01-1
	RG-58, 141	ARF1505-ND	3.38	2.82	1.83	1.70	FA1-NLSP-C04-1
2	RG-174, 188, 316	ARF1502-ND	3.48	2.91	1.88	1.75	FA1-NLSP-C01-0
	RG-58, 141	ARF1504-ND	3.62	3.02	1.96	1.82	FA1-NLSP-C04-0
3	—	ARF1506-ND	3.28	2.74	1.77	1.64	FA1-NLSP-PCB-0
4	—	ARF1507-ND	3.35	2.79	1.81	1.68	FA1-NLSP-PCB-1
5	—	ARF1495-ND	2.73	2.28	1.47	1.37	FA1-NLRP-PCB-9
6	RG-174, 188, 316	ARF1496-ND	3.59	2.99	1.94	1.80	FA1-NLSJ-C01-0
	RG-58, 141	ARF1498-ND	3.69	3.08	1.99	1.85	FA1-NLSJ-C04-0
	Cables with .057 OD	ARF1500-ND	4.11	3.43	2.22	2.06	FA1-NLSJ-C09-0
	RG-178, .071 OD Cables	ARF1501-ND	4.11	3.43	2.22	2.06	FA1-NLSJ-C10-0
7	RG-174, 188, 316	ARF1497-ND	3.69	3.08	1.99	1.85	FA1-NLSJ-C01-6
	RG-58, 141	ARF1499-ND	3.80	3.17	2.05	1.90	FA1-NLSJ-C04-6
8	RG-174, 188, 316	ARF1493-ND	4.11	3.43	2.22	2.06	FA1-NLRJ-C01-0
	RG-58, 141	ARF1494-ND	4.31	3.60	2.33	2.16	FA1-NLRJ-C04-0
FAKRA Coding “M” (Pastel Green)							
1	RG-174, 188, 316	ARF1518-ND	3.21	2.68	1.73	1.61	FA1-NMSP-C01-1
	RG-58, 141	ARF1520-ND	3.38	2.82	1.83	1.70	FA1-NMSP-C04-1
2	RG-174, 188, 316	ARF1517-ND	3.48	2.91	1.88	1.75	FA1-NMSP-C01-0
	RG-58, 141	ARF1519-ND	3.62	3.02	1.96	1.82	FA1-NMSP-C04-0
3	—	ARF1521-ND	3.28	2.74	1.77	1.64	FA1-NMSP-PCB-0
4	—	ARF1522-ND	3.35	2.79	1.81	1.68	FA1-NMSP-PCB-1
5	—	ARF1510-ND	2.73	2.28	1.47	1.37	FA1-NMRP-PCB-9
6	RG-174, 188, 316	ARF1511-ND	3.59	2.99	1.94	1.80	FA1-NMSJ-C01-0
	RG-58, 141	ARF1513-ND	3.69	3.08	1.99	1.85	FA1-NMSJ-C04-0
	Cables with .057 OD	ARF1515-ND	4.11	3.43	2.22	2.06	FA1-NMSJ-C09-0
	RG-178, .071 OD Cables	ARF1516-ND	4.11	3.43	2.22	2.06	FA1-NMSJ-C10-0
7	RG-174, 188, 316	ARF1512-ND	3.69	3.08	1.99	1.85	FA1-NMSJ-C01-6
	RG-58, 141	ARF1514-ND	3.80	3.17	2.05	1.90	FA1-NMSJ-C04-6
8	RG-174, 188, 316	ARF1508-ND	4.11	3.43	2.22	2.06	FA1-NMRJ-C01-0
	RG-58, 141	ARF1509-ND	4.31	3.60	2.33	2.16	FA1-NMRJ-C04-0
FAKRA Coding “Z” (Water Blue)							
1	RG-174, 188, 316	ARF1533-ND	3.21	2.68	1.73	1.61	FA1-NZSP-C01-1
	RG-58, 141	ARF1535-ND	3.38	2.82	1.83	1.70	FA1-NZSP-C04-1
2	RG-174, 188, 316	ARF1532-ND	3.48	2.91	1.88	1.75	FA1-NZSP-C01-0
	RG-58, 141	ARF1534-ND	3.62	3.02	1.96	1.82	FA1-NZSP-C04-0
3	—	ARF1536-ND	3.28	2.74	1.77	1.64	FA1-NZSP-PCB-0
4	—	ARF1537-ND	3.35	2.79	1.81	1.68	FA1-NZSP-PCB-1
5	—	ARF1525-ND	2.73	2.28	1.47	1.37	FA1-NZRP-PCB-9
6	RG-174, 188, 316	ARF1526-ND	3.59	2.99	1.94	1.80	FA1-NZSJ-C01-0
	RG-58, 141	ARF1528-ND	3.69	3.08	1.99	1.85	FA1-NZSJ-C04-0
	Cables with .057 OD	ARF1530-ND	4.11	3.43	2.22	2.06	FA1-NZSJ-C09-0
	RG-178, .071 OD Cables	ARF1531-ND	4.11	3.43	2.22	2.06	FA1-NZSJ-C10-0
7	RG-174, 188, 316	ARF1527-ND	3.69	3.08	1.99	1.85	FA1-NZSJ-C01-6
	RG-58, 141	ARF1529-ND	3.80	3.17	2.05	1.90	FA1-NZSJ-C04-6
8	RG-174, 188, 316	ARF1523-ND	4.11	3.43	2.22	2.06	FA1-NZRJ-C01-0
	RG-58, 141	ARF1524-ND	4.31	3.60	2.33	2.16	FA1-NZRJ-C04-0
9	RG-58/RG-174 Combo Design	ARF1543-ND	6.87	5.73	3.70	3.44	FA2-NZSP-C00-9
	RG-174, 188, 316	ARF1545-ND	6.73	5.61	3.63	3.37	FA2-NZSP-C01-9
	RG-58, 141	ARF1547-ND	6.80	5.67	3.66	3.40	FA2-NZSP-C04-9
10	RG-58/RG-174 Combo Design	ARF1542-ND	7.21	6.01	3.89	3.61	FA2-NZSP-C00-0
	RG-174, 188, 316	ARF1544-ND	7.07	5.90	3.81	3.54	FA2-NZSP-C01-0
	RG-58, 141	ARF1546-ND	7.14	5.96	3.85	3.58	FA2-NZSP-C04-0
11	RG-174, 188, 316	ARF1538-ND	7.76	6.47	4.18	3.89	FA2-NZSJ-C01-0
	RG-58, 141	ARF1540-ND	7.90	6.59	4.26	3.96	FA2-NZSJ-C04-0
12	RG-174, 188, 316	ARF1539-ND	7.90	6.59	4.26	3.96	FA2-NZSJ-C01-6
	RG-58, 141	ARF1541-ND	8.07	6.73	4.35	4.04	FA2-NZSJ-C04-6

RF & RFX Connectors

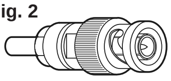
BNC Coaxial Connectors

Fig. 1



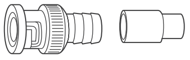
MIL-Crimp 3 Piece

Fig. 2



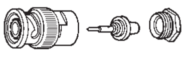
Original Crimp

Fig. 3



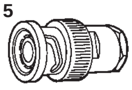
Single Crimp 2 Piece

Fig. 4



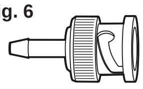
Quick Trim

Fig. 5



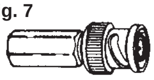
MIL-Clamp

Fig. 6



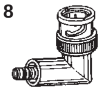
FCP

Fig. 7



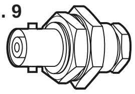
Suretwist®

Fig. 8



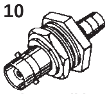
Angle Plug

Fig. 9



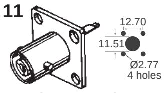
MIL-Clamp Jack

Fig. 10



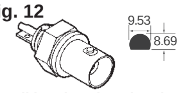
MIL-Crimp Bulkhead Jack

Fig. 11



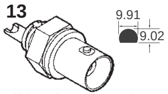
Panel Receptacle

Fig. 12



Bulkhead Jack Isolated

Fig. 13



Bulkhead Receptacle

Fig. 14

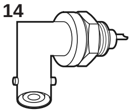


Fig. 15

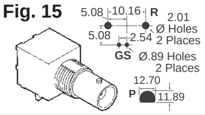


Fig. 16

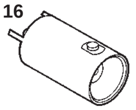


Fig. 17

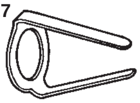


Fig. 18

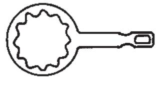


Fig. 19

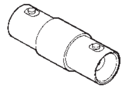


Fig. 20

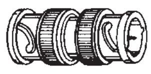


Fig. 21

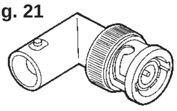


Fig. 22

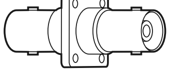


Fig. 23

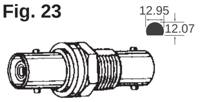


Fig. 24

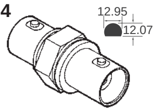


Fig. 25

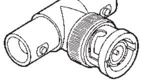


Fig. 26

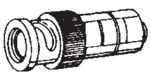
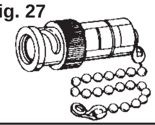


Fig. 27



* RFX connectors. RFX™ is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

Fig.	Description	Cable Group RG/U	Crimp Tool Part No.	Digi-Key Part No.	Pricing			Amphenol Part No.
					1	25	100	
1	Plug (MIL-Crimp)	58, 141, 142	CTL-1	ARF1039-ND	5.34	77.25	268.00	31-320
	Plug (MIL-Crimp)	58, 141, 142	CTL-1	ARFX1039-ND*	1.65	27.50	99.00	31-320-RFX
	Plug (Quick-Crimp)	Plenum 58	CTL-1	ARFX1041-ND*	2.20	24.00	82.50	36650-3RFX
	Plug (MIL-Crimp)	59, 62	CTL-1	ARF1042-ND	5.46	78.75	274.00	31-321
	Plug (MIL-Crimp)	59, 62	CTL-1	ARFX1042-ND*	1.65	27.50	99.00	31-321-RFX
	Plug (MIL-Crimp)	59, 62, 71, 140, 210, 302	CTL-1	ARF1156-ND	8.29	86.25	288.00	68175
	Plug (MIL-Crimp)	Belden 9259	CTL-1	ARF1052-ND	6.75	73.25	255.00	68175-1003
	Plug (MIL-Crimp)	59 (20AWG Ctr. Cond.)	CTL-1	ARF1046-ND	7.33	79.50	275.00	68175-1005
	Plug (MIL-Crimp)	59 (20AWG Ctr. Cond.)	CTL-1	ARFX1046-ND*	1.74	29.00	87.00	68175-5RFX
	Plug (MIL-Crimp)	Plenum 59, 62	CTL-1	ARFX1047-ND*	2.20	28.50	104.00	68175-11RFX
	Plug (MIL-Crimp)	174, 188, 316	CTL-2	ARF1049-ND	10.92	102.75	343.00	31-315
	Plug (MIL-Crimp)	174, 188, 316	CTL-2	ARFX1049-ND*	2.10	35.00	104.00	31-315-RFX
	Plug (MIL-Crimp)	179, 187	CTL-2	ARF1050-ND	9.73	105.25	366.00	31-242
	Plug (MIL-Crimp)	Belden 8281	CTL-2	ARF1051-ND	6.24	90.00	313.00	31-321-1000
	Plug (MIL-Crimp)	Belden 8281	CTL-2	ARFX1051-ND*	2.93	30.75	109.50	31-321-10RFX
	Plug (MIL-Crimp)	Belden 9907, 89907	CTL-1	ARF1054-ND	6.75	73.25	255.00	31-320-1006
	Plug (MIL-Crimp)	59, 62	CTL-1	ARFX1123-ND*	1.65	27.50	82.50	31-71008-RFX
	Plug (MIL-Crimp), 75Ω	59, 62	CTL-1	ARF1175-ND	3.93	71.25	233.00	31-71008
	Plug (MIL-Crimp), 75Ω	59, 62 (20 GACC)	CTL-1	ARF1176-ND	4.14	74.75	245.00	31-71008-1000
	Plug (MIL-Crimp), 75Ω	179, 187	CTL-2	ARF1174-ND	6.58	71.53	249.59	31-71013
	Plug (MIL-Crimp), 75Ω	Belden 8218	CTL-2	ARF1173-ND	3.93	57.00	198.00	31-71033
	Plug (MIL-Crimp), 75Ω	Belden 8281, 88281	CTL-2	ARF1172-ND	4.41	79.63	260.98	31-71032
	Plug (Thinnet/Ethernet)	58	CTL-1	ARF1181-ND	2.90	35.32	129.00	31-5800
	Plug (IBM/Arcnet)	59, 62	CTL-1	ARF1182-ND	3.59	37.50	131.00	31-5900
2	Plug (Original Crimp)	174, 179, 187, 188, 316	—	ARF1143-ND	21.45	213.75	743.00	31-371
3	Plug (Single Crimp)	59, 62	CTL-2	ARFX1124-ND*	2.96	43.75	114.00	31-5556-RFX
4	Plug (Quicktrim®)	59, 62	CTL-1	ARF1045-ND	11.10	162.25	591.00	31-4541
	Plug (Quicktrim®)	59, 62	CTL-1	ARFX1045-ND*	6.06	66.00	229.00	31-4541-RFX
5	Plug (MIL-Clamp)	58	—	ARF1040-ND	5.42	58.75	218.00	31-202
	Plug (MIL-Clamp)	59, 62	—	ARF1043-ND	7.68	83.66	289.37	31-212
	Plug (MIL-Clamp)	59, 62	—	ARFX1043-ND*	2.16	36.00	106.00	31-212-RFX
	Plug (Standard Clamp)	8, 9, 11, 213, 214	—	ARF1155-ND	12.51	181.00	663.00	6775
	Plug (Standard Clamp)	55, 58, 141, 142, 223, 400	—	ARF1126-ND	7.45	77.36	287.00	31-2
	Plug (Standard Clamp)	55, 58, 141, 142, 223, 400	—	ARFX1119-ND*	2.25	37.50	112.50	31-2-RFX
	Plug (Standard Clamp)	59, 62, 71, 140, 210, 302	—	ARF1123-ND	9.59	142.02	556.50	31-12
	Plug (MIL-Clamp)	174, 179, 187, 188, 316	—	ARF1157-ND	10.86	117.75	410.00	69475
	Plug (Standard Clamp)	178, 196	—	ARF1120-ND	10.64	115.61	411.00	15875
6	Plug (FCP)	58, 141	—	ARF1145-ND	8.23	89.00	310.00	31-4700
	Plug (FCP)	59	—	ARF1146-ND	13.93	151.76	526.82	31-4702
7	Plug (Suretwist®)	59, 62	—	ARF1044-ND	6.48	93.67	325.33	31-5136
	Plug (Suretwist®)	59, 62	—	ARFX1044-ND*	2.04	38.25	138.00	31-5136-RFX
	Plug (Suretwist®)	58, 141, 142	—	ARF1147-ND	9.39	101.78	353.53	31-5137
	Plug (Suretwist®)	58, 141, 142	—	ARFX1147-ND*	3.00	44.39	103.50	31-5137-RFX
	Plug (Suretwist®)	Plenum 59, 62	—	ARF1048-ND	8.88	148.00	473.60	31-5369
8	Angle Plug (MIL-Crimp)	58, 141, 142A	CTL-1	ARF1055-ND	36.67	385.73	1376.24	31-335
	Angle Plug (MIL-Crimp)	58, 141, 142A	CTL-1	ARFX1055-ND*	5.37	89.50	268.50	31-335-RFX
	Angle Plug (MIL-Crimp)	59, 62	CTL-1	ARF1056-ND	31.86	345.50	1201.14	31-336
9	Bulkhead Jack (Clamp)	55, 58, 141, 142, 223, 400	—	ARF1127-ND	8.55	142.50	430.62	31-206
10	Bulkhead Jack (MIL-Crimp)	55, 58, 141, 142, 223, 400	CTL-1	ARF1060-ND	17.04	185.11	718.45	31-342
	Bulkhead Jack (MIL-Crimp)	55, 58, 141, 142, 223, 400	CTL-1	ARFX1060-ND*	4.15	45.00	157.50	31-342-RFX
	Bulkhead Jack (MIL-Crimp)	59, 62, 140, 210	CTL-1	ARFX1061-ND*	4.50	75.00	262.50	31-343-RFX
	Bulkhead Jack (MIL-Crimp)	174, 188, 316	CTL-2	ARF1139-ND	14.49	165.75	546.00	31-318
	Bulkhead Jack (MIL-Crimp)	174, 188, 316	CTL-2	ARFX1139-ND*	4.17	69.50	243.00	31-318-RFX
11	Panel Receptacle (Solder)	—	UG-290A	ARF1062-ND	9.26	100.25	349.00	31-203
	Panel Receptacle (Solder)	—	—	ARFX1062-ND*	3.54	59.00	178.00	31-203-RFX
12	Bulkhead Recept. Isolated (Solder)	—	—	ARF1063-ND	5.52	92.00	276.00	31-10
	Bulkhead Recept. Isolated (Solder)	—	—	ARFX1063-ND*	2.67	44.50	133.50	31-10-RFX
	Bulkhead Isolated Recept.	—	—	ARF1121-ND	7.38	123.00	423.44	31-10-75
13	Bulkhead Recept. Pressurized	—	UG-625B	ARF1134-ND	3.39	56.50	211.57	31-236
	Bulkhead Recept.	—	UG-1094/U	ARF1064-ND	2.52	42.00	150.00	31-221
	Bulkhead Recept. (Solder)	—	—	ARFX1064-ND*	3.12	22.75	81.51	31-221-RFX
	Bulkhead Recept.	—	UG-1094A	ARF1131-ND	4.99	52.25	174.00	31-2221
	Bulkhead Recept.	—	—	ARF1149-ND	9.58	104.18	361.51	31-70018
	Bulkhead Recept. Pressurized	—	UG-657	ARF1122-ND	6.54	95.31	328.55	31-102
	Bulkhead Recept. Pressurized	—	UG-912	ARF1136-ND	24.96	416.00	1350.00	31-238
14	Angle Bulkhead Recept.	—	UG-1098	ARF1130-ND	47.43	790.50	2390.00	31-222
15	Rt. Angle Bulkhead Recept.	—	—	ARF1065-ND	9.32	97.25	324.00	31-5431
	Rt. Ang. Bulkhead Recept. w/Hardware	—	—	ARF1065NW-ND	7.58	96.75	336.00	31-5431-2010
	Rt. Angle Bulkhead Recept.	75Ω	—	ARF1177-ND	5.58	93.00	281.00	31-71047-1010
	Rt. Angle Bulkhead Recept.	50Ω	—	ARF1178-ND	5.85	97.50	294.00	31-5640-1010
	Rt. Angle Bulkhead Recept. Metal	75Ω	—	ARF1179-ND	7.78	84.50	294.00	31-71043-1010
	Rt. Angle Bulkhead Recept. Low Profile	50Ω	—	ARF1180-ND	5.58	93.00	281.00	31-5486-1010
16	Receptacle Vertical PC	—	—	ARF1066-ND	8.44	91.50	318.00	31-5329
17	Shield Grounding Lug	—	—	ARF1067-ND	.76	8.50	30.00	31-759
18	Grounding Lug	—	—	ARF1068-ND	.74	8.25	28.00	31-10152-RFX
19	Straight/Jack-Jack	—	UG-914/U	ARF1069-ND	8.85	92.25	306.00	31-219
	Straight/Jack-Jack	—	—	ARFX1069-ND*	4.68	43.25	163.02	31-219-RFX
	Straight/Jack-Jack	75Ω	—	ARF1150-ND	8.39	85.25	296.00	31-70019
20	Straight/Plug-Plug	—	UG-491A/U	ARF1070-ND	12.47	135.10	470.04	31-218
	Straight/Plug-Plug	—	—	ARFX1070-ND*	3.27	54.50	164.59	31-218-RFX
21	Angle/Jack-Plug	—	UG-306/U	ARF1071-ND	17.53	215.75	660.00	31-9
	Angle/Jack-Plug	—	—	ARFX1071-ND*	5.64	70.25	245.00	31-9-RFX
	Angle/Jack-Plug	—	UG-306A	ARF1128-ND	19.15	207.50	721.00	31-209
22	Panel/Jack-Jack	—	UG-414	ARF1154-ND	29.85	497.50	1505.23	47000
23	Bulkhead/Jack-Jack, Gasketed	50Ω	—	ARFX1130-ND*	5.11	55.25	193.00	31-220G-RFX
	Bulkhead/Jack-Jack (Sealed)	50Ω	UG-492A	ARF1129-ND	12.05	130.75	461.00	31-220H
	Bulkhead/Jack-Jack, Non-Gasketed	50Ω	—	ARF1072-ND	13.07	149.75	495.00	31-220N
	Bulkhead/Jack-Jack	—	—	ARFX1072-ND*	6.05	61.50	204.00	31-220N-RFX
	Bulkhead/Jack-Jack (Sealed)	—	UG-492D	ARF1140-ND	16.99	184.63	641.36	31-3220
	Bulkhead/Jack-Jack, Gasketed	75Ω	—	ARF1151-ND	19.83	330.50	1050.00	31-70020
24	Bulkhead/Jack-Jack (Ins.)	—	—	ARF1073-ND	21.18	237.50	735.00	31-4803
25	Tee/Jack-Plug-Jack	—	UG-274	ARF1152-ND	16.63	180.25	650.00	31-8
	Tee/Jack-Plug-Jack	50Ω	UG-274A/U	ARF1074-ND	15.41	150.00	521.00	31-208
	Tee/Jack-Plug-Jack	50Ω	—	ARFX1074-ND*	7.33	76.50	300.00	31-208-RFX
26	Res. Cap, 50 Ohm	—	—	ARF1075-ND	20.28	234.50	765.00	46650-51
	Res. Cap, 50 Ohm	—	—	ARFX1075-ND*	2.46	41.00	145.00	46650-51-RFX
	Res. Cap, 75 Ohm	—	—	ARFX1076-ND*	4.88	41.50	134.00	46650-75-RFX
	Res. Cap, 93 Ohm	—	—	ARFX1077-ND*	2.79	46.50	139.50	46650-93-RFX
27	Res. Cap & Chain, 50 Ohm	—	—	ARF1078-ND	15.72	262.00	789.00	35650-50
	Res. Cap & Chain, 75 Ohm	—	—	ARF1079-ND	21.34	231.59	804.06	35650-75

Fig. 1

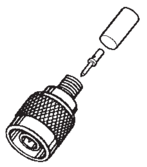


Fig. 2

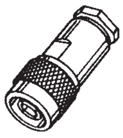


Fig. 3

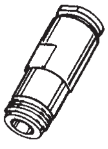


Fig. 4

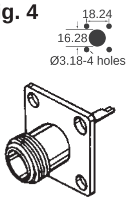


Fig. 5

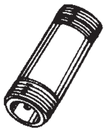


Fig. 6

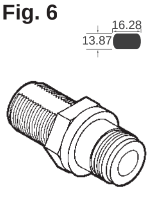


Fig. 7

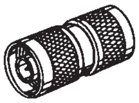


Fig. 8

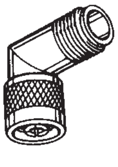


Fig. 9

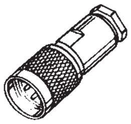


Fig. 10

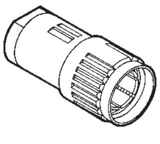


Fig. 11

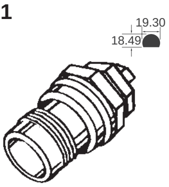


Fig. 12

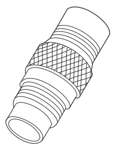


Fig. 13

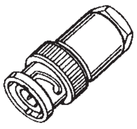


Fig. 14

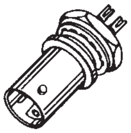


Fig. 15

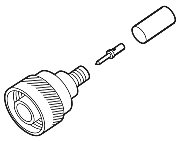


Fig. 16

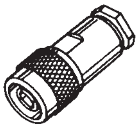
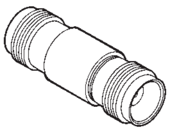


Fig. 17



Type N Coaxial Connectors

Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing			Amphenol Part No.
					1	25	100	
1	Plug (Crimp)‡	8, 213	M39012/10B-0007	ARF1013-ND	14.42	156.31	543.67	82-340
1	Plug (Crimp)	9, 214	—	ARF1163-ND	11.61	193.50	583.22	82-332
1	Plug (Crimp)	55, 142, 223	—	ARF1164-ND	7.65	110.00	384.00	82-5370
1	Plug (Crimp)‡	214, 225, 393	M39012/01-0501	ARF1018-ND	16.52	179.50	623.60	82-4425
1	Plug (Crimp)‡	Ethernet	—	ARF1019-ND	20.79	346.50	1039.50	82-4426-1001
2	Plug (Clamp)	8, 9, 144, 165, 213, 214. 216. 225	UG-21D/U	ARF1014-ND	11.98	122.81	445.04	82-202
2	Plug (Clamp)	8, 9, 144, 165, 213, 214, 216, 225	UG-1185	ARF1161-ND	9.30	110.98	435.30	82-312
2	Plug (Clamp)	58, 141, 142	UG-536B/U	ARF1016-ND	8.73	126.03	438.12	34025
2	Plug (Clamp)	58, 141, 142	UG-536B	ARFX1016-ND*	7.18	77.75	283.50	34025-RFX
2	Plug (Clamp)	Belden 9913	—	ARF1020-ND	8.64	134.00	478.00	82-202-1006
2	Plug (Clamp)	8, 9, 144, 165, 213, 214, 216, 225	UG-21D	ARFX1183-ND*	5.85	72.50	280.80	82-202-RFX
3	Jack (Clamp)	8, 9, 87A, 144, 165,	UG-23B/U	ARF1021-ND	15.24	165.41	573.12	82-63
4	Panel Receptacle	—	UG-58A/U	ARF1023-ND	8.60	129.75	488.00	82-97
4	Panel Receptacle	—	UG-58A	ARFX1023-ND*	4.86	72.00	266.00	82-97-RFX
4	Panel Receptacle	—	UG-58	ARF1160-ND	9.72	162.00	486.00	82-24
5	Straight/Jack-Jack	—	UG-29B/U	ARF1025-ND	14.19	162.56	629.28	82-101
5	Straight/Jack-Jack	—	UG-29B	ARFX1025-ND*	7.22	87.50	238.50	82-101-RFX
6	Bulkhead/Jack-Jack	—	UG-30/U	ARF1026-ND	41.01	431.25	1361.00	82-66
7	Straight/Plug-Plug	—	UG-57B/U	ARF1027-ND	13.15	162.30	626.40	82-100
7	Straight/Plug-Plug	—	UG-57B	ARFX1027-ND*	7.35	122.50	367.50	82-100-RFX
8	Angle/Jack-Plug	—	UG-27A	ARF1028-ND	34.05	369.00	1284.00	82-64

* RFX connectors.
‡ Crimp tools are listed within the RF & RFX Connectors section.

Twinaxial Connectors

Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing			Amphenol Part No.
					1	25	100	
9	Plug (Clamp)	Times AA-6026, AA-6076, AA-6079	—	ARF1031-ND	14.43	260.15	852.47	82-5589
9	Plug (Clamp)		—	ARFX1031-ND*	13.57	198.82	756.00	82-5589-RFX1
10	Plug (Clamp) Plastic Body	Belden 8227, 9207, IBM 7362211	—	ARF1033-ND	15.88	226.20	822.55	82-GB635-CR
11	Receptacle	—	—	ARFX1035-ND*	10.76	116.50	405.00	82-5590-RFX
12	Adapter/Jack-Jack	IBM 7362230	—	ARF1036-ND	33.92	375.07	1304.54	82-5588
12	Adapter/Jack-Jack			ARFX1036-ND*	7.76	86.50	325.50	82-5588-RFX
13	BNC Plug/Twinax - Noryl	108A	—	ARF1037-ND	13.24	143.50	499.00	31-224
13	BNC Plug/Twinax - TFE	108A	—	ARF1133-ND	18.33	199.08	717.00	31-2226
14	BNC Bulkhead/Twinax - Noryl	—	—	ARF1038-ND	25.12	272.00	946.00	31-223
14	BNC Bulkhead/Twinax - TFE	—	—	ARF1132-ND	23.19	262.50	873.00	31-2225

* RFX connectors

TNC Coaxial Connectors

Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing			Amphenol Part No.
					1	25	100	
15	Plug (Quick Crimp)‡	—	—	ARF1081-ND	5.52	92.00	278.00	36825
15	Plug (MIL-Crimp)	142, 223	—	ARF1135-ND	7.16	77.75	270.00	31-2373
15	Plug (Crimp)‡	59, 62	M23329/4-05	ARF1084-ND	5.22	87.00	263.00	31-2368
16	Plug (Clamp)	58, 141	—	ARF1082-ND	13.59	226.50	686.00	79875
16	Plug (Clamp)	58, 141, 142A	—	ARFX1082-ND*	2.40	40.00	120.00	79875-RFX
17	Straight/Jack-Jack	—	—	ARF1090-ND	23.43	390.50	1264.75	31-4791

‡ Crimp tools are listed within the RF & RFX Connectors section.

*RFX™, is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

Amphenol® RF

RF & RFX Connectors

Fig. 1

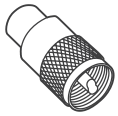
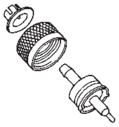


Fig. 2



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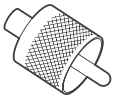

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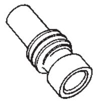

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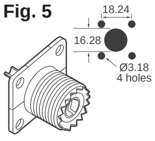

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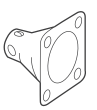

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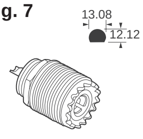

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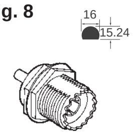

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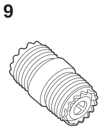

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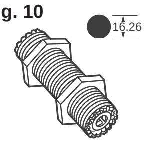

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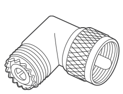

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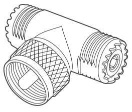

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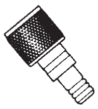

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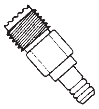

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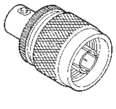
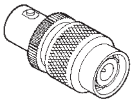


Fig. 16



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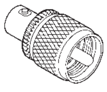

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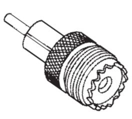

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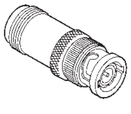

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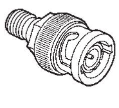

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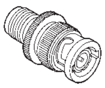

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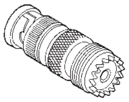

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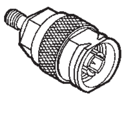

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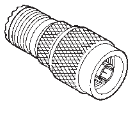

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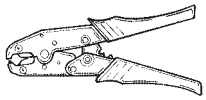


Fig. 26

UHF Coaxial Connectors

Fig.	Description	Cable Group RG/U	Military Part No.	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
1	Plug	8, 9, 11, 13,	PL-259/U	ARF1000-ND	4.68	41.25	138.00	83-1SP-1050
1	Plug	63, 87A, 149	—	ARFX1000-ND	2.10	35.00	105.00	83-1SP-15RFX
1	Plug (TFE Insul.)	213, 214,	PL-259	ARF1001-ND	3.96	71.50	235.00	83-822
1	Plug (UG Standard)	59, 62, 140, 210	—	ARF1166-ND	10.85	131.54	339.76	83-750
2	Plug	58, 141	—	ARF1002-ND	8.79	113.54	439.50	83-58FCP
2	Plug (Crimp)	58, 141, 142	—	ARFX1002-ND*	2.82	58.75	200.00	83-58FCP-RFX
3	Plug (Crimp)	58, 141	—	ARF1165-ND	8.10	88.56	327.00	83-58SP
4	Reducing Adapter	55, 58, 141, 142	UG-175/U	ARF1003-ND	1.12	12.18	44.95	83-185
4	Reducing Adapter	58, 141, 142	UG-175	ARFX1003-ND*	.51	8.50	25.50	83-185-RFX
4	Reducing Adapter	59, 62, 71, 140, 210	UG-176/U	ARF1004-ND	4.73	60.44	206.22	83-168
4	Reducing Adapter	59, 62, 71, 140, 210	UG-176	ARFX1004-ND*	.51	8.50	25.50	83-168-RFX
5	Panel Receptacle	—	SO-239/U	ARF1005-ND	3.51	47.25	175.50	83-1R
5	Panel Receptacle	—	SO-239	ARFX1005-ND*	3.72	62.00	186.00	83-1R-RFX
5	Panel Mount (TFE Insul.)	—	SO-239/A	ARF1168-ND	6.96	75.75	273.00	83-798
6	Panel Mount Hood	58, 141	UG-177	ARF1167-ND	4.21	43.75	146.00	83-765
7	Bulkhead Receptacle	—	—	ARF1006-ND	12.09	143.50	552.45	83-875-1002
8	Bulkhead Receptacle	—	—	ARF1007-ND	4.60	49.85	187.20	83-878
8	Bulkhead Receptacle	—	—	ARFX1007-ND*	3.48	58.00	172.46	83-878-RFX
9	Straight/Jack-Jack	—	PL-258/U	ARF1008-ND	7.22	90.27	288.05	83-1J
10	Bulkhead/Jack-Jack	—	UG-363/U	ARF1009-ND	17.49	291.50	874.50	83-1F
11	Angle/Jack-Plug	—	UG-646/U	ARF1010-ND	13.40	180.60	565.79	83-1AP
12	Tee/Jack-Plug-Jack	—	M-358	ARF1011-ND	16.03	187.57	727.87	83-1T

* RFX connectors. RFX™, is specifically designed for applications that do not require performance above 1 to 3 GHz. RFX ™ connectors are not for use in military system applications. RFX™ connectors are generally less expensive than MIL-Spec and industry standard connectors.

Mini UHF Connectors

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
13	Plug (Crimp)•	58	ARF1092-ND	2.25	37.50	141.00	81-115N-1000
14	Jack (Crimp)•	58	ARF1093-ND	3.30	55.00	165.00	81-116

• Crimp tools are listed below.

Between Series Adapters

Fig.	Description	Military Part No.	Digi-Key Part No.	Pricing 1	25	100	Amphenol Part No.
15	BNC Jack to N Plug	UG-201A/U	ARF1096-ND	15.75	170.84	595.11	31-216
15	BNC Jack to N Plug	UG-201A/U	ARFX1096-ND*	11.88	181.81	596.44	31-216-RFX
16	BNC Jack to TNC Plug	—	ARF1098-ND	30.93	515.50	1546.50	79675
17	BNC Jack to UHF Plug	UG-273/U	ARF1099-ND	20.10	289.98	1005.00	31-28
17	BNC Jack to UHF Plug	UG-273/U	ARFX1099-ND*	17.07	260.75	858.00	31-28-RFX
18	UHF Jack to RCA Plug	—	ARF1101-ND	8.95	192.43	608.60	83-10
19	BNC Plug to N Jack	UG-349A/U	ARF1102-ND	20.39	222.29	874.50	31-217
19	BNC Plug to N Jack	UG-349A/U	ARFX1102-ND*	18.40	210.63	808.50	31-217-RFX
20	BNC Plug to SMA Jack	—	ARF1103-ND	58.02	967.00	2898.00	901-165
21	BNC Plug to TNC Jack	—	ARF1104-ND	33.39	512.75	1681.00	79025
22	BNC Plug to UHF Jack	UG-255/U	ARF1105-ND	20.52	288.02	1026.00	2900
23	N Plug to SMA Jack	—	ARF1106-ND	83.22	1387.00	4156.23	901-294
24	N Plug to UHF Jack	UG-146/U	ARF1107-ND	22.83	249.11	906.15	4400

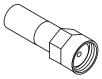
* RFX adapters.

ECONOHEX™ Crimp Tools and Dies

Fig.	Description	Digi-Key Part No.	Price Each	Amphenol Part No.
	CTL Series Crimp Tools			
25	Crimp Tool – RG 58, 59, 62, Plenum 59, 62	ARF1116-ND†	42.65	CTL-1
25	Crimp Tool – RG 174, Belden 8281	ARF1117-ND†	43.85	CTL-2
25	Crimp Tool – RG 58, 8, 213	ARF1118-ND†	43.85	CTL-3
25	Crimp Tool – Belden 8227, IBM 7362211	ARF1119-ND†	43.85	CTL-4
25	Crimp Tool – RG 55, 58, 59, 62, 140, 141, 142, 210, 223, 303, 400, Plenum 59, 62	ARF1183-ND†	43.85	CTL-5
	Crimp Tool and Dies			
25	Tool Handle without Dies	ARF1108-ND	92.51	227-987
26	Crimp Die Set – Twin AX	ARF1110-ND	67.07	227-1417
26	Crimp Die Set – BNC, TNC	ARF1111-ND	52.79	227-1418
26	Crimp Die Set – RG 58, 59	ARF1112-ND	52.79	227-1419
26	Crimp Die Set – “N” Type	ARF1113-ND	52.79	227-1420

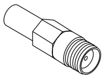
† CTL Series crimp tools are sold complete as a tool handle with die set included.

Fig. 1



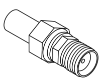
SMA Plug

Fig. 2



SMA Jack

Fig. 3



SMA Bulkhead Jack

Fig. 4

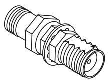
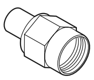


Fig. 5



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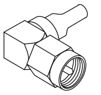
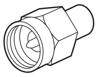


Fig. 7



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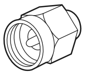

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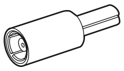
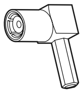


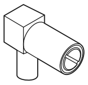
MIL-Type

Fig. 10



MIL-Type

Fig. 11



Zinc Die Cast

Fig. 12

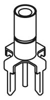


Fig. 13

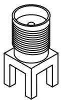


Fig. 14

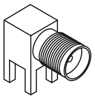


Fig. 15

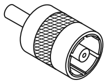


Fig. 16

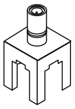


Fig. 17

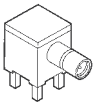


Fig. 18

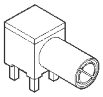
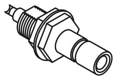


Fig. 19



Front mount shown

Fig. 20

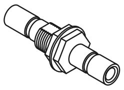


Fig. 21

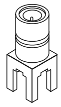
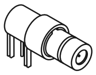


Fig. 22



RF Connectors

A9966-ND Hand Crimp Tool, w/o Dies **$702.45**

SMA Crimp Connectors

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	Die Set	Price Each	Locator Plug*	Price Each
1	Plug, Hex Crimp, Brass, Ni Plated	142, 142A, 142B	A4010-ND	3.40	2.93	447647-2	—	—	—	—
	Plug, Hex Crimp, Brass, Ni Plated	174, 174A, 188, 188A, 316	A4011-ND	3.58	3.08	447647-3	—	—	—	—
	Plug, Hex Crimp, Brass, Ni Plated	Belden YR20621	A24676-ND	4.10	3.53	1-447647-1	—	—	—	—
2	Jack, Hex Crimp	142	A4006-ND	11.70	10.07	447648-2	—	—	—	—
	Jack, Hex Crimp	174, 188, 316	A4007-ND	5.38	4.63	447648-3	—	—	—	—
3	Bulkhead Jack, Crimp	142	A4008-ND	15.75	13.55	447650-2	—	—	—	—
	Bulkhead Jack, Crimp	174, 188, 316	A4009-ND	9.10	7.83	447650-3	—	—	—	—
5	Plug, with Center Contact	405 Semi-Rigid	A4012-ND	7.88	5.20	227868-1	A9964-ND	214.76	A9961-ND	60.03
	Plug, with Center Contact	405 Semi-Rigid	A4013-ND	13.75	11.83	228639-1	A9964-ND	214.76	A9961-ND	60.03
	Short Plug, with Center Contact	405 Semi-Rigid	A24680-ND	10.18	8.76	221447-1	—	—	—	—
6	Right Angle Plug, w/ Center Contact	405 Semi-Rigid	A24681-ND	36.88	31.72	228583-1	A9964-ND	214.76	A9961-ND	60.03
7	Solderless Plug, w/ Center Contact	402 (.141)	A4014-ND	11.68	10.05	227743-1	A9965-ND	446.22	A9961-ND	60.03
	Solderless Plug, w/ Center Contact	402 (.141)	A4015-ND	11.25	9.68	228634-1	A9965-ND	446.22	A9961-ND	60.03
	Solderless Plug, w/o Center Contact	402 (.141)	A4017-ND	3.00	2.58	228635-1	A9965-ND	446.22	A9962-ND	85.98
8	Plug, Retractable Collar	402 (.141)	A4018-ND	3.83	3.29	227531-5	A9963-ND	984.00	A9962-ND	85.98

* Must use a locator with die set.

SMA Crimp Connectors for Flexible Cables

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	Plug, Stainless Steel, Passivated, Length: .950"	174, 188, 188A, 316	A24683-ND‡	13.45	11.57	225532-4
	Plug, Brass, Nickel, Length: 1.188"	17,16	A24684-ND‡	11.85	10.20	221117-2
	Plug, Stainless Steel, Passivated	179, 179A, 179B, 161, 187, 187B, Belden 9221	A24685-ND‡	14.23	12.24	225532-8
	Plug, Stainless Steel, Passivated	58, 58A, 58B, 58C	A24686-ND‡	14.80	12.73	225532-1
	Plug, Stainless Steel, Passivated	223, 55, 55A, 55B	A24687-ND‡	15.43	13.27	1-225532-0
	Plug, Stainless Steel, Passivated	142, 142A, 142B, 400, Belden 84142	A24688-ND‡	14.08	12.11	225532-3
3	Bulkhead Jack, Stainless Steel, Passivated	174, 188, 188A, 316	A24689-ND	30.90	26.58	225608-4
4	Bulkhead Jack Adapter (Jack-Jack)	—	A24690-ND	19.48	16.75	221643-1

‡ Mil Type

SMA PC Board Connectors

Fig.	Description	Body Finish and Plating	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
13	Vertical Jack	Brass and Gold	A24691-ND	6.38	5.49	221789-1
14	Right Angle Jack	Stainless Steel and Gold	A24692-ND	15.98	13.74	221790-1

SMB Connectors

Center Contact: Gold

Fig.	Description	Style	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
	50 Ohm						
9	Plug, Gold	Mil Type	178, 178A, 178B, 196, 196A	A4020-ND††	9.18	7.90	413985-5
	Plug, Nickel			A4021-ND††	5.25	4.52	413985-6
	Plug, Gold	Mil Type	174, 316, 188, 188A	A4026-ND††	6.25	5.38	413985-1
	Plug, Nickel			A4027-ND††	5.48	4.71	413985-3
	Plug, Gold	Mil Type	179, 179A, 179B, 161, 187, 187A, Belden 9221	A4031-ND††	8.93	7.68	1-413985-0
	Plug, Nickel			A4032-ND††	5.00	4.30	1-413985-1
	Plug, Gold	Mil Type	RD 316. 188 Double Braid	A4034-ND††	8.43	7.25	413985-2
	Plug, Nickel			A4035-ND††	5.00	4.30	413985-4
10	Plug, Right Angle, Nickel	Mil Type	178, 178A, 178B, 196, 196A	A4023-ND††	6.65	5.72	414002-8
11	Plug, Right Angle, Gold	Zinc		A4024-ND††	4.48	3.85	414363-8
	Plug, Right Angle, Nickel			A4025-ND††	4.33	3.72	414363-9
10	Plug, Right Angle, Gold	Mil Type	174, 316, 188, 188A, 179, 179A, 179B, 161, 187, 187A, Belden 9221	A4028-ND††	10.40	9.28	414002-1
	Plug, Right Angle, Nickel			A4029-ND††	6.95	5.98	414002-3
11	Plug, Right Angle, Gold	Zinc		A4030-ND††	4.25	3.66	414363-3
	Plug, Right Angle, Nickel			A4033-ND††	4.13	3.55	414363-5
10	Plug, Right Angle, Gold	Mil Type	RD 316, 188 Double Braid	A4036-ND††	7.90	6.80	414002-2
	Plug, Right Angle, Nickel			A4037-ND††	6.33	5.44	414002-4
11	Plug, Right Angle, Gold	Zinc	RD 316, 188 Double Braid	A4038-ND††	4.24	3.80	414363-4
	Plug, Right Angle, Nickel			A4039-ND††	4.13	3.55	414363-6
12	Jack, Vertical, Nickel	Comm.	—	A24693-ND	2.82	2.43	221111-1
16	Jack, Vertical, Gold	Mil Type	—	A4041-ND	4.33	3.72	413990-1
	Jack, Vertical, Nickel			A4042-ND	3.48	2.99	413990-2
17	Jack, Right Angle, Low Profile, Gold	Mil Type	—	A4043-ND	8.50	7.31	413996-2
	Jack, Right-Angle with Standoff Pads, Gold			A24694-ND	6.15	5.29	414026-2
	Jack, Right Angle with Standoff Pads, Nickel			A4044-ND	4.93	4.24	414026-3
	Jack, Right Angle, Nickel/Tin-Lead/Zinc Die Cast	Zinc		A4045-ND	4.60	3.96	414337-1
18	Plug, Right Angle, Gold, Nickel/Tin-Lead, Zinc Die Cast	Zinc	—	A4046-ND	6.03	5.19	414338-1
19	Receptacle, Solder Pot, Front Mount, Nickel	Mil Type		A24695-ND	5.30	4.56	228216-1
	Receptacle, Solder Pot, Rear Mount, Nickel			A24696-ND	5.30	4.56	228215-1
20	Bulkhead Jack Adapter (Jack-Jack), Nickel	Mil Type	—	A24697-ND	7.10	6.11	228553-1
	75 Ohm						
10	Plug, Right Angle, Gold	Comm.	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24704-ND†	17.38	14.95	414048-6
15	Plug, Nickel	Comm.	179, 179A, 179B, 161, 187, 187A, Belden 9221	A4040-ND†	9.18	7.90	414618-2
21	PC Board Jack, Vertical, Gold	Mil Type	—	A4047-ND	5.93	5.10	414244-1
	PC Board Jack, Vertical, Tin-Lead			A4050-ND	4.75	4.09	414244-4
22	Jack, Right Angle, Front: Nickel, Rear: Tin-Lead	Comm.	—	A24698-ND	6.48	5.57	221014-1
	Tools						
	Crimp Tool, 50 Ohm, Hex/Comm. with Die Set		174, 316, 188, 179, 161, 187, RD 316, 188 Double Braid	A9808-ND	134.25	—	58500-1
	Crimp Tool, 50 Ohm, Hex/Comm. with Die Set		178, 196, 174, 316, 179, 161, 187,188	A9810-ND	337.50	—	58046-1
	Pro Crimper II Hand Tool w/o Die, Use with A9968 and A9809		—	A9996-ND	75.00	—	354940-1
	Die Set, Hex/Comm, use with A9996		174, 179, 187	A9809-ND	73.50	—	58489-1
	Die Set, Mil Type Crimp, use with A9996		—	A9968-ND	60.75	—	58483-1

†† Uses A9996-ND PRO-CRIMPER and A9968-ND Die † Uses A9996-ND PRO-CRIMPER and A9809-ND Die

Fig. 1

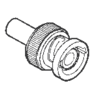


Fig. 2

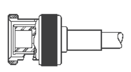


Fig. 3

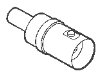
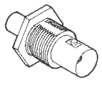


Fig. 4



BNC Coaxial Connectors Dual Crimp

MIL-C-39012 Class II - Cat. B

Fig.	Descrip-tion	Center Contact	Body Plating	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	CERTI-CRIMP Hand Tool	Die for Pro-Crimper
1	Plug	Gold	Nickel	TEFLON	174, 188, 188A, 316	A24422-ND	2.82	2.43	225395-7	A24569-ND	—
		Gold	Nickel	Polyethylene	174, 188, 188A, 316	A24423-ND	1.62	1.40	1-227079-6	A24774-ND	A24780-ND
		Tin Lead	Nickel	Polyethylene	174, 188, 188A, 316	A24424-ND	1.46	1.26	1-227079-4	A24774-ND	A24780-ND
		Gold	Silver	TEFLON	174, 188, 188A, 316	A24425-ND	4.88	4.20	2-331350-4	A24569-ND	—
		Gold	Nickel	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24426-ND	2.78	2.40	225395-8	A24774-ND	—
		Tin Lead	Nickel	Polyethylene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24427-ND	1.62	1.40	2-227079-0	A24774-ND	A24780-ND
		Gold	Nickel	Polyethylene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24428-ND	1.62	1.40	2-227079-2	A24774-ND	A24780-ND
		Gold	Silver	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24429-ND	8.38	7.21	2-331350-5	—	—
		Gold	Nickel	Polyethylene	RD 316, 188, Double Braid	A24430-ND	1.62	1.40	8-227079-2	A24782-ND	A24779-ND
		Gold	Nickel	TEFLON	Belden 9252, 122	A24431-ND	3.58	3.08	5-225395-7	—	—
		Gold	Nickel	TEFLON	180, 180A, 180B, 195, 195A	A24432-ND	2.82	2.43	225395-9	—	—
		Tin Lead	Nickel	Polyethylene	180, 180A, 180B, 195, 195A	A24433-ND	1.62	1.40	3-227079-7	A24782-ND	A24779-ND
		Gold	Silver	TEFLON	180, 180A, 180B, 195, 195A	A24434-ND	8.85	7.62	2-331350-6	—	—
		Gold	Nickel	Polyethylene	Belden 9907, RG-141	A24435-ND	1.62	1.40	6-227079-7	A24572-ND	A24570-ND
		Gold	Nickel	Polyethylene	Belden 89907	A24436-ND	1.62	1.40	6-227079-8	A24572-ND	A24781-ND
		Gold	Nickel	TEFLON	Belden 8218	A24437-ND	2.82	2.43	1-225395-0	—	—
		Gold	Nickel	Polyethylene	Belden 8218	A24438-ND	1.62	1.40	1-227079-9	A24782-ND	A24779-ND
		Tin Lead	Nickel	Polyethylene	Belden 8218	A24439-ND	1.62	1.40	1-227079-7	A24782-ND	A24779-ND
		Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A1100-ND	3.66	3.28	225395-1	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1101-ND	3.62	3.24	225395-2	A24573-ND	A24776-ND
2	Plug	Tin Lead	Nickel	Polyethylene	58, 58A, 58B, 58C	A1117-ND	2.11	1.89	227079-1	A24572-ND	A24778-ND
		Gold	Nickel	Polyethylene	58, 58A, 58B, 58C	A1119-ND	2.10	1.89	227079-5	A24572-ND	A24770-ND
		Silver	Nickel	Polyethylene	58, 58A, 58B, 58C	A1118-ND	1.90	1.71	227079-9	A24572-ND	A24770-ND
		Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24440-ND	5.83	5.01	2-331350-1	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	141, 141A, 303	A24441-ND	2.82	2.43	225395-5	A24571-ND	A24777-ND
		Gold	Nickel	Polyethylene	Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	A24442-ND	1.62	1.40	4-227079-3	A24572-ND	A24570-ND
		Gold	Nickel	TEFLON	Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	A24443-ND	3.58	3.08	4-225395-2	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	223, 55, 55A, 55B	A24444-ND	2.82	2.43	225395-3	A24571-ND	A24777-ND
		Gold	Nickel	Polyethylene	223, 55, 55A, 55B	A24445-ND	1.46	1.26	227079-6	A24572-ND	A24570-ND
		Gold	Nickel	TEFLON	142, 142A, 142B, 400	A24446-ND	2.82	2.43	225395-6	A24571-ND	A24777-ND
		Gold	Nickel	Polyethylene	142, 142A, 142B, 400	A24447-ND	2.35	2.03	6-227079-1	A24572-ND	A24570-ND
		Gold	Silver	TEFLON	142, 142A, 142B, 400	A24448-ND	4.70	4.05	2-331350-9	A24571-ND	A24777-ND
		Tin Lead	Nickel	Polyethylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1120-ND	2.10	1.89	227079-3	—	A24775-ND
		Gold	Nickel	Polyethylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1122-ND	2.10	1.89	227079-7	—	A24570-ND
		Silver	Nickel	Polyethylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1121-ND	2.10	1.89	1-227079-1	—	A24570-ND
		Gold	Silver	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24449-ND	4.60	3.96	331350	A24573-ND	—
		Gold	Nickel	TEFLON	302, Belden 88241, 89269, Hi-Temp 62A Times PL62, Berk-Tek, BTDC-59, BTDC-62	A24450-ND	3.58	3.08	4-225395-1	A24573-ND	A24776-ND
		Gold	Nickel	Polyethylene	302, Belden 88241, 89269, Hi-Temp 62A Times PL62, Berk-Tek, BTDC-59, BTDC-62	A24451-ND	1.62	1.40	4-227079-9	A24573-ND	A24570-ND
		Gold	Nickel	Polyethylene	Hi-Temp 59, Times PL59, PLF59, (20 AWG C.C.)	A24452-ND	1.62	1.40	5-227079-3	—	A24776-ND
		Gold	Nickel	TEFLON	Belden 9104, 9240, 9112, 9167, 9259, 9266, Times FM-59	A24453-ND	2.81	2.42	2-225395-0	A24573-ND	A24776-ND
		Gold	Nickel	Polyethylene	Belden 9104, 9240, 9112, 9167, 9259, 9266, Times FM-59	A24454-ND	1.46	1.26	1-227079-3	—	A24776-ND
		Gold	Nickel	Polyethylene	Belden 9248, 9114	A24455-ND	1.62	1.40	3-227079-0	—	A24776-ND
		Gold	Nickel	Polyethylene	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A24456-ND	1.62	1.40	5-227079-8	—	A24631-ND
		Gold	Silver	TEFLON	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A24457-ND	5.63	4.84	4-331350-0	—	A24631-ND
		Gold	Nickel	TEFLON	8, 8A, 213	A24458-ND	12.78	10.99	2-225395-1	A24574-ND	—
3	Cable Jack	Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A1102-ND	5.28	4.54	225396-1	A24571-ND	—
	Jack	Gold	Nickel	TEFLON	174, 188, 188A, 316	A24459-ND	5.35	4.61	225396-7	A24569-ND	—
		Gold	Nickel	Polypropylene	174, 188, 188A, 316	A24460-ND	2.88	2.48	228979-7	A24774-ND	—
		Gold	Nickel	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24461-ND	5.35	4.61	225396-8	A24569-ND	—
		Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24462-ND	6.58	5.66	2-331351-1	A24571-ND	—
		Gold	Nickel	Polypropylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24463-ND	2.88	2.48	228979-6	—	A24570-ND
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1103-ND	5.28	4.54	225396-2	A24573-ND	A24776-ND
		Gold	Silver	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24464-ND	9.03	7.77	331351	A24573-ND	—
4	Bulkhead Jack	Gold	Nickel	TEFLON	174, 188, 188A, 316	A24465-ND	3.83	3.29	225398-7	A24569-ND	—
		Gold	Nickel	Polypropylene	174, 188, 188A, 316	A24466-ND	3.63	3.12	228980-7	A24774-ND	—
		Gold	Silver	TEFLON	174, 188, 188A, 316	A24467-ND	7.23	6.22	1-331693-2	A24569-ND	—
		Gold	Nickel	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24468-ND	3.83	3.29	225398-8	A24569-ND	—
		Gold	Nickel	TEFLON	Times RD316	A24469-ND	3.83	3.29	1-225398-5	—	—
		Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A1111-ND	4.97	4.47	225398-1	A24571-ND	—
		Gold	Nickel	Polypropylene	58, 58A, 58B, 58C	A24470-ND	3.65	3.14	228980-5	A24572-ND	A24570-ND
		Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24471-ND	10.33	8.88	1-331693-1	A24571-ND	—
		Gold	Nickel	TEFLON	223, 55, 55A, 55B	A24472-ND	3.83	3.29	225398-3	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	142, 142A, 142B, 400	A24473-ND	3.83	3.29	225398-6	A24571-ND	A24777-ND
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1112-ND	4.97	4.47	225398-2	A24573-ND	A24776-ND
	Right Angle Plug	Gold	Silver	TEFLON	58, 58A, 58B, 58C	A24474-ND	20.13	17.31	225973-1	A24571-ND	—
		Gold	Nickel	TEFLON	58, 58A, 58B, 58C	A24475-ND	20.85	17.94	225974-1	A24571-ND	—
		Gold	Nickel	TEFLON	55, 55A, 55B, 223	A24476-ND	20.85	17.94	225974-2	A24571-ND	—
		Gold	Silver	TEFLON	142, 142A, 142B, 400	A24477-ND	20.13	17.31	225973-4	A24571-ND	—
		Gold	Nickel	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24478-ND	20.85	17.94	225974-5	A24573-ND	—
Panel Insulation Bushings for Bulkhead Jacks (2 required)						A24479-ND	.48	.41	330620	—	—
BNC Premises Wire Kit						A9822-ND	154.50	—	58477-1	—	—

AMP tyco Electronics
Authorized Distributor

RF Connectors

BNC Hex Crimp Connectors 50 Ohm

Fig. 1

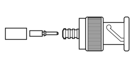


Fig. 2

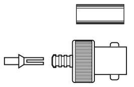


Fig. 3

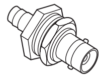


Fig. 4

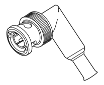
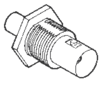


Fig. 5



Collar and outer contacts - nickel plated. Center Contact: Gold (except A24400: Silver) MIL-G-45204

Fig.	Description	Body Plating	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	Die for Pro-Crimper	Price Each
1	Plug	Nickel	Polymethylpentene	174, 188, 188A, 316	A1166-ND	2.53	2.27	2-221128-1	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 179B, 161, 187, Belden 9221	A1167-ND	2.54	2.28	2-221128-3	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1168-ND	2.54	2.28	2-221128-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 9907, 89907, Comm/Scope 2104	A1169-ND	2.54	2.28	2-221128-7	A9994-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C, Belden 88240, Berk-Tek, BTDC-58, Comm/Scope 2135	A1164-ND	2.54	2.28	1-221128-0	A9994-ND	45.00
		Nickel	Polymethylpentene	140, 210, 62, 62A, 62B, 59, 59A, 59B, 302, Belden 9291, 9209, 9269, 89269, 88241, Hi-Temp, 62A,Times PL-62, Berk-Tek BTDC-59, BTDC-62, 124	A1165-ND	2.54	2.28	1-221128-1	A9994-ND	45.00
		Nickel	Polypropylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Beldon 9291, 9209, 9269,	A24400-ND	1.95	1.69	1-221128-4	A9994-ND	45.00
		Nickel	Polyethynene	188, 316 Double Braid	A1172-ND	2.28	2.05	2-221128-9	A9995-ND	45.00
		Nickel	Polypropylene	Belden 9104, 9240, 9112, 9167, 9259, 9266, Times FM-59	A1171-ND	2.54	2.28	1-221128-7	A9994-ND	45.00
		Nickel	Polypropylene	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1170-ND	2.54	2.28	1-221128-2	A9960-ND	45.00
2	Cable Jack	Nickel	Polymethylpentene	174, 188, 188A, 316	A1803-ND	3.15	2.71	413779-3	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 197B, 161, 187, 187A, Belden 9221	A1804-ND	4.30	3.70	413779-4	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1805-ND	3.13	2.69	413779-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 89907, 9907, Comm/Scope 3104, 2104	A1806-ND	3.13	2.69	413779-6	A9994-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C, Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	A1801-ND	4.93	4.24	413779-1	A9994-ND	45.00
		Nickel	Polymethylpentene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1802-ND	3.13	2.69	413779-2	A9994-ND	45.00
3	Bulkhead Jack	Nickel	Polymethylpentene	174, 188, 188A, 316	A1813-ND	4.00	3.44	413771-3	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A1814-ND	5.35	4.61	413771-4	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1815-ND	3.95	3.40	413771-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 89907, 9907, Comm/Scope 3104, 2104	A1816-ND	3.95	3.40	413771-6	A9995-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C, Belden 88240, BerkTek BTDC-58, Comm/Scope 2135	A1811-ND	4.80	4.13	413771-1	A9994-ND	45.00
		Nickel	Polymethylpentene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1812-ND	3.95	3.40	413771-2	A9994-ND	45.00
4	Plug, Right Angle	Nickel	Polymethylpentene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1182-ND	10.65	9.16	413959-2	A9994-ND	45.00
		Nickel	Polymethylpentene	174, 188, 188A, 316	A1183-ND	10.65	9.16	413959-3	A9995-ND	45.00
		Nickel	Polymethylpentene	179, 179A, 179B, 161, 187, 187A, Belden 9221	A1184-ND	10.65	9.16	413959-4	A9995-ND	45.00
		Nickel	Polymethylpentene	180, 180A, 180B, 195, 195A	A1185-ND	10.65	9.16	413959-5	A9995-ND	45.00
		Nickel	Polymethylpentene	Belden 89907, 9907, Comm/Scope 3104, 2104	A1186-ND	10.65	9.16	413959-6	A9994-ND	45.00
		Nickel	Polymethylpentene	188, 174, 316 Double Braid	A1187-ND	10.48	9.01	413959-7	A9995-ND	45.00
		Nickel	Polymethylpentene	58, 58A, 58B, 58C	A1181-ND	9.50	6.31	413959-1	A9994-ND	45.00

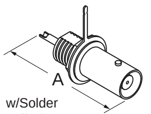
BNC Single Crimp Connectors 50 Ohm

Center Contact: Gold, MIL Type

Fig.	Description	Body Plating	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.	CERTI-CRIMP Hand Tool	Price Each
1	Plug	Silver	TEFLON	178, 178A, 178B, 196, 196A	A24401-ND	10.65	9.16	330876	—	—
		Nickel	Polypropylene	174, 188, 188A, 316	A24402-ND	9.63	8.28	225527-9	A24769-ND	663.00
		Silver	Polypropylene	174, 188, 188A, 316	A24403-ND	15.40	13.25	2-330058-1	A24769-ND	663.00
		Silver	TEFLON	174, 188, 188A, 316	A24404-ND	10.63	9.14	2-330061-1	A24769-ND	663.00
		Silver	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24405-ND	10.60	9.12	2-329446-1	A24769-ND	663.00
		Silver	Polypropylene	58, 58A, 58B, 58C	A24406-ND	8.20	7.06	2-329082-1	A24770-ND	687.00
		Silver	TEFLON	58, 58A, 58B, 58C	A24407-ND	9.65	8.30	2-329444-1	A24770-ND	687.00
		Silver	TEFLON	58, 58A, 58B, 58C	A24408-ND	14.98	12.88	330884	—	—
		Silver	TEFLON	223, 55, 55A, 55B	A24409-ND	9.65	8.30	2-329444-2	A24771-ND	780.00
		Silver	TEFLON	142, 142A, 142B, 400	A24410-ND	9.65	8.30	2-330358-2	A24772-ND	1222.13
		Silver	Polypropylene	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24411-ND	8.20	7.06	2-329083-1	A24773-ND	687.00
		Silver	TEFLON	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24412-ND	9.65	8.30	2-329445-1	A24773-ND	687.00
2	Jack	Nickel	TEFLON	174, 188, 188A, 316	A24413-ND	14.68	12.63	2-330062-1	A24769-ND	663.00
		Nickel	TEFLON	58, 58A, 58B, 58C	A24414-ND	12.38	10.65	2-329545-1	A24770-ND	687.00
		Silver	TEFLON	223, 55, 55A, 55B	A24415-ND	15.60	13.42	2-329452-2	A24771-ND	780.00
4	Plug, Right Angle	Silver	TEFLON	58, 58A, 58B, 58C	A24420-ND	26.03	22.39	331175	A24770-ND	687.00
5	Bulkhead Jack	Silver	Polypropylene	174, 188, 188A, 316	A24416-ND	11.33	9.74	2-330060-1	A24769-ND	663.00
		Silver	TEFLON	179, 179A, 179B, 161, 187, 187A, Belden 9221	A24417-ND	18.78	16.15	2-329458-1	A24769-ND	663.00
		Silver	TEFLON	58, 58A, 58B, 58C	A24418-ND	16.35	14.07	2-329456-1	A24770-ND	687.00

Bulkhead Solder Jacks Connectors 50 Ohm

Fig. 1



w/Solder Tail Shown

Fig. 2

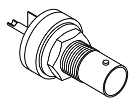


Fig. 3

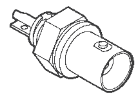
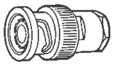


Fig.	Description	Dielectric	Dimension A	Contact Material	Body Plating	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
1	w/o Solder Terminal*	VALOX	1.060 (26.93)	Silver	Nickel	A24520-ND	2.23	1.92	227754-3
	with Solder Terminal**	VALOX	1.060 (26.93)	Silver	Nickel	A24521-ND	2.18	1.88	227755-3
	with Solder Terminal**	VALOX	1.312 (33.33)	Gold	Nickel	A24522-ND	1.80	1.55	227169-7
	w/o Solder Terminal*	VALOX	1.060 (26.93)	Gold	Nickel	A24523-ND	1.55	1.34	227754-2
	with Solder Terminal**	VALOX	1.060 (26.93)	Gold	Nickel	A24524-ND	1.60	1.38	227755-2
	with Solder Terminal**	TEFLON	1.312 (33.33)	Gold	Nickel	A24525-ND	2.50	2.15	227169-8
	w/o Solder Terminal*	TEFLON	1.060 (26.93)	Gold	Nickel	A24526-ND	2.45	2.11	227715-3
	with Solder Terminal**	TEFLON	1.060 (26.93)	Gold	Nickel	A24527-ND	2.75	2.37	227716-3
2	Sealed	Polymethyl-pentene	—	Gold	Nickel	A24528-ND	6.45	5.55	227426-1
3	Isolated	VALOX, White	—	Tin	Nickel	A24529-ND	2.50	2.15	227726-1
	Isolated	VALOX, White	—	Silver	Nickel	A24530-ND	2.50	2.15	227726-2
	Isolated	VALOX, White	—	Gold	Nickel	A24531-ND	2.21	1.91	227726-3

* Includes lockwasher and jam nut. ** Includes solder terminal and jam nut.

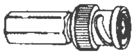
BNC Field Serviceable Plug Connectors 50 Ohm



Center Contact: Gold

Body Plating	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Silver	58, 58A, 58B, 58C, 141, 141A, 303, 222, 55, 55A, 55B, 142, 142A, 142B, 400	A24480-ND	15.93	13.70	221265-1
Nickel	58, 58A, 58B, 58C, 141, 141A, 303, 222, 55, 55A, 55B, 142, 142A, 142B, 400	A24481-ND	8.40	7.23	1-221265-0
	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269, 89269, 88241 Hi-Temp 62A, Times PL-62, Berk-Tek, BTDC-59, BTDC-62, 302, 71, 71A, 71B	A24482-ND	7.98	6.86	1-221265-1

BNC Twist-On Connectors 50 Ohm

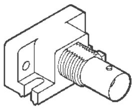


Center Contact: Gold. Body Plating: Nickel

Description	Dielectric	Cable Group RG/U	Digi-Key Part No.	Price Each 1	Price Each 25	AMP Part No.
Plug	Polymethylpentene	59, 59A, 59B	A24483-ND	3.33	2.86	414265-3
Jack	Acetal	59, 59A, 59B	A24484-ND	5.48	4.71	222428-1

AMP tyco Electronics
Authorized Distributor

RF Connectors

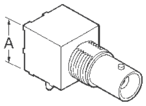

Right Angle

PC Board/Panel Mount Jack Connectors w/Mounting Flanges 50 Ohm

Description	Center Contact	Mount. Height In. (mm)	Body Material	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
Right Angle	Tin	.625 (15.88)	VALOX, White	A1123-ND	4.90	4.22	226978-1
Right Angle	Gold	.625 (15.88)	VALOX, White	A24511-ND	4.90	4.22	226978-3
Vertical	Gold	1.375 (34.93)	VALOX, White	A24540-ND	5.53	4.76	226987-7

PC Board/Panel Mount Right Angle Jack Connectors

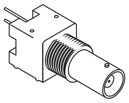
50 Ohm



Description	Center Contact	Mount. Height A- in. (mm)	Body Material	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
W/O Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, White	A24485-ND	2.49	2.15	226990-1
W/Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, White	A24486-ND	1.83	1.58	227161-1
W/O Mounting Posts	Gold	.625 (15.88)	VALOX, White	A24487-ND	2.13	1.84	226990-3
W/Mounting Posts	Gold	.625 (15.88)	VALOX, White	A24488-ND	1.83	1.58	227161-3
W/ Mounting Posts	Gold	.519 (13.18)	VALOX, White	A24489-ND	1.83	1.58	227161-7
W/O Mounting Posts	Tin-Lead	.519 (13.18)	VALOX, White	A24490-ND	2.14	1.84	226990-7
W/O Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, Black	A24491-ND	2.14	1.84	226990-2
W/Mounting Posts	Tin-Lead	.625 (15.88)	VALOX, Black	A24492-ND	1.83	1.58	227161-2
W/O Mounting Posts	Gold	.625 (15.88)	VALOX, Black	A24493-ND	2.13	1.84	226990-6
W/Mounting Posts	Gold	.625 (15.88)	VALOX, Black	A24494-ND	1.83	1.58	227161-6
W/Mounting Posts	Gold	.519 (13.18)	VALOX, Black	A24495-ND	1.83	1.58	227161-9
W/O Mounting Posts	Tin-Lead	.625 (15.88)	Metal	A24496-ND	4.90	4.22	227433-1
W/Mounting Posts	Tin-Lead	.625 (15.88)	Metal	A24497-ND	2.48	2.14	227661-1
W/O Mounting Posts	Gold	.625 (15.88)	Metal	A24498-ND	2.54	2.19	227676-1
W/Mounting Posts	Gold	.625 (15.88)	Metal	A24499-ND	2.48	2.14	227677-1
W/Mounting Posts	Gold	.500 (12.70)	Metal	A24500-ND	4.40	3.79	413879-1

PC Board/Panel Mount Vertical Jack Connectors

50 Ohm



Description	Center Contact	Body Material	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
Without Mounting Posts	Tin-Lead	VALOX, White	A24501-ND	4.78	4.11	226993-1
With Mounting Posts	Tin-Lead	VALOX, White	A24502-ND	1.83	1.58	227222-1
Without Mounting Posts	Gold	VALOX, White	A24503-ND	4.90	4.22	226993-3
With Mounting Posts	Gold	VALOX, White	A24504-ND	1.83	1.58	227222-3
Without Mounting Posts	Tin-Lead	VALOX, Black	A24505-ND	4.90	4.22	226993-2
With Mounting Posts	Tin-Lead	VALOX, Black	A24506-ND	2.40	2.07	227222-2
Without Mounting Posts	Gold	VALOX, Black	A24507-ND	4.90	4.22	226993-6
With Mounting Posts	Gold	VALOX, Black	A24508-ND	2.40	2.07	227222-6
With Mounting Posts	Tin-Lead	Metal	A24509-ND	2.35	2.03	227671-1
With Mounting Posts	Gold	Metal	A24510-ND	2.11	1.82	227673-1

Jack Accessories 50 and 75 Ohm

Description	Digi-Key Part No.	Price Each		AMP Part No.
		1	25	
Insulating Bushing for Mounting Jacks, Nylon	A24532-ND	.50	.43	222163-1
Insulating Bushing for Bulkhead Solder Jacks	A24533-ND	.20	.18	227223-1
Screw for panel thickness of 3/32 (2.38) or greater	A24534-ND	.28	.24	221108-2
Screw for panel thickness of less than 3/32 (2.38)	A24535-ND	.28	.24	221108-4
Lockwasher	A1129-ND	.21	.19	1-329632-2
Hex Nut	A1128-ND	.22	.20	1-329631-2

Vertical Metallized PC Board Mount Jack Connectors 50 Ohm

Fig. 1

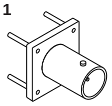


Fig. 2

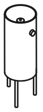


Fig. 3

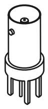
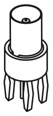


Fig.	Body Plating	Center Contact	Body Material	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
1	Nickel	Silver	VALOX	A24512-ND	2.97	2.56	227699-1
1	Nickel	Gold	VALOX	A24513-ND	2.97	2.56	227699-2
1	Nickel	Tin	VALOX	A24514-ND	2.97	2.56	227699-3
2	Nickel	Gold	VALOX	A24515-ND	3.33	2.86	221123-2
3	Nickel	Silver	VALOX	A24516-ND	4.50	3.87	222420-1
3	Tin-Lead, Leg Length: .125 (3.18)	Silver	VALOX	A24517-ND	3.58	3.08	414305-1
3	Tin-Lead, Leg Length: .175 (4.45)	Silver	VALOX	A24518-ND	4.58	3.94	414305-2

Press-Fit Terminal Jack Connectors 50 Ohm



Body Plating	Center Contact	Body Material	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
Nickel	Gold	TEFLON	A24519-ND	3.78	3.25	222006-1

Right-Angle PC Board Mount Jack Connectors

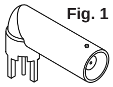


Fig. 1

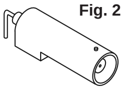
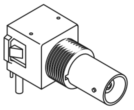


Fig. 2

Fig.	Body Plating	Center Contact Length - In (mm)	Digi-Key Part No.	Price Each		AMP Part No.
				1	25	
1	Nickel	.171 (4.34)	A24536-ND	4.98	4.28	413631-1
1	Tin-Lead	.171 (4.34)	A24537-ND	5.00	4.30	413631-2
1	Nickel	.131 (3.33)	A24538-ND	5.55	4.78	413631-3
2	Nickel	—	A24539-ND	2.02	1.74	414373-1

BNC Self-Terminating Jack Connectors 50 Ohm



Built-in chip resistor terminates the signal line to the proper characteristic impedance when in the unmated state.
Body: Polyester, PBT, Black; **Dielectric:** Polyester, PBT, Natural

Description	Center Contact	Digi-Key Part No.	Price Each		AMP Part No.
			1	25	
PCB, Right Angle, Tin Lead	Gold on mating end and Tin Lead on solder tails	A24634-ND	13.45	11.57	414367-1

BNC Adapters 50 Ohm

Fig.	Description	Body Material and Plating	Center Contact Material and Plating	Digi-Key Part No.	Price Each		AMP Part No.
					1	25	
1	Tee, Jack-Plug-Jack	Brass, Nickel	BE CU, Gold (30µ)	A24549-ND	12.85	11.06	221543-2
1	Tee, Jack-Plug-Jack	Zinc, Nickel	PH BR, Gold (15µ)	A24550-ND	5.70	4.91	413592-2
1	Tee, Jack-Plug-Jack	Zinc, Nickel	BE CU, Gold (30µ)	A24551-ND	5.53	4.76	413592-6
1	Tee, Jack-Plug-Jack	Brass, Nickel	BE CU, Silver (200µ)	A24552-ND	19.58	16.84	329518
2	Tee, Jack-Jack-Jack	Brass, Nickel	BE CU, Silver (200µ)	A24553-ND	15.50	13.33	221988-1
3	Right Angle, Jack-Plug	Nickel	Silver	A24554-ND	16.18	13.92	329517
3	Right Angle, Jack-Plug	Nickel	Gold	A24555-ND	20.70	17.81	222165-2
4	Bulkhead Jack, Jack-Jack	Nickel	Silver	A24556-ND	14.98	12.88	330024
4	Bulkhead Jack, Jack-Jack	Nickel	Gold (50µ)	A24557-ND	5.48	4.71	228226-1
4	Bulkhead Jack, Jack-Jack	Nickel	Gold (15µ)	A24558-ND	3.80	3.27	228226-3
5	Jack Covers	Silver	—	A24559-ND	6.08	5.23	330022
6	Feed-Thru, Jack-Jack	Nickel	Silver	A24560-ND	7.33	6.30	221551-1
6	Feed-Thru, Jack-Jack	Nickel	Gold	A24561-ND	6.73	5.79	221551-3
6	Feed-Thru, Jack-Jack	Nickel	Gold	A24562-ND	3.10	2.67	414414-1

Fig. 1

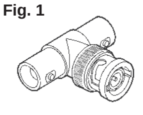


Fig. 2

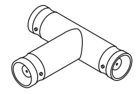


Fig. 3

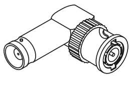


Fig. 4

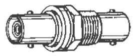


Fig. 5

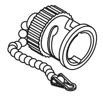
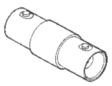


Fig. 6



RF Connectors

Fig. 1

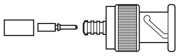


Fig. 2

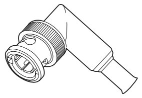


Fig. 3

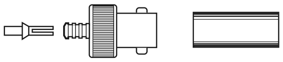
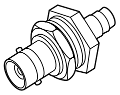


Fig. 4



BNC Dual Crimp Connectors 75 Ohm

Body Plating: Nickel Center contacts: Gold

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each		AMP Part No.	Dies for Pro-Crimper	Price Each
				1	25			
1	Plug	179, 179A, 179B, 187, 187A, 161, Belden 9221	A24575-ND	2.08	1.79	221185-8	A24630-ND	201.75
	Plug	AT&T 735A	A24576-ND	2.09	1.80	1-221185-8	A24632-ND	168.00
	Plug	Belden 8218	A24577-ND	2.09	1.80	221185-3	A24632-ND	168.00
	Plug	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24587-ND	2.08	1.79	221185-2	A24597-ND	168.00
1	Plug	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A24588-ND	2.09	1.80	221185-9	A24597-ND	168.00
	Plug	Belden 9145, AT&T 734A	A24589-ND	2.09	1.80	1-221185-0	A24597-ND	168.00
	Plug	Belden 9248, 9114	A24590-ND	2.08	1.79	221185-1	A24633-ND	201.75
	Plug	6, 6A	A24591-ND	2.08	1.79	221185-7	A24631-ND	160.50
	Plug	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A24592-ND	2.09	1.80	221185-5	A24631-ND	160.50
2	Right Angle Plug	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24593-ND	10.95	9.42	221402-2	A24597-ND	168.00
3	Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A24594-ND	4.68	4.03	221199-5	A24630-ND	201.75
4	Bulkhead Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A24595-ND	4.95	4.26	221221-5	A24630-ND	201.75
	Bulkhead Jack	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24596-ND	4.70	4.05	221221-2	A24597-ND	168.00

BNC Hex Crimp Connectors 75 Ohm

Collar and outer contacts - nickel plated Center contacts - gold MIL-G-45204

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each		AMP Part No.	Dies for Pro-Crimper	Price Each
				1	25			
1	Plug	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1828-ND	3.50	3.01	413589-8	A9993-ND	38.25
	Plug	AT&T 735A	A1820-ND	3.50	3.01	1-413589-0	A9992-ND	38.25
	Plug	AT&T KS 19224 L2	A1824-ND	3.50	3.01	413589-4	A9971-ND	33.00
	Plug	Belden 8218	A1823-ND	3.50	3.01	413589-3	A9971-ND	33.00
	Plug	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1822-ND	3.50	3.01	413589-2	A9992-ND	38.25
1	Plug	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1821-ND	3.50	3.01	413589-1	A9992-ND	38.25
	Plug	59 Double Braid	A1826-ND	4.83	4.15	413589-6	A9993-ND	38.25
	Plug	Belden 8212, 9104, 9112, 9167, 9240, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1829-ND	3.50	3.01	413589-9	A9992-ND	38.25
	Plug	Belden 9145, AT&T 734A	A1827-ND	3.50	3.01	413589-7	A9992-ND	38.25
	Plug	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1825-ND	3.50	3.01	413589-5	—	—
2	Plug, Right Angle	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1873-ND	13.78	11.85	413588-8	A9993-ND	38.25
	Plug, Right Angle	AT&T 735A	A1881-ND	13.78	11.85	1-413588-0	—	—
	Plug, Right Angle	AT&T KS 19224 L2	A1876-ND	13.78	11.85	413588-4	A9993-ND	38.25
	Plug, Right Angle	Belden 8218	A1875-ND	14.53	12.50	413588-3	A9992-ND	38.25
	Plug, Right Angle	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1872-ND	13.78	11.85	413588-2	—	—
2	Plug, Right Angle	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1874-ND	13.78	11.85	413588-1	A9992-ND	38.25
	Plug, Right Angle	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1880-ND	13.78	11.85	413588-9	A9992-ND	38.25
	Plug, Right Angle	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1877-ND	13.78	11.85	413588-5	—	—
3	Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1838-ND	4.53	3.01	413760-8	A9993-ND	38.25
	Jack	AT&T KS 19224 L2	A1834-ND	4.53	3.01	413760-4	A9993-ND	38.25
	Jack	Belden 8218	A1833-ND	4.53	3.01	413760-3	A9992-ND	38.25
	Jack	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1832-ND	2.58	1.71	413760-2	A9992-ND	38.25
	Jack	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1831-ND	4.53	3.01	413760-1	A9992-ND	38.25
3	Jack	Double Shielded RG-59	A1836-ND	4.43	2.94	413760-6	—	—
	Jack	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1839-ND	4.53	3.01	413760-9	A9992-ND	38.25
	Jack	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1835-ND	4.53	3.01	413760-5	—	—
4	Bulkhead Jack	179, 179A, 179B, 187, 187A, 161, Belden 9221	A1848-ND	5.33	4.58	413590-8	A9993-ND	38.25
	Bulkhead Jack	AT&T KS 19224 L2	A1844-ND	5.05	4.35	413590-4	A9993-ND	38.25
	Bulkhead Jack	Belden 8218	A1843-ND	6.13	5.27	413590-3	A9992-ND	38.25
	Bulkhead Jack	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A1842-ND	5.05	4.35	413590-2	A9992-ND	38.25
	Bulkhead Jack	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	A1841-ND	5.05	4.35	413590-1	A9992-ND	38.25
4	Bulkhead Jack	Double Shielded RG-59	A1846-ND	5.05	4.35	413590-6	—	—
	Bulkhead Jack	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	A1849-ND	5.05	4.35	413590-9	A9992-ND	38.25
	Bulkhead Jack	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	A1845-ND	4.03	3.47	413590-5	—	—

BNC Bulkhead Jack Connectors 75 Ohm

Fig. 1

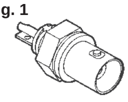
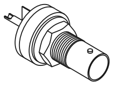


Fig. 2



Center Contact: Gold

Fig.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Jack, Solder, Nickel	A24598-ND	3.10	2.67	221244-1
2	Jack, Sealed Solder, Nickel	A24599-ND	6.23	5.36	414217-1

BNC PC Board/Panel Mount Jack Connectors

75 Ohm

Fig. 1

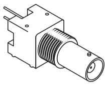


Fig. 2

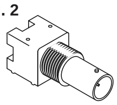


Fig.	Description	Contact Finish	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Vertical, Metal	Gold 30µ	A24604-ND	6.33	5.44	222132-1
2	Right Angle, VALOX, White	Gold 30µ	A24600-ND	5.43	4.67	413194-1
	Right Angle, VALOX, Black	Gold 30µ	A24601-ND	5.43	4.67	413194-2
	Right Angle, VALOX, White	Gold 50µ	A24602-ND	6.40	5.51	414459-1
	Right Angle, VALOX, Metal	Gold 30µ	A24603-ND	4.48	3.85	222092-1

BNC PC Board Mount Jack Connectors

75 Ohm

Center Contact: Gold (except A24607-ND: Silver)

Fig. 1

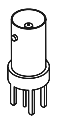


Fig. 2

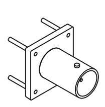


Fig. 3

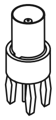


Fig. 4

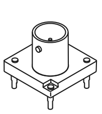


Fig. 5

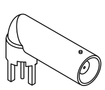


Fig. 6

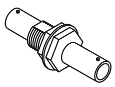
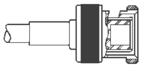


Fig.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Vertical Metallized, Tin-Lead	A24606-ND	3.95	3.40	414394-1
2	Vertical Metallized, Nickel	A24607-ND	4.85	4.18	413986-1
3	Press Fit, Nickel, L (excl. pins): .810	A24608-ND	3.93	3.38	222462-1
	Press Fit, Nickel, L (excl. pins): .640	A24609-ND	5.23	4.50	414088-1
4	Vertical Metallized (PCB: .125 min.)	A24610-ND	7.60	6.54	221336-3
5	Right Angle, Nickel	A24611-ND	5.13	4.41	413558-1
	Right Angle, Tin-Lead	A24612-ND	4.90	4.22	413558-2
6	Bulkhead Jack Adapter, Nickel	A24613-ND	7.70	6.63	222117-1

BNC JIS Hex Crimp Cable Plug Connectors 50 Ohm and 75 Ohm



Body Plating: Nickel Center Contact: Gold

Impedance Ohm	JIS Cable	Digi-Key Part No.	Price Each 1	25	AMP Part No.	CERTI-CRIMP Hand Tool
75	5C-2V	A24541-ND	3.33	2.86	1-413589-2	—
	3C-2V	A24542-ND	3.33	2.86	1-413589-1	A9992-ND
	3C-2W	A24543-ND	3.33	2.86	1-413589-4	A9992-ND
	2.5C-2V	A24544-ND	3.33	2.86	1-413589-6	A9971-ND
	2.5C-2W	A24545-ND	3.33	2.86	1-413589-5	A9992-ND
	1.5C-2V	A24546-ND	3.33	2.86	1-413589-3	A9971-ND
50	3D-2V	A24547-ND	2.02	1.74	3-221128-1	A9972-ND
	1.5D-2V	A24548-ND	2.02	1.74	3-221128-2	—

BNC RF PC Board / Panel Mount Decoupled Jack Connectors

50 Ohm and 75 Ohm

Body Plating: VALOX, Black
Center Contact: Gold

Fig. 1

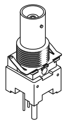


Fig. 2

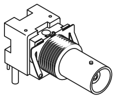
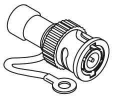


Fig.	Impedance Ohm	Mounting Post Length	Capacity/Voltage	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Vertical							
1	50	.137	9400pF / 1500V	A24615-ND	5.75	4.95	413476-2
Low Profile, Right Angle							
2	50	.158	9400pF / 1500V	A24618-ND	3.15	2.71	413515-2
	50	.158	20000pF / 500V	A24619-ND	3.15	2.71	413515-3
	50	.110	7900pF / 1600V	A24620-ND	3.15	2.71	413515-7
	50	.185	9400pF / 1500V	A24621-ND	3.15	2.71	413515-8
	50	.110	9400pF / 1500V	A24622-ND	3.15	2.71	413515-9
Standard, Right Angle							
2	50	.158	9400pF / 1500V	A24624-ND	3.70	3.19	413524-2
	50	.110	9400pF / 1500V	A24625-ND	3.70	3.19	413524-5

Terminator Plugs

50, 75, 93 Ohm



Body Plating: Nickel Center Contact: Gold

Description	Resistor Specification	Digi-Key Part No.	Price Each 1	25	AMP Part No.
With Tether	1 Watt, 50 Ohm	A24563-ND	7.13	6.13	221629-1
Without Tether	1 Watt, 50 Ohm	A24564-ND	3.95	3.40	221629-4
With Tether	1 Watt, 75 Ohm	A24565-ND	9.48	8.15	221629-2
Without Tether	1 Watt, 75 Ohm	A24566-ND	8.25	7.10	221629-5
Without Tether	1 Watt, 93 Ohm	A24567-ND	6.33	5.44	221629-6
With Tether	1 Watt, 50 Ohm*	A24568-ND	6.45	5.55	1-221629-6

* Tether is conductive with #4 stud size.

BNC Action Pin / Bulkhead Decoupled Jack Connectors

Body Plating: Nickel

Center Contact: Gold

Fig. 1

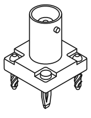


Fig. 2

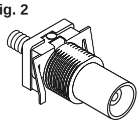


Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Jack, PC Board Action Pin, 50 Ohm	—	A24627-ND	11.93	10.26	414553-1
2	Bulkhead Jack, Hex Crimp	58, 58A, 58B, 58C	A24628-ND	10.25	8.82	414758-1
	Bulkhead Jack, Hex Crimp	174, 174A, 316, 188, 188A	A24629-ND	10.25	8.82	414758-2

Twin BNC and Twin-Ax Jack Connectors

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Plug, Silver*	108, 108A, Belden 9272, 89272	A24705-ND	18.18	15.64	332225
	Plug, Nickel*	108, 108A, Belden 9272, 89272	A24706-ND	16.53	14.22	332225-5
2	Bulkhead Jack, Silver*	108, 108A, Belden 9272, 89272	A24707-ND	24.55	21.12	332342
3	Right-Angle Jack w/Mounting Posts, VALOX, White	—	A24708-ND	7.45	6.41	228686-1
4	Vertical Jack w/Mounting Posts, VALOX, White	—	A24709-ND	12.33	10.60	221198-1
5	Bulkhead Jack Adapter, Nickel (Center Contact: Silver)	—	A24710-ND	22.73	19.55	332215
6	Twin-Ax Bulkhead Solder, Front Mount, Nickel over Zinc	—	A24711-ND	11.70	10.07	228284-1
7	Twin Threaded PC Board Adapter	—	A24712-ND	26.88	23.12	330873

* Center contact: silver

Fig. 1

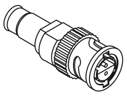


Fig. 2

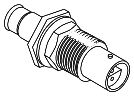
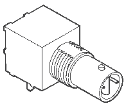


Fig. 3



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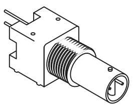

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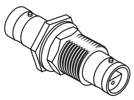

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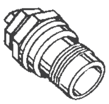

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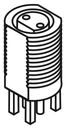

RF Connectors

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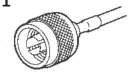

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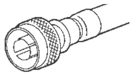

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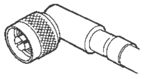

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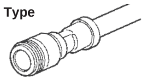

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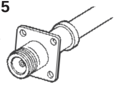

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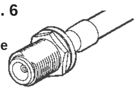

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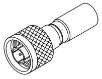

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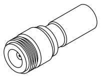

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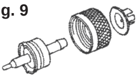

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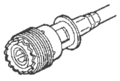

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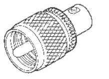

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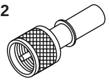

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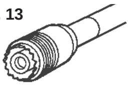

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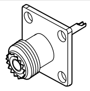

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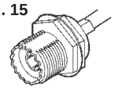

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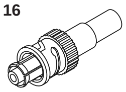

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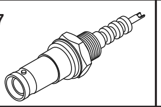

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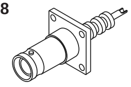

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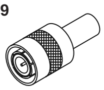

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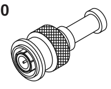

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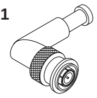

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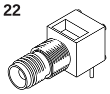

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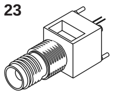

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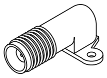

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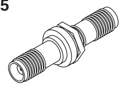

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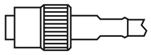

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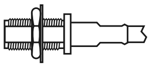

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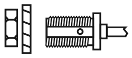


N Dual Crimp Connectors 50 Ohm

Center contact plating: gold *Uses CERTI-CRIMP: A24574-ND **Uses CERTI-CRIMP: A9975-ND

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
			Dual Crimp			
1	Plug, Nickel Plug, Silver	58, 58A, 58B, 58C 58, 58A, 58B, 58C	A1147-ND A1148-ND	10.25 15.13	8.82 13.01	1-225661-2 225361-1
1	Plug, Nickel	223, 55, 55A, 55B	A1149-ND	10.25	8.82	1-225661-3
1	Plug, Silver	142, 142A, 142B, 400	A1151-ND	15.18	13.06	225361-4
1	Plug, Nickel Plug, Silver Plug, Nickel, Weatherproof Plug, Silver, Weatherproof	8, 8A, 213 8, 8A, 213 8, 8A, 213 8, 8A, 213	A1152-ND* A1153-ND* A1154-ND* A1155-ND*	10.25 16.78 11.50 18.85	8.82 14.43 9.89 16.22	225661-2 51692-2 225662-2 225092-2
1	Plug, Nickel Plug, Silver	393 393	A1156-ND* A1157-ND*	11.50 18.85	9.89 16.22	1-225662-1 1-225092-1
1	Plug, Nickel Plug, Silver Plug, Nickel, Weatherproof	9, 9A, 9B, 214 9, 9A, 9B, 214 9, 9A, 9B, 214	A1158-ND* A1159-ND* A1160-ND*	10.25 36.08 11.50	8.82 31.03 9.89	225661-1 51692-1 225662-1
1	Plug, Nickel, Weatherproof	142, 142A, 142B, 400	A24652-ND	14.30	12.30	225699-1
2	Plug, Nickel	8, 8A, 213	A1162-ND*	7.18	6.18	1-227086-0
3	Right Angle Plug, Nickel Right Angle Plug, Silver Right Angle Plug, Silver, Weatherproof	8, 8A, 213 8, 8A, 213 8, 8A, 213	A24654-ND* A1137-ND* A1138-ND*	27.95 44.95 44.95	24.04 38.66 38.66	225699-2 225014-2 225389-2
3	Right Angle Plug, Nickel Right Angle Plug, Silver	9, 9A, 9B, 214 9, 9A, 9B, 214	A1139-ND* A1140-ND*	27.95 44.95	24.04 38.66	225669-1 225014-3
4	Jack, Nickel, Weatherproof Jack, Nickel, Weatherproof Jack, Silver	58, 58A, 58B, 58C 8, 8A, 213 8, 8A, 213	A24655-ND A24656-ND* A1142-ND*	18.93 18.93 30.70	16.28 16.28 26.41	1-225664-2 225664-2 225093-2
5	Panel Jack, Silver, Weatherproof Panel Jack, Silver, Weatherproof	213 214	A1143-ND* A1144-ND*	31.90 31.90	27.44 27.44	225089-2 225089-1
6	Bulkhead Jack, Silver, Weatherproof Bulkhead Jack, Silver, Weatherproof	8, 8A, 213 9, 9A, 9B, 214	A24658-ND* A1146-ND*	31.45 31.63	27.05 27.20	225094-2 225094-1
			Hex Crimp			
2	Plug, Nickel	115A, Belden 89880, 9880	A24659-ND**	13.70	11.79	414160-3
			Semi-Rigid Cable Crimp			
1	Plug, Nickel	402, 141	A24660-ND	32.70	28.13	228440-1
6	Bulkhead Jack, Nickel, Rear Mount	402, 141	A24661-ND	35.03	30.13	228658-1
			Terminators			
7	Plug, Nickel	—	A24662-ND	33.58	28.88	227953-1
8	Jack, Nickel	—	A24663-ND	18.13	15.59	227997-1

UHF Connectors

Center contact plating: Tin (except A24672-ND: Gold)

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
			Standard UHF Connectors			
9	Plug, Single Crimp, Tin Plated Plug, Single Crimp, Tin Plated	58, 58A, 58B, 58C 59, 59A, 59B	A1107-ND A1106-ND	8.55 5.05	7.36 4.35	226279-1 226279-3
10	Jack, Single Crimp, Tin Plated	58, 58A, 58B, 58C	A1132-ND	10.08	8.67	226694-1
11	Adapter, UHF Plug to BNC Jack	—	A1135-ND	26.55	22.84	222320-1
			Miniature UHF Connectors			
12	Plug, Dual Crimp, Nickel	58, 58A, 58B, 58C	A24671-ND	.81	.70	226600-1
13	Jack, Dual Crimp, Nickel Jack, Crimp. Nickel	316 58, 58A, 58B, 58C	A24672-ND A1104-ND	1.61 4.10	1.39 3.68	414477-1 226602-1
14	Panel Solder Jack, Nickel Panel Solder Jack, Nickel	— —	A1131-ND A24673-ND	3.10 3.90	2.67 3.36	226601-1 226601-3
15	Bulkhead Jack, Crimp, Nickel Bulkhead Jack, Crimp, Nickel	174, 316, 188, 188A 58, 58A, 58B, 58C	A24674-ND A1105-ND	6.43 3.95	5.53 3.40	228665-2 414045-1

SHV Dual Crimp Connectors

Center contact plating: Gold

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
16	Plug, Nickel Plug, Silver	58, 58A, 58B, 58C 58, 58A, 58B, 58C	A24664-ND A24665-ND	27.75 29.73	23.87 25.57	51426-4 51426-1
16	Plug, Nickel	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24666-ND	27.75	23.87	51426-5
16	Plug, Silver	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24667-ND	29.73	25.57	51426-2
17	Bulkhead Solder Jack, Silver Bulkhead Solder Jack, Nickel	— —	A24668-ND A24669-ND	19.28 12.20	16.58 10.50	51494-1 51494-2
18	Panel Solder Jack, Nickel	—	A24670-ND	32.30	27.78	51421-2

TNC Hex and Dual Crimp Connectors

50 Ohm

Center Contacts**:** Gold

Dies for Pro-Crimper: **A:** A9994-ND **B:** A24570-ND **C:** A24574-ND

Certi-Crimp Tool: **D:** A24572-ND

Fig.	Description	Die/ Tool	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
			Hex Crimp				
19 19	Plug Plug	— A	174, 188, 188A, 316 58, 58A, 58B, 58C	A24635-ND A24636-ND	4.53 3.25	3.90 2.80	222506-5 222506-1
			Dual Crimp				
20 20 20	Plug Plug, Weatherproof Plug, Weatherproof	B/D — —	58, 58A, 58B, 58C, 141, 141A, 303 223, 55, 55A, 55B 142, 142A, 142B, 400	A24637-ND A24638-ND♦ A24639-ND♦	2.45 26.45 15.55	2.11 22.75 13.38	227000-5 225550-1 225555-6
20	Plug	B	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	A24640-ND♦	3.65	3.14	227000-7
20 20 20	Plug, Weatherproof Plug, Weatherproof Plug, Weatherproof	C C C	8, 8A, 213 Alpha 9847, Belden 8213, 9292 9, 9A, 9B, 214	A24641-ND♦ A24642-ND♦ A24644-ND	35.23 20.10 20.10	30.30 17.29 17.29	225555-7 1-225550-3 225550-8
21	Right Angle Plug, Weatherproof	—	58, 58A, 58B, 58c	A24645-ND	34.05	29.29	225559-2
21	Right Angle Plug, Weatherproof	—	142, 142A, 142B, 400	A24646-ND	32.38	27.85	225554-6
21	Right Angle Plug, Weatherproof	C	393, 225	A24647-ND	35.95	30.92	1-225554-1

♦ Mil Type

TNC PC Board / Panel Mount Connectors

50 Ohm

Center Contacts: Gold

Fig.	Description	Digi-Key Part No.	Price Each 1	25	AMP Part No.
22	Right Angle Jack, Metal With Mounting Posts	A24648-ND	6.08	5.23	227839-1
23	Vertical Jack, Metal With Mounting Posts	A24649-ND	7.03	6.05	227835-1
24	Right Angle Jack, Nickel	A24650-ND	8.45	7.27	413933-1
25	Bulkhead Jack Adapter, Nickel	A24651-ND	10.03	8.63	221500-1

Miniature Threaded Connectors 50 Ohm

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.	Tool	Price Each
26	Plug, TEFLON Plug, TEFLON Plug, TEFLON	178, 178A, 178B, 196, 196A 174, 316, 188, 188A 180, 180A, 180B, 195, 195A	A24699-ND A24700-ND A24701-ND	11.90 11.83 8.33	10.24 10.17 7.16	2-330311-2 2-330311-1 1-330723-0	A28795-ND A28796-ND A28797-ND	1725.00 1953.00 1317.00
27	Jack, TEFLON	180, 180A, 180B, 195, 195A	A24702-ND	14.05	12.09	1-330599-0	A28797-ND	1317.00
28	Solder Jack Adapter	—	A24703-ND	16.78	14.43	329852	—	—

AMP tyco Electronics **Authorized Distributor**

Hand Tools and Die Sets for RF Connectors

Term.Type (Crimp)	Description	Digi-Key Part No.	Price Each	AMP Part No.
	50 Ohm			
Dual	PRO CRIMPER II (BNC)	A24786-ND	92.25	58433-1
—	PRO CRIMPER Hand Tool	A9996-ND	75.00	354940-1
—	Crimp Tool, BNC with Die Set	A9802-ND	92.25	58433-2
Hex	PRO CRIMPER Die Set	A9995-ND	45.00	58436-3
Hex	PRO CRIMPER Die Set	A9994-ND	45.00	58436-1
Hex	PRO CRIMPER Die Set	A9960-ND	45.00	58436-2
Dual	CERTI-CRIMP with Die Set	A24572-ND	288.00	220187-1
Dual	CERTI-CRIMP with Die Set	A24573-ND	315.00	69477-1
Dual	CERTI-CRIMP with Die Set	A24574-ND	849.41	220015-1
Dual	PRO CRIMPER Die Set	A24570-ND	45.00	58435-1
Dual	CERTI-CRIMP with Die Set	A24774-ND	534.00	220009-5
Dual	PRO CRIMPER Die Set	A24780-ND	180.00	318450-2
Dual	PRO CRIMPER Die Set	A24779-ND	201.75	58330-1
Dual	CERTI-CRIMP with Die Set	A24782-ND	635.00	69477-4
Dual	PRO CRIMPER Die Set	A24781-ND	487.50	318452-2
Dual	PRO CRIMPER Die Set	A24777-ND	168.00	220189-3
Dual	PRO CRIMPER Die Set	A24778-ND	65.25	220189-1
Dual	PRO CRIMPER Die Set	A24776-ND	124.50	58537-1
Dual	PRO CRIMPER Die Set	A24775-ND	65.25	220189-2
Dual	CERTI-CRIMP with Die Set	A24769-ND	663.00	69245-1
Dual	CERTI-CRIMP with Die Set	A24770-ND	687.00	69140-1
Dual	CERTI-CRIMP with Die Set	A24771-ND	780.00	69140-2
Dual	CERTI-CRIMP with Die Set	A24772-ND	1222.13	69331-1
Dual	CERTI-CRIMP with Die Set	A24773-ND	687.00	69141-1
—	Jack Die Set	A9972-ND	35.25	58465-1
	BNC Pro-Crimper Dies, 75 Ohm			
Hex	BNC Die Set	A9993-ND	38.25	58425-2
Hex	BNC Die Set	A9992-ND	38.25	58425-1
Hex	Connector Die Set	A9971-ND	33.00	852922-2
—	Crimp Tool with Die Set	A9803-ND	105.00	58531-2
—	Crimp Tool with Die Set	A9804-ND	105.00	58531-1
—	Crimp Tool with Die Set	A9805-ND	105.00	58531-3
Dual	Die Set	A24597-ND	168.00	58085-1
Dual	Die Set	A24630-ND	201.75	318451-2
Dual	Die Set	A24631-ND	160.50	58538-1
Dual	Die Set	A24632-ND	168.00	58174-1
Dual	Die Set	A24633-ND	201.75	58086-1
	N-Type			
—	Crimp Tool with Die Set	A9807-ND	126.00	58501-1
Hex	Die Set, use with A9996-ND	A9975-ND	56.25	58485-1
	Cable Stripper			
—	Cable Stripping Tool	A1110-ND	131.14	603995-1

Braid-Pic Contacts and Terminals

Fig. 1

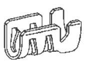


Fig. 2

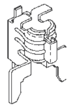


Fig. 3

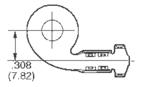
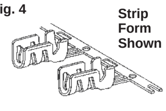


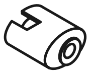
Fig. 4



Strip Form Shown

Fig.	Description	Cable Group RG/U	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	Cable Contact, Loose, 50 or 75 Ohm	—	A24719-ND	1.25	1.01	226286-3
2	Vertical Receptacle, Loose, 50 or 75 Ohm	—	A24720-ND	1.20	.97	226287-2
3	Grounding Terminals	58, 58A, 58B, 58C	A24721-ND	.77	.62	226619-3
4	Braid Termination Only, Strip Form	174, 316, 188, 188A, 179, 179A, 179B, 187, 187A	A24722-ND	.87	.70	226176-2
4	Braid Termination Only, Loose Form	174, 316, 188, 188A, 179, 179A, 179B, 187, 187A	A24723-ND	1.04	.84	226176-4

Shielded Wire Ferrules (Thermashield)



Description	Primary Ins. Dia. Range – In. (mm)	Cable Size	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Tin Plated, Violet	.033-.059 (0.84-1.5)	RG-196A/U	A24713-ND	.94	.76	2-323930-2
Zinc Plated, Tin	.059-.085 (1.5-2.16)	RG-174/U	A24714-ND	1.03	.83	323931
Zinc Plated, Brown	.085-.095 (2.16-2.41)	—	A24715-ND	.96	.77	323932
Zinc Plated, Green	.115-.130 (2.92-3.30)	RG58C/U, RG-141A/U, RG-223/U	A24716-ND	1.30	1.05	323934
Tin Plated, Green	.115-.130 (2.92-3.30)	RG58C/U, RG-141A/U, RG-223/U	A24717-ND	.94	.76	2-323934-2
Zinc Plated, Violet	.130-.145 (3.3-3.68)	—	A24718-ND	2.27	1.82	327137

Paladin Tools® Coaxial Crimper

Fully ratcheted crimp tool for RG58, RG59, and RG6/6QS CATV “F” terminations. Safety release

PAL70006.1-ND CATV “F” Coaxial Crimper **$27.99**

CUI INC

F Connectors

Fig. 1

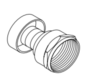


Fig. 2

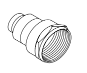


Fig. 3

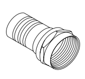


Fig. 4

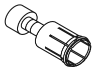


Fig. 5

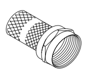


Fig. 6

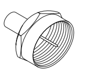


Fig. 7

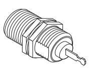


Fig. 8

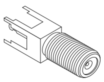


Fig. 9

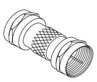


Fig. 10

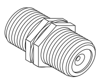


Fig. 11

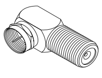


Fig. 12

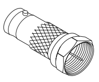
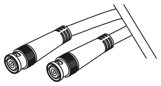


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	1,000
1	Separated Crimp Ring, for RG-59 Cable	CP-0010-ND	.33	.29	.22	.17
	Separated Crimp Ring, for RG-58 Cable	CP-0030-ND	.36	.32	.24	.18
	Separated Crimp Ring, for RG-6 Cable	CP-0060-ND	.37	.32	.25	.19
2	Built-On Crimp Ring, for RG-59 Cable	CP-0110-ND	.51	.44	.34	.26
	Built-On Crimp Ring, for RG-6 Cable	CP-0160-ND	.51	.44	.34	.26
3	Long Type Built-On Crimp Ring, for RG-59 Cable	CP-0210-ND	.48	.42	.33	.25
	Long Type Built-On Crimp Ring, for RG-6 Cable	CP-0260-ND	.48	.42	.33	.25
4	Push-On, Crimp Type, for RG-59 Cable	CP-0310-ND	.71	.62	.47	.36
	Push-On, Crimp Type, for RG-58 Cable	CP-0330-ND	.71	.62	.47	.36
5	Twist-On Type, for RG-59 Cable	CP-0410-ND	.44	.38	.30	.22
6	Male Terminator, with Built-In 75 Ohm Resistor	CP-0610-ND	.41	.36	.28	.21
7	Female Bulkhead Receptacle, with Washer and Nut	CP-1010-ND	.53	.46	.35	.27
8	PCB Type, Full Length 26mm	CP-1210-ND	.77	.67	.52	.39
9	Adapter, Universal Male F to F Coupler	CP-2010-ND	1.24	1.08	.83	.62
10	Adapter, Female F to F Coupler, with Washer and Nut	CP-2110-ND	.48	.42	.33	.25
11	Adapter, Right Angle F Male to F Female	CP-2510-ND	1.62	1.41	1.08	.81
12	Adapter, F Male to BNC Female	CP-0130-ND	2.19	1.90	1.46	1.10

tpi

BNC and F Connector Cables, Male to Male



Item	Description	Cable Type RG58	RG59	RG6
Conductor	Material	BC	CCS	BC
	No. / in. (mm)	1 / .32 (0.813)	1 / .253 (0.643)	1 / .253 (0.643)
Insulation	Material	LDPE	LDPE	LDPE
	Color	Natural	Natural	Natural
	Diameter: in. (mm)	.116 (2.95)	.146 (3.71)	.146 (3.71)
Braided Shielding	Material	BC	BC	BC
	No. / in. (mm)	16/7 / .051 (0.12)	16/7 / .051 (0.12)	16/7 / .051 (0.12)
Jacket	Material	PVC	PVC	PVC
	Thickness: in. (mm)	.283 (0.72)	.354 (0.9)	.354 (0.9)
	Color	Black	Black	See Below
	Outer Diameter: in. (mm)	.195 ± .006 (4.95 ± 0.15)	.236 ± .006 (6.0 ± 0.15)	.236 ± .006 (6.0 ± 0.15)
General	Tensile Strength	1,500 psi	1,500 psi	1,500 psi
	Nominal Impedance (ohm)	53.5	73	75
	Nominal Capacitance (pF/m)	93.5	68.9	44.3
	Attenuation 100MHz (db/km)	138	125	102
	Voltage Rating	5.0kv	7.0kv	3.0kv
	UL Standard	1354	1354	1354

BC = Bare Copper CCS = Copper Clad Steel LDPE = Low Density PE

Length Ft. (M)	Digi-Key Part No.	Price Each	TPI Part No.
	BNC Connector Cables		
	RG58/U Molded Strain Relief Cables 50Ω		
1 (.30)	290-1009-ND	7.95	58-012-1M
2 (.61)	290-1010-ND	8.49	58-024-1M
3 (.91)	290-1011-ND	8.95	58-036-1M
4 (1.22)	290-1012-ND	9.44	58-048-1M
5 (1.52)	290-1013-ND	9.98	58-060-1M
6 (1.83)	290-1014-ND	10.49	58-072-1M
10 (3.05)	290-1015-ND	12.54	58-120-1M
15 (4.57)	290-1016-ND	15.18	58-180-1M
25 (7.62)	290-1017-ND	20.79	58-300-1M
50 (15.24)	290-1018-ND	31.99	58-600-1M
75 (22.86)	290-1019-ND	45.49	58-900-1M
100 (30.48)	290-1020-ND	57.49	58-1200-1M
	RG59/U Molded Strain Relief Cables 75Ω		
1 (.30)	290-1021-ND	7.95	59-012-1M
2 (.61)	290-1022-ND	8.49	59-024-1M
3 (.91)	290-1023-ND	8.95	59-036-1M
4 (1.22)	290-1024-ND	9.44	59-048-1M
5 (1.52)	290-1025-ND	9.98	59-060-1M
6 (1.83)	290-1026-ND	10.49	59-072-1M
10 (3.05)	290-1027-ND	12.54	59-120-1M
15 (4.57)	290-1028-ND	15.18	59-180-1M
25 (7.62)	290-1029-ND	20.79	59-300-1M
50 (15.24)	290-1030-ND	31.99	59-600-1M
75 (22.86)	290-1031-ND	45.49	59-900-1M
100 (30.48)	290-1032-ND	57.49	59-1200-1M
	F Connector Cables		
	RG6/U Molded End Cables - Black		
3 (.91)	290-1081-ND	7.08	F6-3B
6 (1.83)	290-1082-ND	9.15	F6-6B
10 (3.05)	290-1083-ND	10.68	F6-10B
12 (3.66)	290-1084-ND	11.73	F6-12B
15 (4.57)	290-1085-ND	14.28	F6-15B
25 (7.62)	290-1086-ND	17.88	F6-25B
50 (15.24)	290-1135-ND	16.79	F6-50B
75 (22.86)	290-1136-ND	26.35	F6-75B
100 (30.48)	290-1137-ND	35.50	F6-100B
	RG6/U Molded End Cables - White		
3 (.91)	290-1090-ND	7.41	F6-3W
6 (1.83)	290-1091-ND	9.60	F6-6W
10 (3.05)	290-1092-ND	11.01	F6-10W
12 (3.66)	290-1093-ND	12.21	F6-12W
15 (4.57)	290-1094-ND	14.61	F6-15W
25 (7.62)	290-1095-ND	18.21	F6-25W
50 (15.24)	290-1138-ND	16.79	F6-50W
75 (22.86)	290-1139-ND	26.35	F6-75W
100 (30.48)	290-1140-ND	35.50	F6-100W

Coax Adapter Connector Kit

Kit includes male and female connectors of all eight types. Any adapter can be created on the spot in just seconds. Simply screw any combination of 24 connectors to one of the six universal interfaces.

• Gold plated contacts • Silver plated machined brass connector bodies with teflon insulation

290-1045-ND TPI Part No. TPI-3000A **$150.00**

Johnson Components NEW! Fixed Length Cables

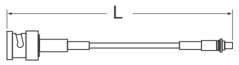
Features:

• Tested to customer specifications • Flexible cable • Conformable cable • Semi-rigid cable • 0 to 26 GHz • 50 and 75 Ohms • Controlled impedance

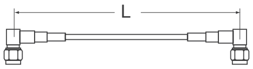
Applications:

• Voltage/Continuity Test Fixture • Interface location gauging • VSWR Quality Assurance Scalar Analyzer • VSWR/TDR Design Engineering Vector Analyzer • CNC Hardline Bender (Semi-rigid cables)

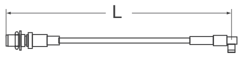
Straight to Straight



Right Angle to Right Angle



Straight to Right Angle



Straight to Straight

Cable Type	Dim. L (In.)	Digi-Key Part No.	Price Each			Johnson Part No.
			1	10	25	
SMB Plug to SMB Plug						
RG-316	6	J1206-ND	13.50	10.13	8.55	415-0003-006
	12	J1212-ND	13.88	10.41	8.79	415-0003-012
	24	J1224-ND	15.00	11.25	9.50	415-0003-024
	36	J1236-ND	15.75	11.82	9.98	415-0003-036
SMB 75Ω Plug to SMB 75Ω Plug						
RG-179	6	J1606-ND	13.88	10.41	8.79	415-0008-006
	12	J1612-ND	14.63	10.97	9.27	415-0008-012
	24	J1624-ND	15.75	11.82	9.98	415-0008-024
	36	J1636-ND	17.25	12.94	10.93	415-0008-036
RG-179DS	6	J1806-ND	14.25	10.69	9.03	415-0010-006
	12	J1812-ND	15.38	11.54	9.74	415-0010-012
	24	J1824-ND	17.25	12.94	10.93	415-0010-024
	36	J1836-ND	19.13	14.35	12.12	415-0010-036
Belden 735A	6	J2006-ND	18.00	13.50	11.40	415-0012-006
	12	J2012-ND	19.50	14.63	12.35	415-0012-012
	24	J2024-ND	15.00	11.25	9.50	415-0012-024
	36	J2036-ND	25.13	18.85	15.92	415-0012-036
MCX Plug to MCX Plug						
RG-178	6	J2206-ND	12.75	9.57	8.08	415-0014-006
	12	J2212-ND	13.50	10.13	8.55	415-0014-012
	24	J2224-ND	15.00	11.25	9.50	415-0014-024
	36	J2236-ND	16.50	12.38	10.45	415-0014-036
RG-316	6	J2606-ND	10.50	7.88	6.65	415-0018-006
	12	J2612-ND	10.88	8.16	6.89	415-0018-012
	24	J2624-ND	11.63	8.72	7.37	415-0018-024
	36	J2636-ND	12.75	9.57	8.08	415-0018-036
RG-316DS	6	J2806-ND	15.00	11.25	9.50	415-0020-006
	12	J2812-ND	10.50	7.88	6.65	415-0020-012
	24	J2824-ND	11.63	8.72	7.37	415-0020-024
	36	J2836-ND	13.13	9.85	8.32	415-0020-036
MCX Plug to MCX Bulkhead Jack						
RG-316	6	J2406-ND	15.38	11.54	9.74	415-0016-006
	12	J2412-ND	15.75	11.82	9.98	415-0016-012
	24	J2424-ND	16.50	12.38	10.45	415-0016-024
	36	J2436-ND	17.63	13.22	11.17	415-0016-036
MCX 75Ω Plug to MCX 75Ω Plug						
RG-179	6	J3006-ND	17.63	13.22	11.17	415-0022-006
	12	J3012-ND	18.38	13.79	11.64	415-0022-012
	24	J3024-ND	19.50	14.63	12.35	415-0022-024
	36	J3036-ND	21.00	15.75	13.30	415-0022-036
Belden 735A	6	J3106-ND	20.63	15.47	13.07	415-0023-006
	12	J3112-ND	22.13	16.60	14.02	415-0023-012
	24	J3124-ND	24.75	18.57	15.68	415-0023-024
	36	J3136-ND	27.75	20.82	17.58	415-0023-036
SMA Plug to SMA Plug						
RG-178	6	J3306-ND	12.75	9.57	8.08	415-0025-006
	12	J3312-ND	13.50	10.13	8.55	415-0025-012
	24	J3324-ND	15.00	11.25	9.50	415-0025-024
	36	J3336-ND	17.63	13.22	11.17	415-0025-036
RG-316	6	J3706-ND	11.25	8.44	7.13	415-0029-006
	12	J3712-ND	12.00	9.00	7.60	415-0029-012
	24	J3724-ND	12.75	9.57	8.08	415-0029-024
	36	J3736-ND	15.00	11.25	9.50	415-0029-036
RG-316DS	6	J4106-ND	11.63	8.72	7.37	415-0033-006
	12	J4112-ND	12.00	9.00	7.60	415-0033-012
	24	J4124-ND	13.50	10.13	8.55	415-0033-024
	36	J4136-ND	14.63	10.97	9.27	415-0033-036
RG-58	12	J4612-ND	13.50	10.13	8.55	415-0038-012
	24	J4624-ND	14.25	10.69	9.03	415-0038-024
	36	J4636-ND	15.00	11.25	9.50	415-0038-036
RG-142	12	J5112-ND	16.88	12.66	10.69	415-0043-012
	24	J5124-ND	21.75	16.32	13.78	415-0043-024
	36	J5136-ND	26.63	19.97	16.87	415-0043-036
SMA Plug to SMA Bulkhead Jack						
RG-316	6	J3906-ND	12.75	9.57	8.08	415-0031-006
	12	J3912-ND	13.50	10.13	8.55	415-0031-012
	24	J3924-ND	14.25	10.69	9.03	415-0031-024
	36	J3936-ND	15.00	11.25	9.50	415-0031-036
RG-316DS	6	J4306-ND	12.75	9.57	8.08	415-0035-006
	12	J4312-ND	13.50	10.13	8.55	415-0035-012
	24	J4324-ND	15.00	11.25	9.50	415-0035-024
	36	J4336-ND	16.13	12.10	10.22	415-0035-036
RG-58	12	J4812-ND	17.25	12.94	10.93	415-0040-012
	24	J4824-ND	18.00	13.50	11.40	415-0040-024
	36	J4836-ND	18.75	14.07	11.88	415-0040-036
RG-142	12	J5312-ND	20.63	15.47	13.07	415-0045-012
	24	J5324-ND	25.50	19.13	16.15	415-0045-024
	36	J5336-ND	30.38	22.79	19.24	415-0045-036
BNC Plug to BNC Plug						
RG-58	12	J6212-ND	8.63	6.47	5.47	415-0054-012
	24	J6224-ND	9.38	7.04	5.94	415-0054-024
	36	J6236-ND	10.50	7.88	6.65	415-0054-036
RG-59TFE	12	J6312-ND	11.63	8.72	7.37	415-0055-012
	24	J6324-ND	15.75	11.82	9.98	415-0055-024
	36	J6336-ND	19.88	14.91	12.59	415-0055-036
Belden 8218	12	J6412-ND	8.63	6.47	5.47	415-0056-012
	24	J6424-ND	9.75	7.32	6.18	415-0056-024
	36	J6436-ND	10.50	7.88	6.65	415-0056-036
RG-59	12	J6512-ND	8.63	6.47	5.47	415-0057-012
	24	J6524-ND	9.75	7.32	6.18	415-0057-024
	36	J6536-ND	10.50	7.88	6.65	415-0057-036
BNC 75Ω Plug to BNC 75Ω Plug						
Belden 8218	12	J5512-ND	11.63	8.72	7.37	415-0047-012
	24	J5524-ND	12.38	9.29	7.84	415-0047-024
	36	J5536-ND	13.50	10.13	8.55	415-0047-036
RG-59	12	J5612-ND	12.38	9.29	7.84	415-0048-012
	24	J5624-ND	13.13	9.85	8.32	415-0048-024
	36	J5636-ND	14.25	10.69	9.03	415-0048-036
Belden 8281	12	J5712-ND	13.20	9.90	8.36	415-0049-012
	24	J5724-ND	15.38	11.54	9.74	415-0049-024
	36	J5736-ND	17.25	12.94	10.93	415-0049-036
COMSCOPE 735	12	J5812-ND	12.75	9.57	8.08	415-0050-012
	24	J5824-ND	14.25	10.69	9.03	415-0050-024
	36	J5836-ND	16.13	12.10	10.22	415-0050-036
Belden 735A	12	J5912-ND	13.88	10.41	8.79	415-0051-012
	24	J5924-ND	16.50	12.38	10.45	415-0051-024
	36	J5936-ND	19.50	14.63	12.35	415-0051-036
Belden 734A	12	J6012-ND	15.00	11.25	9.50	415-0052-012
	24	J6024-ND	19.13	14.35	12.12	415-0052-024
	36	J6036-ND	22.88	17.16	14.49	415-0052-036
Belden 1694A	12	J6112-ND	12.75	9.57	8.08	415-0053-012
	24	J6124-ND	14.25	10.69	9.03	415-0053-024
	36	J6136-ND	15.38	11.54	9.74	415-0053-036
N Plug to N Plug						
RG-58	12	J6612-ND	12.38	9.29	7.84	415-0058-012
	24	J6624-ND	13.13	9.85	8.32	415-0058-024
	36	J6636-ND	14.25	10.69	9.03	415-0058-036
RG-142	12	J6812-ND	16.50	12.38	10.45	415-0060-012
	24	J6824-ND	21.38	16.04	13.54	415-0060-024
	36	J6836-ND	26.25	19.69	16.63	415-0060-036
RG-8	12	J7012-ND	15.38	11.54	9.74	415-0062-012
	24	J7024-ND	18.75	14.07	11.88	415-0062-024
	36	J7036-ND	21.75	16.32	13.78	415-0062-036
RG-213	12	J7112-ND	13.88	10.41	8.79	415-0063-012
	24	J7124-ND	15.38	11.54	9.74	415-0063-024
	36	J7136-ND	17.25	12.94	10.93	415-0063-036
SMA Plug to N Plug						
RG-58	12	J6712-ND	12.75	9.57	8.08	415-0059-012
	24	J6724-ND	13.88	10.41	8.79	415-0059-024
	36	J6736-ND	14.63	10.97	9.27	415-0059-036
RG-142	12	J6912-ND	16.50	12.38	10.45	415-0061-012
	24	J6924-ND	21.75	16.32	13.78	415-0061-024
	36	J6936-ND	26.25	19.69	16.63	415-0061-036
SMA Plug to BNC Plug						
RG-316	6	J3606-ND	10.50	7.88	6.65	415-0028-006
	12	J3612-ND	10.88	8.16	6.89	415-0028-012
	24	J3624-ND	11.63	8.72	7.37	415-0028-024
	36	J3636-ND	12.75	9.57	8.08	415-0028-036
RG-58	12	J4512-ND	10.88	8.16	6.89	415-0037-012
	24	J4524-ND	12.00	9.00	7.60	415-0037-024
	36	J4536-ND	12.75	9.57	8.08	415-0037-036
RG-142	12	J5012-ND	15.00	11.25	9.50	415-0042-012
	24	J5024-ND	19.50	14.63	12.35	415-0042-024
	36	J5036-ND	24.38	18.29	15.44	415-0042-036

Right Angle to Right Angle

Cable Group	Dim. L (In.)	Digi-Key Part No.	Price Each			Johnson Part No.
			1	10	25	
SMB Plug to SMB Plug						
RG-178	6	J1006-ND	15.00	11.25	9.50	415-0001-006
	12	J1012-ND	15.75	11.82	9.98	415-0001-012
	24	J1024-ND	17.25	12.94	10.93	415-0001-024
	36	J1036-ND	18.75	14.07	11.88	415-0001-036
RG-316	6	J7306-ND	13.88	10.41	8.79	415-0004-006
	12	J7312-ND	14.25	10.69	9.03	415-0004-012
	24	J7324-ND	15.38	11.54	9.74	415-0004-024
	36	J7336-ND	16.50	12.38	10.45	415-0004-036
RG-316DS	6	J1406-ND	14.63	10.97	9.27	415-0006-006
	12	J1412-ND	15.00	11.25	9.50	415-0006-012
	24	J1424-ND	16.50	12.38	10.45	415-0006-024
	36	J1436-ND	18.00	13.50	11.40	415-0006-036
SMB 75Ω Plug to SMB 75Ω Plug						
RG-179	6	J1706-ND	14.25	10.69	9.03	415-0009-006
	12	J1712-ND	15.00	11.25	9.50	415-0009-012
	24	J1724-ND	16.13	12.10	10.22	415-0009-024
	36	J1736-ND	17.25	12.94	10.93	415-0009-036
RG-179DS	6	J1906-ND	14.63	10.97	9.27	415-0011-006
	12	J1912-ND	15.38	11.54	9.74	415-0011-012
	24	J1924-ND	17.25	12.94	10.93	415-0011-024
	36	J1936-ND	19.13	14.35	12.12	415-0011-036
Belden 735A	6	J2106-ND	18.75	14.07	11.88	415-0013-006
	12	J2112-ND	20.25	15.19	12.83	415-0013-012
	24	J2124-ND	22.88	17.16	14.49	415-0013-024
	36	J2136-ND	25.50	19.13	16.15	415-0013-036
MCX Plug to MCX Plug						
RG-178	6	J2306-ND	12.38	9.29	7.84	415-0015-006
	12	J2312-ND	13.50	10.13	8.55	415-0015-012
	24	J2324-ND	14.63	10.97	9.27	415-0015-024
	36	J2336-ND	16.50	12.38	10.45	415-0015-036
RG-316	6	J2706-ND	12.00	9.00	7.60	415-0019-006
	12	J2712-ND	12.38	9.29	7.84	415-0019-012
	24	J2724-ND	13.50	10.13	8.55	415-0019-024
	36	J2736-ND	14.25	10.69	9.03	415-0019-036
RG-316DS	6	J2906-ND	12.00	9.00	7.60	415-0021-006
	12	J2912-ND	12.75	9.57	8.08	415-0021-012
	24	J2924-ND	13.88	10.41	8.79	415-0021-024
	36	J2936-ND	15.00	11.25	9.50	415-0021-036
MCX 75Ω Plug to MCX 75Ω Plug						
Belden 735A	6	J3206-ND	16.50	12.38	10.45	415-0024-006
	12	J3212-ND	17.63	13.22	11.17	415-0024-012
	24	J3224-ND	20.25	15.19	12.83	415-0024-024
	36	J3236-ND	23.25	17.44	14.73	415-0024-036
SMA Plug to SMA Plug						
RG-178	6	J3506-ND	17.63	13.22	11.17	415-0027-006
	12	J3512-ND	18.38	13.79	11.64	415-0027-012
	24	J3524-ND	20.25	15.19	12.83	415-0027-024
	36	J3536-ND	21.75	16.32	13.78	415-0027-036
RG-316	6	J4006-ND	14.63	10.97	9.27	415-0032-006
	12	J4012-ND	15.00	11.25	9.50	415-0032-012
	24	J4024-ND	15.00	11.25	9.50	415-0032-024
	36	J4036-ND	17.25	12.94	10.93	415-0032-036
RG-316DS	6	J4406-ND	15.00	11.25	9.50	415-0036-006
	12	J4412-ND	15.38	11.54	9.74	415-0036-012
	24	J4424-ND	16.50	12.38	10.45	415-0036-024
	36	J4436-ND	18.00	13.50	11.40	415-0036-036
RG-58	12	J4912-ND	16.50	12.38	10.45	415-0041-012
	24	J4924-ND	17.25	12.94	10.93	415-0041-024
	36	J4936-ND	18.00	13.50	11.40	415-0041-036
RG-142	12	J5412-ND	19.88	14.91	12.59	415-0046-012
	24	J5424-ND	24.75	18.57	15.68	415-0046-024
	36	J5436-ND	29.63	22.22	18.77	415-0046-036

Straight to Right Angle

Cable Group	Dim. L (In.)	Digi-Key Part No.	Price Each			Johnson Part No.
			1	10	25	
SMB Plug to SMB Plug						
RG-316	6	J1106-ND	13.50	10.13	8.55	415-0002-006
	12	J1112-ND	14.25	10.69	9.03	415-0002-012
	24	J1124-ND	15.00	11.25	9.50	415-0002-024
	36	J1136-ND	16.13	12.10	10.22	415-0002-036
RG-316DS	6	J1306-ND	15.00	11.25	9.50	415-0005-006
	12	J1312-ND	14.63	10.97	9.27	415-0005-012
	24	J1324-ND	15.75	11.82	9.98	415-0005-024
	36	J1336-ND	17.25	12.94	10.93	415-0005-036
RG-178	6	J1506-ND	16.50	12.38	10.45	415-0007-006
	12	J1512-ND	17.25	12.94	10.93	415-0007-012
	24	J1524-ND	19.13	14.35	12.12	415-0007-024
	36	J1536-ND	20.63	15.47	13.07	415-0007-036
MCX Plug to MCX Plug						
RG-316	6	J2506-ND	11.25	8.44	7.13	415-0017-006
	12	J2512-ND	11.63	8.72	7.37	415-0017-012
	24	J2524-ND	12.38	9.29	7.84	415-0017-024
	36	J2536-ND	13.50	10.13	8.55	415-0017-036
SMA Plug to SMA Plug						
RG-178	6	J3406-ND	15.38	11.54	9.74	415-0026-006
	12	J3412-ND	16.13	12.10	10.22	415-0026-012
	24	J3424-ND	17.63	13.22	11.17	415-0026-024
	36	J3436-ND	19.50	14.63	12.35	415-0026-036
RG-316	6	J3806-ND	13.13	9.85	8.32	415-0030-006
	12	J3812-ND	13.50	10.13	8.55	415-0030-012
	24	J3824-ND	14.63	10.97	9.27	415-0030-024
	36	J3836-ND	15.38	11.54	9.74	415-0030-036
RG-316DS	6	J4206-ND	13.13	9.85	8.32	415-0034-006
	12	J4212-ND	13.88	10.41	8.79	415-0034-012
	24	J4224-ND	15.00	11.25	9.50	415-0034-024
	36	J4236-ND	16.13	12.10	10.22	415-0034-036
RG-58	12	J4712-ND	15.00	11.25	9.50	415-0039-012
	24	J4724-ND	15.75	11.82	9.98	415-0039-024
	36	J4736-ND	16.50	12.38	10.45	415-0039-036
RG-142	12	J5212-ND	18.38	13.79	11.64	415-0044-012
	24	J5224-ND	23.25	17.44	14.73	415-0044-024
	36	J5236-ND	28.13	21.10	17.82	415-0044-036

JOHNSON Components™

Adapters

Gold plated.

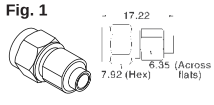
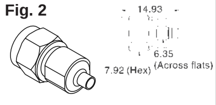
Fig. 1


Fig. 2


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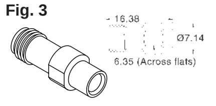

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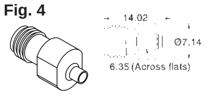

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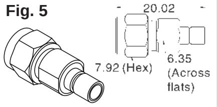

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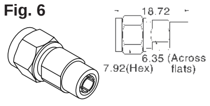

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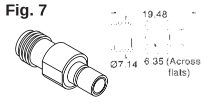

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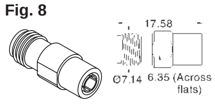

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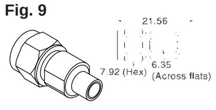

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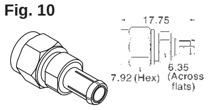

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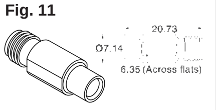

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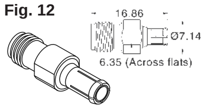

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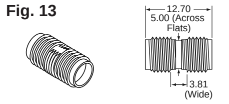

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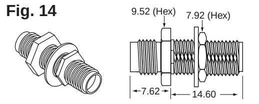

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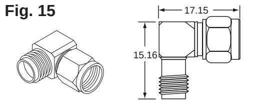

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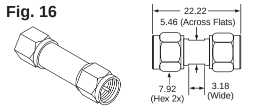

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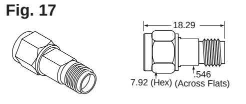


Fig.	Description	VSWR (GHz)	Freq. Range (GHz)	Digi-Key Part No.	Price Each 1	Price Each 10	Johnson Part No.
1	SMA Plug to MMCX Jack	1.05+.05f	0-6	J617-ND	32.40	26.90	134-1019-151
2	SMA Plug to MMCX Plug	1.05+.05f	0-6	J618-ND	35.10	29.14	134-1019-161
3	SMA Jack to MMCX Jack	1.05+.05f	0-6	J619-ND	29.70	24.66	134-1019-171
4	SMA Jack to MMCX Plug	1.05+.05f	0-6	J620-ND	32.40	26.90	134-1019-181
5	SMA Plug to SMB Jack	1.05+.01f	0-4	J621-ND	29.70	24.66	134-1012-011
6	SMA Plug to SMB Plug	1.05+.01f	0-4	J622-ND	32.40	26.90	134-1012-021
7	SMA Jack to SMB Jack	1.05+.01f	0-4	J623-ND	29.70	24.66	134-1012-031
8	SMA Jack to SMB Plug	1.05+.01f	0-4	J624-ND	29.70	24.66	134-1012-041
9	SMA Plug to MCX Jack	1.03+.03f	0-6	J625-ND	29.70	24.66	134-1018-001

Fig.	Description	VSWR (GHz)	Freq. Range (GHz)	Digi-Key Part No.	Price Each 1	Price Each 10	Johnson Part No.
10	SMA Plug to MCX Plug	1.03+.03f	0-6	J626-ND	32.40	26.90	134-1018-011
11	SMA Jack to MCX Jack	1.03+.03f	0-6	J627-ND	29.70	24.66	134-1018-021
12	SMA Jack to MCX Plug	1.03+.03f	0-6	J628-ND	29.70	24.66	134-1018-031
13	SMA Jack to SMA Jack	1.05+.005f	0-18	J655-ND	10.30	9.03	142-0901-801
14	SMA Jack to SMA Bulkhead Jack	1.05+.01f	0-18	J659-ND	15.89	13.94	142-0901-401
15	SMA Jack to SMA Plug / Rt. Angle	1.035+.02f	0-18	J632-ND	14.61	12.82	142-0901-941
16	SMA Plug to SMA Plug	1.05+.01f	0-18	J633-ND	13.02	11.42	142-0901-811
17	SMA Plug to SMA Jack	1.05+.005f	0-18	J656-ND	11.54	10.12	142-0901-821

RF Connectors SMA/SMB Type

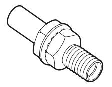
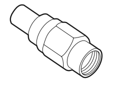
Fig. 1


Fig. 2


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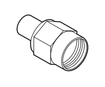

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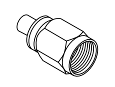

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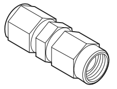

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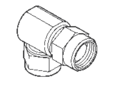

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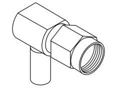

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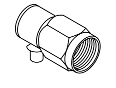

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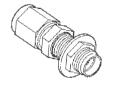

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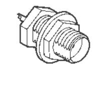

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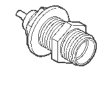

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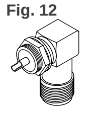
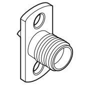


Fig. 13


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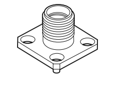

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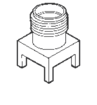

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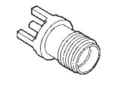

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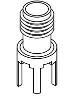

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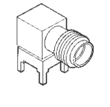

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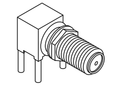

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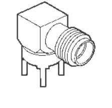

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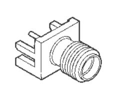

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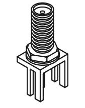

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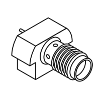

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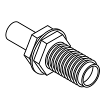

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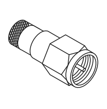

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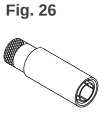

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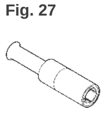

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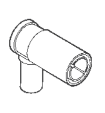

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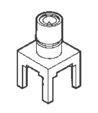

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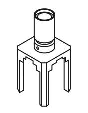

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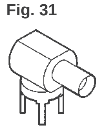

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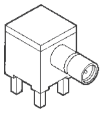

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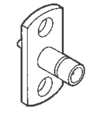

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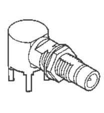


Fig.	Type (Desc.)	Cable Group	Plating	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Johnson Part No.
SMA Type								
1	Crimp	2*	Gold	J523-ND	7.83	6.87	5.90	142-0303-411
	Crimp	2*	Nickel	J524-ND	7.53	6.61	5.68	142-0303-416
2	Crimp	2*	Gold	J525-ND	4.71	4.14	3.56	142-0403-011
	Crimp	2*	Nickel	J526-ND	4.34	3.81	3.27	142-0403-016
3	Solder	RG-402	Gold	J485-ND	1.29	1.13	.98	142-0694-011
	Solder	RG-402	Nickel	J486-ND	.89	.79	.68	142-0694-016
	Solder	RG-405	Gold	J487-ND	3.86	3.39	2.92	142-0693-001
	Solder	RG-405	Nickel	J488-ND	3.47	3.05	2.62	142-0693-006
4	Crimp	RG-178/U, 196	Gold	J605-ND	6.06	5.32	4.57	142-0402-011
	Crimp	4	Gold	J637-ND‡	6.15	5.40	4.64	142-0439-001
	Crimp	5	Gold	J638-ND‡‡	6.15	5.40	4.64	142-0435-001
5	Clamp	2*	Gold	J474-ND	10.00	8.77	7.54	142-0203-011
	Clamp	2*	Nickel	J475-ND	9.13	8.01	6.89	142-0203-016
	Clamp	3**	Gold	J480-ND	17.11	15.01	12.90	142-0207-011
	Clamp	3**	Nickel	J481-ND	16.15	14.17	12.18	142-0207-016
6	Clamp	2*	Nickel	J477-ND	7.79	6.83	5.88	142-0203-106
	Clamp	3**	Nickel	J484-ND	8.91	7.82	6.72	142-0207-106
7	Crimp	2*	Gold	J510-ND	6.88	6.04	5.19	142-0403-101
	Crimp	4	Gold	J639-ND‡	8.65	7.59	6.53	142-0439-101
	Crimp	5	Gold	J640-ND‡‡	9.61	8.43	7.25	142-0435-101
8	Solder	.086 Semi-Rigid	Gold	J606-ND	8.56	7.51	6.46	142-0693-101
	Solder	.141 Semi-Rigid	Gold	J607-ND	8.56	7.51	6.46	142-0694-101
9	Clamp	2*	Gold	J478-ND	11.54	10.12	8.70	142-0103-401
10	Panel Mt.	—	Gold	J490-ND	5.39	4.73	4.06	142-0701-401
11	Panel Mt.	—	Gold	J489-ND	6.45	5.66	4.87	142-0701-411
12	Solder	—	Gold	J609-ND	12.30	10.79	9.28	142-0701-531
13	Flange Mt.	—	Gold	J492-ND	5.37	4.71	4.05	142-0701-621
14	Flange Mt.	—	Gold	J493-ND	5.37	4.71	4.05	142-0701-631
15	PC Mt.	—	Gold	J494-ND	6.75	5.92	5.09	142-0701-211
	PC Mt.	—	Nickel	J495-ND	6.34	5.57	4.79	142-0701-216
16	PC Mt.	—	Gold	J500-ND	4.65	4.08	3.51	142-0701-201
17	PC Mt.	—	Gold	J608-ND	4.82	4.23	3.64	142-0701-231
18	PC Mt.	—	Gold	J496-ND	11.29	9.90	8.51	142-0701-321
	PC Mt.	—	Nickel	J497-ND	10.60	9.30	7.99	142-0701-326
19	PC Mt.	—	Gold	J569-ND	10.77	9.45	8.13	142-0701-501
20	PC Mt.	—	Gold	J501-ND	7.45	6.54	5.62	142-0701-301
21	.062" PC Mt.	—	Gold	J502-ND§	5.07	4.45	3.83	142-0701-801

Fig.	Type (Desc.)	Cable Group	Plating	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Johnson Part No.
21	.062" PC Mt.	—	Gold	J629-ND§	6.06	5.32	4.57	142-0711-821
	.031" PC Mt.	—	Gold	J657-ND	5.58	4.90	4.21	142-0701-881
	.062" PC Mt.	—	Gold	J658-ND§	5.92	5.19	4.46	142-0701-851
	.042" PC Mt.	—	Gold	J630-ND	6.75	5.92	5.09	142-0701-841
22	PC Mt.	—	Gold	J610-ND	6.34	5.56	4.78	142-0701-871
23	PC Mt.	—	Gold	J631-ND	5.47	4.80	4.13	142-0721-881
24	Crimp	4‡	Gold	J641-ND	9.61	8.43	7.25	142-0339-401
	Crimp	5‡‡	Gold	J642-ND	9.61	8.43	7.25	142-0335-401
25	50 ohm Terminator	—	Gold	J634-ND	31.20	27.36	23.52	142-0801-861
SMB Type								
26	50 ohm Terminator	—	Gold	J635-ND	13.20	11.58	9.95	131-3801-811
	75 ohm Terminator	—	Gold	J636-ND	12.21	10.71	9.21	131-3801-821
27	Crimp	2*	Nickel	J464-ND	4.93	4.33	3.72	131-1403-016
28	Crimp	2*	Gold	J465-ND	4.89	4.29	3.69	131-1403-101
	Crimp	2*	Nickel	J466-ND	4.11	3.61	3.10	131-1403-116
29	PC Mt.	—	Gold	J467-ND†	2.65	2.33	2.00	131-1701-201
	PC Mt.	—	Nickel	J468-ND†	2.50	2.20	1.89	131-1701-206
	PC Mt.	—	Nickel	J469-ND†	2.50	2.20	1.89	131-1701-216
30	PC Mt.	—	Gold	J613-ND†	2.09	1.84	1.58	131-3701-261
	PC Mt.	—	Nickel	J614-ND†	2.00	1.75	1.51	131-3701-266
	PC Mt.	—	Gold	J615-ND†	2.09	1.84	1.58	131-3701-271
	PC Mt.	—	Nickel	J616-ND†	2.00	1.75	1.51	131-3701-276
31	PC Mt.	—	Gold	J472-ND	5.05	4.43	3.81	131-3701-301
32	PC Mt.	—	Gold	J470-ND	4.65	4.09	3.51	131-1701-371
	PC Mt.	—	Nickel	J471-ND	4.48	3.93	3.38	131-1701-376
33	Panel Mt.	—	Gold	J520-ND	7.00	6.14	5.28	131-3701-621
34	Panel Mt.	—	Gold	J522-ND	6.73	5.91	5.08	131-3701-341
Crimp Tool Frame				J572-ND	80.93	—	—	140-0000-952
Die Set for SMA, SMB Type (RG178, 316, 316DS, 58)				J573-ND	105.83	—	—	140-0000-951

* **Group 2 Cables:** RG-161/U, RG-174/U, RG-179/U, RG-187/U, RG-188/U, RG-316/U

** **Group 3 Cables:** RG-58/U, RG-141/U, RG-303/U

‡ **Group 4 Cables:** LMR-200, HPF-200, RF-200

‡‡ **Group 5 Cables:** LMR-240, HPF-240, RF-240

† J467, J468, J613 and J614 Leg Length: .155"; J469, J615 and J616 Leg Length: .095"

§ J502: Round Contact, B. Dim. .073"; § J629: Round Contact, B. Dim. .042"; § J658: Tab Contact, B. Dim. .083"

RF Connectors and Adapters

Fig. 1

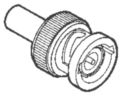


Fig. 2

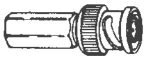


Fig. 3

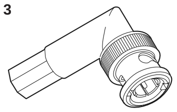


Fig. 4

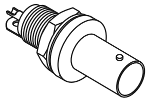


Fig. 5

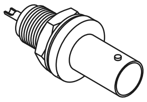


Fig. 6

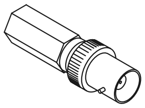


Fig. 7

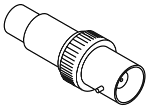


Fig. 8

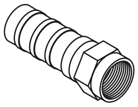
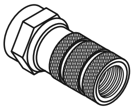


Fig. 9



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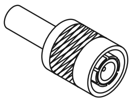


Fig. 11

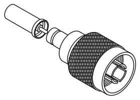


Fig. 12

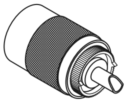


Fig. 13

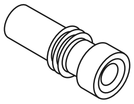


Fig. 14

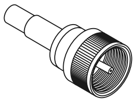


Fig. 15

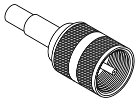


Fig. 16

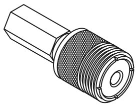


Fig. 17

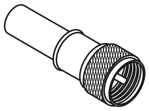


Fig. 18

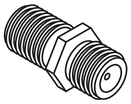


Fig. 19

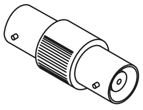


Fig. 20

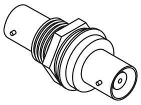


Fig. 21

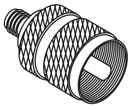


Fig. 22

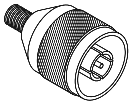


Fig. 23

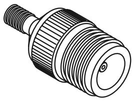


Fig. 24

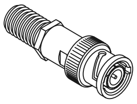


Fig. 25

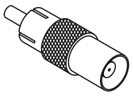


Fig. 26

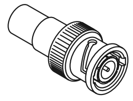


Fig.	Type	Description	Cable Group RG/U	Digi-Key Part No.	Price Each			Cambridge Part No.
					1	25	50	
CONNECTORS								
True 75 Ohm BNC								
1	Plug	Crimp-Type, Solder or Crimp Contact, 75Ω	RG-59, 140, 302, Belden 9209A, 8279, 8241, 8263	367-1067-ND	3.66	3.33	2.66	CPMC-68-2
			Belden 8281, 9231, 9141	367-1068-ND	3.66	3.33	2.66	CPMC-68-3
			RG-6, Belden 8215	367-1069-ND	4.62	4.20	3.36	CPMC-68-5
			Belden 82108, 89108	367-1070-ND	4.43	4.03	3.22	CPMC-68-10
			Belden 8218	367-1071-ND	4.04	3.68	2.94	CPMC-68-18
			RG-179, 187, Belden 1520A	367-1072-ND	4.04	3.68	2.94	CPMC-68-20
			Belden 735A	367-1073-ND	3.66	3.33	2.66	CPMC-68-33
			Belden 1855A	367-1074-ND	3.85	3.50	2.80	CPMC-68-34
			Belden 1505A	367-1075-ND	3.66	3.33	2.66	CPMC-68-35
			Belden 1695A	367-1076-ND	4.24	3.85	3.08	CPMC-68-36
			Belden 1694A, 9248	367-1077-ND	3.66	3.33	2.66	CPMC-68-45
			Belden 1506A, 82259, 89259	367-1078-ND	4.24	3.85	3.08	CPMC-68-50
BNC								
1	Plug	Crimp-Type Push-On, 50Ω	RG-58	367-0001-ND	1.57	1.43	1.14	CP-88-1
			RG-59, 62	367-0002-ND	1.60	1.46	1.17	CP-88-2
			RG-MATV-59	367-0003-ND	1.52	1.38	1.11	CP-88-4
			RG-6	367-0004-ND	1.90	1.73	1.39	CP-88-5
			TIMES MI 2040	367-0005-ND	2.19	2.00	1.60	CP-88-6
			RG-TFE-59, TFE-62	367-0006-ND	1.90	1.73	1.39	CP-88-10
		Crimp Plug, Two Ferrules, 50Ω	RG-58 TFE-59	367-0054-ND	1.67	1.52	1.22	CPMC-88-21
		Crimp-Type, Solder or Crimp Contact, 50Ω	RG-179, 187	367-0043-ND	1.88	1.71	1.37	CPM-88-20
			RG-174, 188,316	367-0044-ND	1.88	1.71	1.37	CPM-88-19
			RG-58, 141	367-0047-ND	1.44	1.31	1.05	CPMC-88-1
			RG-59, 62	367-0048-ND	1.44	1.31	1.05	CPMC-88-2
			Belden 8281	367-0049-ND	1.78	1.62	1.30	CPMC-88-3
			RG-6	367-0055-ND	2.19	2.00	1.60	CPMC-88-5
			RG-TFE-59, 62	367-0050-ND	1.46	1.33	1.07	CPMC-88-10
			RG-303, TFE-58	367-0051-ND	1.52	1.38	1.11	CPMC-88-11
			RG-142, 233, 400, 55	367-0052-ND	1.52	1.38	1.11	CPMC-88-13
			Belden 8218	367-0053-ND	1.75	1.59	1.27	CPMC-88-18
		Crimp-Type, Solder or Crimp Contact, 75Ω	RG-59, 62	367-0045-ND	1.52	1.38	1.11	CPMC-78-2
			Belden 8218, 1855A	367-0046-ND	1.78	1.62	1.30	CPMC-78-18
2	Plug	Twist-On, Field Installable, 50Ω	RG-58	367-0030-ND	1.78	1.62	1.30	CPFI-UG88-1
			RG-59, 62	367-0031-ND	1.88	1.71	1.37	CPFI-UG88-2
			Belden 8281	367-0032-ND	1.78	1.62	1.30	CPFI-UG88-3
			RG-MATV-59	367-0033-ND	1.93	1.76	1.41	CPFI-UG88-4
			RG-6	367-0034-ND	1.78	1.62	1.30	CPFI-UG88-5
			RG-TFE-59, TFE-62	367-0035-ND	1.64	1.50	1.20	CPFI-UG88-10
3	Plug	Twist-On, Field Installable, 50Ω	RG-59, 62	367-0029-ND	3.87	3.52	2.82	CPFI-RA-2
4	Jack	Front-Mnt. Bulkhead Jack w/ Solder Tab, 50Ω	—	367-0019-ND	1.31	1.19	.95	CP-1094-AST
5	Jack	Front-Mnt. Bulkhead Jack w/out Solder Lug, 50Ω	—	367-0020-ND	1.03	.94	.76	CP-1094-U
		Front-Mnt. Bulkhead Jack with Solder Lug, 50Ω	—	367-0021-ND	1.25	1.14	.92	CP-1094-UL
6	Jack	Straight Twist-On Jack, 50 Ohm	RG-59, 62	367-0036-ND	2.19	2.00	1.60	CPFI-UG89-2
7	Jack	Crimp-Type Jack, Push-On Body, 50Ω	RG-59, 62	367-0007-ND	1.88	1.71	1.37	CP-89-2
			RG-6	367-0008-ND	2.14	1.95	1.56	CP-89-5
Type F								
8	Plug	Crimp Plug	RG-6	367-0022-ND	.29	.27	.22	CPF-56-ALM
			RG-6 Quad Shield	367-0023-ND	.34	.31	.25	CPF-56-ALS
			Tri-Shield	367-0024-ND	.35	.33	.26	CPF-56-ALX
			RG-59	367-0025-ND	.28	.26	.21	CPF-59-ALM
9	Plug	Twist-On Plug (no Crimp)	RG-6	367-0027-ND	.25	.23	.19	CPFI-56
TNC								
10	Plug	Crimp-Type Plug Solder or Crimp	RG-58, 141	367-0056-ND	1.52	1.38	1.11	CPMC-TNC-1
			RG-142, 223, 400, 55	367-0057-ND	1.72	1.57	1.26	CPMC-TNC-13
			RG-8X (MINI 8)	367-0058-ND	1.70	1.55	1.24	CPMC-TNC-17
Type N								
11	Plug	Crimp-Type Plug	RG-58	367-0059-ND	3.66	3.33	2.66	CPN-1
			RG-142, TFE	367-0060-ND	3.97	3.61	2.89	CPN-142T
			RG-8, 213	367-0061-ND	3.55	3.23	2.59	CPN-8
			RG-8, 213	367-0062-ND*	3.64	3.31	2.65	CPN-8/110
			PROFLEX RG-450	367-0063-ND	3.66	3.33	2.66	CPN-16
UHF								
12	Plug	Solder-Type, Standard	RG-8, 213	367-0010-ND	1.46	1.33	1.07	CP-AD-250
13	Plug	Solder-Type, Hi-Temp Insulation	RG-58	367-0011-ND	.31	.29	.23	CP-AD-258
14	Plug	Crimp-Type, Crimp Contact	RG-58	367-0037-ND	1.05	.95	.76	CPL-259-1
			RG-59, 62	367-0038-ND	1.20	1.10	.88	CPL-259-2
			RG-8	367-0039-ND	1.36	1.24	.99	CPL-259-8
			RG-TFE-59	367-0040-ND	1.31	1.19	.95	CPL-259-10
			RG-8X (MINI 8)	367-0041-ND	1.25	1.14	.92	CPL-259-17
15	Plug	Crimp-Type, Crimp Contact, Double Nut	RG-58	367-0042-ND	1.57	1.43	1.14	CPL-259-18
16	Jack	Twist-On Jack	RG-58	367-0028-ND	2.61	2.38	1.90	CPFI-249-1
Mini-UHF								
17	Plug	Crimp-Type, Solder or Crimp Contact	RG-58	367-0064-ND	1.31	1.19	.95	MINI-UHF-1
			PROFLEX RG-450	367-0065-ND	1.31	1.19	.95	MINI-UHF-16
			RG-8X (MINI 8)	367-0066-ND	1.31	1.19	.95	MINI-UHF-17

* For 10 gauge wire

Fig.	Description	Digi-Key Part No.	Price Each			Cambridge Part No.
			1	25	50	
ADAPTERS						
F In-Series						
18	Jack to Jack Adapter, 3/4" In-line Splice	367-0026-ND	.25	.23	.19	CPF-81
BNC						
19	Jack to Jack Adapter	367-0015-ND	1.36	1.24	.99	CP-AD-555
20	Bulkhead Jack to Jack Adapter with Lock Washer	367-0016-ND	2.76	2.51	2.01	CP-AD-556M
Between Series						
21	UHF Plug to SMA Jack	367-0009-ND	5.96	5.42	4.34	CP-AD-215
22	N Plug to SMA Jack	367-0017-ND	6.06	5.51	4.41	CP-AD-810
23	N Jack to SMA Jack	367-0018-ND	7.63	6.94	5.55	CP-AD-819
24	BNC Plug to F Jack	367-0014-ND	1.69	1.54	1.24	CP-AD-516
25	BNC Jack to RCA Plug	367-0012-ND	1.31	1.19	.95	CP-AD-501
26	BNC 50 Ohm Plug to RCA Jack	367-0013-ND	1.88	1.71	1.37	CP-AD-515

JOHNSON Components™

RF Connectors MCX Type

FEATURES: • 30% Smaller than SMB. • Rugged snap-on mating design. • Captivated contact. **ELECTRICAL:** • **Impedance:** 50 Ohms • **Frequency Range:** 0-6 GHz • **Working Voltage at sea level:** 335 VRMS; 250 VRMS (J531-ND and J532-ND). **MECHANICAL:** • **Engage/Disengage Force:** 3.4 lbs. max engagement/5 lbs. typical disengagement • **Contact Retention Force:** 4 lbs. min. axial force • **Durability:** 500 cycles min.

Fig. 1 – Right Angle Cable Plug

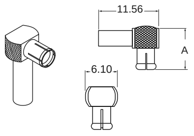


Fig. 2 – Straight Cable Plug

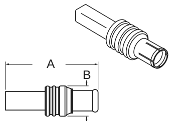


Fig. 3 – Straight Crimp Type Bulkhead Jack

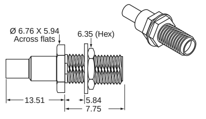


Fig. 4 – Straight Plug Receptacle

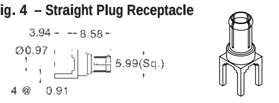


Fig. 5 – Straight PC Mount Jack

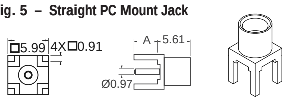


Fig. 6 – Right Angle PC Mnt. Jack

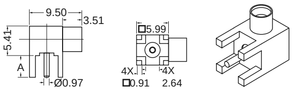


Fig. 7 – Front Mount Bulkhead Jack Receptacle

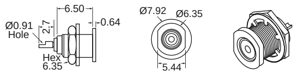


Fig. 8 – End Launch Jack

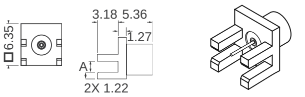


Fig. 9 – SMT Straight Jack

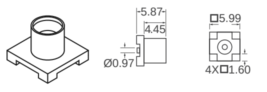


Fig. 10 – SMT Right Angle Jack

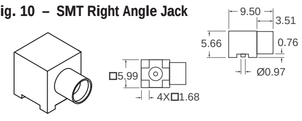


Fig. 11 – Straight Jack Receptacle - 2.54mm

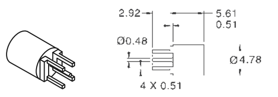


Fig.	Cable Type	Plating	Dim. A (mm)	Dim. B (mm)	Digi-Key Part No.	Price Each 1	10	50	100	Johnson Part No.
50 Ohm										
1	RG 178	Gold	11.58	—	J531-ND	4.65	4.08	3.51	3.01	133-3402-101
1	RG 316	Gold	11.58	—	J535-ND	4.56	4.01	3.44	2.95	133-3403-101
1	RG 178	Nickel	11.58	—	J532-ND	4.39	3.86	3.32	2.84	133-3402-106
1	RG 316	Nickel	11.58	—	J536-ND	4.39	3.86	3.32	2.84	133-3403-106
2	RG 316	Gold	15.19	4.98	J533-ND	3.80	3.34	2.87	2.46	133-3403-001
2	RG 316	Nickel	15.19	4.98	J534-ND	3.55	3.12	2.68	2.30	133-3403-006
4	—	Gold	—	—	J612-ND	6.18	5.42	4.66	3.99	133-3801-201
5	—	Gold	3.94	—	J537-ND	3.41	3.00	2.58	2.21	133-3701-201
5	—	Nickel	3.94	—	J538-ND	3.38	2.97	2.55	2.19	133-3701-206
5	—	Gold	2.79	—	J539-ND	3.55	3.12	2.68	2.30	133-3701-211
5	—	Nickel	2.79	—	J540-ND	3.38	2.97	2.55	2.19	133-3701-216
6	—	Gold	3.94	—	J541-ND	7.79	6.84	5.88	5.04	133-3701-301
6	—	Nickel	3.94	—	J542-ND	7.62	6.68	5.75	4.93	133-3701-306
6	—	Gold	2.79	—	J543-ND	7.98	7.00	6.02	5.16	133-3701-311
6	—	Nickel	2.79	—	J544-ND	7.79	6.84	5.88	5.04	133-3701-316
7	—	Gold	—	—	J545-ND	5.87	5.15	4.43	3.80	133-3701-401
7	—	Nickel	—	—	J546-ND	5.68	4.98	4.29	3.67	133-3701-406
8	—	Gold	1.73	—	J547-ND	4.48	3.93	3.38	2.90	133-3701-801
9	—	Gold	—	—	J548-ND	5.10	4.47	3.85	3.30	133-3711-201
10	—	Gold	—	—	J549-ND	8.33	7.31	6.29	5.39	133-3711-301
11	—	Gold	—	—	J611-ND	4.05	3.55	3.06	2.62	133-3701-231
75 Ohm										
1	RG-179	Gold	7.98	—	J643-ND	5.27	4.62	3.97	3.41	133-8433-101
1	RG-179DS	Gold	7.98	—	J644-ND	5.27	4.62	3.97	3.41	133-8434-101
2	RG-179	Gold	20.47	5.94	J645-ND	8.79	7.71	6.63	5.68	133-8433-001
2	RG-179DS	Gold	20.47	5.94	J646-ND	8.79	7.71	6.63	5.68	133-8434-001
3	RG-179	Gold	—	—	J647-ND	10.59	9.29	7.98	6.84	133-8333-401
3	RG-179DS	Gold	—	—	J648-ND	10.59	9.29	7.98	6.84	133-8334-401
5	—	Gold	3.80	—	J649-ND	4.83	4.24	3.65	3.13	133-8701-201
5	—	Gold	2.70	—	J650-ND	4.65	4.08	3.51	3.01	133-8701-211
6	—	Gold	3.80	—	J651-ND	8.25	7.24	6.22	5.33	133-8701-301
6	—	Gold	2.70	—	J652-ND	8.25	7.24	6.22	5.33	133-8701-311
8	—	Gold	1.73	—	J653-ND	4.74	4.16	3.58	3.07	133-8701-801
9	—	Gold	—	—	J654-ND	5.28	4.63	3.98	3.42	133-8711-201
Prototype Crimp Tool					J574-ND	287.01 each				141-0000-908
Hand Crimp Tool (frame only)					J572-ND	80.93 each				140-0000-952
Die Set (RG178, 316)					J573-ND	105.83 each				140-0000-951

RF Connectors MMCX Type

ELECTRICAL RATINGS: • **Impedance:** 50 Ohms • **Frequency Range:** 0-6 GHz • **Working Voltage:** 170 Vrms at sea level • **Insulation Resistance:** 1000 megaohms min. **MECHANICAL RATINGS:** • **Engagement/Disengagement Force:** 8.0 lbs. max. engagement; 1.4 lbs. min. disengagement • **Contact Retention Force:** 2.0 lbs. min. axial force • **Cable Retention:** 30 lbs. • **Durability:** 500 cycles min. **ENVIRONMENTAL RATINGS** • **Operating Temp.:** –55°C to 155°C

Fig. 1 – Straight Cabled Plug

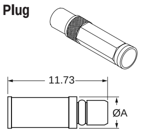


Fig. 2 – Right Angle Flexible Cabled Plug

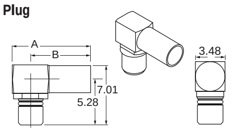


Fig. 3 – Straight Plug

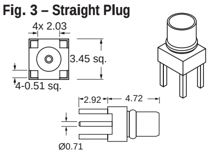


Fig. 4 – Right Angle Semi-Rigid Plug

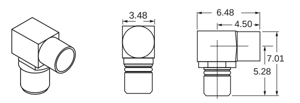


Fig. 5 – Straight Jack

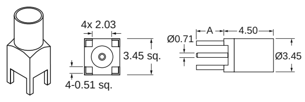


Fig. 6 – Right Angle Jack

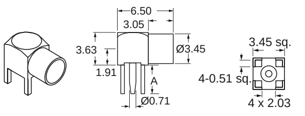


Fig. 7 – End Launch Jack

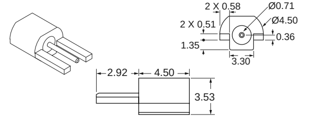


Fig.	Cable Type	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	50	Johnson Part No.
1	RG 178/U, 196	3.48	—	J589-ND	4.47	3.92	3.37	135-3402-001
	RG 316/U, 188, 161, 174	4.39	—	J590-ND	6.66	5.85	5.03	135-3403-001
	RG 316 DS, 188 DS, 187 DS	4.39	—	J591-ND	6.83	5.99	5.15	135-3404-001
	.047" Dia. Flexible, Huber K01152-07, Axon P512479A	3.48	—	J592-ND	4.47	3.92	3.37	135-3436-001
2	RG 178/U, 196	8.99	7.01	J593-ND	7.31	6.42	5.52	135-3402-101
	RG 316/U, 188, 187, 179, 161, 174	10.46	8.48	J594-ND	7.39	6.49	5.58	135-3403-101
	RG 316 DS, RG 188 DS	10.46	8.48	J595-ND	7.56	6.63	5.70	135-3404-101
	.047" Dia. Flexible, Huber K01152-07, Axon P512479A	8.99	7.01	J596-ND	7.48	6.56	5.64	135-3436-101
3	—	—	—	J601-ND	7.02	6.16	5.30	135-3801-201
4	—	—	—	J602-ND	7.48	6.56	5.64	135-3693-101
5	Straight - Gold PCB	2.92	—	J597-ND	4.47	3.92	3.37	135-3701-201
	Straight - Gold PCB	1.73	—	J598-ND	4.39	3.85	3.31	135-3701-211
6	Right Angle - Gold PCB	2.92	—	J599-ND	8.61	7.56	6.50	135-3701-301
	Right Angle - Gold PCB	1.73	—	J600-ND	8.45	7.41	6.37	135-3701-311
7	End Launch - PCB	—	—	J603-ND	5.53	4.85	4.17	135-3711-801
Hand Crimp Tool (frame only)				J572-ND	80.93 each			140-0000-952
Crimp Tool Die Set				J604-ND	173.12 each			140-0000-953

HRS HIROSE ELECTRIC CO.,LTD.

Ultra Miniature Snap-On Coaxial Connector

PC Card Type II Mountable MMCX Type

FEATURES: Snap-on coupling mechanism makes it easy to engage and disengage. Low profile accommodates PCMCIA type II cards. The MMCX-LR-SMT only 3.51mm mounted on the bottom of the type II card. Designed for ultra thin cable. Industry Standard RG-type coaxial cable. RG-178B/U (ø1.8), RG-316/U (ø2.59 max.) ø1.48 single shielded cable (one of the smallest available). CO-6F-FH-SB (ø1.48) made by Hitachi Cable Ltd. Campatibility mates with all industry standard MMCX connectors.

SPECIFICATIONS: Nominal characteristic impedance: 50Ω. **Operating Temperature Range:** -55ºC~+85ºC. **Rated Frequency:** DC-6GHz. **Insulation Resistance:** 500MΩ min. **Contact Resistance:** 10mΩ max.(center), 5mΩ max. (outer) **MATERIAL: Body:** Brass with gold plating. **Male center contact:** Phosphor bronze with gold plating. **Female Center Contact**: Beryllium bronze with gold plating. **Insulator:** PTFE. **Fixing Ring:** Beryllium copper (plug) with nickel plating. **Crimp Sleeve:** Copper with gold plating. **Cover:** Brass (plug) with gold plating

Fig. 1

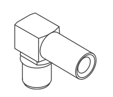


Fig. 2

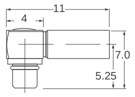


Fig. 3

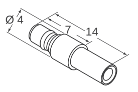


Fig. 4

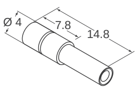


Fig. 5

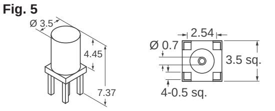


Fig. 6

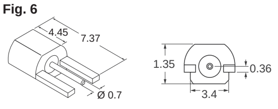


Fig.	Cable Type	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
Right Angle Plug							
1	CO-6F-FH-SB (1.48) Single Shielded	1.9	H3220-ND	11.45	9.96	7.97	MMCX-LP-FHSB
	RG-178B/U Type Coaxial Cable	2.4	H3221-ND	10.67	9.28	7.43	MMCX-LP-178B/U
2	RG-316/U Type Coaxial Cable	—	H3222-ND	10.51	9.14	7.32	MMCX-LP-316/U
Straight Plug							
3	CO-6F-FH-SB (1.48) Single Shielded	1.9	H3223-ND	8.49	7.38	5.91	MMCX-P-FHSB
	RG-178B/U Type coaxial cable	2.4	H3224-ND	8.87	7.51	5.63	MMCX-P-178B/U
Straight Jack							
4	CO-6F-FH-SB (1.48) Single Shielded	1.9	H3225-ND	8.95	7.78	6.23	MMCX-J-FHSB
	RG-178B/U Type Coaxial Cable	2.4	H3226-ND	8.17	7.10	5.68	MMCX-J-178B/U
Receptacle							
5	Vertical, PCB Through Hole	—	H3227-ND	10.10	9.35	7.83	MMCX-R-PC
6	Right Angle, PCB Surface Mount	—	H3228-ND	11.32	9.84	7.88	MMCX-LR-SMT

HIROSE
ELECTRIC
CO.,LTD.

Miniature RF Connectors

Fig. 1

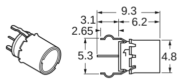


Fig. 2

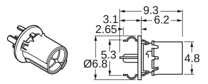


Fig. 3

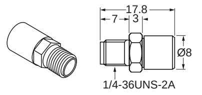


Fig. 4

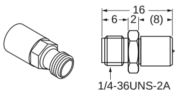


Fig. 5

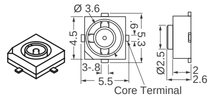


Fig. 6

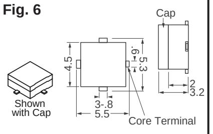


Fig. 7

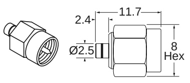


Fig. 8

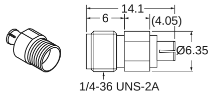


Fig. 9

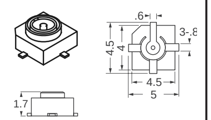


Fig. 10

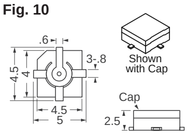


Fig. 11

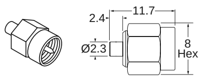


Fig. 12

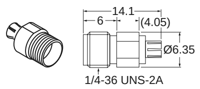


Fig. 13

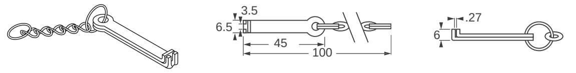
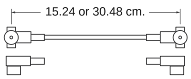
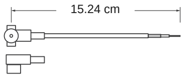


Fig. 14



Double End

Fig. 15



Single End

FL (Finger-Lock) Series Coaxial Connectors:

Low-profile microminiature high-frequency connectors. The FL series connectors are low-profile microminiature coaxial connectors intended for high-density packaging of components on printed circuit boards. The FL series is ideal for high-density circuit board wiring in signal transmission applications at high frequencies up to 1 GHz. **Features:** High-level matching: Maximum V.S.W.R is only 1.2 at frequencies up to 1 GHz. **Applications:** Typical applications include cellular telephones, radio communications equipment, electronic measuring instruments, CATV, control units, etc. **Material and Finish:** • Shell: Brass or phosphor bronze, silver plating • Center contact (male): Brass, gold plating • Center contact (female): Phosphor bronze, gold plating • Insulation: Polybutylene terephthalate (PBT), black. **Performance Characteristics:** • Characteristic impedance: 50Ω • Insulation resistance: 1000 MΩ or more (at 250 VDC) • Contact resistance: 10 mΩ or less for both center and outer conductors (at 1 ADC) • Withstanding voltage: 250 VAC (rms) for one minute • Coupling/removal force: 300 gf of more • Life of contacts: 50 times of use

S.FL2 Series Coaxial Connectors:

S.FL2 (Super FL Type 2 Coaxial Connector) Series is a surface mount, low profile, miniature coaxial connector intended for high density packaging. Compared to Hirose's FL series connectors, the S.FL2 Series offers a 50% reduced profile when assembled, achieving increased density of internal wiring for high frequency transmission applications. **Features:** Highly flexible, offers high frequency performance below V.S.W.R 1.2 over 0-2000MHz range.

H.FL Series Coaxial Connectors:

The H.FL connectors have a lower profile, with a mounted height of approximately 30% that of our S.FL2 connectors. They occupy 20% less board space, allowing higher density internal wiring. **Features:** • High frequency response of V.S.W.R 1.3 or less from D.C. to 3000 MHz. **Material and Treatment:** • Shell: Phosphor bronze, silver plating • Insulator: PBT plastic (plug side), black; Liquid crystal polymer (receptacle side), black • Male center contact: Bronze, gold plating • Female center contact: Phosphor bronze, gold plating. **Performance Characteristics:** • Characteristic impedance: 50Ω • Insulation resistance: 500 MΩ or greater at DC 250V • Contact resistance: 20mΩ (center), 10mΩ (exterior) at DC 10mA • Dielectric strength: AC 300V (r.m.s), 1 minute • Contact service life: 50 times • Voltage standing wave ratio: 1.3 or less, DC to 3000MHz (target value)

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
	FL Series					
1	Receptacle PC MT	H9142-ND	2.67	2.33	1.65	FL-R-PC(1)
2	Receptacle with Washer	H9143-ND	3.77	3.29	2.33	FL-R-PC(3)
3	Adapter Plug/SMA Plug	H9144-ND	42.95	40.81	38.35	HRMJ-FLJ
4	Adapter Recept/SMA Plug	H9145-ND	37.46	36.21	32.47	HRMJ-FLP-1
13	Removal Tool (FL Series)	H9146-ND	24.62	—	—	FL-LP-N
14	6” (15.24cm) FL/FL Series Cable Assembly	229-1000-ND	12.03	11.28	10.34	4189-06
14	12” (30.48cm) FL/FL Series Cable Assembly	229-1001-ND	12.54	11.76	10.78	4189-12
14	12” (30.48cm) FL/SMA Series Cable Assembly	229-1002-ND	23.36	21.90	20.08	4192-12
15	6” (15.24cm) FL Single End Cable Assembly	229-1003-ND	8.80	8.25	7.57	4191-06
	S.FL2 Series					
5	Receptacle Coaxial SMT	H9152-ND	2.85	2.38	1.76	S.FL2-R-SMT(01)
6	Receptacle Coaxial with Cap SMT	H9153CT-ND	2.71	2.26	1.67	S.FL2-R-SMT(C)(10)
6	Receptacle Coaxial with Cap SMT	H9153TR-ND *NEW!*	2776.38/2,500			S.FL2-R-SMT(C)(10)
7	Adapter Plug/SMA Jack	H9154-ND	24.63	23.81	21.35	HRMP-S.FLJ
8	Adapter Jack/SMA Plug	H9155-ND	31.35	30.31	27.17	HRMJ-S.FLP
13	Removal Tool (S.FL2 Series)	H9156-ND	37.46	—	—	S.FL-LP-N
14	6” (15.24cm) S.FL2/S.FL2 Cable Assembly	229-1008-ND	11.36	10.65	9.77	2189-06
14	12” (30.48cm) S.FL2/S.FL2 Cable Assembly	229-1009-ND	12.70	11.91	10.92	2189-12
14	12” (30.48cm) S.FL2/SMA Cable Assembly	229-1010-ND	32.32	30.30	27.78	2192-12
15	6” (15.24cm) S.FL2 Single End Cable Assembly	229-1011-ND	8.48	7.95	7.29	2191-6
	H.FL Series					
9	Receptacle Coaxial SMT	H9147-ND	1.98	1.65	1.22	H.FL-R-SMT(01)
10	Receptacle Coaxial with Cap SMT	H9148CT-ND	2.08	1.73	1.28	H.FL-R-SMT(C)(10)
10	Receptacle Coaxial with Cap SMT	H9148TR-ND *NEW!*	2128.00/2,500			H.FL-R-SMT(C)(10)
11	Adapter Jack/SMA Plug	H9150-ND	20.90	20.20	18.11	HRMP-H.FLJ
12	Adapter Plug/SMA Jack	H9149-ND	28.47	27.53	24.68	HRMJ-H.FLP-3
13	Removal Tool (H.FL Series)	H9151-ND	35.55	—	—	H.FL-LP-N
14	6” (15.24cm) H.FL/H.FL Series Cable Assembly	229-1004-ND	10.62	9.96	9.13	1189-06
14	12” (30.48cm) H.FL/H.FL Series Cable Assembly	229-1005-ND	11.97	11.22	10.29	1189-12
14	12” (30.48cm) H.FL/SMA Cable Assembly	229-1006-ND	31.01	29.07	26.65	1192-12
15	6” (15.24cm) H.FL Single End Cable Assembly	229-1007-ND	7.87	7.38	6.77	1191-06

Coaxial Switching Connector

MS-145 Series

Designed as interface coaxial switches, and other applications requiring redirecting of signals when mating with corresponding plugs. The mating action redirects the signals from the receptacle side to the plug side.

Features:

- **Frequency Range:** From DC to 2.5GHz and with GSM, PCS, cdma-One, W-CDMA, etc.
- **Low Profile:** Low protrusion of only 6mm above the mounting surface (receptacle).
- **Durability:** High durability (mating/unmating) of 10,000 cycles. Self alignment of mating parts. Inducement to floating is +/-0.5mm.
- Engages by pushing up to the 5.06mm diameter shoulder (P surface) of the MS-145 (MS-145-C(LP)-1 engages up to a position (Q point) of 1.3mm from the 5.06mm diameter shoulder of the MS-145).

Applications:

- Mobile phone antenna switching • Checks of microwave boards, etc.

Fig.	Description	Effect. Engage. Length (mm)	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
1	Interface Coaxial Switch Receptacle	—	H2803CT-ND	1.98	1.53	1.22	MS-145(06)
1	Interface Coaxial Switch Receptacle	—	H2803TR-ND	811.00/1,000			MS-145(06)
2	Plug	0.82	H2804-ND*	15.87	14.82	13.76	MS-145-C(LP)-1
3	Plug	1.32	H2805-ND*	22.94	21.41	19.88	MS-145-C(LP)-A
4	Plug	1.32	H2806-ND*	15.66	14.62	13.58	MS-145-C(LP)-MI
5	SMA Adaptor to Male	1.32	H2807-ND	19.86	18.54	17.22	MS-145-HRMP-A
6	SMA Adaptor to Female, Panel Mount	0.82	H2808-ND	27.65	25.81	23.96	MS-145-HRMJ
7	SMA Adaptor to Female, Straight	1.32	H2809-ND	19.86	18.54	17.22	MS-145-HRMJ-A-D

* Applicable cable for plugs: 1.5D-HQEW or 1.5D-QEW (manufactured by Fujikura Ltd.).

Fig. 1

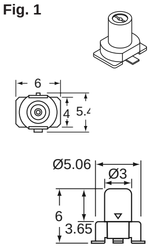


Fig. 2

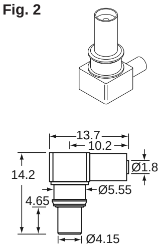


Fig. 3

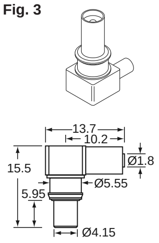


Fig. 4

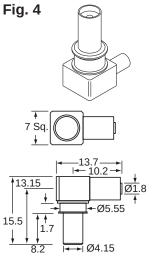


Fig. 5

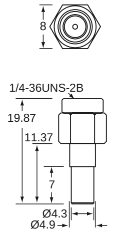


Fig. 6

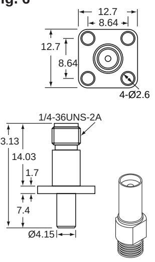
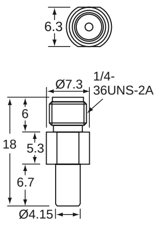
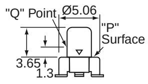


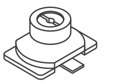
Fig. 7



Plug Applications



Coaxial Switching Connector MS-147 Series



The switching function is accomplished by mating with the corresponding plug. The transmission is redirected from normal direction to the plug assembly. The surface mounted receptacle protrudes above the board 3.9mm. The MS147 has an insertion loss of 0.15dB.

Characteristics: Impedance of 50 Ohm, isolation of 25dB min (DC-2.0 GHz) and 20dB (2.0GHz to 2.5GHz). Self-aligning within 0.5mm and with a guaranteed durability of 12,000 mating/unmating cycles.

Applications: Most mobile phones and circuit testing applications.

Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
Interface Coaxial Switching Recept.	H2800CT-ND	1.95	1.50	1.20	MS-147(06)
Interface Coaxial Switching Recept.	H2800TR-ND	1197.00/1,500			MS-147(06)
Mating Adapter	H2801-ND	20.18	18.83	17.49	MS-147-HRMJ-1
Mating Cable Assembly	H2802-ND	19.67	18.36	17.05	MS-147-C(LP)-1

CUI INC

Audio and Power Connectors

General Specifications:
• **Contact Resistance:** 10 - 20 mΩ • **Insulation Resistance:** 50 MΩ min.: 500 VDC • **Voltage Withstand:** 250 VAC, 1 minute • **Life:** 5,000 cycles, most models • **Insertion/Extraction Force:** 0.8 - 2.0 Kgs

Fig. 1 – Right Angle Panel Mount Jack, Mono

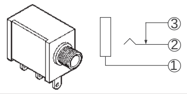


Fig. 2 – PCB Panel Mount Jack, Mono

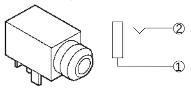


Fig. 3 – Straight Panel Mount Jack, Mono

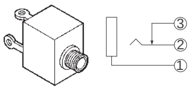


Fig. 4 – Audio Jack, Mono

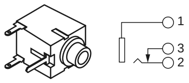


Fig. 5 – Audio Jack, Mono

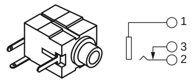


Fig. 6 – SMT Mono Audio Jack

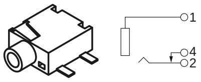


Fig. 7 – SMT Audio Jack, Mono

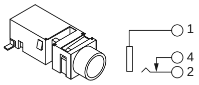


Fig. 8 – SMT Audio Jack, Mono

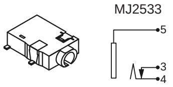


Fig. 9 – Audio Jack, Mono

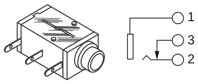


Fig. 10 – SMT Mono Audio Jack

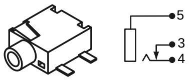


Fig. 11 – SMT Audio Jack, Mono

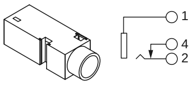


Fig. 12 – Right Angle Panel Mount Jack, Mono

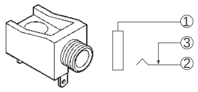


Fig. 13 – Audio Jack, Mono

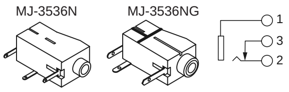


Fig. 14 – Male Power Plug

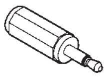


Fig. 15– Male Power Jack, Closed

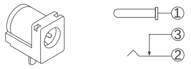


Fig. 16 – Right Angle Power Jack

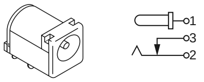


Fig. 17 – SMT Power Jack

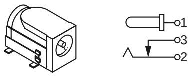


Fig. 18 – SMT Power Jack

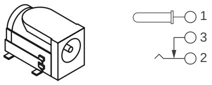


Fig. 19 – Male Power Jack, Open

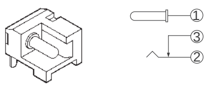


Fig. 20 – Panel Mount Jack

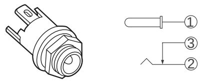


Fig. 21 – Power Jack with Solder Eyelets

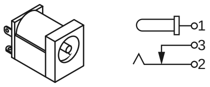


Fig. 22 – Vertical Power Jacks SMT

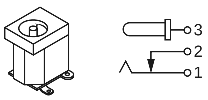


Fig. 23 – Right Angle Power Jack

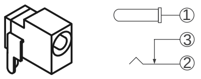


Fig. 24 – DC Power Jack

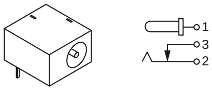


Fig. 25 – SMT Power Jack

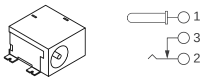


Fig. 26 – DC Power Jack

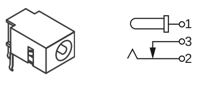


Fig. 27 – Male Power Jack, PCB
(with kinked PCB pins)

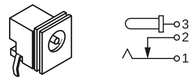


Fig. 28 – SMT Power Jack

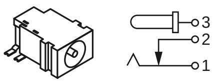


Fig. 29 – DC Power Jack

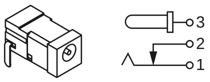


Fig. 30 – SMT Power Jack

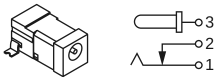


Fig. 31 – DC Power Jack

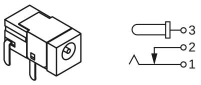


Fig. 32 – SMT Power Jack

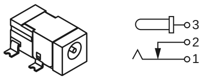


Fig. 33 – DC Power Jack
(with 1 mm PCB pins)

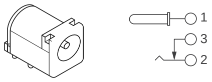


Fig. 34 – Male Power Jack, PCB

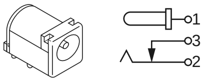


Fig. 35 – Male Power Jack, PCB
(with kinked PCB pins)

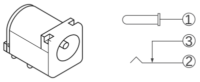


Fig. 36 – Male Power Jack, PCB
(with kinked PCB pins)

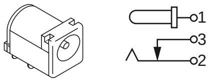
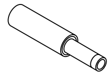


Fig. 37 – Female Plug, 5.5 mm Outside



		Digi-Key	Price Each			CUI Inc.
Fig.	**Dia.**	**Part No.**	**1**	**10**	**100**	**Part No.**
1	2.5mm	CP-2502-ND*	.99	.86	.66	MJ-2502
2	2.5mm	CP-2503-ND†	.51	.44	.34	MJ-2503A
3	2.5mm	CP-2505-ND*	.93	.81	.62	MJ-2505
4	2.5mm	CP-2506-ND*	.37	.33	.25	MJ-2506
	2.5mm	CP-2506N-ND†	.37	.33	.25	MJ-2506N
5	2.5mm	CP-2508-ND*	.26	.23	.18	MJ-2508
	2.5mm	CP-2508N-ND†	.26	.23	.18	MJ-2508N
6	2.5mm	CP-2512TR-ND	828.00/800			MJ-2510-SMT
	2.5mm	CP-2512-ND	2.07	1.80	1.38	MJ-2510-SMT-1
7	2.5mm	CP-2523MJTR-ND	429.00/1,000			MJ-2523-SMT
	2.5mm	CP-2523MJ-ND§	.75	.65	.50	MJ-2523-SMT-1
8	2.5mm	CP-2533MJTR-ND	495.00/1,000			MJ-2533-SMT
	2.5mm	CP-2533MJ-ND§	.99	.86	.66	MJ-2533-SMT-1
9	3.5mm	CP-3502MJ-ND*	.66	.58	.45	MJ-3502
	3.5mm	CP-3502N-ND†	.62	.54	.41	MJ-3502N
10	3.5mm	CP-3510MJTR-ND	288.00/800			MJ-3510-SMT
	3.5mm	CP-3510MJ-ND§	.69	.60	.46	MJ-3510-SMT-1
11	3.5mm	CP-3523MJTR-ND	433.50/1,000			MJ-3523-SMT
	3.5mm	CP-3523MJ-ND§	.76	.66	.51	MJ-3523-SMT-1
12	3.5mm	CP-3536-ND*	.39	.35	.27	MJ-3536
13	3.5mm	CP-3536N-ND†	.39	.35	.27	MJ-3536N
	3.5mm	CP-3536NG-ND‡	.39	.35	.27	MJ-3536NG
14	2.5mm	CP-2501-ND	.76	.66	.51	MP-2501
	3.5mm	CP-3501-ND	.76	.66	.51	MP-3501
15	2.1mm	CP-002A-ND	.38	.33	.26	PJ-002A
	2.5mm	CP-002B-ND	.38	.33	.26	PJ-002B
16	2.0mm	CP-002AH-ND	.42	.37	.28	PJ-002AH
	2.5mm	CP-002BH-ND	.42	.37	.28	PJ-002BH
17	2.0mm	CP-002AHPJTR-ND	112.50/250			PJ-002AH-SMT
	2.0mm	CP-002AHPJ-ND§	.81	.71	.54	PJ-002AH-SMT-1
	2.5mm	CP-002BHPJTR-ND	112.50/250			PJ-002BH-SMT
	2.5mm	CP-002BHPJ-ND§	.81	.71	.54	PJ-002BH-SMT-1
18	2.1mm	CP-002APJTR-ND	100.88/250			PJ-002A-SMT
	2.1mm	CP-002APJ-ND§	.73	.64	.49	PJ-002A-SMT-1
	2.5mm	CP-002BPJTR-ND	100.88/250			PJ-002B-SMT
	2.5mm	CP-002BPJ-ND§	.73	.64	.49	PJ-002B-SMT-1
19	2.1mm	CP-003A-ND	.34	.30	.23	PJ-003A
	2.5mm	CP-003B-ND	.34	.30	.23	PJ-003B
20	2.0mm	CP-5-ND*	1.83	1.59	1.22	PJ-005A

		Digi-Key	Price Each			CUI Inc.
Fig.	**Dia.**	**Part No.**	**1**	**10**	**100**	**Part No.**
20	2.5mm	CP-6-ND*	1.83	1.59	1.22	PJ-005B
21	2.1mm	CP-006A-ND	.45	.38	.30	PJ-006A
	2.5mm	CP-006B-ND	.45	.39	.30	PJ-006B
22	2.1mm	CP-006APJTR-ND	97.50/250			PJ-006A-SMT
	2.1mm	CP-006APJ-ND§	.75	.65	.50	PJ-006A-SMT-1
	2.5mm	CP-006BPJTR-ND	97.50/250			PJ-006B-SMT
	2.5mm	CP-006BPJ-ND§	.75	.65	.50	PJ-006B-SMT-1
23	1.3mm	CP-2519-ND	.45	.39	.30	PJ-007
24	1.0mm	CP-014C-ND	.42	.37	.28	PJ-014C
	1.3mm	CP-014D-ND	.42	.37	.28	PJ-014D
25	1.0mm	CP-014CHPJTR-ND	360.00/800			PJ-014CH-SMT
	1.0mm	CP-014CHPJ-ND§	.78	.68	.52	PJ-014CH-SMT-1
	1.3mm	CP-014DHPJTR-ND	360.00/800			PJ-014DH-SMT
	1.3mm	CP-014DHPJ-ND§	.78	.68	.52	PJ-014DH-SMT-1
	1.0mm	CP-014CPJTR-ND	332.40/800			PJ-014C-SMT
	1.0mm	CP-014CPJ-ND§	.72	.63	.48	PJ-014C-SMT-1
	1.3mm	CP-014DPJTR-ND	332.40/800			PJ-014D-SMT
	1.3mm	CP-014DPJ-ND§	.72	.63	.48	PJ-014D-SMT-1
26	1.65mm	CP-016-ND	.54	.47	.36	PJ-016
27	1.65mm	CP-021-ND	.42	.37	.28	PJ-021
28	1.65mm	CP-021PJTR-ND	294.00/700			PJ-021-SMT
	1.65mm	CP-021PJ-ND§	.84	.73	.56	PJ-021-SMT-1
29	0.65mm	CP-022-ND	.69	.60	.46	PJ-022
30	0.65mm	CP-022PJTR-ND	360.00/1,000			PJ-022-SMT
	0.65mm	CP-022PJ-ND§	.69	.60	.46	PJ-022-SMT-1
31	0.65mm	CP-023-ND	.75	.65	.50	PJ-023
32	0.65mm	CP-023PJTR-ND	390.00/1,000			PJ-023-SMT
	0.65mm	CP-023PJ-ND§	.75	.65	.50	PJ-023-SMT-1
33	2.1mm	CP-102A-ND	.38	.33	.26	PJ-102A
	2.5mm	CP-102B-ND	.38	.33	.26	PJ-102B
34	2.1mm	CP-102AH-ND	.42	.37	.28	PJ-102AH
	2.5mm	CP-102BH-ND	.42	.37	.28	PJ-102BH
35	2.1mm	CP-202A-ND	.38	.33	.26	PJ-202A
	2.5mm	CP-202B-ND	.38	.33	.26	PJ-202B
36	2.1mm	CP-202AH-ND	.42	.37	.28	PJ-202AH
	2.5mm	CP-202BH-ND	.42	.37	.28	PJ-202BH
37	2.1mm	CP-004A-ND	.65	.56	.43	PP-002A
	2.5mm	CP-004B-ND	.65	.56	.43	PP-002B

⋆ Threaded with nut † Non-threaded ‡ Non-threaded and Isolated Ground § Tray

(Continued)

Fig. 38 – Female Plug, 3.5 mm Outside

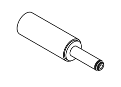


Fig. 39 – Female Plug

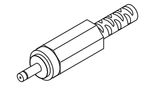


Fig. 40 – Audio Jack, Stereo

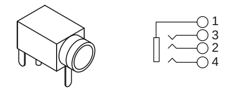


Fig. 41 – SMT Stereo Jack

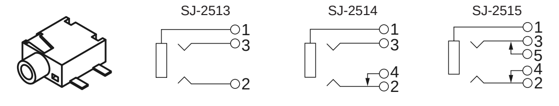


Fig. 42 – SMT Audio Jack, Stereo

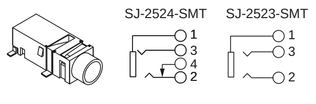


Fig. 43 – SMT Audio Jack, Stereo

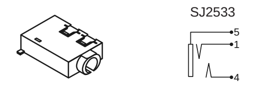


Fig. 44 – SMT Audio Jack, Stereo

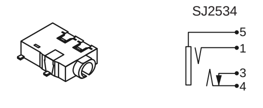


Fig. 45 – SMT Audio Jack, Stereo

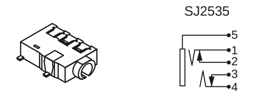


Fig. 46 – Rt Angle PCB Mount Jack, Stereo (CP-3504-ND);
Rt Angle PCB Stereo Jack, Stereo (CP-3505-ND)

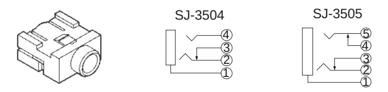


Fig. 47 – Audio Jack, Stereo

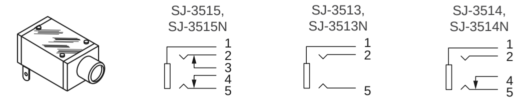


Fig. 48 – SMT Audio Jack, Stereo

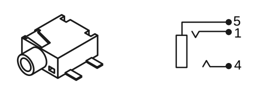


Fig. 49 – SMT Audio Jack, Stereo

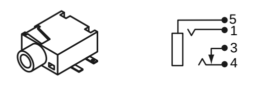


Fig. 50 – SMT Audio Jack, Stereo

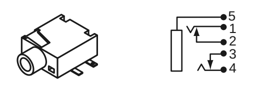


Fig. 51 – Audio Jack, Stereo

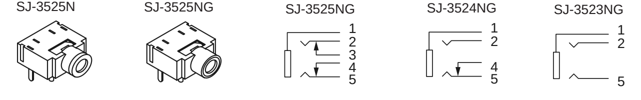


Fig. 52 – SMT Audio Jack, Stereo

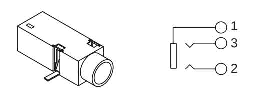


Fig. 53 – SMT Audio Jack, Stereo

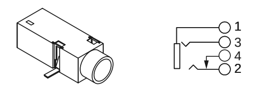


Fig. 54 – Audio Jack, Stereo

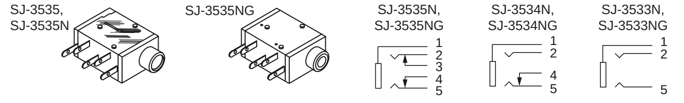


Fig. 55 – Audio Jack, Stereo

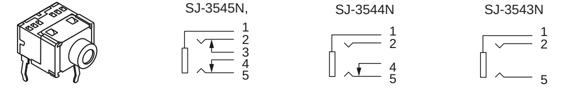


Fig. 56 – Audio Jack, Stereo

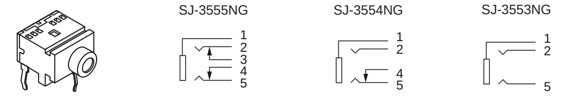


Fig. 57 – Audio Jack

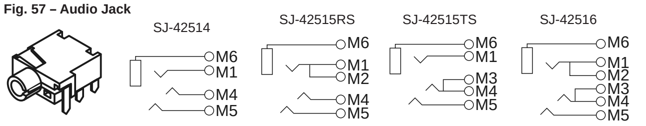


Fig. 58 – SMT Audio Jack

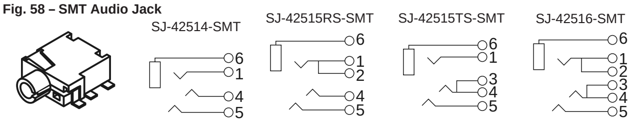


Fig.	Dia.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
38	1.3mm	CP-002D-ND	.78	.68	.53	PP-002D
39	.7 x 2.35mm	CP-012-ND	.90	.78	.60	PP-012
	1.7 x 4.0mm	CP-013-ND	.84	.73	.56	PP-013
	1.7 x 4.75mm	CP-014-ND	.84	.73	.56	PP-014
40	2.5mm	CP-2503A-ND†	.65	.56	.43	SJ-2503A
41	2.5mm	CP-2514TR-ND	1050.00/1,000			SJ-2513-SMT
	2.5mm	CP-2514-ND§	2.10	1.82	1.40	SJ-2513-SMT-1
	2.5mm	CP-2516TR-ND	864.00/800			SJ-2514-SMT
	2.5mm	CP-2516-ND§	2.16	1.88	1.44	SJ-2514-SMT-1
	2.5mm	CP-2518TR-ND	1095.00/1,000			SJ-2515-SMT
	2.5mm	CP-2518-ND§	2.19	1.90	1.46	SJ-2515-SMT-1
42	2.5mm	CP-2523SJTR-ND	429.00/1,000			SJ-2523-SMT
	2.5mm	CP-2523SJ-ND§	.75	.65	.50	SJ-2523-SMT-1
	2.5mm	CP-2524SJTR-ND	448.50/1,000			SJ-2524-SMT
	2.5mm	CP-2524SJ-ND§	.79	.69	.53	SJ-2524-SMT-1
43	2.5mm	CP-2533SJTR-ND	495.00/1,000			SJ-2533-SMT
	2.5mm	CP-2533SJ-ND§	.99	.86	.66	SJ-2533-SMT-1
44	2.5mm	CP-2534SJTR-ND	525.00/1,000			SJ-2534-SMT
	2.5mm	CP-2534SJ-ND§	1.05	.91	.70	SJ-2534-SMT-1
45	2.5mm	CP-2535SJTR-ND	540.00/1,000			SJ-2535-SMT
	2.5mm	CP-2535SJ-ND§	1.08	.94	.72	SJ-2535-SMT-1
46	3.5mm	CP-3504-ND†	2.06	1.79	1.38	SJ-3504
	3.5mm	CP-3505-ND†	2.10	1.83	1.41	SJ-3505
47	3.5mm	CP-3513-ND⁎	.80	.70	.54	SJ-3513
	3.5mm	CP-3513N-ND†	.77	.67	.52	SJ-3513N
	3.5mm	CP-3514-ND⁎	.84	.74	.57	SJ-3514
	3.5mm	CP-3514N-ND†	.82	.71	.55	SJ-3514N
	3.5mm	CP-3515-ND⁎	.84	.74	.57	SJ-3515
	3.5mm	CP-3515N-ND†	.82	.71	.55	SJ-3515N
48	3.5mm	CP-3513SJTR-ND	288.00/800			SJ-3513-SMT
	3.5mm	CP-3513SJ-ND§	.69	.60	.46	SJ-3513-SMT-1
49	3.5mm	CP-3514SJTR-ND	300.00/800			SJ-3514-SMT
	3.5mm	CP-3514SJ-ND§	.72	.63	.48	SJ-3514-SMT-1
50	3.5mm	CP-3515SJTR-ND	312.00/800			SJ-3515-SMT
	3.5mm	CP-3515SJ-ND§	.72	.63	.48	SJ-3515-SMT-1
51	3.5mm	CP-3523N-ND†	.62	.54	.41	SJ-3523N
	3.5mm	CP-3523NG-ND‡	.74	.64	.50	SJ-3523NG
	3.5mm	CP-3524NG-ND‡	.78	.68	.53	SJ-3524NG
51	3.5mm	CP-3524N-ND†	.71	.62	.47	SJ-3524N
	3.5mm	CP-3525N-ND†	.74	.64	.50	SJ-3525N
	3.5mm	CP-3525NG-ND‡	.80	.70	.54	SJ-3525NG
52	3.5mm	CP-3523SJTR-ND	433.50/1,000			SJ-3523-SMT
	3.5mm	CP-3523SJ-ND§	.76	.66	.51	SJ-3523-SMT-1
53	3.5mm	CP-3524SJTR-ND	448.50/1,000			SJ-3524-SMT
	3.5mm	CP-3524SJ-ND§	.79	.69	.53	SJ-3524-SMT-1
54	3.5mm	CP-3533-ND⁎	.98	.85	.66	SJ-3533
	3.5mm	CP-3533N-ND†	.95	.83	.64	SJ-3533N
	3.5mm	CP-3533NG-ND‡	.95	.83	.64	SJ-3533NG
	3.5mm	CP-3534-ND⁎	1.01	.88	.68	SJ-3534
	3.5mm	CP-3534N-ND†	.98	.85	.66	SJ-3534N
	3.5mm	CP-3534NG-ND‡	.98	.85	.66	SJ-3534NG
	3.5mm	CP-3535-ND⁎	1.04	.91	.70	SJ-3535
	3.5mm	CP-3535N-ND†	1.01	.88	.68	SJ-3535N
	3.5mm	CP-3535NG-ND‡	1.01	.88	.68	SJ-3535NG
55	3.5mm	CP-3543-ND⁎	.95	.83	.64	SJ-3543
	3.5mm	CP-3543N-ND†	.97	.84	.65	SJ-3543N
	3.5mm	CP-3544-ND⁎	1.00	.87	.67	SJ-3544
	3.5mm	CP-3544N-ND†	.97	.84	.65	SJ-3544N
	3.5mm	CP-3545-ND⁎	1.03	.90	.69	SJ-3545
	3.5mm	CP-3545N-ND†	1.00	.87	.67	SJ-3545N
56	3.5mm	CP-3553NG-ND‡	.89	.78	.60	SJ-3553NG
	3.5mm	CP-3554NG-ND‡	.94	.82	.63	SJ-3554NG
	3.5mm	CP-3555NG-ND‡	.97	.84	.65	SJ-3555NG
57	2.5mm	CP-42514-ND	1.02	.89	.68	SJ-42514
	2.5mm	CP-42515RS-ND	1.05	.91	.70	SJ-42515RS
	2.5mm	CP-42515TS-ND	1.05	.91	.70	SJ-42515TS
	2.5mm	CP-42516-ND	1.08	.94	.72	SJ-42516
58	2.5mm	CP-42514SJTR-ND	510.00/1,000			SJ-42514-SMT
	2.5mm	CP-42514SJ-ND§	1.02	.89	.68	SJ-42514-SMT-1
	2.5mm	CP-42515RSSJTR-ND	525.00/1,000			SJ-42515RS-SMT
	2.5mm	CP-42515RSSJ-ND§	1.05	.91	.70	SJ-42515RS-SMT-1
	2.5mm	CP-42515TSSJTR-ND	525.00/1,000			SJ-42515TS-SMT
	2.5mm	CP-42515TSSJ-ND§	1.05	.91	.70	SJ-42515TS-SMT-1
	2.5mm	CP-42516SJTR-ND	540.00/,1,000			SJ-42516-SMT
	2.5mm	CP-42516SJ-ND§	1.08	.94	.72	SJ-42516-SMT-1

⁎ Threaded with nut † Non-threaded ‡ Non-threaded and Isolated Ground § Tray

(Continued)

Fig. 59 – SMT Audio Jack

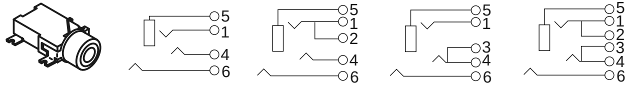


Fig. 60 – SMT Audio Jack

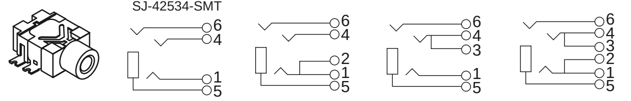


Fig. 61 – Panel Mount Audio Jack

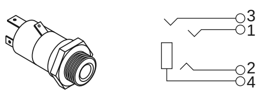


Fig. 62 – Audio Jack

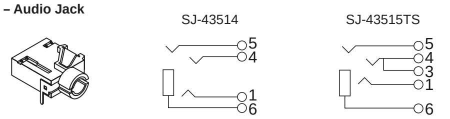


Fig. 63 – Audio Jack

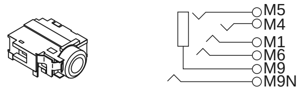


Fig. 64 – 2.5mm Male Stereo Plug

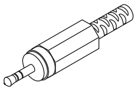


Fig. 65 – 3.5mm Male Stereo Plug

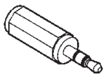


Fig. 66 – Stereo Audio Cables

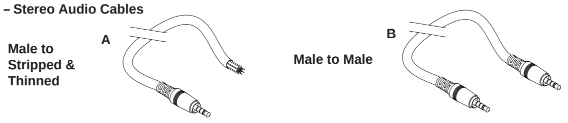


Fig.	Dia.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
59	2.5mm	CP-42524SJTR-ND		510.00/1,000		SJ-42524-SMT
	2.5mm	CP-42524SJ-ND§	1.02	.89	.68	SJ-42524-SMT-1
	2.5mm	CP-42525RSSJTR-ND		525.00/1,000		SJ-42525RS-SMT
	2.5mm	CP-42525RSSJ-ND§	1.05	.91	.70	SJ-42525RS-SMT-1
	2.5mm	CP-42525TSSJTR-ND		525.00/1,000		SJ-42525TS-SMT
	2.5mm	CP-42525TSSJ-ND§	1.05	.91	.70	SJ-42525TS-SMT-1
	2.5mm	CP-42526SJTR-ND		540.00/1,000		SJ-42526-SMT
	2.5mm	CP-42526SJ-ND§	1.08	.94	.72	SJ-42526-SMT-1
60	2.5mm	CP-42534SJTR-ND		570.00/1,000		SJ-42534-SMT
	2.5mm	CP-42534SJ-ND§	1.14	.99	.76	SJ-42534-SMT-1
	2.5mm	CP-42535RSSJTR-ND		585.00/1,000		SJ-42535RS-SMT
	2.5mm	CP-42535RSSJ-ND§	1.17	1.02	.78	SJ-42535RS-SMT-1
	2.5mm	CP-42535TSSJTR-ND		585.00/1,000		SJ-42535TS-SMT
	2.5mm	CP-42535TSSJ-ND§	1.17	1.02	.78	SJ-42535TS-SMT-1
	2.5mm	CP-42536SJTR-ND		600.00/1,000		SJ-42536-SMT
	2.5mm	CP-42536SJ-ND§	1.20	1.04	.80	SJ-42536-SMT-1
61	3.5mm	CP-43502PM-ND	3.69	3.20	2.46	SJ-43502PM

∗ Threaded with nut † Non-threaded ‡ Non-threaded and Isolated Ground § Tray

Fig.	Dia.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
62	3.5mm	CP-43514-ND	.90	.78	.60	SJ-43514
	3.5mm	CP-43515TS-ND	.93	.81	.62	SJ-43515TS
63	3.5mm	CP-63516-ND	1.26	1.10	.84	SJ-63516
64	2.5mm	CP-2501SP-ND	.96	.84	.64	SP-2501
65	3.5mm	CP-3502-ND	.87	.76	.59	SP-3501

Fig.	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.	Mating Jacks
Cable Assembly 4 Conductor						
66B	CP-254CS-M/M-ND	11.76	10.20	7.84	CA-254CS-M/M	SJ-4252X-SMT
66A	CP-254CS-ND	9.30	8.06	6.20	CA-254CS	SJ-4252X-SMT
66A	CP-254S-ND	10.26	8.90	6.84	CA-254S	SJ-4251X-SMT, SJ-4243X-SMT
66B	CP-254S-M/M-ND	12.66	10.98	8.44	CA-254S-M/M	SJ-4251X-SMT, SJ-4243X-SMT, SJ-4251X
66A	CP-354S-ND	9.96	8.64	6.64	CA-354S	SJ-4351X, SJ-43502PM
66B	CP-354S-M/M-ND	12.39	10.74	8.26	CA-354S-M/M	SJ-4351X, SJ-43502PM
Cable Assembly 6 Conductor						
66A	CP-356CS-ND	13.95	12.09	9.30	CA-356CS	SJ-63516
66B	CP-356CS-M/M-ND	18.54	16.07	12.36	CA-356CS-M/M	SJ-63516

CUI INC Phono Plugs and Jacks

Fig. 1

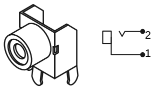


Fig. 2

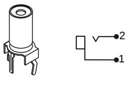


Fig. 3

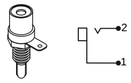


Fig. 4

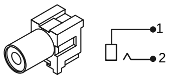


Fig. 5

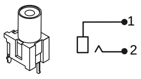


Fig. 6

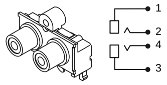


Fig. 7

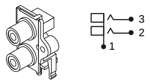


Fig. 8

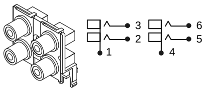


Fig. 9

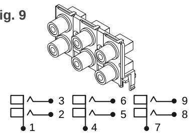


Fig. 10

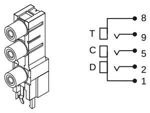


Fig. 11

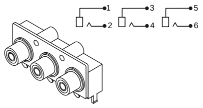


Fig. 12

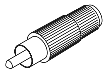


Fig. 13

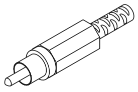


Fig.	Color	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
1	Black	CP-1400-ND	.61	.53	.41	RCJ-011
	Red	CP-1401-ND	.61	.53	.41	RCJ-012
	White	CP-1402-ND	.61	.53	.41	RCJ-013
	Yellow	CP-1403-ND	.61	.53	.41	RCJ-014
	Blue	CP-1404-ND	.61	.53	.41	RCJ-015
	Green	CP-1405-ND	.61	.53	.41	RCJ-016
2	Black	CP-1406-ND	.58	.51	.39	RCJ-021
	Red	CP-1407-ND	.58	.51	.39	RCJ-022
	White	CP-1408-ND	.58	.51	.39	RCJ-023
	Yellow	CP-1409-ND	.58	.51	.39	RCJ-024
	Blue	CP-1410-ND	.58	.51	.39	RCJ-025
	Green	CP-1411-ND	.58	.51	.39	RCJ-026
3	Black	CP-1412-ND	.71	.62	.47	RCJ-031
	Red	CP-1413-ND	.71	.62	.47	RCJ-032
	White	CP-1414-ND	.71	.62	.47	RCJ-033
	Yellow	CP-1415-ND	.71	.62	.47	RCJ-034
	Blue	CP-1416-ND	.71	.62	.47	RCJ-035
	Green	CP-1417-ND	.71	.62	.47	RCJ-036
4	Black	CP-1418-ND	.88	.77	.59	RCJ-041
	Red	CP-1419-ND	.88	.77	.59	RCJ-042
	White	CP-1420-ND	.88	.77	.59	RCJ-043
	Yellow	CP-1421-ND	.88	.77	.59	RCJ-044
	Blue	CP-1422-ND	.88	.77	.59	RCJ-045
	Green	CP-1423-ND	.88	.77	.59	RCJ-046
5	Black	CP-1424-ND	.66	.57	.44	RCJ-051
	Red	CP-1425-ND	.66	.57	.44	RCJ-052
	White	CP-1426-ND	.66	.57	.44	RCJ-053
	Yellow	CP-1427-ND	.66	.57	.44	RCJ-054
	Blue	CP-1428-ND	.66	.57	.44	RCJ-055
	Green	CP-1429-ND	.66	.57	.44	RCJ-056

Fig.	Color	Digi-Key Part No.	Price Each 1	10	100	CUI Inc. Part No.
6	Red/Black	CP-1430-ND	.89	.78	.60	RCJ-2121
	White/Yellow	CP-1431-ND	.89	.78	.60	RCJ-2134
	Red/White	CP-1432-ND	.89	.78	.60	RCJ-2123
7	Red/Black	CP-1433-ND	.86	.75	.58	RCJ-2221
	White/Yellow	CP-1434-ND	.86	.75	.58	RCJ-2234
	Red/White	CP-1435-ND	.86	.75	.58	RCJ-2223
8	Red/Black	CP-1436-ND	1.47	1.28	.98	RCJ-412211
	White/Yellow	CP-1437-ND	1.47	1.28	.98	RCJ-413344
	Red/White	CP-1438-ND	1.47	1.28	.98	RCJ-412233
9	Red/Black	CP-1439-ND	1.98	1.72	1.32	RCJ-61212121
	White/Yellow	CP-1440-ND	1.98	1.72	1.32	RCJ-61343434
	Red/White	CP-1441-ND	1.98	1.72	1.32	RCJ-61232323
	Red/White/Yellow	CP-1442-ND	1.98	1.72	1.32	RCJ-61223344
10	Red/White/Yellow	CP-1443-ND	1.51	1.31	1.01	RCJ-31234
	Red/Green/Blue	CP-1444-ND	1.51	1.31	1.01	RCJ-31265
11	Red/White/Yellow	CP-1445-ND	1.49	1.29	1.00	RCJ-32234
	Red/Green/Blue	CP-1446-ND	1.49	1.29	1.00	RCJ-32265
12	Black	CP-1447-ND	.62	.54	.42	RCP-011
	Red	CP-1448-ND	.62	.54	.42	RCP-012
	White	CP-1449-ND	.62	.54	.42	RCP-013
	Yellow	CP-1450-ND	.62	.54	.42	RCP-014
	Blue	CP-1451-ND	.62	.54	.42	RCP-015
	Green	CP-1452-ND	.62	.54	.42	RCP-016
13	Black	CP-1453-ND	.62	.54	.42	RCP-021
	Red	CP-1454-ND	.62	.54	.42	RCP-022
	White	CP-1455-ND	.62	.54	.42	RCP-023
	Yellow	CP-1456-ND	.62	.54	.42	RCP-024
	Blue	CP-1457-ND	.62	.54	.42	RCP-025
	Green	CP-1458-ND	.62	.54	.42	RCP-026

Switchcraft® EN3 Weathertight Connectors

Fig. 1

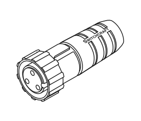


Fig. 2

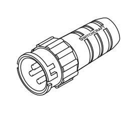


Fig. 3

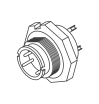
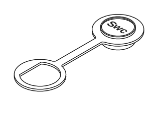
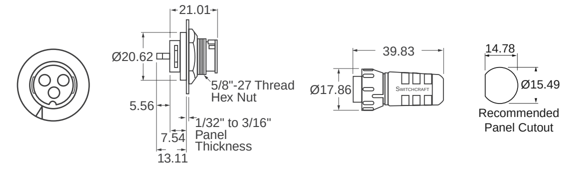


Fig. 4





FEATURES AND BENEFITS: • Housing rated UL 94V-O against flammability • Contact terminal: Solder Cup Contacts • Panel Connector Shell features a positioning keyway to prevent misalignments • No Grommets. Cable clamp assembly features living hinges, which snap easily onto and holds the cable • Choose cord plug or panel mount • 2-8 pins • Exceeds Coast Guard specifications for water tightness (CFR 46 Part 110.20) • Optional cap covers the panel housing assembly when not in use **APPLICATIONS:** • Process control • Marine electronics • Medical instrumentation • Geothermal instrumentation • Communication • Transportation • General industrial electronics **SPECIFICATIONS:** • Mechanical: Shock: Mil-Std. 202 method 213B, condition K • Vibration: Mil-Std 202 Method 201 • Life 600 insertion/withdrawal cycles (min.) **Electrical:** Voltage Rating (sea level): • Tested at 600 VRMS • Insulation Resistance: 100 Megohms (min.) at 77°F (25°C) • Contact Resistance: 3.0 Millohms (max.) • Current Rating: 7.5 Amps (#20 contact) **Environmental:** • Temperature Limits: -40°C to +65°C (non-operating) • Moisture Resistance: Mil-Std 202 Method 106F • Insulation Resistance: Mil-Std 202 Method 302, condition B • Thermal Shock: Mil-Std 202 Method 107G • Salt Spray: Mil-Std 202 Method 101D, condition B • Water Tightness Test: U.S. Coast Guard CFR 46 Part 110.20

Fig.	No. of Positions	Description	Digi-Key Part No.	Price Each 1	10	25	Switchcraft Part No.
Plugs							
1	3	Female	SC1156-ND	4.88	3.66	3.36	EN3C3F
		Male	SC1157-ND	3.52	2.64	2.42	EN3C3M
	4	Female	SC1158-ND	5.84	4.38	4.02	EN3C4F
		Male	SC1159-ND	4.04	3.03	2.78	EN3C4M
	5	Female	SC1160-ND	6.80	5.10	4.68	EN3C5F
		Male	SC1161-ND	4.64	3.48	3.19	EN3C5M
	6	Female	SC1162-ND	7.76	5.82	5.34	EN3C6F
		Male	SC1163-ND	5.16	3.87	3.55	EN3C6M
	8	Female	SC1164-ND	9.72	7.29	6.68	EN3C8F
In-Line Receptacles							
2	3	Female	SC1175-ND	4.76	3.57	3.27	EN3L3F
		Male	SC1176-ND	3.44	2.58	2.37	EN3L3M
	4	Female	SC1177-ND	5.68	4.26	3.91	EN3L4F
		Male	SC1178-ND	3.92	2.94	2.70	EN3L4M
	5	Female	SC1179-ND	6.60	4.95	4.54	EN3L5F
		Male	SC1180-ND	4.52	3.39	3.11	EN3L5M
	6	Female	SC1181-ND	7.52	5.64	5.17	EN3L6F
		Male	SC1182-ND	5.00	3.75	3.44	EN3L6M
	8	Male	SC1183-ND	6.16	4.62	4.24	EN3L8M
Panel-Mount Receptacles							
3	3	Female	SC1165-ND	4.32	3.24	2.97	EN3P3F
		Male	SC1166-ND	3.12	2.34	2.15	EN3P3M
	4	Female	SC1167-ND	5.24	3.93	3.60	EN3P4F
		Male	SC1168-ND	3.64	2.73	2.50	EN3P4M
	5	Female	SC1169-ND	6.16	4.62	4.24	EN3P5F
		Male	SC1170-ND	4.20	3.15	2.89	EN3P5M
	6	Female	SC1171-ND	7.12	5.34	4.90	EN3P6F
		Male	SC1172-ND	4.76	3.57	3.27	EN3P6M
	8	Male	SC1173-ND	5.84	4.38	4.02	EN3P8M
4	—	Dust Cap	SC1174-ND	.92	.69	.63	EN3CAP

Switchcraft® 1/4" (6.35mm) Plugs, Jacks and Audio Adapters

Fig. 1

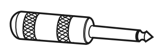


Fig. 2

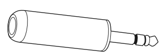
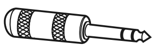


Fig. 3



Dimensions for Figures 1-3

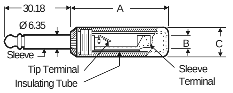
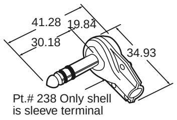


Fig. 4



Pt.# 238 Only shell is sleeve terminal

Fig. 5

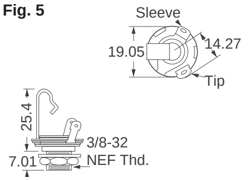


Fig. 6

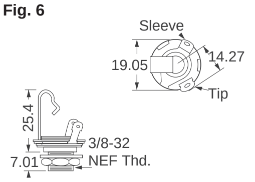


Fig. 7

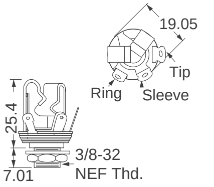
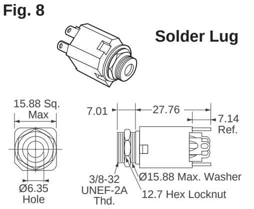


Fig. 8

Solder Lug



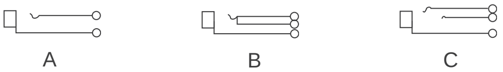


Fig.	Description	Mates With	Dimensions (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	25	Switchcraft Part No.
1/4" (6.35mm) "Littel Plugs" Two Conductor Phone Plugs										
1	Shielded w/ Solder Lug & Cable Clamp	11	42.88	7.54	12.70	SC1075-ND	3.96	29.70	68.00	280
1/4" (6.35mm) "Littel Plugs" Three Conductor Phone Plugs										
2	Black w/ Solder Lug & Cable Clamp	12B	42.88	7.54	12.70	SC1081-ND	4.52	33.90	77.75	267
3	Shielded w/ Solder Lug & Cable Clamp	12B	42.88	7.54	12.70	SC1084-ND	5.36	40.20	92.25	297
1/4" (6.35mm) Right Angle Flat, Two Conductor Type Phone Plugs										
4	Shielded w/ Solder Lugs	11	—	—	—	SC1068-ND	4.40	33.00	75.75	228
1/4" (6.35mm) Right Angle Flat, Three Conductor Type Phone Plugs										
4	Shielded w/ Solder Lugs	12B	—	—	—	SC1069-ND	5.68	42.60	97.75	238

Fig. 9

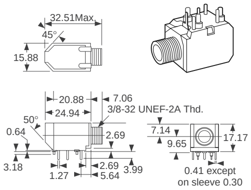


Fig. 10

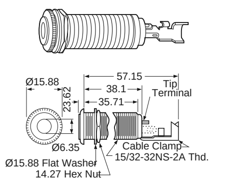


Fig. 11

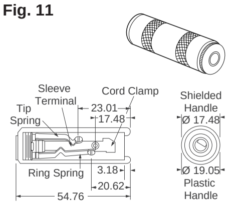


Fig. 12

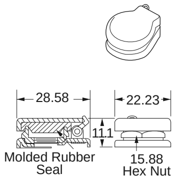
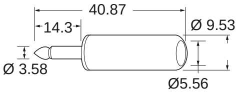


Fig.	Sche-matic	Description	Digi-Key Part No.	Pricing 1	10	25	Switchcraft Part No.
1/4" (6.35mm) "Littel Jax," Two Conductor Phone Jacks							
5	A	Phone Jack 1/4" (6.35mm), Open Circuit	SC1085-ND	2.00	15.00	34.50	11
6	B	Phone Jack 1/4" (6.35mm), Tip Shunt	SC1089-ND	2.00	15.00	34.50	12A
1/4" (6.35mm) "Littel Jax," Three Conductor Phone Jacks							
7	C	Phone Jack Double Open Circuit	SC1094-ND	2.08	15.60	35.75	12B
1/4" (6.35mm) Two Conductor Jacks with Solder Lug Terminals							
8	A	Phone Jack Enclosed Insulated Bushing	SC1103-ND	2.24	16.80	38.50	N111
	B	Phone Jack Enclosed Single Closed Circuit	SC1104-ND	1.92	14.40	33.00	112A
1/4" (6.35mm) Two Conductor Jacks with PC Terminals							
9	A	Phone Jack Rt. Angle Single Open Circuit	SC1121-ND	1.76	13.20	30.25	RN111PC
	B	Phone Jack Rt. Angle Single Closed Circuit	SC1122-ND	2.00	15.00	34.50	RN112APC
1/4" (6.35mm) Three Conductor Jacks with Solder Lug Terminals							
8	C	Phone Jack Enclosed Double Open Circuit	SC1107-ND	1.96	14.70	33.75	112B
1/4" (6.35mm) Three Conductor Jacks with PC Terminals							
9	C	Phone Jack Rt. Angle Double Open Circuit	SC1123-ND	2.16	16.20	37.25	RN112BPC
1/4" (6.35mm) "TP-Jax" Thick-Panel Phone Jacks							
10	A	2 Cond., Open Circuit	SC1034-ND	6.32	47.40	108.75	151
	C	3 Cond., Open Circuit	SC1035-ND	6.96	52.20	119.50	152B
"Extension-Jax" 1/4" (6.35mm) Cable Extension Jacks							
11	—	In Line 3 Cond. Shielded Handle Screw Terminals	SC1042-ND	8.44	63.30	145.00	1230
Jack Cover							
12	—	Jack Cover Black with Hardware	SC1101-ND	7.44	55.80	128.00	515

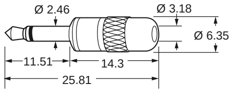
Switchcraft® Phone, Power & Phono Plugs and Jacks

Fig. 1



3.5mm Plug

Fig. 2



2.5mm Plug

Fig. 3

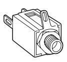
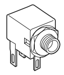


Fig. 4



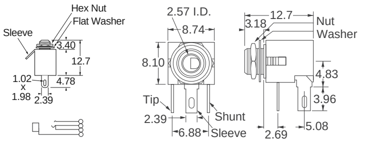
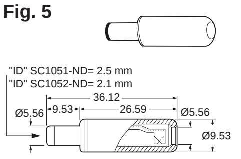


Fig. 5



"ID" SC1051-ND= 2.5 mm
"ID" SC1052-ND= 2.1 mm

Fig. 6

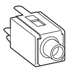
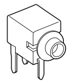


Fig. 7



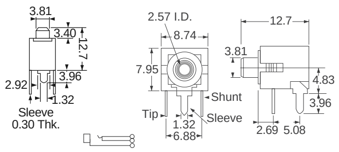
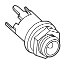
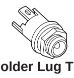


Fig. 8



PCB Term.

Fig. 9



Solder Lug Term.

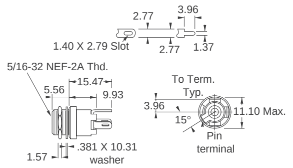


Fig. 10

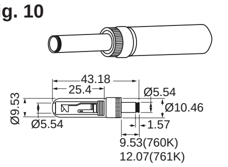


Fig. 11

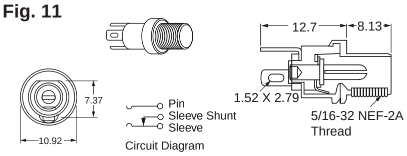
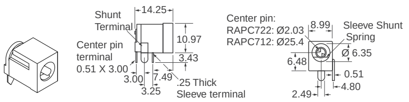


Fig. 12



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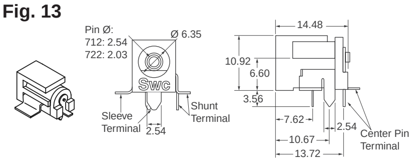

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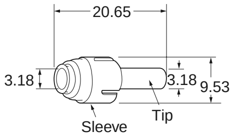

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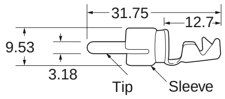
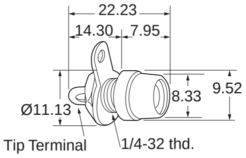


Fig. 16



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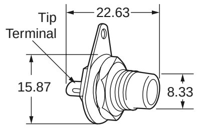


Fig. 18

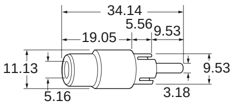


Fig. 19

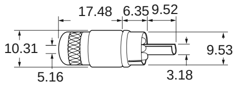


Fig. 20

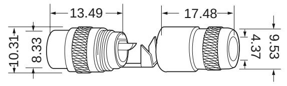


Fig.	Mates With	Description	Digi-Key Part No.	Price Each 1	10	25	Switchcraft Part No.
		“Tini Plug” Miniature Phone Plugs					
1	41	.141” (3.58mm) Black w/ Screw Terminals	SC1053-ND	3.12	2.34	2.15	740
1	41	.141” (3.58mm) Black w/ Solder Lug & Cable Clamp	SC1055-ND	3.04	2.28	2.09	750
1	41	.141” (3.58mm) Red w/ Solder Lug & Cable Clamp	SC1056-ND	3.04	2.28	2.09	755
1	41	.141” (3.58mm) Shielded w/ Solder Lug & Cable Clamp	SC1057-ND	4.12	3.09	2.83	780
		“Micro-plug” Subminiature Phone Plugs					
2	Fig. 3,4,6,7	.097” (2.46mm) 2 Cond Black w/ Solder Lugs	SC1058-ND	3.08	2.31	2.12	850
2	Fig. 3,4,6,7	.097” (2.46mm) 2 Cond Red w/ Solder Lugs	SC1059-ND	3.08	2.31	2.12	855
2	Fig. 3,4,6,7	.097” (2.46mm) 2 Cond Natural w/ Solder Lugs	SC1060-ND	3.08	2.31	2.12	880
		“Micro-d Jax” Subminiature Enclosed Phone Jack					
3	850	Subminiature 2 Cond Closed Circuit Solder Lug	SC1043-ND	2.04	1.53	1.40	MDSL2A
6	850	Subminiature 2 Cond Closed Circuit PCB	SC1044-ND	2.04	1.53	1.40	MDPC2A
4	850	Subminiature Rt. Angle 2 Cond Solder Lug	SC1045-ND	2.28	1.71	1.57	MDSL2ARA
7	850	Subminiature Rt. Angle PCB	SC1046-ND	2.28	1.71	1.57	MDPC2ARA
		Power Plugs					
5	712A	Power Plug .1” Black Handle (2.5 mm Dia.)	SC1051-ND	2.92	2.19	2.01	760
5	722A	Power Plug .08” Black Handle (2.1 mm Dia.)	SC1052-ND	2.92	2.19	2.01	S760
10	L712A	Conn Power Plug Locking 2.5 mm Blk	SC1148-ND	4.24	3.18	2.92	761K
10	712A	Conn Power Plug Locking 2.5 mm Blk	SC1149-ND	4.24	3.18	2.92	760K
		Power Jacks					
8	760K	Panel Mount Jack .1” Dia. PC Terminals (2.5 mm Dia.)	SC1050-ND	2.92	2.19	2.01	PC712A
8	S760K	Panel Mount Jack .08” Dia. (2.1mm Dia.)	SC1047-ND	2.92	2.19	2.01	PC722A
9	760	Panel Mount Jack .1” Dia., Solder Lug (2.5 mm Dia.)	SC1048-ND	2.92	2.19	2.01	712A
9	S760	Panel Mount Jack .08” Dia., Solder Lug (2.1 mm Dia.)	SC1049-ND	2.92	2.19	2.01	722A
11	761K	Conn Power Jack 2.5 mm Panel Mount Long	SC1150-ND	4.00	3.00	2.75	L712A
11	S761K	Conn Power Jack 2.1 mm Panel Mount Long	SC1151-ND	4.00	3.00	2.75	L722A
12	760	Conn Power Jack Right Angle PCB 2.5 mm	SC1152-ND	1.08	.81	.74	RAPC712
12	S760	Conn Power Jack Right Angle PCB 2.1 mm	SC1153-ND	1.08	.81	.74	RAPC722
13	760	Conn Power Jack Hybrid SMT 2.5 mm	SC1154-ND	1.20	.90	.83	RASH712
13	S760	Conn Power Jack Hybrid SMT 2.1 mm	SC1155-ND	1.20	.90	.83	RASH722

Fig.	Description	Digi-Key Part No.	Price Each 1	10	25	100	Switchcraft Part No.
	Phono Jacks and Plugs						
14	Phono Plug 2 Cond	SC1131-ND	.52	.39	.36	.33	3501M
15	Phono Plug 2 Cond. w/ Cable Clamp	SC1132-ND	1.00	.75	.69	.63	3501MC
16	Phono Jack 2 Cond. Panel Mount	SC1133-ND	1.40	1.05	.96	.88	3501FP
—	Insulated Washer Flat For SC1133-ND	SC1144-ND	.34	.25	.23	.21	S-2207
—	Insulated Washer Extruded For SC1133-ND	SC1145-ND	.38	.28	.26	.24	S-1564
17	Phono Jack 2 Cond. Panel Mount w/ Hardware	SC1134-ND	1.76	1.32	1.21	1.10	3501FR
—	Insulated Washer Flat For SC1134-ND	SC1146-ND	.17	.13	.12	.11	S-1028
—	Insulated Washer Extruded For SC1134-ND	SC1147-ND	.38	.28	.26	.24	S-1029
18	Phono Plug 2 Cond, Red Cable Clamp	SC1135-ND	1.48	1.11	1.02	.93	3558-1
18	Phono Plug 2 Cond, Black Cable Clamp	SC1136-ND	1.48	1.11	1.02	.93	3558-2
19	Phono Plug 2 Cond, Shielded w/ Cable Clamp	SC1138-ND	1.96	1.47	1.35	1.23	3502
20	Phono Extension Jack 2 Cond, Shielded w/ Heavy Duty Clamp	SC1139-ND	2.76	2.07	1.90	1.73	3503

Audio Connectors and Couplers

Fig. 1

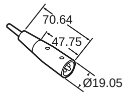


Fig. 2

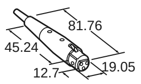


Fig. 3

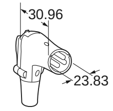


Fig. 4

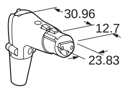


Fig. 5

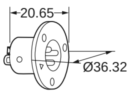


Fig. 6

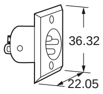


Fig. 7

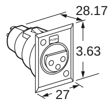


Fig.	Description	Digi-Key Part No.	Price Each 1	10	25	Mfg. Part No.
1	Plug Male Straight 3 pos Satin Nickel Finish	SC1003-ND	4.96	3.72	3.41	A3M
1	Plug Male Straight 3 pos Black w/Silver Contacts	SC1004-ND†	4.96	3.72	3.41	A3MB
1	Plug Male Straight 4 pos Satin Nickel Finish	SC1014-ND	5.72	4.29	3.93	A4M
1	Plug Male Straight 5 pos Satin Nickel Finish	SC1022-ND	10.08	7.56	6.93	A5M
2	Plug Female Straight 3 pos Satin Nickel Finish	SC1001-ND	5.60	4.20	3.85	A3F
2	Plug Female Straight 3 pos Black w/Silver Contacts	SC1002-ND†	5.60	4.20	3.85	A3FB
2	Plug Female Straight 4 pos Satin Nickel Finish	SC1013-ND	7.80	5.85	5.36	A4F
2	Plug Female Straight 5 pos Satin Nickel Finish	SC1021-ND	12.72	9.54	8.75	A5F
3	Plug Male Rt. Angle 3 pos Satin Nickel Finish	SC1012-ND	14.68	11.01	10.09	R3M
4	Plug Female Rt. Angle 3 pos Satin Nickel Finish	SC1011-ND	15.92	11.94	10.95	R3F
5	Receptacle Male Panel Mount 3 pos Satin Nickel Finish	SC1008-ND	6.00	4.50	4.13	C3M
6	Receptacle Male Narrow Panel Mount 3 pos Satin Nickel Finish	SC1010-ND	4.68	3.51	3.22	D3M
6	Receptacle Male Narrow Panel Mount 4 pos Satin Nickel Finish	SC1020-ND	5.56	4.17	3.82	D4M
6	Receptacle Male Narrow Panel Mount 5 pos Satin Nickel Finish	SC1028-ND	9.84	7.38	6.77	D5M
7	Receptacle Female Narrow Panel Mount 3 pos Satin Nickel Finish	SC1009-ND	6.32	4.74	4.35	D3F
7	Receptacle Female Narrow Panel Mount 4 pos Satin Nickel Finish	SC1019-ND	8.96	6.72	6.16	D4F
7	Receptacle Female Narrow Panel Mount 5 pos Satin Nickel Finish	SC1027-ND	14.48	10.86	9.96	D5F

† "Black Velvet" (Electrically Conductive Chrome Plate)

EDAC INC Waterproof Connector Assemblies

Colored wires to be installed in the following order:

1. Black	4. Green	7. Orange
2. White	5. Brown	8. Yellow
3. Red	6. Blue	9. Violet

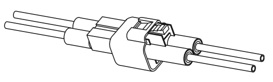


Fig. 1

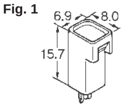


Fig. 2

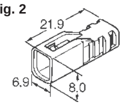
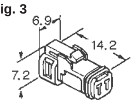


Fig. 3



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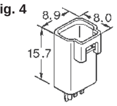
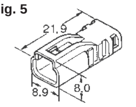


Fig. 5



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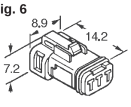


Fig. 7

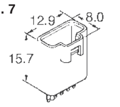


Fig. 8

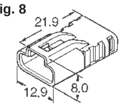


Fig. 9

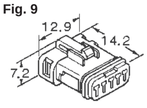


Fig. 10

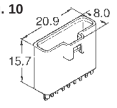


Fig. 11

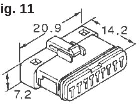


Fig. 12

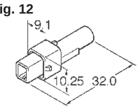


Fig. 13

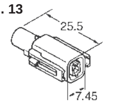


Fig. 14

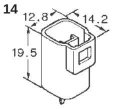


Fig. 15

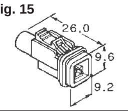


Fig. 16

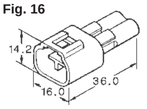
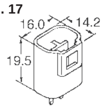


Fig. 17



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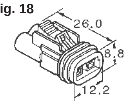


Fig. 19

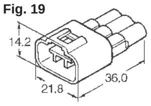


Fig. 20

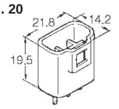
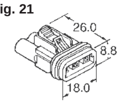


Fig. 21



Features: Major applications include baths, toilets, hot-water suppliers, washing machines, water purifiers, outdoor motors, frozen food showcases, and construction devices.

566 (WP20/22) Series, 22 AWG : FEATURES: As being a fully waterproof small-sized connector of 2 mm pitch. **SPECIFICATIONS: Pitch:** 2.0 mm. **Rated Voltage:** 250V. **Rated Current:** Max 2A. **Withstand Voltage:** AC1000V, 1 Minute. **Contact Resistance:** 10mΩ max. **Insulation Resistance:** 1000MΩ min./DC500V. **Temperature Range:** -40°C~+105°C. **Water proof grade:** JIS C0920 (grade 8) Water proof type by JIS C0920. **Applicable Board Thickness:** 1.6 mm. **Housing - Pin Block:** PBT (UL94V-0). **Terminal:** PB/Tin plating. **Wire - Housing Seal:** Silicone Rubber.

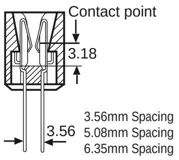
568 (CL07C) Series, 20 AWG FEATURES: • As a waterproof connector of single-pole specification, housing lock can assure tight closing without being easily disengaged. The lock is small in size and compact. • Outstanding in mechanical/electrical characteristics, etc. because of the highly stable contact part. • Conforming to Electric Apparatus Control Regulations. **SPECIFICATIONS: Rated Voltage:** 300V. **Rated Current:** Max 5A. **Withstand Voltage:** AC1700V, 1 Minute. **Contact Resistance:** 10mΩ max. **Insulation Resistance:** 1000MΩ min./DC500V. **Temperature Range:** -40°C~+105°C. **Water proof grade:** JIS C0920 (grade 4) Water proof type by JIS C0920. **Housing - Pin Block:** PBT (UL94V-0). **Terminal:** Brass/Tin plating. **Wire - Housing Seal:** Silicone Rubber.

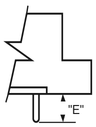
570 (CL07D/E) Series, 16 AWG FEATURES: • Fully waterproof connector of 5.8 mm pitch, being applicable to large current (max. 10A). • Conforming to Electric Apparatus Control Regulations. **SPECIFICATIONS: Rated Voltage:** 300V. **Rated Current:** Max 10A. **Withstand Voltage:** AC1700V, 1 Minute. **Contact Resistance:** 10mΩ max. **Insulation Resistance:** 1000MΩ min./DC500V. **Temperature Range:** -40°C~+105°C. **Water proof grade:** JIS C0920 (grade 4) Water proof type by JIS C0920. **Applicable Board Thickness:** 1.6 mm. **Housing - Pin Block:** PBT (UL94V-0). **Terminal:** Brass/Tin plating. **Wire - Housing Seal:** Silicone Rubber.

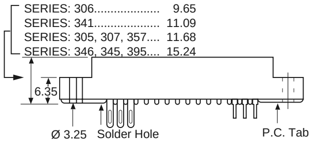
Fig.	Description	Length Ft. (M)	Digi-Key Part No.	Pricing 1	10	100	EDAC Part No.
WP20/22 Series — 22 AWG							
1	Connector Plug, 2 Position, PCB Mount	—	151-1001-ND	.87	7.70	61.60	566-002-420-101
2	Cable Assembly Plug, 2 Position	3 (.91)	151-1002-ND	5.25	48.30	420.00	566-002-714-120
3	Assembly Receptacle, 2 Position	3 (.91)	151-1003-ND	5.68	52.21	454.00	566-002-724-220
4	Connector Plug, 3 Position, PCB Mount	—	151-1004-ND	1.33	11.83	94.60	566-003-420-101
5	Cable Assembly Plug, 3 Position	3 (.91)	151-1005-ND	7.78	71.53	622.00	566-003-714-120
6	Assembly Receptacle, 3 Position	3 (.91)	151-1006-ND	8.18	75.21	654.00	566-003-724-220
7	Connector Plug, 5 Position, PCB Mount	—	151-1007-ND	1.98	17.60	140.80	566-005-420-101
8	Cable Assembly Plug, 5 Position	3 (.91)	151-1008-ND	12.78	117.53	1022.00	566-005-714-120
9	Assembly Receptacle, 5 Position	3 (.91)	151-1009-ND	13.05	120.06	1044.00	566-005-724-220
10	Connector Plug, 9 Position, PCB Mount	—	151-1010-ND	2.91	25.85	206.80	566-009-420-101
11	Assembly Receptacle, 9 Position	3 (.91)	151-1011-ND	22.98	211.37	1838.00	566-009-724-220
CL07C Series — 18 AWG							
12	Cable Assembly Plug, 1 Position	3 (.91)	151-1014-ND	3.40	31.28	272.00	568-001-734-100
13	Assembly Receptacle, 1 Position	3 (.91)	151-1015-ND	3.05	28.06	244.00	568-001-744-200
CL07D/E Series — 18 AWG							
14	Connector Plug, 1 Position, PCB Mount	—	151-1016-ND	1.15	10.18	81.40	570-001-420-101
15	Cable Assembly Receptacle, 1 Position	3 (.91)	151-1017-ND	3.95	36.34	316.00	570-001-744-200
16	Assembly Plug, 2 Position	3 (.91)	151-1018-ND	6.53	60.03	522.00	570-002-734-100
17	Connector Plug, 2 Position, PCB Mount	—	151-1019-ND	1.40	12.38	99.00	570-002-420-101
18	Cable Assembly Receptacle, 2 Position	3 (.91)	151-1020-ND	6.93	63.71	554.00	570-002-744-200
19	Cable Assembly Plug, 3 Position	3 (.91)	151-1021-ND	10.28	94.53	822.00	570-003-734-100
20	Connector Plug, 3 Position, PCB Mount	—	151-1022-ND	2.42	21.45	171.60	570-003-420-101
21	Assembly Receptacle, 3 Position	3 (.91)	151-1023-ND	10.63	97.75	850.00	570-003-744-200
—	Extraction Tool, 566 Series		151-1012-ND	205.35	—	—	566-280-300
—	Extraction Tool, 570 Series		151-1013-ND	147.08	—	—	570-280-300

Edgeboard Connectors

MATERIALS: Insulator: Thermoplastic Polyester,UL 94V-0. **Contacts:** Copper, Nickel, Tin Alloy CA-725 or Phosphor Bronze. **Contact Plating:** Gold on Mating Area, Tin-Lead on the Contact Tails, Nickel Underplate. **Colors**:Series 305, 306, 307, 341, 345 and 346 are green. Series 357 and 395 are black. **MECHANICAL: P.C. Card Slot:** Accepts boards .054" (1.37mm) to .070" (1.78mm) thick. **ELECTRICAL: Insulation Resistance:** 5000 megohms at 500 VDC. **Dielectric Withstanding Voltage:** 1500 V.A.C. RMS at sea level. **Current Rating:** 3 Amperes. **Contact Resistance:** 6 Milliohms, maximum. **ENVIRONMENTAL: Operating Temperature:** -65° to +125°C.



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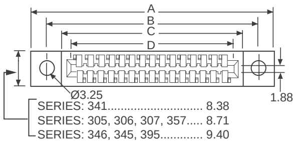
SERIES: 341.................... 11.09
SERIES: 305, 307, 357.... 11.68
SERIES: 346, 345, 395.... 15.24
6.35
Ø 3.25
Solder Hole
P.C. Tab


A
B
C
D
Ø3.25
1.88
SERIES: 341............................ 8.38
SERIES: 305, 306, 307, 357..... 8.71
SERIES: 346, 345, 395............ 9.40

NOTE:
SERIES 341: 10.16mm for 28/56 pin & up.
SERIES 306: 12.70mm for 28 pin & up.
SERIES 305, 307, 357: 12.70mm for 28/56 pin & up

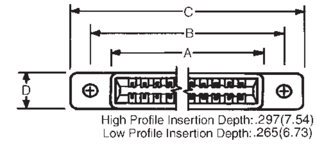
Pos./ Char.	Dimensions (mm) A ±.38	B ±.20	C ±.38	D ±.15	E ±.51	Digi-Key Part No.	Pricing 1	10	100	500	EDAC Part No.
Solder Tail — 3.56mm Spacing											
2.54mm Contact Centers											
12	37.47	29.85	22.23	17.78	3.18	EDC341122-ND	2.39	21.18	169.40	654.50	341-012-520-202
20	47.63	40.01	32.39	27.94	3.18	EDC341202-ND	2.60	23.10	184.80	714.00	341-020-520-202
30	60.33	52.71	45.09	40.64	3.18	EDC341302-ND	2.88	25.58	204.60	790.50	341-030-520-202
40	73.03	65.41	57.79	53.34	3.18	EDC341402-ND	3.16	28.05	224.40	867.00	341-040-520-202
50	85.73	78.11	70.49	66.04	3.18	EDC341502-ND	3.50	31.08	248.60	960.50	341-050-520-202
3.96mm Contact Centers											
12	46.79	38.91	31.65	27.94	5.41	EDC305122-ND	1.43	12.65	101.20	391.00	305-012-520-202
20	62.64	54.76	47.50	43.79	5.41	EDC305202-ND	1.86	16.50	132.00	510.00	305-020-520-202
24	70.56	62.69	55.42	51.71	5.41	EDC305242-ND	2.14	18.98	151.80	586.50	305-024-520-202
30	82.45	74.57	67.31	63.60	5.41	EDC305302-ND	2.42	21.45	171.60	663.00	305-030-520-202
36	94.34	86.46	79.20	75.49	5.41	EDC305362-ND	2.76	24.48	195.80	756.50	305-036-520-202
44	110.19	102.31	95.05	91.34	5.41	EDC305442-ND	3.19	28.33	226.60	875.50	305-044-520-202
Solder Tail — 5.08mm Spacing											
2.54mm Contact Centers											
20	46.61	40.01	32.00	27.94	4.44	EDC395202-ND	2.17	19.25	154.00	595.00	395-020-520-202
26	54.23	47.63	39.62	35.56	4.44	EDC395262-ND	2.36	20.90	167.20	646.00	395-026-520-202
30	59.31	52.71	44.70	40.64	4.44	EDC395302-ND	2.48	22.00	176.00	680.00	395-030-520-202
34	64.39	57.79	49.78	45.72	4.44	EDC395342-ND	2.54	22.55	180.40	697.00	395-034-520-202
36	66.93	60.33	52.32	48.26	4.44	EDC395362-ND	2.60	23.10	184.80	714.00	395-036-520-202
40	72.01	65.41	57.40	53.34	4.44	EDC395402-ND	2.79	24.75	198.00	765.00	395-040-520-202
44	77.09	70.49	62.48	58.42	4.44	EDC395442-ND	2.95	26.13	209.00	807.50	395-044-520-202
50	84.71	78.11	70.10	66.04	4.44	EDC395502-ND	3.13	27.78	222.20	858.50	395-050-520-202
56	92.33	85.73	77.72	73.66	4.44	EDC395562-ND	3.32	29.43	235.40	909.50	395-056-520-202
60	97.41	90.81	82.80	78.74	4.44	EDC395602-ND	3.44	30.53	244.20	943.50	395-060-520-202
62	99.95	93.35	85.34	81.28	4.44	EDC395622-ND	3.53	31.35	250.80	969.00	395-062-520-202

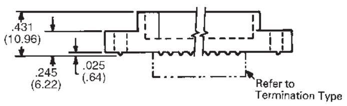
Pos./ Char.	Dimensions (mm) A ±.38	B ±.20	C ±.38	D ±.15	E ±.51	Digi-Key Part No.	Pricing 1	10	100	500	EDAC Part No.
3.96mm Contact Centers											
20	62.64	54.76	47.50	43.79	5.41	EDC357202-ND	1.98	17.60	140.80	544.00	357-020-520-202
24	70.56	62.69	55.42	51.71	5.41	EDC357242-ND	2.08	18.43	147.40	569.50	357-024-520-202
30	82.45	74.57	67.31	63.60	5.41	EDC357302-ND	2.39	21.18	169.40	654.50	357-030-520-202
36	94.34	86.46	79.20	75.49	5.41	EDC357362-ND	2.73	24.20	193.60	748.00	357-036-520-202
44	110.19	102.31	95.05	91.34	5.41	EDC357442-ND	3.10	27.50	220.00	850.00	357-044-520-202
Solder Tail — 6.35mm Spacing											
3.18mm Contact Centers											
44	90.42	83.69	77.09	73.03	4.44	EDC346442-ND	3.22	28.60	228.80	884.00	346-044-520-202
56	109.47	102.74	96.14	92.08	4.44	EDC346562-ND	3.60	31.90	255.20	986.00	346-056-520-202
72	134.87	128.14	121.54	117.48	4.44	EDC346722-ND	4.34	38.50	308.00	1190.00	346-072-520-202
100	179.32	172.59	165.99	161.93	4.44	EDC346102-ND	5.46	48.40	387.20	1496.00	346-100-520-202
Solder Tail — Center Spacing (Single Row)											
3.96mm Contact Centers											
10	62.64	54.76	47.50	43.79	5.41	EDC306102-ND	1.77	15.68	125.40	484.50	306-010-520-102
15	82.45	74.57	67.31	63.60	5.41	EDC306152-ND	2.39	21.18	169.40	654.50	306-015-520-102
18	94.34	86.46	79.20	75.49	5.41	EDC306182-ND	2.76	24.48	195.80	756.50	306-018-520-102
22	110.19	102.31	95.05	91.34	5.41	EDC306222-ND	3.22	28.60	228.80	884.00	306-022-520-102
Solder Eyelets — 3.56mm Spacing											
3.96mm Contact Centers											
12	46.79	38.91	31.65	27.94	7.16	EDC305120-ND	1.43	12.65	101.20	391.00	305-012-500-202
20	62.64	54.76	47.50	43.79	7.16	EDC305200-ND	1.86	16.50	132.00	510.00	305-020-500-202
24	70.56	62.69	55.42	51.71	7.16	EDC305240-ND	2.14	18.98	151.80	586.50	305-024-500-202
30	82.45	74.57	67.31	63.60	7.16	EDC305300-ND	2.42	21.45	171.60	663.00	305-030-500-202
36	94.34	86.46	79.20	75.49	7.16	EDC305360-ND	2.76	24.48	195.80	756.50	305-036-500-202
44	110.19	102.31	95.05	91.34	7.16	EDC305440-ND	3.41	30.25	242.00	935.00	305-044-500-202
Solder Eyelets — 5.08mm Spacing											
3.96mm Contact Centers											
12	46.79	38.91	31.65	27.94	7.16	EDC307120-ND	1.52	13.48	107.80	416.50	307-012-500-202
20	62.64	54.76	47.50	43.79	7.16	EDC307200-ND	1.98	17.60	140.80	544.00	307-020-500-202
24	70.56	62.69	55.42	51.71	7.16	EDC307240-ND	2.08	18.43	147.40	569.50	307-024-500-202
30	82.45	74.57	67.31	63.60	7.16	EDC307300-ND	2.39	21.18	169.40	654.50	307-030-500-202
36	94.34	86.46	79.20	75.49	7.16	EDC307360-ND	2.73	24.20	193.60	748.00	307-036-500-202
44	110.19	102.31	95.05	91.34	7.16	EDC307440-ND	3.19	28.33	226.60	875.50	307-044-500-202
Solder Eyelets — Center Spacing (Single Row)											
3.96mm Contact Centers											
10	62.64	54.76	47.50	43.79	7.16	EDC306100-ND	1.77	15.68	125.40	484.50	306-010-500-102
15	82.45	74.57	67.31	63.60	7.16	EDC306150-ND	2.39	21.18	169.40	654.50	306-015-500-102
18	94.34	86.46	79.20	75.49	7.16	EDC306180-ND	2.76	24.48	195.80	756.50	306-018-500-102
22	110.19	102.31	95.05	91.34	7.16	EDC306220-ND	3.22	28.60	228.80	884.00	306-022-500-102

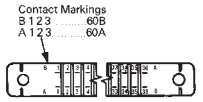
Pos./ Char.	Contact Spacing (mm)	Dim. (mm) C ±.38	D ±.15	Bus Style	Digi-Key Part No.	Pricing 1	10	100	500	EDAC Part No.
Industry Standard Bus Systems										
60	2.54	82.80	78.74	MULTIBUS 1	EDC345602-ND	4.19	37.13	297.00	1147.50	345-060-524-201
120	2.54	159.00	154.94	VERSABUS	EDC345202-ND	6.98	61.88	495.00	1912.50	345-120-520-201
56	3.18	96.14	92.08	STANDARD BUS	EDC346052-ND	4.09	36.30	290.40	1122.00	346-056-520-802
62	2.54	85.34	81.28	IBM PC-XT	EDC395062-ND	1.09	9.63	77.00	297.50	395-062-520-350
98	2.54	131.06	127.00	IMB PC-AT ISA	EDC395982-ND	1.40	12.38	99.00	382.50	395-098-520-350

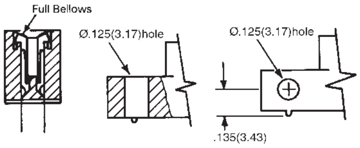
Sullins Edgeboard Connectors

High and Low Profile


C
B
A
D
High Profile Insertion Depth: .297(7.54)
Low Profile Insertion Depth: .265(6.73)







MATERIALS

Insulator: Glass filled thermoplastic polyester Valox (Standard) UL 94V-0 Approved.

Contacts: Phosphor Bronze (Standard).

Contact Plating: Gold over .000050 Nickel Under Plate.

UL File Number: E64287.

Termination Plating: Tin.

MECHANICAL

Board Insertion Force: 16 ozs. maximum per contact pair using .062 steel test blade.

Board Withdrawal Force: 1 oz. minimum per contact pair using .062 steel test blade.

ELECTRICAL

Insulation Resistance: 5,000 megohms.

Dielectric Withstanding Voltage: Contact. Centers — .100, .125, .156. Voltage — 600 VDC, 800 VDC, 1800 VDC.

Current Rating: 3 amperes.

Voltage Drop: 30 MV at rated current.

Contact Resistance: 10 milliohms max. at rated current.

ENVIRONMENTAL

Solvent Resistance: Perchloroethylene, Freon 113, Freon 11, Trichloroethylene.

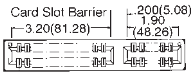
Operating Temperature: Valox -65°C to +135°C. Phosphor Bronze -65°C to +125°C.

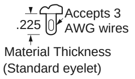
High Profile

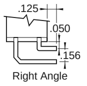
Positions/ Contacts	Dimensions (Inches)				Digi-Key Part No.	Pricing				Sullins Part No.
	A	B	C	D		1	10	100	500	
Peripheral Component Interconnect (PCI) .050" Contact Centers										
10/20	0.740	1.026	1.340	.370	S01019-ND	10.58	84.00	588.00	2352.00	RZB10DCHN•
15/30	0.990	1.276	1.590	.370	S01519-ND	10.96	87.00	609.00	2436.00	RZB15DCHN•
20/40	1.240	1.526	1.840	.370	S02019-ND	11.15	88.50	619.50	2478.00	RZB20DCHN•
25/50	1.490	1.776	2.090	.370	S02519-ND	10.90	86.50	605.50	2422.00	RZB25DCHN•
25/50	1.490	1.776	2.090	.370	S02520-ND*	10.49	83.25	582.75	2331.00	RZB25DCRN•
30/60	1.740	2.026	2.340	.370	S03019-ND	11.25	89.25	624.75	2499.00	RZB30DCHN•
11/45	3.140	3.426	3.740	.370	S05619-578-ND	13.89	110.25	771.75	3087.00	RZB56DCHN-S578•
60/120	3.240	3.526	3.840	.370	S06019-ND	14.18	112.50	787.50	3150.00	RZB60DCHN•
11/49	3.340	3.626	—	.370	S06019-578-ND	14.18	112.50	787.50	3150.00	RZB60DCHN-S578•
11/45/10	3.740	4.026	4.340	.370	S06619-578-ND	14.58	115.75	810.25	3241.00	RZB66DCHN-S578•
80/160	4.240	4.526	4.840	.370	S08019-ND	15.62	124.00	868.00	3472.00	RZB80DCHN•
42/49	4.890	5.176	5.490	.370	S09119-578-ND	16.38	130.00	910.00	3640.00	RZB91DCHN-S578•
100/200	5.240	5.526	5.840	.370	S010019-ND	17.04	135.25	946.75	3787.00	RZB100DCHN•
11/45/50	5.740	6.026	6.340	.370	S010619-578-ND	17.48	138.75	971.25	3885.00	RZB106DCHN-S578•
Solder Tail .100" Contact Centers										
6/12	0.860	1.175	1.435	.370	S1066-ND	1.73	13.75	96.25	385.00	EZC06DCWN•
8/16	1.060	1.375	1.635	.370	S1087-ND	2.27	18.00	126.00	504.00	EZC08DCTN•
10/20	1.260	1.575	1.835	.370	S1106-ND	2.33	18.50	129.50	518.00	EZC10DCWN•
12/24	1.460	1.775	2.035	.370	S1126-ND	2.17	17.25	120.75	483.00	EZC12DCWN•
15/30	1.760	2.075	2.335	.370	S1156-ND	2.68	21.25	148.75	595.00	EZC15DCWN•
25/50	2.760	3.075	3.335	.370	S1256-ND	3.02	24.00	168.00	672.00	EZC25DCWN•
25/50	2.760	3.075	3.335	.370	S1250-ND	3.02	24.00	168.00	672.00	EZC25DCWH
30/60	3.260	3.575	3.835	.370	S1306-ND	3.34	26.50	185.50	742.00	EZC30DCWN•
44/88	4.660	4.975	5.235	.370	S1447-ND	4.82	38.25	267.75	1071.00	EZC44DCTN•
49/98	5.460	—	—	.370	S14916-605-ND	12.19	96.75	677.25	2709.00	EZC49DCAN-S605•
60/120	6.260	6.575	6.835	.370	S1608-ND	6.39	50.75	355.25	1421.00	EZC60DCTI
61/122	6.360	6.675	6.935	.370	S1618-ND	6.46	51.25	358.75	1435.00	EZC61DCTI
70/140	7.260	7.575	7.835	.370	S1706-ND	5.95	47.25	330.75	1323.00	EZC70DCWN•
18/36	2.060	2.375	2.635	.370	S1186-371-ND	2.14	17.00	119.00	476.00	EZC18DCWN-S371
31/62	3.360	3.675	3.935	.370	S1316-371-ND	2.84	22.50	157.50	630.00	EZC31DCWN-S371
49/98	5.460	—	—	.370	S1499-967-ND	15.47	122.75	859.25	3437.00	RXC49DSCN-S967
Solder Tail Right Angle .100" Contact Centers										
10/20	1.460	1.775	2.035	.370	S11022-ND	3.56	28.25	197.75	791.00	EZC10DCAH
15/30	1.760	2.075	2.335	.370	S11515-ND	5.95	47.25	330.75	1323.00	EZC15DCAS
18/36	2.060	2.375	2.635	.370	S11816-ND	4.57	36.25	253.75	1015.00	EZC18DCAN•
25/50	2.760	3.075	3.335	.370	S12517-ND	6.43	51.00	357.00	1428.00	EZC25DTAS
25/50	2.760	3.080	3.340	.370	S12515-189-ND	6.65	52.75	369.25	1477.00	EZC25DCAS-S189
Wire Wrap .100" Contact Centers										
10/20	1.260	1.575	1.835	.370	S11013-ND	2.84	22.50	157.50	630.00	EZC10DCMH
30/60	3.260	3.575	3.835	.370	S13014-ND	5.17	41.00	287.00	1148.00	EZC30DCMN•
Solder Tail .125" Contact Centers										
28/56	3.785	4.045	4.305	.370	S22821-ND††	6.14	48.75	341.25	1365.00	EZA28DRJH
28/56	3.785	4.045	4.305	.370	S22811-ND	5.04	40.00	280.00	1120.00	EZA28DCSD
28/56	3.785	—	—	.370	S22812-ND	5.04	40.00	280.00	1120.00	EZA28DCSN•
36/72	4.785	5.045	5.305	.370	S23612-ND	6.11	48.50	339.50	1358.00	EZA36DCSN•
50/100	6.535	6.795	7.055	.370	S25011-ND	8.60	68.25	477.75	1911.00	EZA50DCSD
Solder Tail Right Angle .125" Contact Centers										
36/72	4.785	5.045	5.305	.370	S23623-ND	8.51	67.50	472.50	1890.00	EZA36DCCH
Solder Tail .156" Contact Centers										
6/12	1.221	1.534	1.784	.370	S5066-ND	2.68	21.25	148.75	595.00	EZM06DCWN•
22/44	3.717	4.030	4.280	.370	S5220-ND	3.94	31.25	218.75	875.00	EZM22DCWH
22/44	3.717	4.030	4.280	.370	S52210-ND†	4.03	32.00	224.00	896.00	EZM22DCTH
36/72	5.901	6.214	6.464	.370	S5366-ND	4.66	37.00	259.00	1036.00	EZM36DCWN•
43/86	6.993	7.306	7.556	.370	S5437-ND	5.32	42.25	295.75	1183.00	EZM43DCTN•
Wire Wrap .156" Contact Centers										
22/44	3.717	4.030	4.280	.370	S52213-ND	5.26	41.75	292.25	1169.00	EZM22DCMH

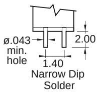
* Card Extender   † .170" Post Length   †† .165" Post Length   • No Mounting Ears

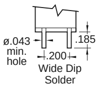
Low Profile











Positions/ Contacts	Dimensions (Inches)				Digi-Key Part No.	Pricing				Sullins Part No.
	A	B	C	D		1	10	100	500	
At Expansion Board Connector										
49/98	PCB Expansion Port Edge Card				S1020-ND	3.12	24.75	173.25	693.00	EZC49DCWN-S420•
Right Angle — Solder Tail — .156" Spacing										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1051-ND	6.33	50.25	351.75	1407.00	EZC05DRAS
6/12	0.875	1.175	1.475	.330	S1061-ND	5.70	45.25	316.75	1267.00	EZC06DRAS
10/20	1.275	1.575	1.875	.330	S1101-ND	4.97	40.48	294.40	1288.00	EZC10DRAS
15/30	1.775	2.075	2.375	.330	S1151-ND	5.99	47.50	332.50	1330.00	EZC15DRAS
18/36	2.075	2.375	2.675	.330	S1181-ND	6.52	51.75	362.25	1449.00	EZC18DRAS
20/40	2.275	2.575	2.875	.330	S1201-ND	7.34	58.25	407.75	1631.00	EZC20DRAS
22/44	2.475	2.775	3.075	.330	S1221-ND	7.62	60.50	423.50	1694.00	EZC22DRAS
25/50	2.775	3.075	3.375	.330	S1251-ND	9.86	78.25	547.75	2191.00	EZC25DRAS
31/62	3.375	3.675	3.975	.330	S1311-ND	9.17	72.75	509.25	2037.00	EZC31DRAS
.156" Contact Centers										
10/20	1.844	2.157	2.499	.325	S5101-ND	7.50	59.50	416.50	1666.00	EZM10DRAS
12/24	2.156	2.469	2.811	.325	S5121-ND	7.94	63.00	441.00	1764.00	EZM12DRAS
22/44	3.716	4.029	4.371	.325	S5221-ND	8.57	68.00	476.00	1904.00	EZM22DRAS
28/56	4.652	4.964	5.303	.438	S5281-ND	13.92	110.50	773.50	3094.00	EZM28DRAS
Eyelet (Standard) — .014" Thick, .140" Spacings										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1052-ND	2.71	21.50	150.50	602.00	EZC05DREH
6/12	0.875	1.175	1.475	.330	S1062-ND	2.84	22.50	157.50	630.00	EZC06DREH
10/20	1.275	1.575	1.875	.330	S1102-ND	3.24	25.75	180.25	721.00	EZC10DREH
15/30	1.775	2.075	2.375	.330	S1152-ND	4.13	32.75	229.25	917.00	EZC15DREH
18/36	2.075	2.375	2.675	.330	S1182-ND	4.57	36.25	253.75	1015.00	EZC18DREH
22/44	2.475	2.775	3.075	.330	S1222-ND	6.24	49.50	346.50	1386.00	EZC22DREH
25/50	2.775	3.075	3.375	.330	S1252-ND	5.48	43.50	304.50	1218.00	EZC25DREH
31/62	3.375	3.675	3.975	.330	S1312-ND	5.20	41.25	288.75	1155.00	EZC31DREH
35/70	3.775	4.075	4.375	.400	S1352-ND	6.74	53.50	374.50	1498.00	EZC35DREH
36/72	3.875	4.175	4.475	.400	S1362-ND	8.69	69.00	483.00	1932.00	EZC36DREH
—	Polarizing Key				PLA-K1-ND	—	1.00	7.00	28.00	PLA-K1
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5062-ND	3.31	26.25	183.75	735.00	EZM06DREH
10/20	1.844	2.157	2.499	.325	S5102-ND	4.19	33.25	232.75	931.00	EZM10DREH
15/30	2.624	2.937	3.279	.325	S5152-ND	4.88	38.75	271.25	1085.00	EZM15DREH
18/36	3.092	3.405	3.747	.325	S5182-ND	5.80	46.00	322.00	1288.00	EZM18DREH
22/44	3.716	4.029	4.371	.325	S5222-ND	5.07	40.25	281.75	1127.00	EZM22DREH
28/56	4.652	4.964	5.303	.438	S5282-ND	7.72	61.25	428.75	1715.00	EZM28DREH
36/72	5.906	6.219	6.566	.438	S5362-ND	11.43	90.75	635.25	2541.00	EZM36DREH
Solder Tail — .140" Spacing										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1053-ND	2.61	20.75	145.25	581.00	EZC05DRTH
6/12	0.875	1.175	1.475	.330	S1063-ND	2.71	21.50	150.50	602.00	EZC06DRTH
10/20	1.275	1.575	1.875	.330	S1103-ND	3.06	24.25	169.75	679.00	EZC10DRTH
15/30	1.775	2.075	2.375	.330	S1153-ND	3.47	27.50	192.50	770.00	EZC15DRTH
20/40	2.275	2.575	2.875	.330	S1203-ND	5.51	43.75	306.25	1225.00	EZC20DRTH
22/44	2.475	2.775	3.075	.330	S1223-ND	5.73	45.50	318.50	1274.00	EZC22DRTH
31/62	3.375	3.675	3.975	.330	S1313-ND	5.89	46.75	327.25	1309.00	EZC31DRTH
36/72	3.875	4.175	4.475	.400	S1363-ND	6.43	51.00	357.00	1428.00	EZC36DRTH
.125" Contact Centers										
28/56	3.785	4.045	4.325	.330	S2283-ND	5.10	40.50	283.50	1134.00	EZA28DRTH
36/72	4.785	5.045	5.325	.330	S2363-ND	7.21	57.25	400.75	1603.00	EZA36DRTH
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5063-ND	4.54	36.00	252.00	1008.00	EZM06DRTH
10/20	1.844	2.157	2.499	.325	S5103-ND	4.35	34.50	241.50	966.00	EZM10DRTH
22/44	3.716	4.029	4.371	.325	S5223-ND	5.54	44.00	308.00	1232.00	EZM22DRTH
25/50	4.184	4.497	4.839	.325	S5253-ND	6.52	51.75	362.25	1449.00	EZM25DRTH
28/56	4.652	4.965	5.303	.438	S5283-ND	8.06	64.00	448.00	1792.00	EZM28DRTH
Solder Tail — .200" Spacing										
.100" Contact Centers										
5/10	0.775	1.075	1.375	.330	S1054-ND	2.27	18.00	126.00	504.00	EZC05DRXH
6/12	0.875	1.175	1.475	.330	S1064-ND	2.36	18.75	131.25	525.00	EZC06DRXH
10/20	1.275	1.575	1.875	.330	S1104-ND	2.68	21.25	148.75	595.00	EZC10DRXH
15/30	1.775	2.075	2.375	.330	S1154-ND	3.09	24.50	171.50	686.00	EZC15DRXH
18/36	2.075	2.375	2.675	.330	S1184-ND	3.09	24.50	171.50	686.00	EZC18DRXH
20/40	2.275	2.575	2.875	.330	S1204-ND	3.94	31.25	218.75	875.00	EZC20DRXH
22/44	2.475	2.775	3.075	.330	S1224-ND	4.47	35.50	248.50	994.00	EZC22DRXH
25/50	2.775	3.075	3.375	.330	S1254-ND	4.47	35.50	248.50	994.00	EZC25DRXH
30/60	3.275	3.575	3.875	.330	S1304-ND	6.74	53.50	374.50	1498.00	EZC30DRXH
36/72	3.875	4.175	4.475	.330	S1364-ND	5.61	44.50	311.50	1246.00	EZC36DRXH
40/80	4.275	4.575	4.875	.330	S1404-ND	6.90	54.75	383.25	1533.00	EZC40DRXH
50/100	5.275	5.575	5.875	.400	S1504-ND	9.67	76.75	537.25	2149.00	EZC50DRXH
60/120	6.275	6.575	6.875	.400	S1604-ND	9.17	72.75	509.25	2037.00	EZC50DRXH
—	Polarizing Key				PLC-K1-ND	—	1.00	7.00	28.00	PLC-K1
.125" Contact Centers										
28/56	3.785	4.045	4.325	.330	S2284-ND	6.65	52.75	369.25	1477.00	EZA28DRXH
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5064-ND	3.02	24.00	168.00	672.00	EZM06DRXH
10/20	1.844	2.157	2.499	.325	S5104-ND	3.02	24.00	168.00	672.00	EZM10DRXH
12/24	2.156	2.469	2.811	.325	S5124-ND	3.59	28.50	199.50	798.00	EZM12DRXH
15/30	2.624	2.937	3.279	.325	S5154-ND	3.47	27.50	192.50	770.00	EZM15DRXH
18/36	3.092	3.405	3.747	.325	S5184-ND	4.16	33.00	231.00	924.00	EZM18DRXH
22/44	3.716	4.029	4.371	.325	S5224-ND	4.16	33.00	231.00	924.00	EZM22DRXH
25/50	4.184	4.497	4.839	.325	S5254-ND	5.32	42.25	295.75	1183.00	EZM25DRXH
28/56	4.652	4.964	5.303	.438	S5284-ND	6.08	48.25	337.75	1351.00	EZM28DRXH
36/72	5.906	6.219	6.566	.438	S5364-ND	7.91	62.75	439.25	1757.00	EZM36DRXH
43/86	7.000	7.302	7.643	.500	S5434-ND	8.73	69.25	484.75	1939.00	EZM43DRXH
Eyelet — .007" Thick, .140" Spacing										
.156" Contact Centers										
6/12	1.220	1.533	1.875	.325	S5065-ND	4.50	35.75	250.25	1001.00	EZM06DSEH
10/20	1.844	2.157	2.499	.325	S5105-ND	4.28	34.00	238.00	952.00	EZM10DSEH
15/30	2.624	2.937	3.279	.325	S5155-ND	4.57	36.25	253.75	1015.00	EZM15DSEH
18/36	3.092	3.405	3.747	.325	S5185-ND	5.36	42.50	297.50	1190.00	EZM18DSEH
22/44	3.716	4.029	4.371	.325	S5225-ND	5.45	43.25	302.75	1211.00	EZM22DSEH
43/86	7.000	7.302	7.643	.500	S5435-ND	9.67	76.75	537.25	2149.00	EZM43DSEH

HIROSE ELECTRIC CO.,LTD.

DIN Connectors

Fig. 1
2-Row, Plug, Right-Angle Type

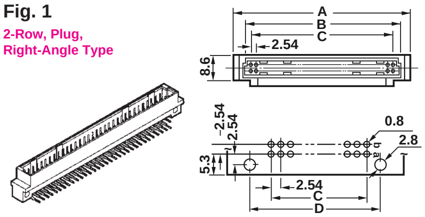


Fig. 2
2-Row, Plug, Straight Type

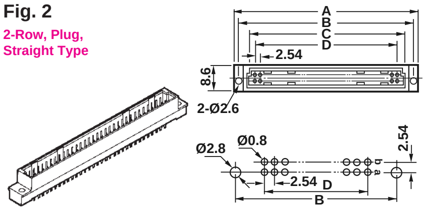


Fig. 3
2-Row, Socket, Right-Angle Type

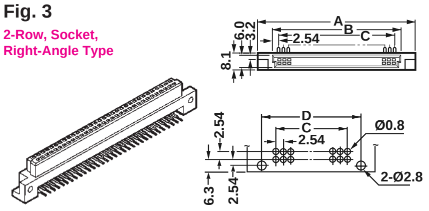
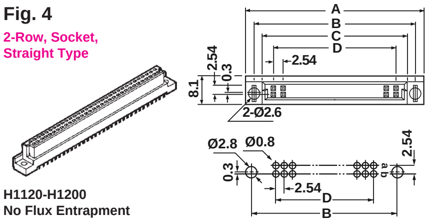


Fig. 4
2-Row, Socket, Straight Type



H1120-H1200
No Flux Entrapment

Fig. 5
3-Row, Plug, Right-Angle Type

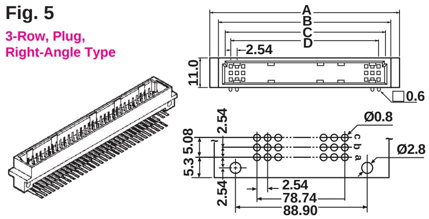


Fig. 6
3-Row, Plug, Straight Type

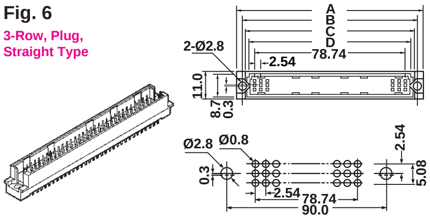


Fig. 7
3-Row, Socket, Right-Angle Type

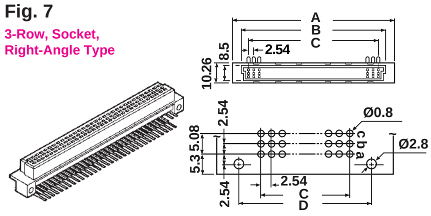


Fig. 8
3-Row, Socket, Straight Type

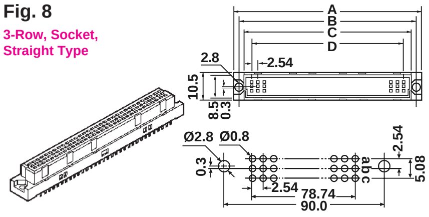


Fig.	No. of Rows	No. of Pins	Type	Dimensions (mm) A	B	C	D	Digi-Key Part No	Pricing 1	10	100	500	1,000	Hirose Part No.
1	2	20	Plug-Right Angle	38.12	29.47	22.86	33.02	H1020-ND	2.67	22.14	164.00	615.00	1090.60	PCN10-20P-2.54DS
		32	Plug-Right Angle	53.26	44.71	38.10	48.26	H1032-ND	3.12	25.92	192.00	720.00	1276.80	PCN10-32P-2.54DS
		44	Plug-Right Angle	68.60	59.95	53.34	63.50	H1044-ND	2.94	25.68	181.90	722.25	1391.00	PCN10-44P-2.54DS
		50	Plug-Right Angle	76.22	67.57	60.96	71.12	H1050-ND	2.64	23.04	163.20	648.00	1248.00	PCN10-50P-2.54DS
		64	Plug-Right Angle	94.00	85.35	78.74	88.90	H1064-ND	3.00	26.16	185.30	735.75	1417.00	PCN10-64P-2.54DS
		90	Plug-Right Angle	127.02	118.37	111.76	121.92	H1090-ND	4.43	38.64	273.70	1086.75	2093.00	PCN10-90P-2.54DS
		100	Plug-Right Angle	139.72	131.07	124.46	134.62	H1100-ND	3.85	33.60	238.00	945.00	1820.00	PCN10-100P-2.54DS
2	2	20	Plug-Straight	43.3	38.1	29.47	22.86	H2020-ND	2.05	17.01	126.00	472.50	837.90	PCN10-20P-2.54DSA
		32	Plug-Straight	58.34	53.34	44.71	38.10	H2032-ND	2.70	22.41	166.00	622.50	1103.90	PCN10-32P-2.54DSA
		44	Plug-Straight	73.58	68.10	59.95	53.34	H2044-ND	2.54	21.06	156.00	585.00	1037.40	PCN10-44P-2.54DSA
		50	Plug-Straight	81.40	76.20	67.57	60.96	H2050-ND	2.78	24.24	171.70	681.75	1313.00	PCN10-50P-2.54DSA
		64	Plug-Straight	99.18	93.98	85.34	78.74	H2064-ND	3.22	28.08	198.90	789.75	1521.00	PCN10-64P-2.54DSA
		90	Plug-Straight	132.20	127.00	118.37	111.76	H2090-ND	5.03	43.92	311.10	1235.25	2379.00	PCN10-90P-2.54DSA
		100	Plug-Straight	144.90	139.70	131.07	124.46	H2100-ND	5.23	45.60	323.00	1282.50	2470.00	PCN10-100P-2.54DSA
3	2	20	Socket-Right Angle	43.10	29.12	22.86	38.10	H2120-ND	2.81	24.48	173.40	688.50	1326.00	PCN10C-20S-2.54DS
		32	Socket-Right Angle	58.34	44.36	38.10	53.34	H2132-ND	3.77	32.88	232.90	924.75	1781.00	PCN10C-32S-2.54DS
		44	Socket-Right Angle	73.58	59.60	53.34	68.58	H2144-ND	4.84	42.24	299.20	1188.00	2288.00	PCN10C-44S-2.54DS
		50	Socket-Right Angle	81.20	67.22	60.96	76.20	H2150-ND	5.12	44.64	316.20	1255.50	2418.00	PCN10C-50S-2.54DS
		64	Socket-Right Angle	98.98	85.00	78.74	93.98	H2164-ND	6.60	57.60	408.00	1620.00	3120.00	PCN10C-64S-2.54DS
		90	Socket-Right Angle	132.00	118.02	111.76	127.00	H2190-ND	7.48	65.78	493.35	1988.35	3812.25	PCN10C-90S-2.54DS
		100	Socket-Right Angle	144.70	130.72	124.46	139.70	H2200-ND	8.52	74.55	568.00	2263.13	4348.75	PCN10C-100S-2.54DS
3	2	20	Socket-Right Angle	43.10	29.12	22.86	38.10	H3020-ND	2.34	19.44	144.00	540.00	957.60	PCN13-20S-2.54DS
		32	Socket-Right Angle	58.34	44.36	38.10	53.43	H3032-ND	2.86	23.76	176.00	660.00	1170.40	PCN13-32S-2.54DS
		44	Socket-Right Angle	73.58	59.60	53.34	68.58	H3044-ND	2.86	24.96	176.80	702.00	1352.00	PCN13-44S-2.54DS
		50	Socket-Right Angle	81.20	67.22	60.96	76.20	H3050-ND	3.52	30.72	217.60	864.00	1664.00	PCN13-50S-2.54DS
		64	Socket-Right Angle	98.98	85.00	78.74	93.98	H3064-ND	3.58	31.20	221.00	877.50	1690.00	PCN13-64S-2.54DS
		90	Socket-Right Angle	132.00	118.02	111.76	127.00	H3090-ND	4.57	39.84	282.20	1120.50	2158.00	PCN13-90S-2.54DS
		100	Socket-Right Angle	144.70	130.72	124.46	139.70	H3100-ND	4.95	43.20	306.00	1215.00	2340.00	PCN13-100S-2.54DS
4	2	20	Socket-Straight	39.12	34.12	29.12	22.86	H1120-ND	4.57	39.84	282.20	1120.50	2158.00	PCN10C-20S-2.54DSA
		32	Socket-Straight	54.36	49.36	44.36	38.10	H1132-ND	3.52	30.72	217.60	864.00	1664.00	PCN10C-32S-2.54DSA
		44	Socket-Straight	69.60	64.60	59.60	53.34	H1144-ND	4.90	42.72	302.60	1201.50	2314.00	PCN10C-44S-2.54DSA
		50	Socket-Straight	77.22	72.22	67.22	60.96	H1150-ND	5.12	44.64	316.20	1255.50	2418.00	PCN10C-50S-2.54DSA
		64	Socket-Straight	95.00	90.00	85.00	78.74	H1164-ND	6.13	53.52	379.10	1505.25	2899.00	PCN10C-64S-2.54DSA
		90	Socket-Straight	128.02	123.02	118.02	111.76	H1190-ND	7.15	62.92	471.90	1901.90	3646.50	PCN10C-90S-2.54DSA
		100	Socket-Straight	140.72	135.72	130.72	124.46	H1200-ND	7.13	62.70	470.25	1895.25	3633.75	PCN10C-100S-2.54DSA
4	2	32	Socket-Straight-W/W	54.36	49.36	43.36	38.10	H4232-ND	6.68	58.32	413.10	1640.25	3159.00	PCN10-32S-2.54WB
		50	Socket-Straight-W/W	77.22	72.22	67.22	60.96	H4250-ND	8.47	74.13	564.80	2250.38	4324.25	PCN10-50S-2.54WB
		64	Socket-Straight-W/W	95.00	99.00	85.00	78.74	H4264-ND	10.15	88.83	676.80	2696.63	5181.75	PCN10-64S-2.54WB
		90	Socket-Straight-W/W	128.02	123.00	118.00	111.76	H4290-ND	12.35	108.78	911.40	3748.50	7203.00	PCN10-90S-2.54WB
		20	Socket-Straight	39.12	34.12	29.12	22.86	H4020-ND	1.72	14.31	106.00	397.50	704.90	PCN13-20S-2.54DSA
		32	Socket-Straight	54.36	49.36	44.36	38.10	H4032-ND	2.05	17.01	126.00	472.50	837.90	PCN13-32S-2.54DSA
		44	Socket-Straight	69.60	64.60	59.60	53.34	H4044-ND	2.37	19.71	146.00	547.50	970.90	PCN13-44S-2.54DSA
		50	Socket-Straight	77.22	72.22	67.22	60.96	H4050-ND	2.63	21.87	162.00	607.50	1077.30	PCN13-50S-2.54DSA
		64	Socket-Straight	95.00	90.00	85.00	78.74	H4064-ND	3.02	25.11	186.00	697.50	1236.90	PCN13-64S-2.54DSA
		90	Socket-Straight	128.02	123.02	118.02	111.76	H4090-ND	3.27	28.56	202.30	803.25	1547.00	PCN13-90S-2.54DSA
		100	Socket-Straight	140.72	135.72	130.72	124.46	H4100-ND	3.55	30.96	219.30	870.75	1677.00	PCN13-100S-2.54DSA
4	2	64	Socket-Straight	95.00	90.00	85.00	78.74	H8164-ND	6.00	52.32	370.60	1471.50	2834.00	PCN10MC-64S-2.54DSA
		100	Socket-Straight	140.72	135.72	130.72	124.46	H8200-ND	8.90	77.91	593.60	2365.13	4544.75	PCN10MC-100S-2.54DSA
1	2	64	Plug-Right Angle	94.00	85.35	78.74	88.90	H5164-ND	5.69	49.68	351.90	1397.25	2691.00	PCN10MC-64P-2.54DS
		100	Plug-Right Angle	139.72	131.07	124.46	134.62	H5200-ND	6.35	55.44	392.70	1559.25	3003.00	PCN10MC-100P-2.54DS
5	3	64*	Plug-Right Angle	94.00	88.00	85.25	78.74	H5064-ND	4.15	36.24	256.70	1019.25	1963.00	PCN10-64ACP-2.54DS
		96	Plug-Right Angle	94.00	88.00	85.25	78.74	H5096-ND	4.46	38.88	275.40	1093.50	2106.00	PCN10-96P-2.54DS
		96	Plug-Right Angle	94.00	88.00	85.25	78.74	H5196-ND	7.35	64.68	485.10	1955.10	3748.50	PCN10MC-96P-2.54DS
6	3	64*	Plug-Straight	95.00	90.00	88.00	85.25	H6064-ND	4.07	35.52	251.60	999.00	1924.00	PCN10-64ACP-2.54DSA
		96	Plug-Straight	95.00	90.00	88.00	85.25	H6096-ND	6.05	52.80	374.00	1485.00	2860.00	PCN10-96P-2.54DSA
7	3	64*	Socket-Right Angle	94.00	85.00	78.74	88.90	H7064-ND	4.26	37.20	263.50	1046.25	2015.00	PCN13-64ACS-2.54DS
		96	Socket-Right Angle	94.00	85.00	78.74	88.90	H7096-ND	5.20	45.36	321.30	1275.75	2457.00	PCN13-96S-2.54DS
8	3	96	Socket-Straight	95.00	90.00	85.00	78.74	H8196-ND	6.27	54.72	387.60	1539.00	2964.00	PCN10MC-96S-2.54DSA
		64*	Socket-Straight	95.00	90.00	85.00	78.74	H8064-ND	5.06	44.16	312.80	1242.00	2392.00	PCN10-64ACS-2.54DSA
		96	Socket-Straight	95.00	90.00	85.00	78.74	H8096-ND	3.66	31.92	226.10	897.75	1729.00	PCN13-96S-2.54DSA
		96	Socket-Straight-W/W	95.00	90.00	85.00	78.74	H8296-ND	12.77	112.48	942.40	3876.00	7448.00	PCN10-96S-2.54WB

* 64 pins; in 3-row format with pins on outside rows and middle row open.

DIN Connectors

Fig. 1

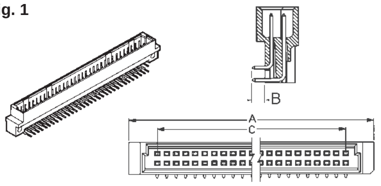


Fig. 2

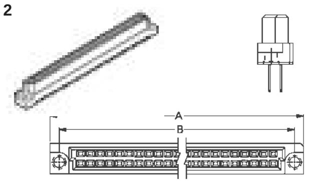


Fig. 3

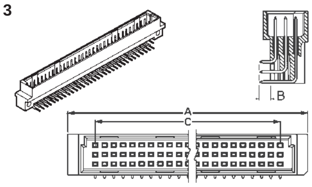


Fig. 4

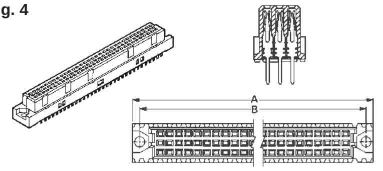


Fig. 5

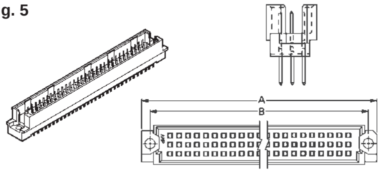


Fig. 6

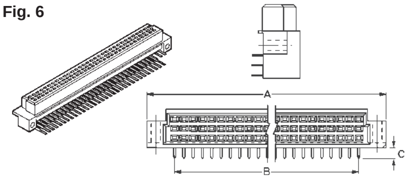


Fig. 7

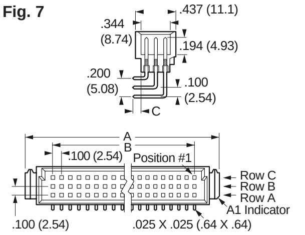


Fig. 8

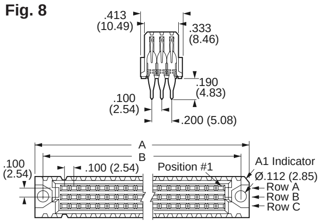


Fig. 9

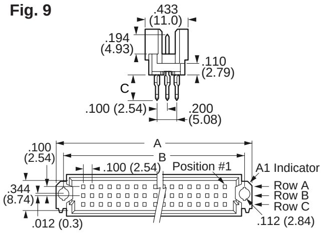


Fig. 10

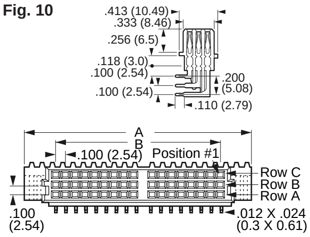


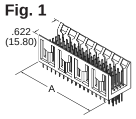
Fig.	No. of Rows	No. of Pins	Type	Dimensions – Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	25	AMP Part No.
1	2	64	Plug, Right Angle	3.700 (93.98)	0.104 (2.64)	3.100 (78.74)	A1250-ND	3.15	70.57	533248-1
2	2	64	Socket, Straight	3.735 (94.87)	3.543 (89.99)	—	A1252-ND	3.38	75.63	650861-5
	2	32	Socket, Straight	2.160 (54.86)	1.969 (50.01)	—	A1253-ND	2.93	68.10	650858-5
3	3	96	Plug, Right Angle	3.700 (93.98)	0.104 (2.64)	3.100 (78.74)	A1254-ND	3.37	75.38	650473-5
	3	64*	Plug, Right Angle	3.700 (93.98)	0.104 (2.64)	3.100 (78.74)	A1255-ND	2.82	63.13	650945-5
4	3	96	Socket, Straight	3.700 (93.98)	3.543 (89.99)	—	A1258-ND	4.05	90.75	535043-5
	3	64*	Socket, Straight	3.700 (93.98)	3.543 (89.99)	—	A1259-ND	3.38	75.63	650408-5
5	3	96	Plug, Straight	3.740 (95.00)	3.543 (89.99)	—	A1260-ND	3.28	73.50	650470-5
	3	64*	Plug, Straight	3.740 (95.00)	3.543 (89.99)	—	A1261-ND	2.70	60.50	650934-5
6	3	96	Socket, Right Angle	3.692 (93.78)	3.100 (78.74)	0.110 (2.79)	A1262-ND	4.39	98.21	650461-5
	3	64*	Socket, Right Angle	3.692 (93.78)	3.100 (78.74)	0.110 (2.79)	A1263-ND	3.59	80.35	650870-4
	3	96	Socket, Right Angle	3.692 (93.78)	3.100 (78.74)	0.167 (4.24)	A1264-ND	4.39	98.21	650462-5
7	3	48	Pin, Right Angle	2.100 (53.34)	1.500 (38.10)	0.104 (2.64)	A1275-ND	2.36	52.77	650478-5
	2	32	Pin, Right Angle	2.100 (53.34)	1.500 (38.10)	0.104 (2.64)	A1276-ND	2.12	49.13	650946-5
	3	120	Pin, Right Angle	4.500 (114.30)	3.900 (99.06)	0.104 (2.64)	A1277-ND	5.07	113.49	650906-5
	3	150	Pin, Right Angle	5.500 (139.70)	4.900 (124.46)	0.104 (2.64)	A1278-ND	5.32	123.50	650907-5
	3	96	Pin, Right Angle	3.700 (93.98)	3.100 (78.74)	—	A1279-ND	3.38	75.63	650947-5
	2	64	Pin, Right Angle	3.700 (93.98)	3.100 (78.74)	—	A1280-ND	2.83	63.34	650951-5
	3	48	Pin, Right Angle	2.100 (53.34)	1.500 (38.10)	.130 (3.30)	A1281-ND	2.36	52.94	650948-5
	3	120	Pin, Right Angle	4.500 (114.30)	3.900 (99.06)	.130 (3.30)	A1283-ND	5.07	113.49	650949-5
8	3	96	Vertical Receptacle	3.700 (93.98)	3.543 (89.99)	—	A1285-ND	4.05	90.75	535090-5
	2	64	Vertical Receptacle	3.700 (93.98)	3.543 (89.99)	—	A1286-ND	3.38	75.63	650956-5
	3	48	Vertical Receptacle	2.100 (53.34)	1.500 (38.10)	—	A1287-ND	3.38	75.63	535070-5
	3	120	Vertical Receptacle	4.500 (114.30)	4.343 (110.31)	—	A1289-ND	5.56	124.40	535098-5
	3	150	Vertical Receptacle	5.500 (139.70)	5.343 (135.71)	—	A1290-ND	7.38	164.58	650405-5
	3	96	Vertical Receptacle with Action Pin	3.700 (93.98)	3.543 (89.99)	—	A1291-ND	4.05	90.75	535032-4
	2	64	Vertical Receptacle with Action Pin	3.700 (93.98)	3.543 (89.99)	—	A1292-ND	3.59	80.35	535059-5
	3	48	Vertical Receptacle with Action Pin	2.100 (53.34)	1.944 (49.38)	—	A1293-ND	2.80	65.08	535034-5
	2	32	Vertical Receptacle with Action Pin	2.100 (53.34)	1.944 (49.38)	—	A1294-ND	2.64	61.20	535068-5
	3	120	Vertical Receptacle with Action Pin	4.500 (114.30)	4.343 (110.31)	—	A1295-ND	5.01	116.35	535079-5
	3	150	Vertical Receptacle with Action Pin	5.500 (139.70)	5.343 (135.71)	—	A1296-ND	6.66	154.70	535080-5
9	3	48	Vertical Pin with Solder Posts	2.140 (54.36)	1.943 (49.35)	—	A1237-ND	2.28	51.05	650477-5
	2	32	Vertical Pin with Solder Posts	2.140 (54.36)	1.943 (49.35)	—	A1238-ND	1.97	45.68	650936-5
	3	120	Vertical Pin with Solder Posts	4.535 (115.19)	4.343 (110.31)	—	A1239-ND	3.98	92.30	650910-5
	3	150	Vertical Pin with Solder Posts	5.535 (140.59)	5.343 (135.71)	—	A1297-ND	4.76	110.50	650911-5
	3	96	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	—	A1241-ND	3.29	73.73	650889-5
	2	64	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	0.250 (6.35)	A1242-ND	3.29	73.73	650912-5
	3	48	Vertical Pin with Action Pin Posts	2.140 (54.36)	1.943 (49.35)	0.250 (6.35)	A1243-ND	2.44	56.58	650918-5
	2	32	Vertical Pin with Action Pin Posts	2.140 (54.36)	1.943 (49.35)	0.250 (6.35)	A1244-ND	2.19	50.86	650931-5
	3	120	Vertical Pin with Action Pin Posts	4.535 (115.19)	4.343 (110.31)	0.250 (6.35)	A1245-ND	4.20	97.50	650921-5
	3	150	Vertical Pin with Action Pin Posts	5.535 (140.59)	5.343 (135.71)	0.250 (6.35)	A1246-ND	4.98	115.70	650924-5
	3	96	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	0.521 (13.23)	A1265-ND	4.23	94.58	650909-5
	2	64	Vertical Pin with Action Pin Posts	3.740 (95.00)	3.543 (89.99)	0.521 (13.23)	A1266-ND	3.42	76.57	650930-5
	2	32	Vertical Pin with Action Pin Posts	2.140 (54.36)	1.943 (49.35)	0.521 (13.23)	A1268-ND	2.30	53.44	650932-5
	3	150	Vertical Pin with Action Pin Posts	5.535 (140.59)	5.343 (135.71)	0.521 (13.23)	A1270-ND	5.94	137.80	650923-5
10	3	48	Right Angle Receptacle	2.096 (53.24)	1.900 (48.26)	—	A1271-ND	3.37	75.38	650868-5
	3	120	Right Angle Receptacle	4.496 (114.20)	4.300 (109.22)	—	A1273-ND	5.92	132.41	650874-5
	3	150	Right Angle Receptacle	5.496 (139.60)	5.300 (134.62)	—	A1274-ND	6.92	160.55	650875-5

* 64 pins; in 3-row format with pins on outside rows and middle row open.

AMP tyco Electronics
Authorized Distributor

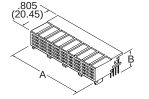
Z-Pack 2mm FB (Futurebus+) Connectors

Fig. 1



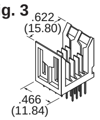
Signal Module, Vertical Pin

Fig. 2



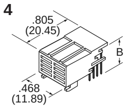
Signal Module, Right-Angle Receptacle

Fig. 3



Power Module, Vertical Pin

Fig. 4



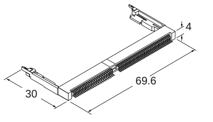
Power Module, Right Angle Receptacle

The Z-PACK 2mm FB two-piece connector system uses a modular concept and a 2mm contact pitch to provide high-density, high-speed signal and power connections for Futurebus+ and Futurebus+ "like" applications. **Product Facts:** • High-density connections; four-row, 2mm x 2mm circuit grid • Modular design for signal and power connections • Designed to meet International Specifications IEC 1076-4-0X (48B) and EIA IS 64 • Module assemblies are end-to-end stackable • Choice of solder leads or compliant press-fit leads • Flat rock receptacle tooling • Unique "cold hold" receptacle retention feature requires no tooling for lower applied cost • Integral receptacle lead organizer **Pin and Receptacle Contacts:** Duplex plated gold flash over 0.0008 (.000030) min. palladium-nickel on mating surface, 0.0038 (.000150) min. tin-lead on solder lead, with entire contact underplated 0.0013 (.000050) nickel **Pin Contacts:** Phosphor bronze **Receptacle Contacts:** Copper alloy 18C **Housing:** Liquid crystal polymer

Fig.	Description	No.of Pos.	Dim. – Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
1	With Solder Leads	24	.468 (11.89)	—	A3262-ND	2.33	2.12	536501-1
		48	.940 (23.88)	—	A3263-ND	3.87	3.51	536501-2
		96	1.885 (47.88)	—	A3264-ND	8.71	7.80	536501-3
		192	3.775 (95.89)	—	A3265-ND	12.35	11.19	536501-4
	With Compliant Press-Fit Leads	24	.468 (11.89)	—	A3266-ND	2.36	2.14	536504-1
		48	.940 (23.88)	—	A3267-ND	3.87	3.51	536504-2
		96	1.885 (47.88)	—	A3268-ND	8.71	7.80	536504-3
		192	3.775 (95.89)	—	A3269-ND	15.15	13.52	536504-4
2	With Solder Leads	24	.468 (11.89)	.107 (2.72)	A3270-ND	2.54	2.31	536507-1
		48	.940 (23.88)	.107 (2.72)	A3271-ND	5.30	4.76	536507-2
		96	1.885 (47.88)	.107 (2.72)	A3272-ND	9.49	8.50	536507-3
		192	3.775 (95.89)	.107 (2.72)	A3273-ND	16.67	14.93	536507-4
		24	.468 (11.89)	.139 (3.53)	A3274-ND	3.12	2.80	536510-1
		48	.940 (23.88)	.139 (3.53)	A3275-ND	5.30	4.76	536510-2
		96	1.885 (47.88)	.139 (3.53)	A3276-ND	9.49	8.50	536510-3
		192	3.775 (95.89)	.139 (3.53)	A3277-ND	16.67	14.93	536510-4
	With Compliant Press-Fit Leads	24	.468 (11.89)	—	A3278-ND	1.92	1.73	536511-1
		48	.940 (23.88)	—	A3279-ND	5.30	4.76	536511-2
		96	1.885 (47.88)	—	A3280-ND	9.49	8.50	536511-3
		192	3.775 (95.89)	—	A3281-ND	16.67	14.93	536511-4
3	With Solder Leads	8	—	—	A3282-ND	2.57	2.33	536600-1
	With Compliant Press-Fit Leads	8	—	—	A3283-ND	2.57	2.33	536603-1
4	With Solder Leads	8	—	.107 (2.72)	A3284-ND	2.83	2.54	536607-1
		8	—	.139 (3.53)	A3285-ND	4.64	4.20	536613-1
	With Compliant Press-Fit Leads	8	—	—	A3286-ND	4.66	4.23	536614-1

HIROSE ELECTRIC CO.,LTD.

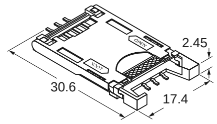
DIMM Sockets — SX6E Series



Features: The SX6E Series are 0.8mm pitch horizontal SMT type sockets conforming to the 144-pin, 8-byte Small Outline DIMM specification which has been standardized by JEDEC. These miniature, lightweight sockets succeed in establishing a mounting height of only 4mm.
Applications: Personal computers, office automation equipment, measuring instruments, communications equipment, medical equipment, factory automation, game machines, EWS, general-use computers, etc.
Ratings: Temp. Range: -55°C to +85°C Volt: 25V AC Current: 0.3A

No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
144	Conn DIMM SMD	H2341-ND	11.61	9.68	8.58	SX6E-144S-O.8SH

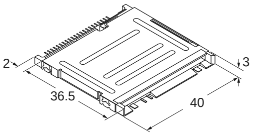
SIM Card Sockets — ID1A Series



Features: Suited for Plug-in SIM Cards of the GSM Standard (11.11). SIM card Subscriber Identity Modules are used for subscriber identification with portable telephone terminals GSM standard (11.11) plug-in SIM cards. These sockets are miniature and thin with a height of 2.45mm, length of 30.6mm, and width of 17.4mm.
Applications: Portable terminals and equipment that uses GSM Standard (11.11) plug-in SIM cards.
Ratings: Current: 1A Temp. Range: -30°C to +80°C. Volt: 100V AC

Digi-Key Part No.	Bulk Price Each 1	25	100	Hirose Part No.	Digi-Key Part No.	T & R Pricing 500	Hirose Part No.
H1016-ND	2.97	2.38	1.84	ID1A-6S-2.54SF	H1016TR-ND	702.00	ID1A-6S-2.54SF(21)

SmartMedia Connectors — MCR 102 Series



Features: The MCR102 Series of miniature, thin connectors conforms to the SSFDC Forum of "SmartMedia" miniature storage media. Available in three types: 3.3V card type, 5V card type, and a combined type for both 3.3V and 5V cards.
Applications: Digital cameras, PDA, voice recorders, and other equipment that uses SmartMedia.
Ratings: Current: 0.5A Temp Range: -20°C to +60°C Voltage: 125V AC

No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
22	Smart Card 3.3V/5V	H2319-ND *NEW!*	4.99	3.87	3.10	MCR102A-22R-1.27SF
22	Smart Card 3.3V	H2339-ND	4.29	3.44	2.66	MCR102-22RL-1.27SF
22	Smart Card 5V	H2340-ND	5.34	4.27	3.30	MCR102-22RH-1.27SF

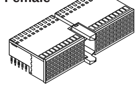
Sullins ELECTRONICS CORPORATION

Hard Metric Compact PCI Connectors

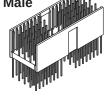
Designed for the Telecommunications industry to replace the DIN 41612 Series of 2 piece connectors. It is much higher density than the older 4162 and the IEC Specification allows for greater standardization.

Specifications: • Insulator Material: Liquid Crystal Polymer (LCP) UL94V-O • Contact Material: Phosphor Bronze • Current Rating: 1 Amp • Dielectric Withstanding Voltage: AC 1000V for 1 Minute • Insulator Resistance: 1000 megohm Minimum at DC 500V • Contact Resistance: 30 milliohm Maximum at DC 100mA • Operating Temperature: -65°C to + 125°C

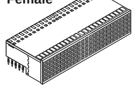
Type A Female



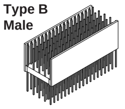
Type A Male



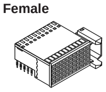
Type B Female



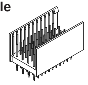
Type B Male



Type C Female



Type C Male



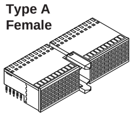
No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	Sullins Part No.
110	Type A Female HM Unshielded	S3100-ND	6.31	5.72	2AF1105F001-0-H
110	Type A Female HM Shielded	S3101-ND	7.50	6.80	2AF1105F001-1-H
154	Type A Male cPCI HM	S3102-ND	6.31	5.72	2AM154P1011-1-H
154	Type A Male HM cPCI Hot Swap	S3103-ND	7.50	6.80	2AM154P1012-1-H
100	Type A Male HM cPCI Telephony	S3104-ND	4.64	4.20	2AM100P1013-1-H
95	Type B19 Female HM Unshielded	S3105-ND	6.07	5.50	2B19F955F001-0-H
95	Type B19 Female HM Shielded	S3106-ND	6.65	6.03	2B19F955F001-1-H
133	Type B19 Male HM	S3107-ND	5.46	4.95	2B19M133P1001-1-H
110	Type B22 Female HM Unshielded	S3108-ND	7.10	6.44	2B22F1105F001-0-H
110	Type B22 Female HM Shielded	S3109-ND	7.50	6.80	2B22F1105F001-1-H
154	Type B22 Male HM	S3110-ND	6.17	5.60	2B22M154P1001-1-H
154	Type B22 Male HM CPCI Telephony	S3111-ND	6.89	6.24	2B22M154P1013-1-H
125	Type B25 Female HM Shielded	S3112-ND	9.41	8.52	2B25F1255F001-1-H
125	Type B25 Female HM Unshielded	S3113-ND	7.16	6.48	2B25F1255F001-0-H
175	Type B25 Male HM	S3114-ND	7.02	6.36	2B25M175P1001-1-H
55	Type C Female HM Unshielded	S3115-ND	4.40	3.99	2CF555F001-0-H
55	Type C Female HM Shielded	S3116-ND	5.70	5.16	2CF555F001-1-H
77	Type C Male HM	S3117-ND	3.31	3.00	2CM77P1001-1-H

HIROSE ELECTRIC CO.,LTD.

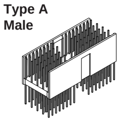
2mm Hard Metric Connector

Applications: Switchboards, transmission systems, Cellular base stations, industrial computer boards, measuring instruments, control equipment. **Product Specifications: Rated current**: 1.5A **Operating Temp:** -55 to +85ºC **Rated volt:** AC 300V **Material: Headers & Receptacle - Insulator:** PBT resin, Gray **Terminal:** Phosphor bronze **PCN21B - Contact area:** Nickel base, gold plating **PCB leads:** Nickel base, tin plating **Receptacle Shield:** Phosphor bronze **PCN21B - Contact area:** Nickel base, gold plating. **PCB leads:** Nickel base, tin plating. UL94V-0

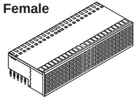
Type A Female



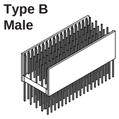
Type A Male



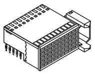
Type B Female



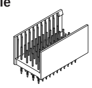
Type B Male



Type C Female



Type C Male



No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	Hirose Part No.
110	Recept. Style A, Female, w/out ground plate	H3208-ND	6.50	5.25	PCN21B-110SA-2PF
110	Header Style A, Male, Short pin	H3200-ND	4.58	3.56	PCN21B-110PA-2PF
110	Header Style A, Male, Short pin w/ground	H3201-ND	5.45	4.23	PCN21B-110PA-2PF-G
110	Recept. Style B, Female, w/out ground plate	H3210-ND	7.22	5.61	PCN21B-110SB-2PF
125	Recept. Style B, Female, w/out ground plate	H3209-ND	7.12	5.76	PCN21B-125SB-2PF
110	Header Style B, Male, Short pin	H3204-ND	4.55	3.54	PCN21B-110PB-2PF
110	Header Style B, Male, Short pin w/ground	H3205-ND	5.42	4.21	PCN21B-110PB-2PF-G
125	Header Style B, Male, Short pin	H3202-ND	5.05	3.92	PCN21B-125PB-2PF
125	Header Style B, Male, Short pin w/ground	H3203-ND	6.03	4.68	PCN21B-125PB-2PF-G
55	Recept. Style C, Female, w/out ground plate	H3211-ND	4.67	3.63	PCN21B-55SC-2PF
—	Bottom ground plate for Recept Style C	H3212-ND	1.48	1.08	PCN21A-SC-G
55	Header Style C, Male, Short pin	H3206-ND	3.07	2.39	PCN21B-55PC-2PF
55	Header Style C, Male, Short pin w/ground	H3207-ND	3.48	2.70	PCN21B-55PC-2PF-G
—	Coding key for Male Header, Yellow - 3.3V	H3213-ND	.45	.27	PCN21-P-CK(A)
—	Coding key for Female Recept, Yellow - 3.3V	H3214-ND	.45	.27	PCN21-S-CK(A)
—	Coding key for Male Header, Blue - 5V	H3215-ND	.45	.27	PCN21-P-CK(B)
—	Coding key for Female Recept, Blue - 5V	H3216-ND	.45	.27	PCN21-S-CK(B)

DIMM Sockets — SX1 Series

Features: The SX1 Series of horizontal SMT type sockets with 0.635mm pitch comply with the "Small Outline DIMM" specification standardized by JEDEC. Compared with the 72-pin DRAM SIMM socket, these SX1 sockets are about half the size. These sockets can be used in applications requiring double density (i.e., both sides) and permit module boards to be designed with higher level functions and higher density. **Applications:** Personal computers, office automation equipment, measuring instruments, communications equipment, medical equipment, factory automation, game machines, EWS, general-use computers, etc. **Ratings:** Temp. Range -55°C to +85°C Volt: 25V AC Current: 0.5A

Fig. 1

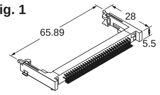


Fig. 2

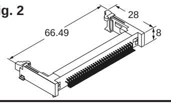


Fig. 3

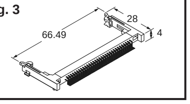


Fig.	No. of Pos.	Description	Digi-Key Part No.	Price Each 1	25	100	Hirose Part No.
		Standard					
1	72	Height 5.5mm, DIMM key 3.3V	H2342-ND	5.17	4.14	3.20	SX1B-72S-0.635SH
	72	Height 5.5mm, DIMM key 5V	H2343-ND	5.17	4.14	3.20	SX1BA-72S-0.635SH
		High Profile					
2	72	Height 8.0mm, DIMM key 3.3V	H2344-ND	7.78	6.54	5.14	SX1C-72S-0.635SH
	72	Height 8.0mm, DIMM key 5V	H2345-ND	7.78	6.54	5.14	SX1CA-72S-0.635SH
		Low Profile					
3	72	Height 4.0mm, DIMM key 3.3V	H2346-ND	6.08	4.87	3.76	SX1E-72S-0.635SH
	72	Height 4.0mm, DIMM key 5V	H2347-ND	6.08	4.87	3.76	SX1EA-72S-0.635SH

SIMM Sockets

Features and Benefits:

- Zero insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Guaranteed 2 points of contact per readout with standard JEDEC module
- Anti-overstress latch feature provides extra protection during module removal
- Polarization posts provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- EIA standard dimensions.

Electrical Specifications:

- Voltage: 250V
- Current: 1.0A
- Contact Resistance: 30mΩ max.
- Dielectric Withstanding Voltage: 1000V AC
- Insulation Resistance: 5000MΩ min.
- Capacitance: 2.5 pF max.

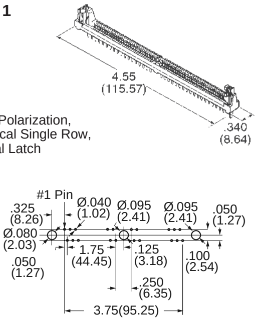
Mechanical Specifications:

- Normal Force: 150g
- Durability: 25 cycles.

Physical Specifications:

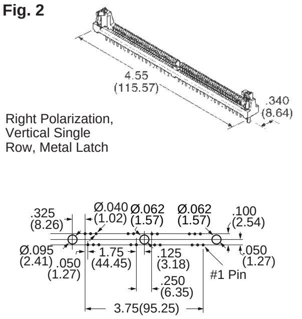
- Housing: Black LCP, UL 94V-0
- Latch: Stainless Steel
- Contact: Phosphor Bronze Alloy
- Temperature: -40°C to +85°C

Fig. 1



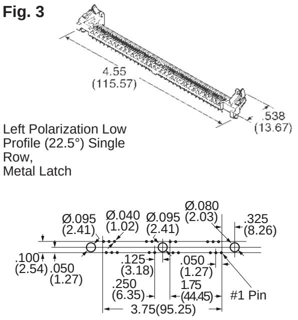
Left Polarization, Vertical Single Row, Metal Latch

Fig. 2



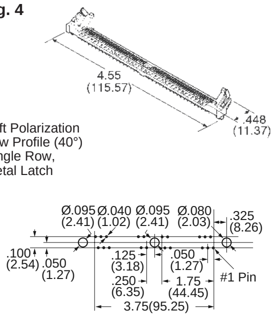
Right Polarization, Vertical Single Row, Metal Latch

Fig. 3



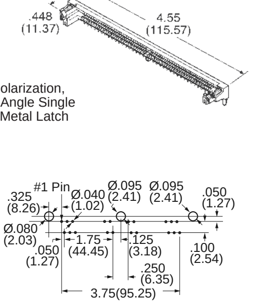
Left Polarization Low Profile (22.5°) Single Row, Metal Latch

Fig. 4



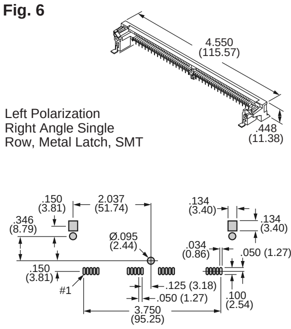
Left Polarization Low Profile (40°) Single Row, Metal Latch

Fig. 5



Left Polarization, Right Angle Single Row, Metal Latch

Fig. 6



Left Polarization Right Angle Single Row, Metal Latch, SMT

Fig.	Plate	Digi-Key Part No.	Price Each 1	25	50	100	Molex Part No.
1	Tin	WM1700-ND	3.22	2.96	2.69	2.42	15-82-0775
	Gold	WM1702-ND	3.22	2.96	2.69	2.42	15-82-0762
2	Tin	WM1701-ND	3.22	2.96	2.69	2.42	15-82-0777
	Gold	WM1703-ND	3.22	2.96	2.69	2.42	15-82-0788
3	Tin	WM1704-ND	3.22	2.96	2.69	2.42	15-82-0678
	Gold	WM1705-ND	3.22	2.96	2.69	2.42	15-82-0675
4	Tin	WM1706-ND	4.63	4.25	3.86	3.48	15-82-0649
	Gold	WM1707-ND	3.22	2.96	2.69	2.42	15-82-0627
5	Tin	WM1709-ND	6.04	5.54	5.04	4.54	15-82-1538
	Gold	WM1708-ND	10.87	9.97	9.07	8.16	15-82-0312
6	Gold	WM18502-ND	14.50	13.30	12.09	10.88	15-82-0328

DIMM Sockets

Features and Benefits:

- Accepts JEDEC M0-161 modules for 100% industry compatibility
- Dual ejector latches for easy module removal
- Palladium nickel with gold flash plating for improved reliability
- Added contact wipe for improved reliability

Electrical Specifications:

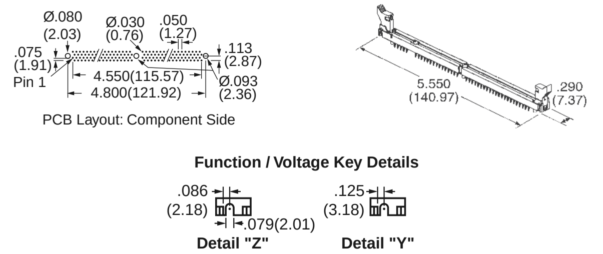
- Voltage: 100V
- Current: 1.0A
- Contact Resistance: 20mΩ max.
- Dielectric Withstanding Voltage: 750V AC
- Insulation Resistance: 100MΩ min.

Mechanical Specifications:

- Mating Force: 5 oz. per pair
- Durability: 25 cycles min.

Physical Specifications:

- Housing and Latch: High temperature resistant thermoplastic, UL 94V-0
- Contact: Phosphor Bronze
- Plating: Selective palladium nickel with gold flash with tin/lead on solder tails
- Temperature: -40°C to +85°C



Description	Circuits	Function Key	Voltage Key	Digi-Key Part No.	Price Each 1	25	50	Molex Part No.
DRAM 3.3V	168	Detail Y	Detail Y	WM1710-ND	4.31	3.95	3.60	71251-0001
SDRAM 3.3V	168	Detail Z	Detail Y	WM1714-ND	4.02	3.69	3.35	71251-0016
Unbuffered 3.3V	168	Detail X	Detail Y	WM1712-ND	4.02	3.69	3.35	71251-0012
DRAM 3.3V, Forklock Version	168	Detail Y	Detail Y	WM18497-ND†	4.00	3.67	3.34	71736-0001

† White glass-filled LCP, UL94-0

S.O. DIMM Sockets

Features and Benefits:

- Size 144 circuits
- S.O. DIMM sockets accept JEDEC standard DRAM and SDRAM modules; SGRAM socket accepts JEDEC standard SGRAM modules
- Plastic latch prevents scratching of module, while metal anti-overstress feature protects latch from bending too far in or out
- Front solder tabs provide secure PCB hold-down
- Polarization key assures proper module insertion

Electrical Specifications:

- Power Supply: 3.3V
- Voltage: 100V
- Current: 0.3A
- Dielectric Withstanding Voltage: 200V AC/1 min.
- Insulation Resistance: 1000MΩ min.

Physical Specifications

- Temperature: -55°C to +85°C

Fig. 1 — S.O. DIMM, Right Angle, SMT

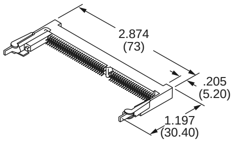


Fig. 2 — S.O. DIMM, Right Angle, SMT

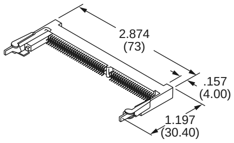
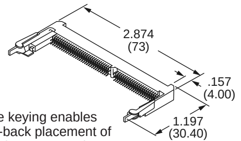


Fig. 3 — S.O. DIMM, Right Angle, SMT, Reverse Keying



Reverse keying enables back-to-back placement of sockets for space savings

Fig. 4 — SGRAM, Right Angle, SMT

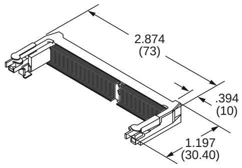
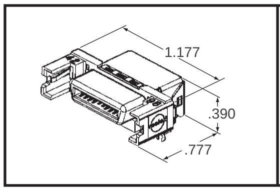
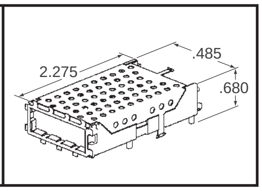


Fig.	Description	Max. Contact Resistance	Mounted Height	Digi-Key Part No.	Price Each 1	25	50	Molex Part No.
	S.O. DIMM Sockets							
1	SMT, Right Angle	60mΩ	5.2mm	WM18499-ND	5.64	5.17	4.70	54142-1440
2	SMT, Right Angle	50mΩ	4.0mm	WM18498-ND	5.84	5.36	4.87	54144-1440
3	SMT, Right Angle, Reverse Keying	60mΩ	4.0mm	WM18501-ND	5.64	5.17	4.70	54432-1440
	SGRAM Socket							
4	SMT, Right Angle	70mΩ	10.0mm	WM18500-ND	5.24	4.81	4.37	54189-1440

Gigabit Interface Converter (GBIC)





Features and Benefits:

• Meets Gigabit Interface Converter (GBIC) specifications • Rugged blind-mate guide ears with +/-2.00mm (0.079") mismating tolerance • Shielded for improved EMI protection with ESD ground contacts and optional shielding pegs • Staggered "hot-plug" first-mate, last-break contacts on 1.27mm (.050") pitch spacing

Electrical:

• Voltage: 30V • Current: 1.0A • Contact Resistance: 20m Ohms. • Dielectric Withstanding Voltage: 500V. • Insulation Resistance: 1000M Ohms.

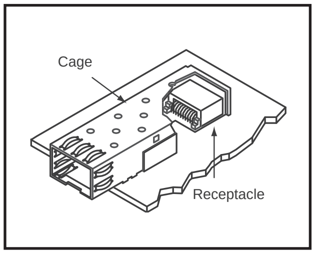
GBIC Guide Frame:

• Complies with the current GBIC standard (SFF-8053) • All metal construction provides the ultimate in EMI protection • Plated die cast body provides the option to solder directly to the PCB • EMI gasket provides 360 degrees of contact to the chassis • Compatible with the industry standard footprint • Mounting options for horizontal and vertical applications

Description	Digi-Key Part No.	Price Each 1	25	50	Molex Part No.
20 Pos., SCA-2 Recept with Shielding Pegs	WM1630-ND	13.47	12.35	11.23	73927-0002-TR24
Guide Frame for GBIC	WM1631-ND	15.13	13.88	12.62	73847-0001-TR12
Adapt. w/o Serial ID,Copper GBIC to DB9 Female	WM1632-ND	58.04	53.21	48.38	73086-0001-TR12

Small Frame Pluggable Connectors and Frames

Features:



The SFP system follows the function of the standard Gigabit Interface Converter (GBIC) products, with reduced size and increased data-transfer rates at and beyond two Gigabits per second (Gbps).

A multi-source, industry-standard product line, our SFP products feature a common design interface for use with multiple data transfer protocols, including Fibre Channel, Gigabit Ethernet, InfiniBand and proprietary links.

Cage Features:

- All metal construction for EMI protection.
- Two point spring contacts for optimal EMI grounding.
- Chamfered edges on cover facilitate assembly.
- Design allows cages to be mounted on opposite sides of PCB for "belly-to-belly" applications.

SMT Receptacle:

- Alignment posts provide stability for placement on the PCB.
- Standoffs allow easy PCB cleaning after soldering.
- SMT design provides option for placement on both sides of PCB.

Circuits	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T & R Pricing* 480	Molex Part No.
Receptacle, Right Angle, SMT						
20	WM1633CT-ND	14.39	12.31	9.60	2681.03	74441-0001

*For Tape & Reel Part No., change CT to TR.

Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
Cage for Small Frame Solder-Tail Post				
WM1634-ND	24.86	20.20	15.54	73927-0002-TR24

CF Card Connectors

Card Headers

Features and Benefits:

• Size 50 circuits • Dual-row 1.27mm (.050") pitch at card interface and 0.635mm (.025") pitch in-line SMT tails • High temperature housing suitable for reflow soldering • In-line SMT tails protect against damage during assembly.

Electrical Specifications:

• Voltage: 100V • Current: 0.5A • Contact Resistance: 40mΩ max. • Dielectric Withstanding Voltage: 500V AC/1 min. • Insulation Resistance: 1000MΩ min.

Physical Specifications:

• Housing: Glass-filled LCP, UL94V-0 (WM18503-ND: black; WM18505-ND and WM18506-ND: white) • Contact: Phosphor bronze • Plating: Gold over palladium nickel in contact area; tin/lead in solder tail area, nickel underplate overall • Solder Tab: Phosphor bronze, tin/lead over copper plating • Temperature: -20°C to +90°C • PC Board Thickness: 0.80mm • PC Card Thickness: 3.30mm ±0.1 • PC Card Width: 42.80mm ±0.1

Card Ejectors

Features and Benefits:

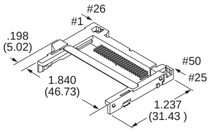
• Low-profile modular design snaps easily onto header • Can be used with both top and bottom mount headers • Lever design provides for smooth card extraction

Physical Specifications:

• Metal Shell and Lever: Stainless steel

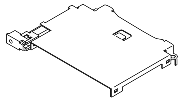
• Top button: Glass-filled PBT, UL 94V-0 (WM18504-ND has a brass pin and black polycarbonate base button)

Fig. 1 – Right Angle, SMT Top Mount Header *For Type I and Type II Cards*



Integral gold plated frame grounds and solder tabs

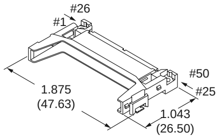
Fig. 2 – Left Side Flip Button Ejector *For Type I and Type II Headers*



Mates with WM18503-ND

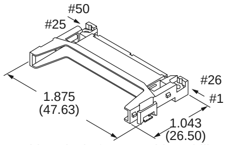
Flip-style button folds 90°
Stainless steel rod

Fig. 3 – Right Angle, SMT Top Mount Header *For Type I Cards*



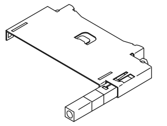
Solder tabs in front provide stability during mating

Fig. 4 – Right Angle, SMT Bottom Mount Header *For Type I Cards*



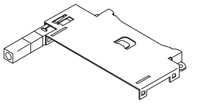
Solder tabs in front provide stability during mating

Fig. 5 – Right Side Button Ejector*For Type I Headers*



Mates with WM18505-ND and WM18506-ND

Fig. 6 – Left Side Button Ejector*For Type I Headers*



Mates with WM18505-ND and WM18506-ND

Fig.	Description	Digi-Key Part No.	Pricing 1	25	50	Molex Part No.
For Type I and Type II Cards and Headers						
1	Header, Rt. Angle, SMT, 5.85mm Low Profile Height	WM18503-ND	15.56	356.66	648.48	55244-5021
2	Ejector, Left Side Flip Button.............	WM18504-ND	5.44	124.66	226.65	55246-0011
For Type I Cards and Headers						
3	Top Mount Header, Rt. Angle, SMT, 1.64mm Standoff Height..........	WM18505-ND	7.65	175.39	318.89	53856-5010
4	Bottom Mount Header, Rt. Angle, SMT, 1.64mm Standoff Height..........	WM18506-ND	7.65	175.39	318.89	53927-5010
5	Ejector, Right Side Flip Button (for Top or Bottom Mount Headers).....	WM18507-ND	5.28	120.93	219.88	55021-0001
6	Ejector, Left Side Button (for Top or Bottom Mount Headers).....	WM18508-ND	5.28	120.93	219.88	55022-0001

CF Card Connectors

Card Headers - MI21 Series-Type I or II Cards

Features: Compact design occupies minimum space. Connectors are designed with small width and depth for miniaturization and the foot print on the board has been made smaller. Card ejection mechanism. Two point ejection mechanism to assure even card ejection. Designed and packaged for board placement with automatic equipment. Headers are designed with a pick up area to accommodate the pick-and-place nozzles of automatic mounting machines. (Patents pending) Receptacles are designed to be mounted on top the board, and automatic mounting is possible on the specified board. Materials and Finishes-Insulator-PPS resin, Black, UL94V-0. Contacts-Brass, Engagement Area: Gold plating of 0.1µm, Termination Area: Solder plating. Reinforced fitting-Brass, Applied to eject mechanism. Eject fitting-Stainless steel, Ground clip-Stainless steel, Applied to MI21. Nut-Steel, Solder plating.

Fig. 1

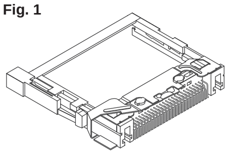


Fig. 2

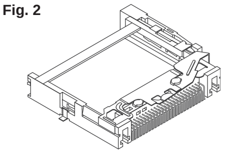


Fig. 3

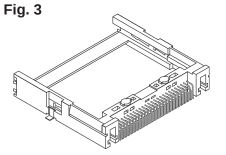


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Hirose Part No.
1	Right Side Eject Button, 0.0mm, Standard Mounting	H3230-ND	8.81	7.46	5.60	MI21-50PD-SF-EJR
2	Left Side Eject Button, No Offset, Standard Mounting	H3231-ND	8.81	7.46	5.60	MI21-50PD-SF-EJL
3	No Eject Button, No Offset, Standard Mounting	H3232-ND	6.79	5.75	4.31	MI21-50PD-SF
3	No Eject Button, No Offset, Reverse Mounting	H3233-ND*	6.79	5.75	4.31	MI21A-50PDR-SF
1	Right Side Eject Button, 2.2mm, Standard Mounting	H3234-ND	8.81	7.46	5.60	MI21A-50PD-SF-EJR
2	Left Side Eject Button, 2.2mm Offset, Standard Mounting	H3235-ND	8.81	7.46	5.60	MI21A-50PD-SF-EJL
3	No Eject Button, 2.2mm Offset, Standard Mounting	H3236-ND	6.79	5.75	4.31	MI21A-50PD-SF

*Reverse Mounting

AMP tyco Electronics
Authorized Distributor

I.C. Sockets

Performance Characteristics:

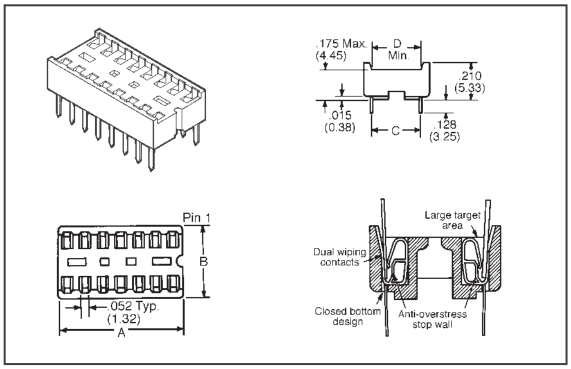
Physical: • Engaging force: 250 grams (.013 [0.33] pin) • Separating force: 50 grams (.008 [0.2] pin).

Electrical: • Rating: 250 VAC • Contact resistance: 20 milliohms max. initial, 30 milliohms max. after test • Dielectric withstanding voltage: 1000 VRMS min. • Insulation resistance: 5,000 megohms min. • Capacitance: 0.5 picofarad max.

Environmental: • Operating temperature: -55°C to + 105°C (tin); -55°C to + 125°C (gold) • Vibration: 10-2000-10 Hz in 20 minutes at .06 [1.52] or 15G's for 3 sweeps in each of 3 axis • Shock: 100 G's sawtooth; 6 shocks.

Material and Finish: • Housing: Glass-filled thermoplastic. 94V-0 rated. (black).

Notes: • Closed bottom design: inhibits flux contamination and solder wicking • Over-stress stop wall: prevents damage to socket contact from bent or twisted DIP leads and off-set insertion or extraction of DIP packages • Closed Frame Style (unless noted) • Large target area: makes it easy to insert DIP packages • Dual wiping contacts: make a gas-tight connection for high reliability • Low profile: .175 (4.45) max. seating plane above pc board • Dual wiping contacts • Stackable end-to-end and side-to-side • Designed to meet EiA RS-415, MIL-S-83734 and stringent computer specifications • Recognized under the Component Program of Underwriters Lab. Inc. File E28476 • Certified by Canadian Standards Association File No. LR 16455.

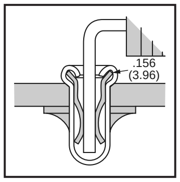


No. of Pins	Dimensions – In. (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	AMP Part No.
Dual Leaf Low Profile Dip Sockets								
Phosphor Bronze with 15µ Gold Plating								
6	.295 (7.49)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9406-ND	.57	.46	2-641296-4
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9408-ND	.57	.46	2-640463-4
14	.695 (17.65)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9414-ND	.75	.60	2-640357-4
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9416-ND	.66	.53	2-640358-4
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A94116-ND*	.75	.60	2-641600-4
18	.895 (22.73)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9418-ND	1.08	.87	2-640359-4
20	.995 (25.27)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A9420-ND	.99	.80	2-640464-4
20	.995 (25.27)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A94120-ND*	.93	.75	2-641602-4
24	1.195 (30.35)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A9424-ND	1.44	1.16	2-640361-4
24	1.195 (30.35)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A94124-ND*	1.29	1.04	2-641932-4
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A9428-ND	1.35	1.08	2-640362-4
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A94128-ND*	1.35	1.08	2-641605-4
32	1.595 (40.51)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A94132-ND*	1.53	1.23	2-644018-4
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A9440-ND	1.77	1.42	2-640379-4
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A94140-ND*	1.77	1.42	2-641606-4
Beryllium Copper with 30µ Gold Plating								
6	.295 (7.49)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24793-ND	.51	.41	2-641296-2
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24794-ND	.36	.29	2-640463-2
14	.695 (17.65)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24795-ND*	.75	.60	2-641599-2
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24796-ND*	.78	.63	2-641600-2
24	1.195 (30.35)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24797-ND*	1.35	1.08	2-641932-2
24	1.195 (30.35)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24798-ND*	1.71	1.37	2-641604-2
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24799-ND*	1.77	1.42	2-641605-2
32	1.595 (40.51)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24800-ND*	2.01	1.61	2-644018-2
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24801-ND*	2.37	1.90	2-641606-2
Sockets with Retention Solder Tails								
Phosphor Bronze with 15µ Gold Plating								
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24802-ND	.51	.41	2-641260-4
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24803-ND*	1.35	1.08	2-641615-4
Phosphor Bronze with Tinned Plating								
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24804-ND*	.60	.48	2-641615-3
Beryllium Copper with 30µ Gold Plating								
28	1.395 (35.43)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24805-ND*	1.77	1.42	2-641615-3
40	1.995 (50.67)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24806-ND*	2.37	1.90	2-641616-2
Beryllium Copper with Tinned Plating								
8	.395 (10.03)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24807-ND	.27	.22	2-641260-1
14	.695 (17.65)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24808-ND*	.51	.41	2-641609-1
16	.795 (20.19)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24809-ND*	.57	.46	2-641610-1
20	.995 (25.27)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24810-ND*	.57	.46	2-641612-1
24	1.195 (30.35)	.394 (10.01)	.300 (7.62)	.320 (8.13)	A24811-ND*	.66	.53	2-641933-1
32	1.595 (40.51)	.694 (17.63)	.600 (15.24)	.620 (15.75)	A24812-ND*	1.08	.87	2-382189-1

* Open Frame Style.

Test Sockets

Reusable Receptacles for Component Testing: • Receptacles help prevent heat damage to pc boards and components during burn-in and bread-boarding evaluation • Receptacles eliminate need for soldering components directly to the board • Board components can be inserted and extracted at a minimum of 100 times.

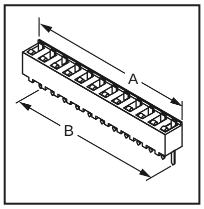


Description	Accepts Lead Size - Inch (mm)	Finish Cup	Finish Spring	Digi-Key Part No.	Price Each 1	10	100	AMP Part No.
Closed Bottom	.018 - .040 (0.46 - 1.02)	30µ Gold	30µ Gold	A29070-ND	.77	.62	.49	380598-1
		Tin-Lead	30µ Gold	A29071-ND	.34	.27	.22	380598-2
		Tin-Lead	Tin-Lead	A29072-ND	.27	.22	.18	380598-3
Closed Bottom	.036 - .051 (0.91 - 1.30)	Tin-Lead	Tin-Lead	A29073-ND	.27	.22	.18	1-380758-0
		Tin-Lead	30µ Gold	A29074-ND	.32	.26	.21	1-380758-1
Open Bottom	.018 - .040 (0.46 - 1.02)	30µ Gold	30µ Gold	A29075-ND	.81	.65	.52	380635-1
		Tin-Lead	30µ Gold	A29076-ND	.50	.40	.32	380635-2
		Tin-Lead	Tin-Lead	A29077-ND	.36	.29	.23	380635-5
Open Bottom	.036 - .051 (0.91 - 1.30)	Tin-Lead	TIn-Lead	A29078-ND	.27	.22	.18	640206-1
		Tin-Lead	30µ Gold	A29079-ND	.43	.35	.28	640206-2
Stand-Off	.018 - .040 (0.46 - 1.02)	Tin-Lead	30µ Gold	A29080-ND	.96	.77	.61	1-380737-0
		Tin-Lead	TIn-Lead	A29081-ND	.40	.33	.26	640593-1

SIP Sockets

STRAIGHT SOLDER TAIL

The DIPLOMATE Dual Leaf SIP socket family provides high quality at low cost with superior handling characteristics. These stackable housings feature a "true closed bottom" design which prevents solder or flux wicking • Housing- Glass-filled thermoplastic, 94V-0 rated, black • Low Profile - .210 (5.33) max. • Dual wiping contacts • Accepts .008 - .014 (0.2 - 0.36) thick x .030 (0.76) max. wide rectangular leads



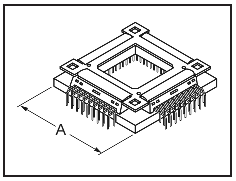
No. of Positions	Dimensions - Inch (mm) A	B	Digi-Key Part No.	Price Each 1	10	100	AMP Part No.
3	.295 (7.49)	.200 (5.08)	A26245-ND	.75	.60	.48	382437-1
4	.395 (10.03)	.300 (7.62)	A24813-ND	.75	.60	.48	382438-1
7	.695 (17.65)	.600 (15.24)	A24814-ND	.75	.60	.48	382441-1
8	.795 (20.19)	.700 (17.78)	A24815-ND	.84	.68	.54	643640-1
10	.995 (25.27)	.900 (22.86)	A24816-ND	.93	.75	.59	643642-1
12	1.195 (30.35)	1.100 (27.94)	A26246-ND	1.11	.89	.71	643644-1
14	1.395 (35.43)	1.300 (33.02)	A24817-ND	1.77	1.42	1.13	643646-1
15	1.495 (37.97)	1.400 (35.56)	A24818-ND	1.92	1.54	1.22	643647-1
16	1.595 (40.51)	1.500 (38.1)	A26247-ND	1.20	.96	.76	643648-1
17	1.695 (43.05)	1.600 (40.64)	A26248-ND	1.53	1.23	.97	643649-1
18	1.795 (45.59)	1.700 (43.18)	A24819-ND	1.68	1.35	1.07	643650-1
20	1.995 (50.57)	1.900 (48.26)	A24820-ND	1.53	1.23	.97	643652-1
25	2.495 (63.37)	2.400 (60.96)	A24821-ND	4.38	3.51	2.78	643657-1
30	2.995 (76.07)	2.900 (73.66)	A26250-ND	5.25	4.20	3.33	643662-1

PQFP Sockets

Housing: High temperature thermoplastic, 94V-0 rated, black. **Cover:** Polyphenylene sulfide (PPS), 94V-0 rated, black. (MICRO-PITCH: Housing and Cover are high temperature thermoplastic, 94V-0 rated).

Performance Characteristics:

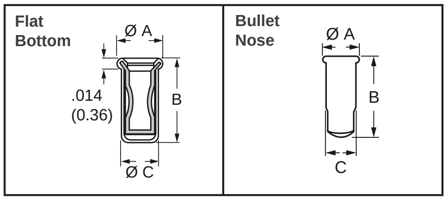
- Current Rating: 1amp Max.
- Operating Temp.: -55°C to +105°C
- Dielectric Withstanding Volt.: 750 VAC min.
- Capacitance (Adjacent Contacts): 1 picofarad max.
- Durability: 15 insertion/withdrawal cycles



No. of Pos.	Description	Dimension A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	AMP Part No.
Conventional AMP Sockets							
100	Housing Sub-Assembly	1.140 (28.96)	A24822-ND	15.42	12.34	9.77	821949-4
100	Cover	1.140 (28.96)	A24823-ND	2.11	1.69	1.34	821939-1
132	Housing Sub-Assembly	1.340 (34.04)	A24824-ND	20.91	16.73	13.25	821949-5
132	Cover	1.340 (34.04)	A24825-ND	2.75	2.21	1.75	821942-1
MICRO-PITCH Sockets for JEDEC Metric Quad Flat Pack IC's							
144	Housing Sub-Assembly	38.2 (1.504)	A24826-ND	20.70	16.56	13.11	822114-3
144	Cover	38.2 (1.504)	A24827-ND	2.80	2.24	1.78	822115-3
160	Housing Sub-Assembly	38.2 (1.504)	A24828-ND	23.01	18.41	14.58	822114-4
160	Cover	38.2 (1.504)	A24838-ND	3.14	2.52	1.99	822115-4
Tools							
—	Extraction Tool	—	A24839-ND	46.65	—	—	822254-1
100	Insertion Hand Tool for Conventional	—	A24831-ND	588.45	—	—	822253-1
132	Insertion Hand Tool for Conventional	—	A24841-ND	691.89	—	—	822253-2
—	Insertion Hand Tool for MICRO-PITCH	—	A24842-ND	225.92	—	—	822253-4

AMP tyco Electronics
Authorized Distributor

Miniature Spring Sockets



The Miniature Spring Socket System is composed of a series of individual sockets, each utilizing a permanently secured helical spring design to accept round, square or rectangular leads.

Features: • SMT and IRR processing compatibility • Five different hole size series .039 to .107” (0.99 to 2.72mm) available to accommodate a pin diameter range of .012 to .065” (0.30 to 1.65mm) and board thicknesses of .031 to .125” (0.79 to 3.18mm) • Low-Profile, above-board height of .022” (0.56mm) allows maximum board-to-board clearance • Small head diameter allow centerline spacing as close as .070” (1.78mm) • Sockets accept round, square or rectangular leads without socket orientation • Inner helical spring assures maximum reliability

Material: **Spring:** Beryllium Copper **Contact Sleeve:** Copper

Description	Pin Diameter Range Inch (mm)	Finish		Dimensions – Inch (mm)			Digi-Key Part No.	Price Each		AMP Part No.
		Spring	Sleeve	A	B	C		1	10	
Flat Bottom										
Closed Bottom	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26251-ND	.32	.26	2-330808-8
	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26253-ND	.29	.23	6-330808-5
	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26255-ND	.30	.24	2-332095-4
	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26257-ND	.34	.28	2-332095-1
	.018 - .021 (0.46 - 0.53)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24846-ND	.32	.26	2-331272-2
	.018 - .021 (0.46 - 0.53)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24848-ND	.54	.43	2-331272-3
	.014 - .026 (0.36 - 0.66)	30µ Gold	Gold Flash	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24850-ND	.34	.27	50863-4
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24851-ND	.29	.24	50863-5
	.014 - .026 (0.36 - 0.66)	Tin	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24854-ND	.24	.20	50863-8
	.022 - .025 (0.56 - 0.64)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24856-ND	.32	.26	2-331272-6
	.022 - .025 (0.56 - 0.64)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24857-ND	.27	.22	2-331272-7
	.014 - .026 (0.36 - 0.66)	30µ Gold	Gold Flash	.070 (1.78)	.178 (4.52)	.050 (1.27)	A24862-ND	.33	.27	50462-6
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.178 (4.52)	.050 (1.27)	A24863-ND	.29	.23	50462-8
	.026 - .029 (0.66 - 0.74)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24864-ND	.65	.52	1-331677-1
	.026 - .029 (0.66 - 0.74)	30µ Gold	Tin	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24865-ND	.29	.24	3-331677-8
	.026 - .033 (0.66 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24866-ND	.34	.28	50864
	.026 - .033 (0.66 - 0.84)	30µ Gold	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24867-ND	.30	.24	50864-1
	.026 - .033 (0.66 - 0.84)	Tin	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24870-ND	.24	.20	50864-6
	.030 - .033 (0.76 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24873-ND	.33	.27	1-331677-4
	.030 - .033 (0.76 - 0.84)	30µ Gold	Tin	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24877-ND	.29	.24	1-331677-8
	.034 - .041 (0.86 - 1.04)	30µ Gold	Gold Flash	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24880-ND	.35	.29	50865
	.037 - .040 (0.94 - 1.02)	30µ Gold	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24886-ND	.33	.27	1-332070-1
	.037 - .040 (0.94 - 1.02)	30µ Gold	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24890-ND	.29	.24	2-332070-3
	.037 - .040 (0.94 - 1.02)	Tin	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24893-ND	.24	.20	2-332070-2
	.042 - .049 (1.07 - 1.24)	30µ Gold	Gold Flash	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24897-ND	.75	.60	50871-4
	.042 - .049 (1.07 - 1.24)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24898-ND	.33	.27	50871-5
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A29082-ND	.26	.21	50871-8
	.050 - .057 (1.27 - 1.45)	30µ Gold	Gold Flash	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24900-ND	.75	.60	1-50871-3
	.050 - .057 (1.27 - 1.45)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24901-ND	.65	.52	1-50871-4
	.056 - .065 (1.42 - 1.65)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24906-ND	.33	.27	2-50871-3
	.056 - .065 (1.42 - 1.65)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A26261-ND	.27	.22	2-50871-6
Open Bottom	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26259-ND	.29	.23	5-330808-6
	.014 - .026 (0.36 - 0.66)	30µ Gold	Gold Flash	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24849-ND	.35	.29	50863
	.014 - .026 (0.36 - 0.66)	Tin	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24853-ND	.25	.21	50863-6
	.018 - .021 (0.46 - 0.53)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24859-ND	.33	.27	3-331272-8
	.018 - .021 (0.46 - 0.53)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24860-ND	.29	.23	3-331272-9
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.178 (4.52)	.050 (1.27)	A24861-ND	.30	.24	50462-2
	.026 - .033 (0.66 - 0.84)	Tin	Gold Flash	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24869-ND	.31	.25	50864-5
	.026 - .033 (0.66 - 0.84)	Tin	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24872-ND	.25	.21	50864-8
	.030 - .033 (0.76 - 0.84)	Tin	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24874-ND	.30	.25	2-331677-2
	.030 - .033 (0.76 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24875-ND	.35	.28	2-331677-6
	.034 - .041 (0.86 - 1.04)	30µ Gold	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24883-ND	.34	.28	50865-3
	.034 - .041 (0.86 - 1.04)	Tin	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24884-ND	.28	.23	50865-6
	.037 - .040 (0.94 - 1.02)	30µ Gold	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24888-ND	.35	.29	1-332070-4
	.030 - .033 (0.76 - 0.84)	Tin	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24889-ND	.31	.25	2-332070-5
	.037 - .040 (0.94 - 1.02)	Tin	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24891-ND	.31	.25	2-332070-9
	.042 - .049 (1.07 - 1.24)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24899-ND	.35	.28	50871-1
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A29083-ND	.53	.43	50871-6
	.050 - .057 (1.27 - 1.45)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24902-ND	.68	.55	1-50871-0
	.056 - .065 (1.42 - 1.65)	30µ Gold	Gold Flash	.118 (3.00)	.288 (7.31)	.101 (2.57)	A24905-ND	.40	.33	1-50871-8
	.056 - .065 (1.42 - 1.65)	30µ Gold	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A26260-ND	.35	.28	1-50871-9
	.056 - .065 (1.42 - 1.65)	Tin	Tin	.118 (3.00)	.288 (7.31)	.101 (2.57)	A26262-ND	.27	.22	2-50871-4
Knockout Bottom	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.142 (3.61)	.038 (0.97)	A26252-ND	.33	.27	3-330808-8
	.013 - .020 (0.33 - 0.51)	30µ Gold	Tin	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26256-ND	.61	.50	1-332095-9
	.013 - .020 (0.33 - 0.51)	30µ Gold	Gold Flash	.059 (1.50)	.178 (4.52)	.039 (0.99)	A26258-ND	.34	.28	2-332095-2
	.018 - .021 (0.46 - 0.53)	30µ Gold	Gold Flash	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24847-ND	.33	.27	3-331272-0
	.014 - .026 (0.36 - 0.66)	30µ Gold	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24852-ND	.60	.49	50863-3
	.014 - .026 (0.36 - 0.66)	Tin	Tin	.070 (1.78)	.260 (6.60)	.050 (1.27)	A24855-ND	.49	.40	50863-7
	.022 - .025 (0.56 - 0.64)	30µ Gold	Tin	.070 (1.78)	.138 (3.51)	.050 (1.27)	A24858-ND	.29	.23	3-331272-5
	.026 - .033 (0.66 - 0.84)	30µ Gold	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24868-ND	.31	.25	50864-3
	.026 - .033 (0.66 - 0.84)	Tin	Tin	.080 (2.03)	.257 (6.53)	.061 (1.55)	A24871-ND	.50	.40	50864-7
	.030 - .033 (0.76 - 0.84)	30µ Gold	Gold Flash	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24876-ND	.35	.28	2-331677-9
	.030 - .033 (0.76 - 0.84)	30µ Gold	Tin	.080 (2.03)	.138 (3.51)	.061 (1.55)	A24878-ND	.30	.25	3-331677-4
	.034 - .041 (0.86 - 1.04)	30µ Gold	Gold Flash	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24881-ND	.72	.58	50865-2
	.034 - .041 (0.86 - 1.04)	30µ Gold	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24882-ND	.32	.26	50865-1
	.034 - .041 (0.86 - 1.04)	Tin	Tin	.089 (2.26)	.260 (6.60)	.070 (1.78)	A24885-ND	.26	.21	50865-7
	.037 - .040 (0.94 - 1.02)	30µ Gold	Gold Flash	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24887-ND	.35	.29	1-332070-7
	.037 - .040 (0.94 - 1.02)	30µ Gold	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24892-ND	.31	.25	3-332070-5
	.037 - .040 (0.94 - 1.02)	Tin	Tin	.089 (2.26)	.143 (3.63)	.070 (1.78)	A24894-ND	.25	.21	3-332070-4
Bullet Nose Bottom										
Loose Piece	.012 - .021 (0.30 - 0.53)	30µ Gold	Tin	.066 (1.67)	.184 (4.64)	.042 (1.07)	A24843-ND	.16	.14	645946-2
	.015 - .021 (0.38 - 0.53)	30µ Gold	Tin	.066 (1.67)	.158 (4.01)	.042 (1.07)	A24844-ND	.30	.24	645945-2
	.015 - .021 (0.38 - 0.53)	Tin	Tin	.066 (1.67)	.158 (4.01)	.042 (1.07)	A24845-ND	.13	.10	645945-1
	.037 - .041 (0.94 - 1.04)	30µ Gold	Tin	.089 (2.26)	.260 (6.60)	.074 (1.88)	A24895-ND	.24	.19	645500-1
	.042 - .049 (1.07 - 1.24)	Gold Flash	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29046-ND	.54	.44	645980-2
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29068-ND	.23	.19	645980-1
Carrier Strip w/Sealant	.028 - .033 (0.71 - 0.84)	30µ Gold	Tin	.080 (2.03)	.290 (7.37)	.061 (1.55)	A24879-ND	—	.17	1-645986-2
	.028 - .033 (0.71 - 0.84)	Tin	Tin	.080 (2.03)	.290 (7.37)	.061 (1.55)	A28507-ND	—	.31	1-645986-1
Carrier Strip without Sealant	.037 - .041 (0.94 - 1.04)	30µ Gold	Tin	.089 (2.03)	.260 (7.37)	.074 (1.55)	A24896-ND	—	.21	1-645502-1
	.042 - .049 (1.07 - 1.24)	Gold Flash	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29045-ND	—	.25	1-645979-2
	.042 - .049 (1.07 - 1.24)	Tin	Tin	.120 (3.05)	.308 (7.82)	.100 (2.54)	A29069-ND	—	.21	645979-1

ON-SHORE TECHNOLOGY, INC.

I.C. Sockets

Low Cost Version

Special Features/Applications:

• Dual wipe contacts to maximize contact area and minimize resistance • Closed bottom design to help prevent wicking and flux contamination • Auto insertability • Low profile design • Wide entry area for easy IC insertion • Board stand-offs for easy clean ups • Side and end stackable • Pin 1 is polarized • Stamped pin

Plating:

• Pin tin plated, 80-120m" tin-lead. Includes internal glass encapsulated ceramic capacitor 0.1mF, 50Vdc

Surface Mount IC Sockets

Special Features/Applications:

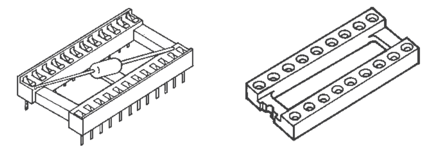
• For surface mounted technology • Tin for solder must be in the pc board

Technical Data:

• Insulator body material: glass-filled polyethersulphone • Temperature range: 55°C to +200°C continuous • Solder temperature: 280°C, intermittent

Plating:

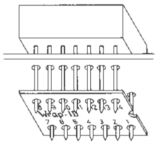
• Pin tin plated min. 80m" nickel + min. 150m" tin-lead • High temperature insulator



No. of Pins	Contact Spacing In. (mm)	Digi-Key Part No.	Price Each 1	10	100	1,000
Low Cost Version with Cap - Tin Plated Solder Pins						
18	.300 (7.62)	ED2126-ND	.93	.77	.64	.54
Surface Mount - Screw Machined Pins w/out Solder Tail						
6	.300 (7.62)	ED2201-ND	.72	.60	.50	.41
8	.300 (7.62)	ED2202-ND	.95	.79	.66	.55
14	.300 (7.62)	ED2203-ND	1.67	1.39	1.16	.96
16	.300 (7.62)	ED2204-ND	1.72	1.43	1.19	.99
18	.300 (7.62)	ED2205-ND	1.93	1.60	1.34	1.11
20	.300 (7.62)	ED2206-ND	2.15	1.78	1.48	1.23
22	.400 (10.16)	ED2207-ND	2.36	1.96	1.63	1.36
24	.600 (15.24)	ED2208-ND	2.87	2.38	1.98	1.64
28	.600 (15.24)	ED2209-ND	3.34	2.76	2.30	1.91
36	.600 (15.24)	ED2210-ND	3.86	3.20	2.67	2.22
40	.600 (15.24)	ED2211-ND	4.29	3.56	2.96	2.46
48	.600 (15.24)	ED2212-ND	5.15	4.27	3.56	2.95
64	.600 (15.24)	ED2213-ND	6.87	5.69	4.74	3.94

Division of OK International

Socket Wrap I.D.



- Press fit to socket pins
- Improves wiring speed
- Instant pin numbering
- Reduces wiring errors
- Large space for user information
- Simplifies troubleshooting

Now offering an exciting, low cost item used to identify pin numbers on wire-wrapping sockets. Consisting of a socket-sized plastic panel with numbered holes in the pin location, the Socket Wrap-ID is simply slipped onto the socket before wrapping.

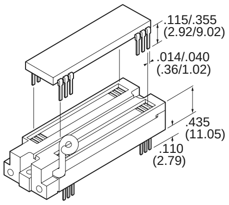
You can also write on them for easy identification of location, IC part number, function, etc. These unique items greatly simplify both initial wire-wrapping and subsequent troubleshooting or repair.

A great help to hobbyists, technicians, and production facilities alike.

Spacing In. (mm)	Description	Digi-Key Part No.	Price Each 5	10
.3 (7.62)	8 Pin I.D.	K470-ND	—	.40
	14 Pin I.D.	K266-ND	—	.30
	16 Pin I.D.	K267-ND	—	.31
	20 Pin I.D.	K269-ND	.57	—
.4 (10.16)	24 Pin I.D.	K495-ND	.67	—
.6 (15.24)	28 Pin I.D.	K272-ND	.79	—
	40 Pin I.D.	K486-ND	1.29	—

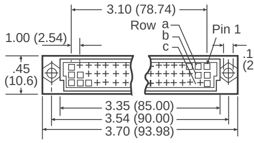
AMP tyco Electronics
Authorized Distributor

ZIF Lock Sockets

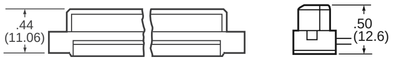


No. of Pos.	Plating	Digi-Key Part No.	Price Each 1	10	AMP Part No.
16	Tin-Lead	A92163-ND	15.28	12.91	55174-5
28	Tin-Lead	A92286-ND	36.20	30.58	54994-5
14	Gold	A91143-ND	27.72	23.41	55173-6
40	Gold	A91406-ND	47.23	39.89	54995-6

NORCOMP DIN Connectors



Contacts fitted in rows a and c only.



No. of Rows	No. of Pins	Type	Digi-Key Part No.	Price Each 1	10	100	NorComp Part No.
3	64	Socket-IDC Type	T8064-ND	13.60	11.73	7.98	689-096-290-001
—	64	Strain Relief	T0064-ND	1.07	.93	.63	164-096-001-000

See **3M Ribbon Cable** in Index for Ribbon Cable (MC64M-ND and MC64G-ND).

Universal Serial Bus Connectors

Features:

- USB receptacles for thru-hole and surface mount
- Plug retention tabs
- Kinked locating legs for secure PCB retention
- Fully compatible with USB 1.0 specification
- Passes 16MHz Signal Attentuation per ASTM-D-4566

Material Specifications:

- Shell and Contact: Copper alloy
- Shell Finish: Tin/lead over copper
- Contact Finish: 30μ selective gold, tin/lead tail
- Housing: Glass filed thermoplastic rated UL94V-0

Ratings:

- Voltage: 30VAC (rms)
- Current: 1A max. per contact for 30°C temperature rise. Thru-hole housings rated at 130°C for wave soldering. SMT housing rated at 240°C for reflow soldering

Electrical:

- Contact Resistance: 30mW max.
- Insulation Resistance: 1000mΩ min.
- Dielectric Withstanding Voltage: 750VAC at sea level
- Capacitance: 2pF max.

Fig. 1

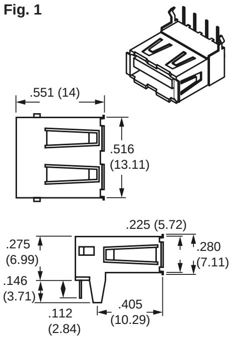


Fig. 2

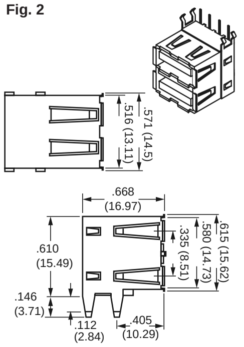


Fig. 3

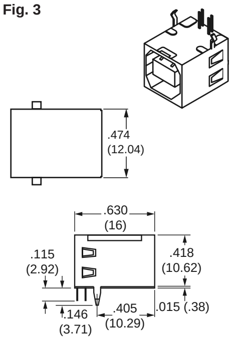


Fig. 4

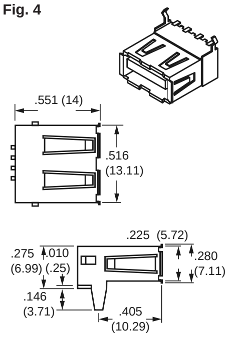
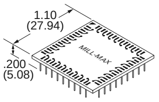


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
1	Type A Receptacle, Single, Thru Hole	ED90001-ND	1.23	1.04	.86	.63	.53	896-30-004-90-000000
2	Type A Receptacle, Double, Thru Hole	ED90002-ND	1.93	1.64	1.34	.99	.84	896-30-008-90-000000
3	Type B Receptacle, Single, Thru Hole	ED90003-ND	1.23	1.04	.86	.63	.53	897-30-004-90-000000
4	Type A Receptacle, Single, Surface Mount	ED90004-ND	1.23	1.04	.86	.63	.53	896-30-004-00-000000

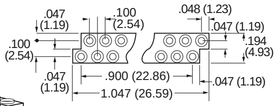
68-Position PLCC Adapter



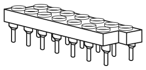
Pin Plating: Gold

Description	Digi-Key Part No.	Price Each 1	10	100	500	Mill-Max Part No.
68-Pos. PLCC Adapter	ED7700-ND	10.05	8.50	6.96	5.14	894-10-068-00-240000

Zig Zag Sockets



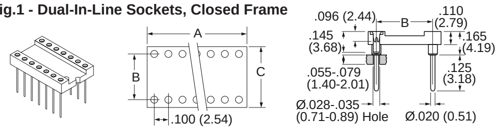
Double row staggered strips will accommodate Single-in-Line Zig-Zag memory packages on high density boards, left stackable. **Insertion Characteristics:** 4-finger low force **Plating:** Sleeve (Pin) – 200μ" Sn.; Contact (Clip) – 30μ" Au



No. of Pins	Insulator Body	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
20	Left Stackable	ED2220-ND	1.37	.95	.77	.66	.55	410-93-220-10-001

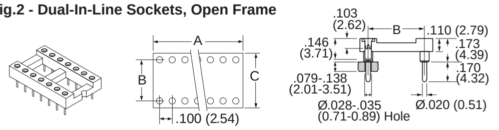
Dual-In-Line and PLCC Sockets

Fig.1 - Dual-In-Line Sockets, Closed Frame



- Closed frame insulator withstands high mechanical impact. • Low profile • Plating; Sleeve (Pin) 200µ"Sn and Contact (Clip) 30µ" Au.

Fig.2 - Dual-In-Line Sockets, Open Frame

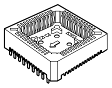


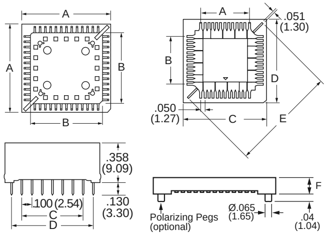
- DIP sockets with solder tail length of .170" ((4.32mm), allowing application on multilayer PCBs up to .139" (3.53mm). • Plating; Sleeve (Pin) 200µ"Sn and Contact (Clip) 30µ" Au.

Fig.3 - Compact PLCC Sockets

Solder Tail

Surface Mount with Polarizing Posts (optional)





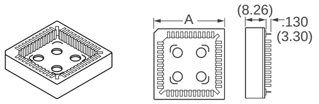
- Designed for JEDEC type devices. • Open frame design in solder area improves results of IR soldering and facilitates visual inspection of solder pads. • The brown PPS (Ryton R-4) insulator has optional polarizing pegs (PP).

No. of Pins	Dimensions (Inch) A	B	C	D	E	F	Digi-Key Part No.	Price Each 1	10	100	Mill-Max Part No.
Fig. 1 — Dual-In-Line Sockets, Solder Tail Closed Frame											
8	0.4	0.3	0.4	—	—	—	ED60000-ND	.42	.29	.24	210-93-308-41-001000
14	0.7	0.3	0.4	—	—	—	ED60001-ND	.73	.51	.41	210-93-314-41-001000
16	0.8	0.3	0.4	—	—	—	ED60002-ND	.83	.58	.47	210-93-316-41-001000
24	1.2	0.3	0.4	—	—	—	ED60003-ND	1.25	.87	.71	210-93-324-41-001000
24	1.2	0.6	0.7	—	—	—	ED60004-ND	1.25	.87	.71	210-93-624-41-001000
28	1.4	0.6	0.7	—	—	—	ED60005-ND	1.46	1.02	.82	210-93-628-41-001000
32	1.6	0.6	0.7	—	—	—	ED60006-ND	1.67	1.16	.94	210-93-632-41-001000
40	2.0	0.6	0.7	—	—	—	ED60007-ND	2.09	1.45	1.17	210-93-640-41-001000
Fig. 2 — Dual-In-Line Sockets, Long Solder Tail for Multilayer PC-Boards, Open Frame											
8	0.4	0.3	0.4	—	—	—	ED60008-ND	.59	.41	.33	111-93-308-41-001000
14	0.7	0.3	0.4	—	—	—	ED60009-ND	.98	.69	.56	111-93-314-41-001000
16	0.8	0.3	0.4	—	—	—	ED60010-ND	1.13	.78	.63	111-93-316-41-001000
20	1.0	0.3	0.4	—	—	—	ED60011-ND	1.36	.95	.77	111-93-320-41-001000
24	1.2	0.3	0.4	—	—	—	ED60012-ND	1.63	1.13	.92	111-93-324-41-001000
24	1.2	0.6	0.7	—	—	—	ED60013-ND	1.63	1.13	.92	111-93-624-41-001000
28	1.4	0.6	0.7	—	—	—	ED60014-ND	1.90	1.32	1.07	111-93-628-41-001000
32	1.6	0.6	0.7	—	—	—	ED60015-ND	2.17	1.51	1.22	111-93-632-41-001000
40	2.0	0.6	0.7	—	—	—	ED60016-ND	2.72	1.89	1.53	111-93-640-41-001000
Fig. 3 — Compact PLCC Sockets Solder Tail											
20	.590	.360	.200	.400	—	—	ED80000-ND	1.11	1.00	.89	540-99-020-24-000000
28	.690	.460	.300	.500	—	—	ED80001-ND	1.37	1.24	1.10	540-99-028-24-000000
32*	.783/.683	.564/.464	.400/.300	.600/.500	—	—	ED80002-ND	1.49	1.35	1.20	540-99-032-24-000000
44	.890	.660	.500	.700	—	—	ED80003-ND	1.48	1.33	1.19	540-99-044-24-000000
52	.990	.760	.600	.800	—	—	ED80004-ND	2.06	1.86	1.65	540-99-052-24-000000
68	1.190	.960	.800	1.000	—	—	ED80005-ND	1.87	1.68	1.50	540-99-068-24-000000
84	1.390	1.160	1.000	1.200	—	—	ED80006-ND	2.39	2.15	1.91	540-99-084-24-000000
Fig. 3 — Compact PLCC Sockets Surface Mount											
20	.200	.200	.585	.585	.657	.180	ED80007-ND	1.26	1.13	1.01	540-99-020-17-400000
28	.300	.300	.685	.685	.799	.180	ED80008-ND	1.29	1.16	1.03	540-99-028-17-400000
32*	.300	.400	.665	.766	.885	.168	ED80009-ND	1.37	1.24	1.10	540-99-032-17-400000
44	.500	.500	.885	.885	1.082	.180	ED80010-ND	1.67	1.51	1.34	540-99-044-17-400000
52	.600	.600	1.000	1.000	1.224	.180	ED80011-ND	1.78	1.60	1.42	540-99-052-17-400000
68	.800	.800	1.202	1.202	1.507	.180	ED80012-ND	1.98	1.78	1.59	540-99-068-17-400000
84	1.000	1.000	1.400	1.400	1.791	.180	ED80013-ND	2.21	1.99	1.77	540-99-084-17-400000
Fig. 3 — Compact PLCC Sockets Surface Mount with Polarizing Posts											
20	.200	.200	.585	.585	.657	.180	ED80014-ND	1.26	1.13	1.01	540-99-020-17-400200
28	.300	.300	.685	.685	.799	.180	ED80015-ND	1.29	1.16	1.03	540-99-028-17-400200
32*	.300	.400	.665	.766	.885	.168	ED80016-ND	1.37	1.24	1.10	540-99-032-17-400200
44	.500	.500	.885	.885	1.082	.180	ED80017-ND	1.67	1.51	1.34	540-99-044-17-400200
52	.600	.600	1.000	1.000	1.224	.180	ED80018-ND	1.78	1.60	1.42	540-99-052-17-400200
68	.800	.800	1.202	1.202	1.507	.180	ED80019-ND	1.98	1.78	1.59	540-99-068-17-400200
84	1.000	1.000	1.400	1.400	1.791	.180	ED80020-ND	2.21	1.99	1.77	540-99-084-17-400200

* Rectangular

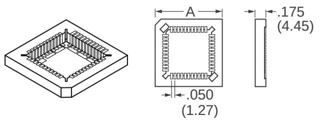
Low Cost PLCC Sockets

Fig.1 — Thru-Hole Mount



- Accepts JEDEC PLCCs MO-052 AE • Holes for drainage • Standoffs provide clearance for heat dissipation and cleaning • Internal standoffs insure proper positioning of chip carrier in socket • Easy access for probing installed chip carrier

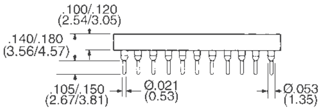
Fig.2 — Surface Mount

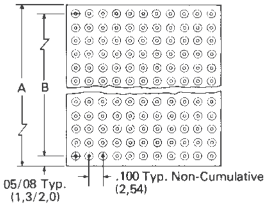


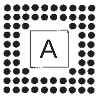
- Accepts JEDEC PLCCs MO-052 AE • Low profile for high density PC board stacking • Standoffs provide clearance for heat dissipation and cleaning

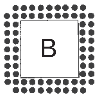
No. of Pins	Dimensions - Inch (mm) A	Digi-Key Part No.	Price Each 1	10	100	Mill-Max Part No.
Fig. 1 — Thru-Hole Mount						
20	0.613 (15.57)	ED80021-ND	.91	.77	.63	940-99-020-24-000000
28	0.720 (18.29)	ED80022-ND	.80	.68	.56	940-99-028-24-000000
32	0.820 (20.83) / .722 (18.34)	ED80023-ND	.82	.69	.57	940-99-032-24-000000
44	0.920 (23.37)	ED80024-ND	.83	.71	.58	940-99-044-24-000000
52	1.020 (25.91)	ED80025-ND	.89	.76	.62	940-99-052-24-000000
68	1.220 (30.99)	ED80026-ND	.91	.78	.64	940-99-068-24-000000
84	1.420 (36.07)	ED80027-ND	1.14	.97	.79	940-99-084-24-000000
Fig. 2 — Surface Mount						
20	0.613 (15.57)	ED80028-ND	.83	.71	.58	940-99-020-17-400000
28	0.720 (18.29)	ED80029-ND	.92	.79	.64	940-99-028-17-400000
32	0.820 (20.83) / .720 (18.29)	ED80030-ND	.73	.63	.51	940-99-032-17-400000
44	0.920 (23.37)	ED80031-ND	.87	.74	.61	940-99-044-17-400000
52	1.020 (25.91)	ED80032-ND	1.06	.90	.74	940-99-052-17-400000
68	1.220 (30.99)	ED80033-ND	1.04	.88	.72	940-99-068-17-400000
84	1.420 (36.07)	ED80034-ND	1.32	1.12	.92	940-99-084-17-400000

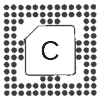
Pin Grid Array Sockets

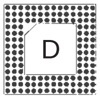


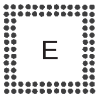


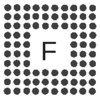


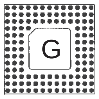


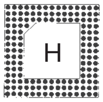


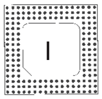


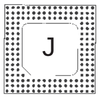


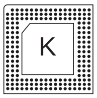


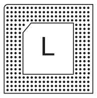


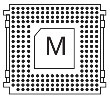












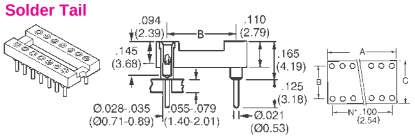
MATERIAL: • **Insulator body:** Standard material is glass filled thermoplastic polyester (PCT), self-extinguishing, rated UL94V-0. • **Color:** Black. • **Receptacle (sleeve):** Screw-machined brass (QQ-B-626), plated 200µ" tin-lead (SnPb 90/10) over 80-120µ" nickel. • **Pin:** Screw-machined brass (QQ-B-626), plated 200µ" tin-lead (SnPb 90/10) over 80-120µ" nickel. • **Contact (clip):** Stamped Beryllium-copper (QQ-C-533) heat treated, plated gold flash, 30µ" gold, over 80-120µ" nickel.

ELECTRICAL DATA: • **Rated Current:** 1A • **Rated Voltage:** 100 VRMS/150 VDC • **Contact Resistance:** 100 mΩ max. • **Insulation resistance:** 10,000 MΩ min. • **Dielectric Strength:** 1000 VRMS min. • **Capacity:** 0.3 pF max. • **Operating Temperature Range:** -55°C to +125°C

Pin Grid Array Size	No. of Pins	Foot-print (See Diag.)	Insulator Size Inches (mm) A	B	Description (Type of Contacts)	Frame Style	Digi-Key Part No.	Price Each 1	10	100
10x10	68	A	1.0 (25.40)	.9 (22.86)	Solder-Tail	Open	ED2002-ND	3.37	2.92	2.36
11x11	68	B	1.1 (27.94)	1.0 (25.40)	Solder-Tail	Open	ED2004-ND	3.37	2.92	2.36
13x13	101	C	1.3 (33.02)	1.2 (30.48)	Solder-Tail	Open	ED2007-ND	4.68	4.06	3.28
14x14	132	D	1.4 (35.56)	1.3 (33.02)	Solder-Tail	Open	ED2008-ND	6.12	5.31	4.29
13x13	88	E	1.3 (33.02)	1.2 (30.48)	Solder-Tail	Open	ED2009-ND	4.36	3.78	3.06
13x13	121	G	1.3 (33.02)	1.2 (30.48)	Solder-Tail	Open	ED2027-ND	5.61	4.87	3.93
15x15	145	H	1.5 (38.10)	1.4 (35.56)	Solder-Tail	Open	ED2029-ND	6.72	5.83	4.71
17x17	168	I	1.7 (43.18)	1.6 (40.64)	Solder-Tail	Open	ED2030-ND	7.79	6.75	5.46
17x17	169	J	1.7 (43.18)	1.6 (40.64)	Solder-Tail	Open	ED2031-ND	7.84	6.80	5.49
10x10	68	A	1.0 (25.40)	.9 (22.86)	3 Level Wire Wrap	Open	ED2014-ND	9.50	8.23	6.65
11x11	68	B	1.1 (27.94)	1.0 (25.40)	3 Level Wire Wrap	Open	ED2016-ND	9.50	8.23	6.65
14x14	132	D	1.4 (35.56)	1.3 (33.02)	3 Level Wire Wrap	Open	ED2020-ND	17.24	14.94	12.07
13x13	88	E	1.3 (33.02)	1.2 (30.48)	3 Level Wire Wrap	Open	ED2021-ND	11.49	9.97	8.05
10x10	84	F	1.0 (25.40)	.9 (22.86)	3 Level Wire Wrap	Open	ED2023-ND	10.10	8.76	7.08
13x13	121	G	1.3 (33.02)	1.2 (30.48)	3 Level Wire Wrap	Open	ED2037-ND	15.80	13.70	11.07
15x15	145	H	1.5 (38.10)	1.4 (35.56)	3 Level Wire Wrap	Open	ED2039-ND	18.75	16.25	13.13
18x18	179	K	1.8 (45.72)	1.7 (43.18)	Solder-Tail	Open	ED2042-ND	8.30	7.20	5.81
21x21	273	L	2.1 (53.34)	2.0 (50.80)	Solder-Tail	Open	ED2044-ND	12.53	10.86	8.78
18x18	223	M	1.8 (45.72)	1.7 (43.18)	Solder-Tail	Open	ED2046-ND	13.18	11.43	9.23

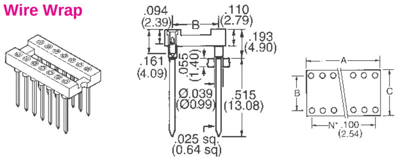
Dual-In-Line Sockets – Open Frame (Screw Machined)

Solder Tail



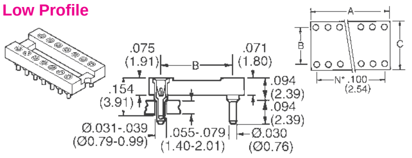
Most popular line of standard low profile IC-Sockets. Open frame design leaves space beneath IC for improved heat dissipation, easier PCB cleaning and inspection. **Insertion Characteristics:** 4-finger standard. **Plating: For ED3308-ED3964:** Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 30µ" Au. **For ED3108-ED3764:** Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 150µ" Sn. **For ED56083-ED56646:** Sleeve (Pin) – 10µ" Au. Contact (Clip) – 30µ" Au.

Wire Wrap



Solderless wire wrap terminals are firmly locked in the insulator body to withstand torque of wrapping tool. Length of terminal for three-level wrapping. **Insertion Characteristics:** 4-finger standard. **Plating: For ED4308-ED4964:** Sleeve (Pin) – 200µ" Sn. Contact (Clip) – 30µ" Au. **For ED57083-ED57406:** Sleeve (Pin) — 10µ" Au. Contact (Clip) — 30µ" Au

Low Profile



"Ultra low profile" Dual-in-line sockets are equipped with specially designed contacts allowing .095" (2.41mm) height above PCB. Special short contact requires .075" (1.91mm) insertion depth only. Solder tail diameter .030" (.76mm). **Insertion Characteristics:** 4-finger short contact. **Plating:** Sleeve (Pin) — 200µ" Sn. Contact (Clip) — 30µ" Au.

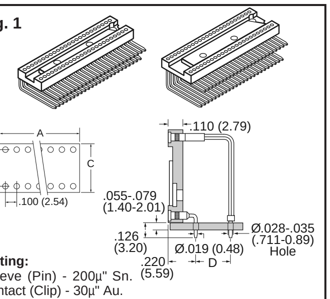
No. of Pins	Dimensions – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
				Solder Tail (Gold)						
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED3308-ND	.42	.29	.24	.20	.17	110-93-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED3314-ND	.73	.51	.41	.36	.30	110-93-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED3316-ND	.83	.58	.47	.40	.34	110-93-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED3318-ND	.94	.66	.53	.46	.38	110-93-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED3320-ND	1.04	.73	.59	.51	.42	110-93-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED3324-ND	1.25	.87	.71	.61	.51	110-93-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED3328-ND	1.46	1.02	.82	.71	.59	110-93-328-41-001
22	1.1 (27.94)	0.4 (10.16)	0.5 (12.70)	ED3422-ND	1.15	.80	.65	.56	.46	110-93-422-41-001
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED3424-ND	1.25	.87	.71	.61	.51	110-93-424-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED3624-ND	1.25	.87	.71	.61	.51	110-93-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED3628-ND	1.46	1.02	.82	.71	.59	110-93-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED3632-ND	1.67	1.16	.94	.81	.67	110-93-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED3640-ND	2.09	1.45	1.17	1.01	.84	110-93-640-41-001
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED3648-ND	2.50	1.74	1.41	1.21	1.01	110-93-648-41-001
50	2.5 (63.50)	0.9 (22.86)	1.0 (25.40)	ED3950-ND	2.61	1.81	1.46	1.26	1.05	110-93-950-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED3964-ND	3.34	2.32	1.87	1.61	1.34	110-93-964-41-001
				Solder Tail (Gold)						
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED56083-ND	.59	.42	.34	.29	.24	110-13-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED56143-ND	1.04	.72	.58	.50	.42	110-13-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED56163-ND	1.18	.82	.67	.57	.48	110-13-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED56183-ND	1.33	.93	.75	.64	.54	110-13-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED56203-ND	1.48	1.03	.83	.71	.60	110-13-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED56243-ND	1.77	1.23	1.00	.86	.71	110-13-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED56283-ND	2.07	1.44	1.16	1.00	.83	110-13-328-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED56246-ND	1.77	1.23	1.00	.86	.71	110-13-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED56286-ND	2.07	1.44	1.16	1.00	.83	110-13-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED56326-ND	2.36	1.64	1.33	1.14	.95	110-13-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED56406-ND	2.96	2.05	1.66	1.42	1.19	110-13-640-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED56646-ND	4.73	3.28	2.65	2.27	1.90	110-13-964-41-001
				Solder Tail (Tin)						
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED3108-ND	.32	.23	.19	.16	.13	110-99-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED3114-ND	.57	.40	.32	.28	.23	110-99-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED3116-ND	.65	.45	.37	.32	.26	110-99-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED3118-ND	.73	.51	.41	.35	.30	110-99-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED3120-ND	.81	.57	.46	.39	.33	110-99-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED3124-ND	.97	.68	.55	.47	.39	110-99-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED3128-ND	1.13	.79	.64	.55	.46	110-99-328-41-001
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED3524-ND	.97	.68	.55	.47	.39	110-99-424-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED3724-ND	.97	.68	.55	.47	.39	110-99-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED3728-ND	1.13	.79	.64	.55	.46	110-99-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED3732-ND	1.30	.90	.73	.63	.52	110-99-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED3740-ND	1.62	1.13	.91	.78	.65	110-99-640-41-001
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED3748-ND	1.94	1.35	1.09	.94	.78	110-99-648-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED3764-ND	2.59	1.80	1.46	1.25	1.04	110-99-964-41-001

No. of Pins	Dimensions – Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
				Wire Wrap						
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED4308-ND	.92	.64	.52	.44	.37	123-93-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED4314-ND	1.60	1.11	.90	.77	.65	123-93-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED4316-ND	1.83	1.27	1.03	.88	.74	123-93-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED4318-ND	2.06	1.43	1.16	.99	.83	123-93-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED4320-ND	2.29	1.59	1.29	1.10	.92	123-93-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED4324-ND	2.75	1.91	1.54	1.32	1.10	123-93-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED4328-ND	3.20	2.22	1.80	1.54	1.29	123-93-328-41-001
22	1.1 (27.94)	0.4 (10.16)	0.5 (12.70)	ED4422-ND	2.52	1.75	1.41	1.21	1.01	123-93-422-41-001
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED4424-ND	2.75	1.91	1.54	1.32	1.10	123-93-424-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED4624-ND	2.75	1.91	1.54	1.32	1.10	123-93-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED4628-ND	3.20	2.22	1.80	1.54	1.29	123-93-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED4632-ND	3.66	2.54	2.05	1.76	1.47	123-93-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED4640-ND	4.58	3.18	2.57	2.20	1.83	123-93-640-41-001
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED4648-ND	5.49	3.81	3.08	2.64	2.20	123-93-648-41-001
50	2.5 (63.50)	0.9 (22.86)	1.0 (25.40)	ED4950-ND	5.72	3.97	3.21	2.75	2.29	123-93-950-41-001
64	3.2 (81.28)	0.9 (22.86)	1.0 (25.40)	ED4964-ND	7.32	5.08	4.10	3.52	2.93	123-93-964-41-001
				Wire Wrap						
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED57083-ND	1.16	.81	.66	.56	.47	123-13-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED57143-ND	2.04	1.42	1.15	.98	.82	123-13-314-41-001
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED57163-ND	2.33	1.62	1.31	1.12	.94	123-13-316-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED57203-ND	2.91	2.02	1.63	1.40	1.17	123-13-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED57243-ND	3.49	2.43	1.96	1.68	1.40	123-13-324-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED57246-ND	3.49	2.43	1.96	1.68	1.40	123-13-624-41-001
28	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED57286-ND	4.07	2.83	2.29	1.96	1.63	123-13-628-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED57406-ND	5.82	4.04	3.26	2.80	2.33	123-13-640-41-001
				Low Profile						
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED5308-ND	.70	.49	.40	.34	.29	115-93-308-41-003
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED5314-ND	1.18	.82	.66	.57	.48	115-93-314-41-003
16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	ED5316-ND	1.35	.94	.76	.65	.54	115-93-316-41-003
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED5318-ND	1.52	1.05	.85	.73	.61	115-93-318-41-003
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED5320-ND	1.62	1.13	.91	.78	.65	115-93-320-41-003
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED5324-ND	1.95	1.35	1.09	.94	.78	115-93-324-41-003
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED5328-ND	2.27	1.58	1.28	1.10	.91	115-93-328-41-003
22	1.1 (27.94)	0.4 (10.16)	0.5 (12.70)	ED5422-ND	1.79	1.24	1.00	.86	.72	115-93-422-41-003
24	1.2 (30.48)	0.4 (10.16)	0.5 (12.70)	ED5424-ND	1.95	1.35	1.09	.94	.78	115-93-424-41-003
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED5624-ND	1.95	1.35	1.09	.94	.78	115-93-624-41-003
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED5628-ND	2.27	1.58	1.28	1.10	.91	115-93-628-41-003
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED5632-ND	2.60	1.81	1.46	1.25	1.04	115-93-632-41-003
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED5640-ND	3.25	2.26	1.82	1.56	1.30	115-93-640-41-003
48	2.4 (60.96)	0.6 (15.24)	0.7 (17.78)	ED5648-ND	3.90	2.71	2.19	1.88	1.56	115-93-648-41-003

Dual-In-Line Sockets – Right Angle Mount Closed Frame

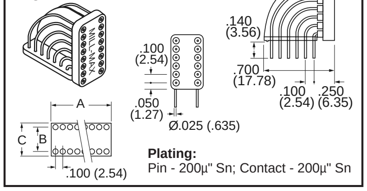
- For components to be mounted perpendicularly to the PCB, such as LED displays.
- Horizontal mount solder tails are available with either .300" (7.62mm) [standard] or .100" (2.54mm) row spacing.

Fig. 1



Plating:
Sleeve (Pin) - 200µ" Sn.
Contact (Clip) - 30µ" Au.

Fig. 2



Plating:
Pin - 200µ" Sn; Contact - 200µ" Sn

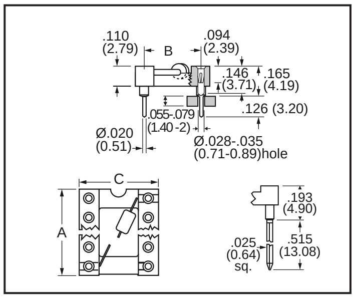
Fig.	No. of Pins	Dimensions – Inch (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Mill-Max Part No.
1	6	0.3 (7.62)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58407-ND	2.46	1.71	1.38	1.19	.99	299-93-306-10-001
	8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58408-ND	3.28	2.28	1.84	1.58	1.32	299-93-308-10-001
	10	0.5 (12.70)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58409-ND	3.93	2.73	2.21	1.89	1.58	299-93-310-10-001
	12	0.6 (15.24)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58410-ND	4.71	3.27	2.64	2.27	1.89	299-93-312-10-001
	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58411-ND	5.50	3.82	3.08	2.64	2.20	299-93-314-10-001
	16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58412-ND	6.29	4.36	3.53	3.02	2.52	299-93-316-10-001
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58413-ND	7.07	4.91	3.97	3.40	2.83	299-93-318-10-001
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58414-ND	7.58	5.26	4.25	3.64	3.04	299-93-320-10-001
	24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	.300 (7.62)	ED58415-ND	9.10	6.31	5.10	4.37	3.64	299-93-324-10-001
1	8	0.4 (10.16)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58416-ND	3.80	2.64	2.13	1.83	1.52	299-93-608-10-002
	10	0.5 (12.70)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58417-ND	4.55	3.16	2.55	2.19	1.82	299-93-610-10-002
	12	0.6 (15.24)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58418-ND	5.46	3.79	3.06	2.63	2.19	299-93-612-10-002
	14	0.7 (17.78)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58419-ND	6.37	4.42	3.57	3.06	2.55	299-93-614-10-002
	16	0.8 (20.30)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58420-ND	7.28	5.05	4.08	3.50	2.92	299-93-616-10-002
	18	0.9 (22.86)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58421-ND	8.19	5.68	4.59	3.94	3.28	299-93-618-10-002
	20	1.0 (25.40)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58422-ND	8.78	6.09	4.92	4.22	3.52	299-93-620-10-002
	22	1.1 (27.94)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58423-ND	9.66	6.70	5.41	4.64	3.87	299-93-622-10-002
	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58424-ND	10.54	7.31	5.91	5.06	4.22	299-93-624-10-002
	26	1.3 (33.02)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58425-ND	11.42	7.92	6.40	5.49	4.57	299-93-626-10-002
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58426-ND	12.30	8.53	6.89	5.91	4.92	299-93-628-10-002
	30	1.5 (38.10)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58427-ND	13.17	9.14	7.38	6.33	5.27	299-93-630-10-002
	32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58428-ND	14.05	9.75	7.87	6.75	5.63	299-93-632-10-002
	36	1.8 (45.72)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58429-ND	15.81	10.97	8.86	7.59	6.33	299-93-636-10-002
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	.300 (7.62)	ED58430-ND	17.57	12.18	9.84	8.44	7.03	299-93-640-10-002
1	6	.300 (7.62)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58431-ND	2.40	1.67	1.35	1.16	.97	299-93-306-11-001
	8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58432-ND	3.20	2.22	1.80	1.54	1.29	299-93-308-11-001
	10	0.5 (12.70)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58433-ND	3.84	2.67	2.16	1.85	1.54	299-93-310-11-001
	12	0.6 (15.24)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58434-ND	4.61	3.20	2.58	2.22	1.85	299-93-312-11-001
	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58435-ND	5.37	3.73	3.01	2.58	2.15	299-93-314-11-001
	16	0.8 (20.30)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58436-ND	6.14	4.26	3.44	2.95	2.46	299-93-316-11-001
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58437-ND	6.91	4.79	3.87	3.32	2.77	299-93-318-11-001
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58438-ND	7.41	5.14	4.15	3.56	2.97	299-93-320-11-001
	24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	.100 (2.54)	ED58439-ND	8.89	6.17	4.98	4.27	3.56	299-93-324-11-001
2	10	0.5 (12.70)	0.2 (5.08)	0.3 (7.62)	—	ED7800-ND	8.41	5.84	4.72	4.04	3.37	299-99-210-12-001800

IC Sockets
With Integral Decoupling Capacitor Machine Screw Contact

Special Features/Applications:
- To eliminate noise at the source before it can reach the chip
- Advantages for uses such as high speed logic and memory applications
- To eliminate long leads as potential sources of noise because capacitor leads are connected directly to the ground and voltage pin of the socket
- To save minimum of 12% on board space

Technical Data:
- Insulator body material: glass filled polyester UL94VO
- Pin: screw machined

Socket with integral glass encapsulated ceramic capacitor 0.1µF, 50 VDC



Type of Pins	No. of Pins	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	Mill-Max Part No.
Tin Plated, Solder Tab	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2101-ND	1.68	14.56	117.60	110-93-314-41-801000
	16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2102-ND	1.80	15.60	126.00	110-93-316-41-801000
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2103-ND	1.92	16.67	134.61	110-93-318-41-801000
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2104-ND	1.96	16.98	137.13	110-93-320-41-801000
	24#	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED2106-ND	2.24	19.37	156.45	110-93-324-41-801000
	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2105-ND	2.47	21.40	172.83	110-93-624-41-801000
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2107-ND	2.67	23.11	186.69	110-93-628-41-801000
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2108-ND	3.14	27.25	220.08	110-93-640-41-801000
Gold Plated, Solder Tab	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2109-ND	1.98	17.19	138.81	110-13-314-41-801000
	16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2110-ND	2.17	18.82	152.04	110-13-316-41-801000
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2111-ND	2.32	20.12	162.54	110-13-318-41-801000
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2112-ND	2.40	20.80	168.00	110-13-320-41-801000
	24#	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED2114-ND	2.77	24.00	193.83	110-13-324-41-801000
	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2113-ND	3.00	26.03	210.21	110-13-624-41-801000
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2115-ND	3.27	28.31	228.69	110-13-628-41-801000
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2116-ND	3.86	33.49	270.48	110-13-640-41-801000
3-Level Tin Plated	14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2117-ND	2.72	23.53	190.05	123-93-314-41-801000
	16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2118-ND	3.00	26.00	210.00	123-93-316-41-801000
	18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2119-ND	3.24	28.11	227.01	123-93-318-41-801000
	20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2120-ND	3.38	29.30	236.67	123-93-320-41-801000
Wire-Wrap	24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2121-ND	4.16	36.09	291.48	123-93-624-41-801000
	28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2122-ND	4.64	40.25	325.08	123-93-628-41-801000
	40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2123-ND	5.85	50.73	409.71	123-93-640-41-801000

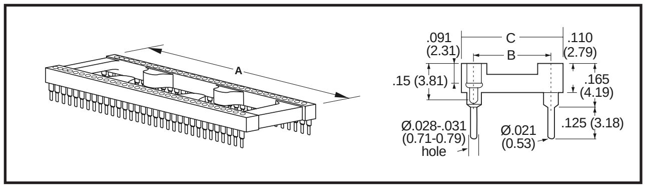
# With .300" (7.62mm) Contact Row Spacing.

Shrink Dip Sockets – Solder Tail – Open Frame

- High density Dual-in-Line Sockets for devices featuring .070" (1.78mm) lead spacing.
- Four-finger beryllium copper contacts meet high vibration and shock requirements.

Insertion Characteristics: 4-finger standard.

Plating:
Sleeve (Pin) – 200µ" Sn.;
Contact (Clip) – 30µ" Au.



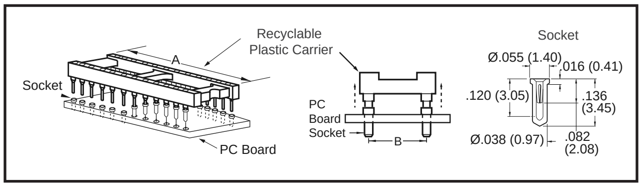
No.of Pins	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
16	0.572 (14.53)	0.3 (7.62)	0.39 (9.91)	ED22163-ND	1.60	11.10	89.67	384.30	640.50	117-93-316-41-005
28	0.992 (25.20)	0.4 (10.16)	0.49 (12.45)	ED22284-ND	2.71	18.77	151.62	649.80	1083.00	117-93-428-41-005
30	1.062 (26.97)	0.4 (10.16)	0.49 (12.45)	ED22304-ND	2.90	20.10	162.33	695.70	1159.50	117-93-430-41-005
48	1.692 (42.98)	0.4 (10.16)	0.49 (12.45)	ED22484-ND	4.64	32.16	259.77	1113.30	1855.50	117-93-448-41-005
20	0.712 (18.08)	0.6 (15.24)	0.69 (17.53)	ED22206-ND	1.93	13.39	108.15	463.50	772.50	117-93-620-41-005
28	0.992 (25.20)	0.6 (15.24)	0.69 (17.53)	ED22286-ND	2.71	18.77	151.62	649.80	1083.00	117-93-628-41-005
40	1.412 (35.86)	0.6 (15.24)	0.69 (17.53)	ED22406-ND	3.86	26.78	216.30	927.00	1545.00	117-93-640-41-005
42	1.482 (37.64)	0.6 (15.24)	0.69 (17.53)	ED22426-ND	4.05	28.11	227.01	972.90	1621.50	117-93-642-41-005
48	1.692 (42.98)	0.6 (15.24)	0.69 (17.53)	ED22486-ND	4.64	32.16	259.77	1113.30	1855.50	117-93-648-41-005
52	1.832 (46.53)	0.6 (15.24)	0.69 (17.53)	ED22526-ND	4.88	33.85	273.42	1171.80	1953.00	117-93-652-41-005
56	1.972 (50.09)	0.6 (15.24)	0.69 (17.53)	ED22566-ND	5.26	36.48	294.63	1262.70	2104.50	117-93-656-41-005
64	2.252 (57.20)	0.6 (15.24)	0.69 (17.53)	ED22646-ND	6.02	41.70	336.84	1443.60	2406.00	117-93-664-41-005
64	2.252 (57.20)	0.75 (19.05)	0.84 (21.34)	ED22647-ND	6.02	41.70	336.84	1443.60	2406.00	117-93-764-41-005
68	2.392 (60.76)	0.6 (15.24)	0.69 (17.53)	ED22686-ND	6.39	44.30	357.84	1533.60	2556.00	117-93-668-41-005

Miniature Dual-In-Line Socket Carriers

- Reusable carriers
- Pin Carrier Assemblies assure maximum ventilation and better visibility for inspection and repair.
- Easy mounting due to the ***RECYCLABLE PLASTIC CARRIER***. No solder wicking problems.

Requires .039" (.99mm) min. diameter holes in PCB.

Insertion Characteristics: 3-finger.
Plating: Sleeve (Pin) – 200µ" Sn.; Contact (Clip) – 30µ" Au.

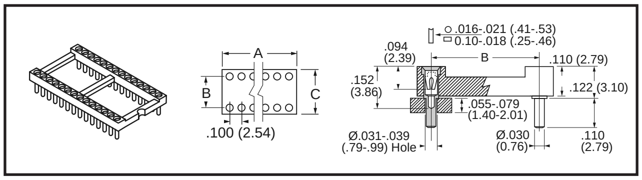


No. of Pins	Dim. – Inch (mm) A	B	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
8	0.4 (10.16)	0.3 (7.62)	ED6008-ND	.93	6.45	52.08	223.20	372.00	614-93-308-31-012
14	0.7 (17.78)	0.3 (7.62)	ED6014-ND	1.63	11.28	91.14	390.60	651.00	614-93-314-31-012
16	0.8 (20.32)	0.3 (7.62)	ED6016-ND	1.86	12.90	104.16	446.40	744.00	614-93-316-31-012
18	0.9 (22.86)	0.3 (7.62)	ED6018-ND	2.09	14.51	117.18	502.20	837.00	614-93-318-31-012
20	1.0 (25.40)	0.3 (7.62)	ED6020-ND	2.33	16.12	130.20	558.00	930.00	614-93-320-31-012
24	1.2 (30.48)	0.3 (7.62)	ED6024-ND	2.79	19.34	156.24	669.60	1116.00	614-93-324-31-012
28	1.4 (35.56)	0.3 (7.62)	ED6028-ND	3.26	22.57	182.28	781.20	1302.00	614-93-328-31-012
24	1.2 (30.48)	0.6 (15.24)	ED6124-ND	2.79	19.34	156.24	669.60	1116.00	614-93-624-31-012
28	1.4 (35.56)	0.6 (15.24)	ED6128-ND	3.26	22.57	182.28	781.20	1302.00	614-93-628-31-012
32	1.6 (40.64)	0.6 (15.24)	ED6132-ND	3.72	25.79	208.32	892.80	1488.00	614-93-632-31-012
40	2.0 (50.80)	0.6 (15.24)	ED6140-ND	4.65	32.24	260.40	1116.00	1860.00	614-93-640-31-012

Dual-In-Line Sockets – Low Profile Open Frame

- Dip Sockets with reduced height; only .122" (3.10mm) above PCB.
- Hi-Rel, 4-finger #30 clip.

Plating: Sleeve (Pin) – 200µ" Sn.; Contact (Clip) – 30µ" Au.

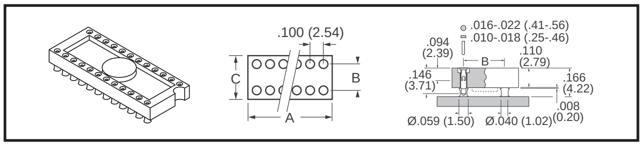


No.of Pins	Dim. – Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED58083-ND	.62	5.28	43.20	159.36	268.80	115-93-308-41-001
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED58143-ND	1.05	8.86	72.45	267.26	450.80	115-93-314-41-001
16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED58163-ND	1.20	10.12	82.80	305.44	515.20	115-93-316-41-001
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED58183-ND	1.35	11.39	93.15	343.62	579.60	115-93-318-41-001
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED58203-ND	1.44	12.21	99.90	368.52	621.60	115-93-320-41-001
24	1.2 (30.48)	0.3 (7.62)	0.4 (10.16)	ED58243-ND	1.73	14.66	119.93	442.39	746.20	115-93-324-41-001
28	1.4 (35.56)	0.3 (7.62)	0.4 (10.16)	ED58283-ND	2.02	17.11	139.95	516.26	870.80	115-93-328-41-001
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED58246-ND	1.73	14.66	119.93	442.39	746.20	115-93-624-41-001
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED58286-ND	2.02	17.11	139.95	516.26	870.80	115-93-628-41-001
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED58326-ND	2.31	19.53	159.75	589.30	994.00	115-93-632-41-001
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED58406-ND	2.89	24.42	199.80	737.04	1243.20	115-93-640-41-001

Dual-In-Line Sockets – Surface Mount, Stub Tail, Closed Frame

- Closed frame insulator is vision system compatible.
- High-temp Nylon 46, suitable for infra-red and vapor phase soldering.

Plating: Sleeve (Pin) – 200µ" Sn.;
Contact (Clip) – 200µ" Sn.



No.of Pins	Dim.– Inch (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Mill-Max Part No.
Vacuum Pads Top Surface Only										
8	0.4 (10.16)	0.3 (7.62)	0.4 (10.16)	ED2128-ND	.57	4.94	39.90	171.00	285.00	214-99-308-01-670800
14	0.7 (17.78)	0.3 (7.62)	0.4 (10.16)	ED2129-ND	.96	8.29	66.99	287.10	478.50	214-99-314-01-670800
16	0.8 (20.32)	0.3 (7.62)	0.4 (10.16)	ED2130-ND	1.10	9.49	76.65	328.50	547.50	214-99-316-01-670800
18	0.9 (22.86)	0.3 (7.62)	0.4 (10.16)	ED2131-ND	1.23	10.63	85.89	368.10	613.50	214-99-318-01-670800
20	1.0 (25.40)	0.3 (7.62)	0.4 (10.16)	ED2132-ND	1.32	11.44	92.40	396.00	660.00	214-99-320-01-670800
Vacuum Pads Top and Bottom										
24	1.2 (30.48)	0.6 (15.24)	0.7 (17.78)	ED2133-ND	1.58	13.70	110.67	474.30	790.50	214-99-624-01-670800
28	1.4 (35.56)	0.6 (15.24)	0.7 (17.78)	ED2134-ND	1.85	15.99	129.15	553.50	922.50	214-99-628-01-670800
32	1.6 (40.64)	0.6 (15.24)	0.7 (17.78)	ED2135-ND	2.11	18.30	147.84	633.60	1056.00	214-99-632-01-670800
40	2.0 (50.80)	0.6 (15.24)	0.7 (17.78)	ED2136-ND	2.64	22.85	184.59	791.10	1318.50	214-99-640-01-670800

MILL-MAX® Pin Receptacles and P.C. Pins

Fig. 1

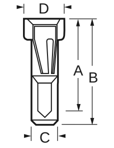


Fig. 2

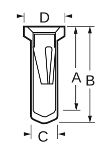


Fig. 3

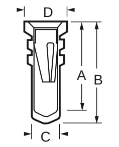
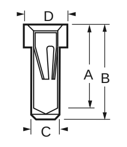


Fig. 4



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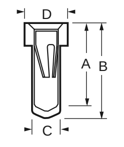


Fig. 6

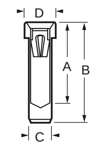


Fig. 7

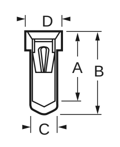


Fig. 8

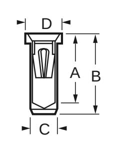


Fig. 9

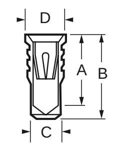


Fig. 10

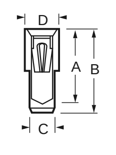


Fig. 11

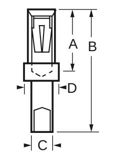


Fig. 12

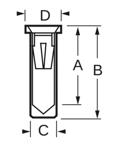


Fig. 13

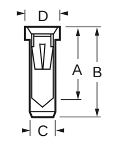


Fig. 14

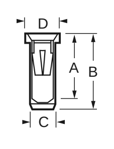


Fig. 15

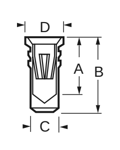


Fig. 16

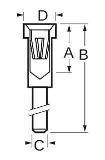


Fig. 17

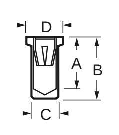


Fig. 18

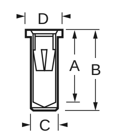


Fig. 19

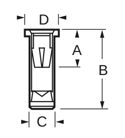


Fig. 20

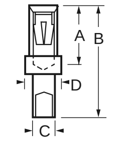


Fig. 21

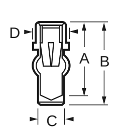


Fig. 22

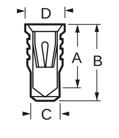


Fig. 23

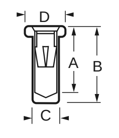
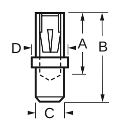


Fig. 24



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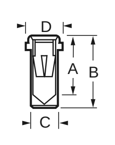


Fig. 26

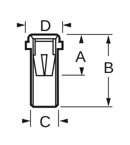


Fig. 27

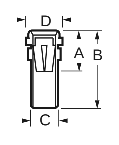


Fig. 28

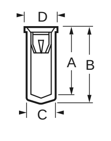


Fig. 29

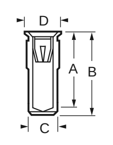


Fig. 30

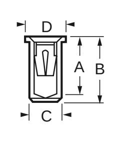


Fig. 31

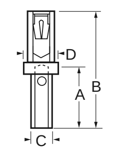


Fig. 32

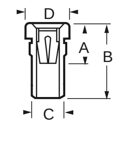


Fig. 33

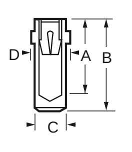


Fig. 34

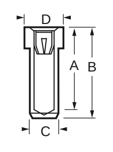


Fig. 35

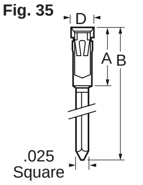


Fig. 36

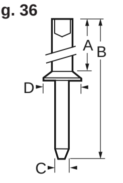


Fig. 37

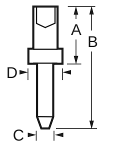


Fig. 38

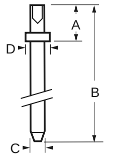


Fig. 39

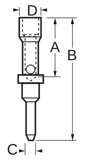


Fig. 40

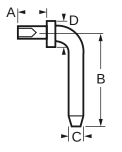


Fig.	Mounting Hole Diameter	Dimensions Inch (mm) A	B	C	D	Digi-Key Part No.	Pricing 10	100	1,000
.015" – .021" (.38mm – .53mm) Pin Diameter									
1	.036 (.91)	.138 (3.51)	.155 (3.94)	.034 (.86)	.058 (1.47)	ED5036-ND	1.48	11.10	74.00
2	.040 (1.02)	.120 (3.05)	.136 (3.45)	.038 (.97)	.055 (1.40)	ED5037-ND	.80	6.00	40.00
2	.040 (1.02)	.150 (3.81)	.170 (4.32)	.038 (.97)	.055 (1.40)	ED5038-ND	.81	6.09	40.60
3	.041 (1.04)	.124 (3.15)	.140 (3.56)	.038 (.97)	.055 (1.40)	ED5039-ND	1.57	11.79	78.60
3	.041 (1.04)	.154 (3.91)	.170 (4.32)	.038 (.97)	.055 (1.40)	ED5040-ND	1.58	11.88	79.20
4	.040 (1.02)	.127 (3.23)	.146 (3.71)	.038 (.97)	.055 (1.40)	ED5046-ND	.93	6.96	46.40
5	.040 (1.02)	.140 (3.56)	.160 (4.06)	.038 (.97)	.056 (1.42)	ED5041-ND	1.77	13.26	88.40
.015" – .025" (.38mm – .64mm) Pin Diameter									
6	.051 (1.30)	.205 (5.21)	.248 (6.30)	.049 (1.24)	.063 (1.60)	ED5045-ND	2.08	15.57	103.80
7	.053 (1.35)	.135 (3.43)	.160 (4.06)	.051 (1.30)	.072 (1.83)	ED5042-ND	1.71	12.84	85.60
8	.057 (1.45)	.142 (3.61)	.161 (4.09)	.055 (1.40)	.072 (1.83)	ED5044-ND	.99	7.44	49.60
9	.057 (1.45)	.150 (3.81)	.170 (4.32)	.053 (1.35)	.072 (1.83)	ED5004-ND	1.75	13.11	87.40
10	.061 (1.55)	.150 (3.81)	.180 (4.57)	.058 (1.47)	.080 (2.03)	ED5043-ND	1.60	12.03	80.20
.022" – .032" (.56mm – .81mm) Pin Diameter									
11	.060 (1.52)	.170 (4.32)	.294 (7.47)	.040 (1.02)	.094 (2.39)	ED5015-ND	4.26	31.92	212.80
12	.063 (1.60)	.233 (5.92)	.259 (6.58)	.060 (1.52)	.077 (1.96)	ED5008-ND	1.89	14.16	94.40
13	.071 (1.80)	.210 (5.33)	.250 (6.35)	.068 (1.73)	.093 (2.36)	ED5006-ND	2.04	15.30	102.00
14	.076 (1.93)	.185 (4.70)	.206 (5.23)	.073 (1.85)	.090 (2.29)	ED5007-ND	2.00	15.03	100.20
.025" – .037" (.64mm – .94mm) Pin Diameter									
15	.061 (1.55)	.165 (4.19)	.200 (5.08)	.057 (1.45)	.078 (1.98)	ED5005-ND	2.85	21.36	142.40
16	.042 (1.07)	.180 (4.57)	.320 (8.13)	.040 (1.02)	.078 (1.98)	ED5009-ND	2.38	17.88	119.20
16	.042 (1.07)	.180 (4.57)	.397 (10.08)	.040 (1.02)	.078 (1.98)	ED5010-ND	2.82	21.12	140.80
.037" – .043" (.94mm – 1.09mm) Pin Diameter									
17	.071 (1.80)	.127 (3.23)	.150 (3.81)	.069 (1.75)	.090 (2.29)	ED5019-ND	2.24	16.80	112.00
.032" – .047" (.56mm – 1.19mm) Pin Diameter									
18	.075 (1.91)	.180 (4.57)	.206 (5.23)	.072 (1.83)	.090 (2.29)	ED5016-ND	2.04	15.30	102.00
19	.075 (1.91)	.125 (3.18)	.221 (5.61)	.072 (1.83)	.090 (2.29)	ED5018-ND	4.21	31.56	210.40
20	.067 (1.70)	.200 (5.08)	.324 (8.23)	.065 (1.65)	.125 (3.18)	ED5021-ND	4.58	34.38	229.20
21	.076 (1.93)	.195 (4.95)	.220 (5.59)	.074 (1.88)	.102 (2.59)	ED5020-ND	4.32	32.40	216.00
22	.076 (1.93)	.180 (4.57)	.206 (5.23)	.071 (1.80)	.090 (2.29)	ED5017-ND	2.42	18.12	120.80
23	.091 (2.31)	.220 (5.59)	.253 (6.43)	.088 (2.24)	.120 (3.05)	ED5013-ND	2.96	22.17	147.80
24	.089 (2.26)	.220 (5.59)	.317 (8.05)	.085 (2.16)	.125 (3.18)	ED5014-ND	3.66	27.48	183.20
25	.087 (2.21)	.195 (4.95)	.236 (5.99)	.085 (2.16)	.125 (3.18)	ED5012-ND	2.54	19.05	127.00

Fig.	Mounting Hole Diameter	Dimensions Inch (mm) A	B	C	D	Digi-Key Part No.	Pricing 10	100	1,000
26	.087 (2.21)	.130 (3.30)	.236 (5.99)	.085 (2.16)	.125 (3.18)	ED5011-ND	2.54	19.08	127.20
27	.089 (2.26)	.131 (3.33)	.250 (6.35)	.080 (2.03)	.110 (2.79)	ED5028-ND	3.14	23.58	157.20
.040" – .050" (1.02mm – 1.27mm) Pin Diameter									
28	.102 (2.59)	.260 (6.60)	.290 (7.37)	.100 (2.54)	.118 (3.00)	ED5024-ND	2.52	18.87	125.80
29	.103 (2.62)	.260 (6.60)	.290 (7.37)	.088 (2.24)	.118 (3.00)	ED5023-ND	3.53	26.49	176.60
.048" – .064" (1.22mm – 1.63mm) Pin Diameter									
30	.102 (2.59)	.180 (4.57)	.213 (5.41)	.098 (2.49)	.120 (3.05)	ED5029-ND	3.28	24.57	163.80
31	—	.267 (6.78)	.530 (13.46)	.103 (2.62)	.141 (3.58)	ED5032-ND	7.31	54.81	365.40
32	.108 (2.74)	.134 (3.40)	.250 (6.35)	.102 (2.59)	.136 (3.45)	ED5031-ND	4.03	30.24	201.60
.065" – .082" (1.65mm – 2.08mm) Pin Diameter									
33	.144 (3.66)	.340 (8.64)	.412 (10.46)	.142 (3.61)	.188 (4.78)	ED5035-ND	5.52	41.40	276.00
.084" – .102" 2.13mm – 2.59mm) Pin Diameter									
34	.144 (3.66)	.415 (10.54)	.465 (11.81)	.142 (3.61)	.188 (4.78)	ED5034-ND	6.68	50.10	334.00
.015" – .025" (.38mm – .64mm) Pin Diameter									
35	.055 (1.40)	.200 (5.08)	.700 (17.78)	—	.072 (1.83)	ED5001-ND	1.41	10.59	70.60
35	.055 (1.40)	.200 (5.08)	.560 (14.22)	—	.072 (1.83)	ED5002-ND	1.26	9.42	62.80
35	.055 (1.40)	.200 (5.08)	.460 (11.68)	—	.072 (1.83)	ED5003-ND	1.62	12.12	80.80
.025" (.64mm) Pin Diameter									
36	.035 (.89)	.047 (1.19)	.260 (6.60)	.025 (.64)	.062 (1.57)	ED5055-ND	.84	6.30	42.00
36	.035 (.89)	.078 (1.98)	.291 (7.39)	.025 (.64)	.062 (1.57)	ED5056-ND	.66	4.98	33.20
37	.043 (1.09)	.076 (1.93)	.201 (5.11)	.025 (.64)	.062 (1.57)	ED5053-ND	.83	6.21	41.40
37	.043 (1.09)	.107 (2.72)	.232 (5.89)	.025 (.64)	.062 (1.57)	ED5054-ND	.67	5.04	33.60
.040" (1.02mm) Pin Diameter									
38	.043 (1.09)	.047 (1.19)	.221 (5.61)	.040 (1.02)	.070 (1.78)	ED5047-ND	.72	5.40	36.00
38	.043 (1.09)	.102 (2.59)	.252 (6.40)	.040 (1.02)	.070 (1.78)	ED5048-ND	.75	5.64	37.60
38	.043 (1.09)	.102 (2.59)	.290 (7.37)	.040 (1.02)	.070 (1.78)	ED5050-ND	.80	6.03	40.20
38	.043 (1.09)	.102 (2.59)	.402 (10.21)	.040 (1.02)	.070 (1.78)	ED5052-ND	.95	7.14	47.60
39	—	.282 (7.16)	.588 (14.94)	.040 (1.02)	.105 (2.67)	ED5061-ND	4.33	32.49	216.60
.040" (1.02mm) Pin Diameter									
40	.043 (1.09)	.082 (2.08)	.257 (6.53)	.040 (1.02)	.070 (1.78)	ED5058-ND	2.65	19.86	132.40

Single In-Line Strip Sockets — Solder Tail and Solderless

MATERIALS: • **Insulator Body:** Glass filled thermoplastic polyester, self-extinguishing rated UL 94V-O; color black; resistant against detergents, mineral acids, solvents, greases and oils (short time) • **Receptacle (sleeve):** Screw machined brass, plated 200µ" tin-lead • **Pin:** Screw machined brass with 10µ" gold plating • **Contact:** Stamped beryllium-copper, plated 30µ" gold • **Mechanical Life:** 100 cycles min. **ELECTRICAL DATA:** • **Rated Current:** 1A • **Current Rating:** Clips have rating of 3A • **Rated Voltage:** 100 VRMS/150 VDC • **Contact Resistance:** 10mΩ max. • **Insulation Resistance:** 10,000MΩ min. • **Dielectric Strength:** 1000 VRMS min. • **Capacitance:** 0.3 pF max. **ENVIRONMENTAL DATA:** • **Operating Temp. Range:** -55°C to +125°C • **Vibration:** 10-2000 Hz, 15g. • **Shock (no elect. discontinuity greater than 1µs):** 150g. • **Solderability:** IEC 68-2-20 Ta. • **Resistance to Soldering Heat:** IEC 68-2-20, 260°C, 5s • **Resistance to Atmosphere Corrosion:** IEC 68-2-42 & 43.

Fig. 1 — Standard Solder Tail

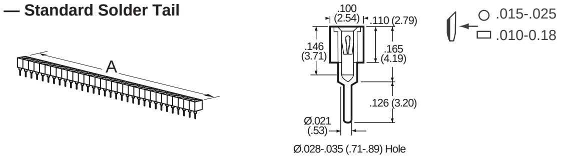


Fig. 2 — Low Profile Socket

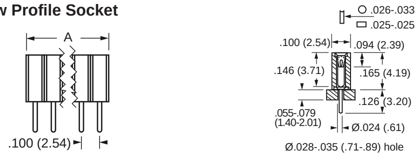


Fig. 3 — Socket Strip

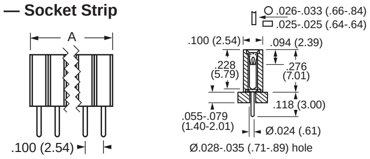


Fig. 4 — Low Profile Pin Header

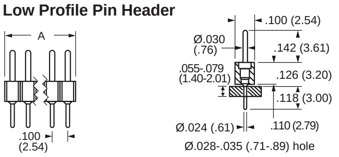


Fig. 5 — Pin Header Strip

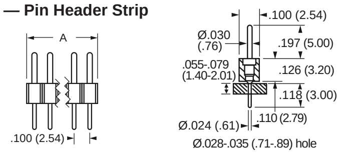


Fig.	No. of Pins	Dim. A Inch (mm)	Plating Sleeve/Pin	Clip	Digi-Key Part No.	Pricing 1	10	100	Mill-Max Part No.
Strip Sockets Solder Tail — 7000 Series									
1	64	6.4 (162.56)	200µ" Sn	30µ" Au	ED7064-ND	2.89	24.48	200.25	310-93-164-41-001
Single Row Socket, Straight Angle Solder Tail — Series 7400									
1	64	6.4 (162.56)	10µ" Au	30µ" Au	ED7464-ND	4.10	34.68	283.73	310-13-164-41-001000
Single Row, Low Profile Socket — Series 7600									
2	36	3.6 (91.44)	200µ" Sn	30µ" Au	ED7636-ND	4.14	35.04	286.65	801-93-036-10-012000
Single Row Pin Socket, Straight Solder Tail — 7100 Series									
3	50	5.0 (127.00)	200µ" Sn	30µ" Au	ED7150-ND	5.98	50.63	414.23	801-93-050-10-001
Single Row, Low Profile Pin Header — Series 7500									
4	64	6.4 (162.56)	10µ" Au	—	ED7564-ND	6.72	56.84	465.08	800-10-064-10-002000
Single Row Pin Header, Straight Solder Tail — 7200 Series									
5	64	6.4 (162.56)	10µ" Au	—	ED7264-ND	6.85	57.97	474.30	800-10-064-10-001

Digi-Key Part No.	Base Price	Pin Adder
7000 Series		
ED70XX-ND	.33	.04
7400 Series		
ED74XX-ND	.26	.06
7600 Series		
ED76XX-ND	.54	.10
7100 Series		
ED71XX-ND	.47	.11
7500 Series		
ED75XX-ND	.32	.10
7200 Series		
ED72XX-ND	.45	.10

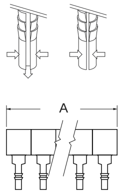
Single In-Line Strip Sockets — Solderless Press Fit, Compliant Tail

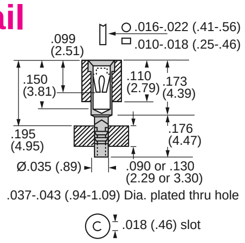
FEATURES:

Unique compliant tail pins conforms to .040" ±.003" (1.02mm ±08mm) finished hole diameter without stressing inner layers.

APPLICATION OF COMPLIANT TAIL PINS:

Mill-Max's patented (Patent No. 4,799,904) compliant tail features precision machined pins that are hollow and slotted to conform to a .040" ±.003" (1.02mm ±08mm) diameter PTH. As the pin is inserted, the slot compresses to fit the PTH, thus avoiding damage (see illustration). The pin's tail has fine serrations that form a perfect "gas tight" connection that doesn't require soldering. And since the pin doesn't damage the hole, compliant tail sockets and connectors can be easily replaced.





No. of Pins	Dim. A Inch (mm)	Plating Sleeve/Pin	Clip	Digi-Key Part No.	Pricing 1	10	100	Mill-Max Part No.
64	6.4" (162.56)	200µ" Sn	30µ" Au	ED7364-ND	7.35	62.15	508.50	346-93-164-41-013

Digi-Key Part No.	Base Price	Pin Adder
ED73XX-ND	.95	.10

HOW TO ORDER — 4 EASY STEPS

How do I order an ED7064 header with 64 pins?
Call Digi-Key where you'll happily receive the price.
or Determine the cost yourself

ED ❑ ❑ ❑ ❑ - ND
Series
Number of Desired Pins

How to Order — In 4 Easy Steps	*Our Example*	*Your Digi-Key Part Number*
Step 1. Select needed "Digi-Key Part Number" and number of pins desired	ED7064-ND	ED __ __ __ __ - ND
Step 2. Begin with appropriate "Base Price" of your selected Part Number (refer to chart)...	.33	______
Step 3. Multiply the number of pins you desire by "Pin Adder" of your selected Part Number (refer to chart)...	64 x .04 = 2.56	____ x ____ = ______
Step 4. Add Step 2 & Step 3 together for Final Cost!	Your Cost = $2.89	Your Cost = $______

NOTE: For quantities of 10 or more, call 1-800-DIGI-KEY.

Surface Mount Connectors — Modular Spring Loaded Contacts

Fig. 1

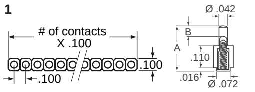
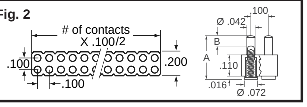


Fig. 2



- Modular contacts for use on .100" grid, available in seven heights from .177" to .295", supplied in single and double row contact strips.
- Precision machined piston/base and gold plated components assure a 40,000 min. cycle life.
- Pistons have a long stroke relative to the low profile of the assembly.
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak.
- High temperature thermoplastic insulators are suitable for surface mount processes
- A typical application would be as the base unit (battery/charger) interface for portable equipment such as mobile phones/radios, bar code readers, medical and test instruments.

Fig.	Contacts	Initial Height Dim. A Inch (mm)	Stroke Dim. B Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Mill-Max Part No.
Single Row - Series 811								
1	64	.177 (4.50)	.045 (1.14)	ED9773-ND	29.95	25.96	20.97	811-22-064-30-001101
		.197 (5.00)	.055 (1.40)	ED9774-ND	29.95	25.96	20.97	811-22-064-30-002101
		.217 (5.51)	.055 (1.40)	ED9775-ND	29.95	25.96	20.97	811-22-064-30-003101
		.295 (7.49)	.055 (1.40)	ED9776-ND	29.95	25.96	20.97	811-22-064-30-007101
Double Row - Series 813								
2	72	.177 (4.50)	.045 (1.14)	ED9777-ND	33.70	29.21	23.59	813-22-072-30-001101
		.197 (5.00)	.055 (1.40)	ED9778-ND	33.70	29.21	23.59	813-22-072-30-002101
		.217 (5.51)	.055 (1.40)	ED9779-ND	33.70	29.21	23.59	813-22-072-30-003101
		.295 (7.49)	.055 (1.40)	ED9780-ND	33.70	29.21	23.59	813-22-072-30-007101

In-Line Sockets and Headers - Solder Tail and Solderless

Fig. 1

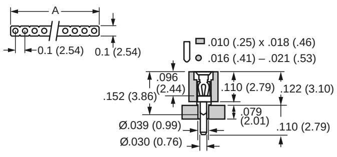


Fig. 2

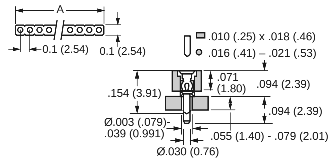


Fig. 3

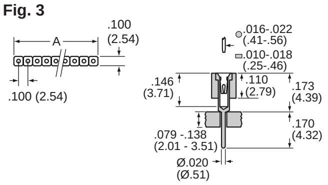


Fig. 4

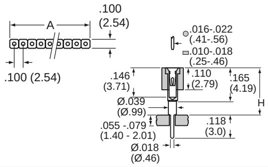


Fig. 5

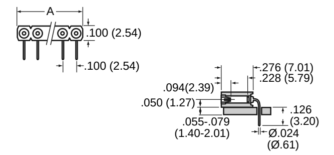


Fig. 6

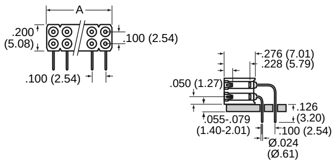


Fig. 7

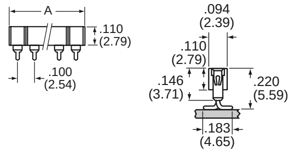


Fig. 8

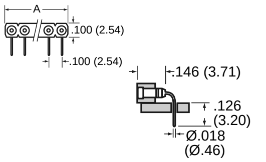


Fig. 9

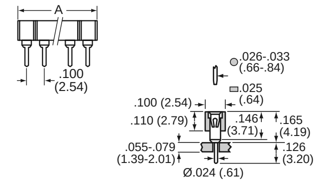
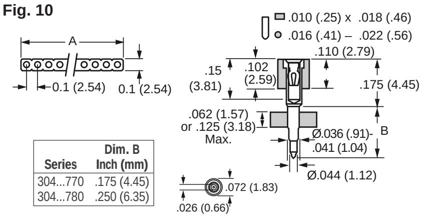


Fig. 10



Series	Dim. B Inch (mm)
304...770	.175 (4.45)
304...780	.250 (6.35)

Fig. 11

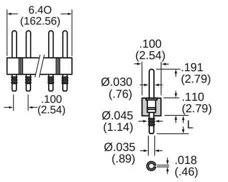


Fig. 12

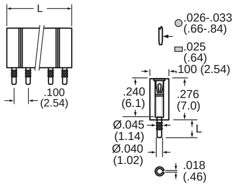


Fig. 13

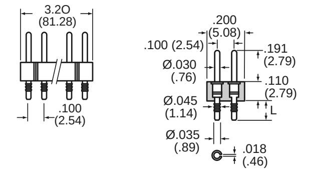


Fig. 14

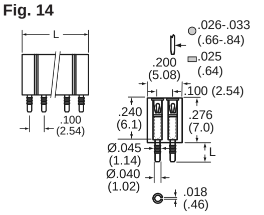


Fig. 15

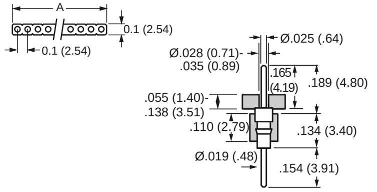


Fig. 16

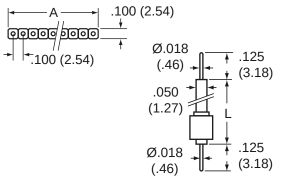


Fig. 17

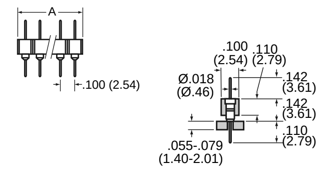


Fig. 18

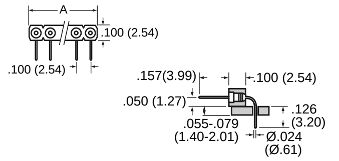


Fig. 19

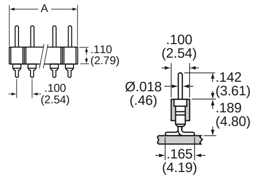


Fig. 20

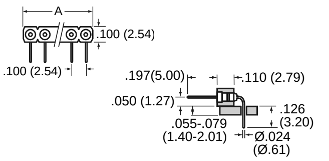


Fig.	Description	No. of Pins	Dim. A Inch (mm)	Plating		Digi-Key Part No.	Price Each			Mill-Max Part No.
				Sleeve/Pin	Contact/Clip		1	10	100	
	Solder Tail Socket									
1	Very Low Profile, Series 315...01	64	6.4” (162.56)	200µ” Sn	30µ” Au	ED7864-ND	4.16	3.52	2.88	315-93-164-41-001000
2	Ultra Low Profile, Series 315...03	64	6.4” (162.56)	200µ” Au	30µ” Au	ED7964-ND	4.06	3.44	2.81	315-93-164-41-003000
3	Single Row, Long Solder Tail, Series 311…01	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1064-ND	3.16	2.74	2.22	311-93-164-41-001000
4	Single Row, Series 316…01 H=.594	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1164-ND	8.48	7.35	5.94	316-93-164-41-001000
4	Single Row, Series 316…03 H=.315	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1264-ND	7.33	6.36	5.14	316-93-164-41-003000
4	Single Row, Series 316…06 H=.236	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1364-ND	6.92	6.01	4.85	316-93-164-41-006000
4	Single Row, Series 316…07 H=.402	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED1464-ND	7.66	6.64	5.37	316-93-164-41-007000
4	Single Row, Series 316…08 H=.472	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED15064-ND	8.01	6.94	5.61	316-93-164-41-008000
5	Single Row, Right Angle .030" dia. Pins	50	5.0" (127.00)	200µ” Sn	30µ” Au	ED1450-ND	5.89	5.11	4.13	801-93-050-20-001000
6	Double Row, Right Angle .030" dia. Pins	2 x 50	5.0" (127.00)	200µ” Sn	30µ” Au	ED14100-ND	14.31	12.41	10.02	803-93-100-20-001000
7	Single Row, .220" Surface Mount	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED23064-ND	5.84	5.06	4.09	310-93-164-41-105000
8	Single Row, Series 399…03 Right Angle	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED22064-ND	5.63	4.88	3.94	399-93-164-10-003000
9	Single Row, Low Profile .030" dia. Pins	64	6.4" (162.56)	200µ” Sn	30µ” Au	ED2764-ND	6.20	5.38	4.35	801-93-064-10-002000
	Solderless Press-Fit Header/Socket									
10	Solderless Press-Fit Socket, Series 304...770	64	6.4” (162.56)	10µ” Au	30µ” Au	ED8064-ND	6.53	5.53	4.53	304-13-164-41-770000
10	Solderless Press-Fit Socket, Series 304...780	64	6.4” (162.56)	10µ” Au	30µ” Au	ED8164-ND	7.05	5.97	4.89	304-13-164-41-780000
11	Single Row Header Compliant Tail L=.104	64	6.4" (162.56)	10µ” Au	—	ED2864-ND	9.04	7.84	6.33	800-10-064-61-001000
11	Single Row Header Compliant Tail L=.143	64	6.4" (162.56)	10µ” Au	—	ED2964-ND	9.17	7.95	6.42	800-10-064-62-001000
12	Single Row Socket Compliant Tail L=.104	50	5.0" (127.00)	200µ” Sn	30µ” Au	ED15050-ND	8.76	7.59	6.13	801-93-050-61-001000
12	Single Row Socket Compliant Tail L=.143	50	5.0" (127.00)	200µ” Sn	30µ” Au	ED1650-ND	8.79	7.62	6.16	801-93-050-62-001000
13	Double Row Header Compliant Tail L=.104	2 x 32	3.2" (81.28)	10µ” Au	—	ED3064-ND	9.04	7.84	6.33	802-10-064-61-001000
13	Double Row Header Compliant Tail L=.143	2 x 32	3.2" (81.28)	10µ” Au	—	ED3164-ND	9.17	7.95	6.42	802-10-064-62-001000
14	Double Row Socket Compliant Tail L=.104	2 x 50	5.0" (127.00)	200µ” Sn	30µ” Au	ED15100-ND	17.34	15.03	12.14	803-93-100-61-001000
14	Double Row Socket Compliant Tail L=.143	2 x 50	5.0" (127.00)	200µ” Sn	30µ” Au	ED16100-ND	17.40	15.08	12.18	803-93-100-62-001000
	Solder Tail Header Strip									
15	Pin/Solder Tail Header Strip, Series 350	64	6.4” (162.56)	10µ” Au	—	ED7764-ND	6.12	5.18	4.24	350-10-164-00-001000
16	Single Row, .018/.018 Pin L=.210	64	6.4" (162.56)	10µ” Au	—	ED16064-ND	5.99	5.20	4.20	342-10-164-00-591000
16	Single Row, .018/.018 Pin L=.335	64	6.4" (162.56)	10µ” Au	—	ED17064-ND	6.42	5.57	4.50	342-10-164-00-592000
16	Single Row, .018/.018 Pin L=.585	64	6.4" (162.56)	10µ” Au	—	ED18064-ND	8.57	7.43	6.00	342-10-164-00-593000
16	Single Row, .018/.018 Pin L=.835	64	6.4" (162.56)	10µ” Au	—	ED19064-ND	11.23	9.74	7.87	342-10-164-00-594000
17	Single Row, Series 350…06 Straight	64	6.4" (162.56)	10µ” Au	—	ED2064-ND	5.76	5.00	4.04	350-10-164-00-006000

(Continued)

In-Line Sockets and Headers - Solder Tail and Solderless *(Cont.)*

Fig. 21

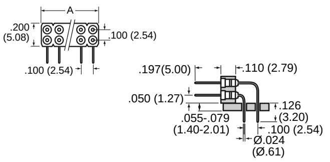


Fig. 22

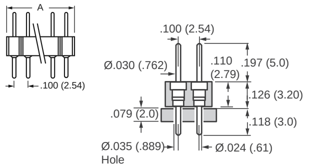


Fig. 23

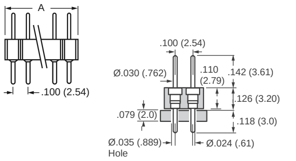


Fig. 24

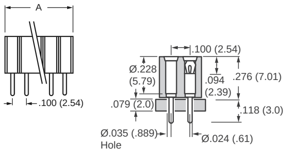


Fig. 25

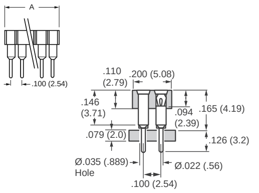


Fig. 26

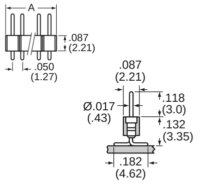


Fig. 27

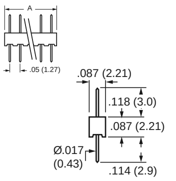


Fig. 28

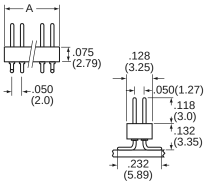


Fig. 29

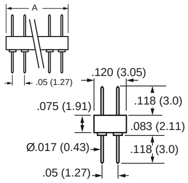


Fig. 30

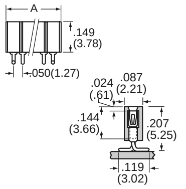


Fig. 31

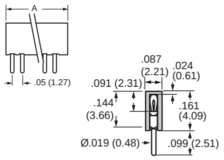


Fig. 32

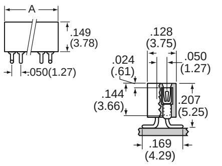


Fig. 33

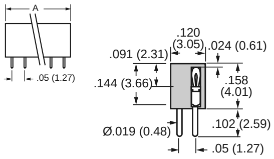


Fig. 34

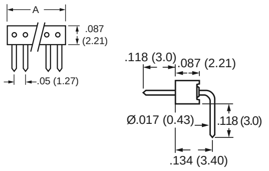


Fig. 35

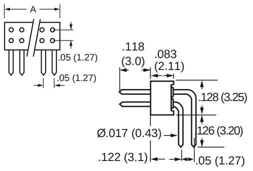


Fig. 36

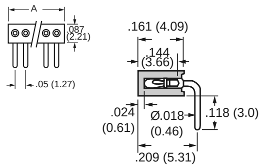


Fig. 37

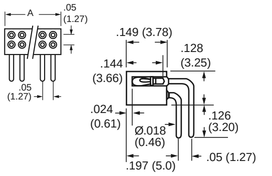


Fig. 38

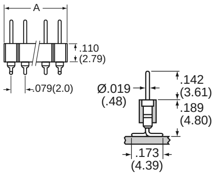


Fig. 39

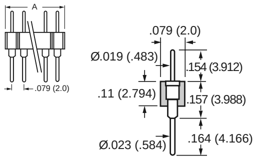


Fig. 40

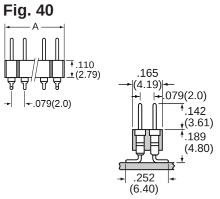


Fig. 41

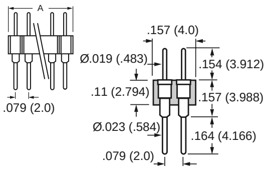


Fig. 42

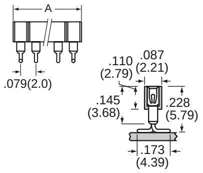


Fig. 43

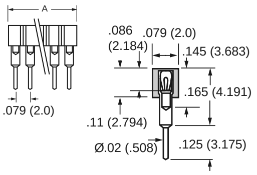


Fig. 44

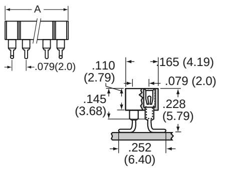


Fig. 45

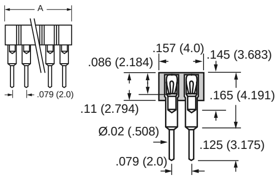


Fig.	Description	No. of Pins	Dim. A Inch (mm)	Plating Sleeve/Pin	Plating Contact/Clip	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Mill-Max Part No.
	Solder Tail Header Strip (Cont.)									
18	Single Row, Series 399...09 Right/Angle	64	6.4" (162.56)	10µ" Au	—	ED2164-ND	6.59	5.72	4.62	399-10-164-10-009000
19	Single Row, .189" Surface Mount Header	64	6.4" (162.56)	10µ" Au	—	ED24064-ND	8.38	7.27	5.87	350-10-164-00-106000
20	Single Row, Right Angle .030" Diameter Pins	64	6.4" (162.56)	10µ" Au	—	ED2564-ND	6.80	5.90	4.77	800-10-064-20-001000
21	Double Row, Right Angle .030" Diameter Pins	2 x 32	3.2" (81.28)	10µ" Au	—	ED2664-ND	7.22	6.26	5.06	802-10-064-20-001000
	Interconnects, .100" (2.54mm) Grid									
22	Double Row, Pin Header, Straight Solder Tail	2 x 32	3.2" (81.28)	10µ" Au	—	ED9464-ND	6.85	5.80	4.75	802-10-064-10-001000
23	Double Row, Low Profile Pin Header	2 x 32	3.2" (81.28)	10µ" Au	—	ED9564-ND	6.72	5.69	4.66	802-10-064-10-002000
24	Double Row, Socket, Straight Solder Tail	2 x 36	3.6" (91.44)	200µ" Sn	30µ" Au	ED9672-ND	8.62	7.29	5.97	803-93-072-10-001000
25	Double Row, Low Profile Socket	2 x 36	3.6" (91.44)	200µ" Sn	30µ" Au	ED9772-ND	8.09	6.85	5.60	803-93-072-10-002000
	Interconnects, .050" (1.27mm) Grid									
26	Single Row, .132" (3.35mm) SMT Header	50	2.5" (63.50)	10µ" Au	—	ED1050-ND	9.65	8.37	6.76	850-10-050-30-001000
27	Single Row, .087" (2.21mm) Profile Pin Header	50	2.5" (63.50)	10µ" Au	—	ED8250-ND	7.10	6.01	4.92	850-10-050-10-001000
28	Double Row, .132" (3.35mm) SMT Header	2 x 50	2.5" (63.50)	10µ" Au	—	ED10100-ND	17.61	15.27	12.33	852-10-100-30-001000
29	Double Row, .075" (1.91mm) Profile Pin Header	2 x 50	2.5" (63.50)	10µ" Au	—	ED83100-ND	14.20	12.02	9.84	852-10-100-10-001000
30	Single Row, .207" (5.26mm) SMT Socket	50	2.5" (63.50)	200µ" Sn	30µ" Au	ED1150-ND	13.12	11.37	9.19	851-93-050-30-001000
31	Single Row, .161" (4.09mm) Profile Socket	50	2.5" (63.50)	200µ" Sn	30µ" Au	ED8450-ND	10.82	9.16	7.50	851-93-050-10-001000
32	Double Row, .207" (5.26mm) SMT Socket	2 x 50	2.5" (63.50)	200µ" Sn	30µ" Au	ED11100-ND	24.48	21.22	17.14	853-93-100-30-001000
33	Double Row, .161" (4.09mm) Profile Socket	2 x 50	2.5" (63.50)	200µ" Sn	30µ" Au	ED85100-ND	21.65	18.32	14.99	853-93-100-10-001000
	Right Angle Interconnects, .050" (1.27mm) Grid									
34	Single Row, Pin Header, Rt. Angle Solder Tail	50	2.5" (63.50)	10µ" Au	—	ED8650-ND	9.64	8.16	6.68	850-10-050-20-001000
35	Double Row, Pin Header, Rt. Angle Solder Tail	2 x 50	2.5" (63.50)	10µ" Au	—	ED87100-ND	19.44	16.45	13.46	852-10-100-20-001000
36	Single Row, Socket, Rt. Angle Solder Tail	50	2.5" (63.50)	200µ" Sn	30µ" Au	ED8850-ND	13.47	11.40	9.33	851-93-050-20-001000
37	Double Row, Socket, Rt. Angle Solder Tail	2 x 50	2.5" (63.50)	200µ" Sn	30µ" Au	ED89100-ND	27.04	22.88	18.72	853-93-100-20-001000
	Interconnects, 2mm Grid									
38	Single Row, .189" (4.80mm) SMT Header	50	3.94" (100.08)	10µ" Au	—	ED1250-ND	8.79	7.62	6.16	830-10-050-30-001000
39	Single Row Pin Header	50	3.94" (100.08)	10µ" Au	—	ED9050-ND	6.31	5.34	4.37	830-10-050-10-001000
40	Double Row, .189" (4.80mm) SMT Header	2 x 50	3.94" (100.08)	10µ" Au	—	ED12100-ND	17.40	15.08	12.18	832-10-100-30-001000
41	Double Row Pin Header	2 x 50	3.94" (100.08)	10µ" Au	—	ED91100-ND	12.61	10.67	8.73	832-10-100-10-001000
42	Single Row, .228" (5.79mm) SMT Socket	50	3.94" (100.08)	200µ" Sn	30µ" Au	ED1350-ND	6.82	5.91	4.78	831-93-050-30-001000
43	Single Row Socket	50	3.94" (100.08)	200µ" Sn	30µ" Au	ED9250-ND	4.06	3.44	2.82	831-93-050-10-001000
44	Double Row, .228" (5.79mm) SMT Socket	2 x 50	3.94" (100.08)	200µ" Sn	30µ" Au	ED13100-ND	13.50	11.70	9.45	833-93-100-30-001000
45	Double Row Socket	2 x 50	3.94" (100.08)	200µ" Sn	30µ" Au	ED93100-ND	8.13	6.88	5.63	833-93-100-10-001000

I.C. Sockets

Dual Leaf Tin Plated Wire Wrap

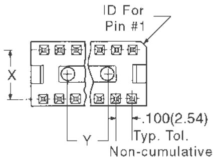
Contacts: Phosphor bronze CA510.
Contact Finish: Tin plating 200µ" minimum.

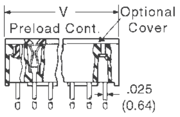
No. of Pins	Digi-Key Part No.	Pricing 1	25	100	500	1,000	2,500
8	C8108-ND	2.12	44.83	173.26	713.41	1324.90	1222.99/M
14	C8114-ND	3.02	63.80	246.60	1015.41	1885.75	1740.70/M
16	C8116-ND	3.31	70.02	270.62	1114.32	2069.45	1910.27/M
18	C8118-ND	3.44	72.77	281.25	1158.09	2150.73	1985.30/M
20	C8120-ND	4.24	89.71	346.73	1427.70	2651.44	2447.48/M
22	C8122-ND	4.77	100.93	390.09	1606.27	2983.07	2753.60/M
24	C8124-ND	5.35	113.14	437.29	1800.59	3343.96	3086.74/M
28	C8128-ND	6.10	129.09	498.94	2054.45	3815.40	3521.91/M
40	C8140-ND	8.74	184.86	714.50	2942.05	5463.81	5043.52/M

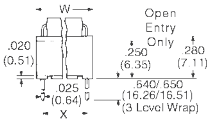
Dual Leaf Gold Inlay Wire Wrap

Contacts: Copper alloy CA725.
Contact Finish: Gold inlay 50µ" over 50µ" nickel interliner.

No. of Pins	Digi-Key Part No.	Pricing 1	25	100	500	1,000	2,500
8	C9108-ND	2.49	52.58	203.23	836.83	1554.12	1434.58/M
14	C9114-ND	4.11	86.96	336.10	1383.93	2570.15	2372.45/M
16	C9116-ND	4.71	99.66	385.20	1586.13	2945.68	2719.09/M
18	C9118-ND	5.19	109.89	424.74	1748.95	3248.05	2998.20/M
20	C9120-ND	5.77	122.10	471.94	1943.28	3608.94	3331.34/M
22	C9122-ND	6.26	132.33	511.48	2106.09	3911.31	3610.45/M
24	C9124-ND	6.91	146.25	565.26	2327.56	4322.60	3990.10/M
28	C9128-ND	8.10	171.44	662.63	2728.47	5067.15	4677.38/M
40	C9140-ND	11.21	237.22	916.88	3775.38	7011.43	6472.09/M







Pins	"V"±.25 Inch (mm)	"W"Max. Inch (mm)	"X"±.13 Inch (mm)	"Y"±.25 Inch (mm)
8	.465 (11.81)	.400 (10.16)	.300 (7.62)	n/a
14	.765 (19.43)	.400 (10.16)	.300 (7.62)	.300 (7.62)
16	.865 (21.97)	.400 (10.16)	.300 (7.62)	.400 (10.16)
18	.965 (24.51)	.400 (10.16)	.300 (7.62)	.400 (10.16)
20	1.065 (27.05)	.400 (10.16)	.300 (7.62)	.400 (10.16)
22	1.180 (29.97)	.500 (12.70)	.400 (10.16)	.500 (12.70)
24	1.280 (32.51)	.700 (17.78)	.600 (15.24)	.500 (12.70)
28	1.480 (37.59)	.700 (17.78)	.600 (15.24)	.500 (12.70)
40	2.080 (52.83)	.700 (17.78)	.600 (15.24)	.800 (20.32)

FEATURES:

- Universal mounting and packaging capabilities.
- Contacts accommodate .015" (.38mm) through .021" (.53mm) rectangular or round dual-in-line leads.
- Wire wrap posts held to true position of .015" (.38mm) providing a true position of .020" (.51mm) on boards for efficient automatic wire wrapping.

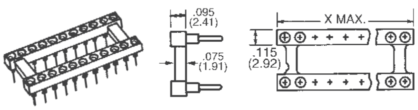
SPECIFICATIONS:

Material: Body, 94V-0 glass filled polyester.

Notes: Sockets meet requirements of Texas Instruments test specification TS-0003 and test report TR-0001. Contacts are replaceable and have redundant spring elements. Cover is removable. Contact is designed and oriented in the plastic body to generate maximum possible contact. Socket is designed to achieve maximum density on boards. Closed entry cover is provided to facilitate automatic insertion and protect IC leads against damage. Accommodates standard (C) leads up to .001" x .018" (.03mm x .46mm). Sockets are capable of being automatically or simultaneously wire wrapped.

Open Frame Machine Pin Collet Sockets

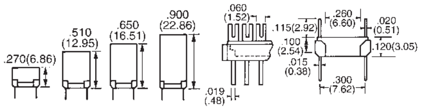
Specifications: Contacts: Collet – beryllium copper with 10µ" gold plating. Body – brass. Collet accepts: .014-.022 (.38-.56) dia. round leads. Platform: Glass filled thermoplastic UL94V-O. • Compatible with automatic insertion equipment. Collet is 10µ" gold plated.



Pin Centers	No. of Pins	Dim "X" Inch (mm)	Digi-Key Part No.	Pricing 1	25	100
.300 (7.62)	8	.400 (10.16)	A400-ND	.44	10.20	23.13
.300 (7.62)	14	.700 (17.78)	A401-ND	.75	17.33	39.29
.300 (7.62)	16	.800 (20.32)	A402AE-ND	.85	19.65	44.56
.300 (7.62)	18	.900 (22.86)	A403AE-ND	1.06	24.38	55.27
.300 (7.62)	20	1.000 (25.40)	A404AE-ND	.96	22.05	50.00
.300 (7.62)	24	1.200 (30.48)	A405-ND	1.19	27.53	62.41
.400 (10.16)	22	1.100 (27.97)	A406-ND	1.40	28.63	86.56
.400 (10.16)	24	1.200 (30.48)	A407-ND	1.59	32.51	98.30
.600 (15.24)	24	1.200 (30.48)	A408-ND	1.17	26.46	64.29
.600 (15.24)	28	1.400 (35.56)	A409-ND	1.40	31.57	76.70
.600 (15.24)	32	1.600 (40.64)	A410-ND	1.59	35.98	87.41
.600 (15.24)	40	2.000 (50.80)	A411-ND	1.85	41.86	101.70
.600 (15.24)	48	2.400 (60.96)	A412-ND	2.41	54.39	132.14
.900 (22.86)	50	2.500 (63.50)	A413-ND	3.18	65.08	196.77
.900 (22.86)	64	3.200 (81.28)	A414-ND	4.06	83.03	251.02

DIP Headers and Covers

Order Headers & Covers Separately

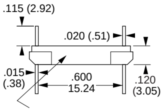


No. of Pins	DIP Header Number	Pricing 1	25	100	Cover Selection Guide – In. (mm) .27" (6.86) Cover	.51" (12.95) Cover	.65" (16.51) Cover	.90" (22.86) Cover
8	A101-ND	1.17	25.62	82.99	A105-ND	—	—	—
14	A102-ND	1.65	36.12	117.01	A106-ND	A107-ND	A108-ND	A109-ND
16	A103-ND	1.80	39.38	127.55	A110-ND	A111-ND	A112-ND	A113-ND
18	A133-ND	2.01	43.94	142.35	A137-ND	—	—	—
20	A104-ND	2.15	46.94	152.04	A114-ND	—	—	—
24*	A134-ND	2.64	57.70	186.90	A138-ND	A139-ND	—	—
28*	A135-ND	3.07	67.15	217.52	A140-ND	—	—	—
40*	A136-ND	4.07	88.99	288.27	A142-ND	—	—	—

Cover	Pricing 1	25	100
A105-ND, A106-ND	.52	10.59	31.26
A107-ND-A111-ND	.56	11.52	33.99
A112-ND, A113-ND	.61	12.49	36.86
A114-ND	.65	13.37	39.45
A137-ND	.65	13.37	39.45
A138-ND	.72	15.11	43.41
A139-ND	.85	17.96	51.60
A140-ND	.94	19.86	57.06
A142-ND	1.03	21.71	62.38

* .600 Spacing

45° pin 1 identification



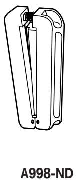
Depth of Bathtub: .100 (2.54)
Width of Bathtub: .500 (12.70)

A998-ND
Anti-Static IC Pin Straightener: Straightens IC legs with one squeeze. Put .300" (7.62mm) ICs in one side of tool, and .600" (15.24mm) in other side of tool. This brings leads into tolerance .320" (8.13mm) or .620" (15.75mm).

Note: This tool does not straighten IC legs that are bent to such an extent that the pin-to-pin spacing is not .100" (2.54mm).

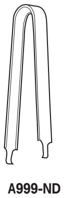
A999-ND Dip Extractor: An extremely handy, low cost tool for removing ICs from dip sockets.

IC Pin Straightener



A998-ND
$32.50/1
$710.89/25

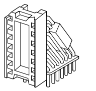
Dip Extractor

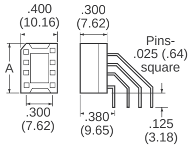


A999-ND
$5.08/1
$111.08/25

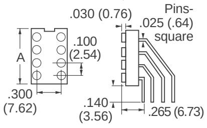
Vertisockets

Vertical Mount





A117-ND – A121-ND



A122-ND – A125-ND

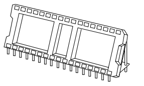
Features: • Restricted entry for contact protection • Maximum electrical contact • Accepts standard LEDs and Incandescent displays as well as .5" (12.70mm) and .6" (15.24mm) high large displays.

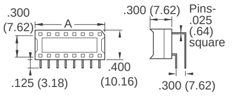
Specifications: • **Contacts:** Grade A spring tempered phosphor bronze • **Plating:** 10µ gold (per MIL-G-45204) over 50µ nickel (per QQN-290), 100µ tin plating (per MIL-T-10727) over 50µ nickel (per QQN-290) • **Socket:** Glass filled thermoplastic.

No. of Pins	Pin Centers Inch (mm)	Description	Dimension Inch (mm) A	Digi-Key Part No.	Pricing 1	25
8	.300 (7.62)	Gold Plated	.45 (11.43)	A117-ND	4.40	96.86
14	.300 (7.62)	Gold Plated	.75 (19.05)	A118-ND	5.21	114.68
16	.300 (7.62)	Gold Plated	.85 (21.59)	A119-ND	6.78	149.22
8	.600 (15.24)	Gold Plated	—	A466-ND	5.51	115.66
14	.300 (7.62)	Tin Plated	.75 (19.05)	A120-ND	3.89	85.53
16	.300 (7.62)	Tin Plated	.85 (21.59)	A121-ND	5.28	116.11
10	.300 (7.62)	Collet Contacts	.495 (12.57)	A122-ND	6.01	132.22
14	.300 (7.62)	Collet Contacts	.695 (17.65)	A124-ND	7.48	164.51
16	.300 (7.62)	Collet Contacts	.795 (20.19)	A125-ND	8.28	182.05
8	.600 (15.24)	Gold Plated	—	A464-ND	4.35	91.35
10	.200 (5.08)	Gold Plated	—	A465-ND	5.21	109.46

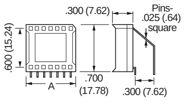
Vertisockets

Horizontal Mount





A126-ND—A129-ND



A130-ND—A132-ND

Features:

• Restricted entry for contact protection. • Maximum electrical contact. • Accepts standard LEDs and Incandescent displays as well as .5" (12.70mm) and .6" (5.24mm) high large displays.

Specifications:

• **Contacts:** Grade A spring tempered phosphor bronze. • **Plating:** 10µ gold (per MIL-G-45204) over 50µ nickel (per QQN-290), 100µ tin plating (per MIL-T-10727) over 50µ nickel (per QQN-290). • **Socket:** Glass filled thermoplastic.

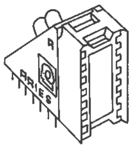
No. of Pins	Pin Centers Inch (mm)	Dimensions Inch (mm) A	Digi-Key Part No.	Pricing 1	25	100
8	.300 (7.62)	.45 (11.43)	A126-ND	3.62	79.59	246.09
14	.300 (7.62)	.75 (19.05)	A127-ND	4.43	97.41	301.19
16	.300 (7.62)	.85 (21.59)	A128-ND	4.81	105.88	327.38
20	.300 (7.62)	1.05 (26.67)	A129-ND	5.92	130.24	402.72
24	.600 (15.24)	1.25 (31.75)	A130-ND	9.11	200.48	619.90
28	.600 (15.24)	1.45 (36.83)	A131-ND	10.22	224.79	695.07
40	.600 (15.24)	2.05 (52.07)	A132-ND	13.30	292.49	904.42

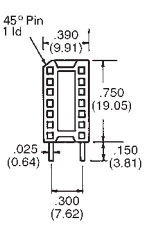
Vertical Socket

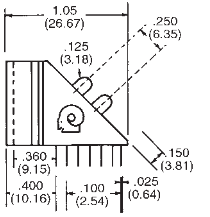
For Displays on .300" (7.62mm) Centers, 14 pin.

These low cost Vertisockets are recommended for high volume vertical display mounting applications.

Available in Tin Plated only.



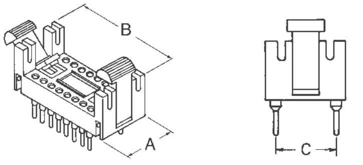


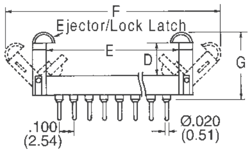


Digi-Key Part No.	Pricing 1	25	100	500	Aries Part No.
A116-ND	2.89	63.53	196.43	866.60	14-810-90R

ARIES® ELECTRONICS, INC.

Lock / Eject DIP Sockets

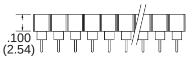




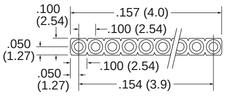
No. of Pins	Dimensions Inches (mm)						
	A	B	C	D	E	F	G
14	.400 (10.16)	.950 (24.16)	.300 (7.62)	.280 (7.11)	.770 (19.56)	1.300 (33.02)	.490 (12.45)
16	.400 (10.16)	1.050 (26.70)	.300 (7.62)	.280 (7.11)	.870 (22.10)	1.540 (39.12)	.490 (12.45)
24	.700 (17.78)	1.490 (37.85)	.600 (15.24)	.182 (4.62)	1.300 (33.02)	1.800 (45.72)	.460 (11.68)
28	.700 (17.78)	1.690 (42.90)	.600 (15.24)	.182 (4.62)	1.500 (38.10)	2.000 (50.80)	.460 (11.68)
32	.700 (17.78)	1.890 (48.00)	.600 (15.24)	.182 (4.62)	1.700 (43.18)	2.200 (55.88)	.460 (11.68)
40	.700 (17.78)	2.290 (58.20)	.600 (15.24)	.182 (4.62)	2.100 (53.34)	2.600 (66.04)	.460 (11.68)

No. of Pins	Fits Jumper Connectors, such as:	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
14	IC Packages	A514-ND	3.21	2.57	1.82	14-C280-10
16	IC Packages	A516-ND	3.49	2.79	1.98	16-C280-10
24	IC Packages	A524-ND	4.83	3.87	2.74	24-C182-10
28	IC Packages	A528-ND	5.14	4.12	2.92	28-C182-10
32	IC Packages	A532-ND	5.89	4.71	3.34	32-C182-10
40	IC Packages	A540-ND	7.48	5.99	4.24	40-C182-10

Series X518 Collet Sockets with Solder Tail Pins



Single Row



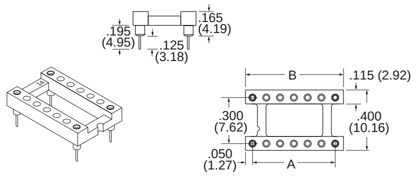
Features: • Cuttable to the number of pins desired to fit the application. • Side-to-side and end-to-end stackable.

Specifications:
• Body material is black UL 94V-0 Nylon 4/6 • Contact Current Rating: 3A • Operating Temperature: 221°F (105°C) Tin plating; 257°F (125°C) Gold plating • Accepts leads .015"-.025" (.381mm-.635mm) in diameter • Accepts lead lengths from .100" (2.54mm) min.

Mounting Considerations:
• Suggested PCB hole size: .030" ±.002" (.76mm ±.05mm) diameter

No. of Pins	Description	Digi-Key Part No.	Price Each 1	25	Aries Part No.
40	Tin Plated	A460-ND	2.33	1.96	40-0518-10
40	Gold Plated	A461-ND	3.43	2.88	40-0518-11

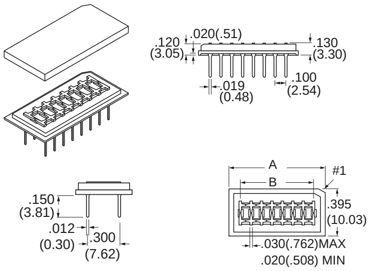
4-Pin Oscillator Sockets



Specifications:
• **Body Material:** Blue UL 94V-0 Glass-filled Polyester Thermoplastic (PBT) • **Pin Body Plating:** 200µ min. Tin per MIL-T-10727 over 100µ min. Nickel per QQ-N-290 • **Contact Plating:** 10µ min. Gold per MIL-G-45204 over 50µ min. Nickel per QQ-N-290 • **Contact Current Rating:** 3 Amps • **Operating Temp.:** 105°C • **Insertion Force:** 180 grams/pin; Withdrawal Force: 90 grams/pin; Normal Force: 140 grams/pin; based on a .018" (.46mm) diameter test lead • Accepts Leads .015"-.025" (.38mm-.64mm) in diameter, .100"-.146" (2.54mm-3.71mm) in length.

Size	Dim. – Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
Full	.600 (15.24)	.700 (17.78)	A462-ND	.60	.50	.41	1107741
Half	.300 (7.62)	.400 (10.16)	A463-ND	.60	.50	.41	1108800

Series 680 Programmable Headers and Covers

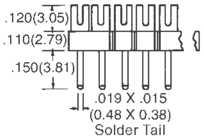


Features:

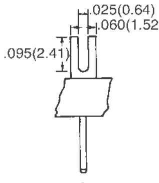
• Complete versatility for programming within the unit itself, thus eliminating the need for DIP switches in many situations. **Specifications:** • **Body and Cover:** Red UL 94-HB glass-filled nylon • **Current Rating:** 1 amp • **Operating Temp.:** 221°F (105°C) • **Mounting Considerations:** Suggested PCB hole size: .032" ±.002" (.81mm ±.05mm) diameter

No. of Pins	Dimensions Inch (mm) A	B	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
Covers							
4	—	—	A470-ND	.36	.30	.25	04-655-10
6	—	—	A471-ND	.57	.49	.39	06-655-10
8	—	—	A472-ND	.57	.49	.39	08-655-10
10	—	—	A473-ND	.63	.53	.43	10-655-10
12	—	—	A474-ND	.63	.53	.43	12-655-10
14	—	—	A475-ND	.65	.55	.45	14-655-10
16	—	—	A476-ND	.65	.55	.45	16-655-10
18	—	—	A477-ND	.71	.60	.49	18-655-10
20	—	—	A478-ND	.71	.60	.49	20-655-10
22	—	—	A479-ND	.76	.64	.52	22-655-10
24	—	—	A480-ND	.82	.69	.56	24-655-10
Headers							
4	.25 (6.35)	.10 (2.54)	A700-ND	.79	.67	.54	04-680-190T
6	.35 (8.89)	.20 (5.08)	A701-ND	.88	.74	.60	06-680-190T
8	.45 (11.43)	.30 (7.62)	A702-ND	.93	.78	.64	08-680-190T
10	.55 (13.97)	.40 (10.16)	A703-ND	.99	.83	.68	10-680-190T
12	.65 (16.51)	.50 (12.70)	A704-ND	1.01	.85	.69	12-680-190T
14	.75 (19.05)	.60 (15.24)	A705-ND	1.06	.89	.72	14-680-190T
16	.85 (21.59)	.70 (17.78)	A706-ND	1.12	.95	.77	16-680-190T
18	.95 (24.13)	.80 (20.32)	A707-ND	1.17	.99	.80	18-680-190T
20	1.05 (26.67)	.90 (22.86)	A708-ND	1.22	1.03	.83	20-680-190T
22	1.15 (29.21)	1.00 (25.40)	A709-ND	1.28	1.08	.87	22-680-190T
24	1.25 (31.75)	1.10 (27.94)	A710-ND	1.32	1.11	.90	24-680-190T
ARIES ELECTRONICS Tool							
A490-ND Header Programming Tool **$22.34**							

Strip Line SIP Headers



25 Contact Header
PLATING = 100µ" TIN



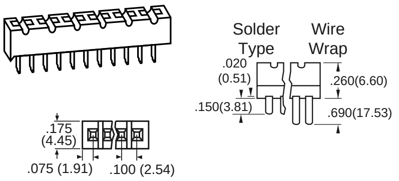
Forked Contact

Coined Contacts

"Break" feature on Pin Line Headers assures Headers can be easily snapped off to any number of positions without loss or damage to any pins. No tool is required. The "break" feature minimizes stocking problems and gives immediate adaptability for any length Header requirement to any grid or matrix pattern.

Digi-Key Part No.	Pricing 1	25	100	Aries Part No.
A115-ND	2.56	56.07	181.63	25-0600-10

Strip Line SIP Socket



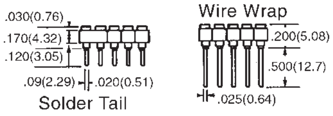
Contacts: Grade A spring temper phosphor bronze QQB-7500 **Plating:** 100µ tin plating per MIL-T-10727 **Socket:** Glass filled thermoplastic.

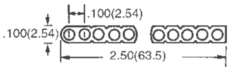
STRIP-LINE

Bifurcated Contacts

No. of Pins	Solder Tail Digi-Key Part No.	Price Each 1	25	100	Wire Wrap Digi-Key Part No.	Price Each 1	25	100
12	A200-ND	1.52	1.38	1.18	A204-ND	2.93	2.55	1.93
20	A201-ND	2.03	1.85	1.57	A205-ND	4.28	3.73	2.82
25	A202-ND	2.55	2.32	1.97	A206-ND	5.39	4.68	3.55
34	A203-ND	2.66	2.42	2.06	A207-ND	5.58	4.85	3.68

Pin Line Sockets with "Break" Feature





Tin-plated Pin Line sockets can be snapped apart into any required number of pins without damage or loss of pins. Pin Line sockets are low profile and used for mounting devices with .100" (2.54mm) spacing between pins. Rows of socket strips may be mounted on any centers or side-by-side for .100" (2.54mm) grid or matrix patterns. Strips also butt end-to-end and maintain .100" (2.54mm) spacing.

No. of Pins	Digi-Key Part No.	Price Each 1	25	100
Solder Tail Dip Socket with Screw Machined Pin				
25	A208-ND	2.47	2.18	1.69
Wire Wrap Socket with Screw Machined Pin				
25	A209-ND	7.85	6.82	5.17

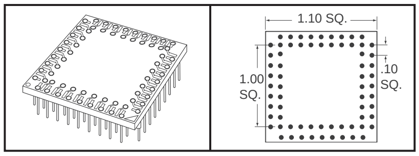
ARIES ELECTRONICS, INC.

Quad Flat Pack (QFP) to PGA Adapter for Motorola 68340

SPECIFICATIONS:
• Adapter body is black FR-4, .094 (2.39) thick, with 1 ounce minimum Copper traces. • **Pins:** Brass Alloy 360, 1/2 hard per QQ-B-626. • **Pin Plating:** 200µ (5.08µm) min. Tin per MIL-T-10727 over 100µ (2.54µm) min. Nickel per QQ-N-290. • **Operating Temperature:** 221°F (125°C).

Pin Count	Digi-Key Part No.	Price Each 1	25	Aries Part No.
144	A723-ND	90.99	78.00	97-68340

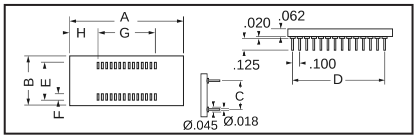
Chip Carriers



• Your present PLCC devices can be used in thru-hole applications by soldering to our adapters. • Your standard JEDEC footprints are converted to PGA footprints. • Your PGA Sockets (LIF) will save space. • Your p.c. board will have more space for conductor runs when converted to .100" (2.54mm) pin spacing. • Polarization option available. • Your standard test clip can be used for testing.
SPECIFICATIONS: Body: Copper Clad FR-4 Solder Plated. **Pins:** Brass, Tin/Lead Plated.

Pin Count	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
68	A171-ND	11.48	9.84	8.96	68-505-110

Surface Mount SOIC to DIP, SSOP to DIP, and SOJ to DIP Adapters



Materials: Board: .062" (1.57mm) thick double-sided FR-4 with 1 oz. copper traces. **Pins:** Brass alloy 360, 1/2 hard.
Plating: 200µ" min. 93/7 tin/lead per MIL-T-10727 type 1 over 100µ" min. nickel per QQ-N-290.
Suggested P.C.B. mounting hole = .028" (.71mm) Diameter

No. of Pins	Digi-Key Part No.	Dimensions (Inch) A	B	C	D	E	F	G	H
8	A724-ND	.400	.460	.300	.300	.455	.155	.150	.121
14	A725-ND	.700	.450	.300	.600	.420	.138	.300	.180
14	A730-ND	.700	.400	.300	.600	.340	.060	.154	—
16	A726-ND	.800	.450	.300	.700	.420	.138	.350	.180
16	A731-ND	.800	.400	.300	.700	.340	.060	.179	—
18	A732-ND	.900	.400	.300	.800	.340	.060	.205	—
20	A727-ND	1.000	.450	.300	.900	.420	.138	.450	.180
20	A325-ND	1.000	.420	.300	.900	.350	.090	.600	.060
20	A733-ND	1.000	.400	.300	.900	.340	.060	.230	—
24	A720-ND	1.200	.700	.600	1.100	.455	.150	.550	.180
24	A322-ND	1.200	.450	.300	1.100	.420	.138	.550	.180
28	A320-ND	1.400	.700	.600	1.300	.450	.075	.650	.375
28	A321-ND	1.400	.400	.300	1.300	.350	.090	.650	.375
28	A734-ND	1.400	.400	.300	1.300	.340	.060	.333	—
28	A735-ND	1.400	.700	.600	1.300	.340	.070	.333	—
32	A323-ND	1.600	.700	.600	1.500	.650	.200	.750	.425
32	A324-ND	1.600	.530	.400	1.500	.500	.090	.750	.425

No. of Pins	Type	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
8	SOIC	A724-ND	6.97	5.86	3.81	08-350000-10
14	SOIC	A725-ND	6.97	5.86	3.81	14-350000-10
14	SSOP	A730-ND	22.06	18.53	12.05	14-351000-10
16	SOIC	A726-ND	6.97	5.86	3.81	16-350000-10
16	SSOP	A731-ND	22.06	18.53	12.05	16-351000-10
18	SSOP	A732-ND	19.61	16.48	10.71	18-351000-10
20	SOIC	A727-ND	6.97	5.86	3.81	20-350000-10
20	SOJ	A325-ND	6.42	5.51	5.01	20-350001-10
20	SSOP	A733-ND	22.06	18.53	12.05	20-351000-10
24	SOIC	A720-ND	10.68	8.98	5.84	24-650000-10
24	SOIC	A322-ND	4.71	4.04	3.68	24-350000-10
28	SOIC	A320-ND	10.70	9.17	8.35	28-650000-10
28	SOIC	A321-ND	6.42	5.51	5.01	28-350002-10
28	SSOP	A734-ND	22.06	18.53	12.05	28-351000-10
28	SSOP	A735-ND	30.61	25.72	16.72	28-651000-10
32	SOJ	A323-ND	10.69	9.17	8.34	32-650000-10
32	SOJ	A324-ND	9.40	8.06	7.33	32-450001-10

Quad Flat Pack (QFP) to PGA Adapters

Fig. 1

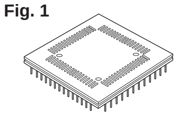
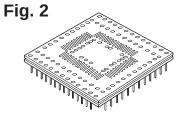


Fig. 2

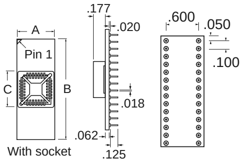


Adapters convert surface mount type Quad Flat Pack (QFP) packages to standard pin grid array through-hole packages on .100" (2.54mm) pin spacing. This allows the surface mount QFP package to be used in standard PGA and PGA ZIF sockets, which is extremely useful for testing. Typically, surface mount QFP packages are less expensive than their through-hole PGA counterparts. The surface mount packages are often more readily available. Also, the user does not have to redesign a through-hole board in order to utilize the advantages of the surface mount QFP packages.

Fig. No.	Chip Type/ Mfg.	Pads No.	PGA No.	Pins/ Matrix	Digi-Key Part No.	Price Each 1	25	Aries Part No.
1	JEDEC	132	132	13x13	A174-ND	33.80	28.97	95-132I25
2	EIAJ	100	100	13x13	A175-ND	32.50	27.86	96-100M65
1	EIAJ	160	160	15x15	A176-ND	32.50	27.86	96-160M65
—	EIAJ	208	208	17x17	A722-ND	60.67	52.00	96-208M50

Surface Mount PLCC to DIP Adapters

Materials:
• **Pins and Contacts:** Phosphor bronze adapter • **Body:** FR-4, .062" (1.57mm) thick • **Socket:** LCP, UL 94V-0 rated • **Pads & Traces:** 1 oz. min. copper.
Plating:
Pins: 200µ" tin per MIL-T-10727 over 100µ" nickel per QQ-N-290.
Contacts: 150µ" 90/10 tin/lead.



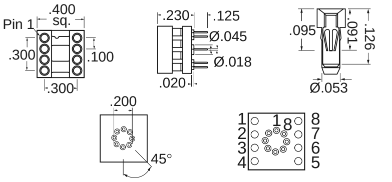
No.of Pins	Dim. (Inch) A	B	C	Digi-Key Part No.	Price Each 1	25	Aries Part No.
28	.77	1.40	.705	A326-ND	24.64	21.12	28-653000-10
32	.705	1.60	.805	A721-ND	40.93	34.38	32-653000-10
44	.97	2.20	.910	A327-ND	28.38	24.33	44-653000-10
68	1.28	3.40	1.220	A328-ND	32.84	28.15	68-653000-10
84	1.48	4.20	1.420	A329-ND	32.84	28.15	84-653000-10

TO to DIP Adapter/Socket

Features: 8-pin DIP IC socket on the top and a circular, 8-pin TO can male pin footprint on the bottom, can be readily mounted on boards having TO thru-hole footprints without having to redesign the board.

Specifications: • **Socket Body**: black UL 94V-0 glass-filled polyester thermoplastic. • **Female Pin Body Plating**: 200µ min. Tin over 100µ min. Nickel. • **Contact Plating:** 10µ min. Gold 50µ min. Nickel. • **Male Pin:** Brass Alloy 360. • **Male Pin Plating:** 200µ min. Tin. • **Current rating:** 3 Amps. • **Operating Temperature:** 221°F (105°C) Tin plating. • Accepts leads .015"-.025" (.38mm-.64mm) in diameter, .100"-.125" (2.54mm-3.18mm) long.

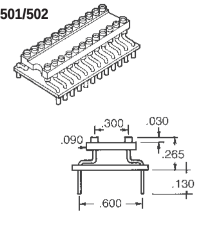
Mounting Considerations: Suggested PCB hole size: .028" (.71mm) diameter.



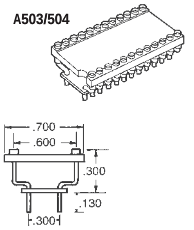
Digi-Key Part No.	Price Each 1	25	100	500	Aries Part No.
A330-ND	6.70	5.74	5.23	4.79	1109523

Adapter Sockets

A501/502

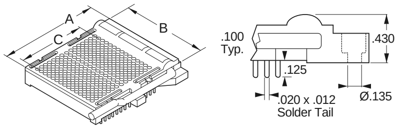


A503/504



No. of Pins	Description (Inch)	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
24	.300 to .600	A501-ND	10.24	7.79	5.13	1106396-24
28	.300 to .600	A502-ND	11.42	8.69	5.72	1106396-28
24	.600 to .300	A503-ND	10.24	7.79	5.13	1107254-24
28	.600 to .300	A504-ND	11.42	8.69	5.72	1107254-28

PGA Zero Insertion Force (ZIF) Sockets



Features: • The Aries ZIF PGA is an extremely rugged, yet smooth acting test socket. • A strong metal cam activates the contacts which are normally closed. This prevents dependency on the plastic for contact force. • Housing of glass filled PPS, UL-94V-O rated.

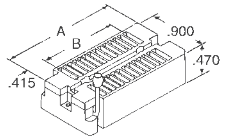
Specifications: • **Contacts:** Beryllium copper. • **Temperature Rating:** -65°C +125°C. • **Housing:** Glass filled PPS UL94VO rated. • **Handle:** Stainless steel.

Grid Size	No. of Pins	Dimensions (Inch) A	B	C	Digi-Key Part No.	Price Each
13 x 13	169	1.894	1.675	1.200	A314-ND	28.04
15 x 15	225	2.094	1.875	1.400	A315-ND	34.94
17 x 17	289	2.294	2.075	1.600	A316-ND	42.62
19 x 19	361	2.494	2.275	1.800	A317-ND	51.26
21 x 21	441	2.694	2.475	2.000	A318-ND	60.93

Universal Zero Insertion Force (ZIF) Test Sockets

The new Aries Universal Test Socket is a direct replacement for other test sockets currently on the market, with a number of significant advantages.

• .900 (22.86) overall height with contact level up • Available 24, 28, 32, 40, 48 pins in body of UL 94VO rated polyphenylene sulfide. • Contacts available tin plated (for up to 105°C) or gold plated (for up to 150°C). • Insulation Resistance – 1000 megohms min. Dielectric withstanding voltage – 1000 VAC min. • Contact rating – 1 amp. • All pin count sockets (24, 28, 32, 40, 48) go into p.c.b.'s with .600 (15.24) centers. • Sockets can be soldered into p.c. boards or plugged into any socket. • Contacts are normally closed to eliminate dependence on plastic to sustain contact.

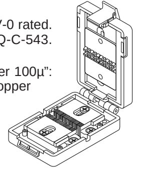


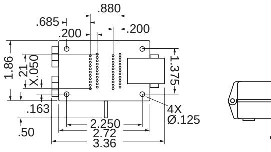
No. of Pins	Dim. (Inch) A	B
24	1.74	1.10
28	1.94	1.30
32	2.14	1.50
40	2.54	1.90
48	2.94	2.30

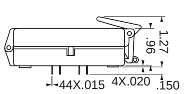
No. of Pins	Contact Plating	Digi-Key Part No.	Price Each 1	25	100	Aries Part No.
24	Tin	A300-ND	7.97	6.98	6.78	24-6554-10
24	Gold	A301AE-ND	11.52	10.09	9.80	24-6554-11
28	Tin	A302-ND	9.10	7.97	7.74	28-6554-10
28	Gold	A303-ND	12.49	10.93	10.62	28-6554-11
32	Tin	A304-ND	10.15	8.89	8.64	32-6554-10
32	Gold	A305-ND	13.84	12.11	11.77	32-6554-11
40	Tin	A306-ND	12.11	10.60	10.30	40-6554-10
40	Gold	A307-ND	16.51	14.45	14.05	40-6554-11
48	Tin	A308-ND	14.23	12.45	12.10	48-6554-10
48	Gold	A309-ND	19.32	16.91	16.43	48-6554-11

Surface Mount Universal SOIC Zero Insertion Force (ZIF) Test Sockets

Socket Accepts: SOIC gull wing & J-lead devices up to 44 pin devices; .050" (1.27mm) lead pitch; body widths from .15" (3.81mm) to .60" (15.24mm).
Materials: • **Body:** Glass-filled PPS, UL 94V-0 rated.
• **Contacts:** Beryllium copper alloy per QQ-C-543.
• **Hardware:** Stainless Steel.
Plating: 20µ" min. gold per MIL-G-45204 over 100µ": min. nickel per QQ-N-290 over 20µ" min. copper per MIL-C-14550.







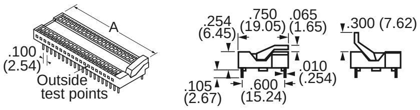
Digi-Key Part No.	Price Each	Aries Part No.
A339-ND	127.99	44-547-11
44 Pos. DIP Adapter (Converts A339-ND to standard 44 Pos. DIP)		
A728-ND	67.62	44-647-10

ARIES® ELECTRONICS, INC.

Zero Insertion Force (ZIF) Lo-Profile Sockets

Features: A complete line of sizes, 24, 28 and 40 pin, low profile ZIF (zero insertion force) sockets provides a low cost solution for a test socket with a height of only .319” (8.10mm) [8, 10] and even with handle in open position, measures just .554” (14.07mm).

Specifications: • **Pin:** Spring temper beryllium copper, tin plated. • **Body:** Glass filled polyester UL94VO rated. • **Cam:** Cast metal.

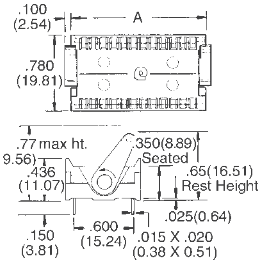


No. of Pins	Dim. A Inch (mm)	Digi-Key Part No.	Price Each			Aries Part No.
			1	25	100	
24	1.450 (36.83)	A346-ND	6.03	5.48	4.66	24-526-10
28	1.650 (41.91)	A347-ND	6.50	5.91	5.03	28-526-10
40	2.250 (57.15)	A348-ND	7.82	7.11	6.05	40-526-10

Zero Insertion Force (ZIF) Sockets

Specifications:

• **Contacts:** Heat treated beryllium copper • **Plating:** 100µ tin plating per MIL-T-10727. • **Sockets:** Glass filled thermoplastic.



No. of Pins	Dim. A Inch (mm)	Digi-Key Part No.	Price Each			Aries Part No.
			1	25	100	
24	1.30 (33.02)	A150-ND	8.90	8.01	7.57	24-516-10
28	1.62 (41.15)	A146-ND	9.58	8.62	8.15	28-516-10
40	2.10 (53.34)	A152-ND	12.63	11.37	10.75	40-516-10

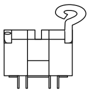
Quick-Release Universal ZIF Test Socket

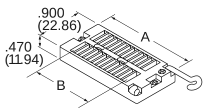
Features:

• Aries’ Universal Test Socket accepts devices on .300” (7.62mm) to .600” (15.24mm) centers • Sockets go into PCB .600” (15.24mm) centers • Swing quick-release handle down to open contacts and insert device. Release and handle automatically returns as contacts close onto device leads.

Specifications:

• **Socket Body**: Black UL 94V-0 Glass-filled Polyphenylene Sulfide (PPS) • **Handle:** stainless steel • **Contact Current Rating:** 1 amp • **Insulation Resistance:** 1000 MOhms min. • **Life Cycle:** 25,000 to 50,000 cycles • **Operating Temperature:** 221°F (105°C) Tin plating; 302°F (150°C) Gold plating • **Retention Force (when closed):** 55 grams/pin based on a .020” (.51mm) diameter test lead • Accepts leads .015”-.035” (.38mm-.89mm) wide, .100”-.280” (2.79mm-7.11mm) long


Loop Handle

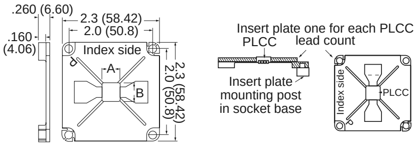


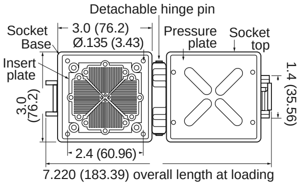
No. of Pins	Dim. – In. (mm) A	Dim. – In. (mm) B
24	1.79 (45.47)	1.10 (27.94)
28	1.99 (50.55)	1.30 (33.02)
32	2.19 (55.63)	1.50 (38.10)
40	2.59 (65.79)	1.90 (48.26)
48	2.99 (75.95)	2.30 (58.42)

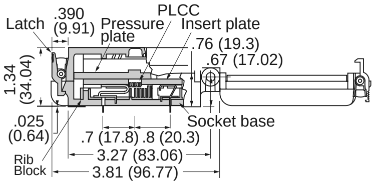
No. of Pins	Description	Digi-Key Part No.	Price Each			Aries Part No.
			1	25	100	
24	Tin Plated	A439-ND	10.36	8.71	7.05	24-6574-10
24	Gold Plated	A440-ND	14.98	12.59	10.20	24-6574-11
28	Tin Plated	A441-ND	11.83	9.94	8.05	28-6574-10
28	Gold Plated	A442-ND	16.23	13.64	11.05	28-6574-11
32	Tin Plated	A443-ND	13.33	11.20	9.07	32-6574-10
32	Gold Plated	A444-ND	18.16	15.26	12.36	32-6574-11
40	Tin Plated	A445-ND	15.74	13.23	10.71	40-6574-10
40	Gold Plated	A446-ND	21.48	18.05	14.62	40-6574-11
48	Tin Plated	A447-ND	18.50	15.54	12.59	48-6574-10
48	Gold Plated	A448-ND	25.11	21.10	17.09	48-6574-11

Surface Mount Universal PLCC ZIF Test Sockets

SPECIFICATIONS: • **Plastic Parts:** UL 94V-0 glass-filled thermoplastic • **Contact Pin:** Beryllium copper • **Fasteners, Spring, Hinge Pins:** Stainless steel • **Temperature Range:** -65°C to 125°C • **Life Cycle:** 10,000 insertions maximum.





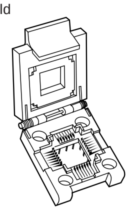


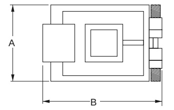
No. Of Pins	Dim. – Inch (mm) A	Dim. – Inch (mm) B	Digi-Key Part No.	Price Each	Aries Part No.
—	—	—	A331-ND	142.03	84-537-21
Adapter Plates					
20	.395/.397 (10.03/10.08)	.395/.397 (10.03/10.08)	A332-ND	8.83	20-537-20
28	.495/.497 (12.57/12.62)	.495/.497 (12.57/12.62)	A333-ND	8.83	28-537-20
32	.495/.497 (12.57/12.62)	.595/.597 (15.11/15.16)	A334-ND	8.83	32-537-20
44	.695/.697 (17.65/17.70)	.695/.697 (17.65/17.70)	A335-ND	8.83	44-537-20
52	.795/.797 (20.19/20.24)	.795/.797 (20.19/20.24)	A336-ND	8.83	52-537-20
68	.995/.997 (25.27/25.32)	.995/.997 (25.27/25.32)	A337-ND	8.83	68-537-20
84	1.195/1.197 (30.35/30.40)	1.195/1.197 (30.35/30.40)	A338-ND	8.83	84-537-20

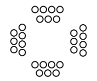
PLCC ZIF Test Sockets

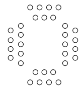
Features: • Zero Insertion Force. • Corner posts provide positive package registration. • 12µ" Gold plating. • 10,000 insertions min.

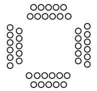
Application: • Can be shimmed to accept many Ceramic, Leadless and J-Lead Packages.

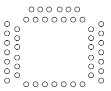


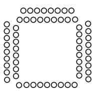


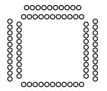

28 pin


32 pin


44 pin

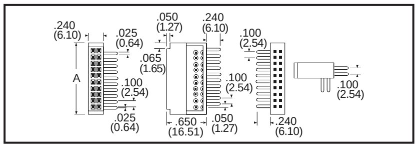

52 pin

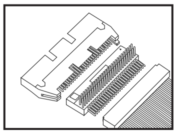

68 pin


84 pin

No. of Pins	Dim. Inch (mm) A	Dim. Inch (mm) B	Digi-Key Part No.	Price Each		
				1	25	100
28	1.181 (30.00)	1.605 (40.77)	A310-ND	61.89	54.82	48.28
32	1.180 (29.97)	1.583 (40.21)	A449-ND	73.81	62.01	40.31
52	1.500 (38.10)	1.920 (48.77)	A450-ND	75.76	63.65	41.37
44	1.339 (34.01)	1.772 (45.01)	A311-ND	63.43	56.19	49.48
68	1.654 (42.01)	2.343 (59.51)	A312-ND	77.34	68.50	60.33
84	1.890 (48.01)	2.580 (65.53)	A313-ND	87.17	77.21	68.00

3M Intra-Connector™

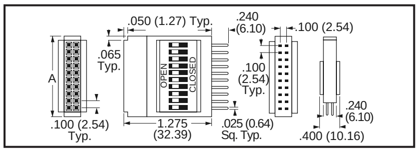


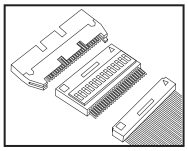


When you wanted to test for a problem that might lie on the circuit board or in the cable, you had a problem. Inaccessible? Not with a 3M ESP Intra-Connector™ system. The Intra-Connector mates in-line with standard double row socket connectors. It has one set of female contacts, but two sets of male contacts at right angles. So, it provides instant line-by-line “probe-ability.” The pins can also be used to make daisy chaining possible from a single connector cable end. Modified configurations are quickly available for special connections. The Intra-Connector system provides both straight-in and right angle functions. It mates with a standard .10” x .10” (2.54mm x 2.54mm) dual row connector or PC board-mounted .025” (.64mm) square pins. Two Intra-Connector systems used with the Intra-Switch™ system form a complete test assembly for probing signals under no load and full-load conditions. Contacts are non-corrosive Alloy 770; body is glass-filled polyester thermo-plastic.

No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Price Each
20	1.160 (29.46)	922576-20-ND	14.84
26	1.460 (37.08)	922576-26-ND	15.45
34	1.860 (47.24)	922576-34-ND	17.24
40	2.160 (54.86)	922576-40-ND	18.90
50	2.660 (67.56)	922576-50-ND	20.45
60	3.160 (80.26)	922576-60-ND	23.77

3M Intra-Switch™

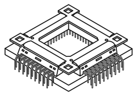




There are a lot of complicated, time consuming ways to interrupt a signal line on an assembly — some may even be damaging to your PC board. But there’s one easy way; Intra-Switch™ from 3M ESP. Simply by inserting the Intra-Switch™ connector between mating system connectors you have instant line-by-line switching. The low profile design and recessed switch buttons give you room to work in confined areas. Using a pencil or probe tip, any or all switches may be actuated. Applications include switching command signals to or from test equipment and programming optional preset logic functions. Switch buttons are recessed to prevent accidental switching. “Open” and “closed” positions are clearly marked, molded-in the body. Contacts are non-corrosive Alloy 770; body is glass-filled polyester thermoplastic. Intra-Switch is compatible with most sockets and mating headers for flat cable, including 3M, T&B/Ansley, Berg, Amp, Symbex and many others.

No. of Contacts	Dim. A In. (mm)	Digi-Key Part No.	Price Each
20	1.160 (29.46)	922578-20-ND	29.62
26	1.460 (37.08)	922578-26-ND	36.06
34	1.860 (47.24)	922578-34-ND	38.16
40	2.160 (54.86)	922578-40-ND	46.39
50	2.660 (67.56)	922578-50-ND	41.36

3M OEM PQFP Sockets



Features: • Accepts JEDEC MO-069 packages, lead sizes 84 through 196 • .025” (.64mm) centerline contacts for high-density packaging • Lid design separates, maintains IC lead spacing • Lid acts as package carrier and transport protector • Lid is compatible with conventional package shipping tubes and trays • Slotted, “open” socket walls and corners permit airflow around captured package (aids in package heat dissipation) • Hinged socket latches audibly “snap” signals secure lid/package assembly to base, expedites package withdrawal • .075” (1.91mm) contact spacing and .100” (2.54mm) row spacing.

Physical Specifications: • **Insulation Socket and Lid:** • Material: Glass Filled Polyethersulfone (PES) • Flammability: UL94 V-0 • Color: Black • **Latching Aid:** • Material: Polycarbonate (PC) • Color: Black • **Contact:** • Material: Beryllium Copper (C172) Plating • Underplate: 50µ” (1.27µm) Sulfamate Nickel • Wiping Area: 200µ” (5.08µm) 60/40 Tin Lead • Soldertails: 200µ” (5.08µm) 60/40 Tin Lead • **Marking:** Raised Letters

Electrical Specifications: • Current Rating: 1 Amp • Insulation Resistance: >1x10^{12}Ω • Withstanding Voltage: 1000 Vrms at Sea Level

Environmental Specifications: • Temperature Rating Operating: -55°C to +105°C

No. of Contacts	Digi-Key Part No.	Pricing 1	Pricing 10	3M Part No.
PQFP Socket Tin				
84	3M8409-ND	35.38	308.20	284-7242-70-1807
100	3M1009-ND	37.62	327.70	2100-7243-00-1807
132	3M1329-ND	41.98	365.70	2132-7244-70-1807
164	3M1649-ND	28.45	203.42	2016407245-00001800

ASSMANN IC Sockets Machine Pin with gold plated precision spring contacts, open frame, solder pin and wire wrap terminals.

Fig. 1

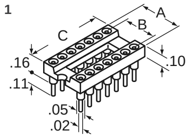
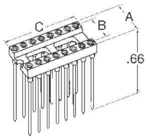


Fig. 2



Contacts: Contact spring: copper alloy, slit 4 times. Surface gold over nickel. Absolute protection against capillary action. Connecting pins brass, solder version.

Mechanical and Electrical Data: Depth of insertion 2.3 to 3.7 mm. Vibration 20 g after MIL-STD-202. Shock 150g to MIL-STD-202. Insertion frequency >1000. Transitional resistance after 100 insertion cycles ≤12mΩ. Capacity between adjacent contacts <0.9pF. Capacity between opposite adjacent contacts <0.4pF. Air and creepage space between adjacent contacts >0.4mm. Tensile strength 1000 V_{eff}.

Insulators: Polyester GV, VO self-extinguishing UL 94. Insulation resistance $10^{12}\Omega$. Operating temperature range -65°C to + 150°C. Retains shape in solder bath. Resistant to detergent.

Contact Plating: Pin: Tin Clip: Gold.

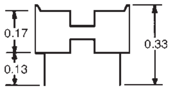
Fig.	No. of Cont.	Dimensions (Inch) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Assmann Part No.
Solder Tail									
Gold Flash									
1	8	0.40	0.30	0.40	AE7208-ND	.35	.31	.25	AR08-HZL
	14	0.40	0.30	0.70	AE7214-ND	.63	.55	.45	AR14-HZL
	16	0.40	0.30	0.80	AE7216-ND	.72	.63	.51	AR16-HZL
	18	0.40	0.30	0.90	AE7218-ND	.84	.73	.59	AR18-HZL
	20	0.40	0.30	1.00	AE7220-ND	.93	.81	.66	AR20-HZL
	22	0.50	0.40	1.10	AE7222-ND	1.02	.89	.72	AR22-HZL
	24	0.70	0.60	1.20	AE7224-ND	1.14	.99	.80	AR24-HZL
	28	0.70	0.60	1.40	AE7228-ND	1.32	1.15	.93	AR28-HZL
	40	0.70	0.60	2.00	AE7240-ND	1.95	1.69	1.37	AR40-HZL
	48	0.70	0.60	2.40	AE7248-ND	2.37	2.06	1.66	AR48-HZL
	64	1.00	0.90	3.20	AE7264-ND	3.15	2.73	2.21	AR64-HZL
10µ" Gold									
1	6	0.40	0.30	0.30	AE7300-ND	.43	.38	.31	AR06-HZL/01-T
	8	0.40	0.30	0.40	AE7301-ND	.47	.41	.33	AR08-HZL/01-T
	14	0.40	0.30	0.70	AE7302-ND	.70	.61	.50	AR14-HZL/01-T
	16	0.40	0.30	0.80	AE7303-ND	.79	.69	.56	AR16-HZL/01-T
	20	0.40	0.30	1.00	AE7304-ND	1.03	.89	.72	AR20-HZL/01-T
	24	0.70	0.60	1.20	AE7305-ND	1.23	1.07	.87	AR24-HZL/01-T
	24	0.40	0.30	1.20	AE7306-ND	1.23	1.07	.87	AR24-HZL/7/01-T
	28	0.70	0.60	1.40	AE7307-ND	1.44	1.25	1.01	AR28-HZL/01-T
	28	0.40	0.30	1.40	AE7308-ND	1.44	1.25	1.01	AR28-HZL/7/01-T
	32	0.70	0.60	1.60	AE7309-ND	1.73	1.50	1.21	AR32-HZL/01-T
	40	0.70	0.60	2.00	AE7310-ND	2.05	1.78	1.44	AR40-HZL/01-T
	48	0.70	0.60	2.40	AE7311-ND	2.58	2.24	1.81	AR48-HZL/01-T

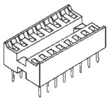
Fig.	No. of Cont.	Dimensions (Inch) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Assmann Part No.
30µ" Gold									
1	6	0.40	0.30	0.30	AE7312-ND	.46	.40	.32	AR06-HZL/07-T
	8	0.40	0.30	0.40	AE7313-ND	.54	.47	.38	AR08-HZL/07-T
	14	0.40	0.30	0.70	AE7314-ND	.79	.69	.56	AR14-HZL/07-T
	16	0.40	0.30	0.80	AE7315-ND	.90	.78	.63	AR16-HZL/07-T
	18	0.40	0.30	0.90	AE7316-ND	.90	.78	.63	AR18-HZL/07-T
	20	0.40	0.30	1.00	AE7317-ND	1.13	.98	.79	AR20-HZL/07-T
	24	0.70	0.60	1.20	AE7318-ND	1.35	1.18	.95	AR24-HZL/07-T
	24	0.40	0.30	1.20	AE7319-ND	1.35	1.18	.95	AR24-HZL/7/07-T
	28	0.70	0.60	1.40	AE7320-ND	1.58	1.37	1.11	AR28-HZL/07-T
	28	0.40	0.30	1.40	AE7321-ND	1.58	1.37	1.11	AR28-HZL/7/07-T
	32	0.70	0.60	1.60	AE7322-ND	1.89	1.65	1.33	AR32-HZL/07-T
	40	0.70	0.60	2.00	AE7323-ND	2.25	1.96	1.58	AR40-HZL/07-T
	48	0.70	0.60	2.40	AE7324-ND	2.73	2.37	1.92	AR48-HZL/07-T
Wire Wrap									
2	8	0.40	0.30	0.40	AE7108-ND	.96	.84	.68	AR08-HZW
	14	0.40	0.30	0.70	AE7114-ND	1.65	1.43	1.16	AR14-HZW
	16	0.40	0.30	0.80	AE7116-ND	1.89	1.64	1.33	AR16-HZW
	18	0.40	0.30	0.90	AE7118-ND	2.13	1.85	1.50	AR18-HZW
	20	0.40	0.30	1.00	AE7120-ND	2.37	2.06	1.66	AR20-HZW
	22	0.50	0.40	1.10	AE7122-ND	2.61	2.27	1.83	AR22-HZW
	24	0.70	0.60	1.20	AE7124-ND	2.85	2.47	2.00	AR24-HZW
	28	0.70	0.60	1.40	AE7128-ND	3.30	2.86	2.31	AR28-HZW
	40	0.70	0.60	2.00	AE7140-ND	4.74	4.11	3.32	AR40-HZW

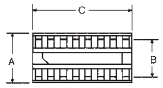
ASSMANN

IC Sockets

Dual Wipe
Solder Tail







Contacts: Phosphor bronze. Protection against capillary version. **Mechanical and Electrical Data:** Transitional resistance ≤12mΩ. Capacity between adjacent contacts <0.9 pF. Capacity between opposite adjacent contacts <0.4 pF. Breakdown voltage 600 V_{eff}. Insertion force ≤1.5N · Extraction force ≥0.7N. **Insulators:** Polyester GV,VO,UL 94. Insulation resistance $10^{12}\ \Omega$. Operation temperature range -65°C to +150°C.

Dimensions (Inch) A	B	C	Digi-Key Part No.
0.39	0.30	0.30	AE8906-ND
0.39	0.30	0.30	AE9806-ND
0.39	0.30	0.39	AE8908-ND
0.39	0.30	0.39	AE9808-ND
0.39	0.30	0.70	AE8914-ND
0.39	0.30	0.70	AE9814-ND
0.39	0.30	0.80	AE8916-ND
0.39	0.30	0.80	AE9816-ND
0.39	0.30	0.90	AE8918-ND
0.39	0.30	1.90	AE9818-ND

Dimensions (Inch) A	B	C	Digi-Key Part No.
0.39	0.30	1.00	AE8920-ND
0.30	0.30	1.00	AE9820-ND
0.50	0.40	1.10	AE8922-ND
0.50	0.40	1.10	AE9822-ND
0.70	0.60	1.20	AE8924-ND
0.70	0.60	1.20	AE9824-ND
0.70	0.60	1.40	AE8928-ND
0.70	0.60	1.40	AE9828-ND
0.70	0.60	2.00	AE8940-ND
0.70	0.60	2.00	AE9840-ND

No. of Cont.	Contact Plating	Digi-Key Part No.	Price Each 1	10	100	500	Assmann Part No.
6	Tin	AE8906-ND	.27	.22	.18	.13	A06-LC-TT
6	Gold	AE9806-ND	.33	.29	.23	.20	A06-LCG
8	Tin	AE8908-ND	.29	.24	.19	.14	A08-LC-TT
8	Gold	AE9808-ND	.36	.32	.26	.22	A08-LCG
14	Tin	AE8914-ND	.32	.26	.21	.15	A14-LC-TT
14	Gold	AE9814-ND	.57	.50	.40	.35	A14-LCG
16	Tin	AE8916-ND	.36	.29	.24	.17	A16-LC-TT
16	Gold	AE9816-ND	.65	.57	.46	.40	A16-LCG
18	Tin	AE8918-ND	.41	.33	.27	.19	A18-LC-TT
18	Gold	AE9818-ND	.73	.64	.52	.44	A18-LCG
20	Tin	AE8920-ND	.45	.36	.29	.21	A20-LC-TT
20	Gold	AE9820-ND	.81	.71	.57	.49	A20-LCG
22	Tin	AE8922-ND	.50	.40	.32	.24	A22-LC-TT
22	Gold	AE9822-ND	.89	.78	.63	.54	A22-LCG
24	Tin	AE8924-ND	.54	.44	.35	.26	A24-LC-TT
24	Gold	AE9824-ND	.98	.85	.69	.59	A24-LCG
28	Tin	AE8928-ND	.63	.51	.41	.30	A28-LC-T
28	Gold	AE9828-ND	1.14	.99	.80	.69	A28-LCG
40	Tin	AE8940-ND	.90	.72	.58	.42	A40-LC-TT
40	Gold	AE9840-ND	1.63	1.42	1.15	.98	A40-LCG

ASSMANN

PLCC Sockets

Fig. 1

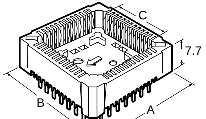
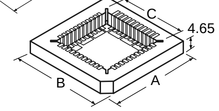


Fig. 2



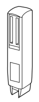
Contacts: Phosphor bronze, tin and gold plated
Current Rating: 1A
Insulating Resistance: 1000MΩ min.
Withstanding Resistance: 500V AC
Contact Resistance: 30MΩ max.
Operating Temperature: -55°C bis +125°C
Insulator: PBT, UL 94V-0

Fig.	No. of Cont.	Dimensions (Inch) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Assmann Part No.
PLCC-Thru Hole									
Tin									
1	20	0.61	0.61	0.20	AE7325-ND	.74	.65	.53	A-CCS20-Z
	28	0.71	0.71	0.30	AE7326-ND	.78	.68	.55	A-CCS28-Z
	32	0.71	0.81	0.30	AE7327-ND	.82	.72	.58	A-CCS32-Z
	44	0.93	0.93	0.50	AE7328-ND	.90	.78	.63	A-CCS44-Z
	52	1.02	1.02	0.60	AE7329-ND	.98	.85	.69	A-CCS52-Z
	68	1.23	1.23	0.80	AE7330-ND	1.00	.87	.70	A-CCS68-Z
	84	1.42	1.42	1.00	AE7331-ND	1.15	1.00	.81	A-CCS84-Z
Gold									
1	20	0.61	0.61	0.20	AE7332-ND	1.21	1.05	.85	A-CCS20-G
	28	0.71	0.71	0.30	AE7333-ND	1.21	1.05	.85	A-CCS28-G
	32	0.71	0.81	0.30	AE7334-ND	1.40	1.21	.98	A-CCS32-G
	44	0.93	0.93	0.50	AE7335-ND	1.52	1.32	1.07	A-CCS44-G
	52	1.02	1.02	0.60	AE7336-ND	1.52	1.32	1.07	A-CCS52-G
	68	1.23	1.23	0.80	AE7337-ND	1.58	1.37	1.11	A-CCS68-G
	84	1.42	1.42	1.00	AE7338-ND	1.76	1.53	1.23	A-CCS84-G
PLCC — Surface Mount									
Tin									
2	20	0.62	0.62	0.20	AE7339-ND	.67	.58	.47	A-CCS20-Z-SM
	28	0.72	0.72	0.30	AE7340-ND	.71	.62	.50	A-CCS28-Z-SM
	32	0.72	0.82	0.40	AE7341-ND	.65	.56	.46	A-CCS32-Z-SM
	44	0.92	0.92	0.50	AE7342-ND	.78	.68	.55	A-CCS44-Z-SM
	52	1.02	1.02	0.60	AE7343-ND	.96	.83	.67	A-CCS52-Z-SM
	68	1.22	1.22	0.80	AE7344-ND	1.04	.90	.73	A-CCS68-Z-SM
	84	1.42	1.42	1.00	AE7345-ND	1.21	1.05	.85	A-CCS84-Z-SM

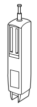
Division of OK International

IC Insertion/Extraction Tools

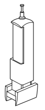
K153-ND



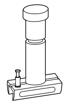
K154-ND



K155-ND

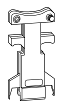


K156-ND

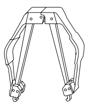


K157-ND

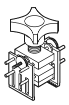
K158-ND



K293-ND



K375-ND

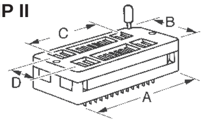


Description	Digi-Key Part No.	Price Each
14-16 Pin Dip/IC Inserter	K153-ND	9.75
14-16 Pin CMOS Safe Inserter	K154-ND	19.00
24-28 Pin CMOS Safe Inserter	K155-ND	19.00
36-40 Pin CMOS Safe Inserter	K156-ND	21.50
Extractor Tool, (8 to 24 pins)	K157-ND	2.95
Extractor Tool, (28 to 40 pins)	K158-ND	21.89
Insertion & Extraction Kit	K159-ND	69.95
Universal PLCC Extraction Tool	K293-ND	19.95
Low Cost Universal PLCC Extractor	K374-ND	7.95
Universal PGA Insert/Extract Kit*	K375-ND	225.00

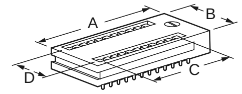
The K159 Kit contains: K154, K155, K156, K157 and K158.* K375-ND, Comes complete with Case and two sets of Jaws.

TEXTOOL/3M Zero Insertion Force (ZIF) I.C. Sockets

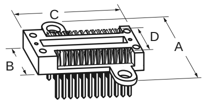
ZIP DIP II



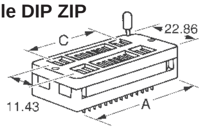
Econo ZIF



Receptacle for ZIP DIP Sockets



Double DIP ZIP



ZIP DIP II SOCKETS: For test and burn-in of all common dual-in-line packages on .100" lead spacing. The zero insertion pressure feature allows easy insertion and removal without lead distortion. Receptacles are ideal for high use situations such as PROM programming.

ECONO ZIF SOCKETS: Designed for OEM/end use applications where field replacement or programming of DIPs is required. The patented ZIF feature uses screwdriver rotation of a cam (instead of a lever) for security against vibration or accidental unloading. Leads are on .100" centers.

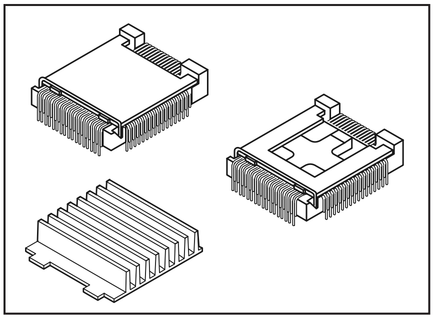
RECEPTACLES FOR ZIP DIP: Features: • Matching receptacle for every ZIP DIP Socket • Mounting flange standard option to hold receptacle to board • Pre-tapped holes in receptacle body mate with screw-hole in socket to hold socket firmly to receptacle (2 screws provided with each receptacle) • Available in solder-tail options. **Physical Specifications:** • Insulation Material: Glass Reinforced Polysulfone, Flammability Rating: UL 94V-0 • Color: Green • Marking: Part Number Identification • Contact Material: Beryllium Copper • Plating: 30µ" (.076µm) Gold — MIL-G-45204, Type II, Grade C over 50µ" (1.3µm) Sulfamate Nickel per QQ-N-290A, Class 2 or 75µ" (1.9µm) Nickel Boron. **Electrical Specifications:** • Current Rating: 1Amp • Insulation Resistance: >1x10^{12}Ω at 500 Vdc Withstanding Voltage: 1000Vrms at Sea Level. **Environmental Specifications:** • Temperature Rating Operating: -67°F (-55°C) to +302°F (+150°C)

ZIP DIP SOCKETS .100 CENTERS - DOUBLE DIP: Features: • For DIPs with .100" lead spacing • Extra wide contact zone allows insertion of DIPs with distance between rows from .300" through .600" • Lever actuated zero insertion force mechanism • Socket easily disassembles for repairability

3M4099-ND Extraction Tool **$3.99**

No. of Pins	Contact Plating	Dimensions – Inch (mm)				Digi-Key Part No.	Pricing		3M Part No.
		A	B	C	D		1	10	
ZIP DIP Sockets									
14	Gold	1.30 (33.02)	.60 (15.24)	.60 (15.24)	.300 (7.62)	3M1402-ND	16.44	130.50	214-3339-00-0602J
16	Gold	1.39 (35.31)	.60 (15.24)	.70 (17.78)	.300 (7.62)	3M1602-ND	17.12	135.90	216-3340-00-0602J
18	Gold	1.49 (37.85)	.60 (15.24)	.80 (20.32)	.300 (7.62)	3M1802-ND	17.80	141.30	218-3341-00-0602J
20	Gold	1.59 (40.39)	.60 (15.24)	.90 (22.86)	.300 (7.62)	3M2002-ND	18.48	146.60	220-3342-00-0602J
22	Gold	1.69 (42.93)	.70 (17.78)	1.00 (25.40)	.400 (10.16)	3M2202-ND	19.15	152.00	222-3343-00-0602J
24	Gold	1.79 (45.47)	.90 (22.86)	1.10 (27.94)	.600 (15.24)	3M2402-ND	17.04	135.30	224-1275-00-0602J
28	Gold	1.99 (50.55)	.90 (22.86)	1.30 (33.02)	.600 (15.24)	3M2802-ND	18.93	150.20	228-1277-00-0602J
40	Gold	2.60 (66.04)	.90 (22.86)	1.90 (48.26)	.600 (15.24)	3M4002-ND	24.51	194.50	240-1280-00-0602J
64	Gold	3.95 (100.33)	1.30 (33.02)	3.10 (78.74)	.900 (22.86)	3M6402-ND	36.20	287.30	264-4493-00-0602J
Econo ZIF Sockets									
14	Gold	1.00 (25.40)	.50 (12.70)	.600 (15.24)	.300 (7.62)	3M1403-ND	10.71	93.30	214-4839-00-3303
16	Gold	1.10 (27.94)	.50 (12.70)	.700 (17.78)	.300 (7.62)	3M1603-ND	7.92	69.00	216-6278-00-3303
20	Gold	1.30 (33.02)	.50 (12.70)	.900 (22.86)	.300 (7.62)	3M2003-ND	11.73	102.20	220-4842-00-3303
24	Gold	1.50 (38.10)	.80 (20.32)	1.100 (27.94)	.600 (15.24)	3M2403-ND	12.40	108.00	224-4844-00-3303
28	Gold	1.70 (43.18)	.80 (20.32)	1.300 (33.02)	.600 (15.24)	3M2803-ND	11.73	102.20	228-1296-00-3303
40	Gold	2.30 (58.42)	.80 (20.32)	1.900 (48.26)	.600 (15.24)	3M4003-ND	15.18	132.30	240-4846-00-3303
64	Gold	3.54 (89.92)	1.10 (27.94)	3.100 (78.74)	.900 (22.86)	3M6403-ND	19.36	168.60	264-5200-00-3303
ZIP DIP Receptacle									
14	Gold	1.00 (25.40)	.60 (15.24)	1.28 (32.51)	.300 (7.62)	3M1401-ND	15.45	116.90	214-3339-09-0602J
16	Gold	.96 (24.38)	.56 (14.22)	1.37 (34.80)	.300 (7.62)	3M1601-ND	16.11	121.90	216-3340-09-0602J
18	Gold	.95 (24.13)	.55 (13.97)	1.49 (37.85)	.300 (7.62)	3M1801-ND	16.86	127.60	218-3341-09-0602J
20	Gold	1.00 (25.40)	.60 (15.24)	1.58 (40.13)	.300 (7.62)	3M2001-ND	17.52	132.50	220-3342-09-0602J
22	Gold	1.06 (26.92)	.65 (16.51)	1.69 (42.93)	.400 (10.16)	3M2201-ND	18.18	137.50	222-3343-09-0602J
24	Gold	1.26 (32.00)	.86 (21.84)	1.77 (44.96)	.603 (15.32)	3M2401-ND	16.20	122.60	224-1275-09-0602J
28	Gold	1.26 (32.00)	.86 (21.84)	1.98 (50.29)	.600 (15.24)	3M2801-ND	17.99	136.10	228-1277-09-0602J
40	Gold	1.27 (32.26)	.86 (21.84)	2.58 (65.53)	.606 (15.39)	3M4001-ND	22.42	169.60	240-1280-09-0602J
64	Gold	1.70 (43.18)	1.30 (33.02)	3.95 (100.33)	.900 (22.86)	3M6401-ND	35.89	271.50	264-4493-09-0602J
Double DIP Socket ZIP									
24	Gold	1.77 (44.96)	—	1.10 (27.94)	—	3M2406-ND	23.75	188.50	224-1286-00-0602J
28	Gold	1.99 (50.55)	—	1.30 (33.02)	—	3M2806-ND	26.85	213.10	228-1371-00-0602J
40	Gold	2.59 (65.79)	—	1.90 (48.26)	—	3M4006-ND	35.07	278.30	240-1288-00-0602J

3M OEM Type "A" LCC Sockets



Features: • Accepts JEDEC leadless type "A" ceramic chip carriers • Variety of lid options available • "U" lid for I.C.E. adapter I/O cable egress • Head Sink(s) acceptable and available • Thruster spring helps register substrate three corner notches, maintain centering • Polarizing post on bottom of socket • Through hole contact tails • No tools required for package insertion/removal • Full contact probe-ability • High temperature PPS plastic and BeCu contacts for rugged performance

Physical Specifications: • Insulation: • Material: Glass Filled Polyphenylene Sulfide (PPS) • Flammability: UL94 V-0 • Color: Black • **Lid Material:** Aluminum • **Latch Material:** Stainless Steel • **Thruster & Contact Material:** Beryllium Copper (C172) Plating; Underplate: 50µ" (1.27µm) Nickel; Wiping Area: 30µ" (0.76µm) Gold; Solder Tails: 30µ" (0.76µm) Gold • **Marking:** Raised Letters

Electrical Specifications: • Current Rating: 1 Amp • Insulation Resistance: >1x10^{12}Ω • Withstanding Voltage: 1000 Vrms at Sea Level

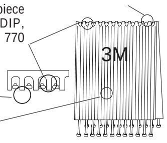
Environmental Specifications: • Operating Temperature Rating: -55° to +105°C

Lid Type	No./ Cont.	Digi-Key Part No.	Pricing		3M Part No.
			1	10	
LCC Sockets					
Full	68	3M6809A-ND	16.15	140.70	268-5401-00-1102JH
No Lid	68	3M6809B-ND	16.15	140.70	268-5401-11-1102JH
U-Shaped	68	3M6809C-ND	16.27	141.70	268-5401-50-1102JH
Finned Heat Sink	68	3M6809D-ND	19.17	167.00	268-5401-52-1102JH
LCC Socket Lid					
Full	—	3MLLSF-ND	.91	7.90	268-5401-00-0000
U-Shaped	—	3MLLSU-ND	1.03	9.00	268-5401-50-0000
Finned Heat Sink	—	3MLLSH-ND	3.45	30.00	268-5401-52-0000

3M IC Test Clips

New "open-nose" design now permits probe tip access at DIP leads.

• Simplifies prototype and production testing, field service work, and Quality Control. • New one-piece body for each DIP size. TC-14 fits 14-pin DIP, etc. • High reliability Gold contacts. • Proven 770 Alloy contacts.



"Contact comb" fits between DIP leads – eliminating any possibilities of shorts.

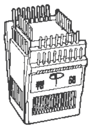
New "duck-bill" contacts are flat- won't roll off new narrow DIP leads.

Rugged, engineering-grade thermoplastic body molded around contact pins

No. of Pins	Row to Row (Inch)	Nail-Head Leads Digi-Key Part No.	Price Each	Headless Leads Digi-Key Part No.	Price Each
Alloy 770					
8	.3	923695-ND	9.79	923690-08-ND	9.79
14	.3	923698-ND	9.85	923690-14-ND	10.04
16	.3	923700-ND	9.95	923690-16-ND	10.14
16	.5/.6	923702-ND	16.54	—	—
18	.3	923703-ND	13.99	923690-18-ND	13.99
20	.3	923704-ND	14.64	923690-20-ND	14.64
22	.5/.6	923705-ND	18.15	—	—
24	.5/.6	923714-ND	19.05	923690-24-ND	19.05
24	.3	923715-ND	19.05	923689-24-ND	19.05
28	.5/.6	923718-ND	22.85	923690-28-ND	22.85
28	.3	923717-ND	22.85	923689-28-ND	22.85
36	.5/.6	923720-ND	25.37	923690-36-ND	25.37
40	.5/.6	923722-ND	26.62	923690-40-ND	26.62
64	.9	923726-ND	40.56	—	—
Gold Plated					
8	.3	923743-08-ND	11.87	923739-08-ND	11.87
14	.3	923743-14-ND	12.19	923739-14-ND	12.19
16	.3	923743-16-ND	12.50	923739-16-ND	12.50
18	.3	923743-18-ND	16.90	923739-18-ND	17.57
20	.3	923743-20-ND	17.65	923739-20-ND	18.32
24	.5/.6	923743-24-ND	23.22	923739-24-ND	23.89
24	.3	923742-24-ND	23.22	923738-24-ND	23.22
28	.5/.6	923743-28-ND	27.91	923739-28-ND	28.57
28	.3	923742-28-ND	27.91	923738-28-ND	27.91
40	.5/.6	923743-40-ND	32.72	923739-40-ND	32.72
48	.5/.6	—	—	923739-48-ND	43.81
64	.9	—	—	923739-64-ND	50.13

3M Surface Mount Test Clips

by 3M Electronic Specialty Products



Features: • Allow safe, convenient, fast and easy testing of normally hard-to-access. Small Outline Integrated Circuits (SOICs) • Eight sizes available for .30" (7.62mm) and .15" (3.81mm) package sizes • Helical compression springs and insulating contact combs ensure contact integrity during testing • Permits devices stacked as close as .0505" (1.28mm) end-to-end to be tested simultaneously • Standard .025" (.64mm) square contacts on .10" (2.54mm) centers at the probe end of the clip easily accept test probes or single row female socket connectors • Steel hinge pin and glass filled polyester body provide long service life • Available with alloy 764 unplated and gold plated leads • Allows safe, convenient testing of Plastic Leaded Chip Carrier (PLCC) style ICs • All four sides of test clip open simultaneously for fast and easy attachment to PLCC being tested • Stays securely clamped to PLCC until removed • Helical compression springs and insulating contact combs ensure contact integrity during testing • Permits testing of ICs with as little as .200" (5.08mm) row to row spacing between devices • Staggered contact rows on .100" (2.54mm) centers • Industry standard .025" (.64mm) square contact pins on the .100" (2.54mm) centers • Available with alloy 764 leads and gold plated leads.

No. of Pin	Description	Narrow Digi-Key Part No.	Price Each	Wide Digi-Key Part No.	Price Each
		.150" SOIC		*.300" SOIC*	
8	Alloy 764	923650-08-ND	10.90	—	—
14	Alloy 764	923650-14-ND	11.04	—	—
16	Alloy 764	923650-16-ND	11.35	923660-16-ND	11.49
18	Alloy 764	—	—	923660-18-ND	12.15
20	Alloy 764	—	—	923660-20-ND	12.27
24	Alloy 764	—	—	923660-24-ND	13.77
28	Alloy 764	—	—	923660-28-ND	14.75
8	Gold Plated	923655-08-ND	11.35	—	—
14	Gold Plated	923655-14-ND	12.57	—	—
16	Gold Plated	923655-16-ND	12.45	923665-16-ND	13.19
18	Gold Plated	—	—	923665-18-ND	13.29
20	Gold Plated	—	—	923665-20-ND	13.45
24	Gold Plated	—	—	923665-24-ND	15.17
28	Gold Plated	—	—	923665-28-ND	16.29

No. of Pin	Description	PLCC Digi-Key Part No.	Price Each
PLCC			
20	Alloy 764	923670-20-ND	30.24
28	Alloy 764	923670-28-ND	32.07
44	Alloy 764	923670-44-ND	40.69
68	Alloy 764	923670-68-ND	46.83
20	Gold Plated	923675-20-ND	33.34
28	Gold Plated	923675-28-ND	39.46
44	Gold Plated	923675-44-ND	43.63
68	Gold Plated	923675-68-ND	51.39
84	Gold Plated	923675-84-I-ND	55.36

Logical Systems

Programming and Prototyping Adapters

Description	Recommended For Use With	Digi-Key Part No.	Price Each	Logical Systems Part No.
Programming Adapters				
8 Pin SOIC .150" Wide Socket to 8 Pin .300" Wide DIP Plug	PIC12(L)C508A, 509A; PIC12(L)CE518, 519	309-1045-ND	60.00	PA8SO1-03-3
8 Pin SOIC .150" Wide Socket to 8 Pin .600" Wide DIP Plug		309-1046-ND	60.00	PA8SO1-03-6
8 Pin SOIC .210" Wide Socket to 8 Pin .300" Wide DIP Plug	PIC12(L)C508A, 509A; PIC12(L)CE518, 519; PIC12C671, 672	309-1047-ND	70.00	PA8SO1-2006-3
8 Pin SOIC .210" Wide Socket to 8 Pin .600" Wide DIP Plug		309-1048-ND	70.00	PA8SO1-2006-6
14 Pin SOIC .150" Wide Socket to 14 Pin .300" Wide DIP Plug	PIC16C505	309-1000-ND	60.00	PA14SO1-03-3
14 Pin SOIC .150" Wide Socket to 14 Pin .600" Wide DIP Plug		309-1001-ND	60.00	PA14SO1-03-6
18 Pin SOIC .300" Wide Socket to 18 Pin .300" Wide DIP Plug	PIC16C52-58, 61, 554, 558, 621-625, 71, 710-717, F83, 84; PIC16HV510; Z86C(E)(L)02, 03, 04, 06, 08, 16, 28; Z8E000, 001	309-1010-ND	70.00	PA18SO1-08H-3
18 Pin SOIC .300" Wide Socket to 18 Pin .600" Wide DIP Plug		309-1011-ND	70.00	PA18SO1-08H-6
20 Pin SOIC .300" Wide Socket to 20 Pin .300" Wide DIP Plug	PIC16C770, 771	309-1012-ND	70.00	PA20SO1-08H-3
20 Pin SOIC .300" Wide Socket to 20 Pin .600" Wide DIP Plug		309-1013-ND	70.00	PA20SO1-08H-6
20 Pin SSOP Socket to 20 Pin .300" Wide DIP Plug		309-1014-ND	80.00	PA20SS-OT-3
20 Pin SSOP Socket to 20 Pin .600" Wide DIP Plug		309-1015-ND	80.00	PA20SS-OT-6
20 Pin SSOP Socket to 18 Pin .600" Wide DIP Plug	PIC16C56(A), 58A(B), 554, 558, 620(A), 621, E623-E625, 710-717; PIC16HV540	309-1016-ND	80.00	PA20SS-P54
28 Pin PLCC Auto-Eject Socket to 28 Pin .600" Wide DIP Plug	Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1017-ND	70.00	PA28-28
28 Pin PLCC Lidded ZIF Socket to 28 Pin .600" Wide DIP Plug		309-1020-ND	90.00	PA28-28Z
28 Pin SOIC .300" Wide Socket to 28 Pin .300" Wide DIP Plug	PIC14000; PIC16C55, 57, 62, 63, 66, 72, 73, 76, 642, 773, F872, F873, F876; PIC18C242, 252; Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1023-ND	70.00	PA28SO1-08H-3
28 Pin SOIC .300" Wide Socket to 28 Pin .600" Wide DIP Plug		309-1024-ND	70.00	PA28SO1-08H-6
28 Pin SSOP Socket to 28 Pin .600" Wide DIP Plug	PIC14000, PIC16C62A(B), 63A, 72(A), 73B, 773, F872	309-1025-ND	80.00	PA28SS-OT-6
28 Pin SSOP Socket to 28 Pin .600" Wide DIP Plug	PIC16C55(A), 57(C)	309-1026-ND	80.00	PA28SS-P55
32 Pin PLCC Auto-Eject Socket to 28 Pin .600" Wide DIP Plug	AT27C(BV, LV) 512, 256, 128, 28BV64, 29C256, 28C17, 27C040	309-1089-ND *NEW!*	70.00	PA32-28
32 Pin PLCC Lidded ZIF Socket to 28 Pin .600" Wide DIP Plug		309-1090-ND *NEW!*	90.00	PA32-28Z
32 Pin PLCC Auto-Eject Socket to 32 Pin .600" Wide DIP Plug	AT27C010, 020, AT49F(BV,LV) 001, 002, 020, AT29C010, 020, 040A, 512	309-1091-ND *NEW!*	70.00	PA32-32
32 Pin PLCC Lidded ZIF Socket to 32 Pin .600" Wide DIP Plug		309-1092-ND *NEW!*	90.00	PA32-32Z
44 Pin PLCC Auto-Eject Socket to 40 Pin .600" Wide DIP Plug	AT89C51, 8051	309-1093-ND *NEW!*	115.00	PA51-44
44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug		309-1094-ND *NEW!*	135.00	PA51-44Z
44 Pin PLCC Auto-Eject Socket to 40 Pin .600" Wide DIP Plug	AT27C1024, 2048, 4096	309-1095-ND *NEW!*	115.00	PA280-44
44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug		309-1096-ND *NEW!*	135.00	PA280-44Z
44 Pin PQFP Socket to 40 Pin .600" Wide DIP Plug	PIC16C64A, 65A(B), 67, 662, 74A(B), 774, 77, F874, F877	309-1002-ND	165.00	PA16C64-QD-16
44 Pin TQFP Socket to 40 Pin .600" Wide DIP Plug		309-1003-ND	165.00	PA16C64-QD-03
44 Pin PLCC Auto-Eject Socket to 40 Pin .600" Wide DIP Plug	PIC17C42(A), 43, 44	309-1006-ND	115.00	PA17C42-PD
44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug		309-1007-ND	135.00	PA17C42-PDZ
44 Pin TQFP Socket to 40 Pin .600" Wide DIP Plug		309-1008-ND	165.00	PA17C42-QD-03
44 Pin PQFP Socket to 40 Pin .600" Wide DIP Plug		309-1009-ND	165.00	PA17C42-QD-16
44 Pin PLCC Auto-Eject Socket to 40 Pin .600" Wide DIP Plug	Z86C(E)21, 61	309-1035-ND	115.00	PA44-40-01-PD
44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug		309-1036-ND	135.00	PA44-40-01-PDZ
44 Pin PLCC Auto-Eject Socket to 40 Pin .600" Wide DIP Plug	Z86C(E)40, 43, 743, 44, 45, 46	309-1037-ND	115.00	PA44-40-33-PD
44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug		309-1038-ND	135.00	PA44-40-33-PDZ
44 Pin PLCC Auto-Eject Socket to 40 Pin .600" Wide DIP Plug	PIC16C64A, 65A(B), 67, 662, 74A (B), 774, 77, F874, F877	309-1039-ND	115.00	PA44-40-P64-PD
44 Pin PLCC Lidded ZIF Socket to 40 Pin .600" Wide DIP Plug		309-1040-ND	135.00	PA44-40-P64-PDZ
DIP to PLCC Prototyping Adapters				
Emulator Adapter, 28 Pin DIP ZIF Socket to 28 Pin PLCC Plug. Wired 1:1	Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1018-ND	104.00	PA28-28-DP
Emulator Adapter, 28 Pin DIP Socket to 28 Pin PLCC Plug. Wired 1:1		309-1019-ND	90.00	PA28-28-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug	PIC17C42(A), 43, 44	309-1004-ND	145.00	PA17C42-DP
Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug		309-1005-ND	125.00	PA17C42-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug	Z86C(E)21, 61	309-1027-ND	145.00	PA40-44-01-DP
Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug		309-1028-ND	125.00	PA40-44-01-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug	Z86C(E)40, 43, 743, 44, 45, 46	309-1029-ND	145.00	PA40-44-33-DP
Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug		309-1030-ND	125.00	PA40-44-33-DP-PP
Emulator Adapter, 40 Pin DIP ZIF Socket to 44 Pin PLCC Plug	PIC16C64A, 65A(B), 67, 662, 74A(B), 774, 77, F874, F877	309-1031-ND	145.00	PA40-44-P64-DP
Emulator Adapter, 40 Pin DIP Socket to 44 Pin PLCC Plug		309-1032-ND	125.00	PA40-44-P64-DP-PP
PLCC to PLCC Prototyping Adapter				
28 Pin PLCC Auto-eject Socket to 28 Pin PLCC Plug. 1:1 Pinout	Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84, Z86233, 733	309-1021-ND	110.00	PA28-PP
28 Pin PLCC Lidded ZIF Socket to 28 Pin PLCC Plug. 1:1 Pinout		309-1022-ND	140.00	PA28-PZP
44 Pin PLCC Auto-eject Socket to 44 Pin PLCC Plug. 1:1 Pinout	Z86C(E)21, 40, 43, 743, 44, 45, 46, 61	309-1041-ND	145.00	PA44-PP
44 Pin PLCC Lidded ZIF Socket to 44 Pin PLCC Plug. 1:1 Pinout		309-1042-ND	165.00	PA44-PZP
DIP to QFP Prototyping Adapters				
40 Pin DIP Socket to 44 Pin QFP Solder Down Plug	Z86C(E)40, 43, 743, 44, 45, 46	309-1033-ND	270.00	PA40DP-44QF-34
40 Pin DIP ZIF Socket to 44 Pin QFP Solder Down Plug		309-1034-ND	290.00	PA40DZ-44QF-34
QFP to QFP Prototyping Adapters				
44 Pin TQFP Socket to 44 Pin Solder Down QFP Plug. 1:1 Pinout	N/A	309-1043-ND	360.00	PA44QF03-44QF
44 Pin PQFP Socket to 44 Pin Solder Down QFP Plug. 1:1 Pinout		309-1044-ND	360.00	PA44QF16-44QF
DIP to SO-Plug Prototyping Adapter Kits				
8 Pin .300" DIP Board. Two 8 Pin .250" SOIC Plugs	PIC12(L)C508A, 509A, DE518, CE519	309-1050-ND	19.60	PADSO-0803-D250-08/2
8 Pin .300" DIP Board. Two 8 Pin .310" SOIC Plugs	PIC12(L)C508A, 509A, CE518, CE519, 671, 672	309-1051-ND	19.60	PADSO-0803-D310-08/2
14 Pin .300" DIP Board. Two 14 Pin .250" SOIC Plugs	PIC16C505	309-1085-ND	23.80	PA-DSO-1403-D250-14/2
14 Pin .300" DIP Board with ZIF Socket. Two 14 Pin .250" SOIC Plugs		309-1086-ND	35.80	PA-DSO-1403Z-D250-14/2
18 Pin .300" DIP Board. Two 18 Pin .420" SOIC Plugs	PIC16C52,54(A)(C), 56(A), 58A(B), 61, 554, 558, 621, 620(A), CE623-CE625, 71, 710-717, F83, F84(A), HV540; Z86C(E)(L)02, 03, 04, 06, 08, 16, 28; Z8E000, 001	309-1057-ND	26.60	PADSO-1803-D420-18/2
18 Pin .300" DIP Board with ZIF Socket. Two 18 Pin .420" SOIC Plugs		309-1059-ND	38.60	PADSO1803Z-D420-18/2
20 Pin .300" DIP Board. Two 20 Pin .420" SOIC Plugs	PIC16C770, 771	309-1061-ND	28.00	PADSO-2003-D420-20/2
20 Pin .300" DIP Board with ZIF Socket. Two 20 Pin .420" SOIC Plugs		309-1063-ND	42.00	PADSO-2003Z-D420-20/2
28 Pin .300" DIP Board. Two 28 Pin .420" SOIC Plugs	PIC14000, PIC16C55(A), 57(C), 62A(B), 57(C), 62A(B), 63(A), 66, 72(A), 73A(B), 76, 642, 773, F872-F876; PIC18C242, 252; Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1065-ND	33.60	PADSO-2803-D420-28/2
28 Pin .300" DIP Board with ZIF Socket. Two 28 Pin .420" SOIC Plugs		309-1067-ND	47.60	PADSO2803Z-D420-28/2
28 Pin .600" DIP Board. Two 28 Pin .420" SOIC Plugs		309-1069-ND	33.60	PADSO-2806-D420-28/2
28 Pin .600" DIP Board with ZIF Socket. Two 28 Pin .420" SOIC Plugs		309-1071-ND	47.60	PADSO2806Z-D420-28/2
SOIC to SOIC Prototyping Adapters				
8 Pin SOIC .210" Socket to 8 Pin SOIC Connector	PIC12(L)C508A, 509A, CE518, CE519, 671, 672	309-1072-ND*	70.00	PA-SOD-2006-08
14 Pin SOIC .300" Socket to 14 Pin SOIC Connector	PIC16C505	309-1074-ND*	70.00	PA-SOD-2808-14
18 Pin SOIC .300" Socket to 18 Pin SOIC Connector	PIC16C52, 54(A)(C), 56(A), 58A(B), 61, 554, 558, 621, 620(A), CE623-CE625, 71, 710-717, F83, F84(A), HV540; Z86C(E)(L)02, 03, 04, 06, 08, 16, 28; Z8E000, 001	309-1075-ND*	70.00	PA-SOD-2808-18
20 Pin SOIC .300" Socket to 20 Pin SOIC Connector	PIC16C770, 771	309-1076-ND*	70.00	PA-SOD-2808-20
28 Pin SOIC .300" Socket to 28 Pin SOIC Connector	PIC14000, PIC16C55(A), 57(C), 62A(B), 63(A), 66, 72(A), 73A(B), 76, 642, 773, F872-F876; PIC18C242, 252, Z86C(E)(L)30, 31, 33, 34, 35, 36, 83, 84; Z86233, 733	309-1073-ND*	70.00	PA-SOD-2808-28

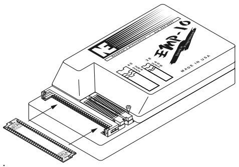
* Require SO-Plugs which must be ordered separately.

Description	Digi-Key Part No.	Price Each	Logical Systems Part No.
Additional DIP Boards			
8 Pin .300" DIP Board	309-1049-ND	14.00	PA-DSO-0803
14 Pin .300" DIP Board	309-1087-ND	17.00	PA-DSO-1403
14 Pin .300" DIP Board with ZIF Socket	309-1088-ND	29.00	PA-DSO-1403Z
18 Pin .300" DIP Board	309-1056-ND	19.00	PA-DSO-1803
18 Pin .300" DIP Board with ZIF Socket	309-1058-ND	31.00	PA-DSO-1803Z
20 Pin .300" DIP Board	309-1060-ND	20.00	PA-DSO-2003
20 Pin .300" DIP Board with ZIF Socket	309-1062-ND	34.00	PA-DSO-2003Z
28 Pin .300" DIP Board	309-1064-ND	24.00	PA-DSO-2803
28 Pin .300" DIP Board with ZIF Socket	309-1066-ND	38.00	PA-DSO-2803Z
28 Pin .600" DIP Board	309-1068-ND	24.00	PA-DSO-2806
28 Pin .600" DIP Board with ZIF Socket	309-1070-ND	38.00	PA-DSO-2806Z

Description	Digi-Key Part No.	Price Each	Logical Systems Part No.
Additional SO-Plugs			
8 Pin .250" Plugs (6 pieces)	309-1078-ND	16.80	PA-SOF-D250-08/6
8 Pin .310" Plugs (6 pieces)	309-1079-ND	16.80	PA-SOF-D310-08/6
14 Pin .250" Plugs (6 pieces)	309-1080-ND	20.40	PA-SOF-D250-14/6
18 Pin .420" Plugs (6 pieces)	309-1081-ND	22.80	PA-SOF-D420-18/6
20 Pin .420" Plugs (6 pieces)	309-1082-ND	24.00	PA-SOF-D420-20/6
28 Pin .420" Plugs (6 pieces)	309-1083-ND	28.80	PA-SOF-D420-28/6
Additional QFP Plug			
44 Pin Solder Down QFP Plug	309-1084-ND	90.00	PQF-44

Needham's Electronics

EMP-10 Programmer



Programs: EPROMS, Gals, Microcontrollers, Flash, EEPROMS

The EMP-10 from Needham's is one of a kind. Versatile and compact with its speed and ease of programming make it untouchable by the competition.

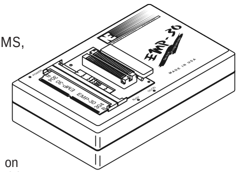
• Very fast programming • Supports Intel Hex, Mots, Jedec Binary, ASCII Formats • Easy to read menus with mouse or cursor control • Contains full screen editor with search and fill entry in Hex, Binary or ASCII • Free software upgrades and 1 year warranty • Programming voltages and algorithms automatically loaded

EMP-10 comes complete with 3 "Family Modules". Each module supports a group of devices. The "Family Modules" allow for rerouting VCC, VPP and ground, when changing to different device groups. The "Family Modules" are simple to snap in and each module supports two device groups. The concept of "Family Modules" provides support for a wide variety of devices. Needham's will be able to provide future support as new devices become available for a minimal cost to the customer.

System Requirements: PC with 512K memory, 1 standard parallel I/O port. MS DOS 2.11 or greater and a standard Centronix 36 pin parallel cable.
Software, power supply and literature included with the EMP-10. • Dimensions: 4.6" x 7.75" x 1.65" (116.84mm x 196.85mm x 41.91mm) • EPROMS: 2716 through 27C080, 27C210 through 27C240 • Flash: 28F256A through 28F020, 29C256-040 • Gal: 22V10, 22V10B • Micros: C51, C51FX, 8751, 87C751, PIC16C5X EEPROMS, 89C5X

EMP-10-ND .... **$219.95 each**

EMP-30 Programmer



Programs: EPROMS, Gals, Microcontrollers, PLD, Flash, EEPROMS, Serial EEPROMS.

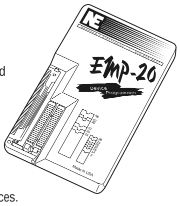
The EMP-30 is an advanced universal programmer that supports digital voltages from 1.8 Volts to 7 Volts and analog voltages (such as VCC) from 0 to 25 volts. The EMP-30 provides near-theoretical programming times for most devices currently available. The EMP-30 is the fastest, most reliable and most versatile programmer in the EMP line. It supports more device types with larger pin counts than the smaller units in the EMP line, and changing Family Modules is not required as often. The socket module on top of the EMP-30 is removable, allowing different modules to be plugged in to accommodate different device packages. This helps eliminate the confusion often caused by third party adapters. The EMP-30 comes standard with a 48-pin DIP Socket Module and thirteen Family Modules. The unit contains three microprocessors, and automatically performs self-test and calibration verification upon power-up.

Contents: EMP-30 Programmer: 48-pin ZIF Socket Module: 110 VAC Power Transformer: 13 Family Modules: Parallel Port Cable: Printed Manual/User's Guide.

System Requirements: IBM-Compatible PC (386+)with 640Kb of RAM: Hard disk with at least 6Mb of free space: Standard parallel port.

No. of Pins	Description	Pkg. Type	Digi-Key Part No.	Price Each	Needham's Part No.
—	Universal Device Programmer	—	EMP-30-ND	995.00	EMP-30
20	Socket Module for EMP-30	PLCC	PLCC20-ND	105.00	PLCC20
32	Socket Module for EMP-30	PLCC	PLCC32-ND	105.00	PLCC32
44	Socket Module for EMP-30	PLCC	PLCC44-ND	105.00	PLCC44
48	Socket Module for EMP-30	TSOP	TSOP48-ND	125.00	TSOP48
56	Socket Module for EMP-30	TSOP	TSOP56-ND	125.00	TSOP56

EMP-20 Programmer



Programs: EPROMS, Gals, Microcontrollers, PLD, Flash, EEPROMS, Serial EEPROMS.

The EMP-20 from Needham's is one of a kind. Versatile and compact with its speed and ease of programming make it untouchable by the competition.

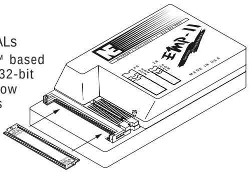
• Very fast programming, for example: 27C10A in 23 seconds; 27C040 in only 90 seconds • Supports Intel Hex, Mots, Jedec Binary, ASC II formats • Easy-to-read menus with cursor control make programming enjoyable • Contains full screen editor with search and fill, entry in Hex, Binary or ASCII • Free software upgrades and 1 year warranty • All programming voltages and algorithms are automatically loaded in when you select a part number to work with

EMP-20 comes complete with 4 family modules. Each module supports a group of devices. The "Family Modules" allows for rerouting of VCC, VPP and ground pins, when changing to different device groups. The "Family Modules" are simple to snap in and each module supports two groups of devices. The concept of family modules provides support for a wide variety of devices. Needham's will be able to provide future support as new devices become available for a minimal cost to the customer.

System Requirements: PC with 512K memory, 1 Standard parallel I/O port, MS Dos 2.11 or greater and a standard centronix 36 pin parallel cable. • Software, power supply and literature included with the EMP-20. • Dimensions: 9.5" x 5.75" x 1.25" (241.30mm x 146.05mm x 31.75mm) • Eproms: 2716 through 27C080, 27C210 through 27C240, 27C400 through 27C800 • Flash: 28F256A through 28F020 • GAL, PLD, PALCE: 16V8, 20V8, 22V10 • Microcontrollers: 8741, 42, 48, 49, C51, C51FX, 8751, 87C751, 87C752, PIC16C5X, PIC16C71 • EEPROMS and Serial EEPROMS • Xilinx — XC1736A & D, XC1765 & D, XC17128

EMP-20-ND .... **$449.50 each**

EMP-11 Programmer



Programs: EPROMS, FLASH, 8051-style micros, Microchip PICs, GALs

The EMP-11 is a low-cost, true low-voltage support, Windows™ based programmer that supports more than 1400 devices. The native 32-bit Windows™ software allows "drag and drop" file loading, window positioning/sizing, along with graphical display of splits and sets. Devices with special features such as block locking, encryption tables, and reset polarity are supported. The file formats supported include Binary, JEDEC, Intel Hex, Motorola S, TekHex, and POF. Modular device and file formats allow for easier updates along with specialized (proprietary) file formats. Configuration data for multiple projects with custom programming tasks can be stored in "session files" for quick retrieval. Full communications error detection and correction in conjunction with device ID checking ensures reliable programming.

Contents: EMP-11 Programmer: 40-pin ZIF Socket Module: 110 VAC Power Transformer: Family Modules: Parallel Port Cable: Software CD-ROM

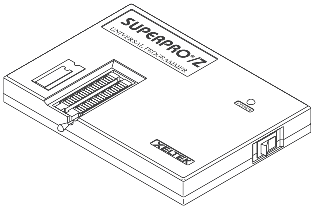
System Requirements: IBM-Compatible PC (486+): Windows™ 95, 98, 2000, or ME: 55-75 Mb Free Space: Parallel Port

Description	Digi-Key Part No.	Price Each	Needham's Part No.
Device Programmer	EMP-11-ND	334.95	EMP-11
44-PSOP Adapter (uses TI socket #CSP044-29)	E11-PSOPA-29-ND	90.00	E11-PSOPA-29
48-TSOP Adapter (uses Wells socket #648-0482211)	E11-TSOPA-48-ND	125.00	E11-TPSOPA-48
44-PSOP Adapter (uses TI socket #CSP044-52)	E11-PSOPA-52-ND	90.00	E11-PSOPA-52
44-PSOP Adapter (uses Wells socket #652-G44)	E11-PSOPA-W-ND	90.00	E11-PSOPA-W

XELTEK

Superpro Z Universal Programmer

Entry Level Programmer with Basic Support



Features:

- Printer Port Interface, parallel communication
- Easy interface to LAPTOP, PC PS/2 or compatible
- Mouse support, user friendly menu driven software interface
- High speed programming

Supports 2000+ Devices Including:

Most E(E)PROM, Series E(E)PROM, Flash, Gal, EP3xxx/6xxx/9xxx, PEEL, PALCE, PLUS, PLS, PLH, PLC, ATV, ATF, CPL, 85Cxxx, 5Cxxx, and DS12xx.
View device list at www.xeltek.com

Microcontrollers:

87xx / 89xx / Z86Exx / TMS320xx / D77Pxx / D75Pxx / PD75xxx / HD6370xxx / PIC16Cxx / 17Cxx / COP87xx and PSD3XX

Functions Include:

• **File:** Load and save file in binary, Intel (extended) hex, Motorola S of Tektronics (extended) hex format. Multi load, format conversion, relocation • **DOS shell:** change directory, print, quit • **Buffer:** HEX-ASCII Edit, Fuse Map EDIT, Checksum, Swap, Vector table edit • **Select:** Bidirectional search device by device name or by manufacturer name • **Device:** Blank check, read, program, verify, security, fuse, erase, Word format select, and functions related to specific devices • **Test:** TTL/CMOS, Memory, Vector, Test pattern edit, Audio Identify TT/CMOS Device • **Others:** Macro, Options, Environments

Hardware and Electrical Specifications:

Device Socket: One 40-pin ZIF socket

Programmer Dimensions: 7.75" x 5.5" x .75" (196.85mm x 139.70mm x 19.05mm)

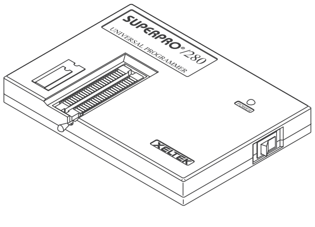
Power Supply:

- Input: AC 100 to 240V
- Output: DC 12V/1.5A

Weight: 4lbs. (1.81kg)

Description	Digi-Key Part No.	Price Each	Xeltek Part No.
Universal Programmer 40-Pin	415-1000-ND	249.00	SUPERPROZ

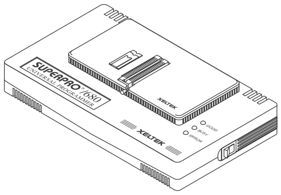
Superpro 280 Advanced Universal Programmer



Features: • Supports 5000+ Devices Including: E(E)PROM, FLASH, Microcontroller and PLD • High speed CPU generates more accurate and reliable algorithm timing • Very high programming speed • Auto Sense-and-Run, Batch Command and Auto Serial Number generation improve production efficiency • Programmable I/O level support low voltage devices down to 1.8V • Device insertion and Pin Contact Check, protect chips from damage • Supports Windows 2000/NT, Windows 98/95 • Windows XP compatible • Connect to PC (desktop and notebook) via printer port • Test standard logic devices and SRAM
View device list at www.xeltek.com
Specifications: • AC Adapter: Input AC 220V or 110V; Output DC 12V/ 1.5A
Dimensions: 7.87" x 5.51" x .945" (200mm x 140mm x 24mm)
Weight: 4lbs. (1.81kg)

Description	Digi-Key Part No.	Price Each	Xeltek Part No.
High Performance Universal Programmer 48-Pin	415-1001-ND	449.00	SUPERPRO280

Superpro 680 High Performance Universal Programmer Designed for High End User



Features: • Supports 8000+ Devices E(E)PROM, FLASH, BPROM, Micros, Classic PLD, EPLD, CPLD. • High Speed CPU generates more accurate and reliable algorithm timing. • 48-pin ZIF socket with universal pin-drivers. Expandable to 100-pins with the PEP600 Expansion Pack. • Interface with LAPTOP, PC, PS/2 or compatible through printer port. • Test TTL/CMOS logic IC's and Dynamic/Static Random Access Memory devices. • Device insertion and poor-pin-contact check. • Supports Windows 2000/NT, Windows 98/95 • Windows XP compatible. • Supports 1.8V low voltage devices.

View device list at www.xeltek.com

System Requirements:

486 Pentium PC or laptop, Parallel port LPT1 or 2, MS Windows 9x, NT or 200, CD Rom Drive, 20 MBYTES of spare hard-drive space, color graphic adapter or monitor. Power Consumption is 12V 2 Amps.

Contents: 48-pin ZIF socket adapter, cable (DB-25 one-one 3' long), programmer, manual, software included.
Dimensions: 11.3" x 6.8" x 1.7" (287.02mm x 172.72mm x 43.18mm)

Weight: 5lbs. (2.27kg)

Description	Digi-Key Part No.	Price Each	Xeltek Part No.
High Performance Universal Programmer 48-Pin	415-1002-ND	895.00	SUPERPRO680
Socket Expander 100-Pin (for Superpro 680)	415-1003-ND	155.00	PEP600

Programmable Gate Arrays

FPGA (Field Programmable Gate Arrays)

A Technical Overview:

Every Xilinx FPGA performs the function of a custom LSI circuit, like a gate array, but the Xilinx device is user-programmable and even reprogrammable in the system.

Xilinx sells standard off-the-shelf devices in many different sizes, speeds, operating temperature ranges, and packages.

The user selects the appropriate Xilinx device, and then converts the design idea or schematic into a configuration data file, using the Xilinx development system software and loads this file into the Xilinx FPGA.

XC3000/XC3100

• Replaces TTI, MSI, and other PLD logic • Toggle rates of 70 to 125 MHz, delays from 9 to 5.5. ns • Unlimited reprogrammability

XC3000A

• Five device types (1300-7500 gates) • 4-input look-up tables • Flip-flop toggle rate over 110 MHz • No on-chip RAM, data storage limited to flip-flops • Use for medium speed, medium complexity applications

XC3100A

• Functionally and bitstream identical with XC3000A series • Five device types (1300-7500 gates) • 4-input look-up tables • No on-chip RAM, data storage limited to flip-flops • Use for high performance design, system clock up to 100 MHz

XC4000/XC4000A

• Benefits of custom CMOS VLSI • Gate ranges from 2,000 to 20,000 • Unlimited reprogrammability

XC4000E

• Ten device types (2,000-25,000 gates) • Dedicated carry network • Function generator can be used as RAM • Use for general purpose logic and data-path logic

XC4000L

• Low voltage version of XC4000E devices (3.0-3.6V)

XC4000EX

• Larger version of the XC4000E family (28,000-125,000 gates) • Increased routing resources • Faster clocking options, more versatile output logic • Use for designs beyond 20,000 gate complexity

XC4000XL

• Low voltage version of the XC4000EX devices (3.0-3.6V)

XC5200

• Low cost FPGA • Dedicated carry structure (no RAM) • Four-input function generators • Use for general purpose logic and data-path logic

Package	Gates	#CLB	I/O Pins	Flip-Flops	Operating Voltage (V)	Digi-Key Part No.	Price Each			Xilinx Part No.
							1	25	100	
XC3000/XC3100 Series										
44-PLCC	3000	100	34	360	4.75V-5.25V	122-1011-ND	17.95	15.20	13.10	XC3030-100PC44C
68-PLCC	3000	100	58	360	4.75V-5.25V	122-1012-ND	18.50	15.65	13.50	XC3030-100PC68C
84-PLCC	3000	100	74	360	4.75V-5.25V	122-1013-ND	19.00	16.10	13.90	XC3030-100PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1014-ND	21.00	17.75	15.35	XC3030-100PQ100C
84-PLCC	4200	144	74	480	4.75V-5.25V	122-1020-ND	22.15	18.75	16.20	XC3042-100PC84C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1021-ND	24.60	20.80	18.00	XC3042-100PQ100C
84-PLCC	2000	64	64	256	4.75V-5.25V	122-1036-ND	37.90	32.10	27.70	XC3120-3PC84C
XC3000A/XC3100A Series										
68-PLCC	2000	64	58	256	4.75V-5.25V	122-1009-ND	13.20	11.15	10.35	XC3020A-7PC68C
84-PLCC	2000	64	64	256	4.75V-5.25V	122-1010-ND	13.70	11.60	10.80	XC3020A-7PC84C
44-PLCC	3000	100	34	360	4.75V-5.25V	122-1017-ND	13.81	11.73	10.88	XC3030A-7PC44C
84-PLCC	3000	100	74	360	4.75V-5.25V	122-1018-ND	14.75	12.50	11.60	XC3030A-7PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1019-ND	16.30	13.80	12.80	XC3030A-7PQ100C
84-PLCC	4200	144	74	480	4.75V-5.25V	122-1025-ND	19.20	16.25	15.10	XC3042A-7PC84C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1026-ND	21.10	17.85	16.60	XC3042A-7PQ100C
84-PLCC	6400	224	70	688	4.75V-5.25V	122-1029-ND	35.65	30.20	28.05	XC3064A-7PC84C
84-PLCC	9000	320	70	928	4.75V-5.25V	122-1034-ND	61.80	52.30	48.55	XC3090A-7PC84C
68-PLCC	2000	64	58	256	4.75V-5.25V	122-1037-ND	16.20	13.70	12.70	XC3120A-3PC68C
84-PLCC	2000	64	64	256	4.75V-5.25V	122-1038-ND	16.65	14.10	13.10	XC3120A-3PC84C
84-PLCC	3000	100	74	360	4.75V-5.25V	122-1040-ND	19.10	16.15	15.00	XC3130A-3PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1041-ND	20.70	17.50	16.25	XC3130A-3PQ100C
84-PLCC	4200	144	74	480	4.75V-5.25V	122-1043-ND	23.45	19.85	18.40	XC3142A-3PC84C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1044-ND	25.80	21.80	20.26	XC3142A-3PQ100C
84-PLCC	6400	224	70	688	4.75V-5.25V	122-1045-ND	34.50	29.20	27.10	XC3164A-3PC84C
84-PLCC	9000	320	70	928	4.75V-5.25V	122-1046-ND	53.25	47.70	44.30	XC3190A-3PC84C
160-PQFP	9000	320	138	928	4.75V-5.25V	122-1047-ND	55.90	50.05	46.50	XC3190A-3PQ160C
100-PQFP	4200	144	82	480	4.75V-5.25V	122-1024-ND	29.30	24.80	21.40	XC3042-70PQ100C
144-TQFP	4500	224	120	688	4.75V-5.25V	122-1084-ND	37.60	31.85	29.55	XC3164A-3TQ144C
160-PQFP	7500	484	176	1320	4.75V-5.25V	122-1085-ND	76.25	68.26	63.41	XC3195A-3PQ160C
XC4000/XC4000A Series										
160-PQFP	5000	196	112	616	4.75V-5.25V	122-1050-ND	105.00	96.55	89.65	XC4005-5PQ160C
84-PLCC	3000	100	61	360	4.75V-5.25V	122-1066-ND	55.60	51.30	47.60	XC4003-6PC84C
84-PLCC	5000	196	61	616	4.75V-5.25V	122-1068-ND	96.05	88.55	82.25	XC4005-5PC84C
208-PQFP	8000	324	144	936	4.75V-5.25V	122-1070-ND	182.00	168.00	156.00	XC4008-5PQ208C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1071-ND	236.00	218.00	202.00	XC4010-5PQ208C
160-PQFP	10000	400	—	1120	4.75V-5.25V	122-1072-ND	146.00	135.01	125.00	XC4010D-5PQ160C
XC4000E Series										
84-PLCC	3000	100	80	360	4.75V-5.25V	122-1086-ND	23.70	21.85	20.30	XC4003E-4PC84C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1087-ND	33.30	30.70	28.50	XC4003E-3PQ100C
100-PQFP	3000	100	80	360	4.75V-5.25V	122-1088-ND	25.60	23.60	21.95	XC4003E-4PQ100C
84-PLCC	5000	196	112	616	4.75V-5.25V	122-1180-ND	26.65	24.75	23.00	XC4005E-4PC84C
100-PQFP	5000	196	112	616	4.75V-5.25V	122-1089-ND	53.35	49.20	45.65	XC4005E-3PQ100C
160-PQFP	5000	196	112	616	4.75V-5.25V	122-1090-ND	55.60	51.25	47.60	XC4005E-3PQ160C
160-PQFP	5000	196	112	616	4.75V-5.25V	122-1091-ND	42.75	39.45	36.61	XC4005E-4PQ160C
160-PQFP	6000	256	128	768	4.75V-5.25V	122-1092-ND	79.73	73.55	68.26	XC4006E-3PQ160C
160-PQFP	6000	256	128	768	4.75V-5.25V	122-1093-ND	61.40	56.65	52.61	XC4006E-4PQ160C
208-PQFP	6000	256	128	768	4.75V-5.25V	122-1094-ND	82.65	76.20	70.80	XC4006E-3PQ208C
208-PQFP	6000	256	128	768	4.75V-5.25V	122-1095-ND	63.60	58.65	54.45	XC4006E-4PQ208C
144-TQFP	6000	256	128	768	4.75V-5.25V	122-1096-ND	67.45	62.20	57.80	XC4006E-4TQ144C
160-PQFP	8000	324	144	936	4.75V-5.25V	122-1097-ND	93.95	86.65	80.45	XC4008E-3PQ160C
160-PQFP	8000	324	144	936	4.75V-5.25V	122-1098-ND	72.25	66.65	61.90	XC4008E-4PQ160C
208-PQFP	8000	324	144	936	4.75V-5.25V	122-1099-ND	102.00	94.30	87.60	XC4008E-3PQ208C
208-PQFP	8000	324	144	936	4.75V-5.25V	122-1100-ND	78.70	72.55	67.36	XC4008E-4PQ208C
84-PLCC	10000	400	160	1120	4.75V-5.25V	122-1101-ND	81.10	75.30	70.00	XC4010E-3PC84C
84-PLCC	10000	400	160	1120	4.75V-5.25V	122-1102-ND	62.35	57.90	53.85	XC4010E-4PC84C
160-PQFP	10000	400	160	1120	4.75V-5.25V	122-1103-ND	109.00	101.00	93.36	XC4010E-3PQ160C
160-PQFP	10000	400	160	1120	4.75V-5.25V	122-1104-ND	83.85	77.35	71.81	XC4010E-4PQ160C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1105-ND	176.00	162.01	150.00	XC4010E-2PQ208C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1106-ND	130.00	120.01	111.00	XC4010E-3PQ208C
208-PQFP	10000	400	160	1120	4.75V-5.25V	122-1107-ND	100.00	92.31	85.70	XC4010E-4PQ208C
160-PQFP	13000	576	192	1536	4.75V-5.25V	122-1108-ND	132.00	123.01	114.00	XC4013E-3PQ160C
160-PQFP	13000	576	192	1536	4.75V-5.25V	122-1109-ND	102.00	94.40	87.80	XC4013E-4PQ160C
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1110-ND	312.00	290.00	270.01	XC4013E-1PQ208C
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1111-ND	223.00	207.01	193.00	XC4013E-2PQ208C

(Continued)

XILINX Programmable Gate Arrays *(Cont.)*

Package	Gates	#CLB	I/O Pins	Flip-Flops	Operating Voltage (V)	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
XC4000E Series										
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1112-ND	165.00	153.01	143.01	XC4013E-3PQ208C
208-PQFP	13000	576	192	1536	4.75V-5.25V	122-1113-ND	127.00	118.00	110.00	XC4013E-4PQ208C
208-HQFP	20000	784	224	2016	4.75V-5.25V	122-1114-ND	286.00	266.01	247.01	XC4020E-2HQ208C
208-HQFP	20000	784	224	2016	4.75V-5.25V	122-1115-ND	212.00	197.01	183.01	XC4020E-3HQ208C
240-HQFP	20000	784	224	2016	4.75V-5.25V	122-1116-ND	444.00	410.00	380.00	XC4020E-2HQ240C
240-HQFP	20000	784	224	2016	4.75V-5.25V	122-1117-ND	329.00	303.00	282.00	XC4020E-3HQ240C
240-HQFP	25000	1024	256	2560	4.75V-5.25V	122-1118-ND	508.00	472.00	439.00	XC4025E-2HQ240C
240-HQFP	25000	1024	256	2560	4.75V-5.25V	122-1119-ND	376.00	349.01	325.01	XC4025E-2HQ240C
XC4000L Series										
84-PLCC	5000	196	112	616	3.0V-3.6V	122-1120-ND	29.50	27.40	25.45	XC4005L-5PC84C
100-PQFP	5000	196	112	616	3.0V-3.6V	122-1121-ND	45.75	42.15	39.15	XC4005L-5PQ100C
208-PQFP	5000	196	112	616	3.0V-3.6V	122-1122-ND	51.50	47.50	44.11	XC4005L-5PQ208C
84-PLCC	10000	400	160	1120	3.0V-3.6V	122-1123-ND	72.00	66.85	62.20	XC4010L-5PC84C
208-PQFP	13000	576	192	1536	3.0V-3.6V	122-1125-ND	169.00	157.00	146.00	XC4013L-5PQ208C
XC4000EX Series										
208-HQFP	28000	1024	256	2560	4.75V-5.25V	122-1126-ND	329.00	295.00	254.00	XC4028EX-2HQ208C
208-HQFP	28000	1024	256	2560	4.75V-5.25V	122-1127-ND	244.00	218.00	188.00	XC4028EX-3HQ208C
240-HQFP	36000	1296	288	3168	4.75V-5.25V	122-1128-ND	318.00	284.01	246.01	XC4036EX-3HQ240C
XC4000LX Series										
240-HQFP	36000	1296	288	3168	3.0V-3.6V	122-1129-ND	377.00	338.01	292.00	XC4036XL-1HQ240C
240-HQFP	36000	1296	288	3168	3.0V-3.6V	122-1130-ND	279.00	250.00	216.00	XC4036XL-2HQ240C
XC5200 Series										
84-PLCC	3000	64	84	256	4.75V-5.25V	122-1131-ND	10.15	8.60	7.40	XC5202-6PC84C
100-PQFP	3000	64	84	256	4.75V-5.25V	122-1132-ND	12.35	10.45	9.05	XC5202-6PQ100C
84-PLCC	6000	120	124	480	4.75V-5.25V	122-1133-ND	18.45	15.65	13.50	XC5204-6PC84C
100-PQFP	6000	120	124	480	4.75V-5.25V	122-1134-ND	20.39	17.35	15.00	XC5204-6PQ100C
160-PQFP	6000	120	124	480	4.75V-5.25V	122-1135-ND	24.20	20.50	17.70	XC5204-6PQ160C
144-TQFP	6000	120	124	480	4.75V-5.25V	122-1136-ND	25.30	21.40	18.51	XC5204-6TQ144C
100-VQFP	6000	120	124	480	4.75V-5.25V	122-1137-ND	21.45	18.15	15.65	XC5204-6VQ100C
84-PLCC	10000	196	148	784	4.75V-5.25V	122-1138-ND	37.90	32.05	27.70	XC5206-5PC84C
100-PQFP	10000	196	148	784	4.75V-5.25V	122-1139-ND	38.20	32.35	27.90	XC5206-6PQ100C
160-PQFP	10000	196	148	784	4.75V-5.25V	122-1140-ND	48.85	41.35	35.70	XC5206-5PQ160C
160-PQFP	10000	196	148	784	4.75V-5.25V	122-1141-ND	42.50	35.95	31.05	XC5206-6PQ160C
208-PQFP	10000	196	148	784	4.75V-5.25V	122-1142-ND	51.50	43.60	37.65	XC5206-5PQ208C
144-TQFP	10000	196	148	784	4.75V-5.25V	122-1143-ND	42.80	36.20	31.30	XC5206-5TQ144C
84-PLCC	16000	324	196	1296	4.75V-5.25V	122-1144-ND	54.40	46.05	39.75	XC5210-5PC84C
160-PQFP	16000	324	196	1296	4.75V-5.25V	122-1145-ND	92.75	78.45	67.76	XC5210-4PQ160C
160-PQFP	16000	324	196	1296	4.75V-5.25V	122-1146-ND	77.25	65.40	56.45	XC5210-5PQ160C
160-PQFP	16000	324	196	1296	4.75V-5.25V	122-1147-ND	67.20	56.85	49.10	XC5210-6PQ160C
208-PQFP	16000	324	196	1296	4.75V-5.25V	122-1148-ND	78.35	66.30	57.25	XC5210-5PQ208C
208-PQFP	16000	324	196	1296	4.75V-5.25V	122-1149-ND	68.15	57.55	49.80	XC5210-6PQ208C
240-PQFP	16000	324	196	1296	4.75V-5.25V	122-1150-ND	84.35	71.35	61.66	XC5210-5PQ240C
240-PQFP	16000	324	196	1296	4.75V-5.25V	122-1151-ND	73.35	62.05	53.60	XC5210-6PQ240C
144-TQFP	16000	324	196	1296	4.75V-5.25V	122-1152-ND	62.95	53.25	46.00	XC5210-6TQ144C

Serial Configuration Proms for Field Programmable Gate Arrays

Package	Memory Size	Description	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
8-Dip	36K	Serial Configuration Prom	122-1187-ND	3.45	2.95	2.55	XC1736EPD8C
8-SOIC	36K	Serial Configuration Prom	122-1189-ND	4.15	3.50	3.05	XC1736ESO8C
8-SOIC	36K	Serial Configuration Prom	122-1192-ND	4.15	3.50	3.05	XC1736EVO8C
8-Dip	65K	Serial Configuration Prom	122-1188-ND	4.00	3.40	2.95	XC1765EPD8C
8-SOIC	65K	Serial Configuration Prom	122-1190-ND	4.80	4.05	3.50	XC1765ESO8C
8-SOIC	65K	Serial Configuration Prom	122-1193-ND	4.80	4.05	3.50	XC1765EVO8C
8-SOIC	65K	3V Serial Configuration Prom	122-1194-ND	5.45	4.60	4.00	XC1765ELVO8C
8-Dip	128K	Serial Configuration Prom	122-1191-ND	6.00	5.40	5.00	XC17128EPD8C
8-SOIC	128K	Serial Configuration Prom	122-1195-ND	6.90	6.20	5.75	XC17128EVO8C
8-SOIC	128K	3V Serial Configuration Prom	122-1196-ND	6.15	5.50	5.10	XC17128ELVO8C
20-PLCC	128K	Serial Configuration Prom	122-1197-ND	6.90	6.20	5.75	XC17128EJC20C
8-Dip	128K	3V Serial Configuration Prom	122-1198-ND	5.35	4.75	4.45	XC17128ELPD8C
8-Dip	256K	Serial Configuration Prom	122-1199-ND	11.45	10.25	9.50	XC17256EPD8C
8-SOIC	256K	Serial Configuration Prom	122-1200-ND	13.60	12.20	11.30	XC17256EVO8C

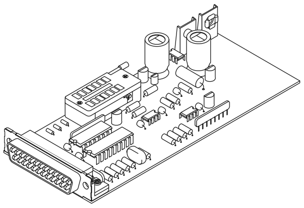
Package	Memory Size	Description	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
8-Dip	256K	3V Serial Configuration Prom	122-1201-ND	7.95	7.35	6.85	XC17256ELPD8C
8-SOIC	256K	3V Serial Configuration Prom	122-1202-ND	8.55	7.95	7.40	XC17256ELVO8C
20-PLCC	256K	Serial Configuration Prom	122-1203-ND	13.60	12.20	11.30	XC17256EPC20C
20-PLCC	256K	3.3V Serial Configuration Prom	122-1242-ND *NEW!*	11.55	10.75	10.00	XC18V256PC20C
20-SOIC	256K	3.3V Serial Configuration Prom	122-1243-ND *NEW!*	11.55	10.75	10.00	XC18V256SO20C
44-PQFP	256K	3.3V Serial Configuration Prom	122-1244-ND *NEW!*	12.25	11.35	10.55	XC18V256VQ44C
20-PLCC	512K	3.3V Serial Configuration Prom	122-1239-ND *NEW!*	16.40	13.85	11.95	XC18V512PC20C
20-SOIC	512K	3.3V Serial Configuration Prom	122-1240-ND *NEW!*	16.40	13.85	11.95	XC18V512SO20C
44-PQFP	512K	3.3V Serial Configuration Prom	122-1241-ND *NEW!*	16.40	13.85	11.95	XC18V512VQ44C
20-PLCC	1.0M	3.3V Serial Configuration Prom	122-1236-ND *NEW!*	20.00	16.95	14.65	XC18V01PC20C
20-SOIC	1.0M	3.3V Serial Configuration Prom	122-1237-ND *NEW!*	20.00	16.95	14.65	XC18V01SO20C
44-PLCC	1.0M	3.3V Serial Configuration Prom	122-1238-ND *NEW!*	20.00	16.95	14.65	XC18V01VQ44C
44-PLCC	2.0M	3.3V Serial Configuration Prom	122-1235-ND *NEW!*	23.10	21.45	19.95	XC18V02PC44C

ROMAN-JONES, INC. Xilinx Serial PROM Programmer

The Xilinx Serial PROM Programmer provides a low cost alternative for programming any Xilinx XC17xx Family Serial PROM devices. The programmer product consists of an external programmer and associated interface software. The programmer and software have been tested and certified by Xilinx.

FEATURES:

• Parallel port interface which can be directly connected (if cable is desired - recommend M7PSG-2506J-ND) • Co-exists with printers using an A/B switchbox • No special interface cards required • Operates on 9 volt battery (not included, recommend P145-ND) • Supports ALL Xilinx Serial PROMs • Simple user interface. Easy to use software • Supported under DOS 2.2 or greater, Windows 95/98, and Windows NT 4.0 • Supports both Intel Hex and Binary files generated by Xilinx compilers **• Software not included. Requires downloading from www.roman-jones.com • Free updates also available via FTP download**



Description	Digi-Key Part No.	Price Each
Programmers		
SPROM Programmer with 8-Dip Machine Pin Socket	SPROM-MPS-ND	119.95
SPROM Programmer with 8-Dip ZIF Socket	SPROM-TZS-ND	139.95
Adapters		
8-Pin Dip to 8-Pin SOIC/VOIC	SA1-ND	44.95
8-Pin Dip to 44-Pin VQFP	SA2-ND	95.95
8-Pin Dip to 20-Pin PLCC	SA3-ND	49.95
8-Pin Dip to 20-Pin SOIC	SA4-ND	54.95
8-Pin Dip to 44-Pin PLCC	SA5-ND	64.95

XILINX Foundation Software Series

Foundation Series provides a complete, front-to-back environment for the design of Xilinx programmable logic devices — incorporating design entry (schematic and Abel HDL), synthesis, simulation, and FPGA/CPLD implementation tools. An emphasis on intuitive, easy to learn and use tools simplifies the task of creating programmable logic designs for both new and experienced users. Foundation F1.3 Standard and Express systems feature Xilinx's new M1 design implementation technology which delivers industry-leading device performance and utilization. The Foundation Express System incorporates advanced synthesis technology from Synopsys into the Foundation Standard System providing push-button and constraint driven synthesis for VHDL and Verilog.

Description	Digi-Key Part No.	Price Each	Xilinx Part No.
Foundation Series Base System (Low Density <8K gates) (Schematic Entry)	122-1181-ND	1090.00	DS-FND-BAS-PC

XC9500 In-System Programmable CPLDs

(Complex Programmable Logic Devices)

The XC9500 CPLD family provides advanced in-system programming and test capabilities for high performance, general purpose logic integration. All devices are in-system programmable for a minimum of 10,000 program/erase cycles. Extensive IEEE 1149.1 (JTAG) boundary-scan support is also included on all family members.

The XC9500 family is fully pin-compatible allowing easy design migration across multiple density options in a given package footprint. Advanced system features include output slew rate control and user-programmable ground pins to help reduce system noise. I/Os may be configured for 3.3V or 5V operation. All outputs provide 24mA drive.

Package	Macro-cells	Usable Gates	Registers	System Frequency MHz (min)	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
44-PLCC	36	800	36	100	122-1167-ND	3.30	3.05	2.85	XC9536-15PC44C
44-VQFP	36	800	36	100	122-1168-ND	3.30	3.05	2.85	XC9536-15VQ44C
44-PLCC	36	800	36	100	122-1169-ND	4.30	4.00	3.70	XC9536-7PC44C
44-VQFP	36	800	36	100	122-1170-ND	4.30	4.00	3.70	XC9536-7VQ44C
44-PLCC	72	1600	72	83	122-1171-ND	5.53	4.35	3.45	XC9572-15PC44C
84-PLCC	72	1600	72	83	122-1172-ND	6.10	5.15	4.45	XC9572-15PC84C
100-PQFP	72	1600	72	83	122-1173-ND	24.50	20.70	17.91	XC9572-7PQ100C
100-PQFP	72	1600	72	83	122-1174-ND	15.10	12.80	11.05	XC9572-10PQ100C
84-PLCC	108	2400	108	83	122-1175-ND	12.10	10.25	8.85	XC95108-15PC84C
84-PLCC	108	2400	108	83	122-1176-ND	28.65	24.25	20.95	XC95108-7PC84C
100-TQFP	108	2400	108	83	122-1177-ND	15.50	13.10	11.35	XC95108-15TQ100C
100-PQFP	108	2400	108	83	122-1178-ND	26.20	22.15	19.15	XC95108-10PQ100C

NEW! Virtex and Spartan Field Programmable Gate Arrays

The **Virtex FPGA** family delivers high performance, high capacity programmable logic solutions. Dramatic increases in silicon efficiency results from optimizing new architecture for place and route efficiency and exploiting an aggressive 5 layer metal 0.22 mm CMOS process. These advances make Virtex FPGAs powerful and flexible alternatives to mask programmed gate arrays. System performance up to 200 MHz - 66 MHz PCI Compliant-Hot swappable for Compact PCI. The **Virtex-E family** is up to 30% faster than the Virtex family. System performance up to 240 MHz using singled ended selectI/O technology. Virtex-E devices have up to 640 Kb of faster (250 MHz) block SelectRAM, but the individual RAMs are the same size and structure as in the Virtex family. Both Virtex Families are supported by FPGA Foundation™ and Alliance Development Systems.
The **Spartan™-II 2.5V** Field -Programmable Gate Array family gives users high performance, abundant logic resources, and a rich feature set, all at an exceptionally low price. System performance is supported up to 200 MHz. The **Spartan™-II 1.8V** Field Programmable Gate Array is similar to the Spartan-II family but operates at a lower voltage.

Package	Gates	#CLB	I/O Pins	Operating Voltage (V)	Digi-Key Part No.	Price Each 1	25	100	Xilinx Part No.
Virtex Series									
256-BGA	57K	384	180	2.5	122-1212-ND	66.45	57.98	50.25	XCV50-5BG256C
240-PQFP	57K	384	166	2.5	122-1213-ND	66.45	57.98	50.25	XCV50-5PQ240C
240-PQFP	108K	600	166	2.5	122-1214-ND	125.00	108.68	94.19	XCV100-5PQ240C
Virtex-E Series									
240-PQFP	71K	384	158	1.8	122-1215-ND	52.05	46.50	40.30	XCV50E-7PQ240C
352-BGA	128K	600	196	1.8	122-1216-ND	60.45	54.00	46.80	XCV100E-6BG352C
240-PQFP	128K	600	158	1.8	122-1217-ND	55.40	49.50	42.90	XCV100E-6PQ240C
SPARTAN-II Series									
144-TQFP	15K	96	86	2.5	122-1218-ND	10.89	9.08	8.15	XC2S15-5TQ144C
100-VQFP	15K	96	60	2.5	122-1219-ND	9.45	7.88	7.10	XC2S15-5VQ100C
208-PQFP	30K	216	132	2.5	122-1220-ND	18.54	15.45	13.90	XC2S30-5PQ208C
144-TQFP	30K	216	92	2.5	122-1221-ND	15.39	12.83	11.55	XC2S30-5TQ144C
100-VQFP	30K	216	60	2.5	122-1222-ND	13.41	11.18	10.05	XC2S30-5VQ100C
256-FBGA	50K	384	176	2.5	122-1223-ND	22.23	18.53	16.65	XC2S50-5FG256C
208-PQFP	50K	384	140	2.5	122-1224-ND	19.71	16.43	14.75	XC2S50-5PQ208C
144-TQFP	50K	384	92	2.5	122-1225-ND	17.10	14.25	12.85	XC2S50-5TQ144C
256-FBGA	100K	600	176	2.5	122-1226-ND	32.85	27.38	24.65	XC2S100-5FG256C
456-FBGA	100K	600	196	2.5	122-1227-ND	41.31	34.43	31.00	XC2S100-5FG456C
208-PQFP	100K	600	140	2.5	122-1228-ND	26.10	21.75	19.56	XC2S100-5PQ208C
144-TQFP	100K	600	92	2.5	122-1229-ND	23.49	19.58	17.60	XC2S100-5TQ144C
256-FBGA	150K	864	176	2.5	122-1230-ND	36.00	30.00	27.00	XC2S150-5FG256C
456-FBGA	150K	864	260	2.5	122-1231-ND	46.80	39.00	35.10	XC2S150-5FG456C
208-PQFP	150K	864	140	2.5	122-1232-ND	28.80	24.00	21.60	XC2S150-5PQ208C
456-FBGA	200K	1176	284	2.5	122-1233-ND	52.20	43.50	39.11	XC2S200-5FG456C
208-PQFP	200K	1176	140	2.5	122-1234-ND	35.01	29.18	26.25	XC2S200-5PQ208C
SPARTAN-IIE Series									
144-TQFP	50K	384	102	1.8	122-1204-ND	17.10	14.25	12.85	XC2S50E-6TQ144C
208-PQFP	50K	384	146	1.8	122-1205-ND	19.71	16.43	14.75	XC2S50E-6PQ208C
144-TQFP	100K	600	102	1.8	122-1206-ND	23.49	19.58	17.60	XC2S100E-6TQ144C
208-PQFP	100K	600	146	1.8	122-1207-ND	26.01	21.68	19.55	XC2S100E-6PQ208C
256-FBGA	100K	600	182	1.8	122-1208-ND	32.94	27.45	24.71	XC2S100E-6FT256C
208-PQFP	200K	1176	146	1.8	122-1209-ND	35.01	29.18	26.25	XC2S200E-6PQ208C
456-FBGA	200K	1176	289	1.8	122-1210-ND	52.20	43.50	39.15	XC2S200E-6FG456C
208-PQFP	300K	1536	146	1.8	122-1211-ND	53.91	44.93	40.45	XC2S300E-6PQ208C

CPLDs (Complex Programmable Logic Devices)

Atmel offers a broad range of high-density, low-power, and cost-effective solutions enabling designers to create products that are "just what the market ordered." Based on a standard architecture, which uses industry standard development tools, Atmel's CPLDs offer the unique low-power or "L" feature while providing 100% connectivity. These devices are processed with Atmel's proprietary 0.65-micron processes.

The ATF750/C CPLDs are based on a 22V10-type architecture and provide market-leading capacity and flexibility in a 22V10 footprint with twice the registers and additional features for better logic utilization.

The ATV2500/B OTP CPLDs offer 24 I/O pins, 48 registers, 17 product terms per macro, and 100% connectivity.

The ATF1500 Series is targeted at wider logic density, with higher number of I/O's. This family has devices from 44 to 160 pins, and 32 to 96 I/O's. High connectivity, and flexible architecture make these parts highly suitable for system design. In system programmability in the larger devices allow for reconfiguration even after the device is in the system.

Standard Development Tools

Atmel's philosophy is that designers should be able to use known development tools. Third-party design tools such as Synario™, ABEL™, CUPL™, PPLDesigner-XL™, LOG/iC™, and PLDSyn™ support Atmel's EPLDs. Also Atmel-specific versions of the popular Synario, ABEL, and CUPL design tools are offered. In addition, workstation support is available on popular platforms with Viewlogic, MINC, Cadence, Mentor, and Synopsys.

Voltage	ISP	Tpd (ns)	Registers	Macro-cells	Usable Gates	Power Option	Memory Type	Package Type	Digi-Key Part No.	Price Each			Atmel Part No.
										1	25	100	
ATF750 Series													
5.0	No	15	20	10	750	Standard	Flash	28-PLCC	ATF750C-15JC-ND	2.36	2.15	1.91	ATF750C-15JC
5.0	No	15	20	10	750	Standard	Flash	24-DIP	ATF750C-15PC-ND	2.36	2.15	1.91	ATF750C-15PC
5.0	No	15	20	10	750	Standard	Flash	24-SOIC	ATF750C-15SC-ND	2.36	2.15	1.91	ATF750C-15SC
5.0	No	15	20	10	750	Low	Flash	28-PLCC	ATF750CL-15JC-ND	2.70	2.43	2.16	ATF750CL-15JC
5.0	No	15	20	10	750	Low	Flash	24-DIP	ATF750CL-15PC-ND	2.60	2.34	2.08	ATF750CL-15PC
5.0	No	15	20	10	750	Low	Flash	24-SOIC	ATF750CL-15SC-ND	2.70	2.43	2.16	ATF750CL-15SC
ATV2500 Series													
5.0	No	15	48	24	2500	Standard	OTP	44-PLCC	ATV2500B-15JC-ND	6.90	5.70	5.17	ATV2500B-15JC
5.0	No	20	48	24	2500	Low	OTP	44-PLCC	ATV2500BL-20JC-ND	7.36	5.03	4.55	ATV2500BL-20JC
5.0	No	20	48	24	2500	Quarter	OTP	44-PLCC	ATV2500BQ-20JC-ND	6.90	5.70	5.17	ATV2500BQ-20JC
5.0	No	25	48	24	2500	Quarter	OTP	40-DIP	ATV2500BQ-25PC-ND	5.60	4.71	4.26	ATV2500BQ-25PC
5.0	No	25	48	24	2500	Qtr & Low	OTP	44-PLCC	ATV2500BQL-25JC-ND	5.70	4.78	4.33	ATV2500BQL-25JC
ATF1500 Series													
5.0	No	10	32	32	1500	Standard	Flash	44-TQFP	ATF1500A-10AC-ND	4.78	4.22	3.77	ATF1500A-10AC
5.0	No	10	32	32	1500	Standard	Flash	44-PLCC	ATF1500A-10JC-ND	3.20	2.83	2.53	ATF1500A-10JC
2.7	No	15	32	32	1500	Standard	Flash	44-TQFP	ATF1500ABV-15AC-ND	3.40	2.99	2.67	ATF1500ABV-15AC
2.7	No	15	32	32	1500	Standard	Flash	44-PLCC	ATF1500ABV-15JC-ND	3.40	2.99	2.67	ATF1500ABV-15JC
5.0	Yes	10	32	32	1500	Standard	Flash	44-TQFP	ATF1502AS-10AC-ND	3.34	2.94	2.63	ATF1502AS-10AC44
5.0	Yes	10	32	32	1500	Standard	Flash	44-PLCC	ATF1502AS-10JC-ND	3.34	2.94	2.63	ATF1502AS-10JC44
5.0	Yes	10	64	64	3000	Standard	Flash	44-TQFP	ATF1504AS-10AC44-ND	4.20	3.62	3.25	ATF1504AS-10AC44
5.0	Yes	10	64	64	3000	Standard	Flash	44-PLCC	ATF1504AS-10JC44-ND	4.58	3.92	3.53	ATF1504AS-10JC44
5.0	Yes	10	64	64	3000	Standard	Flash	68-PLCC	ATF1504AS-10JC68-ND	6.46	5.37	4.86	ATF1504AS-10JC68
5.0	Yes	10	64	64	3000	Standard	Flash	84-PLCC	ATF1504AS-10JC84-ND	6.94	5.73	5.20	ATF1504AS-10JC84
5.0	Yes	10	64	64	3000	Standard	Flash	100-TQFP	ATF1504AS-10AC100-ND	6.52	5.41	4.91	ATF1504AS-10AC100
5.0	Yes	15	64	64	3000	Standard	Flash	100-TQFP	ATF1504AS-15AC100-ND	6.12	5.11	4.62	ATF1504AS-15AC100
5.0	Yes	10	64	64	3000	Standard	Flash	100-PQFP	ATF1504AS-10QC100-ND	8.86	7.18	6.54	ATF1504AS-10QC100
5.0	Yes	20	64	64	3000	Low	Flash	44-TQFP	ATF1504ASL-20AC44-ND	4.46	3.82	3.44	ATF1504ASL-20AC44
5.0	Yes	20	64	64	3000	Low	Flash	44-PLCC	ATF1504ASL-20JC44-ND	4.80	4.09	3.69	ATF1504ASL-20JC44
5.0	Yes	20	64	64	3000	Low	Flash	68-PLCC	ATF1504ASL-20JC68-ND	6.76	5.60	5.08	ATF1504ASL-20JC68
5.0	Yes	20	64	64	3000	Low	Flash	84-PLCC	ATF1504ASL-20JC84-ND	7.24	5.96	5.41	ATF1504ASL-20JC84
5.0	Yes	20	64	64	3000	Low	Flash	100-TQFP	ATF1504ASL20AC100-ND	6.82	5.64	5.12	ATF1504ASL-20AC100
5.0	Yes	20	64	64	3000	Low	Flash	100-PQFP	ATF1504ASL20QC100-ND	9.20	7.44	6.78	ATF1504ASL-20QC100
3.3	Yes	15	64	64	3000	Standard	Flash	44-TQFP	ATF1504ASV-15AC44-ND	4.46	3.82	3.44	ATF1504ASV-15AC44
3.3	Yes	15	64	64	3000	Standard	Flash	44-PLCC	ATF1504ASV-15JC44-ND	4.80	4.09	3.69	ATF1504ASV-15JC44
3.3	Yes	15	64	64	3000	Standard	Flash	68-PLCC	ATF1504ASV-15JC68-ND	6.76	5.60	5.08	ATF1504ASV-15JC68
3.3	Yes	15	64	64	3000	Standard	Flash	84-PLCC	ATF1504ASV-15JC84-ND	7.24	5.96	5.41	ATF1504ASV-15JC84
3.3	Yes	15	64	64	3000	Standard	Flash	100-TQFP	ATF1504ASV15AC100-ND	6.82	5.64	5.12	ATF1504ASV-15AC100
3.3	Yes	15	64	64	3000	Standard	Flash	100-PQFP	ATF1504ASV15QC100-ND	9.20	7.44	6.78	ATF1504ASV-15QC100
3.3	Yes	20	64	64	3000	Low	Flash	44-TQFP	ATF1504ASVL20AC44-ND	4.72	4.03	3.63	ATF1504ASVL-20AC44
3.3	Yes	20	64	64	3000	Low	Flash	44-PLCC	ATF1504ASVL20JC44-ND	5.04	4.28	3.86	ATF1504ASVL-20JC44
3.3	Yes	20	64	64	3000	Low	Flash	68-PLCC	ATF1504ASVL20JC68-ND	7.04	5.81	5.27	ATF1504ASVL-20JC68
3.3	Yes	20	64	64	3000	Low	Flash	84-PLCC	ATF1504ASVL20JC84-ND	7.56	6.20	5.64	ATF1504ASVL-20JC84
3.3	Yes	20	64	64	3000	Low	Flash	100-TQFP	ATF1504ASVL20AC10-ND	7.14	5.88	5.34	ATF1504ASVL-20AC100
5.0	Yes	10	128	128	6000	Standard	Flash	84-PLCC	ATF1508AS-10JC84-ND	17.22	13.31	12.22	ATF1508AS-10JC84
5.0	Yes	10	128	128	6000	Standard	Flash	100-TQFP	ATF1508AS-10AC100-ND	19.68	15.07	13.86	ATF1508AS-10AC100
5.0	Yes	10	128	128	6000	Standard	Flash	100-PQFP	ATF1508AS-10QC100-ND	21.24	16.19	14.90	ATF1508AS-10QC100
5.0	Yes	10	128	128	6000	Standard	Flash	160-PQFP	ATF1508AS-10QC160-ND	26.40	19.84	18.30	ATF1508AS-10QC160
5.0	Yes	20	128	128	6000	Low	Flash	84-PLCC	ATF1508ASL-20JC84-ND	9.10	7.36	6.71	ATF1508ASL-20JC84
5.0	Yes	20	128	128	6000	Low	Flash	100-TQFP	ATF1508ASL20AC100-ND	11.22	8.94	8.16	ATF1508ASL-20AC100
5.0	Yes	20	128	128	6000	Low	Flash	100-PQFP	ATF1508ASL20QC100-ND	12.44	9.83	9.00	ATF1508ASL-20QC100
5.0	Yes	20	128	128	6000	Low	Flash	160-PQFP	ATF1508ASL20QC160-ND	16.26	12.61	11.58	ATF1508ASL-20QC160
3.3	Yes	15	128	128	6000	Standard	Flash	84-PLCC	ATF1508ASV-15JC84-ND	11.48	9.13	8.34	ATF1508ASV-15JC84
3.3	Yes	15	128	128	6000	Standard	Flash	100-TQFP	ATF1508ASV15AC100-ND	13.58	10.67	9.77	ATF1508ASV-15AC100
3.3	Yes	15	128	128	6000	Standard	Flash	100-PQFP	ATF1508ASV15QC100-ND	14.78	11.54	10.58	ATF1508ASV-15QC100
3.3	Yes	15	128	128	6000	Standard	Flash	160-PQFP	ATF1508ASV15QC160-ND	18.52	14.24	13.09	ATF1508ASV-15QC160
3.3	Yes	20	128	128	6000	Low	Flash	100-TQFP	ATF1508ASVL20AC10-ND	13.58	10.67	9.77	ATF1508ASVL-20AC100

SPLDs (PAL Compatible 16V8, 20V8, 22V10)

Atmel SPLDs are products based on the classic PAL architecture and consist of the popular industry standard 16V8, 20V8, and 22V10 in different speed, package, and power specifications. Supported by a wide variety of development tools, these variations offer features such as quarter-power, low standby power, and zero (<25µA) standby power. Atmel's family of Flash-based electrically erasable devices combine proven high-performance and low-power technologies.

(V)	Tpd (ns)	Reg.	Macro-Cells	Usable Gates	Power Option	Package Type	Digi-Key Part No.	Price Each		
								1	25	100
5.0	10	8	8	150	Std	20-PLCC	ATF16V8B-10JC-ND	1.30	1.26	1.10
						20-Dip	ATF16V8B-10PC-ND	1.30	1.26	1.10
						20-SOIC	ATF16V8B-10SC-ND	1.30	1.26	1.10
5.0	10	8	8	150	Quarter	20-PLCC	ATF16V8BQ-10JC-ND	2.00	1.85	1.64
						20-Dip	ATF16V8BQ-10PC-ND	2.00	1.85	1.64
5.0	15	8	8	150	Qtr & Low	20-PLCC	ATF16V8BQL-15JC-ND	1.04	1.04	.90
						20-Dip	ATF16V8BQL-15PC-ND	1.04	1.04	.90
						20-SOIC	ATF16V8BQL-15SC-ND	1.04	1.04	.90
5.0	15	8	8	150	Std & Zero	20-PLCC	ATF16V8CZ-15JC-ND	2.32	2.12	1.88
						20-Dip	ATF16V8CZ-15PC-ND	2.32	2.12	1.88
						20-SOIC	ATF16V8CZ-15SC-ND	2.32	2.12	1.88
3.3	10	8	8	150	Std	20-PLCC	ATF16LV8C-10JC-ND	4.44	2.88	2.57
						20-PLCC	ATF16LV8C-10JI-ND	5.51	3.65	3.28
						20-Dip	ATF16LV8C-10PC-ND	4.44	2.88	2.57
3.3	10	8	8	150	Std	20-SOIC	ATF16LV8C-10SC-ND	4.44	2.88	2.57
5.0	10	8	8	200	Std	28-PLCC	ATF20V8B-10JC-ND	2.10	1.93	1.71
						24-Dip	ATF20V8B-10PC-ND	2.10	1.93	1.71
						24-SOIC	ATF20V8B-10SC-ND	2.10	1.93	1.71
5.0	10	8	8	200	Qtr	28-PLCC	ATF20V8BQ-10JC-ND	3.62	3.16	2.83
						24-Dip	ATF20V8BQ-10PC-ND	3.62	3.16	2.83
5.0	10	10	10	350	Std	28-PLCC	ATF22V10C-10JC-ND	3.60	3.15	2.82
						24-Dip	ATF22V10C-10PC-ND	3.60	3.15	2.82
						24-SOIC	ATF22V10C-10SC-ND	3.60	3.15	2.82
5.0	15	10	10	350	Qtr	28-PLCC	ATF22V10CQ-15JC-ND	4.86	4.14	3.73
						24-Dip	ATF22V10CQ-15PC-ND	4.86	4.14	3.73
						24-SOIC	ATF22V10CQ-15SC-ND	4.86	4.14	3.73
5.0	20	10	10	350	Qtr & Zero	28-PLCC	ATF22V10CQZ-20JC-ND	3.16	2.80	2.50
						24-Dip	ATF22V10CQZ-20PC-ND	3.16	2.80	2.50
						24-SOIC	ATF22V10CQZ-20SC-ND	3.16	2.80	2.50
5.0	15	10	10	350	Std & Zero	28-PLCC	ATF22V10CZ-15JC-ND	4.80	4.09	3.69
						24-Dip	ATF22V10CZ-15PC-ND	4.80	4.09	3.69
						24-SOIC	ATF22V10CZ-15SC-ND	4.80	4.09	3.69
3.3	10	10	10	350	Std	28-PLCC	ATF22LV10C-10JC-ND	3.76	3.27	2.94
						24-Dip	ATF22LV10C-10PC-ND	3.76	3.27	2.94
						24-SOIC	ATF22LV10C-10SC-ND	3.76	3.27	2.94

ATF15xx-DK CPLD Development Kit

The ATF15xx-DK is a low-cost development kit for the designer who wishes to begin working with Atmel's ATF15xx Family of industry standard pin compatible CPLDs with Logic Doubling™. The kit allows designers to design, synthesize, and simulate their design using their choice of either free Atmel-WinCUPL design software or a 30-day free trial version of Atmel-ProChip Designer. When design is complete, the designer can install the sample ATF15xx Family devices in the provided PCB and program them using the built-in in-system programmable (ISP) industry standard 4-pin JTAG interface, ATMISP software, and PC parallel port cable provided. A comprehensive tutorial takes the designer through the complete CPLD development process. All software runs on PC Windows® platforms. The ATF15xx-DK includes everything a designer needs to get started with Atmel Logic Doubling CPLDs, including:

CPLD Demo Board with: • 84-pin auto-eject socket • In System Programming (JTAG) port • 2MHz crystal oscillator • Eight 8-segment LED displays • 5V and 3.3V Vcc operation • Easy access to all CPLD I/O pins • Global Clear, Output Enable and Power switches

Logic Doubling™ CPLDs: • ATF1508AS • ATF1508ASVL

CPLD Programming Cable: • 5V/3.3V ISP cable for PC parallel port with Vcc detection

Software CD: • Free Atmel-WinCUPL design software and Users Manual • 30-day free trial version of Atmel-ProChip Designer™ software • Atmel fitters with Logic Doubling support and docs • ATMISP software and Users Manual • Logic Doubling Reference designs and White Paper

Databook CD: • All Atmel Programmable Logic Datasheets and Application Notes

ATF15XX-DK-ND CPLD Development Kit............................**$92.73**

FPGA's (Field Programmable Gate Arrays)

AT40K Series FPGAs

Atmel's AT40K Series coprocessor FPGAs range from 5K to 50K usable gates, and are designed for high density, compute-intensive DSP and other fast logic designs. The AT40K family solves the Logic vs. SRAM trade-off problem by providing fast, flexible, distributed 10ns FreeRAM™ without using valuable logic resources. Structured logic functions, including variable array multipliers can be implemented directly in core cells without using any bussing resources - providing dramatic improvements in speed, utilization, power and system cost.

The AT40K family has the ability to implement Cache Logic design, where part of the FPGA can be reprogrammed without loss of register data, while the remainder of the FPGA continues to operate without disruption. This is ideal for building adaptive filters, variable coefficient multipliers and other designs where the datapath can change to increase system performance.

All Atmel FPGAs can be designed using industry standard CAE tools for schematics, VHDL and Verilog on a PC, Sun, or HP workstation. Software tools are available on Atmel's website at: http://www.atmel.com/fpga_software.html

Features:

• Distributed, single/dual port 10ns SRAM, independent of logic cells • Up to 384 PCI compliant I/Os • Mixed 3V/5V capability • Architecture optimized for efficient, ultrafast array multipliers • Cache Logic® dynamic full/partial reconfigurability in-system • Eight global clocks • Efficient, industry-standard design tools, optimized for synthesis • QuickChange™ tools for adaptive hardware designs • Variety of surface mount packages • All devices in family are pin-compatible

Package Options	Usable Gates	Cells	Ram (Bits)	I/O (Max)	Speed (ns)	Vcc	Digi-Key Part No.	Price Each 1	25	100
84-PLCC	5K-10K	256	2,048	62	2	5.0	AT40K05-2AJC-ND	24.07	18.14	16.72
144-TQFP	5K-10K	256	2,048	114	2	5.0	AT40K05-2BQC-ND	26.60	20.17	18.61
208-PQFP	5K-10K	256	2,048	128	2	5.0	AT40K05-2DQC-ND	27.22	20.68	19.08
84-PLCC	5K-10K	256	2,048	62	3	3.3	AT40K05LV-3AJC-ND	16.90	12.43	11.40
144-TQFP	5K-10K	256	2,048	114	3	3.3	AT40K05LV-3BQC-ND	18.65	13.81	12.69
208-PQFP	5K-10K	256	2,048	128	3	3.3	AT40K05LV-3DQC-ND	19.08	14.15	13.01
84-PLCC	10K-20K	576	4,608	62	2	5.0	AT40K10-2AJC-ND	28.62	22.27	20.63
144-TQFP	10K-20K	576	4,608	114	2	5.0	AT40K10-2BQC-ND	31.66	24.77	22.96
208-PQFP	10K-20K	576	4,608	161	2	5.0	AT40K10-2DQC-ND	32.44	25.41	23.56
84-PLCC	10K-20K	576	4,608	62	3	3.3	AT40K10LV-3AJC-ND	24.07	18.14	16.72
144-TQFP	10K-20K	576	4,608	114	3	3.3	AT40K10LV-3BQC-ND	26.60	20.17	18.61
208-PQFP	10K-20K	576	4,608	161	3	3.3	AT40K10LV-3DQC-ND	27.22	20.68	19.08
84-PLCC	20K-30K	1024	8,192	62	2	5.0	AT40K20-2AJC-ND	47.87	38.22	35.53
144-TQFP	20K-30K	1024	8,192	114	2	5.0	AT40K20-2BQC-ND	53.07	42.55	39.58
208-PQFP	20K-30K	1024	8,192	161	2	5.0	AT40K20-2DQC-ND	54.35	43.62	40.58
84-PLCC	20K-30K	1024	8,192	62	3	3.3	AT40K20LV-3AJC-ND	37.83	29.29	27.11
144-TQFP	20K-30K	1024	8,192	114	3	3.3	AT40K20LV-3BQC-ND	41.85	32.59	30.19
208-PQFP	20K-30K	1024	8,192	161	3	3.3	AT40K20LV-3DQC-ND	42.86	33.41	30.95
144-TQFP	40K-50K	2304	18,432	114	2	5.0	AT40K40-2BQC-ND	103.32	84.99	79.32
208-PQFP	40K-50K	2304	18,432	161	2	5.0	AT40K40-2DQC-ND	105.86	87.14	81.33
144-TQFP	40K-50K	2304	18,432	114	3	3.3	AT40K40LV-3BQC-ND	90.84	73.18	68.11
208-PQFP	40K-50K	2304	18,432	161	3	3.3	AT40K40LV-3DQC-ND	94.60	76.32	71.05

FPGA Configuration Memory In-System Reprogrammable Serial EEPROMs

The AT17 Series FPGA Configuration EEPROMs (Configurators) provide an easy-to-use, cost-effective configuration memory for Field Programmable Gate Arrays. It uses a simple serial-access procedure to configure one or more FPGA devices. The organization supplies enough memory to configure one or multiple smaller FPGAs. The Configurators can be programmed with industry-standard programmers or Atmel's ATDH2200E Programming System.

Features: • EE Reprogrammable Serial Memories Designed to Store Configuration Programs for Field Programmable Gate Arrays (FPGAs) • In-System Programmable via 2-wire Bus • Simple Interface to SRAM FPGAs • Compatible with Atmel AT6000, AT40K FPGAs, Altera FLEX® Devices, ORCA® FPGAs, Xilinx XC3000, XC4000, XC5200, Spartan®, Virtex® FPGAs • Cascadable Read Back to Support Additional Configurations or Future Higher-density Arrays • Low-power CMOS EEPROM Process • Programmable Reset Polarity • Available in PLCC Package (Pin Compatible Across Product Family) • Emulation of Atmel's AT24CXXX Serial EEPROMs • Available in 3.3V ± 10% LV and 5V ± 5% C Versions • System-friendly READY Pin • Low-power Standby Mode

Package Options	Memory Size	Vcc	Digi-Key Part No.	Price Each 1	25	100
8-DIP	64Kbit	5.0	AT17C65-10PC-ND	5.25	3.46	3.11
8-SOIC	65Kbit	5.0	AT17C65-10NI-ND	7.95	5.47	4.96
8-SOIC	65Kbit	5.0	AT17C65-10NC-ND	6.60	4.46	4.03
8-LAP	64Kbit	5.0	AT17C65-10CC-ND	4.30	3.14	2.97
20-PLCC	64Kbit	5.0	AT17C65-10JC-ND	6.10	4.09	3.69
8-DIP	64Kbit	3.3	AT17LV65-10PC-ND	6.10	4.09	3.69
8-SOIC	64Kbit	3.3	AT17LV65-10NI-ND	9.27	6.47	5.89
8-SOIC	64Kbit	3.3	AT17LV65-10NC-ND	7.69	5.28	4.78
8-LAP	64Kbit	3.3	AT17LV65-10CC-ND *NEW!*	5.16	3.77	3.56
20-PLCC	64Kbit	3.3	AT17LV65-10JC-ND	7.09	4.83	4.37
8-DIP	128Kbit	5.0	AT17C128-10PC-ND	7.75	5.32	4.82
8-SOIC	128Kbit	5.0	AT17C128-10NI-ND	11.83	8.45	7.71
8-SOIC	128Kbit	5.0	AT17C128-10NC-ND	9.78	6.87	6.25
8-LAP	128Kbit	5.0	AT17C128-10CC-ND	6.88	5.02	4.75
20-PLCC	128Kbit	5.0	AT17C128-10JC-ND	9.03	6.29	5.72
8-DIP	128Kbit	3.3	AT17LV128-10PC-ND	9.03	6.29	5.72
8-SOIC	128Kbit	3.3	AT17LV128-10NI-ND	13.83	10.01	9.16
8-SOIC	128Kbit	3.3	AT17LV128-10NC-ND	11.42	8.14	7.42
8-LAP	128Kbit	3.3	AT17LV128-10CC-ND *NEW!*	8.26	6.03	5.70
20-PLCC	128Kbit	3.3	AT17LV128-10JC-ND	10.54	7.45	6.79
8-DIP	256Kbit	5.0	AT17C256-10PC-ND	13.94	10.10	9.24
8-SOIC	256Kbit	5.0	AT17C256-10NI-ND	21.52	16.10	14.82
8-SOIC	256Kbit	5.0	AT17C256-10NC-ND	17.72	13.08	12.01
8-LAP	256Kbit	5.0	AT17C256-10CC-ND	13.76	10.04	9.49
20-PLCC	256Kbit	5.0	AT17C256-10JC-ND	16.32	11.96	10.97

Package Options	Memory Size	Vcc	Digi-Key Part No.	Price Each 1	25	100
8-DIP	256Kbit	3.3	AT17LV256-10PC-ND	16.32	11.96	10.97
8-SOIC	256Kbit	3.3	AT17LV256-10NI-ND	25.25	19.09	17.60
8-SOIC	256Kbit	3.3	AT17LV256-10NC-ND	20.77	15.50	14.26
8-LAP	256Kbit	3.3	AT17LV256-10CC-ND *NEW!*	12.70	12.05	11.39
20-PLCC	256Kbit	3.3	AT17LV256-10JC-ND	19.12	14.18	13.04
8-DIP	512Kbit	5.0	AT17C512-10PC-ND	15.40	14.60	13.80
8-LAP	512Kbit	5.0	AT17C512-10CC-ND	13.20	12.56	11.87
20-PLCC	512Kbit	5.0	AT17C512-10JC-ND	19.80	14.73	13.54
8-DIP	512Kbit	3.3	AT17LV512-10PC-ND *NEW!*	18.00	17.04	16.10
8-LAP	512Kbit	3.3	AT17LV512-10CC-ND *NEW!*	15.50	14.65	13.85
20-PLCC	512Kbit	3.3	AT17LV512-10JC-ND	22.66	17.01	15.67
8-DIP	1-Mbit	5.0	AT17C010-10PC-ND	20.50	19.46	18.41
8-LAP	1-Mbit	5.0	AT17C010-10CC-ND	17.70	16.74	15.82
20-PLCC	1-Mbit	5.0	AT17C010-10JC-ND	25.48	19.27	17.77
8-DIP	1-Mbit	3.3	AT17LV010-10PC-ND *NEW!*	24.60	23.36	22.08
8-LAP	1-Mbit	3.3	AT17LV010-10CC-ND *NEW!*	21.20	20.09	18.99
20-PLCC	1-Mbit	3.3	AT17LV010-10JC-ND	29.92	22.86	21.12
8-LAP	2-Mbit	5.0	AT17C002-10CC-ND	24.90	23.62	22.33
20-PLCC	2-Mbit	5.0	AT17C002-10JC-ND	28.50	27.00	25.53
20-PLCC	2-Mbit	3.3	AT17LV020-10JC-ND	41.32	32.15	29.78
8-LAP	2-Mbit	3.3	AT17LV002-10CC-ND *NEW!*	24.90	23.62	22.33
20-PLCC	2-Mbit	3.3	AT17LV002-10JC-ND *NEW!*	28.50	27.00	25.53
44-TQFP	2-Mbit	3.3	AT17LV002-10TQC-ND *NEW!*	28.50	27.00	25.53
44-PLCC	4-Mbit	3.3	AT17LV040-10BJC-ND *NEW!*	41.90	39.72	37.55

FPGA Configurator Programming Kit (Enhanced) ATDH2200E

Atmel offers a low cost development kit for the designer who wishes to begin working with the AT17 Series of ISP FPGA configuration memories. The kit allows designers to read, write and in-system program any of Atmel's AT17 series family members directly from a PC. All standard file input formats produced by the various FPGA vendors are supported. The AT17 series devices can be programmed directly on the programming board or the board can be used to facilitate in-system programming of the AT17 series devices in the target application (cable provided). The ATDH2200E supports all Atmel AT17 series configuration memories.

Features:

Hardware:

• Supports Programming of all AT17C/LV Series Devices • Connection to Allow In-System Prog. (ISP) • 5.0V or 3.0V Supply

Software:

• CPS - Configurator Programming System • GUI-based Interface • Supports Win95/Win98/WinNT • Online Help • Supports Programming Reset Polarity • Verification Routines to Validate Programming • Accepts HEX, MCS, POF, RBF and BST File Formats

System Contents:

• ATDH2200 Programming Board • ATDH2222 20-pin PLCC Adapter • CPS Software • ATDH2200E Datasheet • ATDH2200E Programming Kit User Guide • Standard (PC Printer Port) Parallel Cable • 10-pin Ribbon Cable for ISP • 9V DC, 200 mA, 2.1 mm Center Positive Power Supply • Sample AT17C/LV Devices

ATDH2200E-ND FPGA Configurator Program Kit **$350.00**

AT91 ARM Thumb Microcontrollers

The best combination of low-power consumption, 32-bit performance and 16-bit system cost.

The AT91 series provides the optimal combination of processing power, peripherals and memory blocks for demanding real-time applications that require high performance on a tight power budget. They utilize the ARM7DTMI 32-bit RISC processor core, an industry leader in MIPS/Watt. Its wide range of Real Time Operating Systems and sophisticated application development tools minimize the risk and time taken to bring new applications to the market.

Features: • Optimal combination of large SRAM, ROM and Flash memories • Wide choice of on-chip peripherals • 3-stage instruction execution pipeline for high instruction throughout • Single-cycle memory access through EBI • Hardware multiplier-plus-barrel shifter gives DSP capability • PDC channels (on-chip DMA) free the processor for the application • Advanced power management provides idle mode and disables unused peripherals • Low-latency Advanced Interrupt Controller • Banked registers provide separate stacks and call/returns in interrupt modes • Wide choice of Real Time Operating Systems for ease of development of real-time applications • Extensive application development tools for rapid, low-risk software development • Widely used in embedded GPS systems, hand-held communications devices, wireless networking, industrial automation

AT91 ARM Thumb Evaluation Kit

The Evaluation Kits are complete low-cost evaluation platforms, which enable real-time code development and exploration of the AT91 ARM Thumb microcontrollers. The kits include:

• Sample microcontroller • Evaluation Board with the Angel debug monitor • AT91 Getting Started CD-ROM with data sheets and examples • DB9 serial cable • 2.1mm power jack (power supply not included) • Evaluation copies of compilers and debuggers from Green Hills and ARM • SRAM • Flash • 2 Serial ports • Reset button and controller • Push buttons • LEDs • 20-pin JTAG ICE interface connector • Voltage regulation • Clock generator • Board self-test program • Angel debug monitor • Current consumption measurement capability • Expansion slots for add-on cards with user specific memories and peripherals

AT91EB40-ND	Evaluation Kit for the AT91 40 Series	**$236.15**
AT91EB63-ND	Evaluation Kit for the AT91 63 and 43 Series	**$274.22**
AT91MEC01-ND	Memory Extension Card for EB40 and EB63	**$324.97**
AT91EB40A-ND	*NEW!* Evaluation Kit for the AT91R40008	**$198.00**
AT91EB55-ND	*NEW!* Evaluation Kit for the AT91M55800A	**$250.00**
AT91EB42-ND	*NEW!* Evaluation Kit for the AT91M42800A	**$250.00**

SRAM (Bytes)	Flash (Bytes)	I/O Pins	Multi-processor I/F	16-Bit Timers	SPI	USART	PDC Channels	VCC Core (V)	VCC I/O (V)	RTC	OSC & PLL	10-bit A/D	10-bit D/A	Speed	Pkg.	Digi-Key Part No.	Price Each 1	25	100	Evaluation Kits Digi-Key Part No.	Evaluation Kits Price Each
8K	—	81	—	3	—	2	4	1.8-3.6	1.8-3.6	N	N	—	—	33MHz	100-TQFP	AT91M40800-33AI-ND	15.10	11.00	10.08	AT91EB40-ND	236.15
136K	—	81	—	3	—	2	4	1.8-3.6	1.8-3.6	N	N	—	—	33MHz	100-TQFP	AT91R40807-33AI-ND	24.21	18.51	17.10		
256K	—	81	—	3	—	2	4	1.65-1.95	2.7-3.6	N	N	—	—	66MHz	100-TQFP	AT91R40008-66AI-ND *NEW!*	21.22	17.32	14.86	AT91EB40A-ND *NEW!*	198.00
8K	2M	85	—	3	—	2	4	2.7-3.6	2.7-3.6	N	N	—	—	33MHz	120-BGA	AT91F40816-33CI-ND	37.83	29.29	27.11	AT91EB40-ND*	236.15
3K	—	115	—	6	1	3	8	1.8-3.6	2.7-5.5	N	N	—	—	25MHz	144-BGA	AT91M43300-25CI-ND	18.90	14.01	12.88	AT91EB63-ND	274.22
3K	—	144	1	6	1	3	8	1.8-3.6	2.7-5.5	N	N	—	—	25MHz	176-TQFP	AT91M63200-25AI-ND	18.90	14.01	12.88		
8K	—	108	—	6	2	2	8	2.7-3.6	2.5-5.5	Y	Y	—	—	33MHz	144-TQFP	AT91M42800A-33AI-ND *NEW!*	17.78	14.52	12.46	AT91EB42-ND *NEW!*	250.00
8K	—	108	—	6	2	2	8	2.7-3.6	2.7-5.5	Y	Y	—	—	33MHz	144-BGA	AT91M42800A-33CI-ND *NEW!*	19.44	15.87	13.62		
8K	—	147	—	6	1	3	8	2.7-3.6	2.5-5.5	Y	Y	8	2	33MHz	176-TQFP	AT91M55800A-33AI-ND *NEW!*	20.04	16.36	14.04	AT91EB55-ND *NEW!*	250.00
8K	—	147	—	6	1	3	8	2.7-3.6	2.7-5.5	Y	Y	8	2	33MHz	176-BGA	AT91M55800A-33CI-ND *NEW!*	22.11	18.05	15.49		

* Need to use Memory Extension Card (AT91MEC01-ND)

NOTE: Operating Temperature: -40° C to 85°C

FPSLIC — Field Programmable System Level Integrated Circuit

FPSLIC — FPGA + AVR in one Package!

The AT94K Series (FPSLIC family) is a combination of the popular Atmel AT40K series SRAM FPGAs and the high-performance Atmel AVR 8-bit RISC microcontroller with standard peripherals. Extensive data and instruction SRAM as well as device control and management logic are included on this monolithic device, fabricated on Atmel's 0.35µ five-layer metal CMOS process.

5,000 to 40,000 Gates of Patented SRAM-based AT40K FPGA with FreeRAM™: • 2K to 18.4K Bits of Distributed Single/Dual Port FPGA User SRAM • High-performance DSP Optimized FPGA Core Cell • Dynamically Reconfigurable In-System – FPGA Configuration Access. Available On-chip from AVR Microcontroller Core to Support Cache Logic ® Designs • Very Low Static and Dynamic Power Consumption – Ideal for Portable and Handheld Applications

Patented AVR Enhanced RISC Architecture: • 120+ Powerful Instructions • Most Single Clock Cycle Execution • High-performance Hardware Multiplier for DSP-based Systems • Approaching 1 MIPS per MHz Performance • C Code Optimized Architecture with 32 x 8 General-purpose Internal Registers • Low-power Idle, Power-save, and Power-down Modes • 100 µA Standby and Typical 2-3 mA per MHz Active

Up to 36K Bytes of Dynamically Allocated Instruction and Data SRAM: • Up to 16K x 16 Internal 15ns Instructions SRAM • Up to 16K x 8 Internal 15ns Data SRAM

AVR Fixed Peripherals: • Industry-standard 2-wire Serial Interface • Two Programmable Serial UARTs • Two 8-bit Timer/Counters with Separate Prescaler and PWM • One 16-bit Timer/Counter with Separate Prescaler, Compare, Capture Modes and Dual 8-, 9- or 10-bit PWM

Support for FPGA Custom Peripherals: • AVR Peripheral Control – 16 Decoded AVR Address Lines Directly Accessible to FPGA • FPGA Macro Library of Custom Peripherals

16 FPGA Supplied Internal Interrupts to AVR
Up to Four External Interrupts to AVR
8 Global FPGA Clocks: • Two FPGA Clocks Driven from AVR Logic • FPGA Global Clock Access Available from FPGA Core

Multiple Oscillator Circuits: • Programmable Watchdog Timer with On-chip Oscillator • Oscillator to AVR Internal Clock Circuit • Software-selectable Clock Frequency • Oscillator to Timer/Counter for Real-time Clock

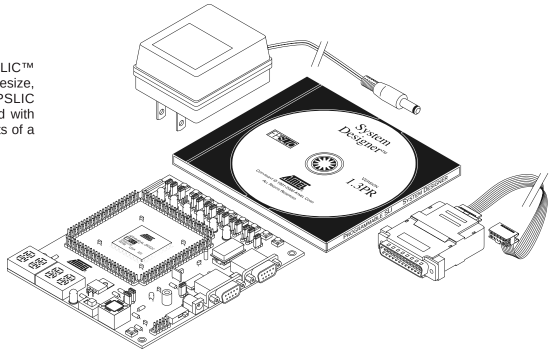
Vcc: 3.0V to 3.6V
3.3V 33 MHz PCI Compliant FPGA I/O: • 20 mA Sink/Source High-performance I/O Structures • All FPGA I/O Individually Programmable

State-of-the-art Integrated PC-based Software Suite including Co-verification

FPGA Gates	FPGA Core Cells	FPGA SRAM Bits	FPGA Registers (Total)	Max. FPGA User I/O	AVR Programmable I/O Lines	Program SRAM Bytes	Operating Temp.	Package	Digi-Key Part No.	Price Each 1	25	100
40K	2304	18432	2862	84	16	20K-32K	Commercial	144-PQFP	AT94K40AL-25BQC-ND	42.12	34.02	31.67
40K	2304	18432	2862	120	16	20K-32K	Commercial	208-PQFP	AT94K40AL-25DQC-ND	102.59	83.00	77.30

ATSTK94 *FPSLIC* Starter Kit

The ATSTK94 is a low-cost development kit for the designer who wishes to begin working with Atmel's award-winning FPSLIC™ (FIELD PROGRAMMABLE SYSTEM-LEVEL INTEGRATION) AT94K family of devices. The kit allows designers to design, synthesize, simulate and program Atmel's new FPSLIC products. A comprehensive tutorial takes designers through the complete FPSLIC development process. The starter kit, which runs on PC Windows based platforms, includes everything needed to get started with FPSLIC, including all software, tutorials, hands on examples, complete documentation, boards, parts and cables. The kit consists of a starter kit board that includes the following.



Features:
- ATK94K40 Device
- AT17LV010 Device
- ISP Port for Direct Download from PC
- Push-button Switches and LEDs
- 4 Alphanumerc LED Displays
- 2 RS232 Transmit/Receive Ports
- 18.432 MHz, 4 MHz and 32 kHz Clock Sources
- Power Mgmt. Circuitry (9V Power Supply included)
- Access to all FPSLIC Pins via Headers
- Push-button Reset
- Configurator Prog. Cable for AT17LV010 In-Syst. Prog.
- The System Designer™ Software (4-Month License)

Software:
- Full-featured Version of the FPSLIC Dev. Tool
- Co-verification for Complete Hardware (VHDL/Verilog) or Software (C/ASM) Interactive Simulation
- Comprehensive FPGA Tool Suite
- ModelTech MTI HDL Simulator
- Exemplar HDL Synthesis
- AVR Studio Complete Development and Debug Environment
- AVR Instruction Set Simulator (ISS)
- 1-Month AVR C Compiler Evaluation License

ATSTK94-ND FPSLIC Starter Kit **$495.00**

TinyAVR™ 8-Bit Microcontrollers

Features: • Low cost • Small package sizes • Streamlined feature sets • Tailored to meet the specific needs of a wide variety of applications • High-performance and low-power 8-bit RISC architecture • 90 powerful instructions - most single clock cycle execution • 32 x 8 general purpose working registers • Low-power Idle and Power-down Modes • Programming lock for Flash program and EEPROM data security • External and internal interrupt sources • Low-power, high-speed CMOS process technology • Fully static operation

ATtiny12 Series:
• In-system programmable via SPI Port • Enhanced Power-on Reset Circuit • Internal calibrated RC oscillator

ATtiny15L Series:
• In-System programmable via SPI Port • Enhanced Power-on Reset Circuit • Programmable Brown-out Detection Circuit • Internal, Calibrated 1.6MHz Tuneable Oscillator • Internal 25.6MHz clock Generator for Timer/Counter • External and Internal Interrupt Sources • Low-power Idle and Power-down Modes

ATtiny28L/ATiny 28V Series:
• Low-power, Idle and Power-down Modes • External and Internal Interrupt Sources • Power-on Reset Circuit with Programmable Start-up Time • Internal Calibrated RC Oscillator

Power Consumption at 4MHz, 3V, 25°C:

Series	ATtiny11 & ATtiny12L	ATtiny15L & ATtiny28L
Active:	2.2mA Max.	3.0mA Max.
Idle Mode:	0.5mA Max.	1.2mA Max.
Power Down Mode:	<1µA Typ.	<1µA Typ.

Memory Size (Bytes) Flash	EEPROM	ISP	I/O Pins	Timers	Analog Comp.	On Chip Osc.	Vcc (V)	Clock Speed (MHz)	Operating Temp. Range †	Pkg.	Digi-Key Part No.	Price Each 1	25	100
1K	—	No	6	1	Yes	Yes	2.7 – 5.5	0-2	Commercial	8-DIP	ATTINY11L-2PC-ND	2.61	1.59	1.40
1K	—	No	6	1	Yes	Yes	2.7 – 5.5	0-2	Industrial	8-DIP	ATTINY11L-2PI-ND	2.75	1.69	1.49
1K	—	No	6	1	Yes	Yes	2.7 – 5.5	0-2	Commercial	8-SOIC	ATTINY11L-2SC-ND	2.61	1.59	1.40
1K	—	No	6	1	Yes	Yes	2.7 – 5.5	0-2	Industrial	8-SOIC	ATTINY11L-2SI-ND	2.75	1.69	1.49
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Commercial	8-Dip	ATTINY11-6PC-ND	2.23	1.33	1.17
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Industrial	8-Dip	ATTINY11-6PI-ND	2.23	1.33	1.17
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Commercial	8-SOIC	ATTINY11-6SC-ND	2.23	1.33	1.17
1K	—	No	6	1	Yes	Yes	4.0 - 5.5	0-6	Industrial	8-SOIC	ATTINY11-6SI-ND	2.23	1.33	1.17
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Commercial	8-Dip	ATTINY12L-4PC-ND	2.75	1.69	1.49
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Industrial	8-Dip	ATTINY12L-4PI-ND	2.75	1.69	1.49
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Commercial	8-SOIC	ATTINY12L-4SC-ND	2.75	1.69	1.49
1K	64	Yes	6	1	Yes	Yes	2.7 - 5.5	0-4	Industrial	8-SOIC	ATTINY12L-4SI-ND	2.75	1.69	1.49
1K	64	Yes	6	1	Yes	Yes	4.0 – 5.5	0-8	Commercial	8-DIP	ATTINY12-8PC-ND	2.75	1.69	1.49
1K	64	Yes	6	1	Yes	Yes	4.0 – 5.5	0-8	Industrial	8-DIP	ATTINY12-8PI-ND	2.90	1.79	1.58
1K	64	Yes	6	1	Yes	Yes	4.0 – 5.5	0-8	Commercial	8-SOIC	ATTINY12-8SC-ND	2.75	1.69	1.49
1K	64	Yes	6	1	Yes	Yes	4.0 – 5.5	0-8	Industrial	8-SOIC	ATTINY12-8SI-ND	2.90	1.79	1.58
1K	64	Yes	6	1	Yes	Yes	1.8 – 5.5	0-1.2	Commercial	8-DIP	ATTINY12V-1PC-ND	3.04	1.89	1.67
1K	64	Yes	6	1	Yes	Yes	1.8 – 5.5	0-1.2	Industrial	8-DIP	ATTINY12V-1PI-ND	3.21	2.00	1.77
1K	64	Yes	6	1	Yes	Yes	1.8 – 5.5	0-1.2	Commercial	8-SOIC	ATTINY12V-1SC-ND	3.04	1.89	1.67
1K	64	Yes	6	1	Yes	Yes	1.8 – 5.5	0-1.2	Industrial	8-SOIC	ATTINY12V-1SI-ND	3.21	2.00	1.77
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Commercial	8-Dip	ATTINY15L-1PC-ND	3.44	2.16	1.92
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Industrial	8-Dip	ATTINY15L-1PI-ND	3.44	2.16	1.92
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Commercial	8-SOIC	ATTINY15L-1SC-ND	3.44	2.16	1.92
1K	64	Yes	6 (4-Ch. 10-Bit A/D)	2	Yes	Yes	2.7 - 5.5	1.6	Industrial	8-SOIC	ATTINY15L-1SI-ND	3.44	2.16	1.92
2K	—	No	20	1	Yes	Yes	2.7 - 5.5	0-4	Commercial	28-Dip	ATTINY28L-4PC-ND	2.75	1.69	1.49
2K	—	No	20	1	Yes	Yes	2.7 - 5.5	0-4	Industrial	28-Dip	ATTINY28L-4PI-ND	2.75	1.69	1.49
2K	—	No	20	1	Yes	Yes	2.7 - 5.5	0-4	Commercial	32-TQFP	ATTINY28L-4AC-ND	2.75	1.69	1.49
2K	—	No	20	1	Yes	Yes	2.7 - 5.5	0-4	Industrial	32-TQFP	ATTINY28L-4AI-ND	2.75	1.69	1.49
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Commercial	32-TQFP	ATTINY28V-1AC-ND	2.75	1.69	1.49
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Industrial	32-TQFP	ATTINY28V-1AI-ND	2.75	1.69	1.49
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Commercial	28-Dip	ATTINY28V-1PC-ND	2.75	1.69	1.49
2K	—	No	20	1	Yes	Yes	1.8-5.5	0-1	Industrial	28-Dip	ATTINY28V-1PI-ND	2.75	1.69	1.49

† Commercial Temperature Range: 0°C to +70°C (+32°F to +159°F); Industrial Temperature Range: -40°C to +85°C (-40°F to +185°F)

AVR 8-Bit RISC *FLASH* Microcontrollers

Atmel's new AVR microcontrollers have a RISC core running single cycle instructions and a well-defined I/O structure that limits the need for external components. Internal oscillators, timers, UART, SPI, pull-up resistors, pulse width modulation, ADC, analog comparator and watch dog timers are some of the features you will find in AVR devices. AVR instructions are tuned to decrease the size of the program whether the code is written in C or Assembly. With on-chip in-system programmable Flash and EEPROM, the AVR is a perfect choice in order to optimize cost and get product to the market quickly.

The AVR is a low-power CMOS 8-bit series of microcontrollers based on the AVR RISC architecture. By executing powerful instructions in a single clock cycle, they achieve throughputs approaching 1 MIPS per MHz allowing the system designer to optimize power consumption versus processing speed. The AVR core combines a rich instruction set with the 32 general purpose working registers. All 32 registers are directly connected to the Arithmetic Logic Unit (ALU), allowing two independent registers to be accessed in one single instruction executed in one clock cycle. The resulting architecture is more code efficient while achieving throughputs up to ten times faster than conventional CISC microcontrollers.

General Features: • Utilizes the AVR high-performance and low-power RISC architecture • 118 powerful instructions – most single clock cycle execution (89 instructions in AT90S1200 Series) • 32 x 8 general purpose working registers • Programming Lock for Flash program and EEPROM data security • Low-power idle and power down modes • External and internal interrupt sources • Low-power, high speed CMOS process technology • Fully static operation

Additional Features:

AT90S1200 Series: • Selectable on-chip RC Oscillator for Zero External Components • 1200A comes with the RCEN fuse programmed

AT90S2323 and AT90S2343 Series:

• Power-on Reset Circuit • Selectable On-chip RC Oscillator on the 2343 Series

AT90S4433 Series:

• Brown-Out Reset Circuit • Enhanced Power-on Reset Circuit

AT90S8535 Series:

• Real Time Clock (RTC) with separate oscillator & counter mode • Three Sleep Modes: Idle, Power Save, and Power Down • Power-on Reset Circuit

Power Consumption at 4MHz, 3V, 25°C

Series	AT90S1200	AT90S2313	AT90S2323 & AT90S2343	AT90S4433	AT90S8515	AT90S8535
Active:	2.0mA Max.	2.8mA Max.	2.4mA Max.	3.4mA Max.	3.0mA Max.	6.4mA Max.
Idle Mode:	0.4mA Max.	0.8mA Max.	0.5mA Max.	1.4mA Max.	1.0mA Max.	1.9mA Max.
Power Down Mode:	<1µA Typ.	<1µA Typ.	<1µA Typ.	<1µA Typ.	<µA Typ.	<1µA Typ.

Memory Size (BYTES)				I/O			Analog	On Chip	Vcc	Clock	Operating Temp.		Digi-Key	Price Each		
Flash	EEPROM	RAM	ISP	Pins	UART	Timers	Comp.	Osc.	(V)	Speed (MHz)	Range †	Pkg.	Part No.	1	25	100
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-Dip	AT90S1200-12PC-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-Dip	AT90S1200-12PI-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SOIC	AT90S1200-12SC-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SOIC	AT90S1200-12SI-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SSOP	AT90S1200-12YC-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SSOP	AT90S1200-12YI-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-Dip	AT90S1200-4PC-ND	3.26	2.03	1.80
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-Dip	AT90S1200-4PI-ND	3.44	2.16	1.92
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SOIC	AT90S1200-4SC-ND	3.26	2.03	1.80
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SOIC	AT90S1200-4SI-ND	3.44	2.16	1.92
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SSOP	AT90S1200-4YC-ND	3.65	2.31	2.06
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SSOP	AT90S1200-4YI-ND	3.83	2.44	2.17
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-Dip	AT90S1200A-12PC-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-Dip	AT90S1200A-12PI-ND	3.51	2.21	1.97
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SOIC	AT90S1200A-12SC-ND	3.35	2.10	1.86
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SOIC	AT90S1200A-12SI-ND	3.51	2.21	1.97
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Commercial	20-SSOP	AT90S1200A-12YC-ND	3.74	2.38	2.12
1K	64	—	Yes	15	—	1	Yes	Yes	4.0 - 6.0	0-12	Industrial	20-SSOP	AT90S1200A-12YI-ND	3.90	2.49	2.22
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-Dip	AT90S1200A-4PC-ND	3.49	2.20	1.95
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-Dip	AT90S1200A-4PI-ND	3.67	2.33	2.07
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SOIC	AT90S1200A-4SC-ND	3.49	2.20	1.95
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SOIC	AT90S1200A-4SI-ND	3.67	2.33	2.07
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Commercial	20-SSOP	AT90S1200A-4YC-ND	3.88	2.47	2.20
1K	64	—	Yes	15	—	1	Yes	Yes	2.7 - 6.0	0-4	Industrial	20-SSOP	AT90S1200A-4YI-ND	4.06	2.60	2.32
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Commercial	20-Dip	AT90S2313-10PC-ND	4.37	2.83	2.53
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Industrial	20-Dip	AT90S2313-10PI-ND	4.37	2.83	2.53
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Commercial	20-SOIC	AT90S2313-10SC-ND	4.37	2.83	2.53
2K	128	128	Yes	15	1	2	Yes	No	4.0 - 6.0	0-10	Industrial	20-SOIC	AT90S2313-10SI-ND	4.37	2.83	2.53
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	20-Dip	AT90S2313-4PC-ND	4.37	2.83	2.53
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	20-Dip	AT90S2313-4PI-ND	4.37	2.83	2.53
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	20-SOIC	AT90S2313-4SC-ND	4.37	2.83	2.53
2K	128	128	Yes	15	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	20-SOIC	AT90S2313-4SI-ND	4.37	2.83	2.53
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Commercial	8-Dip	AT90S2323-10PC-ND	3.70	2.34	2.09
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Industrial	8-Dip	AT90S2323-10PI-ND	3.70	2.34	2.09
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Commercial	8-SOIC	AT90S2323-10SC-ND	3.70	2.34	2.09
2K	128	128	Yes	3	—	1	No	No	4.0 - 6.0	0-10	Industrial	8-SOIC	AT90S2323-10SI-ND	3.70	2.34	2.09
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Commercial	8-Dip	AT90LS2323-4PC-ND	3.26	2.03	1.80
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Industrial	8-Dip	AT90LS2323-4PI-ND	3.42	2.15	1.91
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Commercial	8-SOIC	AT90LS2323-4SC-ND	3.26	2.03	1.80
2K	128	128	Yes	3	—	1	No	No	2.7 - 6.0	0-4	Industrial	8-SOIC	AT90LS2323-4SI-ND	3.42	2.15	1.91
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Commercial	8-Dip	AT90S2343-10PC-ND	3.70	2.34	2.09
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Industrial	8-Dip	AT90S2343-10PI-ND	3.70	2.34	2.09
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Commercial	8-SOIC	AT90S2343-10SC-ND	3.70	2.34	2.09
2K	128	128	Yes	5	—	1	No	Yes	4.0 - 6.0	0-10	Industrial	8-SOIC	AT90S2343-10SI-ND	3.70	2.34	2.09
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Commercial	8-Dip	AT90LS2343-4PC-ND	3.79	2.41	2.15
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Industrial	8-Dip	AT90LS2343-4PI-ND	4.02	2.57	2.29
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Commercial	8-SOIC	AT90LS2343-4SC-ND	3.79	2.41	2.15
2K	128	128	Yes	5	—	1	No	Yes	2.7 - 6.0	0-4	Industrial	8-SOIC	AT90LS2343-4SI-ND	4.02	2.57	2.29
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	32-TQFP	AT90S4433-8AC-ND	6.50	4.39	3.96
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	32-TQFP	AT90S4433-8AI-ND	6.62	4.48	4.04
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	28-Dip	AT90S4433-8PC-ND	6.62	4.48	4.04
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	28-Dip	AT90S4433-8PI-ND	6.62	4.48	4.04
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	32-TQFP	AT90LS4433-4AC-ND	6.85	4.65	4.20
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	32-TQFP	AT90LS4433-4AI-ND	7.24	4.94	4.47
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	28-Dip	AT90LS4433-4PC-ND	6.68	4.52	4.09
4K	256	128	Yes	20 (6-Ch. 10-Bit A/D)	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	28-Dip	AT90LS4433-4PI-ND	7.05	4.80	4.34
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-TQFP	AT90S8515-8AC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-TQFP	AT90S8515-8AI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-PLCC	AT90S8515-8JC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-PLCC	AT90S8515-8JI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	40-Dip	AT90S8515-8PC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	40-Dip	AT90S8515-8PI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-TQFP	AT90S8515-4AC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-TQFP	AT90S8515-4AI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-PLCC	AT90S8515-4JC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-PLCC	AT90S8515-4JI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	40-Dip	AT90S8515-4PC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	40-Dip	AT90S8515-4PI-ND	8.55	5.93	5.38

† Commercial Temperature Range: 0°C to +70°C (+32°F to +159°F); Industrial Temperature Range: -40°C to +85°C (-40°F to +185°F)

(*Continued*)

Microcontrollers AVR 8-Bit RISC *FLASH* Microcontrollers *(Cont.)*

Memory Size (BYTES)				I/O			Analog	On Chip	Vcc	Clock	Operating Temp.		Digi-Key	Price Each		
Flash	EEPROM	RAM	ISP	Pins	UART	Timers	Comp.	Osc.	(V)	Speed (MHz)	Range †	Pkg.	Part No.	1	25	100
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-TQFP	AT90S8515A-8AC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-TQFP	AT90S8515A-8AI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	44-PLCC	AT90S8515A-8JC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	44-PLCC	AT90S8515A-8JI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Commercial	40-Dip	AT90S8515A-8PC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	4.0 - 6.0	0-8	Industrial	40-Dip	AT90S8515A-8PI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-TQFP	AT90S8515A-4AC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-TQFP	AT90S8515A-4AI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	44-PLCC	AT90S8515A-4JC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	44-PLCC	AT90S8515A-4JI-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Commercial	40-Dip	AT90S8515A-4PC-ND	8.55	5.93	5.38
8K	512	512	Yes	32	1	2	Yes	No	2.7 - 6.0	0-4	Industrial	40-Dip	AT90S8515A-4PI-ND	8.55	5.93	5.38
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Commercial	44-TQFP	AT90S8535-8AC-ND	8.85	6.16	5.59
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Industrial	44-TQFP	AT90S8535-8AI-ND	8.85	6.16	5.59
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Commercial	44-PLCC	AT90S8535-8JC-ND	8.85	6.16	5.59
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Industrial	44-PLCC	AT90S8535-8JI-ND	8.85	6.16	5.59
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Commercial	40-Dip	AT90S8535-8PC-ND	8.85	6.16	5.59
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	4.0 - 6.0	0-8	Industrial	40-Dip	AT90S8535-8PI-ND	8.85	6.16	5.59
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Commercial	44-TQFP	AT90LS8535-4AC-ND	9.17	6.40	5.82
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Industrial	44-TQFP	AT90LS8535-4AI-ND	9.70	6.81	6.19
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Commercial	44-PLCC	AT90LS8535-4JC-ND	9.01	6.28	5.71
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Industrial	44-PLCC	AT90LS8535-4JI-ND	9.54	6.69	6.08
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Commercial	40-Dip	AT90LS8535-4PC-ND	9.01	6.28	5.71
8K	512	512	Yes	30 (8-Ch. 10-Bit A/D)	1	3	Yes	No	2.7 - 6.0	0-4	Industrial	40-Dip	AT90LS8535-4PI-ND	9.54	6.69	6.08

† Commercial Temperature Range: 0°C to +70°C (+32°F to +159°F); Industrial Temperature Range: -40°C to +85°C (-40°F to +185°F)

MegaAVR™ 8-Bit Microcontrollers

High-performance, Low-power AVR ® 8-bit Microcontroller: • 32 x 8 General Purpose Working Registers

Data and Nonvolatile Program Memory: • Fully Static Operation

Peripheral Features: • 8-channel, 10-bit ADC • Analog Comparator • Programmable Watchdog Timer with Separate On-chip Oscillator • Programmable Serial UART • Master/Slave SPI Serial Interface for In-System Programming

Special Microcontroller Features: • External and Internal Interrupt Sources • Up to 1 MIPS per MHz

ATmega103

- 121 Powerful Instructions – Most Single Clock Cycle Execution
- 128K Bytes of In-System Programmable Flash
- 4K Bytes Internal SRAM
- 4K Bytes of In-System Programmable EEPROM
- Programming Lock for Flash Program and EEPROM Data Security

Peripheral Features: • Real-time Counter (RTC) with Separate Oscillator • Two 8-bit Timer/Counters with Separate Prescaler and PWM • Expanded 16-bit Timer/Counter System with Separate Prescaler, Compare Capture Modes and Dual 8-, 9- or 10-bit PWM

Special Microcontroller Features: • Low-power Idle, Power Save and Power-down Modes • Software Selectable Clock Frequency

ATmega163/163L

- 130 Powerful Instructions - Most Single Clock Cycle Execution
- On-chip 2-cycle Multiplier
- Self-programming In-System Programmable Flash Memory
- 16K Bytes with Optional Boot Block (256 - 2K Bytes)

Power consumption

Series	AT163	AT163L
Active	15 mA Max.	5.0 mA Max.
Idle Mode	8 mA Max.	2.5 mA Max.
Power-down Mode	< 15µA	< 15µA

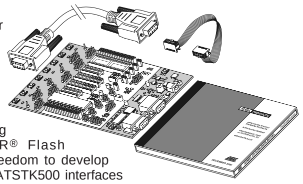
Endurance: 1,000 Write/Erase Cycles • Boot Section Allows Reprogramming of Program Code without External Programmer • Optional Boot Code Section with Independent Lock Bits • 512 Bytes EEPROM • 1024 Bytes Internal SRAM • Programming Lock for Software Security

Peripheral Features: • Two 8-bit Timer/Counters with Separate Prescaler and Compare Mode • One 16-bit Timer/Counter with Separate Prescaler, Compare Mode, and Capture Mode • Real Time Clock with Separate Oscillator and Counter Mode • Three PWM Channels • Byte-oriented 2-wire Serial Interface

Special Microcontroller Features: • Power-on Reset and Programmable Brown-out Detection • Internal Calibrated RC Oscillator • 4 Sleep Modes: Idle, ADC Noise Reduction, Power Save, and Power-Down

Flash (KB)	EPROM (Bytes)	RAM (Bytes)	I/O Pins	Interrupts	UART	TWI (I^2C Compatible)	PWM	10-bit A/D Channels	On-chip Oscillator	Vcc (V)	Clock Speed (MHz)	Pkg.	Digi-Key Part No.	Price Each		
														1	25	100
8K	512	1K	23	16	1	1	3	8	Y	2.7-5.5	0-8	32-TQFP	ATMEGA8L-8AC-ND	6.20	4.17	3.76
8K	512	1K	23	16	1	1	3	8	Y	2.7-5.5	0-8	32-TQFP	ATMEGA8L-8AI-ND	6.54	4.41	3.99
8K	512	1K	23	16	1	1	3	8	Y	2.7-5.5	0-8	28-DIP	ATMEGA8L-8PC-ND	5.99	4.01	3.61
8K	512	1K	23	16	1	1	3	8	Y	2.7-5.5	0-8	28-DIP	ATMEGA8L-8PI-ND	6.33	4.26	3.84
8K	512	1K	23	16	1	1	3	8	Y	4.0-5.5	0-16	32-TQFP	ATMEGA8-16AC-ND	6.20	4.17	3.76
8K	512	1K	23	16	1	1	3	8	Y	4.0-5.5	0-16	32-TQFP	ATMEGA8-16AI-ND	6.54	4.41	3.99
8K	512	1K	23	16	1	1	3	8	Y	4.0-5.5	0-16	28-DIP	ATMEGA8-16PC-ND	6.20	4.17	3.76
8K	512	1K	23	16	1	1	3	8	Y	4.0-5.5	0-16	28-DIP	ATMEGA8-16PI-ND	6.33	4.26	3.84
16K	512	1K	35	20	2	—	4	—	—	2.7-5.5	0-4	44-TQFP	ATMEGA161L-4AC-ND	12.15	8.70	7.95
16K	512	1K	35	20	2	—	4	—	—	2.7-5.5	0-4	44-TQFP	ATMEGA161L-4AI-ND	12.85	9.24	8.45
16K	512	1K	35	20	2	—	4	—	—	2.7-5.5	0-4	40-DIP	ATMEGA161L-4PC-ND	11.96	8.55	7.81
16K	512	1K	35	20	2	—	4	—	—	2.7-5.5	0-4	40-DIP	ATMEGA161L-4PI-ND	12.66	9.10	8.32
16K	512	1K	35	20	2	—	4	—	—	4.0-5.5	0-8	44-TQFP	ATMEGA161-8AC-ND	11.67	8.33	7.60
16K	512	1K	35	20	2	—	4	—	—	4.0-5.5	0-8	44-TQFP	ATMEGA161-8AI-ND	12.36	8.86	8.10
16K	512	1K	35	20	2	—	4	—	—	4.0-5.5	0-8	40-DIP	ATMEGA161-8PC-ND	11.48	8.18	7.46
16K	512	1K	35	20	2	—	4	—	—	4.0-5.5	0-8	40-DIP	ATMEGA161-8PI-ND	12.17	8.71	7.96
16K	512	1K	32	17	1	1	3	8	Y	2.7-5.5	0-4	44-TQFP	ATMEGA163L-4AC-ND	11.77	8.40	7.67
16K	512	1K	32	17	1	1	3	8	Y	2.7-5.5	0-4	44-TQFP	ATMEGA163L-4AI-ND	11.77	8.40	7.67
16K	512	1K	32	17	1	1	3	8	Y	2.7-5.5	0-4	40-DIP	ATMEGA163L-4PC-ND	11.77	8.40	7.67
16K	512	1K	32	17	1	1	3	8	Y	2.7-5.5	0-4	40-DIP	ATMEGA163L-4PI-ND	11.77	8.40	7.67
16K	512	1K	32	17	1	1	3	8	Y	4.0-5.5	0-8	44-TQFP	ATMEGA163-8AC-ND	11.77	8.40	7.67
16K	512	1K	32	17	1	1	3	8	Y	4.0-5.5	0-8	44-TQFP	ATMEGA163-8AI-ND	11.77	8.40	7.67
16K	512	1K	32	17	1	1	3	8	Y	4.0-5.5	0-8	40-DIP	ATMEGA163-8PC-ND	11.77	8.40	7.67
16K	512	1K	32	17	1	1	3	8	Y	4.0-5.5	0-8	40-DIP	ATMEGA163-8PI-ND	11.77	8.40	7.67
32K	1K	2K	32	19	1	1	4	8	Y	2.7-5.5	0-4	44-TQFP	ATMEGA323L-4AC-ND	15.89	11.63	10.66
32K	1K	2K	32	19	1	1	4	8	Y	2.7-5.5	0-4	44-TQFP	ATMEGA323L-4AI-ND	16.83	12.37	11.35
32K	1K	2K	32	19	1	1	4	8	Y	2.7-5.5	0-4	40-DIP	ATMEGA323L-4PC-ND	15.71	11.48	10.53
32K	1K	2K	32	19	1	1	4	8	Y	2.7-5.5	0-4	40-DIP	ATMEGA323L-4PI-ND	16.65	12.22	11.22
32K	1K	2K	32	19	1	1	4	8	Y	4.0-5.5	0-8	44-TQFP	ATMEGA323-8AC-ND	15.25	11.12	10.19
32K	1K	2K	32	19	1	1	4	8	Y	4.0-5.5	0-8	44-TQFP	ATMEGA323-8AI-ND	16.15	11.83	10.85
32K	1K	2K	32	19	1	1	4	8	Y	4.0-5.5	0-8	40-DIP	ATMEGA323-8PC-ND	15.06	10.97	10.06
32K	1K	2K	32	19	1	1	4	8	Y	4.0-5.5	0-8	40-DIP	ATMEGA323-8PI-ND	15.97	11.69	10.72
128K	4K	4K	48	16	1	—	4	8	—	2.7-3.6	0-4	64-TQFP	ATMEGA103L-4AC-ND	19.62	14.59	13.41
128K	4K	4K	48	16	1	—	4	8	—	4.0-5.5	0-6	64-TQFP	ATMEGA103-6AC-ND	19.62	14.59	13.41
128K	4K	4K	48	16	1	—	4	8	—	4.0-5.5	0-6	64-TQFP	ATMEGA103-6AI-ND	19.62	14.59	13.41
128K	4K	4K	48	27	2	1	6+2	8	Y	2.7-5.5	0-8	64-TQFP	ATMEGA128L-8AC-ND	17.05	12.54	11.51
128K	4K	4K	48	27	2	1	6+2	8	Y	2.7-5.5	0-8	64-TQFP	ATMEGA128L-8AI-ND	18.07	13.35	12.26
128K	4K	4K	48	27	2	1	6+2	8	Y	4.0-5.5	0-16	64-TQFP	ATMEGA128-16AC-ND	16.35	11.99	11.00
128K	4K	4K	48	27	2	1	6+2	8	Y	4.0-5.5	0-16	64-TQFP	ATMEGA128-16AI-ND	17.32	12.76	11.71

AVR® Flash Microcontroller Starter Kits



Atmel Starter Kits are complete evaluation platforms for taking your AVR® design from conception to realization. They are the ideal method to get acquainted with the AVR® microcontroller family, including the new analog devices.

STK500 Starter Kit

The ATSTK500 is a complete starter kit, programming tool and development system for Atmel's AVR® Flash microcontrollers. The ATSTK500 gives AVR® users freedom to develop and test complete AVR® designs and prototypes. The ATSTK500 interfaces with AVR® Studio®, Atmel's Integrated Development Environment (IDE) for code writing and debugging. The STK500 supports the following Atmel AVR® devices:

- ATtiny11
- AT90S2313
- AT90S4433
- ATmega163
- ATtiny12
- AT90S2323
- AT90S4434
- AT90S1200
- ATtiny15
- AT90S2333
- AT90S8515
- AT90S4414
- ATtiny28
- AT90S2343
- AT90S8535
- ATmega161
- ATtiny22
- AT90S4414
- ATmega16
- ATmega103†
- AT90S1200
- ATmega8
- ATmega323
- ATmega128†

† In external target or with STK501. Devices do not fit into the sockets of STK500.

The ATSTK500 supports In-System Programming (ISP) of all AVR® microcontrollers in the sockets as well as programming of external target systems. The AVR® I/O ports are accessible on pin headers that can be used for connecting LEDs, push buttons, or external signals. The extra RS232 port can be connected to any of the I/O pins.

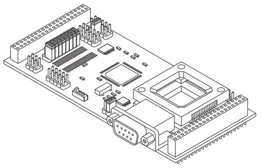
The ATSTK500 programming interface is integrated in AVR® Studio. The Flash, EEPROM and all fuse options can be programmed individually or with the automatic programming option. The DOS programming software is included for efficient batch programming in a production environment. The ATSTK500 clock frequency and supply voltage is controlled from AVR® Studio. The active simulator or emulator code in AVR® Studio can easily be programmed into the ATSTK500 with a click of the mouse.

Features: • AVR® Studio Compatible • RS232 Interface to PC for Programming and Control • Sockets for 8-pin, 20-pin, 28-pin and 40-pin AVR® Devices • Parallel and Serial High-voltage Programming of AVR® Parts • Serial In-System Programming (ISP) of AVR® Parts • In-System Programmer for Programming AVR® Parts in External Target System • Reprogramming of AVR® parts • 8 Push Buttons for General Use • 8 LEDs for General Use • All AVR® I/O Ports Easily Accessible through Pin Header Connectors • Additional RS232 Port for General Use • Expansion Connectors for Plug-in Modules and Prototyping Area • On-board 2-Mbit DataFlash® for Nonvolatile Data Storage • Regulated Power Supply

Note: Requires a 10V-15V DC 500mA (min.) power source such as the Digi-Key T506-ND wall transformer.

ATSTK500-ND	AVR® Programmer Starter Kit	**$79.00**

AVR® STK501 Expansion Board



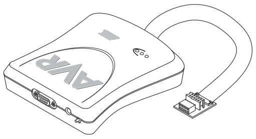
The STK501 board is an expansion module designed to add 64-pin support to the Atmel STK500 Development Board. The STK500 and STK501 expansion module extends support to all current AVR® devices.

The STK501 includes connectors, jumpers and hardware allowing full support for the new features on the 64-pin devices. The Zero Insertion Force (ZIF) socket allows easy use of TQFP packages. In addition to providing support for new devices, the STK501 also adds support for peripherals previously not supported by the STK500. An additional RS-232 driver and an SRAM interface are among the new features. Devices with dual UART or XRAM interface can thus take advantage of the new resources on the STK501 board.

Features: • AVR® Studio Software Interface • STK500 Compatible • Supports 64-pin ATmega Devices • Supports ISP and High-Voltage Programming • Zero Insertion Force Socket for TQFP Packages • TQFP Footprint for Emulator Adapters • JTAG Connector for On-Chip Debugging Using the JTAG ICE • Additional RS-232 Driver and Connector • Adds XRAM Support to the STK500 Board for Devices with XRAM Interface • On-Board 32 kHz Clock Oscillator for Easy RTC Implementations

ATSTK501-ND	STK501 Expansion Board	**$79.25**

AVR® JTAG ICE On-chip Debug System



The AVR® JTAG ICE from Atmel is a powerful development tool for On-chip debugging of all AVR® 8-bit RISC microcontrollers with IEEE 1149.1 compliant JTAG interface. The JTAG ICE and the AVR® Studio user interface give the user complete control of the internal resources of the microcontroller, helping to reduce development time by making debugging easier. The JTAG ICE performs real-time emulation of the microcontroller while it is running in a target system. The JTAG ICE provides emulation capability at a fraction of the cost of traditional emulators.

The JTAG ICE include the following features:

• Interfaces with AVR® Studio Version 3.52 or Newer • Emulates all On-chip Functions, both Digital and Analog • Supports Break on Change of Program Memory Flow • RS-232 Interface to PC • Supports Data and Program Memory Breakpoints • Supports C and Assembler Source Level Debugging • Supports In-System Programming via the JTAG Interface • Directly Powered from Target Board or External Power Supply for 9 – 15V DC Power • Kit also Provides Serial Cable Atmel CD ROM

ATJTAGICE-ND	JTAG On-Chip Debug System	**$299.00**

AVR® ATICE30 Emulator

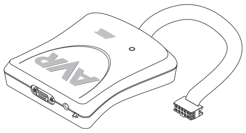
The ICE30 emulator unit is an in-circuit emulator for all ATmega devices. The ICE30 is controlled by AVR® Studio, version 3.0 and later. The ICE30 supports the following AVR® devices:

- **ATmega103**
- **ATmega161**
- **ATmega83**
- **ATmega603**
- **ATmega163**
- **ATmega32**

Contents: • ICE30 emulator unit • Pod Card ATmegaPOD • Pod card AT90AADCPOD • Pod Card ATmega163POD • Pod Cable • ATmega161/ATmega163/ATmega83/ATmega32 Probe (DIL40) with Cable • ATmega103/ATmega603 Probe with TQFP64 Adapter, Including Cables • RS-232 Cable • Power Supply Unit • Documentation

ATICE30-ND	MEGAAVR in Circuit Emulator +SPM	**$3500.00**

AVR® ISP In-System Programmer



The Atmel AVR® ISP is an In-System Programmer for Atmel's AVR® Flash Microcontrollers. The AVR® ISP gives the designer a compact and reliable programming tool to program all In-System Programmable AVR® microcontrollers through a 6 or 10-pin ISP connector. The AVR® ISP uses AVR® Studio, Atmel's Integrated Development Environment (IDE) for code writing and debugging. The programming software can be controlled from both a Windows® environment and a DOS command-line interface. The AVR® ISP supports every AVR® except the ATtiny11 and ATtiny28.

Features: • AVR® Studio Interface • ISP Programming of all In-System Programmable AVR® Devices • Programs both Flash and EEPROM • Supports Fuse and Lock Bit Programming • Supports RC Oscillator Calibration • Upgradeable to Support Future Devices • Operates at Voltages from 2.7V to 5.5V • Adjustable Speed • Supports all Target Boards Running at a Speed Higher than 8kHz • RS-232 Interface • Powered from Target. No need for Additional Power Supply

ATAVRISP-ND	AVR® 8-Bit RISC In-System Programmer	**$29.00**

AVR® ATICE200 – Low Cost In-Circuit Emulator

The AVR® ICE 200 is a real-time In-Circuit Emulator based on a highly integrated AVR® emulator chip. The ICE 200 speeds up the co-development of software and hardware for the AVR® 8-bit RISC. The ICE 200 emulator interfaces with AVR® Studio, Atmel's Integrated Development Environment (IDE) for code writing and debugging. The AVR® ICE 200 has all the advanced features that give the user complete control of the AVR® microcontroller, combined with an intuitive user interface in AVR® Studio. This makes the AVR® ICE 200 the perfect tool to develop applications for AVR® 8-bit RISC microcontrollers. The ICE 200 emulates all the powerful features of the AVR® 8-bit RISC microcontroller. It gives read/write access to all AVR® resources such as Flash memory, EEPROM, Register file, I/O locations, Program Counter, internal and external SRAM.

The AVR® ICE 200 In-Circuit Emulator supports the following Atmel AVR® devices:

- ATtiny11
- AT90LS2333
- AT90LS4434
- ATtiny12
- AT90S4414
- AT90S8515
- AT90S1200
- AT90S4433
- AT90S8535
- AT90S2313
- AT90LS4433
- AT90LS8535
- AT90S2333
- AT90S4434

Features: • Emulates All On-Chip Functions • Real-time Operation • Symbolic Debugging Support • Unlimited Number of Breakpoints • Includes Personality Adapters for 8-pin, 20-pin, 28-pin and 40-pin AVR® devices • Non-intrusive Operation • Electrical Characteristic Identical with Real Device • Supports Assembler and C Source Level Debugging • Automatic Configuration System • 2.7V to 5.5V Operating Voltage • Low Noise Due to Special Emulator Chip Close to Target Application • Software Upgradable from AVR® Studio

ATICE200-ND	AVR® 8-Bit RISC In-Circuit Emulator	**$99.00**

NEW! AT86RF211 Transceiver

The AT86RF211 (aka: TRX01) is a single chip transceiver dedicated to low power wireless applications, optimized for license free ISM band operations from 400 MHz to 930 MHz. Its flexibility and unique level of integration makes it a natural choice for any system related to telemetry, remote controls, alarms, radio modems, automatic meter reading, hand held terminals, high-tech toys

The AT86RF211 makes bidirectional communications affordable for these applications: secured transmissions with hand-shake procedures, new features and services.

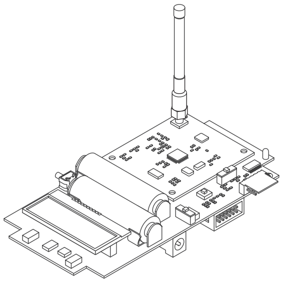
The AT86RF211 can easily be configured to provide the optimal solution for your application: choice of external filters vs technical requirements (bandwidth, selectivity, immunity, range), software protocol (single channel, multiple channel, FHSS).

The AT86RF211 is also well adapted to battery operated systems as it can be powered with only 2.4V. It also offers a "wake up" receiver feature, to save power by alerting the associated microcontroller only when a valid inquiry is detected.

- ISM bands from 400 MHz to 930 MHz
- FSK modulation; fully integrated demodulator
- Up to 14 dBm output power; 8 power levels digitally selectable
- High sensitivity: -100 dBm @ 9600 bps
- Data rate up to 50 Kbits/s (with clock recovery output)
- Power saving features: "power-down" mode, "sleep" mode, stand-alone "wake-up" procedure
- Fully integrated VC0 and synthesizer
- Fine, digital tuning of the carrier frequency (200 Hz steps)
- Fast frequency shifts (<50 µs for a 100 kHz shift) for efficient implementation of "frequency hopping" systems
- Fast RX to TX toggle time: < 200 µs
- Integrated RX/TX switch
- Easy configuration and control through dedicated registers, including digital RSSI and battery voltage readout (100% digital interface)

AT86RF211DAI-ND	Package TQFP-48	**$9.20**

NEW! AT86RF211 915MHz Evaluation Tool



The AT86RF211 Development Kit demonstrates the capability of the AT86RF211 in a real world application.

It includes:

- 2 Stand-alone devices, each including the AT86RF211 Daughter Board, antenna, AVR® motherboard plus all tools to build your stand-alone application very quickly: batteries, LCD, In System Programming, prototyping area
- Remote light measurement demo
- 1 dongle (+ PC software) for immediate evaluation of RF performances and direct access to AT86RF211's registers
- 1 CD-ROM including software functions (C-code), a User Guide, presentations
- 3 Samples of AT86RF211

The RF daughter board is available as a separate item. (Delivered with antenna and documentation).

AT86RF211DB915107-ND	Extra Daughter Board	**$129.00**
AT86RF211DK915107-ND	AT86RF211 Development Kit	**$699.00**

CYGNAL

20/25MIPS 8051 FLASH Microcontrollers

with JTAG Debugging and Precision Analog Data Converters

C8051F000 Family:

This family features a 20 to 25MIPS (max) 8051 code-compatible CPU, in-system programming/debugging, plus precision analog data converters and a rich complement of digital peripherals. All family members have 32K bytes of in-system programmable FLASH memory and 256 or 2304 bytes of SRAM. Built-in debug support and IEEE 1149.1 Boundary Scan circuitry enables low-cost, in-system debugging via JTAG interface (see Development Kit). On-board hardware digital peripherals include UART, SMBus™/I2C™, SPI™ serial interfaces; four 16-Bit timers, and a five-channel, Programmable Counter Array (PCA) useful for PWM and general purpose timing applications. The multi-channel 100ksps 10-Bit or 12-Bit SAR-type ADCs can be operated in either single-ended or differential input modes. All family members have two 12-Bit DACs, programmable voltage comparator(s), temperature sensor and voltage reference. High integration, unmatched performance, flexibility and low cost of development make the C8051F000 family the ideal choice for analog-intensive embedded applications.

C8051F020 Family:

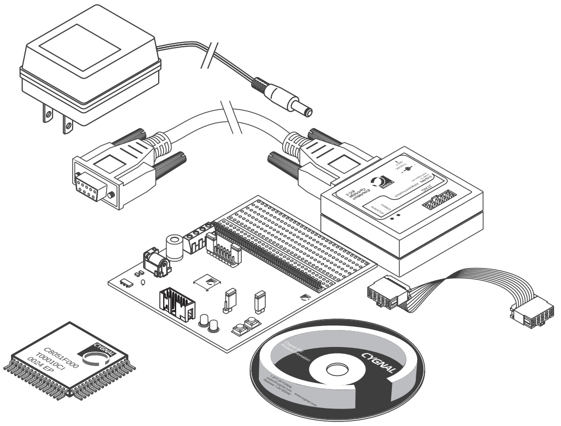
This extension of the C8051F000 family features the same 25MIPS 8051 code-compatible CPU, in-system programming/debugging, and analog and digital peripherals. In addition, it is available in a 100-pin TQFP with 64 Digital I/O, has a fully parallel External Memory Interface (EMIF) for data storage, a second UART and extra 16-Bit Timer. There is also a second ADC, which is an 8-Bit 500ksps SAR with an 8-input multiplexer. All 'F020 family members have 64K bytes of in-system programmable FLASH memory and 4352 bytes of SRAM. With its extra memory and analog/digital peripherals, the C8051F020 family is perfect for compute intensive, mixed-signal embedded applications.

C8051F200 Family:

The reduced pin-count C8051F200 family offers the same 25MIPS 8051 CPU, in-system programmability, and debugging capabilities found in the C8051F000 family. All family members have 8K bytes of in-system programmable FLASH and 256 or 1280 bytes of SRAM. Built-in debug support circuitry enables low-cost, in-system debugging via JTAG interface (see Development Kit). On-board hardware digital peripherals include UART and SPI™ serial interfaces and three 16-Bit timers. Optional analog peripherals consist of either a 12-Bit or 8-Bit 100ksps ADC and two comparators. Each I/O port pin can be configured in firmware as either digital I/O or as an ADC input. Ideal for a wide range of general purpose, embedded applications!

C8051F300 Family:

Available in the tiny 3 x 3mm 11-pin MLP package (PDIP for prototyping), the C8051F300 devices offer the same 25MIPS 8051 CPU, in-system programmability, and debugging capabilities found in Cygnal's other MCUs. All family members have 8K bytes of in-system programmable FLASH and 256 bytes of SRAM. Built-in debug support circuitry enables low-cost, in-system debugging (see Development Kit). On-board hardware digital peripherals include UART and SMBus/I2C serial interfaces, a three channel Programmable Counter Array and three 16-Bit timers. The calibrated 2% oscillator on the C8051F300 and F301 support UART operation without an external crystal oscillator. Analog peripherals consist of an 8-Bit 500ksps ADC, a temperature sensor, and one low-power comparator. Each I/O port pin can be configured in firmware as either digital I/O or analog inputs. Ideal for a wide range embedded applications where small footprint and low power are key.



Complete Development Kit:

Cygnal development kits provide a comprehensive integrated development environment for unobtrusive real-time debug IN YOUR TARGET SYSTEM!

Unlike low cost "development boards," "starter kits," or "evaluation boards" offered by others, Cygnal Development Kits offer features and performance typically found only on development systems costing thousands of dollars. These kits include serial interface hardware and cables, a Target/Prototyping board, a wall-mount power supply, and integrated development environment software (IDE). The IDE contains a full-featured, chroma-coded editor, two-pass macro-assembler with external C-compiler interface, and source-level debugger with multiple breakpoints, single-step, memory inspection/modification, watchpoints and much more. System requirements: Windows™ 95/98/NT/2000/XP, 40MB of hard disk space and RS232 COM port. The pre-assembled Target/Prototyping board has Cygnal's C8051Fxxx chip installed and contains a local power supply regulator, push-button reset switch, port I/O pushbutton and LED, and a user-prototyping area. The kit also includes a Serial Adapter, which interfaces the JTAG port of the C8051Fxxx chip to the RS-232 serial port of the user's PC.

Integrated Circuits																					Development Kits		
																	Cut Tape Price Each						
MIPS	Flash Bytes	RAM Bytes	EMIF	SMB/ I2C	SPI	UART	16-Bit Timers	PCA Chnls	DIG I/O	ADC Bits	A/D Ch.	Temp. Sensor	D/A	Comp.	Pkg.	Digi-Key Part No.*	1	25	100	Cygnal Part No.	Digi-Key Part No.	Price Each	Cygnal Part No.
20	32k	256	—	√	√	1	4	5	32	12	8	√	2	2	64TQFP	336-1000-1-ND	27.48	20.06	15.08	C8051F000	336-1014-ND	99.00	C8051F000DK-U
20	32k	256	—	√	√	1	4	5	16	12	8	√	2	2	48TQFP	336-1001-1-ND	26.38	19.25	14.48	C8051F001			
20	32k	256	—	√	√	1	4	5	8	12	4	√	2	1	32LQFP	336-1002-1-ND	25.64	18.72	14.07	C8051F002			
25	32k	2304	—	√	√	1	4	5	32	12	8	√	2	2	64TQFP	336-1003-1-ND	31.51	23.00	17.29	C8051F005	336-1017-ND	99.00	C8051F005DK-U
25	32k	2304	—	√	√	1	4	5	16	12	8	√	2	2	48TQFP	336-1004-1-ND	30.41	22.20	16.69	C8051F006			
25	32k	2304	—	√	√	1	4	5	8	12	4	√	2	1	32LQFP	336-1041-1-ND	30.04	21.93	16.49	C8051F007			
20	32k	256	—	√	√	1	4	5	32	10	8	√	2	2	64TQFP	336-1005-1-ND	23.81	17.40	13.07	C8051F010	336-1019-ND	99.00	C8051F010DK-U
20	32k	256	—	√	√	1	4	5	16	10	8	√	2	2	48TQFP	336-1006-1-ND	22.71	16.58	12.47	C8051F011			
20	32k	256	—	√	√	1	4	5	8	10	4	√	2	1	32LQFP	336-1007-1-ND	21.61	15.78	11.86	C8051F012			
25	32k	2304	—	√	√	1	4	5	32	10	8	√	2	2	64TQFP	336-1030-1-ND	27.84	20.32	15.28	C8051F015	336-1037-ND	99.00	C8051F015DK-U
25	32k	2304	—	√	√	1	4	5	16	10	8	√	2	2	48TQFP	336-1031-1-ND	26.74	19.52	14.68	C8051F016			
25	32k	2304	—	√	√	1	4	5	8	10	4	√	2	1	32LQFP	336-1042-1-ND	25.64	18.72	14.07	C8051F017			
25	16k	1280	—	√	√	√	4	5	32	10	8	√	—	2	64TQFP	336-1048-1-ND *NEW!*	19.34	14.12	10.62	C8051F018			
25	16k	1280	—	√	√	√	4	5	16	10	8	√	—	2	48TQFP	336-1049-1-ND *NEW!*	18.17	13.27	9.98	C8051F019			
25	64k	4352	√	√	√	2	5	5	64	12	8	√	2	2	100TQFP	336-1032-1-ND	36.42	26.58	19.99	C8051F020	336-1038-ND	129.00	C8051F020DK-U
25	64k	4352	√	√	√	2	5	5	32	12	8	√	2	2	64TQFP	336-1033-1-ND	34.52	25.19	18.94	C8051F021			
25	64k	4352	√	√	√	2	5	5	64	10	8	√	2	2	100TQFP	336-1034-1-ND	32.64	23.83	17.91	C8051F022			
25	64k	4352	√	√	√	2	5	5	32	10	8	√	2	2	64TQFP	336-1035-1-ND	30.85	22.52	16.93	C8051F023			
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25	8k	256	—	—	√	1	3	—	32	8	32	—	—	2	48TQFP	336-1008-1-ND	11.55	8.43	6.34	C8051F220	336-1024-ND	99.00	C8051F226DK-U
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25	8k	1280	—	—	√	1	3	—	32	8	32	—	—	2	48TQFP	336-1010-1-ND	13.74	10.03	7.54	C8051F226			
25	8k	256	—	—	√	1	3	—	32	—	—	—	—	2	48TQFP	336-1011-1-ND	9.72	7.10	5.33	C8051F230			
25	8k	256	—	—	√	1	3	—	22	—	—	—	—	2	32LQFP	336-1012-1-ND	9.35	6.82	5.13	C8051F231			
25	8k	1280	—	—	√	1	3	—	32	—	—	—	—	2	48TQFP	336-1013-1-ND	11.91	8.69	6.53	C8051F236			
25	8k	256	—	√	—	1	3	3	8	8	8	√	—	1	11-MLP	336-1043-1-ND	10.59	7.73	5.81	C8051F300	336-1047-ND	99.00	C8051F300DK-U
25	8k	256	—	√	—	1	3	3	8	—	—	—	—	1	11-MLP	336-1044-1-ND	9.93	7.25	5.45	C8051F301			
25	8k	256	—	√	—	1	3	3	8	8	8	√	—	1	11-MLP	336-1045-1-ND	8.76	6.39	4.81	C8051F302			
25	8k	256	—	√	—	1	3	3	8	—	—	—	—	1	11-MLP	336-1046-1-ND	8.10	5.91	4.44	C8051F303			
25	8k	256	—	√	—	1	3	3	8	8	8	√	—	1	14-Dip	336-1050-5-ND†	10.59	—	—	C8051F300P			

* For Tape and Reel Part No., change the -1 to -2. Please call 1-800-DIGI-KEY for Tape and Reel Pricing. † Dip version for development purposes.

Jackrabbit™ Low-Cost Single-Board Computer

This high-performance single-board computer from Z-World is stocked with I/O, memory, and communication ports. Measuring just 2.5" x 3.5", the Jackrabbit is perfect for embedded control. The Jackrabbit's remarkably low price point, fast execution speed, floating point capability, and interactive debugging make it ideal for OEM applications. The Jackrabbit also offers great flexibility for applications by providing extensive RAM, I/O and code space. Software for the Jackrabbit is developed using industry-proven Dynamic C® an integrated C-language development package that includes an interactive compiler, editor and debugger — making the Jackrabbit easy to program and develop.

Model BL1800: • **Board Size:** 2.50" x 3.50" x 0.94" (64 mm x 89 mm x 24 mm) • **Input Voltage:** 8-40VDC, switching regulator, 49 mA typ. at 24VDC • **General Purpose I/O:** 14 bi-directional, 6 inputs, 4 outputs (CMOS compatible) • **High Power Outputs:** 3 sinking (1 Amp) and 1 sourcing (500mA) • **1 Analog Input:** 9-bit resolution, 8-bit accuracy, 0.1-2.8V input range, 75ms typ. acquisition time • **2 Analog Outputs:** Filtered/buffered PWM outputs • **Processor:** Rabbit 2000, clock, 29.5MHz • **Memory:** SRAM 128K, flash 256K • **Timers:** Five 8-bit cascadable timers, one 10-bit timer with 2 match registers • **Serial Ports:** (2) RS-232 (or one with CTS/RTS) rated at 1KV ESD, (1) RS-485 rated at 15kV ESD, (1) 5V CMOS compatible (programming port), 2 serial ports can be clocked • **Serial Rate**: selectable baud rates up to 115,200 bps (RS-232), 230,400 bps (RS-485). 5 Volt CMOS compatible port up to 7.37Mbps • **Additional Features:** watchdog/supervisor, time/date clock, and backup battery

Model BL1810: Same as BL1800, except with 14.7MHz clock, 128K flash, linear regulator (8-25V), 3 sinking (200mA) and 1 sourcing (100mA) high-voltage outputs, and CMOS port baud rate of 3.69Mbps.

Model BL1820: Same as BL1810, except no RS-485, no backup battery or battery circuitry, and 3 additional I/O

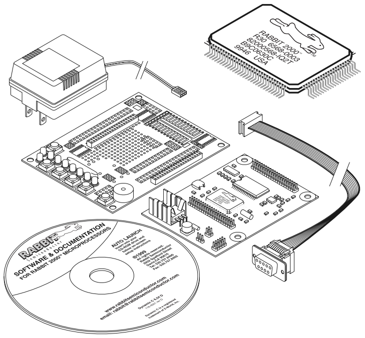
Description	Digi-Key Part No.	Price Each 1	5	25	Z-World Part No.
Model BL1800	316-1011-ND	99.00	—	—	101-0356
Model BL1810	316-1001-ND	69.07	65.00	61.00	101-0357
Model BL1820	316-1002-ND	49.05	46.00	43.00	101-0358

Jackrabbit™ Development Kit

Digi-Key Part No. 316-1000-ND Only **$139.00**

Includes Jackrabbit BL1810, manual, schematics, AC adapter, prototyping board, programming cable, documentation on CD ROM, additional parts, and complete Dynamic C SE software development system (not a trial version).

Rabbit 2000™ 8-Bit Microprocessor



The Rabbit 2000 is a high-performance, 8-bit microprocessor distinguished by its C-friendly instruction set, fast number crunching ability and numerous on-chip peripherals. Built-in features include 4 serial ports, a slave port, remote bootstrap capability, advanced clocking options, and glueless interface to both memory and I/O — making hardware design easy. With a maximum clock speed of 30 MHz, and optimized C-oriented instruction set, the Rabbit 2000 outperforms alternative 16 and 32-bit processors at a much lower system cost. Supported by industry-proven Dynamic C® from Z-World, the Rabbit 2000 can handle C-language applications of approximately 1 megabyte (50,000+ C statements). Dynamic C provides an interactive compiler, editor, and source-level debugger. Numerous application libraries are also included. This close integration of hardware and software shortens development time and makes programming much easier.

Rabbit 2000 Advantages

• Architecture for enhanced math performance • Glueless memory and I/O interface • Remote cold boot • Slave interface • 4 serial ports • 40-plus multifunctional I/O pins • Battery-backable real-time clock • Watchdog timer • Five 8-bit cascadable timers and 2 10-bit timers with match registers • 488 microsecond periodic interrupt • Clocking options for low power applications

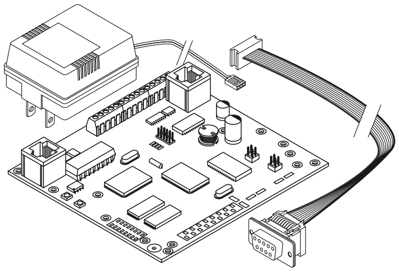
Description	Digi-Key Part No.	Price Each 2	10	100	Rabbit Part No.
Rabbit 2000	316-1004-ND	12.75	11.75	10.75	668-0003

Rabbit 2000™ Development Kit

Digi-Key Part No. 316-1003-ND Only **$139.00**

Kit includes Jackrabbit single board computer, manual, schematics, AC adapter, prototyping board, programming cable, documentation on CD ROM, additional parts, and complete Dynamic C SE software development system (not a trial version).

Rabbit 2000™ 8-Bit Microprocessor with TCP/IP Support



The Rabbit 2000 is now available with full TCP/IP support! The Rabbit 2000 is a high-performance, 8-bit microprocessor distinguished by its C-friendly instruction set, fast number crunching ability and numerous on-chip peripherals.

Built-in features include 4 serial ports, a slave port, remote bootstrap capability, advanced clocking options, and glueless interfacing to both memory and I/O. Full TCP/IP source code for the Rabbit 2000 is provided with Dynamic C® software on CD-ROM. ICMP, HTTP, DCHP (includes facilities for SSI, CGI routines, cookies, and basic authentication), SMTP, FTP and TFTP (client and server) capabilities are provided. Ethernet drivers for the Realtek NE2000 compatible chipset are also included.

Supported by industry-proven Dynamic C, the Rabbit 2000 handles C-language applications of approximately 1 megabyte (50,000+ C statements). Software development is easier and fast using Dynamic C's interactive compiler, editor, and source-level debugger. Numerous application libraries are also included.

Rabbit 2000 TCP/IP Design Advantages

- Cost-effective – no run-time royalties!
- Develop robust 10baseT Ethernet applications
- Write directly to TCP or UDP sockets
- Development board includes RS-232 and RS-485 ports, 4 high-current outputs (200mA) 4 digital inputs, 512K flash, 128K SRAM, Five 8-bit cascadable timers and 2 10-bit timers with match registers, a real time battery-backable clock and 10baseT Ethernet interface

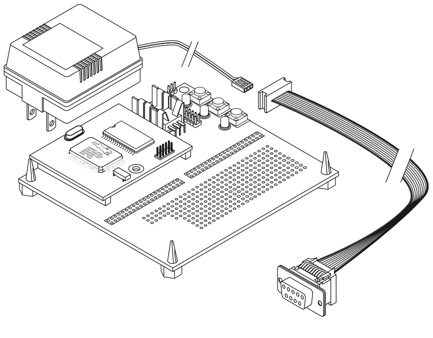
Description	Digi-Key Part No.	Price Each	Rabbit Part No.
Rabbit 2000 TCP/IP Toolkit	316-1006-ND	99.00	101-0403

Rabbit 2000™ TCP/IP Development Kit

Digi-Key Part No. 316-1005-ND Only **$199.00**

Kit includes Rabbit 2000™ TCP/IP development board (with Rabbit 2000 microprocessor, flash, SRAM, Ethernet hardware, 8 digital I/O), demonstration board, power supply, PC serial cable for real-time debugging, and complete Dynamic C SE software development system with TCP/IP on CD ROM (not a trial version).

RabbitCore 2000™ Microprocessor Core Module



A more powerful alternative to a microcontroller, the RabbitCore 2000 will jump-start your board design. Included are general-purpose I/O memory I/O interface, backup interface and master-slave control pins. Dual 40-pin male connectors on the RabbitCore 2000 mate with common dual-row 2mm sockets on your board. Flash and SRAM are on-board, providing a development-ready memory interface. Five parallel ports provide up to 40 parallel I/O lines that may be used to interface to nearly any digital device. Its 8-bit data bus lines, 13 address lines and necessary strobes are provided to easily interface communications peripherals, I/O registers or small memories as I/O devices, external memory. Programs are created using Z-World's Dynamic C®, a C language environment that includes an editor, compiler and debugger. The RabbitCore 2000 is ideal for reducing production costs, prototyping a new design, and time-to-market of your product.

RabbitCore 2000

• **Board Size:** 1.90" x 2.30" x 0.50" (48.3mm x 58.4mm x 12.7mm) • **Input Voltage:** 4.75-5.25V DC • **Current:** 98mA at 18.432 MHz, 5V DC (130mA at 25.8 MHz, 5V DC) • **Processor:** Rabbit 2000 • **General Purpose I/O:** 40 parallel I/O lines grouped in five 8-bit ports (shared with serial ports) • **Memory, I/O Interface:** 13 Address lines, 8 data lines, I/0 read/write, buffer enable, status, clock • **Additional Digital Inputs:** (2), start up mode (for master/slave), reset in • **Additional Digital Outputs:** Watchdog output, reset out • **Clock:** 18.432 MHz - 25.8 Mhz (see versions) • **SRAM:** 128K - 512K, (see versions) • **Flash:** 256K • **Timers:** Five 8-bit cascadable timers, one 10-bit timers with 2 match registers. • **Serial Ports:** 4 CMOS-compatible ports. Max asynchronous baud rate is 806,400bps, max synchronous is 6.45Mbps. Two ports are configurable as clocked ports • **Slave Interface:** Allows the RabbitCore 2000 to be used as an intelligent peripheral device slaved to a master processor • **Additional Features:** Watchdog supervisor, time/date clock, backup battery circuitry and connections for user-supplied battery. Mates to your board via dual 40-pin male connectors.

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM2000 (25.8 MHz clock and 512K SRAM)	316-1008-ND	69.00	101-0404
RCM2010 (25.8 MHz clock and 128K SRAM)	316-1009-ND	49.00	101-0405
RCM2020 (18.432 MHz clock and 128K SRAM)	316-1010-ND	39.00	101-0383

RabbitCore 2000™ Development Kit

Digi-Key Part No. 316-1007-ND Only **$169.00**

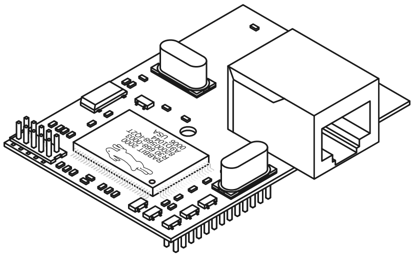
Kit includes a model RCM2020, manual with schematics and documentation on CD-ROM, getting started guide, AC adapter, prototyping board, programming cable, and complete Dynamic C SE software development system on CD-ROM (not a trial version).

RabbitCore™ RCM2200 Microprocessor Core Module

At only 1.6" x 2.3" x 0.86", this compact microprocessor core module with integrated Ethernet facilitates rapid development of embedded systems, giving designers a complete package for control and communication with instant local or worldwide connectivity. Included are general-purpose I/O, memory I/O interface, battery-backable clock, cold boot capability, and a slave mode operation. The integrated Ethernet port frees designers from the limitations of serial port communications. Embedded systems using the RCM2200 can be controlled and monitored (as well as programmed and debugged when using appropriate accessory hardware) across any network or the Internet. Two 26-pin male connectors on the RCM2200 mate with common dual-row 2 mm sockets on your board. Flash and SRAM are onboard, providing a development-ready memory interface. 26 parallel I/O lines may be used to interface to almost any digital device. 8-bit bi-directional data bus lines, 4 address lines, and the necessary strobes are provided to easily interface communications peripherals, input or output registers, or small memories as I/O devices. Programs are created using Z-World's Dynamic C® , a user-friendly C-language environment that includes an editor, compiler, and debugger with royalty-free TCP/IP stack in source form. To permit parallel development, the RCM2200 is pin-compatible with the non-Ethernet RCM2300.

RabbitCore RCM2200

• Board Size: 1.60" x 2.30" x 0.86" (41 mm x 59 mm x 22 mm) • Input Voltage: 4.75–5.25V DC • Current: 134 mA at 5 V DC • Processor: Rabbit 2000 • General Purpose I/0: 26 parallel I/O lines grouped in five 8-bit ports (shared with serial ports) • Memory, I/0 Interface: 4 address lines, 8 data lines, I/O Read-Write • Additional Digital Inputs: Startup mode, reset • Additional Digital Outputs: Status, reset • Clock: 22.1 MHz • SRAM: 128K, surface mount • Flash: 256K, surface mount • Timers: Five 8-bit timers, one 10-bit timer. Five timers are cascadable in pairs • Serial Ports: 4 CMOS-compatible ports. Max asynchronous baud rate is 691,000 bps, max synchronous is 5.53 Mbps. Two ports are configurable as clocked ports • Slave Interface: Allows the RCM2200 to be used as an intelligent peripheral device slaved to a master processor • Additional Features: Watchdog/supervisor, time/date clock, backup battery circuitry, and connection for user-supplied battery



RabbitCore™ RCM2200 Development Kit

Digi-Key Part No. 316-1012-ND Only **$239.00**

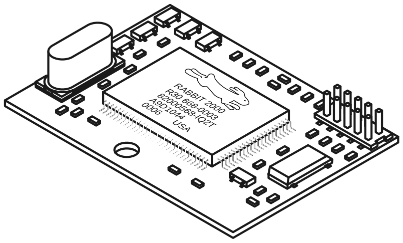
Kit includes RCM2200 core module (Ethernet, 256K Flash, 128K SRAM), Getting Started manual with schematics, DC power supply (U.S. only), prototyping board, PC serial cable, and complete Dynamic C SE software development system (not a trial version!) and complete documentation on CD-ROM.

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM2200	316-1013-ND	49.00	101-0454

RabbitCore™ RCM2300 Microprocessor Core Module

This ultra-compact microprocessor core module measures only 1.15" x 1.60" x 0.47", opening up a world of new design options for economical control products. Included are general-purpose I/O, memory I/O interface, battery-backable clock, cold boot capability, and a slave mode operation. Two 26-pin male connectors on the RCM2300 mate with common dual-row 2 mm sockets on your board. Flash and SRAM are onboard, providing a development-ready memory interface. 29 parallel I/O lines may be used to interface to almost any digital device. 8-bit bi-directional data bus lines, 4 address lines, and the necessary strobes are provided to easily interface communications peripherals, input or output registers, or small memories as I/O devices. Programs are created using Z-World's Dynamic C® , a user-friendly C-language environment that includes an editor, compiler and debugger. To permit parallel development, the RCM2300 is pin-compatible with the Ethernet RCM2200.

RabbitCore RCM2300: • Board Size: 1.15" x 1.60" x 0.47" (29 mm x 41 mm x 12 mm) • Input Voltage: 4.75–5.25V DC • Current: 108 mA at 5 V DC • Processor: Rabbit 2000 • General Purpose I/0: 29 parallel I/O lines grouped in five 8-bit ports (shared with serial ports) • Memory, I/0 Interface: 4 address lines, 8 data lines, I/O Read-Write (extra address line and Buffer Enable via separate connections) • Additional Digital Inputs: Startup mode, reset • Additional Digital Outputs: Status, reset • Clock: 22.1 MHz • SRAM: 128K, surface mount • Flash: 256K, surface mount • Timers: Five 8-bit timers, one 10-bit timer. Five timers are cascadable in pairs • Serial Ports: 4 CMOS-compatible ports. Max asynchronous baud rate is 691,000 bps, max synchronous is 5.53 Mbps. Two ports are configurable as clocked ports • Slave Interface: Allows the RCM2300 to be used as an intelligent peripheral device slaved to a master processor • Additional Features: Watchdog/supervisor, time/date clock, backup battery circuitry, and connection for user-supplied battery



RabbitCore™ RCM2300 Development Kit

Digi-Key Part No. 316-1015-ND Only **$199.00**

Kit includes RCM2300 core module (256K Flash, 128K SRAM), Getting Started manual with schematics, DC power supply (U.S. only), prototyping board, PC serial cable, and complete Dynamic C SE software development system (not a trial version!) and complete documentation on CD-ROM.

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM2300	316-1014-ND	39.00	101-0453

Interactive Speech™ Voice Extreme™ Toolkit

Voice Extreme™ is a programmable module and suite of development tools for building interactive speech applications quickly and easily. Using a highly integrated, low cost chip, developers can write programs in VE-C, a high-level language very similar to ANSI-C. VE-C provides access to numerous voice and audio technologies, in addition to hardware features such as I/O ports, timers and an RS-232 interface.

A Voice Extreme™ application consists of a program file plus any data files it needs, linked together into a binary image file that can be downloaded to a 2Mbit flash memory. This program is then executed by the Voice Extreme™ interpreter, which runs in ROM on the VE IC. Because the VE IC has speech processing technology code already in firmware, application code is compact and executes quickly.

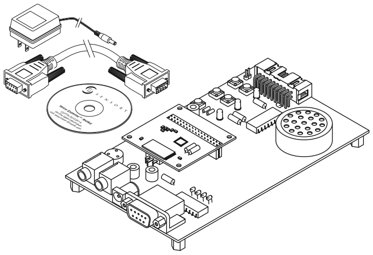
Speaker Independent: No Training Required **Speaker Dependent:** Custom Commands **Speaker Verification:** Voice Password **Continuous Listening:** Gateway Access **Word Spotting:** Identifies a Phrase Out of a Sentence **Speech Synthesis:** Custom Prompts **Record & Playback Music2:** 4-Voice, Midi-Style **DTMF Generation:** Touch Tone Dialing

Kit contains: • Voice Extreme™ Development Board with Built-in Microphone and Speaker • Voice Extreme™ Module • Power Supply • Serial Cable for PC RS-232 Connection • Quick Start Guide **Software CD Containing:** • Voice Extreme™IDE • Quick Synthesis™ • Sample projects and data • Documentation

Voice Extreme™ IDE: IDE Features: Editor with source-level debug Project Management and Project Editing Single button builder that parses, assembles, links and checks the project Syntax coloring, macro generation, bookmarks, line reminders and other utilities Integrated batch-mode device programmer

Quick Synthesis™
The Sensory Quick Synthesis™ tool is designed to help create and manage speech synthesis for Voice Extreme and other Sensory RSC microcontroller applications. Now any .wav file can be converted into a file format compatible with the Voice Extreme IC and other Sensory speech processors. This process can be done quickly and without the use of a Sensory linguist.

System Requirements: • Windows (95/98/ME/NT/2000) • 16MB RAM • 15MB Free Hard Disk Space • RS-232 Port



Description	Digi-Key Part No.	Price Each	Rabbit Part No.
Voice Extreme Toolkit	VEKIT-ND	129.00	EEKVXTHSX
Voice Extreme Module	VEMOD-ND	59.00	EPMVXTHSX

Voice Direct™ 364 Speech Recognition Kit

Bring life to consumer electronics, toys, motors, appliances, lights, and games through the power of VoiceActivation™!

Sensory's Voice Direct™ 364 Speech Recognition Kit delivers state-of-the-art technology in an affordable, easy to assemble module. This kit is an easy-to-use tool for adding voice recognition to a range of applications limited only by your imagination.

The Voice Direct™ 364 is a speaker-dependent speech recognition module, allowing training of up to 15 words (capable of being organized into 1 to 3 command sets). Using sophisticated speech recognition technology, Voice Direct™ 364 maps spoken commands to system control functions. Each time one of the words is recognized, output pins on the module are toggled high for 1 second. With proper use, greater than 99% recognition accuracy can be achieved.

New Continuous Listening Technology is "always on" — meaning no button press is required! Up to 3 "gateway" words can be programmed, each allowing access to 5 commands. In addition, the Voice Direct™ 364 technology builds on the original Voice Direct™ by offering even greater accuracy, faster response times, and improved noise immunity. Minimal programming and effort required.

Features: • Minimal external components • Recognizes up to 15 words or phrases • Over 99% recognition accuracy • Phrase recognition up to 2.5 seconds • User-friendly speech prompting • Quick setup time

Kit Contains: • Voice Direct™ 364 Module • Microphone element • Speaker (2.25", 8 ohm) • Microswitches (4 pieces) • Passive component selection to configure the module • Quick Setup Guide

Additional Required Tools and Components: • Power Source (4.5-5.25V @ 100mA, three 1.5 alkaline batteries recommended) • Soldering iron • Multimeter • 0.1" M/F headers • 3" x 3" proto or perf board • Hookup wire

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
Voice Direct™ 364 Speech Recognition Kit	VD364KIT-ND	49.00	EEKVT3DSX

Winbond
Electronics Corporation America

Single-Chip Voice Record/Playback Devices

General Description: Winbond's patented ChipCorder® technology is a revolutionary multilevel technique to record and play back sound on a single chip. The advanced technology provides natural sound reproduction, in a cost-effective device that retains stored messages in the event of power loss or battery replacement.

The technology, based on a unique multilevel storage approach, stores multiple voltage levels into previously binary, two level EEPROM memory cells. Unlike traditional voice solutions whereby voice is digitized, the Winbond approach stores analog signals directly into single cells as one of over 250 levels.

All ChipCorder products integrate the oscillator, microphone pre-amplifier, automatic gain control, anti-aliasing filter, smoothing filter, and speaker amplifier on-chip to achieve a complete "system on a chip." Only a microphone, speaker, power source, and a few passive components are needed to implement a complete record/playback function.

ISD1100 Series

Description: The ISD1100 has been designed for low-cost consumer applications where a bare die is mounted directly to the PC board. The inclusion of pull-up or pull-down resistors on the input pins minimizes the number of signals used and the number of external components or bonding wires required.

Features: • Pushbutton interface • 5 volt operating range • Automatic power-down

ISD1200 Series

Description: The ISD1200 offers a simple push-button interface coupled with the automatic power-down feature. It offers full addressability to handle multiple messages on a single chip. It is ideal for toy applications.

Features: • 5 volt operating range • Automatic power-down • Fully addressable to handle multiple messages

ISD1400 Series

Description: The ISD1400 expands on the simple push-button interface of the ISD1200, with longer storage durations of 16 and 20 seconds. It offers full addressability to handle multiple messages on a single chip and is widely used in communication and consumer applications.

Features: • 5 volt operating range • Automatic power-down • Fully addressable to handle multiple messages

ISD2500 Series

Description: The ISD2500 family offers improvement in speech length up to a maximum of 90 seconds. This extends the single-chip voice solution to industrial and high-end consumer applications. This family offers sound capability for new applications such as cellular phones, answering machines, voice-response faxes, copy machines and industrial applications where voice prompting provides product differentiation for equipment and manufacturers.

Features: • 5 volt operating range • Fully addressable to handle multiple messages • Directly cascadable for longer durations • Automatic power-down (push-button mode)

ISD400X Series

Description: The ISD4000 series provides high-quality, 3-volt, single-chip record/playback solutions for 2 to 4 minutes (ISD4002), 4 to 8 minutes (ISD4003), and 8 to 16 minutes (ISD4004) messaging applications. These CMOS-based devices include an on-chip oscillator, anti-aliasing filter, smoothing filter, AutoMute™ feature, audio amplifier, and high density, multilevel Flash storage array.

Features: • Single +3 volt supply • Low-power consumption • AutoMute feature to provide background noise attenuation • Fully addressable to handle multiple messages • On-chip clock source • Microcontroller SPI or Microwire™ Serial Interface

ISD5008 Series

Description: The ISD5008 device is designed for use in a microprocessor- or microcontroller-based system. Address, control, and duration selection are accomplished through a Serial Peripheral Interface (SPI) or Microwire Serial Interface to minimize pin count. Recordings are stored in on-chip nonvolatile memory cells, providing zero-power message storage. Voice and audio signals are stored directly into solid-state memory in their natural, uncompressed form, providing superior quality voice and music reproduction.

Features: • Fully-integrated solution • Low-power consumption • Single +3 volt supply • Enhanced voice features • Easy-to-use and control • High quality solution

ISD5116 Series

Description: The ISD5116 ChipCorder Product provides high quality, fully integrated, single-chip Record/Playback solutions for 8-16 minute messaging applications that are ideal for use in cellular phones, automotive communications, GPS/navigation systems and other portable products.

Features: Fully-integrated solution: • Single-chip voice record/playback solution. • Low-power consumption supports 2.0V and 3.0V interface logic • Enhanced voice features • Digital memory features up to 4 MB • Easy-to-use and control • High quality voice and music reproduction

Duration	Interface	Input Sample Rate	Filter Pass Band	Pkg.	Digi-Key Part No.	Price Each			Winbond Part No.
						1	10	25	
10 Sec.	Pushbutton	6.4KHz	2.6KHz	28 Dip	ISD1110P-ND	4.50	3.60	3.00	ISD1110P
10 Sec.	Pushbutton	6.4KHz	2.6KHz	28-SOIC	ISD1110S-ND	4.50	3.60	3.00	ISD1110S
12 Sec.	Pushbutton	5.3KHz	2.2KHz	28 Dip	ISD1212P-ND	4.50	3.60	3.00	ISD1212P
12 Sec.	Pushbutton	5.3KHz	2.2KHz	28-SOIC	ISD1212S-ND	4.50	3.60	3.00	ISD1212S
16 Sec.	Pushbutton	8.0KHz	3.3KHz	28 Dip	ISD1416P-ND	5.63	4.50	3.76	ISD1416P
16 Sec.	Pushbutton	8.0KHz	3.3KHz	28-SOIC	ISD1416S-ND	5.63	4.50	3.76	ISD1416S
20 Sec.	Pushbutton	6.4KHz	2.6KHz	28 Dip	ISD1420P-ND	5.63	4.50	3.76	ISD1420P
20 Sec.	Pushbutton	6.4KHz	2.6KHz	28-SOIC	ISD1420S-ND	5.63	4.50	3.76	ISD1420S
1 Min.	Button/MCU	8.0KHz	3.4KHz	28 Dip	ISD2560P-ND	9.58	7.66	6.38	ISD2560P
75 Sec.	Button/MCU	6.4KHz	2.7KHz	28 Dip	ISD2575P-ND	9.58	7.66	6.38	ISD2575P
90 Sec.	Button/MCU	5.3KHz	2.3KHz	28 Dip	ISD2590P-ND	9.58	7.66	6.38	ISD2590P
2 Min.	Button/MCU	4.0KHz	1.7KHz	28 Dip	ISD25120P-ND	9.58	7.66	6.38	ISD25120P
2 Min.	Button/MCU	4.0KHz	1.7KHz	28-SOIC	ISD25120S-ND	9.58	7.66	6.38	ISD25120S
48 Sec.	Button/MCU	5.3KHz	2.3KHz	28 Dip	ISD2548P-ND	7.23	5.78	4.82	ISD2548P
48 Sec.	Button/MCU	5.3KHz	2.3KHz	28-SOIC	ISD2548S-ND	7.23	5.78	4.82	ISD2548S
1 Min.	Button/MCU	8.0KHz	3.4KHz	28-SOIC	ISD2560S-ND	9.58	7.66	6.38	ISD2560S
75 Sec.	Button/MCU	6.4KHz	2.7KHz	28-SOIC	ISD2575S-ND	9.58	7.66	6.38	ISD2575S
2 Min.	SPI/Microwire	8.0KHz	3.4KHz	28 Dip	ISD4002-120P-ND	8.75	7.00	5.84	ISD4002-120P
2 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-SOIC	ISD4002-120S-ND	8.75	7.00	5.84	ISD4002-120S
2 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-TSOP	ISD4002-120E-ND	8.75	7.00	5.84	ISD4002-120E
150 Sec.	SPI/Microwire	6.4KHz	2.7KHz	28 Dip	ISD4002-150P-ND	8.88	7.10	5.92	ISD4002-150P
150 Sec.	SPI/Microwire	6.4KHz	2.7KHz	28-SOIC	ISD4002-150S-ND	8.88	7.10	5.92	ISD4002-150S
150 Sec.	SPI/Microwire	6.4KHz	2.7KHz	28-TSOP	ISD4002-150E-ND	8.88	7.10	5.92	ISD4002-150E
3 Min.	SPI/Microwire	5.3KHz	2.3KHz	28 Dip	ISD4002-180P-ND	9.00	7.20	6.01	ISD4002-180P
3 Min.	SPI/Microwire	5.3KHz	2.3KHz	28-SOIC	ISD4002-180S-ND	9.00	7.20	6.01	ISD4002-180S
3 Min.	SPI/Microwire	5.3KHz	2.3KHz	28-TSOP	ISD4002-180E-ND	9.00	7.20	6.01	ISD4002-180E
4 Min.	SPI/Microwire	4.0KHz	1.7KHz	28 Dip	ISD4002-240P-ND	9.13	7.30	6.09	ISD4002-240P
4 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-SOIC	ISD4002-240S-ND	9.13	7.30	6.09	ISD4002-240S
4 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-TSOP	ISD4002-240E-ND	9.13	7.30	6.09	ISD4002-240E
4 Min.	SPI/Microwire	8.0KHz	3.4KHz	28 Dip	ISD4003-04MP-ND	10.75	8.60	7.17	ISD4003-04MP
4 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-SOIC	ISD4003-04MS-ND	10.75	8.60	7.17	ISD4003-04MS
4 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-TSOP	ISD4003-04ME-ND	10.75	8.60	7.17	ISD4003-04ME
5 Min.	SPI/Microwire	6.4KHz	2.7KHz	28 Dip	ISD4003-05MP-ND	10.88	8.70	7.26	ISD4003-05MP
5 Min.	SPI/Microwire	6.4KHz	2.7KHz	28-SOIC	ISD4003-05MS-ND	10.88	8.70	7.26	ISD4003-05MS
5 Min.	SPI/Microwire	6.4KHz	2.7KHz	28-TSOP	ISD4003-05ME-ND	10.88	8.70	7.26	ISD4003-05ME
6 Min.	SPI/Microwire	5.3KHz	2.3KHz	28 Dip	ISD4003-06MP-ND	11.00	8.80	7.33	ISD4003-06MP
6 Min.	SPI/Microwire	5.3KHz	2.3KHz	28-SOIC	ISD4003-06MS-ND	11.00	8.80	7.33	ISD4003-06MS
6 Min.	SPI/Microwire	5.3KHz	2.3KHz	28-TSOP	ISD4003-06ME-ND	11.00	8.80	7.33	ISD4003-06ME
8 Min.	SPI/Microwire	4.0KHz	1.7KHz	28 Dip	ISD4003-08MP-ND	11.13	8.90	7.42	ISD4003-08MP
8 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-SOIC	ISD4003-08MS-ND	11.13	8.90	7.42	ISD4003-08MS
8 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-TSOP	ISD4003-08ME-ND	11.13	8.90	7.42	ISD4003-08ME
8 Min.	SPI/Microwire	8.0KHz	3.4KHz	28 Dip	ISD4004-08MP-ND	15.38	12.30	10.26	ISD4004-08MP
8 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-SOIC	ISD4004-08MS-ND	15.38	12.30	10.26	ISD4004-08MS
8 Min.	SPI/Microwire	8.0KHz	3.4KHz	28-TSOP	ISD4004-08ME-ND	15.38	12.30	10.26	ISD4004-08ME
10 Min.	SPI/Microwire	6.4KHz	2.7KHz	28 Dip	ISD4004-10MP-ND	15.50	12.40	10.35	ISD4004-10MP
10 Min.	SPI/Microwire	6.4KHz	2.7KHz	28-SOIC	ISD4004-10MS-ND	15.50	12.40	10.35	ISD4004-10MS
10 Min.	SPI/Microwire	6.4KHz	2.7KHz	28-TSOP	ISD4004-10ME-ND	15.50	12.40	10.35	ISD4004-10ME
12 Min.	SPI/Microwire	5.3KHz	2.3KHz	28 Dip	ISD4004-12MP-ND	15.63	12.50	10.42	ISD4004-12MP
12 Min.	SPI/Microwire	5.3KHz	2.3KHz	28-SOIC	ISD4004-12MS-ND	15.63	12.50	10.42	ISD4004-12MS
12 Min.	SPI/Microwire	5.3KHz	2.3KHz	28-TSOP	ISD4004-12ME-ND	15.63	12.50	10.42	ISD4004-12ME
16 Min.	SPI/Microwire	4.0KHz	1.7KHz	28 Dip	ISD4004-16MP-ND	15.75	12.60	10.51	ISD4004-16MP
16 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-SOIC	ISD4004-16MS-ND	15.75	12.60	10.51	ISD4004-16MS
16 Min.	SPI/Microwire	4.0KHz	1.7KHz	28-TSOP	ISD4004-16ME-ND	15.75	12.60	10.51	ISD4004-16ME
4-8 Min.	SPI/Microwire	4.0-8.0KHz	1.7-3.4KHz	28 Dip	ISD5008P-ND	13.75	11.00	9.17	ISD5008P
4-8 Min.	SPI/Microwire	4.0-8.0KHz	1.7-3.4KHz	28-SOIC	ISD5008S-ND	13.75	11.00	9.17	ISD5008S
4-8 Min.	SPI/Microwire	4.0-8.0KHz	1.7-3.4KHz	28-TSOP	ISD5008E-ND	13.75	11.00	9.17	ISD5008E
8-16 Min.	SPI/Microwire	4.0-8.0KHz	1.7-3.4KHz	28 Dip	ISD5116P-ND	14.75	11.80	9.84	ISD5116P
8-16 Min.	SPI/Microwire	4.0-8.0KHz	1.7-3.4KHz	28-SOIC	ISD5116S-ND	14.75	11.80	9.84	ISD5116S
8-16 Min.	SPI/Microwire	4.0-8.0KHz	1.7-3.4KHz	28-TSOP	ISD5116E-ND	14.75	11.80	9.84	ISD5116E

Quadravox

QV400D: Prototype Programming Kit for Winbond ChipCorder Devices

System Overview:

QV400D™ provides all the software and hardware functions needed to develop complex messaging systems using Winbond's ChipCorder family of analog recording devices. • Supports all current Winbond ChipCorders in 28-Pin Dip packages except the ISD5008 and 5116 devices which require socket adapters. • Utilizes standard Windows® .wav format as input (11.025 KHz, 16-Bit mono format only). • Project management software includes message concatenation creation and auditing for building complex, compact, message systems. • Data are written to precise, pre-computed locations; each programmed device is identical. • Word and concatenation look-up tables are automatically created. The tables can also be used by the customer to create microprocessor look-up tables. • Simple hookup; a single stereo audio cable carries both signal and control commands.

Project Software:

QV400S™ is a software package designed to unify the interface between users and various speech development systems produced by Quadravox. It consists of one executable file, QV400S1.exe (for Windows 95 or later), several DLLs (one at least for each development system), several help files, and an initialization file, QV400S1.ini (Win95 or later). • Data acquisition using a standard 16-Bit sound card. Existing .wav files (11.025 KHz, mono, 16-Bit) work fine, too. • Organization of .wav files into projects and concatenation lists. • Auditing of recorded segments, and of concatenations to verify proper prosody. • Computation of exact address based on chip type and sample rate.

Programmer Hardware:

The speech data created by the project software may be programmed into any Winbond ChipCorder device using the QV400D Programmer Board. Separate easy-to-use ZIF sockets are provided for the ISD1000-2500 and ISD33000-4000 devices. In most PC systems, amplified speakers are connected to the sound card line output. The programmer is interposed between the PC line out and amplified speakers. No other connections to the PC are required. QV400D is designed to pass both channels through when it is not in use, but this feature will function only if the QV400D power supply remains connected.

Power Supply:

Output voltage: 9V DC; Current: 200mA minimum, 110V AC, 60Hz input

Minimum System Requirements:

QV400D will run on any PC operating under Windows '95 or '98 • CPU Pentium 66 Mhz • 8 MB Ram (16 MB and up preferred) • 1.5 MB hard disk space • A 16-Bit sound card capable of 11.025 KHz record and 16-Bit, 44.1 KHz stereo playback is also needed for data acquisition.

Prototype Programmig Kit for Winbond ChipCorder Devices

Kit Contents:

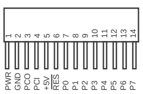
- 2 Floppy disks containing all QV400D software and documentation (Help file).
- 1 Programmer board with two empty ZIF sockets.
- 1 Audio cable (6 ft. shielded, 1/8" stereo miniplug at both ends).
- 1 Power supply: 9V DC 300 mA, 2.1mm female plug, center positive.

QV400D-ND **$249.00**

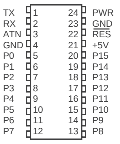
Package Type	For Device Type	Digi-Key Part No.	Price Each
Socket Adapters for the QV400D			
28/600 Dip	ISD5008P and ISD5116P	QV400D-03A-ND	39.00
28/300 SOIC	ISD5008S and ISD5116S	QV400D-03B-ND	39.00
28-Pin TSOP	ISD5008E and ISD5116E	QV400D-03C-ND	39.00
28/300 SOIC	ISD1100S, 1200S,1400S and 2500S	QV400D-04-ND	39.00
28/350 SOIC	ISD1100G and ISD2500G	QV400D-05-ND	39.00
28/300 SOIC	ISD33000S and ISD4000S	QV400D-06-ND	39.00
28-Pin TSOP	ISD33000E and ISD4000E	QV400D-07-ND	39.00
—	ISD33000 OR 4000 Based Module	QV400D-08-ND	19.00

PARALLAX BASIC Stamp Modules

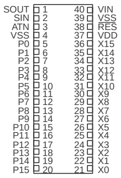
BS1-IC



BS2-IC,
BS2E-IC,
BS2SX-IC,
and
BS2P24



BS2P40



Stamp-Sized Modules Run BASIC

These modules are general-purpose I/O computers which are programmed in BASIC. The language set has instructions for interfacing with electronic circuitry including shift registers, integrated circuits that use SPI, solid state relays, or devices that use asynchronous serial protocols.

BS1: Runs at 4MHz, has 8 I/O lines, and program storage for 80 lines of BASIC code.

BS2: Steps up to 16 I/O lines and program storage for 600 instructions. It's speed also increases to 20MHz.

BS2SX: Increases the speed to 50MHz and program storage to 4000 lines of BASIC code. It also adds 64 Bytes of scratch pad RAM.

BS2E: Has the RAM and program storage of the BS2SX, but runs at the BS2 speed to save power.

BS2P24 and BS2P40: Have several advantages over other Stamps. They run at 20MHz but actually executes instructions faster than the BS2SX. They have all of the features of the BS2SX plus they have commands for interfacing with parallel LCD's, I2C devices, and Dallas Semiconductor "One Wire" parts along with a polled interrupt capability.

Stamp Programming:

To get started programming BASIC Stamps you need a BASIC Stamp module, prototyping board (Carrier Board, Board of Education, or BASIC Stamp Activity Board), serial cable, and software (available for internet download and on the CD-ROM). Getting started is easiest with one of the starter kits below.

System requirements: IBM PC or compatible, VGA monitor, parallel port (BS1-IC), serial port (for all other Stamp modules), CD-ROM drive, DOS or Win98 operating system.

BASIC Stamp I Starter Kit:
The BASIC Stamp I Starter Kit includes one BASIC Stamp I module, SuperCarrier Board, BASIC Stamp manual version 2.0, a Parallax CD-ROM (include software) and a parallel cable.

BASIC Stamp II Starter Kit:
The BASIC Stamp II Starter Kit includes one BASIC Stamp II module, Board of Education, BASIC Stamp manual version 2.0, a Parallax CD-Rom (include software) and a serial cable.

BASIC Stamp IISX Starter Kit:
The BASIC Stamp IISX Starter Kit includes one BASIC Stamp IISX module, Board of Education, BASIC Stamp manual version 2.0, a Parallax CD-ROM (include software) and a serial cable.

Board of Education "Full Kit":
The Board of Education "Full Kit" contains a Board of Education, BASIC Stamp II module, pluggable wires, serial cable, and power supply. The B.O.E. Manual is in PDF format on CD-ROM.

BASIC Stamp 2P24 Professional Starter :

Features include: • BS2P24 Module • BS2P Demo Board • BASIC Stamp Manual • CD-ROM • DS1822 Thermometer • RTC with RAM • 4K EEPROM • 4.7K resistor • 32.768 KHz XTAL • Serial Cable • 10 Jumper Wires

BS2P Plus Pack

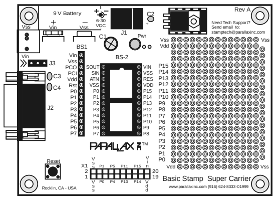
The BS2P Plus Pack is a fantastic collection of demonstration projects for the BS2P module focused on interfacing to 1^{2}C, 1-wire and parallel LCDs. Use the provided source code to get started and customize it for your application. This kit is designed to cut an engineers "getting started" time down from days to hours. The BS2P24 Demo Board (45183) is a helpful companion to the Plus Pack.

Features include: • Parallel LCD module • PCF8574 Remote 8-Bit I/O Expander • PCF8583 Clock/Calendar with 240 x 8-Bit RAM and 32.768 KHz crystal • PCF8591 8-Bit A/D and D/A Converter • 24LC32 32K Serial EEPROM • (2) DS1822 Econo-MicoLAN Digital Thermometer • DS2405 Addressable Switch • DS2890 1-wire Digital Potentiometer • (4) Jumper wires packs • Resistors • Potentiometer • Capacitor • LED's • Pushbutton Switch

BASIC Stamp Super Carrier Board:

The Super Carrier Board provides wire-wrap/solder application space and holes placed to accommodate DIP ICs. The Super Carrier supports the BS1-IC and BS2-IC.

- 3" x 4" Double-sided plated through-hole prototype board
- On-board voltage regulator accepts 6-30 VDC, from wall-pack or battery
- 3-pin parallel (BS1-IC) and DB-9 serial ports (BS2-IC) are used for programming and run-time communication
- Prototype area (1.5" x 2.0") holes arranged to easily support servos, 300 and 600 mil DIP ICs, DB9, DB25, RJ-11 connectors
- Size measures 7.7 x 10.2 cm (3 x 4")

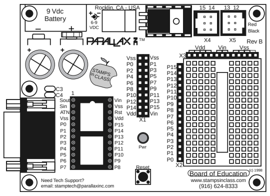

9 V Battery
Rev A
BS1
BS-2
Need Tech Support? Send email to: stamptech@parallaxinc.com
Basic Stamp Super Carrier
Rocklin, CA - USA

Super Carrier Board

Board of Education:

The Stamps in Class curriculum requires a BASIC Stamp II with a Board of Education (BOE). The BOE is a prototype development space with breadboard.

Features include: • Mechanically interlocked power supply to prevent dual connection of wall-pack and 9-volt battery • DB9 connector for BS2-IC programming and serial communication during run-time • P0 - P15 I/O pins, Vdd and Vss connections brought adjacent to 5.1 x 3.5 cm (2" x 1 3/8") breadboard area • Includes set of ten (10) color-coded 22 gauge wires • Traces on top of the board show connections between BS2-IC and breadboard connections for easy understanding by students



Board of Education

BS2P24 Demo Board:

The BS2P24 Demo Board is a valuable learning tool and timesaving prototyping aide for the Parallax BS2P24-IC module. The demo board provides very useful connections to 1-Wire, 1^{2}C components, parallel LCDs as well as breadboard prototype space.

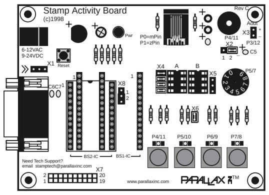
Also Available: The BS2P40 Adapter Board allows the BS2P40 to work with the BS2P Demo Board.

BASIC Stamp Activity Board:

A demonstration board for Parallax BASIC Stamps designed to teach the PBASIC language and hardware control through the BASIC Stamp I/O pins and a set of built-in components. Package includes the BASIC Stamp Activity Board, sample programs on disk, and a 9-volt wall-pack power supply.

Features include:

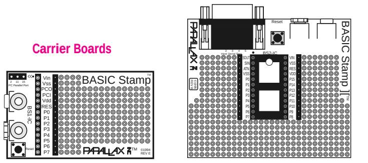
- (4) pushbuttons to stimulate inputs, and (4) LEDs to indicate their status
- 32 Ohm speaker outputs frequencies of 500-8K Hz
- potentiometer for analog input
- RC network for changing PWM into a smooth analog output
- (2) sockets for 8-pin DIP ICs (from AppKits)
- X-10 interface via RJ-11 connection (BS2-IC only)
- Measures 7.7 x 10.2 cm (3 x 4")

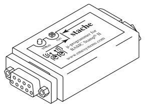


Activity Board

BS1-IC and BS2-IC Carrier Boards: BASIC Stamp carrier boards are small through-hole boards that have a socket for the BS1-IC or BS2-IC, and a 9-volt battery clip plus project space.

Carrier Boards



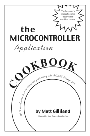


Programmer

Stache Field Programmer Stache is a small field programmer for the BS2-IC. Stache is loaded with your BASIC Stamp programs from the PC, and may then be taken to the field by untrained personnel to reprogram BASIC Stamps. One pushbutton is used for field programming. Holds up to 15 BS2-IC programs.

BASIC Stamp Books Programming and Customizing the BASIC Stamp by Scott Edwares is a 350-page introductory text to the BASIC Stamp. The benefit of this book is the general background on electronics, breadboarding, and applications.

Microcontroller Projects with BASIC Stamps by Al Williams is a 300-page BASIC code syntax guide for the BASIC Stamp, and also includes an assortment of applications.



Microcontroller Application Cookbook: The Microcontroller Application Cookbook by Matt Gilliland is a 248-page selection of circuits and code for the BS2-IC. The intent of the book is to provide circuits and code snippets which could be combined to develop larger projects. Examples include the use of relays with high voltage, D/A and A/D conversion, serial protocols for synchronous/asynchronous communication, shift registers, and buffering I/O pins for protection.

Parallax CD-ROM: The Parallax CD-ROM consists of every resource published by Parallax. Includes source code and schematics for BASIC Stamp circuits, printed manuals, Stamps in Class documentation, and images. Approximately 585 MB. This is included in the BASIC Stamp Starter Kits and Board of Education Full Kit.

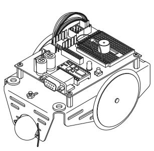
Stamps in Class Educational Kits: The Stamps in Class program (www.stampsinclass.com) consists of educational curriculum and parts kits for high school, community college, and university level classes. The purpose of the curriculum is to teach microcontroller interfacing, electronics, and programming. Authored by Parallax and educational consultants. Each kit includes a printed text and complete parts kits for the experiments. **Stamps in Class curriculum requires a Board of Education and BS2-IC.** Each text typically requires 40-80 hours to complete.

What's a Microcontroller? .... Text and Parts
This 128-page introductory text shows how to load and customize programs in a BASIC Stamp for controlling LEDs, pushbuttons, and a servo motor. Challenge level is easy

Basic Analog and Digital... Text and Parts
This 140-page text instructs the essentials of 8-bit A/D conversion and D/A conversion with potentiometers and sensors. Introduces math concepts required to scale output, resistive ladder networks. Difficulty is easy/moderate.

Earth Measurements .... Text and Parts
Earth Measurements is a 144-page text in which you build an environmental data logger that measures air temperature, water temperature, light levels, and conductivity in water with a closed-loop pump feedback system to control water level. Data is stored in BASIC Stamp EEPROM for future retrieval. Challenge is moderate/high.

Robotics! .... Text and Parts
With the Boe-Bot kit you'll mount the Board of Education on a robot chassis. The robot is capable of basic movement, object detection with whiskers and infrared, detecting an edge of table, following another robot, and following/avoiding light. These experiments may also be built on the robot simultaneously. Challenge of this text is easy/moderate. Have some fun with electronics!



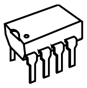
Robotics

Industrial Control .... Text and Parts
Industrial Control is a 194-page tutorial on the essentials of process control, including on-off, differential gap, proportional, integral, and derivative (PID) theories. This text includes a software utility program that graphs and stores data. Challenge is moderate/high.

Description	Digi-Key Part No.	Price Each 1	5	10	25
BASIC Stamp Modules					
BS1-IC BASIC Stamp Module	STAMP1-ND	34.00	—	30.60	28.90
BS2-IC BASIC Stamp Module	STAMP2-ND	49.00	—	44.10	41.65
BASIC STAMP 2E MODULE	BS2E-IC-ND	54.00	—	48.60	45.90
BASIC STAMP 2SX MODULE	BS2SX-IC-ND	59.00	56.05	53.10	50.15
BASIC Stamp 2P24 pin Module	BS2P24-IC-ND	79.00	75.05	71.10	67.15
BASIC Stamp 2P40 pin Module	BS2P40-IC-ND	99.00	94.05	89.10	84.15
BASIC Stamp Starter Kits					
BASIC Stamp I Starter Kit	27205-ND	109.00	103.55	98.10	—
BASIC Stamp II Starter Kit	27203-ND	159.00	151.05	143.10	—
BASIC Stamp IISX Starter Kit:	27206-ND	169.00	160.55	152.10	—
Board of Education Full Kit	28102-ND	109.00	—	89.38	87.20
BASIC Stamp 2P24 Professional Starter Kit	27235-ND	199.00	189.05	179.10	—
Prototype and Development Boards					
BASIC Stamp Super Carrier Board	27130-ND	49.00	—	44.10	41.65
Board of Education	28150-ND	59.00	—	48.38	47.20
BASIC Stamp Activity Board	27905-ND	89.00	—	75.65	71.20
BS1-IC Carrier Board	STAMP1C-ND	15.00	—	13.50	12.75
BS2-IC Carrier Board	STAMP2C-ND	20.00	—	18.00	17.00
BS2P Demo Board	45183-ND	79.00	75.05	71.10	—
Adaptor for the BS2P40	45185-ND	24.50	23.28	22.05	—
BASIC Stamp Accessory Modules					
Pocket Watch B	27962-ND	29.00	27.55	—	—
Motor Mind B	27961-ND	29.00	27.55	—	—
Application Kits					
DTMF Transceiver Kit	27915-ND	26.00	20.80	—	—
Digital Thermometer Kit	27917-ND	26.00	20.80	—	—
8K Serial EEPROM Kit	27918-ND	26.00	20.80	—	—
8-Digit LED Driver Kit	27914-ND	26.00	20.80	—	—
12-Bit A/D Converter Kit	27916-ND	26.00	20.80	—	—
Stache Field Programmer	27330-ND	139.00	—	122.32	—
Serial LCD Module 2x16	27910-ND	49.00	—	—	—
Serial LCD Module 2x16 Backlit	27923-ND	59.00	56.05	53.10	—
Parallax Standard Servo Motor	900-00005-ND	12.00	11.40	10.80	—
Mini SSC (Serial Servo Controller) II	27912-ND	49.00	46.55	—	—
Little Step U-Stepper Motor Controller	27938-ND	69.00	65.55	62.10	—
Basic Stamp 2P Plus Pack	45184-ND	69.00	55.20	—	—
Books					
Microcontroller Projects with Basic Stamps	27952-ND	44.95	—	—	—
Microcontroller Application Cookbook	28111-ND	29.95	28.45	26.36	—
Basic Stamp Manual Ver.2.0	27218-ND	49.00	44.10	39.20	—
Parallax CD-ROM	27000-ND	3.00	—	—	—
*Stamps in Class Educational Kits**					
"What's a Microcontroller?" Parts Kit and Text	28152-ND	45.00	—	40.50	—
"Earth Measurements" Parts Kit and Text	28153-ND	69.00	—	62.10	—
"Robotics!" Parts Kit and Text	28154-ND	119.00	—	107.10	—
"Industrial Control" Parts Kit and Text	28156-ND	49.00	—	44.10	—
"Basic Analog and Digital" Parts Kit and Text	28155-ND	39.00	—	35.10	—

* Requires the Board of Education Full Kit or BASIC Stamp II Starter Kit

KeeLoq® Code-Hopping Algorithm Encoders and Decoders



The Microchip KeeLoq family of code-hopping encoders and decoders offer a low cost, high security solution for security products such as garage door openers, alarm systems, and remote keyless entry systems.

KeeLoq is based on a code-hopping algorithm which provides Rock Solid Security. They use a programmable 64-bit encryption key that is unique to each device to generate 32-bit code-hopping code. The key length and hopping code combination reduces the possibility of unwanted access, due to code grabbing and code scanning, to essentially zero.

The KeeLoq encoders work with any of the decoders. They feature on-chip, error corrected EEPROM for non-volatile operation and, therefore, reduce the required components normally external to the encoder. The only additional circuitry required are push buttons, battery, and RF circuitry.

The KeeLoq decoders are single-chip solutions that employ normal and secure learning mechanisms, and operate over a wide voltage range. Microchip decoders are also full-featured, with serial interface to PICmicro microcontrollers, allowing designers to integrate the decoder with system functionality.

The KeeLoq family of products can be programmed with the KeeLoq Evaluation Kit or with the Pro Mate II Universal Programmer.

Encoder Features:
The HCS200 offers 3 inputs for up to 7 functions and it has a 28-bit serial number. It uses PWM for its output modulation. The HCS201 adds a step-up voltage regulator.

The HCS300 and HCS301 each have 4 inputs for up to 15 functions and add an LED output. The HCS300 runs on 2.0-6.3V while the HCS301 works from 3.5-13.0V. The HCS320 shares the same basic features of the HCS301 but adds a shift key input.

The HCS360 and HCS361 offer an even higher level of security by using a 48-bit seed and selectable 28/32-bit serial number. They offer 4 inputs for up to 15 functions. In addition to PWM, the HCS360 can modulate using the Manchester format and the HCS361 can modulate using VPWM.

Decoder Features:
All three decoders feature secure learning, auto bit rate detection, PWM input decode, and serial interface for PICmicro communication.

The HCS512 is an 18-pin device that can learn 4 different transmitters and has 4 binary function output pins.

The HCS500 is an 8-pin device that can learn up to 7 different transmitters, has an internal oscillator, and has 1Kbits of user EEPROM.

The HCS515 is a 14-pin device with the same features as the HCS500 plus 2 binary function output pins.

Programmer and Evaluation Kit

The KeeLoq Evaluation Kit demonstrates the capabilities of Microchip's code-hopping technology. It includes everything you need to program and test the KeeLoq encoders and decoders.

Kit includes: • Software and License disk • Programmer board for programming encoders, decoders, and transponders • Sockets for HCS Series or software based decoder and RF based receiver module • PDip transmitter for use with any HCS Series encoder or transponder (encoding capability only) • Sample Kit • Requires separate 9V Power Supply (AC162039-ND) and 9 pin Serial Cable (AE1020-ND)

DM303006-ND..**$249.00**

AC162039-ND Power Supply..............................**$24.00**

DS00161-ND CD-ROM Microchip
Technical Library **$2.25**

Inputs	Functions	Voltage	Serial No. Bits	Key Bits	Baud Rates	LED Output	Time Out	Modulation	Operating Temperature	Package	Digi-Key Part No.	Price Each 1	25	100
Encoders														
3	7	3.5 - 13.0	28	64	2	No	Yes	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS200/P-ND	1.33	.96	.86
									+32°F to +158°F (0°C to +70°C)	8-Soic	HCS200/SN-ND	1.33	.96	.86
									-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS200-I/P-ND	1.45	1.06	.95
									-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS200-I/SN-ND	1.45	1.06	.95
									+32°F to +158°F (0°C to +70°C)	8-Dip	HCS201/P-ND	1.28	.92	.83
									+32°F to +158°F (0°C to +70°C)	8-Soic	HCS201/SN-ND	1.28	.92	.83
									-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS201-I/P-ND	1.40	1.01	.91
									-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS201-I/SN-ND	1.40	1.01	.91
4	15	2.0 - 6.3	28	64	3	Yes	Selectable	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS300/P-ND	1.48	1.08	.97
		2.0 - 6.3							+32°F to +158°F (0°C to +70°C)	8-Soic	HCS300/SN-ND	1.48	1.08	.97
		2.0 - 6.3							-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS300-I/P-ND	1.63	1.18	1.06
		2.0 - 6.3							-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS300-I/SN-ND	1.63	1.18	1.06
		3.5 - 13.0							+32°F to +158°F (0°C to +70°C)	8-Dip	HCS301/P-ND	1.48	1.08	.97
		3.5 - 13.0							+32°F to +158°F (0°C to +70°C)	8-Soic	HCS301/SN-ND	1.48	1.08	.97
		3.5 - 13.0							-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS301-I/P-ND	1.63	1.18	1.06
		3.5 - 13.0							-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS301-I/SN-ND	1.63	1.18	1.06
		3.5 - 13.0							+32°F to +158°F (0°C to +70°C)	8-Dip	HCS320/P-ND	1.73	1.26	1.13
		3.5 - 13.0							+32°F to +158°F (0°C to +70°C)	8-Soic	HCS320/SN-ND	1.73	1.26	1.13
		3.5 - 13.0							-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS320-I/P-ND	1.90	1.39	1.25
		3.5 - 13.0							-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS320-I/SN-ND	1.90	1.39	1.25
4	15	2.0 - 6.6	28/32	64	2	Yes	Selectable	PWM/Manchester	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS360/P-ND	1.90	1.38	1.24
								PWM/Manchester	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS360/SN-ND	1.90	1.38	1.24
								PWM/Manchester	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS360-I/P-ND	2.08	1.52	1.37
								PWM/Manchester	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS360-I/SN-ND	2.08	1.52	1.37
								PWM/VPWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS361/P-ND	1.90	1.38	1.24
								PWM/VPWM	+32°F to +158°F (0°C to +70°C)	8-Soic	HCS361/SN-ND	1.90	1.38	1.24
								PWM/VPWM	-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS361-I/P-ND	2.08	1.52	1.37
								PWM/VPWM	-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS361-I/SN-ND	2.08	1.52	1.37

Function Outputs	Functions	Serial Interface	Voltage	Secure Leam	User Memory	Baud Rates	Vlow Output	Repeat	Modulation	Operating Temperature	Package	Digi-Key Part No.	Price Each 1	25	100
Decoders															
1	15	Yes	3.0 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	8-Dip	HCS500/P-ND	2.25	1.81	1.50
										+32°F to +158°F (0°C to +70°C)	8-Soic	HCS500/SM-ND	2.35	1.88	1.57
										-40°F to +185°F (-40°C to +85°C)	8-Dip	HCS500-I/P-ND	2.48	1.98	1.65
										-40°F to +185°F (-40°C to +85°C)	8-Soic	HCS500-I/SM-ND	2.60	2.07	1.73
4	15	Yes	3.0 - 6.0	Yes	No	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	18-Dip	HCS512/P-ND	5.55	4.44	3.70
										+32°F to +158°F (0°C to +70°C)	18-Soic	HCS512/SO-ND	5.58	4.46	3.72
										-40°F to +185°F (-40°C to +85°C)	18-Dip	HCS512-I/P-ND	6.10	4.88	4.07
										-40°F to +185°F (-40°C to +85°C)	18-Soic	HCS512-I/SO-ND	6.15	4.91	4.09
2	15	Yes	4.5 - 5.5	Yes	1Kbit	Full	Yes	Yes	PWM	+32°F to +158°F (0°C to +70°C)	14-Dip	HCS515/P-ND	3.00	2.07	1.96
										+32°F to +158°F (0°C to +70°C)	14-Soic	HCS515/SL-ND	3.05	2.11	2.00
										-40°F to +185°F (-40°C to +85°C)	14-Dip	HCS515-I/P-ND	3.30	2.28	2.16
										-40°F to +185°F (-40°C to +85°C)	14-Soic	HCS515-I/SL-ND	3.35	2.32	2.20

NEW! rfPIC12C509

8-Bit CMOS Microcontroller with UHF ASK/FSK Transmitter

The rfPIC12C509AG/509AF from Microchip Technology is a low-cost, high performance, 8-bit, fully static, EPROM-based CMOS microcontroller combined with a UHF ASK/FSK transmitter. It employs an RISC architecture with only 33 single word/single cycle instructions. All instructions are single cycle (1µs) except for program branches which take two cycles. The Transmitter is a fully integrated UHF ASK/FSK transmitter consisting of crystal oscillator, phase-locked loop (PLL), open-collector differential-output Power Amplifier (PA), and mode control logic. External components consist of bypass capacitors, crystal, and PLL loop filter. There are no internal electrical connections between the PICmicro MCU and the transmitter. The PICmicro MCU oscillator is independent from the transmitter crystal oscillator. The rfPIC12C509AG is capable of Amplitude Shift Keying (ASK) modulation by turning the PA on and off. The rfPIC12C509AF is capable of ASK or Frequency Shift Keying (FSK) modulation by employing an internal FSK switch to pull the transmitter crystal via a second load capacitor.

Features:
• Conforms to US FCC Part 15.231 regulations and European ERC 70-03E and EN 300 220-1 requirements • Frequency range set by crystal: 310-480MHz • ASK Data rate: 0-40Kbps • FSK through crystal pulling allows modulation at 0-20Kbps • Adjustable output power: +2dBm to -12dBm in six discrete steps • Wide temperature range: Industrial: -40°C to +85°C

Memory Size PROGRAM	RAM	Configuration	I/O Lines	Oscillator Type External*	Frequency Range Min/Max	Type of Transmitter	Pkg. Type	Digi-Key Part No.	Price Each 1	25	100
1024 x 12	41	EPROM	6	RC/XT/LP	DC-4 MHz	ASK/FSK	20-CDIP	RFPIC12C509AF/JW-ND	11.58	—	—
		OTP				ASK/FSK	20-SSOP	RFPIC12C509AF-I/SS-ND	4.00	2.30	2.23
		EPROM				ASK	18-CDIP	RFPIC12C509AG/JW-ND	11.58	—	—
		OTP				ASK	18-SOIC	RFPIC12C509AG-I/SO-ND	3.83	2.20	2.12

* Has internal RC Oscillator @ 4MHz.

18/28/40-Pin 8-Bit CMOS *FLASH* Microcontrollers

PIC16F84/84A: Peripheral Features: • 13 I/O pins with individual direction control • High current sink/source for direct LED drive: 25mA sink max. per pin; 20mA source max. per pin • TMR0: 8-bit timer/counter with 8-bit programmable prescaler (**LF84** • Wide operating voltage range: Commercial: 2.0V to 6.0V; Industrial: 2.0V to 6.0V • Low power consumption: <2mA typical @ 5V, 4 MHz; 15µA typical @ 2V, 32 kHz; <1µA typical standby current @ 2V • Max Frequency: 10 MHz.) (**LF84A** • Wide operating voltage range: Commercial: 2.0V to 5.5V; Industrial: 2.0V to 5.5V • Low power consumption: <2mA typical @ 5V, 4 MHz; 15µA typical @ 2V, 32 kHz; <0.5µA typical standby current @ 2V • Max. Frequency: 20 MHz)

PIC16F87X: Core Features: • High-performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two cycle • Operating Speed: DC – 20MHz clock input; DC – 200ns instruction cycle • Up to 8K x 14 words of FLASH Program Memory; Up to 368 x 8 bytes of Data Memory (RAM); Up to 256 x 8 bytes of EEPROM data memory • Pin-out compatible to the PIC16C72, 73, 74, 76, 77 • Interrupt capability (up to 14 internal/external interrupt sources) • Eight level deep hardware stack • Direct, indirect, and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS FLASH/EEPROM technology • Fully static design • In-Circuit Serial Programming™ via two pins • Only single 5V source needed for programming • In-Circuit Debugging via two pins • Processor read/write access to program memory • Wide operating voltage range: 2.0V to 5.5V (PIC16LF87X) • High Sink/Source Current: 25mA • Commercial and Industrial temperature ranges • Low-power consumption: <2mA typical @ 5V, 4MHz; 20µA typical @ 3V, 32kHz; <1µA typical standby current

Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler • Two Capture, Compare, PWM modules • Capture is 16-bit, max. resolution is 12.5ns; Compare is 16-bit, max. resolution is 200ns; PWM max. resolution is 10-bit • 10-bit multi-channel Analog-to-Digital converter • Synchronous Serial Port (SSP) with SPI™ (Master Mode) and I^2C™ (Master/Slave) • Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI) with 9-bit address detection • Parallel Slave Port (PSP) 8-bits wide, with external Read, Write and Chip Select controls (40/44-pin only) • Brown-out detection circuitry for Brown-out Reset (BOR)

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Key Features	**PIC16F872**	**PIC16F873**	**PIC16F874**	**PIC16F876**	**PIC16F877**
Operating Frequency	DC - 20 MHZ				
Resets (and Delays)	POR, BOR (PWRT, OST)				
FLASH Program Memory (14-bit words)	2K	4K		8K	
Data Memory (bytes)	128	192		368	
EEPROM Data Memory	64	128		256	
Interrupts	10	13	14	13	14
I/O Ports	A,B,C	A,B,C	A,B,C,D,E	A,B,C	A,B,C,D,E
Timers	3				
Capture/Compare/ PWM Modules	1	2			
Serial Communications	MSSP	MSSP, USART			
Parallel Communications	—	—	PSP	—	PSP
10-Bit Analog-to-Digital Module	5-input Channels	5-input Channels	8-input Channels	5-input Channels	8-input Channels
Instruction Set	35 Instructions				

Memory Size		**Config-uration**	**I/O Lines**	**Oscillator Type External**	**Frequency Range Min./Max.**	**Operating Temperature Range**	**Package**	**Digi-Key Part No.**	**Price Each**		
PROGRAM	**RAM/ EEPROM**								**1**	**25**	**100**
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-DIP	PIC16F627-04/P-ND★	3.20	1.82	1.69
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-SOIC	PIC16F627-04/SO-ND★	3.25	1.86	1.72
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	20-SSOP	PIC16F627-04/SS-ND	3.50	2.01	1.86
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	32° to 158°F (0°–70°C)	18-DIP	PIC16F627-20/P-ND★	3.43	1.95	1.81
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	32° to 158°F (0°–70°C)	18-SOIC	PIC16F627-20/SO-ND★	3.48	1.99	1.85
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	32° to 158°F (0°–70°C)	20-SSOP	PIC16F627-20/SS-ND	3.75	2.15	1.99
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F627-04I/P-ND★	3.50	2.01	1.86
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F627-04I/SO-ND★	3.58	2.05	1.90
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16F627-04I/SS-ND	3.85	2.21	2.05
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F627-20I/P-ND★	3.75	2.15	1.99
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F627-20I/SO-ND★	3.83	2.19	2.03
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16F627-20I/SS-ND	4.13	2.36	2.19
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-DIP	PIC16F628-04/P-ND★	3.63	2.07	1.92
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-SOIC	PIC16F628-04/SO-ND★	3.70	2.11	1.96
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	20-SSOP	PIC16F628-04/SS-ND	3.98	2.28	2.11
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	32° to 158°F (0°–70°C)	18-DIP	PIC16F628-20/P-ND★	3.88	2.21	2.05
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	32° to 158°F (0°–70°C)	18-SOIC	PIC16F628-20/SO-ND★	3.95	2.26	2.09
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	32° to 158°F (0°–70°C)	20-SSOP	PIC16F628-20/SS-ND	4.28	2.44	2.26
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F628-04I/P-ND★	3.98	2.28	2.11
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F628-04I/SO-ND★	4.08	2.32	2.15
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16F628-04I/SS-ND	4.38	2.50	2.32
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F628-20I/P-ND★	4.28	2.44	2.26
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F628-20I/SO-ND★	4.35	2.49	2.30
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16F628-20I/SS-ND	4.70	2.68	2.48
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-DIP	PIC16LF627-04/P-ND★	3.35	1.91	1.78
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-SOIC	PIC16LF627-04/SO-ND★	3.43	1.95	1.81
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	20-SSOP	PIC16LF627-04/SS-ND	3.68	2.11	1.95
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16LF627-04I/P-ND★	3.68	2.11	1.95
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16LF627-04I/SO-ND★	3.75	2.15	1.99
1K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16LF627-04I/SS-ND	4.05	2.32	2.15
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-DIP	PIC16LF628-04/P-ND★	3.80	2.17	2.02
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	18-SOIC	PIC16LF628-04/SO-ND★	3.88	2.22	2.06
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	32° to 158°F (0°–70°C)	20-SSOP	PIC16LF628-04/SS-ND	4.18	2.39	2.22
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16LF628-04I/P-ND★	4.18	2.39	2.22
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16LF628-04I/SO-ND★	4.28	2.44	2.26
2K x 14	224/128	FLASH	16†	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16LF628-04I/SS-ND	4.60	2.63	2.44
4K x 14	192/—	FLASH	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F73-I/SO-ND★	5.38	3.23	3.18
4K x 14	192/—	FLASH	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F73-I/SP-ND★	5.38	3.23	3.18
4K x 14	192/—	FLASH	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16F73-I/SS-ND★	5.53	3.32	3.27
4K x 14	192/—	FLASH	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F74-I/L-ND★	7.30	4.38	4.32
4K x 14	192/—	FLASH	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F74-I/P-ND★	6.53	3.92	3.86
8K x 14	368/—	FLASH	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F76-I/SP-ND★	7.60	4.56	4.49
8K x 14	368/—	FLASH	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16F76-I/SS-ND	7.73	4.64	4.58
8K x 14	368/—	FLASH	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F77-I/L-ND★	9.18	5.51	5.43
8K x 14	368/—	FLASH	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F77-I/P-ND★	8.20	4.92	4.85
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	18-DIP	PIC16F84-04/P-ND★	6.88	4.51	4.37
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	18-SOIC	PIC16F84-04/SO-ND★	7.00	4.59	4.45
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	32° to 158° F (0°–70°C)	18-DIP	PIC16F84-10/P-ND★	7.38	4.84	4.69
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	32° to 158° F (0°–70°C)	18-SOIC	PIC16F84-10/SO-ND★	7.50	4.93	4.78
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	32° to 158° F (0°–70°C)	18-DIP	PIC16LF84-04/P-ND★	7.20	4.73	4.58
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	32° to 158° F (0°–70°C)	18-SOIC	PIC16LF84-04/SO-ND★	7.33	4.81	4.67
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F84-04I/P-ND★	7.58	4.98	4.82
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F84-04I/SO-ND★	7.73	5.07	4.91
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F84-10I/P-ND★	8.13	5.33	5.17
1K x 14	68/64	FLASH	13	Xtal/RC	DC-10MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F84-10I/SO-ND★	8.28	5.43	5.26
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16LF84-04I/P-ND★	7.93	5.19	5.04
1K x 14	68/64	FLASH	13	Xtal/RC	DC-200KHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16LF84-04I/SO-ND★	8.05	5.29	5.13
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	18-DIP	PIC16F84A-04/P-ND★	5.63	3.46	3.36
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	18-SOIC	PIC16F84A-04/SO-ND★	5.73	3.53	3.42
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	20-SSOP	PIC16F84A-04/SS-ND★	6.10	3.76	3.65

(Continued)

18/28/40-Pin 8-Bit CMOS *FLASH* Microcontrollers *(Cont.)*

Memory Size		Configuration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
PROGRAM	RAM/ EEPROM								1	25	100
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	18-DIP	PIC16F84A-20/P-ND★	6.00	3.69	3.59
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	18-SOIC	PIC16F84A-20/SO-ND★	6.10	3.76	3.65
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	20-SSOP	PIC16F84A-20/SS-ND★	6.50	4.00	3.89
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	18-DIP	PIC16LF84A-04/P-ND★	5.90	3.63	3.53
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	18-SOIC	PIC16LF84A-04/SO-ND★	6.00	3.69	3.58
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	20-SSOP	PIC16LF84A-04/SS-ND★	6.40	3.94	3.82
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F84A-04I/P-ND★	6.18	3.80	3.69
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F84A-04I/SO-ND★	6.28	3.87	3.75
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16F84A-04I/SS-ND★	6.68	4.10	3.99
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16F84A-20I/P-ND★	6.60	4.06	3.94
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16F84A-20I/SO-ND★	6.70	4.13	4.00
1K x 14	68/64	FLASH	13	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16F84A-20I/SS-ND	7.08	4.36	4.24
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-DIP	PIC16LF84A-04I/P-ND★	6.45	3.97	3.86
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	18-SOIC	PIC16LF84A-04I/SO-ND★	6.58	4.05	3.93
1K x 14	68/64	FLASH	13	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	20-SSOP	PIC16LF84A-04I/SS-ND★	6.95	4.28	4.15
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F870-I/SO-ND★	4.63	2.87	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F870-I/SP-ND★	4.63	2.87	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16F870-I/SS-ND★	4.78	2.97	2.82
2K x 14	128/64	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F871-I/P-ND★	5.48	3.40	3.12
2K x 14	128/64	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F871-I/L-ND★	6.13	3.80	3.49
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F872-I/SP-ND★	4.63	2.83	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F872-I/SO-ND★	4.63	2.83	2.74
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16F872-I/SS-ND★	4.78	2.92	2.82
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16LF872-I/SP-ND★	4.88	2.98	2.88
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16LF872-I/SO-ND★	4.88	2.98	2.88
2K x 14	128/64	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16LF872-I/SS-ND★	5.00	3.06	2.96
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	28-DIP .3"	PIC16F873-04/SP-ND★	7.13	4.35	4.21
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	28-SOIC	PIC16F873-04/SO-ND★	7.13	4.35	4.21
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	28-DIP .3"	PIC16F873-20/SP-ND★	7.63	4.66	4.51
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	28-SOIC	PIC16F873-20/SO-ND★	7.63	4.66	4.51
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	28-DIP .3"	PIC16LF873-04/SP-ND★	7.48	4.57	4.42
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	28-SOIC	PIC16LF873-04/SO-ND★	7.48	4.57	4.42
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F873-04I/SP-ND★	7.83	4.79	4.63
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F873-04I/SO-ND★	7.83	4.79	4.63
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F873-20I/SO-ND★	8.38	5.12	4.96
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP	PIC16F873-20I/SP-ND★	8.38	5.12	4.96
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185° F (-40°–85°C)	28-DIP .3"	PIC16LF873-04I/SP-ND★	8.23	5.03	4.86
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16LF873-04I/SO-ND★	8.23	5.03	4.86
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F873A-I/SP-ND§ *NEW!*	7.13	4.35	4.21
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F873A-I/SO-ND§ *NEW!*	7.13	4.35	4.21
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16F873A-I/SS-ND§ *NEW!*	9.43	5.80	5.62
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16LF873A-I/SO-ND§ *NEW!*	7.48	4.57	4.42
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16LF873A-I/SP-ND§ *NEW!*	7.48	4.57	4.42
4K x 14	192/128	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16LF873A-I/SS-ND§ *NEW!*	10.13	6.25	6.05
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	40-DIP	PIC16F874-04/P-ND★	7.78	4.75	4.60
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	44-PLCC	PIC16F874-04/L-ND★	8.70	5.32	5.15
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	40-DIP	PIC16F874-20/P-ND★	8.33	5.08	4.92
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	44-PLCC	PIC16F874-20/L-ND★	9.30	5.69	5.51
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	40-DIP	PIC16LF874-04/P-ND★	8.15	4.99	4.83
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	44-PLCC	PIC16LF874-04/L-ND★	9.13	5.59	5.40
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F874-04I/P-ND★	8.55	5.23	5.06
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F874-20I/L-ND★	10.25	6.26	6.06
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F874-20I/P-ND★	9.15	5.59	5.41
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F874-04I/L-ND★	9.58	5.85	5.66
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16LF874-04I/P-ND★	8.98	5.49	5.31
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16LF874-04I/L-ND★	10.05	6.15	5.95
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F874A-I/L-ND§ *NEW!*	8.70	5.32	5.15
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F874A-I/P-ND§ *NEW!*	7.78	4.75	4.60
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16LF874A-I/L-ND§ *NEW!*	9.13	5.59	5.40
4K x 14	192/128	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16LF874A-I/P-ND§ *NEW!*	8.15	4.99	4.83
8K x 14	368/—	FLASH	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F76-I/SO-ND★	7.60	4.56	4.49
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	28-DIP .3"	PIC16F876-04/SP-ND★	7.68	4.70	4.55
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	28-SOIC	PIC16F876-04/SO-ND★	7.68	4.70	4.55
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	28-DIP .3"	PIC16F876-20/SP-ND★	8.23	5.03	4.86
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	28-SOIC	PIC16F876-20/SO-ND★	8.23	5.03	4.86
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	28-DIP .3"	PIC16LF876-04/SP-ND★	8.08	4.93	4.77
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	28-SOIC	PIC16LF876-04/SO-ND★	8.08	4.93	4.77
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F876-04I/SP-ND★	8.45	5.17	5.00
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F876-04I/SO-ND★	8.45	5.17	5.00
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F876-20I/SO-ND★	9.05	5.53	5.35
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F876-20I/SP-ND★	9.05	5.53	5.35
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16LF876-04I/SP-ND★	8.88	5.43	5.25
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16LF876-04I/SO-ND★	8.88	5.43	5.25
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16F876A-I/SO-ND§ *NEW!*	7.68	4.70	4.55
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16F876A-I/SP-ND§ *NEW!*	7.68	4.70	4.55
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16F876A-I/SS-ND§ *NEW!*	10.15	6.25	6.06
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SOIC	PIC16LF876A-I/SO-ND§ *NEW!*	8.08	4.93	4.77
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-DIP .3"	PIC16LF876A-I/SP-ND§ *NEW!*	8.08	4.93	4.77
8K x 14	368/256	FLASH	22 (5-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	28-SSOP	PIC16LF876A-I/SS-ND§ *NEW!*	10.65	6.56	6.36
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	40-DIP	PIC16F877-04/P-ND★	8.40	5.13	4.96
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	44-PLCC	PIC16F877-04/L-ND★	9.40	5.75	5.56
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	40-DIP	PIC16F877-20/P-ND★	8.98	5.49	5.31
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	32° to 158° F (0°–70°C)	44-PLCC	PIC16F877-20/L-ND★	10.05	6.15	5.95
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	40-DIP	PIC16LF877-04/P-ND★	8.80	5.39	5.21
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	32° to 158° F (0°–70°C)	44-PLCC	PIC16LF877-04/L-ND★	9.88	6.03	5.84
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F877-04I/P-ND★	9.23	5.64	5.46
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F877-04I/L-ND★	10.33	6.32	6.12
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F877-20I/L-ND★	11.05	6.76	6.54
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F877-20I/P-ND★	9.88	6.04	5.84
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16LF877-04I/P-ND★	9.70	5.93	5.73
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16LF877-04I/L-ND★	10.85	6.64	6.42
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16F877A-I/L-ND§ *NEW!*	9.40	5.75	5.56
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-20MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16F877A-I/P-ND§ *NEW!*	8.40	5.13	4.96
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	44-PLCC	PIC16LF877A-I/L-ND§ *NEW!*	9.88	6.03	5.84
8K x 14	368/256	FLASH	33 (8-Ch. 10-Bit A/D)	Xtal/RC	DC-4MHz	-40° to 185°F (-40°–85°C)	40-DIP	PIC16LF877A-I/P-ND§ *NEW!*	8.80	5.43	5.26

† Two Analog Comparators and One 10 Bit PWM § Only supported by Promate II, not Picstart Plus and ICD.

★ *Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

NEW! 8-Pin FLASH-Based 8-Bit CMOS Microcontrollers

PIC12F629/675 Series

High Performance RISC CPU:

• Only 35 instruction to learn • All single cycle instructions (200 ns), except for program branches which are two-cycle • Operating speed: DC - 20 MHz oscillator/clock input, DC - 200 ns instruction cycle • Interrupt capability • 16 special function hardware registers • 8-level deep hardware stack • Direct, Indirect, and Relative Addressing modes

Peripheral Features:

• 6 I/O pins with individual direction control • High current sink/source for direct LED drive • Analog comparator module with: One analog comparator, Programmable on-chip comparator voltage reference (CVREF) module, Programmable input multiplexing from device inputs, Comparator output is externally accessible • Analog-to-Digital Converter module (PIC12F675): 10-bit resolution, Programmable 4-channel input, Voltage reference input • Timer0: 8-bit timer/counter with 8-bit programmable prescaler • Enhanced Timer1: 16-bit timer/counter with prescaler, External Gate Input mode, Option to use OSC1 and OSC2 in LP mode as Timer1 oscillator, if INTRC Oscillator mode selected

Special Microcontroller Features:

• Low power Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Low power Brown-out Detect (BOD) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • In-Circuit Serial Programming™ (ICSP™) via two pins

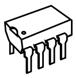
CMOS Technology:

• Low power, high speed CMOS FLASH technology • Fully static design • Wide operating voltage range: PIC12F629/675 - 2.0V to 5.5V • Low power consumption: <1.0 mA @ 5.5V, 4.0 MHz, 20 µA typical @ 2.0V, 32 kHz, <1.0 µA typical standby current @ 2.0V

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
1K x 14	64 x 8	FLASH	6	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12F629-I/P-ND	1.68	1.03	.99
1K x 14	64 x 8	FLASH	6	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	8-SOIC	PIC12F629-I/SN-ND	1.68	1.03	.99
1K x 14	64 x 8	FLASH	6 (4-Ch. 10-Bit ADO)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12F675-I/P-ND	2.08	1.29	1.25
1K x 14	64 x 8	FLASH	6 (4-Ch. 10-Bit ADO)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	8-SOIC	PIC12F675-I/SN-ND	2.08	1.29	1.25

8-Pin, 8-Bit Microcontrollers

PIC12C50X, PIC12CE5XX and PIC12C67X Series



High-Performance RISC CPU:

• Only 33 single word instructions to learn • All instructions are single cycle (1µs) except for program branches which are two-cycle • Operating Speed: DC - 4 MHz clock input, DC - 1µs instruction cycle • 12-bit wide instructions • 8-bit wide data path • Seven special function hardware registers • Two-level deep hardware stack • Direct, indirect and relative addressing modes for data and instructions • Internal 4 MHz RC oscillator with programmable calibration • In-circuit serial programming

Peripheral Features:

• 8-bit real time clock/counter (TMR0) with 8-bit programmable prescaler • Power-On Reset (POR) • Device Reset Timer (DRT) •Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Wake-up from SLEEP on pin change • Internal pull-ups on I/O pins

Selectable Oscillator Options:

• INTRC - Internal 4 MHz RC oscillator • EXTRC - External low-cost RC oscillator • XT - Standard crystal/resonator • LP - Power saving, low frequency crystal • Internal pull-up on MCLR pin

Applications:

The PIC12C5XX series fits perfectly in applications ranging from personal care appliances and security systems to low-power remote transmitters/receivers (e.g., timer functions, replacement of “glue” logic and PLDs in larger systems, co-processor applications).

8 PIN MCU with A/D:

PIC12C67X microcontrollers typically achieve a 2:1 code compression and a 4:1 speed improvement over other 8-bit microcontrollers in their class.
The PIC12C67X devices have 128 bytes of RAM and 6 I/O pins. In addition a timer/counter is available. Also a 4-channel high-speed 8-bit A/D is provided. The 8-bit resolution is ideally suited for applications requiring low-cost analog interface, e.g., thermostat control, pressure sensing, etc.

DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**
DS00711-ND	Embedded Control Handbook Update 2000	**$5.00**

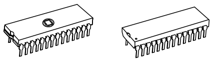
Memory Size		Config-uration	I/O Lines	Oscillator Type External †	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 12	25 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C508/JW-ND	9.65	—	—
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C508-04/P-ND	2.05	1.72	1.40
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12C508-04/SM-ND	2.15	1.81	1.47
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C508-04I/P-ND	2.25	1.90	1.54
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12C508-04I/SM-ND	2.38	1.99	1.61
512 x 12	25 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C508A/JW-ND	9.17	—	—
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C508A-04/P-ND	1.58	.97	.94
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12C508A-04/SM-ND	1.58	.97	.94
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C508A-04I/P-ND	1.73	1.07	1.03
512 x 12	25 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12C508A-04I/SM-ND	1.73	1.07	1.03
1K x 12	41 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C509/JW-ND	10.14	—	—
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C509-04/P-ND	2.28	1.90	1.54
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12C509-04/SM-ND	2.38	2.00	1.62
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C509-04I/P-ND	2.50	2.09	1.70
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12C509-04I/SM-ND	2.60	2.18	1.76
1K x 12	41 x 8	EPROM	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C509A/JW-ND	9.65	—	—
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C509A-04/P-ND	1.63	1.01	.97
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12C509A-04/SM-ND	1.63	1.01	.97
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C509A-04I/P-ND	1.80	1.11	1.07
1K x 12	41 x 8	OTP	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12C509A-04I/SM-ND	1.80	1.11	1.07
512 x 12	25 x 8	EPROM‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE518/JW-ND	10.23	—	—
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE518-04/P-ND	1.93	1.19	1.15
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12CE518-04/SM-ND	2.03	1.25	1.21
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12CE518-04I/P-ND	2.13	1.31	1.27
512 x 12	25 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12CE518-04I/SM-ND	2.23	1.37	1.33
1K x 12	41 x 8	EPROM‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE519/JW-ND	10.81	—	—
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE519-04/P-ND	2.10	1.29	1.25
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12CE519-04/SM-ND	2.20	1.36	1.31
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12CE519-04I/P-ND	2.30	1.42	1.38
1K x 12	41 x 8	OTP‡	5	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12CE519-04I/SM-ND	2.40	1.48	1.43
1K x 14	128	EPROM	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C671/JW-ND	8.62	—	—
1K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C671-04/P-ND	2.88	1.77	1.71
1K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12C671-04/SM-ND	3.00	1.86	1.80
1K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C671-10/P-ND	3.08	1.89	1.83
1K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12C671-10/SM-ND	3.23	1.99	1.92
1K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C671-04I/P-ND	3.15	1.94	1.88
1K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12C671-04I/SM-ND	3.30	2.04	1.98
1K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C671-10I/P-ND	3.38	2.08	2.02
2K x 14	128	EPROM	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12C672/JW-ND	8.63	—	—
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C672-04/P-ND	2.88	1.77	1.71
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Soic*	PIC12C672-04/SM-ND	3.00	1.86	1.80
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12C672-10/P-ND	3.08	1.89	1.83
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-SOIC*	PIC12C672-10/SM-ND	3.23	1.99	1.92
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C672-04I/P-ND	3.15	1.94	1.88
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12C672-04I/SM-ND	3.30	2.04	1.98
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	8-Dip	PIC12C672-10I/P-ND	3.38	2.08	2.01
2K x 14	128	OTP	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	8-SOIC*	PIC12C672-10I/SM-ND	3.55	2.18	2.12
1K x 14	128 x 8	EPROM‡	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE673/JW-ND	9.49	—	—
1K x 14	128 x 8	OTP‡	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE673-04/P-ND	3.38	2.08	2.02
1K x 14	128 x 8	OTP‡	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE673-10/P-ND	3.63	2.23	2.16
2K x 14	128 x 8	EPROM‡	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-CDip	PIC12CE674/JW-ND	9.49	—	—
2K x 14	128 x 8	OTP‡	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE674-04/P-ND	3.38	2.08	2.02
2K x 14	128 x 8	OTP‡	6 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	8-Dip	PIC12CE674-10/P-ND	3.63	2.23	2.16

† Has internal RC Oscillator @ 4MHz (See data sheet for accuracy) ‡ 16-Byte EEPROM ***** Body width = .208 Inches (nominal)

MICROCHIP

8-Bit RISC Microcontrollers

PIC16C5X and PIC16HV540 Series



General Description: Microchip's long history of innovation has proven its commitment to develop and market leading edge products. With its PIC, Microchip has engineered *the most advanced low-to mid range 8-Bit Microcontroller family on the market today*. The flexibility of CMOS OTP EPROM Technology, the superior performance of RISC Architecture and the smallest packaging combined with affordable pricing are the prime reasons systems designers select PIC as their Microcontroller of Choice. With PIC, the 8-12 week lead time typical of ROM MCUs is reduced to just days. In addition, PIC's code compaction factor takes weeks off system design time. PIC's small die size combined with Microchip's advanced CMOS technology, support a *wide performance range* and low operating and standby currents. Low currents are ideal for long-life battery dependent applications. One of PIC's strongest suits is its I/O capability.

PIC16C5X (Use Programmer PICSTART Plus)

Features: Only 33 single word instructions to learn • All single cycle instructions (200 ns) except for program branches which are two-cycle • 12-bit wide instructions • 8-bit wide data path • 512 - 2K x 12 on-chip EPROM program memory • 25 to 73 x 8 general purpose registers (SRAM) • 7 special function hardware registers • 2 level deep hardware stack • Direct, indirect and relative addressing modes for data and instructions • 8 bit real time clock/counter (RTCC) with 8-bit programmable prescaler • Oscillator start-up timer • Watchdog timer (WDT) with its own on-chip RC oscillator.

PIC16C54C (Use Programmer PICSTART Plus)

Features: The PIC16C54C expands the baseline family with a low end device that offers lower power consumption and enhanced electrical characteristics. The PIC16C54C provides a cost reduction path for PIC16C57 and PIC16C58B users that require less program memory or data memory for a new application. Also some current PIC16C54, 54A, and 54B users may migrate to the PIC16C54C to enjoy the advantages of lower power consumption and enhanced electrical characteristics all at a lower cost. Software is supported from the PIC16C54 directly to the PIC16C54C with no software code changes. The PIC16C54C is equipped with special microcontroller-like features that reduce system cost and power requirements. There are four oscillator configurations to choose from, including power saving LP (Low Power) oscillator and cost saving RC oscillator.

PIC16HV540 (Enhanced PIC16C54 EPROM-Based 8-Bit CMOS Microcontroller with On-Chip Voltage Regulator)

General Description: The PIC16HV540 is a low-cost, high-performance, 8-bit, fully-static, EPROM-based CMOS microcontroller. It is pin and software compatible with the PIC16C5X family of devices. It employs an RISC architecture with only 33 single word/single cycle instructions. The PIC16HV540 is the first One-Time-Programmable (OTP) microcontroller with an on-chip 3 Volt and 5 Volt regulator. This eliminates the need for an external regulator in many applications powered from 9 Volt or 12 Volt batteries or unregulated 6 Volt, 9 Volt or 12 Volt mains adapters. The PIC16HV540 is ideally suited for applications that require very low standby current at high voltages. These typically require expensive low current regulators.

The PIC16HV540 is equipped with special features that reduce system cost and power requirements. The Power-On Reset (POR) and Device Reset Timer (DRT) eliminate the need for external reset circuitry. There are four oscillator configurations to choose from, including the power-saving LP (Low Power) oscillator, cost-saving RC oscillator, and XT and HS for crystal oscillators. Power saving SLEEP mode, Watchdog Timer and code protection features improve system cost, power and reliability.

Applications: The PIC16HV540 is very versatile even in areas where no microcontroller use has been considered before (e.g., timer functions, replacement of "glue" logic in larger systems, coprocessor applications). The PIC16HV540 fits perfectly in low-power battery applications such as CO and smoke detection, toys, games, security systems and automobile modules.

Features: • High-Performance RISC CPU • 18-pins • 12 I/O • 512 EPROM • 25 RAM • Only 33 single word instructions to learn • All instructions are single cycle (200 ns) except for program branches which are two-cycle • Operating Speed: DC - 20 MHz clock input; 200 - ns instruction cycle • 12-bit wide instructions • 8-bit wide data path • Seven special function hardware registers • ***Four-level deep hardware stack*** • Direct, indirect and relative addressing modes for data and instructions. **Peripheral Features:** • 8-bit real time clock/counter (TMR0) with 8-bit programmable prescaler • Power-On Reset (POR) • Brown-Out Protection • Device Reset Timer (DRT) with short RC-oscillator start up time • Programmable Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Sleep Timer • ***8 High Voltage I/O*** • ***4 Regulated I/O*** • Wake up from SLEEP on pin change • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options: RC – Low-cost RC oscillator; XT – Standard crystal/resonator; HS – High speed crystal/resonator; LP – Power saving, low frequency crystal • Glitch filtering on master clear and pin change inputs. **CMOS Technology:** • ***Selectable on-chip 3V/5V Regulator*** • Low-power, high-speed CMOS EPROM technology • Fully static design • ***Wide-operating voltage range: 3.5V to 15V*** • Temperature range: Commercial: 0°C to 70°C; Industrial: -40°C to 85°C • Low-power consumption: <2mA typical @ 5V, 4 MHz; 15µA typical @ 3A, 32kHz; <4.5µA typical standby current @ 15V (with WDT disabled), 0°C t0 70°C.

PIC16C58B (Use Programmer PICSTART Plus)

Features: The PIC16C58B expands the baseline family support with a larger memory, small pin count device. The PIC16C58B provides upward migration path to PIC16C54 and PIC16C56 customers that require more program or data memory. In addition, PIC16C57 customers that do not require as much I/O capability can migrate down to 18 pins to save cost and board space. The PIC16C58B positions in the high-end of the baseline family between the PIC16C56 and the PIC16C57 providing the same memory capability of the PIC16C57 in the smaller 18 pin package. Only small code changes are necessary to interface to the I/O pins will be required The PIC16C58B is equipped with special microcontroller-like features that reduce system cost and power requirements. There are four user selectable oscillator configurations to choose from, including power saving LP (Low Power) oscillator and cost saving RC oscillator.

Maximum output current sinked by any I/O pin = 25mA; sourced by any I/O pin = 20mA. Do not exceed more than 800 mw of total power dissipation. EPROM = Erasable PROM; OTP= One Time Programmable Only

PIC16C505 14-pin PIC.

See chart for specifications.

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Updated 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
1K x 12	72 x 8	EPROM	11	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	14-CDip	PIC16C505/JW-ND	6.25	—	—
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	14-Dip	PIC16C505-04/P-ND★	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	14-Soic	PIC16C505-04/SL-ND	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	14-Dip	PIC16C505-04I/P-ND★	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	14-Soic	PIC16C505-04I/SL-ND	2.05	1.26	1.22
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	14-Dip	PIC16C505-20/P-ND★	2.13	1.31	1.27
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	14-Soic	PIC16C505-20/SL-ND	2.13	1.31	1.27
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	14-Dip	PIC16C505-20I/P-ND★	2.13	1.31	1.27
1K x 12	72 x 8	OTP	11	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	14-Soic	PIC16C505-20I/SL-ND	2.13	1.31	1.27
512 x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54-RC/P-ND★	3.70	2.72	2.53
512 x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-RC/SO-ND★	3.78	2.78	2.58
512 x 12	25 x 8	OTP	12	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-XT/SO-ND★	3.78	2.78	2.58
512 x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54-HS/P-ND★	3.95	2.91	2.71
512 x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-HS/SO-ND★	4.05	2.97	2.76
512 x 12	25 x 8	OTP	12	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54-LP/P-ND★	3.88	2.86	2.66
512 x 12	25 x 8	OTP	12	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54-LP/SO-ND★	3.98	2.92	2.71
512 x 12	25 x 8	OTP	12	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54-RCI/P-ND★	4.08	3.00	2.78
512 x 12	25 x 8	OTP	12	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54-XTI/P-ND★	4.08	3.00	2.78
512 x 12	25 x 8	OTP	12	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54-XTI/SO-ND★	4.15	3.06	2.84
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54A-04/P-ND★	3.70	2.72	2.53
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54A-04/SO-ND★	3.78	2.78	2.58
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54A-04/SS-ND★	4.08	3.00	2.79
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC54A-04/SO-ND★	3.95	2.91	2.71
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54A-10/P-ND★	3.95	2.91	2.71
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54A-20/P-ND★	4.23	3.12	2.90
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54A-20/SO-ND★	4.33	3.18	2.95
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54A-20/SS-ND★	4.68	3.44	3.19
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54A-04I/SO-ND★	4.15	3.05	2.84
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC54A-04I/SO-ND★	4.35	3.21	2.98
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54A-10I/P-ND★	4.35	3.20	2.98
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54A-20I/P-ND★	4.65	3.43	3.19
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54A-20I/SO-ND★	4.75	3.50	3.25
512 x 12	25 x 8	EPROM	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C54C/JW-ND	6.59	—	—
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54C-04/P-ND★	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54C-04/SO-ND★	2.35	1.45	1.40
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54C-04/SS-ND★	2.53	1.56	1.51
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C54C-20/P-ND★	2.48	1.52	1.47
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C54C-20/SO-ND★	2.53	1.55	1.50
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C54C-20/SS-ND★	2.73	1.67	1.62
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54C-04I/P-ND★	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54C-04I/SO-ND★	2.35	1.45	1.40
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	20-SSOP	PIC16C54C-04I/SS-ND★	2.53	1.56	1.51
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C54C-20I/P-ND★	2.48	1.52	1.47
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C54C-20I/SO-ND★	2.53	1.55	1.50
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	20-SSOP	PIC16C54C-20I/SS-ND★	2.73	1.67	1.62
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16HV540-04/P-ND	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16HV540-04/SO-ND	2.35	1.45	1.40
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16HV540-20/P-ND	2.45	1.52	1.47
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16HV540-20/SO-ND	2.50	1.55	1.50
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16HV540-04I/P-ND	2.30	1.42	1.37
512 x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16HV540-04I/SO-ND	2.35	1.45	1.40
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-RC/P-ND★	4.55	3.34	3.10
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-RC/SO-ND★	4.73	3.47	3.23
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-RC/SP-ND★	4.55	3.34	3.10
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-XT/P-ND★	4.85	3.57	3.32
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-XT/SO-ND★	5.05	3.72	3.45
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-XT/SP-ND★	4.85	3.57	3.32
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-HS/P-ND★	5.55	4.09	3.80
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-HS/SO-ND★	5.78	4.25	3.95
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-HS/SP-ND★	5.55	4.09	3.80
512 x 12	24 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55-LP/P-ND★	4.78	3.51	3.26
512 x 12	24 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55-LP/SO-ND★	4.95	3.65	3.39
512 x 12	24 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55-LP/SP-ND★	4.78	3.51	3.26

(Continued)

MICROCHIP 8-Bit RISC Microcontrollers *(Cont.)*

Memory Size		Config-uration	Oscillator I/O Lines	Frequency Type External	Operating Range Min./Max.	Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55-HSI/P-ND★	6.13	4.50	4.18
512 x 12	24 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C55-HSI/SO-ND★	6.35	4.68	4.35
512 x 12	24 x 8	OTP	20	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55-RCI/P-ND★	5.00	3.67	3.41
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55-XTI/P-ND★	5.35	3.93	3.65
512 x 12	24 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C55-XTI/SO-ND★	5.55	4.09	3.80
512 x 12	25 x 8	EPROM	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip	PIC16C55A/JW-ND	7.35	—	—
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55A-04/P-ND★	2.83	1.73	1.68
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55A-04/SO-ND★	2.93	1.80	1.75
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55A-04/SP-ND★	2.83	1.73	1.68
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16LC55A-04/P-ND★	2.95	1.82	1.76
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC55A-04/SO-ND★	3.08	1.89	1.83
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C55A-20/P-ND★	3.15	1.95	1.89
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C55A-20/SO-ND★	3.28	2.02	1.96
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C55A-20/SP-ND★	3.15	1.95	1.89
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C55A-04I/P-ND★	3.10	1.91	1.85
512 x 12	25 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C55A-04I/SO-ND★	3.23	1.98	1.92
1K x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-RC/P-ND★	4.73	3.49	3.24
1K x 12	25 x 8	OTP	12	RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56-RC/SO-ND★	4.85	3.57	3.32
1K x 12	25 x 8	OTP	12	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-XT/P-ND★	5.08	3.73	3.47
1K x 12	25 x 8	OTP	12	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56-XT/SO-ND★	5.20	3.82	3.55
1K x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-HS/P-ND★	5.80	4.27	3.97
1K x 12	25 x 8	OTP	12	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56-HS/SO-ND★	5.95	4.38	4.07
1K x 12	25 x 8	OTP	12	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56-LP/P-ND★	4.98	3.66	3.40
1K x 12	25 x 8	OTP	12	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56-RCI/P-ND★	5.20	3.83	3.56
1K x 12	25 x 8	OTP	12	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56-XTI/P-ND★	5.58	4.10	3.81
1K x 12	25 x 8	OTP	12	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56-HSI/P-ND★	6.38	4.70	4.36
1K x 12	25 x 8	EPROM	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C56A/JW-ND	9.09	—	—
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56A-04/P-ND★	2.60	1.60	1.55
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56A-04/SO-ND★	2.65	1.63	1.58
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C56A-20/P-ND★	2.78	1.71	1.66
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C56A-20/SO-ND★	2.83	1.74	1.69
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC56A-04/P-ND★	2.73	1.68	1.63
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC56A-04/SO-ND★	2.78	1.71	1.66
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56A-04I/P-ND★	2.85	1.76	1.70
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C56A-04I/SO-ND★	2.90	1.79	1.74
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C56A-20I/P-ND★	3.05	1.88	1.82
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C56A-20I/SO-ND★	3.13	1.92	1.86
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC56A-04I/P-ND★	3.00	1.84	1.79
1K x 12	25 x 8	OTP	12	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC56A-04I/SO-ND★	3.05	1.88	1.82
2K x 12	72 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-RC/P-ND★	5.78	4.25	3.95
2K x 12	72 x 8	OTP	20	RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-RC/SO-ND★	6.00	4.42	4.11
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-XT/P-ND★	6.18	4.55	4.22
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-XT/SO-ND★	6.43	4.73	4.39
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C57-XT/SP-ND★	6.18	4.55	4.22
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-HS/P-ND★	7.08	5.20	4.84
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-HS/SO-ND★	7.35	5.41	5.03
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C57-HS/SP-ND★	7.08	5.20	4.84
2K x 12	72 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57-LP/P-ND★	6.05	4.46	4.15
2K x 12	72 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57-LP/SO-ND★	6.30	4.64	4.31
2K x 12	72 x 8	OTP	20	Xtal	DC-40KHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C57-LP/SP-ND★	6.05	4.46	4.15
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57-HSI/P-ND★	7.78	5.72	5.32
2K x 12	72 x 8	OTP	20	Xtal	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C57-HSI/SO-ND★	8.10	5.95	5.53
2K x 12	72 x 8	OTP	20	RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57-RCI/P-ND★	6.35	4.67	4.34
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57-XTI/P-ND★	6.80	5.00	4.65
2K x 12	72 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C57-XTI/SO-ND★	7.08	5.20	4.83
2K x 12	72 x 8	EPROM	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip	PIC16C57C/JW-ND	10.48	—	—
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57C-04/P-ND★	3.28	2.02	1.96
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57C-04/SO-ND★	3.43	2.10	2.04
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C57C-04/SP-ND★	3.28	2.02	1.96
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16LC57C-04/P-ND★	3.45	2.12	2.06
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC57C-04/SO-ND★	3.58	2.21	2.14
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip	PIC16C57C-20/P-ND★	3.68	2.27	2.20
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C57C-20/SO-ND★	3.83	2.36	2.29
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C57C-20/SP-ND★	3.68	2.27	2.20
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip	PIC16C57C-04I/P-ND★	3.60	2.23	2.16
2K x 12	72 x 8	OTP	20	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C57C-04I/SO-ND★	3.75	2.31	2.24
2K x 12	73 x 8	EPROM	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C58B/JW-ND	10.29	—	—
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C58B-04/P-ND★	2.75	1.70	1.65
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C58B-04/SO-ND★	2.80	1.73	1.68
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C58B-04/SS-ND★	3.03	1.87	1.81
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C58B-20/P-ND★	2.95	1.82	1.76
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C58B-20/SO-ND★	3.00	1.85	1.80
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C58B-20/SS-ND★	3.25	2.00	1.94
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C58B-20I/P-ND★	3.25	2.00	1.94
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C58B-20I/SO-ND★	3.30	2.04	1.98
2K x 12	73 x 8	OTP	12	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	20-SSOP	PIC16C58B-20I/SS-ND★	3.55	2.19	2.12
2K X 12	73 x 8	OTP	12	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC58B-04/P-ND★	2.90	1.78	1.73

★ Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.

MICROCHIP EPROM-Based 8-Bit CMOS Microcontrollers

PIC16C55X Series

High Performance RISC CPU: • Only 35 instructions to learn • All single-cycle instructions (200ns), except for program branches which are two-cycle • Operating Speed: DC - 20 MHz clock input, DC - 200 ns instruction cycle • Interrupt capability • 16 special function hardware registers • 8-level deep hardware stack • Direct, Indirect and Relative addressing modes

Peripheral Features: • 13 I/O pins with individual direction control • High current sink/source for direct LED drive • Timer0: 8-bit timer/counter with 8-bit programmable prescaler

DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

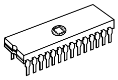
Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 14	80 x 8	OTP	13	Xtal/RC	DC - 4MHz	(0° – 70°C)	18-Dip	PIC16C554-04/P-ND★	3.73	2.70	2.25
512 x 14	80 x 8	OTP	13	Xtal/RC	DC - 4MHz		18-Soic	PIC16C554-04/SO-ND★	3.80	2.75	2.29
2K x 14	128 x 8	EPROM	13	Xtal/RC	DC - 20 MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C558/JW-ND	10.14	—	—
2K x 14	128 x 8	OTP	13	Xtal/RC	DC - 4MHz		18-Dip	PIC16C558-04/P-ND★	4.88	3.54	2.95
2K x 14	128 x 8	OTP	13	Xtal/RC	DC - 4MHz		18-Soic	PIC16C558-04/SO-ND★	4.98	3.61	3.01

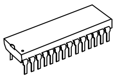
★ This part can be programmed by Digi-Key. For further information and price quotes, please call 1-800-344-4539, and request the programming center.

MICROCHIP

8-Bit RISC Microcontrollers

PIC16C6X Series





General Description:

The PIC16C6X is a family of low-cost, high-performance, CMOS, full-static 8-bit microcontrollers.

"A" Version parts have an additional brown-out detect circuit.

(Use Programmer PICSTART Plus)

All PIC16/17 microcontrollers employ an advanced RISC-like architecture. The PIC16CXX has enhanced core features, eight-level deep stack, and multiple internal and external interrupt sources. The separate instruction and data buses of the Harvard architecture allow a 14-bit wide instruction word with the separate 8-bit wide data. The two stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches (which require two cycles). A total of 35 instructions (reduced instruction set) are available. Additionally, a large register set gives some of the architectural innovations used to achieve a very high performance.

PIC16C6X Microcontroller Core Features:

- High-Performance RISC CPU
- Only 35 single word instructions to learn
- All single cycle instructions except for program branches which are two-cycle
- Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle
- Interrupt capability
- Eight level deep hardware stack
- Direct, indirect and relative addressing modes
- Power-on Reset (POR)
- Power-up Timer (PWRT) and Oscillator Start-up Timer (OST)
- Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation
- Programmable code-protection
- Power saving SLEEP mode
- Selectable oscillator options
- Low-power, high-speed CMOS EPROM/ROM technology
- Fully static design
- Wide operating voltage range: 2.5V to 6.0V
- Commercial, Industrial and Extended temperature ranges
- Lower power consumption: < 2mA @ 5V, 4MHz; 15µA typical @ 3V, 32kHz; <1µA typical standby current

PIC16C6X Peripheral Features:

- Timer0: 8-bit timer/counter with 8-bit prescaler
- Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock
- Timer2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler
- Capture/Compare/PWM (CCP) module(s)
- Capture is 16-bit, max resolution 12.5ns , Compare is 16-bit, max resolution is 200ns, PWM max resolution is 10-bit
- Synchronous Serial Port (SSP) with SPI™ and I²C™
- Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI)
- Parallel Slave Port (PSP) 8-bits wide, with external RD, WR and CS controls
- Brown-out detection circuitry for Brown-out Reset (BOR)

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	**RAM**								**1**	**25**	**100**
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16LC62A-04/SP-ND★	7.43	4.58	4.43
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16LC62A-04/SO-ND★	7.43	4.58	4.43
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16LC62A-04I/SP-ND★	8.15	5.02	4.85
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-400KHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16LC62A-04I/SO-ND★	8.15	5.02	4.85
2K x 14	128 x 8	EPROM	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-CDip	PIC16C62B/JW-ND	9.57	—	—
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C62B-04/SP-ND★	4.40	2.71	2.63
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C62B-04/SO-ND★	4.40	2.71	2.63
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C62B-04/SS-ND★	4.65	2.86	2.77
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C62B-20/SP-ND★	4.70	2.90	2.81
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C62B-20/SO-ND★	4.70	2.90	2.81
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C62B-20/SS-ND★	4.95	3.05	2.96
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16LC62B-04/SP-ND★	4.63	2.85	2.76
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16LC62B-04/SO-ND★	4.63	2.85	2.76
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C62B-04I/SP-ND★	4.85	2.98	2.89
2K x 14	128 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C62B-20I/SP-ND★	5.18	3.19	3.09
4K x 14	192 x 8	EPROM	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-CDip .3"	PIC16C63/JW-ND	13.49	—	—
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63-04/SP-ND★	8.50	5.23	5.06
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63-04/SO-ND★	8.50	5.23	5.06
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-10MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63-10/SP-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-10MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63-10/SO-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63-20/SP-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63-20/SO-ND★	9.10	5.60	5.42
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63-04I/SP-ND★	9.35	5.76	5.57
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63-04I/SO-ND★	9.35	5.76	5.57
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63-20I/SP-ND★	10.05	6.19	5.99
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63-20I/SO-ND★	10.05	6.19	5.99
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-200KHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16LC63-04I/SP-ND★	9.78	6.03	5.83
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-200KHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16LC63-04I/SO-ND★	9.78	6.03	5.83
4K x 14	192 x 8	EPROM	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-CDip .3"	PIC16C63A/JW-ND	9.18	—	—
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63A-04/SP-ND★	5.38	3.31	3.20
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63A-04/SO-ND★	5.38	3.31	3.20
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C63A-04/SS-ND★	5.63	3.47	3.36
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63A-04I/SP-ND★	5.93	3.65	3.54
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63A-04I/SO-ND★	5.93	3.65	3.54
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	28-SSOP	PIC16C63A-04I/SS-ND★	6.20	3.82	3.70
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-Dip .3"	PIC16C63A-20/SP-ND★	5.78	3.56	3.45
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SOIC	PIC16C63A-20/SO-ND★	5.78	3.56	3.45
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	28-SSOP	PIC16C63A-20/SS-ND★	6.03	3.72	3.61
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-Dip .3"	PIC16C63A-20I/SP-ND★	6.35	3.91	3.79
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-SOIC	PIC16C63A-20I/SO-ND★	6.35	3.91	3.79
4K x 14	192 x 8	OTP	22	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	28-SSOP	PIC16C63A-20I/SS-ND★	6.63	4.08	3.95
2K x 14	128 x 8	EPROM	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	40-CDip	PIC16C64A/JW-ND	12.56	—	—
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16C64A-04/P-ND★	7.93	4.89	4.73
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	44-PLCC	PIC16C64A-04/L-ND★	8.58	5.28	5.11
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16C64A-20/P-ND★	8.50	5.23	5.06
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	44-PLCC	PIC16C64A-20/L-ND★	9.15	5.63	5.45
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-200KHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16LC64A-04/P-ND★	8.33	5.13	4.97
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-200KHz	32° - 158°F (0° - 70°C)	44-PLCC	PIC16LC64A-04/L-ND★	8.98	5.53	5.35
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° - 185°F (-40° - 85°C)	40-Dip	PIC16C64A-04I/P-ND★	8.73	5.38	5.20
2K x 14	128 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° - 185°F (-40° - 85°C)	44-PLCC	PIC16C64A-20I/L-ND★	10.00	6.16	5.96
4K x 14	192 x 8	EPROM	33	Xtal/RC	DC-20MHz	32° - 158°F (0° - 70°C)	40-CDip	PIC16C65A/JW-ND	14.02	—	—
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° - 158°F (0° - 70°C)	40-Dip	PIC16C65A-04/P-ND★	10.60	6.53	6.32

(Continued)

MICROCHIP 8-Bit RISC Microcontrollers PIC16C6X Series *(Cont.)*

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65A-10/P-ND★	11.35	6.99	6.76
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65A-10/L-ND★	13.05	8.04	7.78
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65A-20/P-ND★	11.35	6.99	6.76
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65A-20/L-ND★	13.05	8.04	7.78
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16LC65A-04/P-ND★	11.13	6.86	6.64
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC65A-04/L-ND★	12.85	7.91	7.65
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65A-04I/P-ND★	11.68	7.18	6.95
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C65A-04I/L-ND★	13.40	8.25	7.98
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65A-20I/P-ND★	12.48	7.69	7.44
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C65A-20I/L-ND★	14.20	8.74	8.46
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16LC65A-04I/L-ND★	13.90	8.57	8.29
4K x 14	192 x 8	EPROM	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C65B/JW-ND	10.09	—	—
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65B-04/P-ND★	6.03	3.71	3.59
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65B-04/L-ND★	7.00	4.31	4.18
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C65B-20/P-ND★	6.45	3.97	3.85
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C65B-20/L-ND★	7.43	4.57	4.43
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC65B-04/L-ND★	7.30	4.50	4.36
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65B-04I/P-ND★	6.65	4.10	3.98
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C65B-20I/P-ND★	7.10	4.38	4.24
4K x 14	192 x 8	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C65B-20I/L-ND★	8.08	4.98	4.83
8K x 14	368	EPROM	22	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3"	PIC16C66/JW-ND	13.89	—	—
8K x 14	368	OTP	22	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C66-04/SP-ND★	7.83	4.83	4.68
8K x 14	368	OTP	22	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C66-04/SO-ND★	7.83	4.83	4.68
8K x 14	368	OTP	22	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C66-10/SP-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C66-10/SO-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C66-20/SP-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C66-20/SO-ND★	8.38	5.16	5.00
8K x 14	368	OTP	22	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC66-04/SP-ND★	8.23	5.07	4.91
8K x 14	368	OTP	22	Xtal/RC	DC-200KHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC66-04/SO-ND★	8.23	5.07	4.91
8K x 14	368	OTP	22	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C66-04I/SP-ND★	8.63	5.31	5.14
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C66-20I/SP-ND★	9.23	5.68	5.50
8K x 14	368	OTP	22	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C66-20I/SO-ND★	9.23	5.68	5.50
8K x 14	368	EPROM	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C67/JW-ND	13.80	—	—
8K x 14	368	OTP	33	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C67-04/P-ND★	8.55	5.26	5.10
8K x 14	368	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C67-10/P-ND★	9.15	5.63	5.46
8K x 14	368	OTP	33	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C67-10/L-ND★	9.68	5.97	5.79
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C67-20/P-ND★	9.15	5.63	5.46
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C67-20/L-ND★	9.68	5.97	5.79
8K x 14	368	OTP	33	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C67-04I/P-ND★	9.40	5.79	5.61
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C67-20I/P-ND★	10.05	6.20	6.00
8K x 14	368	OTP	33	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C67-20I/L-ND★	10.55	6.51	6.30

★ Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.

MICROCHIP

8-Bit CMOS Microcontroller with LCD Driver

PIC16C92X

(Use Programmer PICSTART Plus and AC164024-ND)

General Description:

The PIC16C9XX is a family of low-cost, high-performance, CMOS, fully-static, 8-bit microcontrollers with an integrated LCD Driver module, in the PIC16CXX mid-range family.

The **PIC16C923** devices have 176 bytes of RAM, 25 I/O pins, and 25-27 input only. In addition several peripheral features are available including: three timer/ counters, one Capture/Compare/ PWM module, one serial port and one LCD module. The Synchronous Serial Port can be configured as either a 3-wire Serial Peripheral Interface (SPI) or the two-wire Inter-Integrated Circuit (I^2C) bus. The LCD module features programmable multiplex mode (static, 1/2, 1/3 and 1/4) and drive bias (static and 1/3). It is capable of driving up to 32 segments and up to 4 commons. It can also drive the LCD panel while in SLEEP mode.

The **PIC16C924** devices have 176 bytes of RAM, 25 I/O pins, and 25-27 input only. In addition several peripheral features are available including: three timer/counters, one Capture/Compare/ PWM module, one serial port and one LCD module. The Synchronous Serial Port can be configured as either a 3-wire Serial Peripheral Interface (SPI) or the two-wire Inter-Integrated Circuit (I^2C) bus. The LCD module features programmable multiplex mode (static, 1/2, 1/3 and 1/4) and drive bias (static and 1/3). It is capable of driving up to 32 segments and up to 4 commons. It can also drive the LCD panel while in SLEEP mode. The PIC16C924 also has a 5-channel high-speed 8-bit A/D. The 8-bit resolution is ideally suited for applications requiring low-cost analog interface, e.g., thermostat control, pressure sensing, and meters.

Microcontroller Core Features:

• High performance RISC CPU • Only 35 single word instructions to learn • 4K x 14 on-chip EPROM program memory • 176 x 8 general purpose registers (SRAM) • 57 special function registers (60 for PIC16C924) • All single cycle instructions (500 ns) except for program branches which are two-cycle • Operating speed: DC - 8Mhz clock input; DC - 500ns instruction cycle • Interrupt capability • Eight level deep hardware stack • Direct, indirect and relative addressing modes

Peripheral Features:

• 25 I/O pins with individual direction control • 25-27 input only pins • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter. Timer1 can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler

• One pin that can be configured a capture input, PWM output, or compare output:

• Capture is 16-bit, max. resolution 31.25ns • Compare is 16-bit, max. resolution 500ns • PWM resolution is 1- to 10-bits. Maximum PWM frequency @ 8-bit resolution = 32kHz, @ 10-bit resolution = 8kHz

• Programmable LCD timing module:

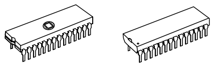
• Multiple LCD timing sources available • Can drive LCD panel while in Sleep mode • Static, 1/2, 1/3, 1/4 multiplex • Static drive and 1/3 bias capability • 16 bytes of dedicated LCD RAM • Up to 32 segments, up to 4 commons • Synchronous Serial Port (SSP) with SPI™ and I^2C™ • 8-bit multichannel Analog to Digital converter (PIC16C924 only)

DS00161-ND CD-ROM Microchip Technical Library **$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	176 x 8	EPROM	50-52 (5-Ch. 8-bit A/D)	Xtal/RC	DC - 8MHz	32° – 158°F (0° – 70°C)	68CLCC	PIC16C924/CL-ND	25.97	—	—
4K x 14	176 x 8	OTP	50-52 (5-Ch. 8-bit A/D)	Xtal/RC	DC - 4MHz		68PLCC	PIC16C924-04/L-ND	7.08	4.35	4.21
4K x 14	176 x 8	OTP	50-52 (5-Ch. 8-bit A/D)	Xtal/RC	DC - 4MHz		68PLCC	PIC16LC924-04/L-ND	7.43	4.57	4.42
4K x 14	176 x 8	OTP	50-52	Xtal/RC	DC - 4MHz		68PLCC	PIC16C923-04/L-ND	6.30	3.88	3.75
4K x 14	176 x 8	OTP	50-52	Xtal/RC	DC - 4MHz		68PLCC	PIC16LC923-04/L-ND	6.63	4.07	3.94

8-Bit RISC Microcontrollers

PIC16C62X / 16CE62X (EEPROM – Memory)



PIC16C62X
(Use Programmer PICSTART Plus or MP-PROG-ND)

General Description: The PIC16C62X are 18-pin EPROM-based members of the versatile PIC16CXX family of low-cost, high-performance, CMOS, fully-static, 8-bit microcontrollers. The PIC16C620 and PIC16C621 have 80 bytes of RAM. The PIC16C622 has 128 bytes of RAM. Each device has 13 I/O pins and an 8-bit timer/counter with an 8-bit programmable prescaler. In addition, the PIC16C62X add two analog comparators with a programmable on-chip voltage reference module. The comparator module is ideally suited for applications requiring a low-cost analog interface, e.g., battery chargers, threshold detectors, white goods controllers etc.

Features: High-Performance RISC-like CPU: • Only 35 single word instructions to learn • All single cycle instructions (200ns), except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • Interrupt capability • 16 special function hardware registers • 8 level deep hardware stack • Direct, Indirect and relative addressing modes.

Peripheral Features: • 13 I/O pins with individual direction control • 25mA sink/source per I/O for direct LED drive • Analog comparator module with: 2 analog comparators, Programmable on-chip voltage reference (VREF) module, Programmable input multiplexing form device inputs and internal voltage reference, Comparator outputs can be output signals • TMR0: 8-bit timer/counter with 8-bit programmable prescaler

Special Microcontroller Features: • Power-on-reset (POR) • Power-up Timer (PWRT) and Oscillator start-up timer (OST) • Brown-out protection • Watchdog timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code protection • Power saving SLEEP mode • Fuse selectable oscillator options • Serial in-system programming (via two pins) • 4 user programmable ID locations

CMOS Technology: • Low-power, high-speed CMOS EPROM technology • Fully static design • Wide operating voltage range - 3.0V to 6.0V • Commercial and industrial temperature range • Low power consumption - < 2mA @ 5v, 4Mhz; 15µA typical @ 3V, 32KHz; < 1µA typical standby current @ 3V

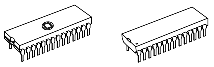
DS00092D-ND	Embedded Control Handbook, Volume 1......	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000..................................	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library.........	**$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
Program	RAM								1	25	100
512 x 14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C620/JW-ND	8.51	—	—
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620-04/P-ND★	4.35	3.65	2.95
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620-04/SO-ND★	4.43	3.72	3.01
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620-20/P-ND★	4.65	3.90	3.16
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620-20/SO-ND★	4.73	3.98	3.22
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC620-04/P-ND★	4.55	3.83	3.10
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC620-04/SO-ND★	4.65	3.90	3.16
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C620-04I/P-ND★	4.78	4.01	3.25
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C620-04I/SO-ND★	4.88	4.09	3.31
1K x 14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C621/JW-ND	9.27	—	—
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621-04/P-ND★	4.90	4.12	3.34
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621-04/SO-ND★	5.00	4.21	3.41
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621-20/P-ND★	5.25	4.41	3.57
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621-20/SO-ND★	5.35	4.50	3.64
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC621-04/P-ND★	5.15	4.33	3.51
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC621-04/SO-ND★	5.25	4.42	3.58
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C621-04I/P-ND★	5.40	4.54	3.67
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C621-20I/SO-ND★	5.90	4.95	4.01
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-200KHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC621-04I/P-ND★	5.68	4.76	3.86
2K x 14	128 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C622/JW-ND	10.14	—	—
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622-04/P-ND★	5.63	4.72	3.82
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622-04/SO-ND★	5.73	4.82	3.90
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C622-04/SS-ND	6.18	5.20	4.21
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622-20/P-ND★	6.03	5.05	4.09
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622-20/SO-ND★	6.13	5.16	4.17
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C622-20/SS-ND	6.63	5.56	4.50
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC622-04/P-ND★	5.90	4.96	4.02
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC622-04/SO-ND★	6.03	5.06	4.10
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC622-04/SS-ND	6.50	5.46	4.42
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622-04I/P-ND★	6.18	5.20	4.21
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C622-04I/SO-ND★	6.30	5.30	4.29
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622-20I/P-ND★	6.63	5.56	4.50
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C622-20I/SO-ND★	6.75	5.67	4.59
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC622-04I/P-ND★	6.50	5.46	4.42
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC622-04I/SO-ND★	6.63	5.57	4.51
512 X 14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C620A/JW-ND	7.53	—	—
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620A-04/P-ND★	2.25	1.39	1.35
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620A-04/SO-ND★	2.30	1.42	1.37
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C620A-20/P-ND★	2.40	1.49	1.44
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C620A-20/SO-ND★	2.45	1.52	1.47
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC620A-04/P-ND★	2.38	1.46	1.41
512 x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C620A-04I/P-ND★	2.25	1.39	1.35
1K x14	80 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C621A/JW-ND	8.49	—	—
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621A-04/P-ND★	2.53	1.56	1.51
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621A-04/SO-ND★	2.58	1.59	1.54
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C621A-20/P-ND★	2.70	1.67	1.62
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C621A-20/SO-ND★	2.75	1.70	1.65
1K x 14	80 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C621A-04I/P-ND★	2.78	1.72	1.66
2K x 14	128 x 8	EPROM❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C622A/JW-ND	9.56	—	—
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622A-04/P-ND★	2.85	1.75	1.70
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622A-04/SO-ND★	2.90	1.79	1.73
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C622A-20/P-ND★	3.05	1.87	1.81
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C622A-20/SO-ND★	3.10	1.91	1.85
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC622A-04/P-ND★	3.88	2.39	2.32
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC622A-04/SO-ND★	3.98	2.46	2.38
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622A-04I/P-ND★	3.13	1.93	1.87
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C622A-20I/P-ND★	3.35	2.06	2.00
2K x 14	128 x 8	OTP❖	13	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C622A-20I/SO-ND★	3.40	2.10	2.04
512 x 14	96 x 8	EPROM‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16CE623/JW-ND	8.94	—	—
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE623-04/P-ND★	3.23	1.98	1.92
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE623-04/SO-ND★	3.28	2.02	1.96
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE623-20/P-ND★	3.45	2.12	2.06
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE623-20/SO-ND★	3.53	2.17	2.10
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16CE623-04I/P-ND★	3.55	2.18	2.11
512 x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16CE623-04I/SO-ND★	3.60	2.23	2.16
1K x 14	96 x 8	EPROM‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16CE624/JW-ND	9.20	—	—
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE624-04/P-ND★	3.60	2.22	2.15
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE624-04/SO-ND★	3.68	2.27	2.20
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE624-20/P-ND★	3.85	2.38	2.30
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE624-20/SO-ND★	3.93	2.42	2.35
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16CE624-04I/P-ND★	3.98	2.44	2.37
1K x 14	96 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16CE624-04I/SO-ND★	4.05	2.49	2.42
2K x 14	128 x 8	EPROM‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16CE625/JW-ND	10.64	—	—
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE625-04/P-ND★	4.10	2.52	2.44
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE625-04/SO-ND★	4.18	2.57	2.49
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16CE625-20/P-ND★	4.38	2.70	2.62
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16CE625-20/SO-ND★	4.48	2.75	2.67
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16CE625-04I/P-ND★	4.50	2.78	2.69
2K x 14	128 x 8	OTP‡❖	13	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16CE625-04I/SO-ND★	4.60	2.83	2.74

❖ 2 Analog comparators, Programmable on Chip V Ref.
† Low Power oscillation 200KHz Max.
‡ 128 Byte EEPROM
★ *This part can be programmed by Digi-Key. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

8-Bit CMOS Microcontrollers with A/D Converter

PIC16C7X and PIC16C77X Series



PIC16C71X **Microcontroller Core Features:** • High-Performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • Up to 2K x 14 words of Program Memory, up to 128 x 8 bytes of Data Memory (RAM) • Interrupt capability • Eight level deep hardware stack • Direct, indirect and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS EPROM technology • Fully static design • High Sink/Source Current 25/25mA • Commercial, Industrial and Extended Temperature Ranges • Program Memory Parity Error Checking Circuitry with Parity Error Reset (PER) (PIC16C715) • Low-power consumption: <2mA @ 5V, 4MHz; 15µA typical @ 3V, 32kHz; <1µA typical standby current

Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • 8-bit multichannel analog-to-digital converter • Brown-out detection circuitry for Brown-out Reset (BOR) • 13 I/O Pins with Individual Direction Control

PIC16C7X **Microcontroller Core Features:** • High-Performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • Up to 8K x 14 words of Program Memory, up to 368 x 8 bytes of Data Memory (RAM) • Interrupt capability • Eight level deep hardware stack • Direct, indirect and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS EPROM technology • Fully static design • Wide operating voltage range: 2.5V to 6.0V • High Sink/Source Current 25/25mA • Commercial, industrial and extended temperature ranges • Program Memory Parity Error Checking Circuitry with Parity Error Reset (PER) (PIC16C715) • Low-power consumption: <2mA @ 5V, 4MHz; 15µA typical @ 3V, 32kHz; <1µA typical standby current

PIC16C7X Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter 8-bit period register, prescaler and postscaler • Capture, Compare, PWM module(s) • Capture is 16-bit, max resolution is 12.5 ns, Compare is 16-bit, max resolution is 200ns, PWM max. resolution is 10-bit • 8-bit multichannel analog-to-digital converter • Synchronous Serial Port (SSP) with SPI™ and I^{2}C™ • Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI) • Parallel, Slave Port (PSP) 8-bits wide, with external RD, WR and CS controls • Brown-out detection circuitry for Brown-out Reset (BOR)

PIC16C77X **Microcontroller Core Features:** • High-Performance RISC CPU • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input, DC - 200ns instruction cycle • 4K x 14 words of Program Memory, 256 x 8 bytes of Data Memory (RAM) • Interrupt capability (up to 14 internal/external interrupt sources) • Eight level deep hardware stack • Direct, indirect and relative addressing modes • Power-on Reset (POR) • Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options • Low-power, high-speed CMOS EPROM technology • Fully static design • In-Circuit Serial Programming™ (ISCP) • Wide operating voltage range: 2.5V to 5.5V • High Sink/Source Current 25/25mA • Commercial and industrial temperature ranges • Low-power consumption: <2mA @ 5V, 4MHz; 22µA typical @ 3V, 32kHz; <1µA typical standby current

PIC16C77X Peripheral Features: • Timer0: 8-bit timer/counter with 8-bit prescaler • Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock • Timer2: 8-bit timer/counter 8-bit period register, prescaler and postscaler • Two Capture, Compare, PWM module • Capture is 16-bit, max. resolution is 12.5 ns; Compare is 16-bit, max. resolution is 200 ns; PWM max. resolution is 10-bit • 12-bit multi-channel Analog-to-Digital converter • On-chip absolute bandgap voltage reference generator • Synchronous Serial Port (SSP) with SPI™ (Master Mode) and I^{2}C™ • Universal Synchronous Asynchronous Receiver Transmitter, supports high/low speeds and 9-bit address mode (USART/SCI) • Parallel, Slave Port (PSP) 8-bits wide, with external Read, Write and Chip Select controls • Programmable Brown-out detection circuitry for Brown-out Reset (BOR) • Programmable Low-voltage detection circuitry

Key Features		PIC16C710	PIC16C71	PIC16C711	PIC16C712	PIC16C715	PIC16C716	PIC16C72A	PIC16C73B
Clock	Maximum Frequency of Operation (MHz)	20	20	20	20	20	20	20	20
Memory	EPROM Program Memory (x14 words)	512	1K	1K	1K	2K	2K	2K	4K
	Data Memory (bytes)	36	36	68	128	128	128	128	192
Peripherals	Timer Modules(s)	TMRO	TMRO	TMRO	TMRO,1,2	TMRO	TMRO,1,2	TMRO,1,2	TMRO,1,2
	Capture/Compare/ PWM Module(s)	— —	— —	— —	1 —	— —	1 —	1 —	2 —
	Serial Port(s) SPI/I^{2}C,USART)	— —	— —	— —	— —	— —	— —	SPI/I^{2}C —	SPI/I^{2}C USART
	A/D Converter (8-bit) Ch.	4	4	4	4	4	4	5	5
Features	Interrupt Sources	4	4	4	7	4	7	8	11
	I/O Pins	13	13	13	13	13	13	22	22
	Voltage Range (Volts)	2.5-6.0	3.0-6.0	2.5-6.0	2.5-5.5	2.5-5.5	2.5-5.5	2.5-5.5	2.5-5.5
	In-Circuit Serial Prog.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Brown-out Reset	Yes	—	Yes	Yes	Yes	Yes	Yes	Yes
	Packages	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP SOIC	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP, SOIC 20-pin SSOP	18-pin DIP, SOIC 20-pin SSOP	28-pin SDIP SOIC, SSOP	28-pin SDIP Soic

PIC16C77X Key Features	PIC16C773	PIC16C774
Operating Frequency	DC - 20MHz	
Resets (and Delays)	POR, BOR, MCLR, WDT (PWRT, OST)	
Program Memory (14-bit words)	4K	
Data Memory (bytes)	256	
Interrupts	13	14
I/O Ports	Ports A,B,C	Ports A,B,C,D,E
Timers	3	
Capture/Compare/ PWM Modules	2	
Serial Communications	MSSP, USART	
Parallel Communications	—	PSP
12-bit Analog-to-Digital Module	6 Input Channels	10 input Channels
Instruction Set	35 Instructions	

9267B-ND Microchip PIC16C7X Family Data Book includes: PIC16C72, PIC16C73A, PIC16C74A, PIC16C76, PIC16C77 . . . . . **$6.95**

Memory Size		Configuration	I/O Lines	Oscillator Type Ext.	Freq. Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C710-04/P-ND★	3.85	2.20	2.04
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C710-04/SO-ND★	3.93	2.24	2.08
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C710-20/P-ND★	4.13	2.35	2.18
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C710-20/SO-ND★	4.20	2.40	2.23
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC710-04/P-ND★	4.05	2.31	2.14
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC710-04/SO-ND★	4.13	2.36	2.18
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC710-04/SS-ND	4.53	2.59	2.40
512 x 14	36	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C710-04I/SO-ND★	4.33	2.47	2.29
1K x 14	36 x 8	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C71/JW-ND	9.30	—	—
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C71-04/P-ND★	6.10	3.91	3.66
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C71-04/SO-ND★	6.23	3.98	3.74
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C71-20/P-ND★	6.53	4.18	3.92
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C71-20/SO-ND★	6.65	4.26	4.00
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC71-04/P-ND★	6.40	4.10	3.85
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC71-04/SO-ND★	6.53	4.18	3.92
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C71-04I/P-ND★	6.73	4.30	4.03
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C71-20I/P-ND★	7.18	4.60	4.31
1K x 14	36 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C71-20I/SO-ND★	7.33	4.69	4.40
1K x 14	68 x 8	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C711/JW-ND★	10.03	—	—
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C711-04/P-ND★	4.20	2.40	2.23
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C711-04/SO-ND★	4.28	2.45	2.27
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C711-04/SS-ND	4.70	2.69	2.50
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C711-20/P-ND★	4.50	2.57	2.38
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C711-20/SO-ND★	4.58	2.62	2.43
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C711-20/SS-ND	5.05	2.88	2.67
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC711-04/P-ND★	4.40	2.52	2.34
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC711-04/SO-ND★	4.50	2.57	2.38
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC711-04/SS-ND	4.95	2.83	2.62
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C711-04I/P-ND★	4.63	2.64	2.45
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C711-04I/SO-ND★	4.70	2.69	2.50

(Continued)

8-Bit CMOS Microcontrollers with A/D Converter, PIC16C7X and PIC16C77X *(Cont.)*

Memory Size		Config-uration	I/O Lines	Oscillator Type Ext.	Freq. Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C711-20I/P-ND★	4.95	2.82	2.62
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C711-20I/SO-ND★	5.05	2.88	2.67
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC711-04I/P-ND★	4.85	2.77	2.57
1K x 14	68 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC711-04I/SO-ND★	4.95	2.83	2.62
2K x 14	128	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C715/JW-ND	11.91	—	—
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C715-04/P-ND★	4.73	2.70	2.50
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C715-04/SO-ND★	4.83	2.75	2.55
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C715-20/P-ND★	5.05	2.89	2.68
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C715-20/SO-ND★	5.15	2.95	2.73
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-SSOP	PIC16C715-20/SS-ND	5.65	3.23	3.00
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC715-04/P-ND★	4.95	2.83	2.62
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC715-04/SO-ND★	5.05	2.89	2.68
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	20-SSOP	PIC16LC715-04/SS-ND	5.55	3.17	2.94
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C715-04I/P-ND★	5.30	3.02	2.80
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C715-20I/P-ND★	5.68	3.24	3.00
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16LC715-04I/P-ND★	5.55	3.18	2.94
2K x 14	128	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16LC715-04I/SO-ND★	5.68	3.24	3.00
2K x 14	128 x 8	EPROM	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-CDip	PIC16C716/JW-ND	9.20	—	—
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C716-04/P-ND★	3.80	2.16	2.01
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C716-04/SO-ND★	3.88	2.21	2.05
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16C716-20/P-ND★	4.05	2.32	2.15
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16C716-20/SO-ND★	4.13	2.36	2.19
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Dip	PIC16LC716-04/P-ND★	3.98	2.27	2.10
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	18-Soic	PIC16LC716-04/SO-ND★	4.05	2.32	2.15
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C716-04I/P-ND★	4.18	2.38	2.21
2K x 14	128 x 8	OTP	13 (4-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C716-04I/SO-ND★	4.25	2.43	2.25
2K x 14	128 x 8	OTP	13 (4-Ch, 8 Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Dip	PIC16C716-20I/P-ND★	4.45	2.55	2.36
2K x 14	128 x 8	OTP	13 (4-Ch, 8 Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	18-Soic	PIC16C716-20I/SO-ND★	4.53	2.59	2.40
2K x 14	128 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3"	PIC16C72/JW-ND	14.05	—	—
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72-04/SO-ND★	7.68	4.72	4.57
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16C72-04/SS-ND★	8.25	5.08	4.91
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C72-10/SP-ND★	8.08	4.98	4.81
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72-10/SO-ND★	8.20	5.05	4.89
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72-20/SO-ND★	8.20	5.05	4.89
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC72-04/SP-ND★	7.93	4.88	4.72
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC72-04/SO-ND★	8.05	4.97	4.81
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	28-SSOP	PIC16LC72-04/SS-ND★	8.63	5.32	5.15
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C72-04I/SP-ND★	8.30	5.12	4.95
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C72-04I/SO-ND★	8.43	5.19	5.02
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C72-20I/SP-ND★	8.88	5.47	5.30
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C72-20I/SO-ND★	9.03	5.56	5.38
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16LC72-04I/SP-ND★	8.70	5.36	5.18
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16LC72-04I/SO-ND★	8.83	5.44	5.26
2K x 14	128 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3"	PIC16C72A/JW-ND	9.77	—	—
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C72A-04/SP-ND★	5.23	3.22	3.12
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72A-04/SO-ND★	5.23	3.22	3.12
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C72A-20/SP-ND★	5.58	3.44	3.34
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C72A-20/SO-ND★	5.58	3.44	3.34
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC72A-04/SP-ND★	5.48	3.38	3.28
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16LC72A-04/SS-ND★	5.78	3.56	3.45
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C72A-04I/SP-ND★	5.78	3.56	3.45
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C72A-04I/SO-ND★	5.78	3.56	3.45
2K x 14	128 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C72A-20I/SP-ND★	6.15	3.79	3.67
4K x 14	192 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3"	PIC16C73A/JW-ND	13.88	—	—
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C73A-04/SP-ND★	9.30	5.73	5.54
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73A-04/SO-ND★	9.30	5.73	5.54
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C73A-10/SP-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73A-10/SO-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C73A-20/SP-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73A-20/SO-ND★	9.95	6.13	5.93
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC73A-04/SP-ND★	9.73	5.99	5.79
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC73A-04/SO-ND★	9.73	5.99	5.79
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C73A-04I/SP-ND★	10.23	6.30	6.09
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73A-04I/SO-ND★	10.23	6.30	6.09
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C73A-10I/SP-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73A-10I/SO-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C73A-20I/SP-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73A-20I/SO-ND★	10.95	6.74	6.52
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16LC73A-04I/SP-ND★	10.65	6.57	6.35
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16LC73A-04I/SO-ND★	10.65	6.57	6.35
4K x 14	192 x 8	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3"	PIC16C73B/JW-ND	11.65	—	—
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C73B-04/SP-ND★	6.75	4.16	4.03
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73B-04/SO-ND★	6.75	4.16	4.03
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16C73B-04/SS-ND★	7.00	4.31	4.18
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C73B-20/SP-ND★	7.23	4.45	4.32
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C73B-20/SO-ND★	7.23	4.45	4.32
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-SSOP	PIC16C73B-20/SS-ND★	7.50	4.62	4.47
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C73B-04I/SP-ND★	7.43	4.58	4.44
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73B-04I/SO-ND★	7.43	4.58	4.44
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-SSOP	PIC16C73B-04I/SS-ND	7.70	4.74	4.59
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C73B-20I/SP-ND★	7.95	4.90	4.75

(Continued)

8-Bit CMOS Microcontrollers with A/D Converter, PIC16C7X and PIC16C77X *(Cont.)*

Memory Size		Config-uration	I/O Lines	Oscillator Type Ext.	Freq. Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C73B-20I/SO-ND★	7.95	4.90	4.75
4K x 14	192 x 8	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-SSOP	PIC16C73B-20I/SS-ND★	8.20	5.05	4.89
4K x 14	192 x 8	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C74A/JW-ND	14.59	—	—
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74A-04/P-ND★	11.25	6.93	6.71
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74A-04/L-ND★	11.93	7.34	7.10
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC -10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74A-10/P-ND★	12.05	7.42	7.18
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC -10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74A-10/L-ND★	12.73	7.84	7.58
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74A-20/P-ND★	12.05	7.42	7.18
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74A-20/L-ND★	12.73	7.84	7.58
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	40-Dip	PIC16LC74A-04/P-ND★	11.83	7.28	7.04
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC74A-04/L-ND★	12.50	7.69	7.44
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C74A-04I/P-ND★	12.38	7.63	7.38
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74A-04I/L-ND★	13.03	8.03	7.77
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC -10MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74A-10I/L-ND★	13.90	8.56	8.28
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74A-20I/L-ND★	13.90	8.56	8.28
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16LC74A-04I/L-ND★	13.63	8.39	8.12
4K x 14	192 x 8	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C74B/JW-ND	11.20	—	—
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74B-04/P-ND★	8.20	5.06	4.90
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74B-04/L-ND★	9.18	5.65	5.48
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C74B-04I/P-ND★	9.03	5.56	5.39
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C74B-04I/L-ND★	10.00	6.16	5.97
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C74B-20/P-ND★	8.78	5.41	5.24
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74B-20/L-ND★	9.75	6.01	5.82
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C74B-20I/P-ND★	9.63	5.93	5.75
4K x 14	192 x 8	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C74B-20I/L-ND★	10.60	6.53	6.33
8K x 14	368	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip .3”	PIC16C76/JW-ND	14.34	—	—
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C76-04/SP-ND★	8.55	5.26	5.10
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C76-04/SO-ND★	8.55	5.26	5.10
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C76-10/SP-ND★	9.15	5.63	5.46
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16C76-20/SP-ND★	9.15	5.63	5.46
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C76-20/SO-ND★	9.15	5.63	5.46
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	28-Dip .3”	PIC16LC76-04/SP-ND★	8.98	5.53	5.36
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC76-04/SO-ND★	8.98	5.53	5.36
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C76-04I/SP-ND★	9.40	5.79	5.61
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C76-04I/SO-ND★	9.40	5.79	5.61
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C76-10I/SP-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C76-10I/SO-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C76-20I/SP-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C76-20I/SO-ND★	10.05	6.20	6.00
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16LC76-04I/SP-ND★	9.83	6.05	5.86
8K x 14	368	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16LC76-04I/SO-ND★	9.83	6.05	5.86
8K x 14	368	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C77/JW-ND	14.23	—	—
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C77-04/P-ND★	9.18	5.66	5.48
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C77-04/L-ND★	9.65	5.94	5.76
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C77-10/P-ND★	9.83	6.06	5.87
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C77-10/L-ND★	10.33	6.36	6.16
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C77-20/P-ND★	9.83	6.06	5.87
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C77-20/L-ND★	10.33	6.36	6.16
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC77-04/L-ND★	10.13	6.24	6.05
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C77-04I/P-ND★	10.10	6.23	6.03
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C77-04I/L-ND★	10.60	6.54	6.33
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C77-10I/P-ND★	10.80	6.66	6.45
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-10MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C77-10I/L-ND★	11.35	6.99	6.78
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C77-20I/P-ND★	10.80	6.66	6.45
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C77-20I/L-ND★	11.35	6.99	6.78
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16LC77-04I/P-ND★	10.55	6.51	6.30
8K x 14	368	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-4MHz†	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16LC77-04I/L-ND★	11.08	6.83	6.62
8K x 14	256	EPROM	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-CDip	PIC16C745/JW-ND	11.74	—	—
8K x 14	256	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3”	PIC16C745-I/SP-ND★	5.43	3.26	2.82
8K x 14	256	OTP	22 (5-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C745-I/SO-ND★	5.43	3.26	2.82
8K x 14	256	EPROM	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-CDip	PIC16C765/JW-ND	12.33	—	—
8K x 14	256	OTP	33 (8-Ch. 8-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-PLCC	PIC16C765-I/L-ND★	6.80	4.08	3.64
PIC16C77X With 12-Bit A/D Converter											
4K x 14	256	EPROM	15 (6-Ch 12 A/C)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	20-CDip	PIC16C771/JW-ND *NEW!*	10.65	—	—
4K x 14	256 x 8	EPROM	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-CDip	PIC16C773/JW-ND	12.01	—	—
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16C773/SP-ND★	6.75	4.16	4.03
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16C773/SO-ND★	6.75	4.16	4.03
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Dip .3"	PIC16LC773/SP-ND★	7.10	4.39	4.24
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	28-Soic	PIC16LC773/SO-ND★	7.10	4.39	4.24
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Dip .3"	PIC16C773-I/SP-ND★	7.43	4.58	4.43
4K x 14	256 x 8	OTP	22 (6-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	28-Soic	PIC16C773-I/SO-ND★	7.43	4.58	4.43
4K x 14	256 x 8	EPROM	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-CDip	PIC16C774/JW-ND	14.85	—	—
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16C774/P-ND★	8.18	5.05	4.89
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16C774/L-ND★	8.85	5.46	5.28
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	40-Dip	PIC16LC774/P-ND★	8.60	5.31	5.14
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	32° – 158°F (0° – 70°C)	44-PLCC	PIC16LC774/L-ND★	9.28	5.72	5.53
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	40-Dip	PIC16C774-I/P-ND★	9.03	5.57	5.38
4K x 14	256 x 8	OTP	33 (10-Ch. 12-Bit A/D)	Xtal/RC	DC-20MHz	-40° – 185°F (-40° – 85°C)	44-PLCC	PIC16C774-I/L-ND★	9.65	5.96	5.77

Specifications are subject to change based on device characterization.

† Low Power oscillation 200KHz Max.

★ *Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.*

PIC18FXX2 / PIC18CXX2 / PIC18FXX20 Series
Flash and OTP High Performance Microcontroller with 10-Bit A/D

(No Memory Paging / 10 MIPS / 8 x 8 MULTIPLY / More Powerful Instructions)

PIC18FXX2 / PIC18FXX20 / PIC18CXX2 Architecture

The PIC18FXX2 / PIC18FXX20 Flash / PIC18CXX2 OTP architecture, an enhanced RISC core that is upward compatible from Microchip's mid-range and high-end core, providing a seamless migration path of software code to higher integration. Applications for the devices are wide ranging and may include anti-lock braking systems, vehicle active suspension, fuel pump controller, fuel injection, manufacturing equipment, instrumentation and monitoring, data acquisition, power conditioning, thermostats, environmental monitoring, telecommunications and consumer audio/video.

High Performance RISC CPU:

• C-compiler optimized architecture/instruction set (source code compatible with the PIC16C, PIC17C instruction sets) • Linear program memory addressing to 32K bytes • Linear data memory addressing to 1.5 Kbytes • Up to 10 MIPs operation: DC - 40 MHz osc./clock input; 4 MHz - 10 MHz osc./clock input with PLL active • 16-bit wide instructions, 8-bit wide data path • Priority levels for interrupts • 8 x 8 Single Cycle Hardware Multiplier, 75 instructions

Peripheral Features:

• High current sink/source 25 mA/25 mA • Three external interrupt pins • **Timer0** module: 8-bit/16-bit timer/counter with 8-bit programmable prescaler • **Timer1** module: 16-bit timer/counter • **Timer2** module: 8-bit timer/counter with 8-bit period register (time-base for PWM) • **Timer3** module: 16-bit timer/counter • Secondary oscillator clock option — Timer1/Timer3 • Two **Capture/Compare/PWM** (CCP) modules. CCP pins that can be configured as: — Capture input: capture is 16-bit, max. resolution 6.25 ns (TCY/16) — Compare is 16-bit, max. resolution 100 ns (TCY) • PWM output: PWM resolution is 1- to 10-bit Max. PWM freq. @: 8-bit resolution = 156 kHz; 10-bit resolution = 39 kHz • **Master Synchronous Serial Port** (MSSP) modules with two modes of operation: 3-wire SPI™ (supports all 4 SPI modes); 1^2C™ master and slave mode • **Addressable USART** module: Supports RS-485 and RS-232 • **Parallel Slave Port** (PSP) module on PIC16F4X2 and all PIC18FXX20. External program Memory Interface on PIC18F8X20 devices only

Analog Features:

• Compatible **10-bit Analog-to-Digital** converter module (A/D) with: Fast sampling rate; Conversion available during SLEEP; DNL = ±1 LSb, INL =±1 LSb • **Programmable Low Voltage Detection** (PLVD), supports interrupt on low voltage detection • Programmable Brown-out Reset (BOR)

Special Microcontroller Features:

• 100,000 erase/write cycle Enhanced FLASH program memory typical • 1,000,000 erase/write cycle Data EEPROM memory • FLASH/Data EEPROM Retention: > 40 years • Self reprogrammable under software control • Power-on Reset (POR), Power-up Timer (PWRT), and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options including: 4X Phase Lock Loop (of primary oscillator); Secondary Oscillator (32 kHz) clock input • Single supply 5V In-Circuit Serial Programming ™ (ICSP™) via two pins • In-Circuit Debug (ICD) via two pins

CAN bus Module Features:

• Message bit rates up to 1 Mbps • Conforms to CAN 2.0B ACTIVE Spec with 29-bit identifier Fields, 8-byte message length • 3 transmit message buffers with prioritization • 2 receive message buffers • 6 full 29-bit acceptance filters • Prioritization of acceptance filters • Multiple receive buffers for high priority messages to prevent loss due to overflow • Advanced error management features

CMOS Technology:

• Low power, high speed enhanced FLASH/EEPROM technology • Fully static design • Wide operating voltage range (2.0V to 5.5V) • Industrial and extended temperature ranges • Low-power consumption

SW006011-ND C Compiler for the PIC18CXXX Family **$495.00**

Memory Size		Configuration	I/O Lines	Frequency Range MIn./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
EPROM	RAM							1	25	100
8K x 16	512	EPROM	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-CDip	PIC18C242/JW-ND	11.90	—	—
8K x 16	512	OTP	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18C242-I/SP-ND	7.58	4.67	4.52
8K x 16	512	OTP	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18C242-I/SO-ND	7.58	4.67	4.52
16K x 16	1536	EPROM	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-CDip	PIC18C252/JW-ND	12.33	—	—
16K x 16	1536	OTP	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18C252-I/SP-ND	8.23	5.08	4.92
16K x 16	1536	OTP	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18C252-I/SO-ND	8.23	5.08	4.92
8K x 16	512	EPROM	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-CDip	PIC18C442/JW-ND	14.80	—	—
8K x 16	512	OTP	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18C442-I/P-ND	8.45	5.21	5.05
8K x 16	512	OTP	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	44-PLCC	PIC18C442-I/L-ND	9.45	5.84	5.65
16K x 16	1536	EPROM	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-CDip	PIC18C452/JW-ND	15.23	—	—
16K x 16	1536	OTP	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18C452-I/P-ND	9.13	5.63	5.45
16K x 16	1536	OTP	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	44-PLCC	PIC18C452-I/L-ND	10.13	6.25	6.05
8K x 16	768	FLASH	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18F242-I/SP-ND *NEW!*	7.78	4.80	4.65
8K x 16	768	FLASH	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18F242-I/SO-ND *NEW!*	7.78	5.76	5.34
8K x 16	768	FLASH	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	44-PLCC	PIC18F442-I/L-ND *NEW!*	9.68	5.98	5.79
8K x 16	768	FLASH	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18F442-I/P-ND *NEW!*	8.65	5.34	5.17
16K x 16	1536	FLASH	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18F252-I/SP-ND *NEW!*	8.48	5.23	5.06
16K x 16	1536	FLASH	*23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18F252-I/SO-ND *NEW!*	8.48	5.23	5.06
16K x 16	1536	FLASH	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	44-PLCC	PIC18F452-I/L-ND *NEW!*	10.38	6.41	6.20
16K x 16	1536	FLASH	†34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18F452-I/P-ND *NEW!*	9.38	5.80	5.61
32K x 16	3840	FLASH	52 (12-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	64-TQFP	PIC18F6620-I/PT-ND *NEW!*	15.88	9.53	8.89
32K x 16	3840	FLASH	68 (16-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	80-TQFP	PIC18F8620-I/PT-ND *NEW!*	16.10	9.66	9.02
64K x 16	3840	FLASH	52 (12-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	64-TQFP	PIC18F6720-I/PT-ND *NEW!*	17.65	10.58	9.88
64K x 16	3840	FLASH	68 (16-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	80-TQFP	PIC18F8720-I/PT-ND *NEW!*	17.93	10.75	10.04

* 22 are i/o and 1 is output only † 33 are i/o and 1 is output only

NEW! PIC18FXX8 Microcontrollers
Flash High Performance 28-Pin/40-Pin

(Microcontrollers with CAN)

PIC18FXX8

High Performance RISC CPU:

• C-compiler optimized architecture instruction set • Linear program memory addressing up to 32 K-bytes • Linear data memory addressing to 4 K-bytes • Up to 10 MIPs operation: DC - 40 MHz clock input; 4 MHz - 10 MHz osc./clock input with PLL active • 16-bit wide instructions, 8-bit wide data path • Priority levels for interrupts • 8 x 8 Single Cycle Hardware Multiplier

Peripheral Features:

• High current sink/source 25 mA/25 mA • Four external interrupt pins • **Timer0** module: 8-bit/16-bit timer/counter with 8-bit programmable prescaler • **Timer1** module: 16-bit timer/counter • **Timer2** module: 8-bit timer/counter with 8-bit period register (time-base for PWM) • **Timer3** module: 16-bit timer/counter • Secondary oscillator clock option — Timer1/Timer3 • **Capture/Compare/PWM** (CCP) modules. CCP pins can be configured as: — Capture input: 16-bit, max. resolution 6.25 ns — Compare is 16-bit, max. resolution 100 ns (TCY) • PWM output: PWM resolution is 1 to 10-bit Max. PWM freq. @: 8-bit resolution = 156 kHz; 10-bit resolution = 39 kHz • Enhanced CCP module which has all the features of the standard CCP module, but also has the following features for advanced motion control: 1, 2, or 4 PWM outputs and selectable PWM polarity • Programmable PWM deadtime • Auto shut-down • **Master Synchronous Serial Port** (MSSP) with two modes of operation: 3-wire SPI™ (supports all 4 SPI modes); 1^2C™ master and slave mode • **Addressable USART** module: Supports Interrupt on Address bit

Advanced Analog Features:

• **10-Bit Analog-to-Digital** converter module (A/D) with: Fast sampling rate; Conversion available during SLEEP; DNL = ±1 LSb, INL =±1 LSb, up to 8 channels available • Analog Comparator module: 2 comparators, programmable input and output multiplexing • Comparator Voltage Reference module • Programmable **Low Voltage Detection** (LVD) module, supports interrupt on low voltage detection • Programmable Brown-out Reset (BOR)

Special Microcontroller Features:

• 100,000 erase/write cycle Enhanced FLASH program memory typical • 1,000,000 erase/write cycle Data EEPROM memory typical • Power-on Reset (POR), Power-up Timer (PWRT), and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator • Programmable code-protection • Power saving SLEEP mode • Selectable oscillator options including: 4X Phase Lock Loop (of primary oscillator); Secondary Oscillator (32 kHz) clock input • In-Circuit Serial Programming™ (ICSP™) via two pins

CAN bus Module Features:

• Message bit rates up to 1 Mbps • Conforms to CAN 2.0B ACTIVE Spec with 29-bit identifier Fields, 8-byte message length • 3 transmit message buffers with prioritization • 2 receive message buffers • 6 full 29-bit acceptance filters • Prioritization of acceptance filters • Multiple receive buffers for high priority messages to prevent loss due to overflow • Advanced error management features

FLASH Technology:

• Low power, high speed enhanced FLASH technology • Fully static design • Wide operating voltage range (2.0V to 5.5V) • Industrial and extended temperature ranges • Low-power consumption

Memory Size		Configuration	I/O Lines	Frequency Range Min./Max.	Operating Temperature Range	Package	Digi-Key Part No.	Price Each		
EPROM	RAM							1	25	100
8K x 16	768	FLASH	23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18F248-I/SO-ND	9.33	5.77	5.57
8K x 16	768	FLASH	23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18F248-I/SP-ND	9.33	5.77	5.57
16K x 16	1536	FLASH	23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-SOIC	PIC18F258-I/SO-ND	10.15	6.27	6.06
16K x 16	1536	FLASH	23 (5-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	28-Dip .3"	PIC18F258-I/SP-ND	10.15	6.27	6.06
8K x 16	768	FLASH	34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	44-PLCC	PIC18F448-I/L-ND	10.48	6.47	6.26
8K x 16	768	FLASH	34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18F448-I/P-ND	9.55	5.91	5.71
16K x 16	1536	FLASH	34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	44-PLCC	PIC18F458-I/L-ND	11.23	6.94	6.71
16K x 16	1536	FLASH	34 (8-Ch. 10-Bit A/D)	DC-40MHz	–40° to 185°F (–40° to 85°C)	40-Dip	PIC18F458-I/P-ND	10.30	6.36	6.15

High-Performance 8-Bit CMOS EPROM Microcontrollers

PIC17C4X, PIC17C75X, and PIC17C76X Series

PIC17C4X

(Use Programmer PICSTART Plus)

Overview:

All PIC16/17 microcontrollers employ an advanced RISC architecture. The PIC17CXX has enhanced core features, 16-level deep stack, and multiple internal and external interrupt sources. The separate instruction and data buses of the Harvard architecture allow a 16-bit wide instruction word with a separate 8-bit wide data. The two stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches (which require two cycles). A total of 55 instructions (reduced instruction set) are available in the PIC17C42 and 58 instructions in all the other devices. Additionally, a large register set gives some of the architectural innovations used to achieve a very high performance. For mathematical intensive applications all devices have a single cycle 8 x 8 Hardware Multiplier.

Microcontroller Core Features:

• Only 58 single word instructions to learn • All single cycle instructions (121ns) except for program branches and table reads/writes which are two-cycle • Operating Speed: DC - 33MHz clock input, DC - 121ns instruction cycle • Hardware Multiplier • Interrupt capability • 16 levels deep hardware stack • Direct, indirect and relative addressing modes • Internal/External program memory execution • 64K x 16 addressable program memory space

Peripheral Features:

• 33 I/O pins with individual direction control • High current sink/source for direct LED drive: RA2 and RA3 are open drain, high voltage (12V), high current (60mA), I/O • Two capture inputs and two PWM outputs: Captures are 16-bit, max resolution 160ns, PWM resolution is 1- to 10-bit • TMR0: 16-bit timer/counter with 8-bit programmable prescaler • TMR1: 8-bit timer/counter • TMR2: 8-bit timer/counter • TMR3: 16-bit timer/counter • Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI)

Special Microcontroller Features:

• Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Code-protection • Power Saving SLEEP mode • Selectable oscillator options

PIC17C756

Overview:

The PIC17C75X devices are 68-Pin, EPROM-based members of the versatile PIC17CXXX family of low-cost, high-performance, CMOS, fully-static, 8-bit microcontrollers.

All PIC16/17 microcontrollers employ an advanced RISC architecture. The PIC17CXXX has enhanced core features, 16-level deep stack, and multiple internal and external interrupt sources. The separate instruction and data buses of the Harvard architecture allow a 16-bit wide instruction word with a separate 8-bit wide data path. The two stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches (which require two cycles). A total of 58 instructions (reduced instruction set) are available. Additionally, a large register set gives some of the architectural innovations used to achieve a very high performance. For mathematical intensive applications, all devices have a single cycle 8 x 8 Hardware Multiplier.

Microcontroller Core Features:

• Only 58 single word instructions to learn • All single cycle instructions (121ns) except for program branches and table reads/writes which are two-cycle • Operating Speed: DC - 33MHz clock input, DC - 121ns instruction cycle • Hardware Multiplier • Interrupt capability • 16 level deep hardware stack • Direct, indirect and relative addressing modes • Internal/External program memory execution • Capable of addressing 64K x 16 program memory space

Peripheral Features:

• 50 I/O pins with individual direction control • High current sink/source for direct LED drive: RA2 and RA3 are open drain, high voltage (12V), high current (60mA), I/O pins • Four capture input pins: Captures are 16-bit, max resolution 121ns • Three PWM outputs: PWM resolution is 1- to 10-bits • TMR0: 16-bit timer/counter with 8-bit programmable prescaler • TMR1: 8-bit timer/counter • TMR2: 8-bit timer/counter • TMR3: 16-bit timer/counter • Two Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI): Independent baud rate generators • 10-bit, 12 channel analog-to-digital converter • Synchronous Serial Port (SSP) with SPI™ and 1^2C™ modes (including 1^2C master mode)

Special Microcontroller Features:

• Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Brown-out Reset • Code-protection • Power Saving SLEEP mode • Selectable oscillator options

DS00092D-ND	Embedded Control Handbook, Volume 1	**$9.95**
DS00711-ND	Embedded Control Handbook, Update 2000	**$5.00**
DS00161-ND	CD-ROM Microchip Technical Library	**$2.25**

Memory Size		Config-uration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
2K x 16	232 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C42A-16/P-ND★	10.38	6.38	6.19
2K x 16	232 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C42A-16/L-ND★	10.93	6.79	6.52
2K x 16	232 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C42A-25/P-ND★	11.08	6.82	6.61
4K x 16	454 x 8	EPROM	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	40-CDip	PIC17C43/JW-ND★	15.45	—	—
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C43-16/P-ND★	11.70	7.20	6.99
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C43-16/L-ND★	12.28	7.61	7.32
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C43-25/P-ND★	12.53	7.71	7.48
4K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C43-25/L-ND★	13.10	8.12	7.81
8K x 16	454 x 8	EPROM	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	40-CDip	PIC17C44/JW-ND	18.12	—	—
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C44-16/P-ND★	14.50	8.92	8.66
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C44-16/L-ND★	15.15	9.33	8.99
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C44-25/P-ND★	15.53	9.55	9.27
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-25MHz	32° – 158°F (0° - 70°C)	44PLCC	PIC17C44-25/L-ND★	16.18	9.96	9.60
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	40-Dip	PIC17C44-33/P-ND★	15.53	9.55	9.27
8K x 16	454 x 8	OTP	33	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	44-PLCC	PIC17C44-33/L-ND★	16.18	9.96	9.60
8K x 16	678	OTP	50 (12-Ch. 10-Bit A/D)	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	68-PLCC	PIC17C752-16/L-ND	13.73	8.46	8.20
8K x 16	678	OTP	50 (12-Ch. 10-Bit A/D)	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	68-PLCC	PIC17C752-33/L-ND	14.68	9.05	8.77
16K x 16	902	EPROM	50 (12-Ch. 10-Bit A/D)	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	68-CLCC	PIC17C756A/CL-ND	17.60	—	—
16K x 16	902	OTP	50 (12-Ch. 10-Bit A/D)	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	68-PLCC	PIC17C756A-16/L-ND	14.35	8.84	8.57
16K x 16	902	OTP	50 (12-Ch. 10-Bit A/D)	Xtal/RC	DC-16MHz	-40° – 185°F (-40° - 85°C)	68-PLCC	PIC17C756A-16I/L-ND	15.78	9.73	9.42
16K x 16	902	OTP	50 (12-Ch. 10-Bit A/D)	Xtal/RC	DC-33MHz	-40° – 185°F (-40° - 85°C)	68-PLCC	PIC17C756A-33I/L-ND	16.88	10.41	10.08
8K x 16	678	OTP	66 (16-Ch. 10-Bit A/D)	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	84-PLCC	PIC17C762-16/L-ND	16.78	10.35	10.02
16K x 16	902	EPROM	66 (16-Ch. 10-Bit A/D)	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	84-CLCC	PIC17C766/CL-ND	18.38	—	—
16K x 16	902	OTP	66 (16-Ch. 10-Bit A/D)	Xtal/RC	DC-16MHz	32° – 158°F (0° - 70°C)	84-PLCC	PIC17C766-16/L-ND	17.98	11.08	10.74
16K x 16	902	OTP	66 (16-Ch. 10-Bit A/D)	Xtal/RC	DC-33MHz	32° – 158°F (0° - 70°C)	84-PLCC	PIC17C766-33/L-ND	18.43	11.35	11.00
16K x 16	902	OTP	66 (16-Ch. 10-Bit A/D)	Xtal/RC	DC-16MHz	-40° – 185°F (-40° - 85°C)	84-PLCC	PIC17C766-16I/L-ND	18.93	11.67	11.31
16K x 16	902	OTP	66 (16-Ch. 10-Bit A/D)	Xtal/RC	DC-33MHz	-40° – 185°F (-40° - 85°C)	84-PLCC	PIC17C766-33I/L-ND	20.25	12.49	12.10

★ Digi-Key now offers a programming service using customer supplied Master IC and software disk for Microchips PIC family. The following formats are supported by our programming center: BIN16 — 16-bit binary format (default for PGM16/TASM16), INHXM8 — Merged 8-bit Intel™ Hex (Parallax) format, INHXS8 — Split 8-bit Intel™ Hex format, INHX16 — 16-bit Intel™ Hex format. For further information and price quotes, please call 1-800-344-4539, and request the programming center.

MICROCHIP 28-Pin Programmable Mixed Signal Controller — PIC14000

General Description: The **PIC14000** is a low-cost, high-performance, CMOS, fully-static, mixed signal, factory calibrated, 8-bit microcontroller. Its features include medium to high resolution A/D conversion (10 to 16 bits), temperature sensing, closed loop charge control, serial communication, and low power operation.

(Use Programmer PICSTART Plus.) The **PIC14000** is based on the high-performance PIC16C74 core. It uses a RISC-like Harvard architecture CPU with separate 14-bit instruction and 8-bit data buses. A two-stage instruction pipeline allows all instructions to execute in a single cycle, except for program branches, which require two cycles. A total of 35 instructions are available. Additionally, a large register set is included.

High-Performance RISC CPU: • Based on PIC16C74 microcontroller • Only 35 single word instructions to learn • All single cycle instructions except for program branches which are two-cycle • Operating speed: DC - 20MHz clock input • 4096 x 14 on-chip EPROM program memory • 192 x 8 general purpose registers (SRAM) • 6 internal and 5 external interrupt sources • 38 special function hardware registers • Eight level deep hardware stack

Analog Peripherals Features: • Slope Analog-to-Digital (A/D) converter: Eight external input channels (two channels with selectable input ranges of -0.3V to VDD -2.0V or 0V to VDD -1.5V), Seven internal input channels, Programmable A/D resolution, up to 16 bits, 16 ms maximum conversion time at maximum (16-bit) resolution and 4 MHz clock, 4-bit current DAC, Internal bandgap voltage reference, Factory calibrated with calibration constants stored in EPROM, Provisions for measuring energy in high frequency pulses (e.g., GSM cellular telephone) • On-chip temperature sensor • Voltage regulator control output for 5V operation • Two multi-range DACs for programmable level/window detect or constant current/voltage charge control • On-chip low voltage detector

Special Microcontroller Features: • Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST) • Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation • Multi-segment programmable code-protection • Selectable oscillator options: Internal 4 MHz oscillator, External crystal oscillator • Two pin serial in-system EPROM programming

Digital Peripherals Features: • 20 I/O pins with individual direction control • High current sink/source for direct LED drive • ADTMR: A/D counter, 16-bit counter with pre-load and capture • TMR0: 8-bit timer/counter with 8-bit programmable prescaler • I²C™ serial port compatible with: ACCESS.bus™, SMBus (System Management Bus)

Memory Size		Configuration	I/O Lines	Oscillator Type External	Frequency Range Min./Max.	Operating Temperature Range	Pkg.	Digi-Key Part No.	Price Each		
EPROM	RAM								1	25	100
4K x 14	192 x 8	EPROM	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-CDip .3"	PIC14000/JW-ND	17.80	—	—
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-SDip .3"	PIC14000-04/SP-ND★	10.25	8.19	6.83
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-SOIC	PIC14000-04/SO-ND★	10.45	8.36	6.96
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	32° – 158°F (0° - 70°C)	28-SSOP	PIC14000-04/SS-ND	11.50	9.19	7.66
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° - 85°C)	28-SDip .3"	PIC14000-04I/SP-ND★	11.28	9.01	7.51
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° - 85°C)	28-SOIC	PIC14000-04I/SO-ND★	11.50	9.19	7.66
4K x 14	192 x 8	OTP	20	Xtal	DC-4MHz	-40° – 185°F (-40° - 85°C)	28-SSOP	PIC14000-04I/SS-ND	12.65	10.11	8.43

★ *This part can be programmed by Digi-Key. For further information please call 1-800-344-4539, and request programming center.*

PRO MATE-II™ Universal Programmer

Programs all PIC16C5X, PIC16CXX and PIC17CXX Microcontrollers:
PRO MATE-II™ is a universal programmer/development tool that provides product developers with the ability to program user software into PIC16C5X, PIC16CXX and PIC17CXX 8-bit micro-controllers. It comes with Microchip's PIC16CXX simulator/assembler software and PIC17CXX assembler software. The PRO MATE-II™ programmer operates either as a stand-alone unit or in conjunction with a PC host system. PC host software provides file display and editing and transfer to and from the programming unit. The PRO MATE-II™ is compatible with and is replacing the existing PRO MATE™ programmer. The PRO MATE-II™ was designed primarily to comply with the new European "CE" requirements for radiated emissions and ESD. The PRO MATE-II™ provides improved socket module alignment and improved LCD display and buttons.

Description of Contents:
• PRO MATE-II™ Universal Programmer Unit • PRO MATE-II™ Universal Power Supply • PRO MATE-II™, PIC16CXX Assembler/Simulator and PIC17CXX Assembler Software • PRO MATE-II™ Documentation • RS-232 Interface Cable

Description	Digi-Key Part No.	Price Each
Programmer		
PRO MATE-II™ Universal Programmer	DV007003-ND	695.00
Sockets for PRO MATE-II™ / PRO MATE™		
RFPIC12C509, PIC16C52,54, HV540,55,56,57, 58A, HCS5XX, 18-SOIC, 20-SSOP	AC124002-ND	159.00
Dip Socket Module for PRO MATE-II™ PIC14000	AC144001-ND	159.00
PIC16C52, 54, HV540, 55, 56, 57, 58A, HCS5XX PDIP PRO MATE-II 18 and 28 LD	AC164001-ND	159.00
PIC16C52, 54, HV540, 55, 56, 57, 58A, HCS5XX SOIC PRO MATE-II 18 and 28 LD	AC164002-ND	159.00
PIC16C54, HV540, 55, 56, 57, 58 SSOP PRO MATE-II™ 20 and 28 LD	AC164015-ND	189.00
PIC16C554, 558, 61, 620, 621, 622, 71, 710, 711, 715, 83, 84 PDIP/SOIC PRO MATE-II™ 18 LD	AC164010-ND	159.00
PIC16C620, 621, 622, 710, 711, 554, 558 SSOP PRO MATE-II™ 20 LD	AC164018-ND	159.00
PIC16C62, 63, 64, 65, 66, 67, 642, 662, 72, 73, 74, 76, 77, 773, 774, 87X, 18CXX2 PDip PRO MATE-II 28 and 40 LD (and "A" & "B" Versions)	AC164012-ND	159.00
PIC16C64/65, 44-MQFP	AC162046-ND	45.00
PIC16C64, 65, 662, 67, 74, 77, 774, 874, 877, 18C4X2 PLCC PRO MATE-II™ 44 LD	AC164013-ND	159.00
PIC16C64, 65, 662, 67, 74, 77, 774, 874, 877, PQFP PRO MATE-II™ 44 LD	AC164014-ND	159.00
PIC16C62, 63, 66, 642, 72, 73, 76, 773, 873, 876, 18C2X2 SOIC PRO MATE-II™ 28 LD	AC164017-ND	159.00
PIC17C42A, 43, 44 PDip PRO MATE-II™ 40 LD	AC174001-ND	159.00
PIC17C42A, 43, 44 PLCC PRO MATE-II™ 44 LD	AC174002-ND	159.00

Description	Digi-Key Part No.	Price Each
PIC17C75X, PLCC PRO MATE-II™ 68 LD	AC174007-ND	159.00
PIC12C50X, 50XA, 51X, 67X, CE67X, 16C505(Dip) Dip/SOIC (208 mil) PRO MATE-II™	AC124001-ND	129.00
PIC16C923, 924, PLCC PRO MATE-II™ 68 LD	AC164022-ND	159.00
PIC16C923, 924, TQFP PRO MATE-II™ 68 LD	AC164023-ND	159.00
PIC16C64, 65, 662, 67, 74, 77, 774, 874, 877, 18C4X2 TQFP PRO MATE-II™ 44LD	AC164020-ND	159.00
PIC16C62, 63A, 72, 73B, 773 SSOP PRO MATE-II™ 28 LD	AC164021-ND	159.00
PIC16C923, 924 SDIP PRO MATE-II™ 64 LD	AC164025-ND	159.00
PIC16C505, 12CE51X, 12C50XA SOIC/TSSOP (150 mil) PRO MATE-II™ 8 and 14 LD	AC164026-ND	159.00
PIC16C432, 20-Dip, 20-SSOP	AC164029-ND	159.00
PIC16C433, 18-Dip, 18-SOIC	AC164030-ND	159.00
PIC16CXX, 28 Pin MLF	AC164031-ND	159.00
PIC16C770, 771 PDIP/SOIC PRO MATE-II™ 20 LD	AC164028-ND	159.00
PIC17C42A, 43, 44 TQFP PRO MATE-II™ 44 LD	AC174005-ND	159.00
PIC17C75X TQFP PRO MATE-II™ 64 LD	AC174008-ND	159.00
PIC17C75X SDIP PRO MATE-II™ 64 LD	AC174009-ND	159.00
PIC17C76X TQFP PRO MATE-II™ 80 LD	AC174011-ND	159.00
PIC17C76X PLCC PRO MATE-II™ 84 LD	AC174012-ND	159.00
PIC17C76X PLCC Socket Adapter for PICSTART Plus - 84 LD	AC164027-ND	159.00
Serial E² 24, 93 Series and HCS200, 201, 300, 301, 320, 36X, 410, 412 DIP for PRO MATE-II™ 16 LD	AC004001-ND	159.00
Serial E² 24, 93 Series and HCS200, 201, 300, 301, 320, 36X, 410, 412 SOIC/SOIC for PRO MATE-II™ 16 LD	AC004002-ND	199.00
ICSP Programming Socket for PRO MATE-II™	AC004004-ND	349.00
Power Supply for ICSP AC004004	AC002012-ND *NEW!*	33.00

PICDEM NET

The PICDEM.net™ demonstration board is an Internet/Ethernet demonstration board using the PIC16F877 microcontroller and TCP/IP firmware. The board supports any 40-pin DIP device that conforms to the standard pin out used by the PIC16F877 or PIC18C452. Board comes preconfigured with an Ethernet and IP address. Simple set-up instructions are provided. The demo board is equipped with a 6-pin modular connector to interface directly with the Microchip In-Circuit Debugger (ICD). A generous breadboarding area is also available. Several status indicators and user interface devices are provided, including a 16 x 2 LCD indicator and LEDs.

Includes: • Ethernet interface • RS-232 interface • Demo Board • Textbook • PIC16F877 MCU • Firmware by Losoft Ltd. • MPLAB® IDE Software • PICDEM.net User's Guide • CAT 5 Ethernet Cable • DB9 Serial Cable • Universal Power Supply

DM163004-ND PIC16F877 Demo Board
with TCP/IP that Connects to LAN $299.00

PICDEM-6 Demo Board

The PICDEM™ 18R Demonstration Board demonstrates the capabilities of the PIC18C601/801 family of Microchip microcontrollers. It supports both PIC18C601 and PIC18C801 devices and provides a hardware implementation of both 8-bit memory modes, as available on PIC18C601/801 microcontrollers. The board includes on-board 2 MB external FLASH memory and 128KB SRAM memory, as well as serial EEPROM, allowing the user to access the different memory types the PIC18C601/801can interface to.

DM163006-ND $399.00

PIC14000 Demo Board

DM143001-ND.. $129.00

NEW! PICDEM-17 Evaluation Board

The PICDEM™ 17 is an evaluation board that demonstrates the capabilities of several Microchip microcontrollers, including PIC17C752, PIC17C756, PIC17C762 and PIC17C766 features 68-pin PLCC socket, space for 84-pin socket, RS232 interface with DB9 connector for USART1 and for USART2 with hardware handshaking signals, precision analog voltage source and reference for 10-bit A/D, MCP2510 CAN interface support

DM173001-ND $199.00

PICDEM-1

The PICDEM-1 is a simple board which demonstrates the capabilities of several of Microchip's microcontrollers. The microcontrollers supported are: PIC16C5X (PIC16C54 to PIC16C58), PIC16C62X, PIC16C71, PIC16C84, and PIC17C42.

Kit contents: PICDEM-1 demonstration board, PIC16/17 product samples, demo/tutorial software, complete documentation.

DM163001-ND $99.00

NEW! PICDEM-2 Plus

The PICDEM-2 Plus comes with an active program loaded on the installed PIC18F452 microcontroller that demonstrates many of the devices features and easy peripheral interface. The program sets up the PICmicro as a real time clock and measures the local temperature which are displayed on the 2 x 16 LCD. All of the information displayed on the LCD is also sent out on the active RS 232 port that can be viewed on a monitor. The "on board" memory is actively used and a pulse width modulated (PWM) signal is sent to the piezo sounder. Can use the ICD2 with this kit to debug code.

A second popular flashed based microcontroller, the PIC16F877, is included with its own demonstration program.

Features: • 2 x 16 LCD display • Piezo sounder driven by PWM signal • Active RS 232 port • On board temperature sensor • 4 LED's • 2 push button switches and master reset • ICD connector

DM163022-ND $99.00

PICDEM-3

The PICDEM-3 is a simple board which demonstrates the capabilities of Microchip's microcontroller LCD family. All necessary hardware is included to run basic demo programs, which are supplied on a 3.5" disk. A programmed sample is included, and the user may erase it and program it with the other sample programs using the PRO MATE® or PICSTART®Plus programmer. The PICSTART®Plus requires a 68- to 40-pin converter socket (AC164024-ND).

Features: • 68-pin PLCC sockets • 5K pot for analog input to the PIC16C9XX • Thermistor for use with A/D converter

DM163003-ND $129.00

PICDEM USB Demonstration Kit

PICDEM™ USB from Microchip demonstrates a PICmicro® (PIC16C765) communicating to a PC using the USB port. Kit includes USB support firmware, example code and reference documentation. Hook up a traditional mouse, keyboard or joystick to the USB port on your computer through the preprogrammed board supplied in the kit. Kit includes board with large prototype area, USB, Serial, PS-2, and Gameport connectors.

DM163010-ND $125.00

PICSTART Plus Programmer

PICSTART Plus is an entry level development kit that will *SUPPORT ALL* PIC12C5XX, PIC12C67X, PIC12CE, PIC16C, PIC16F8XX and PIC17C MICRO-CONTROLLERS *including* the PIC14000, PIC17C4X and PIC17C75X families.

Kit Includes: • PICSTART Plus programmer system • RS232 cable • Power supply • PIC16F84 EEPROM microcontroller sample • MPLAB software diskette: includes MPLAB, MPASM-Windows, MPLAB-SIM simulator • PICSTART Plus software diskette Windows based user interface software for PICSTART Plus, runs under MPLAB • User's manual for PICSTART Plus • User's manual for MPSIM • User's manual for MPLAB, covers MPLAB, MPLAB-SIM and Editor • *CD-ROM: Includes databook and Embedded Control Handbook*

DV003001-ND		$199.00
AC164024-ND	PIC16C92X, PIC17C75X 68PLCC Adapter	$129.00
AC164027-ND	PLCC Socket Adapter for PICSTART Plus 84 LD	$159.00
AC162048-ND	*NEW!* Power Supply with Serial Cable for Microchip Tool	$29.00

NEW! CCS Inc C-Compiler for PICmicro® MCUs

C-Compiler for 12 Bit, 14 Bit and PIC18 PICmicro MCUs. This Integrated C Development Environment gives developers the capability to quickly produce very efficient code from an easily maintainable high level language. With full standard C compatibility, a full featured, Windows IDE with built-in functions and example programs, you will be able to develop embedded solutions for the full line of PICmicro MCUs.

Description	Digi-Key Part No.	Price Each	CCS Part No.
C-Compiler (PCWH)	429-1000-ND	395.00	PCW/H

MICROCHIP MPLAB™-*ICE*

In-Circuit Emulator MPLAB-ICE High-Performance, Real-Time In-Circuit Emulator

MPLAB-ICE is Microchip's new Universal In-Circuit Emulator (ICE) for the 8-bit PICmicro™ microcontrollers (MCU). MPLAB-ICE has been designed with the user requirements in mind. The system is small, portable and lightweight, while at the same time, offers improved performance and value. For quick hook up to portables or desktop PCs, MPLAB-ICE easily connects to the parallel (printer) port. In addition, MPLAB-ICE provides a migration path for existing customers designing with PICMASTER® Probe Kits.

Interchangeable processor modules allow the system to be easily configured to emulate different processors. This modular system consists of an emulator pod, a processor module, a device adapter, and a translation socket.

Also included is Microchip's MPLAB IDE featuring MPASM macro assembler, MPLAB programmer's editor, symbolic debugger, and project manager with built-in support for high-level languages that supports the Common Object Description format (i.e., MPASM and MPLAB-C17).

MPLAB-ICE 2000 is a premium quality emulator system providing full-speed emulation, low voltage operation, 32K by 128-bit trace, and 65,535 breakpoints.

Features: • High-performance PC-based development system for PICmicro™ MCUs • Includes MPLAB IDE • Assembly and C source level debugging • Real-time in-circuit emulation to maximum speed of PICmicro MCUs • Program memory emulation and memory mapping capability up to 64K words • Real-time trace with up to 32K deep by 128 bit wide buffer • Low voltage emulation (as low as 2.0 volts) • Unlimited software breakpoints • Trigger/break/trace on program address and data; internal register address and data; eight external inputs; and access type • Complex breakpoints with four levels of advance trigger features, including sequential events, AND/OR events, filtered trace, pass counters, delay triggering, and time between two events • External trigger input and output allows logic analyzer/scope interface • Time-stamp function • Software programmable target clock speeds (32kHz to 40MHz) • Parallel port (printer) interface • Supports all PICmicro package types, including all through-hole and surface-mount packages • Interchangeable processor modules.

Host System Requirements: • PC with 386 or higher processor (Pentium™ recommended) • 8MB Memory (32MB recommended) • 16MB hard disk space (20MB recommended) • VGA or Super VGA Monitor • Microsoft Windows 3.1 or greater • Parallel Port

Features	MPLAB-ICE 2000
Real-Time Emulation	Full Speed
Low-Voltage Emulation	2.0 to 5.5 volts
Trace Memory	32K x 128 bit
Monitoring Internal Registers	Yes
Software Breakpoints	Program Address
Complex Hardware Trigger / Breakpoints	Program Address and Data Internal Register and Data; Address Type;and 8 External Inputs
Logic Analyzer Trigger	1 External Input and Output
Multi-level Trigger	Yes (4 levels)
Pass Counter	Yes
Delay Counter	Yes
Time Stamp	Yes
Programmable Clock	32 kHz to 40 MHz
Logic Probes	Yes
Communications	Parallel (printer) Port
Code Coverage Profiling	Yes

Description	Digi-Key Part No.	Price Each
MPLAB-ICE Emulator Pods		
MPLAB-ICE 2000 Universal Emulator Pod Kit	ICE2000-ND	1525.00
MPLAB-ICE Processor Modules (Probes)		
PIC 12C671, 672, CE673, CE674 Processor Module	PCM12XA0-ND	445.00
PIC12C50X, CE51X, PIC16C505, 52, 54, 54A, 54B, 55, 55A, 56, 56A, 57, 57C, 58A, 58B Processor Module	PCM16XA0-ND	445.00
PIC16C62A, 63, 64A, 65A, 72, 73A, 74A Processor Module	PCM16XB1-ND	445.00
PIC16C554, 558, 620, 620A, 621, 621A, 622, 622A, CE623, CE624, CE625 Processor Module	PCM16XC0-ND	445.00
PIC16C642, 662 Processor Module	PCM16XD0-ND	445.00
PIC16C63A, 65B, 66, 67, 72A, 73B, 74B, 76, 77, 712, 716 Processor Module	PCM16XE1-ND	445.00
PIC16C71, 710, 711 Processor Module	PCM16XF0-ND	445.00
PIC16C715 Processor Module	PCM16XG0-ND	445.00
PIC16F83, F84, F84A,Processor Module	PCM16XH1-ND	445.00
PIC16C923, 924 Processor Module	PCM16XJ0-ND	445.00
PIC16C773, 774 Processor Module	PCM16XL0-ND	445.00
PIC16C717, 770, 771 Processor Module	PCM16XN0-ND	445.00
PIC16F627, 628 Processor Module	PCM16XP0-ND	445.00
PIC16C745, 765 Processor Module	PCM16XQ0-ND	445.00
PIC16C870, 871 Processor Module	PCM16XR0-ND	445.00
PIC16C925, 926 Processor Module	PCM16XT0-ND	445.00
PIC16F87X Processor Module	PCM16XK1-ND	445.00
PIC16C717, 770, 771 Processor Module	PCM16XN1-ND *NEW!*	445.00
PIC16F870, 871 Processor Module	PCM16XR1-ND *NEW!*	445.00
PIC16F7X Processor Module	PCM16XS1-ND	445.00
PIC16C432 Processor Module	PCM16YB0-ND	445.00
PIC16C433 Processor Module	PCM16YC0-ND	445.00
PIC17C42A, 43, 44, 752, 756, 756A, 76X Processor Module	PCM17XA0-ND	445.00
PIC18CXX2 Processor Module	PCM18XA0-ND	445.00
PIC18CXX8 Processor Module	PCM18XB0-ND	445.00
PIC18F242, 252, 442, 452 Processor Module	PCM18XC1-ND *NEW!*	445.00
PIC18F248, 258, 448, 458 Processor Module	PCM18XD1-ND *NEW!*	445.00
MPLAB-ICE Device Adapters		
PIC12C50X, CE51X PDIP and SOIC 8 LD Device Adapter	DVA12XP080-ND†	125.00
PIC12C67X, CE67X PDIP and SOIC 8 LD Device Adapter	DVA12XP081-ND†	125.00
PIC16C64A, 65A, 65B, 67, 662, 74A, 74B, 765, 77, 774, F871, 874, 877, PIC18CXX2 PQFP and TQFP 44 LD Device Adapter	DVA16PQ441-ND†	225.00
PIC16C923 and 924 TQFP 64 LD Device Adapter	DVA16PQ640-ND†	225.00
PIC16C64A, 65A, 65B, 67, 662, 74A, 74B, 77, 774, 874, 877, PIC18CXX2 PLCC 44 LD Device Adapter	DVA16XL441-ND	165.00
PIC16C923 and 924 PLCC 68 LD Device Adapter	DVA16XL680-ND	225.00
PIC16C505 PDIP and SOIC (150 mil) 14 LD Device Adapter	DVA16XP140-ND†	125.00

Description	Digi-Key Part No.	Price Each
PIC16C52, 54, 54A, 54B, 56, 56A, 58A, 58B, 554, 558, 620, 620A, 621, 621A, 622, 622A, CE623, CE624, CE625, 71, 710, 711, 715,F83, F84, F84A PDIP, SOIC, and SSOP 18/20 LD Device Adapter	DVA16XP180-ND†	125.00
PIC16C712, 716, PDIP, SOIC, SSOP, 18 LD Device Adapter	DVA16XP182-ND†	165.00
PIC16F627, 628, PDIP, SOIC, SSOP, 18 LD Device Adapter	DVA16XP183-ND	165.00
PIC16C717, 18 LD P Device Adapter	DVA16XP184-ND	165.00
PIC16C433 Device Adapter 18 LD, PDIP, SOIC, CDIP	DVA16XP185-ND *NEW!*	165.00
PIC16C717, 770, 771 P,SO SS 20 LD Device Adapter	DVA16XP200-ND	165.00
PIC16C432, P, SS, JW, 20 LD Device Adapter	DVA16XP201-ND	165.00
PIC16C55, 55A, 57, 57C, PDIP, SOIC, and SSOP 28 LD Device Adapter	DVA16XP280-ND†	125.00
PIC16C62A, 63, 63A, 642, 66, 72, 72A, 73A, 73B, 76, 773, 873, 876, PIC18CXX2 PDIP, SOIC,and SSOP 28 LD Device Adapter	DVA16XP282-ND	165.00
PIC16C64A, 65A, 65B, 67, 662, 74A, 74B, 77, 774, 874, 877, PIC18CXX2 PDIP 40 LD Device Adapter	DVA16XP401-ND	165.00
PIC16C923 and 924 SDIP 64 LD Device Adapter	DVA16XP640-ND	225.00
PIC17C42A, 43, and 44 TQFP and PQFP 44 LD Device Adapter	DVA17PQ441-ND†	225.00
PIC17C752, 756, and 756A TQFP 64 LD Device Adapter	DVA17PQ641-ND†	225.00
PIC17C762 and 766 TQFP 80 LD Device Adapter	DVA17PQ801-ND†	225.00
PIC17C42A, 43, and 44 PLCC 44 LD Device Adapter	DVA17XL441-ND	165.00
PIC17C752, 756, and 756A PLCC 68 LD Device Adapter	DVA17XL681-ND	225.00
PIC17C762 and 766 PLCC 84 LD Device Adapter	DVA17XL841-ND	165.00
PIC17C42A, 43, and 44 PDIP 40 LD Device Adapter	DVA17XP401-ND	125.00
PIC18C658 TQFP 64 LD Device Adapter	DVA18PQ640-ND	225.00
PIC18C858 TQFP 80 LD Device Adapter	DVA18PQ800-ND	225.00
PIC18C658 PLCC 68 LD Device Adapter	DVA18XL680-ND	225.00
PIC18C858 PLCC 84 LD Device Adapter	DVA18XL840-ND	225.00
MPLAB-ICE Transition Sockets		
8 LD (150 and 208 mil SOIC) Small Outline Translation Socket	XLT08SO-ND	35.00
14 LD (150 and 208 mil SOIC) Small Outline Translation Socket	XLT14SO-ND	35.00
18 LD (SOIC 300 mil) Small Outline Translation Socket	XLT18SO-ND	75.00
20 LD (300 mil SO) Small Outline Translation Socket	XLT20SO1-ND	75.00
20 LD (SSOP) Small Outline Translation Socket	XLT20SS1-ND	75.00
28 LD (SOIC 300 mil) Small Outline Translation Socket	XLT28SO-ND	75.00
28 LD (300 mil to 600 mil) PDIP Translation Socket	XLT28XP-ND	75.00
20 LD (SSOP) Shrink Small Outline Translation Socket	XLT20SS-ND	75.00
28 LD (SSOP 300 mil) Small Outline Translation Socket	XLT28SS-ND	75.00
28 LD (SSOP 300 mil) Small Outline Translation Socket PIC16C55, 55A, 57, 57C	XLT28SS2-ND	75.00
44 LD Plastic Quad Flatpack (PQFP) and Plastic Thin Quad Flatpack (TQFP) Translation Socket	XLT44PT-ND	125.00
64 LD Plastic Thin Quad Flatpack (TQFP) Translation Socket for PIC16C92X	XLT64PT1-ND	125.00
64 LD Plastic Thin Quad Flatpack (TQFP) Translation Socket for PIC17C75X	XLT64PT2-ND	125.00
80 LD Plastic Thin Quad Flatpack (TQFP) Translation Socket	XLT80PT-ND	125.00

† For SOIC, SSOP, PQFP, and TQFP support, product requires additional Transition Socket which is sold separately. **Microchip's Internet home page can be reached at: *www.microchip.com.***

ICD In-Circuit Debugger for PIC16F87X Flash Microcontrollers

MPLAB-ICD uses the in-circuit debugging capability of the PIC16F87X family and Microchip's In-Circuit Serial Programming™ (ICSP™) to debug source code in the application, debug hardware in real-time and program a target PIC16F87X device. Operating under Microchip's MPLAB Integrated Development Environment (IDE), MPLAB-ICD offers real-time code execution, in-circuit debugging, built-in programmer and 3.0-5.5V operating range.

Full kit includes: In-circuit debugging module, header, demo-board, MPLAB software, modular and serial cables. Simple suite doesn't include header and demo boards.

DV164001-ND	Kit ICD, Full Kit without Power Supply ✱	$159.00
DV164002-ND	Kit ICD, Simple Suite without Power Supply ✱	$99.00
DV164003-ND	Kit ICD, Full Kit with Power Supply	$189.00

✱ Optional power supply, AC162039-ND

NEW! ICD2 In-Circuit Debugger for PIC18FXX2/XX8 Flash Microcontrollers

The ICD 2 module is a low cost development tool which connects between the PC and the designers target board allowing direct in circuit debugging of the PICmicro target microcontroller. DEBUGS PIC18F2X2, PIC18F4X2, PIC18F2X8, PIC18F4X8, PIC18FXX20 and PIC18CX01 series of Microchip parts. Programs can be executed in real time or single step, watch variables established, break points set, memory read/writes accomplished and more. It can also be used as a development programmer for the Microcontrollers. USB (Full Speed 2 M bits) and RS 232 interface to HOST PC. Totally enclosed. Supports low voltage to 2.0 volts. (2.0 to 6.0 range).

Full kit includes: In-circuit debugging module, USB and modular cables, RS232 serial cable and power supply. Simple suite doesn't include RS232 cable and power supply.

DV164005-ND	Kit ICD2 Simple Suit without Power Supply ✱	$159.00
DV164006-ND	Kit ICD2 Full Kit with PICDEM2 also with Power Supply	$209.00
DV164007-ND	Kit ICD2 Full Kit with Power Supply	$188.00

✱ Optional power supply, AC162039-ND

MCP2510 CAN Developer's Kit

Features:

For an introduction to CAN, this tool can be used to demonstrate basic communication on a CAN bus via message transmission and reception. Messages are created on a host PC for transmission to the target board. As messages are sent or received, LEDs connected to the MCP2510 transmission pins toggle to show message traffic.

Push-button switches on the target board show how digital inputs are handled, while a potentiometer shows how to handle analog inputs via the CAN bus. In this manner, both the transmission and reception of messages can be easily demonstrated and understood.

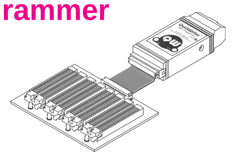
MCP2510 software development is made easy by offering a variety of features designed to manipulate the functionality of the MCP2510. CAN messages are created and can be saved for later use and modification. Also, received messages are displayed in a separate window on the PC in a destuffed format to easily identify message contents. In addition, this tool provides the ability to read, display and modify all registers of the MCP2510. All of these features are designed to jump-start system designers' understanding of the MCP2510 and speed software development.

Stand-Alone CAN Controller with SPI Interface

MCP2510-I/P-ND	Ind Temperature 18-Dip	$4.20
MCP2510-I/SO-ND	Ind Temperature 18-SOIC	$4.20
MCP2510-E/P-ND	Extended Temperature 18-Dip	$5.33
MCP2510-E/SO-ND	Extended Temperature 18-SOIC	$5.33

DV251001-ND	MCP2510CAN Developer's Kit	$239.00

QuickWriter™ Programmer



*Shown with 4 Gang Adapter (not included). Programming adapters must be purchased seperately.

QuickWriter™ comes with power supply, serial cable and in circuit programming cable. Adapter required when not using ICSP cable.
One programmer for all of your PIC® MCU development needs:
• In-circuit Serial Programming • 4 Gang Serial device programming • Single device programming (serial and parallel)

QuickWriter™ is a low cost programmer with these advanced features:
• Over-sized drivers and power supply to properly support multiple device programming and in-circuit programming • Measures programming voltages and current to verify proper target connections or device insertions • Flash firmware updates • Data table driven • New devices are supported with free data table downloads from the TechTools web site (www.tech-tools.com) • Programs ALL 12-bit, 14-bit, and 18-bit series Microchip PIC processors. This includes all 12C, 14000, 16C, 16F, 18C, and 18F families • Includes the TechTools Development Environment (TDE™), a full featured, Windows hosted IDE. TDE™ supports development with all popular PIC®MCU compilers and assemblers. TDE™ includes a multi-file editor, integrated MAKE and one-click cross referencing of compiler errors. TDE™ also interfaces to the TechTools ClearView™ Mathias (not included) for full featured, real-time, in-circuit emulation and source level debugging. • Includes TechTools PIC® MCU assembler, CVASM16™. CVASM16™ supports ALL 12-bit and 14-bit PIC® MCU processors. CVASM16™ assembles Parallax source files (SPASM format) and accepts Microchip mnemonics. • Compatible with existing TechTools and Parallax programming adapters • Accepts HEX files generated by all popular PIC®MCU compilers and assemblers • Supports auto-incrementing serialization • Runs under Win95 through XP as well as NT through XP Pro • Includes serial cable, in-circuit programming cable and power supply

Description	Digi-Key Part No.	Price Each	TechTools Part No.
Programmer			
PICmicro® MCU Programmer	QW1-ND	199.00	QW1
Adapters			
40-Pin ZIF Adapter	MP-ZIF40-ND*	49.00	MP-ZIF40
18/28-Pin ZIF Adapter	MP-ZIF18/28-ND	69.00	MP-ZIF18/28
14-Pin ZIF Adapter	MP-ZIF14-ND	59.00	MP-ZIF14
12CXXX Adapter	MP-12CXXX-ND	49.00	MP-12CXXX
44-Pin PLCC Adapter	MP-PLCC44-ND	129.00	MP-PLCC44
28-Pin SOIC Adapter	MP-SOIC28-ND	129.00	MP-SOIC28
18-Pin SOIC Adapter	MP-SOIC18-ND	79.00	MP-SOIC18
8/14-Pin SOIC Adapter	MP-SOIC8/14-ND	89.00	MP-SOIC814
PIC14000 Adapter	MP-14000-ND	59.00	MP-14000
28-Pin SSOP Adapter	MP-SSOP28-ND	99.00	MP-SSOP28
18-Pin SSOP Adapter	MP-SSOP18-ND	79.00	MP-SSOP18
4 Gang Adapters for QuickWriter			
40-Pin ZIF Adapter	QW-4ZIF40/28-ND*	199.00	QW-4ZIF40/28
44-Pin PLCC Adapter	QW-4PLCC44-ND	249.00	QW-4PLCC44
28-SOIC Adapter	QW-4SOIC28-ND	249.00	QW-4SOIC28
18-Pin ZIF Adapter	QW-4ZIF18-ND	199.00	QW-4ZIF18
18-Pin SOIC Adapter	QW-4SOIC18-ND	249.00	QW-4SOIC18
8/14-Pin ZIF Adapter	QW-4ZIF8/14-ND	199.00	QW-4ZIF8/14
8/14-Pin Narrow SOIC Adapter	QW-4SOIC8/14N-ND	249.00	QW-4SOIC8/14N
8/14-Pin Wide SOIC Adapter	QW-4SOIC8/14W-ND	249.00	QW-4SOIC8/14W

* Use with 28 and 40-Pin 14 bit dip parts.

FR3 FlexROM III FLASH, EPROM and SRAM Emulator

FlexROM III emulators provide engineers with a fast flexible development tool for any Embedded project that uses an external FLASH, EPROM or SRAM device. The FR3 increases productivity by elimination the "burn/insert/test/erase" cycle and by downloading firmware code or data into the emulator at a fast 2.5 Mbits per second.

Features: • Active Cable Modules (ACM™) contain Target interface and Control Logic • Provides adaptability to new Target Technologies • Hard-ware Instrumentation: Target Voltage Measurement, Address Snap-Shot Circuit, Address Match & Trigger Circuit • Reverse Voltage Protection • Adjustable Timing Parameters • Integrated Low-Voltage Support • External Power Option • Jumper-less Address Configuration • Up to 256Mbit/32MByte Emulation in a single unit • Replaces standard EPROM, FLASH, or SRAM device during development • Emulates up to 45ns devices • TARGET random access Read/Write capability • HOST random access Read/Write capability • Auto/Manual Target Reset on download • Downloads up to 2.5 Mbit per second • Read-back, Verify and Self-test functions • Connects to any Parallel Port • All sizes and speeds can be Daisy-chained together • Daisy-chain cable included • Mini-clip cable included for Reset connection • LPT cable included • Target cable(s) included • Includes 2 versions of software: 16 bit DOS version & 32 bit Win9X/NT/2000 version • QuickLoader with Full-screen editor included • Batchable loader & utilities included • Accepts Intel HEX., Tektronix HEX, Motorolla 'S' records and binary files • Free software updates via WEB downloads

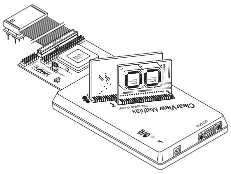
Size	Organization	Speed	Digi-Key Part No.	Price Each
*Base Unit**				
1 Mbit	128Kx8/64Kx16	45ns	FR3-1M-ND	279.00
4 Mbit	512Kx8/256Kx16	45ns	FR3-4M-ND	379.00
8 Mbit	1Mx8/512Kx16	45ns	FR3-8M-ND	529.00
16 Mbit	2Mx8/1Mx16	45ns	FR3-16M-ND	679.00

*Base Unit requires at least one ACM™ target interface

Description	Digi-Key Part No.	Price Each
Active Cable Module (ACM™)		
8 Bit Interface with DIP28 and DIP32 Cable	ACM-8-ND	120.00
16 Bit Interface with DIP40 Cable	ACM-16-ND	120.00

PIC Emulators

ClearView™Mathias



CVM1 supports emulation for 16C5X and 16CXX devices using Microsoft Windows™ for a complete integrated design environment. "Family" modules select 5X or XX device family, while "Member" modules select specific device. Optional timing module shows execution time and number of processor cycles. Optional 16K trace buffer module additionally provides execution history and 8 external trace inputs. Provides full emulation of program and register memory and I/O activity with unlimited hardware breakpoints. Built-in PLL oscillator generates any frequencies from 32KHz to 33MHz.

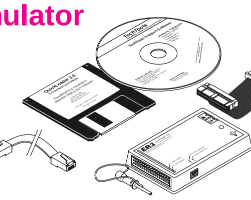
System requirements: IBM PC or compatible, VGA monitor, serial port, 3.5" disk drive, and Windows™ 3.1, Win95, Win98 or NT'.

Description	Digi-Key Part No.	Price Each	TechTools Part No.
Emulator			
ClearView Mathias 16C5x/16CXX	CVM1-ND	495.00	CVM1
Family Module			
Advanced 14 Bit Family Module w/Data Breakpoints..	CVM03F-ND	200.00	CVM03F
PIC16C5X Family Module	CVM5XF-ND	150.00	CVM5XF
PIC16CXX Family Module	CVMXXF-ND	150.00	CVMXXF
Member Module			
PIC16C55X/62X/CE62X	CVM001M-ND	200.00	CVM001M
PIC12C508/509	CVM50XM-ND	75.00	CVM50XM
PIC16C50X/CE51X/16C505	CVM5XXM-ND	100.00	CVM5XXM
PIC12C671/672	CVM67XM-ND†	100.00	CVM67XM
PIC16C5X	CVM5XM-ND	50.00	CVM5XM
PIC16C554/556/558	CVM55XM-ND	100.00	CVM55XM
PIC16C61	CVM61M-ND	100.00	CVM61M
PIC16C62X	CVM62XM-ND	100.00	CVM62XM
PIC16C62X/61/71/84	CVM6/8M-ND	200.00	CVM6/8M
PIC16C641/642/661/662	CVM66XM-ND	200.00	CVM66XM
PIC16C715	CVM715M-ND	100.00	CVM715M
PIC16C70,71,710,711	CVM711M-ND	100.00	CVM711M
PIC16C62-65/72-74	CVM7XM-ND	200.00	CVM7XM
PIC16C66/67/76/77	CVM77M-ND	200.00	CVM77M
PIC16C773,774	CVM77XM-ND	200.00	CVM77XM
PIC16F627/628	CVMF628M-ND	200.00	CVMF628M
PIC16F83,F84,C83,C84	CVMF84M-ND	100.00	CVMF84M
PIC16F873,874,876,877	CVM87XM-ND	200.00	CVM87XM
PIC16F73/F74/F76/F77	CVMF77M-ND	200.00	CVMF77M
PIC16F870/F871	CVMF871M-ND	200.00	CVMF871M
Trace Buffer and Timing Module			
Mathias Timing Module	CVMT1-ND	130.00	CVMT1
Mathias Trace Buffer and Timing Module.........	CVMT2-ND	270.00	CVMT2
Kit Module			
Firmware/Logic Field Upgrade Kit................	CVM1-FWL-ND*	55.00	CVM1-FWL
Adapter			
PIC16C712C716	ADP716-ND§	35.00	ADP716

†Requires the CVM03F Family Module §Requires Member Module CVM77M

*For use with TDE 4.0 software features of: Stack Viewing, Variable Trace Size, faster Step-out function, and faster Register Window Updates. Contains firmware V2.2 and UC13 Ver C.

ER3 EconoROM III Economical EPROM Emulator

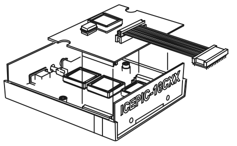


EconoROM III is designed for quick, in-circuit firmware test cycles. If you want to stop the "burn/insert/test/remove/erase" cycle, then this is the tool for you. The ER3 will speed up your firmware development by eliminating the need to remove-erase-program and re-install EPROMs each time you test a code change. These devices plug into the EPROM socket on your target board and emulate the EPROM throughout the development process.

Features:
• Integrated Low-Voltage Support • Target Voltage Sense & Measurement • External Power Option • Jumper-less Address Configuration • Up to 8Mbit Emulation in a single unit • Fast Downloads (up to 2.5 Mbit per second) • Replaces standard EPROM device during development • Connects to any Parallel Port • Auto/Manual Target Reset on download • Read-back, Verify and Self-test functions • Daisy-chain cable included • LPT cable (8 wire Modular Cable and DB25 adapter) included • Target cables (standard IDC to DIP Ribbon Cable) included • Includes 2 versions of software: 16 bit DOS version & 32 bit Win9X/NT/2000 version • QuickLoader with Full-screen editor included • Batchable loader & utilities included • Accepts Intel HEX, Tektronix HEX, Motorolla 'S' records and binary files • Free software updates via WEB downloads

Capacity	Cables Supplied	Speed	Digi-Key Part No.	Price Each
256Kbit/ 32K x 8	28-Pin Dip	45ns	ER3-256-ND	179.00
512Kbit/ 64K x 8	28-Pin Dip	45ns	ER3-512-ND	239.00
1Mbit/ 128K x 8	28 & 32-Pin Dip	45ns	ER3-1M-ND	299.00
4Mbit/ 512K x 8	28 & 32-Pin Dip	45ns	ER3-4M-ND	399.00
8Mbit/ 1M x 8	28 & 32-Pin Dip	45ns	ER3-8M-ND	499.00

ICEPIC and ICEPIC2 PIC Emulators



ICEPIC and ICEPIC2 are fully modular, real time, in-circuit emulator systems, for use with Microchip 12CXX, 16CXX, and 17CXX processors, using interchangeable 'personality daughterboards' which are sold separately. Both emulators are supplied with their own 32 bit operating software, but can also be used with Microchip's MPLAB™ development software.

System Requirements: IBM PC or compatible, VGA monitor, RS-232"C", 3.5" disk drive, and Microsoft Windows 3.1, Win 95, Win 98, Win 2000, or NT.

Both ICEPIC & ICEPIC2 are supplied as a complete system with power supply, cables, manual and a copy of Microchip's MPASM assembler. They both use the same windows software user operating environment (IDE) with a comprehensive GUI under Microsoft Windows software (also MPLAB™).

The emulator system is configured to handle the appropriate PIC microcontroller according to the personality daughter boards which are ordered separately. These daughter boards configure the emulator to handle specific devices from a wide range of PIC microcontrollers. This enables the user to adapt their ICEPIC system to support new PIC processors as they became available.

Features	ICEPIC	ICEPIC2
Real-Time Emulation	32KHz to 20 MHz	32KHz to 33 MHz
Device Emulated	12C, 16C	12C, 16C, 17C
Runs Under MPLAB	Yes	Yes
Source Level Debug	Yes	Yes
"C" Source Level Debug	Yes	Yes
Real Time Trace	No	Yes
Time Stamp	Yes	Yes
Freeze Mode	Yes	Yes
Break Points	Unlimited	Unlimited
Stack Breaks	Yes	Yes
WDT Breaks	Yes	Yes
Stack View	Yes	Yes
Custom Watch	Yes	Yes
Assembler Support	MPASM	MPASM
Communications	RS-232"C"	RS-232"C"

Description	Digi-Key Part No.	Price Each
ICEPIC Emulators		
ICEPIC Emulator System	ICEPIC-ND	445.00
ICEPIC2 Emulator System..................	ICEPIC2-ND	745.00
ICEPIC Daughter Boards		
12C671, 16C672............................	DB12C67X-ND	305.00
12C508/509, 16C54/55/56/57/58, 16C505 ..	DB5XA-ND	259.00
16C554, 16C556, 16C558	DB55X-ND	305.00
16C620, 16C621, 16C622	DB62X-ND	305.00
16C641, 16C642, 16C661, 16C662..........	DB66X-ND	365.00
16C61, 16C71, 16C710, 16C711	DB711-ND	305.00
16C715	DB715-ND	305.00
16C62/63/64/65/72/73/74..................	DB74A-ND	365.00
16C66, 16C67, 16C76, 16C77..............	DB77-ND	365.00
16C772, 16C773, 16C774	DB77X-ND	305.00
16C84, 16F83, 16F84.......................	DB84A-ND	305.00
16F872/873/874/876/877	DB877-ND	305.00
17C42/43/44, 17C752/756 (ICEPIC2 Only)..	DB756-ND	305.00
16F628	DBF628-ND	305.00
16F73, 16F74, 16F76, 16F77	DBF77-ND	305.00
16F870/71..................................	DBF871-ND	305.00
Accessories		
44-Pin PLCC Adapter (For emulation of 16Cxx In PLCC Only)	PLCC44-RF-ND	115.00

SEEPROM Designer's Development Kit

Supports all Microchip 2-wire and 3-wire SERIAL EEPROMs

The Serial EEPROM Designer's Kit includes everything necessary to read, write, erase or program special features of any Microchip Serial EEPROM products including *Smart Serials™* and secure serials. **Description of Contents:** • SEEVAL™ Evaluation and Programming System • Total Endurance Software Model • Serial EEPROM Handbook • SEEVAL software • RS-232 Interface Cable • Serial EEPROM Sample Pack • Power Supply

PICSEE™ Introduction Design Kit

• PICSEE™ PDIP and SOIC to PIC16C54 or 24LC01B Programming Adapter Sockets • Header Interface for PICStart-16B, PICMASTER-16A and PICPROBE-16A • Serial EEPROM Example Software Disk • MTA81010 Product Samples • 8 and 18-Pin Programming Adapter Plugs • Complete Systems Documentation

Description	Digi-Key Part No.	Price Each
SEEPROM Designer's Development Kit.....................	DV243001-ND	149.00
PICSEE™ Introduction Design Kit	AC812001-ND	330.00
IC TrueGauge™ Battery Fuel Gauge (28-DIP .3")............	MTA11200B/SP-ND	7.37

ZiLOG
Totally Logical

Real-Time, In-Circuit Emulation and Programming for only $49.95

Z86CCP01ZEM Emulator / Programmer for Zilog's Z8® Microcontrollers with up to 8K Program Memory

Digi-Key Part No. **269-2002-ND**
(See Z8 chart for applicable devices.)

GENERAL DESCRIPTION: Zilog's in-circuit emulator/programmer is an interactive, Windows™ based development tool providing a real-time environment for emulation and debugging, which includes a full-featured macro cross assembler to enhance programmer productivity. The Z86CCP01ZEM is a member of Zilog's ICEBOX™ product family of in-circuit emulators providing support for the Z8 microcontrollers. The emulator provides essential timing and I/O circuitry to simplify user emulation of the prototype hardware and software product. The Z8 CCP emulator provides users with a hardware platform to develop and debug software in a real-time environment. In contrast, software simulators provide significantly slower operation making them less practical for code development. The Z8 CCP emulator can be connected to a serial port (COM1, COM2, COM3, and COM4) of the host computer and uses Zilog Developer Studio (ZDS).**Z8 CCP Emulator Kit Contents:** Circuit Board: CMOS Z86C9320VSC, 20MHZ CMOS Z86C5020FSE ICE Chip, 8K x 8 Static RAM (for Code Memory) 18-Pin DIP ZIF Programming Socket, Holes Available for 28/40-Pin ZIF Programming Sockets, Sockets for 28/40-Pin Target Cables, 25-pin RS-232C Interface Connector: 18-Pin DIP Target Cable, Power Cable **Documentation:** Emulator User's Manual ***NOTE:*** *Power Supply RS-232C not included with Z86CCP01ZEM (recommended wall transformer T404-ND)*

FEATURES: • In-Circuit Debug Emulation • Real-Time Emulation • Z8 GUI ZDS Emulator Software • Window-Based User Interface • On-Line Help • One-Time Programmable (OTP) Support • Selectable Baud Rates: 9600 to 57.6 Kbps • Bisync Error-Correcting Communications Protocol • Source-Level Debugging • Symbolic Disassembly in the Debug Window • Zilog Developer Studio (ZDS): – ZMASM, – Structured Assembly and Data Code, – Source-Level Debug Support, – Built-In Register Equates, – Linker, – Windows 95TM Integrated Editor

SPECIFICATIONS: **Operating Temperature:** 20°C ± 10°C **Supply Voltage:** +7.5 VDC to 10.0 VDC **Minimum Emulation Speed:** 1 MHz internal SCLK **Maximum Emulation Speed:** 6 MHz internal SCLK12 MHz external Crystal (shipped with 8 MHZ crystal) **Operating Humidity:** 10-90% RH (non-condensing) **Power Requirements:** +8.0 VDC @ 0.5A typical, 0.8A max. **Dimensions:Width:** 7.0 in. (17.7 cm) **Length:** 9.0 in. (22.9 cm) **Height:** 0.9 in. (2.3 cm) **Serial Interface :**RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud

Z8® Series Microcontrollers

Z8 MCU Family

Overview: Zilog MCU products are targeted for cost-sensitive, high-volume applications including consumer, automotive, security, and HVAC. One-time programmable (OTPs) for prototyping as well as volume production where time to market or code flexibility is critical. A variety of packaging options are available. The same on-chip peripherals are used across the MCU product line with the primary differences being the amount of ROM/RAM, number of I/O lines present, and packaging/temperature ranges available. This allows code written for one MCU device to be easily ported to another family member.

Features: • **General-Purpose Register (GPR) File Architecture:** Every RAM register acts like an accumulator, speeding instruction execution and maximizing coding efficiency. Working register groups allow fast context switching. • **Flexible I/O:** I/O byte, nibble, and/or bit programmable as inputs or outputs. Outputs are software programmable as open-drain or push-pull on a port basis. Inputs are Schmitt-triggered with auto latches to hold unused inputs at a known voltage state. • **Analog Inputs:** Three input pins are software programmable as digital or analog inputs. When in the analog mode, two comparator inputs are provided with a common reference input. • **Timer/Counter (T/C):** The T/C consists of a programmable 6-bit prescaler and 8-bit downcounter, with maskable interrupt upon end-of-count. • **Interrupts:** There are six vectored interrupt sources with software-programmable enable and priority for each of the six sources. • **Watch-Dog Timer (WDT):** An internal WDT circuit is included as a fail-safe mechanism so that if software strays outside the bounds of normal operation, the WDT will timeout and reset the MCU. • **Auto Reset:** All family devices have internal Power-On Reset. • **Low-EMI Operation:** Mode is programmable via software or as a mask option. This new option provides for reduced radiated emission via clock and output drive circuit changes. • **Low-Power:** CMOS with two standby modes; STOP and HALT. • **Full Z8 Instruction Set:** Forty-eight basic instructions, supported by six addressing modes with the ability to operate on bits, nibbles, bytes, and words.

EMULATORS/PROGRAMMERS for 8, 16 and 32K Devices

Z86C1200ZEM Emulator

SPECIFICATIONS: • **Minimum Emulation Speed:** 1 MHz • **Maximum Emulation Speed:** 16 MHz* • **Power Requirements:** +5.0 VDC @ 0.5A • **Dimensions:** Width: 6.25 in. (15.8 cm); Length: 9.5 in. (24.1 cm); Height: 2.5 in. (6.35 cm) • **Serial Interface:** RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud. **(Shipped with 12MHz Crystal)*

KIT CONTENTS: Z86C12 Emulator: Emulation Base Board includes: CMOS Z86C9320PSC; 8K x 8 EPROM (Programmed with Debug Monitor); 32K x 8 Static RAM; Three 64K x 4 Static RAM; RS-232C Interface; Reset Switch. Emulation Daughterboard includes: 16MHz CMOS Z86C1216GSE ICE Chip; 2K x 8 Static RAM; 18/40-Pin DIP Zero Insertion Force (ZIF) Programming Sockets; 40/60/80-Pin Target Connectors. • **Cables/Pods:** Power Cable with Banana Plugs; Power Cable with 1A Slow-Blow Fuse; DB25 RS-232C Cable; 18-Pin, 28-Pin, and 40-Pin DIP Emulation Pod Cable. • **Devices:** One Z86E0812PSD (18-Pin DIP OTP) and One Z86E2112PSC (40-Pin DIP OTP).

NOTE: Z86C1200ZEM Emulator does not come with power supply.

Z86C5000ZEM Emulator

SPECIFICATIONS: • **Minimum Emulation Speed:** 1 MHz. • **Maximum Emulation Speed:** 20 MHz • **Power Requirements:** +5.0 VDC @ 1.0A Minimum • **Dimensions:** Width: 6.25 in. (15.8 cm); Length: 9.5 in. (24.1 cm); Height: 2.5 in. (6.35 cm). • **Serial Interface:** RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud.

KIT CONTENTS: • Emulation Base Board with CMOS Z86C9320PSC; 8K x 8 EPROM (Programmed with Debug Monitor); 32K x 8 Static RAM; Three 64K x 4 Static RAM; RS-232C Interface; Reset Switch • Emulation Daughterboard with 20 MHz CMOS Z86C5020GSE ICE Chip; 2K x 8 Static RAM; 18/28/40-Pin ZIF OTP Sockets; Six HP-16500A Logic Analysis System Interface Connectors; 40/60/80-Pin Target Connectors • **Cables:** Power Cable with Banana Plugs; DB25 RS-232C Cable; 18-Pin, 28-Pin, and 40-Pin DIP Emulation Cables • Power Cable with 1A Slow-Blow Fuse • **Devices:** One Z86E3012PSC (28-Pin DIP OTP) and One Z86E4012PSC (40-Pin DIP OTP).

NOTE: Z86C5000ZEM Emulator does not come with power supply.

ACCESSORY KIT

The Z86CCP00ZAC is the accessory kit for the Z86CCP01ZEM. The kit contains all accessories to fully populate and operate all functions of the Z86CCP01ZEM.

Kit Contains: 28-Pin DIP ZIF Socket, 28-Pin Target Connector Cable, 40-Pin DIP ZIF Socket, 40-Pin Target Connector Cable, RS-232 Cable, Power Cable.

Memory Size		I/O Lines	Oscillator Type External	Freq. Range Min./Max.	Supply Voltage Range	Operating Temp. (°C)	Pkg.	Req. Emulator Tools	Req. OTP Prog. Tools	Digi-Key Part No.	Price Each			Zilog Part No.
Eprom	Ram										1	25	100	
0.5K	61	14	XTAL/RC	DC-8MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1011-ND	2.49	1.87	1.14	Z86E0208PEC1925
0.5K	61	14	XTAL/RC	DC-8MHz	3.5-5.5	0-70	18-DIP	A	A	269-1012-ND	2.28	1.71	1.04	Z86E0208PSC1925
0.5K	61	14	XTAL/RC	DC-8MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1013-ND	2.49	1.87	1.14	Z86E0208SEC1925
0.5K	61	14	XTAL/RC	DC-8MHz	3.5-5.5	0-70	18-SOIC	*	A, 2	269-1014-ND	2.28	1.71	1.04	Z86E0208SSC1925
0.5K	61	14	XTAL	DC-8MHz	4.5-5.5	0-70	18-DIP	A	A, 1	269-1083-ND	5.25	3.94	2.84	Z86E0308PSC
0.5K	61	14	XTAL	DC-8MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3068-ND	2.73	2.05	1.24	Z86E0208HEC1925
0.5K	61	14	XTAL	DC-8MHz	3.5-5.5	0-70	20-SSOP	—	—	269-3069-ND	2.49	1.87	1.12	Z86E0208HSC1925
1K	125	14	RC	DC-8MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1022-ND	3.03	2.28	1.44	Z86E0408SSC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A, 1	269-1085-ND	6.39	4.80	2.77	Z86E0612PSC
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1086-ND	6.39	4.80	2.77	Z86E0612SSC
1K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1093-ND	3.90	2.93	1.69	Z86E0412PEC
1K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1094-ND	3.90	2.93	1.69	Z86E0412PEC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1095-ND	3.54	2.66	1.54	Z86E0412PSC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1096-ND	3.54	2.66	1.54	Z86E0412PSC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1097-ND	3.90	2.93	1.69	Z86E0412SEC
1K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1098-ND	3.90	2.93	1.69	Z86E0412SEC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1099-ND	3.54	2.66	1.54	Z86E0412SSC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1100-ND	3.54	2.66	1.54	Z86E0412SSC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3074-ND	4.14	3.11	1.80	Z86E0412HEC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3075-ND	4.14	3.11	1.80	Z86E0412HEC1903
1K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3076-ND	3.75	2.82	1.63	Z86E0412HSC1866
1K	125	14	RC	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3077-ND	3.75	2.82	1.63	Z86E0412HSC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-DIP	A	A	269-1023-ND	4.77	3.58	2.07	Z86E0812PEC
2K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1025-ND	4.35	3.27	1.89	Z86E0812PSC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-DIP	A	A	269-1026-ND	4.35	3.27	1.89	Z86E0812PSC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1027-ND	4.77	3.58	2.07	Z86E0812SEC
2K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	18-SOIC	*	A, 2	269-1028-ND	4.77	3.58	2.07	Z86E0812SEC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1029-ND	4.35	3.27	1.89	Z86E0812SSC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	0-70	18-SOIC	*	A, 2	269-1030-ND	4.35	3.27	1.89	Z86E0812SSC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3086-ND	4.38	3.29	1.90	Z86E0812HEC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	-40-105	20-SSOP	—	—	269-3087-ND	5.01	3.76	2.18	Z86E0812HEC1903
2K	125	14	XTAL	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3088-ND	4.53	3.40	1.97	Z86E0812HSC1866
2K	125	14	RC	DC-12MHz	4.5-5.5	0-70	20-SSOP	—	—	269-3089-ND	4.53	3.40	1.97	Z86E0812HSC1903
2K	125	24	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	28-DIP	A	A, 3	269-1052-ND	7.05	5.29	3.35	Z86E3116PEC
2K	125	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-DIP	A	A, 3	269-1053-ND	6.39	4.80	3.22	Z86E3116PSC
2K	125	24	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	28-SOIC	*	A, 3, 4	269-1054-ND	7.05	5.29	3.35	Z86E3116SEC
2K	125	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-SOIC	*	A, 3, 4	269-1055-ND	6.39	4.80	3.22	Z86E3116SSC
4K	237	24	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	28-DIP	A	A, 4	269-1040-ND	8.49	6.37	3.68	Z86E3016PEC
4K	237	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-DIP	A	A, 4	269-1041-ND	7.71	5.79	3.35	Z86E3016PSC
4K	237	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-SOIC	*	A, 3, 4	269-1043-ND	7.71	5.79	3.35	Z86E3016SSC
4K	237	24	XTAL/RC	DC-16MHz	3.5-5.5	0-70	28-PLCC	A	A, 3, 4	269-1045-ND	7.71	5.79	3.35	Z86E3016VSC
4K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-DIP	A	A, 7	269-1036-ND	7.98	5.99	4.27	Z86E3312PSC
4K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-SOIC	*	A, 8	269-1103-ND	7.98	5.99	4.19	Z86E3312SSC
4K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-PLCC	*	A, 9	269-1104-ND	7.98	5.99	4.16	Z86E3312VSC
4K	236	32	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	40-DIP	A	A, 3	269-1071-ND	10.08	7.56	4.87	Z86E4016PEC
4K	236	32	XTAL/RC	DC-16MHz	4.5-5.5	-40-105	44-PQFP	*	A, 3, 15	269-1106-ND	10.53	7.90	4.87	Z86E4016FEC
4K	236	32	XTAL/RC	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	A, 3, 15	269-1107-ND	9.57	7.18	4.42	Z86E4016FSC
4K	236	32	XTAL/RC	DC-16MHz	3.5-5.5	0-70	40-DIP	A	A, 3	269-1072-ND	9.18	6.89	4.42	Z86E4016PSC
4K	236	32	XTAL/RC	DC-16MHz	3.5-5.5	0-70	44-PLCC	*	A, 3, 6	269-1074-ND	9.18	6.89	4.42	Z86E4016VSC
4K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	40-DIP	A	A, 10	269-1037-ND	9.75	7.32	4.56	Z86E4312PSC
4K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PLCC	*	A, 11	269-1038-ND	9.75	7.32	4.32	Z86E4312VSC
4K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PQFP	*	A, 3, 16	269-1108-ND	10.17	7.63	4.95	Z86E4312FSC
8K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-SOIC	*	A, 8	269-1047-ND	9.72	7.29	4.40	Z8673312SSC
8K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-DIP	A	A, 7	269-1112-ND	9.72	7.29	4.48	Z8673312PSC
8K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-PLCC	*	A, 9	269-1113-ND	9.72	7.29	4.37	Z8673312VSC
8K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PLCC	*	A, 11	269-1048-ND	11.28	8.46	5.02	Z8674312VSC
8K	236	32	XTAL	DC-12MHz	4.5-5.5	0-70	40-DIP	B	B	269-1033-ND	18.93	14.20	8.27	Z86E2116PSC
8K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PQFP	*	A, 16	269-1114-ND	11.70	8.78	5.20	Z8674312FSC
8K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	40-DIP	A	A, 10	269-1115-ND	11.28	8.46	4.89	Z8674312PSC
8K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	B, 14	269-1101-ND	18.93	14.20	8.27	Z86E2116FSC
8K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PLCC	*	B, 12	269-1102-ND	18.93	14.20	8.27	Z86E2116VSC
16K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-SOIC	*	C, 8	269-1035-ND	12.84	9.63	6.03	Z86E3412SSC
16K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-PLCC	*	C, 9	269-1039-ND	12.84	9.63	6.03	Z86E3412VSC
16K	237	24	XTAL/RC	DC-12MHz	3.5-5.5	0-70	28-DIP	C	C, 7	269-1105-ND	12.84	9.63	6.03	Z86E3412PSC
16K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	40-DIP	C	C, 10	269-1034-ND	14.43	10.83	6.26	Z86E4412PSC
16K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PLCC	*	C, 11	269-1046-ND	14.43	10.83	6.26	Z86E4412VSC
16K	236	32	XTAL/RC	DC-12MHz	3.5-5.5	0-70	44-PQFP	*	C, 16	269-1109-ND	14.82	11.12	6.43	Z86E4412FSC
16K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	B, 14	269-1110-ND	23.01	17.26	9.98	Z86E6116FSC
32K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	40-DIP	B	B	269-1091-ND	29.22	21.92	12.67	Z86E6316PSC
32K	236	32	XTAL	DC-16MHz	4.5-5.5	0-70	44-PQFP	*	B, 14	269-1111-ND	29.22	21.92	12.67	Z86E6316FSC

Emulators/Programmers

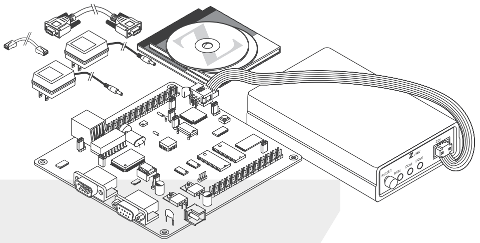
Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
A	Z8 Emulator/Programmer Board	269-2002-ND	49.95	Z86CCP01ZEM
B	Z8 Emulator/Programmer Board	269-2003-ND	1250.00	Z86C1200ZEM
C	Z8 Emulator/Programmer Board	269-2004-ND	1335.00	Z86C5000ZEM

OTP Programming Adapters

Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
1	18 Pin DIP/SOIC Adapter	269-2005-ND	180.00	Z86E0601ZDP
2	18 Pin SOIC Adapter	269-2006-ND	95.00	Z86E0700ZDP
3	Z8 Accessory Kit (28-DIP, 40-DIP) for Z86CCP01ZEM	269-2001-ND	46.43	Z86CCP00ZAC
4	Z8 Accessory Kit (28 Pin SOIC/PLCC) for Z86CCP01ZEM	269-2007-ND	102.00	Z86C3000ZAC
6	44 Pin PLCC Adapter	269-2008-ND	74.83	Z86E4001ZDV
7	28 Pin Dip Adapter	269-2009-ND	35.10	Z86E3400ZDP
8	28 Pin SOIC Adapter	269-2010-ND	52.65	Z86E3400ZDS
9	28 Pin PLCC Adapter	269-2011-ND	40.95	Z86E3400ZDV
10	40 Pin DIP Adapter	269-2012-ND	42.00	Z86E4400ZDP
11	44 Pin PLCC Adapter	269-2013-ND	48.00	Z86E4400ZDV
12	44 Pin PLCC Adapter	269-2014-ND	132.00	Z86E2101ZDV
14	44 Pin PQFP to 40 Dip Adapter	269-2021-ND	198.00	Z86E2101ZDF
15	44 Pin PQFP to 40 Dip Adapter	269-2022-ND	118.83	Z86E4001ZDF
16	44 Pin PQFP to 40 Dip Adapter	269-2023-ND	54.00	Z86E4400ZDF
17	20 Pin SSOP to 18 Dip Adapter	269-2032-ND	65.00	Z8E00101ZDH

* Zilog's emulators support this part, but the in-circuit target cable is configured for DIP only. For designs that require a surface mount package, see logic system adapters in the manufacturers index.

NEW! eZ80 - The Next Generation



EZ80190AZ050EC AND EZ80190AZ050SC

Just as the Z80 revolutionized the semiconductor industry, the next generation eZ80 is revolutionizing the way that communications are happening today. This elegant system-on-a-chip can serve web pages over a TCP/IP network, allowing easy system monitoring and control, effortless processor code updates, and system compatibility. This solution enables any browser with access to your network the ability to control and monitor a network application. The eZ80 executes Z80 code four times faster than traditional Z80s at the same clock speed, and can operate at speeds up to 50MHz. Unlike most 8-bit microprocessors, which can only address 64KB, the eZ80 can address 16MB without a Memory Management unit. The eZ80 Webserver also features an Embedded Internet Software Suite that enables the transmission and reception of HTML form data and the dynamic generation of web pages. **FEATURES:** • 50MHz Processor • Multiply and Accumulate Engine • 16MB Linear Addressing • 3.3V Operation • 2 DMA Channels • Universal ZiLOG Interface (selectable UART, IIC, SPI) • 6 PRTs with Prescalers • 8KB SRAM • 32-Bit GPIO with Interrupt Support • On-Chip Oscillator • Optimized Pipeline Architecture • ZiLOG Debug Interface (ZDI)

EX801900110ZCO

The eZ80190 Webserver evaluation board is a general-purpose platform that allows the designer to evaluate the capabilities and operation of the eZ80190 Webserver device. It includes: eZ80 microprocessor operating at speeds up to 50MHz. **FEATURES:** • 1MB SRAM (15ns access time) • 1MB of user-programmable Flash, expandable to 4MB • 10BaseT Ethernet Interface (Realtek RTL8019AS) • 2 - DB9 RS232 Connectors • Real-Time Clock with Battery Back-up • 2 - Expansion Headers: GPIO, System Bus and Memory Interface

WEBSERVER DEVELOPER'S KIT CONTENTS:

• eZ80 Evaluation Board • ZPAK Emulator • Ethernet Cable and Power Supplies Software • Tools Contents: Royalty-Free TCP/IP Stack and OS • Ethernet and Serial Drivers • Web File to C-Converter • Flash Code • C-Compiler • ZiLOG Developer's Studio IDE • Complete Documentation **FEATURES:** Quick Start Guide • Technical Documentation CD-ROM • Evaluation Board User's Manual

Description	Digi-Key Part No.	Price Each 1	25	100	Zilog Part No.
IC Webserver	269-3123-ND	30.87	23.16	14.70	EZ80190AZ050EC
IC Webserver	269-3124-ND	26.85	20.14	12.79	EZ80190AZ050SC
Webserver Evaluation Board	269-3121-ND	414.96	—	—	EZ801900110ZCO
Webserver Developer's Kit	269-3122-ND	830.96	—	—	EZ801900210ZCO

Z8Plus™ Microcontrollers

Employing the experience gained from the industry-standard Z80 and Z8 cores, the Z8Plus offers increased functionality, significantly higher performance, lower power requirements, and greater cost savings over other 8-bit microcontrollers. The Z8Plus is designed to be easy to use, even for designers who have never used a microcontroller before.

With single-cycle execution, powerful I/O capabilities and register-to-register architecture, the Z8Plus offers state-of-the-art flexibility and freedom for any designer in search of a low-cost solution for a variety of microcontroller applications.

The Z8Plus core offers several significant advantages compared to the current Z8 core. Foremost is performance improvement due to a reduced system clock division and a fixed instruction cycle time. The improvement is nearly 50%, depending upon instruction mix. For example, a Z8Plus-based part at 10MHz has performance comparable to a 16MHz part in production today. This, along with significant design improvements, leads to lower power and lower noise operation.

The Z8PE002 and Z8PE003 microcontrollers are the newest members of the popular Z8E001 Z8 Plus 8-bit microcontroller family. New features include voltage brown-out protection and power-on reset. Additionally, the "RESET" pin has been replaced with a general purpose I/O pin and oscillator circuitry to support RC configurations. These new parts are targeted at customers who require a powerful, yet small OTP microcontroller for use in general purpose applications.

EMULATOR/PROGRAMMER

FEATURES: • In-Circuit Program Debug Emulation • Real-Time Emulation • ZDS Emulator Software • Window-Based User Interface • On-Line Help • One-Time Programmable (OTP) Support • Selectable Baud Rates: 9600 to 57.6 Kbps • Bisync Error-Correcting Communications Protocol

SPECIFICATIONS: OPERATING TEMPERATURE: 20°C ± 10°C **POWER REQUIREMENT:** +9.0 VDC @ 0.5A Minimum (Typical). **DIMENSIONS:** • Width: 6.75 in. (17.15 cm) • 7.50 in. (19.05 cm) • 0.90 in. (2.30 cm). **SERIAL INTERFACE:** RS-232C @ 9600, 19200 (default), 28800, or 57600 Baud

HOST COMPUTER: Minimum Requirements: IBM PC (or 100% Compatible) 386-Based Machine: • 33 MHz • 4 MB RAM • VGA Video Adapter • Hard Disk Drive (2.5 MB Free Space) • 3.5-inch, High-Density (HD) Floppy Disk Drive • RS-232C Com Port • Mouse or Pointing Device • Microsoft Windows 3.1

KIT CONTENTS (One of Each): Z8M001 Emulator Board; • **Cable/Pods:** 18-Pin Emulation Pod Cable; 9-Pin M-F Serial Cable (6 ft.) • **Host Software:** Z8 Graphical User Interface (GUI); ZiLOG Macro Cross Assembler (ZMASM)/ZiLOG Developer Studio (ZDS) • **Documentation:** ZiLOG 1999 Technical Library CD ROM, which contains Z8 device data sheets, user manuals, application notes; Z8M001 Emulator User's Manual

Memory Size Eprom	Ram	I/O Lines	Oscillator Type External	Frequency Range Min/Max	Supply Voltage Range	Operating Temp. (°C)	Package	Required Emulator Tools	Required OTP Programming Tools	Digi-Key Part No.	Price Each 1	25	100	Zilog Part No.
512	32	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1116-ND	1.35	1.02	.90	Z8E00010PEC
512	32	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-DIP	D	D	269-1117-ND	1.23	.93	.82	Z8E00010PSC
512	32	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1118-ND	1.35	1.02	.90	Z8E00010SEC
512	32	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-SOIC	*	D,2	269-1119-ND	1.23	.93	.82	Z8E00010SSC
1K	64	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1120-ND	1.80	1.35	1.20	Z8E00110PEC
1K	64	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-DIP	D	D	269-1121-ND	1.65	1.24	1.10	Z8E00110PSC
1K	64	13	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1122-ND	1.80	1.35	1.20	Z8E00110SEC
1K	64	13	XTAL/LC	DC - 10MHz	3.5 - 5.5	0 – 70	18-SOIC	*	D,2	269-1123-ND	1.65	1.24	1.10	Z8E00110SSC
Z8PE002 / Z8PE003 Series														
512	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-DIP	D	D	269-1130-ND	1.29	.97	.86	Z8PE002PZ010SC
512	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-SOIC	*	D,2	269-1131-ND	1.29	.97	.86	Z8PE002SZ010SC
512	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	20-SSOP	*	D,17	269-1132-ND	1.41	1.06	.94	Z8PE002HZ010SC
512	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1133-ND	1.41	1.06	.94	Z8PE002PZ010EC
512	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1134-ND	1.41	1.06	.94	Z8PE002SZ010EC
512	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	20-SSOP	*	D,17	269-1135-ND	1.56	1.17	1.04	Z8PE002HZ010EC
1K	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-DIP	D	D	269-1136-ND	1.74	1.31	1.16	Z8PE003PZ010SC
1K	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	18-SOIC	*	D,2	269-1137-ND	1.74	1.31	1.16	Z8PE003SZ010SC
1K	64	14	XTAL/LC	DC - 10MHz	3.0 - 5.5	0 – 70	20-SSOP	*	D,17	269-1138-ND	1.92	1.44	1.28	Z8PE003HZ010SC
1K	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-DIP	D	D	269-1139-ND	1.92	1.44	1.28	Z8PE003PZ010EC
1K	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	18-SOIC	*	D,2	269-1140-ND	1.92	1.44	1.28	Z8PE003SZ010EC
1K	64	14	XTAL/LC	DC - 10MHz	4.5 - 5.5	-40 – 105	20-SSOP	*	D,17	269-1141-ND	2.10	1.58	1.40	Z8PE003HZ010EC

Emulator/Programmer†

Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
D	Z8 Plus Emulator/Programmer (Power supply sold separately T405-ND recommended)	269-2033-ND	167.78	Z8ICE001ZEM

† For OTP programming adapters, please refer to Z8 Series.

* Zilog's emulators support this part, but the in-circuit target cable is configured for DIP only. For designs that require a surface mount package, accommodations will have to be made to use the emulator for in-circuit DIP emulation.

3XX Series

Digital Signal Processors

3X1 FEATURES: • 16-Bit Fixed-Point, Single-Cycle Deterministic Instruction Execution • 20 MIPS • 24-Bit Accumulator • 2x 256W Data RAM • 4KW Program Memory • Counter/Timer • Dual CODEC Interface (2nd Timer) • ROM and OTP Drop-In Replacements

3X3 FEATURES: • 16-Bit Fixed-Point, Single-Cycle Deterministic Instruction Execution • 20 MIPS • 24-Bit Accumulator • 2x 256W Data RAM • 8KW Program Memory • SPI • 4-Channel 8-Bit A/D Converter • 3x Counter/Timers, 2x PWM/WDT • Up to 40 I/O Pins • PLL-Driven System Clock • Smart Power-Saver Modes • ROM and TOP Drop-In Replacements

DSP Development Tools

SPECIFICATIONS: OPERATING CONDITIONS: • Operating Temperature: 20°C ±10°C • Supply Voltage: 9.0 VDC • Minimum Emulation Speed: 1 MHz • Maximum Emulation speed: 20 MHz. **SERIAL INTERFACE:** RS-232 @ 9600, 19200 (default), 28800, or 57600 Baud **EMULATION MEMORY:** DSP = 64K words (maximum) **NUMBER OF BREAKPOINTS:** DSP = 256 (maximum)

HOST COMPUTER: Minimum Requirements: IBM PC (or 100% compatible) 486-Based Machine: • 33 MHz • 4 MB RAM • VGA Video Adapter • Hard Disk Drive (3.0 MB free space) • 3.5-inch, High-Density (HD) Floppy Disk Drive • RS-232 COM Port • Mouse or Pointing Device • Microsoft Windows 3.1 or Greater (Utilized with DSPICE software)

Z8932101ZEM AND Z8932102ZEM

FEATURES: • Provides Source-Level Debugging for DSP Codes • Symbolic Disassembly in the Debug Window • Selectable Baud Rates: 9600 to 57.6 Kbps • Windows-Based User Interface • RS-232 Connector **ZDS (w/ZiLOG Macro Cross Assembler):** • Project Front End Interface (graphical-based) • Structured Assembly Code ('C' language-like) • Listing, Map, and Linker Control Files • ZDS Syntax-Highlighting Editor (Windows 95 Only) • ZDS Faster Error Correction (Windows 95 Only)

Z8932101ZEM KIT CONTENTS: Z8932101ZEM Emulator Board • **Cable/Pods:** RS-232 Serial Cable, 9-Pin M-F; 9 VDC @ 1.2A Wall Adapter • **Host Software:** ZDS/DSP GUI diskette; ZDS/ZiLOG Macro Cross Assembler Diskette • **Documentation:** Z8932101ZEM Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual; Software License and Limited Warranty Agreement • **DIMENSIONS:** • Width: 7.375 in (18.733 cm) • Length: 9.75 in. (24.765 cm) • Height: 0.50 in (1.27 cm)

Z8932102ZEM KIT CONTENTS: Z8932102ZEM Emulator Board • **Cable/Pods:** Z89371 40-Pin PDIP Emulation Pod; Z89371 44-Pin PLCC Emulation Pod with Cable; Z89371 44-Pin QFP Adapter; RS-232 Serial Cable, 9-Pin M-F; 9 VDC @ 1.2A Wall Adapter; Z89371 PLCC Program Adapter; Z89371 QFP Program Adapter • **Host Software:** ZDS/DSP GUI Diskette; ZDS/ZiLOG Macro Cross Assembler; Software License and Limited Warranty Agreement • **Documentation:** Z8932102ZEM Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual • **DIMENSIONS:** • Width: 7.375 in (18.733 cm) • Length: 9.75 in. (24.765 cm) • Height: 0.50 in (1.27 cm)

Z8932301ZEM

FEATURES: • ICEBOX Emulator Provides Source-Level Debugging for DSP Codes • Symbolic Disassembly in the Debug Window • Selectable Baud Rates: 9600 to 57.6 Kbps • Windows-Based User Interface • RS-232C Connector **ZiLOG Macro Cross Assembler (ZMASM):** • Structured Assembly and Data Code • Source-Level Debug Support • Built-In Register Equates • Linker

KIT CONTENTS : Z89323 Emulator Board • **Cable/Pods:** RS-232C Serial Cable, 9-Pin M-F; 9 VDC AC Adapter • **Host Software:** ZDS/DSP GUI Diskette; ZDS/ZiLOG Macro Cross Assembler diskette • **Documentation:** Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual; Software License and Limited Warranty Agreement; Registration Card (2) • **DIMENSIONS:** • Width: 5.25 in. (13.335 cm) • Length: 9.50 in. (24.13 cm) • Height: 0.50 in. (1.27 cm)

Z8932302ZEM

FEATURES: • ICEBOX Emulator Provides Source-Level Debugging for DSP Codes • HP Logic Analyzer Interface • 64K of External Data Memory • Symbolic Disassembly in the Debug Window • Selectable Baud Rates: 9600 to 57.6 Kbps • Windows-Based User Interface • RS-232C Connector **Zilog Macro Cross Assembler (ZMASM, ZDS):** • Structured Assembly and Data Code • Source-Level Debug Support • Built-In Register Equates • Linker

KIT CONTENTS: Z89323 Emulator Board • **Cables/Pods:** RS-232C Serial Cable, 9-Pin M-F; 9 VDC AC Adapter; Emulation Pod, 68 PLCC; Power Cable Assembly, 4-Leads; Programming Adapter, 68-PLCC/80-QFP. • **Host Software:** DSP GUI diskette; ZMASM (w/ZDS) Diskette • **Documentation:** Emulator User's Manual; ZiLOG Macro Cross Assembler User's Manual; Software License and Limited Warranty Agreement; Registration Card (2) • **DIMENSIONS:** • Width: 8.00 in. (20.32 cm) • Length: 9.75 in. (24.765 cm) • Height: 0.50 in. (1.27 cm)

OTP (KWORDS)	DSP RAM (WORDS)	MIPS	A/D	Supply Voltage Range	Operating Temp. (°C)	Package	Required Emulator Tools	Required OTP Programming Tools	Digi-Key Part No.	Price Each 1	25	100	Zilog Part No.
4	512	20	NO	4.5 - 5.5	0 – 70	44-PQFP	—	A,3 or A,4 or B	269-1125-ND	13.20	9.90	5.72	Z8937120FSC
4	512	20	NO	4.5 - 5.5	0 – 70	40-DIP	A,4 or B,4	A or B	269-1126-ND	12.57	9.43	5.45	Z8937120PSC
4	512	20	NO	4.5 - 5.5	0 – 70	44-PLCC	A,4 or B	A,3 or A,4 or B	269-1127-ND	13.11	9.84	5.69	Z8937120VSC
8	512	20	YES	4.5 - 5.5	0 – 70	44-PLCC	C,1 or D,2	C or D,2	269-1124-ND	31.32	23.49	13.58	Z8927320VSC
8	512	20	YES	4.5 - 5.5	0 – 70	68-PLCC	C,6 or D	C,5 or C,6 or D	269-1129-ND	32.43	24.33	14.06	Z8937320VSC

Emulators/Programmers

Key	Description	Digi-Key Part No.	Price Each	Zilog Part No.
A	Z89321/371 DSP Family Emulator/Programmer	269-2017-ND	135.51	Z8932101ZEM
B	Z89321/371 DSP Family Emulator/Programmer	269-2018-ND	470.42	Z8932102ZEM
C	Z89223/273/323/373 DSP Family Emulator/Programmer	269-2019-ND	176.68	Z8932301ZEM
D	Z89223/273/323/373 DSP Family Emulator/Programmer	269-2020-ND	566.83	Z8932302ZEM
Accessory Kits				
1	Z89273 44-PLCC Accessory Kit	269-2026-ND	153.08	Z8927301ZAC
2	Z89273 44-PLCC Accessory Kit	269-2027-ND	144.24	Z8927302ZAC
3	Z89371 44-PLCC, 44-PQFP Accessory Kit	269-2028-ND	80.61	Z8937100ZAC
4	Z89371 44-PLCC, 44-PQFP, 40-DIP Accessory Kit	269-2029-ND	213.38	Z8937101ZAC
5	Z89373 68-PLCC, 80-PQFP Accessory Kit	269-2030-ND	78.79	Z8937300ZAC
6	Z89373 68-PLCC, 80-PQFP Accessory Kit	269-2031-ND	227.76	Z8937301ZAC

NEW! CYPRESS PSoC™ (Programmable System on Chip) Microcontrollers

The **CY8C25122/CY8C26233/CY8C26443/CY8C26643** family of Programmable System-on-Chip (PSoC™) microcontrollers replaces multiple MCU-based system components with one single chip, programmable device. A PSoC microcontroller includes a fast CPU, Flash program memory, and SRAM data memory with configurable analog and digital peripheral blocks in a range of convenient pin-outs and memory sizes. The driving force behind this innovative Programmable System-on-Chip comes from user configurability of analog and digital arrays: the PSoC blocks.

Powerful Harvard Architecture Processor with Fast Multiply/Accumulate • M8C processor instruction set • Processor speeds to 24 MHz • Register speed memory transfers • Flexible addressing modes • Bit manipulation on I/O and memory • 8x8 multiply, 32-bit accumulate **Flexible On-Chip Memory** • Flash program storage, 4K to 16K bytes, depending on device • 100,000 erase/write cycles • SRAM data storage, 128 to 256 bytes, depending on device • In-System Serial Programming (ISSP) • Partial Flash updates • Flexible protection modes • EEPROM emulation in Flash, up to 2304 bytes **Programmable System-on-Chip (PSoC) Blocks** • On-chip, user configurable analog and digital peripheral blocks • PSoC blocks can be used individually or in combination • 12 Analog PSoC blocks provide: • Up to 11 bit Delta-Sigma ADC; • Up to 8 bit Successive Approximation ADC; • Up to 12 bit Incremental ADC; • Up to 10 bit DAC • Programmable gain amplifier • Programmable filters • Differential comparators • 8 Digital PSoC blocks provide: • Multi-purpose timers: event timing, real-time clock, pulse width modulation (PWM) and PWM with deadband • CRC modules • Full-duplex UARTs • SPI master or slave configuration • Flexible clocking sources for analog PSoC blocks **Programmable Pin Configurations** • Schmitt trigger TTL I/O pins • Logic output drive to 25 mA with internal pull-up or pull-down resistors, High Z, or strong driver • Interrupt on pin change • Analog output drive to 40 mA **Precision, Programmable Clocking** • Internal 24/48 MHz Oscillator (± 2.5%, no external components) • External 32.768 kHz Crystal Oscillator (optional precision source for PLL) • Internal Low Speed Oscillator for Watchdog and Sleep **Dedicated Peripherals** • Watchdog and Sleep Timers • Low Voltage Detection with user-configurable threshold voltages • On-chip voltage reference **Fully Static CMOS Devices using advanced Flash Technology** • Low power at high speed • Operating voltage from 3.0 to 5.25 V • Operating voltage down to 1.0 V using on-chip switch mode voltage pump • Wide temperature range: -40°C to + 85°C **Complete Development Tools** • Powerful integrated development environment (PSoC Designer) • Low-cost, in-circuit emulator and programmer

Memory Size Prom	Ram	Speed EXT Oscillator	Configuration	Internal Osc Speed	Number I/O	Core Architecture	Temperature Range	Pin count Package	Digi-Key Part No.	Price Each 1	25	100	Cypress Part No.
4K	128	32.768 C.Xtal	Flash	93.7Khz-24MHz	6	M8C	-40°C to +85°C	8-DIP	428-1424-ND	6.15	3.85	3.08	CY8C25122-24PI
8K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	16	M8C	-40°C to +85°C	20-DIP	428-1425-ND	7.70	4.80	3.85	CY8C26233-24PI
8K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	16	M8C	-40°C to +85°C	20-SSOP	428-1426-ND	8.50	5.25	4.25	CY8C26233-24PVI
8K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	16	M8C	-40°C to +85°C	20-SOIC	428-1427-ND	7.70	4.80	3.85	CY8C26233-24SI
16K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	24	M8C	-40°C to +85°C	28-DIP	428-1428-ND	9.75	6.00	4.88	CY8C26443-24PI
16K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	24	M8C	-40°C to +85°C	28-SSOP	428-1429-ND	10.35	6.40	5.18	CY8C26443-24PVI
16K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	24	M8C	-40°C to +85°C	28-SOIC	428-1430-ND	9.75	6.00	4.88	CY8C26443-24SI
16K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	40	M8C	-40°C to +85°C	44-TQFP	428-1431-ND	12.60	7.80	6.30	CY8C26643-24AI
16K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	44	M8C	-40°C to +85°C	48-DIP	428-1432-ND	14.13	8.70	7.07	CY8C26643-24PI
16K	256	32.768 C.Xtal	Flash	93.7Khz-24MHz	44	M8C	-40°C to +85°C	48-SSOP	428-1433-ND	12.83	7.95	6.42	CY8C26643-24PVI

CY3205-DK BASIC PSoC™ Development Kit

The **PSoC™ Development Kit** includes an In-Circuit Emulator (ICE) which consists of a base unit, cable, and power supply. The base unit is connected to the host PC via the parallel port and is included (with cable and power supply) in the Development Kit.

The ICE is driven by the Debugger subsystem of PSoC Designer. This software interface allows the user to run, halt, and single step the processor. It also allows the user to set complex event points. Event points can start and stop the trace memory on the ICE, as well as break the program execution. In addition to the Development Kit, different adapter pods are available to support the range of devices in the PSoC microcontroller family. They plug into the user's circuit board to provide the physical interface. Pods are available for low-cost expansion of the ICE capability. With each pod purchase, two matching devices are provided.

The PSoC Designer ICE also serves as a single-site device programmer. Programming Boards are devices which connect to the ICE and allow programming of Devices supported by that particular Programming Board. Each Programming Board Pod has a 5-pin programming header. This can be used for In-Circuit Serial Programming.

Pods are devices that connect to Modular cable from ICE and are needed to emulate a particular PSoC device. Comes with a PUP, a little demonstration board that you can emulate little projects on, and Feet which allows users to connect from Pod to Application for Debugging. Extra Feet and Pods can be purchased separately.

Development Kit Includes:

• In-Circuit Emulator (ICE) Base Unit • ICE Connection Cables and Power Supply • Demonstration Pup with LED bar graph for simple demonstrations • Programming Module for Dip parts • Feet for interfacing ICE to Target Board • 28-pin, Dip Emulator Pod • Free samples of the CY8C26443-24PI • CD-ROM with PSoC Designer (MCU Development Tool, Sample Projects, Documentation) • PSoC Designer: Integrated Development Environment (IDE) User Guide • Free support

System Requirements:

• 166 MHZ Pentium or better (AMD Athlon or Better) • CD-ROM Driver, 128 MB Ram, 100 MB Free Disk Space • Parallel port, Windows 98 or Better, MSN Explorer 5.0 • Adobe Acrobat Reader

CY3202-C ImageCraft C Compiler

The Cy3202-C compiler is fully integrated into the PSoC Designer IDE. PSoC Designer supports C source level debugging. In order to activate the compiler, you must enable and upgrade. **Features:** ANSI C Compiler, Supports Inline Assembly and can Interface with Assembly Modules, Stack-Based, 7 Basic Data Types, Assemble and Linker, Math and String Libraries, C Interrupt Service Routines, Librarian.

Description	Digi-Key Part No.	Price Each	Cypress Part No.
PSoC Development Kit (for all PSoC Microcontrollers)	428-1434-ND	248.00	CY3205-DK
ImageCraft C Compiler (for all PSoC Microcontrollers)	428-1413-ND	145.00	CY3202-C

Programming Boards for use with the CY3205-DK Development Kit

Description	Works with Parts	Digi-Key Part No.	Price Each	Cypress Part No.
PSoC MCU 48-Pin Dip Programming Board	All PSoC Dip Parts	428-1435-ND	24.05	CY3205-S1
PSoC MCU 28-Pin SOIC Programming Board	CY8C26233(433)-24PVI	428-1436-ND	16.90	CY3205-S2
PSoC MCU 28-Pin SSOP Programming Board	CY8C26233(433)-24SI	428-1437-ND	61.10	CY3205-S3
PSoC MCU 48-Pin SSOP Programming Board	All PSoC SSOP Parts	428-1438-ND	76.80	CY3205-S4
PSoC MCU 44-Pin TQFP Programming Board	CY8C26643-24AI	428-1439-ND	37.85	CY3205-S5

Emulator Pods for use with the CY3205-DK Development Kit

Description	Works with Parts	Digi-Key Part No.	Price Each	Cypress Part No.
PSoC Emulator Pod for 8-Pin DIP	CY8C25122	428-1403-ND	65.00	CY3201-01
PSoC Emulator Pod for 20-Pin DIP	CY8C26233	428-1404-ND	65.00	CY3201-02
PSoC Emulator Pod for 28-Pin DIP	CY8C26443	428-1405-ND	65.00	CY3201-03
PSoC Emulator Pod for 48-Pin DIP	CY8C26643	428-1406-ND	65.00	CY3201-04
PSoC Emulator Pod for 20-Pin SOIC	CY8C26233	428-1407-ND	75.00	CY3201-05
PSoC Emulator Pod for 20-Pin SSOP	CY8C26233	428-1408-ND	75.00	CY3201-06
PSoC Emulator Pod for 28-Pin SOIC	CY8C26443	428-1409-ND	75.00	CY3201-07
PSoC Emulator Pod for 28-Pin SSOP	CY8C26443	428-1410-ND	75.00	CY3201-08
PSoC Emulator Pod for 48-Pin SSOP	CY8C26643	428-1411-ND	85.00	CY3201-09
PSoC Emulator Pod for 44-Pin TQFP	CY8C26643	428-1412-ND	85.00	CY3201-10

Emulator Pod Feet, Use to Adapt Pod to Circuit Boards

Description	Works with Parts	Digi-Key Part No.	Price Each	Cypress Part No.
2 Spare PSoC Emulator Pod Feet for 8-Pin DIP	CY8C25122	428-1414-ND	50.00	CY3203-012
2 Spare PSoC Emulator Pod Feet for 20-Pin DIP	CY8C26233	428-1415-ND	50.00	CY3203-022
2 Spare PSoC Emulator Pod Feet for 28-Pin DIP	CY8C26443	428-1416-ND	50.00	CY3203-032
2 Spare PSoC Emulator Pod Feet for 48-Pin DIP	CY8C26643	428-1417-ND	65.00	CY3203-042
10 Spare PSoC Emulator Pod Feet for 20-Pin SOIC	CY8C26233	428-1418-ND	100.00	CY3203-050
10 Spare PSoC Emulator Pod Feet or 20-Pin SSOP	CY8C26233	428-1419-ND	100.00	CY3203-060
10 Spare PSoC Emulator Pod Feet or 28-Pin SOIC	CY8C26443	428-1420-ND	100.00	CY3203-070
10 Spare PSoC Emulator Pod Feet for 28-Pin SSOP	CY8C26443	428-1421-ND	100.00	CY3203-080
5 Spare PSoC Emulator Pod Feet for 48-Pin SSOP	CY8C26643	428-1422-ND	100.00	CY3203-095
5 Spare PSoC Emulator Pod Feet for 44-Pin TQFP	CY8C26643	428-1423-ND	80.00	CY3203-105

CY7B923 HOTLink

The CY7B923 HOTLink Transmitter and CY7B933 HOTLink Receiver are point-to-point communications building blocks that transfer data over high-speed serial links (fiber, coax, and twisted pair). Standard HOTLink data rates range from 160-330 Mbits/second. Higher speed HOTLink is also available for high-speed applications (160-400 Mbits/second), as well as for those low-cost applications HOTLink-155 (150-160 Mbits/second operations).

Features:

- Fibre-Channel compliant
- IBM ESCON compliant
- DVB-ASI compliant
- ATM compliant
- 8B/10B coded or 10-bit unencoded
- Standard HOTLink - 160–330 Mbps
- High-speed HOTLink - 160–400 Mbps for high-speed applications
- Low-speed HOTLink: 150–160 Mbps for low-cost fiber

Applications:

- TTL synchronous I/O
- No external phase locked-loop (PLL) components
- Triple PECL 100K serial outputs
- Dual PECL 100K serial inputs
- Low power: 350 mW (Tx), 650 mW (Rx)
- Compatible with fiber optic modules, coaxial cable, and twisted pair media
- Built-In Self-Test
- Single +5V supply
- 28-pin SOIC/PLCC/LCC
- 0.8 BiCMOS

Description	Package	Digi-Key Part No.	Price Each 1	25	100	Cypress Part No.
Hotlink Transmitter, Std. Speed	28-PLCC	428-1298-ND	47.25	44.10	40.95	CY7B923-JC
Hotlink Transmitter, Std. Speed	28-SOIC	428-1299-ND	47.25	44.10	40.95	CY7B923-SC
Hotlink Receiver, Std. Speed	28-PLCC	428-1300-ND	47.25	44.10	40.95	CY7B933-JC
Hotlink Receiver, Std. Speed	28-SOIC	428-1301-ND	47.25	44.10	40.95	CY7B933-SC

NEW!

CY7C6XXX Series Of USB Microcontrollers

Cypress offers the industry's broadest line of USB microcontrollers, as well as a full set of development tools, supporting cost-driven applications such as keyboards and mice, as well as high-performance application like printers, scanners, xDSL modems, and digital cameras. Cypress has a wide range of solutions for Low-Speed USB applications, Full-Speed USB Applications and USB Hub Applications.

The CY7C630/1XXA is a family of 8-bit RISC One Time Programmable (OTP) microcontrollers with a built-in 1.5-Mbps USB Serial Interface Engine (SIE). The microcontroller features 35 instructions that are optimized for USB applications. In addition, the microcontroller features 128 bytes of internal RAM and either 2 or 4 Kbytes of program memory space. The Cypress USB Controller accepts a 6-MHz ceramic resonator as its clock source. This clock signal is doubled within the chip to provide a 12-MHz clock for the microprocessor.

The CY7C64013 and CY7C64113 are 8-bit One Time Programmable microcontrollers that are designed for full-speed USB applications. The instruction set has been optimized specifically for USB operations, although the microcontrollers can be used for a variety of non-USB embedded applications.

The CY7C646xx (EZ-USB FX) is Cypress Semiconductor's second-generation full-speed USB family. FX products offer higher performance and a higher level of integration than first-generation EZ-USB products. The FX builds on the EZ-USB feature set, including an intelligent USB core, enhanced 8051, 8-Kbyte RAM, and high-performance I/O. The CY7C646xx enhances the EZ-USB family by providing faster operation and more ways to transfer data into and out of the chip at very high speed.

The CY7C65100 Series offers high-performance, fixed-function Universal Serial Bus (USB) hub devices which comply with USB Specification, Revision 1.1. Up to four downstream USB ports are available to expand the USB attachment points available in your PC system. These self-contained devices require no firmware development for your design, thereby reducing the design risk associated with some microcontroller solutions. These Application-Specific Standard Products (ASSP) can improve time-to-market in a number of USB designs, including standalone hubs, motherboard hubs, and monitor hubs.

CY7C68013-56PVC (EZ-USB FX2) Single-chip integrated USB 2.0 Transceiver, Serial Interface Engine (SIE), and Enhanced 8051 Microprocessor, High Speed 480Mbits/sec. Enhanced 8051 microcontroller, and a programmable peripheral interface in a single chip. Integrated I^{2}C-compatible controller, runs at 100 or 400 kHz, 48-MHz, 24 MHz, or 12 MHz 8051 operation. Four integrated FIFOs, brings glue and FIFO inside for lower system cost. Automatic conversion to and from 16-bit buses, master or slave operation. FIFOs can use externally supplied clock or asynchronous strobes. Easy interface to ASIC and DSP ICs, up to 40 general purpose I/Os.

Memory Size Prom	Ram	Speed EXT Oscillator	Config-uration	USB Application Speed	Number I/O	Core Architechure	Temperature Range	Pin Count Package	Digi-Key Part No.	Price Each			Cypress Part No.
										1	25	100	
Low Speed USB Microcontrollers													
4K	128	6-MHz Resonator	OTP	1.5-Mbps	12	M-8	Com	20-SOIC	428-1313-ND	4.35	2.70	2.18	CY7C63001A-SC
4K	128	6-MHz Resonator	OTP	1.5-Mbps	16	M-8	Com	24-QSOP	428-1314-ND	5.50	3.40	2.75	CY7C63101A-QC
4K	256	6-MHz Resonator	OTP	1.5-Mbps	16	M-8	Com	24-SOIC	428-1315-ND	4.78	2.95	2.39	CY7C63101A-SC
3K	256	6-MHz Resonator	OTP	1.5-Mbps	10	M-8	Com	16-DIP	428-1316-ND	4.35	2.70	2.18	CY7C63221A-PC
3K	256	6-MHz Resonator	OTP	1.5-Mbps	12	M-8	Com	18-SOIC	428-1317-ND	4.55	2.80	2.28	CY7C63231A-SC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	32	M-8	Com	40-DIP	428-1318-ND	6.13	3.80	3.07	CY7C63413-PC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	32	M-8	Com	48-SSOP	428-1319-ND	6.13	3.80	3.07	CY7C63413-PVC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	32	M-8	Com	48-SSOP	428-1320-ND	6.73	4.15	3.37	CY7C63513-PVC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	16	M-8	Com	24-SOIC	428-1321-ND	5.83	3.65	2.92	CY7C63613-SC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	11	M-8	Com	18-DIP	428-1322-ND	5.43	3.40	2.72	CY7C63723-PC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	11	M-8	Com	18-SOIC	428-1323-ND	5.43	3.40	2.72	CY7C63723-SC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	17	M-8	Com	24-DIP	428-1324-ND	5.83	3.65	2.92	CY7C63743-PC
8K	256	6-MHz Resonator	OTP	1.5-Mbps	17	M-8	Com	24-SOIC	428-1325-ND	5.83	3.65	2.92	CY7C63743-SC
Medium Performance Full-Speed Microcontrollers													
8K	256	6-MHz Xtal	OTP	12-Mbps	19	M-8	Com	28-SDIP	428-1326-ND	10.20	6.30	5.10	CY7C64013-PC
8K	256	6-MHz Xtal	OTP	12-Mbps	19	M-8	Com	28-SOIC	428-1327-ND	10.20	6.30	5.10	CY7C64013-SC
8K	256	6-MHz Xtal	OTP	12-Mbps	36	M-8	Com	48-SSOP	428-1328-ND	11.23	6.95	5.62	CY7C64113-PVC
EZ-USB FX Full Speed USB Microcontrollers													
—	8K	12-MHz/XT	Ram	12-Mbps	40	8051	Com	128-PQFP	428-1310-ND	21.18	13.10	10.59	CY7C64613-128NC
—	8K	12-MHz/XT	Ram	12-Mbps	16	8051	Com	52-PQFP	428-1311-ND	19.45	12.00	9.73	CY7C64613-52NC
—	8K	12-MHz/XT	Ram	12-Mbps	32	8051	Com	80-PQFP	428-1312-ND	20.28	12.55	10.14	CY7C64613-80NC
USB Hub and Integrated Hub Solutions													
8K	256	6-MHz Xtal	OTP	12-Mbps Hub	4-port	M-8	Com	28-SOIC	428-1329-ND	6.50	4.00	3.25	CY7C65100-SC
8K	256	6-MHz Xtal	OTP	12-Mbps Hub	4-port	M-8	Com	56-SSOP	428-1330-ND	8.65	5.40	4.33	CY7C66113-PVC
8K	256	6-MHz Xtal	OTP	12-Mbps Hub	4-port	M-8	Com	48-SOIC	428-1331-ND	7.15	4.50	3.58	CY7C65113-SC
High Speed USB Periphal Controller													
—	8K	24-MHz Xtal	Ram	Periphel controller 12/480-Mbps	24	8051	Com	56-SSOP	428-1332-ND	29.95	18.50	14.98	CY7C68013-56PVC

EZ-USB Microcontrollers

The **EZ-USB** chip packs the intelligence required by a USB peripheral interface into a compact integrated circuit. A Serial Interface Engine (SIE) decodes and encodes the serial data and performs error correction, bit stuffing, and other signaling-level details required by USB, and ultimately transfers data bytes to and from the USB interface.

The internal microprocessor is enhanced 8051 with fast execution time and added features. It uses internal RAM for program and data storage, making the EZ-USB family a soft solution. The USB host downloads 8051 program code and device personality into RAM over the USB bus, and then the EZ-USB chip reconnects as the custom device as defined by the loaded code.

The EZ-USB family uses an enhanced SIE/USB interface (called the "USB Core") which has the intelligence to function as a full USB device even before the 8051. The enhanced core simplifies 8051 code by implementing much of the USB protocol itself. EZ-USB chips operate at 3.3V. This simplifies the design of bus-powered USB devices, since the 5V power available in the USB connector (which the USB specification allows to be as low as 4.4V) can drive a 3.3V regulator to deliver clean isolated power to the EZ-USB chip.

AN2131-DK001 The development kit for the EZ-USB family provides complete hardware and software solutions for accelerating the firmware and device driver development for all the members of the families. The development kits use the actual silicon for the entire development. Cypress' software utilities and example firmware allow the user to generate USB traffic in hours, not weeks!

An evaluation version of the 8051 Keil Software Tools is included in the EZ-USB Development Kits. The evaluation version of the C-Compiler lets the designer write 8051 microcontroller applications in C and still get the efficiency and speed of assembly language. Advanced features from Keil tools include the ability to single step through code. The supplied Keil tools are fully functional, but are limited in object size to 4 Kbytes.

Kit includes: EZ-USB Development Board with AN2131QC, peripheral Board for prototyping, a USB cable, and an RS-232 9-pin to 9-pin cable.

Required Tools not included: Microsoft Visual C++, WDM DDK, and Windows 98 PC

Ram Size (KB)	ISO Support	Data Bus or Port B	Prog I/Os	Package	UART Speed	Digi-Key Part No.	Price Each			Cypress Part No.
							1	25	100	
8	Y	Both	24	80-PQFP	115.2	428-1307-ND	17.50	10.80	8.75	AN2131QC
8	Y	Port B	16	44-PQFP	115.2	428-1306-ND	16.38	10.10	8.19	AN2131SC
8	Y	Data Bus	8	44-PQFP	115.2	428-1308-ND	16.38	10.10	8.19	AN2135SC
8	N	Data Bus	8	44-PQFP	115.2	428-1309-ND	15.33	9.50	7.67	AN2136SC
EZ-USB Xcelerator Development Kit						428-1333-ND	495.00	—	—	AN2131-DK001

Developer Kit: CY3671

The development kit for the **EZ-USB FX** family provides complete hardware and software solutions for accelerating the firmware and device driver development for all the members of the families. The development kits use the actual silicon for the entire development. Cypress' software utilities and example firmware allow the user to generate USB traffic in hours, not weeks!

Devices Supported: CY7C64603-128NC, CY7C64603-52NC, CY7C64603-80NC, CY7C64613-128NC, CY7C64613-52NC, CY7C64613-80NC

Cypress includes an evaluation version of the 8051 Keil Software Tools in the CY3671 Development Kit. The evaluation version of the C-Compiler lets the designer write 8051 microcontroller applications in C and still get the efficiency and speed of assembly language. Advanced features from Keil tools include the ability to single step through code. This makes it easy to detect errors, handle source level debugging, and set breakpoints. With the ability to debug code one line at a time and to quickly compile and one-step download new code, developers have a more efficient means to complete firmware faster than using emulators. The supplied Keil tools are fully functional, but are limited in object size to 4 Kbytes.

Kit includes: EZ-USB Development Board with CY7C64613-128NC, a Peripheral Board for prototyping, a USB cable and an RS-232 9-pin to 9-pin cable.

428-1334-ND	EZ-USB FX Development Board	**$495.00**

Developer Kit: SL811HS-DK

The **SL811HS-DK Developer's Kit** is designed to help you build your USB Embedded Host Application in just 2 - 3 weeks. The kit comes complete with the following:

- SL811HS/ISA USB host evaluation board
- SL811S/ISA USB peripheral evaluation board
- Demo software source code, ISA host to ISA slave
- Demo source code supporting ISA host to full speed device slow speed device, hub, and to slow/full speed devices via hub
- Specifications and application notes
- ISA slave source code example, including USB PC drivers (object code), for win98/2000, CE3.0, MAC and others
- Email support
- Sample chips

Devices Supported: SL811HS, SL811HST-AC

Includes: SL811HS and SL811HST Demo (setup file), SL811HS(T) and SL811HST Demo User Manual Tool & Application Notes, Firmware source code examples, and System USB demo source code examples.

428-1345-ND	SL811HS-DK Developer Kit	**$562.50**

NEW! CYPRESS

Reference Design: AN2720-RDK

EZ-Link USB-to-USB Networking

The EZ-Link Reference Design allows you to network two or more computers together via their USB ports. You can share files, printers, CD ROMS, Tape Back-up Units, and many others. It is perfect for mobile “work teams” that need a quick and easy network to take with them from work-site to work-site, or for the laptop owner who wants to use his desktop PC's printer or to share or synchronize files with his desktop PC. An EZ-Link Instant Network supports multiplayer games that use standard Ethernet protocols.

Key Features:

- Network up to 17 PCs together
- Greater than 5 Mbps data transfer rate
- Single Chip Solution integrated into a 32 pin TQFP
- Low power - Less than 100 mW

This Reference Design Kit includes:

- Sample ezlink retail package
- Design Notes
- Schematics
- Datasheet
- Miniport Device Driver which emulates a Network Interface Connector
- Many Software Utilities
  - Easy Install Program
  - On-line Users Manual
  - EZ-Link Network Manager that allows the end user another way quickly to navigate throughout the network

428-1341-ND EZ-LINK Reference Design Kit **$199.00**

Developer Kit: CY3654

CY3654 Base-Board

The CY3654 is the common base board for a variety of our M8 Series products. To emulate a specific USB device within a family, the appropriate personality board needs to be purchased (CY3654-Pxx). Each USB family will have a unique personality board. The base board (CY3654) will only work when supplemented by one of the family specific personality boards.

Personality Boards:

Cypress offers a variety of Personality Boards that accompany the CY3654 Base Board for use in specific applications. The following is a list of current offerings:

CY3654 and CY3654-P02 – Base Board and Personality Board is a development environment in support of a variety of applications such as keyboards and other low speed devices requiring more I/O. The CY3654 and CY3654-P02 is designed for use with Cypress’s CY7C634XX, CY7C635XX, and CY7C636XX M8 based parts.

CY3654 and CY3654-P03 – Base Board and Personality Board is a development environment in support of a variety of applications such as full-speed peripherals, hubs, and hub plus integrated peripheral applications. The CY3654 and CY3654-P03 is designed for use with Cypress’s CY7C64x13 (full-speed), CY7C65x13 and CY7C66x13 (hubs) M8 based parts.

CY3654 and CY3654-P05 – Base Board and Personality Board is a development environment in support of a variety of applications such as mice or other low speed USB peripherals. The CY3654 and CY3654-P05 is designed for use with Cypress’s CY7C632XXA, and CY7C637XX M8 based parts.

Note: A Complete Development Kit consists of the Base Board plus a Personality Board. Other Personality Boards can be used with the same CY3654 Base Board. Please specify both the base-board CY3654, and Personality board CY3654-P02, when ordering this particular kit.

CY3654 Development Kit includes a CY3654 Base board, a RS-232 Cable, and a Power Supply. Personality Kits include a CY3654Px00 Personality Board, a CY3654Dx00 Applications Board, Target µC Adapters, a target Flex Cable, and application Cables.

Description	Devices Supported	Digi-Key Part No.	Price Each	Cypress Part No.
Base Board	All USB Personality Boards CY series	428-1337-ND	700.00	CY3654
Personality Board	CY7C634XX, CY7C635XX, and CY7C636XX	428-1338-ND	400.00	CY3654-P02
Personality Board	CY7C64X13 (full-speed), CY7C65X13, and CY7C66X13	428-1339-ND	400.00	CY3654-P03
Personality Board	CY7C632XXA, and CY7C637XX	428-1340-ND	400.00	CY3654-P05

Developer Kit: SL11R-DK

The SL11R from Cypress, is a low cost, full speed Universal Serial Bus (USB) RISC based Controller. The SL11R contains a 16-bit RISC processor with built-in BIOS ROM that greatly reduces firmware development time. This unique architecture provides the ability to upgrade products, in the field, without changing the peripheral hardware. The processor can execute code either from internal ROM/RAM or external DRAM, SRAM and ROM.

The SL11R-DK Developer's kit comes with the following components:

- HW reference design for SL11R evaluation board
- Assembler/Debugger and built in emulator
- Application notes, BIOS ROM information
- System Software demo program source code
- Generic WDM mini-port driver for WIN98/2000-object code
- 2 sample chips
- Email support

Kit Includes: HW reference design for SL11R evaluation board, Assembler/Debugger and built in emulator, Application notes, BIOS ROM information, System Software demo program source code, Generic WDM mini-port driver for WIN98/2000-object code, and 2 sample chips.

Devices Supported: SL11R-IDE

428-1344-ND SL11 Development Tools.. **$495.00**

Developer Kit: CY3650

The Cypress USB Developer’s Kit is a powerful tool that enables customers to develop USB hardware and firmware with emulated Cypress USB ICs. The development system can be run in two modes. In the typical development system environment, the board is controlled through a PC-based interface. Software running on the PC facilitates debugging through breakpoints, single stepping, and display and modification of registers and data RAM. In this mode, firmware can be implemented in on-board EPROM, or downloaded to program RAM. The RAM option provides a quick and easy method for testing firmware revisions.

Devices Supported: CY7C63101A-SC

The CY3650 Development Kit includes a CY3650 USB development board, a power supply, a USB cable, an RS-232 9-pin to 9-pin cable, and a 9-pin to 25-pin adapter

428-1342-ND USB Development Kit-LO Speed, Low I/O **$513.56**

Reference Design: CY4601

USB to Serial

The USB to Serial Reference Design is a single chip solution for seamlessly upgrading a serial interface to USB. On the host side we provide a custom Windows driver that provides serial port emulation. On the peripheral side we provide firmware for different USB microcontrollers to support a range of application throughput needs. The design architecture enables easy migration to a true USB device in the future.

Key Features:

- 3 chip families supported
  - enCoRe: 600-56K baud (800 bytes/sec)
  - CY7C64013: 600-56K baud (4K bytes/sec)
- Includes COM port emulation driver
- Supports RI, CD, RTS, CTS, DTR, and DSR control and monitoring
- Full control of baud rate, data bytes, stop bits and parity bits

- **Devices Supported:** CY7C63722-PC, CY7C63722-SC, CY7C63723-PC, CY7C63723-SC, CY7C63742-PC, CY7C63742-SC, CY7C63743-PC, CY7C63743-SC, CY7C64013-PC, CY7C64013-SC

This Reference Design Kit includes:

- Documentation Design Notes for enCoRe and CY7C64013 Quick Start/User Guide
- Serial port emulation driver, Windows based support applications, Firmware source code

Notes: (1) No board comes with the reference design kit. It is intended to be used in conjunction with the development kit for the corresponding part: enCoRe – CY3654 plus CY3654-P05, CY7C64013 – CY4654 plus CY3654-P03 (2) Sample, untested source code for the EZ-USB microcontroller is also included

428-1343-ND Reference Design Kit.. **$199.00**

Reference Design: CY4610

Full Speed USB to ATA and Compact Flash

The Cypress EZ-USB family of microcontrollers provides an ideal USB interface to a Mass Storage device. The 16 bit General Programmable Interface of our EZ-USB FX and the 8 bit interface of our EZ-USB provide a glueless interface to the attached drive. Our single chip designs provide low cost, flexible and high performance solutions.

Devices Supported: AN2135SC, CY7C64613-128NC, CY7C64613-80NC

Supported Interfaces:

- The EZ-USB FX design supports USB to ATA
  - IDE: Hard Drives
  - ATAPI: ZIP, LS-120, CDs, DVDs
- The EZ-USB design supports
  - Compact Flash

Key Features:

- Single chip device supports ATA or Compact Flash interfaces
- Sustained transfer rates of 1 Mbyte/second
- Field Upgradeable Firmware
- Large internal RAM allows data buffer and double-buffer bulk endpoints
- Compatible with Mass Storage Class drivers in standard operating systems
- Windows 98 Driver included

The Reference Design Kit includes:

- Design Notes for USB to ATA and USB to Compact Flash
- Firmware source and object code
- Windows, Mac OS, and DOS drivers
- Hardware files for USB to ATA and USB to CompactFlash
  - Schematics
  - Gerber Files
  - Bill of Materials
- USB to ATA demonstration board

428-1336-ND Reference Design Kit **$199.00**

Developer Kit: CY3681

The development kit for the EZ-USB FX2 family provides complete hardware and software solutions for accelerating the firmware and device driver development for all the members of the families. The development kits use the actual silicon for the entire development. Cypress' software utilities and example firmware allow the user to generate USB traffic in hours, not weeks!

Cypress includes an evaluation version of the 8051 Keil Software Tools in the USB 2.0 Development Kit. The evaluation version of the C-Compiler lets the designer write 8051 microcontroller applications in C and still get the efficiency and speed of assembly language. Advanced features from Keil tools include the ability to single step through code. This makes it easy to detect errors, handle source level debugging, and set breakpoints. With the ability to debug code one line at a time and to quickly compile and one-step download new code, developers have a more efficient means to complete firmware faster than using emulators. The supplied Keil tools are fully functional, but are limited in object size to 4 Kbytes.

Devices Supported: CY7C68013-100AC, CY7C68013-128AC, CY7C68013-56PVC

The kit includes the following: EZ-USB Development Board with CY7C68013-128AC, peripheral Board for prototyping, USB cable, and an RS-232 9-pin to 9-pin cable.

428-1335-ND USB 2.0 Development Kit.. **$495.00**

NEW! CYPRESS CPLDs

Cypress offers a wide range of Programmable Logic Devices From PALs with 10 macrocells and 200 gates up to CPLDs with 3072 macrocells and 200,000 gates. Cypress also provides voltages ranging from 2.5V up the typical 5.0V

The **MAX340** are Erasable Programmable Logic Devices (EPLD) in which CMOS EPROM cells are used to configure logic functions within the device. The MAX® architecture is 100% user-configurable, allowing the devices to accommodate a variety of independent logic functions. CMOS EPROM cells are used to configure logic functions within the device. The MAX architecture is 100% user-configurable, allowing the devices to accommodate a variety of independent logic functions.

The **UltraLogic FLASH370i™** is an In-System Reprogrammable Complex Programmable Logic Device (CPLD) and is part of the FLASH370i™ family of high-density, high-speed CPLDs. Like all members of the FLASH370i family, they are designed to bring the ease of use and high performance of the 22V10, as well as PCI Local Bus Specification support, to high-density CPLDs. They are electrically erasable and In-System Reprogrammable (ISR),which simplifies both design and manufacturing flows.

The **Cypress PAL SPLDs** are Advanced second-generation PAL architecture. They are CMOS Flash Erasable programmable array logic device. It is implemented with the familiar sum-of-products (AND-OR) logic structure and the programmable macrocell.

The **Ultra37000™** family of CMOS CPLDs provides a range of high-density programmable logic solutions with unparalleled system performance. The Ultra37000 family is designed to bring the flexibility, ease of use, and performance of the 22V10 to high-density CPLDs. The architecture is based on a number of logic blocks that are connected by a Programmable Inter-connect Matrix (PIM). Each logic block features its own product term array, product term allocator, and 16 macrocells. The PIM distributes signals from the logic block outputs and all in-put pins to the logic block inputs. All of the Ultra37000 devices are electrically erasable and In-System Reprogrammable (ISR).

The **Delta39K™ ISR™ CPLD** Family based on a 0.18-Ïm, six-layer metal CMOS logic process, offers a wide range of high-density solutions at unparalleled system performance. The Delta39K family is designed to combine the high speed, predictable timing, and ease of use of CPLDs with the high densities and low power of FPGAs. With devices ranging from 15,000 to 200,000 usable gates, the family features devices ten times the size of previously available CPLDs. Even at these large densities, the Delta39K family is fast enough to implement a fully synthesizable 64-bit, 66-MHz PCI core.

Voltage	Memory Type	Tpd (ns)	Macrocells	Gates	Option Power	I/O	Package	Digi-Key Part No.	Price Each			Cypress Part No.
									1	25	100	
MAX340 HIGH DENSITY EPLDs												
5.0	Erasable	25	192	—	Std.	72	84-PLCC	428-1261-ND	93.90	87.64	81.38	CY7C341B-25JC
5.0	Erasable	15	128	—	Std.	60	68-PLCC	428-1262-ND	45.00	42.00	39.00	CY7C342B-15JC
5.0	Erasable	25	128	—	Std.	60	68-PLCC	428-1263-ND	60.45	56.42	52.39	CY7C342B-25JC
5.0	Erasable	25	64	—	Std.	32	44-PLCC	428-1264-ND	27.90	26.04	24.18	CY7C343B-25JC
5.0	Erasable	15	32	—	Std.	24	28-PLCC	428-1265-ND	19.05	17.78	16.51	CY7C344B-15JC
5.0	Erasable	25	128	—	Std.	48	84-PLCC	428-1266-ND	43.50	40.60	37.70	CY7C346B-25JC
ULTRA LOGIC Flash370i												
5.0	Flash	10	32	800	Std.	37	44-PLCC	428-1267-ND	8.75	7.88	6.99	CY7C371I-110JC
5.0	Flash	12	64	1600	Std.	37	44-PLCC	428-1268-ND	15.66	14.10	12.51	CY7C372I-100JC
5.0	Flash	12	64	1600	Std.	69	84-PLCC	428-1269-ND	17.48	16.31	15.15	CY7C373I-100JC
5.0	Flash	12	128	3200	Std.	69	44-PLCC	428-1270-ND	34.95	32.62	30.29	CY7C374I-100JC
PAL SPLDs												
3.3	Flash	25	10	300	1/2	22	24-SDIP	428-1273-ND	4.16	3.33	2.59	PALC22V10-25PC
3.3	Flash	25	10	300	Std.	22	28-PLCC	428-1274-ND	3.67	2.94	2.29	PALC22V10D-25JC
3.3	Flash	25	10	300	1/4	22	24-SDIP	428-1275-ND	4.84	3.87	3.01	PALC22V10L-25PC
3.3	Flash	25	10	300	1/4	22	28-PLCC	428-1276-ND	4.84	3.87	3.01	PALC22V10L-25JC
5.0	Flash	15	8	200	Std.	18	20-PLCC	428-1277-ND	3.15	2.52	1.96	PALCE16V8-15JC
5.0	Flash	15	8	200	Std.	18	20-DIP	428-1278-ND	3.15	2.52	1.96	PALCE16V8-15PC
5.0	Flash	15	8	200	Std.	18	20-PLCC	428-1279-ND	3.71	2.97	2.31	PALCE16V8-7JC
5.0	Flash	15	10	300	Std.	22	28-PLCC	428-1280-ND	5.18	4.14	3.22	PALCE22V10-15JC
5.0	Flash	15	10	300	Std.	22	24-SDIP	428-1281-ND	5.18	4.14	3.22	PALCE22V10-15PC
5.0	Flash	25	10	300	Std.	22	24-SDIP	428-1282-ND	3.67	2.94	2.29	PALCE22V10-25PC
5.0	Flash	5	10	300	Std.	22	28-PLCC	428-1283-ND	10.33	9.30	8.25	PALCE22V10-5JC
5.0	Flash	25	10	300	1/4	22	24-SDIP	428-1284-ND	8.10	6.48	5.47	PLDC20G10-25PC
ULTRA 37000 CPLDs												
5.0	Flash	10	32	960	Std.	37	44-TQFP	428-1285-ND	5.50	4.40	3.72	CY37032P44-125AC
3.3	Flash	12	32	960	Std.	37	44-TQFP	428-1286-ND	5.20	4.16	3.51	CY37032VP44-100AC
5.0	Flash	10	64	2000	Std.	69	100-TQFP	428-1287-ND	8.75	7.88	6.99	CY37064P100-125AC
5.0	Flash	10	64	2000	Std.	37	44-TQFP	428-1288-ND	8.50	6.80	5.74	CY37064P44-125AC
5.0	Flash	10	64	2000	Std.	69	84-PLCC	428-1289-ND	9.30	7.44	6.28	CY37064P84-125JC
5.0	Flash	10	128	3800	Std.	133	160-TQFP	428-1290-ND	20.18	18.83	17.49	CY37128P160-125AC
5.0	Flash	10	192	5700	Std.	125	160-TQFP	428-1291-ND	31.43	29.33	27.24	CY37192P160-125AC
3.3	Flash	12	192	5700	Std.	125	160-TQFP	428-1292-ND	31.43	29.33	27.24	CY37192VP160-100AC
5.0	Flash	10	256	7700	Std.	133	160-TQFP	428-1293-ND	44.93	41.93	38.94	CY37256P160-125AC
DELTA 39K ISR CPLDs												
2.5-3.3	Flash	10	1536	100K	Lp	136	208-PQFP	428-1294-ND	88.25	82.37	76.48	CY39100V208B-125NTC
2.5-3.3	Flash	10	1536	100K	Lp	294	388-BGA	428-1295-ND	132.36	123.54	114.72	CY39100V388B-125MGC
2.5-3.3	Flash	10	3072	200K	Lp	136	208-PQFP	428-1296-ND	176.48	164.71	152.95	CY39200V208-125NTC
2.5-3.3	Flash	10	3072	200K	Lp	294	388-BGA	428-1297-ND	264.72	247.08	229.43	CY39200V388-125MGC

Delta39K™/Ultra37000™ ISR™ Programming Kit

Functional Description: The Delta39K/Ultra37000 ISR Programming Kit enables users to program Ultra37000, Ultra37000V, Quantum38K, Delta39K, and PSI CPLDs on board with our ISR Programming Software, the UltraISR Programming Cable, and a personal computer. The UltraISR Programming Cable connects to the parallel port of a PC into a standard 10-pin male connector mounted on the user's board. The ISR software provides an easy-to-use Graphical User Interface that accepts JEDEC or .hex files as input. The JEDEC/.hex files are used to compose platform independent STAPL files. STAPL files contain all the information.

Features: • Supports Cypress' Ultra37000™, Ultra37000V™, Quantum38K, Delta39K™, and PSI™ families of products • STAPL programming language support • Standard JTAG programming interface • Multi-device programming • Easy to use Windows 98™, Windows 2000™, Windows ME™, and Windows NT™ compatible interface • Eliminates programming insertion to improve manufacturing efficiency • For programming in the lab, on manufacturing floor, or at remote sites • ATE support via STAPL on industry leading ATE platforms

Kit Contents: • UltraISR™ Programming Cable for use with Ultra37000, Delta39K, and PSI CPLD families • ISR Programming Software Release 3.0 • ISR Application Notes • Delta39K™/Ultra37000™ Prototype Board

PC System Requirements: • IBM PC or compatible running Windows 98, Windows 98 Second Edition, Windows ME, Windows NT 4.0 Service Pack 5 or later or Windows 2000 Service Pack 1 or later

- One free parallel port
- Minimum of 32MB of RAM
- Approximately 30MB free hard disk space

428-1305-ND Delta39K/Ultra37000 ISR Programming Kit..**$99.00**

*Warp*ISR™ Design Kit for CPLDs

WarpISR is a complete ISR CPLD design and programming solution. It includes Warp Software and the Delta39K\Ultra37000 ISR Programming Kit. Warp is a state-of-the-art HDL compiler for designing with Cypress' Complex Programmable Logic Devices (CPLDs).

Warp Software System Requirements: • IBM PC or equivalent (Pentium® class recommended) • 32 Mb of RAM (64 Mb recommended) • 110 Mb disk space • CD-ROM drive • Windows 98, or Windows NT 4.0

ISR Software PC System Requirements: • IBM PC or compatible running Windows 98, Windows 98 Second Edition, Windows ME, Windows NT 4.0 Service Pack 5 or later, or Windows 2000 Service Pack 1 or later • One free parallel port • Minimum of 32 MB of RAM • Approximately 30 MB free hard disk space

WarpISR includes: • CD-ROM with Warp and on-line documentation •"VHDL for Programmable Logic" textbook by Kevin Skahill • UltraISR Programming Cable • CD-ROM with ISR Programming Software Release 3.0 • ISR Application Notes • Delta39K\Ultra37000 Prototype board with an Ultra37256VP160 and a Delta39100V208 device • Registration Card

Product Code Description: CY3620R62 WarpISR Design Kit for CPLDs

428-1304-ND Warp Design Programming Kit For ISR (In-System Reprogram)..............................**$175.00**

Warp® CPLD Development Tool for UNIX

Warp is a state-of-the-art HDL compiler for designing with Cypress' Complex Programmable Logic Devices (CPLDs). Warp utilizes a subset of IEEE 1076/1164 VHDL and IEEE 1364 Verilog as its Hardware Description Languages (HDL) for design entry. Then, it synthesizes and optimizes the entered design, and outputs a JEDEC or Intel hex file for the desired PLD or CPLD. Warp also accepts VHDL or Verilog produced by the Active-HDL FSM graphical Finite State Machine editor. For simulation, Warp provides a timing simulator, as well as VHDL and Verilog timing models for use with third party simulators.

Supports for the following Cypress Programmable Logic Devices: • PSI™ (Programmable Serial Interface™) • Delta-39K™ CPLDs • Quantum38K™ CPLDs • Ultra37000™ CPLDs • FLASH370i™ CPLDs • MAX340™ CPLDs • Industry-standard PLDs (16V8, 20V8, 22V10)

System Requirements • 32 MB of RAM (64 MB recommended) • 110 MB Disk Space • CD-ROM drive • Solaris 2.5 or later

Warp includes: • CD-ROM with Warp and on-line documentation (Getting Started Manual, User's Guide, HDL Reference Manual) • VHDL for Programmable Logic Textbook • Registration Card

Product Code Description: CY3125R62 Warp Development System for UNIX

428-1302-ND Warp CPLD Development Tool Kit...**$99.00**

Warp® Professional™ CPLD Software

Functional Description: Warp Professional is an integration of the Warp CPLD Development package with additional sophisticated EDA software features from Aldec. In addition to accepting IEEE 1076/1164 VHDL text, IEEE 1364 Verilog text and graphical finite state machines for design entry, Warp Professional provides a graphical HDL block diagram editor with a library of graphical HDL blocks pre-optimized for Cypress devices.

Warp Software System Requirements: • IBM PC or equivalent (Pentium® class recommended) • 32 MB of RAM (64 MB recommended) • 110 MB Disk Space • CD-ROM drive • Windows 98, or Windows NT 4.0 • Warp Professional Hardware Key for License

ISR Software PC Requirements: • IBM PC or compatible running Windows 98, Windows 98 Second Edition, Windows ME, Windows NT 4.0 Service Pack 5 or later, or Windows 2000 Service Pack 1 or later • One free parallel port • Minimum of 32 MB of RAM • Approximately 30 MB free hard disk space

Warp Professional Includes: • Cypress Lab CD-ROM with Warp Professional, ISR software, on-line documentation (Getting Started Manual, User's Guide, HDL Reference Manual, Databook) and other Cypress software • VHDL for Programmable Logic Textbook • UltraISR Programming Cable • Delta39K\Ultra37000 prototype board with a CY37256V 160-pin TQFP device and a CY39100V 208-pin PQFP device • Registration Card • Hardware License Key

Product Code Description: CY3128R62 Warp Professional CPLD Software for PCs

428-1303-ND Warp CPLD Professional Software **$495.00**

NEW! CYPRESS

Integrated Circuits

Asynchronous SRAM

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY7C109B-12VC	428-1032-ND	1M-Bit, 128Kx8 Power Down, 12ns	Wide 32-SOJ	4.32	3.46	2.69
CY7C109B-15VC	428-1033-ND	1M-Bit, 128Kx8 Power Down, 15ns	Wide 32-SOJ	4.12	3.30	2.57
CY7C109B-15ZC	428-1034-ND	1M-Bit, 128Kx8 Power Down, 15ns	32-TSOP	4.32	3.46	2.69
CY7C109B-20VC	428-1035-ND	1M-Bit, 128Kx8 Power Down, 20ns	Wide 32-SOJ	3.71	2.97	2.31
CY7C109B-20ZC	428-1036-ND	1M-Bit, 128Kx8 Power Down, 20ns	32-TSOP	3.89	3.12	2.43
CY7C109B-25VC	428-1037-ND	1M-Bit, 128Kx8 Power Down, 25ns	Wide 32-SOJ	3.71	2.97	2.31
CY7C109B-35VC	428-1038-ND	1M-Bit, 128Kx8 Power Down, 35ns	Wide 32-SOJ	3.71	2.97	2.31
CY7C128A-15PC	428-1039-ND	16K-Bit, 2Kx8 Power Down, 15ns	24-SDip	5.40	4.32	3.65
CY7C128A-15VC	428-1040-ND	16K-Bit, 2Kx8 Power Down, 15ns	24-SOJ	5.10	4.08	3.45
CY7C128A-20PC	428-1041-ND	16K-Bit, 2Kx8 Power Down, 20ns	24-SDip	5.51	4.41	3.43
CY7C128A-20VC	428-1042-ND	16K-Bit, 2Kx8 Power Down, 20ns	24-SOJ	5.18	4.14	3.22
CY7C128A-25PC	428-1043-ND	16K-Bit, 2Kx8 Power Down, 25ns	24-SDip	5.51	4.41	3.43
CY7C128A-25VC	428-1044-ND	16K-Bit, 2Kx8 Power Down, 25ns	24-SOJ	5.18	4.14	3.22
CY7C128A-35PC	428-1045-ND	16K-Bit, 2Kx8 Power Down, 25ns	24-SDip	5.51	4.41	3.43
CY7C128A-35VC	428-1046-ND	16K-Bit, 2Kx8 Power Down, 35ns	24-SOJ	5.18	4.14	3.22
CY7C128A-45PC	428-1047-ND	16K-Bit, 2Kx8 Power Down, 45ns	24-SDip	5.60	4.48	3.78
CY7C185-15VC	428-1052-ND	64K-Bit, 8Kx8 Power Down, 15ns	28-SOJ	4.14	3.32	2.58
CY7C185-20PC	428-1053-ND	64K-Bit, 8Kx8 Power Down, 15ns	28-SDip	3.35	2.69	2.09
CY7C185-20VC	428-1054-ND	64K-Bit, 8Kx8 Power Down, 20ns	28-SOJ	3.74	2.99	2.33
CY7C185-25PC	428-1055-ND	64K-Bit, 8Kx8 Power Down, 25ns	28-SDip	3.35	2.69	2.09
CY7C185-25VC	428-1056-ND	64K-Bit, 8Kx8 Power Down, 25ns	28-SOJ	3.74	2.99	2.33
CY7C185-35PC	428-1057-ND	64K-Bit, 8Kx8 Power Down, 35ns	28-SDip	3.35	2.69	2.09
CY7C185-35VC	428-1058-ND	64K-Bit, 8Kx8 Power Down, 35ns	28-SOJ	3.74	2.99	2.33
CY7C199-10VC	428-1059-ND	256K-Bit, 32Kx8 Power Down, 10ns	28-SOJ	2.84	2.27	1.77
CY7C199-12VC	428-1060-ND	256K-Bit, 32Kx8 Power Down, 12ns	28-SOJ	2.36	1.89	1.47
CY7C199-15PC	428-1061-ND	256K-Bit, 32Kx8 Power Down, 15ns	28-SDip	2.48	1.98	1.54
CY7C199-15VC	428-1062-ND	256K-Bit, 32Kx8 Power Down, 15ns	28-SOJ	2.25	1.80	1.40
CY7C199-15ZC	428-1063-ND	256K-Bit, 32Kx8 Power Down, 15ns	28-TSOP	2.36	1.89	1.47
CY7C199-20PC	428-1064-ND	256K-Bit, 32Kx8 Power Down, 20ns	28-SDip	2.48	1.98	1.49
CY7C199-20VC	428-1065-ND	256K-Bit, 32Kx8 Power Down, 20ns	28-SOJ	2.25	1.80	1.35
CY7C199-20ZC	428-1066-ND	256K-Bit, 32Kx8 Power Down, 20ns	28-TSOP	2.38	1.90	1.43
CY7C199-25PC	428-1067-ND	256K-Bit, 32Kx8 Power Down, 25ns	28-SDip	2.48	1.98	1.49
CY7C199-25VC	428-1068-ND	256K-Bit, 32Kx8 Power Down, 25ns	28-SOJ	2.25	1.80	1.35
CY7C199-35PC	428-1069-ND	256K-Bit, 32Kx8 Power Down, 35ns	28-SDip	2.48	1.98	1.49
CY7C199-35VC	428-1070-ND	256K-Bit, 32Kx8 Power Down, 35ns	28-SOJ	2.25	1.80	1.35
CY7C1009B-12VC	428-1000-ND	1M-Bit, 128Kx8 Power Down, 12ns	32-SOJ	4.32	3.46	2.69
CY7C1009B-15VC	428-1001-ND	1M-Bit, 128Kx8 Power Down, 15ns	32-SOJ	4.12	3.30	2.57
CY7C1009B-20VC	428-1002-ND	1M-Bit, 128Kx8 Power Down, 20ns	32-SOJ	3.71	2.97	2.31
CY7C1019B-12VC	428-1003-ND	1M-Bit, 128Kx8 Power Down, 12ns	Wide 32-SOJ	5.06	4.05	3.15
CY7C1019B-15VC	428-1004-ND	1M-Bit, 128Kx8 Power Down, 15ns	Wide 32-SOJ	4.84	3.87	3.01
CY7C1019BV33-12VC	428-1005-ND	1M-Bit, 128Kx8 3.3V Pwr. Down, 12ns	Wide 32-SOJ	4.32	3.46	2.69
CY7C1020-12ZC	428-1006-ND	512K-Bit, 32Kx16 Power Down, 12ns	44-TSOP2	4.41	3.53	2.75
CY7C1020-15ZC	428-1007-ND	512K-Bit, 32Kx16 Power Down, 15ns	44-TSOP2	4.19	3.35	2.61
CY7C1020V33-15ZC	428-1008-ND	512K-Bit, 32Kx16 3.3V Power Down, 15ns	44-TSOP2	4.21	3.37	2.62
CY7C1021B-12VC	428-1009-ND	1M-Bit, 64Kx16 Power Down, 12ns	Wide 44-SOJ	4.32	3.46	2.69
CY7C1021B-15VC	428-1010-ND	1M-Bit, 64Kx16 Power Down, 15ns	Wide 44-SOJ	4.12	3.30	2.57
CY7C1021B-15ZC	428-1011-ND	1M-Bit, 64Kx16 Power Down, 15ns	44-TSOP2	4.32	3.46	2.69
CY7C1021BV33-10VC	428-1012-ND	1M-Bit, 64Kx16 3.3V Pwr. Down, 10ns	Wide 44-SOJ	4.61	3.69	2.87
CY7C1021BV33-10ZC	428-1013-ND	1M-Bit, 64Kx16 3.3V Power Down, 10ns	44-TSOP2	4.84	3.87	3.01
CY7C1021BV33-12VC	428-1014-ND	1M-Bit, 64Kx16 3.3V Pwr. Down, 12ns	Wide 44-SOJ	4.32	3.46	2.69
CY7C1021BV33-12ZC	428-1015-ND	1M-Bit, 64Kx16 3.3V Power Down, 12ns	44-TSOP2	4.61	3.69	2.87
CY7C1021BV33-15VC	428-1016-ND	1M-Bit, 64Kx16 3.3V Pwr. Down, 15ns	Wide 44-SOJ	4.12	3.30	2.57
CY7C1021BV33-15ZC	428-1017-ND	1M-Bit, 64Kx16 3.3V Power Down, 15ns	44-TSOP2	4.32	3.46	2.69
CY7C1021BV33L-15ZC	428-1018-ND	1M-Bit, 64Kx16 3.3V Power Down, 15ns	44-TSOP2	4.84	3.87	3.01
CY7C1041B-15VC	428-1019-ND	4M-Bit, 256Kx16 Power Down, 15ns	Wide 44-SOJ	11.43	10.29	9.13
CY7C1041B-15ZC	428-1020-ND	4M-Bit, 256Kx16 Power Down, 15ns	44-TSOP2	12.00	10.80	9.58
CY7C1041BV33-12ZC	428-1021-ND	4M-Bit, 256Kx16 3.3V Power Down, 12ns	44-TSOP2	12.66	11.40	10.11
CY7C1041BV33-15VC	428-1022-ND	4M-Bit, 256Kx16 3.3V Power Down, 15ns	Wide 44-SOJ	11.43	10.29	9.13
CY7C1041BV33-15ZC	428-1023-ND	4M-Bit, 256Kx16 3.3V Power Down, 15ns	44-TSOP2	12.00	10.80	9.58
CY7C1041BV33-20ZC	428-1024-ND	4M-Bit, 256Kx16 3.3V Power Down, 20ns	44-TSOP2	10.91	9.83	8.72
CY7C1049B-15VC	428-1025-ND	4M-Bit, 512Kx8 Power Down, 15ns	36-SOJ	11.43	10.29	9.13
CY7C1049B-17VC	428-1026-ND	4M-Bit, 512Kx8 Power Down, 15ns	36-SOJ	10.91	9.83	8.72
CY7C1049B-20VC	428-1027-ND	4M-Bit, 512Kx8 Power Down, 20ns	36-SOJ	10.33	9.30	8.25
CY7C1049BL-17VC	428-1028-ND	4M-Bit, 512Kx8, LP, Power Down, 17ns	36-SOJ	15.33	13.80	12.24
CY7C1049BL-25VC	428-1029-ND	4M-Bit, 512Kx8, LP, Power Down, 25ns	36-SOJ	13.83	12.45	11.04
CY7C1049BV33-15VC	428-1030-ND	4M-Bit, 512Kx8 3.3V Power Down, 15ns	36-SOJ	11.43	10.29	9.13
CY7C1049BV33-20VC	428-1031-ND	4M-Bit, 512Kx8 3.3V Power Down, 20ns	36-SOJ	10.91	9.83	8.72
CY7C1399B-12VC	428-1048-ND	256K-Bit, 32Kx8 3.3V Power Down, 12ns	28-SOJ	2.36	1.89	1.47
CY7C1399B-12ZC	428-1049-ND	256K-Bit, 32Kx8 3.3V Power Down, 12ns	28-TSOP	2.48	1.98	1.54
CY7C1399B-15VC	428-1050-ND	256K-Bit, 32Kx8 3.3V Power Down, 15ns	28-SOJ	2.25	1.80	1.40
CY7C1399B-15ZC	428-1051-ND	256K-Bit, 32Kx8 3.3V Power Down, 15ns	28-TSOP	2.36	1.89	1.47

Synchronous SRAM

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY7C1325B-100AC	428-1086-ND	4M-Bit, 256Kx18 3.3V Sync. SRAM	100-TQFP	9.33	8.40	7.45
CY7C1325B-117AC	428-1087-ND	4M-Bit, 256Kx18 3.3V Sync. SRAM	100-TQFP	9.75	8.78	7.79
CY7C1327B-100AC	428-1088-ND	4M-Bit, 256Kx18 3.3V Sync. Pipe SRAM	100-TQFP	9.33	8.40	7.45
CY7C1327B-133AC	428-1089-ND	4M-Bit, 256Kx18 3.3V Sync. Pipe SRAM	100-TQFP	9.75	8.78	7.79
CY7C1329-100AC	428-1090-ND	2M-Bit, 64Kx32 3.3V Sync. Pipe SRAM	100-TQFP	7.00	5.60	4.73
CY7C1338B-100AC	428-1091-ND	4M-Bit, 128Kx32 3.3V Sync. Flow Through SRAM	100-TQFP	9.33	8.40	7.45
CY7C1339B-100AC	428-1092-ND	4M-Bit, 128Kx32 3.3V Sync. Pipe SRAM	100-TQFP	9.33	8.40	7.45
CY7C1339B-133AC	428-1093-ND	4M-Bit, 128Kx32 3.3V Sync. Pipe SRAM	100-TQFP	9.75	8.78	7.79
CY7C1345B-100AC	428-1094-ND	4M-Bit, 128Kx36 3.3V Sync. Flow Through SRAM	100-TQFP	9.33	8.40	7.45
CY7C1345B-117AC	428-1095-ND	4M-Bit, 128Kx36 3.3V Sync. Flow Through SRAM	100-TQFP	9.33	8.40	7.45
CY7C1347B-100AC	428-1096-ND	4M-Bit, 128Kx36 3.3V Sync. Pipe SRAM	100-TQFP	9.33	8.40	7.45
CY7C1347B-133AC	428-1097-ND	4M-Bit, 128Kx36 3.3V Sync. Pipe SRAM	100-TQFP	9.75	8.78	7.79
CY7C1350B-100AC	428-1098-ND	4M-Bit, 128Kx36 3.3V Sync. Pipe SRAM	100-TQFP	9.33	8.40	7.45
CY7C1350B-133AC	428-1099-ND	4M-Bit, 128Kx36 3.3V Sync. Pipe SRAM	100-TQFP	9.83	8.85	7.85
CY7C1350B-143AC	428-1100-ND	4M-Bit, 128Kx36 3.3V Sync. Pipe SRAM	100-TQFP	10.00	9.00	7.98
CY7C1352B-100AC	428-1102-ND	4M-Bit, 256Kx18 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	9.33	8.40	7.45
CY7C1352B-133AC	428-1103-ND	4M-Bit, 256Kx18 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	9.83	8.85	7.85
CY7C1353B-100AC	428-1104-ND	4M-Bit, 256Kx18 3.3V NoBL™ Sync. Flow Through SRAM	100-TQFP	9.33	8.40	7.45
CY7C1354A-100AC	428-1105-ND	8M-Bit, 256Kx36 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	19.23	17.95	16.67
CY7C1354A-133AC	428-1106-ND	8M-Bit, 256Kx36 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	19.91	18.58	17.26
CY7C1354A-133BGC	428-1107-ND	8M-Bit, 256Kx36 3.3V NoBL™ Sync. Pipe SRAM	119-BGA	20.66	19.28	17.91
CY7C1354A-166BGC	428-1108-ND	8M-Bit, 256Kx36 3.3V NoBL™ Sync. Flow Through SRAM	119-BGA	21.23	19.81	18.40
CY7C1356A-133AC	428-1111-ND	8M-Bit, 512Kx18 2.5V NoBL™ Sync. Pipe SRAM	100-TQFP	19.91	18.58	17.26
CY7C1356A-166AC	428-1112-ND	8M-Bit, 512Kx18 2.5V NoBL™ Sync. Pipe SRAM	100-TQFP	20.48	19.11	17.75
CY7C1360A-150AC	428-1113-ND	8M-Bit, 256Kx36 3.3V Sync. Pipe SRAM	100-TQFP	19.23	17.95	16.67
CY7C1360A-150AJC	428-1114-ND	8M-Bit, 256Kx36 3.3V Sync. Pipe SRAM	100-TQFP	19.23	17.95	16.67
CY7C1360A-150BGC	428-1115-ND	8M-Bit, 256Kx36 3.3V Sync. Pipe SRAM	119-BGA	19.98	18.65	17.32
CY7C1360A-166AJC	428-1116-ND	8M-Bit, 256Kx36 3.3V Sync. Pipe SRAM	100-TQFP	19.53	18.23	16.93
CY7C1361A-100AC	428-1117-ND	8M-Bit, 256Kx36 3.3V Sync. Flow Through SRAM	100-TQFP	19.23	17.95	16.67
CY7C1361A-100BGC	428-1118-ND	8M-Bit, 256Kx36 3.3V Sync. Flow Through SRAM	119-BGA	19.98	18.65	17.32
CY7C1361A-117AC	428-1119-ND	8M-Bit, 256Kx36 3.3V Sync. Flow Through SRAM	100-TQFP	19.91	18.58	17.26
CY7C1361A-117AJC	428-1120-ND	8M-Bit, 256Kx36 3.3V Sync. Flow Through SRAM	100-TQFP	19.91	18.58	17.26
CY7C1362A-150AC	428-1121-ND	8M-Bit, 512Kx18 3.3V Sync. Pipe SRAM	100-TQFP	19.23	17.95	16.67
CY7C1362A-150BGC	428-1122-ND	8M-Bit, 512Kx18 3.3V Sync. Pipe SRAM	119-BGA	19.98	18.65	17.32
CY7C1362A-166AC	428-1123-ND	8M-Bit, 512Kx18 3.3V Sync. Pipe SRAM	100-TQFP	19.53	18.23	16.93
CY7C1362A-166AJC	428-1124-ND	8M-Bit, 512Kx18 3.3V Sync. Pipe SRAM	100-TQFP	19.53	18.23	16.93
CY7C1363A-100AC	428-1125-ND	8M-Bit, 512Kx18 3.3V Sync. Flow Through SRAM	100-TQFP	19.23	17.95	16.67
CY7C1363A-100AJC	428-1126-ND	8M-Bit, 512Kx18 3.3V Sync. Flow Through SRAM	100-TQFP	19.23	17.95	16.67
CY7C1363A-117AC	428-1127-ND	8M-Bit, 512Kx18 3.3V Sync. Flow Through SRAM	100-TQFP	19.91	18.58	17.26
CY7C1367A-150AJC	428-1128-ND	8M-Bit, 512Kx18 3.3V Sync. Pipe SRAM	100-TQFP	19.23	17.95	16.67
CY7C1370B-133AC	428-1129-ND	18M-Bit, 512Kx36 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	49.28	45.99	42.71
CY7C1370B-133BGC	428-1130-ND	18M-Bit, 512Kx36 3.3V NoBL™ Sync. Pipe SRAM	119-BGA	50.03	46.69	43.36
CY7C1370BV25-133AC	428-1131-ND	18M-Bit, 512Kx36 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	49.28	45.99	42.71
CY7C1370BV25-150AC	428-1132-ND	18M-Bit, 512Kx36 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	50.10	46.76	43.42
CY7C1370BV25-167AC	428-1133-ND	18M-Bit, 512Kx36 3.3V NoBL™ Sync. Pipe SRAM	100-TQFP	50.85	47.46	44.07
CY7C1371B-100AC	428-1134-ND	18M-Bit, 512Kx36 3.3V NoBL™ Sync. Flow Through SRAM	100-TQFP	50.10	46.76	43.42
CY7C1372B-133BGC	428-1135-ND	18M-Bit, 1024Kx18 3.3V NoBL™ Sync. Pipe SRAM	119-BGA	50.03	46.69	43.36
CY7C1372BV25-167AC	428-1136-ND	18M-Bit, 1024Kx18 2.5V NoBL™ Sync. Pipe SRAM	100-TQFP	50.85	47.46	44.07
CY7C1380B-133AC	428-1440-ND	18M-Bit, 512Kx36 3.3V Sync. SRAM	100-TQFP	49.28	45.99	42.71
CY7C1380B-150AC	428-1441-ND	18M-Bit, 512Kx36 3.3V Sync. SRAM	100-TQFP	50.10	46.76	43.42
CY7C1380B-167AC	428-1442-ND	18M-Bit, 513Kx36 3.3V Sync. SRAM	100-TQFP	50.85	47.46	44.07
CY7C1381B-100AC	428-1137-ND	18M-Bit, 512Kx36 3.3V Standard Sync. Flow Through SRAM	100-TQFP	50.10	46.76	43.42
CY7C1382B-133AC	428-1138-ND	18M-Bit, 512Kx36 3.3V Standard Sync. Pipe SRAM	100-TQFP	49.28	45.99	42.71
CY7C1383B-100AC	428-1139-ND	18M-Bit, 1024Kx18 3.3V Standard Sync. Flow Through SRAM	100-TQFP	50.10	46.76	43.42
CY7C1386B-167AC	428-1140-ND	18M-Bit, 512Kx36 3.3V Standard Sync. Pipe SRAM	100-TQFP	50.85	47.46	44.07

Dual Port SRAM

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY7C006A-20AC	428-1141-ND	128K-Bit, 16Kx8 Async. Power Down, 20ns	80-TQFP	23.10	21.56	20.02
CY7C006A-20JC	428-1142-ND	128K-Bit, 16Kx8 Async. Power Down, 20ns	68-PLCC	23.10	21.56	20.02
CY7C006AV-20AC	428-1143-ND	128K-Bit, 16Kx8 3.3V Async. Power Down, 20ns	80-TQFP	30.03	28.03	26.03
CY7C007A-20AC	428-1144-ND	256K-Bit, 32Kx8 Async. Power Down, 20ns	80-TQFP	33.00	30.80	28.60
CY7C007A-20JC	428-1145-ND	256K-Bit, 32Kx8 Async. Power Down, 20ns	68-PLCC	33.00	30.80	28.60
CY7C008-20AC	428-1146-ND	512K-Bit, 64Kx8 Async. Power Down, 20ns	100-TQFP	37.95	35.42	32.89
CY7C008V-15AC	428-1147-ND	512K-Bit, 64Kx8 3.3V Async. Power Down, 15ns	100-TQFP	56.93	53.13	49.34
CY7C009-15AC	428-1148-ND	1M-Bit, 128Kx8 Async. Power Down, 15ns	100-TQFP	89.24	83.29	77.34
CY7C009V-15AC	428-1149-ND	1M-Bit, 128Kx8 3.3V Async. Power Down, 15ns	100-TQFP	102.96	96.10	89.24
CY7C016A-15AC	428-1150-ND	128K-Bit, 16Kx9 Async. Power Down, 15ns	100-TQFP	30.03	28.03	26.03
CY7C018-15AC	428-1151-ND	512K-Bit, 64Kx9 Async. Power Down, 15ns	100-TQFP	64.14	59.87	55.59
CY7C019-15AC	428-1152-ND	1M-Bit, 128Kx9 Async. Power Down, 15ns	100-TQFP	89.24	83.29	77.34
CY7C019V-15AC	428-1153-ND	1M-Bit, 128Kx9 3.3V Async. Power Down, 15ns	100-TQFP	102.96	96.10	89.24
CY7C024-15AC	428-1154-ND	64K-Bit, 4Kx16 3.3V Async. Power Down, 15ns	100-TQFP	24.75	23.10	21.45
CY7C024AV-25AC	428-1155-ND	64K-Bit, 4Kx16 3.3V Async. Power Down, 25ns	100-TQFP	16.50	15.40	14.30
CY7C025-15AC	428-1157-ND	128K-Bit, 8Kx16 Async. Power Down Interrupt, Busy, 15ns	100-TQFP	34.65	32.34	30.03
CY7C025-25JC	428-1158-ND	128K-Bit, 8Kx16 Async. Power Down Interrupt, Busy, 25ns	84-PLCC	23.10	21.56	20.02
CY7C025AV-20AC	428-1161-ND	128K-Bit, 8Kx16 3.3V Async. Power Down Interrupt, Busy, 20ns	100-TQFP	30.03	28.03	26.03
CY7C026A-20AC	428-1162-ND	256K-Bit, 16Kx16 Async. Power Down, 20ns	100-TQFP	33.00	30.80	28.60
CY7C027-20AC	428-1163-ND	512K-Bit, 32Kx16 Async. Power Down, 20ns	100-TQFP	37.95	35.42	32.89
CY7C027V-15AC	428-1164-ND	512K-Bit, 32Kx16 3.3V Async. Power Down, 15ns	100-TQFP	56.93	53.13	49.34
CY7C028-15AC	428-1443-ND	SRAM 64Kx16 Async. Power Down, 12ns	100-TQFP	89.24	83.29	77.34
CY7C028-20AC	428-1444-ND	SRAM 64Kx16 Async. Power Down, 15ns	100-TQFP	68.64	64.07	59.49
CY7C028V-15AC	428-1165-ND	1M-Bit, 64Kx16 3.3V Async. Power Down, 15ns	100-TQFP	102.96	96.10	89.24
CY7C036A-15AC	428-1166-ND	256K-Bit, 16Kx18 Async. Power Down, 15ns	100-TQFP	55.77	52.06	48.34
CY7C036AV-20AC	428-1167-ND	256K-Bit, 16Kx18 3.3V Async. Power Down, 20ns	100-TQFP	55.77	52.06	48.34
CY7C037-15AC	428-1168-ND	512K-Bit, 32Kx18 Async. Power Down, 15ns	100-TQFP	64.14	59.87	55.59
CY7C037V-15AC	428-1169-ND	512K-Bit, 32Kx18 3.3V Async. Power Down, 15ns	100-TQFP	74.01	69.08	64.15
CY7C038V-15AC	428-1170-ND	1M-Bit, 64Kx18 3.3V Async. Power Down, 15ns	100-TQFP	102.96	96.10	89.24
CY7C056V-15AC	428-1172-ND	512K-Bit, 16Kx36 3.3V Async. Power Down FLEx36 15ns	144-TQFP	74.01	69.08	64.15
CY7C057V-12AC	428-1173-ND	1M-Bit, 32Kx36 3.3V Async. Power Down FLEx36 12ns	144-TQFP	123.56	115.32	107.09

(Continued)

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NEW! CYPRESS

Integrated Circuits *(Cont.)*

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY7C057V-15AC	428-1174-ND	1M-Bit, 32Kx36 3.3V Async. Power Down FLEx36 15ns	144-TQFP	102.96	96.10	89.24
CY7C130-55PC	428-1191-ND	8K-Bit, 1Kx8 Async. Power Down Master 55ns	48-PDip	6.60	5.28	4.46
CY7C131-15JC	428-1192-ND	8K-Bit, 1Kx8 Async. Power Down Master 15ns	52-PLCC	10.33	9.30	8.25
CY7C131-25JC	428-1193-ND	8K-Bit, 1Kx8 Async. Power Down Master 25ns	52-PLCC	9.50	7.60	6.42
CY7C131-25NC	428-1194-ND	8K-Bit, 1Kx8 Async. Power Down Master 25ns	52-TQFP	9.50	7.60	6.42
CY7C131-35JC	428-1195-ND	8K-Bit, 1Kx8 Async. Power Down Master 25ns	52-PLCC	8.10	6.48	5.47
CY7C131-55JC	428-1196-ND	8K-Bit, 1Kx8 Async. Power Down Master 55ns	52-PLCC	6.60	5.28	4.46
CY7C132-35PC	428-1197-ND	16K-Bit, 2Kx8 Async. Power Down Master 35ns	48-PDip	8.80	7.04	5.94
CY7C132-55PC	428-1198-ND	16K-Bit, 2Kx8 Async. Power Down Master 55ns	48-PDip	7.20	5.76	4.86
CY7C136-55JC	428-1199-ND	16K-Bit, 2Kx8 Async. Power Down Master	52-PLCC	7.20	5.76	4.86
CY7C138-25JC	428-1445-ND	32K-Bit, 4Kx8 Async. Master/Slave Power Down, 25ns	68-PLCC	28.73	26.81	24.90
CY7C141-25JC	428-1200-ND	8K-Bit, 1Kx8 Async. Power Down, 25ns Slave	52-PLCC	9.50	7.60	6.42
CY7C142-55PC	428-1201-ND	16K-Bit, 2Kx8 Async. Power Down, 55ns Slave	48-PDip	7.20	5.76	4.86
CY7C146-25JC	428-1202-ND	16K-Bit, 2Kx8 Async. Power Down, 25ns Slave	52-PLCC	10.00	9.00	7.98
CY7C0241AV-25AC	428-1156-ND	64K-Bit, 4Kx18 3.3V Async. Power Down, 25ns	100-TQFP	16.50	15.40	14.30
CY7C0251-15AC	428-1159-ND	128K-Bit, 8Kx18 Async. Power Down, 15ns	100-TQFP	30.50	28.47	26.43
CY7C0251AV-25AC	428-1160-ND	128K-Bit, 8Kx18 3.3V Async. Power Down, 25ns	100-TQFP	23.10	21.56	20.02
CY7C0430BV-100BGC	428-1171-ND	64x18 3.3V QuadPort™ Switch DSE	272-BGA	216.00	201.60	187.20
CY7C09089V-12AC	428-1175-ND	512K-Bit, 64Kx8 3.3V Sync. 3-Mode Power Down, 15ns	100-TQFP	37.95	35.42	32.89
CY7C09099V-12AC	428-1176-ND	1M-Bit, 128Kx8 3.3V Sync. 3-Mode Power Down, 12ns	100-TQFP	68.64	64.07	59.49
CY7C09159AV-12AC	428-1177-ND	64K-Bit, 8Kx9 3.3V Sync. 3-Mode Power Down, 12ns	100-TQFP	16.50	15.40	14.30
CY7C09179V-12AC	428-1178-ND	256K-Bit, 32Kx9 3.3V Sync. 3-Mode Power Down, 12ns	100-TQFP	42.90	40.04	37.18
CY7C09189-9AC	428-1180-ND	512K-Bit, 64Kx9 Sync. 3-Mode Power Down, 9ns	100-TQFP	64.14	59.87	55.59
CY7C09189-12AC	428-1179-ND	512K-Bit, 64Kx9 Sync. 3-Mode Power Down, 12ns	100-TQFP	49.34	46.05	42.76
CY7C09199-9AC	428-1181-ND	1M-Bit, 128Kx9 Sync. 3-Mode Power Down, 9ns	100-TQFP	89.24	83.29	77.34
CY7C09269A-12AC	428-1182-ND	256K-Bit, 16Kx16 Sync. 3-Mode Power Down, 12ns	100-TQFP	33.00	30.80	28.60
CY7C09269V-12AC	428-1183-ND	256K-Bit, 16Kx16 3.3V Sync. 3-Mode Power Down, 12ns	100-TQFP	33.00	30.80	28.60
CY7C09279-12AC	428-1184-ND	512K-Bit, 32Kx16 Sync. 3-Mode Power Down, 12ns	100-TQFP	37.95	35.42	32.89
CY7C09279V-12AC	428-1185-ND	512K-Bit, 32Kx16 3.3V Sync. 3-Mode Power Down, 12ns	100-TQFP	37.95	35.42	32.89
CY7C09289-12AC	428-1186-ND	1M-Bit, 64Kx16 Sync. 3-Mode Power Down, 12ns	100-TQFP	68.64	64.07	59.49
CY7C09289V-12AC	428-1187-ND	1M-Bit, 64Kx16 3.3V Sync. 3-Mode Power Down, 12ns	100-TQFP	68.64	64.07	59.49
CY7C09349A-12AC	428-1446-ND	64K-Bit, 4Kx18 Sync., Power Down, 12ns	100-TQFP	16.50	15.40	14.30
CY7C09349AV-12AC	428-1447-ND	64K-Bit, 4Kx18 3.3V Sync. Pwr. Down, 12ns	100-TQFP	16.50	15.40	14.30
CY7C09369V-12AC	428-1448-ND	256K-Bit, 16Kx18 3.3V Sync. Power Down, 12ns	100-TQFP	42.90	40.04	37.18
CY7C09379-12AC	428-1449-ND	512K-Bit, 32Kx18 Sync. Pwr. Down, 12ns	100-TQFP	49.34	46.05	42.76
CY7C09379V-12AC	428-1450-ND	512K-Bit, 32Kx18 3.3V Sync. Power Down, 12ns	100-TQFP	49.34	46.05	42.76
CY7C09389V-12AC	428-1451-ND	1M-Bit, 64Kx18 3.3V Sync. Pwr. Down, 12ns	100-TQFP	68.64	64.07	59.49
CY7C09449PV-AC	428-1188-ND	128K-Bit, 4Kx32 3.3V Sync. SRAM PCI Cont.	160-TQFP	34.43	32.13	29.84
CY7C09569V-100AC	428-1189-ND	512K-Bit, 16Kx36 3.3V Sync. 3-Mode FLEx36 Power Down 100MHz	144-TQFP	88.80	82.88	76.96
CY7C09579V-100AC	428-1190-ND	1M-Bit, 32Kx36 3.3V Sync. 3-Mode FLEx36 Power Down 100MHz	144-TQFP	123.56	115.32	107.09

Low Power SRAM

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY6264-70SNC	428-1085-ND	64K-Bit, 8Kx8 Power Down SRAM	28-SOIC	3.26	2.61	2.03
CY62128BLL-70SC	428-1071-ND	1M-Bit, 128Kx8 LP, Pwr. Down SRAM	Wide 32-SOIC	3.74	2.99	2.33
CY62128BLL-70ZC	428-1072-ND	1M-Bit, 128Kx8 LP, Pwr. Down SRAM	32-TSOP	3.74	2.99	2.33
CY62128VLL-70SC	428-1073-ND	1M-Bit, 128Kx8 3.0V LP, Power Down SRAM	Wide 32-SOIC	3.74	2.99	2.33
CY62128VLL-70ZC	428-1074-ND	1M-Bit, 128Kx8 3.0V LP, Power Down SRAM	32-TSOP	3.74	2.99	2.33
CY62148BLL-70SC	428-1075-ND	4M-Bit, 512Kx8 LP, Pwr. Down SRAM	Wide 32-SOIC	8.82	7.06	5.96
CY62148BLL-70ZC	428-1076-ND	4M-Bit, 512Kx8 LP, Power Down SRAM	32-TSOP	8.90	7.12	6.01
CY62256-70SNC	428-1077-ND	256K-Bit, 32Kx8 Power Down SRAM	28-SOIC	2.48	1.98	1.54
CY62256L-70PC	428-1078-ND	256K-Bit, 32Kx8 LP, Power Down SRAM	28-Dip	3.35	2.69	2.09
CY62256L-70SNC	428-1079-ND	256K-Bit, 32Kx8 LP, Power Down SRAM	28-SOIC	2.48	1.98	1.54
CY62256LL-70PC	428-1080-ND	256K-Bit, 32Kx8 LP, Power Down SRAM	28-Dip	3.35	2.69	2.09
CY62256LL-70SNC	428-1081-ND	256K-Bit, 32Kx8 LP, Power Down SRAM	28-SOIC	2.48	1.98	1.54
CY62256LL-70ZC	428-1082-ND	256K-Bit, 32Kx8 LP, Power Down SRAM	28-TSOP	2.48	1.98	1.54
CY62256VLL-70SNC	428-1083-ND	256K-Bit, 32Kx8 3.0V LP, Pwr. Down SRAM	28-SOIC	2.48	1.98	1.54
CY62256VLL-70ZC	428-1084-ND	256K-Bit, 32Kx8 3.0V LP, Pwr. Down SRAM	28-TSOP	2.48	1.98	1.54

FIFO

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY7C419-10JC	428-1203-ND	256x9, Async. Parallel-Cascade FIFO, 10ns	32-PLCC	7.80	6.24	5.27
CY7C421-15JC	428-1209-ND	512x9, Async. Parallel-Cascade FIFO, 15ns	32-PLCC	6.60	5.28	4.46
CY7C425-10JC	428-1227-ND	1Kx9, Async. Parallel-Cascade FIFO, 10ns	32-PLCC	8.58	7.73	6.85
CY7C429-10JC	428-1243-ND	2Kx9, Async. Parallel-Cascade FIFO, 10ns	32-PLCC	11.16	10.05	8.92
CY7C433-10JC	428-1246-ND	4Kx9, Async. Parallel-Cascade FIFO, 10ns	32-PLCC	14.66	13.20	11.71
CY7C441-14JC	428-1247-ND	512x9, Clocked FIFO, 14ns	32-PLCC	22.05	20.58	19.11
CY7C460A-10JC	428-1251-ND	8Kx9, Async. Cascade FIFO, 10ns	32-PLCC	19.13	17.85	16.58
CY7C462A-10JC	428-1252-ND	16Kx9, Async. Cascade FIFO, 10ns	32-PLCC	38.25	35.70	33.15
CY7C464A-10JC	428-1253-ND	32Kx9, Async. Cascade FIFO, 10ns	32-PLCC	57.38	53.55	49.73
CY7C464A-15JC	428-1254-ND	32Kx9, Async. Cascade FIFO, 15ns	32-PLCC	43.88	40.95	38.03
CY7C466A-10JC	428-1255-ND	64Kx9, Async. Cascade FIFO, 10ns	32-PLCC	81.38	75.95	70.53
CY7C4201-10AC	428-1204-ND	256x9, Sync. FIFO, 10ns	32-TQFP	16.33	14.70	13.04
CY7C4201-10JC	428-1205-ND	256x9, Sync. FIFO, 10ns	32-PLCC	16.33	14.70	13.04
CY7C4201V-15AC	428-1206-ND	256x9, 3.3V Sync. FIFO, 15ns	32-TQFP	12.91	11.63	10.31
CY7C4205-10AC	428-1207-ND	256x18, Sync. FIFO, 10ns	64-TQFP	23.18	21.63	20.09
CY7C4205V-15ASC	428-1208-ND	256x18, 3.3V Sync. FIFO, 15ns	64-STQFP	18.60	17.36	16.12
CY7C4211-10JC	428-1210-ND	512x9, Sync. FIFO, 10ns	32-PLCC	16.20	15.12	14.04
CY7C4211-15AC	428-1211-ND	512x9, Sync. FIFO, 10ns	32-TQFP	14.24	12.83	11.38
CY7C4211V-15AC	428-1212-ND	512x9, 3.3V Sync. FIFO, 15ns	32-TQFP	14.24	12.83	11.38
CY7C4215-10JC	428-1213-ND	512x18, Sync. FIFO, 10ns	68-PLCC	25.50	23.80	22.10
CY7C4215V-15ASC	428-1214-ND	512x18, 3.3V Sync. FIFO, 15ns	64-STQFP	20.48	19.11	17.75
CY7C4221-10JC	428-1215-ND	1Kx9, Sync. FIFO, 10ns	32-PLCC	19.50	18.20	16.90
CY7C4221V-15AC	428-1216-ND	1Kx9, 3.3V Sync. FIFO, 15ns	32-TQFP	15.45	14.42	13.39
CY7C4225-15AC	428-1217-ND	1Kx18, Sync. FIFO, 15ns	64-TQFP	22.58	21.07	19.57
CY7C4225V-15ASC	428-1218-ND	1Kx18, 3.3V Sync. FIFO, 15ns	64-STQFP	22.58	21.07	19.57
CY7C4231-10JC	428-1219-ND	2Kx9, Sync. FIFO, 10ns	32-PLCC	23.40	21.84	20.28
CY7C4231V-15JC	428-1220-ND	2Kx9, 3.3V Sync. FIFO, 15ns	32-PLCC	18.60	17.36	16.12
CY7C4235-15AC	428-1221-ND	2Kx18, Sync. FIFO, 15ns	64-TQFP	27.08	25.27	23.47
CY7C4235V-15ASC	428-1222-ND	2Kx18, 3.3V Sync. FIFO, 15ns	64-STQFP	27.08	25.27	23.47
CY7C4241-15JC	428-1223-ND	4Kx9, Sync. FIFO, 10ns	32-PLCC	22.35	20.86	19.37
CY7C4241V-15JC	428-1224-ND	4Kx9, 3.3V Sync. FIFO, 15ns	32-PLCC	22.35	20.86	19.37
CY7C4245-15ASC	428-1225-ND	4Kx18, Sync. FIFO, 15ns	64-STQFP	32.55	30.38	28.21
CY7C4245V-15ASC	428-1226-ND	4Kx18, 3.3V Sync. FIFO, 15ns	64-STQFP	32.55	30.38	28.21
CY7C4251-15AC	428-1228-ND	8Kx9, Sync. FIFO, 10ns	32-TQFP	26.85	25.06	23.27
CY7C4251V-15AC	428-1229-ND	8Kx9, 3.3V Sync. FIFO, 15ns	32-TQFP	26.85	25.06	23.27
CY7C4255-10AC	428-1230-ND	8Kx18, Deep Sync. FIFO, 10ns	64-TQFP	60.00	56.00	52.00
CY7C4255V-10ASC	428-1231-ND	8Kx18, 3.3V Deep Sync. FIFO, 10ns	64-STQFP	57.00	53.20	49.40
CY7C4261-10JC	428-1232-ND	16Kx9, Deep Sync. FIFO, 10ns	32-PLCC	60.00	56.00	52.00
CY7C4261-15JC	428-1233-ND	16Kx9, Deep Sync. FIFO, 15ns	32-PLCC	48.00	44.80	41.60
CY7C4261V-10JC	428-1234-ND	16Kx9, 3.3V Deep Sync. FIFO, 10ns	32-PLCC	57.00	53.20	49.40
CY7C4265-10AC	428-1235-ND	16Kx18, Deep Sync. FIFO, 10ns	64-TQFP	84.00	78.40	72.80
CY7C4265V-10ASC	428-1236-ND	16Kx18, 3.3V Deep Sync. FIFO, 10ns	64-STQFP	81.00	75.60	70.20
CY7C4271-10JC	428-1237-ND	32Kx9, Deep Sync. FIFO, 10ns	32-PLCC	84.00	78.40	72.80
CY7C4271V-10JC	428-1238-ND	32Kx9, 3.3V Deep Sync. FIFO, 10ns	32-PLCC	81.00	75.60	70.20
CY7C4275-10ASC	428-1239-ND	32Kx18, Deep Sync. FIFO, 10ns	64-STQFP	109.20	101.92	94.64
CY7C4275V-10ASC	428-1240-ND	32Kx18, 3.3V Deep Sync. FIFO, 10ns	64-STQFP	105.00	98.00	91.00
CY7C4285-10ASC	428-1241-ND	64Kx18, Deep Sync. FIFO, 10ns	64-STQFP	141.98	132.51	123.05
CY7C4285V-10ASC	428-1242-ND	64Kx18, 3.3V Deep Sync. FIFO, 10ns	64-STQFP	135.00	126.00	117.00
CY7C4291-10JC	428-1244-ND	128Kx9, Deep Sync. FIFO, 10ns	32-PLCC	141.98	132.51	123.05
CY7C4291V-10JC	428-1245-ND	128Kx9, 3.3V Deep Sync. FIFO, 10ns	32-PLCC	135.00	126.00	117.00
CY7C4421-10AC	428-1248-ND	64x9, Sync. FIFO, 10ns	32-TQFP	14.66	13.20	11.71
CY7C4425-10AC	428-1249-ND	64x18, Sync. FIFO, 10ns	64-TQFP	21.08	19.67	18.27
CY7C4425V-15ASC	428-1250-ND	64x18, 3.3V Sync. FIFO, 15ns	64-STQFP	16.88	15.75	14.63
CY7C4811-10AC	428-1256-ND	512x9x2, Double Sync. FIFO, 10ns	64-TQFP	27.60	25.76	23.92
CY7C4821-10AC	428-1257-ND	1Kx9x2, Double Sync. FIFO, 10ns	64-TQFP	33.15	30.94	28.73
CY7C4831-10AC	428-1258-ND	2Kx9x2, Double Sync. FIFO, 10ns	64-TQFP	39.83	37.17	34.52
CY7C4841-10AC	428-1259-ND	4Kx9x2, Double Sync. FIFO, 10ns	64-TQFP	47.85	44.66	41.47
CY7C4851-10AC	428-1260-ND	8Kx9x2, Double Sync. FIFO, 10ns	64-TQFP	57.38	53.55	49.73

Buffers

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY2305SC-1	428-1346-ND	Zero Delay Buffer 3.3V Int. Feedback	8-SOIC	3.15	2.52	1.96
CY2305SC-1H	428-1348-ND	Zero Delay Buffer 3.3V Int. Feedback	8-SOIC	3.15	2.52	1.96
CY2305SI-1	428-1347-ND	Zero Delay Buffer 3.3V Int. Feedback	8-SOIC	5.00	4.00	3.38
CY2305SI-1H	428-1349-ND	Zero Delay Buffer 3.3V Int. Feedback	8-SOIC	5.00	4.00	3.38
CY2308SC-1	428-1350-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	6.70	5.36	4.53
CY2308SC-2	428-1356-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	6.70	5.36	4.53
CY2308SC-3	428-1358-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	6.70	5.36	4.53
CY2308SC-4	428-1360-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	6.70	5.36	4.53
CY2308SC-1H	428-1352-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	6.70	5.36	4.53
CY2308SC-5H	428-1362-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	6.70	5.36	4.53
CY2308SI-1	428-1351-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	11.16	10.05	8.92
CY2308SI-2	428-1357-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	11.16	10.05	8.92
CY2308SI-3	428-1359-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	11.16	10.05	8.92
CY2308SI-4	428-1361-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	11.16	10.05	8.92
CY2308SI-1H	428-1353-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-SOIC	11.16	10.05	8.92
CY2308ZC-1H	428-1354-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-TSSOP	8.00	6.40	5.40
CY2308ZC-5H	428-1363-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-TSSOP	8.00	6.40	5.40
CY2308ZI-1H	428-1355-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-TSSOP	11.50	10.35	9.18
CY2308ZI-5H	428-1364-ND	Zero Delay Buffer 3.3V Ext. Feedback	16-TSSOP	11.50	10.35	9.18
CY2309SC-1	428-1365-ND	Zero Delay Buffer 3.3V Int. Feedback	16-SOIC	5.18	4.14	3.22
CY2309SC-1H	428-1367-ND	Zero Delay Buffer 3.3V Int. Feedback	16-SOIC	5.18	4.14	3.22
CY2309SI-1	428-1366-ND	Zero Delay Buffer 3.3V Int. Feedback	16-SOIC	8.10	6.48	5.47
CY2309SI-1H	428-1368-ND	Zero Delay Buffer 3.3V Int. Feedback	16-SOIC	8.10	6.48	5.47
CY2309ZC-1H	428-1369-ND	Zero Delay Buffer 3.3V Int. Feedback	16-TSSOP	5.30	4.24	3.58
CY2309ZI-1H	428-1370-ND	Zero Delay Buffer 3.3V Int. Feedback	16-TSSOP	9.44	7.56	6.38
CY7B9910-2SC	428-1371-ND	Clock Buffer TTL Out	24-SOIC	12.30	11.07	9.82
CY7B9910-5SC	428-1372-ND	Clock Buffer TTL Out	24-SOIC	9.78	8.81	7.81
CY7B9910-7SC	428-1373-ND	Clock Buffer TTL Out	24-SOIC	9.44	7.56	6.38
CY7B991-2JC	428-1374-ND	Clock Buffer TTL Out	32-PLCC	15.39	14.37	13.34
CY7B991-5JC	428-1375-ND	Clock Buffer TTL Out	32-PLCC	14.29	12.87	11.42
CY7B991-7JC	428-1376-ND	Clock Buffer TTL Out	32-PLCC	12.03	10.83	9.61
CY7B992-2JC	428-1379-ND	Clock Buffer CMOS Out	32-PLCC	15.39	14.37	13.34
CY7B992-5JC	428-1380-ND	Clock Buffer CMOS Out	32-PLCC	14.28	12.86	11.40
CY7B992-7JC	428-1381-ND	Clock Buffer CMOS Out	32-PLCC	12.03	10.83	9.61
CY7B991V-2JC	428-1382-ND	Clock Buffer 3.3V	32-PLCC	15.39	14.37	13.34
CY7B991V-5JC	428-1383-ND	Clock Buffer 3.3V	32-PLCC	14.28	12.86	11.40
CY7B991V-7JC	428-1384-ND	Clock Buffer 3.3V	32-PLCC	13.04	11.75	10.42
CY7B993V-2AC	428-1385-ND	Clock Buffer 3.3V	100-TQFP	42.75	39.90	37.05
CY7B9920-2SC	428-1377-ND	Clock Buffer CMOS Out	24-SOIC	12.26	11.04	9.79
CY7B9920-5SC	428-1378-ND	Clock Buffer CMOS Out	24-SOIC	9.78	8.81	7.81
W40S11-02H	428-1401-ND	Clock Buffer 3.3V 10 Out DIMM SDRAM	28-SSOP	6.80	5.44	4.59
W256H	428-1399-ND	Clock Buffer 3.3V 12 Out DIMM 3SDRAM	28-SSOP	8.00	6.40	5.40

Clock Generators

Cypress Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
CY2291F	428-1392-ND	Clock Gen. Sync. Field Prog. 3PLL 3.3V	20-SOIC	4.82	3.86	3.00
CY2292F	428-1393-ND	Clock Gen. Sync. Field Prog. 3PLL 3.3V	16-SOIC	4.46	3.57	2.78
CY22050FC	428-1386-ND	Clock Gen. Sync. Flash 1PLL 3.3V	16-TSSOP	2.97	2.38	1.85
CY22150FC	428-1387-ND	Clock Gen. Sync. Serial/Flash 1PLL 3.3V	16-TSSOP	3.51	2.81	2.19
CY22381FC	428-1388-ND	Clock Gen. Sync. Flash Prog 3PLL 3.3V	8-SOIC	4.79	3.84	2.99
CY22392FC	428-1389-ND	Clock Gen. Sync. Flash Prog 3PLL 3.3V	16-TSSOP	4.91	3.93	3.06
CY22393FC	428-1390-ND	Clock Gen. Sync. Serial/Flash 3PLL 3.3V	16-TSSOP	5.14	4.12	3.47
CY22394FC	428-1391-ND	Clock Gen. Sync. Serial/Flash 3PLL 3.3V	16-TSSOP	5.14	4.12	3.47
W40S01-04H	428-1400-ND	Spread Spectrum Clock Generator SDRAM	8-SOIC	7.70	6.16	5.20
W42C31-03G	428-1397-ND	Freq. Gen. Spectrum EMI Reduction SSCG	8-SOIC	3.38	2.70	2.10
W48C111-16H	428-1402-ND	Clock Gen. Freq Mod. SSCG, Celeron, PIII	28-SSOP	7.70	6.16	5.20
W180-01G	428-1394-ND	Clock Gen. EMI Reduction 3.3V-5.0V SSCG	8-SOIC	3.20	2.56	1.99
W181-01G	428-1395-ND	Clock Gen. EMI Reduction 3.3V-5.0V SSCG	8-SOIC	3.51	2.81	2.19
W181-02G	428-1396-ND	Clock Gen. EMI Reduction 3.3V-5.0V SSCG	8-SOIC	3.51	2.81	2.19
W234X	428-1398-ND	Clock Gen. Direct Rambus™ 3.3V Dual	28-TSSOP	10.66	9.60	8.52

MOTOROLA Microcontrollers

68HC705 Family — 8-Bit

RAM (Bytes)	EPROM/ OTP (Bytes)	EEPROM (Bytes)	Timer	I/O	Serial	A/D	PWM	COP	Operating Voltage (V)	Max Bus Freq. (MHz)	Temp.	Package	Digi-Key Part No.	Price Each 1	25	100	Motorola Part No.
352	15K	256	16-Bit, 2 IC, 2 OC	32	SCI	8-CH, 8-Bit	2-CH, 8-Bit	Y	3.3, 5.0	2.1	Comm.	52-PLCC	MC68HC705B16CFN-ND	11.61	9.36	8.58	MC68HC705B16CFN
352	15K	256	16-Bit, 2 IC, 2 OC	32	SCI	8-CH, 8-Bit	2-CH, 8-Bit	Y	3.3, 5.0	2.1	Comm.	64-QFP	MC68HC705B16CFU-ND	11.61	9.36	8.58	MC68HC705B16CFU
304	8K	—	16-Bit, 1 IC, 1 OC	31	SCI, SPI	—	—	Y	3.3, 5.0	4.0	Comm.	40-Dip	MC68HC705C8ACP-ND	7.90	5.93	5.73	MC68HC705C8ACP
304	8K	—	16-Bit, 1 IC, 1 OC	31	SCI, SPI	—	—	Y	3.3, 5.0	4.0	Comm.	44-PLCC	MC68HC705C8ACFN-ND	7.90	5.93	5.73	MC68HC705C8ACFN
304	8K	—	16-Bit, 1 IC, 1 OC	31	SCI, SPI	—	—	Y	3.3, 5.0	4.0	Comm.	44-QFP	MC68HC705C8ACFB-ND	7.90	5.93	5.73	MC68HC705C8ACFB
352	16K	—	16-Bit, 1 IC, 1 OC	31	SCI, SPI	—	—	Y	3.3, 5.0	2.1	Comm.	40-Dip	MC68HC705C9ACP-ND	9.90	7.18	6.59	MC68HC705C9ACP
352	16K	—	16-Bit, 1 IC, 1 OC	31	SCI, SPI	—	—	Y	3.3, 5.0	2.1	Comm.	44-PLCC	MC68HC705C9ACFN-ND	9.90	7.18	6.59	MC68HC705C9ACFN
352	16K	—	16-Bit, 1 IC, 1 OC	31	SCI, SPI	—	—	Y	3.3, 5.0	2.1	Comm.	44-QFP	MC68HC705C9ACFB-ND	9.90	7.18	6.59	MC68HC705C9ACFB
64	1.2K	—	MFT, RTI	14	—	—	—	Y	3.3, 5.0	4.0	Comm.	20-Dip	MC68HC705J1ACP-ND	2.54	2.11	1.85	MC68HC705J1ACP
64	1.2K	—	MFT, RTI	14	—	—	—	Y	3.3, 5.0	4.0	Comm.	20-SOIC	MC68HC705J1ACDW-ND	2.54	2.11	1.85	MC68HC705J1ACDW
64	1.2K	—	MFT, RTI	10	—	—	—	Y	3.3, 5.0	4.0	Comm.	16-Dip	MC68HC705KJ1CP-ND	1.68	1.40	1.26	MC68HC705KJ1CP
64	1.2K	—	MFT, RTI	10	—	—	—	Y	3.3, 5.0	4.0	Comm.	16-SOIC	MC68HC705KJ1CDW-ND	1.68	1.40	1.26	MC68HC705KJ1CDW
176	4.5K	—	16-Bit, 1 IC, 1 OC	21	SIOP	4-CH, 8-Bit	—	Y	3.3, 5.0	2.1	Comm.	28-Dip	MC68HC705P6ACP-ND	3.78	3.14	2.75	MC68HC705P6ACP
176	4.5K	—	16-Bit, 1 IC, 1 OC	21	SIOP	4-CH, 8-Bit	—	Y	3.3, 5.0	2.1	Comm.	28-SOIC	MC68HC705P6ACDW-ND	3.78	3.14	2.75	MC68HC705P6ACDW
192	3.75K	—	8-Bit	32	—	4-CH, 8-Bit	—	—	3.3, 5.0	2.1	Ind.	40-Dip	MC68HC705SR3CP-ND	12.15	9.79	8.98	MC68HC705SR3CP

68HC908 Family — 8-Bit

RAM (Bytes)	FLASH or OTP (Bytes)	EEPROM (Bytes)	Timer	I/O	Serial	A/D	PWM	COP	Operating Voltage (V)	Max Bus Freq. (MHz)	Temp.	Package	Digi-Key Part No.	Price Each 1	25	100	Motorola Part No.
128	1.5K Flash	—	2-Ch, 16-Bit IC, OC or PWM	15	—	10-CH, 8-Bit	See Timer	Y	3.3, 5.0	8.0	Comm.	20-SOIC	MC68HC908JK1CDW-ND	2.50	2.08	1.82	MC68HC908JK1CDW
128	1.5K Flash	—	2-Ch, 16-Bit IC, OC or PWM	15	—	10-CH, 8-Bit	See Timer	Y	3.3, 5.0	8.0	Comm.	20-Dip	MC68HC908JK1CP-ND	2.50	2.08	1.82	MC68HC908JK1CP
128	4K Flash	—	2-Ch, 16-Bit IC, OC or PWM	15	—	10-CH, 8-Bit	See Timer	Y	3.3, 5.0	8.0	Comm.	20-SOIC	MC68HC908JK3CDW-ND	3.30	2.74	2.40	MC68HC908JK3CDW
128	4K Flash	—	2-Ch, 16-Bit IC, OC or PWM	15	—	10-CH, 8-Bit	See Timer	Y	3.3, 5.0	8.0	Comm.	20-Dip	MC68HC908JK3CP-ND	3.30	2.74	2.40	MC68HC908JK3CP
1K	32K Flash	512	4-CH + 4-CH, 16-Bit IC, OC or PWM	51	SCI, SPI	8-CH, 8-Bit	See Timer	Y	5.0	8.0	Comm.	64-QFP	MC68HC908AB32CFU-ND	10.71	8.63	7.92	MC68HC908AB32CFU
128	4K Flash	—	2-CH, 16-Bit IC, OC or PWM	23	—	12-CH, 8-Bit	See Timer	Y	3.3, 5.0	8.0	Comm.	28-SOIC	MC68HC908JL3CDW-ND	4.20	3.15	3.05	MC68HC908JL3CDW
128	4K Flash	—	2-CH, 16-Bit IC, OC or PWM	23	—	12-CH, 8-Bit	See Timer	Y	3.0, 5.0	8.0	Comm.	28-Dip	MC68HC908JL3CP-ND	4.20	3.15	3.05	MC68HC908JL3CP
256	8K Flash	—	2-CH, 16-Bit IC, OC or PWM	Up to 21	USB	—	See Timer	Y	5.0	3.0	Comm.	28-SOIC	MC68HC908JB8ADW-ND	5.20	3.90	3.77	MC68HC908JB8ADW
512	32K Flash	—	Dual 2-CH, 16-Bit IC, OC or PWM	33	SCI, SPI	8-CH, 8-Bit	See Timer	Y	3.0, 5.0	8.0	Comm.	44-QFP	MC68HC908GP32CFB-ND	9.90	7.98	7.32	MC68HC908GP32CFB
512	32K Flash	—	Dual 2-CH, 16-Bit IC, OC or PWM	33	SCI, SPI	8-CH, 8-Bit	See Timer	Y	3.0, 5.0	8.0	Comm.	40-Dip	MC68HC908GP32CP-ND	9.90	7.98	7.32	MC68HC908GP32CP
192	8K Flash	—	2-CH, 16-Bit IC, OC or PWM	13	SCI	4-CH, 8-Bit	See Timer	Y	3.0, 5.0	8.0	Comm.	16-SOIC	MC68HC908KX8CDW-ND	5.40	4.05	3.92	MC68HC908KX8CDW
192	8K Flash	—	2-CH, 16-Bit IC, OC or PWM	13	SCI	4-CH, 8-Bit	See Timer	Y	3.0, 5.0	8.0	Comm.	16-Dip	MC68HC908KX8CP-ND	5.40	4.05	3.92	MC68HC908KX8CP
768	16K Flash	—	4-CH + 2-CH, 16-Bit IC, OC or PWM	44	SCI, SPI	10-CH, 10-Bit	See Timer +6-CH, 12-Bit	Y	5.0	8.0	Comm.	64-QFP	MC68HC908MR16CFU-ND	9.00	6.53	5.99	MC68HC908MR16CFU
768	32K Flash	—	4-CH + 2-CH, 16-Bit IC, OC or PWM	44	SCI, SPI	10-CH, 10-Bit	See Timer +6-CH, 12-Bit	Y	5.0	8.0	Comm.	64-QFP	MC68HC908MR32CFU-ND	10.89	8.78	8.05	MC68HC908MR32CFU
2K	60K Flash	1K	6-CH + 2-CH, 16-Bit IC, OC or PWM	48	SCI, SPI	15-CH, 8-Bit	—	Y	5.0	8.0	Ext.	64-QFP	MC68HC908AZ60CFU-ND	18.61	16.26	14.30	MC68HC908AZ60CFU
2K	60K Flash	1K	6-CH + 2-CH, 16-Bit IC, OC, or PWM	48	SCI, SPI	15-CH, 8-Bit	—	Y	5.0	8.0	Military	64-QFP	MC68HC908AZ60MFU-ND	20.47	17.88	15.73	MC68HC908AZ60MFU
2K	60K Flash	1K	6-CH + 2-CH, 16-Bit IC, OC, or PWM	48	SCI, SPI	15-CH, 8-Bit	—	Y	5.0	8.0	Ind.	64-QFP	MC68HC908AZ60VFU-ND	19.54	17.07	15.01	MC68HC908AZ60VFU
128	4K Flash	—	2-CH, 16-Bit, IC, OC, or PWM	Up to 15	—	10-CH, 8-Bit	See Timer	—	3.0, 5.0	8.0	—	20-SOIC	MC68HRC908JK3CDW-ND	3.96	2.74	2.40	MC68HRC908JK3CDW

MOTOROLA Microcontrollers

68HC711 Family — 8-Bit

RAM (Bytes)	EPROM/ OTP (Bytes)	EEPROM (Bytes)	Timer	I/O	Serial	A/D	Operating Voltage (V)	Max Bus Freq. (MHz)	Temp.	Package	Digi-Key Part No.	Price Each			Motorola Part No.
												1	25	100	
192	4K	—	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	32	SCI, SPI	—	5.0	2.0	Comm.	44-PLCC	MC68HC711D3CFN2-ND	9.36	6.79	6.23	MC68HC711D3CFN2
786	20K	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	38	SCI, SPI	8-CH, 8-Bit	5.0	3.0	Comm.	52-PLCC	MC68HC711E20CFN3-ND	21.42	17.26	15.18	MC68HC711E20CFN3
512	12K	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	38	SCI, SPI	8-CH, 8-Bit	5.0	3.0	Comm.	52-PLCC	MC68HC711E9CFN3-ND	14.99	12.08	11.08	MC68HC711E9CFN3
768	20K	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	38	SCI, SPI	8-CH, 8-Bit	5.0	2.0	Comm.	52-PLCC	MC68HC711E20CFN2-ND	18.82	16.45	14.46	MC68HC711E20CFN2
512	12K	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	38	SCI, SPI	8-CH, 8-Bit	5.0	2.0	Comm.	52-PLCC	MC68HC711E9CFN2-ND	14.27	11.50	10.55	MC68HC711E9CFN2
768	24K	640	16-Bit (41 C, 40 C) RTI, 8-Bit	62	SCI, SPI	8-CH, 8-Bit	—	4.0	—	80-QFP	MC68HC711K4CFU4-ND	23.67	20.68	18.19	MC68HC711K4CFU4

68HC11 Family — 8-Bit

RAM (Bytes)	EPROM (Bytes)	Timer	I/O	Serial	PWM	A/D	Operating Voltage (V)	Max Bus Freq. (MHz)	Temp.	Package	Digi-Key Part No.	Price Each			Motorola Part No.
												1	25	100	
512	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	—	SCI, SPI	—	8-CH, 8-Bit	3.0, 5.0	3.0	Comm.	52-PLCC	MC68HC11E1CFN3-ND	9.22	7.43	6.81	MC68HC11E1CFN3
512	—	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	—	SCI, SPI	—	8-CH, 8-Bit	5.0	2.0	Comm.	52-PLCC	MC68HC11E0CFN2-ND	9.46	6.86	6.30	MC68HC11E0CFN2
512	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	—	SCI, SPI	—	8-CH, 8-Bit	5.0	2.0	Comm.	52-PLCC	MC68HC11E1CFN2-ND	9.76	7.08	6.50	MC68HC11E1CFN2
512	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	—	SCI, SPI	—	8-CH, 8-Bit	5.0	2.0	Comm.	52-PLCC	MC68HC11E1CFN2TR-ND	3040.20/450			MC68HC11E1CFN2R2
768	640	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	37	SCI + SPI	4-CH, 8-Bit or 2-CH, 16-Bit	8-CH, 8-Bit	3.0, 5.0	4.0	—	84-PLCC	MC68HC11K1CFN4-ND	15.71	12.66	11.62	MC68HC11K1CFN4
1	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	30	SCI, SPI	8-CH, 8-Bit	—	5.0	2.0	—	68-PLCC	MC68HC11F1CFN2-ND	9.68	7.81	7.16	MC68HC11F1CFN2
1	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	30	SCI, SPI	8-CH, 8-Bit	—	5.0	3.0	—	68-PLCC	MC68HC11F1CFN3-ND	10.15	8.18	7.51	MC68HC11F1CFN3
1	512	16-Bit, 3/4 IC, 4/5 OC, RTI Pulse Accumulator	30	SCI, SPI	8-CH, 8-Bit	—	5.0	3.0	—	68-PLCC	MC68HC11F1CFN3TR-ND	1965.00/250			MC68HC11F1CFN3R2
1	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	30	SCI, SPI	8-CH, 8-Bit	—	5.0	4.0	—	68-PLCC	MC68HC11F1CFN4-ND	10.64	8.57	7.87	MC68HC11F1CFN4
1	512	16-Bit, 3/4 IC, 4/5 OC, RTI, Pulse Accumulator	30	SCI, SPI	8-CH, 8-Bit	—	5.0	4.0	—	80-LQFP	MC68HC11F1CPU4-ND	10.64	8.57	7.87	MC68HC11F1CPU4

68HC912 Family — 16-Bit

RAM (KBytes)	EEPROM (Bytes)	Flash (KBytes)	Timer	I/O	Serial	A/D	PWM	Operating Voltage (V)	Max Bus Freq. (MHz)	Package	Digi-Key Part No.	Price Each			Motorola Part No.
												1	25	100	
1	768	32	8-CH, 16-Bit, (IC or OC) RTI, Pulse Accumulator	Up to 63	SCI, SPI, J1850	8-CH, 10-Bit	4-CH, 8-Bit or 2-CH, 16-Bit	5.0	8.0	80-QFP	MC68HC912B32CFU8-ND	18.41	16.09	14.14	MC68HC912B32CFU8

MOTOROLA

In-Circuit Simulator (ICS)

Economical, Integrated Developing and Debugging

Motorola's In-Circuit Simulator Kits are low cost tools for developing and debugging target systems incorporating Motorola's most popular 68HC05s and 68HC08s. They provide an innovative interface to a user's target system for Windows based editing, assembly, software simulation, programming, and in-circuit simulation. In-circuit simulation allows you to use the actual inputs and outputs of your target during simulation of your code.

FEATURES:

- Windows Based Integrated Development Environment (IDE) with editor, assembler, debugger, and simulator: Run under Windows®3.x and Windows® 98. Examine and modify memory, registers, and I/O. Up to 64 instruction and register (accumulator, stack, index) break points. Several single stepping and run modes of execution. Trace buffer holds previously executed instructions and variables. Data variable display window. Simulates all I/O, interrupts, timers, and other on-chip hardware. Detects attempted use of uninitialized or unimplemented locations. Data logging and script commands for recording and automatic execution of a sequence of commands. On screen context-sensitive windows help.
- In-Circuit Simulation: Emulation cable for connection to target system. Non-Realtime In-Circuit Emulation.
- Program EPROM, OTP, EEPROM, and FLASH microcontrollers

CONTENTS:

- Windowed EPROM or FLASH MCU sample
- Comprehensive Documentation: MCU Technical Data Books. Software and Hardware User's Manual. Application Guide/Text Book. MCU Technical Documentation CD-ROM.
- Serial cable for PC to ICS connection
- Wall Mount Power Supply
- The 68HC08 In-Circuit Simulator Kits add the following capabilities: Real-time in-circuit emulation available except for clock control and communication. Real-time in-circuit debug using the 68HC08s MON08 serial debug/breakpoint capability. Runs under Windows NT and Windows 98.

Description	Digi-Key Part No.	Price Each
Simulator/Programmer for 68HC705B16	M68ICS05B-ND	126.00
Simulator/Programmer for 68HC705C8A/C9A	M68ICS05C-ND	126.00
Simulator/Programmer for 68HC705JP7/JJ7	M68ICS05JP-ND	126.00
Simulator/Programmer for 68HC705KJ1/J1A	M68ICS05KJ-ND	126.00
Simulator/Programmer for 68HC705P6A	M68ICS05P-ND	126.00
Simulator/Programmer for 68HC908JL3/JK3/JK1	M68ICS08JLJK-ND	363.95
Simulator/Programmer for 68HC908MR16/MR32	M68ICS08MR-ND	363.95
Simulator/Programmer for 68HC908RK2	M68ICS08RK2-ND	363.95
Simulator/Programmer for 68HC908JB8	M68ICS08JB-ND	363.95
Simulator/Programmer for 68HC908AB32	M68ICS08AB-ND	363.95
Simulator/Programmer for 68HC908KX8/KX2	M68ICS08KX-ND	363.95

Modular Evaluation System (MMEVS)

The Motorola Modular Evaluation System (MMEVS) is Motorola's economical, two-board emulator for the 68HC(7)05 and 68HC(9)08 family of microcontrollers. The MMEVS consists of a Platform Board and an Emulator Module (EM). Connected to your target system, the emulator replicates the actual target system MCU. An Integrated Development Environment (IDE) allows for quick edits and changes to assembly code, which makes design, debug and real-time evaluation of the target system as efficient as possible. Use this economical system to perform traditional debugging activities such as executing code in run or step mode, setting break points, monitoring or modifying CPU registers, memory and application variables, and creating log or script files to record test results or create test suites.

FEATURES:

- Real-time, non-intrusive, in-circuit emulation at the MCU's operating frequency
- 64 hardware break points
- Control of code execution in run or step mode
- 64K bytes of fast emulation memory (SRAM)
- Current limited target input/output connections
- 6 Software-selectable oscillator clock sources
- Command and response logging to save session history and/or to generate script files
- SCRIPT command for automatic execution of a sequence of commands (such as system configuration setup and automated test runs)
- Assembly source-level debugging
- Host/emulator communications speeds as high as 57,600 baud
- Extensive on-line MCU information via the CHIPINFO command
- Integrated Development Environment (IDE) including editor, assembler, and assembly source-level debugger

CONTENTS:

- MMEVS Platform Board: IDE (including editor, assembler, debugger). 9-lead RS-232 serial cable. 9-to-25-pin serial cable adapter. MMEVS User Manuals. Power Supply.
- Device Specific Emulation Module

Description	Digi-Key Part No.	Price Each
Evaluation System for 68HC705B16	KITMMEVS05B-ND	1074.64
Evaluation System for 68HC705C8A/C9A	KITMMEVS05C-ND	1074.64
Evaluation System for 68HC705JP7/JJ7	KITMMEVS05JP-ND	1074.64
Evaluation System for 68HC705KJ1/J1A	KITMMEVS05KJ-ND	1074.64
Evaluation System for 68HC908GP32	KITMMEVS08GP-ND	1572.08
Evaluation System for 68HC908JL3/JK3/JK1	KITMMEVS08JL-ND	1572.08
Evaluation System for 68HC908JB8	KITMMEVS08JB8-ND	1572.08
Evaluation System for 68HC908AB32	KITMMEVS08AB32-ND	1572.08
Evaluation System for 68HC908MR32/MR16	KITMMEVS08MR32-ND	1572.08
Evaluation System for 68HC908KX8/KX2	KITMMEVS08KX-ND	1572.08
Evaluation System for 68HC05/08	M68MMPFB0508-ND	487.20

Modular Development System (MMDS)

The Motorola Modular Development System (MMDS) is a full-featured emulator system for developing embedded systems using 68HC(7)05 and 68HC(9)08 microcontrollers. In addition to incorporating the debug features of the Motorola Modular Evaluation System (MMEVS), the MMDS adds advanced features such as real-time, dual-ported memory and a bus state analyzer to capture user-defined bus cycles or events. Use the dual-ported memory to tune filter circuits or monitor changes to program variables while your program is running at full speed. Verify nested or complex program flows using the bus state analyzer's full range of sequenced or logical event triggering and data capture modes. These added features help users develop, debug, and deliver 68HC05 or 68HC08 products in less time.

FEATURES:

- Real-time, non-intrusive, in-circuit emulation at the operating frequency of the target device
- Control of code execution in run or step mode
- Real-time bus state analyzer: 8K x 64 real-time trace buffer. Display of real-time trace data. Four hardware triggers. Nine triggering modes up to 8190 pre- or post-trigger points for trace data. 16 general-purpose logic chips. 16-Bit time tag, or optional 24-Bit time tag.
- 4 complex break points (any combination of address, data, control, and/or I/O
- 64 instruction break points
- 32 real-time variables
- 32 bytes of real-time memory
- 64K bytes of fast emulation memory (SRAM)
- Current limited target input/output connections
- 6 software-selectable oscillator clock sources
- Command and response logging to save session history and/or to generate script files
- SCRIPT command for automatic execution of a sequence of commands (such as system configuration setup and automated test runs)
- Assembly source-level debugging
- Host/emulator communications speeds as high as 57600 baud
- Extensive on-line device information via CHIPINFO command
- Integrated Development Environment (IDE) including editor, assembler, and source-level debugger

CONTENTS:

- Station module with built-in power supply: Compact: 15.38" deep x 10.19" wide x 2.75" high (39cm deep x 25.9cm wide x 7cm high). Lightweight: 6 pounds (2.7kg). Built-in power: 85 to 264 VAC. Device-specific Emulator Module and flexible target system cable.
- Two logic clip cable assemblies
- 9-lead RS-232 serial cable
- 9 to 25 pin serial cable adapter
- IDE with editor, assembler, and debugger
- MMDS User Manuals
- MMDS tutorial

Description	Digi-Key Part No.	Price Each
Modular Development Kit for 68HC705B16	KITMMDS05B-ND	3739.58
Modular Development Kit for 68HC705C8A/C9A	KITMMDS05C-ND	3739.58
Modular Development Kit for 68HC705JP7/JJ7	KITMMDS05JP-ND	3739.58
Modular Development Kit for 68HC705KJ1/J1A	KITMMDS05KJ-ND	3739.58
Modular Development Kit for 68HC705P6A	KITMMDS05P6A-ND	3739.58
Modular Development Kit for 68HC908GP32	KITMMDS08GP-ND	4281.45
Modular Development Kit for 68HC908JL3/JK3/JK1	KITMMDS08JL-ND	4281.45
Modular Development Kit for 68HC908JB8	KITMMDS08JB8-ND	4281.45
Modular Development Kit for 68HC908AB32	KITMMDS08AB32-ND	4281.45
Modular Development Kit for 68HC908MR32/MR16	KITMMDS08MR32-ND	4281.45
Modular Development Kit for 68HC908KX8/KX2	KITMMDS08KX-ND	4281.45
Modular Development Kit for 68HC05/08	M68MMDS0508-ND	3197.70

Digital Signal Processors

Program ROM (Kbytes x 16)	Program RAM (Bytes x 16)	Additional RAM (Kbytes x 16)	Data ROM (Kbytes x 16)	Timer	I/O	Serial	A/D	PWM	Other Features	Operating Voltage (V)	Bus Frequency (MHz)	Package	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	Motorola Part No.
32	128	3.5	2	3-16-Bit Timers	16	2 SPI	—	—	—	2.7	70	100-LQFP	DSP56824BU70-ND	14.40	11.60	10.64	DSP56824BU70

Flash Digital Signal Processors

Program Flash (Kbytes x 16)	Program RAM (Kbytes x 16)	Flash (Data) (Kbytes x 16)	RAM (Data) (Kbytes x 16)	Boot Flash (Kbytes x 16)	Timer	I/O	Serial	A/D	PWM	Other Features	Operating Voltage (V)	Bus Freq. (MHz)	Pkg.	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	Motorola Part No.
8	1	2	1	2	2 Quad Timer Modules	11	SPI, SCI	Dual, 4-Input, 12-Bit	6-CH	Internal Oscillator	3.3	80	48-LQFP	DSP56F801FA80-ND	11.50	9.27	8.50	DSP56F801FA80
31.5	0.5	4	2	2	4 Quad Timer Modules	16	SPI, SCI	Dual, 4-Input, 12-Bit	6-CH	CAN, Quad Decoder	3.3	80	100-LQFP	DSP56F803BU80-ND	17.93	15.66	13.77	DSP56F803BU80
31.5	0.5	4	2	2	4 Quad Timer Modules	32	SPI, 2 SCI	Dual, 4-Input, 12-Bit	Two 6-CH	CAN, 2 Quad Decoder Modules	3.3	80	144-LQFP	DSP56F805FV80-ND	21.93	19.16	16.85	DSP56F805FV80
31.5	0.5	2	4	2	1 Quad Timer Module, 1 TOD	16 Dedicated 30 Shared	2 SPI, 2 SCI, SSI	—	—	—	Dual Power Supply, 3.3 and 2.5	80	100-LQFP	DSP56F826BU80-ND	17.87	14.40	13.21	DSP56F826BU80
60	2	8	4	2	4 Quad Timer Modules	32	SPI, 2 SCI	Quad, 4-Input, 12-Bit	Two 6-CH	CAN, 2 Quad Decoder Modules	3.3	80	160-LQFP	DSP56F807PY80-ND	23.69	20.70	18.20	DSP56F807PY80
60	2	8	4	2	4 Quad Timer Modules	32	SPI, 2 SCI	Quad, 4-Input, 12-Bit	Two 6-CH	CAN, 2 Quad Decoder Modules	3.3	80	160-BGA	DSP56F807VF80-ND	26.83	23.44	20.61	DSP56F807VF80

DSP56F801EVM Kit

The DSP56F801EVM Kit is a low cost kit that contains everything you need to quickly evaluate the features and capabilities of the DSP56F801 silicon and tools. It also provides an excellent cost effective vehicle for hardware and software development. It can be used standalone, or in conjunction with our broad range of modular motion control development hardware. The DSP56F801EVM Kit is targeted for use on PC Compatible systems running Windows 95, Windows 98, and Windows NT 4.0.

Features:

- DSP56F801 16-Bit 3.3V Digital Signal Processor operating at 80MHz
- 8.00MHz crystal oscillator for DSP frequency generation
- Optional external oscillator frequency input connector
- Joint Test Action Group (JTAG) port interface connector to interface to an external command converter
- On-board Parallel port command converter with a connector for a PC printer port cable
- RS-232 interface for easy connection to a host processor
- One standard UNI-3 and encoder connector and associated circuitry, enabling the EVM to interface into the Modular Motion Control Development Hardware System

Kit Contents:

- DSP56F801EVM Installation Guide
- DSP56F801 Evaluation Module Board
- 12 Volt universal switching mode power supply
- IEEE 1284 Parallel Port Cable DB25 male to DB25 female
- Metrowerks CodeWarrior for Motorola DSP evaluation CD-ROM
- Embedded Software Development Kit (SDK) CD-ROM

DSP56F801EVM-ND..**$368.59**

DSP56F803EVM Kit

The DSP56F803EVM Kit is a low cost kit that contains everything you need to quickly evaluate the features and capabilities of the DSP56F803 silicon and tools. It also provides an excellent cost effective vehicle for hardware and software development. It can be used standalone, or in conjunction with our broad range of modular motion control development hardware. The DSP56F803EVM Kit is targeted for use on PC Compatible systems running Windows 95, Windows 98, and Windows NT 4.0.

Features:

- DSP56F803 16-Bit 3.3V Digital Signal Processor operating at 80MHz
- External fast static RAM (FSRAM) memory, configured as:
  - 64K x 16-Bit of program memory with 0 wait states at 70MHz
  - 64K x 16-Bit of data memory with 0 wait states at 70MHz
- 8.00MHz crystal oscillator for DSP frequency generation
- Optional external oscillator frequency input connector
- Joint Test Action Group (JTAG) port interface connector to interface to an external command converter
- On-board Parallel port command converter with a connector for a PC printer port cable
- RS-232 interface for easy connection to a host processor
- CAN interface for high speed 1.0Mbps communications
- One standard UNI-3 and encoder connector and associated circuitry enabling the EVM to interface into the Modular Motion Control Development Hardware System

Kit Contents:

- DSP56F803EVM Installation Guide
- DSP56F803 Evaluation Module Board
- 12 Volt universal switching mode power supply
- IEEE 1284 Parallel Port Cable DB25 male to DB25 female
- Metrowerks CodeWarrior for Motorola DSP evaluation CD-ROM
- Embedded Software Development Kit (SDK) CD-ROM

DSP56F803EVM-ND..**$368.30**

DSP56F805EVM Kit

The DSP56F805EVM Kit is a low cost kit that contains everything you need to quickly evaluate the features and capabilities of the DSP56F805 silicon and tools. It also provides an excellent cost effective vehicle for hardware and software development. It can be used standalone, or in conjunction with our broad range of modular motion control development hardware. This kit is targeted for use on PC Compatible systems running Windows 95, Windows 98, and Windows NT 4.0.

Features:

- DSP56F805 16-Bit 3.3V Digital Signal Processor operating at 80MHz
- External fast static RAM (FSRAM) memory, configured as:
  - 64K x 16-Bit of program memory with 0 wait states at 70MHz
  - 64K x 16-Bit of data memory with 0 wait states at 70MHz
- 4-Channel 10-Bit Serial D/A, SPI for real-time user data display
- 8.00MHz crystal oscillator for DSP frequency generation
- Optional external oscillator frequency input connector
- Joint Test Action Group (JTAG) port interface connector to interface to an external command converter
- On-board Parallel port command converter, with a connector for a PC printer port cable
- RS-232 interface for easy connection to a host processor
- CAN interface for high speed, 1.0Mbps, communications
- Two standard UNI-3 and encoder connectors, and associated circuitry, enabling the EVM to interface into two separate Modular Motion Control Development Hardware Systems

Kit Contents:

- DSP56F805EVM Installation Guide and DSP56F805 Evaluation Module Board
- 12 Volt universal switching mode power supply
- IEEE 1284 Parallel Port Cable DB25 male to DB25 female
- Metrowerks CodeWarrior for Motorola DSP evaluation CD-ROM
- Embedded Software Development Kit (SDK) CD-ROM

DSP56F805EVM-ND..**$368.30**

DSP56F807EVM Kit

The DSP56F807EVM Kit is a low cost kit that contains everything you need to quickly evaluate the features and capabilities of the DSP56F807 silicon and tools. It also provides an excellent cost effective vehicle for hardware and software development. It can be used standalone, or in conjunction with our broad range of modular motion control development hardware. This kit is targeted for use on PC Compatible systems running Windows 95, Windows 98, and Windows NT 4.0.

Features:

- DSP56F807 16-Bit 3.3V Digital Signal Processor operating at 80MHz
- External fast static RAM (FSRAM) memory, configured as:
  - 64K x 16-Bit of program memory with 0 wait states at 70MHz
  - 64K x 16-Bit of data memory with 0 wait states at 70MHz
- 4-Channel 10-Bit Serial D/A, SPI for real-time user data display
- 8.00MHz crystal oscillator for DSP frequency generation
- Optional external oscillator frequency input connector
- Joint Test Action Group (JTAG) port interface connector to interface to an external command converter
- On-board Parallel port command converter, with a connector for a PC printer port cable
- RS-232 interface for easy connection to a host processor
- CAN interface for high speed, 1.0Mbps, communications
- Two standard UNI-3 and encoder connectors, and associated circuitry, enabling the EVM to interface into two separate Modular Motion Control Development Hardware Systems

Kit Contents:

- DSP56F807EVM Installation Guide and DSP56F807 Evaluation Module Board
- 12 Volt universal switching mode power supply
- IEEE 1284 Parallel Port Cable DB25 male to DB25 female
- Metrowerks CodeWarrior for Motorola DSP evaluation CD-ROM
- Embedded Software Development Kit (SDK) CD-ROM

DSP56F807EVM-ND..**$368.59**

DSP56F826EVM Kit

The DSP56F826EVM Kit is a low cost kit that contains everything you need to quickly evaluate the features and capabilities of the DSP56F826 silicon and tools. It also provides an excellent cost effective vehicle for hardware and software development. It can be used standalone, or in conjunction with our broad range of modular motion control development hardware. This kit is targeted for use on PC Compatible systems running Windows 95, Windows 98, and Windows NT 4.0.

Features:

- DSP56F826EVM 16-Bit +2.5V/+3.3V Digital Signal Processor operating at 80MHz
- External fast static RAM (FSRAM) memory, configured as:
  - 64K x 16-Bit of program memory with 0 wait states at 70MHz
  - 64K x 16-Bit of data memory with 0 wait states at 70MHz
- 1Mbit Serial EEPROM
- 4.00MHz crystal oscillator for DSP frequency generation
- Optional external oscillator frequency input connector
- Joint Test Action Group (JTAG) port interface connector for an external debug Host Target Interface
- On-board Parallel JTAG Host Target Interface with a connector for a PC printer port cable
- RS-232 interface for easy connection to a host processor
- Stereo headphone interface

Kit Contents:

- DSP56F826EVM Installation Guide and DSP56F826 Evaluation Module Board
- 12 Volt universal switching mode power supply
- IEEE 1284 Parallel Port Cable DB25 male to DB25 female
- Codec sample rate selector
- Peripheral Daughter Card Expansion Connector to allow the user to connect his own SCI, SSI, SPI or GPIO compatible peripheral to the DSP
- Memory Daughter Card Expansion Connector to allow the user to connect his own memory or memory device to the DSP
- 16-Bit stereo codec interface
- Metrowerks CodeWarrior for Motorola DSP evaluation CD-ROM
- Embedded Software Development Kit (SDK) CD-ROM

DSP56F826EVM-ND..**$368.30**

DSP56F827EVM Kit

The DSP56F827EVM Kit is a low-cost kit that contains everything you need to quickly evaluate the features and capabilities of the DSP56F827 silicon and tools. It also provides an efficient, cost-effective vehicle for hardware and software development. It can be used alone or in conjunction with Motorola's broad range of modular motion control development hardware. The DSP56F827EVM Kit is targeted for use on PC-compatible systems running Windows 95, Windows 98, Windows 2000, Windows ME, and Windows NT 4.0.

Kit Contents:

- DSP56F827EVM Installation Guide and DSP56F827 Evaluation Module Board
- 12 Volt universal switching mode power supply
- IEEE 1284 Parallel Port Cable DB25 male to DB25 female
- Metrowerks CodeWarrior for Motorola DSP evaluation CD-ROM
- Embedded Software Development Kit (SDK) CD-ROM

DSP56F827EVM-ND..........................**$368.59**

STATIC PROTECTION

Protection of static sensitive parts is a MUST in today's semiconductor market.
To ensure the quality that Digi-Key customers have come to expect,
the Digi-Key static control program includes proper static safety protection in the following areas:

- ***Receiving, Incoming Inspection, and QC***
- ***Order Picking***
- ***Final Inspection***
- ***Packaging and Shipping***

Shielded metallized bags are used in order picking, and anti-static, non-CFC, photo degradable packaging peanuts are used in packaging and shipping.

As our program is continuously updated with the latest static control technology, you can be reassured that Digi-Key's static sensitive parts are quality safe, *all the way to your door step!*

• Please Note: SO-x packages are the same as x-SOIC packages •

MOTOROLA MICROCONTROLLERS

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC68HC916Y3CFT16-ND	16MHz, 16-Bit 96K FLASH MCU	160-QFP	67.89	52.15	49.90
MC68S711E9CFN2-ND	4MHz, 8-Bit 12K OTP MCU	52-PLCC	15.70	12.65	11.60
MMC2107CFCPV33-ND	33MHz, 16-Bit 128K FLASH MCU	144-LQFP	24.30	19.58	17.22
MPC555LFMZP40-ND	40MHz, 32-Bit 448K FLASH PowerPC MCU	272-PBGA	84.08	—	—

MOTOROLA MICROPROCESSORS

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC68020RC16E-ND	16MHz, 32-Bit Embedded MPU	114-CPGA	149.93	—	—
MC68060RC50-ND	50MHz, 32-Bit Embedded MPU	206-PGA	511.85	—	—
MC68302CFC16C-ND	16MHz, Integrated Multiprotocol MPU	132-PQFP	33.52	26.86	25.75
MC68302FC16C-ND	16MHz, Integrated Multiprotocol MPU	132-PQFP	27.94	24.41	21.46
MC68302FC20C-ND	20MHz, Integrated Multiprotocol MPU	132-PQFP	30.93	27.02	23.76
MC68302FC25C-ND	25MHz, Integrated Multiprotocol MPU	132-PQFP	33.93	27.19	26.07
MC68302PV16C-ND	16MHz, Integrated Multiprotocol MPU	144-TQFP	27.19	23.76	20.89
MC68302PV16VC-ND	16MHz, Integrated Multiprotocol MPU	144-TQFP	33.98	27.23	26.10
MC68302PV20C-ND	20MHz, Integrated Multiprotocol MPU	144-TQFP	30.18	26.37	23.18
MC68302PV25C-ND	25MHz, Integrated Multiprotocol MPU	144-TQFP	33.18	28.99	25.49
MC68302RC16C-ND	16MHz, Integrated Multiprotocol MPU	132-PGA	76.19	—	—
MC68306FC16B-ND	16MHz, 32-Bit Integrated MPU	132-PQFP	18.21	15.91	13.99
MC68328PV16A-ND	16MHz, 5V Integrated Portable System MPU (DragonBall)	144-TQFP	28.22	24.65	21.68
MC68328PV16VA-ND	16MHz, 3V Integrated Portable System MPU (DragonBall)	144-TQFP	28.22	24.65	21.68
MC68331CFC16B1-ND	16MHz, 32-Bit Integrated MPU	132-PQFP	17.69	14.26	13.08
MC68331CFC16-ND	16MHz, 32-Bit Integrated MPU	132-PQFP	16.95	14.81	13.02
MC68332ACFC16B1-ND	16MHz, 32-Bit Integrated MPU	132-PQFP	18.19	15.90	13.98
MC68332ACFC16-ND	16MHz, 32-Bit Integrated MPU	132-PQFP	18.81	16.43	14.45
MC68332ACFC20B1-ND	20MHz, 32-Bit Integrated MPU	132-PQFP	19.09	16.68	14.67
MC68332ACFC20-ND	20MHz, 32-Bit Integrated MPU	132-PQFP	19.74	17.25	15.16
MC68332ACFC25-ND	25MHz, 32-Bit Integrated MPU	132-PQFP	20.67	18.06	15.88
MC68332GCFC16-ND	16MHz, 32-Bit Integrated MPU	132-PQFP	18.81	16.43	14.45
MC68334GCFC16-ND	16MHz, MPU w/DMA, UART, System Integration	132-PQFP	19.29	16.85	14.82
MC68334GFC16-ND	16MHz, MPU w/DMA, UART, System Integration	132-PQFP	19.29	16.85	14.82
MC68340FT16E-ND	16MHz, 32-Bit MPU with DMA	144-PQFP	24.55	21.45	18.86
MC68340FT25E-ND	25MHz, 32-Bit MPU with DMA	144-PQFP	33.38	26.75	25.65
MC68340PV16E-ND	16MHz, 32-Bit MPU with DMA	144-LQFP	25.17	21.99	19.33
MC68340PV25E-ND	25MHz, 32-Bit MPU with DMA	144-LQFP	35.23	28.23	27.06
MC68360EM25K-ND	25MHz, 32-Bit QUICC MPU (Rev. K)	240-PQFP	58.25	46.67	44.74
MC68360EM25L-ND	25MHz, 32-Bit QUICC MPU (Rev. L)	240-PQFP	58.25	46.67	44.74
MC68360EM25VL-ND	25MHz, 32-Bit 3.3V QUICC MPU (Rev. L)	240-PQFP	70.22	53.94	51.61
MC68376BGMFT20-ND	20MHz, 32-Bit MPU	16-PQFP	30.36	26.53	23.32
MC68EC020FG25-ND	25MHz, 32-Bit Enhanced MPU	100-PQFP	26.44	23.10	20.32
MC68EC030FE25C-ND	25MHz, 32-Bit Enhanced MPU	132-CQFP	41.77	33.47	32.08
MC68EC030FE40C-ND	40MHz, 32-Bit Enhanced MPU	132-CQFP	57.93	46.42	44.50
MC68EC040FE33A-ND	33MHz, 32-Bit Enhanced MPU	132-CQFP	122.91	—	—
MC68EC040RC25A-ND	25MHz, 32-Bit Enhanced MPU	179-PGA	110.39	—	—
MC68EC040RC33A-ND	33MHz, 32-Bit Enhanced MPU	179-PGA	150.51	—	—
MC68EC060RC50-ND	50MHz, 32-Bit Embedded MPU	206-PGA	144.78	—	—
MC68EC060RC66-ND	66MHz, 32-Bit Embedded MPU	206-PGA	300.59	—	—
MC68EN302PV20BT-ND	20MHz, Integrated Multiprotocol MPU	144-TQFP	37.73	30.24	28.99
MC68EN302PV25BT-ND	25MHz, Integrated Multiprotocol MPU	144-TQFP	45.27	36.27	34.77
MC68EN360EM25L-ND	25MHz, 32-Bit QUICC with Ethernet Support (Rev. L)	240-PQFP	66.55	51.12	48.91
MC68EN360EM25VL-ND	25MHz, 32-Bit 3.3V QUICC with Ethernet Support (Rev. L)	240-PQFP	78.52	60.31	57.71
MC68EN360EM33K-ND	33MHz, 32-Bit QUICC with Ethernet Support (Rev. K)	240-PQFP	72.53	55.71	53.31
MC68EN360RC25K-ND	25MHz, 32-Bit QUICC with Ethernet Support (Rev. K)	240-PGA	133.62	—	—
MC68EN360ZP25VL-ND	25MHz, 32-Bit 3.3V QUICC with Ethernet Support (Rev. L)	144-TQFP	77.85	59.80	57.22
MC68HC000FN16-ND	16MHz, 32-Bit Low Power MPU	68-PLCC	11.99	9.66	8.86
MC68HC000FN16TR-ND	16MHz, 32-Bit Low Power MPU	68-PLCC	1882.00/250		
MC68LC040RC25A-ND	25MHz, 32-Bit Low Power MPU	179-PGA	162.55	—	—
MC68LC060RC66-ND	66MHz, 32-Bit Low Power MPU	206-PGA	500.40	—	—
MC68LC302PU16CT-ND	16MHz, LP Integrated Multiprotocol Processor	100-TQFP	18.86	16.48	14.49
MC68LC302PU20CT-ND	20MHz, LP Integrated Multiprotocol Processor	100-TQFP	22.59	19.74	17.36
MC68LC302PU25CT-ND	25MHz, LP Integrated Multiprotocol Processor	100-TQFP	26.34	23.02	20.24
MC68SEC000FU16-ND	16MHz, 32-Bit LP Embedded MPU	64-QFP	10.67	8.60	7.89
MPC106ARX66CG-ND	PowerPC PCI Bridge/Memory Controller	304-CBGA	56.72	45.45	43.57
MPC106ARX83DG-ND	PowerPC PCI Bridge/Memory Controller	304-CBGA	77.74	59.71	57.14
MPC603RRX200LC-ND	200MHz, 32-Bit MPC603r PowerPC RISC MPU	255-CBGA	55.83	44.73	42.88
MPC603RRX300LC-ND	300MHz, 32-Bit MPC603r PowerPC RISC MPU	255-CBGA	81.95	—	—
MPC740ARX233LH-ND	233MHz, 32-Bit PowerPC RISC MPU	255-CBGA	78.95	—	—
MPC740ARX266LH-ND	266MHz, 32-Bit PowerPC RISC MPU	255-CBGA	112.80	—	—
MPC750ARX266LH-ND	266MHz, 32-Bit PowerPC RISC MPU with L2 Cache Support	360-CBGA	120.74	—	—

MOTOROLA ADVANCED CLOCK DRIVERS

Clock Drivers

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MPC940LFACT-ND	Low Volt. 1:18 Clock Distribution Chip	32-LQFP	10.71	8.63	7.92
MPC940LFATR-ND	Low Volt. 1:18 Clock Distribution Chip	32-LQFP	15172.00/2,000		

Clock Generators

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC88915FN55-ND	55MHz, Low Skew PLL Clock Driver *NEW!*	28-PLCC	9.67	6.26	5.86
MC88915FN70-ND	70MHz, Low Skew PLL Clock Driver *NEW!*	28-PLCC	12.12	7.84	7.35
MC88915TFN55-ND	Tri-State, 55MHz, Low Skew PLL Clock Driver *NEW!*	28-PLCC	9.74	7.04	6.31
MC88915TFN70-ND	Tri-State, 70MHz, Low Skew PLL Clock Driver *NEW!*	28-PLCC	12.12	7.84	7.35
MC88915TFN100-ND	Tri-State, 100MHz, Low Skew PLL Clock Driver *NEW!*	28-PLCC	12.07	7.81	7.32
MC88915TFN100CT-ND	Tri-State, 100MHz, Low Skew PLL Clock Driver	28-PLCC	8.60	6.94	6.36
MC88915TFN100TR-ND	Tri-State, 100MHz, Low Skew PLL Clock Driver	28-PLCC	3047.50/500		
MC88915TFN160-ND	Tri-State, 160MHz, Low Skew PLL Clock Driver *NEW!*	28-PLCC	12.79	9.25	8.29
MC88916DW70-ND	70MHz, Low Skew PLL Clock Driver with Reset *NEW!*	20-SOIC	15.14	10.95	9.81
MC88916DW80-ND	80MHz, Low Skew PLL Clock Driver with Reset *NEW!*	20-SOIC	18.37	13.28	11.91
MC88920DW-ND	50MHz, Low Skew PLL Clock Driver with Power Control *NEW!*	20-SOIC	12.56	9.08	8.14
MC88LV915TFN-ND	Tri-State, 100MHz, Low Volt. PLL Clock Driver *NEW!*	28-PLCC	12.31	8.90	7.98
MPC972FA-ND	Low Volt. PLL Clock Driver (125MHz Max. Output)	52-LQFP	12.98	11.34	9.98
MPC974FA-ND	3.3 Volt Programmable PLL Clock Driver	52-LQFP	12.98	11.34	9.98

Clock Synthesizers

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC12429FNCT-ND	High Frequency PLL Clock Synthesizer	28-PLCC	14.67	12.82	11.28

MOTOROLA ANALOG

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC33298DW-ND	Octal Serial Switch with 8-Bit SPI I/O *NEW!*	24-SOIC	6.51	4.47	3.95
MC33298DWCT-ND	Octal Serial Switch with 8-Bit SPI I/O	24-SOP	5.26	3.29	3.18
MC33298DWTR-ND	Octal Serial Switch with 8-Bit SPI I/O	24-SOP	3315.00/1,000		
MC33298P-ND	Octal Serial Switch with 8-Bit SPI I/O *NEW!*	20-Dip	6.77	4.64	4.11

MOTOROLA *NEW!* DISPLAY DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC14489BDW-ND	5-Channel LED Display/25 Lamp Driver	20-SOG	5.40	3.33	2.94
MC14489BP-ND	5-Channel LED Display/25 Lamp Driver	20-Dip	5.40	3.33	2.94

MOTOROLA MATH COPROCESSORS

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC68882FN25A-ND	M68000 Family Math CoProcessor	68-PLCC	54.02	43.28	41.49

MOTOROLA MEMORY

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MCM69C432TQ20-ND	16K x 64 Content Addressable Memory	100-TQFP	42.38	33.96	32.56
MPC2605ZP66-ND	PowerPC Integrated Secondary Cache	241-PBGA	44.92	35.99	34.51

MOTOROLA RF/IF PRODUCTS

D/A Converters

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC144110DW-ND	6-Bit Hex Serial Interface D/A Converter	20-SOIC	5.47	3.42	3.31
MC144110DWTR-ND	6-Bit Hex Serial Interface D/A Converter	20-SOIC	2410.00/1,000		
MC144111DW-ND	6-Bit Quad Serial Interface D/A Converter	16-SOIC	4.25	2.94	2.57
MC144111DWTR-ND	6-Bit Quad Serial Interface D/A Converter	16-SOIC	2372.00/1,000		

Encoders / Decoders

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC145026D-ND	Serial Data Output 9-Line Trinary Encoder	16-SOIC	2.38	1.42	1.28
MC145026DTR-ND	Serial Data Output 9-Line Trinary Encoder	16-SOIC	2710.00/2,500		
MC145026P-ND	9-Line Simplex Encoder	16-Dip	2.38	1.42	1.28
MC145027DW-ND	Serial Data Input 9-Line (5 Address, 4 Data) Trinary Decoder	16-SOIC	2.52	1.75	1.53
MC145027DWTR-ND	Serial Data Input 9-Line (5 Address, 4 Data) Trinary Decoder	16-SOIC	1339.00/1,000		
MC145027P-ND	Serial Data Input 9-Line (5 Address, 4 Data) Trinary Decoder	16-Dip	2.52	1.75	1.53
MC145028DW-ND	Serial Data Input 9-Line Trinary Decoder	16-SOIC	3.05	2.11	1.85
MC145028DWTR-ND	Serial Data Input 9-Line Trinary Decoder	16-SOIC	1619.00/1,000		
MC145028P-ND	Serial Data Input 9-Line Trinary Decoder *NEW!*	16-Dip	3.81	2.35	2.08

Frequency Synthesis

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MC145151DW2-ND	Parallel-Input PLL Freq. Synthesizer (Single-Modulus)	28-SOIC	9.00	4.50	4.35
MC145151DW2TR-ND	Parallel-Input PLL Freq. Synthesizer (Single-Modulus)	28-SOIC	3851.00/1,000		
MC145152DW2-ND	Parallel-Input PLL Freq. Synthesizer (Dual-Modulus)	28-SOIC	11.70	5.85	5.66
MC145152DW2TR-ND	Parallel-Input PLL Freq. Synthesizer (Dual-Modulus)	28-SOIC	4998.00/1,000		
MC145157DW2-ND	Serial-Input PLL Freq. Synthesizer (Single-Modulus)	16-SOIC	5.81	3.63	3.51
MC145157DW2TR-ND	Serial-Input PLL Freq. Synthesizer (Single-Modulus)	16-SOIC	3086.00/1,000		
MC145158DW2-ND	Serial-Input PLL Frequency Synthesizer (Dual-Modulus)	16-SOIC	5.81	3.63	3.51
MC145158DW2TR-ND	Serial-Input PLL Frequency Synthesizer (Dual-Modulus)	16-SOIC	3086.00/1,000		
MC145170D2-ND	Serial-Input CMOS PLL Frequency Synthesizer	16-SOIC	5.52	3.45	3.34
MC145170D2TR-ND	Serial-Input CMOS PLL Frequency Synthesizer	16-SOIC	7015.00/2,500		
MC145170DT2-ND	Serial-Input CMOS PLL Frequency Synthesizer	16-TSSOP	5.52	3.45	3.34
MC145170DT2TR-ND	Serial-Input CMOS PLL Frequency Synthesizer	16-TSSOP	7015.00/2,500		

Forward Amplifiers

Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
MHW6342T-ND	77 Channel CATV Amplifier	1302-01	39.84	31.92	30.60
MHW8205-ND	128 Channel CATV Amplifier	714Y-03	63.08	50.54	48.45

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

MOTOROLA SENSORS

Accelerometers

Digi-Key Part No.	Description	Pkg.	Price Each ★		
			1	25	100
MMA1200D-ND	Z-Axis Acceleration Sensor, ±250g Range, 8 mV/g Sensitivity	16-SOIC	19.92	17.40	15.30
MMA1201P-ND	Z-Axis Acceleration Sensor, ±38g Range, 50 mV/g Sensitivity	16-Dip	19.92	17.40	15.30
MMA1220D-ND	Z-Axis Acceleration Sensor, ±8g Range, 250 mV/g Sensitivity	16-SOIC	19.92	17.40	15.30
MMA2200W-ND	X-Axis Acceleration Sensor, ±38g Range, 50 mV/g Sensitivity	Wingback	19.92	17.40	15.30
MMA2201D-ND	X-Axis Acceleration Sensor, ±38g Range, 50 mV/g Sensitivity	16-SOIC	19.92	17.40	15.30
MMA2202D-ND	X-Axis Acceleration Sensor, ±50g Range, 40 mV/g Sensitivity	16-SOIC	19.92	17.40	15.30
MMA3201D-ND	X/Y-Axis Acceleration Sensor, ±38g Range, 50 mV/g Sensitivity	20-SOIC	19.92	17.40	15.30

Pressure, Temperature Compensated

Digi-Key Part No.	Description	Pkg.	Price Each ★		
			1	25	100
MPX10DP-ND	0 to 1.45 PSI Differential Pressure Sensor, 35mV Full Scale Span *NEW!*	344C (ported)	14.68	10.62	9.52
MPX2010D-ND	0 to 1.45 PSI Differential Pressure Sensor, 25mV Full Scale Span *NEW!*	344-15	16.94	12.25	10.98
MPX2010DP-ND	0 to 1.45 PSI Differential Pressure Sensor, 25mV Full Scale Span	344C–01	14.40	11.60	10.64
MPX2010GP-ND	0 to 1.45 PSI Gauge Pressure Sensor, 25mV Full Scale Span *NEW!*	344B-01 (ported)	17.85	12.91	11.57
MPX2050GP-ND	0-7.25 PSI Temp. Compensated Pressure Sensor	344B–01	16.02	12.91	11.84
MPX2200GP-ND	0 to 29 PSI Gauge Pressure Sensor, 40mV Full Scale Span *NEW!*	344B-01 (ported)	20.11	14.54	13.03
MPX4100AP-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX4115A-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volts Output *NEW!*	867	20.53	15.30	14.07
MPX4115AP-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX4250AP-ND	2.9 to 36.3 PSI Absolute Pressure Sensor, 0.2 to 4.9 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX5010DP-ND	0 to 1.45 PSI Differential Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867C (ported)	21.56	16.07	14.78
MPX5010GP-ND	0 to 1.45 PSI Absolute Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX5050D-ND	0 to 7.25 PSI Differential Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867	20.53	15.30	14.07
MPX5050DP-ND	0 to 7.25 PSI Differential Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867C (ported)	21.56	16.07	14.78
MPX5050GP-ND	0 to 7.25 PSI Gauge Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX5100AP-ND	2.18 to 16.68 PSI Absolute Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX5100DP-ND	0 to 14.5 PSI Differential Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867C (ported)	21.56	16.07	14.78
MPX5100GP-ND	0 TO 14.5 PSI Gauge Pressure Sensor, 0.2 to 14.5 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX5700DP-ND	0 to 101.5 PSI Differential Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867C (ported)	21.56	16.07	14.78
MPX5700GP-ND	0 to 101.5 PSI Gauge Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867B (ported)	21.35	15.92	14.64
MPX5999D-ND	0 to 150 PSI Differential Pressure Sensor, 0.2 to 4.7 Volts Output *NEW!*	867	20.53	15.30	14.07
MPXA4100A6U-ND	2.9 to 15.2 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	SOP	16.60	14.50	12.75
MPXA4100AC6U-ND	2.9 to 15.2 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	Ported SOP	17.26	15.08	13.26
MPXA4101AC6U-ND	2.18 to 14.8 PSI Absolute Pressure Sensor, 0.25 to 4.95 Volt Output	Ported SOP	17.26	15.08	13.26
MPXA4115A6U-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	SOP	16.60	14.50	12.75
MPXA4115AC6U-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	Ported SOP	17.26	15.08	13.26
MPXA4250A6U-ND	2.9 to 36.3 PSI Absolute Pressure Sensor, 0.2 to 4.9 Volt Output	SOP	16.60	14.50	12.75
MPXA4250AC6U-ND	2.9 to 36.3 PSI Absolute Pressure Sensor, 0.2 to 4.9 Volt Output	Ported SOP	17.26	15.08	13.26
MPXA6115A6U-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	SOP	16.60	14.50	12.75
MPXA6115AC6U-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	Ported SOP	17.26	15.08	13.26
MPXAZ4100A6U-ND	2.9 to 15.2 PSI Absolute Pressure Sensor, 0.3 to 4.9 Volt Output	SOP	16.85	14.72	12.95
MPXAZ4100AC6U-ND	2.9 to 15.2 PSI Absolute Pressure Sensor, 0.3 to 4.9 Volt Output	Ported SOP	17.51	15.30	13.46
MPXAZ4115A6U-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	SOP	16.85	14.72	12.95
MPXAZ4115AC6U-ND	2.2 to 16.7 PSI Absolute Pressure Sensor, 0.2 to 4.8 Volt Output	Ported SOP	17.51	15.30	13.46
MPXM2010D-ND	0 to 1.45 PSI Differential Pressure Sensor, 25mV Full Scale Span	MPAK	7.20	5.80	5.32
MPXM2010GS-ND	0 to 1.45 PSI Gauge Pressure Sensor, 25mV Full Scale Span	Ported MPAK	7.38	5.95	5.46
MPXM2053D-ND	0 to 7.25 PSI Differential Pressure Sensor, 40mV Full Scale Span	MPAK	7.20	5.80	5.32
MPXM2053GS-ND	0 to 7.25 PSI Gauge Pressure Sensor, 40mV Full Scale Span	Ported MPAK	7.38	5.95	5.46
MPXM2102A-ND	0 to 14.5 PSI Absolute Pressure Sensor, 40mV Full Scale Span, 1% Linearity	MPAK	7.20	5.80	5.32
MPXM2102AS-ND	0 to 14.5 PSI Absolute Pressure Sensor, 40mV Full Scale Span, 1% Linearity	Ported MPAK	7.38	5.95	5.46
MPXM2102D-ND	0 to 14.5 PSI Differential Pressure Sensor, 40mV Full Scale Span, 0.4% Linearity	MPAK	7.20	5.80	5.32
MPXM2102GS-ND	0 to 14.5 PSI Gauge Pressure Sensor, 40mV Full Scale Span, 0.4% Linearity	Ported MPAK	7.38	5.95	5.46
MPXM2202A-ND	0 to 29 PSI Absolute Pressure Sensor, 40mV Full Scale Span, 1% Linearity	MPAK	7.20	5.80	5.32
MPXM2202AS-ND	0 to 29 PSI Absolute Pressure Sensor, 40mV Full Scale Span, 1% Linearity	Ported MPAK	7.38	5.95	5.46
MPXM2202D-ND	0 to 29 PSI Differential Pressure Sensor, 40mV Full Scale Span, 0.4% Linearity	MPAK	7.20	5.80	5.32
MPXM2202GS-ND	0 to 29 PSI Gauge Pressure Sensor, 40mV Full Scale Span, 0.4% Linearity	Ported MPAK	7.38	5.95	5.46
MPXV5004GC6U-ND	0 to 0.57 PSI Gauge Pressure Sensor, 1.0 to 4.9 Volts Output *NEW!*	482A (ported)	21.35	15.92	14.64

Smoke Detection

Digi-Key Part No.	Description	Pkg.	Price Each ★		
			1	25	100
MC14467P1-ND	Ionization Smoke Detector	16-Dip	1.68	1.00	.90
MC145012P-ND	Photoelectric Smoke Detector	16-Dip	2.93	2.03	1.77

MOTOROLA TELECOMMUNICATIONS

Digi-Key Part No.	Description	Pkg.	Price Each ★		
			1	25	100
MC145481DW-ND	3 Volt PCM Codec-Filter *NEW!*	20-SOG	5.56	3.81	3.37
MC145481SD-ND	3 Volt PCM Codec-Filter *NEW!*	20-SSOP	5.56	3.81	3.37
MC145483SD-ND	3 Volt 13-Bit Linear PCM Codec-Filter *NEW!*	20-SSOP	5.71	3.91	3.46
MC145484DW-ND	5 Volt PCM Codec-Filter	20-SOG	4.10	3.08	2.98
MC145484SDCT-ND	5 Volt PCM Codec-Filter	20-SSOP	4.62	3.47	3.35
MC145484SDTR-ND	5 Volt PCM Codec-Filter	20-SSOP	4417.50/1,500		
MC145572AFN-ND	Universal Interface ISDN Transceiver *NEW!*	44-PLCC	26.94	21.43	18.46
MC145572APB-ND	ISDN Interface Transceiver	44-TQFP	16.75	14.64	12.87
MC145574ADW-ND	S/T Interface ISDN Transceiver *NEW!*	28-SOIC	11.82	7.65	7.17
MC145574APB-ND	S/T Interface ISDN Transceiver *NEW!*	32-TQFP	10.57	7.65	6.86
MC14LC5480DW-ND	5 Volt PCM Codec-Filter *NEW!*	20-SOG	5.20	3.57	3.16
MC14LC5480DWCT-ND	5 Volt PCM Codec-Filter	20-SOG	4.12	3.09	2.99
MC14LC5480DWTR-ND	5 Volt PCM Codec-Filter	20-SOG	2627.00/1,000		
MC14LC5480SDCT-ND	5 Volt PCM Codec-Filter	20-SSOP	4.62	3.47	3.35
MC14LC5480SDTR-ND	5 Volt PCM Codec-Filter	20-SSOP	4417.50/1,500		
MC14LC5540DW-ND	Adaptive Differential PCM Codec *NEW!*	28-SOG	12.70	9.18	8.23
MC33390D-ND	Class B Serial Link Transceiver *NEW!*	8-SOIC	2.89	1.71	1.44
MC34118DW3CT-ND	Voice Switch Speakerphone	28-SOIC	6.88	5.16	4.99
MC34118DW3TR-ND	Voice Switch Speakerphone	28-SOIC	4386.00/1,000		
MC34118DWTR-ND	Voice Switch Speakerphone	28-SOIC	1466.00/1,000		
MC34119DCT-ND	Low Power Audio Amplifier	8-SOIC	1.37	.70	.63
MC68160AFB-ND	Enhanced Ethernet Transceiver	52-LQFP	17.82	14.36	13.17
MC92501GC-ND	Asynchronous Transfer Mode Cell Processor	256-PBGA	146.33	—	—

intel EMBEDDED INTEL ARCHITECTURE MICROPROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
KU80C186EC20	802933-ND	20MHz, 16-Bit, Enhanced 80C186 MPU, 5V	100-QFP	21.15	16.65	12.60
KU80C186EC25	802951-ND	25MHz, 16-Bit, Enhanced 80C186 MPU, 5V	100-QFP	21.15	16.65	12.60
TN80C186EB20	802875-ND	20MHz, 16-Bit Enhanced 80C186 MPU, 5V	84-PLCC	17.74	13.97	10.57
N80C186EA25	802825-ND	25MHz, 16-Bit, 80C186EA MPU, 5V, Extended Temperature	68-PLCC	14.81	11.66	8.82
TN80C186EA13	802768-ND	13MHz, 16-Bit, 80C186EA MPU, 5V, Extended Temperature	68-PLCC	14.81	11.66	8.82
TN80C186EA20	802799-ND	20MHz, 16-Bit, 80C186EA MPU, 5V, Extended Temperature	68-PLCC	14.81	11.66	8.82
N80C186EB25	802891-ND	25MHz, 16-Bit, 80C186EB MPU, 5V, Extended Temperature	84-PLCC	17.63	13.88	10.50
S80C186EB25	802897-ND	25MHz, 16-Bit, 80C186EB MPU, 5V, Extended Temperature	80-MQFP	18.21	14.34	10.85
SB80C186EB20	802869-ND	20MHz, 16-Bit, 80C186EB MPU, 5V, Extended Temperature	80-SQFP	17.27	13.60	10.29
SB80C186EB25	802905-ND	25MHz, 16-Bit, 80C186EB MPU, 5V, Extended Temperature	80-SQFP	17.27	13.60	10.29
TN80C186EB13	802851-ND	13MHz, 16-Bit, 80C186EB MPU, 5V, Extended Temperature	84-PLCC	17.74	13.97	10.57
TS80C186EB13	802853-ND	13MHz, 16-Bit, 80C186EB MPU, 5V, Extended Temperature	80-MQFP	17.27	13.60	10.29
TS80C186EB20	802885-ND	20MHz, 16-Bit, 80C186EB MPU, 5V, Extended Temperature	80-MQFP	17.27	13.60	10.29
A80C186ECI	802919-ND	25MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	132-CPGA	62.32	49.20	42.64
KU80C186EC13	802925-ND	13MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	100-QFP	21.15	16.65	12.60
S80C186EC25	802957-ND	25MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	100-MQFP	20.70	16.30	12.34
SB80C186EC13	808819-ND	13MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	100-SQFP	21.00	16.60	13.50
SB80C186EC20	802939-ND	20MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	100-SQFP	21.00	16.60	13.50
SB80C186EC25	802965-ND	25MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	100-SQFP	21.00	16.60	13.50
TS80C186EC13	808820-ND	13MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	100-MQFP	20.70	16.30	12.34
TS80C186EC20	802945-ND	20MHz, 16-Bit, 80C186EC MPU, 5V, Extended Temperature	100-MQFP	20.70	16.30	12.34
A80C186XL12	803000-ND	12MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-PGA	40.53	32.04	26.06
A80C186XL20	803128-ND	20MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-PGA	40.53	32.04	26.06
A80C186XL25	803250-ND	25MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-PGA	40.53	32.04	26.06
A80C186XLI	802971-ND	25MHz, 16-Bit, 80C186XL Microprocessor, 5V	132-CPGA	57.86	45.68	39.59
N80C186XL12	803020-ND	12MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-PLCC	11.14	8.91	5.88
N80C186XL20	803140-ND	20MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-PLCC	11.28	9.02	5.95
N80C186XL25	803256-ND	25MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-PLCC	11.41	9.13	6.02
N80C188XL12	803698-ND	12MHz, 16-Bit, 80C188XL Microprocessor, 5V	68-PLCC	11.14	8.91	5.88
N80C188XL20	803820-ND	20MHz, 16-Bit, 80C188XL Microprocessor, 5V	68-PLCC	11.28	9.02	5.95

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EMBEDDED INTEL ARCHITECTURE MICROPROCESSORS *(Continued)*

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
R80C186XL12	803057-ND	12MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-LCC	33.08	26.15	21.27
R80C186XL20	803196-ND	20MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-LCC	35.28	27.89	22.68
R80C186XL25	803262-ND	25MHz, 16-Bit, 80C186XL Microprocessor, 5V	68-LCC	33.08	26.15	21.27
S80C186XL12	803063-ND	12MHz, 16-Bit, 80C186XL Microprocessor, 5V	80-MQFP	13.06	10.45	6.89
S80C186XL20	803199-ND	20MHz, 16-Bit, 80C186XL Microprocessor, 5V	80-MQFP	13.06	10.45	6.89
S80C186XL25	803269-ND	25MHz, 16-Bit, 80C186XL Microprocessor, 5V	80-MQFP	13.06	10.45	6.89
SB80C186XL12	808823-ND	12MHz, 16-Bit, 80C186XL Microprocessor, 5V	80-SQFP	13.04	10.27	7.77
SB80C186XL20	808824-ND	20MHz, 16-Bit, 80C186XL Microprocessor, 5V	80-SQFP	13.04	10.27	7.77
SB80C186XL25	808825-ND	25MHz, 16-Bit, 80C186XL Microprocessor, 5V	80-SQFP	13.04	10.27	7.77
TA80C186XL12	803069-ND	12MHz, 16-Bit, 80C186XL MPU, 5V, Extended Temperature	68-PGA	42.74	33.79	27.48
TA80C186XL20	803206-ND	20MHz, 16-Bit, 80C186XL MPU, 5V, Extended Temperature	68-PGA	42.74	33.79	27.48
TN80C186XL12	803077-ND	12MHz, 16-Bit, 80C186XL MPU, 5V, Extended Temp.	68-PLCC	11.14	8.91	5.88
TN80C186XL20	803212-ND	20MHz, 16-Bit, 80C186XL Microprocessor, 5V, Ext. Temp.	68-PLCC	11.28	9.02	5.95
TR80C186XL12	803091-ND	12MHz, 16-Bit, 80C186XL MPU, 5V, Extended Temperature	68-LCC	35.28	27.89	22.68
TR80C186XL20	803233-ND	20MHz, 16-Bit, 80C186XL MPU, 5V, Extended Temperature	68-LCC	35.28	27.89	22.68
TS80C186XL12	803097-ND	12MHz, 16-Bit, 80C186XL MPU, 5V, Extended Temperature	80-MQFP	13.34	10.67	7.04
TS80C186XL20	803242-ND	20MHz, 16-Bit, 80C186XL MPU, 5V, Extended Temperature	80-MQFP	13.34	10.67	7.04
TN80L186EA13	806072-ND	13MHz, 16-Bit, 80L186EA Enhanced, MPU, 3V, Extended Temp.	68-PLCC	14.81	11.66	8.82
N80L186EB16	806093-ND	16MHz, 16-Bit, 80L186EB Enhanced MPU, 3V, Extended Temp.	84-PLCC	17.63	13.88	10.50
S80L186EB16	806099-ND	16MHz, 16-Bit, 80L186EB Enhanced MPU, 3V, Extended Temp.	80-MQFP	18.21	14.34	10.85
SB80L186EB13	808880-ND	13MHz, 16-Bit, 80L186EB Enhanced MPU, 3V, Extended Temp.	80-SQFP	17.27	13.60	10.29
SB80L186EB16	806105-ND	16MHz, 16-Bit, 80L186EB Enhanced MPU, 3V, Extended Temp.	80-SQFP	17.27	13.60	10.29
TN80L186EB13	806081-ND	13MHz, 16-Bit, 80L186EB Enhanced MPU, 3V, Extended Temp.	84-PLCC	17.74	13.97	10.57
TS80L186EB13	806087-ND	13MHz, 16-Bit, 80L186EB Enhanced MPU, 3V, Extended Temp.	80-MQFP	17.27	13.60	10.29
KU80L186EC13	806111-ND	13MHz, 16-Bit, 80L186EC Enhanced MPU, 3V, Extended Temp.	100-QFP	21.15	16.65	12.60
KU80L186EC16	806116-ND	16MHz, 16-Bit, 80L186EC Enhanced MPU, 3V, Extended Temp.	100-QFP	21.15	16.65	12.60
S80L186EC16	808881-ND	16MHz, 16-Bit, 80L186EC Enhanced MPU, 3V, Extended Temp.	100-MQFP	20.70	16.30	12.34
SB80L186EC13	809626-ND	13MHz, 16-Bit, 80L186EC Enhanced MPU, 3V, Extended Temp.	100-SQFP	21.00	16.60	13.50
TN80C188EB13	803537-ND	13MHz, 16-Bit, 80C188 Enhanced MPU, 5V, Extended Temp.	84-PLCC	17.74	13.97	10.57
TN80C188EB20	803562-ND	20MHz, 16-Bit, 80C188 Enhanced MPU, 5V, Extended Temp.	84-PLCC	17.74	13.97	10.57
TS80C188EB20	803586-ND	20MHz, 16-Bit, 80C188 Enhanced MPU, 5V, Extended Temp.	80-QFP	17.27	13.60	10.29
N80C188EA25	808826-ND	25MHz, 16-Bit, 80C188EA MPU, 5V, Extended Temperature	68-PLCC	14.81	11.66	8.82
TN80C188EA13	803477-ND	13MHz, 16-Bit, 80C188EA MPU, 5V, Extended Temperature	68-PLCC	14.81	11.66	8.82
TN80C188EA20	803497-ND	20MHz, 16-Bit, 80C188EA MPU, 5V, Extended Temperature	68-PLCC	14.81	11.66	8.82
N80C188EB25	803592-ND	25MHz, 16-Bit, 80C188EB MPU, 5V, Extended Temperature	84-PLCC	17.63	13.88	10.50
S80C188EB25	803598-ND	25MHz, 16-Bit, 80C188EB MPU, 5V, Extended Temperature	80-MQFP	18.21	14.34	10.85
SB80C188EB13	803520-ND	13MHz, 16-Bit, 80C188EB MPU, 5V, Extended Temperature	80-SQFP	17.27	13.60	10.29
SB80C188EB20	803555-ND	20MHz, 16-Bit, 80C188EB MPU, 5V, Extended Temperature	80-SQFP	17.27	13.60	10.29
SB80C188EB25	803604-ND	25MHz, 16-Bit, 80C188EB MPU, 5V, Extended Temperature	80-SQFP	17.27	13.60	10.29
TS80C188EB13	803549-ND	13MHz, 16-Bit, 80C188EB MPU, 5V, Extended Temperature	80-MQFP	17.27	13.60	10.29
KU80C188EC13	803612-ND	13MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-QFP	21.15	16.65	12.60
KU80C188EC20	803638-ND	20MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-QFP	21.15	16.65	12.60
KU80C188EC25	803656-ND	25MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-QFP	21.15	16.65	12.60
S80C188EC25	803664-ND	25MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-MQFP	20.70	16.30	12.34
SB80C188EC13	803618-ND	13MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-SQFP	21.00	16.60	13.50
SB80C188EC20	803644-ND	20MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-SQFP	21.00	16.60	13.50
SB80C188EC25	808828-ND	25MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-SQFP	21.00	16.60	13.50
TS80C188EC13	803632-ND	13MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-QFP	20.70	16.30	12.34
TS80C188EC20	803650-ND	20MHz, 16-Bit, 80C188EC MPU, 5V, Extended Temperature	100-MQFP	20.70	16.30	12.34
A80C188XL12	803689-ND	12MHz, 16-Bit, 80C188XL MPU, 5V	68-PGA	40.53	32.04	26.06
A80C188XL20	803812-ND	20MHz, 16-Bit, 80C188XL MPU, 5V	68-PGA	40.53	32.04	26.06
A80C188XL25	803884-ND	25MHz, 16-Bit, 80C188XL MPU, 5V	68-PGA	40.53	32.04	26.06
N80C188XL25	803895-ND	25MHz, 16-Bit, 80C188XL MPU, 5V	68-PLCC	11.41	9.13	6.02
R80C188XL12	803742-ND	12MHz, 16-Bit, 80C188XL MPU, 5V	68-LCC	33.08	26.15	21.27
R80C188XL20	803844-ND	20MHz, 16-Bit, 80C188XL MPU, 5V	68-LCC	35.28	27.89	22.68
R80C188XL25	803902-ND	25MHz, 16-Bit, 80C188XL MPU, 5V	68-LCC	35.28	27.89	22.68
S80C188XL12	803759-ND	12MHz, 16-Bit, 80C188XL MPU, 5V	80-MQFP	13.06	10.45	6.89
S80C188XL20	803850-ND	20MHz, 16-Bit, 80C188XL MPU, 5V	80-MQFP	13.06	10.45	6.89
S80C188XL25	808831-ND	25MHz, 16-Bit, 80C188XL MPU, 5V	80-MQFP	13.06	10.45	6.89
SB80C188XL12	803769-ND	12MHz, 16-Bit, 80C188XL MPU, 5V	80-SQFP	13.04	10.27	7.77
SB80C188XL20	803856-ND	20MHz, 16-Bit, 80C188XL MPU, 5V	80-SQFP	13.04	10.27	7.77
SB80C188XL25	803908-ND	25MHz, 16-Bit, 80C188XL MPU, 5V	80-SQFP	13.04	10.27	7.77
TA80C188XL12	803775-ND	12MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	68-PGA	42.74	33.79	27.48
TA80C188XL20	803862-ND	20MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	68-PGA	42.74	33.79	27.48
TN80C188XL12	803787-ND	12MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	68-PLCC	10.86	8.69	5.73
TN80C188XL20	803867-ND	20MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	68-PLCC	11.28	9.02	5.95
TR80C188XL12	803799-ND	12MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	68-LCC	35.28	27.89	22.68
TR80C188XL20	803873-ND	20MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	68-LCC	35.28	27.89	22.68
TS80C188XL12	803806-ND	12MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	80-MQFP	13.34	10.67	7.04
TS80C188XL20	803878-ND	20MHz, 16-Bit, 80C188XL MPU, 5V, Extended Temperature	80-MQFP	13.34	10.67	7.04
TN80L188EA13	806131-ND	13MHz, 16-Bit, 80L188EA Enhanced MPU, 3V, Extended Temp.	68-PLCC	14.81	11.66	8.82
N80L188EB16	806163-ND	16MHz, 16-Bit, 80L188EB Enhanced MPU, 3V, Extended Temp.	84-PLCC	17.63	13.88	10.50
SB80L188EB16	806175-ND	16MHz, 16-Bit, 80L188EB Enhanced MPU, 3V, Extended Temp.	80-SQFP	17.27	13.60	10.29
TN80L188EB13	806149-ND	13MHz, 16-Bit, 80L188EB Enhanced MPU, 3V, Extended Temp.	84-PLCC	17.74	13.97	10.57
TS80L188EB13	806156-ND	13MHz, 16-Bit, 80L188EB Enhanced MPU, 3V, Extended Temp.	80-MQFP	17.27	13.60	10.29
KU80L188EC13	806192-ND	13MHz, 16-Bit, 80L188EC Enhanced MPU, 3V, Extended Temp.	100-QFP	21.15	16.65	12.60
SB80L188EC13	806197-ND	13MHz, 16-Bit, 80L188EC Enhanced MPU, 3V, Extended Temp.	100-SQFP	21.00	16.60	13.50
SB80L188EC16	809627-ND	16MHz, 16-Bit, 80L188EC Enhanced MPU, 3V, Extended Temp.	100-SQFP	21.00	16.60	13.50
TS80L188EC13	808882-ND	13MHz, 16-Bit, 80L188EC Enhanced MPU, 3V, Extended Temp.	100-MQFP	20.70	16.30	12.34
A80386DX16	807050-ND	16MHz, 32-Bit, 386DX Processor, 5.0V	132-PGA	44.10	34.86	28.35
A80386DX20	807066-ND	20MHz, 32-Bit, 386DX Processor, 5.0V	132-PGA	44.10	34.86	28.35
A80386DX25	807094-ND	25MHz, 32-Bit, 386DX Processor, 5.0V	132-PGA	44.10	34.86	28.35
A80386DX33	807129-ND	33MHz, 32-Bit, 386DX Processor, 5.0V	132-PGA	44.10	34.86	28.35
NG80386DX16	807054-ND	16MHz, 32-Bit, 386DX Processor, 5.0V	132-QFP	13.87	10.92	8.26
NG80386DX20	807082-ND	20MHz, 32-Bit, 386DX Processor, 5.0V	132-QFP	13.87	10.92	8.26
NG80386DX25	807111-ND	25MHz, 32-Bit, 386DX Processor, 5.0V	132-QFP	13.87	10.92	8.26
NG80386DX33	807141-ND	33MHz, 32-Bit, 386DX Processor, 5.0V	132-QFP	13.87	10.92	8.26
A80386EXI	807153-ND	33MHz, 32-Bit, 386EX Processor, 5.0V	168-CPGA	68.40	54.00	46.80
FA80386EXTB25	807257-ND	25MHz, 32-Bit, 386EX Integrated Processor, 3.3V, Ext. Temp.	144-TQFP	26.25	20.75	16.88
FA80386EXTC25	807267-ND	25MHz, 32-Bit, 386EX Integrated Processor, 5.0V, Ext. Temp.	144-TQFP	21.00	16.60	13.50
FA80386EXTC33	807274-ND	33MHz, 32-Bit, 386EX Integrated Processor, 5.0V, Ext. Temp.	144-TQFP	22.05	17.43	14.18
KU80386EXTB25	807262-ND	25MHz, 386EX Integrated Processor, 3.3V	132-QFP	27.30	21.58	17.55
KU80386EXTC25	807271-ND	25MHz, 386EX Integrated Processor, 5.0V	132-QFP	23.10	18.26	14.85
KU80386EXTC33	807277-ND	33MHz, 386EX Integrated Processor, 5.0V	132-QFP	23.63	18.68	15.19
KU80386SXTA25	800169-ND	25MHz, 32-Bit, 386SX Processor, 5.0V, Extended Temperature	100-QFP	15.04	11.84	8.96
KU80386SXTA33	800175-ND	33MHz, 32-Bit, 386SX Processor, 5.0V, Extended Temperature	100-QFP	15.04	11.84	8.96
KU80386SXTA40	800183-ND	40MHz, 32-Bit, 386SX Processor, 5.0V, Extended Temperature	100-QFP	15.04	11.84	8.96
NG80386SX16	800214-ND	16MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10
NG80386SX20	800273-ND	20MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10
NG80386SX25	800310-ND	25MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10
NG80386SX33	800353-ND	33MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10
NG80386SXLP16	800104-ND	16MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10

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EMBEDDED INTEL ARCHITECTURE MICROPROCESSORS *(Continued)*

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
NG80386SXLP20	800112-ND	20MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10
NG80386SXLP25	800134-ND	25MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10
NG80386SXLP33	800149-ND	33MHz, 32-Bit, 386SX Processor, 5.0V	100-QFP	15.28	12.03	9.10
A80486DX2SA50SX912	800940-ND	50MHz, 32-Bit, 486DX2 MPU, 5.0V	168-PGA	54.15	42.75	37.05
A80486DX2SA66SX911	800948-ND	66MHz, 32-Bit, 486DX2 MPU, 5.0V	168-PGA	55.58	43.88	38.03
SB80486DX2SC50SX920	800952-ND	50MHz, 32-Bit, 486DX2 MPU, 3.3V	208-SQFP	42.00	33.20	27.00
A80486DX4WB100SK096	801069-ND	100MHz, 32-Bit, 486DX4 Microprocessor, 3.3V	168-PGA	65.46	51.68	44.79
A80486DX4WB100SK101	808894-ND	100MHz, 32-Bit, 486DX4 MPU, 3.3V	168-PGA	65.46	51.68	44.79
FC80486DX4WB100SL2M9	816435-ND	100MHz, 32-Bit, 486DX4 MPU, 3.3V	208-SQFP	44.10	34.86	28.35
FA80486GXSF33	801241-ND	33MHz, 32-Bit 486GX MPU, 3.3V	176-TQFP	33.08	26.15	21.27
A80486SXSA25SX930	801266-ND	25MHz, 32-Bit, 486SX MPU, 5.0V	168-PGA	62.23	49.13	42.58
A80486SXSA33SX931	801301-ND	33MHz, 32-Bit, 486SX MPU, 5.0V	168-PGA	63.18	49.88	43.23
FA80486SXSF33	801362-ND	33MHz, 32-Bit, 486SX MPU, 3.3V	176-TQFP	41.90	33.12	26.94
KU80486SXSA25SX934	801281-ND	25MHz, 32-Bit, 486SX MPU, 5.0V	196-QFP	54.63	43.13	37.38
KU80486SXSA33SX935	801318-ND	33MHz, 32-Bit, 486SX MPU, 5.0V	196-QFP	55.58	43.88	38.03
FV80524RX300128SL36A	820704-ND	300MHz, Celeron, 66MHz Bus, 128K L2 Cache, 2.0V	370-PGA	41.80	33.00	28.60
FV80524RX366128SL36C	820706-ND	366MHz, Celeron, 66MHz Bus, 128K L2 Cache, 2.0V	370-PGA	39.60	34.80	30.60
FV80524RX433128SL3BA	821636-ND	433MHz, Celeron, 66MHz Bus, 128K L2 Cache, 2.0V	370-PGA	42.90	37.70	33.15
KC80524KX366128SL3C7	822451-ND	366MHz, LP Celeron, 66MHz Bus, 128K L2 Cache, 1.6V	615-BGA	105.60	92.80	81.60
KC80526LY400128SL4J8	830981-ND	400MHz, LP Celeron, 100MHz Bus, 128K L2 Cache, 1.3V	495-BGA	115.50	101.50	89.25
RB80526RX566128SL4PC	831081-ND	566MHz, Celeron, 66MHz Bus, 128K L2 Cache 1.8V	370-PGA	82.50	72.50	63.75
RB80526RX733128SL4P7	831082-ND	733MHz, Celeron, 66MHz Bus, 128K L2 Cache, 1.8V	370-PGA	99.00	87.00	76.50
A8050266100SL2TU	818463-ND	100MHz, Pentium I, 66MHz Bus, 3.3V	296-CPGA	66.54	52.53	45.53
A8050266133SY022	801827-ND	133MHz, Pentium I, 66MHz Bus, 3.3V	296-CPGA	66.54	52.53	45.53
A8050266166SY016	801878-ND	166MHz, Pentium I, 66MHz Bus, 3.3V	296-CPGA	83.60	66.00	57.20
A80502CSLM66133SY028	801524-ND	133MHz, Pentium I, 66MHz Bus, 3.3V	296-CPGA	66.54	52.53	45.53
FV8050366200SL27J	813127-ND	200MHz, Pentium I with MMX, 66MHz Bus, 2.8V	296-PGA	72.20	57.00	49.40
FV8050366233SL27S	813324-ND	233MHz, Pentium I with MMX, 66MHz Bus, 2.8V	296-PGA	76.00	60.00	52.00
FV80503CSM66166SL2ZX	819416-ND	166MHz, Pentium I with MMX, 66MHz Bus, 1.9V	296-PGA	68.40	54.00	46.80
FV80503CSM66266SL2Z4	819033-ND	266MHz, Pentium I with MMX, 66MHz Bus, 1.9V	296-PGA	70.95	62.35	54.83
GC80503CS166EXTSL3B8	822631-ND	166MHz, Pentium I with MMX, 66MHz Bus, 1.8V, Low Power	352-BGA	66.50	52.50	45.50
GC80503CSM66166SL388	821225-ND	166MHz, Pentium I with MMX, 66MHz Bus, 1.9V	352-BGA	62.70	49.50	42.90
GC80503CSM66266SL389	821226-ND	266MHz, Pentium I with MMX, 66MHz Bus, 1.9V	352-BGA	66.00	58.00	51.00
KC80524KX266256SL32Q	820516-ND	266MHz, Pentium II, 66MHz Bus, 256K L2 Cache, 1.6V	615-BGA	99.00	87.00	76.50
KC80524KX333256SL32S	820520-ND	333MHz, Pentium II, 66MHz Bus, 256K L2 Cache, 1.6V	615-BGA	105.60	92.80	81.60
KC80526LY500256SL4JP	830978-ND	500MHz, LP Pentium III, 100MHz Bus, 256K L2 Cache, 1.3V	495-BGA	242.06	227.50	218.40
RB80526PY700256SL4CH	830150-ND	700MHz, Pentium III, 100MHz Bus, 256K L2 Cache, 1.8V	370-PGA	126.35	118.75	114.00
RB80526PY850256SL4CC	830147-ND	850MHz, Pentium III, 100MHz Bus, 256K L2 Cache, 1.8V	370-PGA	184.87	173.75	166.80
RB80526PZ733256SL4CG	830140-ND	733MHz, Pentium III, 133MHz Bus, 256K L2 Cache, 1.8V	370-PGA	133.00	125.00	120.00
RB80526PZ866256SL4CB	830138-ND	866MHz, Pentium III, 133MHz Bus, 256K L2 Cache, 1.8V	370-PGA	184.87	173.75	166.80

PROCESSOR MODULES

Intel Part No.	Digi-Key Part No.	Description	Price Each ★ 1	10	100
LPM22CUBF500A	833443-ND	Pentium III, 500MHz, Low Power Module	317.87	298.75	286.80
LPM22PDF333A	833446-ND	Pentium II, 333MHz, Low Power Module	271.32	255.00	244.80
LPM25P2F266A	833449-ND	Pentium II, 266MHz, Low Power Module	320.53	301.25	289.20

STRONG ARM® PROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
21281CB	821350-ND	200MHz, Strong Arm SA-110 Microprocessor	144-TQFP	44.08	34.80	30.16
21281DB	821351-ND	166MHz, Strong Arm SA-110 Microprocessor	144-TQFP	30.98	24.49	19.92
21281EB	821352-ND	233MHz, Strong Arm SA-110 Microprocessor	144-TQFP	59.22	46.76	40.53
21285AB	821310-ND	Core Logic for SA-110 MPU	256-BGA	44.73	35.36	28.76

NETWORK PROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
GCIXP1200EA	829314-ND	2V, 166MHz, Network Processor	432-BGA	192.32	180.75	173.52
GCIXP1200EB	829764-ND	2V, 200MHz, Network Processor	432-BGA	251.90	236.75	227.28
GCIXP1200FA	833952-ND	2V, 166MHz, Network Processor	432-BGA	192.32	180.75	173.52
GCIXP1200FB	833954-ND	2V, 200MHz, Network Processor	432-BGA	251.90	236.75	227.28
GCIXP1200FC	833956-ND	2V, 232MHz, Network Processor	432-BGA	338.09	317.75	305.04

I/O PROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
GC80303 S L57T	833962-ND	100MHz, 3.3V, I/O Processor, 64-Bit PCI-PCI Bridge	540-BGA	126.06	110.78	97.41
GC80960RM100SL3YZ	827794-ND	100MHz, 3.3V, I/O Processor, 32-Bit PCI-PCI Bridge	540-BGA	102.00	89.64	78.83
GC80960RN100SL3YW	827744-ND	100MHz, i960RN 32-Bit I/O Processor, 64-Bit PCI-PCI Bridge	540-BGA	123.63	108.65	95.54

MCS® 51 MICROCONTROLLERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
D80C31BH1SF88	809473-ND	5V, 16MHz, 8-Bit MPU	40-CDip	3.60	2.88	1.71
LD80C31BH1SF88	809474-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-CDip	5.00	4.00	2.38
LN80C31BH1SF88	809475-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	44-PLCC	5.00	4.00	2.38
LP80C31BH1SF88	809476-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-Dip	5.00	4.00	2.38
N80C31BH1SF88	809480-ND	5V, 16MHz, 8-Bit MPU	44-PLCC	3.60	2.88	1.71
N80C31BH24SF88	809494-ND	5V, 24MHz, 8-Bit MPU	44-PLCC	3.60	2.88	1.71
P80C31BH1SF88	809484-ND	5V, 16MHz, 8-Bit MPU	40-Dip	3.60	2.88	1.71
P80C31BH24SF88	809495-ND	5V, 24MHz, 8-Bit MPU	40-Dip	3.60	2.88	1.71
S80C31BH1SF88	809486-ND	5V, 16MHz, 8-Bit MPU	44-MQFP	3.60	2.88	1.71
S80C31BH24SF88	811520-ND	5V, 24MHz, 8-Bit MPU	44-QFP	3.60	2.88	1.71
TD80C31BH1SF88	823321-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-CDip	4.20	3.36	2.00
TN80C31BH1SF88	810026-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	44-PLCC	4.20	3.36	2.00
TP80C31BH1SF88	809488-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-Dip	4.20	3.36	2.00
TS80C31BH1SF88	809489-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	44-QFP	4.20	3.36	2.00
N80C321SF88	809512-ND	5V, 16MHz, 8-Bit MPU	44-PLCC	4.40	3.52	2.09
N80C3224SF88	809521-ND	5V, 24MHz, 8-Bit MPU	44-PLCC	4.40	3.52	2.09
P80C321SF88	809515-ND	5V, 16MHz, 8-Bit MPU	40-Dip	4.40	3.52	2.09
P80C3224SF88	809523-ND	5V, 24MHz, 8-Bit MPU	40-Dip	4.40	3.52	2.09
S80C321SF88	809516-ND	5V, 16MHz, 8-Bit MPU	44-MQFP	4.40	3.52	2.09
S80C3224SF88	810024-ND	5V, 24MHz, 8-Bit MPU	44-MQFP	4.40	3.52	2.09
TN80C321SF88	809517-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	44-PLCC	5.00	4.00	2.38
TN80C3224SF88	809524-ND	5V, 24MHz, 8-Bit MPU, Ext. Temp.	44-PLCC	5.00	4.00	2.38
TP80C321SF88	809518-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-Dip	5.00	4.00	2.38
TS80C321SF88	809519-ND	5V, 16MHz, 8-Bit MPU, Extended Temperature	44-MQFP	5.00	4.00	2.38
D80C51FA1SF88	809564-ND	5V, 16MHz, 8-Bit MPU	40-CDIP	6.20	4.96	2.95
LD80C51FA1SF88	809565-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-CDip	7.60	6.08	3.61
LN80C51FA1SF88	811045-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	44-PLCC	7.60	6.08	3.61
LP80C51FA1SF88	810037-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-Dip	7.60	6.08	3.61
N80C51FA1SF88	809568-ND	5V, 16MHz, 8-Bit MPU	44-PLCC	6.20	4.96	2.95
N80C51FA24SF88	809581-ND	5V, 24MHz, 8-Bit MPU	44-PLCC	6.20	4.96	2.95
N80C51FA33SF88	810981-ND	5V, 33MHz, 8-Bit MPU	44-PLCC	6.84	5.48	3.25
N80C51RA1	804496-ND	5V, 16MHz, 8-Bit MPU	44-PLCC	9.20	7.36	4.37
N80C51RA24	804579-ND	5V, 24MHz, 8-Bit MPU	44-PLCC	6.33	5.06	3.34
N87C511SF76	810977-ND	5V, 16MHz, 8-Bit, 4K OTP EPROM MCU	44-PLCC	5.91	4.73	3.12
N87C51FA1SF76	810760-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU	44-PLCC	8.80	7.04	4.64
N87C51FA24SF76	810758-ND	5V, 24MHz, 8-Bit, 8K OTP EPROM MCU	44-PLCC	8.80	7.04	4.64
N87C51FC1	811087-ND	5V, 16MHz, 8-Bit, 32K OTP EPROM MCU	44-PLCC	9.99	7.87	5.95
N87C51RB1	807251-ND	5V, 16MHz, 8-Bit, 16K OTP EPROM MCU	44-PLCC	10.34	8.14	6.16
N87C51RC1	800186-ND	5V, 16MHz, 8-Bit, 32K OTP EPROM MCU	44-PLCC	14.10	11.10	8.40
P80C51FA1SF88	810046-ND	5V, 16MHz, 8-Bit MPU	40-Dip	6.20	4.96	2.95
P80C51FA24SF88	810039-ND	5V, 24MHz, 8-Bit MPU	40-Dip	6.20	4.96	2.95
P80C51RA1	804514-ND	5V, 16MHz, 8-Bit MPU	40-Dip	9.20	7.36	4.37
P80C51RA24	804586-ND	5V, 24MHz, 8-Bit MPU	40-Dip	6.33	5.06	3.34
P87C511SF76	810992-ND	5V, 16MHz, 8-Bit, 4K OTP EPROM MCU	40-Dip	5.91	4.73	3.12
P87C51FB1SF76	811013-ND	5V, 16MHz, 8-Bit, 16K OTP EPROM MCU	40-Dip	8.81	6.94	5.25
S80C51FA1SF88	809572-ND	5V, 16MHz, 8-Bit MPU	44-MQFP	6.20	4.96	2.95
S80C51RA1	804523-ND	5V, 16MHz, 8-Bit MPU	44-MQFP	9.20	7.36	4.37
S80C51RA24	804592-ND	5V, 24MHz, 8-Bit MPU	44-MQFP	6.33	5.06	3.34
TD80C51FA1SF88	809573-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-CDip	6.80	5.44	3.23
TN80C51FA1SF88	809574-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	44-PLCC	6.80	5.44	3.23
TN80C51FA24SF88	809583-ND	5V, 24MHz, 8-Bit MPU, Ext. Temp.	44-PLCC	6.80	5.44	3.23
TP80C51FA1SF88	810034-ND	5V, 16MHz, 8-Bit MPU, Ext. Temp.	40-Dip	6.80	5.44	3.23
TS80C51FA1SF88	810998-ND	5V, 16MHz, 8-Bit MPU, Extended Temperature	44-MQFP	6.80	5.44	3.23
TS80C51RA1	804534-ND	5V, 16MHz, 8-Bit MPU Extended Temperature	44-MQFP	6.74	5.39	3.56
TS80C51RA24	804603-ND	5V, 24MHz, 8-Bit MPU Extended Temperature	44-MQFP	6.74	5.39	3.56
TS87C51FA1SF76	811518-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU, Extended Temp.	44-QFP	9.21	7.37	4.86
AN87C51FA20F8	821038-ND	5V, 20MHz, 8-Bit, 8K OTP MCU, Automotive	44-PLCC	13.84	10.90	8.25
AN87C51FC20F8	821044-ND	5V, 20MHz, 8-Bit, 32K OTP MCU, Automotive	44-PLCC	21.02	16.62	13.52
D87C511SF76	810978-ND	5V, 16MHz, 8-Bit, 4K UV EPROM MCU	40-CDip	23.50	18.50	14.00

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intel MCS® 51 MICROCONTROLLERS *(Continued)*

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
D87C5124SF76	810983-ND	5V, 24MHz, 8-Bit, 4K UV EPROM MCU	40-CDip	23.50	18.50	14.00
D87C51FA1SF76	804397-ND	5V, 16MHz, 8-Bit, 8K UV EPROM MCU	40-CDip	31.50	24.90	20.25
D87C51FA24SF76	810761-ND	5V, 24MHz, 8-Bit, 8K UV EPROM MCU	40-CDip	31.50	24.90	20.25
D87C51FB1SF76	810694-ND	5V, 16MHz, 8-Bit, 16K UV EPROM MCU	40-CDip	35.70	28.22	22.95
D87C51FB24SF76	810695-ND	5V, 24MHz, 8-Bit, 16K UV EPROM MCU	40-CDip	35.70	28.22	22.95
D87C51FC1SF76	811047-ND	5V, 16MHz, 8-Bit, 32K UV EPROM MCU	40-CDip	38.85	30.71	24.98
D87C51FC20SF76	811050-ND	5V, 20MHz, 8-Bit, 32K UV EPROM MCU	40-CDip	38.85	30.71	24.98
D87C51FC24SF76	811048-ND	5V, 24MHz, 8-Bit, 32K UV EPROM MCU	40-CDip	38.85	30.71	24.98
D87C51FC33SF76	811051-ND	5V, 33MHz, 8-Bit, 32K UV EPROM MCU	40-CDip	42.74	33.79	27.48
LD87C511SF76	823330-ND	5V, 16MHz, 8-Bit, 4K UV EPROM MCU, Extended Temperature	40-CDip	24.32	19.15	14.49
LD87C5124SF76	811517-ND	5V, 24MHz, 8-Bit, 4K UV EPROM MCU, Extended Temperature	40-CDip	21.74	17.19	13.98
LD87C51FA1SF76	823333-ND	5V, 16MHz, 8-Bit, 8K UV EPROM MCU, Extended Temperature	40-CDip	32.24	25.49	20.73
LD87C51FB1SF76	823337-ND	5V, 16MHz, 8-Bit, 16K UV EPROM MCU, Extended Temperature	40-CDip	36.44	28.81	23.43
LD87C51FC1SF76	823339-ND	5V, 16MHz, 8-Bit, 32K UV EPROM MCU, Extended Temperature	40-CDip	39.59	31.30	25.45
LN87C511SF76	823401-ND	5V, 16MHz, 8-Bit, 4K OTP MCU, Extended Temperature	44-PLCC	6.88	5.50	3.63
LN87C51FA1SF76	823334-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-PLCC	9.76	7.81	5.15
LN87C51FC20SF76	811064-ND	5V, 20MHz, 8-Bit, 32K OTP MCU, Extended Temperature	44-PLCC	10.81	8.51	6.44
LN87C51FC24SF76	812078-ND	5V, 24MHz, 8-Bit, 32K OTP MCU, Extended Temperature	44-PLCC	10.81	8.51	6.44
LP87C51FC1SF76	823340-ND	5V, 16MHz, 8-Bit, 32K OTP MCU, Extended Temperature	40-Dip	10.81	8.51	6.44
LP87C51SF76	811044-ND	5V, 12MHz, 8-Bit, 4K OTP MCU, Extended Temperature	40-Dip	6.88	5.50	3.63
N87C5124SF76	810976-ND	5V, 24MHz, 8-Bit, 4K OTP MCU	44-PLCC	5.91	4.73	3.12
N87C51FA33SF76	810753-ND	5V, 33MHz, 8-Bit, 8K OTP MCU	44-PLCC	9.68	7.75	5.11
N87C51FB1SF76	812060-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	44-PLCC	8.81	6.94	5.25
N87C51FB20SF76	810972-ND	5V, 20MHz, 8-Bit, 16K OTP MCU	44-PLCC	8.81	6.94	5.25
N87C51FB24SF76	811012-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	44-PLCC	8.81	6.94	5.25
N87C51FB33SF76	811022-ND	5V, 33MHz, 8-Bit, 16K OTP MCU	44-PLCC	9.71	7.65	5.79
N87C51FC24SF76	811089-ND	5V, 24MHz, 8-Bit, 32K OTP MCU	44-PLCC	9.99	7.87	5.95
N87C51FC33SF76	811090-ND	5V, 33MHz, 8-Bit, 32K OTP MCU	44-PLCC	11.00	8.66	6.56
N87C51RA1	806959-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	44-PLCC	9.40	7.40	5.60
N87C51RA24	807119-ND	5V, 24MHz, 8-Bit, 8K OTP MCU	44-PLCC	9.40	7.40	5.60
N87C51RB24	807306-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	44-PLCC	10.34	8.14	6.16
N87C51RC24	800338-ND	5V, 24MHz, 8-Bit, 32K OTP MCU	44-PLCC	14.10	11.10	8.40
P87C5124SF76	811003-ND	5V, 24MHz, 8-Bit, 4K OTP MCU	40-Dip	5.91	4.73	3.12
P87C51FA1SF76	810744-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	40-Dip	8.80	7.04	4.64
P87C51FA24SF76	810748-ND	5V, 24MHz, 8-Bit, 8K OTP MCU	40-Dip	8.80	7.04	4.64
P87C51FA33SF76	810756-ND	5V, 33MHz, 8-Bit, 8K OTP MCU	40-Dip	9.68	7.75	5.11
P87C51FB24SF76	811020-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	40-Dip	8.81	6.94	5.25
P87C51FB33SF76	810366-ND	5V, 33MHz, 8-Bit, 16K OTP MCU	40-Dip	9.71	7.65	5.79
P87C51FC1SF76	811076-ND	5V, 16MHz, 8-Bit, 32K OTP MCU	40-Dip	9.99	7.87	5.95
P87C51FC24SF76	811077-ND	5V, 24MHz, 8-Bit, 32K OTP MCU	40-Dip	9.99	7.87	5.95
P87C51FC33SF76	811074-ND	5V, 33MHz, 8-Bit, 32K OTP MCU	40-Dip	11.00	8.66	6.56
P87C51RA1	806971-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	40-Dip	9.40	7.40	5.60
P87C51RA24	807140-ND	5V, 24MHz, 8-Bit, 8K OTP MCU	40-Dip	9.40	7.40	5.60
P87C51RB1	807273-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	40-Dip	10.34	8.14	6.16
P87C51RB24	807310-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	40-Dip	10.34	8.14	6.16
P87C51RC1	800209-ND	5V, 16MHz, 8-Bit, 32K OTP MCU	40-Dip	14.10	11.10	8.40
P87C51RC24	800354-ND	5V, 24MHz, 8-Bit, 32K OTP MCU	40-Dip	14.10	11.10	8.40
S87C511SF76	823331-ND	5V, 16MHz, 8-Bit, 4K OTP MCU	44-MQFP	5.91	4.73	3.12
S87C51FA1SF76	804439-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	44-MQFP	8.80	7.04	4.64
S87C51FA24SF76	810749-ND	5V, 24MHz, 8-Bit, 8K OTP MCU	44-MQFP	8.80	7.04	4.64
S87C51FB1SF76	805377-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	44-MQFP	8.81	6.94	5.25
S87C51FB24SF76	811017-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	44-MQFP	8.81	6.94	5.25
S87C51FB33SF76	811019-ND	5V, 33MHz, 8-Bit, 16K OTP MCU	44-MQFP	9.71	7.65	5.79
S87C51FC1SF76	806104-ND	5V, 16MHz, 8-Bit, 32K OTP MCU	44-MQFP	9.99	7.87	5.95
S87C51FC24SF76	811081-ND	5V, 24MHz, 8-Bit, 32K OTP MCU	44-MQFP	9.99	7.87	5.95
S87C51RA1	806989-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	44-MQFP	9.40	7.40	5.60
S87C51RA24	807154-ND	5V, 24MHz, 8-Bit, 8K OTP MCU	44-MQFP	9.40	7.40	5.60
S87C51RB1	807279-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	44-MQFP	10.34	8.14	6.16
S87C51RB24	807314-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	44-MQFP	10.34	8.14	6.16
S87C51RC1	800221-ND	5V, 16MHz, 8-Bit, 32K OTP MCU	44-MQFP	14.10	11.10	8.40
S87C51RC24	800375-ND	5V, 24MHz, 8-Bit, 32K OTP MCU	44-MQFP	14.10	11.10	8.40
TD87C511SF76	823332-ND	5V, 16MHz, 8-Bit, 4K UV EPROM MCU, Extended Temperature	40-CDip	21.32	16.85	13.71
TD87C51FA1SF76	810773-ND	5V, 16MHz, 8-Bit, 8K UV EPROM MCU, Extended Temperature	40-CDip	31.82	25.15	20.46
TD87C51FB1SF76	811041-ND	5V, 16MHz, 8-Bit, 16K UV EPROM MCU, Extended Temperature	40-CDip	36.02	28.47	23.16
TD87C51FC1SF76	811040-ND	5V, 16MHz, 8-Bit, 32K UV EPROM MCU, Extended Temperature	40-CDip	39.17	30.96	25.18
TD87C51FC24SF76	812080-ND	5V, 24MHz, 8-Bit, 32K UV EPROM MCU, Extended Temperature	40-CDip	39.17	30.96	25.18
TN87C511SF76	811004-ND	5V, 16MHz, 8-Bit, 4K OTP MCU, Extended Temperature	44-PLCC	6.33	5.06	3.34
TN87C5124SF76	810989-ND	5V, 24MHz, 8-Bit, 4K OTP MCU, Extended Temperature	44-PLCC	6.33	5.06	3.34
TN87C51FA1SF76	810774-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-PLCC	9.21	7.37	4.86
TN87C51FA24SF76	810975-ND	5V, 24MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-PLCC	9.21	7.37	4.86
TN87C51FB1SF76	812042-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temperature	44-PLCC	9.17	7.22	5.46
TN87C51FB20SF76	810996-ND	5V, 20MHz, 8-Bit, 16K OTP MCU, Extended Temperature	44-PLCC	9.17	7.22	5.46
TN87C51FB24SF76	812495-ND	5V, 24MHz, 8-Bit, 16K OTP MCU, Extended Temperature	44-PLCC	9.17	7.22	5.46
TN87C51FC1SF76	812059-ND	5V, 16MHz, 8-Bit, 32K OTP MCU, Extended Temperature	44-PLCC	10.34	8.14	6.16
TN87C51FC24SF76	811071-ND	5V, 24MHz, 8-Bit, 32K OTP MCU, Extended Temperature	44-PLCC	10.34	8.14	6.16
TN87C51RA1	807001-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-PLCC	9.75	7.68	5.81
TN87C51RB24	807318-ND	5V, 24MHz, 8-Bit, 16K OTP MCU, Extended Temperature	44-PLCC	10.69	8.42	6.37
TN87C51RC24	800391-ND	5V, 24MHz, 8-Bit, 32K OTP MCU, Extended Temperature	44-PLCC	14.45	11.38	8.61
TP87C511SF76	811000-ND	5V, 16MHz, 8-Bit, 4K OTP MCU, Extended Temperature	40-Dip	6.33	5.06	3.34
TP87C51FA1SF76	810986-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temperature	40-Dip	9.21	7.37	4.86
TP87C51FA24SF76	810990-ND	5V, 24MHz, 8-Bit, 8K OTP MCU, Extended Temperature	40-Dip	9.21	7.37	4.86
TP87C51FB1SF76	811023-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temperature	40-Dip	9.17	7.22	5.46
TP87C51FB24SF76	811015-ND	5V, 24MHz, 8-Bit, 16K OTP MCU, Extended Temperature	40-Dip	9.17	7.22	5.46
TP87C51FC1SF76	814033-ND	5V, 16MHz, 8-Bit, 32K OTP MCU, Extended Temperature	40-Dip	10.34	8.14	6.16
TP87C51RB24	807320-ND	5V, 24MHz, 8-Bit, 16K OTP MCU, Extended Temperature	40-Dip	10.69	8.42	6.37
TP87C51RC24	800408-ND	5V, 24MHz, 8-Bit, 32K OTP MCU, Extended Temperature	40-Dip	14.45	11.38	8.61
TS87C51FA24SF76	810982-ND	5V, 24MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-MQFP	9.21	7.37	4.86
TS87C51FB1SF76	812058-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temperature	44-MQFP	9.17	7.22	5.46
TS87C51FCSF76	812079-ND	5V, 12MHz, 8-Bit, 32K OTP MCU, Extended Temperature	44-MQFP	10.34	8.14	6.16
TS87C51RA1	807033-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-MQFP	9.75	7.68	5.81
TS87C51RA24	807166-ND	5V, 24MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-MQFP	9.75	7.68	5.81
TS87C51RB1	807285-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temperature	44-MQFP	10.69	8.42	6.37
TS87C51RB24	807322-ND	5V, 24MHz, 8-Bit, 16K OTP MCU, Extended Temperature	44-MQFP	10.69	8.42	6.37
TS87C51RC24	800417-ND	5V, 24MHz, 8-Bit, 32K OTP MCU, Extended Temperature	44-MQFP	14.45	11.38	8.61
D87C521SF76	810764-ND	5V, 16MHz, 8-Bit, 8K UV EPROM MCU	40-CDip	24.15	19.09	15.53
D87C5224SF76	810751-ND	5V, 24MHz, 8-Bit, 8K UV EPROM MCU	40-CDip	24.15	19.09	15.53
N87C521SF76	810755-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU	44-PLCC	6.88	5.50	3.63
N87C5224SF76	810752-ND	5V, 24MHz, 8-Bit, 8K OTP MCU	44-PLCC	6.88	5.50	3.63
N87C5233SF76	810763-ND	5V, 33MHz, 8-Bit, 8K OTP MCU	44-PLCC	7.56	6.05	3.99
P87C521SF76	810765-ND	5V, 16MHz, 8-Bit, 8K OTP EPROM MCU	40-Dip	6.88	5.50	3.63
P87C5224SF76	810767-ND	5V, 24MHz, 8-Bit, 8K OTP MCU	40-Dip	6.88	5.50	3.63
P87C5233SF76	810768-ND	5V, 33MHz, 8-Bit, 8K OTP MCU	40-Dip	7.56	6.05	3.99
S87C521SF76	810770-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	44-MQFP	6.88	5.50	3.63
TD87C521SF76	823336-ND	5V, 16MHz, 8-Bit, 8K UV EPROM MCU, Extended Temperature	40-CDip	24.47	19.34	15.73
TN87C521SF76	810688-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-PLCC	7.29	5.83	3.85
TN87C5224SF76	819853-ND	5V, 24MHz, 8-Bit, 8K OTP MCU, Extended Temperature	44-PLCC	7.29	5.83	3.85
AN87C54F8	821116-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Automotive	44-PLCC	14.52	11.44	8.66
D87C541SF76	810730-ND	5V, 16MHz, 8-Bit, 16K UV EPROM MCU	40-CDip	26.25	20.75	16.88
D87C5433SF76	810732-ND	5V, 33MHz, 8-Bit, 16K UV EPROM MCU	40-CDip	28.88	22.83	18.57
N87C541SF76	810719-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	44-PLCC	7.70	6.16	4.06
N87C5424SF76	810720-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	44-PLCC	7.70	6.16	4.06
N87C5433SF76	810721-ND	5V, 33MHz, 8-Bit, 16K OTP MCU	44-PLCC	7.24	5.70	4.32
P87C541SF76	810716-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	40-Dip	7.70	6.16	4.06
P87C5424SF76	810717-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	40-Dip	7.70	6.16	4.06
S87C541SF76	810369-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	44-MQFP	7.70	6.16	4.06
S87C5424SF76	810712-ND	5V, 24MHz, 8-Bit, 16K OTP MCU	44-MQFP	7.70	6.16	4.06
TD87C541SF76	823347-ND	5V, 16MHz, 8-Bit, 16K UV EPROM MCU, Extended Temp.	40-CDip	26.57	21.00	17.08
D87C581SF76	810738-ND	5V, 16MHz, 8-Bit, 32K UV EPROM MCU	40-CDip	28.98	22.91	18.63
D87C5833SF76	810739-ND	5V, 33MHz, 8-Bit, 32K UV EPROM MCU	40-CDip	31.88	25.20	20.50
N87C581SF76	810724-ND	5V, 16MHz, 8-Bit, 32K OTP MCU	44-PLCC	7.05	5.55	4.20
N87C5833SF76	810725-ND	5V, 33MHz, 8-Bit, 32K OTP MCU	44-PLCC	7.76	6.11	4.62
P87C581SF76	823402-ND	5V, 16MHz, 8-Bit, 32K OTP MCU	40-Dip	7.05	5.55	4.20
P87C5820SF76	810728-ND	5V, 20MHz, 8-Bit, 32K OTP MCU	40-Dip	7.05	5.55	4.20
P87C5833SF76	810729-ND	5V, 33MHz, 8-Bit, 32K OTP MCU	40-Dip	7.76	6.11	4.62
S87C581SF76	810734-ND	5V, 16MHz, 8-Bit, 32K OTP MCU	44-MQFP	7.05	5.55	4.20

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MCS® 96 MICROCONTROLLERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
N80C196KB16	804072-ND	5V, 16MHz, 16-Bit MPU	68-PLCC	10.86	8.69	5.73
N80C196KC20	804097-ND	5V, 20MHz, 16-Bit MPU	68-PLCC	14.34	11.29	8.54
N80C196MC	804195-ND	5V, 16MHz, 16-Bit Industrial Motor Control MPU	84-PLCC	16.45	12.95	9.80
N80C196MD	804212-ND	5V, 16MHz, 16-Bit Industrial Motor Control MPU	84-PLCC	17.16	13.51	10.22
N80C196MH	804221-ND	5V, 16MHz, 16-Bit Industrial Motor Control MPU	84-PLCC	19.27	15.17	11.48
N80C196NT	804261-ND	5V, 20MHz, 16-Bit Event Processor Array MPU	68-PLCC	20.68	16.28	12.32
S80C196EA	816572-ND	5V, 40MHz, 16-Bit Event Processor Array MPU	160-QFP	18.90	14.94	12.15
S80C196KB16	804079-ND	5V, 16MHz, 16-Bit HS I/O MPU	80-QFP	10.86	8.69	5.73
S80C196KC20	804117-ND	5V, 20MHz, 16-Bit HS I/O MPU	80-MQFP	14.34	11.29	8.54
S80C196MC	804203-ND	5V, 16MHz, 16-Bit Industrial Motor Control MPU	80-MQFP	16.45	12.95	9.80
S80C196MH	804227-ND	5V, 16MHz, 16-Bit Industrial Motor Control MPU	80-MQFP	19.27	15.17	11.48
S80C196NP25	804249-ND	5V, 25MHz, 16-Bit Event Processor Array MPU	100-QFP	17.63	13.88	10.50
S80C196NU40	804302-ND	5V, 40MHz, 16-Bit Event Processor Array MPU	100-QFP	18.80	14.80	11.20
S80C196NU50	804314-ND	5V, 50MHz, 16-Bit Event Processor Array MPU	100-QFP	20.68	16.28	12.32
SB80C196KC20	811735-ND	5V, 20MHz, 16-Bit HS I/O MPU	80-SQFP	14.34	11.29	8.54
SB80C196NP	804243-ND	5V, 25MHz, 16-Bit Event Processor Array MPU	100-SQFP	17.63	13.88	10.50
SB80C196NP25	804256-ND	5V, 25MHz, 16-Bit Event Processor Array MPU	100-SQFP	17.63	13.88	10.50
SB80C196NU40	804308-ND	5V, 40MHz, 16-Bit Event Processor Array MPU	100-SQFP	18.80	14.80	11.20
SB80C196NU50	804321-ND	5V, 50MHz, 16-Bit Event Process or Array MPU	100-SQFP	18.48	14.61	11.88
TN80C196KB16	808448-ND	5V, 16MHz, 16-Bit MPU, Extended Temperature	68-PLCC	11.28	9.02	5.95
TN80C196KC20	804155-ND	5V, 20MHz, 16-Bit High Speed I/O MPU, Extended Temperature	68-PLCC	14.69	11.57	8.75
TN80C196NT	804267-ND	5V, 20MHz, 16-Bit Event Processor Array MPU, Extended Temp.	68-PLCC	18.80	14.86	12.09
AN87C196CA18F8	820749-ND	5V, 18MHz, 16-Bit, 32K OTP MCU, Automotive	68-PLCC	39.63	31.33	25.48
AN87C196CAF8	820748-ND	5V, 16MHz, 16-Bit, 32K OTP MCU, Automotive	68-PLCC	39.63	31.33	25.48
AN87C196CB20	807838-ND	5V, 20MHz, 16-Bit, 56K OTP MCU, Automotive	84-PLCC	39.48	31.21	25.38
AN87C196JRF8	821035-ND	5V, 16MHz, 16-Bit, 16K OTP MCU, Automotive	52-PLCC	19.74	15.61	12.69
AN87C196JTWB	828605-ND	5V, 16MHz, 16-Bit, 32K OTP MCU, Automotive	52-PLCC	31.50	24.90	20.25
AN87C196JTWB20	828470-ND	5V, 20MHz, 16-Bit, 32K OTP MCU, Automotive	52-PLCC	37.80	29.88	24.30
AN87C196JV20F8	821068-ND	5V, 20MHz, 16-Bit, 48K OTP MCU, Automotive	52-PLCC	44.98	35.56	28.92
AN87C196KC16F8	820746-ND	5V, 16MHz, 16-Bit, 16K OTP MCU, Automotive	68-PLCC	18.90	14.94	12.15
AN87C196KDF8	820752-ND	5V, 16MHz, 16-Bit, 32K OTP MCU, Automotive	68-PLCC	25.20	19.92	16.20
AN87C196KRF8	820754-ND	5V, 16MHz, 16-Bit, 32K OTP MCU, Automotive	68-PLCC	29.53	23.34	18.99
AN87C196KTF8	820756-ND	5V, 16MHz, 16-Bit, 16K OTP MCU, Automotive	68-PLCC	44.67	35.31	28.72
AN87C196LA20F8	821030-ND	5V, 20MHz, 16-Bit, 24K OTP MCU, Automotive	52-PLCC	33.62	26.58	21.62
AS87C196CB20F8	821067-ND	5V, 20MHz, 16-Bit, 56K OTP MCU, Automotive	100-QFP	39.48	31.21	25.38
N87C196KB16	802532-ND	5V, 16MHz, 16-Bit, 8K OTP MCU	68-PLCC	18.92	14.90	11.27
N87C196KC20	802695-ND	5V, 20MHz, 16-Bit, 16K OTP MCU	68-PLCC	23.21	18.35	14.92
N87C196KD	802848-ND	5V, 16MHz, 16-Bit, 32K OTP MCU	68-PLCC	25.31	20.01	16.27
N87C196KD20	802914-ND	5V, 20MHz, 16-Bit, 32K OTP MCU	68-PLCC	25.31	20.01	16.27
N87C196MC	803344-ND	5V, 16MHz, 16-Bit, 16K OTP Industrial Motor Control MCU	84-PLCC	17.85	14.11	11.48
N87C196MD	803624-ND	5V, 16MHz, 16-Bit, 16K OTP MCU	84-PLCC	18.48	14.61	11.88
N87C196MH	803661-ND	5V, 16MHz, 16-Bit, 32K OTP MCU	84-PLCC	19.95	15.77	12.83
N87C196NT	803728-ND	5V, 20MHz, 16-Bit, 32K OTP MCU	68-PLCC	27.30	21.58	17.55
S87C196KB16	802539-ND	5V, 16MHz, 16-Bit, 8K OTP MCU	80-QFP	18.92	14.90	11.27
S87C196KC20	802755-ND	5V, 20MHz, 16-Bit, 16K OTP MCU	80-MQFP	23.21	18.35	14.92
S87C196KD	802861-ND	5V, 16MHz, 16-Bit, 32K OTP MCU	80-MQFP	25.31	20.01	16.27
S87C196KD20	802931-ND	5V, 20MHz, 16-Bit, 32K OTP MCU	80-MQFP	25.31	20.01	16.27
S87C196MC	803364-ND	5V, 16MHz, 16-Bit, 16K OTP MCU	80-MQFP	17.85	14.11	11.48
S87C196MCSF81	803538-ND	5V, 16MHz, 16-Bit, 16K OTP MCU	80-MQFP	17.85	14.11	11.48
S87C196MD	803636-ND	5V, 16MHz, 16-Bit, 16K OTP MCU	80-MQFP	18.48	14.61	11.88
S87C196MH	803677-ND	5V, 16MHz, 16-Bit, 32K OTP Industrial Motor Control MCU	80-QFP	19.95	15.77	12.83
S87C196MHSF81	803697-ND	5V, 16MHz, 16-Bit, 32K OTP MCU	80-MQFP	19.95	15.77	12.83
SB87C196KC20	802774-ND	5V, 20MHz, 16-Bit, 16K OTP MCU	80-SQFP	23.21	18.35	14.92
SB87C196KD20	802938-ND	5V, 20MHz, 16-Bit, 32K OTP MCU	80-SQFP	25.31	20.01	16.27
TN87C196CA	817074-ND	5V, 16MHz, 16-Bit, 32K OTP MCU, Extended Temp.	68-PLCC	24.89	19.68	16.00
TN87C196CB	817075-ND	5V, 16MHz, 16-Bit, 56K OTP MCU, Extended Temp.	84-PLCC	30.77	24.32	19.78
TN87C196KB16	802547-ND	5V, 16MHz, 16-Bit, 8K OTP MCU, Extended Temp.	68-PLCC	19.27	15.17	11.48
TN87C196KC20	802788-ND	5V, 20MHz, 16-Bit, 16K OTP MCU, Extended Temp.	68-PLCC	23.52	18.60	15.12
TN87C196NT	803734-ND	5V, 20MHz, 16-Bit, 32K OTP MCU, Extended Temp.	68-PLCC	27.62	21.83	17.76
U87C196MC	803558-ND	5V, 16MHz, 16-Bit, 16K OTP MCU	64-SDip	18.90	14.94	12.15
U87C196MCSF81	803613-ND	5V, 16MHz, 16-Bit, 16K OTP MCU	64-SDip	18.90	14.94	12.15
U87C196MH	803703-ND	5V, 16MHz, 16-Bit, 32K OTP MCU	64-SDip	21.00	16.60	13.50
U87C196MHSF81	803716-ND	5V, 16MHz, 16-Bit, 32K OTP MCU	64-SDip	21.00	16.60	13.50

MCS® 251 MICROPROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
N80C251SB16SF87	804421-ND	5V, 16MHz, 8-Bit MPU, 1K Register RAM	44-PLCC	11.25	9.00	5.94
N80C251SQ16	804459-ND	5V, 16MHz, 8-Bit MPU, 512 Byte Register RAM	44-PLCC	10.70	8.56	5.65
N80C251TB24	816721-ND	5V, 24MHz, 8-Bit MPU, 1K Register RAM	44-PLCC	9.65	7.73	5.09
N80C251TQ24	816722-ND	5V, 24MHz, 8-Bit MPU, 512K Register RAM	44-PLCC	9.16	7.33	4.83
P80C251SB16	804434-ND	5V, 16MHz, 8-Bit MPU, 1K Register RAM	40-Dip	11.25	9.00	5.94
P80C251SQ16	804477-ND	5V, 16MHz, 8-Bit MPU, 512 Byte Register RAM	40-Dip	10.70	8.56	5.65
P80C251TB24	816703-ND	5V, 24MHz, 8-Bit MPU, 1K Register RAM	40-Dip	9.65	7.73	5.09
P80C251TQ24	816704-ND	5V, 24MHz, 8-Bit MPU, 512K Register RAM	40-Dip	9.16	7.33	4.83
TN80C251SB16	804441-ND	5V, 16MHz, 8-Bit MPU, 1K Register RAM, Ext. Temp.	44-PLCC	11.66	9.33	6.15
TN80C251SQ16	804487-ND	5V, 16MHz, 8-Bit MPU, 512 Byte Register RAM, Ext. Temp.	44-PLCC	11.11	8.89	5.86
TN80C251TB24	816729-ND	5V, 24MHz, 8-Bit MPU, 1K Register RAM, Ext. Temp.	44-PLCC	10.07	8.06	5.31
TN80C251TQ24	816720-ND	5V, 24MHz, 8-Bit MPU, 512K Register RAM, Ext. Temp.	44-PLCC	9.57	7.66	5.05
TP80C251SB16	804453-ND	5V, 16MHz, 8-Bit MPU, 1K Register RAM, Extended Temp.	40-Dip	11.66	9.33	6.15
TP80C251SQ16	804495-ND	5V, 16MHz, 8-Bit MPU, 512 Byte Register RAM, Extended Temp.	40-Dip	11.11	8.89	5.86
TP80C251TB24	816714-ND	5V, 24MHz, 8-Bit MPU, 1K Register RAM, Extended Temp.	40-Dip	10.07	8.06	5.31
TP80C251TQ24	816718-ND	5V, 24MHz, 8-Bit MPU, 512K Register RAM, Ext. Temp.	40-Dip	9.57	7.66	5.05
N87C251SA16	803771-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	44-PLCC	10.58	8.33	6.30
N87C251SB16SF87	803916-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	44-PLCC	11.75	9.25	7.00
N87C251SP16	803998-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	44-PLCC	10.34	8.14	6.16
N87C251SQ16	804054-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	44-PLCC	11.16	8.79	6.65
P87C251SA16	803788-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	40-Dip	10.58	8.33	6.30
P87C251SB16	803923-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	40-Dip	11.75	9.25	7.00
P87C251SP16	804007-ND	5V, 16MHz, 8-Bit, 8K OTP MCU	40-Dip	10.34	8.14	6.16
P87C251SQ16	804066-ND	5V, 16MHz, 8-Bit, 16K OTP MCU	40-Dip	11.16	8.79	6.65
TN87C251SA16	803800-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temp.	44-PLCC	10.93	8.61	6.51
TN87C251SB16	803953-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temp.	44-PLCC	12.10	9.53	7.21
TN87C251SP16	804021-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temp.	44-PLCC	10.69	8.42	6.37
TN87C251SQ16	804087-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temp.	44-PLCC	11.52	9.07	6.86
TP87C251SA16	803809-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temp.	40-Dip	10.93	8.61	6.51
TP87C251SB16	803973-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temp.	40-Dip	12.10	9.53	7.21
TP87C251SP16	804036-ND	5V, 16MHz, 8-Bit, 8K OTP MCU, Extended Temp.	40-Dip	10.69	8.42	6.37
TP87C251SQ16	804103-ND	5V, 16MHz, 8-Bit, 16K OTP MCU, Extended Temp.	40-Dip	11.52	9.07	6.86

MCS® 296 MICROPROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
S80296SA40	806832-ND	5V, 40MHz, 16-Bit MPU	100-QFP	22.05	17.43	14.18
S80296SA50	806844-ND	5V, 50MHz, 16-Bit MPU	100-QFP	24.26	19.18	15.60

i960 MICROPROCESSORS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
A80960CA16	802846-ND	16MHz, i960CA, 32-Bit MPU with DMA, 1K Cache	168-PGA	64.85	51.20	44.37
A80960CA25	802884-ND	25MHz, i960CA, 32-Bit MPU with DMA, 1K Cache	168-PGA	69.96	55.23	47.87
A80960CA33	802946-ND	33MHz, i960CA, 32-Bit MPU with DMA, 1K Cache	168-PGA	83.56	65.97	57.18
A80960CF16	802987-ND	16MHz, i960CF, 32-Bit MPU with DMA, 4K Cache *NEW!*	168-PGA	76.76	60.60	52.52
A80960CF25	803021-ND	25MHz, i960CF, 32-Bit MPU with DMA, 4K Cache	168-PGA	86.60	68.37	59.26
A80960CF33	803084-ND	33MHz, i960CF, 32-Bit MPU with DMA, 4K Cache	168-PGA	89.78	78.90	69.38

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i960 MICROPROCESSORS *(Continued)*

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
A80960CF40	803133-ND	40MHz, i960CF, 32-Bit MPU with DMA, 4K Cache	168-PGA	111.47	97.97	86.14
A80960HA33SL2GY	813629-ND	33MHz, i960HA, 32-Bit MPU, 3.3V, 16K Cache	168-PGA	87.06	68.73	59.57
A80960HA40SL2GZ	813628-ND	40MHz, i960HA, 32-Bit MPU, 3.3V, 16K Cache	168-PGA	90.74	71.64	62.09
A80960HD32SL2GG	815232-ND	32MHz, i960HD, 32-Bit MPU, 16MHz Bus, 16K Cache *NEW!*	168-PGA	92.25	72.83	63.12
A80960HD50SL2GH	815231-ND	50MHz, i960HD, 32-Bit MPU, 3.3V, 16K Cache	168-CPGA	85.19	74.87	65.83
A80960HD66SL2GJ	815230-ND	66MHz, i960HD, 32-Bit MPU, 33MHz Bus, 3.3V	168-CPGA	91.66	80.55	70.83
A80960HD80SL2GK	815177-ND	80MHz, i960HD, 32-Bit MPU, 40MHz Bus, 3.3V	168-CPGA	113.87	100.07	87.99
A80960HT75SL2GP	814114-ND	75MHz, i960HT, 32-Bit MPU, 3.3V, 16K Cache	168-PGA	101.76	89.43	78.63
A80960JA3V25	819528-ND	25MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache	132-PGA	48.09	37.97	32.91
A80960JA3V33	819529-ND	33MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache	132-PGA	53.77	42.45	36.79
A80960JD3V33	819533-ND	33MHz, i960JD, 32-Bit MPU, 16MHz Bus, 3.3V, 4K Cache *NEW!*	132-PGA	63.35	50.01	43.35
A80960JD3V40	819534-ND	40MHz, i960JD, 32-Bit MPU, 20MHz Bus, 3.3V, 4K Cache *NEW!*	132-PGA	67.51	53.30	46.19
A80960JD3V50	819536-ND	50MHz, i960JD, 32-Bit MPU, 3.3V, 4K Cache	132-PGA	74.18	58.56	50.76
A80960JD3V66	819538-ND	66MHz, i960JD, 32-Bit MPU, 3.3V, 4K Cache	132-QFP	80.09	63.23	54.80
A80960JF3V16	819539-ND	16MHz, i960JF, 32-Bit MPU, 3.3V, 4K Cache *NEW!*	132-PGA	51.32	40.52	35.12
A80960JF3V25	819540-ND	25MHz, i960JF, 32-Bit MPU, 3.3V, 4K Cache *NEW!*	132-PGA	58.60	46.26	40.10
A80960JF3V33	819542-ND	33MHz, i960JF, 32-Bit MPU, 3.3V, 4K Cache	132-PGA	67.58	53.36	46.25
A80960KA16	803435-ND	16MHz, i960KA, 32-Bit MPU, 512 Byte Cache	132-PGA	39.90	31.54	25.65
A80960KA20	803458-ND	20MHz, i960KA, 32-Bit MPU, 512 Byte Cache	132-PGA	40.43	31.96	25.99
A80960KA25	803490-ND	25MHz, i960KA, 32-Bit MPU, 512 Byte Cache	132-PGA	42.90	33.92	27.59
A80960KB16	803496-ND	16MHz, i960KB, 32-Bit MPU, 512 Byte Cache	132-PGA	42.69	33.75	27.45
A80960KB20	803516-ND	20MHz, i960KB, 32-Bit MPU, 512 Byte Cache	132-PGA	45.70	36.13	29.38
A80960KB25	803535-ND	25MHz, i960KB, 32-Bit MPU, 512 Byte Cache	132-PGA	48.38	38.25	31.11
A80960MC25	816319-ND	25MHz, i960MC, 32-Bit MPU, 512 Byte Cache	132-CPGA	192.85	181.25	174.00
FC80960HA25SL2GU	813626-ND	25MHz, i960HA, 32-Bit MPU, 3.3V, 16K Cache	208-QFP	65.74	51.90	44.98
FC80960HA33SL2GV	813627-ND	33MHz, i960HA, 32-Bit MPU, 3.3V, 16K Cache	208-QFP	73.66	58.16	50.41
FC80960HA40SL2GW	813625-ND	40MHz, i960HA, 32-Bit MPU, 3.3V, 16K Cache	208-QFP	77.12	60.89	52.77
FC80960HD32SL2GL	815243-ND	32MHz, i960HD, 32-Bit MPU, 3.3V, 16K Cache	208-QFP	78.36	61.86	53.62
FC80960HD50SL2GM	815241-ND	50MHz, i960HD, 32-Bit MPU, 3.3V, 16K Cache	208-QFP	83.89	66.23	57.40
FC80960HD66SL2GN	815238-ND	66MHz, i960HD, 32-Bit MPU, 3.3V, 16K Cache	208-SQFP	84.86	74.58	65.58
FC80960HD80SL2LZ	815242-ND	80MHz, i960HD, 32-Bit MPU, 40MHz Bus, 3.3V	208-QFP	95.78	84.18	74.02
FC80960HT75SL2GT	815234-ND	75MHz, i960HT, 32-Bit MPU, 3.3V, 16K Cache	208-QFP	89.45	78.61	69.12
FW80960VH100	820682-ND	100MHz, i960VH, 32-Bit MPU, 3.3V, 16K Cache	324-BGA	75.43	59.55	51.61
GD80960JA25	820061-ND	25MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache	196-BGA	28.41	22.46	18.27
GD80960JA33	820063-ND	33MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache	196-BGA	35.47	28.04	22.81
GD80960JF33	819771-ND	33MHz, i960JF, 32-Bit MPU, 3.3V, 4K Cache	196-BGA	44.75	35.38	28.77
KU80960CA16	802858-ND	16MHz, i960CA, 32-Bit MPU with DMA, 1K Cache	196-QFP	49.94	39.48	32.11
KU80960CA25	802900-ND	25MHz, i960CA, 32-Bit MPU with DMA, 5V	196-QFP	57.00	45.00	39.00
KU80960CF16	802993-ND	16MHz, i960CF, 32-Bit MPU with DMA, 4K Cache *NEW!*	196-PQFP	48.37	38.19	33.10
KU80960CF25	803044-ND	25MHz, i960CF, 32-Bit MPU with DMA, 4K Cache	196-QFP	70.78	55.88	48.43
KU80960CF33	803114-ND	33MHz, i960CF, 32-Bit MPU with DMA, 4K Cache	196-QFP	85.37	67.40	58.41
N80960SA10	803819-ND	10MHz, i960SA, 32-Bit MPU, 512 Byte Cache	84-PLCC	19.98	15.73	11.90
N80960SA16	803825-ND	16MHz, i960SA, 32-Bit MPU, 512 Byte Cache	84-PLCC	21.15	16.72	13.60
N80960SA20	803859-ND	20MHz, i960SA, 32-Bit MPU, 5V	84-PLCC	22.74	17.98	14.63
N80960SA20SW227	803859TR-ND	20MHz, i960SA, 32-Bit MPU, 512 Byte Cache	84-PLCC	3519.75/250		
N80960SB10	803870-ND	10MHz, i960SB, 32-Bit MPU, 512 Byte Cache	84-PLCC	18.75	14.77	11.18
N80960SB16	803883-ND	16MHz, i960SB, 32-Bit MPU, 512 Byte Cache	84-PLCC	20.77	16.36	12.38
NG80960JA3V16819544	819544-ND	16MHz, i960JA, 32-Bit MPU, 2K Cache, 3.3V	132-QFP	23.45	18.47	13.98
NG80960JA3V16	819544-ND	16MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache *NEW!*	132-PQFP	23.45	18.47	13.98
NG80960JA3V25	819545-ND	25MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache	132-QFP	29.84	23.59	19.19
NG80960JA3V33	819546-ND	33MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache	132-QFP	35.47	28.04	22.81
NG80960JC33	820340-ND	33MHz, i960JC, 32-Bit MPU, 16MHz Bus, 16K Cache *NEW!*	132-PQFP	48.38	38.25	31.11
NG80960JC40	820341-ND	40MHz, i960JC, 32-Bit MPU, 20MHz Bus, 16K Cache *NEW!*	132-PQFP	47.82	37.76	32.73
NG80960JC66	820343-ND	66MHz, i960JC, 32-Bit MPU, 33MHz Bus, 16K Cache *NEW!*	132-PQFP	59.39	46.89	40.64
NG80960JC50	820342-ND	50MHz, i960JC, 32-Bit MPU, 3.3V, 16K Cache	132-QFP	53.50	42.24	36.61
NG80960JD3V40	819550-ND	40MHz, i960JD, 32-Bit MPU, 3.3V, 4K Cache	132-QFP	48.66	38.42	33.30
NG80960JD3V50	819551-ND	50MHz, i960JD, 32-Bit MPU, 3.3V, 4K Cache	132-PGA	53.92	42.57	36.90
NG80960JD3V66	819553-ND	66MHz, i960JD, 32-Bit MPU, 3.3V, 4K Cache	132-QFP	59.76	47.18	40.89
NG80960JF3V16	819555-ND	16MHz, i960JF, 32-Bit MPU, 3.3V, 4K Cache *NEW!*	132-PQFP	28.92	22.86	18.59
NG80960JF3V25	819556-ND	25MHz, i960JF, 32-Bit MPU, 3.3V, 4K Cache	132-QFP	37.42	29.59	24.06
NG80960JF3V33	819557-ND	33MHz, i960JF, 32-Bit MPU, 3.3V, 4K Cache	132-QFP	44.75	35.38	28.77
NG80960JS16	820347-ND	16MHz, i960JS, 32-Bit MPU, 16K Cache *NEW!*	132-PQFP	28.37	22.43	18.24
NG80960JS25	820348-ND	25MHz, i960JS, 32-Bit MPU, 3.3V, 16K Cache	132-QFP	35.89	28.37	23.08
NG80960JS33	820349-ND	33MHz, i960JS, 32-Bit MPU, 3.3V, 16K Cache	132-QFP	43.01	34.00	27.65
NG80960JT100	818018-ND	100MHz, i960JT, 32-Bit MPU, 3.3V, 16K Cache	132-QFP	70.26	55.47	48.08
NG80960KA16	803445-ND	16MHz, i960KA, 32-Bit MPU, 512 Byte Cache	132-QFP	22.37	17.68	14.38
NG80960KA20	803464-ND	20MHz, i960KA, 32-Bit MPU, 512 Byte Cache	132-QFP	26.12	20.65	16.80
NG80960KB16	803504-ND	16MHz, i960KB, 32-Bit MPU, 512 Byte Cache	132-QFP	24.55	19.41	15.79
NG80960KB20	803523-ND	20MHz, i960KB, 32-Bit MPU, 512 Byte Cache	132-QFP	27.43	21.68	17.64
NG80960KB25	803540-ND	25MHz, i960KB, 32-Bit MPU, 512 Byte Cache	132-QFP	30.56	24.16	19.65
S80960SA16	803843-ND	16MHz, i960SA, 32-Bit MPU, 512 Byte Cache	80-MQFP	22.26	17.60	14.31
TA80960KA16	803455-ND	16MHz, i960KA, 32-Bit MPU, 512 Byte Cache, Extended Temp.	132-PGA	43.68	34.53	28.08
TA80960KA20	803470-ND	20MHz, i960KA, 32-Bit MPU, 512 Byte Cache, Extended Temp.	132-PGA	46.18	36.51	29.69
TA80960KB16	803510-ND	16MHz, i960KB, 32-Bit MPU, 512 Byte Cache, Extended Temp.	132-PGA	47.38	37.45	30.46
TA80960KB20	803529-ND	20MHz, i960KB, 32-Bit MPU, 512 Byte Cache, Extended Temp.	132-PGA	50.17	39.66	32.26
TA80960KB25	803546-ND	25MHz, i960KB, 32-Bit MPU, 512 Byte Cache, Extended Temp.	132-PGA	48.20	38.06	32.99
TG80960JA3V25	819558-ND	25MHz, i960JA, 32-Bit MPU, 3.3V, 2K Cache, Extended Temp.	132-QFP	28.41	22.46	18.27
TG80960JC66	826102-ND	66MHz, i960JC, 32-Bit MPU, 16K Cache *NEW!*	132-PQFP	62.34	49.22	42.66
TG80960JS25	824382-ND	25MHz, i960JS, 32-Bit MPU, 3.3V, 16K Cache, Extended Temp.	132-QFP	42.88	33.90	27.57
TG80960JS33	825153-ND	33MHz, i960JS, 32-Bit MPU, 3.3V, 16K Cache, Extended Temp.	132-QFP	45.15	35.69	29.03
TG80960JT100	824389-ND	100MHz, i960JT, 32-Bit MPU, 3.3V, 16K Cache, Extended Temp.	132-QFP	73.78	58.25	50.48
TG80960KA20	803479-ND	20MHz, i960KA, 32-Bit MPU, 512 Byte Cache, Extended Temp.	132-QFP	27.43	21.68	17.64
TG80960KB25	803553-ND	25MHz, i960KB, 32-Bit MPU, 512 Byte Cache, Extended Temp.	132-QFP	33.41	26.42	21.48
TN80960SA16	803846-ND	16MHz, i960SA, 32-Bit MPU, 512 Byte Cache, Extended Temp.	84-PLCC	24.95	19.73	16.04
TN80960SB16	803896-ND	16MHz, i960SB, 32-Bit MPU, 512 Byte Cache, Extended Temp.	84-PLCC	22.77	17.93	13.57

CONTROLLERS (PCI / LAN / WAN / CAN)

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
21143PD	821337-ND	PCI/CardBus 10/100 Ethernet LAN Controller	144-QFP	18.80	14.80	11.20
21143TD	821339-ND	PCI/CardBus 10/100 Ethernet LAN Controller	144-TQFP	18.80	14.80	11.20
AN82527F8	820732-ND	CAN Protocol Serial Communications Controller, Automotive	44-PLCC	9.40	7.40	5.60
AS82527F8	820722-ND	CAN Protocol Serial Communications Controller, Automotive	44-QFP	9.40	7.40	5.60
DA82562ET	829706-ND	Platform LAN Connect (PLC) Cont.	48-SSOP	15.86	12.49	9.45
FW82439HXSU115	807787TR-ND	82439HX System Controller (MHXC)	324-BGA	6084.00/360		
FW82439HXSU115	807787CT-ND	82439HX System Controller (MHXC)	324-BGA	26.00	21.58	17.55
FW82439TXSL28T	813149TR-ND	82439TX System Controller (MTXC)	324-BGA	4189.68/360		
FW82439TXSL28T	813149CT-ND	82439TX System Controller (MTXC)	324-BGA	20.56	16.19	12.25
GCIXF440AC	831001-ND	Multiport 10/100 Mbps Ethernet Controller	352-BGA	60.61	47.85	41.47
GD82550EYSL4MJ	830751-ND	Fast Ethernet Multifunction PCI/Cardbus Controller	196-BGA	37.80	29.88	24.30
GD82559ERSL3DG	825111-ND	Fast Ethernet Multifunction PCI/Cardbus Controller	196-BGA	18.68	14.71	11.13
GD82559SL3HD	822772-ND	Fast Ethernet Multifunction PCI/Cardbus Controller	196-BGA	37.19	29.40	23.91
KU82596CA25SZ716	806726-ND	25MHz, 5V, Local Area Network Coprocessor	132-QFP	33.60	26.56	21.60
KU82596CA33SZ717	806764-ND	33MHz, 5V, Local Area Network Coprocessor	132-QFP	39.90	31.54	25.65
KU82596DX25SZ714	806807-ND	25MHz, 5V, Local Area Network Coprocessor	132-QFP	39.90	31.54	25.65
KU82596DX33SZ715	806835-ND	33MHz, 5V, Local Area Network Coprocessor	132-QFP	44.10	34.86	28.35

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CONTROLLERS (PCI / LAN / WAN / CAN) *(Continued)*

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
KU82596SX20SZ713	806867-ND	20MHz, 5V, Local Area Network Coprocessor	132-QFP	32.55	25.73	20.93
SB82371SBSU093	805436-ND	PCI ISA IDE Xcelerator (PIIX3)	208-QFP	18.80	14.80	11.20
SCD223110QCD	832550-ND	2-Ch. Serial WAN Communications Controller	100-MQFP	21.00	16.60	13.50
SCD240110QCM	832516-ND	4-Ch. Serial WAN Communications Controller	100-MQFP	37.80	29.88	24.30
SCD240210QCM	832517-ND	Intelligent Multiprotocol WAN Communications Controller	160-QFP	21.15	16.65	12.60
SCD243110QCD	832518-ND	Advanced 4-Channel Serial WAN Communications Controller	100-MQFP	37.80	29.88	24.30
SCD248110QCD	832519-ND	Programmable 4-Channel WAN Communications Controller	100-QFP	40.43	31.96	25.99
TN82527	817073-ND	CAN Protocol Serial Communications Controller	44-PLCC	10.15	8.12	5.36

ETHERNET CONTROLLERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
DA82562EM	829707-ND	10/100 Ethernet Platform LAN Connect Bus Controller	48-SSOP	21.15	16.65	12.60
GCIXF1002ED	832414-ND	Dual Port Gigabit Ethernet Media Access Controller	304-BGA	92.07	80.91	71.15
GD82550ELSL4MK	830748-ND	Fast Ethernet PCI/CardBus Cont.	196-BGA	37.80	29.88	24.30
GD82550GMSL4ML	831172-ND	Ethernet PCI/CardBus Controller *NEW!*	196-BGA	37.80	29.88	24.30
GD82550GYSL4Y5	833858-ND	Fast Ethernet PCI/CardBus Cont.	196-BGA	37.80	29.88	24.30
GD82550PMSL4Y7	834051-ND	Ethernet PCI/CardBus Controller *NEW!*	196-BGA	37.80	29.88	24.30
GD82551ER	844687-ND	Ethernet PCI/CardBus Controller *NEW!*	196-BGA	17.20	13.55	10.25
GD82559CSL3DF	825112-ND	10/100 PCI Bus Mac/PHY Ethernet Controller	196-BGA	35.70	28.22	22.95
GD82559ERSL3TU	826238-ND	10/100 PCI Bus Mac/PHY Ethernet Controller	196-BGA	20.12	15.91	12.94
RC82562EP	832361-ND	10/100 Ethernet Platform LAN Connect Bus Controller	64-BGA	21.15	16.65	12.60
S82562EH	829047-ND	10/100 Ethernet Platform LAN Connect Bus Controller	64-QFP	11.75	9.25	7.00
S82595FX	806680-ND	ISA/PCMCIA High Integration Ethernet Controller	160-MQFP	29.40	23.24	18.90
SB82558BSL2P4	816075-ND	32-Bit Fast Ethernet PCI Bus Controller with Integrated PHY	208-SQFP	35.70	28.22	22.95
TL82543GCSL4AC	829160-ND	10/100/100 PCI Bus Mac Gigabit Ethernet Controller	352-BGA	100.32	88.16	77.52

ETHERNET TRANSCEIVERS / RECEIVERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
DJLXT360LE.A2	832029-ND	1-Port Long-Haul T1/E1 Serial Transceiver	44-LQFP	22.89	18.02	13.64
DJLXT361LE.A2	832034-ND	1-Port Long-Haul T1/E1 Parallel Transceiver	44-LQFP	22.89	18.02	13.64
DJLXT362LE.A3	832036-ND	1-Port Long-Haul T1 Serial Transceiver	44-LQFP	20.66	16.27	12.31
DJLXT380LE.B4	832251-ND	3.3V, 8-Port Short-Haul E1 Transceiver	144-LQFP	56.70	44.82	36.45
DJLXT381LE.B4	832255-ND	3.3V, 8-Port Short-Haul E1 Transceiver	144-LQFP	35.70	28.22	22.95
DJLXT384LEA5834967	834967-ND	8-Port T1/E1 Short-Haul Xcvr.	144-LQFP	79.80	63.00	54.60
DJLXT386LEB2834195	834195-ND	Quad T1/E1/J1 Short-Haul Xcvr.	100-LQFP	45.15	35.69	29.03
DJLXT388LEB2834197	834197-ND	Dual T1/E1/J1 Short-Haul Xcvr.	100-LQFP	25.20	19.92	16.20
DJLXT901ALC.A4	831684-ND	5V, Univ. 10BASE-T/AUI Xcvr.	64-LQFP	12.18	9.75	6.43
DJLXT901LC.E2	831686-ND	5V, Univ. 10BASE-T/AUI Xcvr.	64-LQFP	11.11	8.89	5.86
DJLXT905LC.C2	831645-ND	3.3V/5V, Univ. 10BASE-T Xcvr.	32-LQFP	7.92	6.34	4.18
DJLXT905LE.C2	831646-ND	3.3V/5V, Univ. 10BASE-T Xcvr.	32-LQFP	10.62	8.50	5.60
DJLXT907ALC.A4	831647-ND	3.3V, Univ. 10BASE-T/AUI Xcvr.	64-LQFP	12.18	9.75	6.43
DJLXT908LC.A4	831651-ND	3.3V, Univ. 10BASE-T/AUI Xcvr.	64-LQFP	12.27	9.82	6.47
DJLXT908LE.A4	831652-ND	3.3V, Univ. 10BASE-T/AUI Xcvr.	64-LQFP	12.87	10.30	6.79
DJLXT971ALCA4834105	834105-ND	3.3V, Fast Ethernet Transceiver	64-LQFP	10.59	8.47	5.59
DJLXT971ALE.A4	835676-ND	3.3V, 10/100Mbps Ethernet Xcvr.	64-LQFP	13.31	10.65	7.02
DJLXT972ALCA4834109	834109-ND	3.3V, Fast Ethernet Transceiver	64-LQFP	8.42	6.74	4.44
FALXT970ATCB11	833825-ND	10/100Mbps Ethernet Transceiver	64-TQFP	13.65	10.75	8.14
FLLXT380BE.B4	832318-ND	3.3V, 8-Port Short-Haul E1 Transceiver	160-BGA	57.00	45.00	39.00
FLLXT381BE.B4	832063-ND	3.3V, 8-Port Short-Haul E1 Transceiver	160-BGA	36.10	28.50	24.70
FLLXT384BEA5834969	834969-ND	8-Port T1/E1 Short-Haul Xcvr.	160-BGA	72.60	63.80	56.10
FLLXT386BEB2834206	834206-ND	Quad T1/E1/J1 Short-Haul Xcvr.	160-BGA	48.30	38.18	31.05
FLLXT971ABCA4834103	834103-ND	3.3V, Fast Ethernet Transceiver	64-BGA	11.14	8.77	6.64
FLLXT971ABEA4834104	834104-ND	3.3V, Fast Ethernet Transceiver	64-BGA	12.81	10.09	7.63
FLLXT1000BAC5	838350-ND	Gigabit Ethernet Transceiver *NEW!*	492-BGA	43.22	34.17	27.79
FWLXT9781BCA9831679	831679-ND	8-Port Fast Ethernet Xcvr. (RMII)	272-BGA	21.84	17.27	14.04
HBLXT9781BC.C4	834112-ND	8-Port Fast Ethernet Transceiver (RMII)	272-BGA	21.84	17.27	14.04
FWLXT9782BCA9831681	831681-ND	8-Port Fast Ethernet Xcvr. (SMII)	272-BGA	21.84	17.27	14.04
HBLXT9782BC.C4	834115-ND	8-Port Fast Ethernet Transceiver (SMII)	272-BGA	21.84	17.27	14.04
FWLXT9784BCA3834928	834928-ND	8-Port Fast Ethernet Transceiver (SMII, RMII)	324-BGA	73.50	58.10	47.25
FWLXT9784BE.A3	833561-ND	3.3V, 8-PORT 10/100Mbps Transceiver (RMII, SMII)	324-BGA	73.50	58.10	47.25
FWLXT9785BCB1QE000	835557-ND	Low-Power 8-Port Fast Ethernet Transceiver	241-BGA	23.71	18.75	15.25
HBLXT970AHCB11	831600-ND	10/100Mbps Ethernet Xcvr.	64-HQFP	14.99	11.81	8.94
HBLXT974BHC.A8	831627-ND	5V, 4-Port 10/100 Ethernet Transceiver	160-HQFP	21.19	16.75	13.63
HBLXT975BHC.A8	831630-ND	5V, 4-Port 10/100 Ethernet Transceiver	160-HQFP	21.19	16.75	13.63
HBLXT9761HCB2835066	835066-ND	6-Port Fast Ethernet Xcvr. (RMII)	208-HQFP	18.82	14.88	12.10
HBLXT9761HC.C4	837202-ND	6-Port Fast Ethernet Xcvr. (RMII)	208-HQFP	18.82	14.88	12.10
HBLXT9762HCB2835376	835376-ND	6-Port Fast Ethernet Xcvr. (SMII)	208-HQFP	18.82	14.88	12.10
HBLXT9762HC.C4	835378-ND	6-Port Fast Ethernet Xcvr. (SMII)	208-HQFP	18.82	14.88	12.10
HBLXT9763HCA9831634	831634-ND	6-Port Fast Ethernet Xcvr. (MII)	208-HQFP	18.82	14.88	12.10
HBLXT9763HC.C4	834111-ND	6-Port Fast Ethernet Xcvr. (MII)	208-HQFP	18.82	14.88	12.10
HBLXT9781HC.C4	834114-ND	3.3V, 8-PORT 10/100Mbps Transceiver (RMII)	208-HQFP	20.16	15.94	12.96
N82503	806119-ND	Dual Serial Ethernet Transceiver (802.3 10BASE-T/AUI)	44-PLCC	11.75	9.25	7.00
NLXT305APE.F4	832103-ND	5V, T1/E1 Short-Haul Transceiver	28-PLCC	15.63	12.31	9.31
NLXT307PE.F4	832110-ND	5V, E1 Short-Haul Xcvr.	28-PLCC	13.59	10.87	7.17
NLXT317PE.A2	832059-ND	5V, Long-Haul DECT LIU Xcvr.	28-PLCC	23.96	18.95	15.41
NLXT318PE.B5	832080-ND	5V, Long-Haul E1 NTU/ISDN PRI Transceiver	28-PLCC	22.91	18.04	13.65
NLXT332PE.G2	832128-ND	5V, Short-Haul 2-Ch. LIU T1/E1 Transceiver	44-PLCC	26.25	20.75	16.88
NLXT350PE.A2	832138-ND	1-Port Short-Haul T1/E1/J1 Serial Transceiver	28-PLCC	16.45	12.95	9.80
NLXT351PE.A2	832141-ND	1-Port Short-Haul T1/E1/J1 Parallel Transceiver	28-PLCC	16.45	12.95	9.80
NLXT360PE.A2	832100-ND	1-Port Long-Haul T1/E1 Serial Transceiver	28-PLCC	21.15	16.65	12.60
NLXT361PE.A2	832102-ND	1-Port Long-Haul T1/E1 Parallel Transceiver	28-PLCC	21.15	16.65	12.60
NLXT362PE.A3	832121-ND	1-Port Long-Haul T1 Serial Transceiver	28-PLCC	19.90	15.67	11.86
NLXT901APC.A4	831653-ND	5V, Universal 10BASE-T/AUI Transceiver	44-PLCC	10.67	8.54	5.63
NLXT905PC.C2	831661-ND	3.3V/5V, Universal 10BASE-T Transceiver	28-PLCC	6.93	5.55	3.66
NLXT905PE.C2	831662-ND	3.3V/5V, Universal 10BASE-T Transceiver	28-PLCC	10.07	8.06	5.31
NLXT907APC.A4	831664-ND	3.3V, Universal 10BASE-T/AUI Transceiver	44-PLCC	11.85	9.49	6.25
NLXT907PC.E2	831666-ND	5V, Universal 10BASE-T/AUI Transceiver	44-PLCC	10.84	8.67	5.72
NLXT908PC.A4	831668-ND	3.3V, Universal 10BASE-T/AUI Transceiver	44-PLCC	11.66	9.33	6.15
NLXT908PE.A4	831669-ND	3.3V, Universal 10BASE-T/AUI Transceiver	44-PLCC	12.57	10.06	6.63
PDLXT305ANE.F4	832171-ND	5V, T1/E1 Short-Haul Xcvr.	28-Dip	16.45	12.95	9.80
PDLXT312ANE.A2	832288-ND	5V, Low Power, Dual T1 PCM Repeater/Transceiver	16-Dip	23.10	18.26	14.85
PDLXT315ANE.A2	832291-ND	5V, Low Power T1 PCM Repeater/Transceiver	16-Dip	17.74	13.97	10.57
S82503	806140-ND	Dual Serial Ethernet Transceiver (802.3 10BASE-T/AUI)	44-MQFP	11.75	9.25	7.00
SLXT332AQE.A1	832209-ND	5V, Short-Haul 2-Channel LIU T1/E1 Transceiver	44-QFP	27.30	21.58	17.55
SLXT332QE.G2	832211-ND	5V, Short-Haul 2-Channel LIU T1/E1 Transceiver	44-QFP	27.30	21.58	17.55
SLXT334QE.B3	832215-ND	5V, Short-Haul 4-Channel E1 Transceiver	64-QFP	33.18	26.23	21.33
SLXT335QE.B3	832219-ND	5V, 4-Ch. Analog Interface	64-QFP	25.20	19.92	16.20
SLXT336QE.B3	832224-ND	5V, Short-Haul 4-Channel T1/E1 Receiver	64-QFP	26.25	20.75	16.88
SLXT350QE.A2	832244-ND	1-Port Short-Haul T1/E1/J1 Serial Transceiver	44-QFP	18.80	14.80	11.20
SLXT351QE.A2	832246-ND	1-Port Short-Haul T1/E1/J1 Parallel Transceiver	44-QFP	18.80	14.80	11.20
SLXT360QE.A2	832197-ND	1-Port Long-Haul T1/E1 Serial Transceiver	44-QFP	22.89	18.02	13.64
SLXT361QE.A2	832199-ND	1-Port Long-Haul T1/E1 Parallel Transceiver	44-QFP	22.89	18.02	13.64
SLXT970AQC.B11	831643-ND	10/100Mbps Ethernet Transceiver	64-QFP	13.04	10.27	7.77

ETHERNET REPEATERS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
HBLXT980AHC.A8	831496-ND	5V, 4-Port 10/100Mbps Ethernet Repeater	208-HQFP	39.90	31.54	25.65
HBLXT983AHC.A8	831536-ND	5V, 4-Port 10/100Mbps Ethernet Repeater	208-HQFP	33.60	26.56	21.60
HBLXT983QC.A8	831540-ND	5V, 4-Port 10/100Mbps Ethernet Repeater	208-HQFP	33.60	26.56	21.60
HBLXT9860HCB3831549	831549-ND	6-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	28.98	22.91	18.63
HBLXT9860AHC.B4	837730-ND	6-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	28.98	22.91	18.63
HBLXT9863HCB3834131	834131-ND	6-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	21.86	17.29	14.06
HBLXT9863AHC.B4	837734-ND	6-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	21.86	17.29	14.06
HBLXT9880HCB3834132	834132-ND	8-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	42.76	33.80	27.49
HBLXT9880AHC.B4	837736-ND	8-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	42.76	33.80	27.49
HBLXT9883HCB3834133	834133-ND	8-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	27.32	21.60	17.57
HBLXT9883AHC.B4	837738-ND	8-Port Dual Speed 10/100 Fast Ethernet Repeater	208-HQFP	27.32	21.60	17.57
NLXT914PC.C4	831509-ND	5V, 4-Port 10Mbps Ethernet Repeater (IRB, SMI, AUI)	68-PLCC	15.96	12.57	9.51
NLXT914PE.B3	831518-ND	5V, 4-Port 10Mbps Ethernet Repeater (IRB, SMI, AUI)	68-PLCC	18.66	14.69	11.12
SLXT914QC.C4	831524-ND	5V, 4-Port 10Mbps Ethernet Repeater (IRB, AUI)	100-QFP	14.36	11.31	8.56
SLXT915QC.C4	834924-ND	5V, 4-Port 10Mbps Ethernet Repeater (IRB, AUI)	64-QFP	12.29	9.68	7.33

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TELECOM BROADBAND

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
DJLXT6155LEA4QE001	831868-ND	SDH/SONET/ATM Transceiver	64-LQFP	56.68	44.75	38.78
DJLXT6155LE.B2	834995-ND	SDH/SONET/ATM Xcvr.	64-LQFP	56.68	44.75	38.78
DJLXT6282LEA3831836	831836-ND	Octal E1 Digital Interface Xcvr.	144-LQFP	60.86	48.11	39.13
FLIXF6151BEA2834984	834984-ND	28 T1/E1 Mapper	352-BGA	126.86	119.23	114.46
IXF6401BEC7A1835148	835148-ND	Broadband Access Processor	352-BGA	274.65	258.13	247.80
SLXT6051QEA1831841	831841-ND	SDH/SONET Overhead Terminator	208-QFP	116.16	102.08	89.76
SLXT6234QEA2831690	831690-ND	E-Rate Multiplexer	100-QFP	46.23	36.50	31.63
SLXT6251AQE.A2	834982-ND	21 E1 Synchronous Digital Hierarchy Mapper	208-QFP	143.43	126.05	110.84

PCI-to-PCI BRIDGES

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
21050AB	821286-ND	PCI-to-PCI Bridge	208-QFP	30.35	23.99	19.51
S21152BB	837092-ND	32-Bit, 33MHz Transparent PCI-to-PCI Bridge	160-QFP	23.15	18.23	13.79
FW21555AA	836622-ND	64-Bit, 33MHz Transparent PCI-to-PCI Bridge	304-BGA	52.65	41.57	36.03
FW21555BA	836624-ND	64-Bit, 66MHz, PCI to PCI Bridge *NEW!*	304-BGA	72.39	57.15	49.53
FW21154AE	834404-ND	64-Bit, 33MHz Transparent PCI-to-PCI Bridge	304-BGA	47.80	37.79	30.73
FW21154BE	834405-ND	64-Bit, 66MHz Transparent PCI-to-PCI Bridge	304-BGA	52.65	41.57	36.03
GD21150AC	830011-ND	32-Bit, 33MHz Transparent PCI-to-PCI Bridge	256-LPBGA	34.29	27.11	22.05
GD21150BC	828154-ND	32-Bit, 66MHz Transparent PCI-to-PCI Bridge	256-LPBGA	42.82	33.85	27.53
SB21150AC	823168-ND	32-Bit, 33MHz Transparent PCI-to-PCI Bridge	208-QFP	39.06	30.88	25.11
SB21150BC	822894-ND	32-Bit, 66MHz Transparent PCI-to-PCI Bridge	208-QFP	42.82	33.85	27.53

INTERFACE ADAPTERS/CARDS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
SPD6722QCCE	832530-ND	ISA-to-PC Card Controller	208-MQFP	20.92	16.54	13.45
DZPD6710VCB	832520-ND	ISA-to-PC-Card Host Adapter	144-VQFP	19.62	15.45	11.69
A8238910	808498-ND	Multibus II Bus Interface Cont.	149-CPGA	138.60	121.80	107.10
DZPD6729VCE	832535-ND	PCI-to-PC Card Controller	208-LQFP	23.73	18.76	15.26
SPD6729QCE	832534-ND	PCI-to-PC Card Controller	208-MQFP	22.53	17.82	14.49
SPD6729QCC	832533-ND	PCI-to-PCMCIA Host Adapter	208-QFP	22.33	17.58	13.30
CNLA6000PK5	830447-ND	PRO/100 VE Desktop Adapter		178.95	168.19	161.46
MBLA3400C3	829954-ND	PRO/100 SR Mobile Adapter		91.77	86.25	82.80
MBLA3456C3	829957-ND	PRO/100 SR Combo Mobile Adapter		198.17	186.25	178.80
PILA8460C	832696-ND	PRO/100 S Desktop Adapter		74.25	65.25	57.38
PILA8470C3	832702-ND	PRO/100 S Server Adapter		87.45	76.85	67.58
PWLA8490SX	825706-ND	PRO/1000 F Server Adapter Card (1000BASE-SX)		675.00	664.20	648.00
PWLA8490T	825708-ND	PRO/1000 T Server Adapter Card (1000BASE-T)		198.17	186.25	178.80

FLASH MEMORY

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★		
				1	10	100
E28F008S5120	808704-ND	8Mb, 5V, FLASH Memory (1Mx8)	40-TSOP	7.99	6.29	4.76
E28F008S585	808711-ND	8Mb, 5V, FLASH Memory (1Mx8)	40-TSOP	7.99	6.29	4.76
E28F008SA120	801050-ND	8Mb, 5V, FLASH Memory (1Mx8)	40-TSOP	7.99	6.29	4.76
E28F008SA85	801338-ND	8Mb, 5V, FLASH Memory (1Mx8)	40-TSOP	7.99	6.29	4.76
PA28F008S5120	808708-ND	8Mb, 5V, FLASH Memory (1Mx8)	44-PSOP	7.99	6.29	4.76
PA28F008S585	808715-ND	8Mb, 5V, FLASH Memory (1Mx8)	44-PSOP	7.99	6.29	4.76
PA28F008SA120	801246-ND	8Mb, 5V, FLASH Memory (1Mx8)	44-PSOP	7.99	6.29	4.76
PA28F008SA85	801480-ND	8Mb, 5V, FLASH Memory (1Mx8)	44-PSOP	7.99	6.29	4.76
TB28F008S5100SL2LL	815398-ND	8Mb, 5V, FLASH Memory (1Mx8)	44-PSOP	7.99	6.29	4.76
TB28F008SA100	816471-ND	8Mb, 5V, FLASH Memory (1Mx8)	44-PSOP	7.99	6.29	4.76
TE28F008S5100SL2LL	816751-ND	8Mb, 5V, FLASH Memory (1Mx8)	40-TSOP	7.99	6.29	4.76
TE28F008SA100	811350-ND	8Mb, 5V, FLASH Memory (1Mx8)	40-TSOP	7.99	6.29	4.76
GT28F160B3BA110	819280-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	11.87	9.35	7.07
GT28F160B3BA90SB93	823475-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	12.93	10.18	7.70
GT28F160B3TA90	819068-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	12.46	9.81	7.42
GT28F160B3TA90SB93	823476-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	12.93	10.18	7.70
GT28F160C3BA110	819287-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	11.87	9.35	7.07
GT28F160C3BA90	819081-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	12.46	9.81	7.42
GT28F160C3BA90SB93	823477-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	12.46	9.81	7.42
GT28F160C3TA110	819293-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	11.87	9.35	7.07
GT28F160C3TA90	819083-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	12.46	9.81	7.42
GT28F160C3TA90SB93	823478-ND	16Mb, 3V, FLASH Memory (1Mx16)	46-MBGA	12.46	9.81	7.42
RC28F160C3BA110	830116-ND	16Mb, 3V, FLASH Memory (1Mx16)	64-BGA	11.63	9.16	6.93
RC28F160C3BA90	825547-ND	16Mb, 3V, FLASH Memory (1Mx16)	64-BGA	12.22	9.62	7.28
RC28F160C3BA90SB93	827675-ND	16Mb, 3V, FLASH Memory (1Mx16)	64-BGA	12.22	9.62	7.28
RC28F160C3TA110	830115-ND	16Mb, 3V, FLASH Memory (1Mx16)	64-BGA	11.63	9.16	6.93
RC28F160C3TA90	825548-ND	16Mb, 3V, FLASH Memory (1Mx16)	64-BGA	12.22	9.62	7.28
RC28F160C3TA90SB93	827673-ND	16Mb, 3V, FLASH Memory (1Mx16)	64-BGA	12.22	9.62	7.28
TE28F160B3BA110	819304-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.16	8.79	6.65
TE28F160B3BA90	819075-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.75	9.25	7.00
TE28F160B3BA90SB93	823471-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	12.34	9.72	7.35
TE28F160B3TA110	819305-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.16	8.79	6.65
TE28F160B3TA90	819076-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.75	9.25	7.00
TE28F160B3TA90SB93	823472-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	12.34	9.72	7.35
TE28F160C3BA90	819073-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.75	9.25	7.00
TE28F160C3BA90SB93	823473-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.75	9.25	7.00
TE28F160C3TA90	819078-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.75	9.25	7.00
TE28F160C3TA90SB93	823474-ND	16Mb, 3V, FLASH Memory (1Mx16)	48-TSOP	11.75	9.25	7.00
E28F320J3A110	834996-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	56-TSOP	16.07	12.70	10.33
E28F320J3A110SB93	834999-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	56-TSOP	17.98	14.16	10.71
E28F320J3A110SL5FS	835065-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	56-TSOP	17.98	14.16	10.71
GE28F320B3BC70	831096-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	19.22	15.19	12.36
GE28F320B3BC70SB93	831112-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	19.22	15.19	12.36
GE28F320B3BC90	830951-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	18.27	14.45	11.75
GE28F320C3BC70	831098-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	19.22	15.19	12.36
GE28F320C3BC70SB93	831113-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	19.22	15.19	12.36
GE28F320C3BC90	830946-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	18.27	14.45	11.75
GE28F320C3TC70SB93	831095-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	19.22	15.19	12.36
GE28F320C3TC90	830950-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-BGA	18.27	14.45	11.75
GT28F320B3BA100	823191-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
GT28F320B3BA100SB93	823193-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
GT28F320B3BA110	820969-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
GT28F320B3TA100	823197-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
GT28F320B3TA100SB93	823211-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
GT28F320B3TA110	820972-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
GT28F320C3BA100	823205-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	22.58	17.85	14.52
GT28F320C3BA100SB93	823207-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	22.58	17.85	14.52
GT28F320C3BA110	820975-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
GT28F320C3TA100	823209-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	22.58	17.85	14.52
GT28F320C3TA100SB93	823213-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	22.58	17.85	14.52
GT28F320C3TA110	820978-ND	32Mb, 3V, FLASH Memory (2Mx16)	47-MBGA	18.27	14.45	11.75
RC28F320C3BA100	828107-ND	32Mb, 3V, FLASH Memory (2Mx16)	64-BGA	18.06	14.28	11.61
RC28F320C3BA100SB93	828102-ND	32Mb, 3V, FLASH Memory (2Mx16)	64-BGA	18.06	14.28	11.61
RC28F320C3BA110	828110-ND	32Mb, 3V, FLASH Memory (2Mx16)	64-BGA	18.06	14.28	11.61
RC28F320C3BC90	835725-ND	32Mb, 3V, FLASH Memory (2Mx16)	64-BGA	18.06	14.28	11.61
RC28F320C3TA100SB93	828104-ND	32Mb, 3V, FLASH Memory (2Mx16)	64-BGA	18.06	14.28	11.61
RC28F320C3TA110	828112-ND	32Mb, 3V, FLASH Memory (2Mx16)	64-BGA	18.06	14.28	11.61
RC28F320C3TC90	835729-ND	32Mb, 3V, FLASH Memory (2Mx16)	64-BGA	18.06	14.28	11.61
RC28F320J3A110	834965-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	64-BGA	16.91	13.37	10.87
RC28F320J3A110SB93	834974-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	64-BGA	18.92	14.90	11.27
RC28F320J3A110SL5FU	835071-ND	32Mb, 3V, FLASH Memory (4Mx8, 2Mx16)	64-BGA	18.92	14.90	11.27
TE28F320B3BA100SB93	823216-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	25.10	19.84	16.14
TE28F320B3BC70	833385-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	18.59	14.70	11.95
TE28F320B3BC70SB93	833381-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	18.59	14.70	11.95
TE28F320B3BC90	833379-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	17.64	13.95	11.34
TE28F320B3TA100	823217-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	20.27	16.02	13.03
TE28F320B3TA100SB93	823219-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	20.27	16.02	13.03
TE28F320B3TA110	820964-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	17.64	13.95	11.34
TE28F320C3BA100	823220-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	20.27	16.02	13.03
TE28F320C3BA100SB93	823222-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	29.19	23.08	18.77

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★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

FLASH MEMORY *(Continued)*

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
TE28F320C3BA110	820967-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	20.27	16.02	13.03
TE28F320C3BC70	833387-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	18.59	14.70	11.95
TE28F320C3BC70SB93	833382-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	18.59	14.70	11.95
TE28F320C3BC90	833377-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	17.64	13.95	11.34
TE28F320C3TA110	820968-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	20.27	16.02	13.03
TE28F320C3TC70	833388-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	18.59	14.70	11.95
TE28F320C3TC70SB93	833380-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	18.59	14.70	11.95
TE28F320C3TC90	833376-ND	32Mb, 3V, FLASH Memory (2Mx16)	48-TSOP	17.64	13.95	11.34
DA28F320J5120	827726-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-SSOP	18.69	14.78	12.02
DA28F320J5120SB93	821279-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-SSOP	18.69	14.78	12.02
DA28F320J5120SL2WD	818782-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-SSOP	18.69	14.78	12.02
DA28F320J5120SL2XC	818797-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-SSOP	18.69	14.78	12.02
DA28F320J5120SL39R	821278-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-SSOP	18.69	14.78	12.02
DT28F320J5120	825636-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-SSOP	19.64	15.53	12.63
E28F320J5100SL2XD	818758-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-TSOP	19.64	15.53	12.63
E28F320J5120	827731-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-TSOP	18.69	14.78	12.02
E28F320J5120SL2XB	818759-ND	32Mb, 5V, FLASH Memory (4Mx8, 2Mx16)	56-TSOP	18.69	14.78	12.02
E28F640J3A120SL4AX	829867-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	56-TSOP	25.94	20.51	16.68
E28F640J3A120SL5AQ	834162-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	56-TSOP	25.94	20.51	16.68
E28F640J3A120SL5AR	834161-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	56-TSOP	25.94	20.51	16.68
RC28F640J3A120SL4AX	829865-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	64-BGA	26.78	21.17	17.22
RC28F640J3A120SL5AQ	834165-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	64-BGA	26.78	21.17	17.22
RC28F640J3A120SL5AR	834164-ND	64Mb, 3V, FLASH Memory (8Mx8, 4Mx16)	64-BGA	26.78	21.17	17.22
DA28F640J5150	827729-ND	64Mb, 5V, FLASH Memory (8Mx8, 4Mx16)	56-SSOP	35.18	27.81	22.62
DA28F640J5150SL2XF	818762-ND	64Mb, 5V, FLASH Memory (8Mx8, 4Mx16)	56-SSOP	37.17	29.39	23.90
DA28F640J5150SL34A	819970-ND	64Mb, 5V, FLASH Memory (8Mx8, 4Mx16)	56-SSOP	35.18	27.81	22.62
DT28F640J5150	825639-ND	64Mb, 5V, FLASH Memory (8Mx8, 4Mx16)	56-SSOP	36.96	29.22	23.76
E28F128J3A150SL56C	833801-ND	128Mb, 3V, FLASH Memory (16Mx8, 8Mx16)	56-TSOP	39.33	31.05	26.91
E28F128J3A150SL56J	833865-ND	128Mb, 3V, FLASH Memory (16Mx8, 8Mx16)	56-TSOP	39.33	31.05	26.91
RC28F128J3A150SL56C	833796-ND	128Mb, 3V, FLASH Memory (16Mx8, 8Mx16)	64-BGA	41.42	32.70	28.34
RC28F128J3A150SL56J	833867-ND	128Mb, 3V, FLASH Memory (16Mx8, 8Mx16)	64-BGA	41.42	32.70	28.34

DIRECT DIGITAL SYNTHESIS PRODUCTS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
1375A80CE	828902-ND	Miniature 25MHz Digital Frequency Synthesizer	35-DIL	641.25	630.99	615.60
N1175.125CM	828564-ND	125MHz, 32-Bit, Phase Modulated Numerically Controlled Oscillator	68-PLCC	49.88	39.43	32.07
N1176CM	828565-ND	80MHz, BCD/Decimal Numerically Controlled Oscillator	84-PLCC	156.75	137.75	121.13
N1177CM	828566-ND	60MHz, PM, FM, and Quadrature Numerically Controlled Oscillator	84-PLCC	164.26	154.38	148.20
P1172BCL	828550-ND	50MHz, 32-Bit, Quadrature Numerically Controlled Oscillator	40-Dip	33.25	31.25	30.00
P1173CL	828552-ND	50MHz, 48-Bit, High Resolution Numerically Controlled Oscillator	48-Dip	81.23	64.13	55.58

FORWARD ERROR CORRECTION PRODUCTS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
N2030CCM	828650-ND	9 MBPS Convolutional Encoder/Viterbi Decoder	84-PLCC	53.20	42.00	36.40
N2040BCM	828651-ND	256 KBPS Convolutional Encoder/Viterbi Decoder	68-PLCC	47.88	37.85	30.78
S2060CCR	828656-ND	45 MBPS Viterbi Decoder	100-QFP	81.23	64.13	55.58

DEMODULATION AND CODING PRODUCTS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
N2105CM	828541-ND	Digital CMOS QPSK Cable Demodulator	68-PLCC	23.10	18.26	14.85
SB2176CR	828543-ND	Digital Modulator/Demodulator Cable Modem ASIC with FEC	208-SQFP	49.88	39.43	32.07

PERIPHERAL INTERFACE PRODUCTS

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
GCIXB3208AA	831425-ND	8-Port, 32-Bit, IX Bus Peripheral Controller	352-BGA	106.92	93.96	82.62
N87C42	804115-ND	8-Bit, Universal Peripheral Interface Slave Microcontroller	44-PLCC	16.45	12.95	9.80
P87C42	804121-ND	8-Bit, Universal Peripheral Interface Slave Microcontroller	40-Dip	16.45	12.95	9.80
S87C42	804133-ND	8-Bit, Universal Peripheral Interface Slave Microcontroller	44-MQFP	16.45	12.95	9.80
SCD128310QCE	832512-ND	IEEE 1284 Compatible Parallel Interface Controller	100-MQFP	19.98	15.73	11.90
SCD128410QCE	832513-ND	IEEE 1284 Parallel Interface Controller with Dual Serial Ports	100-MQFP	21.00	16.60	13.50
SCD140010QCJ	832514-ND	4-Channel, Serial/Parallel Communications Transceiver	100-MQFP	23.86	18.86	15.34
SCD186510QCB	832515-ND	8-Channel, Full-Duplex, Serial Communications Controller	100-MQFP	34.65	27.39	22.28

MODEM CHIPSETS, CONTROLLERS, DSPs, AFEs

Intel Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	10	100
MD5660AMS101	830882-ND	ISA/Serial Modem Chipset (MD4450CSCB, MD5660DTMA, MD1724T11VCB)		28.92	22.86	18.59
MD5661AMV101	830883-ND	PCMCIA Modem Chipset (MD4451CVCB, MD5661DTLA, MD1724T11VCB)		28.92	22.86	18.59
MD5662AMS101	830884-ND	ISA/Serial Modem Chipset (MD4450CSCB, MD5660DTMA, (MD1724T11VCB, 2pcs)		32.95	26.05	21.19
MD5675TS101	830885-ND	USB MODEM CHIPSET(MD4470CSCB, MD5660DTMA, MD1724T11VCB)		29.11	23.01	18.72
DQMD4451CVCB	830839-ND	5V, 4451CV Controller	128-LQFP	16.29	12.83	9.71
FYMD4450CSCB	830837-ND	5V, 4450CS Controller	128-SQFP	15.84	12.47	9.44
FYMD4450CVCB	830890-ND	5V, 4450CV Controller	128-SQFP	16.59	13.07	9.89
FYMD4470CSCB	830849-ND	5V, 4470CS Controller	128-SQFP	16.17	12.73	9.64
DJMD5628DLB	830836-ND	3.3V, 5628 Digital Signal Processor	100-LQFP	13.32	10.49	7.94
DQMD5661DTLA	830848-ND	3.3V, 5661 Digital Signal Processor	128-LQFP	16.29	12.83	9.71
FYMD5660DTMA	830842-ND	3.3V, 5660 Digital Signal Processor	128-SQFP	16.29	12.83	9.71
FYMD8820	830850-ND	3.3V, 8820 Digital Signal Processor	128-SQFP	47.77	37.71	32.69
DYMD1724T11VCB	830851-ND	5V, Sigma-Delta Analog Front End	44-LQFP	4.80	3.84	2.28

COUNTERS/ TIMERS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z84C3006FEC	269-3036-ND	6MHz, Z80 CMOS Counter/Timer Circuit	44-QFP	5.10	3.83	2.62
Z84C3006PEC	269-3037-ND	6MHz, Z80 CMOS Counter/Timer Circuit	28-Dip	5.10	3.83	2.62
Z84C3006VEC	269-3038-ND	6MHz, Z80 CMOS Counter/Timer Circuit	44-PLCC	5.10	3.83	2.62
Z84C3008PEC	269-3039-ND	8MHz, Z80 CMOS Counter/Timer Circuit	28-Dip	5.10	3.83	2.62
Z84C3008VEC	269-3040-ND	8MHz, Z80 CMOS Counter/Timer Circuit	44-PLCC	5.10	3.83	2.62
Z84C3010FEC	269-3041-ND	10MHz, Z80 CMOS Counter/Timer Circuit	44-QFP	5.10	3.83	2.62
Z84C3010PEC	269-3042-ND	10MHz, Z80 CMOS Counter/Timer Circuit	28-Dip	5.10	3.83	2.62
Z84C3010VEC	269-3043-ND	10MHz, Z80 CMOS Counter/Timer Circuit	44-PLCC	5.10	3.83	2.62

MICROPROCESSORS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z8018006FSC	269-3004-ND	6MHz, Z180 CMOS Enhanced Microprocessor	80-QFP	10.14	7.61	5.20
Z8018006PEC	269-3005-ND	6MHz, Z180 CMOS Enhanced Microprocessor	64-Dip	11.43	8.58	5.56
Z8018006PSC	269-3006-ND	6MHz, Z180 CMOS Enhanced Microprocessor	64-Dip	9.60	7.20	4.84
Z8018006VEC	269-3007-ND	6MHz, Z180 CMOS Enhanced Microprocessor	68-PLCC	11.43	8.58	5.80
Z8018006VSC	269-3008-ND	6MHz, Z180 CMOS Enhanced Microprocessor	68-PLCC	9.60	7.20	5.08
Z8018008FSC	269-3009-ND	8MHz, Z180 CMOS Enhanced Microprocessor	80-QFP	10.74	8.06	5.92
Z8018008PEC	269-3010-ND	8MHz, Z180 CMOS Enhanced Microprocessor	64-Dip	12.12	9.09	6.29
Z8018008PSC	269-3011-ND	8MHz, Z180 CMOS Enhanced Microprocessor	64-Dip	9.99	7.50	5.56
Z8018008VEC	269-3012-ND	8MHz, Z180 CMOS Enhanced Microprocessor	68-PLCC	13.83	10.38	6.53
Z8018008VSC	269-3013-ND	8MHz, Z180 CMOS Enhanced Microprocessor	68-PLCC	9.99	7.50	5.80
Z8018010FSC	269-3014-ND	10MHz, Z180 CMOS Enhanced Microprocessor	80-QFP	12.12	9.09	6.41
Z8018010PEC	269-3015-ND	10MHz, Z180 CMOS Enhanced Microprocessor	64-Dip	14.19	10.65	6.77
Z8018010PSC	269-3016-ND	10MHz, Z180 CMOS Enhanced Microprocessor	64-Dip	11.67	8.76	6.05
Z8018010VEC	269-3017-ND	10MHz, Z180 CMOS Microprocessor	68-PLCC	14.19	10.65	7.01
Z8018010VSC	269-3018-ND	10MHz, Z180 CMOS Microprocessor	68-PLCC	11.67	8.76	6.29
Z84C0006FEC	269-3019-ND	6MHz, Z80 CMOS Microprocessor	44-QFP	5.10	3.83	2.62
Z84C0006PEC	269-3020-ND	6MHz, Z80 CMOS Microprocessor	40-Dip	5.10	3.83	2.62
Z84C0006VEC	269-3021-ND	6MHz, Z80 CMOS Microprocessor	44-PLCC	5.10	3.83	2.62
Z84C0008FEC	269-3022-ND	8MHz, Z80 CMOS Microprocessor	44-QFP	5.10	3.83	2.62
Z84C0008PEC	269-3023-ND	8MHz, Z80 CMOS Microprocessor	40-Dip	5.10	3.83	2.62
Z84C0008VEC	269-3024-ND	8MHz, Z80 CMOS Microprocessor	44-PLCC	5.10	3.83	2.62
Z84C0010FEC	269-3025-ND	10MHz, Z80 CMOS Microprocessor	44-QFP	5.10	3.83	2.62
Z84C0010PEC	269-3026-ND	10MHz, Z80 CMOS Microprocessor	40-Dip	5.10	3.83	2.62
Z84C0010VEC	269-3027-ND	10MHz, Z80 CMOS Microprocessor	44-PLCC	5.10	3.83	2.62
Z84C0020FEC	269-3028-ND	20MHz, Z80 CMOS Microprocessor	40-QFP	12.63	9.48	6.48
Z84C0020PEC	269-3029-ND	20MHz, Z80 CMOS Microprocessor	40-Dip	12.63	9.48	6.48
Z84C0020VEC	269-3030-ND	20MHz, Z80 CMOS Microprocessor	44-PLCC	12.63	9.48	6.48
Z8S18010FSC	269-3098-ND	10MHz, Static Z180 Microprocessor	80-QFP	10.14	7.61	6.41
Z8S18010PEC	269-3099-ND	10MHz, Static Z180 Microprocessor, X-Temp.	64-Dip	11.43	8.58	6.77
Z8S18010PSC	269-3100-ND	10MHz, Static Z180 Microprocessor	64-Dip	9.60	7.20	6.05
Z8S18010VEC	269-3101-ND	10MHz, Static Z180 Microprocessor, X-Temp.	68-PLCC	11.43	8.58	7.01
Z8S18010VSC	269-3102-ND	10MHz, Static Z180 Microprocessor	68-PLCC	9.60	7.20	6.29
Z8S18020FEC	269-3103-ND	20MHz, Static Z180 Microprocessor, X-Temp.	80-QFP	16.17	12.13	8.48
Z8S18020FEC1960	269-3104-ND	20MHz, Static Z180 Microprocessor, X-Temp.	80-QFP	16.17	12.13	8.48
Z8S18020FSC	269-3105-ND	20MHz, Static Z180 Microprocessor	80-QFP	13.35	10.02	7.37

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MICROPROCESSORS *(Continued)*

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z8S18020FSC1960	269-3106-ND	20MHz, Static Z180 Microprocessor	80-QFP	13.35	10.02	7.37
Z8S18020PSC	269-3107-ND	20MHz, Static Z180 Microprocessor	64-Dip	13.35	10.02	7.01
Z8S18020PSC1960	269-3108-ND	20MHz, Static Z180 Microprocessor	64-Dip	13.35	10.02	7.01
Z8S18020VEC	269-3109-ND	20MHz, Static Z180 Microprocessor, X-Temp.	68-PLCC	16.17	12.13	7.98
Z8S18020VEC1960	269-3110-ND	20MHz, Static Z180 Microprocessor, X-Temp.	68-PLCC	16.17	12.13	7.98
Z8S18020VSC	269-3111-ND	20MHz, Static Z180 Microprocessor	68-PLCC	13.35	10.02	7.25
Z8S18020VSC1960	269-3112-ND	20MHz, Static Z180 Microprocessor	68-PLCC	13.35	10.02	7.25
Z8S18033FEC	269-3113-ND	33MHz, Static Z180 Microprocessor, X-Temp.	80-QFP	17.73	13.30	11.94
Z8S18033FSC	269-3114-ND	33MHz, Static Z180 Microprocessor	80-QFP	14.73	11.05	7.86
Z8S18033VEC	269-3115-ND	33MHz, Static Z180 Microprocessor, X-Temp.	68-PLCC	17.73	13.30	11.94
Z8S18033VSC	269-3116-ND	33MHz, Static Z180 Microprocessor	68-PLCC	14.73	11.05	7.74

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PERIPHERAL CONTROLLERS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z84C1506FEC	269-3031-ND	6MHz, Z80 Intelligent Peripheral Controller	100-QFP	15.36	11.52	7.88
Z84C1510AEC	269-3032-ND	10MHz, Z80 Intelligent Peripheral Controller	100-VQFP	15.36	11.52	7.88
Z84C1510FEC	269-3033-ND	10MHz, Z80 Intelligent Peripheral Controller	100-QFP	15.36	11.52	7.88
Z84C1516ASC	269-3034-ND	16MHz, Z80 Intelligent Peripheral Controller	100-VQFP	20.37	15.28	10.45
Z84C1516FSC	269-3035-ND	16MHz, Z80 Intelligent Peripheral Controller	100-QFP	19.98	14.99	10.25

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SERIAL COMMUNICATION CONTROLLERS

Zilog Part No.	Digi-Key Part No.	Description	Pkg.	Price Each ★ 1	25	100
Z8523008PEC	269-3044-ND	8MHz, Enhanced Serial Communication Controller, Ext. Temp	40-Dip	24.57	18.43	10.65
Z8523008PSC	269-3045-ND	8MHz, Enhanced Serial Communication Controller	40-Dip	14.97	11.23	6.99
Z8523008VEC	269-3046-ND	8MHz, Enhanced Serial Communication Controller, Ext. Temp	44-PLCC	21.60	16.20	10.08
Z8523008VSC	269-3047-ND	8MHz, Enhanced Serial Communication Controller	44-PLCC	14.97	11.23	6.99
Z8523010PEC	269-3048-ND	10MHz, Enhanced Serial Communication Controller XTemp	40-Dip	30.66	23.00	14.31
Z8523010PSC	269-3049-ND	10MHz, Enhanced Serial Communication Controller	40-Dip	18.90	14.18	8.82
Z8523010VEC	269-3050-ND	10MHz, Enhanced Serial Communication Controller XTemp	44-PLCC	30.66	23.00	14.31
Z8523010VSC	269-3051-ND	10MHz, Enhanced Serial Communication Controller	44-PLCC	18.90	14.18	8.82
Z8523016PEC	269-3052-ND	16MHz, Enhanced Serial Communication Controller XTemp	40-Dip	37.80	28.35	17.64
Z8523016PSC	269-3053-ND	16MHz, Enhanced Serial Communication Controller	40-Dip	24.24	18.18	11.31
Z8523016VEC	269-3054-ND	16MHz, Enhanced Serial Communication Controller XTemp	44-PLCC	37.80	28.35	17.64
Z8523016VSC	269-3055-ND	16MHz, Enhanced Serial Communication Controller	44-PLCC	24.24	18.18	11.31
Z8523020PSC	269-3056-ND	20MHz, Enhanced Serial Communication Controller	40-Dip	32.01	24.01	14.94
Z8523020VSC	269-3057-ND	20MHz, Enhanced Serial Communication Controller	44-PLCC	32.01	24.01	14.94
Z85C3008PEC	269-3058-ND	8MHz, Z8500 CMOS Serial Communication Controller	40-Dip	12.81	9.61	5.94
Z85C3008PSC	269-3059-ND	8MHz, Z8500 CMOS Serial Communication Controller	40-Dip	8.55	6.42	4.02
Z85C3008VEC	269-3060-ND	8MHz, Z8500 CMOS Serial Communication Controller	44-PLCC	12.81	9.61	5.94
Z85C3008VSC	269-3061-ND	8MHz, Z8500 CMOS Serial Communication Controller	44-PLCC	8.55	6.42	4.02
Z85C3010PEC	269-3062-ND	10MHz, Z8500 CMOS Serial Communication Controller	40-Dip	14.55	10.92	6.73
Z85C3010PSC	269-3063-ND	10MHz, Z8500 CMOS Serial Communication Controller	40-Dip	9.75	7.32	4.56
Z85C3010VEC	269-3064-ND	10MHz, Z8500 CMOS Serial Communication Controller	44-PLCC	14.55	10.92	6.73
Z85C3010VSC	269-3065-ND	10MHz, Z8500 CMOS Serial Communication Controller	44-PLCC	9.75	7.32	4.56
Z85C3016PSC	269-3066-ND	16MHz, Z8500 CMOS Serial Communication Controller	40-Dip	14.25	10.69	6.70
Z85C3016VSC	269-3067-ND	16MHz, Z8500 CMOS Serial Communication Controller	44-PLCC	14.25	10.69	6.70

TEXAS INSTRUMENTS

AMPLIFIERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
3584JM	3584JM-ND	High-Voltage Op Amplifier *NEW!*	TO-3-8	141.89	132.43	122.97
BUF600AU	BUF600AU-ND	High-Speed Buffer Amplifier	8-SOIC	5.60	4.49	3.49
BUF601AU	BUF601AU-ND	High-Speed Buffer Amplifier	8-SOIC	6.90	5.52	4.66
BUF634F	BUF634F-ND	High-Speed Buffer, 250mA Output	5-DDPAK	7.26	5.81	4.91
BUF634P	BUF634P-ND	High-Speed Buffer, 250mA Output	8-Dip	6.14	4.92	3.83
BUF634T	BUF634T-ND	High-Speed Buffer, 250mA Output	T0-220-5	7.26	5.81	4.91
BUF634U	BUF634U-ND	High-Speed Buffer, 250mA Output	8-SOIC	5.46	4.37	3.69
BUF04701AIDGSR	296-12161-1-ND	4-Channel R/R In/Out CMOS Buffer Amp *NEW!*	10-MSOP	2.79	2.24	1.74
BUF04701AIDGSR	296-12161-2-ND	4-Channel R/R In/Out CMOS Buffer Amp *NEW!*	10-MSOP	3905.00/2,500		
BUF04701AIPWR	296-12162-1-ND	4-Channel R/R In/Out CMOS Buffer Amp *NEW!*	14-TSSOP	2.79	2.24	1.74
BUF04701AIPWR	296-12162-2-ND	4-Channel R/R In/Out CMOS Buffer Amp *NEW!*	14-TSSOP	3905.00/2,500		
BUF11702PWP	BUF11702PWP-ND	10+1 Channel High Current Buffer	28-HTSSOP	3.29	2.63	2.05
INA101AG	INA101AG-ND	Very High Accuracy Instr. Amp	14-Dip	23.25	21.70	20.15
INA101AM	INA101AM-ND	Very High Accuracy Instr. Amp	TO-100-10	16.04	14.45	12.81
INA101CM	INA101CM-ND	Very High Accuracy Instr. Amp	TO-100-10	30.47	28.44	26.41
INA101HP	INA101HP-ND	Very High Accuracy Instr. Amp	14-Dip	11.90	10.71	9.50
INA101KU	INA101KU-ND	Very High Accuracy Instr. Amp	16-SOIC	11.91	10.73	9.51
INA101SM	INA101SM-ND	Very High Accuracy Instr. Amp	TO-100-10	35.16	32.82	30.48
INA103KP	INA103KP-ND	Low Noise, Low Distortion Instr. Amp	16-Dip	8.84	7.08	5.97
INA103KU	INA103KU-ND	Low Noise, Low Distortion Instr. Amp.	16-SOIC	8.84	7.08	5.97
INA105BM	INA105BM-ND	Precision Unity Gain Diff. Amp.	TO-99	12.51	11.27	9.99
INA105KP	INA105KP-ND	Precision Unity Gain Diff. Amp	8-Dip	7.24	5.80	4.89
INA105KU	INA105KU-ND	Precision Unity Gain Diff. Amp.	8-SOIC	7.24	5.80	4.89
INA106KP	INA106KP-ND	Precision Fixed-Gain Differential Amp	8-Dip	8.98	7.19	6.07
INA106U	INA106U-ND	Precision Fixed-Gain Differential Amp	8-SOIC	8.98	7.19	6.07
INA110KP	INA110KP-ND	Fast-Settling, FET-Input Instr. Amp.	16-Dip	10.58	9.53	8.45
INA110KU	INA110KU-ND	Fast-Settling, FET-Input Instr. Amp.	16-SOIC	10.58	9.53	8.45
INA111AP	INA111AP-ND	High Speed FET-Input Instr. Amp.	8-Dip	7.52	6.02	5.08
INA111AU	INA111AU-ND	High Speed FET-Input Instr. Amp.	16-SOIC	7.52	6.02	5.08
INA111BP	INA111BP-ND	High Speed FET-Input Instr. Amp.	8-Dip	10.08	9.08	8.05
INA111BU	INA111BU-ND	High Speed FET-Input Instr. Amp.	16-SOIC	10.08	9.08	8.05
INA114AP	INA114AP-ND	Precision Instrumentation Amp.	8-Dip	6.82	5.46	4.61
INA114AU	INA114AU-ND	Precision Instrumentation Amp	16-SOIC	7.52	6.02	5.08
INA114BP	INA114BP-ND	Precision Instrumentation Amp.	8-Dip	10.28	8.23	6.94
INA114BU	INA114BU-ND	Precision Instrumentation Amp.	16-SOIC	8.56	7.71	6.84
INA115AU	INA115AU-ND	Precision Instrumentation Amp.	16-SOIC	7.60	6.08	5.13
INA115BU	INA115BU-ND	Precision Instrumentation Amp.	16-SOIC	9.30	8.37	7.43
INA116PA	INA116PA-ND	Ultra Low In Bias Current Instr. Amp.	16-Dip	7.60	6.08	5.13
INA116UA	INA116UA-ND	Ultra Low In Bias Current Instr. Amp	16-SOIC	7.60	6.08	5.13
INA117KU	INA117KU-ND	High Common-Mode Volt., Diff. Amp	8-SOIC	5.20	4.16	3.51
INA117P	INA117P-ND	High Common-Mode Volt., Diff. Amp.	8-Dip	5.85	4.68	3.64
INA118P	INA118P-ND	Precision Low Power Instr. Amp	8-Dip	7.18	5.75	4.85
INA118PB	INA118PB-ND	Precision Low Power Instr. Amp	8-Dip	11.14	8.92	7.52
INA118U	INA118U-ND	Precision Low Power Instr. Amp.	8-SOIC	7.18	5.75	4.85
INA118UB	INA118UB-ND	Precision Low Power Instr. Amp.	8-SOIC	9.28	8.36	7.41
INA121P	INA121P-ND	Low Power FET Instrumentation Amp	8-Dip	6.34	5.08	4.28
INA121PA	INA121PA-ND	Low Power FET Instrumentation Amp	8-Dip	5.09	4.07	3.17
INA121U	INA121U-ND	Low Power FET Instrumentation Amp	8-SOIC	6.34	5.08	4.28
INA121UA	INA121UA-ND	Low Power FET Instrumentation Amp	8-SOIC	5.09	4.07	3.17
INA121UA/2K5	INA121UATR-ND	Low Power FET Instrumentation Amp	8-SOIC	7182.50/2,500		
INA121U/2K5	INA121UTR-ND	Low Power FET Instrumentation Amp	8-SOIC	9890.00/2,500		
INA122P	INA122P-ND	Single-Supply, Micropower Instr. Amp	8-Dip	5.51	4.41	3.43
INA122PA	INA122PA-ND	Single Supply, Micropower Instr. Amp	8-Dip	4.23	3.39	2.64
INA122U	INA122U-ND	Single-Supply, Micropower Instr. Amp	8-SOIC	5.51	4.41	3.43
INA122UA	INA122UA-ND	Single Supply, Micropower Instr. Amp	8-SOIC	4.23	3.39	2.64
INA125P	INA125P-ND	Instr. Amp with Precision Voltage Ref.	16-Dip	5.74	4.59	3.57
INA125PA	INA125PA-ND	Instr. Amp with Precision Voltage Ref.	16-Dip	4.55	3.64	2.83
INA125U	INA125U-ND	Instr. Amp with Precision Voltage Ref	16-SOIC	5.10	4.08	3.45
INA125UA	INA125UA-ND	Instr. Amp with Precision Voltage Ref	16-SOIC	4.55	3.64	2.83
INA126ECT	INA126ECT-ND	Micropower Instrumentation Amp.	8-MSOP	4.82	3.86	3.00
INA126E/250	INA126ETR-ND	Micropower Instrumentation Amp.	8-MSOP	711.50/250		
INA126EA/250	INA126EACT-ND	Micropower Instrumentation Amp.	8-MSOP	3.53	2.83	2.20
INA126EA/250	INA126EATR-ND	Micropower Instrumentation Amp.	8-MSOP	522.00/250		
INA126P	INA126P-ND	Micropower Instrumentation Amp.	8-Dip	2.81	2.25	1.75
INA126PA	INA126PA-ND	Micropower Instrumentation Amp	8-Dip	2.38	1.90	1.43
INA126U	INA126U-ND	Micropower Instrumentation Amp	8-SOIC	2.81	2.25	1.75
INA126UA	INA126UA-ND	Micropower Instrumentation Amp	8-SOIC	2.38	1.90	1.43
INA128P	INA128P-ND	Precision Low Power Instr. Amp	8-Dip	10.28	8.23	6.94
INA128PA	INA128PA-ND	Precision Low Power Instr. Amp	8-Dip	6.36	5.09	4.30
INA128U	INA128U-ND	Precision Low Power Instr. Amp.	8-SOIC	8.56	7.71	6.84
INA128UA	INA128UA-ND	Precision Low Power Instr. Amp.	8-SOIC	6.36	5.09	4.30
INA129P	INA129P-ND	Precision Low Power Instr. Amp	8-Dip	10.28	8.23	6.94
INA129PA	INA129PA-ND	Precision Low Power Instr. Amp	8-Dip	6.36	5.09	4.30
INA129U	INA129U-ND	Precision Low Power Instr. Amp.	8-SOIC	8.56	7.71	6.84
INA129UA	INA129UA-ND	Precision Low Power Instr. Amp.	8-SOIC	6.36	5.09	4.30
INA131AP	INA131AP-ND	Precision, Gain=100, Instr. Amp.	8-Dip	6.82	5.46	4.61
INA132U	INA132U-ND	Low Power, Single-Supply Instr. Amp	8-SOIC	2.81	2.25	1.75
INA132UA	INA132UA-ND	Low Power, Single-Supply Instr. Amp	8-SOIC	2.38	1.90	1.43
INA133UA	INA133UA-ND	High Speed Precision Difference Amp	8-SOIC	2.38	1.90	1.43
INA133U	INA133U-ND	High Speed Precision Difference Amp	8-SOIC	2.81	2.25	1.75
INA134PA	INA134PA-ND	Audio Differential Line Receiver	8-Dip	2.38	1.90	1.43
INA134UA	INA134UA-ND	Audio Differential Line Receiver.	8-SOIC	2.38	1.90	1.43
INA137PA	INA137PA-ND	Audio Differential Line Receiver	8-Dip	2.38	1.90	1.43
INA137UA	INA137UA-ND	Audio Differential Line Receiver.	8-SOIC	2.38	1.90	1.43
INA138NA/250	INA138NACT-ND	Current Shunt Monitor	SOT-23-5	2.63	2.25	2.07
INA138NA/250	INA138NATR-ND	Current Shunt Monitor	SOT-23-5	318.50/250		
INA139NA/250	INA139NA/250CT-ND	2.7-40V Current Shunt Monitor	SOT-23-5	2.40	1.92	1.44
INA139NA/250	INA139NA/250TR-ND	2.7-40V Current Shunt Monitor	SOT-23-5	336.00/250		
INA141U	INA141U-ND	Precision Low Power, Gain=10,100 Instrumentation Amp.	8-SOIC	8.56	7.71	6.84
INA141UA	INA141UA-ND	Precision Low Power, Gain=10,100 Instrumentation Amp.	8-SOIC	6.36	5.09	4.30
INA143U	INA143U-ND	High Speed Diff. Gain=10 Instr. Amp	8-SOIC	2.81	2.25	1.75
INA143UA	INA143UA-ND	High Speed Diff. Gain=10 Instr. Amp	8-SOIC	2.38	1.90	1.43
INA145UA	INA145UA-ND	Programmable Difference Amp	8-SOIC	3.04	2.43	1.89
INA146UA	INA146UA-ND	High-Voltage Differential Amp	8-SOIC	3.47	2.78	2.16
INA148UA	INA148UA-ND	Common-Mode Instrumentation Amp	8-SOIC	4.23	3.39	2.64
INA152EA/2K5	INA152EA/2K5CT-ND	Low Power, Single Supply Diff. Amp	8-MSOP	2.30	1.84	1.38
INA152EA/2K5	INA152EA/2K5TR-ND	Low Power, Single Supply Diff. Amp	8-MSOP	3445.00/2,500		
INA154U	INA154U-ND	High-Speed Precision G=1 Diff. Amp	8-SOIC	2.81	2.25	1.75
INA154UA	INA154UA-ND	High-Speed Precision G=1 Diff. Amp	8-SOIC	2.38	1.90	1.43
INA155EA/250	INA155EACT-ND	R/R CMOS Instrumentation Amp	8-MSOP	2.27	1.82	2.27
INA155EA/250	INA155EATR-ND	R/R CMOS Instrumentation Amp	8-MSOP	335.75/250		
INA155E/250	INA155ECT-ND	R/R CMOS Instrumentation Amp	8-MSOP	3.04	2.70	3.04
INA155E/250	INA155ETR-ND	R/R CMOS Instrumentation Amp	8-MSOP	449.00/250		
INA155U	INA155U-ND	R/R CMOS Instrumentation Amp	8-SOIC	2.93	2.34	1.82
INA155UA	INA155UA-ND	R/R CMOS Instrumentation Amp	8-SOIC	2.40	1.92	1.44
INA156EA/250	INA156EACT-ND	CMOS Instrumentation Amp.	8-MSOP	2.18	1.74	1.31
INA156EA/250	INA156EATR-ND	CMOS Instrumentation Amp.	8-MSOP	304.50/250		
INA157U	INA157U-ND	HS Precision G=1/2 or G=2 Diff. Amp.	8-SOIC	2.81	2.25	1.75
INA157UA	INA157UA-ND	HS Precision G=1/2 or G=2 Diff. Amp.	8-SOIC	2.38	1.90	1.43
INA163UA	INA163UA-ND	Low-Noise, Low Distort. Instr. Amp	SO-14-50	5.02	4.02	3.13
INA163UA/2K5	INA163UATR-ND	Low-Noise, Low Distort. Instr. Amp	SO-14-50	7087.50/2,500		
INA166UA	INA166UA-ND	Low-Noise Instrumentation Amp	14-SOIC	10.76	8.61	7.27
INA166UA/2K5	INA166UATR-ND	Low-Noise Instrumentation Amp	14-SOIC	16740.00/2,500		
INA168NA/250	INA168NACT-ND	High-Side Current Shunt Monitor	SOT-23-5	2.59	2.07	1.61
INA168NA/250	INA168NATR-ND	High-Side Current Shunt Monitor	SOT-23-5	382.50/250		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
INA169NA/250	INA169NA/250CT-ND	2.7-60V Current Shunt Monitor	SOT-23-5	2.59	2.07	1.61
INA169NA/250	INA169NA/250TR-ND	2.7-60V Current Shunt Monitor	SOT-23-5	382.50/250		
INA170EA/2K5	INA170EA/2K5CT-ND	Bi-Directional Current Shunt Monitor	8-MSOP	2.88	2.30	1.73
INA170EA/2K5	INA170EA/2K5TR-ND	Bi-Directional Current Shunt Monitor	8-MSOP	3622.50/2,500		
INA321EA/250	INA321EACT-ND	Micropower CMOS R/R Instr. Amp	8-MSOP	2.39	1.91	1.49
INA321EA/250	INA321EATR-ND	Micropower CMOS R/R Instr. Amp	8-MSOP	352.50/250		
INA321E/250	INA321ECT-ND	Micropower CMOS R/R Instr. Amp	8-MSOP	3.13	2.51	1.95
INA321E/250	INA321ETR-ND	Micropower CMOS R/R Instr. Amp	8-MSOP	462.25/250		
INA322EA/250	INA322EACT-ND	Micropower CMOS R/R Instr. Amp	8-MSOP	2.28	1.82	1.37
INA322EA/250	INA322EATR-ND	Micropower CMOS R/R Instr. Amp	8-MSOP	318.50/250		
INA326EA/2K5	INA326EA/2K5CT-ND	Prec., R/R I/O Instr. Amp *NEW!*	8-MSOP	3.65	2.92	2.27
INA326EA/2K5	INA326EA/2K5TR-ND	Prec., R/R I/O Instr. Amp *NEW!*	8-MSOP	5102.50/2,500		
INA327EA/2K5	INA327EA/2K5CT-ND	Prec., R/R I/O Instr. Amp with Shutdown *NEW!*	10-MSOP	3.96	3.17	2.47
INA327EA/2K5	INA327EA/2K5TR-ND	Prec., R/R I/O Instr. Amp with Shutdown *NEW!*	10-MSOP	5545.00/2,500		
INA331AIDGKT	296-12202-1-ND	Low Power, CMOS Instrumentation Amp *NEW!*	8-MSOP	2.15	1.72	1.29
INA331AIDGKT	296-12202-2-ND	Low Power, CMOS Instrumentation Amp *NEW!*	8-MSOP	301.00/250		
INA331IDGKT	296-12203-1-ND	Low Power, CMOS Instrumentation Amp *NEW!*	8-MSOP	2.59	2.07	1.61
INA331IDGKT	296-12203-2-ND	Low Power, CMOS Instrumentation Amp *NEW!*	8-MSOP	382.50/250		
INA332AIDGKT	296-12204-1-ND	Low Power, CMOS Instrumentation Amp *NEW!*	8-MSOP	1.85	1.48	1.11
INA332AIDGKT	296-12204-2-ND	Low Power, CMOS Instrumentation Amp *NEW!*	8-MSOP	259.00/250		
INA2126EA/250	INA2126EACT-ND	Dual, Micropower Instr. Amp	16-SSOP	5.80	4.64	3.92
INA2126EA/250	INA2126EATR-ND	Dual, Micropower Instr. Amp	16-SSOP	975.00/250		
INA2126E/250	INA2126ECT-ND	Dual, Micropower Instr. Amp	16-SSOP	5.80	4.64	3.92
INA2126E/250	INA2126ETR-ND	Dual, Micropower Instr. Amp	16-SSOP	1348.75/250		
INA2126P	INA2126P-ND	Dual, Micropower Instr. Amp	16-Dip	5.09	4.07	3.17
INA2126PA	INA2126PA-ND	Dual, Micropower Instr. Amp	16-Dip	3.89	3.12	2.43
INA2126U	INA2126U-ND	Dual, Micropower Instr. Amp	16-SOIC	5.09	4.07	3.17
INA2126UA	INA2126UA-ND	Dual, Micropower Instr. Amp	16-SOIC	3.89	3.12	2.43
INA2128UA	INA2128UA-ND	Dual, Low Power Instr. Amp	16-SOIC	9.61	8.66	7.68
INA2132U	INA2132U-ND	Dual, LP, Single-Supply Diff. Amp	14-SOIC	6.54	5.24	4.42
INA2132UA	INA2132UA-ND	Dual, LP, Single-Supply Diff. Amp	14-SOIC	5.31	4.25	3.31
INA2133U	INA2133U-ND	Dual, High-Speed, Diff. Amp	14-SOIC	6.54	5.24	4.42
INA2133UA	INA2133UA-ND	Dual, High-Speed, Diff. Amp	14-SOIC	5.31	4.25	3.31
INA2134PA	INA2134PA-ND	Dual, Audio Differential Line Receiver	14-Dip	3.89	3.12	2.43
INA2134UA	INA2134UA-ND	Dual, Audio Differential Line Receiver	14-SOIC	3.89	3.12	2.43
INA2137PA	INA2137PA-ND	Dual, Audio Differential Line Receiver	14-Dip	3.89	3.12	2.43
INA2137UA	INA2137UA-ND	Dual, Audio Differential Line Receiver	14-SOIC	3.89	3.12	2.43
INA2141U	INA2141U-ND	Dual, Gain=10,100 Instr. Amp	16-SOIC	15.78	14.21	12.60
INA2141UA	INA2141UA-ND	Dual, Gain=10,100 Instr. Amp	16-SOIC	9.61	8.66	7.68
INA2143U	INA2143U-ND	Dual, High Speed Precision Gain=10 Difference Amp	14-SOIC	6.54	5.24	4.42
INA2143UA	INA2143UA-ND	Dual, High Speed Precision Gain=10 Difference Amp	14-SOIC	5.31	4.25	3.31
INA2321EA/250	INA2321EACT-ND	Micropower CMOS R/R Instr. Amp	14-TSSOP	4.43	3.55	2.76
INA2321EA/250	INA2321EATR-ND	Micropower CMOS R/R Instr. Amp	14-TSSOP	655.00/250		
INA2322EA/250	INA2322EACT-ND	Micropower CMOS R/R Instr. Amp	14-TSSOP	3.78	3.03	2.36
INA2322EA/250	INA2322EATR-ND	Micropower CMOS R/R Instr. Amp	14-TSSOP	558.50/250		
INA2331AIPWR	INA2331AIPWRCT-ND	LP R/R CMOS Instr. Amp *NEW!*	14-TSSOP	5.02	4.02	3.13
INA2331AIPWR	INA2331AIPWRTR-ND	LP R/R CMOS Instr. Amp *NEW!*	14-TSSOP	7025.00/2,500		
INA2332AIPWR	INA2332AIPWRCT-ND	LP R/R CMOS Instr. Amp *NEW!*	14-TSSOP	3.11	2.49	1.94
INA2332AIPWR	INA2332AIPWRTR-ND	LP R/R CMOS Instr. Amp *NEW!*	14-TSSOP	4347.50/2,500		
ISO100AP	ISO100AP-ND	Low Leakage Isolation Amp	18-Dip	83.12	77.58	72.04
ISO121BG	296-12577-5-ND	2500 VRMS Precision Isolation Amp *NEW!*	40-Dip	60.00	56.00	52.00
ISO122JP	ISO122JP-ND	Lowest Cost Precision Isolation Amp	16-Dip	15.66	14.10	12.51
ISO122JU	ISO122JU-ND	Lowest Cost Precision Isolation Amp	28-SOIC	14.81	13.34	11.83
ISO122P	ISO122P-ND	Lowest Cost Precision Isolation Amp	16-Dip	18.44	16.61	14.73
ISO122U	ISO122U-ND	Lowest Cost Precision Isolation Amp	28-SOIC	15.15	14.14	13.13
ISO124P	ISO124P-ND	Low-Cost Precision Isolation Amp	16-Dip	11.13	10.02	8.89
ISO124U	ISO124U-ND	Low-Cost Precision Isolation Amp	28-SOIC	11.13	10.02	8.89
ISO150AP	ISO150AP-ND	Dual, Isolated, Bi-Dir. Digital Coupler	24-Dip .3	11.83	10.65	9.45
ISO150AU	ISO150AU-ND	Dual, Isolated, Bi-Dir. Digital Coupler	28-SOIC	12.18	10.97	9.73
ISO422P	ISO422P-ND	Differential Bus Transceiver	24-Dip	11.54	9.24	7.79
ISO422P-U	ISO422P-U-ND	Differential Bus Transceiver	24-GullWing	11.54	9.24	7.79
ISO508P	ISO508P-ND	Uni-Directional Isolated Digital Coupler	24-Dip	12.69	11.43	10.14
LF347BD	296-7136-5-ND	Quad WB JFET Op Amp	14-SOP	2.81	2.25	1.75
LF347D	296-7137-5-ND	Quad WB JFET Op Amp	14-SOP	1.60	1.28	.96
LF347DR	296-7137-1-ND	Quad WB JFET Op Amp	14-SOP	1.60	1.28	.96
LF347DR	296-7137-2-ND	Quad WB JFET Op Amp	14-SOP	2047.50/2,500		
LF347N	296-7138-5-ND	Quad WB JFET Op Amp	14-Dip	1.60	1.28	.96
LF353D	296-1384-5-ND	Dual JFET Op Amp	8-SOIC	.68	.51	.39
LF353P	296-7139-5-ND	Dual JFET Op Amp	8-Dip	.68	.51	.39
LF412CD	296-7140-5-ND	Dual JFET Op Amp	8-SOP	1.25	1.00	.75
LF412CP	296-7141-5-ND	Dual JFET Op Amp	8-Dip	1.25	1.00	.75
LM224AD	296-7029-5-ND	Quad Op Amp	14-SOP	.99	.83	.66
LM224ADR	296-7029-1-ND	Quad Op Amp	14-SOP	.99	.83	.66
LM224ADR	296-7029-2-ND	Quad Op Amp	14-SOP	1072.50/2,500		
LM224N	296-7030-5-ND	Quad Op Amp	14-Dip	.68	.51	.39
LM236D-2-5	296-7031-5-ND	2.5V Integrated Reference Circuit	8-SOP	1.45	1.16	.87
LM237KC	296-7032-5-ND	3-Terminal Adj. Voltage Reg.	TO-220AB	3.38	2.70	2.10
LM318D	296-9538-5-ND	Single High Speed Op Amp	8-SOP	1.25	1.00	.75
LM318P	296-9539-5-ND	Single High Speed Op Amp	8-Dip	1.25	1.00	.75
LM324AD	296-9540-5-ND	Quad General Purpose Op Amp	14-SOP	.76	.57	.43
LM324ADR	296-9540-1-ND	Quad General Purpose Op Amp	14-SSOP	.76	.57	.43
LM324ADR	296-9540-2-ND	Quad General Purpose Op Amp	14-SSOP	617.50/2,500		
LM324ADBR	296-9541-1-ND	Quad General Purpose Op Amp	14-SSOP	.76	.57	.43
LM324ADBR	296-9541-2-ND	Quad General Purpose Op Amp	14-SSOP	506.00/2,000		
LM324AN	296-9542-5-ND	Quad General Purpose Op Amp	14-Dip	1.38	1.10	.83
LM324ANSR	296-9543-1-ND	Quad General Purpose Op Amp	14-SOP	1.38	1.10	.83
LM324ANSR	296-9543-2-ND	Quad General Purpose Op Amp	14-SOP	1430.00/2,000		
LM324APWR	296-9544-1-ND	Quad General Purpose Op Amp	14-TSSOP	.76	.57	.43
LM324APWR	296-9544-2-ND	Quad General Purpose Op Amp	14-TSSOP	506.00/2,000		
LM324D	296-1390-5-ND	Quad General Purpose Op Amp	14-SOIC	.52	.39	.30
LM324N	296-1391-5-ND	Quad General Purpose Op Amp	14-Dip	.52	.39	.30
LM324PWR	296-9545-1-ND	Quad General Purpose Op Amp	14-TSSOP	.52	.39	.30
LM324PWR	296-9545-2-ND	Quad General Purpose Op Amp	14-TSSOP	346.00/2,000		
LM348D	296-9552-5-ND	Quad General Purpose Op Amp	8-SOP	.75	.63	.50
LM358AD	296-9553-5-ND	Dual Op Amp	8-SOP	.76	.57	.43
LM358AP	296-9554-5-ND	Dual Op Amp	8-Dip	.76	.57	.43
LM358D	296-1014-5-ND	Dual Op Amp	8-SOIC	.52	.39	.30
LM358DR	296-1014-1-ND	Dual Op Amp	8-SOIC	.52	.39	.30
LM358DR	296-1014-2-ND	Dual Op Amp	8-SOIC	422.50/2,500		
LM358P	296-1395-5-ND	Dual Op Amp	8-Dip	.52	.39	.30
LM358PSR	296-1396-1-ND	Dual Op Amp	8-SOP	1.20	1.00	.80
LM358PSR	296-1396-2-ND	Dual Op Amp	8-SOP	1064.00/2,000		
LM358PWR	296-9555-1-ND	Dual Op Amp	8-TSSOP	.52	.39	.30
LM358PWR	296-9555-2-ND	Dual Op Amp	8-TSSOP	346.00/2,000		
LM2900DR	296-9525-1-ND	Quad Op Amp	14-SOP	1.20	1.00	.80
LM2900DR	296-9525-2-ND	Quad Op Amp	14-SOP	1300.00/2,500		
LM2900N	296-9526-5-ND	Quad Op Amp	14-Dip	1.20	1.00	.80
LM2904D	296-9527-5-ND	Dual General Purpose Op Amp	8-SOP	.64	.48	.36
LM2904P	296-9528-5-ND	Dual General Purpose Op Amp	8-Dip	.64	.48	.36
LM2904PWR	296-9529-1-ND	Dual General Purpose Op Amp	8-TSSOP	.64	.48	.36
LM2904PWR	296-9529-2-ND	Dual General Purpose Op Amp	8-TSSOP	426.00/2,000		
LM3900D	296-9564-5-ND	Quad Op Amp	14-SOP	1.35	1.13	.90
LM3900N	296-9565-5-ND	Quad Op Amp	14-Dip	1.35	1.13	.90
LMV324ID	296-9569-5-ND	Quad Low Voltage R/R Op Amp	14-SOP	.75	.63	.50
LMV324IDR	296-9569-1-ND	Quad Low Voltage R/R Op Amp	14-SOP	.75	.63	.50
LMV324IDR	296-9569-2-ND	Quad Low Voltage R/R Op Amp	14-SOP	812.50/2,500		
LMV321IDBVR	296-9567-1-ND	Low Voltage R/R Op Amp	SOT-23-5	.92	.69	.52
LMV321IDBVR	296-9567-2-ND	Low Voltage R/R Op Amp	SOT-23-5	897.00/3,000		
LMV321IDCKR	296-9568-1-ND	Low Voltage R/R Op Amp	SC-70-5	.96	.72	.54
LMV321IDCKR	296-9568-2-ND	Low Voltage R/R Op Amp	SC-70-5	936.00/3,000		
LMV324IPWR	296-9570-1-ND	Quad Low Voltage R/R Op Amp	14-TSSOP	.75	.63	.50
LMV324IPWR	296-9570-2-ND	Quad Low Voltage R/R Op Amp	14-TSSOP	666.00/2,000		
LMV358IDR	296-9571-1-ND	Dual Low Voltage R/R Op Amp	8-SOP	.92	.69	.52
LMV358IDR	296-9571-2-ND	Dual Low Voltage R/R Op Amp	8-SOP	747.50/2,500		
LMV358IPWR	296-9572-1-ND	Dual Low Voltage R/R Op Amp	8-TSSOP	.92	.69	.52
LMV358IPWR	296-9572-2-ND	Dual Low Voltage R/R Op Amp	8-TSSOP	612.00/2,000		
LOG100JP	LOG100JP-ND	Prec. Logarithmic and Log Ratio Amp.	14-Dip	118.26	110.38	102.50
LOG102AID	LOG102AID-ND	Prec. Logarithmic and Log Ratio Amp *NEW!*	14-SOP	26.58	24.81	23.04
LT1013CP	296-1399-5-ND	Dual Precision Op Amp	8-Dip	2.38	1.90	1.43
LT1013DD	296-1400-5-ND	Dual Precision Op Amp	8-SOIC	2.00	1.60	1.20
LT1013DIP	296-7044-5-ND	Dual Precision Op Amp	8-Dip	2.30	1.84	1.38
LT1013DP	296-7045-5-ND	Dual Precision Op Amp	8-Dip	2.00	1.60	1.20
LT1014DIDW	296-7046-5-ND	Quad Precision Op Amp	16-SOIC	5.45	4.36	3.39
LT1014DN	296-7047-5-ND	Quad Precision Op Amp	14-Dip	4.73	3.78	2.94
MC1458D	296-9601-5-ND	Dual General Purpose Op Amp	8-SOP	.80	.60	.45
MC1458P	296-1403-5-ND	Dual General Purpose Op Amp	8-Dip	.80	.60	.45
MC3303D	296-7033-5-ND	Quad LP Op Amp, -40°C to 85°C	14-SOP	.80	.60	.45
MC3303N	296-7034-5-ND	Quad LP Op Amp, -40°C to 85°C	14-Dip	.80	.60	.45
MC3303PWR	296-11661-1-ND	Quad LP Op Amp, -40°C to 85°C	14-TSSOP	.80	.60	.45
MC3303PWR	296-11661-2-ND	Quad LP Op Amp, -40°C to 85°C	14-TSSOP	532.00/2,000		
MC3403D	296-7035-5-ND	Quad Low Power GP Op Amp	14-SOP	.64	.48	.36
MC3403N	296-1406-5-ND	Quad Low Power GP Op Amp	14-Dip	.64	.48	.36
MC3403NSR	296-1407-1-ND	Quad Low Power GP Op Amp	14-SOP	.84	.63	.48
MC3403NSR	296-1407-2-ND	Quad Low Power GP Op Amp	14-SOP	558.00/2,000		
MC3403PWR	296-7036-1-ND	Quad Low Power GP Op Amp	14-TSSOP	.64	.48	.36
MC3403PWR	296-7036-2-ND	Quad Low Power GP Op Amp	14-TSSOP	426.00/2,000		
MC3487D	296-7039-5-ND	Quad Differential Line Driver	16-SOP	1.20	1.00	.80
NE5532AP	296-7040-5-ND	Dual Low Noise Op Amp	8-Dip	1.38	1.10	.83
NE5532P	296-1410-5-ND	Dual Low Noise Op Amp	8-Dip	1.20	1.00	.80
NE5534AP	296-7042-5-ND	Low Noise High-Speed Audio Op Amp	8-Dip	1.50	1.20	.90
NE5534P	296-7043-5-ND	Low Noise High-Speed Audio Op Amp	8-Dip	1.14	.95	.76
OP07DD	296-9621-5-ND	Low Offset Volt Op Amp	8-SOP	1.26	1.05	.84
OP07DP	296-9622-5-ND	Low Offset Volt Op Amp	8-Dip	1.26	1.05	.84
OPA27GP	OPA27GP-ND	Compensated, Low Noise, Precision Op Amp	8-Dip	2.55	2.04	1.53
OPA27GU	OPA27GU-ND	Compensated, Low Noise, Precision Op Amp	8-SOIC	2.30	1.84	1.43
OPA37GP	OPA37GP-ND	Uncompensated, Low Noise, Precision Op Amp	8-Dip	2.60	2.08	1.56
OPA37GU	OPA37GU-ND	Uncompensated, Low Noise, Precision Op Amp	8-SOIC	2.34	1.88	1.46
OPA111AM	OPA111AM-ND	Low Noise, Precision Op Amp (500µV out)	TO-99	13.04	11.75	10.42
OPA111BM	OPA111BM-ND	Low Noise, Precision Op Amp (250µV out)	TO-99	25.10	23.43	21.75
OPA121KU	OPA121KU-ND	Low Cost, Precision DiFET Op Amp	8-SOIC	9.20	7.36	6.21
OPA124U	OPA124U-ND	Low Noise, Precision DiFET Op Amp	8-SOIC	7.16	5.73	4.84
OPA124UA	OPA124UA-ND	Low Noise, Precision DiFET Op Amp	8-SOIC	8.46	6.77	5.72
OPA128JM	OPA128JM-ND	DiFET Electrometer-Grade Op Amp	TO-99-8	17.34	16.19	15.03
OPA128KM	OPA128KM-ND	DiFET Electrometer-Grade Op Amp	TO-99-8	23.63	22.05	20.48
OPA128LM	OPA128LM-ND	DiFET Electrometer-Grade Op Amp	TO-99-8	29.96	27.96	25.97
OPA128SM	OPA128SM-ND	DiFET Electrometer-Grade Op Amp	TO-99-8	59.96	55.96	51.97
OPA129U	OPA129U-ND	Ultra-Low Bias Current DiFET Op Amp	8-SOIC	5.76	4.61	3.89
OPA129UB	OPA129UB-ND	Ultra-Low Bias Current DiFET Op Amp	8-SOIC	9.80	7.84	6.62
OPA130UA	OPA130UA-ND	Low Power, Prec., FET-In Op Amp	8-SOIC	2.81	2.25	1.75
OPA131U	OPA131U-ND	General Purpose FET-Input Op Amp	8-SOIC	4.23	3.39	2.64
OPA131UA	OPA131UA-ND	General Purpose FET-Input Op Amp	8-SOIC	2.27	1.82	1.42
OPA131UJ	OPA131UJ-ND	General Purpose FET-Input Op Amp	8-SOIC	1.68	1.34	1.01
OPA132U	OPA132U-ND	High-Speed FET-Input Op Amp	8-SOIC	5.12	4.10	3.46
OPA132UA	OPA132UA-ND	High-Speed FET-Input Op Amp	8-SOIC	2.88	2.31	1.80
OPA134PA	OPA134PA-ND	High Performance Audio Op Amp	8-Dip	2.10	1.68	1.26
OPA134UA	OPA134UA-ND	High Performance Audio Op Amp	8-SOIC	2.10	1.68	1.26
OPA137N/250	OPA137NCT-ND	Low Cost FET-Input Op Amp	SOT-23-5	2.23	1.78	1.34
OPA137N/250	OPA137NTR-ND	Low Cost FET-Input Op Amp	SOT-23-5	311.50/250		
OPA137NA/250	OPA137NACT-ND	Low Cost FET-Input Op Amp	SOT-23-5	1.45	1.16	.87

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
OPA137NA/250	OPA137NATR-ND	Low Cost FET-Input Op Amp	SOT-23-5	203.00/250		
OPA137P	OPA137P-ND	Low Cost FET-Input Op Amp	8-Dip	2.13	1.70	1.28
OPA137PA	OPA137PA-ND	Low Cost FET-Input Op Amp	8-Dip	1.59	1.33	1.06
OPA137U	OPA137U-ND	Low Cost FET-Input Op Amp	8-SOIC	2.13	1.70	1.28
OPA137UA	OPA137UA-ND	Low Cost FET-Input Op Amp	8-SOIC	1.59	1.33	1.06
OPA177FP	OPA177FP-ND	Precision Op Amp	8-Dip	5.81	4.65	3.62
OPA177GP	OPA177GP-ND	Precision Op Amp	8-Dip	1.98	1.58	1.19
OPA177GS	OPA177GS-ND	Precision Op Amp	8-SOIC	1.98	1.58	1.19
OPA227P	OPA227P-ND	High Precision, Low Noise Op Amp	8-Dip	4.77	3.82	2.97
OPA227PA	OPA227PA-ND	High Precision, Low Noise Op Amp	8-Dip	2.40	1.92	1.44
OPA227U	OPA227U-ND	High Precision, Low Noise Op Amp	8-SOIC	4.77	3.82	2.97
OPA227UA	OPA227UA-ND	High Precision, Low Noise Op Amp	8-SOIC	2.40	1.92	1.44
OPA228P	OPA228P-ND	Low Noise Precision Op Amp	8-Dip	4.77	3.82	2.97
OPA228PA	OPA228PA-ND	Low Noise Precision Op Amp	8-Dip	2.40	1.92	1.44
OPA228U	OPA228U-ND	Low Noise Precision Op Amp	8-SOIC	4.77	3.82	2.97
OPA228UA	OPA228UA-ND	Low Noise Precision Op Amp	8-SOIC	2.40	1.92	1.44
OPA234E/250	OPA234ECT-ND	Low Power Single-Supply Op Amp	8-MSOP	3.17	2.54	1.98
OPA234E/250	OPA234ETR-ND	Low Power Single-Supply Op Amp	8-MSOP	468.75/250		
OPA234EA/250	OPA234EACT-ND	Low Power Single Supply Op Amp	8-MSOP	2.60	2.08	1.56
OPA234EA/250	OPA234EATR-ND	Low Power Single Supply Op Amp	8-MSOP	364.00/250		
OPA234U	OPA234U-ND	Low Power Single-Supply Op Amp	8-SOIC	2.97	2.38	1.85
OPA234UA	OPA234UA-ND	Low Power Single-Supply Op Amp	8-SOIC	2.35	1.88	1.41
OPA237NA/250	OPA237NACT-ND	Single-Supply Op Amp	SOT-23-5	1.62	1.35	1.08
OPA237NA/250	OPA237NATR-ND	Single-Supply Op Amp	SOT-23-5	202.50/250		
OPA237UA	OPA237UA-ND	Single-Supply Op Amp	8-SOIC	1.20	.96	.72
OPA241PA	OPA241PA-ND	Single-Supply, Micropower, Low Voltage Op Amp	8-Dip	2.55	2.04	1.53
OPA241UA	OPA241UA-ND	Single-Supply, Micropower, Low Voltage Op Amp	8-SOIC	2.30	1.84	1.43
OPA244NA/250	OPA244NACT-ND	Single-Supply, Micropower Op Amp	SOT-23-5	1.56	1.30	1.04
OPA244NA/250	OPA244NATR-ND	Single-Supply, Micropower Op Amp	SOT-23-5	195.00/250		
OPA244PA	OPA244PA-ND	Single-Supply, Micropower Op Amp	8-Dip	1.41	1.18	.94
OPA244UA	OPA244UA-ND	Single-Supply, Micropower Op Amp	8-SOIC	1.41	1.18	.94
OPA251PA	OPA251PA-ND	Single-Supply, Micropower Op Amp	8-Dip	2.55	2.04	1.53
OPA251UA	OPA251UA-ND	Single-Supply, Micropower Op Amp	8-SOIC	2.30	1.84	1.43
OPA277P	OPA277P-ND	High Precision Op Amp	8-Dip	4.28	3.42	2.66
OPA277PA	OPA277PA-ND	High Precision Op Amp	8-Dip	2.18	1.74	1.31
OPA277U	OPA277U-ND	High Precision Op Amp	8-SOIC	4.28	3.42	2.66
OPA277UA	OPA277UA-ND	High Precision Op Amp	8-SOIC	2.18	1.74	1.31
OPA336U	OPA336U-ND	Single-Supply, Micropower Op Amp	8-SOIC	2.18	1.74	1.31
OPA336N/250	OPA336NCT-ND	Single-Supply, Micropower Op Amp	SOT-23-5	2.45	1.96	1.47
OPA336N/250	OPA336NTR-ND	Single-Supply, Micropower Op Amp	SOT-23-5	343.00/250		
OPA336NA/250	OPA336NACT-ND	Single-Supply, Micropower Op Amp	SOT-23-5	1.73	1.38	1.04
OPA336NA/250	OPA336NATR-ND	Single-Supply, Micropower Op Amp	SOT-23-5	241.50/250		
OPA336UA	OPA336UA-ND	Single-Supply, Micropower Op Amp	8-SOIC	1.45	1.16	.87
OPA337EA/250	OPA337EACT-ND	Single Supply, CMOS Op Amp	8-MSOP	1.61	1.38	1.27
OPA337EA/250	OPA337EATR-ND	Single Supply, CMOS Op Amp	8-MSOP	172.50/250		
OPA337NA/250	OPA337NACT-ND	Single Supply, CMOS Op Amp	SOT-23-5	1.26	1.05	.84
OPA337NA/250	OPA337NATR-ND	Single Supply, CMOS Op Amp	SOT-23-5	157.50/250		
OPA337PA	OPA337PA-ND	Single Supply, CMOS Op Amp	8-Dip	1.17	.98	.78
OPA337UA/2K5	OPA337UACT-ND	Single-Supply, CMOS Op Amp	8-SOIC	1.54	1.32	1.21
OPA337UA	OPA337UA-ND	Single Supply, CMOS Op Amp	8-SOIC	1.26	1.05	.84
OPA337UA/2K5	OPA337UATR-ND	Single-Supply, CMOS Op Amp	8-SOIC	1430.00/2,500		
OPA338NA/250	OPA338NACT-ND	Decompensated Single-Supply CMOS Op Amp	SOT-23-5	1.26	1.05	.84
OPA338NA/250	OPA338NATR-ND	Decompensated Single-Supply CMOS Op Amp	SOT-23-5	157.50/250		
OPA338UA	OPA338UA-ND	Decompensated Single-Supply CMOS Op Amp	8-SOIC	1.26	1.05	.84
OPA340NA/250	OPA340NACT-ND	Single-Supply, R/R Op Amp	SOT-23-5	1.88	1.50	1.13
OPA340NA/250	OPA340NATR-ND	Single-Supply, R/R Op Amp	SOT-23-5	262.50/250		
OPA340UA	OPA340UA-ND	Single-Supply, R/R Op Amp	8-SOIC	1.60	1.28	.96
OPA341NA/3K	OPA341NA/3KCT-ND	Single-Supply R/R In/Out, LP Op Amp with Shutdown	6-SOP	1.75	1.40	1.05
OPA341NA/3K	OPA341NA/3KTR-ND	Single-Supply R/R In/Out, LP Op Amp with Shutdown	6-SOP	2688.00/3,000		
OPA341UA	OPA341UA-ND	Single-Supply R/R In/Out, LP Op Amp with Shutdown	8-SOP	1.75	1.40	1.05
OPA342NA/250	OPA342NACT-ND	Low Cost Micropower R/R Op Amp	SOT-23-5	1.63	1.30	.98
OPA342NA/250	OPA342NATR-ND	Low Cost Micropower R/R Op Amp	SOT-23-5	227.50/250		
OPA342UA	OPA342UA-ND	Low Cost Micropower R/R Op Amp	8-SOIC	1.40	1.12	.84
OPA343NA/250	OPA343NACT-ND	Single Supply Op Amp	SOT-23-5	1.60	1.28	.96
OPA343NA/250	OPA343NATR-ND	Single Supply Op Amp	SOT-23-5	224.00/250		
OPA343UA	OPA343UA-ND	Single Supply Op Amp	8-SOIC	1.38	1.10	.83
OPA344NA/250	OPA344NACT-ND	Single Supply Op Amp	SOT-23-5	1.85	1.48	1.11
OPA344NA/250	OPA344NATR-ND	Single Supply Op Amp	SOT-23-5	259.00/250		
OPA344PA	OPA344PA-ND	Single Supply Op Amp	8-Dip	1.60	1.28	.96
OPA344UA	OPA344UA-ND	Single Supply Op Amp	8-SOIC	1.60	1.28	.96
OPA345NA/250	OPA345NACT-ND	Single Supply Op Amp	SOT-23-5	1.85	1.48	1.11
OPA345NA/250	OPA345NATR-ND	Single Supply Op Amp	SOT-23-5	259.00/250		
OPA345UA	OPA345UA-ND	Single Supply Op Amp	8-SOIC	1.60	1.28	.96
OPA347NA/250	OPA347NACT-ND	Rail-to-Rail Op Amp	SOT-23-5	1.44	1.20	.96
OPA347NA/250	OPA347NATR-ND	Rail-to-Rail Op Amp	SOT-23-5	180.00/250		
OPA347PA	OPA347PA-ND	Rail-to-Rail Op Amp	8-Dip	1.32	1.10	.88
OPA347UA	OPA347UA-ND	Rail-to-Rail Op Amp	8-SOIC	1.32	1.10	.88
OPA347UA/2K5	OPA347UATR-ND	Rail-to-Rail Op Amp	8-SOIC	1430.00/2,500		
OPA348AID	296-12275-5-ND	1MHz, 45µA, R/R, I/O Op Amp *NEW!*	8-SOIC	1.41	1.18	.94
OPA348AIDBVT	296-12276-1-ND	1MHz, 45µA, R/R, I/O Op Amp *NEW!*	SOT-23-5	1.41	1.18	.94
OPA348AIDBVT	296-12276-2-ND	1MHz, 45µA, R/R, I/O Op Amp *NEW!*	SOT-23-5	176.25/250		
OPA349NA/250	OPA349NACT-ND	Rail-to-Rail Op Amp	SOT-23-5	1.80	1.44	1.30
OPA349NA/250	OPA349NATR-ND	Rail-to-Rail Op Amp	SOT-23-5	252.00/250		
OPA349UA	OPA349UA-ND	Rail-to-Rail Op Amp	8-SOIC	1.65	1.32	.99
OPA350EA/250	OPA350EACT-ND	HS, Single-Supply CMOS Op Amp (35MHz)	8-MSOP	2.86	2.29	1.78
OPA350EA/250	OPA350EATR-ND	HS, Single-Supply CMOS Op Amp (35MHz)	8-MSOP	422.25/250		
OPA350PA	OPA350PA-ND	HS, Single-Supply CMOS Op Amp (35MHz)	8-Dip	2.63	2.11	1.64
OPA350UA	OPA350UA-ND	HS, Single-Supply CMOS Op Amp (35MHz)	8-SOIC	2.63	2.11	1.64

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
OPA353NA/250	OPA353NACT-ND	HS, Single-Supply R/R CMOS Op Amp	SOT-23-5	2.30	1.84	1.43
OPA353NA/250	OPA353NATR-ND	HS, Single-Supply R/R CMOS Op Amp	SOT-23-5	357.00/250		
OPA353UA	OPA353UA-ND	HS, Single-Supply, R/R CMOS Op Amp (35MHz)	8-SOIC	2.30	1.84	1.38
OPA355NA/250	296-11641-1-ND	High Speed, Video Op Amp	6-SOP	2.68	2.15	1.67
OPA355NA/250	296-11641-2-ND	High Speed, Video Op Amp	6-SOP	395.75/250		
OPA355UA	296-11647-5-ND	High Speed, Video Op Amp	8-SOP	2.57	2.06	1.60
OPA356AID	296-12407-5-ND	2.5V, Single CMOS Op Amp *NEW!*	8-SOIC	2.34	1.88	1.46
OPA404KP	OPA404KP-ND	Quad High Spd., Prec. DiFET Op Amp	14-Dip	12.11	10.91	9.67
OPA404KU	OPA404KU-ND	Quad High Spd., Prec. DiFET Op Amp	16-SOIC	11.38	10.25	9.09
OPA445AP	OPA445AP-ND	High Voltage Op Amp	8-Dip	8.56	6.85	5.78
OPA445AU	OPA445AU-ND	High Voltage Op Amp	8-SOIC	5.29	4.23	3.29
OPA452FA	OPA452FA-ND	80V, 50mA Op Amp	7-DDPAK	5.13	4.11	3.20
OPA452TA-1	OPA452TA-1-ND	80V, 50mA Op Amp	TO-220-7-ZIP	5.13	4.11	3.20
OPA452TA	OPA452TA-ND	80V, 50mA Op Amp	TO-220-7	5.13	4.11	3.20
OPA453FA	OPA453FA-ND	80V, 50mA Op Amp	7-DDPAK	5.13	4.11	3.20
OPA453TA-1	OPA453TA-1-ND	80V, 50mA Op Amp	TO-220-7-ZIP	5.13	4.11	3.20
OPA453TA	OPA453TA-ND	80V, 50mA Op Amp	TO-220-7	5.13	4.11	3.20
OPA501AM	OPA501AM-ND	High Voltage High Current Op Amp	TO-3-8	67.77	63.26	58.74
OPA512BM	OPA512BM-ND	Very-High Current, High Power Op Amp	TO-3-8	84.53	78.89	73.26
OPA541AM	OPA541AM-ND	High Power Monolithic Op Amp	TO-3-8	34.68	32.37	30.06
OPA541AP	OPA541AP-ND	High Power Monolithic Op Amp	11-PWR-ZIP	16.69	15.03	13.33
OPA544F	OPA544F-ND	High Voltage, High Current Op Amp	5-DDPAK	10.58	9.53	8.45
OPA544T	OPA544T-ND	High Voltage, High Current Op Amp	TO-220-5	10.58	9.53	8.45
OPA547F	OPA547F-ND	High Voltage, 60V, High Current (.5A) Op Amp	DDPAK-7	7.86	6.29	5.31
OPA547T	OPA547T-ND	High Voltage, 60V, High Current (.5A) Op Amp	TO-220-7	7.86	6.29	5.31
OPA548F	OPA548F-ND	High Voltage, 60V, High Current (3A) Op Amp	DDPAK-7	8.73	7.86	6.97
OPA548T	OPA548T-ND	High -Voltage, 60V, High Current (3A) Op Amp	TO-220-7	10.48	8.39	7.08
OPA549S	OPA549S-ND	High Voltage, High Current Op Amp	11-PFM	15.62	14.58	13.54
OPA549T	OPA549T-ND	High Voltage, High-Current Op Amp	11-ZIP	17.34	15.62	13.85
OPA551FA	OPA551FA-ND	High Current/Power 60V, 200mA Op Amp	7-DDPAK	4.86	3.89	3.03
OPA551PA	OPA551PA-ND	High Current/Power 60V, 200mA Op Amp	8-Dip	3.56	2.85	2.22
OPA551UA	OPA551UA-ND	High Current/Power 60V, 200mA Op Amp	8-SOIC	3.56	2.85	2.22
OPA552FA	OPA552FA-ND	High Current/Power 60V, 200mA Op Amp	7-DDPAK	4.86	3.89	3.03
OPA552PA	OPA552PA-ND	High Current/Power 60V, 200mA Op Amp	8-Dip	3.56	2.85	2.22
OPA552UA	OPA552UA-ND	High Current/Power 60V, 200mA Op Amp	8-SOIC	3.56	2.85	2.22
OPA561PWP	OPA561PWP-ND	High Current, High Speed Op Amp *NEW!*	20-HTSSOP	5.33	4.27	3.32
OPA602AP	OPA602AP-ND	High-Speed, Precision DiFET Op Amp	8-Dip	6.84	5.48	4.62
OPA602AU	OPA602AU-ND	High-Speed, Precision DiFET Op Amp	8-SOIC	7.50	6.00	5.07
OPA602BP	OPA602BP-ND	High-Speed, Precision DiFET Op Amp	8-Dip	11.02	8.82	7.44
OPA603AP	OPA603AP-ND	HS, Current-Feedback Op Amp	8-Dip	8.32	6.66	5.62
OPA603AU	OPA603AU-ND	HS, Current-Feedback Op Amp	16-SOIC	8.32	6.66	5.62
OPA604AP	OPA604AP-ND	FET-Input, Low Distortion Op Amp	8-Dip	2.18	1.74	1.31
OPA604AU	OPA604AU-ND	FET-Input, Low Distortion Op Amp	8-SOIC	2.18	1.74	1.31
OPA606KP	OPA606KP-ND	Wide Bandwidth DiFET Op Amp	8-Dip	6.73	5.39	4.19
OPA620KP	OPA620KP-ND	Wideband, Precision Op Amp	8-Dip	11.00	9.90	8.78
OPA620KU	OPA620KU-ND	Wideband, Precision Op Amp	8-SOIC	11.00	9.90	8.78
OPA621KU	OPA621KU-ND	Wideband, Precision Op Amp	8-SOIC	11.00	9.90	8.78
OPA627AP	OPA627AP-ND	Precision High-Speed DiFET Op Amp	8-Dip	15.24	13.73	12.17
OPA627AU	OPA627AU-ND	Precision High-Speed DiFET Op Amp	8-SOIC	15.83	14.77	13.72
OPA627BP	OPA627BP-ND	Precision High-Speed DiFET Op Amp	8-Dip	22.98	21.45	19.92
OPA627AM	OPA627AM-ND	Precision High-Speed DiFET Op Amp	TO-99-8	18.28	16.46	14.60
OPA631N/250	OPA631NCT-ND	Low Power Single Supply Op Amp	SOT-23-5	2.70	2.16	1.68
OPA631N/250	OPA631NTR-ND	Low Power Single Supply Op Amp	SOT-23-5	399.00/250		
OPA631U	OPA631U-ND	Low Power Single Supply Op Amp	8-SOIC	2.66	2.13	1.66
OPA632N/250	OPA632NCT-ND	Low Power R/R Op Amp w/Disable	SOT-23-6	2.70	2.16	1.68
OPA632N/250	OPA632NTR-ND	Low Power R/R Op Amp w/Disable	SOT-23-6	399.00/250		
OPA632U	OPA632U-ND	Low Power R/R Op Amp w/Disable	8-SOIC	2.66	2.13	1.66
OPA633KP	OPA633KP-ND	High-Speed Buffer-Amp	8-Dip	9.78	7.83	6.61
OPA634N/250	OPA634NCT-ND	Wideband, Single Supply Op Amp	SOT-23-5	3.11	2.49	1.94
OPA634N/250	OPA634NTR-ND	Wideband, Single Supply Op Amp	SOT-23-5	458.75/250		
OPA634U	OPA634U-ND	Wideband, Single Supply Op Amp	8-SOIC	3.08	2.47	1.92
OPA635N/250	OPA635NCT-ND	Wideband, R/R Op Amp w/Disable	SOT-23-6	3.11	2.49	1.94
OPA635N/250	OPA635NTR-ND	Wideband, R/R Op Amp w/Disable	SOT-23-6	458.75/250		
OPA635U	OPA635U-ND	Wideband, R/R Op Amp w/Disable	8-SOIC	3.08	2.47	1.92
OPA637AP	OPA637AP-ND	Precision High-Speed DiFET Op Amp	8-Dip	15.24	13.73	12.17
OPA637AU	OPA637AU-ND	Precision High-Speed DiFET Op Amp	8-SOIC	15.83	14.77	13.72
OPA637BP	OPA637BP-ND	Precision High-Speed DiFET Op Amp	8-Dip	22.98	21.45	19.92
OPA640U	OPA640U-ND	Wideband, Voltage Feedback Op Amp	8-SOIC	10.11	9.11	8.08
OPA640UB	OPA640UB-ND	Wideband, Voltage Feedback Op Amp	8-SOIC	13.01	11.72	10.39
OPA642N/250	OPA642NCT-ND	Wideband, Low Distortion Low Gain Op Amp	SOT-23-5	6.90	5.52	4.66
OPA642N/250	OPA642NTR-ND	Wideband, Low Distortion Low Gain Op Amp	SOT-23-5	1121.25/250		
OPA642N/250	OPA642NBCT-ND	Wideband, Low Distortion Low Gain Op Amp	SOT-23-5	9.78	7.83	6.61
OPA642N/250	OPA642NBTR-ND	Wideband, Low Distortion Low Gain Op Amp	SOT-23-5	1589.25/250		
OPA642P	OPA642P-ND	Wideband, Low Distortion Low Gain Op Amp	8-Dip	7.22	5.78	4.88
OPA642PB	OPA642PB-ND	Wideband, Low Distortion Low Gain Op Amp	8-Dip	9.74	7.80	6.58
OPA642U	OPA642U-ND	Wideband, Low Distortion Low Gain Op Amp	8-SOIC	6.86	5.49	4.64
OPA642UB	OPA642UB-ND	Wideband, Low Distortion Low Gain Op Amp	8-SOIC	10.24	8.20	6.92
OPA643N/250	OPA643NCT-ND	Wideband, Low Distortion, High Gain Op Amp	SOT-23-5	6.90	5.52	4.66
OPA643N/250	OPA643NTR-ND	Wideband, Low Distortion, High Gain Op Amp	SOT-23-5	1121.25/250		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
OPA643NB/250	OPA643NBCT-ND	Wideband, Low Distortion, High Gain Op Amp	SOT-23-5	9.78	7.83	6.61
OPA643NB/250	OPA643NBTR-ND	Wideband, Low Distortion, High Gain Op Amp	SOT-23-5	1589.25/250		
OPA643U	OPA643U-ND	Wideband, Low Distortion, High Gain Op Amp	8-SOIC	6.86	5.49	4.64
OPA643UB	OPA643UB-ND	Wideband, Low Distortion, High Gain Op Amp	8-SOIC	9.74	7.80	6.58
OPA650N/250	OPA650NCT-ND	Wideband, Low Power, Voltage Feedback Op Amp	SOT-23-5	2.70	2.16	1.68
OPA650N/250	OPA650NTR-ND	Wideband, Low Power, Voltage Feedback Op Amp	SOT-23-5	399.00/250		
OPA650U	OPA650U-ND	Wideband, Low Power, Voltage Feedback Op Amp	8-SOIC	2.66	2.13	1.66
OPA651N/250	OPA651NCT-ND	Wideband, LP, V-Feedback Op Amp -Gain +2 Optimized	SOT-23-5	4.74	3.95	3.16
OPA655P	OPA655P-ND	Wideband, FET-Input Op Amp	8-Dip	14.63	13.17	11.68
OPA655U	OPA655U-ND	Wideband, FET-Input Op Amp	8-SOIC	14.63	13.17	11.68
OPA656N/250	OPA656N/250CT-ND	Wideband Voltage-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	9.41	8.48	7.52
OPA656N/250	OPA656N/250TR-ND	Wideband Voltage-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	1801.00/250		
OPA656NB/250	OPA656NB/250CT-ND	Wideband Voltage-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	11.70	10.53	9.34
OPA656NB/250	OPA656NB/250TR-ND	Wideband Voltage-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	2237.75/250		
OPA656U	OPA656U-ND	Wideband Voltage-Feedback FET-Input Op Amp *NEW!*	8-SOP	9.26	8.34	7.40
OPA656UB	OPA656UB-ND	Wideband Voltage-Feedback FET-Input Op Amp *NEW!*	8-SOP	11.53	10.38	9.21
OPA657N/250	OPA657N/250CT-ND	Low Noise Wideband Volt-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	10.21	9.20	8.16
OPA657N/250	OPA657N/250TR-ND	Low Noise Wideband Volt-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	1954.00/250		
OPA657NB/250	OPA657NB/250CT-ND	Low Noise Wideband Volt-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	12.68	11.42	10.13
OPA657NB/250	OPA657NB/250TR-ND	Low Noise Wideband Volt-Feedback FET-Input Op Amp *NEW!*	SOT-23-5	2425.75/250		
OPA657U	OPA657U-ND	Low Noise Wideband Volt-Feedback FET-Input Op Amp *NEW!*	8-SOP	10.05	9.05	8.02
OPA657UB	OPA657UB-ND	Low Noise Wideband Volt-Feedback FET-Input Op Amp *NEW!*	8-SOP	12.53	11.28	10.01
OPA658N/250	OPA658NCT-ND	Wideband, LP, Current-Fdbk. Op Amp	SOT-23-5	3.11	2.49	1.94
OPA658N/250	OPA658NTR-ND	Wideband, LP, Current-Fdbk. Op Amp	SOT-23-5	458.75/250		
OPA658P	OPA658P-ND	Wideband, LP, Current-Fdbk. Op Amp	8-Dip	4.03	3.23	2.51
OPA658U	OPA658U-ND	Wideband, LP, Current-Fdbk. Op Amp	8-SOIC	3.08	2.47	1.92
OPA658UB	OPA658UB-ND	Wideband, LP, Current-Fdbk. Op Amp	8-SOIC	4.84	3.87	3.01
OPA660AP	OPA660AP-ND	Wideband Transconductance Op Amp and Buffer	8-Dip	10.06	8.05	6.80
OPA660AU	OPA660AU-ND	Wideband Transconductance Op Amp and Buffer	8-SOIC	8.70	6.96	5.88
OPA678AU	OPA678AU-ND	Wideband, Switched-Input Op Amp	16-SOIC	10.90	8.72	7.36
OPA680N/250	OPA680NCT-ND	Wideband, V-Feedback Op Amp with Disable	SOT-23-6	3.71	2.97	2.31
OPA680N/250	OPA680NTR-ND	Wideband, V-Feedback Op Amp with Disable	SOT-23-6	548.75/250		
OPA680P	OPA680P-ND	Wideband, V-Feedback Op Amp with Disable	8-Dip	4.43	3.55	2.76
OPA680U	OPA680U-ND	Wideband, V-Feedback Op Amp with Disable	8-SOIC	3.67	2.94	2.29
OPA681N/250	OPA681NCT-ND	WB, Current-Fdbk Op Amp w/Disable	SOT-23-6	3.71	2.97	2.31
OPA681N/250	OPA681NTR-ND	WB, Current-Fdbk. Op Amp w/Disable	SOT-23-6	548.75/250		
OPA681P	OPA681P-ND	WB, Current-Fdbk. Op Amp w/Disable	8-Dip	4.43	3.55	2.76
OPA681U	OPA681U-ND	WB, Current-Fdbk. Op Amp w/Disable	8-SOIC	3.67	2.94	2.29
OPA682N/250	OPA682NCT-ND	WB, Fixed Gain Buffer Amp w/Disable	SOT-23-6	3.78	3.03	2.36
OPA682N/250	OPA682NTR-ND	WB, Fixed Gain Buffer Amp w/Disable	SOT-23-6	558.50/250		
OPA682P	OPA682P-ND	WB, Fixed Gain Buffer Amp w/Disable	8-Dip	4.52	3.62	2.82
OPA682U	OPA682U-ND	WB, Fixed Gain Buffer Amp w/Disable	8-SOIC	3.74	2.99	2.33
OPA685N/250	OPA685NCT-ND	Ultra-Wideband, Current-Feedback Op Amp with Disable	SOT-23-6	3.94	3.15	2.45
OPA685N/250	OPA685NTR-ND	Ultra-Wideband, Current-Feedback Op Amp with Disable	SOT-23-6	582.00/250		
OPA685U	OPA685U-ND	Ultra-Wideband, Current-Feedback Op Amp with Disable	8-SOIC	3.89	3.12	2.43
OPA686N/250	OPA686NCT-ND	Wideband, Low Noise, V-Feedback Op Amp	SOT-23-5	5.34	4.28	3.61
OPA686N/250	OPA686NTR-ND	Wideband, Low Noise, V-Feedback Op Amp	SOT-23-5	887.75/250		
OPA686U	OPA686U-ND	Wideband, Low Noise, V-Feedback Op Amp	8-SOIC	5.30	4.24	3.58
OPA687N/250	OPA687NCT-ND	Wideband, Ultra-Low Noise Voltage Feedback Op Amp	SOT-23-6	6.44	5.16	4.35
OPA687N/250	OPA687NTR-ND	Wideband, Ultra-Low Noise Voltage Feedback Op Amp	SOT-23-6	1046.50/250		
OPA687U	OPA687U-ND	Wideband, Ultra-Low Noise Voltage Feedback Op Amp	8-SOIC	6.40	5.12	4.32
OPA688P	OPA688P-ND	Wideband, Voltage Limiting Op Amp	8-Dip	5.96	4.77	3.71
OPA688U	OPA688U-ND	Wideband, Voltage Limiting Op Amp	8-SOIC	5.47	4.38	3.41
OPA689P	OPA689P-ND	Wideband, High Gain Voltage Limiting Amp	8-Dip	5.96	4.77	4.03
OPA689U	OPA689U-ND	Wideband, High Gain Voltage Limiting Amp	8-SOIC	5.40	4.32	3.65
OPA690ID	OPA690ID-ND	Wideband Voltage-Feedback Op Amp with Disable *NEW!*	8-SOP	3.20	2.56	1.99
OPA690IDBVT	OPA690IDBVTCT-ND	Wideband Voltage-Feedback Op Amp with Disable *NEW!*	SOT-23-6	4.14	3.32	2.58
OPA690IDBVT	OPA690IDBVTTR-ND	Wideband Voltage-Feedback Op Amp with Disable *NEW!*	SOT-23-6	611.75/250		
OPA691ID	OPA691ID-ND	Wideband Current-Feedback Op Amp with Disable *NEW!*	8-SOP	3.11	2.49	1.94
OPA691IDBVT	OPA691IDBVTCT-ND	Wideband Current-Feedback Op Amp with Disable *NEW!*	SOT-23-6	4.03	3.23	2.51
OPA691IDBVT	OPA691IDBVTTR-ND	Wideband Current-Feedback Op Amp with Disable *NEW!*	SOT-23-6	595.25/250		
OPA703NA/250	296-9624-1-ND	CMOS R/R I/O Op Amp	SOT-23-5	2.59	2.07	1.61
OPA703NA/250	296-9624-2-ND	CMOS R/R I/O Op Amp	SOT-23-5	382.50/250		
OPA703PA	OPA703PA-ND	1MHz, CMOS R/R I/O Op Amp	8-Dip	2.59	2.07	1.61
OPA703UA	OPA703UA-ND	1MHz, CMOS R/R I/O Op Amp	8-SOP	2.59	2.07	1.61
OPA704NA/3K	OPA704NA/3KCT-ND	3MHz, CMOS R/R I/O Op Amp	5-SOP	2.59	2.07	1.61
OPA704NA/3K	OPA704NA/3KTR-ND	3MHz, CMOS R/R I/O Op Amp	5-SOP	4347.00/3,000		
OPA704PA	OPA704PA-ND	3MHz, CMOS R/R I/O Op Amp	8-Dip	2.59	2.07	1.61
OPA704UA	OPA704UA-ND	3MHz, CMOS R/R I/O Op Amp	8-SOP	2.59	2.07	1.61
OPA705NA/3K	OPA705NA/3KCT-ND	1MHz, CMOS R/R In/Out Op Amp	SOT-23-5	2.43	1.94	1.46
OPA705NA/3K	OPA705NA/3KTR-ND	1MHz, CMOS R/R In/Out Op Amp	SOT-23-5	3726.00/3,000		
OPA705PA	OPA705PA-ND	1MHz, CMOS R/R In/Out Op Amp	8-Dip	2.43	1.94	1.46
OPA705UA	OPA705UA-ND	1MHz, CMOS R/R In/Out Op Amp	8-SOP	2.43	1.94	1.46
OPA743NA/3K	OPA743NA/3KCT-ND	7MHz, CMOS R/R I/O Op Amp	5-SOP	2.10	1.68	1.26
OPA743NA/3K	OPA743NA/3KTR-ND	7MHz, CMOS R/R I/O Op Amp	5-SOP	3225.00/3,000		
OPA743PA	OPA743PA-ND	7MHz, CMOS R/R I/O Op Amp	8-Dip	2.10	1.68	1.26
OPA743UA	OPA743UA-ND	7MHz, CMOS R/R I/O Op Amp	8-SOP	2.10	1.68	1.26
OPA1013CN8	OPA1013CN8-ND	Precision Single-Supply, Dual Op Amp	8-Dip	4.97	3.98	3.10
OPA1013DN8	OPA1013DN8-ND	Precision Single-Supply, Dual Op Amp	8-Dip	4.01	3.21	2.50
OPA2107AU	OPA2107AU-ND	Dual, DiFET Op Amp	8-SOIC	12.91	11.63	10.31
OPA2130UA	OPA2130UA-ND	Dual, LP, Precision, FET-Input Op Amp	8-SOIC	4.55	3.64	2.83
OPA2131UA	OPA2131UA-ND	Dual, General Purpose, FET-Input Op Amp	8-SOIC	3.65	2.92	2.27
OPA2131UJ	OPA2131UJ-ND	Dual, General Purpose, FET-Input Op Amp	8-SOIC	2.75	2.20	1.71
OPA2132P	OPA2132P-ND	High Speed, FET Input Op Amp	8-Dip	9.14	7.32	6.17
OPA2132PA	OPA2132PA-ND	High Speed, FET Input Op Amp	8-Dip	4.88	3.91	3.04
OPA2132U	OPA2132U-ND	High Speed, FET Input Op Amp	8-SOIC	9.14	7.32	6.17
OPA2132UA	OPA2132UA-ND	High Speed, FET Input Op Amp	8-SOIC	4.88	3.91	3.04
OPA2134PA	OPA2134PA-ND	Dual, High Performance Audio Op Amp	8-Dip	2.63	2.10	1.58
OPA2134UA	OPA2134UA-ND	Dual, High Performance Audio Op Amp	8-SOIC	2.36	1.89	1.47
OPA2137E/250	OPA2137ECT-ND	Dual, Low Cost FET-Input Op Amp	8-MSOP	2.43	1.94	1.46
OPA2137E/250	OPA2137ETR-ND	Dual, Low Cost FET-Input Op Amp	8-MSOP	339.50/250		
OPA2137EA/250	OPA2137EACT-ND	Dual, Low Cost FET-Input Op Amp	8-MSOP	1.65	1.32	.99
OPA2137EA/250	OPA2137EATR-ND	Dual, Low Cost FET-Input Op Amp	8-MSOP	231.00/250		
OPA2137P	OPA2137P-ND	Dual, Low Cost FET-Input Op Amp	8-Dip	2.30	1.84	1.38
OPA2137PA	OPA2137PA-ND	Dual, Low Cost FET-Input Op Amp	8-Dip	1.55	1.24	.93
OPA2137U	OPA2137U-ND	Dual, Low Cost FET-Input Op Amp	8-SOIC	2.30	1.84	1.38
OPA2137UA	OPA2137UA-ND	Dual, Low Cost FET-Input Op Amp	8-SOIC	1.55	1.24	.93
OPA2227P	OPA2227P-ND	Dual, High Precision Op Amp	8-Dip	7.20	5.76	4.86
OPA2227PA	OPA2227PA-ND	Dual, High Precision Op Amp	8-Dip	3.67	2.94	2.29
OPA2227U	OPA2227U-ND	Dual, High Precision Op Amp	8-SOIC	7.20	5.76	4.86
OPA2227UA	OPA2227UA-ND	Dual, High Precision Op Amp	8-SOIC	3.67	2.94	2.29
OPA2228P	OPA2228P-ND	Dual, High Precision Op Amp	8-Dip	7.20	5.76	4.86
OPA2228PA	OPA2228PA-ND	Dual, High Precision Op Amp	8-Dip	3.67	2.94	2.29
OPA2228U	OPA2228U-ND	Dual, High Precision Op Amp	8-SOIC	7.20	5.76	4.86
OPA2228UA	OPA2228UA-ND	Dual, High Precision Op Amp	8-SOIC	3.67	2.94	2.29
OPA2234PA	OPA2234PA-ND	Dual, Low Power, Precision, Single-Supply Op Amp	8-Dip	2.70	2.34	2.04
OPA2234U	OPA2234U-ND	Dual, Low Power, Precision, Single-Supply Op Amp	8-SOIC	4.66	3.73	2.90
OPA2234UA	OPA2234UA-ND	Dual, Low Power, Precision, Single-Supply Op Amp	8-SOIC	3.80	3.05	2.37
OPA2237EA/250	OPA2237EACT-ND	Dual, Single-Supply Op Amp	8-MSOP	2.25	1.80	1.35
OPA2237EA/250	OPA2237EATR-ND	Dual, Single-Supply Op Amp	8-MSOP	315.00/250		
OPA2237UA	OPA2237UA-ND	Dual, Single-Supply Op Amp	8-SOIC	2.05	1.64	1.23
OPA2241PA	OPA2241PA-ND	Dual, Single-Supply Micropower Op Amp	8-Dip	3.89	3.12	2.43
OPA2241UA	OPA2241UA-ND	Dual, Single-Supply Micropower Op Amp	8-SOIC	3.89	3.12	2.43
OPA2244EA/250	OPA2244EACT-ND	Single-Supply Op Amp	8-MSOP	2.10	1.68	1.26
OPA2244EA/250	OPA2244EATR-ND	Single-Supply Op Amp	8-MSOP	294.00/250		
OPA2244PA	OPA2244PA-ND	Single-Supply Op Amp	8-Dip	1.95	1.56	1.17
OPA2244UA	OPA2244UA-ND	Single-Supply Op Amp	8-SOIC	1.95	1.56	1.17
OPA2251PA	OPA2251PA-ND	Dual, Single-Supply Micropower Op Amp	8-Dip	3.89	3.12	2.43
OPA2251UA	OPA2251UA-ND	Dual, Single-Supply Micropower Op Amp	8-SOIC	3.89	3.12	2.43
OPA2277P	OPA2277P-ND	Dual, High Precision Op Amp	8-Dip	6.48	5.19	4.38
OPA2277PA	OPA2277PA-ND	Dual, High Precision Op Amp	8-Dip	3.31	2.65	2.06
OPA2277U	OPA2277U-ND	Dual, High Precision Op Amp	8-SOIC	6.48	5.19	4.38
OPA2277UA	OPA2277UA-ND	Dual, High Precision Op Amp	8-SOIC	3.31	2.65	2.06
OPA2336E/250	OPA2336ECT-ND	Dual, Micropower Op Amp	8-MSOP	3.69	2.96	2.30
OPA2336E/250	OPA2336ETR-ND	Dual, Micropower Op Amp	8-MSOP	545.25/250		
OPA2336EA/250	OPA2336EACT-ND	Dual, Micropower Op Amp	8-MSOP	2.54	2.04	1.59
OPA2336EA/250	OPA2336EATR-ND	Dual, Micropower Op Amp	8-MSOP	375.75/250		
OPA2336P	OPA2336P-ND	Dual, Micropower Op Amp	8-Dip	3.33	2.67	2.08
OPA2336PA	OPA2336PA-ND	Dual, Micropower Op Amp	8-Dip	2.40	1.92	1.44
OPA2336U	OPA2336U-ND	Dual, Micropower Op Amp	8-SOIC	3.33	2.67	2.08
OPA2336UA	OPA2336UA-ND	Dual, Micropower Op Amp	8-SOIC	2.40	1.92	1.44
OPA2337EA/250	OPA2337EACT-ND	Dual, Single-Supply, MicroSize Op Amp	SOT-23-8	1.38	1.10	.97
OPA2337EA/250	OPA2337EATR-ND	Dual, Single-Supply, MicroSize Op Amp	SOT-23-8	192.50/250		
OPA2337PA	OPA2337PA-ND	Dual, Single-Supply, MicroSize Op Amp	8-Dip	1.38	1.10	.83
OPA2337UA	OPA2337UA-ND	Dual, Single-Supply, MicroSize Op Amp	8-SOIC	1.38	1.10	.83
OPA2338EA/250	OPA2338EACT-ND	Dual, OPA338 Op Amp	SOT-23-8	1.25	1.00	.75
OPA2338EA/250	OPA2338EATR-ND	Dual, OPA338 Op Amp	SOT-23-8	192.50/250		
OPA2338UA	OPA2338UA-ND	Dual, OPA338 Op Amp	8-SOIC	1.38	1.10	.83
OPA2340EA/250	OPA2340EACT-ND	Dual, Single-Supply, R/R Op Amp	8-MSOP	2.75	2.20	1.71
OPA2340EA/250	OPA2340EATR-ND	Dual, Single-Supply, R/R Op Amp	8-MSOP	405.75/250		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
OPA2340PA	OPA2340PA-ND	Dual, Single-Supply, R/R Op Amp	8-Dip	2.65	2.12	1.59
OPA2340UA	OPA2340UA-ND	Dual, Single-Supply, R/R Op Amp	8-SOIC	2.39	1.91	1.49
OPA2341DGSA/250	OPA2341DGSACT-ND	Dual, Single Supply R/R Op Amp with Shutdown	10-MSOP	2.39	1.91	1.70
OPA2341DGSA/250	OPA2341DGSATR-ND	Dual, Single Supply R/R Op Amp with Shutdown	10-MSOP	352.50/250		
OPA2342EA/250	OPA2342EACT-ND	Dual, Micropower R/R Op Amp	8-MSOP	3.08	2.64	2.42
OPA2342EA/250	OPA2342EATR-ND	Dual, Micropower R/R Op Amp	8-MSOP	360.50/250		
OPA2342UA	OPA2342UA-ND	Dual, Micropower R/R Op Amp	8-SOIC	2.20	1.76	1.32
OPA2343EA/250	OPA2343EATR-ND	Rail-to-Rail Op Amp	8-MSOP	318.50/250		
OPA2343UA	OPA2343UA-ND	Rail-to-Rail Op Amp	8-SOIC	2.05	1.64	1.23
OPA2344EA/250	OPA2344EACT-ND	Rail-to-Rail Op Amp	8-MSOP	4.20	3.60	3.30
OPA2344EA/250	OPA2344EATR-ND	Rail-to-Rail Op Amp	8-MSOP	399.00/250		
OPA2344PA	OPA2344PA-ND	Rail-to-Rail Op Amp	8-Dip	2.65	2.12	1.59
OPA2344UA	OPA2344UA-ND	Rail-to-Rail Op Amp	8-SOIC	2.65	2.12	1.59
OPA2345EA/250	OPA2345EACT-ND	Rail-to-Rail Op Amp	8-MSOP	4.20	3.60	3.30
OPA2345EA/250	OPA2345EATR-ND	Rail-to-Rail Op Amp	8-MSOP	399.00/250		
OPA2345UA	OPA2345UA-ND	Rail-to-Rail Op Amp	8-SOIC	2.65	2.12	1.59
OPA2347EA/250	OPA2347EACT-ND	Rail-to-Rail Op Amp	SOT-23-8	1.60	1.28	.96
OPA2347EA/250	OPA2347EATR-ND	Rail-to-Rail Op Amp	SOT-23-8	224.00/250		
OPA2347UA	OPA2347UA-ND	Rail-to-Rail Op Amp	8-SOIC	1.48	1.18	.89
OPA2347UA/2K5	OPA2347UATR-ND	Rail-to-Rail Op Amp	8-SOIC	1887.50/2,500		
OPA2349EA/250	OPA2349EACT-ND	Micropower Op Amp	SOT-23-8	2.33	1.86	1.68
OPA2349EA/250	OPA2349EATR-ND	Micropower Op Amp	SOT-23-8	325.50/250		
OPA2349UA	OPA2349UA-ND	Micropower Op Amp	8-SOIC	2.15	1.72	1.29
OPA2350EA/250	OPA2350EACT-ND	Dual, HS CMOS Op Amp (35MHz)	8-MSOP	4.73	3.78	2.94
OPA2350EA/250	OPA2350EATR-ND	Dual, HS CMOS Op Amp (35MHz)	8-MSOP	698.25/250		
OPA2350PA	OPA2350PA-ND	Dual, HS CMOS Op Amp (35MHz)	8-Dip	4.39	3.51	2.73
OPA2350UA	OPA2350UA-ND	Dual, HS CMOS Op Amp (35MHz)	8-SOIC	4.39	3.51	2.73
OPA2353EA/250	OPA2353EACT-ND	Low Cost, Dual, High-Speed CMOS Op Amp (35MHz)	8-MSOP	3.78	3.03	2.36
OPA2353EA/250	OPA2353EATR-ND	Low Cost, Dual, High-Speed CMOS Op Amp (35MHz)	8-MSOP	558.50/250		
OPA2353UA	OPA2353UA-ND	Low Cost, Dual, High-Speed CMOS Op Amp (35MHz)	8-SOIC	3.47	2.78	2.16
OPA2355DGSA/250	296-12132-1-ND	High Speed Video Op Amp *NEW!*	10-TSSOP	4.25	3.41	2.65
OPA2355DGSA/250	296-12132-2-ND	High Speed Video Op Amp *NEW!*	10-TSSOP	628.50/250		
OPA2356AID	296-12406-5-ND	Dual, HS CMOS Op Amp *NEW!*	8-SOIC	4.05	3.24	2.52
OPA2541AM	OPA2541AM-ND	Dual, High Power Op Amp, 5A Out	TO-3	56.15	52.41	48.66
OPA2541BM	OPA2541BM-ND	Dual, High Power Op Amp, 5A Out	TO-3	58.74	54.83	50.91
OPA2544T	OPA2544T-ND	Dual, High-Voltage/Current Op Amp	11-ZIP	18.08	16.28	14.44
OPA2604AP	OPA2604AP-ND	Dual, FET-Input, Low Distortion Op Amp	8-Dip	3.56	2.85	2.22
OPA2604AU	OPA2604AU-ND	Dual, FET-Input, Low Distortion Op Amp	8-SOIC	3.56	2.85	2.22
OPA2607H	OPA2607H-ND	Dual, High Out, Current Fdbk. Op Amp	8-HSOP	5.76	4.61	3.89
OPA2607U	OPA2607U-ND	Dual, High Out, Current Fdbk. Op Amp	8-SOIC	5.48	4.39	3.70
OPA2631U	OPA2631U-ND	Dual, LP, Single Supply Op Amp	8-SOIC	4.30	3.44	2.68
OPA2634U	OPA2634U-ND	Wideband, Single Supply Op Amp	8-SOIC	5.15	4.13	3.21
OPA2650E/250	OPA2650ECT-ND	Dual, Wideband, LP, V. Feedback Op Amp	8-MSOP	5.81	4.98	4.57
OPA2650E/250	OPA2650ETR-ND	Dual, Wideband, LP, V. Feedback Op Amp	8-MSOP	570.00/250		
OPA2652E/250	OPA2652ECT-ND	Dual, Voltage Feedback Op Amp	SOT-23-8	2.66	2.13	1.66
OPA2652E/250	OPA2652ETR-ND	Dual, Voltage Feedback Op Amp	SOT-23-8	392.25/250		
OPA2652U	OPA2652U-ND	Dual, Voltage Feedback Op Amp	8-SOIC	2.48	1.98	1.54
OPA2658E	OPA2658ECT-ND	Dual, Wideband, Low Power Current-Feedback Op Amp	8-MSOP	7.11	6.09	5.59
OPA2658P	OPA2658P-ND	Dual, Wideband, Low Power, Current-Feedback Op Amp	8-Dip	6.28	5.03	4.24
OPA2658U	OPA2658U-ND	Dual, Wideband, Low Power, Current-Feedback Op Amp	8-SOIC	4.93	3.95	3.07
OPA2662AU	OPA2662AU-ND	Wide Bandwidth, Dual Power Op Transconductance	16-SOIC	8.62	6.90	5.82
OPA2677H	OPA2677H-ND	Dual, Wideband, High Output Current Op Amp	8-HSOP	4.39	3.51	2.73
OPA2677T	OPA2677T-ND	Dual, Wideband, High Output Current Op Amp	16-SOIC	5.60	4.49	3.49
OPA2677U	OPA2677U-ND	Dual, Wideband, High Output Current Op Amp	8-SOIC	4.10	3.28	2.55
OPA2680N	OPA2680N-ND	Dual, Wideband, Current Feedback Op Amp with Disable	14-SOIC	5.34	4.28	3.61
OPA2680U	OPA2680U-ND	Dual, Wideband, Current Feedback Op Amp with Disable	8-SOIC	5.85	4.68	3.64
OPA2681N	OPA2681N-ND	Dual, Wideband, Current Feedback Op Amp with Disable	14-SOIC	5.34	4.28	3.61
OPA2681U	OPA2681U-ND	Dual, Wideband, Current Feedback Op Amp with Disable	8-SOIC	5.85	4.68	3.64
OPA2686U	OPA2686U-ND	Low Noise Voltage-Feedback Op Amp	8-SOIC	8.40	6.72	5.67
OPA2691I-14D	OPA2691I-14D-ND	Dual Wideband, Current Feedback Op Amp *NEW!*	14-SOP	4.95	3.96	3.08
OPA2691ID	OPA2691ID-ND	Dual Wideband, Current Feedback Op Amp *NEW!*	8-SOP	2.90	3.96	3.08
OPA2703EA/250	OPA2703EA/250CT-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	4.66	3.73	2.90
OPA2703EA/250	OPA2703EA/250TR-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	688.25/250		
OPA2703PA	OPA2703PA-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-Dip	4.32	3.46	2.69
OPA2703UA	OPA2703UA-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-SOP	4.32	3.46	2.69
OPA2704EA/250	OPA2704EA/250CT-ND	3MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	4.66	3.73	2.90
OPA2704EA/250	OPA2704EA/250TR-ND	3MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	688.25/250		
OPA2704PA	OPA2704PA-ND	3MHz, Dual CMOS R/R I/O Op Amp	8-Dip	4.32	3.46	2.69
OPA2704UA	OPA2704UA-ND	3MHz, Dual CMOS R/R I/O Op Amp	8-SOP	4.32	3.46	2.69
OPA2705EA/250	OPA2705EA/250CT-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	5.11	4.09	3.18
OPA2705EA/250	OPA2705EA/250TR-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	754.78/250		
OPA2705PA	OPA2705PA-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-Dip	4.77	3.82	2.97
OPA2705UA	OPA2705UA-ND	1MHz, Dual CMOS R/R I/O Op Amp	8-SOP	4.77	3.82	2.97
OPA2743EA/2K5	OPA2743EA/2K5CT-ND	7MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	3.11	2.49	1.94
OPA2743EA/2K5	OPA2743EA/2K5TR-ND	7MHz, Dual CMOS R/R I/O Op Amp	8-MSOP	4347.50/2,500		
OPA2822U	296-9623-5-ND	Dual, Wideband, Low Noise Op Amp	8-SOIC	4.64	3.71	2.89
OPA3355EA/250	OPA3355EA/250CT-ND	Triple, CMOS High Speed Op Amp with Shutdown	14-TSSOP	5.36	4.29	3.62
OPA3355EA/250	OPA3355EA/250TR-ND	Triple, CMOS High Speed Op Amp with Shutdown	14-TSSOP	871.00/250		
OPA3355UA	OPA3355UA-ND	Triple, CMOS High Speed Op Amp with Shutdown	14-SOP	5.36	4.29	3.62
OPA3355UA/2K5	OPA3355UA/2K5CT-ND	Triple, CMOS High Speed Op Amp with Shutdown	14-SOP	5.36	4.29	3.62
OPA3355UA/2K5	OPA3355UA/2K5TR-ND	Triple, CMOS High Speed Op Amp with Shutdown	14-SOP	8308.00/2,500		
OPA3680E/250	OPA3680ECT-ND	Triple, Wideband, Voltage Feedback Op Amp with Disable	16-SSOP	6.94	5.56	4.69
OPA3680E/250	OPA3680ETR-ND	Triple, Wideband, Voltage Feedback Op Amp with Disable	16-SSOP	1127.75/250		
OPA3680U	OPA3680U-ND	Triple, Wideband, Voltage Feedback Op Amp with Disable	16-SOIC	6.94	5.56	4.69
OPA3681E	OPA3681ECT-ND	Triple, Wideband Current-Feedback Op Amp with Disable	16-SSOP	6.94	5.56	4.69
OPA3681E	OPA3681ETR-ND	Triple, Wideband Current-Feedback Op Amp with Disable	16-SSOP	1127.75/250		
OPA3681U	OPA3681U-ND	Triple, Wideband Current-Feedback Op Amp with Disable	16-SOIC	7.24	5.80	4.89
OPA3682E	OPA3682ECT-ND	Triple, Wideband, Fixed Gain Buffer Amp with Disable	16-SSOP	7.06	5.65	4.77
OPA3682E	OPA3682ETR-ND	Triple, Wideband, Fixed Gain Buffer Amp with Disable	16-SSOP	1147.25/250		
OPA3682U	OPA3682U-ND	Triple, Wideband, Fixed Gain Buffer Amp with Disable	16-SOIC	7.24	5.80	4.89
OPA3691ID	OPA3691ID-ND	Triple, Wideband, Current Feedback Op Amp *NEW!*	16-SOP	5.98	4.79	4.04
OPA3691IDBQT	OPA3691IDBQT-ND	Triple, Wideband, Current Feedback Op Amp *NEW!*	16-SSOP	7.62	6.10	5.15
OPA4130UA	OPA4130UA-ND	Quad, LP, Precision, FET-In Op Amp	14-SOIC	6.22	4.98	4.20
OPA4131NA	OPA4131NA-ND	Quad, General Purp. FET-In Op Amp	14-SOIC	6.54	5.24	4.42
OPA4131NJ	OPA4131NJ-ND	Quad, General Purp. FET-In Op Amp	14-SOIC	5.50	4.40	3.72
OPA4131PA	OPA4131PA-ND	Quad, General Purpose FET-Input Op Amp	14-Dip	6.54	5.24	4.42
OPA4131PJ	OPA4131PJ-ND	Quad, General Purpose, FET-Input Op Amp	14-Dip	5.50	4.40	3.72
OPA4131UA	OPA4131UA-ND	Quad, General Purpose FET-Input Op Amp	16-SOIC	6.54	5.24	4.42
OPA4132UA	OPA4132UA-ND	Quad, HS, FET-Input Op Amp	14-SOIC	8.20	6.56	5.54
OPA4134UA	OPA4134UA-ND	Quad, High Performance Op Amp	14-SOIC	3.67	2.94	2.29
OPA4137P	OPA4137P-ND	Quad, FET-Input Op Amp	14-Dip	2.93	2.34	1.82
OPA4137PA	OPA4137PA-ND	Quad, FET-Input Op Amp	14-Dip	2.40	1.92	1.44
OPA4137U	OPA4137U-ND	Quad, FET-Input Op Amp	14-SOIC	2.93	2.34	1.82
OPA4137UA	OPA4137UA-ND	Quad, FET-Input Op Amp	14-SOIC	2.40	1.92	1.44
OPA4227PA	OPA4227PA-ND	Quad, High Precision Op Amp	14-Dip	7.30	5.84	4.93
OPA4227UA	OPA4227UA-ND	Quad, High Precision Op Amp	14-SOIC	7.30	5.84	4.93
OPA4228PA	OPA4228PA-ND	Quad, High Precision Op Amp	14-Dip	7.30	5.84	4.93
OPA4228UA	OPA4228UA-ND	Quad, High Precision Op Amp	14-SOIC	7.30	5.84	4.93
OPA4241PA	OPA4241PA-ND	Quad, Single-Supply µpower Op Amp	14-Dip	7.54	6.04	5.09
OPA4241UA	OPA4241UA-ND	Quad, Single-Supply µpower Op Amp	14-SOIC	7.54	6.04	5.09
OPA4243EA/250	OPA4243EACT-ND	Quad, Single Supply Op Amp	14-TSSOP	3.67	2.94	2.29
OPA4243EA/250	OPA4243EATR-ND	Quad, Single Supply Op Amp	14-TSSOP	542.00/250		
OPA4244EA/250	OPA4244EACT-ND	Single-Supply µpower Op Amp	14-TSSOP	4.66	3.73	2.90
OPA4244EA/250	OPA4244EATR-ND	Single-Supply µpower Op Amp	14-TSSOP	688.25/250		
OPA4251PA	OPA4251PA-ND	Quad, Single-Supply µpower Op Amp	14-Dip	7.54	6.04	5.09
OPA4251UA	OPA4251UA-ND	Quad, Single-Supply µpower Op Amp	14-SOIC	7.54	6.04	5.09
OPA4277PA	OPA4277PA-ND	Quad, High Precision Op Amp	14-Dip	6.92	5.54	4.68
OPA4277UA	OPA4277UA-ND	Quad, High Precision Op Amp	14-SOIC	6.92	5.54	4.68
OPA4234PA	OPA4234PA-ND	Quad, Low Power, Precision, Single-Supply Op Amp	14-Dip	5.56	4.45	3.76
OPA4234U	OPA4234U-ND	Quad, LP, Precision, Single-Supply Op Amp	14-SOIC	7.12	5.70	4.81
OPA4234UA	OPA4234UA-ND	Quad, LP, Precision, Single-Supply Op Amp	14-SOIC	6.22	4.98	4.20
OPA4336EA/250	OPA4336EACT-ND	Quad, Single-Supply, Micropower Op Amp	16-SSOP	4.48	3.59	2.79
OPA4336EA/250	OPA4336EATR-ND	Quad, Single-Supply, Micropower Op Amp	16-SSOP	661.75/250		
OPA4340EA/250	OPA4340EACT-ND	Quad, Single-Supply, R/R Op Amp	16-SSOP	4.88	3.91	3.04
OPA4340EA/250	OPA4340EATR-ND	Quad, Single-Supply, R/R Op Amp	16-SSOP	721.50/250		
OPA4340UA	OPA4340UA-ND	Quad, Single-Supply, R/R Op Amp	14-SOIC	4.52	3.62	2.82
OPA4342EA/250	OPA4342EACT-ND	Quad, Micropower R/R Op Amp	14-TSSOP	3.47	2.78	2.16
OPA4342EA/250	OPA4342EATR-ND	Quad, Micropower R/R Op Amp	14-TSSOP	512.00/250		
OPA4342PA	OPA4342PA-ND	Quad, Micropower R/R Op Amp	14-Dip	3.42	2.74	2.13
OPA4342UA	OPA4342UA-ND	Quad, Micropower R/R Op Amp	14-SOIC	3.42	2.74	2.13
OPA4343EA/250	OPA4343EACT-ND	Quad, Single-Supply Op Amp	16-SSOP	3.47	2.78	2.16
OPA4343EA/250	OPA4343EATR-ND	Quad, Single-Supply Op Amp	16-SSOP	512.00/250		
OPA4343NA/250	OPA4343NACT-ND	Quad, Single-Supply Op Amp	14-TSSOP	5.39	4.62	4.24
OPA4343NA/250	OPA4343NATR-ND	Quad, Single-Supply Op Amp	14-TSSOP	512.00/250		
OPA4343UA	OPA4343UA-ND	Quad, Single-Supply Op Amp	14-SOIC	3.42	2.74	2.13
OPA4344EA/250	OPA4344EACT-ND	Quad, Single-Supply Op Amp	14-TSSOP	4.32	3.46	2.69
OPA4344EA/250	OPA4344EATR-ND	Quad, Single-Supply Op Amp	14-TSSOP	638.50/250		
OPA4344PA	OPA4344PA-ND	Quad, Single-Supply Op Amp	14-Dip	4.01	3.21	2.50
OPA4344UA	OPA4344UA-ND	Quad, Single-Supply Op Amp	14-SOIC	4.01	3.21	2.50
OPA4345EA/250	OPA4345EACT-ND	Quad, Single-Supply Op Amp	14-TSSOP	4.32	3.46	2.69
OPA4345EA/250	OPA4345EATR-ND	Quad, Single-Supply Op Amp	14-TSSOP	638.50/250		
OPA4345UA	OPA4345UA-ND	Quad, Single-Supply Op Amp	14-SOIC	4.01	3.21	2.50
OPA4347EA/250	OPA4347EACT-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	2.34	1.88	1.46
OPA4347EA/250	OPA4347EATR-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	364.00/250		
OPA4347UA	OPA4347UA-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.48	1.98	1.49
OPA4347UA/2K5	OPA4347UATR-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	3232.50/2,500		
OPA4348AID	296-12277-5-ND	1MHz, Quad, R/R, I/O Op Amp *NEW!*	14-SOIC	2.25	1.80	1.40
OPA4348AIPWT	296-12278-1-ND	1MHz, Quad, R/R, I/O Op Amp *NEW!*	14-TSSOP	2.25	1.80	1.40
OPA4348AIPWT	296-12278-2-ND	1MHz, Quad, R/R, I/O Op Amp *NEW!*	14-TSSOP	332.50/250		
OPA4350EA/250	OPA4350EACT-ND	High-Speed CMOS Op Amp (35MHz)	16-SSOP	7.72	6.18	5.22
OPA4350EA/250	OPA4350EATR-ND	High-Speed CMOS Op Amp (35MHz)	16-SSOP	1254.50/250		
OPA4350UA	OPA4350UA-ND	High-Speed CMOS Op Amp (35MHz)	14-SOIC	7.42	5.94	5.01
OPA4353EA/250	OPA4353EACT-ND	Low Cost, HS CMOS Op Amp	16-SSOP	6.14	4.92	4.15
OPA4353EA/250	OPA4353EATR-ND	Low Cost, HS CMOS Op Amp	16-SSOP	997.75/250		
OPA4353UA	OPA4353UA-ND	Low Cost, HS CMOS Op Amp	14-SOIC	5.84	4.68	3.95
OPA4650P	OPA4650P-ND	Quad, Wideband, LP Voltage Feedback Op Amp	14-Dip	10.06	8.05	6.80
OPA4650U	OPA4650U-ND	Quad, Wideband, LP Voltage Feedback Op Amp	14-SOIC	9.16	7.33	6.19

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
OPA4658P	OPA4658P-ND	Quad, Wideband, Low Power, Current-Feedback Op Amp	14-Dip	11.08	8.87	7.48
OPA4658U	OPA4658U-ND	Quad, Wideband, Low Power, Current-Feedback Op Amp	14-SOIC	9.16	7.33	6.19
OPA4703EA/2K5	OPA4703EA/2K5CT-ND	1MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	7.34	5.88	4.96
OPA4703EA/2K5	OPA4703EA/2K5TR-ND	1MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	11377.50/2,500		
OPA4703UA	OPA4703UA-ND	1MHz, Quad CMOS R/R, I/O Op Amp	14-SOP	7.30	5.84	4.93
OPA4704EA/2K5	OPA4704EA/2K5CT-ND	3MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	7.34	5.88	4.96
OPA4704EA/2K5	OPA4704EA/2K5TR-ND	3MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	11377.50/2,500		
OPA4704UA	OPA4704UA-ND	3MHz, Quad CMOS R/R, I/O Op Amp	14-SOP	7.30	5.84	4.93
OPA4705EA/2K5	OPA4705EA/2K5CT-ND	1MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	7.72	6.18	5.22
OPA4705EA/2K5	OPA4705EA/2K5TR-ND	1MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	11965.00/2,500		
OPA4705UA	OPA4705UA-ND	1MHz, Quad CMOS R/R, I/O Op Amp	14-SOP	7.68	6.15	5.19
OPA4743EA/250	OPA4743EA/250CT-ND	7MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	4.93	3.95	3.07
OPA4743EA/250	OPA4743EA/250TR-ND	7MHz, Quad CMOS R/R, I/O Op Amp	14-TSSOP	728.25/250		
OPA4743UA	296-12205-5-ND	12V, Quad, High Speed, R-R, I/O Op Amp *NEW!*	14-SOIC	4.73	3.78	2.94
PGA103U	PGA103U-ND	Programmable Gain Amp	8-SOIC	7.50	6.00	5.07
PGA202KP	PGA202KP-ND	Digitally Controlled Programmable-Gain Op Amp	14-Dip	11.66	10.50	9.31
PGA203KP	PGA203KP-ND	Digitally Controlled Programmable-Gain Op Amp	14-Dip	11.66	10.50	9.31
PGA204AP	PGA204AP-ND	Programmable Gain Instrum. Amp	16-Dip	10.93	9.84	8.73
PGA204AU	PGA204AU-ND	Programmable Gain Instrum. Amp	16-SOIC	10.93	9.84	8.73
PGA204BP	PGA204BP-ND	Programmable Gain Instrum. Amp	16-Dip	15.16	13.65	12.11
PGA204BU	PGA204BU-ND	Programmable Gain Instrum. Amp	16-SOIC	15.16	13.65	12.11
PGA205AP	PGA205AP-ND	Programmable Gain Instrum. Amp	16-Dip	10.93	9.84	8.73
PGA205AU	PGA205AU-ND	Programmable Gain Instrum. Amp	16-SOIC(.3")	10.93	9.84	8.73
PGA205BP	PGA205BP-ND	Programmable Gain Instrum. Amp	16-Dip	15.16	13.65	12.11
PGA205BU	PGA205BU-ND	Programmable Gain Instrum. Amp	16-SOIC	15.16	13.65	12.11
PGA206UA	PGA206UA-ND	High Speed Programmable Gain Instrumentation Amp	16-SOIC	16.23	14.61	12.96
PGA2310UA	296-12255-5-ND	High Performance Stereo Audio Volume Control	16-SOIC	12.58	11.33	10.05
PGA2311P	PGA2311P-ND	High Performance Stereo Audio Volume Control *NEW!*	16-Dip	9.40	7.52	6.35
PGA2311PA	PGA2311PA-ND	High Performance Stereo Audio Volume Control *NEW!*	16-Dip	9.40	8.46	7.51
PGA2311U	PGA2311U-ND	High Performance Stereo Audio Volume Control *NEW!*	16-SOL	9.40	7.52	6.35
PGA2311UA	PGA2311UA-ND	High Performance Stereo Audio Volume Control *NEW!*	16-SOL	9.40	8.46	7.51
SHC605AU	SHC605AU-ND	High-Speed Op Track-And-Hold Amp.	16-SOIC	32.30	30.15	27.99
SHC615AU	SHC615AU-ND	Wide Bandwidth DC Restoration Circuit	14-SOIC	9.08	8.18	7.25
RC4136N	296-9649-5-ND	Quad General Purpose Op Amp	14-Dip	1.20	1.00	.80
RC4558D	296-9650-5-ND	Dual General Purpose Op Amp	8-SOIC	.80	.60	.45
RC4558P	296-1414-5-ND	Dual GP Op Amp	8-Dip	.80	.60	.45
RC4558PSR	296-9651-1-ND	Dual General Purpose Op Amp	8-SOP	1.47	1.23	.98
RC4558PSR	296-9651-2-ND	Dual General Purpose Op Amp	8-SOP	1304.00/2,000		
RC4559P	296-9652-5-ND	Dual High Performance Op Amp	8-Dip	.96	.72	.54
SN75207BN	296-9910-5-ND	Dual High Sensitivity Line Rcvr.	14-Dip	2.97	2.38	1.85
THS3001CD	296-1762-5-ND	420MHz Current-Feedback Op Amp.	8-SOIC	5.80	4.64	3.92
THS3001ID	296-7507-5-ND	420MHz Current-Feedback Op Amp.	8-SOIC	6.00	4.80	4.05
THS3001IDGNR	296-12006-1-ND	420MHz Current-Feedback Op Amp.	8-HTSSOP	6.00	4.80	4.05
THS3001IDGNR	296-12006-2-ND	420MHz Current-Feedback Op Amp.	8-HTSSOP	9300.00/2,500		
THS4001CD	296-1763-5-ND	High Speed Low Power Op Amp	8-SOIC	4.25	3.41	2.65
THS4001ID	296-1764-5-ND	High Speed Low Power Op Amp	8-SOIC	4.48	3.59	2.79
THS4011CD	296-2404-5-ND	290MHz High Speed Amp.	8-SOIC	4.84	3.87	3.01
THS4011CDGNR	296-7508-1-ND	290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	4.84	3.87	3.01
THS4011CDGNR	296-7508-2-ND	290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	6772.50/2,500		
THS4011ID	296-7509-5-ND	290MHz Low-Distortion V-Feedback Op Amp	8-SOP	5.06	4.05	3.15
THS4011IDGNR	296-7510-1-ND	290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	5.06	4.05	3.15
THS4011IDGNR	296-7510-2-ND	290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	7087.50/2,500		
THS4012CD	296-7511-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-SOP	7.16	5.73	4.84
THS4012CDGN	296-10023-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	7.16	5.73	4.84
THS4012CDGNR	296-10023-1-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	7.16	5.73	4.84
THS4012CDGNR	296-10023-2-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	11097.50/2,500		
THS4012ID	296-7513-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-SOP	7.34	5.88	4.96
THS4012IDGN	296-10025-5-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	7.34	5.88	4.96
THS4012IDGNR	296-10025-1-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	7.34	5.88	4.96
THS4012IDGNR	296-10025-2-ND	Dual 290MHz Low-Distortion V-Feedback Op Amp	8-MSOP	11377.50/2,500		
THS4021CD	296-2405-5-ND	350MHz Ultra-Low Noise V-Feedback Op Amp.	8-SOIC	4.64	3.71	2.89
THS4021CDGN	296-10026-5-ND	350MHz Ultra-Low Noise V-Feedback Op Amp	8-MSOP	4.64	3.71	2.89
THS4021CDGNR	296-10026-1-ND	350MHz Ultra-Low Noise V-Feedback Op Amp	8-MSOP	4.64	3.71	2.89
THS4021CDGNR	296-10026-2-ND	350MHz Ultra-Low Noise V-Feedback Op Amp	8-MSOP	6490.00/2,500		
THS4021ID	296-7516-5-ND	350MHz Ultra-Low Noise V-Feedback Op Amp	8-SOP	4.84	3.87	3.01
THS4021IDGNR	296-7517-1-ND	350MHz Ultra-Low Noise V-Feedback Op Amp	8-MSOP	4.84	3.87	3.01
THS4021IDGNR	296-7517-2-ND	350MHz Ultra-Low Noise V-Feedback Op Amp	8-MSOP	6772.50/2,500		
THS4022CDGNR	296-7518-1-ND	Dual 350MHz Low-Noise V-Feedback Op Amp	8-MSOP	6.86	5.49	4.64
THS4022CDGNR	296-7518-2-ND	Dual 350MHz Low-Noise V-Feedback Op Amp	8-MSOP	10632.50/2,500		
THS4022ID	296-7519-5-ND	Dual 350MHz Low Noise V-Feedback Op Amp	8-SOP	7.06	5.65	4.77
THS4022IDGNR	296-7520-1-ND	Dual 350MHz Low-Noise V-Feedback Op Amp	8-MSOP	7.06	5.65	4.77
THS4022IDGNR	296-7520-2-ND	Dual 350MHz Low-Noise V-Feedback Op Amp	8-MSOP	10942.50/2,500		
THS4031CD	296-2406-5-ND	100MHz Low Noise V-Fdbk. Op Amp	8-SOIC	4.21	3.37	2.62
THS4031CDGNR	296-7521-1-ND	100MHz Low Noise V-Fdbk. Op Amp	8-MSOP	4.21	3.37	2.62
THS4031CDGNR	296-7521-2-ND	100MHz Low Noise V-Fdbk. Op Amp	8-MSOP	5890.00/2,500		
THS4031ID	296-7522-5-ND	100MHz Low Noise V-Fdbk. Op Amp	8-SOP	4.41	3.53	2.75
THS4031IDGN	296-10030-5-ND	100MHz Low Noise V-Fdbk. Op Amp	8-MSOP	4.41	3.53	2.75
THS4031IDGNR	296-10030-1-ND	100MHz Low Noise V-Fdbk. Op Amp	8-MSOP	4.41	3.53	2.75
THS4031IDGNR	296-10030-2-ND	100MHz Low Noise V-Fdbk. Op Amp	8-MSOP	6175.00/2,500		
THS4032CD	296-7524-5-ND	Dual 100MHz Low Noise V-Feedback Op Amp	8-SOP	6.34	5.08	4.28
THS4032ID	296-7525-5-ND	Dual 100MHz Low Noise V-Feedback Op Amp	8-SOP	6.54	5.24	4.42
THS4032IDGNR	296-7526-1-ND	Dual 100MHz Low Noise V-Feedback Op Amp	8-MSOP	6.54	5.24	4.42
THS4032IDGNR	296-7526-2-ND	Dual 100MHz Low Noise V-Feedback Op Amp	8-MSOP	10137.50/2,500		
THS4041CD	296-2407-5-ND	165MHz Capacitive-Stable V-Feedback Op Amp.	8-SOIC	3.47	2.78	2.16
THS4041CDGNR	296-7527-1-ND	165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	3.47	2.78	2.16
THS4041CDGNR	296-7527-2-ND	165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	4850.00/2,500		
THS4041ID	296-7528-5-ND	165MHz Capacitive-Stable V-Feedback Op Amp	8-SOP	3.67	2.94	2.29
THS4041IDGN	296-10033-5-ND	165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	3.67	2.94	2.29
THS4041IDGNR	296-10033-1-ND	165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	3.67	2.94	2.29
THS4041IDGNR	296-10033-2-ND	165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	5135.00/2,500		
THS4042CD	296-7530-5-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp	8-SOP	6.12	4.90	4.14
THS4042CDGNR	296-7531-1-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	6.12	4.90	4.14
THS4042CDGNR	296-7531-2-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	9485.00/2,500		
THS4042ID	296-7532-5-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp	8-SOP	6.30	5.04	4.26
THS4042IDGNR	296-7533-1-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	6.30	5.04	4.26
THS4042IDGNR	296-7533-2-ND	Dual 165MHz Capacitive-Stable V-Feedback Op Amp	8-MSOP	9765.00/2,500		
THS4051CD	296-2408-5-ND	70MHz High Speed Amp	8-SOIC	2.32	1.86	1.45
THS4051CDGNR	296-7534-1-ND	70MHz V-Feedback Op Amp	8-MSOP	2.32	1.86	1.45
THS4051CDGNR	296-7534-2-ND	70MHz V-Feedback Op Amp	8-MSOP	3245.00/2,500		
THS4051ID	296-7535-5-ND	70MHz V-Feedback Op Amp	8-SOP	2.52	2.02	1.57
THS4051IDGNR	296-7536-1-ND	70MHz V-Feedback Op Amp	8-MSOP	2.52	2.02	1.57
THS4051IDGNR	296-7536-2-ND	70MHz V-Feedback Op Amp	8-MSOP	3527.50/2,500		
THS4052CD	296-7537-5-ND	Dual 70MHz V-Feedback Op Amp.	8-SOP	3.02	2.42	1.88
THS4052CDGNR	296-7538-1-ND	Dual 70MHz V-Feedback Op Amp	8-MSOP	3.02	2.42	1.88
THS4052CDGNR	296-7538-2-ND	Dual 70MHz V-Feedback Op Amp	8-MSOP	4220.00/2,500		
THS4052ID	296-7539-5-ND	Dual 70MHz V-Feedback Op Amp.	8-SOP	3.22	2.58	2.01
THS4052IDGNR	296-7540-1-ND	Dual 70MHz V-Feedback Op Amp	8-MSOP	3.22	2.58	2.01
THS4052IDGNR	296-7540-2-ND	Dual 70MHz V-Feedback Op Amp	8-MSOP	4505.00/2,500		
THS4061CD	296-2409-5-ND	180MHz High Speed Amp.	8-SOIC	2.95	2.36	1.84
THS4061ID	296-7541-5-ND	180MHz High Speed Amp	8-SOP	3.15	2.52	1.96
THS4062CD	296-7542-5-ND	Dual 180MHz V-Feedback Op Amp	8-SOP	4.16	3.33	2.59
THS4062CDGN	296-7543-5-ND	Dual 180MHz V-Feedback Op Amp	8-MSOP	4.16	3.33	2.59
THS4062ID	296-7544-5-ND	Dual 180MHz V-Feedback Op Amp	8-SOP	4.37	3.50	2.72
THS4062IDGN	296-7545-5-ND	Dual 180MHz V-Feedback Op Amp	8-MSOP	4.37	3.50	2.72
THS4062IDGNR	296-7546-1-ND	Dual 180MHz V-Feedback Op Amp	8-MSOP	4.37	3.50	2.72
THS4062IDGNR	296-7546-2-ND	Dual 180MHz V-Feedback Op Amp	8-MSOP	6110.00/2,500		
THS4081CD	296-2410-5-ND	175MHz LP V-Feedback Op Amp	8-SOIC	3.76	3.01	2.34
THS4081CDGNR	296-7547-1-ND	175MHz LP V-Feedback Op Amp	8-MSOP	3.76	3.01	2.34
THS4081CDGNR	296-7547-2-ND	175MHz LP V-Feedback Op Amp	8-MSOP	5260.00/2,500		
THS4081ID	296-7548-5-ND	175MHz LP V-Feedback Op Amp	8-SOP	3.98	3.19	2.48
THS4081IDGN	296-10039-5-ND	175MHz LP V-Feedback Op Amp	8-MSOP	3.98	3.19	2.48
THS4081IDGNR	296-10039-1-ND	175MHz LP V-Feedback Op Amp	8-MSOP	3.98	3.19	2.48
THS4081IDGNR	296-10039-2-ND	175MHz LP V-Feedback Op Amp	8-MSOP	5575.00/2,500		
THS4082CD	296-7550-5-ND	Dual 175MHz LP V-Feedback Op Amp.	8-SOP	5.58	4.47	3.77
THS4082CDGNR	296-7551-1-ND	Dual 175MHz LP V-Feedback Op Amp.	8-MSOP	5.58	4.47	3.77
THS4082CDGNR	296-7551-2-ND	Dual 175MHz LP V-Feedback Op Amp.	8-MSOP	8650.00/2,500		
THS4082ID	296-7552-5-ND	Dual 175MHz LP V-Feedback Op Amp.	8-SOP	5.76	4.61	3.89
THS4082IDGNR	296-7553-1-ND	Dual 175MHz LP V-Feedback Op Amp.	8-MSOP	5.76	4.61	3.89
THS4082IDGNR	296-7553-2-ND	Dual 175MHz LP V-Feedback Op Amp.	8-MSOP	8927.50/2,500		
THS4120ID	296-11983-5-ND	Fully Differential I/O Out CMOS Amp with Shutdown	8-SOIC	4.46	3.57	2.78
THS4120IDGNR	296-12493-5-ND	High Speed Fully Differential I/O CMOS Amp *NEW!*	8-MSOP	4.23	3.39	2.64
THS4120IDR	296-11983-1-ND	Fully Differential I/O Out CMOS Amp with Shutdown	8-SOIC	4.46	3.57	2.78
THS4120IDR	296-11983-2-ND	Fully Differential I/O Out CMOS Amp with Shutdown	8-SOIC	6237.50/2,500		
THS4121CD	296-10041-5-ND	100MHz Fully Differential CMOS Amp	8-SOIC	4.03	3.23	2.51
THS4121ID	296-10042-5-ND	100MHz Fully Differential CMOS Amp	8-SOIC	4.23	3.39	2.64
THS4130ID	296-7554-5-ND	HS, Low Noise Differential I/O Amp	8-SOP	6.50	5.20	4.39
THS4130IDGNR	296-10044-1-ND	HS, Low Noise Differential I/O Amp	8-MSOP	6.50	5.20	4.39
THS4130IDGNR	296-10044-2-ND	HS, Low Noise Differential I/O Amp	8-MSOP	10075.00/2,500		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
THS4131ID	296-10046-5-ND	150MHz Fully Differential I/O Amp	8-SOIC	6.50	5.20	4.39
THS4131IDGNR	296-10047-1-ND	150MHz Fully Differential I/O Amp	8-MSOP	6.50	5.20	4.39
THS4131IDGNR	296-10047-2-ND	150MHz Fully Differential I/O Amp	8-MSOP	10075.00/2,500		
THS4140ID	296-7555-5-ND	Diff. In/Out Op Amp with Shutdown	8-SOP	6.30	5.04	4.26
THS4140IDGNR	296-10049-1-ND	Diff. In/Out Op Amp with Shutdown	8-MSOP	6.30	5.04	4.26
THS4140IDGNR	296-10049-2-ND	Diff. In/Out Op Amp with Shutdown	8-MSOP	9765.00/2,500		
THS4141ID	296-7556-5-ND	High Speed Fully Diff. I/O Amp	8-SOP	6.30	5.04	4.26
THS4141IDGNR	296-12302-1-ND	High Speed Fully Diff. I/O Amp	8-HTSSOP	6.30	5.04	4.26
THS4141IDGNR	296-12302-2-ND	High Speed Fully Diff. I/O Amp	8-HTSSOP	9765.00/2,500		
THS4150ID	296-10052-5-ND	Differential I/O Op Amp with Shutdown	8-SOIC	8.66	6.93	5.85
THS4151ID	296-10054-5-ND	High Speed Fully Diff. I/O Op Amp	8-SOIC	8.66	6.93	5.85
THS4151IDGNR	296-12303-1-ND	High Speed Fully Diff. I/O Op Amp	8-HTSSOP	8.66	6.93	5.85
THS4151IDGNR	296-12303-2-ND	High Speed Fully Diff. I/O Op Amp	8-HTSSOP	13422.50/2,500		
THS4601D	296-12495-5-ND	Wideband, FET-Input High Speed Op Amp *NEW!*	8-SOIC	15.74	14.18	12.57
THS6062CDGN	296-10068-5-ND	High Speed, Low Noise ADSL Dual Differential Receiver	8-MSOP	4.73	3.78	2.94
THS6062CDGNR	296-10068-1-ND	High Speed, Low Noise ADSL Dual Differential Receiver	8-MSOP	4.52	3.62	2.82
THS6062CDGNR	296-10068-2-ND	High Speed, Low Noise ADSL Dual Differential Receiver	8-MSOP	6677.50/2,500		
THS6062ID	296-10070-5-ND	High Speed, Low Noise ADSL Dual Differential Receiver	8-SOIC	4.73	3.78	2.94
THS6062IDGN	296-10072-5-ND	High Speed, Low Noise ADSL Dual Differential Receiver	8-MSOP	4.73	3.78	2.94
THS6062IDGNR	296-10072-1-ND	High Speed, Low Noise ADSL Dual Differential Receiver	8-MSOP	4.52	3.62	2.82
THS6062IDGNR	296-10072-2-ND	High Speed, Low Noise ADSL Dual Differential Receiver	8-MSOP	6677.50/2,500		
THS6072CDGNR	296-10073-1-ND	High Speed, Low Power ADSL Differential Receiver	8-MSOP	4.52	3.62	2.82
THS6072CDGNR	296-10073-2-ND	High Speed, Low Power ADSL Differential Receiver	8-MSOP	6677.50/2,500		
THS6072ID	296-10075-5-ND	High Speed, Low Power ADSL Differential Receiver	8-SOIC	4.73	3.78	2.94
THS6072IDGNR	296-10076-1-ND	High Speed, Low Power ADSL Differential Receiver	8-MSOP	4.52	3.62	2.82
THS6072IDGNR	296-10076-2-ND	High Speed, Low Power ADSL Differential Receiver	8-MSOP	6677.50/2,500		
THS7001CPWP	296-2411-5-ND	70MHz, HS Prog. Gain Amp	20-HTSSOP	6.88	5.51	4.65
THS7001IPWP	296-7048-5-ND	70MHz, HS Prog. Gain Amp	20-HTSSOP	6.88	5.51	4.65
THS7002CPWP	296-2412-5-ND	Dual, 70MHz, HS Programmable Gain Amp	28-HTSSOP	9.05	8.15	7.23
THS7002IPWP	296-7049-5-ND	Dual 70MHz, HS Programmable Gain Amp	28-HTSSOP	9.05	8.15	7.23
TL022CP	296-7142-5-ND	Dual Low Power Op Amp	8-Dip	1.70	1.36	1.02
TL031CD	296-7143-5-ND	Precision LP JFET Op Amp	8-SOP	1.02	.85	.68
TL031CP	296-7144-5-ND	Precision LP JFET Op Amp	8-Dip	1.02	.85	.68
TL032ACD	296-7145-5-ND	Dual LP Enhanced JFET Op Amp	8-SOP	2.48	1.98	1.54
TL032ACP	296-7146-5-ND	Dual LP Enhanced JFET Op Amp	8-Dip	2.48	1.98	1.54
TL032AIP	296-7147-5-ND	Dual LP Enhanced JFET Op Amp	8-Dip	2.70	2.16	1.68
TL032CD	296-7148-5-ND	Dual Prec. LP Enhanced JFET Op Amp	8-SOP	1.38	1.15	.92
TL032CDR	296-7148-1-ND	Dual Prec. LP Enhanced JFET Op Amp	8-SOP	1.38	1.15	.92
TL032CDR	296-7148-2-ND	Dual Prec. LP Enhanced JFET Op Amp	8-SOP	1495.00/2,500		
TL032CP	296-7149-5-ND	Dual Prec. LP Enhanced JFET Op Amp	8-Dip	1.38	1.15	.92
TL032ID	296-7150-5-ND	Dual Prec. LP Enhanced JFET Op Amp	8-SOP	1.25	1.00	.75
TL032IP	296-7151-5-ND	Dual Prec. LP Enhanced JFET Op Amp	8-Dip	1.25	1.00	.75
TL034ACD	296-7152-5-ND	Quad LP Enhanced JFET Op Amp	14-SOP	4.57	3.66	2.85
TL034AID	296-7153-5-ND	Quad LP Enhanced JFET Op Amp	14-SOP	4.97	3.98	3.10
TL034AIDR	296-7153-1-ND	Quad LP Enhanced JFET Op Amp	14-SOP	4.97	3.98	3.10
TL034AIDR	296-7153-2-ND	Quad LP Enhanced JFET Op Amp	14-SOP	6962.50/2,500		
TL034CD	296-7154-5-ND	Quad Prec. LP Enhanced JFET Op Amp	14-SOP	1.75	1.40	1.05
TL034CN	296-7155-5-ND	Quad Prec. LP Enhanced JFET Op Amp	14-Dip	1.75	1.40	1.05
TL034ID	296-7157-5-ND	Quad Prec. LP Enhanced JFET Op Amp	14-SOP	2.00	1.60	1.20
TL051CD	296-7159-5-ND	Precision Enhanced JFET Op Amp	8-SOP	1.32	1.10	.88
TL052ACD	296-7160-5-ND	Dual Prec. Enhanced JFET Op Amp	8-SOP	5.18	4.15	3.50
TL052ACP	296-7161-5-ND	Dual Prec. Enhanced JFET Op Amp	8-Dip	4.66	3.73	2.90
TL052CD	296-7162-5-ND	Dual Prec. Enhanced JFET Op Amp	8-SOP	1.73	1.38	1.04
TL052CP	296-7163-5-ND	Dual Prec. Enhanced JFET Op Amp	8-Dip	1.73	1.38	1.04
TL052ID	296-7164-5-ND	Dual Prec. Enhanced JFET Op Amp	8-SOP	1.88	1.50	1.13
TL054ACD	296-7165-5-ND	Quad Prec. Enhanced JFET Op Amp	14-SOP	5.58	4.47	3.77
TL054ACN	296-7166-5-ND	Quad Prec. Enhanced JFET Op Amp	14-Dip	5.58	4.47	3.77
TL054AIDR	296-7167-1-ND	Quad Prec. Enhanced JFET Op Amp	14-SOP	6.38	5.11	4.31
TL054AIDR	296-7167-2-ND	Quad Prec. Enhanced JFET Op Amp	14-SOP	9890.00/2,500		
TL054CD	296-7168-5-ND	Quad Prec. Enhanced JFET Op Amp	14-SOP	1.90	1.52	1.14
TL054CN	296-7169-5-ND	Quad Prec. Enhanced JFET Op Amp	14-Dip	1.90	1.52	1.14
TL061ACD	296-7171-5-ND	Low Power JFET Op Amp	8-SOP	1.05	.88	.70
TL061ACP	296-7172-5-ND	Low Power JFET Op Amp	8-Dip	1.05	.88	.70
TL061ID	296-7173-5-ND	Low Power JFET Op Amp	8-SOP	1.05	.88	.70
TL061IP	296-7174-5-ND	Low Power JFET Op Amp	8-Dip	1.05	.88	.70
TL062ACD	296-7175-5-ND	Low Power JFET Op Amp	8-SOP	.96	.80	.64
TL062BCP	296-7176-5-ND	Low Power JFET Op Amp	8-Dip	1.25	1.00	.75
TL062CD	296-1281-5-ND	Dual, Low Power JFET Op Amp	8-SOIC	.92	.69	.52
TL062CDR	296-1281-1-ND	Dual, Low Power JFET Op Amp	8-SOIC	.92	.69	.52
TL062CDR	296-1281-2-ND	Dual, Low Power JFET Op Amp	8-SOIC	747.50/2,500		
TL062CP	296-1771-5-ND	Dual, Low Power JFET Op Amp	8-Dip	.92	.69	.52
TL062CPWR	296-7178-1-ND	Dual, Low Power JFET Op Amp	8-TSSOP	.92	.69	.52
TL062CPWR	296-7178-2-ND	Dual, Low Power JFET Op Amp	8-TSSOP	612.00/2,000		
TL062ID	296-7179-5-ND	Dual, Low Power JFET Op Amp	8-SOP	.87	.73	.58
TL064ACD	296-7180-5-ND	Low Power JFET Op Amp	14-SOP	1.20	1.00	.80
TL064BCD	296-7181-5-ND	Low Power JFET Op Amp	14-SOP	2.00	1.60	1.20
TL064CD	296-1772-5-ND	Quad Low Power JFET Op Amp	14-SOIC	.84	.70	.56
TL064CN	296-1773-5-ND	Quad Low Power JFET Op Amp	14-Dip	.84	.70	.56
TL064CPWR	296-7182-1-ND	Quad Low Power JFET Op Amp	14-TSSOP	.84	.70	.56
TL064CPWR	296-7182-2-ND	Quad Low Power JFET Op Amp	14-TSSOP	744.00/2,000		
TL064ID	296-7183-5-ND	Quad Low Power JFET Op Amp	14-SOP	1.20	1.00	.80
TL064IN	296-7184-5-ND	Quad Low Power JFET Op Amp	14-Dip	1.20	1.00	.80
TL071ACP	296-7185-5-ND	Low Noise JFET Op Amp	8-Dip	.96	.80	.64
TL071CP	296-7186-5-ND	Low Noise JFET Op Amp	8-Dip	.84	.63	.48
TL071ID	296-7187-5-ND	Low Noise JFET Op Amp	8-SOP	1.05	.88	.70
TL071IP	296-7188-5-ND	Low Noise JFET Op Amp	8-Dip	1.05	.88	.70
TL072ACD	296-7189-5-ND	Low Noise JFET Op Amp	8-SOP	.96	.80	.64
TL072ACP	296-7190-5-ND	Low Noise JFET Op Amp	8-Dip	.96	.80	.64
TL072BCD	296-7191-5-ND	Low Noise JFET Op Amp	8-SOP	1.44	1.20	.96
TL072BCP	296-7192-5-ND	Low Noise JFET Op Amp	8-Dip	1.44	1.20	.96
TL072CD	296-1282-5-ND	Dual JFET-Input Op Amp	8-SOIC	.80	.60	.45
TL072CDR	296-1282-1-ND	Dual JFET-Input Op Amp	8-SOIC	.80	.60	.45
TL072CDR	296-1282-2-ND	Dual JFET-Input Op Amp	8-SOIC	650.00/2,500		
TL072CP	296-1775-5-ND	Dual JFET-Input Op Amp	8-Dip	.80	.60	.45
TL072CPWR	296-7193-1-ND	Dual Low Noise JFET Op Amp	8-TSSOP	.80	.60	.45
TL072CPWR	296-7193-2-ND	Dual Low Noise JFET Op Amp	8-TSSOP	532.00/2,000		
TL072ID	296-7194-5-ND	Dual Low Noise JFET Op Amp	8-SOP	.96	.80	.64
TL072IDR	296-7194-1-ND	Dual Low Noise JFET Op Amp	8-SOP	.96	.80	.64
TL072IDR	296-7194-2-ND	Dual Low Noise JFET Op Amp	8-SOP	1040.00/2,500		
TL074ACD	296-7195-5-ND	Low Noise JFET Op Amp	14-SOP	1.20	1.00	.80
TL074BCD	296-7196-5-ND	Low Noise JFET Op Amp	14-SOP	1.40	1.12	.84
TL074BCN	296-7197-5-ND	Low Noise JFET Op Amp	14-Dip	1.40	1.12	.84
TL074CD	296-1283-5-ND	Quad JFET-Input Op Amp	14-SOIC	.78	.65	.52
TL074CDR	296-1283-1-ND	Quad JFET-Input Op Amp	14-SOIC	.78	.65	.52
TL074CDR	296-1283-2-ND	Quad JFET-Input Op Amp	14-SOIC	845.00/2,500		
TL074CN	296-1777-5-ND	Quad JFET-Input Op Amp	14-Dip	.78	.65	.52
TL074CPWR	296-7198-1-ND	Quad Low Noise JFET Op Amp	14-TSSOP	.78	.65	.52
TL074CPWR	296-7198-2-ND	Quad Low Noise JFET Op Amp	14-TSSOP	692.00/2,000		
TL074ID	296-7199-5-ND	Quad Low Noise JFET Op Amp	14-SOP	.96	.80	.64
TL074IN	296-7200-5-ND	Quad Low Noise JFET Op Amp	14-Dip	.96	.80	.64
TL081ACD	296-7201-5-ND	JFET Op Amp	8-SOP	.96	.80	.64
TL081ACP	296-7202-5-ND	JFET Op Amp	8-Dip	.96	.80	.64
TL081CP	296-7203-5-ND	JFET Op Amp	8-Dip	.84	.63	.48
TL081ID	296-7204-5-ND	JFET Op Amp	8-SOP	.96	.80	.64
TL082ACD	296-7205-5-ND	JFET Op Amp	8-SOP	1.05	.88	.70
TL082ACP	296-1778-5-ND	Dual JFET-Input Op Amp	8-Dip	1.05	.88	.70
TL082BCD	296-7206-5-ND	JFET Op Amp	8-SOP	1.65	1.32	.99
TL082BCP	296-7207-5-ND	JFET Op Amp	8-Dip	1.65	1.32	.99
TL082CD	296-1284-5-ND	Dual JFET-Input Op Amp	8-SOIC	.84	.63	.48
TL082CDR	296-1284-1-ND	Dual JFET-Input Op Amp	8-SOIC	.84	.63	.48
TL082CDR	296-1284-2-ND	Dual JFET-Input Op Amp	8-SOIC	682.50/2,500		
TL082CP	296-1780-5-ND	Dual JFET-Input Op Amp	8-Dip	.84	.63	.48
TL082CPWR	296-7208-1-ND	Dual JFET Op Amp	8-TSSOP	.84	.63	.48
TL082CPWR	296-7208-2-ND	Dual JFET Op Amp	8-TSSOP	558.00/2,000		
TL082ID	296-7209-5-ND	Dual JFET Op Amp	8-SOP	.93	.78	.62
TL082IP	296-1781-5-ND	Dual JFET-Input Op Amp	8-Dip	.93	.78	.62
TL084ACD	296-7210-5-ND	JFET Op Amp	14-SOP	1.08	.90	.72
TL084ACN	296-1782-5-ND	Quad JFET-Input Op Amp	14-Dip	1.08	.90	.72
TL084CD	296-1285-5-ND	Quad JFET-Input Op Amp	14-SOIC	.90	.75	.60
TL084CDR	296-1285-1-ND	Quad JFET-Input Op Amp	14-SOIC	.90	.75	.60
TL084CDR	296-1285-2-ND	Quad JFET-Input Op Amp	14-SOIC	975.00/2,500		
TL084CN	296-1784-5-ND	Quad JFET-Input Op Amp	14-Dip	.90	.75	.60
TL084CNSR	296-7211-1-ND	Quad JFET Op Amp	14-SOP	1.05	.88	.70
TL084CNSR	296-7211-2-ND	Quad JFET Op Amp	14-SOP	932.00/2,000		
TL084CPWR	296-7212-1-ND	Quad JFET Op Amp	14-TSSOP	.90	.75	.60
TL084CPWR	296-7212-2-ND	Quad JFET Op Amp	14-TSSOP	798.00/2,000		
TL084ID	296-1785-5-ND	Quad JFET-Input Op Amp	14-SOIC	1.20	1.00	.80
TL084IDR	296-1785-1-ND	Quad JFET-Input Op Amp	14-SOIC	1.20	1.00	.80
TL084IDR	296-1785-2-ND	Quad JFET Op Amp	14-SOIC	1300.00/2,500		
TL084IN	296-7213-5-ND	Quad JFET Op Amp	14-Dip	1.20	1.00	.80
TL084QD	296-7214-5-ND	Quad JFET Op Amp	14-SOP	1.26	1.05	.84
TL343IDBVR	296-12496-1-ND	Single, Low Power Op Amp *NEW!*	SOT-23-5	.80	.60	.45
TL343IDBVR	296-12496-2-ND	Single, Low Power Op Amp *NEW!*	SOT-23-5	780.00/3,000		
TL3472CD	296-10169-5-ND	High Slew Rate, Single Supply Op Amp	8-SOIC	1.05	.88	.70
TL3472CDR	296-10169-1-ND	High Slew Rate, Single Supply Op Amp	8-SOIC	1.05	.88	.70
TL3472CDR	296-10169-2-ND	High Slew Rate, Single Supply Op Amp	8-SOIC	1137.50/2,500		
TL3472CP	296-10170-5-ND	High Slew Rate, Single Supply Op Amp	8-Dip	1.05	.88	.70
TL592B-8D	296-10218-5-ND	Differential Video Amplifier	8-SOIC	1.35	1.13	.90
TL592BP	296-10219-5-ND	Differential Video Amplifier	8-Dip	1.35	1.13	.90
TLC070AIP	296-7216-5-ND	High-Output WB Op Amp	8-Dip	1.35	1.13	.90
TLC070CD	296-2413-5-ND	High-Output WB Op Amp	8-SOIC	1.23	1.03	.82
TLC070CDR	296-2413-1-ND	High-Output WB Op Amp	8-SOIC	1.23	1.03	.82
TLC070CDR	296-2413-2-ND	High-Output WB Op Amp	8-SOIC	1332.50/2,500		
TLC070CDGNR	296-7217-1-ND	High-Output WB Op Amp	8-MSOP	1.23	1.03	.82
TLC070CDGNR	296-7217-2-ND	High-Output WB Op Amp	8-MSOP	1332.50/2,500		
TLC070IDGNR	296-7218-1-ND	High-Output WB Op Amp	8-MSOP	1.29	1.08	.86
TLC070IDGNR	296-7218-2-ND	High-Output WB Op Amp	8-MSOP	1397.50/2,500		
TLC070IDR	296-7219-1-ND	High-Output WB Op Amp	8-SOP	1.29	1.08	.86
TLC070IDR	296-7219-2-ND	High-Output WB Op Amp	8-SOP	1397.50/2,500		
TLC070IP	296-7220-5-ND	High-Output WB Op Amp	8-Dip	1.29	1.08	.86
TLC071AIP	296-7221-5-ND	High-Output WB Op Amp	8-Dip	1.23	1.03	.82
TLC071CD	296-2414-5-ND	Single-Supply Op Amp	8-SOP	1.11	.93	.74
TLC071CDGNR	296-7222-1-ND	High-Output WB Op Amp	8-MSOP	1.23	1.03	.82
TLC071CDGNR	296-7222-2-ND	High-Output WB Op Amp	8-MSOP	1332.50/2,500		
TLC071IDGNR	296-7223-1-ND	High-Output WB Op Amp	8-MSOP	1.29	1.08	.86
TLC071IDGNR	296-7223-2-ND	High-Output WB Op Amp	8-MSOP	1397.50/2,500		
TLC071IDR	296-7224-1-ND	High-Output WB Op Amp	8-SOP	1.17	.98	.78
TLC071IDR	296-7224-2-ND	High-Output WB Op Amp	8-SOP	1267.50/2,500		
TLC071IP	296-7225-5-ND	High-Output WB Op Amp	8-Dip	1.17	.98	.78
TLC072AID	296-7226-5-ND	Dual High-Output WB Op Amp	8-SOP	1.55	1.24	.93
TLC072AIP	296-7227-5-ND	Dual High-Output WB Op Amp	8-Dip	1.55	1.24	.93
TLC072CD	296-2415-5-ND	Dual High-Output WB Op Amp	8-SOIC	1.40	1.12	.84
TLC072CDR	296-2415-1-ND	Dual High-Output WB Op Amp	8-SOIC	1.40	1.12	.84
TLC072CDR	296-2415-2-ND	Dual High-Output WB Op Amp	8-SOIC	1792.50/2,500		
TLC072CDGNR	296-7228-1-ND	Dual High-Output WB Op Amp	8-MSOP	1.40	1.12	.84
TLC072CDGNR	296-7228-2-ND	Dual High-Output WB Op Amp	8-MSOP	1792.50/2,500		
TLC072CP	296-7229-5-ND	Dual High-Output WB Op Amp	8-Dip	1.40	1.12	.84
TLC072IDGNR	296-7230-1-ND	Dual High-Output WB Op Amp	8-MSOP	1.48	1.18	.89
TLC072IDGNR	296-7230-2-ND	Dual High-Output WB Op Amp	8-MSOP	1887.50/2,500		
TLC072IDR	296-7231-1-ND	Dual High-Output WB Op Amp	8-SOP	1.48	1.18	.89
TLC072IDR	296-7231-2-ND	Dual High-Output WB Op Amp	8-SOP	1887.50/2,500		
TLC072IP	296-7232-5-ND	Dual High-Output WB Op Amp	8-Dip	1.48	1.18	.89
TLC073AID	296-7233-5-ND	Dual High-Output WB Op Amp	14-SOP	1.68	1.34	1.01
TLC073CD	296-2416-5-ND	Dual High-Output WB Op Amp	14-SOIC	1.55	1.24	.93
TLC073CDR	296-2416-1-ND	Dual High-Output WB Op Amp	14-SOIC	1.55	1.24	.93
TLC073CDR	296-2416-2-ND	Dual High-Output WB Op Amp	14-SOIC	1985.00/2,500		
TLC073CDGQ	296-7234-5-ND	Dual High-Output WB Op Amp	10-MSOP	1.55	1.24	.93

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC073CN	296-7235-5-ND	Dual High-Output WB Op Amp	14-Dip	1.55	1.24	.93
TLC073ID	296-7236-5-ND	Dual High-Output WB Op Amp	14-SOP	1.63	1.30	.98
TLC073IDR	296-7236-1-ND	Dual High-Output WB Op Amp	14-SOP	1.63	1.30	.98
TLC073IDR	296-7236-2-ND	Dual High-Output WB Op Amp	14-SOP	2080.00/2,500		
TLC073IDGQR	296-7237-1-ND	Dual High-Output WB Op Amp	10-MSOP	1.63	1.30	.98
TLC073IDGQR	296-7237-2-ND	Dual High-Output WB Op Amp	10-MSOP	2080.00/2,500		
TLC073IN	296-7238-5-ND	Dual High-Output WB Op Amp	14-Dip	1.63	1.30	.98
TLC074AID	296-7239-5-ND	Quad High-Output WB Op Amp	14-SOP	2.15	1.72	1.29
TLC074AIN	296-7240-5-ND	Quad High-Output WB Op Amp	14-Dip	2.15	1.72	1.29
TLC074AIPWP	296-7241-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.25	1.80	1.35
TLC074CD	296-2417-5-ND	Quad High-Output Op Amp	14-SOIC	1.98	1.58	1.19
TLC074CDR	296-2417-1-ND	Quad High-Output WB Op Amp	14-SOIC	1.98	1.58	1.19
TLC074CDR	296-2417-2-ND	Quad High-Output WB Op Amp	14-SOIC	2527.50/2,500		
TLC074CN	296-7242-5-ND	Quad High-Output WB Op Amp	14-Dip	1.98	1.58	1.19
TLC074CPWPR	296-7243-1-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.08	1.66	1.25
TLC074CPWPR	296-7243-2-ND	Quad High-Output WB Op Amp	20-HTSSOP	2158.00/2,000		
TLC074IDR	296-7244-1-ND	Quad High-Output WB Op Amp	14-SOP	2.08	1.66	1.25
TLC074IDR	296-7244-2-ND	Quad High-Output WB Op Amp	14-SOP	2655.00/2,500		
TLC074IN	296-7245-5-ND	Quad High-Output WB Op Amp	14-Dip	2.08	1.66	1.25
TLC074IPWP	296-7246-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.15	1.72	1.29
TLC075AID	296-7247-5-ND	Quad High-Output WB Op Amp	16-SOP	2.35	1.88	1.41
TLC075AIN	296-7248-5-ND	Quad High-Output WB Op Amp	16-Dip	2.35	1.88	1.41
TLC075AIPWP	296-7249-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.45	1.96	1.47
TLC075CD	296-2418-5-ND	Quad High-Output WB Op Amp	16-SOIC	2.15	1.72	1.29
TLC075CDR	296-2418-1-ND	Quad High-Output WB Op Amp	16-SOIC	2.15	1.72	1.29
TLC075CDR	296-2418-2-ND	Quad High-Output WB Op Amp	16-SOIC	2752.50/2,500		
TLC075CN	296-7250-5-ND	Quad High-Output WB Op Amp	16-Dip	2.15	1.72	1.29
TLC075CPWP	296-7251-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.25	1.80	1.35
TLC075IDR	296-7252-1-ND	Quad High-Output WB Op Amp	16-SOP	2.25	1.80	1.35
TLC075IDR	296-7252-2-ND	Quad High-Output WB Op Amp	16-SOP	2880.00/2,500		
TLC075IN	296-7253-5-ND	Quad High-Output WB Op Amp	16-Dip	2.25	1.80	1.35
TLC075IPWP	296-7254-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.35	1.88	1.41
TLC080AIDR	296-7255-1-ND	High-Output WB Op Amp	8-SOP	1.35	1.13	.90
TLC080AIDR	296-7255-2-ND	High-Output WB Op Amp	8-SOP	1462.50/2,500		
TLC080AIP	296-7256-5-ND	High-Output WB Op Amp	8-Dip	1.35	1.13	.90
TLC080CD	296-2419-5-ND	High-Output Op Amp	8-SOIC	1.23	1.03	.82
TLC080CDR	296-2419-1-ND	High-Output WB Op Amp	8-SOIC	1.23	1.03	.82
TLC080CDR	296-2419-2-ND	High-Output WB Op Amp	8-SOIC	1332.50/2,500		
TLC080CDGNR	296-7257-1-ND	High-Output WB Op Amp	8-MSOP	1.23	1.03	.82
TLC080CDGNR	296-7257-2-ND	High-Output WB Op Amp	8-MSOP	1332.50/2,500		
TLC080IDGNR	296-7258-1-ND	High-Output WB Op Amp	8-MSOP	1.29	1.08	.86
TLC080IDGNR	296-7258-2-ND	High-Output WB Op Amp	8-MSOP	1397.50/2,500		
TLC080IDR	296-7259-1-ND	High-Output WB Op Amp	8-SOP	1.29	1.08	.86
TLC080IDR	296-7259-2-ND	High-Output WB Op Amp	8-SOP	1397.50/2,500		
TLC080IP	296-7260-5-ND	High-Output WB Op Amp	8-Dip	1.29	1.08	.86
TLC081AIP	296-7261-5-ND	High-Output WB Op Amp	8-Dip	1.23	1.03	.82
TLC081CD	296-2420-5-ND	Single-Supply Op Amp	8-SOIC	1.11	.93	.74
TLC081CDGN	296-7262-5-ND	High-Output WB Op Amp	8-MSOP	1.23	1.03	.82
TLC081CDGNR	296-7262-1-ND	High-Output WB Op Amp	8-MSOP	1.23	1.03	.82
TLC081CDGNR	296-7262-2-ND	High-Output WB Op Amp	8-MSOP	1332.50/2,500		
TLC081IDGNR	296-7263-1-ND	High-Output WB Op Amp	8-MSOP	1.29	1.08	.86
TLC081IDGNR	296-7263-2-ND	High-Output WB Op Amp	8-MSOP	1397.50/2,500		
TLC081IDR	296-7264-1-ND	High-Output WB Op Amp	8-SOP	1.17	.98	.78
TLC081IDR	296-7264-2-ND	High-Output WB Op Amp	8-SOP	1267.50/2,500		
TLC081IP	296-7265-5-ND	High-Output WB Op Amp	8-Dip	1.17	.98	.78
TLC082AIDR	296-7266-1-ND	Dual High-Output WB Op Amp	8-SOP	1.55	1.24	.93
TLC082AIDR	296-7266-2-ND	Dual High-Output WB Op Amp	8-SOP	1985.00/2,500		
TLC082AIP	296-7267-5-ND	Dual High-Output WB Op Amp	8-Dip	1.55	1.24	.93
TLC082CD	296-2421-5-ND	Dual High-Output WB Op Amp	8-SOIC	1.40	1.12	.84
TLC082CDR	296-2421-1-ND	Dual High-Output WB Op Amp	8-SOIC	1.40	1.12	.84
TLC082CDR	296-2421-2-ND	Dual High-Output WB Op Amp	8-SOIC	1792.50/2,500		
TLC082CDGNR	296-7268-1-ND	Dual High-Output WB Op Amp	8-MSOP	1.40	1.12	.84
TLC082CDGNR	296-7268-2-ND	Dual High-Output WB Op Amp	8-MSOP	1792.50/2,500		
TLC082CP	296-7269-5-ND	Dual High-Output WB Op Amp	8-Dip	1.40	1.12	.84
TLC082IDGNR	296-7270-1-ND	Dual High-Output WB Op Amp	8-MSOP	1.48	1.18	.89
TLC082IDGNR	296-7270-2-ND	Dual High-Output WB Op Amp	8-MSOP	1887.50/2,500		
TLC082IDR	296-7271-1-ND	Dual High-Output WB Op Amp	8-SOP	1.48	1.18	.89
TLC082IDR	296-7271-2-ND	Dual High-Output WB Op Amp	8-SOP	1887.50/2,500		
TLC082IP	296-7272-5-ND	Dual High-Output WB Op Amp	8-Dip	1.48	1.18	.89
TLC083AID	296-7273-5-ND	Dual High-Output WB Op Amp	14-SOP	1.68	1.34	1.01
TLC083AIN	296-7274-5-ND	Dual High-Output WB Op Amp	14-Dip	1.68	1.34	1.01
TLC083CD	296-2422-5-ND	Dual High-Output WB Op Amp	14-SOIC	1.55	1.24	.93
TLC083CDR	296-2422-1-ND	Dual High-Output WB Op Amp	14-SOIC	1.55	1.24	.93
TLC083CDR	296-2422-2-ND	Dual High-Output WB Op Amp	14-SOIC	1985.00/2,500		
TLC083CDGQR	296-7275-1-ND	Dual High-Output WB Op Amp	10-MSOP	1.55	1.24	.93
TLC083CDGQR	296-7275-2-ND	Dual High-Output WB Op Amp	10-MSOP	1985.00/2,500		
TLC083CN	296-7276-5-ND	Dual High-Output WB Op Amp	14-Dip	1.55	1.24	.93
TLC083ID	296-7277-5-ND	Dual High-Output WB Op Amp	14-SOP	1.63	1.30	.98
TLC083IDGQ	296-7278-5-ND	Dual High-Output WB Op Amp	10-MSOP	1.63	1.30	.98
TLC083IN	296-7279-5-ND	Dual High-Output WB Op Amp	14-Dip	1.63	1.30	.98
TLC084AID	296-7280-5-ND	Quad High-Out WB Op Amp	14-SOP	2.15	1.72	1.29
TLC084AIN	296-7281-5-ND	Quad High-Out WB Op Amp	14-Dip	2.15	1.72	1.29
TLC084AIPWP	296-7282-5-ND	Quad High-Out WB Op Amp	20-HTSSOP	2.25	1.80	1.35
TLC084CD	296-2423-5-ND	Quad High-Out WB Op Amp	14-SOIC	1.98	1.58	1.19
TLC084CDR	296-2423-1-ND	Quad High-Out WB Op Amp	14-SOIC	1.98	1.58	1.19
TLC084CDR	296-2423-2-ND	Quad High-Out WB Op Amp	14-SOIC	2527.50/2,500		
TLC084CN	296-7283-5-ND	Quad High-Out WB Op Amp	14-Dip	1.98	1.58	1.19
TLC084CPWP	296-7285-5-ND	Quad High-Out WB Op Amp	20-HTSSOP	2.08	1.66	1.25
TLC084CPWPR	296-7285-1-ND	Quad High-Out WB Op Amp *NEW!*	20-HTSSOP	2.08	1.66	1.25
TLC084CPWPR	296-7285-2-ND	Quad High-Out WB Op Amp	20-HTSSOP	2158.00/2,000		
TLC084ID	296-7287-5-ND	Quad High-Out WB Op Amp	14-SOIC	2.08	1.66	1.25
TLC084IDR	296-7287-1-ND	Quad High-Out WB Op Amp *NEW!*	14-SOIC	2.08	1.66	1.25
TLC084IDR	296-7287-2-ND	Quad High-Out WB Op Amp	14-SOIC	2655.00/2,500		
TLC084IPWP	296-7288-5-ND	Quad High-Out WB Op Amp	20-HTSSOP	2.15	1.72	1.29
TLC085AID	296-7289-5-ND	Quad High-Output WB Op Amp	16-SOP	2.35	1.88	1.41
TLC085AIN	296-7290-5-ND	Quad High-Output WB Op Amp	16-Dip	2.35	1.88	1.41
TLC085AIPWP	296-7291-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.45	1.96	1.47
TLC085CD	296-2424-5-ND	Quad High-Output WB Op Amp	16-SOIC	2.15	1.72	1.29
TLC085CDR	296-2424-1-ND	Quad High-Output WB Op Amp	16-SOIC	2.15	1.72	1.29
TLC085CDR	296-2424-2-ND	Quad High-Output WB Op Amp	16-SOIC	2752.50/2,500		
TLC085CN	296-7292-5-ND	Quad High-Output WB Op Amp	16-Dip	2.15	1.72	1.29
TLC085CPWP	296-7293-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.25	1.80	1.35
TLC085IDR	296-7294-1-ND	Quad High-Output WB Op Amp	16-SOP	2.25	1.80	1.35
TLC085IDR	296-7294-2-ND	Quad High-Output WB Op Amp	16-SOP	2880.00/2,500		
TLC085IN	296-7295-5-ND	Quad High-Output WB Op Amp	16-Dip	2.25	1.80	1.35
TLC085IPWP	296-7296-5-ND	Quad High-Output WB Op Amp	20-HTSSOP	2.35	1.88	1.41
TLC25L2ACD	296-7297-5-ND	Dual Op Amp	8-SOP	2.68	2.15	1.67
TLC25L2BCD	296-7298-5-ND	Dual Op Amp	8-SOP	3.24	2.60	2.02
TLC25L2BCP	296-7299-5-ND	Dual Op Amp	8-Dip	3.24	2.60	2.02
TLC25L2CD	296-7300-5-ND	Dual LV Micropower Op Amp	8-SOP	2.48	1.98	1.49
TLC25L2CP	296-7301-5-ND	Dual LV Micropower Op Amp	8-Dip	2.48	1.98	1.49
TLC25L4ACD	296-7302-5-ND	Quad Op Amp	14-SOP	3.74	2.99	2.33
TLC25L4ACN	296-7303-5-ND	Quad Op Amp	14-Dip	3.74	2.99	2.33
TLC25L4BCD	296-7304-5-ND	Quad Op Amp	14-SOP	4.50	3.60	2.80
TLC25L4BCN	296-7305-5-ND	Quad Op Amp	14-Dip	4.50	3.60	2.80
TLC25L4CD	296-7306-5-ND	Quad LV Micropower Op Amp	14-SOP	3.11	2.49	1.94
TLC25L4CN	296-7307-5-ND	Quad LV Micropower Op Amp	14-Dip	3.11	2.49	1.94
TLC25M2ACD	296-7308-5-ND	Dual Op Amp	8-SOP	2.68	2.15	1.67
TLC25M2ACP	296-7309-5-ND	Dual Op Amp	8-Dip	2.68	2.15	1.67
TLC25M2CP	296-7310-5-ND	Dual LP LV Op Amp	8-Dip	2.48	1.98	1.49
TLC25M4ACD	296-7311-5-ND	Quad Op Amp	14-SOP	3.74	2.99	2.33
TLC25M4BCN	296-7312-5-ND	Quad Op Amp	14-Dip	4.50	3.60	2.80
TLC25M4CD	296-7313-5-ND	Quad Low-Power LV Op Amp	14-SOP	3.11	2.49	1.94
TLC25M4CN	296-7314-5-ND	Quad Low-Power LV Op Amp	14-Dip	3.11	2.49	1.94
TLC27L1ACP	296-10259-5-ND	Low-Power Op Amp	8-Dip	.87	.73	.58
TLC27L1ID	296-10260-5-ND	Low-Power Op Amp	8-SOIC	.78	.65	.52
TLC27L2ACD	296-7369-5-ND	Dual Precision Op Amp	8-SOP	.96	.80	.64
TLC27L2ACP	296-7370-5-ND	Dual Precision Op Amp	8-Dip	.96	.80	.64
TLC27L2AID	296-7371-5-ND	Dual Precision Op Amp	8-SOP	1.02	.85	.68
TLC27L2AIP	296-7372-5-ND	Dual Precision Op Amp	8-Dip	1.02	.85	.68
TLC27L2BCD	296-7373-5-ND	Dual Precision Op Amp	8-SOP	1.14	.95	.76
TLC27L2BCP	296-7374-5-ND	Dual Precision Op Amp	8-Dip	1.14	.95	.76
TLC27L2BID	296-7375-5-ND	Dual Precision Op Amp	8-SOP	1.23	1.03	.82
TLC27L2BIP	296-7376-5-ND	Dual Precision Op Amp	8-Dip	1.23	1.03	.82
TLC27L2CD	296-1316-5-ND	Dual Precision Op Amp	8-SOIC	.78	.65	.52
TLC27L2CDR	296-1316-1-ND	Dual Precision Op Amp	8-SOIC	.81	.68	.54
TLC27L2CDR	296-1316-2-ND	Dual Precision Op Amp	8-SOIC	845.00/2,500		
TLC27L2CP	296-7377-5-ND	Dual Precision Single-Supply Micropower Op Amp	8-Dip	.78	.65	.52
TLC27L2CPSR	296-7378-1-ND	Dual Precision Single-Supply Micropower Op Amp	8-SOP	.81	.68	.54
TLC27L2CPSR	296-7378-2-ND	Dual Precision Single-Supply Micropower Op Amp	8-SOP	692.00/2,000		
TLC27L2ID	296-1317-5-ND	Dual Precision Single-Supply Micropower Op Amp	8-SOIC	.87	.73	.58
TLC27L2IDR	296-1317-1-ND	Dual Precision Single-Supply Micropower Op Amp	8-SOIC	.87	.73	.58
TLC27L2IDR	296-1317-2-ND	Dual Precision Single-Supply Micropower Op Amp	8-SOIC	942.50/2,500		
TLC27L2IP	296-7379-5-ND	Dual Precision Single-Supply Micropower Op Amp	8-Dip	.87	.73	.58
TLC27L2IPW	296-7380-5-ND	Dual Precision Single-Supply Micropower Op Amp	8-TSSOP	.87	.73	.58
TLC27L4ACD	296-1831-5-ND	Quad Precision Op Amp	14-SOIC	1.14	.95	.76
TLC27L4ACN	296-7382-5-ND	Quad Precision Op Amp	14-Dip	1.14	.95	.76
TLC27L4AID	296-7383-5-ND	Quad Precision Op Amp	14-SOP	1.23	1.03	.82
TLC27L4AIN	296-7384-5-ND	Quad Precision Op Amp	14-Dip	1.23	1.03	.82
TLC27L4BCD	296-7385-5-ND	Quad Precision Op Amp	14-SOP	1.35	1.13	.90
TLC27L4BCN	296-7386-5-ND	Quad Precision Op Amp	14-Dip	1.35	1.13	.90
TLC27L4BID	296-7387-5-ND	Quad Precision Op Amp	14-SOP	1.44	1.20	.96
TLC27L4BIN	296-7388-5-ND	Quad Precision Op Amp	14-Dip	1.44	1.20	.96
TLC27L4CD	296-1318-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOIC	.93	.78	.62
TLC27L4CDR	296-1318-1-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOIC	.93	.78	.62
TLC27L4CN	296-7389-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-Dip	.93	.78	.62
TLC27L4CPWR	296-7390-1-ND	Quad Precision Single-Supply Micropower Op Amp	14-TSSOP	.93	.78	.62
TLC27L4CPWR	296-7390-2-ND	Quad Precision Single-Supply Micropower Op Amp	14-TSSOP	824.00/2,000		
TLC27L4ID	296-1319-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOIC	1.02	.85	.68
TLC27L4IDR	296-1319-1-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOIC	1.05	.88	.70
TLC27L4IDR	296-1319-2-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOIC	1105.00/2,500		
TLC27L4IN	296-7391-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-Dip	1.02	.85	.68
TLC27L4IPW	296-7392-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-TSSOP	1.02	.85	.68
TLC27L7CD	296-1832-5-ND	Dual Precision Op Amp	8-SOIC	1.55	1.24	.93
TLC27L7CP	296-7393-5-ND	Dual Precision Single-Supply Micropower Op Amp	8-Dip	1.55	1.24	.93
TLC27L7ID	296-1320-5-ND	Dual Precision Op Amp	8-SOIC	1.73	1.38	1.04
TLC27L7IDR	296-1320-1-ND	Dual Precision Op Amp	8-SOIC	1.73	1.38	1.04
TLC27L7IDR	296-1320-2-ND	Dual Precision Op Amp	8-SOIC	2207.50/2,500		
TLC27L7IP	296-7394-5-ND	Dual Precision Single-Supply Micropower Op Amp	8-Dip	1.73	1.38	1.04
TLC27L9CD	296-7395-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOP	2.18	1.74	1.31
TLC27L9CN	296-7396-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-Dip	2.18	1.74	1.31
TLC27L9CNSR	296-7397-1-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOP	2.18	1.74	1.31
TLC27L9CNSR	296-7397-2-ND	Quad Precision Single-Supply Micropower Op Amp	14-SOP	2262.00/2,000		
TLC27L9ID	296-1834-5-ND	Quad Precision Op Amp	14-SOIC	2.40	1.92	1.44
TLC27L9IN	296-7398-5-ND	Quad Precision Single-Supply Micropower Op Amp	14-Dip	2.40	1.92	1.44
TLC27M2ACD	296-7399-5-ND	Dual Precision Op Amp	8-SOP	.96	.80	.64
TLC27M2ACP	296-7400-5-ND	Dual Precision Op Amp	8-Dip	.96	.80	.64
TLC27M2AID	296-7401-5-ND	Dual Precision Op Amp	8-SOP	1.02	.85	.68
TLC27M2AIP	296-7402-5-ND	Dual Precision Op Amp	8-Dip	1.02	.85	.68
TLC27M2BCD	296-7403-5-ND	Dual Precision Op Amp	8-SOP	1.14	.95	.76

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLC27M2BCP	296-7404-5-ND	Dual Precision Op Amp	8-Dip	1.14	.95	.76
TLC27M2BID	296-7405-5-ND	Dual Precision Op Amp	8-SOP	1.23	1.03	.82
TLC27M2BIP	296-7406-5-ND	Dual Precision Op Amp	8-Dip	1.23	1.03	.82
TLC27M2CD	296-1321-5-ND	Dual Precision Op Amp	8-SOIC	.78	.65	.52
TLC27M2CDR	296-1321-1-ND	Dual Precision Op Amp	8-SOIC	.81	.68	.54
TLC27M2CDR	296-1321-2-ND	Dual Precision Op Amp	8-SOIC	845.00/2,500		
TLC27M2CP	296-1836-5-ND	Dual Precision Op Amp	8-Dip	.78	.65	.52
TLC27M2CPWR	296-7407-1-ND	Dual LP Prec. Single-Supply Op Amp	8-TSSOP	.81	.68	.54
TLC27M2CPWR	296-7407-2-ND	Dual LP Prec. Single-Supply Op Amp	8-TSSOP	692.00/2,000		
TLC27M2ID	296-1322-5-ND	Dual LP Prec. Single-Supply Op Amp	8-SOIC	.87	.73	.58
TLC27M2IDR	296-1322-1-ND	Dual LP Prec. Single-Supply Op Amp	8-SOIC	.87	.73	.58
TLC27M2IDR	296-1322-2-ND	Dual LP Prec. Single-Supply Op Amp	8-SOIC	942.50/2,500		
TLC27M2IP	296-7408-5-ND	Dual LP Prec. Single-Supply Op Amp	8-Dip	.87	.73	.58
TLC27M2IPW	296-7409-5-ND	Dual LP Prec. Single-Supply Op Amp	8-TSSOP	.87	.73	.58
TLC27M2MD	296-7410-5-ND	Dual LP Prec. Single-Supply Op Amp	8-SOP	1.45	1.16	.87
TLC27M4ACD	296-7411-5-ND	Quad Precision Op Amp	14-SOP	1.14	.95	.76
TLC27M4ACN	296-7412-5-ND	Quad Precision Op Amp	14-Dip	1.14	.95	.76
TLC27M4AID	296-7413-5-ND	Quad Precision Op Amp	14-SOP	1.23	1.03	.82
TLC27M4AIN	296-7414-5-ND	Quad Precision Op Amp	14-Dip	1.23	1.03	.82
TLC27M4BCD	296-7415-5-ND	Quad Precision Op Amp	14-SOP	1.35	1.13	.90
TLC27M4BCN	296-7416-5-ND	Quad Precision Op Amp	14-Dip	1.35	1.13	.90
TLC27M4BID	296-7417-5-ND	Quad Precision Op Amp	14-SOP	1.44	1.20	.96
TLC27M4BIN	296-7418-5-ND	Quad Precision Op Amp	14-Dip	1.44	1.20	.96
TLC27M4CD	296-1837-5-ND	Quad Precision Op Amp	14-SOIC	.93	.78	.62
TLC27M4CN	296-7419-5-ND	Quad LP Prec. Single-Supply Op Amp	14-Dip	.93	.78	.62
TLC27M4CPWR	296-7420-1-ND	Quad LP Prec. Single-Supply Op Amp	14-TSSOP	.93	.78	.62
TLC27M4CPWR	296-7420-2-ND	Quad LP Prec. Single-Supply Op Amp	14-TSSOP	824.00/2,000		
TLC27M4ID	296-7421-5-ND	Quad LP Prec. Single-Supply Op Amp	14-SOP	1.02	.85	.68
TLC27M4IN	296-7422-5-ND	Quad LP Prec. Single-Supply Op Amp	14-Dip	1.02	.85	.68
TLC27M4IPWR	296-7423-1-ND	Quad LP Prec. Single-Supply Op Amp	14-TSSOP	1.05	.88	.70
TLC27M4IPWR	296-7423-2-ND	Quad LP Prec. Single-Supply Op Amp	14-TSSOP	904.00/2,000		
TLC27M7CD	296-1323-5-ND	Dual LP Prec. Single-Supply Op Amp	8-SOIC	1.55	1.24	.93
TLC27M7CDR	296-1323-1-ND	Dual LP Prec. Single-Supply Op Amp	8-SOIC	1.55	1.24	.93
TLC27M7CDR	296-1323-2-ND	Dual LP Prec. Single-Supply Op Amp	8-SOIC	1985.00/2,500		
TLC27M7CP	296-1838-5-ND	Dual Precision Op Amp	8-Dip	1.55	1.24	.93
TLC27M7ID	296-7424-5-ND	Dual LP Prec. Single-Supply Op Amp	8-SOP	1.73	1.38	1.04
TLC27M7IP	296-7425-5-ND	Dual LP Prec. Single-Supply Op Amp	8-Dip	1.73	1.38	1.04
TLC27M9CD	296-7426-5-ND	Quad LP Prec. Single-Supply Op Amp	14-SOP	2.18	1.74	1.31
TLC27M9CN	296-7427-5-ND	Quad LP Prec. Single-Supply Op Amp	14-Dip	2.18	1.74	1.31
TLC27M9ID	296-7428-5-ND	Quad LP Prec. Single-Supply Op Amp	14-SOP	2.40	1.92	1.44
TLC27M9IN	296-7429-5-ND	Quad LP Prec. Single-Supply Op Amp	14-Dip	2.40	1.92	1.44
TLC251ACD	296-10243-5-ND	Programmable Low Power Op Amp	8-SOIC	2.08	1.66	1.25
TLC251ACP	296-10244-5-ND	Programmable Low Power Op Amp	8-Dip	2.08	1.66	1.25
TLC251BCP	296-10245-5-ND	Programmable Low Power Op Amp	8-Dip	2.25	1.80	1.40
TLC251CD	296-10246-5-ND	Programmable Low Power Op Amp	8-SOIC	1.73	1.38	1.04
TLC251CP	296-10247-5-ND	Programmable Low Power Op Amp	8-Dip	1.73	1.38	1.04
TLC252ACD	296-10248-5-ND	Dual Low Power Op Amp	8-SOIC	2.68	2.15	1.67
TLC252BCD	296-10249-5-ND	Dual Low Power Op Amp	8-SOIC	3.24	2.60	2.02
TLC252BCP	296-10250-5-ND	Dual Low Power Op Amp	8-Dip	3.24	2.60	2.02
TLC252CD	296-10251-5-ND	Dual Low Power Op Amp	8-SOIC	2.48	1.98	1.49
TLC252CP	296-10252-5-ND	Dual Low Power Op Amp	8-Dip	2.48	1.98	1.49
TLC252CPWR	296-10253-1-ND	Dual Low Power Op Amp	8-TSSOP	2.25	1.80	1.40
TLC252CPWR	296-10253-2-ND	Dual Low Power Op Amp	8-TSSOP	2574.00/2,000		
TLC254ACD	296-2902-5-ND	LincMOS Quad Op Amp	14-SOIC	3.74	2.99	2.33
TLC254ACN	296-2903-5-ND	LincMOS Quad Op Amp	14-Dip	3.74	2.99	2.33
TLC254BCD	296-2904-5-ND	LincMOS Quad Op Amp	14-SOIC	4.50	3.60	2.80
TLC254BCN	296-2905-5-ND	LincMOS Quad Op Amp	14-Dip	4.50	3.60	2.80
TLC254CD	296-2906-5-ND	LincMOS Quad Op Amp	14-SOIC	3.11	2.49	1.94
TLC254CN	296-2907-5-ND	LincMOS Quad Op Amp	14-Dip	3.11	2.49	1.94
TLC254ID	296-2908-5-ND	LincMOS Quad Op Amp	14-SOIC	3.42	2.74	2.13
TLC271ACD	296-7338-5-ND	LP Programmable Op Amp	8-SOP	.87	.73	.58
TLC271ACP	296-7339-5-ND	LP Programmable Op Amp	8-Dip	.87	.73	.58
TLC271AID	296-7340-5-ND	LP Programmable Op Amp	8-SOP	.93	.78	.62
TLC271AIP	296-7341-5-ND	LP Programmable Op Amp	8-Dip	.93	.78	.62
TLC271BCD	296-7342-5-ND	LP Programmable Op Amp	8-SOP	1.05	.88	.70
TLC271BID	296-7344-5-ND	LP Programmable Op Amp	8-SOP	1.11	.93	.74
TLC271BIP	296-7345-5-ND	LP Programmable Op Amp	8-Dip	1.11	.93	.74
TLC271CD	296-1308-5-ND	LP Programmable Op Amp	8-SOIC	.96	.72	.54
TLC271CDR	296-1308-1-ND	LP Programmable Op Amp	8-SOIC	.96	.72	.54
TLC271CDR	296-1308-2-ND	LP Programmable Op Amp	8-SOIC	780.00/2,500		
TLC271BCP	296-7343-5-ND	LP Programmable Op Amp	8-Dip	1.05	.88	.70
TLC271CP	296-1820-5-ND	LP Programmable Op Amp	8-Dip	.96	.72	.54
TLC271ID	296-1821-5-ND	LP Programmable Op Amp	8-SOIC	.78	.65	.52
TLC271IDR	296-1821-1-ND	LP Programmable Op Amp	8-SOIC	.78	.65	.52
TLC271IDR	296-1821-2-ND	LP Programmable Op Amp	8-SOIC	845.00/2,500		
TLC271IP	296-1822-5-ND	LP Programmable Op Amp	8-Dip	.78	.65	.52
TLC272ACD	296-1309-5-ND	Dual Precision Op Amp	8-SOIC	.96	.80	.64
TLC272ACDR	296-1309-1-ND	Dual Precision Op Amp	8-SOIC	.96	.80	.64
TLC272ACDR	296-1309-2-ND	Dual Precision Op Amp	8-SOIC	1040.00/2,500		
TLC272ACP	296-7346-5-ND	Dual Precision Op Amp	8-Dip	.96	.80	.64
TLC272AID	296-7347-5-ND	Dual Precision Op Amp	8-SOP	1.02	.85	.68
TLC272AIP	296-7348-5-ND	Dual Precision Op Amp	8-Dip	1.02	.85	.68
TLC272BCD	296-7349-5-ND	Dual Precision Op Amp	8-SOP	1.14	.95	.76
TLC272BCP	296-7350-5-ND	Dual Precision Op Amp	8-Dip	1.14	.95	.76
TLC272BID	296-7351-5-ND	Dual Precision Op Amp	8-SOP	1.23	1.03	.82
TLC272BIP	296-7352-5-ND	Dual Precision Op Amp	8-Dip	1.23	1.03	.82
TLC272CD	296-1310-5-ND	Dual Precision Op Amp	8-SOIC	.78	.65	.52
TLC272CDR	296-1310-1-ND	Dual Precision Op Amp	8-SOIC	.78	.65	.52
TLC272CDR	296-1310-2-ND	Dual Precision Op Amp	8-SOIC	845.00/2,500		
TLC272CP	296-1824-5-ND	Dual Precision Op Amp	8-Dip	.78	.65	.52
TLC272CPSR	296-7353-1-ND	Dual Single-Supply Op Amp	8-SOP	.81	.68	.54
TLC272CPSR	296-7353-2-ND	Dual Single-Supply Op Amp	8-SOP	692.00/2,000		
TLC272CPW	296-7354-5-ND	Dual Single-Supply Op Amp	8-TSSOP	.78	.65	.52
TLC272CPWR	296-7354-1-ND	Dual Single-Supply Op Amp	8-TSSOP	.81	.68	.54
TLC272CPWR	296-7354-2-ND	Dual Single-Supply Op Amp	8-TSSOP	692.00/2,000		
TLC272ID	296-1311-5-ND	Dual Precision Single-Supply Op Amp	8-SOIC	.87	.73	.58
TLC272IDR	296-1311-1-ND	Dual Precision Single-Supply Op Amp	8-SOIC	.87	.73	.58
TLC272IDR	296-1311-2-ND	Dual Precision Single-Supply Op Amp	8-SOIC	942.50/2,500		
TLC272IP	296-7355-5-ND	Dual Single-Supply Op Amp	8-Dip	.87	.73	.58
TLC274ACD	296-1825-5-ND	Quad Precision Op Amp	14-SOIC	1.14	.95	.76
TLC274ACN	296-7356-5-ND	Quad Precision Op Amp	14-Dip	1.14	.95	.76
TLC274AID	296-7357-5-ND	Quad Precision Op Amp	14-SOP	1.23	1.03	.82
TLC274AIN	296-7358-5-ND	Quad Precision Op Amp	14-Dip	1.23	1.03	.82
TLC274BCD	296-7359-5-ND	Quad Precision Op Amp	14-SOP	1.35	1.13	.90
TLC274BCN	296-7360-5-ND	Quad Precision Op Amp	14-Dip	1.35	1.13	.90
TLC274BID	296-1312-5-ND	Quad Precision Op Amp	14-SOIC	1.44	1.20	.96
TLC274BIDR	296-1312-1-ND	Quad Precision Op Amp	14-SOIC	1.47	1.23	.98
TLC274BIDR	296-1312-2-ND	Quad Precision Op Amp	14-SOIC	1560.00/2,500		
TLC274BIN	296-7361-5-ND	Quad Precision Op Amp	14-Dip	1.44	1.20	.96
TLC274CD	296-1313-5-ND	Quad Single-Supply Op Amp	14-SOIC	.93	.78	.62
TLC274CDR	296-1313-1-ND	Quad Precision Op Amp	14-SOIC	.93	.78	.62
TLC274CDR	296-1313-2-ND	Quad Precision Op Amp	14-SOIC	1007.50/2,500		
TLC274CN	296-1826-5-ND	Quad Precision Op Amp	14-Dip	.93	.78	.62
TLC274ID	296-1314-5-ND	Quad Precision Op Amp	14-SOIC	1.02	.85	.68
TLC274IDR	296-1314-1-ND	Quad Precision Op Amp	14-SOIC	1.05	.88	.70
TLC274IDR	296-1314-2-ND	Quad Precision Op Amp	14-SOIC	1105.00/2,500		
TLC274IN	296-7362-5-ND	Quad Single-Supply Op Amp	14-Dip	1.02	.85	.68
TLC274MD	296-7363-5-ND	Quad Single-Supply Op Amp	14-SOP	2.18	1.74	1.31
TLC277CD	296-7364-5-ND	Dual Precision Single-Supply Op Amp	8-SOP	1.55	1.24	.93
TLC277CP	296-1828-5-ND	Dual Precision Op Amp	8-Dip	1.55	1.24	.93
TLC277ID	296-1829-5-ND	Dual Precision Op Amp	8-SOIC	1.73	1.38	1.04
TLC277IP	296-7365-5-ND	Dual Precision Single-Supply Op Amp	8-Dip	1.73	1.38	1.04
TLC279CD	296-7366-5-ND	Quad Prec. Single-Supply Op Amp	14-SOP	2.18	1.74	1.31
TLC279CN	296-7367-5-ND	Quad Prec. Single-Supply Op Amp	14-Dip	2.18	1.74	1.31
TLC279ID	296-1315-5-ND	Quad Prec. Single-Supply Op Amp	14-SOIC	2.40	1.92	1.44
TLC279IDR	296-1315-1-ND	Quad Prec. Single-Supply Op Amp	14-SOIC	2.40	1.92	1.44
TLC279IDR	296-1315-2-ND	Quad Prec. Single-Supply Op Amp	14-SOIC	3072.50/2,500		
TLC279IN	296-7368-5-ND	Quad Prec. Single-Supply Op Amp	14-Dip	2.40	1.92	1.44
TLC1078CD	296-10231-5-ND	Dual Micropower Low Voltage Op Amp	8-SOIC	4.32	3.46	2.69
TLC1078CP	296-10232-5-ND	Dual Micropower Low Voltage Op Amp	8-Dip	4.32	3.46	2.69
TLC1078ID	296-10233-5-ND	Dual Micropower Low Voltage Op Amp	8-SOIC	4.75	3.80	2.96
TLC1078IP	296-10234-5-ND	Dual Micropower Low Voltage Op Amp	8-Dip	4.75	3.80	2.96
TLC1079CD	296-10235-5-ND	Quad Micropower Low Volt. Op Amp	14-SOIC	5.34	4.28	3.61
TLC1079CN	296-10236-5-ND	Quad Micropower Low Volt. Op Amp	14-Dip	5.34	4.28	3.61
TLC1079ID	296-10237-5-ND	Quad Micropower Low Volt. Op Amp	14-SOIC	5.88	4.71	3.97
TLC1079IN	296-10238-5-ND	Quad Micropower Low Volt. Op Amp	14-Dip	5.88	4.71	3.97
TLC2201ACD	296-7050-5-ND	Low Noise Precision Op Amp	8-SOIC	3.98	3.19	2.48
TLC2201AID	296-7052-5-ND	Low Noise Precision Op Amp	8-SOIC	4.30	3.44	2.68
TLC2201AMD	296-7054-5-ND	Low Noise Precision Op Amp	8-SOIC	4.48	3.59	2.79
TLC2201CD	296-2425-5-ND	Low Noise Precision R/R Op Amp	8-SOIC	3.31	2.65	2.06
TLC2201CP	296-10241-5-ND	Low Noise Precision R/R Op Amp	8-Dip	3.31	2.65	2.06
TLC2201IDR	296-7061-1-ND	Low Noise Precision R/R Op Amp	8-SOIC	3.65	2.92	2.27
TLC2201IDR	296-7061-2-ND	Low Noise Precision R/R Op Amp	8-SOIC	5102.50/2,500		
TLC2201ID	296-10242-5-ND	Low Noise Precision R/R Op Amp	8-SOIC	3.65	2.92	2.27
TLC2201IP	296-7062-5-ND	Low Noise Precision R/R Op Amp	8-Dip	3.65	2.92	2.27
TLC2202ACD	296-7063-5-ND	Dual Low Noise Precision Op Amp	14-SOP	5.04	4.04	3.41
TLC2202AID	296-7065-5-ND	Dual Low Noise Precision Op Amp	14-SOP	5.46	4.37	3.69
TLC2202CD	296-1807-5-ND	Dual Low Noise Precision Op Amp	14-SOIC	4.73	3.78	2.94
TLC2202IP	296-7073-5-ND	Dual Low Noise Precision R/R Op Amp	8-Dip	5.20	4.16	3.24
TLC2252AID	296-7074-5-ND	Dual Rail-to-Rail Op Amp	8-SOP	1.63	1.30	.98
TLC2252AIP	296-7075-5-ND	Dual Rail-to-Rail Op Amp	8-Dip	1.63	1.30	.98
TLC2252AIPWR	296-7076-1-ND	Dual Rail-to-Rail Op Amp	8-TSSOP	1.65	1.32	.99
TLC2252AIPWR	296-7076-2-ND	Dual Rail-to-Rail Op Amp	8-TSSOP	1690.00/2,000		
TLC2252AQD	296-7077-5-ND	Dual Rail-to-Rail Op Amp	8-SOP	1.43	1.14	.86
TLC2252CD	296-7078-5-ND	Dual Rail-to-Rail Micropower Op Amp	8-SOP	1.25	1.00	.75
TLC2252CP	296-7079-5-ND	Dual Rail-to-Rail Micropower Op Amp	8-Dip	1.25	1.00	.75
TLC2252ID	296-7080-5-ND	Dual Rail-to-Rail Micropower Op Amp	8-SOP	1.38	1.10	.83
TLC2252IP	296-7081-5-ND	Dual Rail-to-Rail Micropower Op Amp	8-Dip	1.38	1.10	.83
TLC2252QD	296-7082-5-ND	Dual Rail-to-Rail Micropower Op Amp	8-SOP	1.38	1.10	.83
TLC2254AID	296-7083-5-ND	Quad Rail-to-Rail Op Amp	14-SOP	1.98	1.58	1.19
TLC2254AIN	296-7084-5-ND	Quad Rail-to-Rail Op Amp	14-Dip	1.98	1.58	1.19
TLC2254AIPWR	296-7085-1-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	1.98	1.58	1.19
TLC2254AIPWR	296-7085-2-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	2054.00/2,000		
TLC2254AQD	296-7086-5-ND	Quad Rail-to-Rail Op Amp	14-SOP	2.00	1.60	1.20
TLC2254CD	296-1300-5-ND	Quad R/R Micropower Op Amp	14-SOIC	1.50	1.20	.90
TLC2254CDR	296-1300-1-ND	Quad R/R Micropower Op Amp	14-SOIC	1.53	1.22	.92
TLC2254CDR	296-1300-2-ND	Quad R/R Micropower Op Amp	14-SOIC	1920.00/2,500		
TLC2254CN	296-7088-5-ND	Quad R/R Micropower Op Amp	14-Dip	1.50	1.20	.90
TLC2254CPWR	296-7089-1-ND	Quad R/R Micropower Op Amp	14-TSSOP	1.53	1.22	.92
TLC2254CPWR	296-7089-2-ND	Quad R/R Micropower Op Amp	14-TSSOP	1560.00/2,000		
TLC2254ID	296-1301-5-ND	Quad Low Power Op Amp	14-SOIC	1.65	1.32	.99
TLC2254IDR	296-1301-1-ND	Quad Low Power Op Amp	14-SOIC	1.68	1.34	1.01
TLC2254IDR	296-1301-2-ND	Quad Low Power Op Amp	14-SOIC	2112.50/2,500		
TLC2254IN	296-7090-5-ND	Quad Rail-to-Rail Micropower Op Amp	14-Dip	1.65	1.32	.99
TLC2254QD	296-7091-5-ND	Quad Rail-to-Rail Micropower Op Amp	14-SOP	1.93	1.54	1.16
TLC2262AID	296-7092-5-ND	Dual Rail-to-Rail Op Amp	8-SOP	1.63	1.30	.98
TLC2262AIP	296-7093-5-ND	Dual Rail-to-Rail Op Amp	8-Dip	1.63	1.30	.98
TLC2262AQD	296-7094-5-ND	Dual Rail-to-Rail Op Amp	8-SOP	1.43	1.14	.86
TLC2262CD	296-1302-5-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.25	1.00	.75
TLC2262CDR	296-1302-1-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.25	1.00	.75
TLC2262CDR	296-1302-2-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1600.00/2,500		
TLC2262CP	296-7095-5-ND	Dual Rail-to-Rail Op Amp	8-Dip	1.25	1.00	.75
TLC2262CPWR	296-7096-1-ND	Dual Rail-to-Rail Op Amp	8-TSSOP	1.25	1.00	.75
TLC2262CPWR	296-7096-2-ND	Dual Rail-to-Rail Op Amp	8-TSSOP	1300.00/2,000		
TLC2262ID	296-7097-5-ND	Dual Rail-to-Rail Op Amp	8-SOP	1.38	1.10	.83
TLC2262IP	296-7098-5-ND	Dual Rail-to-Rail Op Amp	8-Dip	1.38	1.10	.83
TLC2262QD	296-7099-5-ND	Dual Rail-to-Rail Op Amp	8-SOP	1.38	1.10	.83
TLC2264AID	296-7100-5-ND	Quad Rail-to-Rail Op Amp	14-SOP	1.98	1.58	1.19
TLC2264AIN	296-7101-5-ND	Quad Rail-to-Rail Op Amp	14-Dip	1.98	1.58	1.19
TLC2264AQD	296-7102-5-ND	Quad Rail-to-Rail Op Amp	14-SOP	2.00	1.60	1.20
TLC2264CD	296-7103-5-ND	Quad Rail-to-Rail Op Amp	14-SOP	1.50	1.20	.90
TLC2264CN	296-7104-5-ND	Quad Rail-to-Rail Op Amp	14-Dip	1.50	1.20	.90
TLC2264CPWR	296-7105-1-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	1.53	1.22	.92
TLC2264CPWR	296-7105-2-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	1560.00/2,000		
TLC2264ID	296-7106-5-ND	Quad Rail-to-Rail Op Amp	14-SOP	1.65	1.32	.99
TLC2264IN	296-7107-5-ND	Quad Rail-to-Rail Op Amp	14-Dip	1.65	1.32	.99
TLC2264QD	296-7108-5-ND	Quad Rail-to-Rail Op Amp	14-SOP	1.93	1.54	1.16
TLC2272ACD	296-1303-5-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.50	1.20	.90
TLC2272ACDR	296-1303-1-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.50	1.20	.90
TLC2272ACDR	296-1303-2-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1920.00/2,500		
TLC2272ACP	296-7109-5-ND	Dual Rail-to-Rail Op Amp	8-Dip	1.50	1.20	.90

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC2272ACPWR	296-7110-1-ND	Dual Rail-to-Rail Op Amp	8-TSSOP	1.50	1.20	.90
TLC2272ACPWR	296-7110-2-ND	Dual Rail-to-Rail Op Amp	8-TSSOP	1560.00/2,000		
TLC2272AID	296-1304-5-ND	Rail-to-Rail Dual Op Amp	8-SOIC	1.63	1.30	.98
TLC2272AIDR	296-1304-1-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.65	1.32	.99
TLC2272AIDR	296-1304-2-ND	Dual Rail-to-Rail Op Amp	8-SOIC	2080.00/2,500		
TLC2272AIP	296-7112-5-ND	Rail-to-Rail Dual Op Amp	8-Dip	1.63	1.30	.98
TLC2272AMD	296-7113-5-ND	Rail-to-Rail Dual Op Amp	8-SOP	1.73	1.38	1.04
TLC2272AQD	296-7114-5-ND	Rail-to-Rail Dual Op Amp	8-SOP	1.43	1.14	.86
TLC2272CD	296-1305-5-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.25	1.00	.75
TLC2272CDR	296-1305-1-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.25	1.00	.75
TLC2272CDR	296-1305-2-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1600.00/2,500		
TLC2272CP	296-1812-5-ND	Dual Rail-to-Rail Op Amp	8-Dip	1.25	1.00	.75
TLC2272CPWR	296-7115-1-ND	Dual Low Noise Rail-to-Rail Op Amp	8-TSSOP	1.25	1.00	.75
TLC2272CPWR	296-7115-2-ND	Dual Low Noise Rail-to-Rail Op Amp	8-TSSOP	1300.00/2,000		
TLC2272ID	296-7116-5-ND	Dual Low Noise Rail-to-Rail Op Amp	8-SOP	1.38	1.10	.83
TLC2272IP	296-7117-5-ND	Dual Low Noise Rail-to-Rail Op Amp	8-Dip	1.38	1.10	.83
TLC2272IPWR	296-7118-1-ND	Dual Low Noise Rail-to-Rail Op Amp	8-TSSOP	1.38	1.10	.83
TLC2272IPWR	296-7118-2-ND	Dual Low Noise Rail-to-Rail Op Amp	8-TSSOP	1430.00/2,000		
TLC2272MD	296-7119-5-ND	Dual Low Noise Rail-to-Rail Op Amp	8-SOP	1.58	1.26	.95
TLC2272QD	296-7120-5-ND	Dual Low Noise Rail-to-Rail Op Amp	8-SOP	1.38	1.10	.83
TLC2274ACD	296-1813-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOIC	1.83	1.46	1.10
TLC2274ACDR	296-1813-1-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOIC	1.83	1.46	1.10
TLC2274ACDR	296-1813-2-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOIC	2335.00/2,500		
TLC2274ACN	296-7121-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-Dip	1.83	1.46	1.10
TLC2274ACPWR	296-7122-1-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1.83	1.46	1.10
TLC2274ACPWR	296-7122-2-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1898.00/2,000		
TLC2274AID	296-1814-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOIC	1.98	1.58	1.19
TLC2274AIN	296-7123-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-Dip	1.98	1.58	1.19
TLC2274AIPW	296-7124-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1.98	1.58	1.19
TLC2274AIPWR	296-7125-1-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1.98	1.58	1.19
TLC2274AIPWR	296-7125-2-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	2054.00/2,000		
TLC2274AMD	296-7126-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOP	2.32	1.86	1.45
TLC2274AQD	296-7127-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOP	2.00	1.60	1.20
TLC2274CD	296-1306-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOIC	1.50	1.20	.90
TLC2274CDR	296-1306-1-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOIC	1.53	1.22	.92
TLC2274CDR	296-1306-2-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOIC	1920.00/2,500		
TLC2274CN	296-7129-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-Dip	1.50	1.20	.90
TLC2274CPWR	296-7130-1-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1.53	1.22	.92
TLC2274CPWR	296-7130-2-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1560.00/2,000		
TLC2274ID	296-7131-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOP	1.65	1.32	.99
TLC2274IN	296-7132-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-Dip	1.65	1.32	.99
TLC2274IPWR	296-7133-1-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1.68	1.34	1.01
TLC2274IPWR	296-7133-2-ND	Quad Low Noise Rail-to-Rail Op Amp	14-TSSOP	1716.00/2,000		
TLC2274MD	296-7134-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOP	2.38	1.90	1.43
TLC2274QD	296-7135-5-ND	Quad Low Noise Rail-to-Rail Op Amp	14-SOP	1.93	1.54	1.16
TLV2370IDBVR	296-12617-1-ND	Single Supply, R-R, I/O, Op Amp with Shutdown *NEW!*	SOT-23-6	1.35	1.13	.90
TLV2370IDBVR	296-12617-2-ND	Single Supply, R-R, I/O, Op Amp with Shutdown *NEW!*	SOT-23-6	1755.00/3,000		
TLC2652AIP	296-1818-5-ND	Chopper Op Amp	8-Dip	5.04	4.04	3.14
TLC2652AC-8D	296-7316-5-ND	Adv Prec. Chopper-Stabilized Op Amp	8-SOP	4.66	3.73	2.90
TLC2652AC-14D	296-7315-5-ND	Adv Prec. Chopper-Stabilized Op Amp	14-SOP	4.66	3.73	2.90
TLC2652ACN	296-7317-5-ND	Adv Prec. Chopper-Stabilized Op Amp	14-Dip	4.66	3.73	2.90
TLC2652ACP	296-7318-5-ND	Adv Prec. Chopper-Stabilized Op Amp	8-Dip	4.66	3.73	2.90
TLC2652AI-8D	296-7319-5-ND	Adv Prec. Chopper-Stabilized Op Amp	8-SOP	5.04	4.04	3.14
TLC2652AIN	296-7320-5-ND	Adv Prec. Chopper-Stabilized Op Amp	14-Dip	5.04	4.04	3.14
TLC2652C-8D	296-7321-5-ND	Precision Chopper-Stabilized Op Amp	8-SOP	3.87	3.10	2.41
TLC2652CN	296-7322-5-ND	Precision Chopper-Stabilized Op Amp	14-Dip	3.87	3.10	2.41
TLC2652CP	296-7323-5-ND	Precision Chopper-Stabilized Op Amp	8-Dip	3.87	3.10	2.41
TLC2652I-8D	296-7324-5-ND	Precision Chopper-Stabilized Op Amp	8-SOP	4.25	3.41	2.65
TLC2652M-8D	296-7325-5-ND	Precision Chopper-Stabilized Op Amp	8-SOP	4.14	3.32	2.58
TLC2652Q-8D	296-7326-5-ND	Precision Chopper-Stabilized Op Amp	8-SOP	3.78	3.03	2.36
TLC2654AC-8D	296-7327-5-ND	Adv. LN Chopper-Stabilized Op Amp	8-SOP	3.24	2.60	2.02
TLC2654ACP	296-7328-5-ND	Adv. LN Chopper-Stabilized Op Amp	8-Dip	3.24	2.60	2.02
TLC2654AI-8D	296-7329-5-ND	Adv. LN Chopper-Stabilized Op Amp	8-SOP	3.51	2.81	2.19
TLC2654AIP	296-7330-5-ND	Adv. LN Chopper-Stabilized Op Amp	8-Dip	3.51	2.81	2.19
TLC2654AQ-8D	296-7331-5-ND	Adv. LN Chopper-Stabilized Op Amp	8-SOP	3.26	2.61	2.03
TLC2654C-8D	296-7332-5-ND	Low Noise Chopper-Stabilized Op Amp	8-SOP	2.70	2.16	1.68
TLC2654CN	296-7333-5-ND	Low Noise Chopper-Stabilized Op Amp	14-Dip	2.70	2.16	1.68
TLC2654CP	296-7334-5-ND	Low Noise Chopper-Stabilized O Amp	8-Dip	2.70	2.16	1.68
TLC2654I-8D	296-7335-5-ND	Low Noise Chopper-Stabilized O Amp	8-SOP	2.97	2.38	1.85
TLC2654IP	296-7336-5-ND	Low Noise Chopper-Stabilized O Amp	8-Dip	2.97	2.38	1.85
TLC2654Q-8D	296-7337-5-ND	Low Noise Chopper-Stabilized Op Amp	8-SOP	3.11	2.49	1.94
TLC4501ACD	296-2426-5-ND	Precision, Rail-to-Rail Op Amp	8-SOIC	3.11	2.49	1.94
TLC4501AID	296-10322-5-ND	High Precision R/R Op Amp	8-SOIC	3.38	2.70	2.10
TLC4501CD	296-10323-5-ND	High Precision R/R Op Amp	8-SOIC	2.59	2.07	1.61
TLC4501IDR	296-10324-1-ND	High Precision R/R Op Amp	8-SOIC	2.86	2.29	1.78
TLC4501IDR	296-10324-2-ND	High Precision R/R Op Amp	8-SOIC	4000.00/2,500		
TLC4502ACD	296-10325-5-ND	Dual High Precision R/R Op Amp	8-SOIC	4.43	3.55	2.76
TLC4502AID	296-10326-5-ND	Dual High Precision R/R Op Amp	8-SOIC	4.82	3.86	3.00
TLC4502AMD	296-10327-5-ND	Dual High Precision R/R Op Amp	8-SOIC	3.13	2.51	1.95
TLC4502AQD	296-10328-5-ND	Dual High Precision R/R Op Amp	8-SOIC	4.07	3.26	2.54
TLC4502CD	296-10329-5-ND	Dual High Precision R/R Op Amp	8-SOIC	3.69	2.96	2.30
TLC4502ID	296-10330-5-ND	Dual High Precision R/R Op Amp	8-SOIC	4.07	3.26	2.54
TLC4502IDR	296-10330-1-ND	Dual High Precision R/R Op Amp	8-SOIC	4.07	3.26	2.54
TLC4502IDR	296-10330-2-ND	Dual High Precision R/R Op Amp	8-SOIC	5702.50/2,500		
TLC4502MD	296-10331-5-ND	Dual High Precision R/R Op Amp	8-SOIC	2.50	2.00	1.56
TLE2021ACD	296-10353-5-ND	High Speed, Low Power Prec. Op Amp	8-SOIC	1.50	1.20	.90
TLE2021ACP	296-10354-5-ND	HS, Low Power Precision Op Amp	8-Dip	1.50	1.20	.90
TLE2021AID	296-10355-5-ND	HS, Low Power Precision Op Amp	8-SOIC	1.60	1.28	.96
TLE2021AIP	296-10356-5-ND	HS, Low Power Precision Op Amp	8-Dip	1.60	1.28	.96
TLE2021CD	296-10357-5-ND	HS, Low Power Precision Op Amp	8-SOIC	1.20	1.00	.80
TLE2021CP	296-10358-5-ND	HS, Low Power Precision Op Amp	8-Dip	1.20	1.00	.80
TLE2021ID	296-10359-5-ND	HS, Low Power Precision Op Amp	8-SOIC	1.32	1.10	.88
TLE2021IP	296-10360-5-ND	HS, Low Power Precision Op Amp	8-Dip	1.32	1.10	.88
TLE2021MD	296-10361-5-ND	HS, Low Power Precision Op Amp	8-SOIC	1.44	1.20	.96
TLE2022ACD	296-12304-5-ND	Dual HS, LP Precision Op Amp	8-SOIC	1.93	1.54	1.16
TLE2022ACP	296-10362-5-ND	Dual High Speed, LP Precision Op Amp	8-Dip	1.93	1.54	1.16
TLE2022AID	296-10363-5-ND	Dual High Speed, LP Precision Op Amp	8-SOIC	2.05	1.64	1.23
TLE2022AIP	296-10364-5-ND	Dual High Speed, LP Precision Op Amp	8-Dip	2.05	1.64	1.23
TLE2022AMD	296-10365-5-ND	Dual High Speed, LP Precision Op Amp	8-SOIC	2.25	1.80	1.35
TLE2022CD	296-1873-5-ND	Dual JFET-Input Op Amp	8-SOIC	1.28	1.02	.77
TLE2022CP	296-10366-5-ND	Dual High Speed, LP Precision Op Amp	8-Dip	1.28	1.02	.77
TLE2022ID	296-10367-5-ND	Dual High Speed, LP Precision Op Amp	8-SOIC	1.43	1.14	.86
TLE2022IP	296-10368-5-ND	Dual High Speed, LP Precision Op Amp	8-Dip	1.43	1.14	.86
TLE2022MD	296-10369-5-ND	Dual High Speed, LP Precision Op Amp	8-SOIC	1.50	1.20	.90
TLE2024ACDW	296-10370-5-ND	Quad High Speed, LP Op Amp	16-SOIC	4.52	3.62	2.82
TLE2024ACN	296-10371-5-ND	Quad High Speed, LP Op Amp	14-Dip	4.52	3.62	2.82
TLE2024AIDW	296-10372-5-ND	Quad High Speed, LP Op Amp	16-SOIC	4.84	3.87	3.01
TLE2024AIN	296-10373-5-ND	Quad High Speed, LP Op Amp	14-Dip	4.84	3.87	3.01
TLE2024BMDW	296-10374-5-ND	Quad High Speed, LP Op Amp	16-SOIC	6.56	5.25	4.43
TLE2024CDW	296-10375-5-ND	Quad High Speed, LP Op Amp	16-SOIC	3.02	2.42	1.88
TLE2024CN	296-10376-5-ND	Quad High Speed, LP Op Amp	14-Dip	3.02	2.42	1.88
TLE2024IDW	296-10377-5-ND	Quad High Speed, LP Op Amp	16-SOIC	3.33	2.67	2.08
TLE2024IN	296-10378-5-ND	Quad High Speed, LP Op Amp	14-Dip	3.33	2.67	2.08
TLE2024MDW	296-10379-5-ND	Quad High Speed, LP Op Amp	16-SOIC	3.35	2.69	2.09
TLE2027AMD	296-10380-5-ND	Low Noise, High Speed Op Amp	8-SOIC	4.97	3.98	3.10
TLE2027CD	296-10381-5-ND	Low Noise, High Speed Op Amp	8-SOIC	1.98	1.58	1.19
TLE2027CDR	296-10381-1-ND	Low Noise, High Speed Op Amp	8-SOIC	1.98	1.58	1.19
TLE2027CDR	296-10381-2-ND	Low Noise, High Speed Op Amp	8-SOIC	2528.00/2,500		
TLE2027ID	296-10383-5-ND	Low Noise, High Speed Op Amp	8-SOIC	2.18	1.74	1.31
TLE2027MD	296-10385-5-ND	Low Noise, High Speed Op Amp	8-SOIC	2.25	1.80	1.35
TLE2037CD	296-10386-5-ND	Low Noise, High Speed Op Amp	8-SOIC	1.98	1.58	1.19
TLE2037ID	296-10388-5-ND	Low Noise, High Speed Op Amp	8-SOIC	2.18	1.74	1.31
TLE2037MD	296-10389-5-ND	Low Noise, High Speed Op Amp	8-SOIC	2.03	1.62	1.22
TLE2061ACD	296-10390-5-ND	Low Power JFET Op Amp	8-SOIC	2.25	1.80	1.35
TLE2061AID	296-10391-5-ND	Low Power JFET Op Amp	8-SOIC	2.40	1.92	1.44
TLE2061AIP	296-10392-5-ND	Low Power JFET Op Amp	8-Dip	2.40	1.92	1.44
TLE2061CD	296-10393-5-ND	Low Power JFET Op Amp	8-SOIC	1.50	1.20	.90
TLE2061CP	296-10394-5-ND	Low Power JFET Op Amp	8-Dip	1.50	1.20	.90
TLE2061MD	296-10395-5-ND	Low Power JFET Op Amp	8-SOIC	1.33	1.06	.80
TLE2062ACD	296-10396-5-ND	Dual Low Power JFET Op Amp	8-SOIC	2.18	1.74	1.31
TLE2062AID	296-10397-5-ND	Dual Low Power JFET Op Amp	8-SOIC	2.30	1.84	1.38
TLE2062AMD	296-10399-5-ND	Dual Low Power JFET Op Amp	8-SOIC	2.40	1.92	1.44
TLE2062CD	296-1341-5-ND	Dual Low Power JFET Op Amp	8-SOIC	1.41	1.18	.94
TLE2062CDR	296-1341-1-ND	Dual JFET-Input Op Amp	8-SOIC	1.41	1.18	.94
TLE2062CDR	296-1341-2-ND	Dual JFET-Input Op Amp	8-SOIC	1527.50/2,500		
TLE2062CP	296-10401-5-ND	Dual Low Power JFET Op Amp	8-Dip	1.41	1.18	.94
TLE2062ID	296-10402-5-ND	Dual Low Power JFET Op Amp	8-SOIC	1.30	1.04	.78
TLE2062IP	296-10403-5-ND	Dual Low Power JFET Op Amp	8-Dip	1.30	1.04	.78
TLE2062MD	296-10404-5-ND	Dual Low Power JFET Op Amp	8-SOIC	1.45	1.16	.87
TLE2064ACD	296-10405-5-ND	Quad Low Power JFET Op Amp	14-SOIC	4.52	3.62	2.82
TLE2064ACN	296-10406-5-ND	Quad Low Power JFET Op Amp	14-Dip	4.52	3.62	2.82
TLE2064AID	296-10407-5-ND	Quad Low Power JFET Op Amp	14-SOIC	4.84	3.87	3.01
TLE2064AMD	296-10408-5-ND	Quad Low Power JFET Op Amp	14-SOIC	3.67	2.94	2.29
TLE2064CD	296-10409-5-ND	Quad Low Power JFET Op Amp	14-SOIC	3.02	2.42	1.88
TLE2064CN	296-10410-5-ND	Quad Low Power JFET Op Amp	14-Dip	3.02	2.42	1.88
TLE2064ID	296-10411-5-ND	Quad Low Power JFET Op Amp	14-SOIC	3.33	2.67	2.08
TLE2064IN	296-10412-5-ND	Quad Low Power JFET Op Amp	14-Dip	3.33	2.67	2.08
TLE2064MD	296-10413-5-ND	Quad Low Power JFET Op Amp	14-SOIC	2.57	2.06	1.60
TLE2071ACD	296-10414-5-ND	Low Noise, High Speed JFET Op Amp	8-SOIC	2.10	1.68	1.26
TLE2071ACP	296-10415-5-ND	Low Noise, High Speed JFET Op Amp	8-Dip	2.10	1.68	1.26
TLE2071AID	296-10416-5-ND	Low Noise, High Speed JFET Op Amp	8-SOIC	2.23	1.78	1.34
TLE2071AIP	296-10417-5-ND	Low Noise, High Speed JFET Op Amp	8-Dip	2.23	1.78	1.34
TLE2071CD	296-10418-5-ND	Low Noise, High Speed JFET Op Amp	8-SOIC	1.40	1.12	.84
TLE2071CP	296-10419-5-ND	Low Noise, High Speed JFET Op Amp	8-Dip	1.40	1.12	.84
TLE2071ID	296-10420-5-ND	Low Noise, High Speed JFET Op Amp	8-SOIC	1.53	1.22	.92
TLE2071IP	296-10421-5-ND	Low Noise, High Speed JFET Op Amp	8-Dip	1.53	1.22	.92
TLE2072ACD	296-10422-5-ND	Dual LN, High Speed JFET Op Amp	8-SOIC	2.77	2.22	1.73
TLE2072ACP	296-10423-5-ND	Dual LN, High Speed JFET Op Amp	8-Dip	2.77	2.22	1.73
TLE2072AID	296-10424-5-ND	Dual LN, High Speed JFET Op Amp	8-SOIC	2.95	2.36	1.84
TLE2072CD	296-1342-5-ND	Dual LN, High Speed JFET Op Amp	8-SOIC	1.93	1.54	1.16
TLE2072CDR	296-1342-1-ND	Dual LN, High Speed JFET Op Amp	8-SOIC	1.93	1.54	1.16
TLE2072CDR	296-1342-2-ND	Dual LN, High Speed JFET Op Amp	8-SOIC	2464.00/2,500		
TLE2072CP	296-10426-5-ND	Dual LN, High Speed JFET Op Amp	8-Dip	1.93	1.54	1.16
TLE2072ID	296-10427-5-ND	Dual LN, High Speed JFET Op Amp	8-SOIC	2.13	1.70	1.28
TLE2074ACDW	296-10428-5-ND	Quad LN, High Speed JFET Op Amp	16-SOIC	5.24	4.20	3.54
TLE2074ACN	296-10429-5-ND	Quad LN, High Speed JFET Op Amp	14-Dip	5.24	4.20	3.54
TLE2074AIDW	296-10430-5-ND	Quad LN, High Speed JFET Op Amp	16-SOIC	5.60	4.48	3.78
TLE2074CDWR	296-10431-1-ND	Quad LN, High Speed JFET Op Amp	16-SOIC	3.94	3.15	2.45
TLE2074CDWR	296-10431-2-ND	Quad LN, High Speed JFET Op Amp	16-SOIC	4462.00/2,000		
TLE2074CN	296-10432-5-ND	Quad LN, High Speed JFET Op Amp	14-Dip	3.94	3.15	2.45
TLE2074IDW	296-10433-5-ND	Quad LN, High Speed JFET Op Amp	16-SOIC	4.32	3.46	2.69
TLE2074IN	296-10434-5-ND	Quad LN, High Speed JFET Op Amp	14-Dip	4.32	3.46	2.69
TLE2081ACD	296-10435-5-ND	High Speed JFET-In Op Amp	8-SOIC	1.85	1.48	1.11
TLE2081ACP	296-10436-5-ND	High Speed JFET-In Op Amp	8-Dip	1.85	1.48	1.11
TLE2081CD	296-10437-5-ND	High Speed JFET-In Op Amp	8-SOIC	1.47	1.23	.98
TLE2081CP	296-10438-5-ND	High Speed JFET-In Op Amp	8-Dip	1.47	1.23	.98
TLE2081ID	296-10439-5-ND	High Speed JFET-In Op Amp	8-SOIC	1.25	1.00	.75
TLE2082ACD	296-10440-5-ND	Dual High Speed JFET-In Op Amp	8-SOIC	2.40	1.92	1.44
TLE2082ACP	296-10441-5-ND	Dual High Speed JFET-In Op Amp	8-Dip	1.60	1.28	.96
TLE2082AID	296-10442-5-ND	Dual High Speed JFET-In Op Amp	8-SOIC	2.30	1.84	1.43
TLE2082AIP	296-10443-5-ND	Dual High Speed JFET-In Op Amp	8-Dip	2.30	1.84	1.43
TLE2082CD	296-10444-5-ND	Dual High Speed JFET-In Op Amp	8-SOIC	1.60	1.28	.96
TLE2082CP	296-1874-5-ND	Dual High Speed JFET-In Op Amp	8-Dip	1.60	1.28	.96
TLE2082ID	296-1343-5-ND	Dual High Speed JFET-In Op Amp	8-SOIC	1.75	1.40	1.05
TLE2082IDR	296-1343-1-ND	Dual High Speed JFET-In Op Amp	8-SOIC	1.75	1.40	1.05
TLE2082IDR	296-1343-2-ND	Dual High Speed JFET-In Op Amp	8-SOIC	2240.00/2,500		
TLE2082IP	296-10446-5-ND	Dual High Speed JFET-In Op Amp	8-Dip	1.75	1.40	1.05
TLE2084ACDW	296-10447-5-ND	Quad High Speed JFET Op Amp	16-SOIC	4.30	3.44	2.68
TLE2084ACN	296-10448-5-ND	Quad High Speed JFET Op Amp	14-Dip	4.30	3.44	2.68
TLE2084CDW	296-10449-5-ND	Quad High Speed JFET Op Amp	16-SOIC	2.88	2.31	1.80
TLE2084CN	296-10450-5-ND	Quad High Speed JFET Op Amp	14-Dip	2.88	2.31	1.80
TLE2084IDW	296-10451-5-ND	Quad High Speed JFET Op Amp	16-SOIC	3.15	2.52	1.96

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLE2141ACD	296-10452-5-ND	Low Noise High Speed Op Amp	8-SOIC	1.80	1.44	1.08
TLE2141ACP	296-10453-5-ND	Low Noise High Speed Op Amp	8-Dip	1.80	1.44	1.08
TLE2141AID	296-10454-5-ND	Low Noise High Speed Op Amp	8-SOIC	1.93	1.54	1.16
TLE2141CD	296-10455-5-ND	Low Noise High Speed Op Amp	8-SOIC	1.44	1.20	.96
TLE2141CP	296-10456-5-ND	Low Noise High Speed Op Amp	8-Dip	1.44	1.20	.96
TLE2141ID	296-10457-5-ND	Low Noise High Speed Op Amp	8-SOIC	1.33	1.06	.80
TLE2141IP	296-10458-5-ND	Low Noise High Speed Op Amp	8-Dip	1.33	1.06	.80
TLE2142ACD	296-10459-5-ND	Dual High Speed Precision Op Amp	8-SOIC	2.81	2.25	1.75
TLE2142AID	296-10461-5-ND	Dual High Speed Precision Op Amp	8-SOIC	2.97	2.38	1.85
TLE2142AMD	296-1875-5-ND	Dual High Speed Precision Op Amp	8-SOIC	2.63	2.11	1.64
TLE2142CD	296-10463-5-ND	Dual High Speed Precision Op Amp	8-SOIC	1.80	1.44	1.08
TLE2142CP	296-10464-5-ND	Dual High Speed Precision Op Amp	8-Dip	1.80	1.44	1.08
TLE2142CPWR	296-10465-1-ND	Dual High Speed Precision Op Amp	16-TSSOP	1.80	1.44	1.08
TLE2142CPWR	296-10465-2-ND	Dual High Speed Precision Op Amp	16-TSSOP	1872.00/2,000		
TLE2142ID	296-10466-5-ND	Dual High Speed Precision Op Amp	8-SOIC	1.98	1.58	1.19
TLE2142IP	296-10467-5-ND	Dual High Speed Precision Op Amp	8-Dip	1.98	1.58	1.19
TLE2142MD	296-10468-5-ND	Dual High Speed Precision Op Amp	8-SOIC	1.78	1.42	1.07
TLE2144ACN	296-10469-5-ND	Quad High Speed Precision Op Amp	14-Dip	5.49	4.40	3.42
TLE2144AIN	296-10470-5-ND	Quad High Speed Precision Op Amp	14-Dip	5.20	4.16	3.51
TLE2144CDW	296-10471-5-ND	Quad High Speed Precision Op Amp	16-SOIC	3.67	2.94	2.29
TLE2144CN	296-10472-5-ND	Quad High Speed Precision Op Amp	14-Dip	3.67	2.94	2.29
TLE2144IDW	296-10473-5-ND	Quad High Speed Precision Op Amp	16-SOIC	4.03	3.23	2.51
TLE2144IN	296-10474-5-ND	Quad High Speed Precision Op Amp	14-Dip	3.94	3.15	2.45
TLE2144MDW	296-10475-5-ND	Quad High Speed Precision Op Amp	16-SOIC	3.40	2.72	2.12
TLE2161ACD	296-10476-5-ND	Low Power JFET Op Amp	8-SOIC	1.88	1.50	1.13
TLE2161AID	296-10478-5-ND	Low Power JFET Op Amp	8-SOIC	2.00	1.60	1.20
TLE2161CD	296-10480-5-ND	Low Power JFET Op Amp	8-SOIC	1.25	1.00	.75
TLE2161ID	296-10482-5-ND	Low Power JFET Op Amp	8-SOIC	1.38	1.10	.83
TLS1233N	296-10491-5-ND	Wide Band Video Preamp System	20-Dip	1.78	1.42	1.07
TLV27L1IDBVR	296-12228-1-ND	1-Ch., R-R, Output Op Amp *NEW!*	SOT-23-5	1.11	.93	.74
TLV27L1IDBVR	296-12228-2-ND	1-Ch., R-R, Output Op Amp *NEW!*	SOT-23-5	1599.00/3,000		
TLV27L1IDR	296-12229-1-ND	1-Ch., R-R, Output Op Amp *NEW!*	8-SOIC	1.11	.93	.74
TLV27L1IDR	296-12229-2-ND	1-Ch., R-R, Output Op Amp *NEW!*	8-SOIC	1332.50/2,500		
TLV27L2IDR	296-12230-1-ND	2-Ch., R-R, Output Op Amp *NEW!*	8-SOIC	1.28	1.02	.77
TLV27L2IDR	296-12230-2-ND	2-Ch., R-R, Output Op Amp *NEW!*	8-SOIC	1825.00/2,500		
TLV271ID	296-12300-5-ND	550µA/Ch. 3MHz R/R Out Op Amp	8-SOIC	.99	.83	.66
TLV272IDGKR	296-11946-1-ND	2-Ch. Rail-to-Rail Out Op Amp.	8-MSOP	1.08	.90	.72
TLV272IDGKR	296-11946-2-ND	2-Ch. Rail-to-Rail Out Op Amp.	8-MSOP	1170.00/2,500		
TLV272IDR	296-10655-1-ND	2-Channel Rail-to-Rail Out Op Amp	8-SOIC	1.08	.90	.72
TLV272IDR	296-10655-2-ND	2-Channel Rail-to-Rail Out Op Amp	8-SOIC	1170.00/2,500		
TLV274CPWR	296-12286-1-ND	3MHz R/R Out Op Amp *NEW!*	14-TSSOP	1.23	1.03	.82
TLV274CPWR	296-12286-2-ND	3MHz R/R Out Op Amp *NEW!*	14-TSSOP	1090.00/2,000		
TLV274IDR	296-11981-1-ND	Quad 3MHz Rail-to-Rail Output Op Amp	14-SOIC	1.29	1.08	.86
TLV274IDR	296-11981-2-ND	Quad 3MHz Rail-to-Rail Output Op Amp	14-SOIC	1397.50/2,500		
TLV274IPWR	296-11982-1-ND	Quad 3MHz Rail-to-Rail Output Op Amp	14-TSSOP	1.29	1.08	.86
TLV274IPWR	296-11982-2-ND	Quad 3MHz Rail-to-Rail Output Op Amp	14-TSSOP	1144.00/2,000		
TLV2211CDBVR	296-10500-1-ND	Low Noise, LP, Rail-to-Rail Op Amp	SOT-23-5	1.17	.98	.78
TLV2211CDBVR	296-10500-2-ND	Low Noise, LP, Rail-to-Rail Op Amp	SOT-23-5	1521.00/3,000		
TLV2211IDBVR	296-10501-1-ND	Low Noise, LP, Rail-to-Rail Op Amp	SOT-23-5	1.20	1.00	.80
TLV2211IDBVR	296-10501-2-ND	Low Noise, LP, Rail-to-Rail Op Amp	SOT-23-5	1560.00/3,000		
TLV2221CDBVR	296-10504-1-ND	Rail-to-Rail Op Amp	SOT-23-5	1.17	.98	.78
TLV2221CDBVR	296-10504-2-ND	Rail-to-Rail Op Amp	SOT-23-5	1521.00/3,000		
TLV2231CDBVR	296-12189-1-ND	Low Power R-R Op Amp *NEW!*	SOT-23-5	1.17	.98	.78
TLV2231CDBVR	296-12189-2-ND	Low Power R-R Op Amp *NEW!*	SOT-23-5	1521.00/3,000		
TLV2231IDBVR	296-10505-1-ND	Rail-to-Rail Op Amp	SOT-23-5	1.20	1.00	.80
TLV2231IDBVR	296-10505-2-ND	Rail-to-Rail Op Amp	SOT-23-5	1560.00/3,000		
TLV2241IDBVT	296-10506-1-ND	Micropower R-to-R Op Amp	SOT-23-5	1.40	1.12	.84
TLV2241IDBVT	296-10506-2-ND	Micropower R-to-R Op Amp	SOT-23-5	196.00/250		
TLV2241IDR	296-10507-1-ND	Micropower R-to-R Op Amp	8-SOIC	1.40	1.12	.84
TLV2241IDR	296-10507-2-ND	Micropower R-to-R Op Amp	8-SOIC	1792.00/2,500		
TLV2241IP	296-10508-5-ND	Micropower R-to-R Op Amp	8-Dip	1.40	1.12	.84
TLV2242IDGKR	296-10509-1-ND	Dual Micropower R/R Op Amp	8-MSOP	2.00	1.60	1.20
TLV2242IDGKR	296-10509-2-ND	Dual Micropower R/R Op Amp	8-MSOP	2560.00/2,500		
TLV2242IDR	296-10510-1-ND	Dual Micropower R/R Op Amp	8-SOIC	2.00	1.60	1.20
TLV2242IDR	296-10510-2-ND	Dual Micropower R/R Op Amp	8-SOIC	2560.00/2,500		
TLV2244IDR	296-10511-1-ND	Quad Micropower R/R Op Amp	14-SOIC	2.34	1.88	1.46
TLV2244IDR	296-10511-2-ND	Quad Micropower R/R Op Amp	14-SOIC	3275.00/2,500		
TLV2244IPW	296-10512-5-ND	Quad Micropower R/R Op Amp	14-TSSOP	2.34	1.88	1.46
TLV2252AID	296-7430-5-ND	Dual Low Voltage R/R Op Amp	8-SOP	1.78	1.42	1.07
TLV2252AIP	296-7431-5-ND	Dual Low Voltage R/R Op Amp	8-Dip	1.78	1.42	1.07
TLV2252AIPW	296-7432-5-ND	Dual Low Voltage R/R Op Amp	8-TSSOP	1.78	1.42	1.07
TLV2252AQD	296-7433-5-ND	Dual Low Voltage R/R Op Amp	8-SOP	1.65	1.32	.99
TLV2252ID	296-7434-5-ND	Dual LP Low Volt. R/R Op Amp	8-SOP	1.70	1.36	1.02
TLV2252IP	296-7435-5-ND	Dual LP Low Volt. R/R Op Amp	8-Dip	1.70	1.36	1.02
TLV2252QD	296-7436-5-ND	Dual LP Low Volt. R/R Op Amp	8-SOP	1.58	1.26	.95
TLV2254AID	296-7437-5-ND	Quad Low Volt. R/R Op Amp	14-SOP	2.48	1.98	1.49
TLV2254AIN	296-7438-5-ND	Quad Low Volt. R/R Op Amp	14-Dip	2.48	1.98	1.49
TLV2254AIPWR	296-7439-1-ND	Quad Low Volt. R/R Op Amp	14-TSSOP	2.48	1.98	1.49
TLV2254AIPWR	296-7439-2-ND	Quad Low Volt. R/R Op Amp	14-TSSOP	2574.00/2,000		
TLV2254AQD	296-7440-5-ND	Quad Low Volt. R/R Op Amp	14-SOP	2.30	1.84	1.38
TLV2254ID	296-7441-5-ND	Quad LP Low Volt. R/R Op Amp	14-SOP	2.38	1.90	1.43
TLV2254IN	296-7442-5-ND	Quad LP Low Volt. R/R Op Amp	14-Dip	2.38	1.90	1.43
TLV2262AID	296-7443-5-ND	Dual Adv. Rail-to-Rail Op Amp	8-SOP	1.78	1.42	1.07
TLV2262AIP	296-7444-5-ND	Dual Adv. Rail-to-Rail Op Amp	8-Dip	1.78	1.42	1.07
TLV2262AQD	296-7445-5-ND	Dual Adv. Rail-to-Rail Op Amp	8-SOP	1.65	1.32	.99
TLV2262ID	296-7446-5-ND	Dual LP Low Volt. R/R Op Amp	8-SOP	1.70	1.36	1.02
TLV2262IP	296-7447-5-ND	Dual LP Low Volt. R/R Op Amp	8-Dip	1.70	1.36	1.02
TLV2262IPWR	296-7448-1-ND	Dual LP Low Volt. R/R Op Amp	8-TSSOP	1.70	1.36	1.02
TLV2262IPWR	296-7448-2-ND	Dual LP Low Volt. R/R Op Amp	8-TSSOP	1768.00/2,000		
TLV2262QD	296-7449-5-ND	Dual LP Low Volt. R/R Op Amp	8-SOP	1.58	1.26	.95
TLV2264AID	296-7450-5-ND	Quad Adv. Rail-to-Rail Op Amp	14-SOP	2.48	1.98	1.49
TLV2264AIN	296-7451-5-ND	Quad Adv. Rail-to-Rail Op Amp	14-Dip	2.48	1.98	1.49
TLV2264AIPWR	296-7452-1-ND	Quad Adv. Rail-to-Rail Op Amp	14-TSSOP	2.48	1.98	1.49
TLV2264AIPWR	296-7452-2-ND	Quad Adv. Rail-to-Rail Op Amp	14-TSSOP	2574.00/2,000		
TLV2264ID	296-7453-5-ND	Quad LP Low Voltage R/R Op Amp	14-SOP	2.38	1.90	1.43
TLV2264IDR	296-7454-1-ND	Quad LP Low Voltage R/R Op Amp	14-SOP	2.38	1.90	1.43
TLV2264IDR	296-7454-2-ND	Quad LP Low Voltage R/R Op Amp	14-SOP	3040.00/2,500		
TLV2264IN	296-7455-5-ND	Quad LP Low Voltage R/R Op Amp	14-Dip	2.38	1.90	1.43
TLV2264IPWR	296-7456-1-ND	Quad LP Low Voltage R/R Op Amp	14-TSSOP	2.38	1.90	1.43
TLV2264IPWR	296-7456-2-ND	Quad LP Low Voltage R/R Op Amp	14-TSSOP	2470.00/2,000		
TLV2264QD	296-7457-5-ND	Quad LP Low Voltage R/R Op Amp	14-SOP	2.20	1.76	1.32
TLV2302IDGKR	296-12307-1-ND	Op Amp with O/C Comparator	8-MSOP	2.00	1.60	1.20
TLV2302IDGKR	296-12307-2-ND	Op Amp with O/C Comparator	8-MSOP	2560.00/2,500		
TLV2302IDR	296-10513-1-ND	Op Amp with O/C Comparator	8-SOIC	2.00	1.60	1.20
TLV2302IDR	296-10513-2-ND	Op Amp with O/C Comparator	8-SOIC	2560.00/2,500		
TLV2302IP	296-10514-5-ND	Op Amp with O/C Comparator	8-Dip	2.00	1.60	1.20
TLV2304IDR	296-10515-1-ND	Dual Op Amp with Dual O/C Comparator	14-SOP	2.34	1.88	1.46
TLV2304IDR	296-10515-2-ND	Dual Op Amp with Dual O/C Comparator	14-SOP	3275.00/2,500		
TLV2304IN	296-12041-5-ND	Dual Op Amp with Dual O/C Comparator	14-Dip	2.34	1.88	1.46
TLV2304IPWR	296-10516-1-ND	Dual Op Amp with Dual O/C Comparator	14-TSSOP	2.34	1.88	1.46
TLV2304IPWR	296-10516-2-ND	Dual Op Amp with Dual O/C Comparator	14-TSSOP	2652.00/2,000		
TLV2322ID	296-7458-5-ND	Dual Low Volt. Micropower Op Amp	8-SOP	1.83	1.46	1.10
TLV2322IP	296-7459-5-ND	Dual Low Volt. Micropower Op Amp	8-Dip	1.83	1.46	1.10
TLV2322IPWR	296-7460-1-ND	Dual Low Volt. Micropower Op Amp	8-TSSOP	1.83	1.46	1.10
TLV2322IPWR	296-7460-2-ND	Dual Low Volt. Micropower Op Amp	8-TSSOP	1898.00/2,000		
TLV2324ID	296-7461-5-ND	Quad Low Volt. Micropower Op Amp	14-SOP	2.38	1.90	1.43
TLV2324IN	296-7462-5-ND	Quad Low Volt. Micropower Op Amp	14-Dip	2.38	1.90	1.43
TLV2324IPW	296-7463-5-ND	Quad Low Volt. Micropower Op Amp	14-TSSOP	2.38	1.90	1.43
TLV2324IPWR	296-7464-1-ND	Quad Low Volt. Micropower Op Amp	14-TSSOP	2.38	1.90	1.43
TLV2324IPWR	296-7464-2-ND	Quad Low Volt. Micropower Op Amp	14-TSSOP	2470.00/2,000		
TLV2332ID	296-7465-5-ND	Dual LP Low Voltage Op Amp	8-SOP	1.78	1.42	1.07
TLV2332IP	296-7466-5-ND	Dual LP Low Voltage Op Amp	8-Dip	1.78	1.42	1.07
TLV2332IPWR	296-7467-1-ND	Dual LP Low Voltage Op Amp.	8-TSSOP	1.78	1.42	1.07
TLV2332IPWR	296-7467-2-ND	Dual LP Low Voltage Op Amp.	8-TSSOP	1846.00/2,000		
TLV2334ID	296-7468-5-ND	Quad LP Low Voltage Op Amp	14-SOP	2.48	1.98	1.49
TLV2334IN	296-7469-5-ND	Quad LP Low Voltage Op Amp	14-Dip	2.48	1.98	1.49
TLV2334IPWR	296-7470-1-ND	Quad LP Low Voltage Op Amp	14-TSSOP	2.48	1.98	1.49
TLV2334IPWR	296-7470-2-ND	Quad LP Low Voltage Op Amp	14-TSSOP	2574.00/2,000		
TLV2341ID	296-7471-5-ND	Low Voltage Programmable Op Amp	8-SOP	1.68	1.34	1.01
TLV2341IP	296-7472-5-ND	Low Voltage Programmable Op Amp	8-Dip	1.68	1.34	1.01
TLV2342ID	296-7473-5-ND	Dual Low Voltage High-Speed Op Amp	8-SOP	1.78	1.42	1.07
TLV2342IP	296-7474-5-ND	Dual Low Voltage High-Speed Op Amp	8-Dip	1.78	1.42	1.07
TLV2344ID	296-7475-5-ND	Quad Low Volt. High-Speed Op Amp	14-SOP	2.48	1.98	1.49
TLV2344IN	296-7476-5-ND	Quad Low Volt. High-Speed Op Amp	14-Dip	2.48	1.98	1.49
TLV2361CDBV	296-10523-5-ND	High Performance LV Op Amp	SOT-23-5	.87	.73	.58
TLV2361IDBV	296-10524-5-ND	High Performance LV Op Amp	SOT-23-5	1.02	.85	.68
TLV2362ID	296-10525-5-ND	Dual High Performance Op Amp	8-SOIC	1.08	.90	.72
TLV2362IP	296-10526-5-ND	Dual High Performance Op Amp	8-Dip	1.08	.90	.72
TLV2362IPWR	296-10527-1-ND	Dual High Performance Op Amp	8-TSSOP	1.08	.90	.72
TLV2362IPWR	296-10527-2-ND	Dual High Performance Op Amp	8-TSSOP	958.00/2,000		
TLV2370IDR	296-12298-1-ND	550µA/Channel 3MHz R/R In/Out Op Amp with Shutdown	8-SOIC	1.35	1.13	.90
TLV2370IDR	296-12298-2-ND	550µA/Channel 3MHz R/R In/Out Op Amp with Shutdown	8-SOIC	1462.50/2,500		
TLV2370IP	296-12217-5-ND	550µA/Channel 3MHz R/R In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.35	1.13	.90
TLV2371IDR	296-12299-1-ND	550µA/Channel 3MHz R/R In/Out Op Amp with Shutdown	8-SOIC	1.23	1.03	.82
TLV2371IDR	296-12299-2-ND	550µA/Channel 3MHz R/R In/Out Op Amp with Shutdown	8-SOIC	1332.50/2,500		
TLV2371IP	296-12218-5-ND	550µA/Channel 3MHz R/R In/Out Op Amp with Shutdown *NEW!*	8-Dip	1.23	1.03	.82
TLV2372IDR	296-10528-1-ND	Dual 3MHz R-R I/O Op Amp	8-SOIC	1.25	1.00	.75
TLV2372IDR	296-10528-2-ND	Dual 3MHz R-R I/O Op Amp	8-SOIC	1600.00/2,500		
TLV2372IP	296-12219-5-ND	Dual 3MHz R-R I/O Op Amp *NEW!*	8-Dip	1.25	1.00	.75
TLV2373IDR	296-10529-1-ND	Dual 3MHz R-R, I/O Op Amp with Shutdown	14-SOIC	1.35	1.08	.81
TLV2373IDR	296-10529-2-ND	Dual 3MHz R-R, I/O Op Amp with Shutdown	14-SOIC	1727.50/2,500		
TLV2373IN	296-12220-5-ND	Dual 3MHz R-R, I/O Op Amp with Shutdown *NEW!*	14-Dip	1.35	1.08	.81
TLV2374IDR	296-11967-1-ND	Quad 3MHz R/R I/O Op Amp	14-SOIC	1.48	1.18	.89
TLV2374IDR	296-11967-2-ND	Quad 3MHz R/R I/O Op Amp	14-SOIC	1887.50/2,500		
TLV2374IPWR	296-11968-1-ND	Quad 3MHz R/R I/O Op Amp	14-TSSOP	1.48	1.18	.89
TLV2374IPWR	296-11968-2-ND	Quad 3MHz R/R I/O Op Amp	14-TSSOP	1534.00/2,000		
TLV2374IN	296-12221-5-ND	Quad 3MHz R-R I/O Op Amp *NEW!*	14-Dip	1.48	1.18	.89
TLV2375IDR	296-11969-1-ND	Quad 3MHz Rail-to-Rail I/O Op Amp with Shutdown	16-SOIC	1.63	1.30	.98
TLV2375IDR	296-11969-2-ND	Quad 3MHz Rail-to-Rail I/O Op Amp with Shutdown	16-SOIC	2080.00/2,500		
TLV2375IPWR	296-11970-1-ND	Quad 3MHz Rail-to-Rail I/O Op Amp with Shutdown	16-TSSOP	1.63	1.30	.98
TLV2375IPWR	296-11970-2-ND	Quad 3MHz Rail-to-Rail I/O Op Amp with Shutdown	16-TSSOP	1690.00/2,000		
TLV2375IN	296-12222-5-ND	Quad 3MHz Rail-to-Rail I/O Op Amp with Shutdown *NEW!*	16-Dip	1.63	1.30	.98
TLV2381IDBVT	296-12223-1-ND	1-Channel, R-R, I/O Op Amp *NEW!*	SOT-23-5	1.30	1.04	.78
TLV2381IDBVT	296-12223-2-ND	1-Channel, R-R, I/O Op Amp *NEW!*	SOT-23-5	182.00/250		
TLV2381IDR	296-12224-1-ND	1-Channel, R-R, I/O Op Amp *NEW!*	8-SOIC	1.38	1.15	.92
TLV2381IDR	296-12224-2-ND	1-Channel, R-R, I/O Op Amp *NEW!*	8-SOIC	1665.00/2,500		
TLV2382IDR	296-12226-1-ND	2-Channel, R-R, I/O Op Amp *NEW!*	8-SOIC	1.58	1.26	.95
TLV2382IDR	296-12226-2-ND	2-Channel, R-R, I/O Op Amp *NEW!*	8-SOIC	2272.00/2,500		
TLV2401CDR	296-10530-1-ND	Micropower Op Amp	8-SOIC	1.80	1.44	1.08
TLV2401CDR	296-10530-2-ND	Micropower Op Amp	8-SOIC	2304.00/2,500		
TLV2401IDBVT	296-10531-1-ND	Micropower Op Amp	SOT-23-5	1.90	1.52	1.14
TLV2401IDBVT	296-10531-2-ND	Micropower Op Amp	SOT-23-5	266.00/250		
TLV2401IDR	296-10532-1-ND	Micropower Op Amp	8-SOIC	1.90	1.52	1.14
TLV2401IDR	296-10532-2-ND	Micropower Op Amp	8-SOIC	2432.50/2,500		
TLV2401IP	296-10533-5-ND	Micropower Op Amp	8-Dip	1.90	1.52	1.14
TLV2402CDR	296-10534-1-ND	Dual Micropower R/R Op Amp	8-SOIC	2.25	1.80	1.35
TLV2402CDR	296-10534-2-ND	Dual Micropower R/R Op Amp	8-SOIC	2880.00/2,500		

(Continued)

T. I.	Digi-Key			Price Each★		
Part No.	**Part No.**	**Description**	**Pkg.**	**1**	**25**	**100**
TLV2402IDR	296-10535-1-ND	Dual Micropower R/R Op Amp	8-SOIC	2.38	1.90	1.43
TLV2402IDR	296-10535-2-ND	Dual Micropower R/R Op Amp	8-SOIC	3040.00/2,500		
TLV2402IP	296-10536-5-ND	Dual Micropower R/R Op Amp	8-Dip	2.38	1.90	1.43
TLV2404CD	296-2427-5-ND	Quad Rail-to-Rail Op Amp	14-SOIC	2.86	2.29	1.78
TLV2404IDR	296-10537-1-ND	Quad Micropower Op Amp	14-SOIC	2.99	2.40	1.87
TLV2404IDR	296-10537-2-ND	Quad Micropower Op Amp	14-SOIC	4190.00/2,500		
TLV2404IN	296-10538-5-ND	Quad Micropower Op Amp	14-Dip	2.99	2.40	1.87
TLV2404IPWR	296-10539-1-ND	Quad Micropower Op Amp	14-TSSOP	2.99	2.40	1.87
TLV2404IPWR	296-10539-2-ND	Quad Micropower Op Amp	14-TSSOP	3392.00/2,000		
TLV2422AID	296-10540-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.75	1.40	1.05
TLV2422CD	296-10541-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.60	1.28	.96
TLV2422CPWR	296-10542-1-ND	Dual Micropower R/R Op Amp	8-TSSOP	1.60	1.28	.96
TLV2422CPWR	296-10542-2-ND	Dual Micropower R/R Op Amp	8-TSSOP	1664.00/2,000		
TLV2422ID	296-10543-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.68	1.34	1.01
TLV2422QD	296-10544-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.38	1.10	.83
TLV2432AID	296-10545-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.75	1.40	1.05
TLV2432AIPWR	296-10546-1-ND	Dual Micropower R/R Op Amp	8-TSSOP	1.75	1.40	1.05
TLV2432AIPWR	296-10546-2-ND	Dual Micropower R/R Op Amp	8-TSSOP	1820.00/2,000		
TLV2432AQD	296-10547-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.53	1.22	.92
TLV2432CD	296-10548-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.60	1.28	.96
TLV2432ID	296-10549-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.68	1.34	1.01
TLV2432QD	296-10550-5-ND	Dual Micropower R/R Op Amp	8-SOIC	1.45	1.16	.87
TLV2434AIPWR	296-10551-1-ND	Quad R/R Micropower Op Amp	14-TSSOP	2.45	1.96	1.47
TLV2434AIPWR	296-10551-2-ND	Quad R/R Micropower Op Amp	14-TSSOP	2548.00/2,000		
TLV2434CD	296-10552-5-ND	Quad R/R Micropower Op Amp	14-SOIC	2.23	1.78	1.34
TLV2434CPW	296-10553-5-ND	Quad R/R Micropower Op Amp	14-TSSOP	2.23	1.78	1.34
TLV2434IDR	296-10554-1-ND	Quad R/R Micropower Op Amp	14-SOIC	2.33	1.86	1.40
TLV2434IDR	296-10554-2-ND	Quad R/R Micropower Op Amp	14-SOIC	2976.00/2,500		
TLV2434IPWR	296-10555-1-ND	Quad R/R Micropower Op Amp	14-TSSOP	2.33	1.86	1.40
TLV2434IPWR	296-10555-2-ND	Quad R/R Micropower Op Amp	14-TSSOP	2418.00/2,000		
TLV2442AIDR	296-10556-1-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	1.68	1.34	1.01
TLV2442AIDR	296-10556-2-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	2145.00/2,500		
TLV2442AQD	296-10557-5-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	1.53	1.22	.92
TLV2442AQPW	296-10558-5-ND	Dual, Rail-to-Rail Op Amp	8-SOP	1.53	1.22	.92
TLV2442CD	296-10559-5-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	1.53	1.22	.92
TLV2442ID	296-10560-5-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	1.60	1.28	.96
TLV2442QD	296-10561-5-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	1.45	1.16	.87
TLV2442QPW	296-10562-5-ND	Dual, Rail-to-Rail Op Amp	8-TSSOP	1.50	1.20	.90
TLV2444AIPWR	296-10563-1-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	2.33	1.86	1.40
TLV2444AIPWR	296-10563-2-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	2418.00/2,000		
TLV2444CD	296-10564-5-ND	Quad Rail-to-Rail Op Amp	14-SOIC	2.13	1.70	1.28
TLV2444CPW	296-10565-5-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	2.13	1.70	1.28
TLV2444IDR	296-10566-1-ND	Quad Rail-to-Rail Op Amp	14-SOIC	2.23	1.78	1.34
TLV2444IDR	296-10566-2-ND	Quad Rail-to-Rail Op Amp	14-SOIC	2848.00/2,500		
TLV2444IPWR	296-10567-1-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	2.23	1.78	1.34
TLV2444IPWR	296-10567-2-ND	Quad Rail-to-Rail Op Amp	14-TSSOP	2314.00/2,000		
TLV2450AID	296-10568-5-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1.53	1.22	.92
TLV2450AIDR	296-10568-1-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1.53	1.22	.92
TLV2450AIDR	296-10568-2-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1952.00/2,500		
TLV2450AIP	296-10569-5-ND	Single, Rail-to-Rail Op Amp.	8-Dip	1.53	1.22	.92
TLV2450CD	296-1884-5-ND	Low Power Rail-to-Rail Op Amp	8-SOIC	1.40	1.12	.84
TLV2450CDBVR	296-10570-1-ND	Single, Rail-to-Rail Op Amp	SOT-23-6	1.40	1.12	.84
TLV2450CDBVR	296-10570-2-ND	Single, Rail-to-Rail Op Amp	SOT-23-6	2151.00/3,000		
TLV2450CP	296-1885-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.40	1.12	.84
TLV2450ID	296-1886-5-ND	Low Power Rail-to-Rail Op Amp	8-SOIC	1.48	1.18	.89
TLV2450IDBVR	296-10571-1-ND	Single, Rail-to-Rail Op Amp	SOT-23-6	1.48	1.18	.89
TLV2450IDBVR	296-10571-2-ND	Single, Rail-to-Rail Op Amp	SOT-23-6	2265.60/3,000		
TLV2450IP	296-1887-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.48	1.18	.89
TLV2451AID	296-10572-5-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1.40	1.12	.84
TLV2451AIDR	296-10572-1-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1.40	1.12	.84
TLV2451AIDR	296-10572-2-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1792.50/2,500		
TLV2451AIP	296-10573-5-ND	Single, Rail-to-Rail Op Amp.	8-Dip	1.40	1.12	.84
TLV2451CD	296-1888-5-ND	Low Power Rail-to-Rail Op Amp	8-SOIC	1.28	1.02	.77
TLV2451CDR	296-1888-1-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1.28	1.02	.77
TLV2451CDR	296-1888-2-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1632.50/2,500		
TLV2451CDBVR	296-10574-1-ND	Single, Rail-to-Rail Op Amp	SOT-23-5	1.28	1.02	.77
TLV2451CDBVR	296-10574-2-ND	Single, Rail-to-Rail Op Amp	SOT-23-5	1959.00/3,000		
TLV2451CP	296-1889-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.28	1.02	.77
TLV2451ID	296-1890-5-ND	Low Power Rail-to-Rail Op Amp	8-SOIC	1.28	1.02	.77
TLV2451IDR	296-1890-1-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1.35	1.08	.81
TLV2451IDR	296-1890-2-ND	Single, Rail-to-Rail Op Amp	8-SOIC	1727.50/2,500		
TLV2451IDBVR	296-10576-1-ND	Single, Rail-to-Rail Op Amp	SOT-23-5	1.35	1.08	.81
TLV2451IDBVR	296-10576-2-ND	Single, Rail-to-Rail Op Amp	SOT-23-5	2073.00/3,000		
TLV2451IP	296-1891-5-ND	Low Power Rail-to-Rail Op Amp	8-Dip	1.35	1.08	.81
TLV2452AIDR	296-10578-1-ND	Dual, Rail-to-Rail Op Amp	8-SOP	1.98	1.58	1.19
TLV2452AIDR	296-10578-2-ND	Dual, Rail-to-Rail Op Amp	8-SOP	2528.00/2,500		
TLV2452AIP	296-10579-5-ND	Dual, Rail-to-Rail Op Amp	8-Dip	1.98	1.58	1.19
TLV2452CD	296-2428-5-ND	Dual Rail-to-Rail Op Amp	8-SOIC	1.80	1.44	1.08
TLV2452CDR	296-2428-1-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	1.80	1.44	1.08
TLV2452CDR	296-2428-2-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	2304.00/2,500		
TLV2452CDGKR	296-10580-1-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	1.80	1.44	1.08
TLV2452CDGKR	296-10580-2-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	2304.00/2,500		
TLV2452IDGKR	296-10582-1-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	1.90	1.52	1.14
TLV2452IDGKR	296-10582-2-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	2432.00/2,500		
TLV2452IDR	296-10583-1-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	1.90	1.52	1.14
TLV2452IDR	296-10583-2-ND	Dual, Rail-to-Rail Op Amp.	8-SOIC	2432.00/2,500		
TLV2452IP	296-10584-5-ND	Dual, Rail-to-Rail Op Amp	8-Dip	1.90	1.52	1.14
TLV2453AIDR	296-10585-1-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2.18	1.74	1.31
TLV2453AIDR	296-10585-2-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2785.00/2,500		
TLV2453AIN	296-10586-5-ND	Dual, Rail-to-Rail Op Amp	14-Dip	2.18	1.74	1.31
TLV2453CD	296-2429-5-ND	Dual Rail-to-Rail Op Amp	14-SOIC	1.98	1.58	1.19
TLV2453CDR	296-2429-1-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	1.98	1.58	1.19
TLV2453CDR	296-2429-2-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2528.00/2,500		
TLV2453CDGSR	296-10587-1-ND	Dual, Rail-to-Rail Op Amp	10-MSOP	1.98	1.58	1.19
TLV2453CDGSR	296-10587-2-ND	Dual, Rail-to-Rail Op Amp	10-MSOP	2528.00/2,500		
TLV2453IDGSR	296-10589-1-ND	Dual, Rail-to-Rail Op Amp	10-MSOP	2.08	1.66	1.25
TLV2453IDGSR	296-10589-2-ND	Dual, Rail-to-Rail Op Amp	10-MSOP	2656.00/2,500		
TLV2453IDR	296-10590-1-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2.08	1.66	1.25
TLV2453IDR	296-10590-2-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2656.00/2,500		
TLV2453IN	296-10591-5-ND	Dual, Rail-to-Rail Op Amp	14-Dip	2.08	1.66	1.25
TLV2454AID	296-10592-5-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.34	1.88	1.46
TLV2454AIDR	296-10592-1-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.34	1.88	1.46
TLV2454AIDR	296-10592-2-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	3275.00/2,500		
TLV2454AIN	296-10593-5-ND	Quad, Rail-to-Rail Op Amp	14-Dip	2.34	1.88	1.46
TLV2454AIPWR	296-10594-1-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	2.34	1.88	1.46
TLV2454AIPWR	296-10594-2-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	2652.00/2,000		
TLV2454CD	296-2430-5-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.35	1.88	1.41
TLV2454CN	296-10595-5-ND	Quad, Rail-to-Rail Op Amp	14-Dip	2.35	1.88	1.41
TLV2454ID	296-10596-5-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.48	1.98	1.49
TLV2454IDR	296-10597-1-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.48	1.98	1.49
TLV2454IDR	296-10597-2-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	3167.50/2,500		
TLV2454IN	296-10598-5-ND	Quad, Rail-to-Rail Op Amp	14-Dip	2.48	1.98	1.49
TLV2454IPWR	296-10599-1-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	2.48	1.98	1.49
TLV2454IPWR	296-10599-2-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	2574.00/2,000		
TLV2455AID	296-10600-5-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.54	2.04	1.59
TLV2455AIDR	296-10600-1-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.54	2.04	1.59
TLV2455AIDR	296-10600-2-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	3560.00/2,500		
TLV2455AIN	296-10601-5-ND	Quad, Rail-to-Rail Op Amp	16-Dip	2.54	2.04	1.59
TLV2455AIPWR	296-10602-1-ND	Quad, Rail-to-Rail Op Amp	16-TSSOP	2.54	2.04	1.59
TLV2455AIPWR	296-10602-2-ND	Quad, Rail-to-Rail Op Amp	16-TSSOP	2882.00/2,000		
TLV2455CD	296-2431-5-ND	Quad Rail-to-Rail Op Amp	16-SOIC	2.34	1.88	1.46
TLV2455CN	296-10603-5-ND	Quad, Rail-to-Rail Op Amp	16-Dip	2.34	1.88	1.46
TLV2455CPWR	296-10604-1-ND	Quad, Rail-to-Rail Op Amp	16-TSSOP	2.34	1.88	1.46
TLV2455CPWR	296-10604-2-ND	Quad, Rail-to-Rail Op Amp	16-TSSOP	2652.00/2,000		
TLV2455ID	296-10605-5-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.43	1.95	1.52
TLV2455IDR	296-10605-1-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.43	1.95	1.52
TLV2455IDR	296-10605-2-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	3402.50/2,500		
TLV2455IN	296-10606-5-ND	Quad, Rail-to-Rail Op Amp	16-Dip	2.43	1.95	1.52
TLV2455IPWR	296-10607-1-ND	Quad, Rail-to-Rail Op Amp	16-TSSOP	2.43	1.95	1.52
TLV2455IPWR	296-10607-2-ND	Quad, Rail-to-Rail Op Amp	16-TSSOP	2754.00/2,000		
TLV2460AIDR	296-7477-1-ND	LP R/R In/Out Op Amp with Shutdown	8-SOP	1.53	1.22	.92
TLV2460AIDR	296-7477-2-ND	LP R/R In/Out Op Amp with Shutdown	8-SOP	1952.00/2,500		
TLV2460AIP	296-7478-5-ND	LP R/R In/Out Op Amp with Shutdown	8-Dip	1.53	1.22	.92
TLV2460CD	296-2432-5-ND	LP R/R In/Out Op Amp with Shutdown	8-SOIC	1.40	1.12	.84
TLV2460CDR	296-2432-1-ND	LP R/R In/Out Op Amp with Shutdown	8-SOIC	1.40	1.12	.84
TLV2460CDR	296-2432-2-ND	LP R/R In/Out Op Amp with Shutdown	8-SOIC	1792.50/2,500		
TLV2460CDBVR	296-7479-1-ND	LP R/R In/Out Op Amp with Shutdown	SOT-23-6	1.40	1.12	.84
TLV2460CDBVR	296-7479-2-ND	LP R/R In/Out Op Amp with Shutdown	SOT-23-6	2151.00/3,000		
TLV2460CP	296-7480-5-ND	LP R/R In/Out Op Amp with Shutdown	8-Dip	1.40	1.12	.84
TLV2460IDBVR	296-7481-1-ND	LP R/R In/Out Op Amp with Shutdown	SOT-23-6	1.48	1.18	.89
TLV2460IDBVR	296-7481-2-ND	LP R/R In/Out Op Amp with Shutdown	SOT-23-6	2265.60/3,000		
TLV2460IDR	296-7482-1-ND	LP R/R In/Out Op Amp with Shutdown	8-SOP	1.48	1.18	.89
TLV2460IDR	296-7482-2-ND	LP R/R In/Out Op Amp with Shutdown	8-SOP	1888.00/2500		
TLV2460IP	296-7483-5-ND	LP R/R In/Out Op Amp with Shutdown	8-Dip	1.48	1.18	.89
TLV2461AIDR	296-7484-1-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1.40	1.12	.84
TLV2461AIDR	296-7484-2-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1792.50/2,500		
TLV2461AIP	296-7485-5-ND	LP Rail-to-Rail In/Out Op Amp	8-Dip	1.40	1.12	.84
TLV2461CD	296-7486-5-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1.28	1.02	.77
TLV2461CDBVR	296-7487-2-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	1959.00/3,000		
TLV2461CDBVT	296-2433-1-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	1.28	1.02	.77
TLV2461CDBVT	296-2433-2-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	178.50/250		
TLV2461CDR	296-7488-1-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1.28	1.02	.77
TLV2461CDR	296-7488-2-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1632.50/2,500		
TLV2461CP	296-7489-5-ND	LP Rail-to-Rail In/Out Op Amp	8-Dip	1.28	1.02	.77
TLV2461IDBVR	296-7490-1-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	1.35	1.08	.81
TLV2461IDBVR	296-7490-2-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	2073.00/3,000		
TLV2461IDR	296-7491-1-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1.35	1.08	.81
TLV2461IDR	296-7491-2-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1727.50/2,500		
TLV2461IP	296-7492-5-ND	LP Rail-to-Rail In/Out Op Amp	8-Dip	1.35	1.08	.81
TLV2462AIDR	296-7557-1-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOP	1.98	1.58	1.19
TLV2462AIDR	296-7557-2-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOP	2528.00/2,500		
TLV2462AIP	296-7558-5-ND	Dual LP Rail-to-Rail I/O Op Amp	8-Dip	1.98	1.58	1.19
TLV2462AQD	296-12066-5-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOIC	2.36	1.89	1.47
TLV2462AQPWR	296-12067-1-ND	Dual LP Rail-to-Rail I/O Op Amp	8-TSSOP	2.36	1.89	1.47
TLV2462AQPWR	296-12067-2-ND	Dual LP Rail-to-Rail I/O Op Amp	8-TSSOP	2793.00/2,000		
TLV2462CD	296-2434-5-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOIC	1.80	1.44	1.08
TLV2462CDR	296-2434-1-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOIC	1.80	1.44	1.08
TLV2462CDR	296-2434-2-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOIC	2304.00/2,500		
TLV2462CP	296-1892-5-ND	Dual LP Rail-to-Rail I/O Op Amp	8-Dip	1.80	1.44	1.08
TLV2462ID	296-7562-5-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOP	1.90	1.52	1.14
TLV2462IDR	296-7562-1-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOP	1.90	1.52	1.14
TLV2462IDR	296-7562-2-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOP	2432.00/2,500		
TLV2462IDGKR	296-7561-1-ND	Dual LP Rail-to-Rail I/O Op Amp	8-MSOP	1.90	1.52	1.14
TLV2462IDGKR	296-7561-2-ND	Dual LP Rail-to-Rail I/O Op Amp	8-MSOP	2432.00/2,500		
TLV2462IP	296-1893-5-ND	Dual LP Rail-to-Rail I/O Op Amp	8-Dip	1.90	1.52	1.14
TLV2462QD	296-12068-5-ND	Dual LP Rail-to-Rail I/O Op Amp	8-SOIC	2.27	1.82	1.42
TLV2463AIDR	296-7563-1-ND	Dual LP R/R I/O Op Amp with SD	14-SOP	2.18	1.74	1.31
TLV2463AIDR	296-7563-2-ND	Dual LP R/R I/O Op Amp with SD	14-SOP	2785.00/2,500		
TLV2463AIN	296-7564-5-ND	Dual LP R/R I/O Op Amp with SD	14-Dip	2.18	1.74	1.31
TLV2463AQD	296-12069-5-ND	Dual LP R/R I/O Op Amp with SD	8-SOIC	2.61	2.09	1.63
TLV2463AQPWR	296-12070-1-ND	Dual LP R/R I/O Op Amp with SD	8-TSSOP	2.61	2.09	1.63
TLV2463AQPWR	296-12070-2-ND	Dual LP R/R I/O Op Amp with SD	8-TSSOP	2958.00/2,000		
TLV2463CD	296-2435-5-ND	Dual LP R/R I/O Op Amp with SD.	14-SOIC	1.98	1.58	1.19
TLV2463CDR	296-2435-1-ND	Dual LP R/R I/O Op Amp with SD.	14-SOIC	1.98	1.58	1.19
TLV2463CDR	296-2435-2-ND	Dual LP R/R I/O Op Amp with SD.	14-SOIC	2528.00/2,500		
TLV2463CDGS	296-7565-5-ND	Dual LP R/R I/O Op Amp with SD	10-SOP	1.98	1.58	1.19
TLV2463CN	296-7567-5-ND	Dual LP R/R I/O Op Amp with SD	14-Dip	1.98	1.58	1.19
TLV2463ID	296-1894-5-ND	Dual LP Rail-to-Rail Op Amp	14-SOIC	2.08	1.66	1.25
TLV2463IDGSR	296-7568-1-ND	Dual LP R/R I/O Op Amp w/SD	10-SOP	2.08	1.66	1.25
TLV2463IDGSR	296-7568-2-ND	Dual LP R/R I/O Op Amp w/SD	10-SOP	2656.00/2,500		
TLV2463IN	296-1895-5-ND	Dual LP Rail-to-Rail Op Amp	14-Dip	2.08	1.66	1.25
TLV2463QD	296-12071-5-ND	Dual LP R/R I/O Op Amp w/SD	8-SOIC	2.48	1.98	1.54
TLV2463QPWR	296-12072-1-ND	Dual LP R/R I/O Op Amp w/SD	8-TSSOP	2.48	1.98	1.54
TLV2463QPWR	296-12072-2-ND	Dual LP R/R I/O Op Amp w/SD	8-TSSOP	2806.00/2,000		
TLV2464CD	296-2436-5-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.35	1.88	1.41
TLV2464CDR	296-2436-1-ND	Quad LP Rail-to-Rail I/O Op Amp	14-SOIC	2.35	1.88	1.41
TLV2464CDR	296-2436-2-ND	Quad LP Rail-to-Rail I/O Op Amp	14-SOIC	3007.50/2,500		
TLV2464CN	296-7570-5-ND	Quad LP Rail-to-Rail I/O Op Amp.	14-Dip	2.35	1.88	1.41
TLV2464CPWR	296-7571-1-ND	Quad LP Rail-to-Rail I/O Op Amp	14-TSSOP	2.35	1.88	1.41
TLV2464CPWR	296-7571-2-ND	Quad LP Rail-to-Rail I/O Op Amp	14-TSSOP	2444.00/2,000		
TLV2464ID	296-10608-5-ND	Quad LP Rail-to-Rail Op Amp.	14-SOIC	2.48	1.98	1.49

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLV2464IDR	296-10608-1-ND	Quad LP Rail-to-Rail Op Amp	14-SOIC	2.48	1.98	1.49
TLV2464IDR	296-10608-2-ND	Quad LP Rail-to-Rail I/O Op Amp	14-SOIC	3167.50/2,500		
TLV2464IN	296-7573-5-ND	Quad LP Rail-to-Rail I/O Op Amp	14-Dip	2.48	1.98	1.49
TLV2464IPWR	296-7575-1-ND	Quad LP Rail-to-Rail I/O Op Amp	14-TSSOP	2.48	1.98	1.49
TLV2464IPWR	296-7575-2-ND	Quad LP Rail-to-Rail I/O Op Amp	14-TSSOP	2574.00/2,000		
TLV2465CD	296-2437-5-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.34	1.88	1.46
TLV2465CDR	296-2437-1-ND	Quad LP R/R I/O Op Amp with Shutdown	16-SOIC	2.34	1.88	1.46
TLV2465CDR	296-2437-2-ND	Quad LP R/R I/O Op Amp with Shutdown	16-SOIC	3275.00/2,500		
TLV2465CN	296-7577-5-ND	Quad LP R/R I/O Op Amp with Shutdown	16-Dip	2.34	1.88	1.46
TLV2465CPWR	296-7578-1-ND	Quad LP Rail-to-Rail Op Amp w/SD	16-TSSOP	2.34	1.88	1.46
TLV2465CPWR	296-7578-2-ND	Quad LP Rail-to-Rail Op Amp w/SD	16-TSSOP	2652.00/2,000		
TLV2465ID	296-10609-5-ND	Quad LP R/R I/O Op Amp with Shutdown	16-SOIC	2.43	1.95	1.52
TLV2465ID	296-10609-1-ND	Quad LP R/R I/O Op Amp with Shutdown	16-SOIC	2.43	1.95	1.52
TLV2465IDR	296-10609-2-ND	Quad LP R/R I/O Op Amp with Shutdown	16-SOIC	3402.50/2,500		
TLV2465IN	296-7580-5-ND	Quad LP R/R I/O Op Amp with Shutdown	16-Dip	2.43	1.95	1.52
TLV2465IPWR	296-7581-1-ND	Quad LP Rail-to-Rail Op Amp w/SD	16-TSSOP	2.43	1.95	1.52
TLV2465IPWR	296-7581-2-ND	Quad LP Rail-to-Rail Op Amp w/SD	16-TSSOP	2754.00/2,000		
TLV2470AIDR	296-7493-1-ND	LP R-R I/O Op Amp with Shutdown	8-SOP	1.53	1.22	.92
TLV2470AIDR	296-7493-2-ND	LP R-R I/O Op Amp with Shutdown	8-SOP	1952.00/2,500		
TLV2470AIP	296-7494-5-ND	LP R-R I/O Op Amp with Shutdown	8-Dip	1.53	1.22	.92
TLV2470CD	296-2438-5-ND	LP R-R I/O Op Amp with Shutdown	8-SOIC	1.40	1.12	.84
TLV2470CDR	296-2438-1-ND	LP R-R I/O Op Amp with Shutdown	8-SOIC	1.40	1.12	.84
TLV2470CDR	296-2438-2-ND	LP R-R I/O Op Amp with Shutdown	8-SOIC	1792.50/2,500		
TLV2470CDBVR	296-7495-1-ND	LP R-R I/O Op Amp with Shutdown	SOT-23-5	1.40	1.12	.84
TLV2470CDBVR	296-7495-2-ND	LP R-R I/O Op Amp with Shutdown	SOT-23-5	2151.00/3,000		
TLV2470CP	296-7496-5-ND	LP R-R I/O Op Amp with Shutdown	8-Dip	1.40	1.12	.84
TLV2470IDBVR	296-7497-1-ND	LP R-R I/O Op Amp with Shutdown	SOT-23-5	1.48	1.18	.89
TLV2470IDBVR	296-7497-2-ND	LP R-R I/O Op Amp with Shutdown	SOT-23-5	2265.60/3,000		
TLV2470IDR	296-7498-1-ND	LP R-R I/O Op Amp with Shutdown	8-SOP	1.48	1.18	.89
TLV2470IDR	296-7498-2-ND	LP R-R I/O Op Amp with Shutdown	8-SOP	1888.00/2,500		
TLV2470IP	296-7499-5-ND	LP R-R I/O Op Amp with Shutdown	8-Dip	1.48	1.18	.89
TLV2471AIDR	296-7500-1-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1.40	1.12	.84
TLV2471AIDR	296-7500-2-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1792.50/2,500		
TLV2471AIP	296-7501-5-ND	LP Rail-to-Rail In/Out Op Amp	8-Dip	1.40	1.12	.84
TLV2471CD	296-2439-5-ND	LP Rail-to-Rail In/Out Op Amp	8-SOIC	1.28	1.02	.77
TLV2471CDR	296-2439-1-ND	LP Rail-to-Rail In/Out Op Amp	8-SOIC	1.28	1.02	.77
TLV2471CDR	296-2439-2-ND	LP Rail-to-Rail In/Out Op Amp	8-SOIC	1632.50/2,500		
TLV2471CDBVR	296-7502-1-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	1.28	1.02	.77
TLV2471CDBVR	296-7502-2-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	1959.00/3,000		
TLV2471CP	296-7503-5-ND	LP Rail-to-Rail In/Out Op Amp	8-Dip	1.28	1.02	.77
TLV2471IDBVR	296-7504-1-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	1.35	1.08	.81
TLV2471IDBVR	296-7504-2-ND	LP Rail-to-Rail In/Out Op Amp	SOT-23-5	2073.00/3,000		
TLV2471IDR	296-7505-1-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1.35	1.08	.81
TLV2471IDR	296-7505-2-ND	LP Rail-to-Rail In/Out Op Amp	8-SOP	1727.50/2,500		
TLV2471IP	296-7506-5-ND	LP Rail-to-Rail In/Out Op Amp	8-Dip	1.35	1.08	.81
TLV2472AID	296-10610-5-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	1.98	1.58	1.19
TLV2472AIDR	296-10610-1-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	1.98	1.58	1.19
TLV2472AIDR	296-10610-2-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	2528.00/2,500		
TLV2472AIP	296-10611-5-ND	Dual, Rail-to-Rail Op Amp	8-Dip	1.98	1.58	1.19
TLV2472CDGNR	296-10612-1-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	1.80	1.44	1.08
TLV2472CDGNR	296-10612-2-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	2304.00/2,500		
TLV2472CD	296-2440-5-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	1.80	1.44	1.08
TLV2472CDR	296-2440-1-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	1.80	1.44	1.08
TLV2472CDR	296-2440-2-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	2304.00/2,500		
TLV2472IDGNR	296-10615-1-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	1.90	1.52	1.14
TLV2472IDGNR	296-10615-2-ND	Dual, Rail-to-Rail Op Amp	8-MSOP	2432.00/2,500		
TLV2472ID	296-10614-5-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	1.90	1.52	1.14
TLV2472IDR	296-10616-1-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	1.90	1.52	1.14
TLV2472IDR	296-10616-2-ND	Dual, Rail-to-Rail Op Amp	8-SOIC	2432.00/2,500		
TLV2472IP	296-10617-5-ND	Dual, Rail-to-Rail Op Amp	8-Dip	1.90	1.52	1.14
TLV2473AID	296-10618-5-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2.18	1.74	1.31
TLV2473AIDR	296-10618-2-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2785.00/2,500		
TLV2473AIN	296-10619-5-ND	Dual, Rail-to-Rail Op Amp	14-Dip	2.18	1.74	1.31
TLV2473CDGQR	296-10620-1-ND	Dual, Rail-to-Rail Op Amp	10-SOP	1.98	1.58	1.19
TLV2473CDGQR	296-10620-2-ND	Dual, Rail-to-Rail Op Amp	10-SOP	2528.00/2,500		
TLV2473CD	296-2441-5-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	1.98	1.58	1.19
TLV2473CDR	296-2441-1-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	1.98	1.58	1.19
TLV2473CDR	296-2441-2-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2528.00/2,500		
TLV2473ID	296-10622-5-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2.08	1.66	1.25
TLV2473IDGQR	296-10623-1-ND	Dual, Rail-to-Rail Op Amp	10-SOP	2.08	1.66	1.25
TLV2473IDGQR	296-10623-2-ND	Dual, Rail-to-Rail Op Amp	10-SOP	2656.00/2,500		
TLV2473IDR	296-10624-1-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2.08	1.66	1.25
TLV2473IDR	296-10624-2-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2656.00/2,500		
TLV2473IN	296-10625-5-ND	Dual, Rail-to-Rail Op Amp	14-Dip	2.08	1.66	1.25
TLV2474AIDR	296-10626-1-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.34	1.88	1.46
TLV2474AIDR	296-10626-2-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	3275.00/2,500		
TLV2474AIN	296-10627-5-ND	Quad, Rail-to-Rail Op Amp	14-Dip	2.34	1.88	1.46
TLV2474AIPWPR	296-10628-1-ND	Quad, Rail-to-Rail Op Amp	14-HTSSOP	2.43	1.95	1.52
TLV2474AIPWPR	296-10628-2-ND	Quad, Rail-to-Rail Op Amp	14-HTSSOP	2754.00/2,000		
TLV2474CD	296-2442-5-ND	Quad LP R/R I/O Op Amp	14-SOIC	2.35	1.88	1.41
TLV2474CDR	296-2442-1-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.35	1.88	1.41
TLV2474CDR	296-2442-2-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	3007.50/2,500		
TLV2474CN	296-10630-5-ND	Quad, Rail-to-Rail Op Amp	14-Dip	2.35	1.88	1.41
TLV2474CPWPR	296-10631-1-ND	Quad, Rail-to-Rail Op Amp	14-HTSSOP	2.48	1.98	1.49
TLV2474CPWPR	296-10631-2-ND	Quad, Rail-to-Rail Op Amp	14-HTSSOP	2574.00/2,000		
TLV2474IDR	296-10632-1-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.48	1.98	1.49
TLV2474IDR	296-10632-2-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	3167.50/2,500		
TLV2474IN	296-10633-5-ND	Quad, Rail-to-Rail Op Amp	14-Dip	2.48	1.98	1.49
TLV2474IPWPR	296-12009-1-ND	Quad LP R/R I/O Op Amp	14-HTSSOP	2.28	1.82	1.37
TLV2474IPWPR	296-12009-2-ND	Quad LP R/R I/O Op Amp	14-HTSSOP	2652.00/2,000		
TLV2475AIDR	296-10634-1-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.54	2.04	1.59
TLV2475AIDR	296-10634-2-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	3560.00/2,500		
TLV2475AIN	296-10635-5-ND	Quad, Rail-to-Rail Op Amp	16-Dip	2.54	2.04	1.59
TLV2475AIPWPR	296-10636-1-ND	Quad, Rail-to-Rail Op Amp	16-HTSSOP	2.66	2.13	1.66
TLV2475AIPWPR	296-10636-2-ND	Quad, Rail-to-Rail Op Amp	16-HTSSOP	3010.00/2,000		
TLV2475CD	296-2443-5-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.34	1.88	1.46
TLV2475CDR	296-2443-1-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.34	1.88	1.46
TLV2475CDR	296-2443-2-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	3275.00/2,500		
TLV2475CN	296-10638-5-ND	Quad, Rail-to-Rail Op Amp	16-Dip	2.34	1.88	1.46
TLV2475CPWPR	296-10639-1-ND	Quad, Rail-to-Rail Op Amp	16-HTSSOP	2.43	1.95	1.52
TLV2475CPWPR	296-10639-2-ND	Quad, Rail-to-Rail Op Amp	16-HTSSOP	2754.00/2,000		
TLV2475IDR	296-10640-1-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	2.43	1.95	1.52
TLV2475IDR	296-10640-2-ND	Quad, Rail-to-Rail Op Amp	16-SOIC	3402.50/2,500		
TLV2475IN	296-10641-5-ND	Quad, Rail-to-Rail Op Amp	16-Dip	2.43	1.95	1.52
TLV2475IPWPR	296-10642-1-ND	Quad, Rail-to-Rail Op Amp	16-HTSSOP	2.54	2.04	1.59
TLV2475IPWPR	296-10642-2-ND	Quad, Rail-to-Rail Op Amp	16-HTSSOP	2882.00/2,000		
TLV2620IDR	296-11662-1-ND	Single Supply Op Amp	8-SOIC	1.35	1.08	.81
TLV2620IDR	296-11662-2-ND	Single Supply Op Amp	8-SOIC	1727.50/2,500		
TLV2621IDR	296-11667-1-ND	Single Supply Op Amp	8-SOIC	1.47	1.23	.98
TLV2621IDR	296-11667-2-ND	Single Supply Op Amp	8-SOIC	1592.50/2,500		
TLV2622IDGKR	296-10647-1-ND	Dual, R/R, HS Op Amp	8-MSOP	1.60	1.28	.96
TLV2622IDGKR	296-10647-2-ND	Dual, R/R, HS Op Amp	8-MSOP	2048.00/2,500		
TLV2622IDR	296-10648-1-ND	Dual, R/R, HS Op Amp	8-SOIC	1.60	1.28	.96
TLV2622IDR	296-10648-2-ND	Dual, R/R, HS Op Amp	8-SOIC	2048.00/2,500		
TLV2623IDGSR	296-10649-1-ND	Dual, R/R, LP Op Amp	10-MSOP	1.75	1.40	1.05
TLV2623IDGSR	296-10649-2-ND	Dual, R/R, LP Op Amp	10-MSOP	2240.00/2,500		
TLV2623IDR	296-10650-1-ND	Dual, R/R, LP Op Amp	14-SOIC	1.93	1.54	1.16
TLV2623IDR	296-10650-2-ND	Dual, R/R, LP Op Amp	14-SOIC	2465.00/2,500		
TLV2624IDR	296-11665-1-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2.23	1.78	1.34
TLV2624IDR	296-11665-2-ND	Quad, Rail-to-Rail Op Amp	14-SOIC	2847.50/2,500		
TLV2624IPWR	296-11655-1-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	2.23	1.78	1.34
TLV2624IPWR	296-11655-2-ND	Quad, Rail-to-Rail Op Amp	14-TSSOP	2314.00/2,000		
TLV2625IDR	296-11695-1-ND	Low Voltage Quad Op Amp	16-SOIC	2.45	1.96	1.47
TLV2625IDR	296-11695-2-ND	Low Voltage Quad Op Amp	16-SOIC	3135.00/2,500		
TLV2625IPWR	296-11669-1-ND	Low Voltage Quad Op Amp	16-TSSOP	2.45	1.96	1.47
TLV2625IPWR	296-11669-2-ND	Low Voltage Quad Op Amp	16-TSSOP	2548.00/2,000		
TLV2630IDBVR	296-11971-1-ND	9MHz R-R Output Op Amp with SD	SOT-23-6	1.68	1.34	1.01
TLV2630IDBVR	296-11971-2-ND	9MHz R-R Output Op Amp with SD	SOT-23-6	2574.00/3,000		
TLV2630IDR	296-11972-1-ND	9MHz R-R Output Op Amp with SD	8-SOIC	1.68	1.34	1.01
TLV2630IDR	296-11972-2-ND	9MHz R-R Output Op Amp with SD	8-SOIC	2145.00/2,500		
TLV2631IDBVR	296-11973-1-ND	9MHz Rail-to-Rail Output Op Amp	SOT-23-5	1.40	1.12	.84
TLV2631IDBVR	296-11973-2-ND	9MHz Rail-to-Rail Output Op Amp	SOT-23-5	2150.40/3,000		
TLV2631IDR	296-11974-1-ND	9MHz Rail-to-Rail Output Op Amp	8-SOIC	1.40	1.12	.84
TLV2631IDR	296-11974-2-ND	9MHz Rail-to-Rail Output Op Amp	8-SOIC	1792.00/2,500		
TLV2632IDR	296-11975-1-ND	Dual 9MHz R-R Output Op Amp	8-SOIC	2.10	1.68	1.26
TLV2632IDR	296-11975-2-ND	Dual 9MHz R-R Output Op Amp	8-SOIC	2687.50/2,500		
TLV2633IDR	296-11976-1-ND	Dual 9MHz Rail-to-Rail Output Op Amp with Shutdown	14-SOIC	2.30	1.84	1.38
TLV2633IDR	296-11976-2-ND	Dual 9MHz Rail-to-Rail Output Op Amp with Shutdown	14-SOIC	2945.00/2,500		
TLV2634IDR	296-11977-1-ND	Quad 9MHz Rail-to-Rail Output Op Amp	14-SOIC	2.63	2.11	1.64
TLV2634IDR	296-11977-2-ND	Quad 9MHz Rail-to-Rail Output Op Amp	14-SOIC	3685.00/2,500		
TLV2634IPWR	296-11978-1-ND	Quad 9MHz Rail-to-Rail Output Op Amp	14-TSSOP	2.63	2.11	1.64
TLV2634IPWR	296-11978-2-ND	Quad 9MHz Rail-to-Rail Output Op Amp	14-TSSOP	2984.00/2,000		
TLV2635IDR	296-11979-1-ND	Quad 9MHz Rail-to-Rail Output Op Amp with Shutdown	16-SOIC	2.88	2.31	1.80
TLV2635IDR	296-11979-2-ND	Quad 9MHz Rail-to-Rail Output Op Amp with Shutdown	16-SOIC	4032.50/2,500		
TLV2635IPWR	296-11980-1-ND	Quad 9MHz Rail-to-Rail Output Op Amp with Shutdown	16-TSSOP	2.88	2.31	1.80
TLV2635IPWR	296-11980-2-ND	Quad 9MHz Rail-to-Rail Output Op Amp with Shutdown	16-TSSOP	3264.00/2,000		
TLV2711CDBVR	296-10651-1-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1.08	.90	.72
TLV2711CDBVR	296-10651-2-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1404.00/3,000		
TLV2711IDBVR	296-10652-1-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1.11	.93	.74
TLV2711IDBVR	296-10652-2-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1443.00/3,000		
TLV2721CDBVR	296-10653-1-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1.08	.90	.72
TLV2721CDBVR	296-10653-2-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1404.00/3,000		
TLV2721IDBVR	296-10654-1-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1.11	.93	.74
TLV2721IDBVR	296-10654-2-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1443.00/3,000		
TLV2731CDBVR	296-10656-1-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1.08	.90	.72
TLV2731CDBVR	296-10656-2-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1404.00/3,000		
TLV2731IDBVR	296-10657-1-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1.11	.93	.74
TLV2731IDBVR	296-10657-2-ND	LP, Rail-to-Rail Op Amp	SOT-23-5	1443.00/3,000		
TLV2760ID	296-10658-5-ND	Micropower R-to-R Op Amp	8-SOIC	1.53	1.22	.92
TLV2760IDBVT	296-10659-5-ND	Micropower R-to-R Op Amp	SOT-23-6	1.53	1.22	.92
TLV2760IP	296-10660-5-ND	Micropower R-to-R Op Amp	8-Dip	1.53	1.22	.92
TLV2761ID	296-10661-5-ND	Micropower R-to-R Op Amp	8-SOIC	1.40	1.12	.84
TLV2761IDBVT	296-10662-1-ND	Micropower R-to-R Op Amp	SOT-23-5	1.40	1.12	.84
TLV2761IDBVT	296-10662-2-ND	Micropower R-to-R Op Amp	SOT-23-5	196.00/250		
TLV2761IP	296-10663-5-ND	Low Power, Single R/R Op Amp	8-Dip	1.40	1.12	.84
TLV2762IDGKR	296-10664-1-ND	HS, Dual Rail-to-Rail Op Amp	8-TSSOP	2.00	1.60	1.20
TLV2762IDGKR	296-10664-2-ND	HS, Dual Rail-to-Rail Op Amp	8-TSSOP	2560.00/2,500		
TLV2762IDR	296-10665-1-ND	Low Power, Dual R/R Op Amp	8-SOIC	2.00	1.60	1.20
TLV2762IDR	296-10665-2-ND	Low Power, Dual R/R Op Amp	8-SOIC	2560.00/2,500		
TLV2763CD	296-10666-5-ND	Low Power, Dual R/R Op Amp	14-SOIC	2.10	1.68	1.26
TLV2763CDR	296-10666-1-ND	Low Power, Dual R/R Op Amp	14-SOIC	2.10	1.68	1.26
TLV2763CDR	296-10666-2-ND	Low Power, Dual R/R Op Amp	14-SOIC	2687.50/2,500		
TLV2763IDGSR	296-10667-1-ND	Low Power, Dual R/R Op Amp	10-TSSOP	2.18	1.74	1.31
TLV2763IDGSR	296-10667-2-ND	Low Power, Dual R/R Op Amp	10-TSSOP	2785.00/2,500		
TLV2763IDR	296-10668-1-ND	Low Power, Dual R/R Op Amp	14-SOIC	2.18	1.74	1.31
TLV2763IDR	296-10668-2-ND	Low Power, Dual R/R Op Amp	14-SOIC	2785.00/2,500		
TLV2763IN	296-10669-5-ND	Low Power, Dual R/R Op Amp	14-Dip	2.18	1.74	1.31
TLV2764IDR	296-10670-1-ND	Micropower Single R/R Op Amp	14-SOIC	2.34	1.88	1.46
TLV2764IDR	296-10670-2-ND	Micropower Single R/R Op Amp	14-SOIC	3275.00/2,500		
TLV2764IPWR	296-10671-1-ND	Micropower Single R/R Op Amp	14-TSSOP	2.34	1.88	1.46
TLV2764IPWR	296-10671-2-ND	Micropower Single R/R Op Amp	14-TSSOP	2652.00/2,000		
TLV2765IDR	296-10672-1-ND	Micropower Single R/R Op Amp	16-SOIC	2.57	2.06	1.60
TLV2765IDR	296-10672-2-ND	Micropower Single R/R Op Amp	16-SOIC	3590.00/2,500		
TLV2765IPWR	296-10673-1-ND	Micropower Single R/R Op Amp	16-TSSOP	2.57	2.06	1.60
TLV2765IPWR	296-10673-2-ND	Micropower Single R/R Op Amp	16-TSSOP	2908.00/2,000		
TLV2770AIDR	296-7582-1-ND	Single 2.7V R/R Op Amp w/Shutdown	8-SOP	1.73	1.38	1.04
TLV2770AIDR	296-7582-2-ND	Single 2.7V R/R Op Amp w/Shutdown	8-SOP	2208.00/2,500		

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLV2770AIP	296-7583-5-ND	Single 2.7V R/R Op Amp w/Shutdown	8-Dip	1.73	1.38	1.04
TLV2770CD	296-1896-5-ND	Single 2.7V R/R Op Amp w/Shutdown	8-SOIC	1.60	1.28	.96
TLV2770CDR	296-1896-1-ND	Single 2.7V R/R Op Amp w/Shutdown	8-SOIC	1.60	1.28	.96
TLV2770CDR	296-1896-2-ND	Single 2.7V R/R Op Amp w/Shutdown	8-SOIC	2048.00/2,500		
TLV2770CDGKR	296-7584-1-ND	Single 2.7V R/R Op Amp w/Shutdown	8-MSOP	1.60	1.28	.96
TLV2770CDGKR	296-7584-2-ND	Single 2.7V R/R Op Amp w/Shutdown	8-MSOP	2048.00/2,500		
TLV2770CP	296-1897-5-ND	Rail-to-Rail Operational Amplifier	8-Dip	1.60	1.28	.96
TLV2770ID	296-1898-5-ND	Single 2.7V R/R I/O Op Amp w/SD	8-SOIC	1.65	1.32	.99
TLV2770IDR	296-1898-1-ND	Single 2.7V R/R I/O Op Amp w/SD	8-SOIC	1.65	1.32	.99
TLV2770IDR	296-1898-2-ND	Single 2.7V R/R I/O Op Amp w/SD	8-SOIC	2112.00/2,500		
TLV2770IDGKR	296-7585-1-ND	Single 2.7V R/R Op Amp w/Shutdown	8-MSOP	1.65	1.32	.99
TLV2770IDGKR	296-7585-2-ND	Single 2.7V R/R Op Amp w/Shutdown	8-MSOP	2112.00/2,500		
TLV2770IP	296-1899-5-ND	Rail-to-Rail Op Amp	8-Dip	1.65	1.32	.99
TLV2771AIDR	296-7586-1-ND	Single 2.7V Rail-to-Rail Op Amp	8-SOP	1.60	1.28	.96
TLV2771AIDR	296-7586-2-ND	Single 2.7V Rail-to-Rail Op Amp	8-SOP	2048.00/2,500		
TLV2771CD	296-1900-5-ND	Single 2.7V Rail-to-Rail Op Amp	8-SOIC	1.45	1.16	.87
TLV2771CDR	296-1900-1-ND	Single 2.7V Rail-to-Rail Op Amp	8-SOIC	1.45	1.16	.87
TLV2771CDR	296-1900-2-ND	Single 2.7V Rail-to-Rail Op Amp	8-SOIC	1856.00/2,500		
TLV2771CDBVR	296-1346-1-ND	Rail-to-Rail Op Amp	SOT-23-5	1.45	1.16	.87
TLV2771CDBVR	296-1346-2-ND	Rail-to-Rail Op Amp	SOT-23-5	2227.20/3,000		
TLV2771IDBVR	296-1347-1-ND	Rail-to-Rail Op Amp	SOT-23-5	1.53	1.22	.92
TLV2771IDBVR	296-1347-2-ND	Rail-to-Rail Op Amp	SOT-23-5	2342.40/3,000		
TLV2771ID	296-10674-5-ND	HS, Single Rail-to-Rail Op Amp	8-SOIC	1.53	1.22	.92
TLV2771IDR	296-10674-1-ND	HS, Single Rail-to-Rail Op Amp	8-SOIC	1.53	1.22	.92
TLV2771IDR	296-10674-2-ND	HS, Single Rail-to-Rail Op Amp	8-SOIC	1952.00/2,500		
TLV2772AID	296-7587-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOP	2.25	1.80	1.35
TLV2772AIDR	296-7587-1-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOP	2.25	1.80	1.35
TLV2772AIDR	296-7587-2-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOP	2880.00/2,500		
TLV2772AIP	296-7588-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-Dip	2.25	1.80	1.35
TLV2772AMD	296-7589-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOP	2.45	1.97	1.53
TLV2772AQD	296-10675-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOIC	2.45	1.96	1.47
TLV2772AQPW	296-10676-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-TSSOP	2.45	1.96	1.47
TLV2772CD	296-10677-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOIC	2.05	1.64	1.23
TLV2772CDR	296-10677-2-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOIC	2625.00/2,500		
TLV2772CDGK	296-7591-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-MSOP	2.05	1.64	1.23
TLV2772CP	296-7592-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-Dip	2.05	1.64	1.23
TLV2772ID	296-1902-5-ND	Dual Rail-to-Rail Op Amp	8-SOIC	2.15	1.72	1.29
TLV2772IDR	296-1902-1-ND	Dual Rail-to-Rail Op Amp	8-SOIC	2.15	1.72	1.29
TLV2772IDR	296-1902-2-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOIC	2752.50/2,500		
TLV2772IDGKR	296-7593-1-ND	Dual 2.7V Rail-to-Rail Op Amp	8-MSOP	2.15	1.72	1.29
TLV2772IDGKR	296-7593-2-ND	Dual 2.7V Rail-to-Rail Op Amp	8-MSOP	2752.50/2,500		
TLV2772IP	296-1903-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-Dip	2.15	1.72	1.29
TLV2772MD	296-7594-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOP	2.34	1.88	1.46
TLV2772QD	296-10678-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-SOIC	2.33	1.86	1.40
TLV2772QPW	296-10679-5-ND	Dual 2.7V Rail-to-Rail Op Amp	8-TSSOP	2.33	1.86	1.40
TLV2773AIDR	296-7595-1-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-SOP	2.45	1.96	1.47
TLV2773AIDR	296-7595-2-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-SOP	3135.00/2,500		
TLV2773AIN	296-7596-5-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-Dip	2.45	1.96	1.47
TLV2773CD	296-2444-5-ND	Dual, Rail-to-Rail Op Amp	14-SOIC	2.25	1.80	1.35
TLV2773CDR	296-2444-1-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-SOIC	2.25	1.80	1.35
TLV2773CDR	296-2444-2-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-SOIC	2880.00/2,500		
TLV2773CDGS	296-7597-5-ND	Dual 2.7V R/R Op Amp w/Shutdown	10-SOP	2.25	1.80	1.35
TLV2773IDGSR	296-7599-1-ND	Dual 2.7V R/R Op Amp w/Shutdown	10-SOP	2.35	1.88	1.41
TLV2773IDGSR	296-7599-2-ND	Dual 2.7V R/R Op Amp w/Shutdown	10-SOP	3007.50/2,500		
TLV2773IDR	296-7600-1-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-SOP	2.35	1.88	1.41
TLV2773IDR	296-7600-2-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-SOP	3007.50/2,500		
TLV2773IN	296-7601-5-ND	Dual 2.7V R/R Op Amp w/Shutdown	14-Dip	2.35	1.88	1.41
TLV2774AIDR	296-7602-1-ND	Quad 2.7V Rail-to-Rail Op Amp	14-SOP	2.63	2.11	1.64
TLV2774AIDR	296-7602-2-ND	Quad 2.7V Rail-to-Rail Op Amp	14-SOP	3685.00/2,500		
TLV2774AIN	296-7603-5-ND	Quad 2.7V Rail-to-Rail Op Amp	14-Dip	2.63	2.11	1.64
TLV2774CD	296-1904-5-ND	Quad 2.7V Rail-to-Rail Op Amp	14-SOIC	2.41	1.93	1.50
TLV2774CDR	296-1904-1-ND	Quad 2.7V Rail-to-Rail Op Amp	14-SOIC	2.41	1.93	1.50
TLV2774CDR	296-1904-2-ND	Quad 2.7V Rail-to-Rail Op Amp	14-SOIC	3370.00/2,500		
TLV2774CN	296-1905-5-ND	Quad 2.7V Rail-to-Rail Op Amp	14-Dip	2.41	1.93	1.50
TLV2774CPWR	296-7604-1-ND	Quad 2.7V Rail-to-Rail Op Amp	14-TSSOP	2.41	1.93	1.50
TLV2774CPWR	296-7604-2-ND	Quad 2.7V Rail-to-Rail Op Amp	14-TSSOP	2728.00/2,000		
TLV2774ID	296-1906-5-ND	Quad 2.7V Rail-to-Rail Op Amp	14-SOIC	2.52	2.02	1.57
TLV2774IN	296-1907-5-ND	Quad 2.7V Rail-to-Rail Op Amp	14-Dip	2.52	2.02	1.57
TLV2775AIDR	296-7605-1-ND	Quad 2.7V R/R Op Amp w/SD	16-SOP	2.88	2.31	1.80
TLV2775AIDR	296-7605-2-ND	Quad 2.7V R/R Op Amp w/SD	16-SOP	4032.50/2,500		
TLV2775AIN	296-7606-5-ND	Quad 2.7V R/R Op Amp w/SD	16-Dip	2.88	2.31	1.80
TLV2775AIPW	296-10680-5-ND	Quad 2.7V R/R Op Amp w/SD	16-TSSOP	2.88	2.31	1.80
TLV2775CD	296-1908-5-ND	Quad 2.7V R/R Op Amp w/SD	16-SOIC	2.63	2.11	1.64
TLV2775CDR	296-1908-1-ND	Quad 2.7V R/R Op Amp w/SD	16-SOIC	2.63	2.11	1.64
TLV2775CDR	296-1908-2-ND	Quad 2.7V R/R Op Amp w/SD	16-SOIC	3685.00/2,500		
TLV2775CN	296-1909-5-ND	Quad 2.7V R/R Op Amp w/SD	16-Dip	2.63	2.11	1.64
TLV2775ID	296-1910-5-ND	Quad 2.7V R/R Op Amp w/SD	16-SOIC	2.77	2.22	1.73
TLV2775IDR	296-10681-1-ND	Quad 2.7V R/R Op Amp w/SD	16-SOIC	2.77	2.22	1.73
TLV2775IDR	296-10681-2-ND	Quad 2.7V R/R Op Amp w/SD	16-SOIC	3875.00/2,500		
TLV2775IN	296-7607-5-ND	Quad 2.7V R/R Op Amp w/SD	14-Dip	2.77	2.22	1.73
TLV2780IDBVR	296-7608-1-ND	8MHz, 1.8V R/R Op Amp w/Shutdown	SOT-23-6	1.63	1.30	.98
TLV2780IDBVR	296-7608-2-ND	8MHz, 1.8V R/R Op Amp w/Shutdown	SOT-23-6	2496.00/3,000		
TLV2780IDR	296-7609-1-ND	8MHz, 1.8V R/R I/O Op Amp w/Shutdown	8-SOP	1.63	1.30	.98
TLV2780IDR	296-7609-2-ND	8MHz, 1.8V R/R I/O Op Amp w/Shutdown	8-SOP	2080.00/2,500		
TLV2781IDBVR	296-7610-1-ND	8MHz, 1.8V Rail-to-Rail I/O Op Amp	SOT-23-5	1.50	1.20	.90
TLV2781IDBVR	296-7610-2-ND	8MHz, 1.8V Rail-to-Rail I/O Op Amp	SOT-23-5	2304.00/3,000		
TLV2781IDR	296-7611-1-ND	8MHz, 1.8V Rail-to-Rail I/O Op Amp	8-SOP	1.50	1.20	.90
TLV2781IDR	296-7611-2-ND	8MHz, 1.8V Rail-to-Rail I/O Op Amp	8-SOP	1920.00/2,500		
TLV2782AID	296-7612-5-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-SOP	2.23	1.78	1.34
TLV2782CD	296-2445-5-ND	Low Voltage, Dual, R/R Op Amp	8-SOIC	2.03	1.62	1.22
TLV2782CDR	296-2445-1-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-SOIC	2.03	1.62	1.22
TLV2782CDR	296-2445-2-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-SOIC	2592.50/2,500		
TLV2782CDGKR	296-7613-1-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-MSOP	2.03	1.62	1.22
TLV2782CDGKR	296-7613-2-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-MSOP	2592.50/2,500		

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLV2782ID	296-11652-5-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-SOIC	2.13	1.70	1.28
TLV2782IDGKR	296-7615-1-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-MSOP	2.13	1.70	1.28
TLV2782IDGKR	296-7615-2-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-MSOP	2720.00/2,500		
TLV2782IP	296-7616-5-ND	Dual 8MHz, 1.8V R/R I/O Op Amp	8-Dip	2.13	1.70	1.28
TLV2783CD	296-10684-5-ND	Low Voltage, Dual, R/R Op Amp w/SD	14-SOIC	2.23	1.78	1.34
TLV2783CDR	296-10684-1-ND	Low Voltage, Dual, R/R Op Amp w/SD	14-SOIC	2.23	1.78	1.34
TLV2783CDR	296-10684-2-ND	Low Voltage, Dual, R/R Op Amp w/SD	14-SOIC	2847.50/2,500		
TLV2783CDGSR	296-10683-1-ND	Low Voltage, Dual, R/R Op Amp w/SD	10-SOP	2.23	1.78	1.34
TLV2783CDGSR	296-10683-2-ND	Low Voltage, Dual, R/R Op Amp w/SD	10-SOP	2847.50/2,500		
TLV2783ID	296-2446-5-ND	Low Voltage, Dual, R/R Op Amp	14-SOIC	2.33	1.86	1.40
TLV2783IDGSR	296-10685-1-ND	Low Voltage, Dual, R/R Op Amp w/SD	10-SOP	2.33	1.86	1.40
TLV2783IDGSR	296-10685-2-ND	Low Voltage, Dual, R/R Op Amp w/SD	10-SOP	2975.00/2,500		
TLV2783IN	296-10686-5-ND	Low Voltage, Dual, R/R Op Amp w/SD	14-Dip	2.33	1.86	1.40
TLV2784AID	296-10687-5-ND	Quad, 1.8V/8MHz, R/R Op Amp	14-SOIC	2.59	2.07	1.61
TLV2784IDR	296-10688-1-ND	Quad, 1.8V/8MHz, R/R Op Amp	14-SOIC	2.48	1.98	1.54
TLV2784IDR	296-10688-2-ND	Quad, 1.8V/8MHz, R/R Op Amp	14-SOIC	3465.00/2,500		
TLV2784IPW	296-10689-5-ND	Quad, 1.8V/8MHz, R/R Op Amp	14-TSSOP	2.48	1.98	1.54
TLV2785AID	296-10690-5-ND	Quad, 1.8V/8MHz, R/R Op Amp	16-SOIC	2.84	2.27	1.77
TLV2785CPWR	296-10691-1-ND	Quad, 1.8V/8MHz, R/R Op Amp	16-TSSOP	2.59	2.07	1.61
TLV2785CPWR	296-10691-2-ND	Quad, 1.8V/8MHz, R/R Op Amp	16-TSSOP	2932.00/2,000		
TLV2785IDR	296-10692-1-ND	Quad, 1.8V/8MHz, R/R Op Amp	16-SOIC	2.72	2.18	1.70
TLV2785IDR	296-10692-2-ND	Quad, 1.8V/8MHz, R/R Op Amp	16-SOIC	3812.50/2,500		
TLV3404IDR	296-10710-1-ND	LP, Quad Rail-to-Rail Op Amp	14-SOP	2.45	1.97	1.53
TLV3404IDR	296-10710-2-ND	LP, Quad Rail-to-Rail Op Amp	14-SOP	3432.50/2,500		
TLV3404IPWR	296-10711-1-ND	LP, Quad Rail-to-Rail Op Amp	14-TSSOP	2.45	1.97	1.53
TLV3404IPWR	296-10711-2-ND	LP, Quad Rail-to-Rail Op Amp	14-TSSOP	2780.00/2,000		
TLV4110IDGNR	296-10713-1-ND	High Out/Low Volt Single Rail-to-Rail Op Amp with Shutdown	8-HTSSOP	1.78	1.42	1.07
TLV4110IDGNR	296-10713-2-ND	High Out/Low Volt Single Rail-to-Rail Op Amp with Shutdown	8-HTSSOP	2272.50/2,500		
TLV4110IDR	296-12301-1-ND	High Out/Low Volt Single Rail-to-Rail Op Amp with Shutdown	8-SOIC	1.78	1.42	1.07
TLV4110IDR	296-12301-2-ND	High Out/Low Volt Single Rail-to-Rail Op Amp with Shutdown	8-SOIC	2307.50/2,500		
TLV4111IDGNR	296-10714-1-ND	High Out/Low Volt Single Rail-to-Rail Op Amp	8-HTSSOP	1.63	1.30	.98
TLV4111IDGNR	296-10714-2-ND	High Out/Low Volt Single Rail-to-Rail Op Amp	8-HTSSOP	2080.00/2,500		
TLV4111IDR	296-10715-1-ND	High Out/Low Volt Single Rail-to-Rail Op Amp	8-SOIC	1.63	1.30	.98
TLV4111IDR	296-10715-2-ND	High Out/Low Volt Single Rail-to-Rail Op Amp	8-SOIC	2080.00/2,500		
TLV4112CD	296-2447-5-ND	Dual High-Drive Op Amplifier	8-SOIC	2.00	1.60	1.20
TLV4112CP	296-10716-5-ND	High-Out-Drive Dual R/R Op Amp	8-Dip	2.00	1.60	1.20
TLV4112ID	296-10717-5-ND	High-Out-Drive Dual R/R Op Amp	8-SOIC	2.10	1.68	1.26
TLV4112IDGNR	296-10718-1-ND	High-Out-Drive Dual R/R Op Amp	8-HTSSOP	2.10	1.68	1.26
TLV4112IDGNR	296-10718-2-ND	High-Out-Drive Dual R/R Op Amp	8-HTSSOP	2687.50/2,500		
TLV4112IP	296-10719-5-ND	High-Out-Drive Dual R/R Op Amp	8-Dip	2.10	1.68	1.26
TLV4113ID	296-10720-5-ND	High-Out-Drive Dual Rail-to-Rail Op Amp with Shutdown	14-SOIC	2.30	1.84	1.38
TLV4113IDGQR	296-10721-1-ND	High-Out-Drive Dual Rail-to-Rail Op Amp with Shutdown	10-HTSSOP	2.30	1.84	1.38
TLV4113IDGQR	296-10721-2-ND	High-Out-Drive Dual Rail-to-Rail Op Amp with Shutdown	10-HTSSOP	2945.00/2,500		
TLV4120IDGNR	296-10722-1-ND	High-Out-Drive Signal Rail-to-Rail Op Amp with Shutdown	8-HTSSOP	2.61	2.09	1.63
TLV4120IDGNR	296-10722-2-ND	High-Out-Drive Signal Rail-to-Rail Op Amp with Shutdown	8-HTSSOP	3655.00/2,500		
TPA005D12DCA	296-2448-5-ND	2W Stereo Power Amplifier	48-TSSOP	8.66	6.93	5.85
TPA005D14DCA	296-2449-5-ND	2W Stereo Power Amplifier, Upgrade for TPA005D04DCA	48-TSSOP	9.62	7.70	6.50
TPA032D01DCA	296-2461-5-ND	10W Monaural Power Amp	48-HTSSOP	5.68	4.55	3.84
TPA032D02DCA	296-2462-5-ND	10W Class-D Stereo Audio Power Amp	48-TSSOP	6.56	5.25	4.43
TPA032D02DCAR	296-2462-1-ND	10W Class-D Stereo Audio Power Amp	48-TSSOP	6.56	5.25	4.43
TPA032D02DCAR	296-2462-2-ND	10W Class-D Stereo Audio Power Amp	48-TSSOP	8200.00/2,000		
TPA032D03DCA	296-2463-5-ND	10W Monaural Power Amp	48-HTSSOP	6.22	4.98	4.20
TPA032D04DCA	296-2464-5-ND	10W Stereo Power Amplifier	48-HTSSOP	6.84	5.48	4.62
TPA102DGN	296-1941-5-ND	150mW Stereo Audio Power Amp	8-MSOP	1.90	1.52	1.14
TPA102DGNR	296-1941-1-ND	150mW Stereo Audio Power Amp	8-MSOP	1.90	1.52	1.14
TPA102DGNR	296-1941-2-ND	150mW Stereo Audio Power Amp	8-MSOP	2432.50/2,500		
TPA112D	296-2465-5-ND	150mW Stereo Audio Power Amp	8-SOIC	1.50	1.20	.90
TPA112DR	296-2465-1-ND	150mW Stereo Audio Power Amp	8-SOIC	1.50	1.20	.90
TPA112DR	296-2465-2-ND	150mW Stereo Audio Power Amp	8-SOIC	1920.00/2,500		
TPA112DGN	296-1942-5-ND	150mW Stereo Audio Power Amp	8-MSOP	1.73	1.38	1.04
TPA112DGNR	296-1942-1-ND	150mW Stereo Audio Power Amp	8-MSOP	1.73	1.38	1.04
TPA112DGNR	296-1942-2-ND	150mW Stereo Audio Power Amp	8-MSOP	2207.50/2,500		
TPA122D	296-2466-5-ND	150mW Stereo Audio Power Amp	8-SOIC	1.65	1.32	.99
TPA122DR	296-2466-1-ND	150mW Stereo Audio Power Amp	8-SOIC	1.65	1.32	.99
TPA122DR	296-2466-2-ND	150mW Stereo Audio Power Amp	8-SOIC	2112.00/2,500		
TPA122DGN	296-1943-5-ND	150mW Stereo Audio Power Amp	8-MSOP	1.90	1.52	1.14
TPA122DGNR	296-1943-1-ND	150mW Stereo Audio Power Amp	8-MSOP	1.90	1.52	1.14
TPA122DGNR	296-1943-2-ND	150mW Stereo Audio Power Amp	8-MSOP	2432.50/2,500		
TPA152D	296-1944-5-ND	75mW Single-Ended Audio Power Amp	8-SOIC	1.75	1.40	1.05
TPA152DR	296-1944-2-ND	75mW Single-Ended Audio Power Amp	8-SOIC	2240.00/2,500		
TPA301D	296-1945-5-ND	0.35W Mono Audio Power Amplifier	8-SOIC	1.23	1.03	.82
TPA301DR	296-1945-1-ND	0.35W Mono Audio Power Amplifier	8-SOIC	1.23	1.03	.82
TPA301DR	296-1945-2-ND	0.35W Mono Audio Power Amplifier	8-SOIC	1332.50/2,500		
TPA301DGN	296-1946-5-ND	0.35W Mono Audio Power Amplifier	8-MSOP	1.28	1.02	.77
TPA302D	296-7011-5-ND	0.3W Stereo Audio Power Amp	8-SOP	2.30	1.84	1.38
TPA311D	296-1947-5-ND	0.35W Mono Audio Power Amp	8-SOIC	1.23	1.03	.82
TPA311DR	296-1947-1-ND	0.35W Mono Audio Power Amp	8-SOIC	1.23	1.03	.82
TPA311DR	296-1947-2-ND	0.35W Mono Audio Power Amp	8-SOIC	1332.50/2,500		
TPA311DGN	296-1948-5-ND	0.35W Mono Audio Power Amplifier	8-MSOP	1.28	1.02	.77
TPA321D	296-7012-5-ND	350mW Low Volt. Audio Power Amp with Differential Inputs	8-SOP	1.23	1.03	.82
TPA321DGN	296-12563-5-ND	350mW Low Volt. Audio Power Amp with Differential Inputs *NEW!*	8-MSOP	1.28	1.02	.77

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TEXAS INSTRUMENTS AMPLIFIERS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPA4860D	296-7013-5-ND	1W Mono Audio Power Amp	16-SOP	2.79	2.24	1.74
TPA4861D	296-7014-5-ND	1W Mono Audio Power Amp	8-SOP	2.79	2.24	1.74
TPA4861DR	296-7014-1-ND	1W Mono Audio Power Amp	8-SOP	2.79	2.24	1.74
TPA4861DR	296-7014-2-ND	1W Mono Audio Power Amp	8-SOP	3905.00/2,500		
TPA701D	296-1949-5-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1.38	1.15	.92
TPA701DR	296-1949-1-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1.38	1.15	.92
TPA701DR	296-1949-2-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1495.00/2,500		
TPA701DGN	296-7022-5-ND	700mW Low Volt. Audio Power Amp	8-MSOP	1.38	1.10	.83
TPA701DGNR	296-7022-1-ND	700mW Low Volt. Audio Power Amp	8-MSOP	1.38	1.10	.83
TPA701DGNR	296-7022-2-ND	700mW Low Volt. Audio Power Amp	8-MSOP	1760.00/2,500		
TPA711D	296-1950-5-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1.38	1.15	.92
TPA711DR	296-1950-1-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1.38	1.15	.92
TPA711DR	296-1950-2-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1495.00/2,500		
TPA711DGNR	296-7023-1-ND	700mW Low Volt. Audio Power Amp	8-MSOP	1.38	1.10	.83
TPA711DGNR	296-7023-2-ND	700mW Low Volt. Audio Power Amp	8-MSOP	1760.00/2,500		
TPA721D	296-1951-5-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1.38	1.15	.92
TPA721DR	296-1951-1-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1.38	1.15	.92
TPA721DR	296-1951-2-ND	700mW Low Volt. Audio Power Amp	8-SOIC	1495.00/2,500		
TPA721DGNR	296-7024-1-ND	700mW Low Volt. Audio Power Amp	8-MSOP	1.38	1.10	.83
TPA721DGNR	296-7024-2-ND	700mW Low Volt. Audio Power Amp	8-MSOP	1760.00/2,500		
TPA731D	296-7025-5-ND	700mW Low Volt. Audio Power Amp with Differential Inputs	8-SOP	1.38	1.15	.92
TPA731DGNR	296-7026-1-ND	700mW Low Volt. Audio Power Amp with Differential Inputs	8-MSOP	1.38	1.10	.83
TPA731DGNR	296-7026-2-ND	700mW Low Volt. Audio Power Amp with Differential Inputs	8-MSOP	1760.00/2,500		
TPA741D	296-7027-5-ND	700mW Low Volt. Audio Power Amp with Differential Inputs	8-SOP	1.38	1.15	.92
TPA741DGNR	296-7028-1-ND	700mW Low Volt. Audio Power Amp with Differential Inputs	8-MSOP	1.38	1.10	.83
TPA741DGNR	296-7028-2-ND	700mW Low Volt. Audio Power Amp with Differential Inputs	8-MSOP	1760.00/2,500		
TPA751D	296-10855-5-ND	Low Volt. Audio Power Amp	8-SOIC	1.38	1.15	.92
TPA751DGNR	296-10856-1-ND	Low Volt. Audio Power Amp	8-HTSSOP	1.38	1.10	.83
TPA751DGNR	296-10856-2-ND	Low Volt. Audio Power Amp	8-HTSSOP	1760.00/2,500		
TPA0102PWP	296-1938-5-ND	1.5W Stereo Audio Power Amp	24-HTSSOP	4.07	3.26	2.54
TPA0102PWPR	296-1938-1-ND	1.5W Stereo Audio Power Amp	24-HTSSOP	4.07	3.26	2.54
TPA0102PWPR	296-1938-2-ND	1.5W Stereo Audio Power Amp	24-HTSSOP	4616.00/2,000		
TPA0103PWP	296-1939-5-ND	1.75W 3-Ch. Stereo Audio Power Amp	24-HTSSOP	4.07	3.26	2.54
TPA0103PWPR	296-1939-1-ND	1.75W 3-Ch. Stereo Audio Power Amp	24-HTSSOP	4.07	3.26	2.54
TPA0103PWPR	296-1939-2-ND	1.75W 3-Ch. Stereo Audio Power Amp	24-HTSSOP	4616.00/2,000		
TPA0112PWP	296-2450-5-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	3.22	2.58	2.01
TPA0112PWPR	296-2450-1-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	3.22	2.58	2.01
TPA0112PWPR	296-2450-2-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	3646.00/2,000		
TPA0122PWP	296-2451-5-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	3.22	2.58	2.01
TPA0122PWPR	296-2451-1-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	3.22	2.58	2.01
TPA0122PWPR	296-2451-2-ND	2W Stereo Audio Power Amp with Internal Gain Settings	24-HTSSOP	3646.00/2,000		
TPA0132PWP	296-2452-5-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0132PWPR	296-2452-1-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0132PWPR	296-2452-2-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	6044.00/2,000		
TPA0142PWP	296-2453-5-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0142PWPR	296-2453-1-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0142PWPR	296-2453-2-ND	2W Stereo Audio Power Amp with DC Volume Control	24-HTSSOP	6044.00/2,000		
TPA0152PWP	296-2454-5-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0152PWPR	296-2454-1-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0152PWPR	296-2454-2-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	6044.00/2,000		
TPA0162PWP	296-2455-5-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0162PWPR	296-2455-1-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	5.33	4.27	3.32
TPA0162PWPR	296-2455-2-ND	2W Stereo Audio Power Amp with Digital Volume Control	24-HTSSOP	6044.00/2,000		
TPA0172PWP	296-7000-5-ND	2W Stereo Mono Audio Power Amp	24-HTSSOP	5.34	4.28	3.61
TPA0202PWP	296-1940-5-ND	2W Stereo Audio Power Amp	24-HTSSOP	4.46	3.57	2.78
TPA0202PWPR	296-1940-1-ND	2W Stereo Audio Power Amp	24-HTSSOP	4.46	3.57	2.78
TPA0202PWPR	296-1940-2-ND	2W Stereo Audio Power Amp	24-HTSSOP	5050.00/2,000		
TPA0211DGN	296-2456-5-ND	2W Mono Audio Power Amp	8-TSSOP	1.65	1.32	.99
TPA0211DGNR	296-2456-2-ND	2W Mono Audio Power Amp	8-MSOP	2112.50/2,500		
TPA0212PWP	296-2457-5-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	3.22	2.58	2.01
TPA0212PWPR	296-2457-1-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	3.22	2.58	2.01
TPA0212PWPR	296-2457-2-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	3646.00/2,000		
TPA0213DGQR	296-7001-1-ND	2W Mono Audio Power Amp with Headphone Drive	10-MSOP	3.38	2.70	2.10
TPA0213DGQR	296-7001-2-ND	2W Mono Audio Power Amp with Headphone Drive	10-MSOP	4725.00/2,500		
TPA0222PWP	296-2458-5-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	3.22	2.58	2.01
TPA0222PWPR	296-2458-1-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	2.75	2.20	1.71
TPA0222PWPR	296-2458-2-ND	2W Stereo Audio Power Amp with 4 Select Gain Set/Mux Control	24-HTSSOP	3646.00/2,000		
TPA0223DGQR	296-7002-1-ND	2W Mono Audio Power Amp with Headphone Drive	10-MSOP	3.38	2.70	2.10
TPA0223DGQR	296-7002-2-ND	2W Mono Audio Power Amp with Headphone Drive	10-MSOP	4725.00/2,500		
TPA0232PWP	296-2459-5-ND	2W Stereo Power Amplifier	24-HTSSOP	5.33	4.27	3.32
TPA0233DGQR	296-7003-1-ND	2W Mono Audio Power Amp with Headphone Drive	10- MSOP	3.38	2.70	2.10
TPA0233DGQR	296-7003-2-ND	2W Mono Audio Power Amp with Headphone Drive	10- MSOP	4725.00/2,500		
TPA0242PWP	296-2460-5-ND	2W Stereo Power Amplifier	24-HTSSOP	5.33	4.27	3.32
TPA0243DGQR	296-7004-1-ND	2W Mono Audio Power Amp with Headphone Drive	10-MSOP	3.38	2.70	2.10
TPA0243DGQR	296-7004-2-ND	2W Mono Audio Power Amp with Headphone Drive	10-MSOP	4725.00/2,500		
TPA0252PWP	296-7005-5-ND	2W Stereo Audio Power Amp with Digital Volume Control/Memory	24-HTSSOP	5.33	4.27	3.32
TPA0253DGQR	296-7006-1-ND	1W Mono Audio Power Amp with Headphone Drive	10-MSOP	3.11	2.49	1.94
TPA0253DGQR	296-7006-2-ND	1W Mono Audio Power Amp with Headphone Drive	10-MSOP	4347.50/2,500		
TPA0312PWP	296-10817-5-ND	2W Stereo Power Amplifier	24-HTSSOP	3.22	2.58	2.01
TPA1517DWP	296-7007-5-ND	6W Stereo Audio Power Amp	20-HSOP	2.86	2.29	1.78
TPA1517DWPR	296-7007-1-ND	6W Stereo Audio Power Amp	20-HSOP	2.86	2.29	1.78
TPA1517DWPR	296-7007-2-ND	6W Stereo Audio Power Amp	20-HSOP	3238.00/2,000		
TPA1517NE	296-7008-5-ND	6W Stereo Audio Power Amp	20-Dip	2.38	1.90	1.43
TPA2000D1PW	296-7009-5-ND	2W Class-D Filterless Mono Audio Power Amp	16-TSSOP	2.45	1.97	1.53
TPA2000D2PWP	296-2467-5-ND	2W Class-D Filterless Audio Power Amp	24-HTSSOP	4.07	3.26	2.54
TPA2000D2PWPR	296-2467-1-ND	2W Class-D Filterless Audio Power Amp	24-HTSSOP	4.07	3.26	2.54
TPA2000D2PWPR	296-2467-2-ND	2W Class-D Filterless Audio Power Amp	24-HTSSOP	4616.00/2,000		
TPA2000D4DAP	296-10830-5-ND	2W Class-D Filterless Audio Power Amp	32-HTSSOP	4.46	3.57	2.78
TPA2001D1PW	296-7010-5-ND	1W Class-D Filterless Mono Audio Power Amp	16-TSSOP	1.85	1.48	1.11
TPA2001D2PWP	296-2468-5-ND	1W Class-D Stereo Audio Power Amp	24-HTSSOP	3.67	2.94	2.29
TPA2001D2PWPR	296-2468-1-ND	1W Class-D Stereo Audio Power Amp	24-HTSSOP	3.67	2.94	2.29
TPA2001D2PWPR	296-2468-2-ND	1W Class-D Stereo Audio Power Amp	24-HTSSOP	4156.00/2,000		
TPA6010A4PWPR	296-7015-1-ND	2W Stereo Audio Power Amp w/Bass Boost/DC Volume Control	28-HTSSOP	5.34	4.28	3.61
TPA6010A4PWPR	296-7015-2-ND	2W Stereo Audio Power Amp w/Bass Boost/DC Volume Control	28-HTSSOP	6676.00/2,000		
TPA6017A2PWPR	296-12506-1-ND	2W Stereo Audio Power Amp *NEW!*	20-HTSSOP	2.66	2.13	1.66
TPA6017A2PWPR	296-12506-2-ND	2W Stereo Audio Power Amp *NEW!*	20-HTSSOP	3010.00/2,000		
TPA6100A2DGKR	296-7016-1-ND	50mW Ultra-LV Audio Power Amp	8-MSOP	1.80	1.44	1.08
TPA6100A2DGKR	296-7016-2-ND	50mW Ultra-LV Audio Power Amp	8-MSOP	2305.00/2,500		
TPA6100A2DR	296-7017-1-ND	50mW Ultra-LV Audio Power Amp	8-SOP	1.55	1.24	.93
TPA6100A2DR	296-7017-2-ND	50mW Ultra-LV Audio Power Amp	8-SOP	1984.00/2,500		
TPA6101A2D	296-7018-5-ND	50mW Ultra-LV Audio Power Amp	8-SOP	1.55	1.24	.93
TPA6101A2DGKR	296-7019-1-ND	50mW Ultra-LV Audio Power Amp	8-MSOP	1.80	1.44	1.08
TPA6101A2DGKR	296-7019-2-ND	50mW Ultra-LV Audio Power Amp	8-MSOP	2305.00/2,500		
TPA6102A2D	296-7020-5-ND	50mW Ultra-LV Audio Power Amp	8-SOP	1.55	1.24	.93
TPA6102A2DGKR	296-7021-1-ND	50mW Ultra-LV Audio Power Amp	8-MSOP	1.80	1.44	1.08
TPA6102A2DGKR	296-7021-2-ND	50mW Ultra-LV Audio Power Amp	8-MSOP	2305.00/2,500		
TPA6110A2DGN	296-10843-5-ND	150mW Stereo Power Amp.	8-HTSSOP	1.55	1.24	.93
TPA6111A2DGN	296-10845-5-ND	150mW Stereo Power Amp.	8-HTSSOP	1.55	1.24	.93
TPA6111A2DR	296-10846-1-ND	150mW Stereo Power Amp.	8-SOIC	1.33	1.06	.80
TPA6111A2DR	296-10846-2-ND	150mW Stereo Power Amp.	8-SOIC	1696.00/2,500		
TPA6112A2DGQR	296-10848-1-ND	150mW Stereo Power Amp.	10-HTSSOP	1.65	1.32	.99
TPA6112A2DGQR	296-10848-2-ND	150mW Stereo Power Amp.	10-HTSSOP	2112.00/2,500		
UA741CD	296-11106-5-ND	General Purpose Op Amp	8-SOIC	.80	.60	.45
UA741CP	296-11107-5-ND	General Purpose Op Amp	8-Dip	.80	.60	.45
UC3901D	296-11338-5-ND	Isolated Feedback Generator	14-SOIC	3.96	3.17	2.47
UC3901N	296-11339-5-ND	Isolated Feedback Generator	14-Dip	3.96	3.17	2.47
VCA610U	VCA610U-ND	Wideband Voltage Controlled Amp.	8-SOIC	17.59	15.84	14.05
VCA610UA	VCA610UA-ND	Wideband Voltage Controlled Amp.	8-SOIC	25.25	23.57	21.88
VCA2612Y/250	VCA2612YCT-ND	Dual Low Noise Variable Gain Amp	48-TQFP	16.95	15.82	14.69
VCA2612Y/250	VCA2612YTR-ND	Dual Low Noise Variable Gain Amp	48-TQFP	3602.00/250		
VCA2613Y/250	VCA2613YCT-ND	Dual Low Noise Variable Gain Amp	48-TQFP	13.89	12.97	12.04
VCA2613Y/250	VCA2613YTR-ND	Dual Low Noise Variable Gain Amp	48-TQFP	2951.75/250		
SBAT001	LI-501-ND	Linear & Mixed Signal Products Data Book		4.94	—	—

TEXAS INSTRUMENTS BUS SOLUTIONS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
		Clock Drivers				
CDC111FN	296-6675-5-ND	3.3V Clock Driver	28-PLCC	15.23	13.71	12.16
CDC203DWR	296-6676-1-ND	3.3V Clock Driver	20-SOIC	5.58	4.47	3.77
CDC203DWR	296-6676-2-ND	3.3V Clock Driver	20-SOIC	6976.00/2,000		
CDC204DW	296-6677-5-ND	6-Bit Inverter/Clock Driver	20-SOIC	5.36	4.29	3.62
CDC204DWR	296-6677-1-ND	6-Bit Inverter/Clock Driver	20-SOIC	5.40	4.32	3.65
CDC204DWR	296-6677-2-ND	6-Bit Inverter/Clock Driver	20-SOIC	6750.00/2,000		
CDC208DW	296-6678-5-ND	Dual 1-to-4 Clock Driver	20-SOIC	5.68	4.55	3.84
CDC318ADL	296-1383-5-ND	1-18 Line Clock Driver	48-SSOP	4.21	3.37	2.62
CDC319DBR	296-6692-1-ND	1-10 Clock Driver	28-SSOP	4.30	3.44	2.68
CDC319DBR	296-6692-2-ND	1-10 Clock Driver	28-SSOP	4870.00/2,000		

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TEXAS INSTRUMENTS BUS SOLUTIONS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CDC328ADR	296-6693-1-ND	1-6 Clock Dvr. w/Selectable Polarity	16-SOIC	7.14	5.72	4.82
CDC328ADR	296-6693-2-ND	1-6 Clock Dvr. w/Selectable Polarity	16-SOIC	11067.00/2,500		
CDC328ADBR	296-6694-1-ND	1-6 Clock Dvr. w/Selectable Polarity	16-SSOP	7.14	5.72	4.82
CDC328ADBR	296-6694-2-ND	1-6 Clock Dvr. w/Selectable Polarity	16-SSOP	8925.00/2,000		
CDC329AD	296-6696-5-ND	1-6 Clock Dvr. w/Selectable Polarity	16-SOP	7.10	5.68	4.80
CDC337DW	296-6697-5-ND	1-8 Clock Driver with Clear	20-SOIC	8.66	6.93	5.85
CDC339DBR	296-6698-1-ND	1-8 Clock Driver with Clear	20-SSOP	7.34	5.88	4.96
CDC339DBR	296-6698-2-ND	1-8 Clock Driver with Clear	20-SSOP	9175.00/2,000		
CDC339DW	296-6699-5-ND	1-8 Clock Driver with Clear	20-SOIC	7.30	5.84	4.93
CDC340DW	296-6700-5-ND	1-8 Clock Driver with Tight AC Spec.	20-SOIC	7.30	5.84	4.93
CDC341DW	296-6701-5-ND	1-8 Clock Driver with Tight AC Spec.	20-SOIC	9.48	7.59	6.40
CDC351DBR	296-6702-1-ND	3.3V Clock Driver	24-SSOP	9.88	8.90	7.89
CDC351DBR	296-6702-2-ND	3.3V Clock Driver	24-SSOP	14004.00/2,000		
CDC351DW	296-6703-5-ND	3.3V Clock Driver	24-SOIC	9.41	8.48	7.52
CDC391D	296-6704-5-ND	1-6 Clock Dvr. w/Selectable Polarity	16-SOIC	7.46	5.97	5.04
CDC509PWR	296-6705-1-ND	3.3V Clock Driver	24-TSSOP	4.86	3.89	3.03
CDC509PWR	296-6705-2-ND	3.3V Clock Driver	24-TSSOP	5508.00/2,000		
CDC516DGGR	296-6706-1-ND	3.3V Clock Driver	48-TSSOP	5.92	4.74	4.00
CDC516DGGR	296-6706-2-ND	3.3V Clock Driver	48-TSSOP	7400.00/2,000		
CDC536DBR	296-6707-1-ND	3.3V Clock Driver	28-SSOP	5.40	4.32	3.36
CDC536DBR	296-6707-2-ND	3.3V Clock Driver	28-SSOP	6120.00/2,000		
CDC582PAH	296-6708-5-ND	3.3V Clock Driver	52-QFP	9.03	8.13	7.21
CDC586PAH	296-6709-5-ND	Tri-State 3.3V Clock Driver	52-QFP	8.88	8.00	7.09
CDC924DL	296-6714-5-ND	133 MHz Clock Synthesizer-Driver	56-SSOP	4.19	3.35	2.61
CDC925DL	296-6715-5-ND	133 MHz Clock Synthesizer-Driver	56-SSOP	4.77	3.82	2.97
CDC2351DW	296-6680-5-ND	3.3V Clock Driver	24-SOIC	8.71	7.85	6.96
CDC2351QDB	296-9434-5-ND	1-10 Buffer Clock Driver	24-SSOP	9.95	8.96	7.95
CDC2509APWR	296-6681-1-ND	Tri-State 3.3V PLL Clock Driver	24-TSSOP	9.21	8.30	7.36
CDC2509APWR	296-6681-2-ND	Tri-State 3.3V PLL Clock Driver	24-TSSOP	13660.00/2,000		
CDC2509BPWR	296-6682-1-ND	1-9 PLL Clock Driver	24-TSSOP	4.97	3.98	3.10
CDC2509BPWR	296-6682-2-ND	1-9 PLL Clock Driver	24-TSSOP	5636.00/2,000		
CDC2509CPWR	296-6683-1-ND	3.3V PLL Clock Driver	24-TSSOP	4.97	3.98	3.10
CDC2509CPWR	296-6683-2-ND	3.3V PLL Clock Driver	24-TSSOP	5636.00/2,000		
CDC2510APWR	296-6684-1-ND	3.3V PLL Clock Driver	24-TSSOP	9.21	8.30	7.36
CDC2510APWR	296-6684-2-ND	3.3V PLL Clock Driver	24-TSSOP	13660.00/2,000		
CDC2510BPWR	296-6685-1-ND	3.3V PLL Clock Driver	24-TSSOP	4.97	3.98	3.10
CDC2510BPWR	296-6685-2-ND	3.3V PLL Clock Driver	24-TSSOP	5636.00/2,000		
CDC2510CPWR	296-6686-1-ND	3.3V PLL Clock Driver	24-TSSOP	4.91	3.93	3.06
CDC2510CPWR	296-6686-2-ND	3.3V PLL Clock Driver	24-TSSOP	5560.00/2,000		
CDC2516DGGR	296-6687-1-ND	Tri-State 3.3V PLL Clock Driver	48-TSSOP	5.86	4.69	3.96
CDC2516DGGR	296-6687-2-ND	Tri-State 3.3V PLL Clock Driver	48-TSSOP	7326.00/2,000		
CDC2536DBR	296-6688-1-ND	3.3V Clock Driver	28-SSOP	4.59	3.68	2.86
CDC2536DBR	296-6688-2-ND	3.3V Clock Driver	28-SSOP	5202.00/2,000		
CDC2582PAH	296-6689-5-ND	3.3V Clock Driver	52-QFP	9.54	7.64	6.44
CDC2586PAH	296-6690-5-ND	Tri-State 3.3V Clock Driver	52-QFP	9.36	8.43	7.48
CDCF2510PWR	296-6718-1-ND	3.3V PLL Clock Driver	24-TSSOP	6.76	5.41	4.57
CDCF2510PWR	296-6718-2-ND	3.3V PLL Clock Driver	24-TSSOP	8450.00/2,000		
CDCFR83DBQR	296-12311-1-ND	533MHz Direct Clock Generator	24-SSOP	7.24	5.80	4.89
CDCFR83DBQR	296-12311-2-ND	533MHz Direct Clock Generator	24-SSOP	8587.50/2,500		
CDCR81DBQR	296-6720-1-ND	Direct RAMBUS Clock Generator	24-SOP	4.21	3.37	2.62
CDCR81DBQR	296-6720-2-ND	Direct RAMBUS Clock Generator	24-SOP	5827.50/2,500		
CDCV304PW	296-12420-5-ND	140MHz General Purpose PCI-X Clock Buffer *NEW!*	8-TSSOP	2.81	2.25	1.75
CDCV304PWR	296-9436-1-ND	140-MHz PCI-X Clock Buffer	8-TSSOP	2.68	2.15	1.67
CDCV850DGGR	296-6721-1-ND	PLL Clock Driver	48-TSSOP	4.86	3.89	3.03
CDCV850DGGR	296-6721-2-ND	PLL Clock Driver	48-TSSOP	5508.00/2,000		
CDCV855PWR	296-12200-1-ND	2.5V, 1:4 PLL Clock Driver *NEW!*	28-TSSOP	3.26	2.61	2.03
CDCV855PWR	296-12200-2-ND	2.5V, 1:4 PLL Clock Driver *NEW!*	28-TSSOP	4336.00/2,000		
CDCV857ADGG	296-11575-5-ND	PLL Clock Driver *NEW!*	48-TSSOP	7.49	6.00	4.67
CDCV857DGGR	296-6722-1-ND	PLL Clock Driver	48-TSSOP	6.68	5.35	4.51
CDCV857DGGR	296-6722-2-ND	PLL Clock Driver	48-TSSOP	8518.00/2,000		
CDCVF111FN	296-12421-5-ND	Diff. LVPECL Clock Driver *NEW!*	28-PLCC	13.41	12.08	10.71
CDCVF2310PWR	296-12019-1-ND	2.5-3.3V General Purpose High Power Clock Buffer *NEW!*	24-TSSOP	5.06	4.05	3.15
CDCVF2310PWR	296-12019-2-ND	2.5-3.3V General Purpose High Power Clock Buffer *NEW!*	24-TSSOP	5737.50/2,000		
CDCVF2505D	296-6723-5-ND	3.3V Phase Lock Loop Clock Driver	8-SOIC	2.38	1.90	1.43
CDCVF2505PWR	296-9437-1-ND	3.3V Phase Lock Loop Clock Driver	8-TSSOP	2.15	1.72	1.29
CDCVF2505PWR	296-9437-2-ND	3.3V Phase Lock Loop Clock Driver	8-TSSOP	2366.00/2,000		
CDCVF2509PWR	296-6724-1-ND	3.3V PLL Clock Driver	24-TSSOP	4.79	3.84	2.99
CDCVF2509PWR	296-6724-2-ND	3.3V PLL Clock Driver	24-TSSOP	5432.00/2,000		
CDCVF2510PWR	296-6725-1-ND	3.3V PLL Clock Driver	24-TSSOP	4.79	3.84	2.99
CDCVF2510PWR	296-6725-2-ND	3.3V PLL Clock Driver	24-TSSOP	5432.00/2,000		
CDCVF25081DR	296-12270-1-ND	3.3V PLL Clock Driver *NEW!*	16-SOIC	3.38	2.70	2.10
CDCVF25081DR	296-12270-2-ND	3.3V PLL Clock Driver *NEW!*	16-SOIC	5040.00/2,500		
CDCVF25081PWR	296-12271-1-ND	3.3V PLL Clock Driver *NEW!*	16-TSSOP	3.38	2.70	2.10
CDCVF25081PWR	296-12271-2-ND	3.3V PLL Clock Driver *NEW!*	16-TSSOP	4080.00/2,000		

IEEE1394

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TSB12LV01BPZT	296-11062-ND	High Performance Link Layer	100-TQFP	12.64	11.39	10.10
TSB12LV21BPGF	296-11063-ND	PCILynx Link Layer	176-QFP	13.81	12.44	11.03
TSB12LV23PZ	296-11064-ND	Open Host Controller	100-TQFP	11.13	10.02	8.89
TSB12LV26PZT	296-11065-ND	Open Host Controller	100-TQFP	6.70	5.36	4.53
TSB12LV32IPZ	296-11066-ND	General Purp. Link Layer Controller	100-TQFP	8.51	7.67	6.80
TSB12LV32PZ	296-11067-ND	General Purp. Link Layer Controller	100-TQFP	8.74	7.00	5.90
TSB14AA1PFB	296-11070-ND	Physical Layer Controller	48-TQFP	8.45	7.61	6.75
TSB14C01APM	296-11072-ND	Physical Layer Controller	64-PQFP	9.26	7.41	6.26
TSB15LV01PFC	296-11073-ND	High Performance Link Layer	80-QFP	8.18	6.55	5.53
TSB41AB1PAP	296-11074-ND	One-Port Cable Transceiver/Arbiter	64-HTQFP	4.05	3.24	2.52
TSB41AB1PHP	296-11075-ND	One-Port Cable Transceiver/Arbiter	48-HTQFP	3.92	3.14	2.44
TSB41AB2PAP	296-11076-ND	Two-Port Cable Transceiver/Arbiter	64-PQFP	4.88	3.91	3.04
TSB41AB3PFP	296-11077-ND	Three-Port Cable Transceiver/Arbiter	80-QFP	5.10	4.08	3.45
TSB41LV04APFP	296-11078-ND	Four-Port Cable Transceiver/Arbiter	80-QFP	9.21	8.30	7.36
TSB41LV06APZP	296-11079-ND	Six-Port Cable Transceiver/Arbiter	100-PQFP	9.06	8.16	7.24
TSB42AA9APZT	296-12568-ND	1394 Link Layer Controller *NEW!*	100-TQFP	9.14	7.32	6.17
TSB42AA9PZTR	296-11080-ND	High Performance Link Layer Cont.	100-TQFP	10.11	9.11	8.08
TSB42AB4PDT	296-11081-ND	Link Layer Controller	128-TQFP	15.54	14.00	12.41
TSB43AA82GGW	296-12243-ND	Phy and Link Layer Cont. *NEW!*	176-BGA	12.21	11.00	9.75
TSB43AA82PGE	296-11082-ND	Phy and Link Layer Cont.	144-LQFP	11.78	10.61	9.41
TSB43AB22APDT	296-12569-ND	1394 Link Layer Controller *NEW!*	128-TQFP	8.41	7.58	6.72
TSB43AB23PDT	296-12408-ND	IEEE-1394a Phy/Link Layer Controller *NEW!*	128-TQFP	8.96	8.07	7.16

PCI

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCI950PT	296-1413-5-ND	IRQSER Deserializer	48-LQFP	3.98	3.19	2.48
PCI1225PDV	296-6641-5-ND	PCI-to-PC Card Controller	208-TQFP	9.06	7.25	6.12
PCI1410AGGU	296-6644-5-ND	Single Slot CardBus Controller	144-BGA	8.08	6.47	5.46
PCI1410AGHK	296-6645-5-ND	Single Slot CardBus Controller	209-BGA	9.84	7.88	6.65
PCI1410APGE	296-6646-5-ND	Single Slot CardBus Controller	144-TQFP	8.08	6.47	5.46
PCI1410GGU	296-6647-5-ND	PC Card Controller	144-BGA	8.36	6.69	5.65
PCI1410PGE	296-6648-5-ND	PC Card Controller	144-TQFP	8.36	6.69	5.65
PCI1420GHK	296-6650-5-ND	PC Card Controller	209-BGA	8.88	7.11	6.00
PCI1450GFN	296-6652-5-ND	PC Card Controller	256-BGA	14.63	13.17	11.68
PCI1450GJG	296-6653-5-ND	PC Card Controller	257-BGA	12.15	10.94	9.70
PCI1451AGJG	296-6654-5-ND	PC Card Controller	257-BGA	12.41	11.18	9.91
PCI1520GHK	296-12279-5-ND	PC Card Controller *NEW!*	209-BGA	7.44	5.96	5.03
PCI1520PDV	296-12280-5-ND	PC Card Controller *NEW!*	208-QFP	7.78	6.23	5.26
PCI4410AGHK	296-6657-5-ND	Integrated PC Card	209-BGA	12.88	11.60	10.29
PCI4410APDV	296-6658-5-ND	Integrated PC Card	208-TQFP	12.88	11.60	10.29
PCI4451GFN	296-6663-5-ND	Integrated PC Card	256-BGA	15.21	13.70	12.15
PCI4451GJG	296-6664-5-ND	Integrated PC Card	257-BGA	15.21	13.70	12.15
PCI2040GGU	296-9633-5-ND	PCI-to-DSP Bridge Controller	144-BGA	15.05	14.05	13.04
PCI2040PGE	296-9634-ND	PCI-to-DSP Bridge Controller	144-LQFP	15.05	14.05	13.04
PCI2050APDV	296-12086-ND	32-Bit, 33MHz PCI-to-PCI Bridge	208-LQFP	21.29	19.87	18.45
PCI2050GHK	296-9635-5-ND	32-Bit, 33MHz PCI-to-PCI Bridge	209-BGA	17.39	16.23	15.07
PCI2050IGHK	296-9636-5-ND	32-Bit, 33MHz PCI-to-PCI Bridge	209-BGA	21.42	20.00	18.57
PCI2050IPDV	296-9637-ND	32-Bit, 33MHz PCI-to-PCI Bridge	208-LQFP	21.42	20.00	18.57
PCI2050PDV	296-9638-ND	32-Bit, 33MHz PCI-to-PCI Bridge	208-LQFP	17.39	16.23	15.07
PCI2250PCM	296-9639-ND	32-Bit, 33MHz PCI-to-PCI Bridge	160-QFP	15.23	14.21	13.20
PCI2250PGF	296-9640-ND	32-Bit, 33MHz PCI-to-PCI Bridge	176-LQFP	15.23	14.21	13.20

TEXAS INSTRUMENTS CCD

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC8188CDA	296-10351-5-ND	10-Bit CIS/CCD Signal Processor	32-SOIC	4.25	3.41	2.65
TLV990-13PFB	296-10737-ND	10-Bit, 13Msps CCD Signal Processor/Digitizer	48-TQFP	5.28	4.23	3.57
TLV990-21PFB	296-10738-ND	10-Bit, 21Msps CCD Analog Front End	48-TQFP	4.50	3.60	2.80
TLV990-28PFB	296-10739-ND	10-Bit, 28Msps CCD Analog Front End	48-TQFP	6.26	5.01	4.23
TLV990-40PFB	296-10740-ND	10-Bit, 40Msps CCD Analog Front End	48-TQFP	6.82	5.46	4.61
TLV990BPFB	296-10741-ND	10-Bit, 28Msps CCD/Video Signal Processor	48-TQFP	5.14	4.12	3.47
VSP1221PFB	296-12296-ND	LP CCD Signal Processor *NEW!*	48-TQFP	6.76	5.41	4.57
VSP2000Y	VSP2000Y-ND	CCD Signal Processor for Digital Cameras	48-LQFP	9.92	7.94	6.70
VSP2101Y	VSP2101Y-ND	10-Bit, 27MHz, Digital Camera CCD Signal Processor	48-LQFP	9.25	8.33	7.39
VSP2210Y	VSP2210Y-ND	10-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	12.81	11.54	10.23
VSP2212Y	VSP2212Y-ND	12-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	16.01	14.42	12.79
VSP2230Y	VSP2230Y-ND	10-Bit Digital Camera CCD Signal Processor	48-LQFP	15.24	13.73	12.17
VSP2232Y	VSP2232Y-ND	12-Bit Digital Camera CCD Signal Processor	48-LQFP	16.62	15.52	14.41
VSP2260Y	VSP2260Y-ND	10-Bit, 27MHz, Digital Camera CCD Signal Processor	48-LQFP	12.66	11.40	10.11
VSP2260Y/2K	VSP2260YTR-ND	10-Bit, 27MHz, Digital Camera CCD Signal Processor	48-LQFP	18796.00/2,000		
VSP2262Y	VSP2262Y-ND	12-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	15.86	14.28	12.67
VSP2262Y/2K	VSP2262YTR-ND	12-Bit, 20MHz, Digital Camera CCD Signal Processor	48-LQFP	23564.00/2,000		
VSP2270Y	296-12541-ND	27MHz CCD Signal Proc. *NEW!*	48-LQFP	10.55	9.50	8.42
VSP2272Y	296-12542-ND	27MHz CCD Signal Proc. *NEW!*	48-LQFP	13.71	12.35	10.95
VSP3010Y	VSP3010Y-ND	12-Bit, CCD/CIS Controller	48-LQFP	9.21	8.30	7.36
VSP3100Y	VSP3100Y-ND	14-Bit, 10MHz CCD/CIS Signal Processor	48-LQFP	9.62	7.70	6.50
VSP3200Y	VSP3200Y-ND	14-Bit, CCD/CIS Processor	48-LQFP	9.61	8.66	7.68
VSP3200Y/2K	VSP3200YTR-ND	14-Bit, CCD/CIS Processor	48-LQFP	14302.00/2,000		
VSP3210Y	VSP3210Y-ND	14-Bit, CCD/CIS Processor	48-LQFP	9.61	8.66	7.68
VSP3210Y2/K	VSP3210YTR-ND	14-Bit, CCD/CIS Processor	48-LQFP	14302.00/2,000		

TEXAS INSTRUMENTS COMPARATORS

General Purpose Comparators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
L293DNE	296-9518-5-ND	Quad Half-H Drivers	16-Dip	2.70	2.16	1.68
L293NE	296-9519-5-ND	Quad Half-H Drivers	16-Dip	2.70	2.16	1.68
LM293AD	296-9530-5-ND	Dual Differential Comparator	8-SOP	.78	.65	.52
LM293D	296-9531-5-ND	Dual Differential Comparator	8-SOP	.80	.60	.45
LM293P	296-9532-5-ND	Dual Differential Comparator	8-Dip	.80	.60	.45
LM3302D	296-9546-5-ND	Quad Differential Comparator	14-SOP	.99	.83	.66
LM339AD	296-6604-5-ND	Quad Differential Comparator, A Grade	14-SOIC	.76	.57	.43
LM339ADR	296-6604-1-ND	Quad Differential Comparator, A Grade	14-SOIC	.76	.57	.43
LM339ADR	296-6604-2-ND	Quad Differential Comparator, A Grade	14-SOIC	617.50/2,500		
LM339AN	296-6605-5-ND	Quad Differential Comparator, A Grade	14-Dip	.76	.57	.43
LM339D	296-1013-5-ND	Quad Differential Comparator	14-SOIC	.52	.39	.30
LM339DR	296-1013-1-ND	Quad Differential Comparator	14-SOIC	.52	.39	.30
LM339DR	296-1013-2-ND	Quad Differential Comparator	14-SOIC	422.50/2,500		
LM339DBR	296-6606-1-ND	Quad Differential Comparator	14-SSOP	.52	.39	.30
LM339DBR	296-6606-2-ND	Quad Differential Comparator	14-SSOP	346.00/2,000		
LM339N	296-1393-5-ND	Quad Differential Comparator	14-Dip	.52	.39	.30
LM339PWR	296-6607-1-ND	Quad Diff. Comparator, A Grade	14-TSSOP	.52	.39	.30
LM339PWR	296-6607-2-ND	Quad Diff. Comparator, A Grade	14-TSSOP	346.00/2,000		
LM393AD	296-6608-5-ND	Dual Differential Comparator, A Grade	8-SOP	.76	.57	.43
LM393AP	296-6609-5-ND	Dual Differential Comparator, A Grade	8-Dip	.76	.57	.43

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TEXAS INSTRUMENTS COMPARATORS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM393APWR	296-6610-1-ND	Dual Differential Comparator, A Grade	8-TSSOP	.76	.57	.43
LM393APWR	296-6610-2-ND	Dual Differential Comparator, A Grade	8-TSSOP	506.00/2,000		
LM393D	296-1015-5-ND	Dual Differential Comparator	8-SOIC	.52	.39	.30
LM393DR	296-1015-1-ND	Dual Differential Comparator	8-SOIC	.52	.39	.30
LM393DR	296-1015-2-ND	Dual Differential Comparator	8-SOIC	422.50/2,500		
LM393P	296-1398-5-ND	Dual Differential Comparator	8-Dip	.52	.39	.30
LM393PSR	296-9566-1-ND	Dual Differential Comparator	8-SOP	1.25	1.00	.75
LM393PSR	296-9566-2-ND	Dual Differential Comparator	8-SOP	1300.00/2,000		
LM2901D	296-1385-5-ND	Quad Diff. Comparator, Ind. Temp.	14-SOIC	.64	.48	.36
LM2901N	296-1386-5-ND	Quad Diff. Comparator, Ind. Temp.	14-Dip	.64	.48	.36
LM2901PWR	296-6597-1-ND	Quad Diff. Comparator, Ind. Temp.	14-TSSOP	.64	.48	.36
LM2901PWR	296-6597-2-ND	Quad Diff. Comparator, Ind. Temp.	14-TSSOP	426.00/2,000		
LM2902D	296-6598-5-ND	Quad Operational Amplifier	14-SOP	.64	.48	.36
LM2902N	296-6599-5-ND	Quad Operational Amplifier	14-Dip	.64	.48	.36
LM2902PWR	296-6600-1-ND	Quad Operational Amplifier	14-TSSOP	.64	.48	.36
LM2902PWR	296-6600-2-ND	Quad Operational Amplifier	14-TSSOP	426.00/2,000		
LM2903D	296-1012-5-ND	Dual Diff. Comparator, Ind. Temp.	8-SOIC	.64	.48	.36
LM2903DR	296-1012-1-ND	Dual Diff. Comparator, Ind. Temp.	8-SOIC	.64	.48	.36
LM2903DR	296-1012-2-ND	Dual Diff. Comparator, Ind. Temp.	8-SOIC	520.00/2,500		
LM2903P	296-6601-5-ND	Dual Diff. Comparator, Ind. Temp.	8-Dip	.64	.48	.36
LM2903PWR	296-6602-1-ND	Dual Diff. Comparator, Ind. Temp.	8-TSSOP	.64	.48	.36
LM2903PWR	296-6602-2-ND	Dual Diff. Comparator, Ind. Temp.	8-TSSOP	426.00/2,000		
LM2903QD	296-6603-5-ND	Dual Diff. Comparator, Ind. Temp.	8-SOP	.76	.57	.43
LMV339IDR	296-6611-1-ND	Quad Low-Voltage Comparator	14-SOIC	.78	.65	.52
LMV339IDR	296-6611-2-ND	Quad Low-Voltage Comparator	14-SOIC	845.00/2,500		
LMV339IPWR	296-6612-1-ND	Quad Low-Voltage Comparator	14-TSSOP	.78	.65	.52
LMV339IPWR	296-6612-2-ND	Quad Low-Voltage Comparator	14-TSSOP	692.00/2,000		
TL331IDBVR	296-10168-1-ND	Single/Dual Diff. Comparator	SOT-23-5	.80	.60	.45
TL331IDBVR	296-10168-2-ND	Single/Dual Diff. Comparator	SOT-23-5	780.00/3,000		
TLC372CPWR	296-10309-1-ND	Dual Differential Comparator	8-TSSOP	.90	.75	.60
TLC372CPWR	296-10309-2-ND	Dual Differential Comparator	8-TSSOP	798.00/2,000		
TLC372ID	296-10310-5-ND	Dual Differential Comparator	8-SOIC	.99	.83	.66
TLC372MD	296-10311-5-ND	Dual Differential Comparator	8-SOIC	1.26	1.05	.84
TLC372QD	296-10312-5-ND	Dual Differential Comparator	8-SOIC	1.23	1.03	.82
TLC374CN	296-10313-5-ND	Quad Differential Comparator	14-Dip	1.05	.88	.70
TLC374CPWR	296-10314-1-ND	Quad Differential Comparator	14-TSSOP	1.05	.88	.70
TLC374CPWR	296-10314-2-ND	Quad Differential Comparator	14-TSSOP	932.00/2,000		
TLC374ID	296-10315-5-ND	Quad Differential Comparator	14-SOIC	1.17	.98	.78
TLC374IN	296-10316-5-ND	Quad Differential Comparator	14-Dip	1.17	.98	.78
TLC374MD	296-10317-5-ND	Quad Differential Comparator	14-SOIC	1.33	1.06	.80

High Speed Comparators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM139DR	296-6614-1-ND	Quad GP Differential Comparator	14-SOP	1.20	1.00	.80
LM139DR	296-6614-2-ND	Quad GP Differential Comparator	14-SOP	1300.00/2,500		
LM193DR	296-6615-1-ND	Dual GP Differential Comparator	8-SOP	.84	.63	.48
LM193DR	296-6615-2-ND	Dual GP Differential Comparator	8-SOP	682.50/2,500		
LM211D	296-6616-5-ND	Single Strobed Differential Comparator	8-SOIC	.76	.57	.43
LM211P	296-6617-5-ND	Single Strobed Differential Comparator	8-Dip	.76	.57	.43
LM211QD	296-9520-5-ND	Differential Comparator w/Strobe	8-SOP	.92	.69	.52
LM239ADR	296-6618-1-ND	Quad GP Differential Comparator	14-SOP	1.68	1.34	1.01
LM239ADR	296-6618-2-ND	Quad GP Differential Comparator	14-SOP	2145.00/2,500		
LM239D	296-6620-5-ND	Quad GP Differential Comparator	14-SOIC	.80	.60	.45
LM239N	296-6621-5-ND	Quad GP Differential Comparator	14-Dip	.80	.60	.45
LM258D	296-6624-5-ND	Dual Op Amp	8-SOP	.80	.60	.45
LM258P	296-6625-5-ND	Dual Op Amp	8-Dip	.80	.60	.45
LM306D	296-9533-5-ND	Differential Comparator with Strobe	8-SOP	1.35	1.13	.90
LM306P	296-1387-5-ND	Differential Comparator with Strobe	8-Dip	1.35	1.13	.90
LM311D	296-1388-5-ND	Differential Comparator with Strobe	8-SOIC	.52	.39	.30
LM311DR	296-1388-1-ND	Differential Comparator with Strobe	8-SOIC	.52	.39	.30
LM311DR	296-1388-2-ND	Differential Comparator with Strobe	8-SOIC	422.50/2,500		
LM311P	296-1389-5-ND	Differential Comparator with Strobe	8-Dip	.52	.39	.30
TL712CD	296-6629-5-ND	Differential Comparator	8-SOIC	1.25	1.00	.75
TL712CP	296-6630-5-ND	Differential Comparator	8-Dip	1.25	1.00	.75
TL714CD	296-6631-5-ND	High Speed Differential Comparator	8-SOP	2.81	2.25	1.75
TL714CP	296-6632-5-ND	High Speed Differential Comparator	8-Dip	2.81	2.25	1.75
TL3016CD	296-1793-5-ND	High Speed, Low Power Comparator	8-SOIC	2.03	1.62	1.22
TL3016ID	296-1794-5-ND	High Speed, Low Power Comparator	8-SOIC	2.23	1.78	1.34
TL3116CD	296-6626-5-ND	Ultra-Fast LP Precision Comparator	8-SOIC	2.03	1.62	1.22
TL3116CPWR	296-6627-1-ND	Ultra-Fast LP Precision Comparator	8-TSSOP	2.05	1.64	1.23
TL3116CPWR	296-6627-2-ND	Ultra-Fast LP Precision Comparator	8-TSSOP	2106.00/2,000		
TL3116ID	296-6628-5-ND	Ultra-Fast LP Precision Comparator	8-SOP	2.23	1.78	1.34

Low Power Comparators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LMV331IDBVR	296-6633-1-ND	Single GP LV Comparator	SOT-23-5	.96	.72	.54
LMV331IDBVR	296-6633-2-ND	Single GP LV Comparator	SOT-23-5	936.00/3,000		
LMV331IDCKR	296-6634-1-ND	Single GP LV Comparator	5-SOP	.75	.63	.50
LMV331IDCKR	296-6634-2-ND	Single GP LV Comparator	5-SOP	975.00/3,000		
LMV393IDR	296-6635-1-ND	Dual GP LV Comparator	8-SOIC	.96	.72	.54
LMV393IDR	296-6635-2-ND	Dual GP LV Comparator	8-SOIC	780.00/2,500		
LMV393IPWR	296-6636-1-ND	Dual GP LV Comparator	8-TSSOP	.96	.72	.54
LMV393IPWR	296-6636-2-ND	Dual GP LV Comparator	8-TSSOP	638.00/2,000		
LP211D	296-9573-5-ND	Differential Comparator	8-SOP	1.08	.90	.72
LP2901D	296-9574-5-ND	Quad Differential Comparator	14-SOP	1.20	1.00	.80
LP2901N	296-9575-5-ND	Quad Differential Comparator	14-Dip	1.20	1.00	.80
LP311D	296-9576-5-ND	Differential Comparator	8-SOP	.99	.83	.66
LP311P	296-9577-5-ND	Differential Comparator	8-Dip	.99	.83	.66
LP339D	296-9578-5-ND	Quad Differential Comparator	14-SOP	1.05	.88	.70
LP339N	296-9579-5-ND	Quad Differential Comparator	14-Dip	1.05	.88	.70
TLC339CD	296-10281-5-ND	Quad Differential Comparator	14-SOIC	1.20	1.00	.80
TLC339CN	296-12312-5-ND	Quad Differential Comparator	14-Dip	1.20	1.00	.80
TLC339CPWR	296-10282-1-ND	Quad Differential Comparator	14-TSSOP	1.20	1.00	.80
TLC339CPWR	296-10282-2-ND	Quad Differential Comparator	14-TSSOP	1064.00/2,000		
TLC339ID	296-1324-5-ND	Quad Differential Comparator	14-SOIC	1.32	1.10	.88
TLC339IDR	296-1324-1-ND	Quad Differential Comparator	14-SOIC	1.32	1.10	.88
TLC339IDR	296-1324-2-ND	Quad Differential Comparator	14-SOIC	1430.00/2,500		
TLC339IN	296-10283-5-ND	Quad Differential Comparator	14-Dip	1.32	1.10	.88
TLC339MN	296-10284-5-ND	Quad Differential Comparator	14-Dip	1.25	1.00	.75
TLC372CD	296-1327-5-ND	Dual Differential Comparator	8-SOIC	.90	.75	.60
TLC372CDR	296-1327-1-ND	Dual Differential Comparator	8-SOIC	.90	.75	.60
TLC372CDR	296-1327-2-ND	Dual Differential Comparator	8-SOIC	975.00/2,500		
TLC372CP	296-1845-5-ND	Dual Differential Comparator	8-Dip	.90	.75	.60
TLC372IP	296-1846-5-ND	Dual Differential Comparator	8-Dip	.99	.83	.66
TLC374CD	296-1328-5-ND	Quad Differential Comparator	14-SOIC	1.05	.88	.70
TLC374CDR	296-1328-1-ND	Quad Differential Comparator	14-SOIC	1.05	.88	.70
TLC374CDR	296-1328-2-ND	Quad Differential Comparator	14-SOIC	1137.50/2,500		
TLC393CD	296-1329-5-ND	Dual Voltage Comparator	8-SOIC	.99	.83	.66
TLC393CDR	296-1329-1-ND	Dual Voltage Comparator	8-SOIC	.99	.83	.66
TLC393CDR	296-1329-2-ND	Dual Voltage Comparator	8-SOIC	1072.50/2,500		
TLC393CP	296-1849-5-ND	Dual Voltage Comparator	8-Dip	.99	.83	.66
TLC393CPWR	296-10318-1-ND	Dual Voltage Comparator	8-TSSOP	.99	.83	.66
TLC393CPWR	296-10318-2-ND	Dual Voltage Comparator	8-TSSOP	878.00/2,000		
TLC393ID	296-1330-5-ND	Dual Voltage Comparator	8-SOIC	1.08	.90	.72
TLC393IDR	296-1330-1-ND	Dual Voltage Comparator	8-SOIC	1.11	.93	.74
TLC393IDR	296-1330-2-ND	Dual Voltage Comparator	8-SOIC	1170.00/2,500		
TLC393IP	296-10320-5-ND	Dual Voltage Comparator	8-Dip	1.08	.90	.72
TLC393IPWR	296-10321-1-ND	Dual Voltage Comparator	8-TSSOP	1.11	.93	.74
TLC393IPWR	296-10321-2-ND	Dual Voltage Comparator	8-TSSOP	958.00/2,000		
TLC3702CD	296-1325-5-ND	Dual Voltage Comparator	8-SOIC	.99	.83	.66
TLC3702CDR	296-1325-1-ND	Dual Voltage Comparator	8-SOIC	.99	.83	.66
TLC3702CDR	296-1325-2-ND	Dual Voltage Comparator	8-SOIC	1072.50/2,500		
TLC3702CP	296-1841-5-ND	Dual Voltage Comparator	8-Dip	.99	.83	.66
TLC3702ID	296-1326-5-ND	Dual Voltage Comparator	8-SOIC	1.08	.90	.72
TLC3702IDR	296-1326-1-ND	Dual Voltage Comparator	8-SOIC	1.08	.90	.72
TLC3702IDR	296-1326-2-ND	Dual Voltage Comparator	8-SOIC	1170.00/2,500		
TLC3702IP	296-10300-5-ND	Dual Voltage Comparator	8-Dip	1.08	.90	.72
TLC3702IPW	296-10301-5-ND	Dual Voltage Comparator	8-TSSOP	1.08	.90	.72
TLC3702MD	296-12188-5-ND	Dual Voltage Comparator *NEW!*	8-SOP	1.32	1.10	.88
TLC3704CD	296-10302-5-ND	Quad Voltage Comparator	14-SOIC	1.38	1.15	.92
TLC3704CN	296-10303-5-ND	Quad Voltage Comparator	14-Dip	1.38	1.15	.92
TLC3704CNS	296-10304-5-ND	Quad Voltage Comparator	14-SOP	1.38	1.15	.92
TLC3704CNSR	296-10304-1-ND	Quad Voltage Comparator	14-SOP	1.38	1.15	.92
TLC3704CNSR	296-10304-2-ND	Quad Voltage Comparator	14-SOP	1224.00/2,000		
TLC3702ID	296-1326-5-ND	Dual Voltage Comparator	8-SOIC	1.08	.90	.72
TLC3702IDR	296-1326-1-ND	Dual Voltage Comparator	8-SOIC	1.08	.90	.72
TLC3702IDR	296-1326-2-ND	Dual Voltage Comparator	8-SOIC	1170.00/2,500		
TLC3702IP	296-10300-5-ND	Dual Voltage Comparator	8-Dip	1.08	.90	.72
TLC3702IPW	296-10301-5-ND	Dual Voltage Comparator	8-TSSOP	1.08	.90	.72
TLC3704CD	296-10302-5-ND	Quad Voltage Comparator	14-SOP	1.38	1.15	.92
TLC3704CN	296-10303-5-ND	Quad Voltage Comparator	14-Dip	1.38	1.15	.92
TLC3704CNS	296-10304-5-ND	Quad Voltage Comparator	14-SOP	1.38	1.15	.92
TLC3704CNSR	296-10304-1-ND	Quad Voltage Comparator	14-SOP	1.38	1.15	.92
TLC3704CNSR	296-10304-2-ND	Quad Voltage Comparator	14-SOP	1224.00/2,000		
TLC3704CPWR	296-10305-1-ND	Quad Voltage Comparator	14-TSSOP	1.38	1.15	.92
TLC3704CPWR	296-10305-2-ND	Quad Voltage Comparator	14-TSSOP	1224.00/2,000		
TLC3704ID	296-1843-5-ND	Quad Voltage Comparator	14-SOIC	1.28	1.02	.77
TLC3704IN	296-10306-5-ND	Quad Voltage Comparator	14-Dip	1.28	1.02	.77
TLC3704IPW	296-10307-5-ND	Quad Voltage Comparator	14-TSSOP	1.28	1.02	.77
TLC3704MD	296-10308-5-ND	Quad Voltage Comparator	14-SOIC	1.38	1.10	.83
TLV2702ID	296-12503-5-ND	Nanopower Op Amp and Push-Pull Comparator *NEW!*	8-SOIC	2.00	1.60	1.20
TLV3401IDR	296-10707-1-ND	Single Nanopower Comparator	8-SOIC	1.45	1.16	.87
TLV3401IDR	296-10707-2-ND	Single Nanopower Comparator	8-SOIC	1856.00/2,500		
TLV3401IP	296-12042-5-ND	Single Open Drain Output Comp.	8-Dip	1.45	1.16	.87
TLV3402IP	296-12043-5-ND	Dual Open Drain Output Comp.	8-Dip	2.10	1.68	1.26
TLV3402IDGKR	296-10708-1-ND	Dual Nanopower Comparator	8-MSOP	2.10	1.68	1.26
TLV3402IDGKR	296-10708-2-ND	Dual Nanopower Comparator	8-MSOP	2687.50/2,500		
TLV3402IDR	296-10709-1-ND	Dual Nanopower Comparator	8-SOIC	2.10	1.68	1.26
TLV3402IDR	296-10709-2-ND	Dual Nanopower Comparator	8-SOIC	2687.50/2,500		
TLV3404IN	296-12044-5-ND	Quad Open Drain Output Comp.	14-Dip	2.45	1.97	1.53
TLV3704IDR	296-12287-1-ND	Nanopower P-P Comp. *NEW!*	14-SOIC	2.45	1.97	1.53
TLV3704IDR	296-12287-2-ND	Nanopower P-P Comp. *NEW!*	14-SOIC	3432.50/2,500		
TLV3704IPW	296-12400-5-ND	Nanopower P-P Comp. *NEW!*	14-TSSOP	2.45	1.97	1.53

Low Voltage Comparators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC352CD	296-1839-5-ND	Dual Differential Comparator	8-SOIC	1.05	.88	.70
TLC352CP	296-10285-5-ND	Dual Differential Comparator	8-Dip	1.05	.88	.70
TLC352ID	296-10286-5-ND	Dual Differential Comparator	8-SOIC	1.17	.98	.78
TLC352IP	296-10287-5-ND	Dual Differential Comparator	8-Dip	1.17	.98	.78
TLC354CD	296-10292-5-ND	Quad Differential Comparator	14-SOIC	1.26	1.05	.84
TLC354CN	296-10293-5-ND	Quad Differential Comparator	14-Dip	1.26	1.05	.84
TLC354CPW	296-10294-5-ND	Quad Differential Comparator	14-TSSOP	1.26	1.05	.84
TLC354ID	296-10295-5-ND	Quad Differential Comparator	14-SOIC	1.41	1.18	.94
TLV1391CDBVR	296-10492-1-ND	Differential Comparator	SOT-23-5	.87	.73	.58
TLV1391CDBVR	296-10492-2-ND	Differential Comparator	SOT-23-5	1131.00/3,000		
TLV1391IDBV	296-10493-5-ND	Differential Comparator	SOT-23-5	1.02	.85	.68
TLV2352ID	296-10517-5-ND	Dual Differential Comparator	8-SOIC	1.85	1.48	1.11
TLV2352IP	296-10518-5-ND	Dual Differential Comparator	8-Dip	1.85	1.48	1.11
TLV2352IPWR	296-10519-1-ND	Dual Differential Comparator	8-TSSOP	1.85	1.48	1.11
TLV2352IPWR	296-10519-2-ND	Dual Differential Comparator	8-TSSOP	1924.00/2,000		
TLV2354ID	296-10520-5-ND	Quad Differential Comparator	14-SOIC	2.30	1.84	1.43
TLV2354IN	296-10521-5-ND	Quad Differential Comparator	14-Dip	2.30	1.84	1.43
TLV2354IPWR	296-10522-1-ND	Quad Differential Comparator	14-TSSOP	2.34	1.88	1.46
TLV2354IPWR	296-10522-2-ND	Quad Differential Comparator	14-TSSOP	2602.00/2,000		

TEXAS INSTRUMENTS DATA COMMUNICATIONS

Audio CODECs

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCM3000E	PCM3000E-ND	Stereo Audio CODEC 18-Bits, 3-Wire Interface	28-SSOP	6.22	4.98	4.20
PCM3001E	PCM3001E-ND	Stereo Audio CODEC 18-Bits, Pin Programmable	28-SSOP	6.22	4.98	4.20
PCM3002E	PCM3002E-ND	20-Bit, Stereo CODEC, Software Control	24-SSOP	6.22	4.98	4.20
PCM3003E	PCM3003E-ND	20-Bit, Stereo CODEC, Hardware Control	24-SSOP	6.22	4.98	4.20
PCM3006T	PCM3006T-ND	16-Bit, Stereo CODEC, Single-Ended I/O	24-TSSOP	6.22	4.98	4.20
PCM3008T	PCM3008T-ND	16-Bit, Low Power/Voltage Stereo CODEC	16-TSSOP	5.68	4.55	3.84
PCM3500E	PCM3500E-ND	Voice/Modem CODEC	24-SSOP	5.33	4.27	3.32
PCM3501E	PCM3501E-ND	Voice/Modem CODEC	24-SSOP	5.33	4.27	3.32

Central Office CODEC

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TCM38C17IDL	296-1761-5-ND	4-Channel PCM Combo	48-SSOP	9.70	7.76	6.55
TCM320AC54CDW	296-9981-5-ND	Combination CODEC/Filter	16-SOP	2.50	2.00	1.56
TCM320AC54CN	296-9982-5-ND	Combination CODEC/Filter	16-Dip	2.50	2.00	1.56
TP3054ADW	296-10782-5-ND	PCM CODEC/Filtering System (u-law)	16-SOIC	2.75	2.20	1.71
TP3054AN	296-10783-5-ND	PCM CODEC/Filtering System (u-law)	16-Dip	2.75	2.20	1.71

(Continued)

TEXAS INSTRUMENTS DATA COMMUNICATIONS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TP3054BDW	296-10784-5-ND	PCM CODEC/Filtering System (u-law)	16-SOIC	2.75	2.20	1.71
TP3054BN	296-1936-5-ND	PCM CODEC/Filtering System (u-law)	16-Dip	2.75	2.20	1.71
TP3056BDW	296-10785-5-ND	PCM CODEC and Filter (A-law and u-law)	16-SOIC	2.88	2.31	1.80
TP3056BN	296-10786-5-ND	PCM CODEC and Filter (A-law and u-law)	16-Dip	2.88	2.31	1.80
TP3057ADW	296-10787-5-ND	PCM CODEC and Filter (A-law)	16-SOIC	2.75	2.20	1.71
TP3057AN	296-10788-5-ND	PCM CODEC and Filter (A-law)	16-Dip	2.75	2.20	1.71
TP3057BDW	296-10789-5-ND	PCM CODEC and Filter (A-law)	16-SOIC	2.75	2.20	1.71
TP3057BN	296-10790-5-ND	PCM CODEC and Filter (A-law)	16-Dip	2.75	2.20	1.71
TP3064BDW	296-10791-5-ND	PCM CODEC/Filtering System (u-law)	20-SOIC	2.75	2.20	1.71
TP3064BN	296-10792-5-ND	PCM CODEC/Filtering System (u-law)	20-Dip	2.75	2.20	1.71
TP3067ADW	296-10793-5-ND	PCM CODEC and Filter (A-law)	20-SOIC	2.75	2.20	1.71
TP3067AN	296-10794-5-ND	PCM CODEC and Filter (A-law)	20-Dip	2.75	2.20	1.71
TP3067BDW	296-10795-5-ND	PCM CODEC and Filter (A-law)	20-SOIC	2.75	2.20	1.71
TP3067BN	296-10796-5-ND	PCM CODEC and Filter (A-law)	20-Dip	2.75	2.20	1.71
TP13054ADW	296-10774-5-ND	PCM CODEC/Filtering System (u-law)	16-SOIC	3.08	2.47	1.92
TP13054BDW	296-10775-5-ND	PCM CODEC/Filtering System (u-law)	16-SOIC	3.08	2.47	1.92
TP13054BN	296-10776-5-ND	PCM CODEC/Filtering System (u-law)	16-Dip	3.08	2.47	1.92
TP13057BDW	296-10777-5-ND	PCM CODEC and Filter (A-law)	16-SOIC	3.08	2.47	1.92
TP13057BN	296-10778-5-ND	PCM CODEC and Filter (A-law)	16-Dip	3.08	2.47	1.92
TP13064BDW	296-10779-5-ND	PCM CODEC/Filtering System (u-law)	20-SOIC	3.08	2.47	1.92
TP13067BDW	296-10780-5-ND	PCM CODEC and Filter (A-law)	20-SOIC	3.08	2.47	1.92
TP13067BN	296-10781-5-ND	PCM CODEC and Filter (A-law)	20-Dip	3.08	2.47	1.92

Client Modem CODEC

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC320AC01CPMR	296-1982-1-ND	Analog Interface	64-LQFP	6.50	5.20	4.39
TLC320AD545IPT	296-10276-ND	Single Channel CODEC with Hybrid Op Amps	48-QFP	6.26	5.01	4.23
TLC320AD545PT	296-10277-ND	Single Channel CODEC with Hybrid Op Amps	48-QFP	5.66	4.53	3.83

IRDA

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TIR1000IPWR	296-6574-1-ND	Standalone IrDA Encoder/Decoder	8-TSSOP	2.52	2.02	1.57
TIR1000IPWR	296-6574-2-ND	Standalone IrDA Encoder/Decoder	8-TSSOP	2856.00/2,000		
TIR1000PSR	296-6572-1-ND	Standalone IrDA Encoder/Decoder	8-SOP	2.43	1.94	1.46
TIR1000PSR	296-6572-2-ND	Standalone IrDA Encoder/Decoder	8-SOP	2522.00/2,000		
TIR1000PWR	296-6573-1-ND	Standalone IrDA Encoder/Decoder	8-TSSOP	2.43	1.94	1.46
TIR1000PWR	296-6573-2-ND	Standalone IrDA Encoder/Decoder	8-TSSOP	2522.00/2,000		

Ring Controllers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
UCC2750DW	296-2602-5-ND	Source Ringer Controller	28-SOIC	15.36	13.83	12.27
UCC2751D	296-2603-5-ND	Single Line Ring Generator Controller	16-SOIC	7.84	6.28	5.30
UCC2752D	296-2604-5-ND	Resonant Ring Generator Controller	16-SOIC	7.84	6.28	5.30
UCC3750N	296-11454-5-ND	Source Ringer Controller	28-Dip	11.20	10.08	8.94
UCC3750DW	296-2605-5-ND	Source Ringer Controller	28-SOIC	11.20	10.08	8.94
UCC3751D	296-2606-5-ND	Single Line Ring Generator Controller	16-SOIC	6.30	5.04	4.26
UCC3751N	296-11455-5-ND	Single Line Ring Generator Controller	16-Dip	6.30	5.04	4.26
UCC3752D	296-2607-5-ND	Resonant Ring Generator Controller	16-SOIC	6.30	5.04	4.26
UCC3752N	296-11456-5-ND	Resonant Ring Generator Controller	16-Dip	6.30	5.04	4.26

NEW! SONET Transceivers NEW!

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SLK2501IPZP	296-12281-ND	OC-48 SONET/SDH Multirate Transceiver	100-PQFP	111.15	103.74	96.33
SLK2701IPZP	296-12543-ND	2.7Gbps SONET/SDH Multirate Transceiver	100-PQFP	111.15	103.74	96.33

UARTs

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL16C450FN	296-10145-5-ND	Asynch. Communication Element	44-PLCC	3.60	2.88	2.24
TL16C451FN	296-10146-5-ND	Asynch. Communication Element	68-PLCC	5.06	4.05	3.15
TL16C452FN	296-10147-5-ND	Dual Asynch. Comm. Element	68-PLCC	5.02	4.02	3.39
TL16C550BIFN	296-10149-5-ND	Asynch. Communication Element	44-PLCC	5.98	4.79	4.04
TL16C550BN	296-10151-5-ND	Asynch. Communication Element	40-Dip	5.60	4.48	3.78
TL16C550BPT	296-10152-ND	Asynch. Communication Element	48-LQFP	5.98	4.79	4.04
TL16C550CFN	296-10153-5-ND	Asynch. Communication Element	44-PLCC	3.92	3.14	2.44
TL16C550CIFN	296-10154-5-ND	Asynch. Communication Element	44-PLCC	4.28	3.42	2.66
TL16C550CIPT	296-1786-5-ND	Asynch. Communication Element	48-LQFP	4.61	3.69	2.87
TL16C550CN	296-10155-5-ND	Asynch. Communication Element	40-Dip	3.92	3.14	2.44
TL16C550CPFB	296-10156-ND	Asynch. Communication Element	48-LQFP	4.25	3.41	2.65
TL16C550CPT	296-1787-ND	Asynch. Communication Element	48-LQFP	4.25	3.41	2.65
TL16C550CPTR	296-1787-1-ND	Asynch. Communication Element	48-LQFP	4.25	3.41	2.65
TL16C550CPTR	296-1787-2-ND	Asynch. Communication Element	48-LQFP	2410.00/1,000		
TL16C552AFN	296-1788-5-ND	Dual Asynch. Communication	68-PLCC	6.70	5.36	4.53
TL16C552AFNR	296-1788-1-ND	Dual Asynch. Communication	68-PLCC	6.70	5.36	4.53
TL16C552AFNR	296-1788-2-ND	Dual Asynch. Communication	68-PLCC	1088.75/250		
TL16C552AIFN	296-10159-5-ND	Dual Asynch. Communication	68-PLCC	7.02	5.62	4.74
TL16C552APN	296-10160-ND	Dual Asynch. Communication	80-LQFP	7.04	5.64	4.76
TL16C554AFN	296-6587-5-ND	Quad UART with 16-Byte FIFO	68-PLCC	9.50	8.55	7.59
TL16C554APN	296-6588-5-ND	Quad UART with 16-Byte FIFO	80-PQFP	9.78	8.81	7.81
TL16C554FN	296-1790-5-ND	Asynch. Communication Element	68-PLCC	10.45	9.41	8.34
TL16C554FNR	296-1790-1-ND	Asynch. Communication Element	68-PLCC	10.45	9.41	8.34
TL16C750FN	296-2647-5-ND	64-Byte FIFO UART	44-PLCC	6.32	5.06	4.27
TL16C750IPM	296-6591-5-ND	Single UART with 64-Byte FIFO, AFC, Low Power Modes	64-TQFP	6.92	5.54	4.68
TL16C750PM	296-6592-5-ND	Single UART with 64-Byte FIFO, AFC, Low Power Modes, Ind. Temp.	64-TQFP	6.62	5.30	4.47
TL16C752BPT	296-2648-ND	Dual 3.3V UART	48-PQFP	5.90	4.72	3.99
TL16C754BFN	296-2650-5-ND	Quad 64-Byte FIFO UART	68-PLCC	12.33	11.10	9.85
TL16C754BPN	296-6593-5-ND	Quad UART with 64-Byte FIFO	80-PQFP	12.61	11.36	10.07
TL16PC564BLVPZ	296-2651-ND	PCMCIA UART	100-TQFP	9.66	8.70	7.72
TL16PC564BPZ	296-6594-5-ND	Single UART with 64-Byte FIFO, PCMCIA Interface	100-TQFP	9.30	8.37	7.43
TL16PIR552PH	296-6595-5-ND	Dual UART with 16-Byte FIFO,e Selectable IR and 1284 Modes	80-QFP	9.66	8.70	7.72

USB

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TUSB2036VF	296-11086-ND	2/3-Port USB Hub	32-QFP	2.66	2.13	1.66
TUSB2046BIVFR	296-11087-ND	4-Port USB Hub	32-LQFP	4.48	3.59	2.79
TUSB2046BVF	296-11088-ND	4-Port USB Hub	32-QFP	2.77	2.22	1.73
TUSB2077APT	296-11089-ND	7-Port USB Hub	48-LQFP	4.12	3.30	2.57
TUSB2136PM	296-11090-ND	2-Port USB Hub	64-LQFP	7.68	6.15	5.19
TUSB3200ACPAH	296-12289-5-ND	USB Streaming Controller *NEW!*	52-TQFP	7.20	5.76	4.86
TUSB3200CPAH	296-11091-ND	USB Streaming Controller	52-QFP	7.20	5.76	4.86
TUSB3210PM	296-11092-ND	Universal Serial Bus Controller	64-LQFP	5.78	4.63	3.91
TUSB5052PZ	296-12525-ND	5-Port USB Hub Controller *NEW!*	100-TQFP	8.66	6.93	5.85
TUSB5152PZ	296-12526-ND	5-Port USB Hub Controller *NEW!*	100-TQFP	15.13	13.62	12.08

USB Transient Suppression

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65220DBVR	296-9694-2-ND	Single USB Port Transient Supp.	SOT-23-6	1365.00/3,000		
SN65220DBVT	296-2341-1-ND	Single USB Port Transient Suppressor	SOT-23-6	1.11	.93	.74
SN65220DBVT	296-2341-2-ND	Single USB Port Transient Suppressor	SOT-23-6	131.25/250		
SN75240P	296-6596-5-ND	Dual USB Port Transient Suppressor	8-Dip	1.11	.93	.74
SN75240PWR	296-6596-1-ND	Dual USB Port Transient Suppressor	8-TSSOP	1.11	.93	.74
SN75240PWR	296-6596-2-ND	Dual USB Port Transient Suppressor	8-TSSOP	984.00/2,000		
SN65240P	296-9695-5-ND	Dual USB Port Transient Suppressor	8-Dip	1.20	1.00	.80
SN65240PW	296-9696-5-ND	Dual USB Port Transient Suppressor	8-TSSOP	1.20	1.00	.80
SN65240PWR	296-9696-1-ND	Dual USB Port Transient Suppressor	8-TSSOP	1.26	1.05	.84
SN65240PWR	296-9696-2-ND	Dual USB Port Transient Suppressor	8-TSSOP	1064.00/2,000		

Video Decoder / Encoder

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TVP5031PFP	296-11093-ND	9-Bit with 3-line Adaptive Comb NTSC/PAL Digital Video Decoder	80-TQFP	12.01	10.82	9.59
TVP5040CPFP	296-11802-ND	10-Bit Dual-Channel NTSC-PAL Digital Video Decoder	80-TQFP	9.50	8.55	7.59
TVP6000CPFP	296-11094-ND	NTSC/PAL Video Encoder	80-TQFP	9.53	8.58	7.61

TEXAS INSTRUMENTS DATA CONVERSION

Analog-to-Digital Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ADS574JP	ADS574JP-ND	12-Bit, 40KHz Sampling CMOS ADC	28-Dip	21.63	20.19	18.75
ADS574KP	ADS574KP-ND	12-Bit, 40KHz Sampling CMOS ADC	28-Dip	25.38	23.69	22.00
ADS774JP	ADS774JP-ND	12-Bit, 125KHz Sampling CMOS ADC	28-Dip	22.43	20.93	19.44
ADS774JU	ADS774JU-ND	12-Bit, 125KHz Sampling CMOS ADC	28-Dip	22.43	20.93	19.44
ADS774KE	ADS774KE-ND	12-Bit, 125KHz Sampling CMOS ADC	28-Dip	36.71	34.26	31.82
ADS774KP	ADS774KP-ND	12-Bit, 125KHz Sampling CMOS ADC	28-Dip	34.98	32.65	30.32
ADS774KU	ADS774KU-ND	12-Bit, 125KHz Sampling CMOS ADC	28-SOIC	36.74	34.29	31.84
ADS800U	ADS800U-ND	12-Bit, 40MHz Sampling ADC	28-SOIC	41.82	39.04	36.25
ADS801U	ADS801U-ND	12-Bit, 25MHz Sampling ADC	28-SOIC	29.64	27.67	25.69
ADS802U	ADS802U-ND	12-Bit, 10MHz Sampling ADC	28-SOIC	17.67	16.50	15.32
ADS803E	ADS803E-ND	12-Bit, 5MHz Sampling ADC	28-SSOP	11.13	10.02	8.89
ADS804E	ADS804E-ND	12-Bit, 10MHz Sampling ADC	28-SSOP	15.94	14.36	12.73
ADS805E	ADS805E-ND	12-Bit, 20MHz Sampling ADC	28-SSOP	18.68	17.43	16.19
ADS807E	ADS807E-ND	12-Bit, 53MHz ADC	28-SSOP	23.00	21.47	19.93
ADS808Y/250	ADS808Y/250CT-ND	12-Bit ADC	48-TQFP	28.77	26.86	24.94
ADS808Y/250	ADS808Y/250TR-ND	12-Bit ADC	48-TQFP	5616.50/250		
ADS809Y/250	ADS809Y/250CT-ND	12-Bit ADC	48-TQFP	43.19	40.31	37.43
ADS809Y/250	ADS809Y/250TR-ND	12-Bit ADC	48-TQFP	7191.00/250		
ADS820E	ADS820E-ND	10-Bit, 20MHz Sampling ADC	28-SSOP	10.20	9.18	8.14
ADS820U	ADS820U-ND	10-Bit, 10MHz Sampling ADC	28-SOIC	10.20	9.18	8.14
ADS821U	ADS821U-ND	10-Bit, 40MHz Sampling ADC	28-SOIC	17.67	16.50	15.32
ADS822E	ADS822E-ND	10-Bit, 40MHz Sampling ADC	28-SSOP	9.42	7.54	6.36
ADS823E	ADS823E-ND	10-Bit, 60MHz Sampling ADC	28-SSOP	12.66	11.40	10.11
ADS825E	ADS825E-ND	10-Bit, 40MHz ADC	28-SSOP	9.42	7.54	6.36
ADS826E	ADS826E-ND	10-Bit, 60MHz ADC	28-SSOP	12.66	11.40	10.11
ADS828E	ADS828E-ND	10-Bit, 75MHz ADC	28-SSOP	14.81	13.34	11.83
ADS830E	ADS830E-ND	8-Bit, 60MHz ADC	20-QSOP	5.51	4.41	3.43
ADS830E/2K5	ADS830ETR-ND	8-Bit, 60MHz ADC	20-QSOP	7872.50/2,500		
ADS831E	ADS831E-ND	8-Bit, 80MHz ADC	20-QSOP	6.39	5.12	3.98
ADS831E/2K5	ADS831ETR-ND	8-Bit, 80MHz ADC	20-QSOP	8865.00/2,500		
ADS850Y/2K5	ADS850YCT-ND	14-Bit, 10msps Self-calibrating ADC	48-TQFP	25.58	23.87	22.17
ADS850Y/2K5	ADS850YTR-ND	14-Bit, 10msps Self-calibrating ADC	48-TQFP	5434.75/250		
ADS900E	ADS900E-ND	10-Bit, 20MHz +3V, Supply ADC with Internal Ref.	28-SSOP	5.28	4.23	3.57
ADS901E	ADS901E-ND	10-Bit, 20MHz +3V, Supply ADC	28-SSOP	5.10	4.08	3.45
ADS930E	ADS930E-ND	8-Bit, 30MHz Sampling ADC with Internal Ref.	28-SSOP	4.86	3.89	3.03
ADS931E	ADS931E-ND	8-Bit, 30MHz Sampling ADC	28-SSOP	4.66	3.73	2.90
ADS1201U	ADS1201U-ND	High Dynamic Range Modulator	16-SOIC	9.23	8.31	7.37
ADS1210P	ADS1210P-ND	24-Bit, Delta-Sigma ADC	18-Dip	16.62	15.52	14.41
ADS1210U	ADS1210U-ND	24-Bit, Delta-Sigma ADC	18-SOIC	15.38	13.85	12.28
ADS1211E	ADS1211E-ND	24-Bit, Delta-Sigma ADC with 4-Channel Input Mux	28-SSOP	15.17	14.16	13.15
ADS1211P	ADS1211P-ND	24-Bit, Delta-Sigma ADC with 4-Channel Input Mux	24-Dip	17.76	16.58	15.40
ADS1211U	ADS1211U-ND	24-Bit, Delta-Sigma ADC with 4-Channel Input Mux	24-SOIC	16.43	14.79	13.12
ADS1212P	ADS1212P-ND	22-Bit, Delta-Sigma ADC	18-Dip	13.93	12.54	11.12
ADS1212U	ADS1212U-ND	22-Bit, Delta-Sigma ADC	18-SOIC	11.61	10.46	9.28
ADS1213E	ADS1213E-ND	22-Bit, Delta-Sigma ADC with 4-Channel Input Mux	28-SSOP	13.61	12.26	10.87
ADS1213P	ADS1213P-ND	22-Bit, Delta-Sigma ADC with 4-Channel Input Mux	24-Dip	15.66	14.10	12.51
ADS1213U	ADS1213U-ND	22-Bit, Delta-Sigma ADC with 4-Channel Input Mux	24-SOIC	13.66	12.30	10.91
ADS1216Y/250	ADS1216Y/250CT-ND	24-Bit, Delta-Sigma ADC	48-TQFP	11.93	10.74	9.53
ADS1216Y/250	ADS1216Y/250TR-ND	24-Bit, Delta-Sigma ADC	48-TQFP	2282.25/250		
ADS1218Y/250	ADS1218Y/250CT-ND	24-Bit, Delta-Sigma ADC	48-TQFP	14.01	12.62	11.19
ADS1218Y/250	ADS1218Y/250TR-ND	24-Bit, Delta-Sigma ADC	48-TQFP	2680.75/250		
ADS1240E	ADS1240E-ND	24-Bit, Delta-Sigma ADC	24-SSOP	6.92	5.54	4.68
ADS1241E	ADS1241E-ND	24-Bit, Delta-Sigma ADC	28-SSOP	7.60	6.08	5.13
ADS1242IPWT	ADS1242IPWTCT-ND	24-Bit, Delta/Sigma ADC *NEW!*	16-TSSOP	6.92	5.54	4.68
ADS1242IPWT	ADS1242IPWTTR-ND	24-Bit, Delta/Sigma ADC *NEW!*	16-TSSOP	1124.50/250		
ADS1243IPWT	ADS1243IPWTCT-ND	24-Bit, Delta/Sigma ADC *NEW!*	16-TSSOP	7.60	6.08	5.13
ADS1243IPWT	ADS1243IPWTTR-ND	24-Bit, Delta/Sigma ADC *NEW!*	16-TSSOP	1235.00/250		
ADS1250U	ADS1250U-ND	20-Bit, 25KHz ADC, DSP Interface	16-SOIC	10.50	9.45	8.38
ADS1251U	ADS1251U-ND	24-Bit, Delta-Sigma ADC	8-SOP	8.41	7.58	6.72
ADS1252U	ADS1252U-ND	24-Bit, 40KHz ADC	8-SOIC	10.10	8.08	6.82
ADS1254E	ADS1254E-ND	24-Bit, 20KHz, Low Power ADC	20-SSOP	10.10	9.09	8.06
ADS1254E/2K5	ADS1254E/2K5CT-ND	24-Bit, 20KHz, Low Power ADC	20-SSOP	10.13	9.12	8.09
ADS1254E/2K5	ADS1254E/2K5TR-ND	24-Bit, 20KHz, Low Power ADC	20-SSOP	18467.50/2,500		
ADS1286P	ADS1286P-ND	12-Bit, Micropower Sampling ADC	8-Dip	6.88	5.51	4.65
ADS1286PA	ADS1286PA-ND	12-Bit, 200KHz Unipol ADC	8-Dip	7.72	6.18	5.22
ADS1286U	ADS1286U-ND	12-Bit, Micropower Sampling ADC	8-SOIC	5.74	4.60	3.88
ADS1286UA	ADS1286UA-ND	12-Bit, 200KHz Unipol ADC	8-SOIC	6.42	5.14	4.34
ADS2806Y/1K5	ADS2806Y/1K5TR-ND	12-Bit, Dual, Hi-Speed ADC	64-LQFP	26620.50/1,500		

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ADS2806Y/250	ADS2806Y/250CT-ND	12-Bit, Dual, Hi-Speed ADC	64-LQFP	18.84	17.59	16.33
ADS2806Y/250	ADS2806Y/250TR-ND	12-Bit, Dual, Hi-Speed ADC	64-LQFP	4580.50/250		
ADS2807Y/1K5	ADS2807Y/1K5CT-ND	12-Bit, Dual, Hi-Speed ADC	64-LQFP	31.65	29.54	27.43
ADS2807Y/1K5	ADS2807Y/1K5TR-ND	12-Bit, Dual, Hi-Speed ADC	64-LQFP	39088.50/1,500		
ADS5421Y/T	ADS5421Y/TCT-ND	14-Bit, 40MHz, LP ADC *NEW!*	64-LQFP	29.79	27.81	25.82
ADS5421Y/T	ADS5421Y/TTR-ND	14-Bit, 40MHz, LP ADC *NEW!*	64-LQFP	6330.50/250		
ADS7800JP	ADS7800JP-ND	12-Bit, 3µS Sampling ADC	24-Dip	38.00	35.47	32.93
ADS7800JU	ADS7800JU-ND	12-Bit, 3µS Sampling ADC	24-SOIC	40.74	38.03	35.31
ADS7800KP	ADS7800KP-ND	12-Bit, 3µS Sampling ADC	24-Dip	47.49	44.33	41.16
ADS7800KU	ADS7800KU-ND	12-Bit, 3µS Sampling ADC	24-SOIC	49.74	46.43	43.11
ADS7804P	ADS7804P-ND	12-Bit, 10µS Sampling CMOS ADC	28-Dip	19.04	17.77	16.50
ADS7804PB	ADS7804PB-ND	12-Bit, 10µS Sampling CMOS ADC	28-Dip	24.74	23.09	21.44
ADS7804U	ADS7804U-ND	12-Bit, 10µS Sampling CMOS ADC	28-SOIC	19.04	17.77	16.50
ADS7804UB	ADS7804UB-ND	12-Bit, 10µS Sampling CMOS ADC	28-SOIC	31.08	29.01	26.94
ADS7805P	ADS7805P-ND	16-Bit, 10µs Sampling CMOS ADC	28-Dip .3	29.57	27.60	25.63
ADS7805PB	ADS7805PB-ND	16-Bit, 10µS Sampling CMOS ADC	28-Dip	47.51	44.34	41.18
ADS7805U	ADS7805U-ND	16-Bit, 10µs Sampling CMOS ADC	28-SOIC	29.57	27.60	25.63
ADS7805UB	ADS7805UB-ND	16-Bit, 10µS Sampling CMOS ADC	28-SOIC	39.59	36.95	34.31
ADS7806P	ADS7806P-ND	LP 12-Bit Sampling CMOS ADC	28-Dip	18.19	16.38	14.53
ADS7806U	ADS7806U-ND	LP 12-Bit Sampling CMOS ADC	28-SOIC	17.22	16.08	14.93
ADS7807P	ADS7807P-ND	LP 16-Bit Sampling CMOS ADC	28-Dip .3	37.14	34.67	32.19
ADS7807PB	ADS7807PB-ND	LP 16-Bit Sampling CMOS ADC	28-Dip	45.11	42.10	39.10
ADS7807U	ADS7807U-ND	LP 16-Bit Sampling CMOS ADC	28-SOIC	37.14	34.67	32.19
ADS7807UB	ADS7807UB-ND	LP 16-Bit Sampling CMOS ADC	28-SOIC	45.11	42.10	39.10
ADS7808U	ADS7808U-ND	12-Bit, 10µS Sampling CMOS ADC	20-SOIC	15.08	14.07	13.07
ADS7808UB	ADS7808UB-ND	12-Bit, 10µS Sampling CMOS ADC	20-SOIC	19.61	18.30	17.00
ADS7809U	ADS7809U-ND	16-Bit, 10µS Sampling CMOS ADC	20-SOIC	29.57	27.60	25.63
ADS7809UB	ADS7809UB-ND	16-Bit, 10µS Sampling CMOS ADC	20-SOIC	39.59	36.95	34.31
ADS7811U	ADS7811U-ND	16-Bit, 250kHz Sampling ADC	28-SOIC	49.04	45.77	42.50
ADS7812P	ADS7812P-ND	LP Serial 12-Bit Sampling ADC	16-Dip	17.78	16.01	14.20
ADS7812U	ADS7812U-ND	LP Serial 12-Bit Sampling ADC	16-SOIC	16.01	14.94	13.88
ADS7813P	ADS7813P-ND	LP Serial 16-Bit Sampling ADC	16-Dip	28.85	26.93	25.00
ADS7813U	ADS7813U-ND	LP Serial 16-Bit Sampling ADC	16-SOIC	28.85	26.93	25.00
ADS7815U	ADS7815U-ND	16-Bit, 250kHz Sampling CMOS ADC	28-SOIC	28.85	26.93	25.00
ADS7816E/250	ADS7816ECT-ND	12-Bit, High Speed Micropower Sampling ADC	8-MSOP	4.25	3.41	2.65
ADS7816E/250	ADS7816ETR-ND	12-Bit, High Speed Micropower Sampling ADC	8-MSOP	628.50/250		
ADS7816EB/250	ADS7816EBCT-ND	12-Bit, High Speed Micropower Sampling ADC	8-MSOP	4.79	3.84	2.99
ADS7816EB/250	ADS7816EBTR-ND	12-Bit, High Speed Micropower Sampling ADC	8-MSOP	708.25/250		
ADS7816EC/250	ADS7816ECCT-ND	12-Bit, 200KHz Micropower Sampling ADC	8-MSOP	5.36	4.29	3.34
ADS7816EC/250	ADS7816ECTR-ND	12-Bit, High Speed Micropower Sampling ADC	8-MSOP	791.25/250		
ADS7816P	ADS7816P-ND	12-Bit, High-Speed Micropower Sampling ADC	8-Dip	4.23	3.39	2.64
ADS7816PB	ADS7816PB-ND	12-Bit, High Speed Micropower Sampling ADC	8-Dip	4.75	3.80	2.96
ADS7816PC	ADS7816PC-ND	12-Bit, High Speed Micropower Sampling ADC	8-Dip	5.33	4.27	3.32
ADS7816U	ADS7816U-ND	12-Bit, High-Speed Micropower Sampling ADC	8-SOIC	4.23	3.39	2.64
ADS7816UB	ADS7816UB-ND	12-Bit, High Speed Micropower Sampling ADC	8-SOIC	4.75	3.80	2.96
ADS7816UC	ADS7816UC-ND	12-Bit, High Speed Micropower Sampling ADC	8-SOIC	5.33	4.27	3.32
ADS7817ECT/250	ADS7817ECT-ND	12-Bit, Differential Input Micropower, Sampling ADC	8-MSOP	4.25	3.41	2.65
ADS7817ETR/250	ADS7817ETR-ND	12-Bit, Differential Input Micropower, Sampling ADC	8-MSOP	628.50/250		
ADS7817EB/250	ADS7817EBCT-ND	12-Bit, 200KHz Differential Micropower, Sampling ADC	8-MSOP	4.79	3.84	2.99
ADS7817EB/250	ADS7817EBTR-ND	12-Bit, Differential Input Micropower, Sampling ADC	8-MSOP	708.25/250		
ADS7817EC/250	ADS7817ECCT-ND	12-Bit, 200KHz Differential Micropower, Sampling ADC	8-MSOP	5.36	4.29	3.34
ADS7817EC/250	ADS7817ECTR-ND	12-Bit, Differential Input Micropower, Sampling ADC	8-MSOP	791.25/250		
ADS7817U	ADS7817U-ND	12-Bit, Differential Input Micropower, Sampling ADC	8-SOIC	4.23	3.39	2.64
ADS7817UB	ADS7817UB-ND	12-Bit, Differential Input Micropower, Sampling ADC	8-SOIC	4.75	3.80	2.96
ADS7817UC	ADS7817UC-ND	12-Bit, Differential Input Micropower, Sampling ADC	8-SOIC	5.33	4.27	3.32
ADS7818E/250	ADS7818ECT-ND	12-Bit, 500KHz ADC (±2 LSB)	8-MSOP	5.04	4.04	3.41
ADS7818E/250	ADS7818ETR-ND	12-Bit, 500KHz ADC (±2 LSB)	8-MSOP	838.00/250		
ADS7818EB/250	ADS7818EBCT-ND	12-Bit, 500KHz ADC (±1 LSB)	8-MSOP	5.94	4.76	4.01
ADS7818EB/250	ADS7818EBTR-ND	12-Bit, 500KHz ADC (±1 LSB)	8-MSOP	965.25/250		
ADS7818PB	ADS7818PB-ND	12-Bit, 500KHz ADC (±1 LSB)	8-Dip	6.64	5.31	4.13
ADS7820P	ADS7820P-ND	12-Bit, 10µs Sampling CMOS ADC	28-Dip .3	15.66	13.62	11.84
ADS7822E/250	ADS7822ECT-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-MSOP	3.17	2.54	1.98
ADS7822E/250	ADS7822ETR-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-MSOP	468.75/250		
ADS7822EB/250	ADS7822EBCT-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-MSOP	3.38	2.70	2.10
ADS7822EB/250	ADS7822EBTR-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-MSOP	498.75/250		
ADS7822EC/250	ADS7822ECCT-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-MSOP	3.74	2.99	2.33
ADS7822EC/250	ADS7822ECTR-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-MSOP	552.00/250		
ADS7822P	ADS7822P-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-Dip	3.13	2.51	1.95
ADS7822U	ADS7822U-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-SOIC	3.13	2.51	1.95
ADS7822UB	ADS7822UB-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-SOIC	3.33	2.67	2.08
ADS7822UC	ADS7822UC-ND	12-Bit, 2.7V, Micropower Sampling ADC	8-SOIC	3.69	2.96	2.30
ADS7823E/250	ADS7823E/250CT-ND	12-Bit, LP Sampling ADC	8-TSSOP	5.74	4.60	3.88
ADS7823E/250	ADS7823E/250TR-ND	12-Bit, LP Sampling ADC	8-TSSOP	932.75/250		
ADS7823EB/250	ADS7823EB/250CT-ND	12-Bit, LP Sampling ADC	8-TSSOP	6.98	5.59	4.72
ADS7823EB/250	ADS7823EB/250TR-ND	12-Bit, LP Sampling ADC	8-TSSOP	1134.25/250		
ADS7824P	ADS7824P-ND	12-Bit, 4-Ch. Sampling CMOS ADC	28-Dip .3	19.71	17.75	15.74
ADS7824PB	ADS7824PB-ND	12-Bit, 4-Ch. Sampling CMOS ADC	28-Dip	20.40	19.04	17.68
ADS7824U	ADS7824U-ND	12-Bit, 4-Ch. Sampling CMOS ADC	28-SOIC	17.75	16.57	15.38
ADS7824UB	ADS7824UB-ND	12-Bit, 4-Ch. Sampling CMOS ADC	28-SOIC	20.40	19.04	17.68
ADS7825P	ADS7825P-ND	16-Bit, 4-Ch. Sampling CMOS ADC	28-Dip .3	41.04	38.31	35.57
ADS7825U	ADS7825U-ND	16-Bit, 4-Ch. Sampling CMOS ADC	28-SOIC	41.04	38.31	35.57
ADS7825UB	ADS7825UB-ND	16-Bit, 4-Ch. Sampling CMOS ADC	28-SOIC	48.09	44.89	41.68
ADS7828E/250	296-12402-1-ND	12-Bit, 8-Channel Sampling A/D Converter *NEW!*	16-TSSOP	6.62	5.30	4.47
ADS7828E/250	296-12402-2-ND	12-Bit, 8-Channel Sampling A/D Converter *NEW!*	16-TSSOP	1075.75/250		
ADS7832BN	ADS7832BN-ND	12-Bit, 4-Ch. Auto-calibrating ADC	28-LCC	23.07	21.54	20.00
ADS7832BP	ADS7832BP-ND	12-Bit, 4-Ch. Auto-calibrating ADC	28-Dip	23.07	21.54	20.00
ADS7834EB/250	ADS7834EBCT-ND	12-Bit, 500kHz LP Sampling ADC	8-MSOP	5.94	4.76	4.01
ADS7834EB/250	ADS7834EBTR-ND	12-Bit, 500kHz LP Sampling ADC	8-MSOP	987.50/250		
ADS7835E/250	ADS7835ECT-ND	12-Bit, 500kHz Bipolar Sampling ADC, ±2LSB	8-MSOP	5.72	4.58	3.87
ADS7835E/250	ADS7835ETR-ND	12-Bit, 500kHz Bipolar Sampling ADC, ±2LSB	8-MSOP	951.00/250		
ADS7835EB/250	ADS7835EBCT-ND	12-Bit, 500kHz Bipolar Sampling ADC, ±1LSB	8-MSOP	6.76	5.41	4.57
ADS7835EB/250	ADS7835EBTR-ND	12-Bit, 500kHz Bipolar Sampling ADC, ±1LSB	8-MSOP	1098.50/250		
ADS7841E	ADS7841E-ND	12-Bit, 4-Ch. Serial Output ADC	16-SSOP	5.40	4.32	3.36
ADS7841EB	ADS7841EB-ND	12-Bit, 4-Ch. Serial Output ADC	16-SSOP	5.68	4.55	3.84
ADS7841P	ADS7841P-ND	12-Bit, 4-Ch. Serial Output ADC	16-Dip	5.40	4.32	3.36
ADS7841PB	ADS7841PB-ND	12-Bit, 4-Ch. Serial Output ADC	16-Dip	6.39	5.12	3.98
ADS7842E	ADS7842E-ND	12-Bit, 4-Ch. Parallel Output ADC	28-SSOP	5.68	4.55	3.84
ADS7842EB	ADS7842EB-ND	12-Bit, 4-Ch. Parallel Output ADC	28-SSOP	6.70	5.36	4.53
ADS7843E	ADS7843E-ND	4-Wire Touch Screen Controller	16-SSOP	4.23	3.39	2.64
ADS7844E	ADS7844E-ND	12-Bit, 8 Channel, 200KHz ADC	20-QSOP	6.28	5.03	3.91
ADS7844E/2K5	ADS7844ETR-ND	12-Bit, 8 Channel, 200KHz ADC	20-QSOP	8852.50/2,500		
ADS7844EB	ADS7844EB-ND	12-Bit, 8 Channel, 200KHz ADC	20-QSOP	6.58	5.27	4.45
ADS7844E/2K5	ADS7844EBTR-ND	12-Bit, 8 Channel, 200KHz ADC	20-QSOP	10260.00/2,500		
ADS7844N	ADS7844N-ND	12-Bit, 8 Channel, 200KHz ADC	20-SSOP	5.58	4.47	3.77
ADS7844NB	ADS7844NB-ND	12-Bit, 8 Channel, 200KHz ADC	20-SSOP	6.58	5.27	4.45
ADS7845E	ADS7845E-ND	5-Wire Touch Screen Controller	16-SSOP	7.60	6.08	5.13
ADS7846E	ADS7846E-ND	4-Wire Touch Screen Controller	16-SSOP	4.55	3.64	2.83
ADS7846N	ADS7846N-ND	4-Wire Touch Screen Controller	16-TSSOP	4.55	3.64	2.83
ADS7852Y/250	ADS7852YCT-ND	8-Ch., 12-Bit, Parallel Output ADC, ±2LSB	32-TQFP	6.76	5.41	4.57
ADS7852Y/250	ADS7852YTR-ND	8-Ch., 12-Bit, Parallel Output ADC, ±2LSB	32-TQFP	1098.50/250		
ADS7852YB/250	ADS7852YBCT-ND	8-Ch., 12-Bit, Parallel Output ADC, ±1LSB	32-TQFP	8.02	6.42	5.42
ADS7852YB/250	ADS7852YBTR-ND	8-Ch., 12-Bit, Parallel Output ADC, ±1LSB	32-TQFP	1303.25/250		
ADS7861E	ADS7861E-ND	Dual 12-Bit, 500kHz Simult. Sampling Serial ADC	24-SSOP	7.66	6.13	5.18
ADS7861EB	ADS7861EB-ND	Dual 12-Bit, 500kHz Simult. Sampling Serial ADC, ±1LSB	24-SSOP	9.04	7.24	6.11
ADS7862Y/250	ADS7862YCT-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel ADC, ±2LSB	32-TQFP	9.48	8.54	7.57
ADS7862Y/250	ADS7862YTR-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel ADC, ±2LSB	32-TQFP	1849.25/250		
ADS7862YB/250	ADS7862YBCT-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel ADC, ±1LSB	32-TQFP	11.20	10.08	8.94
ADS7862YB/250	ADS7862YBTR-ND	Dual 12-Bit, 500kHz Simult. Sampling Parallel ADC, ±1LSB	32-TQFP	2142.00/250		
ADS7864Y/250	ADS7864YCT-ND	12-Bit, 500kHz, 6-Channel ADC	48-TQFP	10.81	9.74	8.64
ADS7864Y/250	ADS7864YTR-ND	12-Bit, 500kHz, 6-Channel ADC	48-TQFP	2068.75/250		
ADS7864YB/250	ADS7864YBCT-ND	12-Bit, 500kHz, 6-Channel ADC	48-TQFP	12.50	11.25	9.98
ADS7864YB/250	ADS7864YBTR-ND	12-Bit, 500kHz, 6-Channel ADC	48-TQFP	2390.75/250		
ADS7870EA	ADS7870EA-ND	12-Bit, Data Acquisition System	28-SSOP	7.50	6.00	5.07
ADS8320E/250	ADS8320ECT-ND	16-Bit, 2.7V to 5V Micropower Serial ADC, ±2LSB	8-MSOP	10.01	9.02	8.00
ADS8320E/250	ADS8320ETR-ND	16-Bit, 2.7V to 5V Micropower Serial ADC, ±2LSB	8-MSOP	1915.75/250		
ADS8320EB/250	ADS8320EBCT-ND	16-Bit, 2.7V to 5V Micropower Serial ADC, ±1LSB	8-MSOP	11.21	10.10	8.96
ADS8320EB/250	ADS8320EBTR-ND	16-Bit, 2.7V to 5V Micropower Serial ADC, ±1LSB	8-MSOP	2145.25/250		
ADS8321E/250	ADS8321ECT-ND	16-Bit, 100kHz Bipolar ADC	8-MSOP	10.01	9.02	8.00
ADS8321E/250	ADS8321ETR-ND	16-Bit, 100kHz Bipolar ADC	8-MSOP	1915.75/250		
ADS8321EB/250	ADS8321EBCT-ND	16-Bit, 100kHz Bipolar ADC	8-MSOP	23.56	20.19	18.51
ADS8321EB/250	ADS8321EBTR-ND	16-Bit, 100kHz Bipolar ADC	8-MSOP	2145.25/250		
ADS8322Y/250CT	ADS8322Y/250CT-ND	16-Bit, 500kHz Unipolar ADC *NEW!*	32-TQFP	12.01	10.82	9.59
ADS8322Y/250TR	ADS8322Y/250TR-ND	16-Bit, 500kHz Unipolar ADC *NEW!*	32-TQFP	2298.25/250		
ADS8322Y/2KCT	ADS8322Y/2KCT-ND	16-Bit, 500kHz Unipolar ADC *NEW!*	32-TQFP	12.01	10.82	9.59
ADS8322Y/2KTR	ADS8322Y/2KTR-ND	16-Bit, 500kHz Unipolar ADC *NEW!*	32-TQFP	17808.00/2,000		
ADS8323YB/250	ADS8323YB/250CT-ND	16-Bit, HS Bipolar ADC *NEW!*	32-TQFP	15.13	13.62	12.08
ADS8323YB/250	ADS8323YB/250TR-ND	16-Bit, HS Bipolar ADC *NEW!*	32-TQFP	2894.25/250		
ADS8323Y/250	ADS8323Y/250CT-ND	16-Bit, HS Bipolar ADC *NEW!*	32-TQFP	12.01	10.82	9.59
ADS8323Y/250	ADS8323Y/250TR-ND	16-Bit, HS Bipolar ADC *NEW!*	32-TQFP	2298.25/250		
ADS8341E	ADS8341E-ND	16-Bit, 4-Channel, Serial ADC	16-SSOP	11.21	10.10	8.96
ADS8341EB	ADS8341EB-ND	16-Bit, 4-Channel, Serial ADC	16-SSOP	12.98	11.69	10.37
ADS8343E	ADS8343E-ND	16-Bit, 4-Channel, Serial ADC	16-SSOP	11.21	10.10	8.96
ADS8343EB	ADS8343EB-ND	16-Bit, 4-Channel, Serial ADC	16-SSOP	12.98	11.69	10.37
ADS8344E	ADS8344E-ND	16-Bit, 8-Ch., Serial Sampling ADC	20-QSOP	12.01	10.82	9.59
ADS8344EB	ADS8344EB-ND	16-Bit, 8-Ch., Serial Sampling ADC	20-QSOP	14.41	12.98	11.51
ADS8344N	ADS8344N-ND	16-Bit, 8-Ch., Serial Sampling ADC	20-SSOP	12.01	10.82	9.59
ADS8344NB	ADS8344NB-ND	16-Bit, 8-Ch., Serial Sampling ADC	20-SSOP	14.41	12.98	11.51
AFE1230E	AFE1230E-ND	G.SHDSL/HDSL2 Analog Front End	28-SSOP	20.76	19.38	18.00
AFE1144E	AFE1144E-ND	HDSL/MDSL Analog Front End	28-SSOP	14.41	12.98	11.51
DDC101U	DDC101U-ND	20-Bit, ADC	24-SOIC	27.39	25.57	23.74
DDC112U	DDC112U-ND	20-Bit, 2-Channel, I-Input ADC	28-SOIC	18.43	16.59	14.71
DDC112UK	DDC112UK-ND	20-Bit, 2-Channel, I-Input ADC	28-SOIC	21.14	19.73	18.32

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCM1802DB	PCM1802DB-ND	24-Bit, 96kHz Delta-Sigma Stereo ADC *NEW!*	20-SSOP	7.50	6.00	5.07
PCM1804DB	PCM1804DB-ND	24-Bit, 192kHz Delta-Sigma Stereo ADC *NEW!*	28-SSOP	9.40	7.52	6.35
THS14F01IPFB	296-2843-ND	14 Bit, 1Msps, 1-Ch. 3.3V DSP Compatible ADC with FIFO	48-TQFP	14.49	13.05	11.58
THS14F03IPFB	296-2845-ND	14 Bit, 3Msps, 1-Ch. 3.3V DSP Compatible ADC with FIFO	48-TQFP	17.07	15.94	14.80
THS0842IPFB	296-2171-ND	8-Bit, 40Msps, 2-Ch. 3.3V Parallel ADC	48-TQFP	7.58	6.07	5.12
THS1007IDA	296-2823-5-ND	10-Bit, 6Msps, 4-Channel 5V Parallel ADC	32-TSSOP	7.84	6.28	5.30
THS1009IDA	296-2825-5-ND	10 Bit, 8Msps, 2-Ch. Parallel ADC	32-TSSOP	6.80	5.44	4.59
THS1030CDW	296-2173-5-ND	10 Bit, 30Msps, 1-Ch. 2.7-5.5V ADC	28-SOIC	6.72	5.38	4.54
THS1030IDW	296-2826-5-ND	10 Bit, 30Msps, 1-Ch. 2.7-5.5V ADC	28-SOIC	7.24	5.80	4.89
THS1030IPW	296-2827-5-ND	10 Bit, 30Msps, 1-Ch., 2.7-5.5V ADC	28-TSSOP	7.24	5.80	4.89
THS1031CDW	296-2174-5-ND	10 Bit, 30Msps, 1-Ch. 2.7-5.5V ADC	28-SOIC	7.42	5.94	5.01
THS1031IDW	296-2828-5-ND	10 Bit, 30Msps, 1-Ch. 2.7-5.5V ADC	28-SOIC	7.98	6.39	5.39
THS1031IPW	296-2829-5-ND	10 Bit, 30Msps, 1-Ch., 2.7-5.5V ADC	28-TSSOP	7.98	6.39	5.39
THS1060CPHP	296-2175-ND	10 Bit, 60Msps, 1-Channel 5V IF Sampling ADC	48-TQFP	9.58	7.67	6.47
THS1206CDA	296-2176-5-ND	12 Bit, 6Msps, 4-Channel 3-5V IF Sampling ADC	32-TSSOP	11.70	10.53	9.34
THS1206IDA	296-2833-5-ND	12 Bit, 6Msps, 4-Channel 3-5V IF Sampling ADC	32-TSSOP	13.84	12.47	11.06
THS1207IDA	296-2834-5-ND	12 Bit, 6Msps, 4-Channel 5V IF Sampling ADC	32-TSSOP	12.98	11.69	10.37
THS1209IDA	296-2836-5-ND	12 Bit, 8Msps, 2-Channel 8V IF Sampling ADC	32-TSSOP	14.03	12.63	11.20
THS1215IDW	296-10010-5-ND	12-Bit, 15Msps, Low Power ADC with ENOB	28-SOIC	19.26	17.98	16.70
THS1215IPW	296-10011-5-ND	12-Bit, 15Msps, Low Power ADC with ENOB	28-TSSOP	19.26	17.98	16.70
THS1230IDW	296-2837-5-ND	12 Bit, 30Msps, 3.3V 1-Ch. ADC	28-SOIC	21.20	19.79	18.37
THS1230IPW	296-2838-5-ND	12 Bit, 30Msps, 3.3V 1-Ch. ADC	28-TSSOP	21.20	19.79	18.37
THS1240IPHP	296-2839-ND	12 Bit, 40Msps, 5V IF Sampling ADC	48-HTQFP	22.14	20.67	19.19
THS1401CPFB	296-2177-ND	14 Bit, 1Msps, 1-Ch. 3.3V ADC with Reference	48-TQFP	11.58	10.43	9.25
THS1401IPFB	296-2840-ND	14 Bit, 1Msps 1-Ch. 3.3V ADC with Reference	48-TQFP	13.39	12.06	10.70
THS1401QPHP	296-12314-ND	14-Bit, 1Msps 1-Ch. 3.3V ADC with Reference	48-HTQFP	20.27	18.92	17.57
THS1403CPFB	296-2178-ND	14-Bit, 3Msps 1-Channel, 3.3V ADC w/Ref.	48-TQFP	15.44	13.91	12.33
THS1403IPFB	296-2841-ND	14-Bit, 3Msps 1-Channel, 3.3V ADC w/Ref.	48-TQFP	16.08	15.01	13.94
THS1403QPHP	296-10016-ND	14-Bit, 3Msps 1-Channel, 3.3V ADC w/Ref.	48-HQTFP	18.90	17.64	16.38
THS1408CPFB	296-2179-ND	14-Bit, 8Msps 1-Channel, 3.3V ADC w/Ref.	48-TQFP	17.39	16.23	15.07
THS1408IPFB	296-2842-ND	14-Bit, 8Msps 4-Channel, 3.3V ADC w/Ref.	48-TQFP	20.10	18.76	17.42
THS1408QPHP	296-10018-ND	14-Bit, 8Msps Diff. Input ADC	48-HQTFP	23.61	22.04	20.47
THS10064CDA	296-2172-5-ND	10-Bit, 6Msps 4-Channel, 3-5V Sampling ADC	38-SOP	7.52	6.02	5.08
THS10064IDA	296-2822-5-ND	10-Bit, 6Msps 4-Channel, 3-5V Sampling ADC	32-TSSOP	8.90	7.12	6.01
THS10082IDA	296-2824-5-ND	10-Bit, 4Msps 2-Ch. Parallel ADC	32-TSSOP	7.84	6.28	5.30
THS12082IDA	296-2835-5-ND	12 Bit, 8Msps 2-Channel, 5V IF Sampling ADC	32-TSSOP	14.89	13.41	11.90
TLC0820ACDB	296-2846-5-ND	8 Bit, ADC Modified Flash Converter	20-SSOP	3.87	3.10	2.41
TLC0820ACDBR	296-2846-1-ND	8 Bit, ADC Modified Flash Converter	20-SSOP	3.87	3.10	2.41
TLC0820ACDBR	296-2846-2-ND	8 Bit, ADC Modified Flash Converter	20-SSOP	4386.00/2,000		
TLC0820ACDW	296-2847-5-ND	8 Bit, ADC Modified Flash Converter	20-SOIC	3.87	3.10	2.41
TLC0820ACFN	296-2848-5-ND	8 Bit, ADC Modified Flash Converter	20-PLCC	3.87	3.10	2.41
TLC0820ACN	296-2849-5-ND	8 Bit, ADC Modified Flash Converter	20-Dip	3.87	3.10	2.41
TLC0820AIDW	296-2850-5-ND	8 Bit, ADC Modified Flash Converter	20-SOIC	4.16	3.33	2.59
TLC0820AIFN	296-2851-5-ND	8 Bit, ADC Modified Flash Converter	20-PLCC	4.16	3.33	2.59
TLC0820AIN	296-2852-5-ND	8 Bit, ADC Modified Flash Converter	20-Dip	4.16	3.33	2.59
TLC0831CD	296-2853-5-ND	8-Bit, 31ksps, 1-Ch. 5V Serial ADC	8-SOIC	2.79	2.24	1.74
TLC0831CP	296-2854-5-ND	8-Bit, 31ksps, 1-Ch. 5V Serial ADC	8-Dip	2.79	2.24	1.74
TLC0831ID	296-2855-5-ND	8-Bit, 31ksps, 1-Ch. 5V Serial ADC	8-SOIC	2.99	2.40	1.87
TLC0831IP	296-2856-5-ND	8-Bit, 31ksps, 1-Ch. 5V Serial ADC	8-Dip	2.99	2.40	1.87
TLC0832CD	296-2857-5-ND	8-Bit, 22ksps, 2-Ch. 5V Serial ADC	8-SOIC	2.79	2.24	1.74
TLC0832CP	296-2858-5-ND	8-Bit, 22ksps, 2-Ch. 5V Serial ADC	8-Dip	2.79	2.24	1.74
TLC0832ID	296-2859-5-ND	8-Bit, 22ksps, 2-Ch. 5V Serial ADC	8-SOIC	2.99	2.40	1.87
TLC0832IP	296-2860-5-ND	8-Bit, 22ksps, 2-Ch. 5V Serial ADC	8-Dip	2.99	2.40	1.87
TLC0834CD	296-2861-5-ND	8-Bit, 20ksps, 4-Ch. 5V Serial ADC	14-SOIC	2.90	2.33	1.81
TLC0834CN	296-2862-5-ND	8-Bit, 20ksps, 4-Ch. 5V Serial ADC	14-Dip	2.90	2.33	1.81
TLC0834ID	296-2863-5-ND	8-Bit, 20ksps, 4-Ch. 5V Serial ADC	14-SOIC	3.13	2.51	1.95
TLC0834IN	296-2864-5-ND	8-Bit, 20ksps, 4-Ch. 5V Serial ADC	14-Dip	3.13	2.51	1.95
TLC0838CDW	296-2865-5-ND	8-Bit, 20ksps, 8-Ch. 5V Serial ADC	20-SOIC	2.90	2.33	1.81
TLC0838CN	296-2866-5-ND	8-Bit, 20ksps, 8-Ch. 5V Serial ADC	20-Dip	2.90	2.33	1.81
TLC0838IDW	296-2867-5-ND	8-Bit, 20ksps, 8-Ch. 5V Serial ADC	20-SOIC	3.13	2.51	1.95
TLC0838IN	296-2868-5-ND	8-Bit, 20ksps, 8-Ch. 5V Serial ADC	20-Dip	3.13	2.51	1.95
TLC0838IPW	296-2869-5-ND	8-Bit, 20ksps, 8-Ch. 5V Serial ADC	20-TSSOP	3.13	2.51	1.95
TLC540IDW	296-2919-5-ND	8-Bit, 75ksps, 12-Ch. 5V Serial ADC	20-SOIC	3.67	2.94	2.29
TLC540IFN	296-2920-5-ND	8-Bit, 75ksps, 12-Ch. 5V Serial ADC	20-PLCC	3.67	2.94	2.29
TLC540IN	296-2921-5-ND	8-Bit, 75ksps, 12-Ch. 5V Serial ADC	20-Dip	3.67	2.94	2.29
TLC541IDW	296-2922-5-ND	8-Bit, 40ksps, 11-Ch. 5V Serial ADC	20-SOIC	3.06	2.45	1.91
TLC541IFN	296-2923-5-ND	8-Bit, 40ksps, 11-Ch. 5V Serial ADC	20-PLCC	3.06	2.45	1.91
TLC541IFNR	296-1331-1-ND	8-Bit, 40ksps, 11-Ch. 5V Serial ADC	20-PLCC	3.06	2.45	1.91
TLC541IFNR	296-1331-2-ND	8-Bit, 40ksps, 11-Ch. 5V Serial ADC	20-PLCC	1734.00/1,000		
TLC541IN	296-1850-5-ND	8-Bit, 40ksps, 11-Ch. 5V Serial ADC	20-Dip	3.06	2.45	1.91
TLC542CDW	296-1332-5-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-SOIC	2.99	2.40	1.87
TLC542CDWR	296-1332-1-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-SOIC	3.04	2.43	1.89
TLC542CDWR	296-1332-2-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-SOIC	3392.00/2,000		
TLC542CN	296-2924-5-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-Dip	2.99	2.40	1.87
TLC542IDW	296-1333-5-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-SOIC	3.22	2.58	2.01
TLC542IDWR	296-1333-1-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-SOIC	3.26	2.61	2.03
TLC542IDWR	296-1333-2-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-SOIC	3646.00/2,000		
TLC542IFN	296-1334-5-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-PLCC	3.22	2.58	2.01
TLC542IFNR	296-1334-1-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-PLCC	3.26	2.61	2.03
TLC542IFNR	296-1334-2-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-PLCC	1823.00/1,000		
TLC542IN	296-2927-5-ND	8-Bit, 25ksps, 11-Ch. 5V Serial ADC	20-Dip	3.22	2.58	2.01
TLC545CFN	296-2928-5-ND	8-Bit, 76ksps, 19-Ch. 5V Serial ADC	28-PLCC	5.50	4.40	3.72
TLC545CN	296-2929-5-ND	8-Bit, 76ksps, 19-Ch. 5V Serial ADC	28-Dip	5.50	4.40	3.72
TLC545IFN	296-2930-5-ND	8-Bit, 76ksps, 19-Ch. 5V Serial ADC	28-PLCC	5.92	4.74	4.00
TLC545IN	296-2931-5-ND	8-Bit, 76ksps, 19-Ch. 5V Serial ADC	28-Dip	5.92	4.74	4.00
TLC548CD	296-2934-5-ND	8-Bit, 45.5ksps, 1-Ch. 3-6V Serial ADC	8-SOIC	2.45	1.97	1.53
TLC548CP	296-2935-5-ND	8-Bit, 45.5ksps, 1-Ch. 3-6V Serial ADC	8-Dip	2.45	1.97	1.53
TLC548ID	296-2936-5-ND	8-Bit, 45.5ksps, 1-Ch. 3-6V Serial ADC	8-SOIC	2.63	2.11	1.64
TLC548IP	296-2937-5-ND	8-Bit, 45.5ksps, 1-Ch. 3-6V Serial ADC	8-Dip	2.63	2.11	1.64
TLC549CD	296-1335-5-ND	8-Bit, 40ksps, 1-Ch. 3-6V Serial ADC	8-SOIC	2.18	1.74	1.31
TLC549CDR	296-1335-1-ND	8-Bit, 40ksps, 1-Ch. 3-6V Serial ADC	8-SOIC	2.18	1.74	1.31
TLC549CDR	296-1335-2-ND	8-Bit, 40ksps, 1-Ch. 3-6V Serial ADC	8-SOIC	2784.00/2,500		
TLC549CP	296-1853-5-ND	8-Bit, 40ksps, 1-Ch. 3-6V Serial ADC	8-Dip	2.18	1.74	1.31
TLC549ID	296-1854-5-ND	8-Bit, 40ksps, 1-Ch. 3-6V Serial ADC	8-SOIC	2.33	1.86	1.40
TLC549IP	296-1855-5-ND	8-Bit, 40ksps, 1-Ch. 3-6V Serial ADC	8-Dip	2.33	1.86	1.40
TLC876CDBR	296-2940-1-ND	10-Bit, 20Msps 1-Channel 5.5V Parallel ADC	28-SSOP	5.06	4.05	3.42
TLC876CDBR	296-2940-2-ND	10-Bit, 20Msps 1-Channel 5.5V Parallel ADC	28-SSOP	6250.00/2,000		
TLC876CDW	296-2941-5-ND	10-Bit, 20Msps 1-Channel 5.5V Parallel ADC	28-SOIC	5.00	4.00	3.38
TLC876CPW	296-2942-5-ND	10-Bit, 20Msps 1-Channel 5.5V Parallel ADC	28-TSSOP	5.00	4.00	3.38
TLC876IDW	296-2186-5-ND	10-Bit, 20Msps 1-Ch. 5.5V Parallel ADC	28-SOIC	5.36	4.29	3.62
TLC876IPWR	296-2943-1-ND	10-Bit, 20Msps 1-Channel 5.5V Parallel ADC	28-TSSOP	5.44	4.36	3.68
TLC876IPWR	296-2943-2-ND	10-Bit, 20Msps 1-Channel 5.5V Parallel ADC	28-TSSOP	6700.00/2,000		
TLC1514ID	296-2180-5-ND	10-Bit, 400ksps, 4-Ch. 5V Serial ADC	16-SOIC	5.28	4.23	3.57
TLC1514IPW	296-2870-5-ND	10-Bit, 400ksps, 4-Ch. 5V Serial ADC	16-TSSOP	5.28	4.23	3.57
TLC1518IDW	296-2181-5-ND	10-Bit, 400ksps, 8-Ch. 5V Serial ADC	20-SOIC	6.26	5.01	4.23
TLC1518IPW	296-2871-5-ND	10-Bit, 400ksps, 8-Ch. 5V Serial ADC	20-TSSOP	6.26	5.01	4.23
TLC1541CDW	296-2872-5-ND	10-Bit, 32ksps, 11-Ch. 5V Serial ADC	20-SOIC	5.80	4.64	3.92
TLC1541CFN	296-2873-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-PLCC	5.80	4.64	3.92
TLC1541CN	296-2874-5-ND	10-Bit, 32ksps, 11-Ch. 5V Serial ADC	20-Dip	5.80	4.64	3.92
TLC1541IDW	296-2875-5-ND	10-Bit, 32ksps, 11-Ch. 5V Serial ADC	20-SOIC	6.24	5.00	4.22
TLC1541IN	296-2182-5-ND	10-Bit, 32ksps, 11-Ch. 5V Serial ADC	20-Dip	6.24	5.00	4.22
TLC1541IFN	296-2876-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-PLCC	6.24	5.00	4.22
TLC1542CDW	296-2877-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SOIC	5.09	4.07	3.17
TLC1542CFN	296-2878-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-PLCC	5.09	4.07	3.17
TLC1542CN	296-2879-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-Dip	5.09	4.07	3.17
TLC1542IDW	296-2880-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SOIC	5.47	4.38	3.41
TLC1542IN	296-2881-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-Dip	5.47	4.38	3.41
TLC1542QFN	296-2882-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-PLCC	5.56	4.45	3.46
TLC1543CDB	296-2883-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SSOP	3.89	3.12	2.43
TLC1543CDW	296-1804-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SOIC	3.89	3.12	2.43
TLC1543CDWR	296-1804-2-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SOIC	4412.00/2,000		
TLC1543CFN	296-1805-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-PLCC	3.89	3.12	2.43
TLC1543CN	296-2885-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-Dip	3.89	3.12	2.43
TLC1543IDW	296-2886-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SOIC	4.21	3.37	2.62
TLC1543IFN	296-2887-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-PLCC	4.21	3.37	2.62
TLC1543IN	296-2888-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-Dip	4.21	3.37	2.62
TLC1543QDB	296-2889-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SSOP	4.37	3.50	2.72
TLC1543QDW	296-2890-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-SOIC	4.37	3.50	2.72
TLC1543QFN	296-2891-5-ND	10-Bit, 38ksps, 11-Ch. 5V Serial ADC	20-PLCC	4.37	3.50	2.72
TLC1549CD	296-2892-5-ND	10-Bit, 38ksps, 1-Ch. 5V Serial ADC	8-SOIC	3.69	2.96	2.30
TLC1549CP	296-1806-5-ND	10-Bit, 38ksps, 1-Ch. 5V Serial ADC	8-Dip	3.69	2.96	2.30
TLC1549ID	296-2893-5-ND	10-Bit, 38ksps, 1-Ch. 5V Serial ADC	8-SOIC	3.96	3.17	2.47
TLC1549IP	296-2894-5-ND	10-Bit, 38ksps, 1-Ch. 5V Serial ADC	8-Dip	3.96	3.17	2.47
TLC1550IDW	296-2895-5-ND	10-Bit, 164ksps, 10-Channel 5V Parallel Out ADC	24-SOIC	7.08	5.67	4.78
TLC1551IDW	296-2896-5-ND	10-Bit, 164ksps, 10-Channel 5V Parallel Out ADC	24-SOIC	6.06	4.85	4.10
TLC2543CDB	296-2897-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-SSOP	8.04	6.44	5.43
TLC2543CDW	296-1307-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-SOIC	8.04	6.44	5.43
TLC2543CDWR	296-1307-1-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-SOIC	8.04	6.44	5.43
TLC2543CDWR	296-1307-2-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-SOIC	10050.00/2,000		
TLC2543CFN	296-2898-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-PLCC	8.04	6.44	5.43
TLC2543CN	296-1816-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-Dip	8.04	6.44	5.43
TLC2543IDB	296-2899-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-SSOP	8.66	6.93	5.85
TLC2543IDW	296-2900-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-SOIC	8.66	6.93	5.85
TLC2543IFN	296-2901-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-PLCC	8.66	6.93	5.85
TLC2543IN	296-1817-5-ND	12-Bit, 66ksps, 11-Ch. 5V Serial ADC	20-Dip	8.66	6.93	5.85
TLC2551ID	296-2909-5-ND	12-Bit, 400ksps, 1-Ch. 5V Serial ADC	8-SOIC	7.64	6.12	5.16
TLC2551IDGK	296-2910-5-ND	12-Bit, 400ksps, 1-Ch. 5V Serial ADC	8-MSOP	7.64	6.12	5.16
TLC2552ID	296-2911-5-ND	12-Bit, 400ksps, 2-Ch. 5V Serial ADC	8-SOIC	7.64	6.12	5.16
TLC2552IDGK	296-2912-5-ND	12-Bit, 400ksps, 1-Ch. 5V Serial ADC	8-MSOP	7.64	6.12	5.16
TLC2554ID	296-2913-5-ND	12-Bit, 400ksps, 4-Ch. 5V Serial ADC	16-SOIC	9.11	8.21	7.28
TLC2554IPW	296-2914-5-ND	12-Bit, 400ksps, 4-Ch. 5V Serial ADC	16-TSSOP	9.11	8.21	7.28
TLC2555ID	296-2915-5-ND	12-Bit, 400ksps, 1-Ch. 5V Serial ADC	8-SOIC	7.64	6.12	5.16
TLC2555IDGK	296-2916-5-ND	12-Bit, 400ksps, 1-Ch. 5V Serial ADC	8-MSOP	7.64	6.12	5.16
TLC2558IDW	296-2917-5-ND	12-Bit, 400ksps, 8-Ch. 5V Serial ADC	20-SOIC	9.30	8.37	7.43
TLC2558IPW	296-2918-5-ND	12-Bit, 400ksps, 8-Ch. 5V Serial ADC	20-TSSOP	9.30	8.37	7.43
TLC2574IDW	296-10255-5-ND	12-Bit, 200ksps, 4-Ch. Serial Out ADC	20-SOIC	9.58	7.67	6.47
TLC2574IPW	296-10256-5-ND	12-Bit, 200ksps, 4-Channel Serial Out ADC	20-TSSOP	9.58	7.67	6.47
TLC2578IDW	296-10257-5-ND	12-Bit, 200ksps,8-Ch. Serial Out ADC	24-SOIC	8.78	7.91	7.01
TLC2578IPW	296-10258-5-ND	12-Bit, 200ksps,8-Channel Serial Out ADC	24-TSSOP	8.78	7.91	7.01
TLC3541ID	296-12498-5-ND	14-Bit, 5V, 200ksps, Low Power Serial ADC *NEW!*	8-SOIC	9.02	7.22	6.09
TLC3544IDW	296-10288-5-ND	14-Bit, 200ksps, 4-Ch. Unipolar ADC	20-SOIC	13.21	11.90	10.55
TLC3544IPW	296-10289-5-ND	14-Bit, 200ksps, 4-Ch. Unipolar ADC	20-TSSOP	13.21	11.90	10.55
TLC3545ID	296-12499-5-ND	14-Bit, 5V, 200ksps, Low Power Serial ADC *NEW!*	8-SOIC	9.02	7.22	6.09

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC3548IDW	296-10290-5-ND	14-Bit, 200ksps, 8-Ch. Unipolar ADC	24-SOIC	13.21	11.90	10.55
TLC3548IPW	296-10291-5-ND	14-Bit, 200ksps, 8-Ch. Unipolar ADC	20-TSSOP	13.21	11.90	10.55
TLC3574IDW	296-10296-5-ND	14-Bit, 200ksps, 4-Ch. LP ADC	20-SOP	12.01	10.82	9.59
TLC3574IPW	296-10297-5-ND	14-Bit, 200ksps, 4-Ch. LP ADC	20-TSSOP	12.01	10.82	9.59
TLC3578IDW	296-10298-5-ND	14-Bit, 200ksps, 8-Ch. LP ADC	24-SOIC	14.81	13.34	11.83
TLC3578IPW	296-10299-5-ND	14-Bit, 200ksps, 8-Ch. LP ADC	24-TSSOP	14.81	13.34	11.83
TLC4541ID	296-12500-5-ND	16-Bit, 5V, 200ksps, Low Power Serial ADC *NEW!*	8-SOIC	11.08	9.98	8.85
TLC4545ID	296-12501-5-ND	16-Bit, 5V, 200ksps, Low Power Serial ADC *NEW!*	8-SOIC	11.08	9.98	8.85
TLC5510AINS	296-2938-5-ND	8-Bit, 20Msps 1-Channel 5.0V High Speed Serial ADC	24-SOP	4.43	3.55	2.76
TLC5510INSR	296-2939-1-ND	8-Bit, 20Msps 1-Channel 5.0V High Speed Serial ADC	24-SOP	4.48	3.59	2.79
TLC5510INSR	296-2939-2-ND	8-Bit, 20Msps 1-Channel 5.0V High Speed Serial ADC	24-SOP	5024.00/2,000		
TLC5510IPW	296-2183-5-ND	8-Bit, 20Msps 1-Ch. 5.0V High Speed Serial ADC	24-TSSOP	4.43	3.55	2.76
TLC5540CNSR	296-10336-1-ND	8-Bit, 40Msps, 1-Ch. 5.0V High Speed Serial ADC	24-SOP	4.57	3.66	2.85
TLC5540CNSR	296-10336-2-ND	8-Bit, 40Msps, 1-Ch. 5.0V High Speed Serial ADC	24-SOP	5126.00/2,000		
TLC5540INSR	296-10338-1-ND	8-Bit, 40Msps, 1-Ch. 5.0V High Speed Serial ADC	24-SOP	4.93	3.95	3.07
TLC5540INSR	296-10338-2-ND	8-Bit, 40Msps, 1-Ch. 5.0V High Speed Serial ADC	24-SOP	5534.00/2,000		
TLC5540IPW	296-2184-5-ND	8-Bit, 40Msps 1-Ch. 5.0V High Speed Serial ADC	24-TSSOP	4.88	3.91	3.04
TLC5733AIPM	296-10346-ND	8-Bit, 20Msps, 3-Ch. LP ADC	64-LQFP	9.02	7.22	6.09
TLC7135CDW	296-2185-5-ND	4.5-Digit, .003Msps 1-Ch. +-5V ADC	28-SOIC	3.98	3.19	2.48
TLC7135CN	296-10350-5-ND	4.5-Digit, 0.003ksps, 1-Ch. Differential Input ADC	28-Dip	3.98	3.19	2.48
TLV0831CD	296-2944-5-ND	8-Bit, 49ksps, 1-Ch. 3.3V Serial ADC	8-SOIC	2.79	2.24	1.74
TLV0831CP	296-2187-5-ND	8-Bit, 49ksps, 1-Ch. 3.3V Serial ADC	8-Dip	2.79	2.24	1.74
TLV0831ID	296-2945-5-ND	8-Bit, 49ksps, 1-Ch. 3.3V Serial ADC	8-SOIC	2.99	2.40	1.87
TLV0831IP	296-2946-5-ND	8-Bit, 49ksps, 1-Ch. 3.3V Serial ADC	8-Dip	2.99	2.40	1.87
TLV0832CD	296-2947-5-ND	8-Bit, 44.7ksps, 2-Ch. 3.3V Serial ADC	8-SOIC	2.79	2.24	1.74
TLV0832CP	296-2948-5-ND	8-Bit, 44.7ksps, 2-Ch.I 3.3V Serial ADC.	8-Dip	2.79	2.24	1.74
TLV0832ID	296-2188-5-ND	8-Bit, 44.7ksps, 2-Ch. 3.3V Serial ADC	8-SOIC	2.99	2.40	1.87
TLV0832IP	296-2949-5-ND	8-Bit, 44.7ksps, 2-Ch. 3.3V Serial ADC	8-Dip	2.99	2.40	1.87
TLV0834CD	296-2189-5-ND	8-Bit, 41ksps, 4-Ch. 3.3V Serial ADC	14-SOP	2.90	2.33	1.81
TLV0834ID	296-2950-5-ND	8-Bit, 41ksps, 4-Ch. 3.3V Serial ADC	14-SOIC	3.13	2.51	1.95
TLV0834IN	296-2951-5-ND	8-Bit, 41ksps, 4-Ch. 3.3V Serial ADC	14-Dip	3.13	2.51	1.95
TLV0838CDW	296-2952-5-ND	8-Bit, 37.9ksps, 8-Ch. 3.3V Serial ADC	20-SOIC	2.90	2.33	1.81
TLV0838IDW	296-2190-5-ND	8-Bit, 37.9ksps, 8-Ch. 3.3V Serial ADC	20-SOP	3.13	2.51	1.95
TLV0838IN	296-2953-5-ND	8-Bit, 37.9ksps, 8-Ch. 3.3V Serial ADC	20-Dip	3.13	2.51	1.95
TLV0838IPW	296-2954-5-ND	8-Bit, 37.9ksps, 8-Channel 3.3V Serial ADC	20-TSSOP	3.13	2.51	1.95
TLV571IDW	296-2207-5-ND	8-Bit, 1.25Msps 1-Channel 2.7-5.5V Parallel ADC	24-SOIC	4.77	3.82	2.97
TLV571IPW	296-2988-5-ND	8-Bit, 1.25Msps 1-Channel 2.7-5.5V Parallel ADC	24-TSSOP	4.77	3.82	2.97
TLV1504ID	296-2191-5-ND	10-Bit, 200ksps, 4-Channel 2.7-5.5V Serial ADC	16-SOIC	5.40	4.32	3.36
TLV1504IPW	296-2955-5-ND	10-Bit, 200ksps, 4-Channel 2.7-5.5V Serial ADC	16-TSSOP	5.40	4.32	3.36
TLV1508IDW	296-2192-5-ND	10-Bit, 200ksps, 4-Channel 2.7-5.5V Serial ADC	20-SOIC	5.76	4.61	3.89
TLV1508IPW	296-2956-5-ND	10-Bit, 200ksps, 4-Channel 2.7-5.5V Serial ADC	20-TSSOP	5.76	4.61	3.89
TLV1543CDB	296-2958-5-ND	10-Bit, 200ksps, 11-Ch. 3.3V Serial ADC	20-SOP	4.32	3.46	2.69
TLV1543CDW	296-1878-5-ND	10-Bit, 200ksps, 11-Ch. 3.3V Serial ADC	20-SOP	4.32	3.46	2.69
TLV1543CN	296-2957-5-ND	10-Bit, 200ksps, 11-Ch. 3.3V Serial ADC	20-Dip	4.32	3.46	2.69
TLV1543IDB	296-2959-5-ND	10-Bit, 200ksps, 11-Channel 3.3V Serial ADC	20-SSOP	4.66	3.73	2.90
TLV1544CD	296-2960-5-ND	10-Bit, 85ksps, 4-Channel 2.7-5.5V Serial ADC	16-SOIC	4.01	3.21	2.50
TLV1544CPW	296-2193-5-ND	10-Bit, 85ksps, 4-Channel 2.7-5.5V Serial ADC	16-TSSOP	4.01	3.21	2.50
TLV1544ID	296-2961-5-ND	10-Bit, 85ksps, 4-Channel 2.7-5.5V Serial ADC	16-SOIC	4.30	3.44	2.68
TLV1548IDB	296-2962-5-ND	10-Bit, 85ksps, 8-Channel 2.7-5.5V Serial ADC	20-SSOP	5.04	4.04	3.14
TLV1549CD	296-2963-5-ND	10-Bit, 38ksps, 1-Ch. 3.3V Serial ADC	8-SOIC	3.69	2.96	2.30
TLV1549CP	296-2964-5-ND	10-Bit, 38ksps, 1-Ch. 3.3V Serial ADC	8-Dip	3.69	2.96	2.30
TLV1549ID	296-2194-5-ND	10-Bit, 38ksps, 1-Ch. 3.3V Serial ADC	8-SOIC	3.96	3.17	2.47
TLV1549IP	296-2965-5-ND	10-Bit, 38ksps, 1-Ch. 3.3V Serial ADC	8-Dip	3.96	3.17	2.47
TLV1562CDW	296-2195-5-ND	10-Bit, 2Msps 4-Channel 2.7-5.5V Parallel ADC	28-SOIC	7.48	5.99	5.05
TLV1562CPW	296-2966-5-ND	10-Bit, 2Msps 4-Channel 2.7-5.5V Parallel ADC	28-TSSOP	7.48	5.99	5.05
TLV1562IDW	296-1879-5-ND	10-Bit, 2Msps 4-Channel 2.7-5.5V Parallel ADC	28-SOIC	8.04	6.44	5.43
TLV1562IPW	296-1880-5-ND	10-Bit, 2Msps 4-Channel 2.7-5.5V Parallel ADC	28-TSSOP	8.04	6.44	5.43
TLV1570CDW	296-2196-5-ND	10-Bit, 1.25Msps 8-Channel 2.7-5.5V Serial ADC	20-SOIC	6.84	5.48	4.62
TLV1570CPW	296-2967-5-ND	10-Bit, 1.25Msps 8-Channel 2.7-5.5V Serial ADC	20-TSSOP	6.84	5.48	4.62
TLV1570IDW	296-1881-5-ND	10-Bit, 1.25Msps 8-Channel 2.7-5.5V Serial ADC	20-SOIC	7.34	5.88	4.96
TLV1570IPW	296-1882-5-ND	10-Bit, 1.25Msps 8-Channel 2.7-5.5V Serial ADC	20-TSSOP	7.34	5.88	4.96
TLV1571CDW	296-2197-5-ND	10-Bit, 1.25Msps 1-Channel 2.7-5.5V Parallel ADC	24-SOIC	6.62	5.30	4.47
TLV1571IDW	296-2968-5-ND	10-Bit, 1.25Msps 1-Channel 2.7-5.5V Parallel ADC	24-SOIC	7.12	5.70	4.81
TLV1571IPW	296-2969-5-ND	10-Bit, 1.25Msps 1-Channel 2.7-5.5V Parallel ADC	24-TSSOP	7.12	5.70	4.81
TLV1572CD	296-2970-5-ND	10-Bit, 1.25Msps 1-Channel 2.7-5.5V Serial ADC	8-SOIC	5.96	4.77	4.03
TLV1572ID	296-1883-5-ND	10-Bit, 1.25Msps 1-Channel 2.7-5.5V Serial ADC	8-SOIC	6.40	5.12	4.32
TLV1578CDA	296-2198-5-ND	10-Bit, 1.25Msps 8-Channel 2.7-5.5V Parallel ADC	32-SOP	6.88	5.51	4.65
TLV1578IDA	296-2971-5-ND	10-Bit, 1.25Msps 8-Channel 2.7-5.5V Parallel ADC	32-TSSOP	7.40	5.92	5.00
TLV2541CDGK	296-2199-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-MSOP	6.72	5.38	4.54
TLV2541ID	296-2972-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-SOIC	7.44	5.96	5.03
TLV2541IDGK	296-2973-5-ND	12-Bit, 140/200ksps, Single-Channel 2.7-5.5V Serial ADC	8MSOP	7.44	5.96	5.03
TLV2542CDGK	296-2200-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-MSOP	6.72	5.38	4.54
TLV2542ID	296-2974-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-SOIC	7.44	5.96	5.03
TLV2542IDGK	296-2975-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-MSOP	7.44	5.96	5.03
TLV2543CDBR	296-10643-1-ND	12-Bit, 66ksps, 11-Ch. 3.3V Serial Out ADC	20-SSOP	8.04	6.44	5.43
TLV2543CDBR	296-10643-2-ND	12-Bit, 66ksps, 11-Ch. 3.3V Serial Out ADC	20-SSOP	10050.00/2,000		
TLV2543CDW	296-2977-5-ND	12-Bit, 66ksps, 11-Ch. 3.3V Serial ADC	20-SOIC	8.04	6.44	5.43
TLV2543CN	296-2978-5-ND	12-Bit, 66ksps, 11-Ch. 3.3V Serial ADC	20-Dip	8.04	6.44	5.43
TLV2543IDB	296-2201-5-ND	12-Bit, 66ksps, 11-Ch. 3.3V Serial ADC	20-SSOP	8.64	6.92	5.84
TLV2543IDW	296-2979-5-ND	12-Bit, 66ksps, 11-Ch. 3.3V Serial ADC	20-SOIC	8.64	6.92	5.84
TLV2543IN	296-2980-5-ND	12-Bit, 66ksps, 11-Ch. 3.3V Serial ADC	20-Dip	8.64	6.92	5.84
TLV2544CD	296-2202-5-ND	12-Bit, 200ksps, 4-Channel 2.7-5.5V Serial ADC	16-SOIC	8.12	6.50	5.49
TLV2544ID	296-2981-5-ND	12-Bit, 200ksps, 4-Channel 2.7-5.5V Serial ADC	16-SOIC	8.18	6.55	5.53
TLV2544IPW	296-2982-5-ND	12-Bit, 200ksps, 4-Channel 2.7-5.5V Serial ADC	16-TSSOP	8.18	6.55	5.53
TLV2545CDGK	296-2203-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-MSOP	6.72	5.38	4.54
TLV2545ID	296-2984-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-SOIC	7.44	5.96	5.03
TLV2545IDGK	296-2985-5-ND	12-Bit, 140/200ksps, 2-Channel 2.7-5.5V Serial ADC	8-MSOP	7.44	5.96	5.03
TLV2548CDW	296-2204-5-ND	12-Bit, 200ksps, 8-Channel 2.7-5.5V Serial ADC	20-SOIC	8.94	7.16	6.04
TLV2548IDW	296-2986-5-ND	12-Bit, 200ksps, 8-Channel 2.7-5.5V Serial ADC	20-SOIC	9.42	7.54	6.36
TLV2548IPW	296-2987-5-ND	12-Bit, 200ksps, 8-Channel 2.7-5.5V Serial ADC	20-TSSOP	9.42	7.54	6.36
TLV2553IDW	296-12227-1-ND	12-Bit, Low Power, Serial A/D Converter *NEW!*	20-SOIC	6.88	5.51	4.65
TLV2553IDW	296-12227-2-ND	12-Bit, Low Power, Serial A/D Converter *NEW!*	20-SOIC	5053.65/1,050		
TLV2556IDW	296-12502-5-ND	12-Bit, 5V, 200ksps, Low Power Serial ADC *NEW!*	20-SOIC	7.98	6.39	5.39
TLV5535IPW	296-2206-5-ND	8-Bit, 35Msps 1-Ch. 3.3V LP ADC	28-TSSOP	4.75	3.80	2.96
TLV5580CDW	296-1912-5-ND	8-Bit, 80Msps 1-Ch. 3.3V LP ADC	28-SOIC	5.46	4.37	3.69
TLV5580CPW	296-1913-5-ND	8-Bit, 80Msps 1-Ch. 3.3V LP ADC	28-TSSOP	5.46	4.37	3.69
TLV5580IDW	296-1914-5-ND	8-Bit, 80Msps 1-Ch. 3.3V LP ADC	28-SOIC	5.86	4.69	3.96
TLV5580IPW	296-1915-5-ND	8-Bit, 80Msps 1-Ch. 3.3V LP ADC	28-TSSOP	5.86	4.69	3.96
TSC2003IR	296-12244-1-ND	Touch Screen Controller *NEW!*	16-TSSOP	4.66	3.73	2.90
TSC2003IR	296-12244-2-ND	Touch Screen Controller *NEW!*	16-TSSOP	6520.00/2,500		
TSC2200IPW	TSC2200IPW-ND	Programmable Touch Screen Controller with 12-Bit, 125KHz ADC and Keypad Interface *NEW!*	28-TSSOP	4.93	3.95	3.07

Audio Analog-to-Digital Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
DF1706E	DF1706E-ND	Digital Filter for PCM1704	28-SOP	15.80	14.75	13.69
PCM78P	PCM78P-ND	16-Bit, Audio ADC, -82dB THD	28-Dip	44.34	41.39	38.43
PCM1750U	PCM1750U-ND	Dual 18-Bit, Audio D/A Converter	28-SOIC	32.34	30.19	28.03
PCM1760P	PCM1760P-ND	Dual 20-Bit, ADC	28-Dip	25.91	24.18	22.46
DF1760P	DF1760P-ND	Digital Filter for PCM1760	28-Dip	19.95	18.62	17.29
PCM1760U	PCM1760U-ND	Dual 20-Bit, ADC	28-SOIC	25.91	24.18	22.46
DF1760U	DF1760U-ND	Digital Filter for PCM1760	28-SOIC	19.95	18.62	17.29
PCM1800E	PCM1800E-ND	Single-Ended 20-Bit, Stereo ADC	24-SSOP	5.66	4.53	3.83
PCM1801U	PCM1801U-ND	Stereo Audio ADC	14-SOIC	4.86	3.89	3.03

DSP Compatible Analog-to-Digital Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
AFE1302Y/250	AFE1302YCT-ND	Analog ADSL Front End	48-QFP	15.15	14.14	13.13
AFE1302Y/250	AFE1302YTR-ND	Analog ADSL Front End	48-QFP	3219.50/250		

Digital-to-Analog Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
DAC701KH	DAC701KH-ND	16-Bit, D/A Converter	24-Dip	71.51	66.74	61.98
DAC712P	DAC712P-ND	16-Bit, DAC (16-Bit Bus Interface)	28-Dip .3	25.71	24.00	22.29
DAC712PB	DAC712PB-ND	16-Bit, DAC (16-Bit Bus Interface)	28-Dip	30.56	28.52	26.49
DAC712PK	DAC712PK-ND	16-Bit, DAC (16-Bit Bus Interface)	28-Dip	27.50	25.67	23.83
DAC712U	DAC712U-ND	16-Bit, DAC (16-Bit Bus Interface)	28-SOIC	19.83	17.85	15.83
DAC714P	DAC714P-ND	16-Bit, DAC (Serial Data Interface)	16-Dip	21.42	20.00	18.57
DAC714U	DAC714U-ND	16-Bit, DAC (Serial Data Interface)	16-SOIC	17.85	16.66	15.47
DAC715P	DAC715P-ND	16-Bit, DAC (16-Bit Bus Interface)	28-Dip	21.42	20.00	18.57
DAC715U	DAC715U-ND	16-Bit, DAC (16-Bit Bus Interface)	28-SOIC	19.83	17.85	15.83
DAC715UB	DAC715UB-ND	16-Bit, DAC (16-Bit Bus Interface)	28-SOIC	21.21	19.80	18.39
DAC716P	DAC716P-ND	16-Bit, D/A Converter	16-Dip	21.42	20.00	18.57
DAC716PB	DAC716PB-ND	16-Bit, D/A Converter	16-Dip	25.46	23.76	22.07
DAC716PK	DAC716PK-ND	16-Bit, D/A Converter	16-Dip	22.92	21.40	19.87
DAC716U	DAC716U-ND	16-Bit, D/A Converter	16-SOIC	17.85	16.66	15.47
DAC716UB	DAC716UB-ND	16-Bit, D/A Converter	16-SOIC	21.21	19.80	18.39
DAC716UK	DAC716UK-ND	16-Bit, D/A Converter	16-SOIC	19.10	17.83	16.55
DAC725JP	DAC725JP-ND	Dual 16-Bit, D/A Converter	28-Dip	71.31	66.56	61.81
DAC725KP	DAC725KP-ND	Dual 16-Bit, D/A Converter	28-Dip	85.73	80.01	74.30
DAC811JU	DAC811JU-ND	MPU-Compatible 12-Bit, DAC	28-SOIC	15.56	14.52	13.49
DAC813AU	DAC813AU-ND	MPU-Compatible 12-Bit, DAC	28-SOIC	19.25	17.97	16.68
DAC813JP	DAC813JP-ND	MPU-Compatible 12-Bit, DAC	28-Dip	19.06	17.16	15.22
DAC813JU	DAC813JU-ND	MPU-Compatible 12-Bit, DAC	28-SOIC	15.62	14.58	13.54
DAC900E	DAC900E-ND	10-Bit, 165Msps DAC	28-TSSOP	9.90	7.92	6.69
DAC900U	DAC900U-ND	10-Bit, 165Msps Current Out DAC	28-SOIC	9.90	7.92	6.69
DAC902E	DAC902E-ND	12-Bit, 165Msps DAC	28-TSSOP	12.41	11.18	9.91

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
DAC902U	DAC902U-ND	12-Bit, 165Msps Current Out DAC	28-SOIC	12.41	11.18	9.91
DAC904E	DAC904E-ND	14-Bit, 165Msps DAC	28-TSSOP	15.94	14.36	12.73
DAC904U	DAC904U-ND	14-Bit, 165Msps Current Out DAC	28-SOIC	15.94	14.36	12.73
DAC908E	DAC908E-ND	8-Bit, 165Msps DAC	28-TSSOP	6.06	4.85	4.10
DAC908U	DAC908U-ND	8-Bit, 165Msps Current Out DAC	28-SOIC	6.06	4.85	4.10
DAC1220E	DAC1220E-ND	20-Bit, Mono, LP, Delta-Sigma DAC	16-SSOP	10.01	9.02	8.00
DAC1221E	DAC1221E-ND	16-Bit, DAC	16-SSOP	9.52	7.62	6.43
DAC2900Y/250	DAC2900Y/250CT-ND	10-Bit, 125Msps Dual DAC	48-TQFP	14.58	13.13	11.64
DAC2900Y/250	DAC2900Y/250TR-ND	10-Bit, 125Msps Dual DAC	48-TQFP	2789.00/250		
DAC2902Y/250	DAC2902Y/250CT-ND	12-Bit, 125Msps Dual DAC	48-TQFP	21.99	20.53	19.06
DAC2902Y/250	DAC2902Y/250TR-ND	12-Bit, 125Msps Dual DAC	48-TQFP	4673.00/250		
DAC4813AP	DAC4813AP-ND	Quad 12-Bit, DAC (12-Bit Interface)	28-Dip	70.74	66.03	61.31
DAC4815AP	DAC4815AP-ND	Quad 12-Bit, DAC (8-Bit Interface)	28-Dip	59.69	55.71	51.73
DAC7512E/250	DAC7512ECT-ND	12-Bit, Serial In, LP R/R DAC	8-MSOP	3.04	2.43	1.89
DAC7512E/250	DAC7512ETR-ND	12-Bit, Serial In, LP R/R DAC	8-MSOP	449.00/250		
DAC7512N/250	DAC7512NCT-ND	12-Bit, Serial In, LP R/R DAC	SOT-23-6	2.93	2.34	1.82
DAC7512N/250	DAC7512NTR-ND	12-Bit, Serial In, LP R/R DAC	SOT-23-6	432.25/250		
DAC7513E/250	DAC7513ECT-ND	12-Bit, Serial In, LP R/R DAC	8-MSOP	3.04	2.43	1.89
DAC7513E/250	DAC7513ETR-ND	12-Bit, Serial In, LP R/R DAC	8-MSOP	449.00/250		
DAC7513N/250	DAC7513NCT-ND	12-Bit, Serial In, LP R/R DAC	SOT-23-8	2.93	2.34	1.82
DAC7513N/250	DAC7513NTR-ND	12-Bit, Serial In, LP R/R DAC	SOT-23-8	432.25/250		
DAC7541AJP	DAC7541AJP-ND	Quad 12-Bit, CMOS DAC	18-Dip	10.13	9.12	8.09
DAC7541AJU	DAC7541AJU-ND	Quad 12-Bit, CMOS DAC	18-SOIC	10.13	9.12	8.09
DAC7541AKP	DAC7541AKP-ND	Quad 12-Bit, CMOS DAC	18-Dip	11.51	10.37	9.20
DAC7541AKU	DAC7541AKU-ND	Quad 12-Bit, CMOS DAC	18-SOIC	11.51	10.37	9.20
DAC7545GLU	DAC7545GLU-ND	12-Bit, CMOS Multiplying DAC (MPU Compatible)	20-SOIC	17.19	16.05	14.90
DAC7545JU	DAC7545JU-ND	12-Bit, CMOS Multiplying DAC (MPU Compatible)	20-SOIC	9.78	8.81	7.81
DAC7611P	DAC7611P-ND	12-Bit, Serial General Purpose DAC	8-Dip	5.44	4.36	3.68
DAC7611PB	DAC7611PB-ND	12-Bit, Serial General Purpose DAC	8-Dip	6.44	5.16	4.35
DAC7611U	DAC7611U-ND	12-Bit, Serial General Purpose DAC	8-SOIC	5.11	4.09	3.18
DAC7611UB	DAC7611UB-ND	12-Bit, Serial General Purpose DAC	8-SOIC	5.36	4.29	3.62
DAC7612U	DAC7612U-ND	12-Bit, Dual/Serial GP DAC	8-SOIC	5.38	4.31	3.35
DAC7612UB	DAC7612UB-ND	12-Bit, Dual/Serial GP DAC	8-SOIC	5.66	4.53	3.83
DAC7613E	DAC7613E-ND	12-Bit, Volt. Out Mono Parallel DAC ±2LSB	24-SSOP	4.55	3.64	2.83
DAC7613EB	DAC7613EB-ND	12-Bit, Volt. Out Mono Parallel DAC ±1LSB	24-SSOP	5.36	4.29	3.34
DAC7614E	DAC7614E-ND	Quad Serial-In 12-Bit DAC	20-QSOP	10.10	9.09	8.06
DAC7614EB	DAC7614EB-ND	Quad Serial-In 12-Bit DAC	20-QSOP	10.80	9.72	8.62
DAC7614P	DAC7614P-ND	Quad Serial-In 12-Bit DAC, ±2 LSB	16-Dip	14.66	13.20	11.71
DAC7614PB	DAC7614PB-ND	Quad Serial-In 12-Bit DAC, ±1 LSB	16-Dip	15.86	14.28	12.67
DAC7614U	DAC7614U-ND	Quad Serial-In 12-Bit DAC, ±2 LSB	16-SOIC	10.10	9.09	8.06
DAC7614UB	DAC7614UB-ND	Quad Serial-In 12-Bit DAC, ±1 LSB	16-SOIC	10.80	9.72	8.62
DAC7615E	DAC7615E-ND	Quad Serial-In 12-Bit DAC	20-QSOP	10.10	9.09	8.06
DAC7615P	DAC7615P-ND	Quad Serial-In 12-Bit, General Purpose D/A, ±2 LSB	16-Dip	15.84	14.79	13.73
DAC7615PB	DAC7615PB-ND	Quad Serial-In 12-Bit, General Purpose D/A, ±1 LSB	16-Dip	17.13	15.99	14.85
DAC7615U	DAC7615U-ND	Quad Serial-In 12-Bit, General Purpose D/A, ±2 LSB	16-SOIC	10.10	9.09	8.06
DAC7615UB	DAC7615UB-ND	Quad Serial-In 12-Bit, General Purpose D/A, ±1 LSB	16-SOIC	10.80	9.72	8.62
DAC7616EB	DAC7616EB-ND	Quad Serial In 12-Bit DAC, ±1 LSB	20-SSOP	9.70	8.73	7.75
DAC7616UB	DAC7616UB-ND	Quad Serial In 12-Bit DAC, ±1 LSB	16-SOP	9.70	8.73	7.75
DAC7617EB	DAC7617EB-ND	Quad Serial In 12-Bit DAC, ±1 LSB	20-SSOP	9.70	8.73	7.75
DAC7617UB	DAC7617UB-ND	Quad Serial In 12-Bit DAC, ±1 LSB	16-SOP	9.70	8.73	7.75
DAC7621E	DAC7621E-ND	12-Bit, Parallel In DAC, ±2LSB	20-SSOP	5.51	4.41	3.43
DAC7621EB	DAC7621EB-ND	12-Bit, Parallel In DAC, ±1LSB	20-SSOP	5.78	4.63	3.91
DAC7624P	DAC7624P-ND	12-Bit, Quad DAC, ±2LSB, Mid-Scale Reset	28-Dip	15.84	14.79	13.73
DAC7624PB	DAC7624PB-ND	12-Bit, Quad DAC, ±1LSB, Mid-Scale Reset	28-Dip	17.13	15.99	14.85
DAC7624U	DAC7624U-ND	12-Bit, Quad DAC, ±2LSB, Mid-Scale Reset	28-SOIC	15.48	13.94	12.36
DAC7624UB	DAC7624UB-ND	12-Bit, Quad DAC, ±1LSB, Mid-Scale Reset	28-SOIC	16.58	14.93	13.24
DAC7625P	DAC7625P-ND	12-Bit, Quad DAC, ±2LSB, Zero-Scale Reset	28-Dip	15.84	14.79	13.73
DAC7625PB	DAC7625PB-ND	12-Bit, Quad DAC, ±1LSB, Zero-Scale Reset	28-Dip	17.13	15.99	14.85
DAC7625U	DAC7625U-ND	12-Bit, Quad DAC, ±2LSB, Zero-Scale Reset	28-SOIC	15.48	13.94	12.36
DAC7625UB	DAC7625UB-ND	12-Bit, Quad DAC, ±1LSB, Zero-Scale Reset	28-SOIC	16.58	14.93	13.24
DAC7631E	DAC7631E-ND	16-Bit, Low Power (2.5mW) DAC	20-SSOP	8.81	7.94	7.04
DAC7631EB	DAC7631EB-ND	16-Bit, Low Power (2.5mW) DAC	20-SSOP	10.41	9.38	8.32
DAC7634E	DAC7634E-ND	16-Bit, Quad D/A Converter	48-SSOP	27.05	25.25	23.44
DAC7634EB	DAC7634EB-ND	16-Bit, Quad D/A Converter	48-SSOP	31.44	29.35	27.25
DAC7641YB/250	DAC7641YBCT-ND	16-Bit, 5V, D/A Converter	32-TQFP	11.05	9.95	8.82
DAC7641YB/250	DAC7641YBTR-ND	16-Bit, 5V, D/A Converter	32-TQFP	2113.25/250		
DAC7641Y/250	DAC7641YCT-ND	16-Bit, 5V, D/A Converter	32-TQFP	9.36	8.43	7.48
DAC7641Y/250	DAC7641YTR-ND	16-Bit, 5V, D/A Converter	32-TQFP	1826.50/250		
DAC7642VFT	DAC7642VFTCT-ND	16-Bit, Dual Low Pwr. DAC *NEW!*	32-LQFP	15.89	14.31	12.69
DAC7642VFT	DAC7642VFTTR-ND	16-Bit, Dual Low Pwr. DAC *NEW!*	32-LQFP	3041.00/250		
DAC7643VFT	DAC7643VFTCT-ND	16-Bit, Dual Low Pwr. DAC *NEW!*	32-LQFP	15.89	14.31	12.69
DAC7643VFT	DAC7643VFTTR-ND	16-Bit, Dual Low Pwr. DAC *NEW!*	32-LQFP	3041.00/250		
DAC7644E	DAC7644E-ND	16-Bit, Quad/Parallel ±5V, DAC	48-SSOP	27.05	25.25	23.44
DAC7644EB	DAC7644EB-ND	16-Bit, Quad/Parallel ±5V, DAC	48-SSOP	31.44	29.35	27.25
DAC7714U	DAC7714U-ND	12-Bit, Quad, Volt. Out, Serial DAC	16-SOIC	15.51	14.48	13.45
DAC7714UB	DAC7714UB-ND	12-Bit, Quad, Volt. Out, Serial DAC	16-SOIC	17.03	15.89	14.76
DAC7715U	DAC7715U-ND	12-Bit, Quad, Volt. Out, Serial DAC	16-SOIC	15.51	14.48	13.45
DAC7715UB	DAC7715UB-ND	12-Bit, Quad, Volt. Out, Serial DAC	16-SOIC	17.03	15.89	14.76
DAC7744E	DAC7744E-ND	Quad Parallel 16-Bit DAC	48-SSOP	42.66	39.82	36.98
DAC7744EB	DAC7744EB-ND	Quad Parallel 16-Bit DAC	48-SSOP	47.76	44.58	41.40
DAC7744EC	DAC7744EC-ND	Quad Parallel 16-Bit DAC	48-SSOP	56.51	52.74	48.98
DAC7734E	DAC7734E-ND	Quad Serial 16-Bit, Volt. Out DAC	48-SSOP	42.66	39.82	36.98
DAC7734EB	DAC7734EB-ND	Quad Serial 16-Bit, Volt. Out DAC	48-SSOP	47.76	44.58	41.40
DAC7734EC	DAC7734EC-ND	Quad Serial 16-Bit, Volt. Out DAC	48-SSOP	56.51	52.74	48.98
DAC7724N	DAC7724N-ND	12-Bit, Quad Parallel DAC	28-PLCC	21.15	19.74	18.33
DAC7724NB	DAC7724NB-ND	12-Bit, Quad Parallel DAC	28-PLCC	22.83	21.31	19.79
DAC7724U	DAC7724U-ND	12-Bit, Quad Parallel DAC	28-SOIC	18.83	16.95	15.03
DAC7724UB	DAC7724UB-ND	12-Bit, Quad Parallel DAC	28-SOIC	18.30	17.08	15.86
DAC7725N	DAC7725N-ND	12-Bit, Quad Parallel DAC	28-PLCC	21.15	19.74	18.33
DAC7725NB	DAC7725NB-ND	12-Bit, Quad Parallel DAC	28-PLCC	22.83	21.31	19.79
DAC7725UB	DAC7725UB-ND	12-Bit, Quad Parallel DAC	28-SOIC	18.30	17.08	15.86
DAC7731EC	DAC7731EC-ND	16-Bit, Low Power DAC *NEW!*	24-SSOP	15.88	14.30	12.68
DAC7741YC/250	DAC7741YC/250CT-ND	16-Bit, Low Power DAC *NEW!*	48-LQFP	15.21	14.20	13.19
DAC7741YC/250	DAC7741YC/250TR-ND	16-Bit, Low Power DAC *NEW!*	48-LQFP	3232.25/250		
DAC7801KP	DAC7801KP-ND	Dual 12-Bit, Monolithic DAC	24-Dip	22.35	20.86	19.37
DAC7801LP	DAC7801LP-ND	Dual 12-Bit, Monolithic DAC	24-Dip	27.35	25.53	23.70
DAC7802KP	DAC7802KP-ND	Dual 12-Bit, Monolithic DAC	24-Dip	18.66	17.42	16.18
DAC7802LP	DAC7802LP-ND	Dual 12-Bit, Monolithic DAC	24-Dip	31.62	29.52	27.41
DAC8043UC	DAC8043UC-ND	Serial-In 12-Bit DAC	8-SOIC	15.54	14.00	12.41
DAC8043U	DAC8043U-ND	Serial- In 12-Bit DAC	8-SOIC	11.93	10.74	9.53
DAC8501E/250	DAC8501E/250CT-ND	16-Bit, Low Power DAC	8-TSSOP	5.38	4.31	3.64
DAC8501E/250	DAC8501E/250TR-ND	16-Bit, Low Power DAC	8-TSSOP	874.25/250		
DAC8531E/250	DAC8531E/250CT-ND	16-Bit, Low Power DAC	8-TSSOP	5.38	4.31	3.64
DAC8531E/250	DAC8531E/250TR-ND	16-Bit, Low Power DAC	8-TSSOP	874.25/250		
DAC8532IDGK	DAC8532IDGK-ND	16-Bit, 2-Channel, LP DAC *NEW!*	8-MSOP	8.41	7.58	6.72
DAC8541Y/250	296-12427-1-ND	16-Bit, Low Power DAC *NEW!*	32-TQFP	5.42	4.34	3.66
DAC8541Y/250	296-12427-2-ND	16-Bit, Low Power DAC *NEW!*	32-TQFP	880.75/250		
PCM54HP	PCM54HP-ND	16-Bit, Monolithic DAC	28-Dip	18.02	16.82	15.62
PCM1702U	PCM1702U-ND	20-Bit Advance Sign Magnitude DAC	20-SOIC	16.79	15.67	14.55
THS5641AIDW	296-2989-5-ND	8-Bit, 100Msps 3-5V Single DAC	28-SOIC	5.60	4.48	3.78
THS5651AIDW	296-2992-5-ND	10-Bit, 125Msps 3-5V Single DAC	20-SOIC	9.32	7.46	6.30
THS5651AIPW	296-2287-5-ND	10-Bit, 125Msps 3-5V Single DAC	28-TSSOP	9.32	7.46	6.30
THS5661AIDW	296-2995-5-ND	12-Bit, 125Msps 3-5V Single DAC	28-SOIC	10.85	9.77	8.66
THS5661AIPW	296-2288-5-ND	12-Bit, 125Msps 3-5V Single DAC	28-TSSOP	10.85	9.77	8.66
THS5671AIDW	296-2998-5-ND	14-Bit, 125Msps 3-5V Single DAC	28-SOIC	14.46	13.02	11.55
THS5671AIPW	296-2289-5-ND	14-Bit, 125Msps 3-5V Single DAC	28-TSSOP	14.46	13.02	11.55
THS8133BCPHP	296-2999-ND	10-Bit, 80Msps 3-5V Triple Video DAC	48-HTQFP	11.76	10.59	9.39
THS8134BCPHP	296-3001-ND	8-Bit, 80Msps 3-5V Triple Video DAC	48-HTQFP	8.81	7.94	7.04
TLC5602CDW	296-3003-5-ND	8-Bit, 30Msps 5V Single Video DAC	20-SOIC	2.86	2.29	1.78
TLC5615CD	296-3004-5-ND	10-Bit, 12.5µs 5V Single Serial DAC	8-SOIC	3.89	3.12	2.43
TLC5615CDGK	296-3005-5-ND	10-Bit, 12.5us 5V Single Serial DAC	8-TSSOP	3.89	3.12	2.43
TLC5615CP	296-3006-5-ND	10-Bit, 12.5µs 5V Single Serial DAC	8-Dip	3.89	3.12	2.43
TLC5615ID	296-3007-5-ND	10-Bit, 12.5µs 5V Single Serial DAC	8-SOIC	4.21	3.37	2.62
TLC5615IP	296-2292-5-ND	10-Bit, 12.5µs 5V Single Serial DAC	8-Dip	4.21	3.37	2.62
TLC5618AQD	296-3011-5-ND	12-Bit, 2.5µs 5V Dual Serial DAC	8-SOIC	8.82	7.06	5.96
TLC5620CD	296-1861-5-ND	8-Bit, 10µs 5V Quad Serial DAC	14-SOIC	3.04	2.43	1.89
TLC5620CN	296-1862-5-ND	8-Bit, 10µs 5V Quad Serial DAC	14-Dip	3.04	2.43	1.89
TLC5620ID	296-1339-5-ND	8-Bit, 10µs 5V Quad Serial DAC	14-SOIC	3.26	2.61	2.03
TLC5620IDR	296-1339-1-ND	8-Bit, 10µs 5V Quad Serial DAC	14-SOIC	3.26	2.61	2.03
TLC5620IDR	296-1339-2-ND	8-Bit, 10µs 5V Quad Serial DAC	14-SOIC	4567.50/2,500		
TLC5620IN	296-3012-5-ND	8-Bit, 10µs 5V Quad Serial DAC	14-Dip	3.26	2.61	2.03
TLC5628CDW	296-1864-5-ND	8-Bit, 10µs 5V Octal Serial DAC	16-SOIC	4.95	3.96	3.08
TLC5628CN	296-1865-5-ND	8-Bit, 10µs 5V Octal Serial DAC	16-Dip	4.95	3.96	3.08
TLC5628IDW	296-3013-5-ND	8-Bit, 10µs 5V Octal Serial DAC	16-SOIC	5.33	4.27	3.32
TLC5628IN	296-3014-5-ND	8-Bit, 10µs 5V Octal Serial DAC	16-Dip	5.33	4.27	3.32
TLC7225CDW	296-3015-5-ND	8-Bit, 5µs 5-15V Quad Parallel DAC	24-SOIC	4.66	3.73	2.90
TLC7225IDW	296-3016-5-ND	8-Bit, 5µs 5-15V Quad Parallel DAC	24-SOIC	5.00	4.00	3.11
TLC7226CDW	296-3017-5-ND	8-Bit, 5µs 15V Quad Parallel DAC	20-SOIC	4.46	3.57	2.78
TLC7226CN	296-3018-5-ND	8-Bit, 5µs 15V Quad Parallel DAC	20-Dip	4.46	3.57	2.78
TLC7226IDW	296-3019-5-ND	8-Bit, 5µs 15V Quad Parallel DAC	20-SOIC	4.79	3.84	2.99
TLC7226IN	296-2296-5-ND	8-Bit, 5µs 15V Quad Parallel DAC	20-Dip	4.79	3.84	2.99
TLC7524CD	296-1866-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-SOIC	3.06	2.45	1.91
TLC7524CFN	296-1867-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	20-PLCC	3.06	2.45	1.91
TLC7524CN	296-1868-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-Dip	3.06	2.45	1.91
TLC7524CPW	296-3020-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-TSSOP	3.06	2.45	1.91
TLC7524EN	296-1869-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-Dip	3.51	2.81	2.19
TLC7524ID	296-3021-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-SOIC	3.29	2.63	2.05
TLC7524IFN	296-3022-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-PLCC	3.29	2.63	2.05
TLC7524IN	296-3023-5-ND	8-Bit, 0.1µs 5-15V Single Parallel Mult. DAC	16-Dip	3.29	2.63	2.05
TLC7528CDW	296-1340-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-SOIC	3.20	2.56	1.99
TLC7528CDWR	296-1340-1-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-SOIC	3.24	2.60	2.02
TLC7528CDWR	296-1340-2-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-SOIC	3622.00/2,000		
TLC7528CFN	296-3024-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-PLCC	3.20	2.56	1.99
TLC7528CN	296-1871-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-Dip	3.20	2.56	1.99
TLC7528EDW	296-3025-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-SOIC	3.69	2.96	2.30
TLC7528EN	296-3026-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-Dip	3.69	2.96	2.30
TLC7528IDW	296-3027-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-SOIC	3.44	2.76	2.15
TLC7528IFN	296-3028-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-PLCC	3.44	2.76	2.15
TLC7528IN	296-3029-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-Dip	3.44	2.76	2.15
TLC7528IPW	296-3030-5-ND	8-Bit, 0.1µs 5-15V Dual Parallel Mult. DAC	20-TSSOP	3.44	2.76	2.15
TLC7628CDW	296-3031-5-ND	8-Bit, 0.1µs 11-14V Dual Parallel Mult. DAC	20-SOIC	3.44	2.76	2.15
TLC7628CN	296-3032-5-ND	8-Bit, 0.1µs 11-14V Dual Parallel Mult. DAC	20-Dip	2.86	2.29	1.78
TLV320DAC23PW	296-11658-5-ND	8 to 96kHz Stereo DSP DAC	28-TSSOP	4.07	3.26	2.54
TLV5604CD	296-2297-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC	16-SOIC	9.10	7.28	6.15

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLV5604CPW	296-3033-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC	16-TSSOP	9.10	7.28	6.15
TLV5604ID	296-1916-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC	16-SOIC	9.78	7.83	6.61
TLV5604IPW	296-1917-5-ND	10-Bit, 3µs 2.7-5.5V Quad Parallel DAC	16-TSSOP	9.78	7.83	6.61
TLV5606CD	296-2298-5-ND	10-Bit, 2 or 9µs 2.7-5.5V Single Serial DAC	8-SOIC	3.78	3.03	2.36
TLV5606ID	296-3034-5-ND	10-Bit, 2 or 9µs 2.7-5.5V Single Serial DAC	8-SOIC	4.07	3.26	2.54
TLV5606IDGK	296-3035-5-ND	10-Bit, 2 or 9µs 2.7-5.5V Single Serial DAC	8-MSOP	4.07	3.26	2.54
TLV5608IDW	296-3036-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-SOIC	9.80	7.84	6.62
TLV5608IPW	296-3037-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-TSSOP	9.80	7.84	6.62
TLV5610IDW	296-3038-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-SOIC	14.89	13.41	11.90
TLV5610IPW	296-3039-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-TSSOP	14.89	13.41	11.90
TLV5613CDW	296-2299-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOIC	6.80	5.44	4.59
TLV5613CPW	296-1918-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-TSSOP	6.80	5.44	4.59
TLV5613IDW	296-1919-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOIC	7.30	5.84	4.93
TLV5613IPW	296-1920-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-TSSOP	7.30	5.84	4.93
TLV5614CD	296-2300-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	16-SOIC	13.08	11.78	10.45
TLV5614CPW	296-3040-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	16-TSSOP	13.08	11.78	10.45
TLV5614ID	296-1921-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	16-SOIC	14.06	12.66	11.23
TLV5614IPW	296-1922-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	16-TSSOP	14.06	12.66	11.23
TLV5616CD	296-2301-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOIC	5.44	4.36	3.68
TLV5616CDR	296-2301-1-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOIC	5.44	4.36	3.68
TLV5616CDR	296-2301-2-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOIC	8432.50/2,500		
TLV5616CP	296-3041-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-Dip	5.44	4.36	3.68
TLV5616ID	296-1923-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOIC	5.84	4.68	3.95
TLV5616IDR	296-1923-1-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOIC	5.84	4.68	3.95
TLV5616IDGK	296-3042-5-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-MSOP	5.84	4.68	3.95
TLV5616IDR	296-1923-2-ND	12-Bit, 3µs 2.7-5.5V Quad Serial DAC	8-SOP	9052.50/2,500		
TLV5617ACD	296-2302-5-ND	10-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	6.48	5.19	4.38
TLV5617AID	296-3043-5-ND	10-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	6.96	5.57	4.70
TLV5618ACD	296-2303-5-ND	12-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	8.08	6.47	5.46
TLV5618AID	296-3044-5-ND	12-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	8.70	6.96	5.88
TLV5618AIP	296-10735-5-ND	12-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-Dip	8.70	6.96	5.88
TLV5618AQD	296-2304-5-ND	12-Bit, 2.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	8.82	7.06	5.96
TLV5619IDW	296-3045-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOIC	7.30	5.84	4.93
TLV5619IPW	296-2305-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-TSSOP	7.30	5.84	4.93
TLV5620CD	296-3047-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC	14-SOIC	3.04	2.43	1.89
TLV5620CN	296-2306-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC	14-Dip	3.04	2.43	1.89
TLV5620ID	296-3048-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC	14-SOIC	3.26	2.61	2.03
TLV5620IN	296-3049-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC	14-Dip	3.26	2.61	2.03
TLV5621ID	296-2307-5-ND	8-Bit, 10µs 2.7-5.5V Quad Serial DAC	14-SOIC	3.71	2.97	2.31
TLV5623CD	296-2308-5-ND	8-Bit, 3µs 2.7-5.5V Single Serial DAC	8-SOIC	2.48	1.98	1.54
TLV5623CDGK	296-3051-5-ND	8-Bit, 3µs 2.7-5.5V Single Serial DAC	8-MSOP	2.48	1.98	1.54
TLV5623ID	296-3052-5-ND	8-Bit, 3µs 2.7-5.5V Sgl. Serial DAC	8-SOIC	2.66	2.13	1.66
TLV5623IDGK	296-3053-5-ND	8-Bit, 3µs 2.7-5.5V Single Serial DAC	8-MSOP	2.66	2.13	1.66
TLV5624CD	296-2309-5-ND	8-Bit, 1.0-3.5µs 2.7-5.5V Single Serial DAC	8-SOIC	3.53	2.83	2.20
TLV5624ID	296-3054-5-ND	8-Bit, 1.0-3.5µs 2.7-5.5V Single Serial DAC	8-SOIC	3.78	3.03	2.36
TLV5624IDGK	296-3055-5-ND	8-Bit, 1.0-3.5µs 2.7-5.5V Single Serial DAC	8-MSOP	3.78	3.03	2.36
TLV5625CD	296-2310-5-ND	8-Bit, 2.5 or 12µs 2.7-5.5V Dual Serial DAC	8-SOIC	3.71	2.97	2.31
TLV5625ID	296-3056-5-ND	8-Bit, 2.5 or 12µs 2.7-5.5V Dual Serial DAC	8-SOIC	4.01	3.21	2.50
TLV5626CD	296-2311-5-ND	8-Bit, 1µs 2.7-5.5V Dual Serial DAC	8-SOIC	4.75	3.80	2.96
TLV5626ID	296-3057-5-ND	8-Bit, 1µs 2.7-5.5V Dual Serial DAC	8-SOIC	5.11	4.09	3.18
TLV5627CD	296-2312-5-ND	8-Bit, 3µs 2.7-5.5V Dual Serial DAC	16-SOIC	5.12	4.10	3.46
TLV5627ID	296-3058-5-ND	8-Bit, 3µs 2.7-5.5V Dual Serial DAC	8-SOIC	5.50	4.40	3.72
TLV5627IPW	296-3059-5-ND	8-Bit, 3µs 2.7-5.5V Dual Serial DAC	16-TSSOP	5.50	4.40	3.72
TLV5628CDW	296-3060-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC	16-SOIC	4.95	3.96	3.08
TLV5628CN	296-2313-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC	16-Dip	4.95	3.96	3.08
TLV5628IDW	296-3061-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC	16-SOIC	5.33	4.27	3.32
TLV5628IN	296-3062-5-ND	8-Bit, 10µs 2.7-5.5V Octal Serial DAC	16-Dip	5.33	4.27	3.32
TLV5629IDW	296-3063-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-SOIC	5.68	4.55	3.84
TLV5629IPW	296-3064-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-TSSOP	5.68	4.55	3.84
TLV5630IDW	296-3065-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-SOIC	15.54	14.00	12.41
TLV5630IPW	296-3066-5-ND	12-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-TSSOP	15.54	14.00	12.41
TLV5631IDW	296-3067-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-SOIC	8.81	7.94	7.04
TLV5631IPW	296-3068-5-ND	10-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-TSSOP	8.81	7.94	7.04
TLV5632IDW	296-3069-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-SOIC	6.06	4.85	4.10
TLV5632IPW	296-3070-5-ND	8-Bit, 1/3µs 2.7-5.5V Octal Serial DAC	20-TSSOP	6.06	4.85	4.10
TLV5633CDW	296-2314-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOIC	8.48	6.79	5.73
TLV5633IDW	296-3071-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-SOIC	9.12	7.30	6.16
TLV5633IPW	296-3072-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	20-TSSOP	9.12	7.30	6.16
TLV5636CD	296-2315-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	8-SOIC	7.26	5.81	4.91
TLV5636ID	296-3073-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	8-SOIC	7.80	6.24	5.27
TLV5636IDGK	296-3074-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel DAC	8-MSOP	7.80	6.24	5.27
TLV5637CD	296-2316-5-ND	10-Bit, 1 µs 2.7-5.5V Dual Serial DAC	8-SOIC	8.60	6.88	5.81
TLV5637ID	296-3075-5-ND	10-Bit, 1 µs 2.7-5.5V Dual Serial DAC	8-SOIC	9.24	7.40	6.24
TLV5638CD	296-2317-5-ND	12-Bit, 1 or 3.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	9.30	7.44	6.28
TLV5638ID	296-3076-5-ND	12-Bit, 1 or 3.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	8.33	7.50	6.65
TLV5638QD	296-3077-5-ND	12-Bit, 1 or 3.5µs 2.7-5.5V Dual Serial DAC	8-SOIC	8.45	7.61	6.75
TLV5639CDW	296-2318-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel Serial DAC	20-SOIC	8.48	6.79	5.73
TLV5639IDW	296-3078-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel Serial DAC	20-SOIC	9.12	7.30	6.16
TLV5639IPW	296-3079-5-ND	12-Bit, 1µs 2.7-5.5V Single Parallel Serial DAC	20-TSSOP	9.12	7.30	6.16

Audio Direct Stream Digital-to-Analog Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
DSD1700E	DSD1700E-ND	Dual Differential 5V, DAC	14-Dip	15.94	14.36	12.73

Audio Digital-to-Analog Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
PCM55HP	PCM55HP-ND	16-Bit, Monolithic Audio D/A	24-SOIC	30.45	28.42	26.39
PCM56P	PCM56P-ND	Serial In 16-Bit, Mono DAC, -80dB	16-Dip	10.78	8.63	7.28
PCM56U	PCM56U-ND	16-Bit, Audio DAC	16-SOIC	8.94	7.16	6.04
PCM69AP	PCM69AP-ND	Dual 18-Bit, BICMOS Audio D/A	16-Dip	16.01	14.42	12.79
PCM69AP-J	PCM69AP-J-ND	Dual 18-Bit, BICMOS Audio D/A	16-Dip	16.37	15.28	14.19
PCM69AP-K	PCM69AP-K-ND	Dual 18-Bit, BICMOS Audio D/A	16-Dip	23.07	21.54	20.00
PCM69AU	PCM69AU-ND	Dual 18-Bit, BICMOS Audio D/A	20-SOIC	16.01	14.42	12.79
PCM69AU-J	PCM69AU-J-ND	Dual 18-Bit, BICMOS Audio D/A	20-SOIC	16.37	15.28	14.19
PCM69AU-K	PCM69AU-K-ND	Dual 18-Bit, BICMOS Audio D/A	20-SOIC	23.07	21.54	20.00
PCM1600Y	PCM1600Y-ND	24-Bit, 96kHz 6-Channel DAC	48-LQFP	7.50	6.00	5.07
PCM1601Y	PCM1601Y-ND	24-Bit, 96kHz 6-Channel DAC	48-MQFP	7.50	6.00	5.07
PCM1602KY	PCM1602KY-ND	24-Bit, 192kHz, 6-Channel D/A	48-LQFP	6.64	5.32	4.49
PCM1602Y	PCM1602Y-ND	24-Bit, 192kHz, 6-Channel D/A	48-LQFP	5.86	4.69	3.96
PCM1604Y	PCM1604Y-ND	24-Bit, 192KHz 6-Channel DAC	48-LQFP	8.26	6.61	5.58
PCM1605Y	PCM1605Y-ND	24-Bit, 192KHz 6-Channel DAC	48-MQFP	8.26	6.61	5.58
PCM1608KY	PCM1608KY-ND	24-Bit, 192kHz, 8-Channel D/A	48-LQFP	8.84	7.08	5.97
PCM1608Y	PCM1608Y-ND	24-Bit, 192kHz, 8-Channel D/A	48-LQFP	7.78	6.23	5.26
PCM1700P-K	PCM1700P-K-ND	Dual 18-Bit, Monolithic Audio DAC, -92dB THD	28-Dip	25.10	22.10	19.45
PCM1702P	PCM1702P-ND	BiCMOS Advanced Sign Magnitude 20-Bit D/A -88dB THD	16-Dip	16.79	15.67	14.55
PCM1702P-J	PCM1702P-J-ND	20-Bit, CMOS Advanced Sign Magnitude Audio D/A	16-Dip	19.31	18.02	16.74
PCM1702P-K	PCM1702P-K-ND	20-Bit, CMOS Advanced Sign Magnitude Audio D/A	16-Dip	26.15	24.41	22.66
PCM1702U-J	PCM1702U-J-ND	20-Bit, BICMOS Advanced Sign Magnitude	20-SOIC	19.31	18.02	16.74
PCM1702U-K	PCM1702U-K-ND	BiCMOS Advanced Sign Magnitude 20-Bit, D/A -96dB THD	20-SOP	26.15	24.41	22.66
PCM1704U	PCM1704U-ND	24-Bit, 96kHz Audio DAC, 0.0030%THD	20-SOIC	18.47	17.24	16.01
PCM1704U-J	PCM1704U-J-ND	24-Bit, 96kHz Audio DAC, 0.0025%THD	20-SOIC	22.22	20.74	19.26
PCM1704U-K	PCM1704U-K-ND	24-Bit, 96kHz Audio DAC, 0.0015%THD	20-SOIC	32.69	30.51	28.33
DF1704E	DF1704E-ND	Stereo, 24-Bit, Digital Interpolation Filter for PCM1704	28-SSOP	15.94	14.36	12.73
PCM1716E	PCM1716E-ND	24-Bit, Stereo 96kHz Sampling DAC	28-SSOP	5.68	4.55	3.84
PCM1717E	PCM1717E-ND	Stereo Audio DAC	20-SSOP	6.06	4.85	4.10
PCM1718E	PCM1718E-ND	Stereo Audio DAC, -90dB THD	20-SSOP	6.06	4.85	4.10
PCM1719E	PCM1719E-ND	Stereo Audio DAC, -88dB THD	28-SSOP	7.98	6.39	5.39
PCM1720E	PCM1720E-ND	Stereo Audio DAC, MPEG2/AC-3 Compatible	20-SSOP	4.86	3.89	3.03
PCM1723E	PCM1723E-ND	Stereo DAC w/Programmable PLL	24-SSOP	5.29	4.23	3.29
PCM1725U	PCM1725U-ND	16-Bit, Stereo 96kHz Sampling DAC	14-SOIC	2.70	2.16	1.68
PCM1727E	PCM1727E-ND	Stereo DAC with Programmable Dual PLL	24-SSOP	5.64	4.52	3.81
PCM1728E	PCM1728E-ND	24-Bit, 96kHz Stereo Audio DAC	28-SSOP	5.68	4.55	3.84
PCM1730E	PCM1730E-ND	24-Bit, 192kHz Stereo Audio DAC *NEW!*	28-SSOP	9.40	7.52	6.35
PCM1733U	PCM1733U-ND	18-Bit, Low Cost Stereo DAC	14-SOIC	2.70	2.16	1.68
PCM1737E	PCM1737E-ND	192kHz Stereo Audio DAC	28-SSOP	6.64	5.32	4.49
PCM1738E	PCM1738E-ND	192kHz Stereo Audio DAC	28-SSOP	9.52	7.62	6.43
PCM1739E	PCM1739E-ND	192kHz Stereo Audio DAC	28-SSOP	6.64	5.32	4.49
PCM1740E	PCM1740E-ND	PLL DAC with VCXO	24-SSOP	5.64	4.52	3.81
PCM1741E	PCM1741E-ND	24-Bit, 96kHz Audio DAC	16-SSOP	3.13	2.51	1.95
PCM1742E	PCM1742E-ND	24-Bit, 96kHz Audio DAC	16-SSOP	3.47	2.78	2.16
PCM1742KE	PCM1742KE-ND	24-Bit, 96kHz Audio DAC	16-SSOP	3.89	3.12	2.43
PCM1744U	PCM1744U-ND	24-Bit, Low Cost Stereo DAC	14-SOIC	2.70	2.16	1.68
PCM1748E	PCM1748E-ND	24-Bit, Stereo Audio DAC	16-SSOP	3.13	2.51	1.95
PCM1748E/2K	PCM1748ETR-ND	24-Bit, Stereo Audio DAC	16-SSOP	3596.00/2,000		
PCM1748KE	PCM1748KE-ND	24-Bit, Stereo Audio DAC	16-SSOP	3.58	2.87	2.23
PCM1748KE/2K	PCM1748KETR-ND	24-Bit, Stereo Audio DAC	16-SSOP	4106.00/2,000		
PCM1760U-L	PCM1760U-L-ND	Dual 20-Bit, Audio DAC	28-SOIC	20.73	19.35	17.97
PCM2702	PCM2702E-ND	16-Bit, Stereo Audio DAC	28-SSOP	10.48	8.39	7.08

Voltage-to-Frequency Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
VFC32KP	VFC32KP-ND	Voltage-to-Frequency and Frequency-to-Voltage Converter	14-Dip	9.21	8.30	7.36
VFC32KU	VFC32KU-ND	Voltage-to-Frequency and Frequency-to-Voltage Converter	14-SOIC	11.06	9.96	8.84
VFC110AP	VFC110AP-ND	High Frequency Voltage-to-Frequency Converter	14-Dip	19.01	17.12	15.18
VFC320CP	VFC320CP-ND	Voltage-to-Frequency and Frequency-to-Voltage Conv. *NEW!*	14-Dip	19.68	18.37	17.06

4-20mA Transmitters/Receivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
RCV420JP	RCV420JP-ND	1-20mA Prec. Current Loop Receiver	16-Dip	6.42	5.14	4.34
RCV420KP	RCV420KP-ND	4-20mA Prec. Current Loop Receiver	16-Dip	10.88	8.71	7.35
XTR101AP	XTR101AP-ND	Precision, Low Drift, 4-20mA Two-Wire Transmitter	14-Dip	11.61	10.46	9.28
XTR101AU	XTR101AU-ND	Precision, Low Drift, 4-20mA Two-Wire Transmitter	16-SOIC	12.50	11.25	9.98
XTR105P	XTR105P-ND	4-20mA Current Transmitter with Sensor Excitation/Linearization	14-Dip	10.10	8.08	6.82
XTR105PA	XTR105PA-ND	4-20mA Current Transmitter with Sensor Excitation and Linearization	14-Dip	7.22	5.78	4.88
XTR105U	XTR105U-ND	4-20mA Current Transmitter with Sensor Excitation and Linearization	14-SOIC	8.41	7.58	6.72
XTR105UA	XTR105UA-ND	4-20mA Current Transmitter with Sensor Excitation and Linearization	14-SOIC	7.22	5.78	4.88
XTR106P	XTR106P-ND	4-20mA Current Transmitter	14-Dip	10.10	8.08	6.82
XTR106PA	XTR106PA-ND	4-20mA Current Transmitter	14-Dip	7.22	5.78	4.88
XTR106U	XTR106U-ND	4-20mA Current Transmitter	14-SOIC	8.41	7.58	6.72
XTR106UA	XTR106UA-ND	4-20mA Current Transmitter	14-SOIC	7.22	5.78	4.88
XTR108EA/2K5	XTR108EACT-ND	4-20mA 2-Wire Transmitter	24-SSOP	5.20	4.16	3.51
XTR108EA/2K5	XTR108EATR-ND	4-20mA 2-Wire Transmitter	24-SSOP	9455.00/2,500		
XTR110KP	XTR110KP-ND	4-20mA Precision, Voltage-to-Current 4-20mA Converter/Transmitter	16-Dip	10.18	9.17	8.13
XTR110KU	XTR110KU-ND	4-20mA Precision, Voltage-to-Current Converter/Transmitter	16-SOIC	10.18	9.17	8.13
XTR112U	XTR112U-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	8.41	7.58	6.72
XTR112UA	XTR112UA-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	7.22	5.78	4.88
XTR114U	XTR114U-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	8.41	7.58	6.72
XTR114UA	XTR114UA-ND	4-20mA Current Transmitter with Sensor Excitation	14-SOIC	7.22	5.78	4.88
XTR115U	XTR115U-ND	4-20mA Current Transmitter	8-SOIC	2.88	2.30	1.73
XTR115UA	XTR115UA-ND	4-20mA Current Transmitter	8-SOIC	2.28	1.82	1.37
XTR116U	XTR116U-ND	4-20mA Current Transmitter	8-SOIC	2.88	2.30	1.73
XTR116UA	XTR116UA-ND	4-20mA Current Transmitter	8-SOIC	2.28	1.82	1.37

ADSL Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
THS6002CDWP	296-1765-5-ND	Dual Differential Line Driver/Rcvr.	20-HSOP	9.56	7.65	6.46
THS6002IDWP	296-1766-5-ND	Dual Differential Line Driver/Rcvr.	20-HSOP	9.56	7.65	6.46
THS6007IPWP	296-10060-5-ND	Dual Differential Line Driver Low Power Receiver	28-HTSSOP	9.88	7.91	6.67
THS6012CDWP	296-2372-5-ND	Dual Differential ADSL Driver	20-SOIC	8.00	6.40	5.40
THS6012IDWP	296-1767-5-ND	Dual Differential Line Driver	20-HSOP	8.00	6.40	5.40
THS6012IGQER	296-10062-1-ND	Dual Differential Line Driver	80-VFBGA	7.82	6.26	5.28
THS6012IGQER	296-10062-2-ND	Dual Differential Line Driver	80-VFBGA	12462.50/2,500		
THS6032IDWP	296-10065-5-ND	Low Power ADSL Line Driver	20P-SOIC	8.18	6.55	5.53
THS6032IGQER	296-10066-1-ND	Low Power ADSL Line Driver	80-VFBGA	8.00	6.40	5.40
THS6032IGQER	296-10066-2-ND	Low Power ADSL Line Driver	80-VFBGA	12710.00/2,500		
THS6022CPWP	296-1768-5-ND	Dual Differential Line Driver	14-HTSSOP	5.38	4.31	3.64
THS6022IPWP	296-1769-5-ND	Dual Differential Line Driver	14-HTSSOP	5.38	4.31	3.64
THS6032CDWP	296-2373-5-ND	Low Power ADSL Line Driver	20-SOIC	8.18	6.55	5.53
THS6032IDWP	296-10065-5-ND	Low Power ADSL Line Driver	20-HSOP	8.18	6.55	5.53
THS6032IGQER	296-10066-1-ND	Low Power ADSL Line Driver	80-VFBGA	8.00	6.40	5.40
THS6032IGQER	296-10066-2-ND	Low Power ADSL Line Driver	80-VFBGA	12710.00/2,500		
THS6042ID	296-12315-5-ND	High Speed CPE Line Driver	8-SOIC	5.28	4.23	3.57
THS6043ID	296-12316-5-ND	High Speed CPE Line Driver with Shutdown	14-SOIC	5.28	4.23	3.57
THS6043IPWP	296-12317-5-ND	High Speed CPE Line Driver with Shutdown	14-HTSSOP	5.28	4.23	3.57
THS6052ID	296-11984-5-ND	Dual HS ADSL Line Driver	8-SOIC	5.13	4.11	3.20
THS6052IDR	296-11984-1-ND	Dual HS ADSL Line Driver	8-SOIC	4.93	3.95	3.07
THS6052IDR	296-11984-2-ND	Dual HS ADSL Line Driver	8-SOIC	7245.00/2,500		
THS6053ID	296-12318-5-ND	Dual HS ADSL CPE Line Driver with Shutdown	14-SOP	5.13	4.11	3.20
THS6053IPWP	296-11985-5-ND	Dual HS ADSL Line Driver with Shutdown	14-HTSSOP	5.13	4.11	3.20
THS6053IPWPR	296-11985-1-ND	Dual HS ADSL Line Driver with Shutdown	14-HTSSOP	4.93	3.95	3.07
THS6053IPWPR	296-11985-2-ND	Dual HS ADSL Line Driver with Shutdown	14-HTSSOP	5866.00/2,000		
THS6062CD	296-2374-5-ND	Dual ADSL Differential Receiver	8-SOIC	4.73	3.78	2.94
THS6072CD	296-2375-5-ND	Low Power ADSL Differential Receiver	8-SOIC	4.73	3.78	2.94
THS6092ID	296-12319-5-ND	Dual HS ADSL CPE Line Driver with Shutdown	8-SOIC	4.30	3.44	2.68
THS6093ID	296-11986-5-ND	Dual HS ADSL CPE Line Driver with Shutdown	14-SOIC	4.30	3.44	2.68
THS6093IDR	296-11986-1-ND	Dual HS ADSL CPE Line Driver with Shutdown	14-SOIC	4.10	3.28	2.55
THS6093IDR	296-11986-2-ND	Dual HS ADSL CPE Line Driver with Shutdown	14-SOIC	6080.00/2,500		
THS6093IPWP	296-12320-5-ND	Dual HS ADSL CPE Line Driver with Shutdown	14-HTSSOP	4.30	3.44	2.68
TCM1050D	296-9980-5-ND	Dual Transient Voltage Suppressor	8-SOP	2.23	1.78	1.34

Ethernet

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLK1501IRCP	296-10484-ND	0.6 to 1.5Gbps Transceiver	64-VQFP	20.91	19.52	18.13
TLK2201IRCP	296-10485-ND	1.0 to 1.6Gbps Ethernet Transceiver	64-VQFP	9.34	7.48	6.31
TLK2201JRGQE	296-10486-ND	1.0 to 1.6Gbps Ethernet Transceiver	64-VQFP	7.78	6.23	5.26
TLK2201RCP	296-10487-ND	1.0 to 1.6Gbps Ethernet Transceiver	64-VQFP	7.78	6.23	5.26
TLK2501IRCP	296-10488-ND	1.6 to 2.5Gbps Transceiver	64-VQFP	30.78	28.73	26.68
TLK2701IRCP	296-10489-ND	1.6 to 2.7Gbps Transceiver	64-VQFP	30.78	28.73	26.68
TLK2711IRCP	296-12215-ND	1.6 to 2.7Gbps Transceiver *NEW!*	64-VQFP	30.78	28.73	26.68
TLK2711JRGQE	296-12216-ND	1.6 to 2.7Gbps Transceiver *NEW!*	80-BGA	25.65	23.94	22.23
TLK3101IRCP	296-10490-ND	2.5 to 3.125Gbps Transceiver	64-VQFP	49.59	46.29	42.98
TLK3104SAGNT	296-12040-5-ND	10 Gbps Ethernet Backplane Transceiver	289-PBGA	89.07	83.14	77.20
TNETE2201BPHD	296-10772-ND	1.25Gbps Ethernet Transceiver	64-QFP	9.24	7.40	6.24
TNETE2201BPJD	296-10773-ND	1.25Gbps Ethernet Transceiver	64-QFP	9.24	7.40	6.24

LCD

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TFP101APZP	296-9987-ND	86MHz PanelBus DVI Receiver, with HSYNC Jitter Immunity	100-PQFP	7.70	6.16	5.20
TFP101PZP	296-9988-ND	86MHz PanelBus DVI Receiver	100-PQFP	7.70	6.16	5.20
TFP201APZP	296-9989-ND	112MHz PanelBus DVI Receiver, with HSYNC Jitter Immunity	100-PQFP	8.90	8.01	7.11
TFP201PZP	296-9990-ND	112MHz PanelBus DVI Receiver	100-PQFP	8.90	8.01	7.11
TFP401APZP	296-9991-ND	165MHz PanelBus DVI Receiver, with HSYNC Jitter Immunity	100-PQFP	10.81	9.74	8.64
TFP401PZP	296-9992-ND	165MHz PanelBus DVI Receiver	100-PQFP	10.81	9.74	8.64
TFP403PZP	296-9993-ND	165MHz PanelBus DVI Receiver	100-PQFP	10.81	9.74	8.64

LVDM

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN65LVDM050D	296-1416-5-ND	Dual Differential Line Driver/Receiver	16-SOIC	5.40	4.32	3.36
SN65LVDM050PW	296-12020-5-ND	High Speed Differential Line Driver/Receiver *NEW!*	16-TSSOP	5.40	4.32	3.36
SN65LVDM051D	296-1417-5-ND	Dual Differential Line Driver/Receiver	16-SOIC	5.40	4.32	3.36
SN65LVDM051PW	296-12021-5-ND	High Speed Differential Line Driver/Receiver *NEW!*	16-TSSOP	5.40	4.32	3.36
SN65LVDM22D	296-1421-5-ND	Dual Mux LVDS Repeater	16-SOIC	5.72	4.58	3.87
SN65LVDM22PW	296-12023-5-ND	Dual Mux LVDS Repeater *NEW!*	16-TSSOP	5.72	4.58	3.87
SN65LVDM31D	296-6905-5-ND	High Speed Differential Line Driver	16-SOP	5.78	4.63	3.91
SN65LVDM176D	296-1418-5-ND	High Speed Diff. Line Transceiver	8-SOIC	3.60	2.88	2.24
SN65LVDM176DGK	296-6903-5-ND	High Speed Diff. Multipoint Transceiver	8-SOP	3.60	2.88	2.24
SN65LVDM179D	296-1419-5-ND	Hi Speed Diff. Line Driver/Receiver	8-SOIC	3.60	2.88	2.24
SN65LVDM179DGK	296-6904-5-ND	Hi Speed Diff. Line Driver/Receiver	8-SOP	3.60	2.88	2.24
SN65LVDM180D	296-1420-5-ND	High Speed Differential Line Driver/Receiver	14-SOIC	3.60	2.88	2.24
SN65LVDM180PW	296-12022-5-ND	High Speed Differential Line Driver/Receiver *NEW!*	16-TSSOP	3.60	2.88	2.24
SN75LVDM976DGG	296-1760-5-ND	9-Channel Dual-Mode Transceiver	56-TSSOP	13.24	11.93	10.58
SN75LVDM976DL	296-6934-5-ND	9-Channel Dual-Mode Transceiver	56-SOP	13.24	11.93	10.58
SN75LVDM977DGG	296-2365-5-ND	9-Channel Dual-Mode Transceiver	56-TSSOP	13.24	11.93	10.58
SN75LVDM977DL	296-6935-5-ND	9-Channel Dual-Mode Transceiver	56-SOP	13.24	11.93	10.58
SN65LVDM1676DGG	296-9734-5-ND	16-Channel Transceiver	64-TSSOP	12.25	11.03	9.78
SN65LVDM1677DGG	296-9735-5-ND	16-Channel Transceiver	64-TSSOP	12.73	11.46	10.17

LVDS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN65LVDS047D	296-6909-5-ND	LVDS Quad Differential Line Driver	16-SOP	3.92	3.14	2.44
SN65LVDS047PW	296-6910-5-ND	LVDS Quad Differential Line Driver	16-SOP	3.92	3.14	2.44
SN65LVDS048AD	296-6911-5-ND	High Differential Line Receiver	16-SOP	3.92	3.14	2.44
SN65LVDS048APW	296-6912-5-ND	High Differential Line Receiver	16-SOP	3.92	3.14	2.44
SN65LVDS050D	296-1422-5-ND	Hi Spd. Diff. Line Driver/Receiver	16-SOIC	4.75	3.80	2.96
SN65LVDS050PW	296-12051-5-ND	HS Diff. Line Driver/Receiver	16-TSSOP	4.75	3.80	2.96
SN65LVDS051D	296-1423-5-ND	Hi Spd. Diff.Line Driver/Receiver	16-SOIC	4.75	3.80	2.96
SN65LVDS051PW	296-12052-5-ND	HS Diff. Line Driver/Receiver	16-TSSOP	4.75	3.80	2.96
SN65LVDS1D	296-12138-5-ND	High Speed Diff. Line Driver *NEW!*	8-SOIC	1.80	1.44	1.08
SN65LVDS1DBVR	296-6919-1-ND	High Speed Diff. Line Driver	SOT-23-5	1.80	1.44	1.08
SN65LVDS1DBVR	296-6919-2-ND	High Speed Diff. Line Driver	SOT-23-5	2764.80/3,000		
SN65LVDS2D	296-12139-5-ND	High Speed Diff. Line Receiver *NEW!*	8-SOIC	1.80	1.44	1.08
SN65LVDS2DBVR	296-6920-1-ND	High Speed Diff. Line Receiver	SOT-23-5	1.80	1.44	1.08
SN65LVDS2DBVR	296-6920-2-ND	High Speed Diff. Line Receiver	SOT-23-5	2764.80/3,000		
SN65LVDS22D	296-1426-5-ND	Dual Mux LVDS Repeater	16-SOIC	5.72	4.58	3.87
SN65LVDS22PW	296-12024-5-ND	Dual Mux LVDS Repeater *NEW!*	16-TSSOP	5.72	4.58	3.87
SN65LVDS31D	296-6922-5-ND	Quad High Speed Diff. Driver	16-SOP	4.10	3.28	2.55
SN65LVDS31NS	296-2350-5-ND	Quad High Speed Diff. Driver	16-SOP	4.10	3.28	2.55
SN65LVDS31PW	296-12329-5-ND	Quad High Speed Diff. Driver	16-TSSOP	4.10	3.28	2.55
SN65LVDS32BDR	296-6923-1-ND	Quad High Speed Diff. Receiver	16-SOP	5.40	4.32	3.65
SN65LVDS32BDR	296-6923-2-ND	Quad High Speed Diff. Receiver	16-SOP	8370.00/2,500		
SN65LVDS32D	296-6924-5-ND	Quad High Speed Diff. Receiver	16-SOP	4.10	3.28	2.55
SN65LVDS32PW	296-12330-5-ND	Quad High Speed Diff. Receiver	16-TSSOP	4.10	3.28	2.55
SN65LVDS33D	296-9742-5-ND	Quad High Speed Diff. Receiver	16-SOP	5.40	4.32	3.36
SN65LVDS33PW	296-9743-5-ND	Quad High Speed Diff.Receiver	16-TSSOP	5.40	4.32	3.36
SN65LVDS34D	296-9744-5-ND	Dual High Speed Differential Receiver	8-SOP	4.10	3.28	2.55
SN65LVDS84AQDGG	296-9747-5-ND	Flatlink™ Transmitter	48-TSSOP	9.88	7.91	6.67
SN65LVDS84AQDGGR	296-9747-1-ND	Flatlink™ Transmitter	48-TSSOP	9.88	7.91	6.67
SN65LVDS84AQDGGR	296-9747-2-ND	Flatlink™ Transmitter	48-TSSOP	12350.00/2,000		
SN65LVDS86AQDGG	296-9748-5-ND	Flatlink™ Receiver	48-TSSOP	6.82	5.46	4.61
SN65LVDS86AQDGGR	296-9748-1-ND	Flatlink™ Receiver	48-TSSOP	6.82	5.46	4.61
SN65LVDS86AQDGGR	296-9748-2-ND	Flatlink™ Receiver	48-TSSOP	8526.00/2,000		
SN65LVDS93DGG	296-1429-5-ND	LVDS SERDES Transmitter	56-TSSOP	6.56	5.25	4.43
SN65LVDS94DGG	296-1430-5-ND	LVDS SERDES Receiver	56-TSSOP	6.56	5.25	4.43
SN65LVDS95DGG	296-1431-5-ND	LVDS SERDES Transmitter	48-TSSOP	6.56	5.25	4.43
SN65LVDS96DGG	296-1434-5-ND	Flatlink™ Receiver	48-TSSOP	6.56	5.25	4.43
SN65LVDS104D	296-2344-5-ND	4-Port LVDS Repeater	16-SOIC	4.75	3.80	2.96
SN65LVDS104PW	296-6915-5-ND	4-Port LVDS Repeater	16-SOP	4.75	3.80	2.96
SN65LVDS105D	296-2345-5-ND	4-Port TTL:LVDS Repeater	16-SOP	4.75	3.80	2.96
SN65LVDS105PW	296-6917-5-ND	4-Port LVTTL:LVDS Repeater	16-SOP	4.75	3.80	2.96
SN65LVDS108DBT	296-2346-5-ND	8-Port LVDS Repeater	38-SOP	8.64	6.92	5.84
SN65LVDS109DBT	296-2347-5-ND	Dual 1:4 LVDS Repeater	38-SOP	8.64	6.92	5.84
SN65LVDS116DGG	296-2348-5-ND	1:16 LVDS Repeater	64-SOP	9.45	8.51	7.55
SN65LVDS116DGGR	296-2348-1-ND	1:16 LVDS Repeater	64-SOP	9.45	8.51	7.55
SN65LVDS116DGGR	296-2348-2-ND	1:16 LVDS Repeater	64-SOP	14004.00/2,000		
SN65LVDS117DGG	296-2349-5-ND	Dual 8-Port LVDS Repeater	64-SOP	9.45	8.51	7.55
SN65LVDS117DGGR	296-2349-1-ND	Dual 8-Port LVDS Repeater	64-SOP	9.45	8.51	7.55
SN65LVDS117DGGR	296-2349-2-ND	Dual 8-Port LVDS Repeater	64-SOP	14004.00/2,000		
SN65LVDS150PW	296-9737-5-ND	MuxIt™ PLL Freq. Multiplier	28-TSSOP	7.70	6.16	5.20
SN65LVDS151DA	296-9738-5-ND	MuxIt™ Serializer Transmitter	32-TSSOP	5.40	4.32	3.36
SN65LVDS152DA	296-9739-5-ND	MuxIt™ Receiver-Deserializer	32-TSSOP	5.40	4.32	3.36
SN65LVDS179D	296-1424-5-ND	Single HS Differential Driver/Receiver	8-SOIC	3.60	2.88	2.24
SN65LVDS179DGK	296-6918-5-ND	Single HS Differential Driver/Receiver	8-SOP	3.60	2.88	2.24
SN65LVDS180D	296-1425-5-ND	HS Differential Line Driver/Receiver	14-SOIC	3.60	2.88	2.24
SN65LVDS180PW	296-12053-5-ND	HS Differential Line Driver/Receiver	14-TSSOP	3.60	2.88	2.24
SN65LVDS386DGG	296-2353-5-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	11.13	10.02	8.89
SN65LVDS386DGGR	296-2353-1-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	11.13	10.02	8.89
SN65LVDS386DGGR	296-2353-2-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	16499.60/2,000		
SN65LVDS387DGG	296-2354-5-ND	16-Ch., High Speed Diff. Driver	64-TSSOP	11.13	10.02	8.89
SN65LVDS388ADBT	296-6926-5-ND	Octal LVDS Receiver	38-SOP	6.72	5.38	4.54
SN65LVDS389DBT	296-2356-5-ND	8-Channel, High Speed Diff. Driver	38-TSSOP	6.72	5.38	4.54
SN65LVDS390D	296-6927-5-ND	High Speed Differential Line Receiver	16-SOP	4.10	3.28	2.55
SN65LVDS390PW	296-6928-5-ND	High Speed Differential Line Receiver	16-SOP	4.10	3.28	2.55
SN65LVDS391D	296-6929-5-ND	High Speed Differential Driver	16-SOP	4.10	3.28	2.55
SN65LVDS391PW	296-6930-5-ND	High Speed Differential Driver	16-SOP	4.10	3.28	2.55
SN65LVDS1050PW	296-6916-5-ND	HS Differential Line Driver/Receiver	16-SOP	4.75	3.80	2.96
SN65LVDS3486BDR	296-6925-1-ND	Quad LVDS Receiver	16-SOP	5.40	4.32	3.65
SN65LVDS3486BDR	296-6925-2-ND	Quad LVDS Receiver	16-SOP	8370.00/2,500		
SN65LVDS3486D	296-1427-5-ND	High Speed Diff. Line Receiver	16-SOIC	4.10	3.28	2.55
SN65LVDS3487D	296-1428-5-ND	Quad High Speed Diff. Line Driver	16-SOIC	4.10	3.28	2.55

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65LVDS9637BDR	296-6931-1-ND	Dual LVDS Receiver	8-SOP	5.04	4.04	3.14
SN65LVDS9637BDR	296-6931-2-ND	Dual LVDS Receiver	8-SOP	7055.00/2,500		
SN65LVDS9637D	296-1432-5-ND	Dual HS Differential Receiver	8-SOIC	2.90	2.33	1.81
SN65LVDS9637DGK	296-12003-5-ND	Dual HS Differential Receiver	8-MSOP	2.90	2.33	1.81
SN65LVDS9637DGKR	296-12003-1-ND	Dual HS Differential Receiver	8-MSOP	2.90	2.33	1.81
SN65LVDS9637DGKR	296-12003-2-ND	Dual HS Differential Receiver	8-MSOP	4062.50/2,500		
SN65LVDS9637DGN	296-6932-5-ND	Dual HS Differential Receiver	8-SOP	3.04	2.43	1.89
SN65LVDS9638D	296-1433-5-ND	Dual HS Differential Driver	8-SOIC	2.90	2.33	1.81
SN65LVDS9638DGK	296-12004-5-ND	Dual HS Differential Driver	8-MSOP	2.90	2.33	1.81
SN65LVDS9638DGKR	296-12004-1-ND	Dual HS Differential Driver	8-MSOP	2.90	2.33	1.81
SN65LVDS9638DGKR	296-12004-2-ND	Dual HS Differential Driver	8-MSOP	4062.50/2,500		
SN65LVDS9638DGN	296-6933-5-ND	Dual HS Differential Driver	8-SOP	3.04	2.43	1.89
SN75LVDS31D	296-12325-5-ND	Quad HS Differential Driver	16-SOIC	3.58	2.87	2.23
SN75LVDS31PW	296-12005-5-ND	Quad HS Differential Driver	16-TSSOP	3.58	2.87	2.23
SN75LVDS31PWR	296-12005-1-ND	Quad HS Differential Driver	16-TSSOP	3.58	2.87	2.23
SN75LVDS31PWR	296-12005-2-ND	Quad HS Differential Driver	16-TSSOP	4054.00/2,000		
SN75LVDS32D	296-12326-5-ND	Quad HS Differential Driver	16-SOIC	3.58	2.87	2.23
SN75LVDS82DGGR	296-6666-1-ND	Flatlink™ Receiver	56-TSSOP	8.36	7.53	6.68
SN75LVDS82DGGR	296-6666-2-ND	Flatlink™ Receiver	56-TSSOP	5152.00/2,000		
SN75LVDS83DGG	296-6667-5-ND	Flatlink™ Transmitter	56-TSSOP	4.16	3.33	2.59
SN75LVDS84ADGGR	296-6668-1-ND	Flatlink™ Transmitter	48-TSSOP	7.82	6.26	5.28
SN75LVDS84ADGGR	296-6668-2-ND	Flatlink™ Transmitter	48-TSSOP	5024.00/2,000		
SN75LVDS84DGGR	296-6669-1-ND	Flatlink™ Transmitter	48-TSSOP	7.76	6.21	5.24
SN75LVDS84DGGR	296-6669-2-ND	Flatlink™ Transmitter	48-TSSOP	4692.00/2,000		
SN75LVDS86ADGG	296-1998-5-ND	Flatlink™ Receiver	48-TSSOP	4.37	3.50	2.72
SN75LVDS86ADGGR	296-6671-1-ND	Flatlink™ Receiver	48-TSSOP	7.72	6.18	5.22
SN75LVDS86ADGGR	296-6671-2-ND	Flatlink™ Receiver	48-TSSOP	5024.00/2,000		
SN75LVDS86DGG	296-6672-5-ND	Flatlink™ Receiver	48-TSSOP	4.05	3.24	2.52
SN75LVDS88BPFD	296-6673-5-ND	TFT LCD-Panel Timing Controller with LVDS Interface	100-QFP	7.42	5.94	5.01
SN75LVDS050D	296-12321-5-ND	Dual Low Volt. Diff. Driver/Rcvr.	16-SOIC	4.14	3.32	2.58
SN75LVDS051D	296-12322-5-ND	Dual Low Volt. Diff. Driver/Rcvr.	16-SOIC	4.14	3.32	2.58
SN75LVDS179D	296-12323-5-ND	Low Volt. Diff. Driver/Receiver	8-SOIC	3.13	2.51	1.95
SN75LVDS180D	296-12324-5-ND	Low Volt. Diff. Driver/Receiver	14-SOIC	3.13	2.51	1.95
SN75LVDS386DGG	296-9975-5-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	9.68	8.72	7.73
SN75LVDS386DGGR	296-9975-1-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	9.68	8.72	7.73
SN75LVDS386DGGR	296-9975-2-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	14350.70/2,000		
SN75LVDS387DGG	296-2367-5-ND	16-Ch., High Speed Diff. Driver	64-TSSOP	9.68	8.72	7.73
SN75LVDS389DBT	296-2369-5-ND	8-Channel, High Speed Diff. Driver	38-TSSOP	5.84	4.68	3.95
SN75LVDS9637D	296-12327-5-ND	Dual Hi-Spd. Differential Receiver	8-SOIC	2.54	2.04	1.59
SN75LVDS9638D	296-12328-5-ND	Dual Hi-Spd. Differential Driver	8-SOIC	2.54	2.04	1.59

LVDT

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65LVDT2D	296-12140-5-ND	High Speed Diff. Line Receiver *NEW!*	8-SOIC	1.88	1.50	1.13
SN65LVDT2DBVR	296-6896-1-ND	High Speed Diff. Line Receiver	SOT-23-5	1.88	1.50	1.13
SN65LVDT2DBVR	296-6896-2-ND	High Speed Diff. Line Receiver	SOT-23-5	2880.00/3,000		
SN65LVDT32BDR	296-6897-1-ND	Quad LVDS Receiver	16-SOP	5.68	4.55	3.84
SN65LVDT32BDR	296-6897-2-ND	Quad LVDS Receiver	16-SOP	8805.00/2,500		
SN65LVDT33D	296-9749-5-ND	Quad, High Speed Diff. Receiver	16-SOP	5.40	4.32	3.36
SN65LVDT33PW	296-9750-5-ND	Quad, High Speed Diff. Receiver	16-TSSOP	5.40	4.32	3.36
SN65LVDT34D	296-9751-5-ND	Dual, High Speed Diff. Receiver	8-SOP	3.13	2.51	1.95
SN65LVDT386DGG	296-2360-5-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	11.53	10.38	9.21
SN65LVDT386DGGR	296-2360-1-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	11.53	10.38	9.21
SN65LVDT386DGGR	296-2360-2-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	17092.00/2,000		
SN65LVDT388ADBT	296-6899-5-ND	Octal LVDS Receiver	38-SOP	6.92	5.54	4.68
SN65LVDT390D	296-6900-5-ND	High Speed Differential Line Receiver	16-SOP	4.23	3.39	2.64
SN65LVDT390PW	296-6901-5-ND	High Speed Differential Line Receiver	16-SOP	4.23	3.39	2.64
SN65LVDT3486BDR	296-6898-1-ND	Quad LVDS Receiver	16-SOP	5.68	4.55	3.84
SN65LVDT3486BDR	296-6898-2-ND	Quad LVDS Receiver	16-SOP	8805.00/2,500		
SN65LVDT9637BDR	296-6902-1-ND	Dual LVDS Receiver	8-SOP	5.51	4.41	3.43
SN65LVDT9637BDR	296-6902-2-ND	Dual LVDS Receiver	8-SOP	7717.50/2,500		
SN75LVDT386DGG	296-2370-5-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	10.03	9.03	8.01
SN75LVDT386DGGR	296-2370-1-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	10.03	9.03	8.01
SN75LVDT386DGGR	296-2370-2-ND	16-Ch., High Speed Diff. Receiver	64-TSSOP	14870.00/2,000		

RS422 / RS423 / RS485

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AM26C31CD	296-6781-5-ND	Quad Differential Line Driver	16-SOP	1.50	1.20	.90
AM26C31CDBR	296-6782-1-ND	Quad Differential Line Driver	16-SOP	1.50	1.20	.90
AM26C31CDBR	296-6782-2-ND	Quad Differential Line Driver	16-SOP	1560.00/2,000		
AM26C31CN	296-6783-5-ND	Quad Differential Line Driver	16-Dip	1.50	1.20	.90
AM26C31ID	296-6784-5-ND	Quad Differential Line Driver	16-SOIC	1.63	1.30	.98
AM26C31IN	296-6785-5-ND	Quad Differential Line Driver	16-Dip	1.63	1.30	.98
AM26C32CD	296-6786-5-ND	Quad Differential Line Driver	16-SOP	1.50	1.20	.90
AM26C32CN	296-6787-5-ND	Quad Differential Line Driver	16-Dip	1.50	1.20	.90
AM26C32ID	296-6788-5-ND	Quad Differential Line Driver	16-SOIC	1.63	1.30	.98
AM26C32IN	296-6789-5-ND	Quad Differential Line Driver	16-Dip	1.63	1.30	.98
AM26LS31CD	296-1010-5-ND	Quad Differential Line Driver	16-SOIC	.99	.83	.66
AM26LS31CDR	296-1010-1-ND	Quad Differential Line Driver	16-SOIC	.99	.83	.66
AM26LS31CDR	296-1010-2-ND	Quad Differential Line Driver	16-SOIC	1072.50/2,500		
AM26LS31CN	296-1374-5-ND	Quad Differential Line Driver	16-Dip	.99	.83	.66
AM26LS32ACD	296-1011-5-ND	Quad Differential Line Receiver	16-SOP	.99	.83	.66
AM26LS32ACDR	296-1011-1-ND	Quad Differential Line Receiver	16-SOP	.99	.83	.66
AM26LS32ACDR	296-1011-2-ND	Quad Differential Line Receiver	16-SOP	1072.50/2,500		
AM26LS32ACN	296-1376-5-ND	Quad Differential Line Receiver	16-Dip	.99	.83	.66
AM26LS32ACNSR	296-6790-1-ND	Quad Differential Line Driver	16-SOP	1.14	.95	.76
AM26LS32ACNSR	296-6790-2-ND	Quad Differential Line Driver	16-SOP	1010.00/2,000		
AM26LS33ACD	296-6791-5-ND	Quad Differential Line Receiver	16-SOP	1.25	1.00	.75
AM26LS33ACN	296-6792-5-ND	Quad Differential Line Receiver	16-Dip	1.25	1.00	.75
AM26LV31CD	296-6793-5-ND	Quad Differential Line Driver	16-Dip	1.63	1.30	.98
AM26LV32CD	296-6794-5-ND	Quad Differential Line Receiver	16-SOIC	1.63	1.30	.98
AM26LV32CDR	296-6794-1-ND	Quad Differential Line Receiver	16-SOIC	1.63	1.30	.98
AM26LV32CNSR	296-6796-1-ND	Quad Differential Line Receiver	16-SOP	1.75	1.40	1.05
AM26LV32CNSR	296-6796-2-ND	Quad Differential Line Receiver	16-SOP	1820.00/2,000		
AM26S10CD	296-6797-5-ND	Quad Bus Transceiver	16-SOP	1.25	1.00	.75
AM26S10CN	296-6798-5-ND	Quad Bus Transceiver	16-Dip	1.25	1.00	.75
MC3486D	296-7037-5-ND	Tri-State Quad Diff. Line Receiver	16-SOP	1.20	1.00	.80
MC3486N	296-7038-5-ND	Tri-State Quad Diff. Line Receiver	16-Dip	1.20	1.00	.80
MC3487N	296-1408-5-ND	Quad Differential Line Driver	16-Dip	1.20	1.00	.80
M26LV32CDR	296-6794-2-ND	Quad Differential Line Receiver	16-SOP	2080.00/2,500		
SN65C1167NSR	296-9699-1-ND	Dual Differential Drives & Receiver	16-SOP	2.93	2.34	1.82
SN65C1167NSR	296-9699-2-ND	Dual Differential Driver & Receiver	16-SOP	3316.00/2,000		
SN65HVD230DR	296-11654-1-ND	3.3V CAN Xcvr. with Standby Mode.	8-SOIC	3.83	3.06	2.38
SN65HVD230DR	296-11654-2-ND	3.3V CAN Xcvr. with Standby Mode.	8-SOIC	5135.00/2,500		
SN65HVD231D	296-12206-5-ND	3.3V, CAN Transceiver with Sleep Mode *NEW!*	8-SOIC	3.67	2.94	2.29
SN65HVD232D	296-12282-5-ND	3.3V CAN Transceiver *NEW!*	8-SOIC	3.42	2.74	2.13

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65LBC031D	296-9700-5-ND	High Speed CAN Transceiver	8-SOP	3.20	2.56	1.99
SN65LBC031QD	296-9701-5-ND	High Speed CAN Transceiver	8-SOP	2.99	2.40	1.87
SN65LBC031QDR	296-9701-1-ND	High Speed CAN Transceiver	8-SOP	2.99	2.40	1.87
SN65LBC031QDR	296-9701-2-ND	High Speed CAN Transceiver	8-SOP	4190.00/2,500		
SN65LBC170DB	296-9702-5-ND	Triple Differential Transceiver	16-SSOP	7.40	5.92	5.00
SN65LBC170DW	296-9703-5-ND	Triple Differential Transceiver	20-SOP	7.40	5.92	5.00
SN65LBC171DB	296-9704-5-ND	Triple Differential Transceiver	16-SSOP	7.40	5.92	5.00
SN65LBC171DW	296-9705-5-ND	Triple Differential Transceiver	20-SOP	7.40	5.92	5.00
SN65LBC172ADW	296-9706-5-ND	Quad LP Differential Line Driver	20-SOP	5.33	4.27	3.32
SN65LBC172AN	296-12283-5-ND	Quad RS-485 Diff. Line Driver *NEW!*	16-Dip	5.33	4.27	3.32
SN65LBC172DW	296-9707-5-ND	Quad LP Differential Line Driver	20-SOP	4.05	3.24	2.52
SN65LBC172N	296-9708-5-ND	Quad LP Differential Line Driver	16-Dip	4.05	3.24	2.52
SN65LBC173AD	296-9709-5-ND	Quad LP Differential Line Receiver	16-SOP	3.13	2.51	1.95
SN65LBC173AN	296-9710-5-ND	Quad LP Differential Line Receiver	16-Dip	3.13	2.51	1.95
SN65LBC173D	296-9711-5-ND	Quad LP Differential Line Receiver	16-SOP	2.39	1.91	1.49
SN65LBC173N	296-9712-5-ND	Quad LP Differential Line Receiver	16-Dip	2.39	1.91	1.49
SN65LBC174ADW	296-9713-5-ND	Quad LP Differential Line Driver	20-SOP	5.33	4.27	3.32
SN65LBC174AN	296-12284-5-ND	Quad RS-485 Diff. Line Driver *NEW!*	16-Dip	5.33	4.27	3.32
SN65LBC174DW	296-9714-5-ND	Quad LP Differential Line Driver	20-SOP	4.05	3.24	2.52
SN65LBC174N	296-9715-5-ND	Quad LP Differential Line Driver	16-Dip	4.05	3.24	2.52
SN65LBC175AD	296-9716-5-ND	Quad LP Differential Line Driver	16-SOP	3.13	2.51	1.95
SN65LBC175D	296-9717-5-ND	Quad LP Differential Line Driver	16-SOP	2.39	1.91	1.49
SN65LBC175DW	296-12460-5-ND	Quad LP Differential Line Receiver *NEW!*	16-SOIC	2.39	1.91	1.49
SN65LBC175N	296-9718-5-ND	Quad LP Differential Line Driver	16-Dip	2.39	1.91	1.49
SN65LBC176AD	296-9719-5-ND	Quad LP Differential Bus Transceiver	8-SOP	2.52	2.02	1.57
SN65LBC176AP	296-9720-5-ND	Quad LP Differential Bus Transceiver	8-Dip	2.52	2.02	1.57
SN65LBC176AQD	296-9721-5-ND	Quad LP Differential Bus Transceiver	8-SOP	4.39	3.51	2.73
SN65LBC176D	296-9722-5-ND	Quad LP Differential Bus Transceiver	8-SOP	2.13	1.70	1.28
SN65LBC176P	296-9723-5-ND	Quad LP Differential Bus Transceiver	8-Dip	2.13	1.70	1.28
SN65LBC176QD	296-9724-5-ND	Quad LP Differential Bus Transceiver	8-SOP	2.43	1.95	1.52
SN65LBC179AD	296-9725-5-ND	LP Differential Line Driver/Rcvr. Pairs	8-SOP	2.52	2.02	1.57
SN65LBC179AP	296-9726-5-ND	LP Differential Line Driver/Rcvr. Pairs	8-Dip	2.52	2.02	1.57
SN65LBC179D	296-9727-5-ND	LP Differential Line Driver/Rcvr. Pairs	8-SOP	2.13	1.70	1.28
SN65LBC179P	296-9728-5-ND	LP Differential Line Driver/Rcvr. Pairs	8-Dip	2.13	1.70	1.28
SN65LBC180AD	296-9729-5-ND	LP Differential Line Driver/Rcvr. Pairs	14-SOP	2.77	2.22	1.73
SN65LBC180AN	296-9730-5-ND	LP Differential Line Driver/Rcvr. Pairs	14-Dip	2.77	2.22	1.73
SN65LBC180D	296-9731-5-ND	LP Differential Line Driver/Rcvr. Pairs	14-SOP	2.33	1.86	1.40
SN65LBC180N	296-9732-5-ND	LP Differential Line Driver/Rcvr. Pairs	14-Dip	2.33	1.86	1.40
SN65LBC182D	296-12167-5-ND	Differential Bus Transceiver	8-SOIC	2.23	1.78	1.34
SN65LBC184D	296-9733-5-ND	Differential Xcvr. w/TVS Protection	8-SOP	2.43	1.94	1.46
SN65LBC184P	296-2343-5-ND	Differential Xcvr. w/TVS Protection	8-Dip	2.43	1.94	1.46
SN65176BD	296-9693-5-ND	Differential Bus Transceiver	8-SOP	2.48	1.98	1.54
SN65176BP	296-1415-5-ND	Differential Bus Transceiver	8-Dip	2.48	1.98	1.54
SN75LBC031D	296-6864-5-ND	High Speed Transceiver	8-SOP	2.81	2.25	1.75
SN75LBC172DW	296-6865-5-ND	Quad LP Differential Line Driver	20-SOP	3.67	2.94	2.29
SN75LBC172N	296-6866-5-ND	Quad LP Differential Line Driver	20-Dip	3.67	2.94	2.29
SN75LBC173D	296-6867-5-ND	Quad LP Differential Line Receiver	16-SOP	2.40	1.92	1.44
SN75LBC173N	296-6868-5-ND	Quad LP Differential Line Receiver	16-Dip	2.40	1.92	1.44
SN75LBC174DW	296-6869-5-ND	Quad LP Differential Line Driver	20-SOP	3.67	2.94	2.29
SN75LBC174N	296-6870-5-ND	Quad LP Differential Line Driver	16-Dip	3.67	2.94	2.29
SN75LBC175D	296-6871-5-ND	Quad LP Differential Line Receiver	16-SOP	2.40	1.92	1.44
SN75LBC175N	296-6872-5-ND	Quad LP Differential Line Receiver	16-Dip	2.40	1.92	1.44
SN75LBC176AD	296-6873-5-ND	Quad LP Differential Bus Transceiver	8-SOP	2.34	1.88	1.46
SN75LBC176AP	296-6874-5-ND	Differential Bus Transceiver	8-Dip	2.34	1.88	1.46
SN75LBC176D	296-1279-5-ND	Differential Bus Transceiver	8-SOIC	1.93	1.54	1.16
SN75LBC176DR	296-1279-1-ND	Differential Bus Transceiver	8-SOIC	1.93	1.54	1.16
SN75LBC176DR	296-1279-2-ND	Differential Bus Transceiver	8-SOIC	2465.00/2,500		
SN75LBC176P	296-6875-5-ND	Differential Bus Transceiver	8-Dip	1.93	1.54	1.16
SN75LBC179AD	296-6876-5-ND	LP Differential Line Driver/Rcvr. Pairs	8-SOP	2.34	1.88	1.46
SN75LBC179AP	296-6877-5-ND	LP Differential Line Driver/Rcvr. Pairs	8-Dip	2.34	1.88	1.46
SN75LBC179D	296-6878-5-ND	LP Differential Line Driver/Rcvr Pairs	8-SOP	1.93	1.54	1.16
SN75LBC179P	296-6879-5-ND	LP Differential Line Driver/Rcvr Pairs	8-Dip	1.93	1.54	1.16
SN75LBC180AD	296-6880-5-ND	LP Differential Line Driver/Rcvr Pairs	14-SOP	2.57	2.06	1.60
SN75LBC180AN	296-6881-5-ND	LP Differential Line Driver/Rcvr Pairs	14-Dip	2.57	2.06	1.60
SN75LBC180D	296-6882-5-ND	LP Differential Line Driver/Rcvr Pairs	14-SOP	2.13	1.70	1.28
SN75LBC180N	296-6883-5-ND	LP Differential Line Driver/Rcvr Pairs	14-Dip	2.13	1.70	1.28
SN75LBC182D	296-11656-5-ND	Differential Bus Transceiver	8-SOIC	2.03	1.62	1.22
SN75LBC184D	296-2364-5-ND	Differential Xcvr. w/TVS Protection	8-SOIC	2.20	1.76	1.32
SN75LBC184P	296-6884-5-ND	Differential Xcvr. w/TVS Protection	8-SOP	2.20	1.76	1.32
SN75LBC187DBR	296-6885-1-ND	Multichannel EIA-232 Driver/Receiver	28-SOP	4.50	3.60	2.80
SN75LBC187DBR	296-6885-2-ND	Multichannel EIA-232 Driver/Receiver	28-SOP	5100.00/2,000		
SN75LBC241DW	296-6886-5-ND	LP LinBiCMOS Multiple Drivers and Receivers	28-SOP	3.83	3.06	2.38
SN75LBC771DW	296-6887-5-ND	GeoPort™ Transceiver	20-SOP	2.40	1.92	1.44
SN75LBC775DW	296-6889-5-ND	Single-Chip AppleTalk/LocalTalk™ Transceiver	20-SOP	3.24	2.60	2.02
SN75LBC776DW	296-6890-5-ND	Single-Chip GeoPort™ Transceiver	20-SOP	4.21	3.37	2.62
SN75LBC777DW	296-6891-5-ND	Single-Chip Geoport/AppleTalk™ Transceiver	20-SOP	3.24	2.60	2.02
SN75LBC784DWR	296-6892-1-ND	Quad RS-423-B Driver/Receiver	28-SOP	4.66	3.73	2.90
SN75LBC784DWR	296-6892-2-ND	Quad RS-423-B Driver/Receiver	28-SOP	2639.00/1,000		
SN75LBC786DW	296-6893-5-ND	Quad RS-423-B Driver/Receiver with Loopback	28-SOP	8.96	8.07	7.16
SN75LBC968DL	296-6894-5-ND	9-Channel Bus Transceiver with Active Termination	56-SOP	14.41	12.98	11.51
SN75LBC978DL	296-6895-5-ND	9-Channel Differential Transceiver	56-SOP	20.91	19.52	18.13
SN75LBC978DLR	296-6895-1-ND	9-Channel Differential Transceiver	56-SOP	20.91	19.52	18.13
SN75LBC978DLR	296-6895-2-ND	9-Channel Differential Transceiver	56-SOP	17216.00/1,000		
SN75107AD	296-6799-5-ND	Dual Line Receiver	14-SOIC	1.44	1.20	.96
SN75107AN	296-6800-5-ND	Dual Line Receiver	14-Dip	1.44	1.20	.96
SN75107BD	296-6802-5-ND	Dual Line Receiver	14-SOIC	.90	.75	.60
SN75107BN	296-6803-5-ND	Dual Line Receiver	14-Dip	.90	.75	.60
SN75110AD	296-6804-5-ND	Dual Line Driver	14-SOP	.90	.75	.60
SN75110AN	296-6805-5-ND	Dual Line Driver	14-Dip	.90	.75	.60
SN75112D	296-6806-5-ND	Dual Line Driver	14-SOIC	2.13	1.70	1.28
SN75112DR	296-6806-1-ND	Dual Line Driver	14-SOIC	2.13	1.70	1.28
SN75112DR	296-6806-2-ND	Dual Line Driver	14-SOIC	2720.00/2,500		
SN75112N	296-6807-5-ND	Dual Line Driver	14-Dip	2.13	1.70	1.28
SN75113N	296-6809-5-ND	Dual Differential Line Driver	16-Dip	2.48	1.98	1.54
SN75114N	296-6811-5-ND	Dual Differential Line Driver	16-Dip	2.25	1.80	1.40

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

TEXAS INSTRUMENTS DATA TRANSMISSION *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN75115D	296-6812-5-ND	Dual Differential Line Receiver	16-SOIC	2.25	1.80	1.40
SN75115N	296-6813-5-ND	Dual Differential Line Receiver	16-Dip	2.25	1.80	1.40
SN75116N	296-6814-5-ND	Differential Line Transceiver	16-Dip	3.94	3.15	2.45
SN75118N	296-6821-5-ND	Differential Line Transceiver	16-Dip	3.94	3.15	2.45
SN75119P	296-6822-5-ND	Differential Line Transceiver	8-Dip	3.94	3.15	2.45
SN75121N	296-6823-5-ND	Dual Line Drivers	16-Dip	2.25	1.80	1.40
SN75124N	296-6826-5-ND	Triple Line Receiver	16-Dip	2.25	1.80	1.40
SN75138N	296-6828-5-ND	Quad Bus Transceiver	16-Dip	2.48	1.98	1.54
SN75140P	296-12184-5-ND	Dual Line Receiver *NEW!*	8-Dip	2.25	1.80	1.40
SN75150D	296-6830-5-ND	Dual Line Driver	8-SOP	1.20	1.00	.80
SN75150P	296-6831-5-ND	Dual Line Driver	8-Dip	1.20	1.00	.80
SN75154D	296-6832-5-ND	Quad Differential Line Receiver	16-SOIC	1.44	1.20	.96
SN75154N	296-6833-5-ND	Quad Differential Line Receiver	16-Dip	1.44	1.20	.96
SN75155D	296-6835-5-ND	Line Driver And Receiver	8-SOP	1.25	1.00	.75
SN75155P	296-6836-5-ND	Line Driver And Receiver	8-Dip	1.25	1.00	.75
SN75157D	296-6837-5-ND	Dual Differential Line Receiver	8-SOIC	2.00	1.60	1.20
SN75157P	296-6838-5-ND	Dual Differential Line Receiver	8-Dip	2.00	1.60	1.20
SN75158D	296-6839-5-ND	Dual Differential Line Driver	8-SOP	4.50	3.60	2.80
SN75158P	296-6840-5-ND	Dual Differential Line Driver	8-Dip	4.50	3.60	2.80
SN75158PSR	296-6841-1-ND	Dual Differential Line Driver	8-Dip	4.61	3.69	2.87
SN75158PSR	296-6841-2-ND	Dual Differential Line Driver	8-Dip	5228.00/2,000		
SN75159D	296-6842-5-ND	Dual Differential Line Driver	14-SOIC	4.50	3.60	2.80
SN75159N	296-6843-5-ND	Dual Differential Line Driver	14-Dip	4.50	3.60	2.80
SN75160BDW	296-6844-5-ND	Octal General Purpose Interface Bus Transceiver	20-SOIC	5.06	4.05	3.15
SN75160BN	296-6845-5-ND	Octal General Purpose Interface Bus Transceiver	20-Dip	5.06	4.05	3.15
SN75161BDW	296-6846-5-ND	Octal General Purpose Interface Bus Transceiver	20-SOP	5.90	4.72	3.99
SN75161BN	296-6847-5-ND	Octal General Purpose Interface Bus Transceiver	20-Dip	5.06	4.05	3.15
SN75162BDW	296-6848-5-ND	Octal General Purpose Interface Bus Transceiver	24-SOP	4.95	3.96	3.08
SN75172DW	296-6849-5-ND	Quad Differential Line Driver	20-SOP	3.42	2.74	2.13
SN75172N	296-6850-5-ND	Quad Differential Line Driver	16-Dip	2.48	1.98	1.54
SN751730D	296-6851-5-ND	Triple Line Driver/Receiver	16-SOP	3.94	3.15	2.45
SN751730N	296-6852-5-ND	Triple Line Driver/Receiver	16-Dip	3.94	3.15	2.45
SN75173D	296-6853-5-ND	Quad Differential Line Receiver	16-SOIC	2.25	1.80	1.40
SN75173N	296-6854-5-ND	Quad Differential Line Receiver	16-Dip	2.25	1.80	1.40
SN75174DWR	296-6855-1-ND	Quad Differential Line Driver	20-SOP	2.13	1.70	1.28
SN75174DWR	296-6855-2-ND	Quad Differential Line Driver	20-SOP	2210.00/2,000		
SN75174N	296-1735-5-ND	Quad Differential Line Driver	16-Dip	2.13	1.70	1.28
SN75175D	296-6856-5-ND	Quad Differential Line Receiver	16-SOP	1.50	1.20	.90
SN75175N	296-1736-5-ND	Quad Differential Line Receiver	16-Dip	1.50	1.20	.90
SN75176AD	296-6857-5-ND	Differential Bus Transceiver	8-SOP	1.38	1.10	.83
SN75176AP	296-1737-5-ND	Differential Bus Transceiver	8-Dip	1.38	1.10	.83
SN75176BD	296-1275-5-ND	Differential Bus Transceiver	8-SOIC	1.32	1.10	.88
SN75176BDR	296-1275-1-ND	Differential Bus Transceiver	8-SOIC	1.32	1.10	.88
SN75176BDR	296-1275-2-ND	Differential Bus Transceiver	8-SOIC	1430.00/2,500		
SN75176BP	296-1739-5-ND	Differential Bus Transceiver	8-Dip	1.32	1.10	.88
SN75178BP	296-6858-5-ND	Differential Bus Repeaters	8-Dip	2.25	1.80	1.35
SN75179BD	296-6860-5-ND	Differential Driver/Receiver Pair	8-SOP	1.75	1.40	1.05
SN75179BP	296-6861-5-ND	Differential Driver/Receiver Pair	8-Dip	1.75	1.40	1.05
SN75182N	296-6862-5-ND	Dual Differential Line Receiver	14-Dip	2.25	1.80	1.40
SN75183N	296-6863-5-ND	Quad Differential Line Driver	14-Dip	2.25	1.80	1.40
SN75976A1DGG	296-9925-5-ND	9-Ch., RS-485 Diff.Transceiver	56-TSSOP	14.78	13.31	11.80
SN75976A1DL	296-9926-5-ND	9-Ch., RS-485 Diff. Transceiver	56-SSOP	14.78	13.31	11.80
SN75976A2DGG	296-2363-5-ND	9-Ch., RS-485 Diff. Transceiver	56-TSSOP	18.30	17.08	15.86
SN751177N	296-6816-5-ND	Dual Differential Driver/Receiver	16-Dip	3.42	2.74	2.13
SN751177NSR	296-6817-1-ND	Dual Differential Driver/Receiver	16-SOP	3.53	2.83	2.20
SN751177NSR	296-6817-2-ND	Dual Differential Driver/Receiver	16-SOP	4004.00/2,000		
SN751178N	296-6818-5-ND	Dual Differential Driver/Receiver	16-Dip	3.42	2.74	2.13
SN751178NSR	296-6819-1-ND	Dual Differential Driver/Receiver	16-SOP	3.60	2.88	2.24
SN751178NSR	296-6819-2-ND	Dual Differential Driver/Receiver	16-SOP	4080.00/2,000		
TL3695D	296-10171-5-ND	Differential Bus Transceiver	8-SOIC	2.00	1.60	1.20
TL3695P	296-10172-5-ND	Differential Bus Transceiver	8-Dip	2.00	1.60	1.20
UA9637ACD	296-11149-5-ND	Dual Differential Line Receiver	8-SOIC	1.55	1.24	.93
UA9639CP	296-11150-5-ND	Dual Differential Line Receiver	8-Dip	1.88	1.50	1.13

RS-232

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
GD75232DBR	296-6947-1-ND	Multiple RS-232 Driver/Receiver	20-SOP	.92	.69	.52
GD75232DBR	296-6947-2-ND	Multiple RS-232 Driver/Receiver	20-SOP	612.00/2,000		
GD75232DW	296-6948-5-ND	Multiple RS-232 Driver/Receiver	20-SOP	.92	.69	.52
GD75232DWR	296-6948-1-ND	Multiple RS-232 Driver/Receiver	20-SOP	.92	.69	.52
GD75232DWR	296-6948-2-ND	Multiple RS-232 Driver/Receiver	20-SOP	612.00/2,000		
GD75232PWR	296-6950-1-ND	Multiple RS-232 Driver/Receiver	20-SOP	.92	.69	.52
GD75232PWR	296-6950-2-ND	Multiple RS-232 Driver/Receiver	20-SOP	612.00/2,000		
GD75323DW	296-6951-5-ND	Multiple RS-232 Driver/Receiver	20-SOP	.81	.68	.54
LT1030CD	296-9589-5-ND	Quad Low Power Line Driver	14-SOP	2.25	1.80	1.40
LT1030CN	296-1401-5-ND	Quad Low Power Line Driver	14-Dip	2.25	1.80	1.40
MAX232D	296-6936-5-ND	Dual EIA-232 Driver/Receiver	16-SOP	1.50	1.20	.90
MAX232DW	296-6937-5-ND	Dual EIA-232 Driver/Receiver	16-SOP	1.50	1.20	.90
MAX232ID	296-6938-5-ND	Dual EIA-232 Driver/Receiver	16-SOP	2.20	1.76	1.32
MAX232IDW	296-6939-5-ND	Dual EIA-232 Driver/Receiver	16-SOP	2.20	1.76	1.32
MAX232IN	296-6940-5-ND	Dual EIA-232 Driver/Receiver	16-Dip	2.20	1.76	1.32
MAX232N	296-1402-5-ND	Dual EIA-232 Driver/Receiver	16-Dip	1.60	1.28	.96
MAX3221CDBR	296-9593-1-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2.25	1.80	1.35
MAX3221CDBR	296-9593-2-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2340.00/2,000		
MAX3221CPWR	296-9594-1-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2.25	1.80	1.35
MAX3221CPWR	296-9594-2-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2340.00/2,000		
MAX3221IDBR	296-9595-1-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2.48	1.98	1.54
MAX3221IDBR	296-9595-2-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2806.00/2,000		
MAX3221IPWR	296-9596-1-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2.48	1.98	1.54
MAX3221IPWR	296-9596-2-ND	1-Channel RS-232 Driver/Receiver	16-SSOP	2806.00/2,000		
MAX3238CDBR	296-9597-1-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	2.93	2.34	1.82
MAX3238CDBR	296-9597-2-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	3316.00/2,000		
MAX3238CPWR	296-9598-1-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	2.93	2.34	1.82
MAX3238CPWR	296-9598-2-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	3316.00/2,000		
MAX3238IDBR	296-9599-1-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	3.38	2.70	2.10
MAX3238IDBR	296-9599-2-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	3826.00/2,000		
MAX3238IPWR	296-9600-1-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	3.38	2.70	2.10
MAX3238IPWR	296-9600-2-ND	Multichannel RS-232 Dvr./Rcvr.	28-SSOP	3826.00/2,000		
MAX3243CDBR	296-6941-1-ND	Multiple RS-232 Driver/Receiver	28-SOP	2.25	1.80	1.40
MAX3243CDBR	296-6941-2-ND	Multiple RS-232 Driver/Receiver	28-SOP	2550.00/2,000		
MAX3243CDWR	296-6942-1-ND	Multiple RS-232 Driver/Receiver	28-SOP	2.25	1.80	1.40

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MAX3243CDWR	296-6942-2-ND	Multiple RS-232 Driver/Receiver	28-SOP	1275.00/1,000		
MAX3243CPWR	296-6943-1-ND	Multiple RS-232 Driver/Receiver	28-SOP	2.25	1.80	1.40
MAX3243CPWR	296-6943-2-ND	Multiple RS-232 Driver/Receiver	28-SOP	2550.00/2,000		
MAX3243IDBR	296-6944-1-ND	Multiple RS-232 Driver/Receiver	28-SOP	3.15	2.52	1.96
MAX3243IDBR	296-6944-2-ND	Multiple RS-232 Driver/Receiver	28-SOP	3570.00/2,000		
MAX3243IDWR	296-6945-1-ND	Multiple RS-232 Driver/Receiver	28-SOP	3.15	2.52	1.96
MAX3243IDWR	296-6945-2-ND	Multiple RS-232 Driver/Receiver	28-SOP	1785.00/1,000		
MAX3243IPWR	296-6946-1-ND	Multiple RS-232 Driver/Receiver	28-SOP	3.15	2.52	1.96
MAX3243IPWR	296-6946-2-ND	Multiple RS-232 Driver/Receiver	28-SOP	3570.00/2,000		
MC1488N	296-1404-5-ND	Quad Line Driver	14-Dip	.72	.54	.41
MC1489AN	296-9602-5-ND	Quad Line Receiver	14-Dip	.72	.54	.41
MC1489N	296-1405-5-ND	Quad Line Receiver	14-Dip	.72	.54	.41
SN75C185DW	296-1753-5-ND	Low Power Multiple Driver/Receiver	20-SOIC	2.81	2.25	1.75
SN75C185N	296-9974-5-ND	Low Power Multiple Driver/Receiver	20-Dip	2.81	2.25	1.75
SN75C188D	296-6965-5-ND	Quad Low Power Line Driver	14-SOP	1.25	1.00	.75
SN75C188DBR	296-6966-1-ND	Quad Low Power Line Driver	14-SOP	1.25	1.00	.75
SN75C188DBR	296-6966-2-ND	Quad Low Power Line Driver	14-SOP	1300.00/2,000		
SN75C188N	296-1754-5-ND	Quad Low Power Line Driver	14-Dip	1.25	1.00	.75
SN75C189AD	296-1755-5-ND	Quad Low Power Line Receiver	14-SOIC	1.20	1.00	.80
SN75C189ADBR	296-6967-1-ND	Quad Low Power Line Receiver	14-SOP	1.20	1.00	.80
SN75C189ADBR	296-6967-2-ND	Quad Low Power Line Receiver	14-SOP	1064.00/2,000		
SN75C189AN	296-1756-5-ND	Quad Low Power Line Receiver	14-Dip	1.20	1.00	.80
SN75C189D	296-6968-5-ND	Quad Low Power Line Receiver	14-SOP	1.20	1.00	.80
SN75C189N	296-6969-5-ND	Quad Low Power Line Receiver	14-Dip	1.20	1.00	.80
SN75C198D	296-6970-5-ND	Quad Low Power Line Drivers	14-SOP	3.38	2.70	2.10
SN75C1154DW	296-6958-5-ND	Quad Low Power Driver/Receiver	20-SOP	1.70	1.36	1.02
SN75C1154N	296-6959-5-ND	Quad Low Power Driver/Receiver	20-Dip	1.70	1.36	1.02
SN75C1167DBR	296-6960-1-ND	Dual Differential Driver/Receiver	16-SOP	1.30	1.04	.78
SN75C1167DBR	296-6960-2-ND	Dual Differential Driver/Receiver	16-SOP	1352.00/2,000		
SN75C1167N	296-6961-5-ND	Dual Differential Driver/Receiver	16-Dip	2.13	1.70	1.28
SN75C1167NSR	296-6962-1-ND	Dual Differential Driver/Receiver	16-SOP	1.95	1.56	1.17
SN75C1167NSR	296-6962-2-ND	Dual Differential Driver/Receiver	16-SOP	2028.00/2,000		
SN75C1168N	296-6963-5-ND	Dual Differential Driver/Receiver	16-Dip	2.13	1.70	1.28
SN75C1168NSR	296-6964-1-ND	Dual Differential Driver/Receiver	16-SOP	1.30	1.04	.78
SN75C1168NSR	296-6964-2-ND	Dual Differential Driver/Receiver	16-SOP	1352.00/2,000		
SN75C1406DW	296-1751-5-ND	Triple Low Power Driver/Receiver	16-SOIC	1.50	1.20	.90
SN75C1406DWR	296-1751-1-ND	Triple Low Power Driver/Receiver	16-SOIC	1.50	1.20	.90
SN75C1406DWR	296-1751-2-ND	Triple Low Power Driver/Receiver	16-SOIC	1560.00/2,000		
SN75C1406N	296-1752-5-ND	Triple Low Power Driver/Receiver	16-Dip	1.50	1.20	.90
SN75LP196DBR	296-6974-1-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2.13	1.70	1.28
SN75LP196DBR	296-6974-2-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2210.00/2,000		
SN75LP196DWR	296-6975-1-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2.13	1.70	1.28
SN75LP196DWR	296-6975-2-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2210.00/2,000		
SN75LP1185DBR	296-6971-1-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2.13	1.70	1.28
SN75LP1185DBR	296-6971-2-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2210.00/2,000		
SN75LP1185DW	296-6972-5-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2.13	1.70	1.28
SN75LP1185DWR	296-6972-1-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2.13	1.70	1.28
SN75LP1185DWR	296-6972-2-ND	LP Multiple RS-232 Driver/Receiver	20-SOP	2210.00/2,000		
SN75LPE185DBR	296-6976-1-ND	LP Multiple RS-232 Driver/Receiver	24-SOP	2.25	1.80	1.35
SN75LPE185DBR	296-6976-2-ND	LP Multiple RS-232 Driver/Receiver	24-SOP	2340.00/2,000		
SN75LPE185DW	296-1759-5-ND	LP Multiple RS-232 Driver/Receiver	24-SOIC	2.25	1.80	1.35
SN75LV4737ADBR	296-6977-1-ND	Multichannel RS-232 Line Driver/Receiver with Enable	28-SOP	4.16	3.33	2.59
SN75LV4737ADBR	296-6977-2-ND	Multichannel RS-232 Line Driver/Receiver with Enable	28-SOP	4718.00/2,000		
SN75185DW	296-1740-5-ND	Multiple RS-232 Driver/Receiver	20-SOIC	1.05	.88	.70
SN75185DWR	296-1740-1-ND	Multiple RS-232 Driver/Receiver	20-SOIC	1.05	.88	.70
SN75185DWR	296-1740-2-ND	Multiple RS-232 Driver/Receiver	20-SOIC	932.00/2,000		
SN75185N	296-6953-5-ND	Multiple RS-232 Driver/Receiver	20-Dip	1.05	.88	.70
SN75186DW	296-6954-5-ND	Quad Driver/Receiver with Loopback	24-SOP	3.60	2.88	2.24
SN75188D	296-1276-5-ND	Quad Line Driver	14-SOIC	.72	.54	.41
SN75188DR	296-1276-1-ND	Quad Line Driver	14-SOIC	.72	.54	.41
SN75188DR	296-1276-2-ND	Quad Line Driver	14-SOIC	585.00/2,500		
SN75188N	296-1742-5-ND	Quad Line Driver	14-Dip	.72	.54	.41
SN75189AD	296-1277-5-ND	Quad Line Receiver	14-SOIC	.72	.54	.41
SN75189ADR	296-1277-1-ND	Quad Line Receiver	14-SOIC	.72	.54	.41
SN75189ADR	296-1277-2-ND	Quad Line Receiver	14-SOIC	585.00/2,500		
SN75189AN	296-1744-5-ND	Quad Line Receiver	14-Dip	.72	.54	.41
SN75189D	296-1745-5-ND	Quad Line Receiver	14-SOIC	.72	.54	.41
SN75189N	296-6955-5-ND	Quad Line Receiver	14-Dip	.72	.54	.41
SN75196DW	296-6956-5-ND	Multiple RS-232 Driver/Receiver	20-SOP	1.47	1.23	.98
SN75196N	296-6957-5-ND	Multiple RS-232 Driver/Receiver	20-Dip	1.47	1.23	.98
SN752232DGGR	296-12331-1-ND	Dual RS-232 Port	48-TSSOP	1.35	1.13	.90
SN752232DGGR	296-12331-2-ND	Dual RS-232 Port	48-TSSOP	1198.00/2,000		
SN752232DLR	296-12332-1-ND	Dual RS-232 Port	48-SSOP	1.35	1.13	.90
SN752232DLR	296-12332-2-ND	Dual RS-232 Port	48-SSOP	599.00/1,000		
TL145406DWR	296-10140-1-ND	Triple RS-232 Driver/Receiver	16-SOIC	1.25	1.00	.75
TL145406DWR	296-10140-2-ND	Triple RS-232 Driver/Receiver	16-SOIC	1300.00/2,000		
TL145406N	296-10141-5-ND	Triple RS-232 Driver/Receiver	16-Dip	1.25	1.00	.75
UA9636ACD	296-11147-5-ND	Dual Line Driver with Adjustable Slew Rate	8-SOIC	1.55	1.24	.93
UA9636ACP	296-11148-5-ND	Dual Line Driver with Adjustable Slew Rate	8-Dip	1.55	1.24	.93
UC5170CQ	296-11352-5-ND	Octal Line Driver with Strapped Mode Selection	28-PLCC	6.88	5.51	4.65
UC5171Q	296-11353-5-ND	Octal Line Driver with TTL Mode Selection	28-PLCC	9.28	8.36	7.41
UC5180CQ	296-11354-5-ND	Low-Speed Asynchronous Octal Line Receiver	28-PLCC	8.12	6.50	5.49

SCSI

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN75970B2DGG	296-9921-5-ND	SCSI Diff. Converter Control	56-TSSOP	20.16	18.82	17.48
SN75970B2DL	296-9922-5-ND	SCSI Diff. Converter Control	56-SSOP	20.16	18.82	17.48
SN75971B2DGG	296-9923-5-ND	SCSI Diff. Converter - Data	56-TSSOP	18.44	17.21	15.98
SN75971B2DL	296-9924-5-ND	SCSI Diff. Converter - Data	56-SSOP	18.44	17.21	15.98
SN75976A2DL	296-1278-5-ND	9-Channel Differential Transceiver	56-SSOP	18.30	17.08	15.86
SN75976A2DLR	296-1278-1-ND	9-Channel Differential Transceiver	56-SSOP	18.30	17.08	15.86
SN75976A2DLR	296-1278-2-ND	9-Channel Differential Transceiver	56-SSOP	15067.00/1,000		
UCC5642MWP	296-12333-5-ND	9-Line LVD Only SCSI Terminator with Regulator	36-QSOP	5.46	4.37	3.69

TEXAS INSTRUMENTS DIGITAL AUDIO INTERFACE RECEIVER

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DIR1701E-ND	DIR1701E-ND	Digital Audio Interface Receiver	28-SSOP	5.31	4.25	3.31
DIR1703E-ND	DIR1703E-ND	Digital Audio Interface Receiver	28-SSOP	5.68	4.55	3.84

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

4000 Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD4001BE	296-2028-5-ND	Quad 2-In NOR Gate	14-Dip	.48	.36	.27
CD4001BM	296-3500-5-ND	Quad 2-In NOR Gate	14-SOP	.48	.36	.27
CD4002BE	296-2029-5-ND	Dual 4-In NOR Gate	14-Dip	.48	.36	.27
CD4007UBE	296-3501-5-ND	Dual Complementary Pair Plus Inverter	14-Dip	.48	.36	.27
CD4007UBM	296-3502-5-ND	Dual Complementary Pair Plus Inverter	14-SOP	.48	.36	.27
CD4009UBE	296-2030-5-ND	Hex Inverter Buffer	16-Dip	.84	.70	.47
CD4011BE	296-2031-5-ND	Quad 2-In NAND Gate	14-Dip	.48	.36	.27
CD4011BM	296-3507-5-ND	Quad 2-In NAND Gate	14-SOP	.48	.36	.27
CD4012BE	296-2032-5-ND	Dual 4-In NAND Gate	14-Dip	.48	.36	.27
CD4013BE	296-2033-5-ND	Dual D-Type Flip-Flop	14-Dip	.48	.36	.27
CD4014BE	296-2034-5-ND	8-Bit Shift Register	16-Dip	.96	.72	.54
CD4015BE	296-2035-5-ND	Dual 4-Bit Shift Register	16-Dip	.84	.63	.48
CD4016BE	296-2036-5-ND	Quad Bilateral Switch	14-Dip	.48	.36	.27
CD4017BE	296-2037-5-ND	Decade Counter/Divider	16-Dip	.84	.63	.48
CD4019BE	296-2038-5-ND	Quad AND/OR Select Gate	16-Dip	.51	.43	.29
CD4020BE	296-2039-5-ND	14-Bit Binary Counter	16-Dip	.75	.63	.50
CD4021BE	296-2040-5-ND	8-Bit Shift Register	16-Dip	.84	.63	.48
CD4023BE	296-2041-5-ND	Triple 3-In NAND Gate	14-Dip	.48	.36	.27
CD4024BE	296-2042-5-ND	7-Bit Binary Counter	14-Dip	.84	.63	.48
CD4025BE	296-2043-5-ND	Triple 3-In NOR Gate	14-Dip	.45	.38	.25
CD4027BE	296-2044-5-ND	Dual JK Master/Slave Flip-Flop	16-Dip	.72	.54	.41
CD4027BM	296-3511-5-ND	Dual JK Master/Slave Flip-Flop	16-SOP	.72	.54	.41
CD4028BE	296-2045-5-ND	BCD-to-Decimal Decoder	16-Dip	.72	.54	.41
CD4029BE	296-2046-5-ND	Preset Up/Down Binary Count	16-Dip	.72	.54	.41
CD4030BE	296-2047-5-ND	Quad Exclusive OR Gate	14-Dip	.72	.54	.41
CD4040BE	296-2048-5-ND	12-Bit Binary Counter	16-Dip	.84	.63	.48
CD4042BE	296-2049-5-ND	Quad D-Type Latch	16-Dip	.84	.63	.48
CD4043BE	296-2050-5-ND	Quad NOR R/S Latch	16-Dip	.84	.63	.48
CD4044BE	296-2051-5-ND	Quad NAND R/S Latch	16-Dip	.84	.63	.48
CD4045BE	296-3512-5-ND	21-Stage Counter	16-Dip	.99	.83	.66
CD4046BE	296-2052-5-ND	Micropower Phase Lock Loop	16-Dip	.92	.69	.52
CD4047BE	296-2053-5-ND	Monostable Multivibrator	14-Dip	.76	.57	.43
CD4048BE	296-2054-5-ND	Expandable 8-In Gate	16-Dip	.81	.68	.45
CD4049UBE	296-2055-5-ND	Hex Inverting Buffer	16-Dip	.54	.45	.30
CD4050BE	296-2056-5-ND	Hex Buffer	16-Dip	.72	.54	.41
CD4051BE	296-2057-5-ND	8-Channel Analog Mux/Demux	16-Dip	.72	.54	.41
CD4051BPWR	296-11993-1-ND	8-Ch. Analog Mux/Demux	16-TSSOP	.60	.45	.34
CD4051BPWR	296-11993-2-ND	8-Ch. Analog Mux/Demux	16-TSSOP	400.00/2,000		
CD4052BE	296-2058-5-ND	4-Channel Analog Mux/Demux	16-Dip	.72	.54	.41
CD4053BE	296-2059-5-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.72	.54	.41
CD4054BE	296-3514-5-ND	CMOS 4-Segment LCD Driver	16-Dip	1.08	.90	.72
CD4059AE	296-3515-5-ND	CMOS Prog. Divide by “N” Counter	24-Dip	5.15	4.13	3.21
CD4060BE	296-2060-5-ND	14-Bit Binary Counter	16-Dip	.84	.63	.48
CD4066BE	296-2061-5-ND	Quad Bilateral Switch	14-Dip	.48	.36	.27
CD4066BM	296-3516-5-ND	Quad Bilateral Switch	14-SOP	.48	.36	.27
CD4067BE	296-3517-5-ND	Single 16-Channel Analog Mux/Demux	24-Dip	1.63	1.30	.98
CD4069UBE	296-3518-5-ND	Hex Inverter	14-Dip	.48	.36	.27
CD4069UBM	296-3519-5-ND	Hex Inverter	14-SOP	.48	.36	.27
CD4071BE	296-2062-5-ND	Quad 2-In OR Gate	14-Dip	.48	.36	.27
CD4072BE	296-2063-5-ND	Dual 4-In Buffed Gate	14-Dip	.48	.36	.27
CD4073BE	296-2064-5-ND	Triple 3-In AND Gate	14-Dip	.48	.36	.27
CD4073BM	296-3520-5-ND	Triple 3-In AND Gate	14-SOP	.48	.36	.27
CD4075BE	296-2065-5-ND	Triple 3-In OR Gate	14-Dip	.48	.36	.27
CD4077BM	296-9406-5-ND	Quad Exclusive NOR Gate	14-SOP	.48	.36	.27
CD4078BE	296-3521-5-ND	8-In NOR/OR Gate	14-Dip	.48	.36	.27
CD4081BE	296-2066-5-ND	Quad 2-In AND Gate	14-Dip	.48	.36	.27
CD4082BE	296-2067-5-ND	Dual 4-In AND Gate	14-Dip	.48	.36	.27
CD4085BE	296-3522-5-ND	Dual 2-Wide/2-In AND/OR Invert Gate	14-Dip	.75	.63	.50
CD4089BPWR	296-3523-1-ND	Binary Rate Multiplier	16-TSSOP	1.30	1.04	.78
CD4089BPWR	296-3523-2-ND	Binary Rate Multiplier	16-TSSOP	1352.00/2,000		
CD4093BE	296-2068-5-ND	Quad 2-In NAND Trigger	14-Dip	.48	.36	.27
CD4093BM	296-3524-5-ND	Quad 2-In NAND Trigger	14-SOP	.48	.36	.27
CD4094BE	296-2069-5-ND	8-Bit Shift Register with Latch	16-Dip	.84	.63	.48
CD4097BE	296-3525-5-ND	Diff. 8-Channel Analog Mux/Demux	24-Dip	2.36	1.89	1.47
CD4098BE	296-3526-5-ND	Dual Monostable Multivibrator	16-Dip	.93	.78	.62
CD4099BE	296-2070-5-ND	8-Bit Addressable Latch	16-Dip	.75	.63	.50
CD4099BPWR	296-9407-1-ND	8-Bit Addressable Latch	16-TSSOP	.75	.63	.50
CD4099BPWR	296-9407-2-ND	8-Bit Addressable Latch	16-TSSOP	666.00/2,000		
CD4503BE	296-2071-5-ND	Tri-State Hex Buffer	16-Dip	.75	.63	.50
CD4504BE	296-3527-5-ND	Hex Voltage-Level Shifter	16-Dip	1.20	1.00	.80
CD4504BPWR	296-12010-1-ND	Hex Voltage-Level Shifter *NEW!*	16-TSSOP	1.20	1.00	.80
CD4504BPWR	296-12010-2-ND	Hex Voltage-Level Shifter *NEW!*	16-TSSOP	1064.00/2,000		
CD4511BE	296-2072-5-ND	BCD T Sig Latch/Decoder/Driver	16-Dip	.75	.63	.50
CD4511BNSR	296-3528-1-ND	BCD-to-7 Segment LED Latch/Decoder/Driver	16-SOP	1.29	1.08	.86
CD4511BNSR	296-3528-2-ND	BCD-to-7 Segment LED Latch/Decoder/Driver	16-SOP	1144.00/2,000		
CD4511BPWR	296-3529-1-ND	BCD-to-7 Segment LED Latch/Decoder/Driver	16-TSSOP	.75	.63	.50
CD4511BPWR	296-3529-2-ND	BCD-to-7 Segment LED Latch/Decoder/Driver	16-TSSOP	666.00/2,000		
CD4512BE	296-2073-5-ND	8-Channel Data Selector	16-Dip	.84	.63	.48
CD4514BE	296-2074-5-ND	4-Bit Latch/Line Decoder	24-Dip	1.44	1.20	.96
CD4516BE	296-2075-5-ND	Binary Up/Down Counter	16-Dip	.90	.75	.60
CD4516BPWR	296-3530-1-ND	Binary Up/Down Counter	16-TSSOP	1.11	.93	.74
CD4516BPWR	296-3530-2-ND	Binary Up/Down Counter	16-TSSOP	984.00/2,000		
CD4518BE	296-2076-5-ND	Dual BCD Up Counter	16-Dip	.87	.73	.58
CD4520BE	296-2077-5-ND	Dual Binary Up Counter	16-Dip	.78	.65	.52
CD4522BE	296-3531-5-ND	Prog. BCD Divide by “N” Counter	16-Dip	1.05	.88	.70
CD4527BE	296-3532-5-ND	BCD Rate Multiplier	16-Dip	1.05	.88	.70
CD4532BE	296-3533-5-ND	8-Bit Priority Encoder	16-Dip	.96	.80	.64
CD4536BE	296-3534-5-ND	Programmable Timer	16-Dip	.90	.75	.60
CD4541BE	296-2078-5-ND	Programmable Timer	14-Dip	.76	.57	.43
CD4541BM	296-3535-5-ND	Programmable Timer	14-SOP	.76	.57	.43
CD4541BM96	296-3536-1-ND	Programmable Timer	14-SOP	.76	.57	.43
CD4541BM96	296-3536-2-ND	Programmable Timer	14-SOP	617.50/2,500		
CD4543BE	296-2079-5-ND	BCD to 7-Segment Decoder Driver	16-Dip	.84	.63	.48
CD4556BE	296-3537-5-ND	Dual Binary to 1-of-4 Decoder/Demux with Output	16-Dip	.78	.65	.52
CD4585BE	296-2080-5-ND	4-Bit Magnitude Comparator	16-Dip	.78	.65	.52
CD40106BE	296-3503-5-ND	Hex Schmitt Trigger	14-Dip	.68	.51	.39
CD40107BE	296-3504-5-ND	Dual 2-In NAND Buffer/Driver	8-Dip	.88	.66	.50
CD40109BE	296-3505-5-ND	Quad Low-High Voltage Level Shifter	16-Dip	1.14	.95	.76
CD14538BPWR	296-12018-1-ND	CMOS Dual Precision Monostable Multivibrator *NEW!*	16-TSSOP	.87	.73	.58
CD14538BPWR	296-12018-2-ND	CMOS Dual Precision Monostable Multivibrator *NEW!*	16-TSSOP	772.00/2,000		
CD40109BPWR	296-12163-1-ND	Quad Low-High Voltage Level Shifter *NEW!*	16-TSSOP	1.14	.95	.76
CD40109BPWR	296-12163-2-ND	Quad Low-High Voltage Level Shifter *NEW!*	16-TSSOP	1010.00/2,000		
CD40110BE	296-3506-5-ND	Decade Up-Down Counter/Latch/Display Driver	16-Dip	1.50	1.20	.90
CD40174BE	296-3508-5-ND	Hex D-Type Flip-Flop	16-Dip	.96	.72	.54
CD40192BE	296-3509-5-ND	Presettable Up/Down BCD Counter (Dual Clock with Reset)	16-Dip	.96	.80	.64
CD40193BE	296-3510-5-ND	Presettable Up/Down Binary Counter (Dual Clock with Reset)	16-Dip	.96	.80	.64

ABT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABT125D	296-1019-5-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.87	.73	.58
SN74ABT125DR	296-1019-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.87	.73	.58
SN74ABT125DR	296-1019-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	942.50/2,500		
SN74ABT125DBR	296-3875-1-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	.87	.73	.58
SN74ABT125DBR	296-3875-2-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	772.00/2,000		
SN74ABT125N	296-3876-5-ND	Tri-State Quad Bus Buffer Gate	14-Dip	.87	.73	.58
SN74ABT125PWR	296-3877-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.87	.73	.58
SN74ABT125PWR	296-3877-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	772.00/2,000		
SN74ABT126D	296-1020-5-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.87	.73	.58
SN74ABT126DR	296-1020-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	1.05	.88	.70
SN74ABT126DR	296-1020-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	942.50/2,500		
SN74ABT126DBR	296-3878-1-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	.87	.73	.58
SN74ABT126DBR	296-3878-2-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	772.00/2,000		
SN74ABT126N	296-3879-5-ND	Tri-State Quad Bus Buffer Gate	14-Dip	.87	.73	.58
SN74ABT126PWR	296-3880-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.87	.73	.58
SN74ABT126PWR	296-3880-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	772.00/2,000		
SN74ABT240ADBR	296-3959-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.02	.85	.68
SN74ABT240ADBR	296-3959-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	904.00/2,000		
SN74ABT240ADW	296-3960-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	1.02	.85	.68
SN74ABT240AN	296-3961-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.02	.85	.68
SN74ABT240APWR	296-3962-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.02	.85	.68
SN74ABT240APWR	296-3962-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	904.00/2,000		
SN74ABT241ADBR	296-3963-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.02	.85	.68
SN74ABT241ADBR	296-3963-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	904.00/2,000		
SN74ABT241ADW	296-3964-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	1.02	.85	.68
SN74ABT241AN	296-3965-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.02	.85	.68
SN74ABT241APWR	296-3966-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.02	.85	.68
SN74ABT241APWR	296-3966-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	904.00/2,000		
SN74ABT244ADBR	296-1037-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.02	.85	.68
SN74ABT244ADBR	296-1037-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	904.00/2,000		
SN74ABT244ADW	296-1038-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	1.02	.85	.68
SN74ABT244ADWR	296-1038-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	1.02	.85	.68
SN74ABT244ADWR	296-1038-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	904.00/2,000		
SN74ABT244AN	296-3967-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.02	.85	.68
SN74ABT244APWR	296-3968-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.02	.85	.68
SN74ABT244APWR	296-3968-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	904.00/2,000		
SN74ABT245BDBR	296-1039-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	1.02	.85	.68
SN74ABT245BDBR	296-1039-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	904.00/2,000		
SN74ABT245BDGVR	296-3969-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	1.02	.85	.68
SN74ABT245BDGVR	296-3969-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	904.00/2,000		
SN74ABT245BDW	296-1040-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	1.02	.85	.68
SN74ABT245BDWR	296-1040-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	1.02	.85	.68
SN74ABT245BDWR	296-1040-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	904.00/2,000		
SN74ABT245BGQNR	296-12461-1-ND	Tri-State Octal Bus Transcvr. *NEW!*	20-VFBGA	1.14	.95	.76
SN74ABT245BGQNR	296-12461-2-ND	Tri-State Octal Bus Transcvr. *NEW!*	20-VFBGA	505.00/1,000		
SN74ABT245BN	296-3970-5-ND	Tri-State Octal Bus Transceiver	20-Dip	1.02	.85	.68
SN74ABT245BPWR	296-3971-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	1.02	.85	.68
SN74ABT245BPWR	296-3971-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	904.00/2,000		
SN74ABT273DBR	296-1041-1-ND	Octal D-Type Flip-Flop	20-SSOP	1.35	1.13	.90
SN74ABT273DBR	296-1041-2-ND	Octal D-Type Flip-Flop	20-SSOP	904.00/2,000		
SN74ABT273DW	296-1042-5-ND	Octal D-Type Flip-Flop	20-SOIC	1.02	.85	.68
SN74ABT273DWR	296-1042-1-ND	Octal D-Type Flip-Flop	20-SOIC	1.02	.85	.68
SN74ABT273DWR	296-1042-2-ND	Octal D-Type Flip-Flop	20-SOIC	904.00/2,000		
SN74ABT273N	296-3972-5-ND	Octal D-Type Flip-Flop	20-Dip	1.02	.85	.68
SN74ABT273PWR	296-3973-1-ND	Octal D-Type Flip-Flop	20-TSSOP	1.02	.85	.68
SN74ABT273PWR	296-3973-2-ND	Octal D-Type Flip-Flop	20-TSSOP	904.00/2,000		
SN74ABT373DBR	296-4002-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	1.02	.85	.68
SN74ABT373DBR	296-4002-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	904.00/2,000		
SN74ABT373DW	296-1043-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	1.02	.85	.68
SN74ABT373DWR	296-1043-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	1.02	.85	.68
SN74ABT373DWR	296-1043-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	904.00/2,000		
SN74ABT373N	296-4003-5-ND	Tri-St. Octal Transparent D-Type Latch	20-Dip	1.02	.85	.68
SN74ABT373PWR	296-4004-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	1.02	.85	.68
SN74ABT373PWR	296-4004-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	904.00/2,000		
SN74ABT374ADBR	296-4005-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	1.02	.85	.68
SN74ABT374ADBR	296-4005-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	904.00/2,000		
SN74ABT374ADW	296-1044-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.02	.85	.68
SN74ABT374ADWR	296-1044-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.02	.85	.68
SN74ABT374ADWR	296-1044-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	904.00/2,000		
SN74ABT374AN	296-4006-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.02	.85	.68
SN74ABT374APWR	296-4007-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.02	.85	.68
SN74ABT374APWR	296-4007-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	904.00/2,000		
SN74ABT377ADBR	296-4008-1-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SSOP	1.02	.85	.68
SN74ABT377ADBR	296-4008-2-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SSOP	904.00/2,000		
SN74ABT377ADW	296-4009-5-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SOIC	1.02	.85	.68
SN74ABT377ADWR	296-4009-1-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SOIC	1.02	.85	.68
SN74ABT377ADWR	296-4009-2-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SOIC	904.00/2,000		
SN74ABT377AN	296-4010-5-ND	Octal D-Type Flip-Flop w/Clock Enable	20-Dip	1.02	.85	.68
SN74ABT377APWR	296-4011-1-ND	Octal D-Type Flip-Flop w/Clock Enable	20-TSSOP	1.02	.85	.68
SN74ABT377APWR	296-4011-2-ND	Octal D-Type Flip-Flop w/Clock Enable	20-TSSOP	904.00/2,000		
SN74ABT533ADBR	296-4012-1-ND	Tri-State Transparent D-Type Latch	20-SSOP	2.25	1.80	1.40
SN74ABT533ADBR	296-4012-2-ND	Tri-State Transparent D-Type Latch	20-SSOP	2550.00/2,000		
SN74ABT533ADW	296-4013-5-ND	Tri-State Transparent D-Type Latch	20-SOIC	2.25	1.80	1.40
SN74ABT533ADWR	296-4013-1-ND	Tri-State Transparent D-Type Latch	20-SOIC	2.30	1.84	1.43
SN74ABT533ADWR	296-4013-2-ND	Tri-State Transparent D-Type Latch	20-SOIC	2602.00/2,000		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABT533APWR	296-4014-1-ND	Tri-State Transparent D-Type Latch	20-TSSOP	2.25	1.80	1.40
SN74ABT533APWR	296-4014-2-ND	Tri-State Transparent D-Type Latch	20-TSSOP	2550.00/2,000		
SN74ABT534ADBR	296-4015-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	2.25	1.80	1.40
SN74ABT534ADBR	296-4015-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	2550.00/2,000		
SN74ABT534ADW	296-4016-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	2.25	1.80	1.40
SN74ABT534ADWR	296-4016-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	2.30	1.84	1.43
SN74ABT534ADWR	296-4016-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	2602.00/2,000		
SN74ABT534APWR	296-4017-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	2.25	1.80	1.40
SN74ABT534APWR	296-4017-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	2550.00/2,000		
SN74ABT540DBR	296-4022-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.17	.98	.78
SN74ABT540DBR	296-4022-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	1038.00/2,000		
SN74ABT540DW	296-4023-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	1.17	.98	.78
SN74ABT540N	296-4024-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.17	.98	.78
SN74ABT541BDBR	296-4025-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.17	.98	.78
SN74ABT541BDBR	296-4025-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	1038.00/2,000		
SN74ABT541BDW	296-4026-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	1.17	.98	.78
SN74ABT541BN	296-4027-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.17	.98	.78
SN74ABT541BPWR	296-4028-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.17	.98	.78
SN74ABT541BPWR	296-4028-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1038.00/2,000		
SN74ABT543ADBR	296-4029-1-ND	Tri-State Octal Registered Transceiver	24-SSOP	2.18	1.74	1.31
SN74ABT543ADBR	296-4029-2-ND	Tri-State Octal Registered Transceiver	24-SSOP	2262.00/2,000		
SN74ABT543ADW	296-4030-5-ND	Tri-State Octal Registered Transceiver	24-SOIC	2.18	1.74	1.31
SN74ABT543ANT	296-4031-5-ND	Tri-State Octal Registered Transceiver	24-Dip	2.18	1.74	1.31
SN74ABT543APWR	296-4032-1-ND	Tri-State Octal Registered Transceiver	24-TSSOP	2.18	1.74	1.31
SN74ABT543APWR	296-4032-2-ND	Tri-State Octal Registered Transceiver	24-TSSOP	2262.00/2,000		
SN74ABT573ADBR	296-4033-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	1.11	.93	.74
SN74ABT573ADBR	296-4033-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	984.00/2,000		
SN74ABT573ADW	296-1045-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	1.11	.93	.74
SN74ABT573ADWR	296-1045-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	1.11	.93	.74
SN74ABT573ADWR	296-1045-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	984.00/2,000		
SN74ABT573AGQNR	296-12087-1-ND	Tri-St. Octal Transparent D-Type Latch	20-BGA	1.26	1.05	.84
SN74ABT573AGQNR	296-12087-2-ND	Tri-St. Octal Transparent D-Type Latch	20-BGA	559.00/1,000		
SN74ABT573AN	296-4034-5-ND	Tri-St. Octal Transparent D-Type Latch	20-Dip	1.11	.93	.74
SN74ABT573APWR	296-4035-1-ND	Tri-St. Octal Transparent D-Type Latch	20-TSSOP	1.11	.93	.74
SN74ABT573APWR	296-4035-2-ND	Tri-St. Octal Transparent D-Type Latch	20-TSSOP	984.00/2,000		
SN74ABT574ADBR	296-4036-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	1.11	.93	.74
SN74ABT574ADBR	296-4036-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	984.00/2,000		
SN74ABT574ADW	296-1046-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.11	.93	.74
SN74ABT574ADWR	296-1046-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.11	.93	.74
SN74ABT574ADWR	296-1046-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	984.00/2,000		
SN74ABT574AGQNR	296-12088-1-ND	Tri-State Octal D-Type Flip-Flop	20-BGA	1.26	1.05	.84
SN74ABT574AGQNR	296-12088-2-ND	Tri-State Octal D-Type Flip-Flop	20-BGA	559.00/1,000		
SN74ABT574AN	296-4038-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.11	.93	.74
SN74ABT574APWR	296-4039-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.11	.93	.74
SN74ABT574APWR	296-4039-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	984.00/2,000		
SN74ABT620DBR	296-4040-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	2.36	1.89	1.47
SN74ABT620DBR	296-4040-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	2678.00/2,000		
SN74ABT620DW	296-4041-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	2.36	1.89	1.47
SN74ABT620N	296-4042-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.36	1.89	1.47
SN74ABT623DBR	296-4043-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	2.81	2.25	1.75
SN74ABT623DBR	296-4043-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	3188.00/2,000		
SN74ABT623DW	296-4044-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	2.81	2.25	1.75
SN74ABT623N	296-4045-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.81	2.25	1.75
SN74ABT640DBR	296-4046-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	2.36	1.89	1.47
SN74ABT640DBR	296-4046-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	2678.00/2,000		
SN74ABT640DW	296-4047-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	2.36	1.89	1.47
SN74ABT640N	296-4048-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.36	1.89	1.47
SN74ABT640PWR	296-4049-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	2.36	1.89	1.47
SN74ABT640PWR	296-4049-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	2678.00/2,000		
SN74ABT646ADBR	296-4050-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	3.83	3.06	2.38
SN74ABT646ADBR	296-4050-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	4336.00/2,000		
SN74ABT646ADGVR	296-4051-2-ND	Tri-St. Octal Bus Transceiver/Register	24-TVSOP	4336.00/2,000		
SN74ABT646ADW	296-4052-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOIC	3.83	3.06	2.38
SN74ABT646ANT	296-4053-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	3.83	3.06	2.38
SN74ABT646DBR	296-4054-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	3.38	2.70	2.10
SN74ABT646DBR	296-4054-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	3826.00/2,000		
SN74ABT244ADW	296-1038-5-ND	Tri-State Octal Buffer/Driver	20-SOP	1.02	.85	.68
SN74ABT244ADWR	296-1038-2-ND	Tri-State Octal Buffer/Driver	20-SOP	904.00/2,000		
SN74ABT244AN	296-3967-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.02	.85	.68
SN74ABT244APWR	296-3968-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.02	.85	.68
SN74ABT244APWR	296-3968-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	904.00/2,000		
SN74ABT245BDBR	296-1039-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	1.02	.85	.68
SN74ABT245BDBR	296-1039-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	904.00/2,000		
SN74ABT245BDGVR	296-3969-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	1.02	.85	.68
SN74ABT245BDGVR	296-3969-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	904.00/2,000		
SN74ABT245BDW	296-1040-5-ND	Tri-State Octal Bus Transceiver	20-SOP	1.02	.85	.68
SN74ABT245BDWR	296-1040-1-ND	Tri-State Octal Bus Transceiver	20-SOP	1.02	.85	.68
SN74ABT245BDWR	296-1040-2-ND	Tri-State Octal Bus Transceiver	20-SOP	904.00/2,000		
SN74ABT245BN	296-3970-5-ND	Tri-State Octal Bus Transceiver	20-Dip	1.02	.85	.68
SN74ABT245BPWR	296-3971-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	1.02	.85	.68
SN74ABT245BPWR	296-3971-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	904.00/2,000		
SN74ABT273DBR	296-1041-1-ND	Octal D-Type Flip-Flop	20-SSOP	1.35	1.13	.90
SN74ABT273DBR	296-1041-2-ND	Octal D-Type Flip-Flop	20-SSOP	904.00/2,000		
SN74ABT273DW	296-1042-5-ND	Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74ABT273DWR	296-1042-1-ND	Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74ABT273DWR	296-1042-2-ND	Octal D-Type Flip-Flop	20-SOP	904.00/2,000		
SN74ABT273N	296-3972-5-ND	Octal D-Type Flip-Flop	20-Dip	1.02	.85	.68
SN74ABT273PWR	296-3973-1-ND	Octal D-Type Flip-Flop	20-TSSOP	1.02	.85	.68
SN74ABT273PWR	296-3973-2-ND	Octal D-Type Flip-Flop	20-TSSOP	904.00/2,000		
SN74ABT373DBR	296-4002-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	1.02	.85	.68
SN74ABT373DBR	296-4002-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	904.00/2,000		
SN74ABT373DW	296-1043-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	1.02	.85	.68
SN74ABT373DWR	296-1043-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	1.02	.85	.68
SN74ABT373DWR	296-1043-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	904.00/2,000		
SN74ABT373N	296-4003-5-ND	Tri-St. Octal Transparent D-Type Latch	20-Dip	1.02	.85	.68
SN74ABT373PWR	296-4004-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	1.02	.85	.68
SN74ABT373PWR	296-4004-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	904.00/2,000		
SN74ABT374ADBR	296-4005-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	1.02	.85	.68
SN74ABT374ADBR	296-4005-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	904.00/2,000		
SN74ABT374ADW	296-1044-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74ABT374ADWR	296-1044-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.02	.85	.68
SN74ABT374ADWR	296-1044-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	904.00/2,000		
SN74ABT374AN	296-4006-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.02	.85	.68
SN74ABT374APWR	296-4007-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.02	.85	.68
SN74ABT374APWR	296-4007-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	904.00/2,000		
SN74ABT377ADBR	296-4008-1-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SSOP	1.02	.85	.68
SN74ABT377ADBR	296-4008-2-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SSOP	904.00/2,000		
SN74ABT377ADW	296-4009-5-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SOP	1.02	.85	.68
SN74ABT377ADWR	296-4009-1-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SOP	1.02	.85	.68
SN74ABT377ADWR	296-4009-2-ND	Octal D-Type Flip-Flop w/Clock Enable	20-SOP	904.00/2,000		
SN74ABT377AN	296-4010-5-ND	Octal D-Type Flip-Flop w/Clock Enable	20-Dip	1.02	.85	.68
SN74ABT377APWR	296-4011-1-ND	Octal D-Type Flip-Flop w/Clock Enable	20-TSSOP	1.02	.85	.68
SN74ABT377APWR	296-4011-2-ND	Octal D-Type Flip-Flop w/Clock Enable	20-TSSOP	904.00/2,000		
SN74ABT533ADBR	296-4012-1-ND	Tri-State Transparent D-Type Latch	20-SSOP	2.25	1.80	1.40
SN74ABT533ADBR	296-4012-2-ND	Tri-State Transparent D-Type Latch	20-SSOP	2550.00/2,000		
SN74ABT533ADW	296-4013-5-ND	Tri-State Transparent D-Type Latch	20-SOP	2.25	1.80	1.40
SN74ABT533ADWR	296-4013-1-ND	Tri-State Transparent D-Type Latch	20-SOP	2.30	1.84	1.43
SN74ABT533ADWR	296-4013-2-ND	Tri-State Transparent D-Type Latch	20-SOP	2602.00/2,000		
SN74ABT533APWR	296-4014-1-ND	Tri-State Transparent D-Type Latch	20-TSSOP	2.25	1.80	1.40
SN74ABT533APWR	296-4014-2-ND	Tri-State Transparent D-Type Latch	20-TSSOP	2550.00/2,000		
SN74ABT534ADBR	296-4015-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	2.25	1.80	1.40
SN74ABT534ADBR	296-4015-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	2550.00/2,000		
SN74ABT534ADW	296-4016-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	2.25	1.80	1.40
SN74ABT534ADWR	296-4016-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	2.30	1.84	1.43
SN74ABT534ADWR	296-4016-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	2602.00/2,000		
SN74ABT534APWR	296-4017-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	2.25	1.80	1.40
SN74ABT534APWR	296-4017-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	2550.00/2,000		
SN74ABT540DBR	296-4022-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.17	.98	.78
SN74ABT540DBR	296-4022-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	1038.00/2,000		
SN74ABT540DW	296-4023-5-ND	Tri-State Octal Buffer/Driver	20-SOP	1.17	.98	.78
SN74ABT540N	296-4024-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.17	.98	.78
SN74ABT541BDBR	296-4025-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.17	.98	.78
SN74ABT541BDBR	296-4025-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	1038.00/2,000		
SN74ABT541BDW	296-4026-5-ND	Tri-State Octal Buffer/Driver	20-SOP	1.17	.98	.78
SN74ABT541BN	296-4027-5-ND	Tri-State Octal Buffer/Driver	20-Dip	1.17	.98	.78
SN74ABT541BPWR	296-4028-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.17	.98	.78
SN74ABT541BPWR	296-4028-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1038.00/2,000		
SN74ABT543ADBR	296-4029-1-ND	Tri-State Octal Registered Transceiver	24-SSOP	2.18	1.74	1.31
SN74ABT543ADBR	296-4029-2-ND	Tri-State Octal Registered Transceiver	24-SSOP	2262.00/2,000		
SN74ABT543ADW	296-4030-5-ND	Tri-State Octal Registered Transceiver	24-SOP	2.18	1.74	1.31
SN74ABT543ANT	296-4031-5-ND	Tri-State Octal Registered Transceiver	24-Dip	2.18	1.74	1.31
SN74ABT543APWR	296-4032-1-ND	Tri-State Octal Registered Transceiver	24-TSSOP	2.18	1.74	1.31
SN74ABT543APWR	296-4032-2-ND	Tri-State Octal Registered Transceiver	24-TSSOP	2262.00/2,000		
SN74ABT573ADBR	296-4033-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	1.11	.93	.74
SN74ABT573ADBR	296-4033-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	984.00/2,000		
SN74ABT573ADW	296-1045-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	1.11	.93	.74
SN74ABT573ADWR	296-1045-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	1.11	.93	.74
SN74ABT573ADWR	296-1045-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	984.00/2,000		
SN74ABT573AGQNR	296-12087-1-ND	Tri-St. Octal Transparent D-Type Latch	20-BGA	1.26	1.05	.84
SN74ABT573AGQNR	296-12087-2-ND	Tri-St. Octal Transparent D-Type Latch	20-BGA	559.00/1,000		
SN74ABT573AN	296-4034-5-ND	Tri-St. Octal Transparent D-Type Latch	20-Dip	1.11	.93	.74
SN74ABT573APWR	296-4035-1-ND	Tri-St. Octal Transparent D-Type Latch	20-TSSOP	1.11	.93	.74
SN74ABT573APWR	296-4035-2-ND	Tri-St. Octal Transparent D-Type Latch	20-TSSOP	984.00/2,000		
SN74ABT574ADBR	296-4036-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	1.11	.93	.74
SN74ABT574ADBR	296-4036-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	984.00/2,000		
SN74ABT574ADW	296-1046-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.11	.93	.74
SN74ABT574ADWR	296-1046-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.11	.93	.74
SN74ABT574ADWR	296-1046-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	984.00/2,000		
SN74ABT574AGQNR	296-12088-1-ND	Tri-State Octal D-Type Flip-Flop	20-BGA	1.26	1.05	.84
SN74ABT574AGQNR	296-12088-2-ND	Tri-State Octal D-Type Flip-Flop	20-BGA	559.00/1,000		
SN74ABT574AN	296-4038-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.11	.93	.74
SN74ABT574APWR	296-4039-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.11	.93	.74
SN74ABT574APWR	296-4039-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	984.00/2,000		
SN74ABT620DBR	296-4040-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	2.36	1.89	1.47
SN74ABT620DBR	296-4040-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	2678.00/2,000		
SN74ABT620DW	296-4041-5-ND	Tri-State Octal Bus Transceiver	20-SOP	2.36	1.89	1.47
SN74ABT620N	296-4042-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.36	1.89	1.47
SN74ABT623DBR	296-4043-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	2.81	2.25	1.75
SN74ABT623DBR	296-4043-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	3188.00/2,000		
SN74ABT623DW	296-4044-5-ND	Tri-State Octal Bus Transceiver	20-SOP	2.81	2.25	1.75
SN74ABT623N	296-4045-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.81	2.25	1.75
SN74ABT640DBR	296-4046-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	2.36	1.89	1.47
SN74ABT640DBR	296-4046-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	2678.00/2,000		
SN74ABT640DW	296-4047-5-ND	Tri-State Octal Bus Transceiver	20-SOP	2.36	1.89	1.47
SN74ABT640N	296-4048-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.36	1.89	1.47
SN74ABT640PWR	296-4049-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	2.36	1.89	1.47
SN74ABT640PWR	296-4049-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	2678.00/2,000		
SN74ABT646ADBR	296-4050-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	3.83	3.06	2.38
SN74ABT646ADBR	296-4050-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	4336.00/2,000		
SN74ABT646ADGVR	296-4051-2-ND	Tri-St. Octal Bus Transceiver/Register	24-TVSOP	4336.00/2,000		
SN74ABT646ADW	296-4052-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOP	3.83	3.06	2.38
SN74ABT646ANT	296-4053-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	3.83	3.06	2.38
SN74ABT646DBR	296-4054-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	3.38	2.70	2.10
SN74ABT646DBR	296-4054-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	3826.00/2,000		
SN74ABT646DGVR	296-4055-1-ND	Tri-St. Octal Bus Transceiver/Register	24-TVSOP	3.38	2.70	2.10
SN74ABT646DGVR	296-4055-2-ND	Tri-St. Octal Bus Transceiver/Register	24-TVSOP	3826.00/2,000		
SN74ABT646DW	296-4056-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOIC	3.38	2.70	2.10
SN74ABT646NT	296-4057-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	3.38	2.70	2.10
SN74ABT646PWR	296-4058-1-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	3.38	2.70	2.10
SN74ABT646PWR	296-4058-2-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	3826.00/2,000		
SN74ABT651DBR	296-4059-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	5.40	4.32	3.36
SN74ABT651DBR	296-4059-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	6120.00/2,000		
SN74ABT651DW	296-4060-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOIC	5.40	4.32	3.36
SN74ABT651NT	296-4061-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	5.40	4.32	3.36
SN74ABT652ADBR	296-4062-1-ND	Tri-State Octal Registered Transceiver	24-SSOP	3.83	3.06	2.38
SN74ABT652ADBR	296-4062-2-ND	Tri-State Octal Registered Transceiver	24-SSOP	4336.00/2,000		
SN74ABT652ADW	296-1047-5-ND	Tri-State Octal Registered Transceiver	24-SOIC	3.83	3.06	2.38
SN74ABT652ADWR	296-1047-1-ND	Tri-State Octal Registered Transceiver	24-SOIC	3.83	3.06	2.38
SN74ABT652ADWR	296-1047-2-ND	Tri-State Octal Registered Transceiver	24-SOIC	4336.00/2,000		
SN74ABT652ANT	296-4063-5-ND	Tri-State Octal Registered Transceiver	24-Dip	3.83	3.06	2.38
SN74ABT652DBR	296-4064-1-ND	Tri-State Octal Transceiver/Register	24-SSOP	3.38	2.70	2.10
SN74ABT652DBR	296-4064-2-ND	Tri-State Octal Transceiver/Register	24-SSOP	3826.00/2,000		
SN74ABT652DW	296-4065-5-ND	Tri-State Octal Transceiver/Register	24-SOIC	3.38	2.70	2.10
SN74ABT652DWR	296-4065-1-ND	Tri-State Octal Transceiver/Register	24-SOIC	3.38	2.70	2.10
SN74ABT652DWR	296-4065-2-ND	Tri-State Octal Transceiver/Register	24-SOIC	3826.00/2,000		

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74ABT652NT	296-4066-5-ND	Tri-State Octal Transceiver/Register	24-Dip	3.38	2.70	2.10
SN74ABT657ADBR	296-4067-1-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator	24-SSOP	3.60	2.88	2.24
SN74ABT657ADBR	296-4067-2-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator	24-SSOP	4080.00/2,000		
SN74ABT657ADW	296-4068-5-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator	24-SOIC	3.60	2.88	2.24
SN74ABT657ANT	296-4069-5-ND	Tri-State 8-Bit Octal Transceiver with Parity Generator	24-Dip	3.60	2.88	2.24
SN74ABT821ADBR	296-4088-1-ND	Tri-State 10-Bit Bus Interface Flip-Flop	24-SSOP	2.70	2.16	1.68
SN74ABT821ADBR	296-4088-2-ND	Tri-State 10-Bit Bus Interface Flip-Flop	24-SSOP	3060.00/2,000		
SN74ABT821ADW	296-4089-5-ND	Tri-State 10-Bit Bus Interface Flip-Flop	24-SOP	2.70	2.16	1.68
SN74ABT821ANT	296-4090-5-ND	Tri-State 10-Bit Bus Interface Flip-Flop	24-Dip	2.70	2.16	1.68
SN74ABT823DBR	296-1048-1-ND	Tri-State 9-Bit Bus Interface Flip-Flop	24-SSOP	2.59	2.07	1.61
SN74ABT823DBR	296-1048-2-ND	Tri-State 9-Bit Bus Interface Flip-Flop	24-SSOP	2932.00/2,000		
SN74ABT823DW	296-4091-5-ND	Tri-State 9-Bit Bus Interface Flip-Flop	24-SOIC	2.59	2.07	1.61
SN74ABT823NT	296-4092-5-ND	Tri-State 9-Bit Bus Interface Flip-Flop	24-Dip	2.59	2.07	1.61
SN74ABT827DBR	296-4094-1-ND	Tri-State 10-Bit Buffer/Driver	24-SSOP	2.70	2.16	1.68
SN74ABT827DBR	296-4094-2-ND	Tri-State 10-Bit Buffer/Driver	24-SSOP	3060.00/2,000		
SN74ABT827DW	296-4095-5-ND	Tri-State 10-Bit Buffer/Driver	24-SOIC	2.70	2.16	1.68
SN74ABT827NT	296-4096-5-ND	Tri-State 10-Bit Buffer/Driver	24-Dip	2.70	2.16	1.68
SN74ABT827PWR	296-4097-1-ND	Tri-State 10-Bit Buffer/Driver	24-TSSOP	2.70	2.16	1.68
SN74ABT827PWR	296-4097-2-ND	Tri-State 10-Bit Buffer/Driver	24-TSSOP	3060.00/2,000		
SN74ABT833DW	296-4098-5-ND	8-9 Bit Parity Bus Transceiver	24-SOIC	2.97	2.38	1.85
SN74ABT833NT	296-4099-5-ND	8-9 Bit Parity Bus Transceiver	24-Dip	2.97	2.38	1.85
SN74ABT841ADBR	296-1049-1-ND	Tri-State 10-Bit Bus D-Type Latch	24-SSOP	2.81	2.25	1.75
SN74ABT841ADBR	296-1049-2-ND	Tri-State 10-Bit Bus D-Type Latch	24-SSOP	3188.00/2,000		
SN74ABT841ADW	296-4100-5-ND	Tri-State 10-Bit Bus D-Type Latch	24-SOIC	2.81	2.25	1.75
SN74ABT841ANT	296-4101-5-ND	Tri-State 10-Bit Bus D-Type Latch	24-Dip	2.81	2.25	1.75
SN74ABT841APWR	296-4102-1-ND	Tri-State 10-Bit Bus D-Type Latch	24-TSSOP	2.81	2.25	1.75
SN74ABT841APWR	296-4102-2-ND	Tri-State 10-Bit Bus D-Type Latch	24-TSSOP	3188.00/2,000		
SN74ABT843DBR	296-4103-1-ND	Tri-State 9-Bit Bus D-Type Latch	24-SSOP	2.81	2.25	1.75
SN74ABT843DBR	296-4103-2-ND	Tri-State 9-Bit Bus D-Type Latch	24-SSOP	3188.00/2,000		
SN74ABT843NT	296-4104-5-ND	Tri-State 9-Bit Bus D-Type Latch	24-Dip	2.81	2.25	1.75
SN74ABT853DW	296-4105-5-ND	8-9 Bit Parity Bus Transceiver	24-SOIC	4.28	3.42	2.66
SN74ABT853NT	296-4106-5-ND	8-9 Bit Parity Bus Transceiver	24-Dip	4.28	3.42	2.66
SN74ABT861NT	296-4109-5-ND	Tri-State 10-Bit Transceiver	24-Dip	3.60	2.88	2.24
SN74ABT863DBR	296-4110-1-ND	Tri-State 9-Bit Bus Transceiver	24-SSOP	3.26	2.61	2.03
SN74ABT863DBR	296-4110-2-ND	Tri-State 9-Bit Bus Transceiver	24-SSOP	3698.00/2,000		
SN74ABT863DWR	296-4111-1-ND	Tri-State 9-Bit Bus Transceiver	24-SOIC	3.31	2.65	2.06
SN74ABT863DWR	296-4111-2-ND	Tri-State 9-Bit Bus Transceiver	24-SOIC	3748.00/2,000		
SN74ABT2240ADBR	296-3945-1-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	1.05	.88	.70
SN74ABT2240ADBR	296-3945-2-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	932.00/2,000		
SN74ABT2240ADW	296-3946-5-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SOIC	1.05	.88	.70
SN74ABT2240ADWR	296-3946-1-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SOIC	1.05	.88	.70
SN74ABT2240ADWR	296-3946-2-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SOIC	932.00/2,000		
SN74ABT2240APWR	296-3947-1-ND	Tri-St. Octal Buffer/Line/MOS Driver	20-TSSOP	1.05	.88	.70
SN74ABT2240APWR	296-3947-2-ND	Tri-St. Octal Buffer/Line/MOS Driver	20-TSSOP	932.00/2,000		
SN74ABT2241DBR	296-3948-1-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	1.05	.88	.70
SN74ABT2241DBR	296-3948-2-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	932.00/2,000		
SN74ABT2241DW	296-3949-5-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SOIC	1.05	.88	.70
SN74ABT2241N	296-3950-5-ND	Tri-State Octal Buffer/Line/MOS Driver	20-Dip	1.05	.88	.70
SN74ABT2241PWR	296-3951-1-ND	Tri-St. Octal Buffer/Line/MOS Driver	20-TSSOP	1.05	.88	.70
SN74ABT2241PWR	296-3951-2-ND	Tri-St. Octal Buffer/Line/MOS Driver	20-TSSOP	932.00/2,000		
SN74ABT2244ADBR	296-1036-1-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	1.05	.88	.70
SN74ABT2244ADBR	296-1036-2-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SSOP	932.00/2,000		
SN74ABT2244ADWR	296-3952-1-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SOIC	1.05	.88	.70
SN74ABT2244ADWR	296-3952-2-ND	Tri-State Octal Buffer/Line/MOS Driver	20-SOIC	932.00/2,000		
SN74ABT2244AN	296-3953-5-ND	Tri-State Octal Buffer/Line/MOS Driver	20-Dip	1.05	.88	.70
SN74ABT2244APWR	296-3954-1-ND	Tri-State Octal Buffer/Line/MOS Driver	20-TSSOP	1.05	.88	.70
SN74ABT2244APWR	296-3954-2-ND	Tri-State Octal Buffer/Line/MOS Driver	20-TSSOP	932.00/2,000		
SN74ABT2245DBR	296-3955-1-ND	Tri-State Octal Xcvr./Line/MOS Driver	20-SSOP	1.05	.88	.70
SN74ABT2245DBR	296-3955-2-ND	Tri-State Octal Xcvr./Line/MOS Driver	20-SSOP	932.00/2,000		
SN74ABT2245DW	296-3956-5-ND	Tri-State Octal Xcvr./Line/MOS Driver	20-SOIC	1.05	.88	.70
SN74ABT2245N	296-3957-5-ND	Tri-State Octal Xcvr./Line/MOS Driver	20-Dip	1.05	.88	.70
SN74ABT2245PWR	296-3958-1-ND	Tri-State Octal Xcvr./Line/MOS Driver	20-TSSOP	1.05	.88	.70
SN74ABT2245PWR	296-3958-2-ND	Tri-State Octal Xcvr./Line/MOS Driver	20-TSSOP	932.00/2,000		
SN74ABT2827DWR	296-3974-1-ND	Tri-State 10-Bit Buffer/Driver	24-SOIC	3.76	3.01	2.34
SN74ABT2827DWR	296-3974-2-ND	Tri-State 10-Bit Buffer/Driver	24-SOIC	4258.00/2,000		
SN74ABT2952ADBR	296-3975-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	4.50	3.60	2.80
SN74ABT2952ADBR	296-3975-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	5100.00/2,000		
SN74ABT2952ADW	296-3976-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOIC	4.50	3.60	2.80
SN74ABT2952ANT	296-3977-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	4.50	3.60	2.80
SN74ABT3611-15PCB	296-3978-ND	64x36 Synchronous FIFO Memory	120-HLQFP	15.94	14.36	12.73
SN74ABT3611-15PQ	296-3979-ND	64x36 Synchronous FIFO Memory	132-BQFP	15.94	14.36	12.73
SN74ABT3611-20PCB	296-3980-ND	64x36 Synchronous FIFO Memory	120-HLQFP	15.73	14.16	12.56
SN74ABT3611-20PQ	296-3981-ND	64x36 Synchronous FIFO Memory	132-BQFP	15.73	14.16	12.56
SN74ABT3611-30PCB	296-3982-ND	64x36 Synchronous FIFO Memory	120-HLQFP	15.73	14.16	12.56
SN74ABT3611-30PQ	296-3983-ND	64x36 Synchronous FIFO Memory	132-BQFP	15.73	14.16	12.56
SN74ABT3612-15PCB	296-3984-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	120-HLQFP	15.18	13.67	12.12
SN74ABT3612-15PQ	296-3985-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	132-BQFP	15.18	13.67	12.12
SN74ABT3612-20PCB	296-3986-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	120-HLQFP	14.96	13.47	11.95
SN74ABT3612-20PQ	296-3987-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	132-BQFP	14.96	13.47	11.95
SN74ABT3612-30PCB	296-3988-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	120-HLQFP	15.73	14.16	12.56
SN74ABT3612-30PQ	296-3989-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	132-BQFP	15.73	14.16	12.56
SN74ABT3613-15PCB	296-3990-ND	64x36 Synchronous FIFO Memory	120-HLQFP	15.94	14.36	12.73
SN74ABT3613-15PQ	296-3991-ND	64x36 Synchronous FIFO Memory	132-BQFP	15.94	14.36	12.73
SN74ABT3613-20PCB	296-3992-ND	64x36 Synchronous FIFO Memory	120-HLQFP	15.73	14.16	12.56
SN74ABT3613-20PQ	296-3993-ND	64x36 Synchronous FIFO Memory	132-BQFP	15.73	14.16	12.56
SN74ABT3613-30PCB	296-3994-ND	64x36 Synchronous FIFO Memory	120-HLQFP	15.73	14.16	12.56
SN74ABT3613-30PQ	296-3995-ND	64x36 Synchronous FIFO Memory	132-BQFP	15.73	14.16	12.56
SN74ABT3614-15PCB	296-3996-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	120-HLQFP	15.18	13.67	12.12
SN74ABT3614-15PQ	296-3997-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	132-BQFP	15.18	13.67	12.12
SN74ABT3614-20PCB	296-3998-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	120-HLQFP	14.96	13.47	11.95
SN74ABT3614-20PQ	296-3999-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	132-BQFP	14.96	13.47	11.95
SN74ABT3614-30PCB	296-4000-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	120-HLQFP	15.73	14.16	12.56
SN74ABT3614-30PQ	296-4001-ND	64x36x2 Bi-Directional Synchronous FIFO Memory	132-BQFP	15.73	14.16	12.56
SN74ABT5400ADW	296-4018-1-ND	Tri-State 11-Bit Line/Memory Driver	28-SOIC	3.15	2.52	1.96
SN74ABT5400ADW	296-4018-2-ND	Tri-State 11-Bit Line/Memory Driver	28-SOIC	1785.00/1,000		
SN74ABT5401DW	296-4019-1-ND	Tri-State 11-Bit Line/Memory Driver	28-SOIC	3.15	2.52	1.96
SN74ABT5401DW	296-4019-2-ND	Tri-State 11-Bit Line/Memory Driver	28-SOIC	1785.00/1,000		
SN74ABT5402ADW	296-4020-1-ND	Tri-State 12-Bit Line/Memory Driver	28-SOIC	3.38	2.70	2.10
SN74ABT5402ADW	296-4020-2-ND	Tri-State 12-Bit Line/Memory Driver	28-SOIC	1913.00/1,000		
SN74ABT5403DW	296-4021-1-ND	Tri-State 12-Bit Line/Memory Driver	28-SOIC	3.38	2.70	2.10
SN74ABT5403DW	296-4021-2-ND	Tri-State 12-Bit Line/Memory Driver	28-SOIC	1913.00/1,000		
SN74ABT7820-15PH	296-4080-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-QFP	17.82	16.64	15.45
SN74ABT7820-15PN	296-4081-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-LQFP	17.82	16.64	15.45
SN74ABT7820-20PH	296-4082-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-QFP	17.82	16.64	15.45
SN74ABT7820-20PN	296-4083-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-LQFP	17.82	16.64	15.45
SN74ABT7820-25PH	296-4084-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-QFP	10.56	9.51	8.44
SN74ABT7820-25PN	296-4085-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-LQFP	10.56	9.51	8.44
SN74ABT7820-30PH	296-4086-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-QFP	15.35	14.33	13.30
SN74ABT7820-30PN	296-4087-ND	512x18x2 Bi-Directional Asynchronous FIFO Memory	80-LQFP	15.35	14.33	13.30
SN74ABT8245DW	296-4093-5-ND	Scan Test Device w/Octal Bus Transcvr.	24-SOIC	9.00	7.20	6.08
SN74ABT8543DL	296-4107-5-ND	Scan Test Device w/Octal Bus Transcvr.	28-SSOP	9.00	7.20	6.08
SN74ABT8543DW	296-4108-5-ND	Scan Test Device w/Octal Bus Transcvr.	28-SOIC	9.00	7.20	6.08
SN74ABT8646DL	296-4112-5-ND	Scan Test Device with Octal Bus Transceiver/Register	28-SSOP	9.00	7.20	6.08
SN74ABT8646DW	296-4113-5-ND	Scan Test Device with Octal Bus Transceiver/Register	28-SOIC	9.00	7.20	6.08
SN74ABT8652DL	296-4114-5-ND	Scan Test Device with Octal Bus Transceiver/Register	28-SSOP	9.00	7.20	6.08
SN74ABT8952DL	296-4115-5-ND	Scan Test Device with Octal Bus Transceiver	28-SSOP	9.00	7.20	6.08
SN74ABT8952DW	296-4116-5-ND	Scan Test Device w/Octal Bus Transcvr.	28-SOIC	9.00	7.20	6.08
SN74ABT8996DW	296-4117-5-ND	10-Bit Addressable Scan Port	24-SOIC	8.33	7.50	6.65
SN74ABT8996DWR	296-4117-1-ND	10-Bit Addressable Scan Port	24-SOIC	8.33	7.50	6.65
SN74ABT8996DWR	296-4117-2-ND	10-Bit Addressable Scan Port	24-SOIC	12350.00/2,000		
SN74ABT8996PWR	296-4118-1-ND	10-Bit Addressable Scan Port	24-TSSOP	8.33	7.50	6.65
SN74ABT8996PWR	296-4118-2-ND	10-Bit Addressable Scan Port	24-TSSOP	12350.00/2,000		
SN74ABT16240ADGGR	296-3882-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.03	1.62	1.22
SN74ABT16240ADGGR	296-3882-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2106.00/2,000		
SN74ABT16240ADGVR	296-3883-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.03	1.62	1.22
SN74ABT16240ADGVR	296-3883-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2106.00/2,000		
SN74ABT16240ADLR	296-3884-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT16240ADLR	296-3884-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1053.00/1,000		
SN74ABT16241ADGGR	296-3885-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.03	1.62	1.22
SN74ABT16241ADGGR	296-3885-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2106.00/2,000		
SN74ABT16241ADGVR	296-3886-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.03	1.62	1.22
SN74ABT16241ADGVR	296-3886-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2106.00/2,000		
SN74ABT16241ADL	296-3887-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT16244ADGGR	296-1023-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.25	1.80	1.40
SN74ABT16244ADGGR	296-1023-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2106.00/2,000		
SN74ABT16244ADGVR	296-3888-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.03	1.62	1.22
SN74ABT16244ADGVR	296-3888-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2106.00/2,000		
SN74ABT16244ADL	296-1024-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT16244ADLR	296-1024-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT16244ADLR	296-1024-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1053.00/1,000		
SN74ABT16245ADGGR	296-1025-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.36	1.89	1.47
SN74ABT16245ADGGR	296-1025-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2106.00/2,000		
SN74ABT16245ADGVR	296-3889-1-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	2.03	1.62	1.22
SN74ABT16245ADGVR	296-3889-2-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	2106.00/2,000		
SN74ABT16245ADL	296-1026-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABT16245ADLR	296-1026-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABT16245ADLR	296-1026-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1053.00/1,000		
SN74ABT16373ADGGR	296-3899-1-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TSSOP	2.03	1.62	1.22
SN74ABT16373ADGGR	296-3899-2-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TSSOP	2106.00/2,000		
SN74ABT16373ADL	296-1029-5-ND	Tri-State 16-Bit Transp. D-Type Latch	48-SSOP	2.03	1.62	1.22
SN74ABT16373ADLR	296-1029-1-ND	Tri-State 16-Bit Transp. D-Type Latch	48-SSOP	2.03	1.62	1.22
SN74ABT16373ADLR	296-1029-2-ND	Tri-State 16-Bit Transp. D-Type Latch	48-SSOP	1053.00/1,000		
SN74ABT16374ADGGR	296-3900-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2.03	1.62	1.22
SN74ABT16374ADGGR	296-3900-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2106.00/2,000		
SN74ABT16374ADL	296-1030-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.03	1.62	1.22
SN74ABT16374ADLR	296-1030-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.03	1.62	1.22
SN74ABT16374ADLR	296-1030-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1053.00/1,000		
SN74ABT16470DGGR	296-3901-1-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	8.00	6.40	5.40
SN74ABT16470DGGR	296-3901-2-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	10000.00/2,000		
SN74ABT16470DL	296-3902-5-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	8.00	6.40	5.40
SN74ABT16500BDGGR	296-3903-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3.53	2.83	2.20
SN74ABT16500BDGGR	296-3903-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	4004.00/2,000		
SN74ABT16500BDL	296-3904-5-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.53	2.83	2.20
SN74ABT16501DGGR	296-3905-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3.53	2.83	2.20
SN74ABT16501DGGR	296-3905-2-ND	Tri-State 18-Bit Univ. Bus Transceiver.	56-TSSOP	4004.00/2,000		
SN74ABT16501DLR	296-1031-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.53	2.83	2.20
SN74ABT16501DLR	296-1031-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	2002.00/1,000		
SN74ABT16540ADGGR	296-3906-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	3.40	2.72	2.12
SN74ABT16540ADGGR	296-3906-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	3850.00/2,000		

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABT16540ADGVR	296-3907-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	3.40	2.72	2.12
SN74ABT16540ADGVR	296-3907-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	3850.00/2,000		
SN74ABT16540ADL	296-3908-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	3.40	2.72	2.12
SN74ABT16541ADGGR	296-3909-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.88	2.31	1.80
SN74ABT16541ADGGR	296-3909-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	3264.00/2,000		
SN74ABT16541ADGVR	296-3910-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.88	2.31	1.80
SN74ABT16541ADGVR	296-3910-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	3264.00/2,000		
SN74ABT16541ADL	296-1032-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.88	2.31	1.80
SN74ABT16541ADLR	296-1032-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.88	2.31	1.80
SN74ABT16541ADLR	296-1032-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1632.00/1,000		
SN74ABT16543DGGR	296-3911-1-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	3.58	2.87	2.23
SN74ABT16543DGGR	296-3911-2-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	4054.00/2,000		
SN74ABT16543DLR	296-1033-1-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	3.58	2.87	2.23
SN74ABT16543DLR	296-1033-2-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	2027.00/1,000		
SN74ABT16600DLR	296-3912-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	7.04	5.64	4.76
SN74ABT16600DLR	296-3912-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	4400.00/1,000		
SN74ABT16601DGGR	296-1034-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	7.00	5.60	4.73
SN74ABT16601DGGR	296-1034-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	8750.00/2,000		
SN74ABT16601DL	296-3913-5-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	7.00	5.60	4.73
SN74ABT16623DGGR	296-3914-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	5.18	4.14	3.22
SN74ABT16623DGGR	296-3914-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	5866.00/2,000		
SN74ABT16623DL	296-3915-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	5.18	4.14	3.22
SN74ABT16623DLR	296-3915-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	5.18	4.14	3.22
SN74ABT16623DLR	296-3915-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2933.00/1,000		
SN74ABT16640DGGR	296-3916-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	5.18	4.14	3.22
SN74ABT16640DGGR	296-3916-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	5866.00/2,000		
SN74ABT16640DLR	296-3917-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	5.22	4.18	3.25
SN74ABT16640DLR	296-3917-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2958.00/1,000		
SN74ABT16646DGGR	296-3918-1-ND	Tri-St. 16-Bit Bus Transcvr./Register	56-TSSOP	5.18	4.14	3.22
SN74ABT16646DGGR	296-3918-2-ND	Tri-St. 16-Bit Bus Transcvr./Register	56-TSSOP	5866.00/2,000		
SN74ABT16646DLR	296-1035-1-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	5.18	4.14	3.22
SN74ABT16646DLR	296-1035-2-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	2933.00/1,000		
SN74ABT16652DL	296-3919-5-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	5.18	4.14	3.22
SN74ABT16657DGGR	296-3920-1-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker	56-TSSOP	5.18	4.14	3.22
SN74ABT16657DGGR	296-3920-2-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker	56-TSSOP	5866.00/2,000		
SN74ABT16657DLR	296-3921-1-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker	56-SSOP	5.22	4.18	3.25
SN74ABT16657DLR	296-3921-2-ND	Tri-State 16-Bit Transceiver with Parity Gen/Checker	56-SSOP	2958.00/1,000		
SN74ABT16821DGGR	296-3922-1-ND	Tri-St. 20-Bit Bus-Interface Flip-Flop	56-TSSOP	5.40	4.32	3.36
SN74ABT16821DGGR	296-3922-2-ND	Tri-St. 20-Bit Bus-Interface Flip-Flop	56-TSSOP	6120.00/2,000		
SN74ABT16821DLR	296-3923-1-ND	Tri-St. 20-Bit Bus-Interface Flip-Flop	56-SSOP	5.45	4.36	3.39
SN74ABT16821DLR	296-3923-2-ND	Tri-State 20-Bit Bus-Interface Flip-Flop	56-SSOP	3086.00/1,000		
SN74ABT16823DGGR	296-3924-1-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	5.18	4.14	3.22
SN74ABT16823DGGR	296-3924-2-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	5866.00/2,000		
SN74ABT16823DLR	296-3925-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-SSOP	5.18	4.14	3.22
SN74ABT16823DLR	296-3925-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-SSOP	2933.00/1,000		
SN74ABT16825DL	296-3926-5-ND	Tri-State 18-Bit Buffer/Driver	56-SSOP	5.18	4.14	3.22
SN74ABT16827DLR	296-3928-1-ND	Tri-State 20-Bit Buffer/Driver	56-SSOP	5.40	4.32	3.36
SN74ABT16827DLR	296-3928-2-ND	Tri-State 20-Bit Buffer/Driver	56-SSOP	3060.00/1,000		
SN74ABT16833DLR	296-3929-1-ND	Dual 8-9 Bit Parity Bus Transceiver	56-SSOP	5.22	4.18	3.25
SN74ABT16833DLR	296-3929-2-ND	Dual 8-9 Bit Parity Bus Transceiver	56-SSOP	2958.00/1,000		
SN74ABT16841DL	296-3930-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-SSOP	6.40	5.12	4.32
SN74ABT16843DGGR	296-3931-1-ND	Tri-State 18-Bit Bus-Interface D-Type Latch	56-TSSOP	5.18	4.14	3.22
SN74ABT16843DGGR	296-3931-2-ND	Tri-State 18-Bit Bus-Interface D-Type Latch	56-TSSOP	5866.00/2,000		
SN74ABT16843DLR	296-3932-1-ND	Tri-State 18-Bit Bus-Interface D-Type Latch	56-SSOP	5.22	4.18	3.25
SN74ABT16843DLR	296-3932-2-ND	Tri-State 18-Bit Bus-Interface D-Type Latch	56-SSOP	2958.00/1,000		
SN74ABT16853DLR	296-3933-1-ND	Dual 8-9 Bit Parity Transceiver	56-SSOP	7.64	6.12	5.16
SN74ABT16853DLR	296-3933-2-ND	Dual 8-9 Bit Parity Transceiver	56-SSOP	4775.00/1,000		
SN74ABT16863DLR	296-3934-1-ND	Tri-State 18-Bit Bus Transceiver	56-SSOP	5.84	4.68	3.95
SN74ABT16863DLR	296-3934-2-ND	Tri-State 18-Bit Bus Transceiver	56-SSOP	3650.00/1,000		
SN74ABT16952DGGR	296-3935-1-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	5.18	4.14	3.22
SN74ABT16952DGGR	296-3935-2-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	5866.00/2,000		
SN74ABT16952DLR	296-3936-1-ND	Tri-St. 16-Bit Registered Transceiver	56-SSOP	5.18	4.14	3.22
SN74ABT16952DLR	296-3936-2-ND	Tri-St. 16-Bit Registered Transceiver	56-SSOP	2933.00/1,000		
SN74ABT18245ADGGR	296-3937-1-ND	Scan Test Device with 18-Bit Bus Transceiver	56-TSSOP	9.16	8.25	7.32
SN74ABT18245ADGGR	296-3937-2-ND	Scan Test Device with 18-Bit Bus Transceiver	56-TSSOP	13586.00/2,000		
SN74ABT18245ADL	296-3938-5-ND	Scan Test Device with 18-Bit Bus Transceiver	56-SSOP	9.16	8.25	7.32
SN74ABT18245ADLR	296-3938-1-ND	Scan Test Device with 18-Bit Bus Transceiver	56-SSOP	9.20	8.28	7.35
SN74ABT18245ADLR	296-3938-2-ND	Scan Test Device with 18-Bit Bus Transceiver	56-SSOP	6817.00/1,000		
SN74ABT18502PM	296-3939-ND	Scan Test Device with 18-Bit Bus Transceiver	64-TQFP	14.99	13.50	11.97
SN74ABT18504PM	296-3940-ND	Scan Test Device with 20-Bit Bus Transceiver	64-TQFP	14.99	13.50	11.97
SN74ABT18640DGGR	296-3941-1-ND	Scan Test Device with 18-Bit Inv. Bus Transceiver	56-TSSOP	9.58	8.63	7.65
SN74ABT18640DGGR	296-3941-2-ND	Scan Test Device with 18-Bit Inv. Bus Transceiver	56-TSSOP	14202.00/2,000		
SN74ABT18640DL	296-3942-5-ND	Scan Test Device with 18-Bit Inv. Bus Transceiver	56-SSOP	9.58	8.63	7.65
SN74ABT18646PM	296-3943-ND	Scan Test Device with 18-Bit Bus Transceiver/Register	64-TQFP	15.24	13.73	12.17
SN74ABT18652PM	296-3944-ND	Scan Test Device with 18-Bit Bus Transceiver/Register	64-TQFP	15.24	13.73	12.17
SN74ABT162244DGGR	296-9752-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.03	1.62	1.22
SN74ABT162244DGGR	296-9752-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2106.00/2,000		
SN74ABT162244DGVR	296-3881-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.03	1.62	1.22
SN74ABT162244DGVR	296-3881-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2106.00/2,000		
SN74ABT162244DL	296-1021-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT162244DLR	296-1021-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABT162244DLR	296-1021-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1053.00/1,000		
SN74ABT162245DGGR	296-9753-1-ND	Tri-State 16-Bit Transceiver	48-TSSOP	2.03	1.62	1.22
SN74ABT162245DGGR	296-9753-2-ND	Tri-State 16-Bit Transceiver	48-TSSOP	2106.00/2,000		
SN74ABT162245DL	296-9754-5-ND	Tri-St. 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABT162245DLR	296-1022-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABT162245DLR	296-1022-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1053.00/1,000		
SN74ABT162500DL	296-3890-5-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.53	2.83	2.20
SN74ABT162501DGGR	296-3891-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3.53	2.83	2.20
SN74ABT162501DGGR	296-3891-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	4004.00/2,000		
SN74ABT162501DLR	296-1027-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.98	3.19	2.48
SN74ABT162501DLR	296-1027-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	2002.00/1,000		
SN74ABT162601DGG	296-3892-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	8.83	7.95	7.05
SN74ABT162601DGGR	296-3892-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	13092.00/2,000		
SN74ABT162601DLR	296-1028-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	8.86	7.98	7.08
SN74ABT162601DLR	296-1028-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	6570.00/1,000		
SN74ABT162823ADGGR	296-3893-1-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	5.40	4.32	3.36
SN74ABT162823ADGGR	296-3893-2-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	6120.00/2,000		
SN74ABT162823ADLR	296-3894-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-SSOP	5.45	4.36	3.39
SN74ABT162823ADLR	296-3894-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-SSOP	3086.00/1,000		
SN74ABT162827ADGGR	296-3895-1-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	5.40	4.32	3.36
SN74ABT162827ADGGR	296-3895-2-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	6120.00/2,000		
SN74ABT162827ADL	296-3896-5-ND	Tri-State 20-Bit Buffer/Driver	56-SSOP	5.40	4.32	3.36
SN74ABT162841DGGR	296-3897-1-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-TSSOP	5.00	4.00	3.38
SN74ABT162841DGGR	296-3897-2-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-TSSOP	6250.00/2,000		
SN74ABT162841DL	296-3898-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-SSOP	5.00	4.00	3.38

ABTE Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABTE16245DGGR	296-9755-1-ND	Tri-St. 16-Bit Bus Transceiver	48-TSSOP	6.00	4.80	4.05
SN74ABTE16245DGGR	296-9755-2-ND	Tri-St. 16-Bit Bus Transceiver	48-TSSOP	7500.00/2,000		
SN74ABTE16245DL	296-9756-5-ND	Tri-St. 16-Bit Bus Transceiver	48-SSOP	6.00	4.80	4.05
SN74ABTE16246DGGR	296-4119-1-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver	48-TSSOP	8.20	6.56	5.54
SN74ABTE16246DGGR	296-4119-2-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver	48-TSSOP	10250.00/2,000		
SN74ABTE16246DL	296-4120-5-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver	48-SSOP	8.20	6.56	5.54
SN74ABTE16246DLR	296-4120-1-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver	48-SSOP	8.24	6.60	5.57
SN74ABTE16246DLR	296-4120-2-ND	Tri-State 11-Bit Incident-Wave Bus Transceiver	48-SSOP	5150.00/1,000		

ABTH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABTH245DBR	296-4138-1-ND	Tri-State Octal Bus Transceiver	64-SSOP	1.02	.85	.68
SN74ABTH245DBR	296-4138-2-ND	Tri-State Octal Bus Transceiver	64-SSOP	904.00/2,000		
SN74ABTH245DGVR	296-4139-1-ND	Tri-State Octal Bus Transceiver	64-TVSOP	1.02	.85	.68
SN74ABTH245DGVR	296-4139-2-ND	Tri-State Octal Bus Transceiver	64-TVSOP	904.00/2,000		
SN74ABTH245DWR	296-4140-1-ND	Tri-State Octal Bus Transceiver	64-SOIC	1.02	.85	.68
SN74ABTH245DWR	296-4140-2-ND	Tri-State Octal Bus Transceiver	64-SOIC	904.00/2,000		
SN74ABTH245N	296-4141-5-ND	Tri-State Octal Bus Transceiver	64-Dip	1.02	.85	.68
SN74ABTH245PWR	296-4142-1-ND	Tri-State Octal Bus Transceiver	64-TSSOP	1.35	1.13	.90
SN74ABTH245PWR	296-4142-2-ND	Tri-State Octal Bus Transceiver	64-TSSOP	1198.00/2,000		
SN74ABTH25245DW	296-4143-5-ND	Tri-State 25-Ohm Octal Bus Transceiver	24-SOIC	4.39	3.51	2.73
SN74ABTH25245NT	296-4144-5-ND	Tri-State 25-Ohm Octal Bus Transceiver	24-Dip	4.39	3.51	2.73
SN74ABTH32245PZ	296-4145-ND	Tri-State 36-Bit Bus Transceiver	100-LQFP	15.83	14.25	12.64
SN74ABTH32316PN	296-4146-ND	Tri-Port 16-Bit Univ. Bus Exchanger	80-LQFP	14.16	12.75	11.31
SN74ABTH32543PZ	296-4147-ND	Tri-State 36-Bit Reg. Bus Transceiver	100-LQFP	15.75	14.70	13.65
SN74ABTH16244DGGR	296-4122-1-ND	Tri-State 16-Bit Bus Buffer/Driver	48-TSSOP	2.03	1.62	1.22
SN74ABTH16244DGGR	296-4122-2-ND	Tri-State 16-Bit Bus Buffer/Driver	48-TSSOP	2106.00/2,000		
SN74ABTH16244DL	296-4123-5-ND	Tri-State 16-Bit Bus Buffer/Driver	48-SSOP	2.03	1.62	1.22
SN74ABTH16244DLR	296-4123-1-ND	Tri-State 16-Bit Bus Buffer/Driver	48-SSOP	2.15	1.72	1.29
SN74ABTH16244DLR	296-4123-2-ND	Tri-State 16-Bit Bus Buffer/Driver	48-SSOP	1118.00/1,000		
SN74ABTH16245DGGR	296-4124-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.03	1.62	1.22
SN74ABTH16245DGGR	296-4124-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2106.00/2,000		
SN74ABTH16245DGVR	296-4125-1-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	2.03	1.62	1.22
SN74ABTH16245DGVR	296-4125-2-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	2106.00/2,000		
SN74ABTH16245DL	296-4126-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABTH16260DL	296-1446-5-ND	Tri-State 12-24 Bit Mux D-Type Latch	56-SSOP	5.00	4.00	3.38
SN74ABTH16260DLR	296-1446-1-ND	Tri-State 12-24 Bit Mux D-Type Latch	56-SSOP	5.04	4.04	3.41
SN74ABTH16260DLR	296-1446-2-ND	Tri-State 12-24 Bit Mux D-Type Latch	56-SSOP	3150.00/1,000		
SN74ABTH16460DGGR	296-4127-1-ND	Tri-State 12-24 Bit Mux D-Type Latch	56-TSSOP	7.70	6.16	5.20
SN74ABTH16460DGGR	296-4127-2-ND	Tri-State 12-24 Bit Mux D-Type Latch	56-TSSOP	9626.00/2,000		
SN74ABTH16460DL	296-4128-5-ND	Tri-State 12-24 Bit Mux D-Type Latch	56-SSOP	7.70	6.16	5.20
SN74ABTH16823DGGR	296-4129-1-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	5.20	4.16	3.51
SN74ABTH16823DGGR	296-4129-2-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	6500.00/2,000		
SN74ABTH16823DLR	296-4130-1-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-SSOP	5.24	4.20	3.54
SN74ABTH16823DLR	296-4130-2-ND	Tri-State 18-Bit Bus-Interface Flip-Flop	56-SSOP	3275.00/1,000		
SN74ABTH32318PN	296-1447-5-ND	18-Bit Tri-Port Univ Bus Exchange	80-LQFP	14.58	13.13	11.64
SN74ABTH32501PZ	296-1448-5-ND	36-Bit Bus Transceiver	100-LQFP	16.50	15.40	14.30
SN74ABTH162245DGGR	296-1050-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.03	1.62	1.22
SN74ABTH162245DGGR	296-1050-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2106.00/2,000		
SN74ABTH162245DGVR	296-4121-1-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	2.03	1.62	1.22
SN74ABTH162245DGVR	296-4121-2-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	2106.00/2,000		
SN74ABTH162245DL	296-1445-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.03	1.62	1.22
SN74ABTH162260DLR	296-1051-1-ND	12-24-Bit Mux D-Type Latch	56-SSOP	5.04	4.04	3.41
SN74ABTH162260DLR	296-1051-2-ND	Tri-State 12-24 Bit Mux. D-Type Latch	56-SSOP	3150.00/1,000		
SN74ABTH182502APM	296-4131-ND	Scan Test Device with 18-Bit Universal Bus Transceiver	64-TQFP	12.66	11.40	10.11
SN74ABTH182504APM	296-4132-ND	Scan Test Device with 20-Bit Universal Bus Transceiver	64-TQFP	12.66	11.40	10.11
SN74ABTH182646APM	296-4133-ND	Scan Test Device with 18-Bit Transceiver/Register	64-TQFP	13.74	12.38	10.98
SN74ABTH18502APM	296-4134-ND	Scan Test Device with 18-Bit Universal Bus Transceiver	64-TQFP	12.66	11.40	10.11
SN74ABTH18504APM	296-4135-ND	Scan Test Device with 20-Bit Universal Bus Transceiver	64-TQFP	12.66	11.40	10.11
SN74ABTH18646APM	296-4136-ND	Scan Test Device with 18-Bit Transceiver/Register	64-TQFP	13.74	12.38	10.98
SN74ABTH18652APM	296-4137-ND	Scan Test Device with 18-Bit Transceiver/Register	64-TQFP	13.74	12.38	10.98

ABTR Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABTR2245DBR	296-4148-1-ND	Tri-State Octal Transceiver/Line/ Memory Driver	20-SSOP	1.05	.88	.70
SN74ABTR2245DBR	296-4148-2-ND	Tri-State Octal Transceiver/Line/ Memory Driver	20-SSOP	932.00/2,000		
SN74ABTR2245DW	296-4149-5-ND	Tri-State Octal Transceiver/Line/ Memory Driver	20-SOIC	1.05	.88	.70

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ABTR2245PWR	296-4150-1-ND	Tri-State Octal Transceiver/Line/ Memory Driver	20-TSSOP	1.35	1.13	.90
SN74ABTR2245PWR	296-4150-2-ND	Tri-State Octal Transceiver/Line/ Memory Driver	20-TSSOP	1198.00/2,000		

AC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74AC11032D	296-4156-5-ND	Quad 2-Input OR Gate	16-SOIC	1.05	.88	.70
74AC11032DBR	296-4157-1-ND	Quad 2-Input OR Gate	16-SSOP	1.05	.88	.70
74AC11032DBR	296-4157-2-ND	Quad 2-Input OR Gate	16-SSOP	932.00/2,000		
74AC11032N	296-4158-5-ND	Quad 2-Input OR Gate	16-Dip	1.05	.88	.70
74AC11074D	296-4159-5-ND	Dual D-Type Flip-Flop	14-SOIC	1.14	.95	.76
74AC11074PWR	296-4160-1-ND	Dual D-Type Flip-Flop	14-TSSOP	1.14	.95	.76
74AC11074PWR	296-4160-2-ND	Dual D-Type Flip-Flop	14-TSSOP	1010.00/2,000		
74AC11138N	296-4162-5-ND	3-8 Decoder/Demultiplexer	16-Dip	1.35	1.13	.90
74AC11138PWR	296-4163-1-ND	3-8 Decoder/Demultiplexer	16-TSSOP	1.35	1.13	.90
74AC11138PWR	296-4163-2-ND	3-8 Decoder/Demultiplexer	16-TSSOP	1198.00/2,000		
74AC11240DBR	296-4167-1-ND	Octal Buffer/Line Driver	24-SSOP	1.70	1.36	1.02
74AC11240DBR	296-4167-2-ND	Octal Buffer/Line Driver	24-SSOP	1768.00/2,000		
74AC11244DBR	296-4168-1-ND	Octal Buffer/Line Driver	24-SSOP	1.70	1.36	1.02
74AC11244DBR	296-4168-2-ND	Octal Buffer/Line Driver	24-SSOP	1768.00/2,000		
74AC11244DW	296-4169-5-ND	Octal Buffer/Line Driver	24-SOIC	1.70	1.36	1.02
74AC11244PWR	296-1000-1-ND	Octal Buffer/Line Driver	24-TSSOP	1.70	1.36	1.02
74AC11244PWR	296-1000-2-ND	Octal Buffer/Line Driver	24-TSSOP	1768.00/2,000		
74AC11245DW	296-4170-5-ND	Octal Bus Transceiver	24-SOIC	1.83	1.46	1.10
74AC16244DL	296-4173-5-ND	16-Bit Buffer/Line Driver	48-SSOP	2.40	1.92	1.44
74AC16245DL	296-4174-5-ND	16-Bit Bus Transceiver	48-SSOP	2.40	1.92	1.44
CD74AC00E	296-4214-5-ND	Quad 2-Input NAND Gate	14-Dip	.56	.42	.32
CD74AC00M	296-4215-5-ND	Quad 2-Input NAND Gate	14-SOP	.56	.42	.32
CD74AC00M96	296-4215-1-ND	Quad 2-Input NAND Gate	14-SOP	.56	.42	.32
CD74AC00M96	296-4215-2-ND	Quad 2-Input NAND Gate	14-SOP	455.00/2,500		
CD74AC02M96	296-4216-1-ND	Quad 2-Input NOR Gate	14-SOP	.56	.42	.32
CD74AC02M96	296-4216-2-ND	Quad 2-Input NOR Gate	14-SOP	455.00/2,500		
CD74AC04E	296-4217-5-ND	Hex Inverter	14-Dip	.56	.42	.32
CD74AC04M96	296-4218-1-ND	Hex Inverter	14-SOP	.56	.42	.32
CD74AC04M96	296-4218-2-ND	Hex Inverter	14-SOP	455.00/2,500		
CD74AC05E	296-4219-5-ND	Hex Inverter	14-Dip	.56	.42	.32
CD74AC05M	296-4220-5-ND	Hex Inverter	14-SOP	.56	.42	.32
CD74AC08M	296-1377-5-ND	Quad 2-Input AND Gate	14-SOIC	.56	.42	.32
CD74AC10M	296-4222-5-ND	Triple 3-Input NAND Gate	14-SOP	.56	.42	.32
CD74AC10M96	296-4222-1-ND	Triple 3-Input NAND Gate	14-SOP	.56	.42	.32
CD74AC10M96	296-4222-2-ND	Triple 3-Input NAND Gate	14-SOP	455.00/2,500		
CD74AC14M	296-1981-5-ND	Hex Inverter Schmitt Trigger	14-SOP	.56	.42	.32
CD74AC14M96	296-1981-1-ND	Hex Inverter Schmitt Trigger	14-SOP	.56	.42	.32
CD74AC14M96	296-1981-2-ND	Hex Inverter Schmitt Trigger	14-SOP	455.00/2,500		
CD74AC20E	296-4237-5-ND	Dual 4-Input NAND Gate	14-Dip	.56	.42	.32
CD74AC20M	296-4238-5-ND	Dual 4-Input NAND Gate	14-SOP	.56	.42	.32
CD74AC32M96	296-1985-1-ND	Quad 2-Input OR Gate	14-SOP	.56	.42	.32
CD74AC32M96	296-1985-2-ND	Quad 2-Input OR Gate	14-SOP	455.00/2,500		
CD74AC74M	296-4249-5-ND	Dual D-Type Flip-Flop with Set/Reset	14-SOP	.56	.42	.32
CD74AC109M96	296-4221-1-ND	Dual JK Flip-Flop with Set/Reset	16-SOP	.80	.60	.45
CD74AC109M96	296-4221-2-ND	Dual JK Flip-Flop with Set/Reset	16-SOP	650.00/2,500		
CD74AC112E	296-4223-5-ND	Dual JK Flip-Flop with Set/Reset	16-Dip	.80	.60	.45
CD74AC112M	296-4224-5-ND	Dual JK Flip-Flop with Set/Reset	16-SOP	.80	.60	.45
CD74AC138E	296-4225-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.80	.60	.45
CD74AC138M	296-4226-5-ND	3-8 Line Decoder/Demultiplexer	16-SOP	.80	.60	.45
CD74AC139M96	296-4227-1-ND	2-4 Line Decoder/Demultiplexer	16-SOP	.80	.60	.45
CD74AC139M96	296-4227-2-ND	2-4 Line Decoder/Demultiplexer	16-SOP	650.00/2,500		
CD74AC151M96	296-4228-1-ND	8-Input Multiplexer	16-SOP	.92	.69	.52
CD74AC151M96	296-4228-2-ND	8-Input Multiplexer	16-SOP	747.50/2,500		
CD74AC153M96	296-4229-1-ND	Dual 4-Input Multiplexer	16-SOP	.92	.69	.52
CD74AC153M96	296-4229-2-ND	Dual 4-Input Multiplexer	16-SOP	747.50/2,500		
CD74AC157E	296-4230-5-ND	Quad 2-Input Multiplexer	16-Dip	.84	.63	.48
CD74AC157M	296-4231-5-ND	Quad 2-Input Multiplexer	16-SOP	.84	.63	.48
CD74AC161M	296-4232-5-ND	4-Bit Synchronous Binary Counter	16-SOP	.84	.70	.56
CD74AC163E	296-4233-5-ND	4-Bit Synchronous Binary Counter	16-Dip	.84	.70	.56
CD74AC163M96	296-4234-1-ND	4-Bit Synchronous Binary Counter	16-SOP	.84	.70	.56
CD74AC163M96	296-4234-2-ND	4-Bit Synchronous Binary Counter	16-SOP	910.00/2,500		
CD74AC164E	296-4235-5-ND	8-Bit Serial-In/Parallel-Out Shift Register	14-Dip	1.40	1.12	.84
CD74AC174E	296-4236-5-ND	Hex D-Type Flip-Flop with Reset	16-Dip	.92	.69	.52
CD74AC238M96	296-4239-1-ND	3-8 Line Decoder/Demux	16-SOP	1.20	1.00	.80
CD74AC238M96	296-4239-2-ND	3-8 Line Decoder/Demux	16-SOP	1300.00/2,500		
CD74AC240M	296-4240-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.75	.63	.50
CD74AC253M	296-4242-5-ND	Tri-State Dual 4-Input Mux	16-SOP	.88	.66	.50
CD74AC257M	296-4243-5-ND	Tri-State Quad 2-Input Mux	16-SOP	.88	.66	.50
CD74AC273E	296-1378-5-ND	Octal D-Type Flip-Flop with Reset	20-Dip	.88	.66	.50
CD74AC280E	296-4245-5-ND	9-Bit Odd/Even Parity-Generator/Checker	14-Dip	.88	.66	.50
CD74AC280M96	296-4246-1-ND	9-Bit Odd/Even Parity-Generator/Checker	14-SOP	.88	.66	.50
CD74AC280M96	296-4246-2-ND	9-Bit Odd/Even Parity-Generator/Checker	14-SOP	715.00/2,500		
CD74AC374M	296-9411-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.75	.63	.50
CD74AC534M96	296-4247-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	.87	.73	.58
CD74AC534M96	296-4247-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	772.00/2,000		
CD74AC541E	296-4248-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.02	.85	.68
CD74AC573E	296-1379-5-ND	Octal Transparent Latch	20-Dip	.81	.68	.54
SN74AC00D	296-1052-5-ND	Quad 2-Input NAND Gate	14-SOIC	.56	.42	.32
SN74AC00DR	296-1052-1-ND	Quad 2-Input NAND Gate	14-SOIC	.56	.42	.32
SN74AC00DR	296-1052-2-ND	Quad 2-Input NAND Gate	14-SOIC	455.00/2,500		
SN74AC00N	296-4287-5-ND	Quad 2-Input NAND Gate	14-Dip	.56	.42	.32
SN74AC00PWR	296-4288-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.56	.42	.32
SN74AC00PWR	296-4288-2-ND	Quad 2-Input NAND Gate	14-TSSOP	372.00/2,000		
SN74AC04D	296-1053-5-ND	Hex Inverter	14-SOIC	.56	.42	.32
SN74AC04DR	296-1053-1-ND	Hex Inverter	14-SOIC	.56	.42	.32
SN74AC04DR	296-1053-2-ND	Hex Inverter	14-SOIC	455.00/2,500		
SN74AC04DBR	296-4289-1-ND	Hex Inverter	14-SSOP	.56	.42	.32
SN74AC04DBR	296-4289-2-ND	Hex Inverter	14-SSOP	372.00/2,000		
SN74AC04N	296-4290-5-ND	Hex Inverter	14-Dip	.56	.42	.32
SN74AC04PWR	296-1054-1-ND	Hex Inverter	14-TSSOP	.56	.42	.32
SN74AC04PWR	296-1054-2-ND	Hex Inverter	14-TSSOP	372.00/2,000		
SN74AC08DBR	296-4291-1-ND	Quad 2-Input AND Gate	14-SSOP	.56	.42	.32
SN74AC08DBR	296-4291-2-ND	Quad 2-Input AND Gate	14-SSOP	372.00/2,000		
SN74AC08DR	296-1055-1-ND	Quad 2-Input AND Gate	14-SOIC	.56	.42	.32
SN74AC08DR	296-1055-2-ND	Quad 2-Input AND Gate	14-SOIC	455.00/2,500		
SN74AC08PWR	296-4292-1-ND	Quad 2-Input AND Gate	14-TSSOP	.56	.42	.32
SN74AC08PWR	296-4292-2-ND	Quad 2-Input AND Gate	14-TSSOP	372.00/2,000		
SN74AC10DBR	296-4293-1-ND	Triple 3-Input NAND Gate	14-SSOP	.56	.42	.32
SN74AC10DBR	296-4293-2-ND	Triple 3-Input NAND Gate	14-SSOP	372.00/2,000		
SN74AC10D	296-4294-5-ND	Triple 3-Input NAND Gate	14-SOIC	.56	.42	.32
SN74AC10DR	296-4294-1-ND	Triple 3-Input NAND Gate	14-SOIC	.56	.42	.32
SN74AC10DR	296-4294-2-ND	Triple 3-Input NAND Gate	14-SOIC	455.00/2,500		
SN74AC10PWR	296-4295-1-ND	Triple 3-Input NAND Gate	14-TSSOP	.56	.42	.32
SN74AC10PWR	296-4295-2-ND	Triple 3-Input NAND Gate	14-TSSOP	372.00/2,000		
SN74AC11DBR	296-4296-1-ND	Triple 3-Input AND Gate	14-SSOP	.56	.42	.32
SN74AC11DBR	296-4296-2-ND	Triple 3-Input AND Gate	14-SSOP	372.00/2,000		
SN74AC11D	296-4297-5-ND	Triple 3-Input AND Gate	14-SOIC	.56	.42	.32
SN74AC11DR	296-4297-1-ND	Triple 3-Input AND Gate	14-SOIC	.56	.42	.32
SN74AC11DR	296-4297-2-ND	Triple 3-Input AND Gate	14-SOIC	455.00/2,500		
SN74AC11PWR	296-4298-1-ND	Triple 3-Input AND Gate	14-TSSOP	.56	.42	.32
SN74AC11PWR	296-4298-2-ND	Triple 3-Input AND Gate	14-TSSOP	372.00/2,000		
SN74AC14DBR	296-4299-1-ND	Hex Schmitt-Trigger Inverter	14-SSOP	.56	.42	.32
SN74AC14DBR	296-4299-2-ND	Hex Schmitt-Trigger Inverter	14-SSOP	372.00/2,000		
SN74AC14D	296-4300-5-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.56	.42	.32
SN74AC14DR	296-4300-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.56	.42	.32
SN74AC14DR	296-4300-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	455.00/2,500		
SN74AC14N	296-4301-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.56	.42	.32
SN74AC14PWR	296-4302-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.56	.42	.32
SN74AC14PWR	296-4302-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	372.00/2,000		
SN74AC32D	296-1059-5-ND	Quad 2-Input OR Gate	14-SOIC	.56	.42	.32
SN74AC32DR	296-1059-1-ND	Quad 2-Input OR Gate	14-SOIC	.56	.42	.32
SN74AC32DR	296-1059-2-ND	Quad 2-Input OR Gate	14-SOIC	455.00/2,500		
SN74AC32DBR	296-4317-1-ND	Quad 2-Input OR Gate	14-SSOP	.56	.42	.32
SN74AC32DBR	296-4317-2-ND	Quad 2-Input OR Gate	14-SSOP	372.00/2,000		
SN74AC32N	296-4318-5-ND	Quad 2-Input OR Gate	14-Dip	.56	.42	.32
SN74AC32PWR	296-4319-1-ND	Quad 2-Input OR Gate	14-TSSOP	.56	.42	.32
SN74AC32PWR	296-4319-2-ND	Quad 2-Input OR Gate	14-TSSOP	372.00/2,000		
SN74AC74D	296-1063-5-ND	Dual D-Type Flip-Flop with Clear/Preset	14-SOIC	.56	.42	.32
SN74AC74DR	296-1063-1-ND	Dual D-Type Flip-Flop with Clear/Preset	14-SOIC	.56	.42	.32
SN74AC74DR	296-1063-2-ND	Dual D-Type Flip-Flop with Clear/Preset	14-SOIC	455.00/2,500		
SN74AC74DBR	296-4341-1-ND	Dual D-Type Flip-Flop with Clear/Preset	14-SSOP	.56	.42	.32
SN74AC74DBR	296-4341-2-ND	Dual D-Type Flip-Flop with Clear/Preset	14-SSOP	372.00/2,000		
SN74AC74N	296-4342-5-ND	Dual D-Type Flip-Flop with Clear/Preset	14-Dip	.56	.42	.32
SN74AC74PWR	296-1064-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TSSOP	.56	.42	.32
SN74AC74PWR	296-1064-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TSSOP	372.00/2,000		
SN74AC86D	296-4343-5-ND	Quad 2-Input EX-OR Gate	14-SOIC	.56	.42	.32
SN74AC86DBR	296-4344-1-ND	Quad 2-Input EX-OR Gate	14-SSOP	.56	.42	.32
SN74AC86DBR	296-4344-2-ND	Quad 2-Input EX-OR Gate	14-SSOP	372.00/2,000		
SN74AC86N	296-4345-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.56	.42	.32
SN74AC86PWR	296-4346-1-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.56	.42	.32
SN74AC86PWR	296-4346-2-ND	Quad 2-Input EX-OR Gate	14-TSSOP	372.00/2,000		
SN74AC240DBR	296-4303-1-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	.92	.69	.52
SN74AC240DBR	296-4303-2-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	612.00/2,000		
SN74AC240DW	296-4304-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.92	.69	.52
SN74AC240N	296-4305-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.92	.69	.52
SN74AC240PWR	296-4306-1-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	.92	.69	.52
SN74AC240PWR	296-4306-2-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	612.00/2,000		
SN74AC241DBR	296-4307-1-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	.92	.69	.52
SN74AC241DBR	296-4307-2-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	612.00/2,000		
SN74AC241DW	296-1056-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.92	.69	.52
SN74AC241DWR	296-1056-1-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.92	.69	.52
SN74AC241DWR	296-1056-2-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	612.00/2,000		
SN74AC241N	296-4308-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.92	.69	.52
SN74AC241PWR	296-4309-1-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	.92	.69	.52
SN74AC241PWR	296-4309-2-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	612.00/2,000		
SN74AC244DBR	296-4310-1-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	.92	.69	.52
SN74AC244DBR	296-4310-2-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	612.00/2,000		
SN74AC244DWR	296-1057-1-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.92	.69	.52
SN74AC244DWR	296-1057-2-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	612.00/2,000		
SN74AC244N	296-4311-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.92	.69	.52
SN74AC244NSR	296-4312-1-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.11	.93	.74
SN74AC244NSR	296-4312-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	984.00/2,000		
SN74AC244PWR	296-4313-1-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	.92	.69	.52
SN74AC244PWR	296-4313-2-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	612.00/2,000		
SN74AC245DBR	296-4314-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.92	.69	.52
SN74AC245DBR	296-4314-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	612.00/2,000		
SN74AC245DW	296-1058-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.92	.69	.52
SN74AC245DWR	296-1058-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.92	.69	.52
SN74AC245DWR	296-1058-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	612.00/2,000		
SN74AC245N	296-4315-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.92	.69	.52
SN74AC245PWR	296-4316-1-ND	Tri-St. Octal Bus Transceiver	20-TSSOP	.92	.69	.52
SN74AC245PWR	296-4316-2-ND	Tri-St. Octal Bus Transceiver	20-TSSOP	612.00/2,000		
SN74AC373DBR	296-4320-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	.92	.69	.52
SN74AC373DBR	296-4320-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	612.00/2,000		
SN74AC373DWR	296-4321-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	.92	.69	.52
SN74AC373DWR	296-4321-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	612.00/2,000		
SN74AC373NSR	296-4322-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SOP	1.11	.93	.74
SN74AC373NSR	296-4322-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SOP	984.00/2,000		
SN74AC373PWR	296-4323-1-ND	Tri-St. Octal D-Type Transp. Latch	20-TSSOP	.92	.69	.52
SN74AC373PWR	296-4323-2-ND	Tri-St. Octal D-Type Transp. Latch	20-TSSOP	612.00/2,000		
SN74AC374DBR	296-4324-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.92	.69	.52
SN74AC374DBR	296-4324-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	612.00/2,000		
SN74AC374DW	296-1060-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.92	.69	.52
SN74AC374DWR	296-1060-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.92	.69	.52
SN74AC374DWR	296-1060-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	612.00/2,000		
SN74AC374PWR	296-4325-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.92	.69	.52
SN74AC374PWR	296-4325-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	612.00/2,000		
SN74AC533DBR	296-4326-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	1.05	.88	.70
SN74AC533DBR	296-4326-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	932.00/2,000		
SN74AC533DW	296-4327-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	1.05	.88	.70
SN74AC533PWR	296-4328-1-ND	Tri-St. Octal D-Type Transp. Latch	20-TSSOP	1.05	.88	.70
SN74AC533PWR	296-4328-2-ND	Tri-St. Octal D-Type Transp. Latch	20-TSSOP	932.00/2,000		
SN74AC534DBR	296-4329-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	1.05	.88	.70
SN74AC534DBR	296-4329-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	932.00/2,000		
SN74AC534DW	296-4330-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.05	.88	.70

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74AC534N	296-4331-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.05	.88	.70
SN74AC534PWR	296-4332-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.05	.88	.70
SN74AC534PWR	296-4332-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	932.00/2,000		
SN74AC563DBR	296-4333-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	1.05	.88	.70
SN74AC563DBR	296-4333-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	932.00/2,000		
SN74AC563DW	296-4334-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	1.05	.88	.70
SN74AC563PWR	296-4335-1-ND	Tri-St. Octal D-Type Transp. Latch	20-TSSOP	1.05	.88	.70
SN74AC563PWR	296-4335-2-ND	Tri-St. Octal D-Type Transp. Latch	20-TSSOP	932.00/2,000		
SN74AC564DW	296-4336-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.05	.88	.70
SN74AC573DBR	296-4337-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	.92	.69	.52
SN74AC573DBR	296-4337-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	612.00/2,000		
SN74AC573DW	296-1061-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	.92	.69	.52
SN74AC573DWR	296-1061-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	.92	.69	.52
SN74AC573DWR	296-1061-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	612.00/2,000		
SN74AC573PWR	296-4338-1-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	.92	.69	.52
SN74AC573PWR	296-4338-2-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	612.00/2,000		
SN74AC574DBR	296-4339-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.92	.69	.52
SN74AC574DBR	296-4339-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	612.00/2,000		
SN74AC574DW	296-1062-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.92	.69	.52
SN74AC574DWR	296-1062-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.92	.69	.52
SN74AC574DWR	296-1062-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	612.00/2,000		
SN74AC574PWR	296-4340-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.92	.69	.52
SN74AC574PWR	296-4340-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	612.00/2,000		

ACT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
74ACT11008D	296-4178-5-ND	Quad 2-Input AND Gate	16-SOIC	1.05	.88	.70
74ACT11008N	296-4179-5-ND	Quad 2-Input AND Gate	16-Dip	1.05	.88	.70
74ACT11030DR	296-4180-1-ND	8-Input NAND Gate	14-SOIC	1.11	.93	.74
74ACT11030DR	296-4180-2-ND	8-Input NAND Gate	14-SOIC	1202.50/2,500		
74ACT11074DBR	296-4184-1-ND	Dual D-Type Flip-Flop	14-SSOP	1.14	.95	.76
74ACT11074DBR	296-4184-2-ND	Dual D-Type Flip-Flop	14-SSOP	1010.00/2,000		
74ACT11139D	296-4185-5-ND	2-4 Decoder/Demux	16-SOIC	1.35	1.13	.90
74ACT11139PWR	296-4186-1-ND	Dual 2-4 Decoder/Demux	16-SSOP	1.35	1.13	.90
74ACT11139PWR	296-4186-2-ND	Dual 2-4 Decoder/Demux	16-SSOP	1198.00/2,000		
74ACT11240DW	296-4187-5-ND	Octal Buffer/Line Driver	24-SOIC	1.70	1.36	1.02
74ACT11240NT	296-4188-5-ND	Octal Buffer/Line Driver	24-Dip	1.70	1.36	1.02
74ACT11244DBR	296-4189-1-ND	Octal Buffer/Line Driver	24-SSOP	1.70	1.36	1.02
74ACT11244DBR	296-4189-2-ND	Octal Buffer/Line Driver	24-SSOP	1768.00/2,000		
74ACT11244DW	296-1001-5-ND	Octal Buffer/Line Driver	24-SOIC	1.70	1.36	1.02
74ACT11244DWR	296-1001-1-ND	Octal Buffer/Line Driver	24-SOIC	1.75	1.40	1.05
74ACT11244DWR	296-1001-2-ND	Octal Buffer/Line Driver	24-SOIC	1820.00/2,000		
74ACT11244NT	296-4190-5-ND	Octal Buffer/Line Driver	24-Dip	1.63	1.30	.98
74ACT11244PWR	296-1002-1-ND	Octal Buffer/Line Driver	24-TSSOP	1.70	1.36	1.02
74ACT11244PWR	296-1002-2-ND	Octal Buffer/Line Driver	24-TSSOP	1768.00/2,000		
74ACT11245DBR	296-4191-1-ND	Octal Bus Transceiver	24-SSOP	1.83	1.46	1.10
74ACT11245DBR	296-4191-2-ND	Octal Bus Transceiver	24-SSOP	1898.00/2,000		
74ACT11245DW	296-4192-5-ND	Octal Bus Transceiver	24-SOIC	1.83	1.46	1.10
74ACT11245NT	296-4193-5-ND	Octal Bus Transceiver	24-Dip	1.83	1.46	1.10
74ACT11245PWR	296-1003-1-ND	Octal Bus Transceiver	24-TSSOP	1.83	1.46	1.10
74ACT11245PWR	296-1003-2-ND	Octal Bus Transceiver	24-TSSOP	1898.00/2,000		
74ACT11257DBR	296-4194-1-ND	Quad 2-1 Multiplexer	20-SSOP	1.35	1.13	.90
74ACT11257DBR	296-4194-2-ND	Quad 2-1 Multiplexer	20-SSOP	1198.00/2,000		
74ACT11257DW	296-4195-5-ND	Quad 2-1 Multiplexer	20-SOIC	1.35	1.13	.90
74ACT11257DWR	296-4195-1-ND	Quad 2-1 Multiplexer	20-SOIC	1.41	1.18	.94
74ACT11257DWR	296-4195-2-ND	Quad 2-1 Multiplexer	20-SOIC	1250.00/2,000		
74ACT11286D	296-4196-5-ND	9-Bit Parity Generator/Checker	14-SOIC	1.41	1.18	.94
74ACT11286DR	296-4196-1-ND	9-Bit Parity Generator/Checker	14-SOIC	1.47	1.23	.98
74ACT11286DR	296-4196-2-ND	9-Bit Parity Generator/Checker	14-SOIC	1592.50/2,500		
74ACT11373DBR	296-4197-1-ND	Tri-St. Octal D-Type Transparent Latch	24-SSOP	1.70	1.36	1.02
74ACT11373DBR	296-4197-2-ND	Tri-St. Octal D-Type Transparent Latch	24-SSOP	1768.00/2,000		
74ACT11373DW	296-4198-5-ND	Tri-St. Octal D-Type Transparent Latch	24-SOIC	1.70	1.36	1.02
74ACT11374DW	296-4199-5-ND	Tri-State Octal D-Type Flip-Flop	24-SOIC	1.70	1.36	1.02
74ACT11543DWR	296-4200-1-ND	Tri-State Octal Latched Transceiver	28-SOIC	3.98	3.19	2.48
74ACT11543DWR	296-4200-2-ND	Tri-State Octal Latched Transceiver	28-SOIC	2257.00/1,000		
74ACT11652DWR	296-4201-1-ND	Tri-St. Octal Register Bus Transceiver	28-SOIC	5.04	4.04	3.41
74ACT11652DWR	296-4201-2-ND	Tri-St. Octal Register Bus Transceiver	28-SOIC	3150.00/1,000		
74ACT16240DL	296-4202-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.40	1.92	1.44
74ACT16244DGGR	296-1004-1-ND	Tri-State 16-Bit Buffer/Line Driver	48-TSSOP	2.40	1.92	1.44
74ACT16244DGGR	296-1004-2-ND	Tri-State 16-Bit Buffer/Line Driver	48-TSSOP	2496.00/2,000		
74ACT16244DL	296-1005-5-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	2.40	1.92	1.44
74ACT16244DLR	296-1005-1-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	2.40	1.92	1.44
74ACT16244DLR	296-1005-2-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	1248.00/1,000		
74ACT16245DGGR	296-4203-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.40	1.92	1.44
74ACT16245DGGR	296-4203-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2496.00/2,000		
74ACT16245DL	296-1006-5-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	2.40	1.92	1.44
74ACT16245DLR	296-1006-1-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	2.40	1.92	1.44
74ACT16245DLR	296-1006-2-ND	Tri-State 16-Bit Buffer/Line Driver	48-SSOP	1248.00/1,000		
74ACT16373DL	296-1007-5-ND	Tri-St. 16-Bit D-Type Transparent Latch	48-SSOP	2.40	1.92	1.44
74ACT16373DLR	296-1007-1-ND	Tri-St. 16-Bit D-Type Transparent Latch	48-SSOP	2.40	1.92	1.44
74ACT16373DLR	296-1007-2-ND	Tri-St. 16-Bit D-Type Transparent Latch	48-SSOP	1248.00/1,000		
74ACT16374DL	296-1008-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.40	1.92	1.44
74ACT16374DLR	296-1008-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.40	1.92	1.44
74ACT16374DLR	296-1008-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1248.00/1,000		
74ACT16543DL	296-1009-5-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	5.60	4.48	3.78
74ACT16543DLR	296-1009-1-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	5.60	4.48	3.78
74ACT16543DLR	296-1009-2-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	3500.00/1,000		
74ACT16646DL	296-4205-5-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	4.32	3.46	2.69
74ACT16646DLR	296-4205-1-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	4.32	3.46	2.69
74ACT16646DLR	296-4205-2-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	2448.00/1,000		
74ACT16657DL	296-4207-5-ND	Tri-State 16-Bit Transceiver	56-SSOP	8.50	6.80	5.74
74ACT16823DL	296-4208-5-ND	Tri-State 18-Bit D-Type Flip-Flop	56-SSOP	5.20	4.16	3.51
74ACT16825DL	296-4209-5-ND	Tri-State 18-Bit Buffer/Line Driver	56-SSOP	5.20	4.16	3.51
74ACT16825DLR	296-4209-1-ND	Tri-State 18-Bit Buffer/Line Driver	56-SSOP	5.24	4.20	3.54
74ACT16825DLR	296-4209-2-ND	Tri-State 18-Bit Buffer/Line Driver	56-SSOP	3275.00/1,000		
74ACT16841DL	296-4210-5-ND	Tri-State 20-Bit D-Type Latch	56-SSOP	5.20	4.16	3.51
74ACT16863DL	296-4212-5-ND	Tri-State 18-Bit Transceiver	56-SSOP	5.20	4.16	3.51
CD74ACT00M	296-4250-5-ND	Quad 2-Input NAND Gate	14-SOP	.56	.42	.32
CD74ACT02M	296-4251-5-ND	Quad 2-Input NOR Gate	14-SOP	.56	.42	.32
CD74ACT04M	296-1983-5-ND	Hex Inverter	14-SOP	.56	.42	.32
CD74ACT04M96	296-1983-1-ND	Hex Inverter	14-SOP	.56	.42	.32

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
CD74ACT05M	296-4252-5-ND	Hex Inverter with Open Drain	14-SOP	.56	.42	.32
CD74ACT08M	296-4253-5-ND	Quad 2-Input AND Gate	14-SOP	.56	.42	.32
CD74ACT14M	296-1380-5-ND	Hex-Schmitt Trigger Inverter	14-SOP	.56	.42	.32
CD74ACT20E	296-4266-5-ND	Dual 4-Input NAND Gate	14-Dip	.56	.42	.32
CD74ACT20M	296-4267-5-ND	Dual 4-Input NAND Gate	14-SOP	.56	.42	.32
CD74ACT32M	296-4278-5-ND	Quad 2-Input OR Gate	14-SOP	.56	.42	.32
CD74ACT74M	296-4285-5-ND	Dual D-Type Flip-Flop with Set/Reset	14-SOP	.56	.42	.32
CD74ACT86E	296-4286-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.56	.42	.32
CD74ACT109M	296-4254-5-ND	Dual JK Flip-Flop with Set/Reset	16-SOP	.84	.63	.48
CD74ACT138M	296-4255-5-ND	3-8 Line Decoder/Demultiplexer	16-SOP	.80	.60	.45
CD74ACT139E	296-4256-5-ND	Dual 2-4 Line Decoder/Demux	16-SOP	.80	.60	.45
CD74ACT139M	296-4257-5-ND	Dual 2-4 Line Decoder/Demux	16-Dip	.80	.60	.45
CD74ACT153E	296-4258-5-ND	Dual 4-Input Multiplexer	16-Dip	.88	.66	.50
CD74ACT153M	296-4259-5-ND	Dual 4-Input Multiplexer	16-SOP	.88	.66	.50
CD74ACT157E	296-4260-5-ND	Quad 2-Input Multiplexer	16-Dip	.88	.66	.50
CD74ACT157M	296-4261-5-ND	Quad 2-Input Multiplexer	16-SOP	.88	.66	.50
CD74ACT158M96	296-4262-1-ND	Quad 2-Input Multiplexer	16-SOP	.88	.66	.50
CD74ACT158M96	296-4262-2-ND	Quad 2-Input Multiplexer	16-SOP	715.00/2,500		
CD74ACT161M	296-4263-5-ND	4-Bit Synchronous Binary Counter	16-SOP	.78	.65	.52
CD74ACT163M	296-4264-5-ND	4-Bit Synchronous Binary Counter	16-SOP	.78	.65	.52
CD74ACT164E	296-4265-5-ND	8-Bit Serial-In/Parallel-Out Shift Register	14-Dip	.78	.65	.52
CD74ACT164M	296-1381-5-ND	8-Bit Serial-In/Parallel-Out Shift Register	14-SOP	.78	.65	.52
CD74ACT241M96	296-4268-1-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	.75	.63	.50
CD74ACT241M96	296-4268-2-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	666.00/2,000		
CD74ACT244E	296-4269-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.75	.63	.50
CD74ACT244M	296-4270-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.75	.63	.50
CD74ACT245M	296-4271-5-ND	Tri-State Octal Bus Non-Inverting Xcvr.	20-SOP	.75	.63	.50
CD74ACT273E	296-4272-5-ND	Octal D-Type Flip-Flop with Reset	20-Dip	.88	.66	.50
CD74ACT273M	296-4273-5-ND	Octal D-Type Flip-Flop with Reset	20-SOP	.88	.66	.50
CD74ACT273SM96	296-4274-1-ND	Octal D-Type Flip-Flop with Reset	20-SSOP	.88	.66	.50
CD74ACT273SM96	296-4274-2-ND	Octal D-Type Flip-Flop with Reset	20-SSOP	586.00/2,000		
CD74ACT283E	296-4275-5-ND	4-Bit Binary Fill Adder with Fast-Carry	16-Dip	1.25	1.00	.75
CD74ACT297M	296-4276-5-ND	Digital Phase-Locked Loop	16-SOP	1.63	1.30	.98
CD74ACT299M	296-4277-5-ND	8-In Universal Shift/Storage Register	20-SOP	1.75	1.40	1.05
CD74ACT374E	296-4279-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.75	.63	.50
CD74ACT541E	296-1382-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.81	.68	.54
CD74ACT541M	296-4280-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.81	.68	.54
CD74ACT573M	296-4282-5-ND	Tri-State Octal Transparent Latch	20-SOP	.81	.68	.54
CD74ACT623M96	296-4283-1-ND	Tri-State Octal-Bus Non-Inverting Xcvr.	20-SOP	1.63	1.30	.98
CD74ACT623M96	296-4283-2-ND	Tri-State Octal-Bus Non-Inverting Xcvr.	20-SOP	1690.00/2,000		
CD74ACT652M	296-4284-5-ND	Tri-State Octal-Bus Transceiver/Register	24-SOP	3.78	3.03	2.36
SN74ACT00D	296-1452-5-ND	Quad 2-Input NAND Gate	14-SOIC	.56	.42	.32
SN74ACT00DBR	296-4347-1-ND	Quad 2-Input NAND Gate	14-SSOP	.56	.42	.32
SN74ACT00DBR	296-4347-2-ND	Quad 2-Input NAND Gate	14-SSOP	372.00/2,000		
SN74ACT00N	296-4348-5-ND	Quad 2-Input NAND Gate	14-Dip	.56	.42	.32
SN74ACT00PWR	296-4349-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.56	.42	.32
SN74ACT00PWR	296-4349-2-ND	Quad 2-Input NAND Gate	14-TSSOP	372.00/2,000		
SN74ACT04D	296-1065-5-ND	Hex Inverter	14-SOIC	.56	.42	.32
SN74ACT04DR	296-1065-1-ND	Hex Inverter	14-SOIC	.56	.42	.32
SN74ACT04DR	296-1065-2-ND	Hex Inverter	14-SOIC	455.00/2,500		
SN74ACT04DBR	296-4350-1-ND	Hex Inverter	14-SSOP	.56	.42	.32
SN74ACT04DBR	296-4350-2-ND	Hex Inverter	14-SSOP	372.00/2,000		
SN74ACT04N	296-4351-5-ND	Hex Inverter	14-Dip	.56	.42	.32
SN74ACT04PWR	296-4352-1-ND	Hex Inverter	14-TSSOP	.56	.42	.32
SN74ACT04PWR	296-4352-2-ND	Hex Inverter	14-TSSOP	372.00/2,000		
SN74ACT08D	296-1066-5-ND	Quad 2-Input AND Gate	14-SOIC	.56	.42	.32
SN74ACT08DR	296-1066-1-ND	Quad 2-Input AND Gate	14-SOIC	.56	.42	.32
SN74ACT08DR	296-1066-2-ND	Quad 2-Input AND Gate	14-SOIC	455.00/2,500		
SN74ACT08DBR	296-4353-1-ND	Quad 2-Input AND Gate	14-SSOP	.56	.42	.32
SN74ACT08DBR	296-4353-2-ND	Quad 2-Input AND Gate	14-SSOP	372.00/2,000		
SN74ACT08N	296-4354-5-ND	Quad 2-Input AND Gate	14-Dip	.56	.42	.32
SN74ACT08PWR	296-4355-1-ND	Quad 2-Input AND Gate	14-TSSOP	.56	.42	.32
SN74ACT08PWR	296-4355-2-ND	Quad 2-Input AND Gate	14-TSSOP	372.00/2,000		
SN74ACT10D	296-4359-5-ND	Triple 3-Input NAND Gate	14-SOIC	.56	.42	.32
SN74ACT10DR	296-4360-1-ND	Triple 3-Input NAND Gate	14-SOIC	.56	.42	.32
SN74ACT10DR	296-4360-2-ND	Triple 3-Input NAND Gate	14-SOIC	455.00/2,500		
SN74ACT10DBR	296-4358-1-ND	Triple 3-Input NAND Gate	14-SSOP	.56	.42	.32
SN74ACT10DBR	296-4358-2-ND	Triple 3-Input NAND Gate	14-SSOP	372.00/2,000		
SN74ACT10PWR	296-4361-1-ND	Triple 3-Input NAND Gate	14-TSSOP	.56	.42	.32
SN74ACT10PWR	296-4361-2-ND	Triple 3-Input NAND Gate	14-TSSOP	372.00/2,000		
SN74ACT11D	296-1455-5-ND	Triple 3-Input AND Gate	14-SOIC	.56	.42	.32
SN74ACT11DBR	296-4362-1-ND	Triple 3-Input NAND Gate	14-SSOP	.56	.42	.32
SN74ACT11DBR	296-4362-2-ND	Triple 3-Input NAND Gate	14-SSOP	372.00/2,000		
SN74ACT11N	296-4363-5-ND	Triple 3-Input NAND Gate	14-Dip	.56	.42	.32
SN74ACT11PWR	296-4364-1-ND	Triple 3-Input NAND Gate	14-TSSOP	.56	.42	.32
SN74ACT11PWR	296-4364-2-ND	Triple 3-Input NAND Gate	14-TSSOP	372.00/2,000		
SN74ACT14D	296-1068-5-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.56	.42	.32
SN74ACT14DR	296-1068-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.56	.42	.32
SN74ACT14DR	296-1068-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	455.00/2,500		
SN74ACT14DBR	296-4367-1-ND	Hex Schmitt-Trigger Inverter	14-SSOP	.56	.42	.32
SN74ACT14DBR	296-4367-2-ND	Hex Schmitt-Trigger Inverter	14-SSOP	372.00/2,000		
SN74ACT14N	296-4368-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.56	.42	.32
SN74ACT14PWR	296-4369-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.56	.42	.32
SN74ACT14PWR	296-4369-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	372.00/2,000		
SN74ACT32D	296-1074-5-ND	Quad 2-Input OR Gate	14-SOIC	.56	.42	.32
SN74ACT32DR	296-1074-1-ND	Quad 2-Input OR Gate	14-SOIC	.56	.42	.32
SN74ACT32DR	296-1074-2-ND	Quad 2-Input OR Gate	14-SOIC	455.00/2,500		
SN74ACT32DBR	296-4387-1-ND	Quad 2-Input OR Gate	14-SSOP	.56	.42	.32
SN74ACT32DBR	296-4387-2-ND	Quad 2-Input OR Gate	14-SSOP	372.00/2,000		
SN74ACT32N	296-4388-5-ND	Quad 2-Input OR Gate	14-Dip	.56	.42	.32
SN74ACT32PWR	296-4389-1-ND	Quad 2-Input OR Gate	14-TSSOP	.56	.42	.32
SN74ACT32PWR	296-4389-2-ND	Quad 2-Input OR Gate	14-TSSOP	372.00/2,000		
SN74ACT74D	296-1079-5-ND	Dual D-Type Flip-Flop	14-SOIC	.56	.42	.32
SN74ACT74DR	296-1079-1-ND	Dual D-Type Flip-Flop	14-SOIC	.56	.42	.32
SN74ACT74DR	296-1079-2-ND	Dual D-Type Flip-Flop	14-SOIC	455.00/2,500		

(Continued)

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T. I.	Digi-Key			Price Each★		
Part No.	**Part No.**	**Description**	**Pkg.**	**1**	**25**	**100**
SN74ACT74DBR	296-4443-1-ND	Dual D-Type Flip-Flop	14-SSOP	.56	.42	.32
SN74ACT74DBR	296-4443-2-ND	Dual D-Type Flip-Flop	14-SSOP	372.00/2,000		
SN74ACT74N	296-4444-5-ND	Dual D-Type Flip-Flop	14-Dip	.56	.42	.32
SN74ACT74PWR	296-4446-1-ND	Dual D-Type Flip-Flop	14-TSSOP	.56	.42	.32
SN74ACT74PWR	296-4446-2-ND	Dual D-Type Flip-Flop	14-TSSOP	372.00/2,000		
SN74ACT86D	296-1463-5-ND	Quad 2-Input EX-OR Gate	14-SOIC	.56	.42	.32
SN74ACT86DBR	296-4502-1-ND	Quad 2-Input EX-OR Gate	14-SSOP	.56	.42	.32
SN74ACT86DBR	296-4502-2-ND	Quad 2-Input EX-OR Gate	14-SSOP	372.00/2,000		
SN74ACT86DR	296-9757-1-ND	Quad 2-Input EX-OR Gate	14-SOP	.56	.42	.32
SN74ACT86DR	296-9757-2-ND	Quad 2-Input EX-OR Gate	14-SOP	455.00/2,500		
SN74ACT86N	296-4503-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.56	.42	.32
SN74ACT86PWR	296-4504-1-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.56	.42	.32
SN74ACT86PWR	296-4504-2-ND	Quad 2-Input EX-OR Gate	14-TSSOP	372.00/2,000		
SN74ACT240DBR	296-4377-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.92	.69	.52
SN74ACT240DBR	296-4377-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	612.00/2,000		
SN74ACT240DWR	296-4378-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.92	.69	.52
SN74ACT240DWR	296-4378-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	612.00/2,000		
SN74ACT240N	296-4379-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.92	.69	.52
SN74ACT240PWR	296-4380-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.92	.69	.52
SN74ACT240PWR	296-4380-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	612.00/2,000		
SN74ACT241DBR	296-4381-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.92	.69	.52
SN74ACT241DBR	296-4381-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	612.00/2,000		
SN74ACT241DW	296-4382-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.92	.69	.52
SN74ACT241N	296-4383-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.92	.69	.52
SN74ACT241PWR	296-4384-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.92	.69	.52
SN74ACT241PWR	296-4384-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	612.00/2,000		
SN74ACT244DBR	296-1069-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.92	.69	.52
SN74ACT244DBR	296-1069-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	612.00/2,000		
SN74ACT244DW	296-1070-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.92	.69	.52
SN74ACT244DWR	296-1070-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.92	.69	.52
SN74ACT244DWR	296-1070-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	612.00/2,000		
SN74ACT244N	296-4385-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.92	.69	.52
SN74ACT244PWR	296-1071-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.92	.69	.52
SN74ACT244PWR	296-1071-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	612.00/2,000		
SN74ACT245DBR	296-4386-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.92	.69	.52
SN74ACT245DBR	296-4386-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	612.00/2,000		
SN74ACT245DW	296-1072-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.92	.69	.52
SN74ACT245DWR	296-1072-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.92	.69	.52
SN74ACT245DWR	296-1072-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	612.00/2,000		
SN74ACT245N	296-1460-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.92	.69	.52
SN74ACT245PWR	296-1073-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.92	.69	.52
SN74ACT245PWR	296-1073-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	612.00/2,000		
SN74ACT373DBR	296-4420-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	.92	.69	.52
SN74ACT373DBR	296-4420-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	612.00/2,000		
SN74ACT373DW	296-4421-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	.92	.69	.52
SN74ACT373N	296-4422-5-ND	Tri-St. Octal D-Type Transparent Latch	20-Dip	.92	.69	.52
SN74ACT373PWR	296-1075-1-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	.92	.69	.52
SN74ACT373PWR	296-1075-2-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	612.00/2,000		
SN74ACT374DBR	296-1076-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.92	.69	.52
SN74ACT374DBR	296-1076-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	612.00/2,000		
SN74ACT374DW	296-1077-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.92	.69	.52
SN74ACT374DWR	296-1077-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.92	.69	.52
SN74ACT374DWR	296-1077-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	612.00/2,000		
SN74ACT374PWR	296-4423-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.92	.69	.52
SN74ACT374PWR	296-4423-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	612.00/2,000		
SN74ACT533DBR	296-4424-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	1.05	.88	.70
SN74ACT533DBR	296-4424-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	932.00/2,000		
SN74ACT533DW	296-4425-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	1.05	.88	.70
SN74ACT533N	296-4426-5-ND	Tri-St. Octal D-Type Transparent Latch	20-Dip	1.05	.88	.70
SN74ACT533PWR	296-4427-1-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	1.05	.88	.70
SN74ACT533PWR	296-4427-2-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	932.00/2,000		
SN74ACT534DBR	296-4428-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	1.05	.88	.70
SN74ACT534DBR	296-4428-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	932.00/2,000		
SN74ACT534DW	296-4429-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.05	.88	.70
SN74ACT534DWR	296-4429-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.05	.88	.70
SN74ACT534DWR	296-4429-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	932.00/2,000		
SN74ACT534PWR	296-4430-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.05	.88	.70
SN74ACT534PWR	296-4430-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	932.00/2,000		
SN74ACT563DBR	296-4431-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	1.05	.88	.70
SN74ACT563DBR	296-4431-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	932.00/2,000		
SN74ACT563DW	296-4432-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	1.05	.88	.70
SN74ACT564DBR	296-4433-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	1.05	.88	.70
SN74ACT564DBR	296-4433-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	932.00/2,000		
SN74ACT564DW	296-4434-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.05	.88	.70
SN74ACT564PWR	296-4435-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.05	.88	.70
SN74ACT564PWR	296-4435-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	932.00/2,000		
SN74ACT573DBR	296-4436-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	.92	.69	.52
SN74ACT573DBR	296-4436-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	612.00/2,000		
SN74ACT573DW	296-4437-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	.92	.69	.52
SN74ACT573N	296-4438-5-ND	Tri-State Octal D-Type Transparent Latch	20-Dip	.92	.69	.52
SN74ACT573PWR	296-4439-1-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	.92	.69	.52
SN74ACT573PWR	296-4439-2-ND	Tri-State Octal D-Type Transp. Latch	20-TSSOP	612.00/2,000		
SN74ACT574DBR	296-4440-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.92	.69	.52
SN74ACT574DBR	296-4440-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	612.00/2,000		
SN74ACT574DW	296-4441-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.92	.69	.52
SN74ACT574N	296-4442-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.92	.69	.52
SN74ACT574PWR	296-1078-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.92	.69	.52
SN74ACT574PWR	296-1078-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	612.00/2,000		
SN74ACT1284DBR	296-4365-1-ND	Tri-State 7-Bit Bus Interface	20-SSOP	1.38	1.15	.92
SN74ACT1284DBR	296-4365-2-ND	Tri-State 7-Bit Bus Interface	20-SSOP	1224.00/2,000		
SN74ACT1284DW	296-1067-5-ND	Tri-State 7-Bit Bus Interface	20-SOIC	1.38	1.15	.92
SN74ACT1284DWR	296-1067-1-ND	Tri-State 7-Bit Bus Interface	20-SOIC	1.38	1.15	.92
SN74ACT1284DWR	296-1067-2-ND	Tri-State 7-Bit Bus Interface	20-SOIC	1224.00/2,000		
SN74ACT1284PWR	296-4366-1-ND	Tri-State 7-Bit Bus Interface	20-TSSOP	1.38	1.15	.92
SN74ACT1284PWR	296-4366-2-ND	Tri-State 7-Bit Bus Interface	20-TSSOP	1224.00/2,000		
SN74ACT2226DW	296-4370-5-ND	Dual 64x1 FIFO Memory	24-SOIC	5.40	4.32	3.36
SN74ACT2227DW	296-4371-5-ND	Dual 64x1 FIFO Memory	28-SOIC	5.40	4.32	3.36
SN74ACT2228DW	296-4372-5-ND	Dual 64x1 FIFO Memory	24-SOIC	5.40	4.32	3.36
SN74ACT2229DW	296-4373-5-ND	Dual 64x1 FIFO Memory	28-SOIC	6.00	4.80	4.05
SN74ACT2235-20PAG	296-4374-ND	1024x9x2 Asynch. Bi-Dir. FIFO Memory	64-TQFP	17.82	16.64	15.45
SN74ACT2235-40FN	296-4375-5-ND	1024x9x2 Asynchronous Bi-Directional FIFO Memory	44-PLCC	11.55	10.40	9.22
SN74ACT2235-60FN	296-4376-5-ND	1024x9x2 Asynchronous Bi-Directional FIFO Memory	44-PLCC	10.66	9.60	8.52
SN74ACT3622-15PCB	296-4390-ND	256x36x2 Synchronous Bi-Directional FIFO Memory	120-TQFP	17.82	16.64	15.45
SN74ACT3622-15PQ	296-4391-ND	256x36x2 Synchronous Bi-Directional FIFO Memory	132-PQFP	17.82	16.64	15.45
SN74ACT3622-20PCB	296-4392-ND	256x36x2 Synchronous Bi-Directional FIFO Memory	120-TQFP	17.82	16.64	15.45
SN74ACT3622-20PQ	296-4393-ND	256x36x2 Synchronous Bi-Directional FIFO Memory	132-PQFP	17.82	16.64	15.45
SN74ACT3622-30PCB	296-4394-ND	256x36x2 Synchronous Bi-Directional FIFO Memory	120-TQFP	15.35	14.33	13.30
SN74ACT3622-30PQ	296-4395-ND	256x36x2 Synchronous Bi-Directional FIFO Memory	132-PQFP	15.35	14.33	13.30
SN74ACT3631-15PCB	296-4396-ND	512x36 Clocked FIFO Memory	120-TQFP	17.82	16.64	15.45
SN74ACT3631-15PQ	296-4397-ND	512x36 Clocked FIFO Memory	132-PQFP	17.82	16.64	15.45
SN74ACT3631-20PCB	296-4398-ND	512x36 Clocked FIFO Memory	120-TQFP	17.82	16.64	15.45
SN74ACT3631-20PQ	296-4399-ND	512x36 Clocked FIFO Memory	132-PQFP	17.82	16.64	15.45
SN74ACT3631-30PCB	296-4400-ND	512x36 Clocked FIFO Memory	120-TQFP	15.35	14.33	13.30
SN74ACT3631-30PQ	296-4401-ND	512x36 Clocked FIFO Memory	132-PQFP	15.35	14.33	13.30
SN74ACT3632-15PCB	296-4402-ND	512x36x2 Bi-Directional FIFO Memory	120-TQFP	17.82	16.64	15.45
SN74ACT3632-15PQ	296-4403-ND	512x36x2 Bi-Directional FIFO Memory	132-PQFP	17.82	16.64	15.45
SN74ACT3632-20PCB	296-4404-ND	512x36x2 Bi-Directional FIFO Memory	120-TQFP	17.82	16.64	15.45
SN74ACT3632-20PQ	296-4405-ND	512x36x2 Bi-Directional FIFO Memory	132-PQFP	17.82	16.64	15.45
SN74ACT3632-30PCB	296-4406-ND	512x36x2 Bi-Directional FIFO Memory	120-TQFP	15.35	14.33	13.30
SN74ACT3632-30PQ	296-4407-ND	512x36x2 Bi-Directional FIFO Memory	132-PQFP	15.35	14.33	13.30
SN74ACT3641-15PCB	296-4408-ND	1K x 36 Clocked FIFO Memory	120-TQFP	22.28	20.79	19.31
SN74ACT3641-15PQ	296-4409-ND	1K x 36 Clocked FIFO Memory	132-PQFP	22.28	20.79	19.31
SN74ACT3641-20PCB	296-4410-ND	1K x 36 Clocked FIFO Memory	120-TQFP	21.78	20.33	18.88
SN74ACT3641-20PQ	296-4411-ND	1K x 36 Clocked FIFO Memory	132-PQFP	21.78	20.33	18.88
SN74ACT3641-30PCB	296-4412-ND	1K x 36 Clocked FIFO Memory	120-TQFP	21.78	20.33	18.88
SN74ACT3641-30PQ	296-4413-ND	1K x 36 Clocked FIFO Memory	132-PQFP	21.78	20.33	18.88
SN74ACT3651-15PCB	296-4414-ND	2K x 36 Synchronous FIFO Memory	120-TQFP	30.69	28.65	26.60
SN74ACT3651-15PQ	296-4415-ND	2K x 36 Synchronous FIFO Memory	132-PQFP	30.69	28.65	26.60
SN74ACT3651-20PCB	296-4416-ND	2K x 36 Synchronous FIFO Memory	120-TQFP	24.75	23.10	21.45
SN74ACT3651-20PQ	296-4417-ND	2K x 36 Synchronous FIFO Memory	132-PQFP	24.75	23.10	21.45
SN74ACT3651-30PCB	296-4418-ND	2K x 36 Synchronous FIFO Memory	120-TQFP	22.28	20.79	19.31
SN74ACT3651-30PQ	296-4419-ND	2K x 36 Synchronous FIFO Memory	132-PQFP	22.28	20.79	19.31
SN74ACT7802-25FN	296-4447-ND	1K x 18 Strobed FIFO Memory	68-TQFP	10.56	9.51	8.44
SN74ACT7802-25PN	296-4448-ND	1K x 18 Strobed FIFO Memory	80-TQFP	10.56	9.51	8.44
SN74ACT7803-15DL	296-4449-5-ND	512 x 18 Clocked FIFO Memory	56-SOP	13.19	11.88	10.54
SN74ACT7803-20DL	296-4450-5-ND	512 x 18 Clocked FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7803-25DL	296-4451-5-ND	512 x 18 Clocked FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7803-25DLR	296-4451-1-ND	512 x 18 Clocked FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7803-25DLR	296-4451-2-ND	512 x 18 Clocked FIFO Memory	56-SOP	1287.00/250		
SN74ACT7803-40DL	296-4452-5-ND	512 x 18 Clocked FIFO Memory	56-SOP	6.60	5.28	4.46
SN74ACT7804-20DL	296-4453-5-ND	512 x 18 Strobed FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7804-40DLR	296-4454-1-ND	512 x 18 Strobed FIFO Memory	56-SOP	6.60	5.28	4.46
SN74ACT7804-40DLR	296-4454-2-ND	512 x 18 Strobed FIFO Memory	56-SOP	1072.50/250		
SN74ACT7805-15DL	296-4455-5-ND	256 x 18 Clocked FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7805-20DL	296-4456-5-ND	256 x 18 Clocked FIFO Memory	56-SOP	14.96	13.47	11.95
SN74ACT7805-25DLR	296-4457-1-ND	256 x 18 Clocked FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7805-25DLR	296-4457-2-ND	256 x 18 Clocked FIFO Memory	56-SOP	1287.00/250		
SN74ACT7805-40DL	296-4458-5-ND	256 x 18 Clocked FIFO Memory	56-SOP	5.94	4.76	4.01
SN74ACT7806-20DL	296-4459-5-ND	256 x 18 Strobed FIFO Memory	56-SOP	14.96	13.47	11.95
SN74ACT7807-15FN	296-4460-5-ND	2K x 9 Clocked FIFO Memory	44-PLCC	17.82	16.64	15.45
SN74ACT7807-15PAG	296-4461-ND	2K x 9 Clocked FIFO Memory	64-TQFP	17.82	16.64	15.45
SN74ACT7807-20FN	296-4462-5-ND	2K x 9 Clocked FIFO Memory	44-PLCC	17.82	16.64	15.45
SN74ACT7807-20PAG	296-4463-ND	2K x 9 Clocked FIFO Memory	64-TQFP	17.82	16.64	15.45
SN74ACT7807-25FN	296-4464-5-ND	2K x 9 Clocked FIFO Memory	44-PLCC	10.56	9.51	8.44
SN74ACT7807-25PAG	296-4465-ND	2K x 9 Clocked FIFO Memory	64-TQFP	10.56	9.51	8.44
SN74ACT7807-40FN	296-4466-5-ND	2K x 9 Clocked FIFO Memory	44-PLCC	11.55	10.40	9.22
SN74ACT7807-40PAG	296-4467-ND	2K x 9 Clocked FIFO Memory	64-TQFP	11.55	10.40	9.22
SN74ACT7808-20FN	296-4468-5-ND	2K x 9 Strobed FIFO Memory	44-PLCC	17.82	16.64	15.45
SN74ACT7808-20PAG	296-4469-ND	2K x 9 Strobed FIFO Memory	64-TQFP	17.82	16.64	15.45
SN74ACT7808-25FN	296-4470-5-ND	2K x 9 Strobed FIFO Memory	44-PLCC	10.56	9.51	8.44
SN74ACT7808-25PAG	296-4471-ND	2K x 9 Strobed FIFO Memory	64-TQFP	10.56	9.51	8.44
SN74ACT7808-30FN	296-4472-5-ND	2K x 9 Strobed FIFO Memory	44-PLCC	15.35	14.33	13.30
SN74ACT7808-30PAG	296-4473-ND	2K x 9 Strobed FIFO Memory	64-TQFP	15.35	14.33	13.30
SN74ACT7808-40FN	296-4474-5-ND	2K x 9 Strobed FIFO Memory	44-PLCC	11.55	10.40	9.22
SN74ACT7808-40PAG	296-4475-ND	2K x 9 Strobed FIFO Memory	64-TQFP	11.55	10.40	9.22
SN74ACT7811-15FN	296-4476-5-ND	1K x 18 Clocked FIFO Memory	68-PLCC	10.56	9.51	8.44
SN74ACT7811-15PN	296-4477-ND	1K x 18 Clocked FIFO Memory	80-TQFP	10.56	9.51	8.44
SN74ACT7811-18FN	296-4478-5-ND	1K x 18 Clocked FIFO Memory	68-PLCC	17.82	16.64	15.45
SN74ACT7811-18PN	296-4479-ND	1K x 18 Clocked FIFO Memory	80-TQFP	17.82	16.64	15.45
SN74ACT7811-20FN	296-4480-5-ND	1K x 18 Clocked FIFO Memory	68-PLCC	13.74	12.38	10.98
SN74ACT7811-20PN	296-4481-ND	1K x 18 Clocked FIFO Memory	80-TQFP	13.74	12.38	10.98
SN74ACT7811-25FN	296-4482-5-ND	1K x 18 Clocked FIFO Memory	68-PLCC	10.62	9.60	8.52
SN74ACT7811-25PN	296-4483-ND	1K x 18 Clocked FIFO Memory	80-TQFP	10.66	9.60	8.52
SN74ACT7813-15DL	296-4484-5-ND	64 x 18 Clocked FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7813-20DL	296-4485-5-ND	64 x 18 Clocked FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7813-25DL	296-4486-5-ND	64 x 18 Clocked FIFO Memory	56-SOP	7.26	5.81	4.91
SN74ACT7813-40DL	296-4487-5-ND	64 x 18 Clocked FIFO Memory	56-SOP	6.60	5.28	4.46
SN74ACT7814-20DL	296-4488-5-ND	64 x 18 Strobed FIFO Memory	56-SOP	7.92	6.34	5.35
SN74ACT7814-40DLR	296-4489-1-ND	64 x 18 Strobed FIFO Memory	56-SOP	15.00	12.00	10.13
SN74ACT7814-40DLR	296-4489-2-ND	64 x 18 Strobed FIFO Memory	56-SOP	1072.50/250		
SN74ACT7881-15FN	296-4490-5-ND	1K x 18 Clocked FIFO Memory	68-PLCC	17.82	16.64	15.45
SN74ACT7881-15PN	296-4491-ND	1K x 18 Clocked FIFO Memory	80-TQFP	17.82	16.64	15.45
SN74ACT7881-20FN	296-4492-5-ND	1K x 18 Clocked FIFO Memory	68-PLCC	17.82	16.64	15.45
SN74ACT7881-20PN	296-4493-ND	1K x 18 Clocked FIFO Memory	80-TQFP	17.82	16.64	15.45
SN74ACT7881-30FN	296-4494-5-ND	1K x 18 Clocked FIFO Memory	68-PLCC	15.35	14.33	13.30
SN74ACT7881-30PN	296-4495-ND	1K x 18 Clocked FIFO Memory	80-TQFP	15.35	14.33	13.30
SN74ACT7882-15FN	296-4496-5-ND	2K x 18 Clocked FIFO Memory	68-PLCC	22.28	20.79	19.31
SN74ACT7882-15PN	296-4497-ND	2K x 18 Clocked FIFO Memory	80-LQFP	22.28	20.79	19.31
SN74ACT7882-20FN	296-4498-5-ND	2K x 18 Clocked FIFO Memory	68-PLCC	22.28	20.79	19.31
SN74ACT7882-20PN	296-4499-ND	2K x 18 Clocked FIFO Memory	80-LQFP	22.28	20.79	19.31
SN74ACT7882-30FN	296-4500-5-ND	2K x 18 Clocked FIFO Memory	68-PLCC	20.79	19.41	18.02
SN74ACT7882-30PN	296-4501-ND	2K x 18 Clocked FIFO Memory	80-LQFP	20.79	19.41	18.02
SN74ACT8990FN	296-4505-5-ND	16-Bit Test-Bus Controller Tap Master	44-PLCC	27.00	25.20	23.40
SN74ACT8990FNR	296-4505-1-ND	16-Bit Test-Bus Controller Tap Master	44-PLCC	27.00	25.20	23.40
SN74ACT8990FNR	296-4505-2-ND	16-Bit Test-Bus Controller Tap Master	44-PLCC	11250.00/500		
SN74ACT8997DW	296-4506-5-ND	Scan Path Linker with 4-Bit ID	28-SOIC	8.33	7.50	6.65

AHC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
SN74AHC00DBR	296-4507-1-ND	Quad 2-Input NAND Gate	14-SSOP	.52	.39	.30
SN74AHC00DBR	296-4507-2-ND	Quad 2-Input NAND Gate	14-SSOP	346.00/2,000		
SN74AHC00DGVR	296-4508-1-ND	Quad 2-Input NAND Gate	14-TVSOP	.52	.39	.30
SN74AHC00DGVR	296-4508-2-ND	Quad 2-Input NAND Gate	14-TVSOP	346.00/2,000		
SN74AHC00DR	296-4509-1-ND	Quad 2-Input NAND Gate	14-SOIC	.52	.39	.30

(Continued)

T. I.	Digi-Key			Price Each★		
Part No.	Part No.	Description	Pkg.	1	25	100
SN74AHC00DR	296-4509-2-ND	Quad 2-Input NAND Gate	14-SOIC	422.50/2,500		
SN74AHC00N	296-4510-5-ND	Quad 2-Input NAND Gate	14-Dip	.52	.39	.30
SN74AHC00PWR	296-1080-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74AHC00PWR	296-1080-2-ND	Quad 2-Input NAND Gate	14-TSSOP	346.00/2,000		
SN74AHC02D	296-4511-5-ND	Quad 2-Input NOR Gate	14-SOIC	.52	.39	.30
SN74AHC02DR	296-4511-1-ND	Quad 2-Input NOR Gate	14-SOIC	.52	.39	.30
SN74AHC02DR	296-4511-2-ND	Quad 2-Input NOR Gate	14-SOIC	422.50/2,500		
SN74AHC02DBR	296-4512-1-ND	Quad 2-Input NOR Gate	14-SSOP	.52	.39	.30
SN74AHC02DBR	296-4512-2-ND	Quad 2-Input NOR Gate	14-SSOP	346.00/2,000		
SN74AHC02DGVR	296-4513-1-ND	Quad 2-Input NOR Gate	14-TVSOP	.56	.42	.32
SN74AHC02DGVR	296-4513-2-ND	Quad 2-Input NOR Gate	14-TVSOP	372.00/2,000		
SN74AHC02N	296-4514-5-ND	Quad 2-Input NOR Gate	14-Dip	.52	.39	.30
SN74AHC02PWR	296-4515-1-ND	Quad 2-Input NOR Gate	14-TSSOP	.52	.39	.30
SN74AHC02PWR	296-4515-2-ND	Quad 2-Input NOR Gate	14-TSSOP	346.00/2,000		
SN74AHC04D	296-4516-5-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74AHC04DR	296-4516-1-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74AHC04DR	296-4516-2-ND	Hex Inverter	14-SOIC	422.50/2,500		
SN74AHC04DBR	296-4517-1-ND	Hex Inverter	14-SSOP	.52	.39	.30
SN74AHC04DBR	296-4517-2-ND	Hex Inverter	14-SSOP	346.00/2,000		
SN74AHC04DGVR	296-4518-1-ND	Hex Inverter	14-TVSOP	.52	.39	.30
SN74AHC04DGVR	296-4518-2-ND	Hex Inverter	14-TVSOP	346.00/2,000		
SN74AHC04N	296-4519-5-ND	Hex Inverter	14-Dip	.52	.39	.30
SN74AHC04PWR	296-1081-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74AHC04PWR	296-1081-2-ND	Hex Inverter	14-TSSOP	346.00/2,000		
SN74AHC05D	296-1997-5-ND	Hex Inverter with OD Output	14-SOIC	.56	.42	.32
SN74AHC05DT	296-1997-1-ND	Hex Inverter with OD Output	14-SOIC	.64	.48	.36
SN74AHC05DR	296-1997-2-ND	Hex Inverter with OD Output	14-SOIC	520.00/2,500		
SN74AHC05N	296-1464-5-ND	Hex Inverter with OD Output	14-Dip	.56	.42	.32
SN74AHC05PWR	296-4520-1-ND	Hex Inverter with OD Output	14-TSSOP	.56	.42	.32
SN74AHC05PWR	296-4520-2-ND	Hex Inverter with OD Output	14-TSSOP	372.00/2,000		
SN74AHC08DBR	296-4521-1-ND	Quad 2-Input AND Gate	14-SSOP	.52	.39	.30
SN74AHC08DBR	296-4521-2-ND	Quad 2-Input AND Gate	14-SSOP	346.00/2,000		
SN74AHC08DGVR	296-4522-1-ND	Quad 2-Input AND Gate	14-TVSOP	.52	.39	.30
SN74AHC08DGVR	296-4522-2-ND	Quad 2-Input AND Gate	14-TVSOP	346.00/2,000		
SN74AHC08D	296-4523-5-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74AHC08DR	296-4523-1-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74AHC08DR	296-4523-2-ND	Quad 2-Input AND Gate	14-SOIC	422.50/2,500		
SN74AHC08N	296-4524-5-ND	Quad 2-Input AND Gate	14-Dip	.52	.39	.30
SN74AHC08PWR	296-1082-1-ND	Quad 2-Input AND Gate	14-TSSOP	.52	.39	.30
SN74AHC08PWR	296-1082-2-ND	Quad 2-Input AND Gate	14-TSSOP	346.00/2,000		
SN74AHC14DBR	296-4548-1-ND	Hex Schmitt-Trigger Inverter	14-SSOP	.52	.39	.30
SN74AHC14DBR	296-4548-2-ND	Hex Schmitt-Trigger Inverter	14-SSOP	346.00/2,000		
SN74AHC14DGVR	296-4549-1-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	.52	.39	.30
SN74AHC14DGVR	296-4549-2-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	346.00/2,000		
SN74AHC14DR	296-1085-1-ND	Hex Schmitt Trigger Inverter	14-SOIC	.52	.39	.30
SN74AHC14DR	296-1085-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	422.50/2,500		
SN74AHC14N	296-4550-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.52	.39	.30
SN74AHC14PWR	296-1086-1-ND	Hex Schmitt Trigger Inverter	14-TSSOP	.52	.39	.30
SN74AHC14PWR	296-1086-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	346.00/2,000		
SN74AHC32DBR	296-4593-1-ND	Quad 2-Input OR Gate	14-SSOP	.52	.39	.30
SN74AHC32DBR	296-4593-2-ND	Quad 2-Input OR Gate	14-SSOP	346.00/2,000		
SN74AHC32DGVR	296-4594-1-ND	Quad 2-Input OR Gate	14-TVSOP	.52	.39	.30
SN74AHC32DGVR	296-4594-2-ND	Quad 2-Input OR Gate	14-TVSOP	346.00/2,000		
SN74AHC32DR	296-4595-1-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74AHC32DR	296-4595-2-ND	Quad 2-Input OR Gate	14-SOIC	422.50/2,500		
SN74AHC32N	296-4596-5-ND	Quad 2-Input OR Gate	14-Dip	.52	.39	.30
SN74AHC32PWR	296-1099-1-ND	Quad 2-Input OR Gate	14-TSSOP	.52	.39	.30
SN74AHC32PWR	296-1099-2-ND	Quad 2-Input OR Gate	14-TSSOP	346.00/2,000		
SN74AHC74D	296-1105-5-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SOIC	.56	.42	.32
SN74AHC74DR	296-1105-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SOIC	.56	.42	.32
SN74AHC74DR	296-1105-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SOIC	455.00/2,500		
SN74AHC74DBR	296-4621-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SSOP	.56	.42	.32
SN74AHC74DBR	296-4621-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SSOP	372.00/2,000		
SN74AHC74DGVR	296-4622-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TVSOP	.56	.42	.32
SN74AHC74DGVR	296-4622-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TVSOP	372.00/2,000		
SN74AHC74N	296-4623-5-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-Dip	.56	.42	.32
SN74AHC74PWR	296-4624-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TSSOP	.56	.42	.32
SN74AHC74PWR	296-4624-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TSSOP	372.00/2,000		
SN74AHC86D	296-4625-5-ND	Quad 2-Input EX-OR Gate	14-SOIC	.56	.42	.32
SN74AHC86DR	296-4625-1-ND	Quad 2-Input EX-OR Gate	14-SOIC	.56	.42	.32
SN74AHC86DR	296-4625-2-ND	Quad 2-Input EX-OR Gate	14-SOIC	455.00/2,500		
SN74AHC86DBR	296-4626-1-ND	Quad 2-Input EX-OR Gate	14-SSOP	.56	.42	.32
SN74AHC86DBR	296-4626-2-ND	Quad 2-Input EX-OR Gate	14-SSOP	372.00/2,000		
SN74AHC86N	296-4627-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.56	.42	.32
SN74AHC86PWR	296-4628-1-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.56	.42	.32
SN74AHC86PWR	296-4628-2-ND	Quad 2-Input EX-OR Gate	14-TSSOP	372.00/2,000		
SN74AHC123ADBR	296-4525-1-ND	Dual Retrig Monostable Multivibrator	16-SSOP	.64	.48	.36
SN74AHC123ADBR	296-4525-2-ND	Dual Retrig Monostable Multivibrator	16-SSOP	426.00/2,000		
SN74AHC123ADGVR	296-4526-1-ND	Dual Retrig Monostable Multivibrator	16-TVSOP	.64	.48	.36
SN74AHC123ADGVR	296-4526-2-ND	Dual Retrig Monostable Multivibrator	16-TVSOP	426.00/2,000		
SN74AHC123ADR	296-4527-1-ND	Dual Retrig Monostable Multivibrator	16-SOIC	.64	.48	.36
SN74AHC123ADR	296-4527-2-ND	Dual Retrig Monostable Multivibrator	16-SOIC	520.00/2,500		
SN74AHC123APWR	296-4528-1-ND	Dual Retrig Monostable Multivibrator	16-TSSOP	.64	.48	.36
SN74AHC123APWR	296-4528-2-ND	Dual Retrig Monostable Multivibrator	16-TSSOP	426.00/2,000		
SN74AHC125DBR	296-4529-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.64	.48	.36
SN74AHC125DBR	296-4529-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	426.00/2,000		
SN74AHC125DR	296-4530-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.64	.48	.36
SN74AHC125DR	296-4530-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	520.00/2,500		
SN74AHC125N	296-4531-5-ND	Tri-State Quad Bus Buffer Gate	14-Dip	.64	.48	.36
SN74AHC125PWR	296-1083-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.64	.48	.36
SN74AHC125PWR	296-1083-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	426.00/2,000		
SN74AHC126DBR	296-4532-1-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	.64	.48	.36
SN74AHC126DBR	296-4532-2-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	426.00/2,000		
SN74AHC126DGVR	296-4533-1-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	.64	.48	.36
SN74AHC126DGVR	296-4533-2-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	426.00/2,000		
SN74AHC126DR	296-4534-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.64	.48	.36
SN74AHC126DR	296-4534-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	520.00/2,500		
SN74AHC126N	296-4535-5-ND	Tri-State Quad Bus Buffer Gate	14-Dip	.64	.48	.36
SN74AHC126PWR	296-4536-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.64	.48	.36
SN74AHC126PWR	296-4536-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	426.00/2,000		
SN74AHC132D	296-1465-5-ND	Quad NAND Gate	14-SOIC	.64	.48	.36
SN74AHC132DR	296-1465-1-ND	Quad NAND Gate	14-SOIC	.64	.48	.36
SN74AHC132DR	296-1465-2-ND	Quad NAND Gate	14-SOIC	520.00/2,500		
SN74AHC132DBR	296-4537-1-ND	Quad NAND Gate	14-SSOP	.64	.48	.36
SN74AHC132DBR	296-4537-2-ND	Quad NAND Gate	14-SSOP	426.00/2,000		

T. I.	Digi-Key			Price Each★		
Part No.	Part No.	Description	Pkg.	1	25	100
SN74AHC132DGVR	296-4538-1-ND	Quad NAND Gate	14-TVSOP	.64	.48	.36
SN74AHC132DGVR	296-4538-2-ND	Quad NAND Gate	14-TVSOP	426.00/2,000		
SN74AHC132N	296-1466-5-ND	Quad NAND Gate	14-Dip	.64	.48	.36
SN74AHC132PWR	296-4539-1-ND	Quad NAND Gate	14-TSSOP	.64	.48	.36
SN74AHC132PWR	296-4539-2-ND	Quad NAND Gate	14-TSSOP	426.00/2,000		
SN74AHC138D	296-4540-5-ND	3-8 Line Decoder/Demultiplexer	16-SOIC	.64	.48	.36
SN74AHC138DR	296-4540-1-ND	3-8 Line Decoder/Demultiplexer	16-SOIC	.64	.48	.36
SN74AHC138DR	296-4540-2-ND	3-8 Line Decoder/Demultiplexer	16-SOIC	520.00/2,500		
SN74AHC138DBR	296-4541-1-ND	3-8 Line Decoder/Demultiplexer	16-SSOP	.64	.48	.36
SN74AHC138DBR	296-4541-2-ND	3-8 Line Decoder/Demultiplexer	16-SSOP	426.00/2,000		
SN74AHC138N	296-4542-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.64	.48	.36
SN74AHC138PWR	296-1084-1-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	.64	.48	.36
SN74AHC138PWR	296-1084-2-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	426.00/2,000		
SN74AHC139D	296-4543-5-ND	Dual 2-4 Decoder/Demultiplexer	16-SOIC	.64	.48	.36
SN74AHC139DBR	296-4544-1-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP	.64	.48	.36
SN74AHC139DBR	296-4544-2-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP	426.00/2,000		
SN74AHC139DGVR	296-4545-1-ND	Dual 2-4 Decoder/Demultiplexer	16-TVSOP	.64	.48	.36
SN74AHC139DGVR	296-4545-2-ND	Dual 2-4 Decoder/Demultiplexer	16-TVSOP	426.00/2,000		
SN74AHC139N	296-4546-5-ND	Dual 2-4 Decoder/Demultiplexer	16-Dip	.64	.48	.36
SN74AHC139PWR	296-4547-1-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP	.64	.48	.36
SN74AHC139PWR	296-4547-2-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP	426.00/2,000		
SN74AHC157D	296-4551-5-ND	Quad 2-1 Data Selector/Multiplexer	16-SOIC	.72	.54	.41
SN74AHC157DBR	296-4552-1-ND	Quad 2-1 Data Selector/Multiplexer	16-SSOP	.72	.54	.41
SN74AHC157DBR	296-4552-2-ND	Quad 2-1 Data Selector/Multiplexer	16-SSOP	478.00/2,000		
SN74AHC157DGVR	296-4553-1-ND	Quad 2-1 Data Selector/Multiplexer	16-TVSOP	.72	.54	.41
SN74AHC157DGVR	296-4553-2-ND	Quad 2-1 Data Selector/Multiplexer	16-TVSOP	478.00/2,000		
SN74AHC157N	296-4554-5-ND	Quad 2-1 Data Selector/Multiplexer	16-Dip	.72	.54	.41
SN74AHC157PWR	296-4555-1-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP	.72	.54	.41
SN74AHC157PWR	296-4555-2-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP	478.00/2,000		
SN74AHC158DBR	296-4556-1-ND	Quad 2-1 Data Selector/Multiplexer	16-SSOP	.72	.54	.41
SN74AHC158DBR	296-4556-2-ND	Quad 2-1 Data Selector/Multiplexer	16-SSOP	478.00/2,000		
SN74AHC158DGVR	296-4557-1-ND	Quad 2-1 Data Selector/Multiplexer	16-TVSOP	.72	.54	.41
SN74AHC158DGVR	296-4557-2-ND	Quad 2-1 Data Selector/Multiplexer	16-TVSOP	478.00/2,000		
SN74AHC158DR	296-4558-1-ND	Quad 2-1 Data Selector/Multiplexer	16-SOIC	.88	.66	.50
SN74AHC158DR	296-4558-2-ND	Quad 2-1 Data Selector/Multiplexer	16-SOIC	715.00/2,500		
SN74AHC158PWR	296-4559-1-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP	.72	.54	.41
SN74AHC158PWR	296-4559-2-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP	478.00/2,000		
SN74AHC174D	296-1467-5-ND	Hex D-Type Flip-Flop with Clear	16-SOIC	.84	.63	.48
SN74AHC174DBR	296-4578-1-ND	Hex D-Type Flip-Flop with Clear	16-SSOP	.84	.63	.48
SN74AHC174DBR	296-4578-2-ND	Hex D-Type Flip-Flop with Clear	16-SSOP	558.00/2,000		
SN74AHC174N	296-1468-5-ND	Hex D-Type Flip-Flop with Clear	16-Dip	.84	.63	.48
SN74AHC240DBR	296-4579-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.84	.63	.48
SN74AHC240DBR	296-4579-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	558.00/2,000		
SN74AHC240DW	296-4580-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.84	.63	.48
SN74AHC240DWR	296-4580-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.84	.63	.48
SN74AHC240DWR	296-4580-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	558.00/2,000		
SN74AHC240N	296-4581-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.84	.63	.48
SN74AHC240PWR	296-4582-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.84	.63	.48
SN74AHC240PWR	296-4582-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	558.00/2,000		
SN74AHC244DBR	296-4583-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.84	.63	.48
SN74AHC244DBR	296-4583-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	558.00/2,000		
SN74AHC244DGVR	296-4584-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.84	.63	.48
SN74AHC244DGVR	296-4584-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP	558.00/2,000		
SN74AHC244DW	296-1096-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.84	.63	.48
SN74AHC244DWR	296-1096-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.84	.63	.48
SN74AHC244DWR	296-1096-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	558.00/2,000		
SN74AHC244N	296-4585-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.84	.63	.48
SN74AHC244PWR	296-1097-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.84	.63	.48
SN74AHC244PWR	296-1097-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	558.00/2,000		
SN74AHC245DBR	296-4586-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.84	.63	.48
SN74AHC245DBR	296-4586-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	558.00/2,000		
SN74AHC245DGVR	296-4587-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	.84	.63	.48
SN74AHC245DGVR	296-4587-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	558.00/2,000		
SN74AHC245DW	296-4588-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.84	.63	.48
SN74AHC245N	296-4589-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.84	.63	.48
SN74AHC245PWR	296-1098-1-ND	Tri-State Octal Transceiver	20-TSSOP	.84	.63	.48
SN74AHC245PWR	296-1098-2-ND	Tri-State Octal Transceiver	20-TSSOP	558.00/2,000		
SN74AHC273DBR	296-4590-1-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	.96	.72	.54
SN74AHC273DBR	296-4590-2-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	638.00/2,000		
SN74AHC273DGVR	296-4591-1-ND	Octal D-Type Flip-Flop with Clear	20-TVSOP	.96	.72	.54
SN74AHC273DGVR	296-4591-2-ND	Octal D-Type Flip-Flop with Clear	20-TVSOP	638.00/2,000		
SN74AHC273DW	296-1470-5-ND	Octal D-Type Flip-Flop with Clear	20-SOIC	.96	.72	.54
SN74AHC273DWR	296-1470-1-ND	Octal D-Type Flip-Flop with Clear	20-SOIC	.84	.70	.56
SN74AHC273DWR	296-1470-2-ND	Octal D-Type Flip-Flop with Clear	20-SOIC	744.00/2,000		
SN74AHC273N	296-1471-5-ND	Octal D-Type Flip-Flop	20-Dip	.96	.72	.54
SN74AHC273PWR	296-4592-1-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	.96	.72	.54
SN74AHC273PWR	296-4592-2-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	638.00/2,000		
SN74AHC367DR	296-4597-1-ND	Tri-State Hex Buff/Driver	16-SOIC	1.05	.88	.70
SN74AHC367DR	296-4597-2-ND	Tri-State Hex Buff/Driver	16-SOIC	1137.50/2,500		
SN74AHC373DBR	296-4598-1-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	.84	.63	.48
SN74AHC373DBR	296-4598-2-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	558.00/2,000		
SN74AHC373DW	296-4599-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.84	.63	.48
SN74AHC373N	296-4600-5-ND	Tri-State Octal Transparent D-Type Latch	20-Dip	.84	.63	.48
SN74AHC373PWR	296-1100-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.84	.63	.48
SN74AHC373PWR	296-1100-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	558.00/2,000		
SN74AHC374DBR	296-1101-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.84	.63	.48
SN74AHC374DBR	296-1101-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	558.00/2,000		
SN74AHC374DGVR	296-4601-1-ND	Tri-State Octal D-Type Flip-Flop	20-TVSOP	.84	.63	.48
SN74AHC374DGVR	296-4601-2-ND	Tri-State Octal D-Type Flip-Flop	20-TVSOP	558.00/2,000		
SN74AHC374DW	296-4602-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.84	.63	.48
SN74AHC374DWR	296-4602-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.84	.63	.48
SN74AHC374DWR	296-4602-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	558.00/2,000		
SN74AHC374N	296-4603-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.84	.63	.48
SN74AHC374PWR	296-1102-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.84	.63	.48
SN74AHC374PWR	296-1102-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	558.00/2,000		
SN74AHC540DBR	296-4604-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.72	.54
SN74AHC540DBR	296-4604-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	638.00/2,000		
SN74AHC540DW	296-4605-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74AHC540DWR	296-4605-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74AHC540DWR	296-4605-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	638.00/2,000		

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74AHC540N	296-4606-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.96	.72	.54
SN74AHC540PWR	296-4607-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHC540PWR	296-4607-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHC541DBR	296-4608-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.72	.54
SN74AHC541DBR	296-4608-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	638.00/2,000		
SN74AHC541DWR	296-4609-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74AHC541DWR	296-4609-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	638.00/2,000		
SN74AHC541N	296-4610-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.96	.72	.54
SN74AHC541PWR	296-1103-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHC541PWR	296-1103-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHC573DBR	296-4611-1-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	.84	.63	.48
SN74AHC573DBR	296-4611-2-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	558.00/2,000		
SN74AHC573DW	296-4612-5-ND	Tri-State Octal Transp. D-Type Latch	20-SOIC	.84	.63	.48
SN74AHC573DWR	296-4612-1-ND	Tri-State Octal Transp. D-Type Latch	20-SOIC	.84	.63	.48
SN74AHC573DWR	296-4612-2-ND	Tri-State Octal Transp. D-Type Latch	20-SOIC	558.00/2,000		
SN74AHC573N	296-4613-5-ND	Tri-State Octal Transp. D-Type Latch	20-Dip	.84	.63	.48
SN74AHC573PWR	296-1104-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.84	.63	.48
SN74AHC573PWR	296-1104-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	558.00/2,000		
SN74AHC574DBR	296-4614-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.84	.63	.48
SN74AHC574DBR	296-4614-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	558.00/2,000		
SN74AHC574DWR	296-4615-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.84	.63	.48
SN74AHC574DWR	296-4615-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	558.00/2,000		
SN74AHC574N	296-4616-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.84	.63	.48
SN74AHC574PWR	296-4617-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.84	.63	.48
SN74AHC574PWR	296-4617-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	558.00/2,000		
SN74AHC595D	296-4618-5-ND	Tri-State 8-Bit Shift Register	16-SOIC	.96	.72	.54
SN74AHC595N	296-4619-5-ND	Tri-State 8-Bit Shift Register	16-Dip	.96	.72	.54
SN74AHC595PWR	296-4620-1-ND	Tri-State 8-Bit Shift Register	16-TSSOP	.96	.72	.54
SN74AHC595PWR	296-4620-2-ND	Tri-State 8-Bit Shift Register	16-TSSOP	638.00/2,000		
SN74AHC16240DGGR	296-4560-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHC16240DGGR	296-4560-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHC16240DGVR	296-4561-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHC16240DGVR	296-4561-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1508.00/2,000		
SN74AHC16240DL	296-4562-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87
SN74AHC16244DGGR	296-4563-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHC16244DGGR	296-4563-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHC16244DGVR	296-4564-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHC16244DGVR	296-4564-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1508.00/2,000		
SN74AHC16244DL	296-4565-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87
SN74AHC16373DGGR	296-4566-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TSSOP	1.45	1.16	.87
SN74AHC16373DGGR	296-4566-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TSSOP	1508.00/2,000		
SN74AHC16373DGVR	296-4567-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TVSOP	1.45	1.16	.87
SN74AHC16373DGVR	296-4567-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TVSOP	1508.00/2,000		
SN74AHC16373DL	296-4568-5-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-SSOP	1.45	1.16	.87
SN74AHC16373DLR	296-4568-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-SSOP	1.50	1.20	.90
SN74AHC16373DLR	296-4568-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-SSOP	780.00/1,000		
SN74AHC16374DGGR	296-4569-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	1.45	1.16	.87
SN74AHC16374DGGR	296-4569-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	1508.00/2,000		
SN74AHC16374DGVR	296-4570-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TVSOP	1.45	1.16	.87
SN74AHC16374DGVR	296-4570-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TVSOP	1508.00/2,000		
SN74AHC16374DL	296-4571-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1.45	1.16	.87
SN74AHC16540DGGR	296-4572-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHC16540DGGR	296-4572-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHC16540DGVR	296-4573-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHC16540DGVR	296-4573-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1508.00/2,000		
SN74AHC16540DL	296-4574-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87
SN74AHC16541DGGR	296-4575-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHC16541DGGR	296-4575-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHC16541DGVR	296-4576-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHC16541DGVR	296-4576-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1508.00/2,000		
SN74AHC16541DL	296-4577-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87

AHCT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74AHCT00D	296-4629-5-ND	Quad 2-Input NAND Gate	14-SOP	.52	.39	.30
SN74AHCT00DR	296-4629-1-ND	Quad 2-Input NAND Gate	14-SOP	.52	.39	.30
SN74AHCT00DR	296-4629-2-ND	Quad 2-Input NAND Gate	14-SOP	422.50/2,500		
SN74AHCT00DBR	296-4630-1-ND	Quad 2-Input NAND Gate	14-SSOP	.52	.39	.30
SN74AHCT00DBR	296-4630-2-ND	Quad 2-Input NAND Gate	14-SSOP	346.00/2,000		
SN74AHCT00DGVR	296-4631-1-ND	Quad 2-Input NAND Gate	14-TVSOP	.52	.39	.30
SN74AHCT00DGVR	296-4631-2-ND	Quad 2-Input NAND Gate	14-TVSOP	346.00/2,000		
SN74AHCT00N	296-4632-5-ND	Quad 2-Input NAND Gate	14-Dip	.52	.39	.30
SN74AHCT00PWR	296-4633-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74AHCT00PWR	296-4633-2-ND	Quad 2-Input NAND Gate	14-TSSOP	346.00/2,000		
SN74AHCT02D	296-4634-5-ND	Quad 2-Input NOR Gate	14-SOIC	.52	.39	.30
SN74AHCT02DR	296-4635-1-ND	Quad 2-Input NOR Gate	14-SOIC	.52	.39	.30
SN74AHCT02DR	296-4635-2-ND	Quad 2-Input NOR Gate	14-SOIC	422.50/2,500		
SN74AHCT02DBR	296-4636-1-ND	Quad 2-Input NOR Gate	14-SSOP	.52	.39	.30
SN74AHCT02DBR	296-4636-2-ND	Quad 2-Input NOR Gate	14-SSOP	346.00/2,000		
SN74AHCT02DGVR	296-4637-1-ND	Quad 2-Input NOR Gate	14-TVSOP	.56	.42	.32
SN74AHCT02DGVR	296-4637-2-ND	Quad 2-Input NOR Gate	14-TVSOP	372.00/2,000		
SN74AHCT02N	296-4638-5-ND	Quad 2-Input NOR Gate	14-Dip	.52	.39	.30
SN74AHCT02PWR	296-4639-1-ND	Quad 2-Input NOR Gate	14-TSSOP	.52	.39	.30
SN74AHCT02PWR	296-4639-2-ND	Quad 2-Input NOR Gate	14-TSSOP	346.00/2,000		
SN74AHCT04DBR	296-4640-1-ND	Hex Inverter	14-SSOP	.52	.39	.30
SN74AHCT04DBR	296-4640-2-ND	Hex Inverter	14-SSOP	346.00/2,000		
SN74AHCT04DGVR	296-4641-1-ND	Hex Inverter	14-TVSOP	.52	.39	.30
SN74AHCT04DGVR	296-4641-2-ND	Hex Inverter	14-TVSOP	346.00/2,000		
SN74AHCT04DR	296-4642-1-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74AHCT04DR	296-4642-2-ND	Hex Inverter	14-SOIC	422.50/2,500		
SN74AHCT04N	296-4643-5-ND	Hex Inverter	14-Dip	.52	.39	.30
SN74AHCT04PWR	296-1106-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74AHCT04PWR	296-1106-2-ND	Hex Inverter	14-TSSOP	346.00/2,000		
SN74AHCT08D	296-4644-5-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74AHCT08DR	296-4644-1-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74AHCT08DR	296-4644-2-ND	Quad 2-Input AND Gate	14-SOIC	422.50/2,500		
SN74AHCT08DBR	296-4645-1-ND	Quad 2-Input AND Gate	14-SSOP	.52	.39	.30
SN74AHCT08DBR	296-4645-2-ND	Quad 2-Input AND Gate	14-SSOP	346.00/2,000		
SN74AHCT08DGVR	296-4646-1-ND	Quad 2-Input AND Gate	14-TVSOP	.52	.39	.30
SN74AHCT08DGVR	296-4646-2-ND	Quad 2-Input AND Gate	14-TVSOP	346.00/2,000		
SN74AHCT08N	296-4647-5-ND	Quad 2-Input AND Gate	14-Dip	.52	.39	.30
SN74AHCT08PWR	296-1107-1-ND	Quad 2-Input AND Gate	14-TSSOP	.52	.39	.30
SN74AHCT08PWR	296-1107-2-ND	Quad 2-Input AND Gate	14-TSSOP	346.00/2,000		
SN74AHCT14D	296-1474-5-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74AHCT14DR	296-1474-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30
SN74AHCT14DR	296-1474-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	422.50/2,500		
SN74AHCT14DBR	296-4672-1-ND	Hex Schmitt-Trigger Inverter	14-SSOP	.52	.39	.30
SN74AHCT14DBR	296-4672-2-ND	Hex Schmitt-Trigger Inverter	14-SSOP	346.00/2,000		
SN74AHCT14DGVR	296-4673-1-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	.52	.39	.30
SN74AHCT14DGVR	296-4673-2-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	346.00/2,000		
SN74AHCT14N	296-4674-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.52	.39	.30
SN74AHCT14PWR	296-1110-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.52	.39	.30
SN74AHCT14PWR	296-1110-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	346.00/2,000		
SN74AHCT32D	296-4728-5-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74AHCT32DB	296-4729-5-ND	Quad 2-Input OR Gate	14-SSOP	.56	.42	.32
SN74AHCT32DBR	296-4729-1-ND	Quad 2-Input OR Gate	14-SSOP	.52	.39	.30
SN74AHCT32DBR	296-4729-2-ND	Quad 2-Input OR Gate	14-SSOP	346.00/2,000		
SN74AHCT32DGVR	296-4730-1-ND	Quad 2-Input OR Gate	14-TVSOP	.52	.39	.30
SN74AHCT32DGVR	296-4730-2-ND	Quad 2-Input OR Gate	14-TVSOP	346.00/2,000		
SN74AHCT32DR	296-4731-1-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74AHCT32DR	296-4731-2-ND	Quad 2-Input OR Gate	14-SOIC	422.50/2,500		
SN74AHCT32N	296-4732-5-ND	Quad 2-Input OR Gate	14-Dip	.52	.39	.30
SN74AHCT32PWR	296-1119-1-ND	Quad 2-Input OR Gate	14-TSSOP	.52	.39	.30
SN74AHCT32PWR	296-1119-2-ND	Quad 2-Input OR Gate	14-TSSOP	346.00/2,000		
SN74AHCT74D	296-4769-5-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SOIC	.52	.39	.30
SN74AHCT74DBR	296-4770-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SSOP	.52	.39	.30
SN74AHCT74DBR	296-4770-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-SSOP	346.00/2,000		
SN74AHCT74DGVR	296-4771-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TVSOP	.52	.39	.30
SN74AHCT74DGVR	296-4771-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TVSOP	346.00/2,000		
SN74AHCT74N	296-4772-5-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-Dip	.52	.39	.30
SN74AHCT74PWR	296-4773-1-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TSSOP	.52	.39	.30
SN74AHCT74PWR	296-4773-2-ND	Dual D-Type Flip-Flop w/Clear/Preset	14-TSSOP	346.00/2,000		
SN74AHCT86DBR	296-4774-1-ND	Quad 2-Input EX-OR Gate	14-SSOP	.56	.42	.32
SN74AHCT86DBR	296-4774-2-ND	Quad 2-Input EX-OR Gate	14-SSOP	372.00/2,000		
SN74AHCT86DGVR	296-4775-1-ND	Quad 2-Input EX-OR Gate	14-TVSOP	.56	.42	.32
SN74AHCT86DGVR	296-4775-2-ND	Quad 2-Input EX-OR Gate	14-TVSOP	372.00/2,000		
SN74AHCT86DR	296-4776-1-ND	Quad 2-Input EX-OR Gate	14-SOIC	.56	.42	.32
SN74AHCT86DR	296-4776-2-ND	Quad 2-Input EX-OR Gate	14-SOIC	455.00/2,500		
SN74AHCT86N	296-4777-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.56	.42	.32
SN74AHCT86PWR	296-4778-1-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.56	.42	.32
SN74AHCT86PWR	296-4778-2-ND	Quad 2-Input EX-OR Gate	14-TSSOP	372.00/2,000		
SN74AHCT123ADBR	296-4648-1-ND	Dual Retrig. Mono Multivibrator	16-SSOP	.72	.54	.41
SN74AHCT123ADBR	296-4648-2-ND	Dual Retrig. Mono Multivibrator	16-SSOP	478.00/2,000		
SN74AHCT123ADGVR	296-4649-1-ND	Dual Retrig. Mono Multivibrator	16-TVSOP	.72	.54	.41
SN74AHCT123ADGVR	296-4649-2-ND	Dual Retrig. Mono Multivibrator	16-TVSOP	478.00/2,000		
SN74AHCT123ADR	296-4650-1-ND	Dual Retrig. Mono Multivibrator	16-SOIC	.72	.54	.41
SN74AHCT123ADR	296-4650-2-ND	Dual Retrig. Mono Multivibrator	16-SOIC	585.00/2,500		
SN74AHCT123APWR	296-4651-1-ND	Dual Retrig. Mono Multivibrator	16-TSSOP	.72	.54	.41
SN74AHCT123APWR	296-4651-2-ND	Dual Retrig. Mono Multivibrator	16-TSSOP	478.00/2,000		
SN74AHCT125D	296-4652-5-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.72	.54	.41
SN74AHCT125DR	296-4652-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.72	.54	.41
SN74AHCT125DR	296-4652-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	585.00/2,500		
SN74AHCT125DBR	296-4653-1-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	.72	.54	.41
SN74AHCT125DBR	296-4653-2-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	478.00/2,000		
SN74AHCT125DGVR	296-4654-1-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	.72	.54	.41
SN74AHCT125DGVR	296-4654-2-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	478.00/2,000		
SN74AHCT125N	296-4655-5-ND	Tri-State Quad Bus Buffer Gate	14-Dip	.72	.54	.41
SN74AHCT125PWR	296-1108-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.72	.54	.41
SN74AHCT125PWR	296-1108-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	478.00/2,000		
SN74AHCT126DBR	296-4656-1-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	.72	.54	.41
SN74AHCT126DBR	296-4656-2-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	478.00/2,000		
SN74AHCT126DGVR	296-4657-1-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	.72	.54	.41
SN74AHCT126DGVR	296-4657-2-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	478.00/2,000		
SN74AHCT126DR	296-4658-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.72	.54	.41
SN74AHCT126DR	296-4658-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	585.00/2,500		
SN74AHCT126N	296-4659-5-ND	Tri-State Quad Bus Buffer Gate	14-Dip	.72	.54	.41
SN74AHCT126PWR	296-4660-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.72	.54	.41
SN74AHCT126PWR	296-4660-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	478.00/2,000		
SN74AHCT132D	296-1472-5-ND	Quad NAND Gate	14-SOIC	.76	.57	.43
SN74AHCT132DBR	296-4661-1-ND	Quad NAND Gate with Schmitt-Trigger	14-SSOP	.76	.57	.43
SN74AHCT132DBR	296-4661-2-ND	Quad NAND Gate with Schmitt-Trigger	14-SSOP	506.00/2,000		
SN74AHCT132N	296-1473-5-ND	Quad NAND Gate	14-Dip	.76	.57	.43
SN74AHCT132PWR	296-4662-1-ND	Quad NAND Gate w/Schmitt-Trigger	14-TSSOP	.76	.57	.43
SN74AHCT132PWR	296-4662-2-ND	Quad NAND Gate w/Schmitt-Trigger	14-TSSOP	506.00/2,000		
SN74AHCT138D	296-4663-5-ND	3-8 Line Decoder/Demultiplexer	16-SOIC	.72	.54	.41
SN74AHCT138DBR	296-4664-1-ND	3-8 Line Decoder/Demultiplexer	16-SSOP	.72	.54	.41
SN74AHCT138DBR	296-4664-2-ND	3-8 Line Decoder/Demultiplexer	16-SSOP	478.00/2,000		
SN74AHCT138DGVR	296-4665-1-ND	3-8 Line Decoder/Demultiplexer	16-TVSOP	.72	.54	.41
SN74AHCT138DGVR	296-4665-2-ND	3-8 Line Decoder/Demultiplexer	16-TVSOP	478.00/2,000		
SN74AHCT138N	296-4666-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.72	.54	.41
SN74AHCT138PWR	296-1109-1-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	.72	.54	.41
SN74AHCT138PWR	296-1109-2-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	478.00/2,000		
SN74AHCT139D	296-4667-5-ND	Dual 2-4 Decoder/Demultiplexer	16-SOIC	.72	.54	.41
SN74AHCT139DBR	296-4668-1-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP	.72	.54	.41
SN74AHCT139DBR	296-4668-2-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP	478.00/2,000		
SN74AHCT139DGVR	296-4669-1-ND	Dual 2-4 Decoder/Demultiplexer	16-TVSOP	.72	.54	.41
SN74AHCT139DGVR	296-4669-2-ND	Dual 2-4 Decoder/Demultiplexer	16-TVSOP	478.00/2,000		
SN74AHCT139N	296-4670-5-ND	Dual 2-4 Decoder/Demultiplexer	16-Dip	.72	.54	.41
SN74AHCT139PWR	296-4671-1-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP	.72	.54	.41
SN74AHCT139PWR	296-4671-2-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP	478.00/2,000		
SN74AHCT157D	296-4675-5-ND	Quad 2-to-1 Data Selector/Mux	16-SOIC	.72	.54	.41
SN74AHCT157DBR	296-4676-1-ND	Quad 2-to-1 Data Selector/Mux	16-SSOP	.72	.54	.41
SN74AHCT157DBR	296-4676-2-ND	Quad 2-to-1 Data Selector/Mux	16-SSOP	478.00/2,000		
SN74AHCT157DGVR	296-4677-1-ND	Quad 2-to-1 Data Selector/Mux.	16-TVSOP	.72	.54	.41
SN74AHCT157DGVR	296-4677-2-ND	Quad 2-to-1 Data Selector/Mux.	16-TVSOP	478.00/2,000		
SN74AHCT157PWR	296-4678-1-ND	Quad 2-to-1 Data Selector/Mux.	16-TSSOP	.72	.54	.41
SN74AHCT157PWR	296-4678-2-ND	Quad 2-to-1 Data Selector/Mux.	16-TSSOP	478.00/2,000		
SN74AHCT158D	296-4679-5-ND	Quad 2-to-1 Data Selector/Mux	16-SOIC	.72	.54	.41
SN74AHCT158PWR	296-4680-1-ND	Quad 2-to-1 Data Selector/Mux.	16-TSSOP	.72	.54	.41
SN74AHCT158PWR	296-4680-2-ND	Quad 2-to-1 Data Selector/Mux.	16-TSSOP	478.00/2,000		
SN74AHCT174D	296-1475-5-ND	Hex D-Type Flip-Flop	16-SOIC	.72	.54	.41
SN74AHCT174DBR	296-4702-1-ND	Hex D-Type Flip-Flop	16-SSOP	.72	.54	.41
SN74AHCT174DBR	296-4702-2-ND	Hex D-Type Flip-Flop	16-SSOP	478.00/2,000		
SN74AHCT240DBR	296-4716-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.76	.57	.43

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AHCT240DBR	296-4716-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	506.00/2,000		
SN74AHCT240DW	296-4717-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.76	.57	.43
SN74AHCT240DWR	296-4717-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.76	.57	.43
SN74AHCT240DWR	296-4717-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	506.00/2,000		
SN74AHCT240N	296-4718-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.76	.57	.43
SN74AHCT240PWR	296-4719-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.76	.57	.43
SN74AHCT240PWR	296-4719-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	506.00/2,000		
SN74AHCT244DBR	296-4720-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.76	.57	.43
SN74AHCT244DBR	296-4720-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	506.00/2,000		
SN74AHCT244DGVR	296-4721-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.76	.57	.43
SN74AHCT244DGVR	296-4721-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP	506.00/2,000		
SN74AHCT244DW	296-4722-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.76	.57	.43
SN74AHCT244DWR	296-4722-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.76	.57	.43
SN74AHCT244DWR	296-4722-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	506.00/2,000		
SN74AHCT244N	296-4723-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.76	.57	.43
SN74AHCT244PWR	296-1116-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.76	.57	.43
SN74AHCT244PWR	296-1116-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	506.00/2,000		
SN74AHCT245DBR	296-4724-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.76	.57	.43
SN74AHCT245DBR	296-4724-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	506.00/2,000		
SN74AHCT245DGVR	296-4725-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	.76	.57	.43
SN74AHCT245DGVR	296-4725-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	506.00/2,000		
SN74AHCT245DW	296-1117-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74AHCT245DWR	296-1117-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74AHCT245DWR	296-1117-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	506.00/2,000		
SN74AHCT245N	296-1476-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.76	.57	.43
SN74AHCT245PWR	296-1118-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.76	.57	.43
SN74AHCT245PWR	296-1118-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	506.00/2,000		
SN74AHCT273DBR	296-4726-1-ND	Octal D-Type Flip-Flop w/Clear	20-SSOP	.96	.72	.54
SN74AHCT273DBR	296-4726-2-ND	Octal D-Type Flip-Flop w/Clear	20-SSOP	638.00/2,000		
SN74AHCT273PWR	296-4727-1-ND	Octal D-Type Flip-Flop w/Clear	20-TSSOP	.96	.72	.54
SN74AHCT273PWR	296-4727-2-ND	Octal D-Type Flip-Flop w/Clear	20-TSSOP	638.00/2,000		
SN74AHCT367DBR	296-4733-1-ND	Tri-State Hex Buffer/Driver	16-SSOP	1.05	.88	.70
SN74AHCT367DBR	296-4733-2-ND	Tri-State Hex Buffer/Driver	16-SSOP	932.00/2,000		
SN74AHCT367DGVR	296-4734-1-ND	Tri-State Hex Buffer/Driver	16-TVSOP	1.05	.88	.70
SN74AHCT367DGVR	296-4734-2-ND	Tri-State Hex Buffer/Driver	16-TVSOP	932.00/2,000		
SN74AHCT367DR	296-4735-1-ND	Tri-State Hex Buffer/Driver	16-SOIC	1.05	.88	.70
SN74AHCT367DR	296-4735-2-ND	Tri-State Hex Buffer/Driver	16-SOIC	1137.50/2,500		
SN74AHCT367PWR	296-4736-1-ND	Tri-State Hex Buffer/Driver	16-TSSOP	1.05	.88	.70
SN74AHCT367PWR	296-4736-2-ND	Tri-State Hex Buffer/Driver	16-TSSOP	932.00/2,000		
SN74AHCT373DBR	296-4737-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	.76	.57	.43
SN74AHCT373DBR	296-4737-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	506.00/2,000		
SN74AHCT373DW	296-4739-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.76	.57	.43
SN74AHCT373DWR	296-4739-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.76	.57	.43
SN74AHCT373DWR	296-4739-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	506.00/2,000		
SN74AHCT373N	296-4740-5-ND	Tri-State Octal Transparent D-Type Latch	20-Dip	.76	.57	.43
SN74AHCT373PWR	296-4741-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.76	.57	.43
SN74AHCT373PWR	296-4741-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	506.00/2,000		
SN74AHCT374DBR	296-4742-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-SSOP	.76	.57	.43
SN74AHCT374DBR	296-4742-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-SSOP	506.00/2,000		
SN74AHCT374DGVR	296-4743-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-TVSOP	.76	.57	.43
SN74AHCT374DGVR	296-4743-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-TVSOP	506.00/2,000		
SN74AHCT374DWR	296-4744-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-SOIC	.76	.57	.43
SN74AHCT374DWR	296-4744-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-SOIC	506.00/2,000		
SN74AHCT374N	296-4745-5-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-Dip	.76	.57	.43
SN74AHCT374PWR	296-4746-1-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-TSSOP	.76	.57	.43
SN74AHCT374PWR	296-4746-2-ND	Tri-State Octal D-Type Edge-Triggered Flip-Flop	20-TSSOP	506.00/2,000		
SN74AHCT540DBR	296-4747-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.72	.54
SN74AHCT540DBR	296-4747-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	638.00/2,000		
SN74AHCT540DGVR	296-4748-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.96	.72	.54
SN74AHCT540DGVR	296-4748-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP	638.00/2,000		
SN74AHCT540DW	296-4749-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74AHCT540DWR	296-4749-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74AHCT540DWR	296-4749-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	638.00/2,000		
SN74AHCT540N	296-4750-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.96	.72	.54
SN74AHCT540PWR	296-4751-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHCT540PWR	296-4751-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHCT541DBR	296-4752-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.72	.54
SN74AHCT541DBR	296-4752-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	638.00/2,000		
SN74AHCT541DWR	296-4754-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74AHCT541DWR	296-4754-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	638.00/2,000		
SN74AHCT541N	296-4755-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.96	.72	.54
SN74AHCT541PWR	296-1120-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74AHCT541PWR	296-1120-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74AHCT573DBR	296-4756-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	.76	.57	.43
SN74AHCT573DBR	296-4756-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	506.00/2,000		
SN74AHCT573DGVR	296-4757-1-ND	Tri-St. Octal Transp. D-Type Latch	20-TVSOP	.76	.57	.43
SN74AHCT573DGVR	296-4757-2-ND	Tri-St. Octal Transp. D-Type Latch	20-TVSOP	506.00/2,000		
SN74AHCT573DW	296-4758-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.76	.57	.43
SN74AHCT573DWR	296-4758-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.76	.57	.43
SN74AHCT573DWR	296-4758-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	506.00/2,000		
SN74AHCT573N	296-4759-5-ND	Tri-St. Octal Transparent D-Type Latch	20-Dip	.76	.57	.43
SN74AHCT573PWR	296-1121-1-ND	Tri-St. Octal Transp. D-Type Latch	20-TSSOP	.76	.57	.43
SN74AHCT573PWR	296-1121-2-ND	Tri-St. Octal Transp. D-Type Latch	20-TSSOP	506.00/2,000		
SN74AHCT574DBR	296-4760-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.76	.57	.43
SN74AHCT574DBR	296-4760-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	506.00/2,000		
SN74AHCT574DGVR	296-4761-1-ND	Tri-State Octal D-Type Flip-Flop	20-TVSOP	.76	.57	.43
SN74AHCT574DGVR	296-4761-2-ND	Tri-State Octal D-Type Flip-Flop	20-TVSOP	506.00/2,000		
SN74AHCT574DWR	296-4762-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74AHCT574DWR	296-4762-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	506.00/2,000		
SN74AHCT574N	296-4763-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.76	.58	.43
SN74AHCT574PWR	296-4764-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.76	.57	.43
SN74AHCT574PWR	296-4764-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	506.00/2,000		
SN74AHCT594D	296-4765-5-ND	8-Bit Shift Register w/Output Register	16-SOIC	.96	.72	.54
SN74AHCT594DBR	296-4766-1-ND	8-Bit Shift Register w/Output Register	16-SSOP	.96	.72	.54
SN74AHCT594DBR	296-4766-2-ND	8-Bit Shift Register w/Output Register	16-SSOP	638.00/2,000		
SN74AHCT594PWR	296-4767-1-ND	8-Bit Shift Register w/Output Register	16-TSSOP	.96	.72	.54
SN74AHCT594PWR	296-4767-2-ND	8-Bit Shift Register w/Output Register	16-TSSOP	638.00/2,000		
SN74AHCT595PWR	296-9758-1-ND	Tri-State Shift Register	16-TSSOP	.96	.72	.54
SN74AHCT595PWR	296-9758-2-ND	Tri-State Shift Register	16-TSSOP	638.00/2,000		
SN74AHCT16240DGGR	296-4681-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHCT16240DGGR	296-4681-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHCT16240DGVR	296-4682-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHCT16240DGVR	296-4682-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1542.00/2,000		
SN74AHCT16240DL	296-4683-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87
SN74AHCT16244DGGR	296-4684-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHCT16244DGGR	296-4684-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHCT16244DGVR	296-4685-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHCT16244DGVR	296-4685-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1508.00/2,000		
SN74AHCT16244DL	296-4686-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87
SN74AHCT16245DGGR	296-4687-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	1.45	1.16	.87
SN74AHCT16245DGGR	296-4687-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	1508.00/2,000		
SN74AHCT16245DGVR	296-4688-1-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	1.45	1.16	.87
SN74AHCT16245DGVR	296-4688-2-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	1508.00/2,000		
SN74AHCT16245DL	296-4689-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1.45	1.16	.87
SN74AHCT16373DGGR	296-4690-1-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TSSOP	1.45	1.16	.87
SN74AHCT16373DGGR	296-4690-2-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TSSOP	1508.00/2,000		
SN74AHCT16373DGVR	296-4691-1-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TVSOP	1.45	1.16	.87
SN74AHCT16373DGVR	296-4691-2-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TVSOP	1508.00/2,000		
SN74AHCT16373DL	296-4692-5-ND	Tri-State 16-Bit Transp. D-Type Latch	48-SSOP	1.45	1.16	.87
SN74AHCT16374DGGR	296-4693-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	1.45	1.16	.87
SN74AHCT16374DGGR	296-4693-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	1508.00/2,000		
SN74AHCT16374DGVR	296-4694-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TVSOP	1.45	1.16	.87
SN74AHCT16374DGVR	296-4694-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TVSOP	1508.00/2,000		
SN74AHCT16374DLR	296-4695-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1.50	1.20	.90
SN74AHCT16374DLR	296-4695-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	780.00/1,000		
SN74AHCT16540DGGR	296-4696-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHCT16540DGGR	296-4696-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHCT16540DGVR	296-4697-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHCT16540DGVR	296-4697-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1508.00/2,000		
SN74AHCT16540DL	296-4698-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87
SN74AHCT16541DGGR	296-4699-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.45	1.16	.87
SN74AHCT16541DGGR	296-4699-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1508.00/2,000		
SN74AHCT16541DGVR	296-4700-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.45	1.16	.87
SN74AHCT16541DGVR	296-4700-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1508.00/2,000		
SN74AHCT16541DL	296-4701-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.45	1.16	.87

AHCU Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AHCU04D	296-9759-5-ND	Hex Inverter	14-SOP	.52	.39	.30
SN74AHCU04DBR	296-9760-1-ND	Hex Inverter	14-SSOP	.52	.39	.30
SN74AHCU04DBR	296-9760-2-ND	Hex Inverter	14-SSOP	346.00/2,000		
SN74AHCU04DGVR	296-9761-1-ND	Hex Inverter	14-TVSOP	.52	.39	.30
SN74AHCU04DGVR	296-9761-2-ND	Hex Inverter	14-TVSOP	346.00/2,000		
SN74AHCU04N	296-9762-5-ND	Hex Inverter	14-Dip	.52	.39	.30
SN74AHCU04PWR	296-9763-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74AHCU04PWR	296-9763-2-ND	Hex Inverter	14-TSSOP	346.00/2,000		

Microgate Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AHC1G00DBVR	296-1087-1-ND	Single 2-Input NAND Gate	SOT-23-5	.50	.40	.30
SN74AHC1G00DBVR	296-1087-2-ND	Single 2-Input NAND Gate	SOT-23-5	405.00/3,000		
SN74AHC1G00DCKR	296-8741-1-ND	Single 2-Input NAND Gate	5-SOP	.55	.44	.33
SN74AHC1G00DCKR	296-8741-2-ND	Single 2-Input NAND Gate	5-SOP	447.00/3,000		
SN74AHC1G02DBVR	296-1088-1-ND	Single 2-Input NOR Gate	SOT-23-5	.50	.40	.30
SN74AHC1G02DBVR	296-1088-2-ND	Single 2-Input NOR Gate	SOT-23-5	405.00/3,000		
SN74AHC1G02DCKR	296-8742-1-ND	Single 2-Input NOR Gate	5-SOP	.55	.44	.33
SN74AHC1G02DCKR	296-8742-2-ND	Single 2-Input NOR Gate	5-SOP	447.00/3,000		
SN74AHC1G04DBVR	296-1089-1-ND	Single Inverter Gate	SOT-23-5	.50	.40	.30
SN74AHC1G04DBVR	296-1089-2-ND	Single Inverter Gate	SOT-23-5	405.00/3,000		
SN74AHC1G04DCKR	296-1090-1-ND	Single Inverter Gate	5-SOP	.55	.44	.33
SN74AHC1G04DCKR	296-1090-2-ND	Single Inverter Gate	5-SOP	447.00/3,000		
SN74AHC1G08DBVR	296-1091-1-ND	Single 2-Input AND Gate	SOT-23-5	.50	.40	.30
SN74AHC1G08DBVR	296-1091-2-ND	Single 2-Input AND Gate	SOT-23-5	405.00/3,000		
SN74AHC1G08DCKR	296-8743-1-ND	Single 2-Input AND Gate	5-SOP	.55	.44	.33
SN74AHC1G08DCKR	296-8743-2-ND	Single 2-Input AND Gate	5-SOP	447.00/3,000		
SN74AHC1G14DBVR	296-1092-1-ND	Single Schmitt-Trigger Inverter	SOT-23-5	.50	.40	.30
SN74AHC1G14DBVR	296-1092-2-ND	Single Schmitt-Trigger Inverter	SOT-23-5	405.00/3,000		
SN74AHC1G14DCKR	296-8748-1-ND	Single Schmitt-Trigger Inverter	5-SOP	.55	.44	.33
SN74AHC1G14DCKR	296-8748-2-ND	Single Schmitt-Trigger Inverter	5-SOP	447.00/3,000		
SN74AHC1G32DBVR	296-1093-1-ND	Single 2-Input OR Gate	SOT-23-5	.50	.40	.30
SN74AHC1G32DBVR	296-1093-2-ND	Single 2-Input OR Gate	SOT-23-5	405.00/3,000		
SN74AHC1G32DCKR	296-8749-1-ND	Single 2-Input OR Gate	5-SOP	.55	.44	.33
SN74AHC1G32DCKR	296-8749-2-ND	Single 2-Input OR Gate	5-SOP	447.00/3,000		
SN74AHC1G86DBVR	296-1094-1-ND	Single 2-Input Exclusive-OR Gate	SOT-23-5	.50	.40	.30
SN74AHC1G86DBVR	296-1094-2-ND	Single 2-Input Exclusive-OR Gate	SOT-23-5	405.00/3,000		
SN74AHC1G86DCKR	296-8750-1-ND	Single 2-Input Exclusive-OR Gate	5-SOP	.55	.44	.33
SN74AHC1G86DCKR	296-8750-2-ND	Single 2-Input Exclusive-OR Gate	5-SOP	447.00/3,000		
SN74AHC1G125DBVR	296-8744-1-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	.50	.40	.30
SN74AHC1G125DBVR	296-8744-2-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	405.00/3,000		
SN74AHC1G125DCKR	296-8745-1-ND	Tri-State Single Bus Buffer Gate	5-SOP	.55	.44	.33
SN74AHC1G125DCKR	296-8745-2-ND	Tri-State Single Bus Buffer Gate	5-SOP	447.00/3,000		
SN74AHC1G126DBVR	296-8746-1-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	.50	.40	.30
SN74AHC1G126DBVR	296-8746-2-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	405.00/3,000		
SN74AHC1G126DCKR	296-8747-1-ND	Tri-State Single Bus Buffer Gate	5-SOP	.55	.44	.33
SN74AHC1G126DCKR	296-8747-2-ND	Tri-State Single Bus Buffer Gate	5-SOP	447.00/3,000		
SN74AHC1GU04DBVR	296-1095-1-ND	Single Inverter Gate	SOT-23-5	.50	.40	.30
SN74AHC1GU04DBVR	296-1095-2-ND	Single Inverter Gate	SOT-23-5	405.00/3,000		
SN74AHC1GU04DCKR	296-8751-1-ND	Single Inverter Gate	5-SOP	.55	.44	.33
SN74AHC1GU04DCKR	296-8751-2-ND	Single Inverter Gate	5-SOP	447.00/3,000		
SN74AHCT1G00DBVR	296-1111-1-ND	Single 2-Input NAND Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G00DBVR	296-1111-2-ND	Single 2-Input NAND Gate	SOT-23-5	405.00/3,000		
SN74AHCT1G00DCKR	296-4703-1-ND	Single 2-Input NAND Gate	5-SOT	.55	.44	.33
SN74AHCT1G00DCKR	296-4703-2-ND	Single 2-Input NAND Gate	5-SOT	447.00/3,000		
SN74AHCT1G02DBVR	296-4704-1-ND	Single 2-Input NOR Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G02DBVR	296-4704-2-ND	Single 2-Input NOR Gate	SOT-23-5	405.00/3,000		
SN74AHCT1G02DCKR	296-4705-1-ND	Single 2-Input NOR Gate	5-SOT	.55	.44	.33
SN74AHCT1G02DCKR	296-4705-2-ND	Single 2-Input NOR Gate	5-SOT	447.00/3,000		
SN74AHCT1G04DBVR	296-1112-1-ND	Single Inverter Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G04DBVR	296-1112-2-ND	Single Inverter Gate	SOT-23-5	405.00/3,000		

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AHCT1G04DCKR	296-4706-1-ND	Single Inverter Gate	5-SOT	.55	.44	.33
SN74AHCT1G04DCKR	296-4706-2-ND	Single Inverter Gate	5-SOT	447.00/3,000		
SN74AHCT1G08DBVR	296-1113-1-ND	Single 2-Input AND Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G08DBVR	296-1113-2-ND	Single 2-Input AND Gate	SOT-23-5	405.00/3,000		
SN74AHCT1G08DCKR	296-4707-1-ND	Single 2-Input AND Gate	5-SOT	.55	.44	.33
SN74AHCT1G08DCKR	296-4707-2-ND	Single 2-Input AND Gate	5-SOT	447.00/3,000		
SN74AHCT1G14DBVR	296-1114-1-ND	Single Schmitt-Trigger Inverter	SOT-23-5	.50	.40	.30
SN74AHCT1G14DBVR	296-1114-2-ND	Single Schmitt-Trigger Inverter	SOT-23-5	405.00/3,000		
SN74AHCT1G14DCKR	296-4712-1-ND	Single Schmitt-Trigger Inverter Gate	5-SOT	.55	.44	.33
SN74AHCT1G14DCKR	296-4712-2-ND	Single Schmitt-Trigger Inverter Gate	5-SOT	447.00/3,000		
SN74AHCT1G32DBVR	296-1115-1-ND	Single 2-Input OR Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G32DBVR	296-1115-2-ND	Single 2-Input OR Gate	SOT-23-5	405.00/3,000		
SN74AHCT1G32DCKR	296-4713-1-ND	Single 2-Input OR Gate	5-SOT	.55	.44	.33
SN74AHCT1G32DCKR	296-4713-2-ND	Single 2-Input OR Gate	5-SOT	447.00/3,000		
SN74AHCT1G86DBVR	296-4714-1-ND	Single 2-Input EX-OR Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G86DBVR	296-4714-2-ND	Single 2-Input EX-OR Gate	SOT-23-5	405.00/3,000		
SN74AHCT1G86DCKR	296-4715-1-ND	Single 2-Input EX-OR Gate	5-SOT	.55	.44	.33
SN74AHCT1G86DCKR	296-4715-2-ND	Single 2-Input EX-OR Gate	5-SOT	447.00/3,000		
SN74AHCT1G125DBVR	296-4708-1-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G125DBVR	296-4708-2-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	405.00/3,000		
SN74AHCT1G125DCKR	296-4709-1-ND	Tri-State Single Bus Buffer Gate	5-SOT	.55	.44	.33
SN74AHCT1G125DCKR	296-4709-2-ND	Tri-State Single Bus Buffer Gate	5-SOT	447.00/3,000		
SN74AHCT1G126DBVR	296-4710-1-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	.50	.40	.30
SN74AHCT1G126DBVR	296-4710-2-ND	Tri-State Single Bus Buffer Gate	SOT-23-5	405.00/3,000		
SN74AHCT1G126DCKR	296-4711-1-ND	Tri-State Single Bus Buffer Gate	5-SOT	.55	.44	.33
SN74AHCT1G126DCKR	296-4711-2-ND	Tri-State Single Bus Buffer Gate	5-SOT	447.00/3,000		

ALB Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALB16244DGGR	296-9764-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	5.06	4.05	3.15
SN74ALB16244DGGR	296-9764-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	5738.00/2,000		
SN74ALB16244DGVR	296-9765-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	5.06	4.05	3.15
SN74ALB16244DGVR	296-9765-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	5738.00/2,000		
SN74ALB16244DL	296-9766-5-ND	Tri-State 16-Bit Buffer/Driver *NEW!*	48-SSOP	5.06	4.05	3.15
SN74ALB16244DLR	296-9766-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	5.11	4.09	3.18
SN74ALB16244DLR	296-9766-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2894.00/1,000		
SN74ALB16245DGGR	296-9767-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	5.06	4.05	3.15
SN74ALB16245DGGR	296-9767-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	5738.00/2,000		
SN74ALB16245DGVR	296-9768-1-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	5.06	4.05	3.15
SN74ALB16245DGVR	296-9768-2-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	5738.00/2,000		
SN74ALB16245DL	296-9769-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	5.06	4.05	3.15
SN74ALB16245DLR	296-9769-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	5.11	4.09	3.18
SN74ALB16245DLR	296-9769-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2894.00/1,000		

ALS Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65ALS176D	296-9698-5-ND	Differential Bus Transceiver	8-SOP	3.26	2.61	2.03
SN65ALS1176DR	296-9697-1-ND	Differential Bus Transceiver	8-SOP	3.94	3.15	2.45
SN65ALS1176DR	296-9697-2-ND	Differential Bus Transceiver	8-SOP	5512.50/2,500		
SN74ALS00AD	296-1477-5-ND	Quad 2-Input NAND Gate	14-SOIC	.68	.51	.39
SN74ALS00AN	296-1478-5-ND	Quad 2-Input NAND Gate	14-Dip	.64	.48	.36
SN74ALS00ANSR	296-5001-2-ND	Quad 2-Input NAND Gate	14-SOP	426.00/2,000		
SN74ALS02AN	296-1479-5-ND	Quad 2-Input NOR Gate	14-Dip	.64	.48	.36
SN74ALS04BD	296-1122-5-ND	Hex Inverter	14-SOIC	.68	.51	.39
SN74ALS04BDR	296-1122-1-ND	Hex Inverter	14-SOIC	.76	.57	.43
SN74ALS04BDR	296-1122-2-ND	Hex Inverter	14-SOIC	617.50/2,500		
SN74ALS04BN	296-1481-5-ND	Hex Inverter	14-Dip	.64	.48	.36
SN74ALS05AN	296-1482-5-ND	Hex Inverter with OC	14-Dip	.88	.66	.50
SN74ALS08D	296-1123-5-ND	Quad 2-Input AND Gate	14-SOIC	.68	.51	.39
SN74ALS08DR	296-1123-1-ND	Quad 2-Input AND Gate	14-SOIC	.76	.57	.43
SN74ALS08DR	296-1123-2-ND	Quad 2-Input AND Gate	14-SOIC	617.50/2,500		
SN74ALS08N	296-1484-5-ND	Quad 2-Input AND Gate	14-Dip	.64	.48	.36
SN74ALS21ADR	296-5045-1-ND	Dual 4-Input AND Gate	14-SOIC	1.08	.90	.72
SN74ALS21ADR	296-5045-2-ND	Dual 4-Input AND Gate	14-SOIC	1170.00/2,500		
SN74ALS30AN	296-1494-5-ND	8-Input NAND Gate	14-Dip	.75	.63	.50
SN74ALS32DR	296-1127-1-ND	Quad 2-Input OR Gate	14-SOIC	.76	.57	.43
SN74ALS32DR	296-1127-2-ND	Quad 2-Input OR Gate	14-SOIC	617.50/2,500		
SN74ALS32N	296-1495-5-ND	Quad 2-Input OR Gate	14-Dip	.64	.48	.36
SN74ALS74AD	296-1130-5-ND	Dual D-Type Flip-Flop	14-SOIC	.84	.63	.48
SN74ALS74ADR	296-1130-1-ND	Dual D-Type Flip-Flop	14-SOIC	.92	.69	.52
SN74ALS74ADR	296-1130-2-ND	Dual D-Type Flip-Flop	14-SOIC	747.50/2,500		
SN74ALS74AN	296-1506-5-ND	Dual D-Type Flip-Flop	14-Dip	.80	.60	.45
SN74ALS138AN	296-1485-5-ND	3-8 Line Decoder/Demulitiplexer	16-Dip	.90	.75	.60
SN74ALS139N	296-1486-5-ND	Dual 2-4 Decoder/Demultiplexer	16-Dip	1.08	.90	.72
SN74ALS161BN	296-1487-5-ND	4-Bit Synchronous Binary Counter	16-Dip	1.05	.88	.70
SN74ALS163BN	296-1488-5-ND	4-Bit Synchronous Binary Counter	16-Dip	1.05	.88	.70
SN74ALS166DBR	296-5027-1-ND	8-Bit Parallel-Load Shift Register	16-SSOP	2.81	2.25	1.75
SN74ALS166DBR	296-5027-2-ND	8-Bit Parallel-Load Shift Register	16-SSOP	3188.00/2,000		
SN74ALS232BN	296-5039-5-ND	16 x 4 Asynchronous FIFO Memory	16-Dip	5.40	4.32	3.36
SN74ALS244CDW	296-1124-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	1.26	1.05	.84
SN74ALS244CDWR	296-1124-1-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	1.32	1.10	.88
SN74ALS244CDWR	296-1124-2-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	1170.00/2,000		
SN74ALS244CN	296-1490-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.20	1.00	.80
SN74ALS245ADW	296-1125-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	1.26	1.05	.84
SN74ALS245ADWR	296-1125-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	1.32	1.10	.88
SN74ALS245ADWR	296-1125-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	1170.00/2,000		
SN74ALS245AN	296-1492-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.20	1.00	.80
SN74ALS273N	296-1493-5-ND	Octal D-Type Flip-Flop with Clear	20-SOP	1.38	1.15	.92
SN74ALS374ADWR	296-1128-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.32	1.10	.88
SN74ALS374ADWR	296-1128-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1170.00/2,000		
SN74ALS374AN	296-1498-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.20	1.00	.80
SN74ALS541DW	296-1499-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	1.78	1.42	1.07
SN74ALS541N	296-1500-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.70	1.36	1.02
SN74ALS573CDW	296-1129-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	1.17	.98	.78
SN74ALS573CDWR	296-1129-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	1.23	1.03	.82
SN74ALS573CDWR	296-1129-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	1090.00/2,000		
SN74ALS573CN	296-1502-5-ND	Tri-State Octal D-Type Transparent Latch	20-Dip	1.17	.98	.78
SN74ALS574BDW	296-1503-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	1.17	.98	.78
SN74ALS574BN	296-1504-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	1.17	.98	.78
SN74ALS639AN	296-5068-5-ND	Octal Bus Transceiver	20-Dip	2.93	2.34	1.82
SN74ALS996NT	296-1507-5-ND	8-Bit READ-BACK Latch	24-Dip	8.00	6.40	5.40
SN74ALS1034D	296-5007-5-ND	Hex Non-Inverting Driver	14-SOIC	1.25	1.00	.75
SN75ALS057N	296-9927-5-ND	Quad Interface Bus Transceiver	20-Dip	4.50	3.60	2.80
SN75ALS085NT	296-9928-5-ND	Dual Channel Driver/Receiver	24-Dip	8.33	7.50	6.65
SN75ALS160DW	296-9932-5-ND	Octal Bus Transceiver	20-SOP	4.84	3.87	3.01
SN75ALS161N	296-9933-5-ND	Octal Bus Transceiver	20-Dip	5.90	4.72	3.99
SN75ALS162DW	296-9934-5-ND	Octal Bus Transceiver	24-SOP	4.95	3.96	3.08
SN75ALS170ADW	296-9936-5-ND	Triple Differential Bus Transceiver	20-SOP	6.08	4.87	4.11
SN75ALS171ADW	296-9937-5-ND	Triple Differential Bus Transceiver	20-SOP	6.08	4.87	4.11
SN75ALS171DWR	296-9938-1-ND	Triple Differential Bus Transceiver	20-SOP	6.40	5.12	4.32
SN75ALS171DWR	296-9938-2-ND	Triple Differential Bus Transceiver	20-SOP	8000.00/2,000		
SN75ALS172ADW	296-9939-5-ND	Quad Differential Bus Line Driver	20-SOP	3.87	3.10	2.41
SN75ALS172AN	296-9940-5-ND	Quad Differential Bus Line Driver	16-Dip	3.87	3.10	2.41
SN75ALS173N	296-9951-5-ND	Quad Differential Line Receiver	16-Dip	3.87	3.10	2.41
SN75ALS174AN	296-9952-5-ND	Quad Differential Line Driver	16-Dip	3.87	3.10	2.41
SN75ALS175N	296-9953-5-ND	Quad Differential Line Receiver	16-Dip	3.87	3.10	2.41
SN75ALS175NSR	296-9954-1-ND	Quad Differential Line Receiver	16-SOP	3.98	3.19	2.48
SN75ALS175NSR	296-9954-2-ND	Quad Differential Line Receiver	16-SOP	4602.00/2,000		
SN75ALS176AD	296-9955-5-ND	Differential Bus Transceiver	8-SOP	3.26	2.61	2.03
SN75ALS176BD	296-9956-5-ND	Differential Bus Transceiver	8-SOP	2.59	2.07	1.61
SN75ALS176BP	296-9957-5-ND	Differential Bus Transceiver	8-Dip	2.59	2.07	1.61
SN75ALS176D	296-9958-5-ND	Differential Bus Transceiver	8-SOP	2.59	2.07	1.61
SN75ALS176P	296-9959-5-ND	Differential Bus Transceiver	8-Dip	2.59	2.07	1.61
SN75ALS180D	296-9960-5-ND	Differential Driver/Receiver Pairs	14-SOP	2.59	2.07	1.61
SN75ALS180N	296-9961-5-ND	Differential Driver/Receiver Pairs	14-Dip	2.59	2.07	1.61
SN75ALS181N	296-9962-5-ND	Differential Driver/Receiver Pairs	14-Dip	2.59	2.07	1.61
SN75ALS181NSR	296-9963-1-ND	Differential Driver/Receiver Pairs	14-SOP	2.70	2.16	1.68
SN75ALS181NSR	296-9963-2-ND	Differential Driver/Receiver Pairs	14-SOP	3060.00/2,000		
SN75ALS191D	296-9964-5-ND	Dual Differential Line Driver	8-SOP	2.25	1.80	1.35
SN75ALS191P	296-9965-5-ND	Dual Differential Line Driver	8-Dip	2.25	1.80	1.35
SN75ALS192D	296-9966-5-ND	Quad Differential Line Driver	16-SOP	1.63	1.30	.98
SN75ALS193D	296-9967-5-ND	Quad Differential Line Receiver	16-SOP	2.00	1.60	1.20
SN75ALS193N	296-9968-5-ND	Quad Differential Line Receiver	16-Dip	2.00	1.60	1.20
SN75ALS194N	296-9969-5-ND	Quad Differential Line Driver	16-Dip	2.13	1.70	1.28
SN75ALS195N	296-9970-5-ND	Quad Differential Line Receiver	16-Dip	2.00	1.60	1.20
SN75ALS197D	296-9971-5-ND	Quad Differential Line Receiver	16-SOP	1.63	1.30	.98
SN75ALS197N	296-9972-5-ND	Quad Differential Line Receiver	16-Dip	1.63	1.30	.98
SN75ALS199D	296-9973-5-ND	Quad Differential Line Receiver	16-SOP	2.00	1.60	1.20
SN74ALS641A-1DW	296-9770-5-ND	Octal Bus Transceiver with OC Output	20-SOP	2.81	2.25	1.75
SN74ALS641ADW	296-9771-5-ND	Octal Bus Transceiver with OC Output	20-SOP	2.25	1.80	1.40
SN75ALS1177N	296-9929-5-ND	Tri-State Dual Differential Driver/Rcvr.	16-Dip	4.23	3.39	2.64
SN75ALS1177NSR	296-9930-1-ND	Tri-State Dual Differential Driver/Rcvr.	16-SOP	4.34	3.48	2.71
SN75ALS1177NSR	296-9930-2-ND	Tri-State Dual Differential Driver/Rcvr.	16-SOP	4922.00/2,000		
SN75ALS1178N	296-9931-5-ND	Tri-State Dual Diff. Driver/Rcvr.	16-Dip	4.23	3.39	2.64
SN75ALS1178NSR	296-12185-1-ND	Tri-State Dual Diff. Driver/Rcvr. *NEW!*	16-SOP	4.34	3.48	2.71
SN75ALS1178NSR	296-12185-2-ND	Tri-State Dual Diff. Driver/Rcvr. *NEW!*	16-SOP	4922.00/2,000		

ALVC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVC00DGVR	296-5100-1-ND	Quad 2-Input NAND Gate	14-TVSOP	.72	.54	.41
SN74ALVC00DGVR	296-5100-2-ND	Quad 2-Input NAND Gate	14-TVSOP	478.00/2,000		
SN74ALVC00DR	296-5101-1-ND	Quad 2-Input NAND Gate	14-SOIC	.72	.54	.41
SN74ALVC00DR	296-5101-2-ND	Quad 2-Input NAND Gate	14-SOIC	597.50/2,500		
SN74ALVC00NSR	296-5103-1-ND	Quad 2-Input NAND Gate	14-SOP	.81	.68	.54
SN74ALVC00NSR	296-5103-2-ND	Quad 2-Input NAND Gate	14-SOP	718.00/2,000		
SN74ALVC00PWR	296-5104-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.72	.54	.41
SN74ALVC00PWR	296-5104-2-ND	Quad 2-Input NAND Gate	14-TSSOP	478.00/2,000		
SN74ALVC04D	296-1508-5-ND	Hex Inverter	14-SOIC	.72	.54	.41
SN74ALVC04DGVR	296-5105-1-ND	Hex Inverter	14-TVSOP	.72	.54	.41
SN74ALVC04DGVR	296-5105-2-ND	Hex Inverter	14-TVSOP	478.00/2,000		
SN74ALVC04PWR	296-5106-1-ND	Hex Inverter	14-TSSOP	.72	.54	.41
SN74ALVC04PWR	296-5106-2-ND	Hex Inverter	14-TSSOP	478.00/2,000		
SN74ALVC08DGVR	296-5107-1-ND	Quad 2-Input AND Gate	14-TVSOP	.72	.54	.41
SN74ALVC08DGVR	296-5107-2-ND	Quad 2-Input AND Gate	14-TVSOP	478.00/2,000		
SN74ALVC08DR	296-5108-1-ND	Quad 2-Input AND Gate	14-SOIC	.72	.54	.41
SN74ALVC08DR	296-5108-2-ND	Quad 2-Input AND Gate	14-SOIC	585.00/2,500		
SN74ALVC08PWR	296-5109-1-ND	Quad 2-Input AND Gate	14-TSSOP	.72	.54	.41
SN74ALVC08PWR	296-5109-2-ND	Quad 2-Input AND Gate	14-TSSOP	478.00/2,000		
SN74ALVC10D	296-1509-5-ND	Triple 3-Input NAND Gate	14-SOIC	.72	.54	.41
SN74ALVC10DR	296-1509-1-ND	Triple 3-Input NAND Gate	14-SOIC	.81	.68	.54
SN74ALVC10DR	296-1509-2-ND	Triple 3-Input NAND Gate	14-SOIC	877.50/2,500		
SN74ALVC10DGVR	296-5110-1-ND	Triple 3-Input NAND Gate	14-TVSOP	.72	.54	.41
SN74ALVC10DGVR	296-5110-2-ND	Triple 3-Input NAND Gate	14-TVSOP	478.00/2,000		
SN74ALVC10NSR	296-5111-1-ND	Triple 3-Input NAND Gate	14-SOP	.96	.80	.64
SN74ALVC10NSR	296-5111-2-ND	Triple 3-Input NAND Gate	14-SOP	852.00/2,000		
SN74ALVC10PWR	296-5112-1-ND	Triple 3-Input NAND Gate	14-TSSOP	.72	.54	.41
SN74ALVC10PWR	296-5112-2-ND	Triple 3-Input NAND Gate	14-TSSOP	478.00/2,000		
SN74ALVC14DGVR	296-5119-1-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	.72	.54	.41
SN74ALVC14DGVR	296-5119-2-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	478.00/2,000		
SN74ALVC14DR	296-5120-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.72	.54	.41
SN74ALVC14DR	296-5120-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	585.00/2,500		
SN74ALVC14PWR	296-5121-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.72	.54	.41
SN74ALVC14PWR	296-5121-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	478.00/2,000		
SN74ALVC32DGVR	296-5139-1-ND	Quad 2-Input OR Gate	14-TVSOP	.72	.54	.41
SN74ALVC32DGVR	296-5139-2-ND	Quad 2-Input OR Gate	14-TVSOP	478.00/2,000		
SN74ALVC32DR	296-5140-1-ND	Quad 2-Input OR Gate	14-SOIC	.72	.54	.41
SN74ALVC32DR	296-5140-2-ND	Quad 2-Input OR Gate	14-SOIC	585.00/2,500		
SN74ALVC32NSR	296-5141-1-ND	Quad 2-Input OR Gate	14-SOP	.81	.68	.54
SN74ALVC32NSR	296-5141-2-ND	Quad 2-Input OR Gate	14-SOP	718.00/2,000		
SN74ALVC32PWR	296-5142-1-ND	Quad 2-Input OR Gate	14-TSSOP	.72	.54	.41
SN74ALVC32PWR	296-5142-2-ND	Quad 2-Input OR Gate	14-TSSOP	478.00/2,000		
SN74ALVC125D	296-1510-5-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.88	.66	.50
SN74ALVC125DR	296-1510-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.88	.66	.50
SN74ALVC125DR	296-1510-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	715.00/2,500		
SN74ALVC125DGVR	296-5113-1-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	.88	.66	.50
SN74ALVC125DGVR	296-5113-2-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	586.00/2,000		
SN74ALVC125NSR	296-5114-1-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.96	.80	.64
SN74ALVC125NSR	296-5114-2-ND	Tri-State Quad Bus Buffer Gate	14-SOP	852.00/2,000		
SN74ALVC125PWR	296-5115-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.88	.66	.50
SN74ALVC125PWR	296-5115-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	586.00/2,000		
SN74ALVC126DGVR	296-5116-1-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	.88	.66	.50
SN74ALVC126DGVR	296-5116-2-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	586.00/2,000		
SN74ALVC126DR	296-5117-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.88	.66	.50
SN74ALVC126DR	296-5117-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	715.00/2,500		
SN74ALVC126PWR	296-5118-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.88	.66	.50
SN74ALVC126PWR	296-5118-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	586.00/2,000		
SN74ALVC244DWR	296-5135-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.75	.63	.50
SN74ALVC244DWR	296-5135-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	666.00/2,000		
SN74ALVC245DGVR	296-5137-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	.75	.63	.50

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVC245DGVR	296-5137-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	666.00/2,000		
SN74ALVC245DWR	296-5138-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.75	.63	.50
SN74ALVC245DWR	296-5138-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	666.00/2,000		
SN74ALVC245PWR	296-9774-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.75	.63	.50
SN74ALVC245PWR	296-9774-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	666.00/2,000		
SN74ALVC16244ADGGR	296-5123-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.00	1.60	1.20
SN74ALVC16244ADGGR	296-5123-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2080.00/2,000		
SN74ALVC16244ADL	296-5124-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.00	1.60	1.20
SN74ALVC16244AGQLR	296-9772-1-ND	Tri-State 16-Bit Buffer/Driver	56-VFBGA	2.20	1.76	1.32
SN74ALVC16244AGQLR	296-9772-2-ND	Tri-State 16-Bit Buffer/Driver	56-VFBGA	1144.00/1,000		
SN74ALVC16334DGGR	296-1134-1-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	2.25	1.80	1.35
SN74ALVC16334DGGR	296-1134-2-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	2340.00/2,000		
SN74ALVC16334DGVR	296-5130-1-ND	Tri-State 16-Bit Universal Bus Driver	48-TVSOP	2.25	1.80	1.35
SN74ALVC16334DGVR	296-5130-2-ND	Tri-State 16-Bit Universal Bus Driver	48-TVSOP	2340.00/2,000		
SN74ALVC16334DL	296-1515-5-ND	Tri-State 16-Bit Universal Bus Driver	48-SSOP	2.25	1.80	1.35
SN74ALVC16834DGGR	296-1136-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVC16834DGGR	296-1136-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	4208.00/2,000		
SN74ALVC16834DL	296-1516-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	3.71	2.97	2.31
SN74ALVC16834GQLR	296-5132-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TVFBGA	4.10	3.28	2.55
SN74ALVC16834GQLR	296-5132-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TVFBGA	2321.00/1,000		
SN74ALVC16835DGGR	296-1137-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3.42	2.74	2.13
SN74ALVC16835DGGR	296-1137-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3876.00/2,000		
SN74ALVC16835DGVR	296-5133-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TVSOP	3.42	2.74	2.13
SN74ALVC16835DGVR	296-5133-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TVSOP	3876.00/2,000		
SN74ALVC16835DL	296-5134-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	3.42	2.74	2.13
SN74ALVC162334DGGR	296-1131-1-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	3.71	2.97	2.31
SN74ALVC162334DGGR	296-1131-2-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	4208.00/2,000		
SN74ALVC162334DGVR	296-5122-1-ND	Tri-State 16-Bit Universal Bus Driver	48-TVSOP	3.71	2.97	2.31
SN74ALVC162334DGVR	296-5122-2-ND	Tri-State 16-Bit Universal Bus Driver	48-TVSOP	4208.00/2,000		
SN74ALVC162334DL	296-1511-5-ND	Tri-State 16-Bit Universal Bus Driver	48-SSOP	3.71	2.97	2.31
SN74ALVC162334DLR	296-1511-1-ND	Tri-State 16-Bit Universal Bus Driver	48-SSOP	3.71	2.97	2.31
SN74ALVC162334DLR	296-1511-2-ND	Tri-State 16-Bit Universal Bus Driver	48-SSOP	2104.00/1,000		
SN74ALVC162831DBBR	296-5125-1-ND	Tri-St. 1-4 Bit Address Register/Driver	80-TVSOP	5.80	4.64	3.92
SN74ALVC162831DBBR	296-5125-2-ND	Tri-St. 1-4 Bit Address Register/Driver	80-TVSOP	7250.00/2,000		
SN74ALVC162834DL	296-1512-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	2.81	2.25	1.75
SN74ALVC162834DLR	296-1512-1-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	2.81	2.25	1.75
SN74ALVC162834DLR	296-1512-2-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	1594.00/1,000		
SN74ALVC162834GR	296-5126-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	2.81	2.25	1.75
SN74ALVC162834GR	296-5126-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3188.00/2,000		
SN74ALVC162834VR	296-5127-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TVSOP	2.81	2.25	1.75
SN74ALVC162834VR	296-5127-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TVSOP	3188.00/2,000		
SN74ALVC162835DGGR	296-1132-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3.42	2.74	2.13
SN74ALVC162835DGGR	296-1132-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3876.00/2,000		
SN74ALVC162835DGVR	296-5128-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TVSOP	3.42	2.74	2.13
SN74ALVC162835DGVR	296-5128-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TVSOP	3876.00/2,000		
SN74ALVC162835DL	296-1513-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	3.42	2.74	2.13
SN74ALVC162836DGGR	296-1133-1-ND	Tri-State 20-Bit Universal Bus Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVC162836DGGR	296-1133-2-ND	Tri-State 20-Bit Universal Bus Driver	56-TSSOP	4208.00/2,000		
SN74ALVC162836DGVR	296-5129-1-ND	Tri-State 20-Bit Universal Bus Driver	56-TVSOP	3.71	2.97	2.31
SN74ALVC162836DGVR	296-5129-2-ND	Tri-State 20-Bit Universal Bus Driver	56-TVSOP	4208.00/2,000		
SN74ALVC162836DL	296-1514-5-ND	Tri-State 20-Bit Universal Bus Driver	56-SSOP	3.71	2.97	2.31
SN74ALVC164245DGGR	296-1135-1-ND	Tri-State 16-Bit Level Shift Transceiver	48-TSSOP	4.16	3.33	2.59
SN74ALVC164245DGGR	296-1135-2-ND	Tri-State 16-Bit Level Shift Transceiver	48-SSOP	4718.00/2,000		
SN74ALVC164245DL	296-5131-5-ND	Tri-State 16-Bit Level Shift Transceiver	48-SSOP	4.16	3.33	2.59
SN74ALVC16835GQLR	296-9773-1-ND	Tri-State 18-Bit Universal Bus Driver	56-VFBGA	4.10	3.28	2.55
SN74ALVC16835GQLR	296-9773-2-ND	Tri-State 18-Bit Universal Bus Driver	56-VFBGA	2321.00/1,000		

ALVCH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVCH244DGVR	296-6274-1-ND	Tri-State Octal Buffer/Driver	20-SOP	.75	.63	.50
SN74ALVCH244DGVR	296-6274-2-ND	Tri-State Octal Buffer/Driver	20-SOP	666.00/2,000		
SN74ALVCH244DW	296-1517-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.75	.63	.50
SN74ALVCH244DWR	296-1517-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.75	.63	.50
SN74ALVCH244DWR	296-1517-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	666.00/2,000		
SN74ALVCH244PWR	296-6275-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.75	.63	.50
SN74ALVCH244PWR	296-6275-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	666.00/2,000		
SN74ALVCH245DGVR	296-6276-1-ND	Tri-State Octal Bus Transceiver	20-SOP	.75	.63	.50
SN74ALVCH245DGVR	296-6276-2-ND	Tri-State Octal Bus Transceiver	20-SOP	666.00/2,000		
SN74ALVCH245DWR	296-6277-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.75	.63	.50
SN74ALVCH245DWR	296-6277-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	666.00/2,000		
SN74ALVCH245PWR	296-6278-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.75	.63	.50
SN74ALVCH245PWR	296-6278-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	666.00/2,000		
SN74ALVCH373DGVR	296-6283-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	.75	.63	.50
SN74ALVCH373DGVR	296-6283-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	666.00/2,000		
SN74ALVCH373DWR	296-6284-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.75	.63	.50
SN74ALVCH373DWR	296-6284-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	666.00/2,000		
SN74ALVCH373PWR	296-6285-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.75	.63	.50
SN74ALVCH373PWR	296-6285-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	666.00/2,000		
SN74ALVCH374PWR	296-12462-1-ND	Tri-State Octal Pos. Edge-Triggered D-Type Flip-Flop *NEW!*	20-TSSOP	.75	.63	.50
SN74ALVCH374PWR	296-12462-2-ND	Tri-State Octal Pos. Edge-Triggered D-Type Flip-Flop *NEW!*	20-TSSOP	666.00/2,000		
SN74ALVCH16240DGGR	296-5185-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.00	1.60	1.20
SN74ALVCH16240DGGR	296-5185-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2080.00/2,000		
SN74ALVCH16240DL	296-5186-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.00	1.60	1.20
SN74ALVCH16240DLR	296-5186-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.00	1.60	1.20
SN74ALVCH16240DLR	296-5186-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1040.00/1,000		
SN74ALVCH16244DGGR	296-1139-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.00	1.60	1.20
SN74ALVCH16244DGGR	296-1139-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2080.00/2,000		
SN74ALVCH16244DGVR	296-5187-1-ND	Tri-State 16-Bit Buffer/Driver	48-SOP	2.00	1.60	1.20
SN74ALVCH16244DGVR	296-5187-2-ND	Tri-State 16-Bit Buffer/Driver	48-SOP	2080.00/2,000		
SN74ALVCH16244DL	296-5188-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.00	1.60	1.20
SN74ALVCH16244DLR	296-5188-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.00	1.60	1.20
SN74ALVCH16244DLR	296-5188-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1040.00/1,000		
SN74ALVCH16244KR	296-5189-1-ND	Tri-State 16-Bit Buffer/Driver	48-BGA	2.20	1.76	1.32
SN74ALVCH16244KR	296-5189-2-ND	Tri-State 16-Bit Buffer/Driver	48-BGA	1144.00/1,000		
SN74ALVCH16245DGGR	296-5190-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.00	1.60	1.20
SN74ALVCH16245DGGR	296-5190-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2080.00/2,000		
SN74ALVCH16245DGVR	296-5191-1-ND	Tri-State 16-Bit Bus Transceiver	48-SOP	2.00	1.60	1.20
SN74ALVCH16245DGVR	296-5191-2-ND	Tri-State 16-Bit Bus Transceiver	48-SOP	2080.00/2,000		
SN74ALVCH16245DL	296-5192-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.00	1.60	1.20
SN74ALVCH16245DLR	296-5192-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.00	1.60	1.20
SN74ALVCH16245DLR	296-5192-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1040.00/1,000		
SN74ALVCH16245KR	296-5193-1-ND	Tri-State 16-Bit Bus Transceiver	48-BGA	2.20	1.76	1.32
SN74ALVCH16245KR	296-5193-2-ND	Tri-State 16-Bit Bus Transceiver	48-BGA	1144.00/1,000		
SN74ALVCH16260DGGR	296-1140-1-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	3.38	2.70	2.10
SN74ALVCH16260DGGR	296-1140-2-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	3826.00/2,000		
SN74ALVCH16260DL	296-1141-5-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-SSOP	3.38	2.70	2.10
SN74ALVCH16260DLR	296-1141-1-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-SSOP	3.38	2.70	2.10
SN74ALVCH16260DLR	296-1141-2-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-SSOP	1913.00/1,000		
SN74ALVCH16269DGGR	296-5198-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-TSSOP	3.24	2.60	2.02
SN74ALVCH16269DGGR	296-5198-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-TSSOP	3672.00/2,000		
SN74ALVCH16269DL	296-5199-5-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-SSOP	3.24	2.60	2.02
SN74ALVCH16269KR	296-9775-1-ND	Tri-State 12-24 Bit Registered Bus Exchanger	56-VFBGA	3.58	2.87	2.23
SN74ALVCH16269KR	296-9775-2-ND	Tri-State 12-24 Bit Registered Bus Exchanger	56-VFBGA	2027.00/1,000		
SN74ALVCH16270DGGR	296-5200-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-TSSOP	3.24	2.60	2.02
SN74ALVCH16270DGGR	296-5200-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-TSSOP	3672.00/2,000		
SN74ALVCH16270DL	296-5201-5-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-SSOP	3.24	2.60	2.02
SN74ALVCH16270DLR	296-5201-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-SSOP	3.24	2.60	2.02
SN74ALVCH16270DLR	296-5201-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-SSOP	1836.00/1,000		
SN74ALVCH16271DGGR	296-5202-1-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16271DGGR	296-5202-2-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-TSSOP	4208.00/2,000		
SN74ALVCH16271DL	296-5203-5-ND	Tri-State 12-24-Bit Registered Bus Exchanger	56-SSOP	3.71	2.97	2.31
SN74ALVCH16282DBBR	296-5210-1-ND	Tri-State 18-36-Bit Registered Bus Exchanger	80-SOP	7.50	6.00	5.07
SN74ALVCH16282DBBR	296-5210-2-ND	Tri-State 18-36-Bit Registered Bus Exchanger	80-SOP	9376.00/2,000		
SN74ALVCH16334DGGR	296-5220-1-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	3.71	2.97	2.31
SN74ALVCH16334DGGR	296-5220-2-ND	Tri-State 16-Bit Universal Bus Driver	48-TSSOP	4208.00/2,000		
SN74ALVCH16334DL	296-5221-5-ND	Tri-State 16-Bit Universal Bus Driver	48-SSOP	3.71	2.97	2.31
SN74ALVCH16344DGGR	296-5222-1-ND	Tri-State 1-4-Bit Address Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16344DGGR	296-5222-2-ND	Tri-State 1-4-Bit Address Driver	56-TSSOP	4208.00/2,000		
SN74ALVCH16344DLR	296-5223-1-ND	Tri-State 1-4-Bit Address Driver	56-SSOP	3.71	2.97	2.31
SN74ALVCH16344DLR	296-5223-2-ND	Tri-State 1-4-Bit Address Driver	56-SSOP	2104.00/1,000		
SN74ALVCH16373DGGR	296-5224-1-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TSSOP	2.00	1.60	1.20
SN74ALVCH16373DGGR	296-5224-2-ND	Tri-State 16-Bit Transp. D-Type Latch	48-TSSOP	2080.00/2,000		
SN74ALVCH16373DL	296-5225-5-ND	Tri-State 16-Bit Transp. D-Type Latch	48-SSOP	2.00	1.60	1.20
SN74ALVCH16373KR	296-9776-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	56-VFBGA	2.20	1.76	1.32
SN74ALVCH16373KR	296-9776-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	56-VFBGA	1144.00/1,000		
SN74ALVCH16374DGGR	296-1144-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2.00	1.60	1.20
SN74ALVCH16374DGGR	296-1144-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2080.00/2,000		
SN74ALVCH16374DL	296-5226-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.00	1.60	1.20
SN74ALVCH16374DLR	296-5226-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.00	1.60	1.20
SN74ALVCH16374DLR	296-5226-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1040.00/1,000		
SN74ALVCH16374KR	296-9777-1-ND	Tri-State 16-Bit D-Type Flip-Flop	56-VFBGA	2.20	1.76	1.32
SN74ALVCH16374KR	296-9777-2-ND	Tri-State 16-Bit D-Type Flip-Flop	56-VFBGA	1144.00/1,000		
SN74ALVCH16409DGGR	296-5227-1-ND	Tri-State 9-Bit 4-Port Universal Bus Exchanger	56-TSSOP	4.50	3.60	2.80
SN74ALVCH16409DGGR	296-5227-2-ND	Tri-State 9-Bit 4-Port Universal Bus Exchanger	56-TSSOP	5100.00/2,000		
SN74ALVCH16409DL	296-5228-5-ND	Tri-State 9-Bit 4-Port Universal Bus Exchanger	56-SSOP	4.50	3.60	2.80
SN74ALVCH16500DGGR	296-5229-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16500DGGR	296-5229-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3876.00/2,000		
SN74ALVCH16500DLR	296-5230-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.42	2.74	2.13
SN74ALVCH16500DLR	296-5230-2-ND	Tri-State 18-Bit Univ. Bus Transceiver.	56-SSOP	1938.00/1,000		
SN74ALVCH16501DGGR	296-1145-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16501DGGR	296-1145-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3876.00/2,000		
SN74ALVCH16501DL	296-5231-5-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.42	2.74	2.13
SN74ALVCH16501KR	296-9778-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-VFBGA	3.80	3.05	2.37
SN74ALVCH16501KR	296-9778-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-VFBGA	2155.00/1,000		
SN74ALVCH16524DGGR	296-5232-1-ND	Tri-State 18-Bit Reg. Bus Transceiver	56-TSSOP	8.00	6.40	5.40
SN74ALVCH16524DGGR	296-5232-2-ND	Tri-State 18-Bit Reg. Bus Transceiver	56-TSSOP	10000.00/2,000		
SN74ALVCH16525DGGR	296-5233-1-ND	Tri-State 18-Bit Reg. Bus Transceiver	56-TSSOP	4.50	3.60	2.80
SN74ALVCH16525DGGR	296-5233-2-ND	Tri-State 18-Bit Reg. Bus Transceiver	56-TSSOP	5100.00/2,000		
SN74ALVCH16543DGGR	296-5236-1-ND	Tri-State 16-Bit Reg. Transceiver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16543DGGR	296-5236-2-ND	Tri-State 16-Bit Reg. Transceiver	56-TSSOP	3876.00/2,000		
SN74ALVCH16543DL	296-5237-5-ND	Tri-State 16-Bit Reg. Transceiver	56-SSOP	3.42	2.74	2.13
SN74ALVCH16600DGGR	296-5238-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	4.84	3.87	3.01
SN74ALVCH16600DGGR	296-5238-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	5482.00/2,000		
SN74ALVCH16600DLR	296-5239-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	4.84	3.87	3.01
SN74ALVCH16600DLR	296-5239-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	2741.00/1,000		
SN74ALVCH16601DGGR	296-1146-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16601DGGR	296-1146-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3876.00/2,000		
SN74ALVCH16601DL	296-5240-5-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.42	2.74	2.13
SN74ALVCH16601DLR	296-5241-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.42	2.74	2.13
SN74ALVCH16601DLR	296-5241-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	1938.00/1,000		
SN74ALVCH16646DGGR	296-5242-1-ND	Tri-St. 16-Bit Bus Transcvr./Register	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16646DGGR	296-5242-2-ND	Tri-St. 16-Bit Bus Transcvr./Register	56-TSSOP	3876.00/2,000		
SN74ALVCH16646DGVR	296-5243-1-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SOP	3.42	2.74	2.13
SN74ALVCH16646DGVR	296-5243-2-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SOP	3876.00/2,000		
SN74ALVCH16646DL	296-5244-5-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	3.42	2.74	2.13
SN74ALVCH16646DLR	296-5244-1-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	3.42	2.74	2.13
SN74ALVCH16646DLR	296-5244-2-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SSOP	1938.00/1,000		
SN74ALVCH16721DGGR	296-1147-1-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-TSSOP	3.24	2.60	2.02
SN74ALVCH16721DGGR	296-1147-2-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-TSSOP	3672.00/2,000		
SN74ALVCH16721DGVR	296-5245-1-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-SOP	3.24	2.60	2.02
SN74ALVCH16721DGVR	296-5245-2-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-SOP	3672.00/2,000		
SN74ALVCH16721DLR	296-5246-1-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-SSOP	3.24	2.60	2.02
SN74ALVCH16721DLR	296-5246-2-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-SSOP	1836.00/1,000		
SN74ALVCH16820DGGR	296-5247-1-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16820DGGR	296-5247-2-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop	56-TSSOP	3952.00/2,000		

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVCH16820DLR	296-5248-1-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop	56-SSOP	3.49	2.79	2.17
SN74ALVCH16820DLR	296-5248-2-ND	Tri-State/Dual Output 3.3V 10-Bit Flip-Flop	56-SSOP	1976.00/1,000		
SN74ALVCH16821DGGR	296-5249-1-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16821DGGR	296-5249-2-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop	56-TSSOP	3952.00/2,000		
SN74ALVCH16821DL	296-5250-5-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop	56-SSOP	3.49	2.79	2.17
SN74ALVCH16821DLR	296-5250-1-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop	56-SSOP	3.49	2.79	2.17
SN74ALVCH16821DLR	296-5250-2-ND	Tri-State 3.3V 20-Bit Bus-Interface Flip-Flop	56-SSOP	1976.00/1,000		
SN74ALVCH16823DGGR	296-1148-1-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16823DGGR	296-1148-2-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-TSSOP	3876.00/2,000		
SN74ALVCH16823DL	296-5251-5-ND	Tri-St. 18-Bit Bus-Interface Flip-Flop	56-SSOP	3.42	2.74	2.13
SN74ALVCH16825DGGR	296-5252-1-ND	Tri-State 18-Bit Buffer/Driver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16825DGGR	296-5252-2-ND	Tri-State 18-Bit Buffer/Driver	56-TSSOP	3876.00/2,000		
SN74ALVCH16825DL	296-5253-5-ND	Tri-State 18-Bit Buffer/Driver	56-SSOP	3.42	2.74	2.13
SN74ALVCH16827DGGR	296-5254-1-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH16827DGGR	296-5254-2-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	3876.00/2,000		
SN74ALVCH16827DL	296-5255-5-ND	Tri-State 20-Bit Buffer/Driver	56-SSOP	3.42	2.74	2.13
SN74ALVCH16831DBBR	296-5256-1-ND	Tri-State 1-4 Address Register/Driver	80-SOP	5.84	4.68	3.95
SN74ALVCH16831DBBR	296-5256-2-ND	Tri-State 1-4 Address Register/Driver	80-SOP	7300.00/2,000		
SN74ALVCH16832DGGR	296-5257-1-ND	Tri-State 1-4 Address Register/Driver	64-TSSOP	5.80	4.64	3.92
SN74ALVCH16832DGGR	296-5257-2-ND	Tri-State 1-4 Address Register/Driver	64-TSSOP	7250.00/2,000		
SN74ALVCH16835DGGR	296-1149-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	2.34	1.88	1.46
SN74ALVCH16835DGGR	296-1149-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	2652.00/2,000		
SN74ALVCH16835DGVR	296-5258-1-ND	Tri-State 18-Bit Universal Bus Driver	56-SOP	2.34	1.88	1.46
SN74ALVCH16835DGVR	296-5258-2-ND	Tri-State 18-Bit Universal Bus Driver	56-SOP	2652.00/2,000		
SN74ALVCH16835DL	296-5259-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	2.34	1.88	1.46
SN74ALVCH16835DLR	296-5259-1-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	2.34	1.88	1.46
SN74ALVCH16835DLR	296-5259-2-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	1326.00/1,000		
SN74ALVCH16835KR	296-5260-1-ND	Tri-State 18-Bit Universal Bus Driver	56-BGA	2.59	2.07	1.61
SN74ALVCH16835KR	296-5260-2-ND	Tri-State 18-Bit Universal Bus Driver	56-BGA	1466.00/1,000		
SN74ALVCH16841DGGR	296-6261-1-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-TSSOP	3.71	2.97	2.31
SN74ALVCH16841DGGR	296-6261-2-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-TSSOP	4208.00/2,000		
SN74ALVCH16841DL	296-6266-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-SSOP	3.71	2.97	2.31
SN74ALVCH16863DGGR	296-6267-1-ND	Tri-State 18-Bit Transceiver	56-TSSOP	3.49	2.79	2.17
SN74ALVCH16863DGGR	296-6267-2-ND	Tri-State 18-Bit Transceiver	56-TSSOP	3952.00/2,000		
SN74ALVCH16863DLR	296-6268-1-ND	Tri-State 18-Bit Transceiver	56-SSOP	3.49	2.79	2.17
SN74ALVCH16863DLR	296-6268-2-ND	Tri-State 18-Bit Transceiver	56-SSOP	1976.00/1,000		
SN74ALVCH16901DGGR	296-6269-1-ND	18-Bit Universal Bus Transceiver with Parity-Generator/Checker	64-TSSOP	7.20	5.76	4.86
SN74ALVCH16901DGGR	296-6269-2-ND	18-Bit Universal Bus Transceiver with Parity-Generator/Checker	64-TSSOP	9000.00/2,000		
SN74ALVCH16903DGGR	296-6270-1-ND	Tri-State/Dual Output 3.3V 12-Bit Universal Bus Driver	56-TSSOP	8.50	6.80	5.74
SN74ALVCH16903DGGR	296-6270-2-ND	Tri-State/Dual Output 3.3V 12-Bit Universal Bus Driver	56-TSSOP	10626.00/2,000		
SN74ALVCH16903DGVR	296-6271-1-ND	Tri-State/Dual Output 3.3V 12-Bit Universal Bus Driver	56-SOP	8.50	6.80	5.74
SN74ALVCH16903DGVR	296-6271-2-ND	Tri-State/Dual Output 3.3V 12-Bit Universal Bus Driver	56-SOP	10626.00/2,000		
SN74ALVCH16952DGGR	296-9780-1-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	3.24	2.60	2.02
SN74ALVCH16952DGGR	296-9780-2-ND	Tri-St. 16-Bit Registered Transceiver	56-TSSOP	3672.00/2,000		
SN74ALVCH16952DGVR	296-6272-1-ND	Tri-State 16-Bit Registered Transceiver	56-SOP	3.24	2.60	2.02
SN74ALVCH16952DGVR	296-6272-2-ND	Tri-State 16-Bit Registered Transceiver	56-SOP	3672.00/2,000		
SN74ALVCH16952DL	296-6273-5-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	3.24	2.60	2.02
SN74ALVCH16952DLR	296-6273-1-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	3.24	2.60	2.02
SN74ALVCH16952DLR	296-6273-2-ND	Tri-State 16-Bit Registered Transceiver	56-SSOP	1836.00/1,000		
SN74ALVCH32244KR	296-6279-1-ND	Tri-State 32-Bit Buffer/Driver	96-BGA	3.38	2.70	2.10
SN74ALVCH32244KR	296-6279-2-ND	Tri-State 32-Bit Buffer/Driver	96-BGA	1913.00/1,000		
SN74ALVCH32245KR	296-6280-1-ND	Tri-State 32-Bit Bus Transceiver	96-BGA	3.38	2.70	2.10
SN74ALVCH32245KR	296-6280-2-ND	Tri-State 32-Bit Bus Transceiver	96-BGA	1913.00/1,000		
SN74ALVCH32374KR	296-6281-1-ND	Tri-State 32-Bit D-Type Flip-Flop	96-BGA	3.38	2.70	2.10
SN74ALVCH32374KR	296-6281-2-ND	Tri-State 32-Bit D-Type Flip-Flop	96-BGA	1913.00/1,000		
SN74ALVCH32501KR	296-6282-1-ND	Tri-State 36-Bit Univ. Bus Transceiver	114-BGA	5.86	4.69	3.96
SN74ALVCH32501KR	296-6282-2-ND	Tri-State 36-Bit Univ. Bus Transceiver	114-BGA	3663.00/1,000		
SN74ALVCH162244DL	296-5174-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.20	1.76	1.32
SN74ALVCH162244DLR	296-5174-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.20	1.76	1.32
SN74ALVCH162244DLR	296-5174-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1144.00/1,000		
SN74ALVCH162244GR	296-5175-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.20	1.76	1.32
SN74ALVCH162244GR	296-5175-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2288.00/2,000		
SN74ALVCH162260DL	296-5176-5-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-SSOP	3.42	2.74	2.13
SN74ALVCH162260GR	296-1138-1-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	3.42	2.74	2.13
SN74ALVCH162260GR	296-1138-2-ND	Tri-State 12-24-Bit Mux D-Type Latch	56-TSSOP	3876.00/2,000		
SN74ALVCH162268DL	296-5177-5-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-SSOP	3.24	2.60	2.02
SN74ALVCH162268GR	296-5178-1-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-TSSOP	3.24	2.60	2.02
SN74ALVCH162268GR	296-5178-2-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-TSSOP	3672.00/2,000		
SN74ALVCH162334DL	296-5179-5-ND	Tri-State 16-Bit Univ. Bus Driver	48-SSOP	3.71	2.97	2.31
SN74ALVCH162334GR	296-5180-1-ND	Tri-State 16-Bit Univ. Bus Driver	48-TSSOP	3.71	2.97	2.31
SN74ALVCH162334GR	296-5180-2-ND	Tri-State 16-Bit Univ. Bus Driver	48-TSSOP	4208.00/2,000		
SN74ALVCH162344DL	296-5181-5-ND	Tri-State 1-to-4-Bit Address Driver	56-SSOP	3.71	2.97	2.31
SN74ALVCH162344GR	296-5182-1-ND	Tri-State 1-to-4-Bit Address Driver	56-TSSOP	3.71	2.97	2.31
SN74ALVCH162344GR	296-5182-2-ND	Tri-State 1-to-4-Bit Address Driver	56-TSSOP	4208.00/2,000		
SN74ALVCH162374DL	296-5183-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	2.20	1.76	1.32
SN74ALVCH162374GR	296-5184-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2.20	1.76	1.32
SN74ALVCH162374GR	296-5184-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	2288.00/2,000		
SN74ALVCH162525GR	296-5194-1-ND	Tri-State 18-Bit Reg. Transceiver	56-TSSOP	4.50	3.60	2.80
SN74ALVCH162525GR	296-5194-2-ND	Tri-State 18-Bit Reg. Transceiver	56-TSSOP	5100.00/2,000		
SN74ALVCH162601DL	296-5195-5-ND	Tri-State 18-Bit Reg. Transceiver	56-SSOP	3.42	2.74	2.13
SN74ALVCH162601GR	296-5196-1-ND	Tri-State 18-Bit Reg. Transceiver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH162601GR	296-5196-2-ND	Tri-State 18-Bit Reg. Transceiver	56-TSSOP	3876.00/2,000		
SN74ALVCH162721DL	296-5204-5-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-SSOP	3.42	2.74	2.13
SN74ALVCH162721DLR	296-5204-1-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-SSOP	3.42	2.74	2.13
SN74ALVCH162721DLR	296-5204-2-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-SSOP	1938.00/1,000		
SN74ALVCH162721GR	296-5205-1-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-TSSOP	3.42	2.74	2.13
SN74ALVCH162721GR	296-5205-2-ND	Tri-State 3.3V 20-Bit Flip-Flop	56-TSSOP	3876.00/2,000		
SN74ALVCH162820DL	296-5206-5-ND	Tri-State 3.3V 10-Bit Flip-Flop with Dual Output	56-SSOP	3.24	2.60	2.02
SN74ALVCH162820GR	296-5207-1-ND	Tri-State 3.3V 10-Bit Flip-Flop with Dual Output	56-TSSOP	3.24	2.60	2.02
SN74ALVCH162820GR	296-5207-2-ND	Tri-State 3.3V 10-Bit Flip-Flop with Dual Output	56-TSSOP	3672.00/2,000		
SN74ALVCH162827DL	296-5208-5-ND	Tri-State 20-Bit Buffer/Driver	56-SSOP	3.24	2.60	2.02
SN74ALVCH162827GR	296-1142-1-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	3.24	2.60	2.02
SN74ALVCH162827GR	296-1142-2-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	3672.00/2,000		
SN74ALVCH162827VR	296-5209-1-ND	Tri-State 20-Bit Buffer/Driver	56-SOP	3.24	2.60	2.02
SN74ALVCH162827VR	296-5209-2-ND	Tri-State 20-Bit Buffer/Driver	56-SOP	3672.00/2,000		
SN74ALVCH162830GR	296-5211-1-ND	Tri-State 1-2-Bit Address Driver	80-TSSOP	3.24	2.60	2.02
SN74ALVCH162830GR	296-5211-2-ND	Tri-State 1-2-Bit Address Driver	80-TSSOP	3672.00/2,000		
SN74ALVCH162831GR	296-5212-1-ND	Tri-State 1-4-Bit Address Reg./Driver	80-TSSOP	5.84	4.68	3.95
SN74ALVCH162831GR	296-5212-2-ND	Tri-State 1-4-Bit Address Reg./Driver	80-TSSOP	7300.00/2,000		
SN74ALVCH162832GR	296-5213-1-ND	Tri-State 1-4-Bit Address Reg./Driver	64-TSSOP	5.80	4.64	3.92
SN74ALVCH162832GR	296-5213-2-ND	Tri-State 1-4-Bit Address Reg./Driver	64-TSSOP	7250.00/2,000		
SN74ALVCH162835DL	296-5214-5-ND	Tri-State 18-Bit Universal Bus Driver	56-SSOP	3.42	2.74	2.13
SN74ALVCH162835GR	296-5215-1-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3.42	2.74	2.13
SN74ALVCH162835GR	296-5215-2-ND	Tri-State 18-Bit Universal Bus Driver	56-TSSOP	3876.00/2,000		
SN74ALVCH162836GR	296-5216-1-ND	Tri-State 20-Bit Universal Bus Driver	56-TSSOP	3.94	3.15	2.45
SN74ALVCH162836GR	296-5216-2-ND	Tri-State 20-Bit Universal Bus Driver	56-TSSOP	4462.00/2,000		
SN74ALVCH162836VR	296-5217-1-ND	Tri-State 20-Bit Universal Bus Driver	56-SOP	3.94	3.15	2.45
SN74ALVCH162836VR	296-5217-2-ND	Tri-State 20-Bit Universal Bus Driver	56-SOP	4462.00/2,000		
SN74ALVCH162841DL	296-5218-5-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-SSOP	3.42	2.74	2.13
SN74ALVCH162841GR	296-5219-1-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-TSSOP	3.42	2.74	2.13
SN74ALVCH162841GR	296-5219-2-ND	Tri-State 20-Bit Bus-Interface D-Type Latch	56-TSSOP	3876.00/2,000		

ALVCHG Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVCHG162280GR	296-6286-1-ND	Tri-State 16-32-Bit Registered Bus Exchanger with Byte Mask	80-TSSOP	9.00	7.20	6.08
SN74ALVCHG162280GR	296-6286-2-ND	Tri-State 16-32-Bit Registered Bus Exchanger with Byte Mask	80-TSSOP	11250.00/2,000		

ALVCHR Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVCHR16245GR	296-6287-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.20	1.76	1.32
SN74ALVCHR16245GR	296-6287-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2288.00/2,000		
SN74ALVCHR16245LR	296-6288-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.20	1.76	1.32
SN74ALVCHR16245LR	296-6288-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1144.00/1,000		
SN74ALVCHR16269AGR	296-1280-1-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-TSSOP	2.70	2.16	1.68
SN74ALVCHR16269AGR	296-1280-2-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-TSSOP	3060.00/2,000		
SN74ALVCHR16269ALR	296-6289-1-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-SSOP	2.70	2.16	1.68
SN74ALVCHR16269ALR	296-6289-2-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-SSOP	1530.00/1,000		
SN74ALVCHR16269AVR	296-6290-1-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-SOP	2.70	2.16	1.68
SN74ALVCHR16269AVR	296-6290-2-ND	Tri-St. 12-24-Bit Reg. Bus Exchanger	56-SOP	3060.00/2,000		
SN74ALVCHR16409LR	296-6291-1-ND	Tri-State 9-Bit, 4-Port Universal Bus Exchanger	56-SSOP	7.94	6.36	5.36
SN74ALVCHR16409LR	296-6291-2-ND	Tri-State 9-Bit, 4-Port Universal Bus Exchanger	56-SSOP	4963.00/1,000		
SN74ALVCHR16601GR	296-1150-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3.42	2.74	2.13
SN74ALVCHR16601GR	296-1150-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-TSSOP	3876.00/2,000		
SN74ALVCHR16601LR	296-6292-1-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	3.42	2.74	2.13
SN74ALVCHR16601LR	296-6292-2-ND	Tri-State 18-Bit Univ. Bus Transceiver	56-SSOP	1938.00/1,000		

ALVCHS Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVCHS162830GR	296-6293-1-ND	Tri-State 1-2-Bit Address Driver	80-TSSOP	6.50	5.20	4.39
SN74ALVCHS162830GR	296-6293-2-ND	Tri-State 1-2-Bit Address Driver	80-TSSOP	8126.00/2,000		

ALVTH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVTH16240DLR	296-6296-1-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	4.16	3.33	2.59
SN74ALVTH16240DLR	296-6296-2-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	2359.00/1,000		
SN74ALVTH16240GR	296-6297-1-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16240GR	296-6297-2-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-TSSOP	4718.00/2,000		
SN74ALVTH16240VR	296-6298-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-SOP	4.16	3.33	2.59
SN74ALVTH16240VR	296-6298-2-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-SOP	4718.00/2,000		
SN74ALVTH16244DL	296-1519-5-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	4.16	3.33	2.59
SN74ALVTH16244DLR	296-1519-1-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	4.16	3.33	2.59
SN74ALVTH16244DLR	296-1519-2-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	2359.00/1,000		
SN74ALVTH16244GR	296-6299-1-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16244GR	296-6299-2-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-TSSOP	4718.00/2,000		
SN74ALVTH16244KR	296-6300-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-BGA	4.59	3.68	2.86
SN74ALVTH16244KR	296-6300-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-BGA	2601.00/1,000		
SN74ALVTH16244VR	296-6301-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-SOP	4.16	3.33	2.59
SN74ALVTH16244VR	296-6301-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-SOP	4718.00/2,000		
SN74ALVTH16373DLR	296-6305-1-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Latch	48-SSOP	4.16	3.33	2.59
SN74ALVTH16373DLR	296-6305-2-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Latch	48-SSOP	2359.00/1,000		
SN74ALVTH16373GR	296-6306-1-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Latch	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16373GR	296-6306-2-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Latch	48-TSSOP	4718.00/2,000		
SN74ALVTH16373KR	296-9782-1-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Latch	56-VFBGA	4.59	3.68	2.86
SN74ALVTH16373KR	296-9782-2-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Latch	56-VFBGA	2601.00/1,000		
SN74ALVTH16373VR	296-6307-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch	48-SOP	4.16	3.33	2.59
SN74ALVTH16373VR	296-6307-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Latch	48-SOP	4718.00/2,000		
SN74ALVTH16374DLR	296-6308-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-SSOP	4.16	3.33	2.59
SN74ALVTH16374DLR	296-6308-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-SSOP	2359.00/1,000		
SN74ALVTH16374GR	296-6309-1-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-TSSOP	4.16	3.33	2.59
SN74ALVTH16374GR	296-6309-2-ND	Tri-State 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-TSSOP	4718.00/2,000		
SN74ALVTH16374KR	296-6310-1-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-BGA	4.59	3.68	2.86
SN74ALVTH16374KR	296-6310-2-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-BGA	2601.00/1,000		
SN74ALVTH16374VR	296-6311-1-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-BGA	4.16	3.33	2.59
SN74ALVTH16374VR	296-6311-2-ND	Tri-St. 2.5V/3.3V 16-Bit D-Type Flip-Flop	48-BGA	4718.00/2,000		
SN74ALVTH16601DLR	296-6312-1-ND	Tri-State 2.5V/3.3V 18-Bit Universal Bus Transceiver	56-SSOP	6.00	4.80	4.05
SN74ALVTH16601DLR	296-6312-2-ND	Tri-State 2.5V/3.3V 18-Bit Universal Bus Transceiver	56-SSOP	3750.00/1,000		
SN74ALVTH16601GR	296-6313-1-ND	Tri-State 2.5V/3.3V 18-Bit Universal Bus Transceiver	56-TSSOP	6.00	4.80	4.05
SN74ALVTH16601GR	296-6313-2-ND	Tri-State 2.5V/3.3V 18-Bit Universal Bus Transceiver	56-TSSOP	7500.00/2,000		

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74ALVTH16601VR	296-6314-1-ND	Tri-State 2.5V/3.3V 18-Bit Universal Bus Transceiver	56-SOP	6.00	4.80	4.05
SN74ALVTH16601VR	296-6314-2-ND	Tri-State 2.5V/3.3V 18-Bit Universal Bus Transceiver	56-SOP	7500.00/2,000		
SN74ALVTH16821DL	296-1520-5-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-SSOP	4.16	3.33	2.59
SN74ALVTH16821DLR	296-1520-1-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-SSOP	4.16	3.33	2.59
SN74ALVTH16821DLR	296-1520-2-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-SSOP	2359.00/1,000		
SN74ALVTH16821GR	296-6315-1-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-TSSOP	4.16	3.33	2.59
SN74ALVTH16821GR	296-6315-2-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-TSSOP	4718.00/2,000		
SN74ALVTH16821VR	296-6316-1-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-SOP	4.16	3.33	2.59
SN74ALVTH16821VR	296-6316-2-ND	Tri-State 2.5V/3.3V 20-Bit Bus-Interface Flip-Flop	56-SOP	4718.00/2,000		
SN74ALVTH16827DL	296-6317-5-ND	Tri-St. 2.5V/3.3V 20-Bit Buffer/Driver	56-SSOP	4.16	3.33	2.59
SN74ALVTH16827DLR	296-6317-1-ND	Tri-St. 2.5V/3.3V 20-Bit Buffer/Driver	56-SSOP	4.16	3.33	2.59
SN74ALVTH16827DLR	296-6317-2-ND	Tri-St. 2.5V/3.3V 20-Bit Buffer/Driver	56-SSOP	2359.00/1,000		
SN74ALVTH16827GR	296-6318-1-ND	Tri-St. 2.5V/3.3V 20-Bit Buffer/Driver	56-TSSOP	4.16	3.33	2.59
SN74ALVTH16827GR	296-6318-2-ND	Tri-St. 2.5V/3.3V 20-Bit Buffer/Driver	56-TSSOP	4718.00/2,000		
SN74ALVTH16827VR	296-6319-1-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver	56-SOP	4.16	3.33	2.59
SN74ALVTH16827VR	296-6319-2-ND	Tri-State 2.5V/3.3V 20-Bit Buffer/Driver	56-SOP	4718.00/2,000		
SN74ALVTH32244KR	296-6320-1-ND	Tri-State 2.5V/3.3V 32-Bit Buffer/Driver	96-BGA	5.56	4.45	3.76
SN74ALVTH32244KR	296-6320-2-ND	Tri-State 2.5V/3.3V 32-Bit Buffer/Driver	96-BGA	3475.00/1,000		
SN74ALVTH32373KR	296-6321-1-ND	Tri-State 2.5V/3.3V 32-Bit Transparent D-Type Latch	96-BGA	5.56	4.45	3.76
SN74ALVTH32373KR	296-6321-2-ND	Tri-State 2.5V/3.3V 32-Bit Transparent D-Type Latch	96-BGA	3475.00/1,000		
SN74ALVTH32374KR	296-6322-1-ND	Tri-State 2.5V/3.3V 32-Bit D-Type Flip-Flop	96-BGA	5.56	4.45	3.76
SN74ALVTH32374KR	296-6322-2-ND	Tri-State 2.5V/3.3V 32-Bit D-Type Flip-Flop	96-BGA	3475.00/1,000		
SN74ALVTH162244DL	296-1518-5-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-SSOP	4.16	3.33	2.59
SN74ALVTH162244GR	296-6294-1-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-TSSOP	4.16	3.33	2.59
SN74ALVTH162244GR	296-6294-2-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	48-TSSOP	4718.00/2,000		
SN74ALVTH162244VR	296-6295-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-SOP	4.16	3.33	2.59
SN74ALVTH162244VR	296-6295-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	48-SOP	4718.00/2,000		
SN74ALVTH162827DL	296-6302-5-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	56-SSOP	4.16	3.33	2.59
SN74ALVTH162827GR	296-6303-1-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	56-TSSOP	4.16	3.33	2.59
SN74ALVTH162827GR	296-6303-2-ND	Tri-St. 2.5V/3.3V 16-Bit Buffer/Driver	56-TSSOP	4718.00/2,000		
SN74ALVTH162827VR	296-6304-1-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	56-SOP	4.16	3.33	2.59
SN74ALVTH162827VR	296-6304-2-ND	Tri-State 2.5V/3.3V 16-Bit Buffer/Driver	56-SOP	4718.00/2,000		

AS Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AS00N	296-1521-5-ND	Quad 2-Input NAND Gate	14-Dip	.80	.60	.45
SN74AS04N	296-1522-5-ND	Hex Inverter	14-Dip	.80	.60	.45
SN74AS757N	296-12180-5-ND	Octal Buffer/Line Driver with OC Output *NEW!*	20-Dip	5.10	4.08	3.45

NEW! AUC Family *NEW!*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AUC1G07DBVR	296-12463-1-ND	Single Buffer/Driver with Open Drain Output	SOT-23-5	.72	.54	.41
SN74AUC1G07DBVR	296-12463-2-ND	Single Buffer/Driver with Open Drain Output	SOT-23-5	702.00/3,000		
SN74AUC1G07DCKR	296-12464-1-ND	Single Buffer/Driver with Open Drain Output	SC-70-5	.76	.57	.43
SN74AUC1G07DCKR	296-12464-2-ND	Single Buffer/Driver with Open Drain Output	SC-70-5	741.00/3,000		

AVC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74AVC16244DGGR	296-9783-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	3.60	2.88	2.24
SN74AVC16244DGGR	296-9783-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	4080.00/2,000		
SN74AVC16244DGVR	296-9784-1-ND	Tri-State 16-Bit Buffer/Driver	48-SOP	3.60	2.88	2.24
SN74AVC16244DGVR	296-9784-2-ND	Tri-State 16-Bit Buffer/Driver	48-SOP	4080.00/2,000		
SN74AVC16244GQLR	296-9785-1-ND	Tri-State 16-Bit Buffer/Driver	56-BGA	3.60	2.88	2.24
SN74AVC16244GQLR	296-9785-2-ND	Tri-State 16-Bit Buffer/Driver	56-BGA	2244.00/1,000		
SN74AVC16245DGGR	296-12334-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	3.60	2.88	2.24
SN74AVC16245DGGR	296-12334-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	4080.00/2,000		
SN74AVC16245DGVR	296-9786-1-ND	Tri-State 16-Bit Bus Transceiver	48-SOP	3.60	2.88	2.24
SN74AVC16245DGVR	296-9786-2-ND	Tri-State 16-Bit Bus Transceiver	48-SOP	4080.00/2,000		
SN74AVC16269DGGR	296-9787-1-ND	Tri-St. 12-24 Bit Reg Bus Exchanger	56-TSSOP	4.46	3.57	2.78
SN74AVC16269DGGR	296-9787-2-ND	Tri-St. 12-24 Bit Reg Bus Exchanger	56-TSSOP	5050.00/2,000		
SN74AVC16269DGVR	296-9788-1-ND	Tri-State 12-24 Bit Reg Bus Exchanger	56-SOP	4.46	3.57	2.78
SN74AVC16269DGVR	296-9788-2-ND	Tri-State 12-24 Bit Reg Bus Exchanger	56-SOP	5050.00/2,000		
SN74AVC16334DGGR	296-9789-1-ND	Tri-State 16-Bit Univ. Bus Driver	48-TSSOP	3.60	2.88	2.24
SN74AVC16334DGGR	296-9789-2-ND	Tri-State 16-Bit Univ. Bus Driver	48-TSSOP	4080.00/2,000		
SN74AVC16334DGVR	296-9790-1-ND	Tri-State 16-Bit Univ. Bus Driver	48-SOP	3.60	2.88	2.24
SN74AVC16334DGVR	296-9790-2-ND	Tri-State 16-Bit Univ. Bus Driver	48-SOP	4080.00/2,000		
SN74AVC16373DGGR	296-9791-1-ND	Tri-State 16-Bit Transparent D-Type Latch	48-TSSOP	3.60	2.88	2.24
SN74AVC16373DGGR	296-9791-2-ND	Tri-State 16-Bit Transparent D-Type Latch	48-TSSOP	4080.00/2,000		
SN74AVC16373DGVR	296-9792-1-ND	Tri-St. 16-Bit Transparent D-Type Latch	48-SOP	3.60	2.88	2.24
SN74AVC16373DGVR	296-9792-2-ND	Tri-St. 16-Bit Transparent D-Type Latch	48-SOP	4080.00/2,000		
SN74AVC16373GQLR	296-9793-1-ND	Tri-St. 16-Bit Transparent D-Type Latch	48-BGA	3.96	3.17	2.47
SN74AVC16373GQLR	296-9793-2-ND	Tri-St. 16-Bit Transparent D-Type Latch	48-BGA	2244.00/1,000		
SN74AVC16374DGGR	296-9794-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	3.60	2.88	2.24
SN74AVC16374DGGR	296-9794-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	4080.00/2,000		
SN74AVC16374DGVR	296-9795-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SOP	3.60	2.88	2.24
SN74AVC16374DGVR	296-9795-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SOP	4080.00/2,000		
SN74AVC16374GQLR	296-9796-1-ND	Tri-State 16-Bit D-Type Flip-Flop	56-VFBGA	3.96	3.17	2.47
SN74AVC16374GQLR	296-9796-2-ND	Tri-State 16-Bit D-Type Flip-Flop	56-VFBGA	2244.00/1,000		
SN74AVC16646DGGR	296-9797-1-ND	Tri-State 16-Bit Bus Xcvr./Register	56-TSSOP	3.38	2.70	2.10
SN74AVC16646DGGR	296-9797-2-ND	Tri-State 16-Bit Bus Xcvr./Register	56-TSSOP	3826.00/2,000		
SN74AVC16646DGVR	296-9798-1-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SOP	3.38	2.70	2.10
SN74AVC16646DGVR	296-9798-2-ND	Tri-St. 16-Bit Bus Transceiver/Register	56-SOP	3826.00/2,000		
SN74AVC16722DGGR	296-9799-1-ND	Tri-State 22-Bit Flip-Flop	64-TSSOP	4.19	3.35	2.61
SN74AVC16722DGGR	296-9799-2-ND	Tri-State 22-Bit Flip-Flop	64-TSSOP	4744.00/2,000		
SN74AVC16827DGGR	296-9800-1-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	3.38	2.70	2.10
SN74AVC16827DGGR	296-9800-2-ND	Tri-State 20-Bit Buffer/Driver	56-TSSOP	3826.00/2,000		
SN74AVC16827DGVR	296-9801-1-ND	Tri-State 20-Bit Buffer/Driver	56-SOP	3.38	2.70	2.10
SN74AVC16827DGVR	296-9801-2-ND	Tri-State 20-Bit Buffer/Driver	56-SOP	3826.00/2,000		
SN74AVC16834DGGR	296-9802-1-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	3.60	2.88	2.24
SN74AVC16834DGGR	296-9802-2-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	4080.00/2,000		
SN74AVC16834DGVR	296-9803-1-ND	Tri-State 18-Bit Univ. Bus Driver	56-SOP	3.60	2.88	2.24
SN74AVC16834DGVR	296-9803-2-ND	Tri-State 18-Bit Univ. Bus Driver	56-SOP	4080.00/2,000		
SN74AVC16835DGGR	296-9804-1-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	3.60	2.88	2.24
SN74AVC16835DGGR	296-9804-2-ND	Tri-State 18-Bit Univ. Bus Driver	56-TSSOP	4080.00/2,000		
SN74AVC16835DGVR	296-9805-1-ND	Tri-State 18-Bit Univ. Bus Driver	56-SOP	3.60	2.88	2.24
SN74AVC16835DGVR	296-9805-2-ND	Tri-State 18-Bit Univ. Bus Driver	56-SOP	4080.00/2,000		

BCT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN64BCT125AD	296-9690-5-ND	Tri-State Quad Bus Buffer Gate	14-SOP	1.63	1.30	.98
SN64BCT757DW	296-9692-5-ND	Octal Buffer/Driver	20-SOP	2.70	2.16	1.68
SN64BCT25244NT	296-9691-5-ND	Tri-St. Octal Bus Buffer/Driver	24-Dip	5.40	4.32	3.36
SN74BCT244DWR	296-1152-1-ND	Octal Buffer/Driver	20-SOIC	2.30	1.84	1.38
SN74BCT244DWR	296-1152-2-ND	Octal Buffer/Driver	20-SOIC	2392.00/2,000		
SN74BCT245DWR	296-1154-1-ND	Octal Bus Transceiver	20-SOIC	2.43	1.94	1.46
SN74BCT245DWR	296-1154-2-ND	Octal Bus Transceiver	20-SOIC	2522.00/2,000		
SN74BCT543DW	296-12335-5-ND	Octal Registered Transceiver with Tri-state Output	24-SOIC	5.06	4.05	3.15
SN74BCT652DWR	296-1155-1-ND	Octal Bus Transceiver	24-SOIC	6.04	4.84	4.08
SN74BCT652DWR	296-1155-2-ND	Octal Bus Transceiver	24-SOIC	7550.00/2,000		

Bus Switch Family (CBT)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74CBT1G125DBVR	296-1164-1-ND	Single FET Bus Switch	5-TSSOP	.56	.42	.32
SN74CBT1G125DBVR	296-1164-2-ND	Single FET Bus Switch	5-SOP	546.00/3,000		
SN74CBT1G125DCKR	296-6410-1-ND	Single FET Bus Switch	5-SOP	.64	.48	.36
SN74CBT1G125DCKR	296-6410-2-ND	Single FET Bus Switch	5-SOP	624.00/3,000		
SN74CBT1G384DBVR	296-6411-1-ND	Single FET Bus Switch	SOT-23-5	.56	.42	.32
SN74CBT1G384DBVR	296-6411-2-ND	Single FET Bus Switch	SOT-23-5	546.00/3,000		
SN74CBT1G384DCKR	296-6412-1-ND	Single FET Bus Switch	5-SOP	.64	.48	.36
SN74CBT1G384DCKR	296-6412-2-ND	Single FET Bus Switch	5-SOP	624.00/3,000		
SN74CBT3125D	296-1165-5-ND	Quad FET Bus Switch	14-SOIC	1.02	.85	.68
SN74CBT3125DR	296-1165-1-ND	Quad FET Bus Switch	14-SOIC	1.02	.85	.68
SN74CBT3125DR	296-1165-2-ND	Quad FET Bus Switch	14-SOIC	1105.00/2,500		
SN74CBT3125DBQR	296-6413-1-ND	Quad FET Bus Switch	16-SOP	1.02	.85	.68
SN74CBT3125DBQR	296-6413-2-ND	Quad FET Bus Switch	16-SOP	1105.00/2,500		
SN74CBT3125DBR	296-6414-1-ND	Quad FET Bus Switch	14-SSOP	1.02	.85	.68
SN74CBT3125DBR	296-6414-2-ND	Quad FET Bus Switch	14-SSOP	904.00/2,000		
SN74CBT3125DGVR	296-6415-1-ND	Quad FET Bus Switch	14-TVSOP	1.02	.85	.68
SN74CBT3125DGVR	296-6415-2-ND	Quad FET Bus Switch	14-TVSOP	904.00/2,000		
SN74CBT3125PWR	296-6416-1-ND	Quad FET Bus Switch	14-TSSOP	1.02	.85	.68
SN74CBT3125PWR	296-6416-2-ND	Quad FET Bus Switch	14-TSSOP	904.00/2,000		
SN74CBT3126D	296-1537-5-ND	Quad FET Bus Switch	14-SOIC	1.02	.85	.68
SN74CBT3126DR	296-1537-1-ND	Quad FET Bus Switch	14-SOIC	1.02	.85	.68
SN74CBT3126DR	296-1537-2-ND	Quad FET Bus Switch	14-SOIC	1105.00/2,500		
SN74CBT3126DBQR	296-6417-1-ND	Quad FET Bus Switch	16-SOP	1.02	.85	.68
SN74CBT3126DBQR	296-6417-2-ND	Quad FET Bus Switch	16-SOP	1105.00/2,500		
SN74CBT3126DBR	296-6418-1-ND	Quad FET Bus Switch	14-SSOP	1.02	.85	.68
SN74CBT3126DBR	296-6418-2-ND	Quad FET Bus Switch	14-SSOP	904.00/2,000		
SN74CBT3126DGVR	296-6419-1-ND	Quad FET Bus Switch	14-TVSOP	1.02	.85	.68
SN74CBT3126DGVR	296-6419-2-ND	Quad FET Bus Switch	14-TVSOP	904.00/2,000		
SN74CBT3126PWR	296-6420-1-ND	Quad FET Bus Switch	14-TSSOP	1.02	.85	.68
SN74CBT3126PWR	296-6420-2-ND	Quad FET Bus Switch	14-TSSOP	904.00/2,000		
SN74CBT3244DBQR	296-6421-1-ND	Octal FET Bus Switch	20-SOP	1.02	.85	.68
SN74CBT3244DBQR	296-6421-2-ND	Octal FET Bus Switch	20-SOP	1105.00/2,500		
SN74CBT3244DBR	296-6422-1-ND	Octal FET Bus Switch	20-SSOP	1.02	.85	.68
SN74CBT3244DBR	296-6422-2-ND	Octal FET Bus Switch	20-SSOP	904.00/2,000		
SN74CBT3244DGVR	296-6423-1-ND	Octal FET Bus Switch	20-TVSOP	1.02	.85	.68
SN74CBT3244DGVR	296-6423-2-ND	Octal FET Bus Switch	20-TVSOP	904.00/2,000		
SN74CBT3244DW	296-1538-5-ND	Octal FET Bus Switch	20-SOIC	1.02	.85	.68
SN74CBT3244GQNR	296-12089-1-ND	Octal FET Bus Switch	20-BGA	1.14	.95	.76
SN74CBT3244GQNR	296-12089-2-ND	Octal FET Bus Switch	20-BGA	505.00/1,000		
SN74CBT3244PWR	296-1166-1-ND	Octal FET Bus Switch	20-TSSOP	1.02	.85	.68
SN74CBT3244PWR	296-1166-2-ND	Octal FET Bus Switch	20-TSSOP	904.00/2,000		
SN74CBT3245ADBQR	296-6424-1-ND	Octal FET Bus Switch	20-SOP	1.02	.85	.68
SN74CBT3245ADBQR	296-6424-2-ND	Octal FET Bus Switch	20-SOP	1105.00/2,500		
SN74CBT3245ADBR	296-6425-1-ND	Octal FET Bus Switch	20-SSOP	1.02	.85	.68
SN74CBT3245ADBR	296-6425-2-ND	Octal FET Bus Switch	20-SSOP	904.00/2,000		
SN74CBT3245ADGVR	296-6460-1-ND	Octal FET Bus Switch	20-TVSOP	1.02	.85	.68
SN74CBT3245ADGVR	296-6460-2-ND	Octal FET Bus Switch	20-TVSOP	904.00/2,000		
SN74CBT3245ADW	296-6426-5-ND	Octal FET Bus Switch	20-SOP	1.02	.85	.68
SN74CBT3245AGQNR	296-12090-1-ND	Octal FET Bus Switch	20-BGA	1.14	.95	.76
SN74CBT3245AGQNR	296-12090-2-ND	Octal FET Bus Switch	20-BGA	505.00/1,000		
SN74CBT3245APWR	296-6427-1-ND	Octal FET Bus Switch	20-TSSOP	1.02	.85	.68
SN74CBT3245APWR	296-6427-2-ND	Octal FET Bus Switch	20-TSSOP	904.00/2,000		
SN74CBT3251D	296-6428-5-ND	1-of-8 FET Multiplexer/Demultiplexer	16-SOP	1.02	.85	.68
SN74CBT3251DBQR	296-6429-1-ND	1-of-8 FET Multiplexer/Demultiplexer	16-SOP	1.02	.85	.68
SN74CBT3251DBQR	296-6429-2-ND	1-of-8 FET Multiplexer/Demultiplexer	16-SOP	1105.00/2,500		
SN74CBT3251DBR	296-6430-1-ND	1-of-8 FET Multiplexer/Demultiplexer	16-SSOP	1.02	.85	.68
SN74CBT3251DBR	296-6430-2-ND	1-of-8 FET Multiplexer/Demultiplexer	16-SSOP	904.00/2,000		
SN74CBT3251PWR	296-6431-1-ND	1-of-8 FET Multiplexer/Demultiplexer	16-TSSOP	1.02	.85	.68
SN74CBT3251PWR	296-6431-2-ND	1-of-8 FET Multiplexer/Demultiplexer	16-TSSOP	904.00/2,000		
SN74CBT3253D	296-6432-5-ND	Dual 1-of-4 FET Mux/Demux	16-SOP	1.02	.85	.68
SN74CBT3253DBQR	296-6433-1-ND	Dual 1-of-4 FET Mux/Demux	16-SOP	1.02	.85	.68
SN74CBT3253DBQR	296-6433-2-ND	Dual 1-of-4 FET Mux/Demux	16-SOP	1105.00/2,500		
SN74CBT3253DBR	296-6434-1-ND	Dual 1-of-4 FET Mux/Demux	16-SSOP	1.02	.85	.68
SN74CBT3253DBR	296-6434-2-ND	Dual 1-of-4 FET Mux/Demux	16-SSOP	904.00/2,000		
SN74CBT3253PWR	296-1167-1-ND	Dual 1-of-4 FET Mux/Demux	16-TSSOP	1.02	.85	.68
SN74CBT3253PWR	296-1167-2-ND	Dual 1-of-4 FET Mux/Demux	16-TSSOP	904.00/2,000		
SN74CBT3257D	296-1168-5-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SOIC	1.02	.85	.68
SN74CBT3257DR	296-1168-1-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SOIC	1.02	.85	.68
SN74CBT3257DR	296-1168-2-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SOIC	1105.00/2,500		
SN74CBT3257DBQR	296-6435-1-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SOP	1.02	.85	.68
SN74CBT3257DBQR	296-6435-2-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SOP	1105.00/2,500		
SN74CBT3257DBR	296-6436-1-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SSOP	1.02	.85	.68
SN74CBT3257DBR	296-6436-2-ND	4-Bit, 1-of-2 FET Mux/Demux	16-SSOP	904.00/2,000		
SN74CBT3257PWR	296-6437-1-ND	4-Bit, 1-of-2 FET Mux/Demux	16-TSSOP	1.02	.85	.68
SN74CBT3257PWR	296-6437-2-ND	4-Bit, 1-of-2 FET Mux/Demux	16-TSSOP	904.00/2,000		
SN74CBT3306D	296-1540-5-ND	Dual FET Bus Switch	8-SOIC	1.02	.85	.68
SN74CBT3306DR	296-1540-1-ND	Dual FET Bus Switch	8-SOIC	1.02	.85	.68
SN74CBT3306DR	296-1540-2-ND	Dual FET Bus Switch	8-SOIC	1105.00/2,500		
SN74CBT3306PWR	296-6438-1-ND	Dual FET Bus Switch	8-TSSOP	1.02	.85	.68
SN74CBT3306PWR	296-6438-2-ND	Dual FET Bus Switch	8-TSSOP	904.00/2,000		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74CBT3345DBR	296-6439-1-ND	8-Bit, FET Bus Switch	20-SSOP	1.02	.85	.68
SN74CBT3345DBR	296-6439-2-ND	8-Bit, FET Bus Switch	20-SSOP	904.00/2,000		
SN74CBT3345DGVR	296-6440-1-ND	8-Bit, FET Bus Switch	20-TVSOP	1.02	.85	.68
SN74CBT3345DGVR	296-6440-2-ND	8-Bit, FET Bus Switch	20-TVSOP	904.00/2,000		
SN74CBT3345DW	296-6441-5-ND	8-Bit, FET Bus Switch	20-SOP	1.02	.85	.68
SN74CBT3345PWR	296-6442-1-ND	8-Bit, FET Bus Switch	20-TSSOP	1.02	.85	.68
SN74CBT3345PWR	296-6442-2-ND	8-Bit, FET Bus Switch	20-TSSOP	904.00/2,000		
SN74CBT3383DBQR	296-6443-1-ND	10-Bit, FET Bus-Exchange Switch	24-SOP	1.02	.85	.68
SN74CBT3383DBQR	296-6443-2-ND	10-Bit, FET Bus-Exchange Switch	24-SOP	1105.00/2,500		
SN74CBT3383DBR	296-6444-1-ND	10-Bit, FET Bus-Exchange Switch	24-SSOP	1.02	.85	.68
SN74CBT3383DBR	296-6444-2-ND	10-Bit, FET Bus-Exchange Switch	24-SSOP	904.00/2,000		
SN74CBT3383DW	296-6445-5-ND	10-Bit, FET Bus-Exchange Switch	24-SOIC	1.02	.85	.68
SN74CBT3383PWR	296-6446-1-ND	10-Bit, FET Bus-Exchange Switch	24-TSSOP	1.02	.85	.68
SN74CBT3383PWR	296-6446-2-ND	10-Bit, FET Bus-Exchange Switch	24-TSSOP	904.00/2,000		
SN74CBT3384ADBQR	296-6447-1-ND	10-Bit, FET Bus Switch	24-SOP	1.02	.85	.68
SN74CBT3384ADBQR	296-6447-2-ND	10-Bit, FET Bus Switch	24-SOP	1105.00/2,500		
SN74CBT3384ADBR	296-6448-1-ND	10-Bit, FET Bus Switch	24-SSOP	1.02	.85	.68
SN74CBT3384ADBR	296-6448-2-ND	10-Bit, FET Bus Switch	24-SSOP	904.00/2,000		
SN74CBT3384ADGVR	296-6449-1-ND	10-Bit, FET Bus Switch	24-TVSOP	1.02	.85	.68
SN74CBT3384ADGVR	296-6449-2-ND	10-Bit, FET Bus Switch	24-TVSOP	904.00/2,000		
SN74CBT3384ADW	296-1169-5-ND	10-Bit, FET Bus Switch	24-SOIC	1.02	.85	.68
SN74CBT3384ADWR	296-1169-1-ND	10-Bit, FET Bus Switch	24-SOIC	1.02	.85	.68
SN74CBT3384ADWR	296-1169-2-ND	10-Bit, FET Bus Switch	24-SOIC	904.00/2,000		
SN74CBT3384APWR	296-1170-1-ND	10-Bit, FET Bus Switch	24-TSSOP	1.02	.85	.68
SN74CBT3384APWR	296-1170-2-ND	10-Bit, FET Bus Switch	24-TSSOP	904.00/2,000		
SN74CBT3861DBQR	296-6450-1-ND	10-Bit, FET Bus Switch	24-SOP	1.38	1.10	.83
SN74CBT3861DBQR	296-6450-2-ND	10-Bit, FET Bus Switch	24-SOP	1760.00/2,500		
SN74CBT3861DGVR	296-6451-1-ND	10-Bit, FET Bus Switch	24-TVSOP	1.38	1.10	.83
SN74CBT3861DGVR	296-6451-2-ND	10-Bit, FET Bus Switch	24-TVSOP	1430.00/2,000		
SN74CBT3861DWR	296-6452-1-ND	10-Bit, FET Bus Switch	24-SOIC	1.38	1.10	.83
SN74CBT3861DWR	296-6452-2-ND	10-Bit, FET Bus Switch	24-SOIC	1430.00/2,000		
SN74CBT3861PWR	296-6453-1-ND	10-Bit, FET Bus Switch	24-TSSOP	1.38	1.10	.83
SN74CBT3861PWR	296-6453-2-ND	10-Bit, FET Bus Switch	24-TSSOP	1430.00/2,000		
SN74CBT6800ADBQR	296-6454-1-ND	10-Bit, FET Bus Switch with Precharged Output	24-SOP	1.63	1.30	.98
SN74CBT6800ADBQR	296-6454-2-ND	10-Bit, FET Bus Switch with Precharged Output	24-SOP	2080.00/2,500		
SN74CBT6800ADBR	296-6455-1-ND	10-Bit, FET Bus Switch with Precharged Output	24-SSOP	1.63	1.30	.98
SN74CBT6800ADBR	296-6455-2-ND	10-Bit, FET Bus Switch with Precharged Output	24-SSOP	1690.00/2,000		
SN74CBT6800ADGVR	296-6456-1-ND	10-Bit, FET Bus Switch with Precharged Output	24-TVSOP	1.63	1.30	.98
SN74CBT6800ADGVR	296-6456-2-ND	10-Bit, FET Bus Switch with Precharged Output	24-TVSOP	1690.00/2,000		
SN74CBT6800ADW	296-6457-5-ND	10-Bit, FET Bus Switch with Precharged Output	24-SOIC	1.63	1.30	.98
SN74CBT6800ADWR	296-6457-1-ND	10-Bit, FET Bus Switch with Precharged Output	24-SOIC	1.63	1.30	.98
SN74CBT6800ADWR	296-6457-2-ND	10-Bit, FET Bus Switch with Precharged Output	24-SOIC	1690.00/2,000		
SN74CBT6800APWR	296-6458-1-ND	10-Bit, FET Bus Switch with Precharged Output	24-TSSOP	1.63	1.30	.98
SN74CBT6800APWR	296-6458-2-ND	10-Bit, FET Bus Switch with Precharged Output	24-TSSOP	1690.00/2,000		
SN74CBT16209ADGGR	296-1156-1-ND	18-Bit, FET Bus-Exchange Switch	48-TSSOP	2.34	1.88	1.46
SN74CBT16209ADGGR	296-1156-2-ND	18-Bit, FET Bus-Exchange Switch	48-TSSOP	2652.00/2,000		
SN74CBT16209ADGVR	296-6385-1-ND	18-Bit, FET Bus-Exchange Switch	48-TVSOP	2.34	1.88	1.46
SN74CBT16209ADGVR	296-6385-2-ND	18-Bit, FET Bus-Exchange Switch	48-TVSOP	2652.00/2,000		
SN74CBT16209ADL	296-1531-5-ND	18-Bit, FET Bus-Exchange Switch	48-SSOP	2.34	1.88	1.46
SN74CBT16210DGGR	296-6386-1-ND	20-Bit, FET Bus Switch	48-TSSOP	2.34	1.88	1.46
SN74CBT16210DGGR	296-6386-2-ND	20-Bit, FET Bus Switch	48-TSSOP	2652.00/2,000		
SN74CBT16210DGVR	296-6387-1-ND	20-Bit, FET Bus Switch	48-TVSOP	2.34	1.88	1.46
SN74CBT16210DGVR	296-6387-2-ND	20-Bit, FET Bus Switch	48-TVSOP	2652.00/2,000		
SN74CBT16210DL	296-6388-5-ND	20-Bit, FET Bus Switch	48-SSOP	2.34	1.88	1.46
SN74CBT16210DLR	296-6388-1-ND	20-Bit, FET Bus Switch	48-SSOP	2.34	1.88	1.46
SN74CBT16210DLR	296-6388-2-ND	20-Bit, FET Bus Switch	48-SSOP	1326.00/1,000		
SN74CBT16211ADGGR	296-1157-1-ND	24-Bit, FET Bus Switch	56-TSSOP	2.34	1.88	1.46
SN74CBT16211ADGGR	296-1157-2-ND	24-Bit, FET Bus Switch	56-TSSOP	2652.00/2,000		
SN74CBT16211ADGVR	296-6389-1-ND	24-Bit, FET Bus Switch	56-TVSOP	2.34	1.88	1.46
SN74CBT16211ADGVR	296-6389-2-ND	24-Bit, FET Bus Switch	56-TVSOP	2652.00/2,000		
SN74CBT16211ADL	296-1532-5-ND	24-Bit, FET Bus Switch	56-SSOP	2.34	1.88	1.46
SN74CBT16211ADLR	296-1532-1-ND	24-Bit, FET Bus Switch	56-SSOP	2.34	1.88	1.46
SN74CBT16211ADLR	296-1532-2-ND	24-Bit, FET Bus Switch	56-SSOP	1326.00/1,000		
SN74CBT16211AGQLR	296-9806-1-ND	24-Bit FET Bus Switch	56-VFBGA	2.59	2.07	1.61
SN74CBT16211AGQLR	296-9806-2-ND	24-Bit FET Bus Switch	56-VFBGA	1466.00/1,000		
SN74CBT16212ADGGR	296-1158-1-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	2.34	1.88	1.46
SN74CBT16212ADGGR	296-1158-2-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	2652.00/2,000		
SN74CBT16212ADGVR	296-6390-1-ND	24-Bit, FET Bus-Exchange Switch	56-TVSOP	2.34	1.88	1.46
SN74CBT16212ADGVR	296-6390-2-ND	24-Bit, FET Bus-Exchange Switch	56-TVSOP	2652.00/2,000		
SN74CBT16212ADLR	296-1159-1-ND	24-Bit, FET Bus-Exchange Switch	56-SSOP	2.34	1.88	1.46
SN74CBT16212ADLR	296-1159-2-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	1326.00/1,000		
SN74CBT16212AGQLR	296-9807-1-ND	24-Bit Bus Exchange Switch	56-VFBGA	2.59	2.07	1.61
SN74CBT16212AGQLR	296-9807-2-ND	24-Bit Bus Exchange Switch	56-VFBGA	1466.00/1,000		
SN74CBT16213DGGR	296-6391-1-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	2.34	1.88	1.46
SN74CBT16213DGGR	296-6391-2-ND	24-Bit, FET Bus-Exchange Switch	56-TSSOP	2652.00/2,000		
SN74CBT16213DL	296-6392-5-ND	24-Bit, FET Bus-Exchange Switch	56-SSOP	2.34	1.88	1.46
SN74CBT16214DGGR	296-6393-1-ND	12-Bit, 1-of-3 FET Mux/Demux	56-TSSOP	2.34	1.88	1.46
SN74CBT16214DGGR	296-6393-2-ND	12-Bit, 1-of-3 FET Mux/Demux	56-TSSOP	2652.00/2,000		
SN74CBT16214DL	296-6394-5-ND	12-Bit, 1-of-3 FET Mux/Demux	56-SSOP	2.34	1.88	1.46
SN74CBT16232DGGR	296-6395-1-ND	Sync. 16-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	2.88	2.31	1.80
SN74CBT16232DGGR	296-6395-2-ND	Sync. 16-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	3264.00/2,000		
SN74CBT16232DLR	296-6396-1-ND	Sync. 16-Bit, 1-of-2 FET Mux/Demux	56-SSOP	2.88	2.31	1.80
SN74CBT16232DLR	296-6396-2-ND	Sync. 16-Bit, 1-of-2 FET Mux/Demux	56-SSOP	1632.00/1,000		
SN74CBT16233DGGR	296-1161-1-ND	16-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	2.88	2.31	1.80
SN74CBT16233DGGR	296-1161-2-ND	16-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	3264.00/2,000		
SN74CBT16233DGVR	296-6397-1-ND	16-Bit, 1-of-2 FET Mux/Demux	56-TVSOP	2.88	2.31	1.80
SN74CBT16233DGVR	296-6397-2-ND	16-Bit, 1-of-2 FET Mux/Demux	56-TVSOP	3264.00/2,000		
SN74CBT16233DL	296-6398-5-ND	16-Bit, 1-of-2 FET Mux/Demux	56-SSOP	2.88	2.31	1.80
SN74CBT16233DLR	296-6398-1-ND	16-Bit, 1-of-2 FET Mux/Demux	56-SSOP	2.88	2.31	1.80
SN74CBT16233DLR	296-6398-2-ND	16-Bit, 1-of-2 FET Mux/Demux	56-SSOP	1632.00/1,000		
SN74CBT16244DGGR	296-6399-1-ND	16-Bit, FET Bus Switch	48-TSSOP	3.04	2.43	1.89
SN74CBT16244DGGR	296-6399-2-ND	16-Bit, FET Bus Switch	48-TSSOP	3442.00/2,000		
SN74CBT16244DGVR	296-6400-1-ND	16-Bit, FET Bus Switch	48-TVSOP	3.04	2.43	1.89
SN74CBT16244DGVR	296-6400-2-ND	16-Bit, FET Bus Switch	48-TVSOP	3442.00/2,000		
SN74CBT16244DLR	296-6401-1-ND	16-Bit, FET Bus Switch	48-SSOP	3.04	2.43	1.89
SN74CBT16244DLR	296-6401-2-ND	16-Bit, FET Bus Switch	48-SSOP	1721.00/1,000		
SN74CBT16245DGGR	296-6402-1-ND	16-Bit, FET Bus Switch	48-TSSOP	3.04	2.43	1.89
SN74CBT16245DGGR	296-6402-2-ND	16-Bit, FET Bus Switch	48-TSSOP	3442.00/2,000		
SN74CBT16245DGVR	296-6403-1-ND	16-Bit, FET Bus Switch	48-TVSOP	3.04	2.43	1.89
SN74CBT16245DGVR	296-6403-2-ND	16-Bit, FET Bus Switch	48-TVSOP	3442.00/2,000		
SN74CBT16245DLR	296-6404-1-ND	16-Bit, FET Bus Switch	48-SSOP	3.04	2.43	1.89
SN74CBT16245DLR	296-6404-2-ND	16-Bit, FET Bus Switch	48-SSOP	1721.00/1,000		
SN74CBT16292DGGR	296-1162-1-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	2.34	1.88	1.46
SN74CBT16292DGGR	296-1162-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	2652.00/2,000		
SN74CBT16292DGVR	296-6405-1-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TVSOP	2.34	1.88	1.46
SN74CBT16292DGVR	296-6405-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TVSOP	2652.00/2,000		
SN74CBT16292DL	296-1534-5-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	2.34	1.88	1.46
SN74CBT16292DLR	296-1534-1-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	2.34	1.88	1.46
SN74CBT16292DLR	296-1534-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	1326.00/1,000		
SN74CBT16390DGGR	296-1163-1-ND	16-Bit to 32-Bit, FET Mux/Demux Bus Switch	56-TSSOP	5.18	4.14	3.22
SN74CBT16390DGGR	296-1163-2-ND	16-Bit to 32-Bit, FET Mux/Demux Bus Switch	56-TSSOP	5866.00/2,000		
SN74CBT16390DGVR	296-6406-1-ND	16-Bit to 32-Bit, FET Mux/Demux Bus Switch	56-TVSOP	5.18	4.14	3.22
SN74CBT16390DGVR	296-6406-2-ND	16-Bit to 32-Bit, FET Mux/Demux Bus Switch	56-TVSOP	5866.00/2,000		
SN74CBT16390DL	296-1535-5-ND	16-Bit to 32-Bit, FET Mux/Demux Bus Switch	56-SSOP	5.18	4.14	3.22
SN74CBT16861DGGR	296-6407-1-ND	20-Bit, FET Bus Switch	48-TSSOP	2.48	1.98	1.54
SN74CBT16861DGGR	296-6407-2-ND	20-Bit, FET Bus Switch	48-TSSOP	2806.00/2,000		
SN74CBT16861DGVR	296-6408-1-ND	20-Bit, FET Bus Switch	48-TVSOP	2.48	1.98	1.54
SN74CBT16861DGVR	296-6408-2-ND	20-Bit, FET Bus Switch	48-TVSOP	2806.00/2,000		
SN74CBT16861DLR	296-6409-1-ND	20-Bit, FET Bus Switch	48-SSOP	2.48	1.98	1.54
SN74CBT16861DLR	296-6409-2-ND	20-Bit, FET Bus Switch	48-SSOP	1403.00/1,000		
SN74CBT162292DGGR	296-1160-1-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	2.70	2.16	1.68
SN74CBT162292DGGR	296-1160-2-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	3060.00/2,000		
SN74CBT162292DL	296-1533-5-ND	12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	2.70	2.16	1.68
SN74CBTD1G125DBVR	296-12211-1-ND	Single FET Bus Switch with Level Shifting *NEW!*	SOT-23-5	.56	.42	.32
SN74CBTD1G125DBVR	296-12211-2-ND	Single FET Bus Switch with Level Shifting *NEW!*	SOT-23-5	546.00/3,000		
SN74CBTD1G125DCKR	296-6476-1-ND	Single FET Bus Switch with Level Shifting	5-SOP	.64	.48	.36
SN74CBTD1G125DCKR	296-6476-2-ND	Single FET Bus Switch with Level Shifting	5-SOP	624.00/3,000		
SN74CBTD1G384DBVR	296-12415-1-ND	Single FET Bus Switch with Level Shifting *NEW!*	SOT-23-5	.56	.42	.32
SN74CBTD1G384DBVR	296-12415-2-ND	Single FET Bus Switch with Level Shifting *NEW!*	SOT-23-5	546.00/3,000		
SN74CBTD1G384DCKR	296-12416-1-ND	Single FET Bus Switch with Level Shifting *NEW!*	SC-70-5	.64	.48	.36
SN74CBTD1G384DCKR	296-12416-2-ND	Single FET Bus Switch with Level Shifting *NEW!*	SC-70-5	624.00/3,000		
SN74CBTD3306D	296-6477-5-ND	Dual FET Bus Switch with Level Shifting	8-SOP	1.20	1.00	.80
SN74CBTD3306PWR	296-6478-1-ND	Dual FET Bus Switch w/Level Shifting	8-TSSOP	1.20	1.00	.80
SN74CBTD3306PWR	296-6478-2-ND	Dual FET Bus Switch w/Level Shifting	8-TSSOP	1064.00/2,000		
SN74CBTD3384DBQR	296-6479-1-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOP	1.20	1.00	.80
SN74CBTD3384DBQR	296-6479-2-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOP	1300.00/2,500		
SN74CBTD3384DBR	296-6480-1-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SSOP	1.20	1.00	.80
SN74CBTD3384DBR	296-6480-2-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SSOP	1064.00/2,000		
SN74CBTD3384DGVR	296-6481-1-ND	10-Bit, FET Bus Switch with Level Shifting	24-TVSOP	1.20	1.00	.80
SN74CBTD3384DGVR	296-6481-2-ND	10-Bit, FET Bus Switch with Level Shifting	24-TVSOP	1064.00/2,000		
SN74CBTD3384DW	296-6482-5-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOIC	1.20	1.00	.80
SN74CBTD3384DWR	296-6482-1-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOIC	1.20	1.00	.80
SN74CBTD3384DWR	296-6482-2-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOIC	1064.00/2,000		
SN74CBTD3384PWR	296-1173-1-ND	10-Bit, FET Bus Switch with Level Shifting	24-TSSOP	1.20	1.00	.80
SN74CBTD3384PWR	296-1173-2-ND	10-Bit, FET Bus Switch with Level Shifting	24-TSSOP	1064.00/2,000		
SN74CBTD3861DBQR	296-6483-1-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOP	1.20	1.00	.80
SN74CBTD3861DBQR	296-6483-2-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOP	1300.00/2,500		
SN74CBTD3861DBR	296-6484-1-ND	10-Bit, FET Bus Switch with Level Shifting	24-SSOP	1.20	1.00	.80
SN74CBTD3861DBR	296-6484-2-ND	10-Bit, FET Bus Switch with Level Shifting	24-SSOP	1064.00/2,000		
SN74CBTD3861DGVR	296-6485-1-ND	10-Bit, FET Bus Switch with Level Shifting	24-TVSOP	1.20	1.00	.80
SN74CBTD3861DGVR	296-6485-2-ND	10-Bit, FET Bus Switch with Level Shifting	24-TVSOP	1064.00/2,000		
SN74CBTD3861DW	296-6486-5-ND	10-Bit, FET Bus Switch w/Level Shifting	24-SOP	1.20	1.00	.80
SN74CBTD3861PWR	296-6487-1-ND	10-Bit, FET Bus Switch with Level Shifting	24-TSSOP	1.20	1.00	.80
SN74CBTD3861PWR	296-6487-2-ND	10-Bit, FET Bus Switch with Level Shifting	24-TSSOP	1064.00/2,000		
SN74CBTD16210DGGR	296-1171-1-ND	20-Bit, FET Bus Switch with Level Shifting	48-TSSOP	2.48	1.98	1.54
SN74CBTD16210DGGR	296-1171-2-ND	20-Bit, FET Bus Switch with Level Shifting	48-TSSOP	2806.00/2,000		
SN74CBTD16210DGVR	296-6474-1-ND	20-Bit, FET Bus Switch with Level Shifting	48-TVSOP	2.48	1.98	1.54
SN74CBTD16210DGVR	296-6474-2-ND	20-Bit, FET Bus Switch with Level Shifting	48-TVSOP	2806.00/2,000		
SN74CBTD16210DL	296-1541-5-ND	20-Bit, FET Bus Switch w/Level Shifting	48-SSOP	2.48	1.98	1.54
SN74CBTD16210DLR	296-1541-1-ND	20-Bit, FET Bus Switch w/Level Shifting	48-SSOP	2.52	2.02	1.57
SN74CBTD16210DLR	296-1541-2-ND	20-Bit, FET Bus Switch w/Level Shifting	48-SSOP	1428.00/1,000		

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74CBTD16211DGGR	296-1172-1-ND	24-Bit, FET Bus Switch with Level Shifting	56-TSSOP	2.70	2.16	1.68
SN74CBTD16211DGGR	296-1172-2-ND	24-Bit, FET Bus Switch with Level Shifting	56-TSSOP	3060.00/2,000		
SN74CBTD16211DGVR	296-6475-1-ND	24-Bit, FET Bus Switch with Level Shifting	56-TVSOP	2.70	2.16	1.68
SN74CBTD16211DGVR	296-6475-2-ND	24-Bit, FET Bus Switch with Level Shifting	56-TVSOP	3060.00/2,000		
SN74CBTD16211DL	296-1542-5-ND	24-Bit, FET Bus Switch w/Level Shifting	56-SSOP	2.70	2.16	1.68
SN74CBTH16211DGGR	296-6461-1-ND	24-Bit, FET Bus Switch with Bus Hold	56-TSSOP	2.70	2.16	1.68
SN74CBTH16211DGGR	296-6461-2-ND	24-Bit, FET Bus Switch with Bus Hold	56-TSSOP	3060.00/2,000		
SN74CBTH16211DL	296-1543-5-ND	24-Bit, FET Bus Switch with Bus Hold	56-SSOP	2.70	2.16	1.68
SN74CBTK6800DBQR	296-6492-1-ND	10-Bit, FET Bus Switch	24-SOP	1.63	1.30	.98
SN74CBTK6800DBQR	296-6492-2-ND	10-Bit, FET Bus Switch	24-SOP	2080.00/2,500		
SN74CBTK6800DGVR	296-6493-1-ND	10-Bit, FET Bus Switch	24-TVSOP	1.63	1.30	.98
SN74CBTK6800DGVR	296-6493-2-ND	10-Bit, FET Bus Switch	24-TVSOP	1690.00/2,000		
SN74CBTK6800DWR	296-6494-1-ND	10-Bit, FET Bus Switch	24-SOP	1.63	1.30	.98
SN74CBTK6800DWR	296-6494-2-ND	10-Bit, FET Bus Switch	24-SOP	1690.00/2,000		
SN74CBTK6800PWR	296-6495-1-ND	10-Bit, FET Bus Switch	24-TSSOP	1.63	1.30	.98
SN74CBTK6800PWR	296-6495-2-ND	10-Bit, FET Bus Switch	24-TSSOP	1690.00/2,000		
SN74CBTK16245DGGR	296-6488-1-ND	16-Bit, FET Bus Switch	48-TSSOP	3.15	2.52	1.96
SN74CBTK16245DGGR	296-6488-2-ND	16-Bit, FET Bus Switch	48-TSSOP	3570.00/2,000		
SN74CBTK16245DGVR	296-6489-1-ND	16-Bit, FET Bus Switch	48-TVSOP	3.15	2.52	1.96
SN74CBTK16245DGVR	296-6489-2-ND	16-Bit, FET Bus Switch	48-TVSOP	3570.00/2,000		
SN74CBTK16245DLR	296-6490-1-ND	16-Bit, FET Bus Switch	48-SSOP	3.15	2.52	1.96
SN74CBTK16245DLR	296-6490-2-ND	16-Bit, FET Bus Switch	48-SSOP	1785.00/1,000		
SN74CBTK32245GKER	296-6491-1-ND	32-Bit, FET Bus Switch	96-BGA	4.73	3.78	2.94
SN74CBTK32245GKER	296-6491-2-ND	32-Bit, FET Bus Switch	96-BGA	2678.00/1,000		
SN74CBTLV1G125DBVR	296-9109-1-ND	LV Single FET Bus Switch	SOT-23-5	.72	.54	.41
SN74CBTLV1G125DBVR	296-9109-2-ND	LV Single FET Bus Switch	SOT-23-5	702.00/3,000		
SN74CBTLV1G125DCKR	296-9110-1-ND	LV Single FET Bus Switch	5-SOP	.80	.60	.45
SN74CBTLV1G125DCKR	296-9110-2-ND	LV Single FET Bus Switch	5-SOP	780.00/3,000		
SN74CBTLV3125DBQR	296-9111-1-ND	LV Quad FET Bus Switch	16-SOP	1.45	1.16	.87
SN74CBTLV3125DBQR	296-9111-2-ND	LV Quad FET Bus Switch	16-SOP	1855.00/2,500		
SN74CBTLV3125DGVR	296-9112-1-ND	LV Quad FET Bus Switch	14-TVSOP	1.45	1.16	.87
SN74CBTLV3125DGVR	296-9112-2-ND	LV Quad FET Bus Switch	14-TVSOP	1508.00/2,000		
SN74CBTLV3125DR	296-9113-1-ND	LV Quad FET Bus Switch	14-SOP	1.45	1.16	.87
SN74CBTLV3125DR	296-9113-2-ND	LV Quad FET Bus Switch	14-SOP	1855.00/2,500		
SN74CBTLV3125PWR	296-9114-1-ND	LV Quad FET Bus Switch	14-TSSOP	1.45	1.16	.87
SN74CBTLV3125PWR	296-9114-2-ND	LV Quad FET Bus Switch	14-TSSOP	1508.00/2,000		
SN74CBTLV3126DBQR	296-9115-1-ND	LV Quad FET Bus Switch	16-SOP	1.38	1.10	.83
SN74CBTLV3126DBQR	296-9115-2-ND	LV Quad FET Bus Switch	16-SOP	1760.00/2,500		
SN74CBTLV3126DGVR	296-9116-1-ND	LV Quad FET Bus Switch	14-TVSOP	1.38	1.10	.83
SN74CBTLV3126DGVR	296-9116-2-ND	LV Quad FET Bus Switch	14-TVSOP	1430.00/2,000		
SN74CBTLV3126DR	296-9117-1-ND	LV Quad FET Bus Switch	14-SOP	1.38	1.10	.83
SN74CBTLV3126DR	296-9117-2-ND	LV Quad FET Bus Switch	14-SOP	1760.00/2,500		
SN74CBTLV3126PWR	296-9118-1-ND	LV Quad FET Bus Switch	14-TSSOP	1.38	1.10	.83
SN74CBTLV3126PWR	296-9118-2-ND	LV Quad FET Bus Switch	14-TSSOP	1430.00/2,000		
SN74CBTLV3245ADBQR	296-9119-1-ND	LV Octal FET Bus Switch	20-SOP	1.50	1.20	.90
SN74CBTLV3245ADBQR	296-9119-2-ND	LV Octal FET Bus Switch	20-SOP	1920.00/2,500		
SN74CBTLV3245ADGVR	296-9120-1-ND	LV Octal FET Bus Switch	20-TVSOP	1.50	1.20	.90
SN74CBTLV3245ADGVR	296-9120-2-ND	LV Octal FET Bus Switch	20-TVSOP	1560.00/2,000		
SN74CBTLV3245ADW	296-1544-5-ND	LV Octal FET Bus Switch	20-SOIC	1.50	1.20	.90
SN74CBTLV3245ADWR	296-1544-1-ND	LV Octal FET Bus Switch	20-SOIC	1.50	1.20	.90
SN74CBTLV3245ADWR	296-1544-2-ND	LV Octal FET Bus Switch	20-SOIC	1560.00/2,000		
SN74CBTLV3245APWR	296-9121-1-ND	LV Octal FET Bus Switch	20-TSSOP	1.50	1.20	.90
SN74CBTLV3245APWR	296-9121-2-ND	LV Octal FET Bus Switch	20-TSSOP	1560.00/2,000		
SN74CBTLV3251DBQR	296-9126-1-ND	LV 1-of-8 FET Mux/Demux	16-SOP	1.63	1.30	.98
SN74CBTLV3251DBQR	296-9126-2-ND	LV 1-of-8 FET Mux/Demux	16-SOP	2080.00/2,500		
SN74CBTLV3251DGVR	296-9127-1-ND	LV 1-of-8 FET Mux/Demux	16-TVSOP	1.63	1.30	.98
SN74CBTLV3251DGVR	296-9127-2-ND	LV 1-of-8 FET Mux/Demux	16-TVSOP	1690.00/2,000		
SN74CBTLV3251DR	296-9128-1-ND	LV 1-of-8 FET Mux/Demux	16-SOP	1.63	1.30	.98
SN74CBTLV3251DR	296-9128-2-ND	LV 1-of-8 FET Mux/Demux	16-SOP	2080.00/2,500		
SN74CBTLV3251PWR	296-9129-1-ND	LV 1-of-8 FET Mux/Demux	16-TSSOP	1.63	1.30	.98
SN74CBTLV3251PWR	296-9129-2-ND	LV 1-of-8 FET Mux/Demux	16-TSSOP	1690.00/2,000		
SN74CBTLV3253DBQR	296-9130-1-ND	LV Dual 1-of-4 FET Mux/Demux	16-SOP	1.63	1.30	.98
SN74CBTLV3253DBQR	296-9130-2-ND	LV Dual 1-of-4 FET Mux/Demux	16-SOP	2080.00/2,500		
SN74CBTLV3253DGVR	296-9131-1-ND	LV Dual 1-of-4 FET Mux/Demux	16-TVSOP	1.63	1.30	.98
SN74CBTLV3253DGVR	296-9131-2-ND	LV Dual 1-of-4 FET Mux/Demux	16-TVSOP	1690.00/2,000		
SN74CBTLV3253DR	296-9132-1-ND	LV Dual 1-of-4 FET Mux/Demux	16-SOP	1.63	1.30	.98
SN74CBTLV3253DR	296-9132-2-ND	LV Dual 1-of-4 FET Mux/Demux	16-SOP	2080.00/2,500		
SN74CBTLV3253PWR	296-9133-1-ND	LV Dual 1-of-4 FET Mux/Demux	16-TSSOP	1.63	1.30	.98
SN74CBTLV3253PWR	296-9133-2-ND	LV Dual 1-of-4 FET Mux/Demux	16-TSSOP	1690.00/2,000		
SN74CBTLV3257D	296-9134-5-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-SOP	1.63	1.30	.98
SN74CBTLV3257DBQR	296-9135-1-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-SOP	1.63	1.30	.98
SN74CBTLV3257DBQR	296-9135-2-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-SOP	2080.00/2,500		
SN74CBTLV3257DGVR	296-9136-1-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-TVSOP	1.63	1.30	.98
SN74CBTLV3257DGVR	296-9136-2-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-TVSOP	1690.00/2,000		
SN74CBTLV3257DR	296-9137-1-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-SOP	1.63	1.30	.98
SN74CBTLV3257DR	296-9137-2-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-SOP	2080.00/2,500		
SN74CBTLV3257PWR	296-9138-1-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-TSSOP	1.63	1.30	.98
SN74CBTLV3257PWR	296-9138-2-ND	LV 4-Bit, 1-of-2 FET Mux/Demux	16-TSSOP	1690.00/2,000		
SN74CBTLV3383DBQR	296-9139-1-ND	LV 10-Bit, FET Bus-Exchange Switch	24-SOP	1.50	1.20	.90
SN74CBTLV3383DBQR	296-9139-2-ND	LV 10-Bit, FET Bus-Exchange Switch	24-SOP	1920.00/2,500		
SN74CBTLV3383DGVR	296-9140-1-ND	LV 10-Bit, FET Bus-Exchange Switch	24-TVSOP	1.50	1.20	.90
SN74CBTLV3383DGVR	296-9140-2-ND	LV 10-Bit, FET Bus-Exchange Switch	24-TVSOP	1560.00/2,000		
SN74CBTLV3383DW	296-1545-5-ND	LV 10-Bit, FET Bus-Exchange Switch	24-SOIC	1.50	1.20	.90
SN74CBTLV3383DWR	296-1545-1-ND	LV 10-Bit, FET Bus-Exchange Switch	24-SOIC	1.50	1.20	.90
SN74CBTLV3383DWR	296-1545-2-ND	LV 10-Bit, FET Bus-Exch. Switch	24-SOIC	1560.00/2,000		
SN74CBTLV3383PWR	296-9141-1-ND	LV 10-Bit, FET Bus-Exchange Switch	24-TSSOP	1.50	1.20	.90
SN74CBTLV3383PWR	296-9141-2-ND	LV 10-Bit, FET Bus-Exchange Switch	24-TSSOP	1560.00/2,000		
SN74CBTLV3384DBQR	296-9142-1-ND	LV 10-Bit, FET Bus Switch	24-SOP	1.50	1.20	.90
SN74CBTLV3384DBQR	296-9142-2-ND	LV 10-Bit, FET Bus Switch	24-SOP	1920.00/2,500		
SN74CBTLV3384DGVR	296-9143-1-ND	LV 10-Bit, FET Bus Switch	24-TVSOP	1.50	1.20	.90
SN74CBTLV3384DGVR	296-9143-2-ND	LV 10-Bit, FET Bus Switch	24-TVSOP	1560.00/2,000		
SN74CBTLV3384DW	296-1546-5-ND	LV 10-Bit, FET Bus Switch	24-SOIC	1.50	1.20	.90
SN74CBTLV3384DWR	296-1546-1-ND	LV 10-Bit, FET Bus Switch	24-SOIC	1.50	1.20	.90
SN74CBTLV3384DWR	296-1546-2-ND	LV 10-Bit, FET Bus Switch	24-SOIC	1560.00/2,000		
SN74CBTLV3384PWR	296-9144-1-ND	LV 10-Bit, FET Bus Switch	24-TSSOP	1.50	1.20	.90
SN74CBTLV3384PWR	296-9144-2-ND	LV 10-Bit, FET Bus Switch	24-TSSOP	1560.00/2,000		
SN74CBTLV3857DBQR	296-9145-1-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-SOP	1.63	1.30	.98
SN74CBTLV3857DBQR	296-9145-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-SOP	2080.00/2,500		
SN74CBTLV3857DGVR	296-9146-1-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-TVSOP	1.63	1.30	.98
SN74CBTLV3857DGVR	296-9146-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-TVSOP	1690.00/2,000		
SN74CBTLV3857DW	296-9147-5-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-SOP	1.63	1.30	.98
SN74CBTLV3857DWR	296-9147-1-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-SOP	1.63	1.30	.98
SN74CBTLV3857DWR	296-9147-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-SOP	1690.00/2,000		
SN74CBTLV3857PWR	296-9148-1-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-TSSOP	1.63	1.30	.98
SN74CBTLV3857PWR	296-9148-2-ND	LV 10-Bit, FET Bus Switch with Internal Pulldown Resistor	24-TSSOP	1690.00/2,000		
SN74CBTLV3861DBQR	296-9149-1-ND	LV 10-Bit, FET Bus Switch	24-SOP	1.63	1.30	.98
SN74CBTLV3861DBQR	296-9149-2-ND	LV 10-Bit, FET Bus Switch	24-SOP	2080.00/2,500		
SN74CBTLV3861DGVR	296-9150-1-ND	LV 10-Bit, FET Bus Switch	24-TVSOP	1.63	1.30	.98
SN74CBTLV3861DGVR	296-9150-2-ND	LV 10-Bit, FET Bus Switch	24-TVSOP	1690.00/2,000		
SN74CBTLV3861DWR	296-9151-1-ND	LV 10-Bit, FET Bus Switch	24-SOP	1.63	1.30	.98
SN74CBTLV3861DWR	296-9151-2-ND	LV 10-Bit, FET Bus Switch	24-SOP	1690.00/2,000		
SN74CBTLV3861DGVR	296-9152-1-ND	LV 10-Bit, FET Bus Switch	24-TVSOP	1.63	1.30	.98
SN74CBTLV3861DGVR	296-9152-2-ND	LV 10-Bit, FET Bus Switch	24-TVSOP	1690.00/2,000		
SN74CBTLV3861PWR	296-9153-1-ND	LV 10-Bit, FET Bus Switch	24-TSSOP	1.63	1.30	.98
SN74CBTLV3861PWR	296-9153-2-ND	LV 10-Bit, FET Bus Switch	24-TSSOP	1690.00/2,000		
SN74CBTLV16210DLR	296-6496-1-ND	LV 20-Bit, FET Bus Switch	48-SSOP	3.38	2.70	2.10
SN74CBTLV16210DLR	296-6496-2-ND	LV 20-Bit, FET Bus Switch	48-SSOP	1913.00/1,000		
SN74CBTLV16210GR	296-6497-1-ND	LV 20-Bit, FET Bus Switch	48-TSSOP	3.38	2.70	2.10
SN74CBTLV16210GR	296-6497-2-ND	LV 20-Bit, FET Bus Switch	48-TSSOP	3826.00/2,000		
SN74CBTLV16210VR	296-6498-1-ND	LV 20-Bit, FET Bus Switch	48-TVSOP	3.38	2.70	2.10
SN74CBTLV16210VR	296-6498-2-ND	LV 20-Bit, FET Bus Switch	48-TVSOP	3826.00/2,000		
SN74CBTLV16211DLR	296-6499-1-ND	LV 24-Bit, FET Bus Switch	48-SSOP	3.38	2.70	2.10
SN74CBTLV16211DLR	296-6499-2-ND	LV 24-Bit, FET Bus Switch	48-SSOP	1913.00/1,000		
SN74CBTLV16211GR	296-6500-1-ND	LV 24-Bit, FET Bus Switch	48-TSSOP	3.38	2.70	2.10
SN74CBTLV16211GR	296-6500-2-ND	LV 24-Bit, FET Bus Switch	48-TSSOP	3826.00/2,000		
SN74CBTLV16211VR	296-9100-1-ND	LV 24-Bit, FET Bus Switch	48-TVSOP	3.38	2.70	2.10
SN74CBTLV16211VR	296-9100-2-ND	LV 24-Bit, FET Bus Switch	48-TVSOP	3826.00/2,000		
SN74CBTLV16212DLR	296-9101-1-ND	LV 24-Bit, FET Bus-Exchange Switch	56-SSOP	3.38	2.70	2.10
SN74CBTLV16212DLR	296-9101-2-ND	LV 24-Bit, FET Bus-Exchange Switch	56-SSOP	1913.00/1,000		
SN74CBTLV16212GR	296-9102-1-ND	LV 24-Bit, FET Bus-Exchange Switch	56-TSSOP	3.38	2.70	2.10
SN74CBTLV16212GR	296-9102-2-ND	LV 24-Bit, FET Bus-Exchange Switch	56-TSSOP	3826.00/2,000		
SN74CBTLV16212VR	296-9103-1-ND	LV 24-Bit, FET Bus-Exchange Switch	56-TVSOP	3.38	2.70	2.10
SN74CBTLV16212VR	296-9103-2-ND	LV 24-Bit, FET Bus-Exchange Switch	56-TVSOP	3826.00/2,000		
SN74CBTLV16292DLR	296-9104-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux	56-SSOP	3.15	2.52	1.96
SN74CBTLV16292DLR	296-9104-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux	56-SSOP	1785.00/1,000		
SN74CBTLV16292GR	296-9105-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	3.15	2.52	1.96
SN74CBTLV16292GR	296-9105-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux	56-TSSOP	3570.00/2,000		
SN74CBTLV16800DLR	296-9106-1-ND	LV 20-Bit, 1-of-2 FET Mux/Demux	48-SSOP	3.26	2.61	2.03
SN74CBTLV16800DLR	296-9106-2-ND	LV 20-Bit, 1-of-2 FET Mux/Demux	48-SSOP	1849.00/1,000		
SN74CBTLV16800GR	296-9107-1-ND	LV 20-Bit, 1-of-2 FET Mux/Demux	48-TSSOP	3.26	2.61	2.03
SN74CBTLV16800GR	296-9107-2-ND	LV 20-Bit, 1-of-2 FET Mux/Demux	48-TSSOP	3698.00/2,000		
SN74CBTLV16800VR	296-9108-1-ND	LV 20-Bit, 1-of-2 FET Mux/Demux	48-TVSOP	3.26	2.61	2.03
SN74CBTLV16800VR	296-9108-2-ND	LV 20-Bit, 1-of-2 FET Mux/Demux	48-TVSOP	3698.00/2,000		
SN74CBTLVR16292GR	296-9154-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	3.15	2.52	1.96
SN74CBTLVR16292GR	296-9154-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TSSOP	3570.00/2,000		
SN74CBTLVR16292LR	296-9155-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	3.15	2.52	1.96
SN74CBTLVR16292LR	296-9155-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-SSOP	1785.00/1,000		
SN74CBTLVR16292VR	296-9156-1-ND	LV 12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TVSOP	3.15	2.52	1.96
SN74CBTLVR16292VR	296-9156-2-ND	LV 12-Bit, 1-of-2 FET Mux/Demux with Internal Pulldown Resistor	56-TVSOP	3570.00/2,000		
SN74CBTR16861DGGR	296-12336-1-ND	20-Bit, FET Bus Switch	48-TSSOP	2.48	1.98	1.54
SN74CBTR16861DGGR	296-12336-2-ND	20-Bit, FET Bus Switch	48-TSSOP	2806.00/2,000		
SN74CBTR16861DLR	296-12337-1-ND	20-Bit, FET Bus Switch	48-SSOP	2.48	1.98	1.54
SN74CBTR16861DLR	296-12337-2-ND	20-Bit, FET Bus Switch	48-SSOP	1403.00/1,000		
SN74CBTS3306DR	296-9157-1-ND	Dual FET Bus Switch with Schottky Diode Clamping	8-SOP	1.41	1.18	.94
SN74CBTS3306DR	296-9157-2-ND	Dual FET Bus Switch with Schottky Diode Clamping	8-SOP	1527.50/2,500		
SN74CBTS3306PWR	296-9158-1-ND	Dual FET Bus Switch with Schottky Diode Clamping	8-TSSOP	1.35	1.13	.90
SN74CBTS3306PWR	296-9158-2-ND	Dual FET Bus Switch with Schottky Diode Clamping	8-TSSOP	1198.00/2,000		
SN74CBTS3384DBQR	296-9159-1-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping	24-SOP	2.00	1.60	1.20
SN74CBTS3384DBQR	296-9159-2-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping	24-SOP	2560.00/2,500		
SN74CBTS3384DBR	296-9160-1-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping	24-SSOP	1.75	1.40	1.05
SN74CBTS3384DBR	296-9160-2-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping	24-SSOP	1820.00/2,000		
SN74CBTS3384DW	296-9161-5-ND	10-Bit, FET Bus Switch with Schottky Diode Clamping	24-SOP	1.75	1.40	1.05
SN74CBTS3384PWR	296-9162-1-ND	10-Bit, FET Bus Switch withSchottky Diode Clamping	24-TSSOP	1.75	1.40	1.05
SN74CBTS3384PWR	296-9162-2-ND	10-Bit, FET Bus Switch withSchottky Diode Clamping	24-TSSOP	1820.00/2,000		
SN74CBTS6800DBQR	296-9163-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-SOP	1.63	1.30	.98
SN74CBTS6800DBQR	296-9163-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-SOP	2080.00/2,500		
SN74CBTS6800DGVR	296-9164-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-TVSOP	1.63	1.30	.98
SN74CBTS6800DGVR	296-9164-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-TVSOP	1690.00/2,000		
SN74CBTS6800DWR	296-9165-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-SOP	1.63	1.30	.98
SN74CBTS6800DWR	296-9165-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-SOP	1690.00/2,000		

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74CBTS6800PWR	296-9166-1-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-TSSOP	1.63	1.30	.98
SN74CBTS6800PWR	296-9166-2-ND	10-Bit, FET Bus Switch w/Precharged Out/Schottky Clamping Diode	24-TSSOP	1690.00/2,000		
SN74CBTS16211DGGR	296-1174-1-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3.38	2.70	2.10
SN74CBTS16211DGGR	296-1174-2-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3826.00/2,000		
SN74CBTS16211DL	296-1547-5-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-SSOP	3.38	2.70	2.10
SN74CBTS16212DGGR	296-1175-1-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3.38	2.70	2.10
SN74CBTS16212DGGR	296-1175-2-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-TSSOP	3826.00/2,000		
SN74CBTS16212DL	296-1548-5-ND	24-Bit, FET Bus Switch with Schottky Diode Clamp	56-SSOP	3.38	2.70	2.10

74F Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74F04D	296-1177-5-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74F04DR	296-1177-1-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74F04DR	296-1177-2-ND	Hex Inverter	14-SOIC	422.50/2,500		
SN74F08D	296-1178-5-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74F32D	296-1182-5-ND	Quad 2-Input OR Gate	14-SOIC	.68	.51	.39
SN74F74D	296-1183-5-ND	Dual D-Type Flip-Flop	14-SOIC	.52	.39	.30
SN74F74DR	296-1183-1-ND	Dual D-Type Flip-Flop	14-SOIC	.52	.39	.30
SN74F74DR	296-1183-2-ND	Dual D-Type Flip-Flop	14-SOIC	422.50/2,500		
SN74F74N	296-1558-5-ND	Dual D-Type Flip-Flop	14-Dip	.52	.39	.30
SN74F86N	296-3602-5-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.52	.39	.30
SN74F125D	296-1179-5-ND	Tri-State Quad Bus Buffer	14-SOIC	.48	.40	.32
SN74F125DR	296-1179-1-ND	Tri-State Quad Bus Buffer	14-SOIC	.64	.48	.36
SN74F125DR	296-1179-2-ND	Tri-State Quad Bus Buffer	14-SOIC	520.00/2,500		
SN74F138D	296-3551-5-ND	3-8 Line Decoder/Multiplexer	16-SOP	.64	.48	.36
SN74F138N	296-3552-5-ND	3-8 Line Decoder/Multiplexer	16-Dip	.64	.48	.36
SN74F157AN	296-1552-5-ND	Quad 2:1 Data Selector/Multiplexer	16-Dip	.76	.57	.43
SN74F244DWR	296-1180-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.76	.57	.43
SN74F244DWR	296-1180-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	506.00/2,000		
SN74F244N	296-1553-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.76	.57	.43
SN74F245DW	296-1181-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74F245DWR	296-1181-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74F245DWR	296-1181-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	506.00/2,000		
SN74F245N	296-3572-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.76	.57	.43
SN74F257D	296-1555-5-ND	Tri-State Quad 2-1 Data Select/Mux	16-SOIC	.78	.65	.52
SN74F374N	296-3588-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.76	.57	.43
SN74FB1650PCA	296-3603-ND	18-Bit TTL/BTL Universal Storage Transceiver	100-HLQFP	15.15	14.14	13.13
SN74FB1651PCA	296-3604-ND	17-Bit TTL/BTL Univ. Storage Xcvr.	100-HLQFP	15.15	14.14	13.13
SN74FB1653PCC	296-1559-5-ND	17-Bit Universal Storage Transceiver	100-HLQ	15.83	14.25	12.64
SN74FB2031RC	296-1560-5-ND	9-Bit Address/Data Transceiver	52-QFP	8.91	8.03	7.12
SN74FB2033ARC	296-1561-5-ND	8-Bit Transceiver	52-QFP	9.16	8.25	7.32
SN74FB2033KRC	296-3605-ND	8-Bit TTL/BTL Registered Transceiver	52-QFP	10.33	9.30	8.25
SN74FB2040RC	296-3606-ND	8-Bit TTL/BTL Transceiver	52-QFP	9.58	8.63	7.65
SN74FB2041ARC	296-3607-ND	7-Bit TTL/BTL Transceiver	52-QFP	9.58	8.63	7.65

FCT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD74FCT244M	296-9413-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	2.99	2.40	1.87
CD74FCT245E	296-9414-5-ND	Tri-State Octal Bus Transceiver	20-Dip	3.35	2.69	2.09
CD74FCT245M	296-9415-5-ND	Tri-State Octal Bus Transceiver	20-SOP	3.17	2.54	1.98
CD74FCT374M	296-9416-5-ND	Tri-State D-Type Flip-Flop	20-SOP	2.99	2.40	1.87
CD74FCT623M	296-9419-5-ND	Tri-State Octal Bus Transceiver	20-SOP	4.30	3.44	2.68
CD74FCT843AM	296-9420-5-ND	Tri-State D-Type Latch	20-SOP	4.19	3.35	2.61
CY74FCT157CTQCT	296-12272-5-ND	Tri-St. Quad 2-In Multiplexer *NEW!*	16-SSOP	1.41	1.18	.94
CY74FCT157CTSOC	296-9438-5-ND	Quad 2-Input Multiplexer	16-SOP	1.41	1.18	.94
CY74FCT244TSOC	296-9440-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.35	1.13	.90
CY74FCT245TQCT	296-9441-5-ND	Tri-State Octal Bus Transceiver	20-SSOP	1.35	1.13	.90
CY74FCT374TQCT	296-9442-1-ND	Tri-State D-Type Flip-Flop	20-SOP	1.35	1.13	.90
CY74FCT374TQCT	296-9442-2-ND	Tri-State D-Type Flip-Flop	20-SOP	1462.50/2,500		
CY74FCT541CTSOCT	296-12274-5-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOIC	1.35	1.13	.90
CY74FCT2245TSOC	296-9439-5-ND	Tri-State Octal Bus Transceiver	20-SOP	1.35	1.13	.90
CY74FCT827ATSOC	296-9443-5-ND	Tri-State Octal Buffer/Line Driver	24-SOP	1.47	1.23	.98
CY74FCT16374TPVC	296-12273-5-ND	Tri-St. 16-Bit D-Type Flip-Flop *NEW!*	48-SSOP	2.63	2.11	1.64
CY74FCT162245CTPVC	296-12551-5-ND	Tri-St. 16-Bit Bus Transceiver *NEW!*	48-SSOP	2.41	1.93	1.50

Future Bus Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74FB1653PCA	296-1559-5-ND	17-Bit Universal Storage Transceiver	100-HLQFP	15.83	14.25	12.64
SN74FB2031RC	296-1560-5-ND	9-Bit Address/Data Transceiver	52-QFP	8.91	8.03	7.12
SN74FB2033ARC	296-1561-5-ND	8-Bit Transceiver	52-QFP	9.16	8.25	7.32

GTL Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74GTL1655DGGR	296-1184-1-ND	16-Bit Universal Bus Transceiver	64-TSSOP	10.33	9.30	8.25
SN74GTL1655DGGR	296-1184-2-ND	16-Bit Universal Bus Transceiver	64-TSSOP	15314.00/2,000		
SN74GTL16612DGGR	296-9808-1-ND	18-Bit Universal Bus Transceiver	56-TSSOP	7.00	5.60	4.73
SN74GTL16612DGGR	296-9808-2-ND	18-Bit Universal Bus Transceiver	56-TSSOP	8750.00/2,000		
SN74GTL16612DL	296-9809-5-ND	18-Bit Universal Bus Transceiver	56-SSOP	7.00	5.60	4.73
SN74GTL16616DGGR	296-1185-1-ND	17-Bit Universal Bus Transceiver	56-TSSOP	9.70	7.76	6.55
SN74GTL16616DGGR	296-1185-2-ND	17-Bit Universal Bus Transceiver	56-TSSOP	12126.00/2,000		
SN74GTL16616DLR	296-9810-1-ND	17-Bit Universal Bus Transceiver	56-SSOP	9.74	7.80	6.58
SN74GTL16616DLR	296-9810-2-ND	17-Bit Universal Bus Transceiver	56-SSOP	6088.00/1,000		
SN74GTL16622ADGGR	296-1186-1-ND	18-Bit Bus Transceiver	64-TSSOP	9.08	8.18	7.25
SN74GTL16622ADGGR	296-1186-2-ND	18-Bit Bus Transceiver	64-TSSOP	13462.00/2,000		
SN74GTL16923DGGR	296-9811-1-ND	18-Bit Universal Bus Transceiver	64-TSSOP	9.16	8.25	7.32
SN74GTL16923DGGR	296-9811-2-ND	18-Bit Universal Bus Transceiver	64-TSSOP	13586.00/2,000		

GTLP Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74GTLP817DWR	296-12338-1-ND	GTLP-to-LVTTL 1-to-6 Fanout Driver	24-SOIC	3.94	3.15	2.45
SN74GTLP817DWR	296-12338-2-ND	GTLP-to-LVTTL 1-to-6 Fanout Driver	24-SOIC	4462.00/2,000		
SN74GTLP817PWR	296-12339-1-ND	GTLP-to-LVTTL 1-to-6 Fanout Driver	24-TSSOP	3.94	3.15	2.45
SN74GTLP817PWR	296-12339-2-ND	GTLP-to-LVTTL 1-to-6 Fanout Driver	24-TSSOP	4462.00/2,000		
SN74GTLP1394DGVR	296-9812-1-ND	2-Bit Bus Transceiver	16-TVSOP	4.39	3.51	2.73
SN74GTLP1394DGVR	296-9812-2-ND	2-Bit Bus Transceiver	16-TVSOP	4972.00/2,000		
SN74GTLP1394DR	296-9813-1-ND	2-Bit Bus Transceiver	16-SOP	4.39	3.51	2.73
SN74GTLP1394DR	296-9813-2-ND	2-Bit Bus Transceiver	16-SOP	6142.50/2,500		
SN74GTLP1394PWR	296-9814-1-ND	2-Bit Bus Transceiver	16-TSSOP	4.39	3.51	2.73
SN74GTLP1394PWR	296-9814-2-ND	2-Bit Bus Transceiver	16-TSSOP	4972.00/2,000		
SN74GTLP1395DGVR	296-12465-1-ND	1-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	20-TVSOP	2.81	2.25	1.75
SN74GTLP1395DGVR	296-12465-2-ND	1-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	20-TVSOP	3188.00/2,000		
SN74GTLP1395DWR	296-12466-1-ND	1-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	20-SOIC	2.81	2.25	1.75
SN74GTLP1395DWR	296-12466-2-ND	1-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	20-SOIC	3188.00/2,000		
SN74GRLP1395PWR	296-12467-1-ND	1-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	20-TSSOP	2.81	2.25	1.75
SN74GRLP1395PWR	296-12467-2-ND	1-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	20-TSSOP	3188.00/2,000		
SN74GTLP2033DGGR	296-12468-1-ND	8-Bit LVTTL-to-GTLP Registered Transceiver *NEW!*	48-TSSOP	5.50	4.40	3.72
SN74GTLP2033DGGR	296-12468-2-ND	8-Bit LVTTL-to-GTLP Registered Transceiver *NEW!*	48-TSSOP	6876.00/2,000		
SN74GTLP2033DGVR	296-12469-1-ND	8-Bit LVTTL-to-GTLP Registered Transceiver *NEW!*	48-TVSOP	5.50	4.40	3.72
SN74GTLP2033DGVR	296-12469-2-ND	8-Bit LVTTL-to-GTLP Registered Transceiver *NEW!*	48-TVSOP	6876.00/2,000		

GTLPH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74GTLPH306DWR	296-12341-1-ND	8-Bit LVTTL-to-GTLP Bus Xcvr.	24-SOIC	4.95	3.96	3.08
SN74GTLPH306DWR	296-12341-2-ND	8-Bit LVTTL-to-GTLP Bus Xcvr.	24-SOIC	5610.00/2,000		
SN74GTLPH1616DGGR	296-11932-1-ND	17-Bit Universal Bus Transceiver	64-TSSOP	8.50	6.80	5.74
SN74GTLPH1616DGGR	296-11932-2-ND	17-Bit Universal Bus Transceiver	64-TSSOP	10626.00/2,000		
SN74GTLPH1645DGGR	296-12470-1-ND	16-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	56-TSSOP	3.94	3.15	2.45
SN74GTLPH1645DGGR	296-12470-2-ND	16-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	56-TSSOP	4462.00/2,000		
SN74GTLPH1645DGVR	296-12471-1-ND	16-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	56-TVSOP	3.94	3.15	2.45
SN74GTLPH1645DGVR	296-12471-2-ND	16-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	56-TVSOP	4462.00/2,000		
SN74GTLPH1655DGGR	296-12340-1-ND	16-Bit LVTTL-to-GTLP Adj-Edge-Rate Universal Bus Transceiver	64-TSSOP	8.50	6.80	5.74
SN74GTLPH1655DGGR	296-12340-2-ND	16-Bit LVTTL-to-GTLP Adj-Edge-Rate Universal Bus Transceiver	64-TSSOP	10626.00/2,000		
SN74GTLPH16612DLR	296-9815-1-ND	18-Bit Universal Bus Transceiver	56-SSOP	6.60	5.28	4.46
SN74GTLPH16612DLR	296-9815-2-ND	18-Bit Universal Bus Transceiver	56-SSOP	4125.00/1,000		
SN74GTLPH16612GR	296-9816-1-ND	18-Bit Universal Bus Transceiver	56-TSSOP	6.60	5.28	4.46
SN74GTLPH16612GR	296-9816-2-ND	18-Bit Universal Bus Transceiver	56-TSSOP	8250.00/2,000		
SN74GTLPH16912VR	296-12256-1-ND	18-Bit LVTTL-GTLP UBT *NEW!*	56-TVSOP	7.00	5.60	4.73
SN74GTLPH16912VR	296-12256-2-ND	18-Bit LVTTL-GTLP UBT *NEW!*	56-TVSOP	8750.00/2,000		
SN74GTLPH32945KR	296-12472-1-ND	32-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	96-LFBGA	5.06	4.05	3.15
SN74GTLPH32945KR	296-12472-2-ND	32-Bit LVTTL-GTLP Bus Xcvr. *NEW!*	96-LFBGA	2869.00/1,000		

HC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD74HC00M	296-9167-5-ND	Quad 2-Input NAND Gate	14-SOP	.56	.42	.32
CD74HC08M	296-9169-5-ND	Quad 2-Input AND Gate	14-SOP	.56	.42	.32
CD74HC11M	296-9170-5-ND	Triple 3-Input AND Gate	14-SOP	.64	.48	.36
CD74HC14M	296-9179-5-ND	Hex Schmitt Trigger Inverter	14-SOP	.56	.42	.32
CD74HC14M96	296-9179-1-ND	Hex Schmitt Trigger Inverter	14-SOP	.56	.42	.32
CD74HC14M96	296-9179-2-ND	Hex Schmitt Trigger Inverter	14-SOP	455.00/2,500		
CD74HC21M	296-9186-5-ND	Dual 4-Input AND Gate	14-SOP	.68	.51	.39
CD74HC30E	296-9196-5-ND	8-Input NAND Gate	14-Dip	.56	.42	.32
CD74HC30M	296-9197-5-ND	8-Input NAND Gate	14-SOP	.56	.42	.32
CD74HC75E	296-9240-5-ND	Dual 2-Bit Bistable Transparent Latch	16-Dip	.80	.60	.45
CD74HC85M	296-9242-5-ND	4-Bit Magnitude Comparator	16-SOP	.90	.75	.60
CD74HC85M96	296-9242-1-ND	4-Bit Magnitude Comparator	16-SOP	.96	.80	.64
CD74HC85M96	296-9242-2-ND	4-Bit Magnitude Comparator	16-SOP	1040.00/2,500		
CD74HC93M96	296-9243-1-ND	4-Bit Binary Ripple Counter	14-SOP	.93	.78	.62
CD74HC93M96	296-9243-2-ND	4-Bit Binary Ripple Counter	14-SOP	1007.50/2,500		
CD74HC123E	296-9171-5-ND	Dual Retrig. Monostable Multivibrator	16-Dip	.76	.57	.43
CD74HC123M	296-9172-5-ND	Dual Retrig. Monostable Multivibrator	16-SOP	.76	.57	.43
CD74HC125M	296-9173-5-ND	Quad Tri-State Buffer	14-SOP	.76	.57	.43
CD74HC132M	296-9175-5-ND	Quad 2-In Schmitt-Trig. NAND Gate	14-SOP	.92	.69	.52
CD74HC132M96	296-9175-1-ND	Quad 2-In Schmitt-Trig. NAND Gate	14-SOP	.92	.69	.52
CD74HC132M96	296-9175-2-ND	Quad 2-In Schmitt-Trig. NAND Gate	14-SOP	747.50/2,500		
CD74HC137E	296-9176-5-ND	3-8 Line Decoder/Demultiplexer, with Address Latch	16-Dip	.80	.60	.45
CD74HC138M	296-9177-5-ND	3-8 Line Decoder/Demultiplexer, Inverting/Non-Inverting	16-SOP	.76	.57	.43
CD74HC154EN	296-9181-5-ND	4-16 Line Decoder/Demultiplexer	24-Dip	2.59	2.07	1.61
CD74HC154M	296-9182-5-ND	4-16 Line Decoder/Demultiplexer	24-SOP	2.25	1.80	1.40
CD74HC194E	296-9183-5-ND	4-Bit Bi-Directional Shift Register	16-Dip	.87	.73	.58
CD74HC194M	296-9185-5-ND	4-Bit Bi-Directional Shift Register	16-SOP	.90	.75	.60
CD74HC194M96	296-9185-1-ND	4-Bit Bi-Directional Shift Register	16-SOP	.96	.80	.64
CD74HC194M96	296-9185-2-ND	4-Bit Bi-Directional Shift Register	16-SOP	1040.00/2,500		
CD74HC221E	296-9187-5-ND	Dual Mono Multivibrator with Reset	16-Dip	.93	.78	.62
CD74HC238M	296-9188-5-ND	3-8 Line Decoder/Demux, Inverting/Non-Inverting	16-SOP	1.17	.98	.78
CD74HC243M96	296-9189-1-ND	Tri-State Quad Bus Transceiver	16-SOP	.84	.63	.48
CD74HC243M96	296-9189-2-ND	Tri-State Quad Bus Transceiver	16-SOP	682.50/2,500		
CD74HC245M	296-9421-5-ND	Tri-State Octal Bus Transceiver	20-SOP	.84	.63	.48
CD74HC258M	296-9190-5-ND	Tri-State Quad 2-In Mux, Inverting	16-SOP	.84	.70	.56
CD74HC259M	296-9192-5-ND	8-Bit Addressable Latch	16-SOP	.84	.70	.56
CD74HC259M96	296-9192-1-ND	8-Bit Addressable Latch	16-SOP	.84	.70	.56
CD74HC259M96	296-9192-2-ND	8-Bit Addressable Latch	16-SOP	910.00/2,500		
CD74HC297E	296-9193-5-ND	Digital Phase-Locked-Loop	16-Dip	1.88	1.50	1.13
CD74HC299E	296-9194-5-ND	Tri-State 8-Bit Universal Shift Register	20-Dip	1.44	1.20	.96
CD74HC299M	296-9195-5-ND	Tri-State 8-Bit Universal Shift Register	20-SOP	1.44	1.20	.96
CD74HC354E	296-9198-5-ND	Tri-State 8-Input Mux/Register	8-Dip	.99	.83	.66
CD74HC373M	296-9422-5-ND	Tri-State Octal Transp. Latches	20-SOP	.84	.63	.48
CD74HC390E	296-9199-5-ND	Dual Decade Ripple Counter	16-Dip	.78	.65	.52
CD74HC423E	296-9229-5-ND	Dual Retrig. Monostable Multivibrator with Reset	16-Dip	.87	.73	.58
CD74HC646M	296-9235-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	3.51	2.81	2.19
CD74HC4016E	296-9204-5-ND	Quad Bilateral Switch	14-Dip	.96	.80	.64
CD74HC4016M96	296-9205-1-ND	Quad Bilateral Switch	14-SOP	.96	.80	.64
CD74HC4016M96	296-9205-2-ND	Quad Bilateral Switch	14-SOP	1040.00/2,500		
CD74HC4017PWR	296-9423-1-ND	H.S. Decade Counter/Divider	16-TSSOP	1.05	.88	.70
CD74HC4017PWR	296-9423-2-ND	H.S. Decade Counter/Divider	16-TSSOP	932.00/2,000		
CD74HC4024E	296-9206-5-ND	7-Stage Binary Ripple Counter	14-Dip	.78	.65	.52
CD74HC4024M	296-9207-5-ND	7-Stage Binary Ripple Counter	14-SOP	.78	.65	.52
CD74HC4046AE	296-9208-5-ND	Phase-Locked-Loop with VCO	16-Dip	1.05	.88	.70
CD74HC4046AM	296-9209-5-ND	Phase-Locked-Loop with VCO	16-SOP	1.05	.88	.70
CD74HC4046APWR	296-9210-1-ND	Phase-Locked-Loop with VCO	16-TSSOP	1.05	.88	.70
CD74HC4046APWR	296-9210-2-ND	Phase-Locked-Loop with VCO	16-TSSOP	932.00/2,000		
CD74HC4049E	296-9211-5-ND	Hex Inverting Buffer	16-Dip	.84	.70	.56
CD74HC4049M	296-9212-5-ND	Hex Inverting Buffer	16-SOP	.87	.73	.58
CD74HC4050E	296-9213-5-ND	Hex Non-Inverting Buffer	16-Dip	.84	.70	.56
CD74HC4050M	296-9214-5-ND	Hex Non-Inverting Buffer	16-SOP	.87	.73	.58
CD74HC4050PWR	296-9215-1-ND	Hex Non-Inverting Buffer	16-TSSOP	.96	.80	.64
CD74HC4050PWR	296-9215-2-ND	Hex Non-Inverting Buffer	16-TSSOP	852.00/2,000		
CD74HC4051M	296-9216-5-ND	8-Channel Analog Mux/Demux	16-SOP	.78	.65	.52
CD74HC4052E	296-9217-5-ND	Dual 4-Channel Analog Mux/Demux	16-Dip	.78	.65	.52
CD74HC4052M	296-9218-5-ND	Dual 4-Channel Analog Mux/Demux	16-SOP	.78	.65	.52

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD74HC4053E	296-9219-5-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.78	.65	.52
CD74HC4053M	296-9220-5-ND	Triple 2-Channel Analog Mux/Demux	16-SOP	.78	.65	.52
CD74HC4053PWR	296-12111-1-ND	Triple 2-Channel Analog Mux/Demux	16-TSSOP	1.29	1.08	.86
CD74HC4053PWR	296-12111-2-ND	Triple 2-Channel Analog Mux/Demux	16-TSSOP	1144.00/2,000		
CD74HC4059M96	296-9221-1-ND	CMOS Programmable Divide-by-N Counter	24-SOP	2.48	1.98	1.49
CD74HC4059M96	296-9221-2-ND	CMOS Programmable Divide-by-N Counter	24-SOP	2574.00/2,000		
CD74HC4060M	296-9222-5-ND	14-Stage Binary Counter with Oscillator	16-SOP	1.04	.78	.59
CD74HC4066M	296-9224-5-ND	Quad Bilateral Switch	14-SOP	.78	.65	.52
CD74HC4066M96	296-9224-1-ND	Quad Bilateral Switch	14-SOP	.78	.65	.52
CD74HC4060M96	296-9224-2-ND	Quad Bilateral Switch	14-SOP	845.00/2,500		
CD74HC4067M	296-9225-5-ND	16-Channel Analog Mux/Demux	24-SOP	2.25	1.80	1.35
CD74HC4067SM96	296-9226-1-ND	16-Channel Analog Mux/Demux	24-SSOP	2.25	1.80	1.35
CD74HC4067SM96	296-9226-2-ND	16-Channel Analog Mux/Demux	24-SSOP	2340.00/2,000		
CD74HC4075M	296-9227-5-ND	Triple 3-Input OR Gate	14-SOP	.80	.60	.45
CD74HC4075PWR	296-9228-1-ND	Triple 3-Input OR Gate	14-TSSOP	.80	.60	.45
CD74HC4075PWR	296-9228-2-ND	Triple 3-Input OR Gate	14-TSSOP	532.00/2,000		
CD74HC4316M	296-9230-5-ND	Quad Analog Switch w/Level Translation	16-SOP	1.02	.85	.68
CD74HC4351E	296-9231-5-ND	Analog Mux/Demux with Latch	20-Dip	.96	.80	.64
CD74HC4511M	296-9232-5-ND	BCD-to-7 Segment Latch/Decoder/Driver	16-SOP	.87	.73	.58
CD74HC4515M	296-9233-5-ND	4-16 Line Decoder/Demux w/Input Latch	24-SOP	2.13	1.70	1.28
CD74HC4538M	296-9234-5-ND	Dual Retrig. Precision Monostable Multivibrator	16-SOP	.78	.65	.52
CD74HC7046AE	296-9237-5-ND	Phase-Locked Loop w/VCO/Lock Detector	16-Dip	1.93	1.54	1.16
CD74HC7046AM	296-9238-5-ND	PLL with VCO/Lock Detector	16-SOP	2.23	1.78	1.34
CD74HC7266M	296-9239-5-ND	Quad 2-Input EX-NOR Gate	14-SOP	.96	.80	.64
CD74HC40103E	296-9200-5-ND	8-Stage Synchronous Down Counter	16-Dip	1.23	1.03	.82
CD74HC40103M	296-9201-5-ND	8-Stage Synchronous Down Counter	16-SOP	1.29	1.08	.86
CD74HC40105E	296-9202-5-ND	4-Bit by 16-Word FIFO Register	16-Dip	1.29	1.08	.86
CD74HC40105M96	296-9203-1-ND	4-Bit by 16-Word FIFO Register	16-SOP	1.28	1.02	.77
CD74HC40105M96	296-9203-2-ND	4-Bit by 16-Word FIFO Register	16-SOP	1632.50/2,500		
SN74HC00D	296-1187-5-ND	Quad 2-Input NAND Gate	14-SOP	.52	.39	.30
SN74HC00DR	296-1187-1-ND	Quad 2-Input NAND Gate	14-SOP	.52	.39	.30
SN74HC00DR	296-1187-2-ND	Quad 2-Input NAND Gate	14-SOP	422.50/2,500		
SN74HC00N	296-1563-5-ND	Quad 2-Input NAND Gate	14-Dip	.52	.39	.30
SN74HC00NSR	296-8202-1-ND	Quad 2-Input NAND Gate	14-SOP	1.00	.75	.57
SN74HC00NSR	296-8202-2-ND	Quad 2-Input NAND Gate	14-SOP	666.00/2,000		
SN74HC00PWR	296-8203-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74HC00PWR	296-8203-2-ND	Quad 2-Input NAND Gate	14-TSSOP	346.00/2,000		
SN74HC02D	296-1188-5-ND	Quad 2-Input NOR Gate	14-SOIC	.56	.42	.32
SN74HC02DR	296-1188-1-ND	Quad 2-Input NOR Gate	14-SOIC	.56	.42	.32
SN74HC02DR	296-1188-2-ND	Quad 2-Input NOR Gate	14-SOIC	455.00/2,500		
SN74HC02DBR	296-8204-1-ND	Quad 2-Input NOR Gate	14-SSOP	.56	.42	.32
SN74HC02DBR	296-8204-2-ND	Quad 2-Input NOR Gate	14-SSOP	372.00/2,000		
SN74HC02N	296-1564-5-ND	Quad 2-Input NOR Gate	14-Dip	.56	.42	.32
SN74HC02NSR	296-8205-1-ND	Quad 2-Input NOR Gate	14-SOP	.80	.60	.45
SN74HC02NSR	296-8205-2-ND	Quad 2-Input NOR Gate	14-SOP	532.00/2,000		
SN74HC02PWR	296-8206-1-ND	Quad 2-Input NOR Gate	14-TSSOP	.56	.42	.32
SN74HC02PWR	296-8206-2-ND	Quad 2-Input NOR Gate	14-TSSOP	372.00/2,000		
SN74HC03D	296-9817-5-ND	Quad 2-In NAND Gate with OD Output	14-SOP	.52	.39	.30
SN74HC03N	296-8207-5-ND	Quad 2-In NAND Gate with OD Output	14-Dip	.52	.39	.30
SN74HC04D	296-1189-5-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74HC04DR	296-1189-1-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74HC04DR	296-1189-2-ND	Hex Inverter	14-SOIC	422.50/2,500		
SN74HC04N	296-1566-5-ND	Hex Inverter	14-Dip	.52	.39	.30
SN74HC04PWR	296-8208-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74HC04PWR	296-8208-2-ND	Hex Inverter	14-TSSOP	346.00/2,000		
SN74HC05D	296-1190-5-ND	Hex Inverter with OD	14-SOIC	.52	.39	.30
SN74HC05DR	296-1190-1-ND	Hex Inverter with OD	14-SOIC	.52	.39	.30
SN74HC05DR	296-1190-2-ND	Hex Inverter with OD	14-SOIC	422.50/2,500		
SN74HC05N	296-1568-5-ND	Hex Inverter with OD	14-Dip	.52	.39	.30
SN74HC08D	296-1191-5-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74HC08DR	296-1191-1-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74HC08DR	296-1191-2-ND	Quad 2-Input AND Gate	14-SOIC	422.50/2,500		
SN74HC08N	296-1570-5-ND	Quad 2-Input AND Gate	14-Dip	.52	.39	.30
SN74HC08PWR	296-8210-1-ND	Quad 2-Input AND Gate	14-TSSOP	.52	.39	.30
SN74HC08PWR	296-8210-2-ND	Quad 2-Input AND Gate	14-TSSOP	346.00/2,000		
SN74HC10D	296-8213-5-ND	Triple 3-Input NAND Gate	14-SOP	.52	.39	.30
SN74HC10N	296-8214-5-ND	Triple 3-Input NAND Gate	14-Dip	.52	.39	.30
SN74HC11D	296-8216-5-ND	Triple 3-Input AND Gate	14-SOP	.60	.45	.34
SN74HC11N	296-8217-5-ND	Triple 3-Input AND Gate	14-Dip	.60	.45	.34
SN74HC14D	296-1194-5-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30
SN74HC14DR	296-1194-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30
SN74HC14DR	296-1194-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	422.50/2,500		
SN74HC14N	296-1577-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.52	.39	.30
SN74HC14PWR	296-8234-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.52	.39	.30
SN74HC14PWR	296-8234-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	346.00/2,000		
SN74HC20DR	296-8263-1-ND	Dual 4-Input NAND Gate	14-SOP	.60	.45	.34
SN74HC20DR	296-8263-2-ND	Dual 4-Input NAND Gate	14-SOP	487.50/2,500		
SN74HC21D	296-8265-5-ND	Dual 4-Input AND Gate	14-SOP	.60	.45	.34
SN74HC21N	296-8266-5-ND	Dual 4-Input AND Gate	14-Dip	.60	.45	.34
SN74HC27D	296-8298-5-ND	Triple 3-Input NOR Gate	14-SOP	.60	.45	.34
SN74HC27NSR	296-8299-1-ND	Triple 3-Input NOR Gate	14-SOP	1.05	.88	.70
SN74HC27NSR	296-8299-2-ND	Triple 3-Input NOR Gate	14-SOP	932.00/2,000		
SN74HC32D	296-1199-5-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74HC32DR	296-1199-1-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74HC32DR	296-1199-2-ND	Quad 2-Input OR Gate	14-SOIC	422.50/2,500		
SN74HC32DBR	296-8301-1-ND	Quad 2-Input OR Gate	14-SSOP	.52	.39	.30
SN74HC32DBR	296-8301-2-ND	Quad 2-Input OR Gate	14-SSOP	346.00/2,000		
SN74HC32N	296-1589-5-ND	Quad 2-Input OR Gate	14-Dip	.52	.39	.30
SN74HC32PWR	296-8302-1-ND	Quad 2-Input OR Gate	14-TSSOP	.52	.39	.30
SN74HC32PWR	296-8302-2-ND	Quad 2-Input OR Gate	14-TSSOP	346.00/2,000		
SN74HC42D	296-8331-5-ND	4-to-10 Line Decoder (1 of 10)	16-SOP	.75	.63	.50
SN74HC42DR	296-8331-1-ND	4-to-10 Line Decoder (1 of 10)	16-SOP	.81	.68	.54
SN74HC42DR	296-8331-2-ND	4-to-10 Line Decoder (1 of 10)	16-SOP	877.50/2,500		
SN74HC42N	296-8332-5-ND	4-to-10 Line Decoder (1 of 10)	16-Dip	.75	.63	.50
SN74HC74D	296-1204-5-ND	Dual D-Type Flip-Flop	14-SOIC	.52	.39	.30
SN74HC74DR	296-1204-1-ND	Dual D-Type Flip-Flop	14-SOIC	.52	.39	.30
SN74HC74DR	296-1204-2-ND	Dual D-Type Flip-Flop	14-SOIC	422.50/2,500		
SN74HC74DBR	296-8370-1-ND	Dual D-Type Flip-Flop w/Clear & Preset	14-SSOP	.52	.39	.30

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74HC74DBR	296-8370-2-ND	Dual D-Type Flip-Flop w/Clear & Preset	14-SSOP	346.00/2,000		
SN74HC74N	296-1602-5-ND	Dual D-Type Flip-Flop	14-Dip	.52	.39	.30
SN74HC74NSR	296-8371-1-ND	Dual D-Type Flip-Flop w/Clear & Preset	14-SOP	.84	.63	.48
SN74HC74NSR	296-8371-2-ND	Dual D-Type Flip-Flop w/Clear & Preset	14-SOP	558.00/2,000		
SN74HC74PWR	296-8372-1-ND	Dual D-Type Flip-Flop with Clear and Preset	14-TSSOP	.52	.39	.30
SN74HC74PWR	296-8372-2-ND	Dual D-Type Flip-Flop with Clear and Preset	14-TSSOP	346.00/2,000		
SN74HC86D	296-8374-5-ND	Quad 2-Input EX-OR Gate	14-SOP	.52	.39	.30
SN74HC86N	296-8375-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.52	.39	.30
SN74HC86PWR	296-8376-1-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.52	.39	.30
SN74HC86PWR	296-8376-2-ND	Quad 2-Input EX-OR Gate	14-TSSOP	346.00/2,000		
SN74HC109D	296-8211-5-ND	Dual J-K Flip-Flop with Clear and Preset	16-SOP	.92	.69	.52
SN74HC109N	296-8212-5-ND	Dual J-K Flip-Flop with Clear and Preset	16-Dip	.92	.69	.52
SN74HC112D	296-8215-5-ND	Dual J-K Flip-Flop with Clear and Preset	16-SOP	.64	.48	.36
SN74HC112N	296-12121-5-ND	Dual J-K Flip-Flop with Clear and Preset *NEW!*	16-Dip	.64	.48	.36
SN74HC125D	296-1192-5-ND	Quad Bus Buffer Gate	14-SOIC	.64	.48	.36
SN74HC125DR	296-1192-1-ND	Quad Bus Buffer Gate	14-SOIC	.64	.48	.36
SN74HC125DR	296-1192-2-ND	Quad Bus Buffer Gate	14-SOIC	520.00/2,500		
SN74HC125DBR	296-8218-1-ND	Quad Tri-State Bus Buffer Gate	14-SSOP	.64	.48	.36
SN74HC125DBR	296-8218-2-ND	Quad Tri-State Bus Buffer Gate	14-SSOP	426.00/2,000		
SN74HC125N	296-1572-5-ND	Quad Bus Buffer Gate	14-Dip	.64	.48	.36
SN74HC126D	296-8219-5-ND	Quad Tri-State Bus Buffer Gate	14-SOP	.64	.48	.36
SN74HC126DBR	296-8220-1-ND	Quad Tri-State Bus Buffer Gate	14-SSOP	.64	.48	.36
SN74HC126DBR	296-8220-2-ND	Quad Tri-State Bus Buffer Gate	14-SSOP	426.00/2,000		
SN74HC126N	296-8221-5-ND	Quad Tri-State Bus Buffer Gate	14-Dip	.64	.48	.36
SN74HC126NSR	296-8222-1-ND	Quad Tri-State Bus Buffer Gate	14-SOP	1.11	.93	.74
SN74HC126NSR	296-8222-2-ND	Quad Tri-State Bus Buffer Gate	14-SOP	984.00/2,000		
SN74HC132D	296-8224-5-ND	Quad NAND Gate w/Schmitt-Trigger In	14-SOP	.64	.48	.36
SN74HC132DBR	296-8225-1-ND	Quad NAND Gate w/Schmitt-Trigger In	14-SSOP	.64	.48	.36
SN74HC132DBR	296-8225-2-ND	Quad NAND Gate w/Schmitt-Trigger In	14-SSOP	426.00/2,000		
SN74HC132N	296-1573-5-ND	Quad NAND Gate w/Schmitt-Trigger In	14-Dip	.64	.48	.36
SN74HC132PWR	296-8226-1-ND	Quad NAND Gate w/Schmitt-Trigger In	14-TSSOP	.64	.48	.36
SN74HC132PWR	296-8226-2-ND	Quad NAND Gate w/Schmitt-Trigger In	14-TSSOP	426.00/2,000		
SN74HC138D	296-1193-5-ND	3-8 Line Decoder/Demultiplexer	16-SOIC	.64	.48	.36
SN74HC138DR	296-1193-1-ND	3-8 Line Decoder/Demultiplexer	16-SOIC	.64	.48	.36
SN74HC138DR	296-1193-2-ND	3-8 Line Decoder/Demultiplexer	16-SOIC	520.00/2,500		
SN74HC138DBR	296-8227-1-ND	3-8 Line Decoder/Demultiplexer	16-SSOP	.64	.48	.36
SN74HC138DBR	296-8227-2-ND	3-8 Line Decoder/Demultiplexer	16-SSOP	426.00/2,000		
SN74HC138N	296-1575-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.64	.48	.36
SN74HC138PWR	296-8228-1-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	.64	.48	.36
SN74HC138PWR	296-8228-2-ND	3-8 Line Decoder/Demultiplexer	16-TSSOP	426.00/2,000		
SN74HC139D	296-8229-5-ND	Dual 2-4 Line Decoder/Demultiplexer	16-SOP	.64	.48	.36
SN74HC139N	296-8230-5-ND	Dual 2-4 Line Decoder/Demultiplexer	16-Dip	.64	.48	.36
SN74HC139PWR	296-8231-1-ND	Dual 2-4 Line Decoder/Demultiplexer	16-TSSOP	.64	.48	.36
SN74HC139PWR	296-8231-2-ND	Dual 2-4 Line Decoder/Demultiplexer	16-TSSOP	426.00/2,000		
SN74HC148D	296-8232-5-ND	8-3 Line Priority Encoder	16-SOP	.96	.80	.64
SN74HC148N	296-8233-5-ND	8-3 Line Priority Encoder	16-Dip	.96	.80	.64
SN74HC151D	296-8235-5-ND	8-1 Line Data Selector/Multiplexer	16-SOP	.80	.60	.45
SN74HC151N	296-8236-5-ND	8-1 Line Data Selector/Multiplexer	16-Dip	.80	.60	.45
SN74HC153D	296-8237-5-ND	Dual 4-1 Line Data Selector/Multiplexer	16-SOP	.84	.63	.48
SN74HC153N	296-8238-5-ND	Dual 4-1 Line Data Selector/Multiplexer	16-Dip	.84	.63	.48
SN74HC157D	296-8239-5-ND	Quad 2-1 Data Selector/Multiplexer	16-SOP	.80	.60	.45
SN74HC157N	296-1578-5-ND	Quad 2-1 Data Selector/Multiplexer	16-Dip	.80	.60	.45
SN74HC157NSR	296-8240-1-ND	Quad 2-1 Data Selector/Multiplexer	16-SOP	.78	.65	.52
SN74HC157NSR	296-8240-2-ND	Quad 2-1 Data Selector/Multiplexer	16-SOP	692.00/2,000		
SN74HC161D	296-8243-5-ND	4-Bit Synchronous Binary Counter	16-SOP	.84	.63	.48
SN74HC161N	296-8244-5-ND	4-Bit Synchronous Binary Counter	16-Dip	.84	.63	.48
SN74HC163D	296-8245-5-ND	4-Bit Synchronous Binary Counter	16-SOP	.84	.63	.48
SN74HC163N	296-8246-5-ND	4-Bit Synchronous Binary Counter	16-Dip	.84	.63	.48
SN74HC164D	296-8247-5-ND	8-Bit Parallel-Out Serial Shift Register	14-SOP	.84	.63	.48
SN74HC164N	296-8248-5-ND	8-Bit Parallel-Out Serial Shift Register	14-Dip	.84	.63	.48
SN74HC165D	296-8249-5-ND	8-Bit Parallel-Load Shift Register	16-SOP	.84	.63	.48
SN74HC165DR	296-8250-1-ND	8-Bit Parallel-Load Shift Register	16-SOP	.84	.63	.48
SN74HC165DR	296-8250-2-ND	8-Bit Parallel-Load Shift Register	16-SOP	682.50/2,500		
SN74HC165N	296-8251-5-ND	8-Bit Parallel-Load Shift Register	16-Dip	.84	.63	.48
SN74HC165NSR	296-8252-1-ND	8-Bit Parallel-Load Shift Register	16-SOP	1.08	.90	.72
SN74HC165NSR	296-8252-2-ND	8-Bit Parallel-Load Shift Register	16-SOP	958.00/2,000		
SN74HC165PWR	296-8253-1-ND	8-Bit Parallel-Load Shift Register	16-TSSOP	.84	.63	.48
SN74HC165PWR	296-8253-2-ND	8-Bit Parallel-Load Shift Register	16-TSSOP	558.00/2,000		
SN74HC166D	296-8254-5-ND	8-Bit Parallel-Load Shift Register	16-SOP	.84	.63	.48
SN74HC166N	296-8255-5-ND	8-Bit Parallel-Load Shift Register	16-Dip	.84	.63	.48
SN74HC174D	296-1195-5-ND	Hex D-Type Flip-Flop with Clear	16-SOIC	.84	.63	.48
SN74HC174DR	296-1195-1-ND	Hex D-Type Flip-Flop with Clear	16-SOIC	.84	.63	.48
SN74HC174DR	296-1195-2-ND	Hex D-Type Flip-Flop with Clear	16-SOIC	682.50/2,500		
SN74HC174N	296-1579-5-ND	Hex D-Type Flip-Flop with Clear	16-Dip	.84	.63	.48
SN74HC175D	296-8256-5-ND	Quad D-Type Flip-Flop with Clear	16-SOP	.84	.63	.48
SN74HC175N	296-8257-5-ND	Quad D-Type Flip-Flop with Clear	16-Dip	.84	.63	.48
SN74HC175PWR	296-8258-1-ND	Quad D-Type Flip-Flop with Clear	16-TSSOP	.84	.63	.48
SN74HC175PWR	296-8258-2-ND	Quad D-Type Flip-Flop with Clear	16-TSSOP	558.00/2,000		
SN74HC191D	296-8259-5-ND	4-Bit Synch. Up/Down Binary Counter	16-SOP	.90	.75	.60
SN74HC191N	296-8260-5-ND	4-Bit Synch. Up/Down Binary Counter	16-Dip	.90	.75	.60
SN74HC193D	296-8261-5-ND	4-Bit Synch. Up/Down Counter (Dual Clock with Clear)	16-SOP	.90	.75	.60
SN74HC193N	296-8262-5-ND	4-Bit Synch. Up/Down Counter (Dual Clock with Clear)	16-Dip	.90	.75	.60
SN74HC240DW	296-8267-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.76	.57	.43
SN74HC240N	296-1580-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.76	.57	.43
SN74HC240PWR	296-8269-1-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	.48	.38	.29
SN74HC240PWR	296-8269-2-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	506.00/2,000		
SN74HC241DW	296-8270-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.76	.57	.43
SN74HC241N	296-8271-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.76	.57	.43
SN74HC244DBR	296-8273-1-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	.76	.57	.43
SN74HC244DBR	296-8273-2-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	506.00/2,000		
SN74HC244DW	296-1196-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.76	.57	.43
SN74HC244DWR	296-1196-1-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.76	.57	.43
SN74HC244DWR	296-1196-2-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	506.00/2,000		
SN74HC244N	296-1582-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.76	.57	.43
SN74HC244NSR	296-8274-1-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.29	1.08	.86
SN74HC244NSR	296-8274-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1144.00/2,000		
SN74HC244PWR	296-8276-1-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	.76	.57	.43

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74HC244PWR	296-8276-2-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	506.00/2,000		
SN74HC245DBR	296-8277-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.76	.57	.43
SN74HC245DBR	296-8277-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	506.00/2,000		
SN74HC245DW	296-1197-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74HC245DWR	296-1197-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74HC245DWR	296-1197-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	506.00/2,000		
SN74HC245N	296-1584-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.76	.57	.43
SN74HC245NSR	296-8278-1-ND	Tri-State Octal Bus Transceiver	20-SOP	1.32	1.10	.88
SN74HC245NSR	296-8278-2-ND	Tri-State Octal Bus Transceiver	20-SOP	1170.00/2,000		
SN74HC245PWR	296-8279-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.76	.57	.43
SN74HC245PWR	296-8279-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	506.00/2,000		
SN74HC251D	296-8280-5-ND	Tri-State Data Selector/Mux	16-SOP	.84	.63	.48
SN74HC251N	296-1585-5-ND	Data Selector/Multiplexer	16-Dip	.84	.63	.48
SN74HC253D	296-8281-5-ND	Tri-St. Dual 4-1 Line Data Selector/Mux	16-SOP	.84	.63	.48
SN74HC253DBR	296-8282-1-ND	Tri-St. Dual 4-1 Line Data Selector/Mux	16-SSOP	.84	.63	.48
SN74HC253DBR	296-8282-2-ND	Tri-St. Dual 4-1 Line Data Selector/Mux	16-SSOP	558.00/2,000		
SN74HC253N	296-8283-5-ND	Tri-St. Dual 4-1 Line Data Selector/Mux	16-Dip	.84	.63	.48
SN74HC257D	296-8284-5-ND	Tri-St. Quad 2-1 Line Data Selector/Mux	16-SOP	.84	.63	.48
SN74HC257N	296-8285-5-ND	Tri-St. Quad 2-1 Line Data Selector/Mux	16-Dip	.84	.63	.48
SN74HC257NSR	296-8286-1-ND	Tri-St. Quad 2-1 Line Data Selector/Mux	16-SOP	.93	.78	.62
SN74HC257NSR	296-8286-2-ND	Tri-St. Quad 2-1 Line Data Selector/Mux	16-SOP	824.00/2,000		
SN74HC257PWR	296-8287-1-ND	Tri-State Quad 2-1 Line Data Selector/Mux	16-TSSOP	.84	.63	.48
SN74HC257PWR	296-8287-2-ND	Tri-State Quad 2-1 Line Data Selector/Mux	16-TSSOP	558.00/2,000		
SN74HC259D	296-8290-5-ND	8-Bit Addressable Latch	16-SOP	.84	.63	.48
SN74HC259N	296-8291-5-ND	8-Bit Addressable Latch	16-Dip	.84	.63	.48
SN74HC259PWR	296-8292-1-ND	8-Bit Addressable Latch	16-TSSOP	.84	.63	.48
SN74HC259PWR	296-8292-2-ND	8-Bit Addressable Latch	16-TSSOP	558.00/2,000		
SN74HC266D	296-8293-5-ND	Quad 2-Input EX-NOR Gate with Open-Drain Output	14-SOP	1.85	1.48	1.11
SN74HC266N	296-8294-5-ND	Quad 2-Input EX-NOR Gate with Open-Drain Output	14-Dip	1.85	1.48	1.11
SN74HC273DBR	296-8295-1-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	.84	.63	.48
SN74HC273DBR	296-8295-2-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	558.00/2,000		
SN74HC273DW	296-1198-5-ND	Octal D-Type Flip-Flop	20-SOIC	.84	.63	.48
SN74HC273DWR	296-1198-1-ND	Octal D-Type Flip-Flop	20-SOIC	.84	.63	.48
SN74HC273DWR	296-1198-2-ND	Octal D-Type Flip-Flop	20-SOIC	558.00/2,000		
SN74HC273N	296-1587-5-ND	Octal D-Type Flip-Flop	20-Dip	.84	.63	.48
SN74HC273NSR	296-8296-1-ND	Octal D-Type Flip-Flop with Clear	20-SOP	1.29	1.08	.86
SN74HC273NSR	296-8296-2-ND	Octal D-Type Flip-Flop with Clear	20-SOP	1144.00/2,000		
SN74HC273PWR	296-8297-1-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	.84	.63	.48
SN74HC273PWR	296-8297-2-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	558.00/2,000		
SN74HC365D	296-8303-5-ND	Tri-State Hex Buffer/Line Driver	16-SOP	.81	.68	.54
SN74HC365N	296-8304-5-ND	Tri-State Hex Buffer/Line Driver	16-Dip	.81	.68	.54
SN74HC367D	296-8305-5-ND	Tri-State Hex Buffer/Line Driver	16-SOP	.81	.68	.54
SN74HC367N	296-8306-5-ND	Tri-State Hex Buffer/Line Driver	16-Dip	.81	.68	.54
SN74HC368D	296-8307-5-ND	Tri-State Hex Buffer/Line Driver	16-SOP	.81	.68	.54
SN74HC368N	296-8308-5-ND	Tri-State Hex Buffer/Line Driver	16-Dip	.81	.68	.54
SN74HC373DBR	296-8309-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	.76	.57	.43
SN74HC373DBR	296-8309-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SSOP	506.00/2,000		
SN74HC373DW	296-1200-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.76	.57	.43
SN74HC373DWR	296-1200-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	.76	.57	.43
SN74HC373DWR	296-1200-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOIC	506.00/2,000		
SN74HC373N	296-1591-5-ND	Tri-St. Octal Transparent D-Type Latch	20-Dip	.76	.57	.43
SN74HC373NSR	296-8310-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	1.05	.88	.70
SN74HC373NSR	296-8310-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	932.00/2,000		
SN74HC373PWR	296-8311-1-ND	Tri-St. Octal Transp. D-Type Latch	20-TSSOP	.76	.57	.43
SN74HC373PWR	296-8311-2-ND	Tri-St. Octal Transp. D-Type Latch	20-TSSOP	506.00/2,000		
SN74HC374DBR	296-8312-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.76	.57	.43
SN74HC374DBR	296-8312-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	506.00/2,000		
SN74HC374DW	296-1201-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74HC374DWR	296-1201-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74HC374DWR	296-1201-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	506.00/2,000		
SN74HC374N	296-1592-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.76	.57	.43
SN74HC374NSR	296-8313-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	1.05	.88	.70
SN74HC374NSR	296-8313-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	932.00/2,000		
SN74HC374PWR	296-8314-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.76	.57	.43
SN74HC374PWR	296-8314-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	506.00/2,000		
SN74HC377DW	296-9818-5-ND	Octal D-Type Flip-Flop with Clock Enable	20-SOP	.96	.80	.64
SN74HC377DWR	296-9818-1-ND	Octal D-Type Flip-Flop with Clock Enable	20-SOP	.96	.80	.64
SN74HC377DWR	296-9818-2-ND	Octal D-Type Flip-Flop with Clock Enable	20-SOP	852.00/2,000		
SN74HC377N	296-8316-5-ND	Octal D-Type Flip-Flop with Clock Enable	20-Dip	.96	.80	.64
SN74HC393D	296-8317-5-ND	Dual 4-Bit Binary Counter	14-SOP	.84	.63	.48
SN74HC393DBR	296-8318-1-ND	Dual 4-Bit Binary Counter	14-SSOP	.84	.63	.48
SN74HC393DBR	296-8318-2-ND	Dual 4-Bit Binary Counter	14-SSOP	558.00/2,000		
SN74HC393N	296-8319-5-ND	Dual 4-Bit Binary Counter	14-Dip	.84	.63	.48
SN74HC540DWR	296-8333-1-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.78	.65	.52
SN74HC540DWR	296-8333-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	692.00/2,000		
SN74HC540N	296-8334-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.78	.65	.52
SN74HC541DW	296-1202-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.87	.73	.58
SN74HC541DWR	296-1202-1-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.87	.73	.58
SN74HC541DWR	296-1202-2-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	772.00/2,000		
SN74HC541N	296-1594-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.87	.73	.58
SN74HC541PWR	296-8335-1-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	.87	.73	.58
SN74HC541PWR	296-8335-2-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	772.00/2,000		
SN74HC573ADW	296-1203-5-ND	Tri-State Octal D-Type Latch	20-SOIC	.76	.57	.43
SN74HC573ADWR	296-1203-1-ND	Tri-State Octal D-Type Latch	20-SOIC	.76	.57	.43
SN74HC573ADWR	296-1203-2-ND	Tri-State Octal D-Type Latch	20-SOIC	506.00/2,000		
SN74HC573AN	296-1596-5-ND	Tri-State Octal D-Type Latch	20-Dip	.76	.57	.43
SN74HC573APWR	296-8338-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	1.47	1.23	.98
SN74HC573APWR	296-8338-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	1304.00/2,000		
SN74HC574DW	296-1597-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74HC574DWR	296-1597-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74HC574DWR	296-1597-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	506.00/2,000		
SN74HC574N	296-1598-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.76	.57	.43
SN74HC574PWR	296-8339-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.76	.57	.43
SN74HC574PWR	296-8339-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	506.00/2,000		
SN74HC590AD	296-8340-5-ND	Tri-State 8-Bit Binary Counter	16-SOP	1.20	1.00	.80
SN74HC590ADW	296-8341-5-ND	Tri-State 8-Bit Binary Counter	16-SOP	1.20	1.00	.80
SN74HC590AN	296-1599-5-ND	Tri-State 8-Bit Binary Counter	16-Dip	1.20	1.00	.80

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74HC594DW	296-8342-5-ND	8-Bit Shift Register with Output Register	16-SOP	1.80	1.44	1.08
SN74HC594N	296-8343-5-ND	8-Bit Shift Register with Output Register	16-Dip	1.80	1.44	1.08
SN74HC595D	296-8344-5-ND	Tri-State 8-Bit Shift Register	16-SOP	.78	.65	.52
SN74HC595DW	296-8345-5-ND	Tri-State 8-Bit Shift Register	16-SOP	.78	.65	.52
SN74HC595N	296-1600-5-ND	Tri-State 8-Bit Shift Register	16-Dip	.78	.65	.52
SN74HC623DW	296-8346-5-ND	Tri-State Octal Bus Transceiver	20-SOP	5.20	4.16	3.51
SN74HC623N	296-8347-5-ND	Tri-State Octal Bus Transceiver	20-Dip	5.20	4.16	3.51
SN74HC640DW	296-8348-5-ND	Tri-State Octal Bus Transceiver	20-SOP	1.35	1.13	.90
SN74HC640N	296-8349-5-ND	Tri-State Octal Bus Transceiver	20-Dip	1.35	1.13	.90
SN74HC645DW	296-8350-5-ND	Tri-State Octal Bus Transceiver	20-SOP	2.00	1.60	1.20
SN74HC645N	296-8351-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.00	1.60	1.20
SN74HC646DW	296-8352-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOP	2.00	1.60	1.20
SN74HC646NT	296-8353-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	2.00	1.60	1.20
SN74HC652DW	296-8354-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOP	5.18	4.14	3.22
SN74HC652NT	296-8355-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	5.18	4.14	3.22
SN74HC682DWR	296-8356-1-ND	8-Bit Magnitude Comparator	20-SOP	3.35	2.69	2.09
SN74HC682DWR	296-8356-2-ND	8-Bit Magnitude Comparator	20-SOP	3800.00/2,000		
SN74HC682N	296-8357-5-ND	8-Bit Magnitude Comparator	20-Dip	3.31	2.65	2.06
SN74HC684DW	296-8358-5-ND	8-Bit Magnitude Comparator	20-SOP	5.76	4.61	3.89
SN74HC684N	296-8359-5-ND	8-Bit Magnitude Comparator	20-Dip	5.76	4.61	3.89
SN74HC688DW	296-8360-5-ND	8-Bit Identity Comparator	20-SOP	2.43	1.95	1.52
SN74HC688N	296-8361-5-ND	8-Bit Identity Comparator	20-Dip	2.43	1.95	1.52
SN74HC688PWR	296-8362-1-ND	8-Bit Identity Comparator	20-TSSOP	2.43	1.95	1.52
SN74HC688PWR	296-8362-2-ND	8-Bit Identity Comparator	20-TSSOP	2754.00/2,000		
SN74HC4020D	296-8320-5-ND	14-Bit Asynchronous Binary Counter	16-SOP	1.33	1.06	.80
SN74HC4020N	296-8321-5-ND	14-Bit Asynchronous Binary Counter	16-Dip	1.33	1.06	.80
SN74HC4040D	296-8322-5-ND	12-Bit Asynchronous Binary Counter	16-SOP	.88	.66	.50
SN74HC4040DBR	296-8323-1-ND	12-Bit Asynchronous Binary Counter	16-SSOP	.88	.66	.50
SN74HC4040DBR	296-8323-2-ND	12-Bit Asynchronous Binary Counter	16-SSOP	586.00/2,000		
SN74HC4040N	296-8324-5-ND	12-Bit Asynchronous Binary Counter	16-Dip	.88	.66	.50
SN74HC4040PWR	296-8325-1-ND	12-Bit Asynchronous Binary Counter	16-TSSOP	.88	.66	.50
SN74HC4040PWR	296-8325-2-ND	12-Bit Asynchronous Binary Counter	16-TSSOP	586.00/2,000		
SN74HC4060D	296-8326-5-ND	14-Stage Asynchronous Binary Counter and Oscillator	16-SOP	.88	.66	.50
SN74HC4060N	296-8209-5-ND	14-Stage Asynchronous Binary Counter and Oscillator	16-Dip	.88	.66	.50
SN74HC4066D	296-8327-5-ND	Quad Bilateral Analog Switch	14-SOP	.75	.63	.50
SN74HC4066DBR	296-8328-1-ND	Quad Bilateral Analog Switch	14-SSOP	.75	.63	.50
SN74HC4066DBR	296-8328-2-ND	Quad Bilateral Analog Switch	14-SSOP	666.00/2,000		
SN74HC4066N	296-8329-5-ND	Quad Bilateral Analog Switch	14-Dip	.75	.63	.50
SN74HC4066PWR	296-8330-1-ND	Quad Bilateral Analog Switch	14-TSSOP	.75	.63	.50
SN74HC4066PWR	296-8330-2-ND	Quad Bilateral Analog Switch	14-TSSOP	666.00/2,000		
SN74HC7001D	296-8363-5-ND	Quad AND Gate w/Schmitt-Trigger Input	14-SOP	1.23	1.03	.82
SN74HC7001N	296-8364-5-ND	Quad AND Gate w/Schmitt-Trigger Input	14-Dip	1.23	1.03	.82
SN74HC7002D	296-8365-5-ND	Quad NOR Gate w/Schmitt-Trigger Input	14-SOP	2.20	1.76	1.32
SN74HC7002N	296-8366-5-ND	Quad NOR Gate w/Schmitt-Trigger Input	14-Dip	2.20	1.76	1.32
SN74HC7032D	296-8367-5-ND	Quad OR Gate w/Schmitt-Trigger Input	14-SOP	2.20	1.76	1.32
SN74HC7032N	296-8368-5-ND	Quad OR Gate w/Schmitt-Trigger Input	14-Dip	2.20	1.76	1.32

HCT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
CD74HCT00E	296-2081-5-ND	Quad 2-Input NAND Gate	14-Dip	.39	.32	.24
CD74HCT00M	296-9244-5-ND	Quad 2-Input NAND Gate	14-SOP	.56	.42	.32
CD74HCT02E	296-2082-5-ND	Quad 2-Input NOR Gate	14-Dip	.39	.32	.24
CD74HCT03M96	296-9245-1-ND	Quad 2-Input NAND Gate with OD	14-SOP	.64	.48	.36
CD74HCT03M96	296-9245-2-ND	Quad 2-Input NAND Gate with OD	14-SOP	520.00/2,500		
CD74HCT04E	296-2083-5-ND	Hex Inverter/Buffer	14-Dip	.39	.32	.24
CD74HCT04M	296-9246-5-ND	Hex Inverter/Buffer	14-SOP	.56	.42	.32
CD74HCT08E	296-2084-5-ND	Quad 2-Input AND Gate	14-Dip	.39	.32	.24
CD74HCT10E	296-2086-5-ND	Triple 3-Input NAND Gate	14-Dip	.39	.32	.24
CD74HCT10M	296-9247-5-ND	Triple 3-Input NAND Gate	14-SOP	.56	.42	.32
CD74HCT11E	296-2087-5-ND	Triple 3-Input AND Gate	14-Dip	.44	.36	.27
CD74HCT11M96	296-9249-1-ND	Triple 3-Input AND Gate	14-SOP	.64	.48	.36
CD74HCT11M96	296-9249-2-ND	Triple 3-Input AND Gate	14-SOP	520.00/2,500		
CD74HCT14E	296-2093-5-ND	Hex Schmitt Trigger Inverter	14-Dip	.56	.42	.32
CD74HCT14M	296-9253-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.56	.42	.32
CD74HCT21E	296-9262-5-ND	Dual 4-Input AND Gate	14-Dip	.68	.51	.39
CD74HCT30E	296-2111-5-ND	8-Input NAND Gate	14-Dip	.39	.32	.24
CD74HCT30M	296-9267-5-ND	8-Input NAND Gate	14-SOP	.60	.45	.34
CD74HCT32E	296-2112-5-ND	Quad 2-Input OR Gate	14-Dip	.56	.42	.32
CD74HCT73E	296-9297-5-ND	Dual Neg-Edge-Trig. J-K Flip-Flop with Reset	14-Dip	.80	.60	.45
CD74HCT73M	296-9298-5-ND	Dual Neg-Edge-Trig. J-K Flip-Flop with Reset	14-SOP	.80	.60	.45
CD74HCT74M	296-9299-5-ND	Dual Pos-Edge-Trig. D-Type Flip-Flop with Set and Reset	14-SOP	.56	.42	.32
CD74HCT74E	296-2132-5-ND	Dual D-Type Flip-Flop with Set and Reset	14-Dip	.56	.42	.32
CD74HCT86E	296-2133-5-ND	Quad High Speed 2-Input EX-OR Gate	14-Dip	.64	.48	.36
CD74HCT86M	296-8201-5-ND	Quad High Speed 2-Input EX-OR Gate	14-SOP	.64	.48	.36
CD74HCT86M96	296-8201-1-ND	Quad High Speed 2-Input EX-OR Gate	14-SOP	.64	.48	.36
CD74HCT86M96	296-8201-2-ND	Quad High Speed 2-Input EX-OR Gate	14-SOP	520.00/2,500		
CD74HCT109E	296-2085-5-ND	Dual J-K Flip-Flop with Set and Reset	16-Dip	.55	.45	.33
CD74HCT112E	296-9248-5-ND	Dual Neg-Edge-Trig J-K Flip-Flop with Set and Reset	16-Dip	.87	.73	.58
CD74HCT123E	296-2088-5-ND	Dual Retriggerable Monostable Multivibrator with Reset	16-Dip	.80	.66	.48
CD74HCT123M	296-9250-5-ND	Dual Retriggerable Monostable Multivibrator with Reset	16-SOP	.96	.80	.64
CD74HCT125E	296-2089-5-ND	Quad 3-State Buffer	14-Dip	.76	.57	.43
CD74HCT126E	296-9251-5-ND	Tri-State Quad Buffer	14-Dip	.76	.57	.43
CD74HCT132E	296-2090-5-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.78	.65	.52
CD74HCT138E	296-2091-5-ND	3-to-8 Line Decoder/Demux, Inverting	16-Dip	.76	.57	.43
CD74HCT139E	296-2092-5-ND	Dual 2-of-4 Line Decoder/Demux	16-Dip	.69	.57	.42
CD74HCT147E	296-9252-5-ND	10-4 Line Priority Encoder	16-Dip	.90	.75	.60
CD74HCT151M	296-9254-5-ND	8-Input Multiplexer	16-SOP	.78	.65	.52
CD74HCT153E	296-2094-5-ND	Dual 4-Input Multiplexer	16-Dip	.63	.52	.38
CD74HCT153M	296-9255-5-ND	Dual 4-Input Multiplexer	16-SOP	.78	.65	.52
CD74HCT157E	296-2095-5-ND	Quad 2-Input Multiplexer	16-Dip	.61	.50	.37
CD74HCT161E	296-2096-5-ND	Synchronous 4-Bit Binary Counter, Asynchronous Reset	16-Dip	.66	.54	.40
CD74HCT161M	296-9256-5-ND	Synchronous 4-Bit Binary Counter, Asynchronous Reset	16-SOP	.90	.75	.60
CD74HCT164E	296-2097-5-ND	8-Bit Serial-In Parallel-Out Shift Register	14-Dip	.84	.63	.48

(Continued)

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TEXAS INSTRUMENTS DIGITAL LOGIC *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD74HCT164M	296-9257-5-ND	8-Bit Serial-In/Parallel-Out Shift Register	14-SOP	.81	.68	.54
CD74HCT165E	296-2098-5-ND	8-Bit Parallel-In Serial-Out Shift Register	16-Dip	.69	.57	.42
CD74HCT165M	296-9258-5-ND	Asynchronous 8-Bit Parallel-In/Serial-Out Shift Register	16-SOP	.84	.70	.56
CD74HCT166E	296-2099-5-ND	8-Bit Parallel-In Serial-Out Shift Register	16-Dip	.83	.68	.50
CD74HCT166M	296-9259-5-ND	Synchronous 8-Bit Parallel-In/Serial-Out Shift Register	16-SOP	.99	.83	.66
CD74HCT174E	296-2100-5-ND	Hex D-Type Flip-Flop with Reset	16-Dip	.61	.50	.37
CD74HCT174M	296-9260-5-ND	Hex D-Type Flip-Flop with Reset	16-SOP	.88	.66	.50
CD74HCT175E	296-2101-5-ND	Quad D-Type Flip-Flop with Reset	16-Dip	.55	.45	.33
CD74HCT191M	296-9261-5-ND	Presettable Synchronous 4-Bit Binary Up/Down Counter	16-SOP	.99	.83	.66
CD74HCT221M96	296-9263-1-ND	Dual Monostable Multivibrator with Reset	16-SOP	1.11	.93	.74
CD74HCT221M96	296-9263-2-ND	Dual Monostable Multivibrator with Reset	16-SOP	1202.50/2,500		
CD74HCT240E	296-2103-5-ND	Tri-State Inverting Octal Buffer Line Driver	20-Dip	.84	.63	.48
CD74HCT240M	296-9264-5-ND	Tri-St. Inverting Octal Buffer Line Driver	20-SOP	.84	.63	.48
CD74HCT244E	296-2104-5-ND	Tri-State Octal Buffer Line Driver	20-Dip	.84	.63	.48
CD74HCT245E	296-2105-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.84	.63	.48
CD74HCT251E	296-2106-5-ND	Tri-State 8-Input Multiplexer	16-Dip	.72	.59	.43
CD74HCT253E	296-2107-5-ND	Tri-State Dual 4-Input Multiplexer	16-Dip	.72	.59	.43
CD74HCT253M	296-9265-5-ND	Tri-State Dual 4-Input Multiplexer	16-SOP	.87	.73	.58
CD74HCT257E	296-2108-5-ND	Tri-St. Quad 2-Input Mux, Non-Invert Out	16-Dip	.72	.59	.43
CD74HCT259E	296-2109-5-ND	8-Bit Addressable Latch	16-Dip	.78	.65	.52
CD74HCT273E	296-2110-5-ND	Octal D-Type Flip-Flop with Reset	20-Dip	.83	.68	.50
CD74HCT299M	296-9266-5-ND	Tri-State 8-Bit Universal Shift Register	20-SOP	1.47	1.23	.98
CD74HCT367E	296-2113-5-ND	Tri-State Hex Buffer/Line Driver	16-Dip	.83	.68	.50
CD74HCT368M	296-9268-5-ND	Tri-St. Inverting Hex Buffer/Line Driver	16-SOP	1.05	.88	.70
CD74HCT373E	296-2114-5-ND	Tri-State Octal Transparent Latch	20-Dip	.84	.63	.48
CD74HCT374E	296-2115-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.84	.63	.48
CD74HCT374M96	296-9269-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	.84	.63	.48
CD74HCT374M96	296-9269-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	558.00/2,000		
CD74HCT377M	296-9427-5-ND	Octal D-Type Flip-Flop with Clock Enable	20-SOP	.96	.80	.64
CD74HCT390M	296-9270-5-ND	Dual Decade Ripple Counter	16-SOP	1.05	.88	.70
CD74HCT393E	296-2116-5-ND	Dual 4-Stage Binary Counter	14-Dip	.83	.68	.50
CD74HCT393M	296-9271-5-ND	Dual 4-Stage Binary Counter	14-SOP	.90	.75	.60
CD74HCT540E	296-2126-5-ND	Tri-State Inverting Octal Buffer Line Driver	20-Dip	1.02	.84	.62
CD74HCT541E	296-2127-5-ND	Tri-State Octal Buffer Line Driver	20-Dip	1.05	.88	.70
CD74HCT541M	296-9288-5-ND	Tri-State Non-Inverting Octal Buffer Line Driver	20-SOP	1.05	.88	.70
CD74HCT541M96	296-9288-1-ND	Tri-State Non-Inverting Octal Buffer Line Driver	20-SOP	1.05	.88	.70
CD74HCT541M96	296-9288-2-ND	Tri-State Non-Inverting Octal Buffer Line Driver	20-SOP	932.00/2,000		
CD74HCT563M	296-9289-5-ND	Tri-St. Octal Transparent Inverting Latch	20-SOP	1.14	.95	.76
CD74HCT564M	296-9290-5-ND	Tri-St. Inverting Octal D-Type Flip-Flop	20-SOP	1.41	1.18	.94
CD74HCT573E	296-2128-5-ND	Tri-State Octal Transparent Latch	20-Dip	.84	.63	.48
CD74HCT573M96	296-9291-1-ND	Tri-State Octal Transparent Latch	20-SOP	.84	.63	.48
CD74HCT573M96	296-9291-2-ND	Tri-State Octal Transparent Latch	20-SOP	558.00/2,000		
CD74HCT574E	296-2129-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.84	.63	.48
CD74HCT574M96	296-9292-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	.84	.63	.48
CD74HCT574M96	296-9292-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOP	558.00/2,000		
CD74HCT597E	296-2130-5-ND	8-Bit Shift Register with Input Storage	16-Dip	.96	.79	.58
CD74HCT646M96	296-9293-1-ND	Tri-State Octal D-Type Flip-Flop	24-SOP	3.42	2.74	2.13
CD74HCT646M96	296-9293-2-ND	Tri-State Octal D-Type Flip-Flop	24-SOP	3876.00/2,000		
CD74HCT670M	296-9294-5-ND	4-By-4 Register File	16-SOP	4.73	3.78	2.94
CD74HCT688E	296-2131-5-ND	8-Bit Magnitude Comparator	20-Dip	.96	.80	.64
CD74HCT688M	296-9295-5-ND	8-Bit Magnitude Comparator	20-SOP	.96	.80	.64
CD74HCT4040E	296-2118-5-ND	12-Bit Binary Counter	16-Dip	.88	.72	.53
CD74HCT4020M	296-9273-5-ND	14-Stage Binary Counter	16-SOP	1.05	.88	.70
CD74HCT4024M	296-9274-5-ND	7-Stage Binary Ripple Counter	14-SOP	.87	.73	.58
CD74HCT4046AM	296-9275-5-ND	Phase-Locked-Loop with VCO	16-SOP	1.83	1.46	1.10
CD74HCT4051E	296-2119-5-ND	8-Channel Analog Multiplexer/Demux	16-Dip	.99	.81	.60
CD74HCT4051M	296-9276-5-ND	8-Channel Analog Multiplexer/Demux	16-SOP	1.17	.98	.78
CD74HCT4052E	296-2120-5-ND	Dual 4-Channel Analog Mux/Demux	16-Dip	.96	.79	.58
CD74HCT4052M96	296-9277-1-ND	Dual 4-Channel Analog Mux/Demux	16-SOP	1.14	.95	.76
CD74HCT4052M96	296-9277-2-ND	Dual 4-Channel Analog Mux/Demux	16-SOP	1235.00/2,500		
CD74HCT4053E	296-2121-5-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.99	.81	.60
CD74HCT4053M	296-9278-5-ND	Triple 2-Channel Analog Mux/Demux	16-SOP	1.17	.98	.78
CD74HCT4053PWR	296-9279-1-ND	Triple 2-Channel Analog Mux/Demux	16-TSSOP	1.29	1.08	.86
CD74HCT4053PWR	296-9279-2-ND	Triple 2-Channel Analog Mux/Demux	16-TSSOP	1144.00/2,000		
CD74HCT4060M	296-9280-5-ND	14-Stage Binary Counter with Oscillator	16-SOP	.96	.80	.64
CD74HCT4066M96	296-9281-1-ND	Quad Bilateral Switch	14-SOP	.99	.83	.66
CD74HCT4066M96	296-9281-2-ND	Quad Bilateral Switch	14-SOP	1072.50/2,500		
CD74HCT4066E	296-2122-5-ND	Quad Bilateral Switch	14-Dip	.77	.63	.47
CD74HCT4094E	296-2123-5-ND	8-Stage Shift-and-Store Bus Register	16-Dip	.80	.66	.48
CD74HCT4316E	296-2124-5-ND	Quad Analog Switch	16-Dip	.94	.77	.57
CD74HCT4511E	296-9282-5-ND	BCD-to-7 Segment Latch/Decoder/Driver	16-Dip	1.14	.95	.76
CD74HCT4514E	296-9283-5-ND	4-to-16 Line Decoder/Demux with Input Latch	24-Dip	2.25	1.88	1.13
CD74HCT4520E	296-9284-5-ND	Dual Binary Up-Counter	16-Dip	1.05	.88	.70
CD74HCT4520M	296-9285-5-ND	Dual Binary Up-Counter	16-SOP	1.11	.93	.74
CD74HCT4538E	296-2125-5-ND	Dual Prec. Monostable Multivibrator	16-Dip	1.05	.86	.63
CD74HCT4538M	296-9286-5-ND	Dual Retrig. Precision Monostable Multivibrator	16-SOP	1.29	1.08	.86
CD74HCT7046AM	296-9296-5-ND	Phase-Locked Loop with VCO and Lock Detector	16-SOP	2.23	1.78	1.34
CD74HCT40103M	296-9272-5-ND	8-Stage Synchronous Down Counter	16-SOP	1.29	1.08	.86
CD74HCT40105E	296-2117-5-ND	4 Bits x 16 Words FIFO Register	16-Dip	1.18	.97	.71
SN74HCT00D	296-8377-5-ND	Quad 2-Input NAND Gate	14-SOP	.52	.39	.30
SN74HCT00N	296-1603-5-ND	Quad 2-Input NAND Gate	14-Dip	.52	.39	.30
SN74HCT00PWR	296-8378-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74HCT00PWR	296-8378-2-ND	Quad 2-Input NAND Gate	14-TSSOP	346.00/2,000		
SN74HCT02D	296-8379-5-ND	Quad 2-Input NOR Gate	14-SOP	.64	.48	.36
SN74HCT02N	296-8380-5-ND	Quad 2-Input NOR Gate	14-Dip	.64	.48	.36
SN74HCT04D	296-1205-5-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74HCT04DR	296-1205-1-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74HCT04DR	296-1205-2-ND	Hex Inverter	14-SOIC	422.50/2,500		
SN74HCT04N	296-1605-5-ND	Hex Inverter	14-Dip	.52	.39	.30
SN74HCT04PWR	296-8382-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74HCT04PWR	296-8382-2-ND	Hex Inverter	14-TSSOP	346.00/2,000		
SN74HCT08D	296-8383-5-ND	Quad 2-Input AND Gate	14-SOP	.52	.39	.30
SN74HCT08DBR	296-8384-1-ND	Quad 2-Input AND Gate	14-SSOP	.52	.39	.30
SN74HCT08DBR	296-8384-2-ND	Quad 2-Input AND Gate	14-SSOP	346.00/2,000		
SN74HCT08N	296-1606-5-ND	Quad 2-Input AND Gate	14-Dip	.52	.39	.30
SN74HCT08PWR	296-8385-1-ND	Quad 2-Input AND Gate	14-TSSOP	.52	.39	.30
SN74HCT08PWR	296-8385-2-ND	Quad 2-Input AND Gate	14-TSSOP	346.00/2,000		
SN74HCT14D	296-8391-5-ND	Hex Schmitt-Trigger Inverter	14-SOP	.52	.39	.30
SN74HCT14DBR	296-8392-1-ND	Hex Schmitt-Trigger Inverter	14-SSOP	.52	.39	.30
SN74HCT14DBR	296-8392-2-ND	Hex Schmitt-Trigger Inverter	14-SSOP	346.00/2,000		
SN74HCT14DGVR	296-8393-1-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	.52	.39	.30
SN74HCT14DGVR	296-8393-2-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	346.00/2,000		
SN74HCT14N	296-8394-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.52	.39	.30
SN74HCT14PWR	296-8395-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.52	.39	.30
SN74HCT14PWR	296-8395-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	346.00/2,000		
SN74HCT32D	296-1614-5-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74HCT32DBR	296-8410-1-ND	Quad 2-Input OR Gate	14-SSOP	.52	.39	.30
SN74HCT32DBR	296-8410-2-ND	Quad 2-Input OR Gate	14-SSOP	346.00/2,000		
SN74HCT32N	296-1615-5-ND	Quad 2-Input OR Gate	14-Dip	.52	.39	.30
SN74HCT32PWR	296-8411-1-ND	Quad 2-Input OR Gate	14-TSSOP	.52	.39	.30
SN74HCT32PWR	296-8411-2-ND	Quad 2-Input OR Gate	14-TSSOP	346.00/2,000		
SN74HCT74D	296-1211-5-ND	Dual D-Type Flip-Flop w/Clear & Preset	14-SOIC	.52	.39	.30
SN74HCT74D	296-1211-2-ND	Dual D-Type Flip-Flop w/Clear & Preset	14-SOIC	422.50/2,500		
SN74HCT74DR	296-1211-1-ND	Dual D-Type Flip-Flop	14-SOIC	.52	.39	.30
SN74HCT74N	296-1625-5-ND	Dual D-Type Flip-Flop	14-Dip	.52	.39	.30
SN74HCT74PWR	296-8429-1-ND	Dual D-Type Flip-Flop with Clear and Preset	14-TSSOP	.52	.39	.30
SN74HCT74PWR	296-8429-2-ND	Dual D-Type Flip-Flop with Clear and Preset	14-TSSOP	346.00/2,000		
SN74HCT125D	296-1206-5-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.64	.48	.36
SN74HCT125DR	296-1206-1-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.64	.48	.36
SN74HCT125DR	296-1206-2-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	520.00/2,500		
SN74HCT125N	296-8386-5-ND	Tri-State Quad Bus Buffer Gate	14-Dip	.64	.48	.36
SN74HCT138D	296-8387-5-ND	3-8 Line Decoder/Demultiplexer	14-SOP	.64	.48	.36
SN74HCT138N	296-1608-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.64	.48	.36
SN74HCT138PWR	296-8388-1-ND	3-8 Line Decoder/Demultiplexer	14-TSSOP	.64	.48	.36
SN74HCT138PWR	296-8388-2-ND	3-8 Line Decoder/Demultiplexer	14-TSSOP	426.00/2,000		
SN74HCT139D	296-8389-5-ND	Dual 2-to-4 Line Decoder/Demultiplexer	16-SOP	.92	.69	.52
SN74HCT139N	296-8390-5-ND	Dual 2-to-4 Line Decoder/Demultiplexer	16-Dip	.92	.69	.52
SN74HCT139PWR	296-11999-1-ND	Dual 2-to-4 Line Decoder/Demultiplexer	16-TSSOP	.92	.69	.52
SN74HCT139PWR	296-11999-2-ND	Dual 2-to-4 Line Decoder/Demultiplexer	16-TSSOP	612.00/2,000		
SN74HCT157D	296-8396-5-ND	Quad 2-to-1 Line Data Selector/Mux	16-SOP	.96	.72	.54
SN74HCT157N	296-8397-5-ND	Quad 2-to-1 Line Data Selector/Mux	16-Dip	.96	.72	.54
SN74HCT240DW	296-8398-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.76	.57	.43
SN74HCT240N	296-8399-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.76	.57	.43
SN74HCT244DBR	296-8400-1-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	.76	.57	.43
SN74HCT244DBR	296-8400-2-ND	Tri-State Octal Buffer/Line Driver	20-SSOP	506.00/2,000		
SN74HCT244DW	296-1207-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.76	.57	.43
SN74HCT244DWR	296-1207-1-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.76	.57	.43
SN74HCT244DWR	296-1207-2-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	506.00/2,000		
SN74HCT244N	296-1610-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.76	.57	.43
SN74HCT244NSR	296-8401-1-ND	Tri-State Octal Buffer/Line Driver	20-SOP	1.05	.88	.70
SN74HCT244NSR	296-8401-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	932.00/2,000		
SN74HCT244PWR	296-8402-1-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	.76	.57	.43
SN74HCT244PWR	296-8402-2-ND	Tri-State Octal Buffer/Line Driver	20-TSSOP	506.00/2,000		
SN74HCT245DBR	296-8403-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.76	.57	.43
SN74HCT245DBR	296-8403-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	506.00/2,000		
SN74HCT245DW	296-1208-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74HCT245DWR	296-1208-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.76	.57	.43
SN74HCT245DWR	296-1208-2-ND	Tri-State Octal Bus Transceiver	20-SOIC	506.00/2,000		
SN74HCT245N	296-1612-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.76	.57	.43
SN74HCT245PWR	296-8404-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.76	.57	.43
SN74HCT245PWR	296-8404-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	506.00/2,000		
SN74HCT257D	296-8405-5-ND	Tri-St. Quad 2-1 Line Data Selector/Mux	16-SOP	.84	.70	.56
SN74HCT257N	296-8406-5-ND	Tri-St. Quad 2-1 Line Data Selector/Mux	16-Dip	.84	.70	.56
SN74HCT273DBR	296-8407-1-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	1.14	.95	.76
SN74HCT273DBR	296-8407-2-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	1010.00/2,000		
SN74HCT273DW	296-8408-5-ND	Octal D-Type Flip-Flop with Clear	20-SOP	.76	.57	.43
SN74HCT273N	296-1613-5-ND	Octal D-Type Flip-Flop with Clear	20-Dip	.76	.57	.43
SN74HCT273PWR	296-8409-1-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	.76	.57	.43
SN74HCT273PWR	296-8409-2-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	506.00/2,000		
SN74HCT373DW	296-8412-5-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	.76	.57	.43
SN74HCT373DWR	296-8412-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	.76	.57	.43
SN74HCT373DWR	296-8412-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	506.00/2,000		
SN74HCT373N	296-1616-5-ND	Tri-St. Octal Transparent D-Type Latch	20-Dip	.76	.57	.43
SN74HCT373NSR	296-8413-1-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	1.29	1.08	.86
SN74HCT373NSR	296-8413-2-ND	Tri-St. Octal Transparent D-Type Latch	20-SOP	1144.00/2,000		
SN74HCT373PWR	296-8414-1-ND	Tri-St. Octal Transp. D-Type Latch	20-TSSOP	.76	.57	.43
SN74HCT373PWR	296-8414-2-ND	Tri-St. Octal Transp. D-Type Latch	20-TSSOP	506.00/2,000		
SN74HCT374DBR	296-8415-1-ND	Tri-St. Octal Transp. D-Type Flip-Flop	20-SSOP	.76	.57	.43
SN74HCT374DBR	296-8415-2-ND	Tri-St. Octal Transp. D-Type Flip-Flop	20-SSOP	506.00/2,000		
SN74HCT374DW	296-1209-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74HCT374DWR	296-1209-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74HCT374DWR	296-1209-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	506.00/2,000		
SN74HCT374N	296-1617-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.76	.57	.43
SN74HCT377DW	296-8416-5-ND	Octal D-Type Flip-Flop with Clock Enable	20-SOP	.78	.65	.52
SN74HCT377N	296-8417-5-ND	Octal D-Type Flip-Flop with Clock Enable	20-Dip	.78	.65	.52
SN74HCT540DW	296-8418-5-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.96	.80	.64
SN74HCT540N	296-8419-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.96	.80	.64
SN74HCT541DW	296-1618-5-ND	Octal Buffer/Line Driver	20-SOIC	.78	.65	.52
SN74HCT541N	296-1619-5-ND	Octal Buffer/Line Driver	20-Dip	.78	.65	.52
SN74HCT573DBR	296-8420-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	.76	.57	.43
SN74HCT573DBR	296-8420-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SSOP	506.00/2,000		
SN74HCT573DW	296-1210-5-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	.76	.57	.43
SN74HCT573DWR	296-1210-1-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	.76	.57	.43
SN74HCT573DWR	296-1210-2-ND	Tri-St. Octal D-Type Transparent Latch	20-SOIC	506.00/2,000		
SN74HCT573N	296-1621-5-ND	Tri-St. Octal D-Type Transparent Latch	20-Dip	.76	.57	.43
SN74HCT574DW	296-1622-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.76	.57	.43
SN74HCT574N	296-1623-5-ND	Tri-State Octal D-Type Flip-Flop	20-Dip	.76	.57	.43

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74HCT574PWR	296-8421-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.76	.57	.43
SN74HCT574PWR	296-8421-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	506.00/2,000		
SN74HCT623DW	296-8422-5-ND	Tri-State Octal Bus Transceiver	20-SOP	5.27	4.22	3.28
SN74HCT645DW	296-8423-5-ND	Tri-State Octal Bus Transceiver	20-SOP	2.88	2.31	1.80
SN74HCT645N	296-8424-5-ND	Tri-State Octal Bus Transceiver	20-Dip	2.88	2.31	1.80
SN74HCT646DW	296-8425-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOP	2.88	2.31	1.80
SN74HCT646NT	296-8426-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	2.88	2.31	1.80
SN74HCT652DW	296-1624-5-ND	Tri-State Octal Bus Transceiver/Register	24-SOIC	5.29	4.23	3.29
SN74HCT652DWR	296-1624-1-ND	Tri-State Octal Bus Transceiver/Register	24-SOIC	5.29	4.23	3.29
SN74HCT652DWR	296-1624-2-ND	Tri-State Octal Bus Transceiver/Register	24-SOIC	5992.00/2,000		
SN74HCT652NT	296-8427-5-ND	Tri-State Octal Bus Transceiver/Register	24-Dip	5.18	4.14	3.22

HCU Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
CD74HCU04M	296-9432-5-ND	Hex Inverter/Buffer	14-SOP	.56	.42	.32
SN74HCU04D	296-9819-5-ND	Hex Inverter	14-SOP	.52	.39	.30
SN74HCU04N	296-9820-5-ND	Hex Inverter	14-Dip	.52	.39	.30
SN74HCU04PWR	296-9821-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74HCU04PWR	296-9821-2-ND	Hex Inverter	14-TSSOP	346.00/2,000		

HSTL Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
SN74HSTL162822DGGR	296-9822-1-ND	14-to-28 Bit HSTL-to-LVTTL Memory Address Latch	64-TSSOP	8.00	6.40	5.40
SN74HSTL162822DGGR	296-9822-2-ND	14-to-28 Bit HSTL-to-LVTTL Memory Address Latch	64-TSSOP	10000.00/2,000		
SN74HSTL16918DGGR	296-9823-1-ND	9-to-18 Bit HSTL-to-LVTTL Memory Address Latch	48-TSSOP	7.50	6.00	5.07
SN74HSTL16918DGGR	296-9823-2-ND	9-to-18 Bit HSTL-to-LVTTL Memory Address Latch	48-TSSOP	9376.00/2,000		

LS Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
SN74LS00N	296-1626-5-ND	Quad 2-Input NAND Gate	14-Dip	.48	.36	.27
SN74LS00NSR	296-3616-2-ND	Quad 2-Input NAND Gate	14-SOP	532.00/2,000		
SN74LS02N	296-1627-5-ND	Quad 2-Input NOR Gate	14-Dip	.48	.36	.27
SN74LS02NSR	296-3618-2-ND	Quad 2-Input NOR Gate	14-SOP	320.00/2,000		
SN74LS04D	296-1628-5-ND	Hex Inverter	14-SOIC	.60	.45	.34
SN74LS04N	296-1629-5-ND	Hex Inverter	14-Dip	.48	.36	.27
SN74LS05D	296-1630-5-ND	Hex Inverter with OC Output	14-SOIC	.60	.45	.34
SN74LS05N	296-1631-5-ND	Hex Inverter with OC Output	14-Dip	.48	.36	.27
SN74LS07D	296-3626-5-ND	Hex Buffer/Driver with HV Output	14-SOP	.96	.80	.64
SN74LS07DBR	296-3627-1-ND	Hex Buffer/Driver with HV Output	14-SSOP	.96	.80	.64
SN74LS07DBR	296-3627-2-ND	Hex Buffer/Driver with HV Output	14-SSOP	852.00/2,000		
SN74LS07NSR	296-3628-1-ND	Hex Buffer/Driver with HV Output	14-SOP	.96	.80	.64
SN74LS07NSR	296-3628-2-ND	Hex Buffer/Driver with HV Output	14-SOP	852.00/2,000		
SN74LS08D	296-1632-5-ND	Quad 2-Input AND Gate	14-SOIC	.60	.45	.34
SN74LS08N	296-1633-5-ND	Quad 2-Input AND Gate	14-Dip	.48	.36	.27
SN74LS10N	296-1634-5-ND	Triple 3-Input NAND Gate	14-Dip	.48	.36	.27
SN74LS14D	296-1212-5-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.68	.51	.39
SN74LS14DR	296-1212-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.76	.57	.43
SN74LS14DR	296-1212-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	617.50/2,500		
SN74LS14N	296-1643-5-ND	Hex Schmitt-Trigger Inverter	14-Dip	.60	.45	.34
SN74LS20N	296-3670-5-ND	Dual 4-Input NAND Gate	14-Dip	.60	.50	.40
SN74LS21N	296-3672-5-ND	Dual 4-Input NAND Gate	14-Dip	.96	.80	.64
SN74LS30N	296-3693-5-ND	8-Input NAND Gate	14-Dip	.48	.36	.27
SN74LS32N	296-1658-5-ND	Quad 2-Input OR Gate	14-Dip	.60	.45	.34
SN74LS38N	296-1664-5-ND	Quad 2-Input NAND Buffer	14-Dip	.64	.48	.36
SN74LS47N	296-3712-5-ND	BCD to 7-Segment Decoder/Driver	16-Dip	1.20	1.00	.80
SN74LS74AN	296-1668-5-ND	Dual D-Type Flip-Flop	14-Dip	.56	.42	.32
SN74LS86AN	296-1669-5-ND	Quad 2-Input EX-OR Gate	14-Dip	.56	.42	.32
SN74LS92D	296-3747-5-ND	Divide-By-12 Decade Counter	14-SOIC	1.38	1.10	.83
SN74LS93N	296-3750-5-ND	4-Bit Binary Counter	14-Dip	1.33	1.06	.80
SN74LS122N	296-3639-5-ND	Retriggerable Mono Multivibrator	14-Dip	.90	.75	.60
SN74LS123D	296-1635-5-ND	Dual Monostable Multivibrator	16-SOIC	.87	.73	.58
SN74LS123N	296-1636-5-ND	Dual Monostable Multivibrator	16-Dip	.75	.63	.50
SN74LS125AD	296-1637-5-ND	Tri-State Quad Bus Buffer	14-SOIC	.92	.69	.52
SN74LS125AN	296-1638-5-ND	Tri-State Quad Bus Buffer	14-Dip	.80	.60	.45
SN74LS138N	296-1639-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	.76	.57	.43
SN74LS139AN	296-1640-5-ND	Dual 2-4 Line Decoder	16-Dip	.92	.69	.52
SN74LS145N	296-1641-5-ND	BCD-To-Decimal Decoder/Driver	16-Dip	.81	.68	.54
SN74LS148N	296-3651-5-ND	8-3 Line Priority Encoder	16-Dip	1.44	1.20	.96
SN74LS151N	296-1644-5-ND	8-1 Data Selector/Multiplexer	16-Dip	.76	.57	.43
SN74LS157N	296-1645-5-ND	Quad 2-1 Data Selector/Multiplexer	16-Dip	.76	.57	.43
SN74LS157NSR	296-3659-2-ND	Quad 2-1 Line Data Selector/Mux	16-SOP	506.00/2,000		
SN74LS161AN	296-1646-5-ND	4-Bit Synchronous Binary Counter	16-Dip	.84	.63	.48
SN74LS161ANSR	296-3660-2-ND	4-Bit Synchronous Binary Counter	16-SOP	558.00/2,000		
SN74LS164N	296-1647-5-ND	8-Bit Shift Register	14-Dip	.84	.63	.48
SN74LS175N	296-1648-5-ND	Quad D-Type Flip-Flop	16-Dip	.76	.57	.43
SN74LS193N	296-1649-5-ND	4-Bit Up/Down Counter	16-Dip	.75	.63	.50
SN74LS221N	296-3674-5-ND	Dual Monostable Multivibrator	16-Dip	1.08	.90	.72
SN74LS240DW	296-1650-5-ND	Octal Buffer/Line Driver	20-SOIC	.90	.75	.60
SN74LS240N	296-1651-5-ND	Octal Buffer/Line Driver	20-Dip	.84	.70	.56
SN74LS244DW	296-1213-5-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.90	.75	.60
SN74LS244DWR	296-1213-1-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	.96	.80	.64
SN74LS244DWR	296-1213-2-ND	Tri-State Octal Buffer/Line Driver	20-SOIC	852.00/2,000		
SN74LS244N	296-1653-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	.84	.70	.56
SN74LS244NSR	296-3676-1-ND	Tri-State Octal Buffer/Line Driver	20-SOP	.84	.70	.56
SN74LS244NSR	296-3676-2-ND	Tri-State Octal Buffer/Line Driver	20-SOP	744.00/2,000		
SN74LS245DW	296-1214-5-ND	Octal Bus Transceiver	20-SOIC	.93	.78	.62
SN74LS245DWR	296-1214-1-ND	Octal Bus Transceiver	20-SOIC	.99	.83	.66
SN74LS245DWR	296-1214-2-ND	Octal Bus Transceiver	20-SOIC	878.00/2,000		
SN74LS245N	296-1655-5-ND	Octal Bus Transceiver	20-Dip	.84	.70	.56
SN74LS247D	296-3678-5-ND	BCD to 7-Segment Decoder/Driver	16-SOIC	1.26	1.05	.84
SN74LS247N	296-3679-5-ND	BCD to-7-Segment Decoder/Driver	16-Dip	1.14	.95	.76
SN74LS257BN	296-1656-5-ND	Quad 2-1 Data Selector/Multiplexer	16-Dip	.80	.60	.45
SN74LS266N	296-3681-5-ND	Quad 2-In EX-NOR Gate with OC Out	14-Dip	.80	.60	.45
SN74LS273N	296-1657-5-ND	Octal D-Type Flip-Flop	20-Dip	.81	.68	.54
SN74LS368AN	296-3702-5-ND	6-Bit Buffer/Line Driver	16-Dip	.92	.69	.52
SN74LS373DW	296-1659-5-ND	Octal D-Type Latch	20-SOIC	.90	.75	.60
SN74LS373N	296-1660-5-ND	Octal D-Type Latch	20-Dip	.84	.70	.56
SN74LS374DW	296-1661-5-ND	Octal D-Type Flip-Flop	20-SOIC	.90	.75	.60
SN74LS374N	296-1662-5-ND	Octal D-Type Flip-Flop	20-Dip	.84	.70	.56
SN74LS377N	296-1663-5-ND	Octal D-Type Flip-Flop	20-Dip	1.08	.90	.72
SN74LS393N	296-1665-5-ND	Dual 4-Bit Binary Counter	14-Dip	.87	.73	.58
SN74LS423N	296-3707-5-ND	Dual Retrig. Mono Multivibrator	16-Dip	1.35	1.13	.90
SN74LS541N	296-1666-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	1.20	1.00	.80
SN74LS688N	296-1667-5-ND	8-Bit Magnitude Comparator	20-Dip	1.88	1.50	1.13

LV Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
SN74LV00AD	296-1670-5-ND	Quad 2-Input NAND Gate	14-SOIC	.52	.39	.30
SN74LV00ADR	296-1670-1-ND	Quad 2-Input NAND Gate	14-SOIC	.52	.39	.30
SN74LV00ADR	296-1670-2-ND	Quad 2-Input NAND Gate	14-SOIC	422.50/2,500		
SN74LV00ADBR	296-3751-1-ND	Quad 2-Input NAND Gate	14-SSOP	.52	.39	.30
SN74LV00ADBR	296-3751-2-ND	Quad 2-Input NAND Gate	14-SSOP	346.00/2,000		
SN74LV00ADGVR	296-3752-1-ND	Quad 2-Input NAND Gate	14-TVSOP	.52	.39	.30
SN74LV00ADGVR	296-3752-2-ND	Quad 2-Input NAND Gate	14-TVSOP	346.00/2,000		
SN74LV00APWR	296-3753-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74LV00APWR	296-3753-2-ND	Quad 2-Input NAND Gate	14-TSSOP	346.00/2,000		
SN74LV02AD	296-1671-5-ND	Quad 2-Input NOR Gate	14-SOIC	.60	.45	.34
SN74LV02ADBR	296-3754-1-ND	Quad 2-Input NOR Gate	14-SSOP	.60	.45	.34
SN74LV02ADBR	296-3754-2-ND	Quad 2-Input NOR Gate	14-SSOP	400.00/2,000		
SN74LV04AD	296-1672-5-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74LV04ADBR	296-3755-1-ND	Hex Inverter	14-SSOP	.52	.39	.30
SN74LV04ADBR	296-3755-2-ND	Hex Inverter	14-SSOP	346.00/2,000		
SN74LV04ADGVR	296-3756-1-ND	Hex Inverter	14-TVSOP	.52	.39	.30
SN74LV04ADGVR	296-3756-2-ND	Hex Inverter	14-TVSOP	346.00/2,000		
SN74LV04APWR	296-3757-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74LV04APWR	296-3757-2-ND	Hex Inverter	14-TSSOP	346.00/2,000		
SN74LV05ADR	296-3758-1-ND	Hex Inverter with OD Out	14-SOIC	.60	.45	.34
SN74LV05ADR	296-3758-2-ND	Hex Inverter with OD Out	14-SOIC	487.50/2,500		
SN74LV05APWR	296-3759-1-ND	Hex Inverter with OD Out	14-TSSOP	.60	.45	.34
SN74LV05APWR	296-3759-2-ND	Hex Inverter with OD Out	14-TSSOP	400.00/2,000		
SN74LV06ADBR	296-3760-1-ND	Hex Inverter Buffer/Driver w/OD Out	14-SSOP	.60	.45	.34
SN74LV06ADBR	296-3760-2-ND	Hex Inverter Buffer/Driver w/OD Out	14-SSOP	400.00/2,000		
SN74LV06ADGVR	296-3761-1-ND	Hex Inverter Buffer/Driver w/OD Out	14-TVSOP	.60	.45	.34
SN74LV06ADGVR	296-3761-2-ND	Hex Inverter Buffer/Driver w/OD Out	14-TVSOP	400.00/2,000		
SN74LV06ADR	296-3762-1-ND	Hex Inverter Buffer/Driver w/OD Out	14-SOIC	.60	.45	.34
SN74LV06ADR	296-3762-2-ND	Hex Inverter Buffer/Driver w/OD Out	14-SOIC	487.50/2,500		
SN74LV06APWR	296-3763-1-ND	Hex Inverter Buffer/Driver w/OD Out	14-TSSOP	.60	.45	.34
SN74LV06APWR	296-3763-2-ND	Hex Inverter Buffer/Driver w/OD Out	14-TSSOP	400.00/2,000		
SN74LV07AD	296-3764-5-ND	Hex Buffer/Driver with OD Out	14-SOIC	.60	.45	.34
SN74LV07ADR	296-3764-1-ND	Hex Buffer/Driver with OD Out	14-SOIC	.60	.45	.34
SN74LV07ADR	296-3764-2-ND	Hex Buffer/Driver with OD Out	14-SOIC	487.50/2,500		
SN74LV07ADBR	296-3765-1-ND	Hex Buffer/Driver with OD Out	14-SSOP	.60	.45	.34
SN74LV07ADBR	296-3765-2-ND	Hex Buffer/Driver with OD Out	14-SSOP	400.00/2,000		
SN74LV07ADGVR	296-3766-1-ND	Hex Buffer/Driver with OD Out	14-TVSOP	.60	.45	.34
SN74LV07ADGVR	296-3766-2-ND	Hex Buffer/Driver with OD Out	14-TVSOP	400.00/2,000		
SN74LV07APWR	296-3767-1-ND	Hex Buffer/Driver with OD Out	14-TSSOP	.60	.45	.34
SN74LV07APWR	296-3767-2-ND	Hex Buffer/Driver with OD Out	14-TSSOP	400.00/2,000		
SN74LV08AD	296-1673-5-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74LV08ADBR	296-3768-1-ND	Quad 2-Input AND Gate	14-SSOP	.52	.39	.30
SN74LV08ADBR	296-3768-2-ND	Quad 2-Input AND Gate	14-SSOP	346.00/2,000		
SN74LV08ADGVR	296-3769-1-ND	Quad 2-Input AND Gate	14-TVSOP	.52	.39	.30
SN74LV08ADGVR	296-3769-2-ND	Quad 2-Input AND Gate	14-TVSOP	346.00/2,000		
SN74LV08APWR	296-3770-1-ND	Quad 2-Input AND Gate	14-TSSOP	.52	.39	.30
SN74LV08APWR	296-3770-2-ND	Quad 2-Input AND Gate	14-TSSOP	346.00/2,000		
SN74LV10AD	296-3771-5-ND	Triple 3-Input NAND Gate	14-SOIC	.52	.39	.30
SN74LV10ADR	296-3771-1-ND	Triple 3-Input NAND Gate	14-SOIC	.52	.39	.30
SN74LV10ADR	296-3771-2-ND	Triple 3-Input NAND Gate	14-SOIC	422.50/2,500		
SN74LV10ADBR	296-3772-1-ND	Triple 3-Input NAND Gate	14-SSOP	.52	.39	.30
SN74LV10ADBR	296-3772-2-ND	Triple 3-Input NAND Gate	14-SSOP	346.00/2,000		
SN74LV10ADGVR	296-3773-1-ND	Triple 3-Input NAND Gate	14-TVSOP	.52	.39	.30
SN74LV10ADGVR	296-3773-2-ND	Triple 3-Input NAND Gate	14-TVSOP	346.00/2,000		
SN74LV10APWR	296-9824-1-ND	Triple 3-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74LV10APWR	296-9824-2-ND	Triple 3-Input NAND Gate	14-TSSOP	346.00/2,000		
SN74LV11ADBR	296-9825-1-ND	Triple 3-Input AND Gate	14-SSOP	.60	.45	.34
SN74LV11ADBR	296-9825-2-ND	Triple 3-Input AND Gate	14-SSOP	400.00/2,000		
SN74LV11ADGVR	296-9826-1-ND	Triple 3-Input AND Gate	14-TVSOP	.60	.45	.34
SN74LV11ADGVR	296-9826-2-ND	Triple 3-Input AND Gate	14-TVSOP	400.00/2,000		
SN74LV11ADR	296-9827-1-ND	Triple 3-Input AND Gate	14-SOP	.60	.45	.34
SN74LV11ADR	296-9827-2-ND	Triple 3-Input AND Gate	14-SOP	487.50/2,500		
SN74LV11APWR	296-9828-1-ND	Triple 3-Input AND Gate	14-TSSOP	.60	.45	.34
SN74LV11APWR	296-9828-2-ND	Triple 3-Input AND Gate	14-TSSOP	400.00/2,000		
SN74LV14AD	296-1678-5-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30
SN74LV14ADR	296-1678-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30
SN74LV14ADR	296-1678-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC	422.50/2,500		
SN74LV14ADBR	296-3783-1-ND	Hex Schmitt-Trigger Inverter	14-SSOP	.52	.39	.30
SN74LV14ADBR	296-3783-2-ND	Hex Schmitt-Trigger Inverter	14-SSOP	346.00/2,000		
SN74LV14ADGVR	296-3784-1-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	.52	.39	.30
SN74LV14ADGVR	296-3784-2-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	346.00/2,000		
SN74LV14APWR	296-3785-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.52	.39	.30
SN74LV14APWR	296-3785-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	346.00/2,000		
SN74LV20AD	296-3794-5-ND	Dual 4-Input NAND Gate	14-SOIC	.60	.45	.34
SN74LV20ADR	296-3794-1-ND	Dual 4-Input NAND Gate	14-SOIC	.60	.45	.34
SN74LV20ADR	296-3794-2-ND	Dual 4-Input NAND Gate	14-SOIC	487.50/2,500		
SN74LV20ADBR	296-9838-1-ND	Dual 4-Input NAND Gate	14-SSOP	.60	.45	.34
SN74LV20ADBR	296-9838-2-ND	Dual 4-Input NAND Gate	14-SSOP	400.00/2,000		
SN74LV20ADGVR	296-3795-1-ND	Dual 4-Input NAND Gate	14-TVSOP	.60	.45	.34
SN74LV20ADGVR	296-3795-2-ND	Dual 4-Input NAND Gate	14-TVSOP	400.00/2,000		
SN74LV20APWR	296-3796-1-ND	Dual 4-Input NAND Gate	14-TSSOP	.60	.45	.34
SN74LV20APWR	296-3796-2-ND	Dual 4-Input NAND Gate	14-TSSOP	400.00/2,000		
SN74LV21ADR	296-9839-1-ND	Dual 4-Input AND Gate	14-SOP	.60	.45	.34
SN74LV21ADR	296-9839-2-ND	Dual 4-Input AND Gate	14-SOP	487.50/2,500		
SN74LV21ADBR	296-3798-1-ND	Dual 4-Input AND Gate	14-SSOP	.60	.45	.34
SN74LV21ADBR	296-3798-2-ND	Dual 4-Input AND Gate	14-SSOP	400.00/2,000		
SN74LV21ADGVR	296-3799-1-ND	Dual 4-Input AND Gate	14-TVSOP	.60	.45	.34
SN74LV21ADGVR	296-3799-2-ND	Dual 4-Input AND Gate	14-TVSOP	400.00/2,000		
SN74LV21APWR	296-3800-1-ND	Dual 4-Input AND Gate	14-TSSOP	.60	.45	.34
SN74LV21APWR	296-3800-2-ND	Dual 4-Input AND Gate	14-TSSOP	400.00/2,000		
SN74LV27ADR	296-3813-1-ND	Triple 3-Input NOR Gate	14-SOIC	.60	.45	.34
SN74LV27ADR	296-3813-2-ND	Triple 3-Input NOR Gate	14-SOIC	487.50/2,500		
SN74LV27ADBR	296-3814-1-ND	Triple 3-Input NOR Gate	14-SSOP	.60	.45	.34
SN74LV27ADBR	296-3814-2-ND	Triple 3-Input NOR Gate	14-SSOP	400.00/2,000		
SN74LV27ADGVR	296-3815-1-ND	Triple 3-Input NOR Gate	14-TVSOP	.60	.45	.34
SN74LV27ADGVR	296-3815-2-ND	Triple 3-Input NOR Gate	14-TVSOP	400.00/2,000		
SN74LV27APWR	296-3816-1-ND	Triple 3-Input NOR Gate	14-TSSOP	.60	.45	.34
SN74LV27APWR	296-3816-2-ND	Triple 3-Input NOR Gate	14-TSSOP	400.00/2,000		
SN74LV32AD	296-1686-5-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74LV32ADBR	296-3817-1-ND	Quad 2-Input OR Gate	14-SSOP	.52	.39	.30

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LV32ADBR	296-3817-2-ND	Quad 2-Input OR Gate	14-SSOP	346.00/2,000		
SN74LV32ADGVR	296-3818-1-ND	Quad 2-Input OR Gate	14-TVSOP	.52	.39	.30
SN74LV32ADGVR	296-3818-2-ND	Quad 2-Input OR Gate	14-TVSOP	346.00/2,000		
SN74LV32APWR	296-3819-1-ND	Quad 2-Input OR Gate	14-TSSOP	.52	.39	.30
SN74LV32APWR	296-3819-2-ND	Quad 2-Input OR Gate	14-TSSOP	346.00/2,000		
SN74LV74AD	296-1692-5-ND	Dual D-Type Flip-Flop	14-SOIC	.60	.45	.34
SN74LV74ADBR	296-3844-1-ND	Dual D-Type Flip-Flop	14-SSOP	.60	.45	.34
SN74LV74ADBR	296-3844-2-ND	Dual D-Type Flip-Flop	14-SSOP	400.00/2,000		
SN74LV74ADGVR	296-9842-1-ND	Dual D-Type Flip-Flop	14-TVSOP	.60	.45	.34
SN74LV74ADGVR	296-9842-2-ND	Dual D-Type Flip-Flop	14-TVSOP	400.00/2,000		
SN74LV74APWR	296-3846-1-ND	Dual D-Type Flip-Flop	14-TSSOP	.60	.45	.34
SN74LV74APWR	296-3846-2-ND	Dual D-Type Flip-Flop	14-TSSOP	400.00/2,000		
SN74LV86AD	296-1693-5-ND	Quad 2-Input EX-OR Gate	14-SOIC	.64	.48	.36
SN74LV123ADR	296-9829-1-ND	Dual Retrig. Mono. Multivibrator	16-SOP	1.05	.88	.70
SN74LV123ADR	296-9829-2-ND	Dual Retrig. Mono. Multivibrator	16-SOP	1137.50/2,500		
SN74LV123APWR	296-3774-1-ND	Dual Retrig. Monostable Multivibrator	16-TSSOP	1.05	.88	.70
SN74LV123APWR	296-3774-2-ND	Dual Retrig. Monostable Multivibrator	16-TSSOP	932.00/2,000		
SN74LV125AD	296-1674-5-ND	Tri-State Quad Bus Buffer Gate	14-SOIC	.72	.54	.41
SN74LV125ADGVR	296-3775-1-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	.72	.54	.41
SN74LV125ADGVR	296-3775-2-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	478.00/2,000		
SN74LV125APWR	296-3776-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.72	.54	.41
SN74LV125APWR	296-3776-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	478.00/2,000		
SN74LV132AD	296-1675-5-ND	Quad NAND Gate	14-SOIC	.88	.66	.50
SN74LV132ADR	296-1675-1-ND	Quad NAND Gate	14-SOIC	.88	.66	.50
SN74LV132ADR	296-1675-2-ND	Quad NAND Gate	14-SOIC	715.00/2,500		
SN74LV132ADBR	296-3777-1-ND	Quad NAND Gate	14-SSOP	.88	.66	.50
SN74LV132ADBR	296-3777-2-ND	Quad NAND Gate	14-SSOP	586.00/2,000		
SN74LV132ADGVR	296-3778-1-ND	Quad NAND Gate	14-TVSOP	.88	.66	.50
SN74LV132ADGVR	296-3778-2-ND	Quad NAND Gate	14-TVSOP	586.00/2,000		
SN74LV132APWR	296-3779-1-ND	Quad NAND Gate	14-TSSOP	.88	.66	.50
SN74LV132APWR	296-3779-2-ND	Quad NAND Gate	14-TSSOP	586.00/2,000		
SN74LV138AD	296-1676-5-ND	3-to-8 Decoder/Demultiplexer	16-SOIC	.80	.60	.45
SN74LV138ADR	296-1676-1-ND	3-to-8 Decoder/Demultiplexer	16-SOIC	.80	.60	.45
SN74LV138ADR	296-1676-2-ND	3-to-8 Decoder/Demultiplexer	16-SOIC	650.00/2,500		
SN74LV138APWR	296-3780-1-ND	3-to-8 Decoder/Demultiplexer	16-TSSOP	.80	.60	.45
SN74LV138APWR	296-3780-2-ND	3-to-8 Decoder/Demultiplexer	16-TSSOP	532.00/2,000		
SN74LV139AD	296-1677-5-ND	Dual 2-4 Decoder/Demultiplexer	16-SOIC	.88	.66	.50
SN74LV139ADBR	296-3781-1-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP	.88	.66	.50
SN74LV139ADBR	296-3781-2-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP	586.00/2,000		
SN74LV139APWR	296-3782-1-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP	.88	.66	.50
SN74LV139APWR	296-3782-2-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP	586.00/2,000		
SN74LV157ADBR	296-9830-1-ND	Quad 2-1 Line Data Selector/Mux	16-SSOP	.88	.66	.50
SN74LV157ADBR	296-9830-2-ND	Quad 2-1 Line Data Selector/Mux	16-SSOP	586.00/2,000		
SN74LV157ADGVR	296-9831-1-ND	Quad 2-1 Line Data Selector/Mux	16-TVSOP	.88	.66	.50
SN74LV157ADGVR	296-9831-2-ND	Quad 2-1 Line Data Selector/Mux	16-TVSOP	586.00/2,000		
SN74LV157ADR	296-9832-1-ND	Quad 2-1 Line Data Selector/Mux	16-SOP	.88	.66	.50
SN74LV157ADR	296-9832-2-ND	Quad 2-1 Line Data Selector/Mux	16-SOP	715.00/2,500		
SN74LV157APWR	296-9833-1-ND	Quad 2-1 Line Data Selector/Mux	16-TSSOP	.88	.66	.50
SN74LV157APWR	296-9833-2-ND	Quad 2-1 Line Data Selector/Mux	16-TSSOP	586.00/2,000		
SN74LV161ADBR	296-12342-1-ND	4-Bit Synchronous Binary Counter	16-SSOP	.88	.66	.50
SN74LV161ADBR	296-12342-2-ND	4-Bit Synchronous Binary Counter	16-SSOP	586.00/2,000		
SN74LV161ADGVR	296-12343-1-ND	4-Bit Synchronous Binary Counter	16-TVSOP	.88	.66	.50
SN74LV161ADGVR	296-12343-2-ND	4-Bit Synchronous Binary Counter	16-TVSOP	586.00/2,000		
SN74LV161APWR	296-12344-1-ND	4-Bit Synchronous Binary Counter	16-TSSOP	.88	.66	.50
SN74LV161APWR	296-12344-2-ND	4-Bit Synchronous Binary Counter	16-TSSOP	586.00/2,000		
SN74LV163ADBR	296-12345-1-ND	4-Bit Synchronous Binary Counter	16-SSOP	.88	.66	.50
SN74LV163ADBR	296-12345-2-ND	4-Bit Synchronous Binary Counter	16-SSOP	586.00/2,000		
SN74LV163ADGVR	296-12346-1-ND	4-Bit Synchronous Binary Counter	16-TVSOP	.88	.66	.50
SN74LV163ADGVR	296-12346-2-ND	4-Bit Synchronous Binary Counter	16-TVSOP	586.00/2,000		
SN74LV163ADR	296-11666-1-ND	4-Bit Synchronous Binary Counter	16-SOIC	.88	.66	.50
SN74LV163ADR	296-11666-2-ND	4-Bit Synchronous Binary Counter	16-SOIC	715.00/2,500		
SN74LV163APWR	296-12347-1-ND	4-Bit Synchronous Binary Counter	16-TSSOP	.88	.66	.50
SN74LV163APWR	296-12347-2-ND	4-Bit Synchronous Binary Counter	16-TSSOP	586.00/2,000		
SN74LV164AD	296-1680-5-ND	8-Bit Serial Shift Register	14-SOIC	.88	.66	.50
SN74LV164ADBR	296-3787-1-ND	8-Bit Serial Shift Register	14-SSOP	.88	.66	.50
SN74LV164ADBR	296-3787-2-ND	8-Bit Serial Shift Register	14-SSOP	586.00/2,000		
SN74LV164APWR	296-3788-1-ND	8-Bit Serial Shift Register	14-TSSOP	.88	.66	.50
SN74LV164APWR	296-3788-2-ND	8-Bit Serial Shift Register	14-TSSOP	586.00/2,000		
SN74LV165AD	296-1681-5-ND	8-Bit Parallel Load Shift Register	16-SOP	.75	.63	.50
SN74LV165APWR	296-3790-1-ND	8-Bit Parallel Load Shift Register	16-TSSOP	.75	.63	.50
SN74LV165APWR	296-3790-2-ND	8-Bit Parallel Load Shift Register	16-TSSOP	666.00/2,000		
SN74LV166ADBR	296-9834-1-ND	8-Bit Parallel Load Shift Register	16-SSOP	.75	.63	.50
SN74LV166ADBR	296-9834-2-ND	8-Bit Parallel Load Shift Register	16-SSOP	666.00/2,000		
SN74LV166ADGVR	296-9835-1-ND	8-Bit Parallel Load Shift Register	16-TVSOP	.75	.63	.50
SN74LV166ADGVR	296-9835-2-ND	8-Bit Parallel Load Shift Register	16-TVSOP	666.00/2,000		
SN74LV166ADR	296-9836-1-ND	8-Bit Parallel Load Shift Register	16-SOP	.75	.63	.50
SN74LV166ADR	296-9836-2-ND	8-Bit Parallel Load Shift Register	16-SOP	812.50/2,500		
SN74LV166APWR	296-9837-1-ND	8-Bit Parallel Load Shift Register	16-TSSOP	.75	.63	.50
SN74LV166APWR	296-9837-2-ND	8-Bit Parallel Load Shift Register	16-TSSOP	666.00/2,000		
SN74LV174AD	296-3791-5-ND	Hex D-Type Flip-Flop with Clear	16-SOIC	.88	.66	.50
SN74LV174APWR	296-3792-1-ND	Hex D-Type Flip-Flop with Clear	16-TSSOP	.88	.66	.50
SN74LV174APWR	296-3792-2-ND	Hex D-Type Flip-Flop with Clear	16-TSSOP	586.00/2,000		
SN74LV175AD	296-1682-5-ND	Quad D-Type Flip-Flop with Clear	16-SOIC	.88	.66	.50
SN74LV175APWR	296-3793-1-ND	Quad D-Type Flip-Flop with Clear	16-TSSOP	.88	.66	.50
SN74LV175APWR	296-3793-2-ND	Quad D-Type Flip-Flop with Clear	16-TSSOP	586.00/2,000		
SN74LV221AD	296-3801-5-ND	Dual Monostable Multivibrator	16-SOIC	1.20	1.00	.80
SN74LV221ADR	296-3801-1-ND	Dual Monostable Multivibrator	16-SOIC	1.20	1.00	.80
SN74LV221ADR	296-3801-2-ND	Dual Monostable Multivibrator	16-SOIC	1300.00/2,500		
SN74LV221ANSR	296-12473-1-ND	Dual Monostable Multivibrator *NEW!*	16-SOP	1.35	1.13	.90
SN74LV221ANSR	296-12473-2-ND	Dual Monostable Multivibrator *NEW!*	16-SOP	1198.00/2,000		
SN74LV240ADBR	296-3802-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.72	.54
SN74LV240ADBR	296-3802-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	638.00/2,000		
SN74LV240ADGVR	296-3803-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.96	.72	.54
SN74LV240ADGVR	296-3803-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP	638.00/2,000		
SN74LV240ADW	296-1683-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74LV240APWR	296-12348-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74LV240APWR	296-12348-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74LV244ADBR	296-3804-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.72	.54
SN74LV244ADBR	296-3804-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	638.00/2,000		
SN74LV244ADGVR	296-3805-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.96	.72	.54
SN74LV244ADGVR	296-3805-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP	638.00/2,000		
SN74LV244ADW	296-1684-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74LV244APWR	296-3806-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.72	.54
SN74LV244APWR	296-3806-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	638.00/2,000		
SN74LV245ADBR	296-3807-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.96	.72	.54

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LV245ADBR	296-3807-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	638.00/2,000		
SN74LV245ADGVR	296-3808-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	.96	.72	.54
SN74LV245ADGVR	296-3808-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	638.00/2,000		
SN74LV245ADW	296-1685-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.96	.72	.54
SN74LV245AGQNR	296-12091-1-ND	Tri-State Octal Bus Transceiver	20-BGA	.78	.65	.52
SN74LV245AGQNR	296-12091-2-ND	Tri-State Octal Bus Transceiver	20-BGA	346.00/1,000		
SN74LV245APWR	296-3809-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.96	.72	.54
SN74LV245APWR	296-3809-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	638.00/2,000		
SN74LV273ADBR	296-12349-1-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	.96	.72	.54
SN74LV273ADBR	296-12349-2-ND	Octal D-Type Flip-Flop with Clear	20-SSOP	638.00/2,000		
SN74LV273ADGVR	296-3810-1-ND	Octal D-Type Flip-Flop with Clear	20-TVSOP	.96	.72	.54
SN74LV273ADGVR	296-3810-2-ND	Octal D-Type Flip-Flop with Clear	20-TVSOP	638.00/2,000		
SN74LV273ADW	296-3811-5-ND	Octal D-Type Flip-Flop with Clear	20-SOIC	.96	.72	.54
SN74LV273APWR	296-3812-1-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	.96	.72	.54
SN74LV273APWR	296-3812-2-ND	Octal D-Type Flip-Flop with Clear	20-TSSOP	638.00/2,000		
SN74LV367APWR	296-12350-1-ND	Tri-St. Hex Buffer/Line Driver	16-TSSOP	1.05	.88	.70
SN74LV367APWR	296-12350-2-ND	Tri-St. Hex Buffer/Line Driver	16-TSSOP	932.00/2,000		
SN74LV373ADW	296-1687-5-ND	Tri-State Octal D-Type Transparent Latch	20-SOIC	.96	.72	.54
SN74LV373AGQNR	296-12092-1-ND	Tri-State Octal D-Type Transparent Latch	20-BGA	.78	.65	.52
SN74LV373AGQNR	296-12092-2-ND	Tri-State Octal D-Type Transparent Latch	20-BGA	346.00/1,000		
SN74LV374ADBR	296-12553-1-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	.96	.72	.54
SN74LV374ADBR	296-12553-2-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-SSOP	638.00/2,000		
SN74LV374ADW	296-1688-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.96	.72	.54
SN74LV374AGQNR	296-12093-1-ND	Tri-State Octal D-Type Flip-Flop	20-BGA	.78	.65	.52
SN74LV374AGQNR	296-12093-2-ND	Tri-State Octal D-Type Flip-Flop	20-BGA	346.00/1,000		
SN74LV374APWR	296-3820-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	.96	.72	.54
SN74LV374APWR	296-3820-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	638.00/2,000		
SN74LV393ADBR	296-12351-1-ND	Dual 4-Bit Binary Counter	14-SSOP	.75	.63	.50
SN74LV393ADBR	296-12351-2-ND	Dual 4-Bit Binary Counter	14-SSOP	666.00/2,000		
SN74LV393ADR	296-11664-1-ND	Dual 4-Bit Binary Counter	14-SOIC	.75	.63	.50
SN74LV393ADR	296-11664-2-ND	Dual 4-Bit Binary Counter	14-SOIC	812.50/2,500		
SN74LV393APWR	296-11643-1-ND	Dual 4-Bit Binary Counter	14-TSSOP	.75	.63	.50
SN74LV393APWR	296-11643-2-ND	Dual 4-Bit Binary Counter	14-TSSOP	666.00/2,000		
SN74LV540ADWR	296-3837-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74LV540ADWR	296-3837-2-ND	Tri-State Octal Buffer/Driver	20-SOIC	638.00/2,000		
SN74LV541ADBR	296-3838-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.72	.54
SN74LV541ADBR	296-3838-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	638.00/2,000		
SN74LV541ADW	296-1689-5-ND	Tri-State Octal Buffer/Driver	20-SOIC	.96	.72	.54
SN74LV573ADBR	296-3839-1-ND	Tri-State Octal D-Type Latch	20-SSOP	.96	.72	.54
SN74LV573ADBR	296-3839-2-ND	Tri-State Octal D-Type Latch	20-SSOP	638.00/2,000		
SN74LV573ADW	296-1690-5-ND	Tri-State Octal D-Type Latch	20-SOIC	.96	.72	.54
SN74LV573ADWR	296-1690-1-ND	Tri-State Octal D-Type Latch	20-SOIC	.96	.72	.54
SN74LV573ADWR	296-1690-2-ND	Tri-State Octal D-Type Latch	20-SOIC	638.00/2,000		
SN74LV573AGQNR	296-12094-1-ND	Tri-State Octal Transparent D-Type Latch	20-BGA	.78	.65	.52
SN74LV573AGQNR	296-12094-2-ND	Tri-State Octal Transparent D-Type Latch	20-BGA	346.00/1,000		
SN74LV573APWR	296-3840-1-ND	Tri-State Octal D-Type Latch	20-TSSOP	.96	.72	.54
SN74LV573APWR	296-3840-2-ND	Tri-State Octal D-Type Latch	20-TSSOP	638.00/2,000		
SN74LV574ADW	296-1691-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.96	.72	.54
SN74LV574AGQNR	296-12095-1-ND	Tri-State D-Type Flip-Flop	20-BGA	.78	.65	.52
SN74LV574AGQNR	296-12095-2-ND	Tri-State D-Type Flip-Flop	20-BGA	346.00/1,000		
SN74LV574APWR	296-12285-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.96	.72	.54
SN74LV574APWR	296-12285-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TSSOP	638.00/2,000		
SN74LV594ADBR	296-3841-1-ND	8-Bit Shift Register w/Output Register	16-SSOP	.96	.72	.54
SN74LV594ADBR	296-3841-2-ND	8-Bit Shift Register w/Output Register	16-SSOP	638.00/2,000		
SN74LV594APWR	296-3842-1-ND	8-Bit Shift Register w/Output Register	16-TSSOP	.96	.72	.54
SN74LV594APWR	296-3842-2-ND	8-Bit Shift Register w/Output Register	16-TSSOP	638.00/2,000		
SN74LV595APWR	296-3843-1-ND	Tri-State 8-Bit Shift Register	16-TSSOP	.96	.72	.54
SN74LV595APWR	296-3843-2-ND	Tri-State 8-Bit Shift Register	16-TSSOP	638.00/2,000		
SN74LV4040ADBR	296-3821-1-ND	12-Bit Asynchronous Binary Counter	16-SSOP	1.20	1.00	.80
SN74LV4040ADBR	296-3821-2-ND	12-Bit Asynchronous Binary Counter	16-SSOP	1064.00/2,000		
SN74LV4040ADGVR	296-3822-1-ND	12-Bit Asynchronous Binary Counter	16-TVSOP	1.20	1.00	.80
SN74LV4040ADGVR	296-3822-2-ND	12-Bit Asynchronous Binary Counter	16-TVSOP	1064.00/2,000		
SN74LV4040APWR	296-3824-1-ND	12-Bit Asynchronous Binary Counter	16-TSSOP	1.20	1.00	.80
SN74LV4040APWR	296-3824-2-ND	12-Bit Asynchronous Binary Counter	16-TSSOP	1064.00/2,000		
SN74LV4051ADBR	296-3825-1-ND	8-Channel Analog Mux/Demux	16-SSOP	.75	.63	.50
SN74LV4051ADBR	296-3825-2-ND	8-Channel Analog Mux/Demux	16-SSOP	666.00/2,000		
SN74LV4051ADGVR	296-3826-1-ND	8-Channel Analog Mux/Demux	16-TVSOP	.75	.63	.50
SN74LV4051ADGVR	296-3826-2-ND	8-Channel Analog Mux/Demux	16-TVSOP	666.00/2,000		
SN74LV4051ADR	296-3827-1-ND	8-Channel Analog Mux/Demux	16-SOIC	.75	.63	.50
SN74LV4051ADR	296-3827-2-ND	8-Channel Analog Mux/Demux	16-SOIC	812.50/2,500		
SN74LV4051AN	296-3828-5-ND	8-Channel Analog Mux/Demux	16-Dip	.75	.63	.50
SN74LV4051APWR	296-3829-1-ND	8-Channel Analog Mux/Demux	16-TSSOP	.75	.63	.50
SN74LV4051APWR	296-3829-2-ND	8-Channel Analog Mux/Demux	16-TSSOP	666.00/2,000		
SN74LV4052AN	296-3830-5-ND	Dual 4-Channel Analog Mux/Demux	16-Dip	.75	.63	.50
SN74LV4052APWR	296-3831-1-ND	Dual 4-Channel Analog Mux/Demux	16-TSSOP	.75	.63	.50
SN74LV4052APWR	296-3831-2-ND	Dual 4-Channel Analog Mux/Demux	16-TSSOP	666.00/2,000		
SN74LV4053AN	296-3832-5-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.75	.63	.50
SN74LV4053APWR	296-3833-1-ND	Triple 2-Channel Analog Mux/Demux	16-TSSOP	.75	.50	.63
SN74LV4053APWR	296-3833-2-ND	Triple 2-Channel Analog Mux/Demux	16-TSSOP	650.00/2,000		
SN74LV4066ADR	296-3834-1-ND	Quad Bilateral Analog Switch	14-SOIC	.75	.63	.50
SN74LV4066ADR	296-3834-2-ND	Quad Bilateral Analog Switch	14-SOIC	812.50/2,500		
SN74LV4066AN	296-3835-5-ND	Quad Bilateral Analog Switch	14-Dip	.75	.63	.50
SN74LV4066APWR	296-3836-1-ND	Quad Bilateral Analog Switch	14-TSSOP	.75	.63	.50
SN74LV4066APWR	296-3836-2-ND	Quad Bilateral Analog Switch	14-TSSOP	666.00/2,000		
SN74LV161284DGGR	296-1215-1-ND	19-Bit Bus Interface	48-TSSOP	3.04	2.43	1.89
SN74LV161284DGGR	296-1215-2-ND	19-Bit Bus Interface	48-TSSOP	3442.00/2,000		
SN74LV161284DL	296-1679-5-ND	19-Bit Bus Interface	48-SSOP	3.04	2.43	1.89
SN74LV161284DLR	296-3786-1-ND	19-Bit Bus Interface	48-SSOP	3.04	2.43	1.89
SN74LV161284DLR	296-3786-2-ND	19-Bit Bus Interface	48-SSOP	1721.00/1,000		

LVC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVC1G00DBVR	296-9845-1-ND	2-Input NAND Gate	SOT-23-5	.50	.40	.30
SN74LVC1G00DBVR	296-9845-2-ND	2-Input NAND Gate	SOT-23-5	405.00/3,000		
SN74LVC1G00DCKR	296-9846-1-ND	2-Input NAND Gate	SC-70	.55	.44	.33
SN74LVC1G00DCKR	296-9846-2-ND	2-Input NAND Gate	SC-70	447.00/3,000		
SN74LVC1G06DBVR	296-8483-1-ND	Single Inverter Buffer/Driver with OD Output	SOT-23-5	.50	.40	.30
SN74LVC1G06DBVR	296-8483-2-ND	Single Inverter Buffer/Driver with OD Output	SOT-23-5	405.00/3,000		
SN74LVC1G06DCKR	296-8484-1-ND	Single Inverter Buffer/Driver w/OD Output	5-SOP	.55	.44	.33
SN74LVC1G06DCKR	296-8484-2-ND	Single Inverter Buffer/Driver w/OD Output	5-SOP	447.00/3,000		
SN74LVC1G07DBVR	296-8485-1-ND	Single Buffer/Driver with OD Output	SOT-23-5	.50	.40	.30

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVC1G07DBVR	296-8485-2-ND	Single Buffer/Driver with OD Output	SOT-23-5		405.00/3,000	
SN74LVC1G07DCKR	296-8486-1-ND	Single Buffer/Driver wtih OD Output	5-SOP	.55	.44	.33
SN74LVC1G07DCKR	296-8486-2-ND	Single Buffer/Driver with OD Output	5-SOP		447.00/3,000	
SN74LVC1G08YEAR	296-12474-1-ND	Single 2-In Positive AND Gate *NEW!*	5-DSBGA	.60	.45	.34
SN74LVC1G08YEAR	296-12474-2-ND	Single 2-In Positive AND Gate *NEW!*	5-DSBGA		585.00/3,000	
SN74LVC1G17DBVR	296-11933-1-ND	Single Schmitt-Trigger Buffer	SOT-23-5	.50	.40	.30
SN74LVC1G17DBVR	296-11933-2-ND	Single Schmitt-Trigger Buffer	SOT-23-5		405.00/3,000	
SN74LVC1G17DCKR	296-11934-1-ND	Single Schmitt-Trigger Buffer	5-SOP	.55	.44	.33
SN74LVC1G17DCKR	296-11934-2-ND	Single Schmitt-Trigger Buffer	5-SOP		447.00/3,000	
SN74LVC1G32DBVR	296-9847-1-ND	2-Input Positive-OR Gate	SOT-23-5	.50	.40	.30
SN74LVC1G32DBVR	296-9847-2-ND	2-Input Positive-OR Gate	SOT-23-5		405.00/3,000	
SN74LVC1G32DCKR	296-9848-1-ND	2-Input Positive-OR Gate	SC-70	.55	.44	.33
SN74LVC1G32DCKR	296-9848-2-ND	2-Input Positive-OR Gate	SC-70		447.00/3,000	
SN74LVC1G79DBVR	296-9849-1-ND	Positive Edge-Trig. D-Type Flip-Flop	SOT-23-5	.50	.40	.30
SN74LVC1G79DBVR	296-9849-2-ND	Positive Edge-Trig. D-Type Flip-Flop	SOT-23-5		405.00/3,000	
SN74LVC1G79DCKR	296-9850-1-ND	Positive Edge-Trig. D-Type Flip-Flop	SC-70-5	.55	.44	.33
SN74LVC1G79DCKR	296-9850-2-ND	Positive Edge-Trig. D-Type Flip-Flop	SC-70-5		447.00/3,000	
SN74LVC1G80DBVR	296-9851-1-ND	Positive Edge-Trig. D-Type Flip-Flop	SOT-23-5	.50	.40	.30
SN74LVC1G80DBVR	296-9851-2-ND	Positive Edge-Trig. D-Type Flip-Flop	SOT-23-5		405.00/3,000	
SN74LVC1G80DCKR	296-9852-1-ND	Positive Edge-Trig. D-Type Flip-Flop	SC-70-5	.55	.44	.33
SN74LVC1G80DCKR	296-9852-2-ND	Positive Edge-Trig. D-Type Flip-Flop	SC-70-5		447.00/3,000	
SN74LVC1G86DBVR	296-9853-1-ND	2-Input EX-OR Gate	SOT-23-5	.50	.40	.30
SN74LVC1G86DBVR	296-9853-2-ND	2-Input EX-OR Gate	SOT-23-5		405.00/3,000	
SN74LVC1G86DCKR	296-9854-1-ND	2-Input EX-OR Gate	SC-70	.55	.44	.33
SN74LVC1G86DCKR	296-9854-2-ND	2-Input EX-OR Gate	SC-70		447.00/3,000	
SN74LVC1GU04DBVR	296-8487-1-ND	Single Inverter Gate	SOT-23-5	.50	.40	.30
SN74LVC1GU04DBVR	296-8487-2-ND	Single Inverter Gate	SOT-23-5		405.00/3,000	
SN74LVC1GU04DCKR	296-8488-1-ND	Single Inverter Gate	5-SOP	.55	.44	.33
SN74LVC1GU04DCKR	296-8488-2-ND	Single Inverter Gate	5-SOP		447.00/3,000	
SN74LVC2G125DCTR	296-12164-1-ND	Tri-State Dual Bus Buffer Gate *NEW!*	8-SSOP	.48	.40	.32
SN74LVC2G125DCTR	296-12164-2-ND	Tri-State Dual Bus Buffer Gate *NEW!*	8-SSOP		624.00/3,000	
SN74LVC2G126DCTR	296-12554-1-ND	Tri-State Dual Bus Buffer Gate *NEW!*	8-SSOP	.64	.48	.36
SN74LVC2G126DCTR	296-12554-2-ND	Tri-State Dual Bus Buffer Gate *NEW!*	8-SSOP		624.00/3,000	
SN74LVC2G126DCUR	296-12555-1-ND	Tri-State Dual Bus Buffer Gate *NEW!*	8-VSSOP	.68	.51	.39
SN74LVC2G126DCUR	296-12555-2-ND	Tri-State Dual Bus Buffer Gate *NEW!*	8-VSSOP		663.00/3,000	
SN74LVC2G157DCUR	296-12605-1-ND	Single, 2-Line to 1-Line Data Selector/Mux *NEW!*	8-VSSOP	.68	.51	.39
SN74LVC2G157DCUR	296-12605-2-ND	Single, 2-Line to 1-Line Data Selector/Mux *NEW!*	8-VSSOP		663.00/3,000	
SN74LVC2G241DCTR	296-11935-1-ND	Tri-State Dual Buffer/Driver	8-SSOP	.64	.48	.36
SN74LVC2G241DCTR	296-11935-2-ND	Tri-State Dual Buffer/Driver	8-SSOP		624.00/3,000	
SN74LVC2G241DCUR	296-11936-1-ND	Tri-State Dual Buffer/Driver	8-VSOP	.68	.51	.39
SN74LVC2G241DCUR	296-11936-2-ND	Tri-State Dual Buffer/Driver	8-VSOP		663.00/3,000	
SN74LVC00AD	296-1694-5-ND	Quad 2-Input NAND Gate	14-SOIC	.52	.39	.30
SN74LVC00ADR	296-1694-1-ND	Quad 2-Input NAND Gate	14-SOIC	.52	.39	.30
SN74LVC00ADR	296-1694-2-ND	Quad 2-Input NAND Gate	14-SOIC		422.50/2,500	
SN74LVC00ADBR	296-8430-1-ND	Quad 2-Input NAND Gate	14-SSOP	.52	.39	.30
SN74LVC00ADBR	296-8430-2-ND	Quad 2-Input NAND Gate	14-SSOP		346.00/2,000	
SN74LVC00APWR	296-1216-1-ND	Quad 2-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74LVC00APWR	296-1216-2-ND	Quad 2-Input NAND Gate	14-TSSOP		346.00/2,000	
SN74LVC02AD	296-8433-5-ND	Quad 2-Input NOR Gate	14-SOP	.52	.39	.30
SN74LVC02ADR	296-8433-1-ND	Quad 2-Input NOR Gate	14-SOP	.96	.72	.54
SN74LVC02ADR	296-8433-2-ND	Quad 2-Input NOR Gate	14-SOP		780.00/2,500	
SN74LVC02ADBR	296-8432-1-ND	Quad 2-Input NOR Gate	14-SSOP	.72	.54	.41
SN74LVC02ADBR	296-8432-2-ND	Quad 2-Input NOR Gate	14-SSOP		478.00/2,000	
SN74LVC02APWR	296-8434-1-ND	Quad 2-Input NOR Gate	14-TSSOP	.52	.39	.30
SN74LVC02APWR	296-8434-2-ND	Quad 2-Input NOR Gate	14-TSSOP		346.00/2,000	
SN74LVC04AD	296-1218-5-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74LVC04ADR	296-1218-1-ND	Hex Inverter	14-SOIC	.52	.39	.30
SN74LVC04ADR	296-1218-2-ND	Hex Inverter	14-SOIC		422.50/2,500	
SN74LVC04ADBR	296-1217-1-ND	Hex Inverter	14-SSOP	.52	.39	.30
SN74LVC04ADBR	296-1217-2-ND	Hex Inverter	14-SSOP		346.00/2,000	
SN74LVC04ADGVR	296-8435-1-ND	Hex Inverter	14-TVSOP	.52	.39	.30
SN74LVC04ADGVR	296-8435-2-ND	Hex Inverter	14-TVSOP		346.00/2,000	
SN74LVC04APWR	296-1219-1-ND	Hex Inverter	14-TSSOP	.52	.39	.30
SN74LVC04APWR	296-1219-2-ND	Hex Inverter	14-TSSOP		346.00/2,000	
SN74LVC06AD	296-1696-5-ND	Hex Inverter Buffer/Driver with OD	14-SOIC	.75	.63	.50
SN74LVC06ADGVR	296-8436-1-ND	Hex Inverter Buffer/Driver with OD	14-TVSOP	.75	.63	.50
SN74LVC06ADGVR	296-8436-2-ND	Hex Inverter Buffer/Driver with OD	14-TVSOP		666.00/2,000	
SN74LVC06APWR	296-8437-1-ND	Hex Inverter Buffer/Driver with OD	14-TSSOP	.75	.63	.50
SN74LVC06APWR	296-8437-2-ND	Hex Inverter Buffer/Driver with OD	14-TSSOP		666.00/2,000	
SN74LVC07AD	296-8441-5-ND	Hex Buffer/Driver with OD	14-SOP	.75	.63	.50
SN74LVC07ADR	296-8441-1-ND	Hex Buffer/Driver with OD	14-SOP	.81	.68	.54
SN74LVC07ADR	296-8441-2-ND	Hex Buffer/Driver with OD	14-SOP		877.50/2,500	
SN74LVC07ADBR	296-8439-1-ND	Hex Buffer/Driver with OD	14-SSOP	.75	.63	.50
SN74LVC07ADBR	296-8439-2-ND	Hex Buffer/Driver with OD	14-SSOP		666.00/2,000	
SN74LVC07ADGVR	296-8440-1-ND	Hex Buffer/Driver with OD	14-TVSOP	.75	.63	.50
SN74LVC07ADGVR	296-8440-2-ND	Hex Buffer/Driver with OD	14-TVSOP		666.00/2,000	
SN74LVC07APWR	296-8442-1-ND	Hex Buffer/Driver with OD	14-TSSOP	.75	.63	.50
SN74LVC07APWR	296-8442-2-ND	Hex Buffer/Driver with OD	14-TSSOP		666.00/2,000	
SN74LVC08AD	296-1697-5-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74LVC08ADR	296-1697-1-ND	Quad 2-Input AND Gate	14-SOIC	.52	.39	.30
SN74LVC08ADR	296-1697-2-ND	Quad 2-Input AND Gate	14-SOIC		422.50/2,500	
SN74LVC08ADBR	296-1220-1-ND	Quad 2-Input AND Gate	14-SSOP	.52	.39	.30
SN74LVC08ADBR	296-1220-2-ND	Quad 2-Input AND Gate	14-SSOP		346.00/2,000	
SN74LVC08APWR	296-1221-1-ND	Quad 2-Input AND Gate	14-TSSOP	.52	.39	.30
SN74LVC08APWR	296-1221-2-ND	Quad 2-Input AND Gate	14-TSSOP		346.00/2,000	
SN74LVC10AD	296-8443-5-ND	Triple 3-Input NAND Gate	14-SOP	.52	.39	.30
SN74LVC10ADBR	296-8444-1-ND	Triple 3-Input NAND Gate	14-SSOP	.52	.39	.30
SN74LVC10ADBR	296-8444-2-ND	Triple 3-Input NAND Gate	14-SSOP		346.00/2,000	
SN74LVC10APWR	296-8445-1-ND	Triple 3-Input NAND Gate	14-TSSOP	.52	.39	.30
SN74LVC10APWR	296-8445-2-ND	Triple 3-Input NAND Gate	14-TSSOP		346.00/2,000	
SN74LVC14AD	296-1699-5-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30
SN74LVC14ADR	296-1699-1-ND	Hex Schmitt-Trigger Inverter	14-SOIC	.52	.39	.30
SN74LVC14ADR	296-1699-2-ND	Hex Schmitt-Trigger Inverter	14-SOIC		422.50/2,500	
SN74LVC14ADBR	296-8463-1-ND	Hex Schmitt-Trigger Inverter	14-SSOP	.52	.39	.30
SN74LVC14ADBR	296-8463-2-ND	Hex Schmitt-Trigger Inverter	14-SSOP		346.00/2,000	
SN74LVC14ADGVR	296-8464-1-ND	Hex Schmitt-Trigger Inverter	14-TVSOP	.52	.39	.30
SN74LVC14ADGVR	296-8464-2-ND	Hex Schmitt-Trigger Inverter	14-TVSOP		346.00/2,000	
SN74LVC14APWR	296-1224-1-ND	Hex Schmitt-Trigger Inverter	14-TSSOP	.52	.39	.30
SN74LVC14APWR	296-1224-2-ND	Hex Schmitt-Trigger Inverter	14-TSSOP		346.00/2,000	
SN74LVC32AD	296-1235-5-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74LVC32ADR	296-1235-1-ND	Quad 2-Input OR Gate	14-SOIC	.52	.39	.30
SN74LVC32ADR	296-1235-2-ND	Quad 2-Input OR Gate	14-SOIC		422.50/2,500	
SN74LVC32ADBR	296-1234-1-ND	Quad 2-Input OR Gate	14-SSOP	.52	.39	.30
SN74LVC32ADBR	296-1234-2-ND	Quad 2-Input OR Gate	14-SSOP		346.00/2,000	
SN74LVC32APWR	296-1236-1-ND	Quad 2-Input OR Gate	14-TSSOP	.52	.39	.30
SN74LVC32APWR	296-1236-2-ND	Quad 2-Input OR Gate	14-TSSOP		346.00/2,000	
SN74LVC74AD	296-1240-5-ND	Tri-State Dual D-Type Flip-Flop	14-SOIC	.56	.42	.32
SN74LVC74ADR	296-1240-1-ND	Tri-State Dual D-Type Flip-Flop	14-SOIC	.56	.42	.32
SN74LVC74ADR	296-1240-2-ND	Tri-State Dual D-Type Flip-Flop	14-SOIC		455.00/2,500	
SN74LVC74ADBR	296-1239-1-ND	Tri-State Dual D-Type Flip-Flop	14-SSOP	.56	.42	.32
SN74LVC74ADBR	296-1239-2-ND	Tri-State Dual D-Type Flip-Flop	14-SSOP		372.00/2,000	
SN74LVC74APWR	296-1241-1-ND	Tri-State Dual D-Type Flip-Flop	14-TSSOP	.56	.42	.32
SN74LVC74APWR	296-1241-2-ND	Tri-State Dual D-Type Flip-Flop	14-TSSOP		372.00/2,000	
SN74LVC86AD	296-8561-5-ND	Quad 2-Input EX-OR Gate	14-SOP	.64	.48	.36
SN74LVC86ADBR	296-8562-1-ND	Quad 2-Input EX-OR Gate	14-SSOP	.64	.48	.36
SN74LVC86ADBR	296-8562-2-ND	Quad 2-Input EX-OR Gate	14-SSOP		426.00/2,000	
SN74LVC86APWR	296-1242-1-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.64	.48	.36
SN74LVC86APWR	296-1242-2-ND	Quad 2-Input EX-OR Gate	14-TSSOP		426.00/2,000	
SN74LVC112AD	296-8449-5-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-SOP	.76	.57	.43
SN74LVC112ADR	296-8449-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-SOP	.76	.57	.43
SN74LVC112ADR	296-8449-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-SOP		617.50/2,500	
SN74LVC112ADBR	296-8447-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-SSOP	.76	.57	.43
SN74LVC112ADBR	296-8447-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-SSOP		506.00/2,000	
SN74LVC112ADGVR	296-8448-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-TVSOP	.76	.57	.43
SN74LVC112ADGVR	296-8448-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-TVSOP		506.00/2,000	
SN74LVC112APWR	296-8450-1-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-TSSOP	.76	.57	.43
SN74LVC112APWR	296-8450-2-ND	Dual Neg-Edge-Trig JK Flip-Flop with Clear/Preset	16-TSSOP		506.00/2,000	
SN74LVC125AD	296-8453-5-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.76	.57	.43
SN74LVC125ADR	296-8453-1-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.76	.57	.43
SN74LVC125ADR	296-8453-2-ND	Tri-State Quad Bus Buffer Gate	14-SOP		617.50/2,500	
SN74LVC125ADBR	296-8452-1-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	.76	.57	.43
SN74LVC125ADBR	296-8452-2-ND	Tri-State Quad Bus Buffer Gate	14-SSOP		506.00/2,000	
SN74LVC125APWR	296-1222-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.76	.57	.43
SN74LVC125APWR	296-1222-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP		506.00/2,000	
SN74LVC126AD	296-8457-5-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.76	.57	.43
SN74LVC126ADR	296-8457-1-ND	Tri-State Quad Bus Buffer Gate	14-SOP	.76	.57	.43
SN74LVC126ADR	296-8457-2-ND	Tri-State Quad Bus Buffer Gate	14-SOP		617.50/2,500	
SN74LVC126ADBR	296-8455-1-ND	Tri-State Quad Bus Buffer Gate	14-SSOP	.76	.57	.43
SN74LVC126ADBR	296-8455-2-ND	Tri-State Quad Bus Buffer Gate	14-SSOP		506.00/2,000	
SN74LVC126ADGVR	296-8456-1-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP	.76	.57	.43
SN74LVC126ADGVR	296-8456-2-ND	Tri-State Quad Bus Buffer Gate	14-TVSOP		506.00/2,000	
SN74LVC126APWR	296-8458-1-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP	.76	.57	.43
SN74LVC126APWR	296-8458-2-ND	Tri-State Quad Bus Buffer Gate	14-TSSOP		506.00/2,000	
SN74LVC138AD	296-8459-5-ND	3-8 Decoder/Demultiplexer	16-SOP	.76	.57	.43
SN74LVC138ADBR	296-8460-1-ND	3-8 Decoder/Demultiplexer	16-SSOP	.76	.57	.43
SN74LVC138ADBR	296-8460-2-ND	3-8 Decoder/Demultiplexer	16-SSOP		506.00/2,000	
SN74LVC138AGQNR	296-12096-1-ND	3-8 Decoder/Demultiplexer	20-BGA	.99	.83	.66
SN74LVC138AGQNR	296-12096-2-ND	3-8 Decoder/Demultiplexer	20-BGA		439.00/1,000	
SN74LVC138APWR	296-1223-1-ND	3-8 Decoder/Demultiplexer	16-TSSOP	.76	.57	.43
SN74LVC138APWR	296-1223-2-ND	3-8 Decoder/Demultiplexer	16-TSSOP		506.00/2,000	
SN74LVC139AD	296-1698-5-ND	Dual 2-4 Decoder/Demultiplexer	16-SOIC	.75	.63	.50
SN74LVC139ADBR	296-8461-1-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP	.75	.63	.50
SN74LVC139ADBR	296-8461-2-ND	Dual 2-4 Decoder/Demultiplexer	16-SSOP		666.00/2,000	
SN74LVC139APWR	296-8462-1-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP	.75	.63	.50
SN74LVC139APWR	296-8462-2-ND	Dual 2-4 Decoder/Demultiplexer	16-TSSOP		666.00/2,000	
SN74LVC157AD	296-1700-5-ND	Quad 2-1 Data Selector/Multiplexer	16-SOIC	.84	.63	.48
SN74LVC157ADBR	296-8465-1-ND	Quad 2-1 Data Selector/Multiplexer.	16-SSOP	.84	.63	.48
SN74LVC157ADBR	296-8465-2-ND	Quad 2-1 Data Selector/Multiplexer	16-SSOP		558.00/2,000	
SN74LVC157APWR	296-1225-1-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP	.84	.63	.48
SN74LVC157APWR	296-1225-2-ND	Quad 2-1 Data Selector/Multiplexer	16-TSSOP		558.00/2,000	
SN74LVC240ADBR	296-8494-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.88	.66	.50
SN74LVC240ADBR	296-8494-2-ND	Tri-State Octal Buffer/Driver	20-SSOP		586.00/2,000	
SN74LVC240ADGVR	296-8495-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.88	.66	.50
SN74LVC240ADGVR	296-8495-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP		586.00/2,000	
SN74LVC240ADW	296-8496-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.88	.66	.50
SN74LVC240ADWR	296-8496-1-ND	Tri-State Octal Buffer/Driver	20-SOP	.88	.66	.50
SN74LVC240ADWR	296-8496-2-ND	Tri-State Octal Buffer/Driver	20-SOP		586.00/2,000	
SN74LVC240APWR	296-8498-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.88	.66	.50
SN74LVC240APWR	296-8498-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP		586.00/2,000	
SN74LVC244ADBR	296-8499-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.88	.66	.50
SN74LVC244ADBR	296-8499-2-ND	Tri-State Octal Buffer/Driver	20-SSOP		586.00/2,000	
SN74LVC244ADGVR	296-8500-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.88	.66	.50
SN74LVC244ADGVR	296-8500-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP		586.00/2,000	
SN74LVC244ADWR	296-1229-1-ND	Tri-State Octal Buffer/Driver	20-SOIC	.88	.66	.50
SN74LVC244ADWR	296-1229-2-ND	Tri-State Octal Buffer/Driver	20-SOIC		586.00/2,000	
SN74LVC244AGQNR	296-12097-1-ND	Tri-State Octal Buffer/Driver	20-BGA	.75	.63	.50
SN74LVC244AGQNR	296-12097-2-ND	Tri-State Octal Buffer/Driver	20-BGA		333.00/1,000	
SN74LVC244AN	296-8501-5-ND	Tri-State Octal Buffer/Driver	20-Dip	.88	.66	.50
SN74LVC244APWR	296-1230-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.88	.66	.50
SN74LVC244APWR	296-1230-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP		586.00/2,000	
SN74LVC245ADBR	296-1231-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.88	.66	.50
SN74LVC245ADBR	296-1231-2-ND	Tri-State Octal Bus Transceiver	20-SSOP		586.00/2,000	
SN74LVC245ADGVR	296-8502-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	.88	.66	.50
SN74LVC245ADGVR	296-8502-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP		586.00/2,000	
SN74LVC245ADW	296-1232-5-ND	Tri-State Octal Bus Transceiver	20-SOIC	.88	.66	.50
SN74LVC245ADWR	296-1232-1-ND	Tri-State Octal Bus Transceiver	20-SOIC	.88	.66	.50
SN74LVC245ADWR	296-1232-2-ND	Tri-State Octal Bus Transceiver	20-SOIC		586.00/2,000	
SN74LVC245AGQNR	296-12098-1-ND	Tri-State Octal Bus Transceiver	20-BGA	.75	.63	.50
SN74LVC245AGQNR	296-12098-2-ND	Tri-State Octal Bus Transceiver	20-BGA		333.00/1,000	
SN74LVC245AN	296-8503-5-ND	Tri-State Octal Bus Transceiver	20-Dip	.80	.60	.45
SN74LVC245APWR	296-1233-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.88	.66	.50
SN74LVC245APWR	296-1233-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP		586.00/2,000	
SN74LVC257AD	296-8504-5-ND	Tri-State Quad 2-1 Data Selector/Mux	16-SOP	.88	.66	.50
SN74LVC257ADR	296-8504-1-ND	Tri-State Quad 2-1 Data Selector/Mux	16-SOP	1.17	.98	.78
SN74LVC257ADR	296-8504-2-ND	Tri-State Quad 2-1 Data Selector/Mux	16-SOP		1267.50/2,500	
SN74LVC257APWR	296-8506-1-ND	Tri-State Quad 2-1 Data Selector/Mux	16-TSSOP	1.05	.88	.70
SN74LVC257APWR	296-8506-2-ND	Tri-State Quad 2-1 Data Selector/Mux	16-TSSOP		932.00/2,000	

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVC373ADBR	296-1237-1-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	.88	.66	.50
SN74LVC373ADBR	296-1237-2-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	586.00/2,000		
SN74LVC373ADGVR	296-8510-1-ND	Tri-State Octal Transp. D-Type Latch	20-TVSOP	.88	.66	.50
SN74LVC373ADGVR	296-8510-2-ND	Tri-State Octal Transp. D-Type Latch	20-TVSOP	585.20/2,000		
SN74LVC373ADW	296-8511-5-ND	Tri-State Octal Transp. D-Type Latch	20-SOP	.88	.66	.50
SN74LVC373ADWR	296-8511-1-ND	Tri-State Octal Transp. D-Type Latch	20-SOP	.88	.66	.50
SN74LVC373ADWR	296-8511-2-ND	Tri-State Octal Transp. D-Type Latch	20-SOP	586.00/2,000		
SN74LVC373AGQNR	296-12099-1-ND	Tri-State Octal Transp. D-Type Latch	20-BGA	.75	.63	.50
SN74LVC373AGQNR	296-12099-2-ND	Tri-State Octal Transp. D-Type Latch	20-BGA	333.00/1,000		
SN74LVC373APWR	296-8512-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.88	.66	.50
SN74LVC373APWR	296-8512-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	586.00/2,000		
SN74LVC374ADBR	296-8513-1-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	.88	.66	.50
SN74LVC374ADBR	296-8513-2-ND	Tri-State Octal D-Type Flip-Flop	20-SSOP	586.00/2,000		
SN74LVC374ADW	296-1701-5-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.88	.66	.50
SN74LVC374ADWR	296-1701-1-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	.55	.44	.33
SN74LVC374ADWR	296-1701-2-ND	Tri-State Octal D-Type Flip-Flop	20-SOIC	586.00/2,000		
SN74LVC374APWR	296-1238-1-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1.05	.88	.70
SN74LVC374APWR	296-1238-2-ND	Tri-State Octal D-Type Flip-Flop	20-TSSOP	1760.00/2,000		
SN74LVC540ADBR	296-8516-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.80	.64
SN74LVC540ADBR	296-8516-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	852.00/2,000		
SN74LVC540ADW	296-8517-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.80	.64
SN74LVC540ADWR	296-8517-1-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.80	.64
SN74LVC540ADWR	296-8517-2-ND	Tri-State Octal Buffer/Driver	20-SOP	852.00/2,000		
SN74LVC541ADBR	296-8518-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.96	.80	.64
SN74LVC541ADBR	296-8518-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	852.00/2,000		
SN74LVC541ADGVR	296-8519-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.96	.80	.64
SN74LVC541ADGVR	296-8519-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP	852.00/2,000		
SN74LVC541ADW	296-8520-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.96	.80	.64
SN74LVC541APWR	296-8521-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.96	.80	.64
SN74LVC541APWR	296-8521-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	852.00/2,000		
SN74LVC543ADBR	296-8522-1-ND	Tri-State Octal Registered Transceiver	24-SSOP	1.88	1.50	1.13
SN74LVC543ADBR	296-8522-2-ND	Tri-State Octal Registered Transceiver	24-SSOP	1950.00/2,000		
SN74LVC543ADW	296-8523-5-ND	Tri-State Octal Registered Transceiver	24-SOP	1.88	1.50	1.13
SN74LVC543APWR	296-8524-1-ND	Tri-State Octal Registered Transceiver	24-TSSOP	1.88	1.50	1.13
SN74LVC543APWR	296-8524-2-ND	Tri-State Octal Registered Transceiver	24-TSSOP	1950.00/2,000		
SN74LVC573ADBR	296-8525-1-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	.75	.63	.50
SN74LVC573ADBR	296-8525-2-ND	Tri-State Octal Transp. D-Type Latch	20-SSOP	666.00/2,000		
SN74LVC573ADGVR	296-8526-1-ND	Tri-State Octal Transp. D-Type Latch	20-TVSOP	.75	.63	.50
SN74LVC573ADGVR	296-8526-2-ND	Tri-State Octal Transp. D-Type Latch	20-TVSOP	666.00/2,000		
SN74LVC573ADW	296-8527-5-ND	Tri-State Octal Transp. D-Type Latch	20-SOP	.75	.63	.50
SN74LVC573AGQNR	296-12100-1-ND	Tri-State Octal Transp. D-Type Latch	20-BGA	.84	.70	.56
SN74LVC573AGQNR	296-12100-2-ND	Tri-State Octal Transp. D-Type Latch	20-BGA	372.00/1,000		
SN74LVC573AN	296-8528-5-ND	Tri-State Octal Transp. D-Type Latch	20-Dip	.75	.63	.50
SN74LVC573APWR	296-8529-1-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	.75	.63	.50
SN74LVC573APWR	296-8529-2-ND	Tri-State Octal Transp. D-Type Latch	20-TSSOP	666.00/2,000		
SN74LVC574ADBR	296-8530-1-ND	Tri-St. Octal D-Type Flip-Flop	20-SSOP	.75	.63	.50
SN74LVC574ADBR	296-8530-2-ND	Tri-St. Octal D-Type Flip-Flop	20-SSOP	666.00/2,000		
SN74LVC574ADW	296-8531-5-ND	Tri-St. Octal D-Type Flip-Flop	20-SOP	.75	.63	.50
SN74LVC574ADGVR	296-12475-1-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TVSOP	.75	.63	.50
SN74LVC574ADGVR	296-12475-2-ND	Tri-St. Octal D-Type Flip-Flop *NEW!*	20-TVSOP	666.00/2,000		
SN74LVC574AGQNR	296-12101-1-ND	Tri-St. Octal D-Type Flip-Flop	20-BGA	.84	.70	.56
SN74LVC574AGQNR	296-12101-2-ND	Tri-St. Octal D-Type Flip-Flop	20-BGA	372.00/1,000		
SN74LVC574APWR	296-8532-1-ND	Tri-St. Octal D-Type Flip-Flop	20-TSSOP	.75	.63	.50
SN74LVC574APWR	296-8532-2-ND	Tri-St. Octal D-Type Flip-Flop	20-TSSOP	666.00/2,000		
SN74LVC646ADBR	296-8533-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	2.40	1.92	1.44
SN74LVC646ADBR	296-8533-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	2496.00/2,000		
SN74LVC646ADW	296-8534-5-ND	Tri-St. Octal Bus Transceiver/Register	24-SOP	2.40	1.92	1.44
SN74LVC646APWR	296-8535-1-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	2.40	1.92	1.44
SN74LVC646APWR	296-8535-2-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	2496.00/2,000		
SN74LVC652ADBR	296-8536-1-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	2.36	1.89	1.47
SN74LVC652ADBR	296-8536-2-ND	Tri-St. Octal Bus Transceiver/Register	24-SSOP	2678.00/2,000		
SN74LVC652ADW	296-8537-5-ND	Tri-St. Octal Bus Transceiver/Register	24-SOP	2.36	1.89	1.47
SN74LVC652APWR	296-8538-1-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	2.36	1.89	1.47
SN74LVC652APWR	296-8538-2-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	2678.00/2,000		
SN74LVC821ADBR	296-8539-1-ND	Tri-State 10-Bit Interface Flip-Flop	24-SSOP	1.70	1.36	1.02
SN74LVC821ADBR	296-8539-2-ND	Tri-State 10-Bit Interface Flip-Flop	24-SSOP	1768.00/2,000		
SN74LVC821ADGVR	296-8540-1-ND	Tri-State 10-Bit Interface Flip-Flop	24-TVSOP	1.70	1.36	1.02
SN74LVC821ADGVR	296-8540-2-ND	Tri-State 10-Bit Interface Flip-Flop	24-TVSOP	1768.00/2,000		
SN74LVC821ADW	296-1703-5-ND	Tri-State 10-Bit Interface Flip-Flop	24-SOIC	1.70	1.36	1.02
SN74LVC821ADWR	296-1703-1-ND	Tri-State 10-Bit Bus-Interface Flip-Flop	24-SOIC	1.70	1.36	1.02
SN74LVC821ADWR	296-1703-2-ND	Tri-State 10-Bit Bus-Interface Flip-Flop	24-SOIC	1768.00/2,000		
SN74LVC821APWR	296-8541-1-ND	Tri-State 10-Bit Interface Flip-Flop	24-TSSOP	1.70	1.36	1.02
SN74LVC821APWR	296-8541-2-ND	Tri-State 10-Bit Interface Flip-Flop	24-TSSOP	1768.00/2,000		
SN74LVC823ADBR	296-8542-1-ND	Tri-State 10-Bit Interface Flip-Flop	24-SSOP	1.70	1.36	1.02
SN74LVC823ADBR	296-8542-2-ND	Tri-State 10-Bit Interface Flip-Flop	24-SSOP	1768.00/2,000		
SN74LVC823ADGVR	296-8543-1-ND	Tri-State 10-Bit Interface Flip-Flop	24-TVSOP	1.70	1.36	1.02
SN74LVC823ADGVR	296-8543-2-ND	Tri-State 10-Bit Interface Flip-Flop	24-TVSOP	1768.00/2,000		
SN74LVC823APWR	296-8544-1-ND	Tri-State 10-Bit Interface Flip-Flop	24-TSSOP	1.70	1.36	1.02
SN74LVC823APWR	296-8544-2-ND	Tri-State 10-Bit Interface Flip-Flop	24-TSSOP	1768.00/2,000		
SN74LVC827ADBR	296-8545-1-ND	Tri-State 10-Bit Buffer/Driver	24-SSOP	1.70	1.36	1.02
SN74LVC827ADBR	296-8545-2-ND	Tri-State 10-Bit Buffer/Driver	24-SSOP	1768.00/2,000		
SN74LVC827ADGVR	296-8546-1-ND	Tri-State 10-Bit Buffer/Driver	24-TVSOP	1.70	1.36	1.02
SN74LVC827ADGVR	296-8546-2-ND	Tri-State 10-Bit Buffer/Driver	24-TVSOP	1768.00/2,000		
SN74LVC827ADW	296-8547-5-ND	Tri-State 10-Bit Buffer/Driver	24-SOP	1.70	1.36	1.02
SN74LVC827APWR	296-8548-1-ND	Tri-State 10-Bit Buffer/Driver	24-TSSOP	1.70	1.36	1.02
SN74LVC827APWR	296-8548-2-ND	Tri-State 10-Bit Buffer/Driver	24-TSSOP	1768.00/2,000		
SN74LVC828APWR	296-8549-1-ND	Tri-State 10-Bit Buffer/Driver	24-TSSOP	1.70	1.36	1.02
SN74LVC828APWR	296-8549-2-ND	Tri-State 10-Bit Buffer/Driver	24-TSSOP	1768.00/2,000		
SN74LVC841ADBR	296-8550-1-ND	Tri-St. 10-Bit Interface D-Type Latch	24-SSOP	1.70	1.36	1.02
SN74LVC841ADBR	296-8550-2-ND	Tri-St. 10-Bit Interface D-Type Latch	24-SSOP	1768.00/2,000		
SN74LVC841ADGVR	296-8551-1-ND	Tri-St. 10-Bit Interface D-Type Latch	24-TVSOP	1.70	1.36	1.02
SN74LVC841ADGVR	296-8551-2-ND	Tri-St. 10-Bit Interface D-Type Latch	24-TVSOP	1768.00/2,000		
SN74LVC841ADW	296-8552-5-ND	Tri-St. 10-Bit Interface D-Type Latch	24-SOP	1.70	1.36	1.02
SN74LVC841APWR	296-8553-1-ND	Tri-St. 10-Bit Interface D-Type Latch	24-TSSOP	1.70	1.36	1.02
SN74LVC841APWR	296-8553-2-ND	Tri-St. 10-Bit Interface D-Type Latch	24-TSSOP	1768.00/2,000		
SN74LVC861ADGVR	296-8555-1-ND	Tri-State 10-Bit Bus Transceiver	24-TVSOP	2.05	1.64	1.23
SN74LVC861ADGVR	296-8555-2-ND	Tri-State 10-Bit Bus Transceiver	24-TVSOP	2132.00/2,000		
SN74LVC861ADW	296-8556-5-ND	Tri-State 10-Bit Bus Transceiver	24-SOP	2.05	1.64	1.23
SN74LVC863ADBR	296-8557-1-ND	Tri-State 9-Bit Bus Transceiver	24-SSOP	2.05	1.64	1.23
SN74LVC863ADBR	296-8557-2-ND	Tri-State 9-Bit Bus Transceiver	24-SSOP	2132.00/2,000		
SN74LVC863ADGVR	296-8558-1-ND	Tri-State 9-Bit Bus Transceiver	24-TVSOP	2.05	1.64	1.23
SN74LVC863ADGVR	296-8558-2-ND	Tri-State 9-Bit Bus Transceiver	24-TVSOP	2132.00/2,000		
SN74LVC863ADW	296-8559-5-ND	Tri-State 9-Bit Bus Transceiver	24-SOP	2.05	1.64	1.23
SN74LVC863APWR	296-8560-1-ND	Tri-State 9-Bit Bus Transceiver	24-TSSOP	2.05	1.64	1.23
SN74LVC863APWR	296-8560-2-ND	Tri-State 9-Bit Bus Transceiver	24-TSSOP	2132.00/2,000		

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVC2244ADBR	296-8489-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.78	.65	.52
SN74LVC2244ADBR	296-8489-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	692.00/2,000		
SN74LVC2244ADW	296-8490-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.78	.65	.52
SN74LVC2244ADWR	296-8490-1-ND	Tri-State Octal Buffer/Driver	20-SOP	1.32	1.10	.88
SN74LVC2244ADWR	296-8490-2-ND	Tri-State Octal Buffer/Driver	20-SOP	1170.00/2,000		
SN74LVC2244APWR	296-8491-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.78	.65	.52
SN74LVC2244APWR	296-8491-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	692.00/2,000		
SN74LVC2952ADW	296-8507-5-ND	Tri-St. Octal Bus Transceiver/Register	24-SOP	2.81	2.25	1.75
SN74LVC2952APWR	296-8508-1-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	2.81	2.25	1.75
SN74LVC2952APWR	296-8508-2-ND	Tri-St. Octal Bus Transceiver/Register	24-TSSOP	3188.00/2,000		
SN74LVC4245ADBR	296-8514-1-ND	Tri-St. Octal Bus Xcvr. 3.3V-5V Shifter	24-SSOP	1.38	1.10	.83
SN74LVC4245ADBR	296-8514-2-ND	Tri-St. Octal Bus Xcvr. 3.3V-5V Shifter	24-SSOP	1430.00/2,000		
SN74LVC4245ADW	296-8515-5-ND	Tri-St. Octal Bus Xcvr. 3.3V-5V Shifter	24-SOP	1.38	1.10	.83
SN74LVC4245APWR	296-12183-1-ND	Octal Tri-St. Xcvr. 3.3V-5V Shifter *NEW!*	24-TSSOP	1.38	1.10	.83
SN74LVC4245APWR	296-12183-2-ND	Octal Tri-St. Xcvr. 3.3V-5V Shifter *NEW!*	24-TSSOP	1430.00/2,000		
SN74LVC16244ADGGR	296-1226-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVC16244ADGGR	296-1226-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVC16244ADGVR	296-8471-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.80	1.44	1.08
SN74LVC16244ADGVR	296-8471-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1872.00/2,000		
SN74LVC16244ADL	296-1227-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVC16244ADLR	296-1227-1-ND	16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVC16244ADLR	296-1227-2-ND	16-Bit Buffer/Driver	48-SSOP	936.00/1,000		
SN74LVC16244AGQLR	296-8472-1-ND	Tri-State 16-Bit Buffer/Driver	56-TVFBGA	2.00	1.60	1.20
SN74LVC16244AGQLR	296-8472-2-ND	Tri-State 16-Bit Buffer/Driver	56-TVFBGA	1040.00/1,000		
SN74LVC16245ADGGR	296-1228-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	1.80	1.44	1.08
SN74LVC16245ADGGR	296-1228-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	1872.00/2,000		
SN74LVC16245ADGVR	296-8473-1-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	1.80	1.44	1.08
SN74LVC16245ADGVR	296-8473-2-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	1872.00/2,000		
SN74LVC16245ADL	296-8474-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08
SN74LVC16245ADLR	296-8474-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08
SN74LVC16245ADLR	296-8474-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	936.00/1,000		
SN74LVC16245AGQLR	296-9843-1-ND	Tri-State 16-Bit Bus Transceiver	56-VFBGA	2.00	1.60	1.20
SN74LVC16245AGQLR	296-9843-2-ND	Tri-State 16-Bit Bus Transceiver	56-VFBGA	1040.00/1,000		
SN74LVC16543DGGR	296-9844-1-ND	Tri-State 16-Bit Bus Transceiver	56-TSSOP	2.70	2.16	1.68
SN74LVC16543DGGR	296-9844-2-ND	Tri-State 16-Bit Bus Transceiver	56-TSSOP	3060.00/2,000		
SN74LVC32244GKER	296-8509-1-ND	Tri-State 32-Bit Buffer/Driver	96-BGA	5.28	4.23	3.57
SN74LVC32244GKER	296-8509-2-ND	Tri-State 32-Bit Buffer/Driver	96-BGA	2063.00/1,000		
SN74LVC32245GKER	296-9855-1-ND	Tri-State 32-Bit Bus Transceiver	96-BGA	3.89	3.12	2.43
SN74LVC32245GKER	296-9855-2-ND	Tri-State 32-Bit Bus Transceiver	96-BGA	2163.00/1,000		
SN74LVC161284DGGR	296-8466-1-ND	Tri-State 19-Bit Bus Interface	48-TSSOP	2.25	1.80	1.35
SN74LVC161284DGGR	296-8466-2-ND	Tri-State 19-Bit Bus Interface	48-TSSOP	2340.00/2,000		
SN74LVC161284DL	296-8467-5-ND	Tri-State 19-Bit Bus Interface	48-SSOP	2.25	1.80	1.35
SN74LVC161284DLR	296-8467-1-ND	Tri-State 19-Bit Bus Interface	48-SSOP	2.25	1.80	1.35
SN74LVC161284DLR	296-8467-2-ND	Tri-State 19-Bit Bus Interface	48-SSOP	1170.00/1,000		

LVCC Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVCC3245ADBR	296-8563-1-ND	Tri-State Octal Bus Transceiver with Adjustable Output Volt	24-SSOP	1.35	1.13	.90
SN74LVCC3245ADBR	296-8563-2-ND	Tri-State Octal Bus Transceiver with Adjustable Output Volt	24-SSOP	1198.00/2,000		
SN74LVCC3245ADW	296-1704-5-ND	Tri-State Octal Bus Transceiver with Adjustable Output Volt	24-SOIC	1.35	1.13	.90
SN74LVCC3245APWR	296-8564-1-ND	Tri-State Octal Bus Transceiver with Adjustable Output Volt	24-TSSOP	1.35	1.13	.90
SN74LVCC3245APWR	296-8564-2-ND	Tri-State Octal Bus Transceiver with Adjustable Output Volt	24-TSSOP	1198.00/2,000		
SN74LVCC4245ADBR	296-8565-1-ND	Tri-State Octal Dual Bus Transceiver with Adjustable Output Volt	24-SSOP	1.60	1.28	.96
SN74LVCC4245ADBR	296-8565-2-ND	Tri-State Octal Dual Bus Transceiver with Adjustable Output Volt	24-SSOP	1664.00/2,000		
SN74LVCC4245ADW	296-8566-5-ND	Tri-State Octal Dual Bus Transceiver with Adjustable Output Volt	24-SOP	1.60	1.28	.96
SN74LVCC4245APWR	296-8567-1-ND	Tri-State Octal Dual Bus Transceiver with Adjustable Output Volt	24-TSSOP	1.60	1.28	.96
SN74LVCC4245APWR	296-8567-2-ND	Tri-State Octal Dual Bus Transceiver with Adjustable Output Volt	24-TSSOP	1664.00/2,000		

LVCH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVCH244ADBR	296-8607-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	.88	.66	.50
SN74LVCH244ADBR	296-8607-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	586.00/2,000		
SN74LVCH244ADGVR	296-8608-1-ND	Tri-State Octal Buffer/Driver	20-TVSOP	.88	.66	.50
SN74LVCH244ADGVR	296-8608-2-ND	Tri-State Octal Buffer/Driver	20-TVSOP	586.00/2,000		
SN74LVCH244ADW	296-8609-5-ND	Tri-State Octal Buffer/Driver	20-SOP	.88	.66	.50
SN74LVCH244APWR	296-8610-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	.88	.66	.50
SN74LVCH244APWR	296-8610-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	586.00/2,000		
SN74LVCH245ADBR	296-8611-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	.88	.66	.50
SN74LVCH245ADBR	296-8611-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	586.00/2,000		
SN74LVCH245ADGVR	296-8612-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	.88	.66	.50
SN74LVCH245ADGVR	296-8612-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	586.00/2,000		
SN74LVCH245ADW	296-8613-5-ND	Tri-State Octal Bus Transceiver	20-SOP	.88	.66	.50
SN74LVCH245AGQNR	296-12102-1-ND	Tri-State Octal Bus Transceiver	20-BGA	.75	.63	.50
SN74LVCH245AGQNR	296-12102-2-ND	Tri-State Octal Bus Transceiver	20-BGA	333.00/1,000		
SN74LVCH245APWR	296-1247-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	.88	.66	.50
SN74LVCH245APWR	296-1247-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	586.00/2,000		
SN74LVCH16240ADGGR	296-8571-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVCH16240ADGGR	296-8571-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVCH16240ADL	296-8572-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVCH16240ADLR	296-8572-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVCH16240ADLR	296-8572-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	936.00/1,000		
SN74LVCH16244ADGGR	296-8573-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVCH16244ADGGR	296-8573-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVCH16244ADGVR	296-8574-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1.80	1.44	1.08
SN74LVCH16244ADGVR	296-8574-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	1872.00/2,000		
SN74LVCH16244ADL	296-1243-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVCH16244ADLR	296-1243-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVCH16244ADLR	296-1243-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	936.00/1,000		
SN74LVCH16244AGQLR	296-8578-1-ND	Tri-State 16-Bit Buffer/Driver	56-TVFBGA	2.00	1.60	1.20
SN74LVCH16244AGQLR	296-8578-2-ND	Tri-State 16-Bit Buffer/Driver	56-TVFBGA	1040.00/1,000		
SN74LVCH16245ADGGR	296-1244-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	1.80	1.44	1.08
SN74LVCH16245ADGGR	296-1244-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	1872.00/2,000		
SN74LVCH16245ADGVR	296-8580-1-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	1.80	1.44	1.08
SN74LVCH16245ADGVR	296-8580-2-ND	Tri-State 16-Bit Bus Transceiver	48-TVSOP	1872.00/2,000		
SN74LVCH16245ADL	296-1245-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVCH16245ADLR	296-1245-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08
SN74LVCH16245ADLR	296-1245-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	936.00/1,000		
SN74LVCH16245AGQLR	296-8582-1-ND	Tri-State 16-Bit Bus Transceiver	56-TVFBGA	2.00	1.60	1.20
SN74LVCH16245AGQLR	296-8582-2-ND	Tri-State 16-Bit Bus Transceiver	56-TVFBGA	1040.00/1,000		
SN74LVCH16373ADGGR	296-8583-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TSSOP	1.80	1.44	1.08
SN74LVCH16373ADGGR	296-8583-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TSSOP	1872.00/2,000		
SN74LVCH16373ADGVR	296-8584-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TVSOP	1.80	1.44	1.08
SN74LVCH16373ADGVR	296-8584-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-TVSOP	1872.00/2,000		
SN74LVCH16373ADL	296-8585-5-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-SSOP	1.80	1.44	1.08
SN74LVCH16373ADLR	296-8585-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-SSOP	1.80	1.44	1.08
SN74LVCH16373ADLR	296-8585-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	48-SSOP	936.00/1,000		
SN74LVCH16373AGQLR	296-8586-1-ND	Tri-St. 16-Bit Transp. D-Type Latch	56-TVFBGA	2.00	1.60	1.20
SN74LVCH16373AGQLR	296-8586-2-ND	Tri-St. 16-Bit Transp. D-Type Latch	56-TVFBGA	1040.00/1,000		
SN74LVCH16374ADGGR	296-8587-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	1.80	1.44	1.08
SN74LVCH16374ADGGR	296-8587-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TSSOP	1872.00/2,000		
SN74LVCH16374ADGVR	296-8588-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TVSOP	1.80	1.44	1.08
SN74LVCH16374ADGVR	296-8588-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-TVSOP	1872.00/2,000		
SN74LVCH16374ADL	296-8589-5-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1.80	1.44	1.08
SN74LVCH16374ADLR	296-8589-1-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	1.80	1.44	1.08
SN74LVCH16374ADLR	296-8589-2-ND	Tri-State 16-Bit D-Type Flip-Flop	48-SSOP	936.00/1,000		
SN74LVCH16374AGQLR	296-8590-1-ND	Tri-State 16-Bit D-Type Flip-Flop	56-TVFBGA	2.00	1.60	1.20
SN74LVCH16374AGQLR	296-8590-2-ND	Tri-State 16-Bit D-Type Flip-Flop	56-TVFBGA	1040.00/1,000		
SN74LVCH16540ADGGR	296-8591-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.48	1.98	1.54
SN74LVCH16540ADGGR	296-8591-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2806.00/2,000		
SN74LVCH16540ADGVR	296-8592-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.48	1.98	1.54
SN74LVCH16540ADGVR	296-8592-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2806.00/2,000		
SN74LVCH16540ADL	296-8593-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.48	1.98	1.54
SN74LVCH16541ADGGR	296-8594-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.20	1.76	1.32
SN74LVCH16541ADGGR	296-8594-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2288.00/2,000		
SN74LVCH16541ADGVR	296-8595-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.20	1.76	1.32
SN74LVCH16541ADGVR	296-8595-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2288.00/2,000		
SN74LVCH16541ADL	296-8596-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.20	1.76	1.32
SN74LVCH16543ADGGR	296-1246-1-ND	Tri-State 16-Bit Buffer/Driver	56-TSSOP	3.42	2.74	2.13
SN74LVCH16543ADGGR	296-1246-2-ND	Tri-State 16-Bit Buffer/Driver	56-TSSOP	3876.00/2,000		
SN74LVCH16543ADGVR	296-8597-1-ND	Tri-St. 16-Bit Registered Transceiver	56-TVSOP	3.42	2.74	2.13
SN74LVCH16543ADGVR	296-8597-2-ND	Tri-St. 16-Bit Registered Transceiver	56-TVSOP	3876.00/2,000		
SN74LVCH16543ADL	296-8598-5-ND	Tri-St. 16-Bit Registered Transceiver	56-SSOP	3.42	2.74	2.13
SN74LVCH16543ADLR	296-8598-1-ND	Tri-St. 16-Bit Registered Transceiver	56-SSOP	3.42	2.74	2.13
SN74LVCH16543ADLR	296-8598-2-ND	Tri-St. 16-Bit Registered Transceiver	56-SSOP	1938.00/1,000		
SN74LVCH16646ADGGR	296-8599-1-ND	Tri-St. 16-Bit Transceiver & Register	56-TSSOP	3.38	2.70	2.10
SN74LVCH16646ADGGR	296-8599-2-ND	Tri-St. 16-Bit Transceiver & Register	56-TSSOP	3826.00/2,000		
SN74LVCH16646ADGVR	296-9859-1-ND	Tri-St. 16-Bit Transceiver/Register	56-TVSOP	3.38	2.70	2.10
SN74LVCH16646ADGVR	296-9859-2-ND	Tri-St. 16-Bit Transceiver/Register	56-TVSOP	3826.00/2,000		
SN74LVCH16646ADL	296-8600-5-ND	Tri-St. 16-Bit Transceiver and Register	56-SSOP	3.38	2.70	2.10
SN74LVCH16652ADGGR	296-8601-1-ND	Tri-St. 16-Bit Transceiver & Register	56-TSSOP	3.38	2.70	2.10
SN74LVCH16652ADGGR	296-8601-2-ND	Tri-St. 16-Bit Transceiver & Register	56-TSSOP	3826.00/2,000		
SN74LVCH16652ADGVR	296-8602-1-ND	Tri-St. 16-Bit Transceiver & Register	56-TVSOP	3.38	2.70	2.10
SN74LVCH16652ADGVR	296-8602-2-ND	Tri-St. 16-Bit Transceiver & Register	56-TVSOP	3826.00/2,000		
SN74LVCH16652ADL	296-8603-5-ND	Tri-St. 16-Bit Transceiver & Register	56-SSOP	3.38	2.70	2.10
SN74LVCH16901DGGR	296-8604-1-ND	18-Bit Universal Bus Transceiver with Parity Gen/Checker	64-TSSOP	7.50	6.00	5.07
SN74LVCH16901DGGR	296-8604-2-ND	18-Bit Universal Bus Transceiver with Parity Gen/Checker	64-TSSOP	9376.00/2,000		
SN74LVCH16952ADGGR	296-8605-1-ND	Tri-State 16-Bit Reg. Transceiver	56-TSSOP	3.60	2.88	2.24
SN74LVCH16952ADGGR	296-8605-2-ND	Tri-State 16-Bit Reg. Transceiver	56-TSSOP	4080.00/2,000		
SN74LVCH16952ADL	296-8606-5-ND	Tri-State 16-Bit Reg. Transceiver	56-SSOP	3.60	2.88	2.24
SN74LVCH32244AGKER	296-8614-1-ND	Tri-State 32-Bit Buffer/Driver	96-BGA	3.71	2.97	2.31
SN74LVCH32244AGKER	296-8614-2-ND	Tri-State 32-Bit Buffer/Driver	96-BGA	2104.00/1,000		
SN74LVCH32245AGKER	296-8615-1-ND	Tri-State 32-Bit Bus Transceiver	96-BGA	3.89	3.12	2.43
SN74LVCH32245AGKER	296-8615-2-ND	Tri-State 32-Bit Bus Transceiver	96-BGA	2206.00/1,000		
SN74LVCH32373AGKER	296-8616-1-ND	Tri-St. 32-Bit Transparent D-Type Latch	96-BGA	3.71	2.97	2.31
SN74LVCH32373AGKER	296-8616-2-ND	Tri-St. 32-Bit Transparent D-Type Latch	96-BGA	2104.00/1,000		
SN74LVCH32374AGKER	296-8617-1-ND	Tri-State 32-Bit D-Type Flip-Flop	96-BGA	3.71	2.97	2.31
SN74LVCH32374AGKER	296-8617-2-ND	Tri-State 32-Bit D-Type Flip-Flop	96-BGA	2104.00/1,000		
SN74LVCH162244ADL	296-8568-5-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.48	1.98	1.54
SN74LVCH162244ADLR	296-8568-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.48	1.98	1.54
SN74LVCH162244ADLR	296-8568-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1403.00/1,000		
SN74LVCH162244AGR	296-8569-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.00	1.60	1.20
SN74LVCH162244AGR	296-8569-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2080.00/2,000		
SN74LVCH162244AVR	296-8570-1-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2.48	1.98	1.54
SN74LVCH162244AVR	296-8570-2-ND	Tri-State 16-Bit Buffer/Driver	48-TVSOP	2806.00/2,000		

LVCHR Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVCHR16245AGR	296-9860-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.20	1.76	1.32
SN74LVCHR16245AGR	296-9860-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2288.00/2,000		
SN74LVCHR16245ALR	296-1248-1-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.20	1.76	1.32
SN74LVCHR16245ALR	296-1248-2-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	1144.00/1,000		
SN74LVCHR162245ADL	296-8618-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.20	1.76	1.32

LVCR Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVCR2245ADBR	296-8621-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	1.38	1.10	.83
SN74LVCR2245ADBR	296-8621-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	1430.00/2,000		
SN74LVCR2245ADGVR	296-8622-1-ND	Tri-State Octal Bus Transceiver	20-TVSOP	1.38	1.10	.83
SN74LVCR2245ADGVR	296-8622-2-ND	Tri-State Octal Bus Transceiver	20-TVSOP	1430.00/2,000		
SN74LVCR2245ADWR	296-8623-1-ND	Tri-State Octal Bus Transceiver	20-SOP	1.38	1.10	.83
SN74LVCR2245ADWR	296-8623-2-ND	Tri-State Octal Bus Transceiver	20-SOP	1430.00/2,000		
SN74LVCR2245AGQNR	296-12103-1-ND	Tri-State Octal Bus Transceiver	20-BGA	1.53	1.22	.92
SN74LVCR2245AGQNR	296-12103-2-ND	Tri-State Octal Bus Transceiver	20-BGA	793.00/1,000		
SN74LVCR2245APWR	296-8624-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	1.02	.85	.68
SN74LVCR2245APWR	296-8624-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	904.00/2,000		
SN74LVCR162245DGGR	296-8619-1-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	2.93	2.34	1.82
SN74LVCR162245DGGR	296-8619-2-ND	Tri-State 16-Bit Bus Transceiver	48-TSSOP	3316.00/2,000		
SN74LVCR162245DL	296-8620-5-ND	Tri-State 16-Bit Bus Transceiver	48-SSOP	2.93	2.34	1.82

LVCU Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVCU04AD	296-9861-5-ND	Hex Inverter	14-SOP	.72	.54	.41
SN74LVCU04ADR	296-9861-1-ND	Hex Inverter	14-SOP	.88	.66	.50
SN74LVCU04ADR	296-9861-2-ND	Hex Inverter	14-SOP	715.00/2,500		
SN74LVCU04ADBR	296-9862-1-ND	Hex Inverter	14-SSOP	.72	.54	.41
SN74LVCU04ADBR	296-9862-2-ND	Hex Inverter	14-SSOP	478.00/2,000		
SN74LVCU04ADGVR	296-9863-1-ND	Hex Inverter	14-SOP	.72	.54	.41
SN74LVCU04ADGVR	296-9863-2-ND	Hex Inverter	14-SOP	478.00/2,000		
SN74LVCU04APWR	296-9865-1-ND	Hex Inverter	14-TSSOP	.72	.54	.41
SN74LVCU04APWR	296-9865-2-ND	Hex Inverter	14-TSSOP	478.00/2,000		

LVCZ Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVCZ240ADBR	296-9870-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.05	.88	.70
SN74LVCZ240ADBR	296-9870-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	932.00/2,000		
SN74LVCZ240ADGVR	296-9871-1-ND	Tri-State Octal Buffer/Driver	20-SOP	1.05	.88	.70
SN74LVCZ240ADGVR	296-9871-2-ND	Tri-State Octal Buffer/Driver	20-SOP	932.00/2,000		
SN74LVCZ240ADWR	296-9872-1-ND	Tri-State Octal Buffer/Driver	20-SOP	1.05	.88	.70
SN74LVCZ240ADWR	296-9872-2-ND	Tri-State Octal Buffer/Driver	20-SOP	932.00/2,000		
SN74LVCZ240APWR	296-9873-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.05	.88	.70
SN74LVCZ240APWR	296-9873-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	932.00/2,000		
SN74LVCZ244ADBR	296-9874-1-ND	Tri-State Octal Buffer/Driver	20-SSOP	1.05	.88	.70
SN74LVCZ244ADBR	296-9874-2-ND	Tri-State Octal Buffer/Driver	20-SSOP	932.00/2,000		
SN74LVCZ244ADWR	296-9875-1-ND	Tri-State Octal Buffer/Driver	20-SOP	1.05	.88	.70
SN74LVCZ244ADWR	296-9875-2-ND	Tri-State Octal Buffer/Driver	20-SOP	932.00/2,000		
SN74LVCZ244APWR	296-9876-1-ND	Tri-State Octal Buffer/Driver	20-TSSOP	1.05	.88	.70
SN74LVCZ244APWR	296-9876-2-ND	Tri-State Octal Buffer/Driver	20-TSSOP	932.00/2,000		
SN74LVCZ245ADBR	296-9877-1-ND	Tri-State Octal Bus Transceiver	20-SSOP	1.05	.88	.70
SN74LVCZ245ADBR	296-9877-2-ND	Tri-State Octal Bus Transceiver	20-SSOP	932.00/2,000		
SN74LVCZ245ADWR	296-9878-1-ND	Tri-State Octal Bus Transceiver	20-SOP	1.05	.88	.70
SN74LVCZ245ADWR	296-9878-2-ND	Tri-State Octal Bus Transceiver	20-SOP	932.00/2,000		
SN74LVCZ245APWR	296-9879-1-ND	Tri-State Octal Bus Transceiver	20-TSSOP	1.05	.88	.70
SN74LVCZ245APWR	296-9879-2-ND	Tri-State Octal Bus Transceiver	20-TSSOP	932.00/2,000		
SN74LVCZ16240ADGGR	296-9866-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.59	2.07	1.61
SN74LVCZ16240ADGGR	296-9866-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2932.00/2,000		
SN74LVCZ16240ADLR	296-9867-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.59	2.07	1.61
SN74LVCZ16240ADLR	296-9867-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1466.00/1,000		
SN74LVCZ16244ADGGR	296-9868-1-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2.20	1.76	1.32
SN74LVCZ16244ADGGR	296-9868-2-ND	Tri-State 16-Bit Buffer/Driver	48-TSSOP	2288.00/2,000		
SN74LVCZ16244ADLR	296-9869-1-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	2.59	2.07	1.61
SN74LVCZ16244ADLR	296-9869-2-ND	Tri-State 16-Bit Buffer/Driver	48-SSOP	1466.00/1,000		
SN74LVCZ161284AGR	296-12025-1-ND	Tri-State 19-Bit Bus Interface *NEW!*	48-TSSOP	1.75	1.40	1.05
SN74LVCZ161284AGR	296-12025-2-ND	Tri-State 19-Bit Bus Interface *NEW!*	48-TSSOP	1820.00/2,000		

LVT Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVT125D	296-1249-5-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-SOIC	1.63	1.30	.98
SN74LVT125DR	296-1249-1-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-SOIC	1.70	1.36	1.02
SN74LVT125DR	296-1249-2-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-SOIC	2175.00/2,500		
SN74LVT125PWR	296-1250-1-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-TSSOP	1.60	1.28	.96
SN74LVT125PWR	296-1250-2-ND	Tri-State 3.3V ABT Quad Bus Buffer	14-TSSOP	1664.00/2,000		
SN74LVT240ADW	296-1706-5-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-SOIC	1.35	1.13	.90
SN74LVT240APWR	296-8647-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-TSSOP	1.35	1.13	.90
SN74LVT240APWR	296-8647-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-TSSOP	1198.00/2,000		
SN74LVT244BDBR	296-8648-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-SSOP	1.35	1.13	.90
SN74LVT244BDBR	296-8648-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-SSOP	1198.00/2,000		
SN74LVT244BDW	296-1707-5-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-SOIC	1.35	1.13	.90
SN74LVT244BGQNR	296-12104-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-BGA	1.47	1.23	.98
SN74LVT244BGQNR	296-12104-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-BGA	652.00/1,000		
SN74LVT244BPWR	296-8649-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-TSSOP	1.35	1.13	.90
SN74LVT244BPWR	296-8649-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-TSSOP	1198.00/2,000		
SN74LVT245BDBR	296-8650-1-ND	Tri-St. 3.3V ABT Octal Bus Transceiver	20-SSOP	1.35	1.13	.90
SN74LVT245BDBR	296-8650-2-ND	Tri-St. 3.3V ABT Octal Bus Transceiver	20-SSOP	1198.00/2,000		
SN74LVT245BDW	296-8651-5-ND	Tri-St. 3.3V ABT Octal Bus Transceiver	20-SOP	1.35	1.13	.90
SN74LVT245BDWR	296-8651-1-ND	Tri-St. 3.3V ABT Octal Bus Transceiver	20-SOP	1.35	1.13	.90
SN74LVT245BDWR	296-8651-2-ND	Tri-St. 3.3V ABT Octal Bus Transceiver	20-SOP	1198.00/2,000		
SN74LVT245BGQNR	296-12105-1-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-BGA	1.47	1.23	.98
SN74LVT245BGQNR	296-12105-2-ND	Tri-State 3.3V ABT Octal Buffer/Driver	20-BGA	652.00/1,000		
SN74LVT245BPWR	296-8652-1-ND	Tri-St. 3.3V ABT Octal Bus Transcvr.	20-TSSOP	1.35	1.13	.90
SN74LVT245BPWR	296-8652-2-ND	Tri-St. 3.3V ABT Octal Bus Transcvr.	20-TSSOP	1198.00/2,000		
SN74LVT574DBR	296-1256-1-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-SSOP	2.13	1.70	1.28
SN74LVT574DBR	296-1256-2-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-SSOP	2210.00/2,000		
SN74LVT574PWR	296-1257-1-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-TSSOP	2.13	1.70	1.28
SN74LVT574PWR	296-1257-2-ND	Tri-State 3.3V Octal D-Type Flip-Flop	20-TSSOP	2210.00/2,000		
SN74LVT8980DW	296-8655-5-ND	Embedded Test-Bus Controller (IEEE STD 1149.1)	24-SOP	15.83	14.25	12.64
SN74LVT8980DWR	296-8655-1-ND	Embedded Test-Bus Controller (IEEE STD 1149.1)	24-SOP	14.99	13.50	11.97
SN74LVT8980DWR	296-8655-2-ND	Embedded Test-Bus Controller (IEEE STD 1149.1)	24-SOP	22230.00/2,000		
SN74LVT8996DW	296-8656-5-ND	3.3V 10-Bit Addressable Scan Port Transceiver (IEEE STD 1149.1)	24-SOP	9.00	7.20	6.08
SN74LVT8996DWR	296-8656-1-ND	3.3V 10-Bit Addressable Scan Port Transceiver (IEEE STD 1149.1)	24-SOP	9.00	7.20	6.08
SN74LVT8996DWR	296-8656-2-ND	3.3V 10-Bit Addressable Scan Port Transceiver (IEEE STD 1149.1)	24-SOP	11250.00/2,000		
SN74LVT8996PW	296-8657-5-ND	3.3V 10-Bit Addressable Scan Port Transceiver (IEEE STD 1149.1)	24-TSSOP	9.00	7.20	6.08
SN74LVT8996PWR	296-8657-1-ND	3.3V 10-Bit Addressable Scan Port Transceiver (IEEE STD 1149.1)	24-TSSOP	9.00	7.20	6.08
SN74LVT8996PWR	296-8657-2-ND	3.3V 10-Bit Addressable Scan Port Transceiver (IEEE STD 1149.1)	24-TSSOP	11250.00/2,000		
SN74LVT16240DGGR	296-8633-1-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TSSOP	2.70	2.16	1.68
SN74LVT16240DGGR	296-8633-2-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TSSOP	3060.00/2,000		
SN74LVT16240DLR	296-8634-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver	48-SSOP	2.70	2.16	1.68
SN74LVT16240DLR	296-8634-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver	48-SSOP	1530.00/1,000		
SN74LVT16244BDGGR	296-8635-1-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TSSOP	2.70	2.16	1.68
SN74LVT16244BDGGR	296-8635-2-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TSSOP	3060.00/2,000		
SN74LVT16244BDGVR	296-8636-1-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TVSOP	2.70	2.16	1.68
SN74LVT16244BDGVR	296-8636-2-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TVSOP	3060.00/2,000		
SN74LVT16244BDLR	296-8637-1-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver	48-SSOP	2.70	2.16	1.68
SN74LVT16244BDLR	296-8637-2-ND	Tri-State 3.3V ABT 16-Bit Buffer/Driver	48-SSOP	1530.00/1,000		
SN74LVT16244BGQLR	296-8638-1-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TVFBGA	3.51	2.81	2.19
SN74LVT16244BGQLR	296-8638-2-ND	Tri-St. 3.3V ABT 16-Bit Buffer/Driver	48-TVFBGA	1683.00/1,000		
SN74LVT16245ADGGR	296-1251-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	4.05	3.24	2.52
SN74LVT16245ADGGR	296-1251-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	4590.00/2,000		
SN74LVT16245BDGGR	296-8640-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	2.93	2.34	1.82
SN74LVT16245BDGGR	296-8640-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	3316.00/2,000		
SN74LVT16245BDGVR	296-8641-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TVSOP	2.93	2.34	1.82
SN74LVT16245BDGVR	296-8641-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TVSOP	3316.00/2,000		
SN74LVT16245BDLR	296-8642-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-SSOP	2.93	2.34	1.82
SN74LVT16245BDLR	296-8642-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-SSOP	1658.00/1,000		
SN74LVT16245BGQLR	296-8643-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TVFBGA	3.22	2.58	2.01
SN74LVT16245BGQLR	296-8643-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TVFBGA	1823.00/1,000		
SN74LVT16500DLR	296-8644-1-ND	Tri-St. 3.3V ABT 18-Bit Univ. Bus Xcvr.	56-SSOP	6.90	5.52	4.66
SN74LVT16500DLR	296-8644-2-ND	Tri-St. 3.3V ABT 18-Bit Univ. Bus Xcvr.	56-SSOP	4313.00/1,000		
SN74LVT16501DGGR	296-1252-1-ND	Tri-State 3.3V ABT 18-Bit Universal Bus Transceiver	56-TSSOP	6.90	5.52	4.66

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVT16501DGGR	296-1252-2-ND	Tri-State 3.3V ABT 18-Bit Universal Bus Transceiver	56-TSSOP	8626.00/2,000		
SN74LVT16543DLR	296-8645-1-ND	Tri-St. 3.3V ABT 16-Bit Reg. Xcvr.	56-SSOP	7.30	5.84	4.93
SN74LVT16543DLR	296-8645-2-ND	Tri-St. 3.3V ABT 16-Bit Reg. Xcvr.	56-SSOP	4563.00/1,000		
SN74LVT16952DGGR	296-1253-1-ND	Tri-St. 3.3V ABT 16-Bit Reg. Xcvr.	56-TSSOP	7.30	5.84	4.93
SN74LVT16952DGGR	296-1253-2-ND	Tri-St. 3.3V ABT 16-Bit Reg. Xcvr.	56-TSSOP	9126.00/2,000		
SN74LVT16952DL	296-1254-5-ND	Tri-St. 3.3V ABT 16-Bit Reg. Xcvr.	56-SSOP	7.30	5.84	4.93
SN74LVT16952DLR	296-1254-1-ND	Tri-St. 3.3V ABT 16-Bit Reg. Xcvr.	56-SSOP	7.34	5.88	4.96
SN74LVT16952DLR	296-1254-2-ND	Tri-St. 3.3V ABT 16-Bit Reg. Xcvr.	56-SSOP	4588.00/1,000		
SN74LVT18512DGGR	296-8646-1-ND	3.3V ABT Scan Test Device with 18-Bit Universal Bus Transceiver	64-TSSOP	8.66	7.80	6.92
SN74LVT18512DGGR	296-8646-2-ND	3.3V ABT Scan Test Device with 18-Bit Universal Bus Transceiver	64-TSSOP	12844.00/2,000		
SN74LVT32240GKER	296-9881-1-ND	3.3V ABT 32-Bit Buffer/Driver	96-BGA	4.05	3.24	2.52
SN74LVT32240GKER	296-9881-2-ND	3.3V ABT 32-Bit Buffer/Driver	96-BGA	2250.00/1,000		
SN74LVT32244GKER	296-8653-1-ND	Tri-State 3.3V ABT 32-Bit Buffer/Driver	96-BGA	5.76	4.61	3.89
SN74LVT32244GKER	296-8653-2-ND	Tri-State 3.3V ABT 32-Bit Buffer/Driver	96-BGA	2250.00/1,000		
SN74LVT162240DGGR	296-8625-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TSSOP	2.93	2.34	1.82
SN74LVT162240DGGR	296-8625-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TSSOP	3316.00/2,000		
SN74LVT162240DGVR	296-8626-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TVSOP	2.93	2.34	1.82
SN74LVT162240DGVR	296-8626-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TVSOP	3316.00/2,000		
SN74LVT162240DLR	296-8627-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-SSOP	2.93	2.34	1.82
SN74LVT162240DLR	296-8627-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-SSOP	1658.00/1,000		
SN74LVT162244ADGGR	296-8628-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TSSOP	2.93	2.34	1.82
SN74LVT162244ADGGR	296-8628-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TSSOP	3316.00/2,000		
SN74LVT162244ADGVR	296-8629-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TVSOP	2.93	2.34	1.82
SN74LVT162244ADGVR	296-8629-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-TVSOP	3316.00/2,000		
SN74LVT162244ADLR	296-8630-1-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-SSOP	2.93	2.34	1.82
SN74LVT162244ADLR	296-8630-2-ND	Tri-State 3.3V ABT Quad Bus Buffer/Driver	48-SSOP	1658.00/1,000		
SN74LVT162245ADGGR	296-8631-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	2.93	2.34	1.82
SN74LVT162245ADGGR	296-8631-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-TSSOP	3316.00/2,000		
SN74LVT162245ADLR	296-8632-1-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-SSOP	2.93	2.34	1.82
SN74LVT162245ADLR	296-8632-2-ND	Tri-State 3.3V ABT 16-Bit Bus Xcvr.	48-SSOP	1658.00/1,000		

LVTH Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVTH125D	296-1708-5-ND	Tri-State ABT Quad Bus Buffer	14-SOIC	.78	.65	.52
SN74LVTH125DR	296-1708-1-ND	Tri-State ABT Quad Bus Buffer	14-SOIC	.78	.65	.52
SN74LVTH125DR	296-1708-2-ND	Tri-State ABT Quad Bus Buffer	14-SOIC	845.00/2,500		
SN74LVTH125DBR	296-8658-1-ND	Tri-State ABT Quad Bus Buffer	14-SSOP	.78	.65	.52
SN74LVTH125DBR	296-8658-2-ND	Tri-State ABT Quad Bus Buffer	14-SSOP	692.00/2,000		
SN74LVTH125DGVR	296-8659-1-ND	Tri-State ABT Quad Bus Buffer	14-TVSOP	.78	.65	.52
SN74LVTH125DGVR	296-8659-2-ND	Tri-State ABT Quad Bus Buffer	14-TVSOP	692.00/2,000		
SN74LVTH125PWR	296-8660-1-ND	Tri-State ABT Quad Bus Buffer	14-TSSOP	.78	.65	.52
SN74LVTH125PWR	296-8660-2-ND	Tri-State ABT Quad Bus Buffer	14-TSSOP	692.00/2,000		
SN74LVTH126DBR	296-8661-1-ND	Tri-State ABT Quad Bus Buffer	14-SSOP	.78	.65	.52
SN74LVTH126DBR	296-8661-2-ND	Tri-State ABT Quad Bus Buffer	14-SSOP	692.00/2,000		
SN74LVTH126DGVR	296-8662-1-ND	Tri-State ABT Quad Bus Buffer	14-TVSOP	.78	.65	.52
SN74LVTH126DGVR	296-8662-2-ND	Tri-State ABT Quad Bus Buffer	14-TVSOP	692.00/2,000		
SN74LVTH126DR	296-8663-1-ND	Tri-State ABT Quad Bus Buffer	14-SOP	.78	.65	.52
SN74LVTH126DR	296-8663-2-ND	Tri-State ABT Quad Bus Buffer	14-SOP	845.00/2,500		
SN74LVTH126PWR	296-8664-1-ND	Tri-State ABT Quad Bus Buffer	14-TSSOP	.78	.65	.52
SN74LVTH126PWR	296-8664-2-ND	Tri-State ABT Quad Bus Buffer	14-TSSOP	692.00/2,000		
SN74LVTH240DBR	296-8706-1-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	.93	.78	.62
SN74LVTH240DBR	296-8706-2-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	824.00/2,000		
SN74LVTH240DWR	296-8707-1-ND	Tri-State ABT Octal Buffer/Driver	20-SOP	.93	.78	.62
SN74LVTH240DWR	296-8707-2-ND	Tri-State ABT Octal Buffer/Driver	20-SOP	824.00/2,000		
SN74LVTH240GQNR	296-12106-1-ND	Tri-State ABT Octal Buffer/Driver	20-BGA	1.02	.85	.68
SN74LVTH240GQNR	296-12106-2-ND	Tri-State ABT Octal Buffer/Driver	20-BGA	452.00/1,000		
SN74LVTH240PWR	296-8708-1-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	.93	.78	.62
SN74LVTH240PWR	296-8708-2-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	824.00/2,000		
SN74LVTH241DW	296-1715-5-ND	Tri-State ABT Octal Buffer/Driver	20-SOIC	.93	.78	.62
SN74LVTH241PWR	296-8709-1-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	.93	.78	.62
SN74LVTH241PWR	296-8709-2-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	824.00/2,000		
SN74LVTH244ADBR	296-1269-1-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	.93	.78	.62
SN74LVTH244ADBR	296-1269-2-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	824.00/2,000		
SN74LVTH244ADW	296-1270-5-ND	Tri-State ABT Octal Buffer/Driver	20-SOIC	.93	.78	.62
SN74LVTH244ADWR	296-1270-1-ND	Tri-State ABT Octal Buffer/Driver	20-SOIC	.93	.78	.62
SN74LVTH244ADWR	296-1270-2-ND	Tri-State ABT Octal Buffer/Driver	20-SOIC	824.00/2,000		
SN74LVTH244AGQNR	296-12107-1-ND	Tri-State ABT Octal Buffer/Driver	20-BGA	1.02	.85	.68
SN74LVTH244AGQNR	296-12107-2-ND	Tri-State ABT Octal Buffer/Driver	20-BGA	452.00/1,000		
SN74LVTH244APWR	296-1271-1-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	.93	.78	.62
SN74LVTH244APWR	296-1271-2-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	824.00/2,000		
SN74LVTH245ADBR	296-8710-1-ND	Tri-State ABT Octal Bus Transceiver	20-SSOP	.93	.78	.62
SN74LVTH245ADBR	296-8710-2-ND	Tri-State ABT Octal Bus Transceiver	20-SSOP	824.00/2,000		
SN74LVTH245ADW	296-8711-5-ND	Tri-State ABT Octal Bus Transceiver	20-SOP	.93	.78	.62
SN74LVTH245ADWR	296-8711-1-ND	Tri-State ABT Octal Bus Transceiver	20-SOP	.93	.78	.62
SN74LVTH245ADWR	296-8711-2-ND	Tri-State ABT Octal Bus Transceiver	20-SOP	824.00/2,000		
SN74LVTH245AGQNR	296-12108-1-ND	Tri-State ABT Octal Bus Transceiver	20-BGA	1.02	.85	.68
SN74LVTH245AGQNR	296-12108-2-ND	Tri-State ABT Octal Bus Transceiver	20-BGA	452.00/1,000		
SN74LVTH245APWR	296-1272-1-ND	Tri-State ABT Octal Bus Transceiver	20-TSSOP	.93	.78	.62
SN74LVTH245APWR	296-1272-2-ND	Tri-State ABT Octal Bus Transceiver	20-TSSOP	824.00/2,000		
SN74LVTH273DBR	296-8712-1-ND	ABT Octal D-Type Flip-Flop with Clear	20-SSOP	1.35	1.13	.90
SN74LVTH273DBR	296-8712-2-ND	ABT Octal D-Type Flip-Flop with Clear	20-SSOP	1198.00/2,000		
SN74LVTH273DW	296-8713-5-ND	ABT Octal D-Type Flip-Flop with Clear	20-SOP	1.35	1.13	.90
SN74LVTH273PWR	296-1273-1-ND	ABT Octal D-Type Flip-Flop with Clear	20-TSSOP	.93	.78	.62
SN74LVTH273PWR	296-1273-2-ND	ABT Octal D-Type Flip-Flop with Clear	20-TSSOP	824.00/2,000		
SN74LVTH373DBR	296-8718-1-ND	Tri-State ABT Octal D-Type Latch	20-SSOP	.93	.78	.62
SN74LVTH373DBR	296-8718-2-ND	Tri-State ABT Octal D-Type Latch	20-SSOP	824.00/2,000		
SN74LVTH373DW	296-8719-5-ND	Tri-State ABT Octal D-Type Latch	20-SOP	.93	.78	.62
SN74LVTH373PWR	296-8720-1-ND	Tri-State ABT Octal D-Type Latch	20-TSSOP	.93	.78	.62
SN74LVTH373PWR	296-8720-2-ND	Tri-State ABT Octal D-Type Latch	20-TSSOP	824.00/2,000		
SN74LVTH374DBR	296-8721-1-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SSOP	.93	.78	.62
SN74LVTH374DBR	296-8721-2-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SSOP	824.00/2,000		
SN74LVTH374DW	296-8722-5-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SOP	.93	.78	.62
SN74LVTH374DWR	296-8722-1-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SOP	.93	.78	.62
SN74LVTH374DWR	296-8722-2-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SOP	824.00/2,000		
SN74LVTH374PWR	296-8723-1-ND	Tri-State ABT Octal D-Type Flip-Flop	20-TSSOP	.93	.78	.62
SN74LVTH374PWR	296-8723-2-ND	Tri-State ABT Octal D-Type Flip-Flop	20-TSSOP	824.00/2,000		
SN74LVTH540DBR	296-8724-1-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	1.25	1.00	.75
SN74LVTH540DBR	296-8724-2-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	1300.00/2,000		
SN74LVTH540DW	296-8725-5-ND	Tri-State ABT Octal Buffer/Driver	20-SOP	1.25	1.00	.75
SN74LVTH540PWR	296-8726-1-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	1.25	1.00	.75
SN74LVTH540PWR	296-8726-2-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	1300.00/2,000		
SN74LVTH541DBR	296-8727-1-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	1.25	1.00	.75
SN74LVTH541DBR	296-8727-2-ND	Tri-State ABT Octal Buffer/Driver	20-SSOP	1300.00/2,000		
SN74LVTH541DW	296-8728-5-ND	Tri-State ABT Octal Buffer/Driver	20-SOP	1.25	1.00	.75
SN74LVTH541PWR	296-8729-1-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	1.25	1.00	.75
SN74LVTH541PWR	296-8729-2-ND	Tri-State ABT Octal Buffer/Driver	20-TSSOP	1300.00/2,000		
SN74LVTH543DBR	296-8730-1-ND	Tri-State ABT Octal Xcvr./Reg.	24-SSOP	2.25	1.80	1.40
SN74LVTH543DBR	296-8730-2-ND	Tri-State ABT Octal Xcvr./Reg.	24-SSOP	2550.00/2,000		
SN74LVTH543DGVR	296-8731-1-ND	Tri-State ABT Octal Xcvr./Reg.	24-TVSOP	2.25	1.80	1.40
SN74LVTH543DGVR	296-8731-2-ND	Tri-State ABT Octal Xcvr./Reg.	24-TVSOP	2550.00/2,000		
SN74LVTH543DW	296-1717-5-ND	Tri-State ABT Octal Xcvr./Reg.	24-SOIC	2.25	1.80	1.40
SN74LVTH543PWR	296-8732-1-ND	Tri-State ABT Octal Xcvr./Reg.	24-TSSOP	2.25	1.80	1.40
SN74LVTH543PWR	296-8732-2-ND	Tri-State ABT Octal Xcvr./Reg.	24-TSSOP	2550.00/2,000		
SN74LVTH573DBR	296-8733-1-ND	Tri-State ABT Octal D-Type Latch	20-SSOP	.93	.78	.62
SN74LVTH573DBR	296-8733-2-ND	Tri-State ABT Octal D-Type Latch	20-SSOP	824.00/2,000		
SN74LVTH573DW	296-1718-5-ND	Tri-State ABT Octal D-Type Latch	20-SOIC	.93	.78	.62
SN74LVTH573GQNR	296-12109-1-ND	Tri-State ABT Octal D-Type Latch	20-BGA	1.02	.85	.68
SN74LVTH573GQNR	296-12109-2-ND	Tri-State ABT Octal D-Type Latch	20-BGA	452.00/1,000		
SN74LVTH573PWR	296-8734-1-ND	Tri-State ABT Octal D-Type Latch	20-TSSOP	.93	.78	.62
SN74LVTH573PWR	296-8734-2-ND	Tri-State ABT Octal D-Type Latch	20-TSSOP	824.00/2,000		
SN74LVTH574DBR	296-8735-1-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SSOP	.93	.78	.62
SN74LVTH574DBR	296-8735-2-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SSOP	824.00/2,000		
SN74LVTH574DW	296-1719-5-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SOIC	.93	.78	.62
SN74LVTH574DWR	296-1719-1-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SOIC	.93	.78	.62
SN74LVTH574DWR	296-1719-2-ND	Tri-State ABT Octal D-Type Flip-Flop	20-SOIC	824.00/2,000		
SN74LVTH574GQNR	296-12110-1-ND	Tri-State ABT Octal D-Type Flip-Flop	20-BGA	1.02	.85	.68
SN74LVTH574GQNR	296-12110-2-ND	Tri-State ABT Octal D-Type Flip-Flop	20-BGA	452.00/1,000		
SN74LVTH574PWR	296-8736-1-ND	Tri-State ABT Octal D-Type Flip-Flop	20-TSSOP	.93	.78	.62
SN74LVTH574PWR	296-8736-2-ND	Tri-State ABT Octal D-Type Flip-Flop	20-TSSOP	824.00/2,000		
SN74LVTH646DBR	296-8737-1-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-SSOP	2.25	1.80	1.40
SN74LVTH646DBR	296-8737-2-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-SSOP	2550.00/2,000		
SN74LVTH646DW	296-1720-5-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-SOIC	2.25	1.80	1.40
SN74LVTH646PWR	296-8738-1-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-TSSOP	2.25	1.80	1.40
SN74LVTH646PWR	296-8738-2-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-TSSOP	2550.00/2,000		
SN74LVTH652DBR	296-8739-1-ND	Tri-State ABT Octal Bus Xcvr./Register	24-SSOP	2.25	1.80	1.40
SN74LVTH652DBR	296-8739-2-ND	Tri-State ABT Octal Bus Xcvr./Register	24-SSOP	2550.00/2,000		
SN74LVTH652DW	296-1721-5-ND	Tri-State ABT Octal Bus Xcvr./Register	24-SOIC	2.25	1.80	1.40
SN74LVTH652PWR	296-8740-1-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-TSSOP	2.25	1.80	1.40
SN74LVTH652PWR	296-8740-2-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-TSSOP	2550.00/2,000		
SN74LVTH2245DBR	296-8704-1-ND	Tri-State ABT Octal Bus Transceiver	20-SSOP	1.35	1.13	.90
SN74LVTH2245DBR	296-8704-2-ND	Tri-State ABT Octal Bus Transceiver	20-SSOP	1198.00/2,000		
SN74LVTH2245DW	296-1714-5-ND	Tri-State ABT Octal Bus Transceiver	20-SOIC	1.35	1.13	.90
SN74LVTH2245PWR	296-8705-1-ND	Tri-State ABT Octal Bus Transceiver	20-TSSOP	1.35	1.13	.90
SN74LVTH2245PWR	296-8705-2-ND	Tri-State ABT Octal Bus Transceiver	20-TSSOP	1198.00/2,000		
SN74LVTH2952DBR	296-8714-1-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-SSOP	2.38	1.90	1.43
SN74LVTH2952DBR	296-8714-2-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-SSOP	2470.00/2,000		
SN74LVTH2952DW	296-1716-5-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-SOIC	2.38	1.90	1.43
SN74LVTH2952PWR	296-8715-1-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-TSSOP	2.38	1.90	1.43
SN74LVTH2952PWR	296-8715-2-ND	Tri-St. ABT Octal Bus Xcvr./Register	24-TSSOP	2470.00/2,000		
SN74LVTH16240DGGR	296-8674-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVTH16240DGGR	296-8674-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVTH16240DL	296-8675-5-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVTH16241DGGR	296-8676-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVTH16241DGGR	296-8676-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVTH16244ADGGR	296-1260-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVTH16244ADGGR	296-1260-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVTH16244ADGVR	296-8677-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TVSOP	1.80	1.44	1.08
SN74LVTH16244ADGVR	296-8677-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TVSOP	1872.00/2,000		
SN74LVTH16244ADL	296-1261-5-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVTH16244ADLR	296-1261-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVTH16244ADLR	296-1261-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	936.00/1,000		
SN74LVTH16244AGQLR	296-8678-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TVFBGA	2.00	1.60	1.20
SN74LVTH16244AGQLR	296-8678-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TVFBGA	1040.00/1,000		
SN74LVTH16245ADGGR	296-1262-1-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TSSOP	1.80	1.44	1.08
SN74LVTH16245ADGGR	296-1262-2-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TSSOP	1872.00/2,000		
SN74LVTH16245ADGVR	296-8679-1-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TVSOP	1.80	1.44	1.08
SN74LVTH16245ADGVR	296-8679-2-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TVSOP	1872.00/2,000		
SN74LVTH16245ADL	296-8680-5-ND	Tri-State ABT 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08
SN74LVTH16245ADLR	296-8680-1-ND	Tri-State ABT 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08
SN74LVTH16245ADLR	296-8680-2-ND	Tri-State ABT 16-Bit Bus Transceiver	48-SSOP	936.00/1,000		
SN74LVTH16245AGQLR	296-8681-1-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TVFBGA	2.00	1.60	1.20
SN74LVTH16245AGQLR	296-8681-2-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TVFBGA	1040.00/1,000		
SN74LVTH162541DGGR	296-8682-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	4.05	3.24	2.52
SN74LVTH162541DGGR	296-8682-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	4590.00/2,000		
SN74LVTH162541DL	296-8683-5-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	4.05	3.24	2.52
SN74LVTH16373DGGR	296-8684-1-ND	Tri-State ABT 16-Bit D-Type Latch	48-TSSOP	1.80	1.44	1.08
SN74LVTH16373DGGR	296-8684-2-ND	Tri-State ABT 16-Bit D-Type Latch	48-TSSOP	1872.00/2,000		
SN74LVTH16373DL	296-8685-5-ND	Tri-State ABT 16-Bit D-Type Latch	48-SSOP	1.80	1.44	1.08
SN74LVTH16373DLR	296-8685-1-ND	Tri-State ABT 16-Bit D-Type Latch	48-SSOP	1.80	1.44	1.08
SN74LVTH16373DLR	296-8685-2-ND	Tri-State ABT 16-Bit D-Type Latch	48-SSOP	936.00/1,000		
SN74LVTH16373GQLR	296-8686-1-ND	Tri-State ABT 16-Bit D-Type Latch	48-TVFBGA	2.00	1.60	1.20
SN74LVTH16373GQLR	296-8686-2-ND	Tri-State ABT 16-Bit D-Type Latch	48-TVFBGA	1040.00/1,000		
SN74LVTH16374DGGR	296-1263-1-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-TSSOP	1.80	1.44	1.08
SN74LVTH16374DGGR	296-1263-2-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-TSSOP	1872.00/2,000		
SN74LVTH16374DLR	296-1264-1-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-SSOP	1.80	1.44	1.08
SN74LVTH16374DLR	296-1264-2-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-SSOP	936.00/1,000		
SN74LVTH16374GQLR	296-8688-1-ND	Tri-St. ABT 16-Bit D-Type Flip-Flop	48-TVFBGA	2.00	1.60	1.20
SN74LVTH16374GQLR	296-8688-2-ND	Tri-St. ABT 16-Bit D-Type Flip-Flop	48-TVFBGA	1040.00/1,000		

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★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

TEXAS INSTRUMENTS DIGITAL LOGIC *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVTH16374DL	296-1264-5-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-SSOP	1.80	1.44	1.08
SN74LVTH16500DGGR	296-8689-1-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr.	56-TSSOP	4.73	3.78	2.94
SN74LVTH16500DGGR	296-8689-2-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr.	56-TSSOP	5356.00/2,000		
SN74LVTH16500DL	296-8690-5-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr.	56-SSOP	4.73	3.78	2.94
SN74LVTH16500GQLR	296-12476-1-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr. *NEW!*	56-VFBGA	5.20	4.16	3.24
SN74LVTH16500GQLR	296-12476-2-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr. *NEW!*	56-VFBGA	2945.00/1,000		
SN74LVTH16501DGGR	296-8691-1-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr.	56-TSSOP	4.73	3.78	2.94
SN74LVTH16501DGGR	296-8691-2-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr.	56-TSSOP	5356.00/2,000		
SN74LVTH16501DL	296-8692-5-ND	Tri-St. ABT 18-Bit Univ. Bus Xcvr.	56-SSOP	4.73	3.78	2.94
SN74LVTH16541DGGR	296-8693-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	3.60	2.88	2.24
SN74LVTH16541DGGR	296-8693-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	4080.00/2,000		
SN74LVTH16543DGGR	296-1265-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	4.28	3.42	2.66
SN74LVTH16543DGGR	296-1265-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	4846.00/2,000		
SN74LVTH16543DL	296-1710-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	4.28	3.42	2.66
SN74LVTH16543DLR	296-1710-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	4.28	3.42	2.66
SN74LVTH16543DLR	296-1710-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	2423.00/1,000		
SN74LVTH16646DGGR	296-1266-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	4.28	3.42	2.66
SN74LVTH16646DGGR	296-1266-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	4846.00/2,000		
SN74LVTH16646DL	296-1711-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	5.70	4.56	3.85
SN74LVTH16652DGGR	296-1267-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	5.70	4.56	3.85
SN74LVTH16652DGGR	296-1267-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	7126.00/2,000		
SN74LVTH16652DL	296-1712-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	5.70	4.56	3.85
SN74LVTH16835DGGR	296-8694-1-ND	Tri-State ABT 18-Bit Univ. Bus Driver	56-TSSOP	3.83	3.06	2.38
SN74LVTH16835DGGR	296-8694-2-ND	Tri-State ABT 18-Bit Univ. Bus Driver	56-TSSOP	4336.00/2,000		
SN74LVTH16835DL	296-8695-5-ND	Tri-State ABT 18-Bit Univ. Bus Driver	56-SSOP	3.83	3.06	2.38
SN74LVTH16952DGGR	296-1268-1-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	4.68	3.75	2.92
SN74LVTH16952DGGR	296-1268-2-ND	Tri-State ABT 16-Bit Xcvr./Register	56-TSSOP	5304.00/2,000		
SN74LVTH16952DL	296-1713-5-ND	Tri-State ABT 16-Bit Xcvr./Register	56-SSOP	4.68	3.75	2.92
SN74LVTH18502APM	296-8699-ND	ABT Scan Test Device with 18-Bit Transceiver	64-TQFP	13.33	12.00	10.64
SN74LVTH18504APM	296-8700-ND	ABT Scan Test Device with 20-Bit Transceiver	64-TQFP	13.66	12.30	10.91
SN74LVTH18512DGGR	296-8701-1-ND	ABT Scan Test Device with 18-Bit Transceiver	64-TSSOP	8.66	7.80	6.92
SN74LVTH18512DGGR	296-8701-2-ND	ABT Scan Test Device with 18-Bit Transceiver	64-TSSOP	12844.00/2,000		
SN74LVTH18514DGGR	296-8702-1-ND	ABT Scan Test Device with 20-Bit Transceiver	64-TSSOP	9.00	8.10	7.19
SN74LVTH18514DGGR	296-8702-2-ND	ABT Scan Test Device with 20-Bit Transceiver	64-TSSOP	13338.00/2,000		
SN74LVTH18646APM	296-8703-ND	ABT Scan Test Device w/18-Bit Transceiver and Registers	64-TQFP	13.66	12.30	10.91
SN74LVTH32244GKER	296-8716-1-ND	Tri-State ABT 32-Bit Buffer/Driver	96-BGA	4.05	3.24	2.52
SN74LVTH32244GKER	296-8716-2-ND	Tri-State ABT 32-Bit Buffer/Driver	96-BGA	2250.00/1,000		
SN74LVTH32245GKER	296-9882-1-ND	Tri-State ABT 32-Bit Bus Transceiver	96-BGA	5.76	4.61	3.89
SN74LVTH32245GKER	296-9882-2-ND	Tri-State ABT 32-Bit Bus Transceiver	96-BGA	2438.00/1,000		
SN74LVTH32373GKER	296-8717-1-ND	Tri-State ABT 32-Bit D-Type Latch	96-BGA	5.76	4.61	3.89
SN74LVTH32373GKER	296-8717-2-ND	Tri-State ABT 32-Bit D-Type Latch	96-BGA	2295.00/1,000		
SN74LVTH32374GKER	296-9883-1-ND	Tri-State ABT 32-Bit D-Type Flip-Flop	96-BGA	4.05	3.24	2.52
SN74LVTH32374GKER	296-9883-2-ND	Tri-State ABT 32-Bit D-Type Flip-Flop	96-BGA	2250.00/1,000		
SN74LVTH162240DGGR	296-8665-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVTH162240DGGR	296-8665-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVTH162240DL	296-8666-5-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVTH162241DGGR	296-8667-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVTH162241DGGR	296-8667-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVTH162244DGGR	296-1258-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1.80	1.44	1.08
SN74LVTH162244DGGR	296-1258-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-TSSOP	1872.00/2,000		
SN74LVTH162244DL	296-1259-5-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVTH162244DLR	296-1259-1-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	1.80	1.44	1.08
SN74LVTH162244DLR	296-1259-2-ND	Tri-State ABT 16-Bit Buffer/Driver	48-SSOP	936.00/1,000		
SN74LVTH162245DGGR	296-8669-1-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TSSOP	1.80	1.44	1.08
SN74LVTH162245DGGR	296-8669-2-ND	Tri-State ABT 16-Bit Bus Transceiver	48-TSSOP	1872.00/2,000		
SN74LVTH162245DL	296-8670-5-ND	Tri-State ABT 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08
SN74LVTH162245DLR	296-8670-1-ND	Tri-State ABT 16-Bit Bus Transceiver	48-SSOP	1.80	1.44	1.08
SN74LVTH162245DLR	296-8670-2-ND	Tri-State ABT 16-Bit Bus Transceiver	48-SSOP	936.00/1,000		
SN74LVTH162373DGGR	296-8671-1-ND	Tri-State ABT 16-Bit D-Type Latch	48-TSSOP	1.80	1.44	1.08
SN74LVTH162373DGGR	296-8671-2-ND	Tri-State ABT 16-Bit D-Type Latch	48-TSSOP	1872.00/2,000		
SN74LVTH162374DGGR	296-8672-1-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-TSSOP	1.80	1.44	1.08
SN74LVTH162374DGGR	296-8672-2-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-TSSOP	1872.00/2,000		
SN74LVTH162374DL	296-8673-5-ND	Tri-State ABT 16-Bit D-Type Flip-Flop	48-SSOP	1.80	1.44	1.08
SN74LVTH182502APM	296-8696-ND	ABT Scan Test Device w/18-Bit Xcvr.	64-TQFP	13.33	12.00	10.64
SN74LVTH182504APM	296-8697-ND	ABT Scan Test Device w/20-Bit Xcvr.	64-TQFP	13.66	12.30	10.91
SN74LVTH182512DGGR	296-8698-1-ND	ABT Scan Test Device w/18-Bit Xcvr.	64-TSSOP	9.00	8.10	7.19
SN74LVTH182512DGGR	296-8698-2-ND	ABT Scan Test Device w/18-Bit Xcvr.	64-TSSOP	13338.00/2,000		

LVU Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74LVU04AD	296-1722-5-ND	Unbuffered Hex Inverter	14-SOIC	.60	.45	.34
SN74LVU04ADBR	296-9884-1-ND	Unbuffered Hex Inverter	14-SSOP	.60	.45	.34
SN74LVU04ADBR	296-9884-2-ND	Unbuffered Hex Inverter	14-SSOP	400.00/2,000		
SN74LVU04APWR	296-9885-1-ND	Unbuffered Hex Inverter	14-TSSOP	.60	.45	.34
SN74LVU04APWR	296-9885-2-ND	Unbuffered Hex Inverter	14-TSSOP	400.00/2,000		

74S Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74S00N	296-1723-5-ND	Quad 2-Input NAND Gate	14-Dip	.92	.69	.52
SN74S04N	296-1724-5-ND	Hex Inverter	14-Dip	.92	.69	.52
SN74S38D	296-1732-5-ND	Quad 2-Input NAND with OC	14-SOIC	1.08	.90	.72
SN74S38N	296-1733-5-ND	Quad 2-Input NAND with OC	14-Dip	1.02	.85	.68
SN74S74N	296-1734-5-ND	Dual D-Type Flip-Flop	14-Dip	.81	.68	.54
SN74S138AN	296-1728-5-ND	3-8 Line Decoder/Demultiplexer	16-Dip	1.26	1.05	.84
SN74S240N	296-1729-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	2.03	1.62	1.22
SN74S244N	296-1730-5-ND	Tri-State Octal Buffer/Line Driver	20-Dip	2.03	1.62	1.22
SN74S1053DW	296-1726-5-ND	16-Bit Termination Array	20-SOIC	1.88	1.50	1.13
SN74S1053N	296-1727-5-ND	16-Bit Termination Array	20-Dip	1.88	1.50	1.13

NEW! MLVD Family NEW!

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN65MLVD200D	296-12207-5-ND	High Speed Differential Line Driver/Receiver	8-SOIC	5.40	4.32	3.36
SN65MLVD202D	296-12208-5-ND	High Speed Differential Line Driver/Receiver	14-SOIC	5.00	4.00	3.38
SN65MLVD204D	296-12209-5-ND	High Speed Differential Line Driver/Receiver	8-SOIC	5.40	4.32	3.36
SN65MLVD205D	296-12210-5-ND	High Speed Differential Line Driver/Receiver	14-SOIC	5.00	4.00	3.38

SSTL Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74SSTL16837ADGGR	296-9886-1-ND	Tri-State 20-Bit Universal Bus Driver	64-TSSOP	7.50	6.00	5.07
SN74SSTL16837ADGGR	296-9886-2-ND	Tri-State 20-Bit Universal Bus Driver	64-TSSOP	9376.00/2,000		
SN74SSTL16847DGGR	296-1274-1-ND	20-Bit SSTL-3 Buffer	64-TSSOP	7.50	6.00	5.07
SN74SSTL16847DGGR	296-1274-2-ND	20-Bit SSTL-3 Buffer	64-TSSOP	9376.00/2,000		
SN74SSTL16857DGGR	296-9887-1-ND	14-Bit Registered Buffer	48-TSSOP	7.00	5.60	4.73
SN74SSTL16857DGGR	296-9887-2-ND	14-Bit Registered Buffer	48-TSSOP	8750.00/2,000		

SSTV Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN74SSTV16857DGVR	296-12039-1-ND	14-Bit Reg Buffer w/SSTL, 2-In/Out	48-TVSOP	3.38	2.70	2.10
SN74SSTV16857DGVR	296-12039-2-ND	14-Bit Reg Buffer w/SSTL, 2-In/Out	48-TVSOP	3826.00/2,000		

TTL Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN10KHT5541DW	296-9688-5-ND	Tri-State ECL to TTL Translator	24-SOP	5.90	4.72	3.99
SN10KHT5541NT	296-9689-5-ND	Tri-State ECL to TTL Translator	24-Dip	5.90	4.72	3.99
SN7406DR	296-1017-1-ND	Hex Inverter Buffer/Driver w/HV Output	14-SOIC	.72	.54	.41
SN7406DR	296-1017-2-ND	Hex Inverter Buffer/Driver w/HV Output	14-SOIC	585.00/2,500		
SN7406N	296-1435-5-ND	Hex Inverter Buffer/Driver w/HV Output	14-Dip	.72	.54	.41
SN7407D	296-1018-5-ND	Hex Buffer/Driver with OC HV Output	14-SOIC	.72	.54	.41
SN7407N	296-1436-5-ND	Hex Buffer/Driver with OC HV Output	14-Dip	.72	.54	.41
SN74154N	296-8757-5-ND	4-Line to 16-line Decoder/Demux	24-Dip	2.13	1.70	1.28

TEXAS INSTRUMENTS *NEW!* DIGITAL RADIO

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DIT4096IPW	DIT4096IPW-ND	5V, 96kHz Digital Audio Transmitter	28-TSSOP	5.24	4.20	3.27
DIT4192IPW	DIT4192IPW-ND	5V, 192kHz Digital Audio Transmitter	28-TSSOP	5.60	4.48	3.78
GC1011A	296-12257-ND	Narrowband Digital Downconverter	44-PLCC	285.00	—	—
GC1012A-PQ	296-12258-ND	Wideband Digital Downconverter	120-QFP	242.25	—	—
GC2011A-PB	296-12259-ND	Digital Filter	160-BGA	144.38	—	—
GC2011A-PQ	296-12260-ND	Digital Filter	160-QFP	137.49	—	—
GC3011-PQ	296-122xz61-ND	Digital Resampler	100-QFP	185.25	—	—
GC4014-PQ	296-12263-ND	Digital Quad Downconverter	100-TQFP	142.50	—	—
GC4016-PB	296-12264-ND	Digital Quad Downconverter	160-PBGA	95.63	—	—
GC4114-PQ	296-12265-ND	Digital Quad Downconverter	100-TQFP	142.50	—	—
GC4116-PB	296-12266-ND	Digital Quad Upconverter	160-PBGA	95.63	—	—

TEXAS INSTRUMENTS DIGITAL SIGNAL PROCESSORS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TMS320C206PZ80	296-2001-5-ND	Fixed Point DSP	100-LQFP	14.54	13.10	11.62
TMS320C206PZA80	296-2002-5-ND	Fixed Point DSP	100-LQFP	16.01	14.42	12.79
TMS320C32PCM40	296-1928-5-ND	40MHz DSP	144-PQFP	15.74	14.18	12.57
TMS320C6201GJC200	296-10743-ND	Fixed Point DSP	352-BGA	117.86	110.00	102.15
TMS320C6201GJL200	296-10744-ND	Fixed Point DSP	352-BGA	117.86	110.00	102.15
TMS320C6202GJL250	296-10745-ND	Fixed Point DSP	352-BGA	156.87	146.42	135.96
TMS320C6202GLS250	296-10746-ND	Fixed Point DSP	384-BGA	156.87	146.42	135.96
TMS320C6211BGFN150	296-12559-ND	Fixed Point DSP *NEW!*	256-BGA	30.69	28.65	26.60
TMS320C6211BGFN167	296-12560-ND	Fixed Point DSP *NEW!*	256-BGA	38.37	35.82	33.26
TMS320C6211GFN150	296-10747-ND	Fixed Point DSP	150-BGA	30.69	28.65	26.60
TMS320C6701GJC150	296-10748-ND	Floating Point DSP	352-BGA	117.86	110.00	102.15
TMS320C6711BGFN100	296-12561-ND	Floating Point DSP *NEW!*	256-BGA	30.69	28.65	26.60
TMS320C6711BGFN150	296-12562-ND	Floating Point DSP *NEW!*	256-BGA	43.85	40.93	38.00
TMS320F206PZ	296-2007-5-ND	CMOS DSP	100-TQFP	20.94	19.55	18.15
TMS320F240PQ	296-2009-5-ND	CMOS DSP Controller	132-BQFP	23.10	21.56	20.02
TMS320F240PQA	296-2010-5-ND	CMOS DSP Controller	132-BQFP	23.10	21.56	20.02
TMS320F240PQS	296-2011-5-ND	CMOS DSP Controller	132-BQFP	25.41	23.72	22.03
TMS320F241FN	296-10750-5-ND	16-Bit Fixed Point DSP	68-PLCC	19.04	17.77	16.50
TMS320F241FNA	296-10751-5-ND	16-Bit Fixed Point DSP	68-PLCC	19.04	17.77	16.50
TMS320F241FNS	296-10752-5-ND	16-Bit Fixed Point DSP	68-PLCC	20.94	19.55	18.15
TMS320F241PG	296-10753-ND	16-Bit Fixed Point DSP	64-PQFP	17.63	16.45	15.28
TMS320F241PGA	296-10754-ND	16-Bit Fixed Point DSP	64-PQFP	17.63	16.45	15.28
TMS320F243PGE	296-10755-ND	16-Bit Fixed Point DSP	144-TQFP	19.94	18.61	17.28
TMS320F243PGEA	296-10756-ND	16-Bit Fixed Point DSP	144-TQFP	19.94	18.61	17.28
TMS320LC206PZ80	296-2012-5-ND	CMOS DSP	100-TQFP	16.01	14.42	12.79
TMS320LC206PZA80	296-2013-5-ND	CMOS DSP	100-TQFP	15.86	14.80	13.75
TMS320LC541BPZ-66	296-1930-5-ND	Fixed Point DSP	100-TQFP	14.68	13.22	11.72
TMS320LC545APBK-50	296-2014-5-ND	Fixed Point DSP	128-TQFP	23.42	21.86	20.30
TMS320LF2402APGA	296-12544-ND	16-Bit Fixed-Point DSP with 8K Flash *NEW!*	64-QFP	12.99	11.70	10.38
TMS320LF2402APGS	296-12545-ND	16-Bit Fixed-Point DSP with 8K Flash *NEW!*	64-QFP	14.29	12.87	11.42
TMS320LF2406APZA	296-12546-ND	16-Bit Fixed-Point DSP with 32K Flash *NEW!*	100-LQFP	15.19	13.73	12.17
TMS320LF2406APZS	296-12547-ND	16-Bit Fixed-Point DSP with 32K Flash *NEW!*	100-LQFP	15.72	14.68	13.63
TMS320LF2406PZA	296-10758-ND	16-Bit Fixed Point DSP with 32K Flash	100-LQFP	15.05	14.05	13.04
TMS320LF2407APGEA	296-12548-ND	16-Bit Fixed-Point DSP with 32K Flash *NEW!*	144-LQFP	15.05	14.05	13.04
TMS320LF2407APGES	296-12549-ND	16-Bit Fixed-Point DSP with 32K Flash *NEW!*	144-LQFP	16.08	15.01	13.94
TMS320LF2407PGEA	296-12723-ND	16-Bit Fixed Point DSP	144-LQFP	15.84	14.79	13.73
TMS320UC5402GGU-80	296-10759-ND	Fixed Point DSP	144-TQFP	10.75	9.68	8.58
TMS320UC5402PGE-80	296-10760-ND	Fixed Point DSP	144-TQFP	10.75	9.68	8.58
TMS320UC5409GGU-80	296-12112-ND	80MHz Fixed Point DSP	144-BGA	20.43	19.07	17.71
TMS320UC5409PGE-80	296-12146-5-ND	Fixed Point DSP *NEW!*	144-LQFP	21.53	20.09	18.66
TMS320VC549GGU-100	296-2016-5-ND	Fixed Point DSP	144-BGA	34.52	32.22	29.92
TMS320VC549GGU-80	296-1933-5-ND	Fixed Point DSP	144-BGA	31.34	29.25	27.16
TMS320VC549PGE-80	296-1935-5-ND	Fixed Point DSP	144-TQFP	31.34	29.25	27.16
TMS320VC5401GGU50	296-12147-5-ND	Fixed Point DSP *NEW!*	144-BGA	8.56	6.85	5.78
TMS320VC5401PGE50	296-12148-5-ND	Fixed Point DSP *NEW!*	144-LQFP	8.56	6.85	5.78
TMS320VC5402GGU100	296-10761-ND	Fixed Point DSP	144-BGA	8.96	8.07	7.16
TMS320VC5402PGE100	296-10762-ND	Fixed Point DSP	144-TQFP	8.96	8.07	7.16
TMS320VC5409AGGU12	296-12073-ND	120MHz Fixed Point DSP	144-BGA	15.89	14.83	13.77
TMS320VC5409AGGU16	296-12074-ND	160MHz Fixed Point DSP	144-BGA	18.14	16.93	15.72
TMS320VC5409APGE12	296-12075-ND	120MHz Fixed Point DSP	144-LQFP	15.89	14.83	13.77
TMS320VC5409APGE16	296-12076-ND	160MHz Fixed Point DSP	144-LQFP	18.14	16.93	15.72
TMS320VC5409GGU100	296-10763-ND	Fixed Point DSP	144-BGA	17.03	15.89	14.76
TMS320VC5409PGE100	296-10764-ND	Fixed Point DSP	144-TQFP	17.03	15.89	14.76
TMS320VC5410AGGU12	296-12077-ND	120MHz Fixed Point DSP	144-BGA	19.68	18.37	17.06
TMS320VC5410AGGU16	296-12078-ND	160MHz Fixed Point DSP	144-BGA	21.81	20.36	18.91

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

TEXAS INSTRUMENTS DIGITAL SIGNAL PROCESSORS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TMS320VC5410APGE12	296-12079-ND	120MHz Fixed Point DSP	144-LQFP	19.68	18.37	17.06
TMS320VC5410APGE16	296-12080-ND	160MHz Fixed Point DSP	144-LQFP	21.81	20.36	18.91
TMS320VC5410GGW100	296-10765-ND	Fixed Point DSP	176-PBGA	43.32	40.44	37.55
TMS320VC5410PGE100	296-10766-ND	Fixed Point DSP	144-TQFP	43.32	40.44	37.55
TMS320VC5416GGU120	296-12168-ND	120MHz Fixed Point DSP	144-BGA	38.39	35.83	33.27
TMS320VC5416GGU160	296-11660-ND	160MHz Fixed Point DSP	144-BGA	42.57	39.74	36.90
TMS320VC5416PGE120	296-12169-ND	120MHz Fixed Point DSP	144-BGA	38.24	35.69	33.14
TMS320VC5416PGE160	296-12170-ND	160MHz Fixed Point DSP	144-BGA	42.57	39.74	36.90
TMS320VC5420GGU200	296-10767-ND	Fixed Point DSP	144-BGA	86.28	80.53	74.78
TMS320VC5420PGE200	296-12191-ND	Fixed Point DSP *NEW!*	144-LQFP	86.28	80.53	74.78
TMS320VC5421GGU200	296-10768-ND	Fixed Point DSP	144-BGA	101.61	94.84	88.07
TMS320VC5421PGE200	296-10769-ND	Fixed Point DSP	144-TQFP	101.61	94.84	88.07
TMSC6701GJC16719V	296-10771-ND	Floating Point DSP	352-BGA	169.70	158.39	147.07

TEXAS INSTRUMENTS FILTERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TLC04ID	296-10230-5-ND	Butterworth Switched-Capacitor Filter	8-SOIC	2.32	1.86	1.45
TLC14CD	296-10239-5-ND	Butterworth Switched-Capacitor Filter	8-SOIC	1.98	1.58	1.19
TLC14ID	296-10240-5-ND	Butterworth Switched-Capacitor Filter	8-SOIC	2.13	1.70	1.28
UAF42AP	UAF42AP-ND	Universal Active Filter, -108db THD	14-Dip	11.33	10.20	9.05
UAF42AU	UAF42AU-ND	Universal Active Filter	16-SOIC	11.33	10.20	9.05

TEXAS INSTRUMENTS FIFO MEMORY

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PCA8550DBR	296-9630-1-ND	Non-Volatile 5-Bit Register with I2C Interface	16-SSOP	1.38	1.10	.83
PCA8550DBR	296-9630-2-ND	Non-Volatile 5-Bit Register with I2C Interface	16-SSOP	1430.00/2,000		
PCA8550DR	296-9631-1-ND	Non-Volatile 5-Bit Register with I2C Interface	16-SOP	1.38	1.10	.83
PCA8550DR	296-9631-2-ND	Non-Volatile 5-Bit Register with I2C Interface	16-SOP	1760.00/2,500		
PCA8550PWR	296-9632-1-ND	Non-Volatile 5-Bit Register with I2C Interface	16-TSSOP	1.38	1.10	.83
PCA8550PWR	296-9632-2-ND	Non-Volatile 5-Bit Register with I2C Interface	16-TSSOP	1430.00/2,000		
SN74ALVC3631-10PCB	296-5143-ND	512x36, 3.3V Sync. FIFO Memory	120-HLQFP	22.28	20.79	19.31
SN74ALVC3631-10PQ	296-5144-ND	512x36, 3.3V Sync. FIFO Memory	132-BQFP	22.28	20.79	19.31
SN74ALVC3631-15PCB	296-5145-ND	512x36, 3.3V Sync. FIFO Memory	120-HLQFP	17.82	16.64	15.45
SN74ALVC3631-15PQ	296-5146-ND	512x36, 3.3V Sync. FIFO Memory	132-BQFP	17.82	16.64	15.45
SN74ALVC3631-20PCB	296-5147-ND	512x36, 3.3V Sync. FIFO Memory	120-HLQFP	17.82	16.64	15.45
SN74ALVC3631-20PQ	296-5148-ND	512x36, 3.3V Sync. FIFO Memory	132-BQFP	17.82	16.64	15.45
SN74ALVC3641-10PCB	296-5149-ND	1024x36, 3.3V Sync. FIFO Memory	120-HLQFP	22.28	20.79	19.31
SN74ALVC3641-10PQ	296-5150-ND	1024x36, 3.3V Sync. FIFO Memory	132-BQFP	22.28	20.79	19.31
SN74ALVC3641-15PCB	296-5151-ND	1024x36, 3.3V Sync. FIFO Memory	120-HLQFP	22.28	20.79	19.31
SN74ALVC3641-15PQ	296-5152-ND	1024x36, 3.3V Sync. FIFO Memory	132-BQFP	22.28	20.79	19.31
SN74ALVC3641-20PCB	296-5153-ND	1024x36, 3.3V Sync. FIFO Memory	120-HLQFP	22.28	20.79	19.31
SN74ALVC3641-20PQ	296-5154-ND	1024x36, 3.3V Sync. FIFO Memory	132-BQFP	22.28	20.79	19.31
SN74ALVC3651-10PCB	296-5155-ND	2048x36, 3.3V Sync. FIFO Memory	120-HLQFP	29.70	27.72	25.74
SN74ALVC3651-10PQ	296-5156-ND	2048x36, 3.3V Sync. FIFO Memory	132-BQFP	29.70	27.72	25.74
SN74ALVC3651-15PCB	296-5157-ND	2048x36, 3.3V Sync. FIFO Memory	120-HLQFP	30.69	28.65	26.60
SN74ALVC3651-15PQ	296-5158-ND	2048x36, 3.3V Sync. FIFO Memory	132-BQFP	30.69	28.65	26.60
SN74ALVC3651-20PCB	296-5159-ND	2048x36, 3.3V Sync. FIFO Memory	120-HLQFP	24.75	23.10	21.45
SN74ALVC3651-20PQ	296-5160-ND	2048x36, 3.3V Sync. FIFO Memory	132-BQFP	24.75	23.10	21.45
SN74ALVC7803-20DL	296-5161-5-ND	512x18, 3.3V Sync. FIFO Memory	56-SSOP	7.92	6.34	5.35
SN74ALVC7803-25DL	296-5162-5-ND	512x18, 3.3V Sync. FIFO Memory	56-SSOP	7.92	6.34	5.35
SN74ALVC7803-40DL	296-5163-5-ND	512x18, 3.3V Sync. FIFO Memory	56-SSOP	6.60	5.28	4.46
SN74ALVC7804-25DL	296-5164-5-ND	512x18, 3.3V Async. FIFO Memory	56-SSOP	7.92	6.34	5.35
SN74ALVC7805-20DL	296-5165-5-ND	256x18, 3.3V Sync. FIFO Memory	56-SSOP	14.96	13.47	11.95
SN74ALVC7805-25DL	296-5166-5-ND	256x18, 3.3V Sync. FIFO Memory	56-SSOP	7.92	6.34	5.35
SN74ALVC7805-40DL	296-5167-5-ND	256x18, 3.3V Sync. FIFO Memory	56-SSOP	5.94	4.76	4.01
SN74ALVC7806-25DL	296-5168-5-ND	256x18, 3.3V Async. FIFO Memory	56-SSOP	7.92	6.34	5.35
SN74ALVC7813-20DL	296-5169-5-ND	64x18, 3.3V Sync. FIFO Memory	56-SSOP	7.92	6.34	5.35
SN74ALVC7813-25DL	296-5170-5-ND	64x18, 3.3V Sync. FIFO Memory	56-SSOP	7.26	5.81	4.91
SN74ALVC7813-40DL	296-5171-5-ND	64x18, 3.3V Sync. FIFO Memory	56-SSOP	6.60	5.28	4.46
SN74ALVC7814-25DL	296-5172-5-ND	64x18, 3.3V Async. FIFO Memory	56-SSOP	7.26	5.81	4.91
SN74ALVC7814-40DL	296-5173-5-ND	64x18, 3.3V Async. FIFO Memory	56-SSOP	6.60	5.28	4.46
SN74V215-7PAG	296-9897-ND	512x18 Sync. FIFO Memory	64-TQFP	10.11	9.11	8.08
SN74V215-10PAG	296-9894-ND	512x18 Sync. FIFO Memory	64-TQFP	8.28	6.63	5.59
SN74V215-15PAG	296-9895-ND	512x18 Sync. FIFO Memory	64-TQFP	9.56	8.61	7.64
SN74V215-20PAG	296-9896-ND	512x18 Sync. FIFO Memory	64-TQFP	9.35	8.42	7.47
SN74V225-7PAG	296-9901-ND	1024x18 Sync. FIFO Memory	64-TQFP	9.90	8.91	7.91
SN74V225-10PAG	296-9898-ND	1024x18 Sync. FIFO Memory	64-TQFP	9.50	8.55	7.59
SN74V225-15PAG	296-9899-ND	1024x18 Sync. FIFO Memory	64-TQFP	9.91	8.93	7.92
SN74V225-20PAG	296-9900-ND	1024x18 Sync. FIFO Memory	64-TQFP	9.23	8.31	7.37
SN74V235-7PAG	296-9905-ND	2048x18 Sync. FIFO Memory	64-TQFP	11.00	9.90	8.78
SN74V235-10PAG	296-9902-ND	2048x18 Sync. FIFO Memory	64-TQFP	11.00	9.90	8.78
SN74V235-15PAG	296-9903-ND	2048x18 Sync. FIFO Memory	64-TQFP	10.45	9.41	8.34
SN74V235-20PAG	296-9904-ND	2048x18 Sync. FIFO Memory	64-TQFP	9.90	8.91	7.91
SN74V245-7PAG	296-9909-ND	4096x18 Sync. FIFO Memory	64-TQFP	11.00	9.90	8.78
SN74V245-10PAG	296-9906-ND	4096x18 Sync. FIFO Memory	64-TQFP	11.76	10.59	9.39
SN74V245-15PAG	296-9907-ND	4096x18 Sync. FIFO Memory	64-TQFP	11.55	10.40	9.22
SN74V245-20PAG	296-9908-ND	4096x18 Sync. FIFO Memory	64-TQFP	11.00	9.90	8.78
SN74V263-10PZA	296-12477-ND	8192x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	30.51	28.48	26.45
SN74V263-15PZA	296-12478-ND	8192x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	29.78	27.79	25.81
SN74V263-6PZA	296-12479-ND	8192x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	32.01	29.88	27.75
SN74V263-7PZA	296-12480-ND	8192x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	31.26	29.18	27.10
SN74V273-10PZA	296-12481-ND	16384x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	32.75	30.57	28.38
SN74V273-15PZA	296-12482-ND	16384x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	32.01	29.88	27.75
SN74V273-6PZA	296-12483-ND	16384x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	34.23	31.95	29.67
SN74V273-7PZA	296-12484-ND	16384x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	33.50	31.27	29.03
SN74V283-10PZA	296-12485-ND	32768x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	34.98	32.65	30.32
SN74V283-15PZA	296-12486-ND	32768x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	34.23	31.95	29.67
SN74V283-6PZA	296-12487-ND	32768x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	36.47	34.04	31.61
SN74V283-7PZA	296-12488-ND	32768x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	35.75	33.37	30.98
SN74V293-10PZA	296-12489-ND	65536x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	37.23	34.75	32.27
SN74V293-15PZA	296-12490-ND	65536x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	36.47	34.04	31.61
SN74V293-6PZA	296-12491-ND	65536x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	38.72	36.14	33.56
SN74V293-7PZA	296-12492-ND	65536x18, 3.3V Synch. FIFO Memory *NEW!*	80-TQFP	37.95	35.42	32.89

TEXAS INSTRUMENTS INTEGRATORS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ACF2101BU	ACF2101BU-ND	Low Noise, Dual, Switched Integrator	24-SOIC	21.09	19.69	18.28
IVC102U	IVC102U-ND	Precision Switched Integrator Transimpedance Amplifier	14-SOIC	8.18	6.55	5.53

TEXAS INSTRUMENTS LINEAR PERIPHERAL DRIVERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DS3680D	296-9484-5-ND	Quad Telephone Relay Driver	14-SOP	1.60	1.28	.96
DS3680N	296-9485-5-ND	Quad Telephone Relay Driver	14-Dip	1.60	1.28	.96
SN754410NE	296-9911-5-ND	Quad Half-H Drivers	16-Dip	3.83	3.06	2.38
SN75451BD	296-9912-5-ND	Dual High Speed Peripheral Driver	8-SOP	.80	.60	.45
SN75451BP	296-1746-5-ND	Dual High Speed Peripheral Driver	8-Dip	.80	.60	.45
SN75452BP	296-1747-5-ND	Dual High Speed Peripheral Driver	8-Dip	.80	.60	.45
SN75453BD	296-9913-5-ND	Dual High Speed Peripheral Driver	8-SOP	.80	.60	.45
SN75453BDR	296-9913-1-ND	Dual High Speed Peripheral Driver	8-SOP	.80	.60	.45
SN75453BDR	296-9913-2-ND	Dual High Speed Peripheral Driver	8-SOP	650.00/2,500		
SN75453BP	296-1748-5-ND	Dual High Speed Peripheral Driver	8-Dip	.80	.60	.45
SN75454BP	296-9914-5-ND	Dual High Speed Peripheral Driver	8-Dip	.80	.60	.45
SN75462P	296-9915-5-ND	Dual Peripheral Driver	8-Dip	1.35	1.13	.90
SN75463P	296-9916-5-ND	Dual Peripheral Driver	8-Dip	1.20	1.00	.80
SN75468N	296-9917-5-ND	High Voltage Darlington Transistor Array	16-Dip	1.63	1.30	.98
SN75469N	296-9918-5-ND	High Voltage Darlington Transistor Array	16-Dip	1.63	1.30	.98
SN75471P	296-9919-5-ND	Dual Peripheral Driver	8-Dip	1.29	1.08	.86
SN75477P	296-9920-5-ND	Dual Peripheral Driver	8-Dip	.90	.75	.60
SN75472P	296-1749-5-ND	Dual Peripheral Driver	8-Dip	.90	.75	.60
TLC5904PZP	296-2378-ND	Constant Current LED Driver	100-PQFP	8.48	6.79	5.73
TLC5905PAP	296-2379-ND	Constant Current LED Driver	64-PQFP	6.92	5.54	4.68
TLC5911PZP	296-2381-ND	Constant Current LED Driver	100-PQFP	10.90	9.81	8.70
TLC5920DL	296-10348-5-ND	LED Driver with Shift Register	48-SSOP	5.20	4.16	3.51
TLC5921DAP	296-10349-5-ND	LED Driver with Shift Register	32-HTSSOP	3.49	2.79	2.17
ULN2003AD	296-1368-5-ND	Darlington Transistor Array	16-SOIC	.84	.63	.48
ULN2003ADR	296-1368-1-ND	Darlington Transistor Array	16-SOIC	.84	.63	.48
ULN2003ADR	296-1368-2-ND	Darlington Transistor Array	16-SOIC	682.50/2,500		
ULN2003AN	296-1979-5-ND	Darlington Transistor Array	16-Dip	.84	.63	.48
ULN2004AN	296-1980-5-ND	Darlington Transistor Array	16-Dip	.84	.63	.48
ULQ2003ADR	296-11570-1-ND	Darlington Transistor Array	16-SOIC	1.08	.90	.72
ULQ2003ADR	296-11570-2-ND	Darlington Transistor Array	16-SOIC	1170.00/2,500		

TEXAS INSTRUMENTS MULTIPLEXERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
		Analog Multiplexers/Multipliers				
MPC506AP	MPC506AP-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-Dip	10.24	8.20	6.92
MPC506AU	MPC506AU-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-SOIC	8.53	7.68	6.81
MPC507AP	MPC507AP-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-Dip	10.24	8.20	6.92
MPC507AU	MPC507AU-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	28-SOIC	8.53	7.68	6.81
MPC508AP	MPC508AP-ND	8-Channel/4-Channel CMOS Analog Multiplexer	16-Dip	5.67	4.54	3.53
MPC508AU	MPC508AU-ND	Single Ended 16-Channel/Differential 8-Channel CMOS	16-SOIC	5.04	4.04	3.41
MPC509AP	MPC509AP-ND	Single Ended 8-Channel/Differential 4-Channel CMOS	16-Dip	5.67	4.54	3.53
MPC509AU	MPC509AU-ND	Single Ended 8-Channel/Differential 4-Channel. CMOS	16-SOIC	5.54	4.44	3.74
MPY534KD	MPY534KD-ND	Precision Analog Multiplier	14-CDip	49.88	42.74	31.98
MPY634KP	MPY634KP-ND	Wide Bandwidth Precision Analog Multiplier	14-Dip	17.66	15.90	14.10
MPY634KU	MPY634KU-ND	Wide-Bandwidth Precision Analog Multiplier	16-SOIC	19.23	17.95	16.67
		Video Multiplexers				
MPC100AP	MPC100AP-ND	250MHz Bandwidth 4x1 Video Mux	14-Dip	9.70	7.76	6.55
MPC100AU	MPC100AU-ND	250MHz Bandwidth 4x1 Video Mux	14-SOIC	9.70	7.76	6.55
MPC104AP	MPC104AP-ND	Wide Bandwidth 2x1 Video Mux	8-Dip	5.76	4.61	3.59
MPC104AU	MPC104AU-ND	Wide Bandwidth 2x1 Video Mux	8-SOIC	3.62	2.90	2.26

TEXAS INSTRUMENTS OPTICAL SENSORS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
OPT101P-ND	OPT101P-ND	Mono Photodiode Transimpedance Amp	8-Dip	5.51	4.41	3.43
OPT301M-ND	OPT301M-ND	Integrated Photodiode and Amplifier	TO-99-8	16.96	15.27	13.54

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

TEXAS INSTRUMENTS

PC FAN DRIVER CONTROLLERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
THMC40DR	296-9995-1-ND	VS 12V Brushless DC Fan Motor Driver	14-SOP	3.67	2.94	2.29
THMC40DR	296-9995-2-ND	VS 12V Brushless DC Fan Motor Driver	14-SOP	5135.00/2,500		
THMC41DR	296-9996-1-ND	VS 12V Brushless DC Fan Motor Driver	14-SOP	3.67	2.94	2.29
THMC41DR	296-9996-2-ND	VS 12V Brushless DC Fan Motor Driver	14-SOP	5135.00/2,500		
THMC45DGNR	296-12355-1-ND	DC Brushless Fan Motor Driver	8-HTSSOP	2.59	2.07	1.61
THMC45DGNR	296-12355-2-ND	DC Brushless Fan Motor Driver	8-HTSSOP	3622.50/2,500		

TEXAS INSTRUMENTS

POWER CONTROL / MANAGEMENT PRODUCTS

CCFL Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
UCC2972N	296-2256-5-ND	CCFL Driver Controller	8-Dip	5.68	4.55	3.84
UCC3972N	296-6764-5-ND	BiCMOS CCFL Driver Controller	8-Dip	3.49	2.79	2.17
UCC3972PW	296-2257-5-ND	CCFL Driver Controller	8-TSSOP	3.49	2.79	2.17
UCC3973PW	296-6765-5-ND	BiCMOS CCFL Driver Controller	8-SOP	3.49	2.79	2.17

Hot-Swap

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
HPC3130APBK	296-9510-ND	Hot Plug Controller	128-LQFP	15.54	14.00	12.41
HPC3130APBM	296-9511-ND	Hot Plug Controller	120-QFP	15.54	14.00	12.41
HPC3130APGE	296-9512-ND	Hot Plug Controller	144-LQFP	15.54	14.00	12.41
HPC3130PBK	296-9513-ND	Hot Plug Controller	128-LQFP	15.54	14.00	12.41
HPC3130PBM	296-9514-ND	Hot Plug Controller	120-QFP	15.54	14.00	12.41
TPS2300IPW	296-2319-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.04	4.04	3.41
TPS2301IPW	296-2320-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.04	4.04	3.41
TPS2306DW	296-11642-5-ND	Dual Hot-Swap Power Controller	16-SOP	5.04	4.04	3.41
TPS2310IPW	296-2321-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.04	4.04	3.41
TPS2311IPW	296-2322-5-ND	Dual Hot-Swap Power Controller	20-TSSOP	5.04	4.04	3.41
TPS2320ID	296-6766-5-ND	Dual Hot-Swap Power Controller	16-SOIC	5.02	4.02	3.13
TPS2320IPW	296-2323-5-ND	Dual Hot-Swap Power Controller	16-TSSOP	5.02	4.02	3.13
TPS2321ID	296-6767-5-ND	Dual Hot-Swap Power Controller	16-SOP	5.02	4.02	3.13
TPS2321IPW	296-2324-5-ND	Dual Hot-Swap Power Controller	16-TSSOP	5.02	4.02	3.13
TPS2330ID	296-6768-5-ND	Single Hot-Swap Power Controller	14-SOIC	4.28	3.42	2.66
TPS2330IPW	296-2325-5-ND	Hot-Swap Power Controller	14-TSSOP	4.28	3.42	2.66
TPS2331ID	296-6769-5-ND	Single Hot-Swap Power Controller	14-SOIC	4.28	3.42	2.66
TPS2331IPW	296-2326-5-ND	Hot-Swap Power Controller	14-TSSOP	4.28	3.42	2.66
UC2914DW	296-12245-5-ND	5V to 35V Hotswap Power Manager *NEW!*	18-SOIC	8.84	7.08	5.97
UC2914N	296-2502-5-ND	5V to 35V Hot-Swap Power Manager	18-Dip	8.84	7.08	5.97
UC3914DW	296-11347-5-ND	5V to 35V Hot-Swap Power Manager	18-SOIC	7.74	6.20	5.23
UC3914N	296-2327-5-ND	5V to 35V Hot-Swap Power Manager	18-Dip	7.74	6.20	5.23
UCC391PW	296-6778-5-ND	5-Bit Programmable Output Precision Voltage Reference	8-SOP	2.61	2.09	1.63
UCC2913D	296-2328-5-ND	Neg. V. Hot-Swap Power Manager	8-SOIC	3.24	2.60	2.02
UCC2913N	296-12247-5-ND	Neg. V. Hot-Swap Power Manager *NEW!*	8-Dip	3.24	2.60	2.02
UCC2915DP	296-2329-5-ND	15V Hot-Swap Programmable Power Manager	16-SOIC	7.46	5.97	5.04
UCC2917D	296-2330-5-ND	Pos. Floating Hot-Swap Power Manager	16-SOIC	4.32	3.46	2.69
UCC2917N	296-12249-5-ND	Pos. Floating Hot-Swap Power Manager *NEW!*	16-Dip	4.32	3.46	2.69
UCC2918DP/81510	296-11420-5-ND	Low On-Resistance Hot-Swap Power Manager	16-SOP	6.92	5.54	4.68
UCC2919D	296-2331-5-ND	3V to 8V Hot-Swap Power Manager	16-SOIC	5.18	4.15	3.50
UCC2919PW	296-12251-5-ND	3V to 8V Hot-Swap Power Manager *NEW!*	16-TSSOP	5.18	4.15	3.50
UCC2921D	296-2332-5-ND	Latching Negative Floating Hot-Swap Power Manager	8-SOP	3.71	2.97	2.31
UCC2921N	296-12252-5-ND	Latching Negative Floating Hot-Swap Power Manager *NEW!*	8-Dip	3.71	2.97	2.31
UCC3912DP	296-2333-5-ND	Programmable Hot-Swap Power Manager	16-SOP	4.59	3.68	2.86
UCC3912PWP	296-12031-5-ND	Programmable Hot-Swap Power Manager *NEW!*	24-HTSSOP	4.59	3.68	2.86
UCC3913D	296-2335-5-ND	Negative Volt. Hot-Swap Power Manager	8-SOIC	3.06	2.45	1.91
UCC3913N	296-6770-5-ND	Negative Volt. Hot-Swap Power Manager	8-Dip	3.06	2.45	1.91
UCC3915DP	296-2336-5-ND	15V Program. Hot-Swap Power Manager	16-SOP	5.13	4.11	3.20
UCC3915N	296-6771-5-ND	7-15V Programmable Hot-Swap Power Manager	16-Dip	5.13	4.11	3.20
UCC3915PWP	296-6772-5-ND	7-15V Programmable Hot-Swap Power Manager	24-HTSSOP	5.13	4.11	3.20
UCC39161DP	296-6773-5-ND	4-6V Low Current High-Side Power Manager	8-SOP	4.37	3.50	2.72
UCC3917D	296-2337-5-ND	Pos. Floating Hot-Swap Power Manager	16-SOIC	3.76	3.01	2.34
UCC3917N	296-6774-5-ND	Pos. Floating Hot-Swap Power Manager	16-Dip	3.76	3.01	2.34
UCC3918DP	296-2338-5-ND	Low On-Resistance Hot-Swap Power Manager	16-SOP	4.70	3.77	2.93
UCC3918N	296-6775-5-ND	Low On-Resistance Hot-Swap Power Manager	16-Dip	5.62	4.50	3.80
UCC3919D	296-2339-5-ND	3V to 8V Hot-Swap Power Manager	16-SOIC	4.70	3.77	2.93
UCC3919PW	296-6777-5-ND	Single Hot-Swap Pwr. Controller	16-Dip	4.70	3.77	2.93
UCC3921D	296-2340-5-ND	Neg. Floating Hot-Swap Power Manager	8-SOP	3.22	2.58	2.01
UCC3921N	296-6779-5-ND	Negative Latchable Floating Hot-Swap Power Manager	8-Dip	3.22	2.58	2.01
UCC39151DPTR	296-11994-1-ND	7-15V Programmable Hot-Swap Power Manager	16-SOIC	9.88	7.91	6.67
UCC39151DPTR	296-11994-2-ND	7-15V Programmable Hot-Swap Power Manager	16-SOIC	15315.00/2,500		
UCC39151PWPTR	296-11995-1-ND	7-15V Programmable Hot-Swap Power Manager	24-HTSSOP	9.88	7.91	6.67
UCC39151PWPTR	296-11995-2-ND	7-15V Programmable Hot-Swap Power Manager	24-HTSSOP	12350.00/2,000		

Peripheral

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
UC560DP	296-11361-5-ND	27-Line Single-Ended SCSI Source/Sink Regulator	8-SOIC	3.49	2.79	2.17
UC5601QP	296-11357-5-ND	18-Line 5V SE Terminator for SCSI and Fast SCSI	28-PLCC	6.40	5.12	4.32
UC5602DWP	296-11358-5-ND	18-Line 5V Terminator for SCSI and Fast SCSI	28-SOIC	4.32	3.46	2.69
UC5603DP	296-11359-5-ND	9-Line 5V SE Terminator for SCSI and Fast SCSI	16-SOIC	3.98	3.19	2.48
UC5604DP	296-11360-5-ND	9-Line 5V Terminator for SCSI and Fast SCSI	16-SOIC	3.80	3.05	2.37
UCC3916DP	296-2255-5-ND	SCSI Termpower Manager	8-SOP	3.42	2.74	2.13
UCC5510MWP	296-6730-5-ND	9-Line SCSI Multi Terminator	36-SOP	5.52	4.42	3.73
UCC5511PM	296-12081-ND	27-Line 3-5V SCSI LVD Terminator	64-QFP	7.20	5.76	4.86
UCC5606DP	296-6731-5-ND	9-Line 3-5V SCSI SE Terminator	16-SOP	4.23	3.39	2.64
UCC5606PWP	296-6732-5-ND	9-Line 3-5V SCSI SE Terminator	16-HTSSOP	4.23	3.39	2.64
UCC5610DWP	296-6733-5-ND	18-Line 3-5V SCSI SE Terminator	28-SOP	6.92	5.54	4.68
UCC5611DWP	296-6734-5-ND	18-Line 3-5V SCSI SE Terminator	28-SOP	6.92	5.54	4.68
UCC5614DP	296-6735-5-ND	9-Line 3-5V SCSI SE Terminator	16-SOP	2.79	2.24	1.74
UCC5614PWP	296-6736-5-ND	9-Line 3-5V SCSI SE Terminator	24-HTSSOP	2.79	2.24	1.74
UCC5617DWP	296-6737-5-ND	18-Line 3-5V SCSI SE Terminator	28-SOP	3.80	3.05	2.37
UCC5618DWP	296-6738-5-ND	18-Line 3-5V SCSI SE Terminator	28-SOP	4.66	3.73	2.90
UCC5618QP	296-6739-5-ND	18-Line 3-5V SCSI SE Terminator	28-SOP	5.15	4.13	3.21
UCC5619MWP	296-6740-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI	36-SOP	6.52	5.22	4.41
UCC5620MWP	296-6743-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI	48-SOP	5.94	4.76	4.01
UCC5621MWP	296-6744-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI	44-SOP	6.10	4.88	4.12
UCC5622MWP	296-6746-5-ND	27-Line 5V SE Terminator For Fast/Ultra SCSI	44-SOP	6.54	5.24	4.42
UCC5628FQP	296-6747-ND	14-Line 3-5V SCSI Multi Terminator	48-QFP	7.70	6.16	5.20
UCC5629FQP	296-6748-ND	14-Line 3-5V SCSI Multi Terminator	48-QFP	7.70	6.16	5.20
UCC5630AFQP	296-6749-ND	9-Line 3-5V SCSI Multi Terminator	48-QFP	5.42	4.34	3.66
UCC5630AMWP	296-6750-5-ND	9-Line 3-5V SCSI Multi Terminator	36-SOP	4.91	3.93	3.06
UCC5631AFQP	296-6751-ND	9-Line 3-5V SCSI Multi Terminator	48-QFP	5.42	4.34	3.66
UCC5631AMWP	296-6752-5-ND	9-Line 3-5V SCSI Multi Terminator	36-SOP	4.91	3.93	3.06
UCC5638FQP	296-6753-ND	15-Line 3-5V SCSI Multi Terminator	48-QFP	8.43	7.59	6.73
UCC5639FQP	296-6754-ND	15-Line 3-5V SCSI Multi Terminator	48-QFP	8.43	7.59	6.73
UCC5640PW24	296-6755-5-ND	9-Line 3-5V LVD SCSI Terminator	24-SOP	5.58	4.47	3.48
UCC5640PW28	296-6756-5-ND	9-Line 3-5V LVD SCSI Terminator	28-SOP	5.58	4.47	3.48
UCC5641PW24	296-6757-5-ND	9-Line 3-5V LVD SCSI Terminator	24-SOP	8.30	6.64	5.61
UCC5641PW28	296-6758-5-ND	9-Line 3-5V LVD SCSI Terminator	248-SOP	8.30	6.64	5.61
UCC5646PM	296-6759-ND	27-Line 3-5V LVD SCSI Terminator	64-QFP	11.05	9.95	8.82
UCC5672MWP	296-6760-5-ND	9-Line 3-5V SCSI Multi Terminator	36-SOP	5.72	4.58	3.87
UCC5672PWP	296-6761-5-ND	9-Line 3-5V SCSI Multi Terminator	28-HTSSOP	5.72	4.58	3.87
UCC5673MWP	296-6762-5-ND	9-Line 3-5V SCSI Multi Terminator	36-SOP	5.72	4.58	3.87
UCC5673PWP	296-6763-5-ND	9-Line 3-5V SCSI Multi Terminator	28-HTSSOP	5.72	4.58	3.87
UCC5680PW24	296-11565-5-ND	9-Line 3-5V LVD Terminator for SCSI - Ultra3 SCSI	24-TSSOP	5.58	4.47	3.48
UCC5680PW28	296-11566-5-ND	9-Line 3-5V LVD Terminator for SCSI - Ultra3 SCSI	28-TSSOP	5.58	4.47	3.48
UCC5686PM	296-11567-ND	27-Line 3-5V LVD Terminator for Wide Ultra2/Ultra3 SCSI	64-QFP	12.40	11.16	9.90
UCC5687PM	296-11568-ND	27-Line 3-5V LVD Terminator for Wide Ultra2/Ultra3 SCSI	64-QFP	12.40	11.16	9.90

Power + Array

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPIC44H01DA	296-1952-5-ND	4-Channel High-Side Driver	32-TSSOP	3.58	2.87	2.23

Power + Logic

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPIC6A259DW	296-9004-5-ND	Power 8-Bit Addressable Latch	24-SOP	2.93	2.34	1.82
TPIC6A259NE	296-9005-5-ND	Power 8-Bit Addressable Latch	20-Dip	3.85	3.08	2.40
TPIC6A595DW	296-9006-5-ND	Power 8-Bit Shift Register	24-SOP	2.59	2.07	1.61
TPIC6A595NE	296-9007-5-ND	Power 8-Bit Shift Register	20-Dip	2.63	2.11	1.64
TPIC6A596DW	296-9008-5-ND	Power 8-Bit Shift Register	24-SOIC	2.59	2.07	1.61
TPIC6A596NE	296-9009-5-ND	Power 8-Bit Shift Register	20-Dip	2.63	2.11	1.64
TPIC6B259DW	296-9010-5-ND	Power 8-Bit Addressable Latch	20-SOP	1.65	1.32	.99
TPIC6B259N	296-9011-5-ND	Power 8-Bit Addressable Latch	20-Dip	1.63	1.30	.98
TPIC6B273DW	296-1350-5-ND	Power Octal D-Type Switch	20-SOIC	1.65	1.32	.99
TPIC6B273DWR	296-1350-1-ND	Power Octal D-Type Latch	20-SOIC	1.65	1.32	.99
TPIC6B273DWR	296-1350-2-ND	Power Octal D-Type Latch	20-SOIC	1716.00/2,000		
TPIC6B273N	296-9012-5-ND	Power Octal D-Type Latch	20-Dip	1.65	1.32	.99
TPIC6B595DW	296-1351-5-ND	Power 8-Bit Shift Register	20-SOIC	1.26	1.05	.84
TPIC6B595DWR	296-1351-1-ND	Power 8-Bit Shift Register	20-SOIC	1.32	1.10	.88
TPIC6B595DWR	296-1351-2-ND	Power 8-Bit Shift Register	20-SOIC	1170.00/2,000		
TPIC6B595N	296-1956-5-ND	Power 8-Bit Shift Register	20-Dip	1.32	1.10	.88
TPIC6B596DW	296-9013-5-ND	Power 8-Bit Shift Register	20-SOP	1.26	1.05	.84
TPIC6C595D	296-2019-5-ND	Power 8-Bit Shift Register	16-SOIC	.99	.83	.66
TPIC6C595N	296-2020-5-ND	Power 8-Bit Shift Register	16-Dip	1.05	.88	.70
TPIC6C596D	296-9014-5-ND	Power 8-Bit Shift Register	16-SOP	.99	.83	.66
TPIC6C596N	296-9015-5-ND	Power 8-Bit Shift Register	16-Dip	1.05	.88	.70
TPIC43T01DA	296-10866-5-ND	Three-Phase Brushless Motor RPM Controller	38-TSSOP	4.73	3.78	2.94
TPIC44L01DB	296-10867-5-ND	4-Channel Serial/Parallel Low-Side Pre-FET Driver	24-SSOP	1.90	1.52	1.14
TPIC44L02DB	296-10868-5-ND	4-Channel Serial/Parallel Low-Side Pre-FET Driver	24-SSOP	1.90	1.52	1.14
TPIC46L01DB	296-10869-5-ND	6-Channel Serial/Parallel Low-Side Pre-FET Driver	28-SSOP	2.38	1.90	1.43
TPIC46L02DB	296-10870-5-ND	6-Channel Serial/Parallel Low-Side Pre-FET Driver	28-SSOP	2.38	1.90	1.43
TPIC46L03DB	296-10871-5-ND	6-Channel Serial/Parallel Low-Side Pre-FET Driver	28-SSOP	2.38	1.90	1.43
TPIC0107BDWP	296-10857-5-ND	PWM Control Intelligent H-Bridge	20-HSOP	4.28	3.42	2.66
TPIC0108BDWP	296-10858-5-ND	PWM Control Intelligent H-Bridge	20-HSOP	4.84	3.87	3.01
TPIC0108BDWPR	296-10858-1-ND	PWM Control Intelligent H-Bridge	20-HSOP	4.84	3.87	3.01
TPIC0108BDWPR	296-10858-2-ND	PWM Control Intelligent H-Bridge	20-HSOP	5482.00/2,000		
TPIC2101N	296-10861-5-ND	Single Phase Low-Side Pre-FET Driver	14-Dip	2.27	1.82	1.42
TPIC2603DW	296-10863-5-ND	6-Ch. Serial Interface Low-Side Driver	24-SOP	4.97	3.98	3.10
TPIC2603NE	296-10864-5-ND	6-Ch. Serial Interface Low-Side Driver	20-Dip	4.97	3.98	3.10
TPIC2701N	296-10865-5-ND	7-Ch. Common-Source Driver	16-Dip	4.28	3.42	2.66
TPIC6259DW	296-9000-5-ND	Power 8-Bit Addressable Latch	20-SOP	2.70	2.16	1.68
TPIC6259N	296-9001-5-ND	Power 8-Bit Addressable Latch	20-Dip	2.70	2.16	1.68
TPIC6273DW	296-9002-5-ND	Power Octal D-Type Latch	20-SOP	2.70	2.16	1.68
TPIC6273N	296-1953-5-ND	Power Octal D-Type Latch	20-Dip	2.70	2.16	1.68
TPIC6595DW	296-1349-5-ND	Power 8-Bit Shift Register	20-SOIC	2.39	1.91	1.49
TPIC6595DWR	296-1349-1-ND	Power 8-Bit Shift Register	20-SOIC	2.50	2.00	1.56
TPIC6595DWR	296-1349-2-ND	Power 8-Bit Shift Register	20-SOIC	2754.00/2,000		
TPIC6595N	296-1954-5-ND	Power 8-Bit Shift Register	20-Dip	2.43	1.95	1.52
TPIC6596DW	296-9003-5-ND	Power 8-Bit Shift Register	20-SOP	2.39	1.91	1.49

Special Functions - Motion/Motor Control

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
UC3717AN	296-11258-5-ND	Stepper Motor Drive Circuit	16-Dip	5.84	4.68	3.95
UC3770AN	296-11259-5-ND	HP Stepper Motor Drive Circuit	16-Dip	4.91	3.93	3.06
UC3770BN	296-11260-5-ND	HP Stepper Motor Drive Circuit	16-Dip	4.95	3.96	3.08

(Continued)

TEXAS INSTRUMENTS POWER CONTROL/MGMT. PRODUCTS *(Continued)*

Special Functions - Backlight Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
UC3871DW	296-11326-5-ND	Resonant Fluorescent Lamp Driver	18-SOIC	6.32	5.06	4.27
UC3871N	296-11327-5-ND	Resonant Fluorescent Lamp Driver	18-Dip	6.32	5.06	4.27
UC3872DW	296-11328-5-ND	Resonant Lamp Ballast Controller	16-SOIC	5.20	4.16	3.24
UC3872M	296-11329-5-ND	Resonant Lamp Ballast Controller	16-SSOP	5.20	4.16	3.24
UC3872N	296-11330-5-ND	Resonant Lamp Ballast Controller	20-Dip	5.20	4.16	3.24
UCC3974PW	296-12405-5-ND	Dual Cold Cathode Fluorescent Lamp Controller *NEW!*	16-TSSOP	4.28	3.42	2.66

TEXAS INSTRUMENTS POWER SUPPLY PRODUCTS

Audio Differential Line Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DRV134PA	DRV134PA-ND	Audio Balanced Line Driver with Differential Output	8-Dip	3.89	3.12	2.43
DRV134UA	DRV134UA-ND	Audio Balanced Line Driver with Differential Output	16-SOL	3.89	3.12	2.43
DRV135UA	DRV135UA-ND	Audio Balanced Line Driver with Differential Output	8-SOIC	3.89	3.12	2.43

Battery Management

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
BQ2000PN-B5	296-9313-5-ND	Multichemistry Charge Management	8-Dip	3.78	3.03	2.36
BQ2000PW	296-12359-5-ND	Multichemistry Switchmode Charge Management	8-TSSOP	3.78	3.03	2.36
BQ2000SN-B5	296-9314-5-ND	Multichemistry Charge Management	8-SOP	3.78	3.03	2.36
BQ2000TPN-B5	296-9315-5-ND	Multichemistry Charge Management	8-Dip	3.78	3.03	2.36
BQ2000TPW	296-12360-5-ND	Multichemistry Switchmode Charge Management	8-TSSOP	3.78	3.03	2.36
BQ2000TSN-B5	296-9316-5-ND	Multichemistry Charge Management	8-SOP	3.78	3.03	2.36
BQ2002CPN	296-9317-5-ND	Fast Charge Controller	8-Dip	2.48	1.98	1.54
BQ2002CSN	296-9318-5-ND	Fast Charge Controller	8-SOP	2.48	1.98	1.54
BQ2002DSN	296-9319-5-ND	Fast Charge Controller	8-SOP	2.48	1.98	1.54
BQ2002EPN	296-9320-5-ND	Fast Charge Controller	8-Dip	2.48	1.98	1.54
BQ2002ESN	296-9321-5-ND	Fast Charge Controller	8-SOP	2.48	1.98	1.54
BQ2002FPN	296-9322-5-ND	Fast Charge Controller	8-Dip	2.48	1.98	1.54
BQ2002FSN	296-9323-5-ND	Fast Charge Controller	8-SOP	2.48	1.98	1.54
BQ2002GPN	296-9324-5-ND	Fast Charge Controller	8-Dip	2.48	1.98	1.54
BQ2002GSN	296-9325-5-ND	Fast Charge Controller	8-SOP	2.48	1.98	1.54
BQ2002PN	296-9326-5-ND	Fast Charge Controller	8-Dip	2.48	1.98	1.54
BQ2002SN	296-9327-5-ND	Fast Charge Controller	8-SOP	2.48	1.98	1.54
BQ2002TPN	296-9328-5-ND	Fast Charge Controller	8-Dip	2.48	1.98	1.54
BQ2002TSN	296-9329-5-ND	Fast Charge Controller	8-SOP	2.48	1.98	1.54
BQ2003PN	296-9330-5-ND	Fast Charge Controller	16-Dip	4.25	3.41	2.65
BQ2003S	296-9331-5-ND	Fast Charge Controller	16-SOP	4.25	3.41	2.65
BQ2004EPN	296-9332-5-ND	Fast Charge Controller	16-Dip	4.25	3.41	2.65
BQ2004ESN	296-9333-5-ND	Fast Charge Controller	16-SOP	4.25	3.41	2.65
BQ2004HPN	296-9334-5-ND	Fast Charge Controller	16-Dip	4.25	3.41	2.65
BQ2004HSN	296-9335-5-ND	Fast Charge Controller	16-SOP	4.25	3.41	2.65
BQ2004PN	296-9336-5-ND	Fast Charge Controller	16-Dip	4.25	3.41	2.65
BQ2004SN	296-9337-5-ND	Fast Charge Controller	16-SOP	4.25	3.41	2.65
BQ2005S	296-9338-5-ND	Dual Fast Charge Controller	20-SOP	4.97	3.98	3.10
BQ2010SN-D107	296-2218-5-ND	Battery Gas Gauge	16-SOIC	6.92	5.54	4.68
BQ2011SN-D118	296-9340-5-ND	Battery Gas Gauge	16-SOP	6.74	5.40	4.55
BQ2012SN-D107	296-9341-5-ND	Battery Gas Gauge	16-SOP	6.92	5.54	4.68
BQ2013HSN-A514	296-9343-5-ND	Battery Gas Gauge	16-SOP	6.64	5.32	4.49
BQ2014HSN	296-9345-5-ND	Battery Gas Gauge	16-SOP	6.64	5.32	4.49
BQ2014SN-D120	296-2220-5-ND	Battery Gas Gauge	16-SOIC	6.92	5.54	4.68
BQ2018SN-E1	296-2221-5-ND	Battery Power Monitor	8-SOIC	3.78	3.03	2.36
BQ2018TS-E1	296-2222-5-ND	Battery Power Monitor	8-TSSOP	3.78	3.03	2.36
BQ2019PW	296-9348-5-ND	Advanced Battery Monitoring	8-TSSOP	3.89	3.12	2.43
BQ2023PW	296-11861-5-ND	Battery Power Monitor	8-TSSOP	4.01	3.21	2.50
BQ2031PN-A5	296-9349-5-ND	Lead Acid Fast Charge	16-Dip	5.06	4.05	3.42
BQ2031SN-A5	296-9350-5-ND	Lead Acid Fast Charge	16-SOP	5.06	4.05	3.42
BQ2040SN-C408	296-2223-5-ND	Battery Gas Gauge	16-SOIC	6.92	5.54	4.68
BQ2050HSN-A508	296-9353-5-ND	Lithium-Ion Gas Gauge	16-SOP	6.64	5.32	4.49
BQ2050SN-D119	296-2225-5-ND	Lithium-Ion Power Gauge	16-SOIC	6.92	5.54	4.68
BQ2052SN-A515	296-9355-5-ND	Primary Lithium Gas Gauge	16-SOP	7.22	5.78	4.88
BQ2054PN	296-9356-5-ND	Lithium-Ion Fast Charge	16-Dip	5.00	4.00	3.11
BQ2054SN	296-9357-5-ND	Lithium-Ion Fast Charge	16-SOP	5.00	4.00	3.11
BQ2057CDGK	296-11991-5-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-MSOP	2.70	2.16	1.68
BQ2057CDGKR	296-11991-1-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-MSOP	2.70	2.16	1.68
BQ2057CDGKR	296-11991-2-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-MSOP	3780.00/2,500		
BQ2057CSN	296-9358-5-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-SOP	2.70	2.16	1.68
BQ2057CTS	296-9359-5-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-TSSOP	2.70	2.16	1.68
BQ2057DGK	296-11992-5-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-MSOP	2.70	2.16	1.68
BQ2057DGKR	296-11992-1-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-MSOP	2.70	2.16	1.68
BQ2057DGKR	296-11992-2-ND	Li-Ion LDO Linear Charge Management for 1 Cell	8-MSOP	3780.00/2,500		
BQ2057SN	296-9360-5-ND	Li-Ion LDO Linear Charge Mgmt	8-SOP	2.70	2.16	1.68
BQ2057TS	296-9361-5-ND	Li-Ion LDO Linear Charge Mgmt	8-TSSOP	2.70	2.16	1.68
BQ2057TSN	296-9362-5-ND	Li-Ion LDO Linear Charge Mgmt	8-SOP	2.70	2.16	1.68
BQ2057TTS	296-9363-5-ND	Li-Ion LDO Linear Charge Mgmt	8-TSSOP	2.70	2.16	1.68
BQ2057WSN	296-9364-5-ND	Li-Ion LDO Linear Charge Mgmt	8-SOP	2.70	2.16	1.68
BQ2057WTS	296-9365-5-ND	Li-Ion LDO Linear Charge Mgmt	8-TSSOP	2.70	2.16	1.68
BQ2060SS-E411	296-12268-5-ND	Multi-Chemistry SBS v1.1 Gas Gauge *NEW!*	28-SSOP	7.02	5.62	4.74
BQ2063DBQ	296-12199-5-ND	Battery Gas Gauge *NEW!*	28-SSOP	7.02	5.62	4.74
BQ2201PN	296-9369-5-ND	SRAM Nonvolatile Controller IC	8-Dip	3.74	2.99	2.33
BQ2201SN	296-9370-5-ND	SRAM Nonvolatile Controller IC	8-SOP	3.74	2.99	2.33
BQ2204APN	296-9375-5-ND	SRAM Nonvolatile Controller IC	16-Dip	4.61	3.69	2.87
BQ2204ASN	296-9376-5-ND	SRAM Nonvolatile Controller IC	8-SOP	4.61	3.69	2.87
BQ2954PN	296-9387-5-ND	Lithium-Ion Fast Charger	16-Dip	5.00	4.00	3.11
BQ2954SN	296-9388-5-ND	Lithium-Ion Fast Charger	16-SOP	5.00	4.00	3.11
BQ4010MA-85	296-9389-5-ND	8Kx8 Nonvolatile SRAM, 85nS	28-Dip	11.05	9.95	8.82
BQ4010YMA-70	296-9390-5-ND	8Kx8 Nonvolatile SRAM, 10%, 70nS	28-Dip	11.05	9.95	8.82
BQ4011MA-100	296-9391-5-ND	32Kx8 Nonvolatile SRAM, 100nS	28-Dip	12.61	11.36	10.07
BQ4011YMA-70	296-9393-5-ND	32Kx8 Nonvolatile SRAM, 10%, 70nS	28-Dip	12.61	11.36	10.07
BQ4011YMA-100	296-9392-5-ND	32Kx8 Nonvolatile SRAM, 10%, 100nS	28-Dip	12.61	11.36	10.07
BQ4013YMA-70	296-9394-5-ND	128Kx8 Nonvolatile SRAM, 10%, 70nS	32-Dip	15.18	13.67	12.12
BQ4013YMA-70N	296-9395-5-ND	128Kx8 Nonvolatile SRAM, 10%, 70nS	32-Dip	15.18	13.67	12.12
BQ4013YMA-85	296-9396-5-ND	128Kx8 Nonvolatile SRAM, 10%, 85nS	32-Dip	15.18	13.67	12.12
BQ4014MB-85	296-9397-5-ND	256Kx8 Nonvolatile SRAM, 85nS	32-Dip	37.20	34.72	32.24
BQ4014YMB-85	296-9398-5-ND	256Kx8 Nonvolatile SRAM, 10%, 85nS	32-Dip	37.20	34.72	32.24
BQ4015MA-70	296-9399-5-ND	512Kx8 Nonvolatile SRAM, 70nS	32-Dip	39.77	37.12	34.47
BQ4015YMA-70	296-9400-5-ND	512Kx8 Nonvolatile SRAM, 10%, 70nS	32-Dip	39.77	37.12	34.47
BQ4015YMA-85	296-9401-5-ND	512Kx8 Nonvolatile SRAM, 10%, 85nS	32-Dip	39.77	37.12	34.47
BQ4016MC-70	296-9402-5-ND	1024Kx8 Nonvolatile SRAM, 70nS	36-Dip	46.82	43.70	40.58
BQ4016YMC-70	296-9403-5-ND	1024Kx8 Nonvolatile SRAM, 10%, 70nS	36-Dip	46.82	43.70	40.58
BQ4017MC-70	296-9404-5-ND	2048Kx8 Nonvolatile SRAM, 70nS	36-Dip	84.00	78.40	72.80
BQ24001PWP	296-9378-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24002PWP	296-9379-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24003PWP	296-9380-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24004PWP	296-9381-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24005PWP	296-9382-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24006PWP	296-9383-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24007PWP	296-9384-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24008PWP	296-9385-5-ND	Lithium-Ion Battery Charger	20-HTSSOP	3.78	3.03	2.36
BQ24200DGN	296-12409-5-ND	4.2V, 500mA, Li-Ion and Li-Pol Charge Management *NEW!*	8-MSOP	3.42	2.74	2.13
BQ24201DGN	296-12410-5-ND	4.1V, 500mA, Li-Ion and Li-Pol Charge Management *NEW!*	8-MSOP	3.42	2.74	2.13
BQ24202DGN	296-12411-5-ND	4.2V, 500mA, Li-Ion and Li-Pol Charge Management *NEW!*	8-MSOP	3.31	2.65	2.06
BQ24203DGN	296-12412-5-ND	4.1V, 500mA, Li-Ion and Li-Pol Charge Management *NEW!*	8-MSOP	3.31	2.65	2.06
BQ24204DGN	296-12413-5-ND	4.2V, 500mA, Li-Ion and Li-Pol Charge Management *NEW!*	8-MSOP	3.20	2.56	1.99
BQ24205DGN	296-12414-5-ND	4.1V, 500mA, Li-Ion and Li-Pol Charge Management *NEW!*	8-MSOP	3.20	2.56	1.99
BQ24700PW	296-12361-5-ND	Battery Charger Controller/Selector with DPM	24-TSSOP	4.10	3.28	2.55
BQ24701PW	296-12362-5-ND	Battery Charger Controller/Selector with DPM	24-TSSOP	4.10	3.28	2.55
BQ26231PW	296-12269-5-ND	Battery Coulomb Counter *NEW!*	8-TSSOP	3.04	2.43	1.89
TPS3600D25PW	296-12017-5-ND	Battery Backup Supervisor for LP Processors *NEW!*	14-TSSOP	4.59	3.68	2.86
UC2906DW	296-2228-5-ND	Lead-Acid Battery Charger	16-SOIC	5.22	4.18	3.53
UC2909DW	296-12527-5-ND	Switchmode Lead Acid Battery Charger *NEW!*	20-SOIC	6.06	4.85	4.10
UC2909N	296-2229-5-ND	Lead-Acid Battery Charger	20-Dip	6.06	4.85	4.10
UC3906DW	296-2230-5-ND	Lead-Acid Battery Charger	16-SOIC	5.36	4.29	3.34
UC3906Q	296-12193-5-ND	Lead-Acid Battery Charger *NEW!*	20-PLCC	5.36	4.29	3.34
UC3909DW	296-11345-5-ND	Lead Acid Switchmode Charge Management	20-SOIC	5.52	4.42	3.73
UC3909N	296-2232-5-ND	Lead-Acid Switchmode Charge Management	20-Dip	5.52	4.42	3.73
UCC3911DP-1	296-11540-5-ND	2-Cell Lithium-Ion Protector Circuit	16-SOP	4.32	3.46	2.69
UCC3911DP-2	296-11541-5-ND	2-Cell Lithium-Ion Protector Circuit	16-SOP	4.32	3.46	2.69
UCC3911DP-3	296-11542-5-ND	2-Cell Lithium-Ion Protector Circuit	16-SOP	4.32	3.46	2.69
UCC3911DP-4	296-11543-5-ND	2-Cell Lithium-Ion Protector Circuit	16-SOP	4.32	3.46	2.69
UCC3952DP-1	296-11552-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3952DP-2	296-11553-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3952DP-3	296-11554-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3952DP-4	296-11555-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3952PW-1	296-11556-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3952PW-2	296-11557-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3952PW-3	296-11558-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3952PW-4	296-11559-5-ND	Lithium-Ion Protector Circuit	16-SOP	3.53	2.83	2.20
UCC3956DW	296-11560-5-ND	Lithium-Ion Battery Circuit	8-SOIC	4.10	3.28	2.55
UCC3956N	296-2233-5-ND	Lithium-Ion Battery Circuit	20-Dip	4.10	3.28	2.55
UCC3957M-1	296-2234-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.13	2.51	1.95
UCC3957M-2	296-2235-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.13	2.51	1.95
UCC3957M-3	296-2236-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.13	2.51	1.95
UCC3957M-4	296-2237-5-ND	Lithium-Ion Protector Circuit	16-SSOP	3.13	2.51	1.95
TWL2214CAPFB	296-12295-ND	Lithium-Ion Battery Charge Control *NEW!*	48-TQFP	7.68	6.15	5.19

DC-to-DC Converters

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
0722MG	0722MG-ND	Dual-Isolated DC/DC Converter *NEW!*	20-OmniPak	104.99	97.99	90.99
DCP021212DU	296-9446-5-ND	2W Unregulated DC/DC Converter	12-SOP	10.58	9.53	8.45
DCP021212U	296-9447-5-ND	2W Unregulated DC/DC Converter	12-SOP	10.58	9.53	8.45
DCP021515U	296-9448-5-ND	2W Unregulated DC/DC Converter	8-SOP	10.58	9.53	8.45
DCP022405U	296-12367-5-ND	2 Watt DC/DC Converter, 24V In, ±5V Out	8-SOP	10.58	9.53	8.45
DCP022415DU	296-9449-5-ND	2W Unregulated DC/DC Converter	12-SOP	10.58	9.53	8.45
DCP010505BP	DCP010505BP-ND	Isolated DC/DC Converter, 5V In, 5V Out	14-Dip	9.64	7.72	6.51
DCP010505BP-U	DCP010505BP-U-ND	Isolated DC/DC Converter, 5V In, 5V Out	14-GullWing	9.64	7.72	6.51
DCP010505DBP	DCP010505DBP-ND	Isolated DC/DC Converter, 5V In, Dual ±5V Out	14-Dip	8.83	7.95	7.05
DCP010505DBP-U	DCP010505DBP-U-ND	Isolated DC/DC Converter, 5V In, Dual ±5V Out	14-GullWing	8.83	7.95	7.05
DCP010512BP	DCP010512BP-ND	Isolated DC-DC Converter, 5V In, 12V Out	14-Dip	9.64	7.72	6.51
DCP010512BP-U	DCP010512BP-U-ND	Isolated DC/DC Converter, 5V In, 12V Out	14-GullWing	9.64	7.72	6.51
DCP010512DBP	DCP010512DBP-ND	Isolated DC/DC Converter, 5V In, Dual 12V Out	14-Dip	10.60	8.48	7.16
DCP010512DBP-U	DCP010512DBP-U-ND	Isolated DC/DC Converter, 5V In, Dual 12V Out	14-GullWing	10.60	8.48	7.16
DCP010515BP	DCP010515BP-ND	Isolated DC/DC Converter, 5V In, 15V Out	14-Dip	9.64	7.72	6.51
DCP010515BP-U	DCP010515BP-U-ND	Isolated DC/DC Converter, 5V In, 15V Out	14-GullWing	9.64	7.72	6.51
DCP010515DBP	DCP010515DBP-ND	Isolated DC/DC Converter, 5V In, Dual 15V Out	14-Dip	10.60	8.48	7.16
DCP010515DBP-U	DCP010515DBP-U-ND	Isolated DC/DC Converter, 5V In, Dual 15V Out	14-GullWing	9.64	7.72	6.51
DCP011512DBP	DCP011512DBP-ND	Isolated DC/DC Converter, 15V In, Dual ±12V Out	14-Dip	8.83	7.95	7.05

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DCP011512DBP-U	DCP011512DBP-U-ND	Isolated DC/DC Converter, 15V In, Dual ±12V Out	14-GullWing	8.83	7.95	7.05
DCP011515DBP	DCP011515DBP-ND	Isolated DC/DC Converter, 15V In, Dual ±15V Out	14-Dip	8.83	7.95	7.05
DCP011515DBP-U	DCP011515DBP-U-ND	Isolated DC/DC Converter, 15V In, Dual ±15V Out	14-GullWing	8.83	7.95	7.05
DCP012405BP	DCP012405BP-ND	Isolated DC/DC Converter, 24V In, 5V Out	14-Dip	9.64	7.72	6.51
DCP012405BP-U	DCP012405BP-U-ND	Isolated DC/DC Converter, 24V In, 5V Out	14-GullWing	9.64	7.72	6.51
DCP012415DBP	DCP012415DBP-ND	Isolated DC/DC Converter, 24V In, Dual ±15V Out	14-Dip	8.83	7.95	7.05
DCP012415DBP-U	DCP012415DBP-U-ND	Isolated DC/DC Converter, 24V In, Dual ±15V Out	14-GullWing	8.83	7.95	7.05
DCP020503P	DCP020503P-ND	2W DC/DC Converter, 5V In, 3V Out	14-Dip	10.41	9.38	8.32
DCP020503U	DCP020503U-ND	2W DC/DC Converter, 5V In, 3V Out	28-SOIC	10.58	9.53	8.45
DCP020505P	DCP020505P-ND	2W DC/DC Converter, 5V In, 5V Out	14-Dip	10.41	9.38	8.32
DCP020505U	DCP020505U-ND	2W DC/DC Converter, 5V In, 5V Out	28-SOIC	10.58	9.53	8.45
DCP020507P	DCP020507P-ND	2W DC/DC Converter, 5V In, 7V Out	14-Dip	10.41	9.38	8.32
DCP020507U	DCP020507U-ND	2W DC/DC Converter, 5V In, 7V Out	28-SOIC	10.58	9.53	8.45
DCP020509P	DCP020509P-ND	2W DC/DC Converter, 5V In, 9V Out	14-Dip	10.41	9.38	8.32
DCP020509U	DCP020509U-ND	2W DC/DC Converter, 5V In, 9V Out	28-SOIC	10.58	9.53	8.45
DCP020515DP	DCP020515DP-ND	2W DC/DC Conv., 5V In, ±15V Out	14-Dip	10.41	9.38	8.32
DCP020515DU	DCP020515DU-ND	2W DC/DC Conv., 5V In, ±15V Out	28-SOIC	10.58	9.53	8.45
DCP021205P	DCP021205P-ND	2W DC/DC Conv., 12V In, 5V Out	14-Dip	10.41	9.38	8.32
DCP021205U	DCP021205U-ND	2W DC/DC Conv., 12V In, 5V Out	28-SOIC	10.58	9.53	8.45
DCP021212DP	DCP021212DP-ND	2W DC/DC Conv., 12V In, ±12V Out	14-Dip	10.41	9.38	8.32
DCP021212P	DCP021212P-ND	2W DC/DC Conv., 12V In, 12V Out	14-Dip	10.41	9.38	8.32
DCP021515P	DCP021515P-ND	2W DC/DC Conv., 15V In, 15V Out	14-Dip	10.41	9.38	8.32
DCP022405DP	DCP022405DP-ND	2W DC/DC Conv., 24V In, ±5V Out	14-Dip	10.41	9.38	8.32
DCP022405P	DCP022405P-ND	2W DC/DC Conv., 24V In, 5V Out	14-Dip	10.41	9.38	8.32
DCP022415DP	DCP022415DP-ND	2W DC/DC Conv., 24V In, ±15V Out	14-Dip	10.41	9.38	8.32
DCR010503P	DCR010503P-ND	Isolated DC/DC Converter, 5V to 3V	18-Dip	10.76	8.61	7.27
DCR010503U	296-9450-5-ND	1W Regulated DC/DC Converter	12-SOP	9.45	8.51	7.55
DCR010505P	DCR010505P-ND	Isolated DC/DC Converter, 5V to 5V	18-Dip	10.76	8.61	7.27
DCR010505U	296-9451-5-ND	1W Regulated DC/DC Converter	12-SOP	9.45	8.51	7.55
DCR011203P	DCR011203P-ND	DC/DC Converter, 12V to 3V	18-Dip	10.76	8.61	7.27
DCR011203U	296-9452-5-ND	1W Regulated DC/DC Converter	12-SOP	9.45	8.51	7.55
DCR011205P	DCR011205P-ND	DC/DC Converter, 12V to 5V	18-Dip	10.76	8.61	7.27
DCR011205U	296-9453-5-ND	1W Regulated DC/DC Converter	12-SOP	9.45	8.51	7.55
DCR012403P	296-9454-5-ND	1W Regulated DC/DC Converter	10-Dip	8.96	8.07	7.16
DCR012403U	296-9455-5-ND	1W Regulated DC/DC Converter	12-SOP	9.45	8.51	7.55
DCR012405P	296-9456-5-ND	1W Regulated DC/DC Converter	10-Dip	8.96	8.07	7.16
DCR012405U	296-9457-5-ND	1W Regulated DC/DC Converter	12-SOP	9.45	8.51	7.55
DCR021205P	296-9458-5-ND	2W Regulated DC/DC Converter	10-Dip	10.98	9.89	8.77
DCR022405P	296-9459-5-ND	2W Regulated DC/DC Converter	10-Dip	10.98	9.89	8.77
DCV010505P	DCV010505P-ND	Mini, Isolated DC/DC Converter, 5V In, 5V Out	14-Dip	12.81	11.54	10.23
DCV010505P-U	DCV010505P-U-ND	Mini, Isolated DC/DC Converter, 5V In, 5V Out	14-GullWing	12.81	11.54	10.23
DCV010512DP	DCV010512DP-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 12V Out	14-Dip	13.61	12.26	10.87
DCV010512DP-U	DCV010512DP-U-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 12V Out	14-GullWing	13.61	12.26	10.87
DCV010512P	DCV010512P-ND	Mini, Isolated DC/DC Converter, 5V In, 12V Out	14-Dip	12.81	11.54	10.23
DCV010512P-U	DCV010512P-U-ND	Mini, Isolated DC/DC Converter, 5V In, 12V Out	14-GullWing	12.81	11.54	10.23
DCV010515DP	DCV010515DP-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 15V Out	14-Dip	13.61	12.26	10.87
DCV010515DP-U	DCV010515DP-U-ND	Mini, Isolated DC/DC Converter, 5V In, Dual 15V Out	14-GullWing	13.61	12.26	10.87
DCV010515P	DCV010515P-ND	Mini, Isolated DC/DC Converter, 5V In, 15V Out	14-Dip	12.81	11.54	10.23
DCV010515P-U	DCV010515P-U-ND	Mini, Isolated DC/DC Converter, 5V In, 15V Out	14-GullWing	12.81	11.54	10.23
DCV011512DP	DCV011512DP-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 12V Out	14-Dip	13.61	12.26	10.87
DCV011512DP-U	DCV011512DP-U-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 12V Out	14-GullWing	13.61	12.26	10.87
DCV011512DP-U/700	DCV011512DP-UTR-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 12V Out	14-GullWing	7166.60/700		
DCV011515DP	DCV011515DP-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 15V Out	14-Dip	13.61	12.26	10.87
DCV011515DP-U	DCV011515DP-U-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 15V Out	14-GullWing	13.61	12.26	10.87
DCV011515DP-U/700	DCV011515DP-UTR-ND	Mini, Isolated DC/DC Converter, 15V In, Dual 15V Out	14-GullWing	7166.60/700		
DCV012405P	DCV012405P-ND	Mini, Isolated DC/DC Converter, 24V In, 5V Out	14-Dip	12.81	11.54	10.23
DCV012405P-U	DCV012405P-U-ND	Mini, Isolated DC/DC Converter, 24V In, 5V Out	14-GullWing	12.81	11.54	10.23
DCV012405P-U/700	DCV012405P-UTR-ND	Mini, Isolated DC/DC Converter, 24V In, 5V Out	14-GullWing	6746.60/700		
DCV012415DP	DCV012415DP-ND	Mini, Isolated DC/DC Converter, 24V In, Dual 15V Out	14-Dip	13.61	12.26	10.87
DCV012415DP-U	DCV012415DP-U-ND	Mini, Isolated DC/DC Converter, 24V In, Dual 15V Out	14-GullWing	13.61	12.26	10.87
DCV012415DP-U/700	DCV012415DP-UTR-ND	Mini, Isolated DC/DC Converter, 24V In, Dual 15V Out	14-GullWing	7166.60/700		
LT1054CDW	296-9590-5-ND	Bipolar Regulated Volt. Converter	16-SOP	3.38	2.70	2.10
LT1054CP	296-9591-5-ND	Bipolar Regulated Volt. Converter	8-Dip	3.38	2.70	2.10
LT1054IDW	296-9592-5-ND	Bipolar Regulated Volt. Converter	16-SOP	3.71	2.97	2.31
REG710NA-2.5/250	296-12133-1-ND	2.5V DC/DC Converter *NEW!*	6-SOP	2.15	1.72	1.29
REG710NA-2.5/250	296-12133-2-ND	2.5V DC/DC Converter *NEW!*	6-SOP	301.00/250		
REG710NA-2.7/250	296-12134-1-ND	2.7V DC/DC Converter *NEW!*	6-SOP	2.15	1.72	1.29
REG710NA-2.7/250	296-12134-2-ND	2.7V DC/DC Converter *NEW!*	6-SOP	301.00/250		
REG710NA-3.3/250	296-12135-1-ND	3.3V DC/DC Converter *NEW!*	6-SOP	2.15	1.72	1.29
REG710NA-3.3/250	296-12135-2-ND	3.3V DC/DC Converter *NEW!*	6-SOP	301.00/250		
REG710NA-3/250	296-12136-1-ND	3.0V DC/DC Converter *NEW!*	6-SOP	2.15	1.72	1.29
REG710NA-3/250	296-12136-2-ND	3.0V DC/DC Converter *NEW!*	6-SOP	301.00/250		
REG710NA-5/250	296-12137-1-ND	5.0V DC/DC Converter *NEW!*	6-SOP	2.15	1.72	1.29
REG710NA-5/250	296-12137-2-ND	5.0V DC/DC Converter *NEW!*	6-SOP	301.00/250		
TPS5102IDBT	296-2260-5-ND	Dual DC/DC Controller	30-SSOP	5.94	4.76	4.01
TPS5103IDB	296-2261-5-ND	Multimode DC/DC Controller	20-SSOP	4.52	3.62	2.82

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS5140PAG	296-12364-ND	Quad-Out High Efficiency DC/DC Controller	64-TQFP	9.52	7.62	6.43
TPS5300DAP	296-12508-5-ND	CPU Power Supply Cont. *NEW!*	32-TSSOP	6.26	5.01	4.23
TPS5602IDBT	296-2262-5-ND	Dual DC/DC Controller	30-SSOP	6.14	4.92	4.15
TPS6734ID	296-3225-5-ND	12V, 120mA Boost Converter	8-SOIC	2.68	2.15	1.67
TPS6734IDR	296-3225-1-ND	12V, 120mA Boost Converter	8-SOIC	2.68	2.15	1.67
TPS6734IDR	296-3225-2-ND	12V, 120mA Boost Converter	8-SOIC	3747.50/2,500		
TPS6734IP	296-3226-5-ND	12V, 120mA Boost Converter	8-Dip	2.68	2.15	1.67
TPS6735ID	296-10982-5-ND	Neg. 5V, 200mA DC/DC Converter	8-SOIC	2.68	2.15	1.67
TPS6735IDR	296-10982-1-ND	Neg. 5V, 200mA DC/DC Converter	8-SOIC	2.68	2.15	1.67
TPS6735IDR	296-10982-2-ND	Neg. 5V, 200mA DC/DC Converter	8-SOIC	3747.50/2,500		
TPS6735IP	296-10983-5-ND	Neg. 5V, 200mA DC/DC Converter	8-Dip	2.68	2.15	1.67
TPS6755ID	296-10984-5-ND	Adj, 200mA DC/DC Converter	8-SOIC	2.68	2.15	1.67
TPS6755IP	296-10985-5-ND	Adj, 200mA DC/DC Converter	8-Dip	2.68	2.15	1.67
TPS9103PWR	296-11054-1-ND	GaAs Power Supply	20-TSSOP	3.74	2.99	2.33
TPS9103PWR	296-11054-2-ND	GaAs Power Supply	20-TSSOP	4233.00/2,000		
TPS54610PWP	296-12123-5-ND	Low Input Voltage, 6A Continuous Buck Converter 3.3V Out *NEW!*	28-HTSSOP	9.48	7.59	6.40
TPS54611PWP	296-12124-5-ND	Low Input Voltage 6A Continuous Buck Converter 0.9V Out *NEW!*	28-HTSSOP	9.68	7.75	6.54
TPS54612PWP	296-12125-5-ND	Low Input Voltage 6A Continuous Buck Converter 1.2V Out *NEW!*	28-HTSSOP	9.68	7.75	6.54
TPS54613PWP	296-12126-5-ND	Low Input Voltage 6A Continuous Buck Converter 1.5V Out *NEW!*	28-HTSSOP	9.68	7.75	6.54
TPS54614PWP	296-12127-5-ND	Low Input Voltage 6A Continuous Buck Converter 1.8V Out *NEW!*	28-HTSSOP	9.68	7.75	6.54
TPS54615PWP	296-12128-5-ND	Low Input Voltage 6A Continuous Buck Converter 2.5V Out *NEW!*	28-HTSSOP	9.68	7.75	6.54
TPS54672PWP	296-12130-5-ND	Track-Termination Synch. PWM Switcher with Integrated FETs *NEW!*	28-HTSSOP	9.48	7.59	6.40
TPS60100PWP	296-2263-5-ND	3.3V, 0.2A, DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60101PWP	296-2264-5-ND	3.3V, 0.1A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60110PWP	296-2265-5-ND	5V, 0.3A, DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60111PWP	296-2266-5-ND	5V, 0.15A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60120PWP	296-2267-5-ND	3.3V, 0.2A, DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60121PWP	296-2268-5-ND	3.3V, 0.2A, DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60122PWP	296-2269-5-ND	3.3V, 0.1A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60123PWP	296-2270-5-ND	3.3V, 0.1A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60124PWP	296-10948-5-ND	3.3V, 200mA DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60125PWP	296-10949-5-ND	3.3V, 200mA DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60130PWP	296-2271-5-ND	5V, 0.3A, DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60131PWP	296-2272-5-ND	5V, 0.3A, DC/DC Converter	20-HTSSOP	3.89	3.12	2.43
TPS60132PWP	296-2273-5-ND	5V, 0.15A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60133PWP	296-2274-5-ND	5V, 0.15A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60140PWP	296-2275-5-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60140PWPR	296-2275-1-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60140PWPR	296-2275-2-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3646.50/2,000		
TPS60141PWP	296-2276-5-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60141PWPR	296-2276-1-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3.22	2.58	2.01
TPS60141PWPR	296-2276-2-ND	5V, 0.1A, DC/DC Converter	20-HTSSOP	3646.50/2,000		
TPS60200DGS	296-10954-5-ND	3.3V, 100mA Low Ripple Charge Pump	10-TSSOP	2.77	2.22	1.73
TPS60201DGS	296-10956-5-ND	3.3V, 100mA Low Ripple Charge Pump	10-TSSOP	2.77	2.22	1.73
TPS60202DGS	296-10957-5-ND	3.3V, 100mA Low Ripple Charge Pump	10-TSSOP	2.77	2.22	1.73
TPS60203DGS	296-10958-5-ND	3.3V, 100mA Low Ripple Charge Pump	10-TSSOP	2.77	2.22	1.73
TPS60204DGSR	296-12365-1-ND	Regulated 3.3V Low Ripple Charge Pump LP DC/DC Converter	10-TSSOP	2.77	2.22	1.73
TPS60204DGSR	296-12365-2-ND	Regulated 3.3V Low Ripple Charge Pump LP DC/DC Converter	10-TSSOP	3875.00/2,500		
TPS60205DGSR	296-12366-1-ND	Regulated 3.3V Low Ripple Charge Pump LP DC/DC Converter	10-TSSOP	2.77	2.22	1.73
TPS60205DGSR	296-12366-2-ND	Regulated 3.3V Low Ripple Charge Pump LP DC/DC Converter	10-TSSOP	3875.002,500		
TPS60210DGS	296-10959-5-ND	3.3V, 100mA Low Ripple Charge Pump	10-TSSOP	3.58	2.87	2.23
TPS60211DGS	296-10961-5-ND	3.3V, 100mA Low Ripple Charge Pump	10-TSSOP	3.58	2.87	2.23
TPS60212DGS	296-10962-5-ND	3.3V, 100mA Low Ripple Charge Pump	10-TSSOP	2.95	2.36	1.84
TPS60213DGS	296-10963-5-ND	3.3V, 50mA Low Ripple Charge Pump	10-TSSOP	2.95	2.36	1.84
TPS60400DBVT	296-12013-1-ND	60mA Charge Pump Voltage Inverter *NEW!*	SOT-23-5	1.43	1.14	.86
TPS60400DBVT	296-12013-2-ND	60mA Charge Pump Voltage Inverter *NEW!*	SOT-23-5	153.75/250		
TPS60401DBVT	296-12014-1-ND	60mA Charge Pump Voltage Inverter *NEW!*	SOT-23-5	1.43	1.14	.86
TPS60401DBVT	296-12014-2-ND	60mA Charge Pump Voltage Inverter *NEW!*	SOT-23-5	153.75/250		
TPS60402DBVT	296-12015-1-ND	60mA Charge Pump Voltage Inverter *NEW!*	SOT-23-5	1.33	1.06	.80
TPS60402DBVT	296-12015-2-ND	60mA Charge Pump Voltage Inverter *NEW!*	SOT-23-5	153.75/250		
TPS60500DGS	296-12513-5-ND	0.8-3.3V, 250mA High Efficiency Step-Down Charge Pump *NEW!*	10-MSOP	2.88	2.31	1.80
TPS60501DGS	296-12514-5-ND	3.3V, 250mA High Efficiency Step-Down Charge Pump *NEW!*	10-MSOP	2.88	2.31	1.80
TPS60502DGS	296-12515-5-ND	1.8V, 250mA High Efficiency Step-Down Charge Pump *NEW!*	10-MSOP	2.88	2.31	1.80
TPS60503DGS	296-12516-5-ND	1.5V, 250mA High Efficiency Step-Down Charge Pump *NEW!*	10-MSOP	2.88	2.31	1.80
TPS61000DGS	296-3217-5-ND	Adj. 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61001DGS	296-3218-5-ND	1.5V, 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61002DGS	296-3219-5-ND	1.8V, 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61003DGS	296-3220-5-ND	2.5V, 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61004DGS	296-3221-5-ND	2.8V, 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61005DGS	296-3222-5-ND	3.0V, 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61006DGS	296-3223-5-ND	3.3V, 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61007DGS	296-3224-5-ND	Adj. 100mA Boost Converter	10-TSSOP	2.88	2.31	1.80
TPS61010DGS	296-10969-5-ND	Adj Synch. Boost Converter	10-TSSOP	3.40	2.72	2.12
TPS61011DGS	296-10970-5-ND	1.5V Synch. Boost Converter	10-TSSOP	3.40	2.72	2.12

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS61012DGS	296-10971-5-ND	1.8V Synch. Boost Converter	10-TSSOP	3.40	2.72	2.12
TPS61013DGS	296-10972-5-ND	2.5V Synch. Boost Converter	10-TSSOP	3.40	2.72	2.12
TPS61014DGS	296-10973-5-ND	2.8V Synch. Boost Converter	10-TSSOP	3.40	2.72	2.12
TPS61015DGS	296-10974-5-ND	3.0V Synch. Boost Converter	10-TSSOP	3.40	2.72	2.12
TPS61016DGS	296-10975-5-ND	3.3V Synch. Boost Converter	10-TSSOP	3.40	2.72	2.12
TPS62007DGS	296-12517-5-ND	3.3V High Efficiency Step-Down DC/DC Converter *NEW!*	10-MSOP	3.62	2.90	2.26
UCC2941D-3	296-12143-5-ND	1V Synch. Boost Converter *NEW!*	8-SOIC	3.62	2.90	2.26
UCC2941D-5	296-12144-5-ND	1V Synch. Boost Converter *NEW!*	8-SOIC	3.62	2.90	2.26
UCC2941D-ADJ	296-12145-5-ND	1V Synch. Boost Converter *NEW!*	8-SOIC	3.62	2.90	2.26
UCC3941D-3	296-2280-5-ND	1V to 3V Synch. Boost Converter	8-SOP	3.40	2.72	2.12
UCC3941DTR-3	296-2280-1-ND	1V to 3V Synch. Boost Converter	8-SOP	3.47	2.78	2.16
UCC3941DTR-3	296-2280-2-ND	1V to 3V Synch. Boost Converter	8-SOP	4757.50/2,500		
UCC3941D-5	296-2281-5-ND	1V to 5V Synch. Boost Converter	8-SOP	3.40	2.72	2.12
UCC3941DTR-5	296-2281-1-ND	1V to 5V Synch. Boost Converter	8-SOP	5.28	4.23	3.57
UCC3941DTR-5	296-2281-2-ND	1V to 5V Synch. Boost Converter	8-SOP	4757.50/2,500		
UCC3941D-ADJ	296-2282-5-ND	1V Adj. Synch. Boost Converter	8-SOP	3.40	2.72	2.12
UCC3941N-3	296-3228-5-ND	3.3V Synch. Boost Converter	8-Dip	3.40	2.72	2.12
UCC3941N-5	296-3229-5-ND	5V Synch. Boost Converter	8-Dip	3.40	2.72	2.12
UCC3941N-ADJ	296-3230-5-ND	1V Adj. Synch. Boost Converter	8-Dip	3.40	2.72	2.12
UCC39411PW	296-3227-5-ND	1V Adj. Synch. Boost Converter	8-TSSOP	2.86	2.29	1.78
UCC39412D	296-2278-5-ND	Low Power Synch. Boost Converter	8-SOIC	2.77	2.22	1.73
UCC39413D	296-2279-5-ND	Low Power Synch. Boost Converter	8-SOIC	2.77	2.22	1.73

Microprocessor Supervisory Circuit Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL7702ACD	296-1295-5-ND	2.53V Supply Monitor	8-SOIC	1.08	.90	.72
TL7702ACDR	296-1295-1-ND	2.53V Supply Monitor	8-SOIC	1.08	.90	.72
TL7702ACDR	296-1295-2-ND	2.53V Supply Monitor	8-SOIC	1170.00/2,500		
TL7702ACP	296-3232-5-ND	2.53V Supply Monitor	8-Dip	1.08	.90	.72
TL7702AID	296-3233-5-ND	2.53V Supply Monitor	8-SOIC	1.32	1.10	.88
TL7702AIP	296-3234-5-ND	2.53V Supply Monitor	8-Dip	1.32	1.10	.88
TL7702BCD	296-1296-5-ND	2.53V Supply Monitor	8-SOIC	1.30	1.04	.78
TL7702BCDR	296-1296-1-ND	2.53V Supply Monitor	8-SOIC	1.30	1.04	.78
TL7702BCDR	296-1296-2-ND	2.53V Supply Monitor	8-SOIC	1665.00/2,500		
TL7702BCP	296-3236-5-ND	2.53V Supply Monitor	8-Dip	1.30	1.04	.78
TL7702BID	296-3237-5-ND	2.53V Supply Monitor	8-SOIC	1.50	1.20	.90
TL7702BIP	296-3238-5-ND	2.53V Supply Monitor	8-Dip	1.50	1.20	.90
TL7705ACD	296-1297-5-ND	4.55V Supply Monitor	8-SOIC	1.20	1.00	.80
TL7705ACDR	296-1297-1-ND	4.55V Supply Monitor	8-SOIC	1.20	1.00	.80
TL7705ACDR	296-1297-2-ND	4.55V Supply Monitor	8-SOIC	1300.00/2,500		
TL7705ACP	296-1801-5-ND	4.55V Supply Monitor	8-Dip	1.20	1.00	.80
TL7705ACPSR	296-3239-1-ND	4.55V Supply Monitor	8-SOP	1.38	1.10	.83
TL7705ACPSR	296-3239-2-ND	4.55V Supply Monitor	8-SOP	1430.00/2,000		
TL7705AID	296-3240-5-ND	4.55V Supply Monitor	8-SOIC	1.44	1.20	.96
TL7705AIP	296-3241-5-ND	4.55V Supply Monitor	8-Dip	1.44	1.20	.96
TL7705BCD	296-1298-5-ND	4.55V Supply Monitor	8-SOIC	1.38	1.10	.83
TL7705BCDR	296-1298-1-ND	4.55V Supply Monitor	8-SOIC	1.38	1.10	.83
TL7705BCDR	296-1298-2-ND	4.55V Supply Monitor	8-SOIC	1760.00/2,500		
TL7705BCP	296-3242-5-ND	4.55V Supply Monitor	8-Dip	1.38	1.10	.83
TL7705BID	296-3243-5-ND	4.55V Supply Monitor	8-SOIC	1.58	1.26	.95
TL7705BIP	296-3244-5-ND	4.55V Supply Monitor	8-Dip	1.78	1.42	1.07
TL7705BQD	296-3245-5-ND	4.55V Supply Monitor	8-SOIC	1.88	1.50	1.13
TL7709ACD	296-3247-5-ND	7.6V Supply Monitor	8-SOIC	1.25	1.00	.75
TL7709ACP	296-3248-5-ND	7.6V Supply Monitor	8-Dip	1.25	1.00	.75
TL7712ACD	296-3249-5-ND	10.8V Supply Monitor	8-SOIC	1.25	1.00	.75
TL7712ACP	296-3250-5-ND	10.8V Supply Monitor	8-Dip	1.25	1.00	.75
TL7726CD	296-3253-5-ND	Hex Clamping Circuit	8-SOIC	1.75	1.40	1.05
TL7726CP	296-3254-5-ND	Hex Clamping Circuit	8-Dip	1.75	1.40	1.05
TL7726ID	296-3255-5-ND	Hex Clamping Circuit	8-SOIC	2.20	1.76	1.32
TL7726IP	296-3256-5-ND	Hex Clamping Circuit	8-Dip	2.20	1.76	1.32
TL7757CD	296-3257-5-ND	4.55V Supply Monitor/V. Detector	8-SOP	1.38	1.10	.83
TL7757CLP	296-1992-ND	4.55V Supply Monitor/V. Detector	TO-226AA	1.25	1.00	.75
TL7757CLPR	296-1992-1-ND	4.55V Supply Monitor/V. Detector	TO-226AA	1.25	1.00	.75
TL7757CLPR	296-1992-2-ND	4.55V Supply Monitor/V. Detector	TO-226AA	1300.00/2,000		
TL7757CPK	296-3259-5-ND	4.55V Supply Monitor/V. Detector	SOT-89	1.25	1.00	.75
TL7757ID	296-3260-5-ND	4.55V Supply Monitor/V. Detector	8-SOIC	1.50	1.20	.90
TL7757ILP	296-3261-5-ND	4.55V Supply Monitor/V. Detector	TO-226AA	1.50	1.20	.90
TL7757IPK	296-3262-5-ND	4.55V Supply Monitor/V. Detector	SOT-89	1.50	1.20	.90
TL7759CD	296-3263-5-ND	4.55V Supply Monitor	8-SOIC	1.25	1.00	.75
TL7759CP	296-3264-5-ND	4.55V Supply Monitor	8-Dip	1.25	1.00	.75
TL7759CPWR	296-1299-1-ND	4.55V Supply Monitor	8-TSSOP	1.25	1.00	.75
TL7759CPWR	296-1299-2-ND	4.55V Supply Monitor	8-TSSOP	1300.00/2,000		
TL7770-5CDW	296-3265-5-ND	4.55V Dual Supply Monitor	16-SOIC	2.84	2.27	1.77
TL7770-5CN	296-3266-5-ND	4.55V Dual Supply Monitor	16-Dip	2.18	1.74	1.31
TL7770-5IDW	296-3267-5-ND	4.55V Dual Supply Monitor	16-SOIC	3.29	2.63	2.05
TLC7701ID	296-3268-5-ND	1.1V Supply Monitor	8-SOIC	1.35	1.08	.81
TLC7701IP	296-2608-5-ND	1.1V Supply Monitor	8-Dip	1.35	1.08	.81
TLC7701IPW	296-2609-5-ND	1.1V Supply Monitor	8-TSSOP	1.35	1.08	.81
TLC7701IPWR	296-2609-1-ND	1.1V Supply Monitor	8-TSSOP	1.35	1.08	.81
TLC7701IPWR	296-2609-2-ND	1.1V Supply Monitor	8-TSSOP	1404.00/2,000		
TLC7701QD	296-3270-5-ND	1.1V Supply Monitor	8-SOIC	1.65	1.32	.99
TLC7701QP	296-3271-5-ND	1.1V Supply Monitor	8-Dip	1.65	1.32	.99
TLC7703ID	296-3272-5-ND	2.63V Supply Monitor	8-SOIC	1.73	1.38	1.04
TLC7703IP	296-3273-5-ND	2.63V Supply Monitor	8-Dip	1.73	1.38	1.04
TLC7703IPWR	296-3274-1-ND	2.63V Supply Monitor	8-TSSOP	1.73	1.38	1.04
TLC7703IPWR	296-3274-2-ND	2.63V Supply Monitor	8-TSSOP	1794.00/2,000		
TLC7703QD	296-2610-5-ND	2.63V Supply Monitor	8-SOIC	2.13	1.70	1.28
TLC7705ID	296-1872-5-ND	4.55V Supply Monitor	8-SOIC	1.35	1.08	.81
TLC7705IP	296-3276-5-ND	4.55V Supply Monitor	8-Dip	1.35	1.08	.81
TLC7705IPWR	296-3277-1-ND	4.55V Supply Monitor	8-TSSOP	1.35	1.08	.81
TLC7705IPWR	296-3277-2-ND	4.55V Supply Monitor	8-TSSOP	1404.00/2,000		
TLC7705QD	296-3278-5-ND	4.55V Supply Monitor	8-SOIC	1.65	1.32	.99
TLC7725ID	296-3280-5-ND	2.25V Supply Monitor	8-SOIC	1.73	1.38	1.04
TLC7725QD	296-3281-5-ND	2.25V Supply Monitor	8-SOIC	2.13	1.70	1.28
TLC7725QPWR	296-3283-1-ND	2.25V Supply Monitor	8-TSSOP	2.13	1.70	1.28
TLC7725QPWR	296-3283-2-ND	2.25V Supply Monitor	8-TSSOP	2210.00/2,000		
TLC7725IP	296-2611-5-ND	2.25V Supply Monitor	8-Dip	1.73	1.38	1.04
TLC7733ID	296-2612-5-ND	2.93V Supply Monitor	8-SOIC	1.73	1.38	1.04
TLC7733IP	296-3284-5-ND	2.93V Supply Monitor	8-Dip	1.73	1.38	1.04
TLC7733IPWR	296-3285-1-ND	2.93V Supply Monitor	8-TSSOP	1.73	1.38	1.04
TLC7733IPWR	296-3285-2-ND	2.93V Supply Monitor	8-TSSOP	1794.00/2,000		
TLC7733QD	296-3286-5-ND	2.93V Supply Monitor	8-SOIC	2.13	1.70	1.28
TLC7733QP	296-3287-5-ND	2.93V Supply Monitor	8-Dip	2.13	1.70	1.28
TLC7733QPWR	296-3288-1-ND	2.93V Supply Monitor	8-TSSOP	2.13	1.70	1.28
TLC7733QPWR	296-3288-2-ND	2.93V Supply Monitor	8-TSSOP	2158.00/2,000		
TPS3123G15DBVR	296-10890-2-ND	1.5V Supply Monitor	SOT-23-5	2880.00/3,000		
TPS3123G15DBVT	296-3289-1-ND	1.5V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3123G15DBVT	296-3289-2-ND	1.5V Supply Monitor	SOT-23-5	262.50/250		
TPS3123J12DBVR	296-10891-2-ND	1.2V Supply Monitor	SOT-23-5	2880.00/3,000		
TPS3123J12DBVT	296-3290-1-ND	1.2V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3123J12DBVT	296-3290-2-ND	1.2V Supply Monitor	SOT-23-5	262.50/250		
TPS3123J18DBVR	296-10892-2-ND	1.8V Supply Monitor	SOT-23-5	2880.00/3,000		
TPS3123J18DBVT	296-3291-1-ND	1.8V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3123J18DBVT	296-3291-2-ND	1.8V Supply Monitor	SOT-23-5	262.50/250		
TPS3124G15DBVR	296-10893-2-ND	1.5V Supply Monitor	SOT-23-5	2880.00/3,000		
TPS3124G15DBVT	296-3292-1-ND	1.5V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3124G15DBVT	296-3292-2-ND	1.5V Supply Monitor	SOT-23-5	262.50/250		
TPS3124J12DBVR	296-10894-2-ND	1.2V Supply Monitor	SOT-23-5	2880.00/3,000		
TPS3124J12DBVT	296-3293-1-ND	1.2V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3124J12DBVT	296-3293-2-ND	1.2V Supply Monitor	SOT-23-5	262.50/250		
TPS3124J18DBVR	296-10895-2-ND	1.8V Supply Monitor	SOT-23-5	2880.00/3,000		
TPS3124J18DBVT	296-3294-1-ND	1.8V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3124J18DBVT	296-3294-2-ND	1.8V Supply Monitor	SOT-23-5	262.50/250		
TPS3125G15DBVR	296-10896-2-ND	1.5V Supply Monitor	SOT-23-5	2649.60/3,000		
TPS3125G15DBVT	296-2613-1-ND	1.5V Supply Monitor	SOT-23-5	1.73	1.38	1.04
TPS3125G15DBVT	296-2613-2-ND	1.5V Supply Monitor	SOT-23-5	241.50/250		
TPS3125J12DBVR	296-10897-2-ND	1.2V Supply Monitor	SOT-23-5	2649.60/3,000		
TPS3125J12DBVT	296-2614-1-ND	1.2V Supply Monitor	SOT-23-5	1.73	1.38	1.04
TPS3125J12DBVT	296-2614-2-ND	1.2V Supply Monitor	SOT-23-5	241.50/250		
TPS3125J18DBVR	296-10898-2-ND	1.8V Supply Monitor	SOT-23-5	2649.60/3,000		
TPS3125J18DBVT	296-2615-1-ND	1.8V Supply Monitor	SOT-23-5	1.73	1.38	1.04
TPS3125J18DBVT	296-2615-2-ND	1.8V Supply Monitor	SOT-23-5	241.50/250		
TPS3125L30DBVR	296-10899-2-ND	3V Supply Monitor	SOT-23-5	2649.60/3,000		
TPS3125L30DBVT	296-2616-1-ND	3V Supply Monitor	SOT-23-5	1.73	1.38	1.04
TPS3125L30DBVT	296-2616-2-ND	3V Supply Monitor	SOT-23-5	241.50/250		
TPS3126E12DBVT	296-10900-1-ND	1.2V Supply Monitor	SOT-23-5	1.73	1.38	1.04
TPS3126E12DBVT	296-10900-2-ND	1.2V Supply Monitor	SOT-23-5	241.50/250		
TPS3126E15DBVT	296-10901-1-ND	1.5V Supply Monitor	SOT-23-5	1.73	1.38	1.04
TPS3126E15DBVT	296-10901-2-ND	1.5V Supply Monitor	SOT-23-5	241.50/250		
TPS3126E18DBVT	296-10902-1-ND	1.8V Supply Monitor	SOT-23-5	1.73	1.38	1.04
TPS3126E18DBVT	296-10902-2-ND	1.8V Supply Monitor	SOT-23-5	241.50/250		
TPS3128E12DBVT	296-10903-1-ND	1.2V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3128E12DBVT	296-10903-2-ND	1.2V Supply Monitor	SOT-23-5	262.50/250		
TPS3128E15DBVT	296-10904-1-ND	1.5V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3128E15DBVT	296-10904-2-ND	1.5V Supply Monitor	SOT-23-5	262.50/250		
TPS3128E18DBVT	296-10905-1-ND	1.8V Supply Monitor	SOT-23-5	1.88	1.50	1.13
TPS3128E18DBVT	296-10905-2-ND	1.8V Supply Monitor	SOT-23-5	262.50/250		
TPS3305-18D	296-2617-5-ND	Dual 2.93/1.68 Volt Monitor	8-SOIC	2.18	1.74	1.31
TPS3305-18DGNR	296-3299-1-ND	Dual 3.3/1.8 Volt Monitor	8-SOP	2.18	1.74	1.31
TPS3305-18DGNR	296-3299-2-ND	Dual 3.3/1.8 Volt Monitor	8-SOP	2785.00/2,500		
TPS3305-25D	296-2618-5-ND	Dual 2.93/2.25 Volt Monitor	8-SOIC	2.18	1.74	1.31
TPS3305-25DGNR	296-3300-1-ND	Dual 3.3/2.5 Volt Monitor	8-SOP	2.18	1.74	1.31
TPS3305-25DGNR	296-3300-2-ND	Dual 3.3/2.5 Volt Monitor	8-SOP	2785.00/2,500		
TPS3305-33D	296-2619-5-ND	Dual 4.55/2.93 Volt Monitor	8-SOIC	2.18	1.74	1.31
TPS3305-33DGNR	296-3301-1-ND	Dual 5/3.3 Volt Monitor	8-SOP	2.18	1.74	1.31
TPS3305-33DGNR	296-3301-2-ND	Dual 5/3.3 Volt Monitor	8-SOP	2785.00/2,500		
TPS3306-15D	296-3302-5-ND	Dual 3.3/1.5 Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3306-15DGK	296-3303-5-ND	Dual 3.3/1.5 Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3306-18D	296-3304-5-ND	Dual 3.3/1.8 Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3306-18DGK	296-3305-5-ND	Dual 3.3/1.8 Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3306-20D	296-3306-5-ND	Dual 3.3/2 Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3306-20DGK	296-3307-5-ND	Dual 3.3/2 Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3306-25D	296-3308-5-ND	Dual 3.3/2.5 Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3306-25DGK	296-3309-5-ND	Dual 3.3/2.5 Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3306-33D	296-3310-5-ND	Dual 5/3.3 Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3306-33DGK	296-3311-5-ND	Dual 5/3.3 Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3307-18D	296-2620-5-ND	Triple 2.93/1.68/1.25 Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3307-18DGNR	296-3312-1-ND	Triple 3.3/1.8/Adj Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3307-18DGNR	296-3312-2-ND	Triple 3.3/1.8/Adj Volt Monitor	8-SOP	3007.50/2,500		
TPS3307-25D	296-2621-5-ND	Triple 2.93/2.25/1.25 Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3307-25DGNR	296-3313-1-ND	Triple 3.3/2.5/Adj Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3307-25DGNR	296-3313-2-ND	Triple 3.3/2.5/Adj Volt Monitor	8-SOP	3007.50/2,500		
TPS3307-33D	296-3314-5-ND	Triple 5/3.3/Adj Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3307-33DR	296-3314-1-ND	Triple 5/3.3/Adj Volt Monitor	8-SOIC	2.35	1.88	1.41
TPS3307-33DR	296-3314-2-ND	Triple 5/3.3/Adj Volt Monitor	8-SOIC	3007.50/2,500		
TPS3307-33DGN	296-3315-5-ND	Triple 5/3.3/Adj Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3307-33DGNR	296-3315-1-ND	Triple 5/3.3/Adj Volt Monitor	8-SOP	2.35	1.88	1.41
TPS3307-33DGNR	296-3315-2-ND	Triple 5/3.3/Adj Volt Monitor	8-SOP	3007.50/2,500		
TPS3510DR	296-3317-1-ND	3.5V Power Supply Monitor	8-SOIC	1.47	1.23	.98
TPS3510DR	296-3317-2-ND	3.5V Power Supply Monitor	8-SOIC	1592.50/2,500		
TPS3510P	296-3318-5-ND	3.5V Power Supply Monitor	8-Dip	1.47	1.23	.98
TPS3600D20PW	296-10906-5-ND	2V Battery Backup Supervisor for LP Processors	14-TSSOP	4.59	3.68	2.86
TPS3600D33PW	296-12237-5-ND	3.3V Battery Backup Supervisor for LP Processors *NEW!*	14-TSSOP	4.59	3.68	2.86
TPS3600D33PWR	296-10907-1-ND	3.3V Battery Backup Supervisor for LP Processors	14-TSSOP	4.59	3.68	2.86
TPS3600D33PWR	296-10907-2-ND	3.3V Battery Backup Supervisor for LP Processors	14-TSSOP	5202.00/2,000		
TPS3600D50PW	296-12238-5-ND	5V Battery Backup Supervisor for LP Processors *NEW!*	14-TSSOP	4.59	3.68	2.86
TPS3600D50PWR	296-10908-1-ND	5V Battery Backup Supervisor for LP Processors	14-TSSOP	4.59	3.68	2.86
TPS3606-33DGS	296-10909-5-ND	3.3V Battery Backup Supervisor for LP Processors	10-MSOP	3.60	2.88	2.24
TPS3610T50PW	296-10910-5-ND	5V Battery Backup Supervisors for RAM Retention	14-TSSOP	4.21	3.37	2.62
TPS3610U18PW	296-12239-5-ND	1.8V Battery Backup Supervisor for RAM Retention *NEW!*	14-TSSOP	4.21	3.37	2.62
TPS3613-01DGS	296-10912-5-ND	Adj. Battery Backup Supervisors for RAM Retention	10-MSOP	3.24	2.60	2.02
TPS3617-50DGK	296-10913-5-ND	5V Battery Backup Supervisors for RAM Retention	8-MSOP	2.70	2.16	1.68

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS3619-33DGK	296-12141-5-ND	3.3V Battery Backup Supervisors for RAM Retention *NEW!*	8-MSOP	2.25	1.80	1.40
TPS3619-50DGK	296-12142-5-ND	5V Battery Backup Supervisors for RAM Retention *NEW!*	8-MSOP	2.25	1.80	1.40
TPS3705-30D	296-2622-5-ND	2.63V Supply Monitor	8-SOIC	1.73	1.38	1.04
TPS3705-30DGN	296-3316-5-ND	2.63V Supply Monitor	8-SOP	1.73	1.38	1.04
TPS3705-33D	296-2623-5-ND	2.93V Supply Monitor	8-SOIC	1.73	1.38	1.04
TPS3705-33DGNR	296-3319-1-ND	2.93V Supply Monitor	8-SOP	1.73	1.38	1.04
TPS3705-33DGNR	296-3319-2-ND	2.93V Supply Monitor	8-SOP	2207.50/2,500		
TPS3705-50D	296-2624-5-ND	4.55V Supply Monitor	8-SOIC	1.73	1.38	1.04
TPS3705-50DGNR	296-3320-1-ND	4.55V Supply Monitor	8-SOP	1.73	1.38	1.04
TPS3705-50DGNR	296-3320-2-ND	4.55V Supply Monitor	8-SOP	2207.50/2,500		
TPS3707-25D	296-2625-5-ND	2.25V Supply Monitor	8-SOIC	1.63	1.30	.98
TPS3707-25DGNR	296-3321-1-ND	2.25V Supply Monitor	8-SOP	1.65	1.32	.99
TPS3707-25DGNR	296-3321-2-ND	2.25V Supply Monitor	8-SOP	2080.00/2,500		
TPS3707-30D	296-2626-5-ND	2.63V Supply Monitor	8-SOIC	1.63	1.30	.98
TPS3707-30DGN	296-3322-5-ND	2.63V Supply Monitor	8-SOP	1.63	1.30	.98
TPS3707-33D	296-2627-5-ND	2.93V Supply Monitor	8-SOIC	1.63	1.30	.98
TPS3707-33DGN	296-3323-5-ND	2.93V Supply Monitor	8-SOP	1.63	1.30	.98
TPS3707-50D	296-2628-5-ND	4.55V Supply Monitor	8-SOIC	1.63	1.30	.98
TPS3707-50DGNR	296-3324-1-ND	4.55V Supply Monitor	8-SOP	1.65	1.32	.99
TPS3707-50DGNR	296-3324-2-ND	4.55V Supply Monitor	8-SOP	2080.00/2,500		
TPS3800G27DCKR	296-12382-1-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1.35	1.13	.90
TPS3800G27DCKR	296-12382-2-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1755.00/3,000		
TPS3801-01DCKR	296-12383-1-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1.35	1.13	.90
TPS3801-01DCKR	296-12383-2-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1755.00/3,000		
TPS3801E18DCKR	296-12384-1-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1.35	1.13	.90
TPS3801E18DCKR	296-12384-2-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1755.00/3,000		
TPS3801I50DCKR	296-3325-1-ND	4.55V Supply Monitor	SOT-323-5	1.35	1.13	.90
TPS3801I50DCKR	296-3325-2-ND	4.55V Supply Monitor	SOT-323-5	1755.00/3,000		
TPS3801J25DCKR	296-3326-1-ND	2.25V Supply Monitor	SOT-323-5	1.35	1.13	.90
TPS3801J25DCKR	296-3326-2-ND	2.25V Supply Monitor	SOT-323-5	1755.00/3,000		
TPS3801K33DCKR	296-3327-1-ND	2.93V Supply Monitor	SOT-323-5	1.35	1.13	.90
TPS3801K33DCKR	296-3327-2-ND	2.93V Supply Monitor	SOT-323-5	1755.00/3,000		
TPS3801L30DCKR	296-3328-1-ND	2.64V Supply Monitor	SOT-323-5	1.35	1.13	.90
TPS3801L30DCKR	296-3328-2-ND	2.64V Supply Monitor	SOT-323-5	1755.00/3,000		
TPS3801T50DCKR	296-12385-1-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1.35	1.13	.90
TPS3801T50DCKR	296-12385-2-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1755.00/3,000		
TPS3802K33DCKR	296-12386-1-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1.35	1.13	.90
TPS3802K33DCKR	296-12386-2-ND	Ultra-Small Supply Volt. Supervisor	SOT-323-5	1755.00/3,000		
TPS3806I33DBVR	296-12011-1-ND	Dual Voltage Detector with Adjustable Hysteresis *NEW!*	SOT-23-6	1.33	1.06	.80
TPS3806I33DBVR	296-12011-2-ND	Dual Voltage Detector with Adjustable Hysteresis *NEW!*	SOT-23-6	2035.20/3,000		
TPS3806J20DBVR	296-12012-1-ND	Dual Voltage Detector with Adjustable Hysteresis *NEW!*	SOT-23-6	1.33	1.06	.80
TPS3806J20DBVR	296-12012-2-ND	Dual Voltage Detector with Adjustable Hysteresis *NEW!*	SOT-23-6	2034.00/3,000		
TPS3809I50DBVR	296-10914-2-ND	5V Supply Monitor	SOT-23	1248.00/3,000		
TPS3809I50DBVT	296-2629-1-ND	5V Supply Monitor	SOT-23-3	.96	.80	.64
TPS3809I50DBVT	296-2629-2-ND	5V Supply Monitor	SOT-23-3	120.00/250		
TPS3809J25DBVR	296-10915-2-ND	2.5V Supply Monitor	SOT-23	1248.00/3,000		
TPS3809J25DBVT	296-2630-1-ND	2.5V Supply Monitor	SOT-23-3	.96	.80	.64
TPS3809J25DBVT	296-2630-2-ND	2.5V Supply Monitor	SOT-23-3	120.00/250		
TPS3809K33DBVR	296-10916-2-ND	3.3V Supply Monitor	SOT-23	1248.00/3,000		
TPS3809K33DBVT	296-2631-1-ND	3.3V Supply Monitor	SOT-23-3	.96	.80	.64
TPS3809K33DBVT	296-2631-2-ND	3.3V Supply Monitor	SOT-23-3	120.00/250		
TPS3809L30DBVR	296-10917-2-ND	3.0V Supply Monitor	SOT-23	1248.00/3,000		
TPS3809L30DBVT	296-2632-1-ND	3.0V Supply Monitor	SOT-23-3	.96	.80	.64
TPS3809L30DBVT	296-2632-2-ND	3.0V Supply Monitor	SOT-23-3	120.00/250		
TPS3813I50DBVT	296-10918-1-ND	5V Supervisor with Programmable Watchdog Window	SOT-23-6	1.98	1.58	1.19
TPS3813I50DBVT	296-10918-2-ND	5V Supervisor with Programmable Watchdog Window	SOT-23-6	276.50/250		
TPS3813J25DBVT	296-10919-1-ND	2.5V Supervisor with Programmable Watchdog Window	SOT-23-6	1.98	1.58	1.19
TPS3813J25DBVT	296-10919-2-ND	2.5V Supervisor with Programmable Watchdog Window	SOT-23-6	276.50/250		
TPS3813K33DBVT	296-10920-1-ND	3.3V Supervisor with Programmable Watchdog Window	SOT-23-6	1.98	1.58	1.19
TPS3813K33DBVT	296-10920-2-ND	3.3V Supervisor with Programmable Watchdog Window	SOT-23-6	276.50/250		
TPS3813L30DBVT	296-10921-1-ND	3.0V Supervisor with Programmable Watchdog Window	SOT-23-6	1.98	1.58	1.19
TPS3813L30DBVT	296-10921-2-ND	3.0V Supervisor with Programmable Watchdog Window	SOT-23-6	276.50/250		
TPS3820-33DBVT	296-2633-1-ND	2.93V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3820-33DBVT	296-2633-2-ND	2.93V Supply Monitor	SOT-23-5	192.50/250		
TPS3820-50DBVT	296-2635-1-ND	4.55V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3820-50DBVT	296-2635-2-ND	4.55V Supply Monitor	SOT-23-5	192.50/250		
TPS3823-25DBVR	296-3333-1-ND	2.25V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3823-25DBVR	296-3333-2-ND	2.25V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3823-30DBVR	296-3334-1-ND	2.63V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3823-30DBVR	296-3334-2-ND	2.63V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3823-33DBVR	296-1357-1-ND	2.93V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3823-33DBVR	296-1357-2-ND	2.93V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3823-50DBVR	296-3335-1-ND	4.55V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3823-50DBVR	296-3335-2-ND	4.55V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3823-50DBVT	296-10922-1-ND	4.55V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3823-50DBVT	296-10922-2-ND	4.55V Supply Monitor	SOT-23-5	192.50/250		
TPS3824-25DBVR	296-3336-1-ND	2.25V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3824-25DBVR	296-3336-2-ND	2.25V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3824-30DBVR	296-3337-1-ND	2.63V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3824-30DBVR	296-3337-2-ND	2.63V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3824-33DBVR	296-3338-1-ND	2.93V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3824-33DBVR	296-3338-2-ND	2.93V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3824-50DBVR	296-1358-1-ND	4.55V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3824-50DBVR	296-1358-2-ND	4.55V Supply Monitor	SOT-23-5	2112.00/3,000		
TPS3825-33DBVT	296-2636-1-ND	2.93V Supply Monitor	SOT-23-5	1.47	1.23	.98
TPS3825-33DBVT	296-2636-2-ND	2.93V Supply Monitor	SOT-23-5	183.75/250		
TPS3825-50DBVT	296-2637-1-ND	4.55V Supply Monitor	SOT-23-5	1.38	1.15	.92
TPS3825-50DBVT	296-2637-2-ND	4.55V Supply Monitor	SOT-23-5	183.75/250		
TPS3828-33DBVT	296-2638-1-ND	2.93V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3828-33DBVT	296-2638-2-ND	2.93V Supply Monitor	SOT-23-5	192.50/250		
TPS3828-50DBVT	296-2639-1-ND	4.55V Supply Monitor	SOT-23-5	1.38	1.10	.83
TPS3828-50DBVT	296-2639-2-ND	4.55V Supply Monitor	SOT-23-5	192.50/250		
TPS3836K33DBVT	296-3341-2-ND	2.93V Low Current Monitor	SOT-23-5	266.00/250		
TPS3837E18DBVT	296-3343-1-ND	1.71V Low Current Monitor	SOT-23-5	1.90	1.52	1.14
TPS3837E18DBVT	296-3343-2-ND	1.71V Low Current Monitor	SOT-23-5	266.00/250		
TPS3837J25DBVT	296-3344-2-ND	2.25V Low Current Monitor	SOT-23-5	266.00/250		
TPS3837K33DBVT	296-3345-1-ND	2.93V Low Current Monitor	SOT-23-5	1.90	1.52	1.14
TPS3837K33DBVT	296-3345-2-ND	2.93V Low Current Monitor	SOT-23-5	266.00/250		
TPS3837L30DBVT	296-3346-1-ND	2.64V Low Current Monitor	SOT-23-5	1.90	1.52	1.14
TPS3837L30DBVT	296-3346-2-ND	2.64V Low Current Monitor	SOT-23-5	266.00/250		
TPS3838E18DBVT	296-3347-1-ND	1.71V Low Current Monitor	SOT-23-5	1.90	1.52	1.14
TPS3838E18DBVT	296-3347-2-ND	1.71V Low Current Monitor	SOT-23-5	266.00/250		
TPS3838J25DBVT	296-3348-1-ND	2.25V Low Current Monitor	SOT-23-5	1.90	1.52	1.14
TPS3838J25DBVT	296-3348-2-ND	2.25V Low Current Monitor	SOT-23-5	266.00/250		
TPS3838K33DBVT	296-3349-1-ND	2.93V Low Current Monitor	SOT-23-5	1.90	1.52	1.14
TPS3838K33DBVT	296-3349-2-ND	2.93V Low Current Monitor	SOT-23-5	266.00/250		
TPS3838L30DBVT	296-3350-1-ND	2.64V Low Current Monitor	SOT-23-5	1.90	1.52	1.14
TPS3838L30DBVT	296-3350-2-ND	2.64V Low Current Monitor	SOT-23-5	266.00/250		
UC2543DW	296-3355-5-ND	2.5V Power Supply Monitor	16-SOIC	5.06	4.05	3.42
UC2543N	296-3356-5-ND	2.5V Power Supply Monitor	16-Dip	5.06	4.05	3.42
UC2903DW	296-2640-5-ND	Quad Voltage Supply Monitor	18-SOIC	5.04	4.04	3.14
UC2904DW	296-2641-5-ND	Quad Voltage Supply Monitor	18-SOIC	5.45	4.36	3.39
UC3543DW	296-3357-5-ND	2.5V Power Supply Monitor	16-SOIC	4.66	3.73	2.90
UC3543N	296-3358-5-ND	2.5V Power Supply Monitor	16-Dip	4.66	3.73	2.90
UC3544N	296-3359-5-ND	2.5V Power Supply Monitor	18-Dip	3.08	2.47	1.92
UC3903DW	296-2642-5-ND	Quad Voltage Supply Monitor	18-SOIC	4.28	3.42	2.66
UC3904DW	296-2643-5-ND	Quad Voltage Supply Monitor	18-SOIC	4.66	3.73	2.90
UC3910D	296-2644-5-ND	4-Bit D/A Converter and Voltage Monitor	16-SOIC	5.16	4.13	3.49
UC39432D	296-11350-5-ND	Precision Analog Controller	8-SOIC	5.00	4.00	3.11
UC39432N	296-11351-5-ND	Precision Analog Controller	8-Dip	5.00	4.00	3.11
UCC2946D	296-2645-5-ND	Microprocessor Supervisor with Watch Dog Timer	8-SOIC	2.99	2.40	1.87
UCC3946D	296-2646-5-ND	Microprocessor Supervisor with Watch Dog Timer	8-SOIC	2.72	2.18	1.70

MOSFET / MOSFET Drivers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
SN75372D	296-3360-5-ND	Dual MOSFET Driver	8-SOIC	1.88	1.50	1.13
SN75372P	296-3361-5-ND	Dual MOSFET Driver	8-Dip	1.88	1.50	1.13
SN75374D	296-3362-5-ND	Quad MOSFET Driver	16-SOIC	2.59	2.07	1.61
TPS1100D	296-3379-5-ND	P-Channel MOSFET, Rise Time 10nS	8-SOIC	1.29	1.08	.86
TPS1101D	296-3381-5-ND	P-Channel MOSFET, Rise Time 5.5nS	8-SOIC	1.60	1.28	.96
TPS1120D	296-1352-5-ND	Dual P-Channel MOSFET	8-SOIC	1.50	1.20	.90
TPS1120DR	296-1352-1-ND	Dual P-Channel MOSFET	8-SOIC	1.50	1.20	.90
TPS1120DR	296-1352-2-ND	Dual P-Channel MOSFET	8-SOIC	1920.00/2,500		
TPS2811D	296-2385-5-ND	Dual 2A Invert MOSFET Driver	8-SOIC	1.83	1.46	1.10
TPS2811P	296-3363-5-ND	Dual 2A High Speed Invert MOSFET Driver	8-Dip	1.83	1.46	1.10
TPS2812D	296-3364-5-ND	Dual 2A High Speed Non-Invert FET Driver	8-SOIC	1.83	1.46	1.10
TPS2812P	296-3365-5-ND	Dual 2A High Speed Non-Invert FET Driver	8-Dip	1.83	1.46	1.10
TPS2813D	296-1356-5-ND	Dual 2A High Speed Complementary MOSFET Driver	8-SOIC	1.83	1.46	1.10
TPS2813DR	296-1356-1-ND	Dual 2A Complementary MOSFET Driver	8-SOIC	1.83	1.46	1.10
TPS2813DR	296-1356-2-ND	Dual 2A Complementary MOSFET Driver	8-SOIC	2335.00/2,500		
TPS2813P	296-2386-5-ND	Dual 2A Complementary MOSFET Driver	8-Dip	1.83	1.46	1.10
TPS2813PWR	296-3367-1-ND	Dual 2A Complementary MOSFET Driver	8-TSSOP	1.83	1.46	1.10
TPS2813PWR	296-3367-2-ND	Dual 2A Complementary MOSFET Driver	8-TSSOP	1898.00/2,000		
TPS2814D	296-3368-5-ND	Dual 2A High Speed MOSFET Driver	8-SOIC	1.83	1.46	1.10
TPS2814P	296-2387-5-ND	Dual 2A MOSFET Driver	8-Dip	1.83	1.46	1.10
TPS2814PWR	296-3369-1-ND	Dual 2A MOSFET Driver	8-TSSOP	1.83	1.46	1.10
TPS2814PWR	296-3369-2-ND	Dual 2A MOSFET Driver	8-TSSOP	1898.00/2,000		
TPS2815D	296-2388-5-ND	Dual 2A NAND MOSFET Driver	8-SOIC	1.83	1.46	1.10
TPS2815P	296-3370-5-ND	Dual 2A High Speed NAND MOSFET Driver	8-Dip	1.83	1.46	1.10
TPS2816DBVR	296-3371-1-ND	2A HS Inverting MOSFET Driver	SOT-23-5	1.28	1.02	.77
TPS2816DBVR	296-3371-2-ND	2A HS Inverting MOSFET Driver	SOT-23-5	1959.00/3,000		
TPS2817DBVR	296-3372-1-ND	2A HS Non-Inverting MOSFET Driver	SOT-23-5	1.28	1.02	.77
TPS2817DBVR	296-3372-2-ND	2A HS Non-Inverting MOSFET Driver	SOT-23-5	1959.00/3,000		
TPS2818DBVR	296-3373-1-ND	2A HS Inverting MOSFET Driver	SOT-23-5	1.28	1.02	.77
TPS2818DBVR	296-3373-2-ND	2A HS Inverting MOSFET Driver	SOT-23-5	1959.00/3,000		
TPS2819DBVR	296-3374-1-ND	2A HS Non-Inverting MOSFET Driver	SOT-23-5	1.28	1.02	.77
TPS2819DBVR	296-3374-2-ND	2A HS Non-Inverting MOSFET Driver	SOT-23-5	1959.00/3,000		
TPS2828DBVR	296-1986-1-ND	2A High Spd. Inverting MOSFET Driver	SOT-23-5	1.47	1.23	.98
TPS2828DBVR	296-1986-2-ND	2A High Spd. Inverting MOSFET Driver	SOT-23-5	1872.00/3,000		
TPS2829DBVR	296-1987-1-ND	2A HS Non-Invert MOSFET Driver	SOT-23-5	1.47	1.23	.98
TPS2829DBVR	296-1987-2-ND	2A HS Non-Invert MOSFET Driver	SOT-23-5	1872.00/3,000		
TPS2830D	296-2390-5-ND	Non-Invert Fast Sync BUCK FET Driver	14-SOIC	2.63	2.11	1.64
TPS2830PWP	296-3376-5-ND	Non-Inverting Fast Sync BUCK MOSFET Driver	14-HTSSOP	2.63	2.11	1.64

(Continued)

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T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TPS2831D	296-2391-5-ND	Invert Fast Sync BUCK MOSFET Driver	14-SOIC	2.63	2.11	1.64
TPS2831PWP	296-3377-5-ND	Invert Fast Sync BUCK MOSFET Driver	14-HTSSOP	2.63	2.11	1.64
TPS2832D	296-2392-5-ND	Non-Invert Fast Sync BUCK FET Driver	8-SOIC	2.52	2.02	1.57
TPS2833D	296-2393-5-ND	Invert Fast Sync BUCK MOSFET Driver	8-SOIC	2.52	2.02	1.57
TPS2834D	296-2394-5-ND	Non-Invert Fast Sync BUCK FET Driver	14-SOIC	2.63	2.11	1.64
TPS2834PWP	296-3378-5-ND	Non-Invert Fast Sync BUCK MOSFET Driver	14-HTSSOP	2.63	2.11	1.64
TPS2835D	296-2395-5-ND	Invert Fast Sync BUCK MOSFET Driver	14-SOIC	2.63	2.11	1.64
TPS2835PWP	296-10885-5-ND	Invert Fast Sync BUCK MOSFET Driver	14-HTSSOP	2.63	2.11	1.64
TPS2836D	296-2396-5-ND	Non-Invert Fast Sync BUCK FET Driver	8-SOIC	2.52	2.02	1.57
TPS2848PWP	296-10888-5-ND	MOSFET Driver with Regulator	14-HTSSOP	2.79	2.24	1.74
TPS2849PWP	296-10889-5-ND	MOSFET Driver with Regulator	14-HTSSOP	2.79	2.24	1.74
TPS2837D	296-2397-5-ND	Invert Fast Sync BUCK MOSFET Driver	8-SOIC	2.52	2.02	1.57
UC2709DW	296-2398-5-ND	Dual High Speed MOSFET Driver	16-SOIC	7.66	6.13	5.18
UC2710N	296-2399-5-ND	High Current MOSFET Driver	8-Dip	8.06	6.45	5.45
UC2714D	296-12113-5-ND	Complimentary Switch FET Driver with Aux Out	8-SOIC	5.58	4.47	3.77
UC2714N	296-12171-5-ND	Complimentary Switch FET Driver with Aux Out	8-Dip	5.36	4.29	3.34
UC2715D	296-12172-5-ND	Complimentary Switch FET Driver with Aux Out	8-SOIC	5.36	4.29	3.34
UC2715DP	296-12173-5-ND	Complimentary Switch FET Driver with Aux Out	16-SOIC	5.36	4.29	3.34
UC2715N	296-12174-5-ND	Complimentary Switch FET Driver with Aux Out	8-Dip	5.36	4.29	3.34
UC3706N	296-11242-5-ND	Dual High Speed MOSFET Driver	16-Dip	4.66	3.73	2.90
UC3709DW	296-2400-5-ND	Dual High Speed MOSFET Driver	16-SOIC	5.24	4.20	3.54
UC3709N	296-11245-5-ND	Dual High Speed MOSFET Driver	8-Dip	5.24	4.20	3.54
UC3710DW	296-2401-5-ND	Complimentary Hi Current MOSFET Driver	16-SOP	5.78	4.63	3.91
UC3710N	296-11246-5-ND	High-Current MOSFET Driver	8-Dip	5.78	4.63	3.91
UC3710T	296-11247-5-ND	High-Current MOSFET Driver	TO-220-5	5.78	4.63	3.91
UC3714D	296-11253-5-ND	High-Current MOSFET Driver	8-SOIC	3.22	2.58	2.01
UC3714DP	296-11254-5-ND	High-Current MOSFET Driver	16-SOP	3.22	2.58	2.01
UC3714N	296-11255-5-ND	High-Current MOSFET Driver	8-Dip	3.22	2.58	2.01
UC3715D	296-11256-5-ND	High-Current MOSFET Driver	8-SOIC	3.22	2.58	2.01
UC3715DP	296-11668-5-ND	Complimentary Switch MOSFET Driver with Aux Out	16-SOIC	3.22	2.58	2.01
UC3715N	296-11257-5-ND	High-Current MOSFET Driver	8-SOP	3.22	2.58	2.01
UCC2837D	296-2403-5-ND	N-FET Linear Regulating Controller	8-SOIC	5.56	4.45	3.46
UCC27323D	296-12528-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-SOIC	2.32	1.86	1.45
UCC27323DGN	296-12529-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-MSOP	2.54	2.04	1.59
UCC27323P	296-12530-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-Dip	2.32	1.86	1.45
UCC27324D	296-12531-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-SOIC	2.32	1.86	1.45
UCC27324DGN	296-12532-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-MSOP	2.54	2.04	1.59
UCC27324P	296-12533-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-Dip	2.32	1.86	1.45
UCC27325D	296-12534-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-SOIC	2.32	1.86	1.45
UCC27325DGN	296-12535-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-MSOP	2.54	2.04	1.59
UCC27325P	296-12536-5-ND	4A HS Dual MOSFET Driver *NEW!*	8-Dip	2.32	1.86	1.45

Power Distribution Switches

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TPS2010AD	296-2555-5-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.23	1.78	1.34
TPS2010APWP	296-3384-5-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch	14-HTSSOP	2.23	1.78	1.34
TPS2010PWR	296-3385-1-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch	14-TSSOP	2.30	1.84	1.38
TPS2010PWR	296-3385-2-ND	0.4A, 2.7-5.5V High-Side MOSFET Switch	14-TSSOP	2210.00/2,000		
TPS2011AD	296-2556-5-ND	1.2A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.23	1.78	1.34
TPS2011D	296-3386-5-ND	1.2A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.13	1.70	1.28
TPS2012AD	296-2557-5-ND	2.0A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.23	1.78	1.34
TPS2012D	296-1957-5-ND	2.0A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.13	1.70	1.28
TPS2013AD	296-2558-5-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.23	1.78	1.34
TPS2013D	296-1353-5-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.13	1.70	1.28
TPS2013DR	296-1353-1-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.30	1.84	1.38
TPS2013DR	296-1353-2-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2720.00/2,500		
TPS2013PWR	296-3388-1-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	14-TSSOP	2.30	1.84	1.38
TPS2013PWR	296-3388-2-ND	2.6A, 2.7-5.5V High-Side MOSFET Switch	14-TSSOP	2210.00/2,000		
TPS2014D	296-1354-5-ND	0.66A, 4-5.5V High-Side MOSFET Switch	8-SOIC	4.23	3.39	2.64
TPS2014DR	296-1354-1-ND	0.66A, 4-5.5V High-Side MOSFET Switch	8-SOIC	4.23	3.39	2.64
TPS2014DR	296-1354-2-ND	0.66A, 4-5.5V High-Side MOSFET Switch	8-SOIC	5922.50/2,500		
TPS2014P	296-3389-5-ND	0.66A, 4-5.5V High-Side MOSFET Switch	8-Dip	4.23	3.39	2.64
TPS2015D	296-1355-5-ND	1.1A, 4-5.5V High-Side MOSFET Switch	8-SOIC	4.23	3.39	2.64
TPS2015DR	296-1355-1-ND	1.1A, 4-5.5V High-Side MOSFET Switch	8-SOIC	4.23	3.39	2.64
TPS2015DR	296-1355-2-ND	1.1A, 4-5.5V High-Side MOSFET Switch	8-SOIC	5922.50/2,500		
TPS2015P	296-3390-5-ND	1.1A, 4-5.5V High-Side MOSFET Switch	8-Dip	4.23	3.39	2.64
TPS2020D	296-2560-5-ND	0.22A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2021D	296-2561-5-ND	0.66A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2022D	296-2562-5-ND	1.1A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2023D	296-2563-5-ND	1.65A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2023P	296-12233-5-ND	1.65A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch *NEW!*	8-Dip	2.35	1.88	1.41
TPS2024D	296-2564-5-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2024DR	296-2564-1-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.41	1.93	1.50
TPS2024DR	296-2564-2-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	3007.50/2,500		
TPS2024P	296-12234-5-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch *NEW!*	8-Dip	2.35	1.88	1.41
TPS2030D	296-2565-5-ND	0.22A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2030P	296-3392-5-ND	0.22A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-Dip	2.35	1.88	1.41
TPS2031D	296-2566-5-ND	0.66A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2032D	296-2567-5-ND	1.1A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2033D	296-2568-5-ND	1.65A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2033P	296-12235-5-ND	1.65A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch *NEW!*	8-Dip	2.35	1.88	1.41
TPS2034D	296-2569-5-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2034P	296-12236-5-ND	2.2A, 2.7-5.5V Hot-Swap High-Side MOSFET Switch *NEW!*	8-Dip	2.35	1.88	1.41
TPS2041AD	296-3393-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	1.38	1.10	.83
TPS2041D	296-3394-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2041P	296-2570-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.35	1.88	1.41
TPS2042AD	296-3395-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	1.83	1.46	1.10
TPS2042D	296-3396-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.48	1.98	1.54
TPS2042DR	296-3396-1-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.48	1.98	1.54
TPS2042DR	296-3396-2-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3465.00/2,500		
TPS2042P	296-2571-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.48	1.98	1.54
TPS2043AD	296-3397-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.32	1.86	1.45
TPS2043D	296-2572-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2043DR	296-2572-1-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2043DR	296-2572-2-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4662.50/2,500		
TPS2044AD	296-3399-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3.02	2.42	1.88
TPS2044D	296-1959-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4.23	3.39	2.64
TPS2045AD	296-3400-5-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	1.35	1.08	.81
TPS2045D	296-2573-5-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2045DR	296-2573-1-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2045DR	296-2573-2-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3008.00/2,500		
TPS2045P	296-3402-5-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.35	1.88	1.41
TPS2046AD	296-3403-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	1.83	1.46	1.10
TPS2046D	296-2574-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.48	1.98	1.54
TPS2046DR	296-2574-1-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.45	1.96	1.47
TPS2046DR	296-2574-2-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3465.00/2,500		
TPS2046P	296-3405-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.48	1.98	1.54
TPS2047AD	296-3406-5-ND	Triple (2in/3out), 0.345A,2.7-5.5V High-Side MOSFET Switch	16-SOIC	2.30	1.84	1.43
TPS2047D	296-2575-5-ND	Triple (2in/3out), 0.345A,2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2047DR	296-2575-1-ND	Triple (2in/3out), 0.345A,2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2047DR	296-2575-2-ND	Triple (2in/3out), 0.345A,2.7-5.5V High-Side MOSFET Switch	16-SOIC	4662.50/2,500		
TPS2048AD	296-3408-5-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.02	2.42	1.88
TPS2048DR	296-3409-1-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4.23	3.39	2.64
TPS2048DR	296-3409-2-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	5922.50/2,500		
TPS2051AD	296-3410-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	1.35	1.08	.81
TPS2051D	296-2576-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2051P	296-3411-5-ND	0.7A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.35	1.88	1.41
TPS2052AD	296-3412-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	1.83	1.46	1.10
TPS2052D	296-2577-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.48	1.98	1.54
TPS2052DR	296-2577-1-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.48	1.98	1.54
TPS2052DR	296-2577-2-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3465.00/2,500		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS2052P	296-3414-5-ND	Dual (1in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.48	1.98	1.54
TPS2053AD	296-3415-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	2.30	1.84	1.43
TPS2053D	296-2578-5-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2053DR	296-2578-1-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2053DR	296-2578-2-ND	Triple (2in/3out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4662.50/2,500		
TPS2054AD	296-3417-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.02	2.42	1.88
TPS2054D	296-1960-5-ND	Quad (2in/4out), 0.7A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4.23	3.39	2.64
TPS2055AD	296-3418-5-ND	0.345A, 2.7-5.5V Hi-Side MOSFET Switch	8-SOIC	1.35	1.08	.81
TPS2055D	296-2579-5-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2055DR	296-2579-1-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.35	1.88	1.41
TPS2055DR	296-2579-2-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3008.00/2,500		
TPS2055P	296-3420-5-ND	0.345A, 2.7-5.5V High-Side MOSFET Switch	8-Dip	2.35	1.88	1.41
TPS2056AD	296-3421-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	1.83	1.46	1.10
TPS2056D	296-2580-5-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.48	1.98	1.54
TPS2056DR	296-2580-1-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.48	1.98	1.54
TPS2056DR	296-2580-2-ND	Dual (1in/2out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3465.00/2,500		
TPS2057AD	296-3423-5-ND	Triple (2in/3out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	2.30	1.84	1.43
TPS2057D	296-2581-5-ND	Triple (2in/3out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2057DR	296-2581-1-ND	Triple (2in/3out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	3.33	2.67	2.08
TPS2057DR	296-2581-2-ND	Triple (2in/3out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4662.50/2,500		
TPS2058AD	296-3425-5-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	8-SOIC	3.02	2.42	1.88
TPS2058D	296-2582-5-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4.23	3.39	2.64
TPS2058DR	296-2582-1-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	4.23	3.39	2.64
TPS2058DR	296-2582-2-ND	Quad (2in/4out), 0.345A, 2.7-5.5V High-Side MOSFET Switch	16-SOIC	5922.50/2,500		
TPS2070DAP	296-3427-5-ND	Dual PCMCIA Power I/F Switch, Act. Low	32-TSSOP	5.68	4.55	3.84
TPS2071DAP	296-3428-5-ND	Dual PCMCIA Power I/F Switch, Act. High	32-TSSOP	5.68	4.55	3.84
TPS2074DB	296-3429-5-ND	USB Hub Power Cont., Act. Low	24-SOP	5.20	4.16	3.24
TPS2075DB	296-3430-5-ND	USB Hub Power Cont., Act. High	24-SOP	5.20	4.16	3.24
TPS2080D	296-3431-5-ND	Dual (2in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch, Act. High	8-SOIC	2.36	1.89	1.47
TPS2081D	296-3432-5-ND	Dual (2in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	8-SOIC	2.36	1.89	1.47
TPS2082D	296-3433-5-ND	Dual (2in/2out), 0.7A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	8-SOIC	2.36	1.89	1.47
TPS2085D	296-3434-5-ND	Quad (4in/4out), 0.7A, 2.7-5.5V High-Side MOSFET Switch, Act. High	16-SOIC	4.59	3.68	2.86
TPS2086D	296-3435-5-ND	Quad (4in/4out), 0.7A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	16-SOIC	4.59	3.68	2.86
TPS2087D	296-3436-5-ND	Quad (4in/4out), 0.7A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	16-SOIC	4.59	3.68	2.86
TPS2090D	296-3437-5-ND	Dual (2in/2out), 0.3A, 2.7-5.5V High-Side MOSFET Switch, Act. High	8-SOIC	2.36	1.89	1.47
TPS2091D	296-3438-5-ND	Dual (2in/2out), 0.3A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	8-SOIC	2.36	1.89	1.47
TPS2092D	296-3439-5-ND	Dual (2in/2out), 0.3A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	8-SOIC	2.36	1.89	1.47
TPS2095D	296-3440-5-ND	Quad (4in/4out), 0.3A, 2.7-5.5V High-Side MOSFET Switch, Act. High	16-SOIC	4.59	3.68	2.86
TPS2096D	296-3441-5-ND	Quad (4in/4out), 0.3A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	16-SOIC	4.59	3.68	2.86
TPS2097D	296-3442-5-ND	Quad (4in/4out), 0.3A, 2.7-5.5V High-Side MOSFET Switch, Act. Low	16-SOIC	4.59	3.68	2.86
TPS2100D	296-2583-5-ND	VAUX Power Distribution Switch	8-SOIC	1.40	1.12	.84
TPS2100DBVR	296-10878-2-ND	VAUX Power Distribution Switch	SOT-23-5	2150.40/3,000		
TPS2100DBVT	296-2584-1-ND	VAUX Power Distribution Switch	SOT-23-5	1.65	1.32	.99
TPS2100DBVT	296-2584-2-ND	VAUX Power Distribution Switch	SOT-23-5	196.00/250		
TPS2101D	296-2585-5-ND	VAUX Power Distribution Switch	8-SOIC	1.40	1.12	.84
TPS2101DBVR	296-10879-2-ND	VAUX Power Distribution Switch	SOT-23-5	2150.40/3,000		
TPS2101DBVT	296-2586-1-ND	VAUX Power Distribution Switch	SOT-23-5	1.65	1.32	.99
TPS2101DBVT	296-2586-2-ND	VAUX Power Distribution Switch	SOT-23-5	196.00/250		
TPS2102D	296-2587-5-ND	VAUX Power Distribution Switch	8-SOIC	1.65	1.32	.99
TPS2102DBVR	296-10880-2-ND	VAUX Power Distribution Switch	SOT-23-5	2534.40/3,000		
TPS2102DBVT	296-2588-1-ND	VAUX Power Distribution Switch	SOT-23-5	1.90	1.52	1.14
TPS2102DBVT	296-2588-2-ND	VAUX Power Distribution Switch	SOT-23-5	231.00/250		
TPS2103D	296-2589-5-ND	VAUX Power Distribution Switch	8-SOIC	1.65	1.32	.99
TPS2103DBVR	296-10881-2-ND	VAUX Power Distribution Switch	SOT-23-5	2534.40/3,000		
TPS2103DBVT	296-2590-1-ND	VAUX Power Distribution Switch	SOT-23-5	1.90	1.52	1.14
TPS2103DBVT	296-2590-2-ND	VAUX Power Distribution Switch	SOT-23-5	231.00/250		
TPS2104D	296-2591-5-ND	VAUX Power Distribution Switch	8-SOIC	2.03	1.62	1.22
TPS2104DBVR	296-10882-2-ND	VAUX Power Distribution Switch	SOT-23-5	3110.40/3,000		
TPS2104DBVT	296-3447-1-ND	VAUX Power Distribution Switch	SOT-23-5	2.25	1.80	1.35
TPS2104DBVT	296-3447-2-ND	VAUX Power Distribution Switch	SOT-23-5	283.50/250		
TPS2105D	296-2592-5-ND	VAUX Power Distribution Switch	8-SOIC	2.03	1.62	1.22
TPS2105DBVR	296-10883-2-ND	VAUX Power Distribution Switch	SOT-23-5	3111.00/3,000		
TPS2105DBVT	296-3448-1-ND	VAUX Power Distribution Switch	SOT-23-5	2.25	1.80	1.35
TPS2105DBVT	296-3448-2-ND	VAUX Power Distribution Switch	SOT-23-5	283.50/250		
TPS2201IDBR	296-3449-1-ND	Dual PCMCIA Power Switch	30-SSOP	10.63	9.57	8.49
TPS2201IDBR	296-3449-2-ND	Dual PCMCIA Power Switch	30-SSOP	15758.00/2,000		
TPS2201IDFR	296-3450-1-ND	Dual PCMCIA Power Switch	30-SOP	10.63	9.57	8.49
TPS2201IDFR	296-3450-2-ND	Dual PCMCIA Power Switch	30-SOP	7879.00/1,000		
TPS2202AIDBR	296-3451-1-ND	Dual PCMCIA Power Switch	30-SSOP	10.63	9.57	8.49
TPS2202AIDBR	296-3451-2-ND	Dual PCMCIA Power Switch	30-SSOP	15758.00/2,000		
TPS2205IDAPR	296-3454-2-ND	Dual PCMCIA Power I/F Switch	32-TSSOP	6526.00/2,000		
TPS2205IDBR	296-3455-1-ND	Dual PCMCIA Power I/F Switch	30-SOP	5.68	4.55	3.84
TPS2205IDBR	296-3455-2-ND	Dual PCMCIA Power I/F Switch	30-SOP	6526.00/2,000		
TPS2205IDFR	296-3456-1-ND	Dual PCMCIA Power I/F Switch	30-SOP	5.68	4.55	3.84
TPS2205IDFR	296-3456-2-ND	Dual PCMCIA Power I/F Switch	30-SOP	3263.00/1,000		
TPS2206IDAPR	296-3457-1-ND	Dual PCMCIA Power Switch	32-TSSOP	7.50	6.00	5.07
TPS2206IDAPR	296-3457-2-ND	Dual PCMCIA Power Switch	32-TSSOP	9376.00/2,000		
TPS2206IDB	296-2246-5-ND	Dual PCMCIA Power Switch	30-SSOP	3.22	2.58	2.01
TPS2206IDBR	296-2246-1-ND	Dual PCMCIA Power Switch	30-SSOP	7.50	6.00	5.07
TPS2206IDBR	296-2246-2-ND	Dual PCMCIA Power Switch	30-SOP	9376.00/2,000		
TPS2211AIDB	296-3460-5-ND	PCMCIA Pwr Switch Parallel Interface	16-SOP	3.33	2.67	2.08
TPS2211IDBR	296-3461-2-ND	PCMCIA Pwr Switch Parallel Interface	16-SOP	4336.00/2,000		
TPS2212IDB	296-2247-5-ND	Single PCMCIA Power Switch	16-SSOP	3.33	2.67	2.08
TPS2214ADB	296-2248-5-ND	Dual PCMCIA Power Switch	24-SSOP	5.50	4.40	3.72
TPS2214DB	296-2249-5-ND	Dual PCMCIA Power Switch	24-SSOP	6.58	5.27	4.45
TPS2216ADAP	296-2250-5-ND	Dual PCMCIA Power Switch	32-HTSSOP	5.50	4.40	3.72
TPS2216ADB	296-2251-5-ND	Dual PCMCIA Power Switch	30-SSOP	5.50	4.40	3.72
TPS2216DB	296-2252-5-ND	Dual PCMCIA Power Switch	30-SSOP	6.58	5.27	4.45
TPS2216DAP	296-3462-5-ND	PCMCIA Power Switch Serial Interface	32-SOP	6.58	5.27	4.45
TPS2223DB	296-12387-5-ND	1A Dual-Slot PC Card Power Switch w/Serial Interface	24-SSOP	5.42	4.34	3.38
TPS2223PWP	296-12388-5-ND	1A Dual-Slot PC Card Power Switch w/Serial Interface	24-HTSSOP	5.42	4.34	3.38
TPS2224DB	296-12389-5-ND	1A Dual-Slot PC Card Power Switch w/Serial Interface	24-SSOP	5.16	4.13	3.49
TPS2224PWP	296-12390-5-ND	1A Dual-Slot PC Card Power Switch w/Serial Interface	24-HTSSOP	5.16	4.13	3.49
TPS2226DB	296-12391-5-ND	1A Dual-Slot PC Card Power Switch w/Serial Interface	30-SSOP	5.22	4.18	3.53
UC37131D	296-11248-5-ND	Low Side Smart Power Switch	8-SOIC	4.32	3.46	2.69
UC37132D	296-11249-5-ND	High/Low Side Smart Power Switch	16-SOIC	4.84	3.87	3.01
UC37132N	296-11250-5-ND	High/Low Side Smart Power Switch	14-Dip	4.84	3.87	3.01
UC37133D	296-11251-5-ND	High Side Smart Power Switch	8-SOIC	4.32	3.46	2.69
UC37133N	296-11252-5-ND	High Side Smart Power Switch	8-Dip	4.32	3.46	2.69

PWM Controllers

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DRV101F	DRV101F-ND	PWM Solenoid / Valve Driver	7-DDPAK	6.92	5.54	4.68
DRV101T	DRV101T-ND	PWM Solenoid / Valve Driver	7-TO-220	6.92	5.54	4.68
DRV102F	DRV102F-ND	PWM Solenoid / Valve Driver	7-lead DDPAK	6.92	5.54	4.68
DRV102T	DRV102T-ND	PWM Solenoid / Valve Driver	TO-220-7	6.92	5.54	4.68
DRV103H	DRV103H-ND	Low Side DMOS Power Switch PWM Out	8-SOP	3.67	2.94	2.29
DRV103H/2K5	DRV103H/2K5CT-ND	Low Side DMOS Power Switch PWM Out	8-HSOP	3.71	2.97	2.31
DRV103H/2K5	DRV103H/2K5TR-ND	Low Side DMOS Power Switch PWM Out	8-HSOP	5197.50/2,500		
DRV103U	296-11622-ND	PWM Low Side Driver	8-SOIC	3.24	2.60	2.02
DRV590DWP	296-12201-5-ND	1.2A, High Efficiency PWM Power Driver *NEW!*	20-SOIC	11.01	9.92	8.80
DRV591VFP	296-12430-ND	High Efficiancy PWM Power Driver *NEW!*	32-HLQFP	17.58	16.41	15.24
DRV592VFP	296-12550-ND	High Efficiency PWM Power Driver *NEW!*	32-HLQFP	16.95	15.82	14.69
DRV1100P	DRV1100P-ND	High Power Differential Driver Amp.	8-Dip	6.39	5.12	3.98
DRV1100U	DRV1100U-ND	High Power Differential Driver Amp	8-SOIC	5.68	4.55	3.84
DRV1101U	DRV1101U-ND	High Power Differential Line Driver	8-SOIC	6.39	5.12	3.98
DRV1101U/2K5	DRV1101UTR-ND	High Power Differential Line Driver	8-SOIC	9010.00/2,500		
PLL1700E	PLL1700E-ND	Audio System Multi-Clock Generator (PLL)	20-SSOP	4.23	3.39	2.64
SG2524DR	296-12552-1-ND	5V, PWM Reg. w/ Shutdown *NEW!*	16-SOIC	1.35	1.13	.90
SG2524DR	296-12552-2-ND	5V, PWM Reg. w/ Shutdown *NEW!*	16-SOIC	1462.50/2,500		
SG2524N	296-9685-5-ND	Regulating PWM	16-Dip	1.35	1.13	.90
SG3524D	296-9686-5-ND	Regulating PWM	16-SOP	1.35	1.13	.90
SG3524N	296-9687-5-ND	Regulating PWM	16-Dip	1.35	1.13	.90
SN74TVC3010DBQR	296-9891-1-ND	10-Bit Programmable Voltage Clamp	24-SOP	1.63	1.30	.98
SN74TVC3010DBQR	296-9891-2-ND	10-Bit Programmable Voltage Clamp	24-SOP	2080.00/2,500		
SN74TVC3010DGVR	296-9892-1-ND	10-Bit Programmable Voltage Clamp	24-SOP	1.38	1.10	.83
SN74TVC3010DGVR	296-9892-2-ND	10-Bit Programmable Voltage Clamp	24-SOP	1430.00/2,000		
SN74TVC3010PWR	296-9893-1-ND	10-Bit Programmable Volt. Clamp	24-TSSOP	1.38	1.10	.83
SN74TVC3010PWR	296-9893-2-ND	10-Bit Programmable Volt. Clamp	24-TSSOP	1430.00/2,000		
SN74TVC16222ADGGR	296-9888-1-ND	22-Bit Programmable Volt. Clamp	48-TSSOP	1.70	1.36	1.02
SN74TVC16222ADGGR	296-9888-2-ND	22-Bit Programmable Volt. Clamp	48-TSSOP	1768.00/2,000		
SN74TVC16222ADGVR	296-9889-1-ND	22-Bit Programmable Volt. Clamp	48-SOP	1.70	1.36	1.02
SN74TVC16222ADGVR	296-9889-2-ND	22-Bit Programmable Volt. Clamp	48-SOP	1768.00/2,000		
SN74TVC16222ADLR	296-9890-1-ND	22-Bit Programmable Volt. Clamp	48-SSOP	1.70	1.36	1.02
SN74TVC16222ADLR	296-9890-2-ND	22-Bit Programmable Volt. Clamp	48-SSOP	884.00/1,000		
TL494CD	296-1293-5-ND	PWM Controller	16-SOIC	.81	.68	.54
TL494CDR	296-1293-1-ND	PWM Controller	16-SOIC	.81	.68	.54
TL494CDR	296-1293-2-ND	PWM Controller	16-SOIC	877.50/2,500		
TL494CN	296-1799-5-ND	PWM Controller	16-Dip	.81	.68	.54
TL494CNSR	296-10191-1-ND	PWM Controller	16-SOP	1.20	1.00	.80
TL494CNSR	296-10191-2-ND	PWM Controller	16-SOP	1064.00/2,000		
TL494CPWR	296-10192-1-ND	PWM Controller	16-TSSOP	1.05	.88	.70
TL494CPWR	296-10192-2-ND	PWM Controller	16-TSSOP	932.00/2,000		
TL494ID	296-10193-5-ND	PWM Control Circuit	16-SOIC	2.25	1.80	1.40
TL494IN	296-10194-5-ND	PWM Controller	16-Dip	2.25	1.80	1.40
TL594CD	296-10220-5-ND	PWM Controller	16-SOIC	1.11	.93	.74
TL594CN	296-10221-5-ND	PWM Controller	16-Dip	1.11	.93	.74
TL594ID	296-10222-5-ND	PWM Controller	16-SOIC	2.48	1.98	1.54
TL594IN	296-10223-5-ND	PWM Controller	16-Dip	2.48	1.98	1.54
TL594IPWR	296-10224-1-ND	PWM Controller	16-TSSOP	2.48	1.98	1.54
TL594IPWR	296-10224-2-ND	PWM Controller	16-TSSOP	2806.00/2,000		
TL598CD	296-10225-5-ND	PWM Controller	16-SOIC	1.75	1.40	1.05
TL598CN	296-10226-5-ND	PWM Controller	16-Dip	1.75	1.40	1.05
TL1451ACDBR	296-10133-1-ND	Dual Channel PWM Controller	16-SSOP	2.00	1.60	1.20
TL1451ACDBR	296-10133-2-ND	Dual Channel PWM Controller	16-SSOP	2054.00/2,000		
TL1451ACN	296-12197-5-ND	Dual Channel PWM Controller	16-Dip	1.98	1.58	1.19
TL1451ACNSR	296-10134-1-ND	Dual Channel PWM Controller	16-SOIC	2.00	1.60	1.20
TL1451ACNSR	296-10134-2-ND	Dual Channel PWM Controller	16-SOIC	2054.00/2,000		

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL1451ACPWR	296-10135-1-ND	Dual Channel PWM Controller	16-TSSOP	2.00	1.60	1.20
TL1451ACPWR	296-10135-2-ND	Dual Channel PWM Controller	16-TSSOP	2054.00/2,000		
TL1451AQD	296-10137-5-ND	Dual Channel PWM Controller	16-SOIC	2.05	1.64	1.23
TL1453CD	296-10138-5-ND	Dual Channel PWM Controller	16-SOIC	1.98	1.58	1.19
TL1453CN	296-10139-5-ND	Dual Channel PWM Controller	16-Dip	1.98	1.58	1.19
TL2843D	296-1977-5-ND	Current-Mode PWM Controller	14-SOIC	1.38	1.15	.92
TL2843DR-8	296-10164-1-ND	Current Mode PWM Controller	8-SOIC	1.38	1.15	.92
TL2843DR-8	296-10164-2-ND	Current Mode PWM Controller	8-SOIC	1495.00/2,500		
TL2844DR	296-1367-1-ND	Current-Mode PWM Controller	14-SOIC	1.38	1.15	.92
TL2844DR-8	296-10165-1-ND	Current Mode PWM Controller	8-SOIC	1.38	1.15	.92
TL2844DR-8	296-10165-2-ND	Current Mode PWM Controller	8-SOIC	1495.00/2,500		
TL2845DR-8	296-10166-1-ND	Current Mode PWM Controller	8-SOIC	1.38	1.15	.92
TL2845DR-8	296-10166-2-ND	Current Mode PWM Controller	8-SOIC	1495.00/2,500		
TL3842DR-8	296-10173-1-ND	Current Mode PWM Controller	8-SOIC	1.05	.88	.70
TL3842DR-8	296-10173-2-ND	Current Mode PWM Controller	8-SOIC	1137.50/2,500		
TL3842P	296-10174-5-ND	Current Mode PWM Controller	8-Dip	1.05	.88	.70
TL3843DR-8	296-10175-1-ND	Current Mode PWM Controller	8-SOIC	1.05	.88	.70
TL3843DR-8	296-10175-2-ND	Current Mode PWM Controller	8-SOIC	1137.50/2,500		
TL3843P	296-10176-5-ND	Current Mode PWM Controller	8-Dip	1.05	.88	.70
TL3844DR-8	296-10177-1-ND	Current Mode PWM Controller	8-SOIC	1.05	.88	.70
TL3844DR-8	296-10177-2-ND	Current Mode PWM Controller	8-SOIC	1137.50/2,500		
TL3844P	296-10178-5-ND	Current Mode PWM Controller	8-Dip	1.05	.88	.70
TL3845DR-8	296-10179-1-ND	Current Mode PWM Controller	8-SOIC	1.05	.88	.70
TL3845DR-8	296-10179-2-ND	Current Mode PWM Controller	8-SOIC	1137.50/2,500		
TL3845P	296-10180-5-ND	Current Mode PWM Controller	8-Dip	1.05	.88	.70
TL5001ACD	296-2472-5-ND	PWM Controller Circuit	8-SOIC	1.38	1.15	.92
TL5001ACDR	296-2472-1-ND	PWM Cont. w/Wide Input Volt Range	8-SOIC	1.41	1.18	.94
TL5001ACDR	296-2472-2-ND	PWM Cont. w/Wide Input Volt Range	8-SOIC	1495.00/2,500		
TL5001AIP	296-10203-5-ND	PWM Cont. w/Wide Input Volt Range	8-Dip	1.38	1.15	.92
TL5001AQD	296-10204-5-ND	PWM Cont. w/Wide Input Volt Range	8-SOIC	1.48	1.18	.89
TL5001CDR	296-1294-1-ND	PWM Controller	8-SOIC	1.17	.98	.78
TL5001CDR	296-1294-2-ND	PWM Controller	8-SOIC	1267.502,500		
TL5001CP	296-10205-5-ND	PWM Cont. w/Wide Input Volt Range	8-Dip	1.17	.98	.78
TL5001CPSR	296-10206-1-ND	PWM Cont. w/Wide Input Volt Range	8-SOP	1.17	.98	.78
TL5001CPSR	296-10206-2-ND	PWM Cont. w/Wide Input Volt Range	8-SOP	1038.00/2,000		
TL5001ID	296-10214-5-ND	PWM Cont. w/Wide Input Volt Range	8-SOIC	1.17	.98	.78
TL5001QD	296-10215-5-ND	PWM Cont. w/Wide Input Volt Range	8-SOIC	1.32	1.10	.88
TL5002CD	296-10216-5-ND	PWM Controller	8-SOP	1.40	1.12	.84
TL5002CDR	296-10216-1-ND	PWM Controller	8-SOP	1.40	1.12	.84
TL5002CDR	296-10216-2-ND	PWM Controller	8-SOP	1792.50/2,500		
TLC2932IPWR	296-10262-1-ND	HP Phase Lock Loop	14-TSSOP	3.65	2.92	2.27
TLC2932IPWR	296-10262-2-ND	HP Phase Locked Loop	14-TSSOP	2550.00/2,000		
TLC2933IPW	296-11907-5-ND	HP Phase Locked Loop	14-TSSOP	2.32	1.86	1.45
TLC2934IPWR	296-10263-1-ND	HP Single Phase Locked Loop	14-TSSOP	3.85	3.08	2.40
TLC2934IPWR	296-10263-2-ND	HP Single Phase Locked Loop	14-TSSOP	2678.00/2,000		
TLC2940IPWR	296-10264-1-ND	High Perform. Analog CMOS VCO	8-TSSOP	3.92	3.14	2.44
TLC2940IPWR	296-10264-2-ND	High Perform. Analog CMOS VCO	8-TSSOP	2550.00/2,000		
TLC2943IDB	296-2473-5-ND	Dual Phase Locked Loop	38-SSOP	4.73	3.78	2.94
TPS9104IPT	296-2478-ND	Cellular Subscriber Terminal Power Supply/Audio System	48-LQFP	6.96	5.57	4.70
TPS5100IPW	296-2474-5-ND	3-Channel PWM Controller	16-TSSOP	3.11	2.49	1.94
TPS43000PW	296-12403-5-ND	Hi-Frequency Synchronous PWM Controller *NEW!*	16-TSSOP	5.22	4.18	3.53
TPS54616PWPR	296-12288-1-ND	Synch.-Buck PWM Conv. *NEW!*	28-HTSSOP	9.78	7.83	6.61
TPS54616PWPR	296-12288-2-ND	Synch.-Buck PWM Conv. *NEW!*	28-HTSSOP	12100.00/2,000		
TPS56100PWP	296-2475-5-ND	DSP Power Supply Controller	28-HTSSOP	6.60	5.28	4.46
TPS56300PWP	296-2476-5-ND	DSP Supply Controller	28-HTSSOP	7.78	6.23	5.26
TPS56302PWP	296-2477-5-ND	Dual DSP Supply Controller	28-HTSSOP	7.78	6.23	5.26
UC2524ADW	296-11151-5-ND	Advanced Regulating PWM	16-SOIC	3.53	2.83	2.20
UC2524AN	296-11152-5-ND	Advanced Regulating PWM	16-Dip	3.53	2.83	2.20
UC2525ADW	296-11153-5-ND	Regulating PWM	16-SOP	3.42	2.74	2.13
UC2525AN	296-11154-5-ND	Regulating PWM	16-Dip	3.42	2.74	2.13
UC2525BDW	296-2479-5-ND	Regulating PWM	16-SOIC	5.24	4.20	3.54
UC2526ADW	296-11155-5-ND	Regulating PWM	18-SOP	5.14	4.12	3.47
UC2526AN	296-11156-5-ND	Regulating PWM	18-Dip	5.14	4.12	3.47
UC2572D	296-2480-5-ND	Negative Output Flyback PWM	8-SOIC	4.55	3.64	2.83
UC2572N	296-11157-5-ND	Negative Output Flyback PWM	8-Dip	4.55	3.64	2.83
UC2573N	296-11158-5-ND	Buck PWM Voltage Supply Regulator	8-Dip	4.55	3.64	2.83
UC2625DW	296-11162-5-ND	Brushless DC Motor Controller	28-SOIC	9.60	7.68	6.48
UC2637DW	296-2481-5-ND	DC Motor Switch-Mode Controller	20-SOIC	6.54	5.24	4.42
UC2637N	296-11163-5-ND	DC Motor Switch-Mode Controller	18-Dip	6.54	5.24	4.42
UC2638DW	296-2482-5-ND	PWM Motor Controller	20-SOIC	6.92	5.54	4.68
UC2702D	296-2483-5-ND	Quad PWM Relay Driver	16-SOIC	3.62	2.90	2.26
UC2705D	296-2484-5-ND	High Speed Power Driver	8-SOIC	5.64	4.52	3.81
UC2705N	296-11164-5-ND	High Speed Power Driver	8-Dip	5.64	4.52	3.81
UC2706DW	296-2485-5-ND	Dual Output Driver	16-SOIC	5.64	4.52	3.81
UC2707DW	296-2486-5-ND	Dual Channel Power Driver	16-SOIC	5.68	4.55	3.84
UC2707N	296-11165-5-ND	Dual Channel Power Driver	16-Dip	5.68	4.55	3.84
UC2708DW	296-2487-5-ND	Dual Non-Inverting Power Driver	16-SOP	7.66	6.13	5.18
UC2823ADW	296-2488-5-ND	High Speed PWM Controller	16-SOIC	9.80	7.84	6.62
UC2823AN	296-11166-5-ND	High Speed PWM Controller	16-Dip	9.80	7.84	6.62
UC2823BDW	296-2489-5-ND	High Speed PWM Controller	16-SOIC	9.80	7.84	6.62
UC2823N	296-11167-5-ND	High Speed PWM Controller	16-Dip	7.90	6.32	5.34
UC2825ADW	296-2490-5-ND	High Speed PWM Controller	16-SOIC	8.81	7.94	7.04
UC2825AN	296-11168-5-ND	High Speed PWM Controller	16-Dip	8.81	7.94	7.04
UC2825BDW	296-2491-5-ND	High Speed PWM Controller	16-SOIC	8.81	7.94	7.04
UC2825BN	296-11169-5-ND	High Speed PWM Controller	16-Dip	8.81	7.94	7.04
UC2825DW	296-11170-5-ND	High Speed PWM Controller	16-SOP	5.58	4.47	3.48
UC2825N	296-11171-5-ND	High Speed PWM Controller	16-Dip	5.58	4.47	3.48
UC2827DW-1	296-2492-5-ND	Current Fed PWM Controller	24-SOIC	5.76	4.61	3.89
UC2827DW-2	296-2493-5-ND	Voltage Fed PWM Controller	24-SOIC	5.76	4.61	3.89
UC2834N	296-11172-5-ND	High-Efficiency Regulator Controller	16-Dip	10.31	9.29	8.24
UC2842AD	296-11173-5-ND	Current-Mode PWM Controller	14-SOP	2.20	1.76	1.32
UC2842AD8	296-11174-5-ND	Current-Mode PWM Controller	8-SOP	2.20	1.76	1.32
UC2842AN	296-11175-5-ND	Current-Mode PWM Controller	8-Dip	2.20	1.76	1.32
UC2842N	296-11176-5-ND	Current-Mode PWM Controller	8-Dip	2.38	1.90	1.43
UC2843AD	296-11177-5-ND	Current-Mode PWM Controller	14-SOP	2.05	1.64	1.23
UC2843AD8	296-11178-5-ND	Current-Mode PWM Controller	8-SOP	2.05	1.64	1.23
UC2843AN	296-11179-5-ND	Current-Mode PWM Controller	8-Dip	2.05	1.64	1.23
UC2843D8	296-11180-5-ND	Current-Mode PWM Controller	8-SOP	2.38	1.90	1.43
UC2843N	296-11181-5-ND	Current-Mode PWM Controller	8-Dip	2.38	1.90	1.43
UC2844AD	296-11182-5-ND	Current-Mode PWM Controller	14-SOP	2.18	1.74	1.31
UC2844AN	296-11183-5-ND	Current-Mode PWM Controller	8-Dip	2.18	1.74	1.31
UC2844D8	296-11184-5-ND	Current-Mode PWM Controller	8-SOP	2.38	1.90	1.43
UC2845AD	296-11185-5-ND	Current-Mode PWM Controller	14-SOP	2.18	1.74	1.31
UC2845AD8	296-11186-5-ND	Current-Mode PWM Controller	8-SOP	2.18	1.74	1.31
UC2845AN	296-11187-5-ND	Current-Mode PWM Controller	8-Dip	2.18	1.74	1.31
UC2845N	296-11188-5-ND	Current-Mode PWM Controller	8-Dip	2.35	1.88	1.41
UC2846DW	296-11189-5-ND	Current-Mode PWM Controller	16-SOP	5.42	4.34	3.38
UC2846N	296-11190-5-ND	Current-Mode PWM Controller	16-Dip	5.42	4.34	3.38
UC2849DW	296-2494-5-ND	Secondary-Side Current-Mode Controller	24-SOIC	8.84	7.08	5.97
UC2849N	296-11191-5-ND	Secondary-Side Current-Mode Controller	24-Dip	8.84	7.08	5.97
UC2851N	296-11192-5-ND	Prog. Off-Line PWM Controller	18-Dip	9.31	8.39	7.44
UC2853N	296-11193-5-ND	High Power Factor Pre-Regulator	8-Dip	3.76	3.01	2.34
UC2854ADW	296-2495-5-ND	Power Factor Pre-Regulator	16-SOP	6.88	5.51	4.65
UC2854BDW	296-2496-5-ND	Power Factor Pre-Regulator	16-SOP	6.88	5.51	4.65
UC2854BN	296-11194-5-ND	Power Factor Pre-Regulator	16-Dip	6.88	5.51	4.65
UC2854DW	296-11195-5-ND	Power Factor Pre-Regulator	16-SOP	3.69	2.96	2.30
UC2855ADW	296-2497-5-ND	Power Factor Pre-Regulator	20-SOIC	9.80	8.82	7.83
UC2855BDW	296-2498-5-ND	Power Factor Pre-Regulator	20-SOIC	9.80	8.82	7.83
UC2855BN	296-11196-5-ND	Power Factor Pre-Regulator	20-Dip	9.80	8.82	7.83
UC2856DW	296-11197-5-ND	Improved Current-Mode PWM Controller	16-SOP	10.08	9.08	8.05
UC2856N	296-11198-5-ND	Improved Current-Mode PWM Controller	16-Dip	10.08	9.08	8.05
UC2864DW	296-11199-5-ND	Power Supply Controller	16-SOIC	9.32	7.46	6.30
UC2872DW	296-11200-5-ND	Lamp Ballast Controller	16-SOIC	5.76	4.61	3.89
UC2875N	296-11201-5-ND	Phase Shift PWM Controller	20-Dip	14.16	12.75	11.31
UC2879DW	296-11202-5-ND	Phase Shift PWM Controller	20-SOIC	11.13	10.02	8.89
UC2879N	296-11203-5-ND	Phase Shift PWM Controller	20-Dip	11.13	10.02	8.89
UC2901D	296-11204-5-ND	Isolated FB Generator	14-SOIC	5.56	4.45	3.46
UC2901N	296-11205-5-ND	Isolated FB Generator	14-Dip	5.56	4.45	3.46
UC2901Q	296-11206-5-ND	Isolated FB Generator	20-PLCC	5.56	4.45	3.46
UC2903N	296-11207-5-ND	Supply/Line Monitor	18-Dip	5.04	4.04	3.14
UC2906N	296-11208-5-ND	Lead Acid Charge Management	16-Dip	5.22	4.18	3.53
UC2907DW	296-2499-5-ND	Load Share Controller	16-SOIC	5.13	4.11	3.20
UC3524ADW	296-11211-5-ND	Advanced Regulating PWM	16-SOP	2.68	2.15	1.67
UC3524AN	296-11212-5-ND	Advanced Regulating PWM	16-Dip	2.68	2.15	1.67
UC3524D	296-11213-5-ND	Advanced Regulating PWM	16-SOIC	2.10	1.68	1.26
UC3524N	296-11214-5-ND	Advanced Regulating PWM	16-Dip	2.10	1.68	1.26
UC3525ADW	296-11215-5-ND	Regulating PWM	16-SOP	2.48	1.98	1.49
UC3525AN	296-11216-5-ND	Regulating PWM	16-Dip	2.48	1.98	1.49
UC3525AQ	296-11217-5-ND	Regulating PWM	20-PLCC	2.48	1.98	1.49
UC3525BDW	296-2503-5-ND	Regulating PWM	16-SOIC	4.52	3.62	2.82
UC3525BN	296-11218-5-ND	Regulating PWM	16-Dip	4.52	3.62	2.82
UC3526ADW	296-11219-5-ND	Regulating PWM	18-SOP	3.69	2.96	2.30
UC3526AN	296-11220-5-ND	Regulating PWM	18-Dip	3.69	2.96	2.30
UC3526DW	296-11221-5-ND	Regulating PWM	18-SOP	3.33	2.67	2.08
UC3526N	296-11222-5-ND	Regulating PWM	18-Dip	3.33	2.67	2.08
UC3527AN	296-11223-5-ND	Regulating PWM	16-Dip	3.31	2.65	2.06
UC3527BN	296-2504-5-ND	Regulating PWM	16-Dip	5.09	4.07	3.17
UC3572D	296-2506-5-ND	Negative Output Flyback PWM	8-SOIC	3.24	2.60	2.02
UC3572N	296-11224-5-ND	Negative Output Flyback PWM	8-Dip	3.24	2.60	2.02
UC3573D	296-2507-5-ND	Buck PWM Volt. Supply Regulator	8-SOIC	3.47	2.78	2.16
UC3573N	296-11225-5-ND	Buck PWM Volt. Supply Regulator	8-Dip	3.47	2.78	2.16
UC3578DP	296-11226-5-ND	Buck PWM Volt. Supply Regulator	16-SOP	5.58	4.47	3.77
UC3578N	296-11227-5-ND	Buck PWM Volt. Supply Regulator	16-Dip	5.58	4.47	3.77
UC3584DW	296-11228-5-ND	Secondary Side Sync Post Regulator	16-SOIC	5.94	4.76	4.01
UC3584N	296-11229-5-ND	Secondary Side Sync Post Regulator	16-Dip	5.94	4.76	4.01
UC3625DW	296-11235-5-ND	Brushless DC Motor Controller	28-SOIC	8.84	7.08	5.97
UC3625N	296-11236-5-ND	Brushless DC Motor Controller	28-Dip	8.84	7.08	5.97
UC3637DW	296-2508-5-ND	DC Motor Drive Controller	20-SOIC	5.76	4.61	3.89
UC3637N	296-11237-5-ND	DC Motor Drive Controller	18-Dip	5.76	4.61	3.89
UC3638DW	296-2509-5-ND	PWM Motor Controller	20-SOIC	5.90	4.72	3.99
UC3638N	296-11238-5-ND	PWM Motor Controller	20-Dip	5.90	4.72	3.99
UC3702D	296-2510-5-ND	Quad PWM Relay Driver	16-SOIC	3.29	2.63	2.05
UC3702N	296-11239-5-ND	Quad PWM Relay Driver	16-Dip	3.29	2.63	2.05
UC3705D	296-2511-5-ND	High Speed Power Driver	8-SOIC	4.64	3.71	2.89
UC3705N	296-11240-5-ND	High Speed Power Driver	8-Dip	4.64	3.71	2.89
UC3705T	296-11241-5-ND	High Speed Power Driver	TO-220-5	4.64	3.71	2.89
UC3706DW	296-2512-5-ND	Dual Output Driver	16-SOIC	4.66	3.73	2.90
UC3707DW	296-2513-5-ND	Dual Channel Power Driver	16-SOIC	5.13	4.11	3.20
UC3707N	296-11243-5-ND	Dual Channel Power Driver	16-Dip	5.13	4.11	3.20
UC3708DW	296-2514-5-ND	Dual Non-Inverting Power Driver	16-SOP	5.58	4.47	3.77
UC3708N	296-12120-5-ND	Dual Non-Invert. Power Driver *NEW!*	8-Dip	5.58	4.47	3.77
UC3708NE	296-11244-5-ND	Dual Non-Inverting Power Driver	16-Dip	5.58	4.47	3.77
UC3823ADW	296-2515-5-ND	High Speed PWM Controller	16-SOIC	8.84	7.08	5.97
UC3823AN	296-11261-5-ND	High Speed PWM Controller	16-Dip	8.84	7.08	5.97
UC3823BN	296-11262-5-ND	High Speed PWM Controller	16-Dip	8.83	7.95	7.05
UC3823DW	296-11263-5-ND	High Speed PWM Controller	16-SOP	4.21	3.37	2.62
UC3823Q	296-11264-5-ND	High Speed PWM Controller	20-PLCC	4.21	3.37	2.62
UC3823BDW	296-2516-5-ND	High Speed PWM Controller	16-SOIC	8.83	7.95	7.05
UC3824DW	296-11265-5-ND	High Speed PWM Controller	16-SOP	8.20	6.56	5.54
UC3824N	296-11266-5-ND	High Speed PWM Controller	16-Dip	8.20	6.56	5.54
UC3825ADW	296-2517-5-ND	High Speed PWM Controller	16-SOIC	9.24	7.40	6.24
UC3825AN	296-11267-5-ND	High Speed PWM Controller	16-Dip	9.24	7.40	6.24
UC3825AQ	296-11268-5-ND	High Speed PWM Controller	20-PLCC	9.24	7.40	6.24
UC3825BDW	296-2518-5-ND	High Speed PWM Controller	16-SOIC	9.24	7.40	6.24
UC3825BN	296-11269-5-ND	High Speed PWM Controller	16-Dip	9.24	7.40	6.24
UC3825DW	296-11270-5-ND	High Speed PWM Controller	16-SOP	4.32	3.46	2.69
UC3825N	296-11271-5-ND	High Speed PWM Controller	16-Dip	4.32	3.46	2.69
UC3827DW-1	296-2519-5-ND	Buck, Current Fed PWM Controller	24-SOIC	8.50	7.65	6.79
UC3827DW-2	296-2520-5-ND	Buck, Voltage Fed PWM Controller	24-SOIC	8.50	7.65	6.79
UC3827N-1	296-2521-5-ND	Buck, Current Fed PWM Controller	24-Dip	8.50	7.65	6.79
UC3827N-2	296-2522-5-ND	Buck, Voltage Fed PWM Controller	24-Dip	8.50	7.65	6.79
UC3834N	296-11275-5-ND	High Efficiency Linear Regulator	16-Dip	8.46	7.62	6.76
UC3835N	296-2523-5-ND	High Efficiency Regulator Controller	8-Dip	5.50	4.40	3.72
UC3836D	296-2524-5-ND	High Efficiency Regulator Controller	8-SOIC	6.26	5.01	4.23
UC3836N	296-11276-5-ND	High Efficiency Reg. Controller	8-Dip	6.26	5.01	4.23
UC3841N	296-11277-5-ND	Prog., Off-Line, PWM Controller	18-Dip	7.76	6.21	5.24
UC3842AD	296-11278-5-ND	Current-Mode PWM Controller	14-SOP	1.65	1.32	.99
UC3842AD8	296-11279-5-ND	Current-Mode PWM Controller	8-SOP	1.65	1.32	.99
UC3842AN	296-11280-5-ND	Current-Mode PWM Controller	8-Dip	1.65	1.32	.99

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
UC3842D8	296-11281-5-ND	Current-Mode PWM Controller	8-SOP	1.60	1.28	.96
UC3842N	296-11282-5-ND	Current-Mode PWM Controller	8-Dip	1.60	1.28	.96
UC3843AD	296-11283-5-ND	Current-Mode PWM Controller	14-SOP	1.65	1.32	.99
UC3843AD8	296-11284-5-ND	Current-Mode PWM Controller	8-SOP	1.65	1.32	.99
UC3843AN	296-11285-5-ND	Current-Mode PWM Controller	8-Dip	1.65	1.32	.99
UC3843D	296-11286-5-ND	Current-Mode PWM Controller	14-SOP	1.65	1.32	.99
UC3843D8	296-11287-5-ND	Current-Mode PWM Controller	8-SOP	1.65	1.32	.99
UC3843N	296-11288-5-ND	Current-Mode PWM Controller	8-Dip	1.65	1.32	.99
UC3844AD	296-11289-5-ND	Current-Mode PWM Controller	14-SOP	1.65	1.32	.99
UC3844AD8	296-11290-5-ND	Current-Mode PWM Controller	8-SOP	1.65	1.32	.99
UC3844AN	296-11291-5-ND	Current-Mode PWM Controller	8-Dip	1.65	1.32	.99
UC3844D	296-11292-5-ND	Current-Mode PWM Controller	14-SOP	1.65	1.32	.99
UC3844D8	296-11293-5-ND	Current-Mode PWM Controller	8-SOP	1.65	1.32	.99
UC3844N	296-11294-5-ND	Current-Mode PWM Controller	8-Dip	1.65	1.32	.99
UC3845AD	296-11295-5-ND	Current-Mode PWM Controller	14-SOP	1.65	1.32	.99
UC3845AD8	296-11296-5-ND	Current-Mode PWM Controller	8-SOP	1.65	1.32	.99
UC3845AN	296-11297-5-ND	Current-Mode PWM Controller	8-Dip	1.65	1.32	.99
UC3845D	296-11298-5-ND	Current-Mode PWM Controller	14-SOP	1.65	1.32	.99
UC3845D8	296-11299-5-ND	Current-Mode PWM Controller	8-SOP	1.65	1.32	.99
UC3846DW	296-11300-5-ND	Current-Mode PWM Controller	16-SOP	4.07	3.26	2.54
UC3846N	296-11301-5-ND	Current-Mode PWM Controller	16-Dip	4.07	3.26	2.54
UC3847DW	296-11302-5-ND	Current-Mode PWM Controller	16-SOP	5.38	4.31	3.35
UC3847N	296-11303-5-ND	Current-Mode PWM Controller	16-Dip	5.38	4.31	3.35
UC3848DW	296-11304-5-ND	Avg. Current Mode PWM Controller	16-SOP	7.18	5.75	4.85
UC3849DW	296-2525-5-ND	Secondary-Side Current-Mode Controller	24-SOIC	6.88	5.51	4.65
UC3851N	296-11305-5-ND	Programmable Off-Line PWM Controller	18-Dip	8.60	6.88	5.81
UC3852D	296-11306-5-ND	Power Factor Pre-Regulator	8-SOIC	3.44	2.76	2.15
UC3852N	296-11307-5-ND	Power Factor Pre-Regulator	8-Dip	3.44	2.76	2.15
UC3853D	296-11308-5-ND	Power Factor Pre-Regulator	8-SOIC	3.15	2.52	1.96
UC3853N	296-11309-5-ND	Power Factor Pre-Regulator	8-Dip	3.15	2.52	1.96
UC3854ADW	296-2526-5-ND	Power Factor Pre-Regulator	16-SOP	5.40	4.32	3.36
UC3854AN	296-11310-5-ND	Power Factor Pre-Regulator	16-Dip	5.40	4.32	3.36
UC3854BDW	296-2527-5-ND	Power Factor Pre-Regulator	16-SOP	5.40	4.32	3.36
UC3854BN	296-11311-5-ND	Power Factor Pre-Regulator	16-Dip	5.40	4.32	3.36
UC3854DW	296-11312-5-ND	Power Factor Pre-Regulator	16-SOIC	3.02	2.42	1.88
UC3854N	296-11313-5-ND	Power Factor Pre-Regulator	16-Dip	3.02	2.42	1.88
UC3855ADW	296-2528-5-ND	Power Factor Pre-Regulator	20-SOIC	9.98	7.99	6.74
UC3855AN	296-11314-5-ND	Power Factor Pre-Regulator	20-Dip	9.98	7.99	6.74
UC3855BDW	296-2529-5-ND	Power Factor Pre-Regulator	20-SOIC	9.98	7.99	6.74
UC3855BN	296-11315-5-ND	Power Factor Pre-Regulator	20-Dip	9.98	7.99	6.74
UC3856DW	296-11316-5-ND	Current-Mode PWM Controller	16-SOIC	7.56	6.05	5.11
UC3856N	296-11317-5-ND	Current-Mode PWM Controller	16-Dip	7.56	6.05	5.11
UC3861N	296-11318-5-ND	Resonant-Mode Power Supply Controllers	16-Dip	5.50	4.40	3.72
UC3862N	296-11319-5-ND	Resonant-Mode Power Supply Controllers	16-Dip	5.50	4.40	3.72
UC3863N	296-11320-5-ND	Resonant-Mode Power Supply Controllers	16-Dip	5.50	4.40	3.72
UC3864DW	296-11321-5-ND	Resonant-Mode Power Supply Controllers	16-SOIC	5.50	4.40	3.72
UC3864N	296-11322-5-ND	Resonant-Mode Power Supply Controllers	16-Dip	5.50	4.40	3.72
UC3865N	296-11323-5-ND	Resonant-Mode Power Supply Controllers	16-Dip	5.50	4.40	3.72
UC3867N	296-11324-5-ND	Resonant-Mode Power Supply Controllers	16-Dip	5.50	4.40	3.72
UC3868N	296-11325-5-ND	Resonant-Mode Power Supply Controllers	16-Dip	5.20	4.16	3.24
UC3875DWP	296-11331-5-ND	Phase Shift Resonant Controller	28-SOIC	11.11	10.01	8.88
UC3875N	296-11332-5-ND	Phase Shift Resonant Controller	20-Dip	11.11	10.01	8.88
UC3876N	296-11333-5-ND	Phase Shift Resonant Controller	20-Dip	11.85	10.67	9.46
UC3879DW	296-11334-5-ND	Phase Shift Resonant Controller	20-SOIC	8.75	7.88	6.99
UC3879N	296-11335-5-ND	Phase Shift Resonant Controller	20-Dip	8.75	7.88	6.99
UC3886D	296-11336-5-ND	Current-Mode PWM Controller	16-SOIC	5.15	4.13	3.21
UC3886N	296-11337-5-ND	Current-Mode PWM Controller	16-Dip	5.15	4.13	3.21
UC3902D	296-11340-5-ND	Load Share Controller	8-SOIC	3.76	3.01	2.34
UC3902N	296-11341-5-ND	Load Share Controller	8-Dip	3.76	3.01	2.34
UC3907DW	296-2530-5-ND	Load Share Controller	16-SOIC	4.23	3.39	2.64
UC3907N	296-11344-5-ND	Load Share Controller	16-Dip	4.23	3.39	2.64
UCC28C40DGK	296-12570-5-ND	BiCMOS Low Power Current-Mode PWM Controller *NEW!*	8-MSOP	2.39	1.91	1.49
UCC28C40P	296-12571-5-ND	BiCMOS Low Power Current-Mode PWM Controller *NEW!*	8-Dip	2.39	1.91	1.49
UCC28C41DGK	296-12572-5-ND	BiCMOS Low Power Current-Mode PWM Controller *NEW!*	8-MSOP	2.39	1.91	1.49
UCC28C41P	296-12573-5-ND	BiCMOS Low Power Current-Mode PWM Controller *NEW!*	8-Dip	2.39	1.91	1.49
UCC28C42DGK	296-12291-5-ND	BiCMOS LP Current-Mode PWM Controller *NEW!*	8-MSOP	2.39	1.91	1.49
UCC28C43DGK	296-12292-5-ND	BiCMOS LP Current-Mode PWM Controller *NEW!*	8-MSOP	2.39	1.91	1.49
UCC28C44DGK	296-12574-5-ND	BiCMOS Low Power Current-Mode PWM Controller *NEW!*	8-MSOP	2.39	1.91	1.49
UCC28C44P	296-12575-5-ND	BiCMOS Low Power Current-Mode PWM Controller *NEW!*	8-Dip	2.39	1.91	1.49
UCC28C45D	296-12576-5-ND	BiCMOS Low Power Current-Mode PWM Controller *NEW!*	8-SOIC	2.39	1.91	1.49
UCC28C45DGK	296-12293-5-ND	BiCMOS LP Current-Mode PWM Controller *NEW!*	8-MSOP	2.39	1.91	1.49
UCC38C43D	296-12253-5-ND	BiCMOS LP Current Mode PWM Controller *NEW!*	8-SOIC	2.35	1.88	1.41
UCC2570D	296-11372-5-ND	Low Power PWM	14-SOP	5.18	4.15	3.50
UCC2570N	296-11373-5-ND	Low Power PWM	14-Dip	6.20	4.96	4.19
UCC2580D-1	296-11374-5-ND	Single Ended Active Clamp/Reset PWM	16-SOP	7.50	6.00	5.07
UCC2580D-2	296-11375-5-ND	Single Ended Active Clamp/Reset PWM	16-SOP	7.50	6.00	5.07
UCC2580D-3	296-11376-5-ND	Single Ended Active Clamp/Reset PWM	16-SOP	7.50	6.00	5.07
UCC2580D-4	296-11377-5-ND	Single Ended Active Clamp/Reset PWM	16-SOP	7.50	6.00	5.07
UCC2580N-1	296-11378-5-ND	Single Ended Active Clamp/Reset PWM	16-Dip	7.50	6.00	5.07
UCC2580N-2	296-11671-5-ND	Single Ended Active Clamp/Reset PWM	16-Dip	7.50	6.00	5.07
UCC2580N-3	296-11672-5-ND	Single Ended Active Clamp/Reset PWM	16-Dip	7.50	6.00	5.07
UCC2580N-4	296-11673-5-ND	Single Ended Active Clamp/Reset PWM	16-Dip	7.50	6.00	5.07
UCC2581D	296-11379-5-ND	Micropower Voltage Mode PWM	14-SOP	4.10	3.28	2.55
UCC2583D	296-12392-5-ND	Switch Mode Secondary Side Post Regulator	14-SOP	4.10	3.28	2.55
UCC2583N	296-12115-5-ND	Switch Mode Secondary Side Post Regulator	14-Dip	5.54	4.44	3.74
UCC2800D	296-11380-5-ND	LP BICMOS Current-Mode PWM	8-SOP	3.76	3.01	2.34
UCC2800N	296-11381-5-ND	LP BICMOS Current-Mode PWM	8-Dip	3.76	3.01	2.34
UCC2801D	296-11382-5-ND	LP BICMOS Current-Mode PWM	8-SOP	3.76	3.01	2.34
UCC2801N	296-11383-5-ND	LP BICMOS Current-Mode PWM	8-Dip	3.76	3.01	2.34
UCC2802D	296-11384-5-ND	LP BICMOS Current-Mode PWM	8-SOP	3.76	3.01	2.34
UCC2802N	296-11385-5-ND	LP BICMOS Current-Mode PWM	8-Dip	3.76	3.01	2.34
UCC2803D	296-11386-5-ND	LP BICMOS Current-Mode PWM	8-SOP	3.47	2.78	2.16
UCC2803N	296-11387-5-ND	LP BICMOS Current-Mode PWM	8-Dip	3.76	3.01	2.34
UCC2804D	296-11388-5-ND	LP BICMOS Current-Mode PWM	8-SOP	3.47	2.78	2.16
UCC2804N	296-11389-5-ND	LP BICMOS Current-Mode PWM	8-Dip	3.47	2.78	2.16
UCC2805D	296-11390-5-ND	LP BICMOS Current-Mode PWM	8-SOP	3.76	3.01	2.34
UCC2805N	296-11675-5-ND	LP BiCMOS Current-Mode PWM	8-Dip	3.76	3.01	2.34
UCC2806DW	296-11391-5-ND	Low Power, Dual Output Current-Mode PWM	16-SOIC	9.20	7.36	6.21
UCC2806M	296-11676-5-ND	Low Power, Dual-Output, Current-Mode PWM	16-SSOP	9.20	7.36	6.21
UCC2806PW	296-12393-5-ND	Low Power, Dual Output, Current-Mode PWM Controller	16-TSSOP	9.20	7.36	6.21
UCC2807D-1	296-11393-5-ND	Programmable Duty Cycle PWM	8-SOP	4.10	3.28	2.55
UCC2807D-2	296-2533-5-ND	Programmable Max-Duty PWM	8-SOP	4.10	3.28	2.55
UCC2807D-3	296-11678-5-ND	Programmable Max-Duty PWM	8-SOIC	4.10	3.28	2.55
UCC2807N-2	296-11394-5-ND	Programmable Duty Cycle PWM	8-Dip	4.10	3.28	2.55
UCC2808AD-1	296-11395-5-ND	LP Current-Mode Push/Pull PWM	8-SOP	3.56	2.85	2.22
UCC2808AD-2	296-11396-5-ND	LP Current-Mode Push/Pull PWM	8-SOP	3.56	2.85	2.22
UCC2808AN-1	296-11397-5-ND	LP Current-Mode Push/Pull PWM	8-Dip	3.56	2.85	2.22
UCC2808AN-2	296-11398-5-ND	LP Current-Mode Push/Pull PWM	8-Dip	3.56	2.85	2.22
UCC2808APW-1	296-11679-5-ND	Current-Mode Push/Pull PWM	8-TSSOP	3.56	2.85	2.22
UCC2808APW-2	296-11680-5-ND	Current-Mode Push/Pull PWM	8-TSSOP	3.56	2.85	2.22
UCC2808D-1	296-2534-5-ND	Current-Mode Push/Pull PWM	8-SOIC	3.56	2.85	2.22
UCC2808D-2	296-2535-5-ND	Current-Mode Push/Pull PWM	8-SOIC	3.56	2.85	2.22
UCC2808N-1	296-11399-5-ND	LP Current-Mode Push/Pull PWM	8-Dip	3.56	2.85	2.22
UCC2808N-2	296-11400-5-ND	LP Current-Mode Push/Pull PWM	8-Dip	3.56	2.85	2.22
UCC2809D-1	296-11401-5-ND	Economy Primary Side Controller	8-SOP	2.08	1.66	1.25
UCC2809D-2	296-11681-5-ND	Primary Side Controller	8-SOIC	2.08	1.66	1.25
UCC2809P-1	296-11402-5-ND	Economy Primary Side Controller	8-TSSOP	2.08	1.66	1.25
UCC2809P-2	296-11403-5-ND	Economy Primary Side Controller	8-TSSOP	2.08	1.66	1.25
UCC2810DW	296-2536-5-ND	Dual Channel Synchronous Current-Mode PWM	16-SOIC	6.16	4.93	4.16
UCC2810N	296-11404-5-ND	Dual Channel Synchronous Current-Mode PWM	16-Dip	6.16	4.93	4.16
UCC2813D-0	296-11682-5-ND	LP BiCMOS Current-Mode PWM	8-SOIC	2.66	2.13	1.66
UCC2813D-1	296-11405-5-ND	LP BiCMOS Current-Mode PWM	8-SOP	2.66	2.13	1.66
UCC2813D-2	296-11406-5-ND	LP BiCMOS Current-Mode PWM	8-SOP	2.66	2.13	1.66
UCC2813D-3	296-11407-5-ND	LP BiCMOS Current-Mode PWM	8-SOP	2.66	2.13	1.66
UCC2813D-4	296-11408-5-ND	LP BiCMOS Current-Mode PWM	8-SOP	2.66	2.13	1.66
UCC2813D-5	296-11409-5-ND	LP BiCMOS Current-Mode PWM	8-SOP	2.66	2.13	1.66
UCC2813N-0	296-12055-5-ND	LP BiCMOS Current-Mode PWM	8-Dip	2.66	2.13	1.66
UCC2813N-1	296-12056-5-ND	LP BiCMOS Current-Mode PWM	8-Dip	2.66	2.13	1.66
UCC2813N-2	296-12057-5-ND	LP BiCMOS Current-Mode PWM	8-Dip	2.66	2.13	1.66
UCC2813N-4	296-12058-5-ND	LP BiCMOS Current-Mode PWM	8-Dip	2.66	2.13	1.66
UCC2813N-5	296-12059-5-ND	LP BiCMOS Current-Mode PWM	8-Dip	2.66	2.13	1.66
UCC2813PW-0	296-12060-5-ND	LP BiCMOS Current-Mode PWM	8-TSSOP	2.66	2.13	1.66
UCC2813PW-1	296-12061-5-ND	LP BiCMOS Current-Mode PWM	8-TSSOP	2.66	2.13	1.66
UCC2813PW-2	296-12062-5-ND	LP BiCMOS Current-Mode PWM	8-TSSOP	2.66	2.13	1.66
UCC2813PW-3	296-12063-5-ND	LP BiCMOS Current-Mode PWM	8-TSSOP	2.66	2.13	1.66
UCC2813PW-4	296-12064-5-ND	LP BiCMOS Current-Mode PWM	8-TSSOP	2.66	2.13	1.66
UCC2813PW-5	296-12065-5-ND	LP BiCMOS Current-Mode PWM	8-TSSOP	2.66	2.13	1.66
UCC2817D	296-11410-5-ND	Power Factor Pre-Regulator	16-SOP	5.33	4.27	3.32
UCC2817DW	296-11411-5-ND	Power Factor Pre-Regulator	16-SOP	5.33	4.27	3.32
UCC2818DW	296-11412-5-ND	Power Factor Pre-Regulator	16-SOP	5.33	4.27	3.32
UCC2819D	296-12537-5-ND	BiCMOS Pwr. Factor Prereg. *NEW!*	16-SOIC	5.33	4.27	3.32
UCC2819N	296-12538-5-ND	BiCMOS Pwr. Factor Prereg. *NEW!*	16-Dip	5.33	4.27	3.32
UCC2895DW	296-2537-5-ND	BiCMOS Advanced Phase Shift Resonant Controller	20-SOIC	9.32	7.46	6.30
UCC2895N	296-11418-5-ND	BiCMOS Advanced Phase Shift Resonant Controller	20-Dip	9.32	7.46	6.30
UCC2895PW	296-11419-5-ND	BiCMOS Advanced Phase Shift Resonant Controller	20-TSSOP	9.42	7.54	6.36
UCC2960D	296-11421-5-ND	Primary Side Startup Controller	8-SOP	2.79	2.24	1.74
UCC2960P	296-11422-5-ND	Primary Side Startup Controller	8-Dip	2.79	2.24	1.74
UCC2961D	296-11423-5-ND	Adv. Primary Side Startup Controller	14-SOP	2.99	2.40	1.87
UCC2961N	296-11424-5-ND	Adv. Primary Side Startup Controller	14-Dip	2.99	2.40	1.87
UCC2976PW	296-12539-5-ND	3-13.5V Multi-Topology Transformer Controller *NEW!*	8-TSSOP	3.96	3.17	2.47
UCC2977PW	296-12540-5-ND	3-13.5V Multi-Topology Transformer Controller *NEW!*	8-TSSOP	3.96	3.17	2.47
UCC3570N	296-11435-5-ND	Low Power PWM	14-Dip	4.84	3.87	3.01
UCC3580D-1	296-11436-5-ND	Active Clamp/Reset PWM	16-SOIC	6.48	5.19	4.38
UCC3580D-2	296-11437-5-ND	Active Clamp/Reset PWM	16-SOIC	6.48	5.19	4.38
UCC3580D-3	296-11438-5-ND	Active Clamp/Reset PWM	16-SOIC	6.48	5.19	4.38
UCC3580D-4	296-11439-5-ND	Active Clamp/Reset PWM	16-SOIC	6.48	5.19	4.38
UCC3580N-1	296-11440-5-ND	Active Clamp/Reset PWM	16-Dip	6.48	5.19	4.38
UCC3580N-2	296-11441-5-ND	Active Clamp/Reset PWM	16-Dip	6.48	5.19	4.38
UCC3580N-3	296-11442-5-ND	Active Clamp/Reset PWM	16-Dip	6.48	5.19	4.38
UCC3580N-4	296-11443-5-ND	Active Clamp/Reset PWM	16-SOP	6.48	5.19	4.38
UCC3581D	296-11444-5-ND	Micropower Voltage Mode PWM	14-SOIC	3.44	2.76	2.15
UCC3581N	296-11445-5-ND	Micropower Voltage Mode PWM	14-Dip	3.44	2.76	2.15
UCC3583D	296-11446-5-ND	Switch Mode Secondary Side Post Regulator	14-SOIC	5.06	4.05	3.15
UCC3583N	296-11447-5-ND	Switch Mode Secondary Side Post Regulator	14-Dip	5.06	4.05	3.15

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
UCC3588D	296-2540-5-ND	5-Bit Programmable Power Supply Controller	20-SOIC	4.23	3.39	2.64
UCC3626DW	296-11452-5-ND	Brushless DC Motor Controller	28-SOIC	9.20	8.28	7.35
UCC3626PW	296-11453-5-ND	Brushless DC Motor Controller	28-TSSOP	9.28	8.36	7.41
UCC3800D	296-11457-5-ND	LP BICMOS Current-Mode PWM	8-SOP	2.41	1.93	1.50
UCC3800N	296-11458-5-ND	LP BICMOS Current-Mode PWM	8-Dip	2.41	1.93	1.50
UCC3800PW	296-11459-5-ND	Low Power BICMOS Current-Mode PWM	8-TSSOP	2.52	2.02	1.57
UCC3801D	296-11460-5-ND	LP BICMOS Current-Mode PWM	8-SOP	2.41	1.93	1.50
UCC3801N	296-11461-5-ND	LP BICMOS Current-Mode PWM	8-Dip	2.41	1.93	1.50
UCC3801PW	296-11462-5-ND	Low Power BICMOS Current-Mode PWM	8-TSSOP	2.52	2.02	1.57
UCC3802D	296-11463-5-ND	LP BICMOS Current-Mode PWM	8-SOP	2.41	1.93	1.50
UCC3802N	296-11464-5-ND	LP BICMOS Current-Mode PWM	8-Dip	2.41	1.93	1.50
UCC3802PW	296-11465-5-ND	Low Power BICMOS Current-Mode PWM	8-TSSOP	2.52	2.02	1.57
UCC3803D	296-12195-5-ND	Low Power BiCMOS Current Mode PWM *NEW!*	8-SOIC	2.41	1.93	1.50
UCC3803N	296-11466-5-ND	Low Power BiCMOS Current-Mode PWM	8-Dip	2.41	1.93	1.50
UCC3803PW	296-11467-5-ND	Low Power BiCMOS Current-Mode PWM	8-TSSOP	2.52	2.02	1.57
UCC3804D	296-11468-5-ND	LP BICMOS Current-Mode PWM	8-SOP	2.41	1.93	1.50
UCC3804N	296-11469-5-ND	LP BICMOS Current-Mode PWM	8-Dip	2.41	1.93	1.50
UCC3804PW	296-11470-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	2.52	2.02	1.57
UCC3805D	296-11471-5-ND	LP BICMOS Current-Mode PWM	8-SOP	2.41	1.93	1.50
UCC3805N	296-11472-5-ND	LP BICMOS Current-Mode PWM	8-Dip	2.41	1.93	1.50
UCC3805PW	296-11473-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	2.52	2.02	1.57
UCC3806DW	296-11474-5-ND	Low Power Dual Output Current-Mode PWM	16-SOIC	7.38	5.91	4.99
UCC3806N	296-11475-5-ND	Low Power Dual Output Current-Mode PWM	16-Dip	7.38	5.91	4.99
UCC3806Q	296-11476-5-ND	Low Power Dual Output Current-Mode PWM	20-PLCC	7.38	5.91	4.99
UCC3807D-1	296-2541-5-ND	Prog. Duty Cycle PWM Controller	8-SOP	3.76	3.01	2.34
UCC3807D-2	296-2542-5-ND	Prog. Duty Cycle PWM Controller	8-SOP	3.76	3.01	2.34
UCC3807D-3	296-2543-5-ND	Prog. Duty Cycle PWM Controller	8-SOP	3.76	3.01	2.34
UCC3807N-1	296-11477-5-ND	Prog. Duty Cycle PWM Controller	8-Dip	3.76	3.01	2.34
UCC3807N-2	296-11478-5-ND	Prog. Duty Cycle PWM Controller	8-Dip	3.76	3.01	2.34
UCC3807N-3	296-11479-5-ND	Prog. Duty Cycle PWM Controller	8-Dip	3.76	3.01	2.34
UCC3808AD-1	296-11480-5-ND	LP Current-Mode Push/Pull PWM	8-SOP	3.22	2.58	2.01
UCC3808AD-2	296-11481-5-ND	LP Current-Mode Push/Pull PWM	8-SOP	3.22	2.58	2.01
UCC3808AN-2	296-11482-5-ND	LP Current-Mode Push/Pull PWM	8-Dip	3.22	2.58	2.01
UCC3808APW-1	296-11684-5-ND	LP Current-Mode Push/Pull PWM	8-TSSOP	3.22	2.58	2.01
UCC3808APW-2	296-11685-5-ND	LP Current-Mode Push/Pull PWM	8-TSSOP	3.22	2.58	2.01
UCC3808D-1	296-2544-5-ND	LP Current-Mode Push/Pull PWM	8-SOIC	3.22	2.58	2.01
UCC3808D-2	296-2545-5-ND	LP Current-Mode Push/Pull PWM	8-SOIC	3.22	2.58	2.01
UCC3808N-1	296-11483-5-ND	LP Current-Mode Push/Pull PWM	8-Dip	3.22	2.58	2.01
UCC3808N-2	296-11484-5-ND	LP Current-Mode Push/Pull PWM	8-Dip	3.22	2.58	2.01
UCC3809D-1	296-11485-5-ND	Economy Primary Side Controller	8-SOP	1.88	1.50	1.13
UCC3809D-2	296-11486-5-ND	Economy Primary Side Controller	8-SOP	1.88	1.50	1.13
UCC3809N-1	296-11487-5-ND	Economy Primary Side Controller	8-Dip	1.88	1.50	1.13
UCC3809N-2	296-11488-5-ND	Economy Primary Side Controller	8-Dip	1.88	1.50	1.13
UCC3809P-1	296-11489-5-ND	Economy Primary Side Controller	8-TSSOP	1.88	1.50	1.13
UCC3809PW-1	296-11490-5-ND	Economy Primary Side Controller	8-TSSOP	1.88	1.50	1.13
UCC3809PW-2	296-12395-5-ND	Economy Primary Side Controller	8-TSSOP	1.88	1.50	1.13
UCC3810DW	296-2546-5-ND	2-Channel Sync. Current-Mode PWM	16-SOIC	3.67	2.94	2.29
UCC3810N	296-11491-5-ND	2-Channel Sync. Current-Mode PWM	16-Dip	3.67	2.94	2.29
UCC3813D-0	296-11492-5-ND	LP BICMOS Current-Mode PWM	8-SOP	1.75	1.40	1.05
UCC3813D-1	296-11493-5-ND	LP BICMOS Current-Mode PWM	8-SOP	1.75	1.40	1.05
UCC3813D-2	296-11494-5-ND	LP BICMOS Current-Mode PWM	8-SOP	1.75	1.40	1.05
UCC3813D-3	296-11495-5-ND	LP BICMOS Current-Mode PWM	8-SOP	1.75	1.40	1.05
UCC3813D-4	296-11496-5-ND	LP BICMOS Current-Mode PWM	8-SOP	1.75	1.40	1.05
UCC3813D-5	296-11497-5-ND	LP BICMOS Current-Mode PWM	8-SOP	1.75	1.40	1.05
UCC3813N-0	296-11498-5-ND	LP BICMOS Current-Mode PWM	8-Dip	1.75	1.40	1.05
UCC3813N-1	296-11499-5-ND	LP BICMOS Current-Mode PWM	8-Dip	1.75	1.40	1.05
UCC3813N-2	296-11500-5-ND	LP BICMOS Current-Mode PWM	8-Dip	1.75	1.40	1.05
UCC3813N-3	296-11501-5-ND	LP BICMOS Current-Mode PWM	8-Dip	1.75	1.40	1.05
UCC3813N-4	296-11502-5-ND	LP BICMOS Current-Mode PWM	8-Dip	1.75	1.40	1.05
UCC3813N-5	296-11503-5-ND	LP BICMOS Current-Mode PWM	8-Dip	1.75	1.40	1.05
UCC3813PW-0	296-11504-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	1.75	1.40	1.05
UCC3813PW-1	296-11505-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	1.75	1.40	1.05
UCC3813PW-2	296-11506-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	1.75	1.40	1.05
UCC3813PW-3	296-11507-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	1.75	1.40	1.05
UCC3813PW-4	296-11508-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	1.75	1.40	1.05
UCC3813PW-5	296-11509-5-ND	LP BICMOS Current-Mode PWM	8-TSSOP	1.75	1.40	1.05
UCC3817D	296-2547-5-ND	Power Factor Pre-Regulator	16-SOP	4.43	3.55	2.76
UCC3817DW	296-11510-5-ND	Power Factor Pre-Regulator	16-SOP	4.43	3.55	2.76
UCC3817N	296-11512-5-ND	Power Factor Pre-Regulator	16-Dip	4.43	3.55	2.76
UCC3818D	296-11513-5-ND	Power Factor Pre-Regulator	16-SOIC	4.43	3.55	2.76
UCC3818DW	296-11514-5-ND	Power Factor Pre-Regulator	16-Dip	4.43	3.55	2.76
UCC3818N	296-11515-5-ND	Power Factor Pre-Regulator	16-Dip	4.43	3.55	2.76
UCC3837D	296-2548-5-ND	N-FET Supply Controller	8-SOIC	3.94	3.15	2.45
UCC3839D	296-11516-5-ND	Secondary Side Average Current Mode Controller	14-SOIC	3.58	2.87	2.23
UCC3839N	296-11517-5-ND	Secondary Side Average Current Mode Controller	14-Dip	3.58	2.87	2.23
UCC3884N	296-11530-5-ND	Current-Mode PWM Controller	16-Dip	3.24	2.60	2.02
UCC3888D	296-11531-5-ND	Off-Line Power Supply Controller	8-SOIC	3.24	2.60	2.02
UCC3888N	296-11532-5-ND	Off-Line Power Supply Controller	8-Dip	3.24	2.60	2.02
UCC3889D	296-11533-5-ND	Off-Line Power Supply Controller	8-SOIC	2.05	1.64	1.23
UCC3889N	296-11534-5-ND	Off-Line Power Supply Controller	8-Dip	2.05	1.64	1.23
UCC3895DW	296-2552-5-ND	Phase Shift PWM Controller	20-SOIC	7.78	6.23	5.26
UCC3895N	296-11538-5-ND	Phase Shift PWM Controller	20-Dip	7.78	6.23	5.26
UCC3895PW	296-11686-5-ND	Phase Shift PWM Controller	20-TSSOP	7.88	6.31	5.32
UCC3895Q	296-11539-5-ND	Phase Shift PWM Controller	20-PLCC	7.78	6.23	5.26
UCC3960D	296-11561-5-ND	Primary Side Startup Controller	8-SOP	2.54	2.04	1.59
UCC3960P	296-11562-5-ND	Primary Side Startup Controller	8-Dip	2.54	2.04	1.59
UCC3961D	296-11563-5-ND	Adv. Primary Side Startup Controller	14-SOP	2.77	2.22	1.73
UCC3961N	296-11564-5-ND	Adv. Primary Side Startup Controller	14-Dip	2.77	2.22	1.73
UCC25701D	296-11363-5-ND	Advanced Voltage-Mode PWM	14-SOP	5.60	4.48	3.78
UCC25701N	296-11364-5-ND	Advanced Voltage-Mode PWM	14-Dip	5.60	4.48	3.78
UCC25701PW	296-11365-5-ND	Advanced Voltage-Mode PWM	14-TSSOP	5.70	4.56	3.85
UCC25702D	296-12194-5-ND	Advanced Voltage-Mode PWM *NEW!*	14-SOIC	5.60	4.48	3.78
UCC25702N	296-11366-5-ND	Advanced Voltage-Mode PWM	14-Dip	5.60	4.48	3.78
UCC25702PW	296-11367-5-ND	Advanced Voltage-Mode PWM	14-TSSOP	5.70	4.56	3.85
UCC25705D	296-11368-5-ND	High Speed Voltage-Mode PWM	8-SOP	2.43	1.95	1.52
UCC25705DGK	296-12175-5-ND	High Speed Voltage-Mode PWM	8-MSOP	2.43	1.95	1.52
UCC25705P	296-11369-5-ND	High Speed Voltage-Mode PWM	8-Dip	2.43	1.95	1.52
UCC25706D	296-11370-5-ND	High Speed Voltage-Mode PWM	8-SOP	2.43	1.95	1.52
UCC25706DGK	296-11371-5-ND	High Speed Voltage-Mode PWM	8-MSOP	2.43	1.95	1.52
UCC25706P	296-12114-5-ND	High Speed Voltage-Mode PWM	8-Dip	2.43	1.95	1.52
UCC29421N	296-2538-5-ND	Multimode High-Freq. PWM Controller	16-Dip	3.62	2.90	2.26
UCC29421PW	296-12394-5-ND	Multimode High Frequency Synchronous Controller	20-TSSOP	5.22	4.18	3.25
UCC29422N	296-2539-5-ND	Multimode High-Freq. PWM Controller	16-Dip	5.33	4.27	3.32
UCC35701D	296-11425-5-ND	Advanced Voltage-Mode PWM	14-SOIC	4.12	3.30	2.57
UCC35701N	296-11426-5-ND	Advanced Voltage-Mode PWM	14-Dip	4.12	3.30	2.57
UCC35701PW	296-11427-5-ND	Advanced Voltage-Mode PWM	14-TSSOP	4.23	3.39	2.64
UCC35702D	296-11428-5-ND	Advanced Voltage-Mode PWM	14-SOIC	4.12	3.30	2.57
UCC35702N	296-11429-5-ND	Advanced Voltage-Mode PWM	14-Dip	4.12	3.30	2.57
UCC35702PW	296-11430-5-ND	Advanced Voltage-Mode PWM	14-TSSOP	4.23	3.39	2.64
UCC35705D	296-11431-5-ND	High Speed Voltage-Mode PWM	8-SOP	2.38	1.90	1.43
UCC35705DGK	296-11683-5-ND	High Speed Voltage-Mode PWM	8-MSOP	2.38	1.90	1.43
UCC35705P	296-11432-5-ND	High Speed Voltage-Mode PWM	8-Dip	2.38	1.90	1.43
UCC35706D	296-11433-5-ND	High Speed Voltage-Mode PWM	8-SOP	2.38	1.90	1.43
UCC35706DGK	296-11434-5-ND	High Speed Voltage-Mode PWM	8-MSOP	2.38	1.90	1.43
UCC38500DW	296-11518-5-ND	BICMOS Combined PFC/PWM Controller	20-SOIC	4.79	3.84	2.99
UCC38500N	296-11520-5-ND	BICMOS Combined PFC/PWM Controller	20-Dip	4.79	3.84	2.99
UCC38501DW	296-11521-5-ND	BICMOS Combined PFC/PWM Controller	20-SOIC	4.79	3.84	2.99
UCC38501N	296-11522-5-ND	BICMOS Combined PFC/PWM Controller	20-Dip	4.79	3.84	2.99
UCC38502DW	296-12404-5-ND	BICMOS PFC/PWM Combination Controller *NEW!*	20-SOIC	4.79	3.84	2.99
UCC38502N	296-11523-5-ND	BICMOS Combined PFC/PWM Controller	20-Dip	4.79	3.84	2.99
UCC38503DW	296-12046-5-ND	BiCMOS PFC/PWM Combination Controller	20-SOIC	4.79	3.84	2.99
UCC38503N	296-11524-5-ND	BICMOS Combined PFC/PWM Controller	20-Dip	4.79	3.84	2.99
UCC39421N	296-11545-5-ND	Multimode Hi-Freq. PWM Controller	16-Dip	4.91	3.93	3.06
UCC39421PW	296-2553-5-ND	Multimode Hi-Frequency PWM Controller	16-TSSOP	5.00	4.00	3.11
UCC39422N	296-11546-5-ND	Multimode Hi-Freq. PWM Controller	20-Dip	5.11	4.09	3.18
UCC39422PW	296-2554-5-ND	Multimode Hi-Frequency PWM Controller	20-TSSOP	5.22	4.18	3.25

Schottky Diode Arrays

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
UC2610N	296-11161-5-ND	Dual Schottky Diode Bridge	8-Dip	5.20	4.16	3.51
UC3610DW	296-11230-5-ND	Dual Schottky Diode Bridge	16-SOIC	4.75	3.80	2.96
UC3610N	296-11231-5-ND	Dual Schottky Diode Bridge	8-Dip	4.75	3.80	2.96
UC3611DW	296-11233-5-ND	Quad Schottky Diode Array	16-SOIC	3.89	3.12	2.43
UC3611N	296-11234-5-ND	Quad Schottky Diode Array	8-Dip	3.89	3.12	2.43

Voltage References

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
LM285D-1-2	296-9521-5-ND	1.2V Micropower Voltage Reference.	8-SOP	2.25	1.80	1.35
LM285D-2-5	296-9522-5-ND	2.5V Micropower Voltage Reference.	8-SOP	2.25	1.80	1.35
LM285LP-1-2	296-9523-5-ND	1.2V Micropower Voltage Reference.	TO-92	1.88	1.50	1.13
LM285LP-2-5	296-9524-5-ND	2.5V Micropower Voltage Reference.	TO-92	1.88	1.50	1.13
LM336BD-2-5	296-9547-5-ND	2.5V Precision Voltage Reference	8-SOP	1.38	1.10	.83
LM336BLP-2-5	296-9548-5-ND	2.5V Precision Voltage Reference	TO-92	1.38	1.10	.83
LM336D-2-5	296-9549-5-ND	2.5V Precision Voltage Reference	8-SOP	1.25	1.00	.75
LM385BD-1-2	296-9556-5-ND	1.2V Micropower Voltage Reference.	8-SOP	1.20	1.00	.80
LM385BD-2-5	296-9557-5-ND	2.5V Micropower Voltage Reference.	8-SOP	1.20	1.00	.80
LM385BLP-1-2	296-9558-5-ND	1.2V Micropower Voltage Reference.	TO-92	1.20	1.00	.80
LM385BLP-2-5	296-9559-5-ND	2.5V Micropower Voltage Reference.	TO-92	1.20	1.00	.80
LM385D-1-2	296-9560-5-ND	1.2V Micropower Voltage Reference.	8-SOP	.90	.75	.60
LM385D-2-5	296-9561-5-ND	2.5V Micropower Voltage Reference.	8-SOP	1.05	.88	.70
LM385LP-1-2	296-9562-5-ND	1.2V Micropower Voltage Reference.	TO-92	.90	.75	.60
LM385LP-2-5	296-9563-5-ND	2.5V Micropower Voltage Reference.	TO-92	.90	.75	.60
LT1004CD-1-2	296-9580-5-ND	1.2V Micropower Voltage Reference.	8-SOP	2.23	1.78	1.34
LT1004CD-2-5	296-9581-5-ND	2.5V Micropower Voltage Reference.	8-SOP	2.23	1.78	1.34
LT1004CLP-1-2	296-9582-5-ND	1.2V Micropower Voltage Reference.	TO-92	2.23	1.78	1.34
LT1004CLP-2-5	296-9583-5-ND	2.5V Micropower Voltage Reference.	TO-92	2.23	1.78	1.34
LT1004ID-2-5	296-9584-5-ND	2.5V Micropower Voltage Reference.	8-SOP	2.23	1.78	1.34
LT1009CLP	296-9585-5-ND	2.5V Integrated Reference Circuit	TO-92	1.38	1.10	.83
LT1009ID	296-9586-5-ND	2.5V Integrated Reference Circuit.	8-SOP	1.38	1.10	.83
LT1009ILP	296-9587-5-ND	2.5V Integrated Reference Circuit	TO-92	1.38	1.10	.83
REF02AP	296-12732-5-ND	+5V Precision Voltage Reference	8-Dip	3.56	2.85	2.22
REF02AU	REF02AU-ND	+5V Voltage Reference	8-SOIC	3.58	2.87	2.23
REF02BP	REF02BP-ND	+5V Precision Voltage Reference	8-Dip	4.86	3.89	3.03
REF02BU	REF02BU-ND	+5V Voltage Reference	8-SOIC	4.86	3.89	3.03
REF102AP	REF102AP-ND	+10V Precision Voltage Reference	8-Dip	4.86	3.89	3.03
REF102AU	REF102AU-ND	+10V Precision Voltage Reference	8-SOIC	6.34	5.08	4.28
REF102BP	REF102BP-ND	10V Precision Voltage Reference	8-Dip	7.88	6.31	5.32
REF200AU	REF200AU-ND	Dual Current Source/Current Sink	8-SOIC	5.42	4.34	3.38
REF1004C-1.2	REF1004C-1.2-ND	1.2V Micropower Voltage Reference	8-SOIC	2.77	2.22	1.73
REF1004C-2.5	REF1004C-2.5-ND	2.5V Micropower Voltage Reference	8-SOIC	2.63	2.11	1.64
REF1004I-1.2	REF1004I-1.2-ND	1.2V Micropower Voltage Reference	8-SOIC	5.06	4.05	3.15
REF1004I-2.5	REF1004I-2.5-ND	2.5V Micropower Voltage Reference	8-SOIC	4.93	3.95	3.07
TL431ACD	296-1286-5-ND	Adjustable Shunt Regulator	8-SOIC	.68	.51	.39
TL431ACDR	296-1286-1-ND	Adjustable Shunt Regulator	8-SOIC	.68	.51	.39
TL431ACDR	296-1286-2-ND	Adjustable Shunt Regulator	8-SOIC	552.50/2,500		
TL431ACLP	296-1287-ND	Adjustable Shunt Regulator	TO-92	.68	.51	.39
TL431ACLPR	296-1287-1-ND	Adjustable Shunt Regulator	TO-92	.68	.51	.39
TL431ACLPR	296-1287-2-ND	Adjustable Shunt Regulator	TO-92	452.00/2,000		
TL431ACP	296-10182-5-ND	Adjustable Shunt Regulator	8-Dip	.68	.51	.39
TL431AID	296-1288-5-ND	Adjustable Shunt Regulator	8-SOIC	.80	.60	.45
TL431AIDR	296-1288-1-ND	Adjustable Shunt Regulator	8-SOIC	.80	.60	.45
TL431AIDR	296-1288-2-ND	Adjustable Shunt Regulator	8-SOIC	650.00/2,500		
TL431AILP	296-10183-5-ND	Adjustable Shunt Regulator	TO-226AA	.80	.60	.45
TL431AILPR	296-10183-1-ND	Adjustable Shunt Regulator	TO-226AA	.80	.60	.45
TL431AILPR	296-10183-2-ND	Adjustable Shunt Regulator	TO-226AA	532.00/2,000		
TL431AIP	296-10184-5-ND	Adjustable Shunt Regulator	8-Dip	.80	.60	.45
TL431CD	296-1289-5-ND	Adjustable Shunt Regulator	8-SOIC	.56	.42	.32

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TL431CDR	296-1289-1-ND	Adjustable Shunt Regulator	8-SOIC	.56	.42	.32
TL431CDR	296-1289-2-ND	Adjustable Shunt Regulator	8-SOIC	455.00/2,500		
TL431CDBVR	296-10185-1-ND	Adjustable Shunt Regulator	SOT-23-5	.56	.42	.32
TL431CDBVR	296-10185-2-ND	Adjustable Shunt Regulator	SOT-23-5	546.00/3,000		
TL431CKTPR	296-10186-1-ND	Adjustable Shunt Regulator	3-PFM	.56	.42	.32
TL431CKTPR	296-10186-2-ND	Adjustable Shunt Regulator	3-PFM	546.00/3,000		
TL431CLP	296-1290-ND	Adjustable Shunt Regulator	TO-92	.56	.42	.32
TL431CLPR	296-1290-1-ND	Adjustable Shunt Regulator	TO-92	.56	.42	.32
TL431CLPR	296-1290-2-ND	Adjustable Shunt Regulator	TO-92	372.00/2,000		
TL431CP	296-1798-5-ND	Adjustable Shunt Regulator	8-Dip	.56	.42	.32
TL431CPK	296-1991-1-ND	Adjustable Shunt Regulator	3-Sip	.93	.78	.62
TL431CPWR	296-12497-1-ND	Adjustable Shunt Regulator *NEW!*	8-TSSOP	.56	.42	.32
TL431CPWR	296-12497-2-ND	Adjustable Shunt Regulator *NEW!*	8-TSSOP	372.00/2,000		
TL431IDBVR	296-10187-1-ND	Adjustable Shunt Regulator	SOT-23-5	.68	.51	.39
TL431IDBVR	296-10187-2-ND	Adjustable Shunt Regulator	SOT-23-5	663.00/3,000		
TL431IDR	296-1291-1-ND	Adjustable Shunt Regulator	8-SOIC	.68	.51	.39
TL431IDR	296-1291-2-ND	Adjustable Shunt Regulator	8-SOIC	552.50/2,500		
TL431ILP	296-1292-ND	Adjustable Shunt Regulator	TO-92	.68	.51	.39
TL431ILPR	296-1292-1-ND	Adjustable Shunt Regulator	TO-92	.68	.51	.39
TL431ILPR	296-1292-2-ND	Adjustable Shunt Regulator	TO-92	452.00/2,000		
TL431IP	296-10188-5-ND	Adjustable Shunt Regulator	8-Dip	.68	.51	.39
TL431IPK	296-10189-1-ND	Adjustable Shunt Regulator	SOT-89	1.05	.88	.70
TL431IPK	296-10189-2-ND	Adjustable Shunt Regulator	SOT-89	466.00/1,000		
TL1431CD	296-10129-5-ND	Adj. Programmable Shunt Reg.	8-SOIC	1.35	1.13	.90
TL1431CDR	296-10129-1-ND	Adj. Programmable Shunt Reg.	8-SOIC	1.35	1.13	.90
TL1431CDR	296-10129-2-ND	Adj. Programmable Shunt Reg.	8-SOIC	1462.50/2,500		
TL1431CLP	296-10130-5-ND	Adj. Programmable Shunt Reg.	TO-226AA	1.35	1.13	.90
TL1431CLPR	296-10130-1-ND	Adj. Programmable Shunt Reg.	TO-226AA	1.35	1.13	.90
TL1431CLPR	296-10130-2-ND	Adj. Programmable Shunt Reg.	TO-226AA	1198.00/2,000		
TL1431QD	296-10131-5-ND	Adj. Programmable Shunt Reg.	8-SOIC	1.78	1.42	1.07
TL1431QLPR	296-10132-1-ND	Adj. Programmable Shunt Reg.	TO-92	1.73	1.38	1.04
TL1431QLPR	296-10132-2-ND	Adj. Programmable Shunt Reg.	TO-92	1794.00/2,000		
TLV431ACDBVR	296-1348-1-ND	Low Voltage Adj. Shunt Regulator	SOT-23-5	1.29	1.08	.86
TLV431AIDBVR	296-1984-1-ND	Low Voltage Adj. Shunt Regulator	SOT-23-5	1.41	1.18	.94
TLV431CDBV	296-10726-1-ND	Low Voltage Adj. Shunt Regulator	SOT-23-5	.99	.83	.66
TLV431CDBV	296-10726-2-ND	Low Voltage Adj. Shunt Regulator	SOT-23-5	1287.00/3,000		
TLV431IDBV	296-10728-5-ND	Low Voltage Adj. Shunt Regulator	SOT-23-5	1.14	.95	.76
TLV431ILP	296-10729-5-ND	Low Voltage Adj. Shunt Regulator	TO-92	1.14	.95	.76
UCC561DP	296-12196-5-ND	Low Volt Diff SCSI 27-Line Regulator Set *NEW!*	16-SOIC	4.28	3.42	2.66

Low Dropout Voltage Regulators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
REG101NA-A/250	REG101NA-A/250CT-ND	Adj., 100mA LDO Regulator	5-SOP	1.43	1.14	.86
REG101NA-A/250	REG101NA-A/250TR-ND	Adj., 100mA LDO Regulator	5-SOP	294.00/250		
REG101NA-2.5/250	REG101NA-2.5CT-ND	2.5 Volt CMOS 100mA LDO Reg.	SOT-23-5	2.10	1.68	1.26
REG101NA-2.5/250	REG101NA-2.5TR-ND	2.5 Volt CMOS 100mA LDO Reg.	SOT-23-5	294.00/250		
REG101NA-2.8/250	REG101NA-2.8CT-ND	2.8 Volt CMOS 100mA LDO Reg.	SOT-23-5	2.10	1.68	1.26
REG101NA-2.8/250	REG101NA-2.8TR-ND	2.8 Volt CMOS 100mA LDO Reg.	SOT-23-5	294.00/250		
REG101NA-2.85/250	REG101NA-2.85CT-ND	2.85 Volt CMOS 100mA LDO Reg.	SOT-23-5	2.10	1.68	1.26
REG101NA-2.85/250	REG101NA-2.85TR-ND	2.85 Volt CMOS 100mA LDO Reg.	SOT-23-5	294.00/250		
REG101NA-3/250	REG101NA-3CT-ND	3 Volt CMOS 100mA LDO Reg.	SOT-23-5	2.94	2.52	2.31
REG101NA-3/250	REG101NA-3TR-ND	3 Volt CMOS 100mA LDO Reg.	SOT-23-5	294.00/250		
REG101NA-3.3/250	REG101NA-3.3CT-ND	3.3 Volt CMOS 100mA LDO Reg.	SOT-23-5	2.10	1.68	1.52
REG101NA-3.3/250	REG101NA-3.3TR-ND	3.3 Volt CMOS 100mA LDO Reg.	SOT-23-5	294.00/250		
REG101NA-5/250	REG101NA-5CT-ND	5 Volt CMOS 100mA LDO Reg.	SOT-23-5	2.10	1.68	1.26
REG101NA-5/250	REG101NA-5TR-ND	5 Volt CMOS 100mA LDO Reg.	SOT-23-5	294.00/250		
REG101UA-A	REG101UA-A-ND	Adj., 100mA LDO Regulator	8-SOP	2.18	1.74	1.31
REG101UA-2.5	REG101UA-2.5-ND	2.5Volt CMOS 100mA LDO Reg.	SO-8-50	2.18	1.74	1.31
REG101UA-2.5/2KS	REG101UA-2.5TR-ND	2.5Volt CMOS 100mA LDO Reg.	SO-8-50	2785.00/2,500		
REG101UA-2.8	REG101UA-2.8-ND	2.8Volt CMOS 100mA LDO Reg.	SO-8-50	2.18	1.74	1.31
REG101UA-2.8/2KS	REG101UA-2.8TR-ND	2.8 Volt CMOS 100mA LDO Reg.	SO-8-50	2785.00/2,500		
REG101UA-2.85	REG101UA-2.85-ND	2.85 Volt CMOS 100mA LDO Reg.	SO-8-50	2.18	1.74	1.31
REG101UA-3	REG101UA-3-ND	3 Volt CMOS 100mA LDO Reg.	SO-8-50	2.18	1.74	1.31
REG101UA-3/2KS	REG101UA-3TR-ND	3 Volt CMOS 100mA LDO Reg.	SO-8-50	2785.00/2,500		
REG101UA-3.3	REG101UA-3.3-ND	3.3V, 100mA LDO Reg.	8-SOP	2.18	1.74	1.31
REG101UA-5	REG101UA-5-ND	5 Volt CMOS 100mA LDO Reg.	SO-8-50	2.18	1.74	1.31
REG101UA-5/2KS	REG101UA-5TR-ND	5 Volt CMOS 100mA LDO Reg.	SO-8-50	2785.00/2,500		
REG102NA-A/250	REG102NA-A/250CT-ND	Adj., 250mA LDO Reg.	5-SOP	1.80	1.44	1.08
REG102NA-A/250	REG102NA-A/250TR-ND	Adj., 250mA LDO Reg.	5-SOP	332.50/250		
REG102NA-2.5/250	REG102NA-2.5CT-ND	2.5 Volt CMOS 250mA LDO Reg.	SOT-23-5	2.38	1.90	1.43
REG102NA-2.5/250	REG102NA-2.5TR-ND	2.5 Volt CMOS 250mA LDO Reg.	SOT-23-5	332.50/250		
REG102NA-2.8/250	REG102NA2.8250CT-ND	2.8V, 250mA LDO Regulator	5-SOP	1.80	1.44	1.08
REG102NA-2.8/250	REG102NA2.8250TR-ND	2.8V, 250mA LDO Regulator	5-SOP	332.50/250		
REG102NA-2.85/250	REG102NA-2.85CT-ND	2.85 Volt CMOS 250mA LDO Reg.	SOT-23-5	2.38	1.90	1.43
REG102NA-2.85/250	REG102NA-2.85TR-ND	2.85 Volt CMOS 250mA LDO Reg.	SOT-23-5	332.50/250		
REG102NA-3/250	REG102NA-3CT-ND	3 Volt CMOS 250mA LDO Reg.	SOT-23-5	2.38	1.90	1.43
REG102NA-3/250	REG102NA-3TR-ND	3 Volt CMOS 250mA LDO Reg.	SOT-23-5	332.50/250		
REG102NA-3.3/250	REG102NA-3.3CT-ND	3.3 Volt CMOS 250mA LDO Reg.	SOT-23-5	2.38	1.90	1.43
REG102NA-3.3/250	REG102NA-3.3TR-ND	3.3 Volt CMOS 250mA LDO Reg.	SOT-23-5	332.50/250		
REG102NA-5/250	REG102NA-5CT-ND	5 Volt CMOS 250mA LDO Reg.	SOT-23-5	2.38	1.90	1.43
REG102NA-5/250	REG102NA-5TR-ND	5 Volt CMOS 250mA LDO Reg.	SOT-23-5	332.50/250		
REG102UA-A	REG102UA-A-ND	Adj., 250mA LDO Regulator	8-SOP	2.48	1.98	1.49
REG102UA-2.5	REG102UA-2.5-ND	2.5V, 250mA LDO Regulator	8-SOP	2.48	1.98	1.49
REG102UA-2.85	REG102UA-2.85-ND	2.85V, 250mA LDO Regulator	8-SOP	2.48	1.98	1.49
REG102UA-3	REG102UA-3-ND	3V, 250mA LDO Regulator	8-SOP	2.48	1.98	1.49
REG102UA-3.3	REG102UA-3.3-ND	3.3V, 250mA LDO Regulator	8-SOP	2.48	1.98	1.49
REG102UA-5	REG102UA-5-ND	5V, 250mA LDO Regulator	8-SOP	2.48	1.98	1.49
REG103FA-A	REG103FA-A-ND	Adjustable LDO Regulator	DDPAK-5	5.04	4.04	3.41
REG103FA-2.5	REG103FA-2.5-ND	2.5 Volt LDO Regulator	DDPAK-5	5.04	4.04	3.41
REG103FA-2.7	REG103FA-2.7-ND	2.7 Volt LDO Regulator	DDPAK-5	5.04	4.04	3.41
REG103FA-3	REG103FA-3-ND	3 Volt LDO Regulator	DDPAK-5	5.04	4.04	3.41
REG103FA-3.3	REG103FA-3.3-ND	3.3 Volt LDO Regulator	DDPAK-5	5.04	4.04	3.41
REG103FA-5	REG103FA-5-ND	5 Volt LDO Regulator	DDPAK-5	5.04	4.04	3.41
REG103GA-A	REG103GA-A-ND	CMOS 500mA LDO Regulator	SOT-223-5	4.48	3.59	2.79
REG103GA-2.5	REG103GA-2.5-ND	2.5 Volt CMOS 500mA LDO Reg.	SOT-223-5	4.48	3.59	2.79
REG103GA-2.7	REG103GA-2.7-ND	2.7 Volt CMOS 500mA LDO Reg.	SOT-223-5	4.48	3.59	2.79
REG103GA-3	REG103GA-3-ND	3 Volt LDO Regulator	SOT-223-5	4.48	3.59	2.79
REG103GA-3.3	REG103GA-3.3-ND	3.3 Volt CMOS 500mA LDO Reg.	SOT-223-5	4.48	3.59	2.79
REG103GA-5	REG103GA-5-ND	5 Volt CMOS 500mA LDO Reg.	SOT-223-5	4.48	3.59	2.79
REG103UA-A	REG103UA-A-ND	Adjustable DMOS LDO Regulator	8-SOIC	4.28	3.42	2.66
REG103UA-2.5	REG103UA-2.5-ND	2.5 Volt CMOS 500mA LDO Reg.	8-SOIC	4.28	3.42	2.66
REG103UA-2.7	REG103UA-2.7-ND	2.7 Volt CMOS 500mA LDO Reg.	8-SOIC	4.28	3.42	2.66
REG103UA-3	REG103UA-3-ND	3 Volt LDO Regulator	8-SOIC	4.28	3.42	2.66
REG103UA-3.3	REG103UA-3.3-ND	3.3 Volt DMOS LDO Regulator	8-SOIC	4.28	3.42	2.66
REG103UA-5	REG103UA-5-ND	5.0 Volt DMOS LDO Regulator	8-SOIC	4.28	3.42	2.66
REG104FA-A	REG104FA-A-ND	Adj., 1000mA LDO Regulator	5-PFM	5.20	4.16	3.51
REG104FA-2.5	REG104FA-2.5-ND	2.5 Volt CMOS 1A LDO Regulator	5-DDPAK	5.20	4.16	3.51
REG104FA-2.5/500	REG104FA-2.5TR-ND	2.5 Volt CMOS 1A LDO Regulator	5-DDPAK	1651.00/500		
REG104FA-2.7	REG104FA-2.7-ND	2.7V, 1000mA LDO Regulator	5-PFM	5.20	4.16	3.51
REG104FA-3	REG104FA-3-ND	3 Volt CMOS 1A LDO Regulator	5-DDPAK	5.20	4.16	3.51
REG104FA-3/500	REG104FA-3TR-ND	3 Volt CMOS 1A LDO Regulator	5-DDPAK	1651.00/500		
REG104FA-3.3	REG104FA-3.3-ND	3.3 Volt CMOS 1A LDO Regulator	5-DDPAK	5.20	4.16	3.51
REG104FA-3.3/500	REG104FA-3.3TR-ND	3.3 Volt CMOS 1A LDO Regulator	5-DDPAK	1651.00/500		
REG104FA-5	REG104FA-5-ND	5 Volt CMOS 1A LDO Regulator	5-DDPAK	5.20	4.16	3.51
REG104FA-5/500	REG104FA-5TR-ND	5 Volt CMOS 1A LDO Regulator	5-DDPAK	1651.00/500		
REG104GA-A	REG104GA-A-ND	Adj., 1000mA LDO Regulator	6-SOP	4.75	3.80	2.96
REG104GA-2.5	REG104GA-2.5-ND	2.5 Volt CMOS 1A LDO Regulator	SOT-223-5	4.75	3.80	2.96
REG104GA-2.5/2K5	REG104GA-2.5TR-ND	2.5 Volt CMOS 1A LDO Regulator	SOT-223-5	6647.50/2,500		
REG104GA-3	REG104GA-3-ND	3 Volt CMOS 1A LDO Regulator	SOT-223-5	4.75	3.80	2.96
REG104GA-3/2K5	REG104GA-3TR-ND	3 Volt CMOS 1A LDO Regulator	SOT-223-5	6725.63/2,500		
REG104GA-3.3	REG104GA-3.3-ND	3.3 Volt CMOS 1A LDO Regulator	SOT-223-5	4.75	3.80	2.96
REG104GA-3.3/2K5	REG104GA-3.3TR-ND	3.3 Volt CMOS 1A LDO Regulator	SOT-223-5	6647.50/2,500		
REG104GA-5	REG104GA-5-ND	5 Volt CMOS 1A LDO Regulator	SOT-223-5	4.75	3.80	2.96
REG104GA-5/2K5	REG104GA-5TR-ND	5 Volt CMOS 1A LDO Regulator	SOT-223-5	6647.50/2,500		
REG113EA2.5/2K5	REG113EA2.52K5CT-ND	2.5 Volt DMOS LDO Regulator	8-TSSOP	2.28	1.82	1.37
REG113EA2.5/2K5	REG113EA2.52K5TR-ND	2.5 Volt DMOS LDO Regulator	8-TSSOP	3370.00/2,500		
REG113EA-2.85/2K5	REG113EA2.852K5CT-ND	2.85V, 400mA LDO Regulator	8-TSSOP	2.28	1.82	1.37
REG113EA-2.85/2K5	REG113EA2.852K5TR-ND	2.85V, 400mA LDO Regulator	8-TSSOP	3370.00/2,500		
REG113EA-3/2K5	REG113EA-3/2K5CT-ND	3 Volt DMOS LDO Regulator	8-TSSOP	2.28	1.82	1.37
REG113EA-3/2K5	REG113EA-3/2K5TR-ND	3 Volt DMOS LDO Regulator	8-TSSOP	3370.00/2,500		
REG113EA-5/2K5	REG113EA-5/2K5CT-ND	5 Volt DMOS LDO Regulator	8-TSSOP	2.28	1.82	1.37
REG113EA-5/2K5	REG113EA-5/2K5TR-ND	5 Volt DMOS LDO Regulator	8-TSSOP	3370.00/2,500		
REG113NA-2.5/3K	REG113NA-2.5/3KCT-ND	2.5V, 400mA LDO Regulator	5-SOP	2.05	1.64	1.23
REG113NA-2.5/3K	REG113NA-2.5/3KTR-ND	2.5V, 400mA LDO Regulator	5-SOP	3801.00/3,000		
REG113NA-2.85/3K	REG113NA2.853KCT-ND	2.85V, 400mA LDO Regulator	5-SOP	2.05	1.64	1.23
REG113NA-2.85/3K	REG113NA2.853KTR-ND	2.85V, 400mA LDO Regulator	5-SOP	3801.00/3,000		
REG113NA-3/3K	REG113NA-3/3KCT-ND	3V, 400mA LDO Regulator	5-SOP	2.05	1.64	1.23
REG113NA-3/3K	REG113NA-3/3KTR-ND	3V, 400mA LDO Regulator	5-SOP	3801.00/3,000		
REG113NA-3.3/3K	REG113NA-3.3/3KCT-ND	3.3V, 400mA LDO Regulator	5-SOP	2.05	1.64	1.23
REG113NA-3.3/3K	REG113NA-3.3/3KTR-ND	3.3V, 400mA LDO Regulator	5-SOP	3801.00/3,000		
REG113NA-5/3K	REG113NA-5/3KCT-ND	5V, 400mA DMOS LDO Regulator	5-SOP	2.48	1.98	1.49
REG113NA-5/3K	REG113NA-5/3KTR-ND	5V, 400mA DMOS LDO Regulator	5-SOP	3801.00/3,000		
REG1117	REG1117-ND	Adjustable LDO Positive Regulator	SOT-223	1.73	1.38	1.04
REG1117-2.85	REG1117-2.85-ND	2.85 Volt LDO Positive Regulator	SOT-223	1.73	1.38	1.04
REG1117-3.3	REG1117-3.3-ND	3.30 Volt LDO Positive Regulator	SOT-223	1.73	1.38	1.04
REG1117-5	REG1117-5-ND	5.00 Volt LDO Positive Regulator	SOT-223	1.73	1.38	1.04
REG1117A	REG1117A-ND	1A Adjustable LDO Positive Reg.	SOT-223	1.93	1.54	1.16
REG1117A-1.8	REG1117A-1.8-ND	1.8 Volt 1 Amp LDO Regulator	SOT-223-4	1.93	1.54	1.16
REG1117A-2.5	REG1117A-2.5-ND	2.5 Volt 1 Amp LDO Regulator	SOT-223-4	1.93	1.54	1.16
REG1117F-3.3	REG1117F-3.3-ND	3.3 Volt 0.8 Amp LDO Reg.	3-Lead DDPAK	2.27	1.82	1.42
REG1117FA	REG1117FA-ND	Adjustable 1 Amp LDO Reg.	3-Lead DDPAK	2.50	2.00	1.56
REG1117FA-1.8	REG1117FA-1.8-ND	1.8 Volt 1 Amp LDO Regulator	3-Lead DDPAK	2.50	2.00	1.56
REG1117FA-2.5	REG1117FA-2.5-ND	2.5 Volt 1 Amp LDO Regulator	3-Lead DDPAK	2.50	2.00	1.56
REG1117FA-5.0	REG1117FA-5.0-ND	5.0 Volt 1 Amp LDO Regulator	3-Lead DDPAK	2.50	2.00	1.56
REG1118-2.85	REG1118-2.85-ND	2.85V LDO Reg. with Source/Sink Capability	SOT-223	2.10	1.68	1.26
TL750L05CD	296-8000-5-ND	5.0V, 150mA LDO Regulator	8-SOP	1.35	1.13	.90
TL750L05CKC	296-8001-5-ND	5.0V, 150mA LDO Regulator	TO-220AB	1.43	1.14	.86
TL750L05CLP	296-8002-5-ND	5.0V, 150mA LDO Regulator	TO-92	1.35	1.13	.90
TL750L08CD	296-8004-5-ND	8.0V, 150mA LDO Regulator	8-SOP	1.35	1.08	.81
TL750L08CLP	296-8005-5-ND	8.0V, 150mA LDO Regulator	TO-92	1.35	1.08	.81
TL750L10CD	296-8006-5-ND	10V, 150mA LDO Regulator	8-SOP	1.35	1.08	.81
TL750L10CLPR	296-8007-1-ND	10V, 150mA LDO Regulator	TO-92	1.35	1.08	.81
TL750L10CLPR	296-8007-2-ND	10V, 150mA LDO Regulator	TO-92	1404.00/2,000		
TL750L12CD	296-8008-5-ND	12V, 150mA LDO Regulator	8-SOP	1.35	1.08	.81
TL750L12CLP	296-8009-5-ND	12V, 150mA LDO Regulator	TO-92	1.35	1.08	.81
TL751L05CD	296-8011-5-ND	5.0V, 150mA LDO Regulator	8-SOP	1.75	1.40	1.05
TL751L10CD	296-8012-5-ND	10V, 150mA LDO Regulator	8-SOP	1.75	1.40	1.05
TL751L10CP	296-8013-5-ND	10V, 150mA LDO Regulator	8-Dip	1.58	1.26	.95
TL751L12CD	296-8014-5-ND	12V, 150mA LDO Regulator	8-SOP	1.75	1.40	1.05
TL7700CPSR	296-8015-1-ND	Supply-Voltage Supervisor	8-SOP	3.38	2.70	2.10
TL7700CPSR	296-8015-2-ND	Supply-Voltage Supervisor	8-SOP	3826.00/2,000		
TLV2217-33KC	296-10502-5-ND	LDO 3.3V PnP Fixed Voltage Reg.	TO-220AB	1.35	1.08	.81
TLV2217-33KTPR	296-10503-1-ND	LDO 3.3V PnP Fixed Voltage Reg.	3-PFM	1.35	1.13	.90
TLV2217-33KTPR	296-10503-2-ND	LDO 3.3V PnP Fixed Voltage Reg.	3-PFM	1755.00/3,000		
TLV2217-33PWR	296-12368-1-ND	LDO 3.3V PnP Fixed Voltage Reg.	20-TSSOP	2.66	2.13	1.66
TLV2217-33PWR	296-12368-2-ND	LDO 3.3V PnP Fixed Voltage Reg.	20-TSSOP	3010.00/2,000		
TPPM0110DWPR	296-10872-1-ND	5V, 1mA Dual LDO Regulator	20-HSOP	3.47	2.78	2.16
TPPM0110DWPR	296-10872-2-ND	5V, 1mA Dual LDO Regulator	20-HSOP	3928.00/2,000		
TPPM0111DWP	296-12507-5-ND	Dual LDO Linear Regulator *NEW!*	20-HSOP	3.42	2.74	2.13
TPPM0301DR	296-10873-1-ND	5V, 400mA LDO Volt Regulator	8-SOIC	3.22	2.58	2.01
TPPM0301DR	296-10873-2-ND	5V, 400mA LDO Volt Regulator	8-SOIC	4442.50/2,500		
TPPM0303DR	296-10875-1-ND	5V, 250mA LDO Regulator	8-SOIC	2.38	1.90	1.43
TPPM0303DR	296-10875-2-ND	5V, 250mA LDO Regulator	8-SOIC	3007.50/2,500		
TPPM0304DR	296-10876-1-ND	5V, 250mA LDO Regulator	8-SOIC	2.38	1.90	1.43
TPPM0304DR	296-10876-2-ND	5V, 250mA LDO Regulator	8-SOIC	3007.50/2,500		
TPS71H01QPWPR	296-8051-1-ND	Adjustable 500mA LDO Reg.	20-HTSSOP	4.46	3.57	2.78
TPS71H01QPWPR	296-8051-2-ND	Adjustable 500mA LDO Reg.	20-HTSSOP	5050.00/2,000		
TPS73HD301PWP	296-2666-5-ND	Dual Adjustable LDO Regulator	28-HTSSOP	4.48	3.59	2.79
TPS73HD318PWP	296-2667-5-ND	Dual 1.8/3.3V 750mA LDO Reg.	28-HTSSOP	4.48	3.59	2.79
TPS73HD318PWPR	296-2667-1-ND	Dual 1.8/3.3V 750mA LDO Reg.	28-HTSSOP	5.94	4.76	4.01
TPS73HD318PWPR	296-2667-2-ND	Dual 1.8/3.3V 750mA LDO Reg.	28-HTSSOP	5074.00/2,000		
TPS73HD325PWPR	296-8071-1-ND	Dual 2.5/3.3V 750mA LDO Reg.	28-HTSSOP	5.94	4.76	4.01
TPS73HD325PWPR	296-8071-2-ND	Dual 2.5/3.3V 750mA LDO Reg.	28-HTSSOP	5074.00/2,000		
TPS2140IPWP	296-12564-5-ND	Adj. LDO and 3.3V Switch with Dual Current Limit *NEW!*	14-HTSSOP	2.25	1.80	1.40
TPS2141IPWP	296-12565-5-ND	Adj. LDO and 5V Switch with Dual Current Limit *NEW!*	14-HTSSOP	2.25	1.80	1.40
TPS2150IPWP	296-12566-5-ND	Adj. LDO and 3.3V Switch with Dual Current Limit *NEW!*	14-HTSSOP	2.25	1.80	1.40
TPS2151IPWP	296-12567-5-ND	Adj. LDO and 5V Switch with Dual Current Limit *NEW!*	14-HTSSOP	2.25	1.80	1.40
TPS767D301PWP	296-2740-5-ND	Dual Adjustable /3.3 LDO Reg.	28-HTSSOP	4.01	3.21	2.50

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS767D318PWP	296-2741-5-ND	Dual 1.8/3.3V LDO Regulator	28-HTSSOP	4.01	3.21	2.50
TPS767D325PWP	296-2742-5-ND	Dual 2.5/3.3V LDO Regulator	28-HTSSOP	4.01	3.21	2.50
TPS7101QDR	296-1359-1-ND	Adjustable 1.2V-9.75V 2A LDO Reg.	8-SOIC	2.72	2.18	1.70
TPS7101QDR	296-1359-2-ND	Adjustable 1.2V-9.75V 2A LDO Reg.	8-SOIC	3497.50/2,500		
TPS7101QP	296-8041-5-ND	Adjustable 1.2V-9.75V 2A LDO Reg.	8-Dip	2.50	2.00	1.56
TPS7101QPWR	296-8042-1-ND	Adj. 1.2V-9.75V 2A LDO Regulator	20-TSSOP	2.72	2.18	1.70
TPS7101QPWR	296-8042-2-ND	Adj. 1.2V-9.75V 2A LDO Regulator	20-TSSOP	2830.00/2,000		
TPS7133QD	296-2658-5-ND	3.3V, 500mA PMOS LDO Regulator	8-SOIC	2.50	2.00	1.56
TPS7133QP	296-8046-5-ND	3.3V, 500mA PMOS LDO Regulator	8-Dip	2.50	2.00	1.56
TPS7133QPWR	296-8047-1-ND	3.3V, 500mA PMOS LDO Reg.	20-TSSOP	2.72	2.18	1.70
TPS7133QPWR	296-8047-2-ND	3.3V, 500mA PMOS LDO Reg.	20-TSSOP	2830.00/2,000		
TPS7148QD	296-1961-5-ND	4.8V, 500mA LDO Regulator	8-SOIC	2.50	2.00	1.56
TPS7148QP	296-8048-5-ND	4.85V, 500mA LDO Regulator	8-Dip	2.50	2.00	1.56
TPS7150QD	296-8049-5-ND	5.0V, 500mA LDO Regulator	8-SOP	2.50	2.00	1.56
TPS7150QP	296-8050-5-ND	5.0V, 500mA LDO Regulator	8-Dip	2.50	2.00	1.56
TPS7201QD	296-1360-5-ND	Adjustable 250mA LDO Regulator	8-SOIC	1.59	1.33	1.06
TPS7201QDR	296-1360-1-ND	Adjustable 250mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7201QDR	296-1360-2-ND	Adjustable 250mA LDO Regulator	8-SOIC	1695.00/2,500		
TPS7201QP	296-8052-5-ND	Adjustable 250mA LDO Regulator	8-Dip	1.33	1.06	.80
TPS7201QPWR	296-8053-1-ND	Adjustable 250mA LDO Regulator	8-TSSOP	1.33	1.06	.80
TPS7201QPWR	296-8053-2-ND	Adjustable 250mA LDO Regulator	8-TSSOP	1378.00/2,000		
TPS7225QD	296-1962-5-ND	2.5V, 250mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7225QP	296-1963-5-ND	2.5V, 250mA LDO Regulator	8-Dip	1.33	1.06	.80
TPS7225QPWR	296-8054-1-ND	2.5V, 250mA LDO Regulator	8-TSSOP	1.33	1.06	.80
TPS7225QPWR	296-8054-2-ND	2.5V, 250mA LDO Regulator	8-TSSOP	1378.00/2,000		
TPS7230QD	296-1964-5-ND	3.0V, 250mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7230QP	296-1965-5-ND	3.0V, 250mA LDO Regulator	8-Dip	1.33	1.06	.80
TPS7230QPWR	296-8055-1-ND	3.0V, 250mA LDO Regulator	8-TSSOP	1.33	1.06	.80
TPS7230QPWR	296-8055-2-ND	3.0V, 250mA LDO Regulator	8-TSSOP	1378.00/2,000		
TPS7233QD	296-1966-5-ND	3.3V, 250mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7233QP	296-8056-5-ND	3.3V, 250mA LDO Regulator	8-Dip	1.33	1.06	.80
TPS7233QPWR	296-8057-1-ND	3.3V, 250mA LDO Regulator	8-TSSOP	1.33	1.06	.80
TPS7233QPWR	296-8057-2-ND	3.3V, 250mA LDO Regulator	8-TSSOP	1378.00/2,000		
TPS7248QD	296-8058-5-ND	4.85V, 250mA PMOS LDO Regulator	8-SOP	1.33	1.06	.80
TPS7248QP	296-2659-5-ND	4.85V, 250mA PMOS LDO Regulator	8-Dip	1.33	1.06	.80
TPS7250QD	296-1361-5-ND	5.0V, 250mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7250QDR	296-1361-1-ND	5.0V, 250mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7250QDR	296-1361-2-ND	5.0V, 250mA LDO Regulator	8-SOIC	1695.00/2,500		
TPS7250QP	296-8059-5-ND	5.0V, 250mA LDO Regulator	8-Dip	1.33	1.06	.80
TPS7250QPWR	296-8060-1-ND	5.0V, 250mA LDO Regulator	8-TSSOP	1.33	1.06	.80
TPS7250QPWR	296-8060-2-ND	5.0V, 250mA LDO Regulator	8-TSSOP	1378.00/2,000		
TPS7301QD	296-1362-5-ND	Adjustable 500mA LDO Regulator	8-SOIC	2.35	1.88	1.41
TPS7301QDR	296-1362-1-ND	Adjustable 500mA LDO Regulator	8-SOIC	2.72	2.18	1.70
TPS7301QDR	296-1362-2-ND	Adjustable 500mA LDO Regulator	8-SOIC	3007.50/2,500		
TPS7301QP	296-2660-5-ND	Adjustable 500mA LDO Regulator	8-Dip	2.35	1.88	1.41
TPS7301QPW	296-8061-5-ND	Adjustable 500mA LDO Regulator	20-TSSOP	2.35	1.88	1.41
TPS7325QD	296-2661-5-ND	2.5V, 500mA LDO Regulator with Delayed Reset	8-SOIC	2.35	1.88	1.41
TPS7325QP	296-8062-5-ND	2.5V, 500mA LDO Regulator with Delayed Reset	8-Dip	2.35	1.88	1.41
TPS7325QPWR	296-8063-1-ND	2.5V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2.72	2.18	1.70
TPS7325QPWR	296-8063-2-ND	2.5V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2444.00/2,000		
TPS7330QD	296-2662-5-ND	3.0V, 500mA LDO Regulator with Delayed Reset	8-SOIC	2.35	1.88	1.41
TPS7330QDR	296-2662-1-ND	3.0V, 500mA LDO Regulator with Delayed Reset	8-SOIC	2.72	2.18	1.70
TPS7330QDR	296-2662-2-ND	3.0V, 500mA LDO Regulator with Delayed Reset	8-SOIC	3007.50/2,500		
TPS7330QP	296-8064-5-ND	3.0V, 500mA LDO Regulator with Delayed Reset	8-Dip	2.35	1.88	1.41
TPS7330QPWR	296-8065-1-ND	3.0V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2.72	2.18	1.70
TPS7330QPWR	296-8065-2-ND	3.0V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2444.00/2,000		
TPS7333QD	296-8066-5-ND	3.3V, 500mA LDO Regulator with Delayed Reset	8-SOP	2.35	1.88	1.41
TPS7333QDR	296-8066-1-ND	3.3V, 500mA LDO Regulator with Delayed Reset	8-SOP	2.72	2.18	1.70
TPS7333QDR	296-8066-2-ND	3.3V, 500mA LDO Regulator with Delayed Reset	8-SOP	3007.50/2,500		
TPS7333QP	296-2663-5-ND	3.3V, 500mA LDO Regulator with Delayed Reset	8-Dip	2.35	1.88	1.41
TPS7333QPWR	296-8067-1-ND	3.3V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2.72	2.18	1.70
TPS7333QPWR	296-8067-2-ND	3.3V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2444.00/2,000		
TPS7348QD	296-8068-5-ND	4.85V, 500mA LDO Regulator with Delayed Reset	8-SOP	2.35	1.88	1.41
TPS7348QDR	296-8068-1-ND	4.85V, 500mA LDO Regulator with Delayed Reset	8-SOP	2.72	2.18	1.70
TPS7348QDR	296-8068-2-ND	4.85V, 500mA LDO Regulator with Delayed Reset	8-SOP	3007.50/2,500		
TPS7348QP	296-2664-5-ND	4.85V, 500mA LDO Regulator with Delayed Reset	8-Dip	2.35	1.88	1.41
TPS7350QD	296-8069-5-ND	5.0V, 500mA LDO Regulator with Delayed Reset	8-SOP	2.35	1.88	1.41
TPS7350QP	296-2665-5-ND	5.0V, 500mA LDO Regulator with Delayed Reset	8-Dip	2.35	1.88	1.41
TPS7350QPWR	296-8070-1-ND	5.0V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2.72	2.18	1.70
TPS7350QPWR	296-8070-2-ND	5.0V, 500mA LDO Regulator with Delayed Reset	20-TSSOP	2444.00/2,000		
TPS7415D	296-2668-5-ND	1.5V, 200mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7418D	296-2669-5-ND	1.8V, 200mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7425D	296-2670-5-ND	2.5V, 200mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7430D	296-2671-5-ND	3.0V, 200mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS7433D	296-2672-5-ND	3.3V, 200mA LDO Regulator	8-SOIC	1.33	1.06	.80
TPS70102PWP	296-2652-5-ND	Dual, Adj., 500mA LDO Reg.	20-HTSSOP	4.64	3.71	2.89
TPS70145PWP	296-2653-5-ND	Dual, 3.3/1.2V 500mA LDO Reg.	20-HTSSOP	4.64	3.71	2.89
TPS70148PWP	296-2654-5-ND	Dual, 3.3/1.5V 500mA LDO Reg.	20-HTSSOP	4.64	3.71	2.89
TPS70151PWP	296-2655-5-ND	Dual, 3.3/1.8V 500mA LDO Reg.	20-HTSSOP	4.64	3.71	2.89
TPS70158PWP	296-2656-5-ND	Dual, 3.3/2.5V 500mA LDO Reg.	20-HTSSOP	4.64	3.71	2.89
TPS70202PWP	296-8016-5-ND	Dual, Adj., 500mA LDO Reg.	20-HTSSOP	4.64	3.71	2.89
TPS70245PWP	296-8017-5-ND	Dual, 3.3V/1.2V 500mA/250mA LDO Regulator	20-HTSSOP	4.64	3.71	2.89
TPS70248PWP	296-8018-5-ND	Dual, 3.3V/1.5V 500mA/250mA LDO Regulator	20-HTSSOP	4.64	3.71	2.89
TPS70251PWP	296-8019-5-ND	Dual, 3.3V/1.8V 500mA/250mA LDO Regulator	20-HTSSOP	4.64	3.71	2.89
TPS70258PWP	296-8020-5-ND	Dual, 3.3V/2.5V 500mA/250mA LDO Regulator	20-HTSSOP	4.64	3.71	2.89
TPS70302PWP	296-8021-5-ND	Dual, Adj., 1A/2A LDO Regulator	24-HTSSOP	5.11	4.09	3.18
TPS70345PWP	296-8022-5-ND	Dual, 3.3V/1.2V 1A/2A LDO Reg.	24-HTSSOP	5.11	4.09	3.18
TPS70348PWP	296-8023-5-ND	Dual, 3.3V/1.5V 1A/2A LDO Reg.	20-HTSSOP	5.11	4.09	3.18
TPS70351PWP	296-8024-5-ND	Dual, 3.3V/1.8V 1A/2A LDO Reg.	24-HTSSOP	5.11	4.09	3.18
TPS70358PWP	296-8025-5-ND	Dual, 3.3V/2.5V 1A/2A LDO Reg.	24-HTSSOP	5.11	4.09	3.18
TPS70402PWP	296-8026-5-ND	Dual, Adjustable, 1A/2A LDO Reg.	24-HTSSOP	5.02	4.02	3.13
TPS70445PWP	296-8027-5-ND	Dual, 3.3V/1.2V 1A/2A LDO Reg.	24-HTSSOP	5.02	4.02	3.13
TPS70448PWP	296-8028-5-ND	Dual, 3.3V/1.5V 1A/2A LDO Reg.	24-HTSSOP	5.02	4.02	3.13
TPS70451PWP	296-8029-5-ND	Dual, 3.3V/1.8V 1A/2A LDO Reg.	24-HTSSOP	5.02	4.02	3.13
TPS70458PWP	296-8030-5-ND	Dual, 3.3V/2.5V 1A/2A LDO Reg.	24-HTSSOP	5.02	4.02	3.13
TPS70702PWP	296-8031-5-ND	Dual, Adjustable, 1A/2A LDO Reg.	20-HTSSOP	4.10	3.28	2.55
TPS70745PWP	296-8032-5-ND	Dual, 3.3V/1.2V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70748PWP	296-8033-5-ND	Dual, 3.3V/1.5V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70751PWP	296-8034-5-ND	Dual, 3.3V/1.8V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70758PWP	296-8035-5-ND	Dual, 3.3V/2.5V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70802PWP	296-8036-5-ND	Dual, Adjustable, 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70845PWP	296-8037-5-ND	Dual, 3.3V/1.2V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70848PWP	296-8038-5-ND	Dual, 3.3V/1.5V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70851PWP	296-8039-5-ND	Dual, 3.3V/1.8V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS70858PWP	296-8040-5-ND	Dual, 3.3V/2.5V 250mA/125mA LDO Regulator	20-HTSSOP	4.10	3.28	2.55
TPS71025D	296-8043-5-ND	2.5V, 500mA LDO Regulator	8-SOP	2.50	2.00	1.56
TPS71025DR	296-8043-1-ND	2.5V, 500mA LDO Regulator	8-SOP	2.72	2.18	1.70
TPS71025DR	296-8043-2-ND	2.5V, 500mA LDO Regulator	8-SOP	3497.50/2,500		
TPS71025P	296-2657-5-ND	2.5V, 500mA LDO Regulator	8-Dip	2.50	2.00	1.56
TPS71025PWR	296-8045-1-ND	2.5V, 500mA LDO Regulator	20-TSSOP	2.72	2.18	1.70
TPS71025PWR	296-8045-2-ND	2.5V, 500mA LDO Regulator	20-TSSOP	2830.00/2,000		
TPS71525DCKR	296-12007-1-ND	2.5V, 50mA High Input LDO	5-SOP	1.44	1.20	.96
TPS71525DCKR	296-12007-2-ND	2.5V, 50mA High Input LDO	5-SOP	1170.00/3,000		
TPS71533DCKR	296-12008-1-ND	3.3V, 50mA High Input LDO	5-SOP	1.44	1.20	.96
TPS71533DCKR	296-12008-2-ND	3.3V, 50mA High Input LDO	5-SOP	1170.00/3,000		
TPS72115DBVT	296-12518-1-ND	1.5V, 150mA LDO Regulator *NEW!*	SOT-23-5	1.11	.93	.74
TPS72115DBVT	296-12518-2-ND	1.5V, 150mA LDO Regulator *NEW!*	SOT-23-5	138.75/250		
TPS72116DBVT	296-12519-1-ND	1.6V, 150mA LDO Regulator *NEW!*	SOT-23-5	1.11	.93	.74
TPS72116DBVT	296-12519-2-ND	1.6V, 150mA LDO Regulator *NEW!*	SOT-23-5	138.75/250		
TPS72118DBVT	296-12520-1-ND	1.8V, 150mA LDO Regulator *NEW!*	SOT-23-5	1.11	.93	.74
TPS72118DBVT	296-12520-2-ND	1.8V, 150mA LDO Regulator *NEW!*	SOT-23-5	138.75/250		
TPS72215DBVT	296-12521-1-ND	1.5V, 50mA Low Vin, LDO Regulator *NEW!*	SOT-23-5	1.26	1.05	.84
TPS72215DBVT	296-12521-2-ND	1.5V, 50mA Low Vin, LDO Regulator *NEW!*	SOT-23-5	138.75/250		
TPS72216DBVT	296-12522-1-ND	1.6V, 50mA Low Vin, LDO Regulator *NEW!*	SOT-23-5	1.26	1.05	.84
TPS72216DBVT	296-12522-2-ND	1.6V, 50mA Low Vin, LDO Regulator *NEW!*	SOT-23-5	138.75/250		
TPS72218DBVT	296-12523-1-ND	1.8V, 50mA Low Vin, LDO Regulator *NEW!*	SOT-23-5	1.26	1.05	.84
TPS72218DBVT	296-12523-2-ND	1.8V, 50mA Low Vin, LDO Regulator *NEW!*	SOT-23-5	138.75/250		
TPS75101QPWP	296-2673-5-ND	Adjustable, 1.5A LDO Regulator	20-HTSSOP	3.24	2.60	2.02
TPS75115QPWP	296-2674-5-ND	1.5V, 1.5A LDO Regulator	20-HTSSOP	3.24	2.60	2.02
TPS75118QPWP	296-2675-5-ND	1.8V, 1.5A LDO Regulator	20-HTSSOP	3.24	2.60	2.02
TPS75125QPWP	296-2676-5-ND	2.5V, 1.5A LDO Regulator	20-HTSSOP	3.24	2.60	2.02
TPS75133QPWP	296-2677-5-ND	3.3V, 1.5A LDO Regulator	20-HTSSOP	3.24	2.60	2.02
TPS75201QPWP	296-2678-5-ND	Adjustable, 2A LDO Regulator	20-HTSSOP	3.65	2.92	2.27
TPS75215QPWP	296-2679-5-ND	1.5V, 2A LDO Regulator	20-HTSSOP	3.65	2.92	2.27
TPS75218QPWP	296-2680-5-ND	1.8V, 2A LDO Regulator	20-HTSSOP	3.65	2.92	2.27
TPS75225QPWP	296-2681-5-ND	2.5V, 2A LDO Regulator	20-HTSSOP	3.65	2.92	2.27
TPS75233QPWP	296-2682-5-ND	3.3V, 2A LDO Regulator	20-HTSSOP	3.65	2.92	2.27
TPS75301QPWP	296-2683-5-ND	Adjustable, 1.5A LDO Regulator	20-HTSSOP	3.44	2.76	2.15
TPS75315QPWP	296-2684-5-ND	1.5V, 1.5A LDO Regulator	20-HTSSOP	3.44	2.76	2.15
TPS75318QPWP	296-2685-5-ND	1.8V, 1.5A LDO Regulator	20-HTSSOP	3.44	2.76	2.15
TPS75325QPWP	296-2686-5-ND	2.5V, 1.5A LDO Regulator	20-HTSSOP	3.44	2.76	2.15
TPS75333QPWP	296-2687-5-ND	3.3V, 1.5A LDO Regulator	20-HTSSOP	3.44	2.76	2.15
TPS75401QPWP	296-2688-5-ND	Adjustable, 2A LDO Regulator	20-HTSSOP	3.53	2.83	2.20
TPS75415QPWP	296-2689-5-ND	1.5V, 2A LDO Regulator	20-HTSSOP	3.53	2.83	2.20
TPS75418QPWP	296-2690-5-ND	1.8V, 2A LDO Regulator	20-HTSSOP	3.53	2.83	2.20
TPS75425QPWP	296-2691-5-ND	2.5V, 2A LDO Regulator	20-HTSSOP	3.53	2.83	2.20
TPS75433QPWP	296-2692-5-ND	3.3V, 2A LDO Regulator	20-HTSSOP	3.53	2.83	2.20
TPS75501KC	296-10988-5-ND	Adjustable, 5A LDO Regulator	TO-220	5.38	4.31	3.64
TPS75501KTT	296-10989-5-ND	Adjustable, 5A LDO Regulator	TO-263	5.38	4.31	3.64
TPS75515KC	296-10990-5-ND	1.5V, 5A LDO Regulator	TO-220	5.38	4.31	3.64
TPS75515KTT	296-10991-5-ND	1.5V, 5A LDO Regulator	TO-263	5.38	4.31	3.64
TPS75518KC	296-10992-5-ND	1.8V, 5A LDO Regulator	TO-220	5.38	4.31	3.64
TPS75518KTT	296-10993-5-ND	1.8V, 5A LDO Regulator	TO-263	5.38	4.31	3.64
TPS75525KC	296-10994-5-ND	2.5V, 5A LDO Regulator	TO-220	5.38	4.31	3.64
TPS75525KTT	296-10995-5-ND	2.5V, 5A LDO Regulator	TO-263	5.38	4.31	3.64
TPS75533KC	296-10996-5-ND	3.3V, 5A LDO Regulator	TO-220	5.38	4.31	3.64
TPS75533KTT	296-10997-5-ND	3.3V, 5A LDO Regulator	TO-263	5.38	4.31	3.64
TPS75601KC	296-11947-5-ND	Adjustable, 5A LDO Regulator	TO-220-5	5.38	4.31	3.64
TPS75601KTT	296-11948-5-ND	Adjustable, 5A LDO Regulator	TO-263-5	5.38	4.31	3.64
TPS75615KC	296-11949-5-ND	1.5V, 5A LDO Regulator	TO-220-5	5.38	4.31	3.64
TPS75615KTT	296-11950-5-ND	1.5V, 5A LDO Regulator	TO-263-5	5.38	4.31	3.64
TPS75618KC	296-11951-5-ND	1.8V, 5A LDO Regulator	TO-220-5	5.38	4.31	3.64
TPS75618KTT	296-11952-5-ND	1.8V, 5A LDO Regulator	TO-263-5	5.38	4.31	3.64

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TPS75625KC	296-11953-5-ND	2.5V, 5A LDO Regulator	TO-220-5	5.38	4.31	3.64
TPS75625KTT	296-11954-5-ND	2.5V, 5A LDO Regulator	TO-263-5	5.38	4.31	3.64
TPS75633KC	296-11955-5-ND	3.3V, 5A LDO Regulator	TO-220-5	5.38	4.31	3.64
TPS75633KTT	296-11956-5-ND	3.3V, 5A LDO Regulator	TO-263-5	5.38	4.31	3.64
TPS75701KC	296-10998-5-ND	Adjustable, 3A LDO Regulator	TO-220	5.49	4.40	3.42
TPS75701KTT	296-10999-5-ND	Adjustable, 3A LDO Regulator	TO-263	5.49	4.40	3.42
TPS75715KC	296-11000-5-ND	1.5V, 3A LDO Regulator	TO-220	5.49	4.40	3.42
TPS75715KTT	296-11001-5-ND	1.5V, 3A LDO Regulator	TO-263	5.49	4.40	3.42
TPS75718KC	296-11002-5-ND	1.8V, 3A LDO Regulator	TO-220	5.49	4.40	3.42
TPS75718KTT	296-11003-5-ND	1.8V, 3A LDO Regulator	TO-263	5.49	4.40	3.42
TPS75725KC	296-11004-5-ND	2.5V, 3A LDO Regulator	TO-220	5.49	4.40	3.42
TPS75725KTT	296-11005-5-ND	2.5V, 3A LDO Regulator	TO-263	5.49	4.40	3.42
TPS75733KC	296-11006-5-ND	3.3V, 3A LDO Regulator	TO-220	5.49	4.40	3.42
TPS75733KTT	296-11007-5-ND	3.3V, 3A LDO Regulator	TO-263	5.49	4.40	3.42
TPS75801KC	296-11957-5-ND	Adjustable, 3A LDO Regulator	TO-220-5	5.49	4.40	3.42
TPS75801KTT	296-11958-5-ND	Adjustable, 3A LDO Regulator	TO-263-5	5.49	4.40	3.42
TPS75815KC	296-11959-5-ND	1.5V, 3A LDO Regulator	TO-220-5	5.49	4.40	3.42
TPS75815KTT	296-11960-5-ND	1.5V, 3A LDO Regulator	TO-263-5	5.49	4.40	3.42
TPS75818KC	296-11961-5-ND	1.8V, 3A LDO Regulator	TO-220-5	5.49	4.40	3.42
TPS75818KTT	296-11962-5-ND	1.8V, 3A LDO Regulator	TO-263-5	5.49	4.40	3.42
TPS75825KC	296-11963-5-ND	2.5V, 3A LDO Regulator	TO-220-5	5.49	4.40	3.42
TPS75825KTT	296-11964-5-ND	2.5V, 3A LDO Regulator	TO-263-5	5.49	4.40	3.42
TPS75833KC	296-11965-5-ND	3.3V, 3A LDO Regulator	TO-220-5	5.49	4.40	3.42
TPS75833KTT	296-11966-5-ND	3.3V, 3A LDO Regulator	TO-263-5	5.49	4.40	3.42
TPS75901KC	296-12369-5-ND	Adjustable 7.5-A LDO Regulator	TO-220-5	5.78	4.63	3.91
TPS75901KTT	296-12370-5-ND	Adjustable 7.5-A LDO Regulator	TO-263-5	5.78	4.63	3.91
TPS75915KC	296-12371-5-ND	1.5V Fixed Out 7.5A LDO Regulator	TO-220-5	5.78	4.63	3.91
TPS75915KTT	296-12372-5-ND	1.5V Fixed Out 7.5A LDO Regulator	TO-263-5	5.78	4.63	3.91
TPS75918KC	296-12373-5-ND	1.8V Fixed Out 7.5A LDO Regulator	TO-220-5	5.78	4.63	3.91
TPS75918KTT	296-12374-5-ND	1.8V Fixed Out 7.5A LDO Regulator	TO-263-5	5.78	4.63	3.91
TPS75925KC	296-12375-5-ND	2.5V Fixed Out 7.5A LDO Regulator	TO-220-5	5.78	4.63	3.91
TPS75925KTT	296-12376-5-ND	2.5V Fixed Out 7.5A LDO Regulator	TO-263-5	5.78	4.63	3.91
TPS75933KC	296-12377-5-ND	3.3V Fixed Out 7.5A LDO Regulator	TO-220-5	5.78	4.63	3.91
TPS75933KTT	296-12378-5-ND	3.3V Fixed Out 7.5A LDO Regulator	TO-263-5	5.78	4.63	3.91
TPS76030DBVR	296-1363-1-ND	3V LP 50mA LDO Regulator	SOT-23-5	.96	.80	.64
TPS76030DBVR	296-1363-2-ND	3V LP 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS76032DBVR	296-8072-1-ND	3.2V, 50mA LDO Regulator	SOT-23-5	.96	.80	.64
TPS76032DBVR	296-8072-2-ND	3.2V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS76033DBVR	296-8073-1-ND	3.3V, 50mA LDO Regulator	SOT-23-5	.96	.80	.64
TPS76033DBVR	296-8073-2-ND	3.3V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS76038DBVR	296-8074-1-ND	3.8V, 50mA LDO Regulator	SOT-23-5	.96	.80	.64
TPS76038DBVR	296-8074-2-ND	3.8V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS76050DBVR	296-8075-1-ND	5.0V, 50mA LDO Regulator	SOT-23-5	.96	.80	.64
TPS76050DBVR	296-8075-2-ND	5.0V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS76130DBVR	296-11008-2-ND	3.0V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS76130DBVT	296-2693-1-ND	3.0V, 100mA LDO Regulator	SOT-23-5	.99	.83	.66
TPS76130DBVT	296-2693-2-ND	3.0V, 100mA LDO Regulator	SOT-23-5	123.75/250		
TPS76132DBVR	296-11009-2-ND	3.2V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS76132DBVT	296-2694-1-ND	3.2V, 100mA LDO Regulator	SOT-23-5	.99	.83	.66
TPS76132DBVT	296-2694-2-ND	3.2V, 100mA LDO Regulator	SOT-23-5	123.75/250		
TPS76133DBVR	296-11010-2-ND	3.3V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS76133DBVT	296-2695-1-ND	3.3V, 100mA LDO Regulator	SOT-23-5	.99	.83	.66
TPS76133DBVT	296-2695-2-ND	3.3V, 100mA LDO Regulator	SOT-23-5	123.75/250		
TPS76138DBVR	296-11011-2-ND	3.8V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS76138DBVT	296-2696-1-ND	3.8V, 100mA LDO Regulator	SOT-23-5	.99	.83	.66
TPS76138DBVT	296-2696-2-ND	3.8V, 100mA LDO Regulator	SOT-23-5	123.75/250		
TPS76150DBVR	296-11012-2-ND	5.0V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS76150DBVT	296-2697-1-ND	5.0V, 100mA LDO Regulator	SOT-23-5	.99	.83	.66
TPS76150DBVT	296-2697-2-ND	5.0V, 100mA LDO Regulator	SOT-23-5	123.75/250		
TPS76201DBVR	296-11013-1-ND	Adjustable, 100mA LDO Regulator	SOT-23-5	1.29	1.08	.86
TPS76201DBVR	296-11013-2-ND	Adjustable, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS76301DBVR	296-11014-2-ND	Adjustable, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76301DBVT	296-2698-1-ND	Adjustable, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76301DBVT	296-2698-2-ND	Adjustable, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76316DBVR	296-11015-2-ND	1.6V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76316DBVT	296-2699-1-ND	1.6V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76316DBVT	296-2699-2-ND	1.6V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76318DBVT	296-2700-1-ND	1.8V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76318DBVT	296-2700-2-ND	1.8V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76325DBVR	296-11017-2-ND	2.5V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76325DBVT	296-2701-1-ND	2.5V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76325DBVT	296-2701-2-ND	2.5V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76327DBVR	296-11018-2-ND	2.7V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76327DBVT	296-2702-1-ND	2.7V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76327DBVT	296-2702-2-ND	2.7V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76328DBVR	296-11019-2-ND	2.8V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76328DBVT	296-2703-1-ND	2.8V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76328DBVT	296-2703-2-ND	2.8V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76330DBVR	296-11020-2-ND	3.0V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76330DBVT	296-2704-1-ND	3.0V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76330DBVT	296-2704-2-ND	3.0V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76333DBVR	296-11021-2-ND	3.3V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76333DBVT	296-2705-1-ND	3.3V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76333DBVT	296-2705-2-ND	3.3V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76338DBVT	296-2706-1-ND	3.8V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76338DBVT	296-2706-2-ND	3.8V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76350DBVR	296-11023-2-ND	5.0V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76350DBVT	296-2707-1-ND	5.0V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76350DBVT	296-2707-2-ND	5.0V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76425DBVR	296-11024-2-ND	2.5V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76425DBVT	296-2708-1-ND	2.5V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76425DBVT	296-2708-2-ND	2.5V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76427DBVR	296-11025-2-ND	2.7V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76427DBVT	296-2709-1-ND	2.7V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76427DBVT	296-2709-2-ND	2.7V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76428DBVR	296-11026-2-ND	2.8V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76428DBVT	296-2710-1-ND	2.8V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76428DBVT	296-2710-2-ND	2.8V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76430DBVT	296-2711-1-ND	3.0V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76430DBVT	296-2711-2-ND	3.0V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76433DBVR	296-11028-2-ND	3.3V, 150mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS76433DBVT	296-2712-1-ND	3.3V, 150mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS76433DBVT	296-2712-2-ND	3.3V, 150mA LDO Regulator	SOT-23-5	112.50/250		
TPS76501D	296-2713-5-ND	Adjustable, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76515D	296-2714-5-ND	1.5V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76518D	296-2715-5-ND	1.8V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76525D	296-2716-5-ND	2.5V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76527D	296-2717-5-ND	2.7V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76528D	296-2718-5-ND	2.8V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76530D	296-2719-5-ND	3.0V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76533D	296-2720-5-ND	3.3V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76550D	296-2721-5-ND	5.0V, 150mA LDO Regulator	8-SOIC	1.38	1.15	.92
TPS76601D	296-2722-5-ND	Adjustable, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76615D	296-2723-5-ND	1.5V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76615D	296-2723-1-ND	1.5V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76615DR	296-2723-2-ND	1.5V, 250mA LDO Regulator	8-SOIC	1856.00/2,500		
TPS76618D	296-2724-5-ND	1.8V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76625D	296-2725-5-ND	2.5V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76627D	296-2726-5-ND	2.7V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76628D	296-2727-5-ND	2.8V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76630D	296-2728-5-ND	3.0V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76633D	296-2729-5-ND	3.3V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76650D	296-2730-5-ND	5.0V, 250mA LDO Regulator	8-SOIC	1.45	1.16	.87
TPS76701QD	296-2731-5-ND	Adjustable,1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76701QPWP	296-8076-5-ND	Adjustable, 1A LDO Reg.	20-HTSSOP	2.48	1.98	1.49
TPS76701QPWPR	296-8076-1-ND	Adjustable, 1A LDO Reg. *NEW!*	20-HTSSOP	3.04	2.43	1.89
TPS76701QPWPR	296-8076-2-ND	Adjustable, 1A LDO Reg. *NEW!*	20-HTSSOP	2574.00/2.000		
TPS76715QD	296-2732-5-ND	1.5V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76715QPWP	296-8077-5-ND	1.5V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76718QD	296-2733-5-ND	1.8V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76718QPWP	296-8078-5-ND	1.8V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76725QD	296-2734-5-ND	2.5V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76725QPWP	296-8079-5-ND	2.5V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76727QD	296-2735-5-ND	2.7V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76727QPWP	296-8080-5-ND	2.7V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76728QD	296-2736-5-ND	2.8V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76728QPWP	296-8081-5-ND	2.8V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76730QD	296-2737-5-ND	3.0V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76730QPWP	296-8082-5-ND	3.0V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76733QD	296-2738-5-ND	3.3V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76733QPWP	296-8083-5-ND	3.3V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76750QD	296-2739-5-ND	5.0V, 1A LDO Regulator	8-SOIC	2.48	1.98	1.49
TPS76750QPWP	296-8084-5-ND	5.0V, 1000mA LDO Regulator	20-HTSSOP	2.48	1.98	1.49
TPS76801QD	296-2743-5-ND	Adjustable, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76801QPWP	296-8085-5-ND	Adjustable, 1000mA LDO Reg.	20-HTSSOP	2.38	1.90	1.43
TPS76815QD	296-2744-5-ND	1.5V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76815QPWP	296-8086-5-ND	1.5V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76818QD	296-2745-5-ND	1.8V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76818QPWP	296-8087-5-ND	1.8V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76825QD	296-2746-5-ND	2.5V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76825QPWP	296-8088-5-ND	2.5V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76827QD	296-2747-5-ND	2.7V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76827QPWP	296-8089-5-ND	2.7V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76828QD	296-2748-5-ND	2.8V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76828QPWP	296-8090-5-ND	2.8V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76830QD	296-2749-5-ND	3.0V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76830QPWP	296-8091-5-ND	3.0V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76833QD	296-2750-5-ND	3.3V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76833QPWP	296-8092-5-ND	3.3V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76850QD	296-2751-5-ND	5.0V, 1A LDO Regulator	8-SOIC	2.38	1.90	1.43
TPS76850QPWP	296-8093-5-ND	5.0V, 1000mA LDO Regulator	20-HTSSOP	2.38	1.90	1.43
TPS76901DBVR	296-11029-2-ND	Adjustable, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76901DBVT	296-2752-1-ND	Adjustable, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76901DBVT	296-2752-2-ND	Adjustable, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76912DBVR	296-11031-2-ND	1.2V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76912DBVT	296-2753-1-ND	1.2V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76912DBVT	296-2753-2-ND	1.2V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76915DBVR	296-11032-2-ND	1.5V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76915DBVT	296-2754-1-ND	1.5V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76915DBVT	296-2754-2-ND	1.5V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76918DBVR	296-11033-2-ND	1.8V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76918DBVT	296-2755-1-ND	1.8V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76918DBVT	296-2755-2-ND	1.8V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76925DBVR	296-11035-2-ND	2.5V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76925DBVT	296-2756-1-ND	2.5V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76925DBVT	296-2756-2-ND	2.5V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76927DBVR	296-11036-2-ND	2.7V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76927DBVT	296-2757-1-ND	2.7V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76927DBVT	296-2757-2-ND	2.7V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76928DBVR	296-11037-2-ND	2.8V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76928DBVT	296-2758-1-ND	2.8V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76928DBVT	296-2758-2-ND	2.8V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76930DBVR	296-11038-2-ND	3.0V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76930DBVT	296-2759-1-ND	3.0V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76930DBVT	296-2759-2-ND	3.0V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76933DBVR	296-11039-2-ND	3.3V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76933DBVT	296-2760-1-ND	3.3V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76933DBVT	296-2760-2-ND	3.3V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS76950DBVR	296-11041-2-ND	5.0V, 100mA LDO Regulator	SOT-23-5	1209.00/3,000		
TPS76950DBVT	296-2761-1-ND	5.0V, 100mA LDO Regulator	SOT-23-5	.93	.78	.62
TPS76950DBVT	296-2761-2-ND	5.0V, 100mA LDO Regulator	SOT-23-5	116.25/250		
TPS77001DBVR	296-11043-2-ND	Adjustable, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77001DBVT	296-2762-1-ND	Adjustable, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77001DBVT	296-2762-2-ND	Adjustable, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77012DBVR	296-11044-2-ND	1.2V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77012DBVT	296-2763-1-ND	1.2V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77012DBVT	296-2763-2-ND	1.2V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77015DBVR	296-11045-2-ND	1.5V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77015DBVT	296-2764-1-ND	1.5V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77015DBVT	296-2764-2-ND	1.5V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77018DBVR	296-11046-2-ND	1.8V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77018DBVT	296-2765-1-ND	1.8V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77018DBVT	296-2765-2-ND	1.8V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77025DBVR	296-11047-2-ND	2.5V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77025DBVT	296-2766-1-ND	2.5V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60

(Continued)

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TPS77025DBVT	296-2766-2-ND	2.5V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77027DBVR	296-11048-2-ND	2.7V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77027DBVT	296-2767-1-ND	2.7V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77027DBVT	296-2767-2-ND	2.7V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77028DBVR	296-11049-2-ND	2.8V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77028DBVT	296-2768-1-ND	2.8V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77028DBVT	296-2768-2-ND	2.8V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77030DBVR	296-11050-2-ND	3.0V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77030DBVT	296-2769-1-ND	3.0V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77030DBVT	296-2769-2-ND	3.0V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77033DBVT	296-2770-1-ND	3.3V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77033DBVT	296-2770-2-ND	3.3V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77050DBVR	296-11052-2-ND	5.0V, 50mA LDO Regulator	SOT-23-5	1170.00/3,000		
TPS77050DBVT	296-2771-1-ND	5.0V, 50mA LDO Regulator	SOT-23-5	.90	.75	.60
TPS77050DBVT	296-2771-2-ND	5.0V, 50mA LDO Regulator	SOT-23-5	112.50/250		
TPS77101DGK	296-8094-5-ND	Adjustable, 150mA LDO Regulator	8-MSOP	1.33	1.06	.80
TPS77115DGK	296-8095-5-ND	1.5V, 150mA LDO Regulator	8-MSOP	1.33	1.06	.80
TPS77118DGK	296-8096-5-ND	1.8V, 150mA LDO Regulator	8-MSOP	1.33	1.06	.80
TPS77127DGK	296-8097-5-ND	2.7V, 150mA LDO Regulator	8-MSOP	1.33	1.06	.80
TPS77128DGK	296-8098-5-ND	2.8V, 150mA LDO Regulator	8-MSOP	1.33	1.06	.80
TPS77133DGK	296-8099-5-ND	3.3V, 150mA LDO Regulator	8-MSOP	1.33	1.06	.80
TPS77201DGK	296-8101-5-ND	Adjustable, 150mA LDO Regulator	8-MSOP	1.28	1.02	.77
TPS77215DGK	296-8102-5-ND	1.5V, 150mA LDO Regulator	8-MSOP	1.28	1.02	.77
TPS77218DGK	296-8103-5-ND	1.8V, 150mA LDO Regulator	8-MSOP	1.28	1.02	.77
TPS77227DGK	296-8104-5-ND	2.7V, 150mA LDO Regulator	8-MSOP	1.28	1.02	.77
TPS77228DGK	296-8105-5-ND	2.8V, 150mA LDO Regulator	8-MSOP	1.28	1.02	.77
TPS77233DGK	296-8106-5-ND	3.3V, 150mA LDO Regulator	8-MSOP	1.28	1.02	.77
TPS77250DGK	296-8107-5-ND	5.0V, 150mA LDO Regulator	8-MSOP	1.28	1.02	.77
TPS77301DGK	296-8108-5-ND	Adjustable, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77315DGK	296-8109-5-ND	1.5V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77318DGK	296-8110-5-ND	1.8V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77327DGK	296-8111-5-ND	2.7V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77328DGK	296-8112-5-ND	2.8V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77333DGK	296-8113-5-ND	3.3V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77350DGK	296-8114-5-ND	5.0V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77401DGK	296-8115-5-ND	Adjustable, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77415DGK	296-8116-5-ND	1.5V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77418DGK	296-8117-5-ND	1.8V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77427DGK	296-8118-5-ND	2.7V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77428DGK	296-8119-5-ND	2.8V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77433DGK	296-8120-5-ND	3.3V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77450DGK	296-8121-5-ND	5.0V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77501D	296-2772-5-ND	Adjustable, 500mA LDO Reg.	8-SOIC	2.08	1.66	1.25
TPS77501PWP	296-8122-5-ND	Adjustable, 500mA LDO Reg.	20-HTSSOP	2.08	1.66	1.25
TPS77515D	296-2773-5-ND	1.5V, 500mA LDO Regulator	8-SOIC	2.08	1.66	1.25
TPS77515PWP	296-8123-5-ND	1.5V, 500mA LDO Regulator	20-HTSSOP	2.08	1.66	1.25
TPS77516PWP	296-12401-5-ND	1.6V, 500mA, LDO Reg. *NEW!*	20-HTSSOP	2.08	1.66	1.25
TPS77518D	296-2774-5-ND	1.8V, 500mA LDO Regulator	8-SOIC	2.08	1.66	1.25
TPS77518PWP	296-8124-5-ND	1.8V, 500mA LDO Regulator	20-HTSSOP	2.08	1.66	1.25
TPS77525D	296-2775-5-ND	2.5V, 500mA LDO Regulator	8-SOIC	2.08	1.66	1.25
TPS77525PWP	296-8125-5-ND	2.5V, 500mA LDO Regulator	20-HTSSOP	2.08	1.66	1.25
TPS77533D	296-2776-5-ND	3.3V, 500mA LDO Regulator	8-SOIC	2.08	1.66	1.25
TPS77533PWP	296-8126-5-ND	3.3V, 500mA LDO Regulator	20-HTSSOP	2.08	1.66	1.25
TPS77601D	296-2777-5-ND	Adjustable, 500mA LDO Reg.	8-SOIC	1.98	1.58	1.19
TPS77601PWP	296-8127-5-ND	Adjustable, 500mA LDO Reg.	20-HTSSOP	1.98	1.58	1.19
TPS77615D	296-2778-5-ND	1.5V, 500mA LDO Regulator	8-SOIC	1.98	1.58	1.19
TPS77615PWP	296-11053-5-ND	1.5V, 500mA LDO Regulator	20-HTSSOP	1.98	1.58	1.19
TPS77618D	296-2779-5-ND	1.8V, 500mA LDO Regulator	8-SOIC	1.98	1.58	1.19
TPS77618PWP	296-8128-5-ND	1.8V, 500mA LDO Regulator	20-HTSSOP	1.98	1.58	1.19
TPS77625D	296-2780-5-ND	2.5V, 500mA LDO Regulator	8-SOIC	1.98	1.58	1.19
TPS77625PWP	296-8129-5-ND	2.5V, 500mA LDO Regulator	20-HTSSOP	1.98	1.58	1.19
TPS77628D	296-2781-5-ND	2.8V, 500mA LDO Regulator	8-SOIC	1.98	1.58	1.19
TPS77628PWP	296-8130-5-ND	2.8V, 500mA LDO Regulator	20-HTSSOP	1.98	1.58	1.19
TPS77633D	296-2782-5-ND	3.3V, 500mA LDO Regulator	8-SOIC	1.98	1.58	1.19
TPS77633PWP	296-8131-5-ND	3.3V, 500mA LDO Regulator	20-HTSSOP	1.98	1.58	1.19
TPS77701D	296-2783-5-ND	Adjustable, 750mA LDO Reg.	8-SOIC	2.28	1.82	1.37
TPS77701PWP	296-8132-5-ND	Adjustable, 750mA LDO Reg.	20-HTSSOP	2.28	1.82	1.37
TPS77715D	296-2784-5-ND	1.5V, 750mA LDO Reg. w/Reset Out	8-SOIC	2.28	1.82	1.37
TPS77715PWP	296-8133-5-ND	1.5V, 750mA LDO Reg. w/Reset Out	20-HTSSOP	2.28	1.82	1.37
TPS77718D	296-2785-5-ND	1.8V, 750mA LDO Reg. w/ Reset Out	8-SOIC	2.28	1.82	1.37
TPS77718PWP	296-8134-5-ND	1.8V, 750mA LDO Reg. w/ Reset Out	20-HTSSOP	2.28	1.82	1.37
TPS77725D	296-2786-5-ND	2.5V, 750mA LDO Reg. w/ Reset Out	8-SOIC	2.28	1.82	1.37
TPS77725PWP	296-8135-5-ND	2.5V, 750mA LDO Reg. w/ Reset Out	20-HTSSOP	2.28	1.82	1.37
TPS77733D	296-2787-5-ND	3.3V, 750mA LDO Reg. w/ Reset Out	8-SOIC	2.28	1.82	1.37
TPS77733PWP	296-8136-5-ND	3.3V, 750mA LDO Reg. w/ Reset Out	20-HTSSOP	2.28	1.82	1.37
TPS77801D	296-2788-5-ND	Adjustable, 750mA LDO Reg.	8-SOIC	2.18	1.74	1.31
TPS77801PWP	296-8137-5-ND	Adjustable, 750mA LDO Reg.	20-HTSSOP	2.18	1.74	1.31
TPS77815D	296-2789-5-ND	1.5V, 750mA LDO Regulator	8-SOIC	2.18	1.74	1.31
TPS77815PWP	296-8138-5-ND	1.5V, 750mA LDO Regulator	20-HTSSOP	2.18	1.74	1.31
TPS77818D	296-2790-5-ND	1.8V, 750mA LDO Regulator	8-SOIC	2.18	1.74	1.31
TPS77818PWP	296-8139-5-ND	1.8V, 750mA LDO Regulator	20-HTSSOP	2.18	1.74	1.31
TPS77825D	296-2791-5-ND	2.5V, 750mA LDO Regulator	8-SOIC	2.18	1.74	1.31
TPS77825PWP	296-8140-5-ND	2.5V, 750mA LDO Regulator	20-HTSSOP	2.18	1.74	1.31
TPS77833D	296-2792-5-ND	3.3V, 750mA LDO Regulator	8-SOIC	2.18	1.74	1.31
TPS77833PWP	296-8141-5-ND	3.3V, 750mA LDO Regulator	20-HTSSOP	2.18	1.74	1.31
TPS77901DGK	296-8142-5-ND	Adjustable, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77918DGK	296-8143-5-ND	1.8V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77925DGK	296-8144-5-ND	2.5V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS77930DGK	296-8145-5-ND	3.0V, 250mA LDO Regulator	8-MSOP	1.55	1.24	.93
TPS78825DBVR	296-12379-1-ND	150mA, 2.5V, Low-Noise LDO with In-Rush Current Control	SOT-23-5	1.44	1.20	.96
TPS78825DBVR	296-12379-2-ND	150mA, 2.5V, Low-Noise LDO with In-Rush Current Control	SOT-23-5	1326.00/3,000		
TPS78833DBVR	296-12380-1-ND	150mA, 3.3V, Low-Noise LDO with In-Rush Current Control	SOT-23-5	1.44	1.20	.96
TPS78833DBVR	296-12380-2-ND	150mA, 3.3V, Low-Noise LDO with In-Rush Current Control	SOT-23-5	1326.00/3,000		
TPS78915DBVR	296-8146-1-ND	1.5V, 100mA LDO Regulator	SOT-23-5	1.14	.95	.76
TPS78915DBVR	296-8146-2-ND	1.5V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS78918DBVR	296-8147-1-ND	1.8V, 100mA LDO Regulator	SOT-23-5	1.14	.95	.76
TPS78918DBVR	296-8147-2-ND	1.8V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS78925DBVR	296-8148-1-ND	2.5V, 100mA LDO Regulator	SOT-23-5	1.14	.95	.76
TPS78925DBVR	296-8148-2-ND	2.5V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS78928DBVR	296-8149-1-ND	2.8V, 100mA LDO Regulator	SOT-23-5	1.14	.95	.76
TPS78928DBVR	296-8149-2-ND	2.8V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS78930DBVR	296-8150-1-ND	3.0V, 100mA LDO Regulator	SOT-23-5	1.14	.95	.76
TPS78930DBVR	296-8150-2-ND	3.0V, 100mA LDO Regulator	SOT-23-5	1287.00/3,000		
TPS79015DBVR	296-8151-1-ND	1.5V, 50mA LDO Regulator	SOT-23-5	1.11	.93	.74
TPS79015DBVR	296-8151-2-ND	1.5V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS79018DBVR	296-8152-1-ND	1.8V, 50mA LDO Regulator	SOT-23-5	1.11	.93	.74
TPS79018DBVR	296-8152-2-ND	1.8V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS79025DBVR	296-8153-1-ND	2.5V, 50mA LDO Regulator	SOT-23-5	1.11	.93	.74
TPS79025DBVR	296-8153-2-ND	2.5V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS79028DBVR	296-8154-1-ND	2.8V, 50mA LDO Regulator	SOT-23-5	1.11	.93	.74
TPS79028DBVR	296-8154-2-ND	2.8V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS79030DBVR	296-8155-1-ND	3.0V, 50mA LDO Regulator	SOT-23-5	1.11	.93	.74
TPS79030DBVR	296-8155-2-ND	3.0V, 50mA LDO Regulator	SOT-23-5	1248.00/3,000		
TPS79101DBVR	296-11864-1-ND	Adj., 100mA LDO Regulator	SOT-23-6	1.44	1.20	.96
TPS79101DBVR	296-11864-2-ND	Adj., 100mA LDO Regulator	SOT-23-6	1404.00/3,000		
TPS79118DBVR	296-11865-1-ND	1.8V, 100mA LDO Regulator	SOT-23-5	1.44	1.20	.96
TPS79118DBVR	296-11865-2-ND	1.8V, 100mA LDO Regulator	SOT-23-5	1404.00/3,000		
TPS79133DBVR	296-11866-1-ND	3.3V, 100mA LDO Regulator	SOT-23-5	1.44	1.20	.96
TPS79133DBVR	296-11866-2-ND	3.3V, 100mA LDO Regulator	SOT-23-5	1404.00/3,000		
TPS79147DBVR	296-11867-1-ND	4.7V, 100mA LDO Regulator	SOT-23-5	1.44	1.20	.96
TPS79147DBVR	296-11867-2-ND	4.7V, 100mA LDO Regulator	SOT-23-5	1404.00/3,000		
TPS79201DBVR	296-11868-1-ND	Adj., 100mA LDO Regulator	SOT-23-6	1.44	1.20	.96
TPS79201DBVR	296-11868-2-ND	Adj., 100mA LDO Regulator	SOT-23-6	1404.00/3,000		
TPS79225DBVR	296-11869-1-ND	2.5V, 100mA LDO Regulator	SOT-23-5	1.44	1.20	.96
TPS79225DBVR	296-11869-2-ND	2.5V, 100mA LDO Regulator	SOT-23-5	1404.00/3,000		
TPS79228DBVR	296-11870-1-ND	2.8V, 100mA LDO Regulator	SOT-23-5	1.44	1.20	.96
TPS79228DBVR	296-11870-2-ND	2.8V, 100mA LDO Regulator	SOT-23-5	1404.00/3,000		
TPS79230DBVR	296-11871-1-ND	3V, 100mA LDO Regulator	SOT-23-5	1.44	1.20	.96
TPS79230DBVR	296-11871-2-ND	3V, 100mA LDO Regulator	SOT-23-5	1404.00/3,000		
TPS79301DBVR	296-12154-1-ND	Adj, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1.29	1.08	.86
TPS79301DBVR	296-12154-2-ND	Adj, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1482.00/3,000		
TPS79318DBVR	296-12155-1-ND	1.8V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1.29	1.08	.86
TPS79318DBVR	296-12155-2-ND	1.8V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1482.00/3,000		
TPS79325DBVR	296-12156-1-ND	2.5V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1.29	1.08	.86
TPS79325DBVR	296-12156-2-ND	2.5V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1482.00/3,000		
TPS79328DBVR	296-12158-1-ND	2.8V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1.29	1.08	.86
TPS79328DBVR	296-12158-2-ND	2.8V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1482.00/3,000		
TPS79330DBVR	296-12159-1-ND	3.0V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1.29	1.08	.86
TPS79330DBVR	296-12159-2-ND	3.0V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1482.00/3,000		
TPS79718DCKR	296-11988-1-ND	1.8V, 10mA Micropower LDO Voltage Regulator	5-SOP	1.44	1.20	.96
TPS79718DCKR	296-11988-2-ND	1.8V, 10mA Micropower LDO Voltage Regulator	5-SOP	1170.00/3,000		
TPS79730DCKR	296-11989-1-ND	3.0V, 10mA Micropower LDO Voltage Regulator	5-SOP	1.44	1.20	.96
TPS79730DCKR	296-11989-2-ND	3.0V, 10mA Micropower LDO Voltage Regulator	5-SOP	1170.00/3,000		
TPS79733DCKR	296-11990-1-ND	3.3V, 10mA Micropower LDO Voltage Regulator	5-SOP	1.44	1.20	.96
TPS79733DCKR	296-11990-2-ND	3.3V, 10mA Micropower LDO Voltage Regulator	5-SOP	1170.00/3,000		
TPS793285DBVR	296-12157-1-ND	2.85V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1.29	1.08	.86
TPS793285DBVR	296-12157-2-ND	2.85V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1482.00/3,000		
TPS793475DBVR	296-12160-1-ND	4.75V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1.29	1.08	.86
TPS793475DBVR	296-12160-2-ND	4.75V, 200mA High-PSRR RF LDO Regulator *NEW!*	SOT-23-5	1482.00/3,000		
UC282TD-1	296-2794-5-ND	1.5V Fast LDO Regulator	TO-263-5	9.00	7.20	6.08
UC282TD-3	296-2795-5-ND	2.5V Fast LDO Regulator	TO-263-5	9.00	7.20	6.08
UC282TD-ADJ	296-2796-5-ND	Adjustable Fast LDO Regulator	TO-263-5	9.00	7.20	6.08
UC285TD-ADJ	296-2800-5-ND	Adjustable 5A LDO Regulator	TO-262-5	9.38	8.45	7.49
UC382T-1	296-2801-5-ND	1.5V, Fast Transient Response LDO Regulator	TO-220-5	7.84	6.28	5.30
UC382T-2	296-2802-5-ND	2.1V, Fast Transient Response LDO Regulator	TO-220-5	7.84	6.28	5.30
UC382T-3	296-2803-5-ND	2.5V, Fast Transient Response LDO Regulator	TO-220-5	7.84	6.28	5.30
UC382T-ADJ	296-2804-5-ND	Adjustable Fast Transient Response LDO Regulator	TO-220-5	7.84	6.28	5.30
UC382TD-1	296-2805-5-ND	1.5V, Fast Transient Response LDO Regulator	TO-263-5	7.84	6.28	5.30
UC382TD-2	296-2806-5-ND	2.1V, Fast Transient Response LDO Regulator	TO-263-5	7.84	6.28	5.30
UC382TD-3	296-2807-5-ND	2.5V, Fast Transient Response LDO Regulator	TO-263-5	7.84	6.28	5.30
UC382TD-ADJ	296-11272-5-ND	Adj., 3000mA LDO Regulator	TO-263-5	7.84	6.28	5.30
UC385T-1	296-2809-5-ND	1.5V, 5A LDO Regulator	TO-220-5	9.50	7.60	6.42
UC385T-2	296-2810-5-ND	2.1V, 5A LDO Regulator	TO-220-5	9.50	7.60	6.42
UC385T-3	296-2811-5-ND	2.5V, 5A LDO Reg.	TO-220-5	9.50	7.60	6.42
UC385T-ADJ	296-2812-5-ND	Adjustable, 5A LDO Reg.	TO-220-5	9.50	7.60	6.42
UC385TD-1	296-2813-5-ND	1.5V, 5A LDO Reg.	TO-263-5	9.50	7.60	6.42
UC385TD-2	296-2814-5-ND	2.1V, 5A LDO Reg.	TO-263-5	9.50	7.60	6.42
UC385TD-3	296-2815-5-ND	2.5V, 5A LDO Reg.	TO-263-5	9.50	7.60	6.42
UC385TD-ADJ	296-2816-5-ND	Adjustable, 5A LDO Regulator	TO-263-5	9.50	7.60	6.42
UC2573D	296-2793-5-ND	Buck Pulse PWM Voltage Regulator	8-SOIC	4.55	3.64	2.83

(Continued)

TEXAS INSTRUMENTS POWER SUPPLY PRODUCTS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
UC2834DW	296-2797-5-ND	High-Efficiency Linear Regulator	16-SOIC	10.31	9.29	8.24
UC2835D	296-2798-5-ND	High-Efficiency Regulator Controller	8-SOIC	7.74	6.20	5.23
UC2836D	296-2799-5-ND	High-Efficiency Regulator Controller	8-SOIC	9.70	7.76	6.55
UC3832N	296-11273-5-ND	Adjustable, 100mA LDO Regulator	14-Dip	5.04	4.04	3.14
UC3833N	296-11274-5-ND	Adjustable, 100mA LDO Regulator	8-Dip	4.91	3.93	3.06
UC3834DW	296-2808-5-ND	High-Efficiency Linear Regulator	16-SOIC	8.46	7.62	6.76
UCC281DP-5	296-2817-5-ND	5V, 1A LDO Regulator	8-SOP	6.70	5.36	4.53
UCC281DP-ADJ	296-2818-5-ND	Adjustable, 1A LDO Regulator	8-SOP	6.70	5.36	4.53
UCC283T-3	296-11413-5-ND	3.3V, 1000mA LDO Regulator	TO-220-3	6.54	5.24	4.42
UCC283T-5	296-11414-5-ND	5V, 3000mA LDO Regulator	TO-220-3	6.54	5.24	4.42
UCC284DP-12	296-11415-5-ND	12V, 500mA Neg. LDO Regulator	8-SOIC	5.08	4.07	3.43
UCC284DP-5	296-11416-5-ND	5V, 500mA Negative LDO Regulator	8-SOP	5.08	4.07	3.43
UCC284DP-ADJ	296-11417-5-ND	Adjustable, 500mA Negative LDO Reg.	8-SOP	5.08	4.07	3.43
UCC381DP-3	296-2819-5-ND	3.3V, 1A LDO Regulator	8-SOP	4.91	3.93	3.06
UCC381DP-5	296-2820-5-ND	5.0V, 1A LDO Regulator	8-SOP	4.91	3.93	3.06
UCC381DP-ADJ	296-2821-5-ND	Adjustable, 1A LDO Regulator	8-SOP	4.91	3.93	3.06
UCC383T-3	296-8156-5-ND	Adjustable, 3A LDO Linear Regulator	TO-220	6.24	5.00	4.22
UCC383T-5	296-8157-5-ND	Adjustable, 3A LDO Linear Regulator	TO-220-5	6.24	5.00	4.22
UCC383T-ADJ	296-8158-5-ND	Adjustable, 3A LDO Linear Regulator	TO-220	6.24	5.00	4.22
UCC383TD-3	296-8159-5-ND	Adjustable, 3A LDO Linear Regulator	TO-263	6.24	5.00	4.22
UCC383TD-5	296-8160-5-ND	Adjustable, 3A LDO Linear Regulator	TO-263-5	6.24	5.00	4.22
UCC383TD-ADJ	296-8161-5-ND	Adjustable, 3A LDO Linear Regulator	TO-263-5	6.24	5.00	4.22
UCC384DP-12	296-8162-5-ND	–12V 0.5A LDO Linear Regulator	8-SOP	3.98	3.19	2.48
UCC384DP-5	296-8163-5-ND	–5V 0.5A LDO Linear Regulator	8-SOP	3.98	3.19	2.48
UCC384DP-ADJ	296-8164-5-ND	Neg Adjustable 0.5A LDO Linear Reg.	8-SOP	3.98	3.19	2.48

Voltage Regulators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
LM317KC	296-9535-5-ND	Adjustable Positive Volt. Regulator	TO-220AB	.92	.69	.52
LM317KTER	296-9536-1-ND	Adjustable Positive Volt. Regulator	3-PFM	.75	.63	.50
LM317KTER	296-9536-2-ND	Adjustable Positive Volt. Regulator	3-PFM	666.00/2,000		
LM317MKTPR	296-9537-1-ND	Adjustable Positive Volt. Regulator	3-PFM	.80	.60	.45
LM317MKTPR	296-9537-2-ND	Adjustable Positive Volt. Regulator	3-PFM	780.00/3,000		
LM337KC	296-9550-5-ND	Adjustable Negative Volt. Regulator	TO-220AB	2.25	1.80	1.40
LM337KTER	296-9551-1-ND	Adjustable Negative Volt. Regulator	3-PFM	2.00	1.60	1.20
LM337KTER	296-9551-2-ND	Adjustable Negative Volt. Regulator	3-PFM	2080.00/2,000		
MC79L05ACDR	296-1016-1-ND	5V Negative Voltage Regulator	8-SOIC	.56	.42	.32
MC79L05ACDR	296-1016-2-ND	5V Negative Voltage Regulator	8-SOIC	455.00/2,500		
MC79L05ACLP	296-9603-5-ND	5V Fixed Negative Voltage Regulator	TO-226AA	.56	.42	.32
MC79L12ACD	296-9604-5-ND	12V Fixed Negative Voltage Reg.	8-SOP	.56	.42	.32
MC79L12ACLPR	296-9605-1-ND	12V Fixed Negative Voltage Reg.	3-TO/SOT	.56	.42	.32
MC79L12ACLPR	296-9605-2-ND	12V Fixed Negative Voltage Reg.	3-TO/SOT	372.00/2,000		
MC79L15ACLP	296-9607-5-ND	15V Fixed Negative Voltage Reg.	TO-226AA	.72	.54	.41
REG102GA-A	REG102GA-A-ND	Adj., 250mA DMOS LDO Regulator *NEW!*	SOT-223-5	2.50	2.00	1.56
REG102GA-2.5	REG102GA-2.5-ND	2.5V, 250mA DMOS LDO Regulator *NEW!*	SOT-223-5	2.50	2.00	1.56
REG102GA-2.8	REG102GA-2.8-ND	2.8V, 250mA DMOS LDO Regulator *NEW!*	SOT-223-5	2.50	2.00	1.56
REG102GA-2.85	REG102GA-2.85-ND	2.85V, 250mA DMOS LDO Regulator *NEW!*	SOT-223-5	2.50	2.00	1.56
REG102GA-3	REG102GA-3-ND	3V, 250mA DMOS LDO Regulator *NEW!*	SOT-223-5	2.50	2.00	1.56
REG102GA-3.3	REG102GA-3.3-ND	3.3V, 250mA DMOS LDO Regulator *NEW!*	SOT-223-5	2.50	2.00	1.56
REG102GA-5	REG102GA-5-ND	5V, 250mA DMOS LDO Regulator *NEW!*	SOT-223-5	2.50	2.00	1.56
REG711EA-2.5/2K5	REG711EA2.52K5CT-ND	2.5V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	2.70	2.16	1.68
REG711EA-2.5/2K5	REG711EA2.52K5TR-ND	2.5V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	3780.00/2,500		
REG711EA-2.7/2K5	REG711EA2.72K5CT-ND	2.7V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	2.70	2.16	1.68
REG711EA-2.7/2K5	REG711EA2.72K5TR-ND	2.7V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	3780.00/2,500		
REG711EA-3/2K5	REG711EA-3/2K5CT-ND	3.0V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	2.70	2.16	1.68
REG711EA-3/2K5	REG711EA-3/2K5TR-ND	3.0V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	3780.00/2,500		
REG711EA-3.3/250	REG711EA3.3250CT-ND	3.3V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	2.70	2.16	1.68
REG711EA-3.3/250	REG711EA3.3250TR-ND	3.3V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	399.00/250		
REG711EA-5/2K5	REG711EA-5/2K5CT-ND	5V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	2.70	2.16	1.68
REG711EA-5/2K5	REG711EA-5/2K5TR-ND	5V, 50mA Switched-Cap DC/DC Converter	8-TSSOP	3780.00/2,500		
TL-SCSI285KC	296-10125-5-ND	2.85V Fixed Volt. Reg. for SCSI	TO-220AB	2.48	1.98	1.54
TL-SCSI285PWR	296-10126-1-ND	2.85V Fixed Volt. Reg. for SCSI	20-TSSOP	2.66	2.13	1.66
TL-SCSI285PWR	296-10126-2-ND	2.85V Fixed Volt. Reg. for SCSI	20-TSSOP	3010.00/2,000		
TL317CLP	296-10167-5-ND	Adjustable Positive Voltage Regulator	TO-92	.90	.75	.60
TL497ACD	296-10195-5-ND	1.2V Switching Voltage Regulator	14-SOIC	2.25	1.80	1.40
TL497ACDR	296-10195-1-ND	1.2V Switching Voltage Regulator	14-SOIC	2.30	1.84	1.43
TL497ACDR	296-10195-2-ND	1.2V Switching Voltage Regulator	14-SOIC	3212.50/2,500		
TL497ACN	296-10196-5-ND	1.2V Switching Voltage Regulator	14-Dip	2.38	1.90	1.43
TL497AID	296-10197-5-ND	1.2V Switching Voltage Regulator	14-SOIC	3.38	2.70	2.10
TL497AIDR	296-10197-1-ND	1.2V Switching Voltage Regulator	14-SOIC	3.38	2.70	2.10
TL497AIDR	296-10197-2-ND	1.2V Switching Voltage Regulator	14-SOIC	4725.00/2,500		
TL497AIN	296-10198-5-ND	1.2V Switching Voltage Regulator	14-Dip	3.38	2.70	2.10
TL780-12CKC	296-10227-5-ND	12V Fixed Positive Voltage Reg.	TO-220AB	.81	.68	.54
TL780-15CKC	296-10228-5-ND	15V Fixed Positive Voltage Reg.	TO-220AB	.81	.68	.54
TL783CKC	296-10229-5-ND	Adjustable Positive Voltage Reg.	TO-220AB	2.45	1.96	1.47
TL2218-285PWR	296-10163-1-ND	2.85V Fixed Volt. Reg. for SCSI	20-TSSOP	2.61	2.09	1.63
TL2218-285PWR	296-10163-2-ND	2.85V Fixed Volt. Reg. for SCSI	20-TSSOP	2958.00/2,000		
TL780-05CKC	296-1803-5-ND	5.0V Positive Voltage Regulator	TO-220AB	.81	.68	.54
UA78L02ACD	296-11116-5-ND	2.0V, 100mA Regulator	8-SOP	.56	.42	.32
UA78L02ACLP	296-11117-5-ND	2.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L05ACD	296-1364-5-ND	5.0V, 100mA Regulator	8-SOIC	.56	.42	.32
UA78L05ACDR	296-1364-1-ND	5.0V, 100mA Regulator	8-SOIC	.56	.42	.32
UA78L05ACDR	296-1364-2-ND	5.0V, 100mA Regulator	8-SOIC	455.00/2,500		
UA78L05ACLP	296-1365-ND	5.0V, 100mA Regulator	TO-92	.56	.42	.32
UA78L05ACLPR	296-1365-1-ND	5.0V, 100mA Regulator	TO-92	.56	.42	.32
UA78L05ACLPR	296-1365-2-ND	5.0V, 100mA Regulator	TO-92	372.00/2,000		
UA78L05ACPK	296-11118-1-ND	5.0V, 100mA Regulator	3-SIP	.64	.48	.36
UA78L05ACPK	296-11118-2-ND	5.0V, 100mA Regulator	3-SIP	213.00/1,000		
UA78L05CD	296-11120-5-ND	5.0V, 100mA Regulator	8-SOP	.56	.42	.32
UA78L05CLP	296-11121-5-ND	5.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L06ACLP	296-11122-5-ND	6.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L08ACD	296-11123-5-ND	8.0V, 100mA Regulator	8-SOP	.56	.42	.32
UA78L08ACLP	296-11124-5-ND	8.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L08ACPK	296-11125-1-ND	8.0V, 100mA Regulator	SOT-89	.56	.42	.32
UA78L08ACPK	296-11125-2-ND	8.0V, 100mA Regulator	SOT-89	186.00/1,000		
UA78L09ACD	296-11126-5-ND	9.0V, 100mA Regulator	8-SOP	.56	.42	.32
UA78L09ACLP	296-11127-5-ND	9.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L09CLP	296-11128-5-ND	9.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L10ACD	296-11129-5-ND	10.0V, 100mA Regulator	8-SOP	.56	.42	.32
UA78L10ACLP	296-1996-ND	10V, 100mA Regulator	TO-92	.56	.42	.32
UA78L12ACD	296-11130-5-ND	12.0V, 100mA Regulator	8-SOP	.56	.42	.32
UA78L12ACLP	296-11131-5-ND	12.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L12ACPK	296-11132-1-ND	12.0V, 100mA Regulator	SOT-89	.56	.42	.32
UA78L12ACPK	296-11132-2-ND	12.0V, 100mA Regulator	SOT-89	186.00/1,000		
UA78L15ACLP	296-11133-5-ND	15.0V, 100mA Regulator	TO-226AA	.56	.42	.32
UA78L15ACPK	296-12002-1-ND	15.0V, 100mA Regulator	SOT-89	.56	.42	.32
UA78L15ACPK	296-12002-2-ND	15.0V, 100mA Regulator	SOT-89	186.00/1,000		
UA78M05CDCYR	296-12290-1-ND	5V, 500mA, Fixed Positive Voltage Regulator *NEW!*	SOT-223	.75	.63	.50
UA78M05CDCYR	296-12290-2-ND	5V, 500mA, Fixed Positive Voltage Regulator *NEW!*	SOT-223	812.50/2,500		
UA78M05CKC	296-11134-5-ND	5.0V, 500mA Regulator	TO-220AB	.75	.63	.50
UA78M05CKTPR	296-11135-1-ND	5.0V, 500mA Regulator	2-PFM	.81	.68	.54
UA78M05CKTPR	296-11135-2-ND	5.0V, 500mA Regulator	2-PFM	1053.00/3,000		
UA78M06CKTPR	296-1366-1-ND	6.0V, 500mA Regulator	2-PFM	.87	.73	.58
UA78M08CKC	296-11136-5-ND	8.0V, 500mA Regulator	TO-220AB	.75	.63	.50
UA78M08CKTPR	296-11137-1-ND	8.0V, 500mA Regulator	2-PFM	.81	.68	.54
UA78M08CKTPR	296-11137-2-ND	8.0V, 500mA Regulator	2-PFM	1053.00/3,000		
UA78M12CKTPR	296-11142-1-ND	12.0V, 500mA Regulator	2-PFM	.87	.73	.58
UA78M12CKTPR	296-11142-2-ND	12.0V, 500mA Regulator	2-PFM	1131.00/3,000		
UA79M08CKTPR	296-11146-1-ND	8V Negative Voltage Regulator	2-PFM	.81	.68	.54
UA79M08CKTPR	296-11146-2-ND	8V Negative Voltage Regulator	2-PFM	1053.00/3,000		
UA723CD	296-11102-5-ND	Adjustable, Prec Voltage Regulator	14-SOIC	.93	.78	.62
UA723CDR	296-11102-1-ND	Adjustable, Prec Voltage Regulator	14-SOIC	.93	.78	.62
UA723CDR	296-11102-2-ND	Adjustable, Prec Voltage Regulator	14-SOIC	1007.50/2,500		
UA723CN	296-11104-5-ND	Adjustable, Prec Voltage Regulator	14-Dip	.93	.78	.62
UA733CN	296-11105-5-ND	Differential Video Amplifier	14-Dip	1.11	.93	.74
UA7805CKC	296-1974-5-ND	5.0V, 1500mA Regulator	TO-220AB	.75	.63	.50
UA7805CKTER	296-11108-1-ND	5.0V, 1500mA Regulator	3-PFM	1.02	.85	.68
UA7805CKTER	296-11108-2-ND	5.0V, 1500mA Regulator	3-PFM	904.40/2,000		
UA7808CKC	296-11109-5-ND	8.0V, 1500mA Regulator	TO-220AB	.75	.63	.50
UA7808CKTER	296-11110-1-ND	8.0V, 1500mA Regulator	3-PFM	1.02	.85	.68
UA7808CKTER	296-11110-2-ND	8.0V, 1500mA Regulator	3-PFM	904.40/2,000		
UA7810CKC	296-1975-5-ND	10V, 1500mA Regulator	TO-220AB	.75	.63	.50
UA7812CKC	296-11111-5-ND	12.0V, 1500mA Regulator	TO-220AB	.75	.63	.50
UA7812CKTER	296-11112-1-ND	12.0V, 1500mA Regulator	3-PFM	1.08	.90	.72
UA7812CKTER	296-11112-2-ND	12.0V, 1500mA Regulator	3-PFM	957.60/2,000		
UC2577T-ADJ	296-11159-5-ND	Adj., Simple Step Up Volt. Regulator	TO-220-5	7.34	5.88	4.96
UC2577TD-ADJ	296-11160-5-ND	Adj., Simple Step Up Volt. Regulator	TO-263-5	7.34	5.88	4.96
UC29431D	296-11209-5-ND	Precision Adjustable Shunt Regulator	8-SOIC	6.66	5.33	4.50
UC39431D	296-11348-5-ND	Precision Adjustable Shunt Regulator	8-SOIC	5.00	4.00	3.11
UC39431N	296-11349-5-ND	Precision Adjustable Shunt Regulator	8-Dip	5.00	4.00	3.11

Buck Regulators

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TPPM0115D	296-11987-5-ND	Switch Mode Sync Buck Controller	8-SOIC	2.95	2.36	1.84
TPPM0115DR	296-11987-2-ND	Switch Mode Sync Buck Controller	8-SOIC	4127.50/2,500		
TPS5120DBT	296-10925-ND	Dual Out Buck Controller	30-TSSOP	6.32	5.06	4.27
TPS5210DW	296-2021-5-ND	Synch. Buck Controller	28-SOIC	6.28	5.03	4.24
TPS5210PWP	296-10929-5-ND	Synch. Buck Controller	28-HTSSOP	6.28	5.03	4.24
TPS5211PWP	296-10931-5-ND	Synch. Buck Controller	28-HTSSOP	6.36	5.09	4.30
TPS54310PWP	296-12509-5-ND	Synch. Buck PWM Conv. *NEW!*	20-HTSSOP	7.40	5.92	5.00
TPS5615PWP	296-2022-5-ND	Buck Regulator Controller	28-HTSSOP	6.60	5.28	4.46
TPS5618PWP	296-2023-5-ND	Buck Regulator Controller	28-HTSSOP	6.60	5.28	4.46
TPS5625PWP	296-2024-5-ND	Buck Regulator Controller	28-HTSSOP	6.60	5.28	4.46
TPS5633PWP	296-2025-5-ND	Buck Regulator Controller	28-HTSSOP	6.60	5.28	4.46
TPS60240DGKR	296-12510-1-ND	3.3V Zero-Ripple Switched Cap Buck-Boost Converter *NEW!*	8-MSOP	3.35	2.69	2.09
TPS60240DGKR	296-12510-2-ND	3.3V Zero-Ripple Switched Cap Buck-Boost Converter *NEW!*	8-MSOP	4692.50/2,500		
TPS60241DGKT	296-12241-1-ND	Zero-Ripple Switched Cap Buck Boost Converter *NEW!*	8-MSOP	3.35	2.69	2.09
TPS60241DGKT	296-12241-2-ND	Zero-Ripple Switched Cap Buck Boost Converter *NEW!*	8-MSOP	495.50/250		
TPS60242DGKT	296-12511-5-ND	2.7V Zero-Ripple Switched Cap Buck-Boost Converter *NEW!*	8-MSOP	3.35	2.69	2.09
TPS60243DGKT	296-12512-5-ND	3V Zero-Ripple Switched Cap Buck-Boost Converter *NEW!*	8-MSOP	3.35	2.69	2.09
TPS62100D	296-10976-5-ND	Adjustable Sync Buck Converter	8-SOP	4.30	3.44	2.68
TPS62101D	296-10977-5-ND	Adjustable Sync Buck Converter	8-SOP	4.30	3.44	2.68
TPS62102D	296-10978-5-ND	Adjustable Sync Buck Converter	8-SOP	4.30	3.44	2.68
TPS62103D	296-10979-5-ND	Adjustable Sync Buck Converter	8-SOP	4.30	3.44	2.68
UCC3585D	296-11448-5-ND	Low Voltage Buck Controller	16-SOIC	4.03	3.23	2.51
UCC3585M	296-11450-5-ND	Low Voltage Buck Controller	16-SSOP	4.03	3.23	2.51
UCC3585N	296-11451-5-ND	Low Voltage Buck Controller	16-Dip	4.03	3.23	2.51

TEXAS INSTRUMENTS PRECISION GROUND REFERENCE

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TLE2425CD	296-1344-5-ND	2.5V Precision Ground Reference	8-SOIC	1.40	1.12	.84
TLE2425CDR	296-1344-1-ND	2.5V Precision Ground Reference	8-SOIC	1.40	1.12	.84
TLE2425CDR	296-1344-2-ND	2.5V Precision Ground Reference	8-SOIC	1792.00/2,500		
TLE2425CLP	296-1993-ND	2.5V Precision Ground Reference	TO-92	1.40	1.12	.84
TLE2425ID	296-6545-5-ND	2.5V Precision Ground Reference	8-SOP	1.40	1.12	.84
TLE2425ILP	296-6546-5-ND	2.5V Precision Ground Reference	TO-92	1.40	1.12	.84
TLE2426CD	296-6547-5-ND	1/2 Rail Virtual Ground Reference	8-SOIC	1.47	1.23	.98
TLE2426CLP	296-1994-ND	1/2 Rail Virtual Ground Reference	TO-92	1.47	1.23	.98
TLE2426CLPR	296-1994-1-ND	1/2 Rail Virtual Ground Reference	TO-92	1.47	1.23	.98
TLE2426CLPR	296-1994-2-ND	1/2 Rail Virtual Ground Reference	TO-92	1304.00/2,000		
TLE2426CP	296-6548-5-ND	1/2 Rail Virtual Ground Reference	8-Dip	1.47	1.23	.98
TLE2426ID	296-1345-5-ND	1/2 Rail Virtual Ground Reference	8-SOIC	1.47	1.23	.98
TLE2426IDR	296-1345-1-ND	1/2 Rail Virtual Ground Reference	8-SOIC	1.47	1.23	.98
TLE2426IDR	296-1345-2-ND	1/2 Rail Virtual Ground Reference	8-SOIC	1592.50/2,500		
TLE2426ILP	296-6549-5-ND	1/2 Rail Virtual Ground Reference	TO-92	1.33	1.06	.80
TLE2426IP	296-6550-5-ND	1/2 Rail Virtual Ground Reference	8-Dip	1.47	1.23	.98

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Texas Instruments — PROGRAMMABLE GATE ARRAYS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TIBPAL16L8-7CN	296-10088-5-ND	HP Impact-X PAL Circuits	20-Dip	3.92	3.14	2.44
TIBPAL16L8-10CFN	296-10082-5-ND	HP Impact-X PAL Circuits	20-PLCC	2.30	1.84	1.43
TIBPAL16L8-10CN	296-10083-5-ND	HP Impact-X PAL Circuits	20-Dip	2.30	1.84	1.43
TIBPAL16L8-15CFN	296-10084-5-ND	HP Impact PAL Circuits	20-PLCC	1.50	1.20	.90
TIBPAL16L8-15CN	296-10085-5-ND	HP Impact PAL Circuits	20-Dip	1.50	1.20	.90
TIBPAL16L8-25CFN	296-10086-5-ND	Low Power, HP Impact PAL Circuits	20-PLCC	1.40	1.12	.84
TIBPAL16L8-25CN	296-10087-5-ND	Low Power, HP Impact PAL Circuits	20-Dip	1.40	1.12	.84
TIBPAL16R4-15CN	296-10090-5-ND	HP Impact PAL Circuits	20-Dip	1.50	1.20	.90
TIBPAL16R4-25CFN	296-10091-5-ND	Low Power, HP Impact PAL Circuits	20-PLCC	1.40	1.12	.84
TIBPAL16R6-15CN	296-10095-5-ND	HP Impact PAL Circuits	20-Dip	1.35	1.08	.81
TIBPAL16R8-15CN	296-10096-5-ND	HP Impact PAL Circuits	20-Dip	1.50	1.20	.90
TIBPAL16R8-25CFN	296-10097-5-ND	Low Power, HP Impact PAL Circuits	20-PLCC	1.40	1.12	.84
TIBPAL16R8-25CN	296-10098-5-ND	Low Power, HP Impact PAL Circuits	20-Dip	1.40	1.12	.84
TIBPAL20L8-5CFN	296-10101-5-ND	HP Impact-X PAL Circuits	28-PLCC	10.90	9.81	8.70
TIBPAL20L8-5CNT	296-10102-5-ND	HP Impact-X PAL Circuits	24-Dip	10.90	9.81	8.70
TIBPAL20L8-15CFN	296-10100-5-ND	HP Impact PAL Circuits	28-PLCC	2.40	1.92	1.44
TIBPAL20R4-15CNT	296-10103-5-ND	HP Impact PAL Circuits	24-Dip	2.40	1.92	1.44
TIBPAL20R4-25CNT	296-10104-5-ND	Low Power, HP Impact PAL Circuits	24-Dip	1.95	1.56	1.17
TIBPAL20R6-25CNT	296-10108-5-ND	Low Power, HP Impact PAL Circuits	24-Dip	1.95	1.56	1.17
TIBPAL20R8-7CFN	296-10114-5-ND	HP Impact-X PAL Circuits	28-PLCC	5.64	4.52	3.81
TIBPAL20R8-15CNT	296-10111-5-ND	HP Impact PAL Circuits	24-Dip	2.40	1.92	1.44
TIBPAL20R8-25CFN	296-10112-5-ND	Low Power, HP Impact PAL Circuits	28-PLCC	1.95	1.56	1.17
TIBPAL20R8-25CNT	296-10113-5-ND	Low Power, HP Impact PAL Circuits	24-Dip	1.95	1.56	1.17

Texas Instruments — REALTIME CLOCKS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
BQ3285EP	296-2595-5-ND	RealTime Clock	24-Dip	4.28	3.42	2.66
BQ3285ES	296-2596-5-ND	RealTime Clock	24-SOIC	4.28	3.42	2.66
BQ3285ESS	296-2597-5-ND	RealTime Clock	24-SSOP	4.28	3.42	2.66
BQ3285LDSS	296-2599-5-ND	ACPI Compliant RealTime Clock	24-SSOP	4.28	3.42	2.66
BQ3285LFSS-A1	296-6518-5-ND	ACPI Compliant RTC with (240x8) NVSRAM	24-SOP	4.28	3.42	2.66
BQ3285P-SB2	296-2601-5-ND	RealTime Clock	24-Dip	4.28	3.42	2.66
BQ3285S-SB2	296-6519-5-ND	RTC with (114x8) NVSRAM	24-SOP	4.28	3.42	2.66
BQ3287AMT-SB2	296-6520-5-ND	RTC Module w/(114x8) NVSRAM	T-MOD	7.20	5.76	4.86
BQ3287EAMT	296-6521-5-ND	RTC Module with (242x8) NVSRAM/Alarm Wake-up	T-MOD	7.20	5.76	4.86
BQ3287EMT	296-6522-5-ND	RTC Module with (242x8) NVSRAM/Alarm Wake-up	T-MOD	7.20	5.76	4.86
BQ3287MT-I	296-6523-5-ND	RTC Module with (114x8) NVSRAM	T-MOD	7.20	5.76	4.86
BQ3287MT-SB2	296-6524-5-ND	RTC Module with (114x8) NVSRAM	T-MOD	7.20	5.76	4.86
BQ4285EP	296-6525-5-ND	RTC with (114x8) NVSRAM Alarm Wake-up	24-Dip	6.70	5.36	4.53
BQ4285LS	296-6526-5-ND	RTC with (114x8) NVSRAM Alarm Wake-up	24-SOP	4.70	3.77	2.93
BQ4285P-SB2	296-6527-5-ND	RTC with (114x8) NVSRAM/NVSRAM Control	24-Dip	4.70	3.77	2.93
BQ4285S-SB2	296-6528-5-ND	RTC with (114x8) NVSRAM/NVSRAM Control	24-SOP	4.70	3.77	2.93
BQ4287MT-SB2	296-6529-5-ND	RTC Module with (114x8) NVSRAM/NVSRAM Control	T-MOD	8.18	6.55	5.53
BQ4802LYDWR	296-6530-1-ND	Parallel 3V RTC with CPU Supervisor/ Ext. NVSRAM Control	28-SOIC	5.02	4.02	3.13
BQ4802LYDWR	296-6530-2-ND	Parallel 3V RTC with CPU Supervisor/ Ext. NVSRAM Control	28-SOIC	2843.00/1,000		
BQ4802YDW	296-6531-5-ND	Parallel 5V RTC with CPU Supervisor/ Ext. NVSRAM Control	28-SOIC	5.02	4.02	3.13
BQ4822YMA-70	296-6532-5-ND	RTC Module with (8Kx8) NVSRAM/Watchdog Timer	A-MOD	22.44	20.95	19.45
BQ4830YMA-85	296-6533-5-ND	RTC Module w/(32Kx8) NVSRAM	A-MOD	24.09	22.49	20.88
BQ4832YMA-85	296-6534-5-ND	RTC Module with (32Kx8) NVSRAM/Watchdog Timer	A-MOD	27.00	25.20	23.40
BQ4842YMA-85	296-6535-5-ND	RTC Module with (128Kx8) NVSRAM/Watchdog Timer	A-MOD	29.43	27.47	25.51
BQ4845P-A4	296-6536-5-ND	RTC with NVSRAM Control/ Watchdog Timer	28-Dip	5.02	4.02	3.13
BQ4845S-A4	296-6537-5-ND	RTC with NVSRAM Control/ Watchdog Timer	28-SOP	5.02	4.02	3.13
BQ4845S-A4N	296-6538-5-ND	RTC with NVSRAM Control/ Watchdog Timer	28-SOP	5.02	4.02	3.13
BQ4845YS-A4	296-6539-5-ND	RTC with NVSRAM Control/ Watchdog Timer	28-SOIC	5.02	4.02	3.13
BQ4845YS-A4N	296-6540-5-ND	RTC with NVSRAM Control/ Watchdog Timer	28-SOIC	5.02	4.02	3.13
BQ4847MT	296-6541-5-ND	RTC with NVSRAM Control/ Watchdog Timer	T-MOD	9.40	7.52	6.35
BQ4847YMT	296-6542-5-ND	RTC with NVSRAM Control/ Watchdog Timer	T-MOD	9.40	7.52	6.35
BQ4850YMA-85	296-6543-5-ND	RTC Module with (512Kx8) NVSRAM	A-MOD	59.15	55.21	51.26
BQ4852YMC-85	296-6544-5-ND	RTC Module with (512Kx8) NVSRAM/Watchdog Timer	C-MOD	66.98	62.51	58.05

Texas Instruments — RF PRODUCTS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TRF2052PW	296-1969-5-ND	2GHz Low Voltage Synthesizer	20-TSSOP	4.84	3.87	3.01
TRF4400PW	296-11056-5-ND	420-450MHz Single Chip RF Transmitter	24-TSSOP	4.75	3.80	2.96
TRF4900PW	296-11057-5-ND	850-950MHz Single Chip RF Transmitter	24-TSSOP	4.75	3.80	2.96
TRF6900APT	296-11058-ND	850-950MHz Single Chip RF Transceiver	48-LQFP	7.58	6.07	5.12
TRF6901PT	296-12242-ND	860-930MHz Single Chip RF Transceiver *NEW!*	48-PQFP	6.14	4.92	4.15

Texas Instruments — SIGNAL CONTROLLERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
		Audio Processors / CODECs				
TAS1020APFB	296-12000-ND	Stereo USB Audio Interface	48-TQFP	5.20	4.16	3.51
TAS3001CPW	296-2208-5-ND	Stereo Digital Equalizer	28-SOP	3.26	2.61	2.03
TAS3002PFB	296-9977-ND	Digital Audio Processor with CODEC	48-TQFP	5.74	4.60	3.88
TAS3004PFB	296-9978-ND	Digital Audio Processor with CODEC	48-TQFP	6.08	4.87	4.11
TAS5000PFB	296-9979-ND	Digital Audio PWM Processor	48-TQFP	5.84	4.68	3.95
TAS5001IPFB	296-12556-ND	Digital Audio PWM Processor *NEW!*	48-TQFP	4.86	3.89	3.03
TAS5001PFB	296-12212-ND	Digital Audio PWM Processor *NEW!*	48-TQFP	4.34	3.48	2.71
TAS5010IPFB	296-12557-ND	Digital Audio PWM Processor *NEW!*	48-TQFP	5.42	4.34	3.66
TAS5010PFB	296-12213-ND	Digital Audio PWM Processor *NEW!*	48-TQFP	5.45	4.36	3.39
TAS5012IPFB	296-12558-ND	Digital Audio PWM Processor *NEW!*	48-TQFP	8.40	7.56	6.71
TAS5012PFB	296-12214-ND	Digital Audio PWM Processor *NEW!*	48-TQFP	9.00	7.20	6.08
TLC320AD77CDB	296-2210-5-ND	24-Bit, Stereo CODEC	28-SSOP	5.70	4.56	3.85
TLV320AIC10CPFB	296-2214-ND	16-Bit, General Purpose DSP CODEC	48-TQFP	4.52	3.62	2.82
TLV320AIC11CPFB	296-2215-ND	16-Bit, Low Voltage DSP CODEC	48-TQFP	4.52	3.62	2.82
TLV320AIC10IPFB	296-10702-ND	16-Bit, General Purpose DSP CODEC	48-QFP	4.86	3.89	3.03
TLV320AIC11IPFB	296-10703-ND	16-Bit, Low Voltage DSP CODEC	48-QFP	4.86	3.89	3.03
TLV320AIC12IDBT	296-12398-5-ND	Low-Power CMOS, 1-Channel, 16-Bit, 3.3V, 26-KSPS CODEC *NEW!*	30-TSSOP	5.64	4.52	3.81
TLV320AIC13IDBT	296-12504-5-ND	Low Power, Low Volt., Single Chan., 16-Bit CODEC *NEW!*	30-TSSOP	6.06	4.85	4.10
TLV320AIC14IDBT	296-12399-5-ND	Low-Power CMOS, 1-Channel, 16-Bit, 3.3V, 26-KSPS CODEC *NEW!*	30-TSSOP	5.42	4.34	3.38
TLV320AIC15IDBT	296-12505-5-ND	Low Power, Low Volt., Single Chan., 16-Bit CODEC *NEW!*	30-TSSOP	5.54	4.44	3.74
TLV320AIC23GQE	296-12026-5-ND	24-Bit Stereo CODEC for Portable Audio *NEW!*	80-VFBGA	5.60	4.48	3.78
TLV320DAC23GQE	296-12027-5-ND	8-96kHz Stereo Audio DAC *NEW!*	80-VFBGA	4.28	3.42	2.66
TWL1103GQER	296-11095-1-ND	Voice Band Audio Processor	80-BGA	6.50	5.20	4.39
TWL1103GQER	296-11095-2-ND	Voice Band Audio Processor	80-BGA	10075.00/2,500		
TWL1103PBSR	296-11096-1-ND	Voice Band Audio Processor	32-QFP	6.00	4.80	4.05
TWL1103PBSR	296-11096-2-ND	Voice Band Audio Processor	32-QFP	3750.00/1,000		
TWL1106PWR	296-12028-1-ND	LP Pin-Programmable Voice Band Audio Processor *NEW!*	20-TSSOP	4.79	3.84	2.99
TWL1106PWR	296-12028-2-ND	LP Pin-Programmable Voice Band Audio Processor *NEW!*	20-TSSOP	5432.00/2.000		
TWL1107PWR	296-12029-1-ND	LP Pin-Programmable Voice Band Audio Processor *NEW!*	20-TSSOP	4.79	3.84	2.99
TWL1107PWR	296-12029-2-ND	LP Pin-Programmable Voice Band Audio Processor *NEW!*	20-TSSOP	5432.00/2,000		
TWL1109PBSR	296-11097-1-ND	Voice Band Audio Processor	32-QFP	6.12	4.90	4.14
TWL1109PBSR	296-11097-2-ND	Voice Band Audio Processor	32-QFP	3825.00/1,000		
TWL1110GQER	296-11098-1-ND	Voice Band Audio Processor	80-BGA	6.62	5.30	4.47
TWL1110GQER	296-11098-2-ND	Voice Band Audio Processor	80-BGA	10260.00/2,500		
TWL1110PBSR	296-11099-1-ND	Voice Band Audio Processor	32-QFP	6.12	4.90	4.14
TWL1110PBSR	296-11099-2-ND	Voice Band Audio Processor	32-QFP	3825.00/1,000		

Texas Instruments — MICROCONTROLLERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
		MSP430 Family				
MSP430F110IDW	296-6506-5-ND	16-Bit Ultra-LP with 1K Byte Flash, 128 Byte RAM, Comparator	20-SOIC	2.43	1.94	1.46
MSP430F110IPW	296-9609-5-ND	16-Bit Ultra-LP w/1K Byte Flash, 128 Byte Ram, Comparator	20-TSSOP	2.43	1.94	1.46
MSP430F112IDW	296-6509-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM	20-SOIC	3.76	3.01	2.34
MSP430F112IPW	296-9610-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte Ram	20-TSSOP	3.76	3.01	2.34
MSP430F122IPW	296-12082-5-ND	16-Bit Ultra-LP, 256-Byte MCU	28-TSSOP	5.20	4.16	3.24
MSP430F123IPW	296-12083-5-ND	16-Bit Ultra-LP, 256-Byte MCU	28-TSSOP	5.42	4.34	3.38
MSP430F133IPM	296-9611-ND	16-Bit Ultra-LP with 8K Byte Flash, 256 Byte Ram	64-QFP	5.66	4.53	3.83
MSP430F135IPM	296-9612-ND	16-Bit Ultra-LP with 16K Byte Flash, 512 Byte Ram	64-QFP	6.82	5.46	4.61
MSP430F147IPM	296-9613-ND	16-Bit Ultra-LP with 32K Byte Flash, 1024 Byte Ram	64-QFP	9.52	7.62	6.43
MSP430F148IPM	296-9614-ND	16-Bit Ultra-LP with 48K Byte Flash, 2048 Byte Ram	64-QFP	9.05	8.15	7.23
MSP430F149IPM	296-9615-ND	16-Bit Ultra-LP with 60K Byte Flash, 2048 Byte Ram	64-QFP	9.55	8.60	7.63
MSP430F412IPM	296-12084-ND	16-Bit Ultra-LP, 256-Byte MCU	64-LQFP	5.51	4.41	3.43
MSP430F413IPM	296-12085-ND	16-Bit Ultra-LP, 256-Byte MCU	64-LQFP	5.58	4.47	3.77
MSP430F1101IDW	296-6505-5-ND	16-Bit Ultra-LP with 1K Byte Flash, 128 Byte RAM, Comparator	20-SOIC	2.43	1.94	1.46
MSP430F1101IPW	296-9608-5-ND	16-Bit Ultra-LP with 1K Byte Flash, 128 Byte Ram, Comparator	20-TSSOP	2.43	1.94	1.46
MSP430F1121IDW	296-6507-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM, Comparator	20-SOIC	3.76	3.01	2.34
MSP430F1121IPW	296-6508-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM, Comparator	20-TSSOP	3.76	3.01	2.34
MSP430P112IDW	296-6510-5-ND	16-Bit Ultra-LP with 4K Byte Flash, 256 Byte RAM	20-SOIC	5.04	4.04	3.14
MSP430P313IDL	296-6511-5-ND	16-Bit Ultra-LP with 8K Byte OTP, 256 Byte RAM, LCD Mux Driver	56-SSOP	9.92	7.94	6.70
MSP430P315IDL	296-2382-5-ND	Mixed Signal Microcontroller	56-SOP	9.92	7.94	6.70
MSP430P315SIDL	296-6512-5-ND	16-Bit Ultra-LP with 16K Byte OTP, 512 Byte RAM, LCD Mux Driver	48-SSOP	9.92	7.94	6.70
MSP430P325AIFN	296-6513-5-ND	16-Bit Ultra-LP w/16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver	68-PLCC	11.01	9.92	8.80
MSP430P325AIPG	296-6514-ND	16-Bit Ultra-LP w/16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver	64-QFP	10.83	9.75	8.65
MSP430P325AIPM	296-6515-ND	16-Bit Ultra-LP w/16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver	64-TQFP	10.83	9.75	8.65
MSP430P325IFN	296-1409-5-ND	Mixed Signal Microcontroller	68-PLCC	11.01	9.92	8.80

(Continued)

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TEXAS INSTRUMENTS MICROCONTROLLERS *(Continued)*

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MSP430P325IPG	296-2383-ND	Mixed Signal Microcontroller	64-PQFP	10.91	9.83	8.72
MSP430P325IPM	296-6516-ND	16-Bit Ultra-LP w/16K Byte OTP, 512 Byte RAM, 14-Bit ADC, LCD Mux Driver	64-TQFP	10.83	9.75	8.65
MSP430P337AIPJM	296-2384-ND	Mixed Signal Microcontroller	100-PQFP	12.06	10.86	9.63
MSP430P337IPJM	296-6517-ND	16-Bit Ultra-LP with 32K Byte OTP, 1K Byte RAM, USART, HW Multiplier, LCD Mux Driver	100-QFP	12.06	10.86	9.63

TMS370 Family

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TMS370C756AFNT	296-10770-5-ND	8-Bit Microcontroller	68-PLCC	16.43	15.33	14.24

TEXAS INSTRUMENTS TIMERS

T. I. Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NE555DR	296-6501-1-ND	Precision Timer	8-SOIC	.52	.39	.30
NE555DR	296-6501-2-ND	Precision Timer	8-SOIC	422.50/2,500		
NE555P	296-1411-5-ND	Precision Timer	8-Dip	.52	.39	.30
NE555PSR	296-6502-1-ND	Precision Timer	8-SOP	1.35	1.13	.90
NE555PSR	296-6502-2-ND	Precision Timer	8-SOP	1198.00/2,000		
NE556D	296-6503-5-ND	Dual Precision Timer	14-SOIC	.75	.63	.50
NE556N	296-6504-5-ND	Dual Precision Timer	14-Dip	.75	.63	.50
SA555D	296-9681-5-ND	Precision Timer	8-SOP	.81	.68	.54
SA555P	296-9682-5-ND	Precision Timer	8-Dip	.81	.68	.54
SE555D	296-9683-5-ND	Precision Timer	8-SOP	.84	.70	.56
SE555P	296-9684-5-ND	Precision Timer	8-Dip	.84	.70	.56
TLC551CP	296-10333-5-ND	CMOS Timer	8-Dip	1.20	1.00	.80
TLC552CD	296-10334-5-ND	CMOS Timer	14-SOIC	1.55	1.24	.93
TLC552CN	296-10335-5-ND	CMOS Timer	14-Dip	1.55	1.24	.93
TLC555CD	296-1336-5-ND	CMOS Timer	8-SOIC	.92	.69	.52
TLC555CDR	296-1336-1-ND	CMOS Timer	8-SOIC	.92	.69	.52
TLC555CDR	296-1336-2-ND	CMOS Timer	8-SOIC	747.50/2,500		
TLC555CP	296-1857-5-ND	CMOS Timer	8-Dip	.92	.69	.52
TLC555CPWR	296-10339-1-ND	CMOS Timer	14-TSSOP	.92	.69	.52
TLC555CPWR	296-10339-2-ND	CMOS Timer	14-TSSOP	612.00/2,000		
TLC555ID	296-1337-5-ND	CMOS Timer	8-SOIC	.75	.63	.50
TLC555IDR	296-1337-1-ND	CMOS Timer	8-SOIC	.75	.63	.50
TLC555IDR	296-1337-2-ND	CMOS Timer	8-SOIC	812.50/2,500		
TLC555IP	296-1858-5-ND	CMOS Timer	8-Dip	.75	.63	.50
TLC555QDR	296-10341-1-ND	CMOS Timer	8-SOIC	.84	.70	.56
TLC555QDR	296-10341-2-ND	CMOS Timer	8-SOIC	910.00/2,500		
TLC556CD	296-1338-5-ND	Dual CMOS Timer	14-SOIC	1.11	.93	.74
TLC556CDR	296-1338-1-ND	Dual CMOS Timer	14-SOIC	1.11	.93	.74
TLC556CDR	296-1338-2-ND	Dual CMOS Timer	14-SOIC	1202.50/2,500		
TLC556CN	296-1859-5-ND	Dual CMOS Timer	14-Dip	1.11	.93	.74
TLC556ID	296-10343-5-ND	Dual CMOS Timer	14-SOIC	1.23	1.03	.82
TLC556IN	296-10344-5-ND	Dual CMOS Timer	14-Dip	1.23	1.03	.82
TLC556MD	296-10345-5-ND	Dual CMOS Timer	14-SOIC	1.75	1.40	1.05

FAIRCHILD SEMICONDUCTOR 7400 SERIES TTL

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DM7400N-ND	Quad 2-Input NAND Gate	14-Dip	.88	.66	.50
DM7402N-ND	Quad 2-Input NOR Gate	14-Dip	.88	.66	.50
DM7404N-ND	Hex Inverter	14-Dip	.88	.66	.50
DM7405N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7406M-ND	Hex Inverter with Open-Collect Outputs	14-SOIC	.48	.37	.28
DM7406N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.48	.37	.28
DM7407M-ND	Hex Buffer with Open-Collect Outputs	14-SOIC	.48	.37	.28
DM7407N-ND	Hex Buffer with Open-Collect Outputs	14-Dip	.48	.37	.28
DM7408N-ND	Quad 2-Input AND Gate	14-Dip	.88	.66	.50
DM7414N-ND	Hex Schmitt Trigger Inverter	14-Dip	.89	.75	.60
DM7416N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7417N-ND	Hex Buffer with Open-Collect Outputs	14-Dip	.88	.66	.50
DM7447AN-ND	BCD-to-7 Segment Decoder/Driver	16-Dip	1.95	1.57	1.18
DM7474N-ND	Dual D-Type Pos.-Edge-Trig. Flip Flop with Preset & Clear	14-Dip	.79	.66	.53
DM7476N-ND	Dual JK M/S Flip Flop	16-Dip	.96	.80	.64
DM7486N-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.96	.80	.64
DM74125N-ND	Tri-State Quad Buffer	14-Dip	3.05	2.40	1.94
DM74145N-ND	BCD-to-Decimal Decoder/Driver	16-Dip	1.60	1.28	.96
DM74150N-ND	16-to-1 Multiplexer	24-Dip	2.33	1.87	1.45
DM9368N-ND	7 Segment Decoder/Driver/Latch	16-Dip	4.70	3.77	2.93
DS75451N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50
DS75452N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50
DS75453N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50

FAIRCHILD SEMICONDUCTOR 74LS00 SERIES TTL

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DM74LS00M-ND	Quad 2-Input NAND Gate	14-SOIC	.48	.37	.28
DM74LS00N-ND	Quad 2-Input NAND Gate	14-Dip	.48	.37	.28
DM74LS02N-ND	Quad 2-Input NOR Gate	14-Dip	.48	.37	.28
DM74LS03N-ND	Quad 2-Input NAND Gate with Open-Collect Outputs	14-Dip	.48	.37	.28
DM74LS04M-ND	Hex Inverter	14-SOIC	.48	.37	.28
DM74LS04N-ND	Hex Inverter	14-Dip	.48	.37	.28
DM74LS05N-ND	Hex Inverter with Open-Collect Outputs	14-Dip	.48	.37	.28
DM74LS08M-ND	Quad 2-Input AND Gate	14-SOIC	.48	.37	.28
DM74LS08N-ND	Quad 2-Input AND Gate	14-Dip	.48	.37	.28
DM74LS09N-ND	Quad 2-Input AND Gate with Open-Collect Outputs	14-Dip	.57	.43	.33
DM74LS10N-ND	Triple 3-Input NAND Gate	14-Dip	.48	.37	.28
DM74LS11N-ND	Triple 3-Input AND Gate	14-Dip	.48	.37	.28
DM74LS14M-ND	Hex Schmitt Trigger Inverter	14-SOIC	.57	.43	.33
DM74LS14N-ND	Hex Schmitt Trigger Inverter	14-Dip	.57	.43	.33
DM74LS20N-ND	Dual 4-Input NAND Gate	14-Dip	.48	.37	.28
DM74LS27N-ND	Triple 3-Input NOR Gate	14-Dip	.48	.37	.28
DM74LS30N-ND	8-Input NAND Gate	14-Dip	.48	.37	.28
DM74LS32M-ND	Quad 2-Input OR Gate	14-SOIC	.48	.37	.28
DM74LS32N-ND	Quad 2-Input OR Gate	14-Dip	.48	.37	.28
DM74LS38N-ND	Quad 2-Input NAND Buffer w/Open-Collect Outputs	14-Dip	.53	.40	.30
DM74LS74AM-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Reset	14-SOIC	.53	.40	.30
DM74LS74AN-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Reset	14-Dip	.53	.40	.30
DM74LS75N-ND	Quad Latch	16-Dip	.57	.43	.33
DM74LS83AN-ND	4-Bit Binary Full Adder	16-Dip	.57	.43	.33
DM74LS85N-ND	4-Bit Magnitude Comparator	16-Dip	.57	.43	.33
DM74LS86N-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.57	.43	.33
DM74LS90N-ND	Decade Counter	14-Dip	.70	.53	.40
DM74LS109AN-ND	Dual JK Flip Flop	16-Dip	.57	.43	.33
DM74LS112AN-ND	Dual JK Flip Flop	16-Dip	.62	.47	.35
DM74LS123M-ND	Dual Monostable Multivibrator	16-SOIC	.62	.47	.35
DM74LS123N-ND	Dual Monostable Multivibrator	16-Dip	.62	.47	.35
DM74LS125AM-ND	Tri-State Quad Buffer	14-SOIC	.62	.47	.35
DM74LS125AN-ND	Tri-State Quad Buffer	14-Dip	.62	.47	.35
DM74LS132N-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.62	.47	.35
DM74LS138N-ND	Expandable 3/8 Decoder	16-Dip	.66	.50	.38
DM74LS139N-ND	Expandable 2/4 Decoder	16-Dip	.66	.50	.38
DM74LS151N-ND	8-Channel Multiplexer	16-Dip	.66	.50	.38
DM74LS153N-ND	Dual 4-to-1 Multiplexer	16-Dip	.66	.50	.38
DM74LS154N-ND	4-to-16 Decoder/Demultiplexer	24-Dip	4.23	3.39	2.64
DM74LS157N-ND	Quad 2-Input Multiplexer	16-Dip	.66	.50	.38
DM74LS161AN-ND	Presettable Binary Counter	16-Dip	.66	.50	.38
DM74LS163AN-ND	4-Bit Binary Counter, Synchronous	16-Dip	.66	.50	.38
DM74LS164N-ND	8-Bit Parallel Out Shift Register	14-Dip	.66	.50	.38
DM74LS165N-ND	8-Bit Parallel In/Serial Out Shift Register	16-Dip	.66	.50	.38
DM74LS169N-ND	Up/Down Binary Counter	16-Dip	.66	.50	.38
DM74LS174N-ND	Hex D-Type Flip Flop	16-Dip	.66	.50	.38
DM74LS175N-ND	Quad D-Type Flip Flop	16-Dip	.66	.50	.38
DM74LS191N-ND	Up/Down Binary Counter	16-Dip	.97	.73	.55
DM74LS221N-ND	Dual Monostable with Schmitt Trigger Input	16-Dip	.70	.53	.40
DM74LS240N-ND	Tri-State Octal Inverter Bus/Line Driver	20-Dip	.77	.58	.44
DM74LS241N-ND	Tri-State Octal Line Driver	20-Dip	.77	.58	.44
DM74LS244N-ND	Tri-State Octal Line Driver	20-Dip	.77	.58	.44
DM74LS244WM-ND	Tri-State Octal Line Driver	20-SOIC	.77	.58	.44
DM74LS245N-ND	Tri-State Octal Bus Transceiver	20-Dip	.77	.58	.44
DM74LS245WM-ND	Tri-State Octal Bus Transceiver	20-SOIC	.77	.58	.44
DM74LS253N-ND	Tri-State Dual 4-Input Multiplexer	16-Dip	.75	.57	.43
DM74LS259N-ND	8-Bit Addressable Latch	16-Dip	.75	.57	.43
DM74LS273N-ND	Octal D-Type Flip Flop with Reset	20-Dip	.77	.58	.44
DM74LS279N-ND	Quad SR Latch	16-Dip	.88	.66	.50
DM74LS367AN-ND	Tri-State Hex Buffer	16-Dip	.77	.58	.44
DM74LS373N-ND	Octal D-Type Latch	20-Dip	.77	.58	.44
DM74LS374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.77	.58	.44
DM74LS374WM-ND	Tri-State Octal D-Type Flip Flop	20-SOIC	.77	.58	.44
DM74LS377N-ND	8-Bit D-Type Flip Flop	20-Dip	.97	.73	.55
DM74LS393M-ND	Dual 4-Bit Binary Counter	14-SOIC	.88	.66	.50
DM74LS393N-ND	Dual 4-Bit Binary Counter	14-Dip	.88	.66	.50
DM74LS573N-ND	Octal D-Type Latch with Tri-State Outputs	20-Dip	2.39	1.92	1.44

FAIRCHILD SEMICONDUCTOR 74S00 SERIES SCHOTTKY TTL

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DM74S10N-ND	Triple 3-Input NAND Gate	14-Dip	.82	.62	.46
DM74S30N-ND	8-Input NAND Gate	14-Dip	.82	.62	.46
DM74S51N-ND	Dual 2-Input AND-OR-INV Gate	14-Dip	.82	.62	.46
DM74S64N-ND	AND-OR-INV Gate	14-Dip	1.17	.96	.81
DM74S133N-ND	13 Input NAND Gate	16-Dip	.84	.71	.57
DM74S140N-ND	Dual 50 Ohm Line Driver	14-Dip	1.01	.84	.68
DM74S157N-ND	Quad 2-Input Multiplexer	16-Dip	1.01	.84	.68
DM74S158N-ND	Quad 2-Input Multiplexer, Inverting	16-Dip	1.01	.84	.68
DM74S182N-ND	Look-Ahead Carry Generators	16-Dip	2.61	2.09	1.63
DM74S253N-ND	Tri-State Dual 4-Input Multiplexer (74S153N)	16-Dip	1.31	1.08	.91
DM74S941N-ND	Tri-State Octal Buffer	20-Dip	3.64	2.94	2.38

FAIRCHILD SEMICONDUCTOR 74ALS SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DM74ALS04BM-ND	Hex Inverter	14-SOIC	.50	.40	.30
DM74ALS04BN-ND	Hex Inverter	14-Dip	.50	.40	.30
DM74ALS08N-ND	Quad 2-Input AND Gate	14-Dip	.50	.40	.30
DM74ALS10AM-ND	Triple 3-Input NAND Gate	14-SOIC	.50	.40	.30
DM74ALS10AN-ND	Triple 3-Input NAND Gate	14-Dip	.50	.40	.30
DM74ALS11AN-ND	Triple 3-Input AND Gate	14-Dip	.50	.40	.30
DM74ALS20AN-ND	Dual 4-Input NAND Gate	14-Dip	.50	.40	.30
DM74ALS30AN-ND	8-Input NAND Gate	14-Dip	.55	.44	.33
DM74ALS32N-ND	Quad 2-Input OR Gate	14-Dip	.50	.40	.30
DM74ALS74AN-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Clear	14-Dip	.55	.44	.33
DM74ALS138M-ND	Expandable 3/8 Decoder	16-SOIC	.62	.47	.35
DM74ALS174N-ND	Hex D-Type Flip Flop	16-Dip	.62	.47	.35
DM74ALS244AN-ND	Tri-State Octal Line Driver	20-Dip	.73	.55	.41
DM74ALS244AWM-ND	Tri-State Octal Line Driver	20-SOIC	.73	.55	.41
DM74ALS245AWM-ND	Tri-State Octal Bus Transceiver	20-SOIC	.73	.55	.41
DM74ALS253N-ND	Tri-State Dual 4-Input Multiplexer	16-Dip	.62	.47	.35
DM74ALS257M-ND	Tri-State Quad 2/1 Multiplexer	16-SOIC	.62	.47	.35
DM74ALS258N-ND	Tri-State Quad 2/1 Multiplexer	16-Dip	.71	.59	.50
DM74ALS373N-ND	Octal D-Type Latch	20-Dip	.73	.55	.41
DM74ALS540AN-ND	Octal Inverting Buffer and Line Driver	20-Dip	.94	.79	.63
DM74ALS541N-ND	Octal Buffer/Line Driver with Tri-State Outputs	20-Dip	.94	.79	.63
DM74ALS541WM-ND	Octal Buffer/Line Driver with Tri-State Outputs	20-SOIC	.94	.79	.63
DM74ALS574AN-ND	Octal D-Type Flip Flop	20-Dip	.79	.60	.45
DM74ALS574AWM-ND	Octal D-Type Flip Flop	20-SOIC	.79	.60	.45
DM74ALS580AN-ND	Octal D-Type Transparent Latch	20-Dip	1.60	1.26	1.02
DM74ALS646WM-ND	Tri-State Octal Bus Transceiver	24-SOIC	2.42	1.94	1.46
DM74ALS5245N-ND	Octal Bus Transceiver with Schmitt Trigger	20-Dip	1.05	.84	.63

FAIRCHILD SEMICONDUCTOR

74AS SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DM74AS02N-ND	Quad 2-Input NOR Gate	14-Dip	.92	.76	.64
DM74AS08M-ND	Quad 2-Input AND Gate	14-SOIC	.73	.55	.41
DM74AS08N-ND	Quad 2-Input AND Gate	14-Dip	.73	.55	.41
DM74AS10M-ND	Triple 3-Input NAND Gate	14-SOIC	.73	.55	.41
DM74AS10N-ND	Triple 3-Input NAND Gate	14-Dip	.73	.55	.41
DM74AS20N-ND	Dual 4-Input NAND Gate	14-Dip	.92	.76	.64
DM74AS27N-ND	Triple 3-Input NOR Gate	14-Dip	.94	.78	.66
DM74AS30N-ND	8-Input NAND Gate	14-Dip	.73	.55	.41
DM74AS74N-ND	Dual D-Type Positive-Edge-Triggered Flip Flop with Preset and Clear	14-Dip	.86	.65	.49
DM74AS158N-ND	Quad 2-Input Multiplexer, Inverting	16-Dip	1.74	1.43	1.21
DM74AS258M-ND	Tri-State Quad 2/1 Multiplexer	16-SOIC	1.34	1.12	.90
DM74AS258N-ND	Tri-State Quad 2/1 Multiplexer	16-Dip	1.34	1.12	.90
DM74AS286M-ND	9-Bit Parity Generator/Checker	14-SOIC	1.50	1.26	1.01
DM74AS286N-ND	9-Bit Parity Generator/Checker	14-Dip	1.40	1.17	.94
DM74AS373N-ND	Octal D-Type Latch	20-Dip	1.80	1.45	1.09
DM74AS373WM-ND	Octal D-Type Latch	20-SOIC	1.80	1.45	1.09
DM74AS374WM-ND	Tri-State Octal D-Type Flip Flop	20-SOIC	1.80	1.45	1.09
DM74AS640N-ND	Inverting Octal Bus Transceiver	20-Dip	2.55	2.04	1.53
DM74AS645N-ND	Octal Tri-State Bus Transceiver	20-Dip	3.12	2.52	2.04
DM74AS648NT-ND	Octal Bus Transceiver	24-Dip .3”	5.88	4.75	3.85
DM74AS1000AM-ND	Quad 2-Input NAND Driver	14-SOIC	1.34	1.12	.90
DM74AS1000AN-ND	Quad 2-Input NAND Driver	14-Dip	1.34	1.12	.90
DM74AS1032AN-ND	Quad 2-Input OR Driver	14-Dip	1.34	1.12	.90
DM74AS1034AM-ND	Hex Non-Inverting Driver	14-SOIC	1.34	1.12	.90

FAIRCHILD SEMICONDUCTOR

74LCX SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74LCX08MTC-ND	Quad 2-Input AND Gate *NEW!*	14-TSSOP	.47	.38	.29
74LCX74MTC-ND	Dual D-Type Edge-Triggered Flip-Flop *NEW!*	14-TSSOP	.53	.42	.32
74LCX244MTC-ND	Tri-State Buffer/Line Driver *NEW!*	20-TSSOP	.68	.52	.39
74LCX245MTC-ND	Bi-Directional Octal Transceiver *NEW!*	20-TSSOP	.68	.52	.39
74LCX541WM-ND	Octal Buffer/Line Driver *NEW!*	20-SOIC	.77	.58	.44
74LCX573MTC-ND	Octal D-Type Latch *NEW!*	20-TSSOP	.79	.60	.45
74LCX16244MEA-ND	16-Bit Buffer/Line Driver	48-SSOP	1.49	1.24	.99
74LCX16244MTD-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.49	1.24	.99
74LCX16245MEA-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.49	1.24	.99
74LCX16245MTD-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.49	1.24	.99
74LCX16373MEA-ND	16-Bit Transparent Latch with Tri-State Outputs	48-SSOP	1.49	1.24	.99
74LCX16373MTD-ND	Tri-State, 16-Bit, Transparent D-Type Latch *NEW!*	48-TSSOP	1.49	1.24	.99

FAIRCHILD SEMICONDUCTOR

74LVQ SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74LVQ00SC-ND	Low Voltage Quad 2-Input NAND Gate	14-SOIC	.97	.73	.55
74LVQ08SC-ND	Low Voltage Quad 2-Input AND Gate	14-SOIC	.97	.73	.55
74LVQ14SC-ND	Low Voltage Hex Schmitt Trigger	14-SOIC	.97	.73	.55
74LVQ74SC-ND	Low Voltage Dual D-Type Positive-Edge-Trigger Flip Flop with Preset and Clear	14-SOIC	.89	.75	.60
74LVQ138SC-ND	Low Voltage Expandable 3/8 Decoder	16-SOIC	1.25	1.05	.84
74LVQ151SC-ND	Low Voltage 8-Input Multiplexer	16-SOIC	1.25	1.05	.84
74LVQ240QSC-ND	Tri-State Octal Inverter Bus/Line Driver	20-SSOP	2.54	2.01	1.62
74LVQ573SC-ND	Low Voltage Tri-State Octal D-Type Latch	20-SOIC	1.51	1.21	.91

FAIRCHILD SEMICONDUCTOR

74LVX SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74LVX125M-ND	Quad Buffer with Tri-State Outputs	14-SOIC	.48	.37	.28
74LVX240M-ND	Tri-State Octal Line Bus/Line Driver	20-SOIC	.66	.50	.38
74LVX244M-ND	3V CMOS Octal Tri-State Buffer	20-SOIC	.66	.50	.38
74LVX245M-ND	Low Voltage Octal Bidirectional Transceiver	20-SOIC	.66	.50	.38
74LVX74M-ND	Dual D-Type Positive-Edge-Triggered Flip Flop	14-SOIC	.53	.42	.32
74LVXC3245MTC-ND	Tri-State 8-Bit Dual Transceiver *NEW!*	24-TSSOP	1.65	1.32	.99

FAIRCHILD SEMICONDUCTOR

74C00 SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MM74C00N-ND	Quad 2-Input NAND Gate	14-Dip	1.49	1.19	.90
MM74C04N-ND	Hex Inverter (4069)	14-Dip	1.49	1.19	.90
MM74C08N-ND	Quad 2-Input AND Gate	14-Dip	1.49	1.19	.90
MM74C14M-ND	Hex Schmitt Trigger Inverter	14-SOIC	.83	.69	.55
MM74C14N-ND	Hex Schmitt Trigger Inverter (40106B)	14-Dip	.83	.69	.55
MM74C48N-ND	BCD-to-7 Segment Decoder	16-Dip	2.97	2.38	1.85
MM74C74M-ND	Dual D-Type Flip Flop	14-SOIC	2.09	1.67	1.26
MM74C74N-ND	Dual D-Type Flip Flop	14-Dip	2.09	1.67	1.26
MM74C76N-ND	Dual JK Flip Flop with Clear and Preset	16-Dip	2.20	1.76	1.32
MM74C150N-ND	16-to-1 Multiplexer	24-Dip	5.57	4.46	3.47
MM74C154N-ND	4-to-16 Decoder/Demultiplexer	24-Dip	5.85	4.69	3.96
MM74C221N-ND	Dual Monostable with Schmitt Trigger	16-Dip	4.53	3.63	2.82
MM74C244N-ND	Tri-State Octal Buffer	20-Dip	4.38	3.51	2.73
MM74C906M-ND	Hex Open Drain Buffer	14-SOIC	2.37	1.90	1.42
MM74C906N-ND	Open Drain Buffer (Active Pull Down)	14-Dip	2.37	1.90	1.42
MM74C908N-ND	Dual CMOS 30 Volt Driver	8-Dip	3.22	2.58	2.01
MM74C911N-ND	Display Controller	28-Dip	12.19	10.98	9.73
MM74C912N-ND	Display Controller	28-Dip	12.19	10.98	9.73
MM74C914N-ND	Hex Schmitt Trigger with Ext. Input Volt.	14-Dip	3.47	2.78	2.16
MM74C922N-ND	16-Key Encoder	18-Dip	6.82	5.46	4.61
MM74C923N-ND	20-Key Encoder	20-Dip	6.82	5.46	4.61
MM74C923WM-ND	3V to 15V 20-Key Encoder *NEW!*	20-SOIC	6.82	5.46	4.61
MM74C926N-ND	4-Digit Counter with 7-Segment Output Driver	18-Dip	9.71	8.75	7.76
MM74C928N-ND	4-Digit Counter with 7-Segment Output Driver	18-Dip	9.02	7.22	6.09
MM88C30N-ND	CMOS Dual Line Driver	14-Dip	5.50	4.40	3.72

FAIRCHILD SEMICONDUCTOR

74HC00 SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MM74HC00M-ND	Quad 2-Input NAND Gate	14-SOIC	.50	.41	.28
MM74HC00N-ND	Quad 2-Input NAND Gate	14-Dip	.50	.41	.28
MM74HC02M-ND	Quad 2-Input NOR Gate	14-SOIC	.50	.41	.28
MM74HC02N-ND	Quad 2-Input NOR Gate	14-Dip	.50	.41	.28
MM74HC04M-ND	Hex Inverter	14-SOIC	.50	.41	.28
MM74HC04N-ND	Hex Inverter	14-Dip	.50	.41	.28
MM74HC08M-ND	Quad 2-Input AND Gate	14-SOIC	.50	.41	.28
MM74HC08N-ND	Quad 2-Input AND Gate	14-Dip	.50	.41	.28
MM74HC14M-ND	Hex Schmitt Trigger Inverter	14-SOIC	.44	.36	.27
MM74HC14N-ND	Hex Schmitt Trigger Inverter	14-Dip	.44	.36	.27
MM74HC32M-ND	Quad 2-Input OR Gate	14-SOIC	.50	.41	.28
MM74HC32N-ND	Quad 2-Input OR Gate	14-Dip	.50	.41	.28
MM74HC74AM-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.44	.36	.27
MM74HC74AN-ND	Dual D-Type Flip Flop with Preset and Clear	14-Dip	.44	.36	.27
MM74HC86N-ND	Quad 2-Input Exclusive OR Gate	14-Dip	.44	.36	.27
MM74HC123AM-ND	Dual Monostable Multivibrator	16-SOIC	.48	.37	.28
MM74HC123AN-ND	Dual Monostable Multivibrator	16-Dip	.48	.37	.28
MM74HC125M-ND	Tri-State Quad Buffer *NEW!*	14-SOIC	.48	.37	.28
MM74HC125N-ND	Tri-State Quad Buffer	14-Dip	.48	.37	.28
MM74HC126M-ND	Tri-State Quad Buffer	14-SOIC	.48	.37	.28
MM74HC126N-ND	Tri-State Quad Buffer	14-Dip	.48	.37	.28
MM74HC132M-ND	Quad 2-Input NAND Schmitt Trigger	14-SOIC	.48	.37	.28
MM74HC132N-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.48	.37	.28
MM74HC138M-ND	3-to-8 Line Decoder	16-SOIC	.53	.40	.30
MM74HC138N-ND	3-to-8 Line Decoder	16-Dip	.53	.40	.30
MM74HC139M-ND	Dual 2-to-4 Line Decoder	16-SOIC	.53	.40	.30
MM74HC139N-ND	Dual 2-to-4 Line Decoder	16-Dip	.53	.40	.30
MM74HC151N-ND	8-Channel Multiplexer	16-Dip	.53	.40	.30
MM74HC154N-ND	4-to-16 Line Decoder (.3” Lead Spacing)	24-Dip	1.32	1.10	.88
MM74HC154WM-ND	4-to-16 Line Decoder	24-SOIC	1.32	1.10	.88
MM74HC157N-ND	Quad 2-Input Multiplexer	16-Dip	.53	.40	.30
MM74HC161M-ND	Synchronous Binary Counter with Asynchronous Clear	16-SOIC	.57	.43	.33
MM74HC161N-ND	Synchronous Binary Counter with Asynchronous Clear	16-Dip	.57	.43	.33
MM74HC163N-ND	Synchronous Binary Counter with Synchronous Clear	16-Dip	.57	.43	.33
MM74HC164N-ND	8-Bit Serial-In Parallel-Out Shift Register	14-Dip	.57	.43	.33
MM74HC165M-ND	8-Bit Parallel-In Serial-Out Shift Register	16-SOIC	.57	.43	.33
MM74HC165N-ND	8-Bit Parallel-In Serial-Out Shift Register	16-Dip	.57	.43	.33
MM74HC174N-ND	Hex D-Type Flip Flop with Clear	16-Dip	.57	.43	.33
MM74HC175N-ND	Quad D-Type Flip Flop with Clear	16-Dip	.57	.43	.33
MM74HC221AM-ND	Dual Non-Retriggered Monostable Multivibrator	16-SOIC	.75	.57	.43
MM74HC221AN-ND	Dual Non-Retriggered Monostable Multivibrator	16-Dip	.75	.57	.43
MM74HC240N-ND	Tri-State Octal Inverter Bus/Line Driver	20-Dip	.57	.43	.33
MM74HC244N-ND	Tri-State Octal Line Driver	20-Dip	.57	.43	.33
MM74HC244WM-ND	Tri-State Octal Line Driver	20-SOIC	.57	.43	.33
MM74HC245AN-ND	Tri-State Octal Bus Transceiver	20-Dip	.57	.43	.33
MM74HC245AWM-ND	Tri-State Octal Bus Transceiver	20	.57	.43	.33
MM74HC251N-ND	8-Channel Tri-State Multiplexer	16-Dip	.53	.40	.30
MM74HC259M-ND	8-Bit Addressable Latch/3-to-8 Line Decoder	16-SOIC	.53	.40	.30
MM74HC259N-ND	8-Bit Addressable Latch/3-to-8 Line Decoder	16-Dip	.53	.40	.30
MM74HC273N-ND	Octal D-Type Flip-Flop *NEW!*	20-Dip	.62	.47	.35
MM74HC273WM-ND	Octal D-Type Flip-Flop *NEW!*	20-SOIC	.62	.47	.35
MM74HC373N-ND	Tri-State Octal D-Type Latch	20-Dip	.57	.43	.33
MM74HC373WM-ND	Tri-State Octal D-Type Latch	20-SOIC	.57	.43	.33
MM74HC374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.57	.43	.33
MM74HC374WM-ND	Tri-State Octal D-Type Flip Flop	20-SOIC	.57	.43	.33
MM74HC393M-ND	Dual 4-Bit Binary Counter	14-SOIC	.70	.53	.40
MM74HC393N-ND	Dual 4-Bit Binary Counter	14-Dip	.70	.53	.40
MM74HC423AN-ND	Dual Monostable Multivibrator	16-Dip	.79	.60	.45
MM74HC540N-ND	Octal Inverting Buffer and Line Driver	20-Dip	.73	.55	.41
MM74HC541N-ND	Tri-State Octal Buffer	20-Dip	.73	.55	.41
MM74HC541WM-ND	Tri-State Octal Buffer *NEW!*	20-SOIC	.73	.55	.41
MM74HC573N-ND	Tri-State Octal D-Type Latch	20-Dip	.66	.50	.38
MM74HC573WM-ND	Tri-State Octal D-Type Latch	20-SOIC	.66	.50	.38
MM74HC574N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.66	.50	.38
MM74HC574WM-ND	Tri-State Octal D-Type Flip Flop	20-SOIC	.66	.50	.38
MM74HC595M-ND	8-Bit Shift Register with Output Latches	16-SOIC	.62	.47	.35
MM74HC595N-ND	8-Bit Shift Register with Output Latches	16-Dip	.62	.47	.35
MM74HC688N-ND	8-Bit Magnitude Comparator (Equality Detector)	20-Dip	.79	.60	.45
MM74HC4020N-ND	14 Stage Binary Counter	16-Dip	.62	.47	.35
MM74HC4040M-ND	12 Stage Binary Counter	16-SOIC	.62	.47	.35
MM74HC4040N-ND	12 Stage Binary Counter	16-Dip	.62	.47	.35
MM74HC4046M-ND	CMOS Phase Lock Loop	16-SOIC	.62	.47	.35
MM74HC4046N-ND	CMOS Phase Lock Loop	16-Dip	.62	.47	.35
MM74HC4049N-ND	Hex Inverting Logic Level Down Converter	16-Dip	.62	.47	.35
MM74HC4051M-ND	8-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4051N-ND	8-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4051WM-ND	8-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4052N-ND	Dual 4-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4053M-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4053N-ND	Triple 2-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4053WM-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4060N-ND	14 Stage Binary Counter	16-Dip	.62	.47	.35
MM74HC4046N-ND	CMOS Phase Lock Loop	16-Dip	.62	.47	.35
MM74HC4049N-ND	Hex Inverting Logic Level Down Converter	16-Dip	.62	.47	.35
MM74HC4051M-ND	8-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4051N-ND	8-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4051WM-ND	8-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4052N-ND	Dual 4-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4053M-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4053N-ND	Triple 2-Channel Analog Multiplexer	16-Dip	.62	.47	.35
MM74HC4053WM-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	.62	.47	.35
MM74HC4060N-ND	14 Stage Binary Counter	16-Dip	.62	.47	.35
MM74HC4066N-ND	Quad Analog Switch	14-Dip	.62	.47	.35
MM74HC4316N-ND	Quad Analog Switch	16-Dip	.62	.47	.35
MM74HC4316WM-ND	Quad Analog Switch	16-SOIC	.62	.47	.35
MM74HC4514N-ND	4-to-16 Line Decoder with Latch (.3” Lead Spacing)	24-Dip	1.25	1.05	.84
MM74HC4538M-ND	Dual Retriggerable Monostable Multivibrator *NEW!*	16-SOIC	.66	.50	.38
MM74HC4538N-ND	Dual Retriggerable Monostable Multivibrator	16-Dip	.66	.50	.38

FAIRCHILD SEMICONDUCTOR

74HCT00 SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MM74HCT04N-ND	Hex Inverter	14-Dip	.50	.41	.28
MM74HCT244N-ND	Tri-State Octal Buffer	20-Dip	.57	.43	.33
MM74HCT244WM-ND	Tri-State Octal Buffer	20-SOIC	.57	.43	.33
MM74HCT245N-ND	Tri-State Octal Bus Transceiver	20-Dip	.57	.43	.33
MM74HCT245WM-ND	Tri-State Octal Bus Transceiver	20-SOIC	.57	.43	.33

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74HCT00 SERIES CMOS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MM74HCT373N-ND	Tri-State Octal D-Type Latch	20-Dip	.57	.43	.33
MM74HCT374N-ND	Tri-State Octal D-Type Flip Flop	20-Dip	.57	.43	.33
MM74HCT541N-ND	Tri-State Octal Buffer	20-Dip	.73	.55	.41

74VHC SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74VHC00M-ND	Quad 2-Input NAND Gate	14-SOIC	.50	.41	.28
74VHC04M-ND	Hex Inverter	14-SOIC	.50	.41	.28
74VHC08M-ND	Quad 2-Input AND Gate	14-SOIC	.50	.41	.28
74VHC14M-ND	Hex Schmitt Trigger Inverter	14-SOIC	.44	.36	.27
74VHC32M-ND	Quad 2-Input OR Gate *NEW!*	14-SOIC	.50	.41	.28
74VHC74M-ND	Dual D-Type Flip Flop	14-SOIC	.44	.36	.27
74VHC86M-ND	Quad 2-Input Exclusive OR Gate	14-SOIC	.44	.36	.27
74VHC123AM-ND	Dual Monostable Multivibrator	16-SOIC	.48	.37	.28
74VHC139M-ND	Dual 2-to-4 Decoder/Demultiplexer	16-SOIC	.53	.40	.30
74VHC157MTC-ND	Quad 2-Input Multiplexer	16-TSSOP	.53	.40	.30
74VHC244M-ND	Tri-State Octal Non-Inverting Buffer/Line Driver	20-SOIC	.57	.43	.33
74VHC373M-ND	Tri-State Octal D-Type Latch	20-SOIC	.57	.43	.33
74VHC374MTC-ND	Tri-State Octal D-Type Flip Flop	20-TSSOP	.57	.43	.33
74VHC393M-ND	Dual 4-Bit Binary Counter	14-SOIC	.70	.53	.40
74VHC393MTC-ND	Dual 4-Bit Binary Counter	14-SSOP	.70	.53	.40
74VHC541MTC-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-TSSOP	.75	.57	.43
74VHC573M-ND	Tri-State Octal D-Type Latch	20-SOIC	.75	.57	.43
74VHC574MTC-ND	Tri-State Octal D-Type Flip-Flop *NEW!*	20-TSSOP	.75	.57	.43
74VHC595M-ND	8-Bit Shift Register with Output Latches	16-SOIC	.75	.57	.43

74ABT SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74ABT125CSC-ND	Tri-State Quad Buffer *NEW!*	14-SOIC	.88	.66	.50
74ABT241CMSA-ND	Tri-State Octal Line Driver	20-SSOP	.97	.73	.55
74ABT244CMSA-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SSOP	.97	.73	.55
74ABT244CSC-ND	Tri-State Octal Line Driver	20-SOIC	.97	.73	.55
74ABT245CSC-ND	Tri-State Octal Bus Transceiver	20-SOIC	.97	.73	.55
74ABT273CMSA-ND	Octal D-Type Flip Flop	20-SSOP	.97	.73	.55
74ABT541CSC-ND	Tri-State Octal Buffer/Line Driver *NEW!*	20-SOIC	1.12	.94	.75
74ABT16244CSSC-ND	16-Bit, Tri-State Buffer/Line Driver *NEW!*	48-SSOP	1.43	1.15	.86
74ABT16245CSSC-ND	16-Bit, Tri-State Bidirectional Transceiver *NEW!*	48-SSOP	1.43	1.15	.86
74ABT16373CSSC-ND	16-Bit D-Type Latch with Tri-State Outputs	48-SSOP	1.43	1.15	.86
74ABT16374CSSC-ND	16-Bit D-Type Flip Flop with Tri-State Outputs	48-SSOP	1.43	1.15	.86
74ABT2244CMSA-ND	Octal Buffer Line Driver with Series Resistor Included	20-SSOP	.92	.77	.62
74ABT2244CSC-ND	Octal Buffer Line Driver with Series Resistor Included	20-SOIC	.83	.69	.55

FACT™ ADVANCED CMOS TECHNOLOGY 74AC

These are high speed CMOS devices with CMOS input switching levels and buffered CMOS outputs.

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74AC00PC-ND	Quad 2-Input NAND Gate	14-Dip	.44	.36	.27
74AC00SC-ND	Quad 2-Input NAND Gate	14-SOIC	.44	.36	.27
74AC02PC-ND	Quad 2-Input NOR Gate	14-Dip	.44	.36	.27
74AC02SC-ND	Quad 2-Input NOR Gate	14-SOIC	.44	.36	.27
74AC04PC-ND	Hex Inverter	14-Dip	.44	.36	.27
74AC04SC-ND	Hex Inverter	14-SOIC	.44	.36	.27
74AC08PC-ND	Quad 2-Input AND Gate	14-Dip	.44	.36	.27
74AC08SC-ND	Quad 2-Input AND Gate	14-SOIC	.44	.36	.27
74AC11SC-ND	Triple 3-Input AND Gate	14-SOIC	.44	.36	.27
74AC14PC-ND	Hex Schmitt Trigger Inverter	14-Dip	.50	.40	.30
74AC14SC-ND	Hex Schmitt Trigger Inverter	14-SOIC	.50	.40	.30
74AC20PC-ND	Dual 4-Input NAND Gate	14-Dip	.44	.36	.27
74AC32PC-ND	Quad 2-Input OR Gate	14-Dip	.44	.36	.27
74AC32SC-ND	Quad 2-Input OR Gate	14-SOIC	.44	.36	.27
74AC74PC-ND	Dual D-Type Flip Flop with Set and Reset	14-Dip	.50	.40	.30
74AC74SC-ND	Dual D-Type Flip Flop with Set and Reset	14-SOIC	.50	.40	.30
74AC86SC-ND	Quad 2-Input Exclusive OR Gate	14-SOIC	.50	.40	.30
74AC109SC-ND	Dual JK Positive-Edge-Triggered Flip Flop	16-SOIC	.57	.43	.33
74AC125SC-ND	Tri-State Quad Buffer	14-SOIC	.53	.40	.30
74AC138PC-ND	1-of-8 Decoder/Demultiplexer	16-Dip	.57	.43	.33
74AC138SC-ND	1-of-8 Decoder/Demultiplexer	16-SOIC	.57	.43	.33
74AC139SC-ND	Dual 1-of-4 Decoder/Demultiplexer	16-SOIC	.57	.43	.33
74AC151PC-ND	8-Input Fact Multiplexer	16-Dip	.57	.43	.33
74AC151SC-ND	8-Input Fact Multiplexer	16-SOIC	.57	.43	.33
74AC161PC-ND	Synchronous Presettable 4-Bit Binary Counter	16-Dip	.62	.47	.35
74AC161SC-ND	Synchronous Presettable 4-Bit Binary Counter	16-SOIC	.62	.47	.35
74AC174SC-ND	Hex D-Type Flip Flop	16-SOIC	.62	.47	.35
74AC175SC-ND	Quad D-Type Flip Flop	16-SOIC	.62	.47	.35
74AC244SC-ND	Octal Buffer/Line Driver	20-SOIC	.70	.53	.40
74AC245SC-ND	Octal Bidirectional Transceiver	20-SOIC	.70	.53	.40
74AC257SC-ND	Quad 2-Input Multiplexer	16-SOIC	.62	.47	.35
74AC541SC-ND	Octal Buffer/Line Driver	20-SOIC	.88	.66	.50
74AC273SC-ND	Octal D-Type Flip Flop with Reset	20-SOIC	.70	.53	.40
74AC299SC-ND	Octal Shift/Storage	20-SOIC	1.38	1.10	.83
74AC373SC-ND	Octal D-Type Latch	20-SOIC	.70	.53	.40
74AC521SC-ND	8-Bit Comparator	20-SOIC	.88	.66	.50
74AC540SC-ND	Octal Buffer/Line Driver with Tri-State Output	20-SOIC	.88	.66	.50
74AC541PC-ND	Octal Buffer/Line Driver with Tri-State Output	20-Dip	.88	.66	.50

NEW! 74LVT SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74LVT245MTC-ND	Tri-State Octal Bidirectional Transceiver	20-TSSOP	.97	.73	.55

NEW! 74LVTH SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74LVTH244MTC-ND	Low Volt. Tri-State Octal Buffer/Line Driver	20-TSSOP	.97	.73	.55
74LVTH16244MTD-ND	16-Bit, Tri-State, Low Voltage Buffer/Line Driver	48-TSSOP	1.49	1.24	.99
74LVTH16245MEA-ND	16-Bit, Tri-State, Low Voltage Transceiver	48-SSOP	1.49	1.24	.99
74LVTH16245MTD-ND	16-Bit, Tri-State, Low Voltage Transceiver	48-TSSOP	1.49	1.24	.99

74ACQ SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74ACQ544SC-ND	Tri-State Octal Inverting Registered Transceiver	20-SOIC	5.49	4.44	3.59
74ACQ564PC-ND	Tri-State Octal Inverting D-Type Flip Flop	20-Dip	3.12	2.52	2.04
74ACQ646SC-ND	Tri-State Octal Transceiver Register	24-SOIC	7.43	5.94	5.12

74ACT SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74ACT00SC-ND	Quad 2-Input NAND Gate	14-SOIC	.44	.36	.27
74ACT02SC-ND	Quad 2-Input NOR Gate	14-SOIC	.44	.36	.27
74ACT04PC-ND	Hex Inverter	14-Dip	.44	.36	.27
74ACT04SC-ND	Hex Inverter	14-SOIC	.44	.36	.27
74ACT08SC-ND	Quad 2-Input AND Gate	14-SOIC	.44	.36	.27
74ACT32SC-ND	Quad 2-Input OR Gate	14-SOIC	.44	.36	.27
74ACT74PC-ND	Dual D-Type Positive-Edge-Trigger Flip Flop	14-Dip	.50	.40	.30
74ACT74SC-ND	Dual D-Type Positive-Edge-Trigger Flip Flop	14-SOIC	.50	.40	.30
74ACT109SC-ND	Dual JK Flip Flop	16-SOIC	.57	.43	.33
74ACT125SC-ND	Tri-State Quad Buffer	14-SOIC	.53	.40	.30
74ACT138SC-ND	1-of-8 Decoder/Demultiplexer	16-SOIC	.57	.43	.33
74ACT151PC-ND	8-Input Multiplexer	16-Dip	.57	.43	.33
74ACT157PC-ND	Quad 2-Input Multiplexer	16-Dip	.57	.43	.33
74ACT157SC-ND	Quad 2-Input Multiplexer	16-SOIC	.57	.43	.33
74ACT158PC-ND	Quad 2-Input Multiplexer, Inverting	16-Dip	.66	.55	.46
74ACT161SC-ND	Synchronous Presettable Binary Counter	16-SOIC	.62	.47	.35
74ACT163PC-ND	4-Bit Binary Counter Synchronous Receiver	16-Dip	.62	.47	.35
74ACT174SC-ND	Hex D-Type Flip Flop with Master Reset	16-SOIC	.62	.47	.35
74ACT175SC-ND	Quad D-Type Flip Flop	16-SOIC	.62	.47	.35
74ACT244PC-ND	Octal Buffer/Line Driver	20-Dip	.70	.53	.40
74ACT244SC-ND	Octal Buffer/Line Driver	20-SOIC	.70	.53	.40
74ACT245SC-ND	Octal Bidirectional Transceiver	20-SOIC	.70	.53	.40
74ACT251PC-ND	8-Bit Multiplexer	16-Dip	.62	.47	.35
74ACT251SC-ND	8-Bit Multiplexer	16-SOIC	.62	.47	.35
74ACT373SC-ND	Octal Transparent Latch	20-SOIC	.70	.53	.40
74ACT374SC-ND	Octal D-Type Flip Flop	20-SOIC	.70	.53	.40
74ACT520SC-ND	Comparator with Resistor	20-SOIC	.88	.66	.50
74ACT573PC-ND	Tri-State Octal D-Type Latch	20-Dip	.79	.60	.45
74ACT574SC-ND	Tri-State Octal D-Type Flip Flop	20-SOIC	.79	.60	.45
74ACT899QC-ND	9-Bit Bidirectional Latch	28-PLCC	7.82	6.26	5.39
74ACT1284MSA-ND	IEEE 1284 Transceiver	20 SSOP	1.09	.91	.73
74ACT2708PC-ND	64x9 First-In First-Out Memory	28-Dip	14.90	13.42	11.90

NM95HS HIGH SECURITY SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
NM95HS01EM-ND	Rolling Code Generator High Temp (RC OSC)	14-SOIC	3.12	2.52	2.04
NM95HS01EM8-ND	Rolling Code Generator High Temp (RC OSC)	8-SOIC	4.29	3.47	2.81
NM95HS01N-ND	Rolling Code Generator (RC OSC)	8-Dip	3.90	3.15	2.55
NM95HS01N14-ND	Rolling Code Generator (RC OSC)	14-Dip	3.90	3.15	2.55
NM95HS02EN-ND	Rolling Code Generator High Temp (XTAL OSC)	8-Dip	4.29	3.47	2.81
NM95HS02N-ND	Rolling Code Generator (XTAL OSC)	8-Dip	3.90	3.15	2.55
NM95HS02N14-ND	Rolling Code Generator (XTAL OSC)	14-Dip	3.90	3.15	2.55

74ACTQ SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74ACTQ00SC-ND	Quad 2-Input NAND Gate, Quiet Series	14-SOIC	.92	.77	.62
74ACTQ10PC-ND	Triple 3-Input NAND Gate, Quiet Series	14-Dip	1.20	.62	.47
74ACTQ14SC-ND	Hex Schmitt Trigger Inverting, Quiet Series	14-SOIC	.92	.77	.62
74ACTQ245SC-ND	Octal Bidirectional Transceiver, Quiet Series	20-SOIC	1.73	1.39	1.04
74ACTQ273SC-ND	Octal D-Type Flip Flop	20-SOIC	1.73	1.39	1.04
74ACTQ16244SSC-ND	16-Bit Buffer/Line Driver	48-SSOP	3.71	2.97	2.31
74ACTQ16374SSC-ND	16-Bit D-Type Flip Flop	48-SSOP	3.71	2.97	2.31

74F – FAST™ ADVANCED SCHOTTKY TTL LOGIC

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
74F00PC-ND	Quad 2-Input NAND Gate	14-Dip	.44	.36	.27
74F00SC-ND	Quad 2-Input NAND Gate	14-SOIC	.44	.36	.27
74F04PC-ND	Hex Inverter	14-Dip	.42	.34	.25
74F04SC-ND	Hex Inverter	14-SOIC	.42	.34	.25
74F08PC-ND	Quad 2-Input AND Gate	14-Dip	.44	.36	.27
74F08SC-ND	Quad 2-Input AND Gate	14-SOIC	.42	.34	.25
74F14SC-ND	Hex Inverter Schmitt Trigger *NEW!*	14-SOIC	.50	.40	.30
74F32SC-ND	Quad 2 Input OR Gate	14-SOIC	.42	.34	.25
74F37PC-ND	Quad 2-Input Positive NAND Buffer	14-Dip	.50	.40	.30
74F38SC-ND	Quad 2-Input NAND Buffer *NEW!*	14-SOIC	.50	.40	.30
74F74PC-ND	Dual D-Type Positive-Edge-Triggered Flip Flop	14-Dip	.47	.38	.29
74F74SC-ND	Dual D-Type Positive-Edge-Triggered Flip Flop	14-SOIC	.47	.38	.29
74F86SC-ND	Quad 2-Input Exclusive OR Gate	14-SOIC	.50	.40	.30
74F109PC-ND	Dual JK Positive-Edge-Triggered Flip Flop	16-Dip	.53	.40	.30
74F112PC-ND	Dual JK Negative-Edge-Triggered Flip Flop	16-Dip	.48	.37	.28
74F125PC-ND	Tri-State Quad Buffer	14-Dip	.58	.47	.35
74F125SC-ND	Tri-State Quad Buffer	14-SOIC	.55	.44	.33
74F138PC-ND	1-of-8 Decoder/Demultiplexer	16-Dip	.53	.40	.30
74F157ASC-ND	Quad 2-Input Multiplexer	16-SOIC	.53	.40	.30
74F161APC-ND	Synchronous Presettable 4-Bit Binary Counter	16-Dip	.57	.43	.33

(Continued)

74F – FAST™ ADVANCED SCHOTTKY TTL LOGIC *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
74F175SC-ND	Quad D-Type Flip Flop	16-SOIC	.53	.40	.30
74F181PC-ND	4-Bit Arithmetic Logic Unit	24-Dip	2.55	2.04	1.59
74F182PC-ND	Carry Lookahead Generator	16-Dip	1.82	1.46	1.09
74F189SC-ND	64-Bit Random Access Memory	16-SOIC	4.00	3.24	2.62
74F190PC-ND	Up/Down Decade Counter	16-Dip	1.38	1.10	.83
74F244PC-ND	Tri-State Octal Line Driver	20-Dip	.62	.47	.35
74F244SC-ND	Tri-State Octal Line Driver	20-SOIC	.57	.43	.33
74F245PC-ND	Tri-State Octal Bus Transceiver	20-Dip	.57	.43	.33
74F245SC-ND	Tri-State Octal Bus Transceiver	20-SOIC	.62	.47	.35
74F258APC-ND	Tri-State Quad 2/1 Multiplexer	16-Dip	.57	.43	.33
74F269SPC-ND	8-Bit Up/Down Counter	24-Dip	1.82	1.46	1.09
74F273PC-ND	Octal D-Type Flip Flop	20-Dip	.62	.47	.35
74F299PC-ND	8-Input Universal Shift/Store Register	20-Dip	.86	.72	.58
74F350PC-ND	4-Bit Shifter	16-Dip	1.13	.89	.72
74F352PC-ND	Dual 4-Input Multiplexer	16-Dip	.77	.64	.54
74F373PC-ND	Octal Transparent Latch	20-Dip	.62	.47	.35
74F373SC-ND	Octal Transparent Latch	20-SOIC	.57	.43	.33
74F374SC-ND	Octal D-Type Flip Flop	20-SOIC	.57	.43	.33
74F381PC-ND	4-Bit Arithmetic Logic Unit	16-Dip	1.18	.95	.71
74F398PC-ND	Quad 2-Port Register	20-Dip	.86	.71	.60
74F402PC-ND	Serial Data Polynomial Generator/Checker	16-Dip	6.44	5.15	4.44
74F541SC-ND	Octal Buffer/Line Driver	20-SOIC	.76	.64	.51
74F543PC-ND	Octal Registered Transceiver	24-Dip	1.32	1.10	.88
74F552QC-ND	Octal Bidirectional Transceiver	28-PLCC	9.45	7.57	6.52
74F569SC-ND	4-Bit Binary Counter	20-SOIC	1.16	.97	.77
74F573SC-ND	Octal D-Type Latch	20-SOIC	.70	.53	.40
74F574SC-ND	Octal D-Type Flip Flop	20-SOIC	.70	.53	.40
74F579PC-ND	8-Bit Bidirectional Counter	20-Dip	2.15	1.72	1.29
74F620PC-ND	Inverting Octal Transceiver	20-Dip	.83	.66	.50
74F646BSPC-ND	Octal Bus Transceiver	24-Dip	2.15	1.72	1.29
74F657SPC-ND	Octal Transceiver with Parity	24-Dip	1.79	1.43	1.08
74F675APC-ND	16-Bit Serial In, Serial/Parallel-Out Shift Register	24-Dip	8.93	7.15	6.03
74F676PC-ND	16-Bit Serial/Parallel-In, Serial-Out Shift Register	24-Dip	4.41	3.53	2.75
74F779SC-ND	8-Bit Bidirectional Counter	16-SOIC	1.22	1.02	.82
74F823SC-ND	9-Bit D-Type Flip Flop	24-SOIC	1.24	.99	.75
74F843SPC-ND	9-Bit Transparent Latch	24-Dip	1.51	1.21	.91
74F2244PC-ND	Octal Buffer with 25Ω Series Resistor Outputs	20-Dip	.51	.43	.35

4000 SERIES CMOS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CD4001BCM-ND	Quad 2-Input NOR Gate	14-SOIC	.47	.38	.29
CD4001BCN-ND	Quad 2-Input NOR Gate	14-Dip	.47	.38	.29
CD4007CN-ND	Dual Complementary Pair Plus Invert	14-Dip	.47	.38	.29
CD4011BCM-ND	Quad 2-Input NAND Gate	14-SOIC	.47	.38	.29
CD4011BCN-ND	Quad 2-Input NAND Gate	14-Dip	.47	.38	.29
CD4013BCM-ND	Dual D-Type Flip Flop	14-SOIC	.47	.38	.29
CD4013BCN-ND	Dual D-Type Flip Flop	14-Dip	.47	.38	.29
CD4015BCN-ND	Dual 4-Bit Shift Register	16-Dip	.60	.45	.34
CD4016BCM-ND	Quad Bilateral Switch	14-SOIC	.47	.38	.29
CD4016BCN-ND	Quad Bilateral Switch	14-Dip	.47	.38	.29
CD4017BCM-ND	Decade Counter/Divider	16-SOIC	.60	.45	.34
CD4017BCN-ND	Decade Counter/Divider	16-Dip	.60	.45	.34
CD4019BCN-ND	Quad AND/OR Select Gate	16-Dip	.48	.37	.28
CD4020BCM-ND	14-Bit Binary Counter	16-SOIC	.66	.50	.38
CD4020BCN-ND	14-Bit Binary Counter	16-Dip	.66	.50	.38
CD4023BCN-ND	Triple 3-Input NAND Gate	14-Dip	.47	.38	.29
CD4027BCN-ND	Dual JK M/S Flip Flop	16-Dip	.55	.44	.33
CD4028BCN-ND	BCD-to-Decimal Decoder	16-Dip	.55	.44	.33
CD4030CN-ND	Quad Exclusive OR Gate	14-Dip	.55	.44	.33
CD4040BCM-ND	12-Bit Binary Ripple Counter	16-SOIC	.60	.45	.34
CD4040BCN-ND	12-Bit Binary Ripple Counter	16-Dip	.60	.45	.34
CD4043BCN-ND	Quad NOR R/S Latch	16-Dip	.60	.45	.34
CD4046BCM-ND	Micropower Phase Lock Loop	16-SOIC	.66	.50	.38
CD4046BCN-ND	Micropower Phase Lock Loop	16-Dip	.66	.50	.38
CD4047BCN-ND	Monostable Multivibrator	14-Dip	.60	.45	.34
CD4049UBCM-ND	Hex Inverting Buffer	16-SOIC	.48	.37	.28
CD4050BCN-ND	Hex Buffer	16-Dip	.48	.37	.28
CD4051BCM-ND	8-Channel Analog Mux/Demux	16-SOIC	.57	.43	.33
CD4051BCN-ND	8-Channel Analog Mux/Demux	16-Dip	.57	.43	.33
CD4052BCM-ND	4-Channel Analog Mux/Demux	16-SOIC	.57	.43	.33
CD4052BCN-ND	4-Channel Analog Mux/Demux	16-Dip	.57	.43	.33
CD4053BCM-ND	Triple 2-Channel Analog Mux/Demux	16-SOIC	.57	.43	.33
CD4053BCN-ND	Triple 2-Channel Analog Mux/Demux	16-Dip	.57	.43	.33
CD4060BCM-ND	14-Bit Binary Counter/Oscillator	16-SOIC	.60	.45	.34
CD4060BCN-ND	14-Bit Binary Counter/Oscillator	16-Dip	.60	.45	.34
CD4066BCM-ND	Quad Bilateral Switch	14-SOIC	.47	.38	.29
CD4066BCN-ND	Quad Bilateral Switch	14-Dip	.47	.38	.29
CD4069UBCM-ND	Inverter Circuits	14-SOIC	.47	.38	.29
CD4070BCN-ND	Quad Exclusive OR Gate (4070B)	14-Dip	.47	.38	.29
CD4071BCN-ND	Quad 2-Input OR Gate	14-Dip	.47	.38	.29
CD4081BCN-ND	Quad 2-Input AND Gate	14-Dip	.47	.38	.29
CD4093BCM-ND	Quad 2-Input NAND Schmitt Trigger	14-SOIC	.47	.38	.29
CD4093BCN-ND	Quad 2-Input NAND Schmitt Trigger	14-Dip	.47	.38	.29
CD4094BCN-ND	8-Bit Shift Register with Latch	16-Dip	.57	.43	.33
CD4503BCN-ND	Tri-State Hex Buffer	16-Dip	.70	.53	.40
CD4511BCN-ND	BCD-to-7 Segment Latch/Decoder/Driver	16-Dip	.70	.53	.40
CD4514BCN-ND	4-Bit Latch/4-to-16 Line Decoder	24-Dip	.99	.83	.66
CD4528BCN-ND	Dual Monostable Multivibrator	16-Dip	.70	.53	.40
CD4538BCN-ND	Monostable Multivibrator	16-Dip	.70	.53	.40
CD4541BCN-ND	Programmable Timer	14-Dip	.57	.43	.33
CD4724BCN-ND	8-Bit Addressable Latch	16-Dip	.88	.66	.50
CD40106BCN-ND	Hex Schmitt Trigger	14-Dip	.48	.37	.28
CD40174BCN-ND	Hex D-Type Flip Flop	16-Dip	.60	.45	.34
CD40192BCN-ND	Up/Down Decade Counter	16-Dip	.90	.68	.51

NEW! LINEAR ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
FAN1086M-ND	Adjustable, 1.5A LDO Linear Regulator	TO-263	1.02	.85	.68
FAN1086M5-ND	5V, 1.5A Fixed LDO Linear Regulator	TO-263	1.02	.85	.68
FAN1086M25-ND	2.5V, 1.5A Fixed LDO Linear Regulator	TO-263	1.02	.85	.68
FAN1086M33-ND	3.3V, 1.5A Fixed LDO Linear Regulator	TO-263	1.02	.85	.68
FAN1086M285-ND	2.85V, 1.5A Fixed LDO Linear Regulator	TO-263	1.02	.85	.68

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
FAN2500SXCT-ND	Adjustable, 100mA, CMOS LDO Regulator	SOT-23-5	.81	.68	.54
FAN2500SXTR-ND	Adjustable, 100mA, CMOS LDO Regulator	SOT-23-5	1053.00/3,000		
FAN2500S25XCT-ND	2.5V, 100mA, CMOS LDO Regulator	SOT-23-5	.81	.68	.54
FAN2500S25XTR-ND	2.5V, 100mA, CMOS LDO Regulator	SOT-23-5	1053.00/3,000		
FAN2500S28XCT-ND	2.8V, 100mA, CMOS LDO Regulator	SOT-23-5	.81	.68	.54
FAN2500S28XTR-ND	2.8V, 100mA, CMOS LDO Regulator	SOT-23-5	1053.00/3,000		
FAN2500S30XCT-ND	3.0V, 100mA, CMOS LDO Regulator	SOT-23-5	.81	.68	.54
FAN2500S30XTR-ND	3.0V, 100mA, CMOS LDO Regulator	SOT-23-5	1053.00/3,000		
FAN2500S33XCT-ND	3.3V, 100mA, CMOS LDO Regulator	SOT-23-5	.81	.68	.54
FAN2500S33XTR-ND	3.3V, 100mA, CMOS LDO Regulator	SOT-23-5	1053.00/3,000		
LF353NFS-ND	4MHz Dual JFet Op Amp	8-Dip	.76	.57	.43
LM78L05ACZFS-ND	0 to 125°C, 3-Terminal 0.1A Positive Voltage Regulator	TO-92	.45	.36	.27
LM78M05CTFS-ND	0 to 125°C, 3-Terminal 0.5A Positive Voltage Regulator	TO-220	.48	.36	.27
LM311MFS-ND	0-70°C Single Comparator	8-SOP	.48	.36	.27
LM311NFS-ND	0-70°C Single Comparator	8-Dip	.48	.36	.27
LM317TFS-ND	1.5A, 3-Terminal Positive Adjustable Regulator	TO-220	.68	.51	.39
LM337TFS-ND	1.5A, 3-Terminal Negative Adjustable Regulator	TO-220	.80	.60	.45
LM339ANFS-ND	0 to 70°C Quad Comparator	14-Dip	.55	.44	.33
LM339MFS-ND	0 to 70°C Quad Comparator	14-SOP	.55	.44	.33
LM339NFS-ND	0 to 70°C Quad Comparator	14-Dip	.55	.44	.33
LM350TFS-ND	3A, 3-Terminal Positive Adjustable Voltage	TO-220	1.35	1.13	.90
LM358AMFS-ND	0 to 70°C Dual Op Amp	8-SOIC	.55	.44	.33
LM358ANFS-ND	0 to 70°C Dual Op Amp	8-Dip	.55	.44	.33
LM358MFS-ND	0 to 70°C Dual Op Amp	8-SOIC	.55	.44	.33
LM358NFS-ND	0 to 70°C Dual Op Amp	8-Dip	.55	.44	.33
LM393AN-ND	0 to 70°C Dual Differential Comparator	8-Dip	.55	.44	.33
LM393MFS-ND	0 to 70°C Dual Differential Comparator	8-SOP	.55	.44	.33
LM393NFS-ND	0 to 70°C Dual Differential Comparator	8-Dip	.55	.44	.33
LM555CNFS-ND	0 to 70°C Single Timer	8-Dip	.50	.40	.30
LM1458NFS-ND	Dual Op Amp	8-Dip	.55	.44	.33
LM2901NFS-ND	Quad Comparator	14-Dip	.48	.36	.27
LM2903MFS-ND	Dual Differential Comparator	8-SOP	.48	.36	.27
LM2903NFS-ND	Dual Differential Comparator	8-Dip	.48	.36	.27
LM2904MFS-ND	Dual Op Amp	8-SOP	.48	.36	.27
LM2904NFS-ND	Dual Op Amp	8-Dip	.48	.36	.27
LM7805CT-ND	0 to 125°C, 3-Terminal 1A Positive Voltage Regulator	TO-220	.48	.36	.27
LM7905CTFS-ND	-5V, 4% 3-Terminal 1A Negative Voltage Regulator	TO-220	.48	.36	.27
MC78L08ACPTR-ND	8V, 4% 3-Terminal 0.1A Positive Voltage Regulator	TO-92	.44	.36	.27
MC78M05CT-ND	5V, 4% 3-Terminal 0.5A Positive Voltage Regulator	TO-220	.47	.38	.29
MC7805CT-ND	5V, 4% 3-Terminal 1A Positive Voltage Regulator	TO-220	.47	.38	.29
MC7808CT-ND	8V, 4% 3-Terminal 1A Positive Voltage Regulator	TO-220	.48	.37	.28
MC7812CT-ND	12V, 4% 3-Terminal 1A Positive Voltage Regulator	TO-220	.48	.37	.28
MC7815CT-ND	15V, 4% 3-Terminal 1A Positive Voltage Regulator	TO-220	.47	.38	.29
MC7824CT-ND	24V, 4% 3-Terminal 1A Positive Voltage Regulator	TO-220	.47	.38	.29
MC7905CT-ND	-5V, 4% 3-Terminal 1A Negative Voltage Regulator	TO-220	.48	.37	.28
MC7912CT-ND	-12V, 4% 3-Terminal 1A Negative Voltage Regulator	TO-220	.48	.37	.28
MC7915CT-ND	-15V, 4% 3-Terminal 1A Negative Voltage Regulator	TO-220	.48	.37	.28
RC1117DXCT-ND	1A, Adjustable LDO Linear Regulator	TO-252	1.17	.98	.78
RC1117DXTR-ND	1A, Adjustable LDO Linear Regulator	TO-252	1267.50/2,500		
RC1117M-ND	1A, Adjustable LDO Linear Regulator	TO-263	.96	.80	.64
RC1117M5-ND	5V, 1A, Fixed LDO Linear Regulator	TO-263	.96	.80	.64
RC1117M33-ND	3.3V, 1A, Fixed LDO Linear Regulator	TO-263	.96	.80	.64
RC1117M285-ND	2.85V, 1A, Fixed LDO Linear Regulator	TO-263	.96	.80	.64
RC1117STCT-ND	1A, Adjustable LDO Linear Regulator	SOT-223	.90	.75	.60
RC1117STTR-ND	1A, Adjustable LDO Linear Regulator	SOT-223	975.00/2,500		
RC1117S33TCT-ND	3.3V, 1A, Fixed LDO Linear Regulator	SOT-223	.90	.75	.60
RC1117S33TTR-ND	3.3V, 1A, Fixed LDO Linear Regulator	SOT-223	975.00/2,500		
RC1117S285TCT-ND	2.85V, 1A, Fixed LDO Linear Regulator	SOT-223	.90	.75	.60
RC1117S285TTR-ND	2.85V, 1A, Fixed LDO Linear Regulator	SOT-223	975.00/2,500		
RC1584T-ND	7A, Adjustable LDO Linear Regulator	TO-220	1.47	1.23	.98
RC1585M-ND	5A, Adjustable LDO Linear Regulator	TO-263	1.47	1.23	.98
RC1585M15-ND	1.5V, 5A, Fixed LDO Linear Regulator	TO-263	1.47	1.23	.98
RC1585MTCT-ND	5A, Adjustable LDO Linear Regulator	TO-263	1.47	1.23	.98
RC1585MTTR-ND	5A, Adjustable LDO Linear Regulator	TO-263	548.80/800		
RC1585T-ND	5A, Adjustable LDO Linear Regulator	TO-220	1.38	1.15	.92
RC1585T15-ND	1.5V, 5A, Fixed LDO Linear Regulator	TO-220	1.38	1.15	.92
RC1587M-ND	3A, Adjustable LDO Linear Regulator	TO-263	1.38	1.15	.92
RC1587M15-ND	1.5V, 3A Fixed LDO Linear Regulator	TO-263	1.38	1.15	.92
RC1587M33-ND	3.3V, 3A Fixed LDO Linear Regulator	TO-263	1.38	1.15	.92
RC1587T-ND	3A, Adjustable LDO Linear Regulator	TO-220	1.32	1.10	.88
RC1587T15-ND	1.5V, 3A Fixed LDO Linear Regulator	TO-220	1.32	1.10	.88
RC1587T33-ND	3.3V, 3A Fixed LDO Linear Regulator	TO-220	1.32	1.10	.88
RC2951M-ND	0.1A Adjustable Micropower LDO Voltage Regulator	8-SOIC	1.75	1.40	1.05

NEW! SPECIALIZED ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
100324QC-ND	Low Power Hex TTL-to-ECL Translator	28-PLCC	6.27	5.02	4.24
100325QC-ND	Low Power Hex ECL-to-TTL Translator	28-PLCC	6.27	5.02	4.24

TinyLogic™

TinyLogic™ gives design engineers the ability to implement design changes or modify standard VLSI circuits without having to redesign complex silicon subcomponents or printed circuit board layouts. TinyLogic™ is primarily intended for use in space-constrained systems such as portable CD players, disk drives, cellular phones, pagers, radios, PCM-CIA cards and portable computers.

TinyLogic can facilitate efficient system designs in any application. Placement of single and dual gate logic functions exactly where needed simplifies signal routing while minimizing propagation delays and noise generation. Fairchild's TinyLogic™ family consists of a broad spectrum of high speed, low power, and CMOS single gate logic functions.

Products in the TinyLogic™, 7SZ parts (UHS Series) are the fastest logic devices on the market, operating in a Vcc voltage range of 1.8V to 5.5V.

In addition, with input overvoltage tolerance, the devices are capable of interfacing with 5V components while operating at 3V. 7S parts (HS Series devices) are intended for use with 5V applications, but will operate in a voltage range of 2V to 6V.

Series	Specified Power Supply	Compatibility Input V_{IL}/V_{IH}	Compatibility Output V_{OL}/V_{OH}	Drive I_{OL}/I_{OH}	Supply Current I_{CC}	Speed T_{PD}
7Sxx (HS)	2V - 6V	CMOS	TTL, CMOS	2.6mA/–2.6mA	10µA	21 ns
7SZxx (UHS)	1.8V - 5.5V	CMOS	TTL, CMOS	32mA/–32mA	20µA	4.5 ns

TinyLogic™ 7Sxx (HS Series)

Features	Benefits
CMOS (HS)	Compatible with HC
Low Quiescent Power: Icc < 1 µA @ 6V Vcc	Low power supply drain-beneficial for portables
High Noise immunity-Like HCMOS and VHC	Logic Level Integrity

TinyLogic™ 7SZxx (UHS Series)

Features	Benefits
Low Voltage 1.8V-5.5V operation; 5V tolerant inputs	Battery powered applications (optimized for 3.3V). Interfaces to both 3V & 5V Components
Propagation delay typical 4nS (3.3V)	New high speed designs. Seamless revisions to existing designs.

(Continued)

FAIRCHILD SEMICONDUCTOR TinyLogic™ *(Continued)*

HS Series

Surface Mount Product in Cut Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
NC7S00M5CT-ND	Single 2-Input NAND Gate	SOT-23-5	.96	.80	.64
NC7S00P5CT-ND	2-Input NAND Gate *NEW!*	SC70-5	.96	.80	.64
NC7S02M5CT-ND	Single 2-Input NOR Gate	SOT-23-5	.96	.80	.64
NC7S04M5CT-ND	Single Inverter	SOT-23-5	.96	.80	.64
NC7S08M5CT-ND	Single 2-Input AND Gate	SOT-23-5	.96	.80	.64
NC7S14M5CT-ND	Schmitt Input Inverter	SOT-23-5	.96	.80	.64
NC7S32M5CT-ND	Single 2-Input OR Gate	SOT-23-5	.96	.80	.64
NC7S86M5CT-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	.96	.80	.64

Surface Mount Product on Tape & Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 250
NC7S00M5TR-ND	Single 2-Input NAND Gate	SOT-23-5	119.63
NC7S00P5TR-ND	2-Input NAND Gate *NEW!*	SC70-5	119.63
NC7S02M5TR-ND	Single 2-Input NOR Gate	SOT-23-5	119.63
NC7S04M5TR-ND	Single Inverter	SOT-23-5	119.63
NC7S08M5TR-ND	Single 2-Input AND Gate	SOT-23-5	119.63
NC7S14M5TR-ND	Schmitt Input Inverter	SOT-23-5	119.63
NC7S32M5TR-ND	Single 2-Input OR Gate	SOT-23-5	119.63
NC7S86M5TR-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	119.63

UHS Series

Surface Mount Product in Cut Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
NC7SZ00M5CT-ND	Single 2-Input NAND Gate	SOT-23-5	.96	.80	.64
NC7SZ00P5CT-ND	2-Input NAND Gate *NEW!*	SC70-5	.96	.80	.64
NC7SZ02M5CT-ND	Single 2-Input NOR Gate	SOT-23-5	.96	.80	.64
NC7SZ04M5CT-ND	Single Inverter	SOT-23-5	.96	.80	.64
NC7SZ05M5CT-ND	Single Inverter Open Drain	SOT-23-5	.96	.80	.64
NC7SZ08M5CT-ND	Single 2-Input AND Gate	SOT-23-5	.96	.80	.64
NC7SZ08P5CT-ND	2-Input AND Gate *NEW!*	SC70-5	.96	.80	.64
NC7SZ125M5CT-ND	Single Tri-State Buffer OE=Low	SOT-23-5	.96	.80	.64
NC7SZ125P5CT-ND	Tri-State Buffer *NEW!*	SC70-5	.96	.80	.64
NC7SZ126M5CT-ND	Single Tri-State Buffer OE=High	SOT-23-5	.96	.80	.64
NC7SZ126P5CT-ND	Tri-State Buffer *NEW!*	SC70-5	.96	.80	.64
NC7SZ14M5CT-ND	Schmitt Input Inverter	SOT-23-5	.96	.80	.64
NC7SZ32M5CT-ND	Single 2-Input OR Gate	SOT-23-5	.96	.80	.64
NC7SZ175P6CT-ND	D-Type Flip-Flop *NEW!*	SC70-6	.96	.80	.64
NC7SZ384M5CT-ND	Single Bus Switch	SOT-23-5	.90	.75	.60
NC7SZ38M5CT-ND	Single 2-Input NAND Gate (Open Drain Output)	SOT-23-5	.96	.80	.64
NC7SZ66M5CT-ND	Single Digital Switch	SOT-23-5	.90	.75	.60
NC7SZ86M5CT-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	.96	.80	.64
NC7WZ16P6CT-ND	Dual Buffer *NEW!*	SC70-6	.96	.80	.64

Surface Mount Product on Tape & Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 250
NC7SZ00M5TR-ND	Single 2-Input NAND Gate	SOT-23-5	119.63
NC7SZ00P5TR-ND	2-Input NAND Gate *NEW!*	SC70-5	119.63
NC7SZ02M5TR-ND	Single 2-Input NOR Gate	SOT-23-5	119.63
NC7SZ04M5TR-ND	Single Inverter	SOT-23-5	119.63
NC7SZ05M5TR-ND	Single Inverter Open Drain	SOT-23-5	119.63
NC7SZ08M5TR-ND	Single 2-Input AND Gate	SOT-23-5	119.63
NC7SZ08P5TR-ND	2-Input AND Gate *NEW!*	SC70-5	119.63
NC7SZ125M5TR-ND	Single Tri-State Buffer OE=Low	SOT-23-5	119.63
NC7SZ125P5TR-ND	Tri-State Buffer *NEW!*	SC70-5	119.63
NC7SZ126M5TR-ND	Single Tri-State Buffer OE=High	SOT-23-5	119.63
NC7SZ126P5TR-ND	Tri-State Buffer *NEW!*	SC70-5	119.63
NC7SZ14M5TR-ND	Schmitt Input Inverter	SOT-23-5	119.63
NC7SZ32M5TR-ND	Single 2-Input OR Gate	SOT-23-5	119.63
NC7SZ175P6TR-ND	D-Type Flip-Flop *NEW!*	SC70-6	119.63
NC7SZ384M5TR-ND	Single Bus Switch	SOT-23-5	112.50
NC7SZ38M5TR-ND	Single 2-Input NAND Gate (Open Drain Output)	SOT-23-5	119.63
NC7SZ66M5TR-ND	Single Digital Switch	SOT-23-5	112.50
NC7SZ86M5TR-ND	Single 2-Input Exclusive OR Gate	SOT-23-5	119.63
NC7WZ16P6TR-ND	Dual Buffer *NEW!*	SC70-6	119.63

FAIRCHILD SEMICONDUCTOR *NEW!* OP AMPS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
KM4170IS5TR3CT-ND	5.3V, 16mA, Rail-to-Rail, In/Out Op Amp	SC70-5	1.19	.99	.80
KM4170IS5TR3TR-ND	5.3V, 16mA, Rail-to-Rail, In/Out Op Amp	SC70-5	1544.40/3,000		
LF347NFS-ND	4MHz, High Speed Quad JFet Op Amp	14-Dip	.76	.57	.43
LM324AMFS-ND	0 to 70°C Quad Op Amp	14-SOP	.55	.44	.33
LM324ANFS-ND	0 to 70°C Quad Op Amp	14-Dip	.55	.44	.33
LM324MFS-ND	0 to 70°C Quad Op Amp	14-SOP	.55	.44	.33
LM324NFS-ND	0 to 70°C Quad Op Amp	14-Dip	.55	.44	.33
LM348NFS-ND	0 to 70°C Quad Op Amp	14-Dip	.56	.42	.32
LM741CNFS-ND	0 to 70°C Single Op Amp	8-Dip	.52	.39	.30
LM2902NFS-ND	-40 to 85°C Quad Op Amp	14-Dip	.48	.36	.27
MMPQ2222ACT-ND	General Purpose Multichip NPN Op Amp	16-SOIC	1.39	1.16	.93
MMPQ2222ATR-ND	General Purpose Multichip NPN Op Amp	16-SOIC	1501.50/2,500		
MMPQ2907ACT-ND	General Purpose Multichip PNP Op Amp	16-SOIC	1.39	1.16	.93
MMPQ2907ATR-ND	General Purpose Multichip PNP Op Amp	16-SOIC	1501.50/2,500		

PERICOM SOTiny™

Surface Mount Product in Cut Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
PI74STX1G00CXCT-ND	Single 2-Input NAND Gate	SC70-5	.45	.34	.27
PI74STX1G02CXCT-ND	Single 2-Input NOR Gate	SC70-5	.45	.34	.27
PI74STX1G04CXCT-ND	Single Inverter	SC70-5	.45	.34	.27
PI74STX1G08CXCT-ND	Single 2-Input AND Gate	SC70-5	.45	.34	.27
PI74STX1G125CXCT-ND	Buffer with Tri-State Output	SC70-5	.54	.41	.32
PI74STX1G126CXCT-ND	Buffer with Tri-State Output	SC70-5	.54	.41	.32
PI74STX1G14CXCT-ND	Schmitt-Trigger Inverter	SC70-5	.45	.34	.27
PI74STX1G32CXCT-ND	Single 2-Input OR Gate	SC70-5	.45	.34	.27
PI74STX1G79CXCT-ND	Single Positive-Edge-Triggered D-Type Flip-Flop	SC70-5	.45	.34	.27
PI74STX1G86CXCT-ND	Single 2-Input XOR Gate	SC70-5	.45	.34	.27

Surface Mount Product on Tape & Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
PI74STX1G00CXTR-ND	Single 2-Input NAND Gate	SC70-5	200.00/M
PI74STX1G02CXTR-ND	Single 2-Input NOR Gate	SC70-5	200.00/M
PI74STX1G04CXTR-ND	Single Inverter	SC70-5	200.00/M
PI74STX1G08CXTR-ND	Single 2-Input AND Gate	SC70-5	200.00/M
PI74STX1G125CXTR-ND	Buffer with Tri-State Output	SC70-5	239.00/M
PI74STX1G126CXTR-ND	Buffer with Tri-State Output	SC70-5	239.00/M
PI74STX1G14CXTR-ND	Schmitt-Trigger Inverter	SC70-5	200.00/M
PI74STX1G32CXTR-ND	Single 2-Input OR Gate	SC70-5	200.00/M
PI74STX1G79CXTR-ND	Single Positive-Edge-Triggered D-Type Flip-Flop	SC70-5	200.00/M
PI74STX1G86CXTR-ND	Single 2-Input XOR Gate	SC70-5	200.00/M

PERICOM 74ALVCH LOGIC (ADVANCED LOW VOLTAGE CMOS w/HOLD)

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI74ALVCH16244A-ND	16-Bit Buffer/Line Driver	48-TSSOP	2.40	1.92	1.60
PI74ALVCH16245A-ND	16-Bit Bidirectional Bus Transceiver	48-TSSOP	2.40	1.92	1.60
PI74ALVCH16374A-ND	16-Bit Edge Triggered D-Type Flip Flop	48-TSSOP	2.40	1.92	1.60
PI74ALVCH16501A-ND	16-Bit Universal Transceiver	56-TSSOP	2.55	2.04	1.70
PI74ALVCH16646A-ND	16-Bit Bus Transceiver and Register	56-TSSOP	2.72	2.18	1.81
PI74ALVCH16652A-ND	16-Bit Bus Transceiver and Register	56-TSSOP	2.72	2.18	1.81
PI74ALVCH16721A-ND	20-Bit Flip Flop	56-TSSOP	2.38	1.91	1.59
PI74ALVCH16823A-ND	18-Bit Bus Interface Flip Flop	56-TSSOP	2.38	1.91	1.59

PERICOM DOUBLE DENSITY 2.5 VOLT ALVTC LOGIC WITH TOLERANT I/O & BUS HOLD

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI74ALVTC16244A-ND	16-Bit Buffer/Line Driver	48-TSSOP	2.91	2.28	1.83
PI74ALVTC16245A-ND	16-Bit Bidirectional Transceiver	48-TSSOP	2.91	2.28	1.83
PI74ALVTC16373A-ND	16-Bit Transparent D-Type Latch	48-TSSOP	2.91	2.28	1.83
PI74ALVTC16374A-ND	16-Bit D-Type Flip-Flop	48-TSSOP	2.91	2.28	1.83

PERICOM DOUBLE DENSITY VCX LOGIC WITH TOLERANT I/O & BUS HOLD

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI74VCX16244A-ND	16-Bit Buffer/Line Driver	48-TSSOP	3.33	2.62	2.09
PI74VCX16245A-ND	16-Bit Bidirectional Transceiver	48-TSSOP	3.33	2.62	2.09
PI74VCX16373A-ND	16-Bit Transparent D-Type Latch	48-TSSOP	3.33	2.62	2.09
PI74VCX16374A-ND	16-Bit D-Type Flip-Flop	48-TSSOP	3.33	2.62	2.09

PERICOM LAN / ANALOG SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PI5A100W-ND	Quad SPDT Analog Switch	16-SOIC	2.17	1.87	1.67
PI5A317AP-ND	Single SPST Analog Switch	8-Dip	.92	.80	.71
PI5A319AP-ND	Single SPDT Analog Switch	8-Dip	1.22	1.06	.95
PI5A319AW-ND	Single SPDT Analog Switch	8-SOIC	1.22	1.06	.95
PI5A391AP-ND	Quad SPST Analog Switch	16-Dip	1.85	1.59	1.43
PI5L100Q-ND	Quad 2-1 Multiplexer/Demultiplexer LAN Switch	16-QSOP	2.11	1.91	1.73
PI5L200Q-ND	Quad SPDT LAN Switch	16-QSOP	2.32	1.82	1.48
PI5A126W-ND	Dual SPST, 7 Volt N.O. Analog Switch	8-SOIC	.98	.89	.80
PI5A127W-ND	Dual SPST, 7 Volt N.C. Analog Switch	8-SOIC	.98	.89	.80
PI5V330W-ND	Quad 2/1 Multiplexer/Demultiplexer	16-SOIC	2.63	2.25	2.06
PS301CPA-ND	SPST, 17 Volt N.O. Analog Switch	8-Dip	1.34	1.09	.91
PS301CSA-ND	SPST 17 Volt Analog Switch	8-SOIC	1.19	1.02	.92
PS301CUA-ND	SPST, 17 Volt N.O. Analog Switch	8-MSOP	1.38	1.12	.94
PS302CSA-ND	SPST 17 Volt Analog Switch	8-SOIC	1.01	.87	.79
PS303CPA-ND	SPDT, 17 Volt Analog Switch	8-Dip	1.34	1.09	.91
PS303CSA-ND	SPST 17 Volt Analog Switch	8-SOIC	1.01	.87	.79
PS303ESA-ND	SPDT, 17 Volt Analog Switch	8-SOIC	1.21	.99	.83
PS320ESA-ND	Dual SPST, 17 Volt N.O. Analog Switch	8-SOIC	1.01	.87	.79
PS321CPA-ND	Dual SPST, 17 Volt Analog Switch	8-Dip	.99	.85	.76
PS322ESA-ND	Dual SPST, 17 Volt N.O./N.C. Analog Switch	8-SOIC	1.01	.87	.79
PS323CPA-ND	Dual SPST, 17 Volt N.O. Analog Switch	8-Dip	.99	.85	.76
PS323ESA-ND	Dual SPST, 17 Volt N.O. Analog Switch	8-SOIC	1.01	.87	.79
PS324ESA-ND	Dual SPST, 17 Volt N.C. Analog Switch	8-SOIC	1.01	.87	.79
PS383EPE-ND	Dual SPDT, 17 Volt Analog Switch	16-Dip	2.82	2.43	2.17
PS383ESE-ND	Dual SPDT, 17 Volt Analog Switch	16-SOIC	2.82	2.43	2.17
PS385ESE-ND	Dual DPST, 17 Volt Analog Switch	16-SOIC	2.82	2.43	2.17
PS391EPE-ND	Quad SPST, 17 Volt N.C. Analog Switch	16-Dip	2.11	1.82	1.63
PS391ESE-ND	Quad SPST, 17 Volt N.C. Analog Switch	16-SOIC	2.11	1.82	1.63
PS392CPE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-Dip	2.07	1.78	1.60
PS392CSE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-SOIC	2.07	1.78	1.60
PS392EPE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-Dip	2.11	1.82	1.63
PS392ESE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-SOIC	2.11	1.82	1.63
PS393EPE-ND	Quad SPST, 17 Volt (2)N.O., (2)N.C. Analog Switch	16-Dip	2.11	1.82	1.63
PS393ESE-ND	Quad SPST, 17 Volt (2)N.O., (2)N.C. Analog Switch	16-SOIC	2.11	1.82	1.63
PS4066ACSD-ND	Quad SPST, 17 Volt N.O. Analog Switch	14-SOIC	2.07	1.78	1.60
PS4066AEEE-ND	Quad SPST, 17 Volt N.O. Analog Switch	16-QSOP	2.13	1.83	1.64
PS4066AESD-ND	Quad SPST, 17 Volt N.O. Analog Switch	14-SOIC	2.11	1.82	1.63

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

PERICOM

LVDS DATA TRANSMISSION

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI90LV022L-ND	LVDS 2x2 Mux/Repeater	16-TSSOP	4.90	4.20	3.75
PI90LV027AW-ND	Dual LVDS Line Driver	8-SOIC	2.63	2.25	2.01
PI90LV028AW-ND	Dual LVDS Line Receiver	8-SOIC	2.63	2.25	2.01
PI90LV031AW-ND	Quad LVDS Line Driver	16-SOIC	4.38	3.75	3.35
PI90LV032AW-ND	Quad LVDS Line Receiver	16-SOIC	4.38	3.75	3.35
PI90LV050L-ND	Dual LVDS Driver/Receiver	16-TSSOP	2.98	2.55	2.28
PI90LV051L-ND	Dual LVDS Transceiver (Single EN)	16-TSSOP	5.25	4.50	4.02
PI90LV179W-ND	Single LVDS Transceiver	8-SOIC	2.60	2.24	2.00
PI90LV180W-ND	Single LVDS Transceiver (EN)	14-SOIC	3.15	2.70	2.41
PI90LVB022L-ND	LVDS 2x2 Mux/Repeater	16-TSSOP	6.65	5.70	5.09
PI90LVB050L-ND	Dual Hi-Drive LVDS Transceiver (EN)	16-TSSOP	3.50	3.00	2.68
PI90LVB051L-ND	Dual Hi-Drive LVDS Transceiver (EN)	16-TSSOP	3.03	2.61	2.33
PI90LVB16L-ND	Bus LVDS 1/6 Clock Buffer	24-TSSOP	7.00	6.00	4.44
PI90LVB179W-ND	Single Hi-Drive LVDS Transceiver	8-SOIC	2.28	1.95	1.74
PI90LVB180W-ND	Single Hi-Drive LVDS Transceiver (EN)	14-SOIC	2.45	2.10	1.88

PERICOM

FCT LOGIC STANDARD 5 VOLT

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT132ATW-ND	Quad 2-Input NAND Schmitt	14-SOIC	1.62	1.53	1.48
PI74FCT240ATQ-ND	Inverting Octal Buffer/Line Driver	20-QSOP	.74	.68	.62
PI74FCT240ATS-ND	Inverting Octal Buffer/Line Driver	20-SOIC	.74	.68	.62
PI74FCT244ATQ-ND	Octal Buffer/Line Driver	20-QSOP	.74	.68	.62
PI74FCT244ATS-ND	Octal Buffer/Line Driver	20-SOIC	.74	.68	.62
PI74FCT245ATQ-ND	Octal Bidirectional Transceiver	20-QSOP	.74	.68	.62
PI74FCT245ATS-ND	Octal Bidirectional Transceiver	20-SOIC	.74	.68	.62
PI74FCT253ATQ-ND	Dual 4-Input Multiplexer	16-QSOP	1.17	1.07	.97
PI74FCT257ATS-ND	Quad 2-Input Multiplexer	16-SOIC	.94	.86	.79
PI74FCT273ATQ-ND	Octal D-Type Flip Flop with Reset	20-QSOP	.74	.68	.62
PI74FCT273ATS-ND	Octal D-Type Flip Flop with Reset	20-SOIC	.74	.68	.62
PI74FCT373ATQ-ND	Octal Transparent Latch	20-QSOP	.74	.68	.62
PI74FCT373ATS-ND	Octal Transparent Latch	20-SOIC	.74	.68	.62
PI74FCT374ATQ-ND	Octal D-Type Register, Tri-State	20-QSOP	.74	.68	.62
PI74FCT374ATS-ND	Octal D-Type Register, Tri-State	20-SOIC	.74	.68	.62
PI74FCT377ATS-ND	Octal D-Type Flip Flop with Clock Enable	20-SOIC	1.26	1.15	1.05
PI74FCT541ATQ-ND	Non-Invert Octal Buffer/Line Driver	20-QSOP	.94	.86	.79
PI74FCT541ATS-ND	Non-Invert Octal Buffer/Line Driver	20-SOIC	.94	.86	.79
PI74FCT543ATS-ND	Non-Invert Octal Latched Transceiver	24-SOIC	1.23	1.13	1.02
PI74FCT573ATQ-ND	Octal Transparent Latch with Tri-State	20-QSOP	.74	.68	.62
PI74FCT573ATS-ND	Octal Transparent Latch with Tri-State	20-SOIC	.74	.68	.62
PI74FCT574ATQ-ND	Octal D-Type Register, Tri-State	20-QSOP	.74	.68	.62
PI74FCT574ATS-ND	Octal D-Type Register, Tri-State	20-SOIC	.74	.68	.62
PI74FCT652ATS-ND	Inverting Octal Registered Transceiver	24-SOIC	1.23	1.13	1.02
PI74FCT821ATQ-ND	10-Bit Register, Tri-State	24-QSOP	.98	.89	.81
PI74FCT823ATS-ND	9-Bit Register with Clear and Tri-State	24-SOIC	.98	.89	.81
PI74FCT827ATS-ND	10-Bit Buffer	24-SOIC	.98	.89	.81

PERICOM

74FCT – STANDARD 5 VOLT FCT WITH 25 OHM SERIES OUTPUT RESISTOR

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT2157ATQ-ND	Quad 2-Input Multiplexer	16-QSOP	.94	.86	.79
PI74FCT2241ATQ-ND	Inverting Octal Buffer/Line Driver	20-QSOP	.74	.68	.62
PI74FCT2244ATQ-ND	Octal Buffer/Line Driver	20-QSOP	.74	.68	.62
PI74FCT2244ATS-ND	Octal Buffer/Line Driver	20-SOIC	.74	.68	.62
PI74FCT2245ATQ-ND	Octal Bidirectional Transceiver	20-QSOP	.74	.68	.62
PI74FCT2245ATS-ND	Octal Bidirectional Transceiver	20-SOIC	.74	.68	.62
PI74FCT2273ATQ-ND	Octal D-Type Flip Flop	20-QSOP	.74	.68	.62
PI74FCT2374ATQ-ND	Octal D-Type Register	20-QSOP	.74	.68	.62
PI74FCT2541ATQ-ND	Non-Invert Octal Latched Transceiver	20-QSOP	.94	.86	.79
PI74FCT2573ATQ-ND	Octal Transparent Latch	20-QSOP	.74	.68	.62
PI74FCT2827ATQ-ND	10-Bit Buffer	24-QSOP	.98	.89	.81

PERICOM

74FCT – DOUBLE DENSITY STANDARD 5 VOLT FCT LOGIC

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT16240ATV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.44	1.31	1.20
PI74FCT16245ATA-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.44	1.31	1.20
PI74FCT16245ATV-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.44	1.31	1.20
PI74FCT16373ATA-ND	16-Bit Transparent Latch	48-TSSOP	1.44	1.31	1.20
PI74FCT16373ATV-ND	16-Bit Transparent Latch	48-SSOP	1.44	1.31	1.20
PI74FCT16374ATA-ND	16-Bit Register	48-TSSOP	1.44	1.31	1.20
PI74FCT16374ATV-ND	16-Bit Register	48-SSOP	1.44	1.31	1.20
PI74FCT16646ATA-ND	16-Bit Registered Transceiver	56-TSSOP	1.72	1.57	1.43

PERICOM

74FCT – DOUBLE DENSITY 3.3 VOLT FCT LOGIC

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT163244AA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.44	1.31	1.20
PI74FCT163244AV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.44	1.31	1.20

PERICOM

74FCT – DOUBLE DENSITY STANDARD 5V LOGIC WITH BALANCED OUTPUT DRIVE

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74FCT162244ATA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.44	1.31	1.20
PI74FCT162244ATV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.44	1.31	1.20
PI74FCT162245ATA-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.44	1.31	1.20
PI74FCT162245ATV-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.44	1.31	1.20
PI74FCT162374ATA-ND	16-Bit Register	48-TSSOP	1.44	1.31	1.20
PI74FCT162374ATV-ND	16-Bit Register	48-SSOP	1.44	1.31	1.20
PI74FCT162541ATV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.85	1.69	1.54
PI74FCT162543ATV-ND	16-Bit Latched Transceiver	56-SSOP	1.72	1.57	1.43
PI74FCT162823ATA-ND	18-Bit Register	56-TSSOP	1.72	1.57	1.43
PI74FCT162827ATA-ND	20-Bit Buffer	56-TSSOP	1.72	1.57	1.43

PERICOM

74LPT – STANDARD 3.3 VOLT LOGIC WITH 5 VOLT TOLERANT I/O

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74LPT244AQ-ND	Octal Buffer/Line Driver	20-QSOP	.78	.73	.71
PI74LPT244AS-ND	Octal Buffer/Line Driver	20-SOIC	.78	.73	.71
PI74LPT245AQ-ND	Octal Bidirectional Transceiver	20-QSOP	.78	.73	.71
PI74LPT245AS-ND	Octal Bidirectional Transceiver	20-SOIC	.78	.73	.71
PI74LPT373AQ-ND	Octal Transparent Latch	20-QSOP	.78	.73	.71
PI74LPT373AS-ND	Octal Transparent Latch	20-SOIC	.78	.73	.71
PI74LPT541AQ-ND	Non-Inverting Octal Buffer/Line Driver	20-QSOP	.78	.73	.71
PI74LPT541AS-ND	Non-Inverting Octal Buffer/Line Driver	20-SOIC	.78	.73	.71
PI74LPT573AQ-ND	Octal Transparent Latch with Tri-State	20-QSOP	.78	.73	.71
PI74LPT573AS-ND	Octal Transparent Latch with Tri-State	20-SOIC	.78	.73	.71

PERICOM

74LPT – DOUBLE DENSITY 3.3 VOLT LOGIC WITH 5 VOLT TOLERANT I/O

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI74LPT16240AA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.18	1.11	1.08
PI74LPT16244AA-ND	16-Bit Buffer/Line Driver	48-TSSOP	1.18	1.11	1.08
PI74LPT16244AV-ND	16-Bit Buffer/Line Driver	48-SSOP	1.18	1.11	1.08
PI74LPT16245AA-ND	16-Bit Bidirectional Transceiver	48-TSSOP	1.18	1.11	1.08
PI74LPT16245AV-ND	16-Bit Bidirectional Transceiver	48-SSOP	1.18	1.11	1.08
PI74LPT16373AA-ND	16-Bit Transparent Latch	48-TSSOP	1.18	1.11	1.08
PI74LPT16374AA-ND	16-Bit Octal Register	48-TSSOP	1.18	1.11	1.08
PI74LPT16827AA-ND	20-Bit Buffer	56-TSSOP	1.85	1.69	1.54

PERICOM

3.3 VOLT BUS SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI3B16210A-ND	20-Bit Bus Switch	48-TSSOP	2.40	1.93	1.69
PI3B16211A-ND	24-Bit Bus Switch	56-TSSOP	2.40	2.19	2.00
PI3B16212A-ND	24-Bit Bus Exchange	56-TSSOP	2.40	2.19	2.00
PI3B16213A-ND	24-Bit Bus Exchange (with Extra Selection)	56-TSSOP	2.40	2.19	2.00
PI3B16215A-ND	20-Bit Bus Switch (w/Pre-Charged O/P)	48-TSSOP	2.40	2.19	2.00
PI3B16224B-ND	12-24-Bit Mux/Demux Bus Switch	40-BQSOP	2.15	1.97	1.79
PI3B16232A-ND	Synchronous 16-32 Bit Mux/Demux Bus Switch	56-TSSOP	2.40	2.19	2.00
PI3B16233A-ND	16-32-Bit FET Mux/Demux Bus Switch	56-TSSOP	2.40	2.19	2.00
PI3B16244A-ND	Hot Insertion, 16-Bit, 4-Port Bus Switch	48-TSSOP	2.40	2.19	2.00
PI3B16245A-ND	Hot Insertion, 16-Bit, 2-Port Bus Switch	48-BQSOP	2.40	2.19	2.00
PI3B16248B-ND	24-48-Bit Multiplexer/Demultiplexer Bus Switch	80-QSOP	3.94	3.60	3.29
PI3B3251Q-ND	8-1 Mux/Demux Hot Insertion Bus Switch	16-QSOP	1.18	1.04	.96
PI3B3253Q-ND	Dual 4-1 Mux/Demux Hot Insertion Bus Switch	16-QSOP	1.18	1.04	.96
PI3B3257Q-ND	Quad 2-1 Mux/Demux Hot Insertion Bus Switch	16-QSOP	1.18	1.04	.96
PI3B33X257B-ND	12-24 Multiplexer/Demultiplexer Bus Switch	48-BQSOP	3.33	3.04	2.77
PI3B3863Q-ND	10-Bit Hot Insertion Bus Switch for DDR	24-QSOP	1.18	1.04	.96
PI3C3125Q-ND	Hot Insertion, 4-Bit, 2-Port, Bus Switch with Individual Enables	16-QSOP	1.09	.85	.70
PI3C3126Q-ND	Hot Insertion, 4-Bit, 2-Port, Bus Switch with Individual Enables	16-QSOP	1.09	.85	.70
PI3C3244Q-ND	Hot Insertion, 8-Bit, 2-Port Bus Switch	20-QSOP	1.16	.91	.74
PI3C3245Q-ND	Hot Insertion, 8-Bit, 2-Port Bus Switch	20-QSOP	1.16	.91	.74
PI3C3384Q-ND	3.3V High Bandwidth, Hot Insertion, 10-Bit, 2-Port Bus Switch	24-QSOP	1.16	.91	.74
PI3C3861Q-ND	3.3V High Bandwidth, Hot Insertion, 10-Bit, 2-Port Bus Switch	24-QSOP	1.16	.91	.74
PI3C16210A-ND	3.3V, High Bandwidth Bus Switch	48-TSSOP	3.40	2.91	2.15
PI3C16211A-ND	3.3V, High Bandwidth Bus Switch	56-TSSOP	3.40	2.91	2.15
PI3C16212A-ND	3.3V, High Bandwidth Bus Switch	56-TSSOP	3.40	2.91	2.15
PI3C16215A-ND	3.3V, 2-Port, 20-Bit Bus Switch	48-TSSOP	3.40	2.91	2.15
PI3C34X461NB-ND	3.3V, 40-Bit Bus Switch (861 function)	96-LFBGA	3.82	3.28	2.43
PI3C34X484NB-ND	3.3V, 40-Bit Bus Switch (384 function)	96-LFBGA	3.82	3.28	2.43

PERICOM

LOW VOLTAGE TRANSLATOR BUS SWITCH

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI3VT3306L-ND	2-Bit, 2-Port, Low Voltage Translator Bus Switch	8-TSSOP	1.16	.99	.88
PI3VT3384L-ND	10-Bit, 2-Port, Low Voltage Translator Bus Switch	24-TSSOP	1.51	1.29	1.15
PI3VT3861L-ND	10-Bit, 2-Port, Low Voltage Translator Bus Switch	24-TSSOP	1.51	1.29	1.15

PERICOM

5 VOLT BUS SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI5C32X245B-ND	16-Bit Bus Switch	40-BQSOP	2.02	1.59	1.30
PI5C34X245B-ND	32-Bit Bus Switch	80-BQSOP	2.59	2.35	2.13
PI5C34X383B-ND	32-Bit, 2-Port Bus Switch	80-BQSOP	2.59	2.35	2.13
PI5C3125Q-ND	Quad Bus Switch with Individual Enable	16-QSOP	.71	.63	.58
PI5C3244Q-ND	8-Bit, 2-Port Bus Switch (FCT244 Pinout)	20-QSOP	.72	.64	.59
PI5C3244S-ND	8-Bit, 2-Port Bus Switch (FCT244 Pinout)	20-SOIC	.72	.64	.59
PI5C3245Q-ND	8-Bit, 2-Port Bus Switch (FCT245 Pinout)	20-QSOP	.72	.64	.59
PI5C3245S-ND	8-Bit, 2-Port Bus Switch (FCT245 Pinout)	20-SOIC	.72	.64	.59
PI5C3251Q-ND	8:1 Mux/Demux Bus Switch	16-QSOP	.72	.64	.59
PI5C3253Q-ND	Dual 4:1 Mux/Demux Bus Switch	16-QSOP	.72	.66	.60
PI5C3257Q-ND	Quad 2:1 Mux/Demux Bus Switch	16-QSOP	.72	.66	.60
PI5C3257S-ND	Quad 2:1 Mux/Demux Bus Switch	16-SOIC	.72	.66	.60
PI5C3383Q-ND	5-Bit, 4-Port Swabble Bus Switch	24-QSOP	.72	.66	.60
PI5C3384Q-ND	10-Bit, 2-Port Bus Switch	24-QSOP	.72	.66	.60
PI5C3384S-ND	10-Bit, 2-Port Bus Switch	24-SOIC	.72	.66	.60
PI5C3861Q-ND	10-Bit, 2-Port Bus Switch	24-QSOP	.73	.57	.51
PI5C6800CL-ND	10-Bit PCI Hot-Plug Bus Switch with -1.2 Undershoot Protection	24-TSSOP	1.34	1.05	.92
PI5C6800L-ND	10-Bit PCI Hot-Plug Bus Switch	24-TSSOP	1.19	.94	.82
PI5C6801CL-ND	10-Bit PCI Hot-Plug Bus Switch with -1.2 Undershoot Protection	24-TSSOP	1.34	1.05	.92
PI5C16211A-ND	24-Bit Bus Switch	56-TSSOP	1.98	1.79	1.62
PI5C16212A-ND	24-Bit Bus Switch	56-TSSOP	1.98	1.79	1.62
PI5C16212V-ND	25-Bit Bus Switch	56-SSOP	1.98	1.79	1.62
PI5C16215CA-ND	20-Bit Bus Switch with Charge Pump	48-TSSOP	2.46	2.22	2.01
PI5C16245A-ND	16-Bit, 4-Port Bus Switch (FCT16245 pinout)	48-TSSOP	1.62	1.46	1.32

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

PERICOM 5 VOLT BUS SWITCH PRODUCTS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI5C16861B-ND	20-Bit, Flow Through Pinout Bus Switch	48-BQSOP	1.62	1.46	1.32
PI5C16861CA-ND	20-Bit Flow Through Pinout Bus Switch with Undershoot Protection	48-TSSOP	2.03	1.84	1.67
PI5C16862CA-ND	5V, 20-Bit Bus Switch	48-TSSOP	2.16	1.85	1.65
PI5C32160CA-ND	32-16 Multiplexer/Demultiplexer Bus Switch	56-TSSOP	3.40	3.13	2.85
PI5C32861Q-ND	10-Bit, 2-Port Bus Switch	24-QSOP	.72	.57	.51

PERICOM VIDEO SWITCH PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI5V330Q-ND	Quad 2-1 Multiplexer Video Switch	16-QSOP	2.11	1.91	1.73
PI5V331Q-ND	Dual 4-Channel Video Multiplexer/Demultiplexer	16-QSOP	2.11	1.91	1.73
PI5V332Q-ND	Quad Video Switch	16-QSOP	2.11	1.91	1.73

PERICOM CLOCK DISTRIBUTION PRODUCTS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
PI49FCT3805AQ-ND	Non-Inverting Clock Driver	20-QSOP	2.98	2.72	2.38
PI49FCT3805AS-ND	Non-Inverting Clock Driver	20-SOIC	2.98	2.72	2.38
PI49FCT3807AQ-ND	10-Output Non-Inverting Clock Driver	20-QSOP	2.98	2.72	2.38
PI49FCT3807AS-ND	10-Output Non-Inverting Clock Driver	20-SOIC	2.98	2.72	2.38
PI49FCT804ATS-ND	Non-Inverting Clock Driver	16-SOIC	3.93	3.58	3.14
PI49FCT805ATQ-ND	Non-Inverting Clock Driver	20-QSOP	2.98	2.72	2.38
PI49FCT805ATS-ND	Non-Inverting Clock Driver	20-SOIC	2.98	2.72	2.38
PI49FCT807ATS-ND	10-Output Non-Inverting Clock Driver	20-SOIC	2.98	2.72	2.38
9269B-ND	Data Book on CD-ROM		9.90	—	—

TOSHIBA 74AC SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TC74AC00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.40	.30	.23
TC74AC00FNTR-ND	Quad 2-Input NAND Gate	14-SOIC	325.00/2,500		
TC74AC00P-ND	Quad 2-Input NAND Gate	14-Dip	.40	.30	.23
TC74AC02FNTR-ND	Quad 2-Input NOR Gate	14-SOIC	325.00/2,500		
TC74AC02P-ND	Quad 2-Input NOR Gate	14-Dip	.40	.30	.23
TC74AC04FN-ND	Hex Inverter	14-SOIC	.52	.42	.31
TC74AC04FNTR-ND	Hex Inverter	14-SOIC	325.00/2,500		
TC74AC08FN-ND	Quad 2-Input AND Gate	14-SOIC	.52	.42	.31
TC74AC08FNTR-ND	Quad 2-Input AND Gate	14-SOIC	325.00/2,500		
TC74AC14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.48	.36	.27
TC74AC32FN-ND	Quad 2-Input OR Gate	14-SOIC	.54	.44	.33
TC74AC32FNTR-ND	Quad 2-Input OR Gate	14-SOIC	325.00/2,500		
TC74AC74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.55	.44	.33
TC74AC74FNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	367.88/2,500		
TC74AC74P-ND	Dual D-Type Flip-Flop with Preset and Clear	14-Dip	.68	.51	.39
TC74AC86FN-ND	Quad Exclusive OR Gate	14-SOIC	.44	.33	.25
TC74AC125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.64	.48	.36
TC74AC125FNTR-ND	Quad Bus Buffer, Tri-State	14-SOIC	520.00/2,500		
TC74AC138FN-ND	3-to-8 Line Decoder	16-SOIC	.60	.45	.34
TC74AC138FNTR-ND	3-to-8 Line Decoder	16-SOIC	487.50/2,500		
TC74AC138P-ND	3-to-8 Line Decoder	16-Dip	.60	.45	.34
TC74AC157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.62	.47	.36
TC74AC244P-ND	Octal Bus Buffer, Tri-State	20-Dip	.57	.48	.38
TC74AC245FWTR-ND	Octal Bus Transceiver, Tri-State	20-SOIC	252.70/1,000		
TC74AC245P-ND	Octal Bus Transceiver, Tri-State	20-Dip	.57	.48	.38
TC74AC373P-ND	Octal D-Type Latch, Tri-State	20-Dip	.87	.73	.58
TC74AC573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.93	.78	.62

TOSHIBA 74ACT SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TC74ACT00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.44	.33	.25
TC74ACT00FNTR-ND	Quad 2-Input NAND Gate	14-SOIC	357.50/2,500		
TC74ACT00P-ND	Quad 2-Input NAND Gate	14-Dip	.44	.33	.25
TC74ACT02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.50	.40	.30
TC74ACT02FNTR-ND	Quad 2-Input NOR Gate	14-SOIC	337.50/2,500		
TC74ACT04FN-ND	Hex Inverter	14-SOIC	.58	.47	.35
TC74ACT04FNTR-ND	Hex Inverter	14-SOIC	357.50/2,500		
TC74ACT08FN-ND	Quad 2-Input AND Gate	14-SOIC	.40	.30	.23
TC74ACT14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.48	.36	.27
TC74ACT14FNTR-ND	Hex Schmitt Trigger Inverter	14-SOIC	390.00/2,500		
TC74ACT32FN-ND	Quad 2-Input OR Gate	14-SOIC	.53	.43	.32
TC74ACT32FNTR-ND	Quad 2-Input OR Gate	14-SOIC	357.75/2,500		
TC74ACT74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.44	.33	.25
TC74ACT74FNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	357.50/2500		
TC74ACT138FN-ND	3-to-8 Line Decoder	16-SOIC	.60	.45	.34
TC74ACT138FNTR-ND	3-to-8 Line Decoder	16-SOIC	487.50/2,500		
TC74ACT138P-ND	3-to-8 Line Decoder	16-Dip	.60	.45	.34
TC74ACT139FN-ND	Dual 2-to-4 Line Decoder	16-SOIC	.64	.49	.37
TC74ACT157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.73	.55	.42
TC74ACT244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.57	.48	.38
TC74ACT244FWTR-ND	Octal Bus Buffer, Tri-State	20-SOIC	252.70/1,000		
TC74ACT244P-ND	Octal Bus Buffer, Tri-State	20-Dip	.57	.48	.38
TC74ACT245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.57	.48	.38
TC74ACT245P-ND	Octal Bus Transceiver, Tri-State	20-Dip	.57	.48	.38
TC74ACT257FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.78	.59	.44
TC74ACT257FNTR-ND	Quad 2-Channel Multiplexer	16-SOIC	630.50/2,500		
TC74ACT273FW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.87	.73	.58
TC74ACT373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.57	.48	.38
TC74ACT374FW-ND	Octal D-Type Flip Flop	20-SOIC	.57	.48	.38
TC74ACT541FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.75	.63	.50
TC74ACT541P-ND	Octal Bus Buffer, Tri-State	20-Dip	1.45	1.16	.87
TC74ACT573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.60	.50	.40
TC74ACT574FW-ND	Octal D-Type Flip Flop, Tri-State	20-SOIC	.63	.53	.42

TOSHIBA 74HC SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TC74HC00AFN-ND	Quad 2-Input NAND Gate	14-SOIC	.40	.32	.24
TC74HC00AFNTR-ND	Quad 2-Input NAND Gate	14-SOIC	239.63/2,500		
TC74HC00AP-ND	Quad 2-Input NAND Gate	14-Dip	.40	.32	.24
TC74HC02AFN-ND	Quad 2-Input NOR Gate	14-SOIC	.40	.32	.24
TC74HC02AFNTR-ND	Quad 2-Input NOR Gate	14-SOIC	270.00/2,500		
TC74HC02AP-ND	Quad 2-Input NOR Gate	14-Dip	.40	.32	.24
TC74HC03AP-ND	Quad 2-Input NAND Gate with Open Drain	14-Dip	.60	.48	.36
TC74HC04AFN-ND	Hex Inverter	14-SOIC	.40	.32	.24
TC74HC04AFNTR-ND	Hex Inverter	14-SOIC	270.00/2,500		
TC74HC04AP-ND	Hex Inverter	14-Dip	.40	.32	.24
TC74HC05AP-ND	Hex Inverter with Open Drain	14-Dip	.64	.48	.36
TC74HC08AFN-ND	Quad 2-Input AND Gate	14-SOIC	.40	.32	.24
TC74HC08AFNTR-ND	Quad 2-Input AND Gate	14-SOIC	239.63/2,500		
TC74HC08AP-ND	Quad 2-Input AND Gate	14-Dip	.40	.32	.24
TC74HC10AP-ND	Triple 3-Input NAND Gate	14-Dip	.60	.48	.36
TC74HC14AFN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.40	.32	.24
TC74HC14AFNTR-ND	Hex Schmitt Trigger Inverter	14-SOIC	270.00/2,500		
TC74HC14AP-ND	Hex Schmitt Trigger Inverter	14-Dip	.40	.32	.24
TC74HC32AFN-ND	Quad 2-Input OR Gate	14-SOIC	.40	.32	.24
TC74HC32AFNTR-ND	Quad 2-Input OR Gate	14-SOIC	239.63/2,500		
TC74HC32AP-ND	Quad 2-Input OR Gate	14-Dip	.40	.32	.24
TC74HC74AFN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.40	.32	.24
TC74HC74AFNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	270.00/2,500		
TC74HC74AP-ND	Dual D-Type Flip Flop with Preset and Clear	14-Dip	.40	.32	.24
TC74HC86AP-ND	Quad Exclusive OR Gate	14-Dip	.48	.36	.27
TC74HC123AP-ND	Dual Monostable Multivibrator	16-Dip	.60	.45	.34
TC74HC125AFN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.44	.33	.25
TC74HC125AFNTR-ND	Quad Bus Buffer, Tri-State	14-SOIC	357.50/2,500		
TC74HC125AP-ND	Quad Bus Buffer, Tri-State	14-Dip	.44	.33	.25
TC74HC132AFN-ND	Quad 2-Input Schmitt NAND Gate	14-SOIC	.53	.40	.30
TC74HC132AP-ND	Quad 2-Input Schmitt NAND Gate	14-Dip	.60	.45	.34
TC74HC138AFN-ND	3-to-8 Line Decoder	16-SOIC	.50	.40	.30
TC74HC138AFNTR-ND	3-to-8 Line Decoder	16-SOIC	325.00/2,500		
TC74HC138AP-ND	3-to-8 Line Decoder	16-Dip	.44	.33	.25
TC74HC139AFN-ND	Dual 2-to-4 Line Decoder	16-SOIC	.44	.33	.25
TC74HC139AFNTR-ND	Dual 2-to-4 Line Decoder	16-SOIC	357.50/2,500		
TC74HC139AP-ND	Dual 2-to-4 Line Decoder	16-Dip	.44	.33	.25
TC74HC157AP-ND	Quad 2-Channel Multiplexer	16-Dip	.60	.45	.34
TC74HC173AP-ND	Quad D-Type Register, Tri-State	16-Dip	.64	.48	.36
TC74HC175AFN-ND	Quad D-Type Flip Flop with Clear	16-SOIC	.52	.39	.30
TC74HC175AP-ND	Quad D-Type Flip Flop with Clear	16-Dip	.64	.48	.36
TC74HC244AFW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.64	.48	.36
TC74HC244AFWTR-ND	Octal Bus Buffer, Tri-State	20-SOIC	199.50/1,000		
TC74HC244AP-ND	Octal Bus Buffer, Tri-State	20-Dip	.64	.48	.36
TC74HC245AFWTR-ND	Octal Bus Transceiver, Tri-State	20-SOIC	199.50/1,000		
TC74HC245AP-ND	Octal Bus Transceiver, Tri-State	20-Dip	.64	.48	.36
TC74HC259AP-ND	8-Bit Addressable Latch	16-Dip	.76	.57	.43
TC74HC273AFW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.68	.51	.39
TC74HC273AFWTR-ND	Octal D-Type Flip Flop with Clear	20-SOIC	239.40/1,000		
TC74HC273AP-ND	Octal D-Type Flip Flop with Clear	20-Dip	.68	.51	.39
TC74HC367AP-ND	Hex Bus Buffer, Tri-State	16-Dip	.64	.48	.36
TC74HC373AFW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.64	.48	.36
TC74HC373AFWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	212.80/1,000		
TC74HC373AP-ND	Octal D-Type Latch, Tri-State	20-Dip	.64	.48	.36
TC74HC374AFW-ND	Octal D-Type Flip Flop	20-SOIC	.64	.48	.36
TC74HC374AFWTR-ND	Octal D-Type Flip Flop	20-SOIC	199.50/1,000		
TC74HC374AP-ND	Octal D-Type Flip Flop	20-Dip	.64	.48	.36
TC74HC541AP-ND	Octal Bus Buffer, Tri-State	20-Dip	.76	.57	.43
TC74HC573AFW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.64	.48	.36
TC74HC573AFWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	212.80/1,000		
TC74HC573AP-ND	Octal D-Type Latch, Tri-State	20-Dip	.64	.48	.36
TC74HC574AP-ND	Octal D-Type Flip Flop, Tri-State	20-Dip	.64	.48	.36
TC74HC592AP-ND	8-Bit Register/Binary Counter	16-Dip	.93	.78	.62
TC74HC595AFN-ND	8-Bit Shift Register/Latch, Tri-State	16-SOIC	.58	.44	.33
TC74HC595AFNTR-ND	8-Bit Shift Register/Latch, Tri-State	16-SOIC	487.50/2,500		
TC74HC595AP-ND	8-Bit Shift Register/Latch, Tri-State	16-Dip	.48	.40	.32
TC74HC4040AFN-ND	12-Stage Binary Counter	16-SOIC	.56	.42	.32
TC74HC4040AP-ND	12-Stage Binary Counter	16-Dip	.60	.45	.34
TC74HC4051AP-ND	8-Channel Analog Multiplexer	16-Dip	.76	.57	.43
TC74HC4052AP-ND	Dual 4-Channel Analog Multiplexer	16-Dip	.76	.57	.43
TC74HC4053AFN-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	.58	.44	.33
TC74HC4053AFNTR-ND	Triple 2-Channel Analog Multiplexer	16-SOIC	468.00/2,500		
TC74HC4053AP-ND	Triple 2-Channel Analog Multiplexer	16-Dip	.72	.54	.41
TC74HC4066AFN-ND	Quad Bilateral Switch	14-SOIC	.51	.39	.29
TC74HC4066AP-ND	Quad Bilateral Switch	14-Dip	.68	.51	.39

TOSHIBA 74LCX SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TC74LCX00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.51	.39	.29
TC74LCX00FTCT-ND	Quad 2-input NAND Gate	14-TSSOP	.55	.44	.33
TC74LCX00FTTR-ND	Quad 2-input NAND Gate	14-TSSOP	308.00/2,000		
TC74LCX02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.51	.39	.29
TC74LCX02FTCT-ND	Quad 2-input NOR Gate	14-TSSOP	.55	.44	.33
TC74LCX02FTTR-ND	Quad 2-input NOR Gate	14-TSSOP	308.00/2,000		
TC74LCX04FN-ND	Hex Inverter	14-SOIC	.51	.39	.29
TC74LCX04FTCT-ND	Hex Inverter	14-TSSOP	.55	.44	.33
TC74LCX04FTTR-ND	Hex Inverter	14-TSSOP	308.00/2,000		
TC74LCX08FN-ND	Quad 2-Input AND Gate	14-SOIC	.51	.39	.29
TC74LCX08FTCT-ND	Quad 2-Input AND Gate	14-TSSOP	.55	.44	.33
TC74LCX08FTTR-ND	Quad 2-Input AND Gate	14-TSSOP	308.00/2,000		
TC74LCX14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.51	.39	.29
TC74LCX14FTCT-ND	Hex Schmitt Inverter	14-TSSOP	.55	.44	.33
TC74LCX14FTTR-ND	Hex Schmitt Inverter	14-TSSOP	308.00/2,000		
TC74LCX32FN-ND	Quad 2-Input OR Gate	14-SOIC	.51	.39	.29
TC74LCX32FTCT-ND	Quad 2-Input OR Gate	14-TSSOP	.55	.44	.33
TC74LCX32FTTR-ND	Quad 2-Input OR Gate	14-TSSOP	308.00/2,000		
TC74LCX74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.51	.39	.29
TC74LCX74FTCT-ND	Dual D-Type Flip Flop	14-TSSOP	.48	.36	.27

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TOSHIBA 74LCX SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74LCX74FTTR-ND	Dual D-Type Flip Flop	14-TSSOP	319.20/2,000		
TC74LCX86FN-ND	Quad 2-Input EX-OR Gate	14-SOIC	.51	.39	.29
TC74LCX86FTCT-ND	Quad 2-Input EX-OR Gate	14-TSSOP	.48	.36	.27
TC74LCX86FTTR-ND	Quad 2-Input EX-OR Gate	14-TSSOP	319.20/2,000		
TC74LCX125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.56	.42	.32
TC74LCX125FTCT-ND	Quad Bus Buffer, Tri-State	14-TSSOP	.48	.36	.27
TC74LCX125FTTR-ND	Quad Bus Buffer, Tri-State	14-TSSOP	319.20/2,000		
TC74LCX138FN-ND	3-to-8 Line Decoder	16-SOIC	.62	.47	.36
TC74LCX138FTCT-ND	3-to-8 Line Decoder	16-TSSOP	.56	.42	.32
TC74LCX138FTTR-ND	3-to-8 Line Decoder	16-TSSOP	372.40/2,000		
TC74LCX157FTCT-ND	Quad 2-Channel Multiplexer	16-TSSOP	.52	.39	.30
TC74LCX157FTTR-ND	Quad 2-Channel Multiplexer	16-TSSOP	345.80/2,000		
TC74LCX240FTCT-ND	Octal Inverting Bus Buffer	20-TSSOP	.60	.45	.34
TC74LCX240FTTR-ND	Octal Inverting Bus Buffer	20-TSSOP	399.00/2,000		
TC74LCX240FW-ND	Octal Inverting Bus Buffer, Tri-State	20-SOIC	.68	.54	.41
TC74LCX244FTCT-ND	Octal Bus Buffer, Tri-State	20-TSSOP	.60	.45	.34
TC74LCX244FTTR-ND	Octal Bus Buffer, Tri-State	20-TSSOP	399.00/2,000		
TC74LCX244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.68	.54	.41
TC74LCX245FTCT-ND	Octal Bus Transceiver, Tri-State	20-TSSOP	.64	.48	.36
TC74LCX245FTTR-ND	Octal Bus Transceiver, Tri-State	20-TSSOP	425.60/2,000		
TC74LCX245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.68	.54	.41
TC74LCX257FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.62	.47	.36
TC74LCX257FTCT-ND	Quad 2-Channel Multiplexer, Tri-State	16-TSSOP	.56	.42	.32
TC74LCX257FTTR-ND	Quad 2-Channel Multiplexer, Tri-State	16-TSSOP	372.40/2,000		
TC74LCX373FTCT-ND	Octal D-Type Latch, Tri-State	20-TSSOP	.60	.45	.34
TC74LCX373FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	399.00/2,000		
TC74LCX373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.68	.54	.41
TC74LCX374FTCT-ND	Octal D-Type Flip Flop	20-TSSOP	.60	.45	.34
TC74LCX374FTTR-ND	Octal D-Type Flip Flop	20-TSSOP	399.00/2,000		
TC74LCX374FW-ND	Octal D-Type Flip Flop	20-SOIC	.68	.54	.41
TC74LCX540FTCT-ND	Octal Inverting Bus Buffer	20-TSSOP	.60	.45	.34
TC74LCX540FTTR-ND	Octal Inverting Bus Buffer	20-TSSOP	399.00/2,000		
TC74LCX540FW-ND	Octal Inverting Bus Buffer	20-SOIC	.87	.73	.58
TC74LCX541FTCT-ND	Octal Bus Buffer	20-TSSOP	.60	.45	.34
TC74LCX541FTTR-ND	Octal Bus Buffer	20-TSSOP	399.00/2,000		
TC74LCX541FW-ND	Octal Bus Buffer	20-SOIC	.87	.73	.58
TC74LCX573FTCT-ND	Octal D-Type Latch, Tri-State	20-TSSOP	.60	.45	.34
TC74LCX573FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	399.00/2,000		
TC74LCX573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.73	.58	.44
TC74LCX574FTCT-ND	Octal D-Type Flip Flop, Tri-State	20-TSSOP	.60	.45	.34
TC74LCX574FTTR-ND	Octal D-Type Flip Flop, Tri-State	20-TSSOP	399.00/2,000		
TC74LCX574FW-ND	Octal D-Type Flip-Flop, Tri-State	20-SOIC	.73	.58	.44
TC74LCX16240AFTTR-ND	Inverting 16-Bit Bus Buffer, Tri-State	48-TSSOP	650.00/1,000		
TC74LCX16244AFTTR-ND	16-Bit Bus Buffer, Tri-State	48-TSSOP	650.00/1,000		
TC74LCX16245AFTTR-ND	16-Bit Bus Transceiver, Tri-State	48-TSSOP	650.00/1,000		
TC74LCX16373AFTTR-ND	16-Bit D-Type Latch, Tri-State	48-TSSOP	650.00/1,000		
TC74LCX16374AFTTR-ND	16-Bit D-Type Flip Flop, Tri-State	48-TSSOP	650.00/1,000		

TOSHIBA 74LVX SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74LVX00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.46	.37	.28
TC74LVX00FTTR-ND	Quad 2-Input NAND Gate	14-TSSOP	425.60/2,000		
TC74LVX02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.46	.37	.28
TC74LVX02FTTR-ND	Quad 2-Input NOR Gate	14-TSSOP	425.60/2,000		
TC74LVX04FN-ND	Hex Inverter	14-TSOIC	.46	.37	.28
TC74LVX04FTTR-ND	Hex Inverter	14-TSSOP	425.60/2,000		
TC74LVX08FN-ND	Quad 2-Input AND Gate	14-SOIC	.46	.37	.28
TC74LVX08FTTR-ND	Quad 2-Input AND Gate	14-TSSOP	425.60/2,000		
TC74LVX14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.46	.37	.28
TC74LVX14FTTR-ND	Hex Schmitt Trigger Inverter	14-TSSOP	505.40/2,000		
TC74LVX32FN-ND	Quad 2-Input OR Gate	14-SOIC	.46	.37	.28
TC74LVX32FTTR-ND	Quad 2-Input OR Gate	14-TSSOP	425.60/2,000		
TC74LVX74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.53	.43	.32
TC74LVX74FTTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-TSSOP	532.00/2,000		
TC74LVX86FN-ND	Quad Exclusive OR Gate	14-SOIC	.53	.43	.32
TC74LVX86FTTR-ND	Quad Exclusive OR Gate	14-TSSOP	478.80/2,000		
TC74LVX125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.68	.51	.39
TC74LVX125FTTR-ND	Quad Bus Buffer, Tri-State	14-TSSOP	558.60/2,000		
TC74LVX138FN-ND	3-to-8 Line Decoder	16-SOIC	.53	.40	.30
TC74LVX138FTTR-ND	3-to-8 Line Decoder	16-TSSOP	558.60/2,000		
TC74LVX157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.56	.42	.32
TC74LVX157FTTR-ND	Quad 2-Channel Multiplexer	16-TSSOP	585.20/2,000		
TC74LVX174FN-ND	Hex D-Type Flip Flop with Clear	16-SOIC	.84	.63	.48
TC74LVX174FTTR-ND	Hex D-Type Flip Flop with Clear	16-TSSOP	691.60/2,000		
TC74LVX240FTTR-ND	Octal Inverting Bus Buffer, Tri-State	20-TSSOP	771.40/2,000		
TC74LVX240FW-ND	Octal Inverting Bus Buffer, Tri-State	20-SOIC	.92	.69	.52
TC74LVX244FTTR-ND	Octal Bus Buffer, Tri-State	20-TSSOP	771.40/2,000		
TC74LVX244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.92	.69	.52
TC74LVX245FTTR-ND	Octal Bus Transceiver, Tri-State	20-TSSOP	824.60/2,000		
TC74LVX245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.75	.63	.50
TC74LVX273FTTR-ND	Octal D-Type Flip Flop with Clear	20-TSSOP	771.40/2,000		
TC74LVX273FW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.88	.66	.50
TC74LVX373FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	771.40/2,000		
TC74LVX373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.92	.69	.52
TC74LVX374FTTR-ND	Octal D-Type Flip Flop	20-TSSOP	771.40/2,000		
TC74LVX374FW-ND	Octal D-Type Flip Flop	20-SOIC	.92	.69	.52
TC74LVX573FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	931.00/2,000		
TC74LVX573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.84	.70	.56
TC74LVX4245FSTR-ND	Dual Supply Octal Bus Transceiver	24-SSOP	2550.00/2,000		

TOSHIBA 74VHC SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC74VHC00FN-ND	Quad 2-Input NAND Gate	14-SOIC	.46	.37	.28
TC74VHC00FNTR-ND	Quad 2-Input NAND Gate	14-SOIC	303.75/2,500		
TC74VHC00FTTR-ND	Quad 2-Input NAND Gate	14-TSSOP	252.00/2,000		
TC74VHC02FN-ND	Quad 2-Input NOR Gate	14-SOIC	.46	.37	.28
TC74VHC02FNTR-ND	Quad 2-Input NOR Gate	14-SOIC	303.75/2,500		
TC74VHC02FTTR-ND	Quad 2-Input NOR Gate	14-TSSOP	252.00/2,000		
TC74VHC04FN-ND	Hex Inverter	14-SOIC	.46	.37	.28
TC74VHC04FNTR-ND	Hex Inverter	14-SOIC	310.50/2,500		
TC74VHC04FTTR-ND	Hex Inverter	14-TSSOP	252.00/2,000		
TC74VHC08FN-ND	Quad 2-Input AND Gate	14-SOIC	.46	.37	.28
TC74VHC08FNTR-ND	Quad 2-Input AND Gate	14-SOIC	310.50/2,500		
TC74VHC08FTTR-ND	Quad 2-Input AND Gate	14-TSSOP	252.00/2,000		
TC74VHC10FN-ND	Triple 3-Input NAND Gate	14-SOIC	.50	.40	.30
TC74VHC10FNTR-ND	Triple 3-Input NAND Gate	14-SOIC	371.25/2,500		
TC74VHC10FTTR-ND	Triple 3-Input NAND Gate	14-TSSOP	308.00/2,000		
TC74VHC11FTTR-ND	Triple 3-Input AND Gate	14-TSSOP	308.00/2,000		
TC74VHC14FN-ND	Hex Schmitt Trigger Inverter	14-SOIC	.50	.40	.30
TC74VHC14FNTR-ND	Hex Schmitt Trigger Inverter	14-SOIC	337.50/2,500		
TC74VHC14FTTR-ND	Hex Schmitt Trigger Inverter	14-TSSOP	266.00/2,000		
TC74VHC20FN-ND	Dual 4-Input NAND Gate	14-SOIC	.47	.38	.29
TC74VHC20FTTR-ND	Dual 4-Input NAND Gate	14-TSSOP	308.00/2,000		
TC74VHC21FN-ND	Dual 4-Input AND Gate	14-SOIC	.47	.38	.29
TC74VHC21FTTR-ND	Dual 4-Input AND Gate	14-TSSOP	308.00/2,000		
TC74VHC32FN-ND	Quad 2-Input OR Gate	14-SOIC	.46	.37	.28
TC74VHC32FNTR-ND	Quad 2-Input OR Gate	14-SOIC	310.50/2,500		
TC74VHC32FTTR-ND	Quad 2-Input OR Gate	14-TSSOP	266.00/2,000		
TC74VHC74FN-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	.53	.43	.32
TC74VHC74FNTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-SOIC	357.75/2,500		
TC74VHC74FTTR-ND	Dual D-Type Flip Flop with Preset and Clear	14-TSSOP	280.00/2,000		
TC74VHC86FN-ND	Quad Exclusive OR Gate	14-SOIC	.53	.43	.32
TC74VHC86FNTR-ND	Quad Exclusive OR Gate	14-SOIC	357.75/2,500		
TC74VHC86FTTR-ND	Quad Exclusive OR Gate	14-TSSOP	280.00/2,000		
TC74VHC125FN-ND	Quad Bus Buffer, Tri-State	14-SOIC	.56	.45	.34
TC74VHC125FNTR-ND	Quad Bus Buffer, Tri-State	14-SOIC	422.50/2,500		
TC74VHC125FTTR-ND	Quad Bus Buffer, Tri-State	14-TSSOP	319.20/2,000		
TC74VHC126FTTR-ND	Quad Bus Buffer, Tri-State	14-TSSOP	319.20/2,000		
TC74VHC138FN-ND	3-to-8 Line Decoder	16-SOIC	.53	.40	.30
TC74VHC138FNTR-ND	3-to-8 Line Decoder	16-SOIC	432.25/2,500		
TC74VHC138FTTR-ND	3-to-8 Line Decoder	16-TSSOP	319.20/2,000		
TC74VHC139FN-ND	Dual 2-to-4 Line Decoder	16-SOIC	.58	.44	.33
TC74VHC139FTTR-ND	Dual 2-to-4 Line Decoder	16-TSSOP	319.20/2,000		
TC74VHC153FTTR-ND	Dual 4-Channel Multiplexer	16-TSSOP	319.20/2,000		
TC74VHC157FN-ND	Quad 2-Channel Multiplexer	16-SOIC	.56	.42	.32
TC74VHC157FNTR-ND	Quad 2-Channel Multiplexer	16-SOIC	451.75/2,500		
TC74VHC157FTTR-ND	Quad 2-Channel Multiplexer	16-TSSOP	319.20/2,000		
TC74VHC164FN-ND	8-Bit SIPO Shift Register	14-SOIC	.53	.40	.30
TC74VHC164FTTR-ND	8-Bit SIPO Shift Register	14-TSSOP	399.00/2,000		
TC74VHC165FN-ND	8-Bit PISO Shift Register	16-SOIC	.58	.44	.33
TC74VHC165FTTR-ND	8-Bit PISO Shift Register	16-TSSOP	399.00/2,000		
TC74VHC174FN-ND	Hex D-Type Flip Flop with Clear	16-SOIC	.58	.44	.33
TC74VHC174FTTR-ND	Hex D-Type Flip Flop with Clear	16-TSSOP	372.40/2,000		
TC74VHC175FN-ND	Quad D-Type Flip Flop with Clear	16-SOIC	.58	.44	.33
TC74VHC175FTTR-ND	Quad D-Type Flip Flop with Clear	16-TSSOP	372.40/2,000		
TC74VHC238FN-ND	3-to-8 Line Decoder	16-SOIC	.58	.44	.33
TC74VHC238FTTR-ND	3-to-8 Line Decoder	16-TSSOP	638.40/2,000		
TC74VHC240FTTR-ND	Octal Inverting Bus Buffer, Tri-State	20-TSSOP	372.40/2,000		
TC74VHC240FW-ND	Octal Inverting Bus Buffer, Tri-State	20-SOIC	.72	.54	.41
TC74VHC244FTTR-ND	Octal Bus Buffer, Tri-State	20-TSSOP	372.40/2,000		
TC74VHC244FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.72	.54	.41
TC74VHC245FTTR-ND	Octal Bus Transceiver, Tri-State	20-TSSOP	425.60/2,000		
TC74VHC245FW-ND	Octal Bus Transceiver, Tri-State	20-SOIC	.72	.54	.41
TC74VHC245FWTR-ND	Octal Bus Transceiver, Tri-State	20-SOIC	226.10/1,000		
TC74VHC273FTTR-ND	Octal D-Type Flip Flop with Clear	20-TSSOP	372.40/2,000		
TC74VHC273FW-ND	Octal D-Type Flip Flop with Clear	20-SOIC	.72	.54	.41
TC74VHC273FWTR-ND	Octal D-Type Flip Flop with Clear	20-SOIC	252.70/1,000		
TC74VHC299FTTR-ND	8-Bit PIPO Shift Register	20-TSSOP	851.20/2,000		
TC74VHC299FW-ND	8-Bit PIPO Shift Register	20-SOIC	1.33	1.06	.80
TC74VHC367FN-ND	Hex Bus Buffer, Tri-State	16-SOIC	.56	.42	.32
TC74VHC367FNTR-ND	Hex Bus Buffer, Tri-State	16-SOIC	617.50/2,500		
TC74VHC367FTTR-ND	Hex Bus Buffer, Tri-State	16-TSSOP	345.80/2,000		
TC74VHC373FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	372.40/2,000		
TC74VHC373FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.72	.54	.41
TC74VHC373FWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	252.70/1,000		
TC74VHC374FTTR-ND	Octal D-Type Flip Flop	20-TSSOP	372.40/2,000		
TC74VHC374FW-ND	Octal D-Type Flip Flop	20-SOIC	.72	.54	.41
TC74VHC374FWTR-ND	Octal D-Type Flip Flop	20-SOIC	252.70/1,000		
TC74VHC393FN-ND	Dual Binary Counter	14-SOIC	.60	.45	.34
TC74VHC393FTTR-ND	Dual Binary Counter	14-TSSOP	638.40/2,000		
TC74VHC540FTTR-ND	Inverting Octal Bus Buffer, Tri-State	20-TSSOP	425.60/2,000		
TC74VHC540FW-ND	Inverting Octal Bus Buffer, Tri-State	20-SOIC	.68	.51	.39
TC74VHC541FTTR-ND	Octal Bus Buffer, Tri-State	20-TSSOP	425.60/2,000		
TC74VHC541FW-ND	Octal Bus Buffer, Tri-State	20-SOIC	.68	.51	.39
TC74VHC541FWTR-ND	Octal Bus Buffer, Tri-State	20-SOIC	226.10/1,000		
TC74VHC573FTTR-ND	Octal D-Type Latch, Tri-State	20-TSSOP	425.60/2,000		
TC74VHC573FW-ND	Octal D-Type Latch, Tri-State	20-SOIC	.68	.51	.39
TC74VHC573FWTR-ND	Octal D-Type Latch, Tri-State	20-SOIC	226.10/1,000		
TC74VHC574FTTR-ND	Octal D-Type Flip Flop, Tri-State	20-TSSOP	425.60/2,000		
TC74VHC574FW-ND	Octal D-Type Flip Flop, Tri-State	20-SOIC	.68	.51	.39
TC74VHC574FWTR-ND	Octal D-Type Flip Flop, Tri-State	20-SOIC	226.10/1,000		
TC74VHC595FN-ND	8-Bit Shift Register/Latch, Tri-State	16-SOIC	.64	.49	.37
TC74VHC595FTTR-ND	8-Bit Shift Register/Latch, Tri-State	16-TSSOP	744.80/2,000		
TC74VHC4040FN-ND	12-Stage Binary Counter	16-SOIC	.64	.48	.36
TC74VHC4040FTTR-ND	12-Stage Binary Counter	16-TSSOP	558.60/2,000		

TOSHIBA LMOS SERIES

Surface Mount Product in Cut-Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
TC4S66FCT-ND	Single Analog Switch (4066B)	SMV-5	.68	.51	.39
TC4S584FCT-ND	Single Schmitt Trigger (4584B)	SMV-5	.48	.36	.27
TC7S00FCT-ND	Single NAND Gate (74HC00)	SMV-5	.46	.37	.26
TC7S02FCT-ND	Single NOR Gate (74HC02)	SMV-5	.46	.37	.26
TC7S04FTCT-ND	Single Inverter (74HC04)	SMV-5	.46	.37	.26
TC7S08FCT-ND	Single AND Gate (74HC08)	SMV-5	.46	.37	.26
TC7S14FT5CT-ND	Schmitt Inverter	SMV-5	.46	.37	.26
TC7S32FCT-ND	Single OR Gate (74HC32)	SMV-5	.46	.37	.26
TC7SET00FCT-ND	Single TTL NAND Gate *NEW!*	SMV-5	.48	.36	.27
TC7SET00FUTCT-ND	Single TTL NAND Gate *NEW!*	USV-5	.30	.23	.17

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TOSHIBA LMOS SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
TC7SET02FCT-ND	Single TTL NOR Gate *NEW!*	SMV-5	.30	.23	.17
TC7SET02FUTCT-ND	Single TTL NOR Gate *NEW!*	USV-5	.30	.23	.17
TC7SET04FCT-ND	Single TTL Inverter Gate *NEW!*	SMV-5	.30	.23	.17
TC7SET04FUTCT-ND	Single TTL Inverter Gate *NEW!*	USV-5	.30	.23	.17
TC7SET08FCT-ND	Single TTL AND Gate *NEW!*	SMV-5	.30	.23	.17
TC7SET08FUTCT-ND	Single TTL AND Gate *NEW!*	USV-5	.30	.23	.17
TC7SET32FCT-ND	Single TTL OR Gate *NEW!*	SMV-5	.30	.23	.17
TC7SET32FUTCT-ND	Single TTL OR Gate *NEW!*	USV-5	.30	.23	.17
TC7SH00FCT-ND	Single VHS NAND Gate	SMV-5	.46	.37	.26
TC7SH02FCT-ND	Single TTL NOR Gate	SMV-5	.46	.37	.26
TC7SH04FCT-ND	Single VHS Inverter	SMV-5	.46	.37	.26
TC7SH08FCT-ND	Single VHS AND Gate	SMV-5	.46	.37	.26
TC7SH32FCT-ND	Single VHS OR Gate	SMV-5	.46	.37	.26
TC7SH86FCT-ND	Single VHS Exclusive OR Gate	SMV-5	.46	.37	.26
TC7SH86FUTCT-ND	Single VHS Exclusive OR Gate	USV-5	.46	.37	.26
TC7SHU04FCT-ND	Single Unbuffered VHS Inverter	SMV-5	.46	.37	.26
TC7SL00FUTCT-ND	Single 1 Volt NAND Gate	USV-5	.47	.38	.26
TC7SL02FUTCT-ND	Single 1 Volt NOR Gate	USV-5	.47	.38	.26
TC7SL04FUTCT-ND	Single 1 Volt Inverter	USV-5	.47	.38	.26
TC7SL08FUTCT-ND	Single 1 Volt AND Gate	USV-5	.47	.38	.26
TC7SL32FUTCT-ND	Single 1 Volt OR Gate	USV-5	.47	.38	.26
TC7SLU04FUTCT-ND	Single 1 Volt Unbuffered Inverter	USV-5	.47	.38	.26
TC7ST00FCT-ND	Single TTL NAND Gate	SMV-5	.75	.63	.50
TC7ST00FUTCT-ND	Single TTL NAND Gate	USV-5	.83	.69	.55
TC7ST02FCT-ND	Single TTL NOR Gate	SMV-5	.75	.63	.50
TC7ST02FUTCT-ND	Single TTL NOR Gate	USV-5	.83	.69	.55
TC7ST04FCT-ND	Single TTL Inverter Gate	SMV-5	.75	.63	.50
TC7ST04FUTCT-ND	Single TTL Inverter Gate	USV-5	.83	.69	.55
TC7ST08FCT-ND	Single TTL AND Gate	SMV-5	.75	.63	.50
TC7ST08FUTCT-ND	Single TTL AND Gate	USV-5	.83	.69	.55
TC7ST32FCT-ND	Single TTL OR Gate	SMV-5	.75	.63	.50
TC7ST32FUTCT-ND	Single TTL OR Gate	USV-5	.83	.69	.55
TC7SU04FCT-ND	Single Inverter (74HCU04)	SMV-5	.46	.37	.26
TC7SZ00FCT-ND	2-Input NAND Gate	SMV-5	.46	.37	.26
TC7SZ00FUTCT-ND	2-Input NAND Gate	USV-5	.46	.37	.26
TC7SZ02FCT-ND	2-Input NOR Gate	SMV-5	.46	.37	.26
TC7SZ02FUTCT-ND	2-Input NOR Gate	USV-5	.46	.37	.26
TC7SZ04FCT-ND	Single Inverter Gate	SMV-5	.46	.37	.26
TC7SZ04FUTCT-ND	Single Inverter Gate	USV-5	.46	.37	.26
TC7SZ05FCT-ND	Inverter (Open Drain)	SMV-5	.46	.37	.26
TC7SZ05FUTCT-ND	Inverter (Open Drain)	USV-5	.46	.37	.26
TC7SZ08FCT-ND	2-Input AND Gate	SMV-5	.46	.37	.26
TC7SZ08FUTCT-ND	2-Input AND Gate	USV-5	.46	.37	.26
TC7SZ32FCT-ND	2-Input OR Gate	SMV-5	.46	.37	.26
TC7SZ32FUTCT-ND	2-Input OR Gate	USV-5	.46	.37	.26
TC7SZ125FCT-ND	Bus Buffer 3-State Output	SMV-5	.50	.40	.30
TC7SZ125FUTCT-ND	Bus Buffer 3-State Output	USV-5	.50	.40	.30
TC7SZ126FCT-ND	Bus Buffer 3-State Output	SMV-5	.50	.40	.30
TC7SZ126FUTCT-ND	Bus Buffer 3-State Output	USV-5	.50	.40	.30
TC7SZU04FCT-ND	Inverter (Unbuffered)	SMV-5	.46	.37	.26
TC7SZU04FUTCT-ND	Inverter (Unbuffered)	USV-5	.46	.37	.26
TC7W00FCT-ND	Dual 2-Input NAND Gate (74HC00)	FM8	.74	.56	.42
TC7W00FKCT-ND	Dual 2-Input NAND Gate	US8-8	.56	.42	.32
TC7W00FUTCT-ND	Dual 2-Input NAND Gate	SM8-8	.56	.42	.32
TC7W02FCT-ND	Dual 2-Input NOR Gate (74HC02)	FM8	.74	.56	.42
TC7W02FKCT-ND	Dual 2-Input NOR Gate	US8-8	.56	.42	.32
TC7W02FUTCT-ND	Dual 2-Input NOR Gate	SM8-8	.56	.42	.32
TC7W04FCT-ND	Triple Inverter (74HC04)	FM8	.74	.56	.42
TC7W04FKCT-ND	Triple Inverter (74HC04)	US8-8	.56	.42	.32
TC7W04FUTCT-ND	Triple Inverter (74HC04)	SM8-8	.56	.42	.32
TC7W08FCT-ND	Dual 2-Input AND Gate (74HC08)	FM8	.74	.56	.42
TC7W08FKCT-ND	Dual 2-Input AND Gate (74HC08)	US8-8	.56	.42	.32
TC7W08FUTCT-ND	Dual 2-Input AND Gate (74HC08)	SM8-8	.56	.42	.32
TC7W14FKCT-ND	Schmitt Inverter	US8-8	.56	.42	.32
TC7W32FCT-ND	Dual 2-Input OR Gate (74HC32)	FM8	.74	.56	.42
TC7W32FKCT-ND	Dual 2-Input OR Gate (74HC32AP/F)	US8-8	.56	.42	.32
TC7W32FUTCT-ND	Dual 2-Input OR Gate (74HC32AP/F)	SM8-8	.56	.42	.32
TC7W34FKCT-ND	Triple Non-Inverting Buffer (TC7W34FU)	US8-8	.56	.42	.32
TC7W53FKCT-ND	2-Channel Multiplexer/Demultiplexer	US8-8	.56	.42	.32
TC7W66FKCT-ND	Dual Bilateral Switch	US8-8	.56	.42	.32
TC7W66FUTCT-ND	Dual Bilateral Switch	SM8-8	.56	.42	.32
TC7W74FKCT-ND	D-Type Flip Flop	US8-8	.56	.42	.32
TC7W74FUTCT-ND	D-Type Flip Flop	SM8-8	.56	.42	.32
TC7W125FUTCT-ND	Dual Bus Buffer	SM8-8	.56	.42	.32
TC7W126FUTCT-ND	Dual Bus Buffer	SM8-8	.56	.42	.32
TC7WH00FKCT-ND	Dual 2-Input NAND Gate	US8-8	.56	.42	.32
TC7WH00FUTCT-ND	Dual 2-Input NAND Gate	SM8-8	.56	.42	.32
TC7WH02FKCT-ND	Dual 2-Input NOR Gate	US8-8	.56	.42	.32
TC7WH02FUTCT-ND	Dual 2-Input NOR Gate	SM8-8	.56	.42	.32
TC7WH04FKCT-ND	Triple Inverter	US8-8	.56	.42	.32
TC7WH04FUTCT-ND	Triple Inverter	SM8-8	.56	.42	.32
TC7WH08FKCT-ND	Dual 2-Input AND Gate	US8-8	.56	.42	.32
TC7WH08FUTCT-ND	Dual 2-Input AND Gate	SM8-8	.56	.42	.32
TC7WH14FKCT-ND	Triple Schmitt Inverter	US8-8	.56	.42	.32
TC7WH14FUTCT-ND	Triple Schmitt Inverter	SM8-8	.56	.42	.32
TC7WH32FKCT-ND	Dual 2-Input OR Gate	US8-8	.56	.42	.32
TC7WH32FUTCT-ND	Dual 2-Input OR Gate	SM8-8	.56	.42	.32
TC7WH34FKCT-ND	Triple Buffer	US8-8	.56	.42	.32
TC7WH34FUTCT-ND	Triple Buffer	SM8-8	.56	.42	.32
TC7WH74FKCT-ND	D-Type Flip Flop with Preset and Clear	US8-8	.56	.42	.32
TC7WH74FUTCT-ND	D-Type Flip Flop with Preset and Clear	SM8-8	.56	.42	.32
TC7WH123FKCT-ND	Monostable Multivibrator	US8-8	.56	.42	.32
TC7WH123FUTCT-ND	Monostable Multivibrator	SM8-8	.56	.42	.32
TC7WH125FKCT-ND	Dual Bus Buffer	US8-8	.56	.42	.32
TC7WH126FKCT-ND	Dual Bus Buffer	US8-8	.56	.42	.32
TC7WH157FKCT-ND	2-Channel Multiplexer	US8-8	.56	.42	.32
TC7WH157FUTCT-ND	2-Channel Multiplexer	SM8-8	.56	.42	.32
TC7WH240FKCT-ND	Dual Bus Buffer Inverted, 3-State Output	US8-8	.56	.42	.32
TC7WH240FUTCT-ND	Dual Bus Buffer Inverted, 3-State Output	SM8-8	.56	.42	.32
TC7WH241FKCT-ND	Dual Bus Buffer Non-Inverted, 3-State Output	US8-8	.56	.42	.32
TC7WH241FUTCT-ND	Dual Bus Buffer Non-Inverted, 3-State Output	SM8-8	.56	.42	.32
TC7WH245FKCT-ND	Dual Bus Transceiver	US8-8	.56	.42	.32
TC7WH245FUTCT-ND	Dual Bus Transceiver	SM8-8	.56	.42	.32
TC7WHU04FKCT-ND	Triple Inverter	US8-8	.56	.42	.32
TC7WHU04FUTCT-ND	Triple Inverter	SM8-8	.56	.42	.32
TC7WT125FUTCT-ND	Dual Bus Buffer	SM8-8	.68	.51	.39
TC7WU04FCT-ND	Triple Inverter (74HCU04)	FM8	.74	.56	.42
TC7WU04FKCT-ND	Triple Inverter	US8-8	.56	.42	.32
TC7WU04FUTCT-ND	Triple Inverter	SM8-8	.56	.42	.32

Surface Mount Product on Tape and Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TC4S66FTR-ND	Single Analog Switch (4066B)	SMV-5	221.00/M
TC4S584FTR-ND	Single Schmitt Trigger (4584B)	SMV-5	156.00/M
TC7S00FTR-ND	Single NAND Gate (74HC00)	SMV-5	119.00/M
TC7S02FTR-ND	Single NOR Gate (74HC02)	SMV-5	119.00/M
TC7S04FTTR-ND	Single Inverter (74HC04)	SMV-5	119.00/M
TC7S08FTR-ND	Single AND Gate (74HC08)	SMV-5	119.00/M
TC7S14FT5TR-ND	Schmitt Inverter	SMV-5	119.00/M
TC7S32FTR-ND	Single OR Gate (74HC32)	SMV-5	119.00/M
TC7SET00FTR-ND	Single TTL NAND Gate *NEW!*	SMV-5	156.00/M
TC7SET00FUTTR-ND	Single TTL NAND Gate *NEW!*	USV-5	97.50/M
TC7SET02FTR-ND	Single TTL NOR Gate *NEW!*	SMV-5	97.50/M
TC7SET02FUTTR-ND	Single TTL NOR Gate *NEW!*	USV-5	97.50/M
TC7SET04FTR-ND	Single TTL Inverter Gate *NEW!*	SMV-5	97.50/M
TC7SET04FUTTR-ND	Single TTL Inverter Gate *NEW!*	USV-5	97.50/M
TC7SET08FTR-ND	Single TTL AND Gate *NEW!*	SMV-5	97.50/M
TC7SET08FUTTR-ND	Single TTL AND Gate *NEW!*	USV-5	97.50/M
TC7SET32FTR-ND	Single TTL OR Gate *NEW!*	SMV-5	97.50/M
TC7SET32FUTTR-ND	Single TTL OR Gate *NEW!*	USV-5	97.50/M
TC7SH00FTR-ND	Single VHS NAND Gate	SMV-5	119.00/M
TC7SH02FTR-ND	Single TTL NOR Gate	SMV-5	119.00/M
TC7SH04FTR-ND	Single VHS Inverter	SMV-5	119.00/M
TC7SH08FTR-ND	Single VHS AND Gate	SMV-5	119.00/M
TC7SH32FTR-ND	Single VHS OR Gate	SMV-5	119.00/M
TC7SH86FTR-ND	Single VHS Exclusive OR Gate	SMV-5	119.00/M
TC7SH86FUTTR-ND	Single VHS Exclusive OR Gate	USV-5	119.00/M
TC7SHU04FTR-ND	Single Unbuffered VHS Inverter	SMV-5	119.00/M
TC7SL00FUTTR-ND	Single 1 Volt NAND Gate	USV-5	122.40/M
TC7SL02FUTTR-ND	Single 1 Volt NOR Gate	USV-5	122.40/M
TC7SL04FUTTR-ND	Single 1 Volt Inverter	USV-5	122.40/M
TC7SL08FUTTR-ND	Single 1 Volt AND Gate	USV-5	122.40/M
TC7SL32FUTTR-ND	Single 1 Volt OR Gate	USV-5	122.40/M
TC7SLU04FUTTR-ND	Single 1 Volt Unbuffered Inverter	USV-5	122.40/M
TC7ST00FTR-ND	Single TTL NAND Gate	SMV-5	325.00/M
TC7ST00FUTTR-ND	Single TTL NAND Gate	USV-5	357.50/M
TC7ST02FTR-ND	Single TTL NOR Gate	SMV-5	325.00/M
TC7ST02FUTTR-ND	Single TTL NOR Gate	USV-5	357.50/M
TC7ST04FTR-ND	Single TTL Inverter Gate	SMV-5	325.00/M
TC7ST04FUTTR-ND	Single TTL Inverter Gate	USV-5	357.50/M
TC7ST08FTR-ND	Single TTL AND Gate	SMV-5	325.00/M
TC7ST08FUTTR-ND	Single TTL AND Gate	USV-5	357.50/M
TC7ST32FTR-ND	Single TTL OR Gate	SMV-5	325.00/M
TC7ST32FUTTR-ND	Single TTL OR Gate	USV-5	357.50/M
TC7SU04FTR-ND	Single Inverter (74HCU04)	SMV-5	119.00/M
TC7SZ00FTR-ND	2-Input NAND Gate	SMV-5	119.00/M
TC7SZ00FUTTR-ND	2-Input NAND Gate	USV-5	91.00/M
TC7SZ02FTR-ND	2-Input NOR Gate	SMV-5	119.00/M
TC7SZ02FUTTR-ND	2-Input NOR Gate	USV-5	91.00/M
TC7SZ04FTR-ND	Single Inverter Gate	SMV-5	119.00/M
TC7SZ04FUTTR-ND	Single Inverter Gate	USV-5	91.00/M
TC7SZ05FTR-ND	Inverter (Open Drain)	SMV-5	119.00/M
TC7SZ05FUTTR-ND	Inverter (Open Drain)	USV-5	91.00/M
TC7SZ08FTR-ND	2-Input AND Gate	SMV-5	119.00/M
TC7SZ08FUTTR-ND	2-Input AND Gate	USV-5	91.00/M
TC7SZ32FTR-ND	2-Input OR Gate	SMV-5	119.00/M
TC7SZ32FUTTR-ND	2-Input OR Gate	USV-5	91.00/M
TC7SZ125FTR-ND	Bus Buffer 3-State Output	SMV-5	135.00/M
TC7SZ125FUTTR-ND	Bus Buffer 3-State Output	USV-5	130.00/M
TC7SZ126FTR-ND	Bus Buffer 3-State Output	SMV-5	135.00/M
TC7SZ126FUTTR-ND	Bus Buffer 3-State Output	USV-5	130.00/M
TC7SZU04FTR-ND	Inverter (Unbuffered)	SMV-5	119.00/M
TC7SZU04FUTTR-ND	Inverter (Unbuffered)	USV-5	119.00/M
TC7W00FKTR-ND	Dual 2-Input NAND Gate	US8-8	182.00/M
TC7W00FTR-ND	Dual 2-Input NAND Gate (74HC00)	FM8	246.05†
TC7W00FUTTR-ND	Dual 2-Input NAND Gate	SM8-8	182.00/M
TC7W02FKTR-ND	Dual 2-Input NOR Gate	US8-8	182.00/M
TC7W02FTR-ND	Dual 2-Input NOR Gate (74HC02)	FM8	246.05†
TC7W02FUTTR-ND	Dual 2-Input NOR Gate	SM8-8	182.00/M
TC7W04FKTR-ND	Triple Inverter (74HC04)	US8-8	182.00/M
TC7W04FTR-ND	Triple Inverter (74HC04)	FM8	246.05†
TC7W04FUTTR-ND	Triple Inverter (74HC04)	SM8-8	182.00/M
TC7W08FKTR-ND	Dual 2-Input AND Gate (74HC08)	US8-8	182.00/M
TC7W08FTR-ND	Dual 2-Input AND Gate (74HC08)	FM8	246.05†
TC7W08FUTTR-ND	Dual 2-Input AND Gate (74HC08)	SM8-8	182.00/M
TC7W14FKTR-ND	Schmitt Inverter	US8-8	182.00/M
TC7W32FKTR-ND	Dual 2-Input OR Gate (74HC32AP/F)	US8-8	182.00/M
TC7W32FTR-ND	Dual 2-Input OR Gate (74HC32)	FM8	246.05†
TC7W32FUTTR-ND	Dual 2-Input OR Gate (74HC32AP/F)	SM8-8	182.00/M
TC7W34FKTR-ND	Triple Non-Inverting Buffer (TC7W34FU)	US8-8	182.00/M
TC7W53FKTR-ND	2-Channel Multiplexer/Demultiplexer	US8-8	182.00/M
TC7W66FKTR-ND	Dual Bilateral Switch	US8-8	182.00/M
TC7W66FUTTR-ND	Dual Bilateral Switch	SM8-8	182.00/M
TC7W74FKTR-ND	D-Type Flip Flop	US8-8	182.00/M
TC7W74FUTTR-ND	D-Type Flip Flop	SM8-8	182.00/M
TC7W125FUTTR-ND	Dual Bus Buffer	SM8-8	182.00/M
TC7W126FUTTR-ND	Dual Bus Buffer	SM8-8	182.00/M
TC7WH00FKTR-ND	Dual 2-Input NAND Gate	US8-8	182.00/M
TC7WH00FUTTR-ND	Dual 2-Input NAND Gate	SM8-8	182.00/M
TC7WH02FKTR-ND	Dual 2-Input NOR Gate	US8-8	182.00/M
TC7WH02FUTTR-ND	Dual 2-Input NOR Gate	SM8-8	182.00/M
TC7WH04FKTR-ND	Triple Inverter	US8-8	182.00/M

† Tape and Reel pricing is priced at 1,000.

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

TOSHIBA LMOS SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TC7WH04FUTTR-ND	Triple Inverter	SM8-8	182.00/M
TC7WH08FKTR-ND	Dual 2-Input AND Gate	US8-8	182.00/M
TC7WH08FUTTR-ND	Dual 2-Input AND Gate	SM8-8	182.00/M
TC7WH14FKTR-ND	Triple Schmitt Inverter	US8-8	182.00/M
TC7WH14FUTTR-ND	Triple Schmitt Inverter	SM8-8	182.00/M
TC7WH32FKTR-ND	Dual 2-Input OR Gate	US8-8	182.00/M
TC7WH32FUTTR-ND	Dual 2-Input OR Gate	SM8-8	182.00/M
TC7WH34FKTR-ND	Triple Buffer	US8-8	182.00/M
TC7WH34FUTTR-ND	Triple Buffer	SM8-8	182.00/M
TC7WH74FKTR-ND	D-Type Flip Flop with Preset and Clear	US8-8	182.00/M
TC7WH74FUTTR-ND	D-Type Flip Flop with Preset and Clear	SM8-8	182.00/M
TC7WH123FKTR-ND	Monostable Multivibrator	US8-8	182.00/M
TC7WH123FUTTR-ND	Monostable Multivibrator	SM8-8	182.00/M
TC7WH125FKTR-ND	Dual Bus Buffer	US8-8	182.00/M
TC7WH126FKTR-ND	Dual Bus Buffer	US8-8	182.00/M
TC7WH157FKTR-ND	2-Channel Multiplexer	US8-8	182.00/M
TC7WH157FUTTR-ND	2-Channel Multiplexer	SM8-8	182.00/M
TC7WH240FKTR-ND	Dual Bus Buffer Inverted, 3-State Output	US8-8	182.00/M
TC7WH240FUTTR-ND	Dual Bus Buffer Inverted, 3-State Output	SM8-8	182.00/M
TC7WH241FKTR-ND	Dual Bus Buffer Non-Inverted, 3-State Output	US8-8	182.00/M
TC7WH241FUTTR-ND	Dual Bus Buffer Non-Inverted, 3-State Output	SM8-8	182.00/M
TC7WH245FKTR-ND	Dual Bus Transceiver	US8-8	182.00/M
TC7WH245FUTTR-ND	Dual Bus Transceiver	SM8-8	182.00/M
TC7WHU04FKTR-ND	Triple Inverter	US8-8	182.00/M
TC7WHU04FUTTR-ND	Triple Inverter	SM8-8	182.00/M
TC7WT125FUTTR-ND	Dual Bus Buffer	SM8-8	221.00/M
TC7WU04FKTR-ND	Triple Inverter	US8-8	182.00/M
TC7WU04FTR-ND	Triple Inverter (74HCU04)	FM8	246.05†
TC7WU04FUTTR-ND	Triple Inverter	SM8-8	182.00/M

† Tape and Reel pricing is priced at 1,000.

TOSHIBA LINEAR SERIES

Surface Mount Product in Cut-Tape

Digi-Key Part No.	Description	Pkg.	Cut Tape Price Each★ 1	25	100
TC75S54FCT-ND	Single Op Amp	SMV-5	1.33	1.06	.80
TC75S55FTCT-ND	Single Op Amp	SMV-5	1.33	1.06	.80
TC75W51FUTCT-ND	Dual Op Amp	SM8-8	2.23	1.78	1.34
TC75W54FUTCT-ND	Dual Op Amp	SM8-8	2.28	1.82	1.37
TC75W55FUTCT-ND	Dual Op Amp	SM8-8	2.28	1.82	1.37

Surface Mount Product on Tape & Reel

Digi-Key Part No.	Description	Pkg.	Tape & Reel Pricing★ 3,000
TC75S54FTR-ND	Single Op Amp	SMV-5	678.40/M
TC75S55FTTR-ND	Single Op Amp	SMV-5	678.40/M
TC75W51FUTTR-ND	Dual Op Amp	SM8-8	1139.20/M
TC75W54FUTTR-ND	Dual Op Amp	SM8-8	1164.80/M
TC75W55FUTTR-ND	Dual Op Amp	SM8-8	1164.80/M

National Semiconductor™ LINEAR SERIES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
CGS74LCT2524M-ND	1-to-4 Minimum Skew (300ps) 3V Clock Driver	8-SOIC	2.79	2.07	1.53
CGS74LCT2524MXTR-ND	1-to-4 Minimum Skew (300ps) 3V Clock Driver	8-SOIC	2812.50/2,500		
CLC006AJE-ND	Serial Digital Cable Driver with Adj. Outputs	8-SOIC	8.99	7.11	5.70
CLC007AJE-ND	Serial Digital Cable Driver	8-SOIC	7.98	6.31	5.06
CLC014AJE-ND	Adaptive Cable Equalizer for High-Speed Recovery	14-SOIC	17.15	14.70	13.04
CLC016ACQ-ND	Data Retiming PLL with Automatic Rate Selection	28-PLCC	24.90	23.24	21.58
CLC016AJQ-ND	Data Retiming PLL with Automatic Rate Selection	28-PLCC	27.75	25.90	24.05
CLC018AJVJQ-ND	8 x 8 Digital Cross Point Switch	68-PQFP	24.30	22.68	21.06
CLC021VGZ-5.0-ND	SMPTE 259M Digital Video Serializer with EDH Generation/Insertion	44-PQFP	39.30	36.68	34.06
CLC405AJE-ND	Low Cost, Low Power, 110MHz Op Amp with Disable	8-SOIC	3.68	2.80	2.14
CLC409AJE-TR13TR-ND	Amp Very Wideband Low Distortion	8-SOIC	8448.50/2,500		
CLC405AJP-ND	Low Cost, Low Power, 110MHz Op Amp with Disable	8-Dip	3.68	2.80	2.14
CLC406AJE-ND	Wideband, Low Power Monolithic Op Amp	8-SOIC	5.78	4.39	3.35
CLC409AJE-ND	Very Wideband, Low Distortion Monolithic Op Amp	8-SOIC	5.82	4.60	3.69
CLC409AJM5CT-ND	Amp Very Wideband Low Distortion	SOT-23-5	5.82	4.60	3.69
CLC411AJE-ND	High-Speed Video Op Amp with Disable	8-SOIC	6.32	5.00	4.01
CLC414AJE-ND	Quad Low Power Monolithic Op Amp	14-SOIC	10.40	8.22	6.59
CLC414AJP-ND	Quad Low Power Monolithic Op Amp	14-Dip	10.40	8.22	6.59
CLC420AJP-ND	High-Speed Voltage Feedback Op Amp	8-Dip	5.88	4.47	3.41
CLC425AJE-TR13TR-ND	Ultra Low Noise Wideband Op Amp	8-SOIC	9333.00/2,500		
CLC425AJP-ND	Ultra Low Noise Wideband Op Amp	8-Dip	6.43	5.08	4.07
CLC426AJP-ND	Wideband, Low Noise Voltage Feedback Op Amp	8-Dip	6.49	5.13	4.11
CLC430AJE-TR13TR-ND	General Purpose 100MHz Op Amp with Disable	8-SOIC	4093.75/2,500		
CLC432AJE-ND	Dual Wideband Monolithic Op Amp	8-SOIC	5.45	4.15	3.17
CLC450AJP-ND	Single Supply Low Pwr. High Current Feedback Op Amp	8-Dip	2.85	2.17	1.66
CLC452AJM5-ND	Single Supply Low Pwr. High Current Feedback Op Amp	SOT-23-5	2.95	2.25	1.72
CLC520AJE-ND	Amp with Voltage Controlled Gain, AGC+Amp	14-SOIC	9.93	7.86	6.30
CLC520AJP-ND	Amp with Voltage Controlled Gain, AGC+Amp	14-Dip	9.93	7.86	6.30
CLC532AJE-ND	High-Speed 2:1 Analog Multiplexer	14-SOIC	4.90	3.73	2.85
CLC5523IM-ND	Low Power Variable Gain Amplifier	8-SOIC	7.79	6.16	4.94
CLC5523IN-ND	Low Power Variable Gain Amplifier	8-Dip	7.79	6.16	4.94
CLC952ACMSA-ND	12-Bit, 41MSPS Monolithic A/D Converter	28-SSOP	36.15	33.74	31.33
DP83223V-ND	Twister High-Speed Networking Transceiver Device	28-PLCC	14.18	12.15	10.78
LF147J-ND	Wideband Quad JFET Op Amp	14-Dip	13.50	10.80	6.75
LF156H-ND	Mono JFET In Op Amp	TO-99	5.13	3.90	2.98
LF256H-ND	Wideband JFET Op Amp	TO-99	4.78	3.63	2.77
LF298M-ND	Monolithic Sample and Hold Circuit	14-SOIC	5.50	4.35	3.49
LF347BN-ND	Quad Bi-FET Op Amp	14-Dip	2.14	1.59	1.18
LF347M-ND	Quad Bi-FET Op Amp	14-SOIC	1.73	1.27	.92
LF347MXTR-ND	Quad Bi-FET Op Amp	14-SOIC	1466.25/2,500		
LF347NNS-ND	Quad Bi-FET Op Amp	14-Dip	1.76	1.30	.94
LF353M-ND	Wideband Dual JFET Op Amp	8-SOIC	.68	.49	.36
LF353MXTR-ND	Wideband Dual JFET Op Amp	8-SOIC	498.75/2,500		
LF353NNS-ND	Wideband Dual JFET Input Op Amp	8-Dip	.68	.49	.36
LF356H-ND	Monolithic JFET Input Op Amp	TO-99	3.02	2.25	1.66
LF356M-ND	Monolithic JFET Input Op Amp	8-SOIC	.94	.69	.50
LF356N-ND	Monolithic JFET Input Op Amp	8-Dip	.94	.69	.50
LF398AN-ND	Monolithic Sample and Hold Circuit	8-Dip	3.05	2.32	1.77
LF398H-ND	Monolithic Sample and Hold Circuit	TO-99	3.95	3.01	2.30
LF398M-ND	Monolithic Sample and Hold Circuit	14-SOIC	2.05	1.52	1.13
LF398N-ND	Monolithic Sample and Hold Circuit	8-Dip	2.08	1.55	1.14
LF411ACH-ND	Low Offset Low Drift JFET Input Op Amp	HO8B	7.94	6.28	5.03
LF411ACN-ND	Low Offset Low Drift JFET Input Op Amp	8-Dip	4.75	3.61	2.76
LF411CN-ND	Low Offset Low Drift JFET Input Op Amp	8-Dip	1.80	1.32	.96
LF412ACN-ND	Low Offset Low Drift JFET Dual Op Amp	8-Dip	5.18	3.94	3.01
LF412CN-ND	Low Offset Low Drift JFET Dual Op Amp	8-Dip	1.13	.83	.60
LF412MH-ND	Low Offset Low Drift JFET Dual Op Amp	MOD TO-99	8.17	6.46	5.18
LF442ACN-ND	Dual Low Power JFET Op Amp	8-Dip	5.57	4.40	3.53
LF442AMH-ND	Dual Low Power JFET Op Amp	8PIN MC	16.65	15.54	14.43
LF442CN-ND	Dual Low Power JFET Op Amp	8-Dip	1.61	1.19	.86
LF444ACN-ND	Quad Low Power JFET Op Amp	14-Dip	4.38	3.33	2.54
LF444CM-ND	Quad Low Power JFET Op Amp	14-SOIC	1.76	1.30	.94
LF444CN-ND	Quad Low Power JFET Op Amp	14-Dip	1.76	1.30	.94
LM10CH-ND	Op Amp and Voltage Reference	H08A	5.27	4.17	3.34
LM10CLN-ND	Op Amp and Voltage Reference	8-Dip	2.75	2.09	1.60
LM10CN-ND	Op Amp and Voltage Reference	8-Dip	3.50	2.66	2.03
LM10CWM-ND	Op Amp and Voltage Reference	14-SOIC	3.50	2.66	2.03
LM12CLK-ND	80W Power Op Amp 4-Pin	TO-3	33.50	25.46	19.43
LM12H458CIV-ND	12-Bit + Sign DAS with Self-Calibration	44-PQFP	21.45	20.02	18.59
LM12H458CIVF-ND	12-Bit + Sign DAS with Self-Calibration	44-PQFP	21.45	20.02	18.59
LM12L458CIV-ND	12-Bit + Sign Data Acquisition System with Self-Calibration	44-PQFP	21.45	20.02	18.59
LM20BIM7CT-ND	Micro SMD Temperature Sensor, ±25°C	SC-70-5	1.24	.91	.66
LM20BIM7TR-ND	Micro SMD Temperature Sensor, ±25°C	SC-70-5	429.00/1,000		
LM20CIM7CT-ND	Micro SMD Temperature Sensor, ±5°C	SC-70-5	1.09	.80	.58
LM20CIM7TR-ND	Micro SMD Temperature Sensor, ±5°C	SC-70-5	377.00/1,000		
LM20SIBPCT-ND	Micro SMD Temperature Sensor	4-MicroSMD	1.09	.80	.58
LM20SIBPTR-ND	Micro SMD Temperature Sensor	4-MicroSMD	108.75/250		
LM34AH-ND	Precision F. Temperature Sensor, -50°F to +300°F	TO-46	15.58	13.35	11.84
LM34CAH-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-46	11.31	9.69	8.60
LM34CAZ-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-92	6.64	5.25	4.21
LM34CH-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-46	9.38	8.04	7.13
LM34CZ-ND	Precision F. Temperature Sensor, -40°F to +230°F	TO-92	6.03	4.58	3.50
LM34DM-ND	Precision F. Temperature Sensor, +32°F to +212°F	8-SOIC	1.89	1.41	1.04
LM35DT-ND	Precision Celsius Temperature Sensor	TO-220	2.82	2.10	1.55
LM34DZ-ND	Precision F. Temperature Sensor, +32°F to +212°F	TO-92	2.33	1.73	1.28
LM35AH-ND	Precision Celsius Temperature Sensor, -55°C to +150°C	TO-46	16.35	15.26	14.17
LM35CAH-ND	Precision Celsius Temperature Sensor, -40°C to +110°C	TO-46	10.85	9.30	8.25
LM35CAZ-ND	Precision Celsius Temperature Sensor, -40°C to +110°C	TO-92	5.69	4.50	3.61
LM35CH-ND	Precision Celsius Temperature Sensor, -40°C to +110°C	TO-46	8.93	7.65	6.79
LM35CZ-ND	Precision Celsius Temperature Sensor, -40°C to +110°C	TO-92	5.88	4.47	3.41
LM35DH-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	TO-46	3.30	2.51	1.92
LM35DM-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	8-SOIC	2.05	1.52	1.13
LM35DMXTR-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	8-SOIC	2062.50/2,500		
LM35DZ-ND	Precision Celsius Temperature Sensor, 0°C to +100°C	TO-92	1.98	1.48	1.09
LM45BIM3CT-ND	Precision Celsius Temperature Sensor	SOT-23	1.71	1.27	.94
LM45BIM3TR-ND	Precision Celsius Temperature Sensor	SOT-23	704.00/1,000		
LM45CIM3CT-ND	Precision Celsius Temperature Sensor	SOT-23	1.09	.80	.58
LM45CIM3TR-ND	Precision Celsius Temperature Sensor	SOT-23	377.00/1,000		
LM50BIM3CT-ND	Single Supply Centigrade Temperature Sensor	SOT-23	1.61	1.20	.89
LM50BIM3TR-ND	Single Supply Centigrade Temperature Sensor	SOT-23	665.60/1,000		
LM50CIM3CT-ND	Single Supply Centigrade Temperature Sensor	SOT-23	1.09	.80	.58
LM50CIM3TR-ND	Single Supply Centigrade Temperature Sensor	SOT-23	377.00/1,000		
LM56BIM-ND	Dual Output Low Power Thermostat	8-SOIC	2.51	1.87	1.38
LM56BIMMCT-ND	Dual Output Low Power Thermostat	8-MSOP	2.95	2.19	1.62
LM56BIMMTR-ND	Dual Output Low Power Thermostat	8-MSOP	1216.00/1,000		
LM56CIM-ND	Dual Output Low Power Thermostat	8-SOIC	1.89	1.41	1.04
LM56CIMMCT-ND	Dual Output Low Power Thermostat	8-MSOP	2.23	1.66	1.23
LM56CIMMTR-ND	Dual Output Low Power Thermostat	8-MSOP	921.60/1,000		
LM60BIM3CT-ND	2.7V Temperature Sensor	SOT-23	1.43	1.05	.76
LM60BIM3TR-ND	2.7V Temperature Sensor	SOT-23	494.00/1,000		
LM60CIM3CT-ND	2.7V Temperature Sensor	SOT-23	1.01	.75	.54
LM60CIM3TR-ND	2.7V Temperature Sensor	SOT-23	351.00/1,000		
LM61BIM3CT-ND	2.7V Temperature Sensor	SOT-23	1.43	1.05	.76
LM61BIM3TR-ND	2.7V Temperature Sensor	SOT-23	494.00/1,000		
LM61CIM3CT-ND	2.7V Temperature Sensor, +30°C to +100°C	SOT-23	1.01	.75	.54
LM61CIM3TR-ND	2.7V Temperature Sensor, +30°C to +100°C	SOT-23	351.00/1,000		
LM62BIM3CT-ND	2.7V Temperature Sensor, 0°C to 100°C	SOT-23	1.43	1.05	.76
LM62BIM3TR-ND	2.7V Temperature Sensor, 0°C to 100°C	SOT-23	494.00/1,000		
LM62CIM3CT-ND	2.7V Temperature Sensor, 0°C to 100°C	SOT-23	1.01	.75	.54
LM62CIM3TR-ND	2.7V Temperature Sensor	SOT-23	351.00/1,000		
LM70CIMM-3CT-ND	10-Bit Plus Sign Digital Temperature Sensor	8-MSOP	1.86	1.38	1.02
LM70CIMM-3TR-ND	10-Bit Plus Sign Digital Temperature Sensor	8-MSOP	768.00/1,000		
LM70CIMM-5CT-ND	SPI/MICROWIRE10-Bit plus Digital Temp. Sensor	8-MSOP	1.86	1.38	1.02
LM70CIMM-5TR-ND	SPI/MICROWIRE10-Bit plus Digital Temp. Sensor	8-MSOP	768.00/1,000		
LM70CIMMX-3CT-ND	10-Bit plus Sign Digital Temperature Sensor	8-MSOP	1.86	1.38	1.02
LM70CIMMX-3TR-ND	10-Bit plus Sign Digital Temperature Sensor	8-MSOP	2625.00/3,500		
LM74CIBP-3CT-ND	3V 12-Bit Digital Temperature Sensor	5-MicroSMD	2.51	1.87	1.38
LM74CIBP-3TR-ND	3V 12-Bit Digital Temperature Sensor	5-MicroSMD	1036.80/1,000		
LM74CIBP-5CT-ND	5V 12-Bit Digital Temperature Sensor	5-MicroSMD	2.51	1.87	1.38
LM74CIBP-5TR-ND	5V 12-Bit Digital Temperature Sensor	5-MicroSMD	1036.80/1,000		
LM74CIM-3-ND	3V 12-Bit Digital Temperature Sensor	8-SOIC	2.08	1.55	1.14
LM74CIM-5-ND	5V 12-Bit Digital Temperature Sensor	8-SOIC	2.08	1.55	1.14
LM75CIM-3-ND	3V Digital Temperature Sensor	8-SOIC	2.67	1.98	1.47
LM75CIM-5-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-SOIC	2.67	1.98	1.47
LM75CIMX-5TR-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-SOIC	2687.50/2,500		
LM75CIMM-3CT-ND	3.3V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	2.67	1.98	1.47
LM75CIMM-3TR-ND	3.3V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	1100.80/1,000		
LM75CIMM-5CT-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	2.67	1.98	1.47

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National Semiconductor LINEAR SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM75CIMM-5TR-ND	5V Digital Temperature Sensor and Thermal Watchdog with Two-Wire Interface	8-MSOP	1100.80/1,000		
LM76CHM-5-ND	5V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	8-SOIC	2.85	2.17	1.66
LM76CNM-3-ND	3V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	8-SOIC	2.85	2.17	1.66
LM77CIM-3-ND	3V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	8-SOIC	2.36	1.75	1.30
LM77CIM-5-ND	5V Digital Temperature Sensor and Thermal Window Comparator with Two-Wire Interface	8-SOIC	2.36	1.75	1.30
LM78L05ACM-ND	5V 100mA Positive Regulator	8-SOIC	.44	.32	.24
LM78L05ACMX-ND	5V 100mA Positive Regulator	8-SOIC	280.00/2,500		
LM78L05ACZNS-ND	5V 100mA Positive Regulator	TO-92	.45	.33	.24
LM78L05IBPCT-ND	3-Terminal Positive Regulator	8-MicroSMD	.63	.46	.33
LM78L05IBPTR-ND	3-Terminal Positive Regulator	8-MicroSMD	59.50/250		
LM78L09ACZ-ND	9V 100mA Positive Regulator	TO-92	.45	.33	.24
LM78L12ACM-ND	12V 100mA Positive Regulator	8-SOIC	.45	.33	.24
LM78L12ACMXTR-ND	12V 100mA Positive Regulator	8-SOIC	287.00/2,500		
LM78L12ACZ-ND	12V 0.1 Amp Voltage Regulator	TO-92	.45	.33	.24
LM78L15ACM-ND	15V 100mA Positive Regulator	8-SOIC	.45	.33	.24
LM78L15ACMXTR-ND	15V 100mA Positive Regulator	8-SOIC	287.00/2,500		
LM78L15ACZ-ND	15V 0.1 Amp Positive Regulator	TO-92	.45	.33	.24
LM78L62ACZ-ND	6.2V 100mA Positive Regulator	TO-92	1.09	.80	.58
LM78M05CTNS-ND	5V, 500mA Positive Regulator	TO-220	.72	.52	.38
LM78M05CDT-ND	3-Terminal Positive Regulator	TO-252-3	.81	.59	.43
LM78M12CH-ND	12V 500mA Positive Regulator	TO-39	2.65	2.02	1.54
LM78M12CT-ND	12V Positive Regulator	TO-220	.72	.52	.38
LM78M15CT-ND	15V Positive Regulator	TO-220	.72	.52	.38
LM78M15CH-ND	15V 500mA Positive Regulator	TO-39	2.65	2.02	1.54
LM78S40CN-ND	Universal Switching Regulator Subsystem	16-Dip	2.11	1.57	1.16
LM78S40N-ND	Universal Switching Regulator Subsystem, Ind. Temp	16-Dip	2.29	1.71	1.26
LM79L05ACM-ND	5V 100mA Negative Regulator	8-SOIC	.45	.33	.24
LM79L05ACMXTR-ND	5V 100mA Negative Regulator	8-SOIC	287.00/2,500		
LM79L12ACM-ND	12V 100mA Negative Regulator	8-SOIC	.45	.33	.24
LM79L12ACMXTR-ND	12V 100mA Negative Regulator	8-SOIC	287.00/2,500		
LM79M05CT-ND	5V 500mA Negative Voltage Regulator	TO-220	.77	.56	.40
LM79M12CT-ND	12V 500mA Negative Voltage Regulator	TO-220	.77	.56	.40
LM79M15CT-ND	15V 500mA Negative Voltage Regulator	TO-220	.77	.56	.40
LM80CIMT-3-ND	Serial Interface ACPI-Compatible Microprocessor System Hardware Monitor, 2.8V-5.75V	24-TSSOP	5.80	4.59	3.68
LM80CIMT-5-ND	Serial Interface ACPI-Compatible Microprocessor System Hardware Monitor	24-TSSOP	5.80	4.59	3.68
LM81CIMT-3-ND	Serial Interface ACPI-Compatible Microprocessor System Hardware Monitor, 2.8V-5.75V	24-TSSOP	4.40	3.35	2.56
LM82CIMQA-ND	Triple-Diode Input and Local Digital Temp. Sensor with Two-Wire Interface	16-SSOP	4.28	3.25	2.48
LM83CIMQA-ND	Triple-Diode Input and Local Digital Temp. Sensor with Two-Wire Interface	16-SSOP	5.95	4.53	3.46
LM87CIMT-ND	Serial Interface System Hardware Monitor with Remote Diode Temp. Sensing	24-TSSOP	5.48	4.17	3.18
LM92CIM-ND	Temp. Sensor and Thermal Window Comparator with Two-Wire Interface	8-SOIC	4.05	3.08	2.35
LM108AH-ND	Precision Op Amp	TO-99	5.82	4.60	3.69
LM111H-ND	Voltage Comparator	TO-99	3.75	2.85	2.18
LM111J-8-ND	Voltage Comparator	8-CDip	4.63	3.52	2.69
LM113H-ND	Reference Diode	TO-46	9.43	7.46	5.98
LM117H-ND	500mA Positive Adjustable Voltage Regulator	TO-39	7.08	5.60	4.49
LM117K STEEL-ND	Positive Adjustable Voltage Regulator	TO-3	7.35	5.81	4.66
LM120H-5.0-ND	1.5A, 3-Terminal Negative Voltage Regulator	TO-39	9.24	7.92	7.03
LM124AJ-ND	Low Power Quad Op Amp	14-CDip	6.09	4.82	3.86
LM124J-ND	Low Power Quad Op Amp	14-CDip	2.65	2.02	1.54
LM135AH-ND	Precision Temperature Sensor	TO-46	15.73	13.49	11.96
LM135H-ND	Precision Temperature Sensor	TO-46	8.74	6.91	5.54
LM136AH-2.5-ND	2.5V Reference Diode	TO-46	9.63	8.25	7.32
LM136H-2.5-ND	2.5V Reference Diode	TO-46	8.74	6.91	5.54
LM136H-5.0-ND	5V Reference Diode	TO-46	10.08	7.97	6.39
LM137H-ND	.5A 3-Terminal Negative Voltage Regulator	TO-39	12.13	10.40	9.22
LM139J-ND	Low Power Low Offset Quad Comp.	14-CDip	2.79	2.07	1.53
LM140K-5.0-ND	.5V Ser. 3-Terminal Positive Regulator	TO-3	6.66	5.27	4.22
LM140K-12-ND	12V, 1.5A Positive Voltage Regulator	TO-3	6.66	5.27	4.22
LM140LAH-5.0-ND	5V, Ser., 3-Terminal Positive Regulator	TO-39	6.10	4.64	3.54
LM140LAH-12-ND	12V, 100mA Positive Voltage Regulator	TO-39	6.10	4.64	3.54
LM148J-ND	Quad 741 Op Amp	14-CDip	2.98	2.27	1.73
LM150K STEEL-ND	3A Positive Adjustable Voltage Regulator	TO-3	13.41	11.49	10.19
LM158AH-ND	Low Power Dual Op Amp	TO-99	6.66	5.27	4.22
LM158H-ND	Low Power Dual Op Amp	TO-99	4.13	3.14	2.40
LM185BH-ND	Adjustable Micropower Voltage Reference	TO-46	12.78	10.95	9.71
LM185H-2.5-ND	Micropower Voltage Reference Diode	TO-46	10.29	8.14	6.52
LM193H-ND	Low Power Offset Voltage Dual Comparator	TO-99	4.50	3.42	2.61
LM219J-ND	High Speed Dual Comparator	14-CDip	6.09	4.82	3.86
LM224J-ND	Low Power Quad Op Amp	14-CDip	2.57	1.91	1.42
LM231AN-ND	Precision Voltage-to-Frequency Converter	8-Dip	6.97	5.52	4.42
LM231N-ND	Precision Voltage-to-Frequency Converter	8-Dip	5.82	4.60	3.69
LM234Z-3-ND	Adjustable Current Source/Temperature Sensor	TO-92	3.05	2.32	1.77
LM234Z-6-ND	Adjustable Current Source/Temperature Sensor	TO-92	1.95	1.45	1.08
LM235AH-ND	Precision Temperature Sensor	TO-46	10.26	8.79	7.80
LM235H-ND	Precision Temperature Sensor	TO-46	6.51	5.15	4.13
LM236AH-2.5-ND	2.5V (1%) Voltage Reference	TO-46	6.93	5.48	4.39
LM236AH-5.0-ND	5V Reference Diode	TO-46	5.84	4.62	3.70
LM236H-2.5-ND	2.5V Reference Diode	TO-46	4.50	3.42	2.61
LM239J-ND	High Performance Quad Comparator	14-CDip	2.17	1.61	1.19
LM285BXZ-ND	Adjustable Micropower Voltage Reference	TO-92	3.63	2.76	2.11
LM285BYM-ND	Adjustable Micropower Voltage Reference	8-SOIC	2.70	2.06	1.57
LM285BYZ-ND	Micropower Adjustable Voltage Reference	TO-92	2.70	2.06	1.57
LM285BYZ-1.2-ND	1.2V Micropower Voltage Reference	TO-92	2.70	2.06	1.57
LM285BYZ-2.5-ND	2.5V Reference Diode	TO-92	2.70	2.06	1.57
LM285M-ND	Micropower Adjustable Voltage Reference	8-SOIC	1.61	1.19	.86
LM285MXTR-ND	Micropower Adjustable Voltage Reference	8-SOIC	1370.63/2,500		
LM285M-1.2-ND	1.2V Reference Diode	8-SOIC	1.61	1.19	.86
LM285M-2.5-ND	Micropower Voltage Reference Diode	8-SOIC	1.61	1.19	.86
LM285MX-2.5TR-ND	Micropower Voltage Reference Diode	8-SOIC	1370.63/2,500		
LM285Z-ND	Adjustable Micropower Voltage Reference	TO-92	1.61	1.19	.86
LM285Z-1.2-ND	Micropower Voltage Reference Diode	TO-92	1.61	1.19	.86

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM285Z-2.5-ND	2.5V Reference Diode	TO-92	1.61	1.19	.86
LM301AH-ND	General Purpose Op Amp	TO-99	3.07	2.28	1.69
LM301AN-ND	General Purpose Op Amp	8-Dip	1.20	.88	.64
LM308AH-ND	General Purpose Op Amp	TO-99	2.80	2.13	1.63
LM308H-ND	Super Gain Op Amp	TO-99	3.13	2.38	1.82
LM309H-ND	5V Voltage Regulator	TO-39	4.03	3.06	2.34
LM309K STEEL-ND	+5V 1.5A Voltage Regulator	TO-3	5.13	3.90	2.98
LM311H-ND	Voltage Comparator	TO-99	2.58	1.96	1.50
LM311MNS-ND	Voltage Comparator	8-SOIC	.58	.42	.31
LM311MXTR-ND	Voltage Comparator	8-SOIC	367.50/2,500		
LM311NNS-ND	High Performance Voltage Comparator	8-Dip	.61	.44	.32
LM313H-ND	Precision Reference, 2-Pin	TO-18	6.24	4.94	3.96
LM317AEMPCT-ND	3-Terminal Adjustable Regulator	SOT-223-4	1.76	1.30	.94
LM317AEMPTR-ND	3-Terminal Adjustable Regulator	SOT-223-4	611.00/1,000		
LM317AH-ND	500mA Positive Adjustable Voltage Regulator	TO-39	4.30	3.27	2.50
LM317AT-ND	1.5A Positive Adjustable Voltage Regulator	TO-220	1.50	1.10	.80
LM317EMPCT-ND	1A Positive Adjustable Voltage Regulator	SOT-223	1.13	.83	.60
LM317EMPTR-ND	1A Positive Adjustable Voltage Regulator	SOT-223	390.00/1,000		
LM317H-ND	500mA Positive Adjustable Voltage Regulator	TO-39	2.98	2.27	1.73
LM317HVH-ND	High Voltage 500mA, Adjustable Voltage Regulator	TO-39	7.35	5.81	4.66
LM317HVK STEEL-ND	High Voltage 1.5A, Adjustable Voltage Regulator	TO-3	6.59	5.22	4.18
LM317HVT-ND	High Voltage 1.5A, Adjustable Voltage Regulator	TO-220	2.79	2.07	1.53
LM317K STEEL-ND	1.5A Positive Adjustable Voltage Regulator	TO-3	3.95	3.01	2.30
LM317LM-ND	100mA Positive Adjustable Voltage Regulator	8-SOIC	.58	.42	.31
LM317LMXTR-ND	100mA Positive Adjustable Voltage Regulator	8-SOIC	367.50/2,500		
LM317LZ-ND	100mA Positive Adjustable Voltage Regulator	TO-92	.52	.38	.28
LM317MDT-ND	3-Terminal Adjustable Regulator	TO-252	.81	.59	.43
LM317S-ND	3-Terminal Adjustable Regulator	TO-263	1.13	.83	.60
LM317SXTR-ND	3-Terminal Adjustable Regulator	TO-263	199.50/500		
LM317TNS-ND	1.5A Positive Adjustable Voltage Regulator	TO-220	.63	.46	.33
LM318H-ND	High Slew Rate Op Amp	TO-99	3.50	2.66	2.03
LM318M-ND	High Slew Rate Op Amp	8-SOIC	1.39	1.02	.74
LM318N-ND	High Slew Rate Op Amp	8-Dip	1.50	1.10	.80
LM319AM-ND	High Speed Dual Comparator	14-SOIC	2.02	1.50	1.11
LM319H-ND	High Speed Dual Comparator	TO-100	3.13	2.38	1.82
LM319M-ND	High Speed Dual Comparator	14-SOIC	.98	.72	.52
LM319MXTR-ND	High Speed Dual Comparator	14-SOIC	828.75/2,500		
LM319N-ND	High Speed Dual Comparator	14-Dip	.98	.72	.52
LM320H-5.0-ND	.5A 3-Terminal Negative Voltage Regulator	TO-39	6.10	4.64	3.54
LM320K-15-ND	–15V, 1.5A Voltage Regulator	TO-3	6.78	5.37	4.30
LM320LZ-5.0-ND	5V, 0.1A Negative Voltage Regulator	TO-92	.47	.34	.25
LM320LZ-12-ND	12V, 0.1A Negative Voltage Regulator	TO-92	.47	.34	.25
LM320LZ-15-ND	15V, 0.1A Negative Voltage Regulator	TO-92	.47	.34	.25
LM320T-5.0-ND	5V, 1.5A 3-Terminal Negative Regulator	TO-220	1.92	1.43	1.06
LM320T-12-ND	12V, 1.5A 3-Terminal Negative Voltage Regulator	TO-220	1.92	1.43	1.06
LM320T-15-ND	15V, 1.5A 3-Terminal Negative Voltage Regulator	TO-220	1.92	1.43	1.06
LM323AK STEEL-ND	5V 3A Positive Voltage Regulator	TO-3	5.27	4.17	3.34
LM323K STEEL-ND	5V 3A Positive Voltage Regulator	TO-3	3.53	2.68	2.05
LM324AMNS-ND	Low Power Quad Op Amp	14-SOIC	.55	.40	.29
LM324AMXTR-ND	Low Power Quad Op Amp	14-SOIC	350.00/2,500		
LM324ANNS-ND	Low Power Quad Op Amp	14-Dip	.54	.39	.29
LM324MNS-ND	Low Power Quad Op Amp	14-SOIC	.46	.35	.26
LM324MT-ND	Low Power Quad Op Amp *NEW!*	14-TSSOP	.99	.72	.52
LM324MX-ND	Low Power Quad Op Amp	14-SOIC	297.50/2,500		
LM324NNS-ND	Low Power Quad Op Amp	14-Dip	.49	.38	.27
LM329AH-ND	Precision Zener 10ppm/°C	TO-46	6.66	5.27	4.22
LM329BZNS-ND	Precision Reference	TO-92	2.50	1.90	1.45
LM329CZ-ND	Precision Reference	TO-92	2.33	1.73	1.28
LM329DZ-ND	6.9V Precision Zener 100ppm/°C	TO-92	1.13	.83	.60
LM330T-5.0-ND	3-Terminal Positive Regulator	TO-220	1.69	1.24	.90
LM331AN-ND	Precision Voltage-to-Frequency Converter	8-Dip	6.38	5.05	4.05
LM331N-ND	Precision Voltage-to-Frequency Converter	8-Dip	2.68	2.04	1.56
LM333K STEEL-ND	3A Negative Adjustable Voltage Regulator	TO-3	9.01	7.73	6.85
LM334H-ND	3-Terminal Adjustable Current Source	TO-46	3.13	2.38	1.82
LM334M-ND	3-Terminal Adjustable Current Source	8-SOIC	1.35	.99	.72
LM334MXTR-ND	3-Terminal Adjustable Current Source	8-SOIC	1147.50/2,500		
LM334SM-ND	3-Terminal Adjustable Current Source	8-SOIC	2.65	2.02	1.54
LM334ZNS-ND	3-Terminal Adjustable Current Source	TO-92	1.43	1.05	.76
LM335AH-ND	Precision Temperature Sensor	TO-46	6.38	5.05	4.05
LM335AM-ND	Precision Temperature Sensor	8-SOIC	1.83	1.36	1.01
LM335AZ-ND	Precision Temperature Sensor	TO-92	1.83	1.36	1.01
LM335H-ND	Precision Temperature Sensor	TO-46	2.88	2.19	1.67
LM335M-ND	Precision Temperature Sensor	8-SOIC	1.43	1.05	.76
LM335Z-ND	Voltage Mode Temperature Sensor	TO-92	1.54	1.13	.82
LM336BM-2.5-ND	2.5V, Reference Diode	8-SOIC	2.05	1.52	1.13
LM336BM-5.0-ND	5V, Reference Diode	8-SOIC	2.05	1.52	1.13
LM336BZ-2.5-ND	2.5V, Reference Diode	TO-92	1.71	1.27	.94
LM336BZ-5.0-ND	5V, Reference Diode	TO-92	1.71	1.27	.94
LM336M-2.5-ND	2.5V, Reference Diode	8-SOIC	.99	.73	.53
LM336MX-2.5TR-ND	2.5V, Reference Diode	8-SOIC	844.69/2,500		
LM336M-5.0-ND	5.0V, Reference Diode	8-SOIC	.99	.73	.53
LM336Z-2.5NS-ND	2.5V, Reference Diode	TO-92	.99	.73	.53
LM336Z-5.0-ND	5.0V, Reference Diode	TO-92	.99	.73	.53
LM337H-ND	500mA Negative Adjustable Voltage Regulator	TO-39	3.48	2.65	2.02
LM337HVH-ND	500mA Negative Adjustable Regulator (High Volt)	TO-39	8.86	7.01	5.62
LM337HVK STEEL-ND	1.5A Negative Adjustable Regulator (High Volt)	TO-3	10.27	8.81	7.81
LM337IMPCT-ND	1A Negative Adjustable Voltage Regulator	SOT-223	1.35	.99	.72
LM337IMPTR-ND	1A Negative Adjustable Voltage Regulator	SOT-223	468.00/1,000		
LM337K STEEL-ND	1.5A Negative Adjustable Voltage Regulator	TO-3	4.95	3.77	2.88
LM337LM-ND	100mA Negative Adjustable Voltage Regulator	8-SOIC	.98	.72	.52
LM337LMXTR-ND	100mA Negative Adjustable Voltage Regulator	8-SOIC	828.75/2,500		
LM337LZ-ND	100mA Negative Adjustable Voltage Regulator	TO-92	.98	.72	.52
LM337TNS-ND	1.5A Negative Adjustable Voltage Regulator	TO-220	.94	.69	.50
LM338K STEEL-ND	5A Adjustable Positive Regulator	TO-3	5.13	3.90	2.98
LM338T-ND	5A Adjustable Positive Regulator	TO-220	2.11	1.57	1.16
LM339AMXTR-ND	Low Power Low Offset Voltage Quad Comparator	14-SOIC	350.00/2,500		
LM339ANNS-ND	Low Power Low Offset Voltage Quad Comparator	14-Dip	.54	.39	.29
LM339AM-ND	Low Power Low Offset Voltage Quad Comparator	14-SOIC	.55	.40	.29
LM339MNS-ND	Low Power Low Offset Voltage Quad Comparator	14-SOIC	.46	.35	.26
LM339MX-ND	Low Power Voltage Quad Comparator	14-SOIC	297.50/2,500		

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM339NNS-ND	High Performance Quad Comparator	14-Dip	.49	.38	.27
LM340AT-5.0-ND	5V, 1.0 Amp Positive Voltage Regulator	TO-220	1.65	1.21	.88
LM340K-5.0-ND	5V, 1.0 Amp Positive Voltage Regulator	TO-3	5.78	4.39	3.35
LM340K-12-ND	12V, 1.0 Amp Positive Voltage Regulator	TO-3	5.78	4.39	3.35
LM340K-15-ND	15V, 1.0 Amp Positive Voltage Regulator	TO-3	5.78	4.39	3.35
LM340LAH-5.0-ND	5V, 100mA Positive Voltage Regulator	TO-39	2.88	2.19	1.67
LM340LAH-12-ND	12V, 100mA Positive Voltage Regulator	TO-39	2.60	1.98	1.51
LM340LAZ-5.0-ND	5V, 100mA Positive Voltage Regulator	TO-92	1.16	.86	.62
LM340LAZ-12-ND	12V, 100mA Positive Voltage Regulator	TO-92	1.16	.86	.62
LM340MP-5.0CT-ND	5V, 1A Voltage Regulator	SOT-223	1.01	.75	.54
LM340MP-5.0TR-ND	5V, 1A Voltage Regulator	SOT-223	351.00/1,000		
LM340S-5.0-ND	5V, Series 3-Terminal Positive Regulator	TO-263	1.76	1.30	.94
LM340SX-5.0TR-ND	5V, Series 3-Terminal Positive Regulator	TO-263	325.00/500		
LM340S-12-ND	12V, Series 3-Terminal Positive Regulator	TO-263	1.76	1.30	.94
LM340T-5.0-ND	5V, 1.0A Positive Voltage Regulator (7805)	TO-220	.90	.65	.47
LM340T-12-ND	12V, 1.0A Positive Voltage Regulator (7812)	TO-220	.90	.65	.47
LM340T-15-ND	15V, 1.0A Positive Voltage Regulator (7815)	TO-220	.90	.65	.47
LM341T-5.0-ND	5V, 500mA Voltage Regulator	TO-220	.72	.52	.38
LM341T-15-ND	15V, 500mA Voltage Regulator	TO-220	.72	.52	.38
LM346M-ND	Programmable Quad Op Amp	16-SOIC	1.86	1.38	1.02
LM348M-ND	Quad 741 Operational Amp	14-SOIC	.72	.52	.38
LM348NNS-ND	Quad 741 Operational Amp	14-Dip	.77	.56	.40
LM350AT-ND	3A, 3-Terminal Positive Adjustable Voltage Regulator	TO-220	4.00	3.04	2.32
LM350K STEEL-ND	3A, 3-Terminal Positive Adjustable Voltage Regulator	TO-3	5.13	3.90	2.98
LM350TNS-ND	3A, 3-Terminal Positive Adjustable Voltage Regulator	TO-220	2.29	1.71	1.26
LM358AMNS-ND	Low Power Dual Op Amp	8-SOIC	.55	.40	.29
LM358AMXTR-ND	Low Power Dual Op Amp	8-SOIC	350.00/2,500		
LM358ANNS-ND	Low Power Dual Op Amp (Elect. Improv.)	8-Dip	.54	.39	.29
LM358BPCT-ND	Low Power Dual Op Amp	8-MicroSMD	.63	.46	.33
LM358BPTR-ND	Low Power Dual Op Amp	8-MicroSMD	59.50/250		
LM358MNS-ND	Low Power Dual Op Amp	8-SOIC	.42	.33	.24
LM358MX-ND	Low Power Dual Op Amp	8-SOIC	276.25/2,500		
LM358NNS-ND	Low Power Dual Op Amp	8-Dip	.46	.35	.26
LM359M-ND	Dual, Hi Spd. Programmable Current Mode (Norton) Amp	14-SOIC	2.75	2.09	1.60
LM359N-ND	High Speed Norton Op Amp	14-Dip	2.75	2.09	1.60
LM360H-ND	High Speed Differential Comparator	TO-99	4.80	3.65	2.79
LM360M-ND	High Speed Differential Comparator	8-SOIC	4.25	3.23	2.47
LM360N-ND	High Speed Differential Comparator	8-Dip	4.25	3.23	2.47
LM361M-ND	High Speed Differential Comparator	14-SOIC	2.70	2.06	1.57
LM361N-ND	High Speed Differential Comparator	14-Dip	2.75	2.09	1.60
LM380N-ND	2.5 Watt Audio Power Amplifier	14-Dip	1.69	1.24	.90
LM380N-8-ND	2.5 Watt Audio Amplifier	8-Dip	1.50	1.10	.80
LM384N-ND	5 Watt Audio Amplifier	14-Dip	1.71	1.27	.94
LM385BM-ND	Adj. Micropower Voltage Reference	8-SOIC	1.67	1.25	.92
LM385BM-1.2-ND	1.2V, Reference Diode 150ppm/°C	8-SOIC	1.58	1.16	.84
LM385BMX-1.2TR-ND	1.2V, Reference Diode 150ppm/°C	8-SOIC	1338.75/2,500		
LM385BM-2.5-ND	2.5V, Reference Diode 150ppm/°C	8-SOIC	1.58	1.16	.84
LM385BMX-2.5TR-ND	2.5V, Reference Diode 150ppm/°C	8-SOIC	1338.75/2,500		
LM385BXM-2.5-ND	2.5V, Micropower Voltage Reference Diode	8-SOIC	2.70	2.06	1.57
LM385BXZ-ND	Adjustable Micropower Voltage Reference Diode	TO-92	2.70	2.06	1.57
LM385BXZ-2.5-ND	2.5V, Reference Diode 30ppm/°C	TO-92	2.70	2.06	1.57
LM385BYM-1.2-ND	1.2V, Micropower Voltage Reference Diode	8-SOIC	2.51	1.87	1.38
LM385BYZ-1.2-ND	1.2V, Precision Voltage Reference 50ppm/°C	TO-92	2.51	1.87	1.38
LM385BYZ-2.5-ND	2.5V, Precision Voltage Reference 50ppm/°C	TO-92	2.51	1.87	1.38
LM385BYZ-ND	Adjustable Reference Diode	TO-92	2.51	1.87	1.38
LM385BZ-ND	Adjustable Micropower Voltage Reference Diode	TO-92	1.67	1.25	.92
LM385BZ-1.2NS-ND	Micropower Voltage Reference Diode	TO-92	1.76	1.30	.94
LM385BZ-2.5NS-ND	2.5V, Voltage Reference Diode	TO-92	1.76	1.30	.94
LM385M-ND	Adjustable Voltage Reference Diode	8-SOIC	1.43	1.05	.76
LM385MXTR-ND	Adjustable Voltage Reference Diode	8-SOIC	1115.63/2,500		
LM385M-1.2-ND	1.2V, Voltage Reference Diode	8-SOIC	.86	.62	.45
LM385MX-1.2TR-ND	1.2V, Voltage Reference Diode	8-SOIC	631.75/2,500		
LM385M-2.5-ND	2.5V, Voltage Reference Diode 150ppm/°C	8-SOIC	.86	.62	.45
LM385MX-2.5TR-ND	2.5V, Voltage Reference Diode 150ppm/°C	8-SOIC	631.75/2,500		
LM385M3-2.5CT-ND	2.5V, Micropower Voltage Reference Diode	SOT-23	1.31	.97	.70
LM385M3-2.5TR-ND	2.5V, Micropower Voltage Reference Diode	SOT-23	455.00/1,000		
LM385M3X-2.5CT-ND	2.5V, Voltage Reference Diode	SOT-23	1.31	.97	.70
LM385M3X-2.5TR-ND	2.5V, Voltage Reference Diode	SOT-23	1338.75/3,000		
LM385Z-ND	Adjustable Voltage Reference Diode	TO-92	1.24	.91	.66
LM385Z-1.2NS-ND	1.2V, Voltage Reference Diode	TO-92	.77	.56	.40
LM385Z-2.5NS-ND	2.5V, Voltage Reference Diode	TO-92	.77	.56	.40
LM386M-1-ND	Low Voltage Audio Power Amp	8-SOIC	.58	.42	.31
LM386MM-1CT-ND	Low Voltage Audio Amp	8-MSOP	.74	.54	.39
LM386MM-1TR-ND	Low Voltage Audio Amp	8-MSOP	231.00/1,000		
LM386N-1-ND	Low Voltage Audio Power Amp, Vs=6V	8-Dip	.61	.44	.32
LM386N-3-ND	Low Voltage Audio Power Amp, Vs=9V	8-Dip	.95	.69	.50
LM386N-4-ND	Low Voltage Audio Power Amp, Vs=16V	8-Dip	.94	.69	.50
LM392M-ND	Single Op Amp and Comparator	8-SOIC	1.69	1.24	.90
LM392MXTR-ND	Single Op Amp and Comparator	8-SOIC	1434.38/2,500		
LM392N-ND	Op Amp and Comparator	8-Dip	1.69	1.24	.90
LM393MNS-ND	Low Power Low Offset Voltage Dual Comparator	8-SOIC	.42	.33	.24
LM393MXTR-ND	Low Power Low Offset Voltage Dual Comparator	8-SOIC	276.25/2,500		
LM393NNS-ND	Dual Comparator	8-Dip	.46	.35	.26
LM394CH-ND	Super Matched NPN Pairs	TO-5	5.50	4.35	3.49
LM395T-ND	Ultra Reliable High Gain Power Transistor	TO-220	3.08	2.34	1.79
LM399H-ND	Precision Reference	TO-46	3.93	2.99	2.28
LM431ACM-ND	Adjustable Precision Zener Shunt Regulator	8-SOIC	.44	.32	.24
LM431ACMXTR-ND	Adjustable Precision Zener Shunt Regulator	8-SOIC	280.00/2,500		
LM431ACM3XCT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	.54	.39	.29
LM431ACM3XTR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	478.80/3,000		
LM431ACZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	.44	.32	.24
LM431AIBPCT-ND	Adjustable Precision Zener Shunt Regulator	4-MicroSMD	.59	.43	.31
LM431AIBPTR-ND	Adjustable Precision Zener Shunt Regulator	4-MicroSMD	55.25/250		
LM431AIM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	.77	.56	.40
LM431AIM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	238.00/1,000		
LM431AIMXCT-ND	Adjustable Precision Zener Shunt Regulator	8-SOIC	.55	.40	.29
LM431AIMXTR-ND	Adjustable Precision Zener Shunt Regulator	8-SOIC	350.00/2,500		
LM431AIZ-ND	Adjustable Precision Zener Shunt Regulator, Ind. Temp	TO-92	.55	.40	.29
LM431BCM-ND	Adjustable Precision Zener Shunt Regulator	SOT-8	.77	.56	.40
LM431BCM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	.77	.56	.40
LM431BCM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	238.00/1,000		
LM431BCZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	.77	.56	.40
LM431BIM-ND	Adjustable Precision Zener Shunt Regulator	8-SOIC	1.01	.75	.54
LM431BIM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	1.01	.75	.54
LM431BIM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	351.00/1,000		
LM431BIZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	1.01	.75	.54
LM431CCM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	1.31	.97	.70
LM431CCM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	455.00/1,000		
LM431CCZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	1.50	1.10	.80
LM431CIM-ND	Adjustable Precision Zener Shunt Regulator	8-SOIC	1.73	1.27	.92
LM431CIM3CT-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	1.73	1.27	.92
LM431CIM3TR-ND	Adjustable Precision Zener Shunt Regulator	SOT-23	598.00/1,000		
LM431CIZ-ND	Adjustable Precision Zener Shunt Regulator	TO-92	1.73	1.27	.92
LM555CM-ND	Timer	8-SOIC	.47	.34	.25
LM555CMXTR-ND	Timer	8-SOIC	297.50/2,500		
LM555CMMCT-ND	Timer	8-MSOP	1.46	1.08	.78
LM555CMMTR-ND	Timer	8-MSOP	507.00/1,000		
LM555CNNS-ND	Timer	8-Dip	.50	.36	.27
LM556CM-ND	Dual Timer	14-SOIC	.77	.56	.40
LM556CMXTR-ND	Dual Timer	14-SOIC	565.25/2,500		
LM556CN-ND	Timer	14-Dip	.81	.59	.43
LM565CN-ND	Phase Lock Loop	14-Dip	1.77	1.32	.97
LM567CM-ND	Tone Decoder Phase Lock Loop	8-SOIC	.77	.56	.40
LM567CMXTR-ND	Tone Decoder Phase Lock Loop	8-SOIC	565.25/2,500		
LM567CN-ND	Tone Decoder Phase Lock Loop	8-Dip	.77	.56	.40
LM611CM-ND	Op Amp and Adjustable Reference	14-SOIC	2.02	1.50	1.11
LM611IM-ND	Op Amp and Adjustable Reference	14-SOIC	2.20	1.64	1.21
LM613IWM-ND	Dual Op Amp, Dual Comparator and Adjustable Reference	16-SOIC	2.58	1.96	1.50
LM614CWM-ND	Quad Op Amp with Adjustable Reference	16-SOIC	2.85	2.12	1.57
LM628N-6-ND	Precision Motion Controller, 6MHz	28-Dip	24.75	23.10	21.45
LM628N-8-ND	Precision Motion Controller, 8MHz	28-Dip	39.15	36.54	33.93
LM629M-6-ND	Precision Motion Controller, 6MHz	24-SOIC	24.75	23.10	21.45
LM629M-8-ND	Precision Motion Controller, 8MHz	24-SOIC	39.15	36.54	33.93
LM629N-6-ND	Precision Motion Controller, 6MHz	28-Dip	24.75	23.10	21.45
LM629N-8-ND	8-Bit PWM Motion Controller	28-Dip	39.15	36.54	33.93
LM675T-ND	Power Operational Amplifier	5-Pin TO-220	5.68	4.32	3.30
LM709CH-ND	General Purpose Op Amp	TO-99	3.48	2.65	2.02
LM709H-ND	General Purpose Op Amp	TO-99	4.13	3.14	2.40
LM723CH-ND	150mA Positive Adjustable Voltage Regulator	TO-99	2.37	1.77	1.31
LM723CN-ND	Precision Voltage Regulator	14-Dip	.94	.69	.50
LM723H-ND	2V-37V, Adjustable Voltage Regulator	TO-100	4.20	3.20	2.44
LM725CH-ND	Instrumentation Op Amp	TO-99	4.45	3.39	2.59
LM725CN-ND	Instrumentation Op Amp	8-Dip	2.63	2.00	1.53
LM741CH-ND	18V, High Performance Op Amp	TO-99	2.58	1.96	1.50
LM741CNNS-ND	18V, High Performance Op Amp	8-Dip	.47	.34	.25
LM741H-ND	High Performance Op Amp High Temp	TO-99	3.48	2.65	2.02
LM747H-ND	Dual High Performance Op Amp Low Offset	TO-100	3.63	2.76	2.11
LM809M3-2.63CT-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	.95	.69	.50
LM809M3-2.63TR-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	294.00/1,000		
LM809M3-2.93CT-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	.95	.69	.50
LM809M3-2.93TR-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	294.00/1,000		
LM809M3-3.08CT-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	.95	.69	.50
LM809M3-3.08TR-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	294.00/1,000		
LM809M3-4.00CT-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	.95	.69	.50
LM809M3-4.00TR-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	294.00/1,000		
LM809M3-4.38CT-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	.95	.69	.50
LM809M3-4.38TR-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	294.00/1,000		
LM809M3-4.63CT-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	.95	.69	.50
LM809M3-4.63TR-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	294.00/1,000		
LM810M3-2.63CT-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	.95	.69	.50
LM810M3-2.63TR-ND	3-Pin Microprocessor Reset Circuits, 2.63V	SOT-23	294.00/1,000		
LM810M3-2.93CT-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	.95	.69	.50
LM810M3-2.93TR-ND	3-Pin Microprocessor Reset Circuits, 2.93V	SOT-23	294.00/1,000		
LM810M3-3.08CT-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	.95	.69	.50
LM810M3-3.08TR-ND	3-Pin Microprocessor Reset Circuits, 3.08V	SOT-23	294.00/1,000		
LM810M3-4.00CT-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	.95	.69	.50
LM810M3-4.00TR-ND	3-Pin Microprocessor Reset Circuits, 4.00V	SOT-23	294.00/1,000		
LM810M3-4.38CT-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	.95	.69	.50
LM810M3-4.38TR-ND	3-Pin Microprocessor Reset Circuits, 4.38V	SOT-23	294.00/1,000		
LM810M3-4.63CT-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	.95	.69	.50
LM810M3-4.63TR-ND	3-Pin Microprocessor Reset Circuits, 4.63V	SOT-23	294.00/1,000		
LM828M5CT-ND	Switched Capacitor Voltage Converter	SOT-23-5	1.13	.83	.60
LM828M5TR-ND	Switched Capacitor Voltage Converter	SOT-23-5	390.00/1,000		
LM833M-ND	Dual Audio Op Amp	8-SOIC	.94	.69	.50
LM833MXTR-ND	Dual Audio Op Amp	8-SOIC	796.88/2,500		
LM833MMCT-ND	Dual Audio Op Amp	8-MSOP	1.13	.83	.60
LM833MMTR-ND	Dual Audio Op Amp	8-MSOP	390.00/1,000		
LM833N-ND	Dual Audio Op Amp	8-Dip	.98	.72	.52
LM837M-ND	Low Noise Quad Op Amp	14-SOIC	1.55	1.15	.85
LM837MXTR-ND	Low Noise Quad Op Amp	14-SOIC	1562.50/2,500		
LM837N-ND	Low Noise Quad Op Amp	14-Dip	1.55	1.15	.85
LM1036M-ND	Tone/Volume/Balance Circuit	20-SOIC	2.82	2.10	1.55
LM1036N-ND	Dual DC Oper. Tone/Volume/Balance Circuit	20-Dip	2.82	2.10	1.55
LM1084IS-ADJ-ND	Adjustable Voltage 5A Low Dropout Positive Regulator	TO-263	2.14	1.59	1.18
LM1084IS-3.3-ND	3.3V, 5A LDO Positive Regulator	TO-263	2.14	1.59	1.18
LM1084IS-5.0-ND	5V, 5A LDO Positive Regulator	TO-263	2.14	1.59	1.18
LM1084IS-12-ND	12V, 5A LDO Positive Regulator	TO-263	2.14	1.59	1.18
LM1084IT-ADJ-ND	Adjustable Voltage 5A LDO Positive Regulator	TO-220	2.14	1.59	1.18
LM1084IT-3.3-ND	3.3V, 5A LDO Positive Regulator	TO-220	2.14	1.59	1.18
LM1084IT-5.0-ND	5V, 5A LDO Positive Regulator	TO-220	2.14	1.59	1.18
LM1084IT-12-ND	12V, 5A LDO Positive Regulator	TO-220	2.14	1.59	1.18
LM1085IS-ADJ-ND	Adjustable Voltage 3A Low Dropout Positive Regulator	TO-263	1.55	1.15	.85
LM1085IS-3.3-ND	3.3V, 3A LDO Positive Regulator	TO-263	1.55	1.15	.85
LM1085IS-5.0-ND	5V, 3A LDO Positive Regulator	TO-263	1.55	1.15	.85
LM1085IS-12-ND	12V, 3A LDO Positive Regulator	TO-263	1.55	1.15	.85
LM1085IT-ADJ-ND	Adjustable Voltage 3A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1085IT-3.3-ND	3.3V, 3A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1085IT-5.0-ND	5V, 3A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1085IT-12-ND	12V, 3A LDO Positive Regulator	TO-220	1.55	1.15	.85
LM1086CS-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-263	1.31	.97	.70
LM1086CS-2.5-ND	2.5V, 1.5A LDO Positive Regulator *NEW!*	TO-263	1.31	.97	.70
LM1086CS-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-263	1.31	.97	.70
LM1086CS-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-263	1.31	.97	.70
LM1086CS-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-263	1.31	.97	.70
LM1086CT-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-220	1.31	.97	.70

(Continued)

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National Semiconductor™ LINEAR SERIES *(Continued)*

Digi-Key			Price Each★		
Part No.	**Description**	**Pkg.**	**1**	**25**	**100**
LM1086CT-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-220	1.31	.97	.70
LM1086CT-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-220	1.31	.97	.70
LM1086CT-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-220	1.31	.97	.70
LM1086IS-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-263	1.54	1.13	.82
LM1086IS-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-263	1.54	1.13	.82
LM1086IS-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-263	1.54	1.13	.82
LM1086IS-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-263	1.54	1.13	.82
LM1086IT-ADJ-ND	Adjustable Voltage 1.5A LDO Positive Regulator	TO-220	1.54	1.13	.82
LM1086IT-2.85-ND	2.85V, 1.5A LDO Positive Regulator	TO-220	1.54	1.13	.82
LM1086IT-3.3-ND	3.3V, 1.5A LDO Positive Regulator	TO-220	1.54	1.13	.82
LM1086IT-5.0-ND	5V, 1.5A LDO Positive Regulator	TO-220	1.54	1.13	.82
LM1117DT-ADJ-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-252	1.09	.80	.58
LM1117DT-2.5-ND	2.5V, 800mA LDO Linear Regulator *NEW!*	TO-252	1.09	.80	.58
LM1117DT-2.85-ND	2.85V, 800mA LDO Linear Regulator	TO-252	1.09	.80	.58
LM1117DT-3.3-ND	3.3V, 800mA LDO Linear Regulator	TO-252	1.09	.80	.58
LM1117DT-5.0-ND	5V, 800mA LDO Linear Regulator	TO-252	1.09	.80	.58
LM1117MP-ADJCT-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-223-4	.81	.59	.43
LM1117MP-ADJTR-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-223-4	252.00/1,000		
LM1117MP-1.8CT-ND	1.8V, 800mA LDO Linear Regulator	TO-223-4	.81	.59	.43
LM1117MP-1.8TR-ND	1.8V, 800mA LDO Linear Regulator	TO-223-4	252.00/1,000		
LM1117MP-2.85CT-ND	2.85V, 800mA LDO Linear Regulator	TO-223-4	.81	.59	.43
LM1117MP-2.85TR-ND	2.85V, 800mA LDO Linear Regulator	TO-223-4	252.00/1,000		
LM1117MP-3.3CT-ND	3.3V, 800mA Low Dropout Regulator	SOT-223	.81	.59	.43
LM1117MP-3.3TR-ND	3.3V, 800mA Low Dropout Regulator	SOT-223	252.00/1,000		
LM1117MP-5.0CT-ND	5V, 800mA LDO Linear Regulator	TO-223-4	.81	.59	.43
LM1117MP-5.0TR-ND	5V, 800mA LDO Linear Regulator	TO-223-4	252.00/1,000		
LM1117T-ADJ-ND	Adjustable Voltage 800mA LDO Linear Regulator	TO-220	1.16	.86	.62
LM1117T-2.85-ND	2.85V, 800mA LDO Linear Regulator	TO-220	1.16	.86	.62
LM1117T-3.3-ND	3.3V, 800mA LDO Linear Regulator	TO-220	1.16	.86	.62
LM1117T-5.0-ND	5V, 800mA LDO Linear Regulator	TO-220	1.16	.86	.62
LM1204V-ND	150MHz RGB Video Amp System	44-PLCC	7.46	5.90	4.73
LM1279AN-ND	110MHz RGB Video Amp System with OSD	20-Dip	2.05	1.52	1.13
LM1281N-ND	85MHz RGB Video Amp System with OSD	28-Dip	2.63	2.00	1.53
LM1282N-ND	110MHz RGB Video Amp System with OSD	28-Dip	2.63	2.00	1.53
LM1283N-ND	140MHz RGB Video Amp System with OSD	28-Dip	3.00	2.28	1.74
LM1458M-ND	Dual Op Amp	8-SOIC	.47	.34	.25
LM1458MXTR-ND	Dual Op Amp	8-SOIC	297.50/2,500		
LM1458NNS-ND	Dual Op Amp	8-Dip	.50	.36	.27
LM1815N-ND	Adaptive Variable Reluctance Sensor Amplifier	14-Dip	3.75	2.85	2.18
LM1875T-ND	20W Audio Power Amp	5 Pin TO-220	2.57	1.91	1.42
LM1876TF-ND	Dual 20W Audio Power Amp with Mute/Standby	TO-220	4.75	3.61	2.76
LM1877M-9-ND	Dual Audio Power Amplifier	14-SOIC	1.55	1.15	.85
LM1877N-9-ND	Dual Audio Power Amplifier	14-Dip	1.67	1.25	.92
LM1877N-9A-ND	Dual Audio Power Amplifier	14-Dip	1.69	1.24	.90
LM1881M-ND	Video Synch. Separator	8-SOIC	3.10	2.36	1.80
LM1881MXTR-ND	Video Synch. Separator	8-SOIC	3968.75/2,500		
LM1881N-ND	Video Synch. Separator	8-Dip	2.78	2.11	1.61
LM1894M-ND	Dynamic Noise Reduction System	14-SOIC	2.33	1.73	1.28
LM1894N-ND	Dynamic Noise Reduction System	14-Dip	3.08	2.34	1.79
LM1949N-ND	476Kbytes, Injector Drive Controller *NEW!*	8-Dip	4.38	3.33	2.54
LM1971M-ND	Digitally Controlled 62dB Audio Attenuator with Mute	8-SOIC	2.98	2.27	1.73
LM1971N-ND	Digitally Controlled 62dB Audio Attenuator with Mute	8-Dip	2.98	2.27	1.73
LM1972M-ND	2-Channel 78dB Audio Attenuator with Mute	20-SOIC	4.55	3.46	2.64
LM1972N-ND	2-Channel 78dB Audio Attenuator with Mute	20-Dip	5.05	3.84	2.93
LM1973M-ND	MicroPot™ 3-Channel 76dB Audio Attenuator with Mute	20-SOIC	2368.80/1,000		
LM1973N-ND	MicroPot™ 3-Channel Audio Attenuator with Mute	20-Dip	4.70	3.58	2.73
LM2202M-ND	230MHz Video Amp System	20-SOIC	7.98	6.31	5.06
LM2202N-ND	230MHz Video Amp System	20-Dip	7.98	6.31	5.06
LM2402T-ND	Monolithic Triple 3nS CRT Driver	TO-220-11	7.25	5.73	4.59
LM2403T-ND	Triple 80MHz CRT Driver	TO-220	7.10	5.62	4.50
LM2405T-ND	Monolithic Triple 7nS CRT Driver	TO-220-11	5.75	4.37	3.34
LM2407T-ND	Triple 50MHz CRT Driver	TO-220	4.70	3.58	2.73
LM2409T-ND	Monolithic Triple 9.5nS CRT Driver	TO-220-11	3.40	2.59	1.98
LM2412T-ND	Monolithic Triple 2.8nS CRT Driver	TO-220-11	8.67	6.86	5.50
LM2413T-ND	Monolithic Triple 4nS CRT Driver	TO-220-11	6.07	4.80	3.85
LM2415T-ND	Monolithic Triple 5.5nS CRT Driver	TO-220-11	4.45	3.39	2.59
LM2435T-ND	Monolithic Triple 5.5nS CRT Driver	TO-220-9	4.90	3.73	2.85
LM2437T-ND	Monolithic Triple 7.5nS CRT Driver	TO-220-9	4.08	3.10	2.37
LM2438T-ND	Monolithic Triple 13nS CRT Driver	TO-220-9	2.68	2.04	1.56
LM2439T-ND	Monolithic Triple 9.5nS CRT Driver	TO-220-9	3.00	2.28	1.74
LM2453TA-ND	Monolithic Triple 6nS CRT Driver with Intergrated Clamp and G1 Blanking	TO-220-15	6.20	4.72	3.60
LM2524DN-ND	Regulator Pulse Width Module (PWM)	16-Dip	1.55	1.15	.85
LM2574HVM-ADJ-ND	Simple Switcher 0.5A Step Down Voltage Regulator	14-SOIC	4.23	3.22	2.46
LM2574HVM-3.3-ND	3.3V, Simple Switcher 0.5A Step Down Volt. Regulator	14-SOIC	4.23	3.22	2.46
LM2574HVM-5.0-ND	5V, 500mA Step Down Switch Regulator	14-SOIC	4.23	3.22	2.46
LM2574HVM-12-ND	12V, Simple Switcher 0.5A Step Down Volt. Regulator	14-SOIC	4.23	3.22	2.46
LM2574HVN-ADJ-ND	Adjustable Voltage 500mA Step Down Switch Regulator	8-Dip	4.23	3.22	2.46
LM2574HVN-3.3-ND	3.3V, Simple Switcher 0.5A Step Down Volt. Regulator	8-Dip	4.23	3.22	2.46
LM2574HVN-5.0-ND	5V, 500mA Step Down Switch Regulator	8-Dip	4.23	3.22	2.46
LM2574HVN-12-ND	12V, 500mA Step Down Switch Regulator	8-Dip	4.23	3.22	2.46
LM2574M-3.3-ND	3.3V, 500mA Step Down Switch Regulator	14-SOIC	1.86	1.38	1.02
LM2574M-5.0-ND	5V, 500mA Step Down Switch Regulator	14-SOIC	1.86	1.38	1.02
LM2574MX-5.0TR-ND	5V, 500mA Step Down Switch Regulator	14-SOIC	768.00/1,000		
LM2574M-12-ND	12V, 500mA Step Down Switch Regulator	14-SOIC	1.86	1.38	1.02
LM2574MX-ADJTR-ND	Adjustable 500mA Step Down Switch Regulator	14-SOIC	768.00/1,000		
LM2574N-ADJ-ND	Adjustable 500mA Step Down Switch Regulator	8-Dip	1.86	1.38	1.02
LM2574N-5.0-ND	5V, 500mA Step Down Switch Regulator	8-Dip	1.86	1.38	1.02
LM2574N-12-ND	12V, 500mA Step Down Switch Regulator	8-Dip	1.86	1.38	1.02
LM2574N-15-ND	15V, 500mA Step Down Switch Regulator	8-Dip	1.86	1.38	1.02
LM2575HVM-ADJ-ND	Adjustable 1A Step Down Switch Regulator	24-SOIC	4.75	3.61	2.76
LM2575HVM-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	24-SOIC	4.75	3.61	2.76
LM2575HVM-15-ND	15V, Simple Switcher 1A Step Down Volt. Regulator	24-SOIC	4.75	3.61	2.76
LM2575HVN-5.0-ND	5V, 1A Step Down Switch Regulator	16-Dip	4.75	3.61	2.76
LM2575HVS-ADJ-ND	Adj. V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.75	3.61	2.76
LM2575HVS-3.3-ND	3.3V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.75	3.61	2.76
LM2575HVS-5.0-ND	5V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.75	3.61	2.76
LM2575HVS-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.75	3.61	2.76
LM2575HVS-15-ND	15V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	4.75	3.61	2.76
LM2575HVT-ADJ-ND	Adjustable 1A Step Down Switch Regulator	TO-220	4.75	3.61	2.76

Digi-Key			Price Each★		
Part No.	**Description**	**Pkg.**	**1**	**25**	**100**
LM2575HVT-3.3-ND	3.3V, Simple Switcher 1A Step Down Volt. Regulator	TO-220-5	4.75	3.61	2.76
LM2575HVT-5.0-ND	5V, 1A Step Down Switch Regulator, High Volt.	TO-220	4.75	3.61	2.76
LM2575HVT-12-ND	12V, 1A Step Down Switch Regulator	TO-220	4.75	3.61	2.76
LM2575HVT-15-ND	15V, 1A Step Down Switch Regulator	TO-220	4.75	3.61	2.76
LM2575M-3.3-ND	3.3V, Simple Switcher 1A Step Down Volt. Regulator	24-SOIC	2.51	1.87	1.38
LM2575M-5.0-ND	5V, 1A Step Down Switch Regulator	24-SOIC	2.51	1.87	1.38
LM2575M-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	24-SOIC	2.51	1.87	1.38
LM2575M-15-ND	15V, Simple Switcher 1A Step Down Volt. Regulator	24-SOIC	2.51	1.87	1.38
LM2575N-ADJ-ND	Adjustable 1A Step Down Switch Regulator	16-Dip	2.51	1.87	1.38
LM2575N-5.0-ND	5V, 1A Step Down Switch Regulator	16-Dip	2.51	1.87	1.38
LM2575N-12-ND	12V, 1A Step Down Switch Regulator	16-Dip	2.51	1.87	1.38
LM2575S-ADJ-ND	Adj. V, Simple Switcher 1A Step Down V. Regulator	TO-263-5	2.51	1.87	1.38
LM2575S-3.3-ND	3.3V, Simple Switcher 1A Step Down V. Regulator	TO-263-5	2.51	1.87	1.38
LM2575S-5.0-ND	5V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	2.51	1.87	1.38
LM2575S-12-ND	12V, Simple Switcher 1A Step Down Volt. Regulator	TO-263-5	2.51	1.87	1.38
LM2575T-ADJ-ND	Adjustable 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-3.3-ND	3.3V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-5.0-ND	5V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-12-ND	12V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2575T-15-ND	15V, 1A Step Down Switch Regulator	TO-220	2.51	1.87	1.38
LM2576HVS-ADJ-ND	Adjustable 3A Step Down Switch Regulator	TO-263	6.15	4.68	3.57
LM2576HVS-3.3-ND	3.3V, Simple Switcher 3A Step Down Volt. Regulator	TO-263-5	6.15	4.68	3.57
LM2576HVS-5.0-ND	5V, Simple Switcher 3A Step Down Volt. Regulator	TO-263-5	6.15	4.68	3.57
LM2576HVT-ADJ-ND	Adjustable 3A Step Down Switch Regulator	TO-220-5	6.15	4.68	3.57
LM2576HVT-3.3-ND	3.3V, Simple Switcher 3A Step Down Volt. Regulator	TO-220-5	6.15	4.68	3.57
LM2576HVT-5.0-ND	5V, 3A Step Down Regulator (High Volt.)	TO-220	6.15	4.68	3.57
LM2576HVT-12-ND	12V, 3A Step Down Regulator (High Volt.)	TO-220	6.15	4.68	3.57
LM2576HVT-15-ND	15V, 3A Step Down Regulator (High Volt.)	TO-220	6.15	4.68	3.57
LM2576S-ADJ-ND	Adj. Simple Switcher 3A Step Down V. Regulator	TO-263-5	2.80	2.13	1.63
LM2576S-3.3-ND	3.3V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	2.80	2.13	1.63
LM2576S-5.0-ND	5V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	2.80	2.13	1.63
LM2576S-12-ND	12V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	2.80	2.13	1.63
LM2576S-15-ND	15V, Simple Switcher 3A Step Down V. Regulator	TO-263-5	2.80	2.13	1.63
LM2576T-ADJ-ND	Adjustable 3A Step Down Voltage Regulator	TO-220-5	2.80	2.13	1.63
LM2576T-3.3-ND	3.3V, Simple Switcher 3A Step Down Volt. Regulator	TO-220-5	2.80	2.13	1.63
LM2576T-5.0-ND	5V, 3A Step Down Switch Regulator	TO-220	2.80	2.13	1.63
LM2576T-12-ND	12V, 3A Step Down Simple Switch Regulator	TO-220	2.80	2.13	1.63
LM2576T-15-ND	15V, Simple Switcher 3A Step Down V. Regulator	TO-220-5	2.80	2.13	1.63
LM2577M-ADJ-ND	Adjustable 3A Step Up Switch Regulator	24-SOIC	5.31	4.20	3.37
LM2577M-15-ND	15V, Simple Switcher Step Up Voltage Regulator	24-SOIC	5.31	4.20	3.37
LM2577N-ADJ-ND	Adjustable 3A Step Up Switch Regulator	16-Dip	5.31	4.20	3.37
LM2577N-12-ND	12V, 3A Step Up Switch Regulator	16-Dip	5.31	4.20	3.37
LM2577N-15-ND	15V, 3A Step Up Switch Regulator	16-Dip	5.31	4.20	3.37
LM2577S-ADJ-ND	Adj. Simple Switcher Step Up Voltage Regulator	TO-263-5	5.42	4.29	3.44
LM2577S-12-ND	12V Simple Switcher Step Up Voltage Regulator	TO-263-5	5.42	4.29	3.44
LM2577S-15-ND	15V Simple Switcher Step Up Voltage Regulator	TO-263-5	5.42	4.29	3.44
LM2577T-ADJ-ND	Adjustable 3A Step Up Switch Voltage Regulator	TO-220-5	5.42	4.29	3.44
LM2577T-12-ND	12V 3A Step Up Switch Regulator	TO-220	5.42	4.29	3.44
LM2577T-15-ND	15V 3A Step Up Switch Regulator	TO-220	5.42	4.29	3.44
LM2578AM-ND	750mA Switching Regulator	8-SOIC	2.75	2.09	1.60
LM2578AN-ND	750mA Switching Regulator	8-Dip	2.75	2.09	1.60
LM2585S-ADJ-ND	Adj. Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585S-3.3-ND	3.3V Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585S-5.0-ND	5V Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585S-12-ND	12V Simple Switcher 3A Flyback Regulator	TO-263-5	6.32	5.00	4.01
LM2585T-ADJ-ND	Simple Switcher, 3A, Flyback Voltage Regulator	TO-220-5	6.32	5.00	4.01
LM2585T-3.3-ND	3.3V Simple Switcher 3A Flyback Regulator	TO-220-5	6.32	5.00	4.01
LM2585T-12-ND	12V Simple Switcher 3A Flyback Regulator	TO-220-5	6.32	5.00	4.01
LM2586S-ADJ-ND	Adj. Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586S-3.3-ND	3.3V Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586S-5.0-ND	5V Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586S-12-ND	12V Simple Switcher 3A Flyback Reg. with Shutdown	TO-263-7	6.53	5.17	4.14
LM2586T-ADJ-ND	Adj. Simple Switcher 3A Flyback Reg. with Shutdown	TO-220-7	6.53	5.17	4.14
LM2586T-3.3-ND	3.3V Simple Switcher 3A Flyback Reg. with Shutdown	TO-220-7	6.53	5.17	4.14
LM2586T-5.0-ND	5.0V Simple Switcher 3A Flyback Reg. with Shutdown	TO-220-7	6.53	5.17	4.14
LM2587S-ADJ-ND	Adj. Simple Switcher 5A Flyback Regulator	TO-263-5	8.32	6.58	5.27
LM2587S-3.3-ND	3.3V Simple Switcher 5A Flyback Regulator	TO-263-5	8.32	6.58	5.27
LM2587S-5.0-ND	5V Simple Switcher 5A Flyback Regulator	TO-263-5	8.32	6.58	5.27
LM2587T-ADJ-ND	Adj. Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2587T-3.3-ND	3.3V Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2587T-5.0-ND	5V Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2587T-12-ND	12V Simple Switcher 5A Flyback Regulator	TO-220-5	8.32	6.58	5.27
LM2588S-ADJ-ND	Adjustable Volt. 5A Simple Switcher, Flyback Regulator	TO-263	8.53	6.74	5.40
LM2588S-12-ND	12V 5A Simple Switcher Flyback Regulator	TO-263	8.53	6.74	5.40
LM2588T-ADJ-ND	Adjustable Volt. 5A Simple Switcher Flyback Regulator	TO-220	8.53	6.74	5.40
LM2588T-5.0-ND	5V 5A Switcher Flyback Regulator	TO-220	8.53	6.74	5.40
LM2590HVS-5.0-ND	5.0V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator *NEW!*	TO-263-7	5.38	4.09	3.12
LM2594HVM-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.63	3.52	2.69
LM2594HVM-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.63	3.52	2.69
LM2594HVM-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.63	3.52	2.69
LM2594HVM-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.63	3.52	2.69
LM2594HVN-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594HVN-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594HVN-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594HVN-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.63	3.52	2.69
LM2594M-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	3.05	2.32	1.77
LM2594M-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	3.05	2.32	1.77

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM2594M-5.0-ND	Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	3.05	2.32	1.77
LM2594M-12-ND	12V, Simple Switcher Power Converter, 150kHz, Step Down Voltage Regulator	8-SOIC	3.05	2.32	1.77
LM2594MX-5.0TR-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A Step Down Voltage Regulator	8-SOIC	3812.50/2,500		
LM2594N-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2594N-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2594N-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2594N-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.05	2.32	1.77
LM2595S-ADJ-ND	Adj., Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595S-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-5	3.85	2.93	2.24
LM2595T-ADJ-ND	Adj. Power Converter, 150KHz, 1A, Step Down Volt. Reg.	TO-220	3.85	2.93	2.24
LM2595T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-5	3.85	2.93	2.24
LM2595T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-5	3.85	2.93	2.24
LM2595T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-5	3.85	2.93	2.24
LM2596S-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-5	4.30	3.27	2.50
LM2596S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-5	4.30	3.27	2.50
LM2596S-5.0-ND	5V, Power Converter 150kHz 3A Step Down V Regulator	TO-263	4.30	3.27	2.50
LM2596S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-5	4.30	3.27	2.50
LM2596SX-5.0TR-ND	5V, Power Converter 150kHz 3A Step Down V Regulator	TO-263	1096.50/500		
LM2596T-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2596T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2596T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2596T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-5	4.30	3.27	2.50
LM2597HVM-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.75	3.61	2.76
LM2597HVM-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.75	3.61	2.76
LM2597HVM-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.75	3.61	2.76
LM2597HVM-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	4.75	3.61	2.76
LM2597HVN-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597HVN-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597HVN-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597HVN-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	4.75	3.61	2.76
LM2597M-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	3.78	2.87	2.19
LM2597M-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	3.78	2.87	2.19
LM2597M-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	3.78	2.87	2.19
LM2597M-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-SOIC	3.78	2.87	2.19
LM2597N-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2597N-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2597N-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2597N-12-ND	12V, Simple Switcher Power Converter, 150kHz, 0.5A, Step Down Voltage Regulator	8-Dip	3.78	2.87	2.19
LM2598S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-7	4.45	3.39	2.59
LM2598S-5.0-ND	5V, Pwr. Converter, 150KHz, 1A, Step Down V Regulator	TO-263	4.45	3.39	2.59
LM2598S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-263-7	4.45	3.39	2.59
LM2598T-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59
LM2598T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59
LM2598T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59
LM2598T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 1A, Step Down Voltage Regulator	TO-220-7	4.45	3.39	2.59
LM2599S-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98
LM2599S-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98
LM2599S-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98
LM2599S-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-263-7	5.13	3.90	2.98

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM2599T-ADJ-ND	Adj. Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2599T-3.3-ND	3.3V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2599T-5.0-ND	5V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2599T-12-ND	12V, Simple Switcher Power Converter, 150kHz, 3A, Step Down Voltage Regulator	TO-220-7	5.13	3.90	2.98
LM2621MMCT-ND	Low Input Step Up DC-DC Converter	8-MSOP	4.25	3.23	2.47
LM2621MMTR-ND	Low Input Step Up DC-DC Converter	8-MSOP	2142.00/1,000		
LM2622MM-ADJCT-ND	600kHz/1.3MHz Step-up PWM DC/DC Converter	8-MSOP	4.63	3.52	2.69
LM2622MM-ADJTR-ND	600kHz/1.3MHz Step-up PWM DC/DC Converter	8-MSOP	2331.00/1,000		
LM2635M-ND	5-Bit Programmable Synch. Buck Reg. Controller	20-SOIC	3.85	2.93	2.24
LM2635MXTR-ND	5-Bit Programmable Synch. Buck Reg. Controller	20-SOIC	1940.40/1,000		
LM2636M-ND	5-Bit Program Synch. Buck Reg Controller	20-SOIC	3.80	2.89	2.21
LM2636MTC-ND	5-Bit Program Synch. Buck Reg Controller	20-TSSOP	3.80	2.89	2.21
LM2637M-ND	Motherboard Power Supply Solution	24-SOIC	5.00	3.80	2.90
LM2638M-ND	Motherboard Power Supply Solution	24-SOIC	5.00	3.80	2.90
LM2639M-ND	5-Bit Program, Hi Freq. Multiphase PWM Controller	24-SOIC	5.69	4.50	3.61
LM2640MTC-ADJ-ND	Dual Adj. Step Down Switching Power Supply Controller, Switch. Freq. 200KHz	28-TSSOP	6.99	5.53	4.43
LM2641MTC-ADJ-ND	Dual Adj. Step Down Switching Power Supply Controller, Switch. Freq. 300KHz	28-TSSOP	6.99	5.53	4.43
LM2650M-ADJ-ND	Synchronous Step Down DC/DC Converter	24-SOIC	6.99	5.53	4.43
LM2651MTC-ADJ-ND	Adj. 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2651MTC-1.8-ND	1.8V, 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2651MTC-2.5-ND	2.5V, 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2651MTC-3.3-ND	3.3V, 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	5.88	4.65	3.73
LM2653MTC-ADJ-ND	Adj. 1.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	6.28	4.97	3.98
LM2655MTC-ADJ-ND	Adj. 2.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	6.28	4.97	3.98
LM2655MTC-3.3-ND	3.3V, 2.5A, High Efficiency Synch. Switching Reg.	16-TSSOP	6.28	4.97	3.98
LM2660M-ND	100mA, Switched Capacitor Converter	8-SOIC	1.98	1.48	1.09
LM2660MMCT-ND	100mA, Switched Capacitor Converter	8-MSOP	1.98	1.48	1.09
LM2660MMTR-ND	100mA, Switched Capacitor Converter	8-MSOP	819.20/1,000		
LM2661M-ND	100mA, Switched Capacitor Converter with Shutdown	8-SOIC	1.98	1.48	1.09
LM2661MMCT-ND	100mA, Switched Capacitor Converter with Shutdown	8-MSOP	1.98	1.48	1.09
LM2661MMTR-ND	100mA, Switched Capacitor Converter with Shutdown	8-MSOP	819.20/1,000		
LM2662M-ND	Switched Capacitor Voltage Converter	8-SOIC	2.55	1.94	1.48
LM2663M-ND	Switched Capacitor Voltage Converter	8-SOIC	2.55	1.94	1.48
LM2664M6CT-ND	Switched Capacitor Voltage Converter, 91% Eff.	SOT-23-6	1.28	.94	.68
LM2664M6TR-ND	Switched Capacitor Voltage Converter, 91% Eff.	SOT-23-6	442.00/1,000		
LM2665M6CT-ND	Switched Capacitor Voltage Converter, 90% Eff.	SOT-23-6	1.28	.94	.68
LM2665M6TR-ND	Switched Capacitor Voltage Converter, 90% Eff.	SOT-23-6	442.00/1,000		
LM2670S-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670S-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down V Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670S-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down V Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670S-12-ND	12V, Simple Switcher High Efficiency 3A Step Down V Regulator with Synch.	TO-263-7	6.11	4.84	3.88
LM2670T-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2670T-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2670T-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2670T-12-ND	12V, Simple Switcher High Efficiency 3A Step Down Regulator with Synch.	TO-220-7	6.11	4.84	3.88
LM2671M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-SOIC	4.00	3.04	2.32
LM2671M-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-SOIC	4.00	3.04	2.32
LM2671M-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-SOIC	4.00	3.04	2.32
LM2671M-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-SOIC	4.00	3.04	2.32
LM2671N-ADJ-ND	Adj. Simple Switcher Power Converter High Effieciency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2671N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2671N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2671N-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	4.00	3.04	2.32
LM2672M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-SOIC	6.00	4.56	3.48
LM2672M-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-SOIC	6.00	4.56	3.48
LM2672M-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-SOIC	6.00	4.56	3.48
LM2672M-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-SOIC	6.00	4.56	3.48
LM2672N-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2672N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2672N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2672N-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	6.00	4.56	3.48
LM2673S-ADJ-ND	Adj. Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673S-3.3-ND	3.3V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673S-5.0-ND	5V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673S-12-ND	12V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-263-7	6.11	4.84	3.88
LM2673T-ADJ-ND	Adj. Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM2673T-3.3-ND	3.3V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88
LM2673T-5.0-ND	5V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88
LM2673T-12-ND	12V, Simple Switcher 3A Step Down Voltage Regulator with Adj. Current Limit	TO-220-7	6.11	4.84	3.88
LM2674M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-SOIC	3.30	2.51	1.92
LM2674M-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-SOIC	3.30	2.51	1.92
LM2674M-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-SOIC	3.30	2.51	1.92
LM2674N-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2674N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2674N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2674N-12-ND	12V, Simple Switcher Power Converter High Efficiency 500mA Step Down Voltage Regulator	8-Dip	3.30	2.51	1.92
LM2675M-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-SOIC	5.45	4.15	3.17
LM2675M-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-SOIC	5.45	4.15	3.17
LM2675M-5.0-ND	5V, High-Efficiency Switcher, 1A, Step-Down Voltage Regulator	8-SOIC	5.45	4.15	3.17
LM2675M-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-SOIC	5.45	4.15	3.17
LM2675N-ADJ-ND	Adj. Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2675N-3.3-ND	3.3V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2675N-5.0-ND	5V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2675N-12-ND	12V, Simple Switcher Power Converter High Efficiency 1A Step Down Voltage Regulator	8-Dip	5.35	4.07	3.11
LM2676S-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676S-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676S-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676S-12-ND	12V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-263-7	5.57	4.40	3.53
LM2676T-ADJ-ND	Adj. Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2676T-3.3-ND	3.3V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2676T-5.0-ND	5V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2676T-12-ND	12V, Simple Switcher High Efficiency 3A Step Down Voltage Regulator	TO-220-7	5.57	4.40	3.53
LM2677S-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677S-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677S-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677S-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-263-7	7.37	5.83	4.67
LM2677T-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2677T-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2677T-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2677T-12-ND	12V, Simple Switcher High Efficiency 5A Step-Dow Voltage Regulator with Synch.	TO-220-7	7.37	5.83	4.67
LM2678S-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-263-7	6.97	5.52	4.42
LM2678S-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-263-7	6.97	5.52	4.42
LM2678S-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-263-7	6.97	5.52	4.42
LM2678T-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-220-7	6.97	5.52	4.42
LM2678T-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-220-7	6.97	5.52	4.42
LM2678T-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Voltage Regulator	TO-220-7	6.97	5.52	4.42
LM2679S-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679S-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679S-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679S-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-263-7	7.37	5.83	4.67
LM2679T-ADJ-ND	Adj. Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67
LM2679T-3.3-ND	3.3V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67
LM2679T-5.0-ND	5V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67
LM2679T-12-ND	12V, Simple Switcher High Efficiency 5A Step Down Regulator with Adj. Current Limit	TO-220-7	7.37	5.83	4.67
LM2681M6CT-ND	Switched Capacitor Volt Converter	SOT-23-6	1.16	.86	.62
LM2681M6TR-ND	Switched Capacitor Volt Converter	SOT-23-6	403.00/1,000		
LM2682M-ND	Switched Capacitor Volt Doubling Inverter	8-SOIC	1.67	1.25	.92
LM2682MMCT-ND	Switched Capacitor Volt Doubling Inverter	8-MSOP	1.67	1.25	.92
LM2682MMTR-ND	Switched Capacitor Volt Doubling Inverter	8-MSOP	691.20/1,000		

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM2685MTC-ND	Dual Output Regulated Switched Capacitor V. Conv.	14-TSSOP	2.91	2.17	1.60
LM2686MTC-ND	Regulated Switched Capacitor Volt Converter	14-TSSOP	2.88	2.14	1.59
LM2687MMCT-ND	Low Noise Regulated Switched Capacitor V. Conv.	8-MSOP	2.36	1.75	1.30
LM2687MMTR-ND	Low Noise Regulated Switched Capacitor V. Conv.	8-MSOP	972.80/1,000		
LM2765M6CT-ND	Switched Capacitor Volt Converter	SOT-23-6	1.05	.77	.56
LM2765M6TR-ND	Switched Capacitor Volt Converter	SOT-23-6	364.00/1,000		
LM2767M5CT-ND	Switched Capacitor Volt Converter	SOT-23-6	1.01	.75	.54
LM2767M5TR-ND	Switched Capacitor Volt Converter	SOT-23-6	351.00/1,000		
LM2825HN-ADJ-ND	Adj. Integrated Power Supply 1A DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2825N-ADJ-ND	Adj. DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2825N-3.3-ND	3.3V, Integrated Power Supply 1A DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2825N-5.0-ND	5V, Integrated Power Supply 1A DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2825N-12-ND	12V, Integrated Power Supply 1A DC/DC Converter	24-Dip	15.00	14.00	13.00
LM2876T-ND	High Performance 40W Audio Pwr Amp with Mute	TO-220-11	4.30	3.27	2.50
LM2876TF-ND	High-Performance 40W Audio Power Amp with Mute	TF11B	4.75	3.61	2.76
LM2901M-ND	Quad Voltage Comparator	14-SOIC	.44	.32	.24
LM2901MXTR-ND	Quad Voltage Comparator	14-SOIC	280.00/2,500		
LM2901NNS-ND	Quad Voltage Comparator	14-Dip	.44	.32	.24
LM2902M-ND	Low Power Quad Op Amp	14-SOIC	.44	.32	.24
LM2902MXTR-ND	Low Power Quad Op Amp	14-SOIC	280.00/2,500		
LM2902NNS-ND	Low Power Quad Op Amp	14-Dip	.44	.32	.24
LM2903MNS-ND	Dual Comparator	8-SOIC	.44	.32	.24
LM2903MXTR-ND	Dual Comparator	8-SOIC	280.00/2,500		
LM2903NNS-ND	Dual Comparator	8-Dip	.44	.32	.24
LM2904MNS-ND	Low Power Dual Op Amp	8-SOIC	.44	.32	.24
LM2904NNS-ND	Dual Op Amp	8-Dip	.44	.32	.24
LM2907M-8-ND	Frequency-to-Voltage Converter *NEW!*	8-SOIC	2.02	1.50	1.11
LM2907N-ND	Frequency-to-Voltage Converter	14-Dip	2.02	1.50	1.11
LM2907N-8-ND	Frequency-to-Voltage Converter	8-Dip	2.02	1.50	1.11
LM2917M-ND	Frequency-to-Voltage Converter	14-SOIC	2.26	1.68	1.25
LM2917M-8-ND	Frequency-to-Voltage Converter *NEW!*	8-SOIC	2.26	1.68	1.25
LM2917N-ND	Frequency-to-Voltage Converter	14-Dip	2.51	1.87	1.38
LM2917N-8-ND	Frequency-to-Voltage Converter	8-Dip	2.51	1.87	1.38
LM2930S-5.0-ND	5V, 3-Terminal Positive Regulator	TO-263	1.64	1.22	.91
LM2930S-8.0-ND	8V, 3-Terminal Positive Regulator	TO-263	1.64	1.22	.91
LM2930T-5.0-ND	5V, 150mA Positive Regulator	TO-220	1.58	1.16	.84
LM2930T-8.0-ND	8V, 150mA Positive Regulator	TO-220	1.58	1.16	.84
LM2931AM-5.0-ND	5V, Low Dropout Regulator	8-SOIC	1.04	.75	.55
LM2931AMX-5.0TR-ND	5V, Low Dropout Regulator	8-SOIC	764.75/2,500		
LM2931AS-5.0-ND	5V, Series Low Dropout Regulator	TO-263	1.80	1.32	.96
LM2931AT-5.0-ND	5V, Low Dropout Regulator	TO-220	1.09	.80	.58
LM2931AZ-5.0-ND	5V, Low Dropout Regulator	TO-92	.94	.69	.50
LM2931CM-ND	Series Low Dropout Regulator	8-SOIC	.99	.72	.52
LM2931CMXTR-ND	Series Low Dropout Regulator	8-SOIC	731.50/2,500		
LM2931CS-ND	Series Low Dropout Regulator	TO-263-5	1.65	1.21	.88
LM2931CT-ND	Low Dropout (0.6V) Pos Adjustable Regulator	TO-220-5	1.24	.91	.66
LM2931M-5.0-ND	5V, Low Dropout (0.6V) Regulator	8-SOIC	1.08	.78	.57
LM2931MX-5.0TR-ND	5V, Low Dropout (0.6V) Regulator	8-SOIC	798.00/2,500		
LM2931S-5.0-ND	5V, Series Low Dropout Regulator	TO-263	1.65	1.21	.88
LM2931T-5.0-ND	5V, 100µA Low Dropout (0.6V) Regulator	TO-220	1.13	.83	.60
LM2931Z-5.0-ND	5V, 100µA Low Dropout (0.6V) Regulator	TO-92	.86	.62	.45
LM2936M-5.0-ND	5V, Ultra Low Current Regulator	8-SOIC	2.20	1.64	1.21
LM2936MX-5.0TR-ND	5V, Ultra Low Current Regulator	8-SOIC	2312.50/2,500		
LM2936Z-5.0-ND	5V, Ultra Low Current Regulator	TO-92	2.54	1.89	1.40
LM2937ES-2.5-ND	2.5V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-3.3-ND	3.3V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-5.0-ND	5V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-8.0-ND	8V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-10-ND	10V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-12-ND	12V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ES-15-ND	15V, 500mA Low Dropout Regulator	TO-263	2.05	1.52	1.13
LM2937ESX-5.0TR-ND	5V, 500mA Low Dropout Regulator	TO-263	429.00/500		
LM2937ET-2.5-ND	2.5V, 500mA Low Dropout Regulator	TO-220	1.84	1.35	.98
LM2937ET-3.3-ND	3.3V, 500mA Low Dropout Regulator	TO-220	1.84	1.35	.98
LM2937ET-5.0-ND	5V, 500mA High Temp Regulator	TO-220	1.84	1.35	.98
LM2937ET-8.0-ND	8V, 500mA High Temp Voltage Regulator	TO-220	1.84	1.35	.98
LM2937ET-10-ND	10V, 500mA High Temp Voltage Regulator	TO-220	1.84	1.35	.98
LM2937ET-12-ND	12V, 500mA High Temp Voltage Regulator	TO-220	1.84	1.35	.98
LM2937IMP-2.5CT-ND	2.5V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-2.5TR-ND	2.5V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-3.3CT-ND	3.3V, 500mA Low Dropout Regulator	SOT-223	1.80	1.34	.99
LM2937IMP-3.3TR-ND	3.3V, 500mA Low Dropout Regulator	SOT-223	742.40/1,000		
LM2937IMP-5.0CT-ND	5V, 400mA Low Dropout Regulator	SOT-223	1.80	1.34	.99
LM2937IMP-5.0TR-ND	5V, 400mA Low Dropout Regulator	SOT-223	742.40/1,000		
LM2937IMP-8.0CT-ND	8V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-8.0TR-ND	8V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-10CT-ND	10V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-10TR-ND	10V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-12CT-ND	12V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-12TR-ND	12V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2937IMP-15CT-ND	15V, 500mA Low Dropout Regulator	SOT-223-4	1.80	1.34	.99
LM2937IMP-15TR-ND	15V, 500mA Low Dropout Regulator	SOT-223-4	742.40/1,000		
LM2940CS-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	1.20	.88	.64
LM2940CS-9.0-ND	9V, 1A Low Dropout Regulator	TO-263	1.20	.88	.64
LM2940CS-12-ND	12V, 1A Low Dropout Regulator	TO-263	1.20	.88	.64
LM2940CS-15-ND	15V, 1A Low Dropout Regulator	TO-263	1.20	.88	.64
LM2940CSX-5.0TR-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	212.80/500		
LM2940CT-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-220	1.65	1.21	.88
LM2940CT-9.0-ND	9V, 1A Low Dropout Regulator	TO-220	1.65	1.21	.88
LM2940CT-12-ND	12V, 1A Low Dropout Voltage Regulator	TO-220	1.65	1.21	.88
LM2940CT-15-ND	15V, 1A Low Dropout Voltage Regulator	TO-220	1.65	1.21	.88
LM2940IMP-5.0CT-ND	5V, 1A Low Dropout Regulator	SOT-223	2.08	1.55	1.14
LM2940IMP-5.0TR-ND	5V, 1A Low Dropout Regulator	SOT-223	857.60/1,000		
LM2940IMP-8.0CT-ND	8V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-8.0TR-ND	8V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-9.0CT-ND	9V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-9.0TR-ND	9V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-10CT-ND	10V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-10TR-ND	10V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-12CT-ND	12V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM2940IMP-12TR-ND	12V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940IMP-15CT-ND	15V, 1A Low Dropout Regulator	SOT-223-4	2.08	1.55	1.14
LM2940IMP-15TR-ND	15V, 1A Low Dropout Regulator	SOT-223-4	857.60/1,000		
LM2940S-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	1.71	1.27	.94
LM2940S-8.0-ND	8V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940S-9.0-ND	9V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940S-10-ND	10V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940S-12-ND	12V, 1A Low Dropout Regulator	TO-263	1.71	1.27	.94
LM2940SX-5.0TR-ND	5V, 1A Low Dropout Voltage Regulator	TO-263	357.50/500		
LM2940T-5.0-ND	5V, 1A Low Dropout Voltage Regulator	TO-220	1.69	1.24	.90
LM2940T-8.0-ND	8V, 1A Low Dropout Voltage Regulator	TO-220	1.69	1.24	.90
LM2940T-9.0-ND	9V, 1A Low Dropout Voltage Regulator	TO-220	1.69	1.24	.90
LM2940T-10.0-ND	10V, 1A Low Dropout Voltage Regulator	TO-220	1.69	1.24	.90
LM2940T-12.0-ND	12V, 1A Low Dropout Voltage Regulator	TO-220	1.69	1.24	.90
LM2941CS-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-263	1.98	1.48	1.09
LM2941CSXTR-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-263	416.00/500		
LM2941CT-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-220	1.83	1.36	1.01
LM2941S-ND	Adjustable 1A Low Dropout Voltage Regulator *NEW!*	TO-263-5	1.58	1.18	.87
LM2941SXTR-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-263	331.50/500		
LM2941T-ND	Adjustable 1A Low Dropout Voltage Regulator	TO-220	1.92	1.43	1.06
LM2990S-5.0-ND	5V, Negative Low Dropout Regulator	TO-263	2.65	2.02	1.54
LM2990S-12-ND	12V, Negative Low Dropout Regulator	TO-263	2.65	2.02	1.54
LM2990S-15-ND	15V, Negative Low Dropout Regulator	TO-263	2.65	2.02	1.54
LM2990T-5.0-ND	5V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2990T-5.2-ND	5.2V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2990T-12-ND	12V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2990T-15-ND	15V, Negative Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM2991S-ND	Neg. Adjustable Low Dropout Voltage Regulator *NEW!*	TO-263-5	2.65	2.02	1.54
LM2991T-ND	1A Neg. Adjustable Low Dropout Voltage Regulator	TO-220	3.01	2.24	1.65
LM3302N-ND	Quad Comparator	14-Dip	.99	.72	.52
LM3350MMCT-ND	Switched Capacitor Voltage Converter, 90% Eff.	8-MSOP	2.11	1.57	1.16
LM3350MMTR-ND	Switched Capacitor Voltage Converter, 90% Eff.	8-MSOP	870.40/1,000		
LM3351MMCT-ND	Switched Capacitor Voltage Converter, 95% Eff.	8-MSOP	2.11	1.57	1.16
LM3351MMTR-ND	Switched Capacitor Voltage Converter, 95% Eff.	8-MSOP	870.40/1,000		
LM3352MTC-2.5-ND	2.5V, Regulated 200mA Buck-Boost Switched Capacitor DC/DC Converter	16-TSSOP	3.75	2.85	2.18
LM3352MTC-3.0-ND	3V, Regulated 200mA Buck-Boost Switched Capacitor DC/DC Converter	16-TSSOP	3.75	2.85	2.18
LM3352MTC-3.3-ND	3.3V, Regulated 200mA Buck-Boost Switched Capacitor DC/DC Converter	16-TSSOP	3.75	2.85	2.18
LM3411AM5-3.3CT-ND	3.3V, Precision Secondary Reg/Driver, A Grade	SOT-23-5	1.80	1.34	.99
LM3411AM5-3.3TR-ND	3.3V, Precision Secondary Reg/Driver, A Grade	SOT-23-5	742.40/1,000		
LM3411AM5-5.0CT-ND	5V, Precision Secondary Reg/Driver, A Grade	SOT-23-5	1.80	1.34	.99
LM3411AM5-5.0TR-ND	5V, Precision Secondary Reg/Driver, A Grade	SOT-23-5	742.40/1,000		
LM3411M5-3.3CT-ND	3.3V, Precision Secondary Reg/Driver	SOT-23-5	1.61	1.19	.86
LM3411M5-3.3TR-ND	3.3V, Precision Secondary Reg/Driver	SOT-23-5	559.00/1,000		
LM3411M5-5.0CT-ND	5V, Precision Secondary Reg/Driver	SOT-23-5	1.61	1.19	.86
LM3411M5-5.0TR-ND	5V, Precision Secondary Reg/Driver	SOT-23-5	559.00/1,000		
LM3420AM5-8.2CT-ND	8.2V, Lithium-Ion Battery Charge Controller, A Grade	SOT-23-5	2.50	1.90	1.45
LM3420AM5-8.2TR-ND	8.2V, Lithium-Ion Battery Charge Controller, A Grade	SOT-23-5	1260.00/1,000		
LM3420AM5-8.4CT-ND	8.4V, Lithium-Ion Battery Charge Controller, A Grade	SOT-23-5	2.50	1.90	1.45
LM3420AM5-8.4TR-ND	8.4V, Lithium-Ion Battery Charge Controller, A Grade	SOT-23-5	1260.00/1,000		
LM3420AM5-16.8CT-ND	16.8V, Lithium-Ion Battery Charge Controller, A Grade	SOT-23-5	2.50	1.90	1.45
LM3420AM5-16.8TR-ND	16.8V, Lithium-Ion Battery Charge Controller, A Grade	SOT-23-5	1260.00/1,000		
LM3420M5-16.8CT-ND	16.8V, Lithium-Ion Battery Charge Controller	SOT-23-5	2.67	1.98	1.47
LM3420M5-16.8TR-ND	16.8V, Lithium-Ion Battery Charge Controller	SOT-23-5	1100.80/1,000		
LM3420M5-8.2CT-ND	8.2V, Lithium-Ion Battery Charge Controller	SOT-23-5	2.67	1.98	1.47
LM3420M5-8.2TR-ND	8.2V, Lithium-Ion Battery Charge Controller	SOT-23-5	1100.80/1,000		
LM3460M5-1.2CT-ND	1.2V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	2.45	1.82	1.35
LM3460M5-1.2TR-ND	1.2V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	1011.20/1,000		
LM3460M5-1.5CT-ND	1.5V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	2.45	1.82	1.35
LM3460M5-1.5TR-ND	1.5V, Precision Controller for GTLp and GTL Bus Termination	SOT-23-5	1011.20/1,000		
LM3477MMCT-ND	High Efficiency High Side N-Channel Controller For Switching Regulator	8-MSOP	3.93	2.99	2.28
LM3477MMTR-ND	High Efficiency High Side N-Channel Controller For Switching Regulator	8-MSOP	1978.20/1,000		
LM3478MMCT-ND	High Efficiency Low-Side N-Channel Controller for Switching Regulator	8-MSOP	3.93	2.99	2.28
LM3478MMTR-ND	High Efficiency Low-Side N-Channel Controller for Switching Regulator	8-MSOP	1978.20/1,000		
LM3480IM3X-12CT-ND	12V, 100mA Low Dropout Voltage Regulator	SOT-23	1.09	.80	.58
LM3480IM3X-12TR-ND	12V, 100mA Low Dropout Voltage Regulator	SOT-23	1109.25/3,000		
LM3480IM3-15CT-ND	15V, 100mA Low Dropout Voltage Regulator	SOT-23	1.09	.80	.58
LM3480IM3-15TR-ND	15V, 100mA Low Dropout Voltage Regulator	SOT-23	377.00/1,000		
LM3480IM3-3.3CT-ND	3.3V, 100mA Low Dropout Voltage Regulator	SOT-23	1.09	.80	.58
LM3480IM3-3.3TR-ND	3.3V, 100mA Low Dropout Voltage Regulator	SOT-23	377.00/1,000		
LM3480IM3-5.0CT-ND	5.0V, 100mA Low Dropout Voltage Regulator	SOT-23	1.09	.80	.58
LM3480IM3-5.0TR-ND	5.0V, 100mA Low Dropout Voltage Regulator	SOT-23	377.00/1,000		
LM3488MMCT-ND	High Efficiency High Low Side N-Channel Controller For Switching Regulators	8-MSOP	4.63	3.52	2.69
LM3488MMTR-ND	High Efficiency High Low Side N-Channel Controller For Switching Regulators	8-MSOP	2331.00/1,000		
LM3490IM5-3.3CT-ND	3.3V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-3.3TR-ND	3.3V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		
LM3490IM5-5.0CT-ND	5V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-5.0TR-ND	5V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		
LM3490IM5-12CT-ND	12V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-12TR-ND	12V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		
LM3490IM5-15CT-ND	15V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	1.28	.94	.68
LM3490IM5-15TR-ND	15V, 100mA Quasi LDO Linear Voltage Regulator with Logic-Controlled ON/OFF	SOT-23-5	442.00/1,000		

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM3524DM-ND	Regulating Pulse Width Modulator	16	1.46	1.08	.78
LM3524DN-ND	Regulating Pulse Width Modulator	16-Dip	1.46	1.08	.78
LM3525M-H-ND	Single Port USB Power Switch & Over-Current Protection	8-SOIC	1.92	1.43	1.06
LM3525M-L-ND	Single Port USB Power Switch & Over-Current Protection	8-SOIC	1.92	1.43	1.06
LM3526M-H-ND	Dual Port USB Power Switch & Over-Current Protection	8-SOIC	2.17	1.61	1.19
LM3526M-L-ND	Dual Port USB Power Switch & Over-Current Protection	8-SOIC	2.17	1.61	1.19
LM3578AM-ND	Switching Regulator	8-SOIC	1.92	1.43	1.06
LM3578AMXTR-ND	Switching Regulator	8-SOIC	1937.50/2,500		
LM3578AN-ND	Switching Regulator	8-Dip	1.92	1.43	1.06
LM3620M5-4CT-ND	4V, Lithium-Ion Battery Charger Controller	SOT-23-5	2.20	1.64	1.21
LM3620M5-4TR-ND	4V, Lithium-Ion Battery Charger Controller	SOT-23-5	908.80/1,000		
LM3620M5-8CT-ND	8V, Lithium-Ion Battery Charger Controller	SOT-23-5	2.20	1.64	1.21
LM3620M5-8TR-ND	8V, Lithium-Ion Battery Charger Controller	SOT-23-5	908.80/1,000		
LM3621M-ND	Single Cell Lithium-Ion Battery Charger Controller	16-SOIC	3.73	2.84	2.17
LM3622AM-4.1-ND	4.1V, Lithium-Ion Battery Charger Controller	8-SOIC	2.98	2.27	1.73
LM3622AM-4.2-ND	4.2V, Lithium-Ion Battery Charger Controller	8-SOIC	2.98	2.27	1.73
LM3622AM-8.2-ND	8.2V, Lithium-Ion Battery Charger Controller	8-SOIC	2.98	2.27	1.73
LM3622AM-8.4-ND	8.4V, Lithium-Ion Battery Charger Controller	8-SOIC	2.98	2.27	1.73
LM3622M-4.1-ND	4.1V, Lithium-Ion Battery Charger Controller	8-SOIC	2.79	2.07	1.53
LM3622M-4.2-ND	4.2V, Lithium-Ion Battery Charger Controller	8-SOIC	2.79	2.07	1.53
LM3622M-8.2-ND	8.2V, Lithium-Ion Battery Charger Controller	8-SOIC	2.79	2.07	1.53
LM3622M-8.4-ND	8.4V, Lithium-Ion Battery Charger Controller	8-SOIC	2.79	2.07	1.53
LM3647IM-ND	Univ. Battery Charger for Li-Ion, Ni-MH, & Ni-Cd Batteries	20-SOIC	5.67	4.49	3.60
LM3647-EVAL-ND	Evaluation Board for LM3647	EVAL BOARD	150.00	140.00	130.00
LM3812M-1.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, High Side	8-SOIC	3.58	2.72	2.08
LM3812M-7.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, High Side	8-SOIC	3.58	2.72	2.08
LM3813M-1.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, Low Side	8-SOIC	3.58	2.72	2.08
LM3813M-7.0-ND	Precision Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, Low Side	8-SOIC	3.58	2.72	2.08
LM3814M-1.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, High Side	8-SOIC	3.58	2.72	2.08
LM3814M-7.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, High Side	8-SOIC	3.58	2.72	2.08
LM3815M-1.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, Low Side	8-SOIC	3.58	2.72	2.08
LM3815M-7.0-ND	Fast Current Gauge IC with Ultra Low Loss Sense Element and PWM Output, Low Side	8-SOIC	3.58	2.72	2.08
LM3822MM-1.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, High Side	8-MSOP	2.85	2.17	1.66
LM3822MM-1.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, High Side	8-MSOP	1436.40/1,000		
LM3822MM-2.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, High Side	8-MSOP	2.85	2.17	1.66
LM3822MM-2.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, High Side	8-MSOP	1436.40/1,000		
LM3824MM-1.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, Low Side	8-MSOP	2.85	2.17	1.66
LM3824MM-1.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, Low Side	8-MSOP	1436.40/1,000		
LM3824MM-2.0CT-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, Low Side	8-MSOP	2.85	2.17	1.66
LM3824MM-2.0TR-ND	Precision Current Gauge IC with Internal Zero Ohm Sense Element and PWM Output, Low Side	8-MSOP	1436.40/1,000		
LM3875T-ND	High Power 40W Audio Power Amp	TO-220-11	5.70	4.34	3.31
LM3875TF-ND	High Power 40W Audio Power Amp	TO-220	5.81	4.34	3.31
LM3876T-ND	High Power 40W Audio Power Amp with Mute	TO-220-11	5.23	3.98	3.04
LM3876TF-ND	High Performance 56W Audio Pwr Amp with Mute	TO-220-11	5.35	4.07	3.11
LM3886T-ND	68W Audio Amp with Mute	TO-220-11	5.23	3.98	3.04
LM3886TF-ND	68W Audio Amp with Mute	TO-220-11	5.35	4.07	3.11
LM3914N-1-ND	Dot/Bar Display Driver	18-Dip	2.91	2.17	1.60
LM3914V-ND	Dot/Bar Graph Display Driver	20-PLCC	3.13	2.38	1.82
LM3915N-1-ND	Dot/Bar Display Driver	18-Dip	2.91	2.17	1.60
LM3916N-1-ND	Dot/Bar Display Driver	18-Dip	2.98	2.21	1.64
LM3940IMP-3.3CT-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	SOT-223	2.11	1.57	1.16
LM3940IMP-3.3TR-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	SOT-223	870.40/1,000		
LM3940IS-3.3-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	TO-263	2.51	1.87	1.38
LM3940ISX-3.3TR-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	TO-263	526.50/500		
LM3940IT-3.3-ND	1A Low Dropout Regulator for 5V to 3.3V Conversion	TO-220	2.51	1.87	1.38
LM4040AIM3-2.5CT-ND	2.5V, Voltage Reference ±.1%	SOT-23	2.39	1.78	1.31
LM4040AIM3-2.5TR-ND	2.5V, Voltage Reference ±.1%	SOT-23	985.60/1,000		
LM4040AIM3-4.1CT-ND	4.1V, Precision Micropower Shunt V. Reference	SOT-23	2.39	1.78	1.31
LM4040AIM3-4.1TR-ND	4.1V, Precision Micropower Shunt V. Reference	SOT-23	985.60/1,000		
LM4040AIM3-5.0CT-ND	5V, Voltage Reference ±.1%	SOT-23	2.39	1.78	1.31
LM4040AIM3-5.0TR-ND	5V, Voltage Reference ±.1%	SOT-23	985.60/1,000		
LM4040AIM3-8.2CT-ND	8.2V, Precision Micropower Shunt V. Reference	SOT-23	2.39	1.78	1.31
LM4040AIM3-8.2TR-ND	8.2V, Precision Micropower Shunt V. Reference	SOT-23	985.60/1,000		
LM4040AIM3-10.0CT-ND	10V, Voltage Reference ±.1%	SOT-23	2.39	1.78	1.31
LM4040AIM3-10.0TR-ND	10V, Voltage Reference ±.1%	SOT-23	985.60/1,000		
LM4040AIM3X-10CT-ND	10V, Voltage Reference ±.1%	SOT-23	2.39	1.78	1.31
LM4040AIM3X-10TR-ND	10V, Voltage Reference ±.1%	SOT-23	2887.50/3,000		
LM4040AIZ-2.5-ND	2.5V, Voltage Reference ±.1%	TO-92	2.39	1.78	1.31
LM4040AIZ-4.1-ND	4.1V, Voltage Reference ±.1%	TO-92	2.39	1.78	1.31
LM4040AIZ-5.0-ND	5V, Voltage Reference ±.1%	TO-92	2.39	1.78	1.31
LM4040AIZ-10.0-ND	10V, Voltage Reference ±.1%	TO-92	2.39	1.78	1.31
LM4040BIM3-2.5CT-ND	2.5V, Voltage Reference ±.2%	SOT-23	1.58	1.18	.87
LM4040BIM3-2.5TR-ND	2.5V, Voltage Reference ±.2%	SOT-230	652.80/1,000		
LM4040BIM3-4.1CT-ND	4.1V, Voltage Reference ±.2%	SOT-23	1.58	1.18	.87
LM4040BIM3-4.1TR-ND	4.1V, Voltage Reference ±.2%	SOT-23	652.80/1,000		
LM4040BIM3-5.0CT-ND	5V, Voltage Reference ±.2%	SOT-23	1.58	1.18	.87
LM4040BIM3-5.0TR-ND	5V, Voltage Reference ±.2%	SOT-23	652.80/1,000		
LM4040BIM3-8.2CT-ND	8.2V, Precision Micropower Shunt Voltage Reference	SOT-23	1.58	1.18	.87
LM4040BIM3-8.2TR-ND	8.2V, Precision Micropower Shunt Voltage Reference	SOT-23	652.80/1,000		
LM4040BIM3-10.0CT-ND	10V, Voltage Reference ±.2%	SOT-23	1.58	1.18	.87
LM4040BIM3-10.0TR-ND	10V, Voltage Reference ±.2%	SOT-23	652.80/1,000		
LM4040BIZ-2.5-ND	2.5V, Voltage Reference ±.2%	TO-92	1.58	1.18	.87
LM4040BIZ-4.1-ND	4.1V, Precision Micropower Shunt Voltage Reference	TO-92	1.58	1.18	.87
LM4040BIZ-5.0-ND	5V, Precision Micropower Shunt Voltage Reference	TO-92	1.58	1.18	.87
LM4040CIM3-2.5CT-ND	2.5V, Voltage Reference ±.5%	SOT-23	1.31	.97	.70

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM4040CIM3-2.5TR-ND	2.5V, Voltage Reference ±.5%	SOT-23	455.00/1,000		
LM4040CIM3-4.1CT-ND	4.1V, Voltage Reference ±.5%	SOT-23	1.31	.97	.70
LM4040CIM3-4.1TR-ND	4.1V, Voltage Reference ±.5%	SOT-23	455.00/1,000		
LM4040CIM3-5.0CT-ND	5V, Voltage Reference ±.5%	SOT-23	1.31	.97	.70
LM4040CIM3-5.0TR-ND	5V, Voltage Reference ±.5%	SOT-23	455.00/1,000		
LM4040CIM3-8.2CT-ND	8.2V, Voltage Reference ±.5%	SOT-23	1.31	.97	.70
LM4040CIM3-8.2TR-ND	8.2V, Voltage Reference ±.5%	SOT-23	455.00/1,000		
LM4040CIM3-10.0CT-ND	10V, Precision Micropower Shunt Volt. Reference	SOT-23	1.31	.97	.70
LM4040CIM3-10.0TR-ND	10V, Precision Micropower Shunt Volt. Reference	SOT-23	455.00/1,000		
LM4040CIM3X-10CT-ND	10V, Voltage Reference ±.5%	SOT-23	1.31	.97	.70
LM4040CIM3X-10TR-ND	10V, Voltage Reference ±.5%	SOT-23	1338.75/3,000		
LM4040CIZ-2.5-ND	2.5V, Voltage Reference ±.5%	TO-92	1.31	.97	.70
LM4040CIZ-4.1-ND	4.1V, Voltage Reference ±.5%	TO-92	1.31	.97	.70
LM4040CIZ-5.0-ND	5V, Voltage Reference ±.5%	TO-92	1.31	.97	.70
LM4040CIZ-8.2-ND	8.2V, Voltage Reference ±.5%	TO-92	1.31	.97	.70
LM4040CIZ-10.0-ND	10V, Voltage Reference ±.5%	TO-92	1.31	.97	.70
LM4040DEM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	1.31	.97	.70
LM4040DEM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	455.00/1,000		
LM4040DEM3-5.0CT-ND	5V, Voltage Reference ±1%	SOT-23	1.31	.97	.70
LM4040DEM3-5.0TR-ND	5V, Voltage Reference ±1%	SOT-23	455.00/1,000		
LM4040DIM3-2.5CT-ND	2.5V, Voltage Reference ±1%	SOT-23	1.09	.80	.58
LM4040DIM3-2.5TR-ND	2.5V, Voltage Reference ±1%	SOT-23	377.00/1,000		
LM4040DIM3-4.1CT-ND	4.1V, Voltage Reference ±1%	SOT-23	1.09	.80	.58
LM4040DIM3-4.1TR-ND	4.1V, Voltage Reference ±1%	SOT-23	377.00/1,000		
LM4040DIM3-5.0CT-ND	5V, Voltage Reference ±1%	SOT-23	1.09	.80	.58
LM4040DIM3-5.0TR-ND	5V, Voltage Reference ±1%	SOT-23	377.00/1,000		
LM4040DIM3-10.0CT-ND	10V, Voltage Reference ±1%	SOT-23	1.09	.80	.58
LM4040DIM3-10.0TR-ND	10V, Voltage Reference ±1%	SOT-23	377.00/1,000		
LM4040DIM3X-10CT-ND	10V, Voltage Reference ±1%	SOT-23	1.09	.80	.58
LM4040DIM3X-10TR-ND	10V, Voltage Reference ±1%	SOT-23	1109.25/3,000		
LM4040DIZ-2.5-ND	2.5V, Voltage Reference ±1%	TO-92	1.09	.80	.58
LM4040DIZ-4.1-ND	4.1V, Voltage Reference ±1%	TO-92	1.09	.80	.58
LM4040DIZ-5.0-ND	5V, Voltage Reference ±1%	TO-92	1.09	.80	.58
LM4040DIZ-8.2-ND	8.2V, Voltage Reference ±1%	TO-92	1.09	.80	.58
LM4040DIZ-10.0-ND	10V, Voltage Reference ±1%	TO-92	1.09	.80	.58
LM4040EEM3-2.5CT-ND	2.5V, Voltage Reference ±2%	SOT-23	1.05	.77	.56
LM4040EEM3-2.5TR-ND	2.5V, Voltage Reference ±2%	SOT-23	364.00/1,000		
LM4040EIM3-2.5CT-ND	2.5V, Voltage Reference ±2%	SOT-23	.99	.72	.52
LM4040EIM3-2.5TR-ND	2.5V, Voltage Reference ±2%	SOT-23	308.00/1,000		
LM4040EIZ-2.5-ND	2.5V, Voltage Reference ±2%	TO-92	.99	.72	.52
LM4041AIM3-1.2CT-ND	1.2V, Voltage Reference ±.1%	SOT-23	2.39	1.78	1.31
LM4041AIM3-1.2TR-ND	1.2V, Voltage Reference ±.1%	SOT-23	985.60/1,000		
LM4041AIZ-1.2-ND	1.2V, Voltage Reference	TO-92	2.39	1.78	1.31
LM4041BIZ-1.2-ND	1.2V, Voltage Reference	TO-92	1.58	1.18	.87
LM4041BIM3-1.2CT-ND	1.2V, Voltage Reference ±.2%	SOT-23	1.58	1.18	.87
LM4041BIM3-1.2TR-ND	1.2V, Voltage Reference ±.2%	SOT-23	652.80/1,000		
LM4041CEM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	1.54	1.13	.82
LM4041CEM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	533.00/1,000		
LM4041CEM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	1.54	1.13	.82
LM4041CEM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	533.00/1,000		
LM4041CIM3-1.2CT-ND	1.2V, Voltage Reference ±.5%	SOT-23	1.31	.97	.70
LM4041CIM3-1.2TR-ND	1.2V, Voltage Reference ±.5%	SOT-23	455.00/1,000		
LM4041CIM3-ADJCT-ND	Adj. Voltage Reference ±.5%	SOT-23	1.31	.97	.70
LM4041CIM3-ADJTR-ND	Adj. Voltage Reference ±.5%	SOT-23	455.00/1,000		
LM4041CIZ-1.2-ND	1.2V, Voltage Reference ±.5%	TO-92	1.31	.97	.70
LM4041CIZ-ADJ-ND	Adj. Voltage Reference ±.5%	TO-92	1.31	.97	.70
LM4041DEM3-ADJCT-ND	Adj. Precision Micropower Shunt Volt. Reference	SOT-23	1.31	.97	.70
LM4041DEM3-ADJTR-ND	Adj. Precision Micropower Shunt Volt. Reference	SOT-23	455.00/1,000		
LM4041DEM3-1.2CT-ND	1.2V, Precision Micropower Shunt Volt. Reference	SOT-23	1.31	.97	.70
LM4041DEM3-1.2TR-ND	1.2V, Precision Micropower Shunt Volt. Reference	SOT-23	455.00/1,000		
LM4041DIM3-1.2CT-ND	1.2V, Voltage Reference ±1.0%	SOT-23	1.09	.80	.58
LM4041DIM3-1.2TR-ND	1.2V, Voltage Reference ±1.0%	SOT-23	377.00/1,000		
LM4041DIM3-ADJCT-ND	Adj. Voltage Reference ±1.0%	SOT-23	1.09	.80	.58
LM4041DIM3-ADJTR-ND	Adj. Voltage Reference ±1.0%	SOT-23	377.00/1,000		
LM4041DIZ-ADJ-ND	Adj. Voltage Reference	TO-92	1.09	.80	.58
LM4041DIZ-1.2-ND	1.2V, Voltage Reference	TO-92	1.09	.80	.58
LM4041EEM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	1.05	.77	.56
LM4041EEM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	364.00/1,000		
LM4041EIM3-1.2CT-ND	1.2V, Voltage Reference ±2%	SOT-23	.99	.72	.52
LM4041EIM3-1.2TR-ND	1.2V, Voltage Reference ±2%	SOT-23	308.00/1,000		
LM4041EIZ-1.2-ND	1.2V, Voltage Reference	TO-92	.99	.72	.52
LM4050AIM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-4.1CT-ND	4.1V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-4.1TR-ND	4.1V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-5.0CT-ND	5V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-5.0TR-ND	5V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-8.2CT-ND	8.2V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-8.2TR-ND	8.2V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050AIM3-10CT-ND	10V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4050AIM3-10TR-ND	10V, Voltage Reference	SOT-23	1499.40/1,000		
LM4050BIM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-4.1CT-ND	4.1V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-4.1TR-ND	4.1V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-5.0CT-ND	5V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-5.0TR-ND	5V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-8.2CT-ND	8.2V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-8.2TR-ND	8.2V, Voltage Reference	SOT-23	998.40/1,000		
LM4050BIM3-10CT-ND	10V, Voltage Reference	SOT-23	2.42	1.80	1.33
LM4050BIM3-10TR-ND	10V, Voltage Reference	SOT-23	998.40/1,000		
LM4050CEM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.67	1.98	1.47
LM4050CEM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	1100.80/1,000		
LM4050CIM3-2.5CT-ND	2.5V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-2.5TR-ND	2.5V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-4.1CT-ND	4.1V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-4.1TR-ND	4.1V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-5.0CT-ND	5V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-5.0TR-ND	5V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-8.2CT-ND	8.2V, Voltage Reference	SOT-23	2.14	1.59	1.18

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LM4050CIM3-8.2TR-ND	8.2V, Voltage Reference	SOT-23	883.20/1,000		
LM4050CIM3-10CT-ND	10V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4050CIM3-10TR-ND	10V, Voltage Reference	SOT-23	883.20/1,000		
LM4051AIM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	2.98	2.27	1.73
LM4051AIM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	1499.40/1,000		
LM4051AIM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	2.98	2.27	1.73
LM4051AIM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	1499.40/1,000		
LM4051BIM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	2.36	1.75	1.30
LM4051BIM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	972.80/1,000		
LM4051BIM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	2.36	1.75	1.30
LM4051BIM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	972.80/1,000		
LM4051CIM3-ADJCT-ND	Adj. Voltage Reference	SOT-23	2.14	1.59	1.18
LM4051CIM3-ADJTR-ND	Adj. Voltage Reference	SOT-23	883.20/1,000		
LM4051CIM3-1.2CT-ND	1.2V, Voltage Reference	SOT-23	2.14	1.59	1.18
LM4051CIM3-1.2TR-ND	1.2V, Voltage Reference	SOT-23	883.20/1,000		
LM4120AIM5-1.8CT-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-1.8TR-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-2.0CT-ND	2V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-2.0TR-ND	2V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-2.5CT-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-2.5TR-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-3.0CT-ND	3V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-3.0TR-ND	3V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-3.3CT-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-3.3TR-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-4.1CT-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-4.1TR-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120AIM5-5.0CT-ND	5V, Precision Micropower LDO Reference	SOT-23-5	2.95	2.19	1.62
LM4120AIM5-5.0TR-ND	5V, Precision Micropower LDO Reference	SOT-23-5	1216.00/1,000		
LM4120IM5-1.8CT-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-1.8TR-ND	1.8V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-2.0CT-ND	2V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-2.0TR-ND	2V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-2.5CT-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-2.5TR-ND	2.5V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-3.0CT-ND	3V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-3.0TR-ND	3V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-3.3CT-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-3.3TR-ND	3.3V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-4.1CT-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-4.1TR-ND	4.1V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4120IM5-5.0CT-ND	5V, Precision Micropower LDO Reference	SOT-23-5	2.51	1.87	1.38
LM4120IM5-5.0TR-ND	5V, Precision Micropower LDO Reference	SOT-23-5	1036.80/1,000		
LM4121AIM5-ADJCT-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	2.95	2.19	1.62
LM4121AIM5-ADJTR-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	1216.00/1,000		
LM4121AIM5-1.2CT-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2.95	2.19	1.62
LM4121AIM5-1.2TR-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1216.00/1,000		
LM4121IM5-ADJCT-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	2.51	1.87	1.38
LM4121IM5-ADJTR-ND	Adj. Precision Micropower LDO Volt. Reference	SOT-23-5	1036.80/1,000		
LM4121IM5-1.2CT-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2.51	1.87	1.38
LM4121IM5-1.2TR-ND	1.2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1036.80/1,000		
LM4130AIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	6.99	5.53	4.43
LM4130AIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	4129.20/1,000		
LM4130AIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	6.99	5.53	4.43
LM4130AIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	4129.20/1,000		
LM4130AIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	6.99	5.53	4.43
LM4130AIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	4129.20/1,000		
LM4130BIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	5.70	4.34	3.31
LM4130BIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2872.80/1,000		
LM4130BIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	5.70	4.34	3.31
LM4130BIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	2872.80/1,000		
LM4130BIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	5.70	4.34	3.31
LM4130BIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	2872.80/1,000		
LM4130CIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	4.75	3.61	2.76
LM4130CIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	2394.00/1,000		
LM4130CIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	4.75	3.61	2.76
LM4130CIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	2394.00/1,000		
LM4130CIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	4.75	3.61	2.76
LM4130CIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	2394.00/1,000		
LM4130DIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.60	2.74	2.09
LM4130DIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1814.40/1,000		
LM4130DIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.60	2.74	2.09
LM4130DIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	1814.40/1,000		
LM4130DIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.60	2.74	2.09
LM4130DIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	1814.40/1,000		
LM4130EIM5-2.0CT-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.20	2.44	1.86
LM4130EIM5-2.0TR-ND	2V, Precision Micropower LDO Volt. Reference	SOT-23-5	1612.80/1,000		
LM4130EIM5-2.5CT-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.20	2.44	1.86
LM4130EIM5-2.5TR-ND	2.5V, Precision Micropower LDO Volt. Reference	SOT-23-5	1612.80/1,000		
LM4130EIM5-4.1CT-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	3.20	2.44	1.86
LM4130EIM5-4.1TR-ND	4.1V, Precision Micropower LDO Volt. Reference	SOT-23-5	1612.80/1,000		
LM4140BCM-1.0-ND	1V, Precision Micropower LDO Volt. Reference	8-SOIC	5.69	4.50	3.61
LM4140BCM-1.2-ND	1.2V, Precision Micropower LDO Volt. Reference	8-SOIC	5.69	4.50	3.61
LM4140BCM-2.0-ND	2V, Precision Micropower LDO Volt. Reference	8-SOIC	5.69	4.50	3.61
LM4140BCM-2.5-ND	2.5V, Precision Micropower LDO Volt. Reference	8-SOIC	5.69	4.50	3.61
LM4140BCM-4.1-ND	4.1V, Precision Micropower LDO Volt. Reference	8-SOIC	5.69	4.50	3.61
LM4140CCM-1.0-ND	1V, Precision Micropower LDO Volt. Reference	8-SOIC	5.70	4.34	3.31
LM4140CCM-1.2-ND	1.2V, Precision Micropower LDO Voltage Reference	8-SOIC	5.70	4.34	3.31
LM4140CCM-2.0-ND	2V, Precision Micropower LDO Voltage Reference	8-SOIC	5.70	4.34	3.31
LM4140CCM-2.5-ND	Precision Micropower LDO Voltage Reference	8-SOIC	5.70	4.34	3.31
LM4140CCM-4.1-ND	Precision Micropower LDO Voltage Reference	8-SOIC	5.70	4.34	3.31
LM4250CM-ND	Programmable Op Amp	8-SOIC	1.50	1.10	.80
LM4250CMXTR-ND	Programmable Op Amp	8-SOIC	1275.00/2,500		
LM4250CN-ND	Programmable Op Amp	8-Dip	1.54	1.13	.82
LM4431M3-2.5CT-ND	Precision Voltage Micropower Shunt Voltage Reference	SOT-23	1.13	.83	.60
LM4431M3-2.5TR-ND	Precision Voltage Micropower Shunt Voltage Reference	SOT-23	390.00/1,000		
LM4651N-ND	170W Class D Audio Power Amp Solution	28-Dip	6.49	5.13	4.11
LM4652TA-ND	170W Class D Audio Power Amp Solution	TO-220-15	5.48	4.34	3.48
LM4652TF-ND	170W Class D Audio Power Amp Solution	TO-220-15	5.48	4.34	3.48
LM4663MT-ND	2W Stereo Class D Audio Power Amp with Stereo Headphones Amp	24-TSSOP	3.60	2.74	2.09

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM4700T-ND	30W Audio Pwr Amp with Mute & Standby Modes	TO-220-11	4.28	3.25	2.48
LM4700TF-ND	Overture 30W Audio Power Amp with Mute/Standby	TO-220	4.40	3.35	2.56
LM4701T-ND	30W Audio Pwr Amp with Mute & Standby Modes	TO-220-9	2.78	2.11	1.61
LM4752T-ND	2 x 10 Watt Stereo Audio Amp	TO-220	2.67	1.98	1.47
LM4755T-ND	2 x 10 Watt Stereo Audio Amp with Mute	TO-220	2.67	1.98	1.47
LM4765T-ND	30W Audio Power Amp with Mute & Standby Modes	TO-220-15	4.75	3.61	2.76
LM4766T-ND	Dual 40W Audio Power Amp with Mute	TO-220-15	5.00	3.80	2.90
LM4766TF-ND	Dual 30 Watt Audio Power Amp with Mute	TO-220-15	5.00	3.80	2.90
LM4808M-ND	Dual 105mW Headphone Amp	8-SOIC	1.09	.80	.58
LM4808MMCT-ND	Dual 105mW Headphone Amp	8-MSOP	1.09	.80	.58
LM4808MMTR-ND	Dual 105mW Headphone Amp	8-MSOP	377.00/1,000		
LM4832M-ND	Digital Controlled Tone and Volume Circuit with Stereo Audio Power Amp	28-SOIC	5.96	4.72	3.78
LM4832N-ND	Digital Controlled Tone and Volume Circuit with Stereo Audio Power Amp	28-Dip	5.96	4.72	3.78
LM4834MS-ND	1.75W Audio Power Amp with DC Volume Control and Microphone Preamp	28-SSOP	4.75	3.61	2.76
LM4835MT-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	4.28	3.25	2.48
LM4835MTE-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	5.00	3.80	2.90
LM4836MT-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	4.28	3.25	2.48
LM4836MTE-ND	Stereo 2W Audio Power Amp with DC Volume Control and Selectable Gain	28-TSSOP	5.00	3.80	2.90
LM4860M-ND	Series 1W Audio Power Amp with Shutdown Mode	16-SOIC	1.74	1.29	.96
LM4861M-ND	1.1W Audio Power Amp with Shutdown Mode	8-SOIC	1.74	1.29	.96
LM4861MXTR-ND	1.1W Audio Power Amp with Shutdown Mode	8-SOIC	1750.00/2,500		
LM4862M-ND	675mW Audio Power Amp with Shutdown Mode	8-SOIC	1.64	1.22	.91
LM4863M-ND	Dual 2.2W Audio Amp Plus Headphone Function	16-SOIC	3.20	2.44	1.86
LM4863MT-ND	Dual 2.2W Audio Amp + Headphone Function	20-TSSOP	3.15	2.40	1.83
LM4863MTE-ND	Dual 2.2W Audio Amp + Headphone Function	20-TSSOP	3.60	2.74	2.09
LM4863N-ND	Dual 2.2W Audio Amp Plus Headphone Function	16-Dip	3.58	2.72	2.08
LM4864M-ND	300mW Audio Power Amp with Shutdown Mode	8-SOIC	1.58	1.16	.84
LM4864MMCT-ND	300mW Audio Power Amp with Shutdown Mode	8-MSOP	1.61	1.19	.86
LM4864MMTR-ND	300mW Audio Power Amp with Shutdown Mode	8-MSOP	559.00/1,000		
LM4864MMXTR-ND	300mW Audio Power Amp with Shutdown Mode	8-MSOP	1918.88/3,500		
LM4864N-ND	300mW Audio Power Amp with Shutdown Mode	8-Dip	1.58	1.16	.84
LM4865IBPCT-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MicroSMD	1.98	1.48	1.09
LM4865IBPTR-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MicroSMD	216.00/250		
LM4865M-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-SOIC	1.80	1.34	.99
LM4865MMCT-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MSOP	1.80	1.34	.99
LM4865MMTR-ND	750mW Audio Power Amp with DC Volume Control and Headphone Switch	8-MSOP	742.40/1,000		
LM4871M-ND	3W Audio Power Amp with Shutdown Mode	8-SOIC	1.61	1.19	.86
LM4871N-ND	3W Audio Power Amp with Shutdown Mode	8-Dip	1.77	1.32	.97
LM4872IBPCT-ND	1W Audio Power Amp in Micro SMD Pkg	8-MicroSMD	1.92	1.43	1.06
LM4872IBPTR-ND	1W Audio Power Amp in Micro SMD Pkg	8-MicroSMD	209.25/250		
LM4873MT-ND	Dual 2.1W Audio Amp + Stereo Headphone Function	20-TSSOP	2.85	2.17	1.66
LM4873MTE-ND	Dual 2.1W Audio Amp + Stereo Headphone Function	20-TSSOP	3.60	2.74	2.09
LM4873MTE-1-ND	Dual 2.1W Audio Amp + Stereo Headphone Function	28-TSSOP	5.35	4.07	3.11
LM4876M-ND	1.1W Audio Power Amp with Logic Low Shutdown	8-SOIC	1.35	.99	.72
LM4876MMCT-ND	1.1W Audio Power Amp with Logic Low Shutdown	10-MSOP	1.77	1.32	.97
LM4876MMTR-ND	1.1W Audio Power Amp with Logic Low Shutdown	10-MSOP	729.60/1,000		
LM4877IBPCT-ND	1W Audio Power Amp with Logic Low Shutdown	8-MicroSMD	2.08	1.55	1.14
LM4877IBPTR-ND	1W Audio Power Amp with Logic Low Shutdown	8-MicroSMD	226.13/250		
LM4880M-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-SOIC	2.08	1.55	1.14
LM4880N-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-Dip	2.23	1.66	1.23
LM4881M-ND	Dual 200mW Headphone Amp with Shutdown Mode	8-SOIC	1.98	1.48	1.09
LM4881MMTR-ND	Dual 200mW Headphone Amp with Shutdown Mode	8-MSOP	819.20/1,000		
LM4881N-ND	Dual 200mW Headphone Amp with Shutdown Mode	8-Dip	1.98	1.48	1.09
LM4882M-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-SOIC	1.61	1.19	.86
LM4882MMCT-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-MSOP	1.61	1.19	.86
LM4882MMTR-ND	Dual 250mW Audio Power Amp with Shutdown Mode	8-MSOP	559.00/1,000		
LM4890IBPCT-ND	1 Watt Audio Power Amp	8-MicroSMD	2.36	1.75	1.30
LM4890IBPTR-ND	1 Watt Audio Power Amp	8-MicroSMD	256.50/250		
LM4890M-ND	1 Watt Audio Power Amp	8-SOIC	2.36	1.75	1.30
LM4890MMCT-ND	1 Watt Audio Power Amp	8-MSOP	2.36	1.75	1.30
LM4890MMTR-ND	1 Watt Audio Power Amp	8-MSOP	972.80/1,000		
LM4890MXTR-ND	1 Watt Audio Power Amp	8-SOIC	2375.00/2,500		
LM6132AIM-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	8-SOIC	3.95	3.01	2.30
LM6132AIN-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	8-Dip	3.95	3.01	2.30
LM6132BIM-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	8-SOIC	2.98	2.27	1.73
LM6132BIN-ND	Dual High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	8-Dip	2.98	2.27	1.73
LM6134AIM-ND	Quad High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	14-SOIC	4.25	3.23	2.47
LM6134AIN-ND	Quad High Speed/Low Power 7MHz, Rail-to-Rail Op Amp	14-Dip	4.25	3.23	2.47
LM6134BIM-ND	Quad Low Power 10MHz, R-R, I/O, Op Amp	14-SOIC	3.45	2.63	2.01
LM6134BIMXTR-ND	Quad Low Power 10MHz, R-R, I/O, Op Amp	14-SOIC	4312.50/2,500		
LM6134BIN-ND	Quad High Speed/Low Power, 7MHz, Rail-to-Rail Op Amp	14-Dip	3.45	2.63	2.01
LM6144BIM-ND	Op Amp and Adjustable Reference	14-SOIC	5.78	4.39	3.35
LM6152ACM-ND	Dual High Speed 75MHz, R-R, I/O, Op Amp, Vos = 4mV	8-SOIC	4.38	3.33	2.54
LM6154BCM-ND	Quad High Speed 75MHz, R-R, I/O, Op Amp, Vos = 7mV	14-SOIC	5.71	4.52	3.62
LM6171AIM-ND	Voltage Feedback Low Distortion, Low Power Op Amp	8-SOIC	3.30	2.51	1.92
LM6171BIM-ND	Voltage Feedback Low Distortion, Low Power Op Amp	8-SOIC	2.83	2.15	1.64
LM6171BIN-ND	Voltage Feedback Low Distortion, Low Power Op Amp	8-Dip	2.83	2.15	1.64
LM6172IM-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp	8-SOIC	3.80	2.89	2.21
LM6172IMXCT-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp	8-SOIC	3.80	2.89	2.21
LM6172IMXTR-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp	8-SOIC	4750.00/2,500		
LM6172IN-ND	Dual High Speed Low Power, Low Distortion, Voltage Feedback Op Amp	8-Dip	3.80	2.89	2.21
LM6181IM-8-ND	100mA, 100MHz Current Feedback Amp	8-SOIC	2.98	2.27	1.73

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM6181IN-ND	Current Feedback Amp, 100MHz	8-Dip	3.07	2.28	1.69
LM6218WM-ND	Fast Settling Dual Op Amp	14-SOIC	6.68	5.28	4.23
LM6511IM-ND	180nS 3V, Comparator	8-SOIC	3.04	2.26	1.67
LM7121IM-ND	235MHz Tiny Low Power Voltage Feedback Amp	8-SOIC	2.85	2.12	1.57
LM7121IM5CT-ND	235MHz Tiny Low Power Voltage Feedback Amp	SOT-23-5	2.91	2.17	1.60
LM7121IM5TR-ND	235MHz Tiny Low Power Voltage Feedback Amp	SOT-23-5	1203.20/1,000		
LM7171AIM-ND	Very High Speed High Output Voltage Feedback Amp, A Grade	8-SOIC	3.20	2.44	1.86
LM7171AIN-ND	Very High Speed High Output Volt. Feedback Amp, A Grade	8-Dip	3.20	2.44	1.86
LM7171BIM-ND	Very High Speed High Output Voltage Feedback Amp	8-SOIC	2.80	2.13	1.63
LM7171BIMXTR-ND	Very High Speed High Output Voltage Feedback Amp	8-SOIC	3500.00/2,500		
LM7171BIN-ND	Very High Speed High Output Voltage Feedback Amp	8-Dip	2.80	2.13	1.63
LM7301IM-ND	Low Power 4MHz GBW, R-R, I/O Op Amp in TinyPak	8-SOIC	2.29	1.71	1.26
LM7301IM5CT-ND	Low Power, 4MHz GBW Rail-to-Rail, I/O Op Amp	SOT-23-5	2.29	1.71	1.26
LM7301IM5TR-ND	Low Power, 4MHz GBW Rail-to-Rail, I/O Op Amp	SOT-23-5	947.20/1,000		
LM7372IMA-ND	Dual High Speed Operational Amp *NEW!*	16-SOIC	4.70	3.58	2.73
LM7808CT-ND	8V, 1.0A Positive Voltage Regulator	TO-220	.68	.49	.36
LM7905CTNS-ND	5V, 1.5A Negative Voltage Regulator	TO-220	.72	.52	.38
LM7912CT-ND	12V, 1.5A Negative Voltage Regulator	TO-220	.72	.52	.38
LM7915CT-ND	15V, 1.5A Negative Voltage Regulator	TO-220	.72	.52	.38
LM8261M5CT-ND	R-R, In/Out, High Op Current and Unlimited Cap Load Op Amp	SOT-23-5	2.95	2.19	1.62
LM8261M5TR-ND	R-R, In/Out, High Op Current and Unlimited Cap Load Op Amp	SOT-23-5	1216.00/1,000		
LM9040M-ND	Dual Lambda Sensor Interface Amplifier	14-SOIC	6.32	5.00	4.01
LM9044V-ND	Lambda Sensor Interface Amplifier	20-PLCC	3.25	2.47	1.89
LM9061M-ND	MOSFET Driver with Loss Protection *NEW!*	8-SOIC	1.83	1.36	1.01
LM9822CCWM-ND	3-Channel, 42-Bit, Color Scanner Analog Front End	28-SOIC	9.35	7.39	5.92
LM9830VJD-ND	36-Bit, Color Document Scanner	100-TQFP	13.30	11.40	10.11
LM12454CIV-ND	12-Bit, and Sign Data Acquisition System with Self-Calibration	44-PLCC	20.55	19.18	17.81
LM12458CIV-ND	12-Bit, and Sign Data Acquisition	44-PLCC	20.55	19.18	17.81
LM12458CIVF-ND	12-Bit, and Sign Data Acquisition System with Self-Calibration	44-PQFP	21.75	20.30	18.85
LM13700N-ND	Dual Operational Transconductance Amp	16-Dip	1.71	1.27	.94
LM98501CCVBH-ND	10-Bit, 27MSPS Camera Signal Processor	48-LQFP	8.32	6.58	5.27
LMC555CBPCT-ND	CMOS Timer	8-MicroSMD	1.01	.75	.54
LMC555CBPTR-ND	CMOS Timer	8-MicroSMD	101.25/250		
LMC555CM-ND	CMOS Timer	8-SOIC	.56	.41	.30
LMC555CMXTR-ND	CMOS Timer	8-SOIC	415.63/2,500		
LMC555CMMCT-ND	CMOS Timer, In Small Package	8-MSOP	1.64	1.22	.91
LMC555CMMTR-ND	CMOS Timer, In Small Package	8-MSOP	678.40/1,000		
LMC555CN-ND	CMOS Timer	8-Dip	.59	.43	.31
LMC567CM-ND	CMOS Tone Decoder Phase Lock Loop	8-SOIC	1.89	1.41	1.04
LMC567CMXTR-ND	CMOS Tone Decoder Phase Lock Loop	8-SOIC	1906.25/2,500		
LMC567CN-ND	CMOS Tone Decoder Phase Lock Loop	8-Dip	1.89	1.41	1.04
LMC568CN-ND	CMOS Low Power Phase Lock Loop	8-Dip	2.17	1.61	1.19
LMC660AIM-ND	Quad CMOS Op Amp, Industrial Temperature	14-SOIC	1.95	1.45	1.08
LMC660AIMXTR-ND	Quad CMOS Op Amp, Industrial Temperature	14-SOIC	1968.75/2,500		
LMC660AIN-ND	Quad CMOS Op Amp, Industrial Temperature	14-Dip	2.08	1.55	1.14
LMC660CM-ND	Quad CMOS Op Amp	14-SOIC	1.58	1.18	.87
LMC660CMXTR-ND	Quad CMOS Op Amp	14-SOIC	1593.75/2,500		
LMC660CN-ND	Quad CMOS Op Amp	14-Dip	1.71	1.27	.94
LMC662AIM-ND	Dual CMOS Op Amp, Industrial Temperature	8-SOIC	1.80	1.34	.99
LMC662AIMXTR-ND	Dual CMOS Op Amp, Industrial Temperature	8-SOIC	1812.50/2,500		
LMC662AIN-ND	Dual CMOS Op Amp	8-Dip	1.92	1.43	1.06
LMC662CM-ND	Dual CMOS Op Amp	8-SOIC	1.64	1.22	.91
LMC662CMXTR-ND	Dual CMOS Op Amp	8-SOIC	1656.25/2,500		
LMC662CN-ND	Dual CMOS Op Amp	8-Dip	1.77	1.32	.97
LMC1982CIN-ND	Digitally-Controlled Stereo Tone and Volume Circuit with Two Selectable Stereo Inputs	28-Dip	5.63	4.45	3.57
LMC1982CIV-ND	Digital-Controlled Stereo Tone and Volume Circuit with Two Selectable Stereo Inputs	28-PLCC	5.63	4.45	3.57
LMC2001ACM5CT-ND	High Precision, 6MHz Rail-to-Rail Output Op Amp	SOT-23-5	2.57	1.91	1.42
LMC2001ACM5TR-ND	High Precision, 6MHz, Rail-to-Rail Output Op Amp	SOT-23-5	1062.40/1,000		
LMC2001AIM-ND	High Precision, 6MHz, Rail-to-Rail Output Op Amp *NEW!*	8-SOIC	2.67	1.98	1.47
LMC6001AIN-ND	Ultra Ultra-Low Input Current Amp	8-Dip	12.25	10.50	9.31
LMC6001BIN-ND	Ultra Ultra-Low Input Current Amp	8-Dip	8.93	7.06	5.66
LMC6001CIN-ND	Ultra Ultra-Low Input Current Amp	8-Dip	3.28	2.49	1.90
LMC6024IM-ND	Micropower Quad CMOS Op Amp	14-SOIC	1.83	1.36	1.01
LMC6032IM-ND	Dual CMOS Op Amp, Industrial Temperature	8-SOIC	.98	.72	.52
LMC6032IN-ND	Dual CMOS Op Amp, Industrial Temperature	8-Dip	1.09	.80	.58
LMC6034IM-ND	Quad CMOS Op Amp	14-SOIC	1.13	.83	.60
LMC6035IBPCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	1.80	1.32	.96
LMC6035IBPTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	180.00/250		
LMC6035IBPXCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	1.80	1.32	.96
LMC6035IBPXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MicroSMD	1836.00/3,000		
LMC6035IM-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-SOIC	1.80	1.32	.96
LMC6035IMXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-SOIC	1530.00/2,500		
LMC6035IMMCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	2.08	1.55	1.14
LMC6035IMMTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	857.60/1,000		
LMC6035IMMXCT-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	2.08	1.55	1.14
LMC6035IMMXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	8-MSOP	2931.25/3,500		
LMC6036IM-ND	Low Power 2.7V, Single Supply CMOS Op Amp	14-SOIC	2.11	1.57	1.16
LMC6036IMXTR-ND	Low Power 2.7V, Single Supply CMOS Op Amp	14-SOIC	2125.00/2,500		
LMC6041AIM-ND	Single CMOS Micropower Op Amp	8-SOIC	2.23	1.66	1.23
LMC6041AIN-ND	Single CMOS Micropower Op Amp	8-Dip	2.42	1.80	1.33
LMC6041IM-ND	Single CMOS Micropower Op Amp	8-SOIC	1.77	1.32	.97
LMC6041IN-ND	Single CMOS Micropower Op Amp	8-SOIC	1.83	1.36	1.01
LMC6042AIM-ND	Dual CMOS Micropower Op Amp	8-SOIC	2.95	2.19	1.62
LMC6042AIN-ND	Dual CMOS Micropower Op Amp	8-Dip	3.01	2.24	1.65

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Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LMC6042IM-ND	Dual CMOS Micropower Op Amp	8-SOIC	2.23	1.66	1.23
LMC6042IN-ND	Dual CMOS Micropower Op Amp	8-Dip	2.26	1.68	1.25
LMC6044AIM-ND	Quad CMOS Micropower Op Amp	14-SOIC	2.83	2.15	1.64
LMC6044AIN-ND	Quad CMOS Micropower Op Amp	Dip-14	2.90	2.21	1.69
LMC6044IM-ND	Quad CMOS Micropower Op Amp	14-SOIC	2.76	2.05	1.52
LMC6044IN-ND	Quad CMOS Micropower Op Amp	Dip-14	2.76	2.05	1.52
LMC6061AIM-ND	Precision Single CMOS Micropower Op Amp	8-SOIC	2.11	1.57	1.16
LMC6061IM-ND	Precision Single CMOS Micropower Op Amp	8-SOIC	1.84	1.35	.98
LMC6062AIM-ND	Precision Dual CMOS Micropower Op Amp	8-SOIC	3.10	2.36	1.80
LMC6062AIN-ND	Precision Dual CMOS Micropower Op Amp	8-Dip	3.25	2.47	1.89
LMC6062IM-ND	Precision Dual CMOS Micropower Op Amp	8-SOIC	2.67	1.98	1.47
LMC6062IN-ND	Precision Dual CMOS Micropower Op Amp	8-Dip	2.88	2.14	1.59
LMC6064AIM-ND	Precision Quad CMOS Micropower Op Amp	14-SOIC	6.05	4.60	3.51
LMC6064AIN-ND	Precision Quad CMOS Micropower Op Amp	14-Dip	6.18	4.70	3.59
LMC6064IM-ND	Precision Quad CMOS Micropower Op Amp	14-SOIC	3.78	2.87	2.19
LMC6064IN-ND	Precision Quad CMOS Micropower Op Amp	14-Dip	3.95	3.01	2.30
LMC6081AIM-ND	Precision Single CMOS Op Amp	8-SOIC	4.23	3.22	2.46
LMC6081AIN-ND	Precision Single CMOS Op Amp	8-Dip	4.23	3.22	2.46
LMC6081IM-ND	Precision Single CMOS Micropower Op Amp	8-SOIC	2.63	2.00	1.53
LMC6081IN-ND	Precision Single CMOS Op Amp	8-Dip	2.63	2.00	1.53
LMC6082AIM-ND	Precision Dual CMOS Op Amp	8-SOIC	5.93	4.51	3.44
LMC6082AIN-ND	Precision Dual CMOS Op Amp	8-Dip	5.93	4.51	3.44
LMC6082IM-ND	Precision Dual CMOS Op Amp	8-SOIC	2.60	1.98	1.51
LMC6082IN-ND	Precision Dual CMOS Op Amp	8-Dip	2.60	1.98	1.51
LMC6084AIM-ND	Precision Dual CMOS Micropower Op Amp	14-SOIC	7.48	5.91	4.74
LMC6084AIN-ND	Precision Dual Op Amp	14-Dip	7.48	5.91	4.74
LMC6084IN-ND	Precision Dual Op Amp	14-Dip	3.68	2.80	2.14
LMC6442AIM-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-SOIC	2.63	2.00	1.53
LMC6442AIN-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-Dip	2.63	2.00	1.53
LMC6442IM-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-SOIC	3.01	2.24	1.65
LMC6442IMMCT-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-MSOP	2.83	2.15	1.64
LMC6442IN-ND	Dual Micropower R/R, Output Single Supply Op Amp	8-Dip	3.01	2.24	1.65
LMC6462AIM-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	8-SOIC	3.03	2.30	1.76
LMC6462AIN-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	8-Dip	3.10	2.36	1.80
LMC6462BIM-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	8-SOIC	2.98	2.21	1.64
LMC6462BIN-ND	Dual CMOS Micropower, R/R, Input/Output Op Amp	8-Dip	2.58	1.96	1.50
LMC6464AIM-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	14-SOIC	4.80	3.65	2.79
LMC6464AIN-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	14-Dip	4.88	3.71	2.83
LMC6464BIM-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	14-SOIC	4.10	3.12	2.38
LMC6464BIN-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	14-Dip	4.28	3.25	2.48
LMC6482AIM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	8-SOIC	2.29	1.71	1.26
LMC6482AIN-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	8-Dip	2.29	1.71	1.26
LMC6482IM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	8-SOIC	2.11	1.57	1.16
LMC6482IMMCT-ND	Dual CMOS R/R, Input and Output Op Amp	8-MSOP	2.39	1.78	1.31
LMC6482IMMTR-ND	Dual CMOS R/R, Input and Output Op Amp	8-MSOP	985.60/1,000		
LMC6482IN-ND	Dual CMOS R/R, Input and Output Op Amp	8-Dip	2.05	1.52	1.13
LMC6484AIM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-SOIC	3.88	2.95	2.25
LMC6484AIMXTR-ND	Quad CMOS Micropower, Rail-to-Rail, I/O Op Amp	14-SOIC	4843.75/2,500		
LMC6484AIN-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-Dip	4.48	3.41	2.60
LMC6484IM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-SOIC	2.90	2.21	1.69
LMC6484IMXTR-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-SOIC	3625.00/2,500		
LMC6484IN-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-Dip	2.88	2.19	1.67
LMC6492AEM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	8-SOIC	2.68	2.04	1.56
LMC6492BEM-ND	Dual CMOS Rail-to-Rail, Input/Output Op Amp	8-SOIC	2.64	1.96	1.45
LMC6494AEM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-SOIC	5.75	4.55	3.65
LMC6494BEM-ND	Quad CMOS Rail-to-Rail, Input/Output Op Amp	14-SOIC	3.78	2.87	2.19
LMC6762AIM-ND	CMOS Micropower Rail-to-Rail Comparator	8-SOIC	3.00	2.28	1.74
LMC6762BIM-ND	CMOS Micropower Rail-to-Rail Comparator	8-SOIC	2.50	1.90	1.45
LMC6762BIMXTR-ND	CMOS Micropower Rail-to-Rail Comparator	8-SOIC	3125.00/2,500		
LMC6762BIN-ND	CMOS Micropower Rail-to-Rail Comparator	8-Dip	3.50	2.50	1.33
LMC6772AIM-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	8-SOIC	3.00	2.28	1.74
LMC6772AIN-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	8-Dip	3.00	2.28	1.74
LMC6772BIM-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	8-SOIC	2.50	1.90	1.45
LMC6772BIN-ND	CMOS Micropower Rail-to-Rail Comp. with Open Drain	8-Dip	2.50	1.90	1.45
LMC6953CM-ND	PCI Local Bus Power Supervisor	8-SOIC	3.53	2.68	2.05
LMC7111AIN-ND	Tiny CMOS Op Amp with Rail-to-Rail, Input/Output	8-Dip	1.69	1.24	.90
LMC7111BIN-ND	Tiny CMOS Op Amp with Rail-to-Rail, Input/Output	8-Dip	1.50	1.10	.80
LMC7211AIM-ND	Tiny CMOS Comparator with Rail-to-Rail Input	8-SOIC	1.77	1.32	.97
LMC7211AIM5CT-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	1.77	1.32	1.32
LMC7211AIM5TR-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	729.60/1,000		
LMC7211BIM-ND	Tiny CMOS Comparator with Rail-to-Rail Input	8-SOIC	1.80	1.32	.96
LMC7211BIM5CT-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	1.80	1.32	.96
LMC7211BIM5TR-ND	Tiny CMOS Comparator with Rail-to-Rail Input	SOT-23-5	624.00/1,000		
LMC7215IM-ND	Micropower Rail-to-Rail CMOS Comparator with Open-Drain/Push-Pull Output	8-SOIC	1.58	1.18	.87
LMC7215IMXTR-ND	Micropower Rail-to-Rail CMOS Comparator with Open-Drain/Push-Pull Output	8-SOIC	1593.75/2,500		
LMC7215IM5CT-ND	Micropower Rail-to Rail CMOS Comparator with Push-Pull/Open-Drain Outputs	SOT-23-5	1.58	1.18	.87
LMC7215IM5TR-ND	Micropower Rail-to Rail CMOS Comparator with Push-Pull/Open-Drain Outputs	SOT-23-5	652.80/1,000		
LMC7221AIM-ND	Tiny CMOS Comp. with Rail-to-Rail Input & Open Drain	8-SOIC	2.08	1.55	1.14
LMC7221BIM-ND	Tiny CMOS Comp. with Rail-to-Rail Input & Open Drain	8-SOIC	1.58	1.13	.60
LMC7221BIM5CT-ND	Tiny CMOS Comp. with Rail-to-Rail I/O Drain Output	SOT-23-5	1.61	1.20	.89
LMC7221BIM5TR-ND	Tiny CMOS Comp. with Rail-to-Rail I/O Drain Output	SOT-23-5	665.60/1,000		
LMC7225IM5CT-ND	Micropower CMOS Comparator with Rail-to-Rail, Open-Drain/Push-Pull Output	SOT-23-5	1.58	1.18	.87
LMC7225IM5TR-ND	Micropower CMOS Comparator with Rail-to-Rail, Open-Drain/Push-Pull Output	SOT-23-5	652.80/1,000		
LMC7660IM-ND	Switched Capacitor Voltage Converter	8-SOIC	1.28	.94	.68
LMC7660IN-ND	Switched Capacitor Voltage Converter	8-Dip	1.28	.94	.68
LMC8101BPCT-ND	R/R, Input and Output, 2.7V, Op Amp	8-MicroSMD	1.54	1.13	.82
LMC8101BPTR-ND	Rail-to-Rail, Input and Output, 2.7V, Op Amp	8-MicroSMD	153.75/250		
LMC8101MMCT-ND	Rail-to-Rail, Input and Output, 2.7V, Op Amp	8-MicroSMD	1.54	1.13	.82
LMC8101MMTR-ND	Rail-to-Rail, Input and Output, 2.7V, Op Amp	8-MicroSMD	533.00/1,000		
LMD18200T-ND	55V, 3Amp, H Bridge	TO-220	11.69	10.02	8.89
LMD18201T-ND	55V, 3Amp, H Bridge	TO-220	10.69	9.17	8.13
LMD18245T-ND	55V 3A DMOS H Bridge Motor Driver	TO-220	13.04	11.18	9.91
LMD18400N-ND	60V 3A DMOS Quad High Side Driver	20-Dip	10.40	8.22	6.59
LMH6642MA-ND	Low Power, 3V, Single Supply, R-R Op Amp *NEW!*	8-SOIC	2.20	1.64	1.21
LMH6643MA-ND	Low Power, 3V, Single Supply, R-R Op Amp *NEW!*	8-SOIC	2.67	1.98	1.47
LMH6654MA-ND	Low Power, 250MHz, Single Op Amp *NEW!*	8-SOIC	2.33	1.73	1.28
LMH6655MA-ND	Low Power, 3V, Single Supply, R-R Op Amp *NEW!*	8-SOIC	2.50	1.90	1.45
LMH6672MA-ND	Dual High Speed Operational Amp *NEW!*	8-SOIC	4.70	3.58	2.73
LMF100CCN-ND	Dual Switched Capacitor Filter	20-Dip	5.60	4.26	3.25
LMF100CIWM-ND	High Performance Dual Switched Capacitor Filter	20-SOIC	5.58	4.24	3.24
LMS1585ACS-ADJ-ND	Adj. 5A Low Dropout Fast Response Regulator	TO-263	1.80	1.32	.96
LMS1585ACS-3.3-ND	3.3V, 5A LDO Fast Response Regulator	TO-263	1.80	1.32	.96
LMS1585ACT-ADJ-ND	Adjustable 5A Low Dropout Fast Response Regulator	TO-220	1.80	1.32	.96
LMS1585ACT-3.3-ND	3.3V, 5A LDO Fast Response Regulator	TO-220	1.80	1.32	.96
LMS1585AIS-ADJ-ND	Adjustable 5A LDO Fast Response Reg., Ind. Temp.	TO-263	2.17	1.61	1.19
LMS1585AIS-3.3-ND	3.3V, 5A LDO Fast Response Regulator, Ind. Temp.	TO-263	2.17	1.61	1.19
LMS1585AIT-ADJ-ND	Adj. 5A LDO Fast Response Regulator, Ind. Temp.	TO-220	2.17	1.61	1.19
LMS1585AIT-3.3-ND	3.3V, 5A LDO Fast Response Regulator, Ind. Temp.	TO-220	2.17	1.61	1.19
LMS1587CS-ADJ-ND	Adj. 3A LDO Fast Response Regulator	TO-263	1.80	1.32	.96
LMS1587CS-1.5-ND	1.5V, 3A LDO Fast Response Regulator	TO-263	1.80	1.32	.96
LMS1587CT-ADJ-ND	Adj. 3A LDO Fast Response Regulator	TO-220	1.80	1.32	.96
LMS1587CT-3.3-ND	3.3V, 3A LDO Fast Response Regulator	TO-220	1.80	1.32	.96
LMS1587IS-ADJ-ND	Adj. 3A LDO Fast Response Regulator, Ind. Temp.	TO-263	1.83	1.36	1.01
LMS1587IS-3.3-ND	3.3V, 3A LDO Fast Response Regulator, Ind. Temp.	TO-263	1.83	1.36	1.01
LMS1587IT-ADJ-ND	Adj. 3A LDO Fast Response Regulator, Ind. Temp.	TO-220	1.83	1.36	1.01
LMS1587IT-3.3-ND	3.3V, 3A LDO Fast Response Regulator, Ind. Temp.	TO-220	1.83	1.36	1.01
LMV111M5CT-ND	Op Amp with Bias Network	SOT-23-5	1.13	.83	.60
LMV111M5TR-ND	Op Amp with Bias Network	SOT-23-5	390.00/1,000		
LMV111M7CT-ND	Op Amp with Bias Network	SC-70-5	1.13	.83	.60
LMV111M7TR-ND	Op Amp with Bias Network	SC-70-5	390.00/1,000		
LMV301MGCT-ND	Op Amp 1.8V, Low Input Bias, R/R Output	SC-70-5	.98	.72	.52
LMV301MGTR-ND	Op Amp 1.8V, Low Input Bias, R/R Output	SC-70-5	338.00/1,000		
LMV321M5CT-ND	Op Amp Low Voltage	SOT-23-5	.94	.69	.50
LMV321M5TR-ND	Op Amp Low Voltage	SOT-23-5	325.00/1,000		
LMV321M7CT-ND	Op Amp Low Voltage (2/3 the size of SOT-23)	SC-70-5	.98	.72	.52
LMV321M7TR-ND	Op Amp Low Voltage (2/3 the size of SOT-23)	SC-70-5	338.00/1,000		
LMV324M-ND	Low Power Quad Op Amp Low Voltage	14-SOIC	1.05	.77	.56
LMV324MXTR-ND	Low Power Quad Op Amp Low Voltage	14-SOIC	892.50/2,500		
LMV324MT-ND	Low Power Quad Op Amp Low Voltage	14-TSSOP	1.09	.80	.58
LMV331M5CT-ND	Single General Purpose, Low Volt, TinyPack Comp.	SOT-23-5	.94	.69	.50
LMV331M5TR-ND	Single General Purpose, Low Volt, TinyPack Comp.	SOT-23-5	325.00/1,000		
LMV331M5XCT-ND	General Purpose Low Volt. TinyPack Comparator	SOT-23-5	.94	.69	.50
LMV331M5XTR-ND	General Purpose Low Volt. TinyPack Comparator	SOT-23-5	956.25/3,000		
LMV331M7TR-ND	General Purpose Low Volt. TinyPack Comparator	SC-70-5	338.00/1,000		
LMV331M7XCT-ND	General Purpose Low Volt. TinyPack Comparator	SC-70-5	.98	.72	.52
LMV331M7XTR-ND	General Purpose Low Volt. TinyPack Comparator	SC-70-5	994.50/3,000		
LMV339M-ND	Quad General Purpose, Low Volt, TinyPack Comp.	14-SOIC	364.00/1,000		
LMV339MT-ND	Quad General Purp., Low Volt, TinyPack Comp.	14-TSSOP	1.09	.80	.58
LMV358M-ND	Low Power Dual Op Amp, Low Voltage	8-SOIC	.94	.69	.50
LMV358MXTR-ND	Low Power Dual Op Amp, Low Voltage	8-SOIC	796.88/2,500		
LMV358MMCT-ND	Low Power Dual Op Amp, Low Voltage	8-MSOP	.98	.72	.52
LMV358MMTR-ND	Low Power Dual Op Amp, Low Voltage	8-MSOP	338.00/1,000		
LMV393M-ND	Dual General Purpose, Low Volt, TinyPack Comp.	8-SOIC	.94	.69	.50
LMV393MMXCT-ND	Dual General Purpose Low Volt, TinyPack Comp.	8-MSOP	.98	.72	.52
LMV393MMXTR-ND	General Purpose Low Volt. TinyPack Comparator	8-MSOP	1160.25/3,500		
LMV431ACM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	.90	.65	.47
LMV431ACM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	280.00/1,000		
LMV431ACZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.90	.65	.47
LMV431AIM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	.99	.72	.52
LMV431AIM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	308.00/1,000		
LMV431AIZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.99	.72	.52
LMV431CM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	.77	.56	.40
LMV431CM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	238.00/1,000		
LMV431CZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.77	.56	.40
LMV431IM5CT-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	.90	.65	.47
LMV431IM5TR-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	SOT-23-5	280.00/1,000		
LMV431IZ-ND	Low-Volt (1.24V) Adj. Precision Shunt Reg.	TO-92	.90	.65	.47
LMV710M5CT-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-5	1.64	1.22	.91
LMV710M5TR-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-5	678.40/1,000		
LMV711M6CT-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-6	1.77	1.32	.97
LMV711M6TR-ND	Low Power, R/R, I/O Op Amp with High Output Current Drive and Shutdown Option	SOT-23-6	729.60/1,000		
LMV712LDCT-ND	Low Power, Low Noise, R/R, I/O, Dual Op Amp with Independent Shutdown	10-LLP	2.23	1.66	1.23
LMV712LDTR-ND	Low Power, Low Noise, R/R, I/O, Dual Op Amp with Independent Shutdown	10-LLP	921.60/1,000		
LMV721M5CT-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SOT-23-5	1.74	1.29	.96
LMV721M5TR-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SOT-23-5	716.80/1,000		
LMV721M7CT-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SC-70-5	1.74	1.29	.96
LMV721M7TR-ND	Low Noise, Low Volt, 10MHz, Low Power Op Amp	SC-70-5	716.80/1,000		
LMV722M-ND	10MHz Low Noise, Low Voltage, Low Pwr Op Amp	8-SOIC	2.23	1.66	1.23
LMV722MMCT-ND	10MHz Low Noise, Low Voltage, Low Power Op Amp	8-MSOP	2.23	1.66	1.23
LMV722MMTR-ND	10MHz Low Noise, Low Voltage, Low Power Op Amp	8-MSOP	921.60/1,000		
LMV751M5CT-ND	Low Noise, Low Vos, Single Op Amp	SOT-23-5	1.92	1.43	1.06
LMV751M5TR-ND	Low Noise, Low Vos, Single Op Amp	SOT-23-5	793.60/1,000		
LMV821M5CT-ND	Low Voltage, Low Power, Rail-to-Rail Output Op Amp	SOT-23-5	1.31	.97	.70
LMV821M5TR-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	SOT-23-5	455.00/1,000		
LMV821M7CT-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	SC-70-5	1.35	.99	.72
LMV821M7TR-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	SC-70-5	468.00/1,000		
LMV822M-ND	Low Voltage, 5MHz, Low Power, R-R Output Op Amp	8-SOIC	1.58	1.16	.84
LMV822MMCT-ND	Dual Low Volt, 5MHz, Low Power, R/R Output Op Amp	8-MSOP	1.61	1.19	.86
LMV822MMTR-ND	Dual Low Volt, 5MHz, Low Power, R/R, Output Op Amp	8-MSOP	559.00/1,000		
LMV822MXCT-ND	Low Volt, 5MHz, Low Power, R/R, Output Op Amp	8-SOIC	1.58	1.16	.84
LMV822MXTR-ND	Low Volt, 5MHz, Low Power, R/R, Output Op Amp	8-SOIC	1338.75/2,500		
LMV822MMXTR-ND	Low Volt, 5MHz, Low Power, R/R, Output Op Amp	8-MSOP	1918.88/3,500		
LMV824M-ND	Quad Low Volt, 5MHz, Low Power, R/R, Output Op Amp	14-SOIC	1.84	1.35	.98
LMV824MT-ND	Quad Low Volt, 5MHz, Low Pwr, R/R, Output Op Amp	14-TSSOP	1.84	1.35	.98
LMV921M5CT-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SOT-23-5	1.73	1.27	.92
LMV921M5TR-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SOT-23-5	598.00/1,000		
LMV921M7CT-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SC-70-5	1.73	1.27	.92
LMV921M7TR-ND	Single 1.8V, 1MHz, Low Power, R/R, In/Out Op Amp	SC-70-5	598.00/1,000		
LMV924MT-ND	Quad 1.8V, 1 MHz, Low Power, R/R, In/Out Op Amp	14-TSSOP	1.86	1.38	1.02
LMV7219M5CT-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SOT-23-5	2.63	2.00	1.53

(Continued)

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
LMV7219M5TR-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SOT-23-5		1323.00/1,000	
LMV7219M7CT-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SC-70-5	2.63	2.00	1.53
LMV7219M7TR-ND	7nS, 2.7V to 5V Comparator with R/R, Output	SC-70-5		1323.00/1,000	
LMV981BLCT-ND	LV, R/R, I/O, LP Op Amp with Shutdown	6-microSMD	1.69	1.24	.90
LMV981BLTR-ND	LV, R/R, I/O, LP Op Amp with Shutdown	6-microSMD		168.75/250	
LMV981MGCT-ND	Low Voltage, R/R, I/O, LP Op Amp with Shutdown	SC-70-6	1.69	1.24	.90
LMV981MGTR-ND	Low Voltage, R/R, I/O, LP Op Amp with Shutdown	SC-70-6		630.00/1,000	
LMX1511TM-ND	1.1GHz Freq. Synthesizer for RF Personal Comm.	20-TSSOP	5.23	3.98	3.04
LMX1600TM-ND	Dual Low Cost Frequency Synthesizer	16-TSSOP	3.18	2.42	1.85
LMX1601TM-ND	Platinum Low Cost Dual Frequency Synthesizer	16-TSSOP	2.85	2.17	1.66
LMX1601TMXTR-ND	Platinum Low Cost Dual Frequency Synthesizer	16-TSSOP		3656.25/2,500	
LMX2305TM-ND	160MHz Frequency Synthesizer for RF Personal Communications	20-TSSOP	5.68	4.32	3.30
LMX2306TM-ND	550MHz Low Power Frequency Synthesizer for RF Personal Communications	16-TSSOP	3.50	2.66	2.03
LMX2315TM-ND	1.2GHz Low Power Frequency Synthesizer for RF Personal Communications	20-TSSOP	6.15	4.68	3.57
LMX2316TM-ND	1.2GHz Low Power Frequency Synthesizer for RF Personal Communications	16-TSSOP	3.83	2.91	2.22
LMX2324TM-ND	2.0GHz Frequency Synthesizer for RF Personal Communications	16-TSSOP	3.18	2.42	1.85
LMX2325TM-ND	2.5GHz Frequency Synthesizer for RF Communications	20-TSSOP	5.90	4.67	3.74
LMX2326TM-ND	2.8GHz, Platinum Frequency Synthesizer For RF Communications	16-TSSOP	4.20	3.20	2.44
LMX2330ATM-ND	2.5GHz Dual Freq. Synthesizer for RF Communications	20-TSSOP	6.28	4.97	3.98
LMX2330LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	5.63	4.28	3.27
LMX2331ATM-ND	Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	4.85	3.69	2.82
LMX2331LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	4.25	3.23	2.47
LMX2332ATM-ND	1.2GHz Dual Freq. Synthesizer for RF Communications	20-TSSOP	4.70	3.58	2.73
LMX2332LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	3.83	2.91	2.22
LMX2335LM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	16-SOIC	3.83	2.91	2.22
LMX2335LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	26-TSSOP	4.58	3.48	2.66
LMX2335TM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	16-TSSOP	6.15	4.68	3.57
LMX2335LTMXTR-ND	1.1GHz Dual Freq. Synthesizer for RF Communications	16-TSSOP		5812.50/2,500	
LMX2335M-ND	1.1GHz Dual Freq. Synthesizer for RF Communications	16-SOIC	5.93	4.51	3.44
LMX2336LTM-ND	Low Power Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP	5.63	4.28	3.27
LMX2336TM-ND	2.0GHz Dual Freq. Synthesizer for RF Communications	20-TSSOP	6.09	4.82	3.86
LMX2337M-ND	Dual Freq. Synthesizer for RF Personal Communications	16-SOIC	5.35	4.07	3.11
LMX2337TM-ND	Dual Frequency Synthesizer for RF Personal Communications	16-TSSOP	5.48	4.17	3.18
LMX2350TM-ND	Fractional N RF/ Integer N IF Dual Low Power Frequency Synthesizer	24-TSSOP	6.10	4.64	3.54
LMX2352TM-ND	Dual Low Power Frequency Synthesizer	24-TSSOP	5.53	4.20	3.21
LMX2352TMXCT-ND	Dual Low Power Frequency Synthesizer	24-TSSOP	5.60	4.26	3.25
LMX2352TMXTR-ND	Dual Low Power Frequency Synthesizer	24-TSSOP		7000.00/2,500	
LMX2372TM-ND	Dual Frequency Synthesizer for RF Personal Communications	20-TSSOP		2116.80/1,000	
LMX3161VBH-ND	Single Chip Radio Transceiver	48-LQFP		1698.63/250	
LMX3162VBH-ND	Single Chip Radio Transceiver	48-LQFP		1698.63/250	
LP324M-ND	Low Power Quad Op Amp	14-SOIC	1.04	.75	.55
LP324MXTR-ND	Low Power Quad Op Amp	14-SOIC		764.75/2,500	
LP324N-ND	Micropower Quad Op Amp	14-Dip	.94	.69	.50
LP339M-ND	Ultra-Low Power Quad Comparator	14-SOIC	.90	.65	.47
LP339MXTR-ND	Ultra-Low Power Quad Comparator	14-SOIC		665.00/2,500	
LP339NNS-ND	Ultra-Low Power Quad Comparator	14-Dip	1.31	.97	.70
LP395Z-ND	Ultra Reliable Power Transistor	TO-92	1.43	1.05	.76
LP2902M-ND	Micropower Quad Operational Amplifier	14-SOIC	1.84	1.35	.98
LP2902MXTR-ND	Micropower Quad Operational Amplifier	14-SOIC		1561.88/2,500	
LP2902N-ND	Micropower Quad Operational Amplifier	14-Dip	1.84	1.35	.98
LP2950ACZ-3.0-ND	3V, Series Adjustable Micropower Voltage Regulator	TO-92	1.13	.83	.60
LP2950ACZ-3.3-ND	3.3V, Series Adjustable Micropower Voltage Regulator	TO-92	1.13	.83	.60
LP2950ACZ-5.0-ND	5V, Micropower Voltage Regulator	TO-92	1.13	.83	.60
LP2950CZ-3.0-ND	3V, Series Adjustable Micropower Voltage Regulator	TO-92	.98	.72	.52
LP2950CZ-3.3-ND	3.3V, Adj. Micropower Voltage Regulator	TO-92	.98	.72	.52
LP2950CZ-5.0-ND	5V, Micropower Voltage Regulator	TO-92	.98	.72	.52
LP2951ACM-ND	1.24-29V, Adjustable Voltage Regulator	8-SOIC	.98	.72	.52
LP2951ACMXTR-ND	1.24-29V, Adjustable Voltage Regulator	8-SOIC		828.75/2,500	
LP2951ACM-3.0-ND	3V, Series Adj. Micropower Voltage Regulator	8-SOIC	.98	.72	.52
LP2951ACM-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-SOIC	.98	.72	.52
LP2951ACMM-3.0CT-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.24	.91	.66
LP2951ACMM-3.0TR-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP		429.00/1,000	
LP2951ACMM-3.3CT-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.24	.91	.66
LP2951ACMM-3.3TR-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP		429.00/1,000	
LP2951ACMMCT-ND	Series Adj. Micropower Voltage Regulator	8-MSOP	1.24	.91	.66
LP2951ACMMTR-ND	Series Adj. Micropower Voltage Regulator	8-MSOP		429.00/1,000	
LP2951ACN-ND	1.24-29V, Adjustable Micropower Voltage Regulator	8-Dip	1.05	.77	.56
LP2951ACN-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-Dip	1.05	.77	.56
LP2951CM-ND	1.24-29V, Adjustable Micropower Voltage Regulator	8-SOIC	1.04	.75	.55
LP2951CMXTR-ND	1.24-29V, Adjustable Micropower Voltage Regulator	8-SOIC		764.75/2,500	
LP2951CM-3.0-ND	3V, Series Adj. Micropower Voltage Regulator	8-SOIC	1.04	.75	.55
LP2951CM-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-SOIC	1.04	.75	.55
LP2951CMM-3.0CT-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.13	.83	.60
LP2951CMM-3.0TR-ND	3V, Series Adj. Micropower Voltage Regulator	8-MSOP		390.00/1,000	
LP2951CMM-3.3CT-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP	1.13	.83	.60
LP2951CMM-3.3TR-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-MSOP		390.00/1,000	
LP2951CMMCT-ND	Series Adj. Micropower Voltage Regulator	8-MSOP	1.13	.83	.60
LP2951CMMTR-ND	Series Adj. Micropower Voltage Regulator	8-MSOP		390.00/1,000	
LP2951CN-ND	Adjustable Micropower Voltage Regulator	8-Dip	1.13	.83	.60
LP2951CN-3.0-ND	3V, Series Adj. Micropower Voltage Regulator	8-Dip	1.13	.83	.60
LP2951CN-3.3-ND	3.3V, Series Adj. Micropower Voltage Regulator	8-Dip	1.13	.83	.60
LP2952AIM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	16-SOIC	3.50	2.66	2.03
LP2952AIM-ND	Adj. LDO Voltage Regulator	16-SOIC	3.50	2.66	2.03
LP2952AIN-3.3-ND	3.3V, Adj. LDO Voltage Regulator	14-Dip	3.50	2.66	2.03
LP2952IM-ND	250mA Low Power Adjustable Voltage Regulator	16-SOIC	2.57	1.91	1.42
LP2952IM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	16-SOIC	2.57	1.91	1.42
LP2952IN-3.3-ND	3.3V, Adj. LDO Voltage Regulator	14-Dip	2.57	1.91	1.42
LP2953AIM-ND	250mA Low Power Adj. Voltage Reg (Elect. Improved)	16-SOIC	4.23	3.22	2.46
LP2953AIM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	16-SOIC	4.23	3.22	2.46
LP2953IM-ND	250mA Low Power Adjustable Voltage Regulator	16-SOIC	3.01	2.24	1.65
LP2953IM-3.3-ND	3.3V, Adj. LDO Voltage Regulator	16-SOIC	3.01	2.24	1.65
LP2953IN-ND	250mA Low Power Adjustable Voltage Regulator	16-Dip	3.01	2.24	1.65
LP2954AIS-ND	Adj. Micropower LDO Voltage Regulator	TO-263	4.30	3.27	2.50
LP2954AIT-ND	5.0V, Micropower Low Dropout Voltage Regulator	TO-220	4.30	3.27	2.50
LP2954IS-ND	5A Micropower LDO Voltage Regulator	TO-263	3.98	3.03	2.31
LP2954IT-ND	5.0V, Low Power Voltage Regulator	TO-220	3.98	3.03	2.31
LP2956AIM-ND	Dual Micropower LDO Voltage Regulator	16-SOIC	4.30	3.27	2.50
LP2956AIN-ND	Dual Micropower LDO Voltage Regulator	16-Dip	4.45	3.39	2.59
LP2956IM-ND	Dual Micropower LDO Voltage Regulator	16-SOIC	3.08	2.34	1.79
LP2957AIS-ND	5V, LDO Reg for Micropower Application	TO-263-5	3.83	2.91	2.22
LP2957AIT-ND	5.0V LDO Reg for Micropower Application	TO-220-5	3.83	2.91	2.22
LP2957IS-ND	5.0V LDO Reg for Micropower Application	TO-263-5	3.03	2.30	1.76
LP2960IM-5.0-ND	5.0V, .5A Micropower LDO Regulator, 160ppm	16-SOIC	3.01	2.24	1.65
LP2960IN-5.0-ND	5.0V, .5A Micropower LDO Regulator, 160ppm	16-Dip	2.85	2.17	1.66
LP2966IMM-1818CT-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.8V	8-MSOP	2.33	1.73	1.28
LP2966IMM-1818TR-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.8V	8-MSOP		960.00/1,000	
LP2966IMM-1833CT-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.3V	8-MSOP	2.33	1.73	1.28
LP2966IMM-1833TR-ND	Dual 150mA Ultra LDO Regulator, 1.8V/3.3V	8-MSOP		960.00/1,000	
LP2966IMM-2525CT-ND	Dual 150mA Ultra LDO Regulator, 2.5V/2.5V	8-MSOP	2.33	1.73	1.28
LP2966IMM-2525TR-ND	Dual 150mA Ultra LDO Regulator, 2.5V/2.5V	8-MSOP		960.00/1,000	
LP2966IMM-2828CT-ND	Dual 150mA Ultra LDO Regulator, 2.8V/2.8V	8-MSOP	2.33	1.73	1.28
LP2966IMM-2828TR-ND	Dual 150mA Ultra LDO Regulator, 2.8V/2.8V	8-MSOP		960.00/1,000	
LP2966IMM-3030CT-ND	Dual 150mA Ultra LDO Regulator, 3V/3V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3030TR-ND	Dual 150mA Ultra LDO Regulator, 3V/3V	8-MSOP		960.00/1,000	
LP2966IMM-3333CT-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.3V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3333TR-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.3V	8-MSOP		960.00/1,000	
LP2966IMM-3336CT-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.6V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3336TR-ND	Dual 150mA Ultra LDO Regulator, 3.3V/3.6V	8-MSOP		960.00/1,000	
LP2966IMM-3636CT-ND	Dual 150mA Ultra LDO Regulator, 3.6V/3.6V	8-MSOP	2.33	1.73	1.28
LP2966IMM-3636TR-ND	Dual 150mA Ultra LDO Regulator, 3.6V/3.6V	8-MSOP		960.00/1,000	
LP2966IMM-5050CT-ND	Dual 150mA Ultra LDO Regulator, 5V/5V	8-MSOP	2.33	1.73	1.28
LP2966IMM-5050TR-ND	Dual 150mA Ultra LDO Regulator, 5V/5V	8-MSOP		960.00/1,000	
LP2975AIMM-12CT-ND	12V, MOSFET LDO Driver/Controller	8-MSOP	2.45	1.82	1.35
LP2975AIMM-12TR-ND	12V, MOSFET LDO Driver/Controller	8-MSOP		1011.20/1,000	
LP2975AIMM-3.3CT-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP	2.45	1.82	1.35
LP2975AIMM-3.3TR-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP		1011.20/1,000	
LP2975AIMM-5.0CT-ND	5V, MOSFET LDO Driver/Controller	8-MSOP	2.45	1.82	1.35
LP2975AIMM-5.0TR-ND	5V, MOSFET LDO Driver/Controller	8-MSOP		1011.20/1,000	
LP2975IMM-12CT-ND	12V, MOSFET LDO Driver/Controller	8-MSOP	2.20	1.64	1.21
LP2975IMM-12TR-ND	12V, MOSFET LDO Driver/Controller	8-MSOP		908.80/1,000	
LP2975IMM-3.3CT-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP	2.20	1.64	1.21
LP2975IMM-3.3TR-ND	3.3V, MOSFET LDO Driver/Controller	8-MSOP		908.80/1,000	
LP2975IMM-5.0CT-ND	5V, MOSFET LDO Driver/Controller	8-MSOP	2.20	1.64	1.21
LP2975IMM-5.0TR-ND	5V, MOSFET LDO Driver/Controller	8-MSOP		908.80/1,000	
LP2980AIBP-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2980AIBP-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD		157.50/250	
LP2980AIBP-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2980AIBP-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD		157.50/250	
LP2980AIM5-1.8CT-ND	1.8V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.05	.77	.56
LP2980AIM5-1.8TR-ND	1.8V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5		364.00/1,000	
LP2980AIM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.05	.77	.56
LP2980AIM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5		364.00/1,000	
LP2980AIM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.05	.77	.56
LP2980AIM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5		364.00/1,000	
LP2980AIM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.05	.77	.56
LP2980AIM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5		364.00/1,000	
LP2980AIM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.05	.77	.56
LP2980AIM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5		364.00/1,000	
LP2980IBP-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.50	1.10	.80
LP2980IBP-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD		150.00/250	
LP2980IBP-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.50	1.10	.80
LP2980IBP-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD		150.00/250	
LP2980IM5-1.8CT-ND	1.8V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.08	.78	.57
LP2980IM5-1.8TR-ND	1.8V, Micropower 50mA Ultra LDO Regulator	SOT-23-5		336.00/1,000	
LP2980IM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.08	.78	.57
LP2980IM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5		336.00/1,000	
LP2980IM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.08	.78	.57
LP2980IM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5		336.00/1,000	
LP2980IM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.08	.78	.57
LP2980IM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5		336.00/1,000	
LP2980IM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.08	.78	.57
LP2980IM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5		336.00/1,000	
LP2981AIBP-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	1.76	1.30	.94
LP2981AIBP-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD		176.25/250	
LP2981AIBP-3.2CT-ND	3.2V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	1.76	1.30	.94
LP2981AIBP-3.2TR-ND	3.2V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD		176.25/250	
LP2981AIBP-3.3CT-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD	1.76	1.30	.94
LP2981AIBP-3.3TR-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grade	5-MicroSMD		176.25/250	
LP2981AIM5-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5	1.24	.91	.66
LP2981AIM5-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5		429.00/1,000	
LP2981AIM5-3.0CT-ND	3V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5	1.24	.91	.66
LP2981AIM5-3.0TR-ND	3V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5		429.00/1,000	
LP2981AIM5-3.3CT-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5	1.24	.91	.66
LP2981AIM5-3.3TR-ND	3.3V, Micropower 100mA Ultra LDO Reg., A Grade	SOT-23-5		429.00/1,000	
LP2981AIM5-5.0CT-ND	5V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5	1.24	.91	.66
LP2981AIM5-5.0TR-ND	5V, Micropower 100mA Ultra LDO Regulator, A Grade	SOT-23-5		429.00/1,000	
LP2981IBP-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	1.69	1.24	.90
LP2981IBP-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD		168.75/250	
LP2981IBP-3.2CT-ND	3.2V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	1.69	1.24	.90
LP2981IBP-3.2TR-ND	3.2V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD		168.75/250	
LP2981IBP-3.3CT-ND	3.3V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD	1.69	1.24	.90
LP2981IBP-3.3TR-ND	3.3V, Micropower 100mA Ultra LDO Regulator	5-MicroSMD		168.75/250	
LP2981IM5-2.5CT-ND	2.5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	1.20	.88	.64

(Continued)

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National Semiconductor LINEAR SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LP2981IM5-2.5TR-ND	2.5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	416.00/1,000		
LP2981IM5-3.0CT-ND	3V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	1.20	.88	.64
LP2981IM5-3.0TR-ND	3V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	416.00/1,000		
LP2981IM5-5.0CT-ND	5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	1.20	.88	.64
LP2981IM5-5.0TR-ND	5V, Micropower 100mA Ultra LDO Regulator	SOT-23-5	416.00/1,000		
LP2982AIBP-2.8CT-ND	2.8V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	1.65	1.21	.88
LP2982AIBP-2.8TR-ND	2.8V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	572.00/1,000		
LP2982AIBP-3.0CT-ND	3V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	1.65	1.21	.88
LP2982AIBP-3.0TR-ND	3V, Micropower 50mA Ultra LDO Reg., A Grade	5-MicroSMD	165.00/250		
LP2982AIM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.24	.91	.66
LP2982AIM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	429.00/1,000		
LP2982AIM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.24	.91	.66
LP2982AIM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	429.00/1,000		
LP2982AIM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.24	.91	.66
LP2982AIM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	429.00/1,000		
LP2982AIM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	1.24	.91	.66
LP2982AIM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator, A Grade	SOT-23-5	429.00/1,000		
LP2982IBP-2.8CT-ND	2.8V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2982IBP-2.8TR-ND	2.8V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	157.50/250		
LP2982IBP-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	1.58	1.16	.84
LP2982IBP-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator	5-MicroSMD	157.50/250		
LP2982IM5-2.5CT-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.20	.88	.64
LP2982IM5-2.5TR-ND	2.5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	416.00/1,000		
LP2982IM5-3.0CT-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.20	.88	.64
LP2982IM5-3.0TR-ND	3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	416.00/1,000		
LP2982IM5-3.3CT-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.20	.88	.64
LP2982IM5-3.3TR-ND	3.3V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	416.00/1,000		
LP2982IM5-5.0CT-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	1.20	.88	.64
LP2982IM5-5.0TR-ND	5V, Micropower 50mA Ultra LDO Regulator	SOT-23-5	416.00/1,000		
LP2985AIBP-2.5CT-ND	2.5V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-2.5TR-ND	2.5V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIBP-2.8CT-ND	2.8V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-2.8TR-ND	2.8V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIBP-3.0CT-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-3.0TR-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIBP-3.3CT-ND	3.3V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	1.69	1.24	.90
LP2985AIBP-3.3TR-ND	3.3V, Micropwr. 150mA LN Ultra LDO Reg, A Grade	5-MicroSMD	168.75/250		
LP2985AIM5-2.5CT-ND	2.5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.28	.94	.68
LP2985AIM5-2.5TR-ND	2.5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	442.00/1,000		
LP2985AIM5-2.9CT-ND	2.9V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.28	.94	.68
LP2985AIM5-2.9TR-ND	2.9V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	442.00/1,000		
LP2985AIM5-3.0CT-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.28	.94	.68
LP2985AIM5-3.0TR-ND	3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	442.00/1,000		
LP2985AIM5-3.3CT-ND	3.3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.28	.94	.68
LP2985AIM5-3.3TR-ND	3.3V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	442.00/1,000		
LP2985AIM5-5.0CT-ND	5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	1.28	.94	.68
LP2985AIM5-5.0TR-ND	5V, Micropower 150mA LN Ultra LDO Reg, A Grade.	SOT-23-5	442.00/1,000		
LP2985IBP-2.5CT-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	1.65	1.21	.88
LP2985IBP-2.5TR-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	165.00/250		
LP2985IBP-2.8CT-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	1.65	1.21	.88
LP2985IBP-2.8TR-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	165.00/250		
LP2985IBP-3.0CT-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	5-MicroSMD	1.65	1.21	.88
LP2985IBP-3.0TR-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	5-MicroSMD	165.00/250		
LP2985IBP-3.3CT-ND	3.3V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	1.65	1.21	.88
LP2985IBP-3.3TR-ND	3.3V, Micropower 150mA Low Noise Ultra LDO Reg	5-MicroSMD	165.00/250		
LP2985IM5-2.5CT-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.24	.91	.66
LP2985IM5-2.5TR-ND	2.5V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	429.00/1,000		
LP2985IM5-2.8CT-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.24	.91	.66
LP2985IM5-2.8TR-ND	2.8V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	429.00/1,000		
LP2985IM5-2.9CT-ND	2.9V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.24	.91	.66
LP2985IM5-2.9TR-ND	2.9V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	429.00/1,000		
LP2985IM5-3.0CT-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	1.24	.91	.66
LP2985IM5-3.0TR-ND	3V, Micropower 150mA Low Noise Ultra LDO Reg.	SOT-23-5	429.00/1,000		
LP2985IM5-3.3CT-ND	3.3V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	1.24	.91	.66
LP2985IM5-3.3TR-ND	3.3V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	429.00/1,000		
LP2985IM5-5.0CT-ND	5V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	1.24	.91	.66
LP2985IM5-5.0TR-ND	5V, Micropower 150mA Low-Noise Ultra LDO Reg	SOT-23-5	429.00/1,000		
LP2986AIM-3.0-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-SOIC	2.36	1.75	1.30
LP2986AIM-3.3-ND	3.3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-SOIC	2.36	1.75	1.30
LP2986AIM-5.0-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-SOIC	2.36	1.75	1.30
LP2986AIMM-3.0CT-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	2.60	1.94	1.43
LP2986AIMM-3.0TR-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	1075.20/1,000		
LP2986AIMM-3.3CT-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg .5%	8-MSOP	2.60	1.94	1.43
LP2986AIMM-3.3TR-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg .5%	8-MSOP	1075.20/1,000		
LP2986AIMM-5.0CT-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	2.60	1.94	1.43
LP2986AIMM-5.0TR-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg .5%	8-MSOP	1075.20/1,000		
LP2986IM-3.0-ND	3V, Micropower 200mA Ultra LDO Regulator, 1%	8-SOIC	2.20	1.64	1.21
LP2986IM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Regulator, 1%	8-SOIC	2.20	1.64	1.21
LP2986IM-5.0-ND	5V, Micropower 200mA Ultra LDO Regulator, 1%	8-SOIC	2.20	1.64	1.21
LP2986IMM-3.0CT-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	2.45	1.82	1.35
LP2986IMM-3.0TR-ND	3V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	1011.20/1,000		
LP2986IMM-3.3CT-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg, 1%	8-MSOP	2.45	1.82	1.35
LP2986IMM-3.3TR-ND	3.3V, Micropwr 200mA Ultra LDO Fix or Adj. V. Reg, 1%	8-MSOP	1011.20/1,000		
LP2986IMM-5.0CT-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	2.45	1.82	1.35
LP2986IMM-5.0TR-ND	5V, Micropwr 200mA Ultra LDO Fixed or Adj. V. Reg, 1%	8-MSOP	1011.20/1,000		
LP2987AIM-3.0-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	8-SOIC	2.36	1.75	1.30
LP2987AIM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-SOIC	2.36	1.75	1.30
LP2987AIMM-3.0CT-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay *NEW!*	8-SOIC	2.60	1.94	1.43
LP2987AIMM-3.0TR-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	8-MSOP	1075.20/1,000		
LP2987AIMM-3.3CT-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.60	1.94	1.43
LP2987AIMM-3.3TR-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	1075.20/1,000		
LP2987AIM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-SOIC	2.36	1.75	1.30
LP2987AIMM-5.0CT-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.60	1.94	1.43
LP2987AIMM-5.0TR-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	1075.20/1,000		
LP2987IM-3.0-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, 1%	8-SOIC	2.20	1.64	1.21
LP2987IM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-SOIC	2.20	1.64	1.21
LP2987IM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-SOIC	2.20	1.64	1.21
LP2987IMM-3.0CT-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, 1%	8-MSOP	2.45	1.82	1.35
LP2987IMM-3.0TR-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, 1%	8-MSOP	1011.20/1,000		
LP2987IMM-3.3CT-ND	3.3V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	2.45	1.82	1.35
LP2987IMM-3.3TR-ND	3.3V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	266.63/250		
LP2987IMM-5.0CT-ND	5.0V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	2.45	1.82	1.35
LP2987IMM-5.0TR-ND	5.0V, Micropower 200mA Ultra LDO Reg., 1% Accuracy	8-MSOP	1011.20/1,000		
LP2988AIM-2.5-ND	2.5V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	8-SOIC	2.45	1.82	1.35
LP2988AIM-3.0-ND	3V, Micropower 200mA Ultra LDO Voltage Regulator with Program Power-On Reset Delay, .5%	8-SOIC	2.45	1.82	1.35
LP2988AIM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-SOIC	2.45	1.82	1.35
LP2988AIM-3.3-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-SOIC	2.45	1.82	1.35
LP2988AIMM-2.5CT-ND	2.5V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	2.64	1.96	1.45
LP2988AIMM-2.5TR-ND	2.5V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	1088.00/1,000		
LP2988AIMM-3.0CT-ND	3V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	2.64	1.96	1.45
LP2988AIMM-3.0TR-ND	3V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, .5%	8-MSOP	1088.00/1,000		
LP2988AIMM-3.3CT-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.64	1.96	1.45
LP2988AIMM-3.3TR-ND	3.3V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	1088.00/1,000		
LP2988AIMM-5.0CT-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	2.64	1.96	1.45
LP2988AIMM-5.0TR-ND	5.0V, Micropower 200mA Ultra LDO Reg., .5% Accuracy	8-MSOP	286.88/250		
LP2988IM-2.5-ND	2.5V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, 1% Accuracy	8-SOIC	2.39	1.78	1.31
LP2988IM-3.0-ND	3V, Micropower 200mA Ultra LDO Regulator with Program Power-On Reset Delay, 1% Accuracy	8-SOIC	2.39	1.78	1.31
LP2988IM-3.3-ND	3.3V, 200mA Micropower Ultra LDO Reg., 1% Accuracy	8-SOIC	2.39	1.78	1.31
LP2988IM-5.0-ND	5.0V, Micropower 200mA Ultra LDO Low Noise Regulator 1% Accuracy	8-SOIC	2.39	1.78	1.31
LP2988IMM-2.5CT-ND	2.5V, Micropower 200mA Ultra LDO Reg with Program Power-On Reset Delay	8-MSOP	2.54	1.89	1.40
LP2988IMM-2.5TR-ND	2.5V, Micropower 200mA Ultra LDO Reg with Program Power-On Reset Delay	8-MSOP	1049.60/1,000		
LP2988IMM-3.0CT-ND	3V, Micropower 200mA Ultra Low LDO Reg with Program Power-On Reset Delay	8-MSOP	2.54	1.89	1.40
LP2988IMM-3.0TR-ND	3V, Micropower 200mA Ultra Low LDO Reg with Program Power-On Reset Delay	8-MSOP	1049.60/1,000		
LP2988IMM-3.3CT-ND	3.3V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	2.54	1.89	1.40
LP2988IMM-3.3TR-ND	3.3V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	276.75/250		
LP2988IMM-5.0CT-ND	5.0V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	2.54	1.89	1.40
LP2988IMM-5.0TR-ND	5.0V, 200mA Micropower Ultra LDO Low Noise Regulator 1% Accuracy	8-MSOP	276.75/250		
LP2989AIM-1.8-ND	1.8V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts.	8-SOIC	2.82	2.10	1.55
LP2989AIM-2.5-ND	2.5V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts.	8-SOIC	2.82	2.10	1.55
LP2989AIM-3.3-ND	3.3V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts.	8-SOIC	2.82	2.10	1.55
LP2989IM-1.8-ND	1.8V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts.	8-SOIC	2.67	1.98	1.47
LP2989IM-2.5-ND	2.5V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts.	8-SOIC	2.67	1.98	1.47
LP2989IM-3.3-ND	3.3V, Micropower 500mA Low Noise LDO Regulator for Applications with Output Volts.	8-SOIC	2.67	1.98	1.47
LP3470IM5-2.63CT-ND	2.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-2.63TR-ND	2.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-2.93CT-ND	2.93V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-2.93TR-ND	2.93V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-3.08CT-ND	3.08V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-3.08TR-ND	3.08V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-4.00CT-ND	4V, Tiny Power-On Reset Circuit, Ind. Temp	SOT-23-5	1.71	1.27	.94
LP3470IM5-4.00TR-ND	4V, Tiny Power-On Reset Circuit, Ind. Temp	SOT-23-5	704.00/1,000		
LP3470IM5-4.38CT-ND	4.38V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-4.38TR-ND	4.38V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470IM5-4.63CT-ND	4.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	1.71	1.27	.94
LP3470IM5-4.63TR-ND	4.63V, Tiny Power-On Reset Circuit, Ind. Temp.	SOT-23-5	704.00/1,000		
LP3470M5-2.63CT-ND	2.63V, Tiny Power-On Reset Circuit.	SOT-23-5	1.55	1.15	.85
LP3470M5-2.63TR-ND	2.63V, Tiny Power-On Reset Circuit.	SOT-23-5	640.00/1,000		
LP3470M5-2.93CT-ND	2.93V, Tiny Power-On Reset Circuit.	SOT-23-5	1.55	1.15	.85
LP3470M5-2.93TR-ND	2.93V, Tiny Power-On Reset Circuit.	SOT-23-5	640.00/1,000		
LP3470M5-3.08CT-ND	3.08V, Tiny Power-On Reset Circuit.	SOT-23-5	1.55	1.15	.85
LP3470M5-3.08TR-ND	3.08V, Tiny Power-On Reset Circuit.	SOT-23-5	640.00/1,000		
LP3470M5-4.00CT-ND	5V, Voltage Monitor with Reset	SOT-23-5	1.55	1.15	.85
LP3470M5-4.00TR-ND	5V, Voltage Monitor with Reset	SOT-23-5	640.00/1,000		
LP3470M5-4.38CT-ND	4.38V, Tiny Power-On Reset Circuit.	SOT-23-5	1.55	1.15	.85
LP3470M5-4.38TR-ND	4.38V, Tiny Power-On Reset Circuit.	SOT-23-5	640.00/1,000		
LP3470M5-4.63CT-ND	4.63V, Tiny Power-On Reset Circuit.	SOT-23-5	1.55	1.15	.85
LP3470M5-4.63TR-ND	4.63V, Tiny Power-On Reset Circuit.	SOT-23-5	640.00/1,000		
LP3961EMP-1.8CT-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-1.8TR-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961EMP-2.5CT-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-2.5TR-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961EMP-3.3CT-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-3.3TR-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961EMP-5.0CT-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3961EMP-5.0TR-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3961ES-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59
LP3961ES-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59
LP3961ES-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59
LP3961ES-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-263-5	2.73	2.08	1.59

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National Semiconductor LINEAR SERIES *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LP3961ET-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3961ET-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3961ET-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3961ET-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3962EMP-1.8CT-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-1.8TR-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962EMP-2.5CT-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-2.5TR-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962EMP-3.3CT-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-3.3TR-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962EMP-5.0CT-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3962EMP-5.0TR-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3962ES-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ES-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ES-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ES-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3962ET-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3962ET-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3962ET-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3962ET-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3963ES-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ES-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ES-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ES-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3963ET-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3963ET-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3963ET-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3963ET-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3964EMP-1.8CT-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-1.8TR-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-2.5CT-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-2.5TR-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-3.3CT-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-3.3TR-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-5.0CT-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-5.0TR-ND	5V, 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964EMP-ADJCT-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	2.98	2.21	1.64
LP3964EMP-ADJTR-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	SOT-223-5	1228.80/1,000		
LP3964ES-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ES-ADJ-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	TO-263-5	2.73	2.08	1.59
LP3964ET-1.8-ND	1.8V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-2.5-ND	2.5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-3.3-ND	3.3V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-5.0-ND	5V, 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3964ET-ADJ-ND	Adj., 800mA Fast Ultra LDO Linear Regulator	TO-220-5	2.73	2.08	1.59
LP3965EMP-ADJCT-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-ADJTR-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-1.8CT-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-1.8TR-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-2.5CT-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-2.5TR-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-3.3CT-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-3.3TR-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965EMP-5.0CT-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	2.88	2.19	1.67
LP3965EMP-5.0TR-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	SOT-223-5	1449.00/1,000		
LP3965ES-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ES-ADJ-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	TO-263-5	3.25	2.47	1.89
LP3965ET-ADJ-ND	Adj., 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-1.8-ND	1.8V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-2.5-ND	2.5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-3.3-ND	3.3V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3965ET-5.0-ND	5V, 1.5A Fast Ultra LDO Linear Regulator	TO-220-5	3.25	2.47	1.89
LP3966ES-ADJ-ND	Adj., 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ES-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-263-5	4.13	3.14	2.40
LP3966ET-ADJ-ND	Adj., 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-1.8-ND	1.8V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-2.5-ND	2.5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-3.3-ND	3.3V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LP3966ET-5.0-ND	5V, 3A Fast Ultra LDO Linear Regulator	TO-220-5	4.13	3.14	2.40
LPC660AIM-ND	Low Power Quad CMOS Op Amp, A Grade	14-SOIC	3.13	2.38	1.82
LPC660IM-ND	Low Power Quad CMOS Op Amp	14-SOIC	2.53	1.92	1.47
LPC661IM-ND	Low Power CMOS Op Amp	8-SOIC	1.84	1.35	.98
LPC662AIM-ND	Low Power Dual CMOS Op Amp, A Grade	8-SOIC	3.04	2.26	1.67
LPC662IM-ND	Low Power Quad CMOS Op Amp	8-SOIC	2.08	1.55	1.14
LPV321M5CT-ND	Single General Purpose Low Volt, LP, R/R Out Op Amp	SOT-23-5	1.13	.83	.60
LPV321M5TR-ND	Single General Purpose Low Volt, LP, R/R Out Op Amp	SOT-23-5	390.00/1,000		
LPV321M7CT-ND	Single General Purpose Low Volt, LP, R/R Out Op Amp	SC-70-5	1.13	.83	.60
LPV321M7TR-ND	Single General Purpose Low Volt, LP, R/R Out Op Amp	SC-70-5	390.00/1,000		
LPV324M-ND	Quad General Purpose Low Volt, LP, R/R Out Op Amp	14-SOIC	1.28	.94	.68
LPV324MT-ND	Quad General Purpose Low Volt, LP, R/R Out Op Amp	14-TSSOP	1.28	.94	.68
LPV358M-ND	Dual General Purpose Low Volt, LP, R/R Out Op Amp	8-SOIC	1.16	.86	.62
LPV358MMCT-ND	Dual General Purpose Low Volt, LP, R/R Out Op Amp	8-MSOP	1.16	.86	.62
LPV358MMTR-ND	Dual General Purpose Low Volt, LP, R/R Out Op Amp	8-MSOP	403.00/1,000		
MAX660M-ND	Switch Capacitor Volt Converter	8-SOIC	1.46	1.08	.78
MF10ACN-ND	General Purpose Dual Active Filter, A Grade	20-Dip	4.00	3.04	2.32
MF10CCN-ND	General Purpose Dual Active Filter	20-Dip	3.40	2.59	1.98
MF10CCWM-ND	Universal Monolithic Dual Switched Capacitor Filter	20-SOIC	3.40	2.59	1.98
MM5452V-ND	Liquid Crystal Display Driver, 32 Segments	44-PLCC	4.88	3.71	2.83
MM5483N-ND	Liquid Crystal Display Driver, 31 Segments	40-Dip	4.65	3.35	2.70
MM145453V-ND	Liquid Crystal Display Driver, 33 Segments	44-PLCC	4.75	3.61	2.76
TL082CM-ND	Wide Bandwidth Dual JFET Input Op Amp	8-SOIC	.54	.39	.29
TL082CMXTR-ND	Wide Bandwidth Dual JFET Input Op Amp	8-SOIC	399.00/2,500		
TL082CPNS-ND	Bi-FET Dual Op Amp	8-Dip	.77	.56	.40
9242B-ND	1995 Data Acquisition Data Book Contains data on: D/A and A/D Converters • Active Filters • Voltage References • Temperature Sensors • Sample and Hold • Analog Switches-Multiplexers		18.00	—	—
9243B-ND	1995 Operational Amplifiers Data Book Contains data on: • Buffers • Voltage Comparators • Instrumentation Amps • Op Amps • Surface Mount • Appendixes/ Physical Dimensions		17.00	—	—
9244B-ND	1995 Power ICs Data Book Contains data on: • Linear • Motion Control • Low Dropout and Switching Voltage Regulators • Peripheral Drivers • High Current Switches • Surface Mount • Appendixes/Physical Dimensions		12.00	—	—

Microsemi VOLTAGE REGULATORS

Progress Powered by Technology

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LM78L18ACZMS-ND	Positive 18 Volt Regulator 100mA	TO-92	.36	.27	.15
LM78L24ACZMS-ND	Positive 24 Volt Regulator 100mA	TO-92	.36	.27	.15
LM7918CTMS-ND	Negative 18 Volt Regulator 1 Amp	TO-220	.64	.48	.27
LM79L18ACZMS-ND	Negative 18 Volt Regulator 100mA	TO-92	.36	.27	.15
LM7924CTMS-ND	Negative 24 Volt Regulator 1 Amp	TO-220	.64	.48	.27
LM79L24ACZMS-ND	Negative 24 Volt Regulator 100mA	TO-92	.36	.27	.15

Microsemi *NEW!* LED DRIVERS

Progress Powered by Technology

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
LX1990ILM-TCT-ND	Dual Programmable LED Current Sink	6-MLP	1.05	.93	.76
LX1990ILM-TTR-ND	Dual Programmable LED Current Sink	6-MLP	1396.50/2,500		
LX1993CDU-TCT-ND	High Efficiency Step-Up Boost Converter	8-MSOP	2.45	2.16	1.77
LX1993CDU-TTR-ND	High Efficiency Step-Up Boost Converter	8-MSOP	3258.50/2,500		

National Semiconductor TELECOMMUNICATIONS ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TP3054N-ND	Enhanced Serial Interface CODEC Filter	16-Dip	2.78	2.11	1.61
TP3054WM-ND	Enhanced Serial Interface CODEC Filter	16-SOIC	2.78	2.11	1.61
TP3410J304-ND	ISDN Basic Access Echo-Cancelling 2B1Q U Transceiver	28-Dip	24.00	22.40	20.80
TP3420AV308-ND	ISDN S/T Interface Device	20-PLCC	14.18	12.15	10.78

MICROCHIP A/D CONVERTERS

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MCP3201-CI/P	MCP3201-CI/P-ND	2.7V Single 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-Dip	2.85	2.16	1.73
MCP3201-CI/SN	MCP3201-CI/SN-ND	2.7V Single 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-SOIC	2.85	2.16	1.73
MCP3202-CI/P	MCP3202-CI/P-ND	2.7V 2-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-Dip	3.15	2.39	1.91
MCP3202-CI/SN	MCP3202-CI/SN-ND	2.7V 2-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	8-SOIC	3.15	2.39	1.91
MCP3204-CI/P	MCP3204-CI/P-ND	2.7V 4-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	14-Dip	3.95	2.99	2.39
MCP3204-CI/SL	MCP3204-CI/SL-ND	2.7V 4-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	14-SOIC	3.95	3.88	2.71
MCP3208-CI/P	MCP3208-CI/P-ND	2.7V 8-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	16-Dip	4.35	3.29	2.63
MCP3208-CI/SL	MCP3208-CI/SL-ND	2.7V 8-Ch., 12-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB	16-SOIC	4.35	3.29	2.63
MCP3301-CI/MS	MCP3301-CI/MS-ND	2.7V Single 13-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB *NEW!*	8-MSOP	3.05	2.32	1.86
MCP3301-CI/P	MCP3301-CI/P-ND	2.7V Single 13-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB *NEW!*	8-Dip	2.85	2.16	1.73
MCP3302-CI/P	MCP3302-CI/P-ND	2.7V 4-Ch., 13-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB *NEW!*	14-Dip	3.93	2.98	2.38
MCP3302-CI/SL	MCP3302-CI/SL-ND	2.7V 4-Ch., 13-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB *NEW!*	14-SOIC	3.93	2.98	2.38
MCP3302-CI/ST	MCP3302-CI/ST-ND	2.7V 4-Ch., 13-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB *NEW!*	14-TSSOP	4.20	3.19	2.55
MCP3304-CI/P	MCP3304-CI/P-ND	2.7V 8-Ch., 13-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB *NEW!*	16-Dip	4.35	3.30	2.64
MCP3304-CI/SL	MCP3304-CI/SL-ND	2.7V 8-Ch., 13-Bit A/D Conv. w/SPI Serial Interface, ±2 LSB *NEW!*	16-SOIC	4.35	3.30	2.64

MICROCHIP INFRARED ENCODERS AND DECODERS

In focusing on connectivity solutions for customers, Microchip now offers products to support infrared wireless communication. With the explosive growth of mobile phones, Personal Digital Assistants (PDAs) and other handheld electronic devices, the need for a simple, low-cost wireless communication method has grown as well. The MCP2120 Infrared Encoder/Decoder is low-cost, easy-to-use infrared peripheral. Utilizing this device and an off-the-shelf infrared transceiver, customers will now be able to add wireless communication capability to their designs. Supports IrDA Physical Layer Specification (baud rates up to 115.2k). Can support higher speeds than 115.2k bps with higher frequency crystal oscillator. If interoperability with other infrared enabled devices is required in your design, the revolutionary MCP2150 Infrared Communications Controller supporting the IrDA Standard is simply the smallest, simplest, most economical way of adding IrDA cordless connectivity to embedded applications. Includes: Support for Ir Link Access Protocol (IrLAP), Ir Link Management Protocol (IrLAP), Tiny Transport Protocol (Tiny TP) and IrComm portions of the IrDA Standard protocol stack connects to standard microcontroller UART peripherals and optical transceivers

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MCP2120-I/P	MCP2120-I/P-ND	Infrared Encoder/Decoder	14-Dip	2.48	1.53	1.49
MCP2120-I/SL	MCP2120-I/SL-ND	Infrared Encoder/Decoder	14-SOIC	2.48	1.53	1.49
MCP2150-I/P	MCP2150-I/P-ND	Infrared Controller IrDA Standard	18-Dip	7.63	5.09	4.85
MCP2150-I/SO	MCP2150-I/SO-ND	Infrared Controller IrDA Standard	18-SOIC	7.63	5.09	4.85

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MICROCHIP INFRARED ENCODERS AND DECODERS *(Continued)*

Infrared Developer's Kit This kit includes everything needed to create a system that communicates using infrared. The kit contains two MCP2120 developer's boards enabling a complete system (transmitter and receiver) to be implemented. Also included is a MCP2150 developer's board that can be used to set up a system to communicate with other IrDA enabled devices. On these developer's boards, customers can configure input and output options. All of this functionality is designed to get the user communicating via infrared in the shortest amount of time.

Microchip Part No.	Digi-Key Part No.	Description	Price Each
DM163008	DM163008-ND	IrDA Communications Development Kit for MCP2120/2150 ICs	391.30

MICROCHIP DIGITAL POTENTIOMETERS

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MCP41010-I/P	MCP41010-I/P-ND	10kΩ Single Channel Digital Pot.	8-Dip	1.68	1.27	1.01
MCP41010-I/SN	MCP41010-I/SN-ND	10kΩ Single Channel Digital Pot.	8-SOIC	1.68	1.27	1.01
MCP41050-I/P	MCP41050-I/P-ND	50kΩ Single Channel Digital Pot.	8-Dip	1.68	1.27	1.01
MCP41050-I/SN	MCP41050-I/SN-ND	50kΩ Single Channel Digital Pot.	8-SOIC	1.68	1.27	1.01
MCP41100-I/P	MCP41100-I/P-ND	100kΩ Single Channel Digital Pot.	8-Dip	1.68	1.27	1.01
MCP41100-I/SN	MCP41100-I/SN-ND	100kΩ Single Channel Digital Pot.	8-SOIC	1.68	1.27	1.01
MCP42010-I/P	MCP42010-I/P-ND	10kΩ Dual Channel Digital Pot.	14-Dip	2.53	1.91	1.52
MCP42010-I/SL	MCP42010-I/SL-ND	10kΩ Dual Channel Digital Pot.	14-SOIC	2.53	1.91	1.52
MCP42010-I/ST	MCP42010-I/ST-ND	10kΩ Dual Channel Digital Pot.	14-TSSOP	2.53	1.91	1.52
MCP42050-I/P	MCP42050-I/P-ND	50kΩ Dual Channel Digital Pot.	14-Dip	2.53	1.91	1.52
MCP42050-I/SL	MCP42050-I/SL-ND	50kΩ Dual Channel Digital Pot.	14-SOIC	2.53	1.91	1.52
MCP42050-I/ST	MCP42050-I/ST-ND	50kΩ Dual Channel Digital Pot.	14-TSSOP	2.53	1.91	1.52
MCP42100-I/P	MCP42100-I/P-ND	100kΩ Dual Channel Digital Pot.	14-Dip	2.53	1.91	1.52
MCP42100-I/SL	MCP42100-I/SL-ND	100kΩ Dual Channel Digital Pot.	14-SOIC	2.53	1.91	1.52
MCP42100-I/ST	MCP42100-I/ST-ND	100kΩ Dual Channel Digital Pot.	14-TSSOP	2.53	1.91	1.52

MICROCHIP MIXED SIGNAL

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
		System A/D Converters				
TC500ACOE	TC500ACOE-ND	Prec. Analog Front End, 17-Bit, Resolution	16-SOIC	5.65	3.57	3.23
TC500ACOE713	TC500ACOE713CT-ND	Precision Analog Front End, 17-Bit Resolution	16-SOIC	5.09	4.41	3.96
TC500ACOE713	TC500ACOE713TR-ND	Precision Analog Front End, 17-Bit Resolution	16-SOIC	2979.99/1,000		
TC500ACPE	TC500ACPE-ND	Precision Analog Front End, 17-Bit Resolution	16-Dip	5.00	3.15	2.85
TC500COE	TC500COE-ND	Precision Analog Front End, 16-Bit Resolution	16-SOIC	4.50	3.90	3.50
TC500CPE	TC500CPE-ND	Precision Analog Front End, 16-Bit Resolution	16-Dip	3.65	2.31	2.09
TC520ACPD	TC520ACPD-ND	Serial Interface Adapter	14-Dip	5.40	4.68	4.20
TC7109ACPL	TC7109ACPL-ND	12-Bit, µP-Compatible A/D Converter	40-Dip	8.13	5.13	4.64
TC7109ACKW	TC7109ACKW-ND	12-Bit, µP Compatible A/D Converter	44-PQFP	10.35	8.97	8.05
		Display A/D Converters				
TC835CKW	TC835CKW-ND	4-1/2 Digit A/D Converter	44-PQFP	11.48	9.95	8.93
TC7106ACPL	TC7106ACPL-ND	3-1/2 Digit A/D Converter for LCDs	40-Dip	4.90	3.09	2.79
TC7106CPL	TC7106CPL-ND	3-1/2 Digit A/D Converter for LCDs	40-Dip	4.90	3.09	2.79
TC7107ACPL	TC7107ACPL-ND	3-1/2 Digit A/D Converter for LEDs, Electronically Improved	40-Dip	4.63	2.92	2.64
TC7107CKW	TC7107CKW-ND	3-1/2 Digit A/D Converter for LED's	44-PQFP	5.83	5.06	4.54
TC7107CPL	TC7107CPL-ND	3-1/2 Digit A/D Converter for LEDs	40-Dip	4.45	2.81	2.54
TC7116ACPL	TC7116ACPL-ND	3-1/2 Digit A/D Conv. w/Hold (LCD)	40-Dip	6.23	3.93	3.56
TC7116CPL	TC7116CPL-ND	3-1/2 Digit A/D Converter with Hold (LCD)	40-Dip	5.60	4.86	4.36
TC7117ACPL	TC7117ACPL-ND	3-1/2 Digit A/D Conv. w/Hold (LED)	40-Dip	6.50	4.11	3.71
TC7117CKW	TC7117CKW-ND	3-1/2 Digit A/D Converter with Hold (LED)	44-PQFP	6.53	5.66	5.08
TC7117CPL	TC7117CPL-ND	3-1/2 Digit LED A/D Conv. with Hold	40-Dip	5.48	3.47	3.14
TC7126CPL	TC7126CPL-ND	3-1/2 Digit A/D Converter	40-Dip	7.27	6.30	5.66
TC7129CPL	TC7129CPL-ND	4-1/2 Digit A/D Converter with On-Chip LCD Driver	40-Dip	11.97	10.38	9.31
TC7135CPI	TC7135CPI-ND	4-1/2 Digit A/D Converter	28-Dip	7.28	4.59	4.16
TC14433AEPG	TC14433AEPG-ND	3-1/2 Digit A/D Converter CMOS	24-Dip	5.63	4.88	4.38
TC14433EPG	TC14433EPG-ND	3-1/2 Digit A/D Converter CMOS	24-Dip	5.63	4.88	4.38
		Chopper-Stabilized Operational Amplifiers				
TC7650CPA	TC7650CPA-ND	Chopper-Stabilized Op Amp	8-Dip	3.23	2.04	1.84
TC7650CPD	TC7650CPD-ND	Chopper-Stabilized Operational Amplifier CMOS	14-Dip	3.17	2.75	2.47
TC7652CPA	TC7652CPA-ND	Low Noise, Chopper-Stabilized Op Amp.	8-Dip	4.38	2.76	2.50
TC9421CPD	TC9421CPD-ND	High V. Auto Zero Chopper-Stabilized Op Amp.	14-Dip	6.64	5.76	5.17
TC913BCPA	TC913BCPA-ND	Dual Auto-Zeroed Op Amp.	8-Dip	4.65	2.94	2.66
		Voltage to Frequency & Frequency to Voltage Converters				
TC9400COD	TC9400COD-ND	Volt. to Frequency/Frequency to Volt. Converter, .05% Lin.	14-SOIC	6.98	6.05	5.43
TC9400CPD	TC9400CPD-ND	Voltage to Frequency/Frequency to Voltage Converter, .05% Lin.	14-Dip	6.88	4.34	3.93
TC9400EJD	TC9400EJD-ND	Volt. to Frequency/Frequency to Volt. Converter, .05% Lin.	14-CDIP	12.49	10.83	9.72
TC9402CPD	TC9402CPD-ND	Voltage to Frequency/Frequency to Voltage Converter, .25% Lin.	14-Dip	3.25	2.05	1.86

MICROCHIP OP AMPS

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MCP601-I/P-ND	MCP601-I/P-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply	8-Dip	.68	.42	.38
MCP601-I/SN-ND	MCP601-I/SN-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply	8-SOIC	.68	.42	.38
MCP601T-I/OT	MCP601T-I/OTCT-ND	Single Op Amp CMOS, 2.7V-5.5V, Single Supply	SOT-23-5	.54	.47	.42
MCP601T-I/OT	MCP601T-I/OTTR-ND	Single Op Amp CMOS, 2.7V-5.5V, Single Supply	SOT-23-5	960.00/3,000		
MCP602-I/P-ND	MCP602-I/P-ND	Dual Op Amp CMOS, 2.7V-5.5V Single Supply	8-Dip	.88	.55	.49
MCP602-I/SN-ND	MCP602-I/SN-ND	Dual Op Amp CMOS, 2.7V-5.5V Single Supply	8-SOIC	.88	.55	.49
MCP603-I/P-ND	MCP603-I/P-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply with CS	8-Dip	.70	.44	.40
MCP603-I/SN-ND	MCP603-I/SN-ND	Single Op Amp CMOS, 2.7V-5.5V Single Supply with CS.	8-SOIC	.70	.44	.40
MCP604-I/P-ND	MCP604-I/P-ND	Quad Op Amp CMOS, 2.7V-5.5V Single Supply	14-Dip	1.60	1.01	.91
MCP604-I/SL-ND	MCP604-I/SL-ND	Quad Op Amp CMOS, 2.7V-5.5V Single Supply	14-SOIC	1.60	1.01	.91
MCP606-I/P-ND	MCP606-I/P-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply	8-Dip	1.00	.63	.57
MCP606-I/SN-ND	MCP606-I/SN-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply	8-SOIC	1.00	.63	.57
MCP607-I/P-ND	MCP607-I/P-ND	Dual Op Amp CMOS, 2.5V-5.5V Single Supply	8-Dip	1.33	.84	.76
MCP607-I/SN-ND	MCP607-I/SN-ND	Dual Op Amp CMOS, 2.5V-5.5V Single Supply	8-SOIC	1.33	.84	.76
MCP608-I/P-ND	MCP608-I/P-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply with CS	8-Dip	1.08	.67	.61
MCP608-I/SN-ND	MCP608-I/SN-ND	Single Op Amp CMOS, 2.5V-5.5V Single Supply with CS.	8-SOIC	1.08	.67	.61
MCP609-I/P-ND	MCP609-I/P-ND	Quad Op Amp CMOS, 2.5V-5.5V Single Supply	14-Dip	2.00	1.26	1.14
MCP609-I/SL-ND	MCP609-I/SL-ND	Quad Op Amp CMOS, 2.5V-5.5V Single Supply	14-SOIC	2.00	1.26	1.14
MCP6021-I/P-ND	MCP6021-I/P-ND	Single Op Amp, Rail-to-Rail, 2.5V-5.5V	8-Dip	1.40	1.12	.98
MCP6021-I/SN-ND	MCP6021-I/SN-ND	Single Op Amp, Rail-to-Rail, 2.5V-5.5V	8-SOIC	1.40	1.12	.98
MCP6021-I/ST-ND	MCP6021-I/ST-ND	Single Op Amp, Rail-to-Rail, 2.5V-5.5V	8-TSSOP	1.50	1.20	1.05
MCP6022-I/P-ND	MCP6022-I/P-ND	Dual Op Amp, R/R, 2.5V-5.5V	8-Dip	1.80	1.44	1.26
MCP6022-I/SN-ND	MCP6022-I/SN-ND	Dual Op Amp, Rail-to-Rail, 2.5V-5.5V	8-SOIC	1.80	1.44	1.26
MCP6022-I/ST-ND	MCP6022-I/ST-ND	Dual Op Amp, Rail-to-Rail, 2.5V-5.5V	8-TSSOP	1.93	1.54	1.35
MCP6023-I/P-ND	MCP6023-I/P-ND	Single Op Amp, Rail-to-Rail, 2.5V-5.5V with CS	8-Dip	1.48	1.18	1.04
MCP6023-I/SN-ND	MCP6023-I/SN-ND	Single Op Amp, Rail-to-Rail, 2.5V-5.5V with CS.	8-SOIC	1.48	1.18	1.04
MCP6023-I/ST-ND	MCP6023-I/ST-ND	Single Op Amp, Rail-to-Rail, 2.5V-5.5V with CS.	8-TSSOP	1.60	1.28	1.12
MCP6024-I/P-ND	MCP6024-I/P-ND	Quad Op Amp, Rail-to-Rail, 2.5V-5.5V	14-Dip	2.63	2.10	1.84
MCP6024-I/SL-ND	MCP6024-I/SL-ND	Quad Op Amp, Rail-to-Rail, 2.5V-5.5V	14-SOIC	2.63	2.10	1.84
MCP6024-I/ST-ND	MCP6024-I/ST-ND	Quad Op Amp, Rail-to-Rail, 2.5V-5.5V	8-TSSOP	2.80	2.24	1.96
MCP6041-I/MS-ND	MCP6041-I/MS-ND	Single Op Amp, 1.4V, Ind. Temp.	8-MSOP	.93	.74	.67
MCP6041-I/P-ND	MCP6041-I/P-ND	Single Op Amp, 1.4V, Ind. Temp.	8-Dip	.83	.53	.48
MCP6041-I/SN-ND	MCP6041-I/SN-ND	Single Op Amp, 1.4V, Ind. Temp.	8-SOIC	.83	.53	.48
MCP6042-I/MS-ND	MCP6042-I/MS-ND	Dual Op Amp, 1.4V, Ind. Temp.	8-MSOP	1.18	.95	.86
MCP6042-I/P-ND	MCP6042-I/P-ND	Dual Op Amp, 1.4V, Ind. Temp.	8-Dip	1.10	.69	.63
MCP6042-I/SN-ND	MCP6042-I/SN-ND	Dual Op Amp, 1.4V, Ind. Temp.	8-SOIC	1.10	.69	.63
MCP6043-I/MS-ND	MCP6043-I/MS-ND	Single Op Amp, with CS 1.4V, Ind. Temp.	8-MSOP	.98	.78	.70
MCP6043-I/P-ND	MCP6043-I/P-ND	Single Op Amp, with CS 1.4V, Ind. Temp.	8-Dip	.88	.55	.49
MCP6043-I/SN-ND	MCP6043-I/SN-ND	Single Op Amp, with CS 1.4V, Ind. Temp.	8-SOIC	.88	.55	.49
MCP6044-I/P-ND	MCP6044-I/P-ND	Quad Op Amp, 1.4V, Ind. Temp.	14-Dip	1.93	1.22	1.10
MCP6044-I/SL-ND	MCP6044-I/SL-ND	Quad Op Amp, 1.4V, Ind. Temp.	14-SOIC	1.93	1.22	1.10
MCP6044-I/ST-ND	MCP6044-I/ST-ND	Quad Op Amp, 1.4V, Ind. Temp.	14-TSSOP	2.00	1.26	1.14
TC1034ECTTR	TC1034ECTTRCT-ND	Single Op Amp CMOS, 1.8V-5.5V, Single Supply	SOT-23A-5	.88	.77	.69
TC1034ECTTR	TC1034ECTTRTR-ND	Single Op Amp CMOS, 1.8V-5.5V, Single Supply	SOT-23A-5	1530.00/3,000		
TC901COA	TC901COA-ND	Dual Auto-Zeroed Op Amp CMOS, 5V-32V Single Supply with On-Chip Capacitors	8-SOIC	11.25	9.75	8.75
TC901CPA	TC901CPA-ND	Dual Auto-Zeroed Op Amp CMOS, 5V-32V Single Supply with On-Chip Capacitors	8-Dip	5.83	5.06	4.54
TC911BCOA	TC911BCOA-ND	Single Auto-Zeroed Op Amp CMOS, 4.5V-16V Single Supply with On-Chip Capacitors	8-SOIC	6.75	5.85	5.25
TC911BCPA	TC911BCPA-ND	Single Auto-Zeroed Op Amp CMOS, 4.5V-16V Single Supply with On-Chip Capacitors	8-Dip	4.50	3.90	3.50

MICROCHIP POWER MANAGEMENT

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
		Charge Pump DC-to-DC Converters				
TC151B3027EOA713	TC151B3027EOA71CT-ND	3V, Step Up/Down DC/DC PWM Converter	8-SOIC	4.57	3.96	3.56
TC151B3329EOA713	TC151B3329EOA71CT-ND	3.3V, Step Up/Down DC/DC PWM Converter	8-SOIC	4.57	3.96	3.56
TC151B5045EOA713	TC151B5045EOA71CT-ND	5V, Step Up/Down DC/DC PWM Converter	8-SOIC	4.57	3.96	3.56

(Continued)

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
TC161B3027EOA713	TC161B3027EOA71CT-ND	3V, Step Up/Down DC/DC Converter	8-SOIC	4.57	3.96	3.56
TC161B3329EOA713	TC161B3329EOA71CT-ND	3.3V, Step Up/Down DC/DC Conv.	8-SOIC	4.57	3.96	3.56
TC173B3000EMT713	TC173B3000EMT71CT-ND	3V, PWM Step Up Switching Reg.	SOT-89-5	3.29	2.85	2.56
TC173B5000EMT713	TC173B5000EMT71CT-ND	5V, PWM Step Up Switching Reg.	SOT-89-5	3.29	2.85	2.56
TC183B3000EMT	TC183B3000EMTCT-ND	3V, PFM Step Up Switch. Reg.	SOT-89-5	3.29	2.85	2.56
TC962CPA	TC962CPA-ND	High Current DC/DC Converter, 80mA	8-Dip	4.50	2.84	2.57
TC1121COA	TC1121COA-ND	2.4V-5.5V, 100mA, DC/DC Converter with Shutdown	8-SOIC	1.98	1.25	1.13
TC1121CPA	TC1121CPA-ND	2.4V-5.5V, 100mA, DC/DC Converter with Shutdown	8-Dip	2.03	1.28	1.16
TC7660COA	TC7660COA-ND	1.5V-10V, DC/DC Voltage Converter	8-SOIC	1.70	1.07	.97
TC7660CPA	TC7660CPA-ND	1.5V-10V, DC/DC Voltage Converter	8-Dip	1.75	1.11	1.00
TC7660EOA	TC7660EOA-ND	1.5V-10V, DC/DC Voltage Converter	8-SOIC	1.67	1.45	1.30
TC7660HCPA	TC7660HCPA-ND	1.5V-10V, High Frequency DC/DC Voltage Converter	8-Dip	2.18	1.90	1.70
TC7660SCOA	TC7660SCOA-ND	1.5V-12V, Super DC/DC Volt. Conv.	8-SOIC	1.80	1.13	1.03
TC7660SCPA	TC7660SCPA-ND	1.5V-12V, Super DC/DC Volt. Conv.	8-Dip	1.80	1.56	1.40
TC7660SEOA713	TC7660SEOA713CT-ND	1.5V-12V, Super DC/DC Volt. Conv.	8-SOIC	1.69	1.47	1.32
TC7660SEOA713	TC7660SEOA713TR-ND	1.5V-12V, Super DC/DC Volt. Conv.	8-SOIC	3267.00/3,300		
TC7660SEPA	TC7660SEPA-ND	1.5V-12V, Super DC/DC Volt. Conv.	8-Dip	2.93	2.54	2.28
TC7662ACPA	TC7662ACPA-ND	3.0V-18V, DC/DC Converter	8-Dip	2.50	1.58	1.43
TC7662AEPA	TC7662AEPA-ND	3V-18V, DC/DC Voltage Converter	8-Dip	3.38	2.93	2.63
TC7662AIJA	TC7662AIJA-ND	3V-18V, DC/DC Voltage Converter	8-CDip	4.50	3.90	3.50
TC7662BCOA	TC7662BCOA-ND	1.5V-15V, DC/DC Voltage Converter	8-SOIC	1.80	1.13	1.03
TC7662BCPA	TC7662BCPA-ND	1.5V-15V DC/DC Voltage Converter	8-Dip	1.62	1.41	1.26
TC7662BEOA	TC7662BEOA-ND	1.5V-15V, DC/DC Voltage Converter	8-SOIC	2.10	1.33	1.20
TC7662BEOA713	TC7662BEOA713CT-ND	1.5V-15V DC/DC Voltage Converter	8-SOIC	1.89	1.64	1.47
TC7662BEOA713	TC7662BEOA713TR-ND	1.5V-15V DC/DC Voltage Converter	8-SOIC	3662.98/3,300		
TC7662BEPA	TC7662BEPA-ND	1.5V-15V DC/DC Voltage Converter	8-Dip	1.89	1.64	1.47
TC962COE	TC962COE-ND	3V-18V High Current DC/DC Voltage Converter	(wide)16-SOIC	5.06	4.39	3.94
TCM829ECT713	TCM829ECT713CT-ND	1.5V-5.5V, Switched Cap Volt Converter	SOT-23-5	.97	.84	.76
TCM829ECT713	TCM829ECT713TR-ND	1.5V-5.5V, Switched Cap Volt Converter	SOT-23-5	1680.01/3,000		

Voltage Regulators

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TC1265-1.8VAT	TC1265-1.8VAT-ND	1.8V, 800mA Max., LDO Volt. Reg. with Shutdown	TO-220-5	2.48	1.74	1.57
TC1265-1.8VOA	TC1265-1.8VOA-ND	1.8V, 800mA Max., LDO Volt. Reg. with Shutdown	8-SOIC	1.46	1.03	.93
TC1265-2.5VAT	TC1265-2.5VAT-ND	2.5V, 800mA Max., LDO Volt. Reg. with Shutdown	TO-220-5	2.48	1.74	1.57
TC1265-2.5VOA	TC1265-2.5VOA-ND	2.5V, 800mA Max., LDO Volt. Reg. with Shutdown	8-SOIC	1.46	1.03	.93
TC1265-3.0VAT	TC1265-3.0VAT-ND	3.0V, 800mA Max., LDO Volt. Reg. with Shutdown	TO-220-5	2.48	1.74	1.57
TC1265-3.0VOA	TC1265-3.0VOA-ND	3.0V, 800mA Max., LDO Volt. Reg. with Shutdown	8-SOIC	1.46	1.03	.93
TC1265-3.3VAT	TC1265-3.3VAT-ND	3.3V, 800mA Max., LDO Volt. Reg. with Shutdown	TO-220-5	2.48	1.74	1.57
TC1265-3.3VOA	TC1265-3.3VOA-ND	3.3V, 800mA Max., LDO Volt. Reg. with Shutdown	8-SOIC	1.46	1.03	.93

Low Dropout Voltage Regulators

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TC46LR3003ECT713	TC46LR3003ECT71CT-ND	3V, 35mA, LDO Voltage Reg.	SOT-23-5	1.40	1.21	1.09
TC46LR3303ECT713	TC46LR3303ECT71CT-ND	3.3V, 35mA, LDO Voltage Reg.	SOT-23-5	1.40	1.21	1.09
TC47BR3003ECT713	TC47BR3003ECT71CT-ND	3V, Voltage Regulator Controller	SOT-23-5	1.08	.94	.84
TC47BR3303ECT713	TC47BR3303ECT71CT-ND	3.3V, Voltage Regulator Controller	SOT-23-5	1.08	.94	.84
TC47BR5003ECT	TC47BR5003ECT-ND	5V, Voltage Regulator Controller	SOT-23-5	1.08	.94	.84
TC55RP3002ECB713	TC55RP3002ECB71CT-ND	3V, 250mA max., LDO Volt. Reg.	SOT-23	.97	.84	.76
TC55RP3002ECB713	TC55RP3002ECB71TR-ND	3V, 250mA max., LDO Volt. Reg.	SOT-23	1680.01/3,000		
TC55RP3302ECB713	TC55RP3302ECB71CT-ND	3.3V, 250mA max., LDO Volt. Reg.	SOT-23	.97	.84	.76
TC55RP3302ECB713	TC55RP3302ECB71TR-ND	3.3V, 250mA max., LDO Volt. Reg.	SOT-23	1680.01/3,000		
TC55RP3302EMB713	TC55RP3302EMB71CT-ND	3.3V, 250mA max., LDO Volt. Reg.	SOT-89	.97	.84	.76
TC55RP3302EMB713	TC55RP3302EMB71TR-ND	3V, 250mA max., LDO Volt. Reg.	SOT-89	560.00/1,000		
TC55RP5002ECB713	TC55RP5002ECB71CT-ND	5V, 250mA, max., LDO Volt. Reg.	SOT-23	.97	.84	.76
TC55RP5002ECB713	TC55RP5002ECB71TR-ND	5V, 250mA max., LDO Volt. Reg.	SOT-23	1680.01/3,000		
TC55RP5002EMB713	TC55RP5002EMB71CT-ND	5V, 250mA, max., LDO Volt. Reg.	SOT-89	.97	.84	.76
TC55RP5002EMB713	TC55RP5002EMB71TR-ND	3V, 250mA max., LDO Volt. Reg.	SOT-89	560.00/1,000		
TC1015-2.5VCT713	TC10152.5VCT713CT-ND	2.5V, LDO Reg. with Shutdown	SOT-23A-5	.83	.66	.58
TC1015-2.5VCT713	TC10152.5VCT713TR-ND	2.5V, LDO Reg. with Shutdown	SOT-23A-5	1320.00/3,000		
TC1015-2.7VCT713	TC10152.7VCT713CT-ND	2.7V, LDO Reg. with Shutdown	SOT-23A-5	1.08	.94	.84
TC1015-2.8VCT713	TC10152.8VCT713CT-ND	2.8V, LDO Reg. with Shutdown	SOT-23A-5	.81	.71	.63
TC1015-2.8VCT713	TC10152.8VCT713TR-ND	2.8V, LDO Reg. with Shutdown	SOT-23A-5	1320.00/3,000		
TC1015-3.0VCT713	TC10153.0VCT713CT-ND	3.0V, LDO Reg. with Shutdown	SOT-23A-5	.83	.66	.58
TC1015-3.0VCT713	TC10153.0VCT713TR-ND	3.0V, LDO Reg. with Shutdown	SOT-23A-5	1320.00/3,000		
TC1015-4.0VCT713	TC10154.0VCT713CT-ND	4.0V, LDO Reg. with Shutdown	SOT-23A-5	.83	.66	.58
TC1015-4.0VCT713	TC10154.0VCT713TR-ND	4.0V, LDO Reg. with Shutdown	SOT-23A-5	1320.00/3,000		
TC1055-2.5VCT713	TC10552.5VCT713CT-ND	2.5V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	.83	.66	.58
TC1055-2.5VCT713	TC10552.5VCT713TR-ND	2.5V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	1320.00/3,000		
TC1055-2.7VCT713	TC10552.7VCT713CT-ND	2.7V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	.83	.66	.58
TC1055-2.7VCT713	TC10552.7VCT713TR-ND	2.7V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	1320.00/3,000		
TC1055-3.0VCT713	TC10553.0VCT713CT-ND	3.0V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	.83	.66	.58
TC1055-3.0VCT713	TC10553.0VCT713TR-ND	3.0V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	1320.00/3,000		
TC1055-3.3VCT713	TC10553.3VCT713CT-ND	3.3V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	.83	.66	.58
TC1055-3.3VCT713	TC10553.3VCT713TR-ND	3.3V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	1320.00/3,000		
TC1055-5.0VCT713	TC10555.0VCT713CT-ND	5.0V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	.83	.66	.58
TC1055-5.0VCT713	TC10555.0VCT713TR-ND	5.0V, LDO Reg. with Shutdown and Error Output	SOT-23A-5	1320.00/3,000		
TC1071VCT713	TC1071VCT713CT-ND	Adj. LDO Reg. with Shutdown	SOT-23A-5	.90	.78	.70
TC1071VCT713	TC1071VCT713TR-ND	Adj. LDO Reg. with Shutdown	SOT-23A-5	1590.00/3,000		
TC1073-2.5VCH713	TC10732.5VCH713CT-ND	2.5V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	.90	.78	.70
TC1073-2.5VCH713	TC10732.5VCH713TR-ND	2.5V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	1590.00/3,000		
TC1073-3.0VCH713	TC10733.0VCH713CT-ND	3.0V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	.90	.78	.70
TC1073-3.0VCH713	TC10733.0VCH713TR-ND	3.0V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	1590.00/3,000		
TC1073-3.3VCH713	TC10733.3VCH713CT-ND	3.3V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	.90	.78	.70
TC1073-3.3VCH713	TC10733.3VCH713TR-ND	3.3V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	1590.00/3,000		
TC1073-5.0VCH713	TC10735.0VCH713CT-ND	5.0V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	.90	.78	.70
TC1073-5.0VCH713	TC10735.0VCH713TR-ND	5.0V, LDO Reg. with Shutdown, Error and Bypass	SOT-23A-6	1590.00/3,000		
TC1185-2.5VCT713	TC11852.5VCT713CT-ND	2.5V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	.90	.72	.63
TC1185-2.5VCT713	TC11852.5VCT713TR-ND	2.5V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	1410.00/3,000		
TC1185-2.7VCT713	TC11852.7VCT713CT-ND	2.7V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	.90	.72	.63
TC1185-2.7VCT713	TC11852.7VCT713TR-ND	2.7V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	1410.00/3,000		
TC1185-2.8VCT713	TC11852.8VCT713CT-ND	2.8V, LDO Regulator with SD and Reference Bypass	SOT-23A-5	.90	.72	.63
TC1185-2.8VCT713	TC11852.8VCT713TR-ND	2.8V, LDO Regulator with SD and Reference Bypass	SOT-23A-5	1410.00/3,000		
TC1185-2.85VCT713	TC11852.85VCT71CT-ND	2.85V, LDO Regulator with SD and Reference Bypass	SOT-23A-5	.88	.77	.69
TC1185-2.85VCT713	TC11852.85VCT71TR-ND	2.85V, LDO Regulator with SD and Reference Bypass	SOT-23A-5	1410.00/3,000		
TC1185-3.0VCT713	TC11853.0VCT713CT-ND	3.0V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	.90	.72	.63
TC1185-3.0VCT713	TC11853.0VCT713TR-ND	3.0V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	1410.00/3,000		
TC1185-3.3VCT713	TC11853.3VCT713CT-ND	3.3V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	.90	.72	.63
TC1185-3.3VCT713	TC11853.3VCT713TR-ND	3.3V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	1410.00/3,000		
TC1185-4.0VCT713	TC11854.0VCT713CT-ND	4.0V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	.90	.72	.63
TC1185-4.0VCT713	TC11854.0VCT713TR-ND	4.0V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	1410.00/3,000		
TC1185-5.0VCT713	TC11855.0VCT713CT-ND	5.0V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	.90	.72	.63
TC1185-5.0VCT713	TC11855.0VCT713TR-ND	5.0V, 150mA CMOS LDO Regulator *NEW!*	SOT-23A-5	1410.00/3,000		

Power MOSFET Drivers

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	1	25	100
TC426CPA	TC426CPA-ND	1.5A HS Inverting Dual MOSFET Drvr.	8-Dip	1.63	1.03	.93
TC426EOA	TC426EOA-ND	1.5A High Speed Inverting Dual MOSFET Driver	8-SOIC	1.70	1.07	.97
TC426MJA	TC426MJA-ND	1.5A High Speed Inverting Dual MOSFET Driver	8-CDip	6.73	5.84	5.24
TC427COA	TC427COA-ND	1.5A High Speed Dual MOSFET Driver	8-SOIC	1.63	1.03	.93
TC427CPA	TC427CPA-ND	1.5A High Speed Dual MOSFET Driver	8-Dip	1.63	1.03	.94
TC427EOA	TC427EOA-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-SOIC	1.70	1.08	.98
TC427EPA	TC427EPA-ND	1.5A High Speed Complementary Dual MOSFET Driver	8-SOIC	1.70	1.07	.97
TC427MJA	TC427MJA-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-CDip	6.73	5.84	5.24
TC428CPA	TC428CPA-ND	1.5A HS Complementary Dual MOSFET Driver	8-Dip	1.63	1.03	.93
TC429CPA	TC429CPA-ND	Fast CMOS Power MOSFET Driver	8-Dip	2.13	1.34	1.22
TC1411CPA	TC1411CPA-ND	1A High Speed Inverting MOSFET Driver	8-Dip	.97	.84	.76
TC1411NCPA	TC1411NCPA-ND	1A High Speed Non-Inverting MOSFET Driver	8-Dip	.97	.84	.76
TC1413NCPA	TC1413NCPA-ND	3A High Speed Non-Inverting MOSFET Driver	8-Dip	1.24	1.08	.97
TC1426COA	TC1426COA-ND	1.2A Inverting Dual MOSFET Driver	8-SOIC	1.60	1.01	.92
TC1426COA713	TC1426COA713CT-ND	1.2A Inverting Dual MOSFET Driver	8-SOIC	1.46	1.27	1.14

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MICROCHIP POWER MANAGEMENT *(Continued)*

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC1426COA713	TC1426COA713TR-ND	1.2A Inverting Dual MOSFET Driver	8-SOIC	2772.00/3,300		
TC1426CPA	TC1426CPA-ND	1.2A Inverting Dual MOSFET Driver	8-Dip	1.60	1.01	.92
TC1427COA	TC1427COA-ND	1.2A Non-Inverting Dual MOSFET Driver	8-SOIC	1.60	1.01	.92
TC1427COA713	TC1427COA713CT-ND	1.2A Non-Inverting Dual MOSFET Driver	8-SOIC	1.46	1.27	1.14
TC1427COA713	TC1427COA713TR-ND	1.2A Non-Inverting Dual MOSFET Driver	8-SOIC	2772.00/3,300		
TC1427CPA	TC1427CPA-ND	1.2A Non-Invert Dual MOSFET Drvr.	8-Dip	1.60	1.01	.92
TC1428COA	TC1428COA-ND	1.2A Complementary Dual MOSFET Driver	8-SOIC	1.60	1.01	.92
TC4404COA	TC4404COA-ND	1.5A Open-Drain Inverting Dual MOSFET Driver	8-SOIC	2.25	1.95	1.75
TC4404CPA	TC4404CPA-ND	1.5A Open-Drain Inverting Dual MOSFET Driver	8-Dip	2.25	1.95	1.75
TC4405COA	TC4405COA-ND	1.5A Open-Drain Non-Inverting Dual MOSFET Driver	8-SOIC	2.25	1.95	1.75
TC4405CPA	TC4405CPA-ND	1.5A Open-Drain Noninverting Dual MOSFET Driver	8-Dip	2.25	1.95	1.75
TC4420COA	TC4420COA-ND	6A HS Single Out MOSFET Driver	8-SOIC	1.60	1.01	.92
TC4420COA713	TC4420COA713CT-ND	6A High Speed Single Output MOSFET Driver	8-SOIC	1.44	1.25	1.12
TC4420COA713	TC4420COA713TR-ND	6A High Speed Single Output MOSFET Driver	8-SOIC	2772.00/3,300		
TC4420CPA	TC4420CPA-ND	6A HS Single Out MOSFET Driver	8-Dip	1.60	1.01	.92
TC4420EPA	TC4420EPA-ND	6A HS Single Out MOSFET Driver	8-Dip	1.68	1.05	.95
TC4420MJA	TC4420MJA-ND	6A High Speed Single Output MOSFET Driver	8-CDip	13.03	11.30	10.14
TC4421CAT	TC4421CAT-ND	9A Peak FET Driver with Inverted Output	TO-220-5	3.83	3.32	2.98
TC4421CPA	TC4421CPA-ND	9A Peak FET Driver with Inverted Out	8-Dip	3.20	2.02	1.82
TC4422CPA	TC4422CPA-ND	9A Peak FET Driver with Non-Inverted Output	8-Dip	3.20	2.02	1.82
TC4422EPA	TC4422EPA-ND	9A Peak FET Driver with Non-inverted Output	8-Dip	3.35	2.12	1.91
TC4423CPA	TC4423CPA-ND	3A High Speed Inverting Dual MOSFET Driver	8-Dip	2.63	1.66	1.51
TC4424CPA	TC4424CPA-ND	3A High Speed Non-Inverting Dual MOSFET Driver	8-Dip	2.63	1.66	1.51
TC4424COE	TC4424COE-ND	3A High Speed Non-Inverting Dual MOSFET Driver	(wide)16-SOIC	2.36	2.05	1.84
TC4425CPA	TC4425CPA-ND	3A High Speed 1 Inverting/1 Non-Inv. Dual MOSFET Driver	8-Dip	2.36	2.05	1.84
TC4426COA	TC4426COA-ND	1.5A High Speed Inverting Dual MOSFET Driver	8-SOIC	1.63	1.03	.93
TC4426CPA	TC4426CPA-ND	1.5A Peak Dual FET Driver with Inverted Output	8-Dip	1.63	1.03	.93
TC4426EOA	TC4426EOA-ND	1.5A High Speed Inverting Dual MOSFET Driver	8-SOIC	1.70	1.07	.97
TC4426EPA	TC4426EPA-ND	1.5A High Speed Inverting Dual MOSFET Driver	8-Dip	1.70	1.07	.97
TC4427ACOA	TC4427ACOA-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-SOIC	1.53	1.33	1.19
TC4427ACPA	TC4427ACPA-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-Dip	1.53	1.33	1.19
TC4427COA	TC4427COA-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-SOIC	1.63	1.03	.93
TC4427COA713	TC4427COA713CT-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-SOIC	1.46	1.27	1.14
TC4427COA713	TC4427COA713TR-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-SOIC	2837.99/3,300		
TC4427CPA	TC4427CPA-ND	1.5A Peak Dual FET Driver with Non-Inverting Output	8-Dip	1.63	1.03	.93
TC4427EPA	TC4427EPA-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-Dip	1.70	1.07	.97
TC4427EOA	TC4427EOA-ND	1.5A High Speed Non-Inverting Dual MOSFET Driver	8-SOIC	1.70	1.07	.97
TC4428COA	TC4428COA-ND	1.5A High Speed Complementary Dual MOSFET Driver	8-SOIC	1.63	1.03	.93
TC4428CPA	TC4428CPA-ND	1.5A Peak Dual FET Driver with Complementary Output	8-Dip	1.63	1.03	.93
TC4428EOA	TC4428EOA-ND	1.5A High Speed Complementary Dual MOSFET Driver	8-SOIC	1.70	1.07	.97
TC4429COA	TC4429COA-ND	6A High Speed Inverting Single MOSFET Driver	8-SOIC	1.44	1.25	1.12
TC4429CPA	TC4429CPA-ND	6A High Speed Inverting Single MOSFET Driver *NEW!*	8-Dip	1.44	1.25	1.12
TC4432COA	TC4432COA-ND	1.5A High-Speed 30V Non-Inverting MOSFET Driver	8-SOIC	2.25	1.95	1.75
TC4432CPA	TC4432CPA-ND	1.5A High Speed 30V Non-Inverting MOSFET Driver	8-Dip	2.25	1.95	1.75
TC4467CPD	TC4467CPD-ND	Quad CMOS Logic Driver, NAND Gate, Sourced and Sinked Output	14-Dip	4.00	2.52	2.28
TC4468CPD	TC4468CPD-ND	Quad CMOS Logic Driver, AND Gate, Sourced and Sinked Output	14-Dip	4.00	2.52	2.28
TC4468COE	TC4468COE-ND	Quad CMOS Logic Driver, AND Gate, Sourced and Sinked Output	(wide)16-SOIC	3.60	3.12	2.80
TC4469CPD	TC4469CPD-ND	Quad CMOS Logic Driver, AND/Inverter Gate, Sourced & Sinked Output	14-Dip	4.00	2.52	2.28
TC4469COE	TC4469COE-ND	Quad CMOS Logic Driver, AND/Inverter Gate, Sourced and Sinked Output	(wide)16-SOIC	3.60	3.12	2.80
TC4469COE713	TC4469COE713CT-ND	Quad CMOS Logic Driver, AND/Inverter Gate, Sourced and Sinked Output	(wide)16-SOIC	3.60	3.12	2.80
TC4469COE713	TC4469COE713TR-ND	Quad CMOS Logic Driver, AND/Inverter Gate, Sourced and Sinked Output	(wide)16-SOIC	2100.00/1,000		
TC4489CPD	TC4489CPD-ND	Quad CMOS Logic Driver, AND/Inverter Gate, Sourced Output	14-Dip	4.16	3.61	3.24

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100

Pulse Width Modulators

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC170COE-ND	TC170COE-ND	PWM CMOS Current Mode Controller	(Narrow)16-SOIC	6.75	4.74	4.29
TC170CPE-ND	TC170CPE-ND	PWM CMOS Current Mode Controller	16-Dip	6.64	4.66	4.21

MICROCHIP SYSTEM MANAGEMENT

CPU / System Supervisors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC32MCZB	TC32MCZB-ND	4.5V-5.5V, 3-Pin System Supervisor w/Pwr. Supply Monitor and On-Board Watchdog Circuit	TO-92	1.71	1.49	1.33
TC32MEDB713	TC32MEDB713CT-ND	4.5V-5.5V, 3-Pin System Supervisor w/Pwr. Supply Monitor and On-Board Watchdog Circuit	SOT-223	2.03	1.76	1.58
TC32MEDB713	TC32MEDB713TR-ND	4.5V-5.5V, 3-Pin System Supervisor w/Pwr. Supply Monitor and On-Board Watchdog Circuit	SOT-223	4759.99/4,000		
TC1232COA	TC1232COA-ND	4.5-4.75V, Adj. MPU Monitor	8-SOIC	2.15	1.36	1.23
TC1232CPA	TC1232CPA-ND	4.5-4.75V, Adj. MPU Monitor	8-Dip	2.08	1.31	1.19
TC1232EOA	TC1232EOA-ND	4.5V-4.75V, Adjustable Microprocessor Monitor	8-SOIC	2.48	2.15	1.93
TC1232EPA	TC1232EPA-ND	4.5V-4.75V, Adjustable Microprocessor Monitor	8-Dip	2.65	1.67	1.52
TC1270TERCTR	TC1270TERCTRCT-ND	3.08V, Reset Monitor	SOT-143-4	1.13	.90	.79
TC1270TERCTR	TC1270TERCTRTR-ND	3.08V, Reset Monitor	SOT-143-4	1800.00/3,000		
TCM809JVNB713	TCM809JVNB713CT-ND	4.0V, Reset Monitor *NEW!*	SOT-23B-3	.68	.54	.48
TCM809JVNB713	TCM809JVNB713TR-ND	4.0V, Reset Monitor *NEW!*	SOT-23B-3	1050.00/3,000		
TCM809LENB713	TCM809LENB713CT-ND	4.63V, µP Reset Monitor, Active Low Output	SOT-23	.61	.53	.48
TCM809LENB713	TCM809LENB713TR-ND	4.63V, µP Reset Monitor, Active Low Output	SOT-23	1050.00/3,000		
TCM809MENB713	TCM809MENB713CT-ND	4.38V, µP Reset Monitor, Active Low Output	SOT-23	.61	.53	.48
TCM809MENB713	TCM809MENB713TR-ND	4.38V, µP Reset Monitor, Active Low Output	SOT-23	1050.00/3,000		
TCM809RENB713	TCM809RENB713CT-ND	2.63V, µP Reset Monitor, Active Low Output	SOT-23	.61	.53	.48
TCM809RENB713	TCM809RENB713TR-ND	2.63V, µP Reset Monitor, Active Low Output	SOT-23	1050.00/3,000		
TCM809SVNB713	TCM809SVNB713CT-ND	2.93V, Reset Monitor *NEW!*	SOT23B-3	.68	.54	.48
TCM809SVNB713	TCM809SVNB713TR-ND	2.93V, Reset Monitor *NEW!*	SOT23B-3	1050.00/3,000		
TCM809TVNB713	TCM809TVNB713CT-ND	3.08V, Reset Monitor *NEW!*	SOT23B-3	.68	.54	.48
TCM809TVNB713	TCM809TVNB713TR-ND	3.08V, Reset Monitor *NEW!*	SOT23B-3	1050.00/3,000		
TCM810LENB713	TCM810LENB713CT-ND	4.63V, µP Reset Monitor, Active High Output	SOT-23	.61	.53	.48
TCM810LENB713	TCM810LENB713TR-ND	4.63V, µP Reset Monitor, Active Low Output	SOT-23	1050.00/3,000		
TCM810MENB713	TCM810MENB713CT-ND	4.38V, µP Reset Monitor, Active High Output	SOT-23	.61	.53	.48
TCM810MENB713	TCM810MENB713TR-ND	4.38V, µP Reset Monitor, Active High Output	SOT-23	1050.00/3,000		
TCM810RENB713	TCM810RENB713CT-ND	2.63V, µP Reset Monitor, Active High Output	SOT-23	.61	.53	.48
TCM810RENB713	TCM810RENB713TR-ND	2.63V, µP Reset Monitor, Active High Output	SOT-23	1050.00/3,000		
TCM810SENB713	TCM810SENB713CT-ND	2.93V, µP Reset Monitor, Active High Output	SOT-23	.61	.53	.48
TCM810SENB713	TCM810SENB713TR-ND	2.93V, µP Reset Monitor, Active High Output	SOT-23	1050.00/3,000		
TCM810TENB713	TCM810TENB713CT-ND	3.08V, µP Reset Monitor, Active High Output	SOT-23	.61	.53	.48
TCM810TENB713	TCM810TENB713TR-ND	3.08V, µP Reset Monitor, Active High Output	SOT-23	1050.00/3,000		

Voltage Detectors

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC44VC2703EZB	TC44VC2703EZB-ND	2.7V, Voltage Detector CMOS Output	TO-92	1.19	1.04	.93
TC54VC2702ECB713	TC54VC2702ECB71CT-ND	2.7V, Volt. Detector CMOS Output	SOT-23	.83	.73	.65
TC54VC2702ECB713	TC54VC2702ECB71TR-ND	2.7V, Voltage Detector CMOS Out	SOT-23	1470.00/3,000		
TC54VC2902ECB713	TC54VC2902ECB71CT-ND	2.9V, Volt. Detector CMOS Output	SOT-23	.83	.73	.65
TC54VC2902ECB713	TC54VC2902ECB71TR-ND	2.9V, Voltage Detector CMOS Out	SOT-23	1470.00/3,000		
TC54VC4302ECB713	TC54VC4302ECB71CT-ND	4.3V, Volt. Detector CMOS Output	SOT-23	.83	.73	.65
TC54VC4302ECB713	TC54VC4302ECB71TR-ND	4.3V, Voltage Detector CMOS Out	SOT-23	1443.00/3,000		
TC54VC4302EMB713	TC54VC4302EMB71CT-ND	4.3V, Volt. Detector CMOS Output	SOT-89	.83	.73	.65
TC54VC4302EMB713	TC54VC4302EMB71TR-ND	4.3V, Voltage Detector CMOS Out	SOT-89	481.00/1,000		
TC54VC4502ECB713	TC54VC4502ECB71CT-ND	4.5V, Volt. Detector CMOS Output	SOT-23	.83	.73	.65
TC54VC4502ECB713	TC54VC4502ECB71TR-ND	4.5V, Voltage Detector CMOS Out	SOT-23	1443.00/3,000		
TC54VN2702ECB713	TC54VN2702ECB71CT-ND	2.7V, Volt. Detector N-Ch., O.D.	SOT-23	.83	.73	.65
TC54VN2702ECB713	TC54VN2702ECB71TR-ND	2.7V, Volt. Detector N-Ch., O.D.	SOT-23	1470.00/3,000		
TC54VN2902ECB713	TC54VN2902ECB71CT-ND	2.9V, Volt. Detector N-Ch., O.D.	SOT-23	.83	.73	.65
TC54VN2902ECB713	TC54VN2902ECB71TR-ND	2.9V, Volt. Detector N-Ch., O.D.	SOT-23	1470.00/3,000		
TC54VN2902EMB713	TC54VN2902EMB71CT-ND	2.9V, Volt. Detector N-Ch., O.D.	SOT-89	.77	.67	.60
TC54VN3002ECB713	TC54VN3002ECB71CT-ND	3.0V, Voltage Detector N-Chan, Open Drain	SOT-23A	.83	.73	.65
TC54VN3002ECB713	TC54VN3002ECB71TR-ND	3.0V, Voltage Detector N-Chan, Open Drain	SOT-23A	1470.00/3,000		
TC54VN4302ECB713	TC54VN4302ECB71CT-ND	4.3V, Volt. Detector N-Ch., O.D.	SOT-23	.83	.73	.65
TC54VN4302ECB713	TC54VN4302ECB71TR-ND	4.3V, Volt. Detector N-Ch., O.D.	SOT-23	1443.00/3,000		
TC54VN4502ECB713	TC54VN4502ECB71CT-ND	4.5V, Volt. Detector N-Ch., O.D.	SOT-23	.83	.73	.65
TC54VN4502ECB713	TC54VN4502ECB71TR-ND	4.5V, Volt. Detector N-Ch., O.D.	SOT-23	1443.00/3,000		
TC54VN4502EMB713	TC54VN4502EMB71CT-ND	4.5V, Volt. Detector N-Ch., O.D.	SOT-89	.83	.73	.65
TC54VN4502EMB713	TC54VN4502EMB71TR-ND	4.5V, Volt. Detector N-Ch., O.D.	SOT-89	481.00/1,000		

MICROCHIP — THERMAL MANAGEMENT

Microchip Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
Voltage Output Temperature Sensors						
TC1023VOA	TC1023VOA-ND	Temp. Sensor -40°C to 100°C (.25V, @ 25°C)	8-SOIC	1.35	1.17	1.05
TC1023VUA	TC1023VUA-ND	Temp. Sensor -40°C to 100°C (.25V, @ 25°C)	8-MSOP	1.42	1.23	1.11
Logic Output Temperature Sensors						
TC620CCPA	TC620CCPA-ND	Solid State Temp. Sensor (Non-Inverting)	8-Dip	2.30	1.45	1.32
TC621CCOA	TC621CCOA-ND	4.5V Solid State Temperature Sensor (Inverting)	8-SOIC	2.18	1.90	1.70
TC622EPA	TC622EPA-ND	4.5V Solid State Temperature Sensor	8-Dip	1.62	1.41	1.26
TC622VAT	TC622VAT-ND	4.5V Solid State Temperature Sensor	TO-220	2.54	2.21	1.98
TC622VOA	TC622VOA-ND	4.5V Solid State Temperature Sensor	8-SOIC	1.85	1.60	1.44
Serial Temperature Sensors						
TC74A0-5.0VCTTR	TC74A0-5.0VCTCT-ND	5V, Digital Thermal Sensor *NEW!*	SOT23A-5	1.73	1.38	1.21
TC74A0-5.0VCTTR	TC74A0-5.0VCTTR-ND	5V, Digital Thermal Sensor *NEW!*	SOT23A-5	2730.00/3,000		
TC74A5-3.3VCTTR	TC74A5-3.3VCTCT-ND	3.3V, Digital Thermal Sensor *NEW!*	SOT23A-5	1.73	1.38	1.21
TC74A5-3.3VCTTR	TC74A5-3.3VCTTR-ND	3.3V, Digital Thermal Sensor *NEW!*	SOT23A-5	2730.00/3,000		
TC74A5-5.0VCTTR	TC74A5-5.0VCTCT-ND	5V, Digital Thermal Sensor *NEW!*	SOT23A-5	1.73	1.38	1.21
TC74A5-5.0VCTTR	TC74A5-5.0VCTTR-ND	5V, Digital Thermal Sensor *NEW!*	SOT23A-5	2730.00/3,000		
TCN75-3.3MOA	TCN75-3.3MOA-ND	3.3V, 2-Wire Serial Temp. Sensor *NEW!*	8-SOIC	1.85	1.18	1.06
TCN75-3.3MUA	TCN75-3.3MUA-ND	3.3V, 2-Wire Serial Temp. Sensor	8-MSOP	1.93	1.22	1.10
TCN75-5.0MOA	TCN75-5.0MOA-ND	5.0V, 2-Wire Serial Temp. Sensor	8-SOIC	1.85	1.18	1.06
TCN75-5.0MUA	TCN75-5.0MUA-ND	5.0V, 2-Wire Serial Temp. Sensor	8-MSOP	1.93	1.22	1.10
Fan Controllers						
TC642COA	TC642COA-ND	PWM Fan Speed Controller with Fault Detection	8-SOIC	2.50	1.58	1.43
TC642VPA	TC642VPA-ND	PWM Fan Speed Controller with Fault Detection	8-Dip	2.73	1.72	1.56
TC646VOA	TC646VOA-ND	PWM Fan Speed Controller with SD and Fault Detection	8-SOIC	2.60	1.64	1.48
TC646VPA	TC646VPA-ND	PWM Fan Speed Controller with SD and Fault Detection	8-Dip	2.73	1.72	1.56
TC648VOA713	TC648VOA713CT-ND	PWM Fan Speed Controller with Shutdown	8-SOIC	2.30	1.84	1.61
TC648VOA713	TC648VOA713TR-ND	PWM Fan Speed Controller with Shutdown	8-SOIC	3993.01/3,300		
TC648VPA	TC648VPA-ND	PWM Fan Speed Controller *NEW!*	8-Dip	2.40	1.51	1.37
TC652AGVUA	TC652AGVUA-ND	Integrated Temp. Sensor and Brushless DC Fan Controller w/Fault Detection and Over Temp. Alert	8-MSOP	2.70	1.70	1.54
High Precision Temperature-To-Voltage Converters						
TC1046VNBTR	TC1046VNBTRCT-ND	Temperature to Voltage Converter -40°C to +125°C, 6.25mV/°C	SOT-23B	.83	.66	.58
TC1046VNBTR	TC1046VNBTRTR-ND	Temperature to Voltage Converter -40°C to +125°C, 6.25mV/°C	SOT-23B	1320.00/3,000		
TC1047AVNBTR	TC1047AVNBCT-ND	High Precision Temperature to Voltage Converter *NEW!*	SOT-23B	.88	.70	.62
TC1047AVNBTR	TC1047AVNBTR-ND	High Precision Temperature to Voltage Converter *NEW!*	SOT-23B	1380.00/3,000		

LINEAR TECHNOLOGY — LINEAR SERIES

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LM385BZ-2.5LT-ND	—	Precision Volt Reference, 2.5V, 1.5%	TO-92	2.00	1.45	1.10
LT311AN8-ND	—	Voltage Converter	8-Dip	2.38	1.58	1.25
LT317AT-ND	—	Adjustable Positive Voltage Regulator	TO-220	3.75	2.50	2.15
LT318AN8-ND	—	15MHz High Speed Op Amp	8-Dip	3.38	2.25	1.95
LT323AT-ND	—	5V, 3A Voltage Regulator	TO-220	4.00	2.67	2.50
LT337AT-ND	—	Adjustable Negative Voltage Regulator	TO-220	3.75	2.50	2.15
LT1001ACN8-ND	9175B	Single Precision Op Amp	8-Dip	5.88	3.92	3.40
LT1001CN8-ND	9175B	Single Precision Op Amp	8-Dip	2.88	2.10	1.90
LT1001CS8-ND	9175B	Single Precision Op Amp	8-SOIC	3.63	2.42	2.15
LT1002CN-ND	9175B	Dual MatchedPrecision Op Amp	14-Dip	5.25	3.50	2.95
LT1004CS8-1.2-ND	9175B	Micropower 1.2 Voltage Reference	8-SOIC	2.88	1.92	1.65
LT1004CS8-2.5-ND	9175B	Micropower 2.5 Voltage Reference	8-SOIC	2.88	1.92	1.65
LT1004CZ-1.2-ND	9175B	Micropower 1.2 Voltage Reference	TO-92	2.38	1.58	1.35
LT1004CZ-2.5-ND	9175B	Micropower 2.5 Voltage Reference	TO-92	2.38	1.58	1.35
LT1004IS8-1.2-ND	9175B	Micropower 1.2 Voltage Reference	8-SOIC	5.63	3.75	3.20
LT1004IS8-2.5-ND	9175B	Micropower 2.5 Voltage Reference	8-SOIC	5.63	3.75	3.20
LT1004IZ-2.5-ND	—	Micropower 2.5 Voltage Reference	TO-92	5.00	3.33	2.85
LT1006CN8-ND	9175B	5V Single Precision Op Amp	8-Dip	2.88	1.92	1.60
LT1006S8-ND	9175B	5V Single Precision Op Amp.	8-SOIC	3.50	2.33	1.95
LT1007ACN8-ND	—	Single Low Noise, High-Speed, Precision Op Amp	8-Dip	8.75	5.83	5.00
LT1007CN8-ND	9175B	Single Low Noise, High-Speed, Precision Op Amp	8-Dip	3.63	2.42	1.95
LT1007CS8-ND	9176B	Single Low Noise, High-Speed, Precision Op Amp	8-SOIC	4.13	2.75	2.15
LT1007IS8-ND	—	Single Low Noise, High-Speed, Op Amp, Ind. Temp.	8-SOIC	5.63	3.75	3.10
LT1008CN8-ND	9175B	Precision Low Noise Op Amp with Microvolt Offset	8-Dip	5.50	3.67	3.10
LT1009CMS8-ND	—	2.5V Reference Shunt Regulator	8-MSOP	3.75	2.49	2.00
LT1009CMS8TR-ND	—	2.5V Reference Shunt Regulator	8-MSOP	4775.00/2,500		
LT1009CZ-ND	9175B	2.5V Reference Shunt Regulator	TO-92	2.38	1.58	1.35
LT1009IS8-ND	—	2.5V Reference Shunt Regulator	8-SOIC	4.50	3.00	2.55
LT1009IZ-ND	—	2.5V Reference Shunt Regulator	TO-92	4.13	2.75	2.35
LT1009S8-ND	9175B	2.5V Reference Shunt Regulator	8-SOIC	3.13	2.08	1.85
LT1010CN8-ND	9175B	High Speed 150mA Power Buffer	8-Dip	4.38	2.92	2.50
LT1010CT-ND	9175B	High Speed 150mA Power Buffer	TO-220-5	5.00	3.33	2.85
LT1011ACN8-ND	9175B	5V Precision Voltage Comparator	8-Dip	5.25	3.50	2.85
LT1011AIS8-ND	—	5V Precision Voltage Comparator	8-SOIC	5.75	3.82	3.15
LT1011CN8-ND	9175B	5V Precision Voltage Comparator	8-Dip	2.38	1.58	1.40
LT1011CS8-ND	9175B	5V Precision Voltage Comparator	8-SOIC	3.00	2.00	1.70
LT1012ACN8-ND	9175B	Universal Single Precision Low Noise Op Amp	8-Dip	7.13	4.75	3.95
LT1012CN8-ND	9175B	Universal Single Precision Low Noise Op Amp	8-Dip	5.00	3.33	2.75
LT1012S8-ND	9175B	Universal Single Precision Low Noise Op Amp	8-SOIC	6.00	4.00	3.45
LT1013ACN8-ND	9176B	Dual Precision Op Amp	8-Dip	7.13	4.75	3.95
LT1013CN8-ND	9176B	Dual Precision Op Amp, Vos=300µV	8-Dip	4.25	2.83	2.40
LT1013DN8-ND	9176B	Dual Precision Op Amp, Vos=800µV	8-Dip	3.50	2.33	1.95
LT1013DS8-ND	9176B	Dual Precision Op Amp, Vos=800µV	8-SOIC	4.00	2.67	2.30
LT1014ACN-ND	9176B	Quad Precision Op Amp	14-Dip	12.75	8.50	7.10
LT1014CN-ND	9176B	Quad Precision Op Amp, Vos=300µV	14-Dip	9.38	6.25	5.35
LT1014DNLT-ND	9176B	Quad Precision Op Amp, Vos=800µV	14-Dip	6.25	4.17	3.60
LT1014DSW-ND	9176B	Quad Precision Op Amp	16-SOIC	7.38	4.92	4.15
LT1016CN8-ND	9175B	High-Speed, 10nS Comparator	8-Dip	5.50	3.67	2.95
LT1016CS8-ND	9175B	High-Speed, 10nS Comparator	8-SOIC	6.13	4.08	3.20
LT1017CN8-ND	9210B	Micropower Dual Comparator, 30µA Supply Current	8-Dip	3.63	2.42	2.10
LT1017CS8-ND	9210B	Micropower Dual Comparator, 30µA Supply Current	8-SOIC	4.00	2.67	2.30
LT1017IS8-ND	9210B	Micropower Dual Comparator, 30µA Supply Current	8-SOIC	4.88	3.25	2.75
LT1018CN8-ND	9210B	Micropower Dual Comparator, 110µA Supply Current	8-Dip	3.38	2.25	1.95
LT1018CS8-ND	9210B	Micropower Dual Comparator, 110µA Supply Current	8-SOIC	3.75	2.50	2.20
LT1019ACN8-2.5-ND	9175B	Prec. 2.5V Bandgap Reference (Elect. Improved) .02%	8-Dip	11.25	7.50	6.50
LT1019ACN8-4.5-ND	9175B	Prec. 4.5V Bandgap Reference (Elect. Improved) .02%	8-Dip	11.25	7.50	6.50
LT1019ACN8-5-ND	9175B	Prec. 5V Bandgap Reference (Elect. Improved) .02%	8-Dip	11.25	7.50	6.50
LT1019ACN8-10-ND	9175B	Prec. 10V Bandgap Reference (Elect. Improved) .02%	8-Dip	11.25	7.50	6.50
LT1019ACS8-2.5-ND	—	Prec. 2.5V Reference (Elect. Improved) .02%	8-SOIC	10.88	7.50	6.50
LT1019ACS8-5-ND	—	Prec. 5V Reference (Elect. Improved) .02%	8-SOIC	10.88	7.50	6.50
LT1019CN8-2.5-ND	9175B	Prec. 2.5V Bandgap Reference .02%	8-Dip	6.88	4.58	3.90
LT1019CN8-5-ND	9175B	Prec. 5V Bandgap Reference .02%	8-Dip	6.88	4.58	3.90
LT1019CN8-10-ND	9175B	Prec. 10V Bandgap Reference .02%	8-Dip	6.88	4.58	3.90
LT1019CS8-2.5-ND	9175B	Prec. 2.5V Bandgap Reference .02%	8-SOIC	8.38	5.58	4.85
LT1019CS8-4.5-ND	—	Prec. 4.5V Bandgap Reference .02%	8-SOIC	8.38	5.58	4.85
LT1019CS8-5-ND	9175B	Prec. 5V Bandgap Reference .02%	8-SOIC	8.38	5.58	4.85
LT1019CS8-10-ND	9175B	Prec. 10V Bandgap Reference .02%	8-SOIC	8.38	5.58	4.85
LT1019IN8-2.5-ND	—	Prec. 2.5V Bandgap Reference .02%	8-Dip	8.63	5.75	4.95
LT1020CN-ND	9175B	Micropower Volt. Regulator/Comparator, 2.5V Ref.	14-Dip	6.88	4.58	3.90
LT1020CSW-ND	9175B	Micropower Volt. Regulator/Comparator, 2.5V Ref.	16-SOIC	7.50	5.00	4.25
LT1021BCN8-5-ND	9175B	Precision 5V Reference, TC 5ppm/°C	8-Dip	9.63	6.42	5.50
LT1021BCN8-7-ND	9175B	Precision 7V Reference, TC 5ppm/°C	8-Dip	9.63	6.42	5.50
LT1021BCN8-10-ND	9175B	Precision 10V Reference, TC 5ppm/°C	8-Dip	9.63	6.42	5.50
LT1021CCH-5-ND	9175B	Precision 5V Reference, 0.05% Tolerance	TO-5-8	9.38	6.25	5.35
LT1021CCN8-5-ND	9175B	Precision 5V Reference, TC 20ppm/°C	8-Dip	6.38	4.25	3.65
LT1021CCN8-10-ND	9175B	Precision 10V Reference, TC 20ppm/°C	8-Dip	6.38	4.25	3.65
LT1021CIN8-5-ND	—	Precision 5V Reference, TC 20ppm/°C	8-Dip	8.63	5.75	4.85
LT1021DCN8-5-ND	9175B	Precision 5V Reference, TC 20ppm/°C	8-Dip	4.75	3.17	2.75
LT1021DCN8-10-ND	9175B	Precision 10V Reference, TC 20ppm/°C	8-Dip	4.75	3.17	2.75
LT1021DCS8-5-ND	9175B	Precision 5V Reference, TC 20ppm/°C	8-SOIC	5.88	3.92	3.35
LT1021DCS8-10-ND	9175B	Precision 10V Reference, TC 20ppm/°C	8-SOIC	5.88	3.92	3.35
LT1022CN8-ND	9175B	High Speed Precision JFET Op Amp	8-Dip	5.00	3.33	2.95
LT1025ACN8-ND	9175B	Micropower Thermocouple Cold Junction Compensator	8-Dip	8.63	5.75	4.75
LT1025CN8-ND	9175B	Micropower Thermocouple Cold Junction Compensator	8-Dip	4.63	3.08	2.65
LT1026CN8-ND	9175B	Switched Capacitor Voltage Converter	8-Dip	3.75	2.50	2.10
LT1026CS8-ND	9175B	Switch Capacitor Voltage Converter	8-SOIC	4.25	2.83	2.30
LT1026IS8-ND	—	Switch Capacitor Voltage Converter	8-SOIC	5.38	3.60	3.10
LT1027BCN8-5-ND	9176B	5V Precision Reference, 2ppm/°C	8-Dip	9.25	6.17	4.95
LT1027CCN8-5-ND	9176B	5V Precision Reference, 3ppm/°C	8-Dip	8.38	5.58	4.50
LT1027CCS8-5-ND	—	5V Precision Reference, 3ppm/°C	8-SOIC	9.50	6.31	4.75
LT1027DCN8-5-ND	9176B	5V Precision Reference, 5ppm/°C	8-Dip	7.38	4.92	3.95
LT1027ECN8-5-ND	9176B	5V Precision Reference, 7.5ppm/°C	8-Dip	6.88	4.58	3.65
LT1027ECS8-5-ND	9176B	5V Precision Reference, 7.5ppm/°C	8-SOIC	4.63	3.10	2.40
LT1028ACN8-ND	9210B	Single, Ultra Low Noise Op Amp	8-Dip	13.13	8.75	7.55
LT1028CN8-ND	9210B	Single, Ultra Low Noise Op Amp	8-Dip	8.63	5.75	4.95
LT1028CS8-ND	9210B	Single, Ultra Low Noise Op Amp	8-SOIC	8.63	5.75	4.95
LT1029ACZ-ND	9175B	5V Precision Bandgap Reference, 20ppm/°C	TO-92	4.50	3.00	2.60
LT1029CZ-ND	9175B	5V Precision Bandgap Reference, 20ppm/°C	TO-92	2.75	1.83	1.60
LT1030CNLT-ND	9175B	Quad Low Power Line Driver	14-Dip	3.13	2.08	1.65
LT1031BCH-ND	9175B	Precision 10V Reference, 5ppm/°C	TO-5	13.50	9.00	7.70
LT1031DCH-ND	9175B	Precision 10V Reference, 25ppm/°C	TO-5	6.25	4.15	3.55
LT1032CN-ND	9175B	Quad Low Power Line Driver	14-Dip	4.50	3.00	2.55
LT1032CSW-ND	9175B	Quad Low Power Line Driver	16-SOIC	4.63	3.08	2.60
LT1033CT-ND	9175B	Adj. Negative Voltage Regulator, 3A, 1% Tolerance	TO-220	5.25	3.50	2.95
LT1034BCZ-1.2-ND	9210B	Dual 1.2V Reference, Max TC = 20 ppm/°C.	TO-92	5.00	3.33	2.85
LT1034BCZ-2.5-ND	9210B	Dual 2.5V Reference, Max TC = 20 ppm/°C.	TO-92	5.00	3.33	2.85
LT1034CS8-1.2-ND	9210B	Dual 1.2V Reference, Max TC = 40 ppm/°C	8-SOIC	4.50	3.00	2.40
LT1034CS8-2.5-ND	9210B	Dual 2.5V Reference, Max TC = 40 ppm/°C	8-SOIC	4.50	3.00	2.40
LT1034CZ-1.2-ND	9210B	Dual 1.2V Reference, Max TC = 40 ppm/°C.	TO-92	3.75	2.50	2.15
LT1034CZ-2.5-ND	9210B	Dual 2.5V Reference, Max TC = 40 ppm/°C.	TO-92	3.75	2.50	2.15
LT1034IS8-1.2-ND	—	Dual 1.2V Reference, Max TC = 40 ppm/°C	8-SOIC	6.25	4.17	3.35
LT1034IS8-2.5-ND	9210B	Dual 2.5V Reference, Max TC = 40 ppm/°C	8-SOIC	6.25	4.17	3.35
LT1037ACN8-ND	9175B	Single, Low Noise, High-Speed Precision Op Amp	8-Dip	8.75	5.83	5.00
LT1037CN8-ND	9175B	Single, Low Noise, High-Speed Precision Op Amp	8-Dip	3.63	2.42	1.95
LT1037CS8-ND	9176B	Single, Low Noise, High-Speed Precision Op Amp	8-SOIC	4.13	2.75	2.15
LT1039ACN-ND	—	15kV Triple RS232 Driver/Receiver with Shutdown	18-Dip	5.00	3.35	2.85
LT1039ACSW-ND	—	15kV Triple RS232 Driver/Receiver with Shutdown	18-SOIC	5.88	3.91	3.35
LT1039CN-ND	9175B	15kV Triple RS232 Driver/Receiver with Shutdown	18-Dip	4.38	2.92	2.45
LT1039CN16-ND	—	15kV Triple RS232 Driver/Receiver with Shutdown	16-Dip	3.75	2.75	2.10
LT1039CSW-ND	9175B	15kV Triple RS232 Driver/Receiver with Shutdown	18-SOIC	5.25	3.50	2.90
LT1054CN8-ND	9210B	Switched Capacitor Voltage Converter with Regulator	8-Dip	4.88	3.25	2.80
LT1054CSW-ND	—	Switched Capacitor Voltage Converter with Regulator	16-SOIC	6.00	4.00	3.25
LT1054CS8-ND	9210B	Switched Capacitor Voltage Converter with Regulator.	8-SOIC	6.00	3.99	3.00
LT1054IN8-ND	9210B	Switched Capacitor Volt. Converter w/Reg., Ind. Temp.	8-Dip	7.13	4.75	3.95
LT1054ISW-ND	—	Switched Capacitor Volt. Conv. with Reg., Ind. Temp.	16-SOIC	8.63	5.75	4.85

(Continued)

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LT1054IS8-ND	—	Switched Capacitor Volt. Conv. with Reg., Ind. Temp.	8-SOIC	8.63	5.75	4.65
LT1054LCS8-ND	—	Switched Capacitor Volt. Conv. with Reg., Ind. Temp.	8-SOIC	4.25	2.83	2.15
LT1055CN8-ND	9175B	Precision High-Speed JFET Op Amp	8-Dip	3.38	2.25	1.95
LT1056CN8-ND	9175B	Precision High-Speed JFET Op Amp	8-Dip	3.38	2.25	1.95
LT1056S8-ND	9175B	Precision High-Speed JFET Op Amp	8-SOIC	4.00	2.67	2.50
LT1057ACN8-ND	9175B	Dual Precision JFET Op Amp, 450µV	8-Dip	8.75	5.83	4.95
LT1057CN8-ND	9176B	Dual Precision JFET Op Amp, 600µV	8-Dip	4.50	3.00	2.55
LT1057S8-ND	9176B	Dual Precision JFET Op Amp	8-SOIC	4.75	3.17	2.95
LT1058ACN-ND	9175B	Quad Precision JFET Op Amp	14-Dip	16.50	11.00	9.55
LT1058CN-ND	9175B	Quad Precision JFET Op Amp	14-Dip	7.63	5.08	4.35
LT1058ISW-ND	9175B	Quad Precision JFET Op Amp	16-SOIC	17.88	11.92	10.30
LT1058SW-ND	9175B	Quad Precision JFET Op Amp	16-SOIC	8.88	5.92	5.00
LT1070CT-ND	9175B	5A High Power Switching Regulator	TO-220-5	10.63	7.08	5.65
LT1070HVCT-ND	9175B	5A High Power Switching Regulator	TO-220-5	13.75	9.17	7.35
LT1071CT-ND	9175B	2.5A High Power Switching Regulator	TO-220-5	8.63	5.75	4.75
LT1071HVCT-ND	9175B	2.5A High Power Switching Regulator	TO-220-5	11.25	7.50	6.20
LT1072CN8-ND	9210B	1.25A High Efficiency Switching Regulator	8-Dip	4.38	2.92	2.45
LT1072CS8-ND	9210B	1.25A High Efficiency Switching Regulator	8-SOIC	5.38	3.58	3.00
LT1072CT-ND	9210B	1.25A High Efficiency Switching Regulator	TO-220-5	5.63	3.75	2.95
LT1072HVCT-ND	9210B	1.25A High Efficiency Switching Regulator	TO-220-5	7.38	4.92	3.85
LT1072IN8-ND	—	1.25A High Efficiency Switching Regulator	8-Dip	6.13	4.08	3.45
LT1073CN8-ND	9176B	Adjustable DC/DC Converter	8-Dip	5.50	3.67	3.15
LT1073CN8-5-ND	9176B	5V Fixed DC/DC Converter	8-Dip	5.50	3.67	3.15
LT1073CN8-12-ND	9176B	12V Fixed DC/DC Converter	8-Dip	5.50	3.67	3.15
LT1073CS8-ND	9176B	Adjustable DC/DC Converter	8-SOIC	6.38	4.25	3.60
LT1073CS8-5-ND	9176B	5V Fixed DC/DC Converter	8-SOIC	6.38	4.25	3.60
LT1073CS8-12-ND	9176B	12V Fixed DC/DC Converter	8-SOIC	6.38	4.25	3.60
LT1074CT-ND	9210B	5A Step Down Switching Regulator	TO-220-5	9.25	6.17	5.25
LT1074CT7-ND	9210B	5A Step Down Switching Regulator	TO-220-7	10.75	7.17	6.10
LT1074HVCT-ND	9210B	5A Step Down Switching Regulator	TO-220-5	13.88	9.25	7.90
LT1074HVCT7-ND	9210B	5A Step Down Switching Regulator	TO-220-7	15.38	10.25	8.75
LT1074HVIT-ND	9210B	5A Step Down Switching Regulator, Ind. Temp.	TO-220-5	18.75	12.50	10.65
LT1074HVIT7-ND	9210B	5A Step Down Switching Regulator, Ind. Temp	TO-220-7	20.25	13.50	11.20
LT1074IT-ND	9210B	5A Step Down Switching Regulator, Ind. Temp.	TO-220-5	12.50	8.33	7.10
LT1074IT7-ND	9210B	5A Step Down Switching Regulator, Ind. Temp	TO-220-7	13.75	9.15	7.65
LT1076CQ-ND	9210B	2A Step Down Switching Regulator	5-DD	7.50	5.00	4.00
LT1076CQ-5-ND	9176B	2A Step Down Switching Regulator	5-DD	7.50	5.00	4.00
LT1076CR-ND	9210B	2A Step-Down Switching Regulator	7-DD	8.13	5.42	4.35
LT1076CR-5-ND	9176B	2A Step-Down Switching Regulator	7-DD	8.13	5.42	4.35
LT1076CT-ND	9210B	2A Step Down Switching Regulator	TO-220-5	6.50	4.33	3.50
LT1076CT-5-ND	9176B	2A Step Down Switching Regulator	TO-220-5	6.50	4.33	3.50
LT1076CT7-ND	9210B	2A Step Down Switching Regulator	TO-220-7	7.50	5.00	4.00
LT1076HVCR-ND	9210B	2A Step Down Switching Regulator	7-DD	14.13	9.42	7.65
LT1076HVCT-ND	9210B	2A Step Down Switching Regulator	TO-220-5	11.38	7.58	6.05
LT1076HVCT-5-ND	9210B	2A Step Down 5V Switching Regulator	TO-220-5	11.38	7.58	6.05
LT1076HVIT-ND	9210B	2A Step Down Switching Regulator	TO-220-5	13.38	8.92	7.65
LT1076IT-ND	9210B	2A Step Down Switching Regulator	TO-220-5	8.88	5.92	5.05
LT1077ACN8-ND	9176B	Micropower Precision Single Op Amp	8-Dip	5.63	3.75	3.20
LT1077CN8-ND	9176B	Micropower Precision Single Op Amp	8-Dip	3.13	2.08	1.65
LT1077IS8-ND	9176B	Micropower Precision Single Op Amp	8-SOIC	4.38	2.91	2.40
LT1077S8-ND	9176B	Micropower Precision Single Op Amp	8-SOIC	3.63	2.42	2.05
LT1078ACN8-ND	9176B	Micropower Precision Dual Op Amp	8-Dip	9.00	6.00	5.15
LT1078CN8-ND	9176B	Micropower Precision Dual Op Amp	8-Dip	5.00	3.33	2.80
LT1078IN8-ND	9176B	Micropower Precision Dual Op Amp	8-Dip	6.50	4.33	3.75
LT1078IS8-ND	9176B	Micropower Precision Dual Op Amp	8-SOIC	8.38	5.60	4.85
LT1078S8-ND	9176B	Micropower Precision Dual Op Amp	8-SOIC	6.50	4.35	3.65
LT1079ACN-ND	9176B	Micropower Precision Quad Op Amp	14-Dip	11.25	7.50	6.50
LT1079CN-ND	9176B	Micropower Precision Quad Op Amp	14-Dip	6.25	4.17	3.50
LT1079IN-ND	9176B	Micropower Precision Quad Op Amp, Ind Temp.	14-Dip	7.75	5.17	4.45
LT1079ISW-ND	9176B	Micropower Precision Quad Op Amp, Ind Temp.	16-SOIC	10.13	6.75	5.70
LT1079SW-ND	9176B	Micropower Precision Quad Op Amp	16-SOIC	8.13	5.42	4.55
LT1080CN-ND	9175B	5V, Dual RS232 Driver/Receiver with Shutdown	18-Dip	5.63	3.75	3.15
LT1081CN-ND	9175B	5V, Dual RS232 Driver/Receiver	16-Dip	4.75	3.17	2.65
LT1081CSW-ND	9175B	5V, Dual RS232 Driver/Receiver	16-SOIC	6.00	4.00	3.35
LT1082CN8-ND	9210B	1A High Volt., High Efficiency Switching Regulator	8-Dip	8.13	5.42	4.60
LT1082CT-ND	9210B	1A High Volt., High Efficiency Switching Regulator	TO-220-5	9.38	6.25	5.35
LT1082IQ-ND	9210B	1A High Volt., High Efficiency Switching Regulator	5-DD	11.63	7.75	6.65
LT1082IT-ND	9210B	1A High Volt., High Efficiency Switching Regulator	TO-220-5	10.88	7.25	6.20
LT1083CP-ND	9210B	Adjustable 7.5A LDO Voltage Regulator	TO-3P	13.25	8.83	7.70
LT1083CP-5-ND	9210B	Fixed 5V, 7.5A LDO Voltage Regulator	TO-3P	13.25	8.83	7.70
LT1083CP-12-ND	9210B	Fixed 12V, 7.5A LDO Voltage Regulator	TO-3P	13.25	8.83	7.70
LT1084CP-ND	9210B	Adjustable 5A LDO Voltage Regulator	TO-3P	8.88	5.90	5.00
LT1084CP-5-ND	9210B	Fixed 5V, 5A LDO Voltage Regulator	TO-3P	8.88	5.90	5.00
LT1084CP-12-ND	9210B	Fixed 12V, 5A LDO Voltage Regulator	TO-3P	7.63	5.90	5.00
LT1084CT-ND	9210B	Adjustable 5A LDO Voltage Regulator	TO-220	7.75	5.20	4.45
LT1084CT-3.3-ND	9210B	Fixed 3.3V, 5A LDO Voltage Regulator	TO-220	7.75	5.20	4.45
LT1084CT-5-ND	9210B	Fixed 5V, 5A LDO Voltage Regulator	TO-220	7.75	5.20	4.45
LT1084CT-12-ND	9210B	Fixed 12V, 5A LDO Voltage Regulator	TO-220	7.75	5.20	4.45
LT1084IT-ND	9210B	Adjustable 5A LDO Voltage Regulator, Ind. Temp.	TO-220	10.00	6.65	5.70
LT1085CM-ND	9210B	Adjustable 3A LDO Voltage Regulator	3-DD	7.13	4.75	4.00
LT1085CM-3.3-ND	9210B	Fixed 3.3V, 3A LDO Voltage Regulator	3-DD	7.13	4.75	4.00
LT1085CM-3.6-ND	9210B	Fixed 3.6V, 3A LDO Voltage Regulator	3-DD	7.13	4.75	4.00
LT1085CT-ND	9210B	Adjustable 3A LDO Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085CT-3.3-ND	9210B	Fixed 3.3V, 3A LDO Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085CT-3.6-ND	9210B	Fixed 3.6V, 3A LDO Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085CT-5-ND	9210B	Fixed 5V, 3A LDO Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085CT-12-ND	9210B	Fixed 12V, 3A LDO Voltage Regulator	TO-220	6.50	4.35	3.70
LT1085IM-3.6-ND	—	Fixed 3.6V, 3A LDO Voltage Regulator	3-DD	10.25	6.81	5.13
LT1086CM-ND	9210B	Adjustable 1.5A LDO Voltage Regulator	3-DD	4.00	2.66	2.30
LT1086CM-3.3-ND	9210B	Fixed 3.3V, 1.5A LDO Voltage Regulator	3-DD	4.00	2.66	2.30
LT1086CT-ND	9210B	Adjustable 1.5A LDO Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-2.85-ND	9210B	Fixed 2.85V, 1.5A LDO Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-3.3-ND	9210B	Fixed 3.3V, 1.5A LDO Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-3.6-ND	9210B	Fixed 3.6V, 1.5A LDO Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-5-ND	9210B	Fixed 5V, 1.5A LDO Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086CT-12-ND	9210B	Fixed 12V, 1.5A LDO Voltage Regulator	TO-220	3.75	2.50	2.15
LT1086IM-ND	9210B	Adjustable 1.5A LDO Voltage Regulator	3-DD	4.63	3.08	2.55
LT1087CT-ND	—	Adj. 5A LDO Volt. Reg. with Kelvin-Sense Inputs	TO-220-5	7.75	5.17	4.45
LT1088CD-ND	—	Wideband RMS-DC Converter	14-CDip	25.00	16.60	12.50
LT1097CN8-ND	9176B	Low Cost, Low Power Precision Op Amp	8-Dip	3.13	2.08	1.80
LT1097S8-ND	9176B	Low Cost, Low Power Precision Op Amp	8-SOIC	3.38	2.25	1.95
LT1101ACN8-ND	9176B	Precision Micropower Single Instrumentation Amp	8-Dip	12.25	8.17	6.95
LT1101AIN8-ND	9176B	Prec. Micropower Single Instrum. Amp, Ind. Temp.	8-Dip	15.25	10.17	8.70
LT1101CN8-ND	9176B	Precision Micropower Single Instrumentation Amp	8-Dip	8.75	5.83	4.95
LT1101IN8-ND	9176B	Prec. Micropower Single Instrum. Amp, Ind. Temp.	8-Dip	10.88	7.25	6.25
LT1101SW-ND	9176B	Precision Micropower Single Instrumentation Amp	16-SOIC	10.50	7.00	5.95
LT1102ACN8-ND	9176B	Prec. Micropower Instrumentation Amp, JFET Input	8-Dip	12.25	8.17	6.95
LT1102CN8-ND	9176B	Prec. Micropower Instrumentation Amp, JFET Input	8-Dip	8.75	5.83	4.95
LT1105CN-ND	9210B	Offline Switching Regulator	14-Dip	7.63	5.08	4.05
LT1105CN8-ND	9210B	Offline Switching Regulator	8-Dip	7.13	4.75	3.75
LT1107CS8-ND	—	Adjustable Output DC/DC Converter	8-SOIC	4.38	2.91	2.40
LT1107CS8-5-ND	—	Fixed 5V Output DC/DC Converter	8-SOIC	5.13	3.42	2.90
LT1107IS8-ND	—	Adjustable Output DC/DC Converter, Ind. Temp.	8-SOIC	5.38	3.60	3.10
LT1108CS8-ND	—	Micropower Adjustable Output DC/DC Converter	8-SOIC	5.13	3.42	2.90
LT1108CS8-5-ND	9210B	Micropower Fixed 5V Output DC/DC Converter	8-SOIC	5.13	3.42	2.90
LT1109ACN8-12-ND	9210B	Fixed 12V Output Micropower DC/DC Converter	8-Dip	4.38	2.92	2.45
LT1109ACS8-12-ND	9210B	Fixed 12V Output Micropower DC/DC Converter	8-SOIC	4.38	2.92	2.45
LT1109CS8-ND	9210B	Adjustable Output Micropower DC/DC Converter	8-SOIC	4.38	2.92	2.45
LT1109CS8-12-ND	9210B	Fixed 12V Output Micropower DC/DC Converter	8-SOIC	4.38	2.92	2.45
LT1110CN8-12-ND	9176B	Fixed 12V Output Micropower DC/DC Converter	8-Dip	5.50	3.67	3.15
LT1110CS8-ND	9176B	Adjustable Output Micropower DC/DC Converter	8-SOIC	6.38	4.25	3.60
LT1110CS8-5-ND	9176B	Fixed 5V Output Micropower DC/DC Converter	8-SOIC	6.38	4.25	3.60
LT1111CN8-ND	9210B	Adjustable Output Micropower DC/DC Converter	8-Dip	4.25	2.83	2.40
LT1111CN8-5-ND	9210B	Fixed 5V Output Micropower DC/DC Converter	8-Dip	4.25	2.83	2.40
LT1111CN8-12-ND	9210B	Fixed 12V Output Micropower DC/DC Converter	8-Dip	4.25	2.83	2.40
LT1111CS8-ND	9210B	Adjustable Output Micropower DC/DC Converter	8-SOIC	4.88	3.25	2.80
LT1111CS8-5-ND	9210B	Fixed 5V Output Micropower DC/DC Converter	8-SOIC	4.88	3.25	2.80
LT1111CS8-12-ND	9120B	Fixed 12V Output Micropower DC/DC Converter	8-SOIC	4.88	3.25	2.80
LT1111IS8-ND	9120B	Adjustable Output Micropower DC/DC Converter	8-SOIC	6.38	4.25	3.60
LT1112ACN8-ND	9210B	Dual Low Power Precision Op Amp	8-Dip	6.25	4.17	3.50
LT1112CN8-ND	9210B	Dual Low Power Precision Op Amp	8-Dip	4.38	2.92	2.45
LT1112S8-ND	9210B	Dual Low Power Precision Op Amp	8-SOIC	4.88	3.25	2.65
LT1113CN8-ND	9210B	Dual Low Noise JFET Input Precision Op Amp	8-Dip	6.00	4.00	3.25
LT1113CS8-ND	9210B	Dual Low Noise JFET Input Precision Op Amp	8-SOIC	6.50	4.33	3.55
LT1114ACN-ND	9210B	Quad Low Power Precision Op Amp	14-Dip	12.13	8.08	6.50
LT1114CN-ND	9210B	Quad Low Power Precision Op Amp	14-Dip	8.50	5.67	4.50
LT1114S-ND	9210B	Quad Low Power Precision Op Amp	16-SOIC	8.88	5.92	4.75
LT1115CN8-ND	9176B	Ultra Low Noise Audio Op Amp	8-Dip	5.63	3.74	2.95
LT1116CN8-ND	9176B	Single Supply 12nS Ground-Sensing Comparator	8-Dip	6.00	4.00	3.50
LT1116CS8-ND	9176B	Single Supply 12nS Ground-Sensing Comparator	8-SOIC	6.63	4.42	3.75
LT1117CM-5-ND	9210B	Fixed 5V, 800mA LDO Regulator	3-DD	3.88	2.58	2.20
LT1117CST-ND	9210B	Adjustable, 800mA LDO Regulator	SOT-223	3.63	2.42	1.95
LT1117CST-2.85-ND	9210B	Fixed 2.85V, 800mA LDO Regulator	SOT-223	3.63	2.42	1.95
LT1117CST-3.3-ND	9210B	Fixed 3.3V, 800mA LDO Regulator	SOT-223	3.63	2.42	1.95
LT1117CST-5-ND	9210B	Fixed 5V, 800mA LDO Regulator	SOT-223	3.63	2.42	1.95
LT1118CS8-ND	—	Adjustable, 800mA LDO Regulator with 400mA Isink	8-SOIC	5.00	3.45	2.95
LT1118CS8-2.5-ND	—	Fixed 2.5V, 800mA LDO Regulator with 400mA Isink	8-SOIC	5.00	3.45	2.95
LT1118CS8-2.85-ND	9257B	Fixed 2.85V, 800mA LDO Regulator with 400mA Isink	8-SOIC	4.63	3.20	2.75
LT1118CST-2.5-ND	9257B	Fixed 2.5V, 800mA LDO Regulator w/400mA Isink	SOT-223	4.75	3.16	2.65
LT1118CST-2.85-ND	9257B	Fixed 2.85V, 800mA LDO Regulator w/400mA Isink	SOT-223	4.38	2.91	2.40
LT1118CST-5-ND	9257B	Fixed 5V, 800mA LDO Regulator with 400mA Isink	SOT-223	4.75	3.16	2.65
LT1120ACN8-ND	9210B	Micropower Regulator with Comparator & Shutdown	8-Dip	4.75	3.17	2.60
LT1120ACS8-ND	9210B	Micropower Regulator with Comparator & Shutdown	8-SOIC	5.50	3.67	3.15
LT1120AIS8-ND	—	Micropower Regulator with Comparator & Shutdown	8-SOIC	7.13	4.75	4.05
LT1120CN8-ND	9210B	Micropower Regulator with Comparator & Shutdown	8-Dip	4.38	2.92	2.40
LT1120CS8-ND	9210B	Micropower Regulator with Comparator & Shutdown	8-SOIC	5.13	3.42	2.80
LT1120IN8-ND	—	Micropower Regulator with Comparator & Shutdown	8-Dip	5.50	3.67	3.15
LT1121ACS8-ND	9120B	Adjustable Micropower LDO Regulator with Shutdown	8-SOIC	3.75	2.50	2.00
LT1121ACS8-5-ND	9210B	5V Micropower LDO Regulator with Shutdown	8-SOIC	3.75	2.50	2.00
LT1121AHVCS8-ND	—	Adj. Micropower LDO Regulator with Shutdown	8-SOIC	4.50	2.99	2.40
LT1121AHVIS8-ND	—	Adj. Micropower LDO Reg. with Shutdown, Ind. Temp.	8-SOIC	5.25	3.49	2.81
LT1121AIS8-ND	9120B	Adj. Micropower LDO Reg. with Shutdown, Ind. Temp.	8-SOIC	4.38	2.92	2.35
LT1121AIS8-5-ND	9120B	5V Micropower LDO Reg. with Shutdown, Ind. Temp.	8-SOIC	4.38	2.92	2.35
LT1121CN8-ND	9210B	Adjustable Micropower LDO Regulator with Shutdown	8-Dip	2.75	1.83	1.55
LT1121CN8-3.3-ND	9210B	3.3V, 150mA LDO Regulator with Shutdown	8-Dip	2.75	1.83	1.55
LT1121CN8-5-ND	9210B	5V, 150mA LDO Regulator with Shutdown	8-Dip	2.75	1.83	1.55
LT1121CS8-ND	9210B	Adjustable LDO Regulator with Shutdown	8-SOIC	3.00	2.00	1.70
LT1121CS8-3.3-ND	9210B	3.3V LDO Regulator with Shutdown	8-SOIC	3.00	2.00	1.70
LT1121CS8-5-ND	9210B	5V LDO Regulator with Shutdown	8-SOIC	3.00	2.00	1.70
LT1121CST-3.3-ND	9210B	3.3V LDO Regulator with Shutdown	SOT-223	3.25	2.17	1.75
LT1121CST-5-ND	9210B	5V LDO Regulator with Shutdown	SOT-223	3.25	2.17	1.75
LT1121CZ-3.3-ND	9210B	3.3V, 150mA LDO Regulator with Shutdown	TO-92	2.38	1.58	1.35
LT1121CZ-5-ND	9210B	5V, 150mA LDO Regulator with Shutdown	TO-92	2.38	1.58	1.35
LT1121IS8-ND	9120B	Adjustable LDO Regulator with Shutdown	8-SOIC	3.63	2.42	2.05
LT1121IS8-3.3-ND	9120B	3.3V LDO Regulator with Shutdown	8-SOIC	3.63	2.42	2.05
LT1121IS8-5-ND	9120B	5V LDO Regulator with Shutdown	8-SOIC	3.63	2.42	2.05
LT1121IST-3.3-ND	9120B	3.3V LDO Regulator with Shutdown	SOT-223	3.88	2.58	2.10
LT1121IST-5-ND	9120B	5V LDO Regulator with Shutdown	SOT-223	3.88	2.58	2.10
LT1121IZ-5-ND	9210B	5V LDO Regulator with Shutdown	TO-92	2.88	1.92	1.60
LT1122CCN8-ND	9120B	Fast Settling JFET Input Op Amp	8-Dip	5.25	3.50	2.95
LT1122CS8-ND	9210B	Fast Settling JFET Input Op Amp	8-SOIC	5.75	3.83	3.25
LT1122DCN8-ND	9210B	Fast Settling JFET Input Op Amp	8-Dip	4.50	3.00	2.50
LT1122DS8-ND	9210B	Fast Settling JFET Input Op Amp	8-SOIC	4.88	3.25	2.70
LT1124CN8-ND	9176B	Dual, Low Noise, High Speed Precision Op Amp	8-Dip	6.38	4.25	3.65
LT1124CS8-ND	9176B	Dual, Low Noise, High Speed Precision Op Amp	8-SOIC	6.75	4.50	3.85
LT1125ACN-ND	9176B	Quad, Low Noise, High Speed Precision Op Amp	14-Dip	13.25	8.83	7.50
LT1125CN-ND	9176B	Quad, Low Noise, High Speed Precision Op Amp	14-Dip	10.50	7.00	5.95
LT1125CSW-ND	9176B	Quad, Low Noise, High Speed Precision Op Amp	16-SOIC	11.50	7.67	6.50
LT1126CN8-ND	9176B	Dual, Decompensated, Low Noise, HS Op Amp	8-Dip	6.38	4.25	3.65
LT1126CS8-ND	9176B	Dual, Decompensated, Low Noise, HS Op Amp	8-SOIC	6.75	4.50	3.85
LT1127CN-ND	9176B	Quad, Decomp., Low Noise, High Speed Op Amp	14-Dip	10.50	7.00	5.95
LT1127CSW-ND	9176B	Quad, Decomp., Low Noise, High Speed Op Amp	16-SOIC	11.50	7.67	6.50
LT1128ACN8-ND	9120B	Single, Low Noise, High Speed Op Amp	8-Dip	13.13	8.75	7.55
LT1128CN8-ND	9210B	Single, Low Noise, High Speed Op Amp	8-Dip	8.63	5.75	4.95
LT1128CS8-ND	9210B	Single, Low Noise, High Speed Op Amp	8-SOIC	8.63	5.75	4.95

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1129CQ-ND	9210B	Adjustable, 700mA LDO Regulator with Shutdown	5-DD	4.63	3.08	2.55
LT1129CQ-3.3-ND	9210B	3.3V, 700mA LDO Regulator with Shutdown	5-DD	4.63	3.08	2.55
LT1129CQ-5-ND	9210B	5V, 700mA LDO Regulator with Shutdown	5-DD	4.63	3.08	2.55
LT1129CS8-ND	9210B	Adjustable, 700mA LDO Regulator with Shutdown	8-SOIC	4.75	3.17	2.55
LT1129CS8-3.3-ND	9210B	3.3V, 700mA LDO Regulator with Shutdown	8-SOIC	4.75	3.17	2.55
LT1129CS8-5-ND	9210B	5V, 700mA LDO Regulator with Shutdown	8-SOIC	4.75	3.17	2.55
LT1129CST-3.3-ND	9210B	3.3V, 700mA LDO Regulator with Shutdown	SOT-223	4.25	2.83	2.35
LT1129CST-5-ND	9210B	5V, 700mA LDO Regulator with Shutdown	SOT-223	4.25	2.83	2.35
LT1129CT-ND	9210B	Adjustable, 700mA LDO Regulator with Shutdown	TO-220-5	4.00	2.67	2.25
LT1129CT-3.3-ND	9210B	3.3V, 700mA LDO Regulator with Shutdown	TO-220-5	4.00	2.67	2.25
LT1129CT-5-ND	9210B	5V, 700mA LDO Regulator with Shutdown	TO-220-5	4.00	2.67	2.25
LT1129IQ-ND	9120B	Adjustable, 700mA LDO Regulator with Shutdown	5-DD	5.50	3.67	3.05
LT1129IQ-5-ND	9120B	5V, 700mA LDO Regulator with Shutdown	5-DD	5.50	3.67	3.05
LT1129IS8-ND	9120B	Adjustable, 700mA LDO Regulator with Shutdown	8-SOIC	5.63	3.75	3.05
LT1129IS8-3.3-ND	9120B	3.3V, 700mA LDO Regulator with Shutdown	8-SOIC	5.63	3.75	3.05
LT1129IS8-5-ND	9120B	5V, 700mA LDO Regulator with Shutdown	8-SOIC	5.63	3.75	3.05
LT1129IST-3.3-ND	9120B	3.3V, 700mA LDO Regulator with Shutdown	SOT-223	4.75	3.17	2.70
LT1129IST-5-ND	9120B	5V, 700mA LDO Regulator with Shutdown	SOT-223	4.75	3.17	2.70
LT1130ACN-ND	9210B	5V, RS232, 5 Drivers/5 Receivers	28-Dip	7.25	4.83	4.00
LT1130ACSW-ND	9210B	5V, RS232, 5 Drivers/5 Receivers	28-SOIC	7.63	5.10	4.25
LT1131ACNW-ND	—	5V, RS232, 5 Drivers/4 Receivers	28-Dip	7.25	4.83	4.00
LT1131ACSW-ND	9210B	5V, RS232, 5 Drivers/4 Receivers	28-SOIC	7.63	5.08	4.25
LT1131CNW-ND	9175B	5V, RS232, 5 Drivers/4 Receivers	24-Dip	8.13	6.00	4.60
LT1132ACN-ND	9210B	5V, RS232, 5 Drivers/3 Receivers	24-Dip	7.25	4.83	4.00
LT1132ACSW-ND	9210B	5V, RS232, 5 Drivers/3 Receivers	24-SOIC	7.63	5.08	4.25
LT1132AISW-ND	—	5V, RS232, 5 Drivers/3 Receivers	24-SOIC	9.13	6.06	5.20
LT1133ACN-ND	9210B	5V, RS232, 3 Drivers/5 Receivers	24-Dip	7.25	4.83	4.00
LT1133ACSW-ND	9210B	5V, RS232, 3 Drivers/5 Receivers	24-SOIC	7.63	5.08	4.25
LT1133AISW-ND	—	5V, RS232, 3 Drivers/5 Receivers	24-SOIC	9.13	6.06	5.20
LT1134ACN-ND	9210B	5V, RS232, 4 Drivers/4 Receivers	24-Dip	7.00	4.67	3.75
LT1134ACSW-ND	9210B	5V, RS232, 4 Drivers/4 Receivers	24-SOIC	7.00	4.67	3.75
LT1134AIN-ND	9120B	5V, RS232, 4 Drivers/4 Receivers	24-Dip	9.00	6.00	5.00
LT1134AISW-ND	—	5V, RS232, 4 Drivers/4 Receivers	24-SOIC	9.00	6.00	5.00
LT1135ACN-ND	9210B	5V, RS232, 5 Drivers/3 Receivers	20-Dip	5.88	3.92	3.25
LT1135ACSW-ND	9210B	5V, RS232, 5 Drivers/3 Receivers	20-SOIC	6.25	4.17	3.45
LT1136ACNW-ND	9210B	5V, RS232, 4 Drivers/5 Receivers	28-Dip	7.25	4.83	4.00
LT1136ACSW-ND	9210B	5V, RS232, 4 Drivers/5 Receivers	28-SOIC	7.63	5.08	4.25
LT1137ACG-ND	9120B	5V, RS232, 3 Drivers/5 Receivers	28-SSOP	7.75	5.17	4.15
LT1137ACNW-ND	9210B	5V, RS232, 3 Drivers/5 Receivers	28-Dip	7.00	4.65	3.75
LT1137ACSW-ND	9210B	5V, RS232, 3 Drivers/5 Receivers	28-SOIC	7.00	4.67	3.75
LT1137AIG-ND	—	5V, RS232, 3 Drivers/5 Receivers	28-SSOP	8.88	5.90	4.85
LT1137AINW-ND	—	5V, RS232, 3 Drivers/5 Receivers	28-Dip	8.38	5.58	4.50
LT1137AISW-ND	—	5V, RS232, 3 Drivers/5 Receivers	28-SOIC	8.38	5.58	4.50
LT1138ACNW-ND	9210B	5V, RS232, 5 Drivers/3 Receivers	28-Dip	7.25	4.83	4.00
LT1139ACSW-ND	9210B	5V or 12V, RS232, 4 Drivers/4 Receivers	24-SOIC	7.63	5.08	4.25
LT1140ACN-ND	9210B	5V, RS232, 5 Drivers/3 Receivers	24-Dip	5.88	3.92	3.25
LT1141ACN-ND	9210B	5V, RS232, 3 Drivers/5 Receivers	24-Dip	5.88	3.92	3.25
LT1141ACSW-ND	9210B	5V, RS232, 3 Drivers/5 Receivers	24-SOIC	6.25	4.17	3.45
LT1158CN-ND	9176B	Half Bridge N-Channel Power MOSFET Driver	16-Dip	5.88	3.92	3.50
LT1158CSW-ND	9176B	Half Bridge N-Channel Power MOSFET Driver	16-SOIC	6.25	4.17	3.75
LT1158ISW-ND	—	Half Bridge N-Channel Power MOSFET Driver	16-SOIC	7.25	4.83	4.30
LT1160CN-ND	9285B	Half Bridge N-Channel Power MOSFET Driver	14-Dip	5.25	3.50	3.00
LT1160CS-ND	9285B	Half Bridge N-Channel Power MOSFET Driver	14-SOIC	5.63	3.75	3.20
LT1161CN-ND	9210B	Quad High Side N-Channel MOSFET Driver	20-Dip	6.00	4.00	3.30
LT1161CSW-ND	9210B	Quad High Side N-Channel MOSFET Driver	20-SOIC	6.50	4.32	3.60
LT1161IN-ND	9120B	Quad High Side N-Channel MOSFET Driver	20-Dip	6.75	4.50	3.70
LT1161ISW-ND	—	Quad High Side N-Channel MOSFET Driver	20-SOIC	7.25	4.82	4.05
LT1167ACN8-ND	—	Programmable Precision Instrumentation Amp	8-Dip	11.13	7.39	5.75
LT1167ACS8-ND	—	Programmable Precision Instrumentation Amp	8-SOIC	11.13	7.39	5.75
LT1167AIS8-ND	—	Programmable Precision Instrumentation Amp	8-SOIC	12.75	8.47	6.65
LT1167CN8-ND	—	Programmable Precision Instrumentation Amp	8-Dip	6.38	4.24	3.30
LT1167CS8-ND	—	Programmable Precision Instrumentation Amp	8-SOIC	6.38	4.24	3.30
LT1167IS8-ND	—	Programmable Precision Instrumentation Amp	8-SOIC	7.38	4.90	3.85
LT1169CN8-ND	9210B	Dual Low Noise JFET Op Amp	8-Dip	7.25	4.83	3.95
LT1169CS8-ND	—	Dual Low Noise JFET Op Amp	8-SOIC	7.75	5.15	4.25
LT1170CQ-ND	9210B	5A, 100kHz High Efficiency Switching Regulator	5-DD	11.38	7.58	6.05
LT1170CT-ND	9210B	5A, 100kHz High Efficiency Switching Regulator	TO-220-5	10.63	7.08	5.65
LT1170HVCQ-ND	—	5A, 100kHz, High Voltage, High Efficiency, Switching Regulator	5-DD	14.38	9.55	8.25
LT1170HVCQTR-ND	—	5A, 100kHz, High Voltage, High Efficiency, Switching Regulator	5-DD	5715.00/750		
LT1170HVCT-ND	9210B	5A, 100kHz, High Voltage, High Efficiency, Switching Regulator	TO-220-5	13.75	9.17	7.35
LT1170IQ-ND	—	5A, 100kHz High Efficiency Switching Regulator	5-DD	14.25	9.50	8.50
LT1171CQ-ND	9210B	3A, 100kHz High Efficiency Switching Regulator	5-DD	9.38	6.25	5.20
LT1171CT-ND	9210B	3A, 100kHz High Efficiency Switching Regulator	TO-220-5	8.63	5.75	4.75
LT1171HVCQ-ND	—	2.5A, 100kHz, High Voltage, High Efficiency Switching Regulator	5-DD	11.75	7.81	6.70
LT1171HVCT-ND	9210B	2.5A, 100kHz, High Voltage, High Efficiency Switching Regulator	TO-220-5	11.25	7.50	6.20
LT1171IQ-ND	—	2.5A, 100kHz High Efficiency Switching Regulator	5-DD	10.25	6.81	5.45
LT1172CN8-ND	9210B	1.25A, 100kHz High Efficiency Switching Regulator	8-Dip	4.38	2.92	2.45
LT1172CQ-ND	9210B	1.25A, 100kHz High Efficiency Switching Regulator	5-DD	6.38	4.25	3.55
LT1172CS8-ND	9210B	1.25A, 100kHz High Efficiency Switching Regulator	8-SOIC	5.38	3.58	3.00
LT1172CT-ND	9210B	1.25A, 100kHz High Efficiency Switching Regulator	TO-220-5	5.63	3.75	2.95
LT1172HVCT-ND	9210B	1.25A, 100kHz, High Voltage, High Efficiency Switching Regulator	TO-220-5	7.38	4.92	3.85
LT1172IN8-ND	9120B	1.25A, 100kHz High Efficiency Switching Regulator	8-Dip	6.13	4.08	3.45
LT1172IS8-ND	9120B	1.25A, 100kHz High Efficiency Switching Regulator	8-SOIC	7.00	4.67	3.90
LT1173CN8-ND	9176B	Adjustable Output Micropower DC/DC Converter	8-Dip	4.25	2.83	2.40
LT1173CN8-5-ND	9176B	Fixed 5V Output Micropower DC/DC Converter	8-Dip	4.25	2.83	2.40
LT1173CN8-12-ND	9176B	Fixed 12V Output Micropower DC/DC Converter	8-Dip	4.25	2.83	2.40
LT1173CS8-ND	9176B	Adjustable Output Micropower DC/DC Converter	8-SOIC	4.88	3.25	2.80
LT1173CS8-5-ND	9176B	Fixed 5V Output Micropower DC/DC Converter	8-SOIC	4.88	3.25	2.80
LT1173CS8-12-ND	9176B	Fixed 12V Output Micropower DC/DC Converter	8-SOIC	4.88	3.25	2.80
LT1175CN8-ND	9257B	Adjustable, 500mA Negative LDO Regulator	8-Dip	4.63	3.10	2.55
LT1175CN8-5-ND	9257B	5V, 500mA Negative LDO Regulator	8-Dip	4.63	3.10	2.55
LT1175CQ-ND	9257B	Adjustable, 500mA Negative LDO Regulator	5-DD	5.88	3.91	3.25
LT1175CQ-5-ND	9257B	5V, 500mA Negative LDO Regulator	5-DD	5.88	3.91	3.25
LT1175CS8-ND	9257B	Adjustable, 500mA Negative LDO Regulator	8-SOIC	5.38	3.60	3.00
LT1175CS8-5-ND	9257B	5V, 500mA Negative LDO Regulator	8-SOIC	5.38	3.60	3.00
LT1175CST-5-ND	—	5V, 500mA Negative LDO Regulator	SOT-223	4.88	3.25	2.80
LT1175CT-ND	9257B	Adjustable, 500mA Negative LDO Regulator	TO-220-5	5.63	3.75	3.15
LT1175CT-5-ND	9257B	5V, 500mA Negative LDO Regulator	TO-220-5	5.63	3.75	3.15
LT1175IN8-ND	—	Adjustable, 500mA Negative LDO Regulator	8-Dip	6.00	4.00	3.35
LT1175IQ-ND	—	Adjustable, 500mA Negative LDO Regulator	5-DD	7.50	5.00	4.30
LT1175IQ-5-ND	—	5V, 500mA Negative LDO Regulator	5-DD	7.50	5.00	4.30
LT1175IST-5-ND	—	5V 500mA Negative Low Dropout Regulator	SOT-223	5.38	3.60	3.10
LT1175IS8-ND	—	Adjustable, 500mA Negative LDO Regulator	8-SOIC	7.00	4.65	3.90
LT1175IS8-5-ND	—	5V, 500mA Negative LDO Regulator	8-SOIC	7.00	4.65	3.90
LT1176CN8-ND	9210B	Adjustable, 1A Step Down Switching Regulator	8-Dip	5.63	3.75	3.20
LT1176CN8-5-ND	9210B	5V, 1A Step Down Switching Regulator	8-Dip	5.63	3.75	3.20
LT1176CSW-ND	9210B	Adjustable, 1A Step Down Switching Regulator	20-SOIC	8.13	5.42	4.35
LT1176CSW-5-ND	9210B	5V, 1A Step Down Switching Regulator	20-SOIC	8.13	5.42	4.35
LT1178ACN8-ND	9176B	Dual Micropower Precision Dual Op Amp	8-Dip	10.00	6.67	5.60
LT1178CN8-ND	9176B	Dual Micropower Precision Dual Op Amp	8-Dip	5.50	3.67	3.00
LT1178IN8-ND	—	Dual Micropower Precision Dual Op Amp, Ind. Temp.	8-Dip	6.88	4.58	3.95
LT1178S8-ND	9210B	Dual Micropower Precision Dual Op Amp	8-SOIC	7.00	4.65	3.85
LT1179ACN-ND	9176B	Quad Micropower Precision Op Amp	14-Dip	12.38	8.25	6.90
LT1179CN-ND	9176B	Quad Micropower Precision Op Amp	14-Dip	6.88	4.58	3.90
LT1179IN-ND	9176B	Quad Micropower Precision Op Amp, Ind. Temp.	14-Dip	8.50	5.67	4.85
LT1179SW-ND	9176B	Quad Micropower Precision Op Amp	16-SOIC	8.75	5.83	5.00
LT1180ACN-ND	9210B	Low Power, 5V, RS232, Dual Driver/Receiver	18-Dip	4.63	3.08	2.45
LT1180ACSW-ND	9210B	Low Power, 5V, RS232, Dual Driver/Receiver	18-SOIC	5.13	3.42	2.70
LT1181ACN-ND	9175B	Low Power, 5V, RS232, Dual Driver/Receiver	16-Dip	4.63	3.08	2.45
LT1181ACSW-ND	9210B	Low Power, 5V, RS232, Dual Driver/Receiver	16-SOIC	5.13	3.42	2.70
LT1181ACSWTR-ND	—	Low Power, 5V, RS232, Dual Driver/Receiver	16-SOIC	2710.01/1,000		
LT1182CS-ND	9285B	CCFL/LCD Contrast Switching Regulator	16-SOIC	9.38	6.25	5.35
LT1183CS-ND	9285B	CCFL/LCD Contrast Switching Regulator	16-SOIC	9.38	6.25	5.35
LT1184CS-ND	9257B	CCFL/LCD Contrast Switching Regulator	16-SOIC	6.63	4.40	3.80
LT1184FCS-ND	9257B	CCFL/LCD Contrast Switching Regulator, Floating	16-SOIC	7.88	5.25	4.50
LT1185CT-ND	9176B	Adjustable, 3A, LDO Voltage Regulator	TO-220-5	6.50	4.33	3.70
LT1185IT-ND	—	Adjustable, 3A, LDO Voltage Regulator	TO-220-5	8.75	5.83	4.90
LT1186FCS-ND	—	DAC Programmable CCFL Switching Regulator	16-SOIC	9.75	6.50	5.60
LT1187CN8-ND	9210B	Adjustable Low Power Video Difference Amp	8-Dip	5.50	3.67	2.95
LT1187CS8-ND	9210B	Adjustable Low Power Video Difference Amp	8-SOIC	6.13	4.08	3.45
LT1188CT-ND	9176B	1.5A High Side Switch	TO-220-5	7.50	5.00	4.25
LT1191CN8-ND	9176B	Single, Ultra High Speed Video Op Amp	8-Dip	3.25	2.17	1.73
LT1191CS8-ND	9176B	Single, Ultra High Speed Video Op Amp	8-SOIC	3.75	2.50	1.95
LT1193CN8-ND	9176B	Adjustable Gain Video Difference Amp	8-Dip	5.50	3.67	2.95
LT1193CS8-ND	9176B	Adjustable Gain Video Difference Amp	8-SOIC	6.13	4.08	3.45
LT1195CN8-ND	9210B	Low Power, High Speed Op Amp	8-Dip	3.25	2.17	1.73
LT1203CN8-ND	9210B	2-Input, 150MHz Video Multiplexer	8-Dip	3.13	2.08	1.57
LT1203CS8-ND	9210B	2-Input, 150MHz Video Multiplexer	8-SOIC	3.38	2.25	1.69
LT1204CN-ND	9210B	4-In Video Multiplexer with 75MHz Current Feedback	16-Dip	9.00	6.00	4.95
LT1204CSW-ND	9210B	4-In Video Multiplexer with 75MHz Current Feedback	16-SOIC	9.75	6.50	5.40
LT1205CS-ND	9210B	4-Input, 150MHz, Dual Video Multiplexer	16-SOIC	5.38	3.57	2.70
LT1206CN8-ND	9210B	250mA Out, 60MHz Current Feedback Amp	8-Dip	6.25	4.17	3.45
LT1206CR-ND	9210B	250mA Out, 60MHz Current Feedback Amp	7-DD	8.13	5.42	4.45
LT1206CS8-ND	9210B	250mA Out, 60MHz Current Feedback Amp	8-SOIC	7.25	4.83	3.95
LT1206CT7-ND	—	250mA Out, 60MHz Current Feedback Amp	TO-220-7	8.13	5.42	4.45
LT1207CS-ND	—	Dual, 250mA Out, 60MHz Current Feedback Amp	16-SOIC	12.88	8.60	7.15
LT1208CN8-ND	9210B	Dual, High Speed Op Amp	8-Dip	7.75	5.17	4.45
LT1208CS8-ND	9210B	Dual, High Speed Op Amp	8-SOIC	8.75	5.83	5.00
LT1209CN-ND	9210B	Quad High Speed Op Amp	14-Dip	12.13	8.08	6.90
LT1209CS-ND	9210B	Quad High Speed Op Amp	16-SOIC	13.00	8.67	7.45
LT1211CN8-ND	9210B	14MHz, Single Supply, Dual Precision Op Amp	8-Dip	6.13	4.07	3.07
LT1211CS8-ND	9210B	14MHz, Single Supply, Dual Precision Op Amp	8-SOIC	6.63	4.40	3.32
LT1211IS8-ND	—	14MHz, Single, Dual Precision Op Amp, Ind. Temp.	8-SOIC	7.50	4.98	3.75
LT1212CN-ND	9210B	14MHz, Single Supply, Quad Precision Op Amp	14-Dip	11.00	7.31	5.50
LT1212CS-ND	9210B	14MHz, Single Supply, Quad Precision Op Amp	16-SOIC	11.88	7.89	5.94
LT1212IS-ND	—	14MHz, Single, Quad Precision Op Amp, Ind. Temp.	16-SOIC	13.25	8.80	6.63
LT1213CN8-ND	9210B	28MHz, Single Supply, Dual Precision Op Amp	8-Dip	6.13	4.07	3.07
LT1213CS8-ND	9210B	28MHz, Single Supply, Dual Precision Op Amp	8-SOIC	6.63	4.40	3.32
LT1214CN-ND	9210B	28MHz, Single Supply, Quad Precision Op Amp	14-Dip	11.00	7.31	5.50
LT1214CS-ND	9210B	28MHz, Single Supply, Quad Precision Op Amp	16-SOIC	11.88	7.89	5.94
LT1215CN8-ND	9210B	23MHz, Single Supply, Dual Precision Op Amp	8-Dip	6.13	4.07	3.07
LT1215CS8-ND	9210B	23MHz, Single Supply, Dual Precision Op Amp	8-SOIC	6.63	4.40	3.32
LT1216CN-ND	9210B	23MHz, Single Supply, Quad Precision Op Amp	14-Dip	11.00	7.31	5.50
LT1216CS-ND	9210B	23MHz, Single Supply, Quad Precision Op Amp	16-SOIC	11.88	7.89	5.94
LT1218CN8-ND	—	Precision Rail-to-Rail In/Out Op Amp	8-Dip	9.63	6.40	4.95
LT1218CS8-ND	—	Precision Rail-to-Rail In/Out Op Amp	8-SOIC	10.00	6.64	5.15
LT1218LCN8-ND	—	Precision Rail-to-Rail In/Out Op Amp	8-Dip	5.88	3.91	3.15
LT1218LCS8-ND	—	Precision Rail-to-Rail In/Out Op Amp	8-SOIC	6.13	4.07	3.30
LT1219CS8-ND	—	Precision Rail-to-Rail In/Out Op Amp	8-SOIC	10.00	6.64	5.15
LT1220CN8-ND	9176B	45MHz, High Speed Op Amp	8-Dip	6.25	4.17	3.50
LT1220CS8-ND	9176B	45MHz, High Speed Op Amp	8-SOIC	6.88	4.58	3.75
LT1221CN8-ND	9176B	150MHz, High Speed Op Amp	8-Dip	6.25	4.17	3.35
LT1221CS8-ND	9176B	150MHz, High Speed Op Amp	8-SOIC	6.88	4.57	3.50
LT1222CN8-ND	—	500MHz, High Speed Op Amp	8-Dip	6.25	4.17	3.50
LT1222CS8-ND	—	500MHz, High Speed Op Amp	8-SOIC	6.88	4.58	3.75
LT1223CN8-ND	9176B	100MHz, Current Feedback Op Amp	8-Dip	5.38	3.58	2.85
LT1223CS8-ND	9176B	100MHz, Current Feedback Op Amp	8-SOIC	6.13	4.08	3.40
LT1224CN8-ND	9176B	45MHz, High Speed Op Amp	8-Dip	5.38	3.58	2.85
LT1224CS8-ND	9176B	45MHz, High Speed Op Amp	8-SOIC	6.13	4.07	3.30
LT1226CN8-ND	9176B	High Speed, Low Noise Op Amp	8-Dip	5.38	3.58	2.85
LT1226CS8-ND	9176B	High Speed, Low Noise Op Amp	8-SOIC	6.13	4.08	3.40
LT1227CN8-ND	9210B	140MHz, Video Current Feedback Amp	8-Dip	4.63	3.08	2.45
LT1227CS8-ND	9210B	140MHz, Video Current Feedback Amp	8-SOIC	5.38	3.58	2.85
LT1228CN8-ND	9176B	100MHz, Current Feedback Amp with DC Gain	8-Dip	6.88	4.58	3.95
LT1228CS8-ND	9176B	100MHz, Current Feedback Amp with DC Gain	8-SOIC	7.75	5.17	4.30
LT1229CN8-ND	9176B	100MHz, Dual Current Feedback Op Amp	8-Dip	6.88	4.58	3.95

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1229CS8-ND	9176B	100MHz, Dual Current Feedback Op Amp	8-SOIC	7.75	5.17	4.30
LT1230CS-ND	9176B	100MHz, Quad Current Feedback Op Amp	14-SOIC	13.75	9.13	7.50
LT1236ACN8-5-ND	9257B	5V Precision Reference, 5ppm/°C	8-Dip	7.75	5.15	4.00
LT1236ACN8-10-ND	9257B	10V Precision Reference ,5ppm/°C	8-Dip	6.13	4.07	3.20
LT1236ACS8-5-ND	9257B	5V Precision Reference, 5ppm/°C	8-SOIC	7.75	5.15	4.00
LT1236ACS8-10-ND	9257B	10V Precision Reference, 5ppm/°C	8-SOIC	6.38	4.24	3.30
LT1236AIS8-5-ND	9275B	5V Precision Reference, 5ppm/°C	8-SOIC	10.25	6.81	5.32
LT1236BCN8-5-ND	9257B	5V Precision Reference, 10ppm/°C	8-Dip	4.50	2.99	2.30
LT1236BCN8-10-ND	9257B	10V Precision Reference, 10ppm/°C	8-Dip	4.88	3.24	2.55
LT1236BCS8-5-ND	9257B	5V Precision Reference, 10ppm/°C	8-SOIC	4.50	2.99	2.30
LT1236BCS8-10-ND	9275B	10V Precision Reference, 10ppm/°C	8-SOIC	4.88	3.24	2.55
LT1236BIS8-5-ND	9275B	5V Precision Reference 10ppm/°C	8-SOIC	5.13	3.41	2.65
LT1236CCN8-5-ND	9257B	5V Precision Reference, 15ppm/°C	8-Dip	4.00	2.66	2.05
LT1236CCN8-10-ND	9257B	10V Precision Reference, 15ppm/°C	8-Dip	4.50	2.99	2.35
LT1236CCS8-5-ND	9257B	5V Precision Reference, 15ppm/°C	8-SOIC	4.00	2.66	2.05
LT1237CG-ND	—	5V, RS232 Transceiver with Advanced Power Mgmt. and 1 Receiver Active in Shutdown	28-SSOP	8.13	5.42	4.25
LT1237CNW-ND	9210B	5V, RS232 Transceiver with Advanced Power Mgmt. and 1 Receiver Active in Shutdown	28-Dip	7.38	4.92	3.95
LT1237CSW-ND	9210B	5V, RS232 Transceiver with Advanced Power Mgmt. and 1 Receiver Active in Shutdown	28-SOIC	7.38	4.92	3.95
LT1241CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1241CS8-ND	9176B	High Speed Current Mode PWM	8-SOIC	3.88	2.58	2.30
LT1242CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1242CS8-ND	9176B	High Speed Current Mode PWM	8-SOIC	3.88	2.58	2.30
LT1243CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1243CS8-ND	9176B	High Speed Current Mode PWM	8-SOIC	3.88	2.58	2.30
LT1243IN8-ND	—	High Speed Current Mode PWM, Ind. Temp.	8-Dip	3.88	2.58	2.30
LT1244CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1244CS8-ND	9176B	High Speed Current Mode PWM	8-SOIC	3.88	2.58	2.30
LT1245CN8-ND	9176B	High Speed Current Mode PWM	8-Dip	3.50	2.33	2.10
LT1245CS8-ND	9176B	High Speed Current Mode PWM	8-SOIC	3.88	2.58	2.30
LT1245IN8-ND	—	High Speed Current Mode PWM, Ind. Temp.	8-Dip	3.88	2.58	2.30
LT1246CN8-ND	9257B	1MHz Current Mode PWM	8-Dip	4.00	2.67	2.25
LT1248CN-ND	9210B	Power Factor Correction Controller	16-Dip	6.88	4.58	3.65
LT1248CS-ND	9210B	Power Factor Correction Controller	16-SOIC	7.38	4.92	3.90
LT1248IS-ND	9210B	Power Factor Correction Controller, Ind. Temp.	16-SOIC	8.63	5.75	4.65
LT1249CN8-ND	9210B	Power Factor Correction Controller	8-Dip	6.25	4.17	3.30
LT1249CS8-ND	9210B	Power Factor Correction Controller	8-SOIC	6.75	4.50	3.55
LT1249IN8-ND	9210B	Power Factor Correction Controller	8-Dip	7.13	4.75	3.75
LT1249IS8-ND	9210B	Power Factor Correction Controller, Ind. Temp.	8-SOIC	7.75	5.17	4.15
LT1251CN-ND	9210B	40MHz Video Fader and DC Gain Controlled Amp	14-Dip	11.00	7.33	6.00
LT1252CN8-ND	9210B	Low Cost Single Video Amplifier	8-Dip	3.25	2.17	1.75
LT1252CS8-ND	9210B	Low Cost Single Video Amplifier	8-SOIC	3.50	2.33	1.85
LT1253CN8-ND	9210B	Low Cost Dual Video Amplifier	8-Dip	4.50	3.00	2.49
LT1253CS8-ND	9210B	Low Cost Dual Video Amplifier	8-SOIC	4.88	3.25	2.60
LT1254CN-ND	9210B	Low Cost Quad Video Amplifier	14-Dip	8.13	5.42	4.49
LT1254CS-ND	9210B	Low Cost Quad Video Amplifier	14-SOIC	8.63	5.75	4.80
LT1256CN-ND	9210B	40MHz Video Fader and DC Gain Controlled Amp	14-Dip	11.00	7.33	6.00
LT1256CS-ND	9210B	40MHz Video Fader and DC Gain Controlled Amp	14-SOIC	11.63	7.75	6.30
LT1259CN-ND	9210B	Dual Current Feedback Amp with Shutdown	14-Dip	4.63	3.08	2.55
LT1259CS-ND	9210B	Dual Current Feedback Amp with Shutdown	14-SOIC	4.75	3.16	2.65
LT1260CN-ND	9210B	Triple Current Feedback Amp with Shutdown	16-Dip	4.88	3.24	2.70
LT1260CS-ND	9210B	Triple Current Feedback Amp with Shutdown	16-SOIC	5.13	3.41	2.85
LT1268BCQ-ND	9210B	7.5A, 150kHz Switching Regulator	5-DD	12.75	8.50	7.25
LT1268CT-ND	9210B	7.5A, 150kHz Switching Regulator	TO-220-5	11.38	7.58	6.50
LT1269CT-ND	9210B	4A, High Efficiency, Power Switching Regulator	TO-220-5	8.88	5.92	4.90
LT1270ACT-ND	9210B	10A, High Efficiency, Power Switching Regulator	TO-220-5	15.75	10.50	8.90
LT1270CT-ND	9210B	8A, High Efficiency, Power Switching Regulator	TO-220-5	10.63	7.08	5.65
LT1271CQ-ND	9210B	4A, High Efficiency, Power Switching Regulator	5-DD	9.38	6.25	5.20
LT1271CT-ND	9210B	4A, High Efficiency, Power Switching Regulator	TO-220-5	8.63	5.75	4.75
LT1280ACN-ND	9210B	Low Power 5V, RS232 Dual Driver/Receiver	18-Dip	5.00	3.33	2.65
LT1280ACSW-ND	9210B	Low Power 5V, RS232 Dual Driver/Receiver	18-SOIC	5.50	3.67	2.90
LT1281ACN-ND	9210B	Low Power 5V, RS232 Dual Driver/Receiver	16-Dip	5.00	3.33	2.65
LT1281ACSW-ND	9210B	Low Power 5V, RS232 Dual Driver/Receiver	16-SOIC	5.50	3.67	2.90
LT1300CN8-ND	9210B	3.3V/5V, High Efficiency, Step-Up DC/DC Converter	8-Dip	5.00	3.33	2.60
LT1300CS8-ND	9210B	3.3V/5V, High Efficiency, Step-Up DC/DC Converter	8-SOIC	5.00	3.33	2.60
LT1301CN8-ND	9210B	5V/12V, High Efficiency, Step-Up DC/DC Converter	8-Dip	4.75	3.17	2.50
LT1301CS8-ND	9210B	5V/12V, High Efficiency, Step-Up DC/DC Converter	8-SOIC	4.75	3.17	2.50
LT1302CN8-5-ND	9257B	5V, High Efficiency, Step-Up DC/DC Converter	8-Dip	6.13	4.08	3.35
LT1302CS8-ND	9257B	Adjustable, High Efficiency, Step-Up DC/DC Converter	8-SOIC	6.38	4.25	3.50
LT1302CS8-5-ND	9257B	5V, High Efficiency, Step-Up DC/DC Converter	8-SOIC	6.38	4.25	3.50
LT1303CN8-ND	9257B	Adjustable, Step-Up DC/DC Converter	8-Dip	4.75	3.16	2.50
LT1303CN8-5-ND	9257B	5V, Step-Up DC/DC Converter	8-Dip	4.75	3.16	2.50
LT1303CS8-ND	9257B	Adjustable, Step-Up DC/DC Converter	8-SOIC	4.75	3.16	2.50
LT1303CS8-5-ND	9257B	5V, Step-Up DC/DC Converter	8-SOIC	4.75	3.16	2.50
LT1303IS8-ND	—	Adjustable, Step-Up DC/DC Converter	8-SOIC	6.38	4.25	3.40
LT1304CS8-ND	9285B	Adjustable, Step-Up DC/DC Converter	8-SOIC	4.75	3.16	2.50
LT1304CS8-5-ND	9285B	5V, Step-Up DC/DC Converter	8-SOIC	4.75	3.16	2.50
LT1305CS8-ND	9257B	Micropower High Power Step-Up DC/DC Converter	8-SOIC	6.38	4.25	3.65
LT1307BCS8-ND	9285B	Single Micropower 600kHz PWM DC/DC Converter	8-SOIC	4.13	2.75	2.20
LT1307CS8-ND	9285B	Single Micropower 600kHz PWM DC/DC Converter	8-SOIC	4.13	2.75	2.20
LT1308ACS8-ND	—	Single High Current, Micropower 600kHz DC/DC Converter	8-SOIC	6.50	4.32	3.50
LT1308BCS8-ND	—	Single High Current, Micropower 600kHz DC/DC Converter	8-SOIC	6.50	4.32	3.50
LT1308CS8-ND	—	High Current, Low Power Single Cell 600KHz DC/DC Converter	8-SOIC	6.88	4.57	3.65
LT1310EMSE-ND	—	1.5A Boost DC-DC Converter with PLL *NEW!*	10-MSOP	5.70	3.79	2.91
LT1312CS8-ND	9257B	Single PCMCIA VPP Driver/Regulator	8-SOIC	3.75	2.50	2.15
LT1316CMS8-ND	—	Micropower Step-Up DC/DC Converter	8-MSOP	5.38	3.57	2.95
LT1316CS8-ND	—	Micropower Step-Up DC/DC Converter	8-SOIC	4.75	3.16	2.50
LT1316IS8-ND	—	Micropower Step-Up DC/DC Converter	8-SOIC	5.50	3.66	2.90
LT1317BCMS8-ND	—	Micropower, 600kHz PWM DC/DC Converter	8-MSOP	4.88	3.24	2.55
LT1317BCS8-ND	—	Micropower, 600kHz PWM DC/DC Converter	8-SOIC	4.38	2.91	2.30
LT1317BIS8-ND	—	Micropower, 600kHz PWM DC/DC Converter	8-SOIC	5.63	3.74	3.00
LT1317CMS8-ND	—	Micropower, 600kHz PWM DC/DC Converter	8-MSOP	4.88	3.24	2.55
LT1317CS8-ND	—	Micropower, 600kHz PWM DC/DC Converter	8-SOIC	4.38	2.91	2.30
LT1319CS-ND	9257B	Infrared Receiver Building Block	16-SOIC	7.25	4.83	3.95
LT1328CMS8-ND	—	4Mbps IrDA Infrared Receiver	8-MSOP	5.88	3.91	2.94
LT1330CNW-ND	9210B	5V, RS232 Transceiver with 3V Logic Interface	28-Dip	7.38	4.92	3.95
LT1330CSW-ND	9210B	5V, RS232 Transceiver with 3V Logic Interface	28-SOIC	7.38	4.92	3.95
LT1331CG-ND	9210B	5V/3V RS232 Transceiver with 1 Receiver Active in Shutdown	28-SSOP	8.13	5.42	4.25
LT1331CNW-ND	9210B	5V/3V, RS232 Xcvr. w/1 Receiver Active in Shutdown	28-Dip	7.38	4.92	3.95
LT1331CSW-ND	9210B	5V/3V, RS232 Xcvr. w/1 Receiver Active in Shutdown	28-SOIC	7.38	4.92	3.95
LT1336CN-ND	—	Half-Bridge N-Channel MOSFET Driver w/Boost Reg.	16-Dip	5.63	3.75	3.20
LT1336CS-ND	—	Half-Bridge N-Channel MOSFET Driver w/Boost Reg.	16-SOIC	6.00	4.00	3.40
LT1339CN-ND	9294B	High Power Synchronous DC/DC Controller	20-Dip	9.13	6.10	5.20
LT1339CSW-ND	9294B	High Power Synchronous DC/DC Controller	20-SOIC	9.38	6.25	5.35
LT1339IN-ND	9294B	High Power Synchronous DC/DC Controller	20-Dip	11.00	7.35	6.30
LT1339ISW-ND	9294B	High Power Synchronous DC/DC Controller	20-SOIC	11.25	7.50	6.45
LT1341CG-ND	9210B	5V, RS232, 3 Driver/5 Receiver with 1 Receiver Active in Shutdown	28-SSOP	8.13	5.42	4.25
LT1341CNW-ND	9210B	5V, RS232, 3 Driver/5 Receiver with 1 Receiver Active in Shutdown	28-Dip	7.38	4.92	3.95
LT1341CSW-ND	9210B	5V, RS232, 3 Driver/5 Receiver with 1 Receiver Active in Shutdown	28-SOIC	7.38	4.92	3.95
LT1342CG-ND	9210B	5V, RS232, 3 Driver/5 Receiver with 3V Logic	28-SSOP	7.75	5.17	4.20
LT1351CMS8-ND	9285B	Low Power, High Speed, 3MHz Op Amp	8-MSOP	5.13	3.41	2.80
LT1351CS8-ND	9285B	Low Power, High Speed, 3MHz Op Amp	8-SOIC	4.75	3.15	2.60
LT1352CS8-ND	—	Dual, Very Low Power, High Speed, 3MHz Op Amp	8-SOIC	7.63	5.10	4.25
LT1353CS-ND	—	Quad, Very Low Power, High Speed, 3MHz Op Amp	14-SOIC	12.63	8.40	6.95
LT1354CN8-ND	9210B	Low Power, High Speed, 12MHz Op Amp	8-Dip	4.25	2.83	2.35
LT1354CS8-ND	9210B	Low Power, High Speed, 12MHz Op Amp	8-SOIC	4.75	3.17	2.60
LT1355CN8-ND	9210B	Dual, Low Power, High Speed, 12MHz Op Amp	8-Dip	7.00	4.67	3.95
LT1355CS8-ND	9210B	Dual, Low Power, High Speed, 12MHz Op Amp	8-SOIC	7.63	5.10	4.25
LT1356CN-ND	9210B	Quad, Low Power, High Speed, 12MHz Op Amp	14-Dip	11.75	7.83	6.70
LT1356CS-ND	9210B	Quad, Low Power, High Speed, 12MHz Op Amp	16-SOIC	12.63	8.40	6.95
LT1357CN8-ND	9210B	Single, High Speed, 25MHz Op Amp	8-Dip	4.63	3.08	2.55
LT1357CS8-ND	9210B	Single, High Speed, 25MHz Op Amp	8-SOIC	5.13	3.42	2.80
LT1358CN8-ND	9210B	Dual, High Speed, 25MHz Op Amp	8-Dip	7.25	4.83	4.10
LT1358CS8-ND	9210B	Dual, High Speed, 25MHz Op Amp	8-SOIC	8.25	5.50	4.40
LT1359CN-ND	9210B	Quad, High Speed, 25MHz Op Amp	14-Dip	12.00	8.00	6.80
LT1359CS-ND	9210B	Quad, High Speed, 25MHz Op Amp	16-SOIC	12.88	8.55	7.05
LT1360CN8-ND	9210B	Single, High Speed, 50MHz Op Amp	8-Dip	4.13	2.75	2.25
LT1360CS8-ND	9210B	Single, High Speed, 50MHz Op Amp	8-SOIC	4.63	3.08	2.50
LT1361CN8-ND	9210B	Dual, High Speed, 50MHz Op Amp	8-Dip	6.38	4.25	3.50
LT1361CS8-ND	9210B	Dual, High Speed, 50MHz Op Amp	8-SOIC	6.75	4.50	3.65
LT1362CN-ND	9210B	Quad, High Speed, 50MHz Op Amp	14-Dip	11.25	7.50	6.15
LT1362CS-ND	9210B	Quad, High Speed, 50MHz Op Amp	16-SOIC	11.75	7.83	6.45
LT1363CN8-ND	9210B	Single, High Speed, 70MHz Op Amp	8-Dip	4.50	3.00	2.45
LT1363CS8-ND	9210B	Single, High Speed, 70MHz Op Amp	8-SOIC	5.00	3.33	2.70
LT1364CN8-ND	9210B	Dual, High Speed, 70MHz Op Amp	8-Dip	6.88	4.58	3.80
LT1364CS8-ND	9210B	Dual, High Speed, 70MHz Op Amp	8-SOIC	7.25	4.83	3.95
LT1365CN-ND	9210B	Quad, High Speed, 70MHz Op Amp	14-Dip	12.13	8.08	6.65
LT1365CS-ND	9210B	Quad, High Speed, 70MHz Op Amp	16-SOIC	12.63	8.42	6.95
LT1366CN8-ND	9257B	Dual Rail-to-Rail I/O Precision Op Amp	8-Dip	6.50	4.33	3.60
LT1366CS8-ND	9257B	Dual Rail-to-Rail I/O Precision Op Amp	8-SOIC	6.75	4.50	3.75
LT1367CS-ND	9257B	Quad Rail-to-Rail I/O Precision Op Amp	14-SOIC	11.50	7.65	6.35
LT1368CN8-ND	9257B	Dual Rail-to-Rail I/O Precision Op Amp	8-Dip	6.50	4.32	3.60
LT1368CS8-ND	9257B	Dual Rail-to-Rail I/O Precision Op Amp	8-SOIC	6.75	4.50	3.75
LT1369CS-ND	—	Quad Rail-to-Rail I/O Precision Op Amp	14-SOIC	11.50	7.65	6.35
LT1370CT7-ND	—	500kHz, High Efficiency, 6A Switching Regulator	TO-220-7	11.63	7.72	6.25
LT1370HVCR-ND	—	500kHz, High Efficiency, 6A Switching Regulator	7-DD	13.50	8.97	7.25
LT1370HVCT7-ND	—	500kHz, High Efficiency, 6A Switching Regulator	TO-220-7	13.25	8.80	7.10
LT1370HVIR-ND	—	500kHz, High Efficiency, 6A Switching Regulator	7-DD	16.13	10.71	8.65
LT1370IR-ND	—	500kHz, High Efficiency, 6A Switching Reg., Ind. Temp.	7-DD	14.25	9.47	7.65
LT1371CR-ND	—	500kHz, High Efficiency, 3A Switching Regulator	7-DD	9.63	6.40	5.50
LT1371CSW-ND	—	500kHz, High Efficiency, 3A Switching Regulator	20-SOIC	10.63	7.10	6.10
LT1371HVCR-ND	—	500kHz, High Efficiency, 3A Switching Regulator	7-DD	10.25	6.85	5.85
LT1371IR-ND	—	500kHz, High Efficiency, 3A Switching Reg., Ind. Temp.	7-DD	11.50	7.64	6.55
LT1372CN8-ND	9257B	500kHz, High Efficiency, 1.5A Switching Regulator	8-Dip	6.50	4.32	3.70
LT1372CS8-ND	9257B	500kHz, High Efficiency, 1.5A Switching Regulator	8-SOIC	6.75	4.50	3.85
LT1372HVCS8-ND	—	500kHz, High Efficiency, 1.5A Switching Regulator	8-SOIC	7.38	4.90	4.20
LT1372IS8-ND	—	500kHz, High Effic., 1.5A Switching Reg., Ind. Temp.	8-SOIC	8.13	5.40	4.65
LT1373CN8-ND	9257B	250kHz, High Efficiency, 1.5A Switching Regulator	8-Dip	6.50	4.32	3.70
LT1373CS8-ND	9257B	250kHz, High Efficiency, 1.5A Switching Regulator	8-SOIC	6.75	4.50	3.85
LT1373HVCS8-ND	—	250kHz, High Efficiency, 1.5A Switching Regulator	8-SOIC	7.38	4.90	4.20
LT1373IS8-ND	—	250kHz, High Effic., 1.5A Switching Reg., Ind. Temp.	8-SOIC	8.13	5.40	4.65
LT1374CFE-ND	—	Adj. 500kHz, 4.5A, Step Down Switch. Reg. *NEW!*	16-TSSOP	9.10	6.05	4.64
LT1374CHVFE-ND	—	Adj. 500kHz, 4.5A, Step Down Switch. Reg. *NEW!*	16-TSSOP	10.00	6.64	5.10
LT1374CR-ND	—	Adj., 500kHz, 4.5A, Step Down Switching Regulator	7-DD	10.00	6.64	5.00
LT1374CR-5-ND	—	5V, 500kHz, 4.5A, Step Down Switching Regulator	7-DD	10.00	6.64	5.00
LT1374CS8-ND	—	Adj., 500kHz, 4.5A, Step Down Switching Regulator	8-SOIC	9.38	6.23	4.70
LT1374CS8-5-ND	—	5V, 500KkHz, 4.5A, Step Down Switching Regulator	8-SOIC	9.38	6.23	4.70
LT1374CS8-SYNC-ND	—	Adj., 500kHz, 4.5A, Synchronous Step Down Switching Regulator	8-SOIC	9.38	6.23	4.70
LT1374CS8-5SYNC-ND	—	5V, 500kHz, 4.5A, Synchronous Step Down Switching Regulator	8-SOIC	9.38	6.23	4.70
LT1374CT7-ND	—	Adj., 500kHz, 4.5A, Step Down Switching Regulator	TO-220-7	9.75	6.48	4.90
LT1374CT7-5-ND	—	5V, 500kHz, 4.5A, Step Down Switching Regulator	TO-220-7	9.75	6.48	4.90
LT1374HVCS8-ND	—	Adj., 500kHz, 4.5A, Step Down Switching Regulator	8-SOIC	10.38	6.89	5.20
LT1374IHVFE-ND	—	Adj., 500kHz, 4.5A, Step Down Switching Regulator *NEW!*	16-TSSOP	11.40	7.57	5.81
LT1374IR-ND	—	Adj., 500kHz, 4.5A, Step Down Switching Regulator	7-DD	11.50	7.64	5.75
LT1374IR-5-ND	—	5V, 500kHz, 4.5A, Step Down Switching Regulator	7-DD	11.50	7.64	5.75
LT1374IS8-5SYNC-ND	—	5V, 500kHz, 4.5A, Synchronous Step Down Switching Regulator	8-SOIC	10.75	7.14	5.40
LT1374IT7-5-ND	—	5V, 500kHz, 4.5A Step Down Switching Regulator	TO-220-7	11.25	7.47	5.65
LT1375CS8-ND	9257B	Adj., 500kHz, 1.5A, Step Down Switching Regulator	8-SOIC	6.50	4.32	3.40

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LT1375CS8-5-ND	9257B	5V, 500kHz, 1.5A Step Down Switching Regulator	8-SOIC	6.75	4.49	3.85
LT1375IS8-ND	9257B	Adj., 500kHz, 1.5A Step Down, Switching Regulator, Ind. Temp.	8-SOIC	7.75	5.15	4.10
LT1376CN8-ND	9257B	Adj., 500kHz, 1.5A Step Down Switching Regulator	8-Dip	6.50	4.35	3.70
LT1376CN8-5-ND	9257B	5V, 500kHz, 1.5A, Step Down Switching Regulator	8-Dip	6.50	4.35	3.70
LT1376CS-ND	9257B	Adj., 500kHz, 1.5A, Step Down Switching Regulator	16-SOIC	7.38	4.90	3.90
LT1376CS8-ND	9257B	Adj., 500kHz, 1.5A, Step Down Switching Regulator	8-SOIC	6.50	4.32	3.40
LT1376CS8-5-ND	9257B	5V, 500kHz, 1.5A, Step Down Switching Regulator	8-SOIC	6.75	4.50	3.85
LT1376HVCS8-ND	—	Adj., 500kHz, 1.5A, Step Down Switching Regulator	8-SOIC	7.13	4.74	3.75
LT1376HVIS-ND	—	Adj., 500kHz, 1.5A, Step Down Switching Regulator	16-SOIC	9.50	6.31	5.00
LT1376IS-ND	9257B	Adj., 500kHz, 1.5A, Step Down Switching Regulator, Ind. Temp.	16-SOIC	8.63	5.73	4.55
LT1376IS8-ND	9257B	Adj., 500kHz, 1.5A, Step Down Switching Regulator	8-SOIC	7.75	5.15	4.10
LT1376IS8-5-ND	9257B	5V, 500kHz, 1.5A, Step Down Switching Regulator	8-SOIC	8.13	5.40	4.65
LT1377CS8-ND	—	1MHz, 1.5A, High Efficiency Switching Regulator	8-SOIC	7.88	5.25	4.50
LT1377IS8-ND	—	1MHz, 1.5A, High Efficiency Switching Regulator, Ind. Temp.	8-SOIC	9.50	6.35	5.40
LT1381CS-ND	9210B	5V, RS232, Dual Driver/Receiver	16-SOIC	3.50	2.33	2.00
LT1389ACS8-1.25-ND	—	1.25V Nanopower Precision Shunt Voltage Reference	8-SOIC	11.13	7.39	5.57
LT1389BCS8-1.25-ND	—	1.25V Nanopower Precision Shunt Voltage Reference	8-SOIC	6.50	4.32	3.25
LT1389BCS8-2.5-ND	—	2.5V Nanopower Precision Shunt Voltage Reference	8-SOIC	6.50	4.32	3.25
LT1389BCS8-4.096-ND	—	4.096V Nanopower Precision Shunt Voltage Reference	8-SOIC	6.50	4.32	3.25
LT1389BCS8-5-ND	—	5V Nanopower Precision Shunt Voltage Reference	8-SOIC	6.50	4.32	3.25
LT1394CS8-ND	—	7nS, Low Power Comparator	8-SOIC	5.13	3.41	2.65
LT1394IS8-ND	—	7nS, Low Power Comparator, Ind. Temp.	8-SOIC	5.75	3.82	2.90
LT1395CS5-ND	—	400MHz, Single Current Feedback Amp	SOT-23-5	2.75	1.83	1.40
LT1395CS6-ND	—	400MHz, Single Current Feedback Amp	SOT-23-6	2.75	1.83	1.40
LT1398CS-ND	—	300MHz, Dual Current Feedback Amp	16-SOIC	4.63	3.08	2.32
LT1399CS-ND	—	300MHz, Triple Current Feedback Amp	16-SOIC	5.00	3.32	2.50
LT1399HVCS-ND	—	300MHz, Triple Current Feedback Amp	16-SOIC	6.25	4.15	3.25
LT1413CN8-ND	9210B	5V Single Supply, Dual Precision Op Amp	8-Dip	3.75	2.50	2.05
LT1413S8-ND	9210B	5V Single Supply, Dual Precision Op Amp	8-SOIC	4.00	2.67	2.30
LT1424CN8-9-ND	—	Isolated Flyback Switch Regulator with 9V Output	8-Dip	5.88	3.91	3.10
LT1424CS8-9-ND	—	Isolated Flyback Switch Regulator with 9V Output	8-SOIC	6.13	4.07	3.25
LT1424IN8-9-ND	—	Isolated Flyback Switch Reg. w/9V Output, Ind. Temp.	8-Dip	7.38	4.90	4.30
LT1424IS8-5-ND	—	Isolated Flyback Switch Reg. w/5V Output, Ind. Temp.	8-SOIC	7.63	5.07	4.45
LT1424IS8-9-ND	—	Isolated Flyback Switch Reg. w/9V Output, Ind. Temp.	8-SOIC	7.63	5.07	4.45
LT1425CS-ND	—	Isolated Flyback Switch Regulator	16-SOIC	5.88	3.91	3.10
LT1425IS-ND	—	Isolated Flyback Switch Regulator, Ind. Temp.	16-SOIC	7.38	4.90	4.20
LT1431CN8-ND	9176B	Programmable Reference, .4% Tolerance	8-Dip	2.25	1.50	1.25
LT1431CS8-ND	9176B	Programmable Reference, .4% Tolerance	8-SOIC	3.13	2.08	1.80
LT1431IN8-ND	9176B	Programmable Reference, .4% Tolerance	8-Dip	2.88	1.92	1.60
LT1431IZ-ND	9176B	Programmable Reference, .4% Tolerance	TO-92	2.13	1.42	1.22
LT1457CN8-ND	9210B	Dual Precision JFET Input Op Amp	8-Dip	4.50	3.00	2.40
LT1457S8-ND	9210B	Dual Precision JFET Input Op Amp	8-SOIC	4.75	3.17	2.55
LT1460ACN8-2.5-ND	—	2.5V, Micropower Precision Series Reference	8-Dip	6.00	3.99	3.30
LT1460ACN8-5-ND	—	5V, Micropower Precision Series Reference	8-Dip	6.00	3.99	3.30
LT1460ACN8-10-ND	—	10V, Micropower Precision Series Reference	8-Dip	5.50	3.66	2.85
LT1460ACS8-2.5-ND	—	2.5V, Micropower Precision Series Reference	8-SOIC	6.25	4.15	3.45
LT1460ACS8-5-ND	—	5V, Micropower Precision Series Reference	8-SOIC	6.25	4.15	3.45
LT1460ACS8-10-ND	—	10V, Micropower Precision Series Bandgap Reference	8-SOIC	6.25	4.15	3.25
LT1460BIN8-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	8-Dip	9.00	5.98	4.95
LT1460BIS8-2.5-ND	9294B	2.5V, Micropower Precision Series Bandgap Reference	8-SOIC	9.13	6.06	5.05
LT1460BIS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	8-SOIC	9.13	6.06	5.05
LT1460CCMS8-2.5-ND	9294B	2.5V, Micropower Precision Series Bandgap Ref.	8-MSOP	6.50	4.32	3.60
LT1460CCMS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	8-MSOP	6.50	4.32	3.60
LT1460DCN8-2.5-ND	9294B	2.5V Micropower Precision Series Bandgap Reference	8-Dip	3.75	2.49	2.10
LT1460DCN8-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	8-Dip	3.75	2.49	2.10
LT1460DCS8-2.5-ND	9294B	2.5V, Micropower Precision Series Bandgap Reference	8-SOIC	4.00	2.66	2.20
LT1460DCS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	8-SOIC	4.00	2.66	2.20
LT1460DCS8-10-ND	9294B	10V, Micropower Precision Series Bandgap Reference	8-SOIC	4.00	2.66	2.20
LT1460EIN8-2.5-ND	9294B	2.5V Micropower Precision Series Bandgap Reference	8-Dip	4.25	2.83	2.35
LT1460EIN8-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	8-Dip	4.25	2.83	2.30
LT1460EIS8-2.5-ND	9294B	2.5V Micropower Precision Series Bandgap Reference	8-SOIC	4.50	2.99	2.50
LT1460EIS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	8-SOIC	4.38	2.91	2.40
LT1460EIS8-10-ND	9294B	10V Micropower Precision Series Bandgap Reference	8-SOIC	4.38	2.91	2.40
LT1460FCMS8-5-ND	9294B	5V, Micropower Precision Series Bandgap Ref.	8-MSOP	4.25	2.83	2.30
LT1460FCMS8-10-ND	9294B	10V Micropower Precision Series Bandgap Reference	8-SOIC	4.25	2.83	2.35
LT1460GCZ-2.5-ND	9294B	2.5V, Micropower Precision Series Bandgap Reference	TO-92	3.00	2.00	1.65
LT1460GCZ-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	TO-92	3.00	2.00	1.65
LT1460GIZ-5-ND	9294B	5V, Micropower Precision Series Bandgap Reference	TO-92	3.25	2.16	1.75
LT1460LHS8-2.5-ND	—	2.5V, Precision Series Ref. with Extended Temp	8-SOIC	5.00	3.32	2.85
LT1460LHS8-5-ND	—	5V, Precision Series Ref. with Extended Temp	8-SOIC	4.88	3.24	2.75
LT1460MHS8-2.5-ND	—	2.5V, Precision Series Ref. with Extended Temp	8-SOIC	4.75	3.16	2.40
LT1460MHS8-5-ND	—	5V, Precision Series Ref. with Extended Temp	8-SOIC	4.63	3.08	2.32
LT1462ACN8-ND	9285B	Dual Micropower JFET Input Op Amp	8-Dip	8.75	5.81	4.80
LT1462ACS8-ND	9285B	Dual Micropower JFET Input Op Amp	8-SOIC	9.00	5.98	4.95
LT1464ACS8-ND	9285B	Dual Micropower JFET Input Op Amp	8-SOIC	9.00	5.98	4.95
LT1464CS8-ND	9285B	Dual Micropower JFET Input Op Amp	8-SOIC	5.00	3.32	2.75
LT1465CS-ND	—	Quad Micropower JFET Input Op Amp	14-SOIC	8.50	5.65	4.75
LT1466LCN8-ND	—	Dual Precision Rail-to-Rail In/Out Op Amp	8-Dip	8.13	5.40	4.35
LT1466LCS8-ND	—	Dual Precision Rail-to-Rail In/Out Op Amp	8-SOIC	8.25	5.50	4.40
LT1468CN8-ND	—	90MHz, High Speed, 16-Bit Accurate Op Amp	8-Dip	6.25	4.15	3.13
LT1468CS8-ND	—	90MHz, High Speed, 16-Bit Accurate Op Amp	8-SOIC	6.25	4.15	3.13
LT1468IS8-ND	—	90MHz, High Speed, 16-Bit Accurate Op Amp	8-SOIC	7.50	4.98	3.75
LT1490CMS8-ND	—	Dual Micropower Rail-to-Rail In/Out Op Amp	8-MSOP	4.50	3.00	2.40
LT1490CN8-ND	9285B	Dual Micropower Rail-to-Rail In/Out Op Amp	8-Dip	3.75	2.50	2.05
LT1490CS8-ND	9285B	Dual Micropower Rail-to-Rail In/Out Op Amp	8-SOIC	3.88	2.60	2.15
LT1490IN8-ND	—	Dual Micropower Rail-to-Rail In/Out Op Amp	8-Dip	4.50	2.99	2.45
LT1490IS8-ND	—	Dual Micropower Rail-to-Rail In/Out Op Amp	8-SOIC	4.63	3.08	2.60
LT1491CN-ND	—	Dual Micropower Rail-to-Rail In/Out Op Amp	14-Dip	6.25	4.15	3.50
LT1491IS-ND	—	Dual Micropower Rail-to-Rail In/Out Op Amp	14-SOIC	7.75	5.15	4.25
LT1492CN8-ND	—	Dual Low Power Single Supply Precision Op Amp	8-Dip	7.38	4.90	3.69
LT1492CS8-ND	—	Dual Low Power Single Supply Precision Op Amp	8-SOIC	7.50	4.98	3.75
LT1493CS-ND	—	Quad Low Power Single Supply Precision Op Amp	16-SOIC	13.50	8.97	6.65
LT1494CMS8-ND	—	Single Rail-to-Rail In/Out Op Amp	8-MSOP	3.63	2.41	1.90
LT1494CN8-ND	—	Single Rail-to-Rail In/Out Op Amp	8-Dip	3.38	2.25	1.80
LT1494CS8-ND	—	Single Rail-to-Rail In/Out Op Amp	8-SOIC	3.38	2.25	1.80
LT1494HS8-ND	—	Single Rail-to-Rail In/Out Op Amp	8-SOIC	4.13	2.74	2.20
LT1494IMS8-ND	—	Single Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-MSOP	4.13	2.74	2.20
LT1494IN8-ND	—	Single Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-Dip	3.88	2.58	2.10
LT1494IS8-ND	—	Single Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-SOIC	3.88	2.58	2.10
LT1495CN8-ND	—	Dual Rail-to-Rail In/Out Precision Op Amp	8-Dip	5.13	3.41	3.00
LT1495CS8-ND	—	Dual Rail-to-Rail In/Out Precision Op Amp	8-SOIC	5.38	3.57	3.10
LT1495HS8-ND	—	Dual Rail-to-Rail In/Out Precision Op Amp *NEW!*	8-SOIC	6.75	4.49	3.75
LT1495IN8-ND	—	Dual Rail-to-Rail In/Out Precision Op Amp	8-Dip	6.00	4.50	3.95
LT1495IS8-ND	—	Dual Rail-to-Rail In/Out Precision Op Amp	8-SOIC	6.25	4.15	3.55
LT1496CN-ND	—	Quad Rail-to-Rail In/Out Precision Op Amp	14-Dip	6.75	4.49	3.95
LT1496CS-ND	—	Quad Rail-to-Rail In/Out Precision Op Amp	14-SOIC	7.00	4.65	4.10
LT1496HS-ND	—	Quad Rail-to-Rail In/Out Precision Op Amp *NEW!*	14-SOIC	8.75	5.81	4.90
LT1496IN-ND	—	Quad Rail-to-Rail In/Out Precision Op Amp	14-Dip	8.00	6.80	6.15
LT1496IS-ND	—	Quad Rail-to-Rail In/Out Precision Op Amp	14-SOIC	8.25	5.48	4.70
LT1497CS-ND	—	Dual Current Feedback Amp	16-SOIC	7.88	5.23	4.20
LT1497CS8-ND	—	Dual Current Feedback Amp	8-SOIC	6.25	4.15	3.45
LT1498CN8-ND	—	10MHz, Dual Rail-to-Rail In/Out Op Amp	8-Dip	6.50	4.32	3.25
LT1498CS8-ND	—	10MHz, Dual Rail-to-Rail In/Out Op Amp	8-SOIC	6.75	4.49	3.38
LT1498IN8-ND	—	10MHz, Dual Rail-to-Rail In/Out Op Amp *NEW!*	8-Dip	6.75	4.49	3.45
LT1498IS8-ND	—	10MHz, Dual Rail-to-Rail In/Out Op Amp *NEW!*	8-SOIC	7.00	4.65	3.65
LT1499CS-ND	—	10MHz, Quad Rail-to-Rail In/Out Op Amp	14-SOIC	12.25	8.14	6.13
LT1499IS-ND	—	10MHz, Quad Rail-to-Rail In/Out Op Amp *NEW!*	14-SOIC	12.88	8.55	6.50
LT1500CS-ND	9285B	Adaptive Frequency Current Mode Switching Reg.	14-SOIC	5.00	3.35	2.85
LT1505CG-ND	—	Constant-Current/Voltage, High Efficiency Battery Charger	28-SSOP	9.88	6.56	5.15
LT1505CG-1-ND	—	Constant-Current/Voltage, High Efficiency Battery Charger	28-SSOP	9.38	6.23	4.90
LT1506CR-SYNC-ND	—	500kHz, 4.5A, Step Down Switching Regulator	7-DD	10.00	6.64	5.00
LT1506CR-3.3-ND	—	500kHz, 4.5A, 3.3V Step Down Switching Regulator	7-DD	10.00	6.64	5.00
LT1506CS8-ND	—	500kHz, 4.5A, Step Down Switching Regulator	8-SOIC	9.38	6.23	4.70
LT1506CS8-3.3-ND	—	500kHz, 4.5A, 3.3V Step Down Switching Regulator	8-SOIC	9.38	6.23	4.70
LT1506IR-ND	—	500kHz, 4.5A, Step Down Switching Regulator	7-DD	11.50	7.64	5.75
LT1506IR-3.3-ND	—	500kHz, 4.5A, 3.3V Step Down Switching Regulator	7-DD	11.50	7.64	5.75
LT1506IS8-ND	—	500kHz, 4.5A, Step Down Switching Regulator	8-SOIC	10.75	7.14	5.40
LT1506IS8-3.3-ND	—	500kHz, 4.5A, 3.3V Step Down Switching Regulator	8-SOIC	10.75	7.14	5.40
LT1507CS8-ND	9285B	500kHz, Monolithic Buck Mode Switching Regulator	8-SOIC	6.75	4.50	3.85
LT1507CS8-3.3-ND	—	500kHz, 3.3V Mono Buck Mode Switching Regulator	8-SOIC	6.75	4.50	3.85
LT1508CSW-ND	9294B	Power Factor and PWM Controller	20-SOIC	7.88	5.25	4.50
LT1508ISW-ND	9294B	Power Factor and PWM Controller, Ind. Temp.	20-SOIC	8.75	5.85	5.00
LT1510-5CGN-ND	—	500kHz, 1.5A Constant Volt/Current Battery Charger	16-SSOP	8.13	5.40	4.35
LT1510CGN-ND	9285B	200kHz, 1.5A Constant Volt/Current Battery Charger	16-SSOP	8.13	5.40	4.35
LT1510CN-ND	9285B	200kHz, 1.5A Constant Volt/Current Battery Charger	16-Dip	7.50	4.98	4.00
LT1510CS-ND	—	200kHz, 1.5A Constant Volt/Current Battery Charger	16-SOIC	7.88	5.23	4.20
LT1510CS8-ND	9285B	200kHz, 1.5A Constant Volt/Current Battery Charger	8-SOIC	6.00	3.99	3.20
LT1510IS-ND	—	200kHz, 1.5A Constant Volt/Current Battery Charger	16-SOIC	9.00	5.98	4.80
LT1510IS8-ND	—	200kHz, 1.5A Constant Volt/Current Battery Charger	8-SOIC	6.88	4.57	3.65
LT1511CSW-ND	—	3A Constant Current/Volt. Voltage Battery Charger	24-SOIC	13.00	8.64	6.95
LT1511ISW-ND	—	3A Constant Current/Volt. Battery Charger, Ind. Temp.	24-SOIC	15.00	10.00	8.60
LT1512CGN-ND	—	1.5A, SEPIC Constant Current/Volt Battery Charger	16-SSOP	8.00	5.32	4.60
LT1512CN8-ND	—	1.5A, SEPIC Constant Current/Volt Battery Charger	8-Dip	6.75	4.50	3.85
LT1512CS8-ND	—	1.5A, SEPIC Constant Current/Volt Battery Charger	8-SOIC	7.00	4.65	4.00
LT1513-2CR-ND	—	SEPIC Constant- or Programmable Current/ Constant Voltage Battery Charger	7-DD	9.13	6.06	4.70
LT1513-2CT7-ND	—	SEPIC Constant- or Programmable Current/ Constant Voltage Battery Charger	TO-220-7	8.75	5.81	4.55
LT1513CR-ND	—	SEPIC Constant- or Programmable Current/ Constant Voltage Battery Charger	7-DD	9.13	6.06	4.70
LT1513IR-ND	—	SEPIC Constant- or Programmable Current/ Constant Voltage Battery Charger, Ind. Temp.	7-DD	10.00	6.64	5.20
LT1521CMS8-ND	—	Adj., 300mA LDO Voltage Regulator	8-MSOP	4.63	3.08	2.35
LT1521CMS8-3.3-ND	—	3.3V, 300mA LDO Voltage Regulator	8-MSOP	4.63	3.08	2.35
LT1521CS8-ND	9257B	Adj., 300mA LDO Voltage Regulator	8-SOIC	4.13	2.75	2.50
LT1521CS8-3-ND	9257B	3V, 300mA LDO Voltage Regulator	8-SOIC	4.13	2.75	2.50
LT1521CS8-3.3-ND	9257B	3.3V, 300mA LDO Voltage Regulator	8-SOIC	4.13	2.75	2.50
LT1521CS8-5-ND	9257B	5V, 300mA LDO Voltage Regulator	8-SOIC	4.13	2.75	2.50
LT1521CST-3-ND	9257B	3V, 300mA LDO Voltage Regulator	SOT-223	3.88	2.58	2.00
LT1521CST-3.3-ND	9257B	3.3V, 300mA LDO Voltage Regulator	SOT-223	3.88	2.58	2.00
LT1521CST-5-ND	9257B	5V, 300mA LDO Voltage Regulator	SOT-223	3.88	2.58	2.00
LT1521IS8-5-ND	—	5V, 300mA LDO Voltage Regulator	8-SOIC	5.00	3.35	2.85
LT1521IST-3.3-ND	—	3.3V, 300mA LDO Voltage Regulator	SOT-223	4.75	3.16	2.70
LT1521IST-5-ND	—	5V, 300mA LDO Voltage Regulator	SOT-223	4.75	3.16	2.70
LT1528CQ-ND	—	3.3V, 3A, LDO Voltage Regulator	5-DD	7.13	4.75	4.10
LT1528CT-ND	9257B	3.3V, 3A, LDO Voltage Regulator	TO-220-5	6.50	4.35	3.75
LT1529CQ-ND	—	Adj., 3A LDO Voltage Regulator with Shutdown	5-DD	7.13	4.74	3.57
LT1529CQ-3.3-ND	—	3.3V, 3A LDO Voltage Regulator with Shutdown	5-DD	7.13	4.74	3.57
LT1529CQ-5-ND	—	5V, 3A LDO Voltage Regulator with Shutdown	5-DD	7.13	4.74	3.57
LT1529CT-ND	9257B	Adj., 3A LDO Voltage Regulator with Shutdown	TO-220-5	6.50	4.32	3.25
LT1529CT-3.3-ND	—	3.3V, 3A LDO Voltage Regulator with Shutdown	TO-220-5	6.50	4.32	3.25
LT1529CT-5-ND	9257B	5V, 3A LDO Voltage Regulator with Shutdown	TO-220-5	6.50	4.32	3.25
LT1533CS-ND	—	1A, Ultra Low Noise Switching Regulator	16-SOIC	9.25	6.15	4.85
LT1533IS-ND	—	1A, Ultra Low Noise Switching Regulator	16-SOIC	11.50	7.65	6.55
LT1534CS-ND	—	2A, Ultra Low Noise Switching Regulator	16-SOIC	8.25	5.48	4.25
LT1534IS-ND	—	2A, Ultra Low Noise Switching Regulator	16-SOIC	9.50	6.31	4.80
LT1537CG-ND	—	5V, Low Power, RS232, 3 Drivers/5 Receivers	28-SSOP	6.00	4.00	3.40
LT1567CMS8-ND	—	Op Amp and Inverter/Filter Building Block *NEW!*	8-MSOP	3.75	2.49	2.00
LT1573CS8-ND	—	Adjustable LDO Regulator Driver	8-SOIC	3.75	2.49	1.88
LT1573CS8-2.5-ND	—	2.5V, LDO Regulator Driver	8-SOIC	3.75	2.49	1.88
LT1573CS8-2.8-ND	—	2.8V, LDO Regulator Driver	8-SOIC	3.75	2.49	1.88
LT1573CS8-3.3-ND	—	3.3V, LDO Regulator Driver	8-SOIC	3.75	2.49	1.88
LT1575CN8-ND	—	Adjustable Precision Linear Reg Controller	8-Dip	4.75	3.16	2.70
LT1575CN8-3.3-ND	—	3.3V, Precision Linear Reg Controller	8-Dip	4.75	3.16	2.70
LT1575CS8-ND	—	Ultrafast Transient Response Low Dropout Regulator	8-SOIC	4.75	3.16	2.70
LT1575CS8-2.8-ND	—	2.8V, Precision Linear Reg Controller	8-SOIC	4.75	3.16	2.70
LT1575CS8-3.3-ND	—	3.3V, Precision Linear Reg Controller	8-SOIC	4.75	3.16	2.70
LT1575CS8-5-ND	—	5V, Precision Linear Reg Controller	8-SOIC	4.75	3.16	2.70
LT1576CS8-ND	—	1.5A, 200kHz, Step Down Switching Regulator	8-SOIC	5.75	3.82	2.95
LT1576CS8-SYNC-ND	—	1.5A, 200kHz, Step Down Switching Reg., Sync Input	8-SOIC	5.75	3.82	2.95
LT1576IS8-SYNC-ND	—	1.5A, 200kHz, Step Down Switching Reg., Sync Input	8-SOIC	6.63	4.40	3.35
LT1579CGN-ND	—	Adj., 300mA, Dual Input, Smart LDO Regulator	16-SSOP	8.25	5.48	4.70

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LT1579CGN-3-ND	—	3V, 300mA, Dual Input, Smart LDO Regulator	16-SSOP	8.25	5.48	4.70
LT1579CGN-3.3-ND	—	3.3V, 300mA, Dual Input, Smart LDO Regulator	16-SSOP	8.25	5.48	4.70
LT1579CGN-5-ND	—	5V, 300mA, Dual Input, Smart LDO Regulator	16-SSOP	8.25	5.48	4.70
LT1579CS-ND	—	Adj., 300mA, Dual Input, Smart LDO Regulator	16-SOIC	7.50	4.98	4.30
LT1579CS-3-ND	—	3V, 300mA, Dual Input, Smart LDO Regulator	16-SOIC	7.50	4.98	4.30
LT1579CS-3.3-ND	—	3.3V, 300mA, Dual Input, Smart LDO Regulator	16-SOIC	7.50	4.98	4.30
LT1579CS-5-ND	—	5V, 300mA, Dual Input, Smart LDO Regulator	16-SOIC	7.50	4.98	4.30
LT1579CS8-ND	—	Adj., 300mA, Dual Input, Smart LDO Regulator	8-SOIC	6.75	4.49	3.85
LT1579CS8-3-ND	—	3V, 300mA, Dual Input, Smart LDO Regulator	8-SOIC	6.75	4.49	3.85
LT1579CS8-3.3-ND	—	3.3V, 300mA, Dual Input, Smart LDO Regulator	8-SOIC	6.75	4.49	3.85
LT1579CS8-5-ND	—	5V, 300mA, Dual Input, Smart LDO Regulator	8-SOIC	6.75	4.49	3.85
LT1579IGN-ND	—	Adj., 300mA, Dual Input, Smart LDO Regulator	16-SSOP	10.00	6.64	5.70
LT1580CQ-ND	—	Adj., 7A, High Speed LDO Voltage Regulator	5-DD	11.50	7.64	5.75
LT1580CR-2.5-ND	—	2.5V, 7A, High Speed LDO Voltage Regulator	7-DD	11.88	7.89	5.94
LT1580CT-ND	9285B	Adj., 7A, High Speed LDO Voltage Regulator	TO-220-5	11.25	7.47	5.63
LT1580CT7-2.5-ND	—	2.5V, 7A, High Speed LDO Voltage Regulator	TO-220-7	11.63	7.72	5.82
LT1580IQ-ND	—	Adj., 7A, High Speed LDO Voltage Regulator	5-DD	13.75	9.13	6.88
LT1580IR-2.5-ND	—	2.5V, 7A, High Speed LDO Voltage Reg., Ind. Temp.	7-DD	14.00	9.30	7.00
LT1581CT7-ND	—	Adj., 10A, LDO Voltage Regulator	TO-220-7	13.13	8.75	7.50
LT1581CT7-2.5-ND	—	2.5V, 10A, LDO Voltage Regulator	TO-220-7	13.13	8.75	7.50
LT1584CT-ND	9257B	Adj., 7A, LDO Voltage Regulator	TO-220	10.63	7.08	6.05
LT1584CT-3.3-ND	9257B	3.3V, 7A, LDO Voltage Regulator	TO-220	10.63	7.08	6.05
LT1584CT-3.38-ND	9257B	3.38V, 7A, LDO Voltage Regulator	TO-220	10.63	7.08	6.05
LT1584IT-3.3-ND	—	3.3V, 7A, LDO Voltage Regulator	TO-220	12.75	8.47	7.40
LT1585ACM-1.5-ND	—	1.5V, 4.6A, LDO Voltage Regulator	3-DD	8.13	5.40	4.65
LT1585ACT-1.5-ND	—	1.5V, 4.6A, LDO Voltage Regulator	TO-220	7.50	5.00	4.25
LT1585CM-ND	9210B	Adj., 4A, LDO Voltage Regulator	3-DD	7.75	5.15	4.30
LT1585CM-3.3-ND	9210B	3.3V, 4A, LDO Voltage Regulator	3-DD	7.75	5.15	4.30
LT1585CM-3.6-ND	9210B	3.6V, 4A, LDO Voltage Regulator	3-DD	7.75	5.15	4.30
LT1585CT-ND	9210B	Adj.,4A, LDO Voltage Regulator	TO-220	7.13	4.75	4.00
LT1585CT-3.3-ND	9210B	3.3V, 4A, LDO Voltage Regulator	TO-220	7.13	4.75	4.00
LT1585CT-3.38-ND	9210B	3.38V, 4A, LDO Voltage Regulator	TO-220	7.13	4.75	4.00
LT1585CT-3.6-ND	9210B	3.6V, 4A, LDO Voltage Regulator	TO-220	7.13	4.75	4.00
LT1587CM-ND	9257B	Adj., 3A, LDO Voltage Regulator	3-DD	6.50	4.35	3.70
LT1587CM-1.5-ND	—	1.5V, 3A, LDO Voltage Regulator	3-DD	6.50	4.35	3.70
LT1587CT-ND	9257B	Adj. 3A, LDO Voltage Regulator	TO-220	5.88	3.92	3.35
LT1587CT-3.3-ND	9257B	3.3V, 3A, 3A, LDO Voltage Regulator	TO-220	5.88	3.92	3.35
LT1610CMS8-ND	—	1.7MHz, Single Cell DC/DC Converter	8-MSOP	4.13	2.74	2.10
LT1610CS8-ND	—	1.7MHz, Single Cell DC/DC Converter	8-SOIC	3.50	2.33	1.75
LT1610IS8-ND	—	1.7MHz, Single Cell DC/DC Converter	8-SOIC	4.25	2.83	2.25
LT1611CS5-ND	—	1.4MHz, Inverting Switching Regulator	SOT-23-5	4.00	2.66	2.15
LT1613CS5-ND	—	1.4MHz, Single Cell DC/DC Controller	SOT-23-5	3.50	2.33	1.75
LT1614CMS8-ND	—	600kHz Inverting Switching Regulator	8-MSOP	5.50	3.66	2.80
LT1614CS8-ND	—	600kHz Inverting Switching Regulator	8-SOIC	5.00	3.32	2.55
LT1615ES5-ND	—	Micropower Step-Up DC/DC Converter	SOT-23-5	3.50	2.33	1.75
LT1615IS5-ND	—	Micropower Step-Up DC/DC Converter *NEW!*	SOT-23-5	4.00	2.66	2.00
LT1615IS5TR-ND	—	Micropower Step-Up DC/DC Converter *NEW!*	SOT-23-5	4950.00/2,500		
LT1618EMS-ND	—	1.4MHz, Step-Up DC/DC Converter	10-MSOP	5.75	3.82	2.88
LT1619EMS8-ND	—	300kHz, 2-Cell Current Mode PWM Controller	8-MSOP	4.50	2.99	2.25
LT1619EMS8TR-ND	—	300kHz, 2-Cell Current Mode PWM Controller	8-MSOP	5550.00/2,500		
LT1619ES8-ND	—	300kHz, 2-Cell Current Mode PWM Controller	8-SOIC	4.25	2.83	2.15
LT1619ES8TR-ND	—	300kHz, 2-Cell Current Mode PWM Controller	8-SOIC	5250.00/2,500		
LT1620CGN-ND	—	Rail-to-Rail Current Sense Amp	16-SSOP	4.00	2.66	2.30
LT1620CS8-ND	—	Rail-to-Rail Current Sense Amp	8-SOIC	3.38	2.25	1.95
LT1620IS8-ND	—	Rail-to-Rail Current Sense Amp, Ind. Temp.	8-SOIC	3.88	2.58	2.05
LT1621CGN-ND	9294B	Dual Rail-to-Rail Current Sense Amp	16-SSOP	6.13	4.10	3.50
LT1621IGN-ND	9294B	Dual Rail-to-Rail Current Sense Amp, Ind. Temp.	16-SSOP	7.00	4.65	3.95
LT1630CN8-ND	—	30MHz, Dual Rail-to-Rail I/O Precision Op Amp.	8-Dip	6.50	4.32	3.25
LT1630CS8-ND	—	30MHz, Dual Rail-to-Rail I/O Precision Op Amp	8-SOIC	6.75	4.49	3.38
LT1631CS-ND	—	30MHz, Quad Rail-to-Rail I/O Precision Op Amp	14-SOIC	12.25	8.14	6.13
LT1632CN8-ND	—	45MHz, Dual Rail-to-Rail I/O Precision Op Amp.	8-Dip	6.63	4.40	3.32
LT1632CS8-ND	—	45MHz, Dual Rail-to-Rail I/O Precision Op Amp	8-SOIC	6.88	4.57	3.44
LT1633CS-ND	—	45MHz, Quad Rail-to-Rail I/O Precision Op Amp	14-SOIC	12.38	8.22	6.19
LT1634ACS8-1.25-ND	9294B	1.25V, Micropower Shunt Voltage Reference	8-SOIC	9.38	6.23	4.70
LT1634ACS8-2.5-ND	9294B	2.5V, Micropower Shunt Voltage Reference	8-SOIC	9.38	6.23	4.70
LT1634ACS8-4.096-ND	9294B	4.096V, Micropower Shunt Voltage Reference	8-SOIC	9.38	6.23	4.70
LT1634ACS8-5-ND	9294B	5V, Micropower Shunt Voltage Reference	8-SOIC	9.38	6.23	4.70
LT1634AIS8-1.25-ND	—	1.25V, Micropower Shunt Voltage Reference	8-SOIC	10.38	6.89	5.20
LT1634AIS8-4.096-ND	—	4.096V, Micropower Shunt Voltage Reference	8-SOIC	10.38	6.89	5.20
LT1634BCMS8-1.25-ND	9294B	1.25V, Micropower Shunt Voltage Reference	8-MSOP	4.88	3.24	2.70
LT1634BCS8-1.25-ND	9294B	1.25V, Micropower Shunt Voltage Reference	8-SOIC	4.38	2.91	2.40
LT1634BCS8-2.5-ND	9294B	2.5V, Micropower Shunt Voltage Reference	8-SOIC	4.38	2.91	2.40
LT1634BCS8-4.096-ND	—	4.096V, Micropower Shunt Voltage Reference	8-SOIC	4.38	2.91	2.40
LT1634BIS8-1.25-ND	9294B	1.25V, Micropower Shunt Voltage Reference	8-SOIC	5.63	3.74	2.95
LT1634BIS8-2.5-ND	9294B	2.5V, Micropower Shunt Voltage Reference	8-SOIC	5.63	3.74	2.95
LT1634CCZ-4.096-ND	—	4.096V, Micropower Shunt Voltage Reference	TO-92	3.88	2.58	2.15
LT1635CN8-ND	9294B	Micropower Rail-to-Rail Op Amp and Reference	8-Dip	3.50	2.33	1.85
LT1635CS8-ND	9294B	Micropower Rail-to-Rail Op Amp and Reference	8-SOIC	3.88	2.58	2.05
LT1636CMS8-ND	9294B	220kHz, Single Micropower R-R I/O Op Amp	8-MSOP	3.50	2.33	1.90
LT1636CN8-ND	9294B	220kHz, Single Micropower R-R I/O Op Amp	8-Dip	2.88	1.91	1.50
LT1636CS8-ND	—	220kHz, Single Micropower R-R I/O Op Amp	8-SOIC	3.00	2.00	1.55
LT1636HS8-ND	—	220kHz, Single Micropower R-R I/O Op Amp	8-SOIC	3.75	2.49	1.90
LT1636IS8-ND	—	220kHz, Single Micropower R-R I/O Op Amp, Ind. Temp.	8-SOIC	3.50	2.33	1.80
LT1637CN8-ND	—	1.1MHz, Single Micropower R-R I/O Op Amp	8-Dip	2.88	1.91	1.50
LT1637CS8-ND	—	1.1MHz, Single Micropower R-R I/O Op Amp	8-SOIC	3.00	2.00	1.55
LT1637HS8-ND	—	1.1MHz, Single Micropower R-R I/O Op Amp	8-SOIC	3.50	2.33	1.85
LT1638CMS8-ND	—	1.2MHz, Dual Micropower R-R I/O Op Amp.	8-MSOP	4.50	3.00	2.40
LT1638CN8-ND	—	1.2MHz, Dual Micropower R-R I/O Op Amp.	8-Dip	3.75	2.50	2.05
LT1638CS8-ND	—	1.2MHz, Dual Micropower R-R I/O Op Amp	8-SOIC	3.88	2.60	2.15
LT1638HS8-ND	—	1.2MHz, Dual Micropower R-R I/O Op Amp	8-SOIC	4.88	3.24	2.70
LT1638IS8-ND	—	1.2MHz, Dual Micropower R-R I/O Op Amp, Ind. Temp.	8-SOIC	4.63	3.08	2.60
LT1639HS-ND	—	1.2MHz, Quad Micropower R-R I/O Op Amp	8-SOIC	8.00	5.32	4.35
LT1639IS-ND	—	1.2MHz, Quad Micropower R-R I/O Op Amp, Ind. Temp.	8-SOIC	7.75	5.15	3.88

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LT1640AHCN8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-Dip	3.88	2.58	2.05
LT1640AHCS8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-SOIC	4.00	2.66	2.10
LT1640AHCS8TR-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-SOIC	5024.99/2,500		
LT1640ALCN8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-Dip	3.88	2.58	2.05
LT1640ALCS8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-SOIC	4.00	2.66	2.10
LT1640HIS8-ND	—	Negative Voltage Hot Swap Controller, Ind. Temp.	8-SOIC	4.50	2.99	2.35
LT1640LCN8-ND	—	Negative Voltage Hot Swap Controller.	8-Dip	3.88	2.58	2.05
LT1640LCS8-ND	—	Negative Voltage Hot Swap Controller	8-SOIC	4.00	2.66	2.10
LT1640LIS8-ND	—	Negative Voltage Hot Swap Controller, Ind. Temp.	8-SOIC	4.50	2.99	2.35
LT1641-1CS8-ND	—	Positive High Voltage Hot Swap Controller *NEW!*.	8-SOIC	5.00	3.32	2.50
LT1641-2CS8-ND	—	Positive High Voltage Hot Swap Controller *NEW!*.	8-SOIC	5.00	3.32	2.50
LT1671CS8-ND	—	60nS Low Power Ground-Sensing Comparator	8-SOIC	3.50	2.33	1.80
LT1672CMS8-ND	—	Single Rail-to-Rail In/Out Op Amp	8-MSOP	3.63	2.41	1.90
LT1672CN8-ND	—	Single Rail-to-Rail In/Out Op Amp.	8-Dip	3.38	2.25	1.80
LT1672CS8-ND	—	Single Rail-to-Rail In/Out Op Amp	8-SOIC	3.38	2.25	1.80
LT1672IMS8-ND	—	Single Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-MSOP	4.13	2.74	2.20
LT1672IN8-ND	—	Single Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-Dip	3.88	2.58	2.10
LT1672IS8-ND	—	Single Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-SOIC	3.88	2.58	2.10
LT1673CN8-ND	—	Dual Rail-to-Rail In/Out Op Amp	8-Dip	5.13	3.41	3.00
LT1673CS8-ND	—	Dual Rail-to-Rail In/Out Op Amp.	8-SOIC	5.38	3.57	3.10
LT1673IN8-ND	—	Dual Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-Dip	6.00	3.99	3.45
LT1673IS8-ND	—	Dual Rail-to-Rail In/Out Op Amp, Ind. Temp.	8-SOIC	6.25	4.15	3.55
LT1674CN-ND	—	Quad Rail-to-Rail In/Out Op Amp	14-SOIC	6.75	4.49	3.95
LT1674CS-ND	—	Quad Rail-to-Rail In/Out Op Amp	14-SOIC	7.00	4.65	4.10
LT1674IN-ND	—	Quad Rail-to-Rail In/Out Op Amp, Ind. Temp.	14-Dip	8.00	5.32	4.60
LT1674IS-ND	—	Quad Rail-to-Rail In/Out Op Amp, Ind. Temp.	14-SOIC	8.25	5.48	4.70
LT1675CGN-ND	—	Triple, High Speed RGB Multiplexer	16-SSOP	6.63	4.40	3.55
LT1675CMS8-1-ND	—	Single, High Speed RGB Multiplexer	8-MSOP	4.50	2.99	2.30
LT1675CS8-1-ND	—	Single, High Speed RGB Multiplexer	8-SOIC	4.13	2.74	2.07
LT1676CS8-ND	—	High Efficiency, Step Down Switching Regulator	8-SOIC	5.38	3.57	2.85
LT1676IS8-ND	—	High Efficiency, Step Down Switching Reg., Ind Temp.	8-SOIC	6.25	4.15	3.35
LT1680CN-ND	—	High Power DC/DC Step Up Controller	16-Dip	8.00	5.32	4.25
LT1680CSW-ND	9294B	High Power DC/DC Step Up Controller	16-SOIC	8.38	5.57	4.45
LT1680IN-ND	9294B	High Power DC/DC Step Up Controller	16-Dip	9.63	6.40	5.15
LT1680ISW-ND	9294B	High Power DC/DC Step Up Controller	16-SOIC	10.00	6.64	5.35
LT1681ESW-ND	—	Dual Transistor Synch. Forward Controller *NEW!*	20-SOIC	10.63	7.06	5.32
LT1681ISW-ND	—	Dual Transistor Synch. Forward Controller *NEW!*	20-SOIC	11.75	7.81	5.88
LT1683EG-ND	—	Ultra Low Noise Push-Pull DC/DC Controller *NEW!*	20-SSOP	9.63	6.40	4.85
LT1711CMS8-ND	—	Single Rail-to-Rail, In/Out Comparator	8-MSOP	4.38	2.91	2.50
LT1711IMS8-ND	—	Single Rail-to-Rail, In/Out Comparator, Ind. Temp.	8-MSOP	4.75	3.16	2.65
LT1713IMS8-ND	—	Single, Low Power, R/R I/O Comparator *NEW!*	8-MSOP	4.38	2.91	2.35
LT1714CGN-ND	—	Dual Rail-to-Rail, In/Out Comparator	16-SSOP	6.63	4.40	3.32
LT1714IGN-ND	—	Dual Rail-to-Rail, In/Out Comparator, Ind. Temp.	16-SSOP	7.13	4.74	3.57
LT1715CMS-ND	—	Dual Rail-to-Rail, In/Out Comparator *NEW!*	10-MSOP	6.88	4.57	3.65
LT1719CS6-ND	—	Single Rail-to-Rail, In/Out Comparator	SOT-23-6	2.88	1.91	1.55
LT1719IS6-ND	—	Single Rail-to-Rail, In/Out Comparator, Ind. Temp.	SOT-23-6	3.25	2.16	1.70
LT1720CMS8-ND	—	Dual Rail-to-Rail, In/Out Comparator.	8-MSOP	6.50	4.32	3.45
LT1720CS8-ND	—	Dual Rail-to-Rail, In/Out Comparator	8-SOIC	6.00	3.99	3.00
LT1720IS8-ND	—	Dual Rail-to-Rail, In/Out Comparator, Ind. Temp.	8-SOIC	7.00	4.65	3.50
LT1721CGN-ND	—	Quad Rail-to-Rail, In/Out Comparator	16-SSOP	9.38	6.23	5.00
LT1721CS-ND	—	Quad Rail-to-Rail, In/Out Comparator	16-SOIC	9.00	5.98	4.80
LT1725IGN-ND	—	General Purpose Isolated Flyback Controller	16-SSOP	7.25	4.82	3.77
LT1725IS-ND	—	General Purpose Isolated Flyback Controller	16-SOIC	7.00	4.65	3.50
LT1737IGN-ND	—	High Power Isolated Flyback Controller	16-SSOP	7.25	4.82	3.77
LT1737IS-ND	—	High Power Isolated Flyback Controller	16-SOIC	7.00	4.65	3.50
LT1738EG-ND	—	Ultra Low Noise DC/DC Controller *NEW!*	20-SSOP	8.63	5.73	4.32
LT1738IG-ND	—	Ultra Low Noise DC/DC Controller *NEW!*	20-SSOP	9.88	6.56	4.94
LT1739CFE-ND	—	Dual XDSL Line Driver Amp *NEW!*	20-TSSOP	7.38	4.90	4.25
LT1761ES5-BYP-ND	—	Adj., 100mA Low Noise LDO Micropower Reg.	SOT-23-5	1.93	1.28	.97
LT1761ES5-1.5-ND	—	1.5V, 100mA Low Noise LDO Micropower Regulator *NEW!*	SOT-23-5	1.93	1.28	.97
LT1761ES5-1.8-ND	—	1.8V, 100mA, Low Noise LDO Micropower Reg.	SOT-23-5	1.93	1.28	.97
LT1761ES5-2.5-ND	—	2.5V, 100mA, Low Noise LDO Micropower Reg.	SOT-23-5	1.93	1.28	.97
LT1762EMS8-ND	—	Adj., 150mA, Low Noise LDO Micropower Regulator	8-MSOP	2.38	1.58	1.19
LT1763CS8-ND	—	Adj., 500mA, Low Noise LDO Micropower Regulator	8-SOIC	4.13	2.74	2.07
LT1765EFE-ND	—	3A Step-Down Switching Regulator *NEW!*	16-TSSOP	9.65	6.41	5.10
LT1765ES8-ND	—	3A Step-Down Switching Regulator *NEW!*.	8-SOIC	9.58	6.36	4.79
LT1765ES8TR-ND	—	3A Step-Down Switching Regulator *NEW!*.	8-SOIC	11824.98/2,500		
LT1766EGN-ND	—	1.5A, 200kHz High Volt. Step-Down Switching Reg.	16-SSOP	7.38	4.90	3.72
LT1766EGN-5-ND	—	1.5A, 200kHz High Volt. Step-Down Switching Reg. *NEW!*	16-SSOP	7.38	4.90	3.72
LT1766IGN-ND	—	1.5A, 200kHz High Volt. Step-Down Switching Reg.	16-SSOP	9.00	5.98	4.44
LT1767EMS8-1.8-ND	—	1.8V, Monolithic 1.5A, 1.25MHz Step-Down Switching Regulator *NEW!*.	8-MSOP	6.00	3.99	3.10
LT1767EMS8-2.5-ND	—	2.5V, Monolithic 1.5A, 1.25MHz Step-Down Switching Regulator *NEW!*.	8-MSOP	6.00	3.99	3.10
LT1767EMS8-3.3-ND	—	3.3V, Monolithic 1.5A, 1.25MHz Step-Down Switching Regulator *NEW!*.	8-MSOP	6.00	3.99	3.10
LT1767EMS8-5-ND	—	5V, Monolithic 1.5A, 1.25MHz Step-Down Switching Regulator *NEW!*.	8-MSOP	6.00	3.99	3.10
LT1769CFE-ND	—	Constant-Current/Volt. 2A Battery Charger *NEW!*	20-TSSOP	10.50	6.98	5.25
LT1769CGN-ND	—	Constant-Current/Volt. 2A Battery Charger	28-SSOP	10.13	6.73	5.10
LT1769IFE-ND	—	Constant-Current/Volt. 2A Battery Charger *NEW!*	20-TSSOP	11.50	7.64	5.75
LT1776CN8-ND	—	High Efficiency, Step Down Switching Regulator, Wide Input Range.	8-Dip	5.00	3.32	2.65
LT1776CS8-ND	—	High Efficiency, Step Down Switching Regulator, Wide Input Range	8-SOIC	5.25	3.49	2.75
LT1776IN8-ND	—	High Efficiency, Step Down Switching Regulator, Wide Input Range.	8-Dip	5.75	3.82	3.10
LT1776IS8-ND	—	High Efficiency, Step Down Switching Regulator, Wide Input Range	8-SOIC	3.15	3.99	3.15
LT1780CN-ND	—	5V, RS232, Dual Driver/Receiver, 15KV ESD	18-Dip	5.25	3.49	2.95
LT1780CSW-ND	—	5V, RS232, Dual Driver/Receiver, 15KV ESD.	18-SOIC	5.75	3.82	3.25
LT1781CN-ND	—	5V, RS232, Dual Driver/Receiver, 15KV ESD	16-Dip	5.25	3.49	2.95
LT1781CS-ND	—	5V, RS232, Dual Driver/Receiver, 15KV ESD.	16-SOIC	5.63	3.74	3.15
LT1781CSW-ND	—	5V, RS232, Dual Driver/Receiver, 15KV ESD.	16-SOIC	5.75	3.82	3.25
LT1781IS-ND	—	5V, RS232, Dual Driver/Receiver, 15KV ESD.	16-SOIC	7.00	4.65	3.73

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LT1782HS5-ND	—	Micropower Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	3.13	2.08	1.65
LT1782HS6-ND	—	Micropower Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-6	3.50	2.33	1.80
LT1782IS5-ND	—	Micropower Rail-to-Rail In/Out Op Amp	SOT-23-5	2.83	1.88	1.40
LT1782IS6-ND	—	Micropower Rail-to-Rail In/Out Op Amp	SOT-23-6	3.23	2.15	1.60
LT1783HS5-ND	—	Micropower Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-5	3.13	2.08	1.65
LT1783HS6-ND	—	Micropower Rail-to-Rail In/Out Op Amp *NEW!*	SOT-23-6	3.50	2.33	1.80
LT1783IS5-ND	—	1.25MHz Micropower Rail-to-Rail Op Amp	SOT-23-5	2.83	1.88	1.40
LT1783IS6-ND	—	1.25MHz Micropower Rail-to-Rail Op Amp	SOT-23-6	3.23	2.15	1.60
LT1784CS5-ND	—	2.5MHz Micropower Rail-to-Rail Op Amp	SOT-23-5	2.08	1.38	1.17
LT1784CS6-ND	—	2.5MHz Micropower Rail-to-Rail Op Amp	SOT-23-6	2.25	1.50	1.26
LT1785AIN8-ND	—	60V, Fault Protected RS485/RS422 Transceiver	8-Dip	5.63	3.75	3.00
LT1785AIS8-ND	—	60V, Fault Protected RS485/RS422 Transceiver	8-SOIC	5.75	3.85	3.10
LT1785CN8-ND	—	60V, Fault Protected RS485/RS422 Transceiver	8-Dip	4.00	2.66	2.10
LT1785CS8-ND	—	60V, Fault Protected RS485/RS422 Transceiver	8-SOIC	4.13	2.74	2.15
LT1785IN8-ND	—	60V, Fault Protected RS485/RS422 Transceiver	8-Dip	4.63	3.08	2.40
LT1785IS8-ND	—	60V, Fault Protected RS485/RS422 Transceiver	8-SOIC	4.75	3.16	2.45
LT1786FCS-ND	—	SMBus Programmable CCFL Switching Regulator	16-SOIC	9.00	5.98	4.50
LT1787HS8-ND	—	Precision Current Sense Op Amp	8-SOIC	5.63	3.74	2.90
LT1787HVHS8-ND	—	Precision Current Sense Op Amp	8-SOIC	7.50	4.98	3.80
LT1789CS8-1-ND	—	Micropower Single R/R Out Instrum. Amp *NEW!*	8-SOIC	6.38	4.24	3.30
LT1789IS8-1-ND	—	Micropower Single R/R Out Instrum. Amp *NEW!*	8-SOIC	7.38	4.90	3.85
LT1790BCS6-1.25-ND	—	1.25V Micropower LDO Reference *NEW!*	SOT-23-6	2.63	1.75	1.35
LT1790BCS6-2.048-ND	—	2.048V Micropower LDO Reference *NEW!*	SOT-23-6	2.63	1.75	1.35
LT1790BCS62.048TR-ND	—	2.048V Micropower LDO Reference *NEW!*	SOT-23-6	3274.99/2,500		
LT1790BCS6-3-ND	—	3V Micropower LDO Reference *NEW!*	SOT-23-6	2.63	1.75	1.35
LT1790BCS6-3TR-ND	—	3V Micropower LDO Reference *NEW!*	SOT-23-6	3274.99/2,500		
LT1790BCS6-3.3-ND	—	3.3V Micropower LDO Reference *NEW!*	SOT-23-6	2.63	1.75	1.35
LT1790BCS6-3.3TR-ND	—	3.3V Micropower LDO Reference *NEW!*	SOT-23-6	3274.99/2,500		
LT1790BCS6-4.096-ND	—	4.096V Micropower LDO Reference *NEW!*	SOT-23-6	2.63	1.75	1.35
LT1790BCS64.096TR-ND	—	4.096V Micropower LDO Reference *NEW!*	SOT-23-6	3274.99/2,500		
LT1790BCS6-5-ND	—	5V Micropower LDO Reference *NEW!*	SOT-23-6	2.63	1.75	1.35
LT1791AIS-ND	—	60V, Fault Protected RS485/RS422 Transceiver	14-SOIC	6.38	4.25	3.40
LT1791CN-ND	—	60V, Fault Protected RS485/RS422 Transceiver	14-Dip	4.38	2.91	2.30
LT1791CS-ND	—	60V, Fault Protected RS485/RS422 Transceiver	14-SOIC	4.50	2.99	2.35
LT1791IS-ND	—	60V, Fault Protected RS485/RS422 Transceiver	8-SOIC	5.13	3.41	2.65
LT1792CN8-ND	—	Low Noise, JFET Input Precision Op Amp	8-Dip	4.75	3.16	2.45
LT1792CS8-ND	—	Low Noise, JFET Input Precision Op Amp	8-SOIC	4.75	3.16	2.45
LT1793CN8-ND	—	Low Noise, JFET Input Precision Op Amp	8-Dip	4.75	3.16	2.45
LT1793CS8-ND	—	Low Noise, JFET Input Precision Op Amp	8-SOIC	4.75	3.16	2.45
LT1794CSW-ND	—	500mA, 200MHz Dual Op Amp	20-TSSOP	10.25	6.81	5.45
LT1794IFE-ND	—	500mA, 200MHz Dual Op Amp, Ind. Temp.	20-TSSOP	12.50	8.30	6.70
LT1794ISW-ND	—	500mA, 200MHz Dual Op Amp, Ind. Temp.	20-SOIC	12.13	8.06	6.50
LT1795CSW-ND	—	Dual 500mA, 50MHz, Current Feedback Amplifier	20-SOIC	10.25	6.81	5.30
LT1796CN8-ND	—	Overvoltage Fault Protected CAN Transceiver *NEW!*	8-Dip	3.00	2.00	1.65
LT1796CS8-ND	—	Overvoltage Fault Protected CAN Transceiver *NEW!*	8-SOIC	3.00	2.00	1.65
LT1800CS5-ND	—	80MHz Low Power, R-R I/O Prec. Op Amp *NEW!*	SOT-23-5	2.75	1.83	1.45
LT1800CS8-ND	—	80MHz Low Power, R-R I/O Prec. Op Amp *NEW!*	8-SOIC	2.75	1.83	1.45
LT1806CS6-ND	—	325MHz Single Rail-to-Rail In/Out Op Amp	SOT-23-6	4.38	2.91	2.20
LT1806CS8-ND	—	325MHz Single Rail-to-Rail In/Out Op Amp	8-SOIC	4.38	2.91	2.20
LT1806CS8TR-ND	—	325MHz Single Rail-to-Rail In/Out Op Amp	8-SOIC	5400.00/2,500		
LT1806IS6-ND	—	325MHz Single Rail-to-Rail In/Out Op Amp	SOT-23-6	4.75	3.16	2.40
LT1806IS8-ND	—	325MHz Single Rail-to-Rail In/Out Op Amp, Ind. Temp	8-SOIC	4.75	3.16	2.40
LT1806IS8TR-ND	—	325MHz Single Rail-to-Rail In/Out Op Amp, Ind. Temp	8-SOIC	5850.00/2,500		
LT1809CS6-ND	—	180MHz Single Rail-to-Rail In/Out Op Amp	SOT-23-6	3.75	2.49	1.90
LT1809IS6-ND	—	180MHz Single R/R In/Out Op Amp, Ind. Temp.	SOT-23-6	4.13	2.74	2.10
LT1812CS5-ND	—	100MHz, Low Power Op Amp with Shutdown	SOT-23-5	2.38	1.58	1.35
LT1812CS6-ND	—	100MHz, Low Power Op Amp with Shutdown	SOT-23-5	2.88	1.91	1.65
LT1813CS8-ND	—	Dual, High Speed, Low Power Op Amp	8-SOIC	4.13	2.74	2.30
LT1813HVCS8-ND	—	Dual, High Speed, Low Power Op Amp	8-SOIC	4.50	2.99	2.30
LT1813HVDS8-ND	—	Dual, High Speed, Low Power Op Amp	8-SOIC	4.13	2.74	2.10
LT1813HVIS8-ND	—	Dual, High Speed, Low Power Op Amp	8-SOIC	5.50	3.66	2.80
LT1814CGN-ND	—	Quad, High Speed, Low Power Op Amp *NEW!*	16-SSOP	7.25	4.82	4.15
LT1814CS-ND	—	Quad, High Speed, Low Power Op Amp *NEW!*	14-SOIC	6.88	4.57	3.95
LT1814IGN-ND	—	Quad, High Speed, Low Power Op Amp *NEW!*	16-SSOP	9.25	6.15	5.25
LT1815CS5-ND	—	Single, High Speed Op Amp	SOT-23-5	3.63	2.41	2.15
LT1815CS6-ND	—	Single, High Speed Op Amp	SOT-23-6	4.25	2.83	2.50
LT1815CS8-ND	—	Single, High Speed Op Amp	8-SOIC	3.75	2.49	2.30
LT1815IS5-ND	—	Single, High Speed Op Amp, Ind. Temp.	SOT-23-5	4.38	2.91	2.60
LT1815IS6-ND	—	Single, High Speed Op Amp, Ind. Temp.	SOT-23-6	5.00	3.32	3.00
LT1815IS8-ND	—	Single, High Speed Op Amp, Ind. Temp.	8-SOIC	4.50	2.99	2.70
LT1816ACMS-ND	—	Dual, High Speed Op Amp *NEW!*	10-MSOP	6.50	4.32	3.70
LT1816CMS8-ND	—	Dual, High Speed Op Amp *NEW!*	8-MSOP	6.00	3.99	3.45
LT1816CS8-ND	—	Dual, High Speed Op Amp *NEW!*	8-SOIC	5.75	3.85	3.30
LT1816IMS8-ND	—	Dual, High Speed Op Amp *NEW!*	8-MSOP	7.75	5.70	4.45
LT1816IS8-ND	—	Dual, High Speed Op Amp *NEW!*	8-SOIC	7.25	4.85	4.15
LT1817CGN-ND	—	Quad, High Speed Op Amp *NEW!*	16-SSOP	8.88	5.90	5.10
LT1817CS-ND	—	Quad, High Speed Op Amp *NEW!*	14-SOIC	8.50	5.65	4.85
LT1880CS5-ND	—	Picoamp-In Rail-to-Rail Op Amp	SOT-23-5	3.63	2.41	2.10
LT1880IS5-ND	—	Picoamp-In Rail-to-Rail Op Amp, Ind. Temp.	SOT-23-5	4.38	2.91	2.45
LT1920CN8-ND	—	Precision Instrumentation Amplifier	8-Dip	6.25	4.15	3.25
LT1920CS8-ND	—	Precision Instrumentation Amplifier	8-SOIC	6.25	4.15	3.25
LT1930AES5-ND	—	2.2MHz, Step Up DC/DC Converter	SOT-23-5	4.00	2.66	2.00
LT1930ES5-ND	—	1.2MHz, Step Up DC/DC Converter	SOT-23-5	4.00	2.66	2.00
LT1930ES5TR-ND	—	1.2MHz, Step Up DC/DC Converter	SOT-23-5	4920.00/2,500		
LT1931AES5-ND	—	2.2MHz, Inverting DC/DC Converter	SOT-23-5	4.25	2.83	2.15
LT1931ES5-ND	—	1.2MHz, Inverting DC/DC Converter	SOT-23-5	4.25	2.83	2.15
LT1931ES5TR-ND	—	1.2MHz, Inverting DC/DC Converter	SOT-23-5	5220.00/2,500		
LT1932ES6-ND	—	Constant-Current DC/DC LED Driver *NEW!*	SOT-23-6	3.50	2.33	1.79
LT1944-1EMS-ND	—	Dual Micropower Step Up DC/DC Converter *NEW!*	10-MSOP	4.25	2.83	2.13
LT1944EMS-ND	—	Dual Micropower Step Up DC/DC Converter *NEW!*	10-MSOP	4.25	2.83	2.13
LT1945EMS-ND	—	Dual Micropower DC/DC Converter *NEW!*	10-MSOP	4.25	2.83	2.13
LT1946AEMS8E-ND	—	2.7MHz Boost DC/DC Converter with 1.5A Switch *NEW!*	8-MSOP	5.00	3.32	2.55
LT1946EMS8-ND	—	1.2MHz Boost DC/DC Converter with 1.5A Switch *NEW!*	8-MSOP	4.93	3.28	2.47
LT1947EMS-ND	—	Adj. Output TFT-LCD Triple Switching Reg. *NEW!*	10-MSOP	5.13	3.41	2.65
LT1949-1EMS8-ND	—	1.1MHz, 1A Switch PWM DC/DC Converter	8-MSOP	4.50	2.99	2.25
LT1949EMS8-ND	—	600kHz, 1A Switch PWM DC/DC Converter	8-MSOP	4.50	2.99	2.45
LT1956EGN-ND	—	1.5A, High Volt. Step-Down Switching Reg. *NEW!*	16-SSOP	7.38	4.90	3.72
LT1956EGN-5-ND	—	1.5A, 5V Step-Down Switching Reg. *NEW!*	16-SSOP	7.38	4.90	3.72

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LT1962EMS8-ND	—	Adj., 300mA, Low Noise Micropower LDO Regulator	8-MSOP	3.50	2.33	1.80
LT1962EMS8TR-ND	—	Adj., 300mA, Low Noise Micropower LDO Regulator	8-MSOP	4350.00/2,500		
LT1962EMS8-2.5-ND	—	2.5V, 300mA, Low Noise Micropower LDO Reg.	8-MSOP	3.50	2.33	1.80
LT1962EMS8-2.5TR-ND	—	2.5V, 300mA, Low Noise Micropower LDO Reg.	8-MSOP	4350.00/2,500		
LT1962EMS8-3-ND	—	3V, 300mA, Low Noise Micropower LDO Regulator	8-MSOP	3.50	2.33	1.80
LT1962EMS8-3TR-ND	—	3V, 300mA, Low Noise Micropower LDO Regulator	8-MSOP	4350.00/2,500		
LT1962EMS8-3.3-ND	—	3.3V, 300mA, Low Noise Micropower LDO Reg.	8-MSOP	3.50	2.33	1.80
LT1962EMS8-3.3TR-ND	—	3.3V, 300mA, Low Noise Micropower LDO Reg.	8-MSOP	4350.00/2,500		
LT1962EMS8-5-ND	—	5V, 300mA, Low Noise Micropower LDO Regulator	8-MSOP	3.50	2.33	1.80
LT1962EMS8-5TR-ND	—	5V, 300mA, Low Noise Micropower LDO Regulator	8-MSOP	4350.00/2,500		
LT1964ES5-BYP-ND	—	200mA, Low Noise LDO Negative Micropower Regulator *NEW!*	SOT-23-5	2.70	1.80	1.38
LT1964ES5-5-ND	—	220A, 5V Low Noise LDO Negative Micropower Regulator *NEW!*	SOT-23-5	2.70	1.80	1.38
LT1969CMS-ND	—	Dual, 700MHz, 200mA, Adjustable Current Op Amp *NEW!*	10-MSOP	6.13	4.07	3.25
LT2078AIS8-ND	—	Dual Micropower Op Amp, Ind. Temp.	8-SOIC	11.63	7.72	6.40
LT2078CS8-ND	—	Dual Micropower Op Amp	8-SOIC	6.50	4.35	3.65
LT2078IS8-ND	—	Dual Micropower Op Amp, Ind. Temp.	8-SOIC	8.38	5.60	4.85
LT2079AIS-ND	—	Quad Micropower Op Amp, Ind. Temp	14-SOIC	19.75	13.12	10.95
LT2079CS-ND	—	Quad Micropower Op Amp	14-SOIC	11.13	7.39	6.15
LT2079IS-ND	—	Quad Micropower Op Amp, Ind. Temp.	14-SOIC	14.25	9.47	7.90
LT2178AIS8-ND	—	Dual Micropower Op Amp, Ind. Temp.	8-SOIC	9.75	6.48	5.10
LT2178CS8-ND	—	Dual Micropower Op Amp	8-SOIC	7.00	4.65	3.85
LT2178IS8-ND	—	Dual Micropower Op Amp, Ind. Temp.	8-SOIC	7.75	5.15	4.05
LT2179ACS-ND	—	Quad Micropower Op Amp	14-SOIC	18.00	11.96	9.95
LT4250HCN8-ND	—	Negative 48V Hot Swap Controller *NEW!*	8-Dip	4.75	3.16	2.50
LT4250HCS8-ND	—	Negative 48V Hot Swap Controller *NEW!*	8-SOIC	4.88	3.24	2.55
LT4250LCN8-ND	—	Negative 48V Hot Swap Controller *NEW!*	8-Dip	4.75	3.16	2.50
LT4250LCS8-ND	—	Negative 48V Hot Swap Controller *NEW!*	8-SOIC	4.88	3.24	2.55
LT5502EGN-ND	—	400MHz Quadrature IF Modulator *NEW!*	24-SSOP	10.25	6.81	5.40
LT5503EFE-ND	—	1.2-2.7GHz Direct IQ Modulator and Mixer *NEW!*	20-TSSOP	8.25	5.48	4.13
LT6300CGN-ND	—	500mA, 200MHz xDSL Line Driver *NEW!*	16-SSOP	5.88	3.91	3.35
LT6300IGN-ND	—	500mA, 200MHz xDSL Line Driver *NEW!*	16-SSOP	7.00	4.65	4.00
LT6301CFE-ND	—	Dual 500mA Differential xDSL Line Driver *NEW!*	28-TSSOP	12.38	8.25	7.05
LT6301IFE-ND	—	Dual 500mA Differential xDSL Line Driver *NEW!*	28-TSSOP	15.63	10.38	8.90
LTC485CN8-ND	9176B	Low Power RS485 Transceiver/Receiver Interface	8-Dip	2.50	1.66	1.35
LTC485CS8-ND	9176B	Low Power RS485 Transceiver/Receiver Interface	8-SOIC	3.13	2.10	1.70
LTC486CN-ND	9176B	Low Power Quad RS485 Driver	16-Dip	6.50	4.35	3.70
LTC486CSW-ND	9176B	Low Power Quad RS485 Driver	16-SOIC	7.50	5.00	4.25
LTC487CN-ND	9176B	Low Power Quad RS485 Driver	16-Dip	6.50	4.35	3.70
LTC487CSW-ND	9176B	Low Power Quad RS485 Driver	16-SOIC	7.50	5.00	4.25
LTC488CN-ND	9210B	Low Power Quad RS485 Receiver	16-Dip	6.50	4.33	3.70
LTC488CSW-ND	9210B	Low Power Quad RS485 Receiver	16-SOIC	7.50	5.00	4.25
LTC489CN-ND	9210B	Low Power Quad RS485 Receiver	16-Dip	6.50	4.33	3.70
LTC489CSW-ND	9210B	Low Power Quad RS485 Receiver	16-SOIC	7.50	5.00	4.25
LTC490CN8-ND	9176B	Low Power RS485 Transceiver/Receiver	8-Dip	4.38	2.92	2.50
LTC490CS8-ND	9176B	Low Power RS485 Transceiver/Receiver	8-SOIC	5.38	3.58	3.05
LTC491CN-ND	9176B	Low Power RS485 Transceiver/Receiver	14-Dip	4.88	3.25	2.80
LTC491CS-ND	9176B	Low Power RS485 Transceiver/Receiver	14-SOIC	5.88	3.92	3.25
LTC660CN8-ND	9257B	100mA, CMOS Switched Capacitor Converter	8-Dip	5.00	3.33	2.85
LTC660CS8-ND	9257B	100mA, CMOS Switched Capacitor Converter	8-SOIC	5.50	3.67	3.14
LTC690CN8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-Dip	6.25	4.17	3.50
LTC690CS8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-SOIC	6.88	4.58	3.75
LTC691CN-ND	9176B	MPU Supervisor Reset Circuit and WDT	16-Dip	6.88	4.58	3.80
LTC691CSW-ND	9176B	MPU Supervisor Reset Circuit and WDT	16-SOIC	7.50	5.00	4.15
LTC692CN8-ND	9210B	MPU Supervisor Reset Circuit and WDT	8-Dip	6.25	4.17	3.50
LTC692CS8-ND	9210B	MPU Supervisor Reset Circuit and WDT	8-SOIC	6.88	4.58	3.75
LTC693CSW-ND	9210B	MPU Supervisor Reset Circuit and WDT	16-SOIC	7.50	5.00	4.15
LTC694CN8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-Dip	6.25	4.17	3.50
LTC694CS8-ND	9210B	MPU Supervisor Reset Circuit and WDT	8-SOIC	6.88	4.58	3.75
LTC694CS8-3.3-ND	9210B	3.3V MPU Supervisor Reset Circuit and WDT	8-SOIC	7.50	5.00	4.20
LTC695CN-ND	9176B	MPU Supervisor Reset Circuit and WDT	16-Dip	6.88	4.58	3.80
LTC695CN-3.3-ND	9210B	3.3V MPU Supervisor Reset Circuit and WDT	16-Dip	7.38	4.92	4.15
LTC695CSW-ND	9176B	MPU Supervisor Reset Circuit and WDT	16-SOIC	7.50	5.00	4.15
LTC695CSW-3.3-ND	9210B	3.3V MPU Supervisor Reset Circuit and WDT	16-SOIC	8.13	5.42	4.55
LTC699CN8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-Dip	4.63	3.08	2.47
LTC699CS8-ND	9176B	MPU Supervisor Reset Circuit and WDT	8-SOIC	5.00	3.33	2.67
LTC1040CN-ND	9175B	Dual Micropower Comparator	18-Dip	3.88	2.58	2.20
LTC1040CSW-ND	9175B	Dual Micropower Comparator	18-SOIC	4.63	3.08	2.85
LTC1041CN8-ND	9175B	CMOS Bang-Bang Controller	8-Dip	3.38	2.25	1.90
LTC1042CN8-ND	9175B	CMOS Window Comparator	8-Dip	3.38	2.25	1.90
LTC1043CN-ND	9175B	Dual, Precision Instrumentation Switched-Cap Building Block	18-Dip	5.13	3.42	2.95
LTC1043CSW-ND	—	Dual, Precision Instrumentation Switched-Cap Building Block	18-SOIC	5.63	3.75	3.10
LTC1044CN8-ND	9175B	CMOS Switched-Cap Voltage Converter	8-Dip	3.13	2.08	1.75
LTC1044CS8-ND	9175B	CMOS Switched-Cap Voltage Converter	8-SOIC	4.13	2.75	2.35
LTC1045CN-ND	9175B	Programmable µpower Hex Translator/Receiver/Driver	20-Dip	5.25	3.50	2.95
LTC1045CSW-ND	—	Programmable µpower Hex Translator/Receiver/Driver	20-SOIC	8.25	5.50	4.75
LTC1046CN8-ND	9176B	50mA, CMOS Switched-Cap Voltage Converter	8-Dip	4.00	2.70	2.25
LTC1046CS8-ND	9176B	50mA, CMOS Switched-Cap Voltage Converter	8-SOIC	5.25	3.50	3.00
LTC1046IS8-ND	—	50mA, CMOS Switched-Cap Voltage Converter	8-SOIC	6.50	4.33	3.70
LTC1047CN8-ND	9176B	Dual Chopper-Stabilized Op Amp with Internal Caps	8-Dip	9.00	6.00	5.10
LTC1047CSW-ND	9176B	Dual Chopper-Stabilized Op Amp with Internal Caps	16-SOIC	10.25	6.85	5.45
LTC1049CN8-ND	9176B	Chopper-Stabilized Op Amp with Internal Caps	8-Dip	4.00	2.70	2.25
LTC1049CS8-ND	9176B	Chopper-Stabilized Op Amp with Internal Caps	8-SOIC	5.00	3.35	2.80
LTC1050ACN8-ND	—	Chopper-Stabilized Op Amp with Internal Caps	8-Dip	6.88	4.60	3.95
LTC1050CN8-ND	9175B	Chopper-Stabilized Op Amp with Internal Caps	8-Dip	4.00	2.70	2.25
LTC1050CS8-ND	9175B	Chopper-Stabilized Op Amp with Internal Caps	8-SOIC	5.00	3.35	2.80
LTC1051CN8-ND	9176B	Dual Chopper-Stabilized Op Amp with Internal Caps	8-Dip	7.50	5.00	4.25
LTC1051CSW-ND	9176B	Dual Chopper-Stabilized Op Amp with Internal Caps	16-SOIC	9.00	6.00	4.95
LTC1052CN-ND	9175B	Low Noise Chopper-Stabilized Op Amp	14-Dip	8.13	5.42	4.65
LTC1052CN8-ND	9175B	Low Noise Chopper-Stabilized Op Amp	8-Dip	7.50	5.00	4.30
LTC1053CN-ND	9176B	Quad Chopper-Stabilized Op Amp with Internal Caps	14-Dip	13.50	9.00	7.80

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1053CSW-ND	9176B	Quad Chopper-Stabilized Op Amp with Internal Caps	18-SOIC	16.13	10.75	8.85
LTC1059CN-ND	9175B	Switched-Capacitor Universal Filter Building Block	14-Dip	5.63	3.75	3.25
LTC1059CS-ND	9175B	Switched-Capacitor Universal Filter Building Block	14-SOIC	6.25	4.20	3.40
LTC1060ACN-ND	9175B	Dual Switched-Cap Universal Filter Building Block	20-Dip	13.75	9.20	8.00
LTC1060CN-ND	9175B	Dual Switched-Cap Universal Filter Building Block	20-Dip	6.88	4.60	3.90
LTC1060CSW-ND	9175B	Dual Switched-Cap Universal Filter Building Block	20-SOIC	7.50	5.00	4.25
LTC1061ACN-ND	9175B	Triple Switched-Cap Universal Filter Building Block	20-Dip	25.00	16.65	14.50
LTC1061CN-ND	9175B	Triple Switched-Cap Universal Filter Building Block	20-Dip	13.75	9.15	7.60
LTC1062CN8-ND	9210B	5th Order Lowpass Filter	8-Dip	6.13	4.10	3.30
LTC1062CSW-ND	9210B	5th Order Lowpass Filter	16-SOIC	6.25	4.20	3.55
LTC1063CN8-ND	9210B	Clock-Tunable 5th Order, Lowpass Butterworth Filter	8-Dip	10.00	6.70	5.75
LTC1063CSW-ND	9210B	Clock-Tunable 5th Order, Lowpass Butterworth Filter	16-SOIC	10.75	7.20	6.15
LTC1064-1CN-ND	9175B	8th Order, Clock Sweepable Elliptic Lowpass Filter	14-Dip	22.50	15.00	12.90
LTC1064-2CN-ND	9176B	8th Order, High Freq. Butterworth Lowpass Filter	14-Dip	20.00	13.35	11.25
LTC1064-2CSW-ND	9176B	8th Order, High Freq. Butterworth Lowpass Filter	16-SOIC	27.50	18.35	15.50
LTC1064-3CN-ND	9176B	8th Order, High Freq. Linear Phase Lowpass Filter	14-Dip	17.50	11.70	9.95
LTC1064-3CSW-ND	9176B	8th Order, High Freq. Linear Phase Lowpass Filter	16-SOIC	20.00	13.35	11.30
LTC1064-4CN-ND	9176B	8th Order ,Clock Sweepable Cauer Lowpass Filter	14-Dip	25.00	16.70	14.20
LTC1064-4CSW-ND	9176B	8th Order, Clock Sweepable Cauer Lowpass Filter	16-SOIC	31.25	20.85	17.65
LTC1064-7CN-ND	9210B	8th Order, Linear Phase Lowpass Filter	14-Dip	20.00	13.35	11.25
LTC1064-7CSW-ND	9210B	8th Order, Linear Phase Lowpass Filter	16-SOIC	27.50	18.35	15.50
LTC1064CN-ND	9175B	Quad, Universal Filter Building Block	24-Dip	15.00	10.00	8.40
LTC1064CSW-ND	9175B	Quad, Universal Filter Building Block	24-SOIC	18.00	12.00	9.55
LTC1065CN8-ND	9210B	5th Order, Clock-Tunable Bessel Lowpass Filter	8-Dip	10.00	6.70	5.75
LTC1065CSW-ND	9210B	5th Order, Clock-Tunable Bessel Lowpass Filter	16-SOIC	10.75	7.15	6.15
LTC1066-1CSW-ND	9210B	8th Order, Clock-Tunable Lowpass Filter	18-SOIC	32.50	21.65	17.50
LTC1067-50CS-ND	—	Dual R/R Very Low Noise Universal Filter Bldg. Block	16-SOIC	6.88	4.57	3.60
LTC1067CS-ND	—	Dual R/R Very Low Noise Universal Filter Bldg. Block	16-SOIC	6.88	4.57	3.60
LTC1068-25CG-ND	—	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068-25IG-ND	—	Quad Universal Filter Building Block, Ind. Temp.	28-SSOP	13.50	8.97	7.15
LTC1068-50CG-ND	—	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068-50IG-ND	—	Quad Universal Filter Building Block, Ind. Temp.	28-SSOP	13.50	8.97	7.15
LTC1068-200CG-ND	—	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068-200IG-ND	—	Quad Universal Filter Building Block, Ind. Temp.	28-SSOP	13.50	8.97	7.15
LTC1068CG-ND	9294B	Quad Universal Filter Building Block	28-SSOP	12.38	8.22	6.60
LTC1068CN-ND	9294B	Quad Universal Filter Building Block	24-Dip	12.00	7.97	6.40
LTC1068IG-ND	9294B	Quad Universal Filter Building Block, Ind. Temp.	28-SSOP	13.50	8.97	7.15
LTC1068IN-ND	9294B	Quad Universal Filter Building Block, Ind. Temp	24-Dip	13.13	8.72	6.95
LTC1069-1IS8-ND	—	8th Order Progressive Elliptic, Lowpass Filter	8-SOIC	10.25	6.81	5.45
LTC1069-6CS8-ND	—	8th Order Single Supply, Elliptic Lowpass Filter	8-SOIC	9.38	6.25	5.00
LTC1069-7CS8-ND	—	8th Order Linear Phase Lowpass Filter	8-SOIC	9.38	6.23	5.00
LTC1090ACN-ND	—	Single Chip 8-Channel 10-Bit Data Acquisition System	20-Dip	25.75	17.15	15.80
LTC1090CN-ND	—	Single Chip 8-Channel 10-Bit Data Acquisition System	20-Dip	17.50	11.65	9.90
LTC1091CN8-ND	—	Single Chip 2-Channel, 10-Bit Data Acquisition System	8-Dip	17.50	11.70	9.90
LTC1092CN8-ND	—	Single Chip 1-Channel, 10-Bit Data Acquisition System	8-Dip	17.50	11.65	9.90
LTC1093CN-ND	—	Single Chip 6-Chan., 10-Bit Data Acquisition System	16-Dip	17.50	11.65	9.90
LTC1094CN-ND	—	Single Chip 8-Chan., 10-Bit Data Acquisition System	20-Dip	17.50	11.65	9.90
LTC1096ACS8-ND	9210B	Micropower Sampling 8-Bit Serial I/O ADC	8-SOIC	6.75	4.50	3.60
LTC1096CS8-ND	9210B	Micropower Sampling 8-Bit Serial I/O ADC	8-SOIC	5.50	3.70	2.90
LTC1096LIS8-ND	—	Micropower Sampling 8-Bit Serial I/O ADC	8-SOIC	6.38	4.25	3.45
LTC1098CN8-ND	9210B	Micropower Sampling 8-Bit Serial I/O ADC	8-Dip	5.50	3.70	2.90
LTC1098CS8-ND	9210B	Micropower Sampling 8-Bit Serial I/O ADC	8-SOIC	5.50	3.70	2.90
LTC1099CN-ND	9175B	8-Bit, High Speed ADC with Sample and Hold	20-Dip	14.88	9.90	8.25
LTC1099CSW-ND	9175B	8-Bit, High Speed ADC with Sample and Hold	20-SOIC	19.38	12.90	10.70
LTC1100CN8-ND	9176B	Precision, Chopper-Stabilized Instrumentation Amp	8-Dip	11.25	7.50	6.45
LTC1100CSW-ND	9176B	Precision, Chopper-Stabilized Instrumentation Amp	16-SOIC	13.13	8.75	7.40
LTC1142CG-ND	9210B	Dual Step Down Switching Regulator	28-SS0P	11.25	7.50	6.00
LTC1143LCS-ND	9294B	Dual Step Down Switching Regulator	16-SOIC	8.25	5.48	4.60
LTC1143LCS-ADJ-ND	9294B	Dual Step Down Switching Regulator	16-SOIC	8.25	5.48	4.40
LTC1144CN8-ND	9210B	Switched-Capacitor Voltage Converter with Shutdown	8-Dip	4.50	3.00	2.50
LTC1144CS8-ND	9210B	Switched-Capacitor Voltage Converter with Shutdown	8-SOIC	4.63	3.10	2.55
LTC1144IS8-ND	9210B	Switched-Capacitor Voltage Converter with Shutdown	8-SOIC	5.38	3.57	2.95
LTC1147CN8-5-ND	9210B	5V, High Efficiency Step Down Regulator	8-Dip	5.13	3.41	2.65
LTC1147CS8-3.3-ND	9210B	3.3V, High Efficiency Step Down Regulator	8-SOIC	5.38	3.57	2.80
LTC1147CS8-5-ND	9210B	5V, High Efficiency Step Down Regulator	8-SOIC	5.38	3.57	2.80
LTC1147LCS8-ND	—	High Efficiency Step Down Regulator	8-SOIC	6.00	3.99	3.15
LTC1147LIS8-ND	—	High Efficiency Step Down Regulator	8-SOIC	6.63	4.40	3.40
LTC1148CN-ND	9210B	High Efficiency Synch. Step Down Regulator	14-Dip	7.88	5.25	4.50
LTC1148CS-ND	9210B	High Efficiency Synch. Step Down Regulator	14-SOIC	8.13	5.40	4.60
LTC1148CS-3.3-ND	9210B	3.3V, High Efficiency Synch. Step Down Regulator	14-SOIC	8.13	5.40	4.60
LTC1148CS-5-ND	9210B	5V, High Efficiency Synch. Step Down Regulator	14-SOIC	8.13	5.40	4.60
LTC1148HVCS-ND	9210B	High Efficiency Synchronous Step Down Regulator	14-SOIC	8.50	5.65	4.80
LTC1148HVCS-5-ND	9210B	5V, High Efficiency Synchronous Step Down Regulator	14-SOIC	8.50	5.65	4.80
LTC1148LCS-3.3-ND	9210B	3.3V, High Efficiency Synch. Step Down Regulator	14-SOIC	8.75	5.85	4.90
LTC1149CN-ND	9210B	High Efficiency Synch. Step Down Regulator	16-Dip	9.63	6.40	5.50
LTC1149CN-5-ND	9210B	5V, High Efficiency Synch. Step Down Regulator	16-Dip	9.63	6.40	5.50
LTC1149CS-ND	9210B	High Efficiency Synch. Step Down Regulator	16-SOIC	10.00	6.64	5.00
LTC1149CS-3.3-ND	9210B	3.3V, High Efficiency Synch. Step Down Regulator	16-SOIC	10.00	6.64	5.00
LTC1150CN8-ND	9176B	Chopper-Stabilized Op Amp with Internal Caps	8-Dip	6.88	4.60	3.85
LTC1150CS8-ND	9176B	Chopper-Stabilized Op Amp with Internal Caps	8-SOIC	8.13	5.40	4.55
LTC1151CN8-ND	9210B	Dual, Zero-Drift Op Amp	8-Dip	10.75	7.15	5.95
LTC1151CSW-ND	9210B	Dual, Zero-Drift Op Amp	16-SOIC	12.50	8.35	6.95
LTC1152CN8-ND	9257B	Rail-to-Rail, In/Out, Zero-Drift Op Amp	8-Dip	6.00	4.00	3.25
LTC1152CS8-ND	9257B	Rail-to-Rail, In/Out, Zero-Drift Op Amp	8-SOIC	6.50	4.35	3.50
LTC1152IS8-ND	9275B	Rail-to-Rail, In/Out, Zero-Drift Op Amp, Ind. Temp.	8-SOIC	7.25	4.82	3.95
LTC1153CN8-ND	9210B	Auto-Reset Electronic Circuit Breaker	8-Dip	3.75	2.50	2.10
LTC1153CS8-ND	9210B	Auto-Reset Electronic Circuit Breaker	8-SOIC	4.00	2.65	2.25
LTC1153IS8-ND	9210B	Auto-Reset Electronic Circuit Breaker	8-SOIC	4.88	3.24	2.75
LTC1154CN8-ND	9210B	Single High-Side MOSFET Driver	8-Dip	3.25	2.16	1.85
LTC1154CS8-ND	9210B	Single High-Side MOSFET Driver	8-SOIC	3.50	2.35	2.00
LTC1155CN8-ND	9176B	Dual High-Side MOSFET Driver	8-Dip	5.25	3.50	3.00
LTC1155CS8-ND	9176B	Dual High-Side MOSFET Driver	8-SOIC	5.63	3.75	3.20
LTC1156CN-ND	9176B	Quad High-Side MOSFET Driver	16-Dip	8.75	5.81	4.95
LTC1156CSW-ND	9176B	Quad High-Side MOSFET Driver	16-SOIC	9.38	6.25	5.35
LTC1157CS8-ND	9210B	Dual, 3.3V, High-Side MOSFET Driver	8-SOIC	4.75	3.16	2.65
LTC1159CS-ND	9257B	High Efficiency Synch. Step Down Switch Regulator	16-SOIC	9.00	6.00	4.90
LTC1159CS-3.3-ND	9257B	3.3V, High Effic. Synch. Step Down Switch Regulator	16-SOIC	9.00	6.00	4.90
LTC1163CS8-ND	9210B	Triple High-Side MOSFET Driver	8-SOIC	5.25	3.50	2.90
LTC1164-5CN-ND	9210B	8th Order, Low Power, Lowpass Filter	14-Dip	20.00	13.35	11.25

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1164-5CSW-ND	9210B	8th Order, Low Power, Lowpass Filter	16-SOIC	27.50	18.35	15.50
LTC1164-6CN-ND	9210B	8th Order, Low Power, Lowpass Filter	14-Dip	22.50	15.00	12.90
LTC1164-7CN-ND	9210B	8th Order, Low Power, Lowpass Filter, Linear Phase	14-Dip	20.00	13.35	11.25
LTC1164-7CSW-ND	9210B	8th Order, Low Power, Lowpass Filter, Linear Phase	16-SOIC	27.50	18.35	15.50
LTC1164-8CN-ND	9257B	8th Order, Low Power, Lowpass Filter, Ultra-Selective	14-Dip	30.00	20.00	17.25
LTC1164-8CSW-ND	9257B	8th Order, Low Power, Lowpass Filter, Ultra-Selective	16-SOIC	32.50	21.65	18.50
LTC1164CN-ND	9176B	Quad Universal Filter Building Block	24-Dip	15.00	10.00	8.40
LTC1164CSW-ND	9176B	Quad Universal Filter Building Block	24-SOIC	18.00	12.00	9.55
LTC1165CS8-ND	9210B	Triple High-Side MOSFET Driver	8-SOIC	5.25	3.50	2.90
LTC1174CN8-ND	9210B	Adj., Step Down and Inverting DC/DC Converter	8-Dip	6.50	4.35	3.60
LTC1174CN8-5-ND	9210B	5V, Step Down and Inverting DC/DC Converter	8-Dip	6.50	4.35	3.60
LTC1174CS8-ND	9210B	Adj., Step Down and Inverting DC/DC Converter	8-SOIC	6.88	4.60	3.80
LTC1174CS8-3.3-ND	9210B	3.3V, Step Down and Inverting DC/DC Converter	8-SOIC	6.88	4.60	3.80
LTC1174CS8-5-ND	9210B	5V, Step Down and Inverting DC/DC Converter	8-SOIC	6.88	4.60	3.80
LTC1174HVCN8-ND	9210B	Adj., Step Down and Inverting DC/DC Converter	8-Dip	7.50	5.00	4.10
LTC1174HVCS8-ND	9210B	Adj., Step Down and Inverting DC/DC Converter	8-SOIC	7.88	5.25	4.25
LTC1174HVCS8-3.3-ND	9210B	3.3V, Step Down and Inverting DC/DC Converter	8-SOIC	7.88	5.25	4.25
LTC1174HVCS8-5-ND	9210B	5V, Step Down and Inverting DC/DC Converter	8-SOIC	7.88	5.25	4.25
LTC1174IN8-ND	9210B	Adj., Step Down/Inverting DC/DC Converter, Ind. Temp.	8-Dip	7.50	5.00	4.00
LTC1196-1ACS8-ND	9210B	8-Bit, 600nS, 1MHz, Sampling ADC	8-SOIC	7.63	5.10	4.35
LTC1196-2ACS8-ND	9210B	8-Bit, 710nS, 1MHz, Sampling ADC	8-SOIC	5.50	3.70	3.15
LTC1196-2BCS8-ND	9210B	8-Bit, 710ns, 1MHz, Sampling ADC	8-SOIC	4.38	2.91	2.50
LTC1197CS8-ND	9294B	10-Bit, 500ksps ADC with Shutdown	8-SOIC	4.88	3.24	2.60
LTC1197IS8-ND	9294B	10-Bit, 500ksps ADC with Shutdown, Ind. Temp.	8-SOIC	5.25	3.49	2.80
LTC1197LCMS8-ND	9294B	3V, 10-Bit, ADC with Shutdown	8-MSOP	5.50	3.66	2.95
LTC1197LCS8-ND	9294B	3V, 10-Bit, ADC with Shutdown	8-SOIC	4.88	3.24	2.60
LTC1197LIS8-ND	9294B	3V, 10-Bit, ADC with Shutdown, Ind. Temp.	8-SOIC	5.25	3.49	2.80
LTC1198-2BCS8-ND	9210B	2-Channel, 8-Bit, Sampling ADC	8-SOIC	5.25	3.50	3.00
LTC1199CMS8-ND	—	10-Bit A/D Converter with Shutdown	8-MSOP	5.50	4.10	3.65
LTC1199CS8-ND	9294B	10-Bit A/D Converter with Shutdown	8-SOIC	4.88	3.24	2.60
LTC1199IMS8-ND	—	10-Bit A/D Converter with Shutdown	8-MSOP	6.13	4.50	3.15
LTC1199IS8-ND	9294B	10-Bit A/D Converter with Shutdown, Ind. Temp.	8-SOIC	5.25	3.49	2.80
LTC1199LIMS8-ND	—	10-Bit A/D Converter with Shutdown	8-MSOP	6.13	4.50	3.15
LTC1199LIS8-ND	9294B	10-Bit A/D Converter with Shutdown, Ind. Temp.	8-SOIC	5.25	3.49	2.80
LTC1232CS8-ND	9176B	Microprocessor Supervisory Circuit with WDT	8-SOIC	3.63	2.41	1.95
LTC1235CN-ND	9176B	MPU Supervisor Circuit w/ Battery Backup and WDT	16-Dip	6.88	4.60	3.80
LTC1235CSW-ND	9176B	MPU Supervisor Circuit w/ Battery Backup and WDT	16-SOIC	7.50	5.00	4.15
LTC1250CN8-ND	9210B	Very Low Noise, Zero-Drift Bridge Amp	8-Dip	5.50	3.70	2.90
LTC1250CS8-ND	9210B	Very Low Noise, Zero-Drift Bridge Amp	8-SOIC	6.25	4.20	3.30
LTC1255CN8-ND	9210B	Dual 24V High Side MOSFET Driver	8-Dip	5.25	3.50	3.00
LTC1255CS8-ND	9210B	Dual 24V High Side MOSFET Driver	8-SOIC	5.63	3.75	3.20
LTC1255IS8-ND	9210B	Dual 24V High Side MOSFET Driver	8-SOIC	7.38	4.90	4.15
LTC1257CN8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC	8-Dip	8.38	5.60	4.45
LTC1257CS8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC	8-SOIC	8.88	5.90	4.75
LTC1257IN8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC	8-Dip	9.25	6.15	4.90
LTC1257IS8-ND	9210B	Complete Single Supply 12-Bit Volt Output DAC	8-SOIC	9.75	6.50	5.20
LTC1258CMS8-ND	—	Adj., Micropower LDO Bandgap Reference	8-MSOP	5.13	3.41	2.57
LTC1258CS8-ND	—	Adj., Micropower LDO Bandgap Reference	8-SOIC	4.13	2.74	2.30
LTC1258CS8-2.5-ND	—	2.5V, Micropower LDO Bandgap Reference	8-SOIC	4.13	2.74	2.30
LTC1258CS8-3-ND	—	3V, Micropower LDO Bandgap Reference	8-SOIC	4.13	2.74	2.30
LTC1258CS8-4.1-ND	—	4.1V, Micropower LDO Bandgap Reference	8-SOIC	4.13	2.74	2.30
LTC1258CS8-5-ND	—	5V, Micropower LDO Bandgap Reference	8-SOIC	4.13	2.74	2.30
LTC1261CS-ND	—	Adj. Switched-Capacitor Voltage Inverter	14-SOIC	4.50	3.00	2.60
LTC1261CS8-4-ND	—	4V, Switched-Capacitor Voltage Inverter	8-SOIC	3.75	2.49	1.90
LTC1261LCMS8-ND	—	Adj. Switched-Capacitor Voltage Inverter	8-MSOP	4.00	2.66	2.00
LTC1261LCS8-ND	—	Adj. Switched-Capacitor Voltage Inverter	8-SOIC	3.63	2.41	1.82
LTC1262CN8-ND	9210B	12V, 30mA, Flash Memory DC/DC Converter	8-Dip	4.50	3.00	2.45
LTC1262CS8-ND	9257B	12V, 30mA, Flash Memory DC/DC Converter	8-SOIC	4.63	3.08	2.32
LTC1262IS8-ND	—	12V, 30mA, Flash Memory DC/DC Converter	8-SOIC	5.75	3.82	2.88
LTC1263CS8-ND	—	12V, 60mA Flash Memory DC/DC Converter	8-SOIC	7.00	4.65	3.50
LTC1264-7CN-ND	9210B	8th Order Phase Corrected Lowpass Filter	14-Dip	25.00	16.65	14.20
LTC1264-7CSW-ND	9210B	8th Order Phase Corrected Lowpass Filter	16-SOIC	31.25	20.85	17.65
LTC1264CN-ND	9210B	High Speed Quad Universal Filter Building Block	24-Dip	17.50	11.70	9.80
LTC1264CSW-ND	9210B	High Speed Quad Universal Filter Building Block	24-SOIC	20.50	13.70	10.90
LTC1265CS-ND	9257B	Adj., 1.2A High Effic., Step Down DC/DC Converter	14-SOIC	6.88	4.60	3.95
LTC1266ACS-ND	9257B	Synch. Regulator Controller for N/P Chan. MOSFETS	16-SOIC	9.13	6.06	5.20
LTC1266AIS-ND	—	Synch. Regulator Controller for N/P Chan. MOSFETS	16-SOIC	10.25	6.81	5.75
LTC1266CS-ND	9257B	Synch. Regulator Controller for N/P Chan. MOSFETS	16-SOIC	7.50	4.98	4.05
LTC1266CS-3.3-ND	9275B	3.3V Synch. Reg. Controller for N/P Chan. MOSFETS	16-SOIC	7.50	4.98	4.05
LTC1266IS-ND	—	Synch. Regulator Controller for N/P Chan. MOSFETS	16-SOIC	8.50	5.65	4.45
LTC1266IS-3.3-ND	—	3.3V Synch. Reg. Controller for N/P Chan. MOSFETS	16-SOIC	8.50	5.65	4.45
LTC1266IS-5-ND	—	5V Synch. Reg. Controller for N/P Chan. MOSFETS	16-SOIC	8.50	5.65	4.45
LTC1272-3ACSW-ND	—	12-Bit, 3µS, 250kHz Sampling A/D Converter	24-SOIC	35.00	23.35	18.76
LTC1272-3CCN-ND	9176B	12-Bit, 3µS, 250kHz Sampling A/D Converter	24-Dip	20.63	13.75	11.05
LTC1272-3CCSW-ND	9176B	12-Bit, 3µS, 250kHz Sampling A/D Converter	24-SOIC	22.75	15.15	12.15
LTC1272-8CCN-ND	9176B	12-Bit, 8µS, 250kHz Sampling A/D Converter	24-Dip	15.00	10.00	8.00
LTC1273BCN-ND	9210B	12-Bit, 2.7µS, Sampling A/D Converter	24-Dip	23.50	15.65	12.55
LTC1273BCSW-ND	9210B	12-Bit, 2.7µS, Sampling A/D Converter	24-SOIC	25.88	17.25	13.80
LTC1274CSW-ND	9285B	12-Bit, 100ksps A/D Converter with Shutdown	24-SOIC	14.88	9.90	8.25
LTC1275BCN-ND	9210B	12-Bit, 2.7µS, Sampling A/D Converter	24-Dip	22.00	14.65	11.75
LTC1275BCSW-ND	9210B	12-Bit, 2.7µS, Sampling A/D Converter	24-SOIC	24.25	16.15	12.95
LTC1276BCN-ND	9210B	12-Bit, 2.7µS, Sampling A/D Converter	24-Dip	22.00	14.65	11.75
LTC1276BCSW-ND	9210B	12-Bit, 2.7µS, Sampling A/D Converter	24-SOIC	24.25	16.15	12.95
LTC1277CSW-ND	9285B	12-Bit, 100ksps A/D Converter with Shutdown	24-SOIC	15.63	10.40	8.70
LTC1278-4CN-ND	—	12-Bit, 400ksps, Sampling ADC with Shutdown	24-Dip	24.00	16.00	12.85
LTC1278-4ISW-ND	9210B	12-Bit, 400ksps, Sampling ADC with Shutdown	24-SOIC	27.50	18.35	14.70
LTC1278-5CSW-ND	9210B	12-Bit, 500ksps, Sampling ADC with Shutdown	24-SOIC	25.63	17.10	14.65
LTC1278-5ISW-ND	9210B	12-Bit, 500ksps, Sampling ADC with Shutdown	24-SOIC	29.38	19.60	15.70
LTC1279CG-ND	—	12-Bit, 600ksps, Sampling ADC with Shutdown	24-SSOP	25.88	17.19	14.20
LTC1279CSW-ND	9257B	12-Bit, 600ksps, Sampling ADC with Shutdown	24-SOIC	25.50	16.94	13.95
LTC1282BCSW-ND	9210B	3V, 12-Bit, Sampling A/D Converter with Reference	24-SOIC	28.13	18.75	14.75
LTC1283CN-ND	9210B	3V, 10-Bit, Data Acquisition System	20-Dip	20.13	13.40	11.40
LTC1285CN8-ND	—	3V, 12-Bit, Micropower Sampling A/D Converter	8-Dip	11.88	7.90	6.50
LTC1285CS8-ND	—	3V, 12-Bit, Micropower Sampling A/D Converter	8-SOIC	12.50	8.35	6.95
LTC1286CN8-ND	9210B	12-Bit, Micropower Sampling A/D Converter	8-Dip	9.88	6.60	5.25

(Continued)

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Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1286CS8-ND	9210B	12-Bit, Micropower Sampling A/D Converter	8-SOIC	10.63	7.10	5.65
LTC1286IN8-ND	9210B	12-Bit, Micropower Sampling A/D Converter	8-Dip	12.38	8.25	6.55
LTC1288CN8-ND	9257B	3V, 12-Bit, Micropower Serial I/O Sampling ADC	8-Dip	11.88	7.90	6.50
LTC1288CS8-ND	9257B	3V, 12-Bit, Micropower Serial I/O Sampling ADC	8-SOIC	12.50	8.35	6.95
LTC1289CCSW-ND	9176B	3V, 12-Bit, Data Acquisition System	20-SOIC	41.38	27.60	22.06
LTC1290BCSW-ND	—	12-Bit, Data Acquisition System	20-SOIC	45.00	30.00	23.96
LTC1290CCN-ND	9176B	12-Bit, Data Acquisition System	20-Dip	30.00	20.00	15.95
LTC1290CCSW-ND	9176B	12-Bit, Data Acquisition System	20-SOIC	36.00	24.00	19.15
LTC1290CIN-ND	9176B	12-Bit, Data Acquisition System, Ind. Temp.	20-Dip	42.38	28.25	23.35
LTC1290CISW-ND	9176B	12-Bit, Data Acquisition System, Ind. Temp.	20-SOIC	42.38	28.25	23.35
LTC1290DCN-ND	9176B	12-Bit, Data Acquisition System	20-Dip	12.50	8.35	6.70
LTC1290DCSW-ND	9176B	12-Bit, Data Acquisition System	20-SOIC	21.75	14.50	11.35
LTC1291CCN8-ND	9210B	12-Bit, Data Acquisition System.	8-Dip	28.13	18.75	15.00
LTC1291DCN8-ND	9210B	12-Bit, Data Acquisition System.	8-Dip	18.13	12.10	9.50
LTC1292CCN8-ND	9210B	12-Bit, Data Acquisition System.	8-Dip	28.13	18.75	15.00
LTC1292DCN8-ND	9210B	12-Bit, Data Acquisition System.	8-Dip	18.13	12.10	9.50
LTC1293BCSW-ND	—	12-Bit, Data Acquisition System	16-SOIC	45.00	30.00	23.96
LTC1293CCN-ND	9176B	12-Bit, Data Acquisition System	16-Dip	30.00	20.00	15.95
LTC1293DCN-ND	9176B	12-Bit, Data Acquisition System	16-Dip	18.13	12.10	9.50
LTC1293DCSW-ND	—	12-Bit, Data Acquisition System	20-SOIC	21.75	14.50	11.35
LTC1294BCSW-ND	—	12-Bit, Data Acquisition System	20-SOIC	45.00	30.00	23.96
LTC1294CCN-ND	9176B	12-Bit, Data Acquisition System	20-Dip	28.13	18.75	15.00
LTC1294CCSW-ND	—	12-Bit, Data Acquisition System	20-SOIC	36.00	24.00	19.15
LTC1294DCN-ND	9176B	12-Bit, Data Acquisition System	20-Dip	18.13	12.10	9.50
LTC1294DCSW-ND	—	12-Bit, Data Acquisition System	20-SOIC	21.75	14.50	11.35
LTC1296BCN-ND	9176B	12-Bit, Data Acquisition System	20-Dip	24.38	16.25	13.00
LTC1296BCSW-ND	9176B	12-Bit, Data Acquisition System	20-SOIC	25.00	16.65	13.35
LTC1296CCN-ND	9176B	12-Bit, Data Acquisition System	20-Dip	17.38	11.60	9.25
LTC1296CCSW-ND	9176B	12-Bit, Data Acquisition System	20-SOIC	17.88	11.90	9.50
LTC1296DCN-ND	9176B	12-Bit, Data Acquisition System	20-Dip	15.88	10.60	8.45
LTC1296DCSW-ND	9176B	12-Bit, Data Acquisition System	20-SOIC	16.25	10.85	8.65
LTC1297DCN8-ND	9210B	12-Bit, Data Acquisition System.	8-Dip	21.75	14.50	11.40
LTC1298CN8-ND	9210B	12-Bit, Sampling A/D Converter	8-Dip	9.88	6.60	5.25
LTC1298CS8-ND	9210B	12-Bit, Sampling A/D Converter	8-SOIC	10.63	7.10	5.65
LTC1298IN8-ND	9210B	12-Bit, Sampling A/D Converter, Ind. Temp.	8-Dip	12.38	8.25	6.55
LTC1298IS8-ND	9210B	12-Bit, Sampling A/D Converter, Ind. Temp.	8-SOIC	13.25	8.85	7.05
LTC1314CS-ND	9257B	PCMCIA Switching Matrix	14-SOIC	4.38	2.95	2.35
LTC1315CG-ND	9175B	PCMCIA Switching Matrix	24-SSOP	6.25	4.15	3.35
LTC1318CSW-ND	9257B	Single, 5V, RS232/RS422 Transceiver/Receiver	24-SOIC	9.13	6.10	4.90
LTC1320CSW-ND	9210B	"APPLETALK®" RS422/RS562 Line Transceiver	18-SOIC	6.88	4.60	3.90
LTC1321CN-ND	9210B	RS485/RS232/EIA562 Transceiver/Receiver	24-Dip	8.75	5.85	4.65
LTC1321CSW-ND	9210B	RS485/RS232/EIA562 Transceiver/Receiver	24-SOIC	8.75	5.85	4.65
LTC1321ISW-ND	—	RS485/RS232/EIA562 Xcvr./Receiver, Ind. Temp.	24-SOIC	10.50	7.00	5.60
LTC1322CN-ND	9210B	RS485/RS232/EIA562 Transceiver/Receiver	24-Dip	10.00	6.65	5.35
LTC1322CSW-ND	9210B	RS485/RS232/EIA562 Transceiver/Receiver	24-SOIC	10.00	6.65	5.35
LTC1325CSW-ND	9257B	Battery Management System.	18-SOIC	13.75	9.15	7.35
LTC1326CMS8-ND	—	Micropower Precision Triple Supply Monitor	8-MSOP	4.63	3.08	2.45
LTC1326CMS8-2.5-ND	9294B	2.5V Micropower Precision Triple Supply Monitor	8-MSOP	4.63	3.08	2.45
LTC1326CS8-ND	9294B	Micropower Precision Triple Supply Monitor	8-SOIC	4.38	2.91	2.35
LTC1326CS8-2.5-ND	9294B	2.5V, Micropower Precision Triple Supply Monitor	8-SOIC	4.38	2.91	2.35
LTC1327CG-ND	9210B	3V, 3 Driver/5 Receiver EIA/TIA-562 Transceiver	28-SSOP	9.50	6.35	5.00
LTC1327CNW-ND	9210B	3V, 3 Driver/5 Receiver EIA/TIA-562 Transceiver	28-Dip	8.75	5.85	4.70
LTC1327CSW-ND	9210B	3V, 3 Driver/5 Receiver EIA/TIA-562 Transceiver	28-SOIC	8.75	5.85	4.70
LTC1329CS8-10-ND	—	Micropower 8-Bit, Current Output DAC	8-SOIC	4.75	3.16	2.65
LTC1329CS8-50-ND	—	Micropower 8-Bit, Current Output DAC	8-SOIC	4.75	3.16	2.65
LTC1329IS8-50-ND	9294B	Micropower 8-Bit, Current Output DAC, Ind. Temp.	8-SOIC	5.88	3.91	3.25
LTC1334CG-ND	—	CMOS 5V, RS232/RS485 Multiprotocol Transceiver	28-SSOP	13.00	8.64	7.45
LTC1334CNW-ND	—	CMOS 5V, RS232/RS485 Multiprotocol Transceiver	28-Dip	12.25	8.15	7.00
LTC1334CSW-ND	—	CMOS 5V, RS232/RS485 Multiprotocol Transceiver	28-SOIC	12.25	8.15	7.00
LTC1334ISW-ND	—	CMOS 5V, RS232/RS485 Multiprotocol Transceiver	28-SOIC	14.25	9.50	8.15
LTC1337CG-ND	9210B	5V, 3 Driver/5 Receiver RS232 Transceiver	28-SSOP	9.50	6.35	5.00
LTC1337CNW-ND	9210B	5V, 3 Driver/5 Receiver RS232 Transceiver	28-Dip	8.75	5.85	4.70
LTC1337CSW-ND	9210B	5V, 3 Driver/5 Receiver RS232 Transceiver	28-SOIC	8.75	5.85	4.70
LTC1338CG-ND	9210B	5V, 5 Driver/3 Receiver RS232 Transceiver	28-SSOP	10.13	6.75	5.65
LTC1338CSW-ND	9210B	5V, 5 Driver/3 Receiver RS232 Transceiver	28-SOIC	9.38	6.25	5.25
LTC1340CMS8-ND	9294B	Low Noise Varactor Driver	8-MSOP	6.00	4.00	3.40
LTC1340CS8-ND	9294B	Low Noise Varactor Driver.	8-SOIC	5.50	3.66	3.15
LTC1343CGW-ND	9294B	Software Selectable Multiprotocol Transceiver	44-SSOP	23.50	15.65	13.40
LTC1343IGW-ND	9294B	Software Selectable Multiprotocol Transceiver	44-SSOP	27.00	17.93	14.40
LTC1344ACG-ND	—	Multiprotocol Cable Terminator	24-SSOP	13.63	9.05	6.82
LTC1344CG-ND	9294B	Multiprotocol Cable Terminator	24-SSOP	13.63	9.05	6.82
LTC1344IG-ND	9294B	Multiprotocol Cable Terminator	24-SSOP	15.63	10.38	8.35
LTC1345CNW-ND	9257B	Single Supply V.35 Differential Transceiver	28-Dip	13.88	9.25	7.40
LTC1345CSW-ND	9257B	Single Supply V.35 Differential Transceiver	28-SOIC	14.38	9.60	7.65
LTC1346ACSW-ND	9285B	10mbps DCE/DTE V.35 Transceiver	24-SOIC	12.38	8.25	7.10
LTC1347CNW-ND	9210B	5V, LP, RS232, 3 Driver/5 Receiver Transceiver	28-Dip	8.75	5.85	4.70
LTC1348CG-ND	9257B	3.3V/5V, LP, RS232, 3 Driver/5 Rcvr. Transceiver	28-SSOP	8.75	5.85	4.80
LTC1348CSW-ND	9257B	3.3V/5V, LP, RS232, 3 Driver/5 Rcvr. Transceiver	28-SOIC	8.13	5.45	4.50
LTC1348IG-ND	9257B	3.3V/5V, LP, RS232, 3 Driver/5 Rcvr. Transceiver	28-SSOP	10.13	6.75	5.80
LTC1348ISW-ND	9257B	3.3V/5V, LP, RS232, 3 Driver/5 Rcvr. Transceiver	28-SOIC	9.38	6.25	5.35
LTC1349CN-ND	9210B	5V, LP, RS232 3 Driver/5 Receiver Transceiver.	28-Dip	8.75	5.85	4.70
LTC1349CSW-ND	9210B	5V, LP, RS232 3 Driver/5 Receiver Transceiver	28-SOIC	8.75	5.85	4.70
LTC1349ISW-ND	—	5V, LP, RS232 3 Driver/5 Receiver Transceiver	28-SOIC	9.63	6.40	5.20
LTC1350CG-ND	9210B	3V, EIA/TIA-562, 3 Driver/5 Receiver Transceiver	28 SSOP	9.50	6.35	5.00
LTC1350IG-ND	9210B	3V, EIA/TIA-562, 3 Driver/5 Receiver Transceiver	28-SSOP	10.38	6.90	5.50
LTC1380CGN-ND	—	8-Chan. CMOS Multiplexer with SMBus Interface	16-SSOP	6.50	4.32	3.35
LTC1380CS-ND	—	8-Chan. CMOS Multiplexer with SMBus Interface.	16-SOIC	6.13	4.07	3.07
LTC1380IGN-ND	—	8-Chan. CMOS Multiplexer with SMBus Interface	16-SSOP	7.50	4.98	3.85
LTC1380IS-ND	—	8-Chan. CMOS Multiplexer with SMBus Interface.	16-SOIC	6.88	4.57	3.55
LTC1382CN-ND	9210B	5V, RS232, 2 Driver/2 Receiver Xcvr. w/Shutdown	18-Dip	6.50	4.35	3.40
LTC1382CSW-ND	9210B	5V, RS232, 2 Driver/2 Receiver Xcvr. w/Shutdown	18-SOIC	6.50	4.35	3.40
LTC1383CN-ND	9210B	5V, RS232, Low Power 2 Driver/2 Receiver Xcvr.	16-Dip	5.63	3.75	3.00
LTC1383CS-ND	9210B	5V, RS232, Low Power 2 Driver/2 Receiver Xcvr.	16-SOIC	5.63	3.75	3.00
LTC1383IS-ND	9210B	5V, RS232, Low Power 2 Driver/2 Receiver Xcvr.	16-SOIC	6.50	4.32	3.70
LTC1384CN-ND	9210B	5V, RS232, Low Power 2 Driver/2 Receiver Xcvr.	18-Dip	6.50	4.35	3.40
LTC1384CSW-ND	9210B	5V, RS232, Low Power 2 Driver/2 Receiver Xcvr.	18-SOIC	6.50	4.35	3.40
LTC1385CG-ND	9210B	3.3V, EIA/TIA-562, LP 2/Driver/2Rcvr. Transceiver.	20-SSOP	7.25	4.85	3.85
LTC1385CN-ND	9210B	3.3V, EIA/TIA-562, LP 2/Driver/2Rcvr. Transceiver	18-Dip	6.50	4.35	3.40
LTC1385CSW-ND	9210B	3.3V, EIA/TIA-562, LP 2/Driver/2Rcvr. Transceiver	18-SOIC	6.50	4.35	3.40
LTC1386CS-ND	9210B	3.3V, EIA/TIA-562, LP 2/Driver/2Rcvr. Transceiver	16-SOIC	5.63	3.75	3.00
LTC1387CG-ND	—	5V, Single RS232/RS485 Transceiver	20-SSOP	9.13	6.10	5.20
LTC1387CSW-ND	—	5V, Single RS232/RS485 Transceiver	20-SOIC	8.50	5.65	4.85
LTC1387IG-ND	—	5V, Single RS232/RS485 Transceiver, Ind. Temp.	20-SSOP	10.50	7.00	6.00
LTC1387ISW-ND	—	5V, Single RS232/RS485 Transceiver, Ind. Temp.	20-SOIC	9.75	6.50	5.60
LTC1390CN-ND	9257B	CMOS 8-to-1 Analog Multiplexer w/Serial Interface.	16-Dip	4.38	2.91	2.35
LTC1390CS-ND	9257B	CMOS 8-to-1 Analog Multiplexer w/Serial Interface	16-SOIC	4.63	3.10	2.45
LTC1391CS-ND	—	CMOS 8-to-1 Mux with Cascadable Serial Interface	16-SOIC	4.63	3.10	2.45
LTC1392CN8-ND	9257B	10-Bit Micropower Data Acquisition System	8-Dip	7.50	5.00	4.10
LTC1392CS8-ND	9257B	10-Bit Micropower Data Acquisition System	8-SOIC	7.63	5.10	4.20
LTC1392IN8-ND	9257B	10-Bit Micropower Data Acquisition System	8-Dip	8.88	5.90	4.85
LTC1400CS8-ND	—	12-Bit, 400ksps A/D Converter with Shutdown	8-SOIC	10.00	6.64	5.25
LTC1400IS8-ND	—	12-Bit, 400ksps ADC with Shutdown, Ind. Temp.	8-SOIC	11.13	7.39	5.85
LTC1401CS8-ND	—	12-Bit, 400ksps A/D Converter with Shutdown	8-SOIC	6.50	4.32	3.40
LTC1404CS8-ND	—	12-Bit, 600ksps A/D Converter with Shutdown	8-SOIC	10.50	6.98	5.50
LTC1404IS8-ND	—	12-Bit, 600ksps ADC with Shutdown, Ind. Temp.	8-SOIC	11.50	7.64	6.05
LTC1406CGN-ND	—	8-Bit, 20msps Sampling A/D Converter	24-SSOP	6.50	4.32	3.40
LTC1406IGN-ND	—	8-Bit, 20msps Sampling A/D Converter	24-SSOP	7.00	4.65	3.70
LTC1410CG-ND	9285B	12-Bit, 1.25msps Sampling A/D Converter	28-SSOP	22.25	14.78	11.15
LTC1410CSW-ND	9285B	12-Bit, 1.25msps Sampling ADC, Ind. Temp.	28-SOIC	21.25	14.11	10.65
LTC1411CG-ND	—	Single 14-Bit, 2.5MSPS A/D Converter *NEW!*	36-SSOP	38.25	25.50	21.85
LTC1411IG-ND	—	Single 14-Bit, 2.5MSPS A/D Converter *NEW!*	36-SSOP	42.50	28.35	24.30
LTC1412CG-ND	—	12-Bit, 3msps Sampling A/D Converter	28-SSOP	21.38	14.20	10.69
LTC1412IG-ND	—	12-Bit 3msps Sampling ADC, Ind. Temp.	28-SSOP	23.38	15.53	11.69
LTC1414CGN-ND	—	14-Bit, 2.2msps Sampling A/D Converter	28-SSOP	34.00	22.65	18.15
LTC1414IGN-ND	—	14-Bit, 2.2msps Sampling ADC, Ind. Temp.	28-SSOP	38.25	25.50	21.85
LTC1415CG-ND	9285B	12-Bit, 1.25msps Sampling A/D Converter	28-SSOP	22.25	14.78	11.15
LTC1415CSW-ND	9285B	12-Bit, 1.25msps Sampling A/D Converter.	28-SOIC	21.25	14.11	10.65
LTC1415IG-ND	9285B	12-Bit, 1.25msps Sampling ADC, Ind. Temp.	28-SSOP	24.25	16.11	12.15
LTC1415ISW-ND	9285B	12-Bit, 1.25msps Sampling ADC, Ind. Temp.	28-SOIC	23.25	15.44	11.65
LTC1416CG-ND	—	14-Bit, 400ksps Sampling A/D Converter	28-SSOP	14.75	9.80	7.40
LTC1416IG-ND	—	14-Bit, 400ksps Sampling ADC, Ind. Temp.	28-SSOP	15.75	10.46	7.88
LTC1417ACGN-ND	—	14-Bit, 400ksps Sampling A/D Converter	16-SSOP	20.00	13.28	10.00
LTC1417CGN-ND	—	14-Bit, 400ksps Sampling A/D Converter	16-SSOP	16.25	10.79	8.15
LTC1418ACG-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O	28-SSOP	22.25	14.78	11.15
LTC1418ACN-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O	28-Dip	21.75	14.45	10.90
LTC1418AIG-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O, Ind. Temp	28-SSOP	23.88	15.86	11.95
LTC1418AIN-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O, Ind. Temp	28-Dip	23.38	15.53	11.70
LTC1418CG-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O, Ind. Temp	28-SSOP	17.25	11.46	8.65
LTC1418CN-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O	28-Dip	16.75	11.13	8.40
LTC1418IG-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O, Ind. Temp	28-SSOP	18.88	12.54	9.45
LTC1418IN-ND	—	14-Bit, 200ksps ADC, Serial/Parallel I/O, Ind. Temp.	28-Dip	18.38	12.21	9.20
LTC1419ACG-ND	—	14-Bit, 800ksps Sampling A/D Converter	28-SSOP	54.38	36.11	27.20
LTC1419ACSW-ND	—	14-Bit, 800ksps Sampling A/D Converter	28-SOIC	53.50	35.53	26.75
LTC1419AIG-ND	—	14-Bit 800ksps Sampling A/D Converter, Ind. Temp	28-SSOP	62.50	41.50	31.25
LTC1419CG-ND	—	14-Bit, 800ksps Sampling A/D Converter	28-SSOP	32.50	21.58	16.25
LTC1419CSW-ND	—	14-Bit, 800ksps Sampling A/D Converter	28-SOIC	24.51	21.42	16.13
LTC1419IG-ND	—	14-Bit, 800ksps Sampling A/D Converter, Ind. Temp.	28-SSOP	36.25	24.07	18.15
LTC1421CG-ND	—	Hot Swap Controller	24-SSOP	10.38	6.90	5.90
LTC1421CG-2.5-ND	—	2.5V Hot Swap Controller	24-SSOP	10.38	6.90	5.90
LTC1421CSW-ND	—	Hot Swap Controller	24-SOIC	9.63	6.40	5.50
LTC1421CSW-2.5-ND	—	2.5V Hot Swap Controller	24-SOIC	9.63	6.40	5.50
LTC1422CN8-ND	9294B	8-Pin Hot Swap Controller	8-Dip	5.13	3.41	2.65
LTC1422CS8-ND	—	8-Pin Hot Swap Controller	8-SOIC	5.25	3.50	2.95
LTC1422IN8-ND	9294B	8-Pin Hot Swap Controller	8-Dip	5.88	3.91	3.05
LTC1422IS8-ND	—	8-Pin Hot Swap Controller	8-SOIC	6.00	4.00	3.40
LTC1426CMS8-ND	—	6-Bit, Dual PWM D/A Converter	8-MSOP	6.75	4.49	4.05
LTC1426CS8-ND	—	6-Bit, Dual PWM D/A Converter	8-SOIC	6.25	4.15	3.85
LTC1427CS8-50-ND	9294B	10-Bit, D/A Converter with SMBus Interface.	8-SOIC	6.13	4.07	3.20
LTC1430ACGN-ND	—	Step Down Switching Regulator Controller.	16-SSOP	7.75	5.15	3.90
LTC1430ACS-ND	—	Step Down Switching Regulator Controller	16-SOIC	7.13	4.74	3.60
LTC1430ACS8-ND	—	Step Down Switching Regulator Controller.	8-SOIC	6.25	4.15	3.15
LTC1430CS-ND	9257B	Step Down Switching Regulator Controller	16-SOIC	7.13	4.74	3.60
LTC1430IS-ND	9294B	Step Down Switching Regulator Controller	16-SOIC	8.88	5.90	4.45
LTC1433CGN-ND	9285B	Current Mode Step Down DC/DC Converter	16-SSOP	7.38	4.90	3.95
LTC1435ACS-ND	—	Low Noise Synch. Step Down Switching Regulator	16-SOIC	8.38	5.57	4.80
LTC1435AIS-ND	—	Low Noise Synch. Step Down Switching h Regulator	16-SOIC	10.50	6.98	6.00
LTC1435CG-ND	—	Low Noise Synch. Step Down Switch Regulator	16-SSOP	9.00	5.98	4.50
LTC1435CS-ND	9285B	Low Noise Synch. Step Down Switching Regulator	16-SOIC	8.38	5.57	4.80
LTC1435IS-ND	—	Low Noise Synch. Step Down Switching Regulator	16-SOIC	10.50	6.98	5.25
LTC1436ACGN-PLL-ND	—	Low Noise Synch. Step Down Switching Regulator	24-SSOP	10.00	6.64	5.70
LTC1436AIGN-PLL-ND	—	Low Noise Synch. Step Down Switching Regulator	24-SSOP	12.50	8.30	6.65
LTC1438CG-ADJ-ND	9285B	Dual, Synch. Step Down Switching Regulator	28-SSOP	14.00	9.30	7.50
LTC1438IG-ND	—	Dual, Synch. Step Down Switching Regulator	28-SSOP	16.88	11.21	9.65
LTC1438IG-ADJ-ND	9285B	Dual, Synch. Step Down Switching Regulator	28-SSOP	16.88	11.21	9.00
LTC1439CG-ND	—	Dual, Synch. Step Down Switching Regulator	36 SSOP	15.38	10.21	8.75
LTC1440CMS8-ND	—	Ultra Low Power Single Comparator w/ Reference	8-MSOP	3.13	2.15	1.70
LTC1440CN8-ND	9285B	Ultra Low Power Single Comparator w/ Reference	8-Dip	2.75	1.85	1.50
LTC1440CS8-ND	9285B	Ultra Low Power Single Comparator w/ Reference	8-SOIC	2.75	1.85	1.50
LTC1440IN8-ND	9285B	Ultra Low Power Single Comparator w/Ref., Ind. Temp.	8-Dip	3.25	2.20	1.75
LTC1440IS8-ND	9285B	Ultra Low Power Single Comparator w/Ref., Ind. Temp.	8-SOIC	3.25	2.20	1.75
LTC1441CS8-ND	—	Ultra Low Power Dual Comparator w/ Reference	8-SOIC	3.38	2.25	1.85
LTC1441IS8-ND	9285B	Ultra Low Power Dual Comparator w/Ref., Ind. Temp.	8-SOIC	4.00	2.66	2.20
LTC1442CN8-ND	—	Ultra Low Power Dual Comparator with Reference	8-Dip	4.13	2.74	2.25
LTC1442CS8-ND	9285B	Ultra Low Power Dual Comparator with Reference	8-SOIC	4.13	2.74	2.25
LTC1442IN8-ND	9285B	Ultra Low Power Dual Comparator w/Ref., Ind. Temp.	8-Dip	4.88	3.24	2.70
LTC1442IS8-ND	9285B	Ultra Low Power Dual Comparator w/Ref., Ind. Temp.	8-SOIC	4.88	3.24	2.70
LTC1443CS-ND	9275B	Ultra Low Power Quad Comparator with Reference	16-SOIC	4.75	3.16	2.50
LTC1443IN-ND	9285B	Ultra Low Power Quad Comparator w/Ref., Ind. Temp.	16-Dip	5.50	3.66	3.05
LTC1443IS-ND	9285B	Ultra Low Power Quad Comparator w/Ref., Ind. Temp.	16-SOIC	5.50	3.66	3.05
LTC1444CN-ND	—	Ultra Low Power Quad Comparator with Reference.	16-Dip	4.75	3.16	2.50
LTC1444CS-ND	—	Ultra Low Power Quad Comparator with Reference	16-SOIC	4.75	3.16	2.50
LTC1444IN-ND	9285B	Ultra Low Power Quad Comparator w/Ref., Ind. Temp.	16-Dip	5.50	3.66	3.05
LTC1444IS-ND	9285B	Ultra Low Power Quad Comparator w/Ref., Ind. Temp.	16-SOIC	5.50	3.66	3.05
LTC1445IN-ND	9285B	Ultra Low Power Quad Comparator w/Ref., Ind. Temp.	16-Dip	5.50	3.66	3.05
LTC1445IS-ND	9285B	Ultra Low Power Quad Comparator w/Ref., Ind. Temp.	16-SOIC	5.50	3.66	3.05

(Continued)

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1446CN8-ND	—	Dual 12-Bit Rail-to-Rail Micropower D/A Converter	8-Dip	12.00	8.00	6.55
LTC1446CS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower D/A Converter	8-SOIC	12.13	8.10	6.65
LTC1446IN8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC, Ind. Temp.	8-Dip	13.50	9.00	7.40
LTC1446IS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC, Ind. Temp.	8-SOIC	13.63	9.10	7.45
LTC1446LCS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower D/A Converter	8-SOIC	13.38	8.90	7.65
LTC1446LIS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC, Ind. Temp.	8-SOIC	15.00	10.00	8.60
LTC1448CN8-ND	—	Dual 12-Bit Rail-to-Rail Micropower D/A Converter	8-Dip	12.00	8.00	6.55
LTC1448CS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower D/A Converter	8-SOIC	12.13	8.10	6.65
LTC1448IN8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC, Ind. Temp.	8-Dip	13.50	9.00	7.40
LTC1448IS8-ND	—	Dual 12-Bit Rail-to-Rail Micropower DAC, Ind. Temp.	8-SOIC	13.63	9.10	7.45
LTC1450CG-ND	—	Parallel Input 12-Bit R/R Micropower DAC	24-SSOP	10.63	7.10	6.10
LTC1450LCG-ND	—	Parallel Input 12-Bit R/R Micropower DAC	24-SSOP	11.25	7.50	6.20
LTC1451CN8-ND	9257B	12-Bit, Voltage Out, R/R Micropower D/A Converter	8-Dip	8.63	5.75	4.93
LTC1451CS8-ND	9257B	12-Bit, Voltage Out, R/R Micropower D/A Converter	8-SOIC	9.13	6.08	5.21
LTC1451IN8-ND	9257B	12-Bit, Voltage Out, R/R Micropower DAC, Ind. Temp.	8-Dip	9.38	6.25	5.36
LTC1451IS8-ND	9257B	12-Bit, Voltage Out, R/R Micropower DAC, Ind. Temp.	8-SOIC	9.88	6.58	5.64
LTC1452CN8-ND	9257B	12-Bit, Voltage Out, R/R Micropower D/A Converter	8-Dip	7.63	5.07	4.35
LTC1452CS8-ND	9257B	12-Bit, Voltage Out, R/R Micropower D/A Converter	8-SOIC	8.13	5.40	4.65
LTC1452IS8-ND	9257B	12-Bit, Voltage Out, R/R Micropower DAC, Ind. Temp.	8-SOIC	8.88	5.90	5.10
LTC1453CN8-ND	9257B	12-Bit, Voltage Out, R/R Micropower D/A Converter	8-Dip	8.38	5.60	4.80
LTC1453CS8-ND	9257B	12-Bit, Voltage Out, R/R Micropower D/A Converter	8-SOIC	8.88	5.90	5.10
LTC1453IN8-ND	9257B	12-Bit, Voltage Out, R/R Micropower DAC, Ind. Temp.	8-Dip	9.13	6.06	5.20
LTC1453IS8-ND	9257B	12-Bit, Voltage Out, R/R Micropower DAC, Ind. Temp.	8-SOIC	9.63	6.40	5.50
LTC1454CN-ND	—	Dual 12-Bit, Voltage Out, R/R Micropower DAC	16-Dip	12.38	8.25	7.10
LTC1454CS-ND	—	Dual 12-Bit, Voltage Out, R/R Micropower DAC	16-SOIC	12.50	8.35	7.15
LTC1454LCN-ND	—	Dual 12-Bit, Voltage Out, R/R Micropower DAC	16-Dip	13.63	9.10	7.80
LTC1454LCS-ND	—	Dual 12-Bit, Voltage Out, R/R Micropower DAC	16-SOIC	13.75	9.15	7.85
LTC1454IS-ND	—	Dual 12-Bit, V. Out, R/R Micropower DAC, Ind. Temp.	16-SOIC	14.00	9.35	8.00
LTC1456CN8-ND	—	Single 12-Bit, V. Out, R/R Micropower DAC, w/Clear	8-Dip	8.63	5.75	4.90
LTC1456CS8-ND	—	Single 12-Bit, V. Out, R/R Micropower DAC, w/Clear	8-SOIC	9.13	6.10	5.20
LTC1458CG-ND	9285B	Quad 12-Bit, Voltage Out, R/R Micropower DAC	28-SSOP	24.38	16.25	13.20
LTC1458CSW-ND	9285B	Quad 12-Bit, Voltage Out, R/R Micropower DAC	28-SOIC	22.88	15.25	12.35
LTC1458IG-ND	—	Quad 12-Bit, V., R/R Micropower DAC, Ind. Temp.	28-SSOP	28.75	19.09	15.35
LTC1458ISW-ND	—	Quad 12-Bit, V., R/R Micropower DAC, Ind. Temp.	28-SOIC	27.00	17.93	14.40
LTC1458LCG-ND	—	Quad 12-Bit, Voltage Out, R/R Micropower DAC	28-SSOP	26.88	17.90	15.35
LTC1458LCSW-ND	9285B	Quad 12-Bit, Voltage Out, R/R Micropower DAC	28-SOIC	25.25	16.85	14.40
LTC1458LIG-ND	—	Quad 12-Bit, Voltage Out, R/R Micropower DAC	28-SSOP	31.63	21.00	16.86
LTC1470CS8-ND	9257B	Single PCMCIA Protected 3.3V/5V Vcc Switch	8-SOIC	4.50	3.00	2.60
LTC1471CS-ND	9257B	Dual PCMCIA Protected 3.3V/5V Vcc Switch	16-SOIC	7.50	5.00	4.29
LTC1472CS-ND	9257B	Protected PCMCIA Vcc/VPP Switching Matrix	16-SOIC	6.25	4.15	3.55
LTC1473CGN-ND	—	Dual Power Path Switch Driver, .150 Wide Body	16-SSOP	7.13	4.74	3.80
LTC1473LCGN-ND	—	Dual Power Path Switch Driver, .150 Wide Body	16-SSOP	7.13	4.74	3.80
LTC1474CMS8-ND	—	Adj. High Efficiency, Step Down DC/DC Converter	8-MSOP	7.50	4.98	4.00
LTC1474CMS8-3.3-ND	—	3.3V, High Efficiency, Step Down DC/DC Converter	8-MSOP	7.50	4.98	4.00
LTC1474CMS8-5-ND	—	5V, High Efficiency, Step Down DC/DC Converter	8-MSOP	7.50	4.98	4.00
LTC1474CS8-ND	—	Adj. High Efficiency, Step Down DC/DC Converter	8-SOIC	6.88	4.57	3.65
LTC1474CS8-3.3-ND	—	3.3V, High Efficiency, Step Down DC/DC Converter	8-SOIC	6.88	4.57	3.65
LTC1474CS8-5-ND	—	5V, High Efficiency, Step Down DC/DC Converter	8-SOIC	6.88	4.57	3.65
LTC1474IS8-ND	—	Adj. High Efficiency, Step Down DC/DC Converter	8-SOIC	8.25	5.48	4.40
LTC1474IS8-3.3-ND	—	3.3V, High Efficiency, Step Down DC/DC Converter	8-SOIC	8.25	5.48	4.40
LTC1474IS8-5-ND	—	5V, High Efficiency, Step Down DC/DC Converter	8-SOIC	8.25	5.48	4.40
LTC1475CMS8-ND	—	Adj. High Efficiency, Step Down DC/DC Converter	8-MSOP	7.75	5.15	4.15
LTC1475CS8-5-ND	—	5V, High Efficiency, Step Down DC/DC Converter	8-SOIC	7.13	4.74	3.80
LTC1475IS8-ND	—	Adj. High Efficiency, Step Down DC/DC Converter	8-SOIC	8.50	5.65	4.85
LTC1477CS8-ND	9285B	Single Protected High-Side Switch	8-SOIC	6.25	4.15	3.50
LTC1478CS-ND	9285B	Dual Protected High-Side Switch	16-SOIC	10.00	6.65	5.55
LTC1479IG-ND	—	Power Path Controller for Dual Battery System	36-SSOP	17.25	11.46	8.63
LTC1480CN8-ND	9257B	3.3V, Ultra Low Power RS485 Transceiver	8-Dip	4.75	3.16	2.65
LTC1480CS8-ND	9257B	3.3V, Ultra Low Power RS485 Transceiver	8-SOIC	5.13	3.41	2.75
LTC1480IS8-ND	9257B	3.3V, Ultra Low Power RS485 Transceiver, Ind. Temp.	8-SOIC	6.63	4.40	3.55
LTC1481CN8-ND	9257B	Ultra Low Power RS485 Transceiver w/Shutdown	8-Dip	2.75	1.85	1.45
LTC1481CS8-ND	9257B	Ultra Low Power RS485 Transceiver w/Shutdown	8-SOIC	3.38	2.25	1.80
LTC1481IS8-ND	9257B	Ultra Low Power RS485 Transceiver w/Shutdown	8-SOIC	4.38	2.91	2.40
LTC1482CMS8-ND	—	Low Power RS485 Transceiver with Carrier Detect and Receiver Fail Safe	8-MSOP	4.88	3.25	2.55
LTC1482CN8-ND	—	Low Power RS485 Transceiver with Carrier Detect and Receiver Fail Safe	8-Dip	4.00	2.65	2.10
LTC1482CS8-ND	—	Low Power RS485 Transceiver with Carrier Detect and Receiver Fail Safe	8-SOIC	4.13	2.75	2.15
LTC1483CN8-ND	9257B	Ultra Low Power, Low EMI RS485 Transceiver	8-Dip	2.75	1.85	1.45
LTC1483CS8-ND	9257B	Ultra Low Power, Low EMI RS485 Transceiver	8-SOIC	3.38	2.25	1.80
LTC1483IS8-ND	9257B	Ultra Low Power, Low EMI RS485 Transceiver	8-SOIC	4.38	2.91	2.40
LTC1484CMS8-ND	—	Low Power RS485 Transceiver w/Receiver Fail Safe	8-MSOP	4.25	2.85	2.20
LTC1484CN8-ND	—	Low Power RS485 Transceiver w/Receiver Fail Safe	8-Dip	3.38	2.25	1.75
LTC1484CS8-ND	—	Low Power RS485 Transceiver w/Receiver Fail Safe	8-SOIC	3.50	2.35	1.80
LTC1484IS8-ND	—	LP RS485 Transceiver w/Receiver Fail Safe, Ind. Temp.	8-SOIC	4.63	3.10	2.45
LTC1485CN8-ND	9210B	Differential Bus Transceiver	8-Dip	3.00	2.00	1.70
LTC1485CS8-ND	9210B	Differential Bus Transceiver	8-SOIC	3.38	2.25	1.90
LTC1487CN8-ND	9257B	Ultra Low Power RS485 Transceiver with Low EMI, Shutdown, High Input Impedance	8-Dip	2.75	1.85	1.45
LTC1487CS8-ND	9257B	Ultra Low Power RS485 Transceiver with Low EMI, Shutdown, High Input Impedance	8-SOIC	3.38	2.25	1.80
LTC1502CMS8-3.3-ND	—	Single Cell to 3.3V Regulated Charge Pump DC/DC Converter	8-MSOP	4.13	2.74	2.07
LTC1502CS8-3.3-ND	—	Single Cell to 3.3V Regulated Charge Pump DC/DC Converter	8-SOIC	3.75	2.49	1.90
LTC1503CMS8-2-ND	—	2V Inductorless Step-Down DC/DC Converter	8-MSOP	4.00	2.66	2.00
LTC1503CS8-1.8-ND	—	1.8V Inductorless Step-Down DC/DC Converter	8-SOIC	3.63	2.41	1.82
LTC1503CS8-2-ND	—	2V Inductorless Step-Down DC/DC Converter	8-SOIC	3.63	2.41	1.82
LTC1504ACS8-ND	—	Adj. Step-Down Synchronous Switching Regulator	8-SOIC	5.13	3.41	2.57
LTC1504ACS8-3.3-ND	—	3.3V Step-Down Synchronous Switching Regulator	8-SOIC	5.13	3.41	2.57
LTC1504CS8-ND	—	Adj. Step-Down Synchronous Switching Regulator	8-SOIC	5.13	3.41	2.57
LTC1504CS8-3.3-ND	—	3.3V, Step-Down Synchronous Switching Regulator	8-SOIC	5.13	3.41	2.57
LTC1514CS8-3.3-ND	—	3.3V, Step Up/Down Switch-Cap DC/DC Conv.	8-SOIC	6.50	4.35	3.70
LTC1514CS8-5-ND	—	5V, Step Up/Down Switch-Cap DC/DC Converter	8-SOIC	6.50	4.35	3.70
LTC1514IS8-3.3-ND	9294B	3.3V, Step Up/Down Switch-Cap DC/DC Conv.	8-SOIC	7.88	5.25	4.50
LTC1514IS8-5-ND	9294B	5V, Step Up/Down Switch-Cap DC/DC Converter	8-SOIC	7.88	5.25	4.50
LTC1515CS8-3.3/5-ND	—	3.3V/5V, Step Up/Down Switch-Cap DC/DC Converter	8-SOIC	6.50	4.35	3.70
LTC1515CS8-3/5-ND	—	3V/5V, Step Up/Down Switch-Cap DC/DC Converter	8-SOIC	6.50	4.35	3.70
LTC1515IS8-ND	9294B	Step Up/Down Switch-Cap DC/DC Converter	8-SOIC	7.88	5.25	4.50
LTC1515IS8-3.3/5-ND	9294B	3.3V/5V, Step Up/Down Switch-Cap DC/DC Converter	8-SOIC	7.88	5.25	4.50
LTC1515IS8-3/5-ND	9294B	3V/5V, Step Up/Down Switch-Cap DC/DC Converter	8-SOIC	7.88	5.25	4.50
LTC1516CS8-ND	9285B	Regulated 5V Charge Pump DC/DC Converter	8-SOIC	6.25	4.15	3.55
LTC1517CS5-3.3-ND	—	Regulated 3.3V Charge Pump DC/DC Converter	SOT-23-5	3.75	2.50	2.15
LTC1517CS5-5-ND	—	Regulated 5V Charge Pump DC/DC Converter	SOT-23-5	3.75	2.50	2.15
LTC1517ES5-3.3-ND	—	Regulated 3.3V Charge Pump DC/DC Converter	SOT-23-5	4.00	2.66	2.10
LTC1517ES5-5-ND	—	Regulated 5V Charge Pump DC/DC Converter	SOT-23-5	4.00	2.66	2.10
LTC1518CS-ND	—	Hi-Speed Precision Delay RS485 Quad Line Receiver	16-SOIC	10.13	6.73	5.80
LTC1518IS-ND	—	Hi-Speed Precision Delay RS485 Quad Line Receiver	16-SOIC	11.63	7.75	6.20
LTC1519CS-ND	—	Hi-Speed Precision Delay RS485 Quad Line Receiver	16-SOIC	10.13	6.75	5.80
LTC1519IS-ND	—	Hi-Speed Precision Delay RS485 Quad Line Receiver	16-SOIC	11.63	7.75	6.20
LTC1522CMS8-ND	—	Regulated 5V Charge Pump DC/DC Converter	8-MSOP	3.75	2.50	2.15
LTC1522CS8-ND	—	Regulated 5V Charge Pump DC/DC Converter	8-SOIC	3.25	2.16	1.85
LTC1530CS8-ND	—	Adj. Synchronous Switching Regulator Controller	8-SOIC	6.25	4.15	3.15
LTC1530CS8-3.3-ND	—	3.3V Synchronous Switching Regulator Controller	8-SOIC	6.25	4.15	3.15
LTC1530IS8-ND	—	Adj. Synchronous Switching Regulator Controller	8-SOIC	6.88	4.57	3.50
LTC1531CSW-ND	—	Self-Powered Isolated Comparator	28-SOIC	9.38	6.23	4.69
LTC1536CMS8-ND	—	Triple Supply Monitor for PCI Applications	8-MSOP	5.88	3.91	3.35
LTC1536CS8-ND	—	Triple Supply Monitor for PCI Applications	8-SOIC	5.00	3.35	2.85
LTC1540CMS8-ND	—	Nanopower Comparator with Reference	8-MSOP	3.38	2.25	1.85
LTC1540CS8-ND	9294B	Nanopower Comparator with Reference	8-SOIC	3.00	2.00	1.65
LTC1540IS8-ND	9294B	Nanopower Comparator with Reference	8-SOIC	3.50	2.33	1.90
LTC1542CMS8-ND	—	Micropower Op Amp, Comparator and Reference	8-MSOP	4.38	2.91	2.30
LTC1542CS8-ND	—	Micropower Op Amp, Comparator and Reference	8-SOIC	3.75	2.49	1.95
LTC1543CG-ND	—	Software Selectable Multiprotocol Transceiver	28-SSOP	14.88	9.88	7.45
LTC1544CG-ND	—	Software Selectable Multiprotocol Transceiver	28-SSOP	12.25	8.14	6.15
LTC1545CG-ND	—	Software Selectable Multiprotocol Transceiver	36-SSOP	14.38	9.55	7.20
LTC1550CGN-ND	—	Switched Capacitor-Regulated Voltage Inverter	16-SSOP	5.25	3.49	2.80
LTC1550LCGN-ND	—	Switched Capacitor-Regulated Voltage Inverter	16-SSOP	4.00	2.66	2.00
LTC1550LCMS8-ND	—	Switched Capacitor-Regulated Voltage Inverter	8-MSOP	4.00	2.66	2.00
LTC1550LCS8-ND	—	Switched Capacitor-Regulated Voltage Inverter	8-SOIC	3.63	2.41	1.82
LTC1551CS8-4.1-ND	—	4.1V Switched Capacitor-Regulated Voltage Inverter	8-SOIC	4.25	2.85	2.40
LTC1551LCMS8-ND	—	Switched Capacitor-Regulated Voltage Inverter	8-MSOP	4.00	2.66	2.00
LTC1551LCS8-ND	—	Switched Capacitor-Regulated Voltage Inverter	8-SOIC	3.63	2.41	1.82
LTC1553CG-ND	—	5-Bit, Programmable Synch. Switching Regulator Controller for Pentium II Processor	20 SSOP	8.38	5.57	4.19
LTC1555CGN-ND	9294B	SIM Power Supply and Level Translator	16-SSOP	5.38	3.60	3.10
LTC1555IGN-ND	9294B	SIM Power Supply and Level Translator	16-SSOP	6.50	4.32	3.70
LTC1556CGN-ND	9294B	SIM Power Supply & Level Translator w/LDO Reg	20-SSOP	6.25	4.15	3.60
LTC1556IGN-ND	9294B	SIM Power Supply & Level Translator w/LDO Reg	20-SSOP	7.75	5.15	4.45
LTC1558CGN-3.3-ND	—	3.3V, Backup Battery Controller w/Program. Output	16-SSOP	5.25	3.49	2.80
LTC1558CGN-5-ND	—	5V, Backup Battery Controller w/Program. Output	16-SSOP	5.25	3.49	2.80
LTC1558CS-3.3-ND	—	3.3V, Backup Battery Controller w/Program. Output	16-SOIC	5.00	3.32	2.65
LTC1558CS-5-ND	—	5V, Backup Battery Controller w/Program. Output	16-SOIC	5.00	3.32	2.65
LTC1558CS8-3.3-ND	—	3.3V, Backup Battery Controller w/Program. Output	8-SOIC	4.75	3.16	2.55
LTC1558CS8-5-ND	—	5V, Backup Battery Controller w/Program. Output	8-SOIC	4.75	3.16	2.55
LTC1559CGN-3.3-ND	—	3.3V, Backup Battery Controller with Fixed Output	16-SSOP	5.25	3.49	2.80
LTC1559CGN-5-ND	—	5V, Backup Battery Controller with Fixed Output	16-SSOP	5.25	3.49	2.80
LTC1559CS8-3.3-ND	—	3.3V, Backup Battery Controller with Fixed Output	8-SOIC	4.75	3.16	2.55
LTC1559CS8-5-ND	—	5V, Backup Battery Controller with Fixed Output	8-SOIC	4.75	3.16	2.55
LTC1560-1CS8-ND	—	5th Order, Continuous Time, Low Pass Elliptic Filter	8-SOIC	9.13	6.06	4.85
LTC1560-1IS8-ND		5th Order, Continuous Time, Low Pass Elliptic Filter	8-SOIC	10.25	6.81	5.45
LTC1562ACG-ND	—	Low Distortion Active RC Quad Universal Filter	20-SSOP	25.00	16.60	12.50
LTC1562CG-ND	—	Low Distortion Active RC Quad Universal Filter	20-SSOP	19.13	12.70	9.30
LTC1562CG-2-ND	—	2V, Low Distortion Active RC Quad Universal Filter	20-SSOP	19.13	12.70	9.57
LTC1564CG-ND	—	10-150kHz Digitally Controlled Antialiasing Filter and 4-Bit Programmable Gain Amp *NEW!*	16-SSOP	19.00	12.62	9.50
LTC1564IG-ND	—	10-150kHz Digitally Controlled Antialiasing Filter and 4-Bit Programmable Gain Amp *NEW!*	16-SSOP	21.88	14.53	10.94
LTC1565-31CS8-ND	—	650KHz, 7th Order, Continuous Time Low Pass Filter	8-SOIC	8.00	5.32	4.00
LTC1565-31CS8TR-ND	—	650KHz, 7th Order, Continuous Time Low Pass Filter	8-SOIC	9750.00/2,500		
LTC1565-31IS8-ND	—	650KHz, 7th Order, Continuous Time Low Pass Filter	8-SOIC	9.25	6.15	4.63
LTC1565-31IS8TR-ND	—	650KHz, 7th Order, Continuous Time Low Pass Filter	8-SOIC	11250.00/2,500		
LTC1569CS8-6-ND	—	10th Order Linear Phase Low Pass Filter	8-SOIC	11.50	7.64	6.30
LTC1569CS8-7-ND	—	10th Order Linear Phase Low Pass Filter	8-SOIC	12.25	8.14	6.30
LTC1574CS-ND	9257B	Adjustable CMOS Step Down, DC/DC Converter	16-SOIC	8.50	5.65	4.85
LTC1574CS-5-ND	9257B	5V, CMOS Step Down, DC/DC Converter	16-SOIC	8.50	5.65	4.85
LTC1590CN-ND	—	Dual 12-Bit, Serial Input, Current Output DAC	16-Dip	12.13	8.06	6.65
LTC1590CS-ND	—	Dual 12-Bit, Serial Input, Current Output DAC	16-SOIC	12.38	8.22	6.80
LTC1590IS-ND	—	Dual 12-Bit, Serial Input, Current Output DAC	16-SOIC	13.63	9.05	7.50
LTC1591CG-ND	—	Parallel 14-Bit, Multiplying Current Output DAC	28-SSOP	20.00	13.28	10.00
LTC1591IG-ND	—	Parallel 14-Bit, Multiplying Current Output DAC	28-SSOP	23.75	15.77	11.90
LTC1592ACG-ND	—	16-Bit Softspan D/A Converter *NEW!*	16-SSOP	55.63	36.94	29.65
LTC1592BCG-ND	—	16-Bit Softspan D/A Converter *NEW!*	16-SSOP	29.63	19.68	15.80
LTC1594CS-ND	9285B	4-Channel, 12-Bit, 5V, Sampling Serial ADC	16-SOIC	11.25	7.47	6.00
LTC1594IS-ND	9285B	4-Channel, 12-Bit, 5V, Sampling Serial ADC	16-SOIC	13.00	8.64	6.95
LTC1594LCS-ND	9285B	4-Channel, 12-Bit, 5V, Sampling Serial ADC	16-SOIC	11.25	7.47	6.00
LTC1594LIS-ND	9285B	4-Channel, 12-Bit, 5V, Sampling Serial ADC	16-SOIC	13.00	8.64	6.95
LTC1595ACN8-ND	—	16-Bit, Serial Multiplying DAC	8-Dip	48.13	31.96	24.71
LTC1595ACS8-ND	—	16-Bit, Serial Multiplying DAC	8-SOIC	48.75	32.37	25.65
LTC1595AIN8-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	8-Dip	57.75	38.35	29.65
LTC1595AIS8-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	8-SOIC	58.50	38.85	30.00
LTC1595BCN8-ND	9294B	16-Bit, Serial Multiplying DAC	8-Dip	28.50	18.93	15.20
LTC1595BCS8-ND	9294B	16-Bit, Serial Multiplying DAC	8-SOIC	29.13	19.34	15.55
LTC1595BIS8-ND	9294B	16-Bit, Serial Multiplying DAC, Ind. Temp.	8-SOIC	35.00	23.24	18.65
LTC1595CCN8-ND	—	16-Bit, Serial Multiplying DAC	8-Dip	24.38	16.19	13.00
LTC1595CCS8-ND	—	16-Bit, Serial Multiplying DAC	8-SOIC	25.00	16.60	13.35
LTC1595CIS8-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	8-SOIC	30.00	19.92	16.00
LTC1596ACN-ND	—	16-Bit, Serial Multiplying DAC	16-Dip	50.38	33.45	25.85
LTC1596ACSW-ND	—	16-Bit, Serial Multiplying DAC	16-SOIC	51.00	33.87	26.15
LTC1596AISW-ND	—	16-Bit, Serial Multiplying DAC, Ind. Temp.	16-SOIC	61.25	40.67	31.40
LTC1596BCSW-ND	—	16-Bit, Serial Multiplying DAC	16-SOIC	30.63	20.34	16.35

(Continued)

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★		
				1	25	100
LTC1596CCN-ND	—	16-Bit, Serial Multiplying DAC	16-Dip	25.63	17.02	13.65
LTC1597ACG-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-SSOP	55.63	36.94	27.80
LTC1597ACN-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-Dip	55.00	36.52	28.60
LTC1597BCG-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-SSOP	34.50	22.91	17.25
LTC1597BCN-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-Dip	33.88	22.50	16.95
LTC1597-1ACG-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-SSOP	55.63	36.94	27.80
LTC1597-1ACN-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-Dip	55.00	36.52	28.60
LTC1597-1BCG-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-SSOP	34.50	22.91	17.25
LTC1597-1BCN-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	28-Dip	33.88	22.50	16.95
LTC1598CG-ND	9285B	8-Channel, 12-Bit, 5V, Sampling Serial ADC	24-SSOP	11.50	7.64	6.20
LTC1598IG-ND	9285B	8-Channel, 12-Bit, 5V, Sampling Serial ADC	24-SSOP	13.25	8.80	7.10
LTC1598LCG-ND	—	8-Channel, 12-Bit, 5V, Sampling Serial ADC	24-SSOP	11.63	7.75	6.45
LTC1599ACG-ND	—	16-Bit, Multiplying Parallel DAC w/4 Quad Resistors	24-SSOP	55.63	36.94	28.90
LTC1604ACG-ND	—	16-Bit, 333ksps Sampling ADC withShutdown	36-SSOP	58.75	39.01	29.38
LTC1604AIG-ND	—	16-Bit, 333ksps Sampling ADC withShutdown	36-SSOP	63.13	41.92	31.57
LTC1604CG-ND	—	16-Bit, 333ksps Sampling ADC withShutdown	36-SSOP	44.50	29.55	22.25
LTC1604IG-ND	—	16-Bit, 333ksps Sampling ADC withShutdown	36-SSOP	47.88	31.79	23.94
LTC1605ACG-ND	—	16-Bit, 100ksps Sampling A/D Converter	28-SSOP	49.63	32.96	24.85
LTC1605ACSW-ND	—	16-Bit, 100ksps Sampling A/D Converter	28-SOIC	48.88	32.46	24.45
LTC1605AIG-ND	—	16-Bit, 100ksps Sampling A/D Converter, Ind. Temp.	28-SSOP	51.00	33.87	25.50
LTC1605AISW-ND	—	16-Bit, 100ksps Sampling A/D Converter, Ind. Temp.	28-SOIC	51.00	33.87	25.50
LTC1605CN-ND	—	16-Bit, 100ksps Sampling A/D Converter	28-Dip	36.13	23.99	18.07
LTC1605CSW-ND	—	16-Bit, 100ksps Sampling A/D Converter	28-SOIC	36.13	23.99	18.07
LTC1605IG-ND	—	16-Bit, 100ksps Sampling A/D Converter, Ind. Temp.	28-SSOP	39.50	26.23	20.00
LTC1605IN-ND	—	16-Bit, 100ksps Sampling A/D Converter, Ind. Temp.	28-Dip	38.25	25.40	19.15
LTC1605ISW-ND	—	16-Bit, 100ksps Sampling A/D Converter, Ind. Temp.	28-SOIC	38.25	25.40	19.15
LTC1605-1CG-ND	—	16-Bit, 100ksps Sampling A/D Converter	28-SSOP	36.88	24.49	18.71
LTC1605-2CG-ND	—	16-Bit, 100ksps Sampling A/D Converter	28-SSOP	36.88	24.49	18.71
LTC1608ACG-ND	—	16-Bit, 500ksps Sampling ADC with Shutdown	36-SSOP	49.13	32.62	25.20
LTC1608CG-ND	—	16-Bit, 500ksps Sampling ADC with Shutdown	36-SSOP	35.00	23.24	17.50
LTC1609CSW-ND	—	16-Bit, 200ksps Serial Sampling ADC	20-SOIC	31.75	21.09	15.88
LTC1609IG-ND	—	16-Bit, 200ksps Sampling ADC, Ind. Temp.	28-SSOP	35.00	23.24	17.50
LTC1609ISW-ND	—	16-Bit, 200ksps Serial Sampling ADC *NEW!*	20-SOIC	35.00	23.24	17.50
LTC1622CMS8-ND	—	Low Voltage, Step Down DC/DC Controller	8-MSOP	4.38	2.91	2.19
LTC1622CS8-ND	—	Low Voltage, Step Down DC/DC Controller	8-SOIC	3.88	2.58	1.94
LTC1624CS8-ND	—	High Efficiency N-Channel Switching Reg. Controller	8-SOIC	7.13	4.74	3.75
LTC1624IS8-ND	9294B	High Efficiency N-Channel Switching Reg. Controller	8-SOIC	8.88	5.90	4.80
LTC1625CS-ND	—	No Rsense Synch. Step Down Switching Regulator	16-SOIC	9.13	6.06	4.85
LTC1625IGN-ND	—	No Rsense Synch. Step Down Switching Regulator	16-SSOP	11.75	7.81	6.25
LTC1625IS-ND	—	No Rsense Synch. Step Down Switching Regulator	16-SOIC	11.00	7.31	5.85
LTC1627CS8-ND	—	Mono Synchronous Step Down Switching Regulator	8-SOIC	4.38	2.91	2.19
LTC1627IS8-ND	—	Mono Synchronous Step Down Switching Regulator	8-SOIC	6.50	4.32	3.25
LTC1628CG-ND	—	Mono Synchronous Step Down Switching Reg.	28-SSOP	9.13	6.06	4.75
LTC1628CG-SYNC-ND	—	Mono Synchronous Step Down Switching Reg.	28-SSOP	9.50	6.31	4.90
LTC1629IG-ND	—	Poly Phase High Efficiency Synchronous Step-Down Switching Regulator	28-SSOP	14.25	9.47	7.53
LTC1642CGN-ND	—	Adjustable Hot Swap Controller	16-SSOP	7.25	4.82	3.70
LTC1643HCGN-ND	—	PCI-Bus Hot Swap Controller	16-SSOP	8.75	5.81	4.55
LTC1643LCGN-ND	—	PCI-Bus Hot Swap Controller	16-SSOP	8.75	5.81	4.55
LTC1644CGN-ND	—	CompactPCI-Bus Hot Swap Controller *NEW!*	20-SSOP	7.38	4.90	3.95
LTC1646CGN-ND	—	CompactPCI Dual Hot Swap Controller	16-SSOP	7.00	4.65	3.75
LTC1646IGN-ND	—	CompactPCI Dual Hot Swap Controller	16-SSOP	8.00	5.35	4.25
LTC1649CS-ND	—	3.3V, Step Down Switching Regulator Controller	16-SOIC	8.38	5.57	4.20
LTC1650ACN-ND	—	16-Bit, Rail-to-Rail Voltage Out D/A Converter	16-Dip	31.88	21.17	17.00
LTC1650ACS-ND	—	16-Bit, Rail-to-Rail Voltage Out D/A Converter	16-SOIC	32.50	21.58	17.10
LTC1650AIS-ND	—	16-Bit, Rail-to-Rail Voltage Out DAC, Ind. Temp.	16-SOIC	36.88	24.49	19.40
LTC1650CN-ND	—	16-Bit, Rail-to-Rail Voltage Out D/A Converter	16-Dip	23.88	15.86	11.95
LTC1650CS-ND	—	16-Bit, Rail-to-Rail Voltage Out D/A Converter	16-SOIC	24.50	16.27	12.25
LTC1650IS-ND	—	16-Bit, Rail-to-Rail Voltage Out DAC, Ind. Temp.	16-SOIC	27.75	18.43	13.90
LTC1654CGN-ND	—	Dual 14-Bit, Rail-to-Rail Volt. Out D/A Converter	16-SSOP	19.00	12.62	9.50
LTC1654IGN-ND	—	Dual 14-Bit, Rail-to-Rail Volt. Out DAC, Ind. Temp.	16-SSOP	21.88	14.53	10.90
LTC1655CN8-ND	—	16-Bit, Rail-to-Rail Voltage Out D/A Converter	8-Dip	16.88	11.21	8.45
LTC1655CS8-ND	—	16-Bit, Rail-to-Rail Voltage Out D/A Converter	8-SOIC	16.88	11.21	8.45
LTC1655IS8-ND	—	16-Bit, Rail-to-Rail Voltage Out DAC, Ind. Temp.	8-SOIC	18.50	12.29	9.25
LTC1658CMS8-ND	—	14-Bit, Rail-to-Rail Voltage Out D/A Converter	8-MSOP	10.88	7.23	5.45
LTC1658CN8-ND	—	14-Bit, Rail-to-Rail Voltage Out D/A Converter	8-Dip	10.25	6.81	5.15
LTC1658CS8-ND	—	14-Bit, Rail-to-Rail Voltage Out D/A Converter	8-SOIC	10.25	6.81	5.15
LTC1658IMS8-ND	—	14-Bit, R-R Voltage Out DAC, Ind. Temp.	8-MSOP	13.00	8.64	6.50
LTC1659CS8-ND	—	12-Bit, Rail-to-Rail Voltage Out D/A Converter	8-SOIC	8.38	5.57	4.65
LTC1659IS8-ND	—	12-Bit, Rail-to-Rail Voltage Out DAC, Ind. Temp.	8-SOIC	9.13	6.06	5.10
LTC1660CGN-ND	—	Octal 10-Bit, Voltage Output D/A Converter	16-SSOP	12.38	8.22	6.20
LTC1660CN-ND	—	Octal 10-Bit, Voltage Output D/A Converter	16-Dip	11.38	7.56	5.70
LTC1660IGN-ND	—	Octal 10-Bit, Voltage Output DAC, Ind. Temp.	16-SSOP	13.88	9.22	6.95
LTC1660IN-ND	—	Octal 10-Bit, Voltage Output DAC, Ind. Temp.	16-Dip	12.88	8.55	6.44
LTC1661CMS8-ND	—	Dual 10-Bit, Micropower D/A Converter	8-MSOP	3.38	2.25	1.75
LTC1661CN8-ND	—	Dual 10-Bit, Micropower D/A Converter	8-Dip	3.38	2.25	1.75
LTC1663CS5-1-ND	—	10-Bit, R/R Micropower DAC with 2 Wire Interface	SOT-23-5	3.50	2.33	1.80
LTC1663CS5-1TR-ND	—	10-Bit, R/R Micropower DAC with 2 Wire Interface	SOT-23-5	4600.00/2,500		
LTC1663CS5-2-ND	—	10-Bit, R/R Micropower DAC with 2 Wire Interface	SOT-23-5	3.50	2.33	1.80
LTC1663CS5-2TR-ND	—	10-Bit, R/R Micropower DAC with 2 Wire Interface	SOT-23-5	4600.00/2,500		
LTC1663-8CMS8-ND	—	10-Bit Rail-to-Rail Micropower D/A Converter with 2-Wire Interface *NEW!*	8-MSOP	3.50	2.33	1.85
LTC1663-8IMS8-ND	—	10-Bit Rail-to-Rail Micropower D/A Converter with 2-Wire Interface *NEW!*	8-MSOP	4.13	2.74	2.10
LTC1665CGN-ND	—	Octal 8-Bit , Voltage Output D/A Converter	16-SSOP	6.38	4.24	3.20
LTC1666CG-ND	—	12-Bit, 50Msps D/A Converter *NEW!*	28-SSOP	16.63	11.04	8.95
LTC1667CG-ND	—	14-Bit, 50Msps D/A Converter *NEW!*	28-SSOP	22.38	14.86	12.05
LTC1682CS8-ND	—	Adj. Doubler Charge Pump with Low Noise Linear Reg.	8-SOIC	3.50	2.33	1.80
LTC1682CS8-5-ND	—	5V, Doubler Charge Pump with Low Noise Linear Reg.	8-SOIC	3.50	2.33	1.80
LTC1685CS8-ND	—	52Mbps Precision Delay RS485 Fail-Safe Transceiver	8-SOIC	5.63	3.74	3.15
LTC1685IS8-ND	—	52Mbps Precision Delay RS485 Fail-Safe Transceiver	8-SOIC	6.50	4.32	3.40
LTC1686CS8-ND	—	52Mbps Precision Delay RS485 Fail-Safe Transceiver	8-SOIC	8.38	5.57	4.50
LTC1686IS8-ND	—	52Mbps Precision Delay RS485 Fail-Safe Transceiver	8-SOIC	9.63	6.40	5.00
LTC1687CS-ND	—	52Mbps Precision Delay RS485 Fail-Safe Transceiver	14-SOIC	8.38	5.57	4.50
LTC1687IS-ND	—	52Mbps Precision Delay RS485 Fail-Safe Transceiver	14-SOIC	9.63	6.40	5.00
LTC1688CS-ND	—	100Mbps RS485 Hot Swap Quad Driver	16-SOIC	10.13	6.73	5.25
LTC1688IS-ND	—	100Mbps RS485 Hot Swap Quad Driver, Ind. Temp.	16-SOIC	11.63	7.75	6.20
LTC1689CS-ND	—	100Mbps RS485 Hot Swap Quad Driver	16-SOIC	10.13	6.73	5.25
LTC1689IS-ND	—	100Mbps RS485 Hot Swap Quad Driver, Ind. Temp.	16-SOIC	11.38	7.75	6.20
LTC1690CS8-ND	—	Low Power Driver/Receiver with Fail-Safe Receiver Output	8-SOIC	3.50	2.35	1.80
LTC1693-1CS8-ND	—	High Speed Dual N-Channel MOSFET Driver	8-SOIC	3.50	2.33	1.75
LTC1693-1IS8-ND	—	High Speed Dual N-Chan. MOSFET Driver, Ind. Temp.	8-SOIC	4.00	2.66	2.00
LTC1693-2IS8-ND	—	High Speed Dual N-Chan. MOSFET Driver, Ind. Temp.	8-SOIC	4.00	2.66	2.00
LTC1693-5CMS8-ND	—	High Speed Single N-Channel MOSFET Driver	8-MSOP	3.63	2.41	1.82
LTC1694CS5-ND	—	Dual SMBus Accelerator	SOT-23-5	2.63	1.75	1.32
LTC1667CG-ND	—	Overvoltage Protection Controller *NEW!*	SOT-23-6	22.38	14.86	12.05
LTC1698EGN-ND	—	Secondary Synchronous Rectifier Controller *NEW!*	16-SSOP	11.25	7.47	5.63
LTC1698ES-ND	—	Secondary Synchronous Rectifier Controller *NEW!*	16-SOIC	11.38	7.56	5.69
LTC1700EMS-ND	—	Synchronous Step-Up DC/DC Controller	10-MSOP	5.50	3.66	2.75
LTC1701BES5-ND	—	1MHz Step-Down DC/DC Converter	SOT-23-5	3.75	2.49	2.15
LTC1702CGN-ND	—	Dual 550kHz, Synch. Switch Regulator Controller	24-SSOP	9.88	6.56	5.45
LTC1705EGN-ND	—	Dual 5-Bit, Synch. Switching Regulator Controller	28-SSOP	11.25	7.47	5.63
LTC1706EMS-85-ND	—	VID Voltage Programmer for Intel VRM 8.5 *NEW!*	10-MSOP	4.25	2.83	2.15
LTC1709EG-7-ND	—	5-Bit, 2-Phase Synch. Step-Down Switching Reg.	36-SSOP	9.75	6.48	5.10
LTC1709EG-85-ND	—	5-Bit, 2-Phase, Synchronous, Step-Down Switching Regulator *NEW!*	36-SSOP	9.75	6.48	5.00
LTC1710CMS8-ND	—	Dual SMBus High Side Switch	8-MSOP	6.38	4.24	3.20
LTC1710CS8-ND	—	Dual SMBus High Side Switch	8-SOIC	5.88	3.91	2.95
LTC1710IS8-ND	—	Dual SMBus High Side Switch, Ind. Temp.	8-SOIC	7.00	4.65	3.50
LTC1728ES5-3.3-ND	—	3.3V Precision Triple Supply Monitor *NEW!*	SOT-23-5	2.88	1.91	1.45
LTC1730EGN-4-ND	—	4V Lithium-Ion Battery Pulse Charger	16-SSOP	4.38	2.91	2.19
LTC1730ES8-4.2-ND	—	4.2V Lithium-Ion Battery Pulse Charger	8-SOIC	3.88	2.58	1.94
LTC1731EMS8-8.2-ND	—	8.2V Li-Ion Linear Battery Charger Controller *NEW!*	8-MSOP	3.63	2.41	1.90
LTC1731EMS8-8.4-ND	—	8.4V Li-Ion Linear Battery Charger Controller *NEW!*	8-MSOP	3.63	2.41	1.90
LTC1731ES8-8.2-ND	—	8.2V Li-Ion Linear Battery Charger Controller *NEW!*	8-SOIC	3.25	2.16	1.65
LTC1731ES8-8.4-ND	—	8.4V Lithium-Ion Linear Battery Charger Controller	8-SOIC	3.25	2.16	1.65
LTC1732EMS-8.4-ND	—	Li-Ion Linear Battery Charger Controller *NEW!*	10-MSOP	4.63	3.08	2.32
LTC1734ES6-4.1-ND	—	4.1V Li-Ion Linear Battery Charger Controller	SOT-23-6	2.75	1.83	1.38
LTC1734ES6-4.2-ND	—	4.2V Li-Ion Linear Battery Charger Controller	SOT-23-6	2.75	1.83	1.38
LTC1735CF-ND	—	High Efficiency Synch. Step-Down Switching Regulator *NEW!*	20-TSSOP	7.00	4.65	3.50
LTC1735CGN-ND	—	High Efficiency Synch. Step-Down Switching Reg	16-SSOP	6.88	4.57	3.44
LTC1735CGN-1-ND	—	High Efficiency Synch. Step-Down Switching Reg	16-SSOP	6.88	4.57	3.44
LTC1735CS-ND	—	High Efficiency Synch. Step-Down Switching Reg	16-SOIC	6.63	4.40	3.32
LTC1735IGN-ND	—	High Efficiency Synch. Step-Down Switching Reg	16-SSOP	9.00	5.98	4.53
LTC1751EMS8-ND	—	Micropower Regulated Charge Pump DC/DC Conv.	8-MSOP	4.63	3.08	2.59
LTC1751EMS8-3.3-ND	—	Micropower Regulated Charge Pump DC/DC Conv.	8-MSOP	4.63	3.08	2.59
LTC1751EMS8-5-ND	—	Micropower Regulated Charge Pump DC/DC Conv.	8-MSOP	4.63	3.08	2.59
LTC1753CG-ND	—	5-Bit, Programmable Synchronous Switching Regulator Controller for Pentium II Processor	20-SSOP	6.50	4.32	3.25
LTC1753CSW-ND	—	5-Bit, Programmable Synchronous Switching Regulator Controller for Pentium II Processor	20-SOIC	6.00	3.99	3.00
LTC1758-1EMS8-ND	—	250kHz Single Band RF Power Controller	8-MSOP	3.38	2.25	1.70
LTC1758-2EMS-ND	—	250kHz Dual Band RF Power Controller	10-MSOP	3.50	2.33	1.79
LTC1759CG-ND	—	Smart Battery Charger	36-SSOP	11.50	7.64	5.75
LTC1772BES6-ND	—	Constant Frequency, Current Mode Step-Down DC/DC Controller *NEW!*	SOT-23-6	3.88	2.58	1.94
LTC1772ES6-ND	—	Constant Freq., Current Mode Step Down DC/DC Controller	SOT-23-6	3.88	2.58	2.00
LTC1778EGN-ND	—	Synch. Step-Down Switching Regulator Controller	16-SSOP	5.75	3.82	2.88
LTC1778EGN-1-ND	—	Synch. Step-Down Switching Regulator Controller *NEW!*	16-SSOP	5.75	3.82	2.88
LTC1779ES6-ND	—	250mA Step-Down DC/DC Converter	SOT-23-6	3.75	2.49	1.94
LTC1799CS5-ND	—	1kHz-30MHz Resistor Set Precision Oscillator	SOT-23-5	3.25	2.55	1.95
LTC1799IS5-ND	—	1kHz-30MHz Resistor Set Precision Oscillator	SOT-23-5	3.63	3.45	2.70
LTC1821-1ACGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC	36-SSOP	87.13	58.10	46.46
LTC1821-1AIGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC, Ind. Temp.	36-SSOP	95.63	63.75	51.00
LTC1821-1BCGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC	36-SSOP	63.63	42.40	33.95
LTC1821-1BIGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC, Ind. Temp.	36-SSOP	70.00	46.65	37.35
LTC1821ACGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC	36-SSOP	87.13	58.10	46.46
LTC1821AIGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC, Ind. Temp.	36-SSOP	95.63	63.75	51.00
LTC1821BCGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC	36-SSOP	63.63	42.40	33.95
LTC1821BIGW-ND	—	16-Bit, Ultra Precise, Voltage Out DAC, Ind. Temp.	36-SSOP	70.00	46.65	37.35
LTC1840CGN-ND	—	Dual Fan Controller with 2-Wire Interface *NEW!*	16-SSOP	5.63	3.74	3.00
LTC1841CS8-ND	—	Ultra Low Power Dual Comparator with Reference	8-SOIC	2.50	1.66	1.25
LTC1842CS8-ND	—	Ultra Low Power Dual Comparator with Reference	8-SOIC	2.88	1.91	1.50
LTC1843CS8-ND	—	Ultra Low Power Dual Comparator with Reference	8-SOIC	2.88	1.91	1.50
LTC1852CFW-ND	—	8-Ch., 10-Bit, 400ksps, Low Power ADC *NEW!*	48-TSSOP	12.13	8.06	6.50
LTC1853CFW-ND	—	8-Ch., 12-Bit, 400ksps, Low Power ADC *NEW!*	48-TSSOP	14.63	9.72	7.85
LTC1860CMS8-ND	—	1-Channel, 12-Bit, 250ksps A/D Converter *NEW!*	8-MSOP	4.88	3.24	2.65
LTC1860CS8-ND	—	1-Channel, 12-Bit, 250ksps A/D Converter *NEW!*	8-SOIC	4.75	3.16	2.60
LTC1861CMS-ND	—	2-Channel, 12-Bit, 250ksps A/D Converter *NEW!*	10-MSOP	6.25	4.15	3.50
LTC1861CS8-ND	—	2-Channel, 12-Bit, 250ksps A/D Converter *NEW!*	8-SOIC	5.88	3.91	3.25
LTC1864ACMS8-ND	—	1-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	8-MSOP	15.00	9.96	8.05
LTC1864ACS8-ND	—	1-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	8-SOIC	14.38	9.55	7.70
LTC1864CMS8-ND	—	1-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	8-MSOP	12.88	8.55	6.90
LTC1864CS8-ND	—	1-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	8-SOIC	12.38	8.22	6.65
LTC1865ACMS-ND	—	2-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	10-MSOP	15.38	10.21	8.55
LTC1865ACS8-ND	—	2-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	8-SOIC	14.75	9.80	8.20
LTC1865CMS-ND	—	2-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	10-MSOP	13.38	8.89	7.45
LTC1865CS8-ND	—	2-Channel, 16-Bit, 250ksps A/D Converter *NEW!*	8-SOIC	12.88	8.55	7.15
LTC1871EMS-ND	—	Current Mode Boost, Flyback, SEPIC Controller *NEW!*	10-MSOP	5.38	3.57	2.69
LTC1872BES6-ND	—	Constant Frequency, Current Mode Step-Up DC/DC Controller *NEW!*	SOT-23-6	3.75	2.49	1.95
LTC1872ES6-ND	—	Constant Frequency, Current Mode Step-Up DC/DC Controller	SOT-23-6	3.75	2.49	2.00
LTC1872ES6TR-ND	—	Constant Frequency, Current Mode Step-Up DC/DC Controller	SOT-23-6	4775.00/2,500		
LTC1874EGN-ND	—	Dual Constant Frequency, Current Mode Step-Down DC/DC Controller	16-SSOP	6.75	4.49	3.45
LTC1875EGN-ND	—	1.5A Monolithic Synch. Step-Down Reg. *NEW!*	16-SSOP	7.00	4.65	3.57
LTC1878EMS8-ND	—	High Efficiency Monolithic Synch. Step-Down Reg.	8-MSOP	5.50	3.66	2.80
LTC1878EMS8TR-ND	—	High Efficiency Monolithic Synch. Step-Down Reg.	8-MSOP	6750.00/2,500		
LTC1879EGN-ND	—	1.2A Synchronous Step-Down Regulator *NEW!*	16-SSOP	7.20	4.79	3.67
LTC1909-8EG-ND	—	Step-Down DC/DC Regulator Controller *NEW!*	28-SSOP	10.38	6.89	5.19
LTC1911EMS8-1.5-ND	—	1.5V Low Noise Step-Down DC/DC Conv. *NEW!*	8-MSOP	4.80	3.19	2.40
LTC1911EMS8-1.8-ND	—	1.8V Low Noise Step-Down DC/DC Conv. *NEW!*	8-MSOP	4.80	3.19	2.40
LTC1957-1EMS8-ND	—	Single-Band RF Power Controller with 40dB Range	8-MSOP	3.38	2.25	1.70

(Continued)

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LINEAR TECHNOLOGY LINEAR SERIES *(Continued)*

Digi-Key Part No.	Data Book (Sold Sep.)	Description	Pkg.	Price Each★ 1	25	100
LTC1957-2EMS-ND	—	Dual-Band RF Power Controller with 40dB Range	10-MSOP	3.50	2.33	1.79
LTC1960CG-ND	—	Dual Battery Charger/Selector with SPI Interface *NEW!*	36-SSOP	14.75	9.80	7.38
LTC1966CMS8-ND	—	Precision Micropower RMS/DC Converter *NEW!*	8-MSOP	5.88	3.91	3.60
LTC1981ES5-ND	—	Single Micropower High-Side Switcher Controller *NEW!*	SOT-23-5	2.50	1.66	1.25
LTC1982ES6-ND	—	Dual N-Channel MOSFET Driver	SOT-23-6	3.00	2.00	1.53
LTC1983ES6-3-ND	—	3V, 100mA Regulated Charge-Pump Inverter *NEW!*	SOT-23-6	3.60	2.40	1.80
LTC1983ES6-5-ND	—	2.3V, 100mA, Regulated Charge-Pump Inverter *NEW!*	SOT-23-6	3.60	2.40	1.80
LTC1998CS6-ND	—	Programmable Low Battery Volt. Detector *NEW!*	SOT-23-6	2.00	1.33	1.10
LTC2050HVCS5-ND	—	12V, High Voltage, Zero-Drift Op Amp	SOT-23-5	3.00	2.00	1.55
LTC2050HVCS6-ND	—	12V, High Voltage, Zero-Drift Op Amp	SOT-23-6	3.25	2.16	1.65
LTC2050HVCS8-ND	—	12V, High Voltage, Zero-Drift Op Amp	8-SOIC	3.00	2.00	1.55
LTC2050HVCS8TR-ND	—	12V, High Voltage, Zero-Drift Op Amp	8-SOIC	3775.00/2,500		
LTC2050HVIS8-ND	—	12V, High Voltage, Zero-Drift Op Amp, Ind. Temp.	8-SOIC	3.25	2.16	1.70
LTC2050HVIS8TR-ND	—	12V, High Voltage, Zero-Drift Op Amp, Ind. Temp.	8-SOIC	4050.00/2,500		
LTC2050IS8-ND	—	12V, High Voltage, Zero-Drift Op Amp, Ind. Temp.	8-SOIC	2.63	1.75	1.50
LTC2050IS8TR-ND	—	12V, High Voltage, Zero-Drift Op Amp, Ind. Temp.	8-SOIC	3400.00/2,500		
LTC2051HMS8-ND	—	2A Dual Zero-Drift Op-Amp *NEW!*	8-MSOP	4.75	3.16	2.45
LTC2051HS8-ND	—	2A Dual Zero-Drift Op Amp *NEW!*	8-SOIC	4.50	2.99	2.40
LTC2051HVHMS8-ND	—	2A Dual Zero Drift Op Amp *NEW!*	8-MSOP	6.00	3.99	3.10
LTC2051HVHS8-ND	—	2A Dual Zero-Drift Op Amp *NEW!*	8-SOIC	5.75	3.82	2.95
LTC2052CGN-ND	—	4A Quad Zero-Drift Op Amp	16-SSOP	8.38	5.57	4.20
LTC2052CGNTR-ND	—	4A Quad Zero-Drift Op Amp	16-SSOP	10200.00/2,500		
LTC2052CS-ND	—	4A Quad Zero-Drift Op Amp	14-SOIC	7.75	5.15	3.90
LTC2052CSTR-ND	—	4A Quad Zero-Drift Op Amp	14-SOIC	9450.00/2,500		
LTC2052HGN-ND	—	4A Quad Zero-Drift Op Amp *NEW!*	16-SSOP	9.00	5.98	4.80
LTC2052HS-ND	—	4A Quad Zero-Drift Op Amp *NEW!*	14-SOIC	8.38	5.57	4.45
LTC2052HVCGN-ND	—	4A Quad Zero-Drift Op Amp	16-SSOP	10.50	6.98	5.25
LTC2052HVCGNTR-ND	—	4A Quad Zero-Drift Op Amp	16-SSOP	12750.00/2,500		
LTC2052HVCS-ND	—	4A Quad Zero-Drift Op Amp	14-SOIC	9.63	6.40	4.82
LTC2052HVCSTR-ND	—	4A Quad Zero-Drift Op Amp	14-SOIC	11700.00/2,500		
LTC2052HVHGN-ND	—	4A Quad Zero-Drift Op Amp *NEW!*	16-SSOP	11.13	7.39	6.10
LTC2052HVHS-ND	—	4A Quad Zero-Drift Op Amp *NEW!*	14-SOIC	10.50	6.98	5.75
LTC2052HVIGNTR-ND	—	4A Quad Zero-Drift Op Amp, Ind. Temp.	16-SSOP	13500.00/2,500		
LTC2052HVISTR-ND	—	4A Quad Zero-Drift Op Amp, Ind. Temp.	14-SOIC	12750.00/2,500		
LTC2052IGNTR-ND	—	4A Quad Zero-Drift Op Amp, Ind. Temp.	16-SSOP	10950.00/2,500		
LTC2052ISTR-ND	—	4A Quad Zero-Drift Op Amp, Ind. Temp.	14-SOIC	10200.00/2,500		
LTC2053CMS8-ND	—	Precision R/R I/O Zero-Drift Instrum. Amp *NEW!*	8-MSOP	6.38	4.24	3.30
LTC2053CMS8TR-ND	—	Precision R/R I/O Zero-Drift Instrum. Amp *NEW!*	8-MSOP	8150.03/2,500		
LTC2400CS8-ND	—	24-Bit, Micropower A/D Converter	8-SOIC	15.00	9.96	7.50
LTC2400IS8-ND	—	24-Bit, Micropower A/D Converter, Ind. Temp.	8-SOIC	16.63	11.04	8.32
LTC2408CG-ND	—	24-Bit, 8-Channel Micropower A/D Converter	28-SSOP	17.13	11.38	8.57
LTC2411CMS-ND	—	24-Bit, No Latency Delta Sigma ADC with Differential Input and Reference	10-MSOP	16.38	10.88	8.20
LTC2411CMSTR-ND	—	24-Bit, No Latency Delta Sigma ADC with Differential Input and Reference	10-MSOP	19800.00/2,500		
LTC2411IMS-ND	—	24-Bit, No Latency Delta Sigma ADC with Differential Input and Reference	10-MSOP	17.88	11.87	8.95
LTC2411IMSTR-ND	—	24-Bit, No Latency Delta Sigma ADC with Differential Input and Reference	10-MSOP	21600.00/2,500		
LTC2411-1CMS-ND	—	24-Bit, No Latency Delta Sigma ADC with Differential Input and Reference *NEW!*	10-MSOP	16.88	11.21	9.00
LTC2413CGN-ND	—	24 Bit, Micropower ADC Converter	16-SSOP	15.88	10.59	8.50
LTC2413IGN-ND	—	24 Bit, Micropower ADC Converter, Ind. Temp	16-SSOP	17.63	11.71	9.45
LTC2415CGN-ND	—	24-Bit, ADC with Diff. Input and Ref., Ind. Temp.	16-SSOP	17.63	11.75	8.82
LTC2415IGN-ND	—	24-Bit, ADC with Differential Input and Ref.	16-SSOP	19.38	15.25	9.70
LTC3401EMS-ND	—	1A, 3MHz, Synch. Boost Step-Up DC/DC Converter	10-MSOP	5.50	3.66	2.75
LTC3401EMSTR-ND	—	1A, 3MHz, Synch. Boost Step-Up DC/DC Converter	10-MSOP	6750.00/2,500		
LTC3201EMS-ND	—	100mA Ultralow Noise Charge Pump LED Supply *NEW!*	10-MSOP	3.75	2.49	1.94
LTC3202EMS-ND	—	Low Noise, High Efficiency Charge Pump for White LEDs *NEW!*	10-MSOP	3.75	2.49	1.94
LTC3400ES6-ND	—	600mA, 1.2MHz Micropower Synchronous Boost Converter *NEW!*	SOT-23-6	3.88	2.58	1.99
LTC3404EMS8-ND	—	1.4MHz, Monolithic Synch. Step-Down Regulator	8-MSOP	5.75	3.82	3.00
LTC3405ES6-ND	—	1.5MHz, 300mA High Efficiency Synch. Step-Down Regulator *NEW!*	SOT-23-6	3.23	2.15	1.64
LTC3423EMS-ND	—	1A, Low Output Voltage, 3MHz Micropower Synchronous Boost DC/DC Converter *NEW!*	10-MSOP	5.50	3.66	2.75
LTC3424EMS-ND	—	2A, Low Output Voltage, 3MHz Micropower Synchronous Boost DC/DC Converter *NEW!*	10-MSOP	7.13	4.74	3.57
LTC3440EMS-ND	—	Micropower Synchronous Buck-Boost DC/DC Converter *NEW!*	10-MSOP	5.83	3.87	2.92
LTC3701EGN-ND	—	2-Phase, Low Input Voltage Dual Step-Down DC/DC Controller *NEW!*	16-SSOP	7.00	4.65	3.50
LTC3711EGN-ND	—	5-Bit Adjustable, Wide Operating Range, Step Down Controller *NEW!*	24-SSOP	7.50	4.98	3.75
LTC3713EG-ND	—	Low Input Voltage, High Power, Synchronous DC/DC Controller *NEW!*	24-SSOP	8.38	5.57	4.19
LTC3714EG-ND	—	Intel Compatible, Wide Op. Range, Step-Down Controller with Internal Op Amp *NEW!*	28-SSOP	6.50	4.32	3.25
LTC3716EG-ND	—	5-Bit, 2-Phase Step-Down Switching Regulator	36-SSOP	8.90	5.91	4.45
LTC3717EGN-ND	—	Wide Op. Range, Synchronous Step-Down Controller for DDR Memory Termination *NEW!*	16-SSOP	6.13	4.07	3.07
LTC3719EG-ND	—	2-Phase, 5-Bit VID, Current Mode, High Effic., Synch. Step-Down Switching Reg. *NEW!*	36-SSOP	8.90	5.91	4.45
LTC3727EG-ND	—	2-Phase, High Efficiency Synchronous Step-Down Switching Regulator *NEW!*	28-SSOP	10.25	6.81	5.13
LTC3728EG-ND	—	Dual, 550kHz, 2-Phase Synchronous Step-Down Switching Regulator *NEW!*	28-SSOP	10.25	6.81	5.13
LTC3729EG-ND	—	550kHz, PolyPhase, High Efficiency, Synch. Step-Down Switching Regulator *NEW!*	28-SSOP	11.88	7.89	5.94
LTC3778EF-ND	—	Wide Operating Range, Synchronous Step-Down Controller *NEW!*	20-TSSOP	7.13	4.74	3.57
LTC3830-1ES8-ND	—	HP, Synch. Step-Down DC/DC Controller *NEW!*	8-SOIC	6.25	4.15	3.13
LTC3830EGN-ND	—	HP, Synch. Step-Down DC/DC Controller *NEW!*	16-SSOP	7.75	5.15	3.88
LTC3830ES-ND	—	HP, Synch. Step-Down DC/DC Controller *NEW!*	16-SOIC	7.13	4.74	3.57
LTC3830ES8-ND	—	HP, Synch. Step-Down DC/DC Controller *NEW!*	8-SOIC	6.25	4.15	3.13
LTC3831EGN-ND	—	HP, Synch. Switching Regulator Controller *NEW!*	16-SSOP	6.00	3.99	3.00
LTC4050EMS-4.1-ND	—	4.1V Li-Ion Battery Charger Controller *NEW!*	10-MSOP	4.75	3.16	2.38
LTC4050EMS-4.2-ND	—	4.2V Li-Ion Battery Charger Controller *NEW!*	10-MSOP	4.75	3.16	2.38
LTC4211CMS8-ND	—	Hot Swap Controller *NEW!*	8-MSOP	4.25	2.83	2.25
LTC4211CS8-ND	—	Hot Swap Controller *NEW!*	8-SOIC	4.00	2.66	2.10
LTC4211CMS-ND	—	Hot Swap Controller *NEW!*	10-MSOP	5.25	3.49	2.75
LTC4211IMS8-ND	—	Hot Swap Controller *NEW!*	8-MSOP	4.88	3.24	2.55
LTC4230CGN-ND	—	Triple Hot Swap Controller *NEW!*	20-SSOP	7.38	4.90	3.95
LTC4251-1CS6-ND	—	Negative Voltage Hot Swap Controller *NEW!*	SOT-23-6	4.00	2.66	2.10
LTC4251CS6-ND	—	Negative Voltage Hot Swap Controller *NEW!*	SOT-23-6	4.00	2.66	2.10
LTC4252-1CMS-ND	—	Negative Voltage Hot Swap Controller *NEW!*	10-MSOP	4.88	3.24	2.60
LTC4252-1CMS8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-MSOP	4.13	2.74	2.20
LTC4252-1IMS8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-MSOP	4.75	3.16	2.55
LTC4252-2CMS-ND	—	Negative Voltage Hot Swap Controller *NEW!*	10-MSOP	4.88	3.24	2.60
LTC4252-2CMS8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-MSOP	4.13	2.74	2.20
LTC4252-2IMS8-ND	—	Negative Voltage Hot Swap Controller *NEW!*	8-MSOP	4.75	3.16	2.55
LTC4300-1CMS8-ND	—	Hot Swap 2-Wire Bus Buffer *NEW!*	8-MSOP	3.50	2.35	2.00
LTC4350CGN-ND	—	Hot Swap Load Share Controller *NEW!*	16-SSOP	8.75	5.83	4.65
LTC4400-1ES6-ND	—	RF Power Controller with 450kHz Loop BW and 45dB Dynamic Range *NEW!*	SOT-23-6	2.63	1.75	1.32
LTC4401-1ES6-ND	—	RF Power Controller with 250kHz Loop BW and 45dB Dynamic Range *NEW!*	SOT-23-6	2.63	1.75	1.32
LTC5505-1ES5-ND	—	RF Power Detector with Buffered Output *NEW!*	SOT-23-5	2.38	1.58	1.19
LTC5505-2ES5-ND	—	RF Power Detector with Buffered Output *NEW!*	SOT-23-5	2.38	1.58	1.19
LTC7541ABN-ND	9285B	12-Bit, CMOS Multiplying D/A Converter	18-Dip	11.25	7.50	6.25
LTC7541ABSW-ND	9285B	12-Bit, CMOS Multiplying D/A Converter	18-SOIC	11.25	7.50	6.25
LTC7541AJN-ND	9285B	12-Bit, CMOS Multiplying D/A Converter	18-Dip	6.63	4.42	3.65
LTC7541AKN-ND	9285B	12-Bit, CMOS Multiplying D/A Converter	18-Dip	9.00	6.00	4.95
LTC7543GKN-ND	9285B	12-Bit, Serial Multiplying DAC	16-Dip	13.13	8.75	7.25
LTC7543KN-ND	9285B	12-Bit, Serial Multiplying DAC	16-Dip	12.63	8.40	7.00
LTC7545ABG-ND	—	12-Bit, Parallel Multiplying DAC *NEW!*	20-SSOP	8.75	5.85	5.00
LTC7545ACG-ND	—	12-Bit, Parallel Multiplying DAC *NEW!*	20-SSOP	9.13	6.10	5.20
LTC7545AKG-ND	—	12-Bit, Parallel Multiplying DAC *NEW!*	20-SSOP	7.63	5.10	4.35
LTC7545AKSW-ND	—	12-Bit, Parallel Multiplying DAC	20-SOIC	7.13	4.75	4.10
LTC7545ALG-ND	—	12-Bit, Parallel Multiplying DAC *NEW!*	20-SSOP	8.00	5.35	4.60
LTC8043EN8-ND	9285B	12-Bit, Serial Multiplying DAC	8-Dip	9.13	6.10	5.00
LTC8043ES8-ND	9285B	12-Bit, Serial Multiplying DAC	8-SOIC	9.13	6.10	5.00
LTC8043FN8-ND	9285B	12-Bit, Serial Multiplying DAC	8-Dip	8.75	5.85	4.80
LTC8043FS8-ND	9285B	12-Bit, Serial Multiplying DAC	8-SOIC	8.75	5.85	4.80
LTC8143EN-ND	9285B	12-Bit, Serial Multiplying DAC	16-Dip	13.13	8.75	7.25
LTC8143ESW-ND	9285B	12-Bit, Serial Multiplying DAC	16-SOIC	13.13	8.75	7.25
LTK001ACN8-ND	9175B	Thermocouple Compen. IC & Amp Kit (.5°C Error)	8-Dip	18.88	12.60	10.85
LTK001CN8-ND	9175B	Thermocouple Compen. IC & Amp Kit (2°C Error)	8-Dip	9.88	6.60	5.75
LTKA00CN8-ND	9175B	Thermocouple Amplifier (“0” Polarity)	8-Dip	5.63	3.75	3.15
LTKA01CN8-ND	9175B	Thermocouple Amplifier (“1” Polarity)	8-Dip	5.63	3.75	3.15
LTZ1000ACH-ND	—	Ultra Precision Reference	8-MC	81.75	54.50	46.70
LTZ1000CH-ND	—	Ultra Precision Reference	8-MC	64.25	42.85	36.70
9177B-ND		1990 Linear Technology Applications Handbook, Volume I		19.95	—	—
9175B-ND		1990 Linear Technology Databook, Volume I		9.95	—	—
9176B-ND		1992 Linear Technology Databook, Volume II		9.95	—	—
9258B-ND		1993 Linear Technology Applications Handbook, Volume II		19.95	—	—
9210B-ND		1994 Linear Technology Databook, Volume III		9.95	—	—
9257B-ND		1995 Linear Technology Data Book, Volume IV		10.00	—	—
9285B-ND		1996 Linear Technology Databook, Volume V		10.00	—	—
9286B-ND		1997 Linear Technology Applications Handbook		20.00	—	—
9294B-ND		1997 Linear Technology Databook, Volume VI		12.50	—	—
LTDS-ND		Linear View CD ROM, Contains Data Sheets & Applications Info		3.00	—	—

Panasonic® VOLTAGE REGULATORS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AN78L04-ND	4V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L05-ND	5V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L06-ND	6V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L07-ND	7V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L08-ND	8V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L09-ND	9V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L10-ND	10V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L12-ND	12V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L15-ND	15V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L18-ND	18V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L20-ND	20V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN78L24-ND	24V, 100mA, Positive General Purpose Voltage Regulator	TO-92	.53	.40	.30
AN79L04-ND	4V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L05-ND	5V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L06-ND	6V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L07-ND	7V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L08-ND	8V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L09-ND	9V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L10-ND	10V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L12-ND	12V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L15-ND	15V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L18-ND	18V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L20-ND	20V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN79L24-ND	24V, 100mA, Negative General Purpose Voltage Regulator	TO-92	.52	.39	.30
AN78L04M-ND	4V, 100mA, Pos. General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L04ME1TR-ND	4V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L05M-ND	5V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L05ME1TR-ND	5V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L06M-ND	6V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L06ME1TR-ND	6V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L07M-ND	7V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L07ME1TR-ND	7V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L08M-ND	8V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L08ME1TR-ND	8V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L09M-ND	9V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L09ME1TR-ND	9V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L10M-ND	10V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L10ME1TR-ND	10V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L12M-ND	12V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L12ME1TR-ND	12V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		

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★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

Panasonic VOLTAGE REGULATORS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AN78L15M-ND	15V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L15ME1TR-ND	15V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN78L18M-ND	18V, 100mA, Pos. General Purpose Voltage Regulator	TO-243	.50	.38	.28
AN78L18ME1TR-ND	18V, 100mA, Pos. General Purpose Voltage Regulator	TO-243	165.00/1,000		
AN78L20M-ND	20V, 100mA, Pos. General Purpose Voltage Regulator	TO-243	.50	.38	.28
AN78L20ME1TR-ND	20V, 100mA, Pos. General Purpose Voltage Regulator	TO-243	165.00/1,000		
AN78L24M-ND	24V, 100mA, Positive General Purpose Voltage Regulator	TO-243	.53	.40	.30
AN78L24ME1TR-ND	24V, 100mA, Positive General Purpose Voltage Regulator	TO-243	177.00/1,000		
AN79L04M-ND	4V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	.48	.36	.27
AN79L04ME1TR-ND	4V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	160.00/1,000		
AN79L05M-ND	5V, 100mA, Negative General Purpose Voltage Regulator	TO-243	.52	.39	.30
AN79L05ME1TR-ND	5V, 100mA, Negative General Purpose Voltage Regulator	TO-243	172.00/1,000		
AN79L06M-ND	6V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	.48	.36	.27
AN79L06ME1TR-ND	6V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	160.00/1,000		
AN79L07M-ND	7V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	.48	.36	.27
AN79L07ME1TR-ND	7V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	160.00/1,000		
AN79L08M-ND	8V, 100mA, Negative General Purpose Voltage Regulator	TO-243	.52	.39	.30
AN79L08ME1TR-ND	8V, 100mA, Negative General Purpose Voltage Regulator	TO-243	172.00/1,000		
AN79L09M-ND	9V, 100mA, Negative General Purpose Voltage Regulator	TO-243	.52	.39	.30
AN79L09ME1TR-ND	9V, 100mA, Negative General Purpose Voltage Regulator	TO-243	172.00/1,000		
AN79L10M-ND	10V, 100mA, Negative General Purpose Voltage Regulator	TO-243	.52	.39	.30
AN79L10ME1TR-ND	10V, 100mA, Negative General Purpose Voltage Regulator	TO-243	172.00/1,000		
AN79L12M-ND	12V, 100mA, Negative General Purpose Voltage Regulator	TO-243	.52	.39	.30
AN79L12ME1TR-ND	12V, 100mA, Negative General Purpose Voltage Regulator	TO-243	172.00/1,000		
AN79L15M-ND	15V, 100mA, Negative General Purpose Voltage Regulator	TO-243	.52	.39	.30
AN79L15ME1TR-ND	15V, 100mA, Negative General Purpose Voltage Regulator	TO-243	172.00/1,000		
AN79L18M-ND	18V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	.48	.36	.27
AN79L18ME1TR-ND	18V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	160.00/1,000		
AN79L20M-ND	20V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	.48	.36	.27
AN79L20ME1TR-ND	20V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	160.00/1,000		
AN79L24M-ND	24V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	.48	.36	.27
AN79L24ME1TR-ND	24V, 100mA, Neg. General Purpose Voltage Regulator	TO-243	160.00/1,000		
AN78M05NSP-ND	5V, 0.5A, Positive Output Voltage Regulator	SP3SU	1.07	.89	.72
AN78M05NSPE1TR-ND	5V, 0.5A, Positive Output Voltage Regulator	SP3SU	1389.00/3,000		
AN78M08NSP-ND	8V, 0.5A, Positive Output Voltage Regulator	SP3SU	1.07	.89	.72
AN78M08NSPE1TR-ND	8V, 0.5A, Positive Output Voltage Regulator	SP3SU	1389.00/3,000		
AN77L03-ND	3V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L035-ND	3.5V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L04-ND	4V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L045-ND	4.5V, 100mA, Positive LDO Voltage Regulator	TO-92	1.37	1.14	.92
AN77L05-ND	5V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L06-ND	6V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L07-ND	7V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L08-ND	8V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L09-ND	9V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L10-ND	10V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77L12-ND	12V, 100mA, Positive LDO Voltage Regulator	TO-92	1.47	1.23	.98
AN77035SP-ND	3.5V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN77035SPE1TR-ND	3.5V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7705SP-ND	5V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7705SPE1TR-ND	5V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7706SP-ND	6V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7706SPE1TR-ND	6V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7707SP-ND	7V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7707SPE1TR-ND	7V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7708SP-ND	8V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7708SPE1TR-ND	8V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7709SP-ND	9V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7709SPE1TR-ND	9V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7710SP-ND	10V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7710SPE1TR-ND	10V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7712SP-ND	12V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7712SPE1TR-ND	12V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN7715SP-ND	15V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	2.30	1.85	1.44
AN7715SPE1TR-ND	15V, 1.2A, Positive Low Power Loss Voltage Regulator	SP3SU	3870.00/3,000		
AN77L03M-ND	3V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L03ME1TR-ND	3V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L035M-ND	3.5V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L035ME1TR-ND	3.5V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L04M-ND	4V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L04ME1TR-ND	4V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L045M-ND	4.5V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L045ME1TR-ND	4.5V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L05M-ND	5V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L05ME1TR-ND	5V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L06M-ND	6V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L06ME1TR-ND	6V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L07M-ND	7V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L07ME1TR-ND	7V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L08M-ND	8V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L08ME1TR-ND	8V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L09M-ND	9V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L09ME1TR-ND	9V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L10M-ND	10V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L10ME1TR-ND	10V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN77L12M-ND	12V, 100mA, Positive LDO Voltage Regulator	TO-243	1.47	1.23	.98
AN77L12ME1TR-ND	12V, 100mA, Positive LDO Voltage Regulator	TO-243	650.00/1,000		
AN8002-ND	2V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8025-ND	2.5V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8003-ND	3V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8035-ND	3.5V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8004-ND	4V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8045-ND	4.5V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8005-ND	5V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8006-ND	6V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8007-ND	7V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8008-ND	8V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8085-ND	8.5V, 50mA, Positive LDO Voltage Regulator	TO-92	.90	.75	.60
AN8009-ND	9V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8010-ND	10V, 50mA, Positive LDO Voltage Regulator	TO-92	.96	.81	.65
AN8002M-ND	2V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8002ME1TR-ND	2V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8025M-ND	2.5V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8025ME1TR-ND	2.5V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8003M-ND	3V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8003ME1TR-ND	3V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8004M-ND	4V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8004ME1TR-ND	4V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8045M-ND	4.5V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8045ME1TR-ND	4.5V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8005M-ND	5V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8005ME1TR-ND	5V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8006M-ND	6V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8006ME1TR-ND	6V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8007M-ND	7V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8007ME1TR-ND	7V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8008M-ND	8V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8008ME1TR-ND	8V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8085M-ND	8.5V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8085ME1TR-ND	8.5V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8009M-ND	9V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8009ME1TR-ND	9V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN8010M-ND	10V, 50mA, Positive LDO Voltage Regulator	TO-243	1.06	.88	.71
AN8010ME1TR-ND	10V, 50mA, Positive LDO Voltage Regulator	TO-243	468.00/1,000		
AN80L18RMS-ND	1.8V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L18RMSTXTR-ND	1.8V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L19RMS-ND	1.9V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L19RMSTXTR-ND	1.9V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L20RMS-ND	2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L20RMSTXTR-ND	2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L21RMS-ND	2.1V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L21RMSTXTR-ND	2.1V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L22RMS-ND	2.2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L22RMSTXTR-ND	2.2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L25RMS-ND	2.5V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L25RMSTXTR-ND	2.5V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L28RMS-ND	2.8V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L28RMSTXTR-ND	2.8V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L29RMS-ND	2.9V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L29RMSTXTR-ND	2.9V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L30RMS-ND	3V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L30RMSTXTR-ND	3V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L31RMS-ND	3.1V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L31RMSTXTR-ND	3.1V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L32RMS-ND	3.2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L32RMSTXTR-ND	3.2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L33RMS-ND	3.3V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L33RMSTXTR-ND	3.3V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L34RMS-ND	3.4V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L34RMSTXTR-ND	3.4V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L35RMS-ND	3.5V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L35RMSTXTR-ND	3.5V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L36RMS-ND	3.6V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L36RMSTXTR-ND	3.6V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L48RMS-ND	4.8V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L48RMSTXTR-ND	4.8V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L49RMS-ND	4.9V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L49RMSTXTR-ND	4.9V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L50RMS-ND	5V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L50RMSTXTR-ND	5V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L51RMS-ND	5.1V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L51RMSTXTR-ND	5.1V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80L52RMS-ND	5.2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1.47	1.23	.98
AN80L52RMSTXTR-ND	5.2V, 150mA, with Reset, Positive LDO Voltage Regulator	MINI5D	1908.00/3,000		
AN80M27RSP-ND	2.7V, 500mA, with On-Off, Low Power Loss, Positive Voltage Regulator	SP5SU	2.33	1.87	1.40
AN80M27RSPTXTR-ND	2.7V, 500mA, with On-Off, Low Power Loss, Positive Voltage Regulator	SP5SU	3579.00/3,000		
AN1431M-ND	2.5-36V, Positive Variable Output Shunt Regulator	TO-243	.87	.73	.58
AN1431ME1TR-ND	2.5-36V, Positive Variable Output Shunt Regulator	TO-243	386.00/1,000		
AN1431T-ND	2.5-36V, Positive Variable Output Shunt Regulator	TO-92	.87	.73	.58
AN1433SSMTXLCT-ND	7-14V, Positive, Variable Output Shunt Regulator	SSMINI5D	1.07	.90	.72
AN1433SSMTXLTR-ND	7-14V, Positive, Variable Output Shunt Regulator	SSMINI5D	1395.00/3,000		

Panasonic DC/DC CONVERTER ICs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AN8011SE1CT-ND	2 Channel DC/DC Converter	16-SOIC	1.70	1.36	1.02
AN8011SE1TR-ND	2 Channel DC/DC Converter	16-SOIC	1764.00/2,000		
AN8013SHE1CT-ND	1 Channel DC/DC Converter	SSONF-10D	1.33	1.07	.81
AN8013SHE1TR-ND	1 Channel DC/DC Converter	SSONF-10D	1388.00/2,000		
AN8014SE1CT-ND	1 Channel DC/DC Converter	16-SOIC	1.56	1.25	.94
AN8014SE1TR-ND	1 Channel DC/DC Converter	16-SOIC	1620.00/2,000		
AN8015SHE1CT-ND	1 Channel DC/DC Converter	SSONF-10D	1.33	1.07	.81
AN8015SHE1TR-ND	1 Channel DC/DC Converter	SSONF-10D	1388.00/2,000		
AN8016NSHE1CT-ND	1 Channel DC/DC Converter	SSONF-10D	1.33	1.07	.81
AN8016NSHE1TR-ND	1 Channel DC/DC Converter	SSONF-10D	1388.00/2,000		
AN8017SAE1CT-ND	2 Channel DC/DC Converter	SSONF-16D	1.87	1.50	1.12
AN8017SAE1TR-ND	2 Channel DC/DC Converter	SSONF-16D	1940.00/2,000		
AN8018SAE1CT-ND	2 Channel DC/DC Converter	SSONF-16D	1.87	1.50	1.12
AN8018SAE1TR-ND	2 Channel DC/DC Converter	SSONF-16D	1940.00/2,000		
AN8049FHNEBCT-ND	3 Channel DC/DC Converter	QFN-24	3.01	2.41	1.88
AN8049FHNEBTR-ND	3 Channel DC/DC Converter	QFN-24	3408.00/2,000		
AN8049SHE1CT-ND	3 Channel DC/DC Converter	SSOP-24D	2.30	1.85	1.44
AN8049SHE1TR-ND	3 Channel DC/DC Converter	SSOP-24D	1306.00/1,000		

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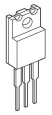
Panasonic® AUDIO ICs

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AN2906FJMEBVCT-ND	Audio I/O Amplifier	QUAD-44	3.69	2.95	2.30
AN2906FJMEBVTR-ND	Audio I/O Amplifier	QUAD-44	4178.00/2,000		
AN5272-ND	4W, 2 Channel Audio Amp with Fin	SIL-12	2.24	1.80	1.35
AN5273-ND	4W, 2 Channel Audio Amp with Fin	SIL-12	2.24	1.80	1.35
AN5274-ND	4W, 2 Channel Audio Amp with Fin	SIL-12	2.40	1.92	1.44
AN5275-ND	15W, Dual Audio Amp with Fin	SIL-12	2.88	2.31	1.80
AN5276-ND	5W, 2 Channel Audio Amp with Fin	SIL-12	2.24	1.80	1.35
AN5277-ND	10W, 2 Channel Audio Amp with Fin	SIL-12	2.30	1.85	1.44
AN5278-ND	4.8W, 1 Channel Audio Amp with Fin	SIL-9	1.60	1.28	.96
AN5279-ND	5W, 1 Channel Audio Amp with Fin	SIL-9	1.60	1.28	.96
AN7125-ND	10W, 2 Channel Audio Amp with Fin	SIL-12	3.46	2.77	2.16
AN7510-ND	1W, 2 Channel Audio Amp with Fin	16-Dip	1.60	1.28	.96
AN7511-ND	1W, 1 Channel Audio Amp with Fin	8-Dip	1.15	.96	.77
AN7512-ND	1W, 2 Channel Audio Amp with Fin	16-Dip	1.92	1.54	1.16
AN7513-ND	1W, 1 Channel Audio Amp	8-Dip	1.28	1.03	.77
AN7522N-ND	5W, 2 Channel Audio Amp with Fin	SIL-12	2.30	1.85	1.44
AN7523N-ND	4W, 1 Channel Audio Amp with Fin	SIL-9	1.60	1.28	.96
AN7586-ND	10W, 1 Channel Audio Amp with Fin	SIL-7	1.92	1.54	1.16
AN17000ABFCT-ND	Audio Amplifier for Notebook	56-SOIC	3.46	2.77	2.16
AN17000ABFTR-ND	Audio Amplifier for Notebook	56-SOIC	5805.00/3,000		
AN17020AVBCT-ND	Audio Amplifier for Headphone	QUAD-16	1.98	1.59	1.20
AN17020AVBTR-ND	Audio Amplifier for Headphone	QUAD-16-SOIC	2064.00/2,000		
AN17880AE1CT-ND	Audio Amplifier for Headphone	16	2.24	1.80	1.35
AN17880AE1TR-ND	Audio Amplifier for Headphone	16-SOIC	2330.00/2,000		

JRC / NJR Corporation VOLTAGE REGULATORS

TO-220F Full Molded Three Terminal Voltage Regulator



Full Molded Package, TO-220F was developed for high and medium power 3 pin linear voltage regulators. It is interchangeable with conventional TO-220, with the difference of radiation fin encapsulated completely by resin, offering the following benefits: • Ease of electrical isolation from nearby devices • Allowing higher density PCB layout • Increased humidity resistance compared to TO-220. • Enhanced manufacturability due to built-in electrical insulation from heat sink. *TO-220F has tinned leads for improved solderability.*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
NJM78L02A-ND	2.6V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L05A-ND	5V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L06A-ND	6V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L08A-ND	8V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L09A-ND	9V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L12A-ND	12V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L15A-ND	15V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L18A-ND	18V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L20A-ND	20V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L24A-ND	24V, 100mA, Pos. Voltage Regulator	TO-92	.36	.30	.24
NJM78L02UA-ND	2.6V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L05UA-ND	5V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L06UA-ND	6V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L08UA-ND	8V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L09UA-ND	9V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L12UA-ND	12V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L15UA-ND	15V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L18UA-ND	18V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L20UA-ND	20V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78L24UA-ND	24V, 100mA, Pos. Voltage Regulator	SOT-89	.39	.33	.26
NJM78M05FA-ND	5V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M06FA-ND	6V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M08FA-ND	8V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M09FA-ND	9V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M12FA-ND	12V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M15FA-ND	15V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M18FA-ND	18V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M20FA-ND	20V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM78M24FA-ND	24V, 500mA, Pos. Voltage Regulator with Isolated Tab	TO-220F	.51	.43	.34
NJM7805FA-ND	5V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7806FA-ND	6V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7808FA-ND	8V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7809FA-ND	9V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7812FA-ND	12V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7815FA-ND	15V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7818FA-ND	18V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7820FA-ND	20V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM7824FA-ND	24V, 1 Amp Pos. Voltage Regulator with Isolated Tab	TO-220F	.57	.48	.38
NJM79L05A-ND	5V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L06A-ND	6V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L08A-ND	8V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L09A-ND	9V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L12A-ND	12V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L15A-ND	15V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L18A-ND	18V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L24A-ND	24V, 100mA, Neg. Voltage Regulator	TO-92	.39	.33	.26
NJM79L05UA-ND	5V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79L06UA-ND	6V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79L08UA-ND	8V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79L09UA-ND	9V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79L12UA-ND	12V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79L15UA-ND	15V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79L18UA-ND	18V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79L24UA-ND	24V, 100mA, Neg. Voltage Regulator	SOT-89	.66	.55	.44
NJM79M05FA-ND	5V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM79M06FA-ND	6V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM79M08FA-ND	8V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM79M09FA-ND	9V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM79M12FA-ND	12V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM79M15FA-ND	15V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM79M18FA-ND	18V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM79M24FA-ND	24V, 500mA, Neg. Voltage Regulator with Isolated Tab	TO-220F	.66	.55	.44
NJM7905FA-ND	5V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7906FA-ND	6V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7908FA-ND	8V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7909FA-ND	9V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7912FA-ND	12V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.69	.58	.46
NJM7915FA-ND	15V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7918FA-ND	18V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM7924FA-ND	24V, 1.5A, Neg. Voltage Regulator with Isolated Tab	TO-220F	.87	.73	.58
NJM317F-ND	Adjustable 1.5A, Voltage Regulator with Isolated Tab	TO-220F	.90	.75	.60
NJM431D-ND	Adjustable Precision Shunt Regulator	8-Dip	.48	.40	.32
NJM431E-ND	Adjustable Precision Shunt Regulator	8-SOIC	.42	.35	.28
NJM431L-ND	Adjustable Precision Shunt Regulator	TO-92	.39	.33	.26
NJM2352D-ND	Low Power Switching Regulator with Low Battery Detect.	8-Dip	.63	.53	.42
NJM2355D-ND	Dual Output High Voltage Switching Regulator	18-Dip	2.43	2.03	1.62
NJM2360D-ND	DC/DC Converter Control IC	8-Dip	.78	.65	.52

JRC / NJR Corporation SPECIALIZED ICs

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
NJM2211D-ND	FSK Demodulator/Tone Decoder	14-Dip	.90	.75	.60
NJM2211M-ND	FSK Demodulator/Tone Decoder	14-SOIC	1.56	1.30	1.04
NJM3517D2-ND	Stepper Motor Controller/Driver *NEW!*	16-Dip	5.19	4.33	3.46
NJM4151D-ND	Voltage-to-Frequency/Frequency-to-Voltage Converter	8-Dip	2.22	1.85	1.48
NJU3712D-ND	8-Bit, 25mA, Serial to Parallel Output Expander	16-Dip	1.74	1.45	1.16
NJU3712M-ND	8-Bit, 25mA, Serial to Parallel Output Expander	16-SOIC	1.62	1.35	1.08
NJU3716L-ND	16-Bit, 25mA, Serial to Parallel Output Expander	24-SDip	2.22	1.85	1.48
NJU3716M-ND	16-Bit, 25mA, Serial to Parallel Output Expander	24-SOIC	1.98	1.65	1.32
NJU3718L-ND	20-Bit, 25mA, Serial to Parallel Output Expander	28-SDip	2.58	2.15	1.72
NJU3718G-ND	20-Bit, 25mA, Serial to Parallel Output Expander	28-SOIC	2.16	1.80	1.44
NJM3770AD3-ND	Stepper Motor Driver *NEW!*	16-Dip (Batwing)	5.58	4.65	3.72
NJM3771D2-ND	Dual Stepper Motor Driver *NEW!*	22-Dip	13.44	11.20	8.96
NJM3771FM2-ND	Dual Stepper Motor Driver *NEW!*	28-PLCC	10.65	8.88	7.10
NJU6355ED-ND	Serial I/O Real Time Clock This serial I/O Real Time Clock is suitable for a 4-Bit microprocessor. It contains a counter, shift register, voltage regulator, voltage detector and interface controller. It requires a 32.768KHz crystal and 4 pins of microprocessor which can receive the data at any time when the microprocessor requires. The operating voltage is as wide as 2.4V, to 5.0V.	8-Dip	1.65	1.38	1.10
NJU7660D-ND	DC/DC Voltage Converter	8-Dip	.69	.58	.46
NJU7662D-ND	DC/DC Voltage Converter	8-Dip	1.41	1.18	.94
NJU9201BD-ND	3-1/2 Digit DVM For LCD Displays	40-Dip	4.86	4.05	3.24
NJU9201BM-ND	3-1/2 Digit DVM For LCD Displays	42-SOIC	4.89	4.08	3.26
NJU9202BD-ND	3-1/2 Digit DVM for LED Displays	40-Dip	4.86	4.05	3.24
NJU9202BM-ND	3-1/2 Digit DVM for LED Displays	42-SOIC	4.41	3.68	2.94
NJU9203BD-ND	3-1/2 Digit DVM for LCD Displays with Display Hold	40-Dip	5.01	4.18	3.34
NJU9203BM-ND	3-1/2 Digit DVM for LCD Displays with Display Hold	42-SOIC	5.28	4.40	3.52
NJU9204BD-ND	3-1/2 Digit DVM for LED Displays with Display Hold	40-Dip	4.86	4.05	3.24
NJU9204BM-ND	3-1/2 Digit DVM for LED Displays with Display Hold	42-SOIC	6.03	5.03	4.02
NJU39610D2-ND	Microstepping Motor Controller with Dual DAC *NEW!*	22-Dip	12.33	10.28	8.22
NJU39610FM2-ND	Microstepping Motor Controller with Dual DAC *NEW!*	28-PLCC	13.62	11.35	9.08

SHARP MICROELECTRONICS OF THE AMERICAS *NEW!* LDO REGULATORS

Sharp Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
PQ1K213M2ZP	425-1642-1-ND	2.1V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K213M2ZP	425-1642-2-ND	2.1V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K253M2ZP	425-1643-1-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K253M2ZP	425-1643-2-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K303M2ZP	425-1644-1-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K303M2ZP	425-1644-2-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K333M2ZP	425-1645-1-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K333M2ZP	425-1645-2-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K343M2ZP	425-1646-1-ND	3.4V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K343M2ZP	425-1646-2-ND	3.4V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K353M2ZP	425-1647-1-ND	3.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K353M2ZP	425-1647-2-ND	3.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K393M2ZP	425-1648-1-ND	3.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K393M2ZP	425-1648-2-ND	3.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K423M2ZP	425-1649-1-ND	4.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K423M2ZP	425-1649-2-ND	4.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1K503M2ZP	425-1650-1-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	.72	.52	.32
PQ1K503M2ZP	425-1650-2-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23L	1120.00/5,000		
PQ1L253M2SP	425-1651-1-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	.68	.49	.30
PQ1L253M2SP	425-1651-2-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	210.00/1,000		
PQ1L303M2SP	425-1652-1-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	.68	.49	.30
PQ1L303M2SP	425-1652-2-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	210.00/1,000		
PQ1L333M2SP	425-1653-1-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	.68	.49	.30
PQ1L333M2SP	425-1653-2-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	210.00/1,000		
PQ1L503M2SP	425-1654-1-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	.68	.49	.30
PQ1L503M2SP	425-1654-2-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-89	210.00/1,000		
PQ1R18	425-1655-1-ND	1.8V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.90	.65	.40
PQ1R18	425-1655-2-ND	1.8V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1400.00/5,000		
PQ1R23	425-1656-1-ND	2.3V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.90	.65	.40
PQ1R23	425-1656-2-ND	2.3V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1400.00/5,000		
PQ1R25	425-1657-1-ND	2.5V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R25	425-1657-2-ND	2.5V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		
PQ1R27	425-1658-1-ND	2.7V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R27	425-1658-2-ND	2.7V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		
PQ1R28	425-1659-1-ND	2.8V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R28	425-1659-2-ND	2.8V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		
PQ1R30	425-1660-1-ND	3.0V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R30	425-1660-2-ND	3.0V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		
PQ1R33	425-1661-1-ND	3.3V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R33	425-1661-2-ND	3.3V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		

* Tape in Box † Lead Form

(Continued)

SHARP MICROELECTRONICS OF THE AMERICAS

NEW! LDO REGULATORS *(Continued)*

Sharp Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★		
				1	25	100
PQ1R38	425-1662-1-ND	3.8V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R38	425-1662-2-ND	3.8V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		
PQ1R42	425-1663-1-ND	4.2V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R42	425-1663-2-ND	4.2V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		
PQ1R47	425-1664-1-ND	4.7V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.98	.77	.51
PQ1R47	425-1664-2-ND	4.7V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1820.00/5,000		
PQ1R50	425-1665-1-ND	5.0V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	.95	.69	.42
PQ1R50	425-1665-2-ND	5.0V, 240mA, LDO Reg. with ON/OFF Control	SOT-23L	1470.00/5,000		
PQ1T181M2ZP	425-1666-1-ND	1.8V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T181M2ZP	425-1666-2-ND	1.8V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T201M2ZP	425-1667-1-ND	2.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T201M2ZP	425-1667-2-ND	2.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T221M2ZP	425-1668-1-ND	2.2V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T221M2ZP	425-1668-2-ND	2.2V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T231M2ZP	425-1669-1-ND	2.3V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T231M2ZP	425-1669-2-ND	2.3V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T251M2ZP	425-1670-1-ND	2.5V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T251M2ZP	425-1670-2-ND	2.5V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T271M2ZP	425-1671-1-ND	2.7V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T271M2ZP	425-1671-2-ND	2.7V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T281M2ZP	425-1672-1-ND	2.8V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T281M2ZP	425-1672-2-ND	2.8V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T291M2ZP	425-1673-1-ND	2.9V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T291M2ZP	425-1673-2-ND	2.9V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T301M2ZP	425-1674-1-ND	3.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T301M2ZP	425-1674-2-ND	3.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T311M2ZP	425-1675-1-ND	3.1V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T311M2ZP	425-1675-2-ND	3.1V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T321M2ZP	425-1676-1-ND	3.2V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T321M2ZP	425-1676-2-ND	3.2V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T331M2ZP	425-1677-1-ND	3.3V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T331M2ZP	425-1677-2-ND	3.3V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T341M2ZP	425-1678-1-ND	3.4V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T341M2ZP	425-1678-2-ND	3.4V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T351M2ZP	425-1679-1-ND	3.5V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T351M2ZP	425-1679-2-ND	3.5V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T361M2ZP	425-1680-1-ND	3.6V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T361M2ZP	425-1680-2-ND	3.6V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T381M2ZP	425-1681-1-ND	3.8V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T381M2ZP	425-1681-2-ND	3.8V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T401M2ZP	425-1682-1-ND	4.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T401M2ZP	425-1682-2-ND	4.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T441M2ZP	425-1683-1-ND	4.4V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T441M2ZP	425-1683-2-ND	4.4V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T471M2ZP	425-1684-1-ND	4.7V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T471M2ZP	425-1684-2-ND	4.7V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T491M2ZP	425-1685-1-ND	4.9V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T491M2ZP	425-1685-2-ND	4.9V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T501M2ZP	425-1686-1-ND	5.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T501M2ZP	425-1686-2-ND	5.0V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1T521M2ZP	425-1687-1-ND	5.2V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	.91	.72	.47
PQ1T521M2ZP	425-1687-2-ND	5.2V, 400mA, LDO Reg. with ON/OFF Control	SOT-23-5	1014.00/3,000		
PQ1U181M2ZP	425-1688-1-ND	1.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U181M2ZP	425-1688-2-ND	1.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U201M2ZP	425-1689-1-ND	2.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U201M2ZP	425-1689-2-ND	2.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U221M2ZP	425-1690-1-ND	2.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U221M2ZP	425-1690-2-ND	2.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U231M2ZP	425-1691-1-ND	2.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U231M2ZP	425-1691-2-ND	2.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U251M2ZP	425-1692-1-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U251M2ZP	425-1692-2-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U271M2ZP	425-1693-1-ND	2.7V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U271M2ZP	425-1693-2-ND	2.7V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U281M2ZP	425-1694-1-ND	2.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U281M2ZP	425-1694-2-ND	2.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U291M2ZP	425-1695-1-ND	2.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U291M2ZP	425-1695-2-ND	2.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U301M2ZP	425-1696-1-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U301M2ZP	425-1696-2-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U311M2ZP	425-1697-1-ND	3.1V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U311M2ZP	425-1697-2-ND	3.1V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U321M2ZP	425-1698-1-ND	3.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U321M2ZP	425-1698-2-ND	3.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U331M2ZP	425-1699-1-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U331M2ZP	425-1699-2-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U341M2ZP	425-1700-1-ND	3.4V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U341M2ZP	425-1700-2-ND	3.4V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U351M2ZP	425-1701-1-ND	3.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U351M2ZP	425-1701-2-ND	3.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U361M2ZP	425-1702-1-ND	3.6V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U361M2ZP	425-1702-2-ND	3.6V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U381M2ZP	425-1703-1-ND	3.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U381M2ZP	425-1703-2-ND	3.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U401M2ZP	425-1704-1-ND	4.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U401M2ZP	425-1704-2-ND	4.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U441M2ZP	425-1705-1-ND	4.4V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U441M2ZP	425-1705-2-ND	4.4V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U471M2ZP	425-1706-1-ND	4.7V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U471M2ZP	425-1706-2-ND	4.7V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U491M2ZP	425-1707-1-ND	4.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U491M2ZP	425-1707-2-ND	4.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U501M2ZP	425-1708-1-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U501M2ZP	425-1708-2-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1U521M2ZP	425-1709-1-ND	5.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.81	.59	.36
PQ1U521M2ZP	425-1709-2-ND	5.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	756.00/3,000		
PQ1X251M2ZP	425-1710-1-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X251M2ZP	425-1710-2-ND	2.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X281M2ZP	425-1711-1-ND	2.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X281M2ZP	425-1711-2-ND	2.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X291M2ZP	425-1712-1-ND	2.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X291M2ZP	425-1712-2-ND	2.9V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X301M2ZP	425-1713-1-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X301M2ZP	425-1713-2-ND	3.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X331M2ZP	425-1714-1-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X331M2ZP	425-1714-2-ND	3.3V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X361M2ZP	425-1715-1-ND	3.6V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X361M2ZP	425-1715-2-ND	3.6V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X381M2ZP	425-1716-1-ND	3.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X381M2ZP	425-1716-2-ND	3.8V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X401M2ZP	425-1717-1-ND	4.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X401M2ZP	425-1717-2-ND	4.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X421M2ZP	425-1718-1-ND	4.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X421M2ZP	425-1718-2-ND	4.2V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X451M2ZP	425-1719-1-ND	4.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X451M2ZP	425-1719-2-ND	4.5V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ1X501M2ZP	425-1720-1-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	.68	.49	.30
PQ1X501M2ZP	425-1720-2-ND	5.0V, 300mA, LDO Reg. with ON/OFF Control	SOT-23-5	630.00/3,000		
PQ3DZ13	425-1728-5-ND	3.3V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ3DZ13U	425-1728-2-ND	3.3V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1599.00/3,000		
PQ3DZ53	425-1729-5-ND	3.3V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ3DZ53U	425-1729-2-ND	3.3V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1599.00/3,000		
PQ3RD13	425-1732-5-ND	3.3V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.40	1.10	.80
PQ3RD13B	425-1733-5-ND	3.3V, 1.0A, LDO Reg. with ON/OFF Control	TO-220†	1.51	1.19	.86
PQ3RD23	425-1734-5-ND	3.3V, 2.0A, LDO Reg. with ON/OFF Control	TO-220	1.71	1.43	1.00
PQ3RD083	425-1731-5-ND	3.3V, 0.8A, LDO Reg. with ON/OFF Control	TO-220	1.40	1.10	.80
PQ3RF33	425-1735-5-ND	3.3V, 3.5A, LDO Reg. with ON/OFF Control	TO-220	2.83	1.88	1.53
PQ3RF43	425-1736-5-ND	3.3V, 4.0A, LDO Reg.	TO-220	3.30	2.20	1.79
PQ3TR5M3AZZ	425-1737-5-ND	3.3V, 0.5A, LDO Reg. with Reset @ 4.2V	SC-63	1.33	1.05	.76
PQ3TR5M3BZZ	425-1738-5-ND	3.3V, 0.5A, LDO Reg. with Reset @ 4.3V	SC-63	1.33	1.05	.76
PQ3TR5M3CZZ	425-1739-5-ND	3.3V, 0.5A, LDO Reg. with Reset @ 4.4V	SC-63	1.33	1.05	.76
PQ3TR5M3DZZ	425-1740-5-ND	3.3V, 0.5A, LDO Reg. with Reset @ 4.5V	SC-63	1.33	1.05	.76
PQ3TR5M4AZZ	425-1741-5-ND	3.3V, 0.5A, LDO Reg. with Reset	SC-63	1.33	1.05	.76
PQ5EV3	425-1742-5-ND	Adj., 3.5A, LDO Reg. with ON/OFF Control	TO-220	2.85	2.38	1.67
PQ5EV5	425-1743-5-ND	Adj., 5.0A, LDO Reg. with ON/OFF Control	TO-220	2.55	1.70	1.38
PQ5EV7	425-1744-5-ND	Adj., 7.5A, LDO Reg. with ON/OFF Control	TO-220	2.85	1.90	1.54
PQ5RS1A	425-1745-5-ND	5V, 0.15A, LDO Reg. with Reset @ 4.7	TO-220	1.30	1.02	.74
PQ5RS1B	425-1746-5-ND	5V, 0.15A, LDO Reg. with Reset @ 4.5	TO-220	1.33	1.05	.76
PQ5RS1C	425-1747-5-ND	5V, 0.15A, LDO Reg. with Reset @ 4.2	TO-220	1.30	1.02	.74
PQ5RS1D	425-1748-5-ND	5V, 0.15A, LDO Reg. with Reset @ 3.9	TO-220	1.30	1.02	.74
PQ5RS1E	425-1749-5-ND	5V, 0.15A, LDO Reg. with Reset @ 3.6	TO-220	1.33	1.05	.76
PQ5RS1F	425-1750-5-ND	5V, 0.15A, LDO Reg. with Reset @ 3.3	TO-220	1.33	1.05	.76
PQ5RS1G	425-1751-5-ND	5V, 0.15A, LDO Reg. with Reset @ 3.1	TO-220	1.33	1.05	.76
PQ6RD083	425-1752-5-ND	6.3V, 0.8A, LDO Reg. with ON/OFF Control	TO-220	1.40	1.10	.80
PQ6RD83B	425-1753-5-ND	6.3V, 0.8A, LDO Reg. with ON/OFF Control	TO-220†	1.44	1.13	.82
PQ7DV5	425-1756-5-ND	Adj., 5A, LDO Reg. with ON/OFF Control	TO-3P	5.10	3.39	2.76
PQ7DV10	425-1754-5-ND	Adj., 10A, LDO Reg. with ON/OFF Control	TO-3P	7.75	5.15	4.19
PQ7DV10B	425-1755-5-ND	Adj., 10A, LDO Reg. with ON/OFF Control	TO-3P†	7.63	5.07	4.12
PQ7RV4	425-1757-5-ND	Adj., 4.6A, LDO Reg.	TO-220	3.40	2.26	1.84
PQ7VZ5U	425-1758-1-ND	Adj., .5A, LDO Reg. with ON/OFF Control	SC-63	2.03	1.60	1.05
PQ7VZ5U	425-1758-2-ND	Adj., .5A, LDO Reg. with ON/OFF Control	SC-63	2262.00/3,000		
PQ05DZ11	425-1589-5-ND	5.0V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ05DZ51	425-1590-5-ND	5.0V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ05RA1	425-1591-5-ND	5.0V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.77	1.48	1.04
PQ05RA11	425-1592-5-ND	5.0V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.95	1.63	1.14
PQ05RD08	425-1593-5-ND	5.0V, 0.8A, LDO Reg. with ON/OFF Control	TO-220	1.40	1.10	.80
PQ05RD11	425-1594-5-ND	5.0V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.54	1.21	.88
PQ05RD1B	425-1595-5-ND	5.0V, 1.0A, LDO Reg. with ON/OFF Control	TO-220†	1.44	1.13	.82
PQ05RD21	425-1596-5-ND	5.0V, 2.0A, LDO Reg. with ON/OFF Control	TO-220	1.71	1.43	1.00
PQ05RR1	425-1597-5-ND	5.0V, 1.0A, LDO Reg. with Reset, 5%	TO-220	1.89	1.58	1.11
PQ05RR11	425-1598-5-ND	5.0V, 1.0A, LDO Reg. with Reset, 2.5%	TO-220	2.10	1.75	1.23
PQ05RR12	425-1599-5-ND	5.0V, 1.0A, LDO Reg. with Reset, 5%	TO-220	2.04	1.70	1.19
PQ05RR13	425-1600-5-ND	5.0V, 1.0A, LDO Reg. with Reset, 2.5%	TO-220	2.13	1.78	1.25
PQ05VY3H3ZZ	425-1602-5-ND	5.0V, 3.5A, LDO Reg. with ON/OFF Control	TO-263	2.88	2.40	1.68
PQ05VY053ZZ	425-1601-5-ND	5.0V, 5.0A, LDO Reg. with ON/OFF Control	TO-263	2.55	1.70	1.38
PQ07RX11	425-1609-5-ND	Adj., 1A, LDO Reg. with ON/OFF Control	TO-220	1.53	1.28	.90
PQ07VR5MAZZ	425-1610-5-ND	Adj., 0.5A, LDO Reg. with Reset @ 4.2V	SC-63	1.26	.99	.72
PQ07VR5MBZZ	425-1611-5-ND	Adj., 0.5A, LDO Reg. with Reset @ 4.3V	SC-63	1.26	.99	.72
PQ07VR5MCZZ	425-1612-5-ND	Adj., 0.5A, LDO Reg. with Reset @ 4.4V	SC-63	1.26	.99	.72
PQ07VR5MDZZ	425-1613-5-ND	Adj., 0.5A, LDO Reg. with Reset @ 4.5V	SC-63	1.26	.99	.72
PQ07VZ5M2ZZ	425-1615-5-ND	Adj., 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.32	.96
PQ07VZ012ZZ	425-1614-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.72	1.35	.98
PQ09DZ11	425-1616-5-ND	9V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ09DZ1U	425-1616-2-ND	9V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1599.00/3,000		
PQ09DZ51	425-1617-5-ND	9V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ09DZ51	425-1617-2-ND	9V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1482.00/3,000		
PQ09RA1	425-1618-5-ND	9V, 1.0A, LDO Reg. with ON/OFF Control, 5%	TO-220	1.77	1.48	1.04
PQ09RA11	425-1619-5-ND	9V, 1.0A, LDO Reg. with ON/OFF Control, 2.5%	TO-220	1.95	1.63	1.14
PQ09RD08	425-1620-5-ND	9V, 0.8A, LDO Reg. with ON/OFF Control	TO-220	1.40	1.10	.80
PQ09RD11	425-1621-5-ND	9V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.58	1.24	.90
PQ09RD1B	425-1622-5-ND	9V, 1.0A, LDO Reg. with ON/OFF Control	TO-220†	1.47	1.16	.84
PQ09RD21	425-1623-5-ND	9V, 2.0A, LDO Reg. with ON/OFF Control	TO-220	1.71	1.43	1.00
PQ12DZ11	425-1624-5-ND	12V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ12DZ11	425-1624-2-ND	12V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1638.00/3,000		
PQ12DZ51	425-1625-5-ND	12V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ12DZ51	425-1625-2-ND	12V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1443.00/3,000		
PQ12RA1	425-1626-5-ND	12V, 1.0A, LDO Reg. with ON/OFF Control, 5%	TO-220	1.77	1.48	1.04
PQ12RA11	425-1627-5-ND	12V, 1.0A, LDO Reg. with ON/OFF Control, 2.5%	TO-220	1.95	1.63	1.14
PQ12RD8S	425-1632-5-ND	12V, 0.8A, LDO Reg. with ON/OFF Control	TO-220†	1.12	.88	.64
PQ12RD08	425-1628-5-ND	12V, 0.8A, LDO Reg. with ON/OFF Control	TO-220	1.40	1.10	.80

* Tape in Box † Lead Form

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

SHARP MICROELECTRONICS OF THE AMERICAS — *NEW!* LDO REGULATORS *(Continued)*

Sharp Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PQ12RD11	425-1629-5-ND	12V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.54	1.21	.88
PQ12RD1B	425-1630-5-ND	12V, 1.0A, LDO Reg. with ON/OFF Control	TO-220†	1.75	1.38	1.00
PQ12RD21	425-1631-5-ND	12V, 2.0A, LDO Reg. with ON/OFF Control	TO-220	1.71	1.43	1.00
PQ15RF15	425-1633-5-ND	15V, 1.0A, LDO Reg. with ON/OFF Control, 5%	TO-220	1.92	1.60	1.12
PQ15RF16	425-1634-5-ND	15V, 1.0A, LDO Reg. with ON/OFF Control, 2.5%	TO-220	2.16	1.80	1.26
PQ15RF1G	425-1635-5-ND	15V, 1.0A, LDO Reg. with ON/OFF Control	TO-220†	1.77	1.48	1.04
PQ15RF2	425-1636-5-ND	15V, 2.0A, LDO Reg. with ON/OFF Control	TO-220	2.25	1.88	1.32
PQ15RF21	425-1637-5-ND	15V, 2.0A, LDO Reg. with ON/OFF Control	TO-220	2.28	1.90	1.33
PQ15RW08	425-1638-5-ND	Adj., 0.8A, LDO Reg.	TO-220	1.40	1.10	.80
PQ15RW11	425-1639-5-ND	Adj., 1.0A, LDO Reg.	TO-220	1.40	1.10	.80
PQ15RW1B	425-1640-5-ND	Adj., 1.0A, LDO Reg.	TO-220†	1.58	1.24	.90
PQ15RW21	425-1641-5-ND	Adj., 2.0A, LDO Reg.	TO-220	1.74	1.45	1.02
PQ010FZ5MZZ	425-1551-5-ND	1.0V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.16	.91	.66
PQ010FZ01ZZ	425-1550-5-ND	1.0V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.30	1.02	.74
PQ012FZ5MZZ	425-1553-5-ND	1.2V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.16	.91	.66
PQ012FZ01ZZ	425-1552-5-ND	1.2V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.30	1.02	.74
PQ015EF01SZ	425-1554-5-ND	1.5V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.12	.88	.64
PQ015EH01ZZ	425-1555-5-ND	1.5V, 1.0A, LDO Reg. with ON/OFF Control	TO-263	1.47	1.16	.84
PQ015EH02ZZ	425-1556-5-ND	1.5V, 2.0A, LDO Reg. with ON/OFF Control	TO-263	1.59	1.33	.93
PQ015EZ01ZZ	425-1557-5-ND	1.5V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.47	1.16	.84
PQ015EZ1HZZ	425-1558-5-ND	1.5V, 1.5A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.32	.96
PQ015EZ5MZZ	425-1559-5-ND	1.5V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ015Y3H3ZZ	425-1561-5-ND	1.5V, 3.5A, LDO Reg. with ON/OFF Control	SC-63	2.85	2.38	1.67
PQ015Y053ZZ	425-1560-5-ND	1.5V, 5.0A, LDO Reg. with ON/OFF Control	SC-63	2.55	1.70	1.38
PQ015YZ01ZZ	425-1562-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.30	1.02	.74
PQ015YZ5MZZ	425-1563-5-ND	1.5V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.16	.91	.66
PQ018EF01SZ	425-1564-5-ND	1.8V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.12	.88	.64
PQ018EH01ZZ	425-1565-5-ND	1.8V, 1.0A, LDO Reg. with ON/OFF Control	TO-263	1.47	1.16	.84
PQ018EH02ZZ	425-1566-5-ND	1.8V, 2.0A, LDO Reg. with ON/OFF Control	TO-263	1.59	1.33	.93
PQ018EZ1HZZ	425-1568-5-ND	1.8V, 1.5A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.32	.96
PQ018EZ5MZZ	425-1569-5-ND	1.8V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ018EZ01ZZ	425-1567-5-ND	1.8V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.47	1.16	.84
PQ025EF01SZ	425-1570-5-ND	2.5V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.12	.88	.64
PQ025EH01ZZ	425-1571-5-ND	2.5V, 1.0A, LDO Reg. with ON/OFF Control	TO-263	1.47	1.16	.84
PQ025EH02ZZ	425-1572-5-ND	2.5V, 2.0A, LDO Reg. with ON/OFF Control	TO-263	1.59	1.33	.93
PQ025EZ1HZZ	425-1574-5-ND	2.5V, 1.5A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.32	.96
PQ025EZ5MZZ	425-1575-5-ND	2.5V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ025EZ01ZZ	425-1573-5-ND	2.5V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.47	1.16	.84
PQ025Y3H3ZZ	425-1577-5-ND	2.5V, 3.5A, LDO Reg. with ON/OFF Control	SC-63	2.85	2.38	1.67
PQ025Y053ZZ	425-1576-5-ND	2.5V, 5.0A, LDO Reg. with ON/OFF Control	SC-63	2.55	1.70	1.38
PQ030EZ01ZZ	425-1578-5-ND	3.0V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.47	1.16	.84
PQ030EZ1HZZ	425-1579-5-ND	3.0V, 1.5A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.32	.96
PQ030EZ5MZZ	425-1580-5-ND	3.0V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ033EF01SZ	425-1581-5-ND	3.3V, 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.12	.88	.64
PQ033ES1MWP	425-1582-1-ND	3.3V, 150mA, LDO Reg.	TO-92	.99	.72	.44
PQ033ES1MWP	425-1582-3-ND*	3.3V, 150mA, LDO Reg.	TO-92	616.00/2,000		
PQ033EZ01ZZ	425-1583-5-ND	3.3V, 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.47	1.16	.84
PQ033EZ1HZZ	425-1584-5-ND	3.3V, 1.5A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.32	.96
PQ033EZ5MZZ	425-1585-5-ND	3.3V, 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ033Y3H3ZZ	425-1587-5-ND	3.3V, 3.5A, LDO Reg. with ON/OFF Control	SC-63	2.85	2.38	1.67
PQ033Y053ZZ	425-1586-5-ND	3.3V, 5.0A, LDO Reg. with ON/OFF Control	SC-63	2.55	1.70	1.38
PQ050ES1MWP	425-1588-1-ND	5.0V, 150mA, LDO Reg.	TO-92	.99	.72	.44
PQ050ES1MWP	425-1588-3-ND*	5.0V, 150mA, LDO Reg.	TO-92	616.00/2,000		
PQ070XF01SZ	425-1603-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.12	.88	.64
PQ070XH01ZZ	425-1604-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	TO-263	1.47	1.16	.84
PQ070XH02ZZ	425-1605-5-ND	Adj., 2.0A, LDO Reg. with ON/OFF Control	TO-263	1.59	1.33	.93
PQ070XZ1HZZ	425-1607-5-ND	Adj., 1.5A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.32	.96
PQ070XZ01ZZ	425-1606-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.47	1.16	.84
PQ070XZ5MZZ	425-1608-5-ND	Adj., 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ20RX05	425-1721-5-ND	Adj., 0.5A, LDO Reg. with ON/OFF Control	TO-220	1.61	1.27	.92
PQ20RX11	425-1722-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.68	1.32	.96
PQ20WZ11	425-1723-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	SC-63	1.44	1.13	.82
PQ20WZ1U	425-1723-2-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	SC-63	1599.00/3,000		
PQ20WZ51	425-1724-5-ND	Adj., 0.5A, LDO Reg. with ON/OFF Control	SC-63	1.40	1.10	.80
PQ20WZ5U	425-1724-2-ND	Adj., 0.5A, LDO Reg. with ON/OFF Control	SC-63	1443.00/3,000		
PQ25VB012FZ	425-1725-5-ND	Adj., 1.0A, LDO Reg. with ON/OFF Control	TO-220	1.77	1.48	1.04
PQ25VB8M2FZ	425-1726-5-ND	Adj., 0.8A, LDO Reg. with ON/OFF Control	SC-63	1.68	1.40	.98
PQ30RV31	425-1727-5-ND	Adj., 3.0A, LDO Reg.	TO-220	3.08	2.05	1.67

* Tape in Box † Lead Form

SHARP MICROELECTRONICS OF THE AMERICAS — *NEW!* CHOPPER REGULATORS

Sharp Part No.	Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PQ1CG2032FZ	425-1759-5-ND	Adj., 3.5A, Chopper Reg. with ON/OFF Control	TO-220	2.28	1.90	1.33
PQ1CG2032RZ	425-1760-5-ND	Adj., 3.5A, Chopper Reg. with ON/OFF Control	TO-220	2.28	1.90	1.33
PQ1CG21H2FZ	425-1761-5-ND	Adj., 1.5A, Chopper Reg. with ON/OFF Control	TO-220	2.04	1.70	1.19
PQ1CG21H2RZ	425-1762-5-ND	Adj., 1.5A, Chopper Reg. with ON/OFF Control	TO-220	1.92	1.60	1.12
PQ1CG38M2FZ	425-1765-5-ND	Adj., .8A, Chopper Reg. with ON/OFF Control	TO-220	1.65	1.38	.97
PQ1CG38M2RZ	425-1766-5-ND	Adj., .8A, Chopper Reg. with ON/OFF Control	TO-220	1.65	1.38	.97
PQ1CG3032FZ	425-1763-5-ND	Adj., 3.5A, Chopper Reg. with ON/OFF Control	TO-220	2.28	1.90	1.33
PQ1CG3032RZ	425-1764-5-ND	Adj., 3.5A, Chopper Reg. with ON/OFF Control	TO-220	2.28	1.90	1.33
PQ1CY1032ZZ	425-1767-5-ND	Adj., 3.5A, Chopper Reg. with ON/OFF Control	TO-263	2.52	2.10	1.47
PQ1CZ21H2ZZ	425-1768-5-ND	Adj., 1.5A, Chopper Reg. with ON/OFF Control	SC-63	2.43	2.03	1.42
PQ1CZ38M2ZZ	425-1769-5-ND	Adj., 0.8A, Chopper Reg. with ON/OFF Control	SC-63	1.72	1.35	.98
PQ2CF1	425-1770-5-ND	Adj., 2.5A, Chopper Reg.	TO-220	3.58	2.38	1.94

National Semiconductor™ — MICROPROCESSOR CHIPS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DP8310N-ND	Octal Latched Peripheral Driver	20-Dip	6.09	4.82	3.86
DP8311N-ND	Octal Latched Peripheral Driver	20-Dip	6.24	4.94	3.96

National Semiconductor™ — UARTs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
PC16550DN-ND	UART	40-Dip	6.20	4.72	3.60
PC16550DV-ND	UART	44-PLCC	6.20	4.72	3.60
PC16552DV-ND	Dual UART	44-PLCC	8.23	6.51	5.22
PC16552DVXTR-ND	Dual UART	44-PLCC	2450.00/500		

National Semiconductor™ — A/D AND D/A CONVERTERS

A/D Converters

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ADC12H030CIWM-ND	12-Bit, A/D Converter, Config.	16-SOIC	7.58	6.00	4.81
ADC12H034CIWM-ND	12-Bit, A/D Converter, 4-Channel	24-SOIC	7.58	6.00	4.81
ADC12H038CIWM-ND	12-Bit, A/D Converter, 8-Channel	28-SOIC	7.79	6.16	4.94
ADC12L034CIWM-ND	12-Bit, A/D Converter, 4-Channel	24-SOIC	7.18	5.68	4.55
ADC12L038CIWM-ND	12-Bit, A/D Converter, 8-Channel	24-SOIC	7.39	5.85	4.69
ADC0801LCN-ND	8-Bit, µP Compatible A/D Converters, 1/4 LSB	20-Dip	10.14	8.02	6.43
ADC0802LCN-ND	8-Bit, µP Compatible A/D Converters, 1/2 LSB	20-Dip	5.84	4.62	3.70
ADC0802LCWM-ND	8-Bit, Compatible A/D Converter, 1/2 LSB	20-SOIC	5.50	4.35	3.49
ADC0803LCN-ND	8-Bit, A/D Converter, 1/2 LSB	20-Dip	4.85	3.69	2.82
ADC0804LCJ-ND	8-Bit, A/D Converter, 1 LSB	20-CDip	6.15	4.68	3.57
ADC0804LCN-ND	8-Bit, A/D Converter, 1 LSB	20-Dip	2.60	1.98	1.51
ADC0804LCWM-ND	8-Bit, A/D Converter, 1 LSB	20-SOIC	2.50	1.90	1.45
ADC0805LCN-ND	8-Bit, A/D Converter, 1 LSB	20-Dip	4.38	3.33	2.54
ADC0808CCN-ND	8-Bit, µP Compatible A/D Conv. with 8-Ch. Mux., 1/2 LSB.	28-Dip	5.58	4.24	3.24
ADC0808CCV-ND	8-Bit, A/D Converter with 8-Channel Multiplexer, 1/2 LSB	28-PLCC	5.93	4.51	3.44
ADC0809CCN-ND	8-Bit, A/D Converter with 8-Channel Multiplexer, 1 LSB.	28-Dip	4.18	3.18	2.43
ADC0809CCV-ND	8-Bit, A/D Converter with 8-Channel Multiplexer, 1 LSB	28-PLCC	5.55	4.22	3.22
ADC0816CCN-ND	8-Bit, A/D Converter with 16-Channel Multiplexer, 1/2 LSB	40-Dip	11.46	9.83	—
ADC0817CCN-ND	8-Bit, A/D Converter with 16-Channel Multiplexer, 1/2 LSB.	40-Dip	7.98	6.31	—
ADC0820BCN-ND	8-Bit, High Speed MPU Comp. A/D, 1/2 LSB	20-Dip	5.50	4.35	3.49
ADC0820BCWM-ND	8-Bit, A/D Converter, 1/2 LSB.	20-SOIC	5.25	4.15	3.33
ADC0820CCN-ND	8-Bit, High Speed MPU Comp. A/D, 1 LSB	20-Dip	3.48	2.65	2.02
ADC0820CCWM-ND	8-Bit, High Speed A/D Converter, 1 LSB	20-SOIC	3.30	2.51	1.92
ADC0831CCN-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options	8-Dip	2.65	2.02	1.54
ADC0831CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options	14-SOIC	2.53	1.92	1.47
ADC0832CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 2-Ch	14-SOIC	2.83	2.15	1.64
ADC0832CIWM-ND	8-Bit, Serial I/O A/D Conv. with Mux. Options, 2-Ch.	14-SOIC	3.23	2.46	1.88
ADC0834BCN-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 4-Ch.	14-Dip	3.85	2.93	2.24
ADC0834CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 4-Ch.	14-SOIC	3.45	2.63	2.01
ADC0838CCN-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 8-Ch.	20-Dip	2.63	2.00	1.53
ADC0838CCV-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 8-Ch.	20-PLCC	3.78	2.87	2.19
ADC0838CCWM-ND	8-Bit, Serial I/O A/D Converter with Multiplex Options, 8-Ch.	20-SOIC	3.15	2.40	1.83
ADC0844CCJ-ND	8-Bit, A/D Converter, MPU Compatible 4-Channel	20-CDip	9.85	7.79	—
ADC0844CCN-ND	8-Bit, A/D Converter, MPU Compatible 4-Channel.	20-Dip	4.40	3.35	—
ADC0848BCV-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1/2 LSB.	28-PLCC	7.94	6.28	—
ADC0848BCN-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1/2 LSB.	24-Dip	5.29	4.19	—
ADC0848CCN-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1 LSB	24-Dip	4.83	3.67	—
ADC0848CCV-ND	8-Bit, µP Compatible A/D Conv. with Mux. Options, 1 LSB.	28-PLCC	5.38	4.09	—
ADC1001CCJ-ND	10-Bit, A/D Conv., Microprocessor Compatible, Ind. Temp.	20-CDip	24.00	22.40	—
ADC1001CCJ-1-ND	10-Bit, A/D Converter, Microprocessor Compatible	20-CDip	17.19	14.73	—
ADC1005BCJ-1-ND	10-Bit, A/D 1/2 LSB	20-CDip	15.15	14.14	—
ADC1005CCJ-1-ND	10-Bit, A/D 1 LSB	20-CDip	13.42	11.51	—
ADC1061CIN-ND	10-Bit, High Speed µP Compat A/D Converter with Track	20-Dip	5.88	4.47	3.41
ADC1241CIJ-ND	12-Bit, A/D with Sample and Hold Sign	28-CDip	12.51	10.73	9.51
ADC1251CIJ-ND	12-Bit, Self-Calibrating Plus Sign µP Compatible A/D.	24-CDip	14.79	12.68	11.24
ADC08031CIWM-ND	8-Bit, A/D Converter Single Channel w/T/H	14-SOIC	2.58	1.96	1.50
ADC08032CIWM-ND	8-Bit, A/D Converter 2-Channel w/T/H	14-SOIC	2.78	2.11	1.61
ADC08034CIWM-ND	8-Bit, A/D Converter 4-Channel w/T/H	14-SOIC	5.53	3.95	2.37
ADC08038CIWM-ND	8-Bit, A/D Converter 8-Channel w/T/H	20-SOIC	3.28	2.49	1.90
ADC08062CIWM-ND	8-Bit, A/D Converter 2-Channel w/S/H	20-SOIC	3.90	2.97	2.27
ADC08100CIMTC-ND	8-Bit, A/D Converter, 100MSPS, 1.3mW	24-TSSOP	10.48	8.29	6.64
ADC08100EVAL-ND	Evaluation Board for ADC08100, 8-Bit	EVAL BOARD	189.00	176.40	163.80
ADC08131CIWM-ND	8-Bit, High Speed A/D Converter.	14-SOIC	3.28	2.49	1.90
ADC08134CIWM-ND	8-Bit, High Speed Serial In/Out A/D Converter w/ Mux Option	14-SOIC	3.28	2.49	1.90
ADC08351CIMTC-ND	8-Bit, A/D Converter	20-TSSOP	5.08	3.86	2.95
ADC08831IM-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-SOIC	2.79	2.07	1.53
ADC08831IMMCT-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-MSOP	2.79	2.07	1.53
ADC08831IMMTR-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-MSOP	1152.00/1,000		
ADC08831IN-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-Dip	2.79	2.07	1.53
ADC08831IWM-ND	8-Bit, Serial I/O A/D Converter, 1 Input	8-SOIC	2.79	2.07	1.53
ADC08832IM-ND	8-Bit, Serial I/O A/D Converter, 2 Input	8-SOIC	2.79	2.07	1.53
ADC08832IMMCT-ND	8-Bit, Serial I/O A/D Converter, 2 Input	8-MSOP	2.79	2.07	1.53
ADC08832IMMTR-ND	8-Bit, Serial I/O A/D Converter, 2 Input	8-MSOP	1152.00/1,000		
ADC08832IN-ND	8-Bit, Serial I/O A/D Converter, 2 Input	8-Dip	2.79	2.07	1.53
ADC08832IWM-ND	8-Bit, Serial I/O A/D Converter	8-SOIC	2.79	2.07	1.53
ADC10030CIVT-ND	10-Bit, A/D Converter.	32-LQFP	8.55	6.76	5.42
ADC10062CIWM-ND	10-Bit, A/D Converter	24-SOIC	5.46	4.32	3.46
ADC10158CIN-ND	10-Bit, Plus Sign 4µS ADC with 4 or 8-Chan. Mux, Track	28-Dip	5.54	4.39	3.52
ADC10158CIWM-ND	10-Bit, Plus Sign 4µS ADC with 4 or 8-Chan. Mux, Track	28-SOIC	5.54	4.39	3.52
ADC10221CIVT-ND	10-Bit, A/D Converter.	32-LQFP	5.99	4.74	3.80
ADC10321CIVT-ND	10-Bit, A/D Converter.	32-LQFP	6.59	5.22	4.18
ADC10461CIWM-ND	10-Bit, A/D Converter	20-SOIC	6.20	4.72	3.60
ADC10464CIWM-ND	10-Bit, 600nS A/D Converter with Input Mux	28-SOIC	5.71	4.52	3.62
ADC10662CIWM-ND	10-Bit, 360nS A/D Converter with Input Mux	24-SOIC	5.40	4.27	—
ADC10664CIWM-ND	10-Bit, 360nS A/D Converter with Input Mux	28-SOIC	5.40	4.27	—
ADC10731CIWM-ND	10-Bit, Serial I/O A/D Converter.	16-SOIC	4.40	3.35	2.56
ADC10738CIWM-ND	10-Bit, Serial I/O A/D Converter.	24-SOIC	4.40	3.35	2.56
ADC1175-50CIJM-ND	8-Bit, A/D Converter	SOP-24	5.48	4.34	3.48
ADC1175-50CIMT-ND	8-Bit, A/D Converter	24-SSOP	5.48	4.34	3.48
ADC12032CIWM-ND	12-Bit, A/D Converter	20-SOIC	6.99	5.53	4.43
ADC12034CIN-ND	12-Bit, A/D Converter.	24-Dip	9.19	7.88	6.99
ADC12038CIWM-ND	12-Bit, A/D Converter	28-SOIC	7.29	5.77	4.62
ADC12062CIV-ND	12-Bit, 1MHz 75mW ADC with Input Mux and S&H.	44-PLCC	9.53	7.54	—
ADC12130CIN-ND	12-Bit, Self-calibrating A/D Plus Sign Serial I/O	16-Dip	7.18	5.68	—
ADC12138CIN-ND	12-Bit, Self-calibrating A/D Plus Sign Serial I/O	28-Dip	7.39	5.85	—
ADC12138CIWM-ND	12-Bit, Self-calibrating A/D Plus Sign Serial I/O	28-SOIC	7.39	5.85	—
ADC12441CIJ-ND	12-Bit, Dynam Tested Self-calibrating Plus Sign A/D Conv.	28-CDip	11.90	10.20	9.05
ADC12451CIJ-ND	12-Bit, Dynam Tested Self-calibrating Plus Sign A/D Conv.	24-CDip	14.79	12.68	11.24
ADCV0831M6CT-ND	8-Bit, Serial I/O A/D Converter.	SOT-23-6	2.90	2.21	1.69
ADCV0831M6TR-ND	8-Bit, Serial I/O A/D Converter.	SOT-23-6	1461.60/1,000		

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National Semiconductor — A/D AND D/A CONVERTERS *(Continued)*

D/A Converters

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DAC0800LCM-ND	8-Bit, D/A Converter	16-SOIC	1.69	1.24	.90
DAC0800LCMXTR-ND	8-Bit, D/A Converter	16-SOIC	1434.38/2,500		
DAC0800LCN-ND	8-Bit, D/A Converter 0.19% Linearity	16-Dip	1.76	1.30	.94
DAC0802LCM-ND	8-Bit, D/A Converter	16-SOIC	2.79	2.07	—
DAC0802LCN-ND	8-Bit, D/A Converter	16-Dip	1.61	1.20	.89
DAC0808LCM-ND	8-Bit, D/A Converter	16-SOIC	1.92	1.43	1.06
DAC0808LCN-ND	8-Bit, D/A Converter 0.19% Linearity	16-Dip	2.11	1.57	1.16
DAC0830LCN-ND	8-Bit, µP Compatible Double Buffered D/A Converter	20-Dip	6.18	4.70	—
DAC0832LCN-ND	8-Bit, µP Compatible D/A Converter 0.20% Linearity	20-Dip	2.98	2.27	—
DAC0832LCWM-ND	8-Bit, µP Compatible D/A Converter	20-SOIC	2.88	2.19	—

MICROCHIP — CMOS LCD DRIVERS

The AY0438 is a CMOS LSI circuit that drives a liquid crystal display, usually under microprocessor control. The part acts as a smart peripheral that drives up to 32 LCD segments. It needs only three control lines due to its serial input construction. It latches the data to be displayed and relieves the microprocessor from the task of generating the required waveforms. • Drives up to 32 LCD segments of arbitrary configuration • CMOS, NMOS and TTL compatible inputs • Cascadable • On-chip oscillator • Requires only three control lines • Can be used to drive relays, solenoids, print head drives, etc.

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AY0438/L-ND	32-Segment CMOS LCD Driver	44-PLCC	5.48	4.72	3.93
AY0438/P-ND	32-Segment CMOS LCD Driver	40-Dip	4.00	3.33	2.78
AY0438-I/L-ND	32-Segment CMOS LCD Driver, Industrial Temp.	44-PLCC	5.75	4.96	4.13
AY0438-I/P-ND	32-Segment CMOS LCD Driver, Industrial Temp.	40-Dip	4.20	3.50	2.92

EPSON ELECTRONICS AMERICA, INC. — REAL TIME CLOCK MODULES

Digi-Key Part No.	Description
SE3231-ND SE3232-ND SE3241-ND SE3242-ND	**Features:** • The built-in quartz crystal makes board design easy • Direct bus-compatibility (120 nSec access time) • Interrupt masking • 30 seconds error adjustment function. 18 pin dual in line plastic package (RTC-72421). • 24 pin SOP plastic package (RTC-72423). • Capable of withstanding reflow temps. of 260°C or 20 seconds (RTC-72423) **Specifications: Power Supply** VDD: In operating temp.: 4.5 ~ 5.5V. **Data-Holding** VDH: In operating temp.: 2.0 ~ 5.5V. **Op. Temp.:** tOPR: –40°C ~ +85°C. **Freq. Tolerance:** 72421A: ±10; 72421B: ±50; 72423A: ±20; 72423B: ±50.
SE3245CT-ND SE3245TR-ND	**Features:** • Built-in crystal allows adjustment-free efficient operation • Automatic leap year correction • Output selectable between 32.768Khz/1 Hz • **Operating Voltage Range:** 2.5V, to 5.5V, • **Supply Voltage Detection Voltage:** 1.7V, ±0.3V. • **Frequency Tolerance:** 5+/-10ppm • **Package:** 14-SOP.

Frequency Tolerance	Package	Digi-Key Part No.	Price Each★ 1	10	50	100	Digi-Key Part No.	T & R Pricing★ 1,000	Epson Part No.
±10 ppm	18-Dip	SE3231-ND	7.62	6.35	4.51	4.06	—	—	RTC-72421A
±50 ppm	18-Dip	SE3232-ND	7.05	5.88	4.18	3.76	—	—	RTC-72421B
±20 ppm	24-SOP	SE3241-ND	8.55	7.13	5.07	4.56	—	—	RTC-72423A
±50 ppm	24-SOP	SE3242-ND	7.50	6.25	4.44	4.00	—	—	RTC-72423B
5+/-10 ppm	14-SOP	SE3245CT-ND	4.32	3.60	2.88	2.56	SE3245TR-ND	2090.00	RTC-4543SA-A0

National Semiconductor — INTERFACE CHIPS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DP8390DN-ND	Serial Network Interface Controller	48-Dip	13.65	11.70	10.38
DP8392CN-ND	Coax Transceiver Interface	16-Dip	5.61	4.44	3.56
DP8392CV-ND	Coax Transceiver Interface	28-PLCC	5.61	4.44	3.56
DP83815DVNG-ND	10/100Mb, Integrated PCI Ethernet Media Access Controller and Physical Layer *NEW!*	144-TQFP	8.40	6.64	5.32
DP83902AV-ND	Serial Network Interface Cont. for Twisted Pair *NEW!*	84-PLCC	15.66	13.43	11.91
DP83902AVLJ-ND	Serial Network Interface Cont. for Twisted Pair	100-PQFP	15.40	13.20	11.71
DP8573AN-ND	RealTime Clock	24-Dip	11.92	10.22	9.06
DS14C88M-ND	Quad CMOS Line Driver	14-SOIC	.99	.73	.53
DS14C88MXTR-ND	Quad CMOS Line Driver	14-SOIC	844.69/2,500		
DS14C88N-ND	Quad CMOS Line Driver	14-Dip	.99	.73	.53
DS14C89AM-ND	Quad CMOS Line Receiver	14-SOIC	.99	.73	.53
DS14C89AMXTR-ND	Quad CMOS Line Receiver	14-SOIC	844.69/2,500		
DS14C89AN-ND	Quad CMOS Line Receiver	14-Dip	.99	.73	.53
DS14C232CM-ND	Low Power +5V, Power TIA/EIA-232 Dual Driver/Receiver	16-SOIC	1.55	1.15	.85
DS14C232CMXTR-ND	Low Power +5V, Power TIA/EIA-232 Dual Driver/Receiver	16-SOIC	1562.50/2,500		
DS14C232CN-ND	EIA232 Dual Driver/Receiver Low Power	16-Dip	1.55	1.15	.85
DS14C232TM-ND	EIA232 Dual Driver/Receiver Low Power	16-SOIC	1.71	1.27	.94
DS14C238WM-ND	Single Supply TIA/EIA-232 4x4 Driver/Receiver	16-SOIC	3.93	2.99	2.28
DS14C238WMXTR-ND	Single Supply TIA/EIA-232 4x4 Driver/Receiver	16-SOIC	1978.20/1,000		
DS14C241WM-ND	Single Supply TIA/EIA-232 4x5 Driver/Receiver	28-SOIC	5.25	4.15	3.33
DS14C335MSA-ND	3.3V, Supply TIA/EIA-232 3x5 Driver/Receiver	28-SSOP	4.60	3.50	2.67
DS14C535MSA-ND	5V, Supply EIA/TIA-232 3x5 Driver/Receiver	28-SSOP	5.45	4.15	3.17
DS26C31TM-ND	CMOS Quad Tri-State Differential Line Driver	16-SOIC	1.35	.99	.72
DS26C31TMXTR-ND	CMOS Quad Tri-State Differential Line Driver	16-SOIC	1147.50/2,500		
DS26C31TN-ND	CMOS Quad RS422 Line Driver	16-Dip	1.35	.99	.72
DS26C32ATM-ND	CMOS Quad RS422 Receiver	16-SOIC	1.35	.99	.72
DS26C32ATMXTR-ND	CMOS Quad RS422 Receiver	16-SOIC	1147.50/2,500		
DS26C32ATN-ND	Quad Differential Line Receiver	16-Dip	1.35	.99	.72
DS26LS31CM-ND	Quad High Speed Differential Line Driver	16-SOIC	1.08	.78	.57
DS26LS31CMXTR-ND	Quad High Speed Differential Line Driver	16-SOIC	798.00/2,500		
DS26LS31CN-ND	Quad High Speed Differential	16-Dip	1.08	.78	.57
DS26LS32ACM-ND	Quad Differential Line Receiver	16-SOIC	1.08	.78	.57
DS26LS32ACMXTR-ND	Quad Differential Line Receiver	16-SOIC	798.00/2,500		
DS26LS32ACN-ND	Quad Differential Line Receiver	16-Dip	1.08	.78	.57
DS26LS32CM-ND	Quad Differential Line Driver	16-SOIC	1.08	.78	.57
DS26LS32CN-ND	Quad Differential Line Receiver	16-Dip	1.08	.78	.57
DS26LV31TM-ND	3V, Enhanced Quad CMOS Differential Line Driver	16-SOIC	1.86	1.38	1.02
DS26LV32ATM-ND	3V, Enhanced Quad CMOS Differential Line Receiver	16-SOIC	1.86	1.38	1.02
DS34C86TM-ND	Quad CMOS Differential Line Receiver	16-SOIC	1.86	1.38	1.02
DS34C86TMXTR-ND	Quad CMOS Differential Line Receiver	16-SOIC	1875.00/2,500		
DS34C86TN-ND	Quad CMOS Differential Line Receiver	16-Dip	1.86	1.38	1.02
DS34C87TM-ND	CMOS Quad Tri-State Differential Line Driver	16-SOIC	1.86	1.38	1.02
DS34C87TMXTR-ND	CMOS Quad Tri-State Differential Line Driver	16-SOIC	1875.00/2,500		
DS34C87TN-ND	CMOS Quad Tri-State Differential Line Driver	16-Dip	1.92	1.43	1.06
DS34LV86TM-ND	3V, Enhanced Quad CMOS Differential Line Receiver	16-SOIC	2.85	2.12	1.57
DS34LV87TM-ND	Enhanced Quad CMOS Differential Line Driver	16-SOIC	2.85	2.12	1.57
DS36C200M-ND	Dual High Speed Bi-Directional Diff. Transceiver	14-SOIC	2.75	2.09	1.60
DS36C278M-ND	Low Power Multipoint EIA-RS-485 Transceiver	8-SOIC	2.58	1.96	1.50
DS36C278N-ND	Low Power Multipoint EIA-RS-485 Transceiver	8-Dip	2.58	1.96	1.50
DS36C278TM-ND	Multipoint EIA Low Power Transceiver	8-SOIC	2.58	1.96	1.50
DS36C279M-ND	Low Power EIA-RS-485 Transceiver with Sleep Mode	8-SOIC	2.58	1.96	1.50
DS36C280M-ND	Slew Rate Controlled CMOS EIA-RS-485 Transceiver	8-SOIC	2.58	1.96	1.50
DS36F95J-ND	High Speed Multipoint RS485/422 Transceiver	8-Dip	13.74	11.78	10.45
DS36F95M-ND	High Speed Multipoint RS485/422 Transceiver	8-SOIC	3.58	2.72	2.08
DS89C21TM-ND	Differential CMOS Line Driver/Receiver Pair	8-SOIC	2.90	2.21	1.69
DS89C386TMEA-ND	12 Channel CMOS Differential Line Receiver	48-SSOP	8.48	6.71	5.38
DS89C387TMEA-ND	12 Channel CMOS Differential Line Driver	48-SSOP	8.48	6.71	5.38
DS90C031BTM-ND	LVDS Quad CMOS Differential Line Driver	16-SOIC	5.03	3.82	2.92
DS90C031TM-ND	LVDS Quad CMOS Differential Line Driver	16-SOIC	5.03	3.82	2.92
DS90C031TMXTR-ND	LVDS Quad CMOS Differential Line Driver	16-SOIC	6281.25/2,500		
DS90C032BTM-ND	LVDS Quad CMOS Differential Line Receiver	16-SOIC	5.03	3.82	2.92
DS90C032TM-ND	LVDS Quad CMOS Differential Line Receiver	16-SOIC	5.03	3.82	2.92
DS90C032TMXTR-ND	LVDS Quad CMOS Differential Line Receiver	16-SOIC	6281.25/2,500		
DS90C363AMTD-ND	LVDS 3.3V, FPD (Flat Panel Display) Link-65MHz 18-Bit, Program Transmitter	48-TSSOP	6.99	5.53	4.43
DS90C363MTD-ND	LVDS 3.3V, FPD Link 18-Bit, Transmitter, 65MHz	48-TSSOP	6.99	5.53	4.43
DS90C365MTD-ND	LVDS 3.3V, FPD Link-85MHz 18-Bit, Program Xmitter.	48-TSSOP	6.99	5.53	4.43
DS90C383AMTD-ND	LVDS 3.3V, FPD Link-65MHz 24-Bit, Program Xmitter.	56-TSSOP	6.99	5.53	4.43
DS90C383MTD-ND	LVDS 3.3V, FPD Link 24-Bit, Transmitter	56-TSSOP	6.99	5.53	4.43
DS90C385MTD-ND	LVDS 3.3V, FPD Link-85MHz 24-Bit, Program Xmitter.	56-TSSOP	6.99	5.53	4.43
DS90C387VJD-ND	LVDS Dual Pixel Display Interface (LDI)-SVGA-OXGA	100-TQFP	9.15	7.85	6.96
DS90C401M-ND	LVDS Dual Low Volt Differential Signaling Driver	8-SOIC	2.85	2.17	1.66
DS90C402M-ND	LVDS Dual Low Volt Differential Signaling Receiver	8-SOIC	2.85	2.17	1.66
DS90CF363AMTD-ND	LVDS 3.3V, FPD Link-65MHz 18-Bit, Program Xmitter.	48-TSSOP	6.99	5.53	4.43
DS90CF363MTD-ND	LVDS 3.3V, FPD Link 18-Bit, Transmitter	48-TSSOP	6.99	5.53	4.43
DS90CF364MTD-ND	LVDS 3.3V, FPD Link 18-Bit, Receiver	48-TSSOP	6.99	5.53	4.43
DS90CF364AMTD-ND	LVDS 3.3V, FPD Link-65MHz, 18-Bit, Receiver	48-TSSOP	6.99	5.53	4.43
DS90CF366MTD-ND	LVDS 3.3V, FPD Link-85MHz, 18-Bit, Receiver	48-TSSOP	6.99	5.53	4.43
DS90CF383AMTD-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384AMTD-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384ASLC-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	64-FBGA	7.98	6.31	5.06
DS90CF383MTD-ND	LVDS 3.3V, FPD Link 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384MTD-ND	LVDS 3.3V, FPD Link 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF384SLC-ND	LVDS 3.3V, FPD Link-65MHz, 24-Bit, Receiver	64-FBGA	7.98	6.31	5.06
DS90CF386MTD-ND	LVDS 3.3V, FPD Link-85MHz 24-Bit, Receiver	56-TSSOP	6.99	5.53	4.43
DS90CF386SLC-ND	LVDS 3.3V, FPD Link-85MHz 24-Bit, Receiver	64-FBGA	7.98	6.31	5.06
DS90CF388VJD-ND	LVDS Dual Pixel Display Interface (LDI)-SVGA/QXGA	100-TQFP	9.15	7.85	6.96
DS90CF561MTD-ND	LVDS 18-Bit, Color, FPD Link	48-TSSOP	7.98	6.31	5.06
DS90CF562MTD-ND	LVDS 18-Bit, Color, FPD Link	48-TSSOP	7.98	6.31	5.06
DS90CF563MTD-ND	LVDS 5V, FPD Link 18-Bit, Transmitter	48-TSSOP	7.98	6.31	5.06
DS90CF564MTD-ND	LVDS 5V, FPD Link 18-Bit, Receiver	48-TSSOP	7.98	6.31	5.06
DS90CF581MTD-ND	LVDS 24-Bit, Color FPD Transmitter	56-TSSOP	8.75	7.50	6.65
DS90CF583MTD-ND	LVDS 5V, FPD Link 24-Bit, Transmitter	56-TSSOP	7.98	6.31	5.06
DS90CF584MTD-ND	LVDS 5V, FPD Link 24-Bit, Receiver	56-TSSOP	7.98	6.31	5.06
DS90CP22M-8-ND	2x2 800 MBPS LVDS CrossSwitch	16-SOIC	8.99	7.11	5.70
DS90CR211MTD-ND	21-Bit, Channel Link, Transmitter, 40MHz	48-TSSOP	10.27	8.12	6.51
DS90CR212MTD-ND	21-Bit, Channel Link, Receiver, 40MHz	48-TSSOP	10.27	8.12	6.51
DS90CR213MTD-ND	21-Bit, Channel Link-66MHz, Transmitter	48-TSSOP	10.06	8.63	7.65
DS90CR214MTD-ND	21-Bit, Channel Link-66MHz, Receiver	48-TSSOP	10.06	8.63	7.65
DS90CR215MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-66MHz, Transmitter	48-TSSOP	7.39	5.85	4.69
DS90CR216AMTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-66MHz, Receiver	48-TSSOP	7.39	5.85	4.69
DS90CR216MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-66MHz	48-TSSOP	7.39	5.85	4.69
DS90CR217MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-85MHz	48-TSSOP	10.06	8.63	7.65
DS90CR218AMTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-85MHz	48-TSSOP	10.06	8.63	7.65
DS90CR218MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 21-Bit, Channel Link-75MHz	48-TSSOP	10.06	8.63	7.65
DS90CR281MTD-ND	28-Bit, Channel Link, Transmitter	56-TSSOP	9.63	8.25	7.32
DS90CR282MTD-ND	28-Bit, Channel Link, Receiver	56-TSSOP	9.63	8.25	7.32
DS90CR283MTD-ND	28-Bit, Channel Link-66MHz, Transmitter	56-TSSOP	11.11	9.53	8.45
DS90CR284MTD-ND	28-Bit, Channel Link-66MHz, Receiver	56-TSSOP	11.11	9.53	8.45
DS90CR285MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit, Channel Link-66MHz, Transmitter	56-TSSOP	7.39	5.85	4.69
DS90CR286AMTD-ND	3.3V, Data Strobe LVDS Receiver 28-Bit Channel Link-66MHz	56-TSSOP	7.39	5.85	4.69
DS90CR286ASLC-ND	LVDS 3.3V, Data Strobe Receiver 28-Bit Channel Link-66MHz	64-FBGA	7.39	5.85	4.69
DS90CR286MTD-ND	LVDS 3.3V, Data Strobe 28-Bit, Channel Link-66MHz	56-TSSOP	7.39	5.85	4.69
DS90CR287MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel Link-75MHz	56-TSSOP	11.81	10.13	8.98
DS90CR287SLC-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel Link-75MHz *NEW!*	64-FBGA	11.81	10.13	8.98
DS90CR288AMTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel Link-85MHz	56-TSSOP	11.81	10.13	8.98
DS90CR288ASLC-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel Link-85MHz	64-FBGA	11.81	10.13	8.98
DS90CR288MTD-ND	LVDS 3.3V, Rising Edge Data Strobe 28-Bit Channel-75MHz	56-TSSOP	11.90	10.20	9.05
DS90CR561MTD-ND	LVDS 18-Bit, FPD Link	48-TSSOP	9.89	8.48	7.52
DS90CR562MTD-ND	LVDS 18-Bit, FPD Link	48-TSSOP	9.89	8.48	7.52
DS90CR581MTD-ND	LVDS Transmitter 24-Bit, FPD Link	56-TSSOP	9.09	7.19	5.76
DS90LV017ATM-ND	LVDS Single High Speed Differential Driver	8-SOIC	2.29	1.71	1.26
DS90LV017M-ND	LVDS Single High Speed Differential Driver	8-SOIC	2.29	1.71	1.26
DS90LV018ATM-ND	LVDS 3V, Single CMOS Differential Line Receiver	8-SOIC	2.29	1.71	1.26
DS90LV019TM-ND	LVDS 3.3V, or 5V, Driver/Receiver	14-SOIC	4.15	3.16	2.41
DS90LV027ATM-ND	LVDS Dual High Speed Differential Driver	8-SOIC	3.20	2.44	1.86
DS90LV027M-ND	LVDS Dual High Speed Differential Driver	8-SOIC	3.28	2.49	1.90
DS90LV028ATM-ND	LVDS 3V, Dual CMOS Differential Line Receiver	8-SOIC	2.90	2.21	1.69
DS90LV031ATM-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-SOIC	4.73	3.60	2.75
DS90LV031ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-TSSOP	4.73	3.60	2.75
DS90LV031ATMXTR-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-SOIC	5906.25/2,500		
DS90LV031BTM-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-SOIC	5.03	3.82	2.92
DS90LV032ATM-ND	LVDS 3V, Quad CMOS Differential Line Receiver	16-SOIC	4.73	3.60	2.75
DS90LV032ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Receiver	16-TSSOP	4.73	3.60	2.75

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National Semiconductor INTERFACE CHIPS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
DS90LV047ATM-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-SOIC	4.73	3.60	2.75
DS90LV047ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Driver	16-TSSOP	4.73	3.60	2.75
DS90LV048ATM-ND	LVDS 3V, Quad CMOS Differential Line Receiver	16-SOIC	4.73	3.60	2.75
DS90LV048ATMTC-ND	LVDS 3V, Quad CMOS Differential Line Receiver	16-TSSOP	4.73	3.60	2.75
DS92CK16TMTC-ND	BLVDS 3V, 1 to 6 Clock Buffer/Bus Transceiver	24-TSSOP	9.98	7.89	6.32
DS92LV010ATM-ND	Bus LVDS 3.3/5.0V, Single Transceiver	8-SOIC	5.95	4.53	3.46
DS92LV090ATVEH-ND	LVDS 9 Channel Transceiver	64-LQFP	11.31	9.69	8.60
DS92LV1021TMSA-ND	16MHz-40MHz 10-Bit, Serializer	28-SSOP	11.55	9.90	8.78
DS92LV1023TMSA-ND	40MHz-66MHz 10-Bit, Serializer	28-SSOP	12.72	10.91	9.67
DS92LV1210TMSA-ND	16MHz-40MHz 10-Bit, Deserializer	28-SSOP	10.85	9.30	8.25
DS92LV1212AMSA-ND	Bus LVDS 16MHz-40MHz 10-Bit, Random Lock Deserializer with Embedded Clock Recovery	28-SSOP	11.55	9.90	8.78
BLVDS04-ND	Evaluation Board for DS92LV1023/1224	EVAL BOARD	222.00	207.20	192.40
PC87200VUL-ND	PCI to ISA Bridge *NEW!*	160-PQFP	10.85	9.30	8.25
DS92LV1224TMSA-ND	40MHz-66MHz, 10-Bit, Deserializer	28-SSOP	12.72	10.91	9.67
DS92LV222ATM-ND	Bus LVDS Two Channel Multiplexer Repeater	16-SOIC	6.78	5.37	4.30
DS96F174CJ-ND	RS485/422 Quad Driver	16-CDip	5.40	4.27	3.42
DS96F175CJ-ND	RS422/485 Quad Line Driver	16-CDip	5.40	4.27	3.42
DS485M-ND	Low Power Multipoint RS485/RS442 Transceiver	8-SOIC	1.92	1.43	1.06
DS485N-ND	Low Power Multipoint RS485/RS422 Transceiver	8-Dip	1.95	1.45	1.08
DS485TM-ND	Low Power Multipoint RS485/RS442 Transceiver	8-SOIC	2.39	1.78	1.31
DS485TN-ND	Low Power Multipoint RS485/RS442 Transceiver	8-Dip	2.39	1.78	1.31
DS0026CN-ND	Dual MOS Clock Driver	8-Dip	3.00	2.28	1.74
DS1487N-ND	Low Power Multipoint RS485 1/4 Unit Load Transceiver	8-Dip	2.98	2.21	1.64
DS1488M-ND	Quad Line Driver	14-SOIC	.58	.42	.31
DS1488MXTR-ND	Quad Line Driver	14-SOIC	367.50/2,500		
DS1488N-ND	Quad Line Driver	14-Dip	.58	.42	.31
DS1489AM-ND	Quad Line Receiver	14-SOIC	.58	.42	.31
DS1489AMXTR-ND	Quad Line Receiver	14-SOIC	367.50/2,500		
DS1489AN-ND	Quad Line Receiver	14-Dip	.58	.42	.31
DS1489M-ND	Quad Line Receiver	14-SOIC	.58	.42	.31
DS1489N-ND	Quad Line Receiver	14-Dip	.58	.42	.31
DS2003CM-ND	High Current/High Voltage Darlington Driver with Internal Resistor	16-SOIC	.95	.69	.50
DS2003CMXTR-ND	High Current/High Voltage Darlington Driver with Internal Resistor	16-SOIC	798.00/2,500		
DS2003CN-ND	High Current/High Voltage Darlington Driver with Internal Resistor	16-Dip	.94	.69	.50
DS3486M-ND	RS422/423 Quad Line Receiver	16-SOIC	.98	.72	.52
DS3486N-ND	RS422/423 Quad Line Receiver	16-Dip	.98	.72	.52
DS3487M-ND	Quad Differential Line Driver	16-SOIC	.98	.72	.52
DS3487N-ND	Quad Differential Line Driver	16-Dip	.98	.72	.52
DS3650N-ND	Quad Differential Line Receiver	16-Dip	2.57	1.91	1.42
DS3658N-ND	Quad High Low Current Peripheral Driver	16-Dip	3.73	2.84	—
DS3662WM-ND	Quad High Speed Trapezoidal Bus Transceiver	16-SOIC	5.38	4.09	3.12
DS3668N-ND	Quad Fault Protect Peripheral Driver	16-Dip	4.03	3.06	—
DS3691M-ND	RS422/423 Line Driver	16-SOIC	2.39	1.78	1.31
DS3691N-ND	RS422/423 Line Driver	16-Dip	2.39	1.78	1.31
DS3695AM-ND	Multipoint RS485/RS422 Transceiver/Repeater	8-SOIC	1.98	1.48	1.09
DS3695AMXTR-ND	Multipoint RS485/RS422 Transceiver/Repeater	8-SOIC	2000.00/2,500		
DS3695ATM-ND	Multipoint RS485/422 Transceiver/Repeater	8-SOIC	2.70	2.01	1.48
DS3695N-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	1.92	1.43	1.06
DS3695TN-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	1.92	1.43	1.06
DS3696N-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	2.58	1.96	1.50
DS3697N-ND	Multipoint RS485/422 Transceiver/Repeater	8-Dip	3.95	3.01	2.30
DS36950V-ND	RS485 Quad Differential Receiver	20-PLCC	9.03	7.74	—
DS36954V-ND	Quad Differential Bus Transceiver	20-PLCC	9.87	7.81	6.26
DS3862N-ND	Octal High Speed Trapezoidal Transceiver	20-Dip	8.72	6.89	5.52
DS3896M-ND	BTL Trapezoidal Transceiver	20-SOIC	8.40	6.64	5.32
DS3897M-ND	BTL Trapezoidal Transceiver	20-SOIC	7.88	6.23	4.99
DS8832N-ND	Dual Tri-State Line Driver	16-Dip	2.73	2.03	1.50
DS8838M-ND	Quad Unified Bus Transceiver	18-SOIC	3.07	2.28	1.69
DS8838N-ND	Quad Unified Bus Transceiver	16-Dip	2.64	1.96	1.45
DS8921AM-ND	Differential Line Driver/Receiver Pair	8-SOIC	1.77	1.32	.97
DS8921AN-ND	Differential Line Driver/Receiver Pair	8-Dip	1.77	1.32	.97
DS8921ATM-ND	Differential Line Driver/Receiver Pair	8-SOIC	1.92	1.43	1.06
DS8921M-ND	Differential Line Driver/Receiver Pair	8-SOIC	1.61	1.20	.89
DS8921N-ND	Differential Line Driver/Receiver Pair	8-Dip	1.61	1.20	.89
DS8922AM-ND	RS422 Dual Driver/Receiver Pair	16-SOIC	1.92	1.43	1.06
DS8922AN-ND	RS422 Dual Driver/Receiver Pair	16-Dip	1.92	1.43	1.06
DS8922M-ND	RS422 Dual Driver/Receiver Pair	16-SOIC	1.61	1.20	.89
DS8922N-ND	RS422 Dual Driver/Receiver Pair	16-Dip	1.61	1.20	.89
DS8923AM-ND	RS422 Dual Differential Line Driver/Receiver	16-SOIC	1.80	1.34	.99
DS8923AMXTR-ND	RS422 Dual Differential Line Driver/Receiver	16-SOIC	1812.50/2,500		
DS8923AN-ND	RS422 Dual Differential Line Driver/Receiver	16-Dip	1.83	1.36	1.01
DS8925M-ND	Local Talk Dual Driver/Triple Receiver	16-SOIC	2.78	2.11	1.61
DS9637ACM-ND	RS423 Dual Receiver	8-SOIC	1.69	1.24	.90
DS9637ACN-ND	RS423 Dual Receiver	8-Dip	1.69	1.24	.90
DS9638CM-ND	RS-422 Dual High Speed Differential Line Driver	8-SOIC	1.69	1.24	.90
DS9638CN-ND	RS-422 Dual High Speed Differential Driver	8-Dip	1.69	1.24	.90
DS14185WM-ND	EIA/TIA-232 3 Driver x 5 Receiver	20-SOIC	1.13	.83	.60
DS14196WM-ND	EIA/TIA-232 5 Driver x 3 Receiver	20-SOIC	1.28	.94	.68
DS36276M-ND	Failsafe Multipoint Transceiver	8-SOIC	2.78	2.11	1.61
DS36277TM-ND	Dominant Mode Multipoint Transceiver	8-SOIC	3.07	2.28	1.69
DS36277TMXTR-ND	Dominant Mode Multipoint Transceiver	8-SOIC	3093.75/2,500		
DS36277TN-ND	Dominant Mode Multipoint Transceiver	8-Dip	3.07	2.28	1.69
DS36954M-ND	Quad Differential Bus Transceiver	20-SOIC	10.23	8.09	6.48
DS75107BN-ND	Dual Line Receiver	14-Dip	1.04	.75	.55
DS75110AM-ND	Dual Line Driver	14-SOIC	.98	.72	.52
DS75150M-ND	Dual Line Driver	8-SOIC	1.24	.91	.66
DS75176BM-ND	Multipoint RS485/422 Transceiver	8-SOIC	1.06	.77	.56
DS75176BMXTR-ND	Multipoint RS485/422 Transceiver	8-SOIC	781.38/2,500		
DS75176BN-ND	Multipoint RS485/422 Transceiver	8-Dip	1.06	.77	.56
DS75176BTM-ND	Multipoint RS485 Transceiver	8-SOIC	1.09	.80	.58
DS75176BTN-ND	Multipoint RS485 Transceiver	8-Dip	1.13	.83	.60
DS75451N-ND	Dual Peripheral Driver	8-Dip	.95	.69	.50
DS75451M-ND	Dual Peripheral Driver	8-SOIC	.95	.69	.50
DS75452M-ND	Dual Peripheral Driver	8-SOIC	.95	.69	.50
DS75453M-ND	Dual Peripheral Driver	8-SOIC	.95	.69	.50
DS96172CN-ND	RS422/485 Quad Line Driver	16-Dip	2.82	2.10	1.55
DS96173CN-ND	EIA422/485 Quad Receiver	16-Dip	2.90	2.21	1.69
DS96174CN-ND	RS485/422 Quad Differential Driver	16-Dip	2.68	2.04	1.56
DS96175CN-ND	RS485/422 Quad Differential Receiver	16-Dip	2.68	2.04	1.56
DS96176CN-ND	RS485 Transceiver	8-Dip	2.68	2.04	1.56
DSV14196TWM-ND	3-3V, Supply EIA/TIA-232 5 Driver x3 Receiver	20-SOIC	2.42	1.80	1.33
DSV14196WM-ND	3-3V, Supply EIA/TIA-232 5 Driver x3 Receiver	20-SOIC	1.86	1.38	1.02

International IOR Rectifier CONTROL / POWER INTEGRATED CIRCUITS

Driver ICs

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
IP2001-ND	20A, Synchronous Buck Multiphase Optimized BGA Power Block *NEW!*	144-BGA	12.22	9.32	8.30
IPS031S-ND	Low Side Driver	D2-PAK	3.60	2.88	2.07
IPS512G-ND	High Side Driver	16-SOIC	4.55	3.64	2.62
IPS514G-ND	50V, 5A Fully Protected High Side Power MOSFET Switch *NEW!*	28-SOIC	6.25	4.29	3.75
IPS5451S-ND	High Side Driver	D2-PAK	5.20	4.16	2.99
IPS5551T-ND	High Side Driver	TO-220	9.00	7.20	5.18
IR51H224-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.38	3.50	2.70
IR51HD224-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.48	3.58	2.76
IR51H310-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.13	3.30	2.54
IR51H420-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.88	3.90	3.00
IR51HD420-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.98	3.98	3.06
IR53HD420-ND	Self-Oscillating Half-Bridge Driver	9-Sip	4.98	3.98	3.06
IR1110-ND	Soft Start Control	64-MQFP	50.00	40.00	24.00
IR1175-ND	5V, 2A, Synchronous Rectifier Driver *NEW!*	20-PDip	5.63	3.86	3.38
IR1175S-ND	Synchronous Rectifier Driver	20-SSOP	5.75	4.60	3.45
IR1176-ND	5V, 4A, Synchronous Rectifier Driver *NEW!*	20-PDip	6.38	4.38	3.83
IRDCSYN2-ND	Design Kit with IR1176 Synchronous Driver *NEW!*	—	385.00	—	—
IR1176S-ND	5V, 4A, Synchronous Rectifier Driver *NEW!*	20-SSOP	6.50	4.46	3.90
IR2101-ND	High and Low Side Driver	8-Dip	2.68	1.94	1.85
IR2101S-ND	High and Low Side Driver	8-SOIC	3.33	2.66	2.05
IR2102-ND	High and Low MOS Driver	8-Dip	3.00	2.40	1.85
IR2102S-ND	High and Low MOS Driver	8-SOIC	3.33	2.66	2.05
IR2103-ND	High and Low Side Driver	8-Dip	3.00	2.40	1.85
IR2103S-ND	High and Low MOS Driver	8-SOIC	3.33	2.66	2.05
IR2104-ND	High and Low Side Driver	8-Dip	3.11	1.93	1.70
IR2104S-ND	High and Low Side Driver	8-SOIC	3.33	2.66	2.05
IR2104STR-ND	High and Low Side Driver	8-SOIC	4657.50/2,500		
IR2105-ND	Half-Bridge Driver	8-Dip	3.00	2.40	1.85
IR2106-ND	High and Low Side Driver	8-Dip	2.95	2.14	2.03
IR2106S-ND	High and Low Side Driver	8-SOIC	3.38	2.70	2.08
IR2107-ND	High and Low Side Driver	8-Dip	2.97	2.38	1.79
IR2107S-ND	High and Low Side Driver	8-SOIC	3.63	2.90	2.23
IR2108-ND	High and Low Side Driver	8-Dip	2.95	2.14	2.03
IR2108S-ND	High and Low Side Driver	8-SOIC	3.38	2.70	2.08
IR2109-ND	Half-Bridge Driver	8-Dip	3.30	2.64	2.03
IR2109S-ND	Half-Bridge Driver	8-SOIC	3.38	2.70	2.08
IR2109STR-ND	Half-Bridge Driver	8-SOIC	5062.50/2,500		
IR2110-ND	High and Low Side Driver	14-Dip	3.95	2.56	2.29
IR2110-1-ND	High and Low Side Driver	14-Dip	5.98	4.78	3.68
IR2110-2-ND	High and Low Side Driver	16-Dip	6.10	4.88	3.66
IR2110S-ND	High and Low Side Driver	16-SOIC	5.25	4.20	3.23
IR2110STR-ND	High and Low Side Driver	16-SOIC	2090.00/1,000		
IR2111-ND	Half-Bridge Driver	8-Dip	2.58	1.61	1.42
IR2111S-ND	Half-Bridge Driver	8-SOIC	3.53	2.82	2.17
IR2111STR-ND	Half-Bridge Driver	8-SOIC	4927.50/2,500		
IR2112-ND	High and Low Side Driver	14-Dip	2.95	2.13	2.03
IR2112-1-ND	High and Low Side Driver	14-Dip	3.40	2.72	2.04
IR2112-2-ND	High and Low Side Driver	16-Dip	3.78	3.03	2.27
IR2112S-ND	High and Low Side Driver	16-SOIC	3.78	3.02	2.32
IR2112STR-ND	High and Low Side Driver	16-SOIC	1594.00/1,000		
IR2113-ND	High and Low Side Driver	14-Dip	5.61	3.68	3.29
IR2113-1-ND	High and Low Side Driver	14-Dip	5.38	4.31	3.23
IR2113-2-ND	High and Low Side Driver	16-Dip	5.49	4.40	3.30
IR2113S-ND	High and Low Side Driver	16-SOIC	5.78	4.62	3.55
IR2117-ND	Single-Channel Driver	8-Dip	2.50	1.81	1.72
IR2117S-ND	Single-Channel Driver	8-SOIC	3.13	2.50	1.92
IR2117STR-ND	Single-Channel Driver	8-SOIC	4387.50/2,500		
IR2118-ND	High Side Driver	8-Dip	2.80	2.24	1.72
IR2118S-ND	High Side Driver	8-SOIC	3.13	2.50	1.92
IR2121-ND	Current Limiting Low Side Driver	8-Dip	5.88	4.70	3.62
IR2122-ND	High Side Driver	8-Dip	4.75	3.80	2.93
IR2125-ND	Current Limiting Single-Channel Driver	8-Dip	5.25	3.80	3.62
IR2125S-ND	Current Limiting Single-Channel Driver	16-SOIC	6.00	4.80	3.70
IR2127-ND	Current Sensing Single-Channel Driver	8-Dip	3.80	2.74	2.62
IR2127S-ND	Current Sensing Single-Channel Driver	8-SOIC	4.75	3.80	2.93
IR2127STR-ND	Current Sensing Single-Channel Driver	8-SOIC	6582.50/2,500		
IR2128-ND	High Side Driver	8-Dip	4.25	3.40	2.62
IR2128S-ND	High Side Driver	8-SOIC	4.75	3.80	2.93
IR2130-ND	3-Phase Bridge Driver	28-Dip	11.93	8.60	8.22
IR2130J-ND	3-Phase Bridge Driver	44-PLCC	14.25	11.40	8.78
IR2130S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2131-ND	Triple High and Low Side Driver	28-Dip	13.35	10.68	8.22
IR2131J-ND	Triple High and Low Side Driver	44-PLCC	14.25	11.40	8.78
IR2131S-ND	Triple High and Low Side Driver	28-SOIC	14.25	11.40	8.78
IR2132-ND	3-Phase Bridge Driver	28-Dip	13.35	10.68	8.22
IR2132J-ND	3-Phase Bridge Driver	44-PLCC	14.25	11.40	8.78
IR2132S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2133-ND	3-Phase Bridge Driver	28-Dip	14.25	11.40	8.78
IR2133J-ND	3-Phase Bridge Driver	44-PLCC	13.18	9.53	9.09
IR2133S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2135-ND	3-Phase Bridge Driver	28-Dip	14.25	11.40	8.78
IR2135J-ND	3-Phase Bridge Driver	44-PLCC	14.75	11.80	9.09
IR2135S-ND	3-Phase Bridge Driver	28-SOIC	14.25	11.40	8.78
IR2136-ND	3-Phase Bridge Driver	28-Dip	7.60	5.49	5.24
IR2136J-ND	3-Phase Bridge Driver	44-PLCC	8.75	7.00	5.39
IR2136S-ND	3-Phase Bridge Driver	28-SOIC	8.50	6.80	5.24
IR2137J-ND	3-Phase Bridge Driver	64-PLCC	18.00	14.40	11.09
IR2137Q-ND	3-Phase Bridge Driver	64-MQFP	19.25	15.40	11.86
IR2151-ND	Half-Bridge Driver	8-Dip	3.00	2.40	1.85

(Continued)

CONTROL / POWER INTEGRATED CIRCUITS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
IR2151S-ND	Half-Bridge Driver	8-SOIC	3.33	2.66	2.05
IR2151STR-ND	Half-Bridge Driver	8-SOIC	4657.50/2,500		
IR2152-ND	Self-Oscillating Half-Bridge Driver	8-Dip	2.70	2.16	1.62
IR2152S-ND	Self-Oscillating Half-Bridge Driver	8-SOIC	2.99	2.40	1.80
IR2153-ND	Self-Oscillating Half-Bridge Driver	8-Dip	2.52	1.57	1.39
IR2153D-ND	Self-Oscillating Half-Bridge Driver	8-Dip	2.90	2.33	1.75
IR2153S-ND	Half-Bridge Driver	8-SOIC	3.33	2.66	2.05
IR2153STR-ND	Half-Bridge Driver	8-SOIC	4657.50/2,500		
IR2155-ND	Half-Bridge Driver	8-Dip	3.93	3.14	2.42
IR2159-ND	Half-Bridge Driver	16-Dip	12.63	10.10	7.78
IR2159S-ND	Half-Bridge Driver	16-SOIC	12.75	10.20	7.85
IR2172-ND	Current Sensing Motor Drive	8-Dip	7.00	5.60	4.20
IR2172S-ND	Current Sensing Motor Drive	8-SOIC	7.13	5.70	4.28
IR2182-ND	High and Low Side Driver	8-Dip	3.38	2.70	2.03
IR2182S-ND	High and Low Side Driver	8-SOIC	3.49	2.79	2.10
IR2184-ND	High and Low Side Driver	8-Dip	3.38	2.70	2.03
IR2184S-ND	High and Low Side Driver	8-SOIC	3.49	2.79	2.10
IR2213-ND	High and Low Side Driver	14-Dip	8.75	7.00	5.39
IR2213S-ND	High and Low Side Driver	16-SOIC	9.00	7.20	5.54
IR2233-ND	3-Phase Bridge Driver	28-Dip	37.50	30.00	23.10
IR2233J-ND	3-Phase Bridge Driver	44-PLCC	26.81	19.39	18.48
IR2233S-ND	3-Phase Bridge Driver	28-SOIC	30.00	24.00	18.48
IR2235-ND	3-Phase Bridge Driver	28-Dip	37.50	30.00	23.10
IR2235J-ND	3-Phase Bridge Driver	44-PLCC	37.50	30.00	23.10
IR2235S-ND	3-Phase Bridge Driver	28-SOIC	37.50	30.00	23.10
IR4426-ND	Low Side Driver	8-Dip	2.13	1.70	1.14
IR4426S-ND	Low Side Driver	8-SOIC	1.91	1.53	1.15
IR4427-ND	Low Side Driver	8-Dip	1.80	1.44	1.08
IR4427S-ND	Low Side Driver	8-SOIC	1.91	1.53	1.15
IR4428-ND	Low Side Driver	8-Dip	1.80	1.44	1.08
IR4428S-ND	Low Side Driver	8-SOIC	1.91	1.53	1.15
IR6210-ND	High Side Driver	TO-220-5	4.98	3.98	3.06
IR6210S-ND	High Side Driver	TO-220-5	5.23	4.18	3.22
IR6216-ND	High Side Driver	TO-220-5	4.98	3.98	3.06
IR6220S-ND	High Side Driver	TO-220-5	5.75	4.60	3.54
IR6220STRL-ND	High Side Driver	TO-220-5	2538.40/800		
IR21064-ND	High and Low Side Driver	14-Dip	3.38	2.70	2.08
IR21064S-ND	High and Low Side Driver	14-SOIC	3.43	2.74	2.11
IR21074-ND	High and Low Side Driver	14-Dip	3.45	2.76	2.13
IR21074S-ND	High and Low Side Driver	14-SOIC	3.43	2.74	2.11
IR21084-ND	High and Low Side Driver	14-Dip	3.38	2.70	2.08
IR21084S-ND	High and Low Side Driver	14-SOIC	3.43	2.74	2.11
IR21094-ND	Half-Bridge Driver	14-Dip	3.45	2.76	2.13
IR21094S-ND	Half-Bridge Driver	14-SOIC	3.43	2.74	2.11
IR21271-ND	600V, 200/420mA Current Sensing Single Channel Driver *NEW!*	8-PDip	4.76	3.06	2.76
IR21271S-ND	600V, 200/420mA Current Sensing Single Channel Driver *NEW!*	8-SOIC	5.23	3.42	3.04
IR21362-ND	3-Phase Bridge Driver	28-Dip	8.50	6.80	5.24
IR21362J-ND	3-Phase Bridge Driver	44-PLCC	8.75	7.00	5.39
IR21362S-ND	3-Phase Bridge Driver	28-SOIC	8.50	6.80	5.24
IR21531-ND	Half-Bridge Driver	8-Dip	3.13	2.50	1.93
IR21531D-ND	Self-Oscillating Half-Bridge Driver	8-Dip	2.90	2.33	1.75
IR21531S-ND	Half-Bridge Driver	8-SOIC	3.18	2.54	1.96
IR21571-ND	Ballast Control	16-Dip	4.50	3.60	2.77
IR21571S-ND	Ballast Control	16-SOIC	4.63	3.70	2.86
IR21726S-ND	Current Sensing Motor Drive	16-SOIC	7.38	5.90	4.43
IR21824-ND	High and Low Side Driver	14-Dip	3.49	2.79	2.10
IR21824S-ND	High and Low Side Driver	14-SOIC	3.60	2.88	2.16
IR21844-ND	High and Low Side Driver	14-Dip	3.49	2.79	2.10
IR21844S-ND	High and Low Side Driver	14-SOIC	3.60	2.88	2.16
IRSF3011-ND	Low Side Driver	TO-220AB	4.38	3.50	2.70
IRSF3011L-ND	Low Side Driver	SOT-223	3.50	2.80	2.16
IRSF3021-ND	Low Side Driver	TO-220AB	4.13	3.30	2.54
IRSF3031-ND	Low Side Driver	TO-220AB	4.13	3.30	2.54
IRMDCS1-ND	Design Kit with Control IC 600V, 1mA *NEW!*	—	210.00	—	—
IRPLCFL1-ND	Design Kit Compact Ballast *NEW!*	—	140.00	—	—
IRPLCFL3-ND	Design Kit CFL Triac Ballast Dimming *NEW!*	—	190.40	—	—
	Switching ICs				
IPS021-ND	Fully Protected Power MOSFET Switch	TO-220AB	2.20	1.76	1.27
IPS021L-ND	Fully Protected Power MOSFET Switch	SOT-223	1.43	1.20	.92
IPS021S-ND	Fully Protected Power MOSFET Switch	SMD-220	2.40	1.92	1.38
IPS022G-ND	Dual Fully Protected Power MOSFET Switch	8-SOIC	2.93	2.34	1.68
IPS022GTR-ND	Dual Fully Protected Power MOSFET Switch	8-SOIC	4050.00/2,500		
IPS024G-ND	Low Side Driver	16-SOIC	5.53	4.42	3.17
IPS031-ND	Fully Protected Power MOSFET Switch	TO-220	3.04	2.55	1.96
IPS031G-ND	Single/Dual Fully Protected Power MOSFET Switch	8-SOIC	2.52	2.02	1.52
IPS032G-ND	Single/Dual Fully Protected Power MOSFET Switch	16-SOIC	4.07	3.26	2.45
IPS041L-ND	Fully Protected Power MOSFET Switch	SOT-223	1.28	1.02	.74
IPS042G-ND	Dual Fully Protected Power MOSFET Switch	8-SOIC	2.55	2.04	1.47
IPS511-ND	Fully Protected High-Side Power MOSFET Switch	TO-220-5	3.00	2.40	1.73
IPS511G-ND	Fully Protected High-Side Power MOSFET Switch	8-SOIC	1.94	1.18	1.03
IPS511GTR-ND	Fully Protected High-Side Power MOSFET Switch	8-SOIC	2072.50/2,500		
IPS511S-ND	Fully Protected High-Side Power MOSFET Switch	SMD-220-5	3.20	2.56	1.84
IPS521-ND	Fully Protected High-Side Power MOSFET Switch	TO-220	3.75	3.15	2.42
IPS521F-ND	Fully Protected High Side Power MOSFET Switch	TO-220-5	4.14	3.32	2.49
IPS521G-ND	Fully Protected High Side Power MOSFET Switch	8-SOIC	3.24	2.60	1.95
IPS521S-ND	Fully Protected High Side Power MOSFET Switch	D2-PAK	4.33	3.01	2.45
IPS0151-ND	Fully Protected Power MOSFET Switch	TO-220AB	4.20	3.36	2.42
IPS0151S-ND	Fully Protected Power MOSFET Switch	D2-PAK	3.96	3.17	2.38
IPS0551T-ND	Fully Protected Power MOSFET Switch	TO-220	7.20	5.76	4.32
IPS5451-ND	Fully Protected High-Side Power MOSFET Switch	TO-220-5	5.00	4.00	2.88
IR2156-ND	600V, 0.5A Ballast Control IC *NEW!*	14-PDip	4.48	2.88	2.60
IR2156S-ND	600V, 0.5A Ballast Control IC *NEW!*	14-SOIC	4.62	2.97	2.68
IR2170-ND	600V, 1mA Over Current Sensing IC *NEW!*	8-PDip	5.63	3.86	3.38
IR2170S-ND	600V, 1mA Over Current Sensing IC *NEW!*	8-SOIC	5.75	3.95	3.45
IR2171-ND	600V, 1mA Linear Current Sensing IC *NEW!*	8-PDip	6.25	4.29	3.75
IR2171S-ND	600V, 1mA Linear Current Sensing IC *NEW!*	8-SOIC	6.38	4.38	3.83
IR2181-ND	600V, 1.7A High and Low Side Driver *NEW!*	8-PDip	4.20	2.70	2.43
IR21814-ND	600V, 1.7A High and Low Side Driver *NEW!*	14-PDip	4.34	2.79	2.52
IR21814S-ND	600V, 1.7A High and Low Side Driver *NEW!*	14-SOIC	4.48	2.88	2.60
IR2183-ND	600V, Half Bridge Driver *NEW!*	8-PDip	4.20	2.70	2.43
IR2183S-ND	600V, Half Bridge Driver *NEW!*	8-SOIC	4.34	2.79	2.52
IR6224-ND	Intelligent High Side MOSFET Power Switch	TO-220	5.06	4.05	3.04
IR6224S-ND	Intelligent High Side MOSFET Power Switch	D2-PAK	5.29	4.23	3.18
IR21834SCT-ND	600V, Half Bridge Driver *NEW!*	14-SOIC	4.62	2.97	2.68
IR21834STR-ND	600V, Half Bridge Driver *NEW!*	14-SOIC	5445.00/2,500		
IRIS4007-ND	Integrated Power Switch, 200V, 4A *NEW!*	TO-220-5	5.54	3.55	3.18
IRIS4007K-ND	Integrated Power Switch, 200V, 4A *NEW!*	TO-262-5	5.40	3.46	3.10
IRISMPS1-ND	Reference Design Kit with IRIS4007, 48V, 30W *NEW!*	—	308.00	—	—
IRIS4011-ND	Integrated Power Switch, 650V, 2.7A *NEW!*	TO-220-5	5.54	3.55	3.18
IRIS4011K-ND	Integrated Power Switch, 650V, 2.7A *NEW!*	TO-262-5	5.40	3.46	3.10
IRISMPS2-ND	Reference Design Kit with IRIS4011, 1-12V, 30W *NEW!*	—	308.00	—	—
IRIS4013-ND	Integrated Power Switch, 650V, 5.1A *NEW!*	TO-220-5	5.96	3.83	3.45
IRIS4013K-ND	Integrated Power Switch, 650V, 5.1A *NEW!*	TO-262-5	5.83	3.74	3.37
IRISMPS3-ND	Reference Design Kit with IRIS4013, 15V, 4A *NEW!*	—	308.00	—	—
IRIS4015-ND	Integrated Power Switch, 650V, 8A *NEW!*	TO-220-5	6.44	4.29	3.88
IRIS4015K-ND	Integrated Power Switch, 650V, 8A *NEW!*	TO-262-5	6.31	4.20	3.80
IRSF3010S-ND	Fully Protected Power MOSFET Switch	D2-PAK	4.28	3.42	2.57
IRSF3012L-ND	Fully Protected Power MOSFET Switch	SOT-223	3.15	2.52	1.89
IRSF3012-ND	Fully Protected Power MOSFET Switch	TO-220	3.94	3.15	2.37
IRSF3021L-ND	Low Side Power MOSFET Switch	SOT-223	2.93	2.34	1.76
IRSF3031L-ND	Low Side Power MOSFET Switch	SOT-223	2.93	2.34	1.76
IRPLBDA1-ND	Download Ballast Design Assistant Software *NEW!*	—	139.93	—	—

LDO REGULATORS/ SWITCHING CONTROLLERS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
IRU431ALCL3CT-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-3	.77	.37	.31
IRU431ALCL3TR-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-3	720.00/3,000		
IRU431ALCL5CT-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-5	.82	.43	.36
IRU431ALCL5TR-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-5	831.00/3,000		
IRU431LCL3CT-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-3	.65	.33	.26
IRU431LCL3TR-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-3	585.00/3,000		
IRU431LCL5CT-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-5	.72	.35	.29
IRU431LCL5TR-ND	Low Voltage Adjustable Precision Shunt Regulator *NEW!*	SOT-23-5	675.00/3,000		
IRU1010CD-ND	1.0 Amp, Adjustable LDO Regulator	D-PAK	.70	.63	.56
IRU1010CP-ND	1.0 Amp, Adjustable LDO Regulator	2-Pin Power Flex	.58	.52	.44
IRU1010CS-ND	1.0 Amp, Adjustable LDO Regulator	8-SOIC	.45	.41	.36
IRU1010CY-ND	1.0 Amp, Adjustable LDO Regulator	SOT-223	.43	.38	.34
IRU1010-18CD-ND	1.8 Volt, 1.0 Amp LDO Regulator	D-PAK	.70	.63	.54
IRU1010-18CP-ND	1.8 Volt, 1.0 Amp LDO Regulator	2-Pin Power Flex	.58	.52	.44
IRU1010-18CS-ND	1.8 Volt, 1.0 Amp LDO Regulator	8-SOIC	.45	.41	.35
IRU1010-18CY-ND	1.8 Volt, 1.0 Amp LDO Regulator	SOT-223	.43	.38	.33
IRU1010-25CD-ND	2.5 Volt, 1.0 Amp LDO Regulator	D-PAK	.70	.63	.54
IRU1010-25CP-ND	2.5 Volt, 1.0 Amp LDO Regulator	2-Pin Power Flex	.58	.52	.44
IRU1010-25CS-ND	2.5 Volt, 1.0 Amp LDO Regulator	8-SOIC	.45	.41	.35
IRU1010-25CY-ND	2.5 Volt, 1.0 Amp LDO Regulator	SOT-223	.43	.38	.33
IRU1010-33CD-ND	3.3 Volt, 1.0 Amp LDO Regulator	D-PAK	.70	.63	.54
IRU1010-33CP-ND	3.3 Volt, 1.0 Amp LDO Regulator	2-Pin Power Flex	.58	.52	.44
IRU1010-33CS-ND	3.3 Volt, 1.0 Amp LDO Regulator	8-SOIC	.45	.41	.35
IRU1010-33CY-ND	3.3 Volt, 1.0 Amp LDO Regulator	SOT-223	.43	.38	.33
IRU1010-33CYTR-ND	3.3 Volt, 1.0 Amp LDO Regulator *NEW!*	SOT-223	672.50/2,500		
IRU1015CD-ND	1.5 Amp, Adjustable LDO Regulator	D-PAK	.83	.74	.63
IRU1015CM-ND	1.5 Amp, Adjustable LDO Regulator	TO-263-3	.95	.85	.76
IRU1015CMCT-ND	1.5A LDO Positive Adjustable Regulator *NEW!*	TO-263-3	1.44	.78	.70
IRU1015CMTR-ND	1.5A LDO Positive Adjustable Regulator *NEW!*	TO-263-3	461.25/750		
IRU1015CT-ND	1.5 Amp, Adjustable LDO Regulator	TO-220	.88	.79	.67
IRU1015-33CD-ND	3.3 Volt, 1.5 Amp LDO Regulator	D-PAK	.83	.74	.63
IRU1015-33CM-ND	3.3 Volt, 1.5 Amp LDO Regulator	TO-263-3	.95	.85	.73
IRU1015-33CP-ND	3.3 Volt, 1.5 Amp LDO Regulator	Ultra Thin-PAK	.70	.63	.54
IRU1015-33CT-ND	3.3 Volt, 1.5 Amp LDO Regulator	TO-220	1.05	.94	.80
IRU1030CD-ND	3.0 Amp, Adjustable Regulator	D-PAK	.83	.74	.63
IRU1030CM-ND	3.0 Amp, Adjustable Regulator	TO-263-3	.95	.95	.77
IRU1030CT-ND	3.0 Amp, Adjustable Regulator	TO-220	1.06	1.05	.85
IRU1030-33CD-ND	3.3 Volt, 3.0 Amp LDO Regulator	D-PAK	.83	.74	.66
IRU1030-33CM-ND	3.3 Volt, 3.0 Amp LDO Regulator	TO-263-3	.95	.95	.77
IRU1030-33CP-ND	3.3 Volt, 3.0 Amp LDO Regulator	2-Pin Power Flex	.70	.63	.54
IRU1030-33CT-ND	3.3 Volt, 3.0 Amp LDO Regulator	TO-220	1.05	.94	.81
IRU1050CD-ND	5.0 Amp, Adjustable Regulator	D-PAK	.90	.81	.72
IRU1050CM-ND	5.0 Amp, Adjustable Regulator	TO-263-3	1.04	1.03	.83
IRU1050CP-ND	5.0 Amp, Adjustable Regulator	2-Pin Power Flex	.78	.69	.62
IRU1050CT-ND	5.0 Amp, Adjustable Regulator	TO-220	1.14	1.02	.91
IRU1050-33CD-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator	D-PAK	.90	.81	.69
IRU1050-33CM-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator	TO-263-3	1.03	.92	.78
IRU1050-33CP-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator	2-Pin Power Flex	.78	.69	.59
IRU1050-33CT-ND	3.3 Volt, 5.0 Amp Low Dropout Regulator	TO-220	1.13	1.01	.86
IRU1075CM-ND	7.5 Amp, Adjustable LDO Regulator	TO-263-3	1.53	1.38	1.23
IRU1075CMTR-ND	7.5 Amp, Adjustable LDO Regulator *NEW!*	TO-263-3	672.00/750		
IRU1075CP-ND	7.5 Amp, Adjustable LDO Regulator	3-Pin Power Flex	1.55	1.40	1.25
IRU1075CT-ND	7.5 Amp, Adjustable LDO Regulator	TO-220	1.63	1.47	1.31
IRU1117CD-ND	800mA LDO Positive Adjustable Regulator *NEW!*	TO-252	1.12	.59	.52
IRU1117CY-ND	800mA LDO Positive Adjustable Regulator *NEW!*	SOT-223	.74	.40	.32
IRU1117-18CD-ND	800mA LDO Positive Fixed 1.8V Regulator *NEW!*	TO-252	1.12	.59	.52
IRU1117-18CP-ND	800mA LDO Positive Fixed 1.8V Regulator *NEW!*	Ultra Thin-Pak	.94	.51	.43
IRU1117-18CS-ND	800mA LDO Positive Fixed 1.8V Regulator *NEW!*	8-SOIC	.77	.42	.34
IRU1117-18CY-ND	800mA LDO Positive Fixed 1.8V Regulator *NEW!*	SOT-223	.74	.40	.32
IRU1117-25CD-ND	800mA LDO Positive Fixed 2.5V Regulator *NEW!*	TO-252	1.12	.59	.52
IRU1117-25CP-ND	800mA LDO Positive Fixed 2.5V Regulator *NEW!*	Ultra Thin-Pak	.94	.51	.43
IRU1117-25CS-ND	800mA LDO Positive Fixed 2.5V Regulator *NEW!*	8-SOIC	.77	.42	.34
IRU1117-33CD-ND	800mA LDO Positive Fixed 3.3V Regulator *NEW!*	TO-252	1.12	.59	.52
IRU1117-33CP-ND	800mA LDO Positive Fixed 3.3V Regulator *NEW!*	Ultra Thin-Pak	.94	.51	.43
IRU1117-33CS-ND	800mA LDO Positive Fixed 3.3V Regulator *NEW!*	8-SOIC	.77	.42	.34
IRU1117-33CY-ND	800mA LDO Positive Fixed 3.3V Regulator *NEW!*	SOT-223	.74	.40	.32
IRU1150CM-ND	4A, Adjustable Positive Voltage Regulator	TO-263-5	1.48	1.32	1.18
IRU1150CMCT-ND	4A, Adjustable Positive Voltage Regulator	TO-263-5	1.26	.95	.74
IRU1150CMTR-ND	4A, Adjustable Positive Voltage Regulator	TO-263-5	425.25/750		
IRU1150CPTR-ND	4.0 Amp, Adjustable Very LDO Regulator	5-Pin Power Flex	946.00/2,000		
IRU1150CSTR-ND	4.0 Amp, Adjustable Very Low Dropout Regulator	8-SOIC	877.50/2,500		
IRU1160CM-ND	6.0 Amp, Adjustable Regulator	TO-263-5	2.28	2.03	1.82
IRU1160CPTR-ND	6.0 Amp, Adjustable Regulator	5-Pin Power Flex	1810.00/2,000		
IRU1175CMCT-ND	7.5A, Adjustable Positive Voltage Regulator	TO-263-5	2.67	2.01	1.56
IRU1175CMTR-ND	7.5A, Adjustable Positive Voltage Regulator	TO-263-5	830.25/750		

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

International Rectifier LDO REGULATORS / SWITCHING CONTROLLERS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
IRU1176CM-ND	7.5 Amp, Adjustable Ultra Low Dropout Regulator	TO-263-7	3.13	2.79	2.50
IRU1176CPTR-ND	7.5 Amp, Adjustable Ultra LDO Regulator	5-Pin Power Flex	1944.00/2,000		
IRU1205CLTR-ND	0.3 Amp, Adjustable Very Low Dropout Regulator	SOT-23-5	891.00/3,000		
IRU1205-25CLTR-ND	2.5 Volt, 0.3 Amp Very Low Dropout Regulator	SOT-23-5	891.00/3,000		
IRU1205-28CLCT-ND	300mA Ultra LDO Positive Fixed 2.8V Regulator *NEW!*	SOT-23-5	.92	.50	.41
IRU1205-28CLTR-ND	300mA Ultra LDO Positive Fixed 2.8V Regulator *NEW!*	SOT-23-5	963.00/3,000		
IRU1205-30CLTR-ND	3.0 Volt, 0.3 Amp Very Low Dropout Regulator	SOT-23-5	891.00/3,000		
IRU1205-33CLTR-ND	3.3 Volt, 0.3 Amp Very Low Dropout Regulator	SOT-23-5	891.00/3,000		
IRU1205-36CLTR-ND	3.6 Volt, 0.3 Amp Very Low Dropout Regulator	SOT-23-5	891.00/3,000		
IRU1206-18CD-ND	1.8 Volt, 1.0 Amp Very Low Dropout Regulator	D-PAK	1.28	1.14	.94
IRU1206-18CY-ND	1.8 Volt, 1.0 Amp Very Low Dropout Regulator	SOT-223	1.00	.89	.74
IRU1206-25CD-ND	2.5 Volt, 1.0 Amp Very Low Dropout Regulator	D-PAK	1.28	1.14	.94
IRU1206-25CY-ND	2.5 Volt, 1.0 Amp Very Low Dropout Regulator	SOT-223	1.00	.89	.74
IRU1206-33CD-ND	3.3 Volt, 1.0 Amp Very Low Dropout Regulator	D-PAK	1.28	1.14	.94
IRU1206-33CY-ND	3.3 Volt, 1.0 Amp Very Low Dropout Regulator	SOT-223	1.00	.89	.74
IRU1207-18CS-ND	1.8 Volt, 1.0 Amp Very Low Dropout Regulator	8-SOIC	1.00	.89	.74
IRU1207-25CS-ND	2.5 Volt, 1.0 Amp Very Low Dropout Regulator	8-SOIC	1.00	.89	.74
IRU1207-33CS-ND	3.3 Volt, 1.0 Amp Very Low Dropout Regulator	8-SOIC	1.00	.89	.74
IRU1208CS-ND	1.0 Amp Adjustable Very Low Dropout Regulator	8-SOIC	1.00	.89	.74
IRU1209CS-ND	1.0 Amp Adjustable Very Low Dropout Regulator	8-SOIC	1.00	.89	.74
IRU1209CSTR-ND	1.0 Amp Adjustable Very Low Dropout Regulator *NEW!*	8-SOIC	1382.50/2,500		
IRU1260CMTR-ND	Dual Adjustable 6 Amp/1 Amp LDO Regulator *NEW!*	TO-263-7	1312.82/750		
IRU1260CPTR-ND	Dual Adjustable 6 Amp/1 Amp LDO Regulator	7-Pin Power Flex	2592.00/2,000		
IRU1260CT-ND	Dual 6A/1A LDO Positive Adjustable Regulator *NEW!*	TO-220-7	2.87	1.98	1.55
IRU1261CT-ND	Dual 6A/1A LDO Positive Fixed 1.5V and 2.5V Reg. *NEW!*	TO-220-5	2.87	1.98	1.55
IRU1261CMTR-ND	Dual LDO Reg. 1.5 V/6 Amp and 2.5 V/1 Amp *NEW!*	TO-263-5	1312.82/750		
IRU1261CPTR-ND	Dual LDO Reg. 1.5 V/6 Amp and 2.5 V/1 Amp	Ultra Thin-PAK-5	2592.00/2,000		
IRU3004CW-ND	5-Bit Prog. Synch. Buck Controller w/Dual LDO Controller	20-SOIC(W)	3.25	2.90	2.41
IRU3007CW-ND	5-Bit Prog. Synch. Buck Controller w/Dual LDO Controller	28-SOIC(W)	4.60	4.10	3.41
IRU3011CW-ND	5-Bit Prog. Synch. Buck Controller	20-SOIC(W)	3.25	2.90	2.41
IRU3018CW-ND	5-Bit Prog. Synch. Buck Controller w/Dual LDO Controller	24-SOIC(W)	4.33	3.85	3.21
IRU3021MCW-ND	5-Bit Programmable Synch. Buck Controller with Triple LDO Controller	28-SOIC(W)	3.08	2.74	2.28
IRU3021MCWTR-ND	5-Bit Programmable Synch. Buck Controller with Triple LDO Controller *NEW!*	28-SOIC(W)	2350.64/1,000		
IRU3027CW-ND	5-Bit Programmable Synch. Buck Controller with Triple LDO Controller	28-SOIC(W)	3.08	2.74	2.28
IRU3027CWTR-ND	5-Bit Programmable Synch. Buck Controller with Triple LDO Controller *NEW!*	28-SOIC(W)	2350.64/1,000		
IRU3033CS-ND	Pulse Width Modulation Switcher and Linear Controller	8-SOIC(N)	2.20	1.96	1.63
IRU3033CSTR-ND	Pulse Width Modulation Switcher and Linear Controller *NEW!*	8-SOIC(N)	3037.50/2,500		
IRU3034CS-ND	PWM Switcher/Controller with Short Circuit Protection	8-SOIC	1.55	1.38	1.15
IRU3037CS-ND	Synchronous PWM Controller *NEW!*	8-SOIC	2.30	1.56	1.22

TOSHIBA 4-CHANNEL DARLINGTON SINK DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TD62064AF-ND	TTL, 5V, CMOS Input - 1.5A @ 50V, Vce Output	HSOP-16	1.40	1.12	.84
TD62064AP-ND	TTL, 5V, CMOS Input - 1.5A @ 50V, Vce Output	16-Dip	1.20	1.00	.80
TD62064BF-ND	TTL, 5V, CMOS Input - 1.5A @ 80V, Vce Output	HSOP-16	1.40	1.12	.84
TD62064BP-1-ND	TTL, 5V, CMOS Input - 1.5A @ 80V, Vce Output	16-Dip	1.20	1.00	.80

TOSHIBA 7-CHANNEL DARLINGTON SINK DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TD62001AF-ND	General Purpose Input - 0.5A @ 50V, Vce Output	16-SOP	.72	.54	.41
TD62001AFELTR-ND	General Purpose Input - 0.5A @ 50V, Vce Output	16-SOP	1092.00/4,000		
TD62001AP-ND	General Purpose Input - 0.5A @ 50V, Vce Output	16-Dip	.64	.48	.36
TD62002AF-ND	14-25V, PMOS Input - 0.5A @ 50V, Vce Output	16-SOP	.72	.54	.41
TD62002AFELTR-ND	14-25V, PMOS Input - 0.5A @ 50V, Vce Output	16-SOP	1092.00/4,000		
TD62002AP-ND	14-25V, PMOS Input - 0.5A @ 50V, Vce Output	16-Dip	.64	.48	.36
TD62003AF-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	16-SOP	.64	.48	.36
TD62003AP-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	16-Dip	.56	.42	.32
TD62004AF-ND	6-15V, PMOS Input - 0.5A @ 50V, Vce Output	16-SOP	.64	.48	.36
TD62004AP-ND	6-15V, PMOS Input - 0.5A @ 50V, Vce Output	16-Dip	.56	.42	.32
ULN2003AFW-ND	TTL, 5V CMOS 0.5A @ 50V, Vce Output	16-SOL	.56	.42	.32
ULN2003AP-ND	TTL, 5V CMOS 0.5A @ 50V, Vce Output	16-Dip	.48	.36	.27
ULN2004AFW-ND	6-15V PMOS, CMOS 0.5A @ 50V Vce Output	16-SOL	.56	.42	.32
ULN2004AP-ND	6-15V PMOS, CMOS 0.5A @ 50V Vce Output	16-Dip	.48	.36	.27

TOSHIBA 8-CHANNEL DARLINGTON SINK DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TD62081AF-ND	General Purpose Input, 0.5A @ 50V, Vce Output	SOP-18	.88	.66	.50
TD62081AP-ND	General Purpose Input, 0.5A @ 50V, Vce Output	18-Dip	.76	.57	.43
TD62082AF-ND	14-25V, PMOS Input, 0.5A @ 50V, Vce Output	SOP-18	.88	.66	.50
TD62082AFTR-ND	14-25V PMOS Input, 0.5A @ 50V, Vce Output	18-SOP	319.20/1,000		
TD62082AP-ND	14-25V, PMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.76	.57	.43
TD62083AF-ND	TTL, 5V, CMOS Input, 0.5A @ 50V, Vce Output	SOP-18	.84	.63	.48
TD62083AFN-ND	TTL, 5V, CMOS Input, 0.5A @ 50V, Vce Output	SSOP-18	.87	.73	.58
TD62083AP-ND	TTL, 5V, CMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.72	.54	.41
TD62084AF-ND	6-15V PMOS, CMOS Input, 0.5A @ 50V, Vce Output	SOP-18	.84	.63	.48
TD62084AFTR-ND	6-15V PMOS, CMOS Input, 0.5A @ 50V, Vce Output	18-SOP	312.00/1,000		
TD62084AFN-ND	6-15V PMOS, CMOS Input, 0.5A @ 50V, Vce Output	SSOP-18	.90	.75	.60
TD62084AFNTR-ND	6-15V PMOS, CMOS Input, 0.5A @ 50V, Vce Output	18-SSOP	1664.00/4,000		
TD62084AP-ND	6-15V PMOS, CMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.76	.57	.43
ULN2803AFW-ND	TTL, 5V CMOS Input, 0.5A @ 50V, Vce Output	18-SOL	.84	.63	.48
ULN2803AP-ND	TTL, 5V CMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.72	.54	.41
ULN2804AFW-ND	6-15V PMOS, CMOS Input, 0.5A @ 50V, Vce Output	18-SOL	.84	.63	.48
ULN2804AP-ND	6-15V PMOS, CMOS Input, 0.5A @ 50V, Vce Output	18-Dip	.76	.57	.43

TOSHIBA 8-CHANNEL DARLINGTON SOURCE DRIVERS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
TD62783AF-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	SOP-18	1.43	1.14	.86
TD62783AFN-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	SSOP-18	1.75	1.40	1.05
TD62783AP-ND	TTL, 5V, CMOS Input - 0.5A @ 50V, Vce Output	18-Dip	1.23	.98	.74
TD62784AF-ND	6-15V, PMOS, CMOS Input, 0.5A @ 50V, Vce Output	SOP-18	1.43	1.14	.86
TD62784AFN-ND	6-15V, PMOS, CMOS Input, 0.5A @ 50V, Vce Output	SSOP-18	1.75	1.40	1.05
TD62784AP-ND	6-15V, PMOS, CMOS Input, 0.5A @ 50V, Vce Output	18-Dip	1.23	.98	.74

MAXIM SPECIALIZED INTEGRATED CIRCUITS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
DG201ACJ-ND	Quad SPST CMOS Normally Closed Analog Switch	16-Dip	4.85	3.66	2.62
DG211CJ-ND	Quad SPST CMOS Normally Closed Analog Switch	16-Dip	3.45	2.60	1.85
DG211CSE-ND	Quad SPST CMOS Normally Closed Analog Switch	16-SOIC	2.76	2.08	1.61
DG212CJ-ND	Quad SPST CMOS Normally Open Analog Switch	16-Dip	3.45	2.60	1.85
DG418DY-ND	Precision CMOS Analog Switch	8-SOIC	3.26	2.46	1.75
DG508ACJ-ND	Monolithic CMOS Analog 1-to-8 Multiplexer	16-Dip	5.70	4.30	3.06
DG509ACJ-ND	Monolithic CMOS Analog 2-to-8 Multiplexer	16-Dip	5.70	4.30	3.06
HI3-0201-5-ND	Quad SPST CMOS Analog Switch	16-Dip	5.64	4.26	2.84
HI3-0201HS-5-ND	High Speed Quad SPST CMOS Analog Switch	16-Dip	6.33	4.78	3.20
HI6-0201-5-ND	Quad SPST CMOS Analog Switch	16-SOIC	6.41	4.84	3.23
HI6-0201HS-5-ND	High Speed Quad SPST CMOS Analog Switch	16-SOIC	8.93	6.74	4.50
ICL7109CPL-ND	12-Bit ADC with Tri-State Binary Outputs	40-Dip	13.04	9.84	8.95
ICL7126CPL-ND	Low Power 3-1/2 Digit ADC with Direct Drive (LCD)	40-Dip	12.16	9.18	6.12
ICL7129ACPL-2-ND	4-1/2 Digit ADC Multiplexer Driver	40-Dip	15.53	11.72	7.81
ICL7660CSA-ND	CMOS Switch Capacitor Voltage Converter	8-SOIC	2.86	2.16	1.54
ICL7665ACPA-ND	Under/Over Volt Detector	8-Dip	4.93	3.72	2.66
ICL7665ACSA-ND	Under/Over Volt Detector	8-SOIC	5.43	4.10	2.93
ICM7218AIPI-ND	8-Digit Multiplexer LED Decoder/Driver	28-Dip	11.74	8.86	6.00
ICM7250IPE-ND	Programmable RC Timer	16-Dip	5.41	4.08	2.72
ICM7250IWE-ND	Programmable RC Timer	16-SOIC	5.94	4.48	2.99
ICMAX7555IPA-ND	CMOS General Purpose Timer	8-Dip	2.49	1.88	1.25
MAX038CPP-ND	IC 20MHz Function Generator	20-Dip	23.37	17.64	11.31
MAX110ACPE-ND	2-Channel ±14-Bit Serial ADC	16-Dip	16.56	12.50	8.01
MAX110ACWE-ND	2-Channel ±14-Bit Serial ADC	16-SOIC	16.56	12.50	8.01
MAX110BCPE-ND	2-Channel ±14-Bit Serial ADC	16-Dip	12.72	9.60	6.17
MAX110BCWE-ND	2-Channel ±14-Bit Serial ADC	16-SOIC	12.72	9.60	6.17
MAX117CPI-ND	3V 8-Channel 8-Bit Parallel Output ADC	28-Dip	9.99	7.54	4.84
MAX118CPI-ND	5V 8-Channel 8-Bit Parallel Output ADC	28-Dip	9.59	7.24	4.64
MAX120CNG-ND	500 KSPS, 12-Bit ADC with Track/Hold and Ref.	24-Dip	40.07	30.24	19.39
MAX120CWG-ND	12-Bit ADC with Track/Hold and Reference	24-SOIC	40.07	30.24	19.39
MAX121CPE-ND	308 KSPS A/D Conv with DSP 78dB Interface and Serial A/D	16-Dip	31.80	24.00	15.39
MAX121CWE-ND	308 KSPS A/D Conv with DSP 78dB Interface and Serial A/D	16-SOIC	31.80	24.00	15.39
MAX132CNG-ND	ADC with Serial Interface	24-Dip	20.01	15.10	9.69
MAX132CWG-ND	ADC with Serial Interface	24-SOIC	20.01	15.10	9.69
MAX133CQH-ND	3-3/4 Digit DMM Circuit	44-PLCC	26.87	20.28	13.00
MAX135CPI-ND	15-Bit Low Power ADC with Parallel Interface	28-Dip	20.01	15.10	9.69
MAX135CWI-ND	15-Bit Low Power ADC with Parallel Interface	28-SOIC	20.01	15.10	9.69
MAX138CPL-ND	3-1/2 Digit ADC with Bandgap Ref. and Charge Pump Volt Converter and LCD Driver	40-Dip	19.37	14.62	9.37
MAX147BCAP-ND	2.7V Low Power 12-Bit 8-Channel Serial ADC	20-SSOP	15.37	11.60	7.44
MAX147BCPP-ND	2.7V Low Power 12-Bit 8-Channel Serial ADC	20-Dip	15.37	11.60	7.44
MAX148BCAP-ND	2.7V Low Power 10-Bit 8-Channel Serial ADC	20-SSOP	8.03	6.06	3.88
MAX148BCPP-ND	2.7V Low Power 10-Bit 8-Channel Serial ADC	20-Dip	8.75	6.60	4.23
MAX150BCPP-ND	CMOS 8-Bit ADC with VREF Track and Hold	20-Dip	22.42	16.92	10.85
MAX152CWP-ND	3V 8-Bit ADC 1µA Power Down	20-SOIC	10.89	8.22	5.27
MAX153CPP-ND	1MSPS, µP-Compatible, 8-Bit ADC with Power Down	20-Dip	16.62	12.54	8.04
MAX154ACNG-ND	4-Channel ADC with Track and Hold	24-Dip	32.54	24.56	15.75
MAX154ACWG-ND	4-Channel ADC with Track and Hold	24-SOIC	32.54	24.56	15.75
MAX154BCNG-ND	4-Channel ADC with Track and Hold	24-Dip	23.53	17.76	11.39
MAX154BCWG-ND	4-Channel ADC with Track and Hold	24-SOIC	23.53	17.76	11.39
MAX156ACWI-ND	High Speed 8-Bit ADC with 4-Channel Multiplexer	28-SOIC	22.60	17.06	10.93
MAX156BCNG-ND	High-Speed 8-Bit ADC with 4-Channel Multiplexer	24-Dip	18.84	14.22	9.12
MAX158ACPI-ND	8-Channel ADC with Track and Hold	28-Dip	33.68	25.42	16.30
MAX158ACWI-ND	8-Channel ADC with Track and Hold	28-SOIC	33.68	25.42	16.30
MAX158BCPI-ND	8-Channel ADC with Track and Hold	28-Dip	24.67	18.62	11.94
MAX158BCWI-ND	8-Channel ADC with Track and Hold	28-SOIC	24.67	18.62	11.94
MAX160CPN-ND	CMOS µP Compatible 4µS 8-Bit A/D Converter	18-Dip	20.27	15.30	9.81
MAX160CWN-ND	CMOS uP Compatible 4µS 8-Bit A/D Converter	18-SOIC	20.27	15.30	9.81
MAX162BCNG-ND	Complete High Speed CMOS 12-Bit ADC	24-Dip	60.82	45.90	30.60
MAX165ACPN-ND	CMOS µP Compatible 5µS 8-Bit ADC	18-Dip	13.28	10.02	6.43
MAX165ACWN-ND	CMOS µP Compatible 5µS 8-Bit ADC	18-SOIC	13.28	10.02	6.43
MAX165BCPN-ND	CMOS µP Compatible, 5µS 8-Bit ADC with T/H and Reference	18-Dip	10.23	7.72	4.96
MAX165BCWN-ND	CMOS µP Compatible 5µS 8-Bit ADC	18-SOIC	10.23	7.72	4.96
MAX166BCPP-ND	Differential Input, 5µS, 8-Bit ADC with T/H and Reference	20-Dip	10.89	8.22	5.27
MAX172BCNG-ND	Complete 10µS CMOS 12-Bit ADC	24-Dip	27.03	20.40	13.08
MAX174CCPI-ND	12-Bit ADC with Reference	28-Dip	79.21	59.78	42.71
MAX176BCPA-ND	Serial Output, 12-Bit 250 KSPS ADC	8-Dip	33.05	24.94	16.00
MAX178ACWG-ND	Calibrated 12-Bit A/D Converter with T/H and Reference	24-SOIC	44.94	33.92	22.64
MAX178BCWG-ND	Calibrated 12-Bit A/D Converter with T/H and Reference	24-SOIC	40.41	30.50	20.35
MAX180BCPL-ND	8-Channel 12-Bit Data Acquisition System	40-Dip	48.92	36.92	23.67
MAX181CCPL-ND	6-Channel 12-Bit Data Acquisition System	40-Dip	42.56	32.12	20.60
MAX181CCQH-D-ND	6-Channel 12-Bit Data Acquisition System	44-PLCC	42.56	32.12	20.60
MAX182BCPI-ND	4-Channel 12-Bit ADC with Track and Hold	28-Dip	46.53	35.12	23.44
MAX186BCPP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-Dip	32.54	24.56	15.75
MAX186BCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-SOIC	32.54	24.56	15.75
MAX186DCPP-ND	Low-Power 8-Channel Serial 12-Bit ADC with V Reference	20-Dip	21.47	16.20	10.38
MAX186DCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-SOIC	21.47	16.20	10.38
MAX187BCPA-ND	Low Power 12-Bit Serial ADC with Track and Hold	8-Dip	19.80	14.94	9.58
MAX187BCWE-ND	Low Power 12-Bit Serial ADC w/Track and Hold	16-SOIC	19.80	14.94	9.58
MAX188BCPP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-Dip	29.76	22.46	14.40
MAX188BCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-SOIC	29.76	22.46	14.40
MAX188DCPP-ND	Low Power 8-Ch. Serial 12-Bit ADC, External Ref. Required	20-Dip	20.25	15.28	9.80
MAX188DCWP-ND	Low Power 8-Channel Serial 12-Bit ADC with Reference	20-SOIC	20.25	15.28	9.80
MAX189CCPA-ND	5V Low Power 12-Bit Serial A/D Converter	8-Dip	16.67	12.58	8.06
MAX189CCWE-ND	5V Low Power 12-Bit Serial A/D Converter	16-SOIC	16.67	12.58	8.06

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MAX191BCNG-ND	Low-Power, Single-Supply 12-Bit ADC with Power Down and Serial/Parallel Outputs	24-Dip	24.04	18.14	11.64
MAX191BCWG-ND	Low-Power, Single-Supply 12-Bit ADC with Power Down and Serial/Parallel Outputs	24-SOIC	24.04	18.14	11.64
MAX192BCAP-ND	Low Power 8-Channel 10-Bit ADC	20-SSOP	16.96	12.80	8.21
MAX192BCPP-ND	Low Power 8-Channel 10-Bit ADC	20-Dip	15.42	11.64	7.46
MAX192BCWP-ND	Low Power 8-Channel 10-Bit ADC	20-SOIC	15.42	11.64	7.46
MAX194BCPE-ND	14-Bit 85KSPS ADC with 10µA Shutdown	16-Dip	36.68	27.68	17.75
MAX194BCWE-ND	14-Bit 85KSPS ADC with 10µA Shutdown	16-SOIC	36.68	27.68	17.75
MAX195BCPE-ND	16-Bit 85KSPS ADC with 10µA Shutdown	16-Dip	67.60	51.02	32.71
MAX195BCWE-ND	16-Bit 85KSPS ADC with 10µA Shutdown	16-SOIC	67.60	51.02	32.71
MAX196BCAI-ND	6-Channel Multi Range 12-Bit ADC Parallel Interface	28-SSOP	28.28	21.34	13.69
MAX196BCNI-ND	6-Channel Multi Range 12-Bit ADC Parallel Interface	28-Dip	27.22	20.54	13.16
MAX197BCAI-ND	8-Channel Multi Range 12-Bit ADC Parallel Interface	28-SSOP	28.28	21.34	13.69
MAX197BCNI-ND	8-Channel Multi Range 12-Bit ADC Parallel Interface	28-Dip	27.22	20.54	13.16
MAX200CPP-ND	+5V Power, Five RS232 Trans. with Power Shutdown and .1µF External Capacitors	20-Dip	8.24	6.22	3.99
MAX201CPD-ND	+5V/+9V to +13.2V, Dual RS232 Transceiver with .1µF External Capacitors	14-Dip	3.31	2.50	1.60
MAX201CWE-ND	+5V/+9V to +13.2V, Dual RS232 Transceiver with .1µF External Capacitors	16-SOIC	3.31	2.50	1.60
MAX202CPE-ND	+5V Dual RS232 Transceiver with .1µF External Caps	16-Dip	3.31	2.50	1.60
MAX202CSE-ND	+5V Dual RS232 Transceiver with .1µF External Caps	16-SOIC	3.31	2.50	1.60
MAX203CPP-ND	Complete, +5V Powered, Dual RS232 Transceiver	20-Dip	7.45	5.62	3.60
MAX203CWP-ND	+5V Powered, Dual RS232 Transceiver	20-SOIC	7.45	5.62	3.60
MAX204CPE-ND	+5V Quad RS232 Transceiver with .1µF External Capacitors	16-Dip	5.88	4.44	2.85
MAX205CPG-ND	Complete, +5V Pwrd, 5-Channel RS232 Transceiver	24-Dip	16.38	12.36	7.92
MAX206CNG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/3 Receivers	24-Dip	7.55	5.70	3.65
MAX206CWG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/3 Receivers	24-SOIC	7.55	5.70	3.65
MAX207CNG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 5 Drivers/3 Receivers	24-Dip	7.55	5.70	3.65
MAX207CWG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 5 Drivers/3 Receivers	24-SOIC	7.55	5.70	3.65
MAX208CNG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/4 Receivers	24-Dip	7.55	5.70	3.65
MAX208CWG-ND	5V RS232 Transceiver w/ .1µF Ext Caps, 4 Drivers/4 Receivers	24-SOIC	7.55	5.70	3.65
MAX209CNG-ND	+5V and +12V Pwrd., 3 RS232 Transmitters and 5 RS232 Receivers with Receiver Enable and .1µF Ext. Caps.	24-Dip	7.55	5.70	3.65
MAX209CWG-ND	+5V and +12V Pwrd, 3 RS232 Transmitters and 5 RS232 Receivers with Receiver Enable and .1µF Ext. Caps.	24-SOIC	7.55	5.70	3.65
MAX211CAI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers with .1µF Ext. Caps.	28-SSOP	7.95	6.00	3.85
MAX211CWI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers with .1µF Ext. Caps.	28-SOIC	7.55	5.70	3.65
MAX211ECAI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers with .1µF Ext. Caps., 15Kv ESD	28-SSOP	9.17	6.92	4.43
MAX213CWI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers (2 active in shutdown) with 0.1µF Ext. Caps.	28-SOIC	7.55	5.70	3.65
MAX214CPI-ND	Programmable DTE/DCE, 5V RS232 Transceiver	28-Dip	9.88	7.46	4.79
MAX214CWI-ND	Programmable DTE/DCE, 5V RS232 Transceiver	28-SOIC	9.06	6.84	4.39
MAX218CPP-ND	1.8V - 4.25V Powered True RS232 Dual Transceiver	20-Dip	4.74	3.58	2.30
MAX218CWP-ND	1.8V - 4.25V Powered True RS232 Dual Transceiver	20-SOIC	4.74	3.58	2.30
MAX222CPN-ND	5V High Speed RS232 Driver Receiver with Shutdown	18-Dip	4.88	3.68	2.45
MAX222CWN-ND	5V High Speed RS232 Driver Receiver with Shutdown	18-SOIC	4.88	3.68	2.45
MAX222EWN-ND	5V High Speed RS232 Driver Receiver with Shutdown	18-SOIC	5.83	4.40	2.93
MAX223CWI-ND	+5V Powered, 4 RS232 Transmitters and 5 RS232 Receivers (2 active in shutdown)	28-SOIC	8.24	6.22	3.99
MAX230CPP-ND	+5V Powered, 5 RS232 Transmitters with Power Shutdown	20-Dip	8.24	6.22	3.99
MAX230CWP-ND	+5V Powered, 5 RS232 Transmitters with Shutdown	20-SOIC	7.55	5.70	3.65
MAX231CPD-ND	+5V and +12V Pwrd., Dual RS232 Transmitters and Receivers	14-Dip	3.31	2.50	1.60
MAX231EPD-ND	+5V and +12V Pwrd., Dual RS232 Transmitters and Receivers	14-Dip	3.98	3.00	1.92
MAX232ACPE-ND	+5V Pwrd., High-Speed Dual RS232 Transmitters & Receivers	16-Dip	5.51	4.16	2.77
MAX232ACSE-ND	+5V Powered, High-Speed Dual RS232 Transmitters and Receivers	16-SOIC	5.51	4.16	2.77
MAX232ACWE-ND	+5V Powered, High-Speed Dual RS232 Transmitters and Receivers	16-SOIC	4.88	3.68	2.45
MAX232AEWE-ND	+5V Powered, High Speed Dual RS232 Transmitters and Receivers	16-SOIC	5.83	4.40	2.93
MAX232CPE-ND	+5V Powered, Dual RS232 Transmitters and Receivers	16-Dip	3.31	2.50	1.60
MAX232CWE-ND	+5V Powered, Dual RS232 Transmitters and Receivers	16-SOIC	3.31	2.50	1.60
MAX232EPE-ND	+5V Pwrd., Dual RS232 Transmitters and Receivers	16-Dip	3.98	3.00	1.92
MAX232EWE-ND	+5V Pwrd., Dual RS232 Transmitters and Receivers	16-SOIC	3.98	3.00	1.92
MAX233ACPP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec	20-Dip	10.76	8.12	5.20
MAX233ACWP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec.	20-SOIC	10.76	8.12	5.20
MAX233CPP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec	20-Dip	7.45	5.62	3.60
MAX233EPP-ND	+5V Pwrd., Dual RS232 No Ext Components Transmitters/Rec	20-Dip	8.93	6.74	4.32
MAX234CPE-ND	+5V Powered Quad RS232,Transmitters	16-Dip	5.88	4.44	2.85
MAX234CWE-ND	+5V Powered Quad RS232 Transmitters	16-SOIC	5.88	4.44	2.85
MAX235CPG-ND	+5V Powered, 5 RS232 No Ext. Comp. Transmitters and Receivers with Power Shutdown and Tri-State	24-Dip	16.38	12.36	7.92
MAX236CNG-ND	+5V Powered, 4 RS232 Transmitters and 3 RS232 Receivers with Power Shutdown and Tri-State	24-Dip	7.55	5.70	3.65
MAX236CWG-ND	+5V Powered, 4 RS232 Xmitters and 3 RS232 Receivers with Power Shutdown and Tri-State.	24-SOIC	7.55	5.70	3.65
MAX237CNG-ND	+5V Powered, 5 RS232 Transmitters, 3 RS232 Receivers	24-Dip	7.55	5.70	3.65
MAX237CWG-ND	5V Powered, 5 RS232 Transmitters, 3 RS232 Receivers	24-SOIC	7.55	5.70	3.65
MAX238CNG-ND	+5V Powered, Quad RS232 Transmitters and Receivers	24-Dip	7.55	5.70	3.65
MAX238CWG-ND	+5V Powered, Quad RS232 Transmitters and Receivers	24-SOIC	7.55	5.70	3.65
MAX239CNG-ND	+5V and +12V P Powered, 3 RS232 Transmitters and 5N RS232 Receivers w/Receiver Enable	24-Dip	7.55	5.70	3.65
MAX240CMH-ND	+5V P Powered, 5 RS232 Transmitters and Receivers with Power Shutdown and Tri-State	44-PQFP	12.40	9.36	6.00
MAX241CWI-ND	+5V P Powered, 4 RS232 Transmitters, 5 Receivers with Power Shutdown and Receiver 3-State Enable	28-SOIC	12.40	9.36	6.00
MAX242CPN-ND	High Speed 5V Dual RS232 Driver/Receiver	18-Dip	4.88	3.68	2.45
MAX242CWN-ND	High Speed 5V Dual RS232 Driver/Receiver	18-SOIC	4.88	3.68	2.45
MAX243CPE-ND	5V Powered Dual RS232 Driver/Receiver	16-Dip	5.51	4.16	2.77
MAX243CSE-ND	5V Powered Dual RS232 Driver/Receiver	16-SOIC	5.51	4.16	2.77
MAX248CQH-ND	5V, Multi-Channel RS232 Driver/Receiver	44-PLCC	20.27	15.30	10.20
MAX249CQH-ND	5V, Multi-Channel RS232 Driver/Receiver	44-PLCC	20.27	15.30	10.20
MAX274ACWI-ND	8th-Order, Analog Filter	28-SOIC	13.62	10.28	6.59
MAX261BCNG-ND	µP Programmable Universal Switched Cap Filter	24-Dip	17.25	13.02	8.35
MAX261BCWG-ND	µP Programmable Universal Switched Cap Filter	24-SOIC	17.25	13.02	8.35
MAX274BCNG-ND	8th-Order Analog Filter	24-Dip	12.40	9.36	6.00
MAX274BCWI-ND	8th-Order Analog Filter	28-SOIC	12.40	9.36	6.00
MAX275BCPP-ND	4th-Order Analog Filter	20-Dip	7.74	5.84	3.74
MAX275BCWP-ND	4th-Order Analog Filter	20-SOIC	7.74	5.84	3.74
MAX280CPA-ND	5th-Order Zero-Error, Butterworth Switched Cap LP Filter	8-Dip	10.47	7.90	5.07
MAX280CWE-ND	5th Order Zero-Error, Butterworth Switched Cap LP Filter	16-SOIC	10.47	7.90	5.07
MAX281ACPA-ND	5th-Order, Zero Error, Bessel Switched Cap LP Filter	8-Dip	12.75	9.62	6.18
MAX281ACWE-ND	5th-Order, Zero Error, Bessel Switched Cap LP Filter	16-SOIC	12.75	9.62	6.18
MAX281BCPA-ND	5th-Order, Zero Error, Bessel Switched Cap LP Filter	8-Dip	10.47	7.90	5.07
MAX301CPE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPST)	16-Dip	4.58	3.46	2.47
MAX301CSE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPST)	16-SOIC	5.51	4.16	2.97
MAX303CPE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPDT)	16-Dip	9.65	7.28	5.22
MAX303CSE-ND	Prec. Dual Low On Resistance Matched CMOS Switch (SPDT)	16-SOIC	11.55	8.72	6.24
MAX305CPE-ND	Precision Dual, Matched CMOS Switches (DPST, NO)	16-Dip	9.65	7.28	5.22
MAX305CSE-ND	Precision Dual, Matched CMOS Switches (DPST, NO)	16-SOIC	11.55	8.72	6.24
MAX306CPI-ND	Precision 16-Channel High Perform CMOS Analog Mux	28-Dip	11.53	8.70	6.21
MAX306CWI-ND	Precision 16-Channel High Perform CMOS Analog Mux	28-SOIC	15.90	12.00	8.58
MAX307CPI-ND	Precision Dual 8-Ch. High Performance CMOS Analog Mux	28-Dip	11.53	8.70	6.21
MAX307CWI-ND	Precision Dual 8-Ch. High Performance CMOS Analog Mux	28-SOIC	15.90	12.00	8.58
MAX308CPE-ND	Precision 8-Channel High Performance CMOS Analog Mux	16-Dip	7.47	5.64	4.04
MAX308CSE-ND	Precision 8-Channel High Performance CMOS Analog Mux	16-SOIC	8.96	6.76	4.84
MAX309CPE-ND	Precision Dual 4-Ch. High Performance CMOS Analog Mux	16-Dip	7.47	5.64	4.04
MAX309CSE-ND	Precision Dual 4-Ch. High Performance CMOS Analog Mux	16-SOIC	8.96	6.76	4.84
MAX311CWN-ND	RF/Video Differential 4-Channel Mux/Demux	18-SOIC	21.15	15.96	10.65
MAX317CPA-ND	Precision SPST Normally Closed CMOS Analog Switch	8-Dip	3.21	2.42	1.74
MAX317CSA-ND	Precision SPST Normally Closed CMOS Analog Switch	8-SOIC	3.74	2.82	2.02
MAX318CPA-ND	Precision SPST Normally Open Analog Switch	8-Dip	3.21	2.42	1.74
MAX318CSA-ND	Precision SPST Normally Open Analog Switch	8-SOIC	3.74	2.82	2.02
MAX319CPA-ND	Precision SPDT CMOS Analog Switch	8-Dip	4.29	3.24	2.31
MAX319CSA-ND	Precision SPDT CMOS Analog Switch	8-SOIC	4.74	3.58	2.56
MAX323CPA-ND	Precision, Single Supply, SPST Analog Switch	8-Dip	2.97	2.24	1.43
MAX323CSA-ND	Precision, Single Supply, SPST Analog Switch	8-SOIC	3.26	2.46	1.57
MAX326CPE-ND	Quad SPST, Ultra-Low Leakage, CMOS Analog Switch	16-Dip	8.69	6.56	4.37
MAX326CSE-ND	Quad SPST, Ultra-Low Leakage, CMOS Analog Switch	16-SOIC	9.54	7.20	4.80
MAX328CPE-ND	8-Channel, Ultra-Low Leakage Monolithic CMOS Multiplexer	16-Dip	11.32	8.54	5.69
MAX328CWE-ND	8-Channel, Ultra-Low Leakage Monolithic CMOS Multiplexer	16-SOIC	12.43	9.38	6.26
MAX329CPE-ND	Diff. 4-Chan., Ultra-Low Leakage Monolithic CMOS Mux	16-Dip	11.32	8.54	5.69
MAX329CWE-ND	Diff. 4-Chan., Ultra-Low Leakage Monolithic CMOS Mux	16-SOIC	12.43	9.38	6.26
MAX333CPP-ND	Quad SPDT CMOS Analog Switch	20-Dip	7.21	5.44	3.63
MAX333CWP-ND	Quad SPDT CMOS Analog Switch	20-SOIC	9.30	7.02	4.68
MAX335CNG-ND	Serial, Controlled, 8-Channel SPST Switch	24-Dip	7.10	5.36	3.44
MAX335CWG-ND	Serial, Controlled, 8-Channel SPST Switch	24-SOIC	7.79	5.88	3.78
MAX351CPE-ND	Precision Quad SPST Analog Switch Normally Closed	16-Dip	6.60	4.98	3.56
MAX351CSE-ND	Precision Quad SPST Analog Switch Normally Closed	16-SOIC	8.56	6.46	4.62
MAX352CPE-ND	Precision Quad SPST Analog Switch Normally Open	16-Dip	6.60	4.98	3.56
MAX352CSE-ND	Precision Quad SPST Analog Switch Normally Open	16-SOIC	8.56	6.46	4.62
MAX353CPE-ND	Precision Quad SPST Analog Switch 2 N/C & 2 N/O	16-Dip	6.60	4.98	3.56
MAX353CSE-ND	Precision Quad SPST Analog Switch 2 N/C & 2 N/O	16	8.56	6.46	4.62
MAX354CPE-ND	Single 8-Channel Fault Protected Analog Mux	16-Dip	10.84	8.18	5.25
MAX354CWE-ND	Single 8-Channel Fault Protected Analog Mux	16-SOIC	10.84	8.18	5.25
MAX355CPE-ND	Dual 4-Channel Fault Protected Analog Mux	16-Dip	10.84	8.18	5.25
MAX355CWE-ND	Dual 4-Channel Fault Protected Analog Mux	16-SOIC	10.84	8.18	5.25
MAX358CPE-ND	Fault Protected 8-Channel Multiplexer	16-Dip	10.84	8.18	5.25
MAX358CWE-ND	Fault Protected 8-Channel Multiplexer	16-SOIC	10.84	8.18	5.25
MAX359CPE-ND	Fault Protected Differential 4-Channel Multiplexer	16-Dip	10.84	8.18	5.25
MAX359CWE-ND	Fault Protected Differential 4-Channel Multiplexer	16-SOIC	10.84	8.18	5.25
MAX361CSE-ND	Precision Quad SPST Analog Switch N/C 3Ω Tolerance	16-SOIC	7.00	5.28	3.79
MAX362CPE-ND	Precision Quad SPST Analog Switch N/O 3Ω Tolerance	16-Dip	5.80	4.38	3.13
MAX362CSE-ND	Precision Quad SPST Analog Switch N/O 3Ω Tolerance	16-SOIC	7.00	5.28	3.79
MAX364CPE-ND	Precision Quad SPST Analog Switch N/C 2Ω Tolerance	16-Dip	3.42	2.58	1.85
MAX364CSE-ND	Precision Quad SPST Analog Switch N/C 2Ω Tolerance	16-SOIC	3.42	2.58	1.85
MAX365CPE-ND	Precision Quad SPST Analog Switch N/O 2Ω Tolerance	16-Dip	3.42	2.58	1.85
MAX365CSE-ND	Precision Quad SPST Analog Switch N/O 2Ω Tolerance	16-SOIC	3.42	2.58	1.85
MAX366CSA-ND	3-Signal Line Circuit Protectors	8-SOIC	3.90	2.94	1.89
MAX367CWN-ND	8-Signal Line Circuit Protectors	18-SOIC	6.70	5.06	3.24
MAX368CPN-ND	Fault Protected 8-Channel Latched Multiplexer	18-Dip	13.73	10.36	6.65
MAX368CWN-ND	Fault Protected 8-Channel Latched Multiplexer	18-SOIC	15.77	11.90	7.63
MAX378CPE-ND	High Voltage, Fault Protected Analog Multiplexer	16-Dip	15.90	12.00	7.70
MAX378CWG-ND	High Voltage, Fault Protected Analog Multiplexer	24-SOIC	15.90	12.00	7.70
MAX382CPN-ND	Low Voltage 8-Channel Mux with Latchable Inputs	18-Dip	10.15	7.66	5.48
MAX382CWN-ND	Low Voltage 8-Channel Mux with Latchable Inputs	18-SOIC	12.16	9.18	6.56
MAX385CPE-ND	Precision Low Voltage Analog Switch	16-Dip	7.92	5.98	4.28
MAX388CPN-ND	8-Channel, High Volt, Fault-Protected Multiplexer	18-Dip	17.33	13.08	8.39
MAX389CPN-ND	Differential 4-Chan., High Volt., Fault Protected Multiplexer	18-Dip	17.33	13.08	8.39
MAX394CPP-ND	Low Voltage Quad SPDT, CMOS Analog Switch	20-Dip	9.09	6.86	4.58
MAX394CWP-ND	Low Voltage Quad SPDT CMOS Analog Switch	20-SOIC	11.71	8.84	5.90
MAX407CPA-ND	1.2µA Max., Dual, Single Supply Op Amp.	8-Dip	7.90	5.96	3.99
MAX407CSA-ND	1.2µA Max., Dual Single Supply Op Amp	8-SOIC	7.90	5.96	3.99
MAX409BCPA-ND	1.2µA Single Supply Op Amp	8-Dip	4.88	3.68	2.37
MAX409BCSA-ND	1.2µA Single Supply Op Amp	8-SOIC	4.88	3.68	2.37
MAX410CPA-ND	28MHz Low-Noise Low Voltage Precision Op Amp	8-Dip	5.80	4.38	2.82
MAX410CSA-ND	28MHz Low Noise Low Voltage Precision Op Amp	8-SOIC	5.80	4.38	2.82
MAX414CPD-ND	Low Noise Quad Op Amp	14-Dip	12.40	9.36	6.00
MAX414CSD-ND	Low Noise Quad Op Amp	14-SOIC	12.40	9.36	6.00
MAX417CPA-ND	1.2µA Dual Single Supply Op Amp.	8-Dip	7.45	5.62	3.61
MAX417CSA-ND	1.2µA Dual Single Supply Op Amp.	8-SOIC	7.45	5.62	3.61
MAX418CPD-ND	1.2µA Quad Single Supply Op Amp.	14-Dip	9.96	7.52	4.82

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Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MAX418CSD-ND	1.2µA Quad Single Supply Op Amp	14-SOIC	9.96	7.52	4.82
MAX420CPA-ND	15V Chopper Stabilized Op Amp	8-Dip	8.98	6.78	4.38
MAX427CPA-ND	Ultra Low Noise Precision Op Amp	8-Dip	4.40	3.32	2.13
MAX427CSA-ND	Ultra Low Noise Precision Op Amp	8-SOIC	5.51	4.16	2.67
MAX435CPD-ND	275MHz, Differential Out, Wideband Transconductance Amp	14-Dip	6.81	5.14	3.29
MAX435CSD-ND	275MHz, Differential Out, Wideband Transconductance Amp	14-SOIC	6.81	5.14	3.29
MAX436CPD-ND	Wideband Transconductance Amplifier	14-Dip	6.81	5.14	3.29
MAX436CSD-ND	Wideband Transconductance Amplifier	14-SOIC	6.81	5.14	3.29
MAX437CPA-ND	Ultra-Low Noise Precision Op Amplifier	8-Dip	4.40	3.32	2.13
MAX437CSA-ND	Ultra Low Noise Precision Op Amp	8-SOIC	5.51	4.16	2.67
MAX452CPA-ND	50MHz CMOS Video Amplifier	8-Dip	6.76	5.10	3.40
MAX453CPA-ND	2-Channel 50MHz Video Multiplexer/Amp.	8-Dip	9.43	7.12	4.76
MAX454CPD-ND	4-Channel 50MHz Video Multiplexer/Amplifier	14-Dip	12.59	9.50	6.34
MAX454CSD-ND	4-Channel 50MHz Video Multiplexer/Amplifier	14-SOIC	13.86	10.46	6.98
MAX455CPP-ND	8-Channel 50MHz Video Multiplexer/Amplifier	20-Dip	20.96	15.82	10.56
MAX455CWP-ND	8-Channel 50MHz Video Multiplexer/Amplifier	20-SOIC	23.06	17.40	11.60
MAX456CPL-ND	8x8 Crosspoint Video Switch	40-Dip	50.03	37.76	24.20
MAX473CPA-ND	Single Supply 10MHz Op Amp	8-Dip	3.58	2.70	1.74
MAX473CSA-ND	Single Supply 10MHz Op Amp	8-SOIC	3.58	2.70	1.74
MAX474CPA-ND	Single Supply 10MHz Dual Op Amp	8-Dip	5.57	4.20	2.69
MAX474CSA-ND	Single Supply 10MHz Dual Op Amp	8-SOIC	5.57	4.20	2.69
MAX475CPD-ND	Single Supply 10MHz Quad Op Amp	14-Dip	8.93	6.74	4.32
MAX475CSD-ND	Single Supply 10MHz Quad Op Amp	14-SOIC	8.93	6.74	4.32
MAX479CPD-ND	17µA Max Quad Single Supply Precision Op Amp	14-Dip	7.90	5.96	3.83
MAX479CSD-ND	17µA Max Quad Single Supply Precision Op Amp	14-SOIC	7.90	5.96	3.83
MAX481CPA-ND	RS485 Transceiver with Low I Shutdown Slew-Rate Ltd, 500µA	8-Dip	2.76	2.08	1.33
MAX483CPA-ND	RS485 Transceiver with Low I Shutdown Slew-Rate Ltd, 350µA	8-Dip	2.76	2.08	1.33
MAX485CPA-ND	RS485 Low Power Transceiver	8-Dip	2.76	2.08	1.33
MAX485CSA-ND	RS485 Low Power Transceiver	8-SOIC	2.76	2.08	1.33
MAX487CPA-ND	RS485/RS422 Transceiver with Low Power Shutdown	8-Dip	2.81	2.12	1.36
MAX487CSA-ND	RS485/RS422 Transceiver with Low Power Shutdown	8-SOIC	2.81	2.12	1.36
MAX488CPA-ND	RS485/RS422 Transceiver with Low Power Low Slew	8-Dip	2.81	2.12	1.36
MAX488CSA-ND	RS485/RS422 Transceiver with Low Power Low Slew.	8-SOIC	2.81	2.12	1.36
MAX489CPD-ND	RS485/RS422 Transceiver with Drive Enable	14-Dip	2.81	2.12	1.36
MAX489CSD-ND	RS485/RS422 Transceiver with Drive Enable	14-SOIC	2.81	2.12	1.36
MAX489EPD-ND	RS485/RS422 Transceiver with Drive Enable	14-Dip	3.52	2.66	1.70
MAX490CPA-ND	RS485/RS422 Transceiver with Full Duplex	8-Dip	2.81	2.12	1.36
MAX490CSA-ND	RS485/RS422 Transceiver with Full Duplex.	8-SOIC	2.81	2.12	1.36
MAX491CPD-ND	RS485 Transceiver Tri-State Control	14-Dip	2.81	2.12	1.36
MAX492CPA-ND	Single Supply Dual Op Amp	8-Dip	5.57	4.20	2.69
MAX492CSA-ND	Single Supply Dual Op Amp	8-SOIC	5.57	4.20	2.69
MAX494CPD-ND	Single Supply Quad Op Amp	14-Dip	8.93	6.74	4.32
MAX494CSD-ND	Single Supply Quad Op Amp	14-SOIC	8.93	6.74	4.32
MAX495CPA-ND	Single Supply Op Amp	8-Dip	3.58	2.70	1.74
MAX495CSA-ND	Single Supply Op Amp	8-SOIC	3.58	2.70	1.74
MAX500BCPE-ND	Quad Serial Input 8-Bit D/A Converter	16-Dip	13.52	10.20	6.54
MAX500BCWE-ND	Quad Serial Input 8-Bit D/A Converter	16-SOIC	13.52	10.20	6.54
MAX501BCNG-ND	12-Bit Multiplexer DAC (8+4) Voltage Output	24-Dip	14.15	10.68	6.85
MAX502BCNG-ND	Parallel Voltage Output 12-Bit Multiplexer DAC	24-Dip	14.15	10.68	6.85
MAX502BCWG-ND	Parallel Voltage Output 12-Bit Multiplexer DAC	24-SOIC	14.15	10.68	6.85
MAX503CNG-ND	5V Low Power Parallel Input Voltage Output 10-Bit DAC	24-Dip	8.32	6.28	4.03
MAX503CWG-ND	5V Low Power Parallel Input Voltage Output 10-Bit DAC	24-SOIC	8.32	6.28	4.03
MAX504CPD-ND	5V Low Power Voltage Output Serial 10-Bit DAC	14-Dip	7.90	5.96	3.83
MAX504CSD-ND	5V Low Power Voltage Output Serial 10-Bit DAC	14-SOIC	7.90	5.96	3.83
MAX505ACWG-ND	CMOS, +5V, Quad, 8-Bit D/A Converter with Rail-to-Rail Outputs and 4 Separate Reference Inputs.	24-SOIC	23.19	17.50	11.23
MAX505BCNG-ND	CMOS, +5V, Quad, 8-Bit D/A Converter with Rail-to-Rail Outputs and 4 Separate Reference Inputs	24-Dip	17.86	13.48	8.64
MAX506BCPP-ND	CMOS, +5V, Quad, 8-Bit D/A Converter with Rail-to-Rail Outputs and 1 Reference Input	20-Dip	15.66	11.82	7.58
MAX506BCWP-ND	CMOS, +5V, Quad, 8-Bit D/A Converter with Rail-to-Rail Outputs and 1 Reference Input.	20-SOIC	15.66	11.82	7.58
MAX507BCNG-ND	Parallel Volt Output, 12-Bit DAC with Internal Reference	24-Dip	19.95	15.06	9.67
MAX507BCWG-ND	Parallel Volt Output, 12-Bit DAC with Internal Reference	24-SOIC	18.31	13.82	8.87
MAX508BCPP-ND	12-Bit DAC with Internal Reference, (8+4) Volt Output	20-Dip	19.95	15.06	9.67
MAX508BCWP-ND	12 Bit DAC with Internal Reference, (8+4) Volt Output	20-SOIC	19.95	15.06	9.67
MAX509BCPP-ND	Quad Serial Input 8-Bit D/A Converter	20-Dip	13.70	10.34	6.64
MAX509BCWP-ND	Quad Serial Input 8-Bit D/A Converter	20-SOIC	13.70	10.34	6.64
MAX510ACPE-ND	Quad Serial Input 8-Bit D/A Converter	16-Dip	15.95	12.04	7.73
MAX510BCPE-ND	Quad Serial Input 8-Bit D/A Converter	16-Dip	13.28	10.02	6.43
MAX510BCWE-ND	Quad Serial Input 8-Bit D/A Converter	16-SOIC	13.28	10.02	6.43
MAX512CPD-ND	8-Bit Voltage Out D/A Converter	14-Dip	7.53	5.68	3.65
MAX512CSD-ND	8-Bit Voltage Out D/A Converter	14-SOIC	7.53	5.68	3.65
MAX513CPD-ND	8-Bit Voltage Out D/A Converter	14-Dip	7.53	5.68	3.65
MAX513CSD-ND	8-Bit Voltage Out D/A Converter	14-SOIC	7.53	5.68	3.65
MAX514BCNG-ND	Quad CMOS 12-Bit Serial Input Mult. D/A Converter	24-Dip	35.67	26.92	17.26
MAX514BCWI-ND	Quad CMOS 12-Bit Serial Input Mult. D/A Converter	28-SOIC	35.67	26.92	17.26
MAX517BCPA-ND	Single 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface	8-Dip	5.64	4.26	2.74
MAX517BCSA-ND	Single 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface	8-SOIC	5.64	4.26	2.74
MAX518BCPA-ND	Dual 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface	8-Dip	6.04	4.56	2.93
MAX518BCSA-ND	Dual 8-Bit Rail-to-Rail DAC with 2-Wire Serial Interface	8-SOIC	6.04	4.56	2.93
MAX520BCPE-ND	Quad 8-Bit DAC w/2-Wire Interface Serial Unbuffered Output	16-Dip	9.28	7.00	4.50
MAX520BCWE-ND	Quad 8-Bit DAC w/2-Wire Interface Serial Unbuffered Output	16-SOIC	9.28	7.00	4.50
MAX521BCPP-ND	Octal 8-Bit Rail-to-Rail DAC w/2-Wire Serial Interface.	20-Dip	13.12	9.90	6.35
MAX522CPA-ND	Dual 8-Bit Voltage Out Serial D/A Converter	8-Dip	6.04	4.56	2.93
MAX522CSA-ND	Dual 8-Bit Voltage Out Serial D/A Converter	8-SOIC	6.04	4.56	2.93
MAX525BCAP-ND	5V Quad 12-Bit VOUT Serial D/A Converter	20-SSOP	33.66	25.40	16.29
MAX525BCPP-ND	5V Quad 12-Bit VOUT Serial D/A Converter	20-Dip	33.66	25.40	16.29
MAX526DCNG-ND	Quad 12-Bit Voltage Output D/A Converter, .3”	24-Dip	48.68	36.74	23.55
MAX526DCWG-ND	Quad 12-Bit Voltage Output D/A Converter	24-SOIC	48.68	36.74	23.55
MAX527DCNG-ND	Calibrated Quad 12-Bit Voltage Output D/A Converter, .3”	24-Dip	41.45	31.28	20.06
MAX527DCWG-ND	Calibrated Quad 12-Bit Voltage Output D/A Converter	24-SOIC	41.45	31.28	20.06
MAX528CPP-ND	Octal 8-Bit Serial D/A Converter w/Output Buffer	20-Dip	16.91	12.76	8.18
MAX529CPP-ND	±5V Octal 8-Bit Serial DAC with Output Buffer	20-Dip	14.15	10.68	7.12
MAX529CWG-ND	±5V Octal 8-Bit Serial DAC with Output Buffer	24-SOIC	14.15	10.68	7.12
MAX530BCNG-ND	5V Low Power Voltage Out 12-Bit D/A Converter	24-Dip	14.26	10.76	6.91
MAX530BCWG-ND	5V Low Power Voltage Out 12-Bit D/A Converter	24-SOIC	14.26	10.76	6.91

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MAX531BCPD-ND	5V Voltage Out 12-Bit Serial D/A Converter	14-Dip	14.26	10.76	6.91
MAX531BCSD-ND	5V Voltage Out 12-Bit Serial D/A Converter	14-SOIC	14.26	10.76	6.91
MAX532BCPE-ND	Dual, Serial Input, Voltage Output, 12-Bit Multiplying DAC	16-Dip	22.13	16.70	10.72
MAX532BCWE-ND	Dual Serial Input Volt Output 12-Bit Multiplying DAC	16-SOIC	22.13	16.70	10.72
MAX533BCEE-ND	2.7V Low Power Quad Serial Voltage Out 8-Bit DAC	16-QSOP	7.90	5.96	3.83
MAX533BCPE-ND	2.7V Low Power Quad Serial Voltage Out 8-Bit DAC	16-Dip	7.90	5.96	3.83
MAX534BCEE-ND	5V Low Power Quad Serial Voltage Out 8-Bit DAC	16-QSOP	7.90	5.96	3.83
MAX534BCPE-ND	5V Low Power Quad Serial Voltage Out 8-Bit DAC	16-Dip	7.90	5.96	3.83
MAX535BCPA-ND	5V 13-Bit Voltage Out Serial D/A Converter	8-Dip	13.94	10.52	6.75
MAX535BCUA-ND	5V 13-Bit Voltage Out Serial D/A Converter	8-µMAX	13.94	10.52	6.75
MAX536BCPE-ND	Quad 12-Bit Voltage Out Serial D/A Converter	16-Dip	44.92	33.90	21.74
MAX536BCWE-ND	Quad 12-Bit Voltage Out Serial D/A Converter	16-SOIC	44.92	33.90	21.74
MAX538BCPA-ND	Low Power 5V 12-Bit Serial D/A Converter	8-Dip	12.72	9.60	6.16
MAX538BCSA-ND	Low Power 5V 12-Bit Serial D/A Converter	8-SOIC	12.72	9.60	6.16
MAX539BCPA-ND	Low Power 5V 12-Bit Serial D/A Converter	8-Dip	12.72	9.60	6.16
MAX539BCSA-ND	Low Power 5V 12-Bit Serial D/A Converter	8-SOIC	12.72	9.60	6.16
MAX541CCPA-ND	5V 16-Bit Serial Voltage Out D/A Converter	8-Dip	28.01	21.14	13.56
MAX541CCSA-ND	5V 16-Bit Serial Voltage Out D/A Converter	8-SOIC	25.71	19.40	12.44
MAX543BCPA-ND	CMOS 12-Bit Serial Multiplying D/A Converter	8-Dip	19.16	14.46	9.27
MAX543BCSA-ND	CMOS 12-Bit Serial Multiplying D/A Converter	8-SOIC	15.34	11.58	7.43
MAX544BCPA-ND	5V 14-Bit Serial Voltage Out D/A Converter	Dip-8	22.23	16.78	10.77
MAX544BCSA-ND	5V 14-Bit Serial Voltage Out D/A Converter	8-SOIC	22.23	16.78	10.77
MAX547ACMH-ND	Octal 13-Bit Voltage Out DAC/Parallel Interface	44-PQFP	94.92	71.64	45.93
MAX547BCQH-ND	Octal 13-Bit Voltage Out DAC/Parallel Interface	44-PLCC	77.57	58.54	37.53
MAX548ACPA-ND	2.5V – 5.5V Dual 8-Bit Voltage Out D/A Converter	8-Dip	4.64	3.50	2.24
MAX548ACUA-ND	2.5V – 5.5V Dual 8-Bit Voltage Out D/A Converter	8-µMAX	4.88	3.68	2.36
MAX560CWI-ND	+3.3V-Pwrd. RS232 4 Driver/5 Receiver with Receivers Active in Shutdown.	28-SOIC	8.24	6.22	3.99
MAX613CSD-ND	Dual PCMCIA Analog Power Controller	14-SOIC	4.56	3.44	2.20
MAX630CSA-ND	CMOS Step Up Switching Regulator	8-SOIC	7.95	6.00	3.84
MAX631ACPA-ND	+5V/Adjustable Output CMOS Step-Up Switching Regulator	8-Dip	6.86	5.18	3.32
MAX631ACSA-ND	+5V/Adjustable Output CMOS Step-Up Switching Regulator	8-SOIC	7.10	5.36	3.44
MAX632ACPA-ND	+12V/Adjustable Output CMOS Step-Up Switching Regulator	8-Dip	6.86	5.18	3.32
MAX632ACSA-ND	+12V/Adjustable Output CMOS Step-Up Switching Regulator	8-SOIC	7.10	5.36	3.44
MAX634CPA-ND	CMOS Micropower Inverting Switching Regulator	8-Dip	6.52	4.92	3.16
MAX634CSA-ND	CMOS Micropower Inverting Switching Regulator	8-SOIC	7.18	5.42	3.48
MAX635ACPA-ND	-5V/Adjustable Output CMOS Inverting Switching Regulator	8-Dip	6.86	5.18	3.32
MAX635ACSA-ND	5V/Adj Output CMOS Inverting Switching Regulator	8-SOIC	7.10	5.36	3.44
MAX636ACPA-ND	-12V/Adjustable Output CMOS Inverting Switching Regulator	8-Dip	6.86	5.18	3.32
MAX636ACSA-ND	-12V/Adjustable Output CMOS Inverting Switching Regulator	8-SOIC	7.10	5.36	3.44
MAX637ACPA-ND	-15V/Adjustable Output CMOS Inverting Switching Regulator	8-Dip	6.86	5.18	3.32
MAX637ACSA-ND	-15V/Adjustable Output CMOS Inverting Switching Regulator.	8-SOIC	7.10	5.36	3.44
MAX638ACPA-ND	5V Adjustable Output CMOS Step Down Switching Regulator	8-Dip	6.86	5.18	3.32
MAX638ACSA-ND	5V Adjustable Output CMOS Step Down Switching Regulator	8-SOIC	7.10	5.36	3.44
MAX660CPA-ND	100mA CMOS Monolithic Voltage Converter	8-Dip	6.94	5.24	3.50
MAX660CSA-ND	100mA CMOS Monolithic Voltage Converter	8-SOIC	7.29	5.50	3.68
MAX662ACPA-ND	12V Supply for Flash Memory	8-Dip	4.80	3.62	2.32
MAX662ACSA-ND	12V Supply for Flash Memory	8-SOIC	4.90	3.70	2.37
MAX663CPA-ND	CMOS +5V/Adjustable Micropower Positive Voltage Regulator	8-Dip	4.21	3.18	2.03
MAX663CSA-ND	CMOS +5V/Adjustable Micropower Positive Voltage Regulator	8-SOIC	4.64	3.50	2.24
MAX665CPA-ND	CMOS +8V/Switched-Capacitor Voltage Converter	8-Dip	9.94	7.50	4.81
MAX666CPA-ND	CMOS +5V/Adjustable Volt Reg with Low Battery Detector	8-Dip	4.88	3.68	2.36
MAX666CSA-ND	CMOS +5V/Adjustable Volt Reg with Low Battery Detector	8-SOIC	5.35	4.04	2.59
MAX666ESA-ND	CMOS +5V/Adjustable Volt Reg with Low Battery Detector	8-SOIC	8.32	6.28	4.02
MAX667CPA-ND	+5V/Programmable Low Dropout Voltage Regulator	8-Dip	5.49	4.14	2.76
MAX667CSA-ND	+5V/Programmable Low Dropout Voltage Regulator	8-SOIC	5.72	4.32	2.88
MAX667ESA-ND	+5V/Programmable Low Dropout Voltage Regulator	8-SOIC	7.39	5.58	3.72
MAX680CPA-ND	+5V to ±10V Voltage Converter	8-Dip	4.48	3.38	2.17
MAX680CSA-ND	+5V to ±10V Voltage Converter	8-SOIC	4.90	3.70	2.38
MAX687CSA-ND	3.3V High Accuracy Low Dropout Reg with Auto Shutdown	8-SOIC	4.35	3.28	2.10
MAX688CPA-ND	3.3V High Accuracy Low Dropout Regulator	8-Dip	4.35	3.28	2.10
MAX688CSA-ND	3.3V High Accuracy Low Dropout Regulator	8-SOIC	4.35	3.28	2.10
MAX690ACPA-ND	Microprocessor WDT Reset Circuit	8-Dip	6.94	5.24	3.36
MAX690ACSA-ND	Microprocessor WDT Reset Circuit	8-SOIC	7.29	5.50	3.53
MAX690CPA-ND	Microprocessor WDT Reset Circuit	8-Dip	7.23	5.46	3.50
MAX690EPA-ND	Microprocessor WDT Reset Circuit	8-Dip	10.49	7.92	5.08
MAX691ACPE-ND	Microprocessor WDT Battery Switchover/Reset Gen., 200ns	16-Dip	7.84	5.92	3.80
MAX691CPE-ND	Microprocessor WDT Battery Switchover/Reset Gen., 200ns	16-Dip	7.84	5.92	3.80
MAX691CWE-ND	Microprocessor WDT Battery Switchover/Reset Gen., 200ns	16-SOIC	8.64	6.52	4.18
MAX691EWE-ND	Microprocessor WDT Battery Switchover/Reset Gen. ,200ns	16-SOIC	12.53	9.46	6.06
MAX692ACPA-ND	Microprocessor Supervisory Circuit	8-Dip	6.94	5.24	3.36
MAX692CPA-ND	Microprocessor Supervisory Circuit	8-Dip	7.23	5.46	3.50
MAX693ACPE-ND	Microprocessor Supervisory Circuit	16-Dip	7.84	5.92	3.80
MAX693CPE-ND	Microprocessor Supervisory Circuit	16-Dip	7.84	5.92	3.80
MAX693CWE-ND	Microprocessor Supervisory Circuit	16-SOIC	8.64	6.52	4.18
MAX694CPA-ND	Microprocessor WDT/Battery Switchover/ Reset Gen., Min. Reset Pulse Width, 140ms	8-Dip	7.23	5.46	3.50
MAX695CPE-ND	Microprocessor WDT/Battery Switchover/Reset Gen	16-Dip	7.84	5.92	3.80
MAX695CWE-ND	Microprocessor WDT/Battery Switchover/Reset Gen.	16-SOIC	8.64	6.52	4.18
MAX696CPE-ND	Microprocessor Supervise Circuit with Battery Switchover	16-Dip	7.84	5.92	3.78
MAX699CPA-ND	Low Cost Power-On Reset and WDT Controller	8-Dip	4.93	3.72	2.38
MAX699CWE-ND	Low Cost Power-On Reset and WDT Controller	16-SOIC	5.33	4.02	2.58
MAX700CSA-ND	Adjustable-Threshold Power-Supply Monitor with Reset	8-SOIC	5.19	3.92	2.62
MAX701CPA-ND	Power Supply Monitor with Reset	8-Dip	4.72	3.56	2.37
MAX701CSA-ND	Power Supply Monitor with Reset	8-SOIC	4.72	3.56	2.37
MAX701ESA-ND	Power Supply Monitor with Reset	8-SOIC	6.12	4.62	3.08
MAX703CPA-ND	Low Cost, Microprocessor Supervisory Circuit with Battery Backup, 4.65V Reset	8-Dip	6.10	4.60	2.95
MAX703CSA-ND	Low Cost, Microprocessor Supervisory Circuit with Battery Backup, 4.65V Reset	8-SOIC	6.10	4.60	2.95
MAX704CPA-ND	Low Cost, µP Supervisory Circuit w/Battery Backup, 4.4V Reset	8-Dip	6.10	4.60	2.95
MAX704CSA-ND	Low Cost, µP Supervisory Circuit w/Battery Backup, 4.4V Reset	8-SOIC	6.10	4.60	2.95
MAX705CPA-ND	Low Cost, µP Supervisory Circuit with Battery Backup, WDT Output, 4.65V Reset	8-Dip	5.46	4.12	2.64

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MAXIM SPECIALIZED INTEGRATED CIRCUITS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
MAX705CSA-ND	Low Cost, Microprocessor Supervisory Circuit with Battery Backup, WDT Output, 4.65V Reset	8-SOIC	5.46	4.12	2.64
MAX706CPA-ND	Microprocessor Supervisor Circuit	8-Dip	5.46	4.12	2.64
MAX706CSA-ND	Microprocessor Supervisory Circuit	8-SOIC	5.46	4.12	2.64
MAX706SCPA-ND	Microprocessor Supervisor Circuit	8-Dip	5.91	4.46	2.86
MAX706SCSA-ND	Microprocessor Supervisor Circuit	8-SOIC	5.91	4.46	2.86
MAX706PCSA-ND	Microprocessor Supervisory Circuit	8-SOIC	5.91	4.46	2.86
MAX707CPA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.65V Reset	8-Dip	4.90	3.70	2.37
MAX707CSA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.65V Reset	8-SOIC	4.90	3.70	2.37
MAX708CPA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.4V Reset	8-Dip	4.90	3.70	2.37
MAX708CSA-ND	Low-Cost, Microprocessor Supervisory Circuit, Active-High Reset, 4.4V Reset	8-SOIC	4.90	3.70	2.37
MAX709RCSA-ND	Power Supply Monitor, 2.63V Reset	8-SOIC	2.65	2.00	1.28
MAX709TCPA-ND	Power Supply Monitor, 3.08V Reset	8-Dip	2.65	2.00	1.28
MAX709MCPA-ND	Power Supply Monitor, 4.40V Reset	8-Dip	2.65	2.00	1.28
MAX709LCPA-ND	Power Supply Monitor, 4.65V Reset	8-Dip	2.65	2.00	1.28
MAX709LCSA-ND	Power Supply Monitor, 4.65V Reset	8-SOIC	2.65	2.00	1.28
MAX712CPE-ND	Battery Fast-Charge Controller for NIMH Battery	16-Dip	7.71	5.82	3.73
MAX712CSE-ND	Battery Fast Charger Controller for NIMH Battery	16-SOIC	8.08	6.10	3.92
MAX713CPE-ND	3-Out Battery Fast Charge Controller for NiCad/NIMH Battery	16-Dip	7.71	5.82	3.73
MAX713CSE-ND	3-Out Battery Fast Charge Controller for NiCad/NIMH Battery	16-SOIC	8.08	6.10	3.92
MAX714CPE-ND	3-Output Battery Management Supply	16-Dip	8.88	6.70	4.29
MAX714CWE-ND	3-Output Battery Management Supply	16-SOIC	9.28	7.00	4.50
MAX718CSE-ND	+3.3V/5V Dual Output DC-DC Conv. with Back-Up Switcher	16-SOIC	12.32	9.30	5.97
MAX719CSE-ND	+3.0V/5V Dual Output DC-DC Conv. with Back-Up Switcher	16-SOIC	12.32	9.30	5.97
MAX722CSE-ND	+3.3V LCD Power Supply Regulator	16-SOIC	11.55	8.72	5.60
MAX724CCK-ND	5A, Step Down, PWM, Switch Mode DC-DC Reg.	5 Pin TO-220	11.71	8.84	6.32
MAX732CPA-ND	+12V Step Up Current Mode PWM Reg .for Flash Memory	8-Dip	6.52	4.92	3.16
MAX732CWE-ND	+12V Step Up Current Mode PWM Reg. for Flash Memory	16-SOIC	6.84	5.16	3.31
MAX734CPA-ND	+12V, 120mA Supply for Flash Memory	8-Dip	5.01	3.78	2.42
MAX734CSA-ND	+12V, 120mA Supply for Flash Memory	8-SOIC	5.09	3.84	2.46
MAX741UCPP-ND	Pin-Programmed, Low-Voltage, Current Mode SMPS Controller, Step Up	20-Dip	8.90	6.72	4.31
MAX749CPA-ND	Digitally Adjustable LCD Bias Supply	8-Dip	6.49	4.90	3.14
MAX749CSA-ND	Digitally Adjustable LCD Bias Supply	8-SOIC	6.76	5.10	3.27
MAX750ACSA-ND	Adjustable Step Down Current Mode PWM Regulator	8-SOIC	5.57	4.20	2.69
MAX751CPA-ND	+5V Step Up Current Mode PWM DC-DC Converter	8-Dip	5.51	4.16	2.67
MAX752CPA-ND	Adjustable Step Up Current Mode PWM Regulator	8-Dip	7.37	5.56	3.57
MAX755CPA-ND	Adj., Neg. Output, Inverting, Current Mode PWM Regulator	8-Dip	4.85	3.66	2.35
MAX756CPA-ND	High Efficiency Step Up DC/DC Converter	8-Dip	4.80	3.62	2.33
MAX756CSA-ND	High Efficiency Step Up DC/DC Converter	8-SOIC	5.38	4.06	2.60
MAX758ACPA-ND	Adjustable Step Down Current Mode PWM Regulator	8-Dip	6.41	4.84	3.10
MAX759CWE-ND	Adjustable Inverting Current Mode PWM	16-SOIC	7.10	5.36	3.44
MAX759CPD-ND	Adjustable Inverting Current Mode PWM	14-Dip	6.78	5.12	3.27
MAX761CPA-ND	12V Adj High Efficiency Step Up DC/DC Converter	8-Dip	5.43	4.10	2.63
MAX761CSA-ND	12V Adj High Efficiency Step Up DC/DC Converter	8-SOIC	5.99	4.52	2.90
MAX765CPA-ND	–12V DC/DC Inverter	8-Dip	5.99	4.52	2.90
MAX766CPA-ND	–15V DC/DC Inverter	8-Dip	5.99	4.52	2.90
MAX791CPE-ND	High Perform Microprocessor Supervisory Circuit	16-Dip	8.48	6.40	4.10
MAX791CSE-ND	High Perform Microprocessor Supervisory Circuit	16	8.90	6.72	4.31
MAX792MCPE-ND	Power Supply Monitor 4.37V	16-Dip	8.40	6.34	4.07
MAX792LCPE-ND	Power Supply Monitor 4.62V	16-Dip	8.40	6.34	4.07
MAX792LCSE-ND	Power Supply Monitor 4.62V	16-SOIC	8.08	6.10	3.92
MAX797CSE-ND	Step Down, PWM Controller with Synchronous Rectifier for CPU with Low Noise	16-SOIC	9.41	7.10	4.56
MAX800LCPE-ND	µP Supervisory Circuit w/4.65V Reset, Chip Enable, Watchdog	16-Dip	9.28	7.00	4.50
MAX800MCPE-ND	µP Supervisory Circuit w/4.4V Reset, Chip Enable, Watchdog	16-Dip	9.28	7.00	4.50
MAX813LCPA-ND	Low Cost Microprocessor Supervisor Circuit	8-Dip	3.47	2.62	1.79
MAX813LCSA-ND	Low Cost Microprocessor Supervisor Circuit	8-SOIC	3.47	2.62	1.79
MAX872CPA-ND	10µA, Low Dropout, +2.5V Precision Volt Ref	8-Dip	5.09	3.84	2.46
MAX874CPA-ND	10µA, Low Dropout, +4.096V Precision Volt Ref	8-Dip	5.09	3.84	2.46
MAX876BCPA-ND	Low-Power, Low-Drift, +10V Precision Volt Ref	8-Dip	7.39	5.58	3.58
MAX882ESA-ND	5V/3.3V Adjustable Low Dropout Linear Reg	8-SOIC	5.22	3.94	2.53
MAX901BCSE-ND	Quad High Speed Low Power, Voltage Comp	16-SOIC	12.40	9.36	6.00
MAX902CSD-ND	Dual High Speed Low Power, Voltage Comp	14-SOIC	10.26	7.74	4.97
MAX907CPA-ND	Dual High Speed Ultra Low Power, Single +5V, TTL Comp	8-Dip	4.27	3.22	2.07
MAX907CSA-ND	Dual High Speed Ultra Low Power, Single +5V, TTL Comp	8-SOIC	4.27	3.22	2.07
MAX908CPD-ND	Quad, High Speed, Ultra L.P., Single +5V, TTL Comp	14-Dip	7.42	5.60	3.60
MAX921CSA-ND	Low Power Comparator with Reference	8-SOIC	3.63	2.74	1.75
MAX921ESA-ND	Low Power Comparator with Reference	8-SOIC	4.61	3.48	2.23
MAX922CSA-ND	Dual Ultra Low Power, Single Supply Comparator	8-SOIC	3.76	2.84	1.83
MAX923CSA-ND	Dual Ultra LP Single Supply Comp. with 1% Precision w/Ref.	8-SOIC	4.88	3.68	2.37
MAX924CSE-ND	Quad Ultra LP Single Supply Comp. with 1% Precision w/Ref.	16-SOIC	5.64	4.26	2.74
MAX931CPA-ND	Ultra Low Power Comparator	8-Dip	2.46	1.86	1.20
MAX932CSA-ND	Dual Ultra LP Single Supply Comp. w/2% Precision w/Ref	8-SOIC	3.15	2.38	1.53
MAX934CSE-ND	Quad Ultra LP Single Supply Comp. w/2% Precision w/Ref	16-SOIC	2.99	2.26	1.45
MAX941CSA-ND	Single, 3V/5V, Single Supply, 75nS, R-R Input Comparator	8-SOIC	3.45	2.60	1.68
MAX942CSA-ND	Dual, 3V/5V, Single Supply, 75nS, R-R Input Comparator	8-SOIC	3.71	2.80	1.80
MAX944CSD-ND	Quad, 3V/5V, Single Supply, 75nS, R-R Input Comparator	14-SOIC	6.15	4.64	2.98
MAX971CSA-ND	Single, Ultra LP, Open-Output Comparator with 1% Accuracy	8-SOIC	3.95	2.98	1.91
MAX975ESA-ND	+3V/+5V Dual Speed Comparator with Auto Standby	8-SOIC	5.17	3.90	2.50
MAX975EUA-ND	+3V/+5V Dual Speed Comparator with Auto Standby	8-µMAX	5.17	3.90	2.50
MAX977EEE-ND	Dual, +3V/+5V Dual Speed Comparator with Auto Standby	16-QSOP	9.28	7.00	4.50
MAX977ESD-ND	Dual, +3V/+5V Dual Speed Comparator with Auto Standby	14-SOIC	9.28	7.00	4.50
MAX1044CPA-ND	CMOS Switchcap Voltage Converter	8-Dip	2.68	2.02	1.35
MAX1110CAP-ND	2.7V 8-Bit 8-Channel Serial ADC with Reference	20-SSOP	5.38	4.06	2.61
MAX1110CPP-ND	2.7V 8-Bit 8-Channel Serial ADC with Reference	20-Dip	5.38	4.06	2.61
MAX1202BCAP-ND	5V 12-Bit 8-Channel Serial ADC w/3V Digital Interface	20-SSOP	18.31	13.82	8.87
MAX1202BCPP-ND	5V 12-Bit 8-Channel Serial ADC with 3V Digital Interface	20-Dip	18.31	13.82	8.87
MAX1204BCAP-ND	5V 10-Bit 8-Channel Serial ADC with 3V Digital Interface	20-SSOP	11.95	9.02	5.79
MAX1204BCPP-ND	5V 10-Bit 8-Channel Serial ADC w/3V Digital Interface	20-Dip	11.95	9.02	5.79
MAX1232CPA-ND	Microprocessor Monitor	8-Dip	3.52	2.66	1.82
MAX1232CSA-ND	Microprocessor Monitor	8-SOIC	3.52	2.66	1.82
MAX1232EPA-ND	Microprocessor Monitor High Temperature	8-Dip	4.40	3.32	2.28
MAX1232ESA-ND	Microprocessor Monitor High Temperature	8-SOIC	4.58	3.46	2.37
MAX1241BCPA-ND	2.7V Low Power 12-Bit Single Channel Serial ADC	8-Dip	11.74	8.86	5.68
MAX1241BCSA-ND	2.7V Low Power 12-Bit Single Channel Serial ADC	8-SOIC	11.74	8.86	5.68
MAX1243BCPA-ND	2.7V Low Power 10-Bit Single Channel Serial ADC	8-Dip	7.08	5.34	3.43
MAX1243BCSA-ND	2.7V Low Power 10-Bit Single Channel Serial ADC	8-SOIC	7.08	5.34	3.43
MAX1245BCAP-ND	2.375V Low Power 12-Bit 8-Channel Serial ADC	20-SSOP	17.60	13.28	8.52
MAX1245BCPP-ND	2.375V Low Power 12-Bit 8-Channel Serial ADC	20-Dip	17.60	13.28	8.52
MAX1247BCEE-ND	2.7V Low Power 12-Bit 4-Channel Serial ADC	16-QSOP	15.00	11.32	7.25
MAX1247BCPE-ND	2.7V Low Power 12-Bit 4-Channel Serial ADC	16-Dip	15.00	11.32	7.25
MAX1249BCEE-ND	2.7V Low Power 10-Bit 4-Channel Serial ADC	16-QSOP	10.20	7.70	4.94
MAX1249BCPE-ND	2.7V Low Power 10-Bit 4-Channel Serial ADC	16-Dip	11.13	8.40	5.39
MAX1480BCPI-ND	Isolated RS485/RS422 Data Interface	28-Dip	25.02	18.88	11.80
MAX1480BEPI-ND	Isolated RS485/RS422 Data Interface	28-Dip	32.49	24.52	15.34
MAX1482CPD-ND	Full Duplex, Slew Rate Ltd, L.P. RS485 Transceiver	14-Dip	2.81	2.12	1.36
MAX1487CPA-ND	2.5 MBPS RS485/RS422 Transceiver	8-Dip	2.81	2.12	1.36
MAX1487CSA-ND	2.5 MBPS RS485/RS422 Transceiver	8-SOIC	2.81	2.12	1.36
MAX1771CPA-ND	12V Adj Output Step Up DC/DC Converter 90% Efficient	8-Dip	4.45	3.36	2.15
MAX3490CSA-ND	3.3V Powered RS485/422 Transceiver	8-SOIC	3.82	2.88	1.84
MAX4121CSA-ND	330MHz Multiplexer/Crosspoint Building Block IC	8-SOIC	5.25	3.96	2.54
MAX4123ESA-ND	Single, 5MHz, Single Supply Op Amp with Shutdown	8-SOIC	2.60	1.96	1.26
MAX4125ESA-ND	Single, 10 V/µs, Single Supply Op Amp with Shutdown	8-SOIC	2.60	1.96	1.26
MAX4126ESA-ND	Dual, 5MHz, Single Supply Op Amp	8-SOIC	3.74	2.82	1.81
MAX4127ESD-ND	Dual, 5MHz, Single Supply Op Amp with Shutdown	14-SOIC	4.43	3.34	2.14
MAX4128ESA-ND	Dual, 10 V/µs, Single Supply Op Amp	8-SOIC	3.74	2.82	1.81
MAX4129ESD-ND	Quad, 5MHz, Single Supply Op Amp	14-SOIC	6.36	4.80	3.08
MAX4131ESA-ND	Single, 10MHz, Single Supply Op Amp with Shutdown	8-SOIC	2.60	1.96	1.26
MAX4132ESA-ND	Dual, 10MHz, Single Supply Op Amp	8-SOIC	3.74	2.82	1.81
MAX4133ESD-ND	Dual, 10MHz, Single Supply Op Amp with Shutdown	14-SOIC	4.43	3.34	2.14
MAX4134ESD-ND	Quad, 10MHz, Single Supply Op Amp	14-SOIC	6.36	4.80	3.08
MAX4172ESA-ND	High-Side Current Sense Amplifier	8-SOIC	3.84	2.90	1.87
MAX4172EUA-ND	High-Side Current Sense Amplifier	8-µMAX	3.52	2.66	1.71
MAX4220EEE-ND	High-Speed Single Supply Rail-to-Rail Quad Op Amp	16-QSOP	10.49	7.92	5.08
MAX4220ESD-ND	High-Speed Single Supply Rail-to-Rail Quad Op Amp	14-SOIC	10.49	7.92	5.08
MAX4420CPA-ND	High-Speed 6A MOSFET Driver, Non-Inverting	8-Dip	3.39	2.56	1.83
MAX4429CPA-ND	High-Speed 6A MOSFET Driver, Inverting	8-Dip	3.39	2.56	1.83
MAX5250BCAP-ND	5V 10-Bit Quad VOUT Serial DAC	20-SSOP	13.94	10.52	6.75
MAX5250BCPP-ND	5V 10-Bit Quad VOUT Serial DAC	20-Dip	13.94	10.52	6.75
MAX5251BCAP-ND	3V 10-Bit Quad VOUT Serial DAC	20-SSOP	13.94	10.52	6.75
MAX5251BCPP-ND	3V 10-Bit Quad VOUT Serial DAC	20-Dip	13.94	10.52	6.75
MAX5253BCAP-ND	3V 12-Bit Quad VOUT Serial DAC	20-SSOP	31.99	24.14	15.48
MAX5253BCPP-ND	3V 12-Bit Quad VOUT Serial DAC	20-Dip	31.99	24.14	15.48
MAX5351BCPA-ND	3.3V 13-Bit VOUT Serial DAC	8-Dip	15.48	11.68	7.50
MAX5351BCUA-ND	3.3V 13-Bit VOUT Serial DAC	8-µMAX	15.48	11.68	7.50
MAX5352BCPA-ND	5V 12-Bit VOUT Serial DAC	8-Dip	11.85	8.94	5.73
MAX5352BCUA-ND	5V 12-Bit VOUT Serial DAC	8-µMAX	11.85	8.94	5.73
MAX5353BCPA-ND	3.3V 12-Bit VOUT Serial DAC	8-Dip	11.85	8.94	5.73
MAX5353BCUA-ND	3.3V 12-Bit VOUT Serial DAC	8-µMAX	11.85	8.94	5.73
MAX5354CPA-ND	5V 10-Bit VOUT Serial DAC	8-Dip	7.61	5.74	3.69
MAX5354CUA-ND	5V 10-Bit VOUT Serial DAC	8-µMAX	7.61	5.74	3.69
MAX5355CPA-ND	3.3V 10-Bit VOUT Serial DAC	8-Dip	8.16	6.16	3.96
MAX5355CUA-ND	3.3V 10-Bit VOUT Serial DAC	8-µMAX	8.16	6.16	3.96
MAX6120ESA-ND	Low-Cost, Micropower, 1.2V Prec, 3-Terminal Volt Reference	8-SOIC	2.52	1.90	1.23
MAX6225AEPA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	8-Dip	13.70	10.34	6.64
MAX6225AESA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	8-SOIC	13.70	10.34	6.64
MAX6225BEPA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	8-Dip	6.31	4.76	3.06
MAX6225BESA-ND	Low-Drift, Low-Noise, 2.5V Precision Voltage Reference	8-SOIC	6.31	4.76	3.06
MAX6241AEPA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	8-Dip	13.70	10.34	6.64
MAX6241AESA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	8-SOIC	13.70	10.34	6.64
MAX6241BEPA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	8-Dip	6.31	4.76	3.06
MAX6241BESA-ND	Low-Drift, Low-Noise, 4.096V Precision Voltage Reference	8-SOIC	6.31	4.76	3.06
MAX6250AEPA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	8-Dip	13.70	10.34	6.64
MAX6250AESA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	8-SOIC	13.70	10.34	6.64
MAX6250BEPA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	8-Dip	6.31	4.76	3.06
MAX6250BESA-ND	Low-Drift, Low-Noise, 5.0V Precision Voltage Reference	8-SOIC	6.31	4.76	3.06
MAX7219CNG-ND	Serial Input 8-Digit LED Driver Multiplexed	24-Dip	10.81	8.16	5.44
MAX7219CWG-ND	Serial Input 8-Digit LED Driver Multiplexed	24-SOIC	10.81	8.16	5.44
MAX7645BCPP-ND	CMOS 12-Bit Buffered Multiplying DAC	20-Dip	15.77	11.90	7.63
MAX8211CPA-ND	Programmable Voltage Detector, Non-Inverting	8-Dip	3.45	2.60	1.68
MAX8211CSA-ND	Programmable Voltage Detector, Non-Inverting	8-SOIC	3.50	2.64	1.70
MAX8211ESA-ND	Programmable Voltage Detector, Non-Inverting	8-SOIC	5.27	3.98	2.56
MAX8212CPA-ND	Programmable Voltage Detector, Inverting	8-Dip	3.45	2.60	1.73
MAX8212CSA-ND	Programmable Voltage Detector, Inverting	8-SOIC	3.02	2.28	1.52
MAX8213ACPE-ND	Five Universal Voltage Monitors with Open-Drain Outputs	16-Dip	7.23	5.46	3.50
MAX8214ACPE-ND	Five Universal Voltage Monitors with Active Pull-Ups	16-Dip	7.23	5.46	3.50
MX574AJN-ND	Industry-Standard, Complete 12-Bit ADC	28-Dip	31.72	23.94	17.10
MX7226KN-ND	CMOS, Quad, 8-Bit DAC with Voltage Output Amp	20-Dip	27.37	20.66	14.75
MX7524JN-ND	CMOS 8-Bit Buffer DAC	16-Dip	5.86	4.42	3.15
MX7528JCWP-ND	CMOS Dual DAC 8-Bit Buffered	20-SOIC	8.80	6.64	4.74
MX7533JCWE-ND	CMOS 10-Bit D/A Converter	16-SOIC	6.60	4.98	3.55
MXD1210CSA-ND	Nonvolatile RAM Controller	8-SOIC	5.83	4.40	2.94
OP07EP-ND	Low Offset Voltage Op Amp	8-Dip	5.64	4.26	3.05

ZETEX SPECIALIZED INTEGRATED CIRCUITS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
ZXCD50STEVAL-ND	Evaluation Board *NEW!*	—	133.00	—	—
ZXCD1000EQ16CT-ND	Audio Amplifier IC Controller	eQSOP-16	4.06	3.48	3.19
ZXCD1000EQ16TR-ND	Audio Amplifier IC Controller	eQSOP-16	1218.00/500		
ZXCD1000MOKIT-ND	Class D Audio Amplifier Solution Kit, Mono	—	10.23	8.07	5.90
ZXCD1000STKIT-ND	Class D Audio Amplifier Solution Kit, Stereo	—	20.71	16.35	11.93
ZXCM209JFCT-ND	CMOS Microprocessor Reset Low Output	SOT-23	.74	.63	.58
ZXCM209JFTR-ND	CMOS Microprocessor Reset Low Output	SOT-23	945.00/3,000		
ZXCM209LFCT-ND	CMOS Microprocessor Reset Low Output	SOT-23	.74	.63	.58
ZXCM209LFTR-ND	CMOS Microprocessor Reset Low Output	SOT-23	945.00/3,000		
ZXCM209MFCT-ND	CMOS Microprocessor Reset Low Output	SOT-23	.74	.63	.58
ZXCM209MFTR-ND	CMOS Microprocessor Reset Low Output	SOT-23	945.00/3,000		
ZXCM209RFCT-ND	CMOS Microprocessor Reset Low Output	SOT-23	.74	.63	.58
ZXCM209RFTR-ND	CMOS Microprocessor Reset Low Output	SOT-23	945.00/3,000		
ZXCM209SFCT-ND	CMOS Microprocessor Reset Low Output	SOT-23	.74	.63	.58
ZXCM209SFTR-ND	CMOS Microprocessor Reset Low Output	SOT-23	945.00/3,000		
ZXCM209TFCT-ND	CMOS Microprocessor Reset Low Output	SOT-23	.74	.63	.58
ZXCM209TFTR-ND	CMOS Microprocessor Reset Low Output	SOT-23	945.00/3,000		
ZXCM210LFCT-ND	CMOS Microprocessor Reset High Output	SOT-23	.74	.63	.58
ZXCM210LFTR-ND	CMOS Microprocessor Reset High Output	SOT-23	945.00/3,000		
ZXCP330E6TACT-ND	Switched Capacitor DC to DC Converter *NEW!*	SOT-23-6	1.58	1.35	1.24

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ZETEX SPECIALIZED INTEGRATED CIRCUITS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
ZXCP330E6TATR-ND	Switched Capacitor DC to DC Converter *NEW!*	SOT-23-6	2025.00/3,000		
ZXCT1009FCT-ND	Current Monitor	SOT-23	.74	.63	.58
ZXCT1009FTR-ND	Current Monitor	SOT-23	945.00/3,000		
ZXCT1010CT-ND	Current Monitor	SOT-23-5	.88	.80	.69
ZXCT1010TR-ND	Current Monitor	SOT-23-5	1125.00/3,000		
ZXCT1021E5TACT-ND	High Side Current Monitor *NEW!*	SOT-23-5	1.23	1.05	.97
ZXCT1021E5TATR-ND	High Side Current Monitor *NEW!*	SOT-23-5	1575.00/3,000		
ZXCT1022E5TACT-ND	High Side Current Monitor *NEW!*	SOT-23-5	1.23	1.05	.97
ZXCT1022E5TATR-ND	High Side Current Monitor *NEW!*	SOT-23-5	1575.00/3,000		
ZXF36L01W24-ND	Variable Q Filter	24-SOIC(W)	11.41	9.20	6.40
ZXF36L01-EVB-ND	Evaluation Board for ZXF36L01W24	—	24.00	—	—
ZXF103Q16CT-ND	High Frequency Filter Variable Q	QSOP-16	5.25	4.50	4.13
ZXF103Q16TR-ND	High Frequency Filter Variable Q	QSOP-16	1575.00/500		
ZXF150W20CT-ND	Low Pass Filter 2 Twin 6 Pole	20-SOIC	10.50	9.00	8.25
ZXF150W20TR-ND	Low Pass Filter 2 Twin 6 Pole	20-SOIC	5100.00/1,000		
ZXFBF04N14CT-ND	4 Channel Buffer	14N	3.15	2.70	2.48
ZXFBF04N14TR-ND	4 Channel Buffer	14N	945.00/500		
ZXFBF05N14CT-ND	4 Channel High Capacitance Buffer	14N	3.15	2.70	2.48
ZXFBF05N14TR-ND	4 Channel High Capacitance Buffer	14N	945.00/500		
ZXFBF08W20CT-ND	8 Channel Buffer	20W	5.08	4.35	3.99
ZXFBF08W20TR-ND	8 Channel Buffer	20W	2465.00/1,000		
ZXFV201N14CT-ND	Video Amplifier Quad High Speed	14-SOIC	4.20	3.60	3.30
ZXFV201N14TR-ND	Video Amplifier Quad High Speed	14-SOIC	1260.00/500		
ZXFV202E5CT-ND	Video Amplifier Single High Speed	SOT-23-5	1.75	1.50	1.38
ZXFV202E5TR-ND	Video Amplifier Single High Speed	SOT-23-5	2250.00/3,000		
ZXFV202N8TACT-ND	Single High Speed Video Amplifier *NEW!*	8-SOIC	1.51	1.29	1.19
ZXFV202N8TATR-ND	Single High Speed Video Amplifier *NEW!*	8-SOIC	451.50/500		
ZXFV302N16TACT-ND	Video Multiplexer *NEW!*	16-SOIC	5.81	4.98	4.57
ZXFV302N16TATR-ND	Video Multiplexer *NEW!*	16-SOIC	7470.00/3,000		
ZXFV401N16TACT-ND	Video Sync Seperator with Filter *NEW!*	16-SOIC	7.77	6.66	6.11
ZXFV401N16TATR-ND	Video Sync Seperator with Filter *NEW!*	16-SOIC	2331.00/500		
ZXLB1600X10TACT-ND	Boost Converter for LCD Bias *NEW!*	10-MSOP	1.93	1.65	1.52
ZXLB1600X10TATR-ND	Boost Converter for LCD Bias *NEW!*	10-MSOP	935.00/1,000		
ZXRD100ANQ16CT-ND	Adjustable PWM DC/DC Controller	16-QSOP	4.80	3.60	2.16
ZXRD100ANQ16TR-ND	Adjustable PWM DC/DC Controller	16-QSOP	532.00/500		
ZXRD100APQ16CT-ND	Adjustable PWM DC/DC Controller	16-QSOP	4.80	3.60	2.16
ZXRD100APQ16TR-ND	Adjustable PWM DC/DC Controller	16-QSOP	532.00/500		
ZXRD1033NQ16CT-ND	3.3V PWM DC/DC Controller	16-QSOP	4.80	3.60	2.16
ZXRD1033NQ16TR-ND	3.3V PWM DC/DC Controller	16-QSOP	532.00/500		
ZXRD1033PQ16CT-ND	3.3V PWM DC/DC Controller	16-QSOP	4.80	3.60	2.16
ZXRD1033PQ16TR-ND	3.3V PWM DC/DC Controller	16-QSOP	532.00/500		
ZXRD1050NQ16CT-ND	5.0V PWM DC/DC Controller	16-QSOP	4.80	3.60	2.16
ZXRD1050NQ16TR-ND	5.0V PWM DC/DC Controller	16-QSOP	532.00/500		
ZXRD1050PQ16CT-ND	5.0V PWM DC/DC Controller	16-QSOP	4.80	3.60	2.16
ZXRD1050PQ16TR-ND	5.0V PWM DC/DC Controller	16-QSOP	532.00/500		
ZXSC100-EVAL-ND	Evaluation Board for ZXSC100	—	50.00	—	—
ZXSC100N8CT-ND	Boost Converter, 1 Cell	8-SOIC	1.75	1.50	1.38
ZXSC100N8TR-ND	Boost Converter, 1 Cell	8-SOIC	525.00/500		
ZXSC100X8CT-ND	Boost Converter, 1 Cell	MSOP-8	1.75	1.50	1.38
ZXSC100X8TR-ND	Boost Converter, 1 Cell	MSOP-8	850.00/1,000		
ZXSC310CT-ND	Boost Converter, 1 Cell LED	SOT-23-5	.91	.84	.72
ZXSC310TR-ND	Boost Converter, 1 Cell LED	SOT-23-5	1170.00/3,000		
ZXSC300E5CT-ND	Boost Converter, 1 Cell LED	SOT-23-5	.84	.72	.66
ZXSC300E5TR-ND	Boost Converter, 1 Cell LED	SOT-23-5	1296.00/3,000		
ZXSC400E6TACT-ND	Boost Converter *NEW!*	SOT-23-6	1.16	.99	.91
ZXSC400E6TATR-ND	Boost Converter *NEW!*	SOT-23-6	1485.00/3,000		
ZXSC410E6TACT-ND	Boost Converter *NEW!*	SOT-23-6	1.05	.90	.83
ZXSC410E6TATR-ND	Boost Converter *NEW!*	SOT-23-6	1350.00/3,000		
ZXSC420E6TACT-ND	Boost Converter *NEW!*	SOT-23-6	1.05	.90	.83
ZXSC420E6TATR-ND	Boost Converter *NEW!*	SOT-23-6	1350.00/3,000		

DALLAS SEMICONDUCTOR SPECIALIZED INTEGRATED CIRCUITS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25
DS12C887-ND	Real Time Clock with RAM, 128 Byte	24-Dip	12.16	9.18
DS18B20-ND	Programmable Resolution 1-Wire® Digital Thermometer	TO-92	5.04	3.80
DS18B20Z-ND	Programmable Resolution 1-Wire® Digital Thermometer	8-SOIC	5.04	3.80
DS18S20-ND	High Precision 1-Wire® Digital Thermometer	TO-92	5.04	3.80
DS18S20Z-ND	High Precision 1-Wire® Digital Thermometer	8-SOIC	5.04	3.80
DS21Q43AT-ND	5V, Quad E1 Framer	128-TQFP	148.53	112.10
DS21Q352-ND	3.3V, T1 Transceiver	256-BGA	189.13	142.74
DS21Q352N-ND	3.3V, T1 Transceiver, Ind. Temp.	256-BGA	217.51	164.16
DS21S07AE-ND	SCSI Terminator	20-TSSOP	4.11	3.10
DS21S07AS-ND	SCSI Terminator	16-SOIC	3.76	2.84
DS21T07E-ND	SCSI Terminator	20-TSSOP	3.66	2.76
DS21T09S-ND	Plug and Play SCSI Terminator, 2%	28-SOIC	6.36	4.80
DS32KHZ/BGA-ND	32.768kHz TCXO	36-BGA	10.15	7.66
DS32KHZ/DIP-ND	32.768kHz TCXO	14-Dip	10.15	7.66
DS32KHZN/BGA-ND	32.768kHz TCXO, Ind. Temp.	36-BGA	11.69	8.82
DS32KHZN/DIP-ND	32.768kHz TCXO, Ind. Temp.	14-Dip	11.69	8.82
DS56S-ND	Dual 3V/5V, Analog Temperature Sensor	8-SOIC	1.83	1.38
DS75S-ND	2-Wire Digital Temperature Sensor, LM75-compatible	8-SOIC	2.01	1.52
DS80C310-MCG-ND	High-Speed Microcontroller, 310, 25MHz	40-Dip	14.10	10.64
DS80C310-QCG-ND	High-Speed Microcontroller, 310, 25MHz	44-PLCC	15.11	11.40
DS80C320-ECG-ND	High-Speed/Low-Power Microcontroller, 320, 25MHz	44-TQFP	22.15	16.72
DS80C320-MCG-ND	High-Speed/Low-Power Microcontroller, 320, 25MHz	40-Dip	17.62	13.30
DS80C320-MCL-ND	High-Speed/Low-Power Microcontroller, 320, 33MHz	40-Dip	20.14	15.20
DS80C320-MNG-ND	HS/Low-Power Microcontroller, 320, 25MHz, Ind. Temp.	40-Dip	20.14	15.20
DS80C320-QCG-ND	High-Speed/Low-Power Microcontroller, 320, 25MHz	44-PLCC	19.13	14.44
DS80C320-QCL-ND	High-Speed/Low-Power Microcontroller, 320, 33MHz	44-PLCC	22.15	16.72
DS80C320-QNG-ND	HS/Low-Power Microcontroller, 320, 25MHz, Ind. Temp.	44-PLCC	22.15	16.72
DS87C520-ECL-ND	EPROM/ROM High-Speed Microcontroller, 33MHz	44-TQFP	44.31	33.44
DS87C520-MCL-ND	EPROM/ROM High-Speed Microcontroller, 33MHz	40-Dip	41.55	31.36
DS87C520-MNL-ND	EPROM/ROM High-Spd. Microcontroller, 33MHz, Ind. Temp.	40-Dip	47.83	36.10
DS87C520-QCL-ND	EPROM/ROM High-Speed Microcontroller, 33MHz	44-PLCC	42.29	31.92
DS87C520-QNL-ND	EPROM/ROM HS Microcontroller, 33MHz, Ind. Temp.	44-PLCC	48.84	36.86
DS87C520-WCL-ND	EPROM/ROM High-Speed Microcontroller, 33MHz	40-CDip	70.49	53.20
DS87C530-QCL-ND	EPROM/ROM Microcontroller with Real Time Clock, 33MHz	52-PLCC	47.33	35.72
DS87C530-QNL-ND	EPROM/ROM MCU w/Real Time Clock, 33MHz, Ind. Temp.	52-PLCC	54.38	41.04
DS87C550-QCL-ND	EPROM High-Speed Microcontroller with A/D and PWM	68-PLCC	41.29	31.16
DS232A-ND	Dual RS-232 Transmitter/Receiver	16-Dip	3.18	2.40
DS232A-N-ND	Dual RS-232 Transmitter/Receiver, Ind. Temp.	16-Dip	3.66	2.76
DS232AR-ND	Dual RS-232 Transmitter/Receiver, 150mil.	16-SOIC	3.74	2.82
DS232AR-N-ND	Dual RS-232 Transmitter/Receiver, 150mil. Ind. Temp.	16-SOIC	4.29	3.24
DS232AS-ND	Dual RS-232 Transmitter/Receiver, 300mil.	16-SOIC	3.74	2.82
DS275-ND	Line-Powered RS-232 Transceiver Chip	8-Dip	5.64	4.26
DS276S-ND	Low Power Transceiver Chip	8-SOIC	5.88	4.44
DS1000M-500-ND	5-Tap High Speed Silicon Delay Line, 500nS	8-Dip	5.04	3.80
DS1000Z-500-ND	5-Tap High Speed Silicon Delay Line, 500nS	8-SOIC	5.30	4.45
DS1004Z-2-ND	5-Tap High Speed Silicon Delay Line, 2nS Tap-to-Tap	8-SOIC	17.44	13.16
DS1004Z-3-ND	5-Tap High Speed Silicon Delay Line, 3nS Tap-to-Tap	8-SOIC	17.44	13.16
DS1004Z-4-ND	5-Tap High Speed Silicon Delay Line, 4nS Tap-to-Tap	8-SOIC	17.44	13.16
DS1005M-100-ND	5-Tap Silicon Delay Line, 100nS	8-Dip	5.30	4.00
DS1005S-250-ND	5-Tap Silicon Delay Line, 250nS	16-SOIC	6.36	4.80
DS1007S-2-ND	7 -1 Silicon Delay Line, 2nS	16-SOIC	16.38	12.36
DS1010-100-ND	10-Tap Silicon Delay Line, 100nS	14-Dip	7.95	6.00
DS1010-50-ND	10-Tap Silicon Delay Line, 50nS	14-Dip	7.95	6.00
DS1010S-100-ND	10-Tap Silicon Delay Line, 100nS	16-SOIC	9.54	7.20
DS1010S-500-ND	10-Tap Silicon Delay Line, 500nS	16-SOIC	9.54	7.20
DS1013M-15-ND	3-in-1 Silicon Delay Line, 15nS	8-Dip	6.36	4.80
DS1013M-40-ND	3-in-1 Silicon Delay Line, 40nS	8-Dip	6.36	4.80
DS1013M-150-ND	3-in-1 Silicon Delay Line, 150nS	8-Dip	6.36	4.80
DS1013S-10-ND	3-in-1 Silicon Delay Line, 10nS	16-SOIC	7.69	5.80
DS1013S-15-ND	3-in-1 Silicon Delay Line, 15nS	16-SOIC	7.69	5.80
DS1013S-20-ND	3-in-1 Silicon Delay Line, 20nS	16-SOIC	7.69	5.80
DS1020S-25-ND	Programmable 8-Bit Silicon Delay Line, .25nS	16-SOIC	46.56	35.14
DS1020S-100-ND	Programmable 8-Bit Silicon Delay Line, 1.00nS	16-SOIC	46.56	35.14
DS1021S-25-ND	Programmable 8-Bit Silicon Delay Line, .25nS	16-SOIC	20.14	15.20
DS1023S-25-ND	8-Bit Programmable Timing Element, .25nS	16-SOIC	18.55	14.00
DS1033Z-8-ND	3-in-1 Low Voltage Silicon Delay Line, 8nS	8-SOIC	12.61	9.52
DS1033Z-10-ND	3-in-1 Low Voltage Silicon Delay Line, 10nS	8-SOIC	12.61	9.52
DS1033Z-15-ND	3-in-1 Low Voltage Silicon Delay Line, 15nS	8-SOIC	12.61	9.52
DS1035Z-6-ND	3-in-1 High Speed Silicon Delay Line, 6nS	8-SOIC	9.96	7.52
DS1040Z-A15-ND	Programmable One-Shot Pulse Generator	8-SOIC	12.99	9.80
DS1100M-25-ND	5-Tap Delay Line, 25nS	8-Dip	5.64	4.26
DS1100M-50-ND	5-Tap Delay Line, 50nS	8-Dip	5.64	4.26
DS1100Z-20-ND	5-Tap Delay Line, 20nS	8-SOIC	6.33	4.78
DS1100Z-35-ND	5-Tap Delay Line, 35nS	8-SOIC	6.33	4.78
DS1100Z-40-ND	5-Tap Delay Line, 40nS	8-SOIC	6.33	4.78
DS1100Z-50-ND	5-Tap Delay Line, 50nS	8-SOIC	6.33	4.78
DS1100Z-100-ND	5-Tap Delay Line, 100nS	8-SOIC	6.33	4.78
DS1100Z-200-ND	5-Tap Delay Line, 200nS	8-SOIC	6.33	4.78
DS1100Z-250-ND	5-Tap Delay Line, 250nS	8-SOIC	6.33	4.78
DS1210-ND	Nonvolatile Controller Chip	8-Dip	5.17	3.90
DS1210N-ND	Nonvolatile Controller Chip, Ind. Temp.	8-Dip	5.70	4.30
DS1210S-ND	Nonvolatile Controller Chip	16-SOIC	5.83	4.40
DS1210SN-ND	Nonvolatile Controller Chip, Ind. Temp.	16-SOIC	6.41	4.84
DS1211-ND	Nonvolatile Controller x 8 Chip	20-Dip	16.24	12.26
DS1211S-ND	Nonvolatile Controller x 8 Chip	20-SOIC	19.50	14.72
DS1213B-ND	SmartSocket 16K/64K	28-Dip	22.66	17.10
DS1213C-ND	SmartSocket 256K	28-Dip	22.66	17.10
DS1213D-ND	SmartSocket 256K/1M	32-Dip	26.42	19.94
DS1216C-ND	SmartWatch/RAM, 64K/256K 5V	28-Dip	38.21	28.84
DS1216D-ND	SmartWatch/RAM, 256K/1M 5V	32-Dip	41.90	31.62
DS1216E-ND	SmartWatch/ROM, 64K, 256K, 1M 5V	28-Dip	38.21	28.84
DS1218S-ND	Nonvolatile Controller Chip	8-SOIC	6.60	4.98
DS1220AB-120-ND	Nonvolatile SRAM, 16K, 5%, 120nS	24-Dip	16.17	12.20
DS1220AB-150-ND	Nonvolatile SRAM, 16K, 5%, 150nS	24-Dip	15.77	11.90
DS1220AB-200-ND	Nonvolatile SRAM, 16K, 5%, 200nS	24-Dip	15.77	11.90
DS1220AD-200-ND	Nonvolatile SRAM, 16K, 10%, 200nS	24-Dip	15.77	11.90
DS1225AB-85-ND	Nonvolatile SRAM, 64K, 5%, 85nS	28-Dip	20.19	15.24
DS1225AB-150-ND	Nonvolatile SRAM, 64K, 5%, 150nS	28-Dip	19.72	14.88
DS1225AB-200-ND	Nonvolatile SRAM, 64K, 5%, 200nS	28-Dip	19.72	14.88
DS1225AB-200IND-ND	Nonvolatile SRAM, 64K, 5%, 200nS, Ind. Temp.	28-Dip	20.67	15.60
DS1225AD-85-ND	Nonvolatile SRAM, 64K, 10%, 85nS	28-Dip	20.19	15.24
DS1225AD-150-ND	Nonvolatile SRAM, 64K, 10%, 150nS	28-Dip	19.72	14.88
DS1225AD-200-ND	Nonvolatile SRAM, 64K, 10%, 200nS	28-Dip	19.72	14.88
DS1230AB-70-ND	Nonvolatile SRAM, 256K, 5%, 70nS	28-Dip	27.27	20.58
DS1230AB-100-ND	Nonvolatile SRAM, 256K, 5%, 100nS	28-Dip	26.63	20.10
DS1230AB-120-ND	Nonvolatile SRAM, 256K, 5%, 120nS	28-Dip	26.63	20.10
DS1230AB-200-ND	Nonvolatile SRAM, 256K, 5%, 200nS	28-Dip	26.63	20.10
DS1230Y-70-ND	Nonvolatile SRAM, 256K, 10%, 70nS	28-Dip	27.27	20.58
DS1230Y-70IND-ND	Nonvolatile SRAM, 256K, 10%, 70nS, Ind. Temp.	28-Dip	28.62	21.60
DS1230Y-120-ND	Nonvolatile SRAM, 256K, 10%, 120nS	28-Dip	26.63	20.10
DS1230Y-150-ND	Nonvolatile SRAM, 256K, 10%, 150nS	28-Dip	26.63	20.10
DS1230Y-200-ND	Nonvolatile SRAM, 256K, 10%, 200nS	28-Dip	26.63	20.10
DS1231S-20-ND	Power Monitor Chip, 20nS	16-SOIC	10.07	7.60
DS1231-20N-ND	Power Monitor Chip, 20nS, Ind. Temp.	8-Dip	9.54	7.20
DS1231-35-ND	Power Monitor Chip, 35nS	8-Dip	8.29	6.26
DS1232-ND	MicroMonitor Chip	8-Dip	2.25	1.70
DS1232N-ND	MicroMonitor Chip, Ind. Temp.	8-Dip	2.60	1.96
DS1232LP-ND	Low Power MicroMonitor Chip	8-Dip	2.25	1.70
DS1232LPS-ND	Low Power MicroMonitor Chip	16-SOIC	2.76	2.08
DS1232LPS-2-ND	Low Power MicroMonitor Chip	8-SOIC	2.25	1.70
DS1232LPSN-2-ND	Low Power MicroMonitor Chip, Ind. Temp.	8-SOIC	2.60	1.96
DS1232S-ND	MicroMonitor Chip	16-SOIC	2.76	2.08
DS1232SN-ND	MicroMonitor Chip, Ind. Temp.	16-SOIC	3.18	2.40
DS1233-5-ND	5V, EconoReset, 5%	TO-92	1.38	1.04
DS1233-10-ND	5V, EconoReset, 10%	TO-92	1.38	1.04
DS1233A-15-ND	3.3V, EconoReset, 15%	TO-92	1.38	1.04
DS1233AZ-10-ND	3.3V, EconoReset, 10%	SOT-223	2.41	1.82
DS1233AZ-15-ND	3.3V, EconoReset, 15%	SOT-223	2.41	1.82
DS1233D-5-ND	5V, EconoReset, No Pushbutton Reset, 5%	TO-92	1.38	1.04
DS1233D-10-ND	5V, EconoReset, No Pushbutton Reset, 10%	TO-92	1.38	1.04
DS1233D-15-ND	5V, EconoReset, No Pushbutton Reset, 15%	TO-92	1.38	1.04
DS1233DZ-5-ND	5V, EconoReset, No Pushbutton Reset, 5%	SOT-223	2.41	1.82
DS1233DZ-10-ND	5V, EconoReset, No Pushbutton Reset, 10%	SOT-223	2.41	1.82
DS1233DZ-15-ND	5V, EconoReset, No Pushbutton Reset, 15%	SOT-223	2.41	1.82
DS1233M-55-ND	5V, EconoReset	TO-92	1.38	1.04

(Continued)

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Digi-Key Part No.	Description	Pkg.	Price Each★	
			1	25
DS1233MS-3-ND	3.3V, EconoReset	8-SOIC	2.89	2.18
DS1233MS-5-ND	5V, EconoReset	8-SOIC	2.89	2.18
DS1233Z-5-ND	EconoReset, 5%	SOT-223	2.41	1.82
DS1233Z-10-ND	EconoReset, 10%	SOT-223	2.41	1.82
DS1233Z-15-ND	EconoReset, 15%	SOT-223	2.41	1.82
DS1236-5-ND	MicroManager™ Chip, 5%	16-Dip	10.57	7.98
DS1236-10-ND	MicroManager™ Chip, 10%	16-Dip	10.57	7.98
DS1236AS-5-ND	MicroManager™ Chip, 5%	16-SOIC	12.35	9.32
DS1236AS-10-ND	MicroManager™ Chip, 10%	16-SOIC	12.35	9.32
DS1236S-10-ND	MicroManager™ Chip, 10%	16-SOIC	12.35	9.32
DS1238-10-ND	MicroManager™ Chip, 10%	16-Dip	10.57	7.98
DS1238AS-5-ND	MicroManager™ Chip, 5%	16-SOIC	12.35	9.32
DS1239S-5-ND	MicroManager™ Chip, 5%	16-SOIC	12.35	9.32
DS1243Y-120-ND	Nonvolatile SRAM with Phantom Clock, 64K, 120nS	28-Dip	44.31	33.44
DS1244Y-70-ND	Nonvolatile SRAM with Phantom Clock, 256K, 70nS	28-Dip	52.10	39.32
DS1245AB-120-ND	Nonvolatile SRAM, 1024K, 5%, 120nS	32-Dip	37.44	28.26
DS1245Y-100-ND	Nonvolatile SRAM, 1024K, 10%, 100nS	32-Dip	37.44	28.26
DS1245Y-120-ND	Nonvolatile SRAM, 1024K, 10%, 120nS	32-Dip	37.44	28.26
DS1245Y-70IND-ND	Nonvolatile SRAM, 1024K, 10%, 70nS, Ind. Temp.	32-Dip	40.12	30.28
DS1245YP-100-ND	Nonvolatile SRAM, 1024K, 10%, 100nS	34-PCM	29.87	22.54
DS1249Y-70-ND	Nonvolatile SRAM, 2048K, 10%, 70nS	32-Dip	67.68	51.08
DS1250WP-150-ND	3.3V, Nonvolatile SRAM, 4096K, 150nS	34-PCM	110.32	83.26
DS1250Y-100-ND	Nonvolatile SRAM, 4096K, 100nS	32-Dip	117.90	88.98
DS1259-ND	Battery Manager Chip	16-Dip	11.82	8.92
DS1259S-ND	Battery Manager Chip	16-SOIC	14.20	10.72
DS1260-100-ND	Smart Battery, 1000MAH @ 3V	16-Dip	24.17	18.24
DS1267-010-ND	Dual Digital Potentiometer Chip, 10K	14-Dip	8.32	6.28
DS1267-050-ND	Dual Digital Potentiometer Chip, 50K	14-Dip	8.32	6.28
DS1267-100-ND	Dual Digital Potentiometer Chip, 100K	14-Dip	8.32	6.28
DS1267E-10-ND	Dual Digital Potentiometer Chip, 10K	20-TSSOP	10.34	7.80
DS1267E-100-ND	Dual Digital Potentiometer Chip, 100K	20-TSSOP	10.34	7.80
DS1267S-010-ND	Dual Digital Potentiometer Chip, 10K	16-SOIC	9.57	7.22
DS1267S-050-ND	Dual Digital Potentiometer Chip, 50K	16-SOIC	9.57	7.22
DS1267S-100-ND	Dual Digital Potentiometer Chip, 100K	16-SOIC	9.57	7.22
DS1283S-ND	Watchdog Timekeeper Chip	28-SOIC	11.00	8.30
DS1283SN-ND	Watchdog Timekeeper Chip, Ind. Temp.	28-SOIC	12.67	9.56
DS1284-ND	Watchdog Timekeeper Chip	28-Dip	13.14	9.92
DS1284Q-ND	Watchdog Timekeeper Chip	28-PLCC	14.10	10.64
DS1284QN-ND	Watchdog Timekeeper Chip, Ind. Temp.	28-PLCC	14.60	11.02
DS1286-ND	Watchdog Timekeeper Chip	28-Dip	26.31	19.86
DS1302-ND	Trickle Charge Timekeeping Chip, 300mil.	8-Dip	4.16	3.14
DS1302N-ND	Trickle Charge Timekeeping Chip, Ind. Temp.	8-Dip	4.58	3.46
DS1302S-16-ND	Trickle Charge Timekeeping Chip, 300mil.	16-SOIC	6.81	5.14
DS1302SN-ND	Trickle Charge Timekeeping Chip, Ind. Temp.	8-SOIC	5.14	3.88
DS1302Z-ND	Trickle Charge Timekeeping Chip, 150mil.	8-SOIC	4.90	3.70
DS1305-ND	Serial Alarm Real-Time Clock, 300mil.	16-Dip	5.51	4.16
DS1305E-ND	Serial Alarm Real-Time Clock, 173mil.	20-TSSOP	7.18	5.42
DS1305EN-ND	Serial Alarm Real-Time Clock, Ind. Temp.	20-TSSOP	7.90	5.96
DS1306E-ND	Serial Alarm Real-Time Clock, 4.4mil.	20-TSSOP	7.90	5.96
DS1306EN-ND	Serial Alarm Real-Time Clock, Ind. Temp.	20-TSSOP	8.69	6.56
DS1307-ND	Serial Real-Time Clock, 64 x 8, 100mil.	8-Dip	4.16	3.14
DS1307Z-ND	Serial Real-Time Clock, 64 x 8, 150mil.	8-SOIC	4.90	3.70
DS1307ZN-ND	Serial Real-Time Clock, 64 x 8, Ind. Temp.	8-SOIC	5.41	4.08
DS1312S-ND	Nonvolatile Cont. with Lithium Battery Monitor, 300mil.	16-SOIC	7.66	5.78
DS1312S-2-ND	Nonvolatile Controller with Lithium Battery Monitor, 150mil.	8-SOIC	6.10	4.60
DS1314S-ND	Nonvolatile Cont. with Lithium Battery Monitor, 3V, 300mil.	16-SOIC	7.66	5.78
DS1314S-2-ND	Nonvolatile Cont. with Lithium Battery Monitor, 3V, 150mil.	8-SOIC	6.10	4.60
DS1315-5-ND	5V, Phantom Time Chip, 300mil.	16-Dip	15.61	11.78
DS1315EN-33-ND	3.3V, Phantom Time Chip, Ind. Temp.	20-TSSOP	20.51	15.48
DS1315S-5-ND	5V, Phantom Time Chip, 300mil.	16-SOIC	18.13	13.68
DS1315SN-5-ND	5V, Phantom Time Chip, Ind. Temp. +B200	16-SOIC	20.51	15.48
DS1321S-ND	Flexible Nonvolatile Cont. with Lithium Battery Monitor, 5V	16-SOIC	10.15	7.66
DS1345WP-150-ND	3.3V, Nonvolatile SRAM with Battery Monitor, 1024K	34-PCM	32.86	24.80
DS1384FP-12-ND	Watchdog Timekeeping Controller, 120nS	44-PQFP	17.70	13.36
DS1386-32-120-ND	RAMified Watchdog Timekeeper, 256K	32-Dip	54.64	41.24
DS1486-120-ND	RAMified Watchdog Timekeeper, 1024K	32-Dip	64.79	48.90
DS1501WE-ND	3.3V, Y2KC Watchdog Real Time Clock	28-TSOP	12.08	9.12
DS1501WEN-ND	3.3V, Y2KC Watchdog Real Time Clock, Ind. Temp.	28-TSOP	13.89	10.48
DS1511W-ND	3.3V, Y2KC Watchdog Real Time Clock	28-Dip	20.86	15.74
DS1602-ND	Elapsed Time Counter	8-Dip	5.27	3.98
DS1602S-ND	Elapsed Time Counter	8-SOIC	5.99	4.52
DS1603-ND	Elapsed Time Counter Module	7-SIP	15.37	11.60
DS1609S-50-ND	Dual Port RAM, 50nS	24-SOIC	8.82	6.66
DS1620-ND	Digital Thermometer and Thermostat, 300mil.	8-Dip	6.97	5.26
DS1620S-ND	Digital Thermometer and Thermostat, 208mil.	8-SOIC	6.97	5.26
DS1621-ND	Digital Thermometer and Thermostat, 300mil.	8-Dip	4.61	3.48
DS1621S-ND	Digital Thermometer and Thermostat, 150mil.	8-SOIC	4.61	3.48
DS1621V-ND	Digital Thermometer and Thermostat, 208mil.	8-SOIC	4.61	3.48
DS1624-ND	Digital Thermometer and Memory, 300mil.	8-Dip	9.04	6.82
DS1624S-ND	Digital Thermometer and Memory, 208mil.	8-SOIC	9.04	6.82
DS1629S-ND	2-Wire Digital Thermometer and Real Time Clock, 150mil.	8-SOIC	7.76	5.86
DS1642-100-ND	Nonvolatile Timekeeping RAM, 100nS	24-Dip	28.62	21.60
DS1643-100-ND	Nonvolatile Timekeeping RAM, 100nS, 700mil.	28-Dip	37.68	28.44
DS1644-120-ND	Nonvolatile Timekeeping RAM, 120nS	28-Dip	47.04	35.50
DS1644P-120-ND	Nonvolatile Timekeeping RAM, 120nS	34-PCM*	35.96	27.14
DS1646-120-ND	Nonvolatile Timekeeping RAM, 120nS	28-Dip	62.25	46.98
DS1646P-120-ND	Nonvolatile Timekeeping RAM+B228, 120nS	34-PCM*	51.22	38.66
DS1666S-10-ND	Audio Digital Resistor	16-SOIC	4.72	3.56
DS1669-10-ND	Dallastat™ Electronic Digital Rheostat, 10K	8-Dip	6.81	5.14
DS1669-100-ND	Dallastat™ Electronic Digital Rheostat, 100K	8-Dip	6.81	5.14
DS1669S-10-ND	Dallastat™ Electronic Digital Rheostat, 10K	8-SOIC	7.18	5.42
DS1669S-50-ND	Dallastat™ Electronic Digital Rheostat, 50K	8-SOIC	7.18	5.42
DS1685E-3-ND	3V/5V, Real-Time Clock	24-TSSOP	6.44	4.86
DS1685QN-5-ND	5V, Real-Time Clock, Ind. Temp.	28-PLCC	7.90	5.96
DS1685S-5-ND	5V, Real-Time Clock	24-SOIC	6.41	4.84
DS1687-5-ND	5V, Real-Time Clock	24-Dip	10.63	8.02
DS1688S-ND	3V/5V, Serialized Real Time Clock with NV RAM Control	28-SOIC	9.38	7.08
DS1689S-ND	3V/5V, Serialized Real Time Clock with NV RAM Control	28-SOIC	9.38	7.08
DS1693-ND	3V/5V, Serialized Real Time Clock Module w/NV RAM Control	28-Dip	19.82	14.96
DS1705EPA-ND	3.3V/5V, MicroMonitor, 5%	8-Dip	2.25	1.70
DS1705ESA-ND	5V, MicroMonitor, 10%	8-Dip	2.25	1.70
DS1706ESA-ND	5V, MicroMonitor, 10%	8-SOIC	2.25	1.70
DS1706LEPA-ND	5V, MicroMonitor, 5%	8-Dip	2.25	1.70
DS1706LESA-ND	5V, MicroMonitor, 5%	8-SOIC	2.25	1.70
DS1706SESA-ND	3.3V, MicroMonitor, 10%	8-SOIC	2.25	1.70
DS1706TESA-ND	3.3V, MicroMonitor, 5%	8-SOIC	2.25	1.70
DS1707ESA-ND	5V, MicroMonitor, 5%	8-SOIC	2.25	1.70
DS1708ESA-ND	5V, MicroMonitor, 5%	8-SOIC	2.25	1.70
DS1708SESA-ND	3.3V, MicroMonitor, 10%	8-SOIC	2.25	1.70
DS1708TESA-ND	3.3V, MicroMonitor, 5%	8-SOIC	2.25	1.70
DS1721S-ND	2-Wire Digital Thermometer and Thermostat	8-SOIC	3.87	2.92
DS1721U-ND	2-Wire Digital Thermometer and Thermostat	8-SOP	3.87	2.92
DS1722S-ND	2-Wire Digital Thermometer and Thermostat	8-SOIC	2.60	1.96
DS1722U-ND	2-Wire Digital Thermometer and Thermostat	8-MSOP	2.65	2.00
DS1742W-120-ND	3.3V, Y2KC Nonvolatile Timekeeping RAM, 120nS	24-Dip	30.87	23.30
DS1742W-150-ND	3.3V, Y2KC Nonvolatile Timekeeping RAM, 150nS	24-Dip	29.52	22.28
DS1743-70-ND	5V, Y2KC Nonvolatile Timekeeping RAM, 70nS	28-Dip	40.86	30.84
DS1743-100-ND	5V, Y2KC Nonvolatile Timekeeping RAM, 100nS	28-Dip	38.58	29.12
DS1743P-100-ND	5V, Y2KC Nonvolatile Timekeeping RAM, 100nS	34-PCM*	28.73	21.68
DS1743WP-120-ND	3.3V, Y2KC Nonvolatile Timekeeping RAM, 120nS	34-PCM*	31.01	23.40
DS1744-70-ND	5V, Y2KC Nonvolatile Timekeeping RAM, 70nS	28-Dip	48.28	36.44
DS1746WP-120-ND	3.3V, Y2KC Nonvolatile Timekeeping RAM, 120nS	34-PCM*	52.50	39.62
DS1780E-ND	CPU Peripheral Monitor	24-TSSOP	5.04	3.80
DS1801E-014-ND	Dual Audio Taper Potentiometer	14-TSSOP	7.50	5.66
DS1803E-010-ND	Addressable Dual Digital Potentiometer	14-TSSOP	6.86	5.18
DS1803Z-010-ND	Addressable Dual Digital Potentiometer, 10K, 150mil.	16-SOIC	6.39	4.82
DS1803Z-050-ND	Addressable Dual Digital Potentiometer, 50K, 150mil.	16-SOIC	6.39	4.82
DS1803Z-100-ND	Addressable Dual Digital Potentiometer, 100K, 150mil.	16-SOIC	6.39	4.82
DS1804-010-ND	Nonvolatile Trimmer Potentiometer, 10K, 300mil.	8-Dip	3.10	2.34
DS1804-100-ND	Nonvolatile Trimmer Potentiometer, 100K, 300mil.	8-Dip	3.10	2.34
DS1804Z-010-ND	Nonvolatile Trimmer Potentiometer, 10K, 150mil.	8-SOIC	3.23	2.44
DS1804Z-050-ND	Nonvolatile Trimmer Potentiometer, 50K, 150mil.	8-SOIC	3.23	2.44
DS1804Z-100-ND	Nonvolatile Trimmer Potentiometer, 100K, 150mil.	8-SOIC	3.23	2.44
DS1806E-050-ND	Digital Sextet Potentiometer, 50K	20-TSSOP	12.08	9.12
DS1810-5-ND	5V, EconoReset with Push-Pull Output, 5%	TO-92	1.11	.84
DS1810-10-ND	5V, EconoReset with Push-Pull Output, 10%	TO-92	1.11	.84
DS1811-5-ND	5V, EconoReset with Open Drain Output, 5%	TO-92	1.11	.84
DS1811-10-ND	5V, EconoReset with Open Drain Output, 10%	TO-92	1.11	.84
DS1811-15-ND	5V, EconoReset with Open Drain Output, 15%	TO-92	1.11	.84
DS1812-5-ND	5V, EconoReset with Active High Push-Pull Output, 5%	TO-92	1.11	.84
DS1812-10-ND	5V, EconoReset with Active High Push-Pull Output, 10%	TO-92	1.11	.84
DS1813-5-ND	5V, EconoReset with Pushbutton, 5%	TO-92	1.11	.84
DS1813-10-ND	5V, EconoReset with Pushbutton, 10%	TO-92	1.11	.84
DS1815-10-ND	3.3V, EconoReset with Push-Pull Output, 10%	TO-92	1.11	.84
DS1818-10-ND	3.3V, EconoReset with Pushbutton, 10%	TO-92	1.11	.84
DS1821-ND	Programmable Digital Thermostat and Thermometer	3-PR35	5.75	4.34
DS1821S-ND	Programmable Digital Thermostat and Thermometer	8-SOIC	5.75	4.34
DS1822-ND	Econo 1-Wire® Digital Thermometer	TO-92	3.87	2.92
DS1831S-ND	Multi-Supply Micromonitor	16-SOIC	6.76	5.10
DS1832S-ND	3.3V, MicroMonitor Chip	8-SOIC	2.25	1.70
DS1833-5-ND	5V, Microprocessor EconoReset, 5%	TO-92	1.80	1.36
DS1833-10-ND	5V, Microprocessor EconoReset, 10%	TO-92	1.80	1.36
DS1833Z-5-ND	5V, Microprocessor EconoReset, 5%	SOT-223	3.15	2.38
DS1833Z-10-ND	5V, Microprocessor EconoReset, 10%	SOT-223	3.15	2.38
DS1834AS-ND	Dual Microprocessor EconoReset with Pushbutton	8-Dip	2.41	1.82
DS1834AU-ND	Dual Microprocessor EconoReset with Pushbutton	8-MSOP	2.60	1.96
DS1834S-ND	Dual Microprocessor EconoReset with Pushbutton	8-SOIC	2.41	1.82
DS1844S-010-ND	Quad Digital Potentiometer	20-SOIC	5.78	4.36
DS1845E-010-ND	Dual Nonvolatile Potentiometer and Memory, 10K	14-TSSOP	4.24	3.20
DS1845E-100-ND	Dual Nonvolatile Potentiometer and Memory, 100K	14-TSSOP	4.24	3.20
DS1866Z-ND	2.7-5.5V, Log Trimmer Potentiometer	8-Dip	2.94	2.22
DS1867E-10-ND	Dual Digital Potentiometer with EEPROM, 10K	20-TSSOP	9.99	7.54
DS1867S-10-ND	Dual Digital Potentiometer with EEPROM, 10K	16-SOIC	9.73	7.34
DS1868-10-ND	Dual Digital Potentiometer Chip, 10K	14-Dip	5.59	4.22
DS1868E-10-ND	Dual Digital Potentiometer Chip, 10K	20-TSSOP	6.78	5.12
DS1868S-10-ND	Dual Digital Potentiometer Chip, 10K	16-SOIC	5.88	4.44
DS1869-10-ND	3V, Dallastat™ Electronic Digital Rheostat, 10K	8-Dip	5.64	4.26
DS1869S-10-ND	3V, Dallastat™ Electronic Digital Rheostat, 10K	8-SOIC	5.88	4.44
DS1869S-50-ND	3V, Dallastat™ Electronic Digital Rheostat, 50K	8-SOIC	5.88	4.44
DS2016-100-ND	3V/5V, 2K x 8, Operation Static RAM	24-Dip	7.47	5.64
DS2108S-ND	Differential SCSI Switchable Terminator	24-SOIC	14.68	11.08
DS2117MB-ND	Ultra3 LVD/SE SCSI Terminator	36-SSOP	7.45	5.62
DS2118MB-ND	Ultra2 LVD/SE SCSI Terminator	36-SSOP	7.45	5.62
DS2119ME-ND	Ultra3 LVD/SE SCSI Terminator	28-TSSOP	7.45	5.62
DS2141AQ-ND	5V, T1 Framer Controller	44-PLCC	50.99	38.48
DS2143Q-ND	5V, E1 Framer Controller	44-PLCC	50.99	38.48
DS2151QB-ND	5V, T1 Single Chip Transceiver	44-PLCC	77.65	58.60
DS2151QNB-ND	5V, T1 Single Chip Transceiver, Ind. Temp.	44-PLCC	89.31	67.40
DS2152L-ND	Enhanced T1 Single-Chip Transceiver	100-LQFP	68.98	52.06
DS2152LN-ND	Enhanced T1 Single-Chip Transceiver, Ind. Temp.	100-LQFP	79.26	59.82
DS2153Q-A7-ND	5V, E1 Single-Chip Transceiver	44-PLCC	77.65	58.60
DS2154L-ND	5V, Enhanced E1 Single Chip Transceiver	100-LQFP	68.98	52.06
DS2165Q-ND	5V, ADPCM Processor 16/24/32kpbs	24-PLCC	41.55	31.36
DS2172T-ND	Bit Error Rate Tester (BERT), 8-Bit	32-TQFP	18.26	13.78
DS2175-ND	T1/CEPT Elastic Store	16-Dip	24.41	18.42
DS2175S-ND	T1/CEPT Elastic Store	16-SOIC	26.82	20.24
DS2176-ND	T1 Receive Buffer	24-Dip	28.33	21.38
DS2176Q-ND	T1 Receive Buffer	28-PLCC	31.14	23.50
DS2180A-ND	T1 Transceiver	40-Dip	33.47	25.26
DS2180AQ-ND	T1 Transceiver	44-PLCC	38.37	28.96
DS2180AQN-ND	T1 Transceiver, Ind. Temp.	44-PLCC	44.65	33.70
DS2181A-ND	CEPT Primary Rate Transceiver	40-Dip	58.78	44.36
DS2181AQ-ND	CEPT Primary Rate Transceiver	44-PLCC	64.58	48.74
DS2187-ND	Receive Line Interface	18-Dip	34.74	26.22
DS2187S-ND	Receive Line Interface	20-SOIC	38.13	28.78
DS2188-ND	T1/CEPT Jitter Attenuator	16-Dip	15.87	11.98
DS2188S-ND	T1/CEPT Jitter Attenuator	16-SOIC	17.62	13.30
DS2250-32-16-ND	Soft Microcontroller Module, 32K x 8	40-SIMM	95.67	72.20
DS2252T-128-16-ND	Secure Microcontroller Module, 128K	40-SIMM	201.40	152.00
DS2282/8722282000-ND	T1 FDL Controller/Monitor Stik	30-SIP	118.83	89.68

*DS9034PCX Powercap required; order DS9034PCX-ND

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DALLAS SEMICONDUCTOR — SPECIALIZED INTEGRATED CIRCUITS *(Continued)*

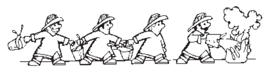
Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25
DS2401-ND	Silicon Serial Number, 48-Bit, One-Wire	TO-92	1.86	1.40
DS2401P-ND	Silicon Serial Number, 48-Bit, One-Wire	6-TSOC	2.01	1.52
DS2401X1CT-ND	Silicon Serial Number, 48-Bit, One-Wire	6-CSP	1.03	.94
DS2401X1TR-ND	Silicon Serial Number, 48-Bit, One-Wire	6-CSP	5850.00/10,000	
DS2401Z-ND	Silicon Serial Number, 48-Bit, One-Wire	SOT-223	2.28	1.72
DS2404B-ND	EconoRAM Time Chip	16-SSOP	11.08	8.36
DS2404S-001-ND	EconoRAM Time Chip	16-SOIC	10.57	7.98
DS2405-ND	Addressable Switch, Open Drain	TO-92	2.23	1.68
DS2406P-ND	Dual Addressable Switch Plus 1K-Bit Memory	6-TSOC	6.78	5.12
DS2417P-ND	1-Wire™ Time Chip with Interrupt	6-TSOC	2.70	2.04
DS2430A-ND	256-Bit 1-Wire™ EEPROM	TO-92	3.39	2.56
DS2430AP-ND	256-Bit 1-Wire™ EEPROM	6-TSOC	3.52	2.66
DS2433-Z01-ND	4K-Bit 1-Wire™ EEPROM	PR-35	5.33	4.02
DS2433S-Z01-ND	4K-Bit 1-Wire™ EEPROM	8-SOIC	5.78	4.36
DS2436B-ND	Battery Identification/Monitor Chip	TO-92	3.74	2.82
DS2436Z-ND	Battery Identification/Monitor Chip	8-SOIC	3.74	2.82
DS2438Z-ND	Smart Battery Monitor	8-SOIC	3.87	2.92
DS2450S-ND	1-Wire™ Quad A/D Converter	8-SOIC	8.72	6.58
DS2480B-ND	Serial 1-Wire™ Line Driver with Load Sensor	8-SOIC	6.84	5.16
DS2502S-ND	1K-Bit Add-Only Memory	8-SOIC	4.61	3.48
DS2505-ND	16K-Bit Add-Only Memory	TO-92	4.37	3.30
DS2505P-ND	16K-Bit Add-Only Memory	6-TSOC	4.37	3.30
DS5000-32-16-ND	Soft Microcontroller Module, 32K-Bit	40-Dip	125.88	95.00
DS5000T-32-16-ND	Soft Microcontroller Module with Real Time Clock, 32K-Bit	40-Dip	138.46	104.50
DS9034PC-ND	PowerCap Module without Crystal	Powercap Module	7.58	5.72
DS9034PCX-ND	PowerCap Module with Crystal	Powercap Module	9.86	7.44
DS9502P-ND	ESD Protection Diode	6-TSOC	1.03	.78
DS9503P-ND	ESD Protection Diode with Resistor	6-TSOC	1.11	.84
DS12885Q-ND	Real Time Clock with RAM, 128 Byte	28-PLCC	8.03	6.06
DS12885S-ND	Real Time Clock with RAM, 128 Byte	24-SOIC	7.74	5.84
DS12887-ND	Real Time Clock with RAM, 128 Byte	24-Dip	11.26	8.50
DS12887A-ND	Real Time Clock with RAM, 128 Byte	24-Dip	12.40	9.36
DS14285Q-ND	Real Time Clock with NV RAM Control	28-PLCC	8.03	6.06
DS14287-ND	Real Time Clock with NV RAM Control	24-Dip	11.26	8.50
DS17285S-3-ND	3V, Real-Time Clock chip	24-SOIC	9.01	6.80
DS17287-5-ND	5V, Real Time Clock with battery and crystal	24-Dip	14.79	11.16
DS17887-5-ND	5V, Real Time Clock	24-Dip	22.34	16.86
DS18030-010-ND	Addressable Dual Digital Potentiometer	16-Dip	5.88	4.44
DS21352L-ND	3.3V, T1 Single Chip Transceiver	100-LQFP	55.04	41.54
DS21352LN-ND	3.3V, T1 Single Chip Transceiver	100-LQFP	63.20	47.70
DS21354L-ND	3.3V, E1 Single Chip Transceiver	100-LQFP	55.04	41.54
DS21554L-ND	5V, E1 Single Chip Transceiver	100-LQFP	55.04	41.54

✱DS9034PCX Powercap required; order DS9034PCX-ND

MING Microsystems — RF TRANSMITTER & RECEIVER BOARDS

Digi-Key Part No.	Description	Price Each★ 1	25	100
TX-01-ND	Encoder Motherboard utilizing the HT-12E Encoder IC; 2.7" x 1.75" (68.58mm x 44.45mm). Designed for use with either the TX-66 or TX-99V3 transmitters. Operating Voltage: 12 VDC	16.72	14.93	10.15
RE-01-ND	Decoder Motherboard utilizing the HT-12D Decoder IC; 3.2" x 2.4" (81.28mm x 60.96mm). Designed for use with either the RE-66 or RE-99V3 Receivers. Operating Voltage: 12 VDC	25.12	22.43	15.25
TX-66-ND	Serial Data Input 310 MHz SAW AM Transmitter Board. .75" x 1.75" (19.05mm x 44.45mm). Operating Voltage: 5VDC	18.40	16.43	11.17
RE-66-ND	Serial Data Output 310 MHz LC AM Receiver Board. 1.188" x 2.375" (30.18mm x 60.33mm). Operating Voltage: 5VDC	16.72	14.93	10.15
TX-99V3-ND	Serial Data Input 300MHz LC AM Transmitter Daughterboard. 1.8" x 0.8" (45.72mm x 20.32mm) Op. Voltage: 5 VDC. Data Rate: 1200 BPS	10.00	8.93	6.07
RE-99V3-ND	Serial Data Output 300MHz AM Receiver Daughterboard. 2.4" x 1.2" (60.96mm x 30.48mm) Op. Voltage: 5 VDC. Data Rate: 1200 BPS	16.72	14.93	10.15
TX-99K2-ND	Two Button, Key Chain Housed 300 MHz RF Transmitter Board with HT-12E Encoder. 2" x 2" (50.80mm x 50.80mm). Operates on one 12V (23A) Battery (Not included)	28.48	25.43	17.29

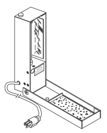
Panasonic® — BUCKET BRIGADE DEVICES



A P-channel silicon gate MOS LSI consists of a number of bucket brigade stages fabricated on a single chip. Each stage consists of a capacitor that stores the electrical charge and a tetrode transistor for switching purposes. Electrical charges corresponding to analog signals are transferred from one stage to another by a two phase clock drive. Thus the electric signals flow undirectionally from the input to the output with a time delay which can be controlled by the clock frequency. The Bucket Brigade Device has found a variety of applications in audio equipment as a useful equipment as a useful variable or fixed delay line. The device can obtain chorus and tremolo effects in electronic musical instruments as well as reverberation effects in audio equipment, which completely replaces conventional mechanical systems.

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MN3003-ND	Dual 64-Stage BBD for Low Voltage Operation	14-Dip	9.18	7.35	6.20
MN3011-ND	3328-Stage Multi-Tap BBD for Audio Delay Signals	12-Dip	25.17	23.49	21.82
MN3209-ND	256-Stage Low Volt Op, Low Noise BBD	8-Dip	5.49	4.40	3.42
9102B-ND	Data Book		3.50	—	—

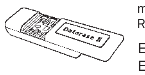
Jelight Company, Inc. — CHIPhERASER®



- Operating intensity is at least 25% greater than competitive systems for increased throughput
- Excellent uniformity ensures fast and complete erasure
- Quick load/unload trays for EPROMs
- All metal housing
- Heavy duty construction for ruggedness
- Units may be stacked to save space
- Safety interlock to prevent accidental UV exposure
- Deep drawer for processing loaded PC boards

JEL10-ND (Holds 12 ICs)	$110.00
JEL20-ND (Holds 20 ICs, with 60 min. Dial Timer)	$175.00

WALLING CO. — UV ERASER



Holds 4 chips, molded plastic case, shirt pocket size. Erases most EPROMs/EPLDs in three minutes. Handles all sizes up to four at a time. Regulated lamp output for uniform erase time. Runs off of wall transformer (Included).

ER2-ND	$39.95
ER3-ND	$49.95

Same as ER2-ND, but with 2-8 minute timer and time-out beeper.

MEMORY

FLASH MEMORY

Toshiba

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC58FVT160AFT-70-ND	16M-Bit 3V CMOS (2M x 8 / 1M x 16) Top Boot Block	48-TSOP	4.98	4.50	3.99
TC58FVB160AFT-70-ND	16M-Bit 3V CMOS (2M x 8 / 1M x 16) Bottom Boot Block	48-TSOP	4.98	4.50	3.99
TC58FVT160FT-85-ND	16M-Bit 3V CMOS (2M x 8 / 1M x 16) Top Boot Block	48-TSOP	14.16	12.75	11.31
TC58V64BFT-ND	64M-Bit 3V NAND (8M x 8)	44-TSOP	5.70	5.32	4.94
TC58128AFT-ND	128M-Bit 3V NAND (16M x 8)	48-TSOP	8.68	7.84	7.28
TC58256FT-ND	256M-Bit 3V NAND (32M x 8)	48-TSOP	17.25	16.10	14.95
TH58100FT-ND	1Gigabit 3.3V CMOS NAND (128M x 8)	48-TSOP	67.50	63.00	58.50

Solid State Floppy Disk Cards

Toshiba

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC58V64ADC-T051-ND	64M-Bit (8M x 8) 3V NAND Smart Media	—	7.50	7.00	6.50
TC58V64BDC-ND	64M-Bit (8M x 8) 3V NAND Smart Media	—	5.70	5.32	4.94
TC58256DC-T051Y-ND	256M-Bit (32M x 8) 3V NAND Smart Media	—	21.00	19.60	18.20
TH58512DC-ND	512M-Bit (64M x 8) 3.3V NAND Smart Media	—	42.00	39.20	36.40
TH58NS512DC-TO51Y-ND	512M-Bit (64M x 8) 3.3V NAND Smart Media	—	36.00	33.60	31.20
TH58NS100DC-TO51-ND	1Gigabit (128M x 8) 3.3V NAND Smart Media	—	70.50	65.80	61.10

SRAM

Toshiba

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
TC554001AF-70L-ND	4M-Bit SRAM (512K x 8)	32-SOP	6.38	5.95	5.53
TC554001AFT-70L-ND	4M-Bit SRAM (512K x 8)	32-TSOP	6.38	5.95	5.53
TC55W800FT55M-ND	8M-Bit SRAM (512K x 16)	48-TSOP	16.50	15.40	14.30

DRAM Controllers

National Semiconductor

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
DP8422AV-25-ND	4Meg DRAM Programmer Controller	84-PLCC	27.60	25.76	23.92

EPROMS OTP (One Time Programmable)

Fairchild Semiconductor

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NMC87C257V200-ND	256K (32Kx8) CMOS Eprom with OTP adr Latch	32-PLCC	7.88	6.30	5.43
NM27LV010T250-ND	1Meg (128Kx8) Low Voltage Eprom 250ns OTP	32-TSOP	9.98	8.40	7.62

Extended Temperature EPROMS OTP (-40° to +85°C)

Fairchild Semiconductor

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NMC87C257VE150-ND	256K (32Kx8) CMOS Eprom with adr Latch	32-PLCC	8.66	6.93	5.97

NEW! EPROMS *NEW!*

Fairchild Semiconductor

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
FM27C256Q120-ND	256K, 120ns, CMOS EPROM	28-CDip	2.85	2.28	1.78
FM27C256Q150-ND	256K, 150ns, CMOS EPROM	28-CDip	2.85	2.28	1.78
FM27C256QE150-ND	256K, 150ns, CMOS EPROM	28-CDip	2.85	2.28	1.78
FM27C256V120-ND	256K, 120ns, CMOS EPROM	32-PLCC	2.06	1.65	1.24
FM27C256V150-ND	256K, 150ns, CMOS EPROM	32-PLCC	2.06	1.65	1.24
FM27C512Q120-ND	512K, 120ns, CMOS EPROM	28-CDip	2.97	2.38	1.85
FM27C512Q150-ND	512K, 150ns, CMOS EPROM	28-CDip	2.97	2.38	1.85

Serial EEPROMs

Microchip Technology

2 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
24LC00/P-ND	16x8 CMOS Serial EEprom 2.5V	8-Dip	.36	.34	.28
24LC00/SN-ND	16x8 CMOS Serial EEprom 2.5V	8-SOIC	.38	.36	.30
24C00/P-ND	16x8 CMOS Serial EEprom 5V	8-Dip	.36	.34	.28
24LC01B/P-ND	1K (128x8) CMOS Serial EEprom 2.5V	8-Dip	.41	.36	.30
24LC01B-I/P-ND	1K (128x8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	.41	.36	.30
24LC01B/SN-ND	1K (128x8) CMOS Serial EEprom 2.5V	8-SOIC	.43	.38	.32
24LC01B-I/SN-ND	1K (128x8) CMOS Serial EEprom, Ind Temp 2.5V	8-SOIC	.43	.38	.32
24C01C/P-ND	1K (128x8) CMOS Serial EEprom 5V (fast byte write)	8-Dip	.63	.56	.47
24C01C/SN-ND	1K (128x8) CMOS Serial EEprom 5V (fast byte write)	8-SOIC	.65	.58	.49

(Continued)

MEMORY *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
24LC02B/P-ND	2K (256x8) CMOS Serial EEprom 2.5V	8-Dip	.50	.45	.37
24LC02B/SN-ND	2K (256x8) CMOS Serial EEprom 2.5V	8-SOIC	.54	.47	.39
24LC02B/ST-ND	2K (256x8) CMOS Serial EEprom 2.5V *NEW!*	8-TSSOP	.56	.49	.41
24C02C/P-ND	2K (256x8) CMOS Serial EEprom 5V (fast byte write)	8-Dip	.68	.60	.50
24C02C/SN-ND	2K (256x8) CMOS Serial EEprom 5V (fast byte write)	8-SOIC	.70	.63	.52
24LC04B/P-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-Dip	.54	.47	.39
24LC04B/SN-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-SOIC	.56	.49	.41
24LC04B/ST-ND	4K (512x8) CMOS Serial EEprom 2.5V *NEW!*	8-TSSOP	.59	.52	.43
24LC04B-I/SN-ND	4K (512x8) CMOS Serial EEprom, Ind Temp 2.5V	8-SOIC	.56	.49	.41
24LC04B-I/ST-ND	4K (512x8) CMOS Serial EEprom, Ind Temp 2.5V *NEW!*	8-TSSOP	.59	.52	.43
24LC08B/P-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	8-Dip	.56	.49	.41
24LC08B/SN-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	8-SOIC	.59	.52	.43
24LC08B/ST-ND	8K (1Kx8) CMOS Serial EEprom 2.5V *NEW!*	8-TSSOP	.61	.54	.45
24LC16B/P-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	8 Dip	.63	.56	.47
24LC16B-I/P-ND	16K (2Kx8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	.63	.56	.47
24LC16B/SN-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	8-SOIC	.65	.58	.49
24LC16B-I/SN-ND	16K (2Kx8) CMOS Serial EEprom, Ind Temp 2.5V	8-SOIC	.65	.58	.49
24LC32A/P-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	8-Dip	.86	.76	.63
24LC32A/SN-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	8-SOIC	.88	.78	.65
24AA65/P-ND	64K (8Kx8) Smart CMOS Serial EEprom 1.8V	8-Dip	2.07	1.84	1.53
24AA65/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom 1.8V	8-SOIC	2.12	1.88	1.57
24LC64-I/P-ND	64K (8Kx8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	.99	.87	.73
24LC64-I/SN-ND	64K (8Kx8) CMOS Serial EEprom, Ind. Temp 2.5V	8-SOIC	1.01	.90	.75
24LC65/P-ND	64K (8Kx8) Smart CMOS Serial EEprom 2.5V	8-Dip	2.03	1.84	1.53
24LC65-I/P-ND	64K (8Kx8) Smart CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	2.03	1.84	1.53
24LC65/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom 2.5V	8-SOIC	2.07	1.88	1.57
24LC65-I/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom, Ind Temp 2.5V	8-SOIC	2.07	1.88	1.57
24C65/P-ND	64K (8Kx8) Smart CMOS Serial EEprom 5V	8-Dip	2.07	1.84	1.53
24C65/SM-ND	64K (8Kx8) Smart CMOS Serial EEprom 5V	8-SOIC	2.12	1.88	1.57
24LC128-I/P-ND	128K (16Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	8-Dip	1.55	1.39	1.16
24LC128-I/SN-ND	128K (16Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	8-SOIC	1.60	1.41	1.18
24LC256-I/P-ND	256K (32Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	8-Dip	2.25	1.99	1.66
24LC256-I/SM-ND	256K (32Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V	8-SOIC	2.30	2.04	1.70
24LC256-I/SN-ND	256K (32Kx8) CMOS Serial EEprom, Ind. Temp. 2.5V *NEW!*	8-SOIC	2.27	2.02	1.68
24LC21/P-ND	1K Dual Mode DDC™/DDC2™ for Monitors	8-Dip	.59	.54	.45
24LC21/SN-ND	1K Dual Mode DDC™/DDC2™ for Monitors	8-SOIC	.61	.56	.47

SPI Serial EEPROMS

Digi-Key Part No.	Description	Pkg.	1	25	100
25AA080/P-ND	8K (1Kx8) CMOS Serial EEprom 1.8V	8-Dip	.99	.92	.77
25AA080/SN-ND	8K (1Kx8) CMOS Serial EEprom 1.8V	8-SOIC	1.04	.94	.78
25AA320-I/SN-ND	32K (4Kx8) CMOS Serial EEprom Ind. Temp. 1.8V	8-SOIC	1.08	.96	.80
25LC040/P-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-Dip	.79	.69	.58
25LC040/SN-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-SOIC	.81	.72	.60
25LC080/P-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	8-Dip	.99	.92	.77
25LC080/SN-ND	8K (1Kx8) CMOS Serial EEprom 2.5V	8-SOIC	1.04	.94	.78
25LC160/P-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	8-Dip	1.04	.94	.78
25LC160/SN-ND	16K (2Kx8) CMOS Serial EEprom 2.5V	8-SOIC	1.06	.96	.80
25LC320/P-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	8-Dip	1.04	.94	.78
25LC320/SN-ND	32K (4Kx8) CMOS Serial EEprom 2.5V	8-SOIC	1.06	.96	.80
25C040/SN-ND	4K (512x8) CMOS Serial EEprom 5V	8-SOIC	.81	.72	.60
25C080/P-ND	8K (1Kx8) CMOS Serial EEprom 5V	8-Dip	.99	.92	.77
25C080/SN-ND	8K (1Kx8) CMOS Serial EEprom 5V	8-SOIC	1.04	.94	.78
25C080-I/SN-ND	8K (1Kx8) CMOS Serial EEprom, Ind Temp 5V	8-SOIC	1.04	.94	.78
25C160/P-ND	16K (2Kx8) CMOS Serial EEprom 5V	8-Dip	1.04	.94	.78
25C160/SN-ND	16K (2Kx8) CMOS Serial EEprom 5V	8-SOIC	1.06	.96	.80
25C160-I/P-ND	16K (2Kx8) CMOS Serial EEprom, Ind Temp 5V	8-Dip	1.04	.94	.78
25C320/P-ND	32K (4Kx8) CMOS Serial EEprom 5V	8-Dip	1.44	1.30	1.08
25C320/SN-ND	32K (4Kx8) CMOS Serial EEprom 5V	8-SOIC	1.46	1.32	1.10
25LC640-I/P-ND	64K (8Kx8) CMOS SPI Serial EEprom, Ind Temp 2.5V	8-Dip	1.08	.96	.80
25LC640-I/SN-ND	64K (8Kx8) CMOS SPI Serial EEprom, Ind. Temp 2.5V	8-SOIC	1.10	.99	.82

3 Wire Interface

Digi-Key Part No.	Description	Pkg.	1	25	100
93AA46/P-ND	1K (128x8 or 64x16) CMOS Serial EEprom 1.8V	8-Dip	.59	.54	.45
93AA46/SN-ND	1K (128x8 or 64x16) CMOS Serial EEprom 1.8V	8-SOIC	.63	.56	.47
93AA46-I/SN-ND	1K (128x8 or 64x16) CMOS Serial EEprom, Ind. Temp 1.8V	8-SOIC	.63	.56	.47
93AA56/SN-ND	2K (256x8 or 128x16) CMOS Serial EEprom 1.8V	8-SOIC	.77	.67	.56
93AA66/P-ND	4K (512x8 or 256x16) CMOS Serial EEprom 1.8V	8-Dip	.72	.65	.54
93AA66/SN-ND	4K (512x8 or 256x16) CMOS Serial EEprom 1.8V	8-SOIC	.77	.67	.56
93LC56/P-ND	2K (256x8 or 128x16) CMOS Serial EEprom 2.5V	8-Dip	.72	.65	.54
93LC56/SN-ND	2K (256x8 or 128x16) CMOS Serial EEprom 2.5V	8-SOIC	.77	.67	.56
93LC66/P-ND	4K (512x8 or 256x16) CMOS Serial EEprom 2.5V	8-Dip	.72	.65	.54
93LC66/SN-ND	4K (512x8 or 256x16) CMOS Serial EEprom 2.5V	8-SOIC	.74	.67	.56
93LC46A/P-ND	1K (128x8) CMOS Serial EEprom 2.5V	8-Dip	.45	.40	.34
93LC46A/SN-ND	1K (128x8) CMOS Serial EEprom 2.5V	8-SOIC	.47	.43	.35
93LC46A-I/P-ND	1K (128x8) CMOS Serial EEprom, Ind. Temp 2.5V	8-Dip	.45	.40	.34
93LC46A-I/SN-ND	1K (128x8) CMOS Serial EEprom, Ind. Temp 2.5V	8-SOIC	.47	.43	.35
93LC46B/P-ND	1K (64x16) CMOS Serial EEprom 2.5V	8-Dip	.43	.38	.32
93LC46B/SN-ND	1K (64x16) CMOS Serial EEprom 2.5V	8-SOIC	.45	.40	.34
93LC46B-I/SN-ND	1K (64x16) CMOS Serial EEprom, Ind. Temp 2.5V	8-SOIC	.45	.40	.34
93LC56A/P-ND	2K (256x8) CMOS Serial EEprom 2.5V	8-Dip	.47	.43	.35
93LC56A/SN-ND	2K (256x8) CMOS Serial EEprom 2.5V	8-SOIC	.50	.45	.37
93LC56B/P-ND	2K (128x16) CMOS Serial EEprom 2.5V	8-Dip	.47	.43	.35
93LC56B/SN-ND	2K (128x16) CMOS Serial EEprom 2.5V	8-SOIC	.50	.45	.37
93LC56B-I/SN-ND	2K (128x16) CMOS Serial EEprom, Ind Temp 2.5V	8-SOIC	.50	.45	.37
93LC66A/P-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-Dip	.56	.49	.41
93LC66A/SN-ND	4K (512x8) CMOS Serial EEprom 2.5V	8-SOIC	.59	.52	.43
93LC66A-I/P-ND	4K (512x8) CMOS Serial EEprom, Ind Temp 2.5V	8-Dip	.56	.49	.41
93LC66A-I/SN-ND	4K (512x8) CMOS Serial EEprom, Ind Temp 2.5V	8-SOIC	.59	.52	.43
93LC66B/P-ND	4K (256x16) CMOS Serial EEprom 2.5V	8-Dip	.56	.49	.41
93LC66B/SN-ND	4K (256x16) CMOS Serial EEprom 2.5V	8-SOIC	.59	.52	.43

Fairchild Semiconductor

2 Wire Interface

Digi-Key Part No.	Description	Pkg.	1	25	100
NM24C08M-ND	8K-Bit CMOS Serial EEprom	14-SOIC	1.68	1.34	1.01

3 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NM93C13M8-ND	256-Bit CMOS Serial EEprom	8-SOIC	.98	.80	.68
NM93C13N-ND	256-Bit CMOS Serial EEprom	8-Dip	.98	.80	.68
NM93C14N-ND	1K-Bit CMOS Serial EEprom	8-Dip	1.05	.88	.70
NM93C56M-ND	2K-Bit CMOS Serial EEprom	14-SOIC	1.63	1.30	.98
NM93CS06LN-ND	256-Bit CMOS Serial EEprom 2.5V with Security	8-Dip	1.52	1.25	1.06
NM93CS06M-ND	256-Bit CMOS Serial EEprom with Security	14-SOIC	1.13	.93	.79
NM95C12N-ND	1K-Bit CMOS Serial EEprom	14-Dip	1.75	1.40	1.05

NEW! 4 Wire Interface NEW!

Digi-Key Part No.	Description	Pkg.	1	25	100
FM93C06EN-ND	256-Bit Serial CMOS EEPROM	8-Dip	.66	.50	.38
FM93C06M8-ND	256-Bit Serial CMOS EEPROM	8-SOIC	.66	.50	.38
FM93C06N-ND	256-Bit Serial CMOS EEPROM	8-Dip	.66	.50	.38
FM93C46ALM8-ND	1K-Bit Serial CMOS EEPROM	8-SOIC	.66	.50	.38
FM93C46EM8-ND	1K-Bit Serial CMOS EEPROM	8-SOIC	.66	.50	.38
FM93C46EN-ND	1K-Bit Serial CMOS EEPROM	8-Dip	.66	.50	.38
FM93C46LM8-ND	1K-Bit Serial CMOS EEPROM	8-SOIC	.66	.50	.38
FM93C46M8-ND	1K-Bit Serial CMOS EEPROM	8-SOIC	.66	.50	.38
FM93C46N-ND	1K-Bit Serial CMOS EEPROM	8-Dip	.66	.50	.38
FM93C56M8-ND	2K-Bit Serial CMOS EEPROM	8-SOIC	.88	.66	.50
FM93C56N-ND	2K-Bit Serial CMOS EEPROM	8-Dip	.88	.66	.50
FM93C66EN-ND	4K-Bit Serial CMOS EEPROM	8-Dip	.76	.64	.51
FM93C66M8-ND	4K-Bit Serial CMOS EEPROM	8-SOIC	.76	.64	.51
FM93C66N-ND	4K-Bit Serial CMOS EEPROM	8-Dip	.76	.64	.51
FM93CS46M8-ND	1K-Bit Serial EEprom with Data Protect	8-SOIC	.66	.50	.38
FM93CS46N-ND	1K-Bit Serial EEprom with Data Protect	8-Dip	.66	.50	.38
FM93CS56LM8-ND	2K-Bit Serial EEprom with Data Protect	8-SOIC	.97	.73	.55
FM93CS56M8-ND	2K-Bit Serial EEprom with Data Protect	8-SOIC	.97	.73	.55
FM93CS66N-ND	4K-Bit Serial EEprom with Data Protect	8-Dip	.97	.73	.55

High Temperature Serial EEPROMS

Fairchild Semiconductor

3 Wire Interface

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
NM93C56EM-ND	2K-Bit CMOS Serial EEprom	14-SOIC	1.63	1.30	.98

SERIAL EEPROMs

2-Wire Serial Interface EEPROMs

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT24C01-10PC-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	8-Dip	.79	.42	.35
AT24C01-10PC-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	8-Dip	.79	.42	.35
AT24C01-10PI-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	8-Dip	.86	.46	.38
AT24C01-10PI-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	8-Dip	.86	.46	.38
AT24C01-10SC-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	8-SOIC	.83	.44	.37
AT24C01-10SC-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	8-SOIC	.83	.44	.37
AT24C01-10SI-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 5V	8-SOIC	.86	.46	.38
AT24C01-10SI-2.7-ND	1K (128x8) Serial EEPROM, Non-Cascadable, 2.7V	8-SOIC	.86	.46	.38
AT24C01A-10PC-ND	1K (128x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-Dip	.79	.42	.35
AT24C01A-10PC-2.7-ND	1K (128x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-Dip	.79	.42	.35
AT24C01A-10PI-2.7-ND	1K (128x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-Dip	.86	.46	.38
AT24C01A-10SC-ND	1K (128x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-SOIC	.83	.44	.37
AT24C01A-10SC-2.7-ND	1K (128x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-SOIC	.83	.44	.37
AT24C01A-10SI-2.7-ND	1K (128x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-SOIC	.86	.46	.38
AT24C02-10PC-ND	2K (256x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-Dip	.92	.49	.42
AT24C02-10PC-2.7-ND	2K (256x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-Dip	.92	.49	.42
AT24C02-10PI-2.7-ND	2K (256x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-Dip	.99	.53	.45
AT24C02N-10SC-ND	2K (256x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-SOIC	.92	.49	.42
AT24C02N-10SC-2.7-ND	2K (256x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-SOIC	.92	.49	.42
AT24C02N-10SI-ND	2K (256x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-SOIC	.99	.53	.45
AT24C02N-10SI-2.7-ND	2K (256x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-SOIC	.99	.53	.45
AT24C04-10PC-ND	4K (512x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-Dip	1.02	.55	.47
AT24C04-10PI-ND	4K (512x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-Dip	1.11	.61	.52
AT24C04-10PI-2.7-ND	4K (512x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-Dip	1.11	.61	.52
AT24C04N-10SC-ND	4K (512x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-SOIC	1.02	.55	.47
AT24C04N-10SC-2.7-ND	4K (512x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-SOIC	1.02	.55	.47
AT24C04N-10SI-ND	4K (512x8) Serial EEPROM, Full Data Array Write Protect, 5V	8-SOIC	1.11	.61	.52
AT24C04N-10SI-2.7-ND	4K (512x8) Ser. EEPROM, Full Data Array Write Protect, 2.7V	8-SOIC	1.11	.61	.52
AT24C08-10PC-ND	8K (1Kx8) Serial EEPROM, 5V	8-Dip	1.32	.74	.63
AT24C08-10PC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.32	.74	.63
AT24C08-10PI-ND	8K (1Kx8) Serial EEPROM, 5V	8-Dip	1.43	.81	.69
AT24C08-10PI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.43	.81	.69

(Continued)

★ *CALL FOR LOWER PRICING ON LARGER QUANTITIES!* ★

SERIAL EEPROMs *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AT24C08N-10SC-ND	8K (1Kx8) Serial EEPROM, 5V	8-SOIC	1.32	.74	.63
AT24C08N-10SC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-SOIC	1.32	.74	.63
AT24C08N-10SI-ND	8K (1Kx8) Serial EEPROM, 5V	8-SOIC	1.43	.81	.69
AT24C08N-10SI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-SOIC	1.43	.81	.69
AT24C16-10PC-ND	16K (2Kx8) Serial EEPROM, Half Data Array Write Protect, 5V	8-Dip	1.60	.91	.79
AT24C16-10PC-2.7-ND	16K (2Kx8) Serial EEPROM, Half Data Array Write Protect, 2.7V	8-Dip	1.60	.91	.79
AT24C16-10PI-ND	16K (2Kx8) Serial EEPROM, Half Data Array Write Protect, 5V	8-Dip	1.73	1.00	.87
AT24C16N-10SC-ND	16K (2Kx8) Serial EEPROM, Half Data Array Write Protect, 5V	8-SOIC	1.60	.91	.79
AT24C16N-10SC-2.7-ND	16K (2Kx8) Serial EEPROM, Half Data Array Write Protect, 2.7V	8-SOIC	1.60	.91	.79
AT24C16N-10SI-ND	16K (2Kx8) Serial EEPROM, Half Data Array Write Protect, 5V	8-SOIC	1.73	1.00	.87
AT24C16N-10SI-2.7-ND	16K (2Kx8) Serial EEPROM, Half Data Array Write Protect, 2.7V	8-SOIC	1.73	1.00	.87
AT24C21-10PC-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	8-Dip	1.32	.74	.63
AT24C21-10PI-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	8-Dip	1.43	.81	.69
AT24C21-10SC-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	8-SOIC	1.32	.74	.63
AT24C21-10SI-2.5-ND	1K (128x8) SEEPROM, DDC1™/DDC2™ for Monitors, 2.5V	8-SOIC	1.43	.81	.69
AT24C32-10PC-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.58	1.57	1.38
AT24C32-10PC-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	2.68	1.64	1.44
AT24C32-10PI-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.78	1.70	1.50
AT24C32-10PI-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	2.87	1.77	1.56
AT24C32N-10SC-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC	2.53	1.53	1.35
AT24C32N-10SC-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC	2.63	1.60	1.41
AT24C32N-10SI-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC	2.73	1.67	1.47
AT24C32N-10SI-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC	2.83	1.74	1.53
AT24C32W-10SC-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	2.58	1.57	1.38
AT24C32W-10SC-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	2.68	1.64	1.44
AT24C32W-10SI-ND	32K (4Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	2.78	1.70	1.50
AT24C32W-10SI-2.7-ND	32K (4Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	2.87	1.77	1.56
AT24C64-10PC-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	3.26	2.03	1.80
AT24C64-10PC-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	3.37	2.12	1.88
AT24C64-10PI-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	3.51	2.21	1.97
AT24C64-10PI-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	3.63	2.30	2.04
AT24C64N-10SC-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC	3.21	2.00	1.77
AT24C64N-10SC-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC	3.33	2.08	1.85
AT24C64N-10SI-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC	3.47	2.18	1.94
AT24C64N-10SI-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC	3.58	2.26	2.01
AT24C64W-10SC-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	3.26	2.03	1.80
AT24C64W-10SC-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	3.37	2.12	1.88
AT24C64W-10SI-ND	64K (8Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	3.51	2.21	1.97
AT24C64W-10SI-2.7-ND	64K (8Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	3.63	2.30	2.04
AT24C128-10PC-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	2.95	1.82	1.61
AT24C128-10PC-2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	3.07	1.90	1.68
AT24C128-10PI-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	3.19	1.98	1.76
AT24C128-10PI-2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	3.28	2.05	1.82
AT24C128N-10SC-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC	2.95	1.82	1.61
AT24C128N-10SC2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC	2.95	1.82	1.61
AT24C128N-10SI-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC	3.19	1.98	1.76
AT24C128N-10SI2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC	3.19	1.98	1.76
AT24C128W-10SC-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	2.95	1.82	1.61
AT24C128W-10SC2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	3.07	1.90	1.68
AT24C128W-10SI-ND	128K (16Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	3.19	1.98	1.76
AT24C128W-10SI2.7-ND	128K (16Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	3.28	2.05	1.82
AT24C256-10PC-ND	256K (32Kx8) Serial EEPROM, Cascadable, 5V	8-Dip	3.99	2.55	2.28
AT24C256-10PC-2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	4.15	2.67	2.38
AT24C256-10PI-2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	8-Dip	4.46	2.89	2.59
AT24C256W-10SC-ND	256K (32Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	3.99	2.55	2.28
AT24C256W-10SC2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	4.15	2.67	2.38
AT24C256W-10SI-ND	256K (32Kx8) Serial EEPROM, Cascadable, 5V	8-SOIC*	4.31	2.78	2.48
AT24C256W-10SI2.7-ND	256K (32Kx8) Serial EEPROM, Cascadable, 2.7V	8-SOIC*	4.46	2.89	2.59

* .200" Body Width

SPI Serial Interface EEPROMs

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AT25010-10PC-ND	1K (128x8) Serial EEPROM, 5V	8-Dip	.86	.46	.38
AT25010-10PC-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	8-Dip	.95	.51	.43
AT25010-10PI-ND	1K (128x8) Serial EEPROM, 5V	8-Dip	.92	.49	.42
AT25010-10PI-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	8-Dip	1.02	.55	.47
AT25010N-10SC-ND	1K (128x8) Serial EEPROM, 5V	8-SOIC	.86	.46	.38
AT25010N-10SC-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	8-SOIC	.95	.51	.43
AT25010N-10SI-ND	1K (128x8) Serial EEPROM, 5V	8-SOIC	.92	.49	.42
AT25010N-10SI-2.7-ND	1K (128x8) Serial EEPROM, 2.7V	8-SOIC	1.02	.55	.47
AT25020-10PC-ND	2K (256x8) Serial EEPROM, 5V	8-Dip	1.05	.57	.48
AT25020-10PC-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	8-Dip	1.17	.64	.55
AT25020-10PI-ND	2K (256x8) Serial EEPROM, 5V	8-Dip	1.14	.63	.53
AT25020-10PI-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	8-Dip	1.26	.70	.60
AT25020N-10SC-ND	2K (256x8) Serial EEPROM, 5V	8-SOIC	1.05	.57	.48
AT25020N-10SC-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	8-SOIC	1.17	.64	.55
AT25020N-10SI-ND	2K (256x8) Serial EEPROM, 5V	8-SOIC	1.14	.63	.53
AT25020N-10SI-2.7-ND	2K (256x8) Serial EEPROM, 2.7V	8-SOIC	1.26	.70	.60
AT25040-10PC-ND	4K (512x8) Serial EEPROM, 5V	8-Dip	1.29	.72	.61
AT25040-10PC-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	8-Dip	1.43	.81	.69
AT25040-10PI-ND	4K (512x8) Serial EEPROM, 5V	8-Dip	1.40	.79	.68
AT25040-10PI-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	8-Dip	1.54	.88	.76
AT25040N-10SC-ND	4K (512x8) Serial EEPROM, 5V	8-SOIC	1.29	.72	.61
AT25040N-10SC-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	8-SOIC	1.43	.81	.69
AT25040N-10SI-ND	4K (512x8) Serial EEPROM, 5V	8-SOIC	1.40	.79	.68
AT25040N-10SI-2.7-ND	4K (512x8) Serial EEPROM, 2.7V	8-SOIC	1.54	.88	.76
AT25080-10PC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.65	.95	.82
AT25080-10PI-ND	8K (1Kx8) Serial EEPROM, 5V	8-Dip	1.60	.91	.79
AT25080-10PI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-Dip	1.79	1.04	.90
AT25080N-10SC-ND	8K (1Kx8) Serial EEPROM, 5V	8-SOIC	1.49	.84	.73
AT25080N-10SC-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-SOIC	1.65	.95	.82
AT25080N-10SI-ND	8K (1Kx8) Serial EEPROM, 5V	8-SOIC	1.60	.91	.79
AT25080N-10SI-2.7-ND	8K (1Kx8) Serial EEPROM, 2.7V	8-SOIC	1.79	1.04	.90
AT25160-10PC-ND	16K (2Kx8) Serial EEPROM, 5V	8-Dip	1.76	1.02	.89
AT25160-10PC-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	8-Dip	1.97	1.16	1.01
AT25160-10PI-ND	16K (2Kx8) Serial EEPROM, 5V	8-Dip	1.89	1.11	.96
AT25160-10PI-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	8-Dip	2.10	1.25	1.09
AT25160N-10SC-ND	16K (2Kx8) Serial EEPROM, 5V	8-SOIC	1.76	1.02	.89
AT25160N-10SC-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	8-SOIC	1.97	1.16	1.01
AT25160N-10SI-ND	16K (2Kx8) Serial EEPROM, 5V	8-SOIC	1.89	1.11	.96
AT25160N-10SI-2.7-ND	16K (2Kx8) Serial EEPROM, 2.7V	8-SOIC	2.10	1.25	1.09
AT25320-10PC-ND	32K (4Kx8) Serial EEPROM, 5V	8-Dip	2.87	1.77	1.56
AT25320-10PC-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	8-Dip	3.21	2.00	1.77
AT25320-10PI-ND	32K (4Kx8) Serial EEPROM, 5V	8-Dip	3.09	1.92	1.70
AT25320-10PI-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	8-Dip	3.42	2.15	1.91
AT25320N-10SC-ND	32K (4Kx8) Serial EEPROM, 5V	8-SOIC	2.87	1.77	1.56
AT25320N-10SC-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	8-SOIC	3.21	2.00	1.77
AT25320N-10SI-ND	32K (4Kx8) Serial EEPROM, 5V	8-SOIC	3.09	1.92	1.70
AT25320N-10SI-2.7-ND	32K (4Kx8) Serial EEPROM, 2.7V	8-SOIC	3.42	2.15	1.91
AT25640-10PC-ND	64K (8Kx8) Serial EEPROM, 5V	8-Dip	3.81	2.42	2.16
AT25640-10PC-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	8-Dip	4.28	2.76	2.47
AT25640-10PI-ND	64K (8Kx8) Serial EEPROM, 5V	8-Dip	4.13	2.65	2.37
AT25640-10PI-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	8-Dip	4.57	2.97	2.66
AT25640N-10SC-ND	64K (8Kx8) Serial EEPROM, 5V	8-SOIC	3.81	2.42	2.16
AT25640N-10SC-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	8-SOIC	4.28	2.76	2.47
AT25640N-10SI-ND	64K (8Kx8) Serial EEPROM, 5V	8-SOIC	4.13	2.65	2.37
AT25640N-10SI-2.7-ND	64K (8Kx8) Serial EEPROM, 2.7V	8-SOIC	4.57	2.97	2.66
AT25128-10PC-ND	128K (16Kx8) Serial EEPROM, 5V	8-Dip	5.21	3.43	3.08
AT25128-10PI-ND	128K (16Kx8) Serial EEPROM, 5V	8-Dip	5.63	3.74	3.37
AT25128-10PI-2.7-ND	128K (16Kx8) Serial EEPROM, 2.7V	8-Dip	6.25	4.20	3.79
AT25128N-10SC-ND	128K (16Kx8) Serial EEPROM, 5V	8-SOIC	3.07	1.90	1.68
AT25128N-10SC-2.7-ND	128K (16Kx8) Serial EEPROM, 2.7V	8-SOIC	3.42	2.15	1.91
AT25128N-10SI-ND	128K (16Kx8) Serial EEPROM, 5V	8-SOIC	3.30	2.07	1.83
AT25128N-10SI-2.7-ND	128K (16Kx8) Serial EEPROM, 2.7V	8-SOIC	3.65	2.31	2.06
AT25256-10PC-ND	256K (32Kx8) Serial EEPROM, 5V	8-Dip	4.26	2.75	2.45
AT25256-10PI-ND	256K (32Kx8) Serial EEPROM, 5V	8-Dip	4.62	3.00	2.69
AT25256-10PI-2.7-ND	256K (32Kx8) Serial EEPROM, 2.7V	8-Dip	5.12	3.37	3.02

3-Wire Serial Interface EEPROMs

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AT93C46-10PC-ND	1K (128x8 or 64x16) Serial EEPROM, 5V	8-Dip	1.11	.61	.52
AT93C46-10PC-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	8-Dip	1.11	.61	.52
AT93C46-10PI-ND	1K (128x8 or 64x16) Serial EEPROM, 5V	8-Dip	1.23	.68	.58
AT93C46-10PI-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	8-Dip	1.23	.68	.58
AT93C46-10SC-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	8-SOIC	1.17	.64	.55
AT93C46-10SI-2.7-ND	1K (128x8 or 64x16) Serial EEPROM, 2.7V	8-SOIC	1.23	.68	.58
AT93C46A-10PC-ND	1K (64x16) Serial EEPROM, 5V	8-Dip	1.11	.61	.52
AT93C46A-10PC-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	8-Dip	1.11	.61	.52
AT93C46A-10PI-ND	1K (64x16) Serial EEPROM, 5V	8-Dip	1.23	.68	.58
AT93C46A-10PI-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	8-Dip	1.23	.68	.58
AT93C46A-10SC-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	8-SOIC	1.17	.64	.55
AT93C46A-10SI-ND	1K (64x16) Serial EEPROM, 5V	8-SOIC	1.23	.68	.58
AT93C46A-10SI-2.7-ND	1K (64x16) Serial EEPROM, 2.7V	8-SOIC	1.23	.68	.58
AT93C56-10PC-ND	2K (256x8 or 128x16) Serial EEPROM, 5V	8-Dip	1.32	.74	.63
AT93C56-10PC-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	8-Dip	1.32	.74	.63
AT93C56-10PI-ND	2K (256x8 or 128x16) Serial EEPROM, 5V	8-Dip	1.46	.83	.71
AT93C56-10PI-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	8-Dip	1.10	.62	.53
AT93C56-10SC-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	8-SOIC	1.37	.77	.66
AT93C56-10SI-ND	2K (256x8 or 128x16) Serial EEPROM, 5V	8-SOIC	1.49	.84	.73
AT93C56-10SI-2.7-ND	2K (256x8 or 128x16) Serial EEPROM, 2.7V	8-SOIC	1.49	.84	.73
AT93C66-10PC-ND	4K (512x8 or 256x16) Serial EEPROM, 5V	8-Dip	1.54	.88	.76
AT93C66-10PC-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	8-Dip	1.54	.88	.76
AT93C66-10PI-ND	4K (512x8 or 256x16) Serial EEPROM, 5V	8-Dip	1.73	1.00	.87
AT93C66-10PI-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	8-Dip	1.73	1.00	.87
AT93C66-10SC-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	8-SOIC	1.63	.93	.81
AT93C66-10SI-ND	4K (512x8 or 256x16) Serial EEPROM, 5V	8-SOIC	1.73	1.00	.87
AT93C66-10SI-2.7-ND	4K (512x8 or 256x16) Serial EEPROM, 2.7V	8-SOIC	1.89	1.11	.96

EPROMS

Low Power Battery Voltage EPROMS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AT27BV256-90JC-ND	256K (32Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	3.37	2.12	1.88
AT27BV256-12JC-ND	256K (32Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	3.19	1.98	1.76
AT27BV512-90JC-ND	512K (64Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	3.56	2.25	2.00
AT27BV512-12JC-ND	512K (64Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	3.37	2.12	1.88
AT27BV010-90JC-ND	1 Meg (128Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	4.73	3.08	2.76
AT27BV010-12JC-ND	1 Meg (128Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	4.20	2.70	2.41
AT27BV1024-12JC-ND	1 Meg (64Kx16) CMOS EPROM 2.7V 120nS OTP	44-PLCC	4.73	3.08	2.76
AT27BV020-90JC-ND	2 Meg (256Kx8) CMOS EPROM 2.7V 90nS OTP	32-PLCC	5.93	3.96	3.57
AT27BV020-12JC-ND	2 Meg (256Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	5.51	3.65	3.28
AT27BV040-12JC-ND	4 Meg (512Kx8) CMOS EPROM 2.7V 120nS OTP	32-PLCC	7.50	5.14	4.65
AT27BV040-15JC-ND	4 Meg (512Kx8) CMOS EPROM 2.7V 150nS OTP	32-PLCC	7.09	4.83	4.37
AT27BV4096-15JC-ND	4 Meg (256KX16) CMOS EPROM 2.7V 150nS OTP	44-PLCC	7.91	5.44	4.93

Low Power Low Voltage EPROMS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AT27LV256A-55JC-ND	256K (32Kx8) CMOS EPROM 3.0V 55nS OTP	32-PLCC	3.83	2.44	2.17
AT27LV256A-55RC-ND	256K (32Kx8) CMOS EPROM 3.0V 55nS OTP	28-SOIC	4.02	2.57	2.29
AT27LV256A-70JC-ND	256K (32Kx8) CMOS EPROM 3.0V 70nS OTP	32-PLCC	3.56	2.25	2.00
AT27LV256A-70RC-ND	256K (32Kx8) CMOS EPROM 3.0V 70nS OTP	28-SOIC	3.74	2.38	2.12
AT27LV512A-70JC-ND	512K (64Kx8) CMOS EPROM 3.0V 70nS OTP	32-PLCC	3.83	2.44	2.17
AT27LV512A-70RC-ND	512K (64Kx8) CMOS EPROM 3.0V 70nS OTP	28-SOIC	4.02	2.57	2.29
AT27LV512A-90JC-ND	512K (64Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	3.37	2.12	1.88
AT27LV512A-90RC-ND	512K (64Kx8) CMOS EPROM 3.0V 90nS OTP	28-SOIC	3.56	2.25	2.00
AT27LV010A-90JC-ND	1 Meg (128Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	4.46	2.89	2.59
AT27LV010A-12JC-ND	1 Meg (128Kx8) CMOS EPROM 3.0V 120nS OTP	32-PLCC	4.02	2.57	2.29
AT27LV020A-90JC-ND	2 Meg (256Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	5.59	3.71	3.34
AT27LV020A-12JC-ND	2 Meg (256Kx8) CMOS EPROM 3.0V 120nS OTP	32-PLCC	5.16	3.40	3.05

(Continued)

EPROMs *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT27LV040A-90JC-ND	4 Meg (512Kx8) CMOS EPROM 3.0V 90nS OTP	32-PLCC	7.34	5.02	4.54
AT27LV040A-12JC-ND	4 Meg (512Kx8) CMOS EPROM 3.0V 120nS OTP	32-PLCC	7.01	4.77	4.31

5V EPROMS

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT27C256R-70JC-ND	256K (32Kx8) CMOS EPROM 70nS OTP	32-PLCC	2.75	1.69	1.49
AT27C256R-70PC-ND	256K (32Kx8) CMOS EPROM 70nS OTP	28-Dip	2.75	1.69	1.49
AT27C256R-70RC-ND	256K (32Kx8) CMOS EPROM 70nS OTP	28-SOIC	2.95	1.82	1.61
AT27C512R-70JC-ND	512K (64Kx8) CMOS EPROM 70nS OTP	32-PLCC	2.95	1.82	1.61
AT27C512R-70PC-ND	512K (64Kx8) CMOS EPROM 70nS OTP	28-Dip	2.95	1.82	1.61
AT27C512R-70RC-ND	512K (64Kx8) CMOS EPROM 70nS OTP	28-SOIC	3.14	1.95	1.73
AT27C520-90SC-ND	512K (64Kx8) CMOS EPROM w/Address Latch 90nS OTP	20-SOIC	2.80	1.72	1.52
AT27C010-55JC-ND	1 Meg (128Kx8) CMOS EPROM 55nS OTP	32-PLCC	3.97	2.54	2.26
AT27C010-70JC-ND	1 Meg (128Kx8) CMOS EPROM 70nS OTP	32-PLCC	3.79	2.41	2.15
AT27C010-70PC-ND	1 Meg (128Kx8) CMOS EPROM 70nS OTP	32-Dip	3.79	2.41	2.15
AT27C1024-70JC-ND	1 Meg (64Kx16) CMOS EPROM 70nS OTP	44-PLCC	4.24	2.73	2.44
AT27C1024-70PC-ND	1 Meg (64Kx16) CMOS EPROM 70nS OTP	40-Dip	4.42	2.86	2.56
AT27C020-70JC-ND	2 Meg (256Kx8) CMOS EPROM 70nS OTP	32-PLCC	4.81	3.15	2.82
AT27C020-70PC-ND	2 Meg (256Kx8) CMOS EPROM 70nS OTP	32-Dip	4.99	3.27	2.94
AT27C040-70JC-ND	4 Meg (512Kx8) CMOS EPROM 70nS OTP	32-PLCC	6.43	4.34	3.91
AT27C040-70PC-ND	4 Meg (512Kx8) CMOS EPROM 70nS OTP	32-Dip	6.60	4.46	4.03
AT27C040-90JC-ND	4 Meg (512Kx8) CMOS EPROM 90nS OTP	32-PLCC	6.01	4.03	3.63
AT27C040-90PC-ND	4 Meg (512Kx8) CMOS EPROM 90nS OTP	32-Dip	6.18	4.15	3.74
AT27C400-90JC-ND	4 Meg (512Kx8) or (256x16) CMOS EPROM 90nS OTP	44-PLCC	7.67	5.26	4.77
AT27C400-90PC-ND	4 Meg (512Kx8) or (256x16) CMOS EPROM 90nS OTP	40-Dip	7.83	5.38	4.88
AT27C4096-70JC-ND	4 Meg (256Kx16) CMOS EPROM 70nS OTP	44-PLCC	6.85	4.65	4.20
AT27C4096-70PC-ND	4 Meg (256Kx16) CMOS EPROM 70nS OTP	40-Dip	7.01	4.77	4.31
AT27C080-90PC-ND	8 Meg (1Mx8) CMOS EPROM 90nS OTP	32-Dip	11.14	7.91	7.22
AT27C080-90JC-ND	8 Meg (1Mx8) CMOS EPROM 90nS OTP	32-PLCC	10.83	7.67	7.00
AT27C080-12JC-ND	8 Meg (1Mx8) CMOS EPROM 120nS OTP	32-PLCC	10.28	7.26	6.61

PARALLEL EEPROM

Parallel EEPROM: Battery-Voltage (2.7 to 3.6V)

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT28BV64B-20JC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	32-PLCC	5.51	3.65	3.28
AT28BV64B-20JI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	32-PLCC	6.10	4.09	3.69
AT28BV64B-20PC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-Dip	5.51	3.65	3.28
AT28BV64B-20PI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-Dip	6.10	4.09	3.69
AT28BV64B-20SC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-SOIC	5.93	3.96	3.57
AT28BV64B-20SI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-SOIC	6.60	4.46	4.03
AT28BV64B-20TC-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-TSOP	5.93	3.96	3.57
AT28BV64B-20TI-ND	64K (8Kx8) 2.7V EEPROM, 200nS	28-TSOP	6.60	4.46	4.03
AT28BV256-20JC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	32-PLCC	10.60	7.49	6.83
AT28BV256-20JI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	32-PLCC	11.90	8.51	7.77
AT28BV256-20PC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-Dip	10.60	7.49	6.83
AT28BV256-20PI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-Dip	11.90	8.51	7.77
AT28BV256-20SC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-SOIC	11.44	8.15	7.44
AT28BV256-20SI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-SOIC	12.74	9.16	8.37
AT28BV256-20TC-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-TSOP	11.44	8.15	7.44
AT28BV256-20TI-ND	256K (32Kx8) 2.7V EEPROM, 200nS	28-TSOP	12.74	9.16	8.37

Parallel EEPROM: Low-Voltage (3.0 to 3.6V)

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT28LV010-20JC-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-PLCC	29.30	22.36	20.65
AT28LV010-20JI-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-PLCC	33.15	25.48	23.56
AT28LV010-20PC-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-Dip	29.30	22.36	20.65
AT28LV010-20PI-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-Dip	33.15	25.48	23.56
AT28LV010-20TC-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-TSOP	31.92	24.48	22.62
AT28LV010-20TI-ND	1M (128Kx8) 3.0V EEPROM, 200nS	32-TSOP	35.73	27.58	25.52

Parallel EEPROM: Standard Voltage (5.0V)

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT28C16-15JC-ND	16K (2Kx8) 5V EEPROM, 150nS	32-PLCC	3.56	2.25	2.00
AT28C16-15JI-ND	16K (2Kx8) 5V EEPROM, 150nS	32-PLCC	3.92	2.51	2.23
AT28C16-15PC-ND	16K (2Kx8) 5V EEPROM, 150nS	24-Dip	3.56	2.25	2.00
AT28C16-15PI-ND	16K (2Kx8) 5V EEPROM, 150nS	24-Dip	3.92	2.51	2.23
AT28C16-15SC-ND	16K (2Kx8) 5V EEPROM, 150nS	24-SOIC	3.83	2.44	2.17
AT28C16-15SI-ND	16K (2Kx8) 5V EEPROM, 150nS	24-SOIC	4.28	2.76	2.47
AT28C16-15TC-ND	16K (2Kx8) 5V EEPROM, 150nS	28-TSOP	3.83	2.44	2.17
AT28C16-15TI-ND	16K (2Kx8) 5V EEPROM, 150nS	28-TSOP	4.28	2.76	2.47
AT28C64B-15JC-ND	64K (8Kx8) 5V EEPROM, 150nS	32-PLCC	5.25	3.46	3.11
AT28C64B-15JI-ND	64K (8Kx8) 5V EEPROM, 150nS	32-PLCC	5.85	3.90	3.51
AT28C64B-15PC-ND	64K (8Kx8) 5V EEPROM, 150nS	28-Dip	5.25	3.46	3.11
AT28C64B-15PI-ND	64K (8Kx8) 5V EEPROM, 150nS	28-Dip	5.85	3.90	3.51
AT28C64B-15SC-ND	64K (8Kx8) 5V EEPROM, 150nS	28-SOIC	5.59	3.71	3.34
AT28C64B-15SI-ND	64K (8Kx8) 5V EEPROM, 150nS	28-SOIC	6.27	4.21	3.80
AT28C64B-15TC-ND	64K (8Kx8) 5V EEPROM, 150nS	28-TSOP	5.59	3.71	3.34
AT28C64B-15TI-ND	64K (8Kx8) 5V EEPROM, 150nS	28-TSOP	6.27	4.21	3.80
AT28HC64B-90JC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	32-PLCC	5.76	3.84	3.46
AT28HC64B-90JI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	32-PLCC	6.52	4.40	3.97
AT28HC64B-90PC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	5.76	3.84	3.46
AT28HC64B-90PI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	6.52	4.40	3.97
AT28HC64B-90SC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-SOIC	6.27	4.21	3.80
AT28HC64B-90SI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-SOIC	6.93	4.71	4.26
AT28HC64B-90TC-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	6.27	4.21	3.80
AT28HC64B-90TI-ND	64K (8Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	6.93	4.71	4.26
AT28HC64B-12JC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	5.42	3.59	3.23
AT28HC64B-12JI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	6.10	4.09	3.69
AT28HC64B-12PC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	5.42	3.59	3.23
AT28HC64B-12PI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	6.10	4.09	3.69
AT28HC64B-12SC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-SOIC	5.85	3.90	3.51
AT28HC64B-12SI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-SOIC	6.52	4.40	3.97
AT28HC64B-12TC-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	5.85	3.90	3.51
AT28HC64B-12TI-ND	64K (8Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	6.52	4.40	3.97
AT28C256-15JC-ND	256K (32Kx8) 5V EEPROM, 150nS	32-PLCC	10.28	7.26	6.61
AT28C256-15JI-ND	256K (32Kx8) 5V EEPROM, 150nS	32-PLCC	11.60	8.27	7.55
AT28C256-15PC-ND	256K (32Kx8) 5V EEPROM, 150nS	28-Dip	10.28	7.26	6.61
AT28C256-15PI-ND	256K (32Kx8) 5V EEPROM, 150nS	28-Dip	11.60	8.27	7.55
AT28C256-15SC-ND	256K (32Kx8) 5V EEPROM, 150nS	28-SOIC	11.14	7.91	7.22
AT28C256-15SI-ND	256K (32Kx8) 5V EEPROM, 150nS	28-SOIC	12.44	8.92	8.15
AT28C256-15TC-ND	256K (32Kx8) 5V EEPROM, 150nS	28-TSOP	11.14	7.91	7.22
AT28C256-15TI-ND	256K (32Kx8) 5V EEPROM, 150nS	28-TSOP	12.44	8.92	8.15
AT28C256F-15JC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	32-PLCC	11.60	8.27	7.55
AT28C256F-15JI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	32-PLCC	13.04	9.39	8.59
AT28C256F-15PC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-Dip	11.60	8.27	7.55
AT28C256F-15PI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-Dip	13.04	9.39	8.59
AT28C256F-15SC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-SOIC	12.59	9.04	8.26
AT28C256F-15SI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-SOIC	14.02	10.16	9.30
AT28C256F-15TC-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-TSOP	12.59	9.04	8.26
AT28C256F-15TI-ND	256K (32Kx8) 5V EEPROM, Fast Write, 150nS	28-TSOP	14.02	10.16	9.30
AT28HC256-70PC-ND	256K (32Kx8) 5V EEPROM, High Speed, 70nS	28-Dip	13.04	9.39	8.59
AT28HC256-70PI-ND	256K (32Kx8) 5V EEPROM, High Speed, 70nS	28-Dip	14.69	10.68	9.78
AT28HC256-90PC-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	11.52	8.21	7.49
AT28HC256-90PI-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-Dip	12.97	9.33	8.53
AT28HC256-90SC-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-SOIC	12.44	8.92	8.15
AT28HC256-90SI-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-SOIC	13.87	10.04	9.19
AT28HC256-90TC-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	12.44	8.92	8.15
AT28HC256-90TI-ND	256K (32Kx8) 5V EEPROM, High Speed, 90nS	28-TSOP	13.87	10.04	9.19
AT28HC256F-90JC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	32-PLCC	13.19	9.51	8.70
AT28HC256F-90JI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	32-PLCC	14.91	10.86	9.95
AT28HC256F-90PC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-Dip	13.19	9.51	8.70
AT28HC256F-90PI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-Dip	14.91	10.86	9.95
AT28HC256F-90SC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-SOIC	14.32	10.39	9.51
AT28HC256F-90SI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-SOIC	16.02	11.73	10.76
AT28HC256F-90TC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-TSOP	14.32	10.39	9.51
AT28HC256F-90TI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 90nS	28-TSOP	16.02	11.73	10.76
AT28HC256-12JC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	10.67	7.55	6.89
AT28HC256-12JI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	32-PLCC	12.06	8.62	7.88
AT28HC256-12PC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	10.67	7.55	6.89
AT28HC256-12PI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-Dip	12.06	8.62	7.88
AT28HC256-12SC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-SOIC	11.60	8.27	7.55
AT28HC256-12SI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-SOIC	12.97	9.33	8.53
AT28HC256-12TC-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	11.60	8.27	7.55
AT28HC256-12TI-ND	256K (32Kx8) 5V EEPROM, High Speed, 120nS	28-TSOP	12.97	9.33	8.53
AT28HC256F-12JC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	32-PLCC	12.28	8.80	8.04
AT28HC256F-12JI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	32-PLCC	13.87	10.04	9.19
AT28HC256F-12PC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-Dip	12.28	8.80	8.04
AT28HC256F-12PI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-Dip	13.87	10.04	9.19
AT28HC256F-12SC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-SOIC	13.34	9.63	8.81
AT28HC256F-12SI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-SOIC	14.91	10.86	9.95
AT28HC256F-12TC-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-TSOP	13.34	9.63	8.81
AT28HC256F-12TI-ND	256K (32Kx8) 5V EEPROM, HS, Fast Write, 120nS	28-TSOP	14.91	10.86	9.95
AT28C010-15JC-ND	1M (128Kx8) 5V EEPROM, 150nS	32-PLCC	27.01	20.51	18.93
AT28C010-15JI-ND	1M (128Kx8) 5V EEPROM, 150nS	32-PLCC	30.61	23.42	21.64
AT28C010-15PC-ND	1M (128Kx8) 5V EEPROM, 150nS	32-Dip	27.01	20.51	18.93
AT28C010-15PI-ND	1M (128Kx8) 5V EEPROM, 150nS	32-Dip	30.61	23.42	21.64
AT28C010-15TC-ND	1M (128Kx8) 5V EEPROM, 150nS	32-TSOP	29.37	22.42	20.70
AT28C010-15TI-ND	1M (128Kx8) 5V EEPROM, 150nS	32-TSOP	32.94	25.31	23.40

FLASH MEMORY

Flash Memory: Voltage (2.7 to 3.6V)
Single-Voltage Read and Write

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT29BV010A-20JC-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-PLCC	6.77	4.58	4.14
AT29BV010A-20JI-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-PLCC	7.91	5.44	4.93
AT29BV010A-20TC-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-TSOP	7.18	4.89	4.43
AT29BV010A-20TI-ND	1M (128Kx8) 2.7V Small Sector Flash, 200nS	32-TSOP	8.31	5.75	5.22
AT29BV040A-25TC-ND	4M (512Kx8) 2.7V Small Sector Flash, 250nS	32-TSOP	12.21	8.74	7.99
AT29BV040A-25TI-ND	4M (512Kx8) 2.7V Small Sector Flash, 250nS	32-TSOP	14.17	10.27	9.40
AT49BV512-12JC-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-PLCC	4.73	3.08	2.76
AT49BV512-12JI-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-PLCC	5.51	3.65	3.28
AT49BV512-12TC-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-TSOP	5.16	3.40	3.05
AT49BV512-12TI-ND	512K (64Kx8) 2.7V Boot Flash, 120nS	32-TSOP	5.93	3.96	3.57
AT49BV002-90JC-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	6.10	4.09	3.69
AT49BV002-90JI-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	6.60	4.46	4.03
AT49BV002-90TC-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	7.18	4.89	4.43
AT49BV002-90TI-ND	2M (256Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	7.42	5.08	4.60
AT49BV002N-90JC-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-PLCC	6.10	4.09	3.69
AT49BV002N-90JI-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-PLCC	6.60	4.46	4.03
AT49BV002N-90TC-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-TSOP	7.18	4.89	4.43
AT49BV002N-90TI-ND	2M (256Kx8) 2.7V Parametric Flash (No Reset), 90nS	32-TSOP	7.42	5.08	4.60
AT49BV040-12JC-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-PLCC	8.55	5.93	5.38
AT49BV040-12JI-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-PLCC	9.27	6.47	5.89
AT49BV040-12TC-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	9.82	6.90	6.28
AT49BV040-12TI-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	10.13	7.14	6.50
AT49BV040-12VC-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	10.13	7.14	6.50
AT49BV040-12VI-ND	4M (512Kx8) 2.7V Boot Flash, 120nS	32-TSOP	11.44	8.15	7.44
AT49BV4096A-12RC-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	44-SOIC	9.50	6.66	6.05
AT49BV4096A-12RI-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	44-SOIC	10.28	7.26	6.61
AT49BV4096A-12TC-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	32-TSOP	10.28	7.26	6.61
AT49BV4096A-12TI-ND	4M (512Kx8, 256Kx16) 2.7V Parametric Flash, 120nS	32-TSOP	10.67	7.55	6.89

Flash Memory: Low-Voltage (3.0 to 3.6V)
Single-Voltage Read and Write

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT29LV256-15JC-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	32-PLCC	4.73	3.08	2.76
AT29LV256-15JI-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	32-PLCC	5.51	3.65	3.28
AT29LV256-15TC-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	28-TSOP	5.16	3.40	3.05
AT29LV256-15TI-ND	256K (32Kx8) 3V Small Sector Flash, 150nS	28-TSOP	5.93	3.96	3.57
AT29LV512-15JC-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-PLCC	5.08	3.34	2.99
AT29LV512-15JI-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-PLCC	5.93	3.96	3.57
AT29LV512-15TC-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-TSOP	5.51	3.65	3.28
AT29LV512-15TI-ND	512K (64Kx8) 3V Small Sector Flash, 150nS	32-TSOP	6.35	4.27	3.86
AT29LV010A-15JC-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-PLCC	6.60	4.46	4.03
AT29LV010A-15JI-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-PLCC	7.67	5.26	4.77
AT29LV010A-15TC-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-TSOP	7.01	4.77	4.31
AT29LV010A-15TI-ND	1M (128Kx8) 3V Small Sector Flash, 150nS	32-TSOP	8.07	5.57	5.05
AT29LV1024-15JC-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	44-PLCC	6.85	4.65	4.20
AT29LV1024-15JI-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	44-PLCC	7.99	5.50	4.99
AT29LV1024-15TC-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	48-TSOP	7.26	4.95	4.48
AT29LV1024-15TI-ND	1M (64Kx16) 3V Small Sector Flash, 150nS	48-TSOP	8.39	5.81	5.27

(Continued)

★ CALL FOR LOWER PRICING ON LARGER QUANTITIES! ★

ATMEL FLASH MEMORY *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT29LV020-20JC-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-PLCC	7.75	5.32	4.82
AT29LV020-20JI-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-PLCC	9.03	6.29	5.72
AT29LV020-20TC-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-TSOP	8.15	5.63	5.10
AT29LV020-20TI-ND	2M (256Kx8) 3V Small Sector Flash, 200nS	32-TSOP	9.42	6.60	6.00
AT29LV040A-20TC-ND	4M (512Kx8) 3V Small Sector Flash, 200nS	32-TSOP	12.44	8.92	8.15
AT29LV040A-20TI-ND	4M (512Kx8) 3V Small Sector Flash, 200nS	32-TSOP	13.49	9.74	8.92
AT49LV001-90JC-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	5.16	3.40	3.05
AT49LV001-90JI-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-PLCC	5.59	3.71	3.34
AT49LV001-90TC-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	6.27	4.21	3.80
AT49LV001-90TI-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-TSOP	6.43	4.34	3.91
AT49LV001-90VC-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-VSOP	6.35	4.27	3.86
AT49LV001-90VI-ND	1M (128Kx8) 2.7V Parametric Flash, 90nS	32-VSOP	6.68	4.52	4.09
AT49LV040-90JC-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-PLCC	8.63	5.99	5.44
AT49LV040-90JI-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-PLCC	9.34	6.53	5.94
AT49LV040-90TC-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-TSOP	9.89	6.96	6.33
AT49LV040-90TI-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-TSOP	10.21	7.20	6.55
AT49LV040-90VC-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-VSOP	10.21	7.20	6.55
AT49LV040-90VI-ND	4M (512Kx8) 2.7V Boot Flash, 90nS	32-VSOP	11.60	8.27	7.55

Flash Memory: Standard Voltage (4.5 to 5.5V) Single-Voltage Read & Write

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT29C512-70JC-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-PLCC	6.10	4.09	3.69
AT29C512-70JI-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-PLCC	7.09	4.83	4.37
AT29C512-70PC-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-Dip	6.10	4.09	3.69
AT29C512-70PI-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-Dip	7.09	4.83	4.37
AT29C512-70TC-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-TSOP	6.52	4.40	3.97
AT29C512-70TI-ND	512K (64Kx8) 5V Small Sector Flash, 70nS	32-TSOP	7.50	5.14	4.65
AT29C010A-70JC-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-PLCC	7.58	5.20	4.71
AT29C010A-70JI-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-PLCC	8.87	6.17	5.61
AT29C010A-70PC-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-Dip	7.58	5.20	4.71
AT29C010A-70PI-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-Dip	8.87	6.17	5.61
AT29C010A-70TC-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-TSOP	7.99	5.50	4.99
AT29C010A-70TI-ND	1M (128Kx8) 5V Small Sector Flash, 70nS	32-TSOP	9.27	6.47	5.89
AT29C1024-70JC-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	44-PLCC	6.68	4.52	4.09
AT29C1024-70JI-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	44-PLCC	7.75	5.32	4.82
AT29C1024-70TC-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	48-TSOP	7.09	4.83	4.37
AT29C1024-70TI-ND	1M (64Kx16) 5V Small Sector Flash, 70nS	48-TSOP	8.15	5.63	5.10
AT29C020-12JC-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-PLCC	7.34	5.02	4.54
AT29C020-12JI-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-PLCC	8.55	5.93	5.38
AT29C020-12PC-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-Dip	7.34	5.02	4.54
AT29C020-12PI-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-Dip	8.55	5.93	5.38
AT29C020-12TC-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-TSOP	7.75	5.32	4.82
AT29C020-12TI-ND	2M (256Kx8) 5V Small Sector Flash, 120nS	32-TSOP	8.95	6.23	5.66
AT29C040A-12PC-ND	4M (512Kx8) 5V Small Sector Flash, 120nS	32-Dip	13.64	9.86	9.02
AT29C040A-12PI-ND	4M (512Kx8) 5V Small Sector Flash, 120nS	32-Dip	14.84	10.80	9.89
AT29C040A-12TC-ND	4M (512Kx8) 5V Small Sector Flash, 120nS	32-TSOP	14.02	10.16	9.30
AT49F512-70JC-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-PLCC	4.73	3.08	2.76
AT49F512-70JI-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-PLCC	5.51	3.65	3.28
AT49F512-70PC-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-Dip	4.73	3.08	2.76
AT49F512-70PI-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-Dip	5.51	3.65	3.28
AT49F512-70TC-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-TSOP	5.16	3.40	3.05
AT49F512-70TI-ND	512K (64Kx8) 5V Boot Flash, 70nS	32-TSOP	5.93	3.96	3.57
AT49F001-55JC-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-PLCC	5.68	3.78	3.40
AT49F001-55JI-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-PLCC	6.18	4.15	3.74
AT49F001-55TC-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-TSOP	6.77	4.58	4.14
AT49F001-55TI-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-TSOP	7.01	4.77	4.31
AT49F001-55VC-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-VSOP	6.85	4.65	4.20
AT49F001-55VI-ND	1M (128Kx8) 5V Parametric Flash, 55nS	32-VSOP	7.26	4.95	4.48
AT49F001NT-55JC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-PLCC	5.68	3.78	3.40
AT49F001NT-55JI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-PLCC	6.18	4.15	3.74
AT49F001NT-55PC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-Dip	5.68	3.78	3.40
AT49F001NT-55PI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-Dip	6.18	4.15	3.74
AT49F001NT-55TC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-TSOP	6.77	4.58	4.14
AT49F001NT-55TI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-TSOP	7.01	4.77	4.31
AT49F001NT-55VC-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-VSOP	6.85	4.65	4.20
AT49F001NT-55VI-ND	1M (128Kx8) 5V Parametric Flash, No Reset, Top Boot, 55nS	32-VSOP	7.26	4.95	4.48
AT49F1024-55VC-ND	1M (64Kx16) 5V Boot Flash, 55nS	40-VSOP	8.23	5.69	5.16
AT49F1024-55VI-ND	1M (64Kx16) 5V Boot Flash, 55nS	40-VSOP	8.63	5.99	5.44
AT49F1025-55JI-ND	1M (64Kx16) 5V Boot Flash, 55nS	44-PLCC	7.50	5.14	4.65
AT49F002T-70JC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-PLCC	6.01	4.03	3.63
AT49F002T-70JI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-PLCC	6.43	4.34	3.91
AT49F002T-70PC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-Dip	6.01	4.03	3.63
AT49F002T-70PI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-Dip	6.43	4.34	3.91
AT49F002T-70TC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-TSOP	7.01	4.77	4.31
AT49F002T-70TI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-TSOP	7.26	4.95	4.48
AT49F002T-70VC-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-VSOP	7.18	4.89	4.43
AT49F002T-70VI-ND	2M (256Kx8) 5V Parametric Flash, Top Boot, 70nS	32-VSOP	7.50	5.14	4.65
AT49F040-70PC-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-Dip	9.19	6.41	5.83
AT49F040-70PI-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-Dip	9.89	6.96	6.33
AT49F040-70TC-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-TSOP	10.36	7.32	6.66
AT49F040-70TI-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-TSOP	10.75	7.61	6.94
AT49F040-70VC-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-VSOP	10.83	7.67	7.00
AT49F040-70VI-ND	4M (512Kx8) 5V Boot Flash, 70nS	32-VSOP	12.28	8.80	8.04
AT49F4096A-90RC-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	44-SOIC	9.11	6.35	5.78
AT49F4096A-90RI-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	44-SOIC	9.82	6.90	6.28
AT49F4096A-90TC-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	48-TSOP	9.89	6.96	6.33
AT49F4096A-90TI-ND	4M (512Kx8, 256Kx16) 5V Parametric Flash, 90nS	48-TSOP	10.28	7.26	6.61

ATMEL SERIAL DATAFLASH

Serial DataFlash

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT45DB011B-XC-ND	1 Meg Serial DataFlash, 2.7V	14-TSSOP	4.81	3.15	2.82
AT45DB011B-XI-ND	1 Meg Serial DataFlash, 2.7V	14-TSSOP	5.21	3.43	3.08
AT45DB011B-SC-ND	1 Meg Serial DataFlash, 2.7V	8-SOIC	4.64	3.02	2.70
AT45DB011B-SI-ND	1 Meg Serial DataFlash, 2.7V	8-SOIC	5.03	3.30	2.97
AT45DB021B-TC-ND	2 Meg Serial DataFlash, 2.7V	28-TSOP	6.10	4.09	3.69
AT45DB021B-TI-ND	2 Meg Serial DataFlash, 2.7V	28-TSOP	6.56	4.43	4.00
AT45DB021B-SC-ND	2 Meg Serial DataFlash, 2.7V	8-SOIC	5.68	3.78	3.40
AT45DB021B-SI-ND	2 Meg Serial DataFlash, 2.7V	8-SOIC	5.85	3.90	3.51
AT45DB021B-RC-ND	2 Meg Serial DataFlash, 2.7V	28-SOIC	5.76	3.84	3.46
AT45DB021B-RI-ND	2 Meg Serial DataFlash, 2.7V	28-SOIC	6.22	4.18	3.77
AT45DB041B-TC-ND	4 Meg Serial DataFlash, 2.7V	28-TSOP	7.95	5.47	4.96
AT45DB041B-TI-ND	4 Meg Serial DataFlash, 2.7V	28-TSOP	8.59	5.96	5.41
AT45DB041B-SC-ND	4 Meg Serial DataFlash, 2.7V	8-SOIC	7.54	5.17	4.68
AT45DB041B-SI-ND	4 Meg Serial DataFlash, 2.7V	8-SOIC	7.71	5.29	4.79
AT45DB041B-RC-ND	4 Meg Serial DataFlash, 2.7V	28-SOIC	7.63	5.23	4.74
AT45DB041B-RI-ND	4 Meg Serial DataFlash, 2.7V	28-SOIC	8.27	5.72	5.19
AT45DB041B-CC-ND	4 Meg Serial DataFlash, 2.7V	14-CBGA	8.27	5.72	5.19
AT45DB041B-CI-ND	4 Meg Serial DataFlash, 2.7V	14-CBGA	8.43	5.84	5.30
AT45DB081B-TC-ND	8 Meg Serial DataFlash, 2.7V	28-TSOP	11.64	8.30	7.57
AT45DB081B-TI-ND	8 Meg Serial DataFlash, 2.7V	28-TSOP	12.61	9.05	8.27
AT45DB081B-RC-ND	8 Meg Serial DataFlash, 2.7V	28-SOIC	11.33	8.06	7.35
AT45DB081B-RI-ND	8 Meg Serial DataFlash, 2.7V	28-SOIC	12.30	8.82	8.06
AT45DB081B-CC-ND	8 Meg Serial DataFlash, 2.7V	14-CBGA	11.94	8.54	7.79
AT45DB081B-CI-ND	8 Meg Serial DataFlash, 2.7V	14-CBGA	12.09	8.65	7.90
AT45DB161B-TC-ND	16 Meg Serial DataFlash, 2.7V	28-TSOP	17.27	12.71	11.67
AT45DB161B-TI-ND	16 Meg Serial DataFlash, 2.7V	28-TSOP	18.74	13.88	12.76
AT45DB161B-RC-ND	16 Meg Serial DataFlash, 2.7V	28-SOIC	16.98	12.48	11.46
AT45DB161B-RI-ND	16 Meg Serial DataFlash, 2.7V	28-SOIC	18.45	13.65	12.54
AT45DB161B-CC-ND	16 Meg Serial DataFlash, 2.7V	24-CBGA	17.56	12.95	11.89
AT45DB161B-CI-ND	16 Meg Serial DataFlash, 2.7V	24-CBGA	17.71	13.06	11.99
AT45DB321B-TC-ND	32 Meg Serial DataFlash, 2.7V	32-TSOP	25.58	19.36	17.85
AT45DB321B-TI-ND	32 Meg Serial DataFlash, 2.7V	32-TSOP	27.83	21.17	19.54
AT45DB321B-CC-ND	32 Meg Serial DataFlash, 2.7V	44-CBGA	25.86	19.58	18.06
AT45DB321B-CI-ND	32 Meg Serial DataFlash, 2.7V	44-CBGA	26.00	19.70	18.17
AT45DB642-TC-ND	64 Meg Serial DataFlash, 2.7V	40-TSOP	41.19	32.04	29.68

ATMEL 8051 ARCHITECTURE MICROCONTROLLERS

Atmel offers a broad range of microcontrollers based on the 8051 architecture, with on-chip Flash or one-time programmable (OTP) QuickFlash™ program memory. The product line includes industry-standard socket drop-in devices, small footprint 20-pin devices, and In-System Programmable (ISP) parts. Device offerings are available in both commercial and industrial grades.

One-Time Programmable 8051-Architecture Microcontrollers

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT87F51-24AC-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-TQFP	4.13	2.65	2.37
AT87F51-24AI-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-TQFP	4.35	2.81	2.51
AT87F51-24JC-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-PLCC	3.92	2.51	2.23
AT87F51-24JI-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	44-PLCC	4.15	2.67	2.38
AT87F51-24PC-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	40-Dip	3.92	2.51	2.23
AT87F51-24PI-ND	80C31 MCU, 4K Bytes OTP QuickFlash™, 24MHz	40-Dip	4.15	2.67	2.38
AT87F52-24AC-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-TQFP	4.42	2.86	2.56
AT87F52-24AI-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-TQFP	4.66	3.03	2.72
AT87F52-24JC-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-PLCC	3.70	2.34	2.09
AT87F52-24JI-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	44-PLCC	3.81	2.42	2.16
AT87F52-24PC-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	40-Dip	3.70	2.34	2.09
AT87F52-24PI-ND	80C32 MCU, 8K Bytes OTP QuickFlash™, 24MHz	40-Dip	3.81	2.42	2.16
AT87F55WD-24AI-ND	80C32 MCU, 20K Bytes OTP QuickFlash™, 24MHz	44-TQFP	8.83	6.14	5.58
AT87F55WD-24JI-ND	80C32 MCU, 20K Bytes OTP QuickFlash™, 24MHz	44-PLCC	8.63	5.99	5.44
AT87F55WD-24PI-ND	80C32 MCU, 20K Bytes OTP QuickFlash™, 24MHz	40-Dip	8.63	5.99	5.44

Flash Reprogrammable 8051-Architecture Microcontrollers

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
AT89C1051U-24PC-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	20-Dip	3.65	2.31	2.06
AT89C1051U-24PI-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	20-Dip	3.86	2.46	2.19
AT89C1051U-24SC-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	20-SOIC	3.65	2.31	2.06
AT89C1051U-24SI-ND	80C31 MCU with UART, 1K Bytes Flash, 24MHz	20-SOIC	3.86	2.46	2.19
AT89C2051-24PC-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	20-Dip	4.04	2.59	2.31
AT89C2051-24PI-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	20-Dip	4.26	2.75	2.45
AT89C2051-24SC-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	20-SOIC	4.04	2.59	2.31
AT89C2051-24SI-ND	80C31 MCU with UART, 2K Bytes Flash, 24MHz	20-SOIC	4.26	2.75	2.45
AT89C4051-24PC-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	20-Dip	4.79	3.13	2.81
AT89C4051-24PI-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	20-Dip	5.05	3.32	2.98
AT89C4051-24SC-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	20-SOIC	4.79	3.13	2.81
AT89C4051-24SI-ND	80C31 MCU with UART, 4K Bytes Flash, 24MHz	20-SOIC	5.05	3.32	2.98
AT89C51-24AC-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-TQFP	5.89	3.93	3.54
AT89C51-24AI-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-TQFP	6.20	4.17	3.76
AT89C51-24JC-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-PLCC	5.70	3.79	3.41
AT89C51-24JI-ND	80C31 MCU, 4K Bytes Flash, 24MHz	44-PLCC	6.01	4.03	3.63
AT89C51-24PC-ND	80C31 MCU, 4K Bytes Flash, 24MHz	40-Dip	5.70	3.79	3.41
AT89C51-24PI-ND	80C31 MCU, 4K Bytes Flash, 24MHz	40-Dip	6.01	4.03	3.63
AT89C52-24AC-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-TQFP	6.41	4.32	3.90
AT89C52-24AI-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-TQFP	4.70	3.07	2.75
AT89C52-24JC-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-PLCC	4.70	3.07	2.75
AT89C52-24JI-ND	80C32 MCU, 8K Bytes Flash, 24MHz	44-PLCC	4.70	3.07	2.75
AT89C52-24PC-ND	80C32 MCU, 8K Bytes Flash, 24MHz	40-Dip	4.70	3.07	2.75
AT89C52-24PI-ND	80C32 MCU, 8K Bytes Flash, 24MHz	40-Dip	4.70	3.07	2.75
AT89C55WD-24AI-ND	80C32 MCU, 20K Bytes Flash, 24MHz	44-TQFP	9.87	6.94	6.32
AT89C55WD-24JI-ND	80C32 MCU, 20K Bytes Flash, 24MHz	44-PLCC	9.68	6.79	6.18
AT89C55WD-24PI-ND	80C32 MCU, 20K Bytes Flash, 24MHz	40-Dip	9.68	6.79	6.18
AT89C51RC-24AI-ND	80C32 MCU, 32K Bytes Flash, 24MHz	44-TQFP	13.17	9.49	8.68
AT89C51RC-24JI-ND	80C32 MCU, 32K Bytes Flash, 24MHz	44-PLCC	12.99	9.35	8.55
AT89C51RC-24PI-ND	80C32 MCU, 32K Bytes Flash, 24MHz	40-Dip	12.99	9.35	8.55

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ATMEL 8051 ARCHITECTURE MICRONTROLLERS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
AT89S8252-24AC-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-TQFP	7.34	5.02	4.54
AT89S8252-24AI-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-TQFP	7.75	5.32	4.82
AT89S8252-24JC-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-PLCC	7.14	4.86	4.40
AT89S8252-24JI-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	44-PLCC	7.54	5.17	4.68
AT89S8252-24PC-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	40-Dip	7.14	4.86	4.40
AT89S8252-24PI-ND	80C32 MCU with SPI, 8K Bytes Flash, 2K Bytes EEPROM, 24MHz	40-Dip	7.54	5.17	4.68
AT89S53-24AC-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-TQFP	6.23	4.26	3.86
AT89S53-24AI-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-TQFP	7.44	5.09	4.61
AT89S53-24JC-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-PLCC	6.03	4.12	3.73
AT89S53-24JI-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	44-PLCC	7.44	5.09	4.61
AT89S53-24PC-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	40-Dip	6.03	4.12	3.73
AT89S53-24PI-ND	80C32 MCU with SPI, 12K Bytes Flash, 24MHz	40-Dip	7.44	5.09	4.61

XICOR NOVRAMS (NON-VOLATILE SRAM)

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
X20C04J-15-ND	4K (512x8) CMOS Parallel NOVRAM 150ns	32-PLCC	26.10	18.38	16.18
X20C04JI-15-ND	4K (512x8) CMOS Parallel NOVRAM 150ns	32-PLCC	27.39	19.30	16.99
X20C04P-15-ND	4K (512x8) CMOS Parallel NOVRAM 150ns	28-Dip	23.35	16.45	14.48
X20C04PI-15-ND	4K (512x8) CMOS Parallel NOVRAM 150ns	28-Dip	26.85	18.91	16.65
X20C04J-20-ND	4K (512x8) CMOS Parallel NOVRAM 200ns	32-PLCC	23.99	16.91	14.89
X20C04JI-20-ND	4K (512x8) CMOS Parallel NOVRAM 200ns	32-PLCC	25.20	17.75	15.63
X20C04P-20-ND	4K (512x8) CMOS Parallel NOVRAM 200ns	28-Dip	21.39	15.07	13.27
X20C04PI-20-ND	4K (512x8) CMOS Parallel NOVRAM 200ns	28-Dip	24.62	17.34	15.26
X20C16J-35-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 35ns	32-PLCC	53.90	30.87	27.86
X20C16JI-35-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 35ns	32-PLCC	56.61	32.41	29.25
X20C16S-35-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 35ns	28-SOIC	56.05	32.10	28.97
X20C16SI-35-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 35ns	28-SOIC	58.85	33.70	30.43
X20C16J-45-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 45ns	32-PLCC	49.60	28.40	25.64
X20C16JI-45-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 45ns	32-PLCC	52.07	29.82	26.92
X20C16S-45-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 45ns	28-SOIC	51.75	29.63	26.75
X20C16SI-45-ND	16K (2Kx8) CMOS Parallel NOVRAM with AUTOSTORE 45ns	28-SOIC	54.33	31.11	28.08
X24C44P-ND	256 (16x16) Bit CMOS Serial NOVRAM	8-Dip	2.69	1.89	1.66
X24C44PI-ND	256 (16x16) Bit CMOS Serial NOVRAM	8-Dip	3.14	2.21	1.94
X24C44S-ND	256 (16x16) Bit CMOS Serial NOVRAM	8-SOIC	2.90	2.04	1.80
X24C44SI-ND	256 (16x16) Bit CMOS Serial NOVRAM	8-SOIC	3.46	2.43	2.14

XICOR PARALLEL EEPROMS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
X28HC64D-90-ND	64K (8Kx8) CMOS EEPROM 90ns	28-CDip	28.17	15.38	14.55
X28HC64P-90-ND	64K (8Kx8) CMOS EEPROM 90ns	28-Dip	10.11	7.24	6.19
X28HC64PI-90-ND	64K (8Kx8) CMOS EEPROM 90ns	28-Dip	10.84	7.75	6.63
X28HC64J-90-ND	64K (8Kx8) CMOS EEPROM 90ns	32-PLCC	10.11	7.24	6.19
X28HC64JI-90-ND	64K (8Kx8) CMOS EEPROM 90ns	32-PLCC	10.84	7.75	6.63
X28HC64D-12-ND	64K (8Kx8) CMOS EEPROM 120ns	28-CDip	26.81	14.66	13.86
X28HC64DI-12-ND	64K (8Kx8) CMOS EEPROM 120ns	28-CDip	29.50	16.12	15.26
X28HC64P-12-ND	64K (8Kx8) CMOS EEPROM 120ns	28-Dip	9.63	6.90	5.90
X28HC64PI-12-ND	64K (8Kx8) CMOS EEPROM 120ns	28-Dip	10.32	7.38	6.31
X28HC64J-12-ND	64K (8Kx8) CMOS EEPROM 120ns	32-PLCC	9.63	6.90	5.90
X28HC64JI-12-ND	64K (8Kx8) CMOS EEPROM 120ns	32-PLCC	10.32	7.38	6.31
X28HC256J-90-ND	256K (32Kx8) CMOS EEPROM 90ns	32-PLCC	23.84	17.06	14.59
X28HC256JI-90-ND	256K (32Kx8) CMOS EEPROM 90ns	32-PLCC	27.41	19.62	16.78
X28HC256P-90-ND	256K (32Kx8) CMOS EEPROM 90ns	28-Dip	23.84	17.06	14.59
X28HC256J-12-ND	256K (32Kx8) CMOS EEPROM 120ns	32-PLCC	21.67	15.63	13.37
X28HC256JI-12-ND	256K (32Kx8) CMOS EEPROM 120ns	32-PLCC	24.92	17.83	15.26
X28HC256P-12-ND	256K (32Kx8) CMOS EEPROM 120ns	28-Dip	21.67	15.50	13.26
X28HC256PI-12-ND	256K (32Kx8) CMOS EEPROM 120ns	28-Dip	24.92	17.83	15.26
X28HC256J-15-ND	256K (32Kx8) CMOS EEPROM 150ns	32-PLCC	20.64	14.77	12.63
X28HC256JI-15-ND	256K (32Kx8) CMOS EEPROM 150ns	32-PLCC	23.74	16.98	14.53
X28HC256P-15-ND	256K (32Kx8) CMOS EEPROM 150ns	28-Dip	20.64	14.77	12.63
X28HC256PI-15-ND	256K (32Kx8) CMOS EEPROM 150ns	28-Dip	23.74	16.98	14.53

XICOR CPU SUPERVISORS

Digi-Key Part No.	Description	Pkg.	Price Each★		
			1	25	100
X4043P-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-Dip	3.78	2.46	2.20
X4043PI-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-Dip	3.93	2.56	2.29
X4043S8-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.05	1.98	1.78
X4043S8I-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.18	2.06	1.85
X4043M8-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.78	2.46	2.20
X4043M8I-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.93	2.56	2.29
X4043S8-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.05	1.98	1.78
X4043S8I-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.18	2.06	1.85
X4043M8-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.78	2.46	2.20
X4043M8I-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.93	2.56	2.29
X4043S8-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.05	1.98	1.78
X4043S8I-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.18	2.06	1.85
X4043M8-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.78	2.46	2.20
X4043M8I-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.93	2.56	2.29
X4043P-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-Dip	3.78	2.46	2.20
X4043PI-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-Dip	3.93	2.56	2.29
X4043S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.05	1.98	1.78
X4043S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-SOIC	3.18	2.06	1.85
X4043M8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.78	2.46	2.20
X4043M8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset Low	8-MSOP	3.93	2.56	2.29
X4045P-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-Dip	3.78	2.46	2.20
X4045PI-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-Dip	3.93	2.56	2.29
X4045S8-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.05	1.98	1.78
X4045S8I-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.18	2.06	1.85
X4045M8-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.78	2.46	2.20
X4045M8I-ND	4.25-4.5V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.93	2.56	2.29
X4045S8-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.05	1.98	1.78
X4045S8I-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.18	2.06	1.85
X4045M8-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.78	2.46	2.20
X4045M8I-4.5A-ND	4.5-4.75V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.93	2.56	2.29
X4045S8-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.05	1.98	1.78
X4045S8I-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.18	2.06	1.85
X4045M8-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.78	2.46	2.20
X4045M8I-2.7A-ND	2.85-3.0V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.93	2.56	2.29
X4045P-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-Dip	3.78	2.46	2.20
X4045PI-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-Dip	3.93	2.56	2.29
X4045S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.05	1.98	1.78
X4045S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-SOIC	3.18	2.06	1.85
X4045M8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.78	2.46	2.20
X4045M8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 4K I^{2}C EE, Reset High	8-MSOP	3.93	2.56	2.29
X4163S8-ND	4.25-4.5V CPU Supervisor with WDT, 16K I^{2}C EE, Reset Low	8-SOIC	2.97	1.93	1.73
X4163S8I-ND	4.25-4.5V CPU Supervisor with WDT, 16K I^{2}C EE, Reset Low	8-SOIC	3.27	2.12	1.90
X4165S8-ND	4.25-4.5V CPU Supervisor with WDT, 16K I^{2}C EE, Reset High	8-SOIC	2.97	1.93	1.73
X4165S8I-ND	4.25-4.5V CPU Supervisor with WDT, 16K I^{2}C EE, Reset High	8-SOIC	3.27	2.12	1.90
X4283S8-ND	4.25-4.5V CPU Supervisor with WDT, 128K I^{2}C EE, Reset Low	8-SOIC	4.26	2.68	2.48
X4283S8I-ND	4.25-4.5V CPU Supervisor with WDT, 128K I^{2}C EE, Reset Low	8-SOIC	4.56	2.87	2.65
X4283V8-ND	4.25-4.5V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset Low	8-TSSOP	4.69	2.96	2.73
X4283V8I-ND	4.25-4.5V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset Low	8-TSSOP	5.03	3.19	2.93
X4283S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 128K I^{2}C EE, Reset Low	8-SOIC	4.26	2.68	2.48
X4283S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 128K I^{2}C EE, Reset Low	8-SOIC	4.56	2.87	2.65
X4283V8-2.7-ND	2.55-2.7V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset Low	8-TSSOP	4.69	2.96	2.73
X4285S8-ND	4.25-4.5V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-SOIC	4.26	2.68	2.48
X4285S8I-ND	4.25-4.5V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-SOIC	4.56	2.87	2.65
X4285V8-ND	4.25-4.5V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-TSSOP	4.69	2.96	2.73
X4285V8I-ND	4.25-4.5V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-TSSOP	5.03	3.19	2.93
X4285S8-2.7-ND	2.55-2.7V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-SOIC	4.26	2.68	2.48
X4285S8I-2.7-ND	2.55-2.7V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-SOIC	4.56	2.87	2.65
X4285V8-2.7-ND	2.55-2.7V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-TSSOP	4.69	2.96	2.73
X4285V8I-2.7-ND	2.55-2.7V CPU Supervisor w/WDT, 128K I^{2}C EE, Reset High	8-TSSOP	5.03	3.19	2.93
X4323S8-ND	4.25-4.5V CPU Supervisor with WDT, 32K I^{2}C EE, Reset Low	8-SOIC	3.40	2.18	1.98
X4323S8I-ND	4.25-4.5V CPU Supervisor with WDT, 32K I^{2}C EE, Reset Low	8-SOIC	3.70	2.37	2.15
X4323S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 32K I^{2}C EE, Reset Low	8-SOIC	3.40	2.18	1.98
X4323S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 32K I^{2}C EE, Reset Low	8-SOIC	3.70	2.37	2.15
X4643S8-ND	4.25-4.5V CPU Supervisor with WDT, 64K I^{2}C EE, Reset Low	8-SOIC	3.83	2.43	2.23
X4643S8I-ND	4.25-4.5V CPU Supervisor with WDT, 64K I^{2}C EE, Reset Low	8-SOIC	4.13	2.62	2.40
X4643S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 64K I^{2}C EE, Reset Low	8-SOIC	3.83	2.43	2.23
X4643S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 64K I^{2}C EE, Reset Low	8-SOIC	4.13	2.62	2.40
X4645S8-ND	4.25-4.5V CPU Supervisor with WDT, 64K I^{2}C EE, Reset High	8-SOIC	3.83	2.43	2.23
X4645S8I-ND	4.25-4.5V CPU Supervisor with WDT, 64K I^{2}C EE, Reset High	8-SOIC	4.13	2.62	2.40
X4645S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 64K I^{2}C EE, Reset High	8-SOIC	3.83	2.43	2.23
X4645S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT, 64K I^{2}C EE, Reset High	8-SOIC	4.13	2.62	2.40
X5001S8-ND	4.25-4.5V CPU Supervisor with Watchdog Timer, Reset Low	8-SOIC	2.41	1.67	1.40
X5001S8I-ND	4.25-4.5V CPU Supervisor with Watchdog Timer, Reset Low	8-SOIC	2.60	1.81	1.52
X5001S8-2.7-ND	2.55-2.7V CPU Supervisor with Watchdog Timer, Reset Low	8-SOIC	2.41	1.67	1.40
X5043P-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-Dip	3.05	1.98	1.78
X5043PI-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-Dip	3.18	2.06	1.85
X5043S8-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.05	1.98	1.78
X5043S8I-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.18	2.06	1.85
X5043M8-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.78	2.46	2.20
X5043M8I-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.93	2.56	2.29
X5043V14I-ND	4.25-4.5V CPU Supervisor w/WDT 4K SPI EE, Reset Low	14-TSSOP	3.93	2.56	2.29
X5043S8-4.5A-ND	4.5-4.75V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.05	1.98	1.78
X5043S8I-4.5A-ND	4.5-4.75V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.18	2.06	1.85
X5043M8-4.5A-ND	4.5-4.75V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.78	2.46	2.20
X5043M8I-4.5A-ND	4.5-4.75V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.93	2.56	2.29
X5043S8-2.7A-ND	2.85-3.0V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.05	1.98	1.78
X5043S8I-2.7A-ND	2.85-3.0V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.18	2.06	1.85
X5043M8-2.7A-ND	2.85-3.0V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.78	2.46	2.20
X5043M8I-2.7A-ND	2.85-3.0V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.93	2.56	2.29
X5043P-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-Dip	3.05	1.98	1.78
X5043PI-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-Dip	3.18	2.06	1.85
X5043S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.05	1.98	1.78
X5043S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-SOIC	3.18	2.06	1.85
X5043M8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.78	2.46	2.20
X5043M8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset Low	8-MSOP	3.93	2.56	2.29
X5043V14I-2.7-ND	2.55-2.7V CPU Supervisor w/WDT 4K SPI EE, Reset Low	14-TSSOP	3.93	2.56	2.29
X5045P-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset High	8-Dip	3.05	1.98	1.78
X5045PI-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset High	8-Dip	3.18	2.06	1.85
X5045S8-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset High	8-SOIC	3.05	1.98	1.78
X5045S8I-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset High	8-SOIC	3.18	2.06	1.85
X5045M8-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset High	8-MSOP	3.78	2.46	2.20
X5045M8I-ND	4.25-4.5V CPU Supervisor with WDT 4K SPI EE, Reset High	8-MSOP	3.93	2.56	2.29
X5045PI-4.5A-ND	4.5-4.75V CPU Supervisor with WDT 4K SPI EE, Reset High	8-Dip	3.18	2.06	1.85
X5045S8-4.5A-ND	4.5-4.75V CPU Supervisor with WDT 4K SPI EE, Reset High	8-SOIC	3.05	1.98	1.78
X5045PI-2.7A-ND	2.85-3.0V CPU Supervisor with WDT 4K SPI EE, Reset High	8-Dip	3.18	2.06	1.85
X5045S8-2.7A-ND	2.85-3.0V CPU Supervisor with WDT 4K SPI EE, Reset High	8-SOIC	3.05	1.98	1.78
X5045S8I-2.7A-ND	2.85-3.0V CPU Supervisor with WDT 4K SPI EE, Reset High	8-SOIC	3.18	2.06	1.85
X5045P-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset High	8-Dip	3.05	1.98	1.78
X5045PI-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset High	8-Dip	3.18	2.06	1.85
X5045S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset High	8-SOIC	3.05	1.98	1.78
X5045S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset High	8-SOIC	3.18	2.06	1.85
X5045M8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset High	8-MSOP	3.78	2.46	2.20
X5045M8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 4K SPI EE, Reset High	8-MSOP	3.93	2.56	2.29
X5083P-ND	4.25-4.5V CPU Supervisor with WDT 8K SPI EE, Reset Low	8-Dip	3.18	2.20	1.85
X5083S8-ND	4.25-4.5V CPU Supervisor with WDT 8K SPI EE, Reset Low	8-SOIC	3.18	2.20	1.85

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XICOR CPU SUPERVISORS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
X5083S8I-ND	4.25-4.5V CPU Supervisor with WDT 8K SPI EE, Reset Low	8-SOIC	3.31	2.29	1.93
X5083S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 8K SPI EE, Reset Low	8-SOIC	3.18	2.20	1.85
X5083S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 8K SPI EE, Reset Low	8-SOIC	3.31	2.29	1.93
X5163P-ND	4.25-4.5V CPU Supervisor with WDT 16K SPI EE, Reset Low	8-Dip	3.31	2.29	1.93
X5163S8-ND	4.25-4.5V CPU Supervisor with WDT 16K SPI EE, Reset Low	8-SOIC	3.31	2.29	1.93
X5163S8I-ND	4.25-4.5V CPU Supervisor with WDT 16K SPI EE, Reset Low	8-SOIC	3.44	2.37	2.00
X5163S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 16K SPI EE, Reset Low	8-SOIC	3.31	2.29	1.93
X5163S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 16K SPI EE, Reset Low	8-SOIC	3.91	2.66	2.28
X5165P-ND	4.25-4.5V CPU Supervisor with WDT 16K SPI EE, Reset High	8-Dip	3.31	2.29	1.93
X5165S8-ND	4.25-4.5V CPU Supervisor with WDT 16K SPI EE, Reset High	8-SOIC	3.31	2.29	1.93
X5165S8I-ND	4.25-4.5V CPU Supervisor with WDT 16K SPI EE, Reset High	8-SOIC	3.44	2.37	2.00
X5165S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 16K SPI EE, Reset High	8-SOIC	3.31	2.29	1.93
X5165S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 16K SPI EE, Reset High	8-SOIC	3.91	2.66	2.28
X5325P-ND	4.25-4.5V CPU Supervisor with WDT 32K SPI EE, Reset High	8-Dip	3.57	2.47	2.08
X5325PI-ND	4.25-4.5V CPU Supervisor with WDT 32K SPI EE, Reset High	8-Dip	4.11	2.84	2.39
X5325S8-ND	4.25-4.5V CPU Supervisor with WDT 32K SPI EE, Reset High	8-SOIC	3.57	2.47	2.08
X5325S8I-ND	4.25-4.5V CPU Supervisor with WDT 32K SPI EE, Reset High	8-SOIC	3.70	2.55	2.15
X5325S8-2.7-ND	2.55-2.7V CPU Supervisor with WDT 32K SPI EE, Reset High	8-SOIC	3.57	2.47	2.08
X5325S8I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 32K SPI EE, Reset High	8-SOIC	5.85	3.97	3.40
X5643P-ND	4.25-4.5V CPU Supervisor with WDT 64K SPI EE, Reset Low	8-Dip	3.96	2.74	2.30
X5643S14-ND	4.25-4.5V CPU Supervisor with WDT 64K SPI EE, Reset Low	14-SOIC	3.96	2.74	2.30
X5643S14I-ND	4.25-4.5V CPU Supervisor with WDT 64K SPI EE, Reset Low	14-SOIC	4.09	2.83	2.38
X5643S14-2.7-ND	2.55-2.7V CPU Supervisor with WDT 64K SPI EE, Reset Low	14-SOIC	3.96	2.74	2.30
X5643S14I-2.7-ND	2.55-2.7V CPU Supervisor with WDT 64K SPI EE, Reset Low	14-SOIC	7.78	5.29	4.53
X5645P-ND	4.25-4.5V CPU Supervisor with WDT 64K SPI EE, Reset High	8-Dip	3.96	2.74	2.30
X5645S14-ND	4.25-4.5V CPU Supervisor w/WDT 64K SPI EE, Reset High	14-SOIC	3.96	2.74	2.30
X5645S14-2.7-ND	2.55-2.7V CPU Supervisor w/WDT 64K SPI EE, Reset High	14-SOIC	3.96	2.74	2.30

XICOR REALTIME CLOCKS

RealTime Clock/Calendars with dual alarms (programmable frequency output X1227 and X1228 only), and on chip oscillator compensation. The X1227 and X1228 are also CPU Supervisor circuits with two polled alarms. The clock and alarm registers allow the clock to operate without loss of accuracy, even during read and write operations. The clock/calendar provides functionality that is controllable and readable through a set of registers. The clock, using a low-cost 32.768kHz crystal input, accurately tracks the time in seconds, minutes, hours, date, day, month and years. 2-wire interface interoperable with 512 x 8 bits of I2C EEprom. The Supervisor circuits come in 4 reset voltages.

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
X1226S8-ND	RTC, Clock/Calendar with Output Frequency and 4K EE	8-SOIC	3.44	2.32	2.00
X1227S8-ND	RTC, 4.25-4.51V CPU Supervisor with WDT 4K EE, Reset Low	8-SOIC	5.16	3.52	3.00
X1227S8-2.7-ND	RTC, 2.57-2.73V CPU Supervisor with WDT 4K EE, Reset Low	8-SOIC	5.16	3.52	3.00
X1227S8-2.7A-ND	RTC, 2.76-2.94V CPU Supervisor with WDT 4K EE, Reset Low	8-SOIC	5.16	3.52	3.00
X1227S8-4.5A-ND	RTC, 4.49-4.77V CPU Supervisor with WDT 4K EE, Reset Low	8-SOIC	5.16	3.52	3.00
X1228S14-ND	RTC, 4.25-4.51V CPU Supervisor w/WDT 4K EE, Reset Low	14-SOIC	5.38	3.67	3.13
X1228S14-2.7-ND	RTC, 2.57-2.73V CPU Supervisor w/WDT 4K EE, Reset Low	14-SOIC	5.38	3.67	3.13
X1228S14-2.7A-ND	RTC, 2.76-2.94V CPU Supervisor w/WDT 4K EE, Reset Low	14-SOIC	5.38	3.67	3.13
X1228S14-4.5A-ND	RTC, 4.49-4.77V CPU Supervisor w/WDT 4K EE, Reset Low	14-SOIC	5.38	3.67	3.13

XICOR DIGITALLY CONTROLLED POTENTIOMETERS (XDCP™)

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
X9C102P-ND	Single DCP, 1KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	2.88	2.20	1.68
X9C102S-ND	Single DCP, 1KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9C102SI-ND	Single DCP, 1KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9C103P-ND	Single DCP, 10KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	2.88	2.20	1.68
X9C103PI-ND	Single DCP, 10KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	3.61	2.75	2.10
X9C103S-ND	Single DCP, 10KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9C103SI-ND	Single DCP, 10KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9C104P-ND	Single DCP, 100KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	2.88	2.20	1.68
X9C104PI-ND	Single DCP, 100KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	3.61	2.75	2.10
X9C104S-ND	Single DCP, 100KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9C104SI-ND	Single DCP, 100KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9C303P-ND	Single DCP, 32KΩ, 100 Tap, 3-Wire Up/Down, Log Taper	8-Dip	2.88	2.20	1.68
X9C303PI-ND	Single DCP, 32KΩ, 100 Tap, 3-Wire Up/Down, Log Taper	8-Dip	3.61	2.75	2.10
X9C303S8-ND	Single DCP, 32KΩ, 100 Tap, 3-Wire Up/Down, Log Taper	8-SOIC	2.88	2.20	1.68
X9C303S8I-ND	Single DCP, 32KΩ, 100 Tap, 3-Wire Up/Down, Log Taper	8-SOIC	3.61	2.75	2.10
X9C303V8-ND	Single DCP, 32KΩ, 100 Tap, 3-Wire Up/Down, Log Taper	8-TSSOP	3.42	2.61	1.99
X9C303V8I-ND	Single DCP, 32KΩ, 100 Tap, 3-Wire Up/Down, Log Taper	8-TSSOP	4.26	3.25	2.48
X9C503P-ND	Single DCP, 50KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	2.88	2.20	1.68
X9C503PI-ND	Single DCP, 50KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	3.61	2.75	2.10
X9C503S-ND	Single DCP, 50KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9C503SI-ND	Single DCP, 50KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9015US8-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down, Volatile	8-SOIC	.65	.49	.38
X9015US8I-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down, Volatile	8-SOIC	.82	.62	.48
X9015UM8-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down, Volatile	8-MSOP	.75	.57	.44
X9015UM8I-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down, Volatile	8-MSOP	.97	.73	.57
X9015US8-2.7-ND	Single DCP, 2.7V, 50KΩ, 32 Tap, 3-Wire Up/Down, Volatile	8-SOIC	.71	.55	.42
X9015US8I-2.7-ND	Single DCP, 2.7V, 50KΩ, 32 Tap, 3-Wire Up/Down, Volatile	8-SOIC	.90	.68	.53
X9110TV14-ND	Single DCP, 5V, 100KΩ, 1024 Tap, SPI, Dual Supply	14-TSSOP	5.35	3.60	3.12
X9110TV14I-ND	Single DCP, 5V, 100KΩ, 1024 Tap, SPI, Dual Supply	14-TSSOP	6.67	4.49	3.88
X9111TV14-ND	Single DCP, 5V, 100KΩ, 1024 Tap, SPI, Single Supply	14-TSSOP	5.35	3.60	3.12
X9111TV14I-ND	Single DCP, 5V, 100KΩ, 1024 Tap, SPI, Single Supply	14-TSSOP	6.67	4.49	3.88
X9116WS8-ND	Single DCP, 5V, 10KΩ, 16 Tap, 3-Wire Up/Down	8-SOIC	1.29	.98	.75
X9116WS8I-ND	Single DCP, 5V, 10KΩ, 16 Tap, 3-Wire Up/Down	8-SOIC	1.61	1.23	.94
X9116WM8-ND	Single DCP, 5V, 10KΩ, 16 Tap, 3-Wire Up/Down	8-MSOP	1.53	1.16	.89
X9116WM8I-ND	Single DCP, 5V, 10KΩ, 16 Tap, 3-Wire Up/Down	8-MSOP	1.91	1.46	1.12
X9116WS8-2.7-ND	Single DCP, 2.7V, 10KΩ, 16 Tap, 3-Wire Up/Down	8-SOIC	1.42	1.08	.83
X9116WS8I-2.7-ND	Single DCP, 2.7V, 10KΩ, 16 Tap, 3-Wire Up/Down	8-SOIC	1.76	1.35	1.03
X9118TV14-ND	Single DCP, 5V, 100KΩ, 1024 Tap, I^{2}C, Dual Supply	14-TSSOP	5.35	3.60	3.12
X9118TV14I-ND	Single DCP, 5V, 100KΩ, 1024 Tap, I^{2}C, Dual Supply	14-TSSOP	6.67	4.49	3.88
X9119TV14-ND	Single DCP, 5V, 100KΩ, 1024 Tap, I^{2}C, Single Supply	14-TSSOP	5.35	3.60	3.12
X9119TV14I-ND	Single DCP, 5V, 100KΩ, 1024 Tap, I^{2}C, Single Supply	14-TSSOP	6.67	4.49	3.88
X9119TV14-2.7-ND	Single DCP, 2.7V, 100KΩ, 1024 Tap, I^{2}C, Single Supply	14-TSSOP	5.89	3.96	3.43
X9119TV14I-2.7-ND	Single DCP, 2.7V, 100KΩ, 1024 Tap, I^{2}C, Single Supply	14-TSSOP	7.35	4.94	4.28
X9221UP-ND	Dual DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-Dip	4.77	3.63	2.78
X9221UPI-ND	Dual DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-Dip	5.98	4.55	3.48
X9221US-ND	Dual DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-SOIC	4.77	3.63	2.78
X9221USI-ND	Dual DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-SOIC	5.98	4.55	3.48
X9221WP-ND	Dual DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-Dip	4.77	3.63	2.78
X9221WPI-ND	Dual DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-Dip	5.98	4.55	3.48
X9221WS-ND	Dual DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-SOIC	4.77	3.63	2.78
X9241UP-ND	Quad DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-Dip	6.36	4.84	3.70
X9241UPI-ND	Quad DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-Dip	7.96	6.05	4.63
X9241US-ND	Quad DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-SOIC	6.36	4.84	3.70
X9241USI-ND	Quad DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-SOIC	7.96	6.05	4.63
X9241UV-ND	Quad DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-TSSOP	7.53	5.72	4.38
X9241UVI-ND	Quad DCP, 5V, 50KΩ, 64 Tap, I^{2}C	20-TSSOP	9.40	7.15	5.47
X9241WP-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-Dip	6.36	4.84	3.70
X9241WPI-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-Dip	7.96	6.05	4.63
X9241WS-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-SOIC	6.36	4.84	3.70
X9241WSI-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-SOIC	7.96	6.05	4.63
X9241WV-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-TSSOP	7.53	5.72	4.38
X9241WVI-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C	20-TSSOP	9.40	7.15	5.47
X9250TS24-ND	Quad DCP, 5V, 100KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	8.94	6.81	5.20
X9250TS24I-ND	Quad DCP, 5V, 100KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	11.20	8.52	6.52
X9250TS24-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	9.85	7.50	5.73
X9250TS24I-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	12.32	9.37	7.17
X9250US24-ND	Quad DCP, 5V, 50KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	8.94	6.81	5.20
X9250US24I-ND	Quad DCP, 5V, 50KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	11.20	8.52	6.52
X9250US24-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	9.85	7.50	5.73
X9250US24I-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	12.32	9.37	7.17
X9251TS24-ND	Quad DCP, 5V, 100KΩ, 256 Tap, SPI, Single Supply	24-SOIC	8.94	6.81	5.20
X9251TS24I-ND	Quad DCP, 5V, 100KΩ, 256 Tap, SPI, Single Supply	24-SOIC	11.20	8.52	6.52
X9251TS24-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, SPI, Single Supply	24-SOIC	9.85	7.50	5.73
X9251TS24I-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, SPI, Single Supply	24-SOIC	12.32	9.37	7.17
X9251US24-ND	Quad DCP, 5V, 50KΩ, 256 Tap, SPI, Single Supply	24-SOIC	8.94	6.81	5.20
X9251US24I-ND	Quad DCP, 5V, 50KΩ, 256 Tap, SPI, Single Supply	24-SOIC	11.20	8.52	6.52
X9251US24-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, SPI, Single Supply	24-SOIC	9.85	7.50	5.73
X9251US24I-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, SPI, Single Supply	24-SOIC	12.32	9.37	7.17
X9258TS24-ND	Quad DCP, 5V, 100KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	8.94	6.81	5.20
X9258TS24I-ND	Quad DCP, 5V, 100KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	11.20	8.52	6.52
X9258TS24-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	9.85	7.50	5.73
X9258TS24I-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	12.32	9.37	7.17
X9258US24-ND	Quad DCP, 5V, 50KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	8.94	6.81	5.20
X9258US24I-ND	Quad DCP, 5V, 50KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	11.20	8.52	6.52
X9258US24-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	9.85	7.50	5.73
X9258US24I-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	12.32	9.37	7.17
X9259TS24-ND	Quad DCP, 5V, 100KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	8.94	6.81	5.20
X9259TS24I-ND	Quad DCP, 5V, 100KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	11.20	8.52	6.52
X9259TS24-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	9.85	7.50	5.73
X9259TS24I-2.7-ND	Quad DCP, 2.7V, 100KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	12.32	9.37	7.17
X9259US24-ND	Quad DCP, 5V, 50KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	8.94	6.81	5.20
X9259US24I-ND	Quad DCP, 5V, 50KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	11.20	8.52	6.52
X9259US24-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	9.85	7.50	5.73
X9259US24I-2.7-ND	Quad DCP, 2.7V, 50KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	12.32	9.37	7.17
X9260TS24-ND	Dual DCP, 5V, 100KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	6.71	5.11	3.90
X9260US24-ND	Dual DCP, 5V, 50KΩ, 256 Tap, SPI, Dual Supply	24-SOIC	6.71	5.11	3.90
X9261TS24-ND	Dual DCP, 5V, 100KΩ, 256 Tap, SPI, Single Supply	24-SOIC	6.71	5.11	3.90
X9261US24-ND	Dual DCP, 5V, 50KΩ, 256 Tap, SPI, Single Supply	24-SOIC	6.71	5.11	3.90
X9268TS24-ND	Dual DCP, 5V, 100KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	6.71	5.11	3.90
X9268US24-ND	Dual DCP, 5V, 50KΩ, 256 Tap, I^{2}C, Dual Supply	24-SOIC	6.71	5.11	3.90
X9269TS24-ND	Dual DCP, 5V, 100KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	6.71	5.11	3.90
X9269US24-ND	Dual DCP, 5V, 50KΩ, 256 Tap, I^{2}C, Single Supply	24-SOIC	6.71	5.11	3.90
X9271TV14-ND	Single DCP, 5V, 100KΩ, 256 Tap, SPI	14-TSSOP	5.38	4.09	3.13
X9271TV14-2.7-ND	Single DCP, 2.7V, 100KΩ, 256 Tap, SPI	14-TSSOP	5.89	4.49	3.43
X9271UV14-ND	Single DCP, 5V, 50KΩ, 256 Tap, SPI	14-TSSOP	5.38	4.09	3.13
X9271UV14-2.7-ND	Single DCP, 2.7V, 50KΩ, 256 Tap, SPI	14-TSSOP	5.89	4.49	3.43
X9279TV14-ND	Single DCP, 5V, 100KΩ, 256 Tap, I^{2}C	14-TSSOP	5.38	4.09	3.13
X9279TV14-2.7-ND	Single DCP, 2.7V, 100KΩ, 256 Tap, I^{2}C	14-TSSOP	5.89	4.49	3.43
X9279UV14-ND	Single DCP, 5V, 50KΩ, 256 Tap, I^{2}C	14-TSSOP	5.38	4.09	3.13
X9279UV14-2.7-ND	Single DCP, 2.7V, 50KΩ, 256 Tap, I^{2}C	14-TSSOP	5.89	4.49	3.43
X9312US-ND	Single DCP, 5V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9312WP-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	4.58	3.05	2.67
X9312WS-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9313TS-ND	Single DCP, 5V, 100KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9313US-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9313USI-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.41	1.84	1.40
X9313UMI-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	2.84	2.17	1.65
X9313WS-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9313WSI-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.41	1.84	1.40
X9313ZS-ND	Single DCP, 5V, 1KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9313ZSI-ND	Single DCP, 5V, 1KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.41	1.84	1.40
X9314WS-ND	Single DCP, 5V, 10KΩ, 32 Tap, Log Taper, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9315TS-ND	Single DCP, 5V, 100KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9315TSI-ND	Single DCP, 5V, 100KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.41	1.84	1.40
X9315TS-2.7-ND	Single DCP, 2.7V, 100KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.49	1.69	1.45
X9315TSI-2.7-ND	Single DCP, 2.7V, 100KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.86	1.95	1.67
X9315US-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9315USI-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.41	1.84	1.40
X9315UM-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	2.37	1.61	1.38
X9315UMI-ND	Single DCP, 5V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	2.73	1.85	1.59
X9315US-2.7-ND	Single DCP, 2.7V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.49	1.69	1.45
X9315USI-2.7-ND	Single DCP, 2.7V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.86	1.95	1.67
X9315UM-2.7-ND	Single DCP, 2.7V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	2.62	1.78	1.53
X9315UMI-2.7-ND	Single DCP, 2.7V, 50KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	3.01	2.04	1.75
X9315WP-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-Dip	1.94	1.48	1.13
X9315WPI-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-Dip	2.41	1.84	1.40
X9315WS-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	1.94	1.48	1.13
X9315WSI-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.41	1.84	1.40
X9315WM-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	2.28	1.74	1.33
X9315WMI-ND	Single DCP, 5V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	2.84	2.17	1.65

(Continued)

XICOR DIGITALLY CONTROLLED POTENTIOMETERS *(Continued)*

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
X9315WS-2.7-ND	Single DCP, 2.7V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.11	1.62	1.23
X9315WSI-2.7-ND	Single DCP, 2.7V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-SOIC	2.64	2.02	1.54
X9315WM-2.7-ND	Single DCP, 2.7V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	2.49	1.91	1.45
X9315WMI-2.7-ND	Single DCP, 2.7V, 10KΩ, 32 Tap, 3-Wire Up/Down	8-MSOP	3.14	2.40	1.83
X9317US8-ND	Single DCP, 5V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9317US8I-ND	Single DCP, 5V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9317UM8-ND	Single DCP, 5V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	3.42	2.61	1.99
X9317UM8I-ND	Single DCP, 5V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	4.26	3.25	2.48
X9317UV8-ND	Single DCP, 5V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	3.42	2.61	1.99
X9317UV8I-ND	Single DCP, 5V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	4.26	3.25	2.48
X9317US8-2.7-ND	Single DCP, 2.7V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.18	2.43	1.85
X9317US8I-2.7-ND	Single DCP, 2.7V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.98	3.04	2.32
X9317UM8-2.7-ND	Single DCP, 2.7V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	3.74	2.86	2.18
X9317UM8I-2.7-ND	Single DCP, 2.7V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	4.69	3.57	2.73
X9317UV8-2.7-ND	Single DCP, 2.7V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	3.74	2.86	2.18
X9317UV8I-2.7-ND	Single DCP, 2.7V, 50KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	4.69	3.57	2.73
X9317WP-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-Dip	2.88	2.20	1.68
X9317WS8-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9317WS8I-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9317WM8-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	3.42	2.61	1.99
X9317WM8I-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	4.26	3.25	2.48
X9317WV8-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	3.42	2.61	1.99
X9317WV8I-ND	Single DCP, 5V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	4.26	3.25	2.48
X9317WS8-2.7-ND	Single DCP, 2.7V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.18	2.43	1.85
X9317WS8I-2.7-ND	Single DCP, 2.7V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.98	3.04	2.32
X9317WM8-2.7-ND	Single DCP, 2.7V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	3.74	2.86	2.18
X9317WM8I-2.7-ND	Single DCP, 2.7V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-MSOP	4.69	3.57	2.73
X9317WV8-2.7-ND	Single DCP, 2.7V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	3.74	2.86	2.18
X9317WV8I-2.7-ND	Single DCP, 2.7V, 10KΩ, 100 Tap, 3-Wire Up/Down	8-TSSOP	4.69	3.57	2.73
X9317ZS8-ND	Single DCP, 5V, 1KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	2.88	2.20	1.68
X9317ZS8I-ND	Single DCP, 5V, 1KΩ, 100 Tap, 3-Wire Up/Down	8-SOIC	3.61	2.75	2.10
X9400WP24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-Dip	7.10	5.39	4.13
X9400WS24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	6.36	4.84	3.70
X9400WS24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	7.96	6.05	4.63
X9400WV24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	7.96	6.05	4.63
X9400WV24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	9.95	7.57	5.79
X9400WS24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	7.01	5.33	4.08
X9400WS24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	8.75	6.66	5.09
X9400WV24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	8.75	6.66	5.09
X9400WV24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	10.94	8.33	6.37
X9401WS24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	24-SOIC	6.36	4.84	3.70
X9401WS24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	24-SOIC	7.96	6.05	4.63
X9401WV24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	24-TSSOP	7.96	6.05	4.63
X9401WV24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	24-TSSOP	9.93	7.56	5.78
X9401WS24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	24-SOIC	7.01	5.33	4.08
X9401WS24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	24-SOIC	8.75	6.66	5.09
X9401WV24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	24-TSSOP	8.75	6.66	5.09
X9401WV24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	24-TSSOP	10.94	8.33	6.37
X9408WS24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-SOIC	6.36	4.84	3.70
X9408WS24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-SOIC	7.96	6.05	4.63
X9408WV24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-TSSOP	7.96	6.05	4.63
X9408WV24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-TSSOP	9.95	7.57	5.79
X9408WS24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-SOIC	7.01	5.33	4.08
X9408WS24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-SOIC	8.75	6.66	5.09
X9408WV24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-TSSOP	8.75	6.66	5.09
X9408WV24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-TSSOP	10.94	8.33	6.37
X9409WS24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-SOIC	6.36	4.84	3.70
X9409WS24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-SOIC	7.96	6.05	4.63
X9409WV24-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-TSSOP	7.96	6.05	4.63
X9409WV24I-ND	Quad DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-TSSOP	9.93	7.56	5.78
X9409WS24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-SOIC	7.01	5.33	4.08
X9409WS24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-SOIC	8.75	6.66	5.09
X9409WV24-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-TSSOP	8.75	6.66	5.09
X9409WV24I-2.7-ND	Quad DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	24-TSSOP	10.94	8.33	6.37
X9410WS24-ND	Dual DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	4.77	3.63	2.78
X9410WS24I-ND	Dual DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	5.98	4.55	3.48
X9410WV24-ND	Dual DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	5.98	4.55	3.48
X9410WV24I-ND	Dual DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	7.46	5.68	4.34
X9410WS24-2.7-ND	Dual DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	5.25	3.99	3.05
X9410WS24I-2.7-ND	Dual DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-SOIC	6.56	4.99	3.82
X9410WV24-2.7-ND	Dual DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	6.56	4.99	3.82
X9410WV24I-2.7-ND	Dual DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	24-TSSOP	8.21	6.25	4.78
X9418WS24-ND	Dual DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-SOIC	4.77	3.63	2.78
X9418WS24I-ND	Dual DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-SOIC	5.98	4.55	3.48
X9418WV24-ND	Dual DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-TSSOP	5.98	4.55	3.48
X9418WV24I-ND	Dual DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-TSSOP	7.46	5.68	4.34
X9418WV24-2.7-ND	Dual DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-TSSOP	6.56	4.99	3.82
X9418WS24I-2.7-ND	Dual DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	24-SOIC	6.56	4.99	3.82
X9420WS16-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	16-SOIC	3.18	2.42	1.85
X9420WS16I-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	16-SOIC	3.98	3.03	2.32
X9420WV14-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	14-TSSOP	3.76	2.87	2.19
X9420WV14I-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Dual Supply	14-TSSOP	4.69	3.57	2.73
X9420WS16-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	16-SOIC	3.50	2.67	2.04
X9420WS16I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	16-SOIC	4.39	3.34	2.55
X9420WV14-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	14-TSSOP	4.13	3.14	2.40
X9420WV14I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Dual Supply	14-TSSOP	5.16	3.93	3.00
X9421WS16-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	16-SOIC	3.18	2.42	1.85
X9421WS16I-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	16-SOIC	3.98	3.04	2.32
X9421WV14-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	14-TSSOP	3.74	2.86	2.18
X9421WV14I-ND	Single DCP, 5V, 10KΩ, 64 Tap, SPI, Single Supply	14-TSSOP	4.69	3.57	2.73
X9421WS16-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	16-SOIC	3.50	2.66	2.04
X9421WS16I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	16-SOIC	4.36	3.33	2.54
X9421WV14-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	14-TSSOP	4.13	3.14	2.40
X9421WV14I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, SPI, Single Supply	14-TSSOP	5.16	3.93	3.00
X9428WS16-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	16-SOIC	3.18	2.42	1.85
X9428WS16I-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	16-SOIC	3.98	3.03	2.32
X9428WV14-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	14-TSSOP	3.76	2.87	2.19
X9428WV14I-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	14-TSSOP	4.69	3.57	2.73
X9428WS16-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	16-SOIC	3.50	2.67	2.04
X9428WS16I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	16-SOIC	4.39	3.34	2.55
X9428WV14-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	14-TSSOP	4.13	3.14	2.40
X9428WV14I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Dual Supply	14-TSSOP	5.16	3.93	3.00
X9429WS16-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	16-SOIC	3.18	2.42	1.85
X9429WS16I-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	16-SOIC	3.98	3.04	2.32
X9429WV14-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	14-TSSOP	3.74	2.86	2.18
X9429WV14I-ND	Single DCP, 5V, 10KΩ, 64 Tap, I^{2}C, Single Supply	14-TSSOP	4.69	3.57	2.73
X9429WS16-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	16-SOIC	3.50	2.66	2.04
X9429WS16I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	16-SOIC	4.36	3.33	2.54
X9429WV14-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	14-TSSOP	4.13	3.14	2.40
X9429WV14I-2.7-ND	Single DCP, 2.7V, 10KΩ, 64 Tap, I^{2}C, Single Supply	14-TSSOP	5.16	3.93	3.00
X9511WP-ND	Single DCP, 5V, 10KΩ, 32 Tap, "Pushpot"	8-Dip	1.94	1.48	1.13
X9511WPI-ND	Single DCP, 5V, 10KΩ, 32 Tap, "Pushpot"	8-Dip	2.41	1.84	1.40
X9511WS-ND	Single DCP, 5V, 10KΩ, 32 Tap, "Pushpot"	8-SOIC	1.94	1.48	1.13
X9511WSI-ND	Single DCP, 5V, 10KΩ, 32 Tap, "Pushpot"	8-SOIC	2.41	1.84	1.40

XICOR DCPs FOR LASER DIODE CONTROL OF FIBER OPTIC MODULES

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
X9520V20I-A-ND	Triple DCP for Laser Diode Control, 2K I^{2}C EE, POR, 3.3V System	20-TSSOP	8.28	6.30	4.82
X9520V20I-B-ND	Triple DCP for Laser Diode Control, 2K I^{2}C EE, POR, 5V System	20-TSSOP	8.28	6.30	4.82
X9521V20I-ND	Dual DCP for Laser Diode Control, 2K I^{2}C EE *NEW!*	20-TSSOP	7.63	5.81	4.44
X9522V20I-A-ND	Triple DCP for Laser Diode Control, I^{2}C, 3.3V System	20-TSSOP	7.16	5.46	4.17
X9522V20I-B-ND	Triple DCP for Laser Diode Control, I^{2}C, 5V System	20-TSSOP	7.16	5.46	4.17
X9523V20I-A-ND	Dual DCP for Laser Diode Control, I^{2}C, POR, 3.3V System	20-TSSOP	6.69	5.08	3.89
X9523V20I-B-ND	Dual DCP for Laser Diode Control, I^{2}C, POR, 5V System	20-TSSOP	6.69	5.08	3.89

XICOR DIGITALLY CONTROLLED POTENTIOMETERS WITH OP AMP

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
X9430WS24-ND	Dual DCP, Dual Op Amp, 5V, 10KΩ, 64 Tap, SPI	24-SOIC	7.01	5.33	4.08
X9430WS24I-ND	Dual DCP, Dual Op Amp, 5V, 10KΩ, 64 Tap, SPI	24-SOIC	8.75	6.66	5.09
X9430WV24-ND	Dual DCP, Dual Op Amp, 5V, 10KΩ, 64 Tap, SPI	24-TSSOP	4.60	3.51	2.68
X9430WS24-2.7-ND	Dual DCP, Dual Op Amp, 2.7V, 10KΩ, 64 Tap, SPI	24-SOIC	7.70	5.86	4.48
X9430WS24I-2.7-ND	Dual DCP, Dual Op Amp, 2.7V, 10KΩ, 64 Tap, SPI	24-SOIC	9.63	7.33	5.60
X9430WV24-2.7-ND	Dual DCP, Dual Op Amp, 2.7V, 10KΩ, 64 Tap, SPI	24-TSSOP	9.63	7.33	5.60
X9438WS24-ND	Dual DCP, Dual Op Amp, 5V, 10KΩ, 64 Tap, I^{2}C	24-SOIC	7.01	5.33	4.08
X9438WS24I-ND	Dual DCP, Dual Op Amp, 5V, 10KΩ, 64 Tap, I^{2}C	24-SOIC	4.60	3.51	2.68
X9438WV24-ND	Dual DCP, Dual Op Amp, 5V, 10KΩ, 64 Tap, I^{2}C	24-TSSOP	8.75	6.66	5.09
X9438WV24I-ND	Dual DCP, Dual Op Amp, 5V, 10KΩ, 64 Tap, I^{2}C	24-TSSOP	10.94	8.33	6.37
X9438WS24-2.7-ND	Dual DCP, Dual Op Amp, 2.7V, 10KΩ, 64 Tap, I^{2}C	24-SOIC	7.70	5.86	4.48
X9438WV24-2.7-ND	Dual DCP, Dual Op Amp, 2.7V, 10KΩ, 64 Tap, I^{2}C	24-TSSOP	9.63	7.33	5.60

XICOR DIGITALLY CONTROLLED POTENTIOMETER WITH VOLTAGE COMPARATOR

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
X9440WS24-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, SPI	24-SOIC	7.01	5.33	4.08
X9440WS24I-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, SPI	24-SOIC	8.75	6.66	5.09
X9440WV24-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, SPI	24-TSSOP	8.75	6.66	5.09
X9440WV24I-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, SPI	24-TSSOP	10.94	8.33	6.37
X9440WS24-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, SPI	24-SOIC	7.70	5.86	4.48
X9440WS24I-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, SPI	24-SOIC	9.63	7.33	5.60
X9440WV24-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, SPI	24-TSSOP	9.63	7.33	5.60
X9440WV24I-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, SPI	24-TSSOP	12.04	9.16	7.00
X9448WS24-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, I^{2}C	24-SOIC	7.01	5.33	4.08
X9448WS24I-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, I^{2}C	24-SOIC	8.75	6.66	5.09
X9448WV24-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, I^{2}C	24-TSSOP	8.75	6.66	5.09
X9448WV24I-ND	Dual Prog. Comparator, 5V, 10KΩ, 64 Tap, I^{2}C	24-TSSOP	10.94	8.33	6.37
X9448WS24-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, I^{2}C	24-SOIC	7.70	5.86	4.48
X9448WS24I-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, I^{2}C	24-SOIC	9.63	7.33	5.60
X9448WV24-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, I^{2}C	24-TSSOP	9.63	7.33	5.60
X9448WV24I-2.7-ND	Dual Prog. Comparator, 2.7V, 10KΩ, 64 Tap, I^{2}C	24-TSSOP	12.04	9.16	7.00

Melexis SPECIALIZED INTEGRATED CIRCUITS

Microelectronic Integrated Systems

Digi-Key Part No.	Description	Pkg.	Price Each★ 1	25	100
MLX90217LUA-ND	Hall Effect Geartooth Speed Sensor	UA/TO-92 (flat)	5.83	3.46	2.05
MLX90247ESF-B-ND	Thermopile with On-Chip PTC Thermistor	TO-39	12.16	7.20	4.28
MLX90247ESF-C-ND	Thermopile with Off-Chip 100k NTC Thermistor	TO-39	13.22	7.84	4.65
MLX90601EZA-B-ND	Infrared Thermometer Module, Analog Output	—	52.66	31.15	18.44
MLX90601EZA-C-ND	Infrared Thermometer Module, SPI Serial Output, 10bit Resolution	—	52.66	31.15	18.44
MLX90601EZA-D-ND	Infrared Thermometer Module, PWM Output, 10bit Resolution	—	52.66	31.15	18.44
MLX90308LDF-ND	Programmable Sensor Interface	16-SOIC	21.12	12.51	7.43
MLX90314LDF-ND	High Gain Programmable Sensor Interface	16-SOIC	21.12	12.51	7.43
DK90308-ND	Demo Kit for MLX90308 Sensor Interface with SOIC Socket, Serial Interface Datasheet and Programming Manual (diskette), Software, and (5) 90308 Samples	—	100.00	—	—
DK90314-ND	Demo Kit for MLX90314 Sensor Interface with SOIC Socket, Serial Interface Datasheet and Programming Manual (diskette), Software, and (5) 90314 Samples	—	100.00	—	—
EVB90601-ND	Evaluation Board for MLX90601 Infrared Thermometer Module, Supply, Serial Cable, Manual and Software	—	100.00	—	—

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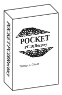
DATA BOOKS

NATIONAL SEMICONDUCTOR

Description	Digi-Key Part No.	Price Each
1996-1997 COP8 Data Book Contains data on: COP8 family and applications, microwire/plus peripherals, development support and appendices/physical dimensions.	**9280B-ND**	**$18.00**
1995 Data Acquisition Data Book Contains data on: D/A and A/D Converters, voltage ref., sample and hold, temperature sensors, analog switches-multiplexors and active filters.	**9242B-ND**	**$18.00**
1995 Operational Amplifiers Data Book Contains data on: Op amps, buffers, voltage comparators, instrumentation amplifiers, surface mount, appendixes/physical dimensions.	**9243B-ND**	**$17.00**
1993 Packaging Data Book Contains data on: introduction, Hermetic packages, plastic packages, advanced pkg. technology, package reliability considerations, packaging considerations, surface mount considerations and appendix.	**9255B-ND**	**$7.00**
1995 Power ICs Data Book Contains data on: linear, low dropout, and switching volt. regulators, motion control, peripheral drivers, high current switches, surface mount, and appendixes/physical dim.	**9244B-ND**	**$12.00**
Real-Time Clock Handbook	**9205B-ND**	**$7.00**

POCKET REFERENCE SERIES



Description	Digi-Key Part No.	Price Each
Pocket PC DIRectory Contains directory information on over 1500 companies involved in PC manufacturing. Includes company names and addresses, phone, fax and world wide web address.	**9273B-ND**	**$8.95**

MISCELLANEOUS

Description	Digi-Key Part No.	Price Each
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Aromat Relay Guide Data Book	**9277B-ND**	**$2.95**
Burr-Brown Linear & Mixed Signal Products Data Book	**LI-501-ND**	**$4.94**
C&K Switch Data Book	**9138B-ND**	**$2.95**
Condor Power Engineering Manual	**9288B-ND**	**$2.95**
Crydom Solid State Relay Design Guide	**9213B-ND**	**$19.95**
ECS X-Tal/Oscillator Data Book	**9256B-ND**	**$2.95**
E-Switch Data Book	**9157B-ND**	**$2.95**
Desco ESD Awareness Guide	**16-1013-ND**	**$3.00**
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IERC Heatsinks Databook	**9295B-ND**	**$2.50**
1990 Linear Technology Applications Handbook, Vol. I	**9177B-ND**	**$19.95**
1990 Linear Technology Data Book, Vol. I	**9175B-ND**	**$9.95**
1992 Linear Technology Data Book, Vol. II	**9176B-ND**	**$9.95**
1993 Linear Technology Applications Handbook, Vol. II	**9258B-ND**	**$19.95**
1994 Linear Technology Data Book, Vol. III	**9210B-ND**	**$9.95**
1995 Linear Technology Data Book, Vol. IV	**9257B-ND**	**$10.00**
1996 Linear Technology Data Book, Vol. V	**9285B-ND**	**$10.00**
1997 Linear Technology Applications Handbook	**9286B-ND**	**$20.00**
1997 Linear Technology Data Book, Vol. VI	**9294B-ND**	**$12.50**
Linear View CD-ROM Contains Data Sheets and Applications Information.	**LTDS-ND**	**$3.00**
Lumex Master Catalog CD-ROM 3.0	**67-1542-ND**	**$1.95**
Microchip PIC16C7X Series Family Data Book	**9267B-ND**	**$6.95**
Microchip Embedded Control PIC Handbook, Volume 1	**DS00092D-ND**	**$9.95**
Microchip Embedded Control Handbook Update 2000	**DS00711-ND**	**$5.00**
Omron Counters Full Line Catalog	**9248B-ND**	**$2.00**
Omron Solid State Timers Catalog	**9249B-ND**	**$1.00**
Omron Photomicrosensors Data Book	**9136B-ND**	**$2.95**
Omron Relay Data Book	**9135B-ND**	**$2.95**
Raychem PolySwitch® Resettable Fuses Data Book	**H55440-ND**	**$7.95**
Teccor Thyristor Product Catalog	**9291B-ND**	**$3.00**
Teccor Sidactor Data Book	**9292B-ND**	**$2.25**
Toko Application Notes for Balun Transformers 458DB-456DB	**9179B-ND**	**$1.95**
Toko Application Notes for Balun Transformers 458DS-456DS	**9180B-ND**	**$1.95**
Toko Coils and Filters Catalog	**9139B-ND**	**$9.95**
Toko IC Data Book	**9194B-ND**	**$15.00**

Melexis
Microelectronic Integrated Systems

RF Transmitters, Receivers and Evaluation Boards

RF Transmitters: • Fully integrated • PLL-stabilized VCO • Flexible frequency possible with external varactor • Wide power supply range • High over-all range • High deviation possible for wideband data transmission • FM frequency accuracy • Very low standby current • Adjustable output power range • Adjustable current consumption • Frequency deviation and center frequency • Differential output well-suited for loop antenna • External clock available for m C drive • "Clock Only" mode

RF Receivers: • Single superhet architecure for low external component count • FSK for digital data and FM reception • For analog signal transmission • FM/FSK demodulation with phase-coincidence demodulator • Low current consumption in active mode and very low standby current • Switchable LMA gain for improved dynamic range • RSSI allows signal strength indication and ASK detection.

RF Filter: • Wide cutoff frequency range (0.8 to 22.4 MHz) • Dual-channel architecture produces superior matching and ease of use for quadrature signals • Low power consumption (<105 mA, typical 55 mA from -5V supply; FC = 1 MHz @ 25°C) • Companding design provides higher resolution at lower cutoff frequencies • Single ended or differential input operation possible (AC coupled) • No external components for trimming necessary

Protocol	Pkg.	Frequency MHz	Temperature Range	Digi-Key Part No.	Price Each 1	10	25	50
RF Transmitters								
FSK/FM/ASK	16-SSOP	315/433	-40° to 85°C	TH7107EFF-ND	5.60	4.26	3.28	2.53
ASK	8-SOIC	315/433		TH71071EDC-ND	4.54	3.46	2.66	2.05
ASK	8-SOIC	315/433		TH71072EDC-ND	4.54	3.46	2.66	2.05
ASK	8-SOIC	868/915		TH71081EDC-ND	4.54	3.46	2.66	2.05
FSK/FM/ASK	16-SSOP	868/915		TH7108EFF-ND	5.60	4.26	3.28	2.53
RF Receivers								
FSK/FM/ASK	32-LQFP	315/433	-40° to 85°C	TH71101ENE-ND	11.60	8.83	6.80	5.24
	32-LQFP	315/433		TH71102ENE-ND	11.60	8.83	6.80	5.24
	32-LQFP	868/915		TH71111ENE-ND	11.60	8.83	6.80	5.24
	32-LQFP	868/915		TH71112ENE-ND	11.60	8.83	6.80	5.24

Description	Pkg.	Digi-Key Part No.	Price Each 1	10	25	Digi-Key Part No.	T & R Pricing 1,500
RF Filter							
Programmable, Low-Pass Filter	16-SOIC	TH7301EDF-ND	22.71	17.28	13.30	TH7301EDF-TR-ND	5404.00/M

Description	Digi-Key Part No.	Price Each
RF Evaluation Boards For Transmitters (Includes PC Board With Matched Loop Antenna and Transmitter)		
Evaluation Board for TH7107 Transmitter	EVB7107-ND	50.00
Evaluation Board for TH7108 Transmitter	EVB7108-ND	50.00
RF Evaluation Boards for Receivers (Includes PC Board With Coax Antenna Input and Receiver)		
Evaluation Board for TH7110 Receiver	EVB7110-ND	100.00
Evaluation Board for TH71101 Receiver	EVB71101-ND	100.00
Evaluation Board for TH71102 Receiver	EVB71102-ND	100.00
Evaluation Board for TH7111 Receiver	EVB7111-ND	100.00
Evaluation Board for TH71111 Receiver	EVB71111-ND	100.00
Evaluation Board for TH71112 Receiver	EVB71112-ND	100.00

LINX TECHNOLOGIES
WIRELESS MADE SIMPLE

OEM Modules

All units below are pre-approved with the FCC to allow immediate integration and sale in most OEM product.

Handheld Transmitter: Compact 8-button handheld remote is capable of 100+ feet transmission ranges. The transmission can be decoded using a standard decoder IC, microcontroller, or matching Linx function module. Selectable addressing provides security and allows distinct TX/RX relationships.

Keyfob Transmitter: This tiny keyfob features outstanding range performance and is configured with 1 to 5 buttons for a variety of OEM applications.

1-4 Position Relay Function Module: Provides 4 latched relay outputs which are capable of switching external AC or DC powered loads up to 5 amps. Selectable addressing.

AC Switch Function Module: Plugs directly into a wall receptacle and is capable of switching devices at loads up to 1800 watts (15 amps) or 1 HP @ 120 VAC.

Decoder Module: Designed for integration onto a OEM's PCB. Provides eight switched outputs which correspond to the buttons on a command module. Pins on .100 (2.54mm) centers allow direct or socketed connection to a user's PCB. Integral antenna tilts and swivels.

PRECERTIFIED FCC INSTANT RF

FCC Pre-Certified OEM Products

Fig.	Description	MHz	Digi-Key Part No.	Price Each 1	25	100	Linx Part No.
1	Handheld Transmitter	315	CMD-HHTX-315-ND	32.03	29.28	24.95	CMD-HHTX-315
		418	CMD-HHTX-418-ND	32.03	29.28	24.95	CMD-HHTX-418
		433	CMD-HHTX-433-ND	32.03	29.28	24.95	CMD-HHTX-433
2	1 to 5 Button FCC Precertified Keyfob Transmitter	315	CMD-KEY5-315-ND	20.60	19.57	18.49	CMD-KEY5-315
		418	CMD-KEY5-418-ND	20.60	19.57	17.95	CMD-KEY5-418
		433	CMD-KEY5-433-ND	20.60	19.57	17.95	CMD-KEY5-433
3	1 to 4 Position Relay Function Module	315	FCTN-RLY4XX-315-ND	59.85	54.72	49.96	FCTN-RLY4XX-315
		418	FCTN-RLY4XX-418-ND	59.85	54.72	49.96	FCTN-RLY4XX-418
		433	FCTN-RLY4XX-433-ND	59.85	54.72	49.96	FCTN-RLY4XX-433
4	AC Switch Function Module - 120 VAC	418	FCTN-WALL-418-1-ND	51.45	47.04	44.95	FCTN-WALL-418-1
5	FCC Precertified Receiver Decoder Module	315	FCTN-DEC1-315-ND	23.63	21.60	17.95	FCTN-DEC1-315
		418	FCTN-DEC1-418-ND	23.63	21.60	17.95	FCTN-DEC1-418
		433	FCTN-DEC1-433-ND	23.63	21.60	17.95	FCTN-DEC1-433

Fig. 1

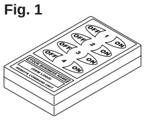


Fig. 2

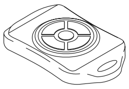


Fig. 3

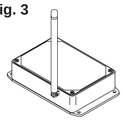


Fig. 4

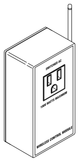
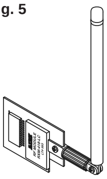


Fig. 5



RF Modules / Broadband Amplifiers / Evaluation Kits

Fig. 1

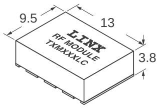


Fig. 2

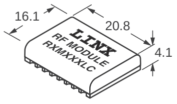


Fig. 3

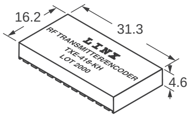


Fig. 4

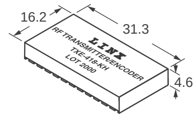


Fig. 5

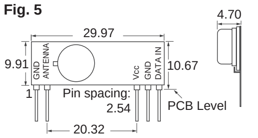


Fig. 6

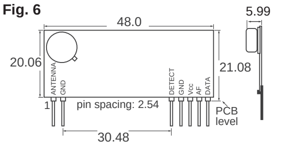


Fig. 7

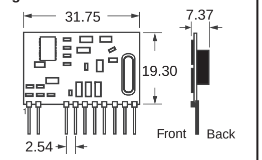


Fig. 8

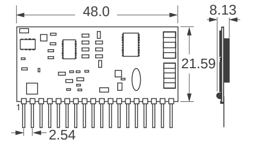


Fig. 9 *NEW!*

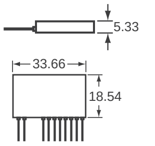


Fig. 10 *NEW!*

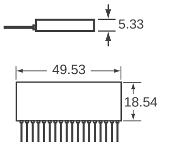


Fig. 11

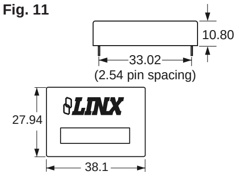


Fig. 12

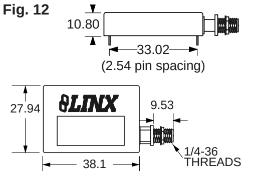


Fig. 13 *NEW!*

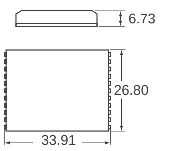


Fig. 14

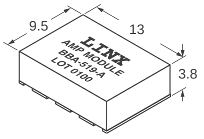


Fig. 15 *NEW!*

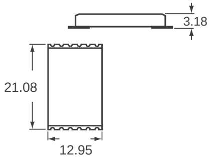
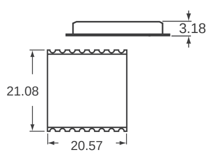


Fig. 16 *NEW!*



LC Series - Ultra-Compact Low-Cost RF TX/RX Modules: Operating in the 260-470 MHz band, these tiny RF modules provide a complete and cost-effective solution for the wireless transfer of serial control, and command information over distances in excess of 300 feet. **Transmitter:** • 2.7 - 5.2 VDC range • 1.5 mA avg. • +3 dbm output • 5Kbps max. data rate • Low harmonics • Compact hand or auto place SMD package. **Receiver:** • 2.7 - 5.2 VDC range • Low power consumption, (6mA operational, 300µA sleep) • -97 typical sensitivity @10-5 • 5Kbps max. data rate • Balanced LO for easy certification • Compact hand or auto place SMD package.

BBA Series - Broadband RF Amplifiers: These amplifiers are well suited to a wide range of amplification and buffering applications including extending the range of Linx's own RF modules (when legally appropriate). Housed in a compact SMD package, the hybrid amps are prematched to 50Ω and and require no external RF components. **BBA-322:** • High Gain Model • 10 Mhz-3 Ghz Broadband Operation • +20dB Small Signal Gain @ 900MHz • Up to +10 (10mW) Linear Output Power • 3.8 dB Noise Figure • Operates From a Single Supply. **BBA-519:** • High Output Model • 10 Mhz-4Ghz Broadband Operation • +18dB Small Signal Gain @ 900MHz • Up to +17 (50mW) Linear Output Power • 4.8dB Noise Figure • Operates From a Single Supply

RM Series: Provides a complete TX/RX solution in a compact SIP style module. The RM series utilizes an advanced SAW based design and FM/FSK modulation and operates in the 260-470 band. **Transmitter:** • 5.9 - 9.0 VDC range • 6.0 mA avg. • +3 dbm output • 10,000 Kbps max. data rate • SIP package. **RM Receiver:** • 4.0 - 9.0 VDC range • 14 mA avg. • -103 typical sensitivity • 10,000 Kbps max. data rate • SIP package.

HP-II & 3 Series - High-Performance Low-Cost RF TX/RX Modules: These modules are designed for the popular 902-928MHz band. The modules offer 8 or 256 selectable channels and are capable of transmitting analog and digital information for distances of p to 1000 ft. (under optimal conditions). These come in SIP or SMT packages. **Transmitter:** • Eight-parallel selectable channels on PO series and 8 parallel 120 serial on PS series • Synthesized architecture • 2.7-13 VDC supply range • Low power (15mA average current): • 0dbm output power • 50Kbps maximum date rate • 100Hz to 25 Khz analog bandwidth • CTS • Powerdown control • Compact SIP package **Receiver:** • Eight-parallel selectable channels on PO series and 8 parallel, 120 serial on PS series • Synthesized architecture • 2.7-18 VDC supply range • Low power (18mA average current: 50µA powerdown) • 50Kbps maximum date rate • 50Hz-25Khz analog bandwidth • RSSI output • Powerdown control • Compact

SC/PA Series - High-Performance, Low-Cost RF Transceiver: Linx transceiver modules are designed for the cost-effective, bi-directional transfer of wireless information. **SC Transceiver:** • Surface mount or Thru-hole • Synthesized architecture • 2.7-16VDC supply range • Low power (15mA Avg.) • Adjustable output power • UART compatible • 33.6Kbps max. data rate • 100Hz to 25Khz analog bandwidth • Integral antenna switch • Powerdown control **SC-PA Version Adds:** • Integrated RP-SMA antenna connection • FCC approved to eliminate additional testing (when used with approved antennas).

KH Series - Transmitter And Receiver Featuring Integrated Encoder/Decoder's: Housed in a compact SMD package the KH series combines the popular LC TX/RX with an integrated encoder/decoder pair. The encoder module accepts up to eight parallel inputs. This allows the direct connection of switches or a microcontroller. KH decoder module provides eight switched outputs and nine address lines which correspond to transmitters pin state.

ES Series: Housed in a tiny SMD package, the ES Series utilizes an advanced FM/FSK-based synthesized architecture to provide superior performance and noise immunity when compared to AM/OOK solutions. An outstanding 56Kbps maximum data rate and wide-range analog capability make the ES Series equally at home with digital data or analog sources such as audio. A host of useful features including RSSI, PDN, audio reference, LVL ADJ, low-voltage detect, and a microprocessor clock source are provided. Operates at 916.48MHz which in North America allows an unlimited variety of applications indlucing data links, audio links, process and status control, home and industrial automation, security, remote control/command, and monitoring. Like all Linx modules, the ES Series requires no tuning or external RF components (except an antenna). Audio 20Hz-28KHz, very low current for long life in battery applications. **Transmitter:** • Supply Voltage 2.1-4 • Current 6.5-7.5mA • 0dbm output power • Sleep 90µA **Reciever:** • Supply Voltage 4.5-5.5 • Current 5.5-6.5mA • Sleep 50µA

Fig.	Description	MHz	Digi-Key Part No.	Price Each			Linx Part No.
				1	25	100	
LC Series							
1	Transmitter	315	TXM-315-LC-ND	6.90	6.31	5.60	TXM-315-LC
		418	TXM-418-LC-ND	6.90	6.31	5.60	TXM-418-LC
		433	TXM-433-LC-ND	6.90	6.31	5.60	TXM-433-LC
2	Receiver	315	RXM-315-LC-S-ND	13.79	12.61	11.25	RXM-315-LC-S
		418	RXM-418-LC-S-ND	13.79	12.61	11.25	RXM-418-LC-S
		433	RXM-433-LC-S-ND	13.79	12.61	11.25	RXM-433-LC-S
KH Series							
3	Transmitter	315	TXE-315-KH-ND	9.98	9.12	7.80	TXE-315-KH
		418	TXE-418-KH-ND	9.98	9.12	7.80	TXE-418-KH
		433	TXE-433-KH-ND	9.98	9.12	7.80	TXE-433-KH
4	Receiver	315	RXD-315-KH-ND	15.93	14.56	12.75	RXD-315-KH
		418	RXD-418-KH-ND	15.93	14.56	12.75	RXD-418-KH
		433	RXD-433-KH-ND	15.93	14.56	12.75	RXD-433-KH
RM Series							
5	Transmitter	418	TXM-418-RM-ND	22.45	20.53	16.21	TXM-418-RM
		433	TXM-433-RM-ND	22.45	20.53	16.21	TXM-433-RM
6	Receiver	418	RXM-418-RM-ND	36.66	33.52	28.31	RXM-418-RM
		433	RXM-433-RM-ND	36.66	33.52	28.31	RXM-433-RM
HPII Series							
7	Transmitter 8 Channel	900	TXM-900-HP-II-ND	31.29	28.61	23.81	TXM-900-HP-II
8	Receiver 8 Channel	900	RXM-900-HP-II-ND	46.90	42.88	34.88	RXM-900-HP-II
NEW! HP3 Series NEW!							
9	Transmitter 8 Channel	900	TXM-900-HP3-PPO-ND	31.15	28.48	23.60	TXM-900-HP3-PPO
	Transmitter 8/120 Channel	900	TXM-900-HP3-PPS-ND	31.68	28.96	24.30	TXM-900-HP3-PPS
10	Receiver 8 Channel	900	RXM-900-HP3-PPO-ND	46.38	42.40	34.89	RXM-900-HP3-PPO
	Receiver 8/120 Channel	900	RXM-900-HP3-PPS-ND	46.90	42.88	35.51	RXM-900-HP3-PPS
SC/SC-PA Series							
11	SC Transceiver	900	TR-916-SC-P-ND	44.80	40.96	39.61	TR-900-SC-P
12	FCC Precertified Transceiver	900	TR-916-SC-PA-ND	48.30	46.92	46.31	TR-900-SC-PA
13	RF Transceiver	916	TR-916-SC-S-ND *NEW!*	42.88	39.20	38.41	TR-916-SC-C
BBA Series							
14	High-Gain Broadband RF Amp.	10~3,000	BBA-322-A-ND	14.80	14.06	13.50	BBA-322-A
	High-Power Broadband RF Amp.	10~4,000	BBA-519-A-ND	15.00	14.25	13.95	BBA-519-A
NEW! ES Series NEW!							
15	Transmitter	916	TXM-916-ES-ND	15.23	13.92	11.95	TXM-916-ES
16	Receiver	916	RXM-916-ES-ND	18.48	16.90	13.95	RXM-916-ES

Evaluation Kits

These kits provide the most complete opportunity to evaluate the Linx module series of your choice and then begin the integration of it into your own design.

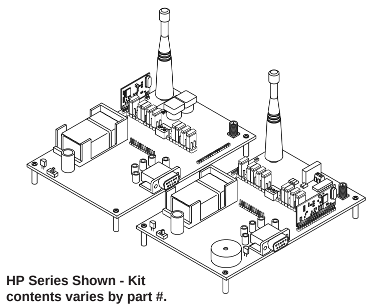
Basic Evaluation Kit:

This kit is a quick way to evaluate the field performance of Linx products. The kit does not allow for the level of testing and interface possible with Master Kits but provides a cost-effective starting point. **Basic Kits Contain:** • 2 Transmitter Modules & 2 Receiver Modules (or 2 Transceiver Modules) • 2 Antennas • 2 Fully Assembled Evaluation Boards w/batteries • Manuals • Part 2 + Part 15 Guidelines.

Master Evaluation/Development System:

The kits not only allow evaluation of the module series you have chosen, but also speeds the development of your own design via on-board prototyping area and breakout headers. **Master Kits Contain:** • 2 Transmitter Modules & 2 Receiver Modules • 2 Antennas • 2 9-Volt Batteries • 2 Fully Assembled Evaluation Boards • Manuals and FCC Guidelines

Description	MHz	Digi-Key Part No.	Price Each	Linx Part No.
Basic Evaluation Kits				
LC Series	315	EVAL-315-LC-S-ND	139.00	EVAL-315-S-LC
	418	EVAL-418-LC-S-ND	139.00	EVAL-418-LC-S
	433	EVAL-433-LC-S-ND	139.00	EVAL-433-LC-S
SC Series	916	EVAL-916-SC-ND	199.00	EVAL-916-SC
SC-PA Series	916	EVAL-916-SC-PA-ND	198.54	EVAL-916-SC-PA
KH Series	315	EVAL-315-KH-ND	149.00	EVAL-315-KH
	418	EVAL-418-KH-ND	149.00	EVAL-418-KH
	433	EVAL-433-KH-ND	149.00	EVAL-433-KH
ES Series	916	EVAL-916-ES-ND *NEW!*	179.95	EVAL-916-ES
Keyfob Series	418	EVAL-418-KEY5-ND *NEW!*	119.95	EVAL-418-KEYS
Master Evaluation Kits				
RM Series	418	MDEV-418-RM-ND	249.00	MDEV-418-RM
	433	MDEV-433-RM-ND	249.00	MDEV-433-RM
HP Series	900	MDEV-900-HP-II-ND	299.00	MDEV-900-HP-II
HP3 Series	900	MDEV-900-HP3-ND *NEW!*	299.95	MDEV-900-HP3
ES Series	916	MDEV-916-ES-ND *NEW!*	299.95	MDEV-916-ES
SC-P Series	916	MDEV-916-SC-P-ND *NEW!*	299.95	MDEV-916-SC-P
SC-S Series	916	MDEV-916-SC-S-ND *NEW!*	299.95	MDEV-916-SC-S



HP Series Shown - Kit contents varies by part #.

Antennas / Connectors

Antennas are a critical and often neglected factor in determining the range and reliability of any wireless link. Linx antennas are ideal for achieving maximum performance and cost efficiency from most discrete or modular designs. All antennas are designed to meet FCC and international standards.

LP Series: LP series antennas are low-cost, reduced height permanently attached 1/4-wave whips. They are ideal for applications requiring a rugged, cosmetically attractive, yet cost-effective antenna solution. The antennas are easily secured directly to a user's PCB via a single screw.

PW Series: Designed for permanent attachment, the PW series of 1/4-wave whip antenna is designed to offer outstanding performance in a rugged, cost-effective Part 15-compliant package. The antenna is attached by securing its base through a 1/4" hole in the product's package. The antenna is fed through the base via RG-174 (7" standard length) coax which may be soldered directly to a PCB or attached via a connector.

CW Series: The CW series antennas features an FCC Part 15-compliant Reverse Polarity SMA connector allowing for easy field replacement. These antennas deliver outstanding performance in a rugged and cosmetically attractive package.

RH Series - Reduced Height: Significantly smaller than our larger whips, the RH series is ideally suited for products where cosmetic or functional requirements dictate a compact, aesthetically pleasing antenna.

RA Series: The RA series offers maximum mounting and orientation flexibility in a cost-effective reduced height package. The antenna's innovative base allows a wide range of horizontal and vertical motions which enhances versatility for both the designer and the customer. The antenna mounts quickly to a PCB via a single screw and meets all Part 15 Requirements.

SP Series - The "Splatch": The Splatch uses a grounded line technique to extract outstanding performance from a tiny surface-mount element. Unlike many compact antennas the Splatch is highly immune to proximity effects making it an ideal choice for hand-held applications for remote controls, pagers, and alert devices. This unique antenna is designed for hand or reflow mounting directly to a product's circuit board.

HD Series - Reduced Height: This reduced height 1/4-wave antenna is ready for years of abuse thanks to a highly flexible internal helical which is over-molded with a heavy-duty protective jacket. The HD series is an excellent choice for outdoor application, or for use in adverse environments where the antenna must resist shock, harsh weather, and tampering.

GPS w/ SMA Connector: This sleekly housed active GPS antenna sets a new standard of value and performance. The antenna operates from 2.5 ~ 5.5 volts and consumes as little as 4mA. The unit's rugged housing is fully weatherized and may be mounted via its magnetic base or integral screw receptacles.

RCS Series - Ultra-Compact Right Angle: The RCS series is ideally suited for products requiring an attractive yet compact antenna in a right-angle form factor.

RCL Series - Compact Right Angle: Similar to the RCS series but in a larger form factor. It is useful in products where additional height above the product's case is needed or a slightly wider operational bandwidth is desired.

JJB Antennas: The JJB-Series packs near the performance of a conventional monopole into an incredibly compact 7mm-diameter package. These antennas are ideal for any OEM application requiring a compact, cosmetically attractive, low-cost antenna solution. The antenna features a through-hole feedline which attaches directly to a user's PCB. Internal or external mounting is possible

Fig.	Description	MHz	Digi-Key Part No.	Price Each			Linx Part No.
				1	25	100	
1	Permanent Mount Reduced Height 1/4 Wave Whip	315	ANT-315-PW-LP-ND	2.03	1.86	1.79	ANT-315-PW-LP
		418	ANT-418-PW-LP-ND	2.03	1.86	1.79	ANT-418-PW-LP
		433	ANT-433-PW-LP-ND	2.03	1.86	1.79	ANT-433-PW-LP
		916	ANT-916-PW-LP-ND	2.03	1.86	1.79	ANT-916-PW-LP
2	Permanent Mount 1/4 Wave Whip	418	ANT-418-PW-QW-ND	6.83	6.24	5.07	ANT-418-PW-QW
		433	ANT-433-PW-QW-ND	6.70	6.13	4.97	ANT-433-PW-QW
		868	ANT-868-PW-QW-ND	6.58	6.02	4.85	ANT-868-PW-QW
		916	ANT-916-PW-QW-ND	6.44	5.89	4.78	ANT-916-PW-QW
3	RP-SMA 1/4 Wave Whip	418	ANT-418-CW-QW-ND	7.88	7.20	5.74	ANT-418-CW-QW
		433	ANT-433-CW-QW-ND	7.70	7.04	5.61	ANT-433-CW-QW
		868	ANT-868-CW-QW-ND	7.53	6.88	5.48	ANT-868-CW-QW
		916	ANT-916-CW-QW-ND	7.35	6.72	5.36	ANT-916-CW-QW
4	RP-SMA Reduced Height 1/4 Wave Whip	315	ANT-315-CW-RH-ND	6.32	5.78	4.36	ANT-315-CW-RH
		418	ANT-418-CW-RH-ND	7.61	6.96	5.25	ANT-418-CW-RH
		433	ANT-433-CW-RH-ND	7.61	6.96	5.25	ANT-433-CW-RH
		916	ANT-916-CW-RH-ND	7.61	6.96	5.25	ANT-916-CW-RH
5	Permanent Mount Swivel Angle 1/4 Wave Whip	315	ANT-315-PW-RA-ND	3.45	3.11	2.89	ANT-315-PW-RA
		418	ANT-418-PW-RA-ND	3.45	3.11	2.89	ANT-418-PW-RA
		433	ANT-433-PW-RA-ND	3.45	3.11	2.89	ANT-433-PW-RA
		916	ANT-916-PW-RA-ND	3.45	3.11	2.89	ANT-916-PW-RA
6	Planar Antenna (SMT)	315	ANT-315-SP-ND	2.08	1.82	1.75	ANT-315-SP
		418	ANT-418-SP-ND	2.08	1.82	1.75	ANT-418-SP
		433	ANT-433-SP-ND	2.08	1.82	1.75	ANT-433-SP
		868	ANT-868-SP-ND	2.08	1.82	1.75	ANT-868-SP
		916	ANT-916-SP-ND	2.08	1.82	1.75	ANT-916-SP
7	RP-SMA Reduced Height 1/4 Wave Whip	315	ANT-315-CW-HD-ND	7.61	6.96	5.50	ANT-315-CW-HD
		418	ANT-418-CW-HD-ND	7.61	6.96	5.50	ANT-418-CW-HD
		433	ANT-433-CW-HD-ND	7.61	6.96	5.50	ANT-433-CW-HD
		916	ANT-916-CW-HD-ND	7.61	6.96	5.50	ANT-916-CW-HD
8	JJB Permanent Ultra-Miniature	916	ANT-916-JJB-ND *NEW!*	2.00	1.52	1.45	ANT-916-JJB
9	High Performance GPS w/SMA	1575.42	ANT-GPS-SE-SMA-ND	37.54	34.32	27.76	ANT-GPS-SE-SMA
10	RP-SMA Right Angle Compact 1/4 Wave Whip	916	ANT-916-CW-RCS-ND	6.46	5.91	5.25	ANT-916-CW-RCS
		2.4	ANT-2.4-CW-RCS-ND	6.46	5.91	5.25	ANT-2.4-CW-RCS
11	1/4 Wave Whip	916	ANT-916-CW-RCL-ND	7.04	6.44	5.50	ANT-916-CW-RCL

Fig. 1

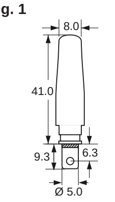


Fig. 2

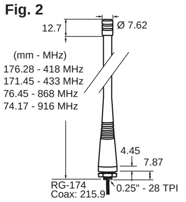


Fig. 3

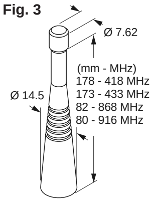


Fig. 4

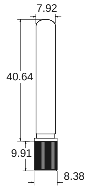


Fig. 5

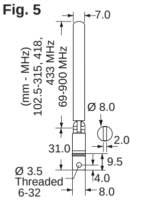


Fig. 6

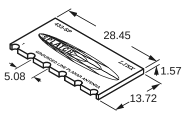


Fig. 7

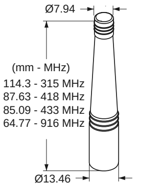


Fig. 8 *NEW!*

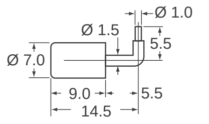


Fig. 9

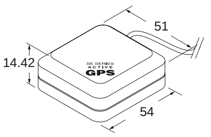


Fig. 10

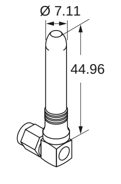
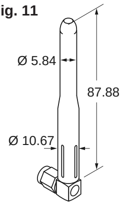


Fig. 11



RP-SMA Connectors for OEM Antennas

Fig. 1

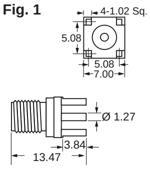


Fig. 2

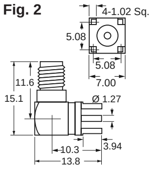


Fig. 3

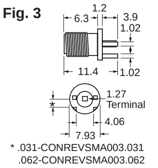


Fig. 4

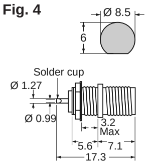


Fig. 5

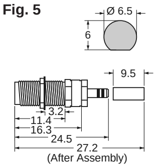


Fig. 6

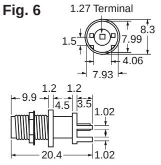


Fig. 7

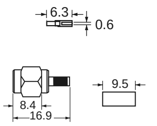


Fig. 8

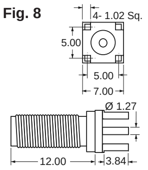


Fig.	Description	Digi-Key Part No.	Price Each				Linx Part No.
			1	25	100	200	
1	PCB Mount Connector	CONREVSMA001-ND	3.13	2.87	2.21	2.15	CONREVSMA001
2	Connector Right Angle PCB Mount	CONREVSMA002-ND	5.48	5.01	3.87	3.76	CONREVSMA002
3	Card Edge Mount Connector for Board Thickness .031" (.79mm)	CONREVSMA003.031-ND	3.75	3.43	2.65	2.57	CONREVSMA003.031
	Card Edge Mount Connector for Board Thickness .062" (1.57mm)	CONREVSMA003.062-ND	3.75	3.43	2.65	2.57	CONREVSMA003.062
4	Front Mount Bulkhead Receptacle	CONREVSMA004-ND	3.54	3.24	2.50	2.43	CONREVSMA004
5	Bulkhead Crimp Jack-Captive Contact	CONREVSMA005-ND	5.88	5.38	4.16	4.04	CONREVSMA005
5	Bulkhead Crimp Jack-Captive Contact w/8.5" Contact	CONREVSMA005C08.5-ND	7.82	7.16	5.54	5.37	CONREVSMA005-C08.5
6	Card Edge Multi-Mount Connector	CONREVSMA006.062-ND	5.48	5.01	3.87	3.76	CONREVSMA006.062
7	Cable End Connector For RG-174	CONREVSMA007-ND	5.22	4.77	3.69	3.58	CONREVSMA007
8	PCB Mount Connector-Long	CONREVSMA008-ND	3.75	3.43	2.65	2.57	CONREVSMA008

Melexis Hall Effect Sensor ICs — US Series

The output transistor of the UA package will be latched on in the presence of a sufficiently strong **south** pole magnetic field facing the marked side of the package. Similarly, the output will be latched off in the presence of a **north** field. The SOT-23 device is reversed from the UA package. The SOT-23 output transistor will be latched on in the presence of a sufficiently strong **north** pole magnetic field subjected to the marked face.

FEATURES: • Maximum Output Current: 50mA • Chopper stabilized amplifier stage • New miniature package/thin, high reliability package

Temperature Suffix: **E:** -40°C to 85°C (Commercial), **L:** -40°C to 150°C (Automotive)

US1881: A bipolar Hall Effect Sensor IC fabricated from mixed signal CMOS technology. The design, specifications and performance have been optimized for commutation applications in 5V and 12V brushless DC motors. **Feature:** • Optimized for BDC motor applications **Applications:** • Solid state switch • Brushless DC motor commutation • Speed sensing • Linear position sensing • Angular position sensing • Current sensing

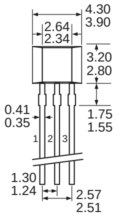
US2881 / US2882: The bipolar design, specifications and performance have been optimized for commutation applications in brushless DC motors and automotive speed sensing. **Features:** • Optimized for BDC motor applications • Ultra low current. **Applications:** • Solid state switch • Brushless DC motor commutation • Speed sensing • Linear position sensing • Angular position sensing • Current sensing

US4881: A bipolar Hall Effect Sensor IC fabricated from mixed signal CMOS technology. The design, specifications and performance have been optimized for commutation applications in brushless DC motors and automotive speed sensing. **Feature:** • Optimized for BDC motor applications. **Applications:** • Solid state switch • Brushless DC motor commutation • Speed sensing

US5881: A unipolar Hall Effect Sensor IC fabricated from mixed signal CMOS technology. The design, specifications and performance have been optimized for applications of solid state switches. **Applications:** • Solid state switch • Limit switch • Current limit • Interrupter • Current sensing

UA-92 (Flat)

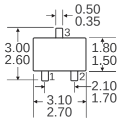
Front View



1: VDD
2: GND
3: Output

SOT-23

Top View

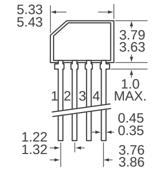


1: VDD
2: Output
3: GND

Pkg.	Supply Voltage	Operating Point (mT)			Release Point (mT)			Output Type	Oper.† Type	Temperature Range	Digi-Key Part No.	Price Each					Tape & Reel * Pricing
		Min.	Typ.	Max.	Min.	Typ.	Max.					1	10	25	50	100	3,000
SOT-23 UA-92(flat)	3.5 to 24	1.0	5.0	9.0	-9.0	-5.0	-1.0	Open Collector	Bidirectional	-40°C to 85°C	US1881ESOCT-ND* US1881EUA-ND	1.60 1.16	1.24 .90	.96 .70	.74 .54	.57 .42	424.60/M —
SOT-23 UA-92(flat)										-40°C to 150°C	US1881LSOCT-ND* US1881LUA-ND	1.89 1.52	1.47 1.19	1.13 .91	.87 .70	.67 .54	501.80/M —
SOT-23 UA-92(flat)	3.5 to 24	0.5	2.0	4.5	-4.5	-2	-0.5	Open Collector	Bidirectional	-40°C to 85°C	US2881ESOCT-ND* US2881EUA-ND	2.03 1.67	1.58 1.30	1.21 1.00	.93 .77	.72 .60	540.40/M —
SOT-23 UA-92(flat)										-40°C to 150°C	US2881LSOCT-ND* US2881LUA-ND	2.32 2.03	1.80 1.58	1.39 1.21	1.07 .93	.83 .72	617.60/M —
SOT-23 UA-92(flat)	3.5 to 24	-2.0	2.0	6.0	-6.0	-2.0	2.0	Open Collector	Bidirectional	-40°C to 85°C	US2882ESOCT-ND* US2882EUA-ND	1.60 1.38	1.24 1.07	.96 .83	.74 .64	.57 .49	424.60/M —
SOT-23 UA-92(flat)										-40°C to 150°C	US2882LSOCT-ND* US2882LUA-ND	1.81 1.60	1.41 1.24	1.08 .96	.83 .74	.65 .57	482.50/M —
UA-92(flat)	2.2 to 18	0.5	2.0	4.5	-4.5	-2	-0.5	Open Collector	Bidirectional	-40°C to 85°C -40°C to 150°C	US4881EUA-ND US4881LUA-ND	1.67 2.03	1.30 1.58	1.00 1.21	.77 .93	.60 .72	— —
SOT-23 UA-92(flat)	3.5 to 24	15	23	30	9.5	19	28	Open Collector	Unidirectional	-40°C to 85°C	US5881ESOCT-ND* US5881EUA-ND	1.96 1.67	1.52 1.30	1.17 1.00	.90 .77	.70 .60	521.10/M —
SOT-23 UA-92(flat)										-40°C to 150°C	US5881LSOCT-ND* US5881LUA-ND	2.25 1.96	1.75 1.52	1.34 1.17	1.03 .90	.80 .70	598.30/M —

***** For Tape and Reel Part Number, change CT-ND to TR-ND † Unidirectional and is only sensitive to either north or south side of magnetic; Bidirectional is sensitive to an alternating magnetic fields of both north and south sides.

Programmable Linear Hall ICs



1: VDD 2: Test/Readback
3: GND 4: Output

MLX90215: Programmable Linear Hall Effect sensor IC fabricated utilizing silicon-CMOS technology. It possesses active error correction circuitry which virtually eliminates the offset errors normally associated with analog Hall Effect devices. All magnetic response functions of the MLX90215 are fully programmable for even greater versatility. The V_{OQ} (V_{OUT}@ B=0), sensitivity, direction of slope and the magnitude of sensitivity drift over temperature, are all programmable.

The ratiometric output voltage is proportional to the supply voltage. When programmed for a conventional sensitivity (with a positive gain), the voltage at the ouput will increase as a **south** magnetic field is applied to the branded face of the MLX90215. Conversely, the voltage output will decrease in the presence of a **north** magnetic field.

Features: • Programmable Linear Hall IC • Quad Switched / Chopper Stabilized • Ratiometric Output for A/D Interface • Adjustable Quiescent Voltage (V_{OQ}) • Very Low Quiescent Voltage Temperature Drift • Adjustable Sensitivity • Adjustable Temperature Compensation of Sensitivity

Temperature Suffix: **E:** -40°C to 85°C (Commercial),
L: -40°C to 150°C (Automotive)

PTC-01: This programmer was designed for efficient and precise calibration of the Melexis family of programmable ICs. The programmer is designed to be easily adapted to a standard PC to allow calibration of programmable sensor ICs within the operating environment. The PTC-01 programmer contains its own programmable power supply and measurement circuitry. Similar to a standard EEPROM programmer, but adds special features such as 16 bit voltage and current measurement capability, and a configuration options that will accommodate users from the prototyping phase directly into production. An IBM compatible PC is required (not included) to load software to the programmer and control the functions of the programmer. DOS and Windows platforms are available, as well as source code and firmware. Communication is done through a standard RS-232 null modem cable to a COM port of the PC. The PC requires no custom configuration, allowing the programmer to be used with any PC with a COM port speed of 19.2kbs or better

Features: • RS-232 serial interface • 16-bit voltage measurement • 12-bit voltage adjustment • Compact design • Internal or external supply voltage • 4 lead SIP (50mil) • RJ45 External Connector • High-level functions in firmware

PC Requirements: Requires a PC capable of RS-232 serial communications of 19200 baud. The minimum PC requirements include a 486 or higher processor with 8MB or RAM and 4MB of available disk space.

Note: The Melexis supplied software may have additional PC requirements.

Description	Temperature Range	Pkg.	Digi-Key Part No.	Price Each			
				1	10	25	50
Precision Programmable Linear Hall IC	-40° to 85°C	4-SIP(VA)	MLX90215EVA-ND	7.75	5.96	4.59	3.54
Precision Programmable Linear Hall IC Precision Programmed Linear Hall IC, 10MV/MT 2.5V Precision Programmed Linear Hall IC, 20MV/MT 2.5V Precision Programmed Linear Hall IC, 50MV/MT 2.5V Precision Programmed Linear Hall IC, 100MV/MT 1V Precision Programmed Linear Hall IC, 100MV/MT 2.5V	-40° to 150°C	4-SIP(VA)	MLX90215LVA-ND MLX90215LVA-BC03-ND MLX90215LVA-CC03-ND MLX90215LVA-GC03-ND MLX90215LVA-LA03-ND MLX90215LVA-LC03-ND	9.74 12.19 12.19 12.19 12.19 12.19	7.48 9.47 9.47 9.47 9.47 9.47	5.77 7.34 7.34 7.34 7.34 7.34	4.44 5.67 5.67 5.67 5.67 5.67
Programmer for Melexis PTC devices. Programmable Infrared and Hall Sensors. (Includes Programmer Console, Power Supply, Serial Interface Cable, Software, Reference Magnet)	—	—	PTC-01-ND	750.00	—	—	—

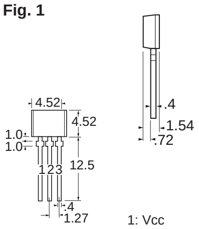
Panasonic Hall Effect Sensor ICs

Panasonic's Hall IC is a combination of a Hall element, amplifier, Schmidt circuit, and stabilized power supply/temperature compensator integrated on an identical chip by using the IC technology. It amplifies Hall element output at the amplifier, converts into a digital signal through the Schmidt circuit, and drives the TTL or MOS IC directly.

Features: • Stable temperature characteristics due to the additional temperature compensator • TTL and MOS ICs directly drivable by output • Semipermanent service life due to no contact parts • Small change of the operating flux density against mechanical stress • Provided with the output pull-up resistors (typ 27kΩ or open collector output (see chart) • Operating Temperature:-40°C to 100°C (-40°C to 85°C for DN6851 - DN6853) • Supply Current Max: 6mA • Output Circuit Max: 20mA

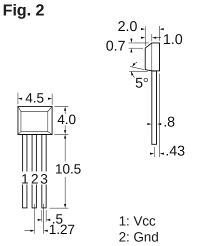
Applications: • Speed Sensors • Position Sensors • Rotation Sensors • Keyboard Switches • Microswitches

Fig. 1



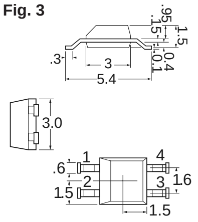
1: Vcc
2: Gnd
3: Output

Fig. 2



1: Vcc
2: Gnd
3: Output

Fig. 3



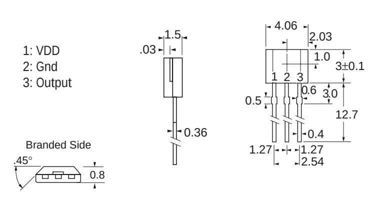
1: Vcc 3: Output
2: Gnd 4: Gnd

Fig.	Supply Voltage Range (V)	Oper.** Flux Density (Gauss)		Output* Type	Oper.† Type	Pkg.	Digi-Key Part No.	Price Each		
		(L-H)	(H-L)					1	10	100
1	4.5 – 16	-175	175	Pullup	Bidirectional	3-Sip	DN6847SE-ND	1.68	1.35	1.01
2	4.5 – 16	5	220	0C	Unidirectional	3-Sip	DN6848-ND	1.04	.87	.70
3	4.5 – 16	5	220	0C	Unidirectional	SOH-4D	DN6848S-ND	1.04	.87	.70
2	4.5 – 16	-175	175	0C	Bidirectional	3-Sip	DN6849-ND	1.69	1.36	1.02
3	4.5 – 16	-175	175	0C	Bidirectional	SOH-4D	DN6849S-ND	1.69	1.36	1.02
1	4.5 – 16	-175	175	0C	Bidirectional	3-Sip	DN6849SE-ND	1.69	1.36	1.02
2	3.6 – 16	-200	200	Pullup	Bidirectional	3-Sip	DN6851A-ND	.90	.76	.61
2	3.6 – 16	100	450	0C	Unidirectional	3-Sip	DN6852A-ND	1.04	.87	.70
2	3.6 – 16	-200	200	0C	Bidirectional	3-Sip	DN6853A-ND	1.35	1.13	.91
2	4.5 – 16	-120	120	Pullup	Bidirectional	3-Sip	DN8897-ND	1.69	1.36	1.02
2	4.5 – 16	-120	120	0C	Bidirectional	3-Sip	DN8899-ND	1.69	1.36	1.02

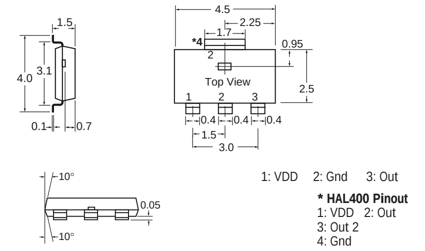
* Output Type: Pull-up Resistors = 27K Internal; 0C = open collector. ** To convert Gauss to millitesla, divide by 10
† Unidirectional and is only sensitive to either north or southside of magnetic; Bidirectional is sensitive to an alternating magnetic fields of both north and south sides.

MICRONAS Hall Effect Sensor ICs

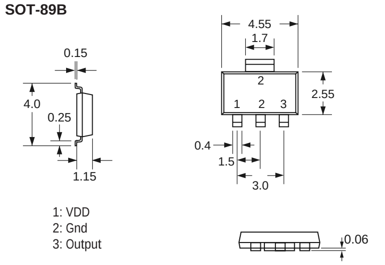
TO-92UA



SOT-89A



SOT-89B



FEATURES: On-Chip temperature compensation circuitry minimizes shifts in ON and OFF points and hysteresis over temperature and supply voltage. Ideal sensors for ignition timing, anti-lock brake systems, speed measurement, angular and linear measurement/positioning. Designed for use in hostile automotive and industrial environments.

SWITCHING SPECIFICATIONS: Bipolar: Output turns low with magnetic south to branded side of package (open drain).

Unipolar: Output turns low with magnetic south to branded side of package, output turns high if magnetic field is removed.

Latching: Output turns low with magnetic south to branded side of package, output does not change states when magnetic field is removed.

Differential: Output determined by magnetic south pole flux density between 2 internal sensors, output low with B_{S1}-B_{S2}>B_{on}, output high with B_{S1}-B_{S2}<B_{off}.

Switch Mode	Switch Frequency	Supply Voltage	Cont. Output Current	On/Off (Max./Min.) Point B mT	Digi-Key Part No.	Price Each 1	10	100	500	Micronas Part No.
TO-92UA										
Latching Differential	DC-10kHz	3.8-24V 4.5-24V	10 mA	18.3/-18.3 3.0/-3.0	HAL505UA-E-ND HAL300UA-E-ND	.78 1.95	.71 1.76	.57 1.41	.47 1.17	HAL505UA-E HAL300UA-E

Switch Mode	Switch Frequency	Supply Voltage	Cont. Output Current	On/Off (Max./Min.) Point B mT	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Micronas Part No.
SOT-89A											
Unipolar	DC-20kHz	4.5-24V	10 mA	36.0/4.3	HAL214S-ECT-ND	2.76	2.48	1.99	HAL214S-ETR-ND	742.00	HAL214S-E
Latching	DC-10kHz	3.8-24V		10.8/-10.8	HAL503S-ECT-ND	3.54	3.19	2.55	HAL503S-ETR-ND	952.00	HAL503S-E
Latching	DC-10kHz	3.8-24V		18.3/-18.3	HAL505S-ECT-ND	3.54	3.19	2.55	—	—	HAL505S-E
Unipolar	DC-10kHz	3.8-24V		21.9/11.4	HAL508S-ECT-ND	3.54	3.19	2.55	HAL508S-ETR-ND	952.00	HAL508S-E
Differential	DC-10kHz	4.5-24V		3.0/-3.0	HAL300S-ECT-ND	4.06	3.65	2.92	HAL300S-ETR-ND	1092.00	HAL300S-E
SOT-89B											
Bipolar	DC-20kHz	4.5-24V	10 mA	12.5/-12.5	HAL115SF-ECT-ND	1.30	1.17	.94	—	—	HAL115SF-E
Unipolar	DC-20kHz	4.5-24V		36.0/3.6	HAL114SF-ECT-ND	1.30	1.17	.94	—	—	HAL114SF-E
Differential	DC-10kHz	4.5-24V		3.5/-3.5	HAL320SF-ECT-ND	3.85	3.47	2.77	HAL320SF-ETR-ND	1036.00	HAL320SF-E
Latching	DC-10kHz	3.8-24V		5.0/-5.0	HAL502SF-ECT-ND	1.67	1.50	1.20	—	—	HAL502SF-E
Latching	DC-10kHz	3.8-24V		10.8/-10.8	HAL503SF-ECT-ND	1.67	1.50	1.20	HAL503SF-ETR-ND	448.00	HAL503SF-E
Unipolar	DC-10kHz	3.8-24V		21.9/11.4	HAL508SF-ECT-ND	1.67	1.50	1.20	HAL508SF-ETR-ND	448.00	HAL508SF-E

HAL115DS-ND	Data Sheet for HAL115	**$2.60**
HAL300DS-ND	Data Sheet for HAL300	**$2.60**

CHERRY

Solid State Magnetic Hall Effect Sensors

Cherry magnetic sensors are used to detect changes in magnetic field polarities and the motion of ferrous metals such as gear tooth movements. Used for such applications as speed and proximity sensing, magnetic polarity detection and current flow monitoring. Solid state design for unlimited life.

Features:

HE31-3500: Magnetically biased bipolar digital latch. Extreme sensitivity. Internal transistor switches on when exposed to south pole and remains on until north pole magnetic field is introduced.

MP100 Series: Aluminum threaded barrel sensor for speed and position sensing. The threaded barrel allows precise positioning and adjustment. Magnet embedded into housing.

GS100 Series: Barrel sensors intended for gear tooth speed sensing. High speed capability, ideal for sensing power gears, conveyer speed and other rotating gears. Built-in magnet supplies its own bias field. GS101202 is plastic housing with steel bushing.

Fig. 1

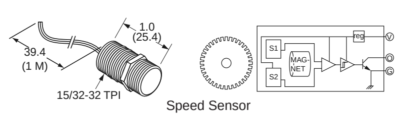


Fig. 2

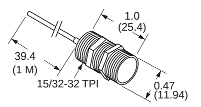


Fig. 3

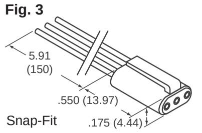


Fig. 4

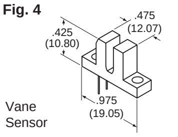


Fig. 5

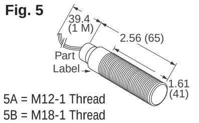


Fig. 6

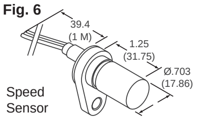


Fig. 7

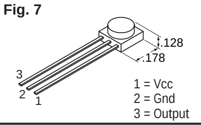


Fig. 8

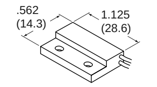


Fig. 9

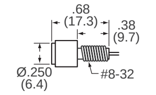


Fig.	Supply Voltage	Output Current	Terminal Type	Polarity	Digi-Key Part No.	Price Each 1	10	50	100	Cherry Part No.
1	4.5-24 VDC	25mA	20AWG Wires	Gear Teeth	CH398-ND	30.24	26.88	21.06	18.60	GS100701
2	4.75-24 VDC 4.75-24 VDC 5-24 VDC	25mA	20AWG Wires 20AWG Wires 22AWG Wires	South Pole	CH396-ND† CH708-ND† CH707-ND⁎	24.44 24.44 36.18	21.72 21.72 32.16	17.02 18.10 26.80	15.03 17.01 25.19	MP100701 MP100502 MP100102
3	4.75-24 VDC	25mA	24AWG Wires	South Pole	CH399-ND	6.08	5.40	4.50	4.23	MP101301
4	4.5-24 VDC	25mA	PC Mount 24AWG Wires	Ferrous Vane	CH401-ND CH712-ND	5.08 7.29	4.52 6.48	3.76 5.40	3.54 5.08	VN101501 VN101503
5A	4.5-24 VDC	25mA	12mm conn. 20AWG Wires 22AWG Wires	Gear Teeth	CH704-ND CH416-ND CH414-ND⁎	55.62 30.24 54.00	49.44 26.88 48.00	41.20 22.40 40.00	38.74 21.06 37.60	GS100101 GS100502 GS100102
5B	4.5-24 VDC 4.5-24 VDC 4.75-24 VDC 5-24 VDC	25mA 25mA 25mA —	12mm conn. 22AWG Wires 12mm conn. 20AWG Wires	Gear Teeth	CH705-ND CH415-ND⁎ CH711-ND⁎ CH706-ND	58.86 57.24 77.63 52.92	52.32 50.88 69.00 47.04	43.60 42.40 57.50 39.20	40.99 39.86 54.05 36.85	GS100201 GS100202 SD100201 GS100203
6	5-24 VDC	25mA	22AWG Wires	Gear Teeth	CH417-ND	32.29	28.71	23.92	22.49	GS101202
7	4.5-24 VDC	20mA	PC Mount	South Pole	CH395-ND	4.19	3.72	2.91	2.57	HE31-3500
8	4.5-24 VDC	25mA	24AWG Wires	North Pole	CH400-ND	6.89	6.12	5.10	4.80	MP102103
— 9	12mm Cord Set - straight female Threaded Actuator, South pole magnet, Aluminum Housed				CH698-ND CH700-ND	29.03 5.13	25.80 4.56	21.50 3.80	20.21 3.57	AS000203 AS101001

⁎ Industrial Grade-Stainless Steel † Commercial Grade Aluminum

TEXAS INSTRUMENTS Integrated Switching Regulators

Texas Instruments manufactures the industry's smallest, most efficient and easy to use Integrated Switching Regulators (ISRs). Using a unique, proprietary design which employs 1 MHz switching technology to produce state-of-the-art power densities, these ISRs let you select the product performance that exactly matches your application. **Features:** • Easy to use—just plug them in. In most cases, only one external component is required, if any • Output voltages are laser-trimmed for accuracy • High efficiencies and low component counts combine to yield MTBFs in excess of 1,000,000 hours

Fig. 1 Package Style EA(x)

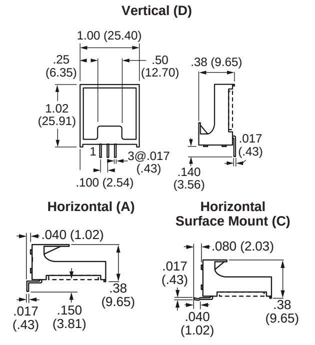


Fig. 2 Package Style EB(x) (12 Pin SIP)

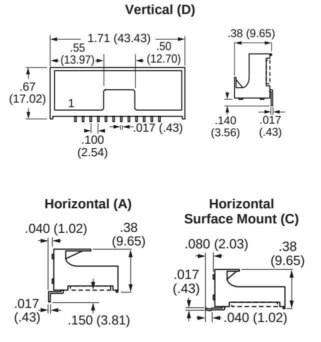


Fig. 3 Package Style EC(x) (12 Pin SIP) / ED(x) (14 Pin SIP)

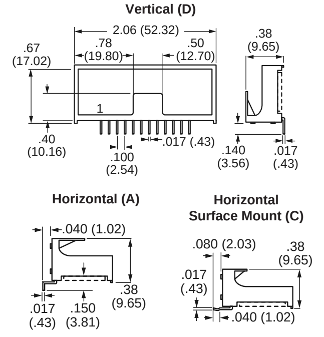


Fig. 4 Package Style EE(x) (14 Pin SIP)

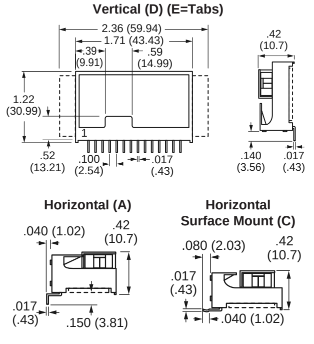


Fig. 5 Package Style EF(x)

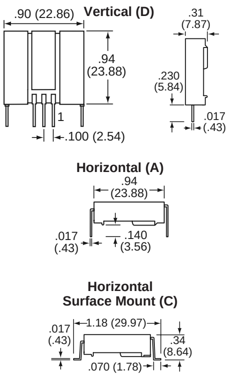


Fig. 6 Package Style EF(x) (5 Pin SIP)

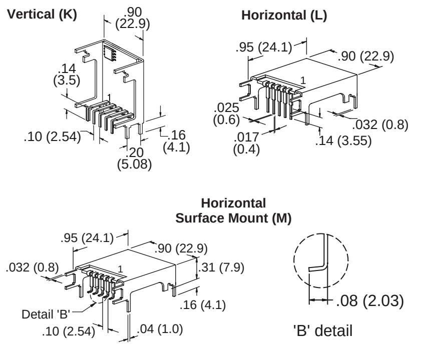


Fig. 7 Package Style EF(x)

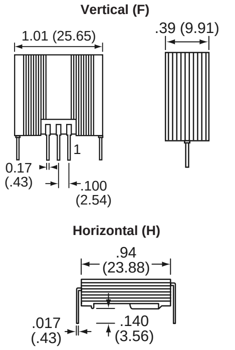


Fig. 8 Package Style EH(x) (27 Pin SIP)

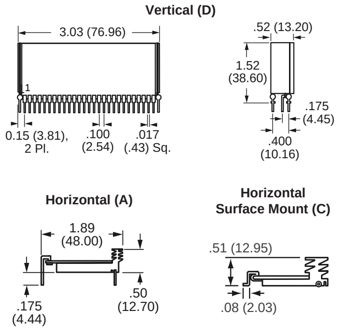


Fig. 9 Package Style EL(x) (23 Pin SIP)

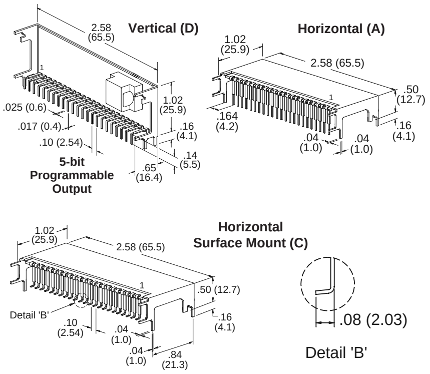


Fig. 10 Package Style EL(x) (23 Pin SIP)

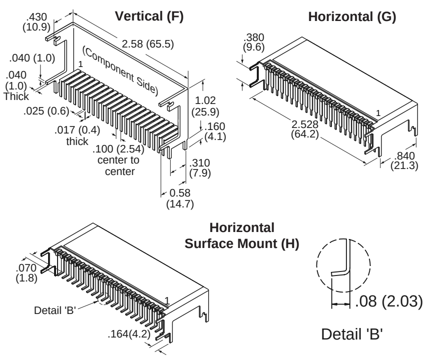


Fig. 11 Package Style EN(x) (27 Pins)

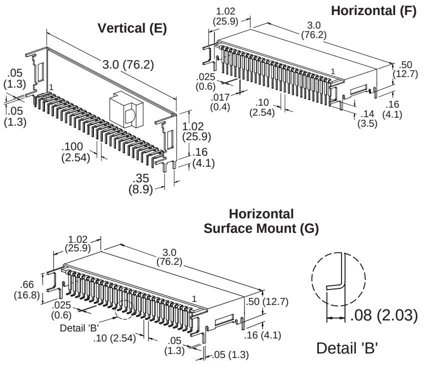


Fig.	Pkg. Style	DC Vout	Max. Amp Iout	Min. Amp Iout	DC Vin Range	Circuit Board Orientation	External Components Required*	Over-Temp Pro-tection	Short Circuit Pro-tection	Vout Adj.	On/Off Control†	Remote Sense	Fast Transient Response	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each 1	25	100
8	EHA	1.3 to 2.05	32.00 (l)	.10 (a)	3.1 to 3.6	Horz.	2400µF/IN, 330µF/OUT	—	X	X (t)	Stnby	X (r)	—	-40 to +85 (e)	PT7778A-ND	68.03	63.49	58.96
8	EHC	1.3 to 2.05	32.00 (l)	.10 (a)	3.1 to 3.6	Horz. SMD	2400µF/IN, 330µF/OUT	—	X	X (t)	Stnby	X (r)	—	-40 to +85 (e)	PT7778C-ND	68.03	63.49	58.96
8	EHD	1.3 to 2.05	32.00 (l)	.10 (a)	3.1 to 3.6	Vert.	2400µF/IN, 330µF/OUT	—	X	X (t)	Stnby	X (r)	—	-40 to +85 (e)	PT7778N-ND	68.03	63.49	58.96
9	ELA	1.3 to 3.5/OVP (s)	13.00	.10 (a)	4.5 to 5.5	Horz.	1000µF/IN, 330µF/OUT, 10k/Power Good	—	X	X (t)	Stnby	X	—	-40(d) to +85 (e)	PT6701A-ND	30.17	28.16	26.15
9	ELC	1.3 to 3.5/OVP (s)	13.00	.10 (a)	4.5 to 5.5	Horz. SMD	1000µF/IN, 330µF/OUT, 10k/Power Good	—	X	X (t)	Stnby	X	—	-40(d) to +85 (e)	PT6701C-ND	30.17	28.16	26.15
	ELD	1.3 to 3.5/OVP (s)	13.00	.10 (a)	4.5 to 5.5	Vert.	1000µF/IN, 330µF/OUT, 10k/Power Good	—	X	X (t)	Stnby	X	—	-40(d) to +85 (e)	PT6701N-ND	30.17	28.16	26.15
	ELA	1.3 to 3.5/OVP (s)	14.00	.10 (a)	10.8 to 13.2	Horz.	1000µF/IN, 330µF/OUT, 10k/Power Good	—	X	X (t)	Stnby	X	—	-40(d) to +85 (e)	PT6721A-ND	30.17	28.16	26.15
9	ELC	1.3 to 3.5/OVP (s)	14.00	.10 (a)	10.8 to 13.2	Horz. SMD	1000µF/IN, 330µF/OUT, 10k/Power Good	—	X	X (t)	Stnby	X	—	-40(d) to +85 (e)	PT6721C-ND	30.17	28.16	26.15
	ELD	1.3 to 3.5/OVP (s)	14.00	.10 (a)	10.8 to 13.2	Vert.	1000µF/IN, 330µF/OUT, 10k/Power Good	—	X	X (t)	Stnby	X	—	-40(d) to +85 (e)	PT6721N-ND	30.17	28.16	26.15

* Power Good: Power good output is high when the output voltage is within specification

† Inhibit: Power to complete part is shut off, quiescent current is less than 100 µA. Stnby: Standby Mode: Part is powered up, but output is in shut off or sleep mode.

(Continued)

Fig.	Pkg. Style	DC Vout	Max. Amp Iout	DC Min. Amp Iout	Vin Range	Circuit Board Orientation	External Components Required*	Over-Temp Pro-tection	Short Circuit Pro-tection	Vout Adj.	On/Off Control†	Remote Sense	Fast Transient Response	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each		
																1	25	100
11	ENF	1.3 to 3.5	20.00 (l)	.10 (a)	4.5 to 5.5	Horz.	1500µF/IN, 330µF/OUT	—	X	X (t)	Stnby	X (r)	—	-40 to +85 (d,e)	PT7711A-ND	45.62	42.58	39.54
11	ENG	1.3 to 3.5	20.00 (l)	.10 (a)	4.5 to 5.5	Horz. SMD	1500µF/IN, 330µF/OUT	—	X	X (t)	Stnby	X (r)	—	-40 to +85 (d,e)	PT7711C-ND	45.62	42.58	39.54
11	ENE	1.3 to 3.5	20.00 (l)	.10 (a)	4.5 to 5.5	Vert.	1500µF/IN, 330µF/OUT	—	X	X (t)	Stnby	X (r)	—	-40 to +85 (d,e)	PT7711N-ND	45.62	42.58	39.54
1	EAA	3.3	1.00	.10 (a)	9 to 26	Horz.	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5103A-ND	11.60	10.44	9.26
1	EAC	3.3	1.00	.10 (a)	9 to 26	Horz. SMD	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5103C-ND	11.60	10.44	9.26
1	EAD	3.3	1.00	.10 (a)	9 to 26	Vert.	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5103N-ND	11.60	10.44	9.26
2	EBA	3.3 (f)	1.00	.10 (a)	9 to 26	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6102A-ND	11.95	10.76	9.54
2	EBC	3.3 (f)	1.00	.10 (a)	9 to 26	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6102C-ND	11.95	10.76	9.54
2	EBD	3.3 (f)	1.00	.10 (a)	9 to 26	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6102N-ND	11.95	10.76	9.54
5	EFA	3.3	1.50	.10 (a)	7 to 26	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST133HC-ND	15.39	14.37	13.34
5	EFC	3.3	1.50	.10 (a)	7 to 26	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST133SC-ND	15.39	14.37	13.34
	EFD	3.3	1.50	.10 (a)	7 to 26	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST133VC-ND	15.39	14.37	13.34
	EFA	3.3	1.50	.10 (a)	9 to 26	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST133H-ND	14.46	13.02	11.55
	EFC	3.3	1.50	.10 (a)	9 to 26	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST133S-ND	14.46	13.02	11.55
	EFD	3.3	1.50	.10 (a)	9 to 26	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST133V-ND	13.66	12.30	10.91
5	EFA	3.3	2.00	.10 (a)	7 to 15	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78HT233HC-ND	18.41	17.18	15.96
	EFC	3.3	2.00	.10 (a)	7 to 15	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78HT233SC-ND	18.41	17.18	15.96
	EFD	3.3	2.00	.10 (a)	7 to 15	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78HT233VC-ND	18.41	17.18	15.96
	EFA	3.3	2.00	.10 (a)	7 to 15	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78ST233HC-ND	18.42	17.20	15.97
	EFC	3.3	2.00	.10 (a)	7 to 15	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78ST233SC-ND	18.42	17.20	15.97
5	EFD	3.3	2.00	.10 (a)	7 to 15	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78ST233VC-ND	18.42	17.20	15.97
2	EBA	3.3	2.00	.10 (a)	7 to 26	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6203A-ND	15.08	14.07	13.07
2	EBC	3.3	2.00	.10 (a)	7 to 26	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6203C-ND	15.08	14.07	13.07
2	EBD	3.3	2.00	.10 (a)	7 to 26	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6203N-ND	15.08	14.07	13.07
5	EFA	3.3	2.00	.10 (a)	9 to 15	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78HT233H-ND	16.10	15.03	13.95
5	EFC	3.3	2.00	.10 (a)	9 to 15	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78HT233S-ND	16.10	15.03	13.95
5	EFD	3.3	2.00	.10 (a)	9 to 15	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78HT233V-ND	15.39	14.37	13.34
2	EBA	3.3	2.00	.10 (a)	9 to 26	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6213D-ND	15.08	14.07	13.07
2	EBC	3.3	2.00	.10 (a)	9 to 26	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6213E-ND	15.08	14.07	13.07
2	EBD	3.3	2.00	.10 (a)	9 to 26	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6213P-ND	15.08	14.07	13.07
3	EDA	3.3	3.00	0.0	4.5 to 5.5	Horz.	2/100µF (n)	X	—	X	—	X	—	0 to +70 (b)	PT6425D-ND	20.88	19.49	18.10
	EDC	3.3	3.00	0.0	4.5 to 5.5	Horz. SMD	2/100µF (n)	X	—	X	—	X	—	0 to +70 (b)	PT6425E-ND	20.88	19.49	18.10
	EDD	3.3	3.00	0.0	4.5 to 5.5	Vert.	2/100µF (n)	X	—	X	—	X	—	0 to +70 (b)	PT6425P-ND	20.88	19.49	18.10
	ECA	3.3	3.00	.10 (a)	4.5 to 5.5	Horz.	2/100µF (n)	X	—	X	—	—	—	0 to +70 (b)	PT6405D-ND	19.95	18.62	17.29
	ECC	3.3	3.00	.10 (a)	4.5 to 5.5	Horz. SMD	2/100µF (n)	X	—	X	—	—	—	0 to +70 (b)	PT6405E-ND	19.95	18.62	17.29
3	ECD	3.3	3.00	.10 (a)	4.5 to 5.5	Vert.	2/100µF (n)	X	—	X	—	—	—	0 to +70 (b)	PT6405P-ND	19.95	18.62	17.29
6	EFL	3.3	3.00	.10 (a)	4.5 to 5.5	Horz.	100µF (n)	—	X	X	Inhibit	—	—	-40 to +85 (b,d)	PT5501A-ND	15.39	14.37	13.34
6	EFM	3.3	3.00	.10 (a)	4.5 to 5.5	Horz. SMD	100µF (n)	—	X	X	Inhibit	—	—	-40 to +85 (b,d)	PT5501C-ND	15.39	14.37	13.34
6	EFK	3.3	3.00	.10 (a)	4.5 to 5.5	Vert.	100µF (n)	—	X	X	Inhibit	—	—	-40 to +85 (b,d)	PT5501N-ND	15.39	14.37	13.34
2	EBA	3.3	3.00	.10 (a)	9 to 26	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6303A-ND	16.94	15.81	14.68
2	EBC	3.3	3.00	.10 (a)	9 to 26	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6303C-ND	16.94	15.81	14.68
	EBD	3.3	3.00	.10 (a)	9 to 26	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6303N-ND	16.94	15.81	14.68
	EBA	3.3	3.00 (h)	.30	4.5 to 9	Horz.	100µF (o)	X	X	X	—	—	—	0 to +70 (b)	PT6305A-ND	19.95	18.62	17.29
	EBC	3.3	3.00 (h)	.30	4.5 to 9	Horz. SMD	100µF (o)	X	X	X	—	—	—	0 to +70 (b)	PT6305C-ND	19.95	18.62	17.29
	EBD	3.3	3.00 (h)	.30	4.5 to 9	Vert.	100µF (o)	X	X	X	—	—	—	0 to +70 (b)	PT6305N-ND	19.95	18.62	17.29
4	EEA	3.3	5.00(e)	.10 (a)	9 to 28	Horz.	560µF/IN(p), 330µF/OUT (o)	—	—	X	Stnby	X	—	-40 to +85 (e)	PT6651D-ND	27.06	25.26	23.46
	EEC	3.3	5.00(e)	.10 (a)	9 to 28	Horz. SMD	560µF/IN(p), 330µF/OUT (o)	—	—	X	Stnby	X	—	-40 to +85 (e)	PT6651E-ND	27.06	25.26	23.46
	EED	3.3	5.00(e)	.10 (a)	9 to 28	Vert.	560µF/IN(p), 330µF/OUT (o)	—	—	X	Stnby	X	—	-40 to +85 (e)	PT6651P-ND	27.06	25.26	23.46
	EEA	3.3	6.00	.10 (a)	9 to 16	Horz.	2/330µF	X	—	X	Stnby	X	—	-40 to +85 (e)	PT6621D-ND	27.06	25.26	23.46
	EEC	3.3	6.00	.10 (a)	9 to 16	Horz. SMD	2/330µF	X	—	X	Stnby	X	—	-40 to +85 (e)	PT6621E-ND	27.06	25.26	23.46
4	EED	3.3	6.00	.10 (a)	9 to 16	Vert.	2/330µF	X	—	X	Stnby	X	—	-40 to +85 (e)	PT6621P-ND	27.06	25.26	23.46
	EEA	3.3	8.00	.10 (a)	4.5 to 5.5	Horz.	2/330µF (p)	—	X	X	Stnby	X	—	-40 to +85 (b,d)	PT6521D-ND	27.06	25.26	23.46
	EEC	3.3	8.00	.10 (a)	4.5 to 5.5	Horz. SMD	2/330µF (p)	—	X	X	Stnby	X	—	-40 to +85 (b,d)	PT6521E-ND	27.06	25.26	23.46
	EED	3.3	8.00	.10 (a)	4.5 to 5.5	Vert.	2/330µF (p)	—	X	X	Stnby	X	—	-40 to +85 (b,d)	PT6521P-ND	27.06	25.26	23.46
	EEA	3.3	7.00 – 9.00 (e)	.10 (a)	4.5 to 6	Horz.	2/330µF (p)	X	—	X	Stnby	X	—	-40 to +85 (d,e)	PT6601D-ND	24.90	23.24	21.58
4	EEC	3.3	7.00 – 9.00 (e)	.10 (a)	4.5 to 6	Horz. SMD	2/330µF (p)	X	—	X	Stnby	X	—	-40 to +85 (d,e)	PT6601E-ND	24.90	23.24	21.58
4	EED	3.3	7.00 – 9.00 (e)	.10 (a)	4.5 to 6	Vert.	2/330µF (p)	X	—	X	Stnby	X	—	-40 to +85 (d,e)	PT6601P-ND	24.90	23.24	21.58
10	ELG	3.3 & 1.5/1.2 (i)	6 & 1.45/1.20 (m)	.10(a,k) & 0.0/0.0	4.5 to 5.5	Horz.	2/330µF (p)	X	—	2 (m)	Stnby	2	—	-40 to +85 (d,e)	PT6932A-ND	37.41	34.92	32.43
10	ELH	3.3 & 1.5/1.2 (i)	6 & 1.45/1.20 (m)	.10(a,k) & 0.0/0.0	4.5 to 5.5	Horz. SMD	2/330µF (p)	X	—	2 (m)	Stnby	2	—	-40 to +85 (d,e)	PT6932C-ND	37.41	34.92	32.43
10	ELF	3.3 & 1.5/1.2 (i)	6 & 1.45/1.20 (m)	.10(a,k) & 0.0/0.0	4.5 to 5.5	Vert.	2/330µF (p)	X	—	2 (m)	Stnby	2	—	-40 to +85 (d,e)	PT6932N-ND	37.41	34.92	32.43
	ELG	3.3 & 2.5/1.8 (i)	6 & 2.20/1.75 (m)	.10(a,k) & 0.0/0.0	4.5 to 5.5	Horz.	2/330µF (p)	X	—	2 (m)	Stnby	2	—	-40 to +85 (d,e)	PT6931A-ND	37.41	34.92	32.43
	ELH	3.3 & 2.5/1.8 (i)	6 & 2.20/1.75 (m)	.10(a,k) & 0.0/0.0	4.5 to 5.5	Horz. SMD	2/330µF (p)	X	—	2 (m)	Stnby	2	—	-40 to +85 (d,e)	PT6931C-ND	37.41	34.92	32.43
10	ELF	3.3 & 2.5/1.8 (i)	6 & 2.20/1.75 (m)	.10(a,k) & 0.0/0.0	4.5 to 5.5	Vert.	2/330µF (p)	X	—	2 (m)	Stnby	2	—	-40 to +85 (d,e)	PT6931N-ND	37.41	34.92	32.43
2	EBA	5.0 (f)	1.00	.10 (a)	9 to 30/38 (c)	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b,f)	PT6101A-ND	11.95	10.76	9.54
2	EBC	5.0 (f)	1.00	.10 (a)	9 to 30/38 (c)	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6101C-ND	11.95	10.76	9.54
2	EBD	5.0 (f)	1.00	.10 (a)	9 to 30/38 (c)	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6101N-ND	11.95	10.76	9.54
1	EAA	5.0	1.00	.10 (a)	9 to 38	Horz.	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5101A-ND	11.60	10.44	9.26
1	EAC	5.0	1.00	.10 (a)	9 to 38	Horz. SMD	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5101C-ND	11.60	10.44	9.26
1	EAD	5.0	1.00	.10 (a)	9 to 38	Vert.	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5101N-ND	14.62	12.70	10.04
5	EFA	5.0	1.50	.10 (a)	7 to 30	Horz.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR105HC-ND	15.39	14.37	13.34
5	EFC	5.0	1.50	.10 (a)	7 to 30	Horz. SMD	None	X	X	—	—	—	—	-40 to +80 (b)	78SR105SC-ND	15.39	14.37	13.34
5	EFD	5.0	1.50	.10 (a)	7 to 30	Vert.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR105VC-ND	15.39	14.37	13.34
	EFA	5.0	1.50	.10 (a)	7 to 30	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST105HC-ND	15.39	14.37	13.34
	EFD	5.0	1.50	.10 (a)	7 to 30	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST105VC-ND	15.39	14.37	13.34
	EFA	5.0	1.50	.10 (a)	9 to 38	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST105H-ND	14.46	13.02	11.55
	EFC	5.0	1.50	.10 (a)	9 to 38	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST105S-ND	14.46	13.02	11.55
5	EFD	5.0	1.50	.10 (a)	9 to 38	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST105V-ND	13.66	12.30	10.91
5	EFA	5.0	2.00	.10 (a)	V_O +2 to 28	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78HT205HC-ND	18.41	17.18	15.96
5	EFC	5.0	2.00	.10 (a)	V_O +2 to 28	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78HT205SC-ND	18.41	17.18	15.96
5	EFD	5.0	2.00	.10 (a)	V_O +2 to 28	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78HT205VC-ND	18.41	17.18	15.96
2	EBA	5.0	2.00	.10 (a)	7.25 to 30	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +60 (b)	PT6202A-ND	15.08	14.07	13.07
2	EBC	5.0	2.00	.10 (a)	7.25 to 30	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +60 (b)	PT6202C-ND	15.08	14.07	13.07
2	EBD	5.0	2.00	.10 (a)	7.25 to 30	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +60 (b)	PT6202N-ND	15.08	14.07	13.07
5	EFA	5.0	2.00	.10 (a)	8 to 20	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78ST205HC-ND	18.42	17.20	15.97
5	EFC	5.0	2.00	.10 (a)	8 to 20	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78ST205SC-ND	18.42	17.20	15.97
5	EFD	5.0	2.00	.10 (a)	8 to 20	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	78ST205VC-ND	18.42	17.20	15.97
5	EFA	5.0	2.00	.10 (a)	9 to 28	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78HT205H-ND	16.10	15.03	13.95
	EFC	5.0	2.00	.10 (a)	9 to 28	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78HT205S-ND	16.10	15.03	13.95
	EFD	5.0	2.00	.10 (a)	9 to 28	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78HT205V-ND	15.39	14.37	13.34

* Power Good: Power good output is high when the output voltage is within specification

† Inhibit: Power to complete part is shut off, quiescent current is less than 100 µA. Stnby: Standby Mode: Part is powered up, but output is in shut off or sleep mode.

(Continued)

TEXAS INSTRUMENTS Integrated Switching Regulators *(Cont.)*

Fig.	Pkg. Style	DC Vout	Max. Amp Iout	Min. Amp Iout	DC Vin Range	Circuit Board Orientation	External Components Required*	Over-Temp Pro-tection	Short Circuit Pro-tection	Vout Adj.	On/Off Control†	Remote Sense	Fast Transient Response	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each		
																1	25	100
2	EBA	5.0	2.00	.10 (a)	9 to 30/38 (c)	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6212D-ND	15.08	14.07	13.07
2	EBC	5.0	2.00	.10 (a)	9 to 30/38 (c)	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6212E-ND	15.08	14.07	13.07
2	EBD	5.0	2.00	.10 (a)	9 to 30/38 (c)	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6212P-ND	15.08	14.07	13.07
7	EFH (q)	5.0	3.00	.10 (a)	8 to 20	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +70 (b)	78ST305HC-ND	22.50	21.00	19.50
7	EFF (q)	5.0	3.00	.10 (a)	8 to 20	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +70 (b)	78ST305VC-ND	22.50	21.00	19.50
7	EFH (q)	5.0	3.00	.10 (a)	V_O +3 to 28	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +70 (b)	78HT305HC-ND	22.50	21.00	19.50
7	EFF (q)	5.0	3.00	.10 (a)	V_O +3 to 28	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +70 (b)	78HT305VC-ND	22.50	21.00	19.50
2	EBA	5.0	3.00	.10 (a)	9 to 30/38 (c)	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6302A-ND	16.94	15.81	14.68
2	EBC	5.0	3.00	.10 (a)	9 to 30/38 (c)	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6302C-ND	16.94	15.81	14.68
2	EBD	5.0	3.00	.10 (a)	9 to 30/38 (c)	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6302N-ND	16.94	15.81	14.68
4	EEA	5.0	4.00	.10 (a)	3.1 to 3.6	Horz.	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (m)	PT6671D-ND	27.06	25.26	23.46
	EEC	5.0	4.00	.10 (a)	3.1 to 3.6	Horz. SMD	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (m)	PT6671E-ND	27.06	25.26	23.46
	EED	5.0	4.00	.10 (a)	3.1 to 3.6	Vert.	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (m)	PT6671P-ND	27.06	25.26	23.46
	EEA	5.0	5.00 (e)	.10 (a)	9 to 28	Horz.	560µF/IN, 330µF/OUT (p)	—	—	X	Stnby	X	—	-40 to +85	PT6653D-ND	27.06	25.26	23.46
	EEC	5.0	5.00 (e)	.10 (a)	9 to 28	Horz. SMD	560µF/IN, 330µF/OUT (p)	—	—	X	Stnby	X	—	-40 to +85	PT6653E-ND	27.06	25.26	23.46
4	EED	5.0	5.00 (e)	.10 (a)	9 to 28	Vert.	560µF/IN, 330µF/OUT (p)	—	—	X	Stnby	X	—	-40 to +85	PT6653P-ND	27.06	25.26	23.46
4	EEA	5.0	6.00	.10 (a)	9 to 16	Horz.	2/330µF (o)	X	—	X	Stnby	X	—	-40 to +85 (e)	PT6625D-ND	27.06	25.26	23.46
4	EEC	5.0	6.00	.10 (a)	9 to 16	Horz. SMD	2/330µF (o)	X	—	X	Stnby	X	—	-40 to +85 (e)	PT6625E-ND	27.06	25.26	23.46
4	EED	5.0	6.00	.10 (a)	9 to 16	Vert.	2/330µF (o)	X	—	X	Stnby	X	—	-40 to +85 (e)	PT6625P-ND	27.06	25.26	23.46
5	EFA	6.0	1.50	.10 (a)	8 to 30	Horz.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR106HC-ND	15.39	14.37	13.34
5	EFD	6.0	1.50	.10 (a)	10 to 38	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST106V-ND	13.66	12.30	10.91
5	EFA	8.0	1.50	.10 (a)	10 to 30	Horz.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR108HC-ND	15.39	14.37	13.34
5	EFD	8.0	1.50	.10 (a)	10 to 30	Vert.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR108VC-ND	15.39	14.37	13.34
5	EFD	9.0	1.50	.10 (a)	13 to 38	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST109V-ND	13.66	12.30	10.91
1	EAA	12.0	1.00	.10 (a)	4.75 to V_O-1	Horz.	100µF (n)	X	—	—	—	—	—	-20 to +70 (e)	PT5041A-ND	15.03	13.53	12.00
1	EAC	12.0	1.00	.10 (a)	4.75 to V_O -1	Horz. SMD	100µF (n)	X	—	—	—	—	—	-20 to +70 (e)	PT5041C-ND	15.03	13.53	12.00
1	EAD	12.0	1.00	.10 (a)	4.75 to V_O -1	Vert.	100µF (n)	X	—	—	—	—	—	-20 to +70 (e)	PT5041N-ND	15.03	13.53	12.00
2	EBA	12.0 (f)	1.00	.10 (a)	16 to 30/38 (c)	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +80 (b)	PT6103A-ND	11.95	10.76	9.54
2	EBC	12.0 (f)	1.00	.10 (a)	16 to 30/38 (c)	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +80 (b)	PT6103C-ND	11.95	10.76	9.54
2	EBD	12.0 (f)	1.00	.10 (a)	16 to 30/38 (c)	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +80 (b)	PT6103N-ND	11.95	10.76	9.54
1	EAA	12.0	1.00	.10 (a)	16 to 38	Horz.	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5102A-ND	11.60	10.44	9.26
1	EAC	12.0	1.00	.10 (a)	16 to 38	Horz. SMD	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5102C-ND	11.60	10.44	9.26
1	EAD	12.0	1.00	.10 (a)	16 to 38	Vert.	100µF (n)	X	X	—	—	—	—	-20 to +80 (b)	PT5102N-ND	11.60	10.44	9.26
4	EEA	12.0	1.25 (e)	.10 (a)	3.1 to 3.6	Horz.	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (e)	PT6673D-ND	27.06	25.26	23.46
4	EEC	12.0	1.25 (e)	.10 (a)	3.1 to 3.6	Horz. SMD	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (e)	PT6673E-ND	27.06	25.26	23.46
4	EED	12.0	1.25 (e)	.10 (a)	3.1 to 3.6	Vert.	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (e)	PT6673P-ND	27.06	25.26	23.46
5	EFA	12.0	1.50	.10 (a)	16 to 38	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST112H-ND	14.46	13.02	11.55
5	EFC	12.0	1.50	.10 (a)	16 to 38	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST112S-ND	14.46	13.02	11.55
5	EFD	12.0	1.50	.10 (a)	16 to 38	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	PT78ST112V-ND	13.66	12.30	10.91
5	EFA	12.0	1.50	.10 (a)	14.5 to 30	Horz.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR112HC-ND	15.39	14.37	13.34
5	EFC	12.0	1.50	.10 (a)	14.5 to 30	Horz. SMD	None	X	X	—	—	—	—	-40 to +80 (b)	78SR112SC-ND	15.39	14.37	13.34
	EFD	12.0	1.50	.10 (a)	14.5 to 30	Vert.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR112VC-ND	20.41	16.70	13.76
	EFA	12.0	1.50	.10 (a)	14.5 to 30	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST112HC-ND	15.39	14.37	13.34
	EFC	12.0	1.50	.10 (a)	14.5 to 30	Horz. SMD	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST112SC-ND	15.39	14.37	13.34
	EFD	12.0	1.50	.10 (a)	14.5 to 30	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +80 (b)	78ST112VC-ND	15.39	14.37	13.34
4	EEA	12.0	2.00	.10 (a)	4.5 to 5.5	Horz.	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (m)	PT6674D-ND	27.06	25.26	23.46
4	EEC	12.0	2.00	.10 (a)	4.5 to 5.5	Horz. SMD	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (m)	PT6674E-ND	27.06	25.26	23.46
4	EED	12.0	2.00	.10 (a)	4.5 to 5.5	Vert.	2/560µF (o)	—	—	X	—	X	—	-40 to +65 (m)	PT6674P-ND	27.06	25.26	23.46
7	EFH	12.0	2.00	.10 (a)	14.5 to 28	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +55 (b)	78ST212HC-ND	23.73	22.15	20.57
7	EFF	12.0	2.00	.10 (a)	14.5 to 28	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +55 (b)	78ST212VC-ND	23.73	22.15	20.57
2	EBA	12.0	2.00	.10 (a)	14.5 to 30	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +60 (b)	PT6204A-ND	15.08	14.07	13.07
2	EBC	12.0	2.00	.10 (a)	14.5 to 30	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +60 (b)	PT6204C-ND	15.08	14.07	13.07
2	EBD	12.0	2.00	.10 (a)	14.5 to 30	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +60 (b)	PT6204N-ND	15.08	14.07	13.07
7	EFF (q)	12.0	2.00	.10 (a)	16 to 28	Vert.	100µF (n)	X	X	—	—	—	—	-40 to +55 (b)	PT78ST212V-ND	23.19	21.65	20.10
2	EBA	12.0	2.00	.10 (a)	16 to 30/38 (c)	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6214D-ND	15.08	14.07	13.07
2	EBC	12.0	2.00	.10 (a)	16 to 30/38 (c)	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6214E-ND	15.08	14.07	13.07
	EBD	12.0	2.00	.10 (a)	16 to 30/38 (c)	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6214P-ND	15.08	14.07	13.07
	EBA	12.0	3.00	.10 (a)	16 to 30/38 (c)	Horz.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6304A-ND	16.94	15.81	14.68
	EBC	12.0	3.00	.10 (a)	16 to 30/38 (c)	Horz. SMD	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6304C-ND	16.94	15.81	14.68
	EBD	12.0	3.00	.10 (a)	16 to 30/38 (c)	Vert.	100µF (n)	X	X	X	Inhibit	—	—	-40 to +85 (b)	PT6304N-ND	16.94	15.81	14.68
4	EEA	12.0	5.00 (e)	.10 (a)	V_O+3 to 28	Horz.	560µF/IN, 330µF/OUT (p)	—	—	X	Stnby	X	—	-40 to +85 (e)	PT6656D-ND	27.06	25.26	23.46
4	EEC	12.0	5.00 (e)	.10 (a)	V_O+3 to 28	Horz. SMD	560µF/IN, 330µF/OUT (p)	—	—	X	Stnby	X	—	-40 to +85 (e)	PT6656E-ND	27.06	25.26	23.46
4	EED	12.0	5.00 (e)	.10 (a)	V_O+3 to 28	Vert.	560µF/IN, 330µF/OUT (p)	—	—	X	Stnby	X	—	-40 to +85 (e)	PT6656P-ND	27.06	25.26	23.46
5	EFA	15.0	1.50	.10 (a)	18.5 to 30	Horz.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR115HC-ND	15.39	14.37	13.34
5	EFD	15.0	1.50	.10 (a)	18.5 to 30	Vert.	None	X	X	—	—	—	—	-40 to +80 (b)	78SR115VC-ND	15.39	14.37	13.34
1	EAA	-3.3	-1.00	-.25 (a)	4.75 to 7 (j)	Horz.	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5021A-ND	15.03	13.53	12.00
1	EAC	-3.3	-1.00	-.25 (a)	4.75 to 7 (j)	Horz. SMD	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5021C-ND	15.03	13.53	12.00
1	EAD	-3.3	-1.00	-.25 (a)	4.75 to 7 (j)	Vert.	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5021N-ND	15.03	13.53	12.00
5	EFA	-5.0	-1.00	-.05 (a)	7 to 25	Horz.	2/100µF (p)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR105H-ND	14.46	13.02	11.55
5	EFC	-5.0	-1.00	-.05 (a)	7 to 25	Horz. SMD	2/100µF (p)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR105S-ND	14.46	13.02	11.55
5	EFD	-5.0	-1.00	-.05 (a)	7 to 25	Vert.	2/100µF (p)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR105V-ND	13.66	12.30	10.91
1	EAA	-5.0	-1.00	-.25 (a)	4.75 to 7 (j)	Horz.	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5022A-ND	15.03	13.53	12.00
1	EAC	-5.0	-1.00	-.25 (a)	4.75 to 7 (j)	Horz. SMD	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5022C-ND	15.03	13.53	12.00
1	EAD	-5.0	-1.00	-.25 (a)	4.75 to 7 (j)	Vert.	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5022N-ND	15.03	13.53	12.00
5	EFA	-5.0	-1.50	-.10 (a)	-9 to -30	Horz.	1N5339B	X	X	—	—	—	—	-40 to +60 (b)	PT79SR105H-ND	16.10	15.03	13.95
5	EFC	-5.0	-1.50	-.10 (a)	-9 to -30	Horz. SMD	1N5339B	X	X	—	—	—	—	-40 to +60 (b)	PT79SR105S-ND	16.10	15.03	13.95
5	EFD	-5.0	-1.50	-.10 (a)	-9 to -30	Vert.	1N5339B	X	X	—	—	—	—	-40 to +60 (b)	PT79SR105V-ND	15.39	14.37	13.34
4	EEA	-5.0	-4.00	-.10	8 to 25	Horz.	560µF/IN, 330µF/OUT (o)	—	—	X	—	X	—	-40 to +85 (e)	PT6642D-ND	27.06	25.26	23.46
4	EEC	-5.0	-4.00	-.10	8 to 25	Horz. SMD	560µF/IN, 330µF/OUT (o)	—	—	X	—	X	—	-40 to +85 (e)	PT6642E-ND	27.06	25.26	23.46
4	EED	-5.0	-4.00	-.10	8 to 25	Vert.	560µF/IN, 330µF/OUT (o)	—	—	X	—	X	—	-40 to +85 (e)	PT6642P-ND	27.06	25.26	23.46
5	EFA	-12.0	-0.40	-.05 (a)	7 to 18	Horz.	2/100µF (p)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR112H-ND	14.46	13.02	11.55
5	EFC	-12.0	-0.40	-.05 (a)	7 to 18	Horz. SMD	2/100µF (p)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR112S-ND	14.46	13.02	11.55
5	EFD	-12.0	-0.40	-.05 (a)	7 to 18	Vert.	2/100µF (p)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR112V-ND	13.66	12.30	10.91
1	EAA	-12.0	-0.50	-.10 (a)	4.75 to 7 (j)	Horz.	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5024A-ND	15.03	13.53	12.00
1	EAC	-12.0	-0.50	-.10 (a)	4.75 to 7 (j)	Horz. SMD	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5024C-ND	15.03	13.53	12.00
1	EAD	-12.0	-0.50	-.10 (a)	4.75 to 7 (j)	Vert.	100µF (n)	—	—	—	—	—	—	-20 to +65 (e)	PT5024N-ND	15.03	13.53	12.00
5	EFA	-12.0	-1.50	-.10 (a)	-16 to -30	Horz.	1N5351B	X	X	—	—	—	—	-40 to +60 (b)	PT79SR112H-ND	16.10	15.03	13.95

* Power Good: Power good output is high when the output voltage is within specification

† Inhibit: Power to complete part is shut off, quiescent current is less than 100 µA. Stnby: Standby Mode: Part is powered up, but output is in shut off or sleep mode.

(Continued)

Fig.	Pkg. Style	DC Vout	Max. Amp Iout	Min. Amp Iout	DC Vin Range	Circuit Board Orientation	External Components Required*	Over-Temp Pro-tection	Short Circuit Pro-tection	Vout Adj.	On/Off Control†	Remote Sense	Fast Transient Response	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each 1	25	100
5	EFC	-12.0	-1.50	-.10 (a)	-16 to -30	Horz. SMD	1N5351B	X	X	—	—	—	—	-40 to +60 (b)	PT79SR112S-ND	16.10	15.03	13.95
5	EFD	-12.0	-1.50	-.10 (a)	-16 to -30	Vert.	1N5351B	X	X	—	—	—	—	-40 to +60 (b)	PT79SR112V-ND	15.39	14.37	13.34
4	EEA	-12.0	-2.00	-.10	8 to 18	Horz.	560µF/IN, 330µF/OUT (o)	—	—	X	—	X	—	-40 to +85 (e)	PT6643D-ND	27.06	25.26	23.46
4	EEC	-12.0	-2.00	-.10	8 to 18	Horz. SMD	560µF/IN, 330µF/OUT (o)	—	—	X	—	X	—	-40 to +85 (e)	PT6643E-ND	27.06	25.26	23.46
4	EED	-12.0	-2.00	-.10	8 to 18	Vert.	560µF/IN, 330µF/OUT (o)	—	—	X	—	X	—	-40 to +85 (e)	PT6643P-ND	27.06	25.26	23.46
5	EFA	-15.0	-0.30	-.05 (a)	7 to 15	Horz.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR115H-ND	14.46	13.02	11.55
5	EFD	-15.0	-0.30	-.05 (a)	7 to 15	Vert.	100µF (n)	X	X	—	—	—	X	-40 to +85 (b)	PT78NR115V-ND	13.66	12.30	10.91
3	ECA	±12	+0.50, -0.25	.05 (g)	4.75 to V_O-1	Horz.	100µF (n)	X	—	X	—	—	—	0 to +65 (e)	PT5061A-ND	15.39	14.37	13.34
3	ECC	±12	+0.50, -0.25	.05 (g)	4.75 to V_O-1	Horz. SMD	100µF (n)	X	—	X	—	—	—	0 to +65 (e)	PT5061C-ND	15.39	14.37	13.34
3	ECD	±12	+0.50, -0.25	.05 (g)	4.75 to V_O-1	Vert.	100µF (n)	X	—	X	—	—	—	0 to +65 (e)	PT5061N-ND	15.39	14.37	13.34

* Power Good: Power good output is high when the output voltage is within specification

† Inhibit: Power to complete part is shut off, quiescent current is less than 100 µA. Stnby: Standby Mode: Part is powered up, but output is in shut off or sleep mode.

(a) ISR will operate down to no load with reduced specification
(b) See thermal derating chart
(c) Input voltage cannot exceed 30V when the inhibit function is used
(d) Operating temperatures below 0 (0°C), use tantalum capacitors
(e) See manufacturer's safe operating area curves for appropriate derating
(f) Carries standards and safety approvals — see manufacturer's data sheet
(g) Do not operate below minimum load
(h) PT6305 series can easily be paralleled to provide output current in multiples of 3 Amps. Please contact Texas Instrument for application note.
(i) With pin 23 open, V2out = 2.5V/1.5V with pin 23 shorted to pin 22, V2out = 1.8V/1.2V
(j) For applications with input voltages greater than 7VDC, Use the PT78NR100 series
(k) Io min. current of .10A can be divided between both outputs, V1 or V2.
(l) This series can be paralleled with a current booster slave to increase output currents in specific increments — see manufacturer's data sheet
(m) Please refer to manufacturer's data sheet for further explanation of ratings
(n) An electrolytic or tantalum capacitor on the output is required for proper operation
(o) Only use an electrolytic capacitor for proper operation
(p) Please use Panasonic low ESR, FC series capacitors for proper operation — see manufacturer's data sheet
(q) Heat sink or tab orientation - see manufacturer's data sheet
(r) Remote sense ground not used, pin 12 must be connected to pin 13 for optimum output voltage accuracy
(s) Has an (OVP) over voltage protection drive output
(t) Processor compatible voltage output adjustment — see manufacturer's data sheet

Isolated DC-DC Converters

These isolated DC-DC converters are state-of-the-art in board-mounted converters, employing high frequency technology with surface mount construction to form high efficiency with un-paralleled flexibility. They are designed for Telecom, Industrial, Computer, Medical, and other distributed power applications that require input-to-output isolation. Very few external components required and in some cases no external components required to make these converters perform, this makes design-in a snap even while saving valuable board space using TI/Power Trend patent pending package designs.

Features For All: • Over-Temperature Shutdown • Adjustable Output Voltage • 1500VDC Isolation • On/Off Control • Fast Transient Response

PT4120/4140 Series Additional Features: • Pin compatible with PT4100 Series • Short-Circuit protection • 25 Watts/in3 Power Density • UL1950 Recognized • CSA 22.2 950 Certified • Designed to meet EN60950

PT4482/4484 Series Additional Features: • Over-Current Protection • Over-Voltage Protection • Differential Remote Sense • Can be coupled with Current Booster Module

PT4560 Series Additional Feature: • Short-Circuit protection • Undervoltage Lockout • Differential Remote Sense • UL1950 recognized • CSA 22.2 950 certified • EN60950 Approved • VDE Licensed • Within FCC Class A Radiated Limits

Fig. 1 Package Style EG(x)

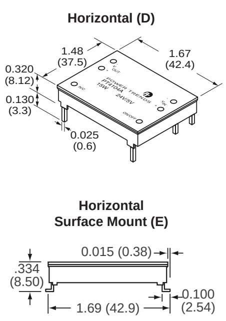


Fig. 2 Package Style EK(x) (26 Pin SIP)

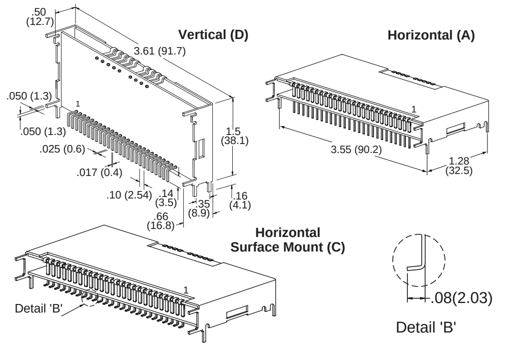


Fig. 3 Package Style EN(x) (19 Pin SIP)

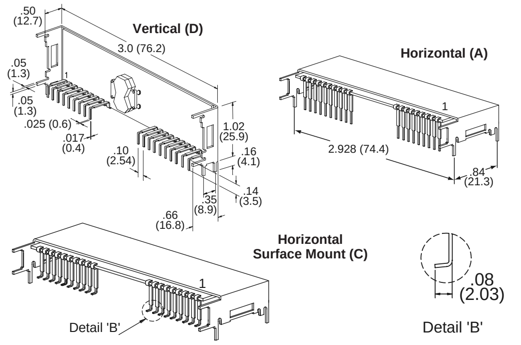
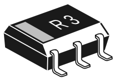


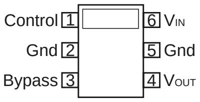
Fig.	Package Style	DC Vout	Max. Amp Iout	Min. Amp Iout	DC Vin Typical	DC Vin Range	Circuit Board Orientation	Recommended Operating Temp. Range (°C)	Digi-Key Part No.	Price Each 1	25	100
2	EKA	1.3 to 3.5 (g)	30.00 (e)	0.00	48	36 to 75	Horz.	-40 to +100	PT4482A-ND	131.04	122.31	113.57
	EKC	1.3 to 3.5 (g)	30.00 (e)	0.00	48	36 to 75	Horz. SMD	-40 to +100	PT4482C-ND	131.04	122.31	113.57
	EKD	1.3 to 3.5 (g)	30.00 (e)	0.00	48	36 to 75	Vert.	-40 to +100	PT4482N-ND	131.04	122.31	113.57
1	EGD	3.3 (c)	5.00 (f)	0.00	24	18 to 40	Horz.	-40 to +85 (b)	PT4141A-ND	46.23	43.15	40.07
1	EGD	3.3 (c)	5.00 (f)	0.00	24	18 to 40	Horz. SMD	-40 to +85 (b)	PT4141C-ND	46.23	43.15	40.07
1	EGE	3.3 (c)	5.00 (f)	0.00	48	36 to 75	Horz.	-40 to +85 (b)	PT4121A-ND	46.23	43.15	40.07
1	EGE	3.3 (c)	5.00 (f)	0.00	48	36 to 75	Horz. SMD	-40 to +85 (b)	PT4121C-ND	46.23	43.15	40.07
3	ENA	3.3 (c,d)	8.00	.25	48	36 to 75	Horz.	-40 to +85 (a,b)	PT4561A-ND	54.89	51.23	47.57
3	ENC	3.3 (c,d)	8.00	.25	48	36 to 75	Horz. SMD	-40 to +85 (a,b)	PT4561C-ND	54.89	51.23	47.57
3	END	3.3 (c,d)	8.00	.25	48	36 to 75	Vert.	-40 to +85 (a,b)	PT4561N-ND	54.89	51.23	47.57
1	EGD	5.0 (c)	4.00	0.00	24	18 to 40	Horz.	-40 to +85 (b)	PT4142A-ND	46.23	43.15	40.07
1	EGD	5.0 (c)	4.00	0.00	24	18 to 40	Horz. SMD	-40 to +85 (b)	PT4142C-ND	46.23	43.15	40.07
1	EGE	5.0 (c)	4.00	0.00	48	36 to 75	Horz.	-40 to +85 (b)	PT4122A-ND	46.23	43.15	40.07
1	EGE	5.0 (c)	4.00	0.00	48	36 to 75	Horz. SMD	-40 to +85 (b)	PT4122C-ND	46.23	43.15	40.07
3	ENA	5.0 (c,d)	6.00	.25	48	36 to 75	Horz.	-40 to +85 (a,b)	PT4562A-ND	54.89	51.23	47.57
3	ENC	5.0 (c,d)	6.00	.25	48	36 to 75	Horz. SMD	-40 to +85 (a,b)	PT4562C-ND	54.89	51.23	47.57
3	END	5.0 (c,d)	6.00	.25	48	36 to 75	Vert.	-40 to +85 (a,b)	PT4562N-ND	54.89	51.23	47.57
2	EKA	5.0 (g)	20.00 (e)	0.00	48	36 to 75	Horz.	-40 to +100	PT4484A-ND	131.04	122.31	113.57
2	EKC	5.0 (g)	20.00 (e)	0.00	48	36 to 75	Horz. SMD	-40 to +100	PT4484C-ND	131.04	122.31	113.57
2	EKD	5.0 (g)	20.00 (e)	0.00	48	36 to 75	Vert.	-40 to +100	PT4484N-ND	131.04	122.31	113.57
1	EGD	12.0 (c)	1.60	0.00	24	18 to 40	Horz.	-40 to +85 (b)	PT4143A-ND	46.23	43.15	40.07
1	EGD	12.0 (c)	1.60	0.00	24	18 to 40	Horz. SMD	-40 to +85 (b)	PT4143C-ND	46.23	43.15	40.07
1	EGE	12.0 (c)	1.60	0.00	48	36 to 75	Horz.	-40 to +85 (b)	PT4123A-ND	46.23	43.15	40.07
1	EGE	12.0 (c)	1.60	0.00	48	36 to 75	Horz. SMD	-40 to +85 (b)	PT4123C-ND	46.23	43.15	40.07
3	ENA	12.0 (c,d)	2.50	.10	48	36 to 75	Horz.	-40 to +85 (a,b)	PT4563A-ND	54.89	51.23	47.57
3	ENC	12.0 (c,d)	2.50	.10	48	36 to 75	Horz. SMD	-40 to +85 (a,b)	PT4563C-ND	54.89	51.23	47.57
3	END	12.0 (c,d)	2.50	.10	48	36 to 75	Vert.	-40 to +85 (a,b)	PT4563N-ND	54.89	51.23	47.57

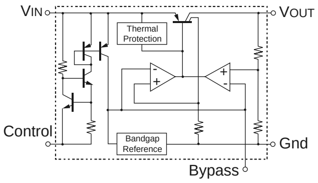
(a) Operating temperatures below 0 (0°C), use tantalum capacitors
(b) See safe operating area curves for appropriate derating
(c) Carries standards and safety approvals – see manufacturer's data sheet
(d) An electrolytic or tantalum capacitor is required for proper operation
(e) This series can be paralleled with a current booster slave to increase output currents in specific increments – see manufacturer's data sheet
(f) The maximum output current reduces the output power to less than 20W (PT4121, PT4141 =16.5W
(g) For normal operation, pin 3 (Inhibit) must be connected to -Vin

Low Dropout Voltage Regulators

Series TK112







Features:

- High voltage precision at ±2.0%
- Active high On/Off control
- Very low dropout voltage 80mV at 30mA
- Very low noise
- Very small SOT-23L package
- Internal thermal shutdown
- Short circuit protection.

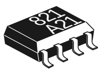
Description:

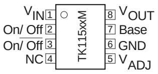
The TK112xxB is a low dropout linear regulator with a built-in electronic switch. The internal switch can be controlled by TTL or CMOS logic levels. The device is in the ON state when the control pin is pulled to a logic high level. An external capacitor can be connected to the noise bypass pin to lower the output noise level to 30µVrms.

An internal PNP pass transistor is used to achieve a low dropout voltage of 80mV (typ.) at 30mA load current. The TK112xxB has a very low quiescent current of 170µA at no load and 1 mA with a 30mA load. The standby current is typically 100 nA. The internal thermal shutdown circuitry limits the junction temperature to below 150°C. The load current is internally monitored and the device will shutdown in the presence of a short circuit or overcurrent condition at the output.

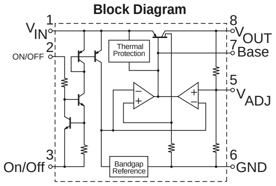
Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,300	Toko Part No.
2.5	TK11225CT-ND	1.53	12.80	117.00	TK11225TR-ND	760.00/M	TK11225BMCL
2.75	TK11227CT-ND	1.53	12.80	117.00	TK11227TR-ND	760.00/M	TK11227BMCL
3.0	TK11230CT-ND	1.53	12.80	117.00	TK11230TR-ND	760.00/M	TK11230BMCL
3.3	TK11233CT-ND	1.53	12.80	118.00	TK11233TR-ND	768.00/M	TK11233BMCL
3.5	TK11235CT-ND	1.53	12.80	117.00	TK11235TR-ND	760.00/M	TK11235BMCL
3.7	TK11237CT-ND	1.53	12.80	117.00	TK11237TR-ND	760.00/M	TK11237BMCL
4.0	TK11240CT-ND	1.53	12.80	117.00	TK11240TR-ND	760.00/M	TK11240BMCL
4.5	TK11245CT-ND	1.53	12.80	117.00	TK11245TR-ND	760.00/M	TK11245BMCL
4.75	TK11247CT-ND	1.53	12.80	117.00	TK11247TR-ND	760.00/M	TK11247BMCL
5.0	TK11250CT-ND	1.53	12.80	117.00	TK11250TR-ND	760.00/M	TK11250BMCL
5.5	TK11255CT-ND	1.53	12.80	117.00	TK11255TR-ND	760.00/M	TK11255BMCL
8.0	TK11280CT-ND	1.53	12.80	117.00	TK11280TR-ND	760.00/M	TK11280BMCL

Series TK115





Block Diagram



TK115xx

Features:

- Very low standby current (“On”, no load)
- Internal thermal shutdown
- Short circuit protection.

Absolute Maximum Ratings:

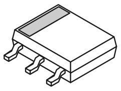
- **Supply Voltage:** 14V.
- **Load Current:** 180mA.
- **Power Dissipation:** 600mW.
- **Operating Temperature Range:** -20°C to +75°C

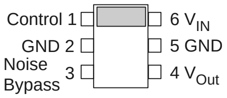
Electrical Characteristics:

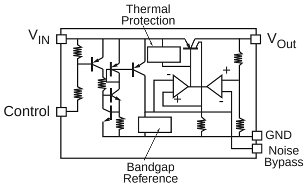
- **V_{OUT}:** ±3% max.
- **LIREG:** 0.02%/V Typ.
- **LDREG:** 0.01%/mA Typ.
- **V_{IN}:** 3.1V min., 13V max.
- **V_{Ripple}:**55dB.

Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Toko Part No.
3.0	TK11530CT-ND	2.43	22.88	214.50	TK11530TR-ND	1594.00	TK11530MTL

Series TK113







Features:

- High voltage precision at ±2.0%
- Active low On/Off control
- Very low dropout voltage 80mV at 30mA
- Very low noise
- Very small SOT-23L or SOT-89-5 surface mount packages
- Internal thermal shutdown
- Short circuit protection.

Description:

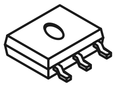
The TK113xxB is a low dropout linear regulator with a built-in electronic switch. The internal switch can be controlled by TTL or CMOS logic levels. The device is in the ON state when the control pin is pulled to a low level. An external capacitor can be connected to the noise bypass pin to lower the output noise level to 30 µVrms.

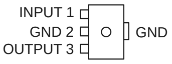
An internal PNP pass transistor is used to achieve a low dropout voltage of 80mV (typ.) at 30mA load current. The TK113xxB has a very low quiescent current of 170µA at no load and 1mA with a 30mA load. The standby current is typically 100nA. The internal thermal shutdown circuitry limits the junction temperature to below 150°C. The load current is internally monitored and the device will shutdown in the presence of a short circuit or overcurrent condition at the output.

Output Voltage	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,300	Toko Part No.
3.3	TK11333CT-ND	1.53	12.80	117.00	TK11333TR-ND	760.00/M	TK11333BMCL
4.0	TK11340CT-ND	1.53	12.80	117.00	TK11340TR-ND	760.00/M	TK11340BMCL
4.5	TK11345CT-ND	1.53	12.80	117.00	TK11345TR-ND	760.00/M	TK11345BMCL
4.8	TK11348CT-ND	1.53	12.80	117.00	TK11348TR-ND	760.00/M	TK11348BMCL

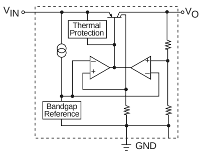
Series TK116xxU

Linear 3-Terminal Regulator





Block Diagram



Features:

- Low dropout voltage
- Very low standby current (no load)
- Good load regulation
- Internal thermal shutdown
- Short circuit protection
- 3% Output voltage accuracy
- Customized versions are available

Description:

The TK116xxU series devices are low power, linear 3-terminal regulators. An internal PNP pass-transistor is used in order to achieve low dropout voltage (typically 160mV at 80mA load current). The regulated output voltages of 3, 5 and 9V are available. The device has very low (400µA) quiescent current with no load and 2mA with 60mA load. An internal thermal shutdown circuit limits the junction temperature to below 150°C. The load current is internally monitored and the device will shutdown in the presence of a short circuit at the output.

Output Voltage (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Toko Part No.
3.0	TK11630UCT-ND	1.77	17.20	131.16	TK11630UTR-ND	860.00	TK11630UTL
5.0	TK11650UCT-ND	1.77	17.20	131.16	TK11650UTR-ND	860.00	TK11650UTL
9.0	TK11690UCT-ND	1.77	17.20	131.16	TK11690UTR-ND	860.00	TK11690UTL

IERC A CTS COMPANY

Heat Sinks

International Electronic Research Corporation has helped pioneer the development of semiconductor heat sinks since 1954. Primarily used by all levels of OEM's engaged in the manufacture of commercial and military equipment, IERC maintains stock and support from prototype through production. IERC has prided themselves for their flexible manufacturing, quality products and on-time delivery.

Clip-On versions have a built-in clip for attaching device to heat sink without additional hardware, positive locks prevent the semiconductor from sliding out. TO-220 versions will also fit TO-202, TO-218 and TO-126 pkgs.

Wattage values listed are at still air conduction only. Moving air will increase this value.

Fig. 1

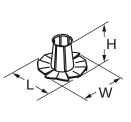


Fig. 2

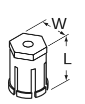


Fig. 3

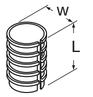


Fig. 4

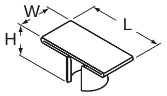


Fig. 5

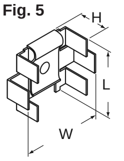


Fig. 6

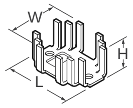


Fig. 7

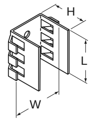


Fig. 8

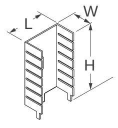


Fig. 9

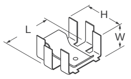


Fig. 10

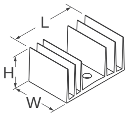


Fig. 11

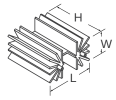


Fig. 12

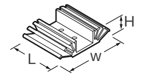


Fig. 13

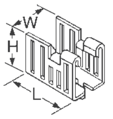


Fig. 14

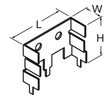


Fig. 15

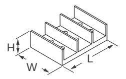


Fig. 16

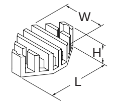


Fig. 17

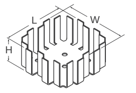


Fig. 18

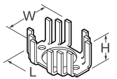


Fig. 19

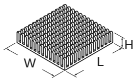


Fig.	Description	Dimensions - Inch (mm) L x W x H	Thermal Res. C/Watt	Digi-Key Part No.	Price Each 1	10	100	IERC Part No.
1	TO-5, Single Fan Top, Black, .5W	.750 x .750 x .250 (19.05 x 19.05 x 6.35)	81.1	294-1122-ND	2.35	2.12	1.65	TXBF-032-025B
1	TO-18, Single Fan Top, .5W	.500 x .500 x .250 (12.70 x 12.70 x 6.35)	150	294-1004-ND	1.13	1.02	.79	TXBF-019-025B
2	TO-5, Press-On Mount, w/Hardware, Black, 1W	.380 x .380 x .310 (9.65 x 9.65 x 7.87)	73.17	294-1120-ND	9.82	8.84	6.88	TXB2P-032-037B
2	TO-5, Press-On Mount, Black, 1W	.380 x .380 x .310 (9.65 x 9.65 x 7.87)	73.17	294-1121-ND	1.86	1.67	1.30	TXBE-032-031B
2	TO-8, Press-On Mount, w/out Hardware, Black, 1W	.380 x .380 x .310 (9.65 x 9.65 x 7.87)	73.17	294-1118-ND	9.29	8.37	6.51	TXB2-032-037B
2	TO-18, Press-On Mount, w/Hardware Black, 5W	.220 x .220 x .340 (5.59 x 5.59 x 8.64)	150.26	294-1123-ND	20.13	18.12	14.10	TXP1808B
2	TO-18, Press-On Mount, w/Hardware, Black, .6W	.220 x .220 x .280 (5.59 x 5.59 x 7.11)	150.26	294-1119-ND	9.49	8.54	6.65	TXB2P-019-028B
3	TO-5, Press-On Mount, Black, 2W	.440 x .440 x .500 (11.18 x 11.18 x 12.70)	35	294-1105-ND	1.07	.96	.75	7-120-BA
4	TO-5, Press-On Mount, Black, 1W	.700 x .325 x .250 (17.78 x 8.26 x 6.35)	58	294-1106-ND	.86	.77	.60	7-175-BA
5	TO-220, Vertical/Horizontal Clip-on Mount, Black, 1.5W	.810 x 1.00 x .310 (20.57 x 25.40 x 7.87)	140.5	294-1115-ND	.70	.63	.49	PSC2-2CB
6	TO-220, Power Horizontal Mount, Black 2W	1.63 x 1.29 x .750 (41.40 x 32.77 x 19.05)	13.6	294-1113-ND	1.66	1.49	1.16	LAT0127B3CB
6	TO-220, Power Horizontal Mount, 8W	1.31 x .90 x .750 (33.27 x 22.86 x 19.05)	17	294-1036-ND	.88	.79	.62	LAE66A3CB
7	TO-220, Horizontal/Vertical Mount w/Tabs, Black, 2.5W	.710 x .800 x .500 (18.03 x 20.32 x 12.70)	30	294-1107-ND	.66	.60	.47	7-361-BA
7	TO-220, Horizontal/Vertical Mount w/Tabs, Black, 2W	.710 x .800 x .340 (18.03 x 20.32 x 8.64)	38	294-1108-ND	.66	.60	.47	7-362-BA
8	TO-220, Vertical Mount, 3W	.750 x .375 x .750 (19.05 x 9.52 x 19.05)	25	294-1011-ND	.74	.53	.37	7-195-2-BA
7	TO-220, Horizontal Mount, 3W (No Mounting Hole)	1.09 x .620 x 1.31 (27.69 x 15.75 x 33.27)	30	294-1013-ND	.66	.52	.39	7-300-000-BA
8	TO-220, Vertical/Horizontal Mount w/Tabs, Nickel, 3W	1.25 x .880 x .250 (31.75 x 22.35 x 6.35)	25.4	294-1114-ND	2.72	2.45	1.91	PSB2-1ND
8	TO-220, Vertical PC Mount w/Tabs, 5W	1.00 x .500 x 1.18 (25.40 x 12.70 x 29.97)	20	294-1042-ND	.63	.57	.44	PB1-36CB
8	TO-220, Vertical PC Mount w/Board Locks	1.00 x .500 x 1.18 (25.40 x 12.70 x 29.97)	28	294-1043-ND	1.00	.90	.70	PB1ST-69CB
8	TO-220, Vertical PC Mount w/Tabs, 6W	.880 x .250 x 1.25 (22.35 x 6.35 x 31.75)	25.4	294-1045-ND	.93	.73	.55	PSB2-1CB
9	TO-220, High Efficiency, 3W	.710 x .310 x 1.00 (18.03 x 7.87 x 25.40)	30	294-1040-ND	.57	.45	.34	PA2-1CB
9	TO-220, High Efficiency, 4W	.710 x .500 x 1.00 (18.03 x 12.70 x 25.40)	26.8	294-1039-ND	.54	.43	.32	PA1-1CB
9	TO-220, Low Profile Clip-On, w/ Antirotation, Black	.810 x .310 x 1.00 (20.57 x 7.87 x 25.40)	40.5	294-1049-ND	.63	.45	.32	PSC2T-2CB
10	TO-220, Power Vertical Mount, 7W	1.15 x .460 x .750 (29.21 x 11.68 x 19.05)	14	294-1034-ND	1.43	1.29	1.00	7-340-1PP-BA
10	TO-220, Power Horizontal Mount, 7W	1.15 x .460 x .750 (29.21 x 11.68 x 19.05)	14	294-1035-ND	1.50	1.35	1.05	7-340-3PP-BA
10	Dual TO-220, Universal Mount, 9W	1.50 x 1.15 x .460 (38.10 x 29.21 x 11.68)	7	294-1080-ND	1.75	1.58	1.23	7-340-2PP-BA
11	TO-220, Power Vertical Mount w/Pins, 11W	1.38 x .500 x 1.50 (35.05 x 6.35 x 38.10)	13	294-1024-ND	4.35	3.92	3.05	7-338-1PP-BA
11	TO-220, Power Vertical Mount w/Pins, 11W	1.65 x 1.00 x 1.50 (41.91 x 25.40 x 38.10)	11	294-1029-ND	3.75	3.38	2.63	7-339-1PP-BA
11	TO-220, Power Vertical Mount w/Pins, 15W	1.65 x 1.00 x 2.00 (41.91 x 25.40 x 50.80)	5	294-1031-ND	5.00	4.50	3.50	7-339-3PP-BA
11	TO-220, Power Vertical Mount w/Pins, 17W	1.38 x .500 x 2.50 (35.05 x 6.35 x 63.50)	4	294-1027-ND	4.90	4.41	3.43	7-338-4PP-BA
11	TO-220, Power Vertical Mount w/Pins, 17W	2.50 x 1.65 x 1.00 (63.50 x 41.91 x 25.40)	4	294-1032-ND	5.35	4.82	3.75	7-339-4PP-BA
12	TO-220, Power Horizontal/Vertical Mount, 12W	.750 x 2.00 x .553 (19.05 x 50.80 x 14.05)	9	294-1067-ND	1.63	1.47	1.14	7-345-1PP-BA
12	TO-220, Power Horizontal Mount, 12W	.750 x 2.00 x .553 (19.05 x 50.80 x 14.05)	9	294-1068-ND	1.35	1.22	.95	7-345-3PP-BA
12	Dual TO-220, Power Universal Mount, 15W	1.50 x 2.00 x .553 (38.10 x 50.80 x 14.05)	4	294-1082-ND	2.13	1.92	1.50	7-345-2PP-BA
13	TO-220, Clip-On, Horizontal (Stamped Copper), Tin Finish	.750 x .520 x .510 (19.05 x 13.21 x 12.95)	35	294-1053-ND	.72	.65	.51	S702
14	Dual TO-220, Vertical w/Tabs, Black, 4W	1.50 x .500 x 1.18 (38.10 x 12.70 x 29.97)	15	294-1117-ND	.83	.75	.59	PSE1-2CB
15	Triple TO-220, Vertical Mount, 7W	1.61 x .750 x .690 (40.89 x 19.05 x 17.53)	9	294-1085-ND	4.41	3.97	3.09	7-342-1PP-BA
15	Six TO-220, Horizontal Mount, 15W	1.61 x 1.50 x .690 (40.89 x 38.10 x 17.53)	4	294-1086-ND	3.21	2.89	2.25	7-342-2PP-BA
16	TO-3, Power Cap, Spacesaver, 2W	1.56 x 1.06 x .500 (39.62 x 26.92 x 12.70)	32	294-1095-ND	4.60	4.14	3.22	7-423-BA
17	TO-3, Power Horizontal Mount, Black, 8W	1.78 x 1.78 x 1.00 (45.21 x 45.21 x 25.40)	7.1	294-1124-ND	2.21	2.00	1.55	UP-TO3-CB
17	TO-3, Power Horizontal Mount, 15W	2.50 x 2.50 x .900 (63.50 x 63.50 x 22.86)	5.4	294-1088-ND	3.69	3.32	2.58	HP1-TO3-CB
18	TO-3, Power Horizontal Mount, 12W	1.63 x 1.29 x 1.25 (41.40 x 32.77 x 31.75)	11.1	294-1092-ND	3.34	3.01	2.34	LA363B5CB
19	Various Semiconductor, Adhesive Backed	.910 x .910 x .355 (23.11 x 23.11 x 9.02)	26.9	294-1097-ND	3.05	2.75	2.14	BDN09-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.01 x 1.01 x .355 (25.65 x 25.65 x 9.02)	26.4	294-1098-ND	3.08	2.77	2.16	BDN10-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.11 x 1.11 x .355 (28.19 x 28.19 x 9.02)	20.9	294-1109-ND	4.32	3.89	3.03	BDN11-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.21 x 1.21 x .355 (30.73 x 30.73 x 9.02)	19.6	294-1099-ND	3.10	2.79	2.17	BDN12-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.21 x 1.21 x .555 (30.73 x 30.73 x 14.10)	16.5	294-1110-ND	4.85	4.37	3.40	BDN12-5CB/A01
19	Various Semiconductor, Adhesive Backed	1.31 x 1.31 x .355 (33.27 x 33.27 x 9.02)	16.1	294-1100-ND	3.13	2.82	2.19	BDN13-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.41 x 1.41 x .355 (35.81 x 35.81 x 9.02)	16.2	294-1101-ND	3.23	2.91	2.26	BDN14-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.51 x 1.51 x .355 (38.35 x 38.35 x 9.02)	15.1	294-1102-ND	3.48	3.13	2.44	BDN15-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.61 x 1.61 x .355 (40.89 x 40.89 x 9.02)	13.5	294-1103-ND	3.75	3.38	2.63	BDN16-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.71 x 1.71 x .355 (43.43 x 43.43 x 9.02)	11.5	294-1111-ND	6.29	5.66	4.41	BDN17-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.81 x 1.81 x .355 (45.97 x 45.97 x 9.02)	10.8	294-1104-ND	4.30	3.87	3.01	BDN18-3CB/A01
19	Various Semiconductor, Adhesive Backed	1.81 x 1.81 x .605 (45.97 x 45.97 x 15.37)	8.1	294-1112-ND	6.76	6.09	4.74	BDN18-6CB/A01

Panasonic®

"PGS" (Pyrolytic Graphite Sheet) Heat Sink Sheet

PGS (Pyrolytic Graphite Sheet) is a heat sink sheet with high thermal conductivity and high flexibility.

PGS is made of graphite with a structure that is close to a single crystal.

This is achieved by highly-oriented polymer film sheet, a process which has never been implemented before.

Features:

- Excellent thermal conductivity: 600 to 800 W/(m.K), twice as high as copper, three times as high as aluminum
- Light weight: the same as water (Specific gravity: 1.0 g/cm^3), 1/9 that of copper, 1/3 that of aluminum
- Flexible sheet, easy to be cut or trimmed and withstands repeated bending
- High heat resistance: Stable up to about 400°C even in the air
- Low thermal resistance
- The main component is carbon. Minimal impurities and outgassing
- Excellent heat transferring performance. Heat sink and even distribution of heat

Application Examples:

- Notebook personal computers, DVDs, DVCs, mobile phones
- Semiconductor manufacturing equipment (Sputtering, Dry etching, Steppers)
- Optical communications equipment

General Characteristics of PGS

Items	Characteristics
Thickness	0.1±0.05mm
Density	1.0 g/cm^3
Thermal Conductivity (a-b plane)	600 – 800 W/(m.K)
Thermal Resistance	0.4°C/w(10N/cm^2)
Electrical Conductivity (a-b plane)	10000 S/cm
Extensional Strength	19.6 Mpa
Expansion Coefficient (a-b plane) (c axis)	9.3 x 10^{-7} 1/K 32 x 10^{-6} 1/K
Heat Resistance	400°C
Bending (angle 180, R5)	10000 cycles

Dimensions – mm L x W	Digi-Key Part No.	Price Each	Panasonic Part No.
125 x 180	P11438-ND	94.62	EYG-S131810
125 x 90	P11439-ND	51.46	EYG-S091310
60 x 90	P11440-ND	29.88	EYG-S060910

AAVID
THERMALLOY

Heat Sinks

Aavid's Ultrastick is a unique phase-change thermal interface material that surpasses grease in thermal performance and long-term stability. This solid, silicone free, paraffin based thermal compound changes phase at 60°C, with a concurrent volumetric expansion that fills gaps between the mating surfaces. One cost effective application leaves a thin, film like deposit, providing excellent heat transfer and low interface thermal resistance.

Features:

- Thermal resistance 20% lower than thermal grease, with significant long-term reliability benefits
- Excellent heat transfer properties, consistent at mounting pressures from less than 5 psi to more than 200 psi
- No run-out, migration, dry-out, or flaking that can occur with typical thermal grease
- Non-toxic and inert
- Electrically nonconducive
- Easy to use and dry to the touch after application, reducing labor costs
- Each bar covers approximately 1,000 in^2

HS243-ND................................**$17.50**

Fig. 1

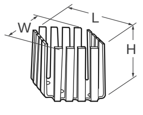


Fig. 2

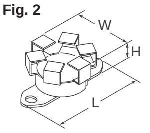


Fig. 3

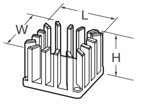


Fig. 4

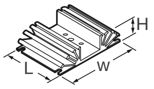


Fig. 5

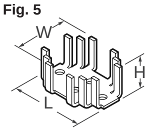


Fig. 6

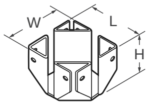


Fig. 7

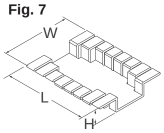


Fig. 8

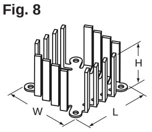


Fig. 9

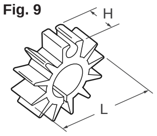


Fig. 10

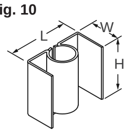


Fig. 11

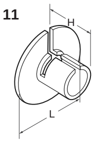


Fig. 12

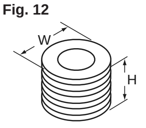


Fig. 13

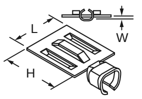


Fig. 14

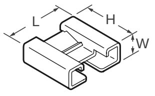


Fig. 15

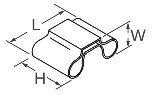


Fig. 16

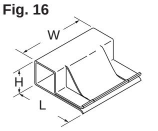


Fig. 17

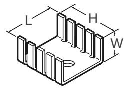


Fig. 18

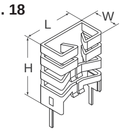


Fig.	Description	Dimensions – Inch (mm) L x W x H	Thermal Resist. °C/W	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
1	TO-3, Compact Heat Sink, 5W, Black	1.88 x 1.40 x .50 (47.75 x 35.56 x 12.70)	11.5	HS148-ND	.80	.72	.56	501303B00000
1	TO-3, Compact Heat Sink, 7W, Black	1.88 x 1.40 x .75 (47.75 x 35.56 x 19.05)	8.3	HS149-ND	.88	.79	.62	501403B00000
1	TO-3, With Wave-On Mounts, 9W, Black	1.88 x 1.40 x .75 (45.97 x 35.56 x 19.05)	8.3	HS267-ND	2.62	2.36	1.84	501403B00100
1	TO-3, Compact Heat Sink, 8.5W, Black	1.88 x 1.40 x 1.00 (47.75 x 35.56 x 25.40)	6.3	HS248-ND	1.22	1.10	.86	501503B00000
1	TO-3, With Wave-On Mounts, 9W, Black	1.88 x 1.40 x 1.00 (45.97 x 35.56 x 25.4)	6.3	HS269-ND	2.40	2.16	1.68	501503B00100
1	TO-3, Compact Heat Sink, 9.5W, Black	1.88 x 1.40 x 1.25 (47.75 x 35.56 x 31.75)	5.4	HS110-ND	1.23	1.11	.86	501603B00000
1	TO-3, Compact, 9W, Gold	1.88 x 1.40 x 1.25 (45.97 x 35.56 x 31.75)	5.4	HS270-ND	1.16	1.04	.81	501603C00000
2	TO-3, Expandable Collar Type (Can be used with Fig. 1), Black	1.54 x 1.125 x .87 (39.12 x 28.58 x 22.10)	22.0	HS236-ND	.90	.81	.63	579103B00000
3	TO-3, 25W, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	5.4	HS103-1.25-ND	4.73	4.26	3.31	568303B00000
3	TO-3, 17W, Black	1.81 x 1.81 x .50 (45.97 x 45.97 x 12.70)	12.5	HS103-0.5-ND	7.93	7.14	5.55	568003B00000
3	TO-3, Free/Forced Air No Holes,12W, Black	1.83 x 1.83 x .50 (46.48 x 46.48 x 12.7)	5.4	HS291-ND	7.41	6.68	5.19	568000B00000
3	TO-3, Free or Forced Air Cooling, 12W, Black	1.83 x 1.83 x .75 (46.48 x 46.48 x 19.05)	5.4	HS293-ND	7.71	6.94	5.40	568103B00000
3	TO-3, Free or Forced Air Cooling, 12W, Black	1.81 x 1.81 x 1.00 (45.97 x 45.97 x 25.4)	5.4	HS294-ND	7.11	6.40	4.98	568203B00000
4	TO-3, Power Cooler, 50W, Black	3.00 x 4.125 x 1.00 (76.20 x 104.78 x 25.40)	5.4	HS117-ND	7.00	6.30	4.90	198540B00000
5	TO-3, Space Saver, 6W, Black	1.63 x 1.29 x .75 (41.40 x 32.77 x 19.05)	5.4	HS140-ND	1.83	1.65	1.28	502203B00000
5	TO-3, Space Saver, 8W, Black	1.63 x 1.29 x 1.00 (41.40 x 32.77 x 25.40)	5.4	HS141-ND	1.98	1.78	1.39	502303B00000
5	TO-3, Space Saver, 12W, Black	1.63 x 1.29 x 1.250 (41.40 x 32.77 x 31.75)	5.4	HS142-ND	1.88	1.69	1.32	502403B00000
6	TO-3, Heatsink, Fold-Back Fins, No Holes, 10W, Black	1.83 x 1.83 x 1.00 (16.26 x 16.26 x 25.4)	5.4	HS296-ND	2.83	2.55	1.99	569000B00000
6	TO-3, Fold-Back Fins, 20W, Black	1.83 x 1.83 x 1.31 (46.48 x 46.48 x 33.27)	5.4	HS110-3-ND	1.38	1.24	.97	569003B00000
6	TO-3, Fold-Back Fins, 10W, Gold	1.83 x 1.83 x 1.31 (46.48 x 46.48 x 33.27)	5.4	HS298-ND	1.35	1.22	.95	569003C00000
7	TO-3, Universal Hole Pattern, Low Profile, Black	2.00 x 1.75 x .375 (50.80 x 44.45 x 9.53)	7.0	HS228-ND	.95	.86	.67	506007B00000
8	TO-3, Slanted Fin, 10W, Black	.75 x 1.88 x .50 (19.05 x 47.75 x 12.7)	3.5	HS260-ND	2.04	1.84	1.43	500103B00000
8	TO-3, Slanted Fin, 12W, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	2.5	HS264-ND	1.98	1.78	1.39	500403B00000
8	TO-3, Slanted Fin, 14W, Black	2.5 x 2.5 x .90 (63.50 x 63.50 x 22.86)	2.2	HS265-ND	3.75	3.38	2.63	500503B00000
9	TO-5, High Performance, 2W, Black	.75 dia x .25 (19.05 dia x 6.35)	56.0	HS101-ND	1.05	.95	.74	323005B00000
9	TO-5, Press-On, 1W, Black	.5 dia x .25 (127 dia x 6.35)	56.0	HS253-ND	.64	.58	.45	320205B00000
9	TO-5, Press-On, High Performance, 1W, Black	.75 dia x .375 (19.05 dia x 9.52)	30.0	HS259-ND	1.19	1.07	.84	326005B00000
10	TO-5, Snap-On Cooler, 1.5W, Black	.83 x .395 x .50 (21.08 x 10.03 x 12.70)	38.0	HS217-ND	.39	.28	.20	578205B00000
10	TO-5, Snap-On Cooler, 2W, Black	.83 x .395 x .75 (21.08 x 10.03 x 19.05)	35.0	HS218-ND	.46	.33	.23	578305B00000
11	TO-5, Dual Fin Press-Fit Heat Sink, Black	.75 dia x .40 (19.05 dia x 10.16)	56.0	HS242-ND	2.38	2.14	1.67	322505B00000
11	TO-5, Press-On, 1.25W, Black	.75 dia x .25 (19.05 dia x 6.35)	40.0	HS257-ND	2.40	2.16	1.68	322605B00000
11	TO-5, Press-On, 1.25W, Gold	.75 dia x .25 (19.05 dia x 6.35)	40.0	HS258-ND	1.04	.94	.73	322605C00000
11	TO-92 and TO-18, Press Fit, 1W, Black	.50 dia x .235 (12.70 dia x 5.97)	100.0	HS100-ND	1.23	1.11	.86	322400B00000
12	TO-5, 2 Pc Part for Max Dissipation, 1W, Gold	.625 dia x .271 (15.88 dia x 6.88)	22.0	HS254-ND	6.96	6.27	4.88	321127C00000
12	TO-5, 2 Pc Part for Max Dissipation, 2W, Black	.75 dia x .290 (19.05 dia x 7.37)	20.0	HS255-ND	10.07	9.07	7.05	321527B00000
13	TO-92, Press Fit Heat Sink, For Standard or Modified Pkg, Black	.60 x .05 x .50 (15.24 x 1.27 x 12.70)	64.0	HS251-ND	.42	.31	.22	575200B00000
15	TO-126, Vertical Mount Clip-On Cooler, Black	.775 x .32 x .52 (19.69 x 8.13 x 13.21)	26.0	HS216-ND	.42	.30	.21	577500B00000
16	TO-202, Compact Clip-On Heat Sink, Black	.58 x .80 x .25 (14.73 x 20.32 x 6.35)	28.0	HS247-ND	.53	.38	.27	574004B00000
17	TO-202, Low Profile Heat Sink, Black	.52 x .375 x .75 (13.21 x 9.53 x 19.05)	27.2	HS214-ND	.42	.30	.21	577304B00000
17	TO-202, Low Profile Heat Sink, Black	.52 x .50 x .75 (13.21 x 12.70 x 19.05)	24.0	HS215-ND	.42	.30	.21	577404B00000
19	TO-218, Power Cooler, With Pins, 10W, Black	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS185-ND	1.23	1.11	.86	513201B02500
19	TO-218, Power Cooler, With Pins, 20W, Black	1.65 x 1.00 x 1.50 (41.91 x 25.40 x 38.10)	3.7	HS187-ND	1.58	1.42	1.11	529801B02500
20	TO-218, Quick Attach, With Pins, 12W, Black	1.95 x .50 x 1.97 (49.53 x 12.70 x 50.04)	6.5	HS134-ND	1.20	1.08	.84	592201B03400
19	TO-218, Vertical Power, 10W, With Pins, Black	1.65 x 1.0 x 2.5 (41.91 x 25.4 x 63.5)	2.5	HS277-ND	1.75	1.58	1.23	530001B02500
21	TO-218, Twisted High Rise Fins, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	6.3	HS109-ND	1.75	1.58	1.23	530101B00150
18	TO-218, Slide-On, Vertical PC Mount, With Standard Tabs, Black	1.00 x .50 x 1.22 (25.40 x 12.70 x 30.99)	11.5	HS234-ND	1.43	1.29	1.00	566010B03400
3	TO-220, Dual Mount Power Cooler, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	5.5	HS135-ND	8.75	7.88	6.13	568322B00000
6	TO-220, Dual Mount Power Cooler, 20W, Black	1.83 x 1.83 x 1.31 (46.48 x 46.48 x 33.27)	5.5	HS110-220-ND	1.70	1.53	1.19	569022B00000
14	TO-202, Clip-On Cooler, 5W, Black	.90 x 1.02 x .39 (22.86 x 25.91 x 9.91)	16.8	HS119-ND	.56	.40	.28	574204B00000
17	TO-220, Compact Heat Sink, Black	.52 x .25 x .75 (13.21 x 6.35 x 19.05)	32.0	HS105-ND	.39	.28	.20	577002B00000
17	TO-220, Compact Heat Sink, Black	.52 x .375 x .75 (13.21 x 9.53 x 19.05)	25.9	HS106-ND	.32	.23	.16	577102B00000
17	TO-220, Compact Heat Sink, Black	.52 x .50 x .75 (13.21 x 12.70 x 19.05)	24.4	HS107-ND	.35	.25	.18	577202B00000
17	TO-220, Low Profile, 2.5W, Gold	.75 x .75 x .375 (19.05 x 19.05 x 9.52)	24.0	HS272-ND	.33	.30	.23	507302C00000
17	TO-220, Low Profile, Low Cost Cooler, 2.5W, Black	.75 x .75 x .375 (19.05 x 19.05 x 9.53)	24.0	HS115-ND	.39	.28	.20	507302B00000
17	TO-220, 2 Hole Pattern Comp. Sink, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	16.7	HS230-ND	.50	.40	.30	530613B00000
17	TO-220, Horizontal/Vertical Mount, 4.5W, Black	1 x 1.18 x .50 (25.4 x 29.97 x 12.7)	16.7	HS278-ND	.43	.39	.30	530614B00000
17	TO-220, Horizontal/Vertical Mount, 3.7W, Gold	1 x .71 x .5 (25.4 x 18.03 x 12.7)	20.3	HS279-ND	.30	.28	.22	530714C00000
17	TO-220, Compact Heat Sink, With Tabs, Black	.52 x .25 x .75 (13.21 x 6.35 x 19.05)	32.0	HS212-ND	.60	.43	.30	577002B04000
17	TO-220, Compact Heat Sink, With Tabs, Black	.52 x .375 x .75 (13.21 x 9.53 x 19.05)	25.9	HS213-ND	.60	.43	.30	577102B04000
17	TO-220, Low Cost Vertical Mount, With Front Tabs, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.6	HS206-ND*****	2.58	2.32	1.81	575002T00000
17	TO-220, Low Cost Vertical Mount, With Center Tabs, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.6	HS186-ND*****	2.75	2.48	1.93	523002T00000
17	TO-220, Vertical Mount With Black Tabs	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.0	HS194-ND	.48	.38	.28	563002B00000
17	TO-220, Vertical Mount With Black Tabs	1.00 x .50 x .95 (25.40 x 12.70 x 24.13)	16.6	HS207-ND	.60	.47	.35	576602B00000
17	TO-220, Vertical Mount With Pre-Tinned Tabs, Black	1.00 x .50 x .95 (25.40 x 12.70 x 24.13)	16.6	HS208-ND*****	2.35	2.12	1.65	576602T00000
19	TO-220, Power Cooler, 9.0W, Screw Mount, Gold	1.5 x 1.375 x 1.00 (38.1 x 34.93 x 25.4)	13.4	HS282-ND	1.21	1.09	.85	531002C00000
19	TO-220, Power Cooler, With Pins, Heavy Duty, Black	1.38 x .50 x 1.00 (35.05 x 12.70 x 25.40)	13.4	HS190-ND	1.20	1.08	.84	531002B02500
19	TO-220, Power Cooler, 9.0W, Black	1.38 x .5 x 1.5 (35.05 x 12.7 x 50.8)	10.4	HS284-ND	1.18	1.06	.83	531102B00000
19	TO-220, Power Cooler, With Pins, Heavy Duty, Black	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	10.4	HS191-ND	1.28	1.15	.90	531102B02500
19	TO-220, Power Cooler, With Pins, 2-Sided Mount, Black	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	11.0	HS184-ND	1.08	.97	.76	513102B02500
19	TO-220, Power Cooler, With Pins, 2-Sided Mount, Black	1.65 x 1.00 x 1.50 (41.91 x 25.40 x 38.10)	3.7	HS188-ND	1.55	1.40	1.09	529802B02500

***** Dielectric Coating   Unless otherwise noted, all heat sinks are black anodized aluminum.

(Continued)

Fig. 19

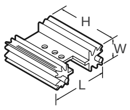


Fig. 20

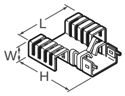


Fig. 21

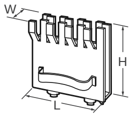


Fig. 22

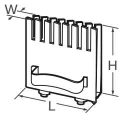


Fig. 23

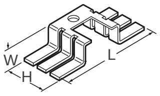


Fig. 24

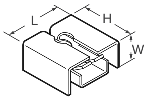


Fig. 25

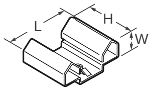


Fig. 26

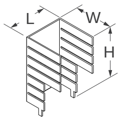


Fig. 27

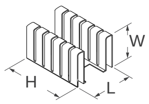


Fig. 28

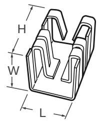


Fig. 29

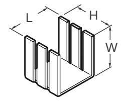


Fig. 30

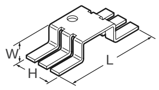


Fig. 31

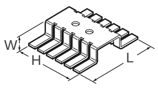


Fig. 32

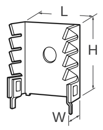


Fig. 33

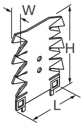


Fig. 34

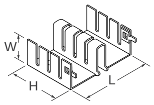


Fig. 35

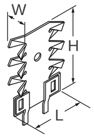


Fig. 36

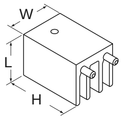


Fig. 37

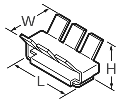


Fig. 38

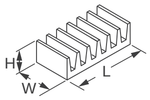


Fig. 39

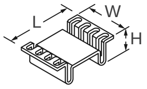


Fig.	Description	Dimensions – Inch (mm) L x W x H	Thermal Resist. °C/W	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
19	TO-220, Power Cooler, Black	1.38 x .50 x 1.00 (35.05 x 12.70 x 25.40)	13.4	HS231-ND	1.10	.99	.77	531002B00000
19	TO-220, Power Cooler, Screw Mount, Gold	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	10.4	HS131-ND	1.40	1.26	.98	531102C00000
19	TO-220, Power Cooler, With Pins, Gold	1.38 x .50 x 1.50 (35.05 x 12.70 x 38.10)	10.4	HS131-P-ND	1.68	1.51	1.18	531102C02500
19	TO-220, Power Cooler, Screw Mount, Gold	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS132-ND	1.43	1.29	1.00	531202C00000
19	TO-220, Power Cooler, With Pins, Gold	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS132-P-ND	1.70	1.53	1.19	531202C02500
19	TO-220, Power Cooler, 9.0W, Black	1.38 x .50 x 2.00 (35.05 x 12.7 x 50.8)	8.3	HS287-ND	1.33	1.20	.94	531202B00000
19	TO-220, Power Cooler, With Pins, Black	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.3	HS241-ND	1.39	1.25	.97	531202B02500
19	TO-220, Vertical Power, 10W, Screw Mount, Black	1.65 x 1.0 x 1.5 (41.91 x 25.4 x 38.1)	2.5	HS276-ND	1.38	1.25	.97	529802B00000
19	TO-220, Power Cooler, With Pins, Black	1.65 x 1.00 x 2.00 (41.91 x 25.40 x 50.80)	3.4	HS229-ND	1.83	1.65	1.28	529902B02500
19	TO-220, Power Cooler, With Pins, 9.0W, Black	1.38 x .50 x 2.5 (35.05 x 12.7 x 63.5)	8.0	HS290-ND	1.43	1.29	1.01	531302B02500
19	TO-220, Power Cooler, Screw Mount, Gold	1.38 x .50 x 2.50 (35.05 x 12.70 x 63.50)	8.0	HS133-ND	1.70	1.53	1.19	531302C00000
19	TO-220, Power Cooler, With Pins, Gold	1.38 x .50 x 2.50 (35.05 x 12.70 x 63.50)	8.0	HS133-P-ND	1.60	1.44	1.12	531302C02500
19	TO-220, Power Cooler, With Pins, Black	1.65 x 1.00 x 2.50 (41.91 x 25.40 x 63.50)	3.8	HS239-ND	1.75	1.58	1.23	530002B02500
21	TO-220, Staggered High Rise Fins, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	16.8	HS151-ND	1.75	1.58	1.23	530402B00150
22	TO-220, Twisted High Rise Fins, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	6.3	HS152-ND	1.75	1.58	1.23	530102B00150
22	TO-220, Dual Mount, With Kool Clip, Black	1.75 x .50 x 1.75 (44.45 x 12.70 x 44.45)	4.4	HS249-ND	1.96	1.77	1.37	530162B00162
23	TO-220, 2W Extended Cap For HS112 and HS114, Black	1.75 x .70 x .50 (17.78 x 44.45 x 12.70)	15.6	HS113-ND	.42	.30	.21	507102B00000
24	TO-220, Vertical Mount Clip-On Cooler, With 1 Mount Hole, Black	.75 x .86 x .395 (19.05 x 21.84 x 10.03)	23.2	HS111-ND	.39	.28	.20	574102B00000
24	TO-220, Vertical Mount Clip-On Cooler, Black	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	21.2	HS198-ND	.39	.28	.20	574502B00000
24	TO-220, Horizontal Mount Clip-On, PC Mount, With Std. Tabs, Blk	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	23.2	HS197-ND	.84	.66	.49	574402B03200
24	TO-220, Vertical Mount Clip-On, PC Mount, w/Long Tabs, Black	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	21.2	HS200-ND	.53	.48	.37	574502B03300
24	TO-220, Vertical Mount Clip-On, PC Mount, w/Long Tabs, Black	.86 x .395 x 1.375 (21.84 x 10.03 x 34.93)	16.0	HS204-ND	.73	.66	.51	574902B03300
24	TO-220, Vertical Mount Clip-On, PC Mount, w/Stepped Tabs, Black	.86 x .395 x .75 (21.84 x 10.03 x 19.05)	21.2	HS201-ND	.57	.45	.34	574502B03700
24	TO-220, Vertical Mount Clip-On, PC Mount, w/Stepped Tabs, Black	.86 x .395 x .69 (21.84 x 10.03 x 17.53)	21.6	HS203-ND	.68	.61	.48	574602B03700
24	TO-220, Vertical Mount Clip-On, PC Mount, w/Standard Tabs, Black	.86 x .395 x 1.375 (21.84 x 10.03 x 34.93)	16.0	HS205-ND	1.00	.90	.70	574902B04300
25	TO-220, Snap Down, 5W, Black	.75 x 1.12 x .435 (19.05 x 28.45 x 11.05)	16.9	HS116-ND	.51	.40	.30	575102B00000
25	TO-220, Snap-Down With Built-In Clip, For Standard TO-220s, Black	.975 x .44 x .75 (24.77 x 11.18 x 19.05)	16.8	HS220-ND	.46	.33	.23	579302B00000
25	TO-220, Snap-Down With Built-In Clip, For Tapered TO-220s, Black	.975 x .44 x .75 (24.77 x 11.18 x 19.05)	16.8	HS221-ND	.53	.38	.27	579402B00000
26	TO-220, High Performance PC Mount, With Tabs, Black	1.00 x 1.00 x 1.675 (25.40 x 25.40 x 42.55)	10.0	HS222-ND	1.00	.90	.70	590102B03600
27	TO-220, SlimLine High Performance, Horizontal Mount, Black	1.00 x .787 x 1.45 (25.40 x 19.99 x 36.83)	12.4	HS193-ND	.65	.59	.46	551002B00000
28	TO-220, Slide-On, Horizontal PC Mount, With Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS150-ND	.55	.50	.39	576802B03100
28	TO-220, Slide-On, 5W, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS121-ND	.53	.38	.27	576802B00000
28	TO-220, Slide-On, 5W, Unfinished, Black	.57 x .50 x .60 (14.48 x 12.70 x 15.24)	26.8	HS237-ND	.63	.45	.32	591202U00000
28	TO-220, Slide-On, Vertical PC Mount, With Wide Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS209-ND	.58	.52	.41	576802B03700
28	TO-220, Slide-On, Vertical PC Mount, With Long Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS210-ND	.60	.47	.35	576802B03900
28	TO-220, Slide-On, Vertical PC Mount, With Standard Tabs, Black	.50 x .50 x .75 (12.70 x 12.70 x 19.05)	18.8	HS211-ND	.58	.52	.41	576802B04100
28	TO-220, Slide-On, Vertical PC Mount, With Surelock Tabs, Black	.57 x .50 x .75 (14.48 x 12.70 x 19.05)	26.8	HS223-ND	.73	.66	.51	591302B02800
28	TO-220, Slide-On, Vertical PC Mount, With Standard Tabs, Black	.75 x .50 x .50 (19.05 x 12.70 x 12.70)	18.8	HS122-ND	.53	.48	.37	576802B04000
28	TO-220, Slide-On, Vertical PC Mount, With SureLock Tabs, Black	.95 x 1.00 x 1.22 (24.13 x 25.40 x 30.99)	11.5	HS240-ND	1.48	1.34	1.04	566010B02800
29	TO-220, Economy Power Cooler, Lightweight , Black	1.00 x .50 x .71 (25.40 x 12.70 x 18.03)	20.3	HS189-ND	.42	.30	.21	530714B00000
29	TO-220, Power Cooler, 10W, Black	.78 x .85 x 1.45 (19.81 x 21.59 x 36.83)	6.4	HS104-2-ND	.57	.45	.34	504222B00000
29	TO-220, Power Cooler, 6W, Black	.70 x .70 x .85 (17.78 x 17.78 x 21.59)	15.6	HS104-1-ND	.46	.33	.23	504102B00000
30	TO-220, Basic Manual Attachment, Low Profile, Black	.70 x 1.75 x .375 (17.78 x 44.45 x 9.53)	15.6	HS112-ND	.39	.28	.20	507002B00000
31	TO-220, Dual Basic Manual Attachment, Horizontal Mount, Black	1.45 x 1.75 x .375 (36.83 x 44.45 x 9.53)	9.6	HS114-ND	.70	.50	.35	507222B00000
32	TO-220, Twisted Fin, Vertical PC Mount, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.4	HS120-ND	.78	.70	.55	593002B03400
32	TO-220, Twisted Fin, With Surelock Tabs and Kool Clip, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.0	HS232-ND	1.28	1.15	.90	534202B02853
32	TO-220, Twisted Fin, Vertical, With Tabs and Kool Clip, Black	1.00 x .50 x 1.18 (25.40 x 12.70 x 29.97)	13.0	HS233-ND	1.50	1.35	1.05	534202B33453
33	TO-220, Spacesaver, Vertical Mount, With Tabs, Black	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	10.0	HS225-ND	.90	.81	.63	593202B03500
33	TO-220, Spacesaver, Vertical Mount, With Kool Clip/Tabs, Black	1.38 x .48 x 2.00 (35.05 x 12.19 x 50.80)	10.4	HS192-ND	.95	.86	.67	534302B03553
34	TO-220, Dual Basic Manual Attachment, Vertical Mount, Black	1.48 x .50 x 1.03 (37.59 x 12.70 x 26.16)	13.2	HS219-ND	.70	.63	.49	578622B03200
35	TO-220, Spacesaver Vertical Mount, With Tabs, Black	.875 x .25 x 1.25 (22.23 x 6.35 x 31.75)	22.0	HS224-ND	.73	.66	.51	592502B03400
35	TO-220, Spacesaver Vert. Mnt, With Kool Clip-SureLock Tabs, Blk	1.38 x .50 x 2.00 (35.05 x 12.70 x 50.80)	8.8	HS238-ND	1.30	1.17	.91	594302B02853
36	TO-220, Vertical Mount, 1W, Black	.64 x .64 x 1.5 (16.26 x 16.26 x 50.8)	17.4	HS300-ND	1.36	1.23	.96	581002B00000
36	TO-220, Vertical Mount, 2.5W, With Pins, Black	.64 x .64 x 1.00 (16.26 x 16.26 x 25.4)	17.4	HS301-ND	1.38	1.25	.97	581002B02500
36	TO-220, Vertical Mount, 2.5W, With Pins, Gold	.64 x .64 x 1.00 (16.26 x 16.26 x 25.4)	17.4	HS302-ND	1.90	1.71	1.33	581002C02500
36	TO-220, Vertical Mount, 2.5W, Black	.64 x .64 x 1.5 (16.26 x 16.26 x 50.8)	16.8	HS303-ND	1.32	1.19	.93	581102B00000
36	TO-220, Vertical Mount, 2.5W, With Pins, Black	.64 x .64 x 1.5 (16.26 x 16.26 x 50.8)	16.8	HS304-ND	1.43	1.29	1.01	581102B02500
36	TO-220, Vertical Mount, 2.5W, With Pins, Black	.64 x .64 x 2.00 (16.26 x 16.26 x 50.8)	12.8	HS305-ND	1.92	1.73	1.35	581202B02500
37	Dip Cooler, 14 or 16 Pin IC, Slide-On, Black	.887 x .60 x .41 (22.53 x 15.24 x 10.41)	38.0	HS179-ND	.45	.36	.27	580200B00000
37	Dip Cooler, 24 Pin IC, Slide-On, Black	1.46 x 1.008 x .58 (37.08 x 25.60 x 14.73)	20.0	HS182-ND	.70	.63	.49	580500B00000
37	Dip Cooler, 40 Pin IC, Slide-On, Black	2.256 x .98 x .59 (57.30 x 24.89 x 14.99)	22.0	HS183-ND	.75	.68	.53	580700B00000
38	Dip Cooler, 14-16 Pin, Glue-On, Black	.73 x .25 x .19 (18.54 x 6.35 x 4.83)	62.5	HS227-ND	.65	.59	.46	501200B00000
38	Dip Cooler, 24 Pin IC, Glue-On, Black	1.25 x .53 x .19 (31.75 x 13.47 x 4.83)	44.0	HS273-ND	.73	.66	.52	508500B00000
38	Dip Cooler, 40 Pin IC, Glue-On, Black	2.0 x .53 x .19 (50.8 x 13.47 x 4.83)	28.0	HS274-ND	1.37	1.23	.96	508700B00000

***** Dielectric Coating   Unless otherwise noted, all heat sinks are black anodized aluminum.

Fig.	Description	Dimensions – Inch (mm) L x W x H	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing† 250	500	Mfg. Part No.
39	SMT D2 Pak Heat Sink, Autoinsertable, Pretinned	1.03x.50x.40 (26.16x12.70x10.16)	HS123CT-ND	.65	.59	107.25	195.00	573300D00010
39	SMT D3 Pak Heat Sink, Autoinsertable, Pretinned	1.22x.50x.40 (30.99x12.70x10.16)	HS124CT-ND	.70	.63	111.38	202.50	573400D00010

† For Tape and Reel Part Number, change the CT to TR.

Heat Sink Pads “The Alternative To Grease”

Sil-Pad 600® is a thermally conductive, silicone elastomer filled with special ingredients to provide higher thermal properties than the original fiberglass based Sil-Pad This material has excellent physical and mechanical characteristics while remaining cost competitive. (Electrically Insulating Material)

Sil-Pad 900-S® family of thermally conductive insulation materials are designed for low cost applications requiring high thermal performance. Intended as an improved Sil Pad 600 alternative.

Q-Pad 3® is a thermally conductive, fiberglass reinforced graphite imbedded elastomer which conforms to surface textures extremely well. This material eliminates problems associated with thermal grease such as contamination of electronic assemblies and reflow solder baths. Q-Pad 3 may be installed prior to soldering and cleaning. (Electrically Conducting Material)

Sil-Pad K10® is a thermally conductive Kapton composite film coated with boron nitride filled polyester resin. Offering the highest thermal properties of the Kapton insulators with minimum thickness and lower thermal resistance. Designed to replace brittle ceramic insulators. (Electrically Insulating Material)

Sil-Pad KA-10™ is the highest performance insulator that utilizes Bergquist's dielectric material T- Film™

CPU Pad® is a thermally conductive, electrically insulating, Kapton double coated tape. Typically used between the CPU and heat sink, it was designed to be used in place of clips used to attach heat sink to CPU. No clamping times or high pressure is required.

SPT 400 is a thermally conductive insulation for clip mounted plastic power devices. These TO-220 thermal tubes slip over the semiconductor device and conduct the heat to the heat sink and clip. Designed to be used on heat sinks with metal clips to attach device to heat sink. (Electrically Insulating Material)

HI-FLOW™ 115-AC is a thermally conductive fiber reinforced phase change material. The product consists of a thermally conductive 65° C phase change compound coated on a fiberglass web, with an adhesive coating on one side for attachment to a cold heat sink. Handles like a Sil-Pad, at room temperature and flows like high quality grease at elevated temperature.

Bond Ply™ 100 is a thermally conductive, double-sided pressure sensitive adhesive tape. The tape consists of a high performance, thermally conductive acrylic adhesive coated with a fiberglass reinforced interweave. Bond Ply 100 is designed to attain high bond strength to a variety of surfaces, and to maintain high bond strength with long term exposure to moderate heat and high humidity. Typical Applications: • Mounting a heat sink to a BGA graphic processor • Mounting a heat sink to a computer processor • Mounting a heat sink to a drive processor • Mounting a heat spreader to a power converter PCB • Mounting a heat spreader to a motor control PCB.

Gap Pad™ 1500 is designed to cost-effectively maximize heat transfer from electronic components to heat sinks or heat spreaders. GP 1500 is a highly conformable low-modulus material that fills air gaps due to steps, rough surfaces, and high stack-up tolerances. The softness relieves stress and absorbs shocks minimizing damage to delicate leads. GP 1500 is an electrically isolating material that allows its use in applications requiring isolation between heat sinks and high voltage, bare leaded devices.

Fig. 1

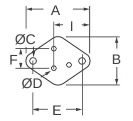


Fig. 2

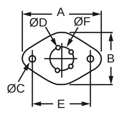


Fig. 3

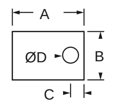


Fig. 4

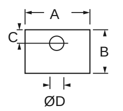


Fig. 5

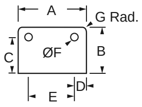


Fig. 6

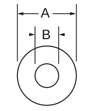


Fig. 7

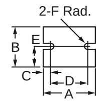


Fig. 8

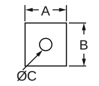


Fig. 9

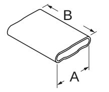
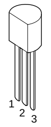


Fig.	Device Type	Dimensions – Inch (mm) A	B	C	D	E	F	G	Digi-Key Part No.	Price Each 1	10	50	100	Bergquist Part No.
1	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER100-ND	1.09	.98	.88	.78	SP600-05
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER172-ND	1.09	.98	.88	.78	SP900S-05
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER101-ND	1.17	1.05	.94	.84	SP600-02
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER171-ND	1.06	.95	.85	.75	SP900S-02
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER111-ND	2.32	2.08	1.86	1.65	K10-05
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER184-ND	1.47	1.31	1.18	1.04	KA10-05
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER112-ND	2.60	2.33	2.09	1.85	K10-02
	TO-3	1.78 (45.21)	1.25 (31.75)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER185-ND	1.69	1.51	1.36	1.20	KA10-02
	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	—	BER122-ND	.71	.63	.57	.50	Q3-05
	TO-3	1.250 (31.75)	.700 (17.78)	.140 (3.56)	.062 (1.57)	.960 (24.38)	.200 (5.08)	—	BER152-ND	1.03	.93	.83	.74	K10-30
	TO-3	1.250 (31.75)	.700 (17.78)	.140 (3.56)	.062 (1.57)	.960 (24.38)	.200 (5.08)	—	BER197-ND	1.26	1.13	1.01	.90	KA10-30
2	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER139-ND	.72	.65	.58	.51	SP600-86
	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER140-ND	1.49	1.33	1.19	1.06	K10-86
	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER194-ND	1.31	1.17	1.05	.93	KA10-86
	TO-3 (4PIN)	1.56 (39.62)	1.05 (26.67)	.156 (39.62)	.080 (2.03)	1.170 (29.72)	.470 (11.94)	—	BER141-ND	.49	.45	.40	.35	Q3-86
3	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER109-ND	.82	.74	.66	.59	SP600-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER178-ND	.82	.74	.66	.59	SP900S-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER120-ND	1.36	1.22	1.09	.97	K10-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER192-ND	.71	.64	.57	.51	KA10-104
	TO-247AC	1.00 (25.40)	.750 (19.05)	.300 (7.62)	.140 (3.56)	—	—	—	BER131-ND	.63	.56	.51	.45	Q3-104
3	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER102-ND	.73	.66	.59	.52	SP600-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER176-ND	.73	.66	.59	.52	SP900S-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER103-ND	.73	.66	.59	.52	SP600-54
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER175-ND	.73	.66	.59	.52	SP900S-54
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER110-ND	.73	.66	.59	.52	SP600-43
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER174-ND	.73	.66	.59	.52	SP900S-43
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER113-ND	1.02	.92	.82	.73	K10-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER186-ND	.45	.40	.36	.32	KA10-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER114-ND	1.02	.92	.82	.73	K10-54
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER187-ND	.45	.40	.36	.32	KA10-54
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER121-ND	1.02	.92	.82	.73	K10-43
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER193-ND	.66	.59	.53	.47	KA10-43
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER124-ND	.60	.54	.49	.43	Q3-58
	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER125-ND	.60	.54	.49	.43	Q3-54
	TO-220	.750 (19.05)	.500 (12.70)	—	—	—	—	—	BER132-ND	.60	.54	.49	.43	Q3-43
	TO-220	.687 (17.45)	.562 (14.27)	.218 (5.54)	.125 (3.18)	—	—	—	BER146-ND	.72	.65	.58	.52	K10-51
	TO-220	.687 (17.45)	.562 (14.27)	.218 (5.54)	.125 (3.18)	—	—	—	BER196-ND	.46	.41	.37	.33	KA10-51
	TO-220	.687 (17.45)	.562 (14.27)	.218 (5.54)	.125 (3.18)	—	—	—	BER147-ND	.43	.39	.35	.31	Q3-51
3	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER108-ND	.80	.72	.64	.57	SP600-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER177-ND	.80	.72	.64	.57	SP900S-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER119-ND	1.26	1.13	1.01	.90	K10-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER191-ND	.63	.57	.51	.45	KA10-90
	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER130-ND	.62	.56	.50	.44	Q3-90
4	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER107-ND	.83	.75	.67	.59	SP600-114
	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER180-ND	.83	.75	.67	.59	SP900S-114
	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER118-ND	1.38	1.24	1.11	.98	K10-114
	MULTI	.945 (24.00)	.827 (21.01)	.196 (4.98)	.150 (3.81)	—	—	—	BER190-ND	.73	.66	.59	.52	KA10-114
5	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER106-ND	.94	.84	.75	.67	SP600-105
	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER179-ND	.94	.84	.75	.67	SP900S-105
	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER117-ND	1.76	1.58	1.42	1.25	K10-105
	SIP	1.450 (36.83)	.838 (21.29)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER189-ND	1.03	.92	.83	.73	KA10-105
6	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER105-ND	.88	.79	.71	.63	SP600-25
	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER173-ND	.88	.79	.71	.63	SP900S-25
	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER116-ND	1.57	1.41	1.26	1.12	K10-25
	DO-5	1.00 (25.40)	.260 (6.60)	—	—	—	—	—	BER188-ND	.88	.79	.71	.63	KA10-25
7	SIP Module	1.50 (38.10)	.900 (22.86)	.150 (3.81)	1.20 (30.48)	.450 (11.43)	.075 (1.91)	—	BER136-ND	.48	.43	.39	.34	Q3-67
	SIP Module	2.50 (63.50)	2.00 (50.80)	.344 (8.74)	1.81 (46.02)	1.00 (25.40)	.156 (3.96)	—	BER137-ND	.65	.58	.52	.46	Q3-101
8	CPU	.63 (16.00)	.63 (16.00)	—	—	—	—	—	BER133-ND	.52	.47	.42	.38	CPU .63X.63
	CPU	1.75 (44.45)	1.75 (44.45)	—	—	—	—	—	BER134-ND	1.29	1.15	1.03	.92	CPU 1.75X1.75
	CPU	1.375 (34.93)	1.375 (34.93)	—	—	—	—	—	BER135-ND	.86	.78	.70	.62	CPU 1.375X1.375
8	Bridge Rect.	1.00 (25.40)	1.00 (25.40)	.187 (4.75)	—	—	—	—	BER142-ND	.46	.42	.37	.33	Q3-48
	Bridge Rect.	1.25 (31.75)	1.25 (31.75)	.200 (5.08)	—	—	—	—	BER144-ND	.49	.44	.39	.35	Q3-46
	Bridge Rect.	1.25 (31.75)	1.25 (31.75)	.200 (5.08)	—	—	—	—	BER145-ND	1.44	1.29	1.15	1.02	K10-46
	Bridge Rect.	1.25 (31.75)	1.25 (31.75)	.200 (5.08)	—	—	—	—	BER195-ND	1.25	1.12	1.01	.89	KA10-46
9	TO-220 Tubes	.433 (11.00)	.985 (25.02)	—	—	—	—	—	BER156-ND	.73	.66	.59	.52	SPT400 -12-11-25
	TO-247 Tubes	.532 (13.50)	.985 (25.02)	—	—	—	—	—	BER157-ND	.89	.80	.72	.64	SPT400-12- 13.5-25
Single Side Adhesive Backed Pads (Phase Change)														
1	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER166-ND	.28	.25	.23	.20	HF115TAAC-05
3	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER167-ND	.10	.09	.08	.07	HF115TAAC-54
3	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER168-ND	.10	.09	.08	.07	HF115TAAC-58
3	TO-218	.860 (21.84)	.740 (18.80)	.200 (5.08)	.160 (4.06)	—	—	—	BER169-ND	.12	.10	.09	.08	HF115TAAC-90
5	SIP	1.450 (36.83)	.830 (21.08)	.612 (15.54)	.245 (6.22)	.960 (24.38)	.170 (4.32)	.120 (3.05)	BER170-ND	.14	.13	.11	.10	HF115TAAC-105
Single Side Adhesive Backed Pads (Low Mounting Pressure)														
1	TO-3	1.65 (41.91)	1.14 (28.96)	.140 (3.56)	.093 (2.36)	1.187 (30.15)	.430 (10.92)	.072 (1.83)	BER181-ND	1.14	1.03	.92	.81	SP900EAAC-05
3	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.147 (3.73)	—	—	—	BER182-ND	.74	.67	.60	.53	SP900EAAC-54
3	TO-220	.750 (19.05)	.500 (12.70)	.187 (4.75)	.125 (3.18)	—	—	—	BER183-ND	.74	.67	.60	.53	SP900EAAC-58
Bond Ply Double SIded Thermal Tape														
Double Sided Adhesive Thermal Pad, .005” (.127) Thick, 10” (25.4cm) Square Sheet									BER158-ND	41.44	36.98	33.15	29.33	BOND PLY 105 10x10”
Double Sided Adhesive Thermal Pad, .008” (.203) Thick, 10” (25.4cm) Square Sheet									BER159-ND	50.99	45.51	40.80	36.09	BOND PLY 108 10x10”
Double Sided Adhesive Thermal Pad, .011” (.279) Thick, 10” (25.4cm) Square Sheet									BER160-ND	63.77	56.90	51.02	45.13	BOND PLY 111 10x10”
Gap Pad Thermal Gap Filling Material														
High Thermally Conductive Pad, .020” (.508) Thick, 4” (10.16cm) Square Sheet									BER161-ND	9.98	8.91	7.99	7.07	GAPPAD1500-20MIL4X4
High Thermally Conductive Pad, .040” (1.02) Thick, 4” (10.16cm) Square Sheet									BER162-ND	14.33	12.79	11.47	10.15	GAPPAD1500-40MIL4X4
High Thermally Conductive Pad, .060” (1.52) Thick, 4” (10.16cm) Square Sheet									BER163-ND	16.45	14.68	13.16	11.64	GAPPAD1500-60MIL4X4
High Thermally Conductive Pad, .080” (2.03) Thick, 4” (10.16cm) Square Sheet									BER164-ND	19.44	17.35	15.55	13.76	GAPPAD1500-80MIL4X4
High Thermally Conductive Pad, .125” (3.18) Thick, 4” (10.16cm) Square Sheet									BER165-ND	26.39	23.55	21.12	18.68	GAPPAD1500-125MIL4X4

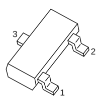
MICROCHIP Microcontroller Supervisors

Microchip's new MCP1XX family of microcontroller supervisor products can be used for power on reset and brown out detection. Select from seven reset trip points and three output options—open drain, open drain with 5K ohm pull-up, and CMOS push-pull options are available. These parts will reset within the Reset Voltage Range and will operate down to VDD = 1 Volt.

TO-92



SOT-23 Top View



Offered in both TO-92 and SOT-23 packages in most pin-out configurations.

Configuration	Package	Pin Out 1	2	3
A	TO-92	OUT	VDD	VSS
B	SOT-23	VSS	OUT	VDD
C	SOT-23	OUT	VDD	VSS

Reset Out	Reset Voltage Min.	Max.	Pkg.	Conf.	Digi-Key Part No.	Pricing 1	25	100
CMOS Push-Pull Active Low								
Low	4.60	4.85	TO-92	A	MCP100-485DI/TO-ND	.63	11.25	41.00
Low	4.35	4.60	TO-92	A	MCP100-460DI/TO-ND	.63	11.25	41.00
Low	4.25	4.50	TO-92	A	MCP100-450DI/TO-ND	.63	11.25	41.00
Low	3.00	3.15	TO-92	A	MCP100-315DI/TO-ND	.63	11.25	41.00
Low	2.85	3.00	TO-92	A	MCP100-300DI/TO-ND	.63	11.25	41.00
Low	2.55	2.70	TO-92	A	MCP100-270DI/TO-ND	.63	11.25	41.00
CMOS Push-Pull Active High								
High	4.60	4.85	TO-92	A	MCP101-485DI/TO-ND	.63	11.25	41.00
High	4.50	4.75	TO-92	A	MCP101-475DI/TO-ND	.63	11.25	41.00
High	4.35	4.60	TO-92	A	MCP101-460DI/TO-ND	.63	11.25	41.00
High	4.25	4.50	TO-92	A	MCP101-450DI/TO-ND	.63	11.25	41.00
High	3.00	3.15	TO-92	A	MCP101-315DI/TO-ND	.63	11.25	41.00
High	2.85	3.00	TO-92	A	MCP101-300DI/TO-ND	.63	11.25	41.00
High	2.55	2.70	TO-92	A	MCP101-270DI/TO-ND	.63	11.25	41.00
N-Channel Open Drain								
Low	4.60	4.85	TO-92	A	MCP120-485DI/TO-ND	.63	11.25	41.00
Low	4.50	4.75	TO-92	A	MCP120-475DI/TO-ND	.63	11.25	41.00
Low	4.35	4.60	TO-92	A	MCP120-460DI/TO-ND	.63	11.25	41.00
Low	4.25	4.50	TO-92	A	MCP120-450DI/TO-ND	.63	11.25	41.00
Low	2.85	3.00	TO-92	A	MCP120-300DI/TO-ND	.63	11.25	41.00
Low	2.55	2.70	TO-92	A	MCP120-270DI/TO-ND	.63	11.25	41.00
N-Channel Open Drain with Internal 5K Pull Up								
Low	4.60	4.85	TO-92	A	MCP130-485DI/TO-ND	.63	11.25	41.00
Low	4.50	4.75	TO-92	A	MCP130-475DI/TO-ND	.63	11.25	41.00
Low	4.35	4.60	TO-92	A	MCP130-460DI/TO-ND	.63	11.25	41.00
Low	4.25	4.50	TO-92	A	MCP130-450DI/TO-ND	.63	11.25	41.00
Low	3.00	3.15	TO-92	A	MCP130-315DI/TO-ND	.63	11.25	41.00
Low	2.85	3.00	TO-92	A	MCP130-300DI/TO-ND	.63	11.25	41.00
Low	2.55	2.70	TO-92	A	MCP130-270DI/TO-ND	.63	11.25	41.00

Reset Out	Reset Voltage Min.	Max.	Pkg.	Conf.	Digi-Key Part No.	Cut Tape Pricing 1	25	100	Digi-Key Part No.	T & R Pricing 3,000
CMOS Push-Pull Active Low										
Low	4.60	4.85	SOT-23	B	MCP809T-485I/TTCT-ND	.70	14.00	49.00	MCP809T-485I/TTTR-ND	410.00/M
Low	4.50	4.75	SOT-23	B	MCP809T-475I/TTCT-ND	.70	14.00	49.00	MCP809T-475I/TTTR-ND	410.00/M
Low	4.35	4.60	SOT-23	B	MCP809T-460I/TTCT-ND	.70	14.00	49.00	MCP809T-460I/TTTR-ND	410.00/M
Low	4.25	4.50	SOT-23	B	MCP809T-450I/TTCT-ND	.70	14.00	49.00	MCP809T-450I/TTTR-ND	410.00/M
Low	3.00	3.15	SOT-23	B	MCP809T-315I/TTCT-ND	.70	14.00	49.00	MCP809T-315I/TTTR-ND	410.00/M
Low	2.85	3.00	SOT-23	B	MCP809T-300I/TTCT-ND	.70	14.00	49.00	MCP809T-300I/TTTR-ND	410.00/M
Low	2.55	2.70	SOT -23	B	MCP809T-270I/TTCT-ND	.70	14.00	49.00	MCP809T-270I/TTTR-ND	410.00/M
CMOS Push-Pull Active High										
High	4.60	4.85	SOT-23	B	MCP810T-485I/TTCT-ND	.70	14.00	49.00	MCP810T-485I/TTTR-ND	410.00/M
High	4.50	4.75	SOT-23	B	MCP810T-475I/TTCT-ND	.70	14.00	49.00	MCP810T-475I/TTTR-ND	410.00/M
High	4.35	4.60	SOT-23	B	MCP810T-460I/TTCT-ND	.70	14.00	49.00	MCP810T-460I/TTTR-ND	410.00/M
High	4.25	4.50	SOT-23	B	MCP810T-450I/TTCT-ND	.70	14.00	49.00	MCP810T-450I/TTTR-ND	410.00/M
High	3.00	3.15	SOT-23	B	MCP810T-315I/TTCT-ND	.70	14.00	49.00	MCP810T-315I/TTTR-ND	410.00/M
High	2.85	3.00	SOT-23	B	MCP810T-300I/TTCT-ND	.70	14.00	49.00	MCP810T-300I/TTTR-ND	410.00/M
High	2.55	2.70	SOT-23	B	MCP810T-270I/TTCT-ND	.70	14.00	49.00	MCP810T-270I/TTTR-ND	410.00/M
N-Channel Open Drain										
Low	4.60	4.85	SOT-23	C	MCP120T-485I/TTCT-ND	.63	12.50	43.75	MCP120T-485I/TTTR-ND	370.00/M
Low	4.50	4.75	SOT-23	C	MCP120T-475I/TTCT-ND	.63	12.50	43.75	MCP120T-475I/TTTR-ND	370.00/M
Low	4.35	4.60	SOT-23	C	MCP120T-460I/TTCT-ND	.63	12.50	43.75	MCP120T-460I/TTTR-ND	370.00/M
Low	4.25	4.50	SOT-23	C	MCP120T-450I/TTCT-ND	.63	12.50	43.75	MCP120T-450I/TTTR-ND	370.00/M
Low	3.00	3.15	SOT-23	C	MCP120T-315I/TTCT-ND	.63	12.50	43.75	MCP120T-315I/TTTR-ND	370.00/M
Low	2.85	3.00	SOT-23	C	MCP120T-300I/TTCT-ND	.63	12.50	43.75	MCP120T-300I/TTTR-ND	370.00/M
Low	2.55	2.70	SOT-23	C	MCP120T-270I/TTCT-ND	.63	12.50	43.75	MCP120T-270I/TTTR-ND	370.00/M
N-Channel Open Drain with Internal 5K Pull Up										
Low	4.60	4.85	SOT-23	C	MCP130T-485I/TTCT-ND	.63	12.50	43.75	MCP130T-485I/TTTR-ND	370.00/M
Low	4.50	4.75	SOT-23	C	MCP130T-475I/TTCT-ND	.63	12.50	43.75	MCP130T-475I/TTTR-ND	370.00/M
Low	4.35	4.60	SOT-23	C	MCP130T-460I/TTCT-ND	.63	12.50	43.75	MCP130T-460I/TTTR-ND	370.00/M
Low	4.25	4.50	SOT-23	C	MCP130T-450I/TTCT-ND	.63	12.50	43.75	MCP130T-450I/TTTR-ND	370.00/M
Low	3.00	3.15	SOT-23	C	MCP130T-315I/TTCT-ND	.63	12.50	43.75	MCP130T-315I/TTTR-ND	370.00/M
Low	2.85	3.00	SOT-23	C	MCP130T-300I/TTCT-ND	.63	12.50	43.75	MCP130T-300I/TTTR-ND	370.00/M
Low	2.55	2.70	SOT-23	C	MCP130T-270I/TTCT-ND	.63	12.50	43.75	MCP130T-270I/TTTR-ND	370.00/M

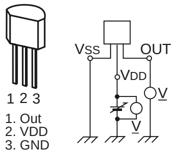
Panasonic Voltage Detectors

Highly Reliable, Easy-to-Use CMOS LSI Is for Voltage Detection

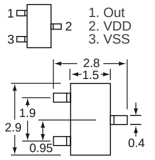
The MN1380 Series is a series of devices with functions for: • Monitoring the power supply voltage supplied to microcomputers and to LSI systems • Generating the RESET signal for carrying out initialization when the power supply is turned ON • Preventing runaway in systems when the power supply voltage fluctuates. Recently, there has been an increase in the number of battery-driven products such as cordless telephones, notebook-type personal computers, etc. In these products, highly accurate monitoring of the power supply voltage is an important point in terms of system operation and data backup. While maintaining the voltage detection precision of similar voltage detection devices so far, the MN1380 Series of devices consumes 1/10 the current. In addition, users can choose from one of three output formats: CMOS output, N-ch open drain and inverted CMOS output.

Item	Symbol	Rating	Unit
Drain Supply Voltage	VDD	7.0	V
Output Voltage	V0	-0.3 ~ VDD + 0.3	V
Operating Ambient Temperature	Ta	-20 ~ +70	°C
Storage Temperature	Tstg	-55 ~ +125	°C
Detection Voltage Hysteresis Max		300	MV

TO-92



Mini-Type TO-236/SC-59A



Output Type	Detection Voltage at Drain Supply (Trigger V) Min	Max	Reset Time (µs) tOH	tOL	Digi-Key Part No.	Pricing 1	10	100
TO-92								
CMOS	2.0	2.2	3.0	250	MN1381-C-ND	1.02	8.48	67.87
	2.2	2.4	3.0	250	MN1381-E-ND	1.02	8.48	67.87
	2.4	2.6	3.0	115	MN1381-G-ND	1.02	8.48	67.87
	2.6	2.9	3.0	115	MN1381-J-ND	1.02	8.48	67.87
	3.0	3.3	2.0	15	MN1381-L-ND	1.02	8.48	67.87
	3.4	3.7	2.0	15	MN1381-N-ND	1.02	8.48	67.87
	3.8	4.1	2.0	15	MN1381-Q-ND	1.02	8.48	67.87
	4.2	4.5	2.0	15	MN1381-S-ND	1.02	8.48	67.87
	4.6	4.9	—	—	MN1381-U-ND	1.02	8.48	67.87
N Channel O.D.	2.0	2.2	2.5	160	MN13811-C-ND	1.02	8.48	67.87
	2.2	2.4	2.5	160	MN13811-E-ND	1.02	8.48	67.87
	2.4	2.6	3.0	100	MN13811-G-ND	1.02	8.48	67.87
	3.0	3.3	4.0	35	MN13811-L-ND	1.02	8.48	67.87
	3.4	3.7	4.0	35	MN13811-N-ND	1.02	8.48	67.87
	3.8	4.1	4.0	35	MN13811-Q-ND	1.02	8.48	67.87
	4.2	4.5	4.0	35	MN13811-S-ND	1.02	8.48	67.87
	4.6	4.9	—	—	MN13811-U-ND	1.02	8.48	67.87
CMOS Inverted	2.0	2.2	230	3.0	MN13812-C-ND	1.02	8.48	67.87
	2.2	2.4	230	3.0	MN13812-E-ND	1.02	8.48	67.87
	2.4	2.6	100	3.0	MN13812-G-ND	1.02	8.48	67.87
	3.0	3.3	30	3.0	MN13812-L-ND	1.02	8.48	67.87
	3.4	3.7	30	3.0	MN13812-N-ND	1.02	8.48	67.87
	3.8	4.1	30	3.0	MN13812-Q-ND	1.02	8.48	67.87
	4.2	4.5	30	3.0	MN13812-S-ND	1.02	8.48	67.87
	4.6	4.9	30	3.0	MN13812-U-ND	1.02	8.48	67.87

Output Type	Detection Voltage at Drain Supply (Trigger V) Min	Max	Reset Time (µs) tOH	tOL	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
MINI-TYPE										
CMOS	2.0	2.2	3.0	250.0	MN1382-CCT-ND	1.02	8.48	67.87	MN1382-CTR-ND	441.00/M
	2.1	2.3	3.0	250.0	MN1382-DCT-ND	1.02	8.48	67.87	MN1382-DTR-ND	441.00/M
	2.2	2.4	3.0	250.0	MN1382-ECT-ND	1.02	8.48	67.87	MN1382-ETR-ND	441.00/M
	2.3	2.5	3.0	250.0	MN1382-FCT-ND	1.02	8.48	67.87	MN1382-FTR-ND	441.00/M
	2.4	2.6	3.0	115.0	MN1382-GCT-ND	1.02	8.48	67.87	MN1382-GTR-ND	441.00/M
	2.5	2.7	3.0	115.0	MN1382-HCT-ND	1.02	8.48	67.87	MN1382-HTR-ND	441.00/M
	2.6	2.9	3.0	115.0	MN1382-JCT-ND	1.02	8.48	67.87	MN1382-JTR-ND	441.00/M
	2.8	3.1	3.0	115.0	MN1382-KCT-ND	1.02	8.48	67.87	MN1382-KTR-ND	441.00/M
	3.0	3.3	2.0	15.0	MN1382-LCT-ND	1.02	8.48	67.87	MN1382-LTR-ND	441.00/M
	3.2	3.5	2.0	15.0	MN1382-MCT-ND	1.02	8.48	67.87	MN1382-MTR-ND	441.00/M
	3.4	3.7	2.0	15.0	MN1382-NCT-ND	1.02	8.48	67.87	MN1382-NTR-ND	441.00/M
	3.6	3.9	2.0	15.0	MN1382-PCT-ND	1.02	8.48	67.87	MN1382-PTR-ND	441.00/M
	3.8	4.1	2.0	15.0	MN1382-QCT-ND	1.02	8.48	67.87	MN1382-QTR-ND	441.00/M
	4.0	4.3	2.0	15.0	MN1382-RCT-ND	1.02	8.48	67.87	MN1382-RTR-ND	441.00/M
	4.2	4.5	2.0	15.0	MN1382-SCT-ND	1.02	8.48	67.87	MN1382-STR-ND	441.00/M
	4.4	4.7	2.0	15.0	MN1382-TCT-ND	1.02	8.48	67.87	MN1382-TTR-ND	441.00/M
	4.6	4.9	—	—	MN1382-UCT-ND	1.02	8.48	67.87	MN1382-UTR-ND	441.00/M
N Channel Open Drain	2.0	2.2	2.5	160.0	MN13821-CCT-ND	1.02	8.48	67.87	MN13821-CTR-ND	441.00/M
	2.1	2.3	2.5	160.0	MN13821-DCT-ND	1.02	8.48	67.87	MN13821-DTR-ND	441.00/M
	2.2	2.4	2.5	160.0	MN13821-ECT-ND	1.02	8.48	67.87	MN13821-ETR-ND	441.00/M
	2.3	2.5	2.5	160.0	MN13821-FCT-ND	1.02	8.48	67.87	MN13821-FTR-ND	441.00/M
	2.4	2.6	3.0	100.0	MN13821-GCT-ND	1.02	8.48	67.87	MN13821-GTR-ND	441.00/M
	2.5	2.7	3.0	100.0	MN13821-HCT-ND	1.02	8.48	67.87	MN13821-HTR-ND	441.00/M
	2.6	2.9	3.0	100.0	MN13821-JCT-ND	1.02	8.48	67.87	MN13821-JTR-ND	441.00/M
	2.8	3.1	3.0	100.0	MN13821-KCT-ND	1.02	8.48	67.87	MN13821-KTR-ND	441.00/M
	3.0	3.3	4.0	35.0	MN13821-LCT-ND	1.02	8.48	67.87	MN13821-LTR-ND	441.00/M
	3.2	3.5	4.0	35.0	MN13821-MCT-ND	1.02	8.48	67.87	MN13821-MTR-ND	441.00/M
	3.4	3.7	4.0	35.0	MN13821-NCT-ND	1.02	8.48	67.87	MN13821-NTR-ND	441.00/M
	3.6	3.9	4.0	35.0	MN13821-PCT-ND	1.02	8.48	67.87	MN13821-PTR-ND	441.00/M
	3.8	4.1	4.0	35.0	MN13821-QCT-ND	1.02	8.48	67.87	MN13821-QTR-ND	441.00/M
	4.0	4.3	4.0	35.0	MN13821-RCT-ND	1.02	8.48	67.87	MN13821-RTR-ND	441.00/M
	4.2	4.5	4.0	35.0	MN13821-SCT-ND	1.02	8.48	67.87	MN13821-STR-ND	441.00/M
	4.4	4.7	4.0	35.0	MN13821-TCT-ND	1.02	8.48	67.87	MN13821-TTR-ND	441.00/M
	4.6	4.9	—	—	MN13821-UCT-ND	1.02	8.48	67.87	MN13821-UTR-ND	441.00/M
CMOS Inverted	2.0	2.2	230.0	3.0	MN13822-CCT-ND	1.02	8.48	67.87	MN13822-CTR-ND	441.00/M
	2.1	2.3	230.0	3.0	MN13822-DCT-ND	1.02	8.48	67.87	MN13822-DTR-ND	441.00/M
	2.2	2.4	230.0	3.0	MN13822-ECT-ND	1.02	8.48	67.87	MN13822-ETR-ND	441.00/M
	2.3	2.5	230.0	3.0	MN13822-FCT-ND	1.02	8.48	67.87	MN13822-FTR-ND	441.00/M
	2.4	2.6	100.0	3.0	MN13822-GCT-ND	1.02	8.48	67.87	MN13822-GTR-ND	441.00/M
	2.5	2.7	100.0	3.0	MN13822-HCT-ND	1.02	8.48	67.87	MN13822-HTR-ND	441.00/M
	2.6	2.9	100.0	3.0	MN13822-JCT-ND	1.02	8.48	67.87	MN13822-JTR-ND	441.00/M
	2.8	3.1	100.0	3.0	MN13822-KCT-ND	1.02	8.48	67.87	MN13822-KTR-ND	441.00/M
	3.0	3.3	30.0	3.0	MN13822-LCT-ND	1.02	8.48	67.87	MN13822-LTR-ND	441.00/M
	3.2	3.5	30.0	3.0	MN13822-MCT-ND	1.02	8.48	67.87	MN13822-MTR-ND	441.00/M
	3.4	3.7	30.0	3.0	MN13822-NCT-ND	1.02	8.48	67.87	MN13822-NTR-ND	441.00/M
	3.6	3.9	30.0	3.0	MN13822-PCT-ND	1.02	8.48	67.87	MN13822-PTR-ND	441.00/M
	3.8	4.1	30.0	3.0	MN13822-QCT-ND	1.02	8.48	67.87	MN13822-QTR-ND	441.00/M
	4.0	4.3	30.0	3.0	MN13822-RCT-ND	1.02	8.48	67.87	MN13822-RTR-ND	441.00/M
	4.2	4.5	30.0	3.0	MN13822-SCT-ND	1.02	8.48	67.87	MN13822-STR-ND	441.00/M
	4.4	4.7	30.0	3.0	MN13822-TCT-ND	1.02	8.48	67.87	MN13822-TTR-ND	441.00/M
	4.6	4.9	—	—	MN13822-UCT-ND	1.02	8.48	67.87	MN13822-UTR-ND	441.00/M

HRS HIROSE ELECTRIC CO.,LTD.

PCMCIA IC Memory Card Connectors

Fig. 1

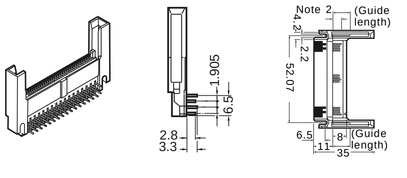


Fig. 2

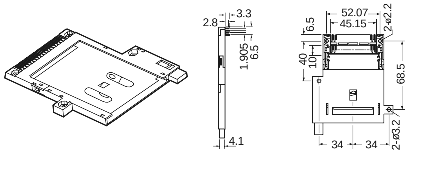


Fig. 3

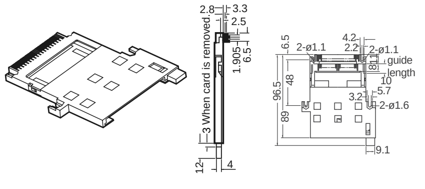


Fig. 4

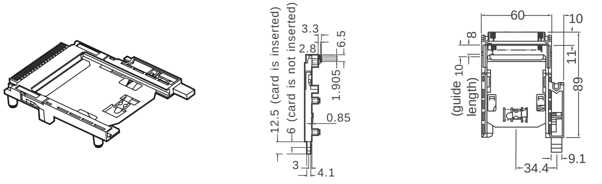
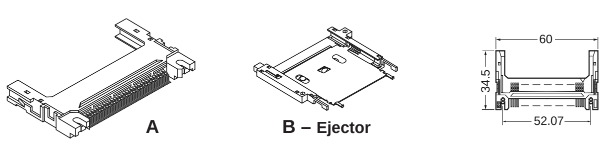


Fig. 5

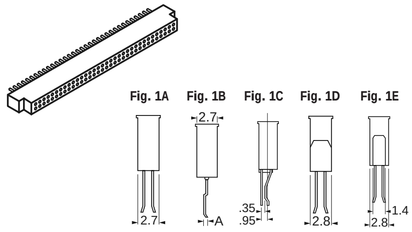


- Leading features of PCMCIA standard of mis-insertion prevention mechanism and sequencing mechanism for circuit protection, are incorporated
- Receptacle is of surface mount type
- Pushbutton switch of ejecting section has an inner spring which makes the pushbutton free from vibration.

Material: Insulator: Black. **Contact:** Selective gold plating. **Ejector:** SUS. **Electrical Specifications: Current Rating:** 0.5A per pin. **Rated Voltage:** 125V AC. **Withstanding Voltage:** 500V AC for one minute at specified value. **Insulation Resistance:** Min. 1000MΩ at 500V DC. **Contact Resistance:** Max. 40mΩ at 1mA DC.

Fig.	No. of Pins	Type	Description	Digi-Key Part No.	Pricing 1	Pricing 10	Hirose Part No.
1	68	I, II	Memory Card Connector	HR801-ND	5.47	47.76	IC1FA-68PD-1.27DS
2	68	I, II	Memory Card Connector with Ejecting Mechanism	HR802-ND	10.78	94.29	IC1G-68PD-1.27DS-EJ
2	68	I,II	With Ejector and ESD Groundings Features	HR810-ND	11.45	100.17	IC1G-68PD-1.27DS-EJ-E
3	68	I	Memory Card Connector with Ejecting Mechanism	HR803-ND	10.99	96.18	IC1F-68PD-1.27DS-EJ
4	68	I, II	Memory Card Connector with Ejecting Mechanism and Std-off	HR804-ND	10.66	93.24	IC1FB-68PD-1.27DS-EJ
5A	68	I, II	SMT Connector without Ejector	HR805-ND	7.85	69.08	IC1G-68PD-1.27SF
5B	68	I, II	SMT Ejector for HR805	HR806-ND	6.41	55.92	IC1G-68PD-EJ

PCMCIA IC Memory Card Connectors

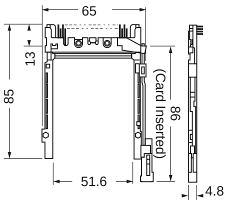


IC1 Series — Figure 1:

The IC1 Series connectors comply with Ver. 3 and Ver. 4.2, JEIDA and PCMCIA 2.0 Standards.

Features:

• Provided with complete features of the JEIDA and PCMCIA Standards, such as polarizing method and sequence construction for circuit protection • Surface-mount socket connectors (card side) • Off-center socket connectors are also available that allow high packaging profile • All the pin connectors described are compatible with cards of type I and II • Surface mount header connectors are available



IC7 Series — Figure 2:

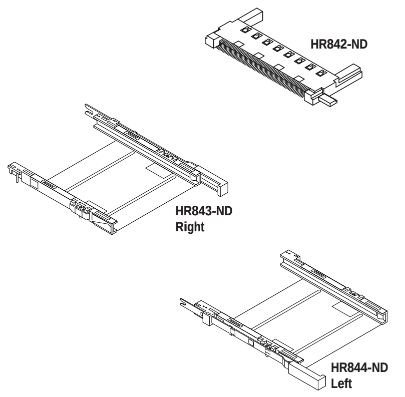
The IC7 Series of miniature, lightweight 68-pin connectors complies with JEIDA Ver. 4.2 and is suitable for use with PCMCIA Type III cards.

Features:

• Smaller and thinner than our previous product • Forty-seven percent lighter than our previous product • Equipped with an eject button for smooth removal of cards • Two types of eject button, either left or right • There is also a reverse type for mounting on the back surface of the board • Equipped with a frame ground terminal • Types available for dip and SMT board mounting methods • The SMT type can be mounted on both sides of the board and can also be used as a 2-slot connector

Fig.	No.of Pins	Type	Description	Digi-Key Part No.	Pricing 1	Pricing 10	Hirose Part No.
			Socket Connector Memory Card				
1A	68	I, II	2.7mm Dual	HR831-ND	3.74	32.64	IC1F-68RD-1.27SH
1B	68	I, II	Single Side, A = .3mm	HR828-ND	5.01	43.68	IC1F-68RD-1.27SF
1B	68	I, II	Single Side, A = .854mm	HR829-ND	5.06	44.16	IC1F-68RD-1.27SFA
1C	68	I, II	Off-Center	HR830-ND	4.48	39.12	IC1H-68RD-1.27SH
1D	68	I, II	2.8mm Dual	HR832-ND	4.48	39.12	IC1BB-68RD-1.27SH
1E	68	I, II	2.8mm Dual	HR833-ND	5.25	45.84	IC1BA-68RD-1.27SH
			Memory Card Connector				
2	68	I, II, III	Light Weight, Right Eject	HR816-ND	6.38	56.10	IC7-68PD-1.27DS-EJR
2	68	I, II, III	Light Weight, Left Eject	HR817-ND	6.38	56.10	IC7-68PD-1.27DS-EJL
2	68	I, II, III	Light Weight, Rev Right Eject	HR818-ND	6.38	56.10	IC7-68PDR-1.27DS-EJR
2	68	I, II, III	Light Weight, Rev Left Eject	HR819-ND	6.38	56.10	IC7-68PDR-1.27DS-EJL

IC11 Series PC Card Connectors for PC CardBus



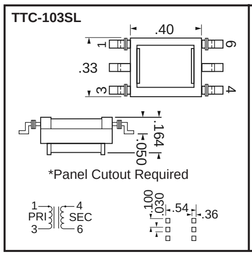
Features:

- **Space-Saving Design:** Miniature and thin at 62.9mm (W) x 85mm (L) x 5.65mm (H), this space-saving design is only 8mm from the card edge position to the connector tip portion
- **Increased Degree of Card Ejection:** An original ejection design increases the degree of card ejection
- **Materials:** Insulation: SMT portion — Liquid crystal polymer (UL94V-0), beige; Card guide portion — PBTresin (UL94V-0), black. Eject button — PBTresin (UL94V-0), black. Contacts: Signal portion — brass with partial gold plating; CardBus ground plate portion — phosphor bronze with partial gold plating.

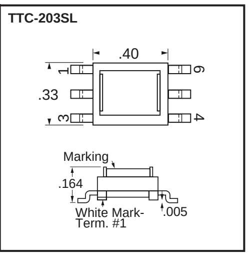
Description	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 50	Hirose Part No.
	68 Position PC Card Connector for PC CardBus				
—	HR842-ND	8.03	70.62	312.98	IC11-68L-1.27SF-EJR
	Ejector PC CardBus Connector				
Right	HR843-ND	3.63	31.68	132.00	IC11-BD-EJR
Left	HR844-ND	3.22	28.08	117.00	IC11-BD-EJL

BANTAM™
SMT Modem/Telcom Transformers

TTC-103SL



TTC-203SL

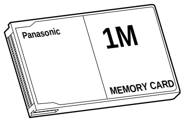


For PCMCIA Type II data/fax modem card V.32 bis/V.17; 14,400 bps applications. **Turns ratio:** 1:1 ±2% Impedance: pri: 600Ω, sec: 346Ω. **Frequency response:** +.15 / -.35 dB 300-3500 Hz; REf. 1KHz. **D.C. resistance at 20°C:** Pri: 127 Ohms ±15%, Sec: 150 Ohms ±15% • **Insertion loss:** 2.7dB ±.4 dB at 1 KHz • **D.C. Unbalance:** 0MA • **Longitudinal balance:** 60dB min 200-4000 Hz (FCC part 68) • **Dielectric rating:** 1000VAC, 1 min (FCC part 68) • **Return loss:** 25dB min at 300-3500 Hz • **Total harmonic distortion:** -76dB max. at 600 Hz and -10dBM • **Terminal coplanarity:** 0.004” • **Flammability:** UL 94V-0 • **Solderability:** per MIL-STD-202 • **Finish:** Varnish • **Weight:** .036 oz. (1gr)

***** TTC-103SL must be mounted through a circuit board cutout .4” x .33” (10.16mm x 8.38mm). † TTC-203SL Above board surface mount component.

MT4121-ND* (TTC-103SL)....................................**$13.48/1; $119.80/10**
MT4122-ND† (TTC-203SL) **$13.48/1; $119.80/10**

Panasonic.
PC Cards



PCMCIA

PCMCIA (Personal Computer Memory Card International Association) has jointly defined standard specifications for an IC memory card system interface. Now the IC memory card can be used as general-purpose media for exchanging data between systems.

SRAM Cards:

68 Pin JEIDA 4.2/PCMCIA Rel 2.1: • Available with or without attribute memory • Tool less replaceable battery (CR2025) • Contains a rechargeable sub-battery which provides data back-up for up to one hour during battery changes. • Type I Card

Flash Cards:

68 Pin Series 2 JEIDA 4.2/PCMCIA Rel 2.1: • Uses 8Mbit memory chips • Type I Card

Description	Digi-Key Part No.	Price Each
SRAM Card PCMCIA/JEIDA Standard, 68 Pins		
64Kx8/32Kx16, 200ns, 150mA, 5 Year Backup	BN-064HSR-ND	39.68
128Kx8/64Kx16, 200ns, 150mA, 5 Year Backup	BN-128HSR-ND	45.23
256Kx8/128Kx16, 200ns, 150mA, 5 Year Backup	BN-256HSR-ND	57.15
512Kx8/256Kx16, 200ns, 150mA, 5 Year Backup	BN-512HSR-ND	81.18
1Mx8/512Kx16, 200ns, 150mA, 4 Year Backup	BN-01MHSR-ND	118.71
2Mx8/1Mx16, 200ns, 150mA, 2 Year Backup	BN-02MHSR-ND	193.50
4Mx8/2Mx16, 200ns, 150mA, 1 Year Backup	BN-04MHSR-ND	301.00
SRAM Card with Attribute Memory PCMCIA/JEIDA Standard, 68 Pins		
64Kx8/32Kx16, 200ns, 150mA, 5 Year Backup	BN-064HSRC-ND	43.60
128Kx8/64Kx16, 200ns, 150mA, 5 Year Backup	BN-128HSRC-ND	48.69
256Kx8/128Kx16, 200ns, 150mA, 5 Year Backup	BN-256HSRC-ND	62.09
512Kx8/256Kx16, 200ns, 150mA, 5 Year Backup	BN-512HSRC-ND	84.74
1Mx8/512Kx16, 200ns, 150mA, 4 Year Backup	BN-01MHSRC-ND	120.18
2Mx8/1Mx16, 200ns, 150mA, 2 Year Backup	BN-02MHSRC-ND	186.20
4Mx8/2Mx16, 200ns, 150mA, 1 Year Backup	BN-04MHSRC-ND	306.60
Flash Card, PCMCIA/JEIDA Standard, 68 Pins (Series 2)		
10Mx8/5Mx16, 250ns, 150mA	BN-10MHF3CE-ND	366.80
16Mx8/8Mx16, 250ns, 150mA	BN-16MHF3CE-ND	279.13

B

NEW!

Memory Modules Unbuffered

Memory Type	Package Size	Speed (MHz)	Memory Size Mega Bytes	Config. Mega Bits	Features	Digi-Key Part No.	Price Each* 1	5	10	Wintec Part No.
SDRAM	168 DIMM	100	64	8x64	Non-ECC	385-1002-ND	25.58	23.87	22.17	W9Q308647PA-222
	168 DIMM	100	64	8x72	ECC	385-1003-ND	49.29	46.01	42.72	W9Q308727KD-222K
	168 DIMM	100	128	16x64	Non-ECC	385-1004-ND	42.62	39.78	36.94	W9Q316647LB-222
	168 DIMM	100	128	16x72	ECC	385-1005-ND	87.86	82.00	76.15	W9Q316727KD-222K
	168 DIMM	100	256	32x64	Non-ECC	385-1006-ND	80.12	74.78	69.44	W9Q332647LB-222
SDRAM	144 SODIMM	100	64	8x64	Non-ECC	385-1007-ND	25.58	23.87	22.17	W9R308647PA-222
	144 SODIMM	100	128	16x64	Non-ECC	385-1008-ND	42.62	39.78	36.94	W9R316647LB-222
	144 SODIMM	100	256	32x64	Non-ECC	385-1009-ND	80.12	74.78	69.44	W9R332647HA-222
SDRAM	144 SODIMM	133	64	8x64	Non-ECC	385-1010-ND	25.58	23.87	22.17	W9V308647PA-333
	144 SODIMM	133	128	16x64	Non-ECC	385-1011-ND	41.67	38.90	36.12	W9V316647LA-333
	144 SODIMM	133	256	32x64	Non-ECC	385-1012-ND	78.33	73.11	67.89	W9V332647HA-333
SDRAM	168 DIMM	133	64	8x64	Non-ECC	385-1013-ND	25.01	23.34	21.68	W9D308647PA-333
	168 DIMM	133	128	16x64	Non-ECC	385-1014-ND	41.67	38.90	36.12	W9D316647LC-333
	168 DIMM	133	256	32x64	Non-ECC	385-1015-ND	78.33	73.11	67.89	W9D332647LA-333
DDR SDRAM	184 SODIMM	266	128	16x64	Non-ECC	385-1000-ND	46.02	42.96	39.89	W4E216646LA-7.5
	184 SODIMM	266	256	32x64	Non-ECC	385-1001-ND	80.12	74.78	69.44	W4E232646LA-7.5

*Please call 1-800-344-4539 for current pricing.

NEW!

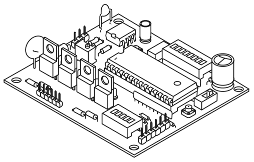
Compact Flash Memory Card

Memory Size (MB)	Digi-Key Part No.	Price Each 1	5	10	Wintec Part No.
32	385-1016-ND	26.76	24.98	23.20	W7B6032M1XG-S7
64	385-1017-ND	42.62	39.78	36.94	W7B6064M1XG-S7
128	385-1018-ND	74.39	69.43	64.47	W7B6128M1XG-S8

MODERN TECHNOLOGY

Unipolar Stepper Motor Driver Board

The MTSD-V1 can be used as a stand-alone uni-polar stepper motor driver board, or in conjunction with a PC or programmable controller for greater flexibility.



Applications:

Robotics, Motion Control, Education, Light Duty Industrial
- Adjustable On-Board Step Clock (15-1500 hz)
- Continuous Run or Pre-settable Step Count from 0-255 steps
- Pushbutton Repeat (pre-set step count)
- LED Phase/Step Indicators
- .1” SIP Header Connectors (.025” square pins)

“Stand Alone” Functions (Dip Switch Selectable):

• Disable/Enable • CW/CCW Direction • Single/Dual Phase Drive • Locked/Free Motor during Disable • Continuous Run/Pre-set Step Count (0-225 steps)

Programmable Controller Input Functions:

• Disable/Enable CW/CCW Direction • Pre-set Step Count Repeat • Logic OUTOUT pin to ID end of pre-set step count • External Clock Input (10 KHz max)

Power Requirements:

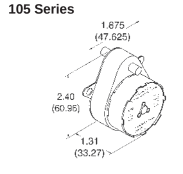
• **Logic Supply:** 5 volts DC @ 50mA • **Motor Supply:** Maximum of 24 volts DC @ 1.85 amps draw • **Board Dimensions:** 3.20” x 2.70” x .875” (81.28mm x 68.58mm x 22.23mm)

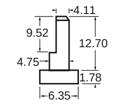
MTSD-V1-ND ....**$82.40 each**

CRAMER COMPANY

AC/DC Geared Motors

105 Series

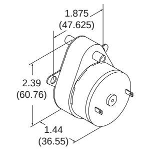




Flatted Round Shaft

(Std. for both series)

800I Series



105 Series: Unidirectional operation assured by ball and slot “no-back” system. Motors listed are all clockwise rotation when facing the output shaft. **Characteristics:** Rotor Speed 600 rpm,115V AC, 60 Hz Coil, 2.7 watts, -20°C to +55°C Operating Temperature. Heat rise +54°C nominal. Motor develops 300 oz. in. Torque starting and running at 1 RPM. Motors shown utilize standard gearing rated for 30 oz. in. max. load. To determine torque available on motors shown, divide 300 oz. in. by listed motor speed.

800I Series DC Gearmotor: Basic 2400 and 4800 armature speed used. Geartrain rating 30 oz. in. dynamic, 90 oz. in. static. Starting and running torque 60oz-in. at 1rpm. These ratings are conventionally stated for output geared to 1rpm. The torque theoretically available at another output speed is the torque at 1rpm divided by the desired speed. Input power 2 watts. Motor output speed will be higher if load is less than 30 oz. in. Voltages offered 12VDC and 24VDC. DC motors are reversible by reversing polarity at terminals. Operating these motors at voltages greater than 10% of nominal, could possibly cause premature motor failure.

Voltage	RPM	Digi-Key Part No.	Price Each 1	10	50	100	Cramer Part No.
105 Series							
110VAC	12	CRA101-ND	26.22	22.91	20.70	19.32	MBA08AA24AABT542X
	10	CRA102-ND	26.22	22.91	20.70	19.32	MBA08AA13MADT542X
	6	CRA103-ND	26.22	22.91	20.70	19.32	MBA08AA24FAAT542X
	2	CRA104-ND	26.22	22.91	20.70	19.32	MBA08AA1A5ABT542X
	1	CRA105-ND	26.22	22.91	20.70	19.32	MBA08AA1C5ABT542X
	1/2	CRA106-ND	26.22	22.91	20.70	19.32	MBA08AA26HAAT542X
800I Series							
12VDC	1	CRA201-ND	46.55	40.67	36.75	34.30	DC3275
	10	CRA202-ND	46.55	40.67	36.75	34.30	DC3276
	30	CRA203-ND	46.55	40.67	36.75	34.30	DC3277
24VDC	1	CRA204-ND	46.55	40.67	36.75	34.30	DC3278
	10	CRA205-ND	46.55	40.67	36.75	34.30	DC3279
	30	CRA206-ND	46.55	40.67	36.75	34.30	DC3280

THOMSON™ Stepper Motors

Fig. 1

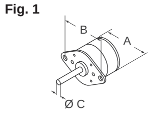
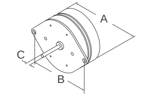


Fig. 2



Thomson Airpax stepper motors are very precise DC motors that move a specific degree of rotation with each pulse applied to its coils. Stepper motors can be controlled for either clockwise or counterclockwise rotation and can operate at very high speeds. Shaft speed is not affected by variations in torque. Unipolar motors have two coils wound on the same bobbin (4 coils total) where each winding is sequentially energized, bipolar motors have only two windings and require a push-pull driver to operate.

Operating Specification:

- **Max. Operating Temperature:** 100°C
- **Operating Temperature Range:** -20°C to 70°C
- **Bearing Type:** Bronze sleeve
- **Insulation Res. at 500Vdc:** 100 megohms
- **Dielectric Withstanding Volt.:** 650VRMS 60 Hz for 2 seconds
- **Lead Wires:** 26AWG

Fig.	Rated Voltage (VDC)	Type	Motor Size (mm) A	(mm) B	(mm) C	Steps per Rev.	Step Angle (Degrees)	Holding Torque (1) (mNm/ox-in)	Digi-Key Part No.	Price Each	Thomson Airpax Part No.
1	5	Bipolar	15	20	1.5	20	18	3.9/5.5	403-1000-ND	15.50	15M020D1B
	5	Unipolar	20	34.9	2	20	18	7.8/1.1	403-1001-ND	16.20	20M020D1U
	5	Bipolar	20	34.9	2	20	18	11.31/1.6	403-1002-ND	15.50	20M020D1B
	12	Unipolar	26	34.9	2	24	15	6.3/0.9	403-1003-ND	16.20	26M024B2U
	12	Unipolar	26	34.9	2	48	7.5	9.2/1.3	403-1004-ND	16.20	26M048B2U
	5	Bipolar	26	34.9	2	48	7.5	10.6/1.5	403-1005-ND	15.46	26M048B1B
	5	Bipolar	36	42	2	48	7.5	27.5/3.9	403-1006-ND	16.50	35L048B1B-N
	12	Unipolar	36	42	2	48	7.5	27.5/3.9	403-1007-ND	17.20	35L048B2U-N
	12	Unipolar	36	42	2	48	7.5	18.4/2.6	403-1008-ND	17.20	35M048B2U
2	5	Bipolar	42	49.5	3	48	7.5	87.5/12.4	403-1009-ND	16.90	42M048C1B
	12	Unipolar	42	49.5	3	48	7.5	73.4/10.4	403-1010-ND	17.80	42M048C2U
	12	Unipolar	42	49.5	3	48	7.5	50.8/7.2	403-1011-ND	17.80	42S048D2U
	5	Bipolar	42	49.5	3	100	3.6	49.4/7.0	403-1012-ND	16.90	42M100B1B
	12	Unipolar	42	49.5	3	100	3.6	45.2/6.4	403-1013-ND	17.80	42M100B2U
	5	Bipolar	44	49.5	3	100	3.6	46.6/6.6	403-1014-ND	17.10	44M100D1B
	12	Bipolar	44	49.5	3	100	3.6	46.6/6.6	403-1015-ND	17.80	44M100D2B
	5	Bipolar	55	66.7	3	48	7.5	221.1/31.4	403-1016-ND	18.00	55M048D1B
	12	Unipolar	55	66.7	3	48	7.5	189.4/26.9	403-1017-ND	18.90	55M048D2U

Note: 1 Holding Torque measured with rated voltage and 2 phases energized.

molex GC/Waldom

TO-220 Solder Tail Transistor Sockets

Fig. 1

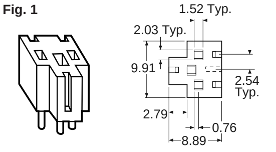
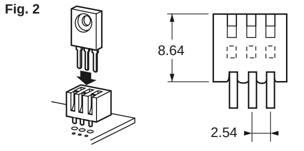


Fig. 2



P.C. Board Mount: .100" (2.54mm) center. These three circuit transistor sockets are preassembled and ready for soldering to a P.C. Board. The proven double cantilever design eliminates circuit failure due to thermal expansion and/or mechanical tolerances. Linear movement of the transistor leads in the socket does not affect contact reliability.

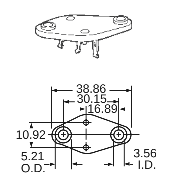
Material: Tin-Plated Brass, 94V-2 Rated Nylon

Fig.	Digi-Key Part No.	Price Each 1	10	100	Molex Part No.
1	WM2550-ND	1.38	1.23	.82	09-48-3031
2	WM2551-ND	1.71	1.52	1.01	10-18-2031

KEYSTONE ELECTRONICS CORP.

TO-3 Power Transistor Sockets

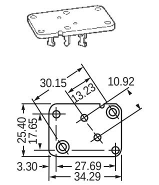
Fig. 1



Chassis Mount

- Top Plate: Molded Nylon
- Base: Phenolic
- Dimensions: 1.53"x.073" (38.86mm x 1.85mm)
- Standoffs: 0.09" (2.29mm)

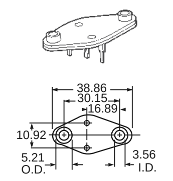
Fig. 2



Chassis Mount

- Top Plate: Phenolic
- Base: Phenolic
- Dimensions: 1.35"x1.00" (34.29mm x 25.40mm)
- Standoffs: None

Fig. 3



P.C. Board Mount

- Top Plate: Molded Nylon
- Base: Phenolic
- Dimensions: 1.53"x.073" (38.86mm x 1.85mm)
- Standoffs: 0.09" (2.29mm)

Transistor Mounting Hardware

Fig. 4A

TO-220
Complete Mounting Kit
(A, B, C, D, E)

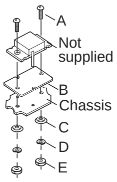


Fig. 4B

TO-3
Complete Mounting Kit
(A, B, C, D, E, F, G)

* **6-20** Mounting Screws
(A Only, 2 Required)

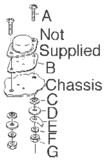
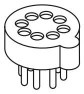


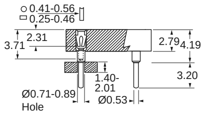
Fig.	Digi-Key Part No.	Price Each 1	10	100	Keystone Part No.
1	4601K-ND	1.60	1.33	1.26	4601
2	4606K-ND	1.37	1.13	1.02	4606
3	4600K-ND	1.44	1.19	1.08	4600
4A	4724K-ND	.89	.85	.79	4724
4B	4725K-ND	.89	.85	.79	4725
4	4706K-ND*		2.99/20	17.36/200	4706

MILL-MAX®

Transistor Sockets

Plating:
Sleeve (Pin): 200µ" Sn.
Contact (Clip): 30µ" Au.





No. of Pins	Digi-Key Part No.	Price Each 1	10	100	Mill-Max Part No.
TO-5 Package					
3	ED2150-ND	.58	.49	.41	917-93-103-41-005
4	ED2151-ND	.77	.65	.54	917-93-104-41-005
8	ED2152-ND	1.48	1.25	1.03	917-93-108-41-005
TO-100 Package					
8	ED2153-ND	1.48	1.25	1.03	917-93-208-41-005
10	ED2154-ND	1.77	1.50	1.23	917-93-210-41-005

Chemtronics®

Heat Sink Grease

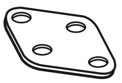
For fast heat transfer from components

- Nonflammable
- Noncorrosive
- Silicon
- Will not dry out, harden or melt
- 5 oz. tube
- Meets MIL-C-47113
- Stable from: -0°F to +342°F (-18°C to 172°C)

Digi-Key Part No.	Price Each 1	25	100	Chemtronics Part No.
CT40-5-ND	13.74	12.42	11.60	CT40-5

KEYSTONE ELECTRONICS CORP.

MICA Insulators for Transistor Mounting



These precision stamped MICA Insulators provide good thermal conductivity (.009 watts per square inch per °C per inch in thickness).

Excellent thermal resistance 1100°F (593°C).

Dielectric constant of 7 at 1000KHz.

Specifications: .003" (.08mm) thick MICA ± .001" (± .03mm).

Fig. 1

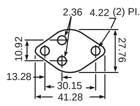


Fig. 2

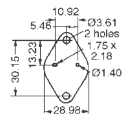


Fig. 3

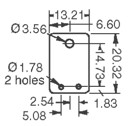
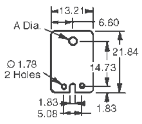


Fig. 4



"A" Dim. (Dia.)
4672K: 3.58mm
4673K: 2.92mm

Fig.	Digi-Key Part No.	Pricing 10	100	500	1,000	Keystone Part No.
1	4651K-ND	.71	5.87	24.73	33.70	4651
2	4662K-ND	.78	6.38	27.80	36.87	4662
3	4671K-ND	1.00	5.86	24.69	23.87	4671
4	4672K-ND	.78	5.88	24.77	17.49	4672
4	4673K-ND	.78	5.88	24.77	17.49	4673

Wakefield Engineering

Heat Sinks

Wakefield Engineering is recognized as a worldwide leader in innovative thermal management solutions. Their products range from board level heat sinks for both surface mount and thru-hole, to fan mounted heat sinks for microprocessors and CPU's. Wakefield Engineering offers a single source for all of your thermal requirements. DeltaPads are replacements to heat sink grease but without any mess. They are heat conducting, electrically isolating pads to go between the heat sink and your semiconductor device. TO-220 heatsinks will also fit TO-202 and TO-126 packages.

Fig. 1

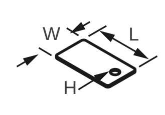


Fig. 2

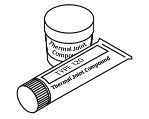


Fig. 3

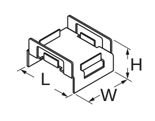


Fig. 4

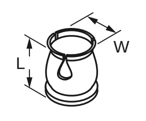
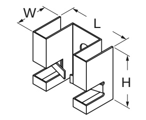


Fig. 5



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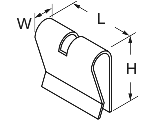


Fig. 7

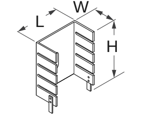


Fig. 8

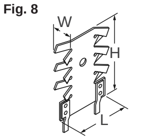


Fig. 9

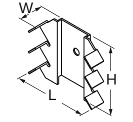


Fig. 10

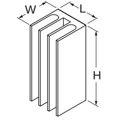


Fig. 11

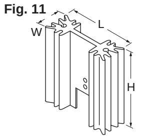


Fig. 12

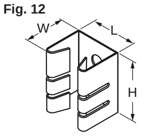


Fig. 13

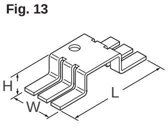


Fig. 14

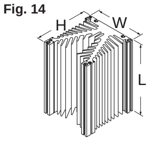


Fig. 15

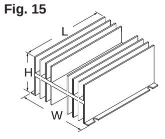


Fig. 16

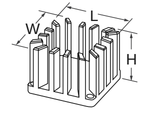


Fig. 17

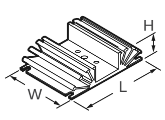


Fig. 18

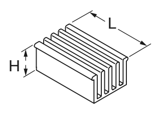


Fig. 19

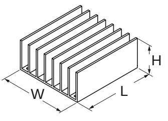


Fig. 20

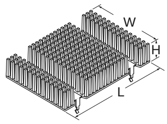


Fig. 21

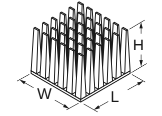


Fig. 22

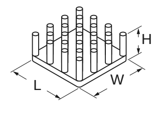


Fig.	Description	Dimensions – Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
1	DeltaPad Thermal Pad TO-220 No Adhesive .007" (.18mm)	.710 x .500 x .141 dia. (18.03 x 12.70 x 3.58 dia.)	345-1000-ND	.35	.25	.18	173-7-220P
1	DeltaPad Thermal Pad TO-220, No Adhesive .009" (.23mm)	.750 x .500 x .147 dia. (19.05 x 12.70 x 3.73 dia.)	345-1001-ND	.35	.25	.18	173-9-240P
1	Kapton Thermal Pad, TO-220, No Adhesive .006" (.15mm)	.710 x .500 x .141 dia. (18.03 x 12.70 x 3.58 dia.)	345-1002-ND	.60	.43	.30	175-6-220P
1	Kapton Thermal Pad TO-220, No Adhesive .006" (.15mm)	.750 x .500 x .125 dia. (19.05 x 12.70 x 3.18 dia.)	345-1003-ND	.60	.43	.30	175-6-230P
1	Kapton Thermal Pad TO-220, No Adhesive .006" (.15mm)	.750 x .500 x .147 dia. (19.05 x 12.70 x 3.73 dia.)	345-1004-ND	.39	.28	.20	175-6-240P
1	Kapton Thermal Pad TO-220, No Adhesive .006" (.15mm)	.860 x .740 x .160 (21.84 x 18.80 x 4.06)	345-1005-ND	.77	.55	.39	175-6-280P
2	Silicon Thermal Grease, 4 gram Plastic Pak	—	345-1006-ND	4.00	3.60	2.80	120-SA
2	Silicon Thermal Grease, 2 Oz. Jar	—	345-1007-ND	11.43	10.29	8.00	120-2
2	Silicon Thermal Grease, 5 Oz. Tube	—	345-1008-ND	21.63	19.47	15.14	120-5
2	Silicon Thermal Grease, 8 Oz. Jar	—	345-1009-ND	26.93	24.24	18.85	120-8
2	Silicon Thermal Grease, 5 Lbs. Can	—	345-1010-ND	140.90	126.81	98.63	120-80
2	Synthetic Non-Silicon Thermal Compound 4 Oz Tube	—	345-1011-ND	34.13	30.72	23.89	126-4
3	D-Pack/SOT-23 Heat Sink, Pretinned, Autoinsertable	.74 x .60 x .36 (18.80 x 15.24 x 9.14)	345-1012-ND	.42	.30	.21	217-36CT6
4	TO-5 Clip-On Cup Style With 4-40 Thd Base	.37 x .38 dia. (9.40 x 9.65 dia.)	345-1013-ND	9.78	8.80	6.85	260-4T5E
5	TO-220, Self-Locking, Horz/Vert Mount, Black	1.0 x .50 x .85 (25.40 x 12.70 x 21.59)	345-1016-ND	.81	.58	.41	235-85AB
6	TO-220, Self-Locking, Horz/Vert Mount, Black	.80 x .27 x .80 (20.32 x 6.86 x 20.32)	345-1017-ND	.35	.25	.18	243-3PAB
7	TO-220, Vertical Mount Wave-Solderable, With Tabs Black	1.0 x .50 x 1.18 (25.40 x 12.70 x 29.97)	345-1018-ND	1.26	.90	.63	287-1AB
7	TO-220, Low Cost Horz/Vert Mount, Black	1.0 x .50 x .71 (25.40 x 12.70 x 18.03)	345-1019-ND	.53	.38	.27	289-AB
7	TO-220, Dual Low Cost Horz/Vert Mount, Black	1.0 x .50 x 1.18 (25.40 x 12.70 x 29.97)	345-1020-ND	.63	.45	.32	290-1AB
7	TO-220, Dual Mount Low Cost, Black	1.0 x .50 x 1.18 (25.40 x 12.70 x 29.97)	345-1021-ND	.63	.45	.32	290-2AB
7	TO-220, Low Cost Horz/Vert Mount, Black	.75 x .375 x .75 (19.05 x 9.52 x 19.05)	345-1022-ND	.49	.35	.25	273-AB
7	TO-220, Low Cost Horz/Vert Mount, Black	.52 x .375 x .750 (13.21 x 9.52 x 19.05)	345-1023-ND	.49	.35	.25	274-1AB
8	TO-220, Vertical Mount Wave-Solderable, With Tabs	.875 x .215 x 1.25 (22.23 x 5.46 x 31.75)	345-1024-ND	1.12	.80	.56	288-1AB
9	TO-220 Self-Locking, Vertical Mount, Black	1.0 x .36 x .860 (25.40 x 9.14 x 21.84)	345-1025-ND	.70	.50	.35	291-H36AB
10	TO-220 Power Vertical Mount With Pins/6-32Thds, Black	.64 x .64 x 1.0 (16.26 x 16.26 x 25.40)	345-1026-ND	1.82	1.30	.91	634-10ABP
10	TO-220 Power Vertical Mount With Pins/6-32Thds, Black	.64 x .64 x 2.0 (16.26 x 16.26 x 50.80)	345-1027-ND	2.07	1.48	1.04	634-20ABP
11	TO-220 Power Vertical Mount With Pins, Black	1.375 x .50 x 1.0 (34.93 x 12.70 x 25.40)	345-1028-ND	2.14	1.53	1.07	637-10ABP
11	TO-220 Power Vertical Mount With Pins, Black	1.375 x .50 x 1.5 (34.93 x 12.70 x 38.10)	345-1029-ND	2.21	1.58	1.11	637-15ABP
11	TO-220 Power Vertical Mount With Pins, Black	1.375 x .50 x 2.0 (34.93 x 12.70 x 50.80)	345-1030-ND	2.49	1.78	1.25	637-20ABP
11	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.0 (41.91 x 25.40 x 25.40)	345-1031-ND	2.91	2.08	1.46	647-10ABP
11	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.5 (41.91 x 25.40 x 38.10)	345-1032-ND	3.12	2.23	1.56	647-15ABP
11	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.5 (41.91 x 25.40 x 38.10)	345-1033-ND	3.12	2.23	1.56	657-15ABP
11	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 1.5 (41.91 x 25.40 x 38.10)	345-1034-ND	2.91	2.08	1.46	657-15ABPN
11	TO-220 Power Vertical Mount With Pins, Black	1.650 x 1.0 x 2.0 (41.91 x 25.40 x 50.80)	345-1035-ND	3.43	2.45	1.72	657-20ABP
11	TO-220 Pwr SpeedClip Mount With Pins (Order clip below)	1.375 x .50 x 1.0 (34.93 x 12.70 x 25.40)	345-1037-ND	2.84	2.03	1.42	667-10ABPP
—	SpeedClip, Stainless Steel for 667 Series	—	345-1039-ND	.95	.68	.48	330-SC
12	TO-220 Self-Locking Horz/Vert Mount, Black	.57 x .50 x .75 (14.48 x 12.70 x 19.05)	345-1040-ND	.74	.53	.37	230-75AB
13	TO-220 Low Cost Horz/Vert Mount, Black	1.75 x .375 x .70 (44.45 x 9.52 x 17.78)	345-1041-ND	.56	.40	.28	270-AB
13	TO-220 Top Mount Booster for 270,272,280 Series, Black	1.75 x .50 x .70 (44.45 x 12.70 x 17.78)	345-1042-ND	.56	.40	.28	271-AB
13	TO-220 Dual Mount Horz, Black	1.75 x .375 x 1.45 (44.45 x 9.52 x 36.83)	345-1043-ND	.67	.48	.34	272-AB
14	IGBT and SSR's Power Module's Black	7.087 x 4.92 x 5.34 (180.01 x 124.97 x 135.64)	345-1046-ND	104.95	94.46	73.47	392-180AB
15	TO-3 Power Horz Mount Double Fin, Black	4.750 x 1.5 x 1.25 (120.65 x 38.10 x 31.75)	345-1047-ND	9.93	8.94	6.95	401-A
15	Power Heat Sink Horz, Double Fin, No Holes	4.750 x 1.5 x 1.25 (120.65 x 38.10 x 31.75)	345-1048-ND	6.68	6.01	4.68	401-K
15	Power Heat Sink, Horz, Double Fin, No Holes	4.750 x 3.0 x 2.62 (120.65 x 76.20 x 66.55)	345-1049-ND	11.93	10.74	8.35	421-K
15	Power Heat Sink, Horz, Double Fin, No Holes	4.750 x 5.5 x 2.62 (120.65 x 139.70 x 66.55)	345-1050-ND	18.05	16.25	12.64	423-K
16	TO-3 Power, Horz Mount, Omnidirectional, Black	1.81 x 1.81 x 1.25 (45.97 x 45.97 x 31.75)	345-1051-ND	4.88	4.39	3.42	680-125A
17	TO-3 Heavy Duty Power, Horz Mount, Black	4.125 x 3.0 x 1.0 (104.78 x 76.20 x 25.40)	345-1052-ND	8.48	7.63	5.94	641-A
17	Power Heat Sink, Horz Mount, No Holes, Black	4.125 x 3.0 x 1.0 (104.78 x 76.20 x 25.40)	345-1053-ND	8.18	7.36	5.73	641-K
18	14-16 Dip IC Heat Sink, Glue On, Black	.75 x .415 x .24 (19.05 x 10.54 x 6.10)	345-1054-ND	1.82	1.30	.91	651-B
19	Half Brick DC/DC Converter, Vert, Black	2.28 x 2.4 x .95 (57.91 x 60.96 x 24.13)	345-1055-ND	4.63	4.17	3.24	518-95AB
19	Half Brick DC/DC Convert With Hardware/Thermal Pad	2.28 x 2.4 x .95 (57.91 x 60.96 x 24.13)	345-1056-ND	8.08	7.27	5.66	518-95AB-MS4
19	Half Brick DC/DC Converter Vert, Black	2.28 x 2.4 x .45 (57.91 x 60.96 x 11.43)	345-1057-ND	8.08	7.27	5.66	528-45AB

CPU, PGA and BGA Heat Sinks

Fig.	Description	Dimensions – Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
	CPU Cooler						
20	40mm QFP and 21mm BGA With Clips and Thermal Tape, Black	2.89 x 2.0 x .5 (73.41 x 50.80 x 12.70)	345-1058-ND	6.48	5.83	4.54	609-50ABS3
21	21mm BGA With Thermal Double Sided Tape	.827 x .827 x .25 (21.01 x 21.01 x 6.35)	345-1059-ND	2.28	1.63	1.14	624-25ABT4
21	25mm BGA With Thermal Double Sided Tape	.984 x .984 x .25 (24.99 x 24.99 x 6.35)	345-1060-ND	2.56	1.83	1.28	625-25ABT4
21	17x17 PGA No Tape, Black	1.75 x 1.7 x .40 (44.45 x 43.18 x 10.16)	345-1061-ND	2.45	1.75	1.23	628-40AB
21	17x17 PGA No Tape, Black	1.75 x 1.7 x .65 (44.45 x 43.18 x 16.51)	345-1062-ND	2.35	2.12	1.65	628-65AB
21	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1036-ND	1.61	1.15	.81	658-25AB
21	28-38mm CQFP With Thermal Tape (Chromerics T-405), Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1063-ND	2.59	1.85	1.30	658-25ABT1
21	28-38mm CQFP With Thermal Tape (Arclad 8223) Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1064-ND	2.24	1.60	1.12	658-25ABT2
21	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .25 (27.94 x 27.94 x 6.35)	345-1065-ND	2.94	2.10	1.47	658-25ABT4
21	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .35 (27.94 x 27.94 x 8.89)	345-1066-ND	1.65	1.18	.83	658-35AB
21	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .35 (27.94 x 27.94 x 8.89)	345-1067-ND	2.66	1.90	1.33	658-35ABT3
21	28-38mm CQFP With Thermal Tape (Chromerics T-410), Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1068-ND	2.91	2.08	1.46	658-35ABT4
21	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1069-ND	1.79	1.28	.90	658-45AB
21	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1070-ND	2.31	1.65	1.16	658-45ABT3
21	28-38mm CQFP With Thermal Tape (Chromerics T-410), Black	1.1 x 1.1 x .45 (27.94 x 27.94 x 11.43)	345-1071-ND	2.23	2.01	1.56	658-45ABT4
21	28-38mm CQFP No Tape, Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1072-ND	1.82	1.30	.91	658-60AB
21	28-38mm CQFP With Thermal Tape (Chromerics T-405), Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1073-ND	2.84	2.03	1.42	658-60ABT1
21	28-38mm CQFP With Thermal Tape (Arclad 8223), Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1074-ND	2.38	1.70	1.19	658-60ABT2
21	28-38mm CQFP With Thermal Tape (Chromerics T-412), Black	1.1 x 1.1 x .60 (27.94 x 27.94 x 15.24)	345-1075-ND	2.94	2.10	1.47	658-60ABT3
	CPU Composite Cooler						
22	CPU Composite Cooler for 84-100QFP, 169BGA, No Tape, Black	.65 x .65 x .40 (16.51 x 16.51 x 10.16)	345-1076-ND	1.68	1.20	.84	D10650-40
22	CPU Composite Cooler for 128-200QFP, 313BGA, No Tape, Black	.85 x .85 x .40 (21.59 x 21.59 x 10.16)	345-1077-ND	2.10	1.50	1.05	D10850-40

Wakefield 609 Series fits PowerPC 601, 604, 255BGA
Wakefield 628 Series fits IntelDX4, Intel 80486DX2, AM486DX2/DX4
Wakefield 658 Series fits IntelDX4, AM29240, PowerPC 603

IXYS
Semiconductors

Fig. 1

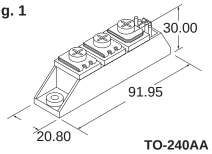


Fig. 1a

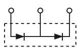


Fig. 1b

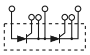


Fig. 1c

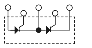


Fig. 2

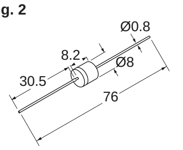


Fig. 3

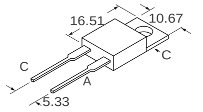


Fig. 4

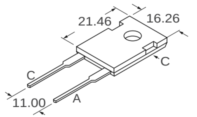


Fig. 5

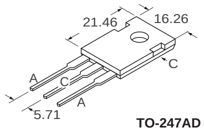


Fig. 6

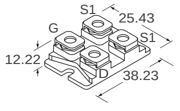


Fig. 6a

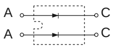


Fig. 6b

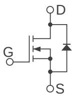


Fig. 6c

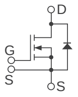


Fig. 7

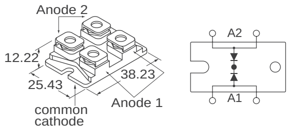


Fig. 8

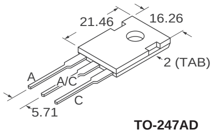


Fig. 9

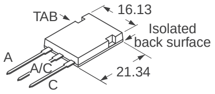


Fig. 10

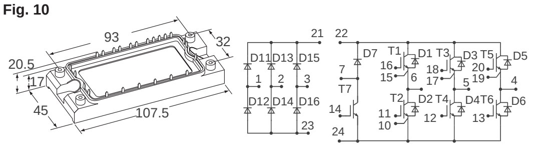
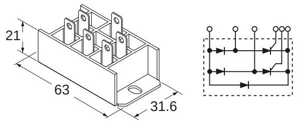


Fig. 11



Description	Package	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Integrated Circuits						
4 Amp Dual Low-Side Ultrafast MOSFET Driver, with Enable	8-Dip	IXDD404PI-ND *NEW!*	4.12	3.73	3.34	IXDD404PI
4 Amp Dual Low-Side Ultrafast MOSFET Driver, with Enable	8-SOIC	IXDD404SI-ND *NEW!*	4.12	3.73	3.34	IXDD404SI
4 Amp Dual Low-Side Ultrafast MOSFET Driver, with Enable	16-SOIC	IXDD404SI-16-ND *NEW!*	4.58	4.15	3.71	IXDD404SI-16
4 Amp Dual Low-Side Ultrafast MOSFET Driver	8-Dip	IXDI404PI-ND *NEW!*	4.12	3.73	3.34	IXDI404PI
4 Amp Dual Low-Side Ultrafast MOSFET Driver	8-SOIC	IXDI404SI-ND *NEW!*	4.12	3.73	3.34	IXDI404SI
4 Amp Dual Low-Side Ultrafast MOSFET Driver	16-SOIC	IXDI404SI-16-ND *NEW!*	4.58	4.15	3.71	IXDI404SI-16
4 Amp Dual Low-Side Ultrafast MOSFET Driver	8-Dip	IXDN404PI-ND *NEW!*	4.12	3.73	3.34	IXDN404PI
4 Amp Dual Low-Side Ultrafast MOSFET Driver	8-SOIC	IXDN404SI-ND *NEW!*	4.12	3.73	3.34	IXDN404SI
4 Amp Dual Low-Side Ultrafast MOSFET Driver	16-SOIC	IXDN404SI-16-ND *NEW!*	4.58	4.15	3.71	IXDN404SI-16
4 Amp Dual Low-Side Ultrafast MOSFET Driver	8-Dip	IXDF404PI-ND *NEW!*	4.12	3.73	3.34	IXDF404PI
4 Amp Dual Low-Side Ultrafast MOSFET Driver	8-SOIC	IXDF404SI-ND *NEW!*	4.12	3.73	3.34	IXDF404SI
4 Amp Dual Low-Side Ultrafast MOSFET Driver	16-SOIC	IXDF404SI-16-ND *NEW!*	4.58	4.15	3.71	IXDF404SI-16
8 Amp Low-Side Ultrafast MOSFET Driver, with Enable	TO-220-5	IXDD408CI-ND *NEW!*	4.35	3.94	3.52	IXDD408CI
8 Amp Low-Side Ultrafast MOSFET Driver, with Enable	8-Dip	IXDD408PI-ND *NEW!*	4.14	3.75	3.35	IXDD408PI
8 Amp Low-Side Ultrafast MOSFET Driver, with Enable	8-SOIC	IXDD408SI-ND *NEW!*	3.99	3.61	3.23	IXDD408SI
8 Amp Low-Side Ultrafast MOSFET Driver, with Enable	TO-263-5	IXDD408YI-ND *NEW!*	4.62	4.18	3.74	IXDD408YI
14 Amp Low-Side Ultrafast MOSFET Driver, with Enable	TO-220-5	IXDD414CI-ND *NEW!*	6.38	5.78	5.17	IXDD414CI
14 Amp Low-Side Ultrafast MOSFET Driver, with Enable	8-Dip	IXDD414PI-ND *NEW!*	4.56	4.13	3.69	IXDD414PI
14 Amp Low-Side Ultrafast MOSFET Driver, with Enable	TO-263-5	IXDD414YI-ND *NEW!*	6.47	5.86	5.24	IXDD414YI
Full-Feature Low-Side Driver	16-Dip	IXBD4410PI-ND	10.79	9.77	8.68	IXBD4410PI
ISOSMART™ Half Bridge Driver Chipset	16-SOIC	IXBD4410SI-ND *NEW!*	5.40	4.89	4.37	IXBD4410SI
ISOSMART™ Half Bridge Driver Chipset	16-Dip	IXBD4411PI-ND *NEW!*	5.25	4.75	4.25	IXBD4411PI
ISOSMART™ Half Bridge Driver Chipset	16-SOIC	IXBD4411SI-ND *NEW!*	5.40	4.89	4.37	IXBD4411SI
Inverter Interface and Digital Deadtime Generator for 3-Phase PWM Controls	18-Dip	IXDP630PI-ND	4.58	4.15	3.70	IXDP630PI
High Performance Dual PWM Microstepping Controller	24-Dip	IXMS150PSI-ND	12.60	11.40	10.13	IXMS150PSI
Gate Driver IC Evaluation Board	—	EVDD404-ND *NEW!*	78.67	71.18	63.69	EVDD404
Gate Driver IC Evaluation Board	—	EVDD408-ND *NEW!*	78.67	71.18	63.69	EVDD408
Gate Driver IC Evaluation Board	—	EVDD414-ND *NEW!*	78.67	71.18	63.69	EVDD414

Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	I_{FRMS} A	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Diode Module									
1a	1200	2x120	105	2x180	MDD95-12N1B-ND	50.55	42.13	32.40	MDD95-12N1B
Avalanche Diode									
2	1600	3.6	45	7	DSA2-16A-ND	7.92	6.60	5.10	DSA2-16A

Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	t_{rr} typ. T_{VJ} = 25°C ns	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Fast Recovery Epitaxial Diodes (FRED)									
3	600	8	115	35	DSEI8-06A-ND	1.41	1.18	.90	DSEI8-06A
	600	14	100	35	DSEI12-06A-ND	1.95	1.63	1.20	DSEI12-06A
	1000	12	100	50	DSEI12-10A-ND	2.13	1.78	1.40	DSEI12-10A
	1200	11	100	50	DSEI12-12A-ND	2.46	2.05	1.60	DSEI12-12A
	1200	17	85	40	DSEI20-12A-ND	3.18	2.65	2.00	DSEI20-12A

Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	t_{rr} typ. T_{VJ} = 25°C ns	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
4	600	37	85	35	DSEI30-06A-ND	4.23	3.53	2.70	DSEI30-06A
	1000	30	85	35	DSEI30-10A-ND	6.18	5.15	3.90	DSEI30-10A
	1200	26	85	40	DSEI30-12A-ND	7.05	5.88	4.60	DSEI30-12A
	600	60	70	35	DSEI60-06A-ND	6.00	5.00	3.90	DSEI60-06A
	1000	60	60	35	DSEI60-10A-ND	7.95	6.63	5.10	DSEI60-10A
	1200	52	60	40	DSEI60-12A-ND	9.18	7.65	5.90	DSEI60-12A
5	600	2x30	85	35	DSEK30-06A-ND	9.54	7.95	6.10	DSEK30-06A
6a	200	2x123	70	35	DSEI2X121-02A-ND	43.23	36.03	27.80	DSEI2X121-02A
	600	2x60	70	35	DSEI2X61-06C-ND	24.72	20.60	15.90	DSEI2X61-06C
	1000	2x60	50	35	DSEI2X61-10B-ND	30.00	25.00	19.30	DSEI2X61-10B
	600	2x106	70	35	DSEI2X101-06A-ND	36.87	30.73	23.60	DSEI2X101-06A
HIPerFRED™ Epitaxial Diode with Soft Recovery									
4	600	30	135	35	DSEP30-06A-ND	4.92	4.10	3.10	DSEP30-06A
	1200	30	115	40	DSEP30-12A-ND	8.13	6.78	5.30	DSEP30-12A
6a	600	2x60	65	35	DSEP2X61-06A-ND	28.41	23.68	18.20	DSEP2X61-06A

Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	I_{FRMS} A	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Phase-Leg Rectifier Diode									
8	1200	2x28	100	2x43	DSP25-12A-ND	5.64	4.70	3.60	DSP25-12A
	1600	2x28	100	2x43	DSP25-16A-ND	6.63	5.53	4.30	DSP25-16A
ISOPLUS247™ Phase-Leg Rectifier Diode									
9	1600	2x28	100	2x43	DSP25-16AR-ND	8.40	7.00	5.40	DSP25-16AR

Three Phase Rectifier	Brake Chopper	Three Phase Inverter	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Converter-Brake-Inverter Modules - Fig. 10							
VRRM = 1600V IDAVM = 26A IFSM = 160A	VCES = 600V IC25 = 20A VCE(sat) = 1.9V	VCES = 600V IC25 = 20A VCE(sat) = 1.9V	MUBW10-06A7-ND	63.99	57.90	49.60	MUBW10-06A7
VRRM = 1600V IDAVM = 26A IFSM = 160A	VCES = 1200V IC25 = 20A VCE(sat) = 2.3V	VCES = 1200V IC25 = 20A VCE(sat) = 2.3V	MUBW10-12A7-ND	74.36	67.28	57.10	MUBW10-12A7
VRRM = 1600V IDAVM = 36A IFSM = 300A	VCES = 1200V IC25 = 20A VCE(sat) = 2.9V	VCES = 1200V IC25 = 50A VCE(sat) = 2.2V	MUBW25-12A7-ND	116.49	105.40	91.01	MUBW25-12A7

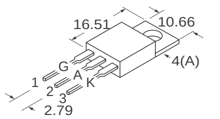
Fig.	V_{RRM} V	I_{FAV} @ T_C A	°C	V_F V	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Power Schottky Rectifier									
3	45	16	160	0.57	DSS16-0045A-ND	2.46	2.05	1.60	DSS16-0045A
5	15	2x20	135	0.32	DSSK40-0015B-ND	10.80	9.00	6.90	DSSK40-0015B
	45	2x30	150	0.60	DSSK60-0045A-ND	12.72	10.60	8.20	DSSK60-0045A
	150	2x30	155	0.69	DSSK60-015A-ND	22.23	18.53	14.30	DSSK60-015A
	15	2x35	130	0.33	DSSK70-0015B-ND	12.63	10.53	8.10	DSSK70-0015B
	45	2x40	125	0.45	DSSK80-0045B-ND	16.95	14.13	10.90	DSSK80-0045B
6a	100	2x40	110	0.70	DSS2X41-01A-ND	24.72	20.60	15.90	DSS2X41-01A
	100	2x60	105	0.73	DSS2X61-01A-ND	34.32	28.60	22.00	DSS2X61-01A
	45	2x60	105	0.66	DSS2X61-0045A-ND	23.22	19.35	15.00	DSS2X61-0045A
	45	2x120	100	0.59	DSS2X121-0045B-ND	35.73	29.78	23.00	DSS2X121-0045B
7	100	2x160	95	0.80	DSS2X160-01A-ND	59.13	49.28	37.90	DSS2X160-01A

Fig.	V_{RRM} V	I_{dAVM} @ T_K A	°C	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Half Controlled Single Phase Rectifier Bridge with Freewheeling Diode								
11	1600	32	85	VHF28-16IO5-ND	58.23	48.53	37.40	VHF28-16IO5

Fig.	VAK V	ID TC = 25°C A	IAP typ. mA	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Adjustable Current Regulators								
12	450	-0.3	10	IXCP10M45S-ND	4.11	3.43	2.80	IXCP10M45S

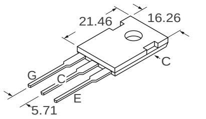
(Continued)

Fig. 12



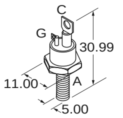
TO-220 AB

Fig. 13



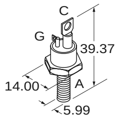
TO-247AD

Fig. 14



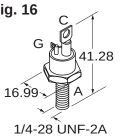
TO-64

Fig. 15



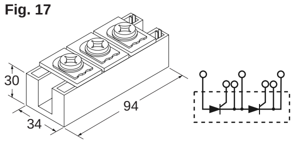
TO-48

Fig. 16



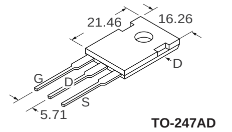
TO-65

Fig. 17



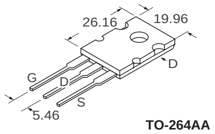
MCC162

Fig. 18



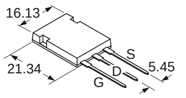
TO-247AD

Fig. 19



TO-264AA

Fig. 20



PLUS247™

Fig. 21

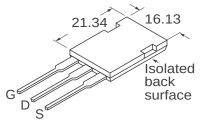


Fig. 22

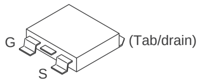


Fig.	V_{CES} V	I_C T_C = 25°C A	V_{CE} (sat) typ. V	t_{rr} 25°C ns	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
High Voltage BIMOSFET™ Monolithic Bipolar MOS Transistor									
13	1600	15	5.8	40	IXBH15N160-ND	19.59	16.33	12.70	IXBH15N160

Fig.	V_{CES} V	I_C T_C = 25°C A	V_{CE} (sat) max. V	t_{rr} typ. 25°C ns	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
IGBTs — Insulated Gate Bipolar Transistors – High Speed									
13	600	48	2.7	275	IXGH24N60A-ND	6.20	5.61	4.98	IXGH24N60A
	600	75	2.7	275	IXGH50N60A-ND	17.01	15.39	13.66	IXGH50N60A
	600	48	2.5	80	IXGH24N60B-ND	6.20	5.61	4.98	IXGH24N60B
	600	48	2.5	60	IXGH24N60C-ND	6.51	5.89	5.24	IXGH24N60C
	600	60	2.5	55	IXGH32N60C-ND	9.51	8.61	7.64	IXGH32N60C
	600	75	2.5	150	IXGH50N60B-ND	17.01	15.39	13.66	IXGH50N60B
IGBTs — Insulated Gate Bipolar Transistors with Diode, Combi Pack – low V_{CE} (sat)									
13	1000	20	3.5	800	IXGH10N100U1-ND	11.66	10.55	9.37	IXGH10N100U1
	1000	34	3.5	750	IXGH17N100U1-ND	11.91	10.78	9.57	IXGH17N100U1
IGBTs — Insulated Gate Bipolar Transistors with Diode, Combi Pack – High Speed									
13	600	48	2.7	275	IXGH24N60AU1-ND	9.49	8.59	7.63	IXGH24N60AU1
	600	60	1.8	100	IXGH30N60BD1-ND	14.20	12.85	11.41	IXGH30N60BD1
	600	60	2.5	55	IXGH32N60CD1-ND	14.57	13.19	11.70	IXGH32N60CD1
	600	55	2.5	70	IXSH30N60CD1-ND	14.57	13.19	11.70	IXSH30N60CD1
	1000	20	4.0	500	IXGH10N100AU1-ND	11.30	10.23	9.09	IXGH10N100AU1
	1000	34	4.0	450	IXGH17N100AU1-ND	12.08	10.93	9.71	IXGH17N100AU1

Fig.	V_{DRM} V	I_{TAV} T_C = 85°C A	I_{TRMS} A	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
Phase Control SCRs								
14	800	16	25	CS8-08IO2-ND	13.02	10.85	8.40	CS8-08IO2
	1200	16	25	CS8-12IO2-ND	14.28	11.90	9.20	CS8-12IO2
15	800	25	50	CS23-08IO2-ND	16.23	13.53	10.40	CS23-08IO2
	1200	25	50	CS23-12IO2-ND	18.00	15.00	11.60	CS23-12IO2
16	800	60	120	CS35-08IO4-ND	20.19	16.83	13.00	CS35-08IO4
	1200	60	120	CS35-12IO4-ND	22.23	18.53	14.30	CS35-12IO4
	1400	60	120	CS35-14IO4-ND	26.61	22.18	17.10	CS35-14IO4

Fig.	V_{DRM} V	I_{TAV} @ A	T_C °C	I_{TRMS} A	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
SCR Module									
1b	1200	2x116	85	2x180	MCC95-12IO1B-ND	64.50	53.75	41.40	MCC95-12IO1B
	1600	116	85	180	MCC95-16IO8B-ND	74.37	61.98	47.80	MCC95-16IO8B
	1600	2x32	85	2x50	MCC26-16IO1B-ND	41.55	34.63	26.70	MCC26-16IO1B
1c	1600	2x116	85	2x180	MCC95-16IO1B-ND	75.15	62.63	48.20	MCC95-16IO1B
17	1600	2x190	85	2x300	MCC162-16IO1-ND	178.59	148.83	130.98	MCC162-16IO1

Fig.	V_{DSS} max. V	I_{D25} T_C = 25°C A	$R_{DS(on)}$ T_C = 25°C Ω	t_{rr} typ. 25°C ns	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
MOSFETs — N-Channel Enhancement-Mode									
18	500	14	0.4	500	IRFP450X-ND	4.47	4.05	3.59	IRFP450
MegaMOSFET™ — N-Channel Enhancement Mode - High Voltage									
18	1100	13	0.920	≤850	IXTH13N110-ND	23.10	20.90	18.56	IXTH13N110
MegaMOSFET™ N-Channel Enhancement Mode									
6c	1000	21	0.550	≤1000	IXTN21N100-ND	43.68	39.52	35.10	IXTN21N100
MOSFETs — N-Channel Enhancement-Mode with Fast Intrinsic Diode									
18	70	76	0.011	150	IXFH76N07-11-ND	14.74	13.34	11.85	IXFH76N07-11
	70	76	0.012	150	IXFH76N07-12-ND	13.27	12.01	10.67	IXFH76N07-12
	100	80	0.015	≤200	IXFH80N10Q-ND	18.44	16.69	15.01	IXFH80N10Q
	200	42	0.06	200	IXFH42N20-ND	13.50	12.22	10.85	IXFH42N20
	200	50	0.045	200	IXFH50N20-ND	13.86	12.54	11.14	IXFH50N20
	200	58	0.04	200	IXFH58N20-ND	16.09	14.56	12.92	IXFH58N20
	200	58	0.040	≤200	IXFH58N20Q-ND	16.09	14.56	12.92	IXFH58N20Q
	200	80	0.028	≤200	IXFH80N20Q-ND	19.68	17.81	15.81	IXFH80N20Q

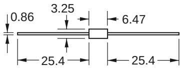
Fig.	V_{DSS} max. V	I_{D25} T_C = 25°C A	$R_{DS(on)}$ T_C = 25°C Ω	t_{rr} typ. 25°C ns	Digi-Key Part No.	Price Each 1	10	50	IXYS Part No.
18	300	40	0.08	200	IXFH40N30-ND	14.18	12.83	11.39	IXFH40N30
	300	40	0.085	≤200	IXFH40N30Q-ND	14.18	12.83	11.39	IXFH40N30Q
	300	40	0.085	400	IXTH40N30-ND	14.18	12.83	11.39	IXTH40N30
	300	52	0.060	≤250	IXFH52N30Q-ND	20.08	18.17	16.13	IXFH52N30Q
	500	13	0.4	250	IXFH13N50-ND	5.65	5.12	4.54	IXFH13N50
	500	21	0.25	250	IXFH21N50-ND	9.87	8.93	7.94	IXFH21N50
	500	24	0.23	250	IXFH24N50-ND	10.88	9.85	8.75	IXFH24N50
	500	26	0.20	250	IXFH26N50-ND	11.76	10.64	9.45	IXFH26N50
	500	26	0.20	≤250	IXFH26N50Q-ND	11.76	10.64	9.45	IXFH26N50Q
	500	32	0.15	≤250	IXFH32N50-ND	18.14	16.42	14.58	IXFH32N50
	600	20	0.35	250	IXFH20N60-ND	13.67	12.37	10.99	IXFH20N60
	600	26	0.250	≤250	IXFH26N60Q-ND	19.95	18.05	16.04	IXFH26N60Q
	800	7	1.4	250	IXFH7N80-ND	6.99	6.33	5.62	IXFH7N80
	800	11	0.95	250	IXFH11N80-ND	18.94	17.14	15.23	IXFH11N80
	800	13	0.80	250	IXFH13N80-ND	14.57	13.19	11.72	IXFH13N80
	800	15	0.60	250	IXFH15N80-ND	18.48	16.72	14.85	IXFH15N80
	800	15	0.600	≤250	IXFH15N80Q-ND	18.48	16.72	14.85	IXFH15N80Q
	800	20	0.420	≤250	IXFH20N80Q-ND	17.60	15.93	14.13	IXFH20N80Q
	900	6	1.8	250	IXFH6N90-ND	8.11	7.34	6.51	IXFH6N90
	900	10	1.1	250	IXFH10N90-ND	17.56	15.89	14.11	IXFH10N90
	1000	6	2.0	250	IXFH6N100-ND	9.85	8.92	7.91	IXFH6N100
	1000	10	1.2	250	IXFH10N100-ND	17.64	15.96	14.18	IXFH10N100
	1000	12	1.05	250	IXFH12N100-ND	26.52	22.10	14.92	IXFH12N100
19	70	110	0.006	150	IXFK110N07-ND	20.37	18.43	16.36	IXFK110N07
	100	180	0.008	≤250	IXFK180N10-ND	22.49	20.35	18.08	IXFK180N10
	200	90	0.020	200	IXFK90N20-ND	21.84	19.76	17.55	IXFK90N20
	200	90	0.022	≤200	IXFK90N20Q-ND	21.84	19.76	17.55	IXFK90N20Q
	200	120	0.017	≤250	IXFK120N20-ND	23.60	21.36	18.97	IXFK120N20
	300	73	0.045	≤200	IXFK73N30-ND	29.27	26.49	23.42	IXFK73N30
	500	48	0.10	250	IXFK48N50-ND	24.78	22.42	19.91	IXFK48N50
	500	55	0.085	250	IXFK55N50-ND	27.26	24.67	21.91	IXFK55N50
	600	36	0.180	≤250	IXFK36N60-ND	25.62	23.18	20.59	IXFK36N60
	600	44	0.130	≤250	IXFK44N60-ND	27.11	24.53	21.67	IXFK44N60
	800	27	0.300	≤250	IXFK27N80-ND	31.79	28.77	25.56	IXFK27N80
	800	34	0.240	≤250	IXFK34N80-ND	28.41	25.71	22.83	IXFK34N80
	1000	24	0.390	≤250	IXFK24N100-ND	31.19	28.22	25.06	IXFK24N100
20	200	120	0.017	≤250	IXFX120N20-ND	21.00	19.00	17.00	IXFX120N20
	500	55	0.080	≤250	IXFX55N50-ND	23.14	20.94	18.60	IXFX55N50
	1000	15	0.70	≤200	IXFX15N100-ND	25.73	23.28	20.67	IXFX15N100
MOSFETs — MiniBLOC™ N-Channel Enhancement-Mode with Fast Intrinsic Diode									
6a	70	200	0.006	150	IXFN200N07-ND	35.91	32.49	28.86	IXFN200N07
	200	106	0.020	200	IXFN106N20-ND	38.64	34.96	31.05	IXFN106N20
	200	180	0.010	≤250	IXFN180N20-ND	65.69	59.44	52.79	IXFN180N20
	500	44	0.12	≤250	IXFN44N50-ND	32.87	29.74	26.41	IXFN44N50
	500	48	0.10	250	IXFN48N50-ND	39.90	36.10	32.06	IXFN48N50
	1000	36	0.24	180	IXFN36N100-ND	86.81	78.55	69.77	IXFN36N100
20	100	180	0.008	≤250	IXFX180N10-ND	19.95	18.05	16.04	IXFX180N10
6b	200	120	0.017	≤250	IXFN120N20-ND	39.42	35.67	31.67	IXFN120N20
6c	500	80	0.050	≤250	IXFN80N50-ND	66.53	60.20	53.46	IXFN80N50
	600	60	0.075	≤250	IXFN60N60-ND	70.56	63.84	56.70	IXFN60N60
	900	26	0.300	≤250	IXFN26N90-ND	48.13	43.55	38.68	IXFN26N90
	1000	24	0.390	≤250	IXFN24N100-ND	50.55	45.74	40.62	IXFN24N100
	300	73	0.045	≤200	IXFN73N30-ND	38.85	35.15	31.23	IXFN73N30
	300	130	0.018	≤250	IXFN130N30-ND	66.19	59.89	53.19	IXFN130N30
MOSFETs — ISOPLUS247™ N-Channel Enhancement-Mode with Fast Intrinsic Diode									
21	100	165	0.008	≤250	IXFR180N10-ND	21.15	19.14	17.00	IXFR180N10
	200	105	0.017	≤250	IXFR120N20-ND	22.26	20.14	17.89	IXFR120N20
	600	38	0.130	≤250	IXFR44N60-ND	25.75	23.30	20.68	IXFR44N60
MOSFETs — N-Channel Enhancement-Mode Avalanche Rated									
20	200	90	0.022	≤200	IXFX90N20Q-ND	21.00	19.00	16.88	IXFX90N20Q
	300	90	0.033	≤250	IXFX90N30-ND	22.05	19.95	17.73	IXFX90N30
	600	44	0.130	≤250	IXFX44N60-ND	24.32	22.01	19.53	IXFX44N60
	800	34	0.240	≤250	IXFX34N80-ND	25.52	23.09	20.51	IXFX34N80
22	200	58	0.040	≤200	IXFT58N20Q-ND	16.09	14.56	12.92	IXFT58N20Q
	300	40	0.080	≤250	IXFT40N30Q-ND	14.18	12.83	11.39	IXFT40N30Q
	300	52	0.060	≤250	IXFT52N30Q-ND	20.08	18.17	16.13	IXFT52N30Q
	500	32	0.150	≤250	IXFT32N50Q-ND	18.14	16.42	14.58	IXFT32N50Q
MOSFETs — P-Channel Enhancement Mode Avalanche Rated									
18	-500	-7	1.500	≤500	IXTH7P50-ND	12.01	10.87	9.65	IXTH7P50
	-500	-8	1.200	≤500	IXTH8P50-ND	12.64	11.44	10.17	IXTH8P50
	-500	-10	0.900	≤500	IXTH10P50-ND	14.74	13.34	11.85	IXTH10P50
	-500	-11	0.750	≤500	IXTH11P50-ND	16.38	14.82	13.16	IXTH11P50

CRYDOM
COMPANY

P6KE Series – 600 Watt Axial TVS

Protects sensitive electronics against voltage transients induced by ESD, inductive load switching and lighting. Ideal for protection of I/O interfaces, Vcc bus and other power supply circuits. Marking: Cathode band – positive terminal (Uni-directional only), device code and logo.

Features: • Glass passivated junction • Excellent clamping capability • Uni-directional and bi-directional • 100% surge tested • UL listed

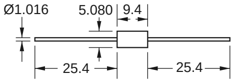


(Value) Nom. Breakdown Voltage	Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	Max. Reverse Leakage I_R @ V_R (µA)
6.8	5.8	6.45	7.14	1000.0
7.5	6.4	7.13	7.88	500.0
9.1	7.78	8.65	9.55	50.0
10	8.55	9.5	10.5	10.0
12	10.2	11.40	12.6	5.0
13	11.1	12.4	13.7	5.0
15	12.8	14.3	15.8	5.0
16	13.6	15.2	16.8	5.0
18	15.3	17.1	18.9	5.0
20	17.1	19.0	21.0	5.0
24	20.5	22.8	25.2	5.0
27	23.1	25.7	28.4	5.0
30	25.6	28.5	31.5	5.0
33	28.2	31.4	34.7	5.0
68	58.1	64.6	71.4	5.0

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
Unidirectional	6.8 - 68	P6KE(Value)ACCCT-ND	.37	.34	.28	P6KE(Value)ACCTR-ND	139.50/M
Bidirectional	6.8 - 68	P6KE(Value)CACCCT-ND	.44	.40	.33	P6KE(Value)CACCTR-ND	165.00/M

1.5KE Series – 1500 Watt Axial TVS

Features:
- Glass passivated junction • Low clamping factor
- Uni-directional and bi-directional • 100% surge tested
- UL listed

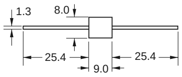


(Value) Nom. Breakdown Voltage	Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	Max. Reverse Leakage I_R @ V_R (µA)
6.8	5.8	6.45	7.14	1000.0
7.5	6.4	7.13	7.88	500.0
10	8.55	9.5	10.5	10.0
15	12.8	14.3	15.8	5.0
30	25.6	28.5	31.5	5.0

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500
Unidirectional	6.8 - 30	1.5KE(Value)ACCCT-ND	.69	.63	.52	1.5KE(Value)ACCTR-ND	259.50/M
Bidirectional	6.8 - 30	1.5KE(Value)CACCCT-ND	.74	.67	.56	1.5KE(Value)CACCTR-ND	279.00/M

5KP Series – 5000 Watt Axial TVS

When no problems exist, TVS diodes are invisible to the circuits they're protecting. But when potentially damaging transients occur, the TVS diodes provide high-speed "clamping" to prevent damage- after which they return to their electronically invisible state. Crydom TVS diodes are available in industry-standard packages. **Features:** • Glass passivated junction • Low clamping factor • Uni-directional and bi-directional • 100% surge tested • UL listed

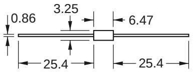


(Value) Nom. Breakdown Voltage	Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	Max. Reverse Leakage I_R @ V_R (µA)
5.0	5.0	6.40	7.00	5000.0
6.0	6.0	6.67	7.37	5000.0
10	10.0	11.1	12.3	15.0
15	15.0	16.7	18.5	10.0
24	24.0	26.7	29.5	10.0
30	30.0	33.3	36.8	10.0
33	33.0	36.7	40.6	10.0
36	36.0	40.0	44.2	10.0
40	40.0	44.4	49.1	10.0
43	43.0	47.8	52.8	10.0
70	70.0	77.0	86.0	10.0

Description	Tol.	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 1,000
Unidirectional	5%	5.0 - 70.0	5KP(Value)ACCCT-ND	2.37	2.14	1.78	5KP(Value)ACCTR-ND	889.50
Bidirectional	10%	5.0	5KP5.0CCCCT-ND	2.37	2.14	1.78	5KP5.0CCCTR-ND	889.50
Bidirectional	5%	6.0 - 70.0	5KP(Value)CACCCT-ND	2.37	2.14	1.78	5KP(Value)CACCTR-ND	889.50

SA Series – 500 Watt Axial TVS

Improved 500W TVS diodes that can handle 3.0 watt steady state with improved reverse leakage characteristics. 100% surge tested. Use for applications requiring surge protection of sensitive electronic components. Marking: Cathode band – positive terminal (Uni-directional only), device code and logo.

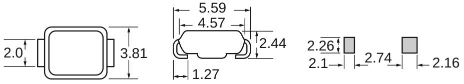


(Value) Nom. Breakdown Voltage	Reverse Standoff Voltage V_R (Volts)	Breakdown Voltage V_{BR} (V) @ I_T Min.	Max.	Max. Reverse Leakage I_R @ V_R (µA)
5.0	5.0	6.40	7.00	600.0
6.0	6.0	6.67	7.37	600.0
12	12.0	13.3	14.7	3.0
15	15.0	16.7	18.5	3.0
16	16.0	17.8	19.7	3.0
33	33.0	36.7	40.6	3.0

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
Unidirectional	5.0 - 33	SA(Value)ACCCT-ND	.38	.35	.29	SA(Value)ACCTR-ND	130.50/M
Bidirectional	6.0 - 33	SA(Value)CACCCT-ND	.41	.37	.31	SA(Value)CACCTR-ND	153.00/M

SMBJ Series – 600 Watt Surface Mount TVS

Features:
- Glass passivated junction • Uni-directional and bi-directional • Jedec package designed to meet SM assembly needs • Low lead inductance
- 100% surge tested



Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
J-Bend Unidirectional	5.0 - 36	SMBJ(Value)ACCCT-ND	.36	.33	.27	SMBJ(Value)ACCTR-ND	135.00/M
J-Bend Bidirectional	5.0 - 36	SMBJ(Value)CACCCT-ND	.40	.36	.30	SMBJ(Value)CACCTR-ND	150.00/M

(Value) Reverse Standoff Voltage V_R (Volts)	Breakdown Volt. V_{BR} (V) @ I_T Min.	Max.	*(Value)* Reverse Standoff Voltage V_R (Volts)	Breakdown Volt. V_{BR} (V) @ I_T Min.	Max.
5.0	6.40	7.25	**15**	16.70	19.20
6.0	6.67	7.67	**18**	20.00	23.30
6.5	7.22	8.30	**20**	22.20	25.50
7.0	7.78	8.95	**22**	24.40	28.00
7.5	8.33	9.58	**24**	26.70	30.70
10	11.10	12.80	**26**	28.90	33.20
12	13.30	15.30	**28**	31.10	35.80
13	14.40	16.50	**30**	33.30	38.30
14	15.60	17.90	**33**	36.70	42.20
			36	40.00	46.00

Thyristors –
SiBOD™

Crydom Thyristor Suppression Devices (SiBOD™ Avalanche Devices) offer the highest quality and performance for protection of sensitive telecommunications circuitry.

They "crow-bar" potentially dangerous transients – switching them to ground and dissipating the voltage to zero. This approach handles more energy than TVS diode "clamping".

Fig. 1
Modified TO-220

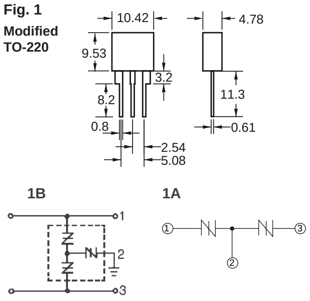


Fig. 2
DO-214

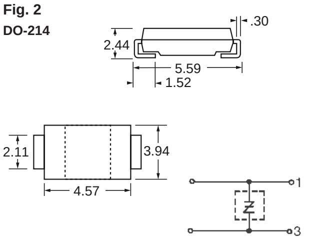


Fig.	Package	Reverse Standoff Voltage (V_R)	Maximum Breakover Voltage (V_{BO})@I_{BO}	Peak Pulse Current (A)	Minimum Holding Current (I_H)	Digi-Key Part No.	Price Each 1	10	100	500	Crydom Part No.
1A	TO-220	25	40	100	150	CR0602AA-ND	1.33	1.18	1.07	.89	CR0602AA
		25	40	150	150	CR0602AB-ND	1.47	1.31	1.18	.98	CR0602AB
		25	40	200	150	CR0602AC-ND	1.63	1.45	1.31	1.09	CR0602AC
1A	TO-220	65	95	100	150	CR1602AA-ND	1.33	1.18	1.07	.89	CR1602AA
		65	95	150	150	CR1602AB-ND	1.47	1.31	1.18	.98	CR1602AB
		65	95	200	150	CR1602AC-ND	1.63	1.45	1.31	1.09	CR1602AC
1A	TO-220	140	180	100	150	CR3002AA-ND	1.33	1.18	1.07	.89	CR3002AA
		140	180	150	150	CR3002AB-ND	1.47	1.31	1.18	.98	CR3002AB
		140	180	200	150	CR3002AC-ND	1.63	1.45	1.31	1.09	CR3002AC
1A	TO-220	275	350	100	150	CR6002AA-ND	1.33	1.18	1.07	.89	CR6002AA
		275	350	150	150	CR6002AB-ND	1.47	1.31	1.18	.98	CR6002AB
		275	350	200	150	CR6002AC-ND	1.63	1.45	1.31	1.09	CR6002AC
1B	TO-220	130	180	50	150	CR1553AA-ND	1.76	1.57	1.41	1.18	CR1553AA
		130	180	100	150	CR1553AB-ND	2.03	1.81	1.63	1.36	CR1553AB
		130	180	500	150	CR1553AC-ND	2.35	2.09	1.88	1.57	CR1553AC
1B	TO-220	200	270	50	150	CR2353AA-ND	1.76	1.57	1.41	1.18	CR2353AA
		200	270	100	150	CR2353AB-ND	2.03	1.81	1.63	1.36	CR2353AB
		200	270	500	150	CR2353AC-ND	2.35	2.09	1.88	1.57	CR2353AC
1B	TO-220	270	350	100	150	CR3203AA-ND	1.76	1.57	1.41	1.18	CR3203AA
		270	350	150	150	CR3203AB-ND	2.03	1.81	1.63	1.36	CR3203AB
		270	350	200	150	CR3203AC-ND	2.35	2.09	1.88	1.57	CR3203AC

Fig.	Package	Rev. Standoff Voltage (V_R)	Max. Breakover Volt. (V_{BO})@I_{BO}	Peak Pulse Current (A)	Min. Holding Current (I_H)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	T & R Pricing 3,000
2	DO-214	140	180	100	150	CR1500SACT-ND	1.23	.98	.74	.49	CR1500SATR-ND	735.00/M
		140	180	150	150	CR1500SBCT-ND	1.47	1.18	.89	.59	CR1500SBTR-ND	882.00/M
		140	180	200	150	CR1500SCCT-ND	1.72	1.38	1.04	.69	CR1500SCTR-ND	1032.00/M
2	DO-214	190	260	100	150	CR2300SACT-ND	1.23	.98	.74	.49	CR2300SATR-ND	735.00/M
		190	260	150	150	CR2300SBCT-ND	1.47	1.18	.89	.59	CR2300SBTR-ND	882.00/M
		190	260	200	150	CR2300SCCT-ND	1.72	1.38	1.04	.69	CR2300SCTR-ND	1032.00/M
2	DO-214	25	40	100	150	CR0300SACT-ND	1.23	.98	.74	.49	CR0300SATR-ND	318.50/M
		25	40	150	150	CR0300SBCT-ND	1.47	1.18	.89	.59	CR0300SBTR-ND	382.20/M
		25	40	200	150	CR0300SCCT-ND	1.72	1.38	1.04	.69	CR0300SCTR-ND	447.20/M
2	DO-214	320	400	100	150	CR3500SACT-ND	1.23	.98	.74	.49	CR3500SATR-ND	735.00/M
		320	400	150	150	CR3500SBCT-ND	1.47	1.18	.89	.59	CR3500SBTR-ND	882.00/M
		320	400	200	150	CR3500SCCT-ND	1.72	1.38	1.04	.69	CR3500SCTR-ND	1032.00/M
2	DO-214	58	77	100	150	CR0640SACT-ND	1.23	.98	.74	.49	CR0640SATR-ND	318.50/M
		58	77	150	150	CR0640SBCT-ND	1.47	1.18	.89	.59	CR0640SBTR-ND	382.20/M
		58	77	200	150	CR0640SCCT-ND	1.72	1.38	1.04	.69	CR0640SCTR-ND	447.20/M
2	DO-214	65	88	100	150	CR0720SACT-ND	1.23	.98	.74	.49	CR0720SATR-ND	318.50/M
		65	88	150	150	CR0720SBCT-ND	1.47	1.18	.89	.59	CR0720SBTR-ND	382.20/M
		65	88	200	150	CR0720SCCT-ND	1.72	1.38	1.04	.69	CR0720SCTR-ND	447.20/M
2	DO-214	220	300	100	150	CR2600SACT-ND	1.23	.98	.74	.49	CR2600SATR-ND	318.50/M
		220	300	150	150	CR2600SBCT-ND	1.47	1.18	.89	.59	CR2600SBTR-ND	382.20/M
		220	300	200	150	CR2600SCCT-ND	1.72	1.38	1.04	.69	CR2600SCTR-ND	447.20/M
2	DO-214	275	350	100	150	CR3100SACT-ND	1.23	.98	.74	.49	CR3100SATR-ND	318.50/M
		275	350	150	150	CR3100SBCT-ND	1.47	1.18	.89	.59	CR3100SBTR-ND	382.20/M
		275	350	200	150	CR3100SCCT-ND	1.72	1.38	1.04	.69	CR3100SCTR-ND	447.20/M

Class D Audio Amplifier Solution

THD+N up to ten times better than competitive solutions!

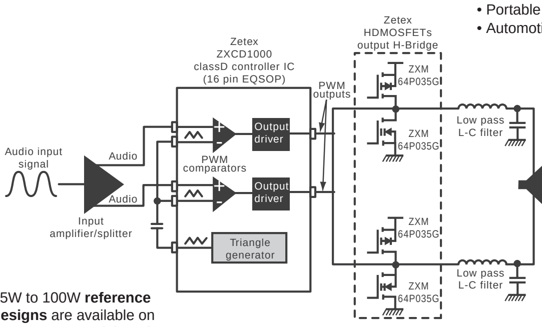
The Zetex ZXCD1000 forms the heart of a high efficiency Class D switching audio amplifier solution. It provides complete control and modulation functions, translating audio input signals into PWM drive to a MOSFET based bridge tied load output.

Used in combination with Zetex MOSFETs, reference designs and matched standard magnetics, the ZXCD1000 offers an exceptionally high performance amplifier with all the inherent benefits of Class D.

Solution Features
- <0.1% THD+N at 1kHz, 1W
- Noise floor - 115dB
- No crossover artifacts
- Flat frequency response 20Hz to 20kHz

Unique Benefits
- Exceptional sound quality
- >90% efficiency
- More power in a smaller space
- Smaller power supply required
- Lower cost per watt

Applications
- DVD players
- Home theater (5.1 systems)
- Multimedia
- Sub woofers
- Wireless speakers
- Portable audio
- Automotive audio



25W to 100W **reference designs** are available on **www.zetex.com/classd**

The Zetex Class D audio amplifier solution can be evaluated using the ZXCD50STEVAL. This board enabled the solution to be demonstrated with output music power to 50W.

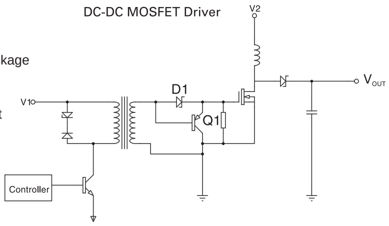
ZXCD50STEVAL-ND	Demonstration Board	**$133.00**

Miniature Package Power Solutions™

To meet the market need for reduced component count and smaller packaging whilst maintaining circuit efficiency, Zetex has introduced miniature package power solutions MPPS™. The initial range consists of SOT23-6 dual NPN, NPN/ PNP and PNP/Schottky combination products.

Features and Benefits
- Low $V_{CE(sat)}$ at high current capability
- High efficiency
- Equivalent performance to single die package devices
- Compact SOT23-6 package
- Reduced component and placement cost
- Reduced PCB area

Applications
- LCD backlighting
- MOSFET gate driving
- Motor driving functions
- Telecoms line switching



More info on www.zetex.com/dual

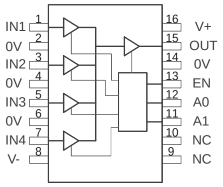
Package	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Zetex Part No.
SOT-23-6	ZXTS1000E6CT-ND	1.20	.90	.60	ZXTS1000E6TR-ND	3,000	300.00/M	ZXTS1000E6TA
	ZXTD6717E6TACT-ND	.89	.68	.45	ZXTD6717E6TATR-ND	3,000	223.50/M	ZXTD6717E6TA
	ZXTD09N50DE6CT-ND	1.20	.90	.60	ZXTD09N50DE6TR-ND	2,500	300.00/M	ZXTD09N50DE6TA
	ZXTD4591E6CT-ND	1.20	.90	.60	ZXTD4591E6TR-ND	2,500	300.00/M	ZXTD4591E6TA

Video Multiplexer

The ZXFV302 is a 4:1 high speed analog switch designed for use as a buffered video multiplexer and other high speed applications.

Features and Benefits:
- -3dB bandwidth 240MHz
- Slew rate 450V/µs
- Stable up to 100pF load
- 16 pin SO package

Applications:
- Video routing and switching
- CCTV switch
- High frequency instrumentation



More info on www.zetex.com/video

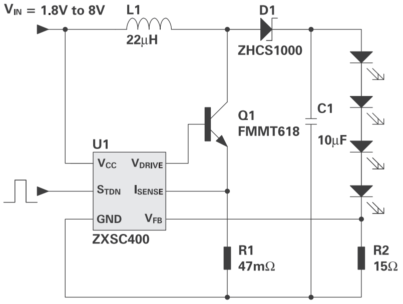
Package	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Zetex Part No.
16 SOIC	ZXFV302N16TACT-ND	5.81	4.98	4.57	ZXFV302N16TATR-ND	2490.00/M	ZXFV302N16TA

Boost Converters for White LED Driving

The ZXSC410 is a boost converter with excellent regulation, over the supply range from lithium Ion cells output tolerance is within 1%. High efficiency Zetex switching transistors also allow output voltages of tens of volts. The ZXSC420 includes a battery low indicator. The ZXSC400 variant is aimed at constant current LED driving.

Features and Benefits:
- 1.8V to 8V supply range
- 3µA typical shutdown current
- Typical output regulation of 1%
- 85% typical efficiency
- Output currents up to 300mA (410/420)
- 8 white LEDs in series at 30mA (400)
- End of regulation flag (420)
- SOT23-6 package

Applications:
- System power for battery products (410/420)
- LCD bias voltage (410/420)
- LED backlighting for LCD products (400)
- White LED flashlights (400)



More info on www.zetex.com/zxsc400

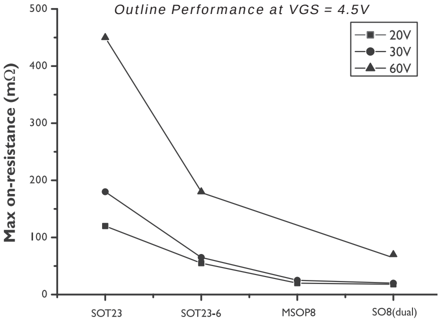
Package	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Zetex Part No.
SOT23-6	ZXSC400E6TACT-ND	1.16	.99	.91	ZXSC400E6TATR-ND	495.00/M	ZXSC400E6TA
	ZXSC410E6TACT-ND	1.05	.90	.83	ZXSC410E6TATR-ND	450.00/M	ZXSC410E6TA
	ZXSC420E6TACT-ND	1.05	.90	.83	ZXSC420E6TATR-ND	450.00/M	ZXSC420E6TA

N and P-Channel MOSFETs

Features and Benefits:
- Latest trench technology
- Low on-resistance
- Low Gate charge
- Selection of surface mount packages
- Single, dual and complementary types

Applications:
- DC-DC conversion
- Power line disconnect switching
- Motor driving
- CCFL backlight inverters
- Audio output stages

More info on www.zetex.com/mosfet and pg 440-442.

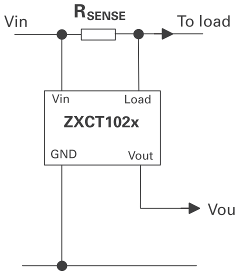


ZXCT Series
High Side Current Monitors

The ZXCT series high side current monitors convert a proportional sensed voltage in the supply to ground. The ZXCT1021 provides a fixed gain of 10, while the ZXCT1022 has a gain of 100, for applications where minimal sense voltage is required. The very low offset voltage enables a typical accuracy of 2% for sense voltages of only 10mV, giving better tolerances for small sense resistors necessary at higher currents.

Features and Benefits:
- Precision high side current sensing
- Output voltage gains of 10 and 100
- 2.5V - 20 V supply range
- 25µ Aquiscent current
- 2% accuracy @ 10mV
- SOT23-5 package

Applications:
- Battery chargers
- Smart battery packs
- Current limiting
- DC motor control
- Power management



More info on www.zetex.com/isense

Package	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Zetex Part No.
SOT23-5	ZXCT1022E5TACT-ND	1.23	1.05	.97	ZXCT1022E5TATR-ND	525.00/M	ZXCT1022E5TA
	ZXCT1021E5TACT-ND	1.23	1.05	.97	ZXCT1021E5TATR-ND	525.00/M	ZXCT1021E5TA

ZETEX Super E-Line Transistors — (modified TO-92) & TO-92 Packages

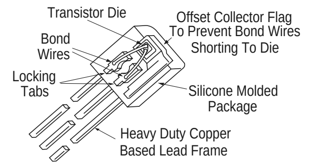
ZETEX ***Now QS9000 Accredited!***

				Max.	V_{CE} (Sat.)			h_{FE}	I_C	Min.		Pricing			
Type	V_{CEO} (V)	V_{CBO} (V)	I_C (A)	I_{CM} (A)	Max. (V)	@ I_C (mA)	I_B (mA)	Min./Max.	@ V_{CE} (mA/V)	f_T (MHz)	Digi-Key Part No.	1	10	100	1,000
Medium Power Transistors — 1,000mW															
NPN	400	400	0.3	0.5	0.5	50	6	100/300	50/10	50	ZTX458-ND	.54	4.05	27.00	180.00
	300	300	0.5	1	0.3	100	10	50/300	50/10	75	ZTX457-ND	.48	3.60	24.00	160.00
	140	160	1	2	0.7	150	15	100/300	150/10	100	ZTX455-ND	.48	3.60	24.00	160.00
	100	120	1	2	0.7	150	15	40/200	150/10	150	ZTX453-ND	.48	3.60	24.00	160.00
	60	80	1	2	0.35	150	15	50/150	150/10	150	ZTX451-ND‡	.48	3.60	24.00	160.00
	45	60	1	2	0.25	150	15	100/300	150/10	150	ZTX450-ND‡	.48	3.60	24.00	160.00
	30	50	1	2	0.5	1000	100	100/300	500/2	150	ZTX449-ND‡	.48	3.60	24.00	160.00
PNP	-400	-400	-0.2	-0.5	-0.5	-50	-6	100/300	-50/-10	50	ZTX558-ND	.54	4.05	27.00	180.00
	-300	-300	-0.5	-1	-0.3	-50	-5	50/300	-50/-10	75	ZTX557-ND	.48	3.60	24.00	160.00
	-200	-200	-1	-2	-0.3	-100	-10	50/300	-300/-10	100	ZTX576-ND	.48	3.60	24.00	160.00
	-150	-160	-1	-2	-0.3	-100	-10	50/300	-300/-10	100	ZTX555-ND	.48	3.60	24.00	160.00
	-100	-120	-1	-2	-0.25	-150	-15	40/200	-150/-10	150	ZTX553-ND	.48	3.60	24.00	160.00
	-60	-80	-1	-2	-0.35	-150	-15	50/150	-150/-10	150	ZTX551-ND‡	.51	3.83	25.50	170.00
	-45	-60	-1	-2	-0.25	-150	-15	100/300	-150/-10	150	ZTX550-ND‡	.51	3.83	25.50	170.00
	-30	-35	-1	-2	-0.5	-1000	-100	100/300	-500/-2	100	ZTX549-ND	.51	3.83	25.50	170.00
High Performance Transistors — 1,000mW															
NPN	400	400	0.5	1	0.5	100	10	50/—	100/5	50	ZTX658-ND	.90	6.75	45.00	300.00
	300	300	0.5	1	0.5	100	10	50/—	100/5	30	ZTX657-ND	.78	5.85	39.00	260.00
	200	200	0.5	1	0.5	100	10	50/—	100/5	30	ZTX656-ND	.78	5.85	39.00	260.00
	150	150	1	2	0.5	1000	200	50/—	500/5	30	ZTX655-ND	.78	5.85	39.00	260.00
	100	120	2	6	0.5	2000	200	100/300	500/2	140	ZTX653-ND‡	.78	5.85	39.00	260.00
	60	80	2	6	0.5	2000	200	100/300	500/2	140	ZTX651-ND‡	.78	5.85	39.00	260.00
	25	35	2	6	0.5	2000	200	100/300	1000/2	150	ZTX649-ND‡	.78	5.85	39.00	260.00
PNP	-400	-400	-0.5	-1	-0.5	-100	-10	50/—	-100/-5	50	ZTX758-ND	.90	6.75	45.00	300.00
	-300	-300	-0.5	-1	-0.5	-100	-10	50/—	-100/-5	30	ZTX757-ND	.78	5.85	39.00	260.00
	-200	-200	-1	-2	-0.5	-500	-50	50/—	-500/-5	30	ZTX776-ND	.78	5.85	39.00	260.00
	-150	-150	-1	-2	-0.5	-1000	-200	50/—	-500/-5	30	ZTX755-ND	.78	5.85	39.00	260.00
	-100	-120	-2	-6	-0.5	-2000	-200	100/300	-500/-2	100	ZTX753-ND‡	.78	5.85	39.00	260.00
	-60	-80	-2	-6	-0.5	-2000	-200	100/300	-500/-2	100	ZTX751-ND‡	.78	5.85	39.00	260.00
	-25	-35	-2	-6	-0.5	-2000	-200	100/300	-1000/-2	100	ZTX749-ND‡	.78	5.85	39.00	260.00
High Gain Transistors — 1,000mW															
NPN	180	180	0.5	1	0.25	200	5	500/—	100/5	70	ZTX696B-ND	.90	6.75	45.00	300.00
	160	200	3	6	0.3	3000	200	300/1200	500/10	100	ZTX1056A-ND	1.14	8.55	51.30	323.00
	120	175	3	6	0.31	3000	150	300/1200	1000/10	100	ZTX1055A-ND	1.14	8.55	51.30	323.00
	120	120	0.5	1	0.5	400	5	400/—	200/2	130	ZTX694B-ND	.90	6.75	45.00	300.00
	75	150	3	10	0.25	3000	100	300/1200	1000/2	100	ZTX1053A-ND	1.14	8.55	51.30	323.00
	70	70	1	2	0.5	1000	10	400/—	500/2	150	ZTX692B-ND‡	.90	6.75	45.00	300.00
	45	45	2	6	0.5	1000	5	400/—	1000/2	150	ZTX690B-ND‡	.90	6.75	45.00	300.00
	40	150	4	10	0.21	4000	100	300/1200	1000/2	100	ZTX1051A-ND	1.14	8.55	51.30	323.00
	25	80	4	15	0.18	2000	10	300/1200	1000/2	100	ZTX1049A-ND‡	1.14	8.55	51.30	323.00
	20	20	3	8	0.5	2000	10	400/—	2000/2	150	ZTX689B-ND‡	.90	6.75	45.00	300.00
	20	20	3.5	10	0.255	3500	50	300/—	200/2	100	ZTX618-ND‡	1.08	8.10	48.60	306.00
	17.5	50	4	20	0.21	4000	20	300/1200	1000/2	150	ZTX1048A-ND‡	1.14	8.55	51.30	323.00
	12	12	3	10	0.35	3000	20	400/—	3000/2	150	ZTX688B-ND	.90	6.75	45.00	300.00
	10	35	4	20	0.19	4000	20	300/1200	1000/2	150	ZTX1047A-ND	1.14	8.55	51.30	323.00
PNP	-200	-200	-0.5	-1	-0.3	-200	-20	300/800	-10/-10	100	ZTX796A-ND	.90	6.75	45.00	300.00
	-140	-140	-0.5	-1	-0.3	-200	-5	300/800	-10/-2	100	ZTX795A-ND	.90	6.75	45.00	300.00
	-70	-75	-2	-4	-0.5	-1000	-25	300/800	-10/-2	100	ZTX792A-ND	.90	6.75	45.00	300.00
	-40	-50	-2	-6	-0.75	-2000	-50	300/800	-10/-2	100	ZTX790A-ND‡	.90	6.75	45.00	300.00
	-40	-45	-3	-5	-0.23	-1800	-70	250/800	-500/-2	145	ZTX1151A-ND	1.32	9.90	59.40	374.00
	-25	-25	-3	-8	-0.45	-2000	-20	300/800	-10/-2	100	ZTX789A-ND‡	.90	6.75	45.00	300.00
	-25	-30	-3	-10	-0.3	-3000	-70	250/800	-500/-2	135	ZTX1149A-ND	1.32	9.90	59.40	374.00
	-20	-20	-2.5	-6	-0.26	-2500	-200	300/—	-10/-2	150	ZTX718-ND‡	1.08	8.10	48.60	306.00
	-15	-20	-3	-10	-0.32	-2000	-20	300/800	-10/-1	100	ZTX788A-ND	.90	6.75	45.00	300.00
	-12	-15	-4	-20	-0.235	-4000	-70	250/850	-500/-2	115	ZTX1147A-ND	1.32	9.90	59.40	374.00
High Performance Darlington Transistors — 1,000mW															
NPN	160	180	1	4	1.2	1000	10	2K-100K	500/10	150	ZTX601-ND	.78	5.85	39.00	260.00
	160	180	1	4	1.2	1000	10	10K-100K	500/10	150	ZTX601B-ND	.78	5.85	39.00	260.00
	140	160	1	4	1.2	1000	10	10K-100K	500/10	150	ZTX600B-ND	.78	5.85	39.00	260.00
	120	140	1	4	1.5	1000	1	2K-100K	1000/5	150	ZTX605-ND‡	.78	5.85	39.00	260.00
	100	120	0.8	2	1.25	800	8	10K/—	500/5	—	ZTX614-ND	.54	4.05	27.00	180.00
	80	100	1	4	1.0	1000	1	2K-100K	1000/5	150	ZTX603-ND‡	.78	5.85	39.00	260.00
PNP	-120	-140	-1	-4	-1.3	-1000	-1	3K/30K	-1000/-5	160	ZTX705-ND‡	.78	5.85	39.00	260.00
	-60	-80	-0.8	-2	-1.25	-800	-8	10K/—	-500/-5	—	ZTX712-ND	.60	4.50	30.00	200.00
RF Transistors															
NPN	25	30	.025	—	0.5	4	4	60/—	4/10	650	MPSH10ZX-ND†‡	.60	4.50	30.00	200.00
	15	30	.025	0.05	—	—	—	25/150	2/1	1300	ZTX325-ND‡	.75	5.63	37.50	250.00
High Current Transistors — 1.2 Watt															
NPN	300	330	3	5	0.25	3000	600	100/300	500/10	80	ZTX857-ND	1.50	11.25	67.50	425.00
	150	250	4	10	0.26	4000	400	100/300	1000/5	90	ZTX855-ND‡	1.50	11.25	67.50	425.00
	100	200	4	10	0.20	4000	400	100/300	2000/2	130	ZTX853-ND	1.50	11.25	67.50	425.00
	60	150	5	20	0.25	5000	200	100/300	2000/1	130	ZTX851-ND‡	1.50	11.25	67.50	425.00
	30	80	5	20	0.22	5000	200	100/300	1000/1	100	ZTX849-ND‡	1.50	11.25	67.50	425.00
	25	60	5	20	0.22	5000	100	300/—	1000/1	100	ZTX869-ND‡	1.50	11.25	67.50	425.00
PNP	-400	-400	-0.5	-1.5	-0.40	-500	-100	100/300	-500/-10	85	ZTX958-ND	1.56	11.70	70.20	442.00
	-330	-300	-1	-2	-0.20	-1000	-300	100/300	-500/-10	85	ZTX957-ND	1.56	11.70	70.20	442.00
	-200	-220	-2	-5	-0.25	-2000	-400	100/300	-1000/-5	110	ZTX956-ND	1.56	11.70	70.20	442.00
	-100	-140	-3.5	-10	-0.33	-4000	-400	100/300	-1000/-1	125	ZTX953-ND	1.56	11.70	70.20	442.00
	-60	-100	-4	-15	-0.30	-4000	-400	100/300	-1000/-1	120	ZTX951-ND‡	1.56	11.70	70.20	442.00
	-30	-50	-4.5	-20	-0.32	-5000	-300	100/300	-1000/-1	100	ZTX949-ND‡	1.56	11.70	70.20	442.00
	-20	-40	-4.5	-20	-0.31	-5000	-300	100/300	-1000/-1	80	ZTX948-ND	1.56	11.70	70.20	442.00
	-12	-15	-4.5	-20	-0.30	-5000	-200	300/1000	-500/-1	85	ZTX968-ND‡	1.56	11.70	70.20	442.00
Avalanche Mode Transistors															
NPN	100	260	—	60	0.25	250	—	25/—	10/10	40	ZTX415-ND‡	21.00	157.50	945.00	5950.00
	50	150	—	50	0.31	130	—	50/—	10/10	150	ZTX413-ND‡	19.50	146.25	877.50	5525.00

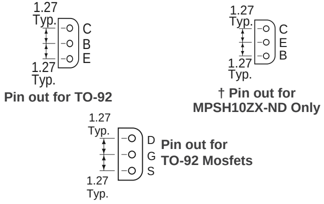
‡ Additional Information included in Zetex Application Handbook, part number ST321-ND.

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

Super E-Line — TO-92


Transistor Die
Offset Collector Flag To Prevent Bond Wires Shorting To Die
Bond Wires
Locking Tabs
Silicone Molded Package
Heavy Duty Copper Based Lead Frame

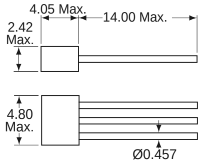
Bottom Views



Pin out for TO-92

† Pin out for MPSH10ZX-ND Only

Pin out for TO-92 Mosfets



Super E-Line

The standard lead formation is collector-base-emitter (c-b-e) "in-line." The Zetex Super E-Line range brings together advanced chip technology and assembly techniques to give superior performance in a TO-92 style package. Parallel studies into chip design and assembly techniques have been combined to produce the outstanding features of the Super E-Line.

High Current Gain:

A major objective of the chip design was to produce a range of transistors with improved gain properties at high current levels. By utilizing advanced power efficient geometries and diffusion techniques, *minimum gains of 75 have been achieved at collector currents of 2 amps on standard hFE range product, while "Super-ß" types can show a minimum gain of 400 at 3A (without a heat sink!)*

High Performance Complementary Pairs:

Selective chip design has produced excellent gain linearity and extremely low base resistance, ideal for consumer applications including audio amplifiers and complementary drivers.

High Current Handling Capability:

Improvements in equalizing current distribution across the chip (avoiding 'hot spots') has produced a continuous current (IC) rating of 5 amps and peak pulse currents (ICM) of 20 amps. This makes the ZTX850 and ZTX950 series ideal for applications such as solenoids, actuators, relays, lamp drivers, motor drivers and photo flash units. The ZETEX SUPER E-LINE gives performance and reliability beyond standard TO-92 products and metal-can transistors. The package is approved over and beyond the full military temperature range. Zetex E-Line transistors are currently in use in many military applications and have been approved for 20 years application use in telecommunication equipment.

Low Saturation Voltage

Advanced chip geometry design and optimized processing lead to minimized Rce(sat). For example the ZTX849 demonstrates an equivalent on-resistance of 36mΩ at 5A. This allows cost effective replacement of much large packaged devices in switching applications.

Environmental Protection:

The silicone plastic used for the Zetex E-Line encapsulation protects the active semiconductor chip from exposure to corrosive agents, moisture and extreme environmental conditions. The absence of ionic contamination in the silicone allows chip operation up to 200°C without risk of failure. In regular tests conducted by the Quality Assurance Dept., E-Line devices are operated at Tamb = 230°C under reverse bias conditions. All devices must survive without degradation. This presents the wide operating and storage temperature range normally associated only with metal-can devices.

Operating and Storage Temperature Range: -55°C to +200°C.

ZETEX Diodes

V_{BR} at I_R = 10µA Min. (V)	V_F at I_F = 1mA Max. (mV)	I_R Max. nA/ V_R (V)	I_F at V_F = 1V Min. (mA)	C_T @ V_R = 0V f = 1MHz Max. (pF)	Pinning Configuration	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Schottky Barrier Diodes — SOT-23 Package											
70	410	200 / 50	15	2.0	Single	ZC2800ECT-ND	1.38	1.04	.63	ZC2800ETR-ND	345.00/M
15	410	100 / 10	20	1.2	Single	ZC2811ECT-ND	1.80	1.35	.81	ZC2811ETR-ND	450.00/M
50	410	200 / 35	15	2.0	Single	ZC5800ECT-ND	.93	.70	.42	ZC5800ETR-ND	232.50/M
30	400	2500 / 25	100	10	Com. Cathode	BAT54CT-ND	.72	.54	.36	BAT54TR-ND	216.00/M
Schottky Barrier Diodes — SOT-23-6 Package											
40	385	300/30	2000	50	—	ZHCS2000CT-ND *	1.29	.97	.65	ZHCS2000TR-ND	322.50/M
Schottky Barrier Diodes — SOD-323 Package											
70	410	200 / 50	15	2.0	Single	ZMS2800CT-ND	.99	.75	.45	ZMS2800TR-ND	247.50/M
50	410	200 / 35	15	2.0	Single	ZMS5800CT-ND	.99	.75	.45	ZMS5800TR-ND	247.50/M
Dual Schottky Barrier Diodes — SOT-23 Package											
70	410	200 / 50	15	2.0	Series	BAS70-04ZXCT-ND	1.92	1.44	.87	BAS70-04ZXTR-ND	480.00/M
70	410	200 / 50	15	2.0	Com. Anode	BAS70-06ZXCT-ND	1.92	1.44	.87	BAS70-06ZXTR-ND	480.00/M
70	410	200 / 50	15	2.0	Com. Cathode	BAS70-05CT-ND	1.92	1.44	.87	BAS70-05TR-ND	480.00/M
30	400	2000 / 25	200	10	Com. Anode	BAT54ACT-ND †	.84	.63	.42	BAT54ATR-ND	252.00/M
30	400	2000 / 25	200	10	Series	BAT54SCT-ND †	.84	.63	.42	BAT54STR-ND	252.00/M
30	400	2000 / 25	200	10	Com. Cathode	BAT54CCT-ND †	.84	.63	.42	BAT54CTR-ND	252.00/M
15	410	100 / 10	20	1.2	Series	ZC2812ECT-ND	2.55	1.92	1.15	ZC2812ETR-ND	637.50/M
15	410	100 / 10	20	1.2	Com. Anode	ZC2813ECT-ND	2.55	1.92	1.15	ZC2813ETR-ND	637.50/M
Dual Schottky Barrier Diodes — SOT-323 Package											
70	410	200 / 50	15	2.0	Series	ZUMD70-04CT-ND	.75	.57	.34	ZUMD70-04TR-ND	187.50/M
30	320	2000 / 25	200	10	Com. Cathode	ZUMD54CCT-ND †	.75	.57	.34	ZUMD54CTR-ND	187.50/M

* VR = 25V   † VR = 1V

V_{BR} (V)	I_R max.	I_R Typical	@VR	VF @200mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Low Leakage Diodes - Common Cathode — SOT-23 Package										
50	3nA	<25pA	50	1.4	FLLD258CT-ND	.45	.34	.23	FLLD258TR-ND	135.00/M
Silicon Planar Low Leakage Diodes - Series — SOT-23 Package										
100	5nA	<25pA	100	1.4	FLLD261CT-ND	.45	.34	.23	FLLD261TR-ND	135.00/M
Silicon Planar Low Leakage Diodes - Common Anode — SOT-23 Package										
100	5nA	<25pA	100	1.4	FLLD263CT-ND	.45	.34	.23	FLLD263TR-ND	135.00/M

Silicon voltage regulator diodes designed for voltage reference and stabilizer applications. Encapsulated in the popular SOT-23 package, these devices are designed specifically for use in thin and thick film hybrid circuits in both industrial and commercial applications.

Specifications:
• Nominal Tolerance: ±5% • Max. Power Dissipation at T_{amb} = 25°C: P_{tot} 350mW • Operating and Storage Temperature Range: -65°C to +150°C • Max. Forward Current: I_F 250mA

Zener Voltage Vz at Iz = 5mA Min.	Nom.	Max.	Diff. Resistance rz at Iz = 5mA Max. (Ohms)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Zener Diodes — Silicon Voltage Regulator Diodes — SOT-23 Package									
2.5	2.7	2.9	100	BZX84C2V7ZXCT-ND•	.39	.30	.20	BZX84C2V7ZXTR-ND	117.00/M
2.8	3.0	3.2	100	BZX84C3V0ZXCT-ND•	.39	.30	.20	BZX84C3V0ZXTR-ND	117.00/M
3.1	3.3	3.5	100	BZX84C3V3ZXCT-ND•	.39	.30	.20	BZX84C3V3ZXTR-ND	117.00/M
3.4	3.6	3.8	100	BZX84C3V6ZXCT-ND	.39	.30	.20	BZX84C3V6ZXTR-ND	117.00/M
3.7	3.9	4.1	100	BZX84C3V9ZXCT-ND•	.39	.30	.20	BZX84C3V9ZXTR-ND	117.00/M
4.0	4.3	4.6	90	BZX84C4V3ZXCT-ND	.39	.30	.20	BZX84C4V3ZXTR-ND	117.00/M
4.4	4.7	5.0	80	BZX84C4V7ZXCT-ND	.39	.30	.20	BZX84C4V7ZXTR-ND	117.00/M
4.8	5.1	5.4	60	BZX84C5V1ZXCT-ND•	.39	.30	.20	BZX84C5V1ZXTR-ND	117.00/M
5.2	5.6	6.0	40	BZX84C5V6ZXCT-ND•	.39	.30	.20	BZX84C5V6ZXTR-ND	117.00/M
5.8	6.2	6.6	10	BZX84C6V2ZXCT-ND•	.39	.30	.20	BZX84C6V2ZXTR-ND	117.00/M
6.4	6.8	7.2	15	BZX84C6V8ZXCT-ND•	.39	.30	.20	BZX84C6V8ZXTR-ND	117.00/M
7.0	7.5	7.9	15	BZX84C7V5ZXCT-ND	.39	.30	.20	BZX84C7V5ZXTR-ND	117.00/M
7.7	8.2	8.7	15	BZX84C8V2ZXCT-ND	.39	.30	.20	BZX84C8V2ZXTR-ND	117.00/M
8.5	9.1	9.6	15	BZX84C9V1ZXCT-ND•	.39	.30	.20	BZX84C9V1ZXTR-ND	117.00/M
9.4	10	10.6	20	BZX84C10ZXCT-ND•	.39	.30	.20	BZX84C10ZXTR-ND	117.00/M
10.4	11	11.6	20	BZX84C11ZXCT-ND	.39	.30	.20	BZX84C11ZXTR-ND	117.00/M
11.4	12.0	12.7	25	BZX84C12ZXCT-ND•	.39	.30	.20	BZX84C12ZXTR-ND	117.00/M
12.4	13	14.1	30	BZX84C13ZXCT-ND	.39	.30	.20	BZX84C13ZXTR-ND	117.00/M
13.8	15	15.6	30	BZX84C15ZXCT-ND•	.39	.30	.20	BZX84C15ZXTR-ND	117.00/M
15.3	16	17.1	40	BZX84C16ZXCT-ND	.39	.30	.20	BZX84C16ZXTR-ND	117.00/M
16.8	18	19.1	45	BZX84C18ZXCT-ND•	.39	.30	.20	BZX84C18ZXTR-ND	117.00/M
18.8	20	21.2	55	BZX84C20ZXCT-ND•	.39	.30	.20	BZX84C20ZXTR-ND	117.00/M
20.8	22	23.3	55	BZX84C22ZXCT-ND	.39	.30	.20	BZX84C22ZXTR-ND	117.00/M
22.8	24	25.6	70	BZX84C24ZXCT-ND•	.39	.30	.20	BZX84C24ZXTR-ND	117.00/M
25.1	27	28.9	80	BZX84C27ZXCT-ND†	.39	.30	.20	BZX84C27ZXTR-ND	117.00/M
28	30	32	80	BZX84C30ZXCT-ND•†	.39	.30	.20	BZX84C30ZXTR-ND	117.00/M
31.0	33.0	35.0	80	BZX84C33ZXCT-ND•†	.39	.30	.20	BZX84C33ZXTR-ND	117.00/M
34.0	36.0	38.0	90	BZX84C36ZXCT-ND•†	.39	.30	.20	BZX84C36ZXTR-ND	117.00/M
37	39	41	130	BZX84C39ZXCT-ND†	.39	.30	.20	BZX84C39ZXTR-ND	117.00/M
40	43	46	150	BZX84C43ZXCT-ND†	.39	.30	.20	BZX84C43ZXTR-ND	117.00/M
44	47	50	170	BZX84C47ZXCT-ND†	.39	.30	.20	BZX84C47ZXTR-ND	117.00/M

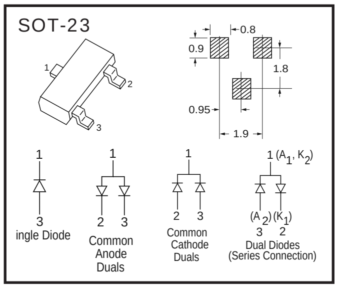
† Iz at 2mA

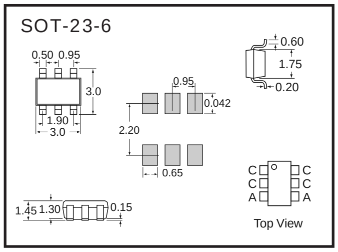
• **BZX1-KIT-ND** ***Digi-Key® SMD Zener Diode Kit*** 10 each of values denoted (180 total pieces) **$49.95**

‡ Additional Information included in Zetex Application Handbook, part number ST321-ND.

ZETEX ***Now QS9000 Accredited!***

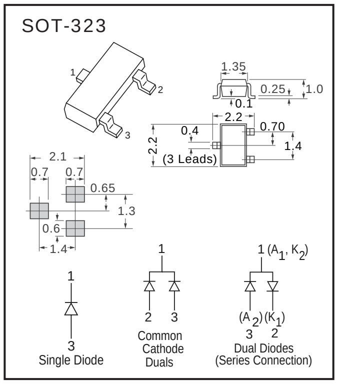
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book....	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook........	**$4.98**

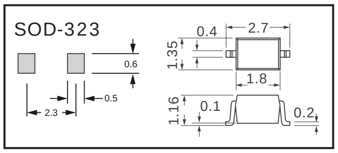


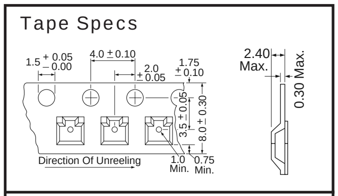


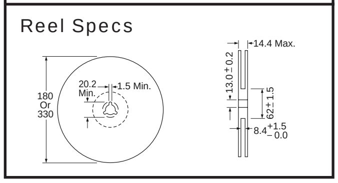
SOT-23 Tape and Reel Information:

Tape packaging has special attractions for customers using manual placement since it makes it easier to assemble and orientate these tiny components; stock accounting is also simplified.









ZETEX Diodes

Description	Ratings V_R (V)	I_F (mA)	trr Max. (ns)	Max. V_F at I_F = mA 10/50/100	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar High Speed Switching Diodes — SOT-23 Package										
Single Diode	75	100	6	0.855/1.0/—	BAS16ZXCT-ND	.39	.30	.20	BAS16ZXTR-ND	117.00/M
Single Diode	75	75	4/8	1.0/–/–	FMMD914CT-ND	.36	.27	.18	FMMD914TR-ND	108.00/M
Single Diode	50	150	4	–/–/1.0	BAR74ZXCT-ND	.39	.30	.20	BAR74ZXTR-ND	117.00/M
Dual Diode w/ Common Cathode	70	200	5	0.7/–/1.1	FMMD6100CT-ND	.36	.27	.18	FMMD6100TR-ND	108.00/M
Dual Diode w/ Common Cathode	70	100	6	0.855/1.1/1.3	BAV70ZXCT-ND	.39	.30	.20	BAV70ZXTR-ND	117.00/M
Dual Diode w/ Common Cathode	50	150	4	–/–/1.0	BAV74ZXCT-ND	.39	.30	.20	BAV74ZXTR-ND	117.00/M
Dual Diode w/ Series Connection	70	100	6	0.855/1.1/1.3	BAV99ZXCT-ND	.39	.30	.20	BAV99ZXTR-ND	117.00/M
Dual Diode w/ Common Anode	70	100	6	0.855/1.1/1.3	BAW56ZXCT-ND	.39	.30	.20	BAW56ZXTR-ND	117.00/M
Single Diode	200	200	50	1.0	BAS21ZXCT-ND	.36	.27	.18	BAS21ZXTR-ND	108.00/M

V_{BR} (V)	$I_{F(DC)}$ (mA)	I_{FSM} (A)	V_F (mV)	@mA	V_F (mV)	@mA	P_{tot} (mW)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar High Current Schottky Diodes — SOT-23 Package													
40	500	6.75	550	500	1050	1500	330	ZHCS500CT-ND	.72	.54	.36	ZHCS500TR-ND	216.00/M
60	500	6.75	550	500	1120	1500	330	ZHCS506CT-ND	.78	.59	.39	ZHCS506TR-ND	234.00/M
40	750	12	490	750	650	1500	625	ZHCS750CT-ND	.96	.72	.44	ZHCS750TR-ND	240.00/M
60	750	12	520	750	760	1500	625	ZHCS756CT-ND	1.02	.77	.51	ZHCS756TR-ND	306.00/M
40	1000	12	500	1000	600	1500	625	ZHCS1000CT-ND	1.20	.90	.54	ZHCS1000TR-ND	300.00/M
60	1000	12	510	1000	620	1500	625	ZHCS1006CT-ND	1.26	.95	.63	ZHCS1006TR-ND	378.00/M
Silicon Planar High Current Schottky Diodes — SOD-323 Package													
40	400	6.75	500	400	1050	1500	300	ZHCS400CT-ND	.63	.48	.32	ZHCS400TR-ND	189.00/M

Max. Reverse Voltage (V)	Max. Forward Current (mA)	Forward Voltage to V_{CC} (V)	from G_{ND} (V)	Max. Reverse Current (µA)	Typical Capacitance (pF)	Typical Recovery Time (ns)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000
Schottky Diode Array — SO-16 Package													
7	50	0.85	0.75	6	6	8	SDA24N16CT-ND‡	4.65	3.49	2.10	SDA24N16TR-ND‡	813.75	1317.50

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

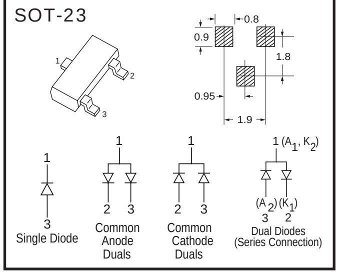
ZETEX *NEW!* MMPS Transistors

Type	V_{CBO} (V)	V_{CEO} (V)	I_C	h_{FE} @ Min./Max.	I_C/V_{CE} (mA/V)	V_{CE} (Sat.) Max. (V)	@ I_C (mA)	I_B (mA)	f_T Typ. (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Size	Pricing
MPPS — 3X2 MLP															
NPN	100	27	4.5	200/—	8/2	15	10	10	140	ZX3CDBS1M832TACT-ND*	1.20	.90	ZX3CDBS1M832TATR-ND*	3,000	360.00/M
PNP	-35	-25	-4	300/—	10/-2	-10	100	10	110	ZX3CD1S1M832TACT-ND*	1.20	.90	ZX3CD1S1M832TATR-ND*	3,000	360.00/M
Dual N & P Channel	70	18	4.5	200/—	10/-2	8	100	10	120	ZXTDA1M832TACT-ND	1.20	.90	ZXTDA1M832TATR-ND	3,000	360.00/M
	-35	-25	-4	475/—	10/-2	-10	100	10	110						
	190	65	4	200/—	10/2	8	100	10	165	ZXTDCM832TACT-ND	1.20	.90	ZXTDCM832TATR-ND	3,000	360.00/M
	-80	-70	-3	300/—	10/-2	-25	100	-10	110						
Dual NPN	70	18	4.5	200/—	10/2	14	100	10	120	ZXTDAM832TACT-ND	1.20	.90	ZXTDAM832TATR-ND	3,000	360.00/M
	100	27	4.5	200/—	10/2	8	100	10	140	ZXTDBM832TACT-ND	1.20	.90	ZXTDBM832TATR-ND	3,000	360.00/M
Dual PNP	-35	-25	-4	300/—	10/2	-10	100	10	110	ZXTD1M832TACT-ND	1.20	.90	ZXTD1M832TATR-ND	3,000	360.00/M
	-35	-25	-3.5	300/—	10/-2	-19	100	10	180	ZXTDCM832TACT-ND	1.20	.90	ZXTDCM832TATR-ND	3,000	360.00/M
Dual Complementary	100	27	4.5	200/—	10/2	8	100	10	140	ZXTDB2M832TACT-ND	1.20	.90	ZXTDB2M832TATR-ND	3,000	360.00/M
MPPS — 2X2 MLP															
NPN	70	18	4.5	200/—	10/2	8	100	10	120	ZXTAM322TACT-ND	.78	.59	ZXTAM322TATR-ND	3,000	234.00/M
	100	27	10	200/—	10/2	8	100	10	140	ZXTBM322TACT-ND	.78	.59	ZXTBM322TATR-ND	3,000	234.00/M
PNP	-35	-25	-4	300/—	10/-2	-10	100	10	110	ZXT1M322TACT-ND	.78	.59	ZXT1M322TATR-ND	3,000	234.00/M
	-35	-25	-3.5	300/—	10/-2	-19	100	10	180	ZXT2M322TACT-ND	.78	.59	ZXT2M322TATR-ND	3,000	234.00/M

ZETEX *Now QS9000 Accredited!*

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

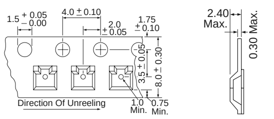
SOT-23



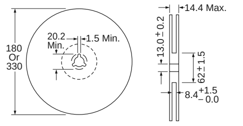
SOT-23 Tape and Reel Information:

Tape packaging has special attractions for customers using manual placement since it makes it easier to assemble and orientate these tiny components; stock accounting is also simplified.

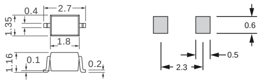
Tape Specs



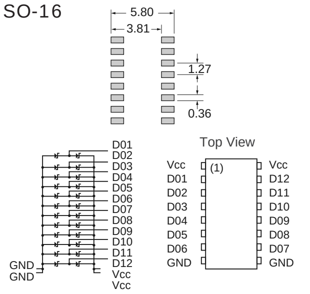
Reel Specs



SOD-323

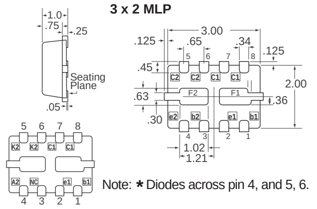


SO-16

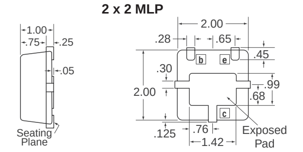


5.80
3.81
1.27
0.36
Top View
D01 D02 D03 D04 D05 D06 D07 D08 D09 D10 D11 D12 Vcc Vcc
GND GND
Vcc D01 D02 D03 D04 D05 D06 GND
(1)
Vcc D12 D11 D10 D09 D08 D07 GND

NEW! MPPS



Note: * Diodes across pin 4, and 5, 6.



ZETEX Transistors — SOT-89 Package

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	h_{FE} @ I_C/V_{CE} Min./Max.	(mA/V)	V_{CE} (Sat.) Max. @ (V)	I_C (mA)	I_B (mA)	f_T Typ. (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Size	Pricing
1 Watt — SOT-89 Package															
NPN	400	400	500	35/—	200/10	0.2	100	10	50	FCX658ACT-ND	.84	.63	FCX658ATR-ND	1,000	238.00
	400	400	225	100/300	50/10	0.5	50	6	50	FCX458CT-ND	1.05	.79	FCX458TR-ND	1,000	297.50
	400	350	500	40/—	20/10	0.5	50	4	70	BST39CT-ND	.96	.72	BST39TR-ND	1,000	272.00
	300	250	500	40/—	20/10	0.5	50	4	70	BST40CT-ND	.96	.72	BST40TR-ND	1,000	272.00
	170	150	100	100/300	250/10	0.3	500	50	100	FCX495CT-ND	1.02	.77	FCX495TR-ND	1,000	289.00
	150	75	3000	270/1200	1000/2	0.25	3000	100	140	FCX1053ACT-ND	1.05	.79	FCX1053ATR-ND	1,000	297.50
	150	40	3000	270/1200	1000/2	0.34	5000	100	155	FCX1051ACT-ND	1.05	.79	FCX1051ATR-ND	1,000	297.50
	120	100	1000	100/300	250/10	0.3	500	50	150	FCX493CT-ND	1.05	.79	FCX493TR-ND	1,000	297.50
	100	80	1000	100/250	150/2	0.5	500	50	150	BCX5616CT-ND	.93	.70	BCX5616TR-ND	1,000	263.50
	90	80	500	2000/—	500/10	1.3	500	0.5	150	BST52CT-ND*	.96	.72	BST52TR-ND*	1,000	272.00
	80	60	1000	100/300	500/5	0.5	1000	100	150	FCX491CT-ND	1.05	.79	FCX491TR-ND	1,000	297.50
	80	60	500	1000/—	150/10	1.3	500	.5	—	BST51CT-ND*	.96	.72	BST51TR-ND*	1,000	272.00
	60	60	1000	100/250	150/2	0.5	500	50	150	BCX5516CT-ND	.93	.70	BCX5516TR-ND	1,000	263.50
	50	50	2000	200/—	1000/2	0.35	3000	100	165	FCX619CT-ND	.87	.66	FCX619TR-ND	1,000	246.50
	45	45	2000	400/150	2000/2	0.30	1000	5	150	FCX690BCT-ND	.87	.66	FCX690BTR-ND	1,000	246.50
	40	40	1000	300/900	500/5	0.5	1000	100	150	FCX491ACT-ND	1.05	.79	FCX491ATR-ND	1,000	297.50
	40	30	500	20,000	100/5	1.0	100	0.1	150	BCV29CT-ND*	.96	.72	BCV29TR-ND*	1,000	272.00
	35	10	4000	300/1200	1000/2	0.35	5000	25	150	FCX1047ACT-ND	1.05	.79	FCX1047ATR-ND	1,000	297.50
	25	20	1000	85/375	500/1	0.5	1000	100	60	BC868CT-ND	.90	.68	BC868TR-ND	1,000	300.00
	15	15	4000	200/—	3000/2	0.20	3000	50	120	FCX617CT-ND	.87	.66	FCX617TR-ND	1,000	246.50
	12	12	3000	400/—	3000/2	0.40	4000	50	150	FCX688BCT-ND	.87	.66	FCX688BTR-ND	1,000	246.50
PNP	-400	-400	-200	100/300	-50/-10	-0.5	-50	-6	50	FCX558CT-ND	1.05	.79	FCX558TR-ND	1,000	297.50
	-300	-300	-50	50/-	-25/-20	-0.6	-30	-5	100	BF621CT-ND	.90	.68	BF621TR-ND	1,000	300.00
	-220	-200	-300	85/300	25	-0.35	-250	25	150	FCX596CT-ND	1.02	.77	FCX596TR-ND	1,000	289.00
	-200	-200	-500	30/150	-50/-10	-2.0	-50	-5	15	BST15CT-ND	.96	.72	BST15TR-ND	1,000	272.00
	-120	-100	-1000	100/300	-500/-5	-0.3	-500	-50	50	FCX593CT-ND	1.05	.79	FCX593TR-ND	1,000	297.50
	-100	-80	-1000	100/250	-150/-2	-0.5	-500	-50	150	BCX5316CT-ND	.93	.70	BCX5316TR-ND	1,000	263.50
	-80	-60	-1000	100/300	-500-5	-0.6	-1000	-100	150	FCX591CT-ND	1.05	.79	FCX591TR-ND	1,000	297.50
	-80	-60	-500	10,000/-	-100/-5	-1.0	-100	-0.1	200	BCV48CT-ND*	.96	.72	BCV48TR-ND*	1,000	272.00
	-80	-60	-500	2,000	-500/-10	-1.3	-500	-50	200	BST61CT-ND*	.96	.72	BST61TR-ND*	1,000	272.00
	-70	-60	-1000	100/300	-100/-5	-0.5	-500	-50	100	BSR31CT-ND	.96	.72	BSR31TR-ND	1,000	272.00
	-60	-60	-1000	100/250	-150/-2	-0.5	-500	-50	150	BCX5216CT-ND	.93	.70	BCX5216TR-ND	1,000	263.50
	-50	-30	-1000	100/300	-500/-2	-0.35	-1000	-100	100	FCX589CT-ND	1.05	.79	FCX589TR-ND	1,000	297.50
	-50	-40	-2000	250/150	-2000/-2	-0.45	-500	-10	100	FCX790ACT-ND	.87	.66	FCX790ATR-ND	1,000	246.50
	-45	-40	-3000	250/800	-500/-2	-0.30	-3000	-250	145	FCX1151ACT-ND	1.05	.79	FCX1151ATR-ND	1,000	297.50
	-40	-40	-1000	300/800	-100/-5	-0.35	-500	-20	150	FCX591ACT-ND	1.05	.79	FCX591ATR-ND	1,000	297.50
	-30	-25	-3000	250/800	-500/-2	-0.30	-3000	-100	135	FCX1149ACT-ND	.87	.66	FCX1149ATR-ND	1,000	246.50
	-25	-20	-1000	85/375	-500/-1	-0.5	-1000	-100	60	BC869CT-ND	.90	.68	BC869TR-ND	1,000	300.00
	-25	-25	-3000	300/800	-10/-2	-0.19	-1000	-10	100	FCX789ACT-ND	.87	.66	FCX789ATR-ND	1,000	246.50
	-20	-20	-2500	300/—	-100/-2	-0.22	-1500	-50	150	FCX718CT-ND	.87	.66	FCX718TR-ND	1,000	246.50
	-15	-12	-3000	250/850	-500/-2	-0.25	-3000	-30	115	FCX1147ACT-ND	1.05	.79	FCX1147ATR-ND	1,000	297.50
	-12	-12	-3000	300/—	-100/-2	-0.32	-3000	-50	110	FCX717CT-ND	.87	.66	FCX717TR-ND	1,000	246.50

* Darlington

ZETEX Transistors — SOT-23, SOT23-6 and MSOP-8 Packages

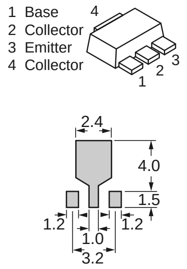
Type	V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	h_{FE} @ I_C/V_{CE} Min./Max.	(mA/V)	V_{CE} (Sat.) Max. @ (V)	I_C (mA)	I_B (mA)	f_T Typ. (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Size	Pricing
General Purpose — 330mW — SOT-23 Package															
NPN	80	80	1500	300/900	200/2	0.20	1500	50	160	FMMT620CT-ND	.69	.52	FMMT620TR-ND	3,000	172.50/M
	60	40	200	100/300	10/1	0.2	10	1	300	FMMT3904CT-ND	.36	.27	FMMT3904TR-ND	3,000	108.00/M
	45	45	200	380/630	2/5	0.35	10	0.25	250	BCX70KCT-ND	.36	.27	BCX70KTR-ND	3,000	108.00/M
	32	32	200	380/630	2/5	0.35	10	0.25	250	BCW60DCT-ND	.36	.27	BCW60DTR-ND	3,000	108.00/M
	40	30	200	50/150	2/1	0.3	50	5	250	FMMT4123CT-ND	.36	.27	FMMT4123TR-ND	3,000	108.00/M
PNP	-60	-40	-200	100/300	-10/-1	-0.2	-10	-1.0	300	FMMT3906CT-ND	.36	.27	FMMT3906TR-ND	3,000	108.00/M
	-45	-45	-200	380/630	-2/-5	-0.25	-10	-0.25	180	BCX71KCT-ND	.36	.27	BCX71KTR-ND	3,000	108.00/M
	-32	-32	-200	380/630	-2/-5	-0.25	-10	-0.25	180	BCW61DCT-ND	.36	.27	BCW61DTR-ND	3,000	108.00/M
Switching Transistors — 330mW — SOT-23 Package															
NPN	75	40	600	100/300	150/10	0.3	150	15	300	FMMT2222ACT-ND	.36	.27	FMMT2222ATR-ND	3,000	108.00/M
	60	40	600	100/300	150/1	0.4	150	15	200	FMMT4401CT-ND	.36	.27	FMMT4401TR-ND	3,000	108.00/M
	30	25	200	120/360	2/1	0.3	50	5	300	FMMT4124CT-ND	.36	.27	FMMT4124TR-ND	3,000	108.00/M
	40	15	200	40/120	10/1	0.25	10	1	500	FMMT2369CT-ND	.36	.27	FMMT2369TR-ND	3,000	108.00/M
PNP	-60	-60	-600	100/300	-150/-10	-0.4	-150	-15	200	FMMT2907ACT-ND	.36	.27	FMMT2907ATR-ND	3,000	108.00/M
	-40	-40	-600	100/300	-150/-1	-0.4	-150	-15	200	FMMT4403CT-ND	.36	.27	FMMT4403TR-ND	3,000	108.00/M
	-30	-30	-200	50/150	-2/-1	-0.4	-50	-5	200	FMMT4125CT-ND	.36	.27	FMMT4125TR-ND	3,000	108.00/M
	-25	-25	-200	120/360	-2/-1	-0.4	-50	-5	250	FMMT4126CT-ND	.36	.27	FMMT4126TR-ND	3,000	108.00/M
RF Transistors — SOT-23 Package															
NPN	30	25	25	60/—	4/10	0.5	4	0.4	650	FMMTH10CT-ND	.60	.45	FMMTH10TR-ND	3,000	180.00/M
	20	12	50	25/250	3/1	0.4	10	1	900	FMMT5179CT-ND‡	.54	.41	FMMT5179TR-ND‡	3,000	162.00/M
	30	15	100	20/—	3/1	0.4	10	1	600	FMMT918CT-ND	.48	.36	FMMT918TR-ND	3,000	144.00/M
	30	20	25	40/—	7/10	—	—	—	450	BFS20CT-ND	.48	.36	BFS20TR-ND	3,000	144.00/M
	30	15	25	25/150	2/1	—	—	—	1300	BFS17CT-ND‡	.51	.39	BFS17TR-ND‡	3,000	153.00/M
	25	15	25	70/200	2/1	—	—	—	1300	BFS17HCT-ND	.54	.41	BFS17HTR-ND	3,000	162.00/M
High Voltage — 330mW — SOT-23 Package															
NPN	500	450	150	50/—	30/10	0.075	20	2.0	50	FMMT459TACT-ND *NEW!*	.60	.45	FMMT459TATR-ND *NEW!*	6,000	150.00/M
	300	300	200	40/—	30/10	0.5	20	2.0	50	FMMTA42CT-ND	.39	.30	FMMTA42TR-ND	3,000	117.00/M
	180	160	400	80/250	10/5	0.4	50	5	200	FMMT5551CT-ND	.45	.34	FMMT5551TR-ND	3,000	135.00/M
	120	80	100	20/—	10/1	0.15	4	0.4	100	BSS64ZXCT-ND	.45	.34	—	—	—

(Continued)

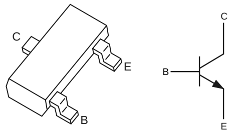
ZETEX ***Now QS9000 Accredited!***

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

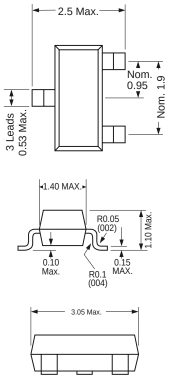
SOT-89



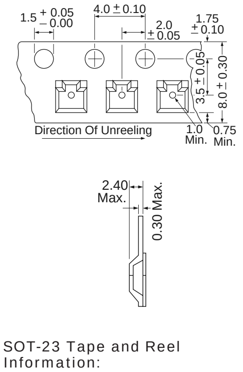
SOT-23 Conventional



SOT-23 Package Outline



SOT-23 Tape Specs



SOT-23 Tape and Reel Information:

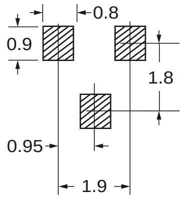
Tape packaging also has special attractions for customers using manual placement since it makes it easier to assemble and orient these tiny components; stock accounting is also simplified.

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	h_{FE} @ Min./Max.	I_C/V_{CE} (mA/V)	V_{CE} (Sat.) Max. (V)	@ I_C (mA)	I_B (mA)	f_T Typ. (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Size	Pricing
High Voltage — 330mW — SOT-23 Package															
PNP	-500	-500	-500	80/—	-50/-10	-0.2	-20	-2	90	FMMT560CT-ND	.90	.68	FMMT560TR-ND	3,000	270.00/M
	-300	-300	-200	25/—	-30/-10	-0.5	-20	-2.0	50	FMMTA92CT-ND	.39	.30	FMMTA92TR-ND	3,000	117.00/M
	-160	-150	-600	60/240	-10/-5	-0.5	-50	-5	200	FMMT5401CT-ND	.39	.30	FMMT5401TR-ND	3,000	117.00/M
	-110	-100	-100	30/—	-10/-1	-0.25	-25	-2.5	85	BSS63ZXCT-ND	.45	.34	BSS63ZXTR-ND	3,000	135.00/M
Darlington — 330mW — SOT-23 Package															
NPN	80	60	300	10K/—	500/5	1.25	800	8.0	100	FMMT38CCT-ND	.48	.36	FMMT38CTR-ND	3,000	144.00/M
	30	30	300	10K/—	10/5	1.5	100	0.1	100	FMMTA14CT-ND	.39	.30	FMMTA14TR-ND	3,000	117.00/M
	30	30	300	5K/—	10/5	1.5	100	0.1	100	FMMTA13CT-ND	.39	.30	FMMTA13TR-ND	3,000	117.00/M
PNP	-30	-30	-500	10K/—	-10/-5	-1.5	-100	-0.1	150	FMMTA63CT-ND	.39	.30	FMMTA63TR-ND	3,000	117.00/M
	-30	-30	-500	20K/—	-10/-5	-1.5	-100	-0.1	150	FMMTA64CT-ND	.39	.30	FMMTA64TR-ND	3,000	117.00/M
High Performance — 500mW — SOT-23 Package															
NPN	400	400	225	100/300	50/10	0.2	20	2	50	FMMT458CT-ND	.66	.50	FMMT458TR-ND	3,000	198.00/M
	300	300	500	100/300	100/10	0.2	100	10	75	FMMT497CT-ND	.51	.39	FMMT497TR-ND	3,000	153.00/M
	170	150	1000	100/300	250/10	0.2	250	25	100	FMMT495CT-ND	.51	.39	FMMT495TR-ND	3,000	153.00/M
	140	120	1000	100/300	250/10	0.2	250	25	100	FMMT494CT-ND	.51	.39	FMMT494TR-ND	3,000	153.00/M
	120	100	1000	100/300	250/10	0.25	500	50	150	FMMT493CT-ND	.51	.39	FMMT493TR-ND	3,000	153.00/M
	120	100	500	5K/—	500/5	1.0	500	5	100	FMMT614CT-ND*	.63	.48	FMMT614TR-ND*	3,000	189.00/M
	80	60	1000	50/150	150/10	0.35	150	15	150	FMMT451CT-ND	.51	.39	FMMT451TR-ND	3,000	153.00/M
	80	60	1000	100/300	500/5	0.3	500	50	150	FMMT491CT-ND‡	.51	.39	FMMT491TR-ND‡	3,000	153.00/M
	40	40	1000	300/900	500/5	0.3	500	50	150	FMMT491ACT-ND	.51	.39	FMMT491ATR-ND	3,000	153.00/M
	50	30	1000	100/300	1000/2	0.3	1000	100	150	FMMT489CT-ND‡	.51	.39	FMMT489TR-ND‡	3,000	153.00/M
	50	30	1000	100/300	500/2	0.5	1000	100	150	FMMT449CT-ND	.48	.36	FMMT449TR-ND	3,000	144.00/M
PNP	-400	-400	-150	100/300	-50/-10	-0.2	-20	-2	50	FMMT558CT-ND	.66	.50	FMMT558TR-ND	3,000	198.00/M
	-300	-300	-200	100/—	-100/-10	-0.25	-100	-20	75	FMMT597CT-ND	.54	.41	FMMT597TR-ND	3,000	162.00/M
	-220	-200	-500	100/300	-250/-10	-0.35	-250	-25	150	FMMT596CT-ND	.54	.41	FMMT596TR-ND	3,000	162.00/M
	-120	-100	-1000	100/300	-500/-10	-0.3	-500	-50	150	FMMT593CT-ND	.54	.41	FMMT593TR-ND	3,000	162.00/M
	-80	-60	-1000	100/300	-500/-5	-0.3	-500	-50	150	FMMT591CT-ND	.54	.41	FMMT591TR-ND	3,000	162.00/M
	-80	-60	-1000	50/150	-150/-10	-0.35	-150	-15	150	FMMT551CT-ND	.51	.39	FMMT551TR-ND	3,000	153.00/M
	-50	-30	-1000	100/300	-500/-2	-0.35	-1000	-100	100	FMMT589CT-ND‡	.54	.41	FMMT589TR-ND‡	3,000	162.00/M
	-40	-40	-1000	300/800	-100/-5	-0.35	-500	-20	150	FMMT591ACT-ND	.54	.41	FMMT591ATR-ND	3,000	162.00/M
	-35	-30	-1000	100/300	-500/-2	-0.5	-1000	-100	100	FMMT549CT-ND	.51	.39	FMMT549TR-ND	3,000	153.00/M
Medium Power — 330mW — SOT-23 Package															
NPN	80	80	500	50/—	100/10	0.25	100	10	100	FMMTA06CT-ND	.39	.30	FMMTA06TR-ND	3,000	117.00/M
	75	45	800	250/630	100/1	0.3	100	10	100	BCW66HCT-ND	.36	.27	BCW66HTR-ND	3,000	108.00/M
	60	32	800	250/630	100/1	0.3	100	10	100	BCW65CCT-ND	.36	.27	BCW65CTR-ND	3,000	108.00/M
	50	45	500	100/600	100/1	0.62	500	50	200	BCX19CT-ND	.36	.27	BCX19TR-ND	3,000	108.00/M
PNP	-80	-80	-500	50/—	-100/-1	-0.25	-100	-10	100	FMMTA56CT-ND	.39	.30	FMMTA56TR-ND	3,000	117.00/M
	-60	-45	-800	250/630	-100/-1	-0.3	-100	-10	100	BCW68HCT-ND	.36	.27	BCW68HTR-ND	3,000	108.00/M
	-50	-45	-800	100/600	-100/-1	-0.62	-500	-50	100	BCX17CT-ND	.36	.27	BCX17TR-ND	3,000	108.00/M
	-45	-30	-800	250/630	-100/-1	-0.3	-100	-10	100	BCW67CCT-ND	.36	.27	BCW67CTR-ND	3,000	108.00/M
SuperSOTs — 625mW — SOT-23 Package															
NPN	150	150	1000	300/—	200/10	0.3	1000	50	135	FMMT625CT-ND	.99	.75	FMMT625TR-ND	3,000	247.50/M
	125	125	1000	100/—	1000/10	0.25	1000	50	155	FMMT624CT-ND	.99	.75	FMMT624TR-ND	3,000	247.50/M
	50	50	2000	100/—	2000/2	0.2	1000	10	165	FMMT619CT-ND‡	.99	.75	FMMT619TR-ND‡	3,000	247.50/M
	40	15	3300	300/900	200/2	0.15	3000	150	145	ZXT11N15DFCT-ND	.72	.54	ZXT11N15DFTR-ND	3,000	180.00/M
	40	20	2500	300/900	100/2	0.13	2500	250	160	ZXT11N20DFCT-ND	.72	.54	ZXT11N20DFTR-ND	3,000	180.00/M
	20	20	2500	200/—	2000/2	0.2	2500	50	140	FMMT618CT-ND‡	.99	.75	FMMT618TR-ND‡	3,000	247.50/M
	15	15	3000	200/—	3000/2	0.2	3000	50	120	FMMT617CT-ND‡	.99	.75	FMMT617TR-ND‡	3,000	247.50/M
PNP	-100	-100	-1000	250/—	-500/-10	-0.20	-500	-50	150	FMMT723CT-ND	1.05	.79	FMMT723TR-ND	3,000	262.50/M
	-70	-70	-1500	150/—	-1000/-5	-0.30	-500	-20	150	FMMT722CT-ND	1.05	.79	FMMT722TR-ND	3,000	262.50/M
	-40	-40	-1500	150/—	-1000/-2	-0.25	-1000	-50	150	FMMT720CT-ND‡	1.05	.79	FMMT720TR-ND‡	3,000	262.50/M
	-20	-20	-1500	150/—	-2000/-2	-0.20	-1000	-20	150	FMMT718CT-ND‡	1.05	.79	FMMT718TR-ND‡	3,000	262.50/M
	-12	-12	-2500	180/—	-2500/-2	-0.17	-1500	-50	110	FMMT717CT-ND‡	1.05	.79	FMMT717TR-ND‡	3,000	262.50/M
Avalanche Mode Transistors — SOT-23 Package															
NPN	260	100	500	25	10/10	0.5	10	1	40	FMMT415CT-ND	21.00	15.75	FMMT415TR-ND	3,000	5250.00/M
	320	100	500	25	10/10	0.5	10	1	40	FMMT417CT-ND	24.00	18.00	FMMT417TR-ND	3,000	6000.00/M
SuperSOT 4 — 1.1W — SOT23-6 Package															
NPN	15	15	4000	300/—	10/2	0.014	100	10	120	ZXT10N15DE6TACT-ND *NEW!*	.78	.59	ZXT10N15DE6TATR-ND *NEW!*	3,000	195.00/M
	20	20	3500	200/—	10/2	0.015	100	10	140	ZXT10N20DE6TACT-ND *NEW!*	.78	.59	ZXT10N20DE6TATR-ND *NEW!*	3,000	195.00/M
	40	15	5000	300/900	1000/2	0.20	5000	1000	72	ZXT13N15DE6CT-ND	.81	.61	ZXT13N15DE6TR-ND	3,000	202.50/M
	50	20	4500	300/900	1000/2	0.23	4500	45	96	ZXT13N20DE6CT-ND	.81	.61	ZXT13N20DE6TR-ND	3,000	202.50/M
	50	50	3000	200/—	10/2	0.02	100	10	165	ZXT10N50DE6TACT-ND *NEW!*	.78	.59	ZXT10N50DE6TATR-ND *NEW!*	3,000	195.00/M
	50	50	1000	200/—	10/2	0.035	100	10	215	ZXTD09N50DE6CT-ND	1.20	.90	ZXTD09N50DE6TR-ND	2,500	300.00/M
	100	50	4000	300/900	1000/2	0.23	4000	100	115	ZXT13N50DE6CT-ND	.81	.61	ZXT13N50DE6TR-ND	3,000	202.50/M
PNP	-50	-40	-3000	300/900	-1000/-2	-0.24	-3000	-300	115	ZXT13P40DE6CT-ND	.81	.61	ZXT13P40DE6TR-ND	3,000	202.50/M
	-40	-40	-2000	300/—	10/2	-0.040	-100	-10	190	ZXT10P40DE6TACT-ND *NEW!*	.78	.59	ZXT10P40DE6TATR-ND *NEW!*	3,000	195.00/M
	-25	-20	-3500	300/900	-1000/-2	-0.25	-3500	-350	90	ZXT13P20DE6CT-ND	.81	.61	ZXT13P20DE6TR-ND	3,000	202.50/M
	-20	-20	-2500	300/—	10/2	-0.030	-100	-10	180	ZXT10P20DE6TACT-ND *NEW!*	.78	.59	ZXT10P20DE6TATR-ND *NEW!*	3,000	195.00/M
	-20	-12	-4000	300/900	-1000/-2	-0.25	-4000	-50	55	ZXT13P12DE6CT-ND	.81	.61	ZXT13P12DE6TR-ND	3,000	202.50/M
	-12	-12	3000	300/—	10/2	-0.017	-100	-10	110	ZXT10P12DE6TACT-ND *NEW!*	.78	.59	ZXT10P12DE6TATR-ND *NEW!*	3,000	195.00/M
	-12	-12	-1250	125/—	-1250/-2	-0.240	-1250	-100	220	ZXTS1000E6CT-ND	1.20	.90	ZXTS1000E6TR-ND	3,000	300.00/M
Dual N & P	15 -12	15 -12	1.5 1.2	200/— 300/—	10/2 10/-2	20 -40	100 -100	10 -10	180 220	ZXTD6717E6TACT-ND *NEW!*	.89	.68	ZXTD6717E6TATR-ND *NEW!*	3,000	223.50/M
SuperSOT 4 — 1.1W — MSOP-8 Package															
NPN	50	20	7000	300/900	1000/2	0.14	7000	70	180	ZXT14N20DXCT-ND	1.62	1.22	ZXT14N20DXTR-ND	1,000	459.00
	100	50	6000	300/900	1000/2	0.155	6000	120	185	ZXT14N50DXCT-ND	1.62	1.22	ZXT14N50DXTR-ND	1,000	459.00
PNP	-50	-40	-4000	300/900	-1000/-2	-0.16	-4000	-200	185	ZXT14P40DXCT-ND	1.62	1.22	ZXT14P40DXTR-ND	1,000	459.00
	-25	-20	-5000	300/900	-1000/-2	-0.20	-5000	-100	170	ZXT14P20DXCT-ND	1.62	1.22	ZXT14P20DXTR-ND	1,000	459.00
	-20	-12	-6000	300/900	-1000/-2	-0.163	-6000	-60	110	ZXT14P12DXCT-ND	1.62	1.22	ZXT14P12DXTR-ND	1,000	459.00
Dual SuperSOT 4 — 1.25W — MSOP-8 Package															
Dual NPN	50	20	3500	300/900	1000/2	0.20	3500	50	112	ZXT12N20DXCT-ND	1.98	1.49	ZXT12N20DXTR-ND	1,000	561.00
	100	50	3000	300/900	1000/2	0.25	3000	50	132	ZXT12N50DXCT-ND	1.98	1.49	ZXT12N50DXTR-ND	1,000	561.00
Dual PNP	-50	-40	-2000	300/900	-1000/-2	-0.26	-2000	-100	130	ZXT12P40DXCT-ND	1.98	1.49	ZXT12P40DXTR-ND	1,000	561.00
	-25	-20	-2500	300/900	-1000/-2	-0.20	-2500	-125	110	ZXT12P20DXCT-ND	1.98	1.49	ZXT12P20DXTR-ND	1,000	561.00
	-20	-12	-3000	300/900	-1000/-2	-0.27	-3000	-30	85	ZXT12P12DXCT-ND	1.98	1.49	ZXT12P12DXTR-ND	1,000	561.00

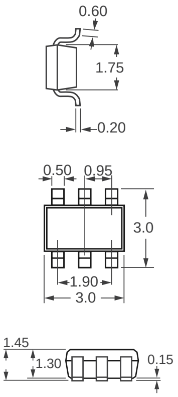
* Darlington ‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

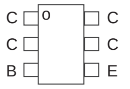
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

SOT-23 PC Layout

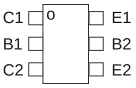


SOT23-6



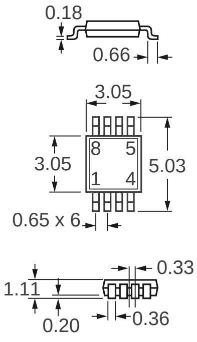


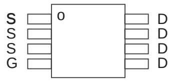
Pin out for SOT23-6



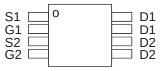
Dual

8-MSOP MOSFET





8-MSOP (Single) Pin out



8-MSOP (Dual) Pin out

ZETEX Transistors — SOT-223 Package

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (cont) (A)	I_{CM} (A)	h_{FE} at I_C/V_{CE} Min./Max.	h_{FE} at I_C/V_{CE} (mA/V)	V_{CE} (Sat.) Max. at I_C/I_B (V)	V_{CE} (Sat.) Max. at I_C/I_B (mA)	f_T (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Digi-Key Part No.	Tape & Reel Pricing 1,000
High Performance Transistors (Including Darlington) — SOT-223 Package														
NPN	400	400	0.5	1.0	50/–	100/5	0.5	100/10	50	FZT658CT-ND	1.38	1.04	FZT658TR-ND	391.00
	300	300	0.5	1.0	50/–	100/5	0.5	100/10	30	FZT657CT-ND	1.38	1.04	FZT657TR-ND	391.00
	150	150	1.0	2.0	50/–	500/5	0.5	500/50	30	FZT655CT-ND	1.38	1.04	FZT655TR-ND	391.00
	120	100	2.0	6.0	100/300	500/2	0.3	1000/100	175	FZT653CT-ND	1.38	1.04	FZT653TR-ND	391.00
	80	60	3.0	6.0	100/300	500/2	0.3	1000/100	175	FZT651CT-ND	1.38	1.04	FZT651TR-ND	391.00
	35	25	3.0	8.0	100/300	1000/2	0.3	1000/100	240	FZT649CT-ND	1.38	1.04	FZT649TR-ND	391.00
	140	120	2.0	4.0	5K/–	500/5	1.0	250/0.25	150	FZT605CT-ND*‡	1.38	1.04	FZT605TR-ND*‡	391.00
	120	100	1.5	4.0	5K/–	500/5	1.0	250/0.25	150	FZT604CT-ND*	1.38	1.04	FZT604TR-ND*	391.00
	100	80	2.0	6.0	5K/100K	500/5	1.0	1000/1	150	FZT603CT-ND*	1.38	1.04	FZT603TR-ND*	391.00
	160	140	2.0	4.0	1K/–	1000/10	1.2	1000/10	150	FZT600CT-ND*	1.38	1.04	FZT600TR-ND*	391.00
PNP	-400	-400	-0.5	-1.0	50/–	-100/-5	-0.5	-100/-10	50	FZT758CT-ND	1.38	1.04	FZT758TR-ND	391.00
	-300	-300	-0.5	-1.0	50/–	-100/-5	-0.5	-100/-10	30	FZT757CT-ND	1.38	1.04	FZT757TR-ND	391.00
	-150	-150	-1.0	-2.0	50/–	-500/-5	-0.5	-500/-50	30	FZT755CT-ND	1.38	1.04	FZT755TR-ND	391.00
	-120	-100	-2.0	-6.0	100/300	-500/-2	-0.3	-1000/-100	100	FZT753CT-ND	1.38	1.04	FZT753TR-ND	391.00
	-80	-60	-3.0	-6.0	100/300	-500/-2	-0.3	-1000/-100	100	FZT751CT-ND	1.38	1.04	FZT751TR-ND	391.00
	-35	-25	-3.0	-8.0	100/300	-1000/-2	-0.3	-1000/-100	100	FZT749CT-ND	1.38	1.04	FZT749TR-ND	391.00
	-140	-120	-2.0	-4.0	3K/30K	-1000/-5	-1.3	-1000/-1	100	FZT705CT-ND*	1.38	1.04	FZT705TR-ND*	391.00
	-120	-100	-2.0	-4.0	3K/30K	-1000/-5	-1.3	-1000/-1	100	FZT704CT-ND*	1.38	1.04	FZT704TR-ND*	391.00
Medium Power Transistors — SOT-223 Package														
NPN	400	350	0.5	1.0	50/–	100/5	0.5	50/4	70	BSP19CT-ND	1.02	.77	BSP19TR-ND	289.00
	300	250	0.5	1.0	30/200	30/10	0.5	50/4	40	BSP20CT-ND	1.02	.77	BSP20TR-ND	289.00
	300	300	0.05	0.1	50/–	25/20	0.6	30/5	100	BF720CT-ND	1.02	.77	BF720TR-ND	289.00
	120	100	1.0	2.0	100/300	250/10	0.3	500/50	150	FZT493CT-ND	1.26	.95	FZT493TR-ND	357.00
	100	80	1.0	1.5	40/250	150/2	0.5	500/50	100	BCP56CT-ND	1.02	.77	BCP56TR-ND	289.00
	80	60	1.0	2.0	100/300	500/5	0.25	500/50	150	FZT491CT-ND	1.26	.95	FZT491TR-ND	357.00
	60	60	1.0	1.5	40/250	150/2	0.5	500/50	100	BCP55CT-ND	1.02	.77	BCP55TR-ND	289.00
	45	45	1.0	1.5	40/250	150/2	0.5	500/50	100	BCP54CT-ND	1.02	.77	BCP54TR-ND	289.00
	25	20	1.0	2.0	63/400	500/1	1.0	1000/100	100	BCP68CT-ND	1.02	.77	BCP68TR-ND	289.00
PNP	-120	-100	-1.0	-2.0	100/300	-500/-2	-0.3	-500/-50	150	FZT593CT-ND	1.26	.95	FZT593TR-ND	357.00
	-100	-80	-1.0	-1.5	40/250	-150/-2	-0.5	-500/-50	125	BCP53CT-ND	1.02	.77	BCP53TR-ND	289.00
	-80	-60	-1.0	-2.0	100/300	-500/-5	-0.3	-500/-50	150	FZT591CT-ND	1.26	.95	FZT591TR-ND	357.00
	-70	-60	-1.0	-2.0	100/300	-100/-1	-0.25	-150/-15	100	BSP31CT-ND	1.02	.77	BSP31TR-ND	289.00
	-60	-60	-1.0	-1.5	40/250	-150/-2	-0.5	-500/-50	125	BCP52CT-ND	1.02	.77	BCP52TR-ND	289.00
	-45	-45	-1.0	-1.5	40/250	-150/-2	-0.5	-500/-50	125	BCP51CT-ND	1.02	.77	BCP51TR-ND	289.00
	-35	-30	-1.0	-2.0	100/300	-500/-5	-0.5	-1000/-100	100	FZT549CT-ND	1.26	.95	FZT549TR-ND	357.00
	-25	-20	-1.0	-2.0	63/400	-500/-1	-0.5	-1000/-100	100	BCP69CT-ND	1.02	.77	BCP69TR-ND	289.00
High Gain Transistors — SOT-223 Package														
NPN	180	180	0.5	1.0	500/–	100/5	0.25	200/5	70	FZT696BCT-ND	1.50	1.13	FZT696BTR-ND	425.00
	150	75	4.5	10.0	300/1200	500/2	0.21	2000/100	140	FZT1053ACT-ND	1.56	1.17	FZT1053ATR-ND	442.00
	150	60	5.0	10.0	270/1200	1000/2	0.18	3000/10	150	FZT1051ACT-ND	1.56	1.17	FZT1051ATR-ND	442.00
	120	120	1.0	2.0	400/–	200/2	0.25	100/0.5	130	FZT694BCT-ND	1.50	1.13	FZT694BTR-ND	425.00
	80	30	5.0	20.0	300/1200	1000/2	0.33	5000/50	180	FZT1049ACT-ND	1.56	1.17	FZT1049ATR-ND	442.00
	70	70	1.0	2.0	400/–	500/2	0.15	100/0.5	150	FZT692BCT-ND	1.50	1.13	FZT692BTR-ND	425.00
	50	17.5	5.0	20.0	300/1200	1000/2	0.35	5000/25	150	FZT1048ACT-ND	1.56	1.17	FZT1048ATR-ND	442.00
	45	45	2.0	6.0	400/–	1000/2	0.1	100/0.5	150	FZT690BCT-ND	1.50	1.13	FZT690BTR-ND	425.00
	35	10	5.0	20.0	300/1200	1000/2	0.35	5000/25	150	FZT1047ACT-ND	1.56	1.17	FZT1047ATR-ND	442.00
	20	20	3.0	8.0	400/–	2000/2	0.45	3000/20	150	FZT689BCT-ND	1.50	1.13	FZT689BTR-ND	425.00
	12	12	4.0	10.0	400/–	3000/2	0.35	3000/20	150	FZT688BCT-ND	1.50	1.13	FZT688BTR-ND	425.00
PNP	-200	-200	-0.5	-1.0	250/–	-300/-10	-0.3	-200/-20	100	FZT796ACT-ND	1.50	1.13	FZT796ATR-ND	425.00
	-140	-140	-0.5	-1.0	250/–	-200/-2	-0.3	-200/-5	100	FZT795ACT-ND	1.50	1.13	FZT795ATR-ND	425.00
	-75	-70	-2.0	-5.0	250/–	-500/-2	-0.5	-1000/-25	100	FZT792ACT-ND	1.50	1.13	FZT792ATR-ND	425.00
	-50	-40	-2.0	-6.0	250/–	-500/-2	-0.45	-1000/-10	100	FZT790ACT-ND	1.50	1.13	FZT790ATR-ND	425.00
	-45	-40	-3.0	-5.0	250/800	-500/-2	0.3	-3000/-250	145	FZT1151ACT-ND	1.62	1.22	FZT1151ATR-ND	459.00
	-30	-25	-4.0	-10.0	250/800	-500/-2	0.35	-4000/-140	135	FZT1149ACT-ND	1.62	1.22	FZT1149ATR-ND	459.00
	-25	-25	-2.0	-6.0	250/–	-1000/-2	-0.45	-2000/-20	100	FZT789ACT-ND‡	1.50	1.13	FZT789ATR-ND‡	425.00
	-15	-15	-3.0	-8.0	300/–	-2000/-2	-0.45	-2000/-10	100	FZT788BCT-ND	1.50	1.13	FZT788BTR-ND	425.00
	-15	-12	-5.0	-20.0	250/850	-500/-2	0.4	-5000/-50	115	FZT1147ACT-ND	1.62	1.22	FZT1147ATR-ND	459.00
High Current Transistors — SOT-223 Package														
NPN	350	300	3.5	5.0	100/300	1000/5	0.23	2000/200	80	FZT857CT-ND	2.10	1.58	FZT857TR-ND	595.00
	200	150	5.0	10.0	100/300	1000/5	0.11	1000/100	90	FZT855CT-ND	2.10	1.58	FZT855TR-ND	595.00
	200	100	6.0	10.0	100/300	2000/2	0.15	2000/100	130	FZT853CT-ND	2.10	1.58	FZT853TR-ND	595.00
	150	60	6.0	20.0	100/300	2000/1	0.17	2000/50	130	FZT851CT-ND	2.10	1.58	FZT851TR-ND	595.00
	80	30	7.0	20.0	100/300	1000/1	0.215	2000/20	100	FZT849CT-ND‡	2.10	1.58	FZT849TR-ND‡	595.00
	80	25	6.5	20.0	300/–	1000/1	0.215	2000/10	100	FZT869CT-ND	2.10	1.58	FZT869TR-ND	595.00
PNP	-400	-400	-0.5	-1.5	100/300	-500/-10	-0.40	-500/-100	85	FZT958CT-ND	2.10	1.58	FZT958TR-ND	595.00
	-300	-300	-1.0	-2.0	100/300	-500/-10	-0.24	-1000/-300	85	FZT957CT-ND	2.10	1.58	FZT957TR-ND	595.00
	-220	-200	-2.0	-5.0	100/300	-1000/-5	-0.165	-1000/-100	110	FZT956CT-ND	2.10	1.58	FZT956TR-ND	595.00
	-180	-140	-4.0	-10.0	100/300	-1000/-5	-0.15	-1000/-100	110	FZT955CT-ND	2.10	1.58	FZT955TR-ND	595.00
	-140	-100	-5.0	-10.0	100/300	-1000/-1	-0.22	-2000/-200	125	FZT953CT-ND	2.10	1.58	FZT953TR-ND	595.00
	-100	-60	-5.0	-15.0	100/300	-2000/-1	-0.21	-2000/-200	120	FZT951CT-ND	2.10	1.58	FZT951TR-ND	595.00
	-50	-30	-5.5	-20.0	100/300	-1000/-1	-0.27	-2000/-200	80	FZT949CT-ND‡	2.10	1.58	FZT949TR-ND‡	595.00
	-40	-20	-6.0	-20.0	100/300	-1000/-1	-0.18	-2000/-200	80	FZT948CT-ND	2.10	1.58	FZT948TR-ND	595.00
	-15	-12	-6.0	-20.0	300/1000	-500/-1	-0.17	-2000/-50	80	FZT968CT-ND	2.10	1.58	FZT968TR-ND	595.00
Switching Transistors — SOT-223 Package														
NPN	75	40	0.6	—	100/300	150/10	0.4	150/15	250	FZT2222ACT-ND	1.11	.84	FZT2222ATR-ND	314.50
PNP	-60	-60	-0.6	—	100/300	-150/-10	-0.4	-150/-15	200	FZT2907ACT-ND	1.11	.84	FZT2907ATR-ND	314.50
	-40	-40	-0.6	—	100/300	-150/-2	-0.4	-150/-15	200	FZT4403CT-ND	1.11	.84	FZT4403TR-ND	314.50

* Darlington ‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

Transistors — SOT-323 Package

Type	V_{CBO} (V)	V_{CEO} (V)	I_C (mA)	h_{FE} at I_C/V_{CE} Min./Max.	h_{FE} at I_C/V_{CE} (mA/V)	$V_{CE(sat)}$ Max. (V)	I_C (mA)	I_B (mA)	fT typ (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Cut Tape Price Each 100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Super 323-500mW															
NPN	50	50	1000	200/-	500/5	0.18	500	25	180	ZUMT619CT-ND	.75	.57	.38	ZUMT619TR-ND	225.00/M
	20	20	1250	200/-	1000/2	0.2	1000	10	195	ZUMT618CT-ND	.75	.57	.38	ZUMT618TR-ND	225.00/M
	15	15	1500	200/-	1000/2	0.18	1000	10	130	ZUMT617CT-ND	.75	.57	.38	ZUMT617TR-ND	225.00/M
PNP	-40	-40	-1000	180/-	-500/-5	-0.3	-500	-25	190	ZUMT720CT-ND	.75	.57	.38	ZUMT720TR-ND	225.00/M
	-20	-20	-1000	180/-	-500/-2	-0.18	-500	-20	180	ZUMT718CT-ND	.75	.57	.38	ZUMT718TR-ND	225.00/M
	-12	-12	-1250	180/-	-1000/2	-0.24	-1000	-50	110	ZUMT717CT-ND	.75	.57	.38	ZUMT717TR-ND	225.00/M
RF Transistors															
NPN	30	15	100	20/-	3/1	0.4	10	10	600	ZUMT918CT-ND	.54	.41	.27	ZUMT918TR-ND	162.00/M
	25	15	25	25/150	2/1	—	—	—	1300	ZUMTS17CT-ND	.57	.43	.29	ZUMTS17TR-ND	171.00/M
Switching Transistors — 330mW —SOT-323 Package															
NPN	40	15	200	40/120	10/1	0.20	10	1	500	ZUMT2369ACT-ND	.51	.39	.26	ZUMT2369ATR-ND	153.00/M

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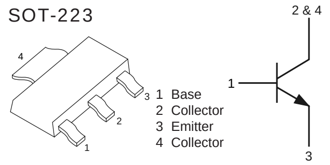
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

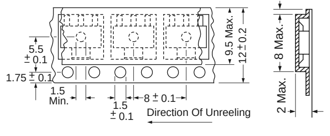
SOT-223



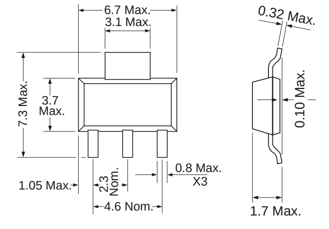
General Information: As surface mount continues to increase its penetration throughout the world of electronics, the SOT-223 is one of many surface mount packages which are the driving force behind this phenomenal growth. The package is capable of housing semiconductor crystals up to 2.5mm x 2.5mm offering power capabilities up to and above 2W (subject to mounting). Designed in a similar fashion to the very popular SOT-23 package, it ensures that it is fully compatible with all industry standard wave and reflow soldering techniques.

Maximum Thermal Ratings: Junction Temperature: 150°C. Operating and Storage Temperature: -55°C to +150°C.

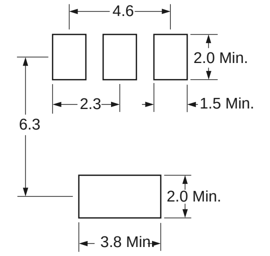
SOT-223



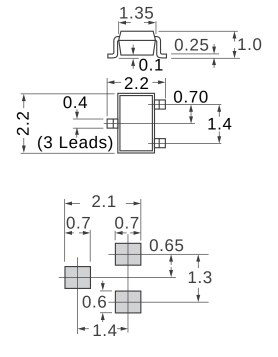
SOT-223 Package Outline



SOT-223 Pad Layout



SOT-323



ZETEX Transistors — Dual SM-8 Package

V_{CEO} (V)	V_{CBO} (V)	I_C (A)	I_{CM} (A)	VCE(sat) (mV) max	VCE(sat) IC (A)	VCE(sat) IB (mA)	h_{FE} min	h_{FE} IC (A)	h_{FE} VCE (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing
Dual NPN Transistors																
15	15	3	12	200	3	50	200	3	2	ZDT617CT-ND	2.49	1.87	1.13	ZDT617TR-ND	1,000	705.50
17.5	50	5	20	300	5	50	300	1	2	ZDT1048CT-ND‡	3.48	2.61	1.57	ZDT1048TR-ND‡	1,000	986.00
25	35	2	6	500	2	200	75	2	2	ZDT649CT-ND	2.49	1.87	1.13	ZDT649TR-ND	1,000	705.50
50	50	2	6	200	1	10	200	1	2	ZDT619CT-ND	2.49	1.87	1.13	ZDT619TR-ND	1,000	705.50
45	45	2	6	500	1	5	400	1	2	ZDT690CT-ND	2.49	1.87	1.13	ZDT690TR-ND	1,000	705.50
60	80	2	6	500	2	200	100	1	2	ZDT651CT-ND	2.49	1.87	1.13	ZDT651TR-ND	1,000	705.50
120	140	1	4	1500	1	1	2000	1	5	ZDT605CT-ND*	2.49	1.87	1.13	ZDT605TR-ND*	1,000	705.50
Dual PNP Transistors																
-12	-12	-2.5	-10	-220	-2.5	50	180	-2.5	-2	ZDT717CT-ND	2.49	1.87	1.13	ZDT717TR-ND	1,000	705.50
-400	-400	-0.5	-1	-0.5	-0.1	-10	50	-0.1	-5	ZDT758CT-ND	3.00	2.50	1.50	—	—	
NPN/PNP Transistors Combinations																
20 -20	20 -20	2 -1.5	6 -6	200 -220	2.5 -1.5	50 -50	200 150	2 -2	2 -2	ZDT6718CT-ND	2.49	1.87	1.13	ZDT6718TR-ND	1,000	705.50
45 -40	45 -50	2 -2	6 -6	500 -450	1 -1	5 -10	150 150	2 -2	2 -2	ZDT6790CT-ND‡	2.49	1.87	1.13	ZDT6790TR-ND‡	1,000	705.50
60 -60	80 -80	2 -2	4 -4	1200 -1200	2 -2	2 -2	2000 2000	2 -2	3 -3	ZDT6702CT-ND*	2.49	1.87	1.13	ZDT6702TR-ND*	1,000	705.50
60 -60	80 -80	1 -1	6 -2	500 -600	1 -1	100 -100	100 100	0.5 0.5	5 5	ZXTD4591E6CT-ND†	1.20	.90	.60	ZXTD4591E6TR-ND	2,500	300.00/M
120 -120	140 -140	1 -1	4 -4	1500 1300	1 -1	1 -1	2000 3000	1 -1	5 -5	ZDT6705CT-ND*	2.49	1.87	1.13	ZDT6705TR-ND*	1,000	705.50
300 -300	300 -300	0.5 -0.5	1 -1	500 -500	0.1 -0.1	10 -10	50 50	0.1 -0.1	5 -5	ZDT6757CT-ND	2.49	1.87	1.13	ZDT6757TR-ND	1,000	705.50

* Darlington † SOT23-6 ‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

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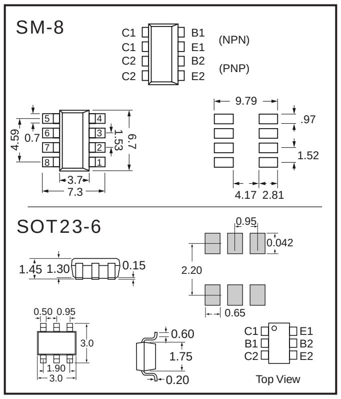
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

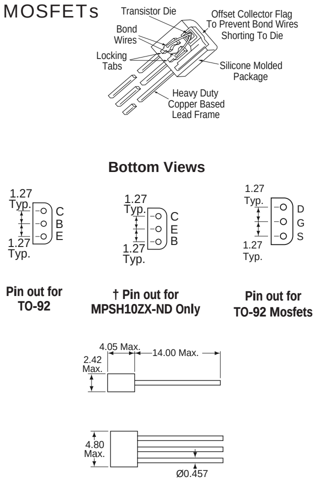


ZETEX MOSFETs — Super E-Line, Modified TO-92 Package

Type	BV_{DSS} (V)	I_D (mA)	I_{DM} (A)	$V_{GS(th)}$ (V) Min.	$V_{GS(th)}$ at Max.	$V_{GS(th)}$ I_D (mA)	$R_{DS(on)}$ (Ω) Max. @	$R_{DS(on)}$ I_D (mA)	$R_{DS(on)}$ V_{GS} (V)	P_D (W)	Digi-Key Part No.	Price Each 1	10	100	1,000
MOSFETs — TO-92															
N-Channel	450	90	0.6	1.0	3.0	1	50	100	10	0.7	ZVN0545A-ND‡	2.76	2.07	1.25	.79
	350	90	0.8	0.5	1.5	1	40	50	3	0.7	ZVNL535A-ND	2.07	1.56	.94	.59
	240	260	1	0.8	1.8	1	6	100	2.5	—	ZVN4424A-ND‡	1.68	1.26	.76	.48
	200	120	2	—	—	—	23	25	2.6	0.5	BS107P-ND	1.08	.81	.49	.31
	200	180	2	0.5	1.5	1	10	125	3	0.7	ZVNL120A-ND	1.38	1.04	.63	.40
	100	320	6	0.8	2.4	1	4	1000	10	0.7	ZVN2110A-ND‡	1.02	.77	.46	.29
	100	200	2	0.8	2.4	1	10	500	10	0.625	ZVN3310A-ND	.75	.57	.38	.25
	100	900	12	1.0	3.0	1	0.65	1500	5	0.85	ZVN4310A-ND	2.10	1.58	.95	.60
	100	450	6	0.8	2.4	1	1.8	500	5	0.7	ZVN4210A-ND‡	1.26	.95	.57	.36
	100	320	6	0.75	1.5	1	4.5	250	5	0.7	ZVNL110A-ND	1.02	.77	.46	.29
	60	600	8	1.3	3.0	1	1.5	500	5	0.7	ZVN4206A-ND‡	1.02	.77	.46	.29
	60	450	8	0.8	2.4	1	2	1000	10	0.7	ZVN2106A-ND	1.02	.77	.46	.29
	60	270	3	0.8	2.4	1	5	500	10	0.625	ZVN3306A-ND	.75	.57	.38	.25
	60	270	3	0.8	2.5	1	7.5	200	5	0.625	VN10LP-ND	.75	.57	.38	.25
	60	270	3	0.8	3.0	1	5	200	10	0.625	BS170P-ND	.75	.57	.38	.25
	60	1100	20	1.3	3.0	1	0.45	1500	5	0.85	ZVN4306A-ND	2.10	1.58	.95	.60
P-Channel	-450	-45	-0.4	-1.5	-4.5	-1	150	-50	-10	0.7	ZVP0545A-ND‡	3.09	2.32	1.40	.88
	-240	-200	-1	-0.8	-2.5	-1	15	-100	-3.5	—	ZVP4424A-ND‡	1.74	1.31	.79	.50
	-200	-120	-1.2	-1.5	-4.5	-1	25	-150	-10	0.7	ZVP2120A-ND	1.38	1.04	.63	.40
	-100	-230	-3	-1.5	-4.5	-1	8	-375	-10	0.7	ZVP2110A-ND	1.23	.93	.56	.35
	-100	-140	-1.2	-1.5	-4.5	-1	20	-150	-10	0.625	ZVP3310A-ND	.99	.75	.45	.29
	-60	-280	-4	-1.5	-4.5	-1	5	-500	-10	0.7	ZVP2106A-ND	1.23	.93	.56	.35
	-60	-160	-1.6	-1.5	-4.5	-1	14	-200	-10	0.625	ZVP3306A-ND	.99	.75	.45	.29
	-50	-175	-0.52	-0.8	-2.0	-1	10	-100	-5	0.625	ZVP4105A-ND	1.23	.93	.56	.35
	-45	-230	-3	-1.0	-3.5	-1	14	-200	-10	0.7	BS250P-ND	.69	.52	.35	.23
Avalanche Rated (Relay/Solenoid Drivers)															
N-Channel	60	600	8	1.3	3	1	1.5	500	5	0.7	ZVN4206AV-ND‡	1.50	1.13	.68	.43
	60	1100	20	1.3	3	1	0.45	1500	5	—	ZVN4306AV-ND‡	2.10	1.58	.95	.60

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

Super E-Line — TO-92 MOSFETs

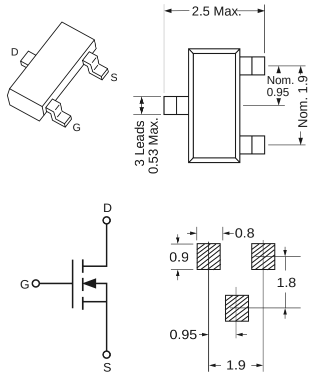


MOSFETs — SOT-23 Package

Type	BV_{DSS} (V)	I_D (mA)	I_{DM} (A)	P_D (mW)	$V_{GS(th)}$ (V) Min.	$V_{GS(th)}$ at Max.	$V_{GS(th)}$ I_D (mA)	$R_{DS(on)}$ (Ω) Max. @	$R_{DS(on)}$ I_D (mA)	$R_{DS(on)}$ V_{GS} (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 3,000
Small Signal MOSFETs (SOTFETs) — 350mW															
N-Channel	200	60	1	300	1.0	3	1	25	100	10	ZVN3320FCT-ND	1.14	.86	ZVN3320FTR-ND	285.00/M
	100	170	.68	360	0.8	2.8	1	6	100	10	BSS123CT-ND	.60	.45	BSS123TR-ND	150.00/M
	100	100	2	330	0.8	2.4	1	10	500	10	ZVN3310FCT-ND	.93	.70	ZVN3310FTR-ND	232.50/M
	60	150	3	330	0.8	2.4	1	5	500	10	ZVN3306FCT-ND	.93	.70	ZVN3306FTR-ND	232.50/M
	60	200	3	330	1.3	3	1	2.5	500	10	ZVN4106FCT-ND‡	1.02	.77	ZVN4106FTR-ND‡	255.00/M
	60	150	3	330	0.8	2.5	1	7.5	200	5	VN10LFCT-ND	1.02	.77	VN10LFTR-ND	255.00/M
	60	115	0.8	300	1.0	2.5	250µA	7.5	500	10	2N7002CT-ND‡	.81	.61	2N7002TR-ND ‡	243.00/M
	60	150	3	330	0.8	3	1	5	200	10	BS170FCT-ND	1.02	.77	BS170FTR-ND	255.00/M
	60	1	4	625	1.0	3	250µA	0.4	250µA	3	ZXMN6A07FCT-ND	.72	.54	ZXMN6A07FTR-ND	180.00/M
	50	200	0.8	360	0.5	1.5	1	3.5	200	5	BSS138ZXCT-ND‡	.60	.45	BSS138ZXTR-ND‡	150.00/M
	20	1.7	—	0.7	—	—	0.3	—	2.5	0.8	ZXMN2A01FCT-ND	.63	.48	ZXMN2A01FTR-ND	157.50/M
P-Channel	-100	-75	-1.2	330	-1.5	-3.5	-1	20	-150	-10	ZVP3310FCT-ND	1.11	.84	ZVP3310FTR-ND	277.50/M
	-60	-90	-1.6	330	-1.5	-3.5	-1	14	-200	-10	ZVP3306FCT-ND	1.11	.84	ZVP3306FTR-ND	277.50/M
	-50	-130	-0.52	360	-0.8	-2.0	-1	10	-100	-5	BSS84ZXCT-ND	.60	.45	BSS84ZXTR-ND	180.00/M
	-45	-90	-1.6	330	-1	-3.5	-1	14	-200	-10	BS250FCT-ND	1.05	.79	BS250FTR-ND	262.50/M

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

SOT-23 MOSFETs (SOTFETs™)



ZETEX Low Voltage MOSFETs — SOT-23 and SC59-6 Packages

Type	V_{DS} (V)	I_D (A)	$R_{DS(ON)}$ 2.7V	Max. Ohms @V_{GS} 4.5V	10V	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
SOT-23 Package											
N-Channel	20	1.7	0.35	0.25	—	ZXM61N02FCT-ND	.72	.54	.36	ZXM61N02FTR-ND	240.00/M
	30	1.2	—	0.40	0.25	ZXM61N03FCT-ND	.72	.54	.36	ZXM61N03FTR-ND	240.00/M
	30	1.8		0.18	0.12	ZXMN3A01FCT-ND	.63	.48	.32	ZXMN3A01FTR-ND	157.50/M
	100	0.6	—	1.3	1.2	ZXMN10A07FCT-ND	.72	.54	.36	ZXMN10A07FTR-ND	180.00/M
P-Channel	-20	-0.8	0.90	0.60	—	ZXM61P02FCT-ND	.75	.57	.38	ZXM61P02FTR-ND	250.00/M
	-30	-0.8	—	1.00	0.60	ZXM61P03FCT-ND	.75	.57	.38	ZXM61P03FTR-ND	250.00/M
SC59-6 Package											
N-Channel	20	3.2	0.17	0.10	—	ZXM62N02E6CT-ND	1.02	.77	.46	ZXM62N02E6TR-ND	255.00/M
	30	3.2	—	0.20	0.10	ZXM62N03E6CT-ND	1.02	.77	.46	ZXM62N03E6TR-ND	255.00/M
P-Channel	-20	-1.6	0.375	0.20	—	ZXM62P02E6CT-ND	1.08	.81	.49	ZXM62P02E6TR-ND	270.00/M
	-30	-1.6	—	0.40	0.20	ZXM62P03E6CT-ND	1.08	.81	.49	ZXM62P03E6TR-ND	270.00/M

MOSFETs — Dual N-Channel SM-8

B_{VDSS} (V)	I_D (A)	I_{DM} (A)	$V_{GS(th)}$ (V) min.	@ max.	I_D mA	$R_{DS(on)}$ (Ω) max.	V_{GS} (V)	I_D (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	5,000
Dual N-Channel MOSFETs															
60	1	8	1.3	3	1	1	10	1.5	ZDM4206NCT-ND	2.88	2.16	1.30	ZDM4206NTR-ND	816.00	624.00/M
60	1.3	15	1.3	3	1	0.33	10	3	ZDM4306NCT-ND	4.35	3.27	1.96	ZDM4306NTR-ND	1232.50	942.50/M

Additional Information included in Zetex Application Handbook, part number ST321-ND .

MOSFETs — 8-MSOP Package

(P_D = 800mW single chip device;
P_D = 625mW for dual chip devices)

Type	V_{DS} (V)	I_D (A)	$R_{DS(on)}$ 2.7V	Max. Ohms @ V_{GS}= 4.5V	10V	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
8-MSOP MOSFETS												
N-Channel	20	5.7	0.05	0.035	—	ZXM64N02XCT-ND	1.98	1.49	.90	ZXM64N02XTR-ND	1,000	561.00
	20	5.8	30	0.7	—	ZXMN2A02X8CT-ND	2.40	1.80	1.20	ZXMN2A02X8TR-ND	1,000	680.00
	30	6.7	—	0.035	0.025	ZXMN3A02X8CT-ND	2.40	1.80	1.20	ZXMN3A02X8TR-ND	1,000	680.00
	30	5.7	—	0.06	0.035	ZXM64N03XCT-ND	1.98	1.49	.90	ZXM64N03XTR-ND	1,000	561.00
P-Channel	-20	-3.6	0.13	0.09	—	ZXM64P02XCT-ND	2.10	1.58	.95	ZXM64P02XTR-ND	1,000	595.00
	-30	-3.6	—	0.15	0.09	ZXM64P03XCT-ND	2.40	1.80	1.08	ZXM64P03XTR-ND	1,000	595.00
Dual N-Channel	20	2.4	0.20	0.135	—	ZXMD63N02XCT-ND	2.40	1.80	1.08	ZXMD63N02XTR-ND	1,000	680.00
	30	2.4	—	0.222	0.135	ZXMD63N03XCT-ND	2.40	1.80	1.08	ZXMD63N03XTR-ND	1,000	680.00
Dual P-Channel	-20	-1.7	0.40	0.27	—	ZXMD63P02XCT-ND	2.52	1.89	1.14	ZXMD63P02XTR-ND	1,000	714.00
	-30	-1.7	—	0.45	0.27	ZXMD63P03XCT-ND	2.52	1.89	1.14	ZXMD63P03XTR-ND	1,000	714.00
N & P Channel Complimentary	20	1.7	0.20	0.135	—	ZXMD63C02XCT-ND	2.28	1.71	1.03	ZXMD63C02XTR-ND	1,000	646.00
	-20	-1.2	0.40	0.27	—							
	30	1.7	—	0.222	0.135	ZXMD63C03XCT-ND	2.28	1.71	1.03	ZXMD63C03XTR-ND	1,000	646.00
	-20	-1.2	—	0.45	0.27							

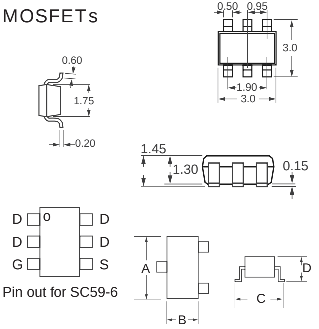
MOSFETs — SOT-223 Package

Type	B_{VDSS} (V)	I_D (A)	I_{DM} (A)	$V_{GS\ (th)}$ V at I_D Min.	Max.	(mA)	$R_{DS\ (on)}$ Ω Max.	I_D (mA)	V_{GS} (V)	PD (W)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 1,000
MOSFET Transistors															
N-Channel	450	0.14	0.6	1.0	3.0	1.0	50	0.1	10	2.0	ZVN0545GCT-ND	1.50	1.13	ZVN0545GTR-ND	425.00
	250	0.31	1.44	0.8	1.8	1	14.0	360	4.5	2.0	ZVN4525GCT-ND	.96	.72	ZVN4525GTR-ND	272.00
	240	0.5	1.0	0.8	1.8	1.0	6.0	0.1	2.5	2.5	ZVN4424GCT-ND	1.74	1.31	ZVN4424GTR-ND	493.00
	200	0.32	2.0	1.0	3.0	1.0	10	0.25	10	2.0	ZVN2120GCT-ND	1.50	1.13	ZVN2120GTR-ND	425.00
	200	0.32	2.0	0.5	1.5	1.0	10	0.125	3	2.0	ZVNL120GCT-ND	1.50	1.13	ZVNL120GTR-ND	425.00
	100	1	—	2	4	—	0.65	—	4.5	2.0	ZXMN10A11GCT-ND	1.20	.90	ZXMN10A11GTR-ND	340.00
	100	0.6	6.0	0.75	1.5	1.0	4.5	0.25	5	2.0	ZVNL110GCT-ND	1.50	1.13	ZVNL110GTR-ND	425.00
	100	0.5	6.0	0.8	2.4	1.0	4.0	1.0	10	2.0	ZVN2110GCT-ND	1.50	1.13	ZVN2110GTR-ND	425.00
	60	2.4	—	1	3	—	0.28	—	4.5	2	ZXMN6A11GCT-ND	1.20	.90	ZXMN6A11GTR-ND	340.00
	60	1.0	8.0	1.3	3.0	1.0	1.0	1.5	10	2.0	ZVN4206GCT-ND	1.80	1.35	ZVN4206GTR-ND	510.00
	60	0.7	8.0	0.8	2.4	1.0	2.0	1.0	10	2.0	ZVN2106GCT-ND	1.50	1.13	ZVN2106GTR-ND	425.00
P-Channel	-450	-0.075	-0.4	-1.5	-4.5	-1.0	150	-50	-10	2.0	ZVP0545GCT-ND	1.80	1.35	ZVP0545GTR-ND	510.00
	-250	-0.265	-1.0	-0.8	-2.0	1.0	14.0	200	-10	2.0	ZVP4525GCT-ND	.96	.72	ZVP4525GTR-ND	272.00
	-240	-1.0	-1.0	-0.7	-2.0	-1.0	9.0	-200	-10	2.5	ZVP4424GCT-ND	1.80	1.35	ZVP4424GTR-ND	510.00
	-100	-0.35	-3.0	-1.5	-3.5	-1.0	8.0	-0.375	-10	2.0	ZVP2110GCT-ND	1.80	1.35	ZVP2110GTR-ND	510.00
	-60	-0.45	-4.0	-1.5	-3.5	-1.0	5.0	-0.5	-10	2.0	ZVP2106GCT-ND	1.80	1.35	ZVP2106GTR-ND	510.00
Avalanche Rated MOSFETs															
N-Channel	60	1.0	8.0	1.3	3.0	1.0	1.0	1.5	10	2.0	ZVN4206GVCT-ND	1.89	1.42	ZVN4206GVTR-ND	535.50
	60	2.1	20	1.3	3.0	1.0	0.33	3.0	10	3.0	ZVN4306GVCT-ND	2.10	1.58	ZVN4306GVTR-ND	595.00
MOSFET Transistors — Low RDS (on)															
N-Channel	100	1.7	12	1.0	3.0	1.0	0.50	3.0	10	3.0	ZVN4310GCT-ND	2.46	1.85	ZVN4310GTR-ND	697.00
	60	2.1	20	1.3	3.0	1.0	0.33	3.0	10	3.0	ZVN4306GCT-ND	2.46	1.85	ZVN4306GTR-ND	697.00

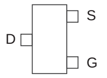
ZETEX *Now QS9000 Accredited!*

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

LOW VOLTAGE MOSFETs



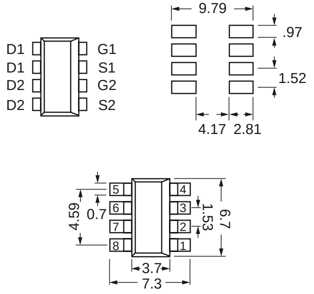
Pin out for SC59-6



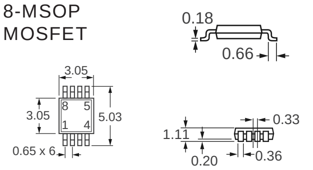
Pin out for SOT-23

Package	Dimension (mm) A	B	C	D
SOT-23	3	1.46	2.5	1.1
SC59-6	3	1.75	3	1.45

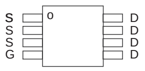
SM-8 MOSFET



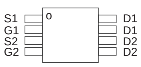
8-MSOP MOSFET



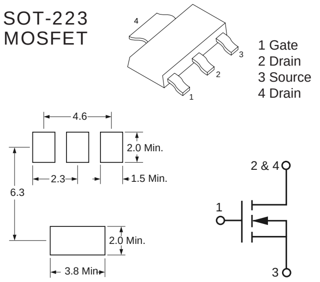
8-MSOP (Single) Pin out



8-MSOP (Dual) Pin out



SOT-223 MOSFET



ZETEX MOSFETs

Type	BV_{DSS} (V)	I_D (A)	I_{DM} (A)	$V_{GS(th)}$ V at I_D Min.	Max.	(mA)	$R_{DS(on)}$ Ω Max.	I_D (mA)	V_{GS} (V)	PD (W)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
SO-8 Package																	
N-Channel	60	7.6	—	1	3	—	0.03	—	4.5	2.5	ZXMN6A10N8CT-ND	8.40	6.30	4.20	ZXMN6A10N8TR-ND	500	1470.00
	60	4.4	—	1	3	—	0.075	—	4.5	2	ZXMN6A09DN8CT-ND*	7.20	5.40	3.60	ZXMN6A09DN8TR-ND	500	1260.00
	30	4.8	—	1	—	—	0.075	—	4.5	2	ZXMN3A06DN8CT-ND*	3.30	2.48	1.65	ZXMN3A06DN8TR-ND	500	550.00
	30	6.8	—	1	—	—	0.035	—	4.5	2	ZXMN3A04DN8CT-ND*	5.40	4.05	2.70	ZXMN3A04DN8TR-ND	500	945.00
	30	7.6	—	1	—	—	0.025	—	4.5	2.5	ZXMN3B04N8CT-ND	5.40	4.05	2.70	ZXMN3B04N8TR-ND	500	945.00
	20	12	—	0.7	—	—	0.015	—	2.5	2.5	ZXMN2A05N8CT-ND	7.80	5.85	3.90	ZXMN2A05N8TR-ND	500	1365.00
	30	12	—	1	—	—	0.012	—	4.5	2.5	ZXMN3A05N8CT-ND	7.80	5.85	3.90	ZXMN3A05N8TR-ND	500	1365.00
	20	6	—	0.7	—	—	0.045	—	2.5	2	ZXMN2A04DN8CT-ND*	5.40	4.05	2.70	ZXMN2A04DN8TR-ND	500	945.00
P-Channel	-20	-7.6	—	-0.7	—	—	0.05	—	-2.5	2.5	ZXM66P02N8CT-ND	3.60	2.70	1.80	ZXM66P02N8TR-ND	500	630.00
	-20	-4.4	—	-0.7	—	—	0.15	—	-2.5	2	ZXMD65P02N8CT-ND*	3.30	2.48	1.65	ZXMD65P02N8TR-ND	500	577.50
	-30	-7.6	—	-1	—	—	0.04	—	-4.5	2.5	ZXM66P03N8CT-ND	3.60	2.70	1.80	ZXM66P03N8TR-ND	500	630.00
	-30	-4.4	—	-1	—	—	0.09	—	-4.5	2	ZXMD65P03N8CT-ND*	3.30	2.48	1.65	ZXMD65P03N8TR-ND	500	577.50
	-60	-2.3	—	-1	—	—	0.3	2	-4.5	2	ZXMN6A11DN8CT-ND*	2.40	1.80	1.20	ZXMN6A11DN8TR-ND	500	420.00
SOT-89 Package																	
P-Channel	-250	-0.2	-1	-0.8	-2	1	14	-200	-10	2	ZVP4525ZCT-ND	1.14	.86	.57	ZVP4525ZTR-ND	1,000	323.00
N-Channel	250	0.24	1.44	0.8	1.8	1	9	360	4.5	1.2	ZVN4525ZCT-ND	.96	.72	.48	ZVN4525ZTR-ND	1,000	272.00
	60	1.2	—	1	3	—	0.55	—	4.5	1	ZXMN6A07ZCT-ND	.90	.68	.45	ZXMN6A07ZTR-ND	1,000	255.00
	100	0.7	—	2	4	—	1.3	—	4.5	1	ZXMN10A07ZCT-ND	.90	.68	.45	ZXMN10A07ZTR-ND	1,000	255.00
SOT23-6 Package																	
N-Channel	250	0.23	1.44	0.8	1.8	1	8.5	500	10	1.1	ZVN4525E6CT-ND	1.14	.86	.57	ZVN4525E6TR-ND	3,000	285.00/M
	30	4.2	—	1	—	—	0.075	—	4.5	1.7	ZXMN3A03E6CT-ND	1.26	.95	.63	ZXMN3A03E6TR-ND	3,000	315.00/M
	20	2.5	—	0.7	—	—	0.3	—	2.5	1.7	ZXMN2A01E6CT-ND	.96	.72	.48	ZXMN2A01E6TR-ND	3,000	240.00/M
	100	1.5	—	2	4	—	0.44	—	4.5	1.7	ZXMN10A08E6CT-ND	1.44	1.08	.72	ZXMN10A08E6TR-ND	3,000	360.00/M
	60	2.5	—	1	3	—	0.2	—	4.5	1.7	ZXMN6A08E6CT-ND	1.44	1.08	.72	ZXMN6A08E6TR-ND	3,000	360.00/M
	30	2.8	—	1	—	—	0.18	—	4.5	1.7	ZXMN3A01E6CT-ND	.96	.72	.48	ZXMN3A01E6TR-ND	3,000	240.00/M
	20	4.5	—	—	0.12	—	.11	—	2.5	—	ZXMN2A03E6CT-ND	1.26	.95	.63	ZXMN2A03E6TR-ND	3,000	315.00/M
P-Channel	-250	-.197	-1	-0.8	-2.0	1	14	-200	-10	1.1	ZVP4525E6CT-ND	.96	.72	.48	ZVP4525E6TR-ND	3,000	240.00/M

* Dual Mosfet

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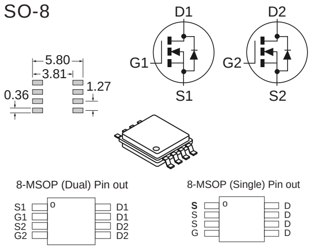
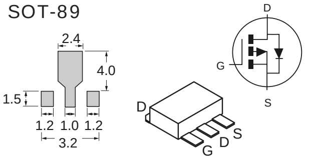
ST321-ND	Zetex Application Handbook	**$4.98**

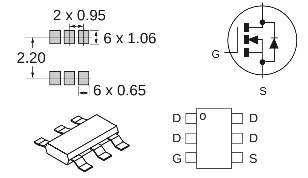
SO-8



SOT-89



SOT-23-6

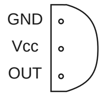


ZETEX Voltage Supply Monitors

Typical V cc (V)	Threshold Voltage (V)	Typical Hysteresis (mV)	Max. Output Sink Current (mA)	Input Voltage Range (V)	Max. Quiescent Current (µA)	Digi-Key Part No.	Price Each 1	10	100	1,000
Voltage Supply Monitors — TO-92										
5	4.6	20	60	1 to 6.5	200	ZM33064CL-ND	1.80	1.35	.81	.51
5	4.3	20	60	1 to 6.5	200	ZM33164CL-ND	1.62	1.22	.73	.46
3	2.63	20	60	1 to 6.5	200	ZSM300C-ND	1.62	1.22	.73	.46
3	2.68	20	60	1 to 10	190	ZM331643C-ND	1.62	1.22	.73	.46
3.3	3.08	20	60	1 to 6.5	200	ZSM330C-ND	1.62	1.22	.73	.46
5	4.6	20	60	1 to 6.5	200	ZSM560C-ND	1.62	1.22	.73	.46
5	4.6	20	60	1 to 7.0	200	ZSM561C-ND	1.62	1.22	.73	.46
3.3	3.1	20	50	-1 to 10	180	ZSH330C-ND	1.62	1.22	.73	.46
5	4.6	20	50	-1 to 10	180	ZSH560C-ND	1.62	1.22	.73	.46

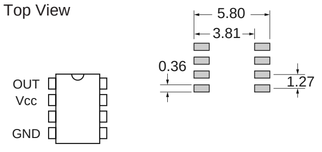
Typical V cc (V)	Thresh-hold Voltage (V)	Typical Hysteresis (mV)	Max. Output Sink Current (mA)	Input Voltage Range (V)	Max. Quiescent Current (µA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000
Voltage Supply Monitors — SO-8												
5	4.6	20	60	1 to 6.5	200	ZM33064N8CT-ND	2.97	2.23	1.34	ZM33064N8TR-ND	519.75	841.50
5	4.3	20	60	1 to 6.5	200	ZM33164N8CT-ND	2.49	1.87	1.13	ZM33164N8TR-ND	435.75	705.50
3	2.68	20	60	1 to 10	190	ZM331643N8CT-ND	2.49	1.87	1.13	ZM331643N8TR-ND	435.75	705.50
3	2.63	20	60	1 to 6.5	200	ZSM300N8CT-ND	2.49	1.87	1.13	ZSM300N8TR-ND	435.75	705.50
3.3	3.08	20	60	1 to 6.5	200	ZSM330N8CT-ND	2.49	1.87	1.13	ZSM330N8TR-ND	435.75	705.50
5	4.6	20	60	1 to 6.5	200	ZSM560N8CT-ND	2.49	1.87	1.13	ZSM560N8TR-ND	435.75	705.50
3.3	3.1	20	50	-1 to 10	180	ZSH330N8CT-ND	2.49	1.87	1.13	ZSH330N8TR-ND	435.75	705.50
5	4.6	20	50	-1 to 10	180	ZSH560N8CT-ND	2.49	1.87	1.13	ZSH560N8TR-ND	435.75	705.50
Voltage Supply Monitors — SOT-223												
5	4.6	20	60	1 to 6.5	200	ZM33064GCT-ND	2.28	1.71	1.03	ZM33064GTR-ND	—	646.00
5	4.3	20	60	1 to 6.5	200	ZM33164GCT-ND	1.92	1.44	.87	ZM33164GTR-ND	—	544.00
3	2.68	20	60	1 to 10	190	ZM331643GCT-ND	1.92	1.44	.87	ZM331643GTR-ND	—	544.00
3	2.63	20	60	1 to 6.5	200	ZSM300GCT-ND	1.92	1.44	.87	ZSM300GTR-ND	—	544.00
3.3	3.08	20	60	1 to 6.5	200	ZSM330GCT-ND	1.92	1.44	.87	ZSM330GTR-ND	—	544.00
5	4.6	20	60	1 to 6.5	200	ZSM560GCT-ND	1.92	1.44	.87	ZSM560GTR-ND	—	544.00
5	4.6	20	60	1 to 7.0	200	ZSM561GCT-ND	1.92	1.44	.87	ZSM561GTR-ND	—	544.00
3.3	3.1	20	50	-1 to 10	180	ZSH330GCT-ND	1.92	1.44	.87	ZSH330GTR-ND	—	544.00
5	4.6	20	50	-1 to 10	180	ZSH560GCT-ND	1.92	1.44	.87	ZSH560GTR-ND	—	544.00

TO-92
Pkg. Suffix C
Bottom View



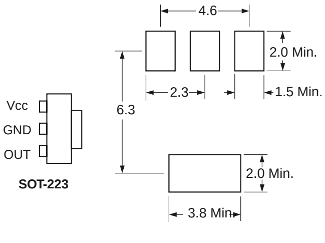
TO-92

SO-8
Pkg. Suffix N8
Top View



SO-8

SOT-223
Pkg. Suffix G
Top View



SOT-223

ZETEX Voltage Regulators

ZETEX *Now QS9000 Accredited!*

Output Voltage (V)	Max. Output Current (mA)	Ptot (W)	Max Line Regulation (mV)	Max Load Regulation (mV)	Digi-Key Part No.	Price Each 1	10	100	1,000
200mA ZR78L Series Local Voltage Regulators — TO-92									
4.85	200	0.6	40	25	ZR78L048C-ND	1.08	.81	.49	.31
8.5	200	0.6	40	30	ZR78L085C-ND	1.08	.81	.49	.31
9.0	200	0.6	40	30	ZR78L09C-ND	1.08	.81	.49	.31

Output Voltage (V)	Max. Output Current (mA)	Ptot (W)	Max Line Regulation (mV)	Max Load Regulation (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
200mA ZR78L Series Local Voltage Regulators — SOT-223										
2.85	200	2	40	25	ZR78L028GCT-ND	2.22	1.67	1.00	ZR78L028GTR-ND	629.00
3.0	200	2	40	25	ZR78L03GCT-ND	2.22	1.67	1.00	ZR78L03GTR-ND	629.00
3.3	200	2	30	25	ZR78L033GCT-ND	2.22	1.67	1.00	ZR78L033GTR-ND	629.00
4.0	200	2	40	25	ZR78L04GCT-ND	2.22	1.67	1.00	ZR78L04GTR-ND	629.00
4.85	200	2	40	25	ZR78L048GCT-ND	2.22	1.67	1.00	ZR78L048GTR-ND	629.00
5.0	200	2	40	25	ZR78L05GCT-ND	2.22	1.67	1.00	ZR78L05GTR-ND	629.00
5.2	200	2	40	25	ZR78L052GCT-ND	2.22	1.67	1.00	ZR78L052GTR-ND	629.00
5.7	200	2	40	30	ZR78L057GCT-ND	2.22	1.67	1.00	ZR78L057GTR-ND	629.00
6.0	200	2	40	30	ZR78L06GCT-ND	2.22	1.67	1.00	ZR78L06GTR-ND	629.00
7.0	200	2	40	25	ZR78L07GCT-ND	2.22	1.67	1.00	ZR78L07GTR-ND	629.00
8.0	200	2	40	30	ZR78L08GCT-ND	2.22	1.67	1.00	ZR78L08GTR-ND	629.00
8.5	200	2	40	30	ZR78L085GCT-ND	2.22	1.67	1.00	ZR78L085GTR-ND	629.00
9.0	200	2	40	30	ZR78L09GCT-ND	2.22	1.67	1.00	ZR78L09GTR-ND	629.00
10.0	200	2	40	30	ZR78L10GCT-ND	2.22	1.67	1.00	ZR78L10GTR-ND	629.00
12.0	200	2	40	30	ZR78L12GCT-ND	2.22	1.67	1.00	ZR78L12GTR-ND	629.00

Output Voltage (V)	Max. Output Current (mA)	Ptot (W)	Max. Line Regulation (mV)	Max. Load Regulation (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
200mA ZSR Series Local Voltage Regulators - Sot-223										
3.3	200	2.0	30	25	ZSR330GCT-ND	1.83	1.38	.83	ZSR330GTR-ND	518.50
5.0	200	2.0	40	25	ZSR500GCT-ND	1.83	1.38	.83	ZSR500GTR-ND	518.50
6.0	200	2.0	40	30	ZSR600GCT-ND	1.83	1.38	.83	ZSR600GTR-ND	518.50
8.0	200	2.0	40	30	ZSR800GCT-ND	1.83	1.38	.83	ZSR800GTR-ND	518.50
10.0	200	2.0	40	30	ZSR1000GCT-ND	1.83	1.38	.83	ZSR1000GTR-ND	518.50

Output Voltage (V)	Max. Output Current (mA)	Ptot (W)	Max. Line Regulation (mV)	Max. Load Regulation (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000
200mA ZSR Series Local Voltage Regulators — SO-8											
2.85	200	0.78	40	25	ZSR285N8CT-ND	2.49	1.87	1.13	ZSR285N8TR-ND	435.75	705.50
3.0	200	0.78	40	25	ZSR300N8CT-ND	2.49	1.87	1.13	ZSR300N8TR-ND	435.75	705.50
3.3	200	0.78	30	25	ZSR330N8CT-ND	2.49	1.87	1.13	ZSR330N8TR-ND	435.75	705.50
4.0	200	0.78	40	25	ZSR400N8CT-ND	2.49	1.87	1.13	ZSR400N8TR-ND	435.75	705.50
4.85	200	0.78	40	25	ZSR485N8CT-ND	2.49	1.87	1.13	ZSR485N8TR-ND	—	705.50
5.0	200	0.78	40	25	ZSR500N8CT-ND	2.49	1.87	1.13	ZSR500N8TR-ND	435.75	705.50
5.2	200	0.78	40	25	ZSR520N8CT-ND	2.49	1.87	1.13	ZSR520N8TR-ND	—	705.50
5.7	200	0.78	40	30	ZSR570N8CT-ND	2.49	1.87	1.13	ZSR570N8TR-ND	435.75	705.50
6.0	200	0.78	40	30	ZSR600N8CT-ND	2.49	1.87	1.13	ZSR600N8TR-ND	435.75	705.50
7.0	200	0.78	40	25	ZSR700N8CT-ND	2.49	1.87	1.13	ZSR700N8TR-ND	—	705.50
8.0	200	0.78	40	30	ZSR800N8CT-ND	2.49	1.87	1.13	ZSR800N8TR-ND	435.75	705.50
8.5	200	0.78	40	30	ZSR850N8CT-ND	2.49	1.87	1.13	ZSR850N8TR-ND	—	705.50
9.0	200	0.78	40	30	ZSR900N8CT-ND	2.49	1.87	1.13	ZSR900N8TR-ND	435.75	705.50
10.0	200	0.78	40	30	ZSR1000N8CT-ND	2.49	1.87	1.13	ZSR1000N8TR-ND	435.75	705.50
12.0	200	0.78	40	30	ZSR1200N8CT-ND	2.49	1.87	1.13	ZSR1200N8TR-ND	—	705.50

Shunt Voltage Regulators

Reference Voltage (V)	Output Voltage (V) Min.	Max.	Min. Operating Current (µA)	Tol. (%)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Shunt Voltage Regulators — SOT-23										
2.5	2.5	20	50	2	ZR431FCT-ND‡	.78	.59	.36	ZR431FTR-ND‡	195.00/M
2.5	2.5	20	50	1	ZR431F01CT-ND‡	1.08	.81	.49	ZR431F01TR-ND‡	270.00/M
2.5	2.5	20	50	0.5	ZR431F005TACT-ND *NEW!*	1.32	.99	.60	ZR431F005TATR-ND *NEW!*	330.00/M
Shunt Voltage Regulators — SOT-23										
1.24	1.24	15	30	2.5	ZR2431F02CT-ND	1.32	.99	.60	ZR2431F02TR-ND	330.00/M
1.24	1.24	15	30	1	ZR2431F01CT-ND	1.74	1.31	.79	ZR2431F01TR-ND	435.00/M
Improved Stability Low Voltage Shunt Regulators — SOT-23										
1.24	1.24	10	30	1	ZR431LF01CT-ND	1.20	.90	.54	ZR431LF01TR-ND	300.00/M
1.24	1.24	10	30	2.5	ZR431LF02CT-ND	.87	.66	.40	ZR431LF02TR-ND	217.50/M

Reference Voltage (V)	Output Voltage (V) Min.	Max.	Min. Operating Current (µA)	Tol. %	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500
Shunt Voltage Regulators — SO-8										
2.5	2.5	20	50	2	ZR431N8CT-ND	2.55	1.92	1.15	ZR431N8TR-ND	446.25
2.5	2.5	20	50	1	ZR431N801CT-ND	2.70	2.03	1.22	ZR431N801TR-ND	472.50
1.24	1.24	15	30	2.5	ZR2431N802CT-ND	2.61	1.96	1.18	ZR2431N802TR-ND	456.75
1.24	1.24	15	30	1	ZR2431N801CT-ND	2.79	2.10	1.26	ZR2431N801TR-ND	488.25

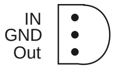
Reference Voltage (V)	Output Voltage (V) Min.	Max.	Min. Operating Current (µA)	Tolerance (%)	Digi-Key Part No.	Price Each 1	10	100
Shunt Voltage Regulators — TO-92								
2.5	2.5	20	50	2	ZR431C-ND‡	1.08	.81	.49
2.5	2.5	20	50	1	ZR431C01-ND‡	1.38	1.04	.63
1.24	1.24	15	30	2.5	ZR2431C02-ND	1.08	.81	.49
1.24	1.24	15	30	1	ZR2431C01-ND	1.47	1.11	.67
Improved Stability Low Voltage Shunt Regulators — TO-92								
1.24	1.24	10	30	1	ZR431LC01-ND	1.47	1.11	.67
1.24	1.24	10	30	2.5	ZR431LC02L-ND	1.08	.81	.49

‡ Additional Information included in Zetex Application Handbook, part number ST321-ND.

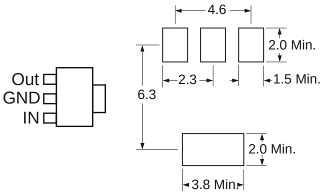
ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

Local Voltage Regulators

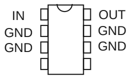
TO-92
Bottom View

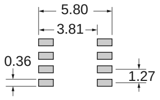


SOT-223
Top View



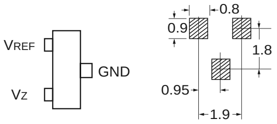
SO-8
Top View
Pkg. Suffix N8



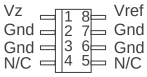


Shunt Voltage Regulators SC-70

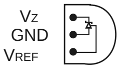
SOT-23
Top View



SO-8
Top View



TO-92
Bottom View



ZETEX Voltage Regulators and References

ZETEX Now QS9000 Accredited!

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

Micro Power Low Dropout Regulators

V Out (V)	Dropout (mV)@IL =50mA	Max. Load I(mA)	Shutdown I(µA)	Package	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Micro Power Low Dropout Regulators										
4.00	85	150	0.01	SOT23-5	ZXCL400E5TACT-ND *NEW!*	.39	.28	.22	ZXCL400E5TATR-ND *NEW!*	165.00/M
3.30	85	150	0.01	SOT23-5	ZXCL330E5CT-ND	.66	.50	.30	ZXCL330E5TR-ND	165.00/M
3.00	85	150	0.01	SOT23-5	ZXCL300E5CT-ND	.66	.50	.30	ZXCL300E5TR-ND	165.00/M
2.80	85	150	0.01	SOT23-5	ZXCL280E5CT-ND	.66	.50	.30	ZXCL280E5TR-ND	165.00/M
2.60	85	150	0.01	SOT23-5	ZXCL260E5CT-ND	.66	.50	.30	ZXCL260E5TR-ND	165.00/M
2.50	85	100	0.01	SOT23-5	ZXCL250E5TACT-ND *NEW!*	.39	.28	.22	ZXCL250E5TATR-ND *NEW!*	165.00/M
4.00	85	150	0.01	SC-70	ZXCL400H5TACT-ND *NEW!*	.39	.28	.22	ZXCL400H5TATR-ND *NEW!*	165.00/M
3.30	85	150	0.01	SC-70	ZXCL330H5CT-ND	.66	.50	.30	ZXCL330H5TR-ND	165.00/M
3.00	85	150	0.01	SC-70	ZXCL300H5CT-ND	.66	.50	.30	ZXCL300H5TR-ND	165.00/M
2.80	85	150	0.01	SC-70	ZXCL280H5CT-ND	.66	.50	.30	ZXCL280H5TR-ND	165.00/M
2.60	85	150	0.01	SC-70	ZXCL260H5CT-ND	.66	.50	.30	ZXCL260H5TR-ND	165.00/M
2.50	85	100	0.01	SC-70	ZXCL250H5TACT-ND *NEW!*	.39	.28	.22	ZXCL250H5TATR-ND *NEW!*	165.00/M

Ultra Low Dropout Regulators

V Out (V)	Dropout Voltage (mV)	I Max. (mA)	Shutdown Current (µA)	Max. Load Reg. (mV)	Max. Line Reg. (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
Ultra Low Dropout Regulators — SM-8											
3.3	35	300	11	52	78	ZLDO330T8CT-ND‡	3.30	2.48	1.49	ZLDO330T8TR-ND‡	935.00
4.85	35	300	11	69	119	ZLDO485T8CT-ND‡	3.30	2.48	1.49	ZLDO485T8TR-ND‡	935.00
5	35	300	11	70	123	ZLDO500T8CT-ND‡	3.30	2.48	1.49	ZLDO500T8TR-ND‡	935.00

Miniature Voltage Regulators

Output Voltage (V)	Max. Output Current (mA)	Max. Quiescent Current (µA)	Typical Dropout Voltage (V)	Max. Line Reg. (mV)	Max. Load Reg. (mV)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Miniature Voltage Regulators — SOT-23											
2.5	50	40	1.7	15	30	ZMR250FCT-ND‡	1.77	1.33	.80	ZMR250FTR-ND‡	442.50/M
5.0	50	70	1.7	15	40	ZMR500FCT-ND	1.41	1.06	.64	ZMR500FTR-ND	352.50/M
Miniature Voltage Regulators — TO-92											
2.5	50	40	1.7	15	30	ZMR250C-ND*	1.41	1.06	.64	—	—
5.0	50	70	1.7	15	40	ZMR500C-ND*	1.41	1.06	.64	—	—

* Bulk Pricing

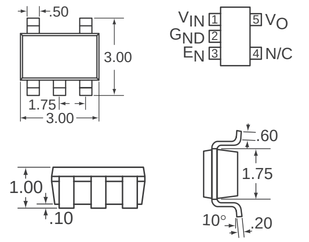
‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

Micropower Voltage Reference

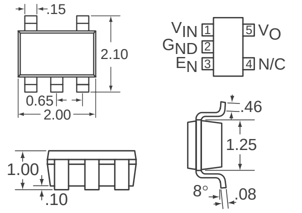
Reverse Breakdown Voltage (V)	Min. Current (µA)	Max. Current (mA)	Max. Temp. Coefficient (ppm/°C)	Max. Slope Resistance (Ohms)	Tol. (%)	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Micropower Voltage Reference — SOT-23 Package											
2.50	20	20	90	1	2	ZR285F02CT-ND	.91	.65	.52	ZR285F02TR-ND	325.00/M
2.50	20	20	90	1	3	ZR285F03CT-ND	.77	.55	.44	ZR285F03TR-ND	275.00/M
2.50	50	20	90	2	1	ZR40401F25CT-ND	.88	.63	.50	ZR40401F25TR-ND	312.50/M
2.50	50	20	90	2	2	ZR40402F25CT-ND	.74	.53	.42	ZR40402F25TR-ND	262.50/M
4.096	50	20	90	2	1	ZR40401F41CT-ND	.88	.63	.50	ZR40401F41TR-ND	312.50/M
4.096	50	20	90	2	2	ZR40402F41CT-ND	.74	.53	.42	ZR40402F41TR-ND	262.50/M
5.00	50	20	90	1.5	1	ZR40401F50CT-ND	.88	.63	.50	ZR40401F50TR-ND	312.50/M
5.00	50	20	90	1.5	2	ZR40402F50CT-ND	.74	.53	.42	ZR40402F50TR-ND	262.50/M
2.50	25	60	30	0.4	0.5	ZR404005F25TACT-ND *NEW!*	.81	.58	.46	ZR404005F25TATR-ND *NEW!*	287.50/M
2.45	2000	120	50	0.5	1	ZRA245F01CT-ND	1.23	.88	.70	ZRA245F01TR-ND	437.50/M
2.45	2000	120	50	0.5	3	ZRA245F03CT-ND	.77	.55	.44	ZRA245F03TR-ND	275.00/M
1.22	30	5	90	0.5	0.5	ZXRE125CFCT-ND	1.72	1.23	.98	ZXRE125CFTR-ND	612.50/M
1.22	30	5	90	0.5	1	ZXRE125DFCT-ND	1.23	.88	.70	ZXRE125DFTR-ND	437.50/M
1.22	30	5	90	0.5	2	ZXRE125EFCT-ND	.91	.65	.52	ZXRE125EFTR-ND	325.00/M
1.22	30	5	90	0.5	3	ZXRE125FFCT-ND	.77	.55	.44	ZXRE125FFTR-ND	275.00/M
1.22	8	20	75	0.5	0.5	ZXRE1004CFCT-ND	2.57	1.84	1.47	ZXRE1004CFTR-ND	918.75/M
1.22	8	20	75	0.5	1	ZXRE1004DFCT-ND	2.24	1.60	1.28	ZXRE1004DFTR-ND	800.00/M
1.22	8	20	75	0.5	2	ZXRE1004EFCT-ND	1.93	1.38	1.10	ZXRE1004EFTR-ND	687.50/M
1.22	4	20	75	0.6	3	ZXRE1004FFCT-ND	1.80	1.29	1.03	ZXRE1004FFTR-ND	643.75/M
1.225	30	12	75	0.5	0.5	ZXRE4041CFCT-ND	1.72	1.23	.98	ZXRE4041CFTR-ND	612.50/M
1.225	30	12	75	0.5	1	ZXRE4041DFCT-ND	1.23	.88	.70	ZXRE4041DFTR-ND	437.50/M
1.225	30	12	75	0.5	2	ZXRE4041EFCT-ND	.91	.65	.52	ZXRE4041EFTR-ND	325.00/M
2.5	20	5	90	1	1	ZRC250F01CT-ND	1.23	.88	.70	ZRC250F01TR-ND	437.50/M
2.5	20	5	90	1	2	ZRC250F02CT-ND	.91	.65	.52	ZRC250F02TR-ND	325.00/M
2.5	20	5	90	1	3	ZRC250F03CT-ND	.77	.55	.44	ZRC250F03TR-ND	275.00/M
5	50	15	50	1.5	1	ZRB500F01CT-ND	1.23	.88	.70	ZRB500F01TR-ND	437.50/M
5	50	15	50	1.5	2	ZRB500F02CT-ND	.91	.65	.52	ZRB500F02TR-ND	325.00/M
5	50	15	50	1.5	3	ZRB500F03CT-ND	.77	.55	.44	ZRB500F03TR-ND	275.00/M
3.3	20	5	50	2	1	ZRC330F01CT-ND	1.23	.88	.70	ZRC330F01TR-ND	645.00/M
3.3	20	5	50	2	2	ZRC330F02CT-ND	.91	.65	.52	ZRC330F02TR-ND	325.00/M
3.3	20	5	50	2	3	ZRC330F03CT-ND	.77	.55	.44	ZRC330F03TR-ND	275.00/M

Micro Power Low Dropout Regulators

NEW! SOT-23-5

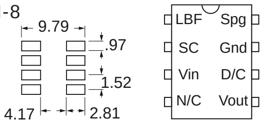


NEW! SC70



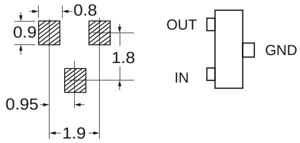
Ultra Low Dropout Regulators

SM-8

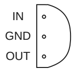


Miniature Voltage Regulators

SOT-23
Pkg. Suffix F Top View

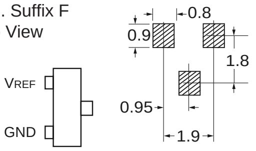


TO-92
Pkg. Suffix C
Bottom View



Micropower Voltage Reference

SOT-23
Pkg. Suffix F
Top View



(Continued)

VO (V)	ΔVref (mV) Typ.	ΔVref (mV) Max.	Iref (mA) Min.	Iref (mA) Max.	Slope Resistance Typ.	Slope Resistance Max.	Trim Range	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
Precision Micropower Voltage Reference, Trimmable — SOT-223													
2.5	2.7	8.8	0.15	75	0.85	2	5.0%	ZRT025GC1CT-ND	1.94	1.39	1.11	ZRT025GC1TR-ND	693.75
4.0	4.2	14.0	0.15	75	1.1	3	5.0%	ZRT040GC1CT-ND	1.94	1.39	1.11	ZRT040GC1TR-ND	693.75
5.0	5.4	17.2	0.15	60	1.25	2	5.0%	ZRT050GC1CT-ND	1.94	1.39	1.11	ZRT050GC1TR-ND	693.75
6.2	6.5	22.0	0.15	50	1.4	3	5.0%	ZRT062GC1CT-ND	1.94	1.39	1.11	ZRT062GC1TR-ND	693.75
9.8	10.8	34.4	0.15	30	1.8	4	2.5%	ZRT100GC1CT-ND	1.94	1.39	1.11	ZRT100GC1TR-ND	693.75

Reverse Breakdown Voltage (V)	Min. Current (μA)	Max. Current (mA)	Max. Temp. Coefficient (ppm/°C)	Max. Slope Resistance (Ohms)	Tolerance (%)	Digi-Key Part No.	Price Each 1	25	100	1,000
Micropower Voltage Reference — TO-92 Package										
2.50	20	20	90	1	2	ZR285R02-ND	.91	.65	.39	.33
2.50	20	20	90	1	3	ZR285R03-ND	.77	.55	.33	.28
2.50	50	20	90	2	1	ZR40401R25-ND	1.23	.88	.53	.44
2.50	50	20	90	2	2	ZR40402R25-ND	.91	.65	.39	.33
4.096	50	20	90	2	1	ZR40401R41-ND	1.23	.88	.53	.44
4.096	50	20	90	2	2	ZR40402R41-ND	.91	.65	.39	.33
5.00	50	20	90	1.5	1	ZR40401R50-ND	1.23	.88	.53	.44
5.00	50	20	90	1.5	2	ZR40402R50-ND	.91	.65	.39	.33
2.45	2000	120	50	0.5	1	ZRA245A01-ND	1.23	.88	.53	.44
2.45	2000	120	50	0.5	3	ZRA245A03-ND	.77	.55	.33	.28

Micropower Voltage Reference

VR (V)	IR Min. (μA)	IR Max. (mA)	TC ppm/°C	RS Max. (Ω)	Tolerance	Digi-Key Part No.	Price Each 1	25	100	1,000
Micropower Voltage Reference, 330mW — TO-92 Package										
2.45/2.55	20	5	90	1.0	2%	ZRC250A02-ND	.91	.65	.39	.33
4.0	23	5	90	2.0	2%	ZRC400A02-ND	.91	.65	.39	.33
5.0	25	5	90	2.0	2%	ZRC500A02-ND	1.21	.87	.52	.44
5.0	50	15	50	1.5	1%	ZRB500A01-ND	1.23	.88	.53	.44
5.0	50	15	50	1.5	3%	ZRB500A03-ND	2.05	.79	.48	.40
3.3	20	5	50	2.0	1%	ZRC330A01-ND	1.23	.88	.53	.44
3.3	20	5	50	2.0	3%	ZRC330A03-ND	.77	.55	.33	.28
2.5	20	5	90	1.0	1%	ZRC250A01-ND	1.23	.88	.53	.44
2.5	20	5	90	1.0	3%	ZRC250A03-ND	.77	.55	.33	.28
2.5	20	5	90	1.0	1%	ZRC250R01-ND	1.23	.88	.53	.44
2.5	20	5	90	1.0	3%	ZRC250R03-ND	.77	.55	.33	.28
1.22	8	20	75	0.5	1%	ZXRE1004DR-ND	2.24	1.60	.96	.80
1.225	30	12	75	0.5	1%	ZXRE4041DR-ND	1.23	.88	.53	.44
1.22	30	5	90	0.5	1%	ZXRE125DR-ND	1.23	.88	.53	.44
1.22	30	5	90	0.5	2%	ZXRE125ER-ND	.91	.65	.39	.33
1.22	30	5	90	0.5	3%	ZXRE125FR-ND	.77	.55	.33	.28

Reverse Breakdown Voltage (V)	Min. Current (μA)	Max. Current (mA)	Max. Temp. Coefficient (ppm/°C)	Max. Slope Resistance (Ohms)	Tol. (%)	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	T & R Pricing 500
Micropower Voltage Reference — SO-8 Package											
2.45	2000	120	50	0.5	1	ZRA245N801CT-ND	1.66	1.19	.95	ZRA245N801TR-ND	315.88
2.45	2000	120	50	0.5	3	ZRA245N803CT-ND	1.44	1.03	.82	ZRA245N803TR-ND	272.65
2.50	20	20	90	1.0	2	ZR285N802CT-ND	1.54	1.10	.88	ZR285N802TR-ND	292.60
2.50	20	20	90	1.0	3	ZR285N803CT-ND	1.44	1.03	.82	ZR285N803TR-ND	272.65
2.50	50	20	90	2.0	1	ZR40401N825CT-ND	1.66	1.19	.95	ZR40401N825TR-ND	315.88
2.50	50	20	90	2.0	2	ZR40402N825CT-ND	1.49	1.07	.85	ZR40402N825TR-ND	282.63
3.3	20	5	50	2.0	1	ZRC330N801CT-ND	1.66	1.19	.95	ZRC330N801TR-ND	315.88
3.3	20	5	50	2.0	3	ZRC330N803CT-ND	1.44	1.03	.82	ZRC330N803TR-ND	272.65
4.096	50	20	90	2.0	1	ZR40401N841CT-ND	1.66	1.19	.95	ZR40401N841TR-ND	315.88
4.096	50	20	90	2.0	2	ZR40402N841CT-ND	1.49	1.07	.85	ZR40402N841TR-ND	282.63
5.0	50	20	90	1.5	1	ZR40401N850CT-ND	1.66	1.19	.95	ZR40401N850TR-ND	315.88
5.0	50	20	90	1.5	2	ZR40402N850CT-ND	1.49	1.07	.85	ZR40402N850TR-ND	282.63
5.0	50	15	50	1.5	1	ZRB500N801CT-ND	1.66	1.19	.95	ZRB500N801TR-ND	315.88
5.0	50	15	50	1.5	3	ZRB500N803CT-ND	1.44	1.03	.82	ZRB500N803TR-ND	272.65
2.5	20	5	90	1.0	1	ZRC250N801CT-ND	1.66	1.19	.95	ZRC250N801TR-ND	315.88
2.5	20	5	90	1.0	3	ZRC250N803CT-ND	1.44	1.03	.82	ZRC250N803TR-ND	272.65
1.22	8	20	75	0.5	1	ZXRE1004DN8CT-ND	2.24	1.60	1.28	ZXRE1004DN8TR-ND	425.60
1.22	8	20	75	0.5	2	ZXRE1004EN8CT-ND	1.93	1.38	1.10	ZXRE1004EN8TR-ND	365.75
1.22	8	20	75	0.5	3	ZXRE1004FN8CT-ND	1.80	1.29	1.03	ZXRE1004FN8TR-ND	342.48
1.22	30	5	90	0.5	1	ZXRE125DN8CT-ND	1.45	1.04	.83	ZXRE125DN8TR-ND	275.98
1.22	30	5	90	0.5	2	ZXRE125EN8CT-ND	1.28	.92	.73	ZXRE125EN8TR-ND	242.73
1.22	30	5	90	0.5	3	ZXRE125FN8CT-ND	1.17	.84	.67	ZXRE125FN8TR-ND	222.78
1.225	30	12	75	0.5	1	ZXRE4041DN8CT-ND	1.45	1.04	.83	ZXRE4041DN8TR-ND	275.98
1.225	30	12	75	0.5	2	ZXRE4041EN8CT-ND	1.28	.92	.73	ZXRE4041EN8TR-ND	242.73
1.225	30	12	75	0.5	3	ZXRE4041FN8CT-ND	1.17	.84	.67	ZXRE4041FN8TR-ND	222.78

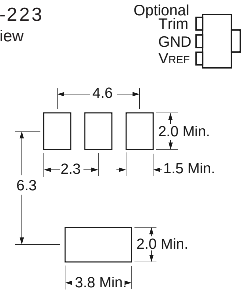
"H" Bridge

Polarity	V_{CBO} (V)	V_{CEO} (V)	I_C (DC) (A)	I_{CM} (A)	V_{CE} (sat) (V)	I_C/I_B (mA)	h_{FE} min	I_C (mA)	V_{CE} (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 1,000
'H' Bridge — SM-8														
NPN PNP	20 -20	20 -20	2.5 -2.5	6 -6	0.15 -0.2	1000/10 -1000/-20	200 150	2 -2	2 -2	ZHB6718CT-ND	5.01	3.76	ZHB6718TR-ND	1419.50
NPN PNP	40 -40	50 -50	2 -2	6 -6	0.5 -0.45	1000/5 -1000/-10	150 150	2 -2	2 -2	ZHB6790CT-ND	5.01	3.76	ZHB6790TR-ND	1419.50

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

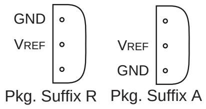
Precision Micropower Voltage Reference

SOT-223
Top View



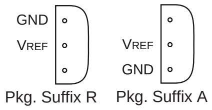
Micropower Voltage Reference

TO-92
3 Pin E-LINE
Bottom View

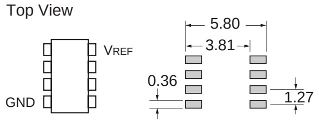


Micropower Voltage Reference

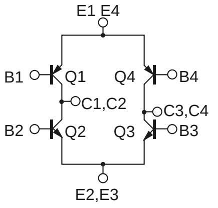
TO-92
3 Pin E-LINE
Bottom View

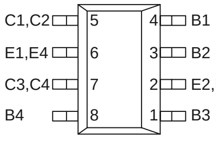


SO-8
Pkg. Suffix N8
Top View



H Bridge





NEW! Brushless Fan Motor Controller

Supply Voltage Range (V)	Quiescent Current Max (mA)	Output Drive Current Max (mA)	PWM Freq. Range (kHz)	Output Flag Format	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing
						1	25	100		1,000
MSOP10										
4.5 - 18	3	80	1 - 50	Rotor lock and Speed pulse	ZXBM2001X10TACT-ND	1.47	1.26	1.16	ZXBM2001X10TATR-ND	714.00
4.5 - 18	3	80	1 - 50	Rotor lock only	ZXBM2002X10TACT-ND	1.33	1.14	1.05	ZXBM2002X10TATR-ND	646.00
4.5 - 18	3	80	1 - 50	Speed pulse only	ZXBM2003X10TACT-ND	1.33	1.14	1.05	ZXBM2003X10TATR-ND	646.00

Automotive and Household Security Siren Driver

Features: • Direct drive of darlington, mosfet and IGBT output stages • Suitable for automotive and static alarm systems

Operating Voltage (V)	Operating Current (mA)	Sleep Mode Current (μA)	Operating Temp. (°C)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing
					1	10	100		500
4-18V	10	1	-40° – 125°	ZSD100D8-ND‡	2.25	1.69	1.02	—	—
4-18V	10	1	-40° – 125°	ZSD100N8CT-ND‡	2.70	2.03	1.22	ZSD100N8TR-ND‡	472.50

‡ Additional Information included in Zetex Application Handbook, part number ST321-ND.

Precision Single Cell Timer

Supply Voltage Min./Max. (V)	Supply Current Min./Max. (μA)	Sink Current (mA)	T_{PD} (μS)	Maximum Frequency (KHz)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing
						1	10	100		500
8 Dip										
0.9 / 6.0	74 / 200	100	2	330	ZSCT1555D8-ND†	3.09	2.32	1.40	—	—
8-SOIC										
0.9 / 6.0	74 / 200	100	2	330	ZSCT1555N8CT-ND	3.09	2.32	1.40	ZSCT1555N8TR-ND	540.75

† Tube Pricing

Current Mirror — SM-8 Package

This device offers excellent matching between transistor elements to allow a space and cost-effective solution for high side current sense applications. Uncommitted sensitivity is selected by external resistors.

Type	V_{CBO} (V)	V_{CEO} (V)	V_{EBO} (V)	I_{CM} (Amps)	I_C (Amps)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing
							1	10	100		1,000
NPN	140	120	10	4	1	ZDS1009CT-ND	4.41	3.31	1.99	ZDS1009TR-ND	1249.50
PNP	-140	-120	-10	-4	-1						

The Fastest Analog Solution

Field Programmable Analog Device

Field programmable Analog Device which is supported by powerful PC based Design and Simulation tools, plus a hardware emulator for fast hardware prototyping, **TRAC** provides real time and computational approach to signal processing, assuring design integration and secrecy. For more information check TRAC site @ http://www.zetex.com)

Description	Digi-Key Part No.	Pricing		
		1	25	100
TRAC020LH in QSOP36	TRAC020LHQ36-ND	16.50	387.50	1400.00
TRAC Development Kit	TRAC020LHUSA-ND	460.00	—	—

Variable Capacitance Diodes — SOT-23 and SOD-323 Packages

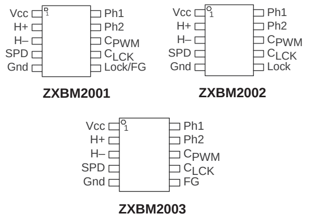
V_{BR} @ I_R = 10μA Min. (V)	I_R Max. μA/ V_R (V)	Cd @ V_R = 25V Max. (pf)	RD Max. Ω	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing
					1	10	100		3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package									
28	0.05/28	2.8	1.2	BBY31CT-ND‡	.54	4.05	27.00	BBY31TR-ND‡	162.00/M
28	0.05/28	6.0	0.6	BBY40CT-ND‡	.54	4.05	27.00	BBY40TR-ND‡	162.00/M

P_{TOT} (mW)	V_{BR} (V)	C2 Nominal Capacitance (pF)	Capacitance Ratio C_2/C_{20} at f = 1MHz		Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing
			Min.	Max.		1	10	100		3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package										
330	25	8.2	4.3	5.8	ZC829ACT-ND	2.52	18.90	113.40	ZC829ATR-ND	630.00/M
330	25	10	4.5	6.0	ZC830ACT-ND‡	2.52	18.90	113.40	ZC830ATR-ND‡	630.00/M
330	25	15	4.5	6.0	ZC831ACT-ND‡	2.52	18.90	113.40	ZC831ATR-ND‡	630.00/M
330	25	22	5.0	6.5	ZC832ACT-ND‡	2.52	18.90	113.40	ZC832ATR-ND‡	630.00/M
330	25	33	5.0	6.5	ZC833ACT-ND‡	2.52	18.90	113.40	ZC833ATR-ND‡	630.00/M
330	25	47	5.0	6.5	ZC834ACT-ND‡	2.52	18.90	113.40	ZC834ATR-ND‡	630.00/M
330	25	68	5.0	6.5	ZC835ACT-ND‡	2.52	18.90	113.40	ZC835ATR-ND‡	630.00/M
330	25	100	5.0	6.5	ZC836ACT-ND‡	2.52	18.90	113.40	ZC836ATR-ND‡	630.00/M
Silicon Planar Variable Capacitance Diodes — SOD-323 Package										
300	25	8.2	4.3	5.8	ZMV829ACT-ND	2.49	18.68	112.05	ZMV829ATR-ND	622.50/M
300	25	10	4.5	6.0	ZMV830ACT-ND	2.49	18.68	112.05	ZMV830ATR-ND	622.50/M
300	25	15	4.5	6.0	ZMV831ACT-ND	2.49	18.68	112.05	ZMV831ATR-ND	622.50/M
300	25	22	5.0	6.5	ZMV832ACT-ND	2.49	18.68	112.05	ZMV832ATR-ND	622.50/M
300	25	33	5.0	6.5	ZMV833ACT-ND	2.49	18.68	112.05	ZMV833ATR-ND	622.50/M
300	25	47	5.0	6.5	ZMV834ACT-ND	2.49	18.68	112.05	ZMV834ATR-ND	622.50/M
300	25	68	5.0	6.5	ZMV835ACT-ND	1.98	14.85	89.10	ZMV835ATR-ND	495.00/M

Now QS9000 Accredited!

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

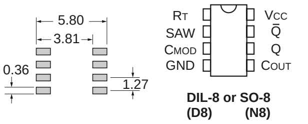
NEW! MSOP10



ZXBM2001 **ZXBM2002**

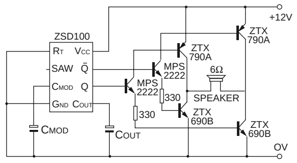
ZXBM2003

IC Siren Driver



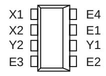
DIL-8 or SO-8
(D8) (N8)

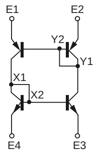
Sample Circuit



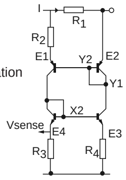
Current Mirror

SM-8





Typical Application Circuit

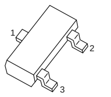


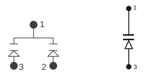
$V_{sense} = IR_1 \frac{R_3}{R_2}$

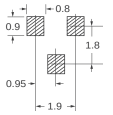
For balance R3=R4
e.g.
R2=100mΩ
R1=R3=R4=100Ω

V_{sense} sensitivity = 100mV/A

SOT-23
Variable Capacitance Diodes

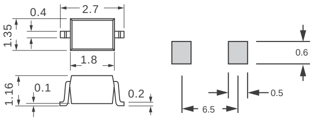






Dual Diodes **Single Diode**

SOD-323
Variable Capacitance Diodes



(Continued)

ZETEX Variable Capacitance Diodes — SOT-23 and SOD-323 Packages *(Cont.)*

P_{TOT} (mW)	V_{BR} (V)	min. C_d at V_R=1V	min/max C_d at V_R=2.5V	max. Cd at V_R=4V	Q min.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes - Hyper-hyperabrupt Variety — SOT-23 Package											
330	12	8.7	4.3 / 5.5	2.9	350	ZC930CT-ND	3.39	25.43	152.55	ZC930TR-ND	847.50/M
330	12	14.5	6.5 / 7.8	4	300	ZC931CT-ND	3.39	25.43	152.55	ZC931TR-ND	847.50/M
330	12	17	8.5 / 10.5	5.5	200	ZC932CT-ND	3.39	25.43	152.55	ZC932TR-ND	847.50/M
330	12	42	18 / 27	12	150	ZC933CT-ND	3.39	25.43	152.55	ZC933TR-ND	847.50/M
330	12	42	20.25 / 24.75	12	150	ZC933ACT-ND	3.39	25.43	152.55	ZC933ATR-ND	847.50/M
330	12	95	40 / 65	25	80	ZC934CT-ND	3.39	25.43	152.55	ZC934TR-ND	847.50/M
330	12	95	47.25 / 57.75	25	80	ZC934ACT-ND	3.39	25.43	152.55	ZC934ATR-ND	847.50/M
Silicon Planar Variable Capacitance Diodes - Hyper-hyperabrupt Variety — SOD-323 Package											
300	12	8.7	4.3 / 5.5	2.9	350	ZMV930CT-ND	2.19	16.43	98.55	ZMV930TR-ND	547.50/M
300	12	14.5	6.5 / 7.8	4	300	ZMV931CT-ND	2.19	16.43	98.55	ZMV931TR-ND	547.50/M
300	12	17	8.5 / 10.5	5.5	200	ZMV932CT-ND	2.19	16.43	98.55	ZMV932TR-ND	547.50/M
300	12	42	18 / 27	12	150	ZMV933CT-ND	2.19	16.43	98.55	ZMV933TR-ND	547.50/M
300	12	42	20.25 / 24.75	12	150	ZMV933ACT-ND	2.34	17.55	105.30	ZMV933ATR-ND	585.00/M
300	12	95	40 / 65	25	80	ZMV934CT-ND	2.19	16.43	98.55	ZMV934TR-ND	547.50/M
300	12	95	47.25 / 57.75	25	80	ZMV934ACT-ND	2.34	17.55	105.30	ZMV934ATR-ND	585.00/M

P_{TOT} (mW)	V_{BR} (V)	C2 Nominal Capacitance (pF)	Capacitance Ratio C_2/C_{20} at f=1MHz Min.	Max.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes - Dual, Common Cathode — SOT-23 Package										
330	25	33	5.0	6.5	ZDC833ACT-ND	2.82	21.15	126.90	ZDC833ATR-ND	705.00/M

P_{TOT} (mW)	V_{BR} (V)	I_R (µA)	C_d(pF) Min.	Max.	V/MHz	C_3/C_{25} Min.	Max.	Q Min	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package														
330	30	0.05	1.8	2.8	25/1	4.0	6.0	250	FMMV105GCT-ND‡	.81	6.08	40.50	FMMV105GTR-ND‡	243.00/M
330	30	0.02	26	32	3/1	5.0	6.5	200	FMMV109CT-ND‡	.81	6.08	40.50	FMMV109TR-ND‡	243.00/M
330	30	0.1	20	25	3/1	4.5	—	200	FMMV3102CT-ND‡	.81	6.08	40.50	FMMV3102TR-ND‡	243.00/M

P_{TOT} (mW)	V_R (V)	I_F (mA)	C_d(pF) @ 4V Nom.	Max.	Tuning Ratio C_2/C_{30} @ f=1MHz Min.	Max.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Silicon Planar Variable Capacitance Diodes — SOT-23 Package												
330	30	20	6.8	7.5	2.5	3.3	FMMV2101CT-ND‡	.81	6.08	40.50	FMMV2101TR-ND‡	243.00/M
330	30	20	10	11	2.6	3.3	FMMV2103CT-ND‡	.81	6.08	40.50	FMMV2103TR-ND‡	243.00/M
330	30	20	12	13.2	2.6	3.3	FMMV2104CT-ND‡	.81	6.08	40.50	FMMV2104TR-ND‡	243.00/M
330	30	20	15	16.5	2.6	3.3	FMMV2105CT-ND‡	.81	6.08	40.50	FMMV2105TR-ND‡	243.00/M
330	30	20	22	24.2	2.7	3.3	FMMV2107CT-ND‡	.81	6.08	40.50	FMMV2107TR-ND‡	243.00/M
330	30	20	33	36.3	2.7	3.3	FMMV2109CT-ND‡	.81	6.08	40.50	FMMV2109TR-ND‡	243.00/M

‡ *Additional Information included in Zetex Application Handbook, part number ST321-ND.*

NEW! Silicon 12V Hyperabrupt Varactor Diodes

P_{TOT} (mW)	V_{BR} (V)	min. C_d at V_R=1V	min/max C_d at V_R=2.5V	max. Cd at V_R=4V	Q min.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
SOD-523 Package											
330	12	13.5	6.5 / 7.8	4	300	ZV931V2TACT-ND	1.32	.99	.66	ZV931V2TATR-ND	396.00/M
330	12	17	8.5/10.5	5.5	200	ZV932V2TACT-ND	1.32	.99	.66	ZV932V2TATR-ND	396.00/M
330	12	42	18/27	12	150	ZV933V2TACT-ND	1.32	.99	.66	ZV933V2TATR-ND	396.00/M

NEW! Silicon 25V Hyperabrupt Varactor Diodes

P_{TOT} (mW)	V_{BR} (V)	C2 Nominal Capacitance (pF)	Capacitance Ratio C_2/C_{20} at f=1MHz Min.	Max.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
SOD-523 Package										
330	25	15	4.5	6.0	ZV831BV2TACT-ND	1.32	.99	.66	ZV831BV2TATR-ND	396.00/M
330	25	22	5.0	6.5	ZV832BV2TACT-ND	1.32	.99	.66	ZV832BV2TATR-ND	396.00/M
SOD-23 Package										
330	25	47	5.0	6.5	ZDC834ATACT-ND*	1.32	.99	.66	ZDC834ATATR-ND*	396.00/M

* Dual Package

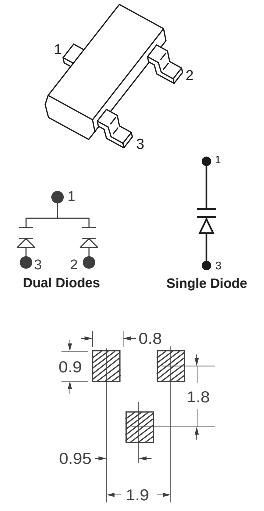
NEW! Silicon Low Voltage Hyperabrupt Varactor Diodes

Capacitance pF V_R=0.5V at f=1MHz	Capacitance pF V_R=0.5V at f=1MHz Min.	Max.	Capacitance Ratio $C_{0.5}/C_{2.5}$ at f=1MHz	Minimum Q V_R=0.5V f=50MHz	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
SOD-523 Package										
9.5	6.3	7.8	2.0	500	ZV950V2TACT-ND	1.32	.99	.66	ZV950V2TATR-ND	396.00/M
19	12.7	15.7	2.0	350	ZV952V2TACT-ND	1.32	.99	.66	ZV952V2TATR-ND	396.00/M
45	30	37	2.0	250	ZMDC953TACT-ND	1.50	1.13	.75	ZMDC953TATR-ND	450.00/M

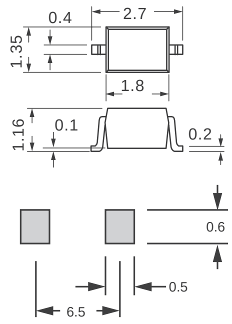
ZETEX ***Now QS9000 Accredited!***

ST303-ND	Zetex Through-Hole Data Book	**$6.40**
ST317-ND	Zetex Surface Mount Data Book	**$9.60**
ST320-ND	Zetex Linear Data Book	**$3.60**
ST321-ND	Zetex Application Handbook	**$4.98**

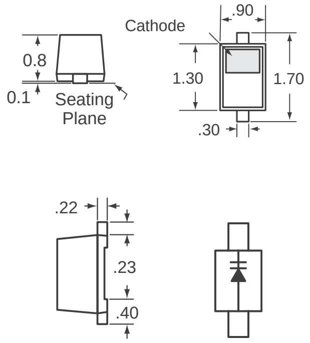
SOT-23
Variable Capacitance Diodes



SOD-323
Variable Capacitance Diodes



NEW! SOD-523
Hyperabrupt Varactor Diodes



Panasonic Transistor Arrays

Composite Transistors (Built-in Resistor)

Dim. in mm

Fig. 1

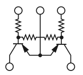


Fig. 2

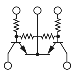


Fig. 3

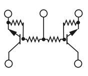


Fig. 4

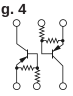


Fig. 5

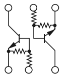


Fig. 6

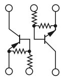


Fig. 7

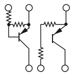


Fig. 8

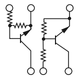


Fig. 9 *NEW!*

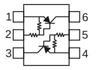


Fig. 10 *NEW!*

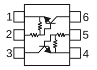
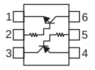
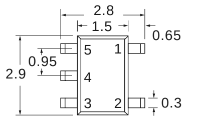


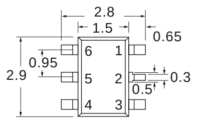
Fig. 11 *NEW!*



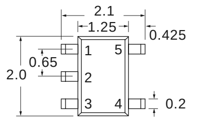
Mini Type (5-pin) / EIAJ: SC-74A



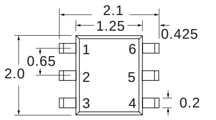
Mini Type (6-pin) / EIAJ: SC-74



S-Mini Type (5-pin) / EIAJ: SC-88A



S-Mini Type (6-pin) / EIAJ: SC-88



NEW! **SS-Mini Type (6-pin)**

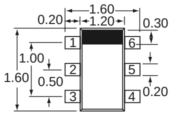


Fig.	Package	Basic Type		Resistor Value		Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel Pricing	
		PNP	NPN	RB (K ohm)	RBE (K ohm)		1	10	100		Size	Pricing
1	Mini 5Pin	UN211F x2	—	4.7	10	XN111FCT-ND	.41	.35	.28	XN111FTR-ND	3,000	109.00/M
1	Mini 5Pin	UN211H x2	—	2	10	XN111HCT-ND	.41	.35	.28	XN111HTR-ND	3,000	109.00/M
1	Mini 5Pin	UN1110 x2	—	47	open	XN1110CT-ND	.41	.35	.28	XN1110TR-ND	3,000	109.00/M
1	Mini 5Pin	UN2111 x2	—	10	10	XN1111CT-ND	.41	.35	.28	XN1111TR-ND	3,000	109.00/M
1	Mini 5Pin	UN2112 x2	—	22	22	XN1112CT-ND	.41	.35	.28	XN1112TR-ND	3,000	109.00/M
1	Mini 5Pin	UN2113 x2	—	47	47	XN1113CT-ND	.41	.35	.28	XN1113TR-ND	3,000	109.00/M
1	Mini 5Pin	UN2114 x2	—	10	47	XN1114CT-ND	.41	.35	.28	XN1114TR-ND	3,000	109.00/M
1	Mini 5Pin	UN2115 x2	—	10	open	XN1115CT-ND	.41	.35	.28	XN1115TR-ND	3,000	109.00/M
1	Mini 5Pin	UN2116 x2	—	4.7	open	XN1116CT-ND	.41	.35	.28	XN1116TR-ND	3,000	109.00/M
1	Mini 5Pin	UN2119 x2	—	1	10	XN1119CT-ND	.41	.35	.28	XN1119TR-ND	3,000	109.00/M
2	Mini 5Pin	—	UN2210 x2	47	open	XN1210CT-ND	.41	.35	.28	XN1210TR-ND	3,000	109.00/M
2	Mini 5Pin	—	UN2211 x2	10	10	XN1211CT-ND	.41	.35	.28	XN1211TR-ND	3,000	109.00/M
2	Mini 5Pin	—	UN2212 x2	22	22	XN1212CT-ND	.41	.35	.28	XN1212TR-ND	3,000	109.00/M
2	Mini 5Pin	—	UN2213 x2	47	47	XN1213CT-ND	.41	.35	.28	XN1213TR-ND	3,000	109.00/M
2	Mini 5Pin	—	UN2214 x2	10	47	XN1214CT-ND	.41	.35	.28	XN1214TR-ND	3,000	109.00/M
2	Mini 5Pin	—	UN2215 x2	10	open	XN1215CT-ND	.41	.35	.28	XN1215TR-ND	3,000	109.00/M
2	Mini 5Pin	—	UN2216 x2	4.7	open	XN1216CT-ND	.41	.35	.28	XN1216TR-ND	3,000	109.00/M
3	Mini 5Pin	—	UN2211 x2	10	10	XN2211CT-ND	.41	.35	.28	XN2211TR-ND	3,000	109.00/M
4	Mini 6Pin	UN2111 x2	—	10	10	XN4111CT-ND	.41	.35	.28	XN4111TR-ND	3,000	109.00/M
4	Mini 6Pin	UN2112 x2	—	22	22	XN4112CT-ND	.41	.35	.28	XN4112TR-ND	3,000	109.00/M
4	Mini 6Pin	UN2113 x2	—	47	47	XN4113CT-ND	.41	.35	.28	XN4113TR-ND	3,000	109.00/M
4	Mini 6Pin	UN2114 x2	—	10	47	XN4114CT-ND	.41	.35	.28	XN4114TR-ND	3,000	109.00/M
4	Mini 6Pin	UN2115 x2	—	10	open	XN4115CT-ND	.41	.35	.28	XN4115TR-ND	3,000	109.00/M
4	Mini 6Pin	UN2116 x2	—	4.7	open	XN4116CT-ND	.41	.35	.28	XN4116TR-ND	3,000	109.00/M
5	Mini 6Pin	—	UN1210 x2	47	open	XN4210CT-ND	.41	.35	.28	XN4210TR-ND	3,000	109.00/M
5	Mini 6Pin	—	UN2211 x2	10	10	XN4211CT-ND	.41	.35	.28	XN4211TR-ND	3,000	109.00/M
5	Mini 6Pin	—	UN2212 x2	22	22	XN4212CT-ND	.41	.35	.28	XN4212TR-ND	3,000	109.00/M
5	Mini 6Pin	—	UN2213 x2	47	47	XN4213CT-ND	.41	.35	.28	XN4213TR-ND	3,000	109.00/M
5	Mini 6Pin	—	UN2214 x2	10	47	XN4214CT-ND	.41	.35	.28	XN4214TR-ND	3,000	109.00/M
5	Mini 6Pin	—	UN2215 x2	10	open	XN4215CT-ND	.41	.35	.28	XN4215TR-ND	3,000	109.00/M
5	Mini 6Pin	—	UN2216 x2	4.7	open	XN4216CT-ND	.41	.35	.28	XN4216TR-ND	3,000	109.00/M
6	Mini 6Pin	UN2111 x1	UN2211 x1	10/10	10/10	XN4311CT-ND	.41	.35	.28	XN4311TR-ND	3,000	109.00/M
6	Mini 6Pin	UN2112 x1	UN2212 x1	22/22	22/22	XN4312CT-ND	.41	.35	.28	XN4312TR-ND	3,000	109.00/M
6	Mini 6Pin	UN2114 x1	UN2114 x1	10/10	47/47	XN4314CT-ND	.41	.35	.28	XN4314TR-ND	3,000	109.00/M
6	Mini 6Pin	UN2115 x1	UN2115 x1	10/10	open/open	XN4315CT-ND	.41	.35	.28	XN4315TR-ND	3,000	109.00/M
6	Mini 6Pin	UN2116 x1	UN2116 x1	4.7/4.7	open/open	XN4316CT-ND	.41	.35	.28	XN4316TR-ND	3,000	109.00/M
6	Mini 6Pin	UN2122 x1	UN2213 x1	4.7/4.7	4.7/4.7	XN4381CT-ND	.41	.35	.28	XN4381TR-ND	3,000	109.00/M
7	Mini 6Pin	—	UN1213 x2	47	47	XN6213CT-ND	.41	.35	.28	XN6213TR-ND	3,000	109.00/M
7	Mini 6Pin	—	UN1215 x2	10	open	XN6215CT-ND	.41	.35	.28	XN6215TR-ND	3,000	109.00/M
7	Mini 6Pin	—	UN1216 x2	4.7	open	XN6216CT-ND	.41	.35	.28	XN6216TR-ND	3,000	109.00/M
1	S Mini 5Pin	UN111F x2	—	4.7	10	XP111FCT-ND	.48	.40	.32	XP111FTR-ND	3,000	127.00/M
1	S Mini 5Pin	UN111H x2	—	2.2	10	XP111HCT-ND	.48	.40	.32	XP111HTR-ND	3,000	127.00/M
1	S Mini 5Pin	UN1111 x2	—	10	10	XP1111CT-ND	.48	.40	.32	XP1111TR-ND	3,000	127.00/M
1	S Mini 5Pin	UN1112 x2	—	22	22	XP1112CT-ND	.48	.40	.32	XP1112TR-ND	3,000	127.00/M
1	S Mini 5Pin	UN1113 x2	—	47	47	XP1113CT-ND	.48	.40	.32	XP1113TR-ND	3,000	127.00/M
1	S Mini 5Pin	UN1114 x2	—	10	47	XP1114CT-ND	.48	.40	.32	XP1114TR-ND	3,000	127.00/M
1	S Mini 5Pin	UN1115 x2	—	10	open	XP1115CT-ND	.48	.40	.32	XP1115TR-ND	3,000	127.00/M
1	S Mini 5Pin	UN1116 x2	—	4.7	open	XP1116CT-ND	.48	.40	.32	XP1116TR-ND	3,000	127.00/M
1	S Mini 5Pin	UN1119 x2	—	1	10	XP1119CT-ND	.48	.40	.32	XP1119TR-ND	3,000	127.00/M
2	S Mini 5Pin		UN1210 x2	47	open	XP1210CT-ND	.48	.40	.32	XP1210TR-ND	3,000	127.00/M
2	S Mini 5Pin		UN1211 x2	10	10	XP1211CT-ND	.48	.40	.32	XP1211TR-ND	3,000	127.00/M
2	S Mini 5Pin	—	UN1212 x2	22	22	XP1212CT-ND	.48	.40	.32	XP1212TR-ND	3,000	127.00/M
2	S Mini 5Pin	—	UN1213 x2	47	47	XP1213CT-ND	.48	.40	.32	XP1213TR-ND	3,000	127.00/M
2	S Mini 5Pin	—	UN1214 x2	10	47	XP1214CT-ND	.48	.40	.32	XP1214TR-ND	3,000	127.00/M
2	S Mini 5Pin	—	UN1215 x2	10	open	XP1215CT-ND	.48	.40	.32	XP1215TR-ND	3,000	127.00/M
2	S Mini 5Pin	—	UN1216 x2	4.7	open	XP1216CT-ND	.48	.40	.32	XP1216TR-ND	3,000	127.00/M
2	S Mini 5Pin	—	UN1217 x2	22	open	XP1217CT-ND	.48	.40	.32	XP1217TR-ND	3,000	127.00/M
3	S Mini 6Pin	UN1111 x2	—	10	10	XP4111CT-ND	.48	.40	.32	XP4111TR-ND	3,000	127.00/M
3	S Mini 6Pin	UN1112 x2	—	22	22	XP4112CT-ND	.48	.40	.32	XP4112TR-ND	3,000	127.00/M
3	S Mini 6Pin	UN1113 x2	—	47	47	XP4113CT-ND	.48	.40	.32	XP4113TR-ND	3,000	127.00/M
3	S Mini 6Pin	UN1114 x2	—	10	47	XP4114CT-ND	.48	.40	.32	XP4114TR-ND	3,000	127.00/M
3	S Mini 6Pin	UN1115 x2	—	10	open	XP4115CT-ND	.48	.40	.32	XP4115TR-ND	3,000	127.00/M
3	S Mini 6Pin	UN1116 x2	—	4.7	open	XP4116CT-ND	.48	.40	.32	XP4116TR-ND	3,000	127.00/M
5	S Mini 6Pin	UN1210 x2	—	47	open	XP4210CT-ND	.48	.40	.32	XP4210TR-ND	3,000	127.00/M
5	S Mini 6Pin	UN1211 x2	—	10	10	XP4211CT-ND	.48	.40	.32	XP4211TR-ND	3,000	127.00/M
5	S Mini 6Pin	UN1212 x2	—	22	22	XP4212CT-ND	.48	.40	.32	XP4212TR-ND	3,000	127.00/M
5	S Mini 6Pin	UN1213 x2	—	47	47	XP4213CT-ND	.48	.40	.32	XP4213TR-ND	3,000	127.00/M
5	S Mini 6Pin	UN1214 x2	—	10	47	XP4214CT-ND	.48	.40	.32	XP4214TR-ND	3,000	127.00/M
5	S Mini 6Pin	UN1215 x2	—	10	open	XP4215CT-ND	.48	.40	.32	XP4215TR-ND	3,000	127.00/M
5	S Mini 6Pin	UN1216 x2	—	4.7	open	XP4216CT-ND	.48	.40	.32	XP4216TR-ND	3,000	127.00/M
6	S Mini 6Pin	UN1211 x1	UN1111 x1	10	10	XP4311CT-ND	.48	.40	.32	XP4311TR-ND	3,000	127.00/M
6	S Mini 6Pin	UN1212 x1	UN1112 x1	22	22	XP4312CT-ND	.48	.40	.32	XP4312TR-ND	3,000	127.00/M
6	S Mini 6Pin	UN2214 x1	UN2114 x1	10	47	XP4314CT-ND	.48	.40	.32	XP4314TR-ND	3,000	127.00/M
6	S Mini 6Pin	UN1215 x1	UN1115 x1	10	open	XP4315CT-ND	.48	.40	.32	XP4315TR-ND	3,000	127.00/M
6	S Mini 6Pin	UN1216 x1	UN1116 x1	4.7	open	XP4316CT-ND	.48	.40	.32	XP4316TR-ND	3,000	127.00/M
7	S Mini 6Pin	UN1115 x2	—	10	open	XP6115CT-ND	.48	.40	.32	XP6115TR-ND	3,000	127.00/M
8	S Mini 6Pin	UN1211 x2	—	10	10	XP6211CT-ND	.48	.40	.32	XP6211TR-ND	3,000	127.00/M
8	S Mini 6Pin	UN1212 x2	—	22	22	XP6212CT-ND	.48	.40	.32	XP6212TR-ND	3,000	127.00/M
8	S Mini 6Pin	UN1213 x2	—	47	47	XP6213CT-ND	.48	.40	.32	XP6213TR-ND	3,000	127.00/M
8	S Mini 6Pin	UN1214 x2	—	10	47	XP6214CT-ND	.48	.40	.32	XP6214TR-ND	3,000	127.00/M
8	S Mini 6Pin	UN1215 x2	—	10	open	XP6215CT-ND	.48	.40	.32	XP6215TR-ND	3,000	127.00/M
9	SS Mini 6Pin	UN2111 x2	—	10	10	UP0411100LCT-ND *NEW!*	.61	.46	.35	UP0411100LTR-ND *NEW!*	8,000	194.00/M
10	SS Mini 6Pin	—	UN2213 x2	47	47	UP0421300LCT-ND *NEW!*	.61	.46	.35	UP0421300LTR-ND *NEW!*	8,000	194.00/M
11	SS Mini 6Pin	UN2116 x1	UN2216 x1	4.7	open	UP0431600LCT-ND *NEW!*	.61	.46	.35	UP0431600LTR-ND *NEW!*	8,000	194.00/M

Panasonic® Transistor Arrays Composite Transistors

Fig. 1

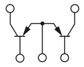


Fig. 2

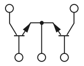


Fig. 3

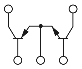


Fig. 4

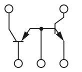


Fig. 5

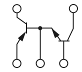


Fig. 6

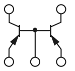


Fig. 7

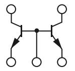


Fig. 8

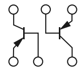


Fig. 9

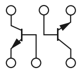


Fig. 10

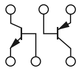


Fig. 11

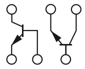


Fig. 12

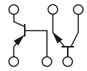


Fig. 13

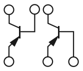


Fig. 14

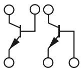


Fig. 15

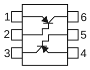


Fig. 16

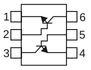
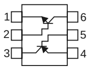
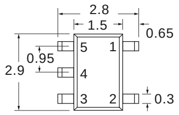


Fig. 17

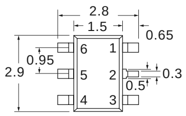


Dim. in mm

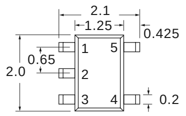
Mini Type (5-pin)
EIAJ: SC-74A



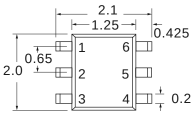
Mini Type (6-pin)
EIAJ: SC-74



S-Mini Type (5-pin)
EIAJ: SC-88A



S-Mini Type (6-pin)
EIAJ: SC-88



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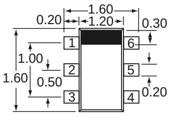
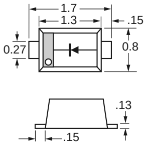


Fig.	Basic Type		Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing
	PNP	NPN		1	10	100		
Mini Type 5-Pin								
1	2SB709A x2	—	XN1401CT-ND	.41	.34	.23	XN1401TR-ND	321.00/3,000
2	—	2SD601A x2	XN1501CT-ND	.41	.34	.23	XN1501TR-ND	321.00/3,000
2	—	2SD1938 x2	XN1504CT-ND	.59	.45	.34	XN1504TR-ND	576.00/3,000
2	—	2SC4561 x2	XN1509CT-ND	.54	.41	.31	XN1509TR-ND	528.00/3,000
2	—	2SC3130 x2	XN1531CT-ND	.89	.67	.51	XN1531TR-ND	870.00/3,000
3	2SB709A x1	2SD601A x1	XN1601CT-ND	.41	.34	.23	XN1601TR-ND	321.00/3,000
6	2SB709A x2	—	XN2401CT-ND	.41	.34	.23	XN2401TR-ND	321.00/3,000
7	—	2SD601A x2	XN2501CT-ND	.41	.34	.23	XN2501TR-ND	321.00/3,000
7	—	2SC3130 x2	XN2531CT-ND	.66	.50	.37	XN2531TR-ND	642.00/3,000
4	2SB709A x1	2SD601A x1	XN1B301CT-ND	.41	.35	.28	XN1B301TR-ND	327.00/3,000
5	2SB709A x1	2SD601A x1	XN1C301CT-ND	.41	.35	.28	XN1C301TR-ND	327.00/3,000
Mini Type 6-Pin								
8	2SB709A x2	—	XN4401CT-ND	.41	.34	.23	XN4401TR-ND	321.00/3,000
8	2SB710A x2	—	XN4402CT-ND	.56	.42	.32	XN4402TR-ND	543.00/3,000
8	2SB970 x2	—	XN4404CT-ND	.64	.49	.37	XN4404TR-ND	627.00/3,000
9	—	2SD601A x2	XN4501CT-ND	.41	.34	.23	XN4501TR-ND	321.00/3,000
9	—	2SD602A x2	XN4502CT-ND	.57	.46	.35	XN4502TR-ND	456.00/3,000
9	—	2SD1328 x2	XN4504CT-ND	.60	.45	.34	XN4504TR-ND	582.00/3,000
10	2SB709A x1	2SD601A x1	XN4601CT-ND	.41	.34	.23	XN4601TR-ND	321.00/3,000
10	2SB970 x1	2SD1328 x1	XN4604CT-ND	.81	.61	.46	XN4604TR-ND	789.00/3,000
10	2SB970 x1	2SD601A x1	XN4608CT-ND	.49	.37	.28	XN4608TR-ND	477.00/3,000
10	2SB709A x1	2SD1328 x1	XN4609CT-ND	.58	.44	.33	XN4609TR-ND	567.00/3,000
11	—	2SD601A x2	XN5501CT-ND	.41	.34	.23	XN5501TR-ND	321.00/3,000
11	—	2SC3130 x2	XN5531CT-ND	.66	.50	.37	XN5531TR-ND	642.00/3,000
11	—	2SD1149 x2	XN5553CT-ND	.79	.60	.45	XN5553TR-ND	774.00/3,000

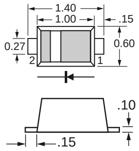
Fig.	Basic Type		Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing
	PNP	NPN		1	10	100		
Mini Type 6-Pin								
12	2SB709A x1	2SD601A x1	XN5601CT-ND	.41	.34	.23	XN5601TR-ND	321.00/3,000
13	2SB709A x2	—	XN6401CT-ND	.41	.34	.23	XN6401TR-ND	321.00/3,000
14	—	2SD601A x2	XN6501CT-ND	.41	.34	.23	XN6501TR-ND	321.00/3,000
14	—	2SC2404 x2	XN6534CT-ND	.81	.61	.46	XN6534TR-ND	789.00/3,000
14	—	2SC3110 x2	XN6537CT-ND	.66	.50	.37	XN6537TR-ND	642.00/3,000
14	—	2SC3904 x2	XN6543CT-ND	.95	.79	.64	XN6543TR-ND	1233.00/3,000
S-Mini Type 5-Pin								
1	2SB709A x2	—	XP1401CT-ND	.42	.34	.24	XP1401TR-ND	330.00/3,000
2	—	2SD601A x2	XP1501CT-ND	.42	.34	.24	XP1501TR-ND	330.00/3,000
6	2SB709A x2	—	XP2401CT-ND	.42	.34	.24	XP2401TR-ND	330.00/3,000
7	—	2SD601A x2	XP2501CT-ND	.42	.34	.24	XP2501TR-ND	330.00/3,000
4	2SB709A x1	2SD601A x1	XP1B301CT-ND	.42	.35	.28	XP1B301TR-ND	333.00/3,000
5	2SB709A x1	2SD601A x1	XP1C301CT-ND	.42	.35	.28	XP1C301TR-ND	333.00/3,000
S-Mini Type 6-Pin								
8	2SB709A x2	—	XP4401CT-ND	.42	.34	.24	XP4401TR-ND	330.00/3,000
10	2SB709A x1	2SD601A x1	XP4601CT-ND	.42	.34	.24	XP4601TR-ND	330.00/3,000
10	2SA1738 x1	2SC3757 x1	XP4654CT-ND	.71	.54	.40	XP4654TR-ND	690.00/3,000
11	—	2SC4782 x2	XP5555CT-ND	.63	.48	.36	XP5555TR-ND	618.00/3,000
12	2SB709A x1	2SD601A x1	XP5601CT-ND	.42	.34	.24	XP5601TR-ND	330.00/3,000
13	2SB709A x2	—	XP6401CT-ND	.42	.34	.24	XP6401TR-ND	330.00/3,000
14	—	2SD601A x2	XP6501CT-ND	.42	.34	.24	XP6501TR-ND	330.00/3,000
SS-Mini Type 6-Pin								
15	2SB709A x2	—	UP0440100LCT-ND	.61	.46	.35	UP0440100LTR-ND	1552.00/8,000
16	—	2SD601A x2	UP0450100LCT-ND	.61	.46	.35	UP0450100LTR-ND	1552.00/8,000
17	2SB709A x1	2SD601A x1	UP0460100LCT-ND	.61	.46	.35	UP0460100LTR-ND	1552.00/8,000

Variable Capacitance Diodes - Silicon Epitaxial Planar Type

SS-Mini (2-pin)



SSS-Mini (2-pin)



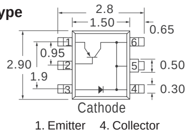
Package	Application	VR (V)	IR @ 10nA @VR	CD @ 1Mhz		CD @ 1Mhz		RD @ 470Mhz Ω (max)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel	
				@VR	pF(max)	@VR	pF(max)			1	10	100		Size	Pricing
SS-Mini 2P	Band Switching	35	33*	6	1.2	—	—	.85*	MA2S077CT-ND	.40	.34	.27	MA2S077TR-ND	3,000	107.00/M
SS-Mini 2P	VCO	30	28	1	29.8	4	8.3	1.0*	MA2S304CT-ND	.46	.37	.28	MA2S304TR-ND	3,000	122.00/M
SS-Mini 2P	VCO/UHF	12	12	1	20	4	12.4	.22	MA2S331CT-ND	.43	.35	.26	MA2S331TR-ND	3,000	115.00/M
SS-Mini 2P	CATV Tuner	34	30	2	34.3	10	8.32	.54	MA2S357CT-ND	.43	.35	.26	MA2S357TR-ND	3,000	115.00/M
SS-Mini 2P	UHF/VHF Tuner	32	30	2	15.47	10	6.13	.45	MA2S372CT-ND	.46	.39	.31	MA2S372TR-ND	3,000	123.00/M
SS-Mini 2P	CATV Tuner	34	30	2	50.79	10	13.08	.90	MA2S374CT-ND	.48	.39	.29	MA2S374TR-ND	3,000	128.00/M
SS-Mini 2P	VCO/TCXO	12	12	2	3.4	10	1.5	.60	MA2S377CT-ND	.44	.36	.27	MA2S377TR-ND	3,000	118.00/M
SSS-Mini 2P	VCO	6	6	1	17	3	7	1.0	MA27V01CT-ND	.50	.41	.31	MA27V01TR-ND	10,000	126.00/M
SSS-Mini 2P	VCO	6	5	1	20	4	9	.30	MA27V02CT-ND	.53	.43	.33	MA27V02TR-ND	10,000	134.00/M
SSS-Mini 2P	VCO	6	5	1	5.8	4	2.58	.30	MA27V03CT-ND	.46	.37	.28	MA27V03TR-ND	10,000	115.00/M
SSS-Mini 2P	VCO	6	5	1	11.1	3	6.4	.35	MA27V04CT-ND	.46	.37	.28	MA27V04TR-ND	10,000	115.00/M
SSS-Mini 2P	VCO	10	10	1	20.5	4	4.1	.65	MA27V05CT-ND	.51	.41	.31	MA27V05TR-ND	10,000	128.00/M
SSS-Mini 2P	VCO	6	5	1	3.12	3	1.62	.35	MA27V07CT-ND	.48	.38	.29	MA27V07TR-ND	10,000	119.00/M
SSS-Mini 2P	VCO	6	5	1	16.4	3	9.2	.35	MA27V09CT-ND	.54	.44	.33	MA27V09TR-ND	10,000	135.00/M
SSS-Mini 2P	VCO	8	5	1	3.01	4	1.34	.35	MA27V11CT-ND	.54	.44	.33	MA27V11TR-ND	10,000	135.00/M
SSS-Mini 2P	VCO	8	5	1	3.9	4	2.14	.35	MA27V12CT-ND	.56	.45	.34	MA27V12TR-ND	10,000	139.00/M
SSS-Mini 2P	VCO	12	10	1	12.29	3	5.81	.40	MA27V13CT-ND	.56	.45	.34	MA27V13TR-ND	10,000	139.00/M
SSS-Mini 2P	VCO	6	5	0.5	7.91	2.5	3.23	.45	MA27V15CT-ND	.58	.47	.35	MA27V15TR-ND	10,000	144.00/M
SSS-Mini 2P	VCO/UHF	6	6	1	16	3	8.9	.30	MA27376CT-ND	.46	.37	.28	MA27376TR-ND	10,000	115.00/M

*100Mhz

PNP Transistors with Diode Protection

Application	Package	V_{CEO} (V)	IC	Diode		Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel Pricing 3,000
				V_F	I_F		1	10	100		
PNP Type											
DC-DC Converter	Mini 6P	15	2.5A 2.5A 1.5A	.45V .45V .45V	1.0A 700mA 700mA	XN09D57CT-ND XN09D58CT-ND XN09D61CT-ND	.95 .93 .91	.72 .70 .68	.54 .53 .52	XN09D57TR-ND XN09D58TR-ND XN09D61TR-ND	309.00/M 303.00/M 295.00/M

Mini Type (6-pin)

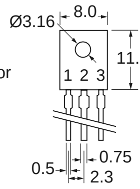


1. Emitter 4. Collector
2. Base 5. Collector
3. Anode 6. Collector

Panasonic

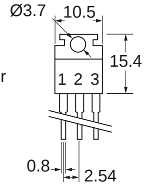
Transistors and MOSFETs

TO-126



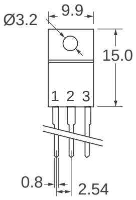
1. Emitter
2. Collector
3. Base

TO-220
EIAJ: SC-46



1. Base
2. Collector
3. Emitter

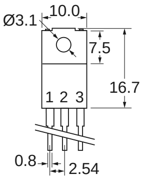
TO-220D



Transistors
1. Base
2. Collector
3. Emitter

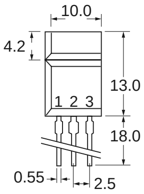
Mosfets
1. Gate
2. Drain
3. Source

TO-220F
EIAJ:SC-67



1. Base
2. Collector
3. Emitter

MT-4



1. Base
2. Collector
3. Emitter

Power Transistors

Application	Package	VCEO (V)	IC	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000
PNP Type									
AF Power Amp	TO-126	60	2A	2SA1096A-ND	1.35	1.13	.91	—	—
AF Power Amp	TO-126	120	0.5A	2SA1110-ND	.89	.75	.60	—	—
AF Output Driver	TO-126	120	0.5A	2SA794A-ND	1.35	1.13	.91	—	—
AF Output Driver	TO-126	35	1A	2SA885-ND	.77	.65	.52	—	—
AF Power Amp	TO-126	40	1.5A	2SA886-ND	.77	.65	.52	—	—
AF Power Amp	TO-126	18	1A	2SA900-ND	1.13	.94	.76	—	—
AF Power Pre-Amp	TO-126	150	50mA	2SA914-ND	1.35	1.13	.91	—	—
AF Power Amp	TO-126	40	1.5A	2SA963-ND	1.47	1.23	.99	—	—
AF Amp	TO-126	400	0.1A	2SB1011-ND	.81	.68	.55	—	—
AF Driver	TO-220F	180	1A	2SA1535A-ND	1.16	.97	.78	—	—
Vertical Deflection	TO-220F	180	2A	2SB940A-ND	.97	.81	.65	—	—
Power Switching	TO-220F	80	3A	2SB943-ND	1.45	1.17	.88	—	—
Power Amp/Switching	TO-220F	80	2A	2SB949A-ND	1.16	.97	.78	—	—
Power Amp/Switching	TO-220F	80	4A	2SB950A-ND	1.35	1.13	.91	—	—
Med. Speed Switch	TO-220F	80	8A	2SB951A-ND	1.61	1.29	.97	—	—
Power Amp	TO-220D	60	3A	2SA2057-ND	1.02	.85	.68	—	—
General Amp	TO-220D	80	3A	2SB1548A-ND	.85	.71	.57	—	—
Power Amp	MT-4	80	3A	2SB1417ACT-ND†	1.16	.97	.78	2SB1417ATB-ND	515.00
Power Amp	MT-4	80	2A	2SB1418ACT-ND†	1.35	1.13	.91	2SB1418ATB-ND	600.00
NPN Type									
AF High Power Driver	TO-126	120	0.5A	2SC1567A-ND	1.29	1.04	.78	—	—
Med. Power Amp	TO-126	18	1A	2SC1568-ND	.77	.65	.52	—	—
Med. Power Amp	TO-126	35	1A	2SC1846-ND	.62	.47	.35	—	—
Med. Power Amp	TO-126	40	1.5A	2SC1847-ND	.85	.64	.48	—	—
AF Power Pre-Amp	TO-126	150	50mA	2SC1953-ND	1.24	1.04	.83	—	—
AF Power Amp	TO-126	40	1.5A	2SC2209-ND	1.16	.97	.78	—	—
TV Video Out Amp	TO-126	250	0.1A	2SC2258-ND	.77	.58	.44	—	—
AF Power Amp	TO-126	60	1.5A	2SC2497A-ND	1.24	1.04	.83	—	—
AF Power Amp	TO-126	120	0.5A	2SC2590-ND	.83	.62	.47	—	—
AF Power Amp	TO-126	20	5A	2SC2594-ND	1.01	.84	.68	—	—
RF Power Amp	TO-126	16	0.5A	2SC2988-ND	2.32	1.86	1.45	—	—
Video Amp	TO-126	50	0.15A	2SC3611-ND	.64	.49	.37	—	—
Horz. Deflection Driver	TO-126	300	0.2A	2SC4212-ND	.77	.58	.44	—	—
Color Chroma Input	TO-126	400	70mA	2SC5121-ND	.77	.58	.44	—	—
AF Amp	TO-126	60	1A	2SD1645-ND*	.89	.75	.60	—	—
AF Amp	TO-126	60	1A	2SD2018-ND*	.67	.51	.38	—	—
AF Amp	TO-126	80	1A	2SD946B-ND*	.89	.75	.60	—	—
Color Chroma Output	TO-220F	300	0.1A	2SC3942-ND	.97	.81	.65	—	—
Video Amp	TO-220F	50	0.15A	2SC3943-ND	1.35	1.13	.91	—	—
High Power Amp	TO-220F	180	1A	2SC3944A-ND	1.08	.91	.73	—	—
Vertical Deflection	TO-220F	180	2A	2SD1264A-ND	.89	.75	.60	—	—
Power Amp	TO-220F	80	4A	2SD1267A-ND	1.35	1.13	.91	—	—
Power Switching	TO-220F	100	7A	2SD1271A-ND	1.61	1.29	.97	—	—
Power Amp	TO-220F	250	5A	2SD1274B-ND	1.77	1.42	1.07	—	—
Power Amp	TO-220F	80	2A	2SD1275A-ND*	1.08	.91	.73	—	—
Power Amp	TO-220F	80	4A	2SD1276A-ND*	1.28	1.07	.86	—	—
Med. Speed Switch	TO-220F	80	8A	2SD1277A-ND*	1.45	1.17	.88	—	—
High DC Current Gain	TO-220F	60	6A	2SD1474-ND	1.45	1.17	.88	—	—
High Power Amp	TO-220F	100	5A	2SD1499-ND	1.47	1.23	.99	—	—
Power Switching	TO-220F	60	4A	2SD2000-ND	.89	.75	.60	—	—
High Speed Switch	TO-220D	400	3A	2SC4953-ND	1.29	1.04	.78	—	—
High Speed Switch	TO-220D	500	1.5A	2SC5392-ND	1.45	1.17	.88	—	—
General Amp	TO-220D	80	3A	2SD2374A-ND	.77	.65	.52	—	—
High Gain	TO-220D	60	3A	2SD2375-ND	.97	.81	.65	—	—
Power Amp	TO-220D	60	3A	2SC5739-ND	.93	.78	.62	—	—
High Gain	TO-220D	60	5A	2SD2528-ND	1.29	1.04	.78	—	—
General Amp	TO-220D	80	3A	2SD2549-ND	.93	.70	.53	—	—
Power Amp	MT-4	80	3A	2SD2137ACT-ND†	1.08	.91	.73	2SD2137ATB-ND	480.00
Power Amp	MT-4	80	2A	2SD2138ACT-ND†	1.35	1.13	.91	2SD2138ATB-ND	600.00
High DC Current Gain	MT-4	60	3A	2SD2139ACT-ND†	1.16	.97	.78	2SD2139ATB-ND	515.00

* Darlington † Cut Tape Pricing

Power MOSFETs

Package	VDSS (V)	VGSS (V)	ID	RDS (on) Type (Ω)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
N-Channel Type										
TO-220D	450	30	5A	1.0	2SK3043-ND	1.80	1.45	1.09	.98	.94
	450	30	7A	0.56	2SK3044-ND	2.47	1.98	1.48	1.34	1.29
	500	30	2.5A	3.2	2SK3045-ND	1.52	1.22	.92	.82	.79
	500	30	7A	0.7	2SK3046-ND	2.37	1.90	1.43	1.29	1.24
TO-220D	800	30	2A	4.8	2SK3047-ND	1.83	1.47	1.11	1.00	.96
	600	30	3A	1.7	2SK3048-ND	1.77	1.42	1.07	.96	.93
	600	30	5A	0.85	2SK3049-ND	2.47	1.98	1.48	1.34	1.29

Surface Mount Transistors and MOSFETs

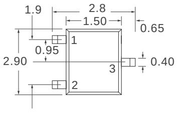
Transistors

Application	Package	VCEO (V)	IC	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
PNP Type									
DC-DC Converter	Mini 3P	15	2.5A	2SA2010CT-ND	.51	.38	.29	2SA2010TR-ND	164.00/M
DC-DC Converter	Mini 3P	20	1.5A	2SA2046CT-ND	.49	.37	.28	2SA2046TR-ND	159.00/M
AF Amplifier	S-Mini 3P	10	0.5A	2SB1679CT-ND	.59	.48	.36	2SB1679TR-ND	158.00/M
NPN Type									
DC-DC Converter	Mini 3P	15	2.5A	2SC5592CT-ND	.49	.37	.28	2SC5592TR-ND	159.00/M
DC-DC Converter	Mini 3P	15	2A	2SC5725CT-ND	.58	.47	.35	2SC5725TR-ND	155.00/M

Surface Mount MOSFETS

Package	VDSS (V)	VGSS (V)	ID (A)	RDS (on) Typ. (Ω)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Small Signal/Switching MOSFET — N-Channel Type										
S-Mini 3P	30	20	1	30	2SK3064CT-ND	.46	.39	.31	2SK3064TR-ND	123.00/M
S-Mini 3P	50	7	1	8/6	2SK3539CT-ND	.43	.35	.26	2SK3539TR-ND	115.00/M
Mini 3P	50	10	.05	27	2SK1228CT-ND	.48	.40	.32	2SK1228TR-ND	128.00/M
S-Mini 6P	50	7	1	8/6	XP04878CT-ND	.68	.52	.39	XP04878TR-ND	222.00/M
Small Signal/Switching MOSFET — P-Channel Type										
S-Mini 3P	30	20	1	50	2SJ0536CT-ND	.48	.40	.32	2SJ0536TR-ND	128.00/M

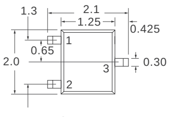
Mini Type Package (3-pin)



Transistors:
1. Base
2. Emitter
3. Collector

Mosfets:
1. Gate
2. Source
3. Drain

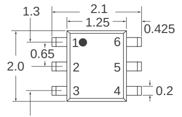
S-Mini Type Package (3-pin)



Transistors:
1. Base
2. Emitter
3. Collector

Mosfets:
1. Gate
2. Source
3. Drain

S-Mini Type Package (6-pin)



1. Source
2. Gate
3. Drain
4. Source
5. Gate
6. Source

Unit - mm

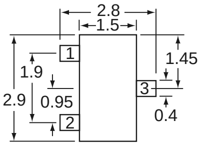
Panasonic® PNP/NPN Transistors

Mini Type

Surface Mount with built-in resistors for preset gains

VCEO=50V/-50V
IC=100mA/-100mA
PC=200mW
JEDEC: TO-236
EIAJ: SC-59A

1. Base
2. Emitter
3. Collector



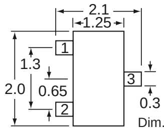
Resistance Value RB K Ohms	RBE K Ohms	hFE min Vce=10V IC=5mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
PNP								
10	10	35	UN2111CT-ND	.37	.29	.20	UN2111TR-ND	75.00/M
22	22	60	UN2112CT-ND	.37	.29	.20	UN2112TR-ND	75.00/M
47	47	80	UN2113CT-ND	.37	.29	.20	UN2113TR-ND	75.00/M
10	47	80	UN2114CT-ND	.37	.29	.20	UN2114TR-ND	75.00/M
10	∞	160	UN2115CT-ND	.37	.29	.20	UN2115TR-ND	75.00/M
4.7	∞	160	UN2116CT-ND	.37	.29	.20	UN2116TR-ND	75.00/M
22	∞	160	UN2117CT-ND	.37	.29	.20	UN2117TR-ND	75.00/M
0.51	5.1	20	UN2118CT-ND	.37	.29	.20	UN2118TR-ND	75.00/M
1	10	30	UN2119CT-ND	.37	.29	.20	UN2119TR-ND	75.00/M
47	∞	160	UN2110CT-ND	.37	.29	.20	UN2110TR-ND	75.00/M
47	10	30	UN211DCT-ND	.37	.29	.20	UN211DTR-ND	75.00/M
47	22	60	UN211ECT-ND	.37	.29	.20	UN211ETR-ND	75.00/M
4.7	10	30	UN211FCT-ND	.37	.29	.20	UN211FTR-ND	75.00/M
2.2	10	30	UN211HCT-ND	.37	.29	.20	UN211HTR-ND	75.00/M
4.7	4.7	20	UN211LCT-ND	.37	.29	.20	UN211LTR-ND	75.00/M
2.2	47	80	UN211MCT-ND	.37	.29	.20	UN211MTR-ND	75.00/M
4.7	47	80	UN211NCT-ND	.37	.29	.20	UN211NTR-ND	75.00/M
2.2	2.2	6	UN211VCT-ND	.37	.29	.20	UN211VTR-ND	75.00/M
NPN								
10	10	35	UN2211CT-ND	.37	.29	.20	UN2211TR-ND	75.00/M
22	22	60	UN2212CT-ND	.37	.29	.20	UN2212TR-ND	75.00/M
47	47	80	UN2213CT-ND	.37	.29	.20	UN2213TR-ND	75.00/M
10	47	80	UN2214CT-ND	.37	.29	.20	UN2214TR-ND	75.00/M
10	∞	160	UN2215CT-ND	.37	.29	.20	UN2215TR-ND	75.00/M
4.7	∞	160	UN2216CT-ND	.37	.29	.20	UN2216TR-ND	75.00/M
22	∞	160	UN2217CT-ND	.37	.29	.20	UN2217TR-ND	75.00/M
0.51	5.1	20	UN2218CT-ND	.37	.29	.20	UN2218TR-ND	75.00/M
1	10	30	UN2219CT-ND	.37	.29	.20	UN2219TR-ND	75.00/M
47	∞	160	UN2210CT-ND	.37	.29	.20	UN2210TR-ND	75.00/M
47	10	30	UN221DCT-ND	.37	.29	.20	UN221DTR-ND	75.00/M
47	22	60	UN221ECT-ND	.37	.29	.20	UN221ETR-ND	75.00/M
4.7	10	30	UN221FCT-ND	.37	.29	.20	UN221FTR-ND	75.00/M
10	4.7	20	UN221KCT-ND	.37	.29	.20	UN221KTR-ND	75.00/M
4.7	4.7	20	UN221LCT-ND	.37	.29	.20	UN221LTR-ND	75.00/M
2.2	47	80	UN221MCT-ND	.37	.29	.20	UN221MTR-ND	75.00/M
4.7	47	80	UN221NCT-ND	.37	.29	.20	UN221NTR-ND	75.00/M
2.2	2.2	6	UN221VCT-ND	.37	.29	.20	UN221VTR-ND	75.00/M

S-Mini Type

Surface Mount with built-in resistors for preset gains

VCEO=50V/-50V
IC=100mA/-100mA
PC=150mW
EIAJ: SC-70

1. Base
2. Emitter
3. Collector



Dim. in mm

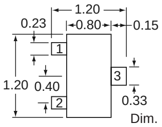
Resistance Value RB K Ohms	RBE K Ohms	hFE min Vce=10V IC=5mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
PNP								
10	10	35	UN5111CT-ND	.40	.30	.21	UN5111TR-ND	80.00/M
22	22	60	UN5112CT-ND	.40	.30	.21	UN5112TR-ND	80.00/M
47	47	80	UN5113CT-ND	.40	.30	.21	UN5113TR-ND	80.00/M
10	47	80	UN5114CT-ND	.40	.30	.21	UN5114TR-ND	80.00/M
10	∞	160	UN5115CT-ND	.40	.30	.21	UN5115TR-ND	80.00/M
4.7	∞	160	UN5116CT-ND	.40	.30	.21	UN5116TR-ND	80.00/M
22	∞	160	UN5117CT-ND	.40	.30	.21	UN5117TR-ND	80.00/M
0.51	5.1	20	UN5118CT-ND	.40	.30	.21	UN5118TR-ND	80.00/M
1	10	30	UN5119CT-ND	.40	.30	.21	UN5119TR-ND	80.00/M
47	∞	160	UN5110CT-ND	.40	.30	.21	UN5110TR-ND	80.00/M
47	10	30	UN511DCT-ND	.40	.30	.21	UN511DTR-ND	80.00/M
47	22	60	UN511ECT-ND	.40	.30	.21	UN511ETR-ND	80.00/M
4.7	10	30	UN511FCT-ND	.40	.30	.21	UN511FTR-ND	80.00/M
2.2	10	30	UN511HCT-ND	.40	.30	.21	UN511HTR-ND	80.00/M
4.7	4.7	20	UN511LCT-ND	.40	.30	.21	UN511LTR-ND	80.00/M
2.2	47	80	UN511MCT-ND	.40	.30	.21	UN511MTR-ND	80.00/M
4.7	47	80	UN511NCT-ND	.40	.30	.21	UN511NTR-ND	80.00/M
2.2	2.2	6	UN511VCT-ND	.40	.30	.21	UN511VTR-ND	80.00/M
NPN								
10	10	35	UN5211CT-ND	.40	.30	.21	UN5211TR-ND	80.00/M
22	22	60	UN5212CT-ND	.40	.30	.21	UN5212TR-ND	80.00/M
47	47	80	UN5213CT-ND	.40	.30	.21	UN5213TR-ND	80.00/M
10	47	80	UN5214CT-ND	.40	.30	.21	UN5214TR-ND	80.00/M
10	∞	160	UN5215CT-ND	.40	.30	.21	UN5215TR-ND	80.00/M
4.7	∞	160	UN5216CT-ND	.40	.30	.21	UN5216TR-ND	80.00/M
22	∞	160	UN5217CT-ND	.40	.30	.21	UN5217TR-ND	80.00/M
0.51	5.1	20	UN5218CT-ND	.40	.30	.21	UN5218TR-ND	80.00/M
1	10	30	UN5219CT-ND	.40	.30	.21	UN5219TR-ND	80.00/M
47	∞	160	UN5210CT-ND	.40	.30	.21	UN5210TR-ND	80.00/M
47	10	30	UN521DCT-ND	.40	.30	.21	UN521DTR-ND	80.00/M
47	22	60	UN521ECT-ND	.40	.30	.21	UN521ETR-ND	80.00/M
4.7	10	30	UN521FCT-ND	.40	.30	.21	UN521FTR-ND	80.00/M
10	4.7	20	UN521KCT-ND	.40	.30	.21	UN521KTR-ND	80.00/M
4.7	4.7	20	UN521LCT-ND	.40	.30	.21	UN521LTR-ND	80.00/M
2.2	47	80	UN521MCT-ND	.40	.30	.21	UN521MTR-ND	80.00/M
4.7	47	80	UN521NCT-ND	.40	.30	.21	UN521NTR-ND	80.00/M
2.2	2.2	6	UN521VCT-ND	.40	.30	.21	UN521VTR-ND	80.00/M

SSS-Mini Type

Surface Mount with built-in-resistors for preset gains

VCEO= -50V/50V
IC= -100mA/100mA
PC=100mW

1. Base
2. Emitter
3. Collector



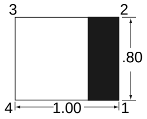
Dim. in mm

Resistance Value RB K Ohms	RBE K Ohms	hFE min Vce=10V IC=5mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 10,000
PNP								
47	47	80	UNR311300LCT-ND	.39	.33	.27	UNR311300LTR-ND	92.00/M
NPN								
47	47	80	UNR321300LCT-ND	.39	.33	.27	UNR321300LTR-ND	92.00/M
4.7	∞	160	UNR321600LCT-ND	.39	.33	.27	UNR321600LTR-ND	92.00/M
4.7	47	80	UNR321N00LCT-ND	.39	.33	.27	UNR321N00LTR-ND	92.00/M

1008 Mold Leadless Type

Surface Mount with built-in-resistors for preset gains

VCEO= -50V/50V
IC= -100mA/100mA
PC=150mW



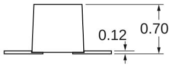
Dim. in mm

Resistance Value RB K Ohms	RBE K Ohms	hFE min Vce=10V IC=5mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 10,000
PNP								
10	10	35	UNRL11100ACT-ND	.69	.53	.40	UNRL11100ATR-ND	217.00/M
47	47	80	UNRL11300ACT-ND	.69	.53	.40	UNRL11300ATR-ND	217.00/M
10	∞	160	UNRL11500ACT-ND	.69	.53	.40	UNRL11500ATR-ND	217.00/M
NPN								
10	10	35	UNRL21100ACT-ND	.69	.53	.40	UNRL21100ATR-ND	217.00/M
47	47	80	UNRL21300ACT-ND	.69	.53	.40	UNRL21300ATR-ND	217.00/M
10	∞	160	UNRL21500ACT-ND	.69	.53	.40	UNRL21500ATR-ND	217.00/M

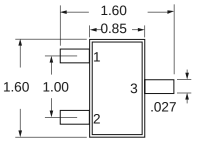
SS-Mini Flat (J-Type)

Surface Mount with built in resistors for preset gains

VCEO=50V/50V
IC=100mA/-100mA
PT=125mW
EIAJ: SC-81



1. Base
2. Emitter
3. Collector



Dim. in mm

Resistance Value RB K Ohms	RBE K Ohms	hFE min Vce=10V IC=5mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
PNP								
10	10	35	UN9111JCT-ND	.40	.30	.21	UN9111JTR-ND	79.00/M
22	22	60	UN9112JCT-ND	.40	.30	.21	UN9112JTR-ND	79.00/M
47	47	80	UN9113JCT-ND	.40	.30	.21	UN9113JTR-ND	79.00/M
10	47	80	UN9114JCT-ND	.40	.30	.21	UN9114JTR-ND	79.00/M
10	∞	160	UN9115JCT-ND	.40	.30	.21	UN9115JTR-ND	79.00/M
4.7	∞	160	UN9116JCT-ND	.40	.30	.21	UN9116JTR-ND	79.00/M
22	∞	160	UN9117JCT-ND	.40	.30	.21	UN9117JTR-ND	79.00/M
0.51	5.1	20	UN9118JCT-ND	.40	.30	.21	UN9118JTR-ND	79.00/M
1	10	30	UN9119JCT-ND	.40	.30	.21	UN9119JTR-ND	79.00/M
47	∞	160	UN9110JCT-ND	.40	.30	.21	UN9110JTR-ND	79.00/M
22	47	80	UN911TJCT-ND	.40	.30	.21	UN911TJTR-ND	79.00/M
47	22	60	UN911EJCT-ND	.40	.30	.21	UN911EJTR-ND	79.00/M
4.7	10	30	UN911FJCT-ND	.40	.30	.21	UN911FJTR-ND	79.00/M
2.2	10	30	UN911HJCT-ND	.40	.30	.21	UN911HJTR-ND	79.00/M
4.7	4.7	20	UN911LJCT-ND	.40	.30	.21	UN911LJTR-ND	79.00/M
4.7	47	80	UN911NJCT-ND	.40	.30	.21	UN911NJTR-ND	79.00/M
100	100	80	UNR911AJCT-ND	.40	.30	.21	UNR911AJTR-ND	79.00/M
100	—	160	UNR911BJCT-ND	.40	.30	.21	UNR911BJTR-ND	79.00/M
2.2	47	80	UNR911MJCT-ND	.40	.30	.21	UNR911MJTR-ND	79.00/M
NPN								
10	10	35	UN9211JCT-ND	.40	.30	.21	UN9211JTR-ND	79.00/M
22	22	60	UN9212JCT-ND	.40	.30	.21	UN9212JTR-ND	79.00/M
47	47	80	UN9213JCT-ND	.40	.30	.21	UN9213JTR-ND	79.00/M
10	47	80	UN9214JCT-ND	.40	.30	.21	UN9214JTR-ND	79.00/M
10	∞	160	UN9215JCT-ND	.40	.30	.21	UN9215JTR-ND	79.00/M
4.7	∞	160	UN9216JCT-ND	.40	.30	.21	UN9216JTR-ND	79.00/M
22	∞	160	UN9217JCT-ND	.40	.30	.21	UN9217JTR-ND	79.00/M
0.51	5.1	20	UN9218JCT-ND	.40	.30	.21	UN9218JTR-ND	79.00/M
1	10	30	UN9219JCT-ND	.40	.30	.21	UN9219JTR-ND	79.00/M
47	∞	160	UN9210JCT-ND	.40	.30	.21	UN9210JTR-ND	79.00/M
22	47	80	UN921MJCT-ND	.40	.30	.21	UN921MJTR-ND	79.00/M
22	47	80	UN921TJCT-ND	.40	.30	.21	UN921TJTR-ND	79.00/M
47	10	30	UN921DJCT-ND	.40	.30	.21	UN921DJTR-ND	79.00/M
47	22	60	UN921EJCT-ND	.40	.30	.21	UN921EJTR-ND	79.00/M
4.7	10	30	UN921FJCT-ND	.40	.30	.21	UN921FJTR-ND	79.00/M
4.7	4.7	20	UN921LJCT-ND	.40	.30	.21	UN921LJTR-ND	79.00/M
100	100	80	UNR921AJCT-ND	.40	.30	.21	UNR921AJTR-ND	79.00/M
100	100	160	UNR921BJCT-ND	.40	.30	.21	UNR921BJTR-ND	79.00/M
2.2	2.2	6	UNR921NJCT-ND	.40	.30	.21	UNR921NJTR-ND	79.00/M
2.2	2.2	6	UNR921VJCT-ND	.40	.30	.21	UNR921VJTR-ND	79.00/M

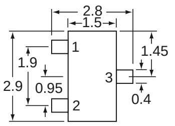
Panasonic

Small Signal Transistors

Mini, S-Mini, SS-Mini, Mini Power, MT-1 & MT-2 Type Package

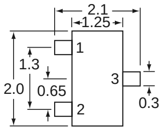
Dim. in mm

Mini Type



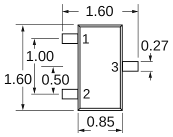
1. Base
2. Emitter
3. Collector

S-Mini Type



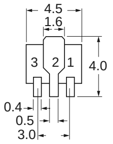
1. Base
2. Emitter
3. Collector

SS-Mini Flat J Type



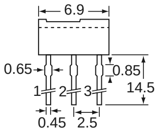
1. Base
2. Emitter
3. Collector

Mini Power Type



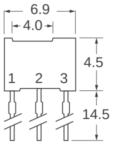
1. Base
2. Collector
3. Emitter

MT-1 Type



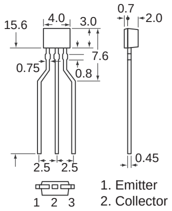
1. Emitter
2. Collector
3. Base

MT-2 Type



1. Emitter
2. Collector
3. Base

S Type



1. Emitter
2. Collector
3. Base

Package	Application	VCEO (V)	IC (mA)	hFE		Digi-Key	Cut Tape Price Each			Digi-Key	Tape & Box		Tape & Reel	
				Min	Max	Part No.	1	10	100	Part No.	Size	Pricing	Size	Pricing
PNP Type														
Mini 3P	General Amp	45	100	160	460	2SB709ACT-ND	.26	.20	.14	2SB709ATR-ND	—	—	3,000	52.00/M
Mini 3P	General Amp	25	500	85	340	2SB710CT-ND	.41	.33	.25	2SB710TR-ND	—	—	3,000	108.00/M
Mini 3P	General Amp	50	500	85	340	2SB710ACT-ND	.41	.33	.25	2SB710ATR-ND	—	—	3,000	108.00/M
Mini 3P	General Amp	45	100	160	260	2SB709AQCT-ND	.28	.22	.16	2SB709AQTR-ND	—	—	3,000	55.00/M
Mini 3P	General Amp	45	100	210	340	2SB709ARCT-ND	.28	.22	.16	2SB709ARTR-ND	—	—	3,000	55.00/M
Mini 3P	General Amp	45	100	290	460	2SB709ASCT-ND	.28	.22	.16	2SB709ASTR-ND	—	—	3,000	55.00/M
Mini 3P	General Amp	25	500	85	170	2SB710QCT-ND	.44	.37	.30	2SB710QTR-ND	—	—	3,000	116.00/M
Mini 3P	General Amp	25	500	120	240	2SB710RCT-ND	.44	.37	.30	2SB710RTR-ND	—	—	3,000	116.00/M
Mini 3P	General Amp	25	500	170	340	2SB710SCT-ND	.44	.37	.30	2SB710STR-ND	—	—	3,000	116.00/M
Mini 3P	General Amp	50	500	85	170	2SB710AQCT-ND	.44	.37	.30	2SB710AQTR-ND	—	—	3,000	116.00/M
Mini 3P	General Amp	50	500	120	240	2SB710ARCT-ND	.44	.37	.30	2SB710ARTR-ND	—	—	3,000	116.00/M
Mini 3P	General Amp	50	500	170	340	2SB710ASCT-ND	.44	.37	.30	2SB710ASTR-ND	—	—	3,000	116.00/M
Mini 3P	Low Noise Amp	185	50	130	220	2SB792ARCT-ND	.38	.29	.20	2SB792ARTR-ND	—	—	3,000	76.00/M
Mini 3P	Low Noise Amp	185	50	185	330	2SB792ASCT-ND	.38	.29	.20	2SB792ASTR-ND	—	—	3,000	76.00/M
S-Mini 3P	General Amp	45	100	160	460	2SB1218ACT-ND	.38	.29	.20	2SB1218ATR-ND	—	—	3,000	76.00/M
S-Mini 3P	General Amp	25	500	85	340	2SB1219CT-ND	.45	.36	.28	2SB1219TR-ND	—	—	3,000	120.00/M
S-Mini 3P	General Amp	50	500	85	340	2SB1219ACT-ND	.45	.36	.28	2SB1219ATR-ND	—	—	3,000	120.00/M
S-Mini 3P	General Amp	45	100	160	260	2SB1218AQCT-ND	.34	.26	.18	2SB1218AQTR-ND	—	—	3,000	67.00/M
S-Mini 3P	General Amp	45	100	210	340	2SB1218ARCT-ND	.34	.26	.18	2SB1218ARTR-ND	—	—	3,000	67.00/M
S-Mini 3P	General Amp	45	100	290	460	2SB1218ASCT-ND	.34	.26	.18	2SB1218ASTR-ND	—	—	3,000	67.00/M
S-Mini 3P	General Amp	50	2000	120	240	2SB1219RCT-ND	.40	.33	.25	2SB1219RTR-ND	—	—	3,000	107.00/M
SS-Mini (J)	General Amp	50	100	180	390	2SB1462JCT-ND	.34	.27	.19	2SB1462JTR-ND	—	—	3,000	77.00/M
MT-1	General Amp	50	100	160	460	2SB1320ACT-ND	.41	.32	.23	2SB1320ATB-ND	2,000	97.00/M	—	—
MT-1	Low Freq. Amp	50	500	85	340	2SB1321ACT-ND	.48	.39	.29	2SB1321ATB-ND	2,000	135.00/M	—	—
MT-2	Low Freq. Amp	50	2000	120	340	2SB1434CT-ND	.68	.52	.39	2SB1434TB-ND	2,000	227.00/M	—	—
MT-2	Low Freq. Amp	50	1000	85	340	2SB1322ACT-ND	.59	.44	.33	2SB1322ATB-ND	2,000	195.00/M	—	—
MT-2	Low Freq. Amp	25	5000	90	135	2SB1398PCT-ND	.77	.65	.52	2SB1398PTB-ND	2,000	341.00/M	—	—
MT-2	Low Freq. Amp	25	5000	120	205	2SB1398QCT-ND	.77	.65	.52	2SB1398QTB-ND	2,000	341.00/M	—	—
Mini-Pwr.	Low Freq. Amp	20	4000	120	315	2SB1073CT-ND	.57	.43	.32	2SB1073TR-ND	—	—	1,000	189.00
Mini-Pwr.	Low Freq. Amp	10	1000	200	800	2SB1537CT-ND	.52	.39	.30	2SB1537TR-ND	—	—	1,000	172.00
Mini-Pwr.	Low Freq. Amp	120	500	90	155	2SB789AQCT-ND	.75	.57	.43	2SB789AQTR-ND	—	—	1,000	249.00
Mini-Pwr.	Low Freq. Amp	120	500	130	220	2SB789ARCT-ND	.75	.57	.43	2SB789ARTR-ND	—	—	1,000	249.00
Mini-Pwr.	Low Freq. Output Amp	50	2000	120	340	2SB1440CT-ND	.72	.55	.41	2SB1440TR-ND	—	—	1,000	240.00
Mini-Pwr.	Low Freq. Output Amp	10	1500	200	700	2SB1589CT-ND	.52	.39	.30	2SB1589TR-ND	—	—	1,000	172.00
Mini-Pwr.	Low Freq. Output Amp	50	1000	85	340	2SB766ACT-ND	.52	.39	.30	2SB766ATR-ND	—	—	1,000	172.00
Mini-Pwr.	Low Freq. Output Amp	120	500	90	220	2SB789ACT-ND	.77	.58	.44	2SB789ATR-ND	—	—	1,000	257.00
Mini-Pwr.	Low Freq. Output Amp	20	1000	130	280	2SB956CT-ND	.52	.39	.30	2SB956TR-ND	—	—	1,000	172.00
New S Type	Low Freq. Amp	50	100	160	460	2SA1309ACT-ND	.33	.27	.19	2SA1309ATB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	50	500	85	340	2SB1030ACT-ND	.42	.34	.26	2SB1030ATB-ND	5,000	108.00/M	—	—
New S Type	Low Freq. Amp	50	100	160	260	2SA1309AQCT-ND	.39	.30	.21	2SA1309AQTB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	50	100	210	340	2SA1309ARCT-ND	.39	.30	.21	2SA1309ARTB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	50	100	290	460	2SA1309ASCT-ND	.39	.30	.21	2SA1309ASTB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	50	500	120	240	2SB1030ARCT-ND	.47	.40	.32	2SB1030ARTB-ND	5,000	118.00/M	—	—
NPN Type														
Mini	Low VCE(sat)	20	300	500	1500	2SD1938SCT-ND	.36	.28	.20	2SD1938STR-ND	—	—	3,000	81.00/M
Mini	Low VCE(sat)	20	300	800	2500	2SD1938TCT-ND	.36	.28	.20	2SD1938TTR-ND	—	—	3,000	81.00/M
Mini3P	General Amp	50	100	160	460	2SD601ACT-ND	.26	.20	.14	2SD601ATR-ND	—	—	3,000	52.00/M
Mini3P	General Amp	50	500	85	340	2SD602ACT-ND	.45	.38	.31	2SD602ATR-ND	—	—	3,000	121.00/M
Mini3P	General Amp	50	100	160	260	2SD601AQCT-ND	.28	.22	.16	2SD601AQTR-ND	—	—	3,000	55.00/M
Mini3P	General Amp	50	100	210	340	2SD601ARCT-ND	.28	.22	.16	2SD601ARTR-ND	—	—	3,000	55.00/M
Mini3P	General Amp	50	100	290	460	2SD601ASCT-ND	.28	.22	.16	2SD601ASTR-ND	—	—	3,000	55.00/M
Mini3P	General Amp	50	500	85	170	2SD602AQCT-ND	.40	.34	.27	2SD602AQTR-ND	—	—	3,000	108.00/M
Mini3P	General Amp	50	500	120	240	2SD602ARCT-ND	.40	.34	.27	2SD602ARTR-ND	—	—	3,000	108.00/M
Mini3P	General Amp	50	500	170	340	2SD602ASCT-ND	.40	.34	.27	2SD602ASTR-ND	—	—	3,000	108.00/M
Mini3P	High Freq. Amp	20	50	25	250	2SC2480CT-ND	.41	.34	.23	2SC2480TR-ND	—	—	3,000	108.00/M
Mini3P	Low Freq. Amp/High Gain	100	20	400	800	2SD1149RCT-ND	.34	.26	.18	2SD1149RTR-ND	—	—	3,000	67.00/M
Mini3P	Low Freq. Amp/High Gain	100	20	600	1200	2SD1149SCT-ND	.34	.26	.18	2SD1149STR-ND	—	—	3,000	67.00/M
Mini3P	Low Volt Amp	20	500	200	800	2SD1328CT-ND	.40	.32	.25	2SD1328TR-ND	—	—	3,000	106.00/M
Mini3P	Low Volt Amp	20	500	200	350	2SD1328RCT-ND	.43	.36	.29	2SD1328RTR-ND	—	—	3,000	115.00/M
Mini3P	Low Volt Amp	20	500	300	500	2SD1328SCT-ND	.43	.36	.29	2SD1328STR-ND	—	—	3,000	115.00/M
Mini3P	Low Volt Amp	20	500	400	800	2SD1328TCT-ND	.47	.38	.26	2SD1328TTR-ND	—	—	3,000	115.00/M
S-Mini 3P	General Amp	50	100	160	460	2SD1819ACT-ND	.38	.31	.22	2SD1819ATR-ND	—	—	3,000	100.00/M
S-Mini 3P	General Amp	25	500	85	340	2SD1820CT-ND	.45	.36	.27	2SD1820TR-ND	—	—	3,000	119.00/M
S-Mini 3P	General Amp	50	500	85	340	2SD1820ACT-ND	.45	.36	.27	2SD1820ATR-ND	—	—	3,000	119.00/M
S-Mini 3P	General Amp	50	100	160	260	2SD1819AQCT-ND	.42	.33	.24	2SD1819AQTR-ND	—	—	3,000	95.00/M
S-Mini 3P	General Amp	50	100	210	340	2SD1819ARCT-ND	.42	.33	.24	2SD1819ARTR-ND	—	—	3,000	95.00/M
S-Mini 3P	General Amp	50	100	290	460	2SD1819ASCT-ND	.42	.33	.24	2SD1819ASTR-ND	—	—	3,000	95.00/M
S-Mini 3P	General Amp	50	500	120	240	2SD1820ARCT-ND	.48	.40	.32	2SD1820ARTR-ND	—	—	3,000	127.00/M
S-Mini 3P	High Freq. Amp	20	50	25	250	2SC3932CT-ND	.41	.33	.25	2SC3932TR-ND	—	—	3,000	109.00/M
S-Mini 3P	Low Freq. Amp/High Gain	100	20	400	800	2SD1824RCT-ND	.35	.26	.19	2SD1824RTR-ND	—	—	3,000	69.00/M
S-Mini 3P	Low Freq. Amp/High Gain	100	20	600	1200	2SD1824SCT-ND	.35	.26	.19	2SD1824STR-ND	—	—	3,000	69.00/M
S-Mini 3P	Low VCE(sat)	20	500	200	800	2SD2623CT-ND	.45	.38	.31	2SD2623TR-ND	—	—	3,000	120.00/M
SS-Mini (J)	General Amp	50	100	160	460	2SD2216JCT-ND	.33	.27	.19	2SD2216JTR-ND	—	—	3,000	75.00/M
SS-Mini (J)	High Freq. Amp	20	15	40	260	2SC4627JCT-ND	.42	.34	.26	2SC4627JTR-ND	—	—	3,000	113.00/M

(*Continued*)

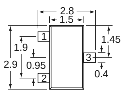
Panasonic® Small Signal Transistors Mini, S-Mini, SS-Mini, Mini Power, MT-1 & MT-2 Type Package *(Cont.)*

Package	Application	VCEO (V)	IC (mA)	hFE Min	hFE Max	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Size	Tape & Box Pricing	Tape & Reel Size	Tape & Reel Pricing
NPN Type														
Mini-Pwr.	UHF Low Noise Amp	10	80	80	250	2SC5019CT-ND	.72	.55	.41	2SC5019TR-ND	—	—	1,000	240.00
Mini-Pwr.	Med. Output Pwr. Amp	20	1000	90	360	2SD1280CT-ND	.77	.58	.44	2SD1280TR-ND	—	—	1,000	257.00
Mini-Pwr.	Low Freq. Output Amp	50	3000	120	340	2SD2185CT-ND	.67	.51	.38	2SD2185TR-ND	—	—	1,000	223.00
Mini-Pwr.	Low Freq. Output Amp	10	1500	200	700	2SD2441CT-ND	.52	.39	.30	2SD2441TR-ND	—	—	1,000	172.00
Mini-Pwr.	Low Freq. Output Amp	20	500	200	800	2SD2210CT-ND	.57	.46	.35	2SD2210TR-ND	—	—	1,000	159.00
Mini-Pwr.	Low Freq. Output Amp	50	1000	85	340	2SD874ACT-ND	.59	.48	.36	2SD874ATR-ND	—	—	1,000	166.00
Mini-Pwr.	Low Freq. Output Amp	120	500	90	220	2SD968ACT-ND	.98	.74	.56	2SD968ATR-ND	—	—	1,000	326.00
MT-1	General Amp	50	100	160	460	2SD1991ACT-ND	.37	.30	.21	2SD1991ATB-ND	2,000	89.00/M	—	—
MT-1	General Amp	50	500	210	340	2SD1991ARCT-ND	.33	.26	.19	2SD1991ARTB-ND	2,000	79.00/M	—	—
MT-1	Low Freq. Amp	50	500	85	340	2SD1992ACT-ND	.45	.36	.27	2SD1992ATB-ND	2,000	125.00/M	—	—
MT-1	Low Freq. Amp	50	1000	85	340	2SD1994ACT-ND	.59	.47	.36	2SD1994ATB-ND	2,000	164.00/M	—	—
MT-1	Low Freq. Amp	50	2000	120	340	2SD2177CT-ND	.93	.70	.53	2SD2177TB-ND	2,000	311.00/M	—	—
MT-1	Low Freq. Amp	60	2000	120	340	2SD2177ACT-ND	.93	.70	.53	2SD2177ATB-ND	2,000	311.00/M	—	—
MT-1	Low Freq. Amp	20	500	200	350	2SD1996RCT-ND	.54	.44	.33	2SD1996RTB-ND	2,000	152.00/M	—	—
MT-1	Low Freq. Amp	20	500	300	500	2SD1996SCT-ND	.54	.44	.33	2SD1996STB-ND	2,000	152.00/M	—	—
MT-1	Low Freq. Amp	20	500	400	800	2SD1996TCT-ND	.54	.44	.33	2SD1996TTB-ND	2,000	152.00/M	—	—
MT-2	Low Freq. Amp	50	1000	120	240	2SD1994ARCT-ND	.53	.43	.32	2SD1994ARTB-ND	2,000	147.00/M	—	—
MT-2	Low Freq. Amp	50	1000	170	340	2SD1994ASCT-ND	.53	.43	.32	2SD1994ASTB-ND	2,000	147.00/M	—	—
MT-2	Low Freq. Amp	50	100	170	340	2SD2177SCT-ND	.84	.63	.48	2SD2177STB-ND	2,000	279.00/M	—	—
New S Type	Low Freq. Amp	50	100	160	460	2SC3311ACT-ND	.33	.27	.19	2SC3311ATB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	50	500	85	340	2SD1423ACT-ND	.42	.34	.26	2SD1423ATB-ND	5,000	108.00/M	—	—
New S Type	Low Freq. Amp	20	500	200	800	2SD1450CT-ND	.42	.34	.26	2SD1450TB-ND	5,000	108.00/M	—	—
New S Type	Low Freq. Amp	50	100	160	260	2SC3311AQCT-ND	.39	.30	.21	2SC3311AQTB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	50	100	210	340	2SC3311ARCT-ND	.39	.30	.21	2SC3311ARTB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	50	100	290	460	2SC3311ASCT-ND	.39	.30	.21	2SC3311ASTB-ND	5,000	71.00/M	—	—
New S Type	Low Freq. Amp	20	500	200	350	2SD1450RCT-ND	.47	.40	.32	2SD1450RTB-ND	5,000	118.00/M	—	—
New S Type	Low Freq. Amp	20	500	300	500	2SD1450SCT-ND	.47	.40	.32	2SD1450STB-ND	5,000	118.00/M	—	—
New S Type	Low Freq. Amp	20	500	400	800	2SD1450TCT-ND	.47	.40	.32	2SD1450TTB-ND	5,000	118.00/M	—	—
New S Type	Low Freq. Amp	50	500	120	240	2SD1423ARCT-ND	.48	.40	.32	2SD1423ARTB-ND	5,000	119.00/M	—	—

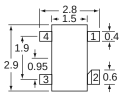
Panasonic® Switching Diodes – Silicon Epitaxial Planar Type

Dim. in mm

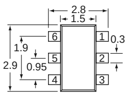
**Mini Type (3-pin)
JEDEC: TO-236
EIAJ: SC-59**



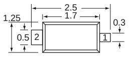
Mini Type (4-pin)



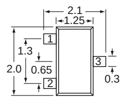
Mini Type (6-pin)



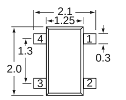
S-Mini Type (2-pin)



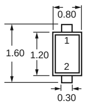
**S-Mini Type (3-pin)
EIAJ: SC-70**



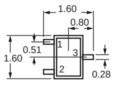
S-Mini Type (4-pin)



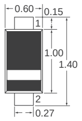
**SS-Mini Type
(2-pin)**



**SS-Mini Type
(3-pin)**



**SSS-Mini Type
(2-pin)**



**1008 Mold Leadless
(4-pin)**

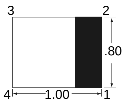


Fig. 1

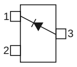


Fig. 2

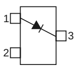


Fig. 3

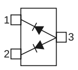


Fig. 4

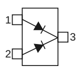


Fig. 5

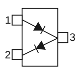


Fig. 6

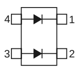


Fig. 7

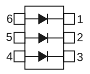


Fig. 8

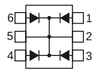


Fig. 9

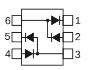


Fig. 10

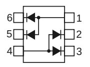


Fig. 11

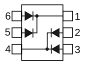


Fig. 12

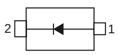


Fig. 13

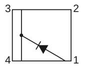


Fig.	Package	Description	VR (v)	IF (mA)	IR (uA)	trr (ns)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing
1	Mini 3P	Single	80	100	0.1	3	MA152ACT-ND	.40	.30	.21	MA152ATR-ND	3,000	80.00/M
2	Mini 3P	Single	80	100	0.1	3	MA152KCT-ND	.40	.30	.21	MA152KTR-ND	3,000	80.00/M
3	Mini 3P	Dual Com Anode	80	100	0.1	10	MA152WACT-ND	.37	.30	.21	MA152WATR-ND	3,000	84.00/M
4	Mini 3P	Dual Com Cathode	80	100	0.1	3	MA152WKCT-ND	.37	.30	.21	MA152WKTR-ND	3,000	84.00/M
5	Mini 3P	Dual Series	80	65	0.1	150/9	MA153ACT-ND	.37	.30	.21	MA153ATR-ND	3,000	96.00/M
2	Mini 3P	Single	200	100	1	–	MA158CT-ND	.53	.43	.32	MA158TR-ND	3,000	141.00/M
5	Mini 3P	Dual Series	40	75	0.01	100	MA198CT-ND	.40	.33	.23	MA198TR-ND	3,000	104.00/M
2	Mini 3P	Single	200	100	1	60	MA199CT-ND	.49	.37	.28	MA199TR-ND	3,000	160.00/M
6	Mini 4P	Dual	80	75	0.1	3	MA159ACT-ND	.48	.39	.29	MA159ATR-ND	3,000	127.00/M
6	Mini 4P	Dual	200	100	1	–	MA174CT-ND	.67	.51	.38	MA174TR-ND	3,000	219.00/M
7	Mini 6P	Triple	80	100	0.1	3	MA121CT-ND	.51	.41	.31	MA121TR-ND	3,000	135.00/M
8	Mini 6P	Quad	80	100	0.1	3	MA124CT-ND	.70	.53	.40	MA124TR-ND	3,000	229.00/M
9	Mini 6P	Quad	40	100	0.1	150/9	MA125CT-ND	.73	.55	.42	MA125TR-ND	3,000	238.00/M
10	Mini 6P	Quad	80	100	0.1	10	MA127CT-ND	.46	.37	.28	MA127TR-ND	3,000	122.00/M
11	Mini 6P	Quad	80	100	0.1	3	MA128CT-ND	.45	.36	.27	MA128TR-ND	3,000	119.00/M
12	S-Mini 2P	Single	80	100	0.1	3	MA111CT-ND	.35	.27	.19	MA111TR-ND	3,000	70.00/M
12	S-Mini 2P	Single	40	200	0.5	10	MA112CT-ND	.44	.36	.27	MA112TR-ND	3,000	117.00/M
12	S-Mini 2P	Single	80	200	0.5	10	MA113CT-ND	.41	.34	.23	MA113TR-ND	3,000	108.00/M
12	S-Mini 2P	Single	150	200	0.2	–	MA114CT-ND	.62	.47	.35	MA114TR-ND	3,000	201.00/M
12	S-Mini 2P	Single	200	200	0.2	–	MA115CT-ND	.59	.45	.34	MA115TR-ND	3,000	192.00/M
12	S-Mini 2P	Single	40	100	0.01	100	MA116CT-ND	.45	.37	.28	MA116TR-ND	3,000	120.00/M
1	S-Mini 3P	Single	80	100	0.1	3	MA142ACT-ND	.34	.27	.19	MA142ATR-ND	3,000	76.00/M
2	S-Mini 3P	Single	80	100	0.1	3	MA142KCT-ND	.34	.27	.19	MA142KTR-ND	3,000	76.00/M
3	S-Mini 3P	Dual Com Anode	80	100	0.1	10	MA142WACT-ND	.36	.30	.21	MA142WATR-ND	3,000	95.00/M
4	S-Mini 3P	Dual Com Cathode	80	100	0.1	3	MA142WKCT-ND	.36	.30	.21	MA142WKTR-ND	3,000	95.00/M
5	S-Mini 3P	Dual Series	40	65	0.1	150/9	MA143CT-ND	.39	.32	.22	MA143TR-ND	3,000	102.00/M
5	S-Mini 3P	Dual Series	80	65	0.1	150/9	MA143ACT-ND	.39	.32	.22	MA143ATR-ND	3,000	102.00/M
5	S-Mini 3P	Dual Series	80	65	0.1	3	MA147CT-ND	.44	.36	.27	MA147TR-ND	3,000	118.00/M
6	S-Mini 4P	Dual	80	75	0.1	3	MA4S159CT-ND	.58	.47	.35	MA4S159TR-ND	3,000	155.00/M
12	SS-Mini 2P	Single	80	100	0.1	3	MA2S111CT-ND	.36	.29	.20	MA2S111TR-ND	3,000	81.00/M
1	SS-Mini 3P	Single	80	100	0.1	3	MA132ACT-ND	.36	.29	.20	MA132ATR-ND	3,000	81.00/M
2	SS-Mini 3P	Single	80	100	0.1	3	MA132KCT-ND	.36	.29	.20	MA132KTR-ND	3,000	81.00/M
3	SS-Mini 3P	Dual Com Anode	80	100	0.1	10	MA132WACT-ND	.38	.31	.21	MA132WATR-ND	3,000	99.00/M
4	SS-Mini 3P	Dual Com Cathode	80	100	0.1	3	MA132WKCT-ND	.38	.31	.21	MA132WKTR-ND	3,000	99.00/M
5	SS-Mini 3P	Dual Series	80	65	0.1	150/9	MA133CT-ND	.42	.34	.26	MA133TR-ND	3,000	111.00/M
5	SS-Mini 3P	Dual Series	80	65	0.1	3	MA137CT-ND	.42	.34	.26	MA137TR-ND	3,000	111.00/M
12	SSS-Mini 2P	Single	80	100	0.1	3	MA27111CT-ND	.41	.35	.28	MA27111TR-ND	10,000	97.00/M
13	1008 Mold Leadless 4P	Single	80	100	0.1	3	MA4L11100ACT-ND	.46	.39	.31	MA4L11100ATR-ND	10,000	107.00/M

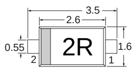
Panasonic

Schottky Barrier Diodes – Silicon Epitaxial Planar Type

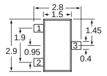
Fig.	Description	VR (v)	IF (mA)	VF		Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel	
				(V)	@mA		1	10	100		Size	Pricing
Mini Type 2-Pin												
9	Single	20	1000	0.45	1	MA2YD15CT-ND	.55	.42	.31	MA2YD15TR-ND	3,000	179.00/M
		100	300	0.58	300	MA2YD17CT-ND	.53	.40	.31	MA2YD17TR-ND	3,000	174.00/M
		15	1000	0.40	1000	MA2YD21CT-ND	.50	.38	.29	MA2YD21TR-ND	3,000	164.00/M
		25	1000	0.47	500	MA2YD23CT-ND	.53	.40	.31	MA2YD23TR-ND	3,000	174.00/M
Mini Type 3-Pin												
1	Single	30	700	0.55	700	MA10701CT-ND	.47	.38	.29	MA10701TR-ND	3,000	125.00/M
		15	30	0.40	1	MA704CT-ND	.44	.36	.27	MA704TR-ND	3,000	117.00/M
		30	30	0.40	1	MA704ACT-ND	.44	.36	.27	MA704ATR-ND	3,000	117.00/M
		30	30	0.30	1	MA717CT-ND	.52	.42	.32	MA717TR-ND	3,000	137.00/M
		40	500	0.55	500	MA720CT-ND	.58	.47	.35	MA720TR-ND	3,000	155.00/M
		30	200	0.55	200	MA721CT-ND	.59	.48	.36	MA721TR-ND	3,000	158.00/M
		50	200	0.55	200	MA727CT-ND	.58	.44	.33	MA727TR-ND	3,000	188.00/M
		20	500	0.50	500	MA748CT-ND	.59	.48	.36	MA748TR-ND	3,000	158.00/M
		30	100	0.55	100	MA786CT-ND	.50	.40	.30	MA786TR-ND	3,000	132.00/M
		50	100	0.55	100	MA787CT-ND	.44	.36	.27	MA787TR-ND	3,000	118.00/M
		20	1000	0.45	1	MA3XD11CT-ND	.59	.48	.36	MA3XD11TR-ND	3,000	157.00/M
		20	1000	0.45	1	MA3XD15CT-ND	.52	.39	.30	MA3XD15TR-ND	3,000	169.00/M
		100	300	0.58	300	MA3XD17CT-ND	.53	.40	.31	MA3XD17TR-ND	3,000	174.00/M
		15	1000	0.40	500	MA3XD21CT-ND	.50	.38	.29	MA3XD21TR-ND	3,000	164.00/M
2	Dual Com Anode	30	30	0.40	1	MA704WACT-ND	.70	.53	.40	MA704WATR-ND	3,000	228.00/M
			110/150	0.30	1	MA717WACT-ND	.91	.68	.51	MA717WATR-ND	3,000	294.00/M
			130/200	0.55	130/200	MA721WACT-ND	.84	.64	.48	MA721WATR-ND	3,000	274.00/M
			200/300	0.55	200/300	MA786WACT-ND	.65	.49	.37	MA786WATR-ND	3,000	211.00/M
3	Dual Com Cathode	30	30	0.40	1	MA704WKCT-ND	.70	.53	.40	MA704WKTR-ND	3,000	228.00/M
			110/150	0.30	1	MA717WKCT-ND	.91	.68	.51	MA717WKTR-ND	3,000	294.00/M
			130/200	0.55	130/200	MA721WKCT-ND	.84	.64	.48	MA721WKTR-ND	3,000	274.00/M
			200/300	0.55	200/300	MA786WKCT-ND	.65	.49	.37	MA786WKTR-ND	3,000	211.00/M
4	Dual Series	30	20/30	0.30	1	MA715CT-ND	.75	.57	.43	MA715TR-ND	3,000	245.00/M
			20/30	0.40	1	MA716CT-ND	.61	.46	.35	MA716TR-ND	3,000	198.00/M
			220/300	0.55	220/300	MA740CT-ND	.94	.71	.53	MA740TR-ND	3,000	305.00/M
Mini Type 4-Pin												
5	Dual	50	150/200	0.55	150/200	MA746CT-ND	.80	.60	.45	MA746TR-ND	3,000	259.00/M
		30	20/30	0.40	1	MA713CT-ND	.61	.47	.35	MA713TR-ND	3,000	200.00/M
		30	150	0.55	150	MA724CT-ND	.69	.52	.39	MA724TR-ND	3,000	224.00/M
		50	70/100	0.55	70/100	MA796CT-ND	.64	.48	.36	MA796TR-ND	3,000	207.00/M
9	Dual	30	150/200	0.55	150/200	MA726CT-ND	.93	.71	.53	MA726TR-ND	3,000	304.00/M
11	Dual	30	20/30	0.40	1	MA714CT-ND	.75	.56	.42	MA714TR-ND	3,000	243.00/M
Mini Type 6-Pin												
6	Triple	30	30	0.40	1	MA718CT-ND	.88	.74	.59	MA718TR-ND	3,000	381.00/M
S-Mini Type 2-Pin												
9	Single	20	200	0.47	1	MA2SD19CT-ND	.50	.40	.30	MA2SD19TR-ND	3,000	132.00/M
		60	100	1.00	100	MA2SP01CT-ND	.59	.48	.36	MA2SP01TR-ND	3,000	157.00/M
		60	100	1.00	100	MA2SP02CT-ND	.59	.48	.36	MA2SP02TR-ND	3,000	157.00/M
		40	500	0.55	500	MA2Z720CT-ND	.48	.39	.29	MA2Z720TR-ND	3,000	128.00/M
		20	300	0.40	300	MA2Z748CT-ND	.41	.33	.25	MA2Z748TR-ND	3,000	108.00/M
		20	500	0.40	10	MA2ZD02CT-ND	.54	.44	.33	MA2ZD02TR-ND	3,000	144.00/M
		20	100	0.27	5	MA2ZD14CT-ND	.44	.38	.30	MA2ZD14TR-ND	3,000	119.00/M
		20	500	0.42	500	MA2ZD18CT-ND	.41	.33	.25	MA2ZD18TR-ND	3,000	108.00/M
		30	30	0.40	1	MA728CT-ND	.48	.40	.32	MA728TR-ND	3,000	128.00/M
		30	200	0.55	200	MA729CT-ND	.57	.46	.35	MA729TR-ND	3,000	151.00/M
		30	30	0.30	1	MA732CT-ND	.44	.36	.27	MA732TR-ND	3,000	118.00/M
		30	100	0.55	100	MA784CT-ND	.47	.40	.32	MA784TR-ND	3,000	125.00/M
		50	100	0.55	100	MA785CT-ND	.45	.37	.28	MA785TR-ND	3,000	121.00/M
S-Mini Type 3-Pin												
1	Single	40	500	0.55	500	MA10700CT-ND	.55	.45	.34	MA10700TR-ND	3,000	147.00/M
		20	500	0.55	500	MA10702CT-ND	.55	.44	.33	MA10702TR-ND	3,000	146.00/M
		30	30	0.40	1	MA741CT-ND	.48	.39	.29	MA741TR-ND	3,000	128.00/M
		30	200	0.55	200	MA744CT-ND	.57	.43	.32	MA744TR-ND	3,000	184.00/M
		30	30	0.30	1	MA745CT-ND	.66	.50	.38	MA745TR-ND	3,000	215.00/M
		20	700	0.45	700	MA3ZD12CT-ND	.58	.47	.35	MA3ZD12TR-ND	3,000	154.00/M
2	Dual Com Anode	30	20/30	0.40	1	MA741WACT-ND	.61	.46	.35	MA741WATR-ND	3,000	199.00/M
			20/30	0.30	1	MA745WACT-ND	.62	.47	.36	MA745WATR-ND	3,000	203.00/M
			70/100	0.55	70/100	MA792WACT-ND	.51	.41	.31	MA792WATR-ND	3,000	136.00/M
3	Dual Com Cathode	30	20/30	0.40	1	MA741WKCT-ND	.61	.46	.35	MA741WKTR-ND	3,000	199.00/M
			20/30	0.30	1	MA745WKCT-ND	.62	.47	.36	MA745WKTR-ND	3,000	203.00/M
			70/100	0.55	70/100	MA792WKCT-ND	.51	.41	.31	MA792WKTR-ND	3,000	136.00/M
4	Dual Series	30	20/30	0.40	1	MA742CT-ND	.64	.48	.36	MA742TR-ND	3,000	207.00/M
			70/100	0.55	70/100	MA793CT-ND	.62	.47	.35	MA793TR-ND	3,000	201.00/M
S-Mini Mold Type 4-Pin												
7	Dual	30	20/30	0.40	1	MA4S713CT-ND	.58	.47	.35	MA4S713TR-ND	3,000	154.00/M
		20	75/100	0.27	5	MA4ZD14CT-ND	.52	.42	.32	MA4ZD14TR-ND	3,000	138.00/M
		45	75/100	0.60	75/100	MA4ZD03CT-ND	.50	.38	.29	MA4ZD03TR-ND	3,000	164.00/M
S-Mini Mold Type 6-Pin												
8	Triple	30	30	0.40	1	MA6S718CT-ND	.68	.52	.39	MA6S718TR-ND	3,000	222.00/M
Mini-Power Type 2-Pin												
10	Single	40	1000	0.55	1000	MA701ACT-ND	.84	.64	.48	MA701ATR-ND	1,000	280.00
New Mini-Power Type 2-Pin												
9	Single	30	1500	0.37	1000	MA10705CT-ND	.84	.64	.48	MA10705TR-ND	1,500	280.00/M
		30	1000	0.50	1000	MA735CT-ND	.85	.64	.48	MA735TR-ND	1,500	282.00/M
		40	1000	0.55	1000	MA736CT-ND	.70	.53	.40	MA736TR-ND	1,500	234.00/M
		30	1500	0.50	2000	MA737CT-ND	.99	.75	.56	MA737TR-ND	1,500	329.00/M
		40	1500	0.55	2000	MA738CT-ND	.73	.55	.42	MA738TR-ND	1,500	243.00/M
		90	700	0.80	700	MA739CT-ND	.88	.67	.50	MA739TR-ND	1,500	293.00/M
SS-Mini Type 2-Pin												
9	Single	30	30	0.40	1	MA2S728CT-ND	.46	.39	.31	MA2S728TR-ND	3,000	124.00/M
		30	100	0.55	100	MA2S784CT-ND	.52	.42	.31	MA2S784TR-ND	3,000	137.00/M
		20	200	0.47	1	MA2SD10CT-ND	.52	.42	.31	MA2SD10TR-ND	3,000	137.00/M
		20	200	0.58	200	MA2SD24CT-ND	.48	.39	.29	MA2SD24TR-ND	3,000	128.00/M
		15	200	0.39	200	MA2SD25CT-ND	.48	.39	.29	MA2SD25TR-ND	3,000	128.00/M
SS-Mini Type 3-Pin												
1	Single	30	30	0.40	1	MA781CT-ND	.52	.42	.31	MA781TR-ND	3,000	137.00/M
			30	0.30	1	MA795CT-ND	.52	.42	.31	MA795TR-ND	3,000	137.00/M
2	Dual Com Anode	30	30	0.40	1	MA781WACT-ND	.62	.47	.35	MA781WATR-ND	3,000	201.00/M
			30	0.30	1	MA795WACT-ND	.62	.47	.35	MA795WATR-ND	3,000	201.00/M
3	Dual Com Cathode	30	30	0.40	1	MA781WKCT-ND	.62	.47	.35	MA781WKTR-ND	3,000	201.00/M
			20	0.30	1	MA795WKCT-ND	.62	.47	.35	MA795WKTR-ND	3,000	201.00/M
4	Dual Series	20	25/35	0.40	1	MA3SE02CT-ND	.71	.54	.41	MA3SE02TR-ND	3,000	231.00/M
SS-Mini Type 4-Pin												
7	Dual	30	20/30	0.35	1	MA4SD01CT-ND	.53	.43	.33	MA4SD01TR-ND	3,000	142.00/M
SSS-Mini Type 2-Pin												
9	Single	30	30	0.4	1	MA27728CT-ND	.42	.34	.26	MA27728TR-ND	10,000	105.00/M
			100	0.55	100	MA27784CT-ND	.50	.40	.30	MA27784TR-ND	10,000	124.00/M
1008 Mold Leadless Type 4-Pin												
12	Single	30	30	0.40	1	MA4L72800ACT-ND	.47	.38	.29	MA4L72800ATR-ND	10,000	117.00/M
			100	0.55	100	MA4L78400ACT-ND	.55	.45	.34	MA4L78400ATR-ND	10,000	138.00/M

Dim. in mm

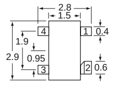
Mini Type (2-pin)



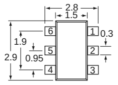
Mini Type (3-pin)
JEDEC: TO-236
EIAJ: SC-59



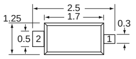
Mini Type (4-pin)



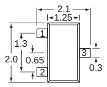
Mini Type (6-pin)



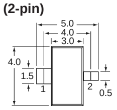
S-Mini Type (2-pin)



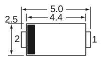
S-Mini Type (3-pin)
EIAJ: SC-70



Mini-Power Type (2-pin)



New Mini-Power Type (2-pin)



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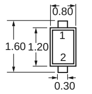
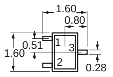
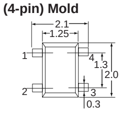


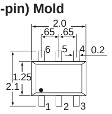
SS-Mini Type (3-pin)



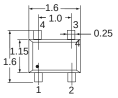
S-Mini Type (4-pin) Mold



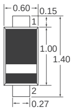
Mini Type (6-pin) Mold



SS-Mini Type (4-pin) Mold



SSS-Mini Type (2-pin)



1008 Mold Leadless Type (4-pin)

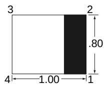


Fig. 1

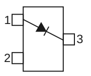


Fig. 2

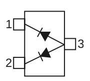


Fig. 3

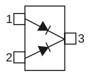


Fig. 4

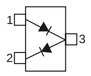


Fig. 5

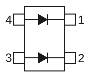


Fig. 6

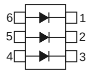


Fig. 7

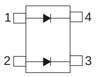


Fig. 8

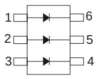


Fig. 9

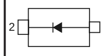


Fig. 10

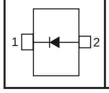


Fig. 11

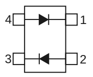
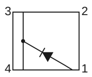


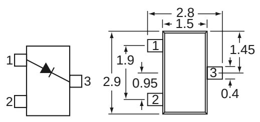
Fig. 12



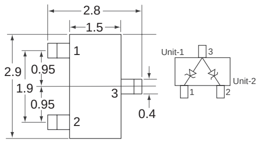
Panasonic Zener Diodes Silicon Planar Type

Zener Voltage VZ Min.	Nom.	Max.	IZ (mA)	RZ (max.) (Ohms)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
Mini Type Package / MA3000 Series - 200mW											
2.28	2.40	2.60	5	100	MA3024CT-ND	.37	.31	.21	MA3024TR-ND	3,000	98.00/M
2.50	2.70	2.90	5	110	MA3027CT-ND	.37	.31	.21	MA3027TR-ND	3,000	98.00/M
2.80	3.00	3.20	5	120	MA3030CT-ND	.37	.31	.21	MA3030TR-ND	3,000	98.00/M
3.10	3.30	3.50	5	130	MA3033CT-ND	.37	.31	.21	MA3033TR-ND	3,000	98.00/M
3.40	3.60	3.80	5	130	MA3036CT-ND	.37	.31	.21	MA3036TR-ND	3,000	98.00/M
3.70	3.90	4.10	5	130	MA3039CT-ND	.37	.31	.21	MA3039TR-ND	3,000	98.00/M
4.00	4.30	4.60	5	130	MA3043CT-ND	.37	.31	.21	MA3043TR-ND	3,000	98.00/M
4.40	4.70	5.00	5	80	MA3047CT-ND	.37	.31	.21	MA3047TR-ND	3,000	98.00/M
4.80	5.10	5.40	5	60	MA3051CT-ND	.37	.31	.21	MA3051TR-ND	3,000	98.00/M
5.30	5.60	6.00	5	40	MA3056CT-ND	.37	.31	.21	MA3056TR-ND	3,000	98.00/M
5.80	6.20	6.60	5	20	MA3062CT-ND	.37	.31	.21	MA3062TR-ND	3,000	98.00/M
6.40	6.80	7.20	5	15	MA3068CT-ND	.37	.31	.21	MA3068TR-ND	3,000	98.00/M
7.00	7.50	7.90	5	15	MA3075CT-ND	.37	.31	.21	MA3075TR-ND	3,000	98.00/M
7.70	8.20	8.70	5	15	MA3082CT-ND	.37	.31	.21	MA3082TR-ND	3,000	98.00/M
8.50	9.10	9.60	5	15	MA3091CT-ND	.37	.31	.21	MA3091TR-ND	3,000	98.00/M
9.40	10.00	10.60	5	20	MA3100CT-ND	.37	.31	.21	MA3100TR-ND	3,000	98.00/M
10.40	11.00	11.60	5	20	MA3110CT-ND	.37	.31	.21	MA3110TR-ND	3,000	98.00/M
11.40	12.00	12.70	5	25	MA3120CT-ND	.37	.31	.21	MA3120TR-ND	3,000	98.00/M
12.40	13.00	14.10	5	30	MA3130CT-ND	.37	.31	.21	MA3130TR-ND	3,000	98.00/M
13.65	14.00	14.35	5	30	MA3140CT-ND	.37	.31	.21	MA3140TR-ND	3,000	98.00/M
13.90	15.00	15.60	5	30	MA3150CT-ND	.37	.31	.21	MA3150TR-ND	3,000	98.00/M
15.30	16.00	17.10	5	40	MA3160CT-ND	.37	.31	.21	MA3160TR-ND	3,000	98.00/M
16.90	18.00	19.10	5	45	MA3180CT-ND	.37	.31	.21	MA3180TR-ND	3,000	98.00/M
18.80	20.00	21.20	5	55	MA3200CT-ND	.37	.31	.21	MA3200TR-ND	3,000	98.00/M
20.80	22.00	23.30	5	55	MA3220CT-ND	.37	.31	.21	MA3220TR-ND	3,000	98.00/M
22.80	24.00	25.60	5	70	MA3240CT-ND	.37	.31	.21	MA3240TR-ND	3,000	98.00/M
25.10	27.00	28.90	5	80	MA3270CT-ND	.37	.31	.21	MA3270TR-ND	3,000	98.00/M
28.00	30.00	32.00	5	80	MA3300CT-ND	.37	.31	.21	MA3300TR-ND	3,000	98.00/M
31.00	33.00	35.00	5	80	MA3330CT-ND	.37	.31	.21	MA3330TR-ND	3,000	98.00/M
34.00	36.00	38.00	5	90	MA3360CT-ND	.37	.31	.21	MA3360TR-ND	3,000	98.00/M
Mini Mold 3-Pin Package - 200mW											
5.9	6.2	6.5	5	30	MAZC062DCT-ND	.47	.40	.32	MAZC062DTR-ND	3,000	125.00/M
Mini Mold 5-Pin Package - 200mW											
6.4	6.8	7.2	5	30	MAZL068HCT-ND	.57	.46	.35	MAZL068HTR-ND	3,000	152.00/M
11.4	12.0	12.7	5	15	MAZL120HCT-ND	.57	.46	.35	MAZL120HTR-ND	3,000	152.00/M
S-Mini Type Package / MA8000 Series - 200mW											
2.28	2.40	2.60	5	100	MA8024CT-ND	.43	.34	.24	MA8024TR-ND	3,000	97.00/M
2.50	2.70	2.90	5	110	MA8027CT-ND	.43	.34	.24	MA8027TR-ND	3,000	97.00/M
2.80	3.00	3.20	5	120	MA8030CT-ND	.43	.34	.24	MA8030TR-ND	3,000	97.00/M
3.10	3.30	3.50	5	130	MA8033CT-ND	.43	.34	.24	MA8033TR-ND	3,000	97.00/M
3.40	3.60	3.80	5	130	MA8036CT-ND	.43	.34	.24	MA8036TR-ND	3,000	97.00/M
3.70	3.90	4.10	5	130	MA8039CT-ND	.43	.34	.24	MA8039TR-ND	3,000	97.00/M
4.00	4.30	4.60	5	130	MA8043CT-ND	.43	.34	.24	MA8043TR-ND	3,000	97.00/M
4.40	4.70	5.00	5	80	MA8047CT-ND	.43	.34	.24	MA8047TR-ND	3,000	97.00/M
4.80	5.10	5.40	5	60	MA8051CT-ND	.43	.34	.24	MA8051TR-ND	3,000	97.00/M
5.30	5.60	6.00	5	40	MA8056CT-ND	.43	.34	.24	MA8056TR-ND	3,000	97.00/M
5.80	6.20	6.60	5	30	MA8062CT-ND	.43	.34	.24	MA8062TR-ND	3,000	97.00/M
6.40	6.80	7.20	5	20	MA8068CT-ND	.43	.34	.24	MA8068TR-ND	3,000	97.00/M
7.00	7.50	7.90	5	20	MA8075CT-ND	.43	.34	.24	MA8075TR-ND	3,000	97.00/M
7.70	8.20	8.70	5	20	MA8082CT-ND	.43	.34	.24	MA8082TR-ND	3,000	97.00/M
8.50	9.10	9.60	5	20	MA8091CT-ND	.43	.34	.24	MA8091TR-ND	3,000	97.00/M
9.40	10.00	10.60	5	30	MA8100CT-ND	.43	.34	.24	MA8100TR-ND	3,000	97.00/M
10.40	11.00	11.60	5	30	MA8110CT-ND	.43	.34	.24	MA8110TR-ND	3,000	97.00/M
11.40	12.00	12.70	5	30	MA8120CT-ND	.43	.34	.24	MA8120TR-ND	3,000	97.00/M
12.40	13.00	14.10	5	35	MA8130CT-ND	.43	.34	.24	MA8130TR-ND	3,000	97.00/M
13.65	14.00	14.35	5	40	MA8140CT-ND	.43	.34	.24	MA8140TR-ND	3,000	97.00/M
13.90	15.00	15.60	5	40	MA8150CT-ND	.43	.34	.24	MA8150TR-ND	3,000	97.00/M
15.30	16.00	17.10	5	50	MA8160CT-ND	.43	.34	.24	MA8160TR-ND	3,000	97.00/M
16.90	18.00	19.10	5	60	MA8180CT-ND	.43	.34	.24	MA8180TR-ND	3,000	97.00/M
18.80	20.00	21.20	5	80	MA8200CT-ND	.43	.34	.24	MA8200TR-ND	3,000	97.00/M
20.80	22.00	23.30	5	80	MA8220CT-ND	.43	.34	.24	MA8220TR-ND	3,000	97.00/M
22.80	24.00	25.60	5	100	MA8240CT-ND	.43	.34	.24	MA8240TR-ND	3,000	97.00/M
25.10	27.00	28.90	2	120	MA8270CT-ND	.43	.34	.24	MA8270TR-ND	3,000	97.00/M
28.00	30.00	32.00	2	160	MA8300CT-ND	.43	.34	.24	MA8300TR-ND	3,000	97.00/M
31.00	33.00	35.00	2	200	MA8330CT-ND	.43	.34	.24	MA8330TR-ND	3,000	97.00/M
34.00	36.00	38.00	2	250	MA8360CT-ND	.43	.34	.24	MA8360TR-ND	3,000	97.00/M
SS-Mini Type Package 2 Pin / MAZS000 Series - 150mW											
3.1	3.3	3.5	5	130	MAZS033CT-ND	.40	.34	.27	MAZS033TR-ND	3,000	107.00/M
3.7	3.9	4.1	5	130	MAZS039CT-ND	.40	.34	.27	MAZS039TR-ND	3,000	107.00/M
4	4.3	4.6	5	130	MAZS043CT-ND	.40	.34	.27	MAZS043TR-ND	3,000	107.00/M
4.4	4.7	5	5	80	MAZS047CT-ND	.40	.34	.27	MAZS047TR-ND	3,000	107.00/M
4.8	5.1	5.4	5	60	MAZS051CT-ND	.40	.34	.27	MAZS051TR-ND	3,000	107.00/M
5.3	5.6	6	5	40	MAZS056CT-ND	.40	.34	.27	MAZS056TR-ND	3,000	107.00/M
5.8	6.2	6.6	5	30	MAZS062CT-ND	.40	.34	.27	MAZS062TR-ND	3,000	107.00/M
6.4	6.8	7.2	5	20	MAZS068CT-ND	.40	.34	.27	MAZS068TR-ND	3,000	107.00/M
7	7.5	7.9	5	20	MAZS075CT-ND	.40	.34	.27	MAZS075TR-ND	3,000	107.00/M
7.7	8.2	8.7	5	20	MAZS082CT-ND	.40	.34	.27	MAZS082TR-ND	3,000	107.00/M
9.4	10	10.6	5	30	MAZS100CT-ND	.40	.34	.27	MAZS100TR-ND	3,000	107.00/M
11.4	12	12.7	5	30	MAZS120CT-ND	.40	.34	.27	MAZS120TR-ND	3,000	107.00/M
20.8	22	23.3	5	80	MAZS220CT-ND	.40	.34	.27	MAZS220TR-ND	3,000	107.00/M
34	36	38	2	250	MAZS360CT-ND	.40	.34	.27	MAZS360TR-ND	3,000	107.00/M
SS-Mini Type Package 3 Pin / MAZS000 Series - 150mW											
6.4	6.8	7.2	5	30	MAZT068HCT-ND	.42	.34	.26	MAZT068HTR-ND	3,000	112.00/M
7.7	8.2	8.7	5	30	MAZT082HCT-ND	.42	.34	.26	MAZT082HTR-ND	3,000	112.00/M
S-Mini Type Package 5 Pin / MAZS000 Series - 200mW											
6.4	6.8	7.2	5	30	MAZZ068HCT-ND	.49	.37	.28	MAZZ068HTR-ND	3,000	159.00/M
1008 Mold Leadless Package 4 Pin / 100mW											
7.7	8.2	8.7	5	20	MAZR08200ACT-ND	.43	.35	.26	MAZR08200ATR-ND	10,000	107.00/M
7.7	8.2	8.7	5	20	MAZR082H0ACT-ND	.69	.52	.39	MAZR082H0ATR-ND	10,000	214.00/M

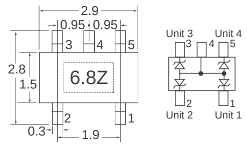
Mini Type Package



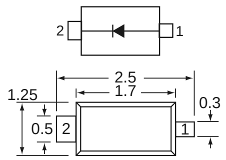
Mini Mold (3-pin) Package - 200mW



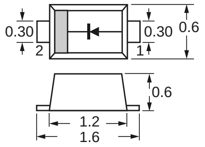
Mini Mold (5-pin) Package - 200mW



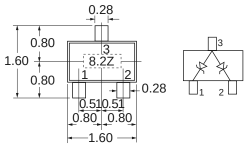
S-Mini Type Package



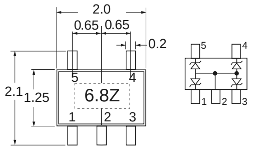
SS-Mini Type Package (2-pin)



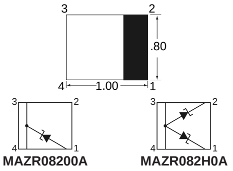
SS-Mini Type Package (3-pin)



S-Mini Type Package (5-pin)



1008 Mold Leadless Package (4-pin)



International
IOR Rectifier

IGBT Transistors

The field of 3-phase 220V PWM motor drives has had mainly bipolars and power MOSFETs competing with one another. Power MOSFETs have been the choice of power electronic designers, especially at power levels below 5 hp because of the ease of drive and their rugged operations. Since FETs are voltage-controlled devices, they require only very small gate current pulses to turn them off and on. The average currents necessary for controlling the device state are often magnitudes lower than those required by bipolar devices of similar ratings. What's more, the FET's wide switching safe operating area (SOA), avalanche and dv/dt capabilities allow for snubberless operation, often a great advantage over bipolars. The $R_{DS(on)}$ of the FET does, however, rise exponentially with voltage rating. The IGBT combines the best of both worlds. It is a voltage-controlled device (like the MOSFET) allowing designers to greatly simplify their drive circuits. It is a rugged device with a square switching SOA and high peak current capability. In addition, it exhibits low forward voltage characteristics similar to bipolars, reducing the conduction loss. For those IGBT's without an internal reverse diode, designers can choose an external fast recovery diode to suit a specific application. All this indicates that the IGBT will be the device for applications requiring high current densities at high voltages coupled with switching frequencies up to 20 to 50 kHz.

High Efficiency WARP™ Speed IGBTs: Optimized for 75-150kHz hard switching frequency. For use in UPS, welding, switch mode power supplies and PFC stages.

IGBT SIP Module: The IGBT technology is the key to International Rectifier's advanced line of IMS (Insulated Metal Substrate) Power Modules. These modules are more efficient than comparable bipolar transistor modules, while at the same time having the simpler gate-drive requirements of the familiar power MOSFET. This superior technology has now been coupled to a state of the art materials system that maximizes power throughput with low thermal resistance. This package is highly suited to motor drive applications and where space is at a premium. **Features**: • Fully isolated printed circuit board mount package • Switching-loss rating includes all "tail" losses • HEXFRED soft ultrafast diodes • Optimized for medium operating (1 to 10kHz)

Fig. 1

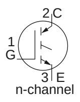


Fig. 2

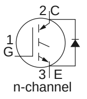


Fig. 3

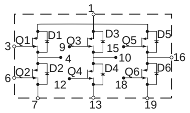


Fig. 4

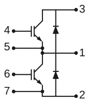
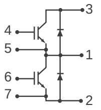
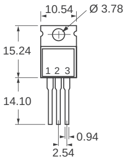


Fig. 5



TO-220AB



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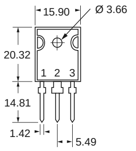
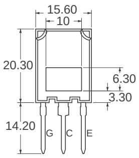
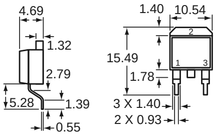


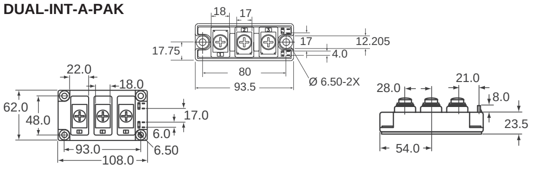
SUPER-247



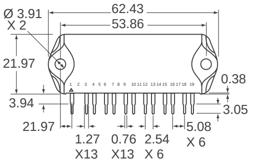
D2PAK



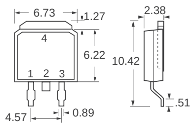
DUAL-INT-A-PAK



IMS-2



D-Pak



TO-247AD *NEW!*

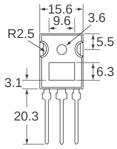
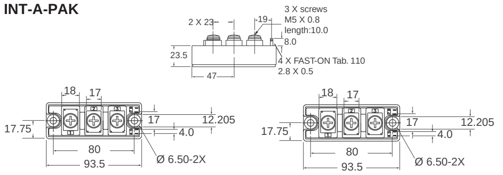


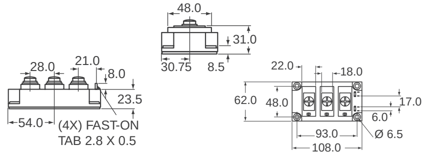
Fig.	Package	VCE	VCE (Sat) Max	IC @ TC +25°C	Pulse Current ICM	Max Power Dissipation	Delay Time (ns)		ETS Total Switching Loss @ IC		Digi-Key Part No.	Price Each		
							Td (on)	Td (off)	MJ	Amps		1	10	100
1	TO-220AB	600	1.4	19	38	60	27	540	2.17	10	IRG4BC20S-ND	2.78	2.22	1.59
			2.27	13	52	60	20	190	.22	6.5	IRG4BC20U-ND	2.32	1.98	1.63
			1.99	31	120	100	20	290	2.50	17.0	IRG4BC30F-ND	2.98	2.54	2.09
			1.4	34	68	100	22	540	3.71	18	IRG4BC30S-ND	3.73	2.98	2.13
			2.52	23	92	100	20	180	.73	12.0	IRG4BC30U-ND	4.26	2.99	2.40
			1.66	16	64	60	24	190	1.1	9	IRG4BC20F-ND	2.78	2.22	1.67
			1.5	49	200	160	26	240	2.18	27	IRG4BC40F-ND	5.80	4.64	3.31
			2.15	40	160	160	30	220	1.40	20.0	IRG4BC40U-ND	4.76	4.05	3.34
			2.8	16	32	60	28	190	0.68	9.0	IRG4BC20K-ND *NEW!*	2.78	2.22	1.78
2	TO-220AB	600	2.15	8.5	34	38	40	87	0.26	25	IRG4BC10UD-ND	3.00	2.04	1.61
			1.66	16	64	60	43	240	0.89	9	IRG4BC20FD-ND	3.80	3.04	2.17
			2.27	16	32	60	54	180	0.64	9	IRG4BC20KD-ND	3.93	3.14	2.24
			2.27	13	52	60	38	100	.49	6.5	IRG4BC20UD-ND	3.14	2.67	2.20
			1.99	31	120	100	42	310	3.20	17.0	IRG4BC30FD-ND	4.86	4.14	3.41
			2.21	28	58	100	60	160	1.18	16	IRG4BC30KD-ND	4.22	3.01	2.44
			2.52	23	92	100	40	120	.89	12.0	IRG4BC30UD-ND	4.98	4.24	3.49
1	TO-247AC	600	1.59	31	120	100	21	200	1.41	17.0	IRG4PC30F-ND	4.45	3.56	2.54
			1.5	49	200	160	26	240	2.18	27	IRG4PC40F-ND	6.13	4.90	3.50
			2.1	42	84	160	30	140	0.95	25	IRG4PC40K-ND	6.40	5.12	3.66
			1.68	60	120	160	23	1000	12.00	31.0	IRG4PC40S-ND	4.90	4.17	3.43
			2.15	40	160	160	30	220	1.40	20.0	IRG4PC40U-ND	4.98	3.62	2.97
			1.79	70	280	200	28	390	5.00	39.0	IRG4PC50F-ND	8.40	7.14	5.88
			1.47	70	114	200	32	845	21.4	33	IRG4PC50S-ND	10.50	8.40	6.00
			2.00	55	220	200	31	230	1.60	27.0	IRG4PC50U-ND	8.68	6.53	5.45
1	TO-247AC	1200	2.74	30	60	160	30	200	4.93	25	IRG4PH40K-ND	6.00	4.80	3.43
			2.43	30	82	160	24	220	4.44	21	IRG4PH40U-ND	6.00	4.80	3.43
			3.20	45	180	200	31	320	5.40	24.0	IRG4PH50U-ND	7.91	6.05	5.09
			1.47	57	114	200	32	845	21.4	33	IRG4PH50S-ND	7.65	6.12	3.71
2	TO-247AC	600	1.99	31	120	100	42	310	3.20	17.0	IRG4PC30FD-ND	5.34	4.54	3.74
			1.95	23	92	100	40	91	0.38	12	IRG4PC30UD-ND	6.95	5.56	4.17
			1.85	49	200	160	63	350	4.70	27.0	IRG4PC40FD-ND	8.20	6.97	5.74
			2.15	40	160	160	40	200	1.60	20.0	IRG4PC40UD-ND	9.69	7.27	6.06
			1.79	70	280	200	59	260	6.50	39.0	IRG4PC50FD-ND	13.28	11.29	9.30
			2.00	55	220	200	44	240	2.30	27.0	IRG4PC50UD-ND	13.52	11.50	9.47
			3.1	28	40	100	39	340	2.6	10	IRG4PC30KD-ND	5.38	4.30	3.07
			2.74	42	60	160	50	140	2.8	15	IRG4PC40KD-ND	10.50	8.40	6.00
			2.77	52	90	200	67	310	7.9	24	IRG4PC50KD-ND	14.05	11.24	8.03
2	TO-247AC	1200	3.1	20	40	100	39	340	2.6	10	IRG4PH30KD-ND	7.63	6.10	4.36
			2.74	30	60	160	50	140	2.8	15	IRG4PH40KD-ND	8.20	6.56	4.69
			2.43	30	82	160	46	150	4.6	21	IRG4PH40UD-ND	8.20	6.56	4.69
			2.1	45	84	160	30	140	.95	25	IRG4PH50KD-ND	14.20	11.36	8.11
			3.20	45	180	200	46	240	6.38	24.0	IRG4PH50UD-ND	18.86	16.04	13.21
			2.28	60	120	300	50	210	2559	25	IRGP30B120KD-E-ND	13.18	10.54	7.90
1	TO-247AD	1200	3.05	40	120	300	50	204	1275	20	IRGP20B120U-E-ND *NEW!*	6.98	5.03	4.19
1	Super 247	600	2.00	85	200	350	34	56	2.41	15	IRG4PSC71U-ND	18.13	14.50	8.79
			1.83	85	200	350	34	251	2.77	60	IRG4PSC71K-ND *NEW!*	18.13	14.50	11.60
2	Super 247	600	2.00	85	60	350	90	245	7.2	75	IRG4PSC71UD-ND	21.00	16.80	10.19
1	D2PAK	430	1.2	20	—	125	0.9	6	—	—	IRGS14C40L-ND *NEW!*	3.96	2.78	2.16
2	D2PAK	600	1.85	13	52	60	39	93	0.49	6.5	IRG4BC20UD-S-ND	4.00	3.20	2.40
			1.85	18	36	60	21	463	2.44	11	IRG4BC20MD-S-ND *NEW!*	3.21	2.25	1.75
			1.4	34	68	100	22	540	3.71	18	IRG4BC30S-S-ND *NEW!*	4.12	2.94	2.39
			1.10	14	18	38	76	815	3.60	8.0	IRG4BC10SD-S-ND *NEW!*	1.98	1.13	.92
			2.02	14	42	49	17	160	0.50	7.8	IRG4BC15UD-S-ND *NEW!*	2.02	1.41	1.07
5	DUAL-INT-A-PAK	1200	2.4	150	300	780	414	552	90	150	GA150TD120U-ND *NEW!*	252.25	201.80	156.40
High Efficiency WARP™ Speed IGBTs														
1	TO-220AB	600	2.16	13	52	60	22	110	0.14	6.5	IRG4BC20W-ND	2.32	1.98	1.66
			2.70	23	92	100	24	150	0.26	12.0	IRG4BC30W-ND	3.24	2.76	2.31
			1.2	20	—	125	0.9	6	—	—	IRGB14C40L-ND *NEW!*	3.75	2.63	2.05
			2.05	40	160	160	27	100	0.34	20.0	IRG4BC40W-ND	6.20	5.27	4.43
1	TO-247AC	600	2.70	23	92	100	25	99	0.26	12.0	IRG4PC30W-ND	3.60	3.06	2.57
		600	2.05	40	160	160	27	100	0.34	20.0	IRG4PC40W-ND	6.46	5.50	4.61
		600	2.1	13	52	60	20	190	0.4	6.5	IRG4PC20U-ND *NEW*	2.95	2.36	1.89
		600	2.30	55	220	200	46	120	0.40	27.0	IRG4PC50W-ND	9.06	7.71	6.47
		900	2.25	51	204	200	29	110	1.25	28	IRG4PF50W-ND	7.65	6.12	3.71
IGBT SIP Module														
3	IMS-2	600	1.5	27	80	63	42	220	1.8	15	CPV364M4F-ND	70.85	56.68	42.51
		600	1.63	16	50	36	37	400	0.85	8.7	CPV363M4F-ND	57.55	46.04	34.53

(Continued)

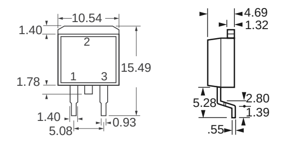
INT-A-PAK



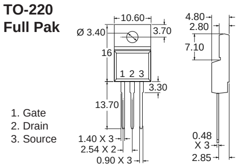
Double INT-A-PAK



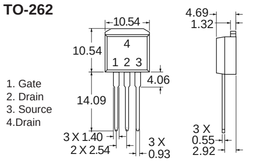
SMD-220 & SMD-220 CO-PAK



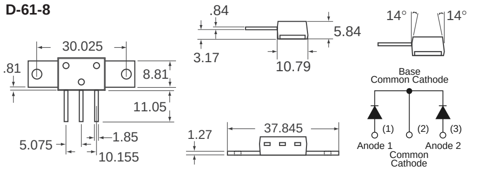
TO-220 Full Pak



TO-262



D-61-8



SOT-227 *NEW!*

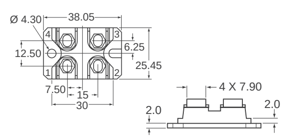


Fig.	Package	VCE	VCE (Sat) Max	IC @ TC +25°C	Pulse Current ICM	Max Power Dissipation	Delay Time (ns)		ETS Total Switching Loss @ IC		Digi-Key Part No.	Price Each		
							Td (on)	Td (off)	MJ	Amps		1	10	100
3	IMS-2	600	1.93	5.7	11	23	23	125	0.26	3.0	CPV362M4K-ND	45.18	36.15	27.11
			2.2	7.2	22	23	42	120	0.35	3.9	CPV362M4U-ND	44.69	35.75	26.82
			2.2	11	22	36	55	107	0.50	6.0	CPV363M4K-ND	51.64	41.31	30.99
			2.2	13	40	36	43	140	0.45	6.8	CPV363M4U-ND	51.35	41.08	30.81
			2.3	24	48	63	50	170	1.28	13	CPV364M4K-ND	63.77	51.02	38.26
			2.1	20	60	63	41	140	0.74	10	CPV364M4U-ND	63.77	51.02	38.26
Half-Bridge IGBT														
2	D2PAK	600	1.7	14	18	38	76	815	3.60	8.0	IRG4RC10SD-ND	1.58	1.26	.95
			1.82	22	44	66	26	194	1.11	12	IRG4RC20F-ND *NEW!*	1.81	1.03	.84
			2.39	9.0	18	38	49	97	0.39	5.0	IRG4RC10KD-ND *NEW!*	2.21	1.54	1.17
1	D-PAK	600	2.39	9.0	18	38	11	51	0.26	5.0	IRG4RC10K-ND	.83	.67	.50
			1.10	14	18	38	25	630	2.72	8.0	IRG4RC10S-ND	.45	.36	.27
			2.15	8.5	34	38	19	116	0.24	5.0	IRG4RC10U-ND	1.26	1.01	.76
4	INT-A-PAK	1200	2.9	100	200	520	172	435	52	100	GA100TS120U-ND	153.74	123.00	92.25
		600	2.0	100	200	320	168	320	11	100	GA100TS60U-ND	93.80	75.05	56.29
		1200	2.2	125	250	625	186	459	75	125	GA125TS120U-ND	176.87	141.50	106.13
		1200	1.7	150	300	440	241	336	33	150	GA150KS61U-ND	110.45	88.37	66.28
		600	1.7	150	300	440	241	336	33	150	GA150TS60U-ND	109.58	87.66	65.75
		600	1.8	200	400	625	342	366	39	200	GA200TS60U-ND	143.73	114.99	86.24
		600	1.9	250	500	780	173	1020	45	250	GA250TS60U-ND	164.97	131.98	98.99
		1200	2.5	50	100	280	74	313	16	50	GA50TS120U-ND	99.05	79.24	59.43
		1200	2.1	75	150	390	109	392	31	75	GA75TS120U-ND	123.19	98.55	73.92
		600	1.7	75	150	285	110	250	6.35	75	GA75TS60U-ND	87.98	70.38	52.79
4	Double INT-A-PAK	1200	2.4	200	400	1040	636	650	130	200	GA200TD120U-ND	288.43	230.75	173.06
		1200	2.4	250	500	1250	731	653	108	250	GA250TD120U-ND	337.34	269.88	202.41
		600	1.8	300	600	880	645	418	60	300	GA300TD60U-ND	227.93	182.34	136.76
		250	1.3	400	800	1350	1250	841	45	400	GA400TD25S-ND	248.18	198.54	148.91
		600	1.7	400	800	1250	1033	688	74	400	GA400TD60U-ND	248.18	198.54	148.91
		600	1.9	500	1000	1550	1900	800	97	500	GA500TD60U-ND	312.19	249.75	187.32
		250	1.25	600	1200	1920	1060	846	122	600	GA600GD25S-ND	248.18	198.54	148.91
1	SMD-220	600	1.66	16	64	60	43	240	0.89	9.0	IRG4BC20F-S-ND	2.41	1.93	1.45
		600	2.27	16	32	60	28	150	0.40	9.0	IRG4BC20K-S-ND	2.41	1.93	1.45
		600	12.16	13	52	60	22	110	0.14	6.5	IRG4BC20W-S-ND	2.70	2.16	1.62
		600	1.99	31	120	100	42	310	3.20	17.0	IRG4BC30F-S-ND	3.38	2.70	2.03
		600	2.21	28	58	100	26	130	0.87	16	IRG4BC30K-S-ND	3.31	2.65	1.99
		600	1.95	23	92	100	17	78	0.73	12	IRG4BC30U-S-ND	3.40	2.72	2.04
		600	2.10	23	92	100	25	99	0.26	12	IRG4BC30W-S-ND	2.68	2.15	1.61
		600	2.05	40	160	160	27	100	0.34	20.0	IRG4BC40W-S-ND	5.13	4.11	3.08
		1200	3.17	11	22	60	23	93	0.89	5.0	IRG4BH20K-S-ND	2.75	2.20	1.65
2	SMD-220 COPAK	600	1.66	16	64	60	43	240	0.89	9.0	IRG4BC20FD-S-ND	3.53	2.83	2.12
			1.4	19	38	60	62	690	2.90	10	IRG4BC20SD-S-ND	3.60	2.88	2.16
			1.99	31	120	100	42	310	3.20	17.0	IRG4BC30FD-S-ND	5.60	4.49	3.37
			2.21	28	58	100	60	160	1.18	16	IRG4BC30KD-S-ND	4.34	3.48	2.61
1	SUPER 247	1200	2.97	78	156	350	45	220	5.49	42	IRG4PSH71K-ND	16.38	13.11	9.83
		600	1.67	85	200	350	34	56	2.41	60	IRG4PSH71U-ND	16.31	13.05	9.79
2	SUPER 247	600	1.83	85	200	350	82	282	6.28	60	IRG4PSC71KD-ND	18.90	15.12	11.34
		1200	2.97	78	156	350	67	230	8.90	42	IRG4PSH71KD-ND	18.90	15.12	11.34
		600	1.67	85	200	350	90	245	5.53	60	IRG4PSH71UD-ND	18.90	15.12	11.34
1	TO-220 FULLPAK	600	2.16	11.8	52	34	22	110	0.14	6.5	IRG4IBC20W-ND	2.43	1.95	1.46
			2.1	17	92	45	25	99	0.26	12	IRG4IBC30W-ND	3.40	2.72	2.04
2	TO-220 FULLPAK	600	2.15	6.8	27	25	40	87	0.26	5.0	IRG4IBC10UD-ND	4.25	3.41	2.56
			1.66	14.3	64	34	43	240	0.89	9.0	IRG4IBC20FD-ND	3.53	2.83	2.12
			2.27	11.5	23	34	54	180	0.64	9.0	IRG4IBC20KD-ND	3.53	2.83	2.12
			1.85	11.4	52	34	39	93	0.29	6.5	IRG4IBC20UD-ND	5.58	4.47	3.35
			1.59	20.3	120	45	42	230	2.02	17	IRG4IBC30FD-ND	5.58	4.47	3.35
			2.21	17	34	45	60	160	1.18	16	IRG4IBC30KD-ND	5.58	4.47	3.35
			1.6	23.5	68	45	22	540	3.71	18	IRG4IBC30S-ND	3.40	2.72	2.04
			1.95	17	92	45	40	91	0.54	12	IRG4IBC30UD-ND	3.65	2.92	2.19
1	TO-220AB	600	2.39	9.0	18	38	11	51	0.26	5.0	IRG4BC10K-ND	2.03	1.62	1.22
			1.1	14	18	38	25	630	2.72	8.0	IRG4BC10S-ND	2.03	1.62	1.22
			2.15	8.5	34	38	40	87	0.26	5.0	IRG4BC10U-ND	2.03	1.62	1.22
			2.21	28	58	100	26	130	0.87	16	IRG4BC30K-ND	3.13	2.51	1.88
			2.10	42	84	160	30	140	1.9	25	IRG4BC40K-ND	5.36	4.29	3.22
2	TO-220AB	600	2.39	9.0	18	38	49	97	0.39	5.0	IRG4BC10KD-ND	2.30	1.84	1.38
			2.02	14	42	49	17	160	0.50	7.8	IRG4BC15UD-ND *NEW!*	1.98	1.13	.92
			1.1	14	18	38	76	815	3.6	8.0	IRG4BC10SD-ND	2.16	1.73	1.30
			1.4	19	38	60	62	690	2.90	10	IRG4BC20SD-ND	2.57	2.06	1.54
1	TO-247AC	1200	2.77	45	90	200	36	200	3.46	24	IRG4PH50K-ND	8.21	6.57	4.93
		250	1.32	98	196	200	40	270	3.88	55	IRG4P254S-ND	9.11	7.29	5.47
		600	2.21	28	58	100	26	130	0.87	16	IRG4PC30K-ND	3.24	2.60	1.95
		600	1.4	34	68	100	22	540	3.71	18	IRG4PC30S-ND	4.17	2.89	2.31
		600	1.95	23	92	100	17	78	0.73	12	IRG4PC30U-ND	4.25	3.41	2.56
		600	1.84	52	104	200	38	160	1.12	30	IRG4PC50K-ND	8.37	6.70	5.03
		1200	3.17	11	22	60	23	93	1.7	5.0	IRG4PH20K-ND	2.84	2.27	1.71
		1200	3.10	20	40	100	28	200	1.56	10	IRG4PH30K-ND	3.38	2.70	2.03
2	TO-247AC	900	2.25	51	204	200	71	150	3.97	28	IRG4PF50WD-ND	8.89	7.11	5.34
		1200	3.17	11	22	60	50	100	0.92	5.0	IRG4PH20KD-ND	3.65	2.92	2.19
		1200	4.85	40	120	300	50	204	1275	20	IRGP20B120UD-E-ND	11.86	9.49	7.12
1	TO-262	1200	3.17	11	22	60	23	93	0.89	5.0	IRG4BH20K-L-ND	2.75	2.20	1.65
2	TO-262	600	1.10	14	18	38	76	815	3.6	8.0	IRG4BC10SD-L-ND *NEW!*	1.98	1.13	.92
			2.02	14	42	49	17	160	0.50	7.8	IRG4BC15UD-L-ND *NEW!*	2.02	1.41	1.07
1	SOT-227	600	1.1	200	400	630	78	890	18.4	100	GA200SA60S-ND *NEW!*	41.72	34.73	30.45
			1.6	200	400	500	54	130	4.46	100	GA200SA60U-ND *NEW!*	41.72	34.73	30.45

FAIRCHILD
SEMICONDUCTOR

Surface Mount and Through-Hole Power MOSFETS

Fig.	Type	V_{DS} (V)	$R_{DS(on)}$ Max (Ω)			I_D (A)	P_D (W)	Config. or Pkg.	Digi-Key Part No	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing
			V_{GS} @ 10V	V_{GS} @ 4.5V	V_{GS} @ 2.7V					1	10	100		
SuperSOT™-3 High Drain Current														
1	N-Chan.	30	—	0.25	—	1.1	0.5	Single	NDS351NCT-ND	.48	3.63	27.23	NDS351NTR-ND	471.90/3,000
		30	—	0.125	—	1.6	0.5		NDS355NCT-ND	1.64	12.27	92.03	NDS355NTR-ND	1595.10/3,000
1	P-Chan.*	-20	—	0.5	—	-0.85	0.5	Single	NDS352PCT-ND	.62	4.62	34.65	NDS352PTR-ND	600.60/3,000
		-20	—	0.3	—	-1.1	0.5		NDS356PCT-ND	.97	7.26	54.45	NDS356PTR-ND	943.80/3,000
2	N-Chan.	30	—	0.065	.082†	2.2	0.5	Single	FDN337NCT-ND *NEW!*	.65	4.89	36.68	FDN337NTR-ND *NEW!*	635.70/3,000
		30	0.16	0.25	—	1.2	0.5		NDS351ANCT-ND *NEW!*	.50	4.04	27.72	NDS351ANTR-ND *NEW!*	392.70/3,000
		20	—	0.16	0.21	1.3	0.5		NDS331NCT-ND *NEW!*	.50	3.96	29.70	NDS331NTR-ND *NEW!*	400.95/3,000
		20	—	0.11	0.14	1.7	0.5		NDS335NCT-ND *NEW!*	.62	4.62	34.65	NDS335NTR-ND *NEW!*	600.60/3,000
		30	0.085	0.125	—	1.7	0.5		NDS355ANCT-ND *NEW!*	.48	3.63	27.23	NDS355ANTR-ND *NEW!*	471.90/3,000
2	P-Chan.*	-20	—	115	155†	-1.6	0.5	Single	FDN338PCT-ND *NEW!*	.57	4.29	32.18	FDN338PTR-ND *NEW!*	557.70/3,000
		-20	—	0.3	0.41	-1	0.5		NDS332PCT-ND *NEW!*	.48	3.63	27.23	NDS332PTR-ND *NEW!*	471.90/3,000
		-30	0.2	0.3	—	±1.1	0.5		NDS356APCT-ND *NEW!*	.62	4.62	34.65	NDS356APTR-ND *NEW!*	600.60/3,000
		-30	0.3	0.5	—	±9	0.5		NDS352APCT-ND *NEW!*	.50	4.04	27.72	NDS352APTR-ND *NEW!*	392.70/3,000
SOT-23 (TO236AB)														
1	N-Chan.	25	—	0.45	0.6	0.68	0.35	Single	FDV303NCT-ND *NEW!*	.40	3.13	22.00	FDV303NTR-ND *NEW!*	270.00/3,000
		25	—	4	5	0.22	0.35		FDV301NCT-ND *NEW!*	.31	2.33	16.12	FDV301NTR-ND *NEW!*	186.00/3,000
		50	3.5	6	—	0.22	0.36		BSS138CT-ND	.33	2.48	17.16	BSS138TR-ND	198.00/3,000
		60	7.5	—	—	0.115	0.2		2N7002NCT-ND	.24	1.80	13.00	2N7002NTR-ND	141.00/3,000
		60	2	—	—	0.28	0.3		NDS7002ACT-ND	.33	2.48	17.16	NDS7002ATR-ND	198.00/3,000
		100	6	—	—	0.17	0.36		BSS123NCT-ND	.39	2.93	20.28	BSS123NTR-ND	234.00/3,000
1	P-Chan.*	-25	—	1.1	1.5	-0.46	0.35	Single	FDV304PCT-ND *NEW!*	.43	3.47	23.76	FDV304PTR-ND *NEW!*	336.60/3,000
		-25	—	10	13	-0.12	0.35		FDV302PCT-ND *NEW!*	.33	2.48	17.16	FDV302PTR-ND *NEW!*	198.00/3,000
		-50	10	—	—	-0.13	0.3		BSS84CT-ND	.36	2.70	18.72	BSS84TR-ND	216.00/3,000
		-60	5	7.5	—	-0.18	0.36		NDS0605CT-ND	.40	3.13	22.00	NDS0605TR-ND	270.00/3,000
		-60	10	—	—	-0.12	0.36		NDS0610CT-ND	.40	3.13	22.00	NDS0610TR-ND	270.00/3,000
SuperSOT™-6 (SOT-6)														
3	N-Chan.	30	0.06	0.09	—	3.2	1.6	Single	NDC651NCT-ND	.53	3.96	29.70	NDC651NTR-ND	514.80/3,000
4		50	2	—	—	0.35	0.5	Dual	NDC7002NCT-ND	.51	3.81	28.58	NDC7002NTR-ND	495.30/3,000
3	P-Chan.*	-30	0.11	0.18	—	-2.4	1.6	Single	NDC652PCT-ND	.53	3.96	29.70	NDC652PTR-ND	514.80/3,000
4		-50	5	—	—	-0.22	0.5	Dual	NDC7003PCT-ND	.51	3.81	28.58	NDC7003PTR-ND	495.30/3,000
4	N-Chan.	50	2	—	—	0.35	0.5	Compl.	NDC7001CCT-ND	.53	3.96	29.70	NDC7001CTR-ND	514.80/3,000
	P-Chan.*	-50	5	—	—	-0.22	0.5							
Power MOSFET (SO-8)														
7	N-Chan.	20	—	0.05	0.07	4.5	2	Dual	NDS8926CT-ND	1.60	12.76	95.70	—	—
6		30	0.015	0.02	—	10.0	2.5	Single	NDS8410CT-ND	1.12	9.35	74.80	NDS8410TR-ND	1215.50/2,500
7		30	0.037	0.055	—	5.3	2	Dual	NDS8936CT-ND	1.09	9.08	72.60	NDS8936TR-ND	1179.75/2,500
5		30	0.028	0.042	—	7.3	2.5	Single	NDS9410ACT-ND	.97	7.26	54.45	NDS9410ATR-ND	786.50/2,500
7		30	0.05	0.08	—	5	2	Dual	NDS9936CT-ND	.84	7.01	56.10	NDS9936TR-ND	911.63/2,500
7		30	0.08	0.11	—	3.7	2	Dual	NDS9956ACT-ND	.76	6.33	50.60	NDS9956ATR-ND	822.25/2,500
7		50	0.13	0.2	—	3	2	Dual	NDS9955CT-ND	1.49	12.38	99.00	NDS9955TR-ND	1608.75/2,500
7		50	0.3	0.5	—	2	2	Dual	NDS9959CT-ND	.97	7.26	54.45	NDS9959TR-ND	786.50/2,500
7		60	0.1	0.2	—	3.5	2	Dual	NDS9945CT-ND	.99	8.25	66.00	NDS9945TR-ND	1072.50/2,500
7		60	0.16	0.25	—	2.6	2	Dual	NDS9957CT-ND	1.27	10.12	75.90	—	—
6	P-Chan.*	-20	—	0.035	0.05	-6.7	2.5	Single	NDS8434CT-ND	1.16	9.63	77.00	NDS8434TR-ND	1251.25/2,500
5		-20	0.1	0.16	—	-4.3	2.5	Single	NDS9405CT-ND	1.62	12.98	97.35	NDS9405TR-ND	2076.80/2,500
6		-20	0.06	0.115	—	-5.3	2.5	Single	NDS9430CT-ND	1.09	9.08	72.60	NDS9430TR-ND	1179.75/2,500
7		-20	—	0.11	0.19	-3.2	2	Dual	NDS9933CT-ND	1.74	13.89	104.16	NDS9933TR-ND	2222.08/2,500
7		-20	0.1	0.19	—	-3.5	2	Dual	NDS9947CT-ND	1.06	8.80	70.40	NDS9947TR-ND	1144.00/2,500
6		-30	0.028	0.045	—	-7.0	2.5	Single	NDS8435CT-ND	1.32	11.00	88.00	—	—
7		-30	0.065	0.1	—	-4.0	2	Dual	NDS8947CT-ND	1.51	12.10	90.75	NDS8947TR-ND	1936.00/2,500
5		-30	0.13	0.2	—	-3.6	2.5	Single	NDS9400ACT-ND	.95	7.95	63.60	NDS9400ATR-ND	1033.50/2,500
6		-30	0.05	0.09	—	-5.3	2.5	Single	NDS9435ACT-ND	.92	7.70	61.60	NDS9435ATR-ND	1001.00/2,500
7		-30	0.13	0.2	—	-2.9	2	Dual	NDS9953ACT-ND	.83	6.88	55.00	NDS9953ATR-ND	893.75/2,500
6		-60	0.15	0.24	—	-3.3	2.5	Single	NDS9407CT-ND	1.39	11.55	92.40	NDS9407TR-ND	1501.50/2,500
7		-60	0.25	0.5	—	-2.3	2	Dual	NDS9948CT-ND	1.06	8.80	70.40	NDS9948TR-ND	1144.00/2,500
PowerSOT (SOT-223)														
8	N-Chan.	30	0.05	0.08	—	5.5	3	Single	NDT451NCT-ND	1.09	9.08	72.60	NDT451NTR-ND	1179.75/2,500
		30	0.037	0.055	—	7.1	3		NDT451ANCT-ND	.86	7.15	57.20	NDT451ANTR-ND	929.50/2,500
		30	0.028	0.042	—	8	3		NDT453NCT-ND	1.02	8.53	68.20	NDT453NTR-ND	1108.25/2,500
		30	0.015	0.02	—	11.5	3		NDT455NCT-ND	1.51	12.10	90.75	NDT455NTR-ND	1936.00/2,500
		60	0.12	—	—	3.7	3		NDT3055CT-ND	.64	4.80	36.00	NDT3055TR-ND	520.00/2,500
		60	—	0.15	—	3.5	3		NDT3055LCT-ND	.64	4.80	36.00	NDT3055LTR-ND	520.00/2,500
8	P-Chan.*	-30	0.18	0.32	—	-3	3	Single	NDT452PCT-ND	1.06	8.80	70.40	NDT452PTR-ND	1144.00/2,500
		-30	0.035	0.05	—	-7.3	3		NDT456PCT-ND	1.51	12.10	90.75	NDT456PTR-ND	1936.00/2,500
		-30	0.065	0.1	—	-5	3		NDT452APCT-ND *NEW!*	.83	6.88	55.00	NDT452APTR-ND *NEW!*	893.75/2,500
		-60	0.3	0.5	—	-2.5	3		NDT2955CT-ND	.66	4.95	37.13	NDT2955TR-ND	536.25/2,500
NEW! TO-252 NEW!														
9	N-Chan.	30	0.008	0.010	—	66	3.2	Single	FDD6670ACT-ND	1.49	12.38	99.00	FDD6670ATR-ND	1608.75/2,500
Power MOSFET (SO-8) (Complementary N-P Channel 3 Phase Brushless Motor Driver)														
7	N-Chan.	20	0.125	0.25	—	3	2	Compl.	NDS9942CT-ND	1.51	12.10	90.72	NDS9942TR-ND	1935.36/2,500
	P-Chan.*	-20	0.2	0.4	—	-2.5	2							
7	N-Chan.	20	0.125	0.25	—	3	2	Compl.	NDS9943CT-ND	1.51	12.10	90.75	NDS9943TR-ND	1936.00/2,500
	P-Chan.*	-20	0.16	0.3	—	-2.8	2							
7	N-Chan.	20	0.1	0.15	—	3.5	2	Compl.	NDS9958CT-ND	1.35	11.28	90.20	NDS9958TR-ND	1465.75/2,500
	P-Chan.*	-20	0.1	0.19	—	-3	2							
7	N-Chan.	30	0.037	0.055	—	5.3	2	Compl.	NDS8958CT-ND	1.35	11.28	90.20	NDS8958TR-ND	1465.75/2,500
	P-Chan.*	-30	0.065	0.10	—	-4.0	2							
7	N-Chan.	30	0.08	0.11	—	4	2	Compl.	NDS9952ACT-ND	1.02	8.53	68.20	NDS9952ATR-ND	1108.25/2,500
	P-Chan.*	-30	0.13	0.2	—	-2.9	2							

* V_{GS} are negative for P-Channel devices. † V_{GS} @ 2.5V ‡ V_{GS} @ 5V

(Continued)

Fig. 1 **SOT-23 (TO-236AB)**

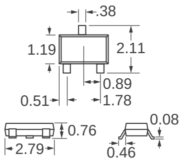
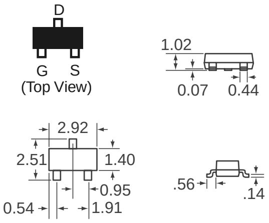


Fig. 2 *NEW!* **SuperSOT™-3**



SuperSOT™-6

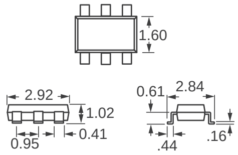
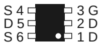


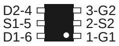
Fig. 3



SOT-6
(Top View)

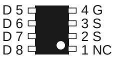
Fig. 4

NDC7001CCT:
G1, S1, D1 are
N-Chan



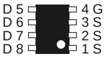
SOT-6
(Top View)

Fig. 5



SO-8
(Top View)

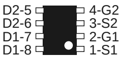
Fig. 6



SO-8
(Top View)

Fig. 7

1, 2, 7, 8 are
N-Chan for
complementary
parts only.



SO-8
(Top View)

Fig. 8 **SOT-223**

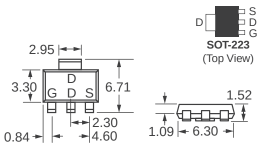
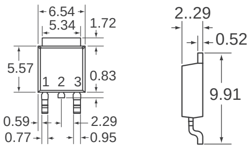


Fig. 9 *NEW!* **TO-252**



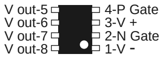
FAIRCHILD SEMICONDUCTOR

Surface Mount and Through-Hole Power MOSFETS *(Cont.)*

Fig.	Type	V_{DS} (V)	$R_{DS(on)}$ Max (Ω)			I_D (A)	P_D (W)	Config. or Pkg.	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing
			V_{GS} @ 10V	V_{GS} @ 4.5V	V_{GS} @ 2.7V					1	10	100		
Power MOSFET (SO-8) (Complementary MOSFETS Half Bridge)														
10	N-Chan.	30	0.037	0.055	—	6.3	2.5	Compl.	NDS8858HCT-ND	1.19	9.90	79.20	NDS8858HTR-ND	1287.00/2,500
	P-Chan.*	-30	0.065	0.10	—	-4.8	2.5							
10	N-Chan.	30	0.08	0.11	—	4.3	2.5	Compl.	NDS8852HCT-ND	1.09	9.08	72.60	NDS8852HTR-ND	1179.75/2,500
	P-Chan.*	-30	0.13	0.2	—	-3.4	2.5							
Power MOSFET (TO-263AB)														
11	N-Chan.	30	0.022	0.04	—	25	50	TO-263AB	NDB603ALCT-ND	1.42	11.83	94.60	NDB603ALTR-ND	529.76/800
		50	0.1	—	—	15	50		NDB4050CT-ND	1.10	9.20	73.60	NDB4050TR-ND	397.44/800
		50	—	—	0.1	15	50		NDB4050LCT-ND	1.02	8.53	68.20	NDB4050LTR-ND	381.92/800
		60	0.1	—	—	15	50		NDB4060CT-ND	1.36	11.34	90.72	—	—
		60	—	—	0.1	15	50		NDB4060LCT-ND	3.72	27.90	186.00	—	—
		60	—	—	0.025	48	100		NDB6060LCT-ND	1.32	10.56	79.20	NDB6060LTR-ND	570.24/800
		60	0.015	—	—	75	150		NDB7060CT-ND	13.80	103.50	690.00	NDB7060TR-ND	1132.56/800
		60	—	—	0.015	75	150		NDB7060LCT-ND	16.02	120.15	801.00	NDB7060LTR-ND	2840.88/800
Through-Hole Power MOSFET (TO-220AB)														
12	N-Chan.	30	0.022	0.04	—	25	50	TO-220AB	NDP603AL-ND	1.25	10.45	83.60	—	—
		50	—	—	0.1	15	50		NDP4050L-ND	1.09	9.08	72.60	—	—
		50	0.015	—	—	75	150		NDP7050-ND	2.50	20.00	155.54	—	—
		50	—	—	0.015	75	150		NDP7050L-ND	2.45	19.60	152.46	—	—
		60	0.1	—	—	15	50		NDP4060-ND	1.02	8.53	68.20	—	—
		60	—	—	0.1	15	50		NDP4060L-ND	1.02	8.53	68.20	—	—
		60	0.025	—	—	48	100		NDP6060-ND	1.60	12.76	95.70	—	—
		60	—	—	0.025	48	100		NDP6060L-ND	1.79	14.30	107.25	—	—
		60	0.015	—	—	75	150		NDP7060-ND	2.20	17.60	132.00	—	—
12	N-Chan.	30	0.010	—	—	70	150	Single	RFP70N03-ND *NEW!*	1.89	15.10	113.25	—	—
		50	0.100	—	—	14	48		RFP14N05-ND *NEW!*	.83	6.88	55.00	—	—
		55	0.008	—	—	100	175		HRF3205-ND *NEW!*	1.94	15.52	116.40	—	—
		55	0.022	—	—	49	120		HRFZ44N-ND *NEW!*	.94	7.85	62.80	—	—
		60	0.028	—	—	45	131		RFP45N06-ND *NEW!*	1.35	10.78	80.85	—	—
		60	0.022	—	—	50	131		RFP50N06-ND *NEW!*	1.24	10.35	82.80	—	—
		60	—	0.107‡	—	11	38		RFP3055LE-ND *NEW!*	.79	5.94	44.55	—	—
		60	—	0.047‡	—	30	96		RFP30N06LE-ND *NEW!*	1.12	9.35	74.80	—	—
		100	—	1.050‡	—	2	25		RFP2N10L-ND *NEW!*	.98	8.18	65.40	—	—
		100	0.064	—	—	22	85		IRF530NFS-ND *NEW!*	.92	6.93	51.98	—	—
		100	0.040	—	—	33	120		IRF540NFS-ND *NEW!*	.76	6.93	51.98	—	—
		100	0.040	—	—	40	160		RFP40N10-ND *NEW!*	1.52	12.18	91.35	—	—
		100	—	0.2‡	—	12	60		RFP12N10L-ND *NEW!*	.92	7.70	61.60	—	—
		1000	3.500	—	—	4.3	150		RFP4N100-ND *NEW!*	3.59	28.71	223.30	—	—
12	P-Chan.*	-50	0.150	—	—	-15	80	Single	RFP15P05-ND *NEW!*	1.25	10.40	83.20	—	—
		-50	0.300	—	—	-8	48		RFP8P05-ND *NEW!*	.95	7.93	63.40	—	—
		-50	0.065	—	—	30	120		RFP30P05-ND *NEW!*	2.11	16.84	126.30	—	—
		-60	0.065	—	—	30	135		RFP30P06-ND *NEW!*	1.65	13.16	98.70	—	—
Through-Hole Power MOSFET (TO-92)														
13	N-Chan.	60	5	—	—	0.2	0.4	TO-92	2N7000FS-ND	.26	1.98	14.30	—	—
		60	5	—	—	0.5	0.83		BS170-ND	.34	2.69	18.92	—	—
NEW! TO-251AA NEW!														
14	N-Chan.	50	0.100	—	—	14	48	Single	RFD14N05-ND	.79	5.94	44.55	—	—
		50	0.047	—	—	16	72		RFD16N05-ND	1.09	9.08	72.60	—	—
		50	—	.100‡	—	14	48		RFD14N05L-ND	.86	6.45	48.38	—	—
		60	—	.107‡	—	11	38		RFD3055LE-ND	.75	5.61	42.08	—	—
		100	0.27	—	—	8.4	50		IRFU120FS-ND	.92	7.70	61.60	—	—
		200	0.800	—	—	4.6	50		IRFU220FS-ND	.92	6.93	51.98	—	—
14	P-Chan.*	-50	0.150	—	—	-15	80	Single	RFD15P05-ND	1.16	9.65	77.20	—	—
		-50	0.300	—	—	-8	48		RFD8P05-ND	.92	7.70	61.60	—	—
NEW! TO-247 NEW!														
15	N-Chan.	60	0.014	—	—	70	150	Single	RFG70N06-ND	2.16	17.28	129.60	—	—
		500	0.270	—	—	20	250		IRFP460FS-ND	2.35	18.81	146.30	—	—
15	P-Chan.*	-50	0.030	—	—	60	215	Single	RFG60P05E-ND	10.23	92.07	816.35	—	—
NEW! TO-252AA NEW!														
16	N-Chan.	50	0.100	—	—	14	48	Single	RFD14N05SM-ND	.88	6.60	49.50	—	—
		50	—	0.100‡	—	14	48		RFD14N05LSM-ND	.86	6.45	48.38	—	—
		50	—	0.047‡	—	16	60		RFD16N05LSM-ND	1.06	8.80	70.40	—	—
		50	0.047	—	—	16	72		RFD16N05SM-ND	.83	6.88	55.00	—	—
		60	—	0.107‡	—	11	38		RFD3055LESM-ND	.78	5.88	44.10	—	—
		100	0.27	—	—	8.4	50		IRFR120FS-ND	.79	5.94	44.55	—	—
16	P-Chan.*	-30	—	0.200‡	—	10	65	Single	RFD10P03LSM-ND	.92	7.70	61.60	—	—
		-50	0.150	—	—	-15	80		RFD15P05SM-ND	1.09	9.08	72.60	—	—
		-50	0.300	—	—	-8	48		RFD8P05SM-ND	.92	7.70	61.60	—	—
NEW! 8-SOIC NEW!														
17	N-Chan.	30	0.008	0.010	—	13	2.5	Single	FDS6670ACT-ND	1.29	10.34	77.55	FDS6670ATR-ND	1654.40/2,500
		30	0.0095	0.013	—	12.5	2.5	Single	FDS6680ACT-ND	.96	7.98	63.80	FDS6680ATR-ND	1036.75/2,500
		50	0.130	—	0.200	3.0	2.0	Dual	SI9955DYCT-ND	.83	6.88	55.00	SI9955DYTR-ND	893.75/2,500

* V_{GS} are negative for P-Channel devices. † V_{GS} @ 2.5V ‡ V_{GS} @ 5V

Fig. 10



SO-8
(Top View)

Fig. 11 **TO-263AB**

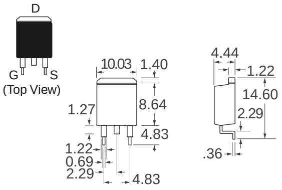


Fig. 12 **TO-220AB**

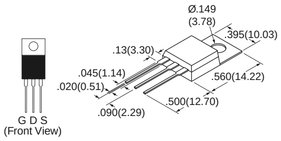
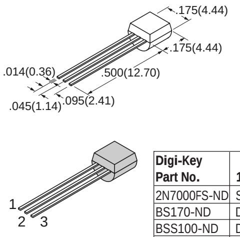


Fig. 13 **TO-92**



Digi-Key Part No.	Pins 1	2	3
2N7000FS-ND	S	G	D
BS170-ND	D	G	S
BSS100-ND	D	G	S
BSS110-ND	D	G	S
NDF0610-ND	S	G	D

Fig. 14 *NEW!* **TO-251AA**

1. Gate
2. Drain
3. Source
4. Drain

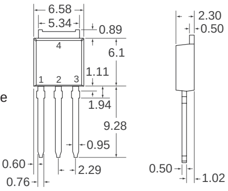


Fig. 15 *NEW!* **TO-247**

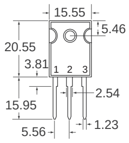


Fig. 16 *NEW!* **TO-252AA**

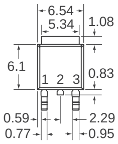
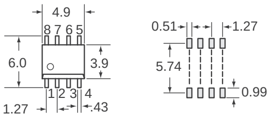


Fig. 17 *NEW!* **8-SOIC**



International IOR Rectifier

HexFred Diodes

HEXFRED technology sets a new standard for high performance ultrafast diodes. This performance advantage can be utilized by the designer resulting in higher efficiency circuits and lower overall system cost. HEXFREDS will: • Allow IGBTS and MOSFETS to run cooler by 10°C, 20°C • Improve overall system efficiency by 1%, 2% • Reduce noise and the need for snubber circuitry • Allow for higher frequency operation • Allow many marginal circuits to work more reliably

Fig. 1

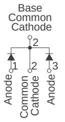


Fig. 2

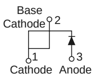


Fig. 3

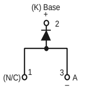


Fig. 4

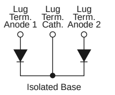


Fig. 5

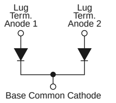


Fig. 6

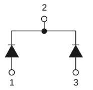


Fig. 7

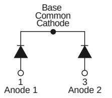


Fig. 8

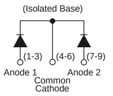


Fig. 9

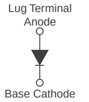


Fig. 10

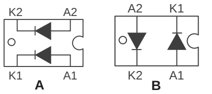


Fig. 11

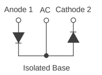


Fig. 12

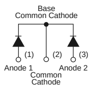


Fig. 13

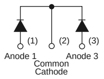
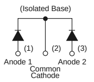
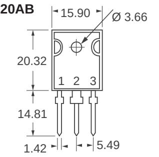


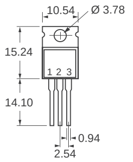
Fig. 14



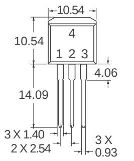
TO-220AB



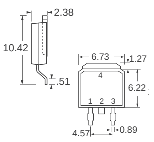
TO-220AC



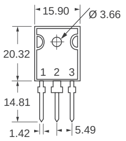
TO-262 *NEW!*



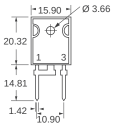
D-PAK



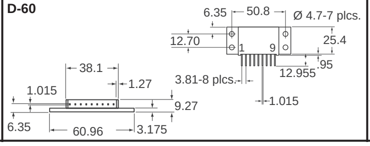
TO-247AC



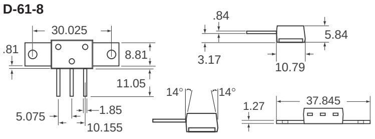
TO-247AC/ MOD



D-60



D-61-8



D-61-8SL

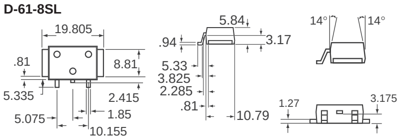
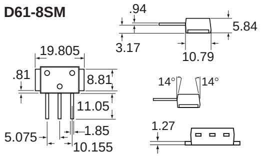
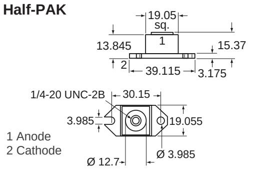


Fig.	Package	VR	VF	IF(AV) (A)	TRR(Typical) NS	QRR(Typical) NC	IRRM (A)	Digi-Key Part No.	Price Each 1	10	100
1	TO-220AB	200	0.975	16	25	23	1.7	MUR1620CTIR-ND	1.28	1.02	.71
		600	1.7	16	18	65	5	HFA16TA60C-ND	3.36	2.86	2.36
		600	1.7	30	19	80	6	HFA30TA60C-ND	5.02	4.27	3.52
		600	1.8	8	42	40	5.2	HFA08TA60C-ND	2.52	2.02	1.52
2	TO-220AC	600	1.7	8	18	65	5	HFA08TB60-ND	2.02	1.72	1.42
		600	1.7	15	19	80	6	HFA15TB60-ND	3.04	2.13	1.71
		600	1.7	25	23	112	10	HFA25TB60-ND	4.14	3.52	2.90
1	D-Pak	200	1.2	6	25	60	4.6	MURD620CT-ND	.95	.76	.53
1	TO-247AC	600	1.7	30	19	80	6	HFA30PA60C-ND	6.62	5.63	4.64
1		600	1.7	16	55	60	5	HFA16PA60C-ND	5.00	4.00	2.86
7		1200	2.4	6	26	116	4.4	HFA12PA120C-ND	8.51	6.81	5.11
2		1200	3.3	8.0	28	140	4.5	HFA16PA120C-ND	9.56	7.65	5.74
7		1200	2.3	16	30	260	5.8	HFA32PA120C-ND	17.33	13.86	10.40
2	TO-247AC/MOD	1200	2.4	30	37	490	8.1	HFA30PB120-ND	15.95	12.77	9.58
		1200	3	8	28	140	4.5	HFA08PB120-ND	5.63	4.50	3.38
		600	1.7	15	19	80	6	HFA15PB60-ND	3.88	3.30	2.72
		600	1.7	25	23	112	10	HFA25PB60-ND	5.28	3.90	3.23
		1200	3.0	16	30	260	5.8	HFA16PB120-ND	8.36	7.11	5.86
		600	1.7	8	55	65	5	HFA08PB60-ND	3.58	2.86	2.04
		1200	3	6	26	80	4.4	HFA06PB120-ND	5.50	4.40	3.14
8	D-60	600	1.1	60	30	200	6	HFA60MB60C-ND	42.86	34.29	25.72
		400	1	75	30	200	6	HFA75MB40C-ND	42.53	34.02	25.52
12	D61-8	600	1.2	70	30	210	6	HFA70NC60C-ND	23.85	19.08	14.31
		400	1	80	30	200	6	HFA80NC40C-ND	23.92	19.14	14.36
7	D-61-8SL	400	1	80	30	200	6	HFA80NC40CSL-ND	26.58	21.26	14.17
		600	1.2	70	30	210	6	HFA70NC60CSL-ND	23.85	19.08	14.31
13	D61-8SM	600	1.2	70	30	210	6	HFA70NC60CSM-ND	23.85	19.08	14.31
		400	1	80	30	200	6	HFA80NC40CSM-ND	23.92	19.14	14.36
9	HALF-PAK	600	1.2	105	35	450	10	HFA105NH60-ND	34.49	27.60	20.70
		400	1	135	50	290	7.5	HFA135NH40-ND	35.64	28.52	21.39
		600	1.3	140	39	490	9.3	HFA140NH60-ND	43.43	34.74	26.06
		400	1.1	180	45	420	8.7	HFA180NH40-ND	49.63	39.70	29.78
		400	1.1	180	45	420	8.7	HFA180NH40R-ND *NEW!*	50.93	40.74	31.57
		600	1.2	70	33	340	8.5	HFA70NH60-ND	26.10	20.88	15.66
		400	10	90	36	420	9.3	HFA90NH40-ND	26.73	21.39	16.04
6	SMD-220	600	1.8	8	42	40	5.2	HFA08TA60CS-ND	2.81	2.25	1.69
3		600	1.8	4.0	42	40	5.2	HFA04TB60S-ND	2.09	1.68	1.26
3		1200	3	6	26	116	4.4	HFA06TB120S-ND	4.79	3.84	2.88
3		1200	3	8	28	140	4.5	HFA08TB120S-ND	5.45	4.36	3.27
6		600	1.7	8.0	18	65	5.0	HFA16TA60CS-ND	4.28	3.42	2.57
2		1200	2.3	16	30	260	5.8	HFA16TB120S-ND	11.52	9.22	6.92
3		600	1.7	15	23	84	6.0	HFA15TB60S-ND	3.71	2.97	2.23
3		600	1.3	25	23	112	10	HFA25TB60S-ND	5.06	4.05	3.04
3		600	1.4	8	18	65	5	HFA08TB60STRL-ND	1285.60/800		
6		600	1.2	15	19	80	4.0	HFA30TA60CS-ND	6.12	4.90	3.68
10A	SOT-227	600	1.4	120	65	270	7.0	HFA120FA60-ND	34.07	27.26	20.44
10B		600	1.4	60	65	270	7.0	HFA120EA60-ND *NEW!*	37.55	31.30	27.46
4	TO-244AB ISO	600	1.4	100	33	300	8	HFA100MD60C-ND	49.41	39.53	29.65
11		600	1.4	100	33	300	8	HFA100MD60D-ND	50.83	40.67	30.50
11		400	0.9	120	36	420	9.3	HFA120MD40D-ND	92.68	74.15	55.61
4		400	0.9	120	36	420	9.3	HFA120MD40C-ND	91.26	73.01	54.76
4		600	1.2	140	35	360	8.0	HFA140MD60C-ND	93.17	74.54	55.91
11		600	1.2	140	35	360	8.0	HFA140MD60D-ND	94.59	75.68	56.76
4		400	0.9	160	50	260	7.1	HFA160MD40C-ND	95.92	76.74	57.56
11		400	0.9	160	50	260	7.1	HFA160MD40D-ND	97.34	77.87	58.41
5		600	1.5	180	140	—	17	HFA180MD60D-ND *NEW!*	122.00	97.60	75.64
5		600	1.5	180	140	—	17	HFA180MD60C-ND *NEW!*	120.43	96.34	74.67
4		400	0.9	200	45	330	8.1	HFA200MD40C-ND	111.89	89.52	67.14
11		400	0.9	200	45	330	8.1	HFA200MD40D-ND	111.69	89.36	67.02
5	TO-244AB	600	1.2	140	33	340	8.5	HFA140NJ60C-ND	58.46	46.77	35.08
		600	1.2	140	33	340	8.5	HFA140NJ60D-ND	59.85	47.88	35.91
		400	1	160	36	420	9.3	HFA160NJ40C-ND	62.24	49.79	37.35
		400	1	160	36	420	9.3	HFA160NJ40D-ND	63.63	50.91	38.18
		600	1.2	210	35	450	10	HFA210NJ60C-ND	82.19	65.76	49.32
		600	1.2	210	35	450	10	HFA210NJ60D-ND	83.59	66.87	50.16
		400	1	240	50	290	7.5	HFA240NJ40C-ND	77.81	62.25	46.69
		400	1	240	50	290	7.5	HFA240NJ40D-ND	77.78	62.23	46.67
		600	1.3	280	39	490	93	HFA280NJ60C-ND	94.03	75.23	56.42
		600	1.3	280	39	490	93	HFA280NJ60D-ND	95.42	76.34	57.26
		400	1	320	45	420	8.7	HFA320NJ40C-ND	98.08	78.47	58.85
		400	1	320	45	420	8.7	HFA320NJ40D-ND	99.47	79.58	59.69
1	TO-249AA	600	1.1	60	30	200	6	HFA60MC60C-ND	42.86	34.29	25.72
14		400	1	75	30	200	6	HFA75MC40C-ND	42.53	34.02	25.52
14		400	1	80	30	200	6	HFA80NK40C-ND	24.73	19.79	14.84
1	TO-262	600	1.7	15	60	600	6	HFA15TB60-1-ND *NEW!*	2.08	1.46	1.11

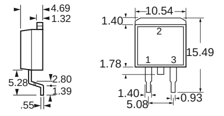
D61-8SM



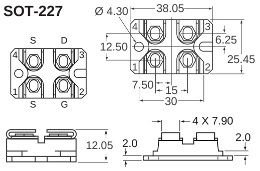
Half-PAK



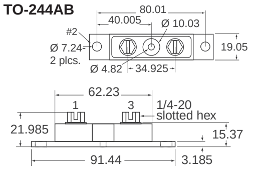
SMD-220



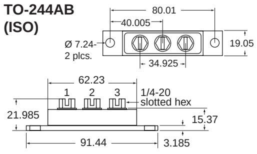
SOT-227



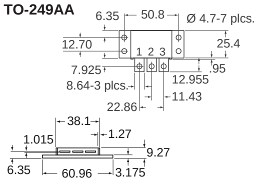
TO-244AB



TO-244AB (ISO)



TO-249AA



International IOR Rectifier

N and P Channel HEXFETs

Electrical characteristics at 25°C unless otherwise noted.
Dimensions shown in mm

Fig. 1 — TO-220AB

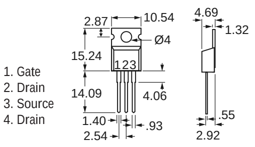


Fig. 2 — TO-220 Fullpak

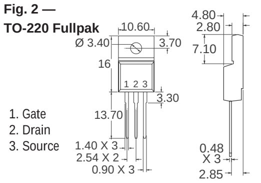


Fig. 3 — TO-247AC

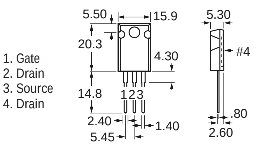


Fig. 4 — TO-262

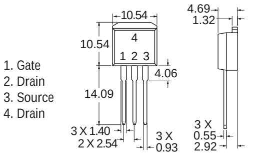


Fig. 5 — I-PAK

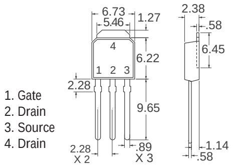


Fig. 6 — 4-Pin Dip (Hexdip)

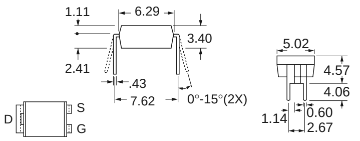


Fig. 7 — SMD-220/D2Pak

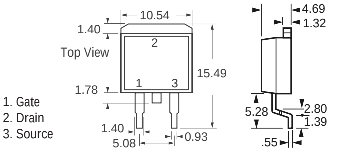


Fig. 8 — D-Pak

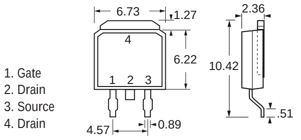


Fig. 9 — Micro-3 (SOT-23)

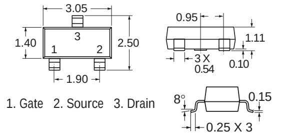


Fig. 10 — Micro-6/TSOP-6 Surface Mount

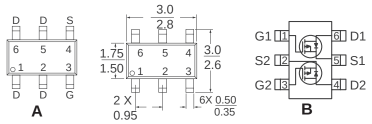


Fig. 11 — Micro-8 Outline

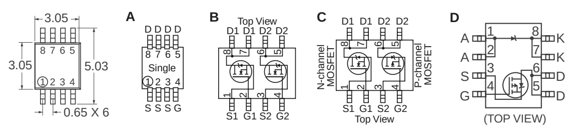


Fig. 12 — SOT-223

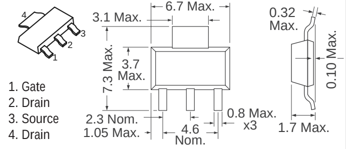


Fig. 13 — SO-8/SOIC-8

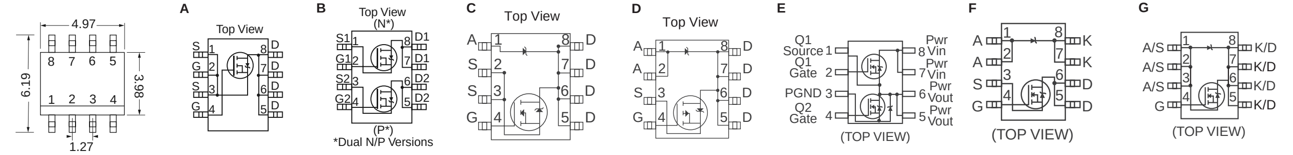


Fig. 14 — TO-220-5

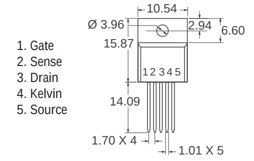


Fig. 15 — Super 247

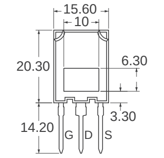


Fig. 16 — Super 220/Super TO-220

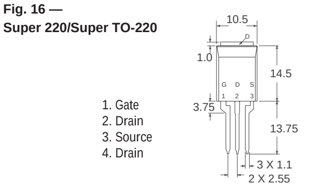


Fig. 17 — Super TO-247

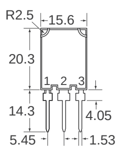


Fig. 18 — SOT-227

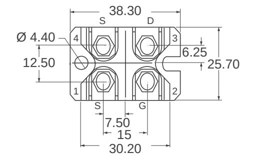


Fig. 19 — 8-TSSOP

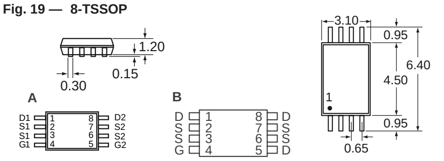


Fig. 20 — Flip-FET

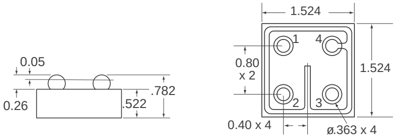


Fig. 21 — Flip-FET

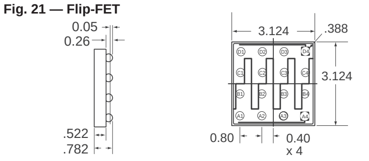


Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
P-CHANNEL TYPES									
TO-220AB									
1	-50	0.28	-9.7	—	—	IRF9Z20-ND	1.50	1.20	.86
	-50	0.14	-18	—	—	IRF9Z30-ND	2.25	1.80	1.29
	-55	0.1	-17	-68	56	IRF9Z34N-ND	1.72	1.14	.89
	-55	0.175	-12	-48	45	IRF9Z24N-ND	1.20	.85	.70
	-55	0.02	-64	-260	150	IRF4905-ND	3.21	2.36	1.95
	-55	0.06	-31	-110	110	IRF5305-ND	1.84	1.21	.94
	-60	0.5	-6.7	-27	43	IRF9Z14-ND	1.10	.79	.65
	-60	0.28	-11	-44	60	IRF9Z24-ND	1.50	1.20	.86
	-100	1.2	-3	-12	20	IRF9510-ND	1.16	.75	.58
	-100	0.2	-13	-56	75	IRF9530N-ND	1.51	1.08	.89
	-100	0.117	-19	-76	94	IRF9540N-ND	2.02	1.38	1.09
	-100	0.06	-35	-140	150	IRF5210-ND	3.79	2.64	2.11
	-100	0.48	-6.8	-27	48	IRF9520N-ND	1.04	.83	.63
	-150	0.29	-11	-44	83	IRF6215-ND	2.09	1.37	1.05
	-200	3	-1.75	-7	20	IRF9610-ND	1.27	.91	.75
	-200	1.5	-3.5	-14	40	IRF9620-ND	1.80	1.28	1.05
	-200	0.8	-6.5	-26	75	IRF9630-ND	1.56	1.05	.82
	-200	0.5	-11	-44	125	IRF9640-ND	1.90	1.31	1.04
	-200	0.50	-6.1	-24	40	IRFI9640G-ND	2.66	2.13	1.60
TO-220 Fullpak									
2	-60	0.14	-12	-48	42	IRFI9Z34G-ND	2.38	1.90	1.36
	-60	0.50	-5.3	-21	27	IRFI9Z14G-ND	1.15	.92	.69
	-100	0.30	-7.7	-31	42	IRFI9530G-ND	2.00	1.60	1.14
	-100	0.117	-13	-44	48	IRFI9540G-ND	3.23	2.58	1.84
	-200	1.5	-3	-12	30	IRFI9620G-ND	2.00	1.60	1.14

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
2	-200	0.8	-4.3	-17	35	IRFI9630G-ND	2.20	1.76	1.26
	-250	1.0	-4.1	-16	35	IRFI9634G-ND	2.03	1.62	1.22
TO-247AC									
3	-100	.20	-21	—	180	IRFP9140-ND	9.91	7.03	5.79
	-100	0.117	-23	-76	140	IRFP9140N-ND	10.33	8.26	5.90
	-200	.5	-12	—	150	IRFP9240-ND	4.87	3.46	2.85
TO-262									
4	-55	0.06	-31	-110	3.8	IRF5305L-ND	1.43	1.43	1.07
	-55	0.28	-12	-48	3.8	IRF9Z24NL-ND	1.35	1.08	.81
	-55	0.10	-19	-68	3.8	IRF9Z34NL-ND	1.94	1.55	1.17
	-55	0.02	-74	-260	200	IRF4905L-ND	8.00	6.40	4.57
	-60	0.50	-6.7	-27	3.7	IRF9Z14L-ND	1.26	1.01	.76
	-100	0.20	-14	-56	3.8	IRF9530NL-ND	1.80	1.44	1.08
	-100	0.11	-23	-76	3.8	IRF9540NL-ND	2.63	2.11	1.58
	-100	1.2	-4.0	-16	43	IRF9510L-ND	1.46	1.17	.88
	-100	0.06	-40	-140	3.8	IRF5210L-ND	2.65	2.65	1.99
	-150	0.29	-13	-44	3.8	IRF6215L-ND	1.53	1.23	.92
	-200	0.50	-11	-44	125	IRF9640L-ND *NEW!*	3.08	2.46	1.85
	-200	3.0	-1.8	-7	20	IRF9610L-ND *NEW!*	1.58	1.26	.94
	-200	0.80	-6.5	-26	74	IRF9630L-ND *NEW!*	2.33	1.86	1.40
I-Pak									
5	-50	0.5	-5.3	-21	25	IRFU9010-ND *NEW!*	1.10	.88	.66
	-50	0.28	-9.9	—	—	IRFU9020-ND	1.53	1.22	.87
	-55	0.065	-28	-110	110	IRFU5305-ND	1.83	1.46	1.04
	-55	0.11	-18	-64	57	IRFU5505-ND	1.33	1.06	.76
	-55	0.175	-11	-44	38	IRFU9024N-ND	1.23	.98	.74
	-60	0.5	-5.1	-20	25	IRFU9014-ND	1.10	.88	.63
	-60	0.50	-5.1	-20	25	IRFU9014N-ND *NEW!*	1.45	.84	.70

(Continued)

N and P Channel HEXFETs *(Cont.)*

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
5	-60	0.28	-8.8	-35	42	IRFU9024-ND	1.53	1.22	.87
	-100	0.205	-13	-52	66	IRFU5410-ND *NEW!*	1.23	.66	.59
	-100	1.2	-3.1	-12	25	IRFU9110-ND	1.15	.92	.66
	-100	0.6	-5.6	-22	42	IRFU9120-ND	1.43	1.14	.81
	-100	0.48	-6.5	-26	40	IRFU9120N-ND	1.23	.98	.70
	-150	2.0	-13	-44	110	IRFU6215-ND	1.44	1.16	.87
	-200	3.0	-1.9	-7.6	25	IRFU9210-ND	1.35	1.08	.77
	-200	1.5	-3.6	-14	42	IRFU9220-ND	1.85	1.48	1.06
	-250	3.0	-2.7	-11	50	IRFU9214-ND	1.13	.90	.68
	-400	7.0	-1.8	-7.2	50	IRFU9310-ND	1.15	.92	.69
4-Pin Dip									
6	-50	0.5	-1.1	—	—	IRFD9010-ND	1.00	.80	.57
	-50	0.28	-1.6	—	—	IRFD9020-ND	1.31	.85	.65
	-60	0.28	-1.6	-13	1.3	IRFD9024-ND	1.35	1.08	.77
	-60	0.5	-1.1	-8.8	1.3	IRFD9014-ND	1.17	.75	.56
	-100	1.2	-0.7	-3	1.0	IRFD9110-ND	1.16	.75	.56
	-100	0.6	-1.0	-8	1.0	IRFD9120-ND	1.09	.71	.54
	-200	3	-0.4	-1.6	1.0	IRFD9210-ND	1.32	.94	.77
	-200	1.5	-0.6	-4.8	1.0	IRFD9220-ND	2.14	1.52	1.25
SMD-220/D2Pak									
7	-55	0.02	-74	-260	200	IRF4905S-ND	3.55	2.62	2.17
	-55	0.02	-74	-260	200	IRF4905STRL-ND	3456.00/800		
	-55	0.06	-31	-110	110	IRF5305S-ND	1.98	1.58	1.13
	-55	0.175	-12	-48	45	IRF9Z24NS-ND	1.50	1.20	.86
	-55	0.1	-19	-68	68	IRF9Z34NS-ND	2.15	1.72	1.23
	-55	0.1	-19	-68	68	IRF9Z34NSTRL-ND	928.80/800		
	-60	0.28	-11	-44	60	IRF9Z24S-ND	1.75	1.40	1.00
	-60	0.28	-11	-44	60	IRF9Z24STRR-ND	756.00/800		
	-60	0.5	-6.7	-27	43	IRF9Z14S-ND	1.40	1.12	.80
	-60	0.14	-18	-72	88	IRF9Z34S-ND	2.50	2.00	1.43
	-60	0.14	-18	-72	88	IRF9Z34STRL-ND	1080.00/800		
	-100	0.3	-12	-48	88	IRF9530S-ND	2.13	1.70	1.21
	-100	0.3	-12	-48	88	IRF9530STRL-ND	918.40/800		
	-100	0.2	-19	-72	150	IRF9540S-ND	3.35	2.68	1.91
	-100	0.2	-19	-72	150	IRF9540STRL-ND	1447.20/800		
	-100	0.48	-6.8	-27	48	IRF9520NS-ND	1.40	1.12	.80
	-100	0.2	-14	-56	79	IRF9530NS-ND	1.83	1.46	1.04
	-100	0.117	-23	-76	140	IRF9540NS-ND	2.81	1.99	1.64
	-100	0.117	-23	-76	140	IRF9540NSTRL-ND	1264.00/800		
	-100	0.06	-40	-140	200	IRF5210S-ND	3.53	2.50	2.06
	-100	0.06	-40	-140	200	IRF5210STRL-ND	1588.00/800		
	-100	0.06	-40	-140	200	IRF5210STRR-ND	1588.00/800		
	-100	1.2	-4	-16	43	IRF9510S-ND	1.63	1.30	.93
	-150	0.29	-13	-44	110	IRF6215S-ND	1.70	1.36	.97
	-150	0.29	-13	-44	110	IRF6215STRR-ND	734.40/800		
	-200	3	-1.8	-7	20	IRF9610S-ND	1.58	1.26	.90
	-200	1.5	-3.5	-14	40	IRF9620S-ND	2.13	1.70	1.21
	-200	0.8	-6.5	-26	74	IRF9630S-ND	2.33	1.86	1.33
	-200	0.5	-11	-44	125	IRF9640S-ND	3.08	2.46	1.76
	-200	0.5	-11	-44	125	IRF9640STRL-ND	1328.80/800		
D-PAK (TO-252AA)									
8	-50	0.5	-5.3	—	—	IRFR9010-ND	1.10	.88	.63
	-50	0.5	-5.3	—	—	IRFR9010TR-ND	1188.00/2,000		
	-50	0.28	-9.9	—	—	IRFR9020-ND	1.53	1.22	.87
	-50	0.28	-9.9	—	—	IRFR9020TR-ND	1648.00/2,000		
	-55	0.065	-31	-110	110	IRFR5305-ND	1.75	1.25	1.03
	-55	0.065	-31	-110	110	IRFR5305TR-ND	1336.00/2,000		
	-55	0.11	-18	-64	57	IRFR5505-ND	1.33	1.06	.76
	-55	0.175	-11	-44	38	IRFR9024N-ND	1.03	.66	.50
	-55	0.175	-11	-44	38	IRFR9024NTR-ND	802.00/2,000		
	-60	0.5	-5.1	-20	25	IRFR9014-ND	1.10	.88	.63
	-60	0.5	-5.1	-20	25	IRFR9014TR-ND	1188.00/2,000		
	-60	0.5	-5.1	-20	25	IRFR9014TRL-ND	1782.00/3,000		
	-60	0.28	-8.8	-35	42	IRFR9024-ND	1.25	.82	.63
	-60	0.28	-8.8	-35	42	IRFR9024TR-ND	1012.00/2,000		
	-60	0.50	-5.1	-20	25	IRFR9014N-ND	.95	.76	.57
	-100	0.205	-13	-52	66	IRFR5410-ND	2.18	1.75	1.31
	-100	1.2	-3.1	-12	25	IRFR9110-ND	1.15	.92	.66
	-100	1.2	-3.1	-12	25	IRFR9110TR-ND	1242.00/2,000		
	-100	1.2	-3.1	-12	25	IRFR9110TRL-ND	1863.00/3,000		
	-100	0.48	-6.5	-26	40	IRFR9120N-ND	1.18	.84	.69
	-100	0.48	-6.5	-26	40	IRFR9120NTR-ND	820.00/2,000		
	-100	0.6	-5.6	-22	42	IRFR9120TR-ND	1540.00/2,000		
	-100	0.6	-5.6	-22	42	IRFR9120TRL-ND	2310.00/3,000		
	-200	3	-1.9	-7.6	25	IRFR9210-ND	1.35	1.08	.81
	-200	3	-1.9	-7.6	25	IRFR9210TR-ND	1458.00/2,000		
	-200	1.5	-3.6	-14	42	IRFR9220-ND	1.85	1.48	1.06
	-200	1.5	-3.6	-14	42	IRFR9220TR-ND	942.00/2,000		
	-250	3	-2.7	-11	50	IRFR9214-ND	.85	.68	.49
	-400	7	-1.8	-7.2	50	IRFR9310-ND	.88	.70	.50
	-400	7	-1.8	-7.2	50	IRFR9310TR-ND	916.00/2,000		
Micro-3 (SOT-23) Logic Level									
9	-12	0.05	-4.3	-34	1.3	IRLML6401CT-ND	.66	.50	.39
	-12	0.05	-4.3	-34	1.3	IRLML6401TR-ND	588.00/3,000		
	-20	0.6	-0.62	-4.9	0.54	IRLML6302CT-ND	.66	.50	.39
	-20	0.6	-0.62	-4.9	0.54	IRLML6302TR-ND	441.00/3,000		
	-20	0.065	-3.7	-22	1.3	IRLML6402CT-ND	.66	.50	.39
	-20	0.065	-3.7	-22	1.3	IRLML6402TR-ND	588.00/3,000		
	-30	0.6	-0.61	-4.8	0.54	IRLML5103CT-ND	.72	.54	.42
	-30	0.6	-0.61	-4.8	0.54	IRLML5103TR-ND	543.00/3,000		
Micro-6 Logic Level									
10A	-12	0.042	-5.5	-44	1.7	IRLMS4502CT-ND	1.00	.62	.45
	-12	0.042	-5.5	-44	1.7	IRLMS4502TR-ND	1014.00/3,000		
	-20	0.2	-2.3	-13	1.7	IRLMS6702CT-ND	1.25	.75	.58
	-20	0.2	-2.3	-13	1.7	IRLMS6702TR-ND	985.92/3,000		
	-20	0.065	-4.4	-20	2	SI3443DVCT-ND	.68	.54	.48
	-20	0.065	-4.4	-20	2	SI3443DVTR-ND	1122.00/3,000		
	-20	0.05	-5.6	-45	2	IRLMS6802CT-ND	.96	.72	.56
	-20	0.05	-5.6	-45	2	IRLMS6802TR-ND	987.00/3,000		
	-30	0.2	-2.3	-13	1.7	IRLMS5703CT-ND	1.25	.75	.58
	-30	0.2	-2.3	-13	1.7	IRLMS5703TR-ND	739.44/3,000		

Fig.	RDS VDS (V)	ID Cont. (on) (Ω)	(A) 25°C	PD IDM (A)	Max. (W)	Digi-Key Part No.	Price Each 1	10	100
Micro-8									
11A	-30	0.026	-7.0	-28	1.79	IRF7726CT-ND *NEW!*	1.59	.92	.77
	-30	0.026	-7.0	-28	1.79	IRF7726TR-ND *NEW!*	2548.00/4,000		
Micro-8 Logic Level									
11A	-20	0.09	-3.6	-19	1.8	IRF7604CT-ND	2.37	1.78	1.39
	-20	0.09	-3.6	-19	1.8	IRF7604TR-ND	4268.00/4,000		
	-20	0.02	-8.2	-66	1.8	IRF7663CT-ND	2.10	1.58	1.23
	-20	0.02	-8.2	-66	1.8	IRF7663TR-ND	1748.00/4,000		
	-30	0.09	-3.6	-19	1.8	IRF7606CT-ND	2.10	1.58	1.23
	-30	0.09	-3.6	-19	1.8	IRF7606TR-ND	3780.00/4,000		
	-30	0.20	-2.0	-16	1.25	IRF7526D1TR-ND	1944.00/4,000		
11D	-20	0.27	-1.7	-14	1.25	IRF7524D1CT-ND	1.20	.90	.70
	-20	0.27	-1.7	-14	1.25	IRF7524D1TR-ND	2160.00/4,000		
	-20	0.055	-4.3	-34	1.25	IRF7534D1TR-ND *NEW!*	2700.00/4,000		
Micro-8 Dual Logic Level									
11B	-20	0.27	-1.7	-9.6	1.25	IRF7504CT-ND	2.10	1.58	1.23
	-20	0.27	-1.7	-9.6	1.25	IRF7504TR-ND	3780.00/4,000		
	-20	0.055	-4.3	-34	1.25	IRF7555CT-ND	2.10	1.58	1.23
	-20	0.055	-4.3	-34	1.25	IRF7555TR-ND	3780.00/4,000		
	-30	0.27	-1.7	-9.6	1.25	IRF7506CT-ND	1.89	1.42	1.11
	-30	0.27	-1.7	-9.6	1.25	IRF7506TR-ND	3404.00/4,000		
SOT-223									
12	-60	0.5	-1.8	-14	3.1	IRFL9014-ND	.87	.58	.45
	-60	0.5	-1.8	-14	3.1	IRFL9014TR-ND	892.50/2,500		
	-100	1.2	-1.1	-8.8	3.1	IRFL9110-ND	1.63	1.30	.93
	-100	1.2	-1.1	-8.8	3.1	IRFL9110TR-ND	1062.50/2,500		
SOIC-8									
13A	-12	0.020	±9.5	±76	2.5	IRF7233-ND	2.54	2.04	1.53
	-12	7	-16	-65	2.5	IRF7410-ND *NEW!*	2.90	2.02	1.57
	-12	14	-11.5	-46	2.5	IRF7420-ND *NEW!*	2.11	1.48	1.12
	-20	0.06	-5.4	-43	2.5	IRF7207-ND	1.76	1.41	1.06
	-20	8.2	-15	-60	2.5	IRF7425-ND *NEW!*	1.84	1.05	.85
	-30	0.02	-5.6	-45	1	IRF7416-ND	1.22	.87	.72
	-30	0.02	-5.6	-45	1	IRF7416TR-ND	2544.00/4,000		
	-30	13.5	-11	-47	2.5	IRF7424-ND *NEW!*	2.01	1.14	.93
	-40	0.015	-10.5	-43	2.5	IRF7240-ND *NEW!*	3.86	2.76	2.24
	-40	41	-6.2	-25	2.5	IRF7241-ND *NEW!*	1.37	.72	.65
SOIC-8 Logic Level									
13A	-12	0.005	-16	-100	2.5	IRF7210-ND	3.13	2.50	1.78
	-12	0.012	-11	-88	2.5	IRF7220-ND	2.83	2.26	1.61
	-12	0.012	-11	-88	2.5	IRF7220TR-ND	6104.00/4,000		
	-20	0.058	-5.3	-43	2.0	IRF7322D1-ND	1.01	.81	.61
	-20	0.04	-6.7	-27	2.5	IRF7404-ND	2.38	1.90	1.36
	-20	0.04	-6.7	-27	2.5	IRF7404TR-ND	5132.00/4,000		
	-20	0.06	-5.3	-21	1.6	IRF7204CT-ND	3.39	2.55	1.98
	-20	0.06	-5.3	-21	1.6	IRF7204TR-ND	3900.00/4,000		
	-30	0.07	-5.3	—	2.5	IRF7205-ND	1.11	.74	.58
	-30	0.07	-5.3	—	2.5	IRF7205TR-ND	1790.29/4,000		
	-30	0.045	-5.8	-23	2.5	IRF7406-ND	2.25	1.80	1.29
	-30	0.02	-30	-50	2.5	SI4435DY-ND	1.50	1.20	.85
	-30	0.02	-30	-50	2.5	SI4435DYTR-ND	3240.00/4,000		
SOIC-8 Dual Logic Level									
13B	-12	17	-9.2	-37	2	IRF7329-ND *NEW!*	1.37	.72	.65
	-20	.25	-2.3	-10	2	IRF7104-ND	1.68	1.19	.98
	-20	.25	-2.3	-10	2	IRF7104TR-ND	3780.00/4,000		
	-20	0.09	-4.3	-17	2	IRF7304-ND	2.13	1.70	1.21
	-20	0.09	-4.3	-17	2	IRF7304TR-ND	1780.00/4,000		
	-20	0.058	-5.3	-21	2	IRF7314-ND	2.76	1.96	1.61
	-20	0.058	-5.3	-21	2	IRF7314TR-ND	6212.00/4,000		
	-20	0.018	-9	-71	2	IRF7324-ND	2.83	2.26	1.61
	-20	0.18	-2.9	-23	2	IRF7324D1-ND	1.03	.82	.56
	-30	0.1	-3.6	-14	2	IRF7306-ND	2.00	1.60	1.14
	-30	0.1	-3.6	-14	2	IRF7306TR-ND	4320.00/4,000		
	-30	0.058	-4.9	-30	2	IRF7316-ND	2.76	1.96	1.61
	-30	0.058	-4.9	-30	2	IRF7316TR-ND	6212.00/4,000		
	-30	21	-8.0	-32	2	IRF7328-ND *NEW!*	1.94	1.11	.90
	-30	0.25	-2.3	-10	2	IRF9953-ND	1.75	1.40	1.00
	-55	0.105	-3.4	-27	2	IRF7342-ND	1.55	1.24	.88
	-55	0.105	-3.4	-27	2	IRF7342TR-ND	3348.00/4,000		
SOIC-8 "Fetky™" Mosfet and Schottky Diode									
13D	-30	0.062	-4.7	-38	2	IRF7321D2-ND	1.48	1.18	.80
	-30	0.062	-4.7	-38	2	IRF7321D2TR-ND	3188.00/4,000		
SOIC-8 "Fetky™" Mosfet and Schottky Diode Logic Level									
13D	-20	0.09	-4.1	-18	2	IRF7422D2-ND	1.20	.85	.70
TSOP-6									
10A	-20	0.065	-4.4	-20	2.0	SI3443DV-ND *NEW!*	1.08	.65	.50
TSOP-6 Dual									
10B	20	0.090	2.7	11	0.96	IRF5852-ND *NEW!*	1.02	.60	.46
TSSOP-8									
19B	-12	0.011	±10	±80	1.5	IRF7701-ND *NEW!*	1.84	1.05	.85
	-12	0.015	±8.0	±70	1.5	IRF7702-ND *NEW!*	3.27	2.29	1.79
	-12	25	-5.5	-22	1	IRF7754-ND *NEW!*	1.71	.97	.79
	-20	22	-7.0	-28	1.5	IRF7707-ND *NEW!*	1.70	.97	.80
	-30	18	-8.0	-30	1.5	IRF7705-ND *NEW!*	1.65	.94	.80
	-30	22	-7.0	-28	1.51	IRF7706-ND *NEW!*	1.63	.88	.79
	-40	28	-6.0	-24	1.5	IRF7703-ND *NEW!*	1.71	.97	.79
	-40	46	-4.6	-19	1.5	IRF7704-ND *NEW!*	1.44	.82	.70
TSSOP Dual-8									
19A	-12	0.040	±4.3	-17	1.0	IRF7756-ND *NEW!*	1.71	.97	.79
	-20	0.030	±4.7	38	1.0	IRF7750-ND *NEW!*	3.24	2.27	1.77
	-20	0.030	±4.7	±38	1.0	IRF7750CT-ND	2.92	2.19	1.71
	-20	0.030	±4.7	±38	1.0	IRF7750TR-ND	5248.00/4,000		
	-20	51	-3.9	.15	1.0	IRF7755-ND *NEW!*	1.71	.97	.79
	-30	35	-4.5	-18	1.0	IRF7751-ND *NEW!*	2.66	1.85	1.44
FlipFET™									
20	-20	0.065	±5.1	±35	2.2	IRF6100CT-ND *NEW!*	1.08	.65	.50
20	-20	0.065	±5.1	±35	2.2	IRF6100TR-ND *NEW!*	2268.00/6,000		
21	-20	0.036	±7.1	±40	3.0	IRF6150CT-ND *NEW!*	2.95	2.06	1.59
21	-20	0.036	±7.1	±40	3.0	IRF6150TR-ND *NEW!*	5024.00/4,000		

(Continued)

N and P Channel HEXFETs *(Cont.)*

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each		
							1	10	100
N-CHANNEL TYPES									
TO-220AB									
1	20	0.0085	77	280	88	IRF3706-ND	1.40	1.12	.84
	20	6.0	110	440	120	IRF3711-ND *NEW!*	1.78	1.01	.82
	20	20	36	140	47	IRL3714-ND *NEW!*	.94	.56	.43
	20	14	54	210	71	IRL3715-ND *NEW!*	.94	.56	.43
	30	2.8	210	1000	230	IRF3703-ND *NEW!*	4.87	3.37	2.84
	30	9.0	90	360	120	IRF3709-ND *NEW!*	1.78	1.01	.82
	40	0.009	100	400	170	IRF1104-ND	2.43	1.94	1.38
	50	0.2	7.2	29	20	IRFZ10-ND *NEW!*	1.10	.88	.66
	50	0.05	30	—	—	IRFZ30-ND	1.30	1.04	.74
	50	0.028	35	—	—	IRFZ40-ND	1.58	1.26	.90
	55	0.024	31	160	45	IRFIZ44N-ND	1.63	1.16	.96
	55	0.02	33	180	45	IRFIZ46N-ND	2.11	1.50	1.24
	55	0.016	36	210	42	IRFIZ48N-ND	3.96	2.81	2.31
	55	0.04	26	100	56	IRFZ34N-ND	1.24	.81	.62
	55	0.024	41	160	83	IRFZ44N-ND	1.66	1.09	.84
	55	0.02	46	180	88	IRFZ46N-ND	1.58	1.06	.83
	55	0.016	53	210	94	IRFZ48N-ND	1.64	1.16	.93
	55	0.012	72	290	130	IRF1010N-ND	3.24	2.30	1.89
	55	0.0053	169	680	330	IRF1405-ND	4.13	3.30	2.48
	55	0.008	98	390	150	IRF3205-ND	2.87	2.09	1.71
	55	0.012	49	290	58	IRFI1010N-ND	3.36	2.38	1.96
	55	0.008	64	390	63	IRFI3205-ND	6.36	4.51	3.71
	55	0.07	13	—	26	IRFIZ24N-ND	1.08	.77	.63
	55	0.04	19	100	21	IRFIZ34N-ND	1.37	.97	.80
	60	0.2	10	40	36	IRFZ14-ND	1.11	.70	.52
	60	0.05	30	120	88	IRFZ34-ND	1.30	1.04	.74
	60	0.042	28	112	68	IRFZ34E-ND	1.25	.89	.73
	60	0.023	48	192	110	IRFZ44E-ND	1.62	1.07	.82
	60	0.028	50	200	150	IRFZ44R-ND *NEW!*	1.84	1.05	.85
	60	0.0165	55	220	115	IRFZ44V-ND	.98	.78	.69
	60	0.012	72	290	150	IRFZ48V-ND	1.05	.84	.74
	60	0.071	14	68	29	IRFIZ24E-ND	1.08	.77	.63
	60	0.042	21	100	37	IRFIZ34E-ND	1.63	1.16	.96
	60	0.012	81	330	170	IRF1010E-ND	3.24	2.30	1.89
	75	0.0078	130	520	330	IRF1407-ND *NEW!*	2.60	1.81	1.40
	75	0.0075	142	570	380	IRF1607-ND *NEW!*	4.31	3.08	2.50
	75	0.013	71	280	150	IRF2807-ND	3.38	2.32	1.84
	100	0.6	4.0	16	20	IRF510-ND	1.08	.68	.50
	100	0.20	9.7	38	48	IRF520N-ND *NEW!*	1.25	1.00	.75
	100	0.11	15.0	60	63	IRF530N-ND	1.38	.90	.68
	100	0.077	28	110	150	IRF540-ND	1.38	.93	.72
	100	0.052	27	110	94	IRF540N-ND	1.74	1.16	.91
	100	0.036	36	140	120	IRF1310N-ND	3.36	2.38	1.96
	100	0.028	46	180	150	IRF3710-ND	3.09	2.23	1.82
	100	0.025	59	236	200	IRFB59N10D-ND	2.43	1.95	1.46
	100	0.20	7.2	38	27	IRFI520N-ND	1.22	.87	.72
	100	0.11	11	60	33	IRFI530N-ND	1.37	.97	.80
	100	0.052	18	110	42	IRFI540N-ND	2.04	1.45	1.19
	100	0.036	22	140	45	IRFI1310N-ND	3.48	2.47	2.03
	150	0.082	21	84	94	IRF3315-ND	2.23	1.59	1.31
	150	0.042	37	150	150	IRF3415-ND	4.03	2.86	2.36
	150	0.090	23	92	136	IRFB23N15D-ND	1.60	1.28	.96
	150	0.056	33	130	170	IRFB33N15D-ND	1.80	1.44	1.08
	150	0.045	41	164	200	IRFB41N15D-ND	2.45	1.97	1.48
	150	0.032	60	250	2.4	IRFB61N15D-ND *NEW!*	3.63	2.55	1.98
	200	1.5	2.5	10	20	IRF610-ND	1.08	.77	.63
	200	0.8	5	20	40	IRF620-ND	1.14	.74	.57
	200	0.3	9.3	37	82	IRF630N-ND	1.05	.84	.74
	200	0.15	18	72	150	IRF640N-ND	1.99	1.30	1.00
	200	0.17	16	64	140	IRFB17N20D-ND	1.46	1.17	.88
	200	0.10	24	96	170	IRFB23N20D-ND	1.91	1.53	1.15
	200	0.082	31	124	200	IRFB31N20D-ND	2.41	1.93	1.45
	200	0.040	56	220	380	IRFB260N-ND *NEW!*	3.90	2.73	2.13
	250	2	2.7	8	36	IRF614-ND	1.13	.90	.64
	250	1.1	4.4	14	50	IRF624-ND	1.06	.69	.53
	250	0.45	8.1	32	74	IRF634-ND	1.50	1.20	.86
	250	0.28	14	56	125	IRF644-ND	1.72	1.19	.95
	250	240	14	56	150	IRF644N-ND *NEW!*	1.45	.84	.70
	300	0.75	6.1	24	74	IRF737LC-ND	1.28	1.03	.77
	300	0.45	9.3	37	96	IRFB9N30A-ND	1.33	1.06	.64
	400	3.6	1.5	6	20	IRF710-ND	1.11	.70	.53
	400	1.8	3	12	40	IRF720-ND	1.33	.85	.64
	400	1	5.5	22	74	IRF730-ND	1.59	1.04	.80
	400	1	5.5	22	74	IRF730A-ND	1.43	1.14	.81
	400	0.55	10	40	125	IRF740-ND	2.03	1.37	1.07
	400	0.55	10	40	125	IRF740A-ND	1.86	1.26	.98
	400	0.55	10	40	125	IRF740LC-ND	2.43	1.95	1.46
	450	0.63	8.8	35	125	IRF744-ND	2.20	1.76	1.26
	450	1.2	4.9	20	74	IRF734-ND	1.60	1.28	.91
	500	3	2.5	10	40	IRF820-ND	1.06	.75	.62
	500	1.5	4.5	18	75	IRF830-ND	1.50	.99	.76
	500	1.4	5	20	74	IRF830A-ND	1.53	1.22	.87
	500	0.85	8	32	125	IRF840-ND	2.05	1.38	1.08
	500	0.85	8	32	125	IRF840A-ND	2.25	1.80	1.28
	500	0.85	8	28	125	IRF840LC-ND	2.80	2.24	1.60
	500	3.0	2.5	10	50	IRF820A-ND	1.26	1.01	.76
	500	0.52	11	44	170	IRFB11N50A-ND	1.73	1.38	.97
	500	0.450	14	56	250	IRFB13N50A-ND *NEW!*	3.69	2.59	2.02
	500	0.26	17	68	220	IRFB18N50K-ND *NEW!*	4.95	3.42	2.88
	600	1.2	6.2	25	130	IRFBC40LC-ND	3.53	2.83	2.12
	600	0.75	9.2	37	170	IRFB9N60A-ND	1.70	1.36	.97
	600	4.4	2.2	6.8	50	IRFBC20-ND	1.99	1.42	1.17
	600	2.2	3.6	14	74	IRFBC30-ND	2.38	1.69	1.39
	600	2.2	3.6	14	74	IRFBC30A-ND	2.98	2.02	1.59
	600	1.2	6.2	25	125	IRFBC40-ND	3.73	2.98	2.13
	600	1.2	6.2	25	125	IRFBC40A-ND	3.73	2.98	2.12
	650	0.93	8.5	21	167	IRFB9N65A-ND	2.43	1.94	1.41
1	800	6.5	1.8	—	54	IRFBE20-ND	1.66	1.18	.97
	800	3	4.1	—	125	IRFBE30-ND	2.24	1.53	1.21
	900	8	1.7	—	54	IRFBF20-ND	1.87	1.33	1.10
	900	3.7	3.6	—	125	IRFBF30-ND	3.31	2.35	1.94
	1000	11	1.4	—	54	IRFBG20-ND	2.26	1.60	1.32
	1000	5	3.1	—	125	IRFBG30-ND	3.10	2.20	1.81
TO-220AB Logic Level									
1	20	0.013	61	240	89	IRL3102-ND	1.70	1.36	.97
	20	0.016	48	190	69	IRL3202-ND	1.40	1.12	.80
	20	0.02	39	160	57	IRL3302-ND	1.45	1.16	.84
	20	0.007	110	420	140	IRL3502-ND	2.70	2.16	1.54
	20	0.01	85	340	110	IRL3402-ND	1.91	1.53	1.15
	20	0.090	77	308	87	IRF3704-ND	1.40	1.12	.84
	30	0.007	100	400	130	IRL2203N-ND	3.60	2.55	2.10
	30	0.014	64	220	110	IRL3103-ND	2.64	1.87	1.54
	30	0.014	64	220	89	IRL3103D1-ND	3.60	2.55	2.10
	30	0.026	38	140	68	IRL3303-ND	1.87	1.33	1.10
	30	0.006	120	470	150	IRL3803-ND	6.96	4.93	4.06
	30	0.04	24	96	45	IRL2703-ND	.70	.56	.42
	30	0.0125	62	248	87	IRF3707-ND	1.40	1.12	.84
	30	0.012	62	248	87	IRF3708-ND	1.40	1.12	.84
	30	0.014	54	220	70	IRL3103D2-ND	2.00	1.60	1.20
	30	0.026	34	140	68	IRL3303D1-ND	1.50	1.20	.90
	30	0.007	61	400	47	IRLI2203N-ND	3.72	2.64	2.17
	30	0.006	76	470	63	IRLI3803-ND	7.08	5.02	4.13
	40	0.0065	130	520	200	IRL1004-ND	3.65	2.92	2.08
	40	0.008	104	416	167	IRL1104-ND	2.30	1.84	1.38
	40	0.004	160	640	200	IRL1404-ND	4.61	3.69	2.77
	55	0.008	104	360	200	IRL2505-ND	6.50	5.20	3.71
	55	0.01	77	310	130	IRL3705N-ND	3.60	2.55	2.10
	55	0.008	58	360	63	IRLI2505-ND	6.01	4.81	3.61
	55	0.01	52	310	58	IRLI3705N-ND	3.72	2.64	2.17
	55	0.06	14	72	26	IRLIZ24N-ND	1.44	1.02	.84
	55	0.035	22	110	37	IRLIZ34N-ND	1.49	1.06	.87
	55	0.022	30	160	45	IRLIZ44N-ND	1.85	1.31	1.08
	55	0.074	18	72	45	IRLZ24N-ND	1.26	.82	.63
	55	0.042	27	110	56	IRLZ34N-ND	1.40	.92	.70
	55	0.022	41	160	83	IRLZ44N-ND	1.74	1.15	.89
	60	0.2	10	40	43	IRLZ14-ND	1.17	.74	.55
	60	0.028	50	200	150	IRLZ44-ND	1.77	1.17	.91
	100	0.026	55	190	200	IRL2910-ND	5.75	4.60	3.29
	100	0.54	5.6	16	43	IRL510-ND	1.19	.75	.55
	100	0.18	10	35	47	IRL520N-ND	.86	.62	.51
	100	0.1	15	60	63	IRL530N-ND	1.53	.99	.75
	100	0.044	36	120	94	IRL540N-ND	2.02	1.36	1.06
	100	0.18	7.7	35	27	IRLI520N-ND	1.20	.85	.70
	100	0.1	11	60	33	IRLI530N-ND	1.80	1.17	.89
	100	0.044	20	120	42	IRLI540N-ND	2.11	1.50	1.24
	150	0.166	12	48	80	IRL3215-ND	.92	.74	.56
	200	0.8	5.2	21	50	IRL620-ND	1.45	1.16	.83
	200	0.4	9	36	74	IRL630-ND	1.88	1.50	1.07
	200	0.18	17	68	125	IRL640-ND	2.02	1.37	1.07
TO-220 Fullpak									
2	60	0.2	8	32	27	IRFIZ14G-ND	1.15	.92	.66
	60	0.1	14	56	37	IRFIZ24G-ND	1.13	.90	.64
	60	0.05	20	80	42	IRFIZ34G-ND	1.43	1.14	.81
	60	0.082	30	120	48	IRFIZ44G-ND	2.35	1.88	1.20
	60	0.028	30	120	48	IRLIZ44G-ND	2.48	1.98	1.41
	100	0.27	7.2	29	37	IRLI520G-ND	1.23	.98	.70
	100	0.16	9.7	39	42	IRLI530G-ND	1.30	1.04	.74
	100	0.54	4.5	18	27	IRFI510G-ND	1.20	.96	.68
	100	0.16	9.7	39	42	IRFI530G-ND	1.43	1.14	.81
	100	0.077	17	68	48	IRFI540G-ND	2.13	1.70	1.21
	200	0.4	5.9	24	35	IRFI630G-ND	1.58	1.26	.90
	200	0.8	4.1	16	30	IRFI620G-ND	1.50	1.20	.86
	200	0.18	9.8	39	40	IRFI640G-ND	2.20	1.76	1.26
	200	0.8	4.1	16	30	IRLI620G-ND	1.58	1.26	.90
	250	2	2.1	8.4	23	IRFI614G-ND	1.25	1.00	.71
	250	1.1	3.4	14	30	IRFI624G-ND	1.58	1.26	.90
	250	0.45	5.6	22	35	IRFI634G-ND	1.63	1.30	.93
	250	0.28	7.9	32	40	IRFI644G-ND	3.23	2.58	1.84
	400	1.8	2.6	10	30	IRFI720G-ND	1.20	.96	.84
	400	1	3.7	15	35	IRFI730G-ND	1.55	1.24	.89
	400	0.55	5.7	23	40	IRFI740GLC-ND	2.54	2.04	1.53
	400	0.55	5.4	22	40	IRFI740G-ND	2.09	1.68	1.26
	450	1.2	3.4	14	35	IRFI734G-ND	1.55	1.25	.94
	450	0.63	4.9	20	40	IRFI744G-ND	2.33	1.86	1.33
	500	3	2.1	8.4	30	IRFI820G-ND	1.23	.98	.70
	500	1.5	3.1	12	35	IRFI830G-ND	1.65	1.32	.94
	500	0.85	4.6	18	40	IRFI840G-ND	2.38	1.90	1.36
	500	0.85	4.5	18	40	IRFI840GLC-ND	2.93	2.34	1.67
	500	0.52	6.6	44	60	IRFIB7N50A-ND	2.18	1.74	1.24
	600	1.2	3.5	14	40	IRFIBC40GLC-ND	3.65	2.92	2.19
	600	0.75	5.5	37	60	IRFIB6N60A-ND	2.15	1.72	1.23
	600	4.4	1.7	6.8	30	IRFIBC20G-ND	2.20	1.76	1.26
	600	2.2	2.5	10	35	IRFIBC30G-ND	2.60	2.08	1.49
	600	1.2	3.5	14	40	IRFIBC40G-ND	3.85	3.08	2.20
	650	0.93	5.1	21	60	IRFIB5N65A-ND	2.55	2.04	1.47
	800	6.5	1.4	5.6	30	IRFIBE20G-ND	1.85	1.48	1.06
	800	3	2.1	8.5	35	IRFIBE30G-ND	2.88	2.30	1.64
	900	8	1.2	4.8	30	IRFIBF20G-ND	2.08	1.66	1.19
	900	3.7	1.9	7.6	35	IRFIBF30G-ND	3.58	2.86	2.04
TO-220 Fullpak Logic-Level									
2	60	0.20	8.0	32	27	IRLIZ14G-ND	1.19	.96	.72
	100	0.026	31	190	63	IRLI2910-ND	3.60	2.88	2.16
	200	0.4	6.2	25	35	IRLI630G-ND	2.00	1.60	1.14
	200	0.18	9.9	40	40	IRLI640G-ND	2.38	1.90	1.36

(Continued)

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each		
							1	10	100
SUPER TO-220 Logic Level									
16	30	0.005	179	720	270	IRLBA3803P-ND	3.67	2.94	2.21
16	40	0.004	185	740	300	IRLBA1304P-ND	6.44	5.15	3.87
TO-220-5 Current Sense									
14	55	0.04	26	68	60	IRCZ24-ND	1.98	1.58	1.13
	60	0.028	50	210	150	IRCZ44-ND	3.20	2.56	1.83
	100	0.16	14	56	88	IRC530-ND	2.35	1.88	1.34
	100	0.077	28	110	150	IRC540-ND	3.15	2.52	1.80
	200	0.40	9.0	36	74	IRC630-ND	2.30	1.84	1.38
	200	0.18	18	72	125	IRC640-ND	3.28	2.62	1.87
	250	0.45	8.1	32	74	IRC634-ND	2.12	1.70	1.27
	250	0.28	14.0	56	125	IRC644-ND	3.60	2.88	2.16
	400	1.0	5.5	22	74	IRC730-ND	2.88	2.31	1.73
	400	0.55	10.0	40	125	IRC740-ND	2.99	2.40	1.80
	500	1.5	4.5	18	74	IRC830-ND	2.23	1.79	1.34
	500	0.85	8.0	32	125	IRC840-ND	3.29	2.63	1.98
TO-247AC									
3	30	0.0028	210	1000	230	IRFP3703-ND *NEW!*	5.58	3.86	3.25
	55	0.024	49	180	100	IRFP044N-ND	2.60	1.80	1.43
	55	0.016	64	210	140	IRFP048N-ND	4.34	3.08	2.54
	55	0.012	72	290	130	IRFP054N-ND	3.13	2.30	1.89
	55	0.008	98	390	150	IRFP064N-ND	13.20	9.35	7.70
	60	0.014	70	360	230	IRFP054-ND	7.30	5.84	4.17
	60	0.009	70	520	300	IRFP064-ND	13.75	11.00	7.86
	75	4.5	209	840	470	IRFP2907-ND *NEW!*	6.60	4.76	3.96
	100	0.052	27	110	94	IRFP140N-ND	3.55	2.52	2.08
	100	0.055	41	160	230	IRFP150-ND	3.20	2.31	1.89
	100	0.036	39	140	140	IRFP150N-ND	5.54	3.93	3.24
	100	0.025	57	180	200	IRFP3710-ND	6.25	5.00	3.57
	150	0.042	43	150	200	IRFP3415-ND *NEW!*	3.45	2.41	1.86
	200	0.18	20	—	150	IRFP240-ND	4.01	2.84	2.34
	200	0.04	50	200	300	IRFP260N-ND	5.23	3.73	3.04
	200	0.075	30	120	214	IRFP250N-ND	3.33	2.66	2.33
	250	0.28	15	—	150	IRFP244-ND	4.56	3.23	2.66
	250	0.14	23	92	190	IRFP254-ND	6.20	4.96	3.54
	250	.075	38	—	280	IRFP264-ND	5.16	3.89	3.25
	400	0.55	11	—	150	IRFP340-ND	4.44	3.15	2.59
	400	0.3	16	64	190	IRFP350-ND	3.83	2.78	2.28
	400	0.30	16	64	190	IRFP350LC-ND	5.83	4.67	3.50
	400	0.35	14	56	190	IRFP354-ND	6.20	4.96	3.54
	400	0.2	23	92	280	IRFP360-ND	11.50	8.15	6.71
	400	0.2	23	92	280	IRFP360LC-ND	12.25	9.80	7.00
	450	0.63	9.5	38	150	IRFP344-ND	4.08	3.26	2.33
	500	0.28	16	64	220	IRFP17N50L-ND *NEW!*	4.81	3.33	2.80
	500	0.23	22	88	277	IRFP22N50A-ND	4.33	3.46	2.45
	500	0.19	23	92	370	IRFP23N50L-ND *NEW!*	6.00	4.32	3.60
	500	0.15	31	124	460	IRFP31N50L-ND *NEW!*	9.00	6.48	5.40
	500	0.135	32	130	460	IRFP32N50K-ND *NEW!*	8.40	6.05	5.04
	500	.85	8.8	—	150	IRFP440-ND	6.60	4.68	3.85
	500	0.6	11	44	180	IRFP448-ND	6.88	5.50	3.93
	500	0.4	14	56	190	IRFP450A-ND	5.38	4.30	3.07
	500	0.4	14	—	190	IRFP450IR-ND	3.69	2.65	2.16
	500	0.4	14	56	190	IRFP450LC-ND	7.09	5.68	4.97
	500	0.27	20	80	280	IRFP460-ND	4.63	3.47	2.89
	500	0.27	20	80	280	IRFP460A-ND	10.33	8.26	5.90
	500	0.24	20	80	280	IRFP460N-ND *NEW!*	4.48	4.48	2.60
	500	0.27	20	80	280	IRFP460P-ND *NEW!*	6.20	6.20	3.72
	500	0.27	20	80	280	IRFP460LC-ND	5.08	4.06	3.56
	600	2.2	4.3	17	100	IRFPC30-ND	5.00	4.00	2.86
	600	1.2	6.8	27	150	IRFPC40-ND	7.20	5.76	4.11
	600	0.82	8.9	36	170	IRFPC48-ND	12.73	10.18	7.27
	600	0.6	11	44	180	IRFPC50-ND	11.23	7.96	6.56
	600	0.58	11	44	180	IRFPC50A-ND	11.70	9.36	6.69
	600	0.60	11	44	190	IRFPC50LC-ND	9.65	7.73	5.80
	600	0.4	16	64	280	IRFPC60-ND	7.41	5.70	4.81
	600	0.4	16	64	280	IRFPC60LC-ND	16.80	13.44	9.60
	600	0.4	16	64	280	IRFPC60A-ND	8.25	6.60	4.21
	800	3	4.1	16	125	IRFPE30-ND	7.03	5.62	4.01
	800	2	5.4	22	150	IRFPE40-ND	8.15	6.52	4.66
	800	1.2	7.8	—	190	IRFPE50-ND	10.63	7.54	6.21
	800	3	4.1	16	125	IRFPF30-ND	7.20	5.76	4.11
	900	2.5	4.7	19	150	IRFPF40-ND	9.53	7.62	5.44
	900	1.6	6.7	27	190	IRFPF50-ND	14.45	11.56	8.26
	1000	5.0	3.1	—	125	IRFPG30-ND	7.44	5.27	4.34
	1000	3.5	4.3	17	150	IRFPG40-ND	10.00	8.00	5.71
	1000	2	6.1	—	190	IRFPG50-ND	13.49	9.56	7.87
TO-262									
4	20	9.0	77	308	87	IRF3704L-ND	1.46	1.17	.88
	20	8.5	77	280	88	IRF3706L-ND	1.46	1.17	.88
	20	6.0	110	440	120	IRF3711L-ND *NEW!*	1.78	1.01	.82
	20	20	36	140	47	IRL3714L-ND *NEW!*	1.11	.65	.50
	20	14	54	210	71	IRL3715L-ND *NEW!*	1.27	.75	.58
	30	12.5	62	248	87	IRF3707L-ND	1.46	1.17	.88
	30	0.007	116	400	170	IRL2203NL-ND	3.60	2.88	2.16
	30	0.026	38	140	68	IRL3303L-ND	2.21	1.77	1.33
	30	12	62	248	87	IRF3708L-ND *NEW!*	1.44	.78	.70
	30	9.0	90	360	120	IRF3709L-ND *NEW!*	1.78	1.01	.82
	30	0.006	140	470	200	IRL3803L-ND	6.98	5.58	4.19
	40	0.009	100	40	170	IRF1104L-ND *NEW!*	2.55	2.04	1.53
	40	0.004	162	650	200	IRF1404L-ND	3.80	3.05	2.29
	40	0.0065	130	520	200	IRL1004L-ND	3.42	2.74	2.06
	40	0.008	104	416	167	IRL1104L-ND	2.30	1.84	1.38
	40	0.004	160	640	3.8	IRL1404L-ND *NEW!*	2.93	2.04	1.58
	55	0.022	49	160	110	IRFZ44NL-ND	2.03	1.62	1.16
	55	0.011	84	290	170	IRF1010NL-ND	3.38	2.70	2.03
	55	8.0	110	390	200	IRF3205L-ND	6.30	5.04	3.78
	55	0.07	17	68	45	IRFZ24NL-ND	1.10	.89	.67
	55	0.040	29	100	68	IRFZ34NL-ND	1.46	1.17	.88
	55	0.0165	53	180	107	IRFZ46NL-ND	2.09	1.68	1.26
	55	0.014	64	210	130	IRFZ48NL-ND	3.83	3.06	2.30
4	55	0.008	104	360	200	IRL2505L-ND	6.30	5.04	3.78
	55	0.06	18	72	45	IRLZ24NL-ND	1.46	1.17	.88
	55	0.035	30	110	68	IRLZ34NL-ND	1.51	1.21	.91
	55	0.022	47	160	110	IRLZ44NL-ND	1.85	1.48	1.11
	55	5.3	131	680	200	IRF1405L-ND	3.80	3.05	2.29
	60	0.012	83	330	170	IRF1010EL-ND	3.49	2.79	2.10
	60	0.023	48	192	110	IRFZ44EL-ND	1.53	1.23	.92
	60	0.20	10	40	43	IRFZ14L-ND	1.04	.83	.63
	75	0.0078	100	520	—	IRF1407L-ND *NEW!*	2.57	1.79	1.39
	75	0.013	82	280	200	IRF2807L-ND	3.47	2.78	2.08
	100	0.1	17	60	79	IRL530NL-ND	1.88	1.50	1.07
	100	0.036	42	140	160	IRF1310NL-ND	3.49	2.79	2.10
	100	0.54	5.6	20	43	IRF510L-ND *NEW!*	1.13	.90	.68
	100	0.025	57	180	200	IRF3710L-ND	5.63	4.50	3.38
	100	0.11	17	600	79	IRF530NL-ND	1.35	1.08	.81
	100	0.052	33	110	140	IRF540NL-ND	2.03	1.62	1.22
	100	0.026	55	190	200	IRL2910L-ND	5.63	4.50	3.38
	100	0.025	59	236	200	IRFSL59N10D-ND	2.68	2.15	1.61
	100	0.18	10	35	48	IRL520NL-ND	1.24	.99	.75
	100	0.044	36	120	140	IRL540NL-ND	2.09	1.68	1.26
	100	0.20	9.7	38	3.8	IRF520NL-ND	1.13	.90	.68
	100	0.54	5.6	20	43	IRL510L-ND	1.04	.83	.63
	200	0.30	9.3	37	82	IRF630NL-ND *NEW!*	2.21	1.54	1.17
	150	0.082	21	84	94	IRF3315L-ND	2.27	1.82	1.37
	150	0.042	43	150	200	IRF3415L-ND	3.87	3.10	2.33
	150	0.045	41	164	200	IRF3515L-ND	2.59	2.07	1.56
	150	0.090	23	92	136	IRFSL23N15D-ND	1.78	1.43	1.07
	150	0.056	33	130	170	IRFSL33N15D-ND	1.80	1.44	1.08
	150	0.045	41	164	3.1	IRFSL41N15D-ND	2.57	2.06	1.54
	200	1.5	3.3	10	36	IRF610L-ND *NEW!*	1.38	1.10	.82
	200	0.80	5.2	18	50	IRF620L-ND *NEW!*	1.63	1.30	.97
	200	0.15	18	72	150	IRF640NL-ND	1.48	1.19	.89
	200	0.10	24	96	170	IRFSL23N20D-ND	1.98	1.59	1.19
	200	0.17	16	64	140	IRFSL17N20D-ND	1.69	1.35	1.02
	250	0.24	14	45	150	IRF644L-ND *NEW!*	3.35	2.68	2.01
	250	2.0	2.7	8.0	36	IRF614L-ND *NEW!*	1.38	1.10	.82
	250	1.1	4.4	14	50	IRF624L-ND *NEW!*	1.70	1.36	1.02
	250	0.435	8.0	32	88	IRF634L-ND *NEW!*	1.88	1.50	1.13
	300	0.75	6.1	24	74	IRF737LCL-ND	1.76	1.41	1.06
	400	0.55	10	40	125	IRF740L-ND *NEW!*	2.63	2.10	1.58
	400	3.6	2.0	6.0	36	IRF710L-ND *NEW!*	1.33	1.06	.80
	400	1.8	3.3	13	50	IRF720L-ND *NEW!*	1.45	1.16	.87
	400	1.0	5.5	22	74	IRF730L-ND *NEW!*	1.68	1.34	1.00
	400	1.0	5.5	22	74	IRF730AL-ND	1.51	1.21	.91
	400	0.55	10	40	125	IRF740AL-ND	2.21	1.77	1.33
	400	0.55	10	32	125	IRF740LCL-ND *NEW!*	2.58	2.06	1.54
	450	0.63	8.8	35	125	IRF744L-ND *NEW!*	2.33	1.86	1.40
	500	3.0	2.5	8.0	50	IRF820L-ND *NEW!*	1.63	1.30	.97
	500	1.40	5.0	20	3.1	IRF830L-ND *NEW!*	1.78	1.42	1.06
	500	0.85	8	28	125	IRF840L-ND	2.75	2.20	1.57
	500	3.0	2.5	10	50	IRF820AL-ND	1.22	.98	.73
	500	1.40	5.0	20	74	IRF830AL-ND	1.60	1.28	.96
	500	0.85	8.0	32	125	IRF840AL-ND *NEW!*	2.50	2.00	1.50
	500	0.85	8.0	28	125	IRF840LCL-ND	2.36	1.89	1.42
	500	0.55	11	44	190	IRFSL11N50A-ND	1.80	1.44	1.08
	600	4.4	2.2	8.0	50	IRFBC20L-ND	2.09	1.68	1.26
	600	2.2	3.6	14	74	IRFBC30L-ND	2.45	1.97	1.48
	600	1.2	6.2	25	130	IRFBC40L-ND	3.58	2.87	2.15
	600	2.2	3.6	14	74	IRFBC30AL-ND	1.03	.82	.62
	600	1.2	6.2	25	125	IRFBC40AL-ND	1.50	1.20	.90
	600	1.2	6.2	25	3.1	IRFBC40LCL-ND	3.76	3.01	2.26
	800	6.5	1.8	7.2	54	IRFBE20L-ND	1.67	1.34	1.00
	800	3.0	4.1	16	125	IRFBE30L-ND	2.59	2.07	1.56
	900	8.0	1.7	6.8	54	IRFBF20L-ND	1.78	1.43	1.07
	900	3.7	3.6	14	125	IRFBF30L-ND	3.22	2.58	1.94
TO-262 Logic Level									
4	30	0.014	64	220	110	IRL3103L-ND	3.25	2.60	1.86
	60	0.2	10	40	43	IRLZ14L-ND	1.15	.92	.66
	600	0.75	9.2	37	170	IRFSL9N60A-ND	2.28	1.82	1.60
I-PAK									
5	20	9.5	75	300	90	IRFU3704-ND *NEW!*	1.44	.78	.70
	20	9.0	75	280	88	IRFU3706-ND *NEW!*	1.44	.78	.70
	20	6.5	110	440	2.5	IRFU3711-ND *NEW!*	1.78	1.01	.82
	20	20	36	140	47	IRLU3714-ND *NEW!*	.92	.55	.41
	20	14	54	210	71	IRLU3715-ND *NEW!*	1.05	.63	.47
	30	0.031	33	120	57	IRFU3303-ND	1.10	.88	.63
	30	13	61	244	87	IRFU3707-ND *NEW!*	1.44	.78	.70
	30	12.5	61	244	87	IRFU3708-ND *NEW!*	1.44	.78	.70
	30	9.0	90	360	120	IRFU3709-ND *NEW!*	1.78	1.01	.82
	50	0.2	8.2	33	25	IRFU010-ND *NEW!*	.88	.70	.53
	50	0.1	15	—	—	IRFU020-ND	1.20	.96	.69
	55	0.075	17	68	45	IRFU024N-ND	1.20	.96	.69
	55	0.027	44	160	107	IRFU1205-ND	2.48	1.98	1.49
	55	0.016	56	220	110	IRFU2405-ND *NEW!*	1.55	.90	1.55
	55	0.045	27	100	68	IRFU4105-ND	2.36	1.89	1.42
	55	0.14	10	40	28	IRLU014N-ND *NEW!*	1.33	.70	.63
	60	0.2	7.7	—	—	IRFU014-ND	.88	.70	.50
	60	0.1	14	—	—	IRFU024-ND	1.20	.96	.69
	75	0.026	42	170	110	IRFU2407-ND *NEW!*	1.55	.90	.75
	100	0.27	7.7	31	42	IRFU120-ND	1.10	.88	.63
	100	0.2	9.4	38	48	IRFU120N-ND	1.10	.88	.63
	100	0.54	4.3	17	25	IRFU110-ND	.90	.72	.54
	100	0.115	16	60	79	IRFU3910-ND	1.76	1.41	1.06
	150	0.18	14	56	86	IRFU13N15D-ND	1.49	1.19	.90
	150	0.125	18	72	110	IRFU18N15D-ND	1.46	1.17	.88
	200	1.5	2.6	10	25	IRFU210-ND	.98	.78	.56
	200	0.6	5	20	43	IRFU220N-ND	.60	.48	.36
	200	0.235	13	52	110	IRFU13N20D-ND	1.44	1.16	.87
	200	0.38	9.4	38	86	IRFU9N20D-ND	1.44	1.16	.87
	250	1.1	3.8	15	42	IRFU224-ND	1.01	.81	.61

(Continued)

N and P Channel HEXFETs *(Cont.)*

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each		
							1	10	100
5	250	0.26	14	56	144	IRFU12N25D-ND *NEW!*	2.24	1.57	1.19
	400	3.6	1.7	6	25	IRFU310-ND	1.08	.86	.61
	400	1.8	3.1	12	42	IRFU320-ND	1.35	1.08	.77
	500	3	2.4	8	42	IRFU420-ND	1.22	.79	.61
	600	7	1.4	5.6	36	IRFU1N60A-ND *NEW!*	1.08	.86	.65
	600	4.4	2.0	8.0	42	IRFUC20-ND	1.80	1.44	1.08
I-PAK Logic-Level									
5	30	0.019	55	220	107	IRLU3103-ND	3.00	2.40	1.71
	30	0.031	35	140	68	IRLU3303-ND	1.68	1.34	.96
	30	0.045	23	96	45	IRLU2703-ND	.85	.68	.49
	55	0.040	24	110	68	IRLU2705-ND	1.24	.99	.75
	55	0.027	42	160	110	IRLU2905-ND	2.75	2.20	1.65
	55	0.065	17	72	45	IRLU024N-ND	1.11	.71	.54
	60	0.1	14	56	42	IRLR024-ND	1.13	.90	.64
	60	0.2	7.7	31	25	IRLR014-ND	1.00	.80	.57
	60	0.2	7.7	—	—	IRLU014-ND	1.00	.64	.48
	60	0.1	14	—	—	IRLU024-ND	1.13	.90	.68
	100	0.54	4.8	17	25	IRLU110-ND *NEW!*	1.08	.86	.65
	100	0.185	10	35	48	IRLU120N-ND	1.55	1.00	.75
	100	0.105	17	60	79	IRLU3410-ND	1.45	1.16	.83
Super-220 (TO-274AC)									
16	40	3.7	206	650	300	IRFBA1404P-ND *NEW!*	5.55	4.44	3.11
Super TO-247									
17	500	0.087	46	180	540	IRFPS40N50L-ND *NEW!*	12.53	9.66	8.31
Super-247									
15	500	0.13	36	144	446	IRFPS37N50A-ND	9.65	7.24	6.04
	500	0.078	47	190	540	IRFPS43N50K-ND *NEW!*	11.97	9.23	7.94
4-Pin Dip									
6	50	0.2	1.7	—	—	IRFD010-ND	.88	.70	.50
	50	0.1	2.4	—	—	IRFD020-ND	1.14	.75	.57
	60	0.2	1.7	14	1.3	IRFD014-ND	.95	.60	.45
	60	0.1	2.5	20	1.3	IRFD024-ND	1.14	.75	.57
	100	0.6	1.0	8.0	1.0	IRFD110-ND	.97	.61	.45
	100	0.3	1.3	5.2	1.0	IRFD120-ND	1.06	.68	.51
	200	1.5	0.6	2.5	1.0	IRFD210-ND	.92	.59	.44
	200	0.8	0.8	6.4	1.0	IRFD220-ND	1.08	.69	.52
	250	2	0.45	3.6	1	IRFD214-ND	1.00	.80	.57
	250	1.1	0.63	5	1	IRFD224-ND	1.08	.86	.61
	400	3.6	0.35	2.8	1	IRFD310-ND	1.18	.94	.67
	400	1.8	0.49	3.9	1	IRFD320-ND	1.58	1.26	.90
	500	3	0.46	3	1	IRFD420-ND	1.50	1.20	.86
	600	4.4	0.32	2.6	1	IRFDC20-ND	1.83	1.46	1.04
4-Pin Dip Logic Level									
6	60	.20	1.7	14	1.3	IRLD014-ND	1.04	.67	.51
	60	.10	2.5	20	1.3	IRLD024-ND	1.16	.76	.59
	100	.54	1	8	1.3	IRLD110-ND	.84	.72	.59
	100	.27	1.3	10	1.3	IRLD120-ND	.96	.82	.68
SOT-227									
18	100	0.0065	180	720	480	FB180SA10-ND	35.85	28.68	20.44
	500	0.13	38	150	500	FA38SA50LC-ND	34.85	27.89	20.92
	500	0.08	57	228	625	FA57SA50LC-ND	51.50	41.20	30.90
SMD-220/D2Pak									
7	20	.0085	77	280	88	IRF3706S-ND	1.63	1.30	.98
	20	6.0	110	440	120	IRF3711S-ND *NEW!*	1.78	1.01	.82
	20	20	36	140	47	IRL3714S-ND *NEW!*	1.11	.65	.50
	20	14	54	210	71	IRL3715S-ND *NEW!*	1.27	.75	.57
	30	0.014	54	220	70	IRL3103D1S-ND	4.43	3.10	2.49
	30	0.026	38	140	68	IRL3303S-ND	2.35	1.67	1.38
	30	.012	62	248	87	IRF3708S-ND	3.80	3.04	2.04
	30	9.0	90	360	120	IRF3709S-ND *NEW!*	1.78	1.01	.82
	30	0.026	34	140	68	IRL3303D1S-ND	1.75	1.40	1.05
	30	12.5	62	248	87	IRF3707S-ND	1.46	1.17	.88
	30	0.014	64	220	89	IRL3103D2S-ND	2.25	1.80	1.35
	40	0.009	100	400	170	IRF1104S-ND	2.30	1.84	1.38
	40	0.004	160	640	3.8	IRL1404S-ND *NEW!*	3.00	2.10	1.64
	55	5.3	131	680	200	IRF1405S-ND	3.80	3.05	2.29
	55	0.011	84	290	170	IRF1010NS-ND	3.63	2.90	2.07
	55	0.008	110	390	200	IRF3205S-ND	6.72	4.76	3.92
	55	0.008	110	390	200	IRF3205STRL-ND	3024.00/800		
	55	0.07	17	68	45	IRFZ24NS-ND	1.18	.94	.67
	55	0.04	29	100	68	IRFZ34NS-ND	1.55	1.24	.89
	55	0.04	29	100	68	IRFZ34NSTRL-ND	669.60/800		
	55	0.04	29	100	68	IRFZ34NSTRR-ND	669.60/800		
	55	0.022	49	160	110	IRFZ44NS-ND	2.00	1.60	1.14
	55	0.022	49	160	110	IRFZ44NSTRL-ND	539.20/800		
	55	0.02	53	180	120	IRFZ46NS-ND	2.33	1.86	1.33
	55	0.016	64	210	140	IRFZ48NS-ND	4.25	3.40	2.43
	55	0.016	64	210	140	IRFZ48NSTRL-ND	1836.00/800		
	55	0.016	64	210	140	IRFZ48NSTRR-ND	1836.00/800		
	60	0.012	83	330	170	IRF1010ES-ND	3.88	3.10	2.21
	60	0.050	30	120	88	IRFZ34S-ND	1.55	1.24	.93
	60	0.2	10	40	43	IRFZ14S-ND	1.08	.86	.61
	60	0.1	17	68	60	IRFZ24S-ND	1.18	.94	.67
	60	0.023	48	192	110	IRFZ44ES-ND	1.63	1.16	.96
	60	0.023	48	192	110	IRFZ44ESTRR-ND	734.40/800		
	60	0.028	50	200	150	IRFZ44S-ND	2.00	1.60	1.14
	60	0.028	50	200	150	IRFZ44STRR-ND	864.00/800		
	60	16.5	55	220	115	IRFZ44VS-ND *NEW!*	1.44	.78	.70
	60	12	72	290	150	IRFZ48VS-ND *NEW!*	1.70	.97	.80
	75	0.013	71	280	150	IRF2807S-ND	3.49	2.41	1.91
	75	0.0078	100	520	3.8	IRF1407S-ND *NEW!*	2.60	1.81	1.40
	100	0.036	42	140	160	IRF1310NS-ND	3.75	3.00	2.14
	100	0.036	42	140	160	IRF1310NSTRL-ND	708.00/800		
	100	0.025	57	180	200	IRF3710S-ND	6.00	4.25	3.50
	100	0.025	57	180	200	IRF3710STRR-ND	2700.00/800		
	100	0.54	5.6	20	43	IRF510S-ND	1.08	.86	.61
	100	0.2	9.7	38	48	IRF520NS-ND	1.18	.94	.67
	100	0.11	17	80	79	IRF530NS-ND	1.38	1.10	.79
	100	0.11	17	80	79	IRF530NSTRL-ND	594.40/800		
	100	0.11	17	80	79	IRF530NSTRR-ND	594.40/800		
7	100	0.16	14	56	88	IRF530S-ND	1.38	1.10	.79
	100	0.16	14	56	88	IRF530STRR-ND	594.40/800		
	100	0.052	33	110	140	IRF540NS-ND	2.25	1.80	1.29
	100	0.052	33	110	140	IRF540NSTRL-ND	624.00/800		
	100	0.052	33	110	140	IRF540NSTRR-ND	972.00/800		
	100	0.077	28	110	150	IRF540S-ND	2.25	1.80	1.28
	100	0.077	28	110	150	IRF540STRL-ND	972.00/800		
	100	0.077	28	110	150	IRF540STRR-ND	972.00/800		
	100	0.6	6.8	-27	60	IRF9520S-ND	1.75	1.40	1.00
	100	0.6	6.8	-27	60	IRF9520STRL-ND	756.00/800		
	100	0.025	59	236	200	IRFS59N10D-ND	2.52	2.02	1.52
	150	0.082	21	84	94	IRF3315S-ND	2.42	1.72	1.42
	150	0.042	43	150	200	IRF3415S-ND	4.13	2.93	2.41
	150	0.042	43	150	200	IRF3415STRL-ND	1857.60/800		
	150	0.045	41	164	200	IRF3515S-ND	2.88	2.30	1.64
	150	0.090	23	92	136	IRFS23N15D-ND	1.78	1.43	1.07
	150	0.056	33	130	170	IRFS33N15D-ND	1.80	1.44	1.08
	150	0.045	41	164	200	IRFS41N15D-ND	2.57	2.06	1.54
	200	1.5	3.3	10	36	IRF610S-ND	1.38	1.10	.79
	200	0.8	5.2	18	50	IRF620S-ND	1.63	1.30	.93
	200	0.3	9.3	37	82	IRF630NS-ND	1.06	.85	.75
	200	0.3	9.3	37	82	IRF630NSTRL-ND	459.20/800		
	200	0.15	18	72	150	IRF640NS-ND	1.46	1.17	1.03
	200	0.15	18	72	150	IRF640NSTRL-ND	629.60/800		
	200	0.15	18	72	150	IRF640NSTRR-ND	668.00/800		
	200	0.10	24	96	170	IRFS23N20D-ND	1.80	1.44	1.08
	200	0.082	31	124	200	IRFS31N20D-ND	2.54	2.04	1.53
	200	0.17	16	64	140	IRFS17N20D-ND	1.69	1.35	1.02
	250	1.1	4.4	—	50	IRF624S-ND	1.63	1.16	.96
	250	.45	8.1	—	74	IRF634S-ND	1.68	1.19	.98
	250	2	2.7	8	36	IRF614S-ND	1.38	1.10	.79
	250	240	14	56	150	IRF644NS-ND *NEW!*	1.45	.84	.70
	250	0.28	14	56	125	IRF644S-ND	3.22	2.28	1.88
	250	0.28	14	56	125	IRF644STRL-ND	1447.20/800		
	300	0.75	6.1	24	74	IRF737LCS-ND	1.76	1.41	1.06
	400	3.6	2	6	36	IRF710S-ND	1.23	.98	.70
	400	1.8	3.3	—	50	IRF720S-ND	1.27	.91	.75
	400	1	5.5	—	74	IRF730S-ND	1.61	1.14	.94
	400	1	5.5	22	74	IRF730AS-ND	1.68	1.34	.95
	400	0.55	10	40	125	IRF740AS-ND	2.45	1.96	1.40
	400	0.55	10	—	125	IRF740S-ND	2.35	1.67	1.38
	400	0.55	10	40	125	IRF740STRL-ND	1058.40/800		
	400	0.55	10	40	125	IRF740LCS-ND	2.32	1.86	1.40
	500	3	2.5	—	50	IRF820S-ND	1.30	.92	.76
	500	1.5	4.5	—	74	IRF830S-ND	1.70	1.21	1.00
	500	1.4	5	20	74	IRF830AS-ND	1.78	1.42	1.01
	500	.85	8	—	125	IRF840S-ND	2.40	1.70	1.40
	500	0.85	8	32	125	IRF840AS-ND	2.50	2.00	1.43
	500	0.52	11	44	170	IRFS11N50A-ND	1.85	1.48	1.05
	500	3.0	2.5	10	50	IRF820AS-ND	1.22	.98	.73
	500	0.85	8.0	28	125	IRF840LCS-ND	2.36	1.89	1.42
	600	2.2	3.6	14	74	IRFBC30AS-ND	2.73	2.18	1.55
	600	2.2	3.6	14	74	IRFBC30S-ND	2.73	2.18	1.56
	600	1.2	6.2	25	125	IRFBC40AS-ND	3.98	3.18	2.27
	600	1.2	6.2	25	130	IRFBC40S-ND	3.98	3.18	2.27
	600	0.75	9.2	37	170	IRFS9N60A-ND	2.05	1.64	1.23
	600	4.4	2.2	8.0	50	IRFBC20S-ND	2.09	1.68	1.26
	600	1.2	6.2	25	130	IRFBC40LCS-ND	3.76	3.01	2.26
	800	6.5	1.8	—	54	IRFBE20S-ND	1.67	1.34	1.00
	900	8	1.7	6.8	54	IRFBF20S-ND	1.98	1.58	1.39
	900	3.7	3.6	—	125	IRFBF30S-ND	3.22	2.58	1.94
SMD-220/D2Pak Logic Level									
7	20	0.01	85	340	110	IRL3402S-ND	2.05	1.64	1.23
	20	0.009	77	308	87	IRF3704S-ND	1.63	1.30	1.14
	20	0.013	61	240	89	IRL3102S-ND	1.85	1.48	1.06
	20	0.016	48	190	69	IRL3202S-ND	1.55	1.24	.89
	20	0.02	39	160	57	IRL3302S-ND	1.30	1.04	.74
	20	0.007	110	420	140	IRL3502S-ND	1.90	1.52	1.33
	20	0.007	110	420	140	IRL3502STRL-ND	1220.80/800		
	30	0.04	24	96	45	IRL2703S-ND	1.15	.92	.69
	30	0.007	116	400	170	IRL2203NS-ND	4.00	3.20	2.29
	30	0.007	116	400	170	IRL2203NSTRL-ND	1728.00/800		
	30	0.014	64	220	110	IRL3103S-ND	3.12	2.21	1.82
	30	0.014	64	220	110	IRL3103STRL-ND	643.20/800		
	30	0.006	140	470	200	IRL3803S-ND	7.44	5.27	4.34
	30	0.006	140	470	200	IRL3803STRL-ND	1289.60/800		
	40	0.0065	130	520	200	IRL1004S-ND	3.80	3.04	2.16
	40	0.008	104	416	167	IRL1104S-ND	2.30	1.84	1.38
	55	0.008	104	360	200	IRL2505S-ND	7.00	5.60	4.00
	55	0.01	89	310	170	IRL3705NS-ND	4.37	3.07	2.48
	55	0.01	89	310	170	IRL3705NSTRL-ND	1728.00/800		
	55	0.06	18	72	45	IRLZ24NS-ND	1.63	1.30	.93
	55	0.035	30	110	68	IRLZ34NS-ND	1.68	1.34	.96
	55	0.035	30	110	68	IRLZ34NSTRL-ND	724.00/800		
	55	0.022	47	160	110	IRLZ44NS-ND	2.00	1.60	1.14
	55	0.022	47	160	110	IRLZ44NSTRL-ND	550.40/800		
	55	0.022	47	160	110	IRLZ44NSTRR-ND	864.00/800		
	60	0.2	10	40	43	IRLZ14S-ND	1.15	.92	.66
	60	0.028	50	200	150	IRLZ44S-ND	.90	.72	.52
	60	0.028	50	200	150	IRLZ44STRR-ND	388.80/800		
	100	0.026	55	190	200	IRL2910S-ND	6.25	5.00	3.57
	100	0.18	10	35	48	IRL520NS-ND	1.30	1.04	.74
	100	0.18	10	35	48	IRL520NSTRL-ND	561.60/800		
	100	0.1	17	60	79	IRL530NS-ND	1.63	1.30	.93
	100	0.1	17	60	79	IRL530NSTRL-ND	702.40/800		
	100	0.1	17	80	79	IRL530NSTRR-ND	460.80/800		
	100	0.16	15	60	88	IRL530STRR-ND	367.20/800		
	100	0.044	36	120	140	IRL540NS-ND	2.25	1.80	1.29
	100	0.044	36	120	140	IRL540NSTRL-ND	972.00/800		

(Continued)

International
IOR Rectifier

N and P Channel HEXFETs (Cont.)

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
7	100	0.077	28	110	150	IRL540S-ND	1.30	1.04	.75
	200	0.8	5.2	21	50	IRL620S-ND	1.70	1.36	.97
	200	0.4	9	36	74	IRL630S-ND	2.13	1.70	1.21
	200	0.4	9	36	74	IRL630STRL-ND	918.40/800		
	200	0.18	17	68	125	IRL640S-ND	2.63	2.10	1.50
D-Pak									
8	20	9.5	75	300	90	IRFR3704-ND *NEW!*	1.44	.78	.70
	20	9.0	75	280	88	IRFR3706-ND *NEW!*	1.44	.78	.70
	20	6.5	110	440	2.5	IRFR3711-ND *NEW!*	1.78	1.01	.82
	20	20	36	31	140	IRLR3714-ND *NEW!*	.92	.55	.41
	20	14	54	210	71	IRLR3715-ND *NEW!*	1.13	.68	.50
	30	0.031	33	120	57	IRFR3303-ND	1.10	.88	.63
	30	0.031	33	120	57	IRFR3303TR-ND	1188.00/2,000		
	30	13	61	244	87	IRFR3707-ND *NEW!*	1.44	.78	.70
	30	12.5	61	244	87	IRFR3708-ND *NEW!*	1.44	.78	.70
	30	7.9	91	363	115	IRLR8103V-ND *NEW!*	1.78	1.01	.82
	50	0.20	8.2	33	25	IRFR010-ND *NEW!*	.88	.70	.53
	50	0.1	15	—	—	IRFR020-ND	1.20	.96	.69
	50	0.1	15	—	—	IRFR020TR-ND	1296.00/2,000		
	50	0.1	15	—	—	IRFR020TRL-ND	1944.00/3,000		
	55	0.075	16	68	38	IRFR024N-ND	1.15	.82	.68
	55	0.075	16	68	38	IRFR024NTR-ND	776.00/2,000		
	55	0.075	16	68	38	IRFR024NTRL-ND	1944.00/3,000		
	55	0.027	37	160	107	IRFR1205-ND	2.64	1.87	1.54
	55	0.027	37	160	107	IRFR1205TR-ND	2064.00/2,000		
	55	0.061	56	220	110	IRFR2405-ND *NEW!*	1.59	.92	.77
	55	0.045	27	100	68	IRFR4105-ND	2.63	2.10	1.50
	60	0.075	17	68	45	IRFR024-ND	1.20	.96	.69
	60	0.075	17	68	45	IRFR024TR-ND	972.00/2,000		
	60	0.2	7.7	31	25	IRFR014TR-ND	946.00/2,000		
	75	0.026	42	170	110	IRFR2407-ND *NEW!*	1.59	.92	.77
	100	0.54	4.3	17	25	IRFR110TR-ND	1080.00/2,000		
	100	0.27	7.7	31	42	IRFR120-ND	1.11	.71	.54
	100	0.27	7.7	31	42	IRFR120TR-ND	854.00/2,000		
	100	0.27	7.7	31	42	IRFR120TRL-ND	1782.00/3,000		
	100	0.21	9.4	38	48	IRFR120N-ND	1.15	.74	.56
	100	0.21	9.4	38	48	IRFR120NTR-ND	882.00/2,000		
	100	0.21	9.4	38	48	IRFR120NTRL-ND	1782.00/3,000		
	100	0.115	16	60	79	IRFR3910TR-ND	1038.00/2,000		
	100	0.115	16	60	79	IRFR3910TRL-ND	3159.00/3,000		
	100	0.115	16	60	79	IRFR3910-ND	1.87	1.33	1.10
	150	0.125	18	72	110	IRFR18N15D-ND	1.46	1.17	.88
	150	0.18	14	56	86	IRFR13N15D-ND *NEW!*	1.71	.97	.79
	200	0.235	13	52	110	IRFR13N20D-ND	1.60	1.28	1.02
	200	0.38	9.4	38	86	IRFR9N20D-ND	1.44	1.16	.87
	200	1.5	2.6	10	25	IRFR210-ND	.98	.78	.56
	200	0.6	5	20	43	IRFR220N-ND	.60	.48	.36
	250	2	2.2	8.8	25	IRFR214-ND	1.00	.80	.57
	250	1.1	3.8	15	42	IRFR224-ND	1.13	.90	.64
	250	1.1	3.8	15	42	IRFR224TR-ND	1216.00/2,000		
	250	1.1	3.8	15	42	IRFR224TRL-ND	1824.00/3,000		
	250	0.26	14	56	144	IRFR12N25D-ND *NEW!*	2.24	1.57	1.19
	400	3.6	1.7	6	25	IRFR310-ND	1.08	.86	.61
	400	3.6	1.7	6	25	IRFR310TR-ND	1162.00/2,000		
	400	1.8	3.1	12	42	IRFR320-ND	1.35	1.08	.77
	400	1.8	3.1	12	42	IRFR320TR-ND	1458.00/2,000		
	500	3	2.4	8	42	IRFR420-ND	1.33	1.06	.76
	500	3	2.4	8	42	IRFR420TR-ND	926.00/2,000		
	600	7	1.4	5.6	36	IRFR1N60A-ND	.73	.58	.41
	600	4.4	2	8	42	IRFRC20-ND	2.00	1.60	1.14
	600	4.4	2	8	42	IRFRC20TR-ND	2160.00/2,000		
D-PAK Logic Level									
8	30	0.045	23	96	45	IRLR2703-ND	.85	.68	.49
	30	0.012	49	196	62	IRLR8503-ND	2.88	2.30	1.73
	30	0.019	55	220	107	IRLR3103TR-ND	3240.00/2,000		
	30	0.031	35	140	68	IRLR3303-ND	1.68	1.34	.96
	30	0.031	35	140	68	IRLR3303TR-ND	1810.00/2,000		
	55	0.065	17	72	45	IRLR024N-ND	1.61	1.03	.78
	55	0.065	17	72	45	IRLR024NTR-ND	962.00/2,000		
	55	0.027	36	160	110	IRLR2905-ND	2.64	1.87	1.54
	55	0.027	42	160	110	IRLR2905TRL-ND *NEW!*	4224.00/3,000		
	55	0.027	36	160	110	IRLR2905TR-ND	2970.00/2,000		
	55	0.040	28	110	68	IRLR2705-ND	1.73	1.12	.85
	60	0.2	7.7	31	25	IRLR014N-ND	.70	.56	.42
	60	0.2	7.7	31	25	IRLR014TR-ND	756.00/2,000		
	60	0.1	14	56	42	IRLR024TR-ND	1216.00/2,000		
	100	0.105	17	60	79	IRLR3410-ND	1.45	1.16	.83
	100	0.105	17	60	79	IRLR3410TR-ND	1566.00/2,000		
	100	0.54	4.3	17	25	IRLR110-ND	1.08	.86	.61
	100	0.54	4.3	17	25	IRLR110TR-ND	1162.00/2,000		
	100	0.54	4.3	17	25	IRLR110TRL-ND	1743.00/3,000		
	100	0.27	7.7	31	42	IRLR120-ND	1.29	.83	.62
	100	0.27	7.7	31	42	IRLR120TR-ND	1188.00/2,000		
	100	0.185	11	35	48	IRLR120N-ND	1.06	.75	.62
	100	0.185	11	35	48	IRLR120NTR-ND	964.00/2,000		
	100	0.185	11	35	48	IRLR120NTRL-ND	1782.00/3,000		
Micro-3 (SOT-23) Logic Level									
9	20	0.25	1.2	7.4	540	IRLML2402CT-ND	.66	.50	.39
	20	0.25	1.2	7.4	540	IRLML2402TR-ND	546.00/3,000		
	20	0.045	4.2	33	1.25	IRLML2502CT-ND	.66	.50	.39
	20	0.045	4.2	33	1.25	IRLML2502TR-ND	630.00/3,000		
	30	0.25	1.2	7.3	540	IRLML2803CT-ND	.60	.45	.35
	30	0.25	1.2	7.3	540	IRLML2803TR-ND	549.00/3,000		
Micro-6 Logic Level									
10A	20	0.1	3.2	18	1.7	IRLMS1902CT-ND	.96	.72	.56
	20	0.1	3.2	18	1.7	IRLMS1902TR-ND	1296.00/3,000		
	20	0.030	6.5	20	2.0	IRLMS2002CT-ND	.76	.57	.45
	20	0.030	6.5	20	2.0	IRLMS2002TR-ND	1050.00/3,000		
10A	30	0.1	3.2	18	1.7	IRLMS1503CT-ND	.87	.66	.51
	30	0.1	3.2	18	1.7	IRLMS1503TR-ND	1176.00/3,000		
Micro-8 Logic Level									
11A	20	0.035	5.7	30	1.8	IRF7601CT-ND	2.16	1.62	1.26
	20	0.035	5.7	30	1.8	IRF7601TR-ND	3888.00/4,000		
	20	0.135	2.4	19	1.3	IRF7521D1TR-ND	1944.00/4,000		
	20	0.030	6.5	50	1.8	IRF7607TR-ND	2332.00/4,000		
	30	0.035	5.6	30	1.8	IRF7603CT-ND	1.92	1.44	1.12
	30	0.035	5.6	30	1.8	IRF7603TR-ND	1696.00/4,000		
	30	0.11	2.7	21	1.25	IRF7523D1TR-ND	1944.00/4,000		
Micro-8 Dual Logic Level									
11B	20	0.135	2.4	19	1.25	IRF7501CT-ND	1.89	1.42	1.11
	20	0.135	2.4	19	1.25	IRF7501TR-ND	3404.00/4,000		
	30	0.135	2.4	14	1.25	IRF7503CT-ND	1.74	1.31	1.02
	30	0.135	2.4	14	1.25	IRF7503TR-ND	2264.00/4,000		
SOT-223									
12	55	0.16	1.9	15	2.1	IRFL014N-ND	.61	.49	.37
	55	0.075	2.8	11.2	2.1	IRFL024N-ND	.72	.58	.44
	55	0.045	3.7	30	2.1	IRFL4105-ND *NEW!*	1.75	1.40	1.05
	55	0.045	3.7	30	1	IRFL4105CT-ND	2.10	1.58	1.23
	55	0.045	3.7	30	1	IRFL4105TR-ND	2187.50/2,500		
	60	0.22	1.6	6.4	2.1	IRFL1006-ND	.72	.58	.44
	60	0.2	2.7	22	3.1	IRFL014-ND	.86	.56	.43
	60	0.2	2.7	22	3.1	IRFL014TR-ND	832.50/2,500		
	100	0.54	1.5	12	3.1	IRFL110-ND	1.20	.96	.69
	100	0.54	1.5	12	3.1	IRFL110TR-ND	1022.50/2,500		
	100	0.2	1.6	13	2.1	IRFL4310-ND *NEW!*	1.50	1.20	.90
	100	0.2	1.6	13	1	IRFL4310CT-ND	3.21	2.41	1.88
	100	0.2	1.6	13	1	IRFL4310TR-ND	1290.00/2,500		
	200	1.5	0.96	7.7	3.1	IRFL210-ND	1.30	1.04	.74
	200	1.5	0.96	7.7	3.1	IRFL210TR-ND	875.00/2,500		
	250	2	0.79	6.3	3.1	IRFL214-ND	1.40	1.12	.80
SOT-223 Logic-Level									
12	30	0.045	3.9	16	1	IRLL2703-ND	1.75	1.40	1.05
	30	0.031	4.6	37	1	IRLL3303CT-ND	3.78	2.84	2.21
	30	0.031	4.6	37	1	IRLL3303TR-ND	2468.03/2,500		
	55	0.14	2	16	2.1	IRLL014N-ND	.68	.54	.39
	55	0.14	2	16	2.1	IRLL014NTR-ND	945.00/2,500		
	55	0.065	3.1	12	2.1	IRLL024N-ND	.80	.64	.48
	55	0.04	3.8	30	2.1	IRLL2705-ND *NEW!*	1.58	1.27	.95
	55	0.04	3.8	30	1	IRLL2705CT-ND	2.10	1.58	1.23
	55	0.04	3.8	30	1	IRLL2705TR-ND	2084.73/2,500		
	60	0.2	2.7	22	3.1	IRLL014-ND	1.38	1.10	.79
	60	0.2	2.7	22	3.1	IRLL014TR-ND	1037.50/2,500		
	100	0.54	1.5	12	3.1	IRLL110-ND	1.30	1.04	.74
	100	0.54	1.5	12	3.1	IRLL110TR-ND	800.00/2,500		
SO-8									
13A	20	30	7.0	28	2.0	IRF7331-ND *NEW!*	1.37	.72	.65
	20	0.035	6.8	54	2.5	IRF7402-ND	1.46	1.17	.88
	20	9.0	12	100	2.5	IRF7459-ND	1.51	1.21	.91
	30	0.03	7	37	2.5	IRF9410-ND	1.80	1.44	1.03
	30	8.0	14	110	2.5	IRF7458-ND	1.69	1.35	1.02
	30	8.5	14	110	2.5	IRF7477-ND *NEW!*	1.59	.92	.77
	30	11	13	100	2.5	IRF7805A-ND *NEW!*	1.81	1.03	.84
	30	25	8.3	66	2.5	IRF7807A-ND *NEW!*	1.23	.66	.59
	30	17	8.3	66	2.5	IRF7807V-ND *NEW!*	1.19	.64	.57
13G	30	17	8.3	66	2.5	IRF7807VD2-ND *NEW!*	1.40	.80	.68
13A	30	7.0	13.3	100	2.5	IRF7809AV-ND *NEW!*	1.45	.84	.70
	30	11	10.8	100	2.5	IRF7811AV-ND *NEW!*	1.33	.70	.63
	30	5.0	18	150	3.1	IRF7822-ND *NEW!*	2.75	1.92	1.49
	40	.017	9.0	73	2.5	IRF7469-ND *NEW!*	1.44	.78	.70
	40	0.013	10	85	1.6	IRF7470-ND	1.20	.96	.72
	40	13	10	83	2.5	IRF7471-ND *NEW!*	2.41	1.37	1.14
13B	50	.130	3.0	25	2.4	IRF7103Q-ND *NEW!*	1.06	.63	.48
13A	60	.026	4.2	56	2.5	IRF7478-ND *NEW!*	1.29	.68	.62
	100	.026	6.9	55	2.5	IRF7473-ND *NEW!*	1.74	.99	.81
	100	0.060	4.5	36	2.5	IRF7452-ND	1.64	1.32	.99
	150	0.09	3.6	29	2.5	IRF7451-ND *NEW!*	2.33	1.63	1.24
	150	0.28	1.9	15	2.5	IRF7465-ND *NEW!*	1.67	.95	.79
	200	0.17	2.5	20	2.5	IRF7450-ND *NEW!*	2.08	1.46	1.11
	200	0.73	1.2	10	2.5	IRF7464-ND	1.10	.89	.67
	250	0.23	2.2	17	2.5	IRF7453-ND *NEW!*	1.67	.95	.79
SO-8 Logic Level									
13A	20	0.022	8.7	35	2.5	IRF7401-ND	2.38	1.90	1.36
	20	0.022	8.7	35	2.5	IRF7401TR-ND	5132.00/4,000		
	20	0.1	3.5	14	2.0	IRF7101-ND	1.05	.70	.54
	20	0.1	3.5	14	2.0	IRF7101TR-ND	1652.00/4,000		
	20	7.0	15	120	2.5	IRF7457-ND	1.73	1.39	1.04
	20	7.2	12	100	2.5	IRF7460-ND	1.46	1.17	.88
	20	0.0065	16	130	2.5	IRF7456-ND	1.58	1.26	.90
	20	0.0065	16	130	2.5	IRF7456TR-ND	3404.00/4,000		
	20	0.03	5.4	40	1.3	IRF7530CT-ND	1.44	1.08	.84
	20	0.03	5.4	40	1.3	IRF7530TR-ND	2592.00/4,000		
	28	0.012	11.4	100	2.5	IRF7809A-ND	3.00	2.40	1.63
	28	0.012	11.4	100	2.5	IRF7811A-ND	2.20	1.50	1.18
	28	0.012	11.4	100	2.5	IRF7811ATR-ND	3696.00/4,000		
	30	0.03	7.3	58	2.5	IRF7201-ND	1.13	.75	.58
	30	0.03	7.3	58	2.5	IRF7201TR-ND	1800.00/4,000		
	30	0.022	8.5	34	2.5	IRF7403-ND	2.25	1.80	1.29
	30	0.022	8.5	34	2.5	IRF7403TR-ND *NEW!*	4608.00/4,000		
	30	0.011	13	58	2.5	IRF7413-ND	1.32	.90	.72
	30	0.011	13	58	2.5	IRF7413TR-ND	2248.00/4,000		
	30	0.0075	15	120	2.5	IRF7455-ND	1.53	1.22	.87
	30	9.8	11	90	2.5	IRF7466-ND	1.69	1.35	1.02
	30	12	11	90	2.5	IRF7467-ND	1.69	1.35	1.02
	30	0.009	±12.5	±50	2.5	SI4420DY-ND	2.86	2.29	1.72
	30	0.029	6.5	52	2.0	IRF7353D2-ND	1.19	.96	.72
	30	9.0	14	109	3.1	IRF7811W-ND	1.08	.86	.65
	30	0.0075	15	120	2.5	IRF7455TR-ND	3296.00/4,000		
	30	0.008	14	110	2.5	IRF7463-ND	1.55	1.24	.88

(Continued)

International
IOR Rectifier

N and P Channel HEXFETs *(Cont.)*

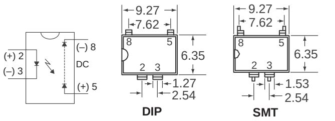
Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max. (W)	Digi-Key Part No.	Price Each 1	10	100
13B	30	0.0135	10	50	2.5	SI4410DY-ND	2.83	2.26	1.61
	30	0.011	13	100	2.5	IRF7805TR-ND	3676.00/4,000		
	30	25	8.3	66	2.5	IRF7807TR-ND	2432.00/4,000		
	40	15.5	9.4	75	2.5	IRF7468-ND	1.80	1.44	1.08
	50	0.13	3.0	10	2.0	IRF7103-ND	1.04	.69	.53
	20	0.05	5.2	21	2.0	IRF7301-ND	2.13	1.70	1.21
	20	0.05	5.2	21	2.0	IRF7301TR-ND	4592.00/4,000		
	20	0.029	6.6	26	2.0	IRF7311-ND	2.64	1.87	1.54
	20	0.029	6.6	26	2.0	IRF7311TR-ND	2156.00/4,000		
	30	0.05	4.9	20	2.0	IRF7303-ND	2.00	1.60	1.14
	30	0.05	4.9	20	2.0	IRF7303TR-ND	1980.00/4,000		
	30	0.029	6.5	30	2.5	IRF7313-ND	1.96	1.34	1.07
	30	0.029	6.5	30	2.5	IRF7313TR-ND	3348.00/4,000		
	30	0.1	3.5	16	2.0	IRF9956-ND	1.63	1.30	.93
	50	0.13	3.0	10	2.0	IRF7103TR-ND	1648.00/4,000		
	55	0.05	4.7	38	2.0	IRF7341-ND	1.41	.93	.71
	55	0.05	4.7	38	2.0	IRF7341TR-ND	3348.00/4,000		
SO-8 “Fetky™” Mosfet and Schottky Diode									
13E	30	0.028	6.2	48	2.0	IRF7901D1-ND	2.50	2.00	1.50
13C	30	0.035	5.8	33	2.5	IRF7421D1-ND	1.08	.77	.63
13F	30	0.029	6.5	52	2.0	IRF7353D1-ND	1.13	.90	.61
13F	30	0.029	6.5	52	2.0	IRF7353D1TR-ND	2432.00/4,000		
Dual N- and P- Channel									
Micro-8 Logic-Level									
11C	20/-20	.135/-.27	2.4/-1.7	19/-14	1.25	IRF7507CT-ND	2.10	1.58	1.23
	20/-20	.135/-.27	2.4/-1.7	19/-14	1.25	IRF7507TR-ND	3780.00/4,000		
	30/-30	0.11/-0.2	2.7/-2.0	21/-16	1.25	IRF7509CT-ND	1.89	1.42	1.09
	30/-30	0.11/-0.2	2.7/-2.0	21/-16	1.25	IRF7509TR-ND	3404.00/4,000		
SO-8									
13B	20/-20	0.029/-0.058	6.6/-5.3	26/-21	2	IRF7317-ND	2.88	2.30	1.64
	20/-20	0.029/-0.058	6.6/-5.3	26/-21	2	IRF7317TR-ND	6212.00/4,000		
	30/-30	0.029/-0.058	6.5/-4.9	30/-30	2	IRF7319-ND	2.88	2.30	1.64
SO-8 Logic Level									
13B	20/-20	0.05/-0.090	5.2/-4.3	21/-17	2	IRF7307-ND	2.13	1.70	1.21
	20/-20	0.05/-0.090	5.2/-4.3	21/-17	2	IRF7307TR-ND	4328.00/4,000		
	25/-25	.10/-.25	3.5/-2.3	14/-10	2.0	IRF7105-ND	1.03	.68	.53
	25/-25	.10/-.25	3.5/-2.3	14/-10	2.0	IRF7105TR-ND	1644.00/4,000		
	30/-30	0.05/-0.10	4.0/-3.0	16/-12	1.4	IRF7309-ND	2.00	1.60	1.14
	30/-30	0.05/-0.10	4.0/-3.0	16/-12	1.4	IRF7309TR-ND	1788.00/4,000		
	30/-30	0.045/-0.090	5.8/-4.3	46/-34	2.5	IRF7379-ND	3.00	2.40	1.71
	30/-30	0.029/-0.058	7.3/-5.3	30/-30	2.5	IRF7389-ND	2.88	2.30	1.64
	30/-30	0.10/-0.25	3.5/-2.3	16/-10	2	IRF9952-ND	1.83	1.46	1.04
	55/-55	0.043/-0.056	4.7/-3.4	38/-27	2	IRF7343-ND	1.70	1.36	.97
	55/-55	0.043/-0.056	4.7/-3.4	38/-27	2	IRF7343TR-ND	3672.00/4,000		

Photovoltaic Isolators

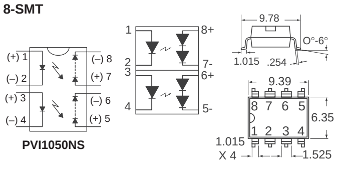
The PhotoVoltaic isolator (PVI) generates an electrically isolated DC voltage upon receipt of a DC input signal. The PVI is ideally suited for driving power MOSFETs, IGBTs or sensitive gate SCRs to form solid state relays.

Input Circuit			Output Circuit							
Vf (led)	Imin (mA)	Imax (mA)	Vout (dc)	Imin (μA)	Ton/Toff Max	Pkg.	Digi-Key Part No.	Price Each 1	10	100
1.4	5.0	40	8.0	10	5/0.25ms	8-Dip	PVI5013R-ND	3.60	2.88	2.16
1.4	5.0	40	8.0	10	5/0.25ms	8-SMT	PVI5013RS-ND	3.74	2.99	2.25
1.4	5.0	40	40	10	2.5/0.5ms	8-Dip	PVI5033R-ND	4.57	3.66	2.75
1.4	5.0	40	40	10	2.5/0.5ms	8-SMT	PVI5033RS-ND	4.61	3.69	2.77
1.4	2.0	50	8.0	10	3/0.22ms	MOD-8 Dip	PVI5050N-ND *NEW!*	3.60	2.52	1.97
1.4	2.0	50	8.0	10	3/0.22ms	MOD-8-Dip	PVI5080N-ND *NEW!*	4.76	3.40	2.76
1.4	2.0	50	8.0	10	3/0.22ms	8-SMT	PVI1050NS-ND *NEW!*	5.70	4.11	3.42
1.4	2.0	50	8.0	10	3/0.22ms	MOD-8-SMT	PVI5050NS-ND *NEW!*	3.69	2.59	2.02
1.4	2.0	50	8.0	10	3/0.22ms	MOD-8-SMT	PVI5080NS-ND *NEW!*	4.76	3.29	2.77
2.0	2.0	25	190	1.0	3.0/0.5ms	6-SMT	PVT312LS-ND	2.39	1.91	1.44
2.0	2.0	25	210	1.0	3.0/0.5ms	6-SMT	PVT312S-ND	2.32	1.86	1.40
2.0	2.0	25	170	1.0	3.0/0.5ms	8-Dip	PVT322A-ND	6.48	5.19	3.89
2.0	2.0	25	170	1.0	3.0/0.5ms	8-SMT	PVT322AS-ND	6.62	5.30	3.97
2.0	2.0	25	120	1.0	2.0/2.0ms	8-SMT	PVT422S-ND	4.70	3.77	2.83

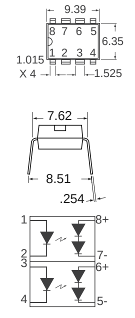
MOD-8



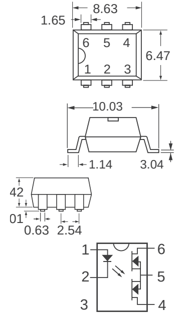
8-SMT



8-DIP



6-SMT



TOSHIBA MOSFETs

Fig.	VDS (V)	RDS (on) (Ω)	ID Cont. (A) 25°C	IDM (A)	PD Max (W)	Digi-Key Part No.	Price Each 1	10	100	Tape & Reel Pricing* 700
P-Channel Types										
2-10S1B Package										
1	-100	0.15	-16	-64	60	2SJ412-ND	1.54	1.23	.93	—
2-7B2B Package										
2	-60	0.16	-5	-20	20	2SJ377TE16CT-ND‡	2.70	2.03	1.24	535.50
N-Channel Types										
TO-220AB Package										
3	100	0.066	27	108	75	2SK2314-ND	1.42	1.14	.86	—
	200	0.18	15	45	80	YTA640-ND	1.54	1.23	.93	—
	400	0.40	10	40	80	2SK2841-ND	1.65	1.32	.99	—
	500	0.75	8	32	80	2SK2542-ND	1.45	1.16	.87	—
	60	0.15	45	180	125	2SK1542-ND	2.33	1.87	1.46	—
2-7B1B Package										
4	60	0.12	5	20	20	2SK2231-ND	.82	.62	.47	—
	50	0.032	20	50	40	2SK2614-ND	1.02	.82	.61	—
2-10R1B Package										
5	60	0.036	25	100	35	2SK2232T-ND	1.26	1.05	.84	—
	60	0.013	45	180	45	2SK2312-ND	2.40	1.92	1.44	—
	900	3.7	3	9	40	2SK2700T-ND†	1.44	1.15	.87	—
2-16C1B Package										
6	500	0.35	15	60	150	2SK2698T-ND	2.36	1.89	1.47	—
	100	0.025	50	200	150	2SK1381-ND	5.01	4.52	4.01	—
	500	0.75	10	40	125	2SK2601-ND	1.90	1.52	1.14	—
2-7B2B Package										
2	100	0.28	3	12	20	2SK2201TE16CT-ND‡	2.82	2.12	1.29	559.30
	60	0.12	5	20	20	2SK2231TE16CT-ND‡	2.64	1.98	1.21	523.60
2-16F1B Package										
7	600	0.31	15	60	90	2SK2953-ND†	2.90	2.32	1.96	—
2-16H1B Package										
8	500	0.21	20	80	160	2SK3117-ND	4.50	3.60	3.04	—

* For Tape and Reel Part Number, change CT-ND to TR-ND ‡ Cut Tape Pricing.
† Isolated Tab

Fig. 1 — TO-220FL Pkg.

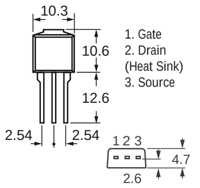


Fig. 2 — 2-7B2B Pkg.

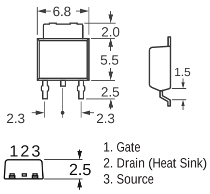


Fig. 3 — TO-220AB Pkg.

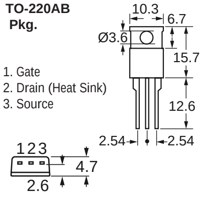


Fig. 4 — 2-7B1B Pkg.

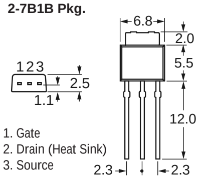


Fig. 5 — 2-10R1B Pkg.

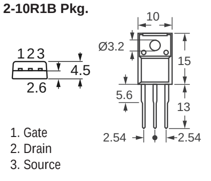


Fig. 6 — 2-16C1B Pkg.

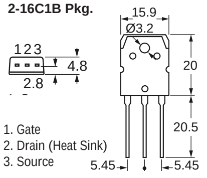


Fig. 7 — 2-16F1B Pkg.

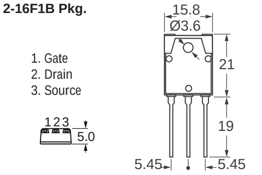
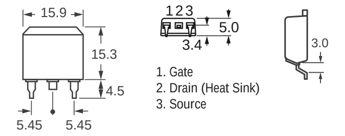


Fig. 8 — 2-16H1B Pkg.



Diodes-Bridge Rectifiers

Fig. 1

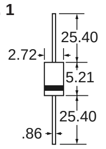


Fig. 2

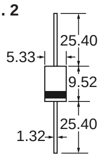


Fig. 3

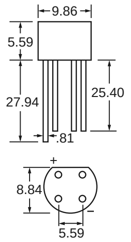


Fig. 4

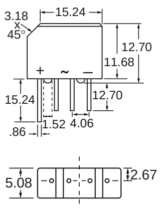


Fig. 5

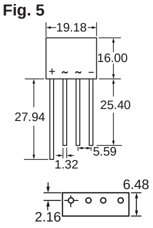


Fig. 6

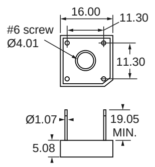


Fig. 7

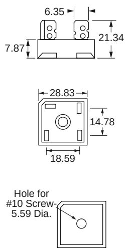


Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Typ. Reverse Recovery Time (µS)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing	
								1	10	100		1,400	5,500
Silicon Rectifiers													
1	1.0	50	30	1.1	30	-50 to 175	1N4001GICT-ND	—	.40	3.20	1N4001GITR-ND	—	16.00/M
		100	30	1.1	30	-50 to 175	1N4002GICT-ND	—	.40	3.20	1N4002GITR-ND	—	16.00/M
		200	30	1.1	30	-50 to 175	1N4003GICT-ND	—	.40	3.20	1N4003GITR-ND	—	16.00/M
		400	30	1.1	30	-50 to 175	1N4004GICT-ND	—	.40	3.20	1N4004GITR-ND	—	16.00/M
		600	30	1.1	30	-50 to 175	1N4005GICT-ND	—	.40	3.20	1N4005GITR-ND	—	16.00/M
		800	30	1.1	30	-50 to 175	1N4006GICT-ND	—	.40	3.20	1N4006GITR-ND	—	16.00/M
		1000	30	1.1	30	-50 to 175	1N4007GICT-ND	—	.40	3.20	1N4007GITR-ND	—	16.00/M
2	3.0	50	200	1.2	—	-50 to 170	1N5400GICT-ND	.32	2.31	16.80	1N5400GITR-ND	105.00/M	—
		100	200	1.2	—	-50 to 170	1N5401GICT-ND	.32	2.31	16.80	1N5401GITR-ND	105.00/M	—
		200	200	1.2	—	-50 to 170	1N5402GICT-ND	.32	2.31	16.80	1N5402GITR-ND	105.00/M	—
		400	200	1.2	—	-50 to 170	1N5404GICT-ND	.32	2.31	16.80	1N5404GITR-ND	105.00/M	—
		600	200	1.2	—	-50 to 170	1N5406GICT-ND	.32	2.31	16.80	1N5406GITR-ND	105.00/M	—
		800	200	1.2	—	-50 to 170	1N5407GICT-ND	.32	2.31	16.80	1N5407GITR-ND	105.00/M	—
		1000	200	1.2	—	-50 to 170	1N5408GICT-ND	.32	2.31	16.80	1N5408GITR-ND	105.00/M	—
Schottky Barrier Rectifiers													
1	1.0	20	25	.45	—	-65 to 125	1N5817GICT-ND	.45	3.30	24.00	1N5817GITR-ND	—	114.00/M
		30	25	.55	—	-65 to 125	1N5818GICT-ND	.45	3.30	24.00	1N5818GITR-ND	—	114.00/M
		40	25	.60	—	-65 to 125	1N5819GICT-ND	.45	3.30	24.00	1N5819GITR-ND	—	114.00/M
2	3.0	20	80	.475	—	-65 to 125	1N5820GICT-ND	.83	6.05	44.00	1N5820GITR-ND	209.00/M	—
		30	80	.500	—	-65 to 125	1N5821GICT-ND	.83	6.05	44.00	1N5821GITR-ND	209.00/M	—
		40	80	.525	—	-65 to 125	1N5822GICT-ND	.83	6.05	44.00	1N5822GITR-ND	209.00/M	—
2	5.0	20	150	0.55	—	-65 to 125	SB520CT-ND	.39	3.30	27.50	SB520TR-ND	176.00/M	—
		30	150	0.55	—	-65 to 125	SB530CT-ND	.39	3.30	27.50	SB530TR-ND	176.00/M	—
		40	150	0.55	—	-65 to 125	SB540CT-ND	.39	3.30	27.50	SB540TR-ND	176.00/M	—
		50	150	0.67	—	-65 to 125	SB550CT-ND	.44	3.75	31.25	SB550TR-ND	200.00/M	—
		60	150	0.67	—	-65 to 125	SB560CT-ND	.44	3.75	31.25	SB560TR-ND	200.00/M	—

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Pricing			
							1	10	100	500
Silicon and Glass Passivated Bridge Rectifiers										
3	1.5	50	50	1.0	-55 to 150	W005GGI-ND	.46	3.90	32.50	130.00
		100	50	1.0	-55 to 150	W01GGI-ND	.46	3.90	32.50	130.00
		200	50	1.0	-55 to 150	W02GGI-ND	.46	3.90	32.50	130.00
		400	50	1.0	-55 to 150	W04GGI-ND	.46	3.90	32.50	130.00
		600	50	1.0	-55 to 150	W06GGI-ND	.49	4.20	35.00	140.00
		800	50	1.0	-55 to 150	W08GGI-ND	.49	4.20	35.00	140.00
		1000	50	1.0	-55 to 150	W10GGI-ND	.49	4.20	35.00	140.00
4	2.0	50	30	1.1	-55 to 165	2KBP005M-ND	.81	6.90	—	—
		100	30	1.1	-55 to 165	2KBP01M-ND	.81	6.90	—	—
		200	30	1.1	-55 to 165	2KBP02M-ND	.81	6.90	—	—
		400	30	1.1	-55 to 165	2KBP04M-ND	.81	6.90	—	—
		600	30	1.1	-55 to 165	2KBP06M-ND	.81	6.90	—	—
		800	30	1.1	-55 to 165	2KBP08M-ND	.81	6.90	—	—
		1000	30	1.1	-55 to 165	2KBP10M-ND	.81	6.90	—	—
5	4.0	50	200	1.1	-50 to 150	KBL005-ND	1.86	16.97	155.25	—
		100	200	1.1	-50 to 150	KBL01-ND	1.90	17.34	158.63	—
		200	200	1.1	-50 to 150	KBL02-ND	1.97	17.92	163.88	—
		400	200	1.1	-50 to 150	KBL04-ND	2.07	18.86	172.50	—
		600	200	1.1	-50 to 150	KBL06-ND	2.12	19.27	176.25	—
		800	200	1.1	-50 to 150	KBL08-ND	2.16	19.68	180.00	—
		1000	200	1.1	-50 to 150	KBL10-ND	2.25	20.50	187.50	—
6	6.0	50	175	1.0	-55 to 150	GBPC6005-ND	2.17	18.60	155.00	—
		100	175	1.0	-55 to 150	GBPC601-ND	2.17	18.60	155.00	—
		200	175	1.0	-55 to 150	GBPC602-ND	2.17	18.60	155.00	—
		400	175	1.0	-55 to 150	GBPC604-ND	2.17	18.60	155.00	—
		600	175	1.0	-55 to 150	GBPC606-ND	2.31	19.80	165.00	—
		800	175	1.0	-55 to 150	GBPC608-ND	2.31	19.80	165.00	—
		1000	175	1.0	-55 to 150	GBPC610-ND	2.31	19.80	165.00	—
7	12	50	200	1.1	-55 to 150	GBPC12005-ND	3.50	30.00	250.00	—
		100	200	1.1	-55 to 150	GBPC1201-ND	3.50	30.00	250.00	—
		200	200	1.1	-55 to 150	GBPC1202-ND	3.50	30.00	250.00	—
		400	200	1.1	-55 to 150	GBPC1204-ND	3.50	30.00	250.00	—
		600	200	1.1	-55 to 150	GBPC1206-ND	3.50	30.00	250.00	—
		800	200	1.1	-55 to 150	GBPC1208-ND	3.50	30.00	250.00	—
		1000	200	1.1	-55 to 150	GBPC1210-ND	3.50	30.00	250.00	—

(Continued)

Diodes-Bridge Rectifiers *(Cont.)*

Fig. 8

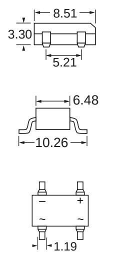


Fig. 9

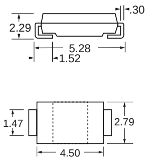


Fig. 10

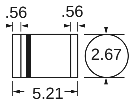


Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Pricing 1	10	100
Silicon and Glass Passivated Bridge Rectifiers (Cont.)									
7	25	50	300	1.1	-55 to 150	GBPC25005-ND	3.78	32.40	270.00
		100	300	1.1	-55 to 150	GBPC2501GI-ND	3.78	32.40	270.00
		200	300	1.1	-55 to 150	GBPC2502GI-ND	3.78	32.40	270.00
		400	300	1.1	-55 to 150	GBPC2504GI-ND	3.78	32.40	270.00
		600	300	1.1	-55 to 150	GBPC2506GI-ND	3.78	32.40	270.00
		800	300	1.1	-55 to 150	GBPC2508GI-ND	3.78	32.40	270.00
		1000	300	1.1	-55 to 150	GBPC2510GI-ND	3.78	32.40	270.00
7	35	50	400	1.1	-55 to 150	GBPC35005-ND	4.38	37.50	312.50
		100	400	1.1	-55 to 150	GBPC3501GI-ND	4.38	37.50	312.50
		200	400	1.1	-55 to 150	GBPC3502GI-ND	4.38	37.50	312.50
		400	400	1.1	-55 to 150	GBPC3504GI-ND	4.38	37.50	312.50
		600	400	1.1	-55 to 150	GBPC3506GI-ND	4.38	37.50	312.50
		800	400	1.1	-55 to 150	GBPC3508GI-ND	4.38	37.50	312.50
		1000	400	1.1	-55 to 150	GBPC3510GI-ND	4.38	37.50	312.50

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Rev. Voltage (V)	Peak Forward Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Typ. Rev. Recovery Time (µS)	Oper. Junction Temp. (°C)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500	1,800
Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifier													
8	1.0	200	50	1.1	5.0	-55 to 150	DF02SGICT-ND	.53	4.50	37.50	DF02SGITR-ND	225.00/M	—
		400	50	1.1	5.0	-55 to 150	DF04SGICT-ND	.53	4.50	37.50	DF04SGITR-ND	225.00/M	—
		600	50	1.1	5.0	-55 to 150	DF06SGICT-ND	.56	4.80	40.00	DF06SGITR-ND	240.00/M	—
Surface Mount Schottky Rectifier — DO-214AC													
9	1.0	20	30	0.50	0.5	-65 to 125	SS12GICT-ND	.35	3.00	25.00	SS12GITR-ND	—	150.00/M
		60	30	0.75	0.5	-65 to 125	SS16GICT-ND	.35	3.00	25.00	SS16GITR-ND	—	150.00/M
Surface Mount Schottky Barrier Rectifier — DO-213AB													
10	1.0	20	30	0.50	0.5	-55 to 125	SGL41-20GICT-ND	.28	2.40	20.00	SGL41-20GITR-ND	120.00/M	—
		40	30	0.50	0.5	-55 to 125	SGL41-40GICT-ND	.28	2.40	20.00	SGL41-40GITR-ND	120.00/M	—
		60	30	0.70	0.5	-55 to 150	SGL41-60GICT-ND	.28	2.40	20.00	SGL41-60GITR-ND	120.00/M	—

Microsemi
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Zener Diodes

Fig. 1
DO-35
500 mW

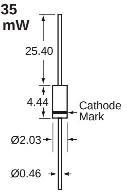


Fig. 2
DO-41
1 W

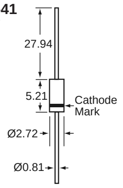
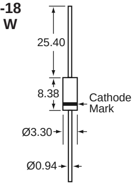


Fig. 3
T-18
5 W



500 mW Series DO-35 Silicon Zener Diodes, 1N5221 — 1N5281

(Value)	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA	*(Value)*	Nom. Zener Voltage Vz @ Izt Volts	Test Current Izt mA
21	2.4	20	34	6.2	20	47	17	7.4	61	47	2.7	74	130	0.95
22	2.5	20	35	6.8	20	48	18	7.0	62	51	2.5	75	140	0.90
23	2.7	20	36	7.5	20	49	19	6.6	63	56	2.2	76	150	0.85
24	2.8	20	37	8.2	20	50	20	6.2	64	60	2.1	77	160	0.80
25	3.0	20	38	8.7	20	51	22	5.6	65	62	2.0	78	170	0.74
26	3.3	20	39	9.1	20	52	24	5.2	66	68	1.8	79	180	0.68
27	3.6	20	40	10	20	53	25	5.0	67	75	1.7	81	200	0.65
28	3.9	20	41	11	20	54	27	4.6	68	82	1.5			
29	4.3	20	42	12	20	55	28	4.5	69	87	1.4			
30	4.7	20	43	13	9.5	57	33	3.8	70	91	1.4			
31	5.1	20	44	14	9.0	58	36	3.4	71	100	1.3			
32	5.6	20	45	15	8.5	59	39	3.2	72	110	1.1			
33	6.0	20	46	16	7.8	60	43	3.0	73	120	1.0			

1W Series, DO-41 Glass Zener Diodes
1N4728A — 1N4764A

(Value)	Zener Voltage (Vz) Volts	Test Current (Izt) mA	*(Value)*	Zener Voltage (Vz) Volts	Test Current (Izt) mA
28	3.3	76	46	18	14
29	3.6	69	47	20	12.5
30	3.9	64	48	22	11.5
31	4.3	58	49	24	10.5
32	4.7	53	50	27	9.5
33	5.1	49	51	30	8.5
34	5.6	45	52	33	7.5
35	6.2	41	53	36	7.0
36	6.8	37	54	39	6.5
37	7.5	34	55	43	6.0
38	8.2	31	56	47	5.5
39	9.1	28	57	51	5.0
40	10	25	58	56	4.5
41	11	23	59	62	4.0
42	12	21	60	68	3.7
43	13	19	61	75	3.3
44	15	17	62	82	3.0
45	16	15.5	63	91	2.8
			64	100	2.5

2 W Series, DO-41 Silicon Zener Diodes
2EZ3.6D5 — 2EZ200D5

(Value)	Nominal Zener Voltage (Vz) Volts	(Izt) mA	*(Value)*	Nominal Zener Voltage (Vz) Volts	(Izt) mA	*(Value)*	Nominal Zener Voltage (Vz) Volts	(Izt) mA
3.6	3.6	139	16	16	31.2	68	68	7.4
3.9	3.9	128	17	17	29.4	75	75	6.7
4.3	4.3	116	18	18	27.8	82	82	6.1
4.7	4.7	106	19	19	26.3	91	91	5.5
5.1	5.1	98	20	20	25	100	100	5.0
5.6	5.6	89.5	22	22	22.8	110	110	4.5
6.2	6.2	80.5	24	24	20.8	120	120	4.2
6.8	6.8	73.5	27	27	18.5	130	130	3.8
7.5	7.5	66.5	30	30	16.6	140	140	3.6
8.2	8.2	61	33	33	15.1	150	150	3.3
9.1	9.1	55	36	36	13.9	160	160	3.1
10	10	50	39	39	12.8	170	170	2.9
11	11	45.5	43	43	11.6	180	180	2.8
12	12	41.5	47	47	10.6	190	190	2.6
13	13	38.5	51	51	9.8	200	200	2.5
14	14	35.7	56	56	9.0			
15	15	33.4	62	62	8.1			

5 W Series, T-18 Silicon Zener Diodes
1N5333B — 1N5388B

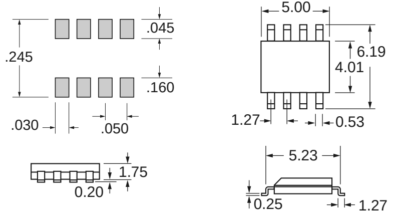
(Value)	Regulator Voltage (Vz)	Test Current (Iz)	*(Value)*	Regulator Voltage (Vz)	Test Current (Iz)	*(Value)*	Regulator Voltage (Vz)	Test Current (Iz)
33	3.3	380	52	15	75	71	60	20
34	3.6	350	53	16	75	72	62	20
35	3.9	320	54	17	70	73	68	20
36	4.3	290	55	18	65	74	75	20
37	4.7	260	56	19	65	75	82	15
38	5.1	240	57	20	65	76	87	15
39	5.6	220	58	22	50	77	91	15
40	6.0	200	59	24	50	78	100	12
41	6.2	200	60	25	50	79	110	12
42	6.8	175	61	27	50	80	120	10
43	7.5	175	62	28	50	81	130	10
44	8.2	150	63	30	40	82	140	8.0
45	8.7	150	64	33	40	83	150	8.0
46	9.1	150	65	36	30	84	160	8.0
47	10	125	66	39	30	85	170	8.0
48	11	125	67	43	30	86	180	5.0
49	12	100	68	47	25	87	190	5.0
50	13	100	69	51	25	88	200	5.0
51	14	100	70	56	20			

Fig.	DC Power Dissipation	Voltage Range (Code) See Chart	Digi-Key Part No.*	Cut Tape Pricing 1	10	100	Digi-Key Part No.*	Tape & Reel Pricing 3,000	4,000	6,000	8,000	10,000	12,000	24,000	30,000	Microsemi Part No.*
1	500 mW	2.4V — 200V	1N52(Value)BMSCT-ND	1.20	8.40	60.00	1N52(Value)BMSTR-ND	—	—	—	—	210.00/M	—	—	180.00/M	1N52(Value)B
2	1 W	3.3V — 100V	1N47(Value)AMSCT-ND	.25	1.65	13.20	1N47(Value)AMSTR-ND	—	74.00/M	—	59.00/M	—	—	51.00/M	—	1N47(Value)A
2	2 W	3.6V — 200V	2EZ(Value)D5MSCT-ND	.75	5.00	40.00	2EZ(Value)D5MSTR-ND	—	225.00/M	—	180.00/M	—	—	155.00/M	—	2EZ(Value)D5
3	5 W	3.3V — 200V	1N53(Value)BMSCT-ND	1.20	8.00	64.00	1N53(Value)BMSTR-ND	400.00/M	—	320.00/M	—	—	280.00/M	248.00/M	—	1N53(Value)B

⁎ For complete part number, substitute corresponding value from chart for (Value).

Transient Voltage Suppressor Arrays

SO-8 Package



SO-16 Package

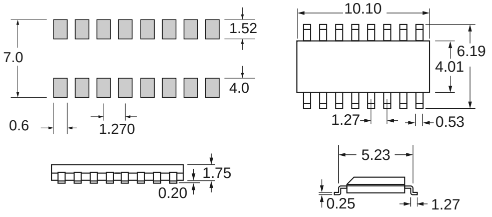
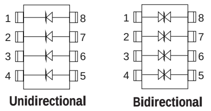


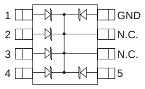
Fig.	Stand-off Voltage Vwm (V) Max.	Breakdown Voltage V_{BR} @ V_{BR} = 1mA (V) Min.	Clamping Voltage V_C @ 1 Amp (V) Max.	Leakage Current I_D @ V_{WM} (µAmps) Max.	Capacitance (f-1 MHz) @ 0 V C (pf) Typ.	Temperature Coefficient of V_{BR} αV_{BR} mV/°C Max.	Digi-Key Part No.	Pricing 1	10	100	Microsemi Part No.
SMDA (Unidirectional) and SMDAxxC (Bidirectional) Series — 300 Watt											
1	3.3	4	6.5	125	800	-3	SMDA03MS-ND	3.84	34.56	288.00	SMDA03
	5.0	6.0	9.8	100	600	3	SMDA05MS-ND	3.84	34.56	288.00	SMDA05
	12.0	13.3	19.0	1	185	10	SMDA12MS-ND	3.84	34.56	288.00	SMDA12
	15.0	16.7	24.0	1	140	13	SMDA15MS-ND	3.84	34.56	288.00	SMDA15
	24.0	26.7	43.0	1	90	30	SMDA24MS-ND	3.84	34.56	288.00	SMDA24
1	3.3	4.5	7.0	200	400	-5	SMDA03CMS-ND	4.20	37.80	315.00	SMDA03C
	5.0	6.0	9.8	100	300	1	SMDA05CMS-ND	4.20	37.80	315.00	SMDA05C
	12.0	13.3	19.0	1	95	8	SMDA12CMS-ND	4.20	37.80	315.00	SMDA12C
	15.0	16.7	24.0	1	70	11	SMDA15CMS-ND	4.20	37.80	315.00	SMDA15C
	24.0	26.7	43.0	1	45	28	SMDA24CMS-ND	4.20	37.80	315.00	SMDA24C
SMDB (Unidirectional) and SMDBxxC (Bidirectional) Series — 500 Watt											
1	3.3	4	6.5	125	800	-3	SMDB03MS-ND	4.32	38.88	324.00	SMDB03
	5.0	6.0	9.8	200	600	3	SMDB05MS-ND	4.32	38.88	324.00	SMDB05
	12.0	13.3	17.5	1	185	10	SMDB12MS-ND	4.32	38.88	324.00	SMDB12
	15.0	16.7	24.0	2	140	13	SMDB15MS-ND	4.32	38.88	324.00	SMDB15
	24.0	26.7	43.0	2	90	30	SMDB24MS-ND	4.32	38.88	324.00	SMDB24
1	3.3	4.5	7.0	200	400	-5	SMDB03CMS-ND	4.80	43.20	360.00	SMDB03C
	5.0	6.0	9.8	200	300	1	SMDB05CMS-ND	4.80	43.20	360.00	SMDB05C
	12.0	13.3	17.5	1	95	8	SMDB12CMS-ND	4.80	43.20	360.00	SMDB12C
	15.0	16.7	24.0	2	70	11	SMDB15CMS-ND	4.80	43.20	360.00	SMDB15C
	24.0	26.7	43.0	2	45	28	SMDB24CMS-ND	4.80	43.20	360.00	SMDB24C
SMDAxxC-5, Bidirectional — 300 Watt											
2	3.3	4	6.5	200	300	-5	SMDA03C-5MS-ND	4.24	38.16	318.00	SMDA03C-5
	5.0	6.0	9.8	100	200	3	SMDA05C-5MS-ND	4.24	38.16	318.00	SMDA05C-5
	12	13.3	19	1	75	10	SMDA12C-5MS-ND	4.24	38.16	318.00	SMDA12C-5
	15	16.7	24	1	50	13	SMDA15C-5MS-ND	4.24	38.16	318.00	SMDA15C-5
	24	26.7	43	1	35	30	SMDA24C-5MS-ND	4.24	38.16	318.00	SMDA24C-5
SMDAxx-6, Unidirectional — 300 Watt											
3	3.3	4	6.5	200	800	-3	SMDA03-6MS-ND	4.24	38.16	318.00	SMDA03-6
	5.0	6.0	9.8	100	550	3	SMDA05-6MS-ND	4.24	38.16	318.00	SMDA05-6
	12	13.3	19	1	185	10	SMDA12-6MS-ND	4.24	38.16	318.00	SMDA12-6
	15	16.7	24	1	140	13	SMDA15-6MS-ND	4.24	38.16	318.00	SMDA15-6
	24	26.7	43	1	88	30	SMDA24-6MS-ND	4.24	38.16	318.00	SMDA24-6
SMDAxxC-7, Bidirectional — 300 Watt											
4	3.3	4.5	7.0	200	300	-5	SMDA03C-7MS-ND	4.32	38.88	324.00	SMDA03C-7
	5.0	6.0	9.8	100	200	1	SMDA05C-7MS-ND	4.32	38.88	324.00	SMDA05C-7
	12	13.3	19	1	75	8	SMDA12C-7MS-ND	4.32	38.88	324.00	SMDA12C-7
	15	16.7	24	1	70	11	SMDA15C-7MS-ND	4.32	38.88	324.00	SMDA15C-7
	24	26.7	43	1	35	28	SMDA24C-7MS-ND	4.32	38.88	324.00	SMDA24C-7
SM8LCxx Series, Bidirectional — 500 Watt											
5	3.3	4	6.5	200	25	-3	SM8LC03MS-ND	4.32	38.88	324.00	SM8LC03
	5.0	6.0	9.8	125	25	3	SM8LC05MS-ND	4.32	38.88	324.00	SM8LC05
	12	13.3	17.5	1	25	10	SM8LC12MS-ND	4.32	38.88	324.00	SM8LC12
	15	16.7	24	2	25	13	SM8LC15MS-ND	4.32	38.88	324.00	SM8LC15
	24	26.7	43	2	25	30	SM8LC24MS-ND	4.32	38.88	324.00	SM8LC24
USB08xxC Series, Bidirectional — 500 Watt											
6	3.3	4	6.5	200	5	-5	USB0803CMS-ND	5.16	46.44	387.00	USB0803C
	5.0	6.0	9.8	5	5	3	USB0805CMS-ND	5.16	46.44	387.00	USB0805C
	12	13.3	17.9	1	5	10	USB0812CMS-ND	5.16	46.44	387.00	USB0812C
	15	16.7	25.5	1	5	13	USB0815CMS-ND	5.16	46.44	387.00	USB0815C
	24	26.7	47.5	1	5	30	USB0824CMS-ND	5.16	46.44	387.00	USB0824C
SM16 (Unidirectional) and SM16xxC (Bidirectional) Series — 300 Watt											
7	3.3	4	6.5	125	850	-3	SM1603MS-ND	5.40	48.60	405.00	SM1603
	5.0	6.0	9.8	200	880	3	SM1605MS-ND	5.40	48.60	405.00	SM1605
	12	13.3	17.5	1	440	10	SM1612MS-ND	5.40	48.60	405.00	SM1612
	15	16.7	24	1	400	13	SM1615MS-ND	5.40	48.60	405.00	SM1615
	24	26.7	43	2	275	30	SM1624MS-ND	5.40	48.60	405.00	SM1624
7	3.3	4	7.0	200	425	-5	SM1603CMS-ND	6.00	54.00	450.00	SM1603C
	5.0	6.0	9.8	200	440	1	SM1605CMS-ND	6.00	54.00	450.00	SM1605C
	12	13.3	17.5	1	220	8	SM1612CMS-ND	6.00	54.00	450.00	SM1612C
	15	16.7	24	2	200	11	SM1615CMS-ND	6.00	54.00	450.00	SM1615C
	24	26.7	43	2	137	28	SM1624CMS-ND	6.00	54.00	450.00	SM1624C
SM16LCxx (Unidirectional) and SM16LCxxC (Bidirectional) Series — 300 Watt											
8	3.3	4	7	400	25	-3	SM16LC03MS-ND	6.60	59.40	495.00	SM16LC03
	5.0	6.0	9.8	100	25	1	SM16LC05MS-ND	6.60	59.40	495.00	SM16LC05
	12	13.3	19.5	2	25	8	SM16LC12MS-ND	6.60	59.40	495.00	SM16LC12
	15	16.7	24	2	25	11	SM16LC15MS-ND	6.60	59.40	495.00	SM16LC15
	24	26.7	43	2	25	28	SM16LC24MS-ND	6.60	59.40	495.00	SM16LC24
9	3.3	4	7	400	25	-3	SM16LC03CMS-ND	7.68	69.12	576.00	SM16LC03C
	5.0	6.0	9.8	100	25	1	SM16LC05CMS-ND	7.68	69.12	576.00	SM16LC05C
	12	13.3	19.5	2	25	8	SM16LC12CMS-ND	7.68	69.12	576.00	SM16LC12C
	15	16.7	24	2	25	11	SM16LC15CMS-ND	7.68	69.12	576.00	SM16LC15C
	24	26.7	43	2	25	28	SM16LC24CMS-ND	7.68	69.12	576.00	SM16LC24C

Fig. 1



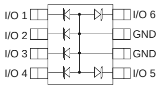
Features: • Protects 3.0/3.3 up through 24V Components • Protects 4 lines Unidirectional or Bidirectional • Provides electrically isolated protection • SO-8 packaging

Fig. 2



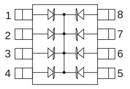
Features: • Protects up to 5 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • SO-8 packaging

Fig. 3



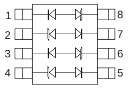
Features: • Protects up to 6 Unidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • SO-8 packaging

Fig. 4



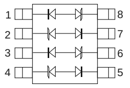
Features: • Protects up to 7 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • SO-8 packaging

Fig. 5



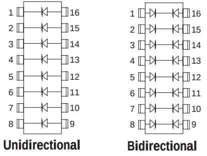
Features: • Protects up to 2 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • Provides electrically isolated protection • SO-8 packaging • Low capacitance of 25 pF per line pair

Fig. 6



Features: • Protects up to 2 Bidirectional lines • Surge protection Per IEC 1000-4-2, 1000-4-4 • Provides electrically isolated protection • SO-8 packaging • Ultra Low capacitance of 5 pF per line pair • Ultra Low leakage

Fig. 7



Features: • Protects 3.0/3.3 up through 24V Components • Protects 8 lines Unidirectional or Bidirectional • Provides electrically isolated protection • SO-16 packaging

Fig. 8

Features:
- Protects 3.0/3.3 up through 24V Components
- Protects 8 lines Unidirectional
- Provides electrically isolated protection
- SO-16 packaging

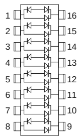
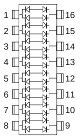


Fig. 9

Features:
- Protects 3.0/3.3 up through 24V Components
- Protects 8 lines Bidirectional
- Provides electrically isolated protection
- SO-16 packaging



•M•C•C• Micro Commercial Components

Rectifiers

Electrical Characteristics @ 25°C unless otherwise specified.

Series	DO-41	MELF	DO-214AA	DO-214AB	R-6
Average Forward Current, $I_{F(AV)}$	1.0A T_A = 75°C	1.0A T_A = 75°C	2.0A T_J = 75°C	3.0A T_J = 120°C	6.0A T_A = 60°C
Peak Forward Surge Current, I_{FSM}	30A 8.3ms, half sine	30A 8.3 ms, half sine	70A 8.3ms, half sine, T_J = 150°C	100A 8.3ms, half sine	400A 8.3ms, half sine
Maximum Forward Voltage, V_F	1.1V I_{FM} = 1.0A; T_J = 25°C*	1.1V I_{FM} = 1.0A; T_J = 25°C*	1.15V I_{FM} = 1.0A; T_J = 25°C*	1.20V I_{FM} = 3.0A; T_J = 25°C†	0.95V I_{FM} = 6.0A; T_J = 25°C‡
Maximum Reverse Recovery Time, Trr	—	—	2.0µs I_F=0.5A, I_R=1.0A, 1rr=0.25A	2.5µs I_J=0.5A, I_R=1.0A, 1rr=0.25A	—

* Pulse Test: Pulse width 300 µsec, Duty cycle 2%   † Pulse Test: Pulse width 200 µsec, Duty cycle 2%   ‡ Pulse Test: Pulse width 300 µsec, Duty cycle 1%

Fig.	Max. Peak Reverse Voltage	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel Pricing						MCC Part No.
			1	10	100	1,000		500	1,000	3,000	5,000	10,000	12,000	
DO-41 — 1 Amp Rectifier														
1	50V	1N4001MSCT-ND	—	.43	3.40	25.50	1N4001MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4001
	100V	1N4002MSCT-ND	—	.43	3.40	25.50	1N4002MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4002
	200V	1N4003MSCT-ND	—	.43	3.40	25.50	1N4003MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4003
	400V	1N4004MSCT-ND	—	.43	3.40	25.50	1N4004MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4004
	600V	1N4005MSCT-ND	—	.43	3.40	25.50	1N4005MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4005
	800V	1N4006MSCT-ND	—	.43	3.40	25.50	1N4006MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4006
	1000V	1N4007MSCT-ND	—	.43	3.40	25.50	1N4007MSTR-ND	—	—	—	17.00/M	15.00/M	—	1N4007
MELF — 1 Amp Glass Passivated Rectifier — SMT														
2	50V	DL4001MSCT-ND	—	1.95	16.58	136.50	DL4001MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4001
	100V	DL4002MSCT-ND	—	1.95	16.58	136.50	DL4002MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4002
	200V	DL4003MSCT-ND	—	1.95	16.58	136.50	DL4003MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4003
	400V	DL4004MSCT-ND	—	1.95	16.58	136.50	DL4004MSTR-ND	—	—	—	78.00/M	59.00/M	—	DL4004
	600V	DL4005MSCT-ND	—	2.10	17.85	147.00	DL4005MSTR-ND	—	—	—	84.00/M	63.00/M	—	DL4005
	800V	DL4006MSCT-ND	—	2.25	19.13	157.50	DL4006MSTR-ND	—	—	—	90.00/M	68.00/M	—	DL4006
	1000V	DL4007MSCT-ND	—	2.45	20.83	171.50	DL4007MSTR-ND	—	—	—	98.00/M	74.00/M	—	DL4007
DO-214AA — 2 Amp Silicon Rectifier — SMT														
3	50V	S2AMSCT-ND	—	2.50	20.00	150.00	S2AMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2A
	100V	S2BMSCT-ND	—	2.50	20.00	150.00	S2BMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2B
	200V	S2DMSCT-ND	—	2.50	20.00	150.00	S2DMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2D
	400V	S2GMSCT-ND	—	2.50	20.00	150.00	S2GMSTR-ND	—	—	100.00/M	—	—	88.00/M	S2G
	600V	S2JMSCT-ND	—	3.00	24.00	180.00	S2JMSTR-ND	—	—	120.00/M	—	—	105.00/M	S2J
	800V	S2KMSCT-ND	—	3.00	24.00	180.00	S2KMSTR-ND	—	—	120.00/M	—	—	105.00/M	S2K
	1000V	S2MMSCT-ND	—	3.00	24.00	180.00	S2MMSTR-ND	—	—	120.00/M	—	—	105.00/M	S2M
DO-214AB — 3 Amp Silicon Rectifier — SMT														
4	50V	S3AMSCT-ND	—	7.00	56.00	420.00	S3AMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3A
	100V	S3BMSCT-ND	—	7.00	56.00	420.00	S3BMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3B
	200V	S3DMSCT-ND	—	7.00	56.00	420.00	S3DMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3D
	400V	S3GMSCT-ND	—	7.00	56.00	420.00	S3GMSTR-ND	—	—	280.00/M	—	—	245.00/M	S3G
	600V	S3JMSCT-ND	—	9.00	72.00	540.00	S3JMSTR-ND	—	—	360.00/M	—	—	315.00/M	S3J
	800V	S3KMSCT-ND	—	9.00	72.00	540.00	S3KMSTR-ND	—	—	360.00/M	—	—	315.00/M	S3K
	1000V	S3MMSCT-ND	—	9.00	72.00	540.00	S3MMSTR-ND	—	—	360.00/M	—	—	315.00/M	S3M
R-6 — 6 Amp Rectifier														
5	50V	6A05MSCT-ND	.71	5.23	38.00	—	6A05MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A05
	100V	6A1MSCT-ND	.71	5.23	38.00	—	6A1MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A1
	200V	6A2MSCT-ND	.71	5.23	38.00	—	6A2MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A2
	400V	6A4MSCT-ND	.71	5.23	38.00	—	6A4MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A4
	600V	6A6MSCT-ND	.71	5.23	38.00	—	6A6MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A6
	800V	6A8MSCT-ND	.71	5.23	38.00	—	6A8MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A8
	1000V	6A10MSCT-ND	.71	5.23	38.00	—	6A10MSTR-ND	142.50	238.00	—	190.00/M	166.00/M	—	6A10

Fig. 1, DO-41
1 Amp

Dim.	Min.	Max.
A	4.22	5.21
B	2.03	2.72
C	.71	.86
D	25.40	—

DIMENSIONS (mm)

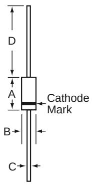


Fig. 2, MELF, SMT
1 Amp

Dim.	Min.	Max.
A	4.83	5.21
B	—	.56
C	2.41	2.51

DIMENSIONS (mm)

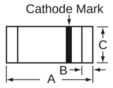


Fig. 3, DO-214AA, SMT
2 Amp

Dim.	Min.	Max.
A	1.91	2.92
B	2.06	2.21
C	.10	.20
D	—	.51
E	.76	1.52
F	1.65	2.13
G	5.21	5.59
H	4.06	4.57
J	3.30	3.94

DIMENSIONS (mm)

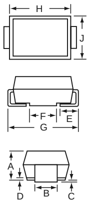


Fig. 4, DO-214AB, SMT
3 Amp

Dim.	Min.	Max.
A	1.91	2.41
B	2.92	3.07
C	.10	.20
D	—	.51
E	.76	1.52
G	7.75	8.13
H	6.60	7.11
J	5.59	6.22

DIMENSIONS (mm)

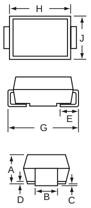
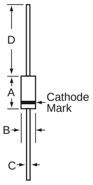


Fig. 5, R-6
6 Amp

Dim.	Min.	Max.
A	8.64	9.14
B	8.64	9.14
C	1.22	1.32
D	25.40	—

DIMENSIONS (mm)



B

•M•C•C• Micro Commercial Components

Surface Mount Schottky Rectifiers

Electrical Characteristics @ 25°C unless otherwise specified.

Series	DO-214AA		DO-214AB	
Average Forward Current, $I_{F(AV)}$	1.0A	T_J = 90°C	3.0A	T_J = 120°C
Peak Forward Surge Current, I_{FSM}	50A	8.3ms, half sine	100A	8.3ms, half sine
Maximum Forward Voltage, V_F	SK12 .45V SK13 .55V SK14 .60V SK15-16 .72V SK18-110 .80V	I_{FM}=1.0A T_J=25°C*	SK32-34 .50V SK35-38 .75V	I_{FM}=3.0A T_J=25°C†

* Pulse Test: Pulse width 300 µsec, Duty cycle 2%

† Pulse Test: Pulse width 200 µsec, Duty cycle 2%

Fig. 1, DO-214AA, 1 Amp

Dim.	Min.	Max.
A	1.91	2.92
B	2.06	2.21
C	.10	.20
D	—	.51
E	.76	1.52
F	1.65	2.13
G	5.21	5.59
H	4.06	4.57
J	3.30	3.94

DIMENSIONS (mm)

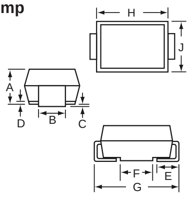


Fig. 2, DO-214AB, 3 Amp

Dim.	Min.	Max.
A	1.91	2.41
B	2.92	3.07
C	.10	.20
D	—	.51
E	.76	1.52
G	7.75	8.13
H	6.60	7.11
J	5.59	6.22

DIMENSIONS (mm)

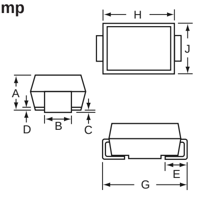


Fig.	Max. Peak Reverse Voltage	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel Pricing				MCC Part No.
			1	10	100	500		3,000	6,000	12,000	24,000	
DO-214AA 1 Amp Schottky Rectifier — SMT												
1	20V	SMB5817MSCT-ND	.42	3.78	31.50	131.25	SMB5817MSTR-ND	174.00/M	158.00/M	147.00/M	131.00/M	SMB5817 (SK12)
	30V	SMB5818MSCT-ND	.42	3.78	31.50	131.25	SMB5818MSTR-ND	174.00/M	158.00/M	147.00/M	131.00/M	SMB5818 (SK13)
	40V	SMB5819MSCT-ND	.42	3.78	31.50	131.25	SMB5819MSTR-ND	174.00/M	158.00/M	147.00/M	131.00/M	SMB5819 (SK14)
	50V	SMBSR105MSCT-ND	.56	5.04	42.00	175.00	SMBSR105MSTR-ND	232.00/M	210.00/M	196.00/M	175.00/M	SMBSR105 (SK15)
	60V	SMBSR106MSCT-ND	.56	5.04	42.00	175.00	SMBSR106MSTR-ND	232.00/M	210.00/M	196.00/M	175.00/M	SMBSR106 (SK16)
	80V	SMBSR108MSCT-ND	.56	5.04	42.00	175.00	SMBSR108MSTR-ND	232.00/M	210.00/M	196.00/M	175.00/M	SMBSR108 (SK18)
	100V	SMBSR1010MSCT-ND	.64	5.76	48.00	200.00	SMBSR1010MSTR-ND	266.00/M	240.00/M	224.00/M	200.00/M	SMBSR1010 (SK110)
DO-214AB 3 Amp Schottky Rectifier — SMT												
2	20V	SK32MSCT-ND	1.04	9.36	78.00	325.00	SK32MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK32
	30V	SK33MSCT-ND	1.04	9.36	78.00	325.00	SK33MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK33
	40V	SK34MSCT-ND	1.04	9.36	78.00	325.00	SK34MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK34
	50V	SK35MSCT-ND	1.04	9.36	78.00	325.00	SK35MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK35
	60V	SK36MSCT-ND	1.04	9.36	78.00	325.00	SK36MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK36
	80V	SK38MSCT-ND	1.04	9.36	78.00	325.00	SK38MSTR-ND	455.00/M	384.00/M	346.00/M	332.00/M	SK38

•M•C•C• Micro Commercial Components

Single Phase Bridge Rectifiers

Fig. 1, RB-15
1.5 Amp

DIMENSIONS (mm)		
Dim.	Min.	Max.
A	—	9.10
B	—	4.00
C	25.40	—
D	27.90	—
E	4.60	5.60
F	0.76	0.81

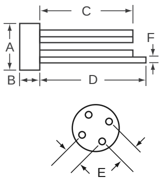


Fig. 2, RS-4L
4 Amp

DIMENSIONS (mm)		
Dim.	Min.	Max.
A	18.50	19.50
B	15.20	16.30
C	19.00	—
D	6.00	6.50
E	4.60	5.60
G	—	2.10
H	1.20	1.30

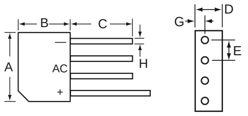


Fig. 3, DB-1 — 1 Amp

DIMENSIONS (mm)		
Dim.	Min.	Max.
A	9.02	9.27
B	6.22	6.48
C	7.62	8.89
D	3.94	4.19
E	2.92	3.43
F	—	1.52
G	—	.51
H	4.95	5.21

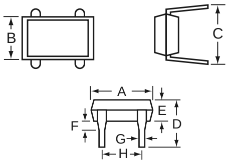


Fig. 4, BR-6
8 Amp

DIMENSIONS (mm)		
Dim.	Min.	Max.
A	—	15.50
B	—	6.33
C	—	25.40
D	10.41	12.70
E	1.00	—
G	3.70	—

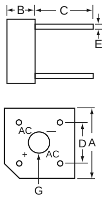


Fig. 5, PB-6
6 Amp, 10 Amp

DIMENSIONS (mm)		
Dim.	Min.	Max.
A	—	15.50
B	—	6.33
C	—	19.20
D	10.30	11.30
E	1.00	—
G	3.70	—

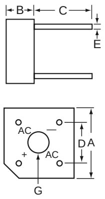


Fig. 6, MB-35W
15 Amp, 25 Amp, 35 Amp

DIMENSIONS (mm)		
Dim.	Min.	Max.
A	28.33	28.83
B	10.85	11.35
C	19.65	—
D	17.10	19.10
E	.96	1.07
G	4.90	—
H	10.90	11.90

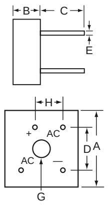
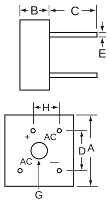


Fig. 7, MP-50W
50 Amp

DIMENSIONS (mm)		
Dim.	Min.	Max.
A	28.33	28.83
B	10.85	11.35
C	19.65	—
D	17.10	19.10
E	.96	1.07
G	4.90	—
H	10.90	11.90



Electrical Characteristics @ 25°C unless specified

Series	RB-15 RB151–RB157	RS-4L RS401L–RS407L	DB-1 DB101–DB107	BR-6 MB805–MB810	PB-6 PB605–PB610	PB-6 MB1005–MB1010	MB-35W MB1505W–MB1510W	MB-35W MB2505W–MB2510W	MB-35W MB3505W–MB3510W	MP-50W MP5005W–MP5010W
Average Forward Current, $I_{F(AV)}$	1.5A T_J = 25°C	4.0A T_J = 50°C	1A T_A = 40°C	8.0A T_C = 50°C	6.0A T_J = 50°C	10.0A T_J = 75°C	15.0A T_J = 55°C	25.0A T_J = 55°C	35.0A T_J = 55°C	50.0A T_J = 55°C
Peak Forward Surge Current, I_{FSM}	50A 8.3ms, half sine	200A 8.3 ms, half sine	50A 8.3ms, half sine	125A 8.3ms, half sine	125A 8.3ms, half sine	150A 8.3ms, half sine	300A 8.3ms, half sine	300A 8.3ms, half sine	300A 8.3ms, half sine	400A 8.3ms, half sine
Maximum Forward Voltage Drop Per Element, V_F	1.0V I_{FM}=1.5A, T_J=25°C*	1.0V I_{FM}=4.0A, T_J=25°C*	1.1V I_{FM}=1.0A, T_A=25°C	1.0V I_{FM}=4.0A, T_A=25°C*	1.1V I_{FM}=3.0A, T_J=25°C*	1.1V I_{FM}=5.0A, T_J=25°C*	1.1V I_{FM}=7.5A, T_J=25°C*	1.1V I_{FM}=12.5A, T_J=25°C*	1.1V I_{FM}=17.5A, T_J=25°C*	1.2V I_{FM}=20A, T_J=25°C*

* Pulse Test: Pulse width 300 µsec, Duty cycle 1%

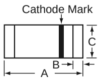
Fig.	Max. Peak Reverse Voltage	Digi-Key Part No.	Price Each 1	10	100	500	1,000	MCC Part No.
		RB-15 — 1.5 Amp Single Phase Bridge Rectifier						
1	50V	RB151MS-ND	.52	.46	.39	.33	.26	RB151
	100V	RB152MS-ND	.52	.46	.39	.33	.26	RB152
	200V	RB153MS-ND	.56	.49	.42	.35	.28	RB153
	400V	RB154MS-ND	.60	.53	.45	.38	.30	RB154
	600V	RB155MS-ND	.60	.53	.45	.38	.30	RB155
	800V	RB156MS-ND	.64	.56	.48	.40	.32	RB156
	1000V	RB157MS-ND	.76	.67	.57	.48	.38	RB157
		RS-4L — 4 Amp Single Phase Bridge Rectifier						
2	50V	RS401LMS-ND	1.56	1.37	1.17	.98	.78	RS401L
	100V	RS402LMS-ND	1.56	1.37	1.17	.98	.78	RS402L
	200V	RS403LMS-ND	1.56	1.37	1.17	.98	.78	RS403L
	400V	RS404LMS-ND	1.60	1.40	1.20	1.00	.80	RS404L
	600V	RS405LMS-ND	1.76	1.54	1.32	1.10	.88	RS405L
	800V	RS406LMS-ND	1.92	1.68	1.44	1.20	.96	RS406L
	1000V	RS407LMS-ND	2.00	1.75	1.50	1.25	1.00	RS407L
		DB-1 — 1 Amp Single Phase Glass Passivated Bridge Rectifier						
3	50V	DB101MS-ND	.52	.50	.39	.33	.26	DB101
	100V	DB102MS-ND	.52	.50	.39	.33	.26	DB102
	200V	DB103MS-ND	.56	.54	.42	.35	.28	DB103
	400V	DB104MS-ND	.60	.58	.45	.38	.30	DB104
	600V	DB105MS-ND	.64	.62	.48	.40	.32	DB105
	800V	DB106MS-ND	.72	.69	.54	.45	.36	DB106
	1000V	DB107MS-ND	.80	.77	.60	.50	.40	DB107
		BR-6 — 8 Amp Single Phase Bridge Rectifier						
4	50V	MB805MS-ND	2.20	1.93	1.65	1.38	1.10	MB805
	100V	MB81MS-ND	2.20	1.93	1.65	1.38	1.10	MB81
	200V	MB82MS-ND	2.20	1.93	1.65	1.38	1.10	MB82
	400V	MB84MS-ND	2.20	1.93	1.65	1.38	1.10	MB84
	600V	MB86MS-ND	2.20	1.93	1.65	1.38	1.10	MB86
	800V	MB88MS-ND	2.20	1.93	1.65	1.38	1.10	MB88
	1000V	MB810MS-ND	2.20	1.93	1.65	1.38	1.10	MB810
		PB-6 — 6 Amp Single Phase Bridge Rectifier						
5	50V	PB605MS-ND	1.68	1.47	1.26	1.05	.84	PB605
	100V	PB61MS-ND	1.68	1.47	1.26	1.05	.84	PB61
	200V	PB62MS-ND	1.76	1.54	1.32	1.10	.88	PB62
	400V	PB64MS-ND	1.76	1.54	1.32	1.10	.88	PB64
	600V	PB66MS-ND	1.84	1.61	1.38	1.15	.92	PB66
	800V	PB68MS-ND	1.92	1.68	1.44	1.20	.96	PB68
	1000V	PB610MS-ND	2.20	1.93	1.65	1.38	1.10	PB610

Fig. No.	Max. Peak Reverse Voltage	Digi-Key Part No.	Price Each 1	10	100	500	1,000	MCC Part No.
		PB-6 — 10 Amp Single Phase Bridge Rectifier						
5	50V	MB1005MS-ND	2.20	1.93	1.65	1.38	1.10	MB1005
	100V	MB101MS-ND	2.20	1.93	1.65	1.38	1.10	MB101
	200V	MB102MS-ND	2.20	1.93	1.65	1.38	1.10	MB102
	400V	MB104MS-ND	2.40	2.10	1.80	1.50	1.20	MB104
	600V	MB106MS-ND	2.80	2.45	2.10	1.75	1.40	MB106
	800V	MB108MS-ND	2.80	2.45	2.10	1.75	1.40	MB108
	1000V	MB1010MS-ND	3.00	2.63	2.25	1.88	1.50	MB1010
		MB-35W — 15 Amp Single Phase Bridge Rectifier						
6	50V	MB1505WMS-ND	4.00	3.50	3.00	2.50	2.00	MB1505W
	100V	MB151WMS-ND	4.40	3.85	3.30	2.75	2.20	MB151W
	200V	MB152WMS-ND	4.20	3.68	3.15	2.63	2.10	MB152W
	400V	MB154WMS-ND	4.40	3.85	3.30	2.75	2.20	MB154W
	600V	MB156WMS-ND	4.60	4.03	3.45	2.88	2.30	MB156W
	800V	MB158WMS-ND	4.60	4.03	3.45	2.88	2.30	MB158W
	1000V	MB1510WMS-ND	5.00	4.38	3.75	3.13	2.50	MB1510W
		MB-35W — 25 Amp Single Phase Bridge Rectifier						
6	50V	MB2505WMS-ND	4.40	3.85	3.30	2.75	2.20	MB2505W
	100V	MB251WMS-ND	4.40	3.85	3.30	2.75	2.20	MB251W
	200V	MB252WMS-ND	4.60	4.03	3.45	2.88	2.30	MB252W
	400V	MB254WMS-ND	4.80	4.20	3.60	3.00	2.40	MB254W
	600V	MB256WMS-ND	4.80	4.20	3.60	3.00	2.40	MB256W
	800V	MB258WMS-ND	5.00	4.38	3.75	3.13	2.50	MB258W
	1000V	MB2510WMS-ND	5.20	4.55	3.90	3.25	2.60	MB2510W
		MB-35W — 35 Amp Single Phase Bridge Rectifier						
6	50V	MB3505WMS-ND	4.80	4.20	3.60	3.00	2.40	MB3505W
	100V	MB351WMS-ND	4.80	4.20	3.60	3.00	2.40	MB351W
	200V	MB352WMS-ND	4.80	4.20	3.60	3.00	2.40	MB352W
	400V	MB354WMS-ND	5.00	4.38	3.75	3.13	2.50	MB354W
	600V	MB356WMS-ND	5.00	4.38	3.75	3.13	2.50	MB356W
	800V	MB358WMS-ND	5.20	4.55	3.90	3.25	2.60	MB358W
	1000V	MB3510WMS-ND	5.60	4.90	4.20	3.50	2.80	MB3510W
		MP-50WW — 50 Amp Single Phase Bridge Rectifier						
7	50V	MP5005WMS-ND	6.40	5.60	4.80	4.00	3.20	MP5005W
	100V	MP501WMS-ND	6.40	5.60	4.80	4.00	3.20	MP501W
	200V	MP502WMS-ND	6.40	5.60	4.80	4.00	3.20	MP502W
	400V	MP504WMS-ND	6.40	5.60	4.80	4.00	3.20	MP504W
	600V	MP506WMS-ND	6.80	5.95	5.10	4.25	3.40	MP506W
	800V	MP508WMS-ND	6.80	5.95	5.10	4.25	3.40	MP508W
	1000V	MP5010WMS-ND	7.96	6.97	5.97	4.98	3.98	MP5010W

•M•C•C• Micro Commercial Components

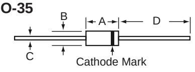
SW Rectifiers

Fig. 1
MINIMELF
SMT



DIMENSIONS (mm)		
Dim.	Min.	Max.
A	3.40	3.61
B	.20	.41
C	1.40	1.50

Fig. 2
DO-35



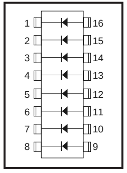
DIMENSIONS (mm)		
Dim.	Min.	Max.
A	—	4.22
B	—	2.01
C	—	.51
D	25.40	—

Fig.	Max. Reverse Voltage V_R	Average Rectified Current I_O	Power Dissi-pation P_{TOT}	Reverse Recovery Time T_{RR}	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000	10,000	MCC Part No.
					500mW Silicon Epitaxial Diode								
1	75V	150mA	500mW	4nS*	DL4148MSCT-ND	1.10	9.35	77.00	DL4148MSTR-ND	72.00/M	66.00/M	44.00/M	DL4148
2	75V	150mA	500mW	4nS*	1N4148MSCT-ND	.53	4.20	35.00	1N4148MSTR-ND	—	—	14.00/M	IN4148

* I_F=10mA; V_R=6V; R_L=100Ω

Microsemi
Progress Powered by Technology

Switching Diode Arrays



Features: • 8 Isolated lines • Standard SOIC 16 pin Surface Mount Package • UL 94V-0 Flammability Classification

Vbr @ Ibr = 100µA (V) Min.	Ir +25°C (µA) Max.	(V) @ Vr	CAP @ 0 V (pF) Max.	trr (nS) Max.	Vf @ If = 100mA (V) Min.	Max.	Digi-Key Part No.	Pricing 1	10	100
100	.025 .100	20 50	4.0	5.0	—	1.20	S16-4148MS-ND	6.60	59.40	495.00
75	.500	75	2.5	4.0	0.82	0.92	S16-4150MS-ND	7.60	68.40	570.00

NEC RF and Microwave Products

Low Noise Bipolar Transistors

Fig.	Test f GHz	NF Typ dB	GA Typ dB	VCE V	S21E2 IC mA	Typ dB	fT Typ GHz	HFE Typ	IC Max mA	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000
1	2.0	1.9	9.5	6	10	9	10.0	120	35	NE68019-ND	.66	5.50	25.67	NE68019TR-ND	367.00/M
2	2.0	1.7	9.5	6	10	8.5	10.0	100	35	NE68030-ND	.84	7.00	32.67	NE68030TR-ND	467.00/M
3	2.0	1.7	11	6	10	9	10.0	100	35	NE68039R-ND*	.90	7.50	35.00	NE68039RTR-ND	500.00/M
1	1.0	1.4	14	8	20	14	7.0	120	65	NE68119-ND	.60	5.00	23.33	NE68119TR-ND	333.00/M
2	1.0	1.5	13.5	8	20	13	7.0	120	65	NE68130-ND	.75	6.25	29.17	NE68130TR-ND	417.00/M
3	1.0	1.2	13.5	8	20	15	9.0	100	65	NE68139-ND	.75	6.25	29.17	NE68139TR-ND	417.00/M
3	1.0	1.2	13.5	8	20	15	9.0	100	65	NE68139R-ND*	.75	6.25	29.17	NE68139RTR-ND	417.00/M
1	2.0	1.5	7.5	3	10	9	12.0	110	30	NE68519-ND	.66	5.50	25.67	NE68519TR-ND	367.00/M
2	2.0	1.5	7	3	10	8.5	12.0	110	30	NE68530-ND	.81	6.75	31.50	NE68530TR-ND	450.00/M
1	2.0	1.3	7.5	1	10	7.5	9.0	100	30	NE68719-ND	.75	6.25	29.17	NE68719TR-ND	417.00/M
2	2.0	1.3	7.5	1	10	7.5	9.0	100	30	NE68730-ND	1.05	8.75	40.83	NE68730TR-ND	583.00/M
1	2.0	1.5	8	3	20	8	9.5	120	100	NE68819-ND	.60	5.00	23.33	NE68819TR-ND	333.00/M
4	2.0	1.6	9	3	10	14	14.0	120	30	NE696M01-ND	.87	7.25	33.83	NE696M01TR-ND	483.00/M
1	1.0	1.4	12.5	3	7	9	4.5	120	100	NE85619-ND	.54	4.50	21.00	NE85619TR-ND	300.00/M
2	1.0	1.3	12	10	20	12	4.5	110	100	NE85630-ND	.66	5.50	25.67	NE85630TR-ND	367.00/M
5	1.0	1.4	9	10	20	11.5	7.0	120	100	NE85633-ND	.66	5.50	25.67	NE85633TR-ND	367.00/M
3	1.0	1.5	13.5	10	20	13	7.0	120	100	NE85639R-ND*	.66	5.50	25.67	NE85639RTR-ND	367.00/M
Dual Package															
4	2.0	1.9	—	3	5	7.5	8.0	120	35	UPA800T-ND	1.17	9.75	45.50	UPA800TTR-ND	650.00/M
	2.0	1.5	—	3	10	8.5	12.0	100	30	UPA806T-ND	1.17	9.75	45.50	UPA806TTR-ND	650.00/M
	1.0	1.2	—	3	7	9	4.5	120	100	UPA810T-ND	.99	8.25	38.50	UPA810TTR-ND	550.00/M
	2.0	1.5	—	3	7	5	9.0	120	100	UPA814T-ND	1.17	9.75	45.50	UPA814TTR-ND	650.00/M

* Reverse Pinout (see Fig.)

Medium Power Bipolar Transistors

Fig.	Test f GHz	P1dB				ifT Typ GHz	HFE Typ	IC Max mA	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000
		VCE V	IC mA	Pin dBM	Typ dBM									
6	1.0	12.5	100	20.5	27.5	5.5	100	250	NE46134-ND	1.68	14.00	65.33	NE46134TR-ND	933.00
	1.0	10	40	13	22	6.5	120	100	NE85634-ND	.90	7.50	35.00	NE85634TR-ND	500.00

Bipolar Oscillator Transistors

Fig.	Posc				fT Typ GHz	HFE Typ	IC Max mA	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000
	f GHz	VCE V	IC mA	Typ W									
2	2.5	2.5	0.4	0.001	2	100	50	NE94430-ND	.36	3.00	14.00	—	—
5	2.5	2.5	0.4	0.001	2	100	50	NE94433-ND	.36	3.00	14.00	NE94433TR-ND	200.00/M

General Purpose GaAs FETs

Fig.	Gate Length um	Gate Width um	Frequency Range GHHz	Test f GHz	NF/GA Bias		NF dB	GA dB	P1dB dBm	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000
					VDS V	IDS mA									
3	1	400	0.1-6	0.9	5	10	1.1	20	12	NE25139-ND	1.50	12.50	58.33	NE25139TR-ND	833.00/M
7	0.6	400	0.1-6	2.0	2	5	0.6	16	16	NE34018-ND	1.65	13.75	64.17	NE34018TR-ND	848.00/M

Silicon MMIC Wideband Amplifiers

Fig.	f Typ @ 3dB down MHz	Vcc V	Icc Typ mA	NF Typ dB	Gain Typ dB	RLin Typ dB	RLout Typ dB	P1dB Typ dBm	ISOL Typ dB	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000	3,000
8	1900	5	49	6.0	23	14	4	+15.9	35	UPC1678GV-ND	2.65	23.85	112.63	UPC1678GVTR-ND	1634.00	—
4	2900	5	12	5.0	13	25	12	-2.6	30	UPC2711TB-ND	1.41	11.75	54.83	UPC2711TBTR-ND	—	783.00/M
	2600	5	12	4.5	20	12	13	-0.4	33	UPC2712TB-ND	1.41	11.75	54.83	UPC2712TBTR-ND	—	667.00/M
	2700	3	7.5	6.0	12	11	5.5	-3.0	33	UPC2745TB-ND	1.38	11.50	53.67	UPC2745TBTR-ND	—	767.00/M
	1500	3	7.5	4.0	19	13	8.5	-3.7	45	UPC2746TB-ND	1.38	11.50	53.67	UPC2746TBTR-ND	—	767.00/M
	2900	3	27	6.5	14.5	8.5	12	+7	25	UPC2762TB-ND	1.38	11.50	53.67	UPC2762TBTR-ND	—	767.00/M
4	2400	3	27	5.5	20	12	9	+6.5	29	UPC2763TB-ND	1.38	11.50	53.67	UPC2763TBTR-ND	—	767.00/M
	2400	3	36	6.0	21	14	10	+11.5	30	UPC2771TB-ND	1.38	11.50	53.67	UPC2771TBTR-ND	—	767.00/M
	2700	5	25	6.0	23	7.5	20	+6	32	UPC2776TB-ND	1.41	11.75	54.83	UPC2776TBTR-ND	—	783.00/M

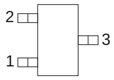
Silicon MMIC Prescalers

Fig.	fin GHz		Pin dBm		Vcc V	Icc Typ mA	Divide Ratio	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000
	Min	Max	Min	Max									
8	0.5	3	-15	+6	5	19	64/128/256	UPB1506GV-ND	3.00	27.00	127.50	UPB1506GVTR-ND	1850.00
	0.5	3	-15	+6	5	19	64/128/256	UPB1507GV-ND	3.00	27.00	127.50	UPB1507GVTR-ND	1850.00
	0.5	3	-10	+6	5	10	2	UPB1508GV-ND	3.00	27.00	127.50	UPB1508GVTR-ND	1850.00
	0.5	1	-20	-5	3	5	2/4/8	UPB1509GV-ND	3.00	27.00	127.50	UPB1509GVTR-ND	1850.00
	0.5	3	-10	+6	5	15	4	UPB1510GV-ND	3.00	27.00	127.50	UPB1510GVTR-ND	1850.00

GaAs MMIC SPDT Switches

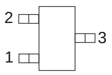
Fig.	Frequency Range GHz	IL Typ dB	Isolation @ 2GHz dB	RLin Min dB	RLout Min dB	P1dB dBm	tsw ns	Vcont V	Digi-Key Part No.	Pricing 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000
8	0.1-2.5	0.6	22	11	11	+30	30	+3/0	UPG137GV-ND	2.85	25.65	121.13	—	—
9	0.1-2.5	0.5	20	11	11	+30	30	+3/0	UPG152TA-ND	1.62	13.50	63.00	UPG152TATR-ND	900.00/M

Fig. 1 **SMT**



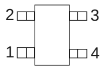
Std. Pin Conn.
1 Emitter
2 Base
3 Collector

Fig. 2 **SOT-323**



Std. Pin Conn.
1 Emitter
2 Base
3 Collector

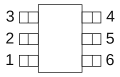
Fig. 3 **SOT-143R**



Pin Conn. for UPC1688G
1. GND
2. OUT
3. V_{CC}
4. IN

Std. Pin Conn.	**Rev. Pin Conn.**	**Pin Conn. for NE25139**
1 Collector	1 Emitter	1 Source
2 Emitter	2 Collector	2 Drain
3 Base	3 Emitter	3 Gate 2
4 Emitter	4 Base	4 Gate 1

Fig. 4 **SOT-363**

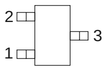


Pin Conn. for NE696M01
1. Emitter
2. Emitter
3. Base
4. Emitter
5. Emitter
6. Collector

Pin Conn. for UPA810T/ UPA814T
1. C2 4. B1
2. B2 5. E1
3. C1 6. E2

Pin Conn. for UPA800T/ UPA806T
1. C2 4. B1
2. E1 5. B2
3. C1 6. E2

Fig. 5 **SOT-23**



Std. Pin Conn.
1 Emitter
2 Base
3 Collector

Fig. 6 **SOT-89**

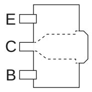
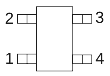


Fig. 7 **SOT-343**



Pin Conn. for NE25118 NE25139
1 Source
2 Drain
3 Gate 2
4 Gate 1

Pin Conn. for NE34018
1 Source
2 Gate
3 Source
4 Drain

Fig. 8 **8 pin SSOP**

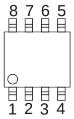
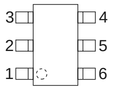


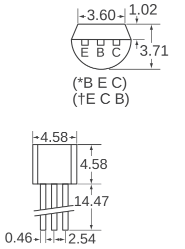
Fig. 9 **SOT-26**



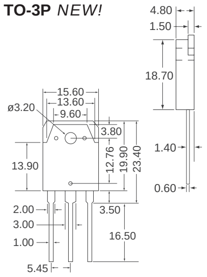
FAIRCHILD
SEMICONDUCTOR

Transistors

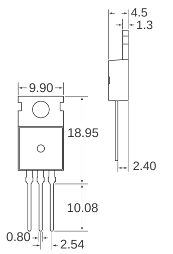
TO-92



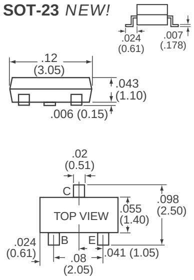
TO-3P *NEW!*



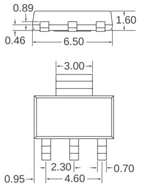
TO-220 *NEW!*



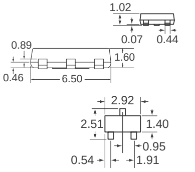
SOT-23 *NEW!*



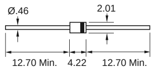
SOT-223 *NEW!*



SuperSOT™ 3 *NEW!*



DO-35 *NEW!*



Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 1	25	100
NPN Transistors						
GP Ampl SW, 30V, 500MA	100	TO-92	2N3704-ND†	.24	4.50	13.00
SSGP, 40V, 100mA	100	TO-92	2N3904-ND	.22	4.05	11.70
SS GP Ampl, 30V, 50mA	50	TO-92	2N4123-ND	.22	4.05	11.70
SSGP, 25V, 50mA	60	TO-92	2N4124-ND	.22	4.05	11.70
SS GP Ampl, 40V, 500mA	50	TO-92	2N4400-ND	.22	4.05	11.70
SSGP, 40V, 500mA	100	TO-92	2N4401-ND	.22	4.05	11.70
LLGP, 80V, 10mA	60	TO-92	2N4410-ND	.22	4.05	11.70
LL LN Ampl, 30V, 10mA	350	TO-92	2N5088-ND	.22	4.05	11.70
LL LN Ampl, 25V, 10mA	450	TO-92	2N5089-ND	.22	4.05	11.70
LLGP, 50V, 10mA	250	TO-92	2N5210-ND	.22	4.05	11.70
SS GP Ampl, 140V, 50mA	60	TO-92	2N5550-ND	.26	4.95	14.30
Saturated SW, 15V, 10mA	40	TO-92	2N5769-ND	.23	4.28	12.35
RF Ampl, 15V,50mA	20	TO-92	2N5770-ND	.23	4.28	12.35
Saturated SW, 15V, 300mA	30	TO-92	2N5772-ND	.23	4.28	12.35
SS GP Ampl, 100V, 50mA	80	TO-92	2N5830-ND	.28	5.25	14.56
LL Ampl, 60V, 10mA	150	TO-92	2N5961-ND	.25	4.73	13.65
SS GP Ampl, 25V, 2mA	150	TO-92	MPS2924-ND	.41	8.27	22.68
SS GP Ampl, 25V, 100mA	250	TO-92	MPS6515-ND	.22	4.05	11.70
SS GP Ampl, 80V, 50mA	50	TO-92	MPSA06-ND	.20	3.83	11.05
Darlington, 20V, 10mA	20K	TO-92	MPSA12-ND	.20	3.83	11.05
Darlington, 30V, 100mA	10K	TO-92	MPSA13-ND	.20	3.83	11.05
Darlington, 30V, 100mA	20K	TO-92	MPSA14-ND	.20	3.83	11.05
Medium Power, 300V, 30mA	40	TO-92	MPSA42-ND	.20	3.83	11.05
Medium Power, 200V, 30mA	50	TO-92	MPSA43-ND	.20	3.83	11.05
RF Ampl, 25V, 50mA	60	TO-92	MPSH10-ND*	.35	6.88	19.36
SSGP, 30V, 500mA, 1A	100	TO-92	PN2222-ND	.20	3.83	11.05
SSGP, 40V, 500mA, 1A	100	TO-92	PN2222A-ND	.20	3.83	11.05
Saturated SW, 15V, 10mA	20	TO-92	PN2369-ND	.20	3.83	11.05
Saturated, 15V, 100mA	40	TO-92	PN2369A-ND	.20	3.83	11.05
LL Ampl, 60V, 10mA	250	TO-92	PN2484-ND	.20	3.83	11.05
LLGP, 25V, 1mA	150	TO-92	PN3565-ND	.22	4.05	11.70
SSGP, 30V, 100mA	150	TO-92	PN3566-ND	.22	4.05	11.70
SSGP, 40V, 150mA	40	TO-92	PN3567-ND	.22	4.05	11.70
SSGP, 40V, 150mA	100	TO-92	PN3569-ND	.22	4.05	11.70
SSHS, 15V, 100mA	35	TO-92	PN4275-ND	.22	4.05	11.70
SSGP Ampl, 25V, 100mA	50	TO-92	PN5135-ND	.32	6.25	17.60
Darlington, 100V, 1.5A	1,000	TO-92	2N7052-ND *NEW!*	.33	6.19	17.16
GP Ampl, 40V, 600mA	20	TO-92	2N4401D75ZCT-ND** *NEW!*	.22	4.05	11.70
GP Ampl, 40V, 600mA	20	TO-92	2N4401D26ZCT-ND** *NEW!*	.22	4.05	11.70
GP Ampl, 45V, 500mA	80	TO-92	PN100RMCT-ND** *NEW!*	.26	4.95	14.30
GP Ampl, 40V, 1.0A	35	TO-92	PN2222AD26ZCT-ND** *NEW!*	.20	3.83	11.05
N-Channel Switch, 30V 50mA	60	TO-92	PN4392FS-ND *NEW!*	.34	6.38	17.68
GP Ampl, 80V, 500mA	100	TO-92	MPSA06_D26ZTR-ND *NEW!*		91.80/2,000	
GP Ampl, 45V, 100mA	400	TO-92	MPSA18-ND *NEW!*	.22	4.05	11.70
SS Ampl, 300V, 500mA	25	TO-92	MPSA42_D26ZTR-ND *NEW!*		91.80/2,000	
Darlington, 100V, 10A	1,000	TO-3P	TIP142TU-ND *NEW!*	1.16	24.06	77.00
Darlington, 100V, 2A	1,000	TO-220	TIP112TU-ND *NEW!*	.55	10.35	31.05
Darlington, 100V, 5A	1,000	TO-220	TIP122FS-ND *NEW!*	.55	10.35	31.05
Darlington, 100V, 5A	1,000	TO-220	TIP122TU-ND *NEW!*	.55	10.35	31.05
Darlington, 100V, 8A	1,000	TO-220	TIP102TU-ND *NEW!*	.74	13.88	41.63
GP Ampl, 300V, 500mA	25	SOT-223	PZTA42CT-ND** *NEW!*	.47	9.45	25.92
GP Ampl, 40V, 200mA	40	SOT-223	2N3904D26ZCT-ND** *NEW!*	.22	4.05	11.70
GP Ampl, 40V, 1.0A	35	SOT-223	PZT2222ACT-ND** *NEW!*	.47	9.45	25.92
GP Ampl, 60V, 1.5A	25	SOT-223	BCP55FSCT-ND** *NEW!*	.43	8.66	23.76
Darlington, 40V, 1.2A	10,000	SOT-23	MMBT6427FSCT-ND** *NEW!*	.24	4.50	13.00
GP Ampl, 40V, 1.0A	35	SOT-23	MMBT2222AFSCT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 30V, 100mA	300	SOT-23	MMBT5088CT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 40V, 600mA	20	SOT-23	MMBT4401FSCT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 80V, 500mA	100	SOT-23	MMBTA06FSCT-ND** *NEW!*	.23	4.28	12.35
GP Ampl, 40V, 200mA	40	SOT-23	MMBT3904FSCT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 50V, 0.5A	250	SOT-23	MMBT6428CT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 65V, 100mA	200	SOT-23	BC846BCT-ND** *NEW!*	.70	13.05	37.70
GP Ampl, 45V, 1.5A	160	SOT-23	BC81740CT-ND** *NEW!*	.18	3.38	9.75
High V Amp, 300V, 500mA	25	SOT-23	MMBTA42FSCT-ND** *NEW!*	.23	4.28	12.35
RF, 25V, 50mA	60	SOT-23	MMBTH10FSCT-ND** *NEW!*	.35	6.88	19.36
RF, 12V, 50mA	25	SOT-23	MMBT5179CT-ND** *NEW!*	.50	10.11	27.72
Epitaxial, 100V, 1.0A	40	TO-220	TIP29CFS-ND *NEW!*	.50	9.30	27.90
Epitaxial, 100V, 3.0A	25	TO-220	TIP31CFS-ND *NEW!*	.50	9.30	27.90
Epitaxial, 100V, 3.0A	25	TO-220	TIP31CTU-ND *NEW!*	.50	9.30	27.90
Epitaxial, 100V, 6.0A	30	TO-220	TIP41CTU-ND *NEW!*	.56	10.50	31.50
PNP Transistors						
SS GP Ampl, 40, 100mA	50	TO-92	2N3905-ND	.22	4.05	11.70
SSGP, 40V, 100mA	100	TO-92	2N3906-ND	.22	4.05	11.70
SS GP Ampl, 25V, 50mA	120	TO-92	2N4125-ND	.22	4.05	11.70
SSGP, 25V, 50mA	60	TO-92	2N4126-ND	.22	4.05	11.70
SS GP Ampl, 40, 500mA	50	TO-92	2N4402-ND	.22	4.05	11.70
SSGP, 40V, 500mA	100	TO-92	2N4403-ND	.22	4.05	11.70
LLGP, 50V, 10mA	250	TO-92	2N5087-ND	.22	4.05	11.70
SS GP Ampl, 120, 50mA	40	TO-92	2N5400-ND	.20	3.83	11.05
SS GP Ampl, 150, 50mA	60	TO-92	2N5401-ND	.20	3.83	11.05
HS SW, 15V, 10mA	50	TO-92	2N5771-ND	1.35	26.95	80.85
SSGP, 25V, 300mA	30	TO-92	PN3638A-ND	.22	4.05	11.70
High Current Dr, 80V, 500mA	50	TO-92	MPSA56-ND	.20	3.83	11.05
High V Amp, 300V, 500mA	25	TO-92	MPSA92-ND	.29	5.40	15.60
Medium Power, 200V, 30mA	40	TO-92	MPSA93-ND	.24	4.50	12.48
SS GP Ampl, 100V, 50mA	40	TO-92	MPSL51-ND	.26	4.88	13.52
SSGP, 40V, 500mA	100	TO-92	PN2907-ND	.20	3.83	11.05
SSGP, 60V, 500mA	100	TO-92	PN2907A-ND	.20	3.83	11.05
SS GP Ampl, 40V, 50mA	100	TO-92	PN3251-ND	.39	7.88	21.60
Saturated SW, 12V, 50mA	30	TO-92	PN3640-ND	.24	4.50	13.00
SSGP, 40V, 50mA	70	TO-92	PN4121-ND	.25	4.74	13.16
SSGP, 40V, 50mA	150	TO-92	PN4122-ND	.22	4.05	11.70
LLLN, 60V, 1mA	300	TO-92	PN4249-ND	.22	4.05	11.70
LLLN, 40V, 1mA	250	TO-92	PN4250-ND	.22	4.05	11.70
LLLN, 60V, 1mA	250	TO-92	PN4250A-ND	.22	4.05	11.70
SS GP Ampl, 150V, 10mA	40	TO-92	PN4888-ND	.37	7.19	20.24
SSGP Ampl, 30V, 50mA	150	TO-92	PN4917-ND	.22	4.05	11.70
Saturated SW, 10V, 30mA	20	TO-92	PN5134-ND	.22	4.05	11.70
LL Ampl, 30V, 10mA	50	TO-92	PN5138-ND	.22	4.05	11.70
SS GP Ampl, 20V, 300mA	30	TO-92	PN5142-ND	.42	8.13	22.88
GP Ampl, 40V, 600mA	30	TO-92	2N4403D26ZCT-ND** *NEW!*	.22	4.05	11.70
Darlington, 30V, 1.2A	5,000	TO-92	MPSA63-ND *NEW!*	.20	3.83	11.05
GP Ampl, 40V, 200mA	60	TO-92	2N3906D26ZCT-ND** *NEW!*	.22	4.05	11.70
GP Ampl, 60V, 500mA	100	TO-92	MPSA05-ND *NEW!*	.20	3.83	11.05
Epitaxial, -100V, -3A	25	TO-220	TIP32CFS-ND *NEW!*	.51	9.53	28.58
Epitaxial, -100V, -3A	25	TO-220	TIP32CTU-ND *NEW!*	.51	9.53	28.58
Darlington, -100V, -10A	1,000	TO-220	TIP147TU-ND *NEW!*	1.22	25.44	81.40
Darlington, -100V, -5A	1,000	TO-220	TIP127FS-ND *NEW!*	.58	10.88	32.63
Darlington, -100V, -5A	1,000	TO-220	TIP127TU-ND *NEW!*	.57	10.73	32.18
Darlington, -100V, -5A	1,000	TO-220	TIP125TU-ND *NEW!*	.57	10.73	32.18
Darlington, -100V, -8A	1,000	TO-220	TIP107TU-ND *NEW!*	.77	14.48	43.43
Darlington, 30V, 1.2A	10,000	SOT-23	MMBTA64FSCT-ND** *NEW!*	.23	4.28	12.35
Epitaxial, -30V, -100mA	110	SOT-23	BC858CCT-ND** *NEW!*	.18	3.38	9.75
GP Ampl, 60V, 800mA	75	SOT-23	MMBT2907AFSCT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 50V, 100mA	250	SOT-23	MMBT5087CT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 40V, 600mA	30	SOT-23	MMBT4403FSCT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 40V, 200mA	60	SOT-23	MMBT3906FSCT-ND** *NEW!*	.16	2.93	8.45
GP Ampl, 25V, 200mA	120	SOT-23	MMBT4126FSCT-ND** *NEW!*	.22	4.05	11.70
GP Ampl, 80V, 500mA	100	SOT-23	MMBTA56FSCT-ND** *NEW!*	.23	4.28	12.35
High V Amp, 300V, 500mA	25	SOT-23	MMBTA92FSCT-ND** *NEW!*	.23	4.28	12.35
Supersot-3, 30V,1.0A	70	SOT-23	FMMT549FSCT-ND** *NEW!*	1.16	24.06	77.00
RF, 20V, 50mA	60	SOT-23	MMBTH81CT-ND** *NEW!*	.36	6.75	18.72
N-Channel J-FET Transistors						
GP Amp	—	TO-92	2N5457-ND	.40	7.81	22.00
VHF Amp & Mixer	—	TO-92	MPF102-ND	.28	5.25	14.56

Zener Volt. V_R (V)	I_R (μA)	Pkg.	Digi-Key Part No.	Pricing 1	10	100	Tape and Reel Size	Pricing
Zener Transistors								
3.0	5.0	DO-35	1N5232BTRFSCT-ND** *NEW!*	.12	.90	6.50	5,000	20.00/M
1.0	1.0	DO-35	1N751ATRCT-ND** *NEW!*	.13	.99	7.15	5,000	22.00/M
14.0	0.05	SOT-23	BZX84C20FSCT-ND** *NEW!*	.20	1.53	11.05	3,000	39.95/M
2.0	2.0	SOT-23	BZX84C5V1FSCT-ND** *NEW!*	.20	1.53	11.05	3,000	39.95/M
9.1	1.0	SOT-23	MMBZ5242BFSCT-ND** *NEW!*	.18	1.35	9.75	3,000	35.25/M

† * (See drawings above for pin layout).

** For Tape and Reel Part No., change the CT to TR. Please call 1-800-DIGI-KEY for Tape and Reel Pricing.

(Continued)

FAIRCHILD SEMICONDUCTOR Transistors *(Cont.)*

Fig. 1 *NEW!*

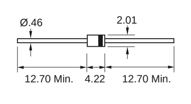


Fig. 2 *NEW!*

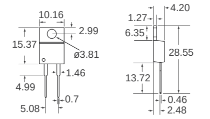


Fig. 3 *NEW!*

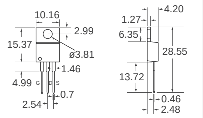


Fig. 4 *NEW!*

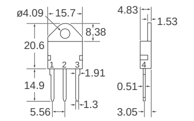


Fig. 5 *NEW!*

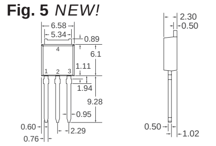


Fig. 6 *NEW!*

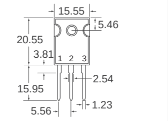


Fig. 7 *NEW!*

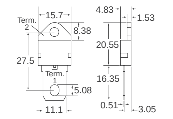


Fig. 8 *NEW!*

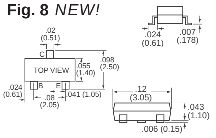


Fig. 9 *NEW!*

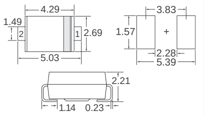


Fig. 10 *NEW!*

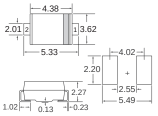


Fig. 11 *NEW!*

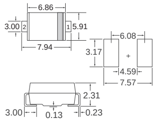


Fig. 12 *NEW!*

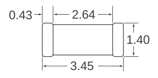


Fig. 13 *NEW!*

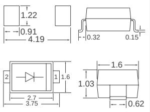


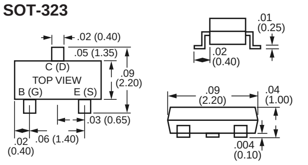
Fig.	Max. Reverse Voltage (V)	Max. Ave. Rectified Current (mA)	Pkg.	Digi-Key Part No.	Pricing 1	10	100	Tape and Reel* Size	Pricing
1	100	200mA	DO-35	1N914BTRCT-ND *NEW!*	.08	.63	4.55	10,000	11.90/M
	100	200mA	DO-35	1N914TRCT-ND *NEW!*	.08	.63	4.55	10,000	11.90/M
	150	200mA	DO-35	1N3595TRCT-ND *NEW!*	.13	.99	7.15	10,000	18.70/M
	100	200mA	DO-35	1N4448TRCT-ND *NEW!*	.08	.63	4.55	10,000	11.90/M
	50	200mA	DO-35	1N4454TRCT-ND *NEW!*	.08	.63	4.55	10,000	11.90/M
1	100	200mA	DO-35	1N4148FS-ND *NEW!*	.08	.63	4.55	—	—
2	200	15A	TO-220AC	MUR1520FS-ND *NEW!*	.91	7.60	60.80	—	—
	400	15A	TO-220AC	MUR1540-ND *NEW!*	.99	8.25	66.00	—	—
	600	15A	TO-220AC	MUR1560-ND *NEW!*	1.09	9.08	72.60	—	—
	600	15A	TO-220AC	RURP1560-ND *NEW!*	1.40	11.65	93.20	—	—
	1,000	8A	TO-220AC	MUR8100E-ND *NEW!*	.79	6.60	52.80	—	—
2	1,000	8A	TO-220AC	RURP8100-ND *NEW!*	1.16	9.63	77.00	—	—
	200	8A	TO-220AC	MUR820FS-ND *NEW!*	.77	5.76	43.20	—	—
	400	8A	TO-220AC	MUR840-ND *NEW!*	.77	5.76	43.20	—	—
	600	8A	TO-220AC	MUR860-ND *NEW!*	.77	5.76	43.20	—	—
	600	8A	TO-220AC	RURP860-ND *NEW!*	.83	6.88	55.00	—	—
2	1,000	15A	TO-220AC	RURP15100-ND *NEW!*	1.42	11.34	85.05	—	—
	600	30A	TO-220AC	RURP3060-ND *NEW!*	1.98	15.84	118.80	—	—
3	200	8A	TO-220AB	MUR1620CTFS-ND *NEW!*	.79	6.58	52.60	—	—
4	200	15A	TO-218AC	MUR3020PT-ND *NEW!*	2.03	16.20	121.50	—	—
	400	15A	TO-218AC	MUR3040PT-ND *NEW!*	2.04	16.28	122.10	—	—
	600	15A	TO-218AC	MUR3060PT-ND *NEW!*	2.26	18.04	135.30	—	—
5	200	6A	TO-251AA	RURD620CC-ND *NEW!*	.92	7.70	61.60	—	—
6	1,000	30A	TO-247	RURG30100-ND *NEW!*	2.50	20.00	155.54	—	—
	1,200	30A	TO-247	RURG30120-ND *NEW!*	2.55	20.39	158.62	—	—
	200	30A	TO-247	RURG3020CC-ND *NEW!*	3.66	29.30	227.92	—	—
	600	30A	TO-247	RURG3060-ND *NEW!*	2.37	18.92	141.90	—	—
	600	30A	TO-247	RURG3060CC-ND *NEW!*	3.61	28.91	224.84	—	—
6	600	50A	TO-247	RURG5060-ND *NEW!*	3.51	28.12	218.68	—	—
	1,000	80A	TO-247	RURG80100-ND *NEW!*	5.15	41.18	320.32	—	—
	600	80A	TO-247	RURG8060-ND *NEW!*	5.20	41.58	323.40	—	—
7	600	100A	TO-218	RURU10060-ND *NEW!*	5.52	44.18	372.74	—	—
	600	150A	TO-218	RURU15060-ND *NEW!*	7.88	63.01	531.63	—	—
	600	80A	TO-218	RURU8060-ND *NEW!*	5.43	43.47	366.80	—	—
8	85	200mA	SOT-23	BAS16FSCT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
	250	200mA	SOT-23	BAS21FSCT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
	30	200mA	SOT-23	BAT54CFSCT-ND *NEW!*	.30	2.25	15.60	3,000	60.00/M
	30	200mA	SOT-23	BAT54FSCT-ND *NEW!*	.30	2.25	15.60	3,000	60.00/M
	30	200mA	SOT-23	BAT54SFSCT-ND *NEW!*	.30	2.25	15.60	3,000	60.00/M
8	70	200mA	SOT-23	BAV70FSCT-ND *NEW!*	.18	1.35	9.75	3,000	35.25/M
	50	200mA	SOT-23	BAV74FSCT-ND *NEW!*	.18	1.35	9.75	3,000	35.25/M
	70	200mA	SOT-23	BAV99FSCT-ND *NEW!*	.18	1.35	9.75	3,000	35.25/M

Fig.	Max. Reverse Voltage (V)	Max. Ave. Rectified Current (mA)	Pkg.	Digi-Key Part No.	Pricing 1	10	100	Tape and Reel* Size	Pricing
8	100	200mA	SOT-23	MMBD1203CT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
	100	200mA	SOT-23	MMBD1204CT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
	200	200mA	SOT-23	MMBD1503ACT-ND *NEW!*	.33	2.48	17.16	3,000	66.00/M
	100	200mA	SOT-23	MMBD4148CCCT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
	100	200mA	SOT-23	MMBD4148FSCT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
8	100	200mA	SOT-23	MMBD7000FSCT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
	100	200mA	SOT-23	MMBD914FSCT-ND *NEW!*	.20	1.53	11.05	3,000	39.95/M
9	200	1.0A	DO-214AC	ES1DFSCT-ND *NEW!*	.37	2.88	20.24	7,500	78.20/M
10	200	2.0A	DO-214AA	ES2DFSCT-ND *NEW!*	.40	3.20	21.96	3,000	103.70/M
11	200	3.0A	DO-214AB	ES3DFSCT-ND *NEW!*	.53	4.24	31.80	3,000	143.10/M
12	100	200mA	LL-34	FDLL4148CT-ND *NEW!*	.18	1.35	9.75	2,500	35.26/M
13	20	500mA	SOD-123	MBR0520LCT-ND *NEW!*	.38	3.05	20.88	3,000	98.60/M

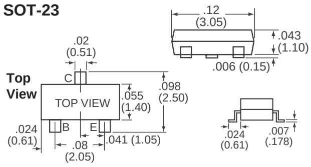
* For Tape & Reel Part No., change CT to TR.

DIODES INCORPORATED Transistors

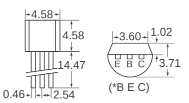
SOT-323



SOT-23



TO-92



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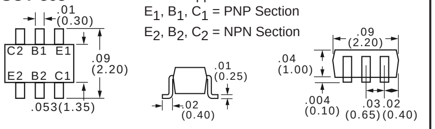
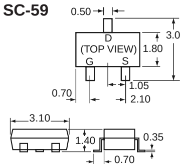
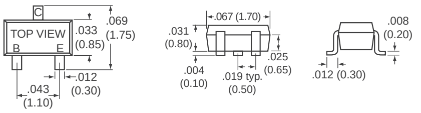


SC-59



SOT-523



Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 10	100	Tape and Reel** Size	Pricing
NPN Transistors							
S.S., 40V, 600mA	100	SOT-323	MMST2222ADICT-ND*	3.25	23.40	3,000	111.00/M
S.S., 40V, 600mA	20	SOT-323	MMST4401CT-ND	3.25	23.40	3,000	111.00/M
S.S., 25V, 200mA	60	SOT-323	MMST4124DICT-ND*	3.25	23.40	3,000	111.00/M
S.S., 160V, 200mA	30	SOT-323	MMST5551DICT-ND*	3.25	23.40	3,000	111.00/M
Darlington Amp, 40V, 500mA	14K	SOT-323	MMST6427DICT-ND*	3.25	23.40	3,000	111.00/M
S.S., 60V, 500mA	100	SOT-323	MMSTA05DICT-ND*	3.60	27.00	3,000	135.00/M
S.S., 80V, 500mA	100	SOT-323	MMSTA06DICT-ND*	3.60	27.00	3,000	135.00/M
Darlington Amp, 30V, 300mA	10K	SOT-323	MMSTA13DICT-ND*	3.60	27.00	3,000	135.00/M
Darlington Amp, 30V, 300mA	20K	SOT-323	MMSTA14DICT-ND*	3.60	27.00	3,000	135.00/M
S.S., 300V, 200mA	25	SOT-323	MMSTA42DICT-ND*	3.60	27.00	3,000	135.00/M
SMD 350mW, 40V, 1.0	100	SOT-23	MMBT2222ADICT-ND	2.63	18.20	3,000	70.00/M
SMD 350mW, 40V, 0.3	100	SOT-23	MMBT3904DICT-ND	2.25	15.60	3,000	60.00/M
SMD 350mW, 40V, 0.75	100	SOT-23	MMBT4401DICT-ND	2.63	18.20	3,000	70.00/M
Gen. Purp. 60V, 100mA, 0.25	50	SOT-23	MMBTA05DICT-ND	3.63	25.52	3,000	104.00/M
Gen. Purp., 80V, 100mA, 0.25	50	SOT-23	MMBTA06DICT-ND	3.63	25.52	3,000	104.00/M
Darlington Amp. 30V, 100mA	10K	SOT-23	MMBTA13DICT-ND	3.63	25.52	3,000	104.00/M
Darlington Amp. 30V, 100mA	20K	SOT-23	MMBTA14DICT-ND	3.63	25.52	3,000	104.00/M
S.S., 25V, 200mA	60	SOT-23	MMBT4124DICT-ND*	2.63	18.20	3,000	70.00/M
Darlington Amp, 40V, 500mA	14K	SOT-23	MMBT6427DICT-ND*	3.63	25.52	3,000	104.00/M
S.S., 300V, 200mA	25	SOT-23	MMBTA42DICT-ND*	3.63	25.52	3,000	104.00/M

** For Tape & Reel Part No., change CT to TR.

(Continued)

Transistors *(Cont.)*

Description	Min. HFE	Pkg.	Digi-Key Part No.	Pricing 10	Pricing 100	Tape and Reel** Size	Tape and Reel** Pricing
NPN Transistors (Cont.)							
SMD VHF/UHF, 25V, 50mA	30	SOT-23	MMBTH10DICT-ND*	4.00	28.80	3,000	136.00/M
SMD VHF/UHF, 40V, 50mA	60	SOT-23	MMBTH24DICT-ND*	4.00	28.80	3,000	136.00/M
S.S., 40V, 600mA	35	SOT-523	MMBT2222ATDICT-ND *NEW!*	2.63	18.20	3,000	70.00/M
S.S., 40V, 200mA	30	SOT-523	MMBT3904TDICT-ND *NEW!*	2.25	15.60	3,000	60.00/M
S.S., 40V, 600mA	20	SOT-523	MMBT4401TDICT-ND *NEW!*	2.63	18.20	3,000	70.00/M
PNP Transistors							
S.S., –60V, –600mA	75	SOT-323	MMST2907ACT-ND	3.25	23.40	3,000	111.00/M
S.S., –40V, –200mA	60	SOT-323	MMST3906CT-ND	3.25	23.40	3,000	111.00/M
S.S., –25V, –200mA	60	SOT-323	MMST4126DICT-ND*	3.25	23.40	3,000	111.00/M
S.S., –150V, –200mA	50	SOT-323	MMST5401DICT-ND*	3.25	23.40	3,000	111.00/M
S.S., –60V, –500mA	100	SOT-323	MMSTA55DICT-ND*	3.60	27.00	3,000	135.00/M
S.S., –80V, –500mA	100	SOT-323	MMSTA56DICT-ND*	3.60	27.00	3,000	135.00/M
Darlington Amp, –30V, –500mA	10K	SOT-323	MMSTA63DICT-ND*	3.60	27.00	3,000	135.00/M
Darlington Amp, –30V, –500mA	20K	SOT-323	MMSTA64DICT-ND*	3.60	27.00	3,000	135.00/M
S.S., –300V, –100mA	25	SOT-323	MMSTA92DICT-ND*	3.60	27.00	3,000	135.00/M
Gen. Purp., 40V, 100mA	30	TO-92	2N3906DICT-ND	1.45	11.60	—	—
SMD 350mW, 40V, 0.75	100	SOT-23	MMBT4403DICT-ND	2.63	18.20	3,000	70.00/M
SMD Gen. Purp., 60V, 100mA	50	SOT-23	MMBTA55DICT-ND	3.63	25.52	3,000	104.00/M
SMD Gen. Purp., 80V, 100mA	50	SOT-23	MMBTA56DICT-ND	3.63	25.52	3,000	104.00/M
SMD Gen. Purp., 60V, 150mA	300	SOT-23	MMBT2907ADICT-ND	2.63	18.20	3,000	70.00/M
S.S., –25V, –200mA	60	SOT-23	MMBT4126DICT-ND*	2.63	18.20	3,000	70.00/M
Darlington Amp, –30V, –500mA	10K	SOT-23	MMBTA63DICT-ND*	3.63	25.52	3,000	104.00/M
Darlington Amp, –30V, –500mA	20K	SOT-23	MMBTA64DICT-ND*	3.63	25.52	3,000	104.00/M
S.S., –300V, –100mA	25	SOT-23	MMBTA92DICT-ND*	3.63	25.52	3,000	104.00/M
S.S., -60V, -600mA	50	SOT-523	MMBT2907ATDICT-ND *NEW!*	2.63	18.20	3,000	70.00/M
S.S., -40V, -200mA	30	SOT-523	MMBT3906TDICT-ND *NEW!*	2.25	15.60	3,000	60.00/M
S.S., -40V, -600mA	20	SOT-523	MMBT4403TDICT-ND *NEW!*	2.63	18.20	3,000	70.00/M
Dual NPN Transistor							
S.S., 40V, 600mA	35	SOT-363	MMDT2222ACT-ND	4.00	28.80	3,000	136.00/M
S.S., 40V, 200mA	100	SOT-363	MMDT3904DICT-ND*	4.00	28.80	3,000	136.00/M
S.S., 40V, 600mA	100	SOT-363	MMDT4401DICT-ND*	4.00	30.00	3,000	150.00/M
S.S., 25V, 200mA	60	SOT-363	MMDT4124DICT-ND*	4.00	30.00	3,000	150.00/M
S.S., 160V, 200mA	30	SOT-363	MMDT5551DICT-ND*	4.00	30.00	3,000	150.00/M
Dual PNP Transistors							
S.S., –60V, –600mA	75	SOT-363	MMDT2907ACT-ND	4.00	28.80	3,000	136.00/M
S.S., –40V, –200mA	60	SOT-363	MMDT3906CT-ND	4.00	28.80	3,000	136.00/M
S.S., –40V, –600mA	100	SOT-363	MMDT4403DICT-ND*	4.00	30.00	3,000	150.00/M
S.S., –25V, –200mA	60	SOT-363	MMDT4126DICT-ND*	4.00	30.00	3,000	150.00/M
S.S., –150V, –200mA	50	SOT-363	MMDT5401DICT-ND*	4.00	30.00	3,000	150.00/M
Complementary NPN/PNP Transistors							
S.S., 40V, 600mA/ S.S., 60V, 600mA	35/50	SOT-363	MMDT2227DICT-ND*	4.00	28.80	3,000	136.00/M
S.S., 40V, 200mA/ S.S., 40V, 200mA	40/60	SOT-363	MMDT3946CT-ND	4.00	28.80	3,000	136.00/M
S.S., 40V, 600mA/ S.S., 40V 600mA	20/30	SOT-363	MMDT4413CT-ND	4.00	30.00	3,000	150.00/M
S.S., 40V, 200mA/ S.S., 40V 200mA	60/60	SOT-363	MMDT4146DICT-ND*	4.00	30.00	3,000	150.00/M
S.S., 160V, 200mA/ S.S., 160V 200mA	30/50	SOT-363	MMDT5451DICT-ND*	4.00	30.00	3,000	150.00/M

MOSFETs

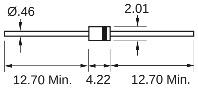
Description	RDS (on) Type	Pkg.	Digi-Key Part No.	Pricing 10	Pricing 100	Tape and Reel** Size	Tape and Reel** Pricing
N-Channel							
Enhance., 60V, 0.115A	3.2Ω	SOT-23	2N7002DICT-ND	4.00	30.00	3,000	150.00/M
Enhance., 60V, 0.250A	5.0Ω	SOT-23	BS870DICT-ND	4.00	30.00	3,000	150.00/M
Enhance., 50V, 0.200A	3.5Ω	SOT-23	BSS138DICT-ND	4.00	30.00	3,000	150.00/M
Enhance., 60V, 0.500A	5.0Ω	SOT-23	MMBF170DICT-ND	3.00	21.60	3,000	102.00/M
Enhance., 30V, 1.1A	0.17Ω	SC-59	DMN100DICT-ND	7.04	52.80	3,000	293.00/M
Enhance., 60V, 0.115A	3.2Ω	SOT-323	2N7002WCT-ND	4.80	36.00	3,000	180.00/M
Enhance., 50V, 0.200A	3.5Ω	SOT-323	BSS138WDICT-ND	4.40	33.00	3,000	165.00/M
Dual N-Channel							
Enhance., 60V, 0.115A	7.5Ω	SOT-363	2N7002DWDICT-ND	4.80	36.00	3,000	200.00/M
Enhance., 50V, 0.200A	3.5Ω	SOT-363	BSS138DWDICT-ND	5.28	39.60	3,000	219.00/M
P-Channel							
Enhance., –50V, –0.130A	10Ω	SOT-23	BSS84DICT-ND	4.00	30.00	3,000	150.00/M
Enhance., –50V, –0.130A	10Ω	SOT-323	BSS84WDICT-ND	4.40	33.00	3,000	165.00/M

* See drawings above for pin layout.

** For Tape & Reel Part No., change CT to TR.

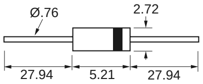
Zener Diodes

DO-35 Zener Diodes — 500mW (+5%)



Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Impedance ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 10,000
3.3	20	28	1N5226BDICT-ND	.36	2.10	13.65	56.70	1N5226BDITR-ND	36.00/M
3.6	20	24	1N5227BDICT-ND	.36	2.10	13.65	56.70	1N5227BDITR-ND	36.00/M
3.9	20	23	1N5228BDICT-ND	.36	2.10	13.65	56.70	1N5228BDITR-ND	36.00/M
4.3	20	22	1N5229BDICT-ND	.36	2.10	13.65	56.70	1N5229BDITR-ND	36.00/M
4.7	20	19	1N5230BDICT-ND	.36	2.10	13.65	56.70	1N5230BDITR-ND	36.00/M
5.1	20	17	1N5231BDICT-ND	.36	2.10	13.65	56.70	1N5231BDITR-ND	36.00/M
5.6	20	11	1N5232BDICT-ND	.36	2.10	13.65	56.70	1N5232BDITR-ND	36.00/M
6.0	20	7	1N5233BDICT-ND	.36	2.10	13.65	56.70	1N5233BDITR-ND	36.00/M
6.2	20	7	1N5234BDICT-ND	.36	2.10	13.65	56.70	1N5234BDITR-ND	36.00/M
6.8	20	5	1N5235BDICT-ND	.36	2.10	13.65	56.70	1N5235BDITR-ND	36.00/M
7.5	20	6	1N5236BDICT-ND	.36	2.10	13.65	56.70	1N5236BDITR-ND	36.00/M
8.2	20	8	1N5237BDICT-ND	.36	2.10	13.65	56.70	1N5237BDITR-ND	36.00/M
8.7	20	8	1N5238BDICT-ND	.36	2.10	13.65	56.70	1N5238BDITR-ND	36.00/M
9.1	20	10	1N5239BDICT-ND	.36	2.10	13.65	56.70	1N5239BDITR-ND	36.00/M
10	20	17	1N5240BDICT-ND	.36	2.10	13.65	56.70	1N5240BDITR-ND	36.00/M
11	20	22	1N5241BDICT-ND	.36	2.10	13.65	56.70	1N5241BDITR-ND	36.00/M
12	20	30	1N5242BDICT-ND	.36	2.10	13.65	56.70	1N5242BDITR-ND	36.00/M
13	9.5	13	1N5243BDICT-ND	.36	2.10	13.65	56.70	1N5243BDITR-ND	36.00/M
14	9.0	15	1N5244BDICT-ND	.36	2.10	13.65	56.70	1N5244BDITR-ND	36.00/M
15	8.5	16	1N5245BDICT-ND	.36	2.10	13.65	56.70	1N5245BDITR-ND	36.00/M
16	7.8	17	1N5246BDICT-ND	.36	2.10	13.65	56.70	1N5246BDITR-ND	36.00/M
17	7.4	19	1N5247BDICT-ND	.36	2.10	13.65	56.70	1N5247BDITR-ND	36.00/M
18	7.0	21	1N5248BDICT-ND	.36	2.10	13.65	56.70	1N5248BDITR-ND	36.00/M
19	6.6	23	1N5249BDICT-ND	.36	2.10	13.65	56.70	1N5249BDITR-ND	36.00/M
20	6.2	25	1N5250BDICT-ND	.36	2.10	13.65	56.70	1N5250BDITR-ND	36.00/M
22	5.6	29	1N5251BDICT-ND	.36	2.10	13.65	56.70	1N5251BDITR-ND	36.00/M
24	5.2	33	1N5252BDICT-ND	.36	2.10	13.65	56.70	1N5252BDITR-ND	36.00/M
25	5.0	35	1N5253BDICT-ND	.36	2.10	13.65	56.70	1N5253BDITR-ND	36.00/M
27	4.6	41	1N5254BDICT-ND	.36	2.10	13.65	56.70	1N5254BDITR-ND	36.00/M
28	4.5	44	1N5255BDICT-ND	.36	2.10	13.65	56.70	1N5255BDITR-ND	36.00/M
30	4.2	49	1N5256BDICT-ND	.36	2.10	13.65	56.70	1N5256BDITR-ND	36.00/M
33	3.8	58	1N5257BDICT-ND	.36	2.10	13.65	56.70	1N5257BDITR-ND	36.00/M
36	3.4	70	1N5258BDICT-ND	.36	2.10	13.65	56.70	1N5258BDITR-ND	36.00/M
39	3.2	80	1N5259BDICT-ND	.36	2.10	13.65	56.70	1N5259BDITR-ND	36.00/M
43	3.0	93	1N5260BDICT-ND	.36	2.10	13.65	56.70	1N5260BDITR-ND	36.00/M
47	2.7	105	1N5261BDICT-ND	.36	2.10	13.65	56.70	1N5261BDITR-ND	36.00/M
51	2.5	125	1N5262BDICT-ND	.36	2.10	13.65	56.70	1N5262BDITR-ND	36.00/M

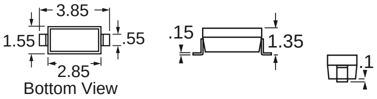
DO-41 Zener Diodes 1W (+5%)



Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 5,000
3.3	76	10.0	1N4728ADICT-ND	.36	2.48	17.16	75.90	1N4728ADITR-ND	59.00/M
3.6	69	10.0	1N4729ADICT-ND	.36	2.48	17.16	75.90	1N4729ADITR-ND	59.00/M
3.9	64	9.0	1N4730ADICT-ND	.36	2.48	17.16	75.90	1N4730ADITR-ND	59.00/M
4.3	58	9.0	1N4731ADICT-ND	.36	2.48	17.16	75.90	1N4731ADITR-ND	59.00/M
4.7	53	8.0	1N4732ADICT-ND	.36	2.48	17.16	75.90	1N4732ADITR-ND	59.00/M
5.1	49	7.0	1N4733ADICT-ND	.36	2.48	17.16	75.90	1N4733ADITR-ND	59.00/M
5.6	45	5.0	1N4734ADICT-ND	.36	2.48	17.16	75.90	1N4734ADITR-ND	59.00/M
6.2	41	2.0	1N4735ADICT-ND	.36	2.48	17.16	75.90	1N4735ADITR-ND	59.00/M
6.8	37	3.5	1N4736ADICT-ND	.36	2.48	17.16	75.90	1N4736ADITR-ND	59.00/M
7.5	34	4.0	1N4737ADICT-ND	.36	2.48	17.16	75.90	1N4737ADITR-ND	59.00/M
8.2	31	4.5	1N4738ADICT-ND	.36	2.48	17.16	75.90	1N4738ADITR-ND	59.00/M
9.1	28	5.0	1N4739ADICT-ND	.36	2.48	17.16	75.90	1N4739ADITR-ND	59.00/M
10	25	7.0	1N4740ADICT-ND	.36	2.48	17.16	75.90	1N4740ADITR-ND	59.00/M
11	23	8	1N4741ADICT-ND	.36	2.48	17.16	75.90	1N4741ADITR-ND	59.00/M
12	21	9	1N4742ADICT-ND	.36	2.48	17.16	75.90	1N4742ADITR-ND	59.00/M
13	19	10	1N4743ADICT-ND	.36	2.48	17.16	75.90	1N4743ADITR-ND	59.00/M
15	17	14	1N4744ADICT-ND	.36	2.48	17.16	75.90	1N4744ADITR-ND	59.00/M
16	15	16	1N4745ADICT-ND	.36	2.48	17.16	75.90	1N4745ADITR-ND	59.00/M
18	14	20	1N4746ADICT-ND	.36	2.48	17.16	75.90	1N4746ADITR-ND	59.00/M
20	12.5	22	1N4747ADICT-ND	.36	2.48	17.16	75.90	1N4747ADITR-ND	59.00/M
22	11.5	23	1N4748ADICT-ND	.36	2.48	17.16	75.90	1N4748ADITR-ND	59.00/M
24	10.5	25	1N4749ADICT-ND	.36	2.48	17.16	75.90	1N4749ADITR-ND	59.00/M
27	9.5	35	1N4750ADICT-ND	.36	2.48	17.16	75.90	1N4750ADITR-ND	59.00/M
30	8.5	40	1N4751ADICT-ND	.36	2.48	17.16	75.90	1N4751ADITR-ND	59.00/M
33	7.5	45	1N4752ADICT-ND	.36	2.48	17.16	75.90	1N4752ADITR-ND	59.00/M
36	7	50	1N4753ADICT-ND	.36	2.48	17.16	75.90	1N4753ADITR-ND	59.00/M
39	6.5	60	1N4754ADICT-ND	.36	2.48	17.16	75.90	1N4754ADITR-ND	59.00/M
43	6	70	1N4755ADICT-ND	.36	2.48	17.16	75.90	1N4755ADITR-ND	59.00/M
47	55	80	1N4756ADICT-ND	.36	2.48	17.16	75.90	1N4756ADITR-ND	59.00/M
51	5	95	1N4757ADICT-ND	.36	2.48	17.16	75.90	1N4757ADITR-ND	59.00/M
56	4.5	110	1N4758ADICT-ND	.36	2.48	17.16	75.90	1N4758ADITR-ND	59.00/M
62	4	125	1N4759ADICT-ND	.36	2.48	17.16	75.90	1N4759ADITR-ND	59.00/M
68	3.7	150	1N4760ADICT-ND	.36	2.48	17.16	75.90	1N4760ADITR-ND	59.00/M
75	3.3	175	1N4761ADICT-ND	.36	2.48	17.16	75.90	1N4761ADITR-ND	59.00/M

(Continued)

SOD-123 Surface Mount Zener Diodes — 500mW

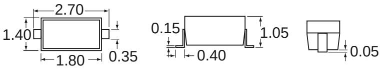


Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Impedance ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZT Series								
2.4	5	100	BZT52C2V4-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C2V4-7DITR-ND BZT52C2V4-13DITR-ND	90.00/M 78.00/M†
2.7	5	100	BZT52C2V7-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C2V7-7DITR-ND BZT52C2V7-13DITR-ND	90.00/M 78.00/M†
3.0	5	95	BZT52C3V0-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C3V0-7DITR-ND BZT52C3V0-13DITR-ND	90.00/M 78.00/M†
3.3	5	95	BZT52C3V3-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C3V3-7DITR-ND BZT52C3V3-13DITR-ND	90.00/M 78.00/M†
3.6	5	90	BZT52C3V6-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C3V6-7DITR-ND BZT52C3V6-13DITR-ND	90.00/M 78.00/M†
3.9	5.0	95	BZT52C3V9-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C3V9-7DITR-ND BZT52C3V9-13DITR-ND	90.00/M 78.00/M†
4.3	5.0	95	BZT52C4V3-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C4V3-7DITR-ND BZT52C4V3-13DITR-ND	90.00/M 78.00/M†
4.7	5	80	BZT52C4V7-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C4V7-7DITR-ND BZT52C4V7-13DITR-ND	90.00/M 78.00/M†
5.1	5.0	60	BZT52C5V1-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C5V1-7DITR-ND BZT52C5V1-13DITR-ND	90.00/M 78.00/M†
5.6	5.0	40	BZT52C5V6-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C5V6-7DITR-ND BZT52C5V6-13DITR-ND	90.00/M 78.00/M†
6.2	5.0	10	BZT52C6V2-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C6V2-7DITR-ND BZT52C6V2-13DITR-ND	90.00/M 78.00/M†
6.8	5.0	15	BZT52C6V8-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C6V8-7DITR-ND BZT52C6V8-13DITR-ND	90.00/M 78.00/M†
7.5	5.0	7	BZT52C7V5-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C7V5-7DITR-ND BZT52C7V5-13DITR-ND	90.00/M 78.00/M†
8.2	5.0	15	BZT52C8V2-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C8V2-7DITR-ND BZT52C8V2-13DITR-ND	90.00/M 78.00/M†
9.1	5.0	15	BZT52C9V1-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C9V1-7DITR-ND BZT52C9V1-13DITR-ND	90.00/M 78.00/M†
10.0	5.0	15	BZT52C10-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C10-7DITR-ND BZT52C10-13DITR-ND	90.00/M 78.00/M†
11	5.0	20	BZT52C11-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C11-7DITR-ND BZT52C11-13DITR-ND	90.00/M 78.00/M†
12.0	5.0	20	BZT52C12-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C12-7DITR-ND BZT52C12-13DITR-ND	90.00/M 78.00/M†
13	5.0	30	BZT52C13-7DICT-ND	3.13	22.00	100.00	BZT52C13-7DITR-ND	90.00/M
15	5.0	30	BZT52C15-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C15-7DITR-ND BZT52C15-13DITR-ND	90.00/M 78.00/M†
16	5.0	40	BZT52C16-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C16-7DITR-ND BZT52C16-13DITR-ND	90.00/M 78.00/M†
18	5.0	45	BZT52C18-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C18-7DITR-ND BZT52C18-13DITR-ND	90.00/M 78.00/M†
20.0	5.0	50	BZT52C20-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C20-7DITR-ND BZT52C20-13DITR-ND	90.00/M 78.00/M†
22	5.0	55	BZT52C22-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C22-7DITR-ND BZT52C22-13DITR-ND	90.00/M 78.00/M†
24	5.0	70	BZT52C24-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C24-7DITR-ND BZT52C24-13DITR-ND	90.00/M 78.00/M†
27.0	5.0	80	BZT52C27-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C27-7DITR-ND BZT52C27-13DITR-ND	90.00/M 78.00/M†
30	2.0	80	BZT52C30-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C30-7DITR-ND BZT52C30-13DITR-ND	90.00/M 78.00/M†
33	2.0	80	BZT52C33-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C33-7DITR-ND BZT52C33-13DITR-ND	90.00/M 78.00/M†
36	2.0	90	BZT52C36-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C36-7DITR-ND BZT52C36-13DITR-ND	90.00/M 78.00/M†
39	2.0	130	BZT52C39-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C39-7DITR-ND BZT52C39-13DITR-ND	90.00/M 78.00/M†
43	5.0	100	BZT52C43-7DICT-ND —	3.13 —	22.00 —	100.00 —	BZT52C43-7DITR-ND BZT52C43-13DITR-ND	90.00/M 78.00/M†
47	5.0	100	BZT52C47-7DICT-ND	3.13	22.00	100.00	BZT52C47-7DITR-ND	90.00/M
51	5.0	100	BZT52C51-7DICT-ND	3.13	22.00	100.00	BZT52C51-7DITR-ND	90.00/M

† Tape and Reel pricing is priced per 10,000.

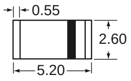
Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 3,000
MMSZ Series								
2.4	20	30	MMSZ5221BDICT-ND	3.13	22.00	100.00	MMSZ5221BDITR-ND	90.00/M
2.7	20	30	MMSZ5223BDICT-ND	3.13	22.00	100.00	MMSZ5223BDITR-ND	90.00/M
3.0	20	30	MMSZ5225BDICT-ND	3.13	22.00	100.00	MMSZ5225BDITR-ND	90.00/M
3.3	20	28	MMSZ5226BDICT-ND	3.13	22.00	100.00	MMSZ5226BDITR-ND	90.00/M
3.6	20	24	MMSZ5227BDICT-ND	3.13	22.00	100.00	MMSZ5227BDITR-ND	90.00/M
3.9	20	23	MMSZ5228BDICT-ND	3.13	22.00	100.00	MMSZ5228BDITR-ND	90.00/M
4.3	20	22	MMSZ5229BDICT-ND	3.13	22.00	100.00	MMSZ5229BDITR-ND	90.00/M
4.7	20	19	MMSZ5230BDICT-ND	3.13	22.00	100.00	MMSZ5230BDITR-ND	90.00/M
5.1	20	17	MMSZ5231BDICT-ND	3.13	22.00	100.00	MMSZ5231BDITR-ND	90.00/M
5.6	20	11	MMSZ5232BDICT-ND	3.13	22.00	100.00	MMSZ5232BDITR-ND	90.00/M
6.2	20	7	MMSZ5234BDICT-ND	3.13	22.00	100.00	MMSZ5234BDITR-ND	90.00/M
6.8	20	5	MMSZ5235BDICT-ND	3.13	22.00	100.00	MMSZ5235BDITR-ND	90.00/M
7.5	20	6	MMSZ5236BDICT-ND	3.13	22.00	100.00	MMSZ5236BDITR-ND	90.00/M
8.2	20	8	MMSZ5237BDICT-ND	3.13	22.00	100.00	MMSZ5237BDITR-ND	90.00/M
9.1	20	10	MMSZ5239BDICT-ND	3.13	22.00	100.00	MMSZ5239BDITR-ND	90.00/M
10	20	17	MMSZ5240BDICT-ND	3.13	22.00	100.00	MMSZ5240BDITR-ND	90.00/M
11	20	22	MMSZ5241BDICT-ND	3.13	22.00	100.00	MMSZ5241BDITR-ND	90.00/M
12	20	30	MMSZ5242BDICT-ND	3.13	22.00	100.00	MMSZ5242BDITR-ND	90.00/M
13	9.5	13	MMSZ5243BDICT-ND	3.13	22.00	100.00	MMSZ5243BDITR-ND	90.00/M
15	8.5	16	MMSZ5245BDICT-ND	3.13	22.00	100.00	MMSZ5245BDITR-ND	90.00/M
16	7.8	17	MMSZ5246BDICT-ND	3.13	22.00	100.00	MMSZ5246BDITR-ND	90.00/M
18	7.0	21	MMSZ5248BDICT-ND	3.13	22.00	100.00	MMSZ5248BDITR-ND	90.00/M
20	6.2	25	MMSZ5250BDICT-ND	3.13	22.00	100.00	MMSZ5250BDITR-ND	90.00/M
22	5.6	29	MMSZ5251BDICT-ND	3.13	22.00	100.00	MMSZ5251BDITR-ND	90.00/M
24	5.2	33	MMSZ5252BDICT-ND	3.13	22.00	100.00	MMSZ5252BDITR-ND	90.00/M
27	5.0	41	MMSZ5254BDICT-ND	3.13	22.00	100.00	MMSZ5254BDITR-ND	90.00/M
28	4.5	44	MMSZ5255BDICT-ND	3.13	22.00	100.00	MMSZ5255BDITR-ND	90.00/M
30	4.2	49	MMSZ5256BDICT-ND	3.13	22.00	100.00	MMSZ5256BDITR-ND	90.00/M
33	3.8	58	MMSZ5257BDICT-ND	3.13	22.00	100.00	MMSZ5257BDITR-ND	90.00/M
36	3.4	70	MMSZ5258BDICT-ND	3.13	22.00	100.00	MMSZ5258BDITR-ND	90.00/M
39	3.2	80	MMSZ5259BDICT-ND	3.13	22.00	100.00	MMSZ5259BDITR-ND	90.00/M

SOD-323 Surface Mount Zener Diodes — 200mW



Zener Volt VZ @ IZT Nom	Test Curr. iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZT Series								
2.4	5	100	BZT52C2V4SDICT-ND	.47	3.44	24.20	BZT52C2V4SDITR-ND	99.00/M
2.7	5	100	BZT52C2V7SDICT-ND	.47	3.44	24.20	BZT52C2V7SDITR-ND	99.00/M
3.0	5	95	BZT52C3V0SDICT-ND	.47	3.44	24.20	BZT52C3V0SDITR-ND	99.00/M
3.3	5	95	BZT52C3V3SDICT-ND	.47	3.44	24.20	BZT52C3V3SDITR-ND	99.00/M
3.6	5	90	BZT52C3V6SDICT-ND	.47	3.44	24.20	BZT52C3V6SDITR-ND	99.00/M
3.9	5	90	BZT52C3V9SDICT-ND	.47	3.44	24.20	BZT52C3V9SDITR-ND	99.00/M
4.3	5	90	BZT52C4V3SDICT-ND	.47	3.44	24.20	BZT52C4V3SDITR-ND	99.00/M
4.7	5	80	BZT52C4V7SDICT-ND	.47	3.44	24.20	BZT52C4V7SDITR-ND	99.00/M
5.1	5	60	BZT52C5V1SDICT-ND	.47	3.44	24.20	BZT52C5V1SDITR-ND	99.00/M
5.6	5	40	BZT52C5V6SDICT-ND	.47	3.44	24.20	BZT52C5V6SDITR-ND	99.00/M
6.2	5	10	BZT52C6V2SDICT-ND	.47	3.44	24.20	BZT52C6V2SDITR-ND	99.00/M
6.8	5	15	BZT52C6V8SDICT-ND	.47	3.44	24.20	BZT52C6V8SDITR-ND	99.00/M
7.5	5	15	BZT52C7V5SDICT-ND	.47	3.44	24.20	BZT52C7V5SDITR-ND	99.00/M
8.2	5	15	BZT52C8V2SDICT-ND	.47	3.44	24.20	BZT52C8V2SDITR-ND	99.00/M
9.1	5	15	BZT52C9V1SDICT-ND	.47	3.44	24.20	BZT52C9V1SDITR-ND	99.00/M
10	5	20	BZT52C10SDICT-ND	.47	3.44	24.20	BZT52C10SDITR-ND	99.00/M
11	5	20	BZT52C11SDICT-ND	.47	3.44	24.20	BZT52C11SDITR-ND	99.00/M
12	5	25	BZT52C12SDICT-ND	.47	3.44	24.20	BZT52C12SDITR-ND	99.00/M
13	5	30	BZT52C13SDICT-ND	.47	3.44	24.20	BZT52C13SDITR-ND	99.00/M
15	5	30	BZT52C15SDICT-ND	.47	3.44	24.20	BZT52C15SDITR-ND	99.00/M
16	5	40	BZT52C16SDICT-ND	.47	3.44	24.20	BZT52C16SDITR-ND	99.00/M
18	5	45	BZT52C18SDICT-ND	.47	3.44	24.20	BZT52C18SDITR-ND	99.00/M
20	5	55	BZT52C20SDICT-ND	.47	3.44	24.20	BZT52C20SDITR-ND	99.00/M
22	5	55	BZT52C22SDICT-ND	.47	3.44	24.20	BZT52C22SDITR-ND	99.00/M
24	5	70	BZT52C24SDICT-ND	.47	3.44	24.20	BZT52C24SDITR-ND	99.00/M
27	2	80	BZT52C27SDICT-ND	.47	3.44	24.20	BZT52C27SDITR-ND	99.00/M
30	2	80	BZT52C30SDICT-ND	.47	3.44	24.20	BZT52C30SDITR-ND	99.00/M
33	2	80	BZT52C33SDICT-ND	.47	3.44	24.20	BZT52C33SDITR-ND	99.00/M
36	2	90	BZT52C36SDICT-ND	.47	3.44	24.20	BZT52C36SDITR-ND	99.00/M
39	2	130	BZT52C39SDICT-ND	.47	3.44	24.20	BZT52C39SDITR-ND	99.00/M
MMSZ Series								
2.4	20	30	MMSZ5221BSDICT-ND	.47	3.44	24.20	MMSZ5221BSDITR-ND	99.00/M
3.0	20	30	MMSZ5225BSDICT-ND	.47	3.44	24.20	MMSZ5225BSDITR-ND	99.00/M
3.3	20	28	MMSZ5226BSDICT-ND	.47	3.44	24.20	MMSZ5226BSDITR-ND	99.00/M
3.6	20	24	MMSZ5227BSDICT-ND	.47	3.44	24.20	MMSZ5227BSDITR-ND	99.00/M
3.9	20	23	MMSZ5228BSDICT-ND	.47	3.44	24.20	MMSZ5228BSDITR-ND	99.00/M
4.3	20	22	MMSZ5229BSDICT-ND	.47	3.44	24.20	MMSZ5229BSDITR-ND	99.00/M
4.7	20	19	MMSZ5230BSDICT-ND	.47	3.44	24.20	MMSZ5230BSDITR-ND	99.00/M
5.1	20	17	MMSZ5231BSDICT-ND	.47	3.44	24.20	MMSZ5231BSDITR-ND	99.00/M
5.6	20	11	MMSZ5232BSDICT-ND	.47	3.44	24.20	MMSZ5232BSDITR-ND	99.00/M
6.2	20	7	MMSZ5234BSDICT-ND	.47	3.44	24.20	MMSZ5234BSDITR-ND	99.00/M
6.8	20	5	MMSZ5235BSDICT-ND	.47	3.44	24.20	MMSZ5235BSDITR-ND	99.00/M
7.5	20	6	MMSZ5236BSDICT-ND	.47	3.44	24.20	MMSZ5236BSDITR-ND	99.00/M
8.2	20	8	MMSZ5237BSDICT-ND	.47	3.44	24.20	MMSZ5237BSDITR-ND	99.00/M
9.1	20	10	MMSZ5239BSDICT-ND	.47	3.44	24.20	MMSZ5239BSDITR-ND	99.00/M
10	20	17	MMSZ5240BSDICT-ND	.47	3.44	24.20	MMSZ5240BSDITR-ND	99.00/M
11	20	22	MMSZ5241BSDICT-ND	.47	3.44	24.20	MMSZ5241BSDITR-ND	99.00/M
12	20	30	MMSZ5242BSDICT-ND	.47	3.44	24.20	MMSZ5242BSDITR-ND	99.00/M
13	9.5	13	MMSZ5243BSDICT-ND	.47	3.44	24.20	MMSZ5243BSDITR-ND	99.00/M
15	8.5	16	MMSZ5245BSDICT-ND	.47	3.44	24.20	MMSZ5245BSDITR-ND	99.00/M
18	7.0	21	MMSZ5248BSDICT-ND	.47	3.44	24.20	MMSZ5248BSDITR-ND	99.00/M
20	6.2	25	MMSZ5250BSDICT-ND	.47	3.44	24.20	MMSZ5250BSDITR-ND	99.00/M
22	5.6	29	MMSZ5251BSDICT-ND	.47	3.44	24.20	MMSZ5251BSDITR-ND	99.00/M
24	5.2	33	MMSZ5252BSDICT-ND	.47	3.44	24.20	MMSZ5252BSDITR-ND	99.00/M
27	5.0	41	MMSZ5254BSDICT-ND	.47	3.44	24.20	MMSZ5254BSDITR-ND	99.00/M
28	4.5	44	MMSZ5255BSDICT-ND	.47	3.44	24.20	MMSZ5255BSDITR-ND	99.00/M
30	4.2	49	MMSZ5256BSDICT-ND	.47	3.44	24.20	MMSZ5256BSDITR-ND	99.00/M
33	3.8	58	MMSZ5257BSDICT-ND	.47	3.44	24.20	MMSZ5257BSDITR-ND	99.00/M
36	3.4	70	MMSZ5258BSDICT-ND	.47	3.44	24.20	MMSZ5258BSDITR-ND	99.00/M
39	3.2	80	MMSZ5259BSDICT-ND	.47	3.44	24.20	MMSZ5259BSDITR-ND	99.00/M

MELF (DL-41) Surface Mount Zener Diodes — 1W



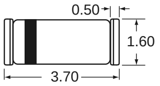
Zener Volt VZ @ IZT Nom	Test Curr. iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 5,000
3.3	76	10	ZM4728ADICT-ND	4.00	28.80	84.00	ZM4728ADITR-ND	128.00/M
3.9	64	9.0	ZM4730ADICT-ND	4.00	28.80	84.00	ZM4730ADITR-ND	128.00/M
4.3	58	9.0	ZM4731ADICT-ND	4.00	28.80	84.00	ZM4731ADITR-ND	128.00/M
4.7	53	8.0	ZM4732ADICT-ND	4.00	28.80	84.00	ZM4732ADITR-ND	128.00/M
5.1	49	7.0	ZM4733ADICT-ND	4.00	28.80	84.00	ZM4733ADITR-ND	128.00/M
5.6	45	5.0	ZM4734ADICT-ND	4.00	28.80	84.00	ZM4734ADITR-ND	128.00/M
6.2	41	2.0	ZM4735ADICT-ND	4.00	28.80	84.00	ZM4735ADITR-ND	128.00/M
6.8	37	3.5	ZM4736ADICT-ND	4.00	28.80	84.00	ZM4736ADITR-ND	128.00/M

(*Continued*)

Zener Diodes *(Cont.)*

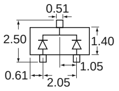
Zener Volt VZ @ IZT Nom	Test Curr. iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 5,000
7.5	34	4.0	ZM4737ADICT-ND	4.00	28.80	84.00	ZM4737ADITR-ND	128.00/M
8.2	31	4.5	ZM4738ADICT-ND	4.00	28.80	84.00	ZM4738ADITR-ND	128.00/M
9.1	28	5.0	ZM4739ADICT-ND	4.00	28.80	84.00	ZM4739ADITR-ND	128.00/M
10	25	7.0	ZM4740ADICT-ND	4.00	28.80	84.00	ZM4740ADITR-ND	128.00/M
11	23	8	ZM4741ADICT-ND	4.00	28.80	84.00	ZM4741ADITR-ND	128.00/M
12	21	9	ZM4742ADICT-ND	4.00	28.80	84.00	ZM4742ADITR-ND	128.00/M
13	19	10	ZM4743ADICT-ND	4.00	28.80	84.00	ZM4743ADITR-ND	128.00/M
15	17	14	ZM4744ADICT-ND	4.00	28.80	84.00	ZM4744ADITR-ND	128.00/M
16	15	16	ZM4745ADICT-ND	4.00	28.80	84.00	ZM4745ADITR-ND	128.00/M
18	14	20	ZM4746ADICT-ND	4.00	28.80	84.00	ZM4746ADITR-ND	128.00/M
20	12.5	22	ZM4747ADICT-ND	4.00	28.80	84.00	ZM4747ADITR-ND	128.00/M
22	11.5	23	ZM4748ADICT-ND	4.00	28.80	84.00	ZM4748ADITR-ND	128.00/M
24	10.5	25	ZM4749ADICT-ND	4.00	28.80	84.00	ZM4749ADITR-ND	128.00/M
27	9.5	35	ZM4750ADICT-ND	4.00	28.80	84.00	ZM4750ADITR-ND	128.00/M
30	8.5	40	ZM4751ADICT-ND	4.00	28.80	84.00	ZM4751ADITR-ND	128.00/M
33	7.5	45	ZM4752ADICT-ND	4.00	28.80	84.00	ZM4752ADITR-ND	128.00/M
36	7.0	50	ZM4753ADICT-ND	4.00	28.80	84.00	ZM4753ADITR-ND	128.00/M
39	6.5	60	ZM4754ADICT-ND	4.00	28.80	84.00	ZM4754ADITR-ND	128.00/M
43	6.0	70	ZM4755ADICT-ND	4.00	28.80	84.00	ZM4755ADITR-ND	128.00/M
47	5.5	80	ZM4756ADICT-ND	4.00	28.80	84.00	ZM4756ADITR-ND	128.00/M
51	5.0	95	ZM4757ADICT-ND	4.00	28.80	84.00	ZM4757ADITR-ND	128.00/M
56	4.5	110	ZM4758ADICT-ND	4.00	28.80	84.00	ZM4758ADITR-ND	128.00/M
62	4.0	125	ZM4759ADICT-ND	4.00	28.80	84.00	ZM4759ADITR-ND	128.00/M
68	3.7	150	ZM4760ADICT-ND	4.00	28.80	84.00	ZM4760ADITR-ND	128.00/M
75	3.3	175	ZM4761ADICT-ND	4.00	28.80	84.00	ZM4761ADITR-ND	128.00/M
82	3.0	200	ZM4762ADICT-ND	4.00	28.80	84.00	ZM4762ADITR-ND	128.00/M
91	2.8	250	ZM4763ADICT-ND	4.00	28.80	84.00	ZM4763ADITR-ND	128.00/M
100	2.5	350	ZM4764ADICT-ND	4.00	28.80	84.00	ZM4764ADITR-ND	128.00/M

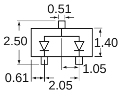
MiniMELF (DL-35) Surface Mount Zener Diodes — 500mW



Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Impedance ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 2,500
3.0	20	29	ZMM5225BDICT-ND	2.48	17.16	75.90	ZMM5225BDITR-ND	66.00/M
3.3	20	28	ZMM5226BDICT-ND	2.48	17.16	75.90	ZMM5226BDITR-ND	66.00/M
3.6	20	24	ZMM5227BDICT-ND	2.48	17.16	75.90	ZMM5227BDITR-ND	66.00/M
3.9	20	23	ZMM5228BDICT-ND	2.48	17.16	75.90	ZMM5228BDITR-ND	66.00/M
4.3	20	22	ZMM5229BDICT-ND	2.48	17.16	75.90	ZMM5229BDITR-ND	66.00/M
4.7	20	19	ZMM5230BDICT-ND	2.48	17.16	75.90	ZMM5230BDITR-ND	66.00/M
5.1	20	17	ZMM5231BDICT-ND	2.48	17.16	75.90	ZMM5231BDITR-ND	66.00/M
5.6	20	11	ZMM5232BDICT-ND	2.48	17.16	75.90	ZMM5232BDITR-ND	66.00/M
6.0	20	7	ZMM5233BDICT-ND	2.48	17.16	75.90	ZMM5233BDITR-ND	66.00/M
6.2	20	7	ZMM5234BDICT-ND	2.48	17.16	75.90	ZMM5234BDITR-ND	66.00/M
6.8	20	5	ZMM5235BDICT-ND	2.48	17.16	75.90	ZMM5235BDITR-ND	66.00/M
7.5	20	6	ZMM5236BDICT-ND	2.48	17.16	75.90	ZMM5236BDITR-ND	66.00/M
8.2	20	8	ZMM5237BDICT-ND	2.48	17.16	75.90	ZMM5237BDITR-ND	66.00/M
8.7	20	8	ZMM5238BDICT-ND	2.48	17.16	75.90	ZMM5238BDITR-ND	66.00/M
9.1	20	10	ZMM5239BDICT-ND	2.48	17.16	75.90	ZMM5239BDITR-ND	66.00/M
10	20	17	ZMM5240BDICT-ND	2.48	17.16	75.90	ZMM5240BDITR-ND	66.00/M
11	20	22	ZMM5241BDICT-ND	2.48	17.16	75.90	ZMM5241BDITR-ND	66.00/M
12	20	30	ZMM5242BDICT-ND	2.48	17.16	75.90	ZMM5242BDITR-ND	66.00/M
13	9.5	13	ZMM5243BDICT-ND	2.48	17.16	75.90	ZMM5243BDITR-ND	66.00/M
14	9.0	15	ZMM5244BDICT-ND	2.48	17.16	75.90	ZMM5244BDITR-ND	66.00/M
15	8.5	16	ZMM5245BDICT-ND	2.48	17.16	75.90	ZMM5245BDITR-ND	66.00/M
16	7.8	17	ZMM5246BDICT-ND	2.48	17.16	75.90	ZMM5246BDITR-ND	66.00/M
17	7.4	19	ZMM5247BDICT-ND	2.48	17.16	75.90	ZMM5247BDITR-ND	66.00/M
18	7.0	21	ZMM5248BDICT-ND	2.48	17.16	75.90	ZMM5248BDITR-ND	66.00/M
19	6.6	23	ZMM5249BDICT-ND	2.48	17.16	75.90	ZMM5249BDITR-ND	66.00/M
20	6.2	25	ZMM5250BDICT-ND	2.48	17.16	75.90	ZMM5250BDITR-ND	66.00/M
22	5.6	29	ZMM5251BDICT-ND	2.48	17.16	75.90	ZMM5251BDITR-ND	66.00/M
24	5.2	33	ZMM5252BDICT-ND	2.48	17.16	75.90	ZMM5252BDITR-ND	66.00/M
25	5.0	35	ZMM5253BDICT-ND	2.48	17.16	75.90	ZMM5253BDITR-ND	66.00/M
27	4.6	41	ZMM5254BDICT-ND	2.48	17.16	75.90	ZMM5254BDITR-ND	66.00/M
28	4.5	44	ZMM5255BDICT-ND	2.48	17.16	75.90	ZMM5255BDITR-ND	66.00/M
30	4.2	49	ZMM5256BDICT-ND	2.48	17.16	75.90	ZMM5256BDITR-ND	66.00/M
33	3.8	58	ZMM5257BDICT-ND	2.48	17.16	75.90	ZMM5257BDITR-ND	66.00/M
36	3.4	70	ZMM5258BDICT-ND	2.48	17.16	75.90	ZMM5258BDITR-ND	66.00/M
39	3.2	80	ZMM5259BDICT-ND	2.48	17.16	75.90	ZMM5259BDITR-ND	66.00/M
43	3.0	93	ZMM5260BDICT-ND	2.48	17.16	75.90	ZMM5260BDITR-ND	66.00/M
47	2.7	105	ZMM5261BDICT-ND	2.48	17.16	75.90	ZMM5261BDITR-ND	66.00/M
51	2.5	125	ZMM5262BDICT-ND	2.48	17.16	75.90	ZMM5262BDITR-ND	66.00/M
62	2.0	185	ZMM5265BDICT-ND	2.48	17.16	75.90	ZMM5265BDITR-ND	66.00/M
68	1.8	230	ZMM5266BDICT-ND	2.48	17.16	75.90	ZMM5266BDITR-ND	66.00/M

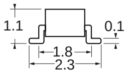
SOT-23 Dual Surface Mount Zener Diodes — 300mW

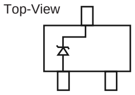

Common Cathode


Common Anode

Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Common Anode								
3.0	5.0	95	AZ23C3V0DICT-ND	.50	4.00	30.00	AZ23C3V0DITR-ND	150.00/M
3.9	5.0	95	AZ23C3V9DICT-ND	.50	4.00	30.00	AZ23C3V9DITR-ND	150.00/M
4.7	5.0	78	AZ23C4V7DICT-ND	.50	4.00	30.00	AZ23C4V7DITR-ND	150.00/M
5.1	5.0	60	AZ23C5V1DICT-ND	.50	4.00	30.00	AZ23C5V1DITR-ND	150.00/M
5.6	5.0	40	AZ23C5V6DICT-ND	.50	4.00	30.00	AZ23C5V6DITR-ND	150.00/M
6.2	5.0	10	AZ23C6V2DICT-ND	.50	4.00	30.00	AZ23C6V2DITR-ND	150.00/M
6.8	5.0	8	AZ23C6V8DICT-ND	.50	4.00	30.00	AZ23C6V8DITR-ND	150.00/M
10	5.0	15	AZ23C10DICT-ND	.50	4.00	30.00	AZ23C10DITR-ND	150.00/M
11	5.0	20	AZ23C11DICT-ND	.50	4.00	30.00	AZ23C11DITR-ND	150.00/M
12	5.0	20	AZ23C12DICT-ND	.50	4.00	30.00	AZ23C12DITR-ND	150.00/M
15	5.0	30	AZ23C15DICT-ND	.50	4.00	30.00	AZ23C15DITR-ND	150.00/M
16	5.0	40	AZ23C16DICT-ND	.50	4.00	30.00	AZ23C16DITR-ND	150.00/M
18	5.0	50	AZ23C18DICT-ND	.50	4.00	30.00	AZ23C18DITR-ND	150.00/M
20	5.0	50	AZ23C20DICT-ND	.50	4.00	30.00	AZ23C20DITR-ND	150.00/M
22	5.0	55	AZ23C22DICT-ND	.50	4.00	30.00	AZ23C22DITR-ND	150.00/M
27	5.0	80	AZ23C27DICT-ND	.50	4.00	30.00	AZ23C27DITR-ND	150.00/M
36	5.0	90	AZ23C36DICT-ND	.50	4.00	30.00	AZ23C36DITR-ND	150.00/M
51	5.0	100	AZ23C51DICT-ND	.50	4.00	30.00	AZ23C51DITR-ND	150.00/M
Common Cathode								
2.7	5.0	83	DZ23C2V7DICT-ND	.45	3.60	27.00	DZ23C2V7DITR-ND	135.00/M
3.0	5.0	95	DZ23C3V0DICT-ND	.45	3.60	27.00	DZ23C3V0DITR-ND	135.00/M
3.3	5.0	95	DZ23C3V3DICT-ND	.45	3.60	27.00	DZ23C3V3DITR-ND	135.00/M
3.6	5.0	95	DZ23C3V6DICT-ND	.45	3.60	27.00	DZ23C3V6DITR-ND	135.00/M
3.9	5.0	95	DZ23C3V9DICT-ND	.45	3.60	27.00	DZ23C3V9DITR-ND	135.00/M
4.3	5.0	95	DZ23C4V3DICT-ND	.45	3.60	27.00	DZ23C4V3DITR-ND	135.00/M
5.1	5.0	60	DZ23C5V1DICT-ND	.45	3.60	27.00	DZ23C5V1DITR-ND	135.00/M
5.6	5.0	40	DZ23C5V6DICT-ND	.45	3.60	27.00	DZ23C5V6DITR-ND	135.00/M
6.2	5.0	10	DZ23C6V2DICT-ND	.45	3.60	27.00	DZ23C6V2DITR-ND	135.00/M
6.8	5.0	8	DZ23C6V8DICT-ND	.45	3.60	27.00	DZ23C6V8DITR-ND	135.00/M
7.5	5.0	7	DZ23C7V5DICT-ND	.45	3.60	27.00	DZ23C7V5DITR-ND	135.00/M
8.2	5.0	7	DZ23C8V2DICT-ND	.45	3.60	27.00	DZ23C8V2DITR-ND	135.00/M
9.1	5.0	10	DZ23C9V1DICT-ND	.45	3.60	27.00	DZ23C9V1DITR-ND	135.00/M
10	5.0	15	DZ23C10DICT-ND	.45	3.60	27.00	DZ23C10DITR-ND	135.00/M
11	5.0	20	DZ23C11DICT-ND	.45	3.60	27.00	DZ23C11DITR-ND	135.00/M
12	5.0	20	DZ23C12DICT-ND	.45	3.60	27.00	DZ23C12DITR-ND	135.00/M
13	5.0	25	DZ23C13DICT-ND	.45	3.60	27.00	DZ23C13DITR-ND	135.00/M
15	5.0	30	DZ23C15DICT-ND	.45	3.60	27.00	DZ23C15DITR-ND	135.00/M
16	5.0	40	DZ23C16DICT-ND	.45	3.60	27.00	DZ23C16DITR-ND	135.00/M
18	5.0	50	DZ23C18DICT-ND	.45	3.60	27.00	DZ23C18DITR-ND	135.00/M
20	5.0	50	DZ23C20DICT-ND	.45	3.60	27.00	DZ23C20DITR-ND	135.00/M
22	5.0	55	DZ23C22DICT-ND	.45	3.60	27.00	DZ23C22DITR-ND	135.00/M
24	5.0	80	DZ23C24DICT-ND	.45	3.60	27.00	DZ23C24DITR-ND	135.00/M
27	5.0	80	DZ23C27DICT-ND	.45	3.60	27.00	DZ23C27DITR-ND	135.00/M
30	5.0	80	DZ23C30DICT-ND	.45	3.60	27.00	DZ23C30DITR-ND	135.00/M
33	5.0	80	DZ23C33DICT-ND	.45	3.60	27.00	DZ23C33DITR-ND	135.00/M
36	5.0	90	DZ23C36DICT-ND	.45	3.60	27.00	DZ23C36DITR-ND	135.00/M
43	5.0	100	DZ23C43DICT-ND	.45	3.60	27.00	DZ23C43DITR-ND	135.00/M

SOT-23 Surface Mount Zener Diodes — 350mW





Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZX Series								
2.4	5.0	100	BZX84C2V4DICT-ND	.44	3.00	20.80	BZX84C2V4DITR-ND	80.00/M
2.7	5.0	100	BZX84C2V7DICT-ND	.44	3.00	20.80	BZX84C2V7DITR-ND	80.00/M
3.0	5.0	95	BZX84C3V0DICT-ND	.44	3.00	20.80	BZX84C3V0DITR-ND	80.00/M
3.3	5	95	BZX84C3V3DICT-ND•	.44	3.00	20.80	BZX84C3V3DITR-ND	80.00/M
3.6	5	95	BZX84C3V6DICT-ND	.44	3.00	20.80	BZX84C3V6DITR-ND	80.00/M
3.9	5	90	BZX84C3V9DICT-ND•	.44	3.00	20.80	BZX84C3V9DITR-ND	80.00/M
4.3	5	90	BZX84C4V3DICT-ND	.44	3.00	20.80	BZX84C4V3DITR-ND	80.00/M
4.7	5	80	BZX84C4V7DICT-ND	.44	3.00	20.80	BZX84C4V7DITR-ND	80.00/M
5.1	5	60	BZX84C5V1DICT-ND•	.44	3.00	20.80	BZX84C5V1DITR-ND	80.00/M
5.6	5	40	BZX84C5V6DICT-ND•	.44	3.00	20.80	BZX84C5V6DITR-ND	80.00/M
6.2	5	10	BZX84C6V2DICT-ND•	.44	3.00	20.80	BZX84C6V2DITR-ND	80.00/M
6.8	5	15	BZX84C6V8DICT-ND•	.44	3.00	20.80	BZX84C6V8DITR-ND	80.00/M
7.5	5	15	BZX84C7V5DICT-ND	.44	3.00	20.80	BZX84C7V5DITR-ND	80.00/M
8.2	5	15	BZX84C8V2DICT-ND	.44	3.00	20.80	BZX84C8V2DITR-ND	80.00/M
9.1	5	15	BZX84C9V1DICT-ND•	.44	3.00	20.80	BZX84C9V1DITR-ND	80.00/M
10	5	20	BZX84C10DICT-ND•	.44	3.00	20.80	BZX84C10DITR-ND	80.00/M
11	5	2	BZX84C11DICT-ND	.44	3.00	20.80	BZX84C11DITR-ND	80.00/M
12	5	25	BZX84C12DICT-ND•	.44	3.00	20.80	BZX84C12DITR-ND	80.00/M
13	5	30	BZX84C13DICT-ND	.44	3.00	20.80	BZX84C13DITR-ND	80.00/M
15	5	30	BZX84C15DICT-ND•	.44	3.00	20.80	BZX84C15DITR-ND	80.00/M
16	5	40	BZX84C16DICT-ND	.44	3.00	20.80	BZX84C16DITR-ND	80.00/M
18	5	45	BZX84C18DICT-ND•	.44	3.00	20.80	BZX84C18DITR-ND	80.00/M
20	5	55	BZX84C20DICT-ND•	.44	3.00	20.80	BZX84C20DITR-ND	80.00/M
22	5	55	BZX84C22DICT-ND	.44	3.00	20.80	BZX84C22DITR-ND	80.00/M
24	5	70	BZX84C24DICT-ND•	.44	3.00	20.80	BZX84C24DITR-ND	80.00/M
27	2	80	BZX84C27DICT-ND	.44	3.00	20.80	BZX84C27DITR-ND	80.00/M
30	2	80	BZX84C30DICT-ND•	.44	3.00	20.80	BZX84C30DITR-ND	80.00/M
33	2	80	BZX84C33DICT-ND•	.44	3.00	20.80	BZX84C33DITR-ND	80.00/M
36	2	90	BZX84C36DICT-ND•	.44	3.00	20.80	BZX84C36DITR-ND	80.00/M
39	2	130	BZX84C39DICT-ND•	.44	3.00	20.80	BZX84C39DITR-ND	80.00/M
43	2	150	BZX84C43DICT-ND	.44	3.00	20.80	BZX84C43DITR-ND	80.00/M
47	2	170	BZX84C47DICT-ND•	.44	3.00	20.80	BZX84C47DITR-ND	80.00/M
51	2	180	BZX84C51DICT-ND	.44	3.00	20.80	BZX84C51DITR-ND	80.00/M
MMBZ Series								
2.4	20	30	MMBZ5221BDICT-ND	.44	3.00	20.80	MMBZ5221BDITR-ND	80.00/M
3.3	20	28	MMBZ5226BDICT-ND	.44	3.00	20.80	MMBZ5226BDITR-ND	80.00/M
3.6	20	24	MMBZ5227BDICT-ND	.44	3.00	20.80	MMBZ5227BDITR-ND	80.00/M
3.9	20	23	MMBZ5228BDICT-ND	.44	3.00	20.80	MMBZ5228BDITR-ND	80.00/M
4.3	20	22	MMBZ5229BDICT-ND	.44	3.00	20.80	MMBZ5229BDITR-ND	80.00/M
4.7	20	19	MMBZ5230BDICT-ND	.44	3.00	20.80	MMBZ5230BDITR-ND	80.00/M
5.1	20	17	MMBZ5231BDICT-ND	.44	3.00	20.80	MMBZ5231BDITR-ND	80.00/M
5.6	20	11	MMBZ5232BDICT-ND	.44	3.00	20.80	MMBZ5232BDITR-ND	80.00/M
6.2	20	7	MMBZ5234BDICT-ND	.44	3.00	20.80	MMBZ5234BDITR-ND	80.00/M
6.8	20	5	MMBZ5235BDICT-ND	.44	3.00	20.80	MMBZ5235BDITR-ND	80.00/M
7.5	20	6	MMBZ5236BDICT-ND	.44	3.00	20.80	MMBZ5236BDITR-ND	80.00/M
8.2	20	8	MMBZ5237BDICT-ND	.44	3.00	20.80	MMBZ5237BDITR-ND	80.00/M
9.1	20	10	MMBZ5239BDICT-ND	.44	3.00	20.80	MMBZ5239BDITR-ND	80.00/M
10	20	17	MMBZ5240BDICT-ND	.44	3.00	20.80	MMBZ5240BDITR-ND	80.00/M
12	20	30	MMBZ5242BDICT-ND	.44	3.00	20.80	MMBZ5242BDITR-ND	80.00/M
13	9.5	13	MMBZ5243BDICT-ND	.44	3.00	20.80	MMBZ5243BDITR-ND	80.00/M
15	8.5	16	MMBZ5245BDICT-ND	.44	3.00	20.80	MMBZ5245BDITR-ND	80.00/M
16	7.8	17	MMBZ5246BDICT-ND	.44	3.00	20.80	MMBZ5246BDITR-ND	80.00/M
18	7.0	21	MMBZ5248BDICT-ND	.44	3.00	20.80	MMBZ5248BDITR-ND	80.00/M
24	5.2	33	MMBZ5252BDICT-ND	.44	3.00	20.80	MMBZ5252BDITR-ND	80.00/M
27	5.0	41	MMBZ5254BDICT-ND	.44	3.00	20.80	MMBZ5254BDITR-ND	80.00/M
28	4.5	44	MMBZ5255BDICT-ND	.44	3.00	20.80	MMBZ5255BDITR-ND	80.00/M
30	4.2	49	MMBZ5256BDICT-ND	.44	3.00	20.80	MMBZ5256BDITR-ND	80.00/M
33	3.8	58	MMBZ5257BDICT-ND	.44	3.00	20.80	MMBZ5257BDITR-ND	80.00/M
36	3.4	70	MMBZ5258BDICT-ND	.44	3.00	20.80	MMBZ5258BDITR-ND	80.00/M

• **BZX2-KIT-ND** ***Digi-Key® SMD Zener Diodes Kit*** 10 each of values denoted (180 total pieces) **$23.79**

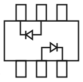
(Continued)

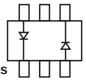
DIODES INCORPORATED Zener Diodes *(Cont.)*

SOT-323 Surface Mount Zener Diode — 200mW

Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZX Series								
2.4	5.0	100	BZX84C2V4WDICT-ND	2.81	19.80	90.00	BZX84C2V4WDITR-ND	81.00/M
2.7	5.0	100	BZX84C2V7WDICT-ND	2.81	19.80	90.00	BZX84C2V7WDITR-ND	81.00/M
3.0	5.0	95	BZX84C3V0WDICT-ND	2.81	19.80	90.00	BZX84C3V0WDITR-ND	81.00/M
3.3	5.0	95	BZX84C3V3WDICT-ND	2.81	19.80	90.00	BZX84C3V3WDITR-ND	81.00/M
3.6	5.0	90	BZX84C3V6WDICT-ND	2.81	19.80	90.00	BZX84C3V6WDITR-ND	81.00/M
3.9	5.0	90	BZX84C3V9WDICT-ND	2.81	19.80	90.00	BZX84C3V9WDITR-ND	81.00/M
4.7	5.0	80	BZX84C4V7WDICT-ND	2.81	19.80	90.00	BZX84C4V7WDITR-ND	81.00/M
5.1	5.0	60	BZX84C5V1WDICT-ND	2.81	19.80	90.00	BZX84C5V1WDITR-ND	81.00/M
5.6	5.0	40	BZX84C5V6WDICT-ND	2.81	19.80	90.00	BZX84C5V6WDITR-ND	81.00/M
6.2	5.0	10	BZX84C6V2WDICT-ND	2.81	19.80	90.00	BZX84C6V2WDITR-ND	81.00/M
6.8	5.0	15	BZX84C6V8WDICT-ND	2.81	19.80	90.00	BZX84C6V8WDITR-ND	81.00/M
7.5	5.0	15	BZX84C7V5WDICT-ND	2.81	19.80	90.00	BZX84C7V5WDITR-ND	81.00/M
8.2	5.0	15	BZX84C8V2WDICT-ND	2.81	19.80	90.00	BZX84C8V2WDITR-ND	81.00/M
9.1	5.0	15	BZX84C9V1WDICT-ND	2.81	19.80	90.00	BZX84C9V1WDITR-ND	81.00/M
10	5.0	20	BZX84C10WDICT-ND	2.81	19.80	90.00	BZX84C10WDITR-ND	81.00/M
11	5.0	20	BZX84C11WDICT-ND	2.81	19.80	90.00	BZX84C11WDITR-ND	81.00/M
12	5.0	25	BZX84C12WDICT-ND	2.81	19.80	90.00	BZX84C12WDITR-ND	81.00/M
15	5.0	30	BZX84C15WDICT-ND	2.81	19.80	90.00	BZX84C15WDITR-ND	81.00/M
16	5.0	40	BZX84C16WDICT-ND	2.81	19.80	90.00	BZX84C16WDITR-ND	81.00/M
18	5.0	45	BZX84C18WDICT-ND	2.81	19.80	90.00	BZX84C18WDITR-ND	81.00/M
20	5.0	55	BZX84C20WDICT-ND	2.81	19.80	90.00	BZX84C20WDITR-ND	81.00/M
22	5.0	55	BZX84C22WDICT-ND	2.81	19.80	90.00	BZX84C22WDITR-ND	81.00/M
24	5.0	70	BZX84C24WDICT-ND	2.81	19.80	90.00	BZX84C24WDITR-ND	81.00/M
27	2.0	80	BZX84C27WDICT-ND	2.81	19.80	90.00	BZX84C27WDITR-ND	81.00/M
30	2.0	80	BZX84C30WDICT-ND	2.81	19.80	90.00	BZX84C30WDITR-ND	81.00/M
33	2.0	80	BZX84C33WDICT-ND	2.81	19.80	90.00	BZX84C33WDITR-ND	81.00/M
36	2.0	90	BZX84C36WDICT-ND	2.81	19.80	90.00	BZX84C36WDITR-ND	81.00/M
39	2.0	130	BZX84C39WDICT-ND	2.81	19.80	90.00	BZX84C39WDITR-ND	81.00/M
MMBZ Series								
2.4	20	30	MMBZ5221BWDICT-ND	2.81	19.80	90.00	MMBZ5221BWDITR-ND	81.00/M
3.0	20	30	MMBZ5225BWDICT-ND	2.81	19.80	90.00	MMBZ5225BWDITR-ND	81.00/M
3.3	20	28	MMBZ5226BWDICT-ND	2.81	19.80	90.00	MMBZ5226BWDITR-ND	81.00/M
3.6	20	24	MMBZ5227BWDICT-ND	2.81	19.80	90.00	MMBZ5227BWDITR-ND	81.00/M
3.9	20	23	MMBZ5228BWDICT-ND	2.81	19.80	90.00	MMBZ5228BWDITR-ND	81.00/M
4.7	20	19	MMBZ5230BWDICT-ND	2.81	19.80	90.00	MMBZ5230BWDITR-ND	81.00/M
5.1	20	17	MMBZ5231BWDICT-ND	2.81	19.80	90.00	MMBZ5231BWDITR-ND	81.00/M
5.6	20	11	MMBZ5232BWDICT-ND	2.81	19.80	90.00	MMBZ5232BWDITR-ND	81.00/M
6.2	20	7.0	MMBZ5234BWDICT-ND	2.81	19.80	90.00	MMBZ5234BWDITR-ND	81.00/M
6.8	20	5.0	MMBZ5235BWDICT-ND	2.81	19.80	90.00	MMBZ5235BWDITR-ND	81.00/M
7.5	20	6.0	MMBZ5236BWDICT-ND	2.81	19.80	90.00	MMBZ5236BWDITR-ND	81.00/M
8.2	20	8.0	MMBZ5237BWDICT-ND	2.81	19.80	90.00	MMBZ5237BWDITR-ND	81.00/M
9.1	20	10	MMBZ5239BWDICT-ND	2.81	19.80	90.00	MMBZ5239BWDITR-ND	81.00/M
11	20	22	MMBZ5241BWDICT-ND	2.81	19.80	90.00	MMBZ5241BWDITR-ND	81.00/M
12	20	30	MMBZ5242BWDICT-ND	2.81	19.80	90.00	MMBZ5242BWDITR-ND	81.00/M
13	9.5	13	MMBZ5243BWDICT-ND	2.81	19.80	90.00	MMBZ5243BWDITR-ND	81.00/M
15	8.5	16	MMBZ5245BWDICT-ND	2.81	19.80	90.00	MMBZ5245BWDITR-ND	81.00/M
16	7.8	17	MMBZ5246BWDICT-ND	2.81	19.80	90.00	MMBZ5246BWDITR-ND	81.00/M
18	7.0	21	MMBZ5248BWDICT-ND	2.81	19.80	90.00	MMBZ5248BWDITR-ND	81.00/M
20	6.2	25	MMBZ5250BWDICT-ND	2.81	19.80	90.00	MMBZ5250BWDITR-ND	81.00/M
22	5.6	29	MMBZ5251BWDICT-ND	2.81	19.80	90.00	MMBZ5251BWDITR-ND	81.00/M
24	5.2	33	MMBZ5252BWDICT-ND	2.81	19.80	90.00	MMBZ5252BWDITR-ND	81.00/M
27	5.0	41	MMBZ5254BWDICT-ND	2.81	19.80	90.00	MMBZ5254BWDITR-ND	81.00/M
28	4.5	44	MMBZ5255BWDICT-ND	2.81	19.80	90.00	MMBZ5255BWDITR-ND	81.00/M
36	3.4	70	MMBZ5258BWDICT-ND	2.81	19.80	90.00	MMBZ5258BWDITR-ND	81.00/M
39	3.2	80	MMBZ5259BWDICT-ND	2.81	19.80	90.00	MMBZ5259BWDITR-ND	81.00/M

SOT-363 Dual Isolated Surface Mount Zener Diodes — 200mW


BZX Series

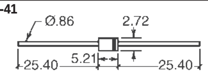
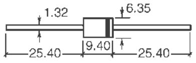
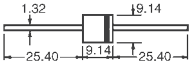

MMBZ Series

Zener Volt VZ @ IZT Nom	Test Current iZT (mA)	Max. Dynamic Imped. ZZT iZT	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Pricing 3,000
BZX Series								
2.4	5.0	100	BZX84C2V4SDICT-ND	3.13	22.00	100.00	BZX84C2V4SDITR-ND	90.00/M
2.7	5.0	100	BZX84C2V7SDICT-ND	3.13	22.00	100.00	BZX84C2V7SDITR-ND	90.00/M
3.0	5.0	95	BZX84C3V0SDICT-ND	3.13	22.00	100.00	BZX84C3V0SDITR-ND	90.00/M
3.3	5.0	95	BZX84C3V3SDICT-ND	3.13	22.00	100.00	BZX84C3V3SDITR-ND	90.00/M
3.6	5.0	90	BZX84C3V6SDICT-ND	3.13	22.00	100.00	BZX84C3V6SDITR-ND	90.00/M
3.9	5.0	90	BZX84C3V9SDICT-ND	3.13	22.00	100.00	BZX84C3V9SDITR-ND	90.00/M
4.3	5.0	90	BZX84C4V3SDICT-ND	3.13	22.00	100.00	BZX84C4V3SDITR-ND	90.00/M
4.7	5.0	80	BZX84C4V7SDICT-ND	3.13	22.00	100.00	BZX84C4V7SDITR-ND	90.00/M
5.1	5.0	60	BZX84C5V1SDICT-ND	3.13	22.00	100.00	BZX84C5V1SDITR-ND	90.00/M
5.6	5.0	40	BZX84C5V6SDICT-ND	3.13	22.00	100.00	BZX84C5V6SDITR-ND	90.00/M
6.2	5.0	10	BZX84C6V2SDICT-ND	3.13	22.00	100.00	BZX84C6V2SDITR-ND	90.00/M
6.8	5.0	15	BZX84C6V8SDICT-ND	3.13	22.00	100.00	BZX84C6V8SDITR-ND	90.00/M
7.5	5.0	15	BZX84C7V5SDICT-ND	3.13	22.00	100.00	BZX84C7V5SDITR-ND	90.00/M
8.2	5.0	15	BZX84C8V2SDICT-ND	3.13	22.00	100.00	BZX84C8V2SDITR-ND	90.00/M
9.1	5.0	15	BZX84C9V1SDICT-ND	3.13	22.00	100.00	BZX84C9V1SDITR-ND	90.00/M
11	5.0	20	BZX84C11SDICT-ND	3.13	22.00	100.00	BZX84C11SDITR-ND	90.00/M
12	5.0	25	BZX84C12SDICT-ND	3.13	22.00	100.00	BZX84C12SDITR-ND	90.00/M
15	5.0	30	BZX84C15SDICT-ND	3.13	22.00	100.00	BZX84C15SDITR-ND	90.00/M
18	5.0	45	BZX84C18SDICT-ND	3.13	22.00	100.00	BZX84C18SDITR-ND	90.00/M
20	5.0	55	BZX84C20SDICT-ND	3.13	22.00	100.00	BZX84C20SDITR-ND	90.00/M
22	5.0	55	BZX84C22SDICT-ND	3.13	22.00	100.00	BZX84C22SDITR-ND	90.00/M
24	5.0	70	BZX84C24SDICT-ND	3.13	22.00	100.00	BZX84C24SDITR-ND	90.00/M
27	2.0	80	BZX84C27SDICT-ND	3.13	22.00	100.00	BZX84C27SDITR-ND	90.00/M
30	2.0	80	BZX84C30SDICT-ND	3.13	22.00	100.00	BZX84C30SDITR-ND	90.00/M
33	2.0	80	BZX84C33SDICT-ND	3.13	22.00	100.00	BZX84C33SDITR-ND	90.00/M
36	2.0	90	BZX84C36SDICT-ND	3.13	22.00	100.00	BZX84C36SDITR-ND	90.00/M
39	2.0	130	BZX84C39SDICT-ND	3.13	22.00	100.00	BZX84C39SDITR-ND	90.00/M
MMBZ Series								
2.4	20	30	MMBZ5221BSDICT-ND	3.13	22.00	100.00	MMBZ5221BSDITR-ND	90.00/M
3.0	20	30	MMBZ5225BSDICT-ND	3.13	22.00	100.00	MMBZ5225BSDITR-ND	90.00/M
3.3	20	28	MMBZ5226BSDICT-ND	3.13	22.00	100.00	MMBZ5226BSDITR-ND	90.00/M
3.6	20	24	MMBZ5227BSDICT-ND	3.13	22.00	100.00	MMBZ5227BSDITR-ND	90.00/M
3.9	20	23	MMBZ5228BSDICT-ND	3.13	22.00	100.00	MMBZ5228BSDITR-ND	90.00/M
4.7	20	19	MMBZ5230BSDICT-ND	3.13	22.00	100.00	MMBZ5230BSDITR-ND	90.00/M
5.6	20	11	MMBZ5232BSDICT-ND	3.13	22.00	100.00	MMBZ5232BSDITR-ND	90.00/M
6.2	20	7	MMBZ5234BSDICT-ND	3.13	22.00	100.00	MMBZ5234BSDITR-ND	90.00/M
6.8	20	5	MMBZ5235BSDICT-ND	3.13	22.00	100.00	MMBZ5235BSDITR-ND	90.00/M
7.5	20	6	MMBZ5236BSDICT-ND	3.13	22.00	100.00	MMBZ5236BSDITR-ND	90.00/M
8.2	20	8	MMBZ5237BSDICT-ND	3.13	22.00	100.00	MMBZ5237BSDITR-ND	90.00/M
9.1	20	10	MMBZ5239BSDICT-ND	3.13	22.00	100.00	MMBZ5239BSDITR-ND	90.00/M
10	20	17	MMBZ5240BSDICT-ND	3.13	22.00	100.00	MMBZ5240BSDITR-ND	90.00/M
11	20	22	MMBZ5241BSDICT-ND	3.13	22.00	100.00	MMBZ5241BSDITR-ND	90.00/M
12	20	30	MMBZ5242BSDICT-ND	3.13	22.00	100.00	MMBZ5242BSDITR-ND	90.00/M
13	9.5	13	MMBZ5243BSDICT-ND	3.13	22.00	100.00	MMBZ5243BSDITR-ND	90.00/M
15	8.5	16	MMBZ5245BSDICT-ND	3.13	22.00	100.00	MMBZ5245BSDITR-ND	90.00/M
16	7.8	17	MMBZ5246BSDICT-ND	3.13	22.00	100.00	MMBZ5246BSDITR-ND	90.00/M
18	7.0	21	MMBZ5248BSDICT-ND	3.13	22.00	100.00	MMBZ5248BSDITR-ND	90.00/M
20	6.2	25	MMBZ5250BSDICT-ND	3.13	22.00	100.00	MMBZ5250BSDITR-ND	90.00/M
22	5.6	29	MMBZ5251BSDICT-ND	3.13	22.00	100.00	MMBZ5251BSDITR-ND	90.00/M
24	5.2	33	MMBZ5252BSDICT-ND	3.13	22.00	100.00	MMBZ5252BSDITR-ND	90.00/M
27	5.0	41	MMBZ5254BSDICT-ND	3.13	22.00	100.00	MMBZ5254BSDITR-ND	90.00/M
28	4.5	44	MMBZ5255BSDICT-ND	3.13	22.00	100.00	MMBZ5255BSDITR-ND	90.00/M
30	4.2	49	MMBZ5256BSDICT-ND	3.13	22.00	100.00	MMBZ5256BSDITR-ND	90.00/M
33	3.8	58	MMBZ5257BSDICT-ND	3.13	22.00	100.00	MMBZ5257BSDITR-ND	90.00/M
36	3.4	70	MMBZ5258BSDICT-ND	3.13	22.00	100.00	MMBZ5258BSDITR-ND	90.00/M
39	3.2	80	MMBZ5259BSDICT-ND	3.13	22.00	100.00	MMBZ5259BSDITR-ND	90.00/M

SMA Surface Mount Zener Diodes —1.0W, 6% Tolerance

Zener Voltage	Test Current IZT mA	Impedance ZZT @ IZT Ohms	Digi-Key Part No.	Cut Tape Pricing 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 5,000
5.1	100	5.0	SMAZ5V1DICT-ND	4.00	28.80	84.00	SMAZ5V1DITR-ND	128.00/M
5.6	100	2.0	SMAZ5V6DICT-ND	4.00	28.80	84.00	SMAZ5V6DITR-ND	128.00/M
6.2	100	2.0	SMAZ6V2DICT-ND	4.00	28.80	84.00	SMAZ6V2DITR-ND	128.00/M
6.8	100	2.0	SMAZ6V8DICT-ND	4.00	28.80	84.00	SMAZ6V8DITR-ND	128.00/M
7.5	100	2.0	SMAZ7V5DICT-ND	4.00	28.80	84.00	SMAZ7V5DITR-ND	128.00/M
8.2	100	2.0	SMAZ8V2DICT-ND	4.00	28.80	84.00	SMAZ8V2DITR-ND	128.00/M
9.1	50	4.0	SMAZ9V1DICT-ND	4.00	28.80	84.00	SMAZ9V1DITR-ND	128.00/M
10	50	4.0	SMAZ10DICT-ND	4.00	28.80	84.00	SMAZ10DITR-ND	128.00/M
12	50	7.0	SMAZ12DICT-ND	4.00	28.80	84.00	SMAZ12DITR-ND	128.00/M
15	50	10	SMAZ15DICT-ND	4.00	28.80	84.00	SMAZ15DITR-ND	128.00/M
16	25	15	SMAZ16DICT-ND	4.00	28.80	84.00	SMAZ16DITR-ND	128.00/M
18	25	15	SMAZ18DICT-ND	4.00	28.80	84.00	SMAZ18DITR-ND	128.00/M
20	25	15	SMAZ20DICT-ND	4.00	28.80	84.00	SMAZ20DITR-ND	128.00/M
22	25	15	SMAZ22DICT-ND	4.00	28.80	84.00	SMAZ22DITR-ND	128.00/M
24	25	15	SMAZ24DICT-ND	4.00	28.80	84.00	SMAZ24DITR-ND	128.00/M
27	25	15	SMAZ27DICT-ND	4.00	28.80	84.00	SMAZ27DITR-ND	128.00/M
30	25	15	SMAZ30DICT-ND	4.00	28.80	84.00	SMAZ30DITR-ND	128.00/M
33	25	15	SMAZ33DICT-ND	4.00	28.80	84.00	SMAZ33DITR-ND	128.00/M
36	10	40	SMAZ36DICT-ND	4.00	28.80	84.00	SMAZ36DITR-ND	128.00/M
39	10	40	SMAZ39DICT-ND	4.00	28.80	84.00	SMAZ39DITR-ND	128.00/M

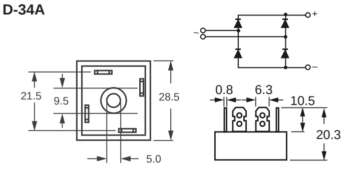
High-Efficiency Rectifiers

Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Reverse Current @25°C (µA)	Max. Forward Voltage Peak (V)	Max. Reverse Recovery Time (nS)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,200	5,000	Package
1.0	50	50	5.0	1.0	50	HER101CT-ND	.41	3.00	21.12	HER101TR-ND	—	—	82.00/M	**DO-41** 
	100	50	5.0	1.0	50	HER102CT-ND	.46	3.38	23.76	HER102TR-ND	—	—	92.00/M	
	200	50	5.0	1.0	50	HER103CT-ND	.48	3.56	25.08	HER103TR-ND	—	—	97.00/M	
	300	50	5.0	1.0	50	HER104CT-ND	.48	3.70	26.64	HER104TR-ND	—	—	118.00/M	
	400	50	5.0	1.0	50	HER105CT-ND	.46	3.68	27.60	HER105TR-ND	—	—	129.00/M	
3.0	50	200	10.0	1.0	50	HER301CT-ND	.63	5.00	37.50	HER301TR-ND	—	200.00/M	—	**DO-201AD** 
	100	200	10.0	1.0	50	HER302CT-ND	.65	5.20	39.00	HER302TR-ND	—	208.00/M	—	
	200	200	10.0	1.0	50	HER303CT-ND	.70	5.60	42.00	HER303TR-ND	—	224.00/M	—	
	300	200	10.0	1.0	50	HER304CT-ND	.64	5.12	38.40	HER304TR-ND	—	232.00/M	—	
	400	200	10.0	1.0	50	HER305CT-ND	.72	5.76	43.20	HER305TR-ND	—	261.00/M	—	
6.0	50	300	10.0	1.0	60	HER601CT-ND	.96	7.68	57.60	HER601TR-ND	198.00	—	—	**R-6** 
	100	300	10.0	1.0	60	HER602CT-ND	.86	6.76	52.00	HER602TR-ND	188.50	—	—	
	200	300	10.0	1.0	60	HER603CT-ND	.92	7.28	56.00	HER603TR-ND	203.00	—	—	
	300	300	10.0	1.0	60	HER604CT-ND	1.16	9.10	70.00	HER604TR-ND	254.00	—	—	

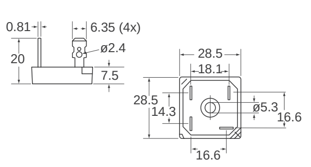
Operating and Storage Temperature: -65°C to +175°C. Reverse recovery test @ 1.0A, V_R = 30V.

Bridge Rectifiers

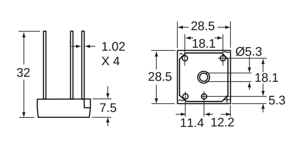
D-34A



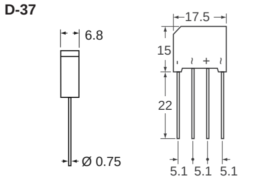
GBPC…A



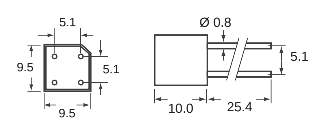
GBPC…W



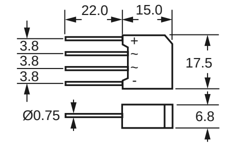
D-37



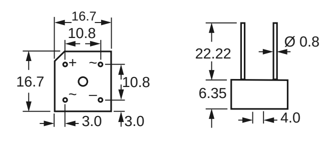
D-38



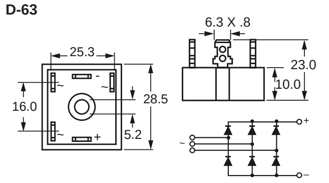
D-44



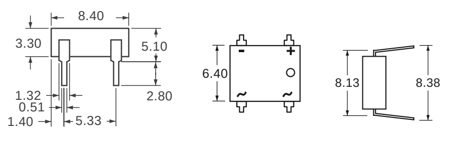
D-46



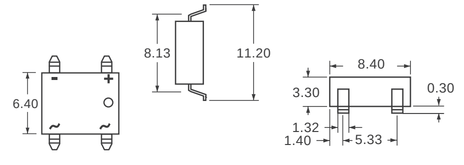
D-63



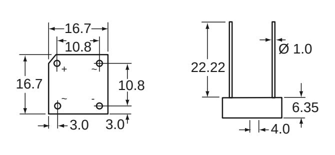
D-70



D-71



D-72



Operating Temperature Range: -40°C to + 150°C. Storage Temperature Range: -40°C to +150°C

Pkg.	Max. Peak Reverse Volt.(V)	Max. Surge Current 10ms(A)	Max. Instant Forward Volt. (V)	Max. Ave. Rectified Current (A)	Digi-Key Part No.	Price Each 1	10	100
D-34A	50	350	1.1	25	26MB05A-ND	5.31	4.25	3.19
	100	350	1.1	25	26MB10A-ND	6.38	5.10	3.14
	200	350	1.1	25	26MB20A-ND	5.76	4.61	3.46
	600	350	1.1	25	26MB60A-ND	6.75	5.40	3.26
	1000	350	1.1	25	26MB100A-ND	7.31	5.85	4.39
	1400	350	1.1	25	26MB140A-ND	9.68	7.74	5.81
	1600	350	1.1	25	26MB160A-ND	10.49	8.39	6.30
	50	420	1.2	35	36MB05A-ND	5.63	4.50	3.38
	100	420	1.2	35	36MB10A-ND	5.92	4.74	3.56
	200	420	1.2	35	36MB20A-ND	6.05	4.85	3.64
	400	420	1.2	35	36MB40A-ND	6.85	5.48	3.65
	600	420	1.2	35	36MB60A-ND	7.00	5.60	3.72
	800	420	1.2	35	36MB80A-ND	7.10	5.68	3.78
	1000	420	1.2	35	36MB100A-ND	8.00	6.40	4.07
	1200	420	1.2	35	36MB120A-ND	8.13	6.50	4.10
	1400	420	1.2	35	36MB140A-ND	12.05	9.64	6.41
	1600	420	1.2	35	36MB160A-ND	14.20	11.36	7.56
GBPC-A	200	350	1.1	25	GBPC2502A-ND	2.70	2.16	1.62
	200	350	1.1	35	GBPC3502A-ND	3.02	2.42	1.81
	400	350	1.1	25	GBPC2504A-ND	2.75	2.20	1.65
	600	350	1.1	25	GBPC2506A-ND	2.79	2.24	1.68
	800	350	1.1	25	GBPC2508A-ND	2.84	2.27	1.71
	400	420	1.1	35	GBPC3504A-ND	2.88	2.31	1.73
	600	420	1.1	35	GBPC3506A-ND	2.97	2.38	1.79
	800	420	1.1	35	GBPC3508A-ND	3.02	2.42	1.81
	1000	420	1.1	35	GBPC3510A-ND	3.08	2.47	1.85
	1200	420	1.1	35	GBPC3512A-ND	3.15	2.52	1.89
GBPC-W	200	335	1.1	25	GBPC2502W-ND	2.70	2.16	1.62
	400	335	1.1	25	GBPC2504W-ND	2.79	2.24	1.68
	600	335	1.1	25	GBPC2506W-ND	3.15	2.52	1.89
	800	335	1.1	25	GBPC2508W-ND	2.90	2.33	1.75
	200	400	1.1	35	GBPC3502WIR-ND	2.88	2.31	1.73
	400	400	1.1	35	GBPC3504W-ND	2.93	2.34	1.76
	600	400	1.1	35	GBPC3506W-ND	2.97	2.38	1.79
	800	475	1.1	35	GBPC3508W-ND	3.43	2.74	2.24
	1000	400	1.1	35	GBPC3510W-ND	3.15	2.52	1.89
	1200	400	1.1	35	GBPC3512W-ND	3.22	2.58	1.94
D-37	50	52	1.1	1.9	2KBB05-ND	.65	.53	.40
	50	52	1.1	1.9	2KBB05R-ND*	.65	.53	.40
	100	52	1.1	1.9	2KBB10-ND	.68	.54	.41
	100	52	1.1	1.9	2KBB10R-ND*	.68	.54	.41
	200	52	1.1	1.9	2KBB20-ND	.70	.56	.42
	200	52	1.1	1.9	2KBB20R-ND*	.70	.56	.42
	400	52	1.1	1.9	2KBB40-ND	.72	.58	.44
	400	52	1.1	1.9	2KBB40R-ND*	.72	.58	.44
	600	52	1.1	1.9	2KBB60-ND	.74	.60	.45
	600	52	1.1	1.9	2KBB60R-ND*	.74	.60	.45
	800	52	1.1	1.9	2KBB80-ND	.77	.62	.46
	800	52	1.1	1.9	2KBB80R-ND*	.77	.62	.46
	1000	52	1.1	1.9	2KBB100-ND	.79	.63	.48
	1000	52	1.1	1.9	2KBB100R-ND*	.79	.63	.48
D-38	50	52	1	1.5	1KAB05E-ND	.52	.42	.32
	100	52	1	1.5	1KAB10E-ND	.52	.42	.32
	400	52	1	1.5	1KAB40E-ND	.52	.42	.32
	600	52	1	1.5	1KAB60E-ND	.54	.44	.33
	800	52	1	1.5	1KAB80E-ND	.59	.47	.36
	1000	52	1	1.5	1KAB100E-ND	.77	.62	.46

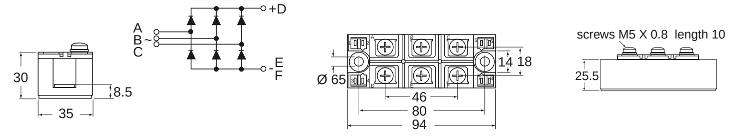
***** Pin Configuration: - ~ ~ +

Pkg.	Max. Peak Reverse Volt.(V)	Max. Surge Current 10ms(A)	Max. Instant Forward Volt. (V)	Max. Ave. Rectified Current (A)	Digi-Key Part No.	Price Each 1	10	100
D-44	50	63	1	2	2KBP005-ND	.73	.58	.35
	100	63	1	2	2KBP01-ND	.68	.54	.41
	200	63	1	2	2KBP02-ND	.70	.56	.42
	400	63	1	2	2KBP04-ND	.72	.58	.44
	600	63	1	2	2KBP06-ND	.74	.60	.45
	800	63	1	2	2KBP08-ND	.77	.62	.46
	1000	63	1	2	2KBP10-ND	.79	.63	.48
D-46	50	50	1	3	KB5PC1005-ND	.63	.51	.38
	100	50	1	3	KBPC101-ND	.65	.53	.40
	200	55	1	3	KBPC102-ND	.78	.62	.42
	400	55	1	3	KBPC104-ND	.80	.64	.43
	600	50	1	3	KBPC106-ND	.79	.63	.48
	800	50	1	3	KBPC108-ND	.81	.65	.49
	1000	50	1	3	KBPC110-ND	.86	.69	.52
D-63	100	360	1.26	25	26MT10-ND	14.11	11.29	8.47
	200	360	1.26	25	26MT20-ND	14.15	11.33	8.50
	400	360	1.26	25	26MT40-ND	14.18	11.34	8.51
	600	360	1.26	25	26MT60-ND	14.36	11.49	8.62
	1000	360	1.26	25	26MT100-ND	16.25	13.00	9.75
	1200	360	1.26	25	26MT120-ND	17.15	13.72	10.29
	1400	360	1.26	25	26MT140-ND	18.20	14.57	10.93
	1600	360	1.26	25	26MT160-ND	20.48	16.38	12.29
	100	475	1.26	25	36MT10-ND	14.87	11.90	8.93
	200	475	1.26	25	36MT20-ND	14.96	11.97	8.98
	400	300	1.19	35	36MT40-ND	16.83	13.46	8.96
	600	475	1.19	35	36MT60-ND	15.37	12.30	9.23
	800	475	1.19	35	36MT80-ND	15.59	12.48	9.36
	1000	475	1.19	35	36MT100-ND	17.82	14.26	10.70
	1200	475	1.19	35	36MT120-ND	18.72	14.98	11.24
	1400	475	1.19	35	36MT140-ND	20.86	16.69	12.52
	1600	420	1	35	36MT160-ND	26.05	20.84	13.85
D-70	50	40	1	1	DF005MIR-ND	.40	.32	.28
	100	30	1	1	DF01MIR-ND	.35	.28	.25
	200	40	1	1	DF02MIR-ND	.35	.28	.25
	400	40	1	1	DF04MIR-ND	.38	.30	.27
	600	30	1	1	DF06MIR-ND	.40	.32	.28
	800	31	1	1	DF08MIR-ND	.38	.31	.23
	800	31	1	1	DF08SIR-ND	.38	.31	.23
D-71	50	40	1	1	DF005SIR-ND	.40	.32	.28
	100	31	1	1	DF01STRR16CT-ND	.42	.32	.25
	100	31	1	1	DF01STRR16TR-ND	236.25/1,250		
	100	40	1	1	DF01SIR-ND	.35	.28	.25
	200	31	1	1	DF02STRR16CT-ND	.45	.34	.27
	200	31	1	1	DF02STRR16TR-ND	253.13/1,250		
	200	40	1	1	DF02SIR-ND	.38	.30	.27
	400	31	1	1	DF04SIR-ND	.36	.29	.22
	600	31	1	1	DF06SIR-ND	.38	.31	.23
	1000	31	1	1	DF10MIR-ND	.43	.34	.26
	1000	31	1	1	DF10SIR-ND	.38	.31	.23
D-72	50	109	1	6	KBPC6005-ND	1.80	1.44	1.08
	100	109	1	6	KBPC601-ND	1.85	1.48	1.11
	200	109	1	6	KBPC602-ND	1.87	1.50	1.13
	400	137	1.2	6	KBPC604-ND	2.13	1.70	1.14
	600	109	1	6	KBPC606-ND	2.03	1.62	1.22

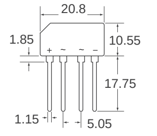
(Continued)

Bridge Rectifiers *(Cont.)*

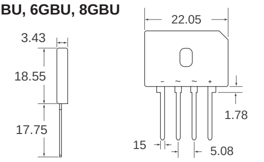
INT-A-Pak



4GBL



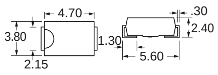
4GBU, 6GBU, 8GBU



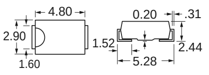
Pkg.	Peak Reverse Volt.(V)	Surge Current 10ms(A)	Instant Forward Volt. (V)	Ave. Rectified Current (A)	Digi-Key Part No.	Price Each		
						1	10	100
D-72	800	109	1	6	KBPC608-ND	2.18	1.75	1.31
	1000	109	1	6	KBPC610-ND	2.36	1.89	1.42
	50	137	1	8	KBPC8005-ND	1.98	1.59	1.19
	100	137	1	8	KBPC801-ND	2.03	1.62	1.22
	200	137	1	8	KBPC802-ND	2.07	1.66	1.25
	400	137	1	8	KBPC804-ND	2.12	1.70	1.27
	600	137	1	8	KBPC806-ND	2.27	1.82	1.37
	800	137	1	8	KBPC808-ND	2.43	1.95	1.46
	1000	137	1	8	KBPC810-ND	2.59	2.07	1.56
INT-A-Pak	1600	390	2.5	55	51MT160KB-ND	97.74	87.97	65.00
4GBL	50	158	1.1	4	4GBL005-ND *NEW!*	1.23	.66	.59
	100	158	1.1	4	4GBL01-ND *NEW!*	1.33	.70	.63
	200	158	1.1	4	4GBL02-ND *NEW!*	1.40	.76	.68
	400	158	1.1	4	4GBL04-ND *NEW!*	1.44	.82	.70
	600	158	1.1	4	4GBL06-ND *NEW!*	1.52	.88	.73
	800	158	1.1	4	4GBL08-ND *NEW!*	1.62	.94	.78
4GBU	50	158	1.0	4	4GBU005-ND *NEW!*	1.29	.68	.62
4GBU	100	158	1.0	4	4GBU01-ND *NEW!*	1.37	.74	.67
	200	158	1.0	4	4GBU02-ND *NEW!*	1.40	.80	.68
	400	158	1.0	4	4GBU04-ND *NEW!*	1.48	.86	.72
	600	158	1.0	4	4GBU06-ND *NEW!*	1.59	.92	.77
	800	158	1.0	4	4GBU08-ND *NEW!*	1.67	.95	.79
6GBU	50	182	1.0	6	6GBU005-ND *NEW!*	1.40	.80	.68
	100	182	1.0	6	6GBU01-ND *NEW!*	1.48	.86	.72
	200	182	1.0	6	6GBU02-ND *NEW!*	1.59	.92	.77
	400	182	1.0	6	6GBU04-ND *NEW!*	1.67	.95	.79
	600	182	1.0	6	6GBU06-ND *NEW!*	1.74	.99	.81
	800	182	1.0	6	6GBU08-ND *NEW!*	1.84	1.05	.85
8GBU	50	210	1.0	8	8GBU005-ND *NEW!*	1.55	.90	.75
	100	210	1.0	8	8GBU01-ND *NEW!*	1.63	.93	.77
	200	210	1.0	8	8GBU02-ND *NEW!*	1.71	.97	.79
	400	210	1.0	8	8GBU04-ND *NEW!*	1.81	1.03	.84
	600	210	1.0	8	8GBU06-ND *NEW!*	1.91	1.09	.89
	800	210	1.0	8	8GBU08-ND *NEW!*	2.01	1.14	.93

Schottky Rectifiers

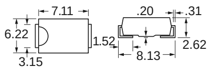
SMB



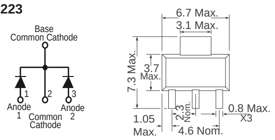
SMA



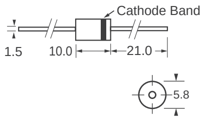
SMC



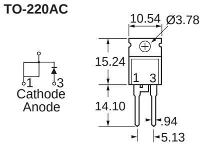
SOT-223



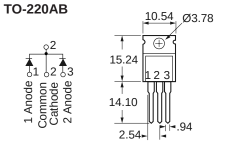
C-16



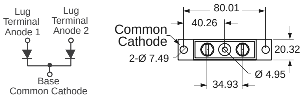
TO-220AC



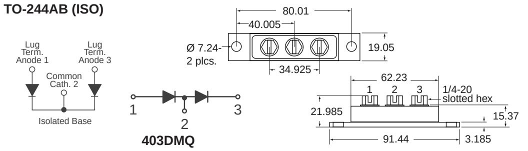
TO-220AB



TO-244AB



TO-244AB (ISO)

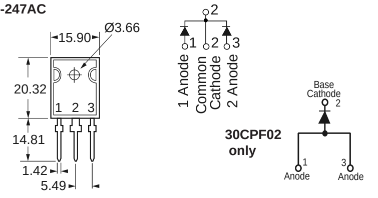


IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp = 5µs Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each		
						1	10	100
					SMB			
1	15	0.34	140	-55 to 150	10BQ015-ND	.40	.32	.23
1	15	0.34	140	-55 to 150	10BQ015TR-ND		420.00/3,000	
1	15	0.42	230	-55 to 125	MBRS130CT-ND *NEW!*	.45	.27	.17
1	30	0.42	230	-55 to 125	MBRS130TR-ND *NEW!*		372.00/3,000	
1	30	0.30	230	-55 to 125	MBRS130LCT-ND *NEW!*	.74	.43	.29
1	30	0.30	230	-55 to 125	MBRS130LTR-ND *NEW!*		590.18/3,000	
1	30	0.30	360	-55 to 150	STPS1L30UCT-ND *NEW!*	.40	.24	.16
1	30	0.30	360	-55 to 150	STPS1L30UTR-ND *NEW!*		327.00/3,000	
1	30	0.30	430	-55 to 150	10BQ030-ND *NEW!*	.45	.27	.17
1	40	0.53	430	-55 to 150	10BQ040-ND	.43	.26	.18
1	40	0.53	430	-55 to 150	10BQ040TR-ND		390.00/3,000	
1	40	0.53	380	-55 to 150	MBRS140CT-ND *NEW!*	.40	.24	.16
1	40	0.53	380	-55 to 150	MBRS140TR-ND *NEW!*		327.00/3,000	
1	60	0.57	700	-55 to 150	10BQ060-ND	.38	.30	.21
1	60	0.57	700	-55 to 150	10BQ060TR-ND		408.00/3,000	
1	90	0.63	870	-55 to 175	MBRS190CT-ND *NEW!*	.40	.24	.16
1	90	0.63	870	-55 to 175	MBRS190TR-ND *NEW!*		327.00/3,000	
1	100	0.78	780	-55 to 175	10BQ100-ND	.51	.31	.22
1	100	0.78	780	-55 to 175	10BQ100TR-ND		477.00/3,000	
1	100	0.63	870	-55 to 175	MBRS1100CT-ND *NEW!*	.40	.24	.16
1	100	0.63	870	-55 to 175	MBRS1100TR-ND *NEW!*		327.00/3,000	
2	30	0.370	350	-55 to 150	20BQ030CT-ND *NEW!*	.51	.30	.21
2	30	0.370	350	-55 to 150	20BQ030TR-ND *NEW!*		459.00/3,000	
					SMA			
1.5	40	0.54	120	-55 to 150	10MQ040N-ND	.45	.27	.19
1.5	40	0.54	120	-55 to 150	10MQ040NTR-ND		967.50/7,500	
2.1	40	0.42	330	-40 to 150	15MQ040N-ND	.68	.42	.30
2.1	40	0.42	330	-40 to 150	15MQ040NTR-ND		1590.00/7,500	
3	40	0.49	120	-55 to 150	MBRA140CT-ND *NEW!*	.31	.18	.12
3	40	0.49	120	-55 to 150	MBRA140TR-ND *NEW!*		562.50/7,500	
1.5	60	0.63	40	-55 to 150	10MQ060N-ND	.39	.23	.16
1.5	60	0.63	40	-55 to 150	10MQ060NTR-ND		817.50/7,500	
1.5	100	0.78	120	-55 to 150	10MQ100N-ND	.35	.28	.20
1.5	100	0.78	120	-55 to 150	10MQ100NTR-ND		817.50/7,500	
					SMC			
3	15	0.35	650	-55 to 100	30BQ015-ND	.90	.72	.51
3	15	0.35	650	-55 to 100	30BQ015TR-ND		1458.00/3,000	
3	40	0.51	2000	-55 to 150	30BQ040-ND	.85	.68	.49
3	40	0.51	2000	-55 to 150	30BQ040TR-ND		810.00/3,000	
3	40	0.43	1580	-55 to 150	MBRS340CT-ND *NEW!*	.65	.33	.26
3	40	0.43	1580	-55 to 150	MBRS340TR-ND *NEW!*		564.00/3,000	
3	60	0.58	1200	-55 to 150	30BQ060-ND	.88	.70	.50
3	60	0.58	1200	-55 to 150	30BQ060TR-ND		1419.00/3,000	
3	60	0.61	790	-55 to 150	MBRS360CT-ND *NEW!*	1.10	.55	.44
3	60	0.61	790	-55 to 150	MBRS360TR-ND *NEW!*		990.00/3,000	
3	100	0.79	2100	-55 to 175	30BQ100-ND	1.35	.86	.64
3	100	0.79	2100	-55 to 175	30BQ100TR-ND		816.00/3,000	
					SOT-223			
2	45	0.54	390	-55 to 150	20CJQ045-ND	1.00	.80	.57
2	60	0.56	385	-55 to 150	20CJQ060-ND	.95	.76	.57
2	100	0.56	385	-55 to 150	20CJQ100-ND	.99	.80	.60
					C-16			
3.3	40	0.55	470	-40 to 150	31DQ04-ND	.84	.71	.49
3.0	40	0.6	430	-40 to 150	MBR340-ND *NEW!*	.51	.30	.21
3.0	50	0.73	460	-40 to 150	MBR350-ND *NEW!*	.51	.30	.21
3.3	50	0.58	340	-40 to 150	31DQ05-ND	.58	.46	.33
3.0	60	0.73	460	-40 to 150	MBR360-ND *NEW!*	.51	.30	.21
3.3	60	0.58	340	-40 to 150	31DQ06-ND	.91	.78	.54
3.3	60	0.58	340	-40 to 150	31DQ06TR-ND		388.80/1,200	
3.3	90	0.85	210	-40 to 150	31DQ09-ND	.99	.84	.58
3.3	90	0.85	210	-40 to 150	31DQ09TR-ND *NEW!*		434.40/1,200	
3.3	100	0.85	210	-40 to 150	31DQ10-ND	.83	.51	.38
3.3	100	0.85	210	-40 to 150	31DQ10TR-ND		438.00/1,200	
					TO-220AC			
19	15	0.32	700	-55 to 100	19TQ015-ND	2.45	1.69	1.35
20	15	0.25	700	-55 to 125	20L15T-ND	1.31	1.05	.79
20	15	0.25	700	-55 to 125	STPS20L15D-ND *NEW!*	1.40	.80	.68
6	35	0.53	690	-55 to 175	6TQ035-ND	1.80	1.44	1.08
7.5	35	0.84	690	-65 to 150	MBR735-ND	.81	.65	.52
10	35	0.49	1050	-55 to 175	10TQ035-ND	1.73	1.39	1.04
10	35	0.84	1080	-65 to 150	MBR1035-ND	1.17	.94	.75
15	35	0.50	990	-55 to 150	12TQ035-ND	1.73	1.39	1.04
16	35	0.63	1060	-65 to 150	MBR1635-ND	1.50	1.20	.96
18	35	0.6	1800	-55 to 175	18TQ035-ND	2.00	1.60	1.14
20	35	0.51	1800	-55 to 150	20TQ035-ND	1.89	1.52	1.14
6	40	0.53	690	-55 to 175	6TQ040-ND	1.87	1.50	1.13
10	40	0.49	1050	-55 to 175	10TQ040-ND	1.82	1.46	1.10
15	40	0.50	990	-55 to 150	12TQ040-ND	1.85	1.48	1.11
18	40	0.53	1800	-55 to 175	18TQ040-ND	1.91	1.53	1.15
20	40	0.51	1800	-55 to 150	20TQ040-ND	2.00	1.61	1.21
7.5	45	0.57	690	-65 to 150	MBR745-ND	1.09	.67	.49
10	45	0.57	1050	-65 to 150	MBR1045-ND	.94	.84	.75

(Continued)

Schottky Rectifiers *(Cont.)*

TO-247AC



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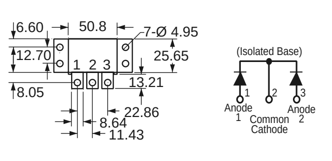
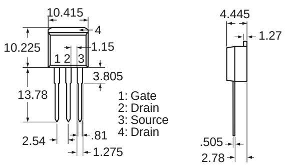


TO-262



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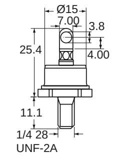
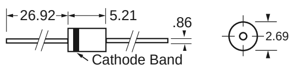


Cathode to stud

DO-41



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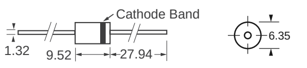
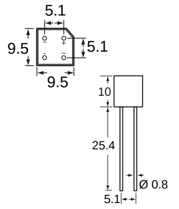
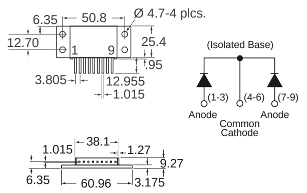


D-38



D-60



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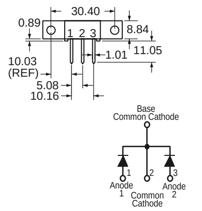
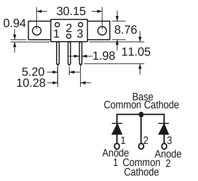


D61-8

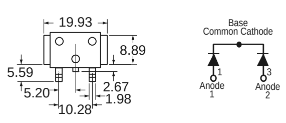


IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp = 5μs Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each 1	10	100
15	45	0.50	990	-55 to 150	12TQ045-ND	1.94	1.55	1.17
16	45	0.57	1800	-65 to 150	MBR1645-ND	1.20	1.07	.96
6	45	0.53	690	-55 to 175	6TQ045-ND	2.23	1.78	1.19
10	45	0.57	1050	-55 to 175	10TQ045-ND	2.13	1.70	1.21
18	45	0.6	1800	-55 to 175	18TQ045-ND	2.39	1.61	1.26
20	45	0.57	1800	-65 to 150	20TQ045-ND	2.33	1.86	1.33
8	60	0.72	850	-55 to 175	8TQ060-ND	2.35	1.88	1.34
8	80	0.72	850	-55 to 175	8TQ080-ND	2.40	1.92	1.37
8	100	0.58	850	-55 to 175	8TQ100-ND	2.47	1.59	1.47
15	200	1.05	200	-65 to 175	MUR1520IR-ND	1.82	1.18	.90
8	200	0.975	100	-65 to 175	MUR820IR-ND	.83	.67	.50
TO-220AB								
40	15	0.41	700	-55 to 125	40L15CT-ND	2.63	2.10	1.30
40	15	0.25	700	-55 to 125	STPS40L15CT-ND *NEW!*	2.30	1.61	1.22
40	20	0.34	1000	-55 to 150	47CTQ020-ND	2.43	1.95	1.46
30	25	0.40	900	-55 to 150	32CTQ025-ND	2.36	1.89	1.42
12	30	0.53	690	-55 to 175	12CTQ030-ND	1.76	1.41	1.06
30	30	0.73	1060	-65 to 150	MBR2535CT-ND	1.86	1.49	1.19
30	30	0.37	—	-55 to 150	STPS30L30CT-ND *NEW!*	1.81	1.03	.84
30	35	0.6	120	-65 to 150	MBR3035CT-ND *NEW!*	1.40	.80	.68
15	35	0.72	690	-65 to 150	MBR1535CT-ND	1.14	.92	.73
10	200	1.25	50	-65 to 175	MUR1020CT-ND	1.17	.94	.71
20	200	0.85	100	-65 to 175	MUR2020CT-ND	1.17	.94	.71
30	30	0.40	900	-55 to 150	32CTQ030-ND	2.40	1.64	1.30
40	30	0.48	1100	-55 to 150	42CTQ030-ND	3.27	2.62	2.09
20	35	0.57	1060	-65 to 150	MBR2035CT-ND	1.40	1.12	.84
12	35	0.53	690	-55 to 175	12CTQ035-ND	1.64	1.32	.99
15	35	0.51	810	-55 to 150	15CTQ035-ND	1.64	1.32	.99
20	35	0.57	1060	-55 to 175	20CTQ035-ND	2.03	1.62	1.22
30	35	0.50	990	-55 to 150	25CTQ035-ND	2.48	1.98	1.49
30	35	0.62	1060	-55 to 175	30CTQ035-ND	2.25	1.80	1.28
15	40	0.51	810	-55 to 150	15CTQ040-ND	1.69	1.35	1.02
12	40	0.53	690	-55 to 175	12CTQ040-ND	1.69	1.35	1.02
20	40	0.57	1060	-55 to 175	20CTQ040-ND	2.03	1.62	1.22
30	40	0.56	1060	-55 to 175	30CTQ040-ND	2.12	1.70	1.27
30	40	0.50	990	-55 to 150	25CTQ040-ND	2.54	2.04	1.53
15	45	0.51	810	-55 to 150	15CTQ045-ND	1.76	1.41	1.06
40	45	0.6	1020	-65 to 150	MBR4045CT-ND	1.53	1.23	.92
15	45	0.57	690	-65 to 150	MBR1545CT-ND	.89	.81	.73
20	45	0.57	1060	-65 to 150	MBR2045CT-ND	1.46	1.32	1.19
30	45	0.73	1060	-65 to 150	MBR2545CT-ND	1.46	1.32	1.19
30	45	0.76	1060	-65 to 150	MBR3045CT-ND	2.60	2.08	1.71
45	45	0.53	690	-55 to 175	12CTQ045-ND	1.95	1.56	1.04
20	45	0.64	1060	-55 to 175	20CTQ045-ND	2.25	1.80	1.29
30	45	0.62	1060	-55 to 175	30CTQ045-ND	2.40	1.92	1.42
40	45	0.53	1240	-55 to 150	40CTQ045-ND	2.88	2.30	1.64
30	50	0.56	1000	-55 to 150	30CTQ050-ND	2.86	2.29	1.72
15	60	0.56	1000	-55 to 150	15TQ060-ND	2.14	1.71	1.29
30	60	0.62	1060	-55 to 150	30CTQ060-ND	3.40	2.72	1.94
40	60	0.75	1000	-55 to 150	48CTQ060-ND	2.95	2.36	1.70
20	80	0.85	850	-65 to 150	MBR2080CT-ND	1.86	1.49	1.19
16	80	0.72	850	-55 to 175	16CTQ080-ND	3.53	2.82	2.01
20	90	0.85	850	-65 to 150	MBR2090CT-ND	1.86	1.49	1.19
40	100	0.81	850	-55 to 175	43CTQ100-ND	3.50	2.80	2.24
20	100	0.7	850	-65 to 150	MBR20100CT-ND	2.03	1.33	1.02
16	100	0.72	850	-55 to 175	16CTQ100-ND	2.19	1.54	1.24
10	150	0.73	620	-55 to 175	10CTQ150-ND	3.07	2.18	1.80
TO-244AB								
220	15	0.32	10800	-55 to 100	225CNQ015-ND	32.31	25.85	19.39
400	15	0.47	4000	-55 to 175	445CNQ015-ND *NEW!*	56.40	45.12	34.97
220	25	0.40	22500	-55 to 150	220CNQ025-ND	31.07	24.86	18.65
220	30	0.40	22500	-55 to 150	220CNQ030-ND	31.07	24.86	18.65
440	30	0.41	27000	-55 to 150	440CNQ030-ND	52.76	42.21	31.66
200	35	0.49	26000	-55 to 150	200CNQ035-ND	30.49	24.39	18.30
200	35	0.58	16000	-55 to 175	201CNQ035-ND	30.49	24.39	18.30
300	35	0.59	16000	-55 to 175	301CNQ035-ND	31.39	25.11	18.84
400	35	0.52	29000	-55 to 150	400CNQ035-ND	47.88	38.31	28.73
400	35	0.56	25000	-55 to 175	401CNQ035-ND	47.88	38.31	28.73
200	40	0.49	26000	-55 to 150	200CNQ040-ND	30.49	24.39	18.30
200	40	0.58	16000	-55 to 175	201CNQ040-ND	30.49	24.39	18.30
300	40	0.62	600	-55 to 175	300CNQ040-ND *NEW!*	38.13	30.50	23.34
300	40	0.59	16000	-55 to 175	301CNQ040-ND	31.50	25.20	18.90
300	45	0.69	16000	-55 to 175	301CNQ045-ND	35.13	28.10	18.51
200	45	0.49	26000	-55 to 150	200CNQ045-ND	30.49	24.39	18.30
200	45	0.58	16000	-55 to 175	201CNQ045-ND	30.49	24.39	18.30
300	45	0.62	600	-55 to 175	300CNQ045-ND *NEW!*	38.13	30.50	23.34
400	45	0.52	29000	-55 to 150	400CNQ045-ND	47.88	38.31	28.73
400	45	0.56	25000	-55 to 175	401CNQ045-ND	47.88	38.31	28.73
200	50	0.58	16000	-55 to 175	201CNQ050-ND	30.49	24.39	18.30
300	50	0.59	16000	-55 to 175	301CNQ050-ND	31.73	25.38	19.04
200	60	0.59	16000	-55 to 150	408CMQ060-ND *NEW!*	35.45	29.55	25.93
400	60	0.59	25500	-55 to 150	408CNQ060-ND *NEW!*	17.27	13.35	11.54
200	80	0.70	16000	-55 to 175	203CNQ080-ND	45.38	36.31	27.23
300	80	0.72	22000	-55 to 175	303CNQ080-ND	44.44	35.55	26.67
400	80	0.69	25500	-55 to 175	403CNQ080-ND	52.99	42.39	31.80
200	100	0.86	16000	-55 to 175	203CNQ100-ND	49.56	39.65	31.73
200	100	0.70	16000	-55 to 175	203CNQ100R-ND	31.07	24.86	18.65
200	100	0.70	16000	-55 to 175	203DNQ100-ND	35.63	28.50	21.38
300	100	0.72	22000	-55 to 175	303CNQ100-ND	44.44	35.55	26.67
400	100	0.69	25500	-55 to 175	403CNQ100-ND	52.99	42.39	31.80
200	135	0.71	10000	-55 to 175	209CNQ135-ND *NEW!*	26.40	21.12	18.48
400	135	0.72	20000	-55 to 175	409CNQ135-ND *NEW!*	41.16	34.27	30.04
400	150	0.72	20000	-55 to 175	409CNQ150-ND	56.14	44.91	33.69
TO-244AB(ISO)								
220	30	0.40	22500	-55 to 150	220CMQ030-ND	44.91	35.93	26.95
440	30	0.41	27000	-55 to 150	440CMQ030-ND	64.04	51.23	38.43
200	45	0.58	16000	-55 to 175	201CMQ045-ND	44.06	35.25	26.44
400	45	0.52	29000	-55 to 150	400CMQ045-ND*NEW!*	40.18	33.48	29.38
400	45	0.52	29000	-55 to 150	400DMQ045-ND	63.68	50.94	38.21
400	45	0.56	25000	-55 to 175	401CMQ045-ND	62.82	50.26	37.70
200	60	0.59	16000	-55 to 150	208CMQ060-ND*NEW!*	28.50	24.00	21.00
400	60	0.59	25500	-55 to 150	408CMQ060-ND*NEW!*	35.45	29.55	25.93
200	80	0.70	16000	-55 to 175	203CMQ080-ND	39.92	31.94	23.95
400	80	0.69	25500	-55 to 175	403CMQ080-ND	54.86	43.89	32.92
200	100	0.70	16000	-55 to 175	203CMQ100-ND	44.91	35.93	26.95
200	100	0.70	16000	-55 to 175	203DMQ100-ND	45.56	36.45	27.34
400	100	0.69	25500	-55 to 175	403CMQ100-ND	62.89	50.31	37.74
400	100	0.72	25500	-55 to 175	403DMQ100-ND*NEW!*	40.18	33.48	29.38
TO-247AC								
40	15	0.25	700	-55 to 125	40L15CW-ND	2.68	2.14	1.33
40	15	0.26	700	-55 to 125	MBR40L15CW-ND *NEW!*	4.16	2.91	2.21
40	15	0.25	700	-55 to 125	STPS40L15CW-ND *NEW!*	2.60	1.81	1.40
80	20	0.32	2200	-55 to 150	80CPQ020-ND	4.50	3.60	2.70
50	30	0.38	2180	-55 to 150	52CPQ030-ND	10.13	8.10	6.08
70	30	0.51	2180	-55 to 150	72CPQ030-ND	6.33	5.06	3.61
30	35	0.50	1020	-55 to 150	30CPQ035-ND	3.24	2.60	1.95
30	35	0.76	1020	-65 to 150	MBR3035WT-ND	1.92	1.54	1.23
40	35	0.43	3500	-55 to 150	40CPQ035-ND	5.33	4.27	3.20
30	40	0.50	1020	-55 to 150	30CPQ040-ND	3.42	2.74	2.06
40	40	0.43	3500	-55 to 150	40CPQ040-ND	5.67	4.54	3.41
40	40	0.42	1240	-55 to 150	40L40CW-ND	3.38	2.70	2.03
40	40	0.43	3500	-55 to 150	STPS40L40CW-ND *NEW!*	3.18	2.23	1.74
45	40	0.42	1240	-55 to 150	STPS40L45CW-ND *NEW!*	2.43	1.70	1.29
30	45	0.60	1020	-65 to 150	MBR3045WT-ND	1.46	1.37	1.23
40	45	0.42	1240	-55 to 150	40L45CW-ND	2.41	1.93	1.45
40	45	0.59	1020	-55 to 150	MBR4045WT-ND	1.92	1.54	1.23
60	45	0.69	2900	-55 to 150	MBR6045WT-ND	2.47	1.65	1.28
30	45	0.50	1020	-55 to 150	30CPQ045-ND	4.46	3.17	2.61
40	45	0.43	3500	-55 to 150	40CPQ045-ND	6.31	4.05	3.76
30	50	0.50	1020	-55 to 150	30CPQ050-ND	4.50	3.60	2.70
40	50	0.49	3200	-55 to 150	40CPQ050-ND	6.37	5.10	3.83
40	60	0.77	3200	-55 to 150	MBR4060WT-ND	3.41	2.74	2.19
30	60	0.50	1020	-55 to 150	30CPQ060-ND	5.50	3.90	3.21
40	60	0.49	3200	-55 to 150	40CPQ060-ND	7.63	4.89	4.54
30	60	0.56	1020	-55 to 150	STPS30L60CW-ND *NEW!*	2.21	1.54	1.17
30	80	0.67	920	-55 to 175	30CPQ080-ND	5.63	4.50	3.38
40	80	0.61	2950	-55 to 175	40CPQ080-ND	7.94	6.36	4.77

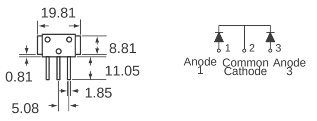
(Continued)

Schottky Rectifiers *(Cont.)*

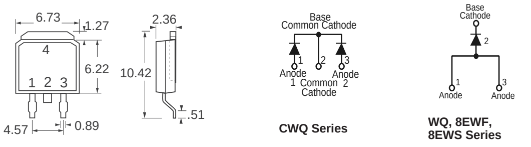
D61-8-SL



D61-8-SM *NEW!*



D-PAK

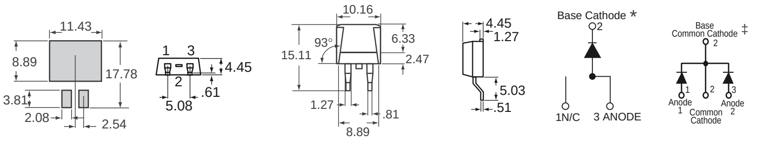


IF	VRRM	VF	IFSM(A) @	TJ Junction	Digi-Key	Price Each		
(A)	(V)	(V)	tp = 5μs Sine	Temp (°C)	Part No.	1	10	100
30	90	0.67	920	-55 to 175	30CPQ090-ND	3.44	2.76	2.07
30	100	0.67	920	-55 to 175	30CPQ100-ND	4.35	3.17	2.61
40	100	.77	2950	-55 to 175	40CPQ100-ND	9.40	7.52	5.37
30	140	0.67	920	-55 to 175	30CPQ140-ND	6.44	5.15	3.87
30	150	1	1000	-55 to 175	30CPQ150-ND	7.38	5.90	4.21
30	200	1.05	200	-65 to 175	MUR3020WT-ND	2.68	2.15	1.61
TO-249AA								
160	30	0.46	7900	-55 to 150	162CNQ030-ND	28.01	22.41	16.81
160	30	0.46	7900	-55 to 150	162CMQ030-ND	29.59	23.67	17.76
300	30	0.56	10000	-55 to 150	322CNQ030-ND	34.61	27.69	20.77
160	34	0.60	6400	-55 to 150	160CMQ035-ND	28.91	23.13	17.35
160	35	0.63	11500	-55 to 175	161CMQ035-ND	28.91	23.13	17.35
160	40	0.60	6400	-55 to 150	160CMQ040-ND	28.91	23.13	17.35
160	40	0.63	11500	-55 to 175	161CMQ040-ND	28.91	23.13	17.35
160	45	0.60	6400	-55 to 150	160CNQ045-ND	26.87	21.50	16.12
160	45	0.63	11500	-55 to 175	161CNQ045-ND	27.43	21.95	16.46
160	45	0.60	6400	-55 to 150	160CMQ045-ND	28.91	23.13	17.35
160	45	0.63	11500	-55 to 175	161CMQ045-ND	28.91	23.13	17.35
160	80	0.80	9000	-55 to 175	163CMQ080-ND	30.71	24.57	18.43
160	100	0.80	9000	-55 to 175	163CNQ100-ND	29.14	23.31	17.49
160	100	0.98	9000	-55 to 175	163CMQ100-ND	34.13	27.30	19.50
TO-262								
40	20	0.34	1000	-55 to 150	47CTQ020-1-ND	2.39	1.91	1.44
32	30	0.40	900	-55 to 150	32CTQ030-1-ND *NEW!*	1.74	.99	.81
40	30	0.38	1100	-55 to 150	42CTQ030-1-ND	2.72	2.18	1.64
30	35	0.73	1060	-65 to 150	MBR2535CT-1-ND	1.49	1.19	.90
15	35	0.57	690	-65 to 150	MBR1535CT-1-ND *NEW!*	1.08	.65	.50
30	45	0.56	1060	-55 to 175	30CTQ045-1-ND *NEW!*	1.74	.99	.81
40	45	0.48	1240	-55 to 150	40CTQ045-1-ND *NEW!*	2.14	1.50	1.14
15	45	0.84	690	-65 to 150	MBR1545CT-1-ND	.92	.74	.56
20	45	0.57	1060	-65 to 150	MBR2045CT-1-ND	1.42	1.14	.86
30	45	0.73	1060	-65 to 150	MBR2545CT-1-ND	1.51	1.21	.91
30	45	0.6	1020	-65 to 150	MBR3045CT-1-ND	2.41	1.93	1.45
40	45	0.6	1020	-65 to 150	MBR4045CT-1-ND	1.46	1.17	.88
40	60	0.58	1000	-55 to 150	48CTQ060-1-ND	2.72	2.18	1.64
20	80	0.70	850	-65 to 150	MBR2080CT-1-ND	1.42	1.14	.86
20	90	0.70	850	-65 to 150	MBR2090CT-1-ND	1.46	1.17	.88
16	100	0.58	850	-55 to 175	16CTQ100-1-ND	1.30	1.04	.78
20	100	0.70	850	-65 to 150	MBR20100CT-1-ND	1.44	1.16	.87
40	100	0.67	850	-55 to 175	43CTQ100-1-ND	2.77	2.22	1.67
10	150	0.73	620	-55 to 175	10CTQ150-1-ND	.88	.70	.53
10	200	1.25	50	-65 to 175	MURB1020CT-1-ND	1.24	.99	.75
15	200	1.05	200	-65 to 175	MURB1520-1-ND	1.24	.99	.75
16	200	0.975	100	-65 to 175	MURB1620CT-1-ND	1.19	.96	.72
20	200	0.85	100	-65 to 175	MURB2020CT-1-ND	1.24	.99	.75
DO-5								
95	15	.46	7500	-65 to 100	95HQ015-ND	11.13	8.90	6.36
60	30	0.5	12000	-65 to 150	55HQ030-ND	10.63	8.50	6.07
50	30	0.86	800	-65 to 125	1N6097-ND*NEW!*	8.60	6.20	5.16
50	40	0.86	800	-65 to 125	1N6098-ND*NEW!*	8.60	6.20	5.16
60	35	0.75	800	-65 to 150	SD51-ND	9.45	7.56	5.67
75	35	0.63	9000	-65 to 175	75HQ035-ND	9.45	7.56	5.67
60	45	0.68	1000	-55 to 175	1N6392-ND *NEW!*	8.60	6.20	5.16
60	35	0.53	10800	-65 to 150	50HQ035-ND	9.34	7.47	5.61
60	35	0.58	10800	-65 to 150	51HQ035-ND	9.34	7.47	5.61
75	35	0.60	1000	-65 to 150	MBR7535-ND	9.34	7.47	5.61
85	35	0.62	9000	-65 to 175	85HQ035-ND	9.68	7.74	5.81
60	40	0.58	10800	-65 to 150	51HQ040-ND	9.45	7.56	5.67
60	40	0.53	10800	-65 to 150	50HQ040-ND	9.45	7.56	5.67
75	40	0.63	9000	-65 to 175	75HQ040-ND	9.56	7.65	5.74
85	40	0.62	9000	-65 to 175	85HQ040-ND	9.79	7.83	5.88
60	45	0.6	10800	-65 to 150	50HQ045-ND	10.50	8.40	6.00
60	45	0.58	10800	-65 to 150	51HQ045-ND	10.50	8.40	6.30
60	45	0.66	800	-65 to 150	52HQ045-ND *NEW!*	9.45	7.56	5.03
75	45	0.60	1000	-65 to 150	MBR7545-ND	11.03	8.82	6.62
75	45	0.71	9000	-65 to 175	75HQ045-ND	10.63	8.50	6.07
85	45	0.62	9000	-65 to 175	85HQ045-ND	9.79	7.83	5.88
60	60	0.70	8400	-65 to 175	60HQ060-ND	9.45	7.56	5.67
60	80	0.70	8400	-65 to 175	60HQ080-ND	9.70	7.76	5.82
60	100	0.7	8400	-65 to 175	60HQ100-ND	11.33	9.06	6.47
DO-41/DO-204AL								
1.0	30	0.55	225	-40 to 150	1N5818IR-ND *NEW!*	.49	.28	.17
1.1	30	0.55	225	-40 to 150	11DQ03-ND	.38	.33	.23
1.1	30	0.55	225	-40 to 150	11DQ03TR-ND	675.00/5,000		
3.3	30	0.55	470	-40 to 150	31DQ03-ND	.80	.68	.47
1.0	30	0.55	225	-40 to 150	1N5819IR-ND *NEW!*	.40	.24	.16
1.1	40	0.55	225	-40 to 150	11DQ04-ND	.33	.19	.13
1.1	40	0.55	225	-40 to 150	11DQ04TR-ND	675.00/5,000		
1.0	50	0.65	150	-40 to 150	MBR150-ND *NEW!*	.49	.28	.17
1.1	50	0.58	150	-40 to 150	11DQ05-ND	.28	.22	.16
1.1	50	0.58	150	-40 to 150	11DQ05TR-ND	445.00/5,000		
1.0	60	0.65	150	-40 to 150	MBR160-ND *NEW!*	.42	.24	.15
1.1	60	0.58	150	-40 to 150	11DQ06-ND	.42	.25	.17
1.1	60	0.58	150	-40 to 150	11DQ06TR-ND	590.00/5,000		
1.1	90	0.85	85	-40 to 150	11DQ09-ND	.46	.39	.27
1.1	90	0.85	85	-40 to 150	11DQ09TR-ND	810.00/5,000		
1.0	100	0.68	200	-40 to 150	MBR1100-ND *NEW!*	.31	.18	.12
1.1	100	0.85	85	-40 to 150	11DQ10-ND	.30	.24	.17
DO-204AR								
9	15	0.31	2900	-55 to 100	95SQ015-ND	2.05	1.42	1.13
9	15	0.31	2900	-55 to 100	95SQ015TR-ND	2430.00/1,500		
8	30	0.44	2400	-55 to 175	80SQ030-ND	1.33	1.07	.80
9	30	0.42	2150	-55 to 150	90SQ030-ND	1.40	1.12	.84
8	35	0.53	2400	-55 to 175	80SQ035-ND	1.50	1.20	.86
8	35	0.53	2400	-55 to 175	80SQ035TR-ND	1215.00/1,500		
9	35	0.42	2150	-55 to 150	90SQ035-ND	1.42	1.14	.86
8	40	0.53	2400	-55 to 175	80SQ040-ND	1.63	1.30	.93
9	40	0.48	2150	-55 to 150	90SQ040-ND	1.60	1.28	.91
8	45	0.53	2400	-55 to 175	80SQ045-ND	1.87	1.24	.96
8	45	0.53	2400	-55 to 175	80SQ045TR-ND	1458.00/1,500		
9	45	0.48	2150	-55 to 150	90SQ045-ND	1.70	1.36	.97
9	45	0.48	2150	-55 to 150	90SQ045TR-ND	1377.00/1,500		
5	60	0.65	225	-65 to 150	50SQ060-ND *NEW!*	1.90	1.52	1.14
5	80	0.66	1900	-55 to 175	50SQ080-ND	2.00	1.60	1.14
5	100	0.52	1900	-55 to 175	50SQ100-ND	2.14	1.37	1.27
5	100	0.52	1900	-55 to 175	50SQ100TR-ND	1803.00/1,500		
D-38								
1.2	200	1.1	50	-40 to 150	1KAB20E-ND	.58	.46	.31
D-60								
150	15	0.80	—	-55 to 175	155CMQ015-ND *NEW!*	24.15	19.32	15.46
150	30	0.65	9200	-55 to 175	152CMQ030-ND	29.59	23.67	17.76
150	35	0.60	6600	-55 to 150	150CMQ035-ND	28.91	23.13	17.35
150	35	0.65	9200	-55 to 175	151CMQ035-ND	28.91	23.13	17.35
150	40	0.60	6600	-55 to 150	150CMQ040-ND	28.91	23.13	17.35
150	40	0.65	9200	-55 to 175	151CMQ040-ND	28.91	23.13	17.35
150	45	0.60	6600	-55 to 150	150CMQ045-ND	28.91	23.13	17.35
150	45	0.65	9200	-55 to 175	151CMQ045-ND	28.91	23.13	17.35
150	45	0.60	6600	-55 to 150	150CNQ045-ND	26.87	21.50	16.12
150	80	0.80	7000	-55 to 175	153CMQ080-ND	30.71	24.57	18.43
150	100	0.80	7000	-55 to 175	153CMQ100-ND	30.71	24.57	18.43
D61-6								
60	30	0.46	4600	-55 to 150	62CNQ030-ND	16.50	13.20	9.43
60	45	0.52	6300	-55 to 175	61CNQ045-ND	16.18	12.94	9.24
D61-8								
80	15	0.36	5200	-55 to 100	85CNQ015A-ND	17.55	14.04	10.03
110	15	0.33	5050	-55 to 125	115CNQ015A-ND *NEW!*	13.20	10.20	8.82
80	20	0.32	6000	-55 to 150	87CNQ020A-ND *NEW!*	14.23	11.00	9.52
80	30	0.47	5100	-55 to 150	82CNQ030A-ND	16.88	13.50	9.64
110	30	0.39	5100	-55 to 150	112CNQ030A-ND *NEW!*	13.20	10.20	8.82
80	35	0.47	5800	-55 to 150	80CNQ035A-ND *NEW!*	14.56	11.26	9.74
80	35	0.54	4600	-55 to 175	81CNQ035A-ND *NEW!*	14.56	11.26	9.74
80	40	0.47	5800	-55 to 150	80CNQ040A-ND *NEW!*	14.56	11.26	9.74
80	40	0.54	4600	-55 to 175	81CNQ040A-ND *NEW!*	14.56	11.26	9.74
80	45	0.47	5800	-55 to 150	80CNQ045ASM-ND *NEW!*	13.40	10.36	8.96
80	45	0.54	4600	-55 to 175	81CNQ045A-ND *NEW!*	14.56	11.26	9.74
110	45	0.55	4000	-55 to 175	111CNQ045A-ND *NEW!*	13.20	10.20	8.82
110	45	0.5	5400	-55 to 150	110CNQ045A-ND *NEW!*	13.20	10.20	8.82
80	60	0.56	5000	-55 to 150	88CNQ060A-ND *NEW!*	11.30	8.72	7.50
80	80	0.67	7000	-55 to 175	83CNQ080A-ND *NEW!*	14.85	11.48	9.93
80	100	0.81	7000	-55 to 175	83CNQ100A-ND	16.88	13.50	9.64
110	100	0.67	7000	-55 to 175	113CNQ100A-ND *NEW!*	13.20	10.20	8.82
80	135	0.69	4300	-55 to 175	89CNQ135A-ND *NEW!*	14.23	11.00	9.52
80	150	0.69	4300	-55 to 175	89CNQ150A-ND *NEW!*	14.23	11.00	9.52
110	450	0.5	5400	-5 to 150	110CNQ045A-ND *NEW!*	13.20	10.20	8.82
D61-8-SL								
80	15	0.32	5200	-55 to 100	85CNQ015ASL-ND *NEW!*	14.21	10.99	9.50
110	15	0.33	5050	-55 to 125	115CNQ015ASL-ND *NEW!*	13.42	10.37	8.97
80	20	0.32	6000	-55 to 150	87CNQ020ASL-ND *NEW!*	14.23	11.00	9.52
110	30	0.39	5100	-50 to 150	112CNQ030ASL-ND *NEW!*	13.42	10.37	8.97
80	35	0.47	5800	-55 to 150	80CNQ035ASL-ND *NEW!*	13.40	10.36	8.96
80	35	0.54	4600	-55 to 175	81CNQ035ASL-ND *NEW!*	13.40	10.36	8.96
80	40	0.52	5800	-55 to 150	80CNQ040ASL-ND	15.23	12.18	8.70
80	40	0.54	4600	-55 to 175	81CNQ040ASL-ND *NEW!*	13.40	10.36	8.96
80	45	0.47	5800	-55 to 150	80CNQ045ASL-ND *NEW!*	15.23	12.18	8.70
80	45	0.54	4600	-55 to 175	81CNQ045ASL-ND *NEW!*	13.40	10.36	8.96
110	45	0.5	5400	-55 to 150	110CNQ045ASL-ND *NEW!*	13.75	10.63	9.19
110	45	0.55	4000	-55 to 175	111CNQ045ASL-ND *NEW!*	13.53	10.46	9.05
80	60	0.56	5000	-55 to 150	88CNQ060ASL-ND *NEW!*	11.30	8.72	7.50
80	80	0.67	7000	-55 to 175	83CNQ080ASL-ND *NEW!*	13.66	10.56	9.13
80	100	0.67	7000	-55 to 175	83CNQ100ASL-ND *NEW!*	13.66	10.56	9.13
110	100	0.67	7000	-55 to 175	113CNQ100ASL-ND *NEW!*	13.97	10.80	9.34
80	135	0.69	4300	-55 to 175	89CNQ135ASL-ND *NEW!*	14.23	11.00	9.52
80	150	0.69	4300	-55 to 175	89CNQ150ASL-ND *NEW!*	14.23	11.00	9.52
D61-8-SM								
80	15	0.32	5200	-55 to 100	85CNQ015ASM-ND *NEW!*	14.21	10.99	9.50
110	15	0.33	5050	-55 to 125	115CNQ015ASM-ND *NEW!*	13.42	10.37	8.97
80	20	0.32	6000	-55 to 150	87CNQ020ASM-ND *NEW!*	14.23	11.00	9.52
80	30	0.37	5100	-55 to 150	82CNQ030ASM-ND *NEW!*	13.66	10.56	9.13
110	30	0.39	5100	-55 to 150	112CNQ030ASM-ND *NEW!*	13.42	10.37	8.97
80	35	0.54	4600	-55 to 175	81CNQ035ASM-ND *NEW!*	13.40	10.36	8.96
80	40	0.47	5800	-55 to 150	80CNQ040ASM-ND *NEW!*	13.40	10.36	8.96
80	40	0.54	4600	-55 to 175	81CNQ040ASM-ND *NEW!*	13.40	10.36	8.96
80	45	0.47	5800	-55 to 150	80CNQ045ASM-ND *NEW!*	13.40	10.36	8.96

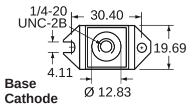
*‡See D-2PAK drawing

(Continued)

D-2PAK



HALF-PAK/D-67



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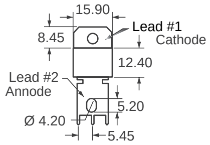
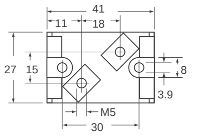


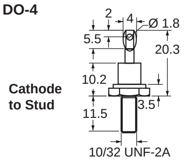
IF	VRRM	VF	IFSM(A) @	TJ Junction	Digi-Key	Price Each		
(A)	(V)	(V)	tp = 5μs Sine	Temp (°C)	Part No.	1	10	100
80	45	0.54	4600	-55 to 175	81CNQ045ASM-ND *NEW!*	13.40	10.36	8.96
110	45	0.5	5400	-55 to 150	110CNQ045ASM-ND *NEW!*	13.75	10.63	9.19
110	45	0.55	4000	-55 to 175	111CNQ045ASM-ND *NEW!*	13.53	10.46	9.05
80	60	0.56	5000	-55 to 150	88CNQ060ASM-ND *NEW!*	11.30	8.72	7.50
80	80	0.67	7000	-55 to 175	83CNQ080ASM-ND *NEW!*	13.66	10.56	9.13
100	80	0.67	7000	-55 to 175	83CNQ100ASM-ND *NEW!*	13.66	10.56	9.13
110	100	0.67	7000	-55 to 175	113CNQ100ASM-ND *NEW!*	13.97	10.80	9.34
80	135	0.69	4300	-55 to 175	89CNQ135ASM-ND *NEW!*	14.23	11.00	9.52
80	150	0.69	4300	-55 to 175	89CNQ150ASM-ND *NEW!*	14.23	11.00	9.52
D-PAK								
7	30	0.35	535	-40 to 150	6CWQ03FN-ND	.86	.69	.52
12	30	0.47	320	-55 to 150	12CWQ03FN-ND	.93	.74	.53
12	30	0.47	320	-55 to 150	12CWQ03FNTR-ND		1000.00/2,000	
3.5	30	0.45	535	-40 to 150	30WQ03FN-ND	.75	.60	.43
5.5	30	0.46	320	-40 to 150	50WQ03FN-ND	.93	.74	.53
3.0	30	0.49	490	-40 to 150	MBRD330-ND *NEW!*	.74	.45	.32
7	40	0.53	500	-40 to 150	6CWQ04FN-ND	1.13	.90	.64
7	40	0.53	500	-40 to 150	6CWQ04FNTR-ND		1216.00/2,000	
12	40	0.52	320	-55 to 150	12CWQ04FN-ND	.93	.74	.53
3.5	40	0.53	500	-40 to 150	30WQ04FN-ND	.83	.66	.47
3.5	40	0.53	500	-40 to 150	30WQ04FNTR-ND		892.00/2,000	
5.5	40	0.51	340	-40 to 150	50WQ04FN-ND	1.05	.84	.60
5.5	40	0.51	340	-40 to 150	50WQ04FNTR-ND		1134.00/2,000	
3.0	40	0.49	490	-40 to 150	MBRD340-ND*NEW!*	.74	.45	.32
10	45	0.53	400	-40 to 175	10WQ045FN-ND *NEW!*	3.75	2.63	2.05
10	45	0.57	75	-65 to 175	STPS1045B-ND *NEW!*	1.76	1.04	.80
6	50	0.65	490	-40 to 150	MBRD650CT-ND*NEW!*	.82	.48	.36
6	60	0.65	490	-40 to 150	MBRD660CT-ND*NEW!*	.74	.45	.32
7	60	0.61	500	-40 to 150	6CWQ06FN-ND	1.30	1.04	.74
7	60	0.61	500	-40 to 150	6CWQ06FNTR-ND		1404.00/2,000	
12	60	0.61	500	-55 to 150	12CWQ06FN-ND	.93	.74	.53
3.5	60	0.61	490	-40 to 150	30WQ06FN-ND	.95	.76	.54
3.5	60	0.61	490	-40 to 150	30WQ06FNTR-ND		1026.00/2,000	
5.5	60	0.57	320	-40 to 150	50WQ06FN-ND	1.20	.96	.69
5.5	60	0.57	320	-40 to 150	50WQ06FNTRR-ND		1944.00/3,000	
7	100	0.81	440	-40 to 150	6CWQ10FN-ND	1.55	1.24	.89
7	100	0.81	440	-40 to 150	6CWQ10FNTR-ND		1674.00/2,000	
12	100	0.8	330	-55 to 150	12CWQ10FN-ND	.93	.74	.53
12	100	0.8	330	-55 to 150	12CWQ10FNTR-ND		1000.00/2,000	
12	100	0.8	330	-55 to 150	12CWQ10FNTRR-ND		1500.00/3,000	
3.5	100	0.81	440	-40 to 150	30WQ10FN-ND	1.13	.90	.64
3.5	100	0.81	440	-40 to 150	30WQ10FNTR-ND		1216.00/2,000	
5.5	100	0.77	30	-40 to 150	50WQ10FN-ND	1.43	1.14	.81
D-2PAK								
19	15	0.36	700	-55 to 100	19TQ015S-ND	3.78	3.02	2.16
19	15	0.36	700	-55 to 100	19TQ015STRL-ND		1684.80/800	
20	15	0.25	700	-55 to 125	20L15TS-ND *NEW!*	1.52	.88	.73
40	15	0.41	700	-55 to 125	40L15CTS-ND	3.14	2.15	1.70
20	15	0.25	700	-55 to 125	STPS20L15G-ND *NEW!*	2.38	1.36	1.16
40	20	0.45	1000	-55 to 150	47CTQ020S-ND	2.70	2.16	1.39
30	30	0.49	1000	-55 to 150	32CTQ030S-ND	3.35	2.68	1.91
30	30	0.49	1000	-55 to 150	32CTQ030STRL-ND		652.00/800	
40	30	0.48	1100	-55 to 150	42CTQ030S-ND	3.03	2.42	2.19
40	30	0.48	1100	-55 to 150	42CTQ030STRL-ND		1307.20/800	
10	35	0.49	1050	-55 to 175	10TQ035S-ND	2.34	1.88	1.41
30	35	0.50	990	-55 to 150	25CTQ035S-ND	2.52	2.02	1.52
6	35	0.53	690	-55 to 175	6TQ035S-ND	1.78	1.43	1.07
12	35	0.53	690	-55 to 175	12CTQ035S-ND	1.87	1.50	1.13
15	35	0.50	990	-55 to 150	12TQ035S-ND	2.34	1.88	1.41
15	35	0.51	810	-55 to 150	15CTQ035S-ND	1.87	1.50	1.13
20	35	0.57	1060	-55 to 175	20CTQ035S-ND	2.36	1.89	1.42
20	35	0.51	1800	-55 to 150	20TQ035S-ND	2.16	1.73	1.30
30	35	0.56	1060	-55 to 175	30CTQ035S-ND	2.72	2.18	1.64
7.5	35	0.57	690	-65 to 150	MBRB735-ND *NEW!*	.88	.53	.39
10	35	0.57	1060	-65 to 150	MBRB1035-ND *NEW!*	1.06	.63	.48
15	35	0.57	690	-65 to 150	MBRB1535CT-ND *NEW!*	1.08	.65	.50
16	35	0.57	1800	-65 to 150	MBRB1635-ND *NEW!*	1.29	.68	.62
20	35	0.57	1060	-65 to 150	MBRB2035CT-ND	1.98	1.59	1.19
6	45	0.53	690	-55 to 175	6TQ045S-ND	1.82	1.46	1.10
7.5	45	0.57	690	-65 to 150	MBRB745-ND *NEW!*	1.72	1.03	.76
16	45	0.57	1800	-65 to 150	MBRB1645-ND *NEW!*	2.77	1.46	1.32
10	45	0.57	1060	-65 to 150	MBRB1045-ND	2.38	1.90	1.14
12	45	0.53	690	-55 to 175	12CTQ045S-ND	1.91	1.53	1.15
15	45	0.84	690	-65 to 150	MBRB1545CT-ND	1.53	1.22	.74
10	45	0.49	1050	-55 to 175	10TQ045S-ND	2.39	1.91	1.44
15	45	0.50	990	-55 to 150	12TQ045S-ND	2.39	1.91	1.44
15	45	0.50	990	-55 to 150	12TQ045STRR-ND *NEW!*		1269.60/800	
15	45	0.51	810	-55 to 150	15CTQ045S-ND	1.91	1.53	1.15
18	45	0.6	1800	-55 to 175	18TQ045S-ND	2.43	1.94	1.39
20	45	0.57	1060	-55 to 175	20CTQ045S-ND	2.39	1.91	1.44
20	45	0.51	1800	-55 to 150	20TQ045S-ND	2.36	1.89	1.42
20	45	0.57	1060	-65 to 150	MBRB2045CT-ND	4.03	3.23	2.42
30	45	0.50	990	-55 to 150	25CTQ045S-ND	2.77	2.22	1.67
30	45	0.6	1020	-65 to 150	MBRB3045CT-ND	2.93	2.34	1.76
30	45	0.73	1060	-65 to 150	MBRB2545CTTRL-ND		1382.40/800	
25	45	0.73	1060	-65 to 150	MBRB2535CT-ND	2.77	2.22	1.67
30	45	0.73	1060	-65 to 150	MBRB2545CT-ND	2.88	2.31	1.73
40	45	0.6	1020	-65 to 150	MBRB4045CT-ND	3.08	2.47	1.85
30	45	0.62	1060	-55 to 175	30CTQ045S-ND	3.08	2.46	1.76
30	45	0.62	1060	-55 to 175	30CTQ045STRR-ND		1372.00/800	
40	45	0.53	1240	-55 to 150	40CTQ045S-ND	3.03	2.42	1.73
15	60	0.56	1000	-55 to 150	15TQ060S-ND	2.72	2.18	1.64
30	60	0.62	1060	-55 to 150	30CTQ060S-ND	3.93	3.14	2.24
40	60	0.61	1000	-55 to 150	48CTQ060S-ND	3.03	2.42	1.73
8	80	0.72	850	-55 to 175	8TQ080S-ND	3.05	2.44	1.74
16	80	0.58	850	-55 to 175	16CTQ080S-ND	3.98	3.19	2.39
20	80	0.70	850	-65 to 150	MBRB2080CT-ND	4.03	3.23	2.42
20	90	0.70	850	-65 to 150	MBRB2090CT-ND	4.03	3.23	2.42
8	100	0.72	850	-55 to 175	8TQ100S-ND	3.10	2.48	1.77
8	100	0.72	850	-55 to 175	8TQ100STRR-ND		1382.40/800	
16	100	0.72	850	-55 to 175	16CTQ100S-ND	4.48	3.58	2.56
20	100	0.95	850	-65 to 150	MBRB20100CT-ND	1.89	1.52	1.21
20	100	0.95	850	-65 to 150	MBRB20100CTTRL-ND		659.20/800	
40	100	0.81	850	-55 to 175	43CTQ100S-ND	3.50	2.80	2.24
180	135	0.74	15000	-55 to 175	189NQ135-ND *NEW!*	16.50	12.75	11.03
10	150	0.93	620	-55 to 175	10CTQ150S-ND	3.73	2.98	2.13
10	200	1.25	50	-65 to 175	MURB1020CT-ND	1.24	.99	.75
15	200	1.05	200	-65 to 175	MURB1520-ND	1.24	.99	.75
16	200	0.975	100	-65 to 175	MURB1620CT-ND	1.19	.96	.72
20	200	0.85	100	-65 to 175	MURB2020CT-ND	1.24	.99	.75
8	200	0.975	100	-65 to 175	MURB820-ND	.90	.72	.54
Half-Pak/D-67								
120	15	0.39	10800	-55 to 100	125NQ015-ND	18.20	14.56	10.40
120	15	0.39	10800	-55 to 100	125NQ015R-ND	18.20	14.56	10.40
180	15	0.4	15000	-55 to 100	185NQ015-ND	23.65	18.92	13.51
180	15	0.4	15000	-55 to 100	185NQ015R-ND	21.29	17.03	12.78
240	15	0.4	20000	-55 to 100	245NQ015-ND	28.00	22.40	16.00
240	15	0.4	20000	-55 to 100	245NQ015R-ND	25.20	20.16	15.12
20	30	0.41	22500	-55 to 150	122NQ030-ND	17.83	14.26	10.19
120	30	0.41	22500	-55 to 150	122NQ030R-ND	16.04	12.84	9.63
180	30	0.41	30000	-55 to 150	182NQ030-ND	20.84	16.67	12.51
240	30	0.42	27000	-55 to 150	242NQ030-ND	24.66	19.73	14.80
240	30	0.42	27000	-55 to 150	242NQ030R-ND	24.66	19.73	14.80
120	35	0.52	29000	-55 to 150	120NQ035-ND	15.71	12.57	9.43
120	35	0.56	19800	-55 to 175	121NQ035-ND	15.71	12.57	9.43
180	35	0.56	25500	-55 to 150	180NQ035-ND	20.39	16.31	12.24
180	35	0.56	22000	-55 to 175	181NQ035-ND	20.39	16.31	12.24
240	35	0.59	25000	-55 to 175	241NQ035-ND	24.14	19.32	14.49
240	35	0.55	26000	-55 to 150	240NQ035-ND	24.14	19.32	14.49
120	40	0.56	19800	-55 to 175	121NQ040-ND	15.71	12.57	9.43
120	40	0.52	29000	-55 to 150	120NQ040-ND	15.77	12.62	9.47
180	40	0.56	25500	-55 to 150	180NQ040-ND	20.39	16.31	12.24
180	40	0.56	22000	-55 to 175	181NQ040-ND	20.39	16.31	12.24
240	40	0.55	26000	-55 to 150	240NQ040-ND	24.14	19.32	14.49
240	40	0.59	25000	-55 to 175	241NQ040-ND	24.14	19.32	14.49
120	45	0.52	29000	-55 to 150	120NQ045-ND	15.86	12.69	9.52
120	45	0.52	29000	-55 to 150	120NQ045R-ND	15.86	12.69	9.52
120	45	0.56	19800	-55 to 175	121NQ045-ND	15.71	12.57	9.43
120	45	0.56	19800	-55 to 175	121NQ045R-ND	15.71	12.57	9.43
180	45	0.56	25500	-55 to 150	180NQ045-ND	20.39	16.31	12.24
180	45	0.56	25500	-55 to 150	180NQ045R-ND	20.39	16.31	12.24
180	45	0.56	22000	-55 to 175	181NQ045-ND	20.39	16.31	12.24
180	45	0.56	22000	-55 to 175	181NQ045R-ND	20.39	16.31	12.24
240	45	0.55	26000	-55 to 150	240NQ045-ND	24.14	19.32	14.49
240	45	0.55	26000	-55 to 150	240NQ045R-ND	24.14	19.32	14.49
240	45	0.59	25000	-55 to 175	241NQ045-ND	24.14	19.32	14.49
240	45	0.59	25000	-55 to 175	241NQ045R-ND	24.14	19.32	14.49
120	80	0.74	16000	-55 to 175	123NQ080-ND	16.04	12.84	9.63
240	80	0.72	25500	-55 to 175	243NQ080-ND	24.66	19.73	14.80
180	80	0.75	22000	-55 to 175	183NQ080-ND	20.84	16.67	12.51
180	100	0.95	22000	-55 to 175	183NQ100-ND	23.15	18.52	13.23
120	100	0.91	16000	-55 to 175	123NQ100-ND	17.83	14.26	10.19
120	100	0.74	16000	-55 to 175	123NQ100R-ND	16.04	12.84	9.63
180	100	0.75	22000	-55 to 175	183NQ100R-ND	20.84	16.67	12.51
240	100	0.72	25500	-55 to 175	243NQ100-ND	24.66	19.73	14.80
240	100	0.72	25500	-55 to 175	243NQ100R-ND	24.66	19.73	14.80
120	135	0.74	10000	-55 to 175	129NQ135-ND *NEW!*	14.48	11.19	9.68
240	135	0.72	20000	-55 to 175	249NQ135-ND *NEW!*	21.53	16.92	14.61
PowlRtab								
100	15	0.35	5000	-55 to 125	100BGQ015J-ND	4.05	3.24	2.43
100	15	0.35	5000	-55 to 125	100BGQ015-ND	4.05	3.24	2.43
100	30	0.48	4500	-55 to 150	100BGQ030J-ND	4.16	3.33	2.50
175	30	0.45	8000	-55 to 150	175BGQ030J-ND	5.92	4.74	3.56
100	30	0.48	4500	-55 to 150	100BGQ030-ND	4.16	3.33	2.50
175	30	0.46	8000	-55 to 150	175BGQ030-ND	6.58	5.26	2.98
175	45	0.45	8000	-55 to 150	175BGQ045J-ND	6.26	5.01	3.76
100	45	0.63	4400	-55 to 150	100BGQ045J-ND	4.52	3.62	2.72
100	45	0.63	4400	-55 to 150	100BGQ045-ND	4.52	3.62	2.72
175	45	0.45	8000	-55 to 150	175BGQ045-ND	6.26	5.01	3.76

Input Rectifier Diodes

D-56



DO-4



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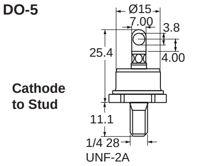

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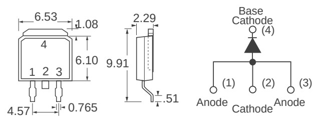
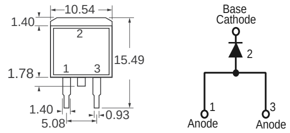
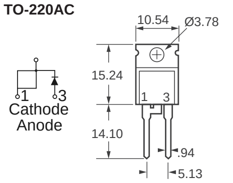


SMD-220



TO-220AC



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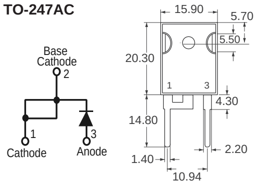
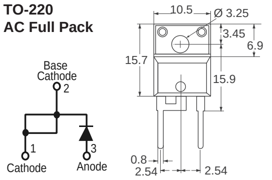


TO-220
AC Full Pack



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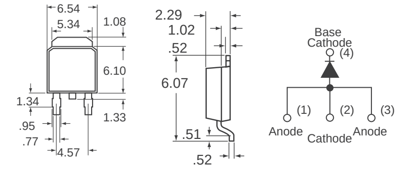
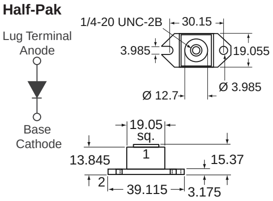


Half-Pak



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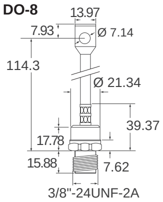

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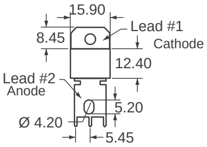

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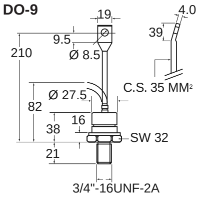
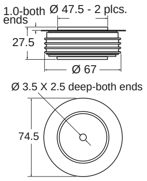
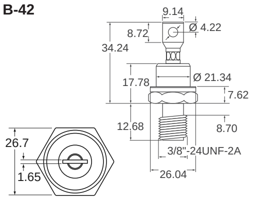


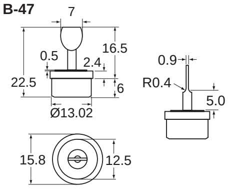
K-PUK



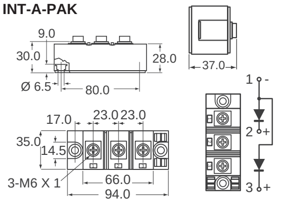
B-42



B-47



INT-A-PAK



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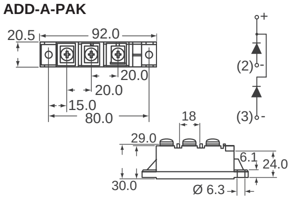
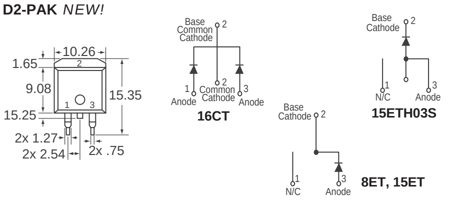
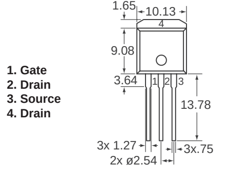


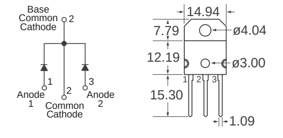
D2-PAK *NEW!*



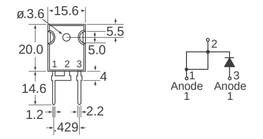
TO-262 *NEW!*



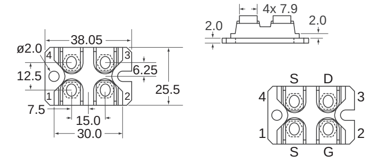
TO-218 *NEW!*



TO-247AC/MOD *NEW!*



SOT-227 *NEW!*



Pkg.	IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp=10ms Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each 1	10	100
Standard Recovery Diodes (Discrete Circuit)									
DO-4	6	400	1.1	159	-65 to 175	6F40-ND	3.30	2.64	1.98
	6	400	1.1	159	-65 to 175	6FR40-ND*	3.30	2.64	1.98
	6	600	1.1	159	-65 to 175	6F60-ND	3.73	2.98	2.24
	6	600	1.1	159	-65 to 175	6FR60-ND*	3.73	2.98	2.24
	6	1200	1.1	159	-65 to 175	6FR120-ND*	5.99	4.79	3.60
	12	50	1.35	230	-65 to 200	1N1199A-ND	2.95	2.36	1.77
	12	100	1.26	265	-65 to 175	12F10-ND	2.93	2.34	1.76
	12	100	1.26	265	-65 to 175	12FR10-ND*	2.93	2.34	1.76
	12	100	1.35	230	-65 to 200	1N1200A-ND	2.98	2.38	1.58
	12	100	1.35	230	-65 to 200	1N1200RA-ND*	2.98	2.38	1.79
	12	150	1.35	230	-65 to 200	1N1201A-ND	3.00	2.40	1.80
	12	200	1.26	265	-65 to 175	12F20-ND	2.98	2.38	1.79
	12	200	1.26	265	-65 to 175	12FR20-ND*	2.98	2.38	1.79
	12	200	1.35	230	-65 to 200	1N1202RA-ND*	3.03	2.42	1.82
	12	300	1.35	230	-65 to 200	1N1203RA-ND*	3.13	2.50	1.88
	12	400	1.26	265	-65 to 175	12F40-ND	3.50	2.80	2.10
	12	400	1.26	265	-65 to 175	12FR40-ND*	3.50	2.80	2.10
	12	400	1.35	230	-65 to 200	1N1204A-ND	3.38	2.70	2.03
	12	600	1.35	230	-65 to 200	1N1206A-ND	4.00	3.20	2.13
	12	600	1.26	265	-65 to 175	12F60-ND	4.13	3.30	2.48
	12	600	1.26	265	-65 to 175	12FR60-ND*	4.13	3.30	2.48
	12	600	1.35	230	-65 to 200	1N1206RA-ND*	4.00	3.20	2.40
	12	800	1.26	265	-65 to 175	12F80-ND	4.55	3.64	2.73
	12	800	1.26	265	-65 to 175	12FR80-ND*	4.55	3.64	2.73
	12	1000	1.26	265	-65 to 175	12F100-ND	6.20	4.96	3.72
	12	1000	1.35	230	-65 to 200	1N3673A-ND	6.20	4.96	3.72
	12	1200	1.26	265	-65 to 175	12F120-ND	6.41	5.13	3.85
	12	1200	1.26	265	-65 to 175	12FR120-ND*	6.41	5.13	3.85
DO-5	15	50	1.5	239	-65 to 190	1N3208-ND	3.90	3.12	2.34
	15	100	1.5	239	-65 to 190	1N3209-ND	3.93	3.14	2.36

Pkg.	IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp=10ms Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each 1	10	100
DO-5	15	400	1.5	239	-65 to 190	1N3212-ND	4.00	3.20	2.40
	15	600	1.5	239	-65 to 190	1N3214-ND	5.63	4.50	3.38
DO-4	16	100	1.23	350	-65 to 175	16F10-ND	2.98	2.38	1.79
	16	100	1.23	350	-65 to 175	16FR10-ND	2.98	2.38	1.79
	16	200	1.23	350	-65 to 175	16F20-ND	3.18	2.54	1.91
	16	200	1.23	350	-65 to 175	16FR20-ND	3.18	2.54	1.91
	16	400	0.9	350	-65 to 175	16F40-ND	3.93	3.14	2.09
	16	400	0.9	350	-65 to 175	16FR40-ND*	3.93	3.14	2.09
	16	600	1.23	350	-65 to 175	16F60-ND	4.55	3.64	2.73
	16	600	1.23	350	-65 to 175	16FR60-ND	4.55	3.64	2.73
	16	800	1.23	350	-65 to 175	16FR80-ND	4.95	3.96	2.97
	16	1000	1.23	350	-65 to 175	16F100-ND	6.65	5.32	3.99
	16	1200	1.23	370	-65 to 175	16F120-ND	7.60	6.08	4.05
	16	1200	1.23	350	-65 to 175	16FR120-ND	6.84	5.48	4.11
	25	100	1.3	356	-65 to 175	25F10-ND	3.67	2.94	2.21
	25	100	1.3	356	-65 to 175	25FR10-ND*	3.67	2.94	2.21
	25	200	1.3	356	-65 to 175	25F20-ND	3.83	3.06	2.30
	25	200	1.3	356	-65 to 175	25FR20-ND*	3.83	3.06	2.30
	25	400	1.3	356	-65 to 175	25F40-ND	3.94	3.15	2.37
	25	400	1.3	356	-65 to 175	25FR40-ND*	3.94	3.15	2.37
	25	600	1.3	356	-65 to 175	25FR60-ND*	4.16	3.33	2.50
	25	800	1.3	356	-65 to 175	25F80-ND	4.48	3.59	2.69
	25	800	1.3	356	-65 to 175	25FR80-ND*	4.48	3.59	2.69
	25	1000	1.3	356	-65 to 175	25F100-ND	6.08	4.86	3.65
	25	1000	1.3	356	-65 to 175	25FR100-ND*	6.08	4.86	3.65
	25	1200	1.3	356	-65 to 175	25F120-ND	7.20	5.76	4.32
	25	1200	1.3	356	-65 to 175	25FR120-ND*	7.20	5.76	4.32
DO-5	35	100	1.7	480	-65 to 190	1N1184-ND	3.95	3.16	2.37
	35	200	1.7	480	-65 to 190	1N1186-ND	4.38	3.50	2.63
	35	200	1.7	480	-65 to 190	1N1186R-ND*	4.38	3.50	2.63
	35	300	1.7	480	-65 to 190	1N1187-ND	5.00	4.00	3.00

* Anode to stud   † tp = 8.3ms

(Continued)

Input Rectifier Diodes *(Cont.)*

Pkg.	IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp=10ms Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each		
							1	10	100
DO-5	35	400	1.7	480	-65 to 190	1N1188R-ND*	5.63	4.50	3.38
	40	50	1.3	765	-65 to 200	1N1183R-ND*	3.90	3.12	2.34
	40	50	1.3	765	-65 to 200	1N1183A-ND	4.68	3.74	2.81
	40	100	1.3	765	-65 to 190	1N1184RA-ND*	4.73	3.78	2.84
	40	100	1.3	570	-65 to 160	40HFR10-ND *NEW!*	3.93	3.14	2.20
	40	200	1.3	765	-65 to 190	1N1186RA-ND*	4.83	3.86	2.90
	40	400	1.3	765	-65 to 190	1N1188RA-ND*	5.75	4.60	3.45
	40	200	1.3	570	-65 to 190	40HF20-ND	4.45	3.56	2.67
	40	200	1.3	570	-65 to 190	40HFR20-ND*	4.45	3.56	2.67
	40	200	0.70	570	-65 to 190	41HF20-ND	5.24	4.20	3.15
	40	400	1.3	570	-65 to 190	40HFR40-ND*	5.78	4.62	3.47
	40	600	0.70	570	-65 to 190	41HF60-ND	7.18	5.75	4.31
	40	600	1.3	765	-65 to 190	1N1190RA-ND*	6.63	5.30	3.98
	40	800	1.3	570	-65 to 190	40HF80-ND	7.43	5.94	4.46
	40	800	1.3	570	-65 to 190	40HFR80-ND*	3.71	2.97	2.23
	40	800	0.70	570	-65 to 190	41HF80-ND	7.92	6.34	4.76
	40	800	0.70	570	-65 to 190	41HFR80-ND*	7.92	6.34	4.76
	40	1000	0.70	570	-65 to 190	41HF100-ND	8.78	7.02	5.27
	40	1000	1.3	570	-65 to 160	40HFR100-ND *NEW!*	8.25	6.60	4.39
	40	1200	1.3	595	-65 to 190	40HF120-ND†	9.00	7.20	4.79
	40	1200	1.3	595	-65 to 190	40HFR120-ND*†	9.00	7.20	4.79
	40	1400	1.3	595	-65 to 190	40HF140-ND†	10.00	8.00	5.32
	40	1400	1.3	570	-65 to 160	40HFR140-ND*	9.00	7.20	5.40
	60	50	1.3	860	-65 to 200	1N2128A-ND	6.15	4.92	3.69
	60	100	1.3	860	-65 to 190	1N2129A-ND	6.53	5.22	3.92
	60	200	1.3	860	-65 to 190	1N2131A-ND	7.25	5.80	4.35
	60	200	1.3	860	-65 to 190	1N2131RA-ND*	7.25	5.80	4.35
	60	400	1.3	860	-65 to 190	1N2135A-ND	9.70	7.76	5.82
	60	400	1.3	860	-65 to 190	1N2135RA-ND*	9.70	7.76	5.82
	60	600	1.3	860	-65 to 190	1N2138A-ND	11.55	9.24	6.93
	60	600	1.3	860	-65 to 190	1N2138RA-ND*	11.55	9.24	6.93
	70	100	1.00	1250	-65 to 150	70HF10-ND *NEW!*	6.53	5.22	3.66
	70	100	1.35	1200	-65 to 180	70HFR10-ND*	6.53	5.22	3.92
	70	100	1.00	1200	-65 to 180	71HF10-ND	7.45	5.96	4.47
	70	200	0.79	1200	-65 to 150	70HF20-ND	6.90	5.52	4.14
	70	200	1.35	1200	-65 to 180	70HFR20-ND*	6.90	5.52	4.14
	70	400	1.00	1200	-65 to 180	71HF40-ND	9.00	7.20	5.40
	70	400	1.00	1200	-65 to 180	71HFR40-ND*	9.00	7.20	5.40
	70	600	1.35	1200	-65 to 180	70HFR60-ND*	9.08	7.26	5.45
	70	600	1.00	1200	-65 to 180	71HF60-ND	9.74	7.80	5.85
	70	800	0.79	1200	-65 to 150	70HF80-ND	9.90	7.92	5.94
	70	800	1.35	1200	-65 to 180	70HFR80-ND*	9.90	7.92	5.94
	70	1000	1.35	1200	-65 to 180	70HFR100-ND*	12.33	9.86	7.40
	70	1000	1.00	1200	-65 to 180	71HFR100-ND*	12.67	10.14	7.61
	70	1200	1.00	1200	-65 to 180	71HFR120-ND*	13.52	10.82	8.12
	70	1200	1.35	1250	-65 to 180	70HF120-ND†	13.28	10.62	7.08
	70	1200	1.35	1250	-65 to 180	70HFR120-ND*†	13.28	10.62	7.08
	70	1400	0.79	1200	-65 to 150	70HF140-ND	12.71	10.17	7.63
	70	1400	1.35	1200	-65 to 150	70HFR140-ND*	12.71	10.17	7.63
	70	1600	0.79	1200	-65 to 150	70HF160-ND	13.50	10.80	8.10
	70	1600	1.35	1200	-65 to 150	70HFR160-ND*	13.50	10.80	8.10
	85	100	1.2	1700	-65 to 180	85HF10-ND	8.35	6.68	5.01
	85	100	1.2	1700	-65 to 180	85HFR10-ND*	8.35	6.68	5.01
	85	200	1.2	1700	-65 to 180	85HF20-ND	8.84	7.08	5.31
	85	200	1.2	1700	-65 to 180	85HFR20-ND*	8.84	7.08	5.31
	85	400	1.2	1800	-65 to 180	85HF40-ND†	11.55	9.24	6.16
	85	400	1.2	1700	-65 to 180	85HF140-ND	14.63	11.70	8.78
	85	400	1.2	1700	-65 to 180	85HFR40-ND*	10.40	8.32	6.24
	85	600	1.2	1700	-65 to 180	85HF160-ND	15.53	12.42	9.32
	85	600	1.2	1700	-65 to 180	85HF60-ND	11.14	8.91	6.69
	85	600	—	1700	-65 to 180	86HF60-ND	12.71	10.17	7.63
	85	600	1.2	1700	-65 to 180	85HFR60-ND*	11.14	8.91	6.69
	85	800	1.2	1700	-65 to 180	85HF80-ND	11.88	9.51	7.13
	85	800	1.2	1700	-65 to 180	85HFR80-ND*	11.88	9.51	7.13
	85	800	—	1700	-65 to 180	86HF80-ND	13.46	10.77	8.08
	85	1200	1.2	1700	-65 to 180	85HF120-ND	13.73	10.98	8.24
	85	1200	1.2	1700	-65 to 180	85HFR120-ND*	13.73	10.98	8.24
	85	1400	1.2	1700	-65 to 150	85HFR140-ND*	14.63	11.70	8.78
	5	1600	1.2	1700	-65 to 150	85HFR160-ND*	15.53	12.42	9.32
	85	1600	—	1700	-65 to 150	86HFR160-ND*	17.10	13.68	10.26
DO-8	100	100	1.5	2200	-40 to 200	1N3288A-ND	22.30	17.84	13.38
	100	100	1.5	2200	-40 to 200	1N3288RA-ND*	22.30	17.84	13.38
	100	100	1.5	1550	-40 to 200	1N3288-ND	19.01	15.21	11.41
	100	100	1.5	1550	-40 to 200	1N3288R-ND*	19.01	15.21	11.41
	100	200	1.5	2200	-40 to 200	1N3289A-ND	21.04	16.83	12.63
	100	200	1.5	2200	-40 to 200	1N3289RA-ND	23.38	18.70	14.03
	100	200	1.5	1550	-40 to 200	1N3289R-ND*	19.91	15.93	11.95
	100	300	1.5	2200	-40 to 200	1N3290A-ND	24.05	19.24	14.43
	100	300	1.5	2200	-40 to 200	1N3290RA-ND*	24.05	19.24	14.43
	100	300	1.5	1550	-40 to 200	1N3290-ND	20.61	16.49	12.37
	100	300	1.5	1550	-40 to 200	1N3290R-ND*	20.61	16.49	12.37
	100	400	1.5	2200	-40 to 200	1N3291A-ND	24.63	19.70	14.78
	100	400	1.5	2200	-40 to 200	1N3291RA-ND*	24.63	19.70	14.78
	100	400	1.5	1550	-40 to 200	1N3291-ND	21.04	16.83	12.63
	100	400	1.5	1550	-40 to 200	1N3291R-ND*	21.04	16.83	12.63
	100	500	1.5	2200	-40 to 200	1N3292B-ND	25.43	20.34	15.26
	100	500	1.5	2200	-40 to 200	1N3292RB-ND*	25.43	20.34	15.26
	100	500	1.5	1550	-40 to 200	1N3292-ND	21.80	17.45	13.09
	100	500	1.5	1550	-40 to 200	1N3292R-ND*	21.80	17.45	13.09
	100	600	1.5	2200	-40 to 200	1N3293A-ND	26.35	21.08	15.81
DO-8	100	600	1.5	2200	-40 to 200	1N3293RA-ND*	26.35	21.08	15.81
	100	600	1.5	1550	-40 to 200	1N3293-ND	22.50	18.00	13.50
	100	600	1.5	1550	-40 to 200	1N3293R-ND*	22.50	18.00	13.50
	100	800	1.5	2200	-40 to 200	1N3294A-ND	28.33	22.66	17.00
	100	800	1.5	2200	-40 to 200	1N3294RA-ND*	28.33	22.66	17.00
	100	800	1.5	1550	-40 to 200	1N3294-ND	24.28	19.43	14.57
	100	800	1.5	1550	-40 to 200	1N3294R-ND*	24.28	19.43	14.57
	100	1000	1.5	2200	-40 to 200	1N3295A-ND	35.85	28.68	21.51
	100	1000	1.5	1550	-40 to 200	1N3295RA-ND*	35.85	28.68	21.51
	100	1000	1.5	1550	-40 to 200	1N3295R-ND	31.30	25.04	18.78
	150	50	1.33	3570	-40 to 200	150K5A-ND	22.50	18.00	13.50
	150	50	1.33	3570	-40 to 200	150KR5A-ND*	20.25	16.20	12.15
	150	100	1.33	3570	-40 to 200	150K10A-ND	23.45	18.76	14.07
	150	100	1.33	3570	-40 to 200	150KR10A-ND*	23.45	18.76	14.07
	150	200	1.33	3570	-40 to 200	150K20A-ND	24.63	19.70	14.78
	150	300	1.33	3570	-40 to 200	150K30A-ND	25.43	20.34	15.26
	150	300	1.33	3570	-40 to 200	150KR30A-ND*	25.43	20.34	15.26
	150	400	1.33	3570	-40 to 200	150KR40A-ND*	26.00	20.80	15.60
	150	600	1.33	3570	-40 to 200	150KR60A-ND*	27.75	22.20	16.65
	150	600	1.33	3570	-40 to 200	150K60A-ND	24.98	19.98	14.99
	150	800	1.33	3570	-40 to 200	150K80A-ND	29.88	23.90	17.93
	150	800	1.33	3570	-40 to 200	150KR80A-ND*	29.88	23.90	17.93
	150	1000	1.33	3570	-40 to 200	150KR100A-ND*	32.74	26.19	19.65
	150	1000	1.33	3570	-40 to 200	150K100A-ND	36.38	29.10	21.83
D-Pak	8	800	1.1	175	-55 to 150	8EWS08S-ND	1.19	.95	.76
	8	1000	1	200	-55 to 150	8EWS10S-ND	.83	.67	.50
	8	1200	1.1	175	-55 to 150	8EWS12S-ND	1.28	1.03	.82
POWIRTAB	70	200	1.33	1000	-40 to 150	70EPF02-ND	7.81	6.25	5.00
	70	400	1.33	1000	-40 to 150	70EPF04-ND	8.06	6.45	5.16
	70	600	1.33	1000	-40 to 150	70EPF06-ND	8.80	7.04	5.63
	85	200	1.35	1250	-40 to 150	85EPF02-ND	10.23	8.19	6.55
	85	400	1.35	1250	-40 to 150	85EPF04-ND	10.58	8.47	6.77
	85	600	1.35	1250	-40 to 150	85EPF06-ND	11.53	9.23	7.38
	85	1000	1.35	1250	-40 to 150	85EPF10-ND	11.55	9.24	7.39
	85	1200	1.35	1250	-40 to 150	85EPF12-ND	11.00	8.80	7.87
TO-220AC	10	800	1.1	175	-40 to 150	10ETS08-ND	1.80	1.44	1.15
SMD-220	10	800	1.1	175	-40 to 150	10ETS08S-ND	2.09	1.68	1.34
	10	1200	1.1	170	-40 to 150	10ETS12S-ND	1.58	1.26	.95
	16	1000	1.23	350	-40 to 150	16FR100-ND	6.65	5.32	3.99
	20	800	1.1	260	-40 to 150	20ETS08S-ND	2.58	2.07	1.65
	20	1200	1.1	260	-40 to 150	20ETS12S-ND	3.44	2.75	2.20
TO-220AC	20	800	1.1	260	-40 to 150	20ETS08-ND	2.42	1.94	1.55
	20	1200	1.1	260	-40 to 150	20ETS12-ND	2.63	2.10	1.68
TO-220AC FP	10	800	1.1	170	-40 to 150	10ETS08FP-ND	1.91	1.53	1.15
	10	1200	1.1	170	-40 to 150	10ETS12FP-ND	1.94	1.55	1.17
	10	1200	1.1	170	-40 to 150	10ETS12-ND	1.40	1.12	.84
	20	400	1.3	250	-40 to 150	20ETF04FP-ND	1.58	1.26	.95
	20	800	1.3	250	-40 to 150	20ETS08FP-ND	2.08	1.66	1.25
	20	1200	1.3	250	-40 to 150	20ETS12FP-ND	2.12	1.70	1.27
TO-247AC	40	800	1.1	380	-40 to 150	40EPS08-ND	3.67	2.94	2.35
	40	1200	1.1	380	-40 to 150	40EPS12-ND	4.00	3.20	2.56
	60	800	1.1	735	-40 to 150	60EPS08-ND	5.09	4.08	3.26
	60	1200	1.1	735	-40 to 150	60EPS12-ND	4.93	3.94	3.55
	80	800	1.17	1450	-40 to 150	80EPS08-ND	5.85	4.68	3.51
	80	1200	1.17	1450	-40 to 150	80EPS12-ND	6.64	5.31	3.99
DO-9	300	800	0.89	5200	-40 to 180	300HF80P-ND *NEW!*	43.93	35.14	26.89
	300	800	0.61	6550	-65 to 200	300HFR80P-ND	43.93	35.14	25.17
K-PUK	3800	400	0.86	35800	-40 to 180	SD3000C04K-ND	189.00	160.65	135.14
B-42	150	50	1.33	3000	-40 to 200	150KSR5-ND*	22.28	17.82	13.37
	150	50	1.33	3000	-40 to 200	150KS5-ND	22.28	17.82	13.37
	150	100	0.83	3000	-40 to 200	150KS100-ND	36.11	28.89	21.67
	150	100	1.33	3000	-40 to 200	150KSR10-ND*	23.27	18.62	13.96
	150	100	1.33	3000	-40 to 200	150KS10-ND	23.27	18.62	13.96
	150	200	1.33	3000	-40 to 200	150KSR20-ND*	24.41	19.53	14.65
	150	200	1.33	3000	-40 to 200	150KS20-ND	24.41	19.53	14.65
	150	300	1.33	3000	-40 to 200	150KS30-ND	25.16	20.13	15.10
	150	300	1.33	3000	-40 to 200	150KSR30-ND*	25.16	20.13	15.10
	150	400	1.33	3000	-40 to 200	150KSR40-ND*	25.74	20.60	15.45
	150	400	1.33	3000	-40 - 200	150KS40-ND	25.74	20.60	15.45
	150	600	1.33	3000	-40 to 200	150KSR60-ND*	27.47	21.98	16.49
	150	600	1.33	3000	-40 to 200	150KS60-ND	27.47	21.98	16.49
	150	800	1.33	3000	-40 to 200	150KSR80-ND*	29.57	23.66	17.74
	150	800	1.33	3000	-40 to 200	150KS80-ND	29.57	23.66	17.74
	150	1000	1.33	3000	-40 to 200	150KSR100-ND*	36.11	28.89	21.67
B-47	50	50	1.45	714	-65 to 195	8AF05NPP-ND	3.42	2.74	2.06
	50	50	1.45	714	-65 to 195	8AF05RPP-ND*	3.42	2.74	2.06
	50	100	1.45	714	-65 to 195	8AF1NPP-ND	3.76	3.01	2.26
	50	100	1.45	714	-65 to 195	8AF1RPP-ND*	3.76	3.01	2.26
	50	200	1.45	714	-65 to 195	8AF2NPP-ND	4.07	3.26	2.45
	50	200	1.45	714	-65 to 195	8AF2RPP-ND	4.07	3.26	2.45
	50	400	1.45	714	-65 to 195	8AF4NPP-ND	4.48	3.59	2.69
	50	400	1.45	714	-65 to 195	8AF4RPP-ND	4.48	3.59	2.69
INT-A-PAK	230	400	0.83	5765	-40 to 150	IRKJ236/04-ND *NEW!*	90.75	72.60	55.86
ADD-A-PAK	60	400	0.92	1680	-40 to 150	IRKC56/04A-ND *NEW!*	32.58	26.06	20.75
Fast Recovery Diodes									
D-56	40	1600	0.84	570	-40 to 150	T40HF160-ND	30.70	24.57	16.34
DO-4	6	50	1.4	72	-65 to 150	1N3879R-ND*	4.14	3.32	2.49
	6	100	1.4	72	-65 to 150	1N3880-ND	4.16	3.33	2.50
	6	200	1.4	72	-65 to 150	1N3881-ND	4.19	3.35	2.52

* Anode to stud   † tp = 8.3ms

(Continued)

Input Rectifier Diodes *(Cont.)*

Pkg.	IF (A)	VRRM (V)	VF (V)	IFSM(A) @ tp=10ms Sine	TJ Junction Temp (°C)	Digi-Key Part No.	Price Each		
							1	10	100
DO-4	6	600	1.4	110	-65 to 150	6FL60S02-ND	5.94	4.76	3.57
	6	1000	1.4	115	-40 to 150	6FL100S05-ND	7.00	5.60	3.73
	12	100	1.4	145	-65 to 150	1N3890R-ND	4.75	3.80	2.85
	12	100	1.4	145	-65 to 150	12FL10S02-ND	4.14	3.32	2.49
	12	100	1.4	145	-65 to 150	1N3890-ND	4.28	3.42	2.57
	12	200	1.4	145	-65 to 150	12FL20S02-ND	4.57	3.66	2.75
	12	200	1.4	145	-65 to 150	1N3891-ND	4.30	3.44	2.58
	12	400	1.4	145	-65 to 150	12FL40S02-ND	5.65	4.52	3.39
	12	400	1.4	145	-65 to 150	12FLR40S02-ND*	5.65	4.52	3.39
	12	600	1.4	145	-65 to 150	12FL60S02-ND	6.23	4.99	3.74
	12	600	1.4	145	-65 to 150	12FLR60S02-ND*	6.23	4.99	3.74
	12	1000	1.4	145	-65 to 150	12FL100S05-ND	7.88	6.30	4.73
	12	1000	1.4	145	-65 to 150	12FLR100S05-ND*	7.88	6.30	4.73
	16	200	1.4	180	-65 to 150	16FL20S02-ND	4.79	3.84	2.88
	16	200	1.4	180	-65 to 150	16FLR20S02-ND*	4.79	3.84	2.88
	16	400	1.4	180	-65 to 150	16FL40S02-ND	5.94	4.76	3.57
	16	600	1.4	180	-65 to 150	16FL60S02-ND	6.53	5.22	3.92
	16	600	1.4	180	-65 to 150	16FL60S05-ND	5.54	4.43	3.33
	16	600	1.4	180	-65 to 150	16FLR60S02-ND*	6.53	5.22	3.92
	16	800	1.4	180	-65 to 150	16FL80S05-ND	6.12	4.90	3.68
	16	1000	1.4	180	-65 to 150	16FL100S05-ND	8.24	6.59	4.95
	16	1000	1.4	180	-65 to 150	16FLR100S05-ND*	8.24	6.59	4.95
DO-5	20	100	1.65	240	-40 to 125	IRD3900-ND	4.28	3.42	2.57
	20	200	1.65	240	-40 to 125	IRD3901-ND	4.61	3.69	2.77
	20	200	1.65	240	-40 to 125	IRD3901R-ND*	4.61	3.69	2.77
	20	300	1.65	240	-40 to 125	IRD3902-ND	5.06	4.05	3.04
	20	400	1.65	240	-40 to 125	IRD3903-ND	5.51	4.41	3.31
	20	400	1.65	240	-40 to 125	IRD3903R-ND*	5.51	4.41	3.31
	30	200	1.45	400	-40 to 150	30HFU-200-ND	8.55	6.84	5.13
	30	400	1.45	400	-40 to 150	30HFU-400-ND	10.31	8.25	6.19
	30	600	1.45	400	-40 to 150	30HFU-600-ND	11.21	8.97	6.73
	30	200	1.45	400	-40 to 150	30HFUR-200-ND*	8.55	6.84	5.13
	30	100	1.8	285	-40 to 125	IRD3910-ND	4.50	3.60	2.70
	30	100	1.8	285	-40 to 125	IRD3910R-ND*	4.50	3.60	2.70
	30	200	1.8	285	-40 to 125	IRD3911-ND	4.95	3.96	2.97
	30	300	1.8	285	-40 to 125	IRD3912-ND	5.40	4.32	3.24
	30	400	1.8	285	-40 to 125	IRD3913-ND	5.85	4.68	3.51
	30	400	1.8	285	-40 to 125	IRD3913R-ND	5.85	4.68	3.51
	40	1000	1.95	400	-40 to 125	40HFL100S05-ND	13.28	10.62	7.97
	40	400	1.95	400	-40 to 125	40HFL40S05-ND	9.29	7.44	5.58
	40	600	1.2	420	-40 to 150	40HFL60S02-ND	12.38	9.90	6.60
	40	600	1.95	400	-40 to 125	40HFL60S05-ND	10.40	8.32	6.24
	40	800	1.95	400	-40 to 125	40HFL80S05-ND	11.52	9.22	6.92
	40	100	1.95	400	-40 to 125	40HFLR10S02-ND*	8.35	6.68	5.01
	40	100	1.95	400	-40 to 125	40HFLR10S05-ND*	7.36	5.89	4.42
	40	200	1.95	400	-40 to 125	40HFLR20S02-ND*	8.69	6.95	5.22
	40	400	1.95	400	-40 to 125	40HFLR40S02-ND*	10.22	8.18	6.13
	40	600	1.95	400	-40 to 125	40HFLR60S02-ND*	11.14	8.91	6.69
	40	600	1.95	400	-40 to 125	40HFLR60S05-ND*	10.40	8.32	6.24
	40	800	1.95	400	-40 to 125	40HFLR80S05-ND*	11.52	9.22	6.92
	60	100	1.5	700	-40 to 125	60HFU-100-ND	9.34	7.47	5.61
	60	200	1.5	700	-40 to 125	60HFU-200-ND	10.24	8.19	6.15
	60	400	1.5	700	-40 to 125	60HFU-400-ND	12.15	9.72	7.29
	60	600	1.5	700	-40 to 125	60HFU-600-ND	14.18	11.34	8.51
	60	300	1.5	700	-40 to 125	60HFUR-300-ND*	11.14	8.91	6.69
	70	100	1.85	700	-40 to 125	70HFL10S02-ND	11.30	9.04	6.78
	70	400	1.85	700	-40 to 125	70HFL40S02-ND	12.38	9.90	7.43
	70	400	1.85	700	-40 to 125	70HFL40S05-ND	11.25	9.00	6.75
	70	600	1.85	700	-40 to 125	70HFL60S02-ND	13.05	10.44	7.83
	70	800	1.85	700	-40 to 125	70HFL80S05-ND	13.28	10.62	7.97
	70	1000	1.85	700	-40 to 125	70HFLR100S05-ND*	14.18	11.34	8.51
	70	1000	1.2	730	-40 to 150	70HFL100S05-ND	15.75	12.60	8.38
	70	200	1.85	700	-40 to 125	70HFLR20S02-ND*	11.72	9.38	7.04
	70	400	1.85	700	-40 to 125	70HFLR40S02-ND*	12.38	9.90	7.43
	70	400	1.85	700	-40 to 125	70HFLR40S05-ND*	11.25	9.00	6.75
	70	600	1.85	700	-40 to 125	70HFLR60S02-ND*	13.05	10.44	7.83
	85	1000	1.76	1100	-40 to 125	85HFL100S05-ND	18.38	14.71	11.03
	85	100	1.76	1100	-40 to 125	85HFL10S02-ND	11.70	9.36	7.02
	85	200	1.76	1100	-40 to 125	85HFL20S02-ND	12.22	9.78	7.34
	85	400	1.76	1100	-40 to 125	85HFL40S02-ND	14.11	11.29	8.47
	85	600	1.76	1100	-40 to 125	85HFL60S02-ND	16.52	13.22	9.91
	85	600	1.76	1100	-40 to 125	85HFL60S05-ND	15.59	12.48	9.36
	85	800	1.76	1100	-40 to 125	85HFL80S05-ND	16.16	12.93	9.70
	85	1000	1.76	1100	-40 to 125	85HFLR100S05-ND*	18.38	14.71	11.03
	85	100	1.76	1100	-40 to 125	85HFLR10S02-ND*	11.70	9.36	7.02
	85	200	1.76	1100	-40 to 125	85HFLR20S02-ND*	12.22	9.78	7.34
	85	400	1.76	1100	-40 to 125	85HFLR40S02-ND*	14.11	11.29	8.47
	85	600	1.76	1100	-40 to 125	85HFLR60S02-ND*	16.52	13.22	9.91
	85	600	1.76	1100	-40 to 125	85HFLR60S05-ND*	15.59	12.48	9.36
	85	800	1.76	1100	-40 to 125	85HFLR80S05-ND*	16.16	12.93	9.70
D-Pak	8	200	1.2	200	-40 to 150	8EWF02S-ND	1.50	1.20	.85
	8	400	1.2	200	-40 to 150	8EWF04S-ND	1.55	1.24	.88
	8	600	1.2	200	-40 to 150	8EWF06S-ND	1.63	1.30	.96
	8	600	1.2	200	-40 to 150	8EWF06STRL-ND	2796.00/3,000		
	8	1000	1.13	170	-40 to 150	8EWF10S-ND	1.28	1.02	.90
SMD-220	10	200	1.2	160	-40 to 150	10ETF02S-ND	2.10	1.68	1.36
	10	400	1.2	160	-40 to 150	10ETF04S-ND	2.10	1.68	1.45
SMD-220	10	600	1.2	160	-40 to 150	10ETF06S-ND	2.28	1.82	1.56
	10	1000	1.33	160	-40 to 150	10ETF10S-ND	1.91	1.53	1.15
	10	1200	1.33	160	-40 to 150	10ETF12S-ND	2.34	1.88	1.41
SMD-220	20	200	1.2	355	-40 to 150	20ETF02S-ND	3.30	2.64	1.92
	20	400	1.3	250	-40 to 150	20ETF04S-ND	2.97	2.38	1.79
	20	600	1.3	250	-40 to 150	20ETF06S-ND	3.15	2.52	1.89
	20	800	1.3	250	-40 to 150	20ETF08S-ND	3.29	2.63	1.98
	20	1000	1.3	250	-40 to 150	20ETF10S-ND	2.72	2.18	1.64
	20	1200	1.3	250	-40 to 150	20ETF12S-ND	3.33	2.67	2.00
TO-220AC	10	200	1.2	150	-40 to 150	10ETF02-ND	1.76	1.41	1.06
	10	400	1.2	160	-40 to 150	10ETF04-ND	1.95	1.56	1.34
	10	600	1.2	160	-40 to 150	10ETF06-ND	1.81	1.22	.95
	10	1000	1.2	150	-40 to 150	10ETF10-ND	1.78	1.43	1.07
	10	1200	1.2	150	-40 to 150	10ETF12-ND	2.16	1.73	1.30
	20	200	1.2	150	-40 to 150	20ETF02-ND	2.81	2.25	1.69
	20	400	1.2	150	-40 to 150	20ETF04-ND	2.81	2.25	1.69
	20	600	1.2	150	-40 to 150	20ETF06-ND	3.04	2.43	1.83
	20	800	1.2	150	-40 to 150	20ETF08-ND	2.81	2.25	1.69
	20	1000	1.2	150	-40 to 150	20ETF10-ND	2.57	2.06	1.54
	20	1200	1.2	150	-40 to 150	20ETF12-ND	3.13	2.51	1.88
TO-220AC FP	20	200	1.2	300	-40 to 150	20ETF02FP-ND	1.46	1.17	.88
	20	600	1.2	300	-40 to 150	20ETF06FP-ND	1.69	1.35	1.02
TO-247AC	30	200	1.2	315	-40 to 150	30CPF02-ND	3.63	2.90	1.81
	30	200	1.2	350	-40 to 150	30EPF02-ND	3.26	2.61	1.96
	30	400	1.2	350	-40 to 150	30CPF04-ND	3.26	2.61	1.96
	30	400	1.2	350	-40 to 150	30EPF04-ND	3.26	2.61	1.96
	30	600	1.2	350	-40 to 150	30CPF06-ND *NEW!*	3.75	3.00	1.84
	30	600	1.2	350	-40 to 150	30EPF06-ND	3.38	2.70	2.03
	30	1000	1.41	350	-40 to 150	30CPF10-ND	3.02	2.42	1.81
	30	1000	1.2	350	-40 to 150	30EPF10-ND	3.02	2.42	1.81
	30	1200	1.2	350	-40 to 150	30CPF12-ND	4.03	3.23	2.42
	30	1200	1.2	350	-40 to 150	30EPF12-ND	4.03	3.23	2.42
	40	200	1.25	400	-40 to 150	40EPF02-ND	3.71	2.97	2.23
	40	400	1.25	400	-40 to 150	40EPF04-ND	3.71	2.97	2.23
	40	600	1.25	400	-40 to 150	40EPF06-ND	4.05	3.24	2.43
	40	1000	1.25	400	-40 to 150	40EPF10-ND	4.43	3.55	2.66
	40	1200	1.25	400	-40 to 150	40EPF12-ND	5.06	4.05	3.04
	60	200	1.3	700	-40 to 150	60CPF02-ND	6.64	5.31	3.99
	60	200	1.3	700	-40 to 150	60EPF02-ND	6.64	5.31	3.99
	60	400	1.3	700	-40 to 150	60CPF04-ND	6.64	5.31	3.99
	60	400	1.3	700	-40 to 150	60EPF04-ND	6.64	5.31	3.99
	60	600	1.3	700	-40 to 150	60CPF06-ND	6.98	5.58	4.19
	60	600	1.3	700	-40 to 150	60EPF06-ND	6.98	5.58	4.19
	60	1000	1.3	700	-40 to 150	60CPF10-ND	6.08	4.86	3.65
	60	1000	1.3	700	-40 to 150	60EPF10-ND	6.08	4.86	3.65
	60	1200	1.3	700	-40 to 150	60CPF12-ND	6.95	5.57	4.18
	60	1200	1.3	700	-40 to 150	60EPF12-ND	6.95	5.57	4.18
	80	200	1.2	800	-40 to 150	80EPF02-ND	9.68	7.74	5.81
	80	400	1.2	800	-40 to 150	80EPF04-ND	9.68	7.74	5.81
	80	600	1.2	800	-40 to 150	80EPF06-ND	10.58	8.46	6.35
	80	1000	1.2	800	-40 to 150	80EPF10-ND	8.48	6.79	5.09
	80	1200	1.2	800	-40 to 150	80EPF12-ND	9.70	7.76	5.82
TO-252AA	8	1200	1.2	170	-40 to 150	8EWF12S-ND	1.49	1.19	.90
Half-Pak	70	600	1.5	400	-55 to 150	HFA70NH60R-ND*	26.03	20.83	15.62
	90	400	1.3	600	-55 to 150	HFA90NH40R-ND*	26.73	21.39	16.04
	105	600	1.5	600	-55 to 150	HFA105NH60R-ND*	34.49	27.60	20.70
	135	400	1.3	900	-55 to 150	HFA135NH40R-ND*	35.64	28.52	21.39
	140	600	1.6	800	-55 to 150	HFA140NH60R-ND*	43.74	35.00	26.25
PowIRtab	85	1200	1.4	700	-40 to 150	70EPF12-ND	7.79	6.23	4.68
Ultrafast Diodes									
D2-PAK	8	300	1.25	100	-65 to 175	8ETH03S-ND *NEW!*	1.29	.68	.62
	8	400	1.3	100	-65 to 175	8ETU04S-ND *NEW!*	1.40	.76	.68
	8	600	2.4	90	-65 to 175	8ETH06S-ND *NEW!*	1.48	.78	.71
	15	300	1.25	140	-65 to 175	15ETH03S-ND *NEW!*	1.81	1.03	.84
	15	600	2.2	120	-65 to 175	15ETH06S-ND *NEW!*	1.81	1.03	.84
TO-220AC	8	300	1.25	100	-65 to 175	8ETH03-ND *NEW!*	1.16	.62	.55
	8	400	1.3	100	-65 to 175	8ETU04-ND *NEW!*	1.40	.76	.68
	8	600	2.4	90	-65 to 175	8ETH06-ND *NEW!*	1.50	.80	.71
	15	600	2.2	120	-65 to 175	15ETH06-ND *NEW!*	1.63	.86	.78
	30	600	2.6	200	-65 to 175	30ETH06-ND *NEW!*	2.57	1.79	1.39
TO-262	8	300	1.25	100	-65 to 175	8ETH03-1-ND *NEW!*	1.29	.68	.62
	8	400	1.3	100	-65 to 175	8ETU04-1-ND *NEW!*	1.40	.76	.68
	8	600	2.4	90	-65 to 175	8ETH06-1-ND *NEW!*	1.48	.78	.71
	15	300	1.25	140	-65 to 175	15ETH03-1-ND *NEW!*	1.81	1.03	.84
	15	600	2.2	120	-65 to 175	15ETH06-1-ND *NEW!*	1.81	1.03	.84
	25	200	—	100	-65 to 175	MURB820-1-ND *NEW!*	1.40	.80	.68
TO-218	35	200	1.09	300	-55 to 175	70CRU02-ND *NEW!*	4.48	3.20	2.60
TO-247	30	300	1.25	300	-65 to 175	30EPH03-ND *NEW!*	1.88	1.07	.87
TO-247AC	30	300	1.25	300	-65 to 175	30CPH03-ND *NEW!*	1.91	1.09	.89
	30	400	1.25	400	-65 to 175	30CPU04-ND *NEW!*	2.49	1.74	1.32
	30	600	2.6	600	-65 to 175	30EPH06-ND *NEW!*	2.57	1.79	1.39
	60	200	1.08	800	-55 to 175	60APU02-ND *NEW!*	3.98	2.84	2.31
	60	400	1.25	400	-55 to 175	60APU04-ND *NEW!*	4.06	2.90	2.35
TO-247AC/MOD	60	200	1.08	800	-55 to 175	60EPU02-ND *NEW!*	3.98	2.84	2.31
	60	400	1.25	400	-55 to 175	60EPU04-ND *NEW!*	4.06	2.90	2.35
SOT-227	100	400	—	1300	-55 to 150	UFB200FA40-ND *NEW!*	17.64	13.64	11.79
	240	200	—	1700	-55 to 150	UFB200FA20-ND *NEW!*	16.76	12.96	11.21
PowIRtab	80	200	1.13	800	-55 to 175	80EBU02-ND *NEW!*	5.09	3.52	2.96
	80	400	1.3	800	-55 to 175	80EBU04-ND *NEW!*	5.14	3.56	3.00
	150	200	1.13	1600	-55 to 175	150EBU02-ND *NEW!*	7.23	5.21	4.34
	150	400	1.3	1500	-55 to 175	150EBU04-ND *NEW!*	7.28	5.24	4.37

* Anode to stud † tp = 8.3ms

DIODES INCORPORATED

Glass Passivated Bridge Rectifiers

Storage Temperature: -65°C to +150°C

Fig.	Max. Average Rectified Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Instant. Voltage Drop (V)	Oper. Temp. Range (°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
RH Series											
1	0.5	400	30	1.15	-55 to +150	RH04DICT-ND	.96	.77	.58	RH04DITR-ND	319.00/M
		600	30	1.15	-55 to +150	RH06DICT-ND	.86	.68	.52	RH06DITR-ND	338.00/M
HD Series											
1	0.8	100	30	1.0	-55 to +150	HD01DICT-ND	.70	.56	.42	HD01DITR-ND	210.00/M
		200	30	1.0	-55 to +150	HD02DICT-ND	.60	.48	.36	HD02DITR-ND	200.00/M
		400	30	1.0	-55 to +150	HD04DICT-ND	.64	.52	.39	HD04DITR-ND	213.00/M
		600	30	1.0	-55 to +150	HD06DICT-ND	.68	.55	.41	HD06DITR-ND	226.00/M

Fig.	Max. Ave. Rect. Curr. (A)	Max. Peak Rev. Volt. (V)	Max. Surge Current 8.3ms (A)	Max. Inst. For. Volt. (V)	Op. Temp. Range (°C)	Digi-Key Part No.	Price Each 1	10	100	500	Tape & Reel Pricing* 1,500
DF-S Series											
2	1.5	50	50	1.1	-65 to +150	DF15005SDICT-ND	.84	.68	.51	.35	305.00/M
		100	50	1.1	-65 to +150	DF1501SDICT-ND	.84	.68	.51	.35	305.00/M
		200	50	1.1	-65 to +150	DF1502SDICT-ND	.84	.68	.51	.35	305.00/M
		400	50	1.1	-65 to +150	DF1504SDICT-ND	.84	.68	.51	.35	305.00/M
		600	50	1.1	-65 to +150	DF1506SDICT-ND	.96	.77	.58	.40	348.00/M
		1000	50	1.1	-65 to +150	DF1510SDICT-ND	.89	.71	.54	.40	359.00/M

*For Tape and Reel Part No., change "CT-ND to "TR-ND"

Fig.	Max. Average Rectified Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Operating Temperature Range (°C)	Digi-Key Part No.	Price Each 1	10	100	500
DF-S Series										
2	1.0	50	50	1.1	-65 to +150	DF005SDI-ND	.76	.61	.46	.32
		100	50	1.1	-65 to +150	DF01SDI-ND	.76	.61	.46	.32
		200	50	1.1	-65 to +150	DF02SDI-ND	.76	.61	.46	.32
		400	50	1.1	-65 to +150	DF04SDI-ND	.76	.61	.46	.32
		600	50	1.1	-65 to +150	DF06SDI-ND	.88	.71	.53	.37
		800	50	1.1	-65 to +150	DF08SDI-ND	.96	.77	.58	.40
		1000	50	1.1	-65 to +150	DF10SDI-ND	.96	.77	.58	.40
DB-1 Series										
3	1.0	50	50	1.1	-65 to +150	DB101DI-ND	.60	.48	.36	.25
		100	50	1.1	-65 to +150	DB102DI-ND	.60	.48	.36	.25
		200	50	1.1	-65 to +150	DB103DI-ND	.60	.48	.36	.25
		400	50	1.1	-65 to +150	DB104DI-ND	.60	.48	.36	.25
		600	50	1.1	-65 to +150	DB105DI-ND	.80	.64	.48	.33
DF-M Series										
4	1.0	50	45	1.1	-65 to +150	DF005MDI-ND	.60	.48	.36	.25
		100	45	1.1	-65 to +150	DF01MDI-ND	.60	.48	.36	.25
		200	45	1.1	-65 to +150	DF02MDI-ND	.60	.48	.36	.25
		400	45	1.1	-65 to +150	DF04MDI-ND	.60	.48	.36	.25
		600	45	1.1	-65 to +150	DF06MDI-ND	.72	.58	.44	.30
		800	45	1.1	-65 to +150	DF08MDI-ND	.80	.64	.48	.33
		1000	45	1.1	-65 to +150	DF10MDI-ND	.80	.64	.48	.33
WxxG Series										
5	1.5	50	50	1.0	-65 to +150	W005GDI-ND	.65	.52	.39	.24
		100	50	1.0	-65 to +150	W01GDI-ND	.70	.56	.42	.26
		200	50	1.0	-65 to +150	W02GDI-ND	.60	.48	.36	.25
		400	50	1.0	-65 to +150	W04GDI-ND	.64	.52	.39	.27
		600	50	1.0	-65 to +150	W06GDI-ND	.68	.55	.41	.29
		800	50	1.0	-65 to +150	W08GDI-ND *NEW!*	.70	.56	.42	.26
		1000	50	1.0	-65 to +150	W10GDI-ND	.72	.58	.44	.30
KBP Series										
6	1.5	50	40	1.1	-55 to +125	KBP005G-ND	1.16	.91	.70	.51
		100	40	1.1	-55 to +125	KBP01G-ND	1.16	.91	.70	.51
		200	40	1.1	-55 to +125	KBP02G-ND	1.19	.94	.72	.53
		400	40	1.1	-55 to +125	KBP04G-ND	1.22	.97	.74	.54
		600	40	1.1	-55 to +125	KBP06G-ND	1.32	1.04	.80	.58
		800	40	1.1	-55 to +125	KBP08G-ND	1.39	1.10	.84	.61
		1000	40	1.1	-55 to +125	KBP10G-ND	1.62	1.28	.98	.72
	2.0	50	65	1.1	-65 to +150	KBP2005GDI-ND	1.16	.91	.70	.51
		100	65	1.1	-65 to +150	KBP201GDI-ND	1.16	.91	.70	.51
		200	65	1.1	-65 to +150	KBP202GDI-ND	1.19	.94	.72	.53
		400	65	1.1	-65 to +150	KBP204GDI-ND	1.22	.97	.74	.54
		600	65	1.1	-65 to +150	KBP206GDI-ND	1.32	1.04	.80	.58
		1000	65	1.1	-65 to +150	KBP210GDI-ND	1.62	1.28	.98	.72
GBU Series										
7	4.0	100	150	1.0	-55 to +150	GBU401DI-ND	1.35	1.07	.82	.60
		400	150	1.0	-55 to +150	GBU404DI-ND	1.42	1.12	.86	.63
		1000	150	1.0	-55 to +150	GBU410DI-ND	1.38	1.08	.85	.69
	6.0	100	175	1.0	-55 to +150	GBU601DI-ND	1.55	1.23	.94	.69
		400	175	1.0	-55 to +150	GBU604DI-ND	1.62	1.28	.98	.72
		1000	175	1.0	-55 to +150	GBU610DI-ND	1.51	1.18	.93	.76
	8.0	50	200	1.0	-55 to +150	GBU8005DI-ND	1.38	1.08	.85	.69
		100	200	1.0	-55 to +150	GBU801DI-ND	1.40	1.10	.87	.71
		200	200	1.0	-55 to +150	GBU802DI-ND	1.43	1.12	.88	.72
		400	200	1.0	-55 to +150	GBU804DI-ND	1.46	1.14	.90	.73
		600	200	1.0	-55 to +150	GBU806DI-ND	1.51	1.18	.93	.76
		1000	200	1.0	-55 to +150	GBU810DI-ND	1.70	1.33	1.05	.86

Fig. 1 — Mini Dip (SMT)

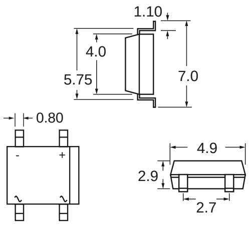


Fig. 2 — DF-S Series

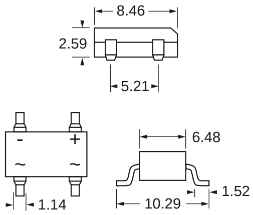


Fig. 3 — DB-1 Series

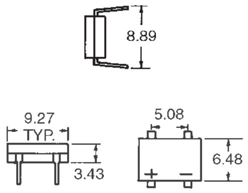


Fig. 4 — DF-M Series

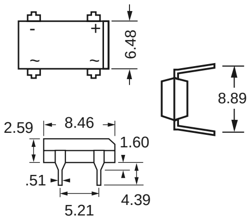


Fig. 5 — WxxG Series

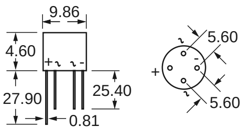
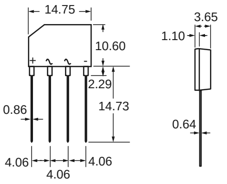


Fig. 6 — KBP Series



(Continued)

Glass Passivated Bridge Rectifiers *(Cont.)*

Fig.	Max. Average Rectified Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Instant. Forward Voltage (V)	Operating Temperature Range (°C)	Digi-Key Part No.	Price Each 1	10	100	500
GBJ Series										
8	6.0	50	170	1.0	-65 to +150	GBJ6005DI-ND	1.73	1.35	1.07	.87
		100	170	1.0	-65 to +150	GBJ601DI-ND	1.78	1.39	1.10	.90
		200	170	1.0	-65 to +150	GBJ602DI-ND	1.81	1.41	1.12	.91
		400	170	1.0	-65 to +150	GBJ604DI-ND	1.84	1.43	1.13	.92
		600	170	1.0	-65 to +150	GBJ606DI-ND	1.89	1.47	1.17	.95
		1000	170	1.0	-65 to +150	GBJ610DI-ND	2.05	1.60	1.27	1.03
	8.0	50	170	1.0	-65 to +150	GBJ8005DI-ND	1.84	1.43	1.13	.92
		100	170	1.0	-65 to +150	GBJ801DI-ND	1.89	1.47	1.17	.95
		200	170	1.0	-65 to +150	GBJ802DI-ND	1.92	1.50	1.18	.96
		400	170	1.0	-65 to +150	GBJ804DI-ND	1.94	1.52	1.20	.98
		600	170	1.0	-65 to +150	GBJ806DI-ND	2.00	1.56	1.23	1.00
		1000	170	1.0	-65 to +150	GBJ810DI-ND	2.21	1.73	1.37	1.11
	10	50	170	1.05	-65 to +150	GBJ10005DI-ND	1.92	1.50	1.18	.96
		100	170	1.05	-65 to +150	GBJ1001DI-ND	1.97	1.54	1.22	.99
		200	170	1.05	-65 to +150	GBJ1002DI-ND	2.00	1.56	1.23	1.00
		400	170	1.05	-65 to +150	GBJ1004DI-ND	2.03	1.58	1.25	1.02
		600	170	1.05	-65 to +150	GBJ1006DI-ND	2.08	1.62	1.28	1.04
		1000	170	1.05	-65 to +150	GBJ1010DI-ND	2.38	1.85	1.47	1.19
	15	50	240	1.05	-65 to +150	GBJ15005DI-ND	2.08	1.62	1.28	1.04
		100	240	1.05	-65 to +150	GBJ1501DI-ND	2.16	1.68	1.33	1.08
		200	240	1.05	-65 to +150	GBJ1502DI-ND	2.19	1.71	1.35	1.10
		400	240	1.05	-65 to +150	GBJ1504DI-ND	2.21	1.73	1.37	1.11
		600	240	1.05	-65 to +150	GBJ1506DI-ND	2.27	1.77	1.40	1.14
		1000	240	1.05	-65 to +150	GBJ1510DI-ND	2.48	1.94	1.53	1.25
	20	50	240	1.05	-65 to +150	GBJ20005DI-ND	2.13	1.66	1.32	1.07
		100	240	1.05	-65 to +150	GBJ2001DI-ND	2.19	1.71	1.35	1.10
		200	240	1.05	-65 to +150	GBJ2002DI-ND	2.21	1.73	1.37	1.11
		400	240	1.05	-65 to +150	GBJ2004DI-ND	2.27	1.77	1.40	1.14
		600	240	1.05	-65 to +150	GBJ2006DI-ND	2.32	1.81	1.43	1.17
		1000	240	1.05	-65 to +150	GBJ2010DI-ND	2.51	1.96	1.55	1.26
	25	50	350	1.05	-65 to +150	GBJ25005DI-ND	2.32	1.81	1.43	1.17
		100	350	1.05	-65 to +150	GBJ2501DI-ND	2.38	1.85	1.47	1.19
		200	350	1.05	-65 to +150	GBJ2502DI-ND	2.46	1.92	1.52	1.23
		400	350	1.05	-65 to +150	GBJ2504DI-ND	2.51	1.96	1.55	1.26
		600	350	1.05	-65 to +150	GBJ2506DI-ND	2.57	2.00	1.58	1.29
		1000	350	1.05	-65 to +150	GBJ2510DI-ND	2.35	1.89	1.53	1.33
GBPC Series										
9	15.0	50	300	1.1	-65 to +150	GBPC15005DI-ND *NEW!*	2.30	1.85	1.50	1.30
		100	300	1.1	-55 to +150	GBPC1501DI-ND	2.65	2.13	1.73	1.50
		200	300	1.1	-55 to +150	GBPC1502DI-ND	2.76	2.22	1.80	1.56
		400	300	1.1	-55 to +150	GBPC1504DI-ND	2.88	2.32	1.88	1.63
		600	300	1.1	-55 to +150	GBPC1506DI-ND	2.88	2.32	1.88	1.63
		800	300	1.1	-55 to +150	GBPC1508DI-ND	3.11	2.50	2.03	1.76
		1000	300	1.1	-55 to +150	GBPC1510DI-ND	3.22	2.59	2.10	1.82
	25.0	100	300	1.1	-55 to +150	GBPC2501DI-ND	2.76	2.22	1.80	1.56
		200	300	1.1	-55 to +150	GBPC2502DI-ND	2.88	2.32	1.88	1.63
		400	300	1.1	-55 to +150	GBPC2504DI-ND	2.88	2.32	1.88	1.63
		600	300	1.1	-55 to +150	GBPC2506DI-ND	2.88	2.32	1.88	1.63
		800	300	1.1	-55 to +150	GBPC2508DI-ND	3.22	2.59	2.10	1.82
		1000	300	1.1	-55 to +150	GBPC2510DI-ND	3.22	2.59	2.10	1.82
	35.0	100	400	1.1	-55 to +150	GBPC3501DI-ND	2.99	2.41	1.95	1.69
		200	400	1.1	-55 to +150	GBPC3502DI-ND	3.11	2.50	2.03	1.76
		400	400	1.1	-55 to +150	GBPC3504DI-ND	3.22	2.59	2.10	1.82
		600	400	1.1	-55 to +150	GBPC3506DI-ND	3.22	2.59	2.10	1.82
		800	400	1.1	-55 to +150	GBPC3508DI-ND	3.45	2.78	2.25	1.95
		1000	400	1.1	-55 to +150	GBPC3510DI-ND	3.57	2.87	2.33	2.02

Fig. 7 — GBU Series

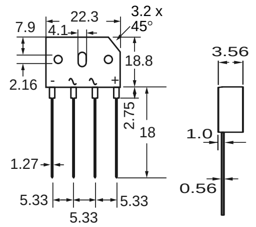


Fig. 8 — GBJ Series

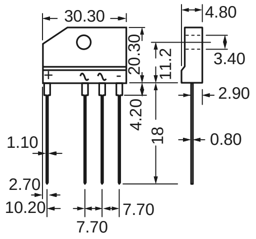
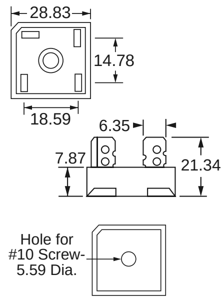


Fig. 9 — GBPC Series



Bridge Rectifiers

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Reverse Current @25°C (µA)	Max. Forward Voltage Peak (V)	Digi-Key Part No.	Price Each 1	10	100	500
1	4.0	50	200	10.0	1.0	RS401LDI-ND	1.32	1.04	.80	.58
		100	200	10.0	1.0	RS402LDI-ND	1.32	1.04	.80	.58
		200	200	10.0	1.0	RS403LDI-ND	1.32	1.04	.80	.58
		400	200	10.0	1.0	RS404LDI-ND	1.32	1.04	.80	.58
		600	200	10.0	1.0	RS405LDI-ND	1.35	1.05	.83	.68
2	6.0	50	200	10.0	1.0	PB605DI-ND	1.49	1.17	.90	.66
		100	200	10.0	1.0	PB61DI-ND	1.49	1.17	.90	.66
		200	200	10.0	1.0	PB62DI-ND	1.49	1.17	.90	.66
		400	200	10.0	1.0	PB64DI-ND	1.49	1.17	.90	.66
		600	200	10.0	1.0	PB66DI-ND	1.49	1.17	.90	.66
3	15.0	50	300	10.0	1.1	MB1505-ND	2.30	1.85	1.50	1.30
		100	300	10.0	1.1	MB151-ND	2.42	1.95	1.58	1.37
		200	300	10.0	1.1	MB152-ND	2.53	2.04	1.65	1.43
		400	300	10.0	1.1	MB154-ND	2.65	2.13	1.73	1.50
		600	300	10.0	1.1	MB156-ND	2.76	2.22	1.80	1.56
	25.0	50	300	10.0	1.1	MB2505-ND	2.42	1.95	1.58	1.37
		100	300	10.0	1.1	MB251-ND	2.53	2.04	1.65	1.43
		200	300	10.0	1.1	MB252-ND	2.65	2.13	1.73	1.50
		400	300	10.0	1.1	MB254-ND	2.76	2.22	1.80	1.56
		600	300	10.0	1.1	MB256-ND	2.88	2.32	1.88	1.63
	35.0	50	400	10.0	1.1	MB3505-ND	2.53	2.04	1.65	1.43
		100	400	10.0	1.1	MB351-ND	2.65	2.13	1.73	1.50
		200	400	10.0	1.1	MB352-ND	2.76	2.22	1.80	1.56
		400	400	10.0	1.1	MB354-ND	2.88	2.32	1.88	1.63
		600	400	10.0	1.1	MB356-ND	2.99	2.41	1.95	1.69

Operating Temperature Range: -55°C to +125°C. Storage Temperature: -55°C to +150°C

Fig. 1

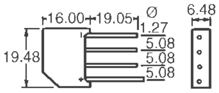


Fig. 2

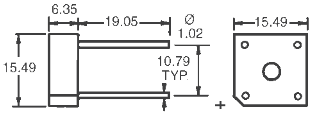
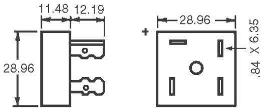


Fig. 3



Schottky Barrier Rectifiers

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms(A)	Max. Rev. Current @ 25°C(mA)	Max. For. Voltage Peak (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	1.0	20	25	1.0	0.45	1N5817DICT-ND	.39	.30	.22	1N5817DITR-ND	5,000	96.00/M
		30	25	1.0	0.55	1N5818DICT-ND	.39	.30	.22	1N5818DITR-ND	5,000	96.00/M
		40	25	1.0	0.60	1N5819DICT-ND	.39	.30	.22	1N5819DITR-ND	5,000	96.00/M
		20	40	1.0	0.55	SR102CT-ND	.49	.38	.27	SR102TR-ND	5,000	120.00/M
		30	40	1.0	0.55	SR103CT-ND	.49	.38	.27	SR103TR-ND	5,000	120.00/M
		40	40	1.0	0.55	SR104CT-ND	.49	.38	.27	SR104TR-ND	5,000	120.00/M
		50	40	1.0	0.70	SR105CT-ND	.52	.40	.29	SR105TR-ND	5,000	128.00/M
		60	40	1.0	0.70	SR106CT-ND	.53	.42	.32	SR106TR-ND	5,000	147.00/M
		100	25	0.5	0.80	SB1100DICT-ND	.55	.44	.33	SB1100DITR-ND	5,000	154.00/M
2	3.0	20	80	2.0	0.475	1N5820DICT-ND	.68	.54	.41	1N5820DITR-ND	1,200	216.00/M
		30	80	2.0	0.500	1N5821DICT-ND	.68	.54	.41	1N5821DITR-ND	1,200	216.00/M
		40	80	2.0	0.525	1N5822DICT-ND	.68	.54	.41	1N5822DITR-ND	1,200	216.00/M
		20	150	3.0	0.55	SR302CT-ND	.60	.48	.36	SR302TR-ND	1,200	218.00/M
		40	150	3.0	0.55	SR304CT-ND	.60	.48	.36	SR304TR-ND	1,200	218.00/M
		50	150	3.0	0.75	SR305CT-ND	.64	.52	.39	SR305TR-ND	1,200	232.00/M
		60	150	3.0	0.75	SR306CT-ND	.68	.55	.41	SR306TR-ND	1,200	247.00/M
		100	80	0.5	0.80	SB3100DICT-ND	.80	.64	.48	SB3100DITR-ND	1,200	290.00/M
	5.0	20	250	10.0	0.57	SR502CT-ND	.88	.71	.53	SR502TR-ND	1,200	319.00/M
		30	250	10.0	0.57	SR503CT-ND	.92	.74	.56	SR503TR-ND	1,200	334.00/M
		40	250	10.0	0.57	SR504CT-ND	.96	.77	.58	SR504TR-ND	1,200	348.00/M
		50	150	1.0	0.67	SR505CT-ND *NEW!*	.65	.52	.39	SR505TR-ND *NEW!*	1,200	208.00/M
		60	150	1.0	0.67	SR506CT-ND *NEW!*	.65	.52	.39	SR506TR-ND *NEW!*	1,200	208.00/M
		100	150	0.5	0.80	SB5100DICT-ND	1.12	.89	.68	SB5100DITR-ND	1,200	452.00/M
3	1.0	20	25	1.0	0.45	1N5817MCT-ND	.68	.54	.41	1N5817MTR-ND	5,000	189.00/M
		30	25	1.0	0.55	1N5818MCT-ND	.68	.54	.41	1N5818MTR-ND	5,000	189.00/M
		40	25	1.0	0.60	1N5819MCT-ND	.68	.54	.41	1N5819MTR-ND	5,000	189.00/M
4	1.0	20	30	0.5	0.50	B120DICT-ND	.55	.44	.33	B120DITR-ND	5,000	154.00/M
		30	30	0.5	0.50	B130DICT-ND	.58	.46	.35	B130DITR-ND	5,000	161.00/M
		30	25	1.0	0.41	B130LDICT-ND	.68	.54	.41	B130LDITR-ND	5,000	189.00/M
		40	30	0.5	0.50	B140DICT-ND	.60	.48	.36	B140DITR-ND	5,000	168.00/M
		50	30	0.5	0.70	B150DICT-ND	.62	.50	.38	B150DITR-ND	5,000	198.00/M
		60	30	0.5	0.70	B160DICT-ND	.76	.61	.46	B160DITR-ND	5,000	242.00/M
		80	30	0.5	0.79	B180DICT-ND	.80	.64	.48	B180DITR-ND	5,000	255.00/M
		100	30	0.5	0.79	B1100DICT-ND	.84	.68	.51	B1100DITR-ND	5,000	268.00/M
	2.0	20	50	0.5	0.50	B220ADICT-ND	.76	.61	.46	B220ADITR-ND	5,000	242.00/M
		30	50	0.5	0.50	B230ADICT-ND	.82	.66	.50	B230ADITR-ND	5,000	261.00/M
		40	50	0.5	0.50	B240ADICT-ND	.86	.69	.52	B240ADITR-ND	5,000	274.00/M
		50	50	0.5	0.70	B250ADICT-ND	.90	.72	.54	B250ADITR-ND	5,000	287.00/M
		60	50	0.5	0.70	B260ADICT-ND	.96	.77	.58	B260ADITR-ND	5,000	306.00/M
	3.0	20	100	0.5	0.50	B320ADICT-ND	.96	.77	.58	B320ADITR-ND	5,000	306.00/M
		30	100	0.5	0.50	B330ADICT-ND	.83	.65	.50	B330ADITR-ND	5,000	319.00/M
		40	100	0.5	0.50	B340ADICT-ND	.86	.68	.52	B340ADITR-ND	5,000	332.00/M
		40	70	1.0	0.35	B340LADICT-ND	.86	.68	.52	B340LADITR-ND	5,000	332.00/M
		50	100	0.5	0.70	B350ADICT-ND	1.06	.84	.64	B350ADITR-ND	5,000	408.00/M
		60	100	0.5	0.70	B360ADICT-ND	1.16	.91	.70	B360ADITR-ND	5,000	446.00/M
5	1.0	20	30	0.5	0.50	B120BDICT-ND	.63	.50	.38	B120BDITR-ND	3,000	188.00/M
		20	30	0.5	1.1	SK12DICT-ND	.63	.50	.38	SK12DITR-ND	3,000	188.00/M
		30	30	0.5	0.50	B130BDICT-ND	.65	.52	.39	B130BDITR-ND	3,000	195.00/M
		30	40	1.0	.445	B130LBCT-ND	.70	.56	.42	B130LBTR-ND	3,000	210.00/M
		30	25	0.5	0.55	SK13DICT-ND	.68	.54	.41	SK13DITR-ND	3,000	203.00/M
		40	45	0.1	0.53	B140HBDICT-ND	.73	.58	.44	B140HBDITR-ND	3,000	218.00/M
		40	30	0.5	0.50	B140BDICT-ND	.68	.54	.41	B140BDITR-ND	3,000	203.00/M
		40	25	0.5	0.55	SK14DICT-ND	.60	.48	.36	SK14DITR-ND	3,000	200.00/M
		50	30	0.5	0.50	B150BDICT-ND	.70	.56	.42	B150BDITR-ND	3,000	233.00/M
		50	25	0.5	0.70	SK15DICT-ND	.70	.56	.42	SK15DITR-ND	3,000	233.00/M
		60	30	0.5	0.70	B160BDICT-ND	.84	.68	.51	B160BDITR-ND	3,000	279.00/M
		60	25	0.5	0.70	SK16DICT-ND	.88	.71	.53	SK16DITR-ND	3,000	293.00/M
		70	30	0.5	0.79	B170BDICT-ND	.86	.69	.52	B170BDITR-ND	3,000	286.00/M
		80	30	0.5	0.79	B180BDICT-ND	.88	.71	.53	B180BDITR-ND	3,000	293.00/M
		90	30	0.5	0.79	B190BDICT-ND	.90	.72	.54	B190BDITR-ND	3,000	299.00/M
		100	30	0.5	0.79	B1100BDICT-ND	.92	.74	.56	B1100BDITR-ND	3,000	306.00/M
		100	50	0.5	0.75	B1100LBDICT-ND	.83	.65	.50	B1100LBDITR-ND	3,000	325.00/M
	2.0	20	50	0.5	0.50	B220DICT-ND	.84	.68	.51	B220DITR-ND	3,000	279.00/M
		30	50	0.5	0.50	B230DICT-ND	.90	.72	.54	B230DITR-ND	3,000	299.00/M
		40	50	0.5	0.50	B240DICT-ND	.96	.77	.58	B240DITR-ND	3,000	319.00/M
		50	50	0.5	0.70	B250DICT-ND	.83	.65	.50	B250DITR-ND	3,000	325.00/M
		60	50	0.5	0.70	B260DICT-ND	.89	.71	.54	B260DITR-ND	3,000	351.00/M
		70	50	0.5	0.79	B270DICT-ND	.92	.73	.56	B270DITR-ND	3,000	364.00/M
		80	50	0.5	0.79	B280DICT-ND	.96	.76	.58	B280DITR-ND	3,000	377.00/M
		90	50	0.5	0.79	B290DICT-ND	.99	.78	.60	B290DITR-ND	3,000	390.00/M
		100	50	0.5	0.79	B2100DICT-ND	1.02	.81	.62	B2100DITR-ND	3,000	403.00/M
	3.0	20	100	0.5	0.50	B320BDICT-ND	.89	.71	.54	B320BDITR-ND	3,000	351.00/M
		30	100	0.5	0.50	B330BDICT-ND	.92	.73	.56	B330BDITR-ND	3,000	364.00/M
		40	100	0.5	0.50	B340BDICT-ND	.96	.76	.58	B340BDITR-ND	3,000	377.00/M
		40	70	2.0	0.45	B340LBDICT-ND	.96	.76	.58	B340LBDITR-ND	3,000	377.00/M
		50	100	0.5	0.70	B350BDICT-ND	1.19	.94	.72	B350BDITR-ND	3,000	468.00/M
		60	100	0.5	0.50	B360BDICT-ND	1.29	1.02	.78	B360BDITR-ND	3,000	507.00/M
6	3.0	20	100	0.5	0.50	B320DICT-ND	.99	.78	.60	B320DITR-ND	3,000	390.00/M
		30	100	0.5	0.50	B330DICT-ND	1.02	.81	.62	B330DITR-ND	3,000	403.00/M
		40	100	0.5	0.50	B340DICT-ND	1.09	.86	.66	B340DITR-ND	3,000	429.00/M
		50	100	0.5	0.70	B350DICT-ND	1.32	1.04	.80	B350DITR-ND	3,000	520.00/M
		60	100	0.5	0.70	B360DICT-ND	1.45	1.15	.88	B360DITR-ND	3,000	572.00/M
		70	100	0.5	0.79	B370DICT-ND	1.49	1.17	.90	B370DITR-ND	3,000	585.00/M

(Continued)

Fig. 1 — DO-41

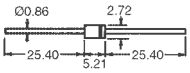


Fig. 2 — DO-201AD

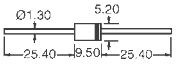


Fig. 3 — MELF (DL-41)

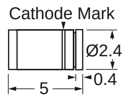


Fig. 4 — SMA

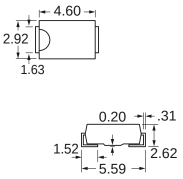


Fig. 5 — SMB

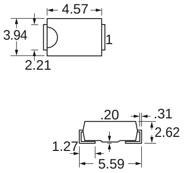


Fig. 6 — SMC

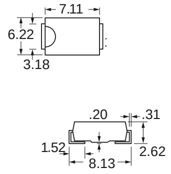
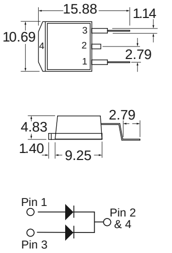


Fig. 7 — D2PAK



Schottky Barrier Rectifiers *(Cont.)*

Fig.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms(A)	Max. Rev. Current @ 25°C(mA)	Max. For. Voltage Peak (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
6	3.0	80	100	0.5	0.79	B380DICT-ND	1.52	1.20	.92	B380DITR-ND	3,000	598.00/M
		100	100	0.5	0.79	B3100DICT-ND	1.58	1.25	.96	B3100DITR-ND	3,000	624.00/M
		20	100	0.5	0.50	SK32DICT-ND	.86	.68	.52	SK32DITR-ND	500	188.50
		30	100	0.5	0.50	SK33DICT-ND	.86	.68	.52	SK33DITR-ND	500	188.50
		40	100	0.5	0.50	SK34DICT-ND	.86	.68	.52	SK34DITR-ND	500	188.50
		50	100	0.5	0.75	SK35DICT-ND	.86	.68	.52	SK35DITR-ND	500	188.50
		60	100	0.5	0.75	SK36DICT-ND	.86	.68	.52	SK36DITR-ND	500	188.50
		90	100	0.5	0.79	B390DICT-ND	1.55	1.23	.94	B390DITR-ND	3,000	611.00/M
	5.0	20	175	0.5	0.55	B520CDICT-ND	1.16	.91	.70	B520CDITR-ND	3,000	455.00/M
		30	175	0.5	0.55	B530CDICT-ND	1.22	.97	.74	B530CDITR-ND	3,000	481.00/M
		40	175	0.5	0.55	B540CDICT-ND	1.29	1.02	.78	B540CDITR-ND	3,000	507.00/M
		50	175	0.5	0.70	B550CDICT-ND	1.42	1.12	.86	B550CDITR-ND	3,000	559.00/M
		60	175	0.5	0.70	B560CDICT-ND	1.55	1.23	.94	B560CDITR-ND	3,000	611.00/M
7	10.0	40	125	1.0	0.55	SBG1040CTDI-ND	1.46	1.14	.90	—	—	—
	15.0	30	150	0.1	0.7	MBRB1530CTDICT-ND	1.38	1.08	.85	MBRB1530CTDITR-ND	800	551.20
	15.0	35	150	0.1	0.7	MBRB1535CTDICT-ND	1.40	1.10	.87	MBRB1535CTDITR-ND	800	561.60
	15.0	40	150	0.1	0.7	MBRB1540CTDICT-ND	1.43	1.12	.88	MBRB1540CTDITR-ND	800	572.80
	15.0	45	150	0.1	0.7	MBRB1545CTDICT-ND	1.46	1.14	.90	MBRB1545CTDITR-ND	800	583.20
	16.0	30	175	1.0	0.55	SBG1630CTDICT-ND	1.51	1.18	.93	SBG1630CTDITR-ND	800	604.80
	16.0	40	175	1.0	0.55	SBG1640CTDI-ND	1.57	1.22	.97	—	—	—
	20.0	40	225	1.0	0.55	SBG2040CTDI-ND	1.70	1.33	1.05	—	—	—
	30.0	40	250	1.0	0.55	SBG3040CTDI-ND	2.30	1.79	1.42	—	—	—
8	10.0	40	150	0.3	0.51	SBM1040DICT-ND *NEW!*	1.46	1.14	.90	SBM1040DITR-ND *NEW!*	5,000	691.00/M!
9	0.5	20	5.5	—	0.300	B0520LWDICT-ND	.50	.40	.30	B0520LWDITR-ND	3,000	150.00/M
	0.5	30	5.5	—	0.375	B0530WDICT-ND	.50	.40	.30	B0530WDITR-ND	3,000	150.00/M
	0.5	40	5.5	—	0.510	B0540WDICT-ND	.50	.40	.30	B0540WDITR-ND	3,000	150.00/M
	1.0	40	25	1.0	0.320	1N5819HWDICT-ND	.72	.58	.44	1N5819HWDITR-ND	3,000	239.00/M
10	8.0	45V	200	8.0	0.55	SBL845DI-ND	1.46	1.14	.90	—	—	—
	16.0	45V	275	16.0	0.63	SBL1645DI-ND	1.67	1.31	1.03	—	—	—
11	10.0	45V	250	10.0	0.60	SBL1045CTDI-ND	1.54	1.20	.95	—	—	—
	16.0	20V	250	10.0	0.65	SR1602-ND†	3.08	2.31	1.93	—	—	—
	16.0	45V	250	0.5	0.55	SBL1645CTDI-ND	1.78	1.39	1.10	—	—	—
	20.0	45V	250	20.0	0.60	SBL2045CTDI-ND	1.89	1.47	1.17	—	—	—
	30.0	45V	250	1.0	0.55	SBL3045CTDI-ND	2.67	2.08	1.65	—	—	—

Operating and Storage Temperature: -65°C to +150°C. † Dual rectifier package

Fig. 8 — POWERMITE®3 *NEW!*

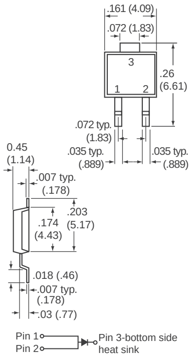


Fig. 9 — SOD-123

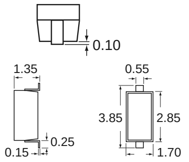


Fig. 10 — TO-220

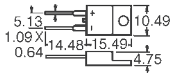
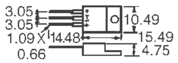


Fig. 11 — TO-220



Fast Schottky Barrier Rectifiers

Fig.	Peak Rev. Voltage VRRM(V)	Leakage Current	Forward Volt. @ IF VF	IF(mA)	Junction Cap. (pF)	Reverse Recovery Time(nS)	Power Dissipation Ptot(mW)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	20	5µA	0.37	20	50	10	400	SD103CCT-ND	.48	.38	.29	SD103CTB-ND‡	10,000	126.00/M
	30	5µA	0.37	20	50	10	400	SD103BCT-ND	.48	.38	.29	SD103BTB-ND‡	10,000	126.00/M
	40	5µA	0.37	20	50	10	400	SD103ACT-ND	.48	.38	.29	SD103ATB-ND‡	10,000	126.00/M
	40	200nA	0.39	1	2.2	1	400	SD101CCT-ND	.52	.40	.29	SD101CTB-ND‡	10,000	120.00/M
	50	200nA	0.40	1	2.1	1	400	SD101BCT-ND	.52	.40	.29	SD101BTB-ND‡	10,000	120.00/M
	60	200nA	0.41	1	2.0	1	400	SD101ACT-ND	.52	.40	.29	SD101ATB-ND‡	10,000	120.00/M
2	20	5µA	0.37	20	50	10	400	LLSD103CCT-ND	.55	.44	.33	LLSD103CTR-ND*	2,500	154.00/M
	30	5µA	0.37	20	50	10	400	LLSD103BCT-ND	.55	.44	.33	LLSD103BTR-ND*	2,500	154.00/M
	40	5µA	0.37	20	50	10	400	LLSD103ACT-ND	.55	.44	.33	LLSD103ATR-ND*	2,500	154.00/M
	40	200nA	0.39	1	2.2	1	400	LLSD101CCT-ND	.45	.36	.27	LLSD101CTR-ND*	2,500	126.00/M
	50	200nA	0.40	1	2.1	1	400	LLSD101BCT-ND	.45	.36	.27	LLSD101BTR-ND*	2,500	126.00/M
	60	200nA	0.41	1	2.0	1	400	LLSD101ACT-ND	.45	.36	.27	LLSD101ATR-ND*	2,500	126.00/M
3	20	100µA	0.31	100	170	—	200	B0520WSDICT-ND	.60	.48	.36	B0520WSDITR-ND*	3,000	180.00/M
	20	5µA	0.37	20	50	10	200	SD103CWSDICT-ND	.60	.48	.36	SD103CWSDITR-ND*	3,000	200.00/M
	30	500nA	1.0	200	10	5	200	BAT42WSCT-ND	.64	.52	.39	BAT42WSTR-ND*	3,000	213.00/M
	30	100µA	0.33	2	10	5	200	BAT43WSDICT-ND	.64	.52	.39	BAT43WSDITR-ND*	3,000	213.00/M
	30	2.0µA	0.32	1	10	5	200	BAT54WSDICT-ND	.80	.64	.48	BAT54WSDITR-ND*	3,000	266.00/M
	30	5µA	0.37	20	50	10	200	SD103BWSDICT-ND	.60	.48	.36	SD103BWSDITR-ND*	3,000	200.00/M
	40	200nA	0.39	1	2.2	1.0	200	SD101CWSDICT-ND	.63	.50	.38	SD101CWSDITR-ND*	3,000	188.00/M
	40	5.0µA	0.37	20	50	10	200	SD103AWSDICT-ND	.60	.48	.36	SD103AWSDITR-ND*	3,000	200.00/M
	40	500nA	0.37	1	2.0	—	250	SDMK0340LDICT-ND	.60	.48	.36	SDMK0340LDITR-ND*	3,000	200.00/M
	45	1.0µA	0.45	10	6.0	—	200	SDM10K45DICT-ND *NEW!*	.60	.48	.36	SDM10K45DITR-ND *NEW!*	3,000	200.00/M
	50	200nA	0.40	1	2.1	1.0	200	SD101BWSDICT-ND	.63	.50	.38	SD101BWSDITR-ND*	3,000	188.00/M
	60	200nA	0.41	1	2.0	1	200	SD101AWSCT-ND	.63	.50	.38	SD101AWSTR-ND*	3,000	188.00/M
	70	200nA	0.41	1.0	2.0	1.0	200	1N5711WSDICT-ND	.72	.58	.44	1N5711WSDITR-ND*	3,000	239.00/M
4	20	5µA	—	—	—	10	—	SD103-CWDICT-ND	.53	.42	.32	SD103-CWDITR-ND*	10,000	140.00/M
	30	100µA	1.0	200	10	5	200	BAT42WDICT-ND	.60	.48	.36	BAT42WDITR-ND*	3,000	180.00/M
	30	500nA	1.0	200	10	5.0	200	BAT43WDICT-ND	.60	.48	.36	BAT43WDITR-ND*	3,000	180.00/M
	30	5µA	—	—	—	10	—	SD103-BWDICT-ND	.53	.42	.32	SD103-BWDITR-ND*	10,000	140.00/M
	40	200nA	—	—	—	1	—	SD101-CWDICT-ND	.48	.38	.29	SD101-CWDITR-ND*	10,000	126.00/M
	40	5µA	—	—	—	10	—	SD103-AWDICT-ND	.53	.42	.32	SD103-AWDITR-ND*	10,000	140.00/M
	50	200nA	—	—	—	1	—	SD101-BWDICT-ND	.48	.38	.29	SD101-BWDITR-ND*	10,000	126.00/M
	60	200µA	1.0	15	2.0	1	400	1N6263WDICT-ND	.70	.56	.42	1N6263WDITR-ND*	3,000	210.00/M
	60	200nA	—	—	—	1	—	SD101-AWDICT-ND	.48	.38	.29	SD101-AWDITR-ND*	10,000	126.00/M

‡ TB = Tape & Box * TR = Tape & Reel

Fig. 1 — DO-35

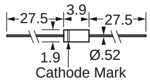


Fig.2 — MiniMELF

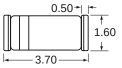


Fig. 3 — SOD-323

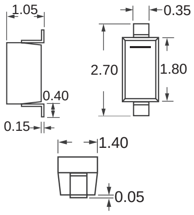
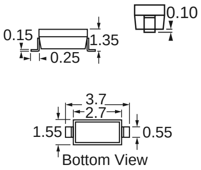


Fig. 4 — SOD-123



DIODES INCORPORATED

Schottky Barrier Double Diodes

(Top View Shown on all drawings)

Fig.	Repetitive Peak Reverse Voltage VRRM	Forward Continuous Current IF	Forward Voltage @ 100 mA	Leakage Current	Reverse Recovery Time	Package	Digi-Key Part No.	Cut Tape Price Each 10	100	1,000	Tape & Reel* Size	Pricing
1	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54DICT-ND	.40	.30	.16	3,000	150.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54WCT-ND	.48	.36	.20	3,000	180.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40DICT-ND	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40WDICT-ND	.64	.48	.29	3,000	266.00/M
	40V	500mA	0.5V	50µA	—	SOT-23	BAT400DDICT-ND	.52	.39	.24	3,000	213.00/M
	40V	750mA	0.75V	100µA	—	SOT-23	BAT750DICT-ND	.58	.44	.27	3,000	239.00/M
	70V	70mA	1.0V	200uA	5nS	SOT-23	BAS70DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70HDICT-ND	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70WDICT-ND	.71	.53	.32	3,000	293.00/M
2	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54CDICT-ND	.48	.36	.22	3,000	200.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54CWCT-ND	.58	.44	.27	3,000	239.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40-05DICT-ND	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40W-05DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	70mA	1.0V	200nA	5nS	SOT-23	BAS70-05DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70H-05DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70W-05DICT-ND	.71	.53	.32	3,000	293.00/M
3	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54SDICT-ND	.48	.36	.22	3,000	200.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54SWCT-ND	.58	.44	.27	3,000	239.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40-04CT-ND	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40W-04DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	70mA	1.0V	200nA	5nS	SOT-23	BAS70-04DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70H-04DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70W-04DICT-ND	.71	.53	.32	3,000	293.00/M
4	30V	200mA	1.0V	2µA	5nS	SOT-23	BAT54ADICT-ND	.48	.36	.22	3,000	200.00/M
	30V	200mA	1.0V	2µA	5nS	SOT-323	BAT54AWCT-ND	.58	.44	.27	3,000	239.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-23	BAS40-06DICT-ND	.52	.39	.24	3,000	213.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-323	BAS40W-06DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	70mA	1.0V	200nA	5nS	SOT-23	BAS70-06DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	200mA	1.0V	100nA	5nS	SOT-23	BAS70H-06DICT-ND	.64	.48	.29	3,000	266.00/M
	70V	100mA	1.0V	100nA	5nS	SOT-323	BAS70W-06DICT-ND	.71	.53	.32	3,000	293.00/M
5	30V	200mA	1.0V	2µA	5nS	SOT-363	BAT54DWDICT-ND	.65	.50	.34	3,000	325.00/M
6	30V	200mA	1.0V	2.0µA	5nS	SOT-523	BAT54TDICT-ND *NEW!*	.40	.30	.16	3,000	150.00/M
	40V	200mA	0.37V	1µA	—	SOT-323	SDMG0340LDICT-ND	.54	.41	.22	3,000	203.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-523	BAS40TDICT-ND *NEW!*	.52	.39	.24	3,000	213.00/M
7	30V	200mA	1.0V	2.0µA	5nS	SOT-523	BAT54ATDICT-ND *NEW!*	.48	.36	.22	3,000	200.00/M
	40V	200mA	0.37V	1µA	—	SOT-323	SDMG0340LADICT-ND	.54	.41	.22	3,000	203.00/M
	40V	200mA	1.0V	200nS	5nS	SOT-523	BAS40T-06DICT-ND *NEW!*	.52	.39	.24	3,000	213.00/M
8	30V	200mA	1.0V	2.0µA	5nS	SOT-523	BAT54CTDICT-ND *NEW!*	.48	.36	.22	3,000	200.00/M
	40V	200mA	0.37V	1µA	—	SOT-323	SDMG0340LCDICT-ND	.54	.41	.22	3,000	203.00/M
9	40V	200mA	0.37V	1µA	—	SOT-323	SDMG0340LSDICT-ND	.54	.41	.22	3,000	203.00/M
	40V	200mA	1.0V	200nA	5nS	SOT-523	BAS40T-04DICT-ND *NEW!*	.52	.39	.24	3,000	213.00/M

* For Tape and Reel Part No., change “CT-ND” to “TR-ND”.

Fig. 1

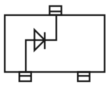


Fig. 2

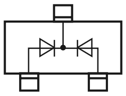


Fig. 3

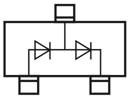


Fig. 4

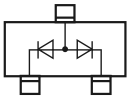


Fig. 5

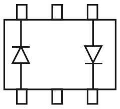


Fig. 6

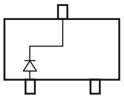


Fig. 7

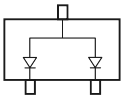


Fig. 8

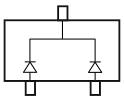
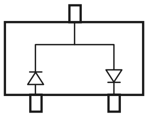


Fig. 9



Schottky Barrier Diode Arrays SOT-363 (200mW)

Fig.	Peak Rev. Voltage VRRM(V)	Leakage Current	Forward Volt. @ IF VF	IF(mA)	Junction Cap. (pF)	Reverse Recovery Time (nS)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
1	30	2.0µA	0.40	10	10	5.0	BAT54SDWDICT-ND	.96	.77	.58	BAT54SDWDITR-ND	319.00/M
	40	200nA	0.38	1.0	5.0	5.0	BAS40DW-04DICT-ND	.80	.64	.48	BAS40DW-04DITR-ND	266.00/M
	70	100nA	0.41	1.0	2.0	5.0	BAS70DW-04DICT-ND	.83	.65	.50	BAS70DW-04DITR-ND	325.00/M
2	30	2.0µA	0.40	10	10	5.0	BAT54CDWDICT-ND	.96	.77	.58	BAT54CDWDITR-ND	319.00/M
	40	200nA	0.38	1.0	5.0	5.0	BAS40DW-05DICT-ND	.80	.64	.48	BAS40DW-05DITR-ND	266.00/M
3	30	2.0µA	0.40	10	10	5.0	BAT54ADWDICT-ND	.96	.77	.58	BAT54ADWDITR-ND	319.00/M
	40	200nA	0.38	1.0	5.0	5.0	BAS40DW-06DICT-ND	.80	.64	.48	BAS40DW-06DITR-ND	266.00/M
	70	100nA	0.41	1.0	2.0	5.0	BAS70DW-06DICT-ND	.83	.65	.50	BAS70DW-06DITR-ND	325.00/M
4	40	200nA	0.38	1.0	5.0	5.0	BAS40TWDICT-ND	.72	.58	.44	BAS40TWDITR-ND	239.00/M
	70	100nA	0.41	1.0	2.0	5.0	BAS70TWDICT-ND	.88	.71	.53	BAS70TWDITR-ND	293.00/M
5	30	2.0µA	0.45	10	10	5.0	QSBT40DICT-ND	1.09	.86	.66	QSBT40DITR-ND	429.00/M
6	30	2.0µA	0.40	10	10	5.0	BAT54BRWDICT-ND *NEW!*	.96	.77	.58	BAT54BRWDITR-ND *NEW!*	319.00/M
	40	2.0µA	0.38	1.0	5.0	5.0	BAS40BRWDICT-ND *NEW!*	.96	.77	.58	BAS40BRWDITR-ND *NEW!*	319.00/M
7	30	2.0µA	0.40	10	10	5.0	BAT54JWDICT-ND *NEW!*	.64	.52	.39	BAT54JWDITR-ND *NEW!*	213.00/M

Fig. 1

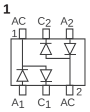


Fig. 2

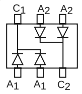


Fig. 3

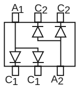


Fig. 4

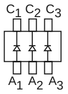


Fig. 5

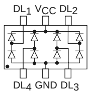


Fig. 6 *NEW!*

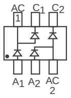
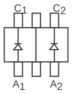


Fig. 7 *NEW!*



Switching Diode Arrays SOT-363/SOT-353 (200mW)

Fig.	Peak Rev. Volt. VRRM (V)	Reverse Curr. max. IR (µA)	VR (V)	For. Volt. max. VF (V)	@ IF (mA)	Capac-itance C max. (pF)	Reverse Recovery Time Trr max. (nS)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
1	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HAQWDICT-ND	.60	.48	.36	MMBD4448HAQWDITR-ND	200.00/M
2	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HCQWDICT-ND	.60	.48	.36	MMBD4448HCQWDITR-ND	180.00/M
3	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HTWDICT-ND	.50	.40	.30	MMBD4448HTWDITR-ND	150.00/M
4	75	2.5	75	1.0	50	2.0	4.0	BAV70DWDICT-ND	.50	.40	.30	BAV70DWDITR-ND	150.00/M
4	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HCDWDICT-ND	.60	.48	.36	MMBD4448HCDWDITR-ND	180.00/M
5	75	2.5	75	1.0	50	2.0	4.0	BAV99DWDICT-ND	.50	.40	.30	BAV99DWDITR-ND	150.00/M
5	80	0.1	70	1.0	100	3.5	4.0	MMBD4448HSDWDICT-ND	.60	.48	.36	MMBD4448HSDWDITR-ND	180.00/M
6	75	2.5	75	1.0	50	2.0	4.0	BAW56DWDICT-ND	.50	.40	.30	BAW56DWDITR-ND	150.00/M
6	80	1.0	75	1.0	100	3.5	4.0	MMBD4448HADWDICT-ND	.60	.48	.36	MMBD4448HADWDITR-ND	180.00/M
7	75	2.5	75	1.0	50	2.0	4.0	BAV756DWDICT-ND	.50	.40	.30	BAV756DWDITR-ND	150.00/M

Fig. 1

SOT-363

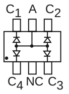


Fig. 2

SOT-353

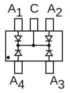


Fig. 3

SOT-363

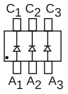


Fig. 4

SOT-363

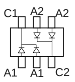


Fig. 5

SOT-363

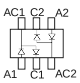


Fig. 6

SOT-363

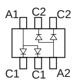
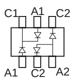


Fig. 7

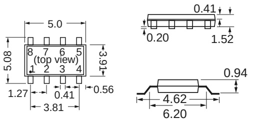
SOT-363



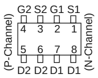
Surface Mount MOSFETS

VDSS	RDS (On) OHMS	ID Cont. (A)	PD (watts)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000
Single P-Channel Enhancement Mode FETs										
-30	0.24	3.4	2.5	DI9400CT-ND	4.50	3.75	3.00	—	—	—
-20	0.12	4.3	2.5	DI9405CT-ND	4.68	3.90	3.12	DI9405TR-ND	1560.00/M	1365.00/M
-20	0.12	5.3	2.5	DI9430CT-ND	4.92	4.10	3.28	DI9430TR-ND	1640.00/M	1435.00/M
-30	0.064	5.3	2.5	DI9435CT-ND	4.98	4.15	3.32	DI9435TR-ND	1660.00/M	1453.00/M
Dual N & P-Channel Enhancement Mode FETs										
20, -20	0.11, 0.35	3, -2.5	1.6	DI9942CT-ND	5.40	4.50	3.60	DI9942TR-ND	1800.00/M	1575.00/M
30, -30	0.11, -0.24	3.7, -2.9	2	DI9952CT-ND	5.58	4.65	3.72	—	—	—
Dual N-Channel Enhancement Mode FETs										
60	0.17	3.5	1.6	DI9945CT-ND	5.40	4.50	3.60	DI9945TR-ND	1800.00/M	1575.00/M
30	0.11	3.7	2	DI9956CT-ND	5.22	4.35	3.48	DI9956TR-ND	1740.00/M	1523.00/M

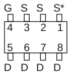
SO-8



Dual



Single



*No connection for DI9400

Fast Recovery Rectifiers

Fig.	Pkg.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Reverse Current @25°C (µA)	Max. Forward Voltage Peak (V)	Max. Reverse Recovery Time (nS)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	DO-41	1.0	50	50	5.0	1.2	200	1N4933CT-ND	.39	.23	.15	1N4933TR-ND	5,000	46.00/M
			100	50	5.0	1.2	200	1N4934CT-ND	.39	.23	.15	1N4934TR-ND	5,000	46.00/M
			200	50	5.0	1.2	200	1N4935CT-ND	.39	.23	.15	1N4935TR-ND	5,000	46.00/M
			400	50	5.0	1.2	200	1N4936CT-ND	.39	.23	.15	1N4936TR-ND	5,000	46.00/M
			600	50	5.0	1.2	200	1N4937CT-ND	.39	.23	.15	1N4937TR-ND	5,000	46.00/M
			800	50	5.0	1.3	500	FR106CT-ND	.44	.30	.21	FR106TR-ND	5,000	72.00/M
			1000	50	5.0	1.3	500	FR107CT-ND	.44	.30	.21	FR107TR-ND	5,000	72.00/M
2	MELF	1.0	50	30	5.0	1.2	200	DL4933CT-ND	—	.33	.24	DL4933TR-ND	5,000	104.00/M
			100	30	5.0	1.2	200	DL4934CT-ND	—	.33	.24	DL4934TR-ND	5,000	104.00/M
			200	30	5.0	1.2	200	DL4935CT-ND	—	.33	.24	DL4935TR-ND	5,000	104.00/M
			400	30	5.0	1.2	200	DL4936CT-ND	—	.33	.24	DL4936TR-ND	5,000	104.00/M
			600	30	5.0	1.2	200	DL4937DICT-ND	.42	.33	.24	DL4937DITR-ND	5,000	104.00/M
3	DO-201AD	3.0	50	200	10.0	1.3	150	FR301CT-ND	.41	.32	.23	FR301TR-ND	1,200	113.00/M
			100	200	10.0	1.3	150	FR302CT-ND	.42	.32	.24	FR302TR-ND	1,200	115.00/M
			200	200	10.0	1.3	150	FR303CT-ND	.44	.34	.25	FR303TR-ND	1,200	121.00/M
			400	200	10.0	1.3	150	FR304CT-ND	.44	.34	.25	FR304TR-ND	1,200	121.00/M
			600	200	10.0	1.3	250	FR305CT-ND	.48	.37	.27	FR305TR-ND	1,200	133.00/M
			800	200	10.0	1.3	500	FR306CT-ND	.48	.37	.27	FR306TR-ND	1,200	133.00/M
			1000	200	10.0	1.3	500	FR307CT-ND	.57	.44	.32	FR307TR-ND	1,200	158.00/M
4	R-6	6.0	50	300	10.0	1.3	150	FR601CT-ND	.64	.52	.39	FR601TR-ND	500	132.00
			100	300	10.0	1.3	150	FR602CT-ND	.68	.55	.41	FR602TR-ND	500	140.50
			200	300	10.0	1.3	150	FR603CT-ND	.72	.58	.44	FR603TR-ND	500	148.50
			400	300	10.0	1.3	150	FR604CT-ND	.76	.61	.46	FR604TR-ND	500	157.00
			600	300	10.0	1.3	250	FR605CT-ND	.84	.68	.51	FR605TR-ND	500	173.50
			800	300	10.0	1.3	500	FR606CT-ND	.92	.74	.56	FR606TR-ND	500	190.00
5	TO-220A	8.0	50	300	10.0	1.3	150	FR801-ND	1.19	.94	.72	—	—	—
			100	300	10.0	1.3	150	FR802-ND	1.25	.99	.76	—	—	—
			200	300	10.0	1.3	150	FR803-ND	1.32	1.04	.80	—	—	—
			400	300	10.0	1.3	150	FR804-ND	1.45	1.15	.88	—	—	—
			600	300	10.0	1.3	250	FR805-ND	1.55	1.23	.94	—	—	—
6	TO-220	16	150	125	10.0	.975	35	SF163DI-ND	2.08	1.62	1.28	—	—	—
			200	125	10.0	.975	35	SF164DI-ND	2.13	1.66	1.32	—	—	—
7	SMA	1.0	100	30	5.0	1.3	150	RS1BDICT-ND	.55	.43	.31	RS1BDITR-ND	5,000	136.00/M
		1.0	200	30	5.0	1.3	150	RS1DDICT-ND	.45	.36	.27	RS1DDITR-ND	5,000	126.00/M
		1.0	400	30	5.0	1.3	150	RS1GDICT-ND	.48	.38	.29	RS1GDITR-ND	5,000	133.00/M
		1.0	600	30	5.0	1.3	250	RS1JDICT-ND	.50	.40	.30	RS1JDITR-ND	5,000	140.00/M
		1.0	800	30	5.0	1.3	500	RS1KDICT-ND	.53	.42	.32	RS1KDITR-ND	5,000	147.00/M
		1.0	1000	30	5.0	1.3	500	RS1MDICT-ND	.55	.44	.33	RS1MDITR-ND	5,000	154.00/M
		1.5	50	50	5.0	1.3	150	RS2AADICT-ND	.50	.40	.30	RS2AADITR-ND	5,000	140.00/M
		1.5	100	50	5.0	1.3	150	RS2BADICT-ND	.53	.42	.32	RS2BADITR-ND	5,000	147.00/M
		1.5	400	50	5.0	1.3	150	RS2GADICT-ND	.58	.46	.35	RS2GADITR-ND	5,000	161.00/M
		1.5	1000	50	5.0	1.3	500	RS2MADICT-ND	.70	.56	.42	RS2MADITR-ND	5,000	196.00/M
8	SMB	1.0	50	30	5.0	1.0	150	FR1ADICT-ND	.53	.41	.30	FR1ADITR-ND	3,000	138.00/M
		1.0	100	30	5.0	1.0	150	FR1BDICT-ND	.45	.36	.27	FR1BDITR-ND	3,000	135.00/M
		1.0	200	30	5.0	1.0	150	FR1DDICT-ND	.48	.38	.29	FR1DDITR-ND	3,000	143.00/M
		1.0	200	30	5.0	1.3	150	RS1DBDICT-ND	.45	.36	.27	RS1DBDITR-ND	3,000	135.00/M
		1.0	400	30	5.0	1.0	150	FR1GDICT-ND	.50	.40	.30	FR1GDITR-ND	3,000	150.00/M
		1.0	600	30	5.0	1.0	250	FR1JDICT-ND	.52	.42	.32	FR1JDITR-ND	3,000	156.00/M
		1.0	800	30	5.0	1.0	500	FR1KDICT-ND	.54	.44	.33	FR1KDITR-ND	3,000	162.00/M
		1.0	1000	30	5.0	1.0	500	FR1MDICT-ND	.57	.46	.34	FR1MDITR-ND	3,000	170.00/M
		1.5	50	50	5.0	1.3	150	RS2ADICT-ND	.50	.40	.30	RS2ADITR-ND	3,000	150.00/M
		3.0	50	100	5.0	1.3	150	RS3ABDICT-ND	.84	.68	.51	RS3ABDITR-ND	3,000	279.00/M
		3.0	600	100	5.0	1.3	250	RS3JBDICT-ND	.89	.71	.54	RS3JBDITR-ND	3,000	351.00/M
9	SMC	3.0	50	100	5.0	1.3	150	RS3ADICT-ND	.84	.68	.51	RS3ADITR-ND	3,000	279.00/M
		3.0	100	100	5.0	1.3	150	RS3BDICT-ND	.88	.71	.53	RS3BDITR-ND	3,000	293.00/M
		3.0	200	100	5.0	1.3	150	RS3DDICT-ND	.92	.74	.56	RS3DDITR-ND	3,000	306.00/M
		3.0	400	100	5.0	1.3	150	RS3GDICT-ND	.96	.77	.58	RS3GDITR-ND	3,000	319.00/M
		3.0	800	100	5.0	1.3	500	RS3KDICT-ND	.96	.76	.58	RS3KDITR-ND	3,000	377.00/M
		3.0	1000	100	5.0	1.3	500	RS3MDICT-ND	.99	.78	.60	RS3MDITR-ND	3,000	390.00/M

Operating and Storage Temperature: -65°C to +175°C.   Reverse Recovery Test @ I_F = 1.0A, V_R = 30V.

Fig. 1 — DO-41

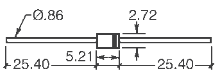


Fig. 2 MELF (DL-41)

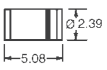


Fig. 3 — DO-201AD

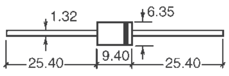


Fig. 4 — R-6

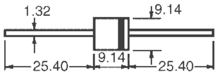


Fig. 5 — TO-220A

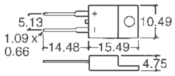


Fig. 6 — TO-220

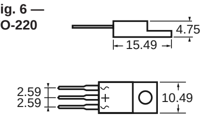


Fig. 7 — SMA

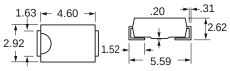


Fig. 8 — SMB

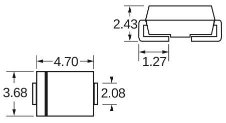
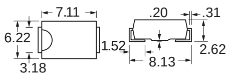


Fig. 9 — SMC



DIODES INCORPORATED

Ultra Fast Switching Rectifiers

Operating Temperature Range: -65°C to +150°C

Fig.	Pkg.	Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. Rev. Current @ 25°C (µA)	Max. Forward Voltage Peak (V)	Max. Rev. Recovery Time (nS)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	DO41	1.0	50	30	5.0	1.0	50	UF1001DICT-ND	.45	.31	.22	UF1001DITR-ND	5,000	74.00/M
			100	30	5.0	1.0	50	UF1002DICT-ND	.39	.29	.21	UF1002DITR-ND	5,000	78.00/M
			200	30	5.0	1.0	50	UF1003DICT-ND	.43	.32	.23	UF1003DITR-ND	5,000	87.00/M
			400	30	5.0	1.3	50	UF1004DICT-ND	.50	.37	.26	UF1004DITR-ND	5,000	100.00/M
			600	30	5.0	1.7	75	UF1005DICT-ND	.44	.34	.25	UF1005DITR-ND	5,000	109.00/M
			800	30	5.0	1.7	75	UF1006DICT-ND	.52	.40	.29	UF1006DITR-ND	5,000	128.00/M
			1000	30	5.0	1.7	75	UF1007DICT-ND	.48	.38	.29	UF1007DITR-ND	5,000	133.00/M
2	D2-PAK	16	200	100	5.0	0.975	25	MURB1620CTDICT-ND	2.30	1.79	1.42	MURB1620CTDITR-ND	800	918.40
3	SMA	1.0	50	30	2.0	0.9	25	ES1ADICT-ND	.68	.54	.41	ES1ADITR-ND	5,000	189.00/M
			100	30	2.0	0.9	25	ES1BDICT-ND	.70	.56	.42	ES1BDITR-ND	5,000	196.00/M
			150	30	5.0	0.98	20	ES1CDICT-ND	.73	.58	.44	ES1CDITR-ND	5,000	203.00/M
			200	30	2.0	0.9	25	ES1DDICT-ND	.60	.48	.36	ES1DDITR-ND	5,000	191.00/M
	SMA	1.0	50	30	5.0	1.0	50	US1ADICT-ND	.55	.44	.33	US1ADITR-ND	5,000	154.00/M
			100	30	5.0	1.0	50	US1BDICT-ND	.60	.48	.36	US1BDITR-ND	5,000	168.00/M
			200	30	5.0	1.0	50	US1DDICT-ND	.65	.52	.39	US1DDITR-ND	5,000	182.00/M
			400	30	5.0	1.3	50	US1GDICT-ND	.70	.56	.42	US1GDITR-ND	5,000	196.00/M
			600	30	5.0	1.7	75	US1JDICT-ND	.60	.48	.36	US1JDITR-ND	5,000	191.00/M
			800	30	5.0	1.7	75	US1KDICT-ND	.64	.52	.39	US1KDITR-ND	5,000	204.00/M
			1000	30	5.0	1.7	75	US1MDICT-ND	.68	.55	.41	US1MDITR-ND	5,000	217.00/M
	SMA	2.0	50	50	5.0	0.92	25	ES2AADICT-ND	.64	.52	.39	ES2AADITR-ND	5,000	204.00/M
			100	50	5.0	0.92	25	ES2BADICT-ND	.68	.55	.41	ES2BADITR-ND	5,000	217.00/M
			150	50	5.0	0.92	25	ES2CADICT-ND	.72	.58	.44	ES2CADITR-ND	5,000	230.00/M
			200	50	5.0	0.9	25	ES2DADICT-ND	.76	.61	.46	ES2DADITR-ND	5,000	242.00/M
4	SMB	1.0	200	40	2.0	0.875	25	MURS120DICT-ND	.60	.48	.36	MURS120DITR-ND	3,000	200.00/M
			400	35	5.0	1.25	50	MURS140DICT-ND	.60	.48	.36	MURS140DITR-ND	3,000	200.00/M
			600	35	5.0	1.25	50	MURS160DICT-ND	.64	.52	.39	MURS160DITR-ND	3,000	213.00/M
	SMB	2.0	50	50	5.0	0.9	25	ES2ADICT-ND	.64	.52	.39	ES2ADITR-ND	3,000	213.00/M
			100	50	5.0	0.9	25	ES2BDICT-ND	.68	.55	.41	ES2BDITR-ND	3,000	226.00/M
			150	50	5.0	0.9	25	ES2CDICT-ND	.72	.58	.44	ES2CDITR-ND	3,000	239.00/M
			200	50	5.0	0.9	25	ES2DDICT-ND	.76	.61	.46	ES2DDITR-ND	3,000	253.00/M
	SMB	3.0	50	100	10	0.9	25	ES3ABDICT-ND	.89	.71	.54	ES3ABDITR-ND	3,000	351.00/M
			100	100	10	0.9	25	ES3BBDICT-ND	.84	.67	.51	ES3BBDITR-ND	3,000	332.00/M
			150	100	10	0.9	25	ES3CBDICT-ND	.89	.71	.54	ES3CBDITR-ND	3,000	351.00/M
			200	100	10	0.9	25	ES3DBDICT-ND	1.06	.84	.64	ES3DBDITR-ND	3,000	416.00/M
5	SMC	3.0	50	100	10	0.9	25	ES3ADICT-ND	.89	.71	.54	ES3ADITR-ND	3,000	351.00/M
			100	100	10	0.9	25	ES3BDICT-ND	.84	.67	.51	ES3BDITR-ND	3,000	332.00/M
			150	100	10	0.9	25	ES3CDICT-ND	.89	.71	.54	ES3CDITR-ND	3,000	351.00/M
			200	100	10	0.9	25	ES3DDICT-ND	1.06	.84	.64	ES3DDITR-ND	3,000	416.00/M

Fig. 1 — DO-41

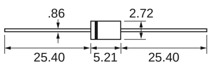


Fig. 2 — D2-PAK

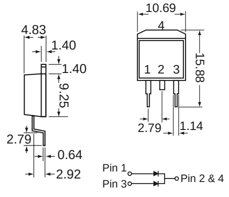


Fig. 3 — SMA

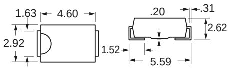


Fig. 4 — SMB

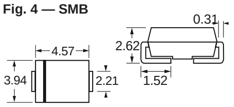
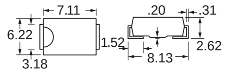


Fig. 5 — SMC



High Speed Switching Rectifiers

Fig.	Peak Rev. Volt. VRWM (V)	Reverse Curr. max. IR (µA)	VR (V)	Forward Volt. max. @ VF (V)	IF (mA)	Capacitance C max. (pF)	Reverse Recovery Time Trr max. (nS)	Power Dissipation Pd (mW)	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Tape & Reel* Size	Pricing
1	75	5.0	75	1.0	10	4.0	4.0	500	1N4148DICT-ND	1.20	6.75	24.38	10,000	15.00/M
2	150	0.1	150	1.0	100	1.5	50	500	BAV102DICT-ND	2.25	15.60	69.00	2,500	60.00/M
	200	0.1	200	1.0	100	1.5	50	500	BAV103DICT-ND	2.25	15.60	69.00	2,500	60.00/M
	75	5.0	75	1.0	10	4.0	4.0	500	LL4148DICT-ND	2.00	13.00	54.00	10,000	34.00/M
	50	0.1	50	1.0	200	2.5	4.0	500	LL4150DICT-ND	2.00	13.00	54.00	2,500	47.00/M
	50	0.05	50	1.0	50	2.0	4.0	500	LL4151DICT-ND	2.00	13.00	54.00	2,500	47.00/M
	75	5.0	75	1.0	100	4.0	4.0	500	LL4448DICT-ND	2.00	13.00	54.00	2,500	47.00/M
3	75	2.5	75	1.0	50	2.0	4.0	350	BAL99DICT-ND	3.00	20.80	92.00	3,000	80.00/M
	75	1.0	70	.855	10	2.0	6.0	350	BAS16DICT-ND	2.25	15.60	69.00	3,000	60.00/M
	100	0.1	100	1.0	100	5.0	50	250	BAS19DICT-ND	2.81	19.80	90.00	3,000	81.00/M
	150	0.1	150	1.0	100	5.0	50	250	BAS20DICT-ND	2.81	19.80	90.00	3,000	81.00/M
	200	0.1	250	1.0	100	5.0	50	250	BAS21DICT-ND	2.81	19.80	90.00	3,000	81.00/M
	85	.005	75	1.0	10	2.0	3.0§	250	BAS116DICT-ND	3.00	20.80	92.00	3,000	80.00/M
	200	0.1	250	1.0	100	5.0	50	350	BAV23ADICT-ND *NEW!*	3.13	22.00	100.00	3,000	90.00/M
	200	0.1	250	1.0	100	5.0	50	350	BAV23CDICT-ND *NEW!*	3.13	22.00	100.00	3,000	90.00/M
	200	0.1	200	1.0	100	5.0	50	350	BAV23SDICT-ND	3.13	22.00	100.00	3,000	90.00/M
	70	2.5	75	.855	10	1.5	6.0	350	BAV70DICT-ND	2.63	18.20	80.50	3,000	70.00/M
	75	2.5	70	.855	10	1.5	6.0	350	BAV99DICT-ND	3.00	20.80	92.00	3,000	80.00/M
	85	.005	75	1.0	10	2.0	3.0§	250	BAV170DICT-ND	3.13	22.00	100.00	3,000	90.00/M
	85	.005	75	1.0	10	2.0	3.0§	250	BAV199DICT-ND	3.13	22.00	100.00	3,000	90.00/M
	75	2.5	70	.855	10	2.0	6.0	350	BAW56DICT-ND	2.81	19.80	90.00	3,000	81.00/M
	85	.005	75	1.0	10	3.0	3.0§	250	BAW156DICT-ND	3.13	22.00	100.00	3,000	90.00/M
	75	1.0	75	1.0	50	2.0	4.0	350	MMBD914DICT-ND	2.25	15.60	69.00	3,000	60.00/M
	240	0.1	240	1.0	100	5.0	50	350	MMBD2004SDICT-ND *NEW!*	3.13	22.00	100.00	3,000	90.00/M
	75	2.5	75	1.0	50	2.0	4.0	350	MMBD4148DICT-ND	2.25	15.60	69.00	3,000	60.00/M
	75	2.5	75	1.0	100	4.0	4.0	350	MMBD4448DICT-ND	2.25	15.60	69.00	3,000	60.00/M
	80	1.0	75	1.0	100	3.5	4.0	350	MMBD4448HDICT-ND	2.25	15.60	69.00	3,000	60.00/M
	75	3.0	100	1.25	150	2.0	4.0	350	MMBD7000DICT-ND	3.00	20.80	92.00	3,000	80.00/M
4	75	1.0	75	.855	10	2.0	4.0	200	BAS16WCT-ND	2.70	18.72	82.80	3,000	72.00/M
	100	15	120	1.0	100	5.0	50	200	BAS19WCT-ND	3.38	23.76	108.00	3,000	97.00/M
	150	15	200	1.0	100	5.0	50	200	BAS20WCT-ND	3.38	23.76	108.00	3,000	97.00/M
	200	15	250	1.0	100	5.0	50	200	BAS21WCT-ND	3.38	23.76	108.00	3,000	97.00/M
	75	2.5	75	.855	10	2.0	4.0	200	BAV70WCT-ND	3.15	21.84	96.60	3,000	84.00/M
	75	2.5	75	.855	10	2.0	4.0	200	BAV99WCT-ND	3.00	21.12	96.00	3,000	86.00/M
	75	2.5	75	.855	10	2.0	4.0	200	BAW56WCT-ND	3.38	23.76	108.00	3,000	97.00/M
	75	2.5	75	1.0	100	2.0	4.0	200	MMBD4148WDICT-ND	3.30	22.88	101.20	3,000	88.00/M
	80	50	75	1.0	100	3.5	4.0	200	MMBD4448HWDICT-ND	3.30	22.88	101.20	3,000	88.00/M
	75	2.5	75	1.0	100	4.0	4.0	200	MMBD4448WDICT-ND	3.30	22.88	101.20	3,000	88.00/M
5	75	2.5	75	1.0	50	4.0	4.0	200	MMBD4448DWDICT-ND†	3.13	22.00	100.00	3,000	90.00/M
6	75	2.5	75	.855	10	2.0	4.0	400	1N4148WCT-ND	3.00	20.80	92.00	3,000	80.00/M
	75	2.5	75	.855	10	4.0	4.0	350	1N4448WDICT-ND	3.00	20.80	92.00	3,000	80.00/M
	75	1.0	75	1.0	50	2.0	4.0	400	BAV16WDICT-ND	3.00	20.80	92.00	3,000	80.00/M
	100	0.1	150	1.0	100	5.0	50	250	BAV19WDICT-ND	3.13	22.00	100.00	3,000	90.00/M
	150	0.1	150	1.0	100	5.0	50	250	BAV20WDICT-ND	3.13	22.00	100.00	3,000	90.00/M
7	80	5.0	75	.855	10	3.5	4.0	200	1N4448HWSDICT-ND	3.00	20.80	92.00	3,000	80.00/M
	75	1.0	75	.855	10	2.0	4.0	200	1N4148WSCT-ND	3.00	20.80	92.00	3,000	80.00/M
	75	2.5	75	1.0	100	4.0	4.0	200	1N4448WSDICT-ND	3.00	20.80	92.00	3,000	80.00/M
	75	1.0	75	1.0	50	2.0	4.0	200	BAV16WSDICT-ND	3.00	20.80	92.00	3,000	80.00/M
	100	0.1	100	1.0	100	5.0	50	200	BAV19WSDICT-ND	3.00	21.60	108.00	3,000	102.00/M
	150	0.1	150	1.0	100	5.0	50	200	BAV20WSDICT-ND	3.00	21.60	108.00	3,000	102.00/M
	200	0.1	200	1.0	100	5.0	50	250	BAV21WDICT-ND	3.13	22.00	100.00	3,000	90.00/M
	200	0.1	200	1.0	100	5.0	50	200	BAV21WSDICT-ND	3.00	21.60	108.00	3,000	102.00/M
8	85	2.0	75	1.0	50	1.5	4.0	150	BAV70TDICT-ND *NEW!*	2.63	18.20	80.50	3,000	70.00/M
	85	2.0	75	1.0	50	1.5	4.0	150	BAV99TDICT-ND *NEW!*	3.00	20.80	92.00	3,000	80.00/M
	85	.005	75	1.0	10	—	3.0§	150	BAV170TDICT-ND *NEW!*	3.13	22.00	100.00	3,000	90.00/M
	85	2.0	75	1.0	50	1.5	4.0	150	BAW56TDICT-ND *NEW!*	2.81	19.80	90.00	3,000	81.00/M
	85	.005	75	1.0	10	—	3.0§	150	BAW156TDICT-ND *NEW!*	3.13	22.00	100.00	3,000	90.00/M
	80	0.1	70	1.0	100	3.5	4.0	150	MMBD4448HTADICT-ND *NEW!*	2.63	18.20	80.50	3,000	70.00/M

* For Tape and Reel Part No., change “CT-ND” to “TR-ND” † Dual Isolated Single § Reverse Recovery Time @ µs

Fig. 1 — DO-35

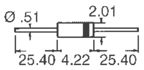


Fig. 2 — MiniMELF

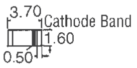
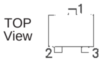


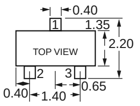
Fig. 3 — SOT-23



	1	2	3
BAL99	A	—	K
BAS16	K	A	—
BAS19	K	A	—
BAS20	K	A	—
BAS21	K	A	—
BAS116	K	A	—
BAV23A	A/A	K	K
BAV23C	K/K	A	A
BAV23S	—	A	K
BAV70	K	A	A
BAV99	K/A	A	K

	1	2	3
BAV170	K/K	A	A
BAV199	K/A	A	K
BAW56	A/A	K	K
BAW156	A/A	K	K
MMBD914	K	A	—
MMBD2004S	K/A	A	K
MMBD4148	K	A	—
MMBD4448	K	A	—
MMBD4448H	K	A	—
MMBD7000	K/A	A	K

Fig. 4 — SOT-323



	1	2	3
BAS16W	K	A	—
BAS19W	K	A	—
BAS20W	K	A	—
BAS21W	K	A	—
BAV70W	K	A	A
BAV99W	K/A	A	K
BAW56W	A/A	K	K
MMBD4148W	K	A	—
MMBD4448HW	K	A	—
MMBD4448W	K	A	—

Fig. 5 — SOT-363

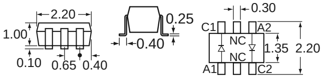


Fig. 6 — SOD-123

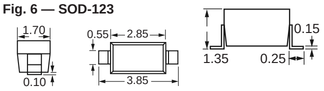


Fig. 7 — SOD-323

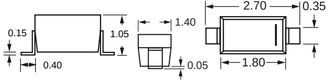
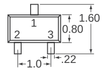
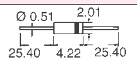
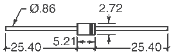
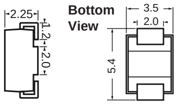
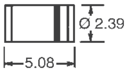
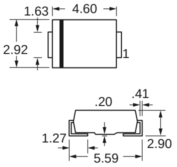
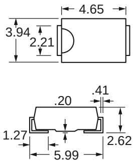
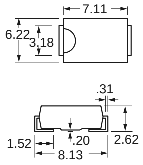
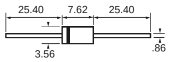
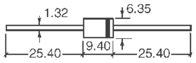
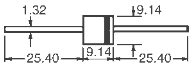


Fig. 8 *NEW!* **— SOT-523**



	1	2	3
BAV70T	K/K	A	A
BAV99T	A/K	A	K
BAV170T	K/K	A	A
BAW56T	A/A	K	K
BAW156T	A/A	K	K
MMBD4448HT	A/A	K	K

Silicon and Glass Passivated Rectifiers

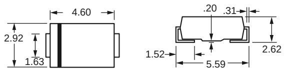
Max. Avg. Rect. Current (A)	Max. Peak Reverse Voltage (V)	Max. Surge Current 8.3ms (A)	Max. For. Volt. Peak (V)	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Package
					1	10	100	1,000		Size	Pricing	
0.2	200	—	1.0	BAV20DICT-ND	—	1.80	11.70	48.60	BAV20DITB-ND‡	10,000	31.00/M	DO-35 
	250	—	1.0	BAV21DICT-ND	—	1.80	11.70	48.60	BAV21DITB-ND‡	10,000	31.00/M	
1.0	50	30	1.1	1N4001DICT-ND	—	1.36	7.65	27.63	1N4001DITR-ND*	5,000	20.00/M	DO-41 
	100	30	1.1	1N4002DICT-ND	—	1.36	7.65	27.63	1N4002DITR-ND*	5,000	20.00/M	
	200	30	1.1	1N4003DICT-ND	—	1.36	7.65	27.63	1N4003DITR-ND*	5,000	20.00/M	
	400	30	1.1	1N4004DICT-ND	—	1.36	7.65	27.63	1N4004DITR-ND*	5,000	20.00/M	
	600	30	1.1	1N4005DICT-ND	—	1.36	7.65	27.63	1N4005DITR-ND*	5,000	20.00/M	
	800	30	1.1	1N4006DICT-ND	—	1.36	7.65	27.63	1N4006DITR-ND*	5,000	20.00/M	
	1000	30	1.1	1N4007DICT-ND	—	1.36	7.65	27.63	1N4007DITR-ND*	5,000	20.00/M	
1.0	50	30	1.0	1N4001GCT-ND	—	2.20	14.30	59.40	1N4001GTR-ND*	5,000	44.00/M	
	100	30	1.0	1N4002GCT-ND	—	2.40	15.60	64.80	1N4002GTR-ND*	5,000	48.00/M	
	200	30	1.0	1N4003GCT-ND	—	2.60	16.90	70.20	1N4003GTR-ND*	5,000	52.00/M	
	400	30	1.0	1N4004GCT-ND	—	2.70	17.55	72.90	1N4004GTR-ND*	5,000	54.00/M	
	600	30	1.0	1N4005GCT-ND	—	2.90	18.85	78.30	1N4005GTR-ND*	5,000	58.00/M	
	800	30	1.0	1N4006GCT-ND	—	2.33	16.12	71.30	1N4006GTR-ND*	5,000	56.00/M	
	1000	30	1.0	1N4007GCT-ND	—	2.48	17.16	75.90	1N4007GTR-ND*	5,000	59.00/M	
1.0	50	30	1.1	S1ABDICT-ND	—	3.13	22.00	100.00	S1ABDITR-ND*	3,000	90.00/M	SMB 
	100	30	1.1	S1BBDICT-ND	—	3.25	22.88	104.00	S1BBDITR-ND*	3,000	94.00/M	
	200	30	1.1	S1DBDICT-ND	—	3.38	23.76	108.00	S1DBDITR-ND*	3,000	97.00/M	
	400	30	1.1	S1GBDICT-ND	—	3.50	24.64	112.00	S1GBDITR-ND*	3,000	101.00/M	
	600	30	1.1	S1JBDICT-ND	—	3.63	25.52	116.00	S1JBDITR-ND*	3,000	104.00/M	
	800	30	1.1	S1KBDICT-ND	—	3.00	21.60	108.00	S1KBDITR-ND*	3,000	102.00/M	
	1000	30	1.1	S1MBDICT-ND	—	3.40	24.48	122.40	S1MBDITR-ND*	3,000	116.00/M	
1.0	50	30	1.1	DL4001DICT-ND	—	2.93	20.28	89.70	DL4001DITR-ND*	5,000	70.00/M	MELF (DL-41) 
	100	30	1.1	DL4002DICT-ND	—	2.93	20.28	89.70	DL4002DITR-ND*	5,000	70.00/M	
	200	30	1.1	DL4003DICT-ND	—	2.93	20.28	89.70	DL4003DITR-ND*	5,000	70.00/M	
	400	30	1.1	DL4004DICT-ND	—	2.93	20.28	89.70	DL4004DITR-ND*	5,000	70.00/M	
	600	30	1.1	DL4005DICT-ND	.46	3.15	21.84	96.60	DL4005DITR-ND*	5,000	76.00/M	
	800	30	1.1	DL4006DICT-ND	.46	3.15	21.84	96.60	DL4006DITR-ND*	5,000	76.00/M	
	1000	30	1.1	DL4007DICT-ND	.46	3.15	21.84	96.60	DL4007DITR-ND*	5,000	76.00/M	
1.0	50	30	1.0	S1ADICT-ND	—	3.23	22.36	98.90	S1ADITR-ND*	5,000	77.00/M	SMA  1.63 4.60 2.92 1 .20 .41 1.27 2.90 5.59
	100	30	1.0	S1BDICT-ND	—	3.30	22.88	101.20	S1BDITR-ND*	5,000	79.00/M	
	200	30	1.0	S1DDICT-ND	—	2.81	19.80	90.00	S1DDITR-ND*	5,000	77.00/M	
	400	30	1.0	S1GDICT-ND	—	2.88	20.24	92.00	S1GDITR-ND*	5,000	78.00/M	
	600	30	1.0	S1JDICT-ND	—	3.00	21.12	96.00	S1JDITR-ND*	5,000	82.00/M	
	800	30	1.0	S1KDICT-ND	—	3.44	24.20	110.00	S1KDITR-ND*	5,000	94.00/M	
	1000	30	1.0	S1MDICT-ND	—	3.15	22.68	113.40	S1MDITR-ND*	5,000	101.00/M	
1.5	50	50	1.15	S2AADICT-ND	.39	3.00	21.60	108.00	S2AADITR-ND*	5,000	96.00/M	
	100	50	1.15	S2BADICT-ND	.39	3.00	21.60	108.00	S2BADITR-ND*	5,000	96.00/M	
	200	50	1.15	S2DADICT-ND	.39	3.00	21.60	108.00	S2DADITR-ND*	5,000	96.00/M	
	400	50	1.15	S2GADICT-ND	.39	3.00	21.60	108.00	S2GADITR-ND*	5,000	96.00/M	
	600	50	1.15	S2JADICT-ND	.46	3.50	25.20	126.00	S2JADITR-ND*	5,000	112.00/M	
	800	50	1.15	S2KADICT-ND	.46	3.50	25.20	126.00	S2KADITR-ND*	5,000	112.00/M	
	1000	50	1.15	S2MADICT-ND	.46	3.50	25.20	126.00	S2MADITR-ND*	5,000	112.00/M	
1.5	50	30	1.5	S2ADICT-ND	—	3.13	22.00	100.00	S2ADITR-ND*	3,000	90.00/M	SMB 
	100	30	1.5	S2BDICT-ND	—	3.13	22.00	100.00	S2BDITR-ND*	3,000	90.00/M	
	200	30	1.5	S2DDICT-ND	—	3.13	22.00	100.00	S2DDITR-ND*	3,000	90.00/M	
	400	30	1.5	S2GDICT-ND	—	3.13	22.00	100.00	S2GDITR-ND*	3,000	90.00/M	
	600	30	1.5	S2JDICT-ND	—	3.00	21.60	108.00	S2JDITR-ND*	3,000	102.00/M	
	800	30	1.5	S2KDICT-ND	—	3.00	21.60	108.00	S2KDITR-ND*	3,000	102.00/M	
	1000	30	1.5	S2MDICT-ND	—	3.00	21.60	108.00	S2MDITR-ND*	3,000	102.00/M	
3.0	50	100	1.15	S3ABDICT-ND	.65	5.20	39.00	208.00	S3ABDITR-ND*	3,000	195.00/M	
	100	100	1.15	S3BBDICT-ND	.65	5.20	39.00	208.00	S3BBDITR-ND*	3,000	195.00/M	
	200	100	1.15	S3DBDICT-ND	.65	5.20	39.00	208.00	S3DBDITR-ND*	3,000	195.00/M	
	400	100	1.15	S3GBDICT-ND	.65	5.20	39.00	208.00	S3GBDITR-ND*	3,000	195.00/M	
	600	100	1.15	S3JBDICT-ND	.68	5.44	40.80	246.50	S3JBDITR-ND*	3,000	226.00/M	
	800	100	1.15	S3KBDICT-ND	.68	5.44	40.80	246.50	S3KBDITR-ND*	3,000	226.00/M	
	1000	100	1.15	S3MBDICT-ND	.68	5.44	40.80	246.50	S3MBDITR-ND*	3,000	226.00/M	
3.0	50	100	1.15	S3ADICT-ND	—	5.60	42.00	224.00	S3ADITR-ND*	3,000	210.00/M	SMC 
	100	100	1.15	S3BDICT-ND	—	5.60	42.00	224.00	S3BDITR-ND*	3,000	210.00/M	
	200	100	1.15	S3DDICT-ND	—	5.60	42.00	224.00	S3DDITR-ND*	3,000	210.00/M	
	400	100	1.15	S3GDICT-ND	—	5.60	42.00	224.00	S3GDITR-ND*	3,000	210.00/M	
	600	100	1.15	S3JDICT-ND	—	5.76	43.20	261.00	S3JDITR-ND*	3,000	239.00/M	
	800	100	1.15	S3KDICT-ND	—	5.76	43.20	261.00	S3KDITR-ND*	3,000	239.00/M	
	1000	100	1.15	S3MDICT-ND	—	5.76	43.20	261.00	S3MDITR-ND*	3,000	239.00/M	
5.0	50	100	1.15	S5ACDICT-ND	.64	5.12	38.40	—	S5ACDITR-ND*	3,000	213.00/M	
	100	100	1.15	S5BCDICT-ND	.68	5.44	40.80	—	S5BCDITR-ND*	3,000	226.00/M	
	200	100	1.15	S5DCDICT-ND	.72	5.76	43.20	—	S5DCDITR-ND*	3,000	239.00/M	
	400	100	1.15	S5GCDICT-ND	.80	6.40	48.00	—	S5GCDITR-ND*	3,000	266.00/M	
	600	100	1.15	S5JCDICT-ND	.84	6.72	50.40	—	S5JCDITR-ND*	3,000	279.00/M	
	800	100	1.15	S5KCDICT-ND	.92	7.36	55.20	—	S5KCDITR-ND*	3,000	306.00/M	
	1000	100	1.15	S5MCDICT-ND	.83	6.50	50.00	—	S5MCDITR-ND*	3,000	325.00/M	
2.0	200	70	1.0	RL203DICT-ND	—	2.90	18.85	78.30	RL203DITR-ND*	4,000	68.00/M	DO-15 
	400	70	1.0	RL204DICT-ND	—	2.33	16.12	71.30	RL204DITR-ND*	4,000	62.00/M	
	600	70	1.0	RL205DICT-ND	—	2.40	16.64	73.60	RL205DITR-ND*	4,000	64.00/M	
	800	70	1.0	RL206DICT-ND	—	2.63	18.20	80.50	RL206DITR-ND*	4,000	70.00/M	
	1000	70	1.0	RL207DICT-ND	—	2.70	18.72	82.80	RL207DITR-ND*	4,000	72.00/M	
3.0	50	200	0.95	1N5400DICT-ND	.41	2.78	19.24	—	1N5400DITR-ND*	1,200	85.00/M	DO-201AD 
	100	200	0.95	1N5401DICT-ND	.41	2.78	19.24	—	1N5401DITR-ND*	1,200	85.00/M	
	200	200	0.95	1N5402DICT-ND	.41	2.78	19.24	—	1N5402DITR-ND*	1,200	85.00/M	
	400	200	0.95	1N5404DICT-ND	.41	2.78	19.24	—	1N5404DITR-ND*	1,200	85.00/M	
	600	200	0.95	1N5406DICT-ND	.41	2.78	19.24	—	1N5406DITR-ND*	1,200	85.00/M	
	800	200	0.95	1N5407DICT-ND	.41	2.78	19.24	—	1N5407DITR-ND*	1,200	85.00/M	
	1000	200	0.95	1N5408DICT-ND	.41	2.78	19.24	—	1N5408DITR-ND*	1,200	85.00/M	
3.0	50	125	1.0	1N5400GCT-ND	—	3.60	25.92	—	1N5400GTR-ND*	1,200	130.00/M	
	100	125	1.0	1N5401GCT-ND	—	3.70	26.64	—	1N5401GTR-ND*	1,200	133.00/M	
	200	125	1.0	1N5402GCT-ND	—	3.85	27.72	—	1N5402GTR-ND*	1,200	139.00/M	
	400	125	1.0	1N5404GCT-ND	—	4.10	29.52	—	1N5404GTR-ND*	1,200	148.00/M	
	600	125	1.0	1N5406GCT-ND	—	4.45	32.04	—	1N5406GTR-ND*	1,200	160.00/M	
	800	125	1.0	1N5407GCT-ND	—	3.64	27.30	—	1N5407GTR-ND*	1,200	146.00/M	
	1000	125	1.0	1N5408GCT-ND	—	4.04	30.30	—	1N5408GTR-ND*	1,200	162.00/M	
6.0	50	400	0.9	6A05DICT-ND	.48	3.80	28.50	—	6A05DITR-ND*	500	85.50	R-6 
	100	400	0.9	6A1DICT-ND	.48	3.80	28.50	—	6A1DITR-ND*	500	85.50	
	200	400	0.9	6A2DICT-ND	.48	3.80	28.50	—	6A2DITR-ND*	500	85.50	
	400	400	0.9	6A4DICT-ND	.48	3.80	28.50	—	6A4DITR-ND*	500	85.50	
	600	400	0.9	6A6DICT-ND	.48	3.80	28.50	—	6A6DITR-ND*	500	85.50	
	800	400	0.9	6A8DICT-ND	.48	3.80	28.50	—	6A8DITR-ND*	500	85.50	
	1000	400	0.9	6A10DICT-ND	.48	3.80	28.50	—	6A10DITR-ND*	500	85.50	

* TR = Tape & Reel   ‡ TB = Tape & Box

DIODES INCORPORATED

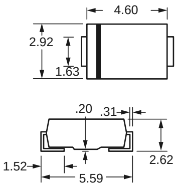
SMA 400 Watt Surface Mount TVS Uni-Directional

Features: • 400W peak pulse power dissipation • 70V standoff voltage • 100V maximum clamping voltage, a requirement of many -48V backplane telecom applications • Glass passivated die construction • Fast response time: typically less than 1 ps • Plastic material - UL flammability, classification rating 94V-0



Reverse Standoff Voltage VRWM (V)	Breakdown Voltage VBR @ IT		Test Current IT (mA)	Max. Reverse Leakage @ VRWM IR (µA)	Max. Clamping Voltage @ Ipp Vc (V)	Max. Peak Pulse Current Ipp (A)	Typical Junction Capacitance (pF)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing 5,000
	Min (V)	Max (V)							1	10	100		
70	77.8	89.5	1.0	5.0	100	3.5	55	SMAT70ADICT-ND	.68	.55	.41	SMAT70ADITR-ND	217.00/M

SMAJ (J-Bend) 400 Watt Surface Mount TVS



Features: • 400 Watts peak pulse power dissipation • 5.0V - 36V Standoff voltages • Glass passivated die construction • Uni- and Bi-directional versions available • Excellent clamping capability • Fast response time • Plastic case material has UL flammability classification rating 94V-0

Mechanical Data:
- **Case:** SMA, Transfer molded epoxy
- **Terminals:** Solderable per MIL-STD-202, Method 208

UNI-DIRECTIONAL - 400 Watt

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)	*(Value)* Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)
5.0	6.40	7.00	800	22	24.4	26.9	5.0
6.0	6.67	7.37	800	24	26.7	29.5	5.0
6.5	7.22	7.98	500	26	28.9	25.3	5.0
7.0	7.78	8.60	200	28	31.1	34.4	5.0
7.5	8.33	9.21	100	30	33.3	36.8	5.0
8.0	8.89	9.83	50	33	36.7	40.6	5.0
8.5	9.44	10.4	10	36	40.0	44.2	5.0
10	11.1	12.3	5.0	43	47.8	52.8	5.0
11	12.2	13.5	5.0	60	66.7	73.7	5.0
12	13.3	14.7	5.0	70	77.8	86.0	5.0
14	15.6	17.2	5.0	85	94.4	104	5.0
15	16.7	18.5	5.0	100	111	123	5.0
17	18.9	20.9	5.0	110	122	135	5.0
18	20.0	22.1	5.0	120	133	147	5.0
20	22.2	24.5	5.0	150	167	185	5.0

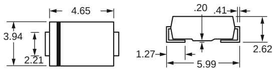
BI-DIRECTIONAL - 400 Watt

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)	*(Value)* Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)
5.0	6.40	7.00	800	18	20.0	22.1	5.0
6.0	6.67	7.37	800	20	22.2	24.5	5.0
6.5	7.22	7.98	500	22	24.4	26.9	5.0
7.0	7.78	8.60	200	24	26.7	29.5	5.0
8.0	8.89	9.83	50	26	28.9	25.3	5.0
8.5	9.44	10.4	10	28	31.1	34.4	5.0
10	11.1	12.3	5.0	30	33.3	36.8	5.0
11	12.2	13.5	5.0	33	36.7	40.6	5.0
12	13.3	14.7	5.0	36	40.0	44.2	5.0
13	14.4	15.9	5.0	40	44.4	49.1	5.0
14	15.6	17.2	5.0	43	47.8	52.8	5.0
15	16.7	18.5	5.0	75	83.3	92.1	5.0
16	17.8	19.7	5.0	78	86.7	95.8	5.0
17	18.9	20.9	5.0				

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
Uni-Directional	5.0 - 150	SMAJ(Value)ADICT-ND	.68	.55	.41	SMAJ(Value)ADITR-ND	217.00/M
Bi-Directional	5.0 - 78	SMAJ(Value)CADICT-ND	.76	.61	.46	SMAJ(Value)CADITR-ND	242.00/M

SMBJ (J-Bend) 600 Watt Surface Mount TVS

Features: • 600 Watts peak pulse power dissipation • 6.5V - 26V standoff voltages • Glass passivated die • Excellent clamping capability • Fast response time • 100% tested at rated peak pulse power **Mechanical Data:** • **Case:** Transfer molded epoxy • **Terminals:** Solderable per MIL-STD-202, Method 208 • **Marking:** Unidirectional — device code number and cathode band; Bidirectional — device code only • **Weight:** 0.1 gram (approx.) • Plastic case material has UL flammability rating 94V-0



UNI-DIRECTIONAL - 600 Watt

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)	*(Value)* Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)
5.0	6.40	7.23	800	28	31.10	35.80	5.0
6.0	6.67	7.67	800	30	33.30	38.30	5.0
6.5	7.22	9.14	1000	33	36.70	42.20	5.0
7.0	7.78	8.95	200	36	40.00	46.00	5.0
7.5	8.33	9.58	100	40	44.40	51.10	5.0
8.5	9.44	10.82	10	43	47.80	54.90	5.0
9.0	10.00	11.50	5.0	48	53.30	61.30	5.0
10	11.1	12.8	5.0	54	60.00	69.00	5.0
11	12.20	14.40	5.0	58	64.40	74.60	5.0
12	13.3	15.3	5.0	64	71.10	81.80	5.0
13	14.4	16.5	5.0	70	77.80	89.50	5.0
14	15.60	17.90	5.0	78	86.70	99.70	5.0
15	16.7	19.2	5.0	85	94.40	108.20	5.0
16	17.80	20.50	5.0	100	111.0	128.00	5.0
17	18.9	21.7	5.0	110	122.0	140.00	5.0
18	20.0	24.4	5.0	120	133.0	153.00	5.0
22	24.40	28.00	5.0	130	144.0	165.50	5.0
20	22.2	25.5	5.0	150	167.0	192.50	5.0
24	26.7	30.7	5.0	160	178.0	205.00	5.0
26	28.9	35.3	5.0	170	189.0	217.50	5.0

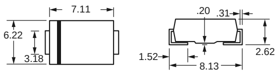
BI-DIRECTIONAL - 600 Watt

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)	*(Value)* Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)
5.0	6.40	7.23	800	28	31.10	35.80	5.0
6.0	6.67	7.67	800	30	33.30	38.30	5.0
6.5	7.22	9.14	1000	33	36.70	42.20	5.0
7.0	7.78	8.95	200	36	40.00	46.00	5.0
7.5	8.33	9.58	100	40	44.40	51.10	5.0
8.0	8.89	10.23	50	45	50.00	57.50	5.0
8.5	9.44	10.82	10	51	56.70	65.20	5.0
9.0	10.00	11.50	5.0	54	60.00	69.00	5.0
10	11.1	12.8	5.0	58	64.40	74.60	5.0
11	12.20	14.40	5.0	60	66.70	76.70	5.0
12	13.3	15.3	5.0	64	71.10	81.80	5.0
13	14.4	16.5	5.0	70	77.80	89.50	5.0
14	15.60	17.90	5.0	75	83.30	95.80	5.0
15	16.7	19.2	5.0	78	86.70	99.70	5.0
16	17.80	20.50	5.0	85	94.40	108.20	5.0
17	18.9	21.7	5.0	90	100.0	115.50	5.0
18	20.0	24.4	5.0	100	111.0	128.00	5.0
20	22.2	25.5	5.0	110	122.0	140.00	5.0
22	24.40	28.00	5.0	150	167.0	192.50	5.0
24	26.7	30.7	5.0	160	178.0	205.00	5.0
26	28.9	35.3	5.0	170	189.0	217.50	5.0

Description	Volt. Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
Unidirectional	5.0 - 170	SMBJ(Value)ADICT-ND	.89	.71	.54	SMBJ(Value)ADITR-ND	351.00/M
Bidirectional	5.0 - 170	SMBJ(Value)CADICT-ND	.96	.76	.58	SMBJ(Value)CADITR-ND	377.00/M

SMCJ (J-Bend) 1500 Watt Surface Mount TVS

Features: • 1500 Watts peak pulse power dissipation • 5.0V - 36V Standoff voltages • Glass passivated die construction • Uni- and Bi-directional versions available • Excellent clamping capability • Fast response time • Plastic case material has UL flammability classification rating 94V-0 **Mechanical Data:** • **Case:** SMC, Transfer molded epoxy • **Terminals:** Solderable per MIL-STD-202, Method 208



UNI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)	*(Value)* Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)
5.0	6.40	7.25	1000	30	33.30	38.30	5.0
6.0	6.67	7.67	1000	33	36.70	42.20	5.0
6.5	7.22	8.30	500	36	40.00	46.00	5.0
7.5	8.33	9.58	100	40	44.40	51.10	5.0
8.0	8.89	10.23	50	43	47.80	54.90	5.0
8.5	9.44	10.82	20	45	50.00	57.50	5.0
9.0	10.00	11.50	10	54	60.00	69.00	5.0
10	11.10	12.80	5.0	60	66.70	76.70	5.0
11	12.20	14.40	5.0	64	71.10	81.80	5.0
12	13.30	15.30	5.0	70	77.80	89.50	5.0
13	14.40	16.50	5.0	75	83.30	95.80	5.0
15	16.70	19.20	5.0	78	86.70	99.70	5.0
16	17.80	20.50	5.0	85	94.40	108.20	5.0
17	18.90	21.70	5.0	100	111.00	128.00	5.0
18	20.00	23.30	5.0	110	122.00	140.50	5.0
20	22.20	25.50	5.0	130	144.00	165.50	5.0
22	24.40	28.00	5.0	150	167.00	192.50	5.0
24	26.70	30.70	5.0	160	178.00	205.00	5.0
26	28.90	33.20	5.0	170	189.00	217.50	5.0
28	31.10	35.80	5.0				

BI-DIRECTIONAL

(Value) Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)	*(Value)* Reverse Standoff Voltage Vwm (Volts)	Breakdown Voltage (VBR) Min.	Breakdown Voltage (VBR) Max.	Max. Reverse Leakage @ Vwm ID (µA)
5.0	6.40	7.25	1000	24	26.70	30.70	5.0
6.0	6.67	7.67	1000	28	31.10	35.80	5.0
6.5	7.22	8.30	500	30	33.30	38.30	5.0
7.5	8.33	9.58	100	33	36.70	42.20	5.0
8.0	8.89	10.23	50	36	40.00	46.00	5.0
8.5	9.44	10.82	20	40	44.40	51.10	5.0
9.0	10.00	11.50	10	43	47.80	54.90	5.0
10	11.10	12.80	5.0	45	50.00	57.50	5.0
11	12.20	14.40	5.0	48	53.30	61.30	5.0
12	13.30	15.30	5.0	51	56.70	65.20	5.0
13	14.40	16.50	5.0	54	60.00	69.00	5.0
14	15.60	17.90	5.0	58	64.40	74.60	5.0
15	16.70	19.20	5.0	70	77.80	89.50	5.0
16	17.80	20.50	5.0	75	83.30	95.80	5.0
17	18.90	21.70	5.0	78	86.70	99.70	5.0
18	20.00	23.30	5.0	85	94.40	108.20	5.0
20	22.20	25.50	5.0	170	189.00	217.50	5.0

Description	Voltage Range *(Value)* See Chart	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
1500 Watt Uni-Directional	5.0 - 170	SMCJ(Value)ADICT-ND	1.25	.99	.76	SMCJ(Value)ADITR-ND	494.00/M
1500 Watt Bi-Directional	5.0 - 170	SMCJ(Value)CADICT-ND	1.39	1.10	.84	SMCJ(Value)CADITR-ND	546.00/M

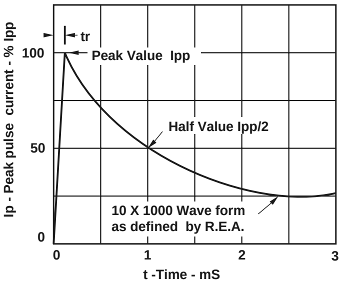
DIODES
INCORPORATED

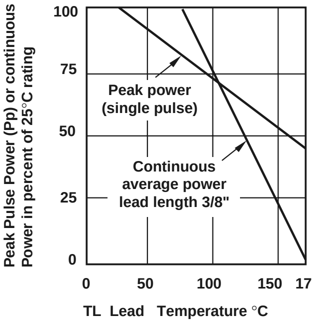
Transient Voltage Suppressors

APPLICATIONS:
These TVS devices afford the circuit designer an economic means to protect voltage sensitive circuit components from the destructive effects of applied transient voltages. Featuring virtually instantaneous response times of one picosecond.

FEATURES:
• 500, 600 and 1500 Watts Peak Pulse Power Dissipation • Fast Response Time – 1 Picosecond • Uni and Bidirectional Units Available • Constructed with Glass Passivated Die.

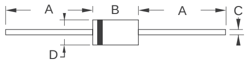
MECHANICAL DATA:
• **Case:** Transfer Molded Epoxy U/L Flammability Rating 94V-0. • **Leads:** Solderable per MIL-STD-202 Method 208. • **Soldering Temperature:** 260°C Maximum, 3/8" (9.53mm) From Body, 10 Seconds. • **Marking:** Type Number and Cathode Band.



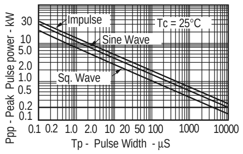


500 Watts & 600 Watts

DO-15 OUTLINE



DO-15 (mm)		
Dim	**Min.**	**Max.**
A	1.00 (25.40)	—
B	.216 (5.50)	.30 (7.62)
C	.027 (0.686)	.035 (0.889)
D	.102 (2.60)	.142 (3.6)

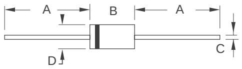


MAXIMUM RATINGS:

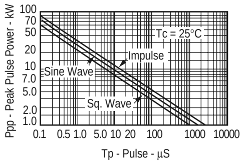
- **Peak Pulse Power Dissipation @ 25°C:** 500 and 600 Watts.
- **Steady State Power Dissipation @ 75°C Lead Temperature, 3/8" (9.53mm) from Body:** 2.5 Watts.
- **Clamping Time (0 Volt to BV min): Unidirectional –** < 1x10^{-12} Seconds. **Bidirectional –** < 5x10^{-9} Seconds.
- **Storage and Operating Temperature:** -65 to +175°C.

1500 Watts

DO-201 Outline



DO-201 (mm)		
Dim	**Min.**	**Max.**
A	1.00 (25.40)	—
B	.335 (8.50)	.375 (9.53)
C	.037 (0.96)	.041 (1.06)
D	.189 (4.80)	.205 (5.21)



MAXIMUM RATINGS:

- **Peak Pulse Power Dissipation @ 25°C:** 1500 Watts.
- **Steady State Power Dissipation @ 75°C Lead Temperature, 3/8" (9.53mm) from Body:** 5 Watts.
- **Forward Surge Current, 50ms @ 25°C:** 200 Amperes.
- **Clamping Time (0 Volt to BV min): Unidirectional –** < 1x10^{-12} Seconds. **Bidirectional –** < 5x10^{-9} Seconds.
- **Storage and Operating Temperature:** -65 to +175°C.

Breakdown Voltage (V(BR) @ IT)			IT	Rated Standoff Voltage	Reverse DC Leakage (Current	Digi-Key	Cut Tape Pricing			Digi-Key	Tape & Reel Pricing		Diodes
Min.	Nom.	Max.	(mADC)	(Vwm)	@ Vwm)	Part No.	1	10	100	Part No.	1,000	4,000	Part No.
500 Watts, Unidirectional (D0-15)													
6.4	—	7.00	10	5.0	600 µA	SA5V0ADICT-ND	.47	3.72	27.90	SA5V0ADITR-ND	—	140.00/M	SA5V0ADI
6.67	—	7.37	10	6.0	600 µA	SA6V0ADICT-ND	.47	3.72	27.90	SA6V0ADITR-ND	—	140.00/M	SA6V0ADI
7.22	—	7.98	10	6.5	400 µA	SA6V5ADICT-ND	.47	3.72	27.90	SA6V5ADITR-ND	—	140.00/M	SA6.5ADI
11.1	—	12.3	1	10	3 µA	SA10ADICT-ND	.47	3.72	27.90	SA10ADITR-ND	—	140.00/M	SA10ADI
13.3	—	14.7	1	12	3 µA	SA12ADICT-ND	.47	3.72	27.90	SA12ADITR-ND	—	140.00/M	SA12ADI
16.7	—	18.5	1	15	3 µA	SA15ADICT-ND	.47	3.72	27.90	SA15ADITR-ND	—	140.00/M	SA15ADI
22.2	—	24.5	1	20	3 µA	SA20ADICT-ND	.47	3.72	27.90	SA20ADITR-ND	—	140.00/M	SA20ADI
33.3	—	36.8	1	30	3 µA	SA30ADICT-ND	.47	3.72	27.90	SA30ADITR-ND	—	140.00/M	SA30ADI
500 Watts, Bidirectional (DO-15)													
6.67	—	7.37	10	6.0	600 µA	SA6V0CADICT-ND	.56	4.44	33.30	SA6V0CADITR-ND	—	167.00/M	SA6.0CADI
7.22	—	7.98	10	6.5	400 µA	SA6V5CADICT-ND	.56	4.44	33.30	SA6V5CADITR-ND	—	167.00/M	SA6.5CADI
11.1	—	12.3	1	10	3 µA	SA10CADICT-ND	.56	4.44	33.30	SA10CADITR-ND	—	167.00/M	SA10CADI
13.3	—	14.7	1	12	3 µA	SA12CADICT-ND	.56	4.44	33.30	SA12CADITR-ND	—	167.00/M	SA12CADI
16.7	—	18.5	1	15	3 µA	SA15CADICT-ND	.56	4.44	33.30	SA15CADITR-ND	—	167.00/M	SA15CADI
22.2	—	24.5	1	20	3 µA	SA20CADICT-ND	.56	4.44	33.30	SA20CADITR-ND	—	167.00/M	SA20CADI
33.3	—	36.8	1	30	3 µA	SA30CADICT-ND	.56	4.44	33.30	SA30CADITR-ND	—	167.00/M	SA30CADI
600 Watts, Unidirectional (DO-15)													
6.45	6.8	7.14	10	5.8	1000µA	P6KE6.8ADICT-ND	.47	3.72	27.90	P6KE6.8ADITR-ND	—	140.00/M	P6KE6.8A
7.13	7.5	7.88	10	6.4	500 µA	P6KE7.5ADICT-ND	.47	3.72	27.90	P6KE7.5ADITR-ND	—	140.00/M	P6KE7.5A
7.79	8.2	8.61	10	7.02	200 µA	P6KE8.2ADICT-ND	.47	3.72	27.90	P6KE8.2ADITR-ND	—	140.00/M	P6KE8.2A
9.5	10.0	10.5	1	8.55	10 µA	P6KE10ADICT-ND	.47	3.72	27.90	P6KE10ADITR-ND	—	140.00/M	P6KE10A
11.4	12.0	12.6	1	10.2	5 µA	P6KE12ADICT-ND	.47	3.72	27.90	P6KE12ADITR-ND	—	140.00/M	P6KE12A
14.3	15.0	15.8	1	12.8	5 µA	P6KE15ADICT-ND	.47	3.72	27.90	P6KE15ADITR-ND	—	140.00/M	P6KE15A
19.0	20.0	21.0	1	17.1	5 µA	P6KE20ADICT-ND	.47	3.72	27.90	P6KE20ADITR-ND	—	140.00/M	P6KE20A
22.8	24.0	25.2	1	20.5	5 µA	P6KE24ADICT-ND	.47	3.72	27.90	P6KE24ADITR-ND	—	140.00/M	P6KE24A
25.7	27.0	28.4	1	23.1	5 µA	P6KE27ADICT-ND	.47	3.72	27.90	P6KE27ADITR-ND	—	140.00/M	P6KE27A
28.5	30.0	31.5	1	25.5	5 µA	P6KE30ADICT-ND	.47	3.72	27.90	P6KE30ADITR-ND	—	140.00/M	P6KE30A
31.4	33.0	34.7	1	28.2	5 µA	P6KE33ADICT-ND	.47	3.72	27.90	P6KE33ADITR-ND	—	140.00/M	P6KE33A
48.5	51.0	53.6	1	43.6	5 µA	P6KE51ADICT-ND	.47	3.72	27.90	P6KE51ADITR-ND	—	140.00/M	P6KE51A
64.6	68.0	71.4	1	58.1	5 µA	P6KE68ADICT-ND	.47	3.72	27.90	P6KE68ADITR-ND	—	140.00/M	P6KE68A
600 Watts, Bidirectional (DO-15)													
6.45	6.8	7.14	10	5.8	1000 µA	P6KE6.8CADICT-ND	.56	4.44	33.30	P6KE6.8CADITR-ND	—	167.00/M	P6KE6.8CA
7.13	7.5	7.88	10	6.4	500 µA	P6KE7.5CADICT-ND	.56	4.44	33.30	P6KE7.5CADITR-ND	—	167.00/M	P6KE7.5CA
7.79	8.2	8.61	10	7.02	200 µA	P6KE8.2CADICT-ND	.56	4.44	33.30	P6KE8.2CADITR-ND	—	167.00/M	P6KE8.2CA
9.5	10.0	10.5	1	8.55	10 µA	P6KE10CADICT-ND	.56	4.44	33.30	P6KE10CADITR-ND	—	167.00/M	P6KE10CA
11.4	12.0	12.6	1	10.2	5 µA	P6KE12CADICT-ND	.56	4.44	33.30	P6KE12CADITR-ND	—	167.00/M	P6KE12CA
14.3	15.0	15.8	1	12.8	5 µA	P6KE15CADICT-ND	.56	4.44	33.30	P6KE15CADITR-ND	—	167.00/M	P6KE15CA
19.0	20.0	21.0	1	17.1	5 µA	P6KE20CADICT-ND	.56	4.44	33.30	P6KE20CADITR-ND	—	167.00/M	P6KE20CA
22.8	24.0	25.2	1	20.5	5 µA	P6KE24CADICT-ND	.56	4.44	33.30	P6KE24CADITR-ND	—	167.00/M	P6KE24CA
25.7	27.0	28.4	1	23.1	5 µA	P6KE27CADICT-ND	.56	4.44	33.30	P6KE27CADITR-ND	—	167.00/M	P6KE27CA
28.5	30.0	31.5	1	25.5	5 µA	P6KE30CADICT-ND	.56	4.44	33.30	P6KE30CADITR-ND	—	167.00/M	P6KE30CA
31.4	33.0	34.7	1	28.2	5 µA	P6KE33CADICT-ND	.56	4.44	33.30	P6KE33CADITR-ND	—	167.00/M	P6KE33CA
48.5	51.0	53.6	1	43.6	5 µA	P6KE51CADICT-ND	.56	4.44	33.30	P6KE51CADITR-ND	—	167.00/M	P6KE51CA
64.6	68.0	71.4	1	58.1	5 µA	P6KE68CADICT-ND	.56	4.44	33.30	P6KE68CADITR-ND	—	167.00/M	P6KE68CA
95.0	100.0	105.0	1	85.5	5 µA	P6KE100CADICT-ND	.56	4.44	33.30	P6KE100CADITR-ND	—	167.00/M	P6KE100CA
143.0	150.0	158.0	1	128.0	5 µA	P6KE150CADICT-ND	.56	4.44	33.30	P6KE150CADITR-ND	—	167.00/M	P6KE150CA
1500 Watts, Unidirectional (D0-201)													
6.45	6.8	7.14	10	5.8	1000 µA	1.5KE6.8ADICT-ND	.69	5.54	41.52	1.5KE6.8ADITR-ND	251.00	—	1.5KE6.8A
7.13	7.5	7.88	10	6.4	500 µA	1.5KE7.5ADICT-ND	.69	5.54	41.52	1.5KE7.5ADITR-ND	251.00	—	1.5KE7.5A
7.79	8.2	8.61	10	7.02	200 µA	1.5KE8.2ADICT-ND	.69	5.54	41.52	1.5KE8.2ADITR-ND	251.00	—	1.5KE8.2A
9.5	10.0	10.5	1	8.55	10 µA	1.5KE10ADICT-ND	.69	5.54	41.52	1.5KE10ADITR-ND	251.00	—	1.5KE10A
11.4	12.0	12.6	1	10.2	5 µA	1.5KE12ADICT-ND	.69	5.54	41.52	1.5KE12ADITR-ND	251.00	—	1.5KE12A
14.3	15.0	15.8	1	12.8	5 µA	1.5KE15ADICT-ND	.69	5.54	41.52	1.5KE15ADITR-ND	251.00	—	1.5KE15A
19.0	20.0	21.0	1	17.1	5 µA	1.5KE20ADICT-ND	.69	5.54	41.52	1.5KE20ADITR-ND	251.00	—	1.5KE20A
22.8	24.0	25.2	1	20.5	5 µA	1.5KE24ADICT-ND	.69	5.54	41.52	1.5KE24ADITR-ND	251.00	—	1.5KE24A
25.7	27.0	28.4	1	23.1	5 µA	1.5KE27ADICT-ND	.69	5.54	41.52	1.5KE27ADITR-ND	251.00	—	1.5KE27A
28.5	30.0	31.5	1	25.5	5 µA	1.5KE30ADICT-ND	.69	5.54	41.52	1.5KE30ADITR-ND	251.00	—	1.5KE30A
31.4	33.0	34.7	1	28.2	5 µA	1.5KE33ADICT-ND	.69	5.54	41.52	1.5KE33ADITR-ND	251.00	—	1.5KE33A
48.5	51.0	53.6	1	43.6	5 µA	1.5KE51ADICT-ND	.69	5.54	41.52	1.5KE51ADITR-ND	251.00	—	1.5KE51A
64.6	68.0	71.4	1	58.1	5 µA	1.5KE68ADICT-ND	.69	5.54	41.52	1.5KE68ADITR-ND	251.00	—	1.5KE68A
1500 Watts, Bidirectional (DO-201)													
6.45	6.8	7.14	10	5.8	1000 µA	1.5KE6.8CADICT-ND	.74	5.95	44.64	1.5KE6.8CADITR-ND	270.00	—	1.5KE6.8CA
7.13	7.5	7.88	10	6.4	500 µA	1.5KE7.5CADICT-ND	.74	5.95	44.64	1.5KE7.5CADITR-ND	270.00	—	1.5KE7.5CA
7.79	8.2	8.61	10	7.02	200 µA	1.5KE8.2CADICT-ND	.74	5.95	44.64	1.5KE8.2CADITR-ND	270.00	—	1.5KE8.2CA
9.5	10.0	10.5	1	8.55	10 µA	1.5KE10CADICT-ND	.74	5.95	44.64	1.5KE10CADITR-ND	270.00	—	1.5KE10CA
11.4	12.0	12.6	1	10.2	5 µA	1.5KE12CADICT-ND	.74	5.95	44.64	1.5KE12CADITR-ND	270.00	—	1.5KE12CA
14.3	15.0	15.8	1	12.8	5 µA	1.5KE15CADICT-ND	.74	5.95	44.64	1.5KE15CADITR-ND	270.00	—	1.5KE15CA
19.0	20.0	21.0	1	17.1	5 µA	1.5KE20CADICT-ND	.74	5.95	44.64	1.5KE20CADITR-ND	270.00	—	1.5KE20CA
22.8	24.0	25.2	1	20.5	5 µA	1.5KE24CADICT-ND	.74	5.95	44.64	1.5KE24CADITR-ND	270.00	—	1.5KE24CA
25.7	27.0	28.4	1	23.1	5 µA	1.5KE27CADICT-ND	.74	5.95	44.64	1.5KE27CADITR-ND	270.00	—	1.5KE27CA
28.5	30.0	31.5	1	25.5	5 µA	1.5KE30CADICT-ND	.74	5.95	44.64	1.5KE30CADITR-ND	270.00	—	1.5KE30CA
31.4	33.0	34.7	1	28.2	5 µA	1.5KE33CADICT-ND	.74	5.95	44.64	1.5KE33CADITR-ND	270.00	—	1.5KE33CA
48.5	51.0	53.6	1	43.6	5 µA	1.5KE51CADICT-ND	.74	5.95	44.64	1.5KE51CADITR-ND	270.00	—	1.5KE51CA
64.6	68.0	71.4	1	58.1	5 µA	1.5KE68CADICT-ND	.74	5.95	44.64	1.5KE68CADITR-ND	270.00	—	1.5KE68CA
95.0	100.0	105.0	1	85.5	5 µA	1.5KE100CADICT-ND	.74	5.95	44.64	1.5KE100CADITR-ND	270.00	—	1.5KE100CA
143.0	150.0	158.0	1	128.0	5 µA	1.5KE150CADICT-ND	.74	5.95	44.64	1.5KE150CADITR-ND	270.00	—	1.5KE150CA

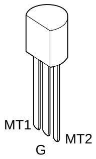
TECCOR ELECTRONICS
An Invensys company

Logic Triacs (1.0-8.0 Amps) and Gated Triacs (1-15 Amps)

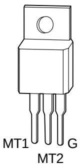
9291B-ND	Teccor Thyristor Product Catalog	**$3.00**
9292B-ND	Teccor Sidactor Data Book	**$2.25**

ISOLATED

Plastic TO-92

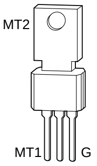


Thermotab TO-220AB

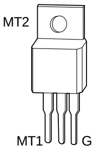


NON-ISOLATED

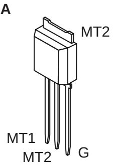
TO-202AB



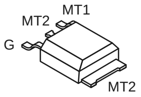
TO-220AB



TO-251AA



SMT TO-252AA

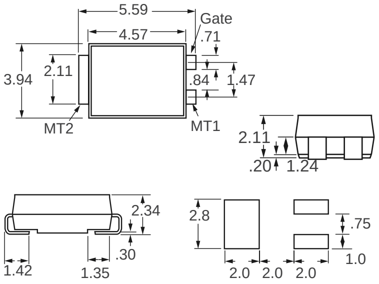


$I_{T\,RMS}$ (A)	V_{DRM} (V)	Package	I_{GT} (mA)	IDRM @25°C (mA)	VTM @25°C (V)	VGT @25°C (V)	PG (AV) (W)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each						Tape & Reel † Pricing 2,500
										1	10	100	250	500	1,000	
Logic Triacs (1.0-8.0 Amps)																
1.0	200	TO-92 (Isolated)	3	.01	1.6	2.0	0.2	2.5	L201E3-ND	.74	.66	.60	.50	.43	.42	—
	400								L401E3-ND	.77	.68	.62	.51	.45	.43	—
	600								L601E3-ND	.88	.78	.71	.59	.51	.49	—
	200	TO-92 (Isolated)	5	.01	1.6	2.0	0.2	2.5	L201E5-ND	.70	.62	.56	.47	.41	.39	—
	400								L401E5-ND	.74	.66	.60	.50	.43	.42	—
	600								L601E5-ND	.83	.74	.67	.56	.49	.47	—
4.0	200	TO-202AB (Non-Isolated)	3	.02	1.6	2.0	0.3	2.5	L2004F31-ND	1.04	.92	.83	.69	.60	.58	—
	400			.02					L4004F31-ND	1.08	.96	.87	.72	.63	.60	—
	600			.01					L6004F31-ND	1.24	1.10	.99	.83	.72	.69	—
	200	TO-220AB (Isolated)	3	.01	1.6	2.0	0.3	2.5	L2004L3-ND	1.31	1.16	1.05	.87	.76	.73	—
	400								L4004L3-ND	1.37	1.22	1.10	.92	.80	.77	—
	600								L6004L3-ND	1.58	1.40	1.26	1.05	.91	.88	—
	200	TO-202AB (Non-Isolated)	5	.02	1.6	2.0	0.3	2.5	L2004F51-ND	.99	.88	.80	.66	.58	.55	—
	400			.02					L4004F51-ND	1.04	.92	.83	.69	.60	.58	—
	600			.01					L6004F51-ND	1.19	1.06	.96	.80	.69	.67	—
	400	TO-251AA (Non-Isolated)	3	.01	1.6	2.0	0.3	2.8	L4004V3-ND	.95	.84	.76	.63	.55	.53	—
	600								L6004V3-ND	1.08	.96	.87	.72	.63	.60	—
	400	TO-251AA (Non-Isolated)	5	.01	1.6	2.0	0.3	3.0	L4004V5-ND	.90	.80	.72	.60	.52	.50	—
	600								L6004V5-ND	1.01	.90	.81	.68	.59	.57	—
	400	TO-252AA (Non-Isolated)	3	.01	1.6	2.0	0.3	2.8	L4004D3CT-ND*	1.68	1.38	1.17	.99	.91	.76	731.00/M
	600								L6004D3CT-ND*	1.91	1.57	1.33	1.13	1.03	.86	833.00/M
	400	TO-252AA (Non-Isolated)	5	.01	1.6	2.0	0.3	3.0	L4004D5CT-ND*	1.56	1.28	1.08	.92	.84	.70	680.00/M
	600								L6004D5CT-ND*	1.79	1.48	1.25	1.06	.97	.81	782.00/M
6.0	400	TO-252AA (Non-Isolated)	5	.02	1.6	2.0	0.4	3.0	L4006D5CT-ND*	1.72	1.41	1.19	1.02	.93	.77	748.00/M
	600								L6006D5CT-ND*	1.99	1.64	1.38	1.18	1.08	.90	867.00/M
8.0	200	TO-220AB (Isolated)	5	.02	1.6	2.0	0.4	2.5	L2008L6-ND	1.42	1.26	1.14	.95	.82	.79	—
	400			.05					L4008L6-ND	1.49	1.32	1.19	.99	.86	.83	—
	600			.02					L6008L6-ND	1.69	1.50	1.35	1.13	.98	.94	—
	400	TO-252AA (Non-Isolated)	5	.02	1.6	2.0	0.4	3.0	L4008D6CT-ND*	1.79	1.48	1.25	1.06	.97	.81	782.00/M
	600								L6008D6CT-ND*	2.03	1.67	1.41	1.20	1.10	.91	884.00/M
Gated Triacs (1.0-15 Amps)																
1.0	200	TO-92 (Isolated)	10	.02	1.6	2.0	0.2	2.5	Q201E3-ND	.63	.56	.51	.42	.37	.35	—
	400								Q401E3-ND	.70	.62	.56	.47	.41	.39	—
	600								Q601E3-ND	.83	.74	.67	.56	.49	.47	—
4.0	200	TO-220AB (Isolated)	10	.05	1.6	2.0	0.3	2.5	Q2004L3-ND	1.08	.96	.87	.72	.63	.60	—
	400								Q4004L3-ND	1.19	1.06	.96	.80	.69	.67	—
	600								Q6004L3-ND	1.42	1.26	1.14	.95	.82	.79	—
	200	TO-202AB (Non-Isolated)	10	.05	1.6	2.0	0.3	2.5	Q2004F31-ND	.86	.76	.69	.57	.50	.48	—
	400								Q4004F31-ND	.95	.84	.76	.63	.55	.53	—
	600								Q6004F31-ND	1.13	1.00	.90	.75	.65	.63	—
	400	TO-251AA (Non-Isolated)	10	.05	1.6	2.0	0.3	2.5	Q4004V3-ND	.86	.76	.69	.57	.50	.48	—
	600								Q6004V3-ND	1.01	.90	.81	.68	.59	.57	—
	400	TO-252AA (Non-Isolated)	10	.05	1.6	2.0	0.3	2.5	Q4004D3CT-ND*	1.60	1.32	1.11	.95	.87	.72	697.00/M
	600								Q6004D3CT-ND*	1.87	1.54	1.30	1.11	1.01	.84	816.00/M
8.0	200	TO-220AB (Isolated)	25	.05	1.6	2.5	0.5	3.0	Q2008L4-ND	1.28	1.14	1.03	.86	.75	.72	—
	400		25						Q4008L4-ND	1.42	1.26	1.14	.95	.82	.79	—
	600		50						Q6008L5-ND	1.58	1.40	1.26	1.05	.91	.88	—
	200	TO-220AB (Non-Isolated)	25	.05	1.6	2.5	0.5	3.0	Q2008F41-ND	1.01	.90	.81	.68	.59	.57	—
	400		25						Q4008R4-ND	1.31	1.16	1.05	.87	.76	.73	—
	600		50						Q6008R5-ND	1.46	1.30	1.17	.98	.85	.82	—
10.0	200	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	3.0	Q2010L5-ND	1.40	1.24	1.12	.93	.81	.78	—
	400								Q4010L5-ND	1.55	1.38	1.25	1.04	.90	.87	—
	600								Q6010L5-ND	1.82	1.62	1.46	1.22	1.06	1.02	—
	200	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	3.0	Q2010R5-ND	1.28	1.14	1.03	.86	.75	.72	—
	400								Q4010R5-ND	1.42	1.26	1.14	.95	.82	.79	—
	600								Q6010R5-ND	1.69	1.50	1.35	1.13	.98	.94	—
15.0	200	TO-220AB (Isolated)	50	.05	1.6	2.5	0.5	4.0	Q2015L5-ND	1.69	1.50	1.35	1.13	.98	.94	—
	400								Q4015L5-ND	1.85	1.64	1.48	1.23	1.07	1.03	—
	600								Q6015L5-ND	2.18	1.94	1.75	1.46	1.27	1.22	—
	200	TO-220AB (Non-Isolated)	50	.05	1.6	2.5	0.5	4.0	Q2015R5-ND	1.55	1.38	1.25	1.04	.90	.87	—
	400								Q4015R5-ND	1.71	1.52	1.37	1.14	.99	.95	—
	600								Q6015R5-ND	2.03	1.80	1.62	1.35	1.17	1.13	—

***** Cut Tape   **†** For Tape and Reel Part Number, change CT-ND to TR-ND

Surface Mount Triacs (0.8-1.0 Amps)

$I_{T\,RMS}$ (A)	V_{DRM} (V)	Package	I_{GT} (mA)	I_{DRM} @25°C (mA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	I_H (mA)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing 2,500
									1	10	100	250		
Surface Mount Triacs														
0.8	400	COMPAK	10	0.02	1.6	2.0	15.0	Q4X3CT-ND	1.13	.93	.79	.67	Q4X3TR-ND	493.00/M
0.8	600							Q6X3CT-ND	1.37	1.12	.95	.81	Q6X3TR-ND	595.00/M
1.0	400							Q4N3CT-ND	1.37	1.12	.95	.81	Q4N3TR-ND	595.00/M
1.0	600							Q6N3CT-ND	1.60	1.32	1.11	.95	Q6N3TR-ND	697.00/M
Sensitive Gate Surface Mount Triacs														
0.8	400	COMPAK	3	0.01	1.6	2.0	5.0	L4X3CT-ND	1.37	1.12	.95	.81	L4X3TR-ND	595.00/M
	600		3				5.0	L6X3CT-ND	1.32	1.04	.88	.76	L6X3TR-ND	680.00/M
	400		5				10.0	L4X5CT-ND	1.29	1.06	.90	.76	L4X5TR-ND	561.00/M
	600		5				10.0	L6X5CT-ND	1.48	1.22	1.03	.88	L6X5TR-ND	646.00/M



TECCOR
ELECTRONICS
An Invensys company

Bilateral Trigger Diacs HT and ST Series

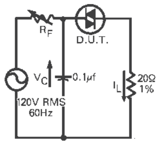
General Description: The diac semiconductor is a full-wave or bi-directional thyristor. It is triggered from a blocking-to-conduction state for either polarity of applied voltage whenever the amplitude of applied voltage exceeds the breakover voltage rating of the diac.
The Teccor line of diacs features glass passivated junctions to insure long term device reliability and parameter stability. Teccor's glass offers a rugged, reliable barrier against junction contamination.

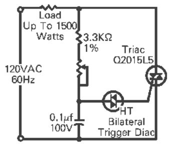
Specifications: • Maximum Ratings, Absolute-Maximum Values. Maximum Trigger Firing Capacitance - 0.1µF; Device dissipation (at$_{T}$A = -40° to +40°C) -250mW; Derate Above +40°C -3.6mW/°C • Temperature Ranges: Storage -40° to +125°C; Operating (Junction) -40° to +125°C * Thermal Resistance: Junction to Ambient (R()JA) = 278°C/W; Junction to Lead (R()JL) = 100°C/W. Based on Maximum lead temperature of 85°C @ = 250mW.

9291B-ND	Teccor Thyristor Product Catalog	**$3.00**
9292B-ND	Teccor Sidactor Data Book	**$2.25**

DO-35

DO-214AA





Package	$V_{(BO)}$ (V) Min.	Max.	$V_{(BO)}$ Symmetry (V) Max.	Dynamic Breakback Voltage (V)	$I_{(BO)}$ (µA) Max.	I_{TRM} (A) Max.	Digi-Key Part No.	Pricing 1	10	100	250	500	1,000	Tape & Reel † Size	Pricing
HT Series															
D0-35	27	37	3	10	25	2.0	HT-32-ND	.18	1.60	14.40	30.00	52.00	100.00	—	—
	35	45	3	10	25	2.0	HT-40-ND	.16	1.40	12.60	26.25	45.50	87.50	—	—
	30	40	3	10	25	2.0	HT-35-ND	.16	1.40	12.60	26.25	45.50	87.50	—	—
	56	70	4	20	25	1.5	HT-60-ND	.20	1.80	16.20	33.75	58.50	112.50	—	—
	28	36	4	7	25	2.0	HT-32A-ND	.20	1.80	16.20	33.75	58.50	112.50	—	—
	30	34	2	7	25	2.0	HT-32B-ND	.25	2.20	19.80	41.25	71.50	137.50	—	—
	32	36	2	10	25	2.0	HT-34B-ND	.25	2.20	19.80	41.25	71.50	137.50	—	—
	32	40	4	7	25	2.0	HT-36A-ND	.20	1.80	16.20	33.75	58.50	112.50	—	—
ST Series															
DO-214AA	32	36	2	10	25	2.0	ST-34BCT-ND*	.74	6.08	51.30	109.25	199.50	332.50	2,500	304.00/M
	30	40	3	10	25	2.0	ST-35CT-ND*	.62	5.12	43.20	92.00	168.00	280.00	2,500	272.00/M
	32	40	2	7	25	2.0	ST-36ACT-ND*	.90	7.36	62.10	132.25	241.50	402.50	2,500	391.00/M
	34	38	2	10	25	2.0	ST-36BCT-ND*	1.01	8.32	70.20	149.50	273.00	455.00	2,500	442.00/M
	35	45	3	10	25	2.0	ST-40CT-ND*	.62	5.12	43.20	92.00	168.00	280.00	2,500	272.00/M

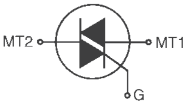
* Cut Tape † For Tape and Reel Part Number, change CT-ND to TR-ND

Alternistor Triacs 8 to 40 Amps

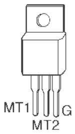
General Description: Teccor's Alternistor Triac has been specifically designed for applications which are required to switch highly inductive loads. To accomplish this, a special chip has been designed which effectively offers the same performance as two thyristors (SCRs) wired inverse parallel (back-to-back), hence, the alternistor has better turn-off behavior than a standard triac.

All Alternistors have glass passivated junctions to ensure long term reliability and parameter stability.

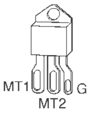
9292B-ND	Teccor Sidactor Data Book	**$2.25**
9291B-ND	Teccor Thyristor Product Catalog	**$3.00**



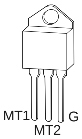
TO-220AB - Isolated



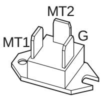
TO-218X



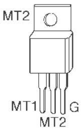
TO-218AC



TO-3 Base / FASTPAK



TO-220AB - Non-Isolated



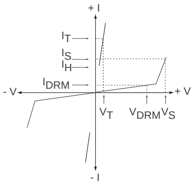
Package	$I_{T\,RMS}$ (A)	V_{DRM} (V)	I_{GT} (mA)	I_{DRM} @25°C (mA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	$P_{G\,(AV)}$ (W)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each 1	10	100	250	500	1,000
TO-220AB (Isolated)	8	400	35	.01	1.6	1.5	0.5	4	Q4008LH4-ND	1.42	1.26	1.14	.95	.82	.79
		600	35	.01	1.6	1.5	0.5	4	Q6008LH4-ND	1.58	1.40	1.26	1.05	.91	.88
		800	35	.01	1.6	1.5	0.5	4	Q8008LH4-ND	1.82	1.62	1.46	1.22	1.06	1.02
TO-220AB (Isolated)	12	400	50	.01	1.6	1.5	0.5	4	Q4012LH5-ND	1.64	1.46	1.32	1.10	.95	.92
		600	50	.01	1.6	1.5	0.5	4	Q6012LH5-ND	1.82	1.62	1.46	1.22	1.06	1.02
		800	50	.01	1.6	1.5	0.5	4	Q8012LH5-ND	2.16	1.92	1.73	1.44	1.25	1.20
TO-220AB (Isolated)	15	200	80	.05	1.6	2.5	0.5	5	Q2015L6-ND‡	1.91	1.70	1.53	1.28	1.11	1.07
		400	80	.05	1.6	2.5	0.5	5	Q4015L6-ND‡	2.09	1.86	1.68	1.40	1.21	1.17
		600	80	.05	1.6	2.5	0.5	5	Q6015L6-ND‡	2.32	2.06	1.86	1.55	1.34	1.29
		800	80	.10	1.6	2.5	0.5	5	Q8015L6-ND‡	2.77	2.46	2.22	1.85	1.60	1.54
TO-220AB (Non-Isolated)	15	200	80	.05	1.6	2.5	0.5	5	Q2015R6-ND‡	1.67	1.48	1.34	1.11	.97	.93
		400	80	.05	1.6	2.5	0.5	5	Q4015R6-ND‡	2.57	2.28	2.06	1.71	1.49	1.43
		600	80	.05	1.6	2.5	0.5	5	Q6015R6-ND‡	2.05	1.82	1.64	1.37	1.19	1.14
		800	80	.10	1.6	2.5	0.5	5	Q8015R6-ND‡	2.43	2.16	1.95	1.62	1.41	1.35
		200	125	.05	1.6	2.5	0.5	5	Q2015R9-ND	2.18	1.94	1.75	1.46	1.27	1.22
TO-220AB (Isolated)	16	200	20	.05	1.6	1.5	0.5	3	Q2016LH3-ND	1.85	1.64	1.48	1.23	1.07	1.03
		400	20	.05	1.6	1.5	0.5	3	Q4016LH3-ND	2.03	1.80	1.62	1.35	1.17	1.13
		600	20	.05	1.6	1.5	0.5	3	Q6016LH3-ND	2.25	2.00	1.80	1.50	1.30	1.25
		800	20	.10	1.6	1.5	0.5	3	Q8016LH3-ND	2.68	2.38	2.15	1.79	1.55	1.49
		200	35	.05	1.6	2.0	0.5	3	Q2016LH4-ND	1.37	1.22	1.10	.92	.80	.77
		400	35	.05	1.6	2.0	0.5	3	Q4016LH4-ND	1.96	1.74	1.57	1.31	1.14	1.09
		600	35	.05	1.6	2.0	0.5	3	Q6016LH4-ND	2.18	1.94	1.75	1.46	1.27	1.22
		800	35	.10	1.6	2.0	0.5	3	Q8016LH4-ND	2.59	2.30	2.07	1.73	1.50	1.44
		200	80	.05	1.6	2.5	0.5	5	Q2016LH6-ND	1.69	1.50	1.35	1.13	.98	.94
		400	80	.05	1.6	2.5	0.5	5	Q4016LH6-ND	1.85	1.64	1.48	1.23	1.07	1.03
		600	80	.05	1.6	2.5	0.5	5	Q6016LH6-ND	2.05	1.82	1.64	1.37	1.19	1.14
		800	80	.10	1.6	2.5	0.5	5	Q8016LH6-ND	2.43	2.16	1.95	1.62	1.41	1.35
TO-220AB (Non-Isolated)	16	200	20	.05	1.6	1.5	0.5	3	Q2016RH3-ND	1.67	1.48	1.34	1.11	.97	.93
		400	20	.05	1.6	1.5	0.5	3	Q4016RH3-ND	1.82	1.62	1.46	1.22	1.06	1.02
		600	20	.05	1.6	1.5	0.5	3	Q6016RH3-ND	2.03	1.80	1.62	1.35	1.17	1.13
		800	20	.10	1.6	1.5	0.5	3	Q8016RH3-ND	2.41	2.14	1.93	1.61	1.40	1.34
		200	35	.05	1.6	2.0	0.5	3	Q2016RH4-ND	1.60	1.42	1.28	1.07	.93	.89
		400	35	.05	1.6	2.0	0.5	3	Q4016RH4-ND	1.76	1.56	1.41	1.17	1.02	.98
		600	35	.05	1.6	2.0	0.5	3	Q6016RH4-ND	1.96	1.74	1.57	1.31	1.14	1.09
		800	35	.10	1.6	2.0	0.5	3	Q8016RH4-ND	2.32	2.06	1.86	1.55	1.34	1.29
		200	80	.05	1.6	2.5	0.5	5	Q2016RH6-ND	1.51	1.34	1.21	1.01	.88	.84
		400	80	.05	1.6	2.5	0.5	5	Q4016RH6-ND	1.67	1.48	1.34	1.11	.97	.93
		600	80	.05	1.6	2.5	0.5	5	Q6016RH6-ND	1.85	1.64	1.48	1.23	1.07	1.03
		800	80	.10	1.6	2.5	0.5	5	Q8016RH6-ND	2.18	1.94	1.75	1.46	1.27	1.22
TO-220AB (Isolated)	25	200	80	.05	1.7	2.5	0.5	3	Q2025L6-ND	2.50	2.22	2.00	1.67	1.45	1.39
		400	80	.05	1.7	2.5	0.5	3	Q4025L6-ND	2.75	2.44	2.20	1.83	1.59	1.53
		600	80	.05	1.7	2.5	0.5	3	Q6025L6-ND	3.04	2.70	2.43	2.03	1.76	1.69
		800	80	.10	1.8	2.5	0.5	5	Q8025L6-ND	3.60	3.20	2.88	2.40	2.08	2.00
TO-220AB (Non-Isolated)	25	600	125	.05	1.8	2.5	0.5	5	Q6025R9-ND	5.31	4.72	4.25	3.54	3.07	2.95
		200	80	.01	1.8	2.5	0.5	4	Q2025R6-ND	2.23	1.98	1.79	1.49	1.29	1.24
		400	80	.01	1.8	2.5	0.5	4	Q4025R6-ND	2.45	2.18	1.97	1.64	1.42	1.37
		600	80	.01	1.8	2.5	0.5	4	Q6025R6-ND	2.72	2.42	2.18	1.82	1.58	1.52
		800	80	.10	1.8	2.5	0.5	5	Q8025R6-ND	3.24	2.88	2.60	2.16	1.88	1.80
TO-218AC (Isolated)	25	200	80	.05	1.8	2.5	0.5	5	Q2025K6-ND	4.86	4.32	3.89	3.24	2.81	2.70
		800	80	.10	1.8	2.5	0.5	5	Q8025K6-ND	7.04	6.26	5.64	4.70	4.07	3.92
TO-218X (Isolated)	25	200	80	.05	1.8	2.5	0.5	5	Q2025J6-ND	5.38	4.78	4.31	3.59	3.11	2.99
		400	80	.05	1.8	2.5	0.5	5	Q4025J6-ND	5.90	5.24	4.72	3.93	3.41	3.28
		600	80	.05	1.8	2.5	0.5	5	Q6025J6-ND	6.55	5.82	5.24	4.37	3.79	3.64
		800	80	.10	1.8	2.5	0.5	5	Q8025J6-ND	7.79	6.92	6.23	5.19	4.50	4.33
TO-3-BASE / FASTPAK (Isolated)	25	200	80	.01	1.8	2.5	0.5	4	Q2025P-ND	7.18	6.38	5.75	4.79	4.15	3.99
		400	80	.01	1.8	2.5	0.5	4	Q4025P-ND	7.90	7.02	6.32	5.27	4.57	4.39
		600	80	.01	1.8	2.5	0.5	3	Q6025P-ND	8.75	7.78	7.01	5.84	5.06	4.87
		800	80	.10	1.8	2.5	0.5	5	Q8025P-ND	10.40	9.24	8.32	6.93	6.01	5.78
TO-3 FASTPAK (Isolated)	35	600	50	.10	1.5	2.75	0.5	3	Q6035P5-ND *NEW!*	11.68	10.38	9.35	7.79	6.75	6.49
		800	50	.10	1.5	2.75	0.5	3	Q8035P5-ND *NEW!*	13.88	12.34	11.11	9.26	8.03	7.72
TO-218X (Isolated)	40	200	100	.20	1.8	2.5	0.8	5	Q2040J7-ND	7.16	6.36	5.73	4.77	4.14	3.98
		400	100	.20	1.8	2.5	0.8	5	Q4040J7-ND	7.88	7.00	6.30	5.25	4.55	4.38
		600	100	.20	1.8	2.5	0.8	5	Q6040J7-ND	8.73	7.76	6.99	5.82	5.05	4.85
		800	100	.20	1.8	2.5	0.8	5	Q8040J7-ND	10.37	9.22	8.30	6.92	6.00	5.77
TO-218AC (Isolated)	40	200	100	.20	1.8	2.5	0.8	5	Q2040K7-ND	6.48	5.76	5.19	4.32	3.75	3.60
		400	100	.20	1.8	2.5	0.8	5	Q4040K7-ND	7.13	6.34	5.71	4.76	4.13	3.97
		600	100	.20	1.8	2.5	0.8	5	Q6040K7-ND	7.92	7.04	6.34	5.28	4.58	4.40
		800	100	.20	1.8	2.5	0.8	5	Q8040K7-ND	9.41	8.36	7.53	6.27	5.44	5.23
TO-3-BASE (Isolated)	40	400	100	.20	1.8	2.5	0.8	5	Q4040P-ND	10.53	9.36	8.43	7.02	6.09	5.85

‡ Not recommended for new design

The New Standard In Surge Protection For Electronic Equipment

Product Description: SIDACtors® are solid state crowbar devices designed to protect telecom equipment during hazardous transient conditions. Capitalizing on the latest in thyristor advancements, Teccor designs their SIDACtors® with a patented ion implant technology. This technology ensures effective protection within nanoseconds, 500A surge current ratings, and simple solutions for regulatory requirements such as Bellcore 1089, TIA/EIA-15-968, ITU-T K.20, ITU-T K.21 and UL60950.

Operation: In the standby mode, SIDACtors® exhibit a high off-state impedance eliminating excessive leakage currents and appearing transparent to the circuits they protect. Upon application of a voltage exceeding the switching voltage (Vs), SIDACtors® will crowbar and simulate a short circuit condition until the current flowing through the device is either interrupted or drops below the SIDACtors® holding current (IH), once this occurs, SIDACtors® will reset and return to their high off-state impedance.



9291B-ND	Teccor Thyristor Product Catalog	**$3.00**
9292B-ND	Teccor Sidactor Data Book	**$2.25**

Surge Ratings

Series	I_{pp} 2 x 10µs (A)	I_{pp} 8 x 20µs (A)	I_{pp} 10 x 160µs (A)	I_{pp} 10 x 560µs (A)	I_{pp} 10 x 1000µs (A)	I_{TSM} 60Hz (A)	di/dt (A/µs)
A	150	150	90	50	45	20	500
B	250	250	150	100	80	30	500
C	500	400	200	150	100	50	500

Fig. A
TO-92
(Isolated)

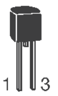


Fig. 1

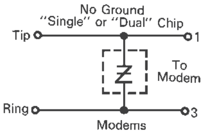


Fig. B
TO-220
No-Ground
(Isolated)

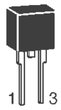


Fig. 2

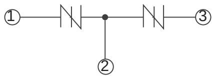


Fig. C
TO-220
(Isolated)

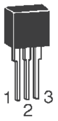


Fig. 3

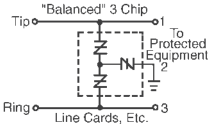


Fig. D
DO-214AA
(Isolated)

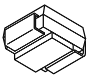


Fig. 4 *NEW!*

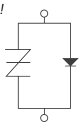


Fig. E *NEW!*
DO-214AA
(Isolated)

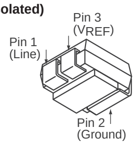


Fig. 5 *NEW!*

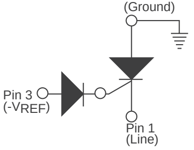


Fig.	Package	V_{DRM} ‡ (V)	V_S (V)	V_T (V)	I_S (mA)	I_H (mA)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
A,1	TO-92	25	40	4	800	50	P0300EA-ND	.92	.82	.74	.62	.54
		58	77			150	P0640EA-ND	.92	.82	.74	.62	.54
		58	77			150	P0640EC-ND *NEW!*	1.17	1.04	.94	.78	.68
		65	88			150	P0720EA-ND	.92	.82	.74	.62	.54
		75	98			150	P0900EA-ND	.92	.82	.74	.62	.54
		90	130			150	P1100EA-ND	.92	.82	.74	.62	.54
		120	160			150	P1300EA-ND	.92	.82	.74	.62	.54
		140	180			150	P1500EA-ND	.92	.82	.74	.62	.54
		170	220			150	P1800EC-ND *NEW!*	1.17	1.04	.94	.78	.68
		220	300			150	P2600EA-ND	.92	.82	.74	.62	.54
		220	300			150	P2600EB-ND *NEW!*	1.01	.90	.81	.68	.59
		220	300			150	P2600EC-ND *NEW!*	1.17	1.04	.94	.78	.68
		275	350			150	P3100EA-ND	.92	.82	.74	.62	.54
		275	350			150	P3100EB-ND *NEW!*	1.01	.90	.81	.68	.59
		275	350			150	P3100EC-ND *NEW!*	1.17	1.04	.94	.78	.68
		320	400			150	P3500EB-ND *NEW!*	1.01	.90	.81	.68	.59
		320	400			150	P3500EC-ND *NEW!*	1.17	1.04	.94	.78	.68
B,1	Modified TO-220	220	260	4	800	150	P2400AA61-ND	2.03	1.80	1.62	1.35	1.17
		270	330				P3000AA61-ND	2.03	1.80	1.62	1.35	1.17
C,2	Modified TO-220	25	40	4	800	50	P0602AA-ND*	2.34	2.08	1.88	1.56	1.36
		65	95			150	P1602AB-ND*	2.93	2.60	2.34	1.95	1.69
		90	130			150	P2202AB-ND*	2.93	2.60	2.34	1.95	1.69
		140	180			150	P3002AB-ND*	2.93	2.60	2.34	1.95	1.69
		275	350			150	P6002AB-ND*	2.93	2.60	2.34	1.95	1.69
C,3	Modified TO-220	130	180	8	800	150	P1553AB-ND†	4.07	3.62	3.26	2.72	2.36
		170	250				P2103AB-ND† *NEW!*	4.07	3.62	3.26	2.72	2.36
		200	270				P2353AB-ND†	4.07	3.62	3.26	2.72	2.36
		230	300				P2703AB-ND†	4.07	3.62	3.26	2.72	2.36
		270	350				P3203AB-ND†	4.07	3.62	3.26	2.72	2.36
		300	400				P3403AB-ND†	4.07	3.62	3.26	2.72	2.36

* Between pin 1-2, 2-3 † Between any 2 pins ‡ V_{DRM} between pin 1-3 = 2 X V_{DRM} 1-2

Fig.	Package	V_{DRM} (V)	V_S (V)	V_T (V)	I_S (mA)	I_H (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 2,500
D,1	DO-214	25	40	5	800	150	P0300SARPCT-ND	2.75	2.20	1.65	P0300SARPTR-ND	650.00/M
		58	77				P0640SARPCT-ND	2.75	2.20	1.65	P0640SARPTR-ND	650.00/M
		58	77				P0640SCRPCT-ND *NEW!*	3.00	2.40	1.80	P0640SCRPTR-ND *NEW!*	780.00/M
		65	88				P0720SARPCT-ND	2.75	2.20	1.65	P0720SARPTR-ND	650.00/M
		140	180				P1500SARPCT-ND	2.75	2.20	1.65	P1500SARPTR-ND	650.00/M
		170	220				P1800SCRPCT-ND *NEW!*	3.00	2.40	1.80	P1800SCRPTR-ND *NEW!*	780.00/M
		220	300				P2600SARPCT-ND	2.75	2.20	1.65	P2600SARPTR-ND	650.00/M
		220	300				P2600SBRPCT-ND *NEW!*	2.75	2.20	1.65	P2600SBRPTR-ND *NEW!*	715.00/M
		220	300				P2600SCRPCT-ND *NEW!*	3.00	2.40	1.80	P2600SCRPTR-ND *NEW!*	780.00/M
		275	350				P3100SARPCT-ND	2.75	2.20	1.65	P3100SARPTR-ND	650.00/M
		275	350				P3100SBRPCT-ND *NEW!*	2.75	2.20	1.65	P3100SBRPTR-ND *NEW!*	715.00/M
		275	350				P3100SCRPCT-ND *NEW!*	3.00	2.40	1.80	P3100SCRPTR-ND *NEW!*	390.00/M
		320	400				P3500SBRPCT-ND *NEW!*	2.75	2.20	1.65	P3500SBRPTR-ND *NEW!*	715.00/M
		320	400				P3500SCRPCT-ND *NEW!*	3.00	2.40	1.80	P3500SCRPTR-ND *NEW!*	780.00/M

NEW! Subscriber Line Interface Circuit Protecion (SLIC)

The Battrax® device is a solid state protection device that can be referenced to either a positive or negative voltage source. The B1100C_ is for a –VREF. Designed using an SCR and an integrated diode, the B1100C_ Battrax® device begins to conduct at |-VREF|+|-1.2V|.

The P0641S_ is a unidirectional solid state protection devices constructed with a SIDACtor® device and an integrated diode. Used to protect SLIC IC's from being damaged during transient voltage activity. They help line cards meet various regulatory requirements including: GR1089, ITU K.20, K.21 and K.45, IEC 60950 and TIA/EIA-15-968.

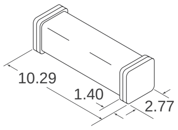
Surge Ratings

Digi-Key Part No.	Series	I_{pp} 2 x 10µs (A)	I_{pp} 8 x 20µs (A)	I_{pp} 10 x 160µs (A)	I_{pp} 10 x 560µs (A)	I_{pp} 10 x 1000µs (A)	I_{TSM} 60Hz (A)	di/dt (A/µs)
B1100C_	A	150	150	90	50	45	40	500
	C	500	400	200	150	100	50	500
P0641S_	A	200	150	100	60	50	20	500
	C	500	400	200	120	100	50	500

Fig.	Package	VDRM (V)	VS (V)	VT (V)	VF (V)	IDRM (mA)	IGT (mA)	IS (mA)	IT (A)	IH (mA)	CO (pF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	T&R Pricing 2,500
SLIC Battrax Protection																		
E,5	Modified DO-214	|-VREF|+|-1.2V|	|-VREF|+|-10V|	4	5	5	100	—	1	100	50	B1100CARPCT-ND	2.75	2.20	1.65	1.10	B1100CARPTR-ND	715.00/M
												B1100CCRPCT-ND	4.70	3.76	2.82	1.88	B1100CCRPTR-ND	1222.00/M
SLIC Protection																		
D,4	DO-214	58	77	4	5	5	—	800	1	120	70	P0641SARPCT-ND	2.15	1.72	1.29	.86	P0641SARPTR-ND	559.00/M
												P0641SCRPCT-ND	2.75	2.20	1.65	1.10	P0641SCRPTR-ND	715.00/M

NEW! TECCOR TeleLink® SMD Fuse

The TeleLink® Surface Mount surge resistant time lag fuse has been designed to offer the ultimate in circuit protection while meeting the necessary surge requirements of the telecommunications industry. When used in conjunction with the SIDACtor® they provide a complete regulatory compliant solution for standards such as GR 1089, TIA/EIA-15-968, UL60950, and ITU K.20 & K.21. **Specifications:** Interrupting Values • Voltage Rating: 250V • Current Rating: 1.25A **Surge Ratings:** • 100A, 10 x 1000µs and 500A, 2 x 10µs • Designed specifically for telecommunications equipment



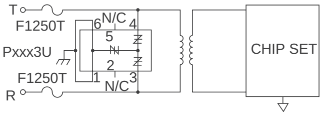
Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 2,500
F1250TRPCT-ND	2.05	1.64	1.23	F1250TRPTR-ND	741.00/M

NEW!

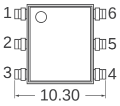
Preliminary Balanced Line Protecter

General Description:

Teccor's new Balanced Protector is designed to offer Teccor customers a surface mount alternative to our traditional modified TO-220 package. Based on a 6-pin SOIC package, Teccor's Balanced Protector is built using Teccor's patented "Y" (US Patent 4,905,119) configuration and is available in surge current ratings of up to 500A.



Series	I_{pp} 2 x 10µs (A)	I_{pp} 8 x 20µs (A)	I_{pp} 10 x 160µs (A)	I_{pp} 10 x 560µs (A)	I_{pp} 10 x 1000µs (A)	I_{TSM} 60Hz (A)	di/dt (A/µs)
C	500	400	200	150	100	50	500



V_{DRM} (V)	V_S (V)	V_T (V)	I_S (mA)	I_H (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 1,500
130	180	10	800	120	P1553UCRPCT-ND	6.60	6.00	5.40	P1553UCRPTR-ND	3120.00/M
150	210	10	800	120	P1803UCRPCT-ND	6.60	6.00	5.40	P1803UCRPTR-ND	3120.00/M
170	250	10	800	120	P2103UCRPCT-ND	6.60	6.00	5.40	P2103UCRPTR-ND	3120.00/M
200	270	10	800	120	P2353UCRPCT-ND	6.60	6.00	5.40	P2353UCRPTR-ND	3120.00/M
230	300	10	800	120	P2703UCRPCT-ND	6.60	6.00	5.40	P2703UCRPTR-ND	3120.00/M
270	350	10	800	120	P3203UCRPCT-ND	6.60	6.00	5.40	P3203UCRPTR-ND	3120.00/M
300	400	10	800	120	P3403UCRPCT-ND	6.60	6.00	5.40	P3403UCRPTR-ND	3120.00/M
420	600	10	800	120	P5103UCRPCT-ND	6.60	6.00	5.40	P5103UCRPTR-ND	3120.00/M

Sidac

General Description:

The Sidac is a silicon bilateral voltage triggered switch with greater power-handling capabilities than standard diacs. Upon application of a voltage exceeding the Sidac breakover voltage point, the Sidac switches on through a negative resistance region to a low on-state voltage. Conduction will continue until the current is interrupted or drops below the minimum holding current of the device.

Applications:

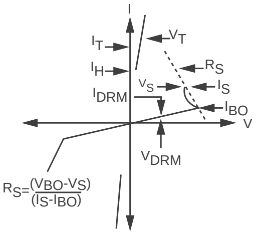
• High voltage lamp ignitors • Natural gas ignitors • Gas oil ignitors • High voltage power supplies • Xenon ignitors • Over voltage protector • Pulse generators • Fluorescent lighting ignitors • HID lighting ignitors

Features:

• AC circuit oriented • Glass passivated junctions • High surge current capability

General Notes:

• All measurements are made at 60Hz with a resistive load at an ambient temperature of +25°C unless otherwise specified • Storage temperature range (TS) is -65°C to +150°C • Junction temperature range (TJ) is -40°C to +110°C • Lead solder temperature is a maximum of +230°C for 10 seconds maximum; ≥ 1/16" (1.59mm) from case.



9291B-ND	Teccor Thyristor Product Catalog	**$3.00**
9292B-ND	Teccor Sidactor Data Book	**$2.25**

Example Circuit

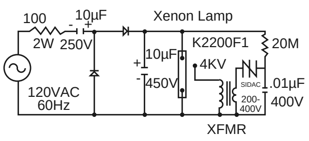


Fig. 1

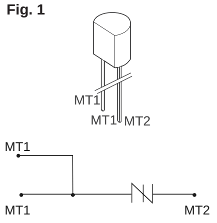


Fig. 2

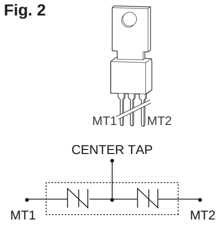
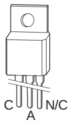


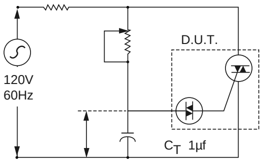
Fig.	Package	$I_{T(RMS)}$ (A)	V_{DRM} (V)	V_{BO} Min.	V_{BO} Max.	I_{DRM} (µA)	I_{BO} (µA)	Digi-Key Part No.	Price Each 1	10	100	250	500	1,000
1	TO-92	1.0	±90	95	113	5	10	K1050E70-ND	.54	.48	.44	.36	.32	.30
			±90	104	118	5	10	K1100E70-ND	.54	.48	.44	.36	.32	.30
			±90	110	125	5	10	K1200E70-ND	.54	.48	.44	.36	.32	.30
			±90	120	138	5	10	K1300E70-ND	.54	.48	.44	.36	.32	.30
			±90	130	146	5	10	K1400E70-ND	.59	.52	.47	.39	.34	.33
			±90	140	170	5	10	K1500E70-ND	.59	.52	.47	.39	.34	.33
			±180	190	215	5	10	K2000E70-ND	.68	.60	.54	.45	.39	.38
			±180	205	230	5	10	K2200E70-ND	.68	.60	.54	.45	.39	.38
			±190	220	250	5	10	K2400E70-ND	.72	.64	.58	.48	.42	.40
			±190	240	280	5	10	K2500E70-ND	.72	.64	.58	.48	.42	.40
2	TO-202AB (Non-Isolated)	1.0	±180	190	215	5	10	K2000F1-ND	.95	.84	.76	.63	.55	.53
			±180	205	230	5	10	K2200F1-ND	.95	.84	.76	.63	.55	.53
			±190	220	250	5	10	K2400F1-ND	.99	.88	.80	.66	.58	.55
			±190	240	280	5	10	K2500F1-ND	.99	.88	.80	.66	.58	.55
			±190	270	330	5	10	K3000F1-ND	1.10	.98	.89	.74	.64	.62

Silicon Rectifiers with Glass Passivated

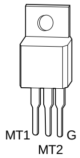


Package	$I_{T\ RMS}$ (A)	V_{RRM} (V)	I_{FSM} (A)	V_{FM} (V)	Digi-Key Part No.	Price Each 1	10	100	250	500	1,000
TO-220AB (Isolated)	20	400	300	1.6	D4020L-ND	1.53	1.36	1.23	1.02	.89	.85
	20	600	300	1.6	D6020L-ND	1.76	1.56	1.41	1.17	1.02	.98
	25	400	350	1.6	D4025L-ND	2.07	1.84	1.66	1.38	1.20	1.15
	25	600	350	1.6	D6025L-ND	2.36	2.10	1.89	1.58	1.37	1.32

QUADRAC® Internally Triggered Triacs (4.0-15 Amps)



Thermotab
TO-220AB



9291B-ND	Teccor Thyristor Product Catalog	**$3.00**
9292B-ND	Teccor Sidactor Data Book	**$2.25**

General Description:

Teccor's QUADRAC® is a triac that includes a diac trigger mounted inside the same package. This device developed by Teccor, saves the user the expense and assembly time of buying a discrete diac and assembling in conjunction with a gated triac.

The QUADRAC® is a bidirectional AC switch and is gate controlled for either polarity of main terminal voltage. Its primary purpose is for AC switching and phase control applications such as speed controls, temperature modulation controls, and lighting controls.

Features:

- Glass passivated junctions
- Electrically isolated package
- Internal trigger diac
- High surge capability - up to 150 Amps
- High voltage capability - 200 up to 600 volts.

Electrical Isolation:

Teccor's isolated TO-220 Quadrac package will withstand a minimum high potential test of 2500VAC (RMS) from leads to case over the operating temperature range of the device.

Electrical Isolation From Leads to Case:

U.L. Recognized File No. 71639

Package	$I_{T\ RMS}$ (A)	V_{DRM} (V)	I_{GTM} (A)	I_{DRM} @25°C (mA)	V_{TM} @25°C (V)	VBO (V) Min.	Max.	I_{BO} (µA)	C (µF)	I_H (mA)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each 1	10	100	250	500	1,000
TO-220AB (Isolated)	4.0	200	1.2	.05	1.6	30	45	200	0.1	40	3	Q2004LT-ND	1.22	1.08	.98	.81	.71	.68
		400										Q4004LT-ND	1.33	1.18	1.07	.89	.77	.74
		600										Q6004LT-ND	1.58	1.40	1.26	1.05	.91	.88
	8.0	400	1.5	.05	1.6	30	45	200	0.1	60	3	Q4008LT-ND	1.60	1.42	1.28	1.07	.93	.89
		600										Q6008LT-ND	1.89	1.68	1.52	1.26	1.10	1.05
	15.0	400	1.5	.05	1.6	30	45	200	0.1	70	3	Q4015LT-ND	1.98	1.76	1.59	1.32	1.15	1.10
		600										Q6015LT-ND	2.34	2.08	1.88	1.56	1.36	1.30

TECCOR
ELECTRONICS
An Invensys company

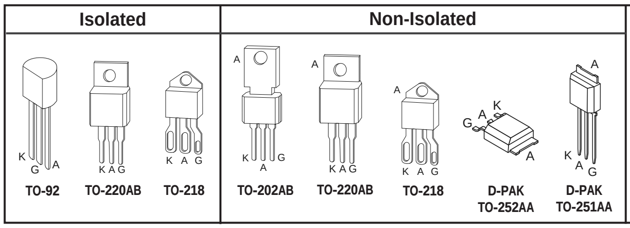
Sensitive Gate (0.8-10 Amps) and Non-Sensitive Gate (1-70 Amps) SCRs

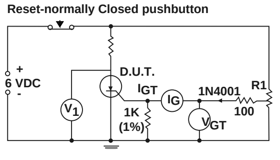
The Teccor Electronics line of thyristor SCR semi-conductors are half-wave, unidirectional, gate-controlled rectifiers. Teccor offers both Sensitive Gate and Non-Sensitive Gate SCR's in a choice of 3 different electrically isolated packages and 5 non-isolated packages. Electrically Isolated Packages: The electrically isolated packages isolate the case or tab internally to allow the use of low cost assembly and convenient packaging techniques. Teccor offers electrical isolation in the TO-92, TO-220AB, and TO-218 type packages. Glass Passivation: The Teccor line of SCR's features glass passivated device junctions to ensure long term device reliability and parameter stability. Teccor's glass offers a rugged, reliable barrier against junction contamination.

Sensitive Gate Type:
The Teccor line of sensitive SCR semiconductors complement Teccor's line of power SCRs. **Features:** • Current Ratings: 0.8-10 amps • Voltage Ratings: 30-600 volts • Gate Sensitivities: 12-500 micro amps • Surge Current: up to 100 amps

Non-Sensitive Gate Type:
The Teccor Electronics line of thyristor SCR semiconductors complement Teccor's line of sensitive gate SCRs. **Features:** • Current Ratings: 1-70 amps • Voltage Ratings: 100-800 volts • Gate Sensitivities: 10-50 milliamps • Surge Current: up to 950 amps

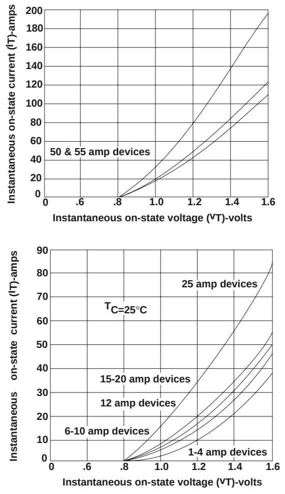
9291B-ND	Teccor Thyristor Product Catalog	**$3.00**
9292B-ND	Teccor Sidactor Data Book	**$2.25**





Simple Test Circuit For Gate Trigger Voltage and Current Measurement

Instantaneous On-State Current vs. On-State Voltage



I_T RMS (A)	V_{DRM} & V_{RRM} (V)	Package	I_{GT} (mA)		I_{DRM} & I_{RRM} @25°C (mA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	$P_{G(AV)}$ (W)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each						Tape & Reel† Pricing
			Min.	Max.							1	10	100	250	500	1,000	2,500
SCRs — Sensitive Gate (0.8-10.0 Amp)																	
.8	30	TO-92 (Isolated)	—	.200	.001‡	1.7	0.8	0.1	2.2	2N5060-ND	.59	.52	.47	.39	.34	.33	—
	200				.001					EC103B-ND	.41	.36	.33	.27	.24	.23	—
	200				.001‡					2N5064-ND	.43	.38	.35	.29	.25	.24	—
	400				.001					EC103D-ND	.43	.38	.35	.29	.25	.24	—
	600				.002					EC103M-ND	.50	.44	.40	.33	.29	.28	—
1.5	50	TO-92 (Isolated)	—	.200	.001	1.5	0.8	0.1	2.2	TCR22-2-ND	.47	.42	.38	.32	.28	.27	—
	100				.001					TCR22-3-ND	.47	.42	.38	.32	.28	.27	—
	200				.001					TCR22-4-ND	.45	.40	.36	.30	.26	.25	—
	400				.001					TCR22-6-ND	.47	.42	.38	.32	.28	.27	—
	600				.002					TCR22-8-ND	.59	.52	.47	.39	.34	.33	—
3.0	400	TO-220AB (Isolated)	—	.200	.002	1.6	0.8	0.1	2.2	S4003LS2-ND	.99	.88	.80	.66	.58	.55	—
4.0	100	TO-202AB (Non-Isolated)	—	.200	.002	2.2	0.8	0.1	2.2	T106A1-ND	.61	.54	.49	.41	.36	.34	—
	200									T106B1-ND	.63	.56	.51	.42	.37	.35	—
	400									T106D1-ND	.70	.62	.56	.47	.41	.39	—
	600									T106M1-ND	.77	.68	.62	.51	.45	.43	—
	200	TO-251AA (Non-Isolated)	—	.200	.002	2.2	0.8	0.1	4.0	S2004VS2-ND	.61	.54	.49	.41	.36	.34	—
	400									S4004VS2-ND	.68	.60	.54	.45	.39	.38	—
	600									S6004VS2-ND	.81	.72	.65	.54	.47	.45	—
	200	TO-252AA (Non-Isolated)	—	.200	.002	2.2	0.8	0.1	4.0	S2004DS2CT-ND*	1.13	.93	.79	.67	.61	.51	493.00/M
	400									S4004DS2CT-ND*	1.25	1.03	.87	.74	.68	.56	544.00/M
	600									S6004DS2CT-ND*	1.52	1.25	1.06	.90	.82	.69	663.00/M
6.0	200	TO-251AA (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	4.0	S2006VS2-ND	.63	.56	.51	.42	.37	.35	—
	400									S4006VS2-ND	.70	.62	.56	.47	.41	.39	—
	600									S6006VS2-ND	.86	.76	.69	.57	.50	.48	—
	200	TO-252AA (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	4.0	S2006DS2CT-ND*	1.17	.96	.81	.69	.63	.53	510.00/M
	400									S4006DS2CT-ND*	1.29	1.06	.90	.76	.70	.58	561.00/M
	600									S6006DS2CT-ND*	1.60	1.32	1.11	.95	.87	.72	697.00/M
	400	TO-220AB (Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4008LS2-ND	1.19	1.06	.96	.80	.69	.67	—
	400	TO-202AB (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4008FS21-ND	.92	.82	.74	.62	.54	.52	—
8.0	200	TO-251AA (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	4.0	S2008VS2-ND	.70	.62	.56	.47	.41	.39	—
	400									S4008VS2-ND	.77	.68	.62	.51	.45	.43	—
	600									S6008VS2-ND	.95	.84	.76	.63	.55	.53	—
	200	TO-252AA (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	4.0	S2008DS2CT-ND*	1.29	1.06	.90	.76	.70	.58	561.00/M
	400									S4008DS2CT-ND*	1.40	1.16	.98	.83	.76	.63	612.00/M
	600									S6008DS2CT-ND*	1.76	1.44	1.22	1.04	.95	.79	765.00/M
10.0	400	TO-220AB (Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4010LS2-ND	1.31	1.16	1.05	.87	.76	.73	—
	400	TO-202AB (Non-Isolated)	—	.200	.005	1.6	0.8	0.1	2.2	S4010FS21-ND	1.01	.90	.81	.68	.59	.57	—
SCRs — Non-Sensitive Gate (1.0-70 Amp)																	
1.0	100	TO-92 (Isolated)	1	10	.01	1.6	1.5	0.3	2.0	S101E-ND	.54	.48	.44	.36	.32	.30	—
	200									S201E-ND	.59	.52	.47	.39	.34	.33	—
	400									S401E-ND	.61	.54	.49	.41	.36	.34	—
	600									S601E-ND	.63	.56	.51	.42	.37	.35	—
6.0	200	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2006L-ND	.97	.86	.78	.65	.56	.54	—
	400									S4006L-ND	1.04	.92	.83	.69	.60	.58	—
	600									S6006L-ND	1.10	.98	.89	.74	.64	.62	—
	200	TO-251AA (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2006V-ND	.65	.58	.53	.44	.38	.37	—
	400									S4006V-ND	.70	.62	.56	.47	.41	.39	—
	600									S6006V-ND	.74	.66	.60	.50	.43	.42	—
	800									S8006V-ND	.79	.70	.63	.53	.46	.44	—
	200	TO-252AA (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2006DCT-ND*	1.25	1.03	.87	.74	.68	.56	544.00/M
	400									S4006DCT-ND*	1.33	1.09	.92	.79	.72	.60	578.00/M
	600									S6006DCT-ND*	1.44	1.19	1.00	.86	.78	.65	629.00/M
	800									S8006DCT-ND*	1.52	1.25	1.06	.90	.82	.69	663.00/M
8.0	200	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2008L-ND	1.08	.96	.87	.72	.63	.60	—
	400									S4008L-ND	1.15	1.02	.92	.77	.67	.64	—
	600									S6008L-ND	1.24	1.10	.99	.83	.72	.69	—
	200	TO-220AB (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2008R-ND	.97	.86	.78	.65	.56	.54	—
	400									S4008R-ND	1.04	.92	.83	.69	.60	.58	—
	600									S6008R-ND	1.10	.98	.89	.74	.64	.62	—
8.0	200	TO-251AA (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2008V-ND	.74	.66	.60	.50	.43	.42	—
	400									S4008V-ND	.79	.70	.63	.53	.46	.44	—
	600									S6008V-ND	.83	.74	.67	.56	.49	.47	—
	800									S8008V-ND	.88	.78	.71	.59	.51	.49	—
	200	TO-252AA (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2008DCT-ND*	1.40	1.16	.98	.83	.76	.63	612.00/M
	400									S4008DCT-ND*	1.52	1.25	1.06	.90	.82	.69	663.00/M
	600									S6008DCT-ND*	1.60	1.32	1.11	.95	.87	.72	697.00/M
	800									S8008DCT-ND*	1.72	1.41	1.19	1.02	.93	.77	748.00/M
10.0	400	TO-220AB (Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S4010L-ND	1.26	1.12	1.01	.84	.73	.70	—
	600									S6010L-ND	1.35	1.20	1.08	.90	.78	.75	—
10.0	200	TO-251AA (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2010V-ND	.81	.72	.65	.54	.47	.45	—

‡ .05mA@125°C * Cut Tape † For Tape and Reel Part Number, change CT-ND to TR-ND

(Continued)

TECCOR ELECTRONICS
An Invensys company

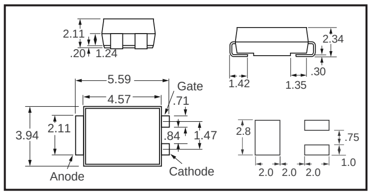
Sensitive Gate (0.8-10 Amps) and Non-Sensitive Gate (1-70 Amps) SCRs *(Cont.)*

I_T RMS (A)	V_{DRM} & V_{RRM} (V)	Package	I_{GT} (mA) Min.	I_{GT} (mA) Max.	I_{DRM} & I_{RRM} @25°C (mA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	$P_{G(AV)}$ (W)	t_{gt} (µsec.)	Digi-Key Part No.	Price Each 1	10	100	250	500	1,000	Tape & Reel† Pricing 2,500
SCRs — Non-Sensitive Gate (1.0-70 Amp) cont.																	
10.0	400	TO-251AA (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S4010V-ND	.86	.76	.69	.57	.50	.48	—
	600									S6010V-ND	.92	.82	.74	.62	.54	.52	—
	800									S8010V-ND	.97	.86	.78	.65	.56	.54	—
	200	TO-252AA (Non-Isolated)	1	15	.01	1.6	1.5	0.5	2.0	S2010DCT-ND*	1.56	1.28	1.08	.92	.84	.70	680.00/M
	400									S4010DCT-ND*	1.64	1.35	1.14	.97	.89	.74	714.00/M
	600									S6010DCT-ND*	1.76	1.44	1.22	1.04	.95	.79	765.00/M
	800									S8010DCT-ND*	1.87	1.54	1.30	1.11	1.01	.84	816.00/M
12.0	400	TO-220AB (Non-Isolated)	1	20	.01	1.6	1.5	0.5	2.0	S4012R-ND	1.19	1.06	.96	.80	.69	.67	—
	600									S6012R-ND	1.26	1.12	1.01	.84	.73	.70	—
	200	TO-251AA (Non-Isolated)	1	20	.01	1.6	1.5	0.5	2.0	S2012V-ND	.83	.74	.67	.56	.49	.47	—
	400									S4012V-ND	.90	.80	.72	.60	.52	.50	—
	600									S6012V-ND	.95	.84	.76	.63	.55	.53	—
	800									S8012V-ND	1.01	.90	.81	.68	.59	.57	—
	200	TO-252AA (Non-Isolated)	1	20	.01	1.6	1.5	0.5	2.0	S2012DCT-ND*	1.60	1.32	1.11	.95	.87	.72	697.00/M
	400									S4012DCT-ND*	1.72	1.41	1.19	1.02	.93	.77	748.00/M
	600									S6012DCT-ND*	1.83	1.51	1.27	1.09	.99	.83	799.00/M
	800									S8012DCT-ND*	1.95	1.60	1.35	1.15	1.05	.88	850.00/M
15.0	400	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.6	2.0	S4015L-ND	1.35	1.20	1.08	.90	.78	.75	—
	600									S6015L-ND	1.44	1.28	1.16	.96	.84	.80	—
20.0	400	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.5	2.0	S4020L-ND	1.55	1.38	1.25	1.04	.90	.87	—
	600									S6020L-ND	1.64	1.46	1.32	1.10	.95	.92	—
25.0	400	TO-220AB (Isolated)	1	30	.01	1.6	1.5	0.5	2.0	S4025L-ND	1.82	1.62	1.46	1.22	1.06	1.02	—
	600									S6025L-ND	1.94	1.72	1.55	1.29	1.12	1.08	—
55.0	400	TO-218 (Non-Isolated)	5	40	.01	1.8	1.5	0.8	2.5	S4055W-ND	4.37	3.88	3.50	2.91	2.53	2.43	—
	600									S6055W-ND	4.66	4.14	3.73	3.11	2.70	2.59	—
65.0	400	TO-218 (Isolated)	5	50	.02	1.8	2.0	1.0	2.5	S4065J-ND	6.48	5.76	5.19	4.32	3.75	3.60	—
	600									S6065J-ND	6.91	6.14	5.53	4.61	4.00	3.84	—
70.0	400	TO-218 (Non-Isolated)	5	50	.02	1.8	2.0	1.0	2.5	S4070W-ND	6.03	5.36	4.83	4.02	3.49	3.35	—
	600									S6070W-ND	6.41	5.70	5.13	4.28	3.71	3.57	—

* Cut Tape † For Tape and Reel Part Number, change CT-ND to TR-ND

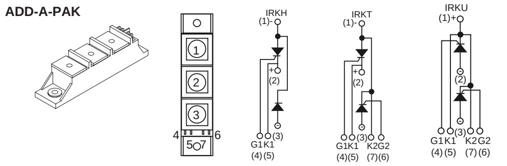
Sensitive Gate Surface Mount SCRs

I_T RMS (A)	V_{DRM} & V_{RRM} (V)	Package	I_{GT} (µA)	I_{DRM} & I_{RRM} @25°C (µA)	V_{TM} @25°C (V)	V_{GT} @25°C (V)	I_H (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	250	Digi-Key Part No.	Tape & Reel Pricing 2,500
0.8	200	COMPAK	200	2.0	1.7	0.8	5.0	S2SCT-ND	.90	.74	.63	.53	S2STR-ND	391.00/M
	400							S4SCT-ND	.98	.80	.68	.58	S4STR-ND	425.00/M
	600							S6SCT-ND	1.21	1.00	.84	.72	S6STR-ND	527.00/M
	200	COMPAK	50	2.0	1.7	0.8	5.0	S2S2CT-ND	1.01	.84	.71	.60	S2S2TR-ND	442.00/M
	400							S4S2CT-ND	1.09	.90	.76	.65	S4S2TR-ND	476.00/M
	600							S6S2CT-ND	1.37	1.12	.95	.81	S6S2TR-ND	595.00/M

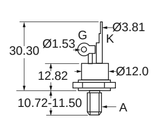


International IOR Rectifier SCRs

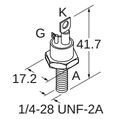
ADD-A-PAK



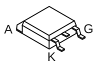
TO-208AA



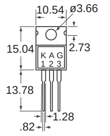
TO-65



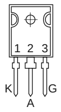
D2PAK



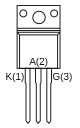
TO-220AC



TO-247AC

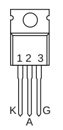


TO-220 FULLPAK

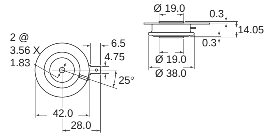


V_{DRM} & Volts Min.	I_T (av) Amps Max.@85°C	Package	V_{GT} Volts Max.	I_{GT} mA Max.	V_{TM} Comp.(a) Volts Max.	DV/DT V/us Max.	Digi-Key Part No.	Price Each 1	10	100
800	95	ADD-A-PAK	2.5	150	1.58	500	IRKU91/08A-ND	38.53	30.82	26.97
1200	95		2.5	150	1.58	500	IRKH91/12A-ND	52.22	41.78	33.42
1200	95		2.5	150	1.58	500	IRKT91/12A-ND	53.77	43.02	34.41
1200	95		2.5	150	1.58	500	IRKU91/12A-ND	38.58	30.86	27.78
25	16	TO-208AA	2.0	40	2	100	2N681-ND	9.68	7.74	5.81
1000	16		2.0	60	1.75	300	16RIA100-ND	17.93	14.34	9.54
600	50	TO-65	2.5	100	1.6	500	50RIA60-ND	20.25	16.20	10.77
1200	50		2.5	100	1.6	500	50RIA120-ND	28.63	22.90	15.23
800	6.5	D2PAK	1.0	15	1.15	150	10TTS08S-ND *NEW!*	1.37	.72	.65
800	6.5		1.0	15	1.15	150	12TTS08S-ND *NEW!*	2.39	1.68	1.27
800	10		2.0	60	1.4	500	16TTS08S-ND	3.05	2.44	1.95
800	10		2.0	60	1.4	500	16TTS08-ND	2.84	2.28	1.82
1200	10		3.0	90	1.4	500	16TTS12S-ND	2.54	2.04	1.53
800	16		2.0	45	1.25	500	25TTS08S-ND	3.31	2.65	2.12
800	16		2.0	45	1.25	500	25TTS08-ND	2.75	2.20	1.99
1200	16		2.0	45	1.25	500	25TTS12S-ND	2.97	2.38	1.79
800	6.5	TO-220AC	1.0	15	1.15	150	10TTS08-ND *NEW!*	1.37	.72	.65
800	8		1.0	15	1.2	150	12TTS08-ND *NEW!*	2.39	1.68	1.27
800	20	TO-247AC	2.0	45	1.3	500	30TPS08-ND	2.00	1.61	1.21
1200	20		2.0	45	1.3	500	30TPS12-ND	2.25	1.80	1.35
800	35		2.5	150	1.85	1000	40TPS08-ND	4.00	3.20	2.30
800	35		2.5	150	1.85	1000	40TPS08A-ND *NEW!*	4.48	3.20	2.60
1200	35		2.5	150	1.85	1000	40TPS12-ND	5.00	4.00	2.53
1200	35		2.5	150	1.85	1000	40TPS12A-ND *NEW!*	5.50	3.80	3.20
800	10	TO-220 FULLPAK	3.0	90	1.4	500	16TTS08FP-ND	2.34	1.88	1.41
800	16		2.0	45	1.25	500	25TTS08FP-ND	2.74	1.90	1.51
1200	16		2.0	45	1.25	500	25TTS12FP-ND	3.13	2.51	1.88
1200	10	TO-220AB	2.0	60	1.4	500	16TTS12-ND	2.75	2.20	1.99
1200	16		2.0	45	1.25	500	25TTS12-ND	3.23	2.58	2.19
800	350	A-PUK	3.0	150	1.96	500	ST180C08C0-ND *NEW!*	68.15	54.52	34.08
800	410	A-PUK	3.0	150	1.69	500	ST230C08C0-ND *NEW!*	71.73	57.38	35.86
2000	1650	K-PUK	3.0	200	1.73	500	ST1200C20K0-ND *NEW!*	357.75	286.20	178.88
100	16	TO-48	2.0	40	2	100+	2N683-ND *NEW!*	9.50	7.60	5.05
200	16	TO-48	2.0	60	1.75	100	16RIA20-ND *NEW!*	11.15	8.92	5.93
200	16	TO-48	2.0	40	2	100+	2N685-ND *NEW!*	10.00	8.00	5.32
800	180	TO-93	2.5	150	1.35	500	180RKI80-ND *NEW!*	74.80	59.84	38.00
600	280	TO-93	3.0	150	1.28	500	ST280S06P0V-ND *NEW!*	93.15	74.52	46.58

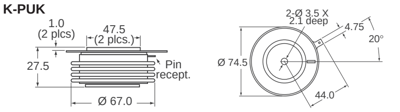
TO-220 AB



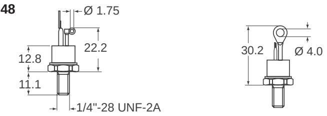
A-PUK



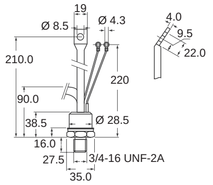
K-PUK



TO-48



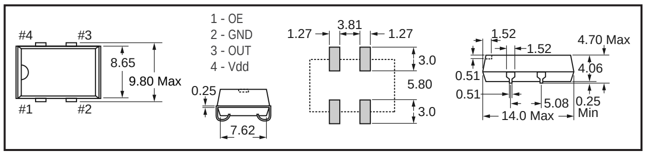
TO-93



CITIZEN™ Oscillators

CMX309F Series Oscillators

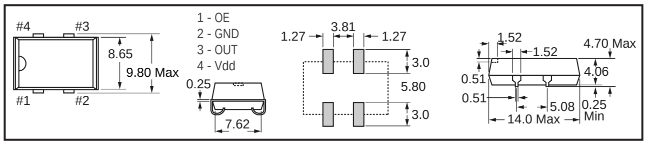
SPECIFICATIONS: • **Frequency Stability:** ±100ppm (-10°C to +70°C) • **Operating Temperature Range:** -10°C to +70°C • **Storage Temperature Range:** -55° C to +125°C • **Supply Voltage:** V_{DD}: 5.0V ±0.5V • **Supply Current:** 23mA Max. • **Duty:** TTL Level (1.4V): 45% to 55% • CMOS Level (V_{DD}/2): 40% to 60% • **Output Voltage:** V_{OH}: V_{DD} - 0.4V Min.; V_{OL}: 0.4V Max. • **Output Load:** TTL: 10TTL Max.; CMOS: 50pF Max. • **Rise & Fall Time:** TTL: tr,tf : 8nsec Max.; CMOS: tr,tf : 8nsec Max. • **Start-up Time:** 4msec Max. • **Input (OE) Voltage:** V_{IH}: 2.0V Min.; V_{IL}: 0.8V Max. • **Disable Current:** 12mA Max. • **Aging (first year):** ±5ppm/year Max.



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T & R Pricing	Citizen Part No.
		1	10	50		1,000	
1.544	300-7001-1-ND	3.00	2.80	1.80	300-7001-2-ND	1328.00	CMX309FLC1.544MT
1.8432	300-7002-1-ND	3.00	2.80	1.80	300-7002-2-ND	1328.00	CMX309FLC1.8432MT
2.000	300-7003-1-ND	3.00	2.80	1.80	300-7003-2-ND	1328.00	CMX309FLC2.000MT
2.048	300-7004-1-ND	3.00	2.80	1.80	300-7004-2-ND	1328.00	CMX309FLC2.048MT
2.4576	300-7005-1-ND	3.00	2.80	1.80	300-7005-2-ND	1328.00	CMX309FLC2.4576MT
3.072	300-7006-1-ND	3.00	2.80	1.80	300-7006-2-ND	1328.00	CMX309FLC3.072MT
3.579545	300-7007-1-ND	3.00	2.80	1.80	300-7007-2-ND	1328.00	CMX309FLC3.579545MT
3.6864	300-7008-1-ND	3.00	2.80	1.80	300-7008-2-ND	1328.00	CMX309FLC3.6864MT
4.000	300-7009-1-ND	3.00	2.80	1.80	300-7009-2-ND	1328.00	CMX309FLC4.000MT
4.096	300-7010-1-ND	3.00	2.80	1.80	300-7010-2-ND	1328.00	CMX309FLC4.096MT
4.9152	300-7011-1-ND	3.00	2.80	1.80	300-7011-2-ND	1328.00	CMX309FLC4.9152MT
5.000	300-7012-1-ND	3.00	2.80	1.80	300-7012-2-ND	1328.00	CMX309FLC5.000MT
6.000	300-7013-1-ND	3.00	2.80	1.80	300-7013-2-ND	1328.00	CMX309FLC6.000MT
6.144	300-7014-1-ND	3.00	2.80	1.80	300-7014-2-ND	1328.00	CMX309FLC6.144MT
7.3728	300-7015-1-ND	3.00	2.80	1.80	300-7015-2-ND	1328.00	CMX309FLC7.3728MT
8.000	300-7016-1-ND	3.00	2.80	1.80	300-7016-2-ND	1328.00	CMX309FLC8.000MT
8.192	300-7017-1-ND	3.00	2.80	1.80	300-7017-2-ND	1328.00	CMX309FLC8.192MT
9.8304	300-7018-1-ND	3.00	2.80	1.80	300-7018-2-ND	1328.00	CMX309FLC9.8304MT
10.000	300-7019-1-ND	3.00	2.80	1.80	300-7019-2-ND	1328.00	CMX309FLC10.000MT
11.000	300-7021-1-ND	3.00	2.80	1.80	300-7021-2-ND	1328.00	CMX309FLC11.000MT
11.0592	300-7022-1-ND	3.00	2.80	1.80	300-7022-2-ND	1328.00	CMX309FLC11.0592MT
11.2896	300-7023-1-ND	3.00	2.80	1.80	300-7023-2-ND	1328.00	CMX309FLC11.2896MT
12.000	300-7024-1-ND	3.00	2.80	1.80	300-7024-2-ND	1328.00	CMX309FLC12.000MT
12.288	300-7025-1-ND	3.00	2.80	1.80	300-7025-2-ND	1328.00	CMX309FLC12.288MT
12.352	300-7026-1-ND	3.00	2.80	1.80	300-7026-2-ND	1328.00	CMX309FLC12.352MT
13.500	300-7027-1-ND	3.00	2.80	1.80	300-7027-2-ND	1328.00	CMX309FLC13.500MT
14.31818	300-7028-1-ND	3.00	2.80	1.80	300-7028-2-ND	1328.00	CMX309FLC14.31818MT
14.7456	300-7029-1-ND	3.00	2.80	1.80	300-7029-2-ND	1328.00	CMX309FLC14.7456MT
15.360	300-7031-1-ND	3.00	2.80	1.80	300-7031-2-ND	1328.00	CMX309FLC15.360MT
16.000	300-7032-1-ND	3.00	2.80	1.80	300-7032-2-ND	1328.00	CMX309FLC16.000MT
16.384	300-7034-1-ND	3.00	2.80	1.80	300-7034-2-ND	1328.00	CMX309FLC16.384MT
16.6666	300-7035-1-ND	3.00	2.80	1.80	300-7035-2-ND	1328.00	CMX309FLC16.6666MT
17.734475	300-7036-1-ND	3.00	2.80	1.80	300-7036-2-ND	1328.00	CMX309FLC17.734475MT
18.000	300-7037-1-ND	3.00	2.80	1.80	300-7037-2-ND	1328.00	CMX309FLC18.000MT
18.432	300-7038-1-ND	3.00	2.80	1.80	300-7038-2-ND	1328.00	CMX309FLC18.432MT
19.6608	300-7039-1-ND	3.00	2.80	1.80	300-7039-2-ND	1328.00	CMX309FLC19.6608MT
20.000	300-7040-1-ND	3.00	2.80	1.80	300-7040-2-ND	1328.00	CMX309FLC20.000MT
22.1184	300-7041-1-ND	3.00	2.80	1.80	300-7041-2-ND	1328.00	CMX309FLC22.1184MT
24.000	300-7042-1-ND	3.00	2.80	1.80	300-7042-2-ND	1360.00	CMX309FLC24.000MT
24.576	300-7043-1-ND	3.00	2.80	1.80	300-7043-2-ND	1328.00	CMX309FLC24.576MT
25.000	300-7044-1-ND	3.00	2.80	1.80	300-7044-2-ND	1328.00	CMX309FLC25.000MT
25.175	300-7045-1-ND	3.00	2.80	1.80	300-7045-2-ND	1328.00	CMX309FLC25.175MT
27.000	300-7046-1-ND	3.00	2.80	1.80	300-7046-2-ND	1328.00	CMX309FLC27.000MT
28.322	300-7047-1-ND	3.00	2.80	1.80	300-7047-2-ND	1328.00	CMX309FLC28.322MT
28.63636	300-7048-1-ND	3.00	2.80	1.80	300-7048-2-ND	1328.00	CMX309FLC28.63636MT
29.498928	300-7049-1-ND	3.00	2.80	1.80	300-7049-2-ND	1328.00	CMX309FLC29.498928MT
30.000	300-7050-1-ND	3.00	2.80	1.80	300-7050-2-ND	1328.00	CMX309FLC30.000MT

CMX309H Series Oscillators

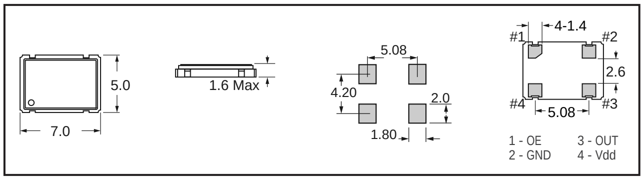
SPECIFICATIONS: • **Frequency Stability:** ±100ppm (-10°C to +70°C) • **Operating Temperature Range:** -10°C to +70°C • **Storage Temperature Range:** -55° C to +125°C • **Supply Voltage:** V_{DD}: 5.0V ±0.5V • **Supply Current:** 35mA Max. • **Duty:** TTL Level (1.4V): 45% to 55% • CMOS Level (V_{DD}/2): 40% to 60% • **Output Voltage:** V_{OH}: V_{DD} - 0.5V Min.; V_{OL}: 0.5V Max. • **Output Load:** TTL: 10TTL Max.; CMOS: 50pF Max. • **Rise & Fall Time:** TTL: tr,tf : 5nsec Max.; CMOS: tr,tf : 7nsec Max. • **Start-up Time:** 10msec Max. • **Input (OE) Voltage:** V_{IH}: 2.0V Min.; V_{IL}: 0.8V Max. • **Disable Current:** 28mA Max. • **Aging (first year):** ±5ppm/year Max.



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T & R Pricing	Citizen Part No.
		1	10	50		1,000	
32.000	300-7101-1-ND	3.00	2.80	1.80	300-7101-2-ND	1328.00	CMX309HWC32.000MT
32.768	300-7102-1-ND	3.00	2.80	1.80	300-7102-2-ND	1328.00	CMX309HWC32.768MT
33.000	300-7103-1-ND	3.00	2.80	1.80	300-7103-2-ND	1328.00	CMX309HWC33.000MT
33.3333	300-7104-1-ND	3.00	2.80	1.80	300-7104-2-ND	1328.00	CMX309HWC33.3333MT
33.8688	300-7105-1-ND	3.00	2.80	1.80	300-7105-2-ND	1328.00	CMX309HWC33.8688MT
40.000	300-7107-1-ND	3.00	2.80	1.80	300-7107-2-ND	1328.00	CMX309HWC40.000MT
44.2368	300-7108-1-ND	3.00	2.80	1.80	300-7108-2-ND	1328.00	CMX309HWC44.2368MT
48.000	300-7109-1-ND	3.00	2.80	1.80	300-7109-2-ND	1328.00	CMX309HWC48.000MT
49.152	300-7110-1-ND	3.00	2.80	1.80	300-7110-2-ND	1328.00	CMX309HWC49.152MT
50.000	300-7111-1-ND	3.19	2.98	1.92	300-7111-2-ND	1411.00	CMX309HWC50.000MT
53.125	300-7112-1-ND	3.00	2.80	1.80	300-7112-2-ND	1328.00	CMX309HWC53.125MT
60.000	300-7113-1-ND	3.00	2.80	1.80	300-7113-2-ND	1328.00	CMX309HWC60.000MT
64.000	300-7114-1-ND	3.00	2.80	1.80	300-7114-2-ND	1328.00	CMX309HWC64.000MT
66.000	300-7115-1-ND	3.00	2.80	1.80	300-7115-2-ND	1328.00	CMX309HWC66.000MT
66.6667	300-7116-1-ND	3.00	2.80	1.80	300-7116-2-ND	1328.00	CMX309HWC66.6667MT

CSX750PCC Series Oscillators

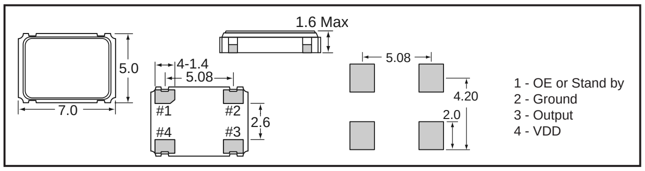
SPECIFICATIONS: • **Frequency Stability:** ±100ppm (-20°C to +70°C) • **Operating Temperature Range:** -20°C to +70°C • **Storage Temperature Range:** -55° C to +125°C • **Supply Voltage:** V_{DD}: 5.0V ±0.5V • **Supply Current:** 45mA Max. • **Duty:** CMOS Level (V_{DD}/2): 45% to 55% • **Output Voltage:** V_{OH}: V_{DD} -0.4V Min.; V_{OL}: 0.4V Max. • **Output Load:** CMOS: 25pF Max. • **Rise & Fall Time:** CMOS: tr,tf : 4nsec Max. • **Start-up Time:** 10msec Max. • **Input (OE) Voltage:** V_{IH}: 2.0V Min.; V_{IL}: 0.8V Max. • **Disable Current:** 30mA Max. • **Stand-by Current:** 50µA Max.



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T & R Pricing	Citizen Part No.
		1	10	50		2,000	
1.5440	300-8001-1-ND	4.13	3.85	3.30	300-8001-2-ND	1540.00/M	CSX750PCC1.5440MT
1.8432	300-8002-1-ND	4.13	3.85	3.30	300-8002-2-ND	1540.00/M	CSX750PCC1.8432MT
3.6864	300-8003-1-ND	4.13	3.85	3.30	300-8003-2-ND	1540.00/M	CSX750PCC3.6864MT
4.0000	300-8004-1-ND	4.13	3.85	3.30	300-8004-2-ND	1540.00/M	CSX750PCC4.0000MT
6.1760	300-8005-1-ND	4.13	3.85	3.30	300-8005-2-ND	1540.00/M	CSX750PCC6.1760MT
7.3728	300-8006-1-ND	4.13	3.85	3.30	300-8006-2-ND	1540.00/M	CSX750PCC7.3728MT
8.0000	300-8007-1-ND	4.13	3.85	3.30	300-8007-2-ND	1540.00/M	CSX750PCC8.0000MT
10.0000	300-8008-1-ND	4.13	3.85	3.30	300-8008-2-ND	1540.00/M	CSX750PCC10.0000MT
12.0000	300-8009-1-ND	4.13	3.85	3.30	300-8009-2-ND	1540.00/M	CSX750PCC12.0000MT
12.2880	300-8010-1-ND	4.13	3.85	3.30	300-8010-2-ND	1540.00/M	CSX750PCC12.2880MT
12.3520	300-8011-1-ND	4.13	3.85	3.30	300-8011-2-ND	1540.00/M	CSX750PCC12.3520MT
14.31818	300-8012-1-ND	4.13	3.85	3.30	300-8012-2-ND	1540.00/M	CSX750PCC14.31818MT
15.3600	300-8013-1-ND	4.13	3.85	3.30	300-8013-2-ND	1540.00/M	CSX750PCC15.3600MT
16.0000	300-8014-1-ND	4.13	3.85	3.30	300-8014-2-ND	1540.00/M	CSX750PCC16.0000MT
16.3840	300-8015-1-ND	4.13	3.85	3.30	300-8015-2-ND	1540.00/M	CSX750PCC16.3840MT
18.4320	300-8016-1-ND	4.13	3.85	3.30	300-8016-2-ND	1540.00/M	CSX750PCC18.4320MT
19.4400	300-8017-1-ND	4.13	3.85	3.30	300-8017-2-ND	1540.00/M	CSX750PCC19.4400MT
20.0000	300-8018-1-ND	4.13	3.85	3.30	300-8018-2-ND	1540.00/M	CSX750PCC20.0000MT
24.0000	300-8019-1-ND	4.13	3.85	3.30	300-8019-2-ND	1540.00/M	CSX750PCC24.0000MT
24.7040	300-8020-1-ND	4.13	3.85	3.30	300-8020-2-ND	1540.00/M	CSX750PCC24.7040MT
25.0000	300-8021-1-ND	4.13	3.85	3.30	300-8021-2-ND	1540.00/M	CSX750PCC25.0000MT
29.4912	300-8022-1-ND	4.13	3.85	3.30	300-8022-2-ND	1540.00/M	CSX750PCC29.4912MT
30.0000	300-8023-1-ND	4.13	3.85	3.30	300-8023-2-ND	1540.00/M	CSX750PCC30.0000MT
32.0000	300-8024-1-ND	4.13	3.85	3.30	300-8024-2-ND	1540.00/M	CSX750PCC32.0000MT
32.7680	300-8025-1-ND	4.13	3.85	3.30	300-8025-2-ND	1540.00/M	CSX750PCC32.7680MT
33.3330	300-8026-1-ND	4.13	3.85	3.30	300-8026-2-ND	1540.00/M	CSX750PCC33.3330MT
40.0000	300-8027-1-ND	4.13	3.85	3.30	300-8027-2-ND	1540.00/M	CSX750PCC40.0000MT
44.7360	300-8028-1-ND	4.13	3.85	3.30	300-8028-2-ND	1540.00/M	CSX750PCC44.7360MT
45.0000	300-8029-1-ND	4.13	3.85	3.30	300-8029-2-ND	1540.00/M	CSX750PCC45.0000MT
49.1520	300-8030-1-ND	4.13	3.85	3.30	300-8030-2-ND	1540.00/M	CSX750PCC49.1520MT
50.0000	300-8031-1-ND	4.50	4.20	3.60	300-8031-2-ND	1680.00/M	CSX750PCC50.0000MT
51.8400	300-8032-1-ND	4.13	3.85	3.30	300-8032-2-ND	1540.00/M	CSX750PCC51.8400MT
60.0000	300-8033-1-ND	4.13	3.85	3.30	300-8033-2-ND	1540.00/M	CSX750PCC60.0000MT
64.0000	300-8034-1-ND	4.13	3.85	3.30	300-8034-2-ND	1540.00/M	CSX750PCC64.0000MT
66.6666	300-8035-1-ND	4.13	3.85	3.30	300-8035-2-ND	1540.00/M	CSX750PCC66.6666MT
72.0000	300-8036-1-ND	4.13	3.85	3.30	300-8036-2-ND	1540.00/M	CSX750PCC72.0000MT
80.0000	300-8037-1-ND	4.13	3.85	3.30	300-8037-2-ND	1540.00/M	CSX750PCC80.0000MT

High Frequency Ceramic Surface Mount Clock Oscillator CSX750A

SPECIFICATIONS: • CSX750AC: 10TTL/30pF, OE, 5.0V operation type • CSX750AB: 15pF, OE, 3.3V operation type • Nominal Frequency: CSX750AC/AB 70.0 to 140.0MHz • Operating Temperature: -20°C to +70°C • Supply Voltage: CSX750AC 5.0 ±0.5V, CSX750AB 3.3 ±0.3V • Frequency Stability: B:±50ppm(-20°C to 70°C) • Current Consumption: 50mA Max (CSX750AC), 30mA Max (CSX750AB) • Duty Cycle: 40% to 60% (TTL level), 45% to 55%(C-MOS level)

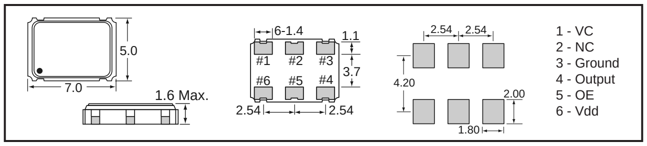


Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T & R Pricing	Citizen Part No.
		1	10	50		2,000	
80.0000	300-8145-1-ND	4.13	3.38	3.00	300-8145-2-ND	2100.00/M	CSX750ACB80.000MTR
100.0000	300-8146-1-ND	4.13	3.38	3.00	300-8146-2-ND	2100.00/M	CSX750ACB100.000MTR
100.0200	300-8147-1-ND	4.13	3.38	3.00	300-8147-2-ND	2100.00/M	CSX750ACB100.020MTR
106.2500	300-8148-1-ND	4.13	3.38	3.00	300-8148-2-ND	2100.00/M	CSX750ACB106.250MTR
125.0000	300-8149-1-ND	4.13	3.38	3.00	300-8149-2-ND	2100.00/M	CSX750ACB125.000MTR
133.3300	300-8150-1-ND	4.13	3.38	3.00	300-8150-2-ND	2100.00/M	CSX750ACB133.330MTR
80.0000	300-8151-1-ND	4.13	3.38	3.00	300-8151-2-ND	2100.00/M	CSX750ABB80.000MTR
100.0000	300-8152-1-ND	4.13	3.38	3.00	300-8152-2-ND	2100.00/M	CSX750ABB100.000MTR
100.0200	300-8153-1-ND	4.13	3.38	3.00	300-8153-2-ND	2100.00/M	CSX750ABB100.020MTR
106.2500	300-8154-1-ND	4.13	3.38	3.00	300-8154-2-ND	2100.00/M	CSX750ABB106.250MTR
125.0000	300-8155-1-ND	4.13	3.38	3.00	300-8155-2-ND	2100.00/M	CSX750ABB125.000MTR
133.3300	300-8156-1-ND	4.13	3.38	3.00	300-8156-2-ND	2100.00/M	CSX750ABB133.330MTR

CITIZEN™ Oscillators

Voltage Controlled Crystal Oscillator CSX750V

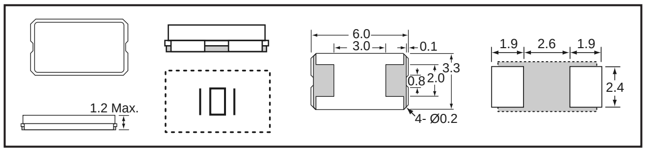
SPECIFICATIONS: • CSX750VC: 2TTL/30pF, OE<pin#5>, ±100ppm Pullability, 5.0V operation type • CSX750VB: 30pF, OE<pin#5>, ±90ppm Pullability, 3.3V operation type • Nominal Frequency: CSX750AC/AB 2.430 to 35.328MHz • Operating Temperature: -20°C to +70°C • Supply Voltage: CSX750VC 5.0 ±0.5V, CSX750VB 3.3 ±0.3V • Frequency Stability: B:±50ppm(-20°C to 70°C) • Current Consumption: 30mA Max. (CSX750VC), 11mA Max. (CSX750VB) • Duty Cycle: 40% to 60% (TTL level), 45% to 55% (C-MOS level) • Pullability: ±100ppm Min./Vc=2.5V±2.0V, ±90ppm Min./1.65V±1.65V • Modulation Band Width: 10kHz Min./gain-3dB • Phase Noise: -120dBc/Hz Max./offset 1KHz



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 2,000	Citizen Part No.
4.0960	300-8157-1-ND	8.25	6.75	6.00	300-8157-2-ND	4200.00/M	CSX750VCBM4.096MTR
8.0000	300-8158-1-ND	8.25	6.75	6.00	300-8158-2-ND	4200.00/M	CSX750VCBM8.000MTR
8.1920	300-8159-1-ND	8.25	6.75	6.00	300-8159-2-ND	4200.00/M	CSX750VCBM8.192MTR
12.2880	300-8160-1-ND	8.25	6.75	6.00	300-8160-2-ND	4200.00/M	CSX750VCBM12.288MTR
12.3520	300-8161-1-ND	8.25	6.75	6.00	300-8161-2-ND	4200.00/M	CSX750VCBM12.352MTR
13.500	300-8162-1-ND	8.25	6.75	6.00	300-8162-2-ND	4200.00/M	CSX750VCBM13.500MTR
16.3840	300-8163-1-ND	8.25	6.75	6.00	300-8163-2-ND	4200.00/M	CSX750VCBM16.384MTR
19.4400	300-8164-1-ND	8.25	6.75	6.00	300-8164-2-ND	4200.00/M	CSX750VCBM19.440MTR
20.0000	300-8165-1-ND	8.25	6.75	6.00	300-8165-2-ND	4200.00/M	CSX750VCBM20.000MTR
24.5760	300-8166-1-ND	8.25	6.75	6.00	300-8166-2-ND	4200.00/M	CSX750VCBM24.576MTR
24.7040	300-8167-1-ND	8.25	6.75	6.00	300-8167-2-ND	4200.00/M	CSX750VCBM24.704MTR
25.0000	300-8168-1-ND	8.25	6.75	6.00	300-8168-2-ND	4200.00/M	CSX750VCBM25.000MTR
27.0000	300-8169-1-ND	8.25	6.75	6.00	300-8169-2-ND	4200.00/M	CSX750VCBM27.000MTR
32.0000	300-8170-1-ND	8.25	6.75	6.00	300-8170-2-ND	4200.00/M	CSX750VCBM32.000MTR
32.7680	300-8171-1-ND	8.25	6.75	6.00	300-8171-2-ND	4200.00/M	CSX750VCBM32.768MTR
35.3280	300-8172-1-ND	8.25	6.75	6.00	300-8172-2-ND	4200.00/M	CSX750VCBM35.328MTR
4.0960	300-8173-1-ND	8.25	6.75	6.00	300-8173-2-ND	4200.00/M	CSX750VBBL4.096MTR
8.0000	300-8174-1-ND	8.25	6.75	6.00	300-8174-2-ND	4200.00/M	CSX750VBBL8.000MTR
8.1920	300-8175-1-ND	8.25	6.75	6.00	300-8175-2-ND	4200.00/M	CSX750VBBL8.192MTR
12.2880	300-8176-1-ND	8.25	6.75	6.00	300-8176-2-ND	4200.00/M	CSX750VBBL12.288MTR
12.3520	300-8177-1-ND	8.25	6.75	6.00	300-8177-2-ND	4200.00/M	CSX750VBBL12.352MTR
13.500	300-8178-1-ND	8.25	6.75	6.00	300-8178-2-ND	4200.00/M	CSX750VBBL13.500MTR
16.3840	300-8179-1-ND	8.25	6.75	6.00	300-8179-2-ND	4200.00/M	CSX750VBBL16.384MTR
19.4400	300-8180-1-ND	8.25	6.75	6.00	300-8180-2-ND	4200.00/M	CSX750VBBL19.440MTR
20.0000	300-8181-1-ND	8.25	6.75	6.00	300-8181-2-ND	4200.00/M	CSX750VBBL20.000MTR
24.5760	300-8182-1-ND	8.25	6.75	6.00	300-8182-2-ND	4200.00/M	CSX750VBBL24.576MTR
24.7040	300-8183-1-ND	8.25	6.75	6.00	300-8183-2-ND	4200.00/M	CSX750VBBL24.704MTR
25.0000	300-8184-1-ND	8.25	6.75	6.00	300-8184-2-ND	4200.00/M	CSX750VBBL25.000MTR
27.0000	300-8185-1-ND	8.25	6.75	6.00	300-8185-2-ND	4200.00/M	CSX750VBBL27.000MTR
32.0000	300-8186-1-ND	8.25	6.75	6.00	300-8186-2-ND	4200.00/M	CSX750VBBL32.000MTR
32.7680	300-8187-1-ND	8.25	6.75	6.00	300-8187-2-ND	4200.00/M	CSX750VBBL32.768MTR
35.3280	300-8188-1-ND	8.25	6.75	6.00	300-8188-2-ND	4200.00/M	CSX750VBBL35.328MTR

Ceramic Surface Mount Crystal CS10

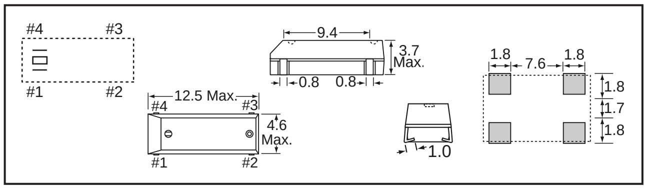
SPECIFICATIONS: • Operating Temperature: -40°C to +85°C • Maximum Drive Level: 50µW Max. • Frequency Tolerance: ±30ppm • Frequency Temperature Characteristics: ±50ppm • Load Capacitance: 18.0pF(J) **ESR:** • 12.0MHz≤f0<14.0MHz 70KΩ Max Fundamental mode • 14.0MHz≤f0<50.0MHz 50KΩ Max Fundamental mode



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 2,000	Citizen Part No.
12.0000	300-8089-1-ND	1.65	1.35	1.20	300-8089-2-ND	840.00/M	CS10-12.000MABJTR
12.2880	300-8090-1-ND	1.65	1.35	1.20	300-8090-2-ND	840.00/M	CS10-12.288MABJTR
12.5000	300-8091-1-ND	1.65	1.35	1.20	300-8091-2-ND	840.00/M	CS10-12.500MABJTR
13.5600	300-8092-1-ND	1.65	1.35	1.20	300-8092-2-ND	840.00/M	CS10-13.560MABJTR
14.31818	300-8093-1-ND	1.65	1.35	1.20	300-8093-2-ND	840.00/M	CS10-14.31818MABJTR
14.7456	300-8094-1-ND	1.65	1.35	1.20	300-8094-2-ND	840.00/M	CS10-14.7456MABJTR
15.3600	300-8095-1-ND	1.65	1.35	1.20	300-8095-2-ND	840.00/M	CS10-15.360MABJTR
16.0000	300-8096-1-ND	1.65	1.35	1.20	300-8096-2-ND	840.00/M	CS10-16.000MABJTR
16.3840	300-8097-1-ND	1.65	1.35	1.20	300-8097-2-ND	840.00/M	CS10-16.384MABJTR
18.4320	300-8098-1-ND	1.65	1.35	1.20	300-8098-2-ND	840.00/M	CS10-18.432MABJTR
19.6608	300-8100-1-ND	1.65	1.35	1.20	300-8100-2-ND	840.00/M	CS10-19.6608MABJTR
20.0000	300-8101-1-ND	1.65	1.35	1.20	300-8101-2-ND	840.00/M	CS10-20.000MABJTR
22.1184	300-8102-1-ND	1.65	1.35	1.20	300-8102-2-ND	840.00/M	CS10-22.1184MABJTR
24.0000	300-8103-1-ND	1.65	1.35	1.20	300-8103-2-ND	840.00/M	CS10-24.000MABJTR
24.5760	300-8104-1-ND	1.65	1.35	1.20	300-8104-2-ND	840.00/M	CS10-24.576MABJTR
25.0000	300-8105-1-ND	1.65	1.35	1.20	300-8105-2-ND	840.00/M	CS10-25.000MABJTR
27.0000	300-8106-1-ND	1.65	1.35	1.20	300-8106-2-ND	840.00/M	CS10-27.000MABJTR
28.63636	300-8107-1-ND	1.65	1.35	1.20	300-8107-2-ND	840.00/M	CS10-28.63636MABJTR
29.4912	300-8108-1-ND	1.65	1.35	1.20	300-8108-2-ND	840.00/M	CS10-29.4912MABJTR
29.498928	300-8109-1-ND	1.65	1.35	1.20	300-8109-2-ND	840.00/M	CS10-29.498928MABJTR
32.0000	300-8110-1-ND	1.65	1.35	1.20	300-8110-2-ND	840.00/M	CS10-32.000MABJTR
33.0000	300-8112-1-ND	1.65	1.35	1.20	300-8112-2-ND	840.00/M	CS10-33.000MABJTR
40.0000	300-8114-1-ND	1.65	1.35	1.20	300-8114-2-ND	840.00/M	CS10-40.000MABJTR
48.0000	300-8115-1-ND	1.65	1.35	1.20	300-8115-2-ND	840.00/M	CS10-48.000MABJTR

Plastic Surface Mount Crystal CM309S

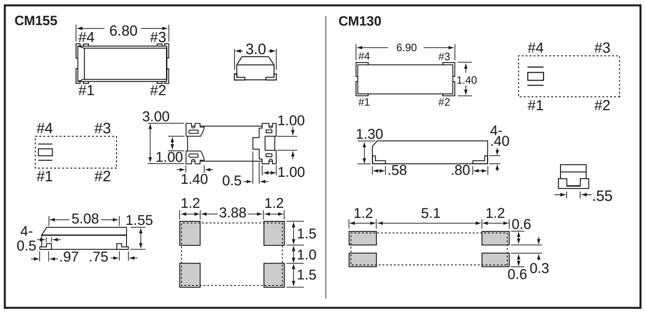
SPECIFICATIONS: • Operating Temperature: -40°C to +85°C • Maximum Drive Level: 100µW Max. • Frequency Tolerance: ±30ppm • Frequency Temperature Characteristics: ±50ppm • Load Capacitance: 18.0pF **ESR:** • 3.5MHz≤f0<4MHz 200KΩ Max. Fundamental mode • 4MHz≤f0<6MHz 150KΩ Max. Fundamental mode • 6MHz≤f0<10MHz 100Ω Max Fundamental mode • 10MHz≤f0<32MHz 50Ω Max. Fundamental mode • 30MHz≤f0<36MHz 100Ω Max. 3rd overtone mode • 36MHz≤f0<70MHz 60Ω Max. 3rd overtone mode



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 1,000	Citizen Part No.
3.579545	300-8040-1-ND	1.10	.90	.80	300-8040-2-ND	560.00	CM309S3.579545MABJTR
3.6864	300-8041-1-ND	1.10	.90	.80	300-8041-2-ND	664.00	CM309S3.6864MABJTR
4.0000	300-8042-1-ND	1.10	.90	.80	300-8042-2-ND	664.00	CM309S4.000MABJTR
4.0960	300-8043-1-ND	1.10	.90	.80	300-8043-2-ND	664.00	CM309S4.096MABJTR
4.9152	300-8044-1-ND	1.10	.90	.80	300-8044-2-ND	664.00	CM309S4.9152MABJTR
6.0000	300-8045-1-ND	1.10	.90	.80	300-8045-2-ND	664.00	CM309S6.000MABJTR
6.1440	300-8046-1-ND	1.10	.90	.80	300-8046-2-ND	664.00	CM309S6.144MABJTR
7.3728	300-8047-1-ND	1.10	.90	.80	300-8047-2-ND	664.00	CM309S7.3728MABJTR
7.6800	300-8048-1-ND	1.10	.90	.80	300-8048-2-ND	664.00	CM309S7.680MABJTR
8.0000	300-8049-1-ND	1.10	.90	.80	300-8049-2-ND	664.00	CM309S8.000MABJTR
9.8300	300-8050-1-ND	1.10	.90	.80	300-8050-2-ND	664.00	CM309S9.830MABJTR
10.0000	300-8051-1-ND	1.10	.90	.80	300-8051-2-ND	664.00	CM309S10.000MABJTR
10.2400	300-8052-1-ND	1.10	.90	.80	300-8052-2-ND	664.00	CM309S10.240MABJTR
11.0592	300-8053-1-ND	1.10	.90	.80	300-8053-2-ND	664.00	CM309S11.0592MABJTR
11.2896	300-8054-1-ND	1.10	.90	.80	300-8054-2-ND	664.00	CM309S11.2896MABJTR
12.0000	300-8055-1-ND	1.10	.90	.80	300-8055-2-ND	664.00	CM309S12.000MABJTR
12.2880	300-8056-1-ND	1.10	.90	.80	300-8056-2-ND	664.00	CM309S12.288MABJTR
14.31818	300-8057-1-ND	1.10	.90	.80	300-8057-2-ND	664.00	CM309S14.31818MABJTR
14.7456	300-8058-1-ND	1.10	.90	.80	300-8058-2-ND	664.00	CM309S14.7456MABJTR
15.0000	300-8059-1-ND	1.10	.90	.80	300-8059-2-ND	664.00	CM309S15.000MABJTR
15.3600	300-8060-1-ND	1.10	.90	.80	300-8060-2-ND	664.00	CM309S15.360MABJTR
16.0000	300-8061-1-ND	1.10	.90	.80	300-8061-2-ND	664.00	CM309S16.000MABJTR
16.6660	300-8062-1-ND	1.10	.90	.80	300-8062-2-ND	664.00	CM309S16.666MABJTR
18.4320	300-8063-1-ND	1.10	.90	.80	300-8063-2-ND	664.00	CM309S18.432MABJTR
19.4400	300-8064-1-ND	1.10	.90	.80	300-8064-2-ND	664.00	CM309S19.440MABJTR
19.6608	300-8065-1-ND	1.10	.90	.80	300-8065-2-ND	664.00	CM309S19.6608MABJTR
20.0000	300-8066-1-ND	1.10	.90	.80	300-8066-2-ND	664.00	CM309S20.000MABJTR
20.4800	300-8067-1-ND	1.10	.90	.80	300-8067-2-ND	664.00	CM309S20.480MABJTR
22.1184	300-8068-1-ND	1.10	.90	.80	300-8068-2-ND	664.00	CM309S22.1184MABJTR
24.0000	300-8069-1-ND	1.10	.90	.80	300-8069-2-ND	664.00	CM309S24.000MABJTR
25.0000	300-8071-1-ND	1.10	.90	.80	300-8071-2-ND	664.00	CM309S25.000MABJTR
27.0000	300-8072-1-ND	1.10	.90	.80	300-8072-2-ND	664.00	CM309S27.000MABJTR
28.63636	300-8073-1-ND	1.10	.90	.80	300-8073-2-ND	664.00	CM309S28.63636MABJTR
29.4912	300-8074-1-ND	1.10	.90	.80	300-8074-2-ND	664.00	CM309S29.4912MABJTR
30.0000	300-8075-1-ND	1.10	.90	.80	300-8075-2-ND	664.00	CM309S30.000MABJTR
32.0000	300-8076-1-ND	1.10	.90	.80	300-8076-2-ND	664.00	CM309S32.000MABJTR
32.7680	300-8077-1-ND	1.10	.90	.80	300-8077-2-ND	664.00	CM309S32.768MABJTR
33.0000	300-8078-1-ND	1.10	.90	.80	300-8078-2-ND	664.00	CM309S33.000MABJTR
33.3333	300-8079-1-ND	1.10	.90	.80	300-8079-2-ND	664.00	CM309S33.3333MABJTR
36.0000	300-8080-1-ND	1.10	.90	.80	300-8080-2-ND	664.00	CM309S36.000MABJTR
40.0000	300-8081-1-ND	1.10	.90	.80	300-8081-2-ND	664.00	CM309S40.000MABJTR
48.0000	300-8082-1-ND	1.10	.90	.80	300-8082-2-ND	664.00	CM309S48.000MABJTR
49.9152	300-8083-1-ND	1.10	.90	.80	300-8083-2-ND	664.00	CM309S49.152MABJTR
50.0000	300-8084-1-ND	1.10	.90	.80	300-8084-2-ND	664.00	CM309S50.000MABJTR
53.1250	300-8085-1-ND	1.10	.90	.80	300-8085-2-ND	664.00	CM309S53.125MABJTR
60.0000	300-8086-1-ND	1.10	.90	.80	300-8086-2-ND	664.00	CM309S60.000MABJTR
64.0000	300-8087-1-ND	1.10	.90	.80	300-8087-2-ND	664.00	CM309S64.000MABJTR
66.6666	300-8088-1-ND	1.10	.90	.80	300-8088-2-ND	664.00	CM309S66.6666MABJTR

Miniature Plastic Surface Mount 32.768KHz Crystal CM155 and CM130

SPECIFICATIONS: • Nominal Frequency: 32.768KHz • Operating Temperature: -40°C to +85°C • Maximum Drive Level: 1.0µW Max. • Frequency Tolerance: ±20ppm • Load Capacitance: 12.5pF **ESR:** 65KΩ Max.



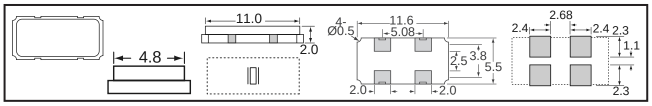
Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 3,000	Citizen Part No.
32.768	300-8038-1-ND	1.24	1.02	.90	300-8038-2-ND	819.00/M	CM155-32.768KDZFTR
32.768	300-8039-1-ND	1.79	1.47	1.30	300-8039-2-ND	1183.00/M	CM130-32.768KDZFTR

CITIZEN™ Ceramic Surface Mount Crystal CS20

SPECIFICATIONS:

• Operating Temperature: -40°C to +85°C • Maximum Drive Level: 100µW Max • Frequency Tolerance: ±30ppm • Frequency Temperature Characteristics: ±50ppm • Load Capacitance: 18.0pF(J)

ESR:
- 3.5MHz≤f0<4MHz 200KΩ Max Fundamental mode
- 4MHz≤f0<6MHz 150KΩ Max Fundamental mode
- 6MHz≤f0<10MHz 100Ω Max Fundamental mode
- 10MHz≤f0<14MHz 80Ω Max Fundamental mode
- 14MHz≤f0<30MHz 50Ω Max Fundamental mode



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 2,000	Citizen Part No.
3.579545	300-8116-1-ND	1.32	1.08	.96	300-8116-2-ND	672.00/M	CS20-3.579545MABJTR
3.6864	300-8117-1-ND	1.32	1.08	.96	300-8117-2-ND	672.00/M	CS20-3.6864MABJTR
4.0000	300-8118-1-ND	1.32	1.08	.96	300-8118-2-ND	672.00/M	CS20-4.000MABJTR
4.0960	300-8119-1-ND	1.32	1.08	.96	300-8119-2-ND	672.00/M	CS20-4.096MABJTR
4.9152	300-8120-1-ND	1.32	1.08	.96	300-8120-2-ND	672.00/M	CS20-4.9152MABJTR
5.0000	300-8121-1-ND	1.32	1.08	.96	300-8121-2-ND	672.00/M	CS20-5.000MABJTR
6.0000	300-8122-1-ND	1.32	1.08	.96	300-8122-2-ND	672.00/M	CS20-6.000MABJTR
6.1440	300-8123-1-ND	1.32	1.08	.96	300-8123-2-ND	672.00/M	CS20-6.144MABJTR
7.3728	300-8124-1-ND	1.32	1.08	.96	300-8124-2-ND	672.00/M	CS20-7.3728MABJTR
7.6800	300-8125-1-ND	1.32	1.08	.96	300-8125-2-ND	672.00/M	CS20-7.680MABJTR
8.0000	300-8126-1-ND	1.32	1.08	.96	300-8126-2-ND	672.00/M	CS20-8.000MABJTR
10.0000	300-8127-1-ND	1.32	1.08	.96	300-8127-2-ND	672.00/M	CS20-10.000MABJTR
11.0592	300-8128-1-ND	1.32	1.08	.96	300-8128-2-ND	672.00/M	CS20-11.0592MABJTR
11.2896	300-8129-1-ND	1.32	1.08	.96	300-8129-2-ND	672.00/M	CS20-11.2896MABJTR
12.0000	300-8130-1-ND	1.32	1.08	.96	300-8130-2-ND	672.00/M	CS20-12.000MABJTR

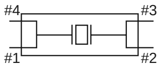
Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	T & R Pricing 2,000	Citizen Part No.
12.2880	300-8131-1-ND	1.32	1.08	.96	300-8131-2-ND	672.00/M	CS20-12.288MABJTR
14.31818	300-8132-1-ND	1.32	1.08	.96	300-8132-2-ND	672.00/M	CS20-14.31818MABJTR
14.7456	300-8133-1-ND	1.32	1.08	.96	300-8133-2-ND	672.00/M	CS20-14.7456MABJTR
15.3600	300-8134-1-ND	1.32	1.08	.96	300-8134-2-ND	672.00/M	CS20-15.360MABJTR
16.0000	300-8135-1-ND	1.32	1.08	.96	300-8135-2-ND	672.00/M	CS20-16.000MABJTR
16.6660	300-8136-1-ND	1.32	1.08	.96	300-8136-2-ND	672.00/M	CS20-16.666MABJTR
18.4320	300-8137-1-ND	1.32	1.08	.96	300-8137-2-ND	672.00/M	CS20-18.432MABJTR
19.4400	300-8138-1-ND	1.32	1.08	.96	300-8138-2-ND	672.00/M	CS20-19.440MABJTR
20.0000	300-8139-1-ND	1.32	1.08	.96	300-8139-2-ND	672.00/M	CS20-20.000MABJTR
20.4800	300-8140-1-ND	1.32	1.08	.96	300-8140-2-ND	672.00/M	CS20-20.480MABJTR
22.1184	300-8141-1-ND	1.32	1.08	.96	300-8141-2-ND	672.00/M	CS20-22.1184MABJTR
24.0000	300-8142-1-ND	1.32	1.08	.96	300-8142-2-ND	672.00/M	CS20-24.000MABJTR
24.5760	300-8143-1-ND	1.32	1.08	.96	300-8143-2-ND	672.00/M	CS20-24.576MABJTR
25.0000	300-8144-1-ND	1.32	1.08	.96	300-8144-2-ND	672.00/M	CS20-25.000MABJTR

CM309 Series Crystals

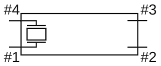
SPECIFICATIONS:
- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -40°C to +85°C
- **Storage Temperature Range:** -55°C to +125°C
- **Load Capacitance:** 18pF
- **Shunt Capacitance:** 7.0pF
- **Drive Level:** 50µW to 100µW
- **Insulation Resistance:** 500MΩ Min.
- **Aging (first year):** ±5ppm Max.

Equivalent Series Resistance (ESR, R_1)

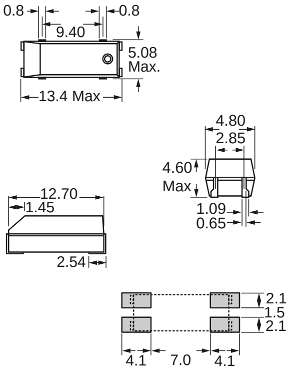
Frequency	ESR	Mode
3.5MHz ≤ fo < 4MHz	200	Fundamental
4MHz ≤ fo < 6MHz	150	
6MHz ≤ fo < 10MHz	100	
10MHz ≤ fo ≤ 32MHz	50	
30MHz < fo < 36MHz	100	3rd OT
36MHz ≤ fo < 66.6666MHz	80	



CM309A



CM309B



Freq. (MHz)	309A Series Digi-Key Part No.	309A Series Citizen Part No.	309B Series Digi-Key Part No.	309B Series Citizen Part No.	Cut Tape Price Each 1	10	50	Tape & Reel Pricing† 1,000
3.579545	300-4001-1-ND	CM309A3.579545MABJT	300-4101-1-ND	CM309B3.579545MABJT	1.51	1.30	.98	756.00
3.6864	300-4002-1-ND	CM309A3.6864MABJT	300-4102-1-ND	CM309B3.6864MABJT	1.51	1.30	.98	756.00
4.000	300-4003-1-ND	CM309A4.000MABJT	300-4103-1-ND	CM309B4.000MABJT	1.51	1.30	.98	756.00
4.096	300-4004-1-ND	CM309A4.096MABJT	300-4104-1-ND	CM309B4.096MABJT	1.51	1.30	.98	756.00
4.800	300-4005-1-ND	CM309A4.800MABJT	300-4105-1-ND	CM309B4.800MABJT	1.51	1.30	.98	756.00
4.915	300-4006-1-ND	CM309A4.915MABJT	300-4106-1-ND	CM309B4.915MABJT	1.51	1.30	.98	756.00
5.120	300-4007-1-ND	CM309A5.120MABJT	300-4107-1-ND	CM309B5.120MABJT	1.51	1.30	.98	756.00
5.5296	300-4008-1-ND	CM309A5.5296MABJT	300-4108-1-ND	CM309B5.5296MABJT	1.51	1.30	.98	786.00
6.000	300-4009-1-ND	CM309A6.000MABJT	300-4109-1-ND	CM309B6.000MABJT	1.51	1.30	.98	756.00
6.144	300-4010-1-ND	CM309A6.144MABJT	300-4110-1-ND	CM309B6.144MABJT	1.51	1.30	.98	756.00
7.3728	300-4011-1-ND	CM309A7.3728MABJT	300-4111-1-ND	CM309B7.3728MABJT	1.51	1.30	.98	756.00
7.680	300-4012-1-ND	CM309A7.680MABJT	300-4112-1-ND	CM309B7.680MABJT	1.51	1.30	.98	756.00
8.000	300-4013-1-ND	CM309A8.000MABJT	300-4113-1-ND	CM309B8.000MABJT	1.51	1.30	.98	756.00
8.000156	300-4014-1-ND	CM309A8.000156MABJT	300-4114-1-ND	CM309B8.000156MABJT	1.51	1.30	.98	756.00
8.192	300-4015-1-ND	CM309A8.192MABJT	300-4115-1-ND	CM309B8.192MABJT	1.51	1.30	.98	756.00
9.216	300-4016-1-ND	CM309A9.216MABJT	300-4116-1-ND	CM309B9.216MABJT	1.51	1.30	.98	756.00
9.600	300-4017-1-ND	CM309A9.600MABJT	300-4117-1-ND	CM309B9.600MABJT	1.51	1.30	.98	756.00
9.8304	300-4018-1-ND	CM309A9.8304MABJT	300-4118-1-ND	CM309B9.8304MABJT	1.51	1.30	.98	756.00
10.000	300-4019-1-ND	CM309A10.000MABJT	300-4119-1-ND	CM309B10.000MABJT	1.51	1.30	.98	756.00
10.240	300-4020-1-ND	CM309A10.240MABJT	300-4120-1-ND	CM309B10.240MABJT	1.51	1.30	.98	756.00
11.000	300-4021-1-ND	CM309A11.000MABJT	300-4121-1-ND	CM309B11.000MABJT	1.51	1.30	.98	756.00
11.0592	300-4022-1-ND	CM309A11.0592MABJT	300-4122-1-ND	CM309B11.0592MABJT	1.51	1.30	.98	756.00
11.2896	300-4023-1-ND	CM309A11.2896MABJT	300-4123-1-ND	CM309B11.2896MABJT	1.51	1.30	.98	756.00
12.000	300-4024-1-ND	CM309A12.000MABJT	300-4124-1-ND	CM309B12.000MABJT	1.51	1.30	.98	756.00
12.288	300-4025-1-ND	CM309A12.288MABJT	300-4125-1-ND	CM309B12.288MABJT	1.51	1.30	.98	756.00
12.352	300-4026-1-ND	CM309A12.352MABJT	300-4126-1-ND	CM309B12.352MABJT	1.51	1.30	.98	756.00
12.500	300-4027-1-ND	CM309A12.500MABJT	300-4127-1-ND	CM309B12.500MABJT	1.51	1.30	.98	756.00
13.500	300-4028-1-ND	CM309A13.500MABJT	300-4128-1-ND	CM309B13.500MABJT	1.51	1.30	.98	756.00
14.31818	300-4029-1-ND	CM309A14.31818MABJT	300-4129-1-ND	CM309B14.31818MABJT	1.51	1.30	.98	756.00
14.7456	300-4030-1-ND	CM309A14.7456MABJT	300-4130-1-ND	CM309B14.7456MABJT	1.51	1.30	.98	756.00
15.000	300-4031-1-ND	CM309A15.000MABJT	300-4131-1-ND	CM309B15.000MABJT	1.51	1.30	.98	756.00
15.360	300-4032-1-ND	CM309A15.360MABJT	300-4132-1-ND	CM309B15.360MABJT	1.51	1.30	.98	756.00
16.000	300-4033-1-ND	CM309A16.000MABJT	300-4133-1-ND	CM309B16.000MABJT	1.51	1.30	.98	756.00
16.000312	300-4034-1-ND	CM309A16.000312MABJT	300-4134-1-ND	CM309B16.000312MABJT	1.51	1.30	.98	756.00
16.257	300-4035-1-ND	CM309A16.257MABJT	300-4135-1-ND	CM309B16.257MABJT	1.51	1.30	.98	756.00
16.384	300-4036-1-ND	CM309A16.384MABJT	300-4136-1-ND	CM309B16.384MABJT	1.51	1.30	.98	756.00
16.667	300-4037-1-ND	CM309A16.667MABJT	300-4137-1-ND	CM309B16.667MABJT	1.51	1.30	.98	756.00
16.9344	300-4038-1-ND	CM309A16.9344MABJT	300-4138-1-ND	CM309B16.9344MABJT	1.51	1.30	.98	756.00
17.734475	300-4039-1-ND	CM309A17.734475MABJT	300-4139-1-ND	CM309B17.734475MABJT	1.51	1.30	.98	756.00
18.000	300-4040-1-ND	CM309A18.000MABJT	300-4140-1-ND	CM309B18.000MABJT	1.51	1.30	.98	756.00
18.432	300-4041-1-ND	CM309A18.432MABJT	300-4141-1-ND	CM309B18.432MABJT	1.51	1.30	.98	756.00
18.869	300-4042-1-ND	CM309A18.869MABJT	300-4142-1-ND	CM309B18.869MABJT	1.51	1.30	.98	756.00
19.6608	300-4043-1-ND	CM309A19.6608MABJT	300-4143-1-ND	CM309B19.6608MABJT	1.51	1.30	.98	756.00
20.000	300-4044-1-ND	CM309A20.000MABJT	300-4144-1-ND	CM309B20.000MABJT	1.51	1.30	.98	756.00
20.480	300-4045-1-ND	CM309A20.480MABJT	300-4145-1-ND	CM309B20.480MABJT	1.51	1.30	.98	756.00
22.1184	300-4046-1-ND	CM309A22.1184MABJT	300-4146-1-ND	CM309B22.1184MABJT	1.51	1.30	.98	756.00
24.000	300-4047-1-ND	CM309A24.000MABJT	300-4147-1-ND	CM309B24.000MABJT	1.51	1.30	.98	756.00
24.576	300-4048-1-ND	CM309A24.576MABJT	300-4148-1-ND	CM309B24.576MABJT	1.51	1.30	.98	756.00
25.000	300-4049-1-ND	CM309A25.000MABJT	300-4149-1-ND	CM309B25.000MABJT	1.51	1.30	.98	756.00
25.175	300-4050-1-ND	CM309A25.175MABJT	300-4150-1-ND	CM309B25.175MABJT	1.51	1.30	.98	756.00
27.000	300-4051-1-ND	CM309A27.000MABJT	300-4151-1-ND	CM309B27.000MABJT	1.51	1.30	.98	756.00
28.000	300-4052-1-ND	CM309A28.000MABJT	300-4152-1-ND	CM309B28.000MABJT	1.51	1.30	.98	756.00
28.322	300-4053-1-ND	CM309A28.322MABJT	300-4153-1-ND	CM309B28.322MABJT	1.51	1.30	.98	756.00
28.63636	300-4054-1-ND	CM309A28.63636MABJT	300-4154-1-ND	CM309B28.63636MABJT	1.51	1.30	.98	756.00
29.4912	300-4055-1-ND	CM309A29.4912MABJT	300-4155-1-ND	CM309B29.4912MABJT	1.51	1.30	.98	756.00
30.000	300-4056-1-ND	CM309A30.000MABJT	300-4156-1-ND	CM309B30.000MABJT	1.51	1.30	.98	756.00
32.000	300-4057-1-ND	CM309A32.000MABJT	300-4157-1-ND	CM309B32.000MABJT	1.51	1.30	.98	756.00
32.768	300-4058-1-ND	CM309A32.768MABJT	300-4158-1-ND	CM309B32.768MABJT	1.51	1.30	.98	756.00
33.000	300-4059-1-ND	CM309A33.000MABJT	300-4159-1-ND	CM309B33.000MABJT	1.51	1.30	.98	756.00
33.3333	300-4060-1-ND	CM309A33.3333MABJT	300-4160-1-ND	CM309B33.3333MABJT	1.51	1.30	.98	756.00
33.8688	300-4061-1-ND	CM309A33.8688MABJT	300-4161-1-ND	CM309B33.8688MABJT	1.51	1.30	.98	756.00
40.000	300-4063-1-ND	CM309A40.000MABJT	300-4163-1-ND	CM309B40.000MABJT	1.51	1.30	.98	756.00
48.000	300-4064-1-ND	CM309A48.000MABJT	300-4164-1-ND	CM309B48.000MABJT	1.51	1.30	.98	756.00
49.152	300-4065-1-ND	CM309A49.152MABJT	300-4165-1-ND	CM309B49.152MABJT	1.51	1.30	.98	756.00
50.000	300-4066-1-ND	CM309A50.000MABJT	300-4166-1-ND	CM309B50.000MABJT	1.51	1.30	.98	756.00
53.125	300-4067-1-ND	CM309A53.125MABJT	300-4167-1-ND	CM309B53.125MABJT	1.51	1.30	.98	756.00
60.000	300-4068-1-ND	CM309A60.000MABJT	300-4168-1-ND	CM309B60.000MABJT	1.51	1.30	.98	756.00
64.000	300-4069-1-ND	CM309A64.000MABJT	300-4169-1-ND	CM309B64.000MABJT	1.51	1.30	.98	756.00
66.6666	300-4070-1-ND	CM309A66.6666MABJT	300-4170-1-ND	CM309B66.6666MABJT	1.51	1.30	.98	756.00

† For Tape & Reel part number, change -1-ND to -2-ND.

CITIZEN™ Quartz Crystals

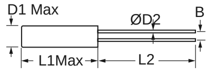
CFS, CFV, and CSA Series Cylinder Type Crystals

SPECIFICATIONS: • **Frequency Tolerance:** CFS Series: ±20ppm; CFV & CSA Series: ±30ppm • **Operating Temperature Range:** -10°C to +60°C • **Storage Temperature Range:** -40°C to +85°C • **Drive Level:** CFS & CFV Series: 1µW Max.; CSA Series: 50µW to 100µW • **Insulation Resistance:** 500MΩ Min. • **Aging (first year):** CFS Series: ±3ppm Max.; CFV & CSA Series: ±5ppm Max.

Equivalent Series Resistance (ESR, R1) (ΩMax.) for CSA Series

Frequency	ESR	Mode
3.5MHz ≤ fo < 4MHz	200	Fundamental
4MHz ≤ fo < 6MHz	150	
6MHz ≤ fo < 10MHz	100	
10MHz ≤ fo < 30MHz	50	
30MHz < fo < 36MHz	100	3rd OT
36MHz ≤ fo < 66.6666MHz	80	

Cylinder Type



Series	Dimensions (mm) L1 max.	L2	D1 max.	D2	B
CFS145	5.1	4.3	1.5	0.20	0.45
CFS206	6.2	10	2.1	0.26	0.7
CFS308	8.2	10	3.1	0.35	1.1
CFV206	6.2	10	2.1	0.26	0.7
CSA310	10.5	10	3.2	0.32	1.1
CSA309	9.0	10	3.2	0.32	1.1

Series	Frequency	Load Cap. (pF)	Shunt Cap. (pF)	Digi-Key Part No.	Price Each 1	10	50	Citizen Part No.
CFS145	32.768 KHz	12.5	1.00	300-1003-ND	.95	.81	.68	CFS145-32.768KDZF
CFS206	32.768 KHz	12.5	1.35	300-1002-ND	.42	.36	.24	CFS206-32.768KDZF
CFS308	32.768 KHz	12.5	1.60	300-1001-ND	.42	.36	.24	CFS308-32.768KDZF
CFV206	32.000 KHz	12.5	0.8-1.7	300-3007-ND	1.00	.90	.65	CFV206-32.000KAZF
	40.000 KHz	12.5	0.8-1.7	300-3015-ND	1.00	.90	.65	CFV206-40.000KAZF
	60.000 KHz	12.5	0.8-1.7	300-3018-ND	1.00	.90	.65	CFV206-60.000KAZF
	60.005 KHz	12.5	0.8-1.7	300-3019-ND	1.00	.90	.65	CFV206-60.005KAZF
	65.536 KHz	12.5	0.8-1.7	300-3020-ND	1.00	.90	.65	CFV206-65.536KAZF
	75.000 KHz	12.5	0.8-1.7	300-3021-ND	1.00	.90	.65	CFV206-75.000KAZF
	76.790 KHz	12.5	0.8-1.7	300-3022-ND	1.00	.90	.65	CFV206-76.790KAZF
	76.800 KHz	12.5	0.8-1.7	300-3023-ND	1.00	.90	.65	CFV206-76.800KAZF
	76.810 KHz	12.5	0.8-1.7	300-3024-ND	1.00	.90	.65	CFV206-76.810KAZF
	77.500 KHz	12.5	0.8-1.7	300-3025-ND	1.00	.90	.65	CFV206-77.500KAZF
	77.503 KHz	12.5	0.8-1.7	300-3026-ND	1.00	.90	.65	CFV206-77.503KAZF
	96.000 KHz	12.5	0.8-1.7	300-3029-ND	1.22	1.10	.79	CFV206-96.000KAZF
	100.000 KHz	12.5	0.8-1.7	300-3030-ND	1.00	.90	.65	CFV206-100.000KAZF
CSA310	3.579545 MHz	18.0	5.0	300-1008-ND	.91	.78	.65	CSA310-3.57954MABJ
	3.6864 MHz	18.0	5.0	300-1009-ND	.91	.78	.65	CSA310-3.6864MABJ
	4.000 MHz	18.0	5.0	300-1010-ND	.91	.78	.65	CSA310-4.000MABJ
CSA309	4.096 MHz	18.0	5.0	300-5001-ND	.91	.78	.65	CSA309-4.096MABJ
	4.800 MHz	18.0	5.0	300-5002-ND	.91	.78	.65	CSA309-4.800MABJ
	4.915 MHz	18.0	5.0	300-5003-ND	.91	.78	.65	CSA309-4.915MABJ
	5.120 MHz	18.0	5.0	300-5004-ND	.91	.78	.65	CSA309-5.120MABJ
	5.5296 MHz	18.0	5.0	300-5005-ND	.91	.78	.65	CSA309-5.5296MABJ
	6.000 MHz	18.0	5.0	300-5006-ND	.91	.78	.65	CSA309-6.000MABJ
	6.144 MHz	18.0	5.0	300-5007-ND	.91	.78	.65	CSA309-6.144MABJ
	7.3728 MHz	18.0	5.0	300-5008-ND	.91	.78	.65	CSA309-7.3728MABJ
	7.680 MHz	18.0	5.0	300-5009-ND	.91	.78	.65	CSA309-7.680MABJ
	8.000 MHz	18.0	5.0	300-5010-ND	.91	.78	.65	CSA309-8.000MABJ
	8.000156 MHz	18.0	5.0	300-5011-ND	.91	.78	.65	CSA309-8.000156MABJ
	8.192 MHz	18.0	5.0	300-5012-ND	.91	.78	.65	CSA309-8.192MABJ
	9.216 MHz	18.0	5.0	300-5013-ND	.91	.78	.65	CSA309-9.216MABJ
	9.600 MHz	18.0	5.0	300-5014-ND	.91	.78	.65	CSA309-9.600MABJ
	9.8304 MHz	18.0	5.0	300-5015-ND	.91	.78	.65	CSA309-9.8304MABJ
	10.000 MHz	18.0	5.0	300-5016-ND	.91	.78	.65	CSA309-10.000MABJ
	10.240 MHz	18.0	5.0	300-5017-ND	.91	.78	.65	CSA309-10.240MABJ
	11.000 MHz	18.0	5.0	300-5018-ND	.91	.78	.65	CSA309-11.000MABJ
	11.0592 MHz	18.0	5.0	300-5019-ND	.91	.78	.65	CSA309-11.0592MABJ
	11.2896 MHz	18.0	5.0	300-5020-ND	.91	.78	.65	CSA309-11.2896MABJ
	12.000 MHz	18.0	5.0	300-5021-ND	.91	.78	.65	CSA309-12.000MABJ
	12.288 MHz	18.0	5.0	300-5022-ND	.91	.78	.65	CSA309-12.288MABJ
	12.352 MHz	18.0	5.0	300-5023-ND	.91	.78	.65	CSA309-12.352MABJ
	12.500 MHz	18.0	5.0	300-5024-ND	.91	.78	.65	CSA309-12.500MABJ
	13.500 MHz	18.0	5.0	300-5025-ND	.91	.78	.65	CSA309-13.500MABJ
	14.31818 MHz	18.0	5.0	300-5026-ND	.91	.78	.65	CSA309-14.31818MABJ
	14.7456 MHz	18.0	5.0	300-5027-ND	.91	.78	.65	CSA309-14.7456MABJ
	15.000 MHz	18.0	5.0	300-5028-ND	.91	.78	.65	CSA309-15.000MABJ
	15.360 MHz	18.0	5.0	300-5029-ND	.91	.78	.65	CSA309-15.360MABJ
	16.000 MHz	18.0	5.0	300-5030-ND	.91	.78	.65	CSA309-16.000MABJ
	16.000312 MHz	18.0	5.0	300-5031-ND	.91	.78	.65	CSA309-16.000312MABJ
	16.257 MHz	18.0	5.0	300-5032-ND	.91	.78	.65	CSA309-16.257MABJ
	16.384 MHz	18.0	5.0	300-5033-ND	.91	.78	.65	CSA309-16.384MABJ
	16.667 MHz	18.0	5.0	300-5034-ND	.91	.78	.65	CSA309-16.667MABJ
	16.9344 MHz	18.0	5.0	300-5035-ND	.91	.78	.65	CSA309-16.9344MABJ
	17.734475 MHz	18.0	5.0	300-5036-ND	.91	.78	.65	CSA309-17.734475MABJ
	18.000 MHz	18.0	5.0	300-5037-ND	.91	.78	.65	CSA309-18.000MABJ
	18.432 MHz	18.0	5.0	300-5038-ND	.91	.78	.65	CSA309-18.432MABJ
	18.869 MHz	18.0	5.0	300-5039-ND	.91	.78	.65	CSA309-18.869MABJ
	19.6608 MHz	18.0	5.0	300-5040-ND	.91	.78	.65	CSA309-19.6608MABJ
	20.000 MHz	18.0	5.0	300-5041-ND	.91	.78	.65	CSA309-20.000MABJ
	20.480 MHz	18.0	5.0	300-5042-ND	.91	.78	.65	CSA309-20.480MABJ
	22.1184 MHz	18.0	5.0	300-5043-ND	.91	.78	.65	CSA309-22.1184MABJ
	24.000 MHz	18.0	5.0	300-5044-ND	.91	.78	.65	CSA309-24.000MABJ
	24.576 MHz	18.0	5.0	300-5045-ND	.91	.78	.65	CSA309-24.576MABJ
	25.000 MHz	18.0	5.0	300-5046-ND	.91	.78	.65	CSA309-25.000MABJ
	25.175 MHz	18.0	5.0	300-5047-ND	.91	.78	.65	CSA309-25.175MABJ
	27.000 MHz	18.0	5.0	300-5048-ND	.91	.78	.65	CSA309-27.000MABJ
	28.000 MHz	18.0	5.0	300-5049-ND	.91	.78	.65	CSA309-28.000MABJ
	28.322 MHz	18.0	5.0	300-5050-ND	.91	.78	.65	CSA309-28.322MABJ
	28.63636 MHz	18.0	5.0	300-5051-ND	.91	.78	.65	CSA309-28.63636MABJ
	29.4912 MHz	18.0	5.0	300-5052-ND	.91	.78	.65	CSA309-29.4912MABJ
	30.000 MHz	18.0	5.0	300-5053-ND	.91	.78	.65	CSA309-30.000MABJ
	32.000 MHz	18.0	5.0	300-5054-ND	.91	.78	.65	CSA309-32.000MABJ
	32.768 MHz	18.0	5.0	300-5055-ND	.91	.78	.65	CSA309-32.768MABJ
	33.000 MHz	18.0	5.0	300-5056-ND	.91	.78	.65	CSA309-33.000MABJ
	33.3333 MHz	18.0	5.0	300-5057-ND	.91	.78	.65	CSA309-33.3333MABJ
	33.8688 MHz	18.0	5.0	300-5058-ND	.91	.78	.65	CSA309-33.8688MABJ
	40.000 MHz	18.0	5.0	300-5060-ND	.91	.78	.65	CSA309-40.000MABJ
	48.000 MHz	18.0	5.0	300-5061-ND	.91	.78	.65	CSA309-48.000MABJ
	49.152 MHz	18.0	5.0	300-5062-ND	.91	.78	.65	CSA309-49.152MABJ
	50.000 MHz	18.0	5.0	300-5063-ND	.91	.78	.65	CSA309-50.000MABJ
	53.125 MHz	18.0	5.0	300-5064-ND	.91	.78	.65	CSA309-53.125MABJ
	60.000 MHz	18.0	5.0	300-5065-ND	.91	.78	.65	CSA309-60.000MABJ
	64.000 MHz	18.0	5.0	300-5066-ND	.91	.78	.65	CSA309-64.000MABJ
	66.6666 MHz	18.0	5.0	300-5067-ND	.91	.78	.65	CSA309-66.6666MABJ

CM100S, CM200S, CM201, and CM202 Series Crystals 32.768KHz

SPECIFICATIONS:
• **Frequency Tolerance:** ±20ppm • **Operating Temperature Range:** -40°C to +85°C • **Storage Temperature Range:** -55°C to +125°C • **Equivalent Series Resistance:** 50kΩ Max. • **Load Capacitance:** 12.5pF • **Drive Level:** 1µW Max. • **Insulation Resistance:** 500MΩ Min. • **Aging (first year)** ±3ppm Max.

Fig. 1 - CM100S Series

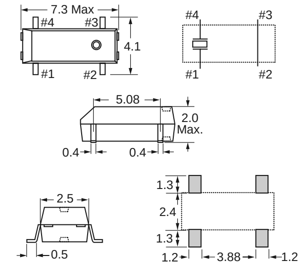


Fig. 2 - CM200S Series

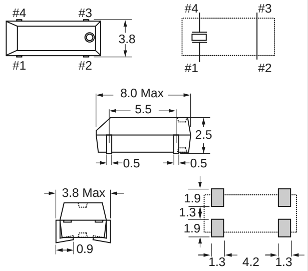


Fig. 3 - CM201 Series

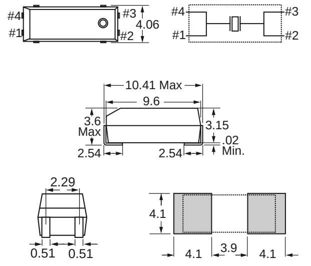


Fig. 4 - CM202 Series

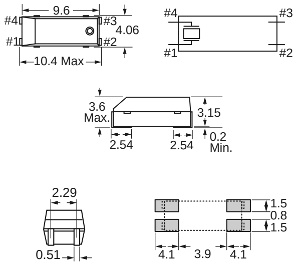
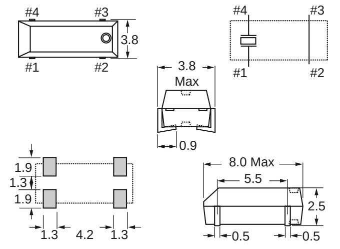


Fig.	Series	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 2,000	3,000	Citizen Part No.
1	CM100S	300-1007-1-ND	1.70	1.46	1.10	300-1007-2-ND	—	885.00/M	CM100S32.768KDZFT
2	CM200S	300-1004-1-ND	1.19	1.02	.77	300-1004-2-ND	—	618.98/M	CM200S32.768KDZFT
3	CM201	300-1005-1-ND	1.29	1.11	.83	300-1005-2-ND	668.00/M	—	CM201-32.768KDZFT
4	CM202	300-1006-1-ND	1.29	1.11	.83	300-1006-2-ND	668.00/M	—	CM202-32.768KDZFT

CM250S Series Quartz Crystals

SPECIFICATIONS:
- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -40°C to +85°C
- **Storage Temperature Range:** -55°C to +125°C
- **Load Capacitance:** 12.5pF
- **Shunt Capacitance:** 0.8 to 1.7pF
- **Drive Level:** 1µW Max.
- **Insulation Resistance:** ±500MΩ Min.
- **Aging (first year):** ±5ppm Max.



Frequency	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 3,000	Citizen Part No.
32.000 KHz	300-2007-1-ND	1.65	1.35	1.20	300-2007-2-ND	864.00/M	CM250S32.000KAZFT
40.000 KHz	300-2015-1-ND	1.65	1.35	1.20	300-2015-2-ND	864.00/M	CM250S40.000KAZFT
60.000 KHz	300-2018-1-ND	1.65	1.35	1.20	300-2018-2-ND	864.00/M	CM250S60.000KAZFT
60.005 KHz	300-2019-1-ND	1.65	1.35	1.20	300-2019-2-ND	864.00/M	CM250S60.005KAZFT
65.536 KHz	300-2020-1-ND	1.65	1.35	1.20	300-2020-2-ND	864.00/M	CM250S65.536KAZFT
75.000 KHz	300-2021-1-ND	1.65	1.35	1.20	300-2021-2-ND	864.00/M	CM250S75.000KAZFT
76.790 KHz	300-2022-1-ND	1.65	1.35	1.20	300-2022-2-ND	864.00/M	CM250S76.790KAZFT
76.800 KHz	300-2023-1-ND	1.65	1.35	1.20	300-2023-2-ND	864.00/M	CM250S76.800KAZFT
76.810 KHz	300-2024-1-ND	1.65	1.35	1.20	300-2024-2-ND	864.00/M	CM250S76.810KAZFT
77.500 KHz	300-2025-1-ND	1.65	1.35	1.20	300-2025-2-ND	864.00/M	CM250S77.500KAZFT
77.503 KHz	300-2026-1-ND	1.65	1.35	1.20	300-2026-2-ND	864.00/M	CM250S77.503KAZFT
96.000 KHz	300-2029-1-ND	1.65	1.35	1.20	300-2029-2-ND	864.00/M	CM250S96.000KAZFT
100.000 KHz	300-2030-1-ND	1.65	1.35	1.20	300-2030-2-ND	864.00/M	CM250S100.000KAZFT

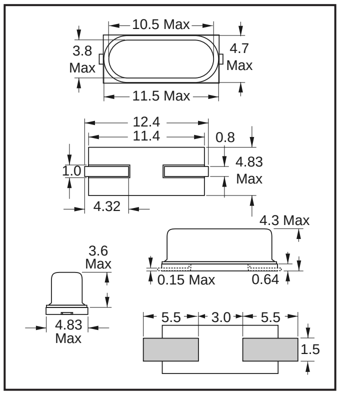
CITIZEN™ Quartz Crystals

HCM49 Series Surface Mount Crystals

SPECIFICATIONS:
- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -40°C to +85°C
- **Storage Temperature Range:** -55°C to +125°C
- **Load Capacitance:** 18pfd
- **Shunt Capacitance:** 7.0pF Max.
- **Drive Level:** 100µW
- **Insulation Resistance:** 500MΩ Min.
- **Aging (first year):** ±5ppm Max.

Equivalent Series Resistance (ESR, R1) (Ohm Max.)

Frequency	ESR
3.5MHz ≤ fo < 4.0MHz	200
4.0MHz ≤ fo < 6.0MHz	150
6.0MHz ≤ fo < 10.0MHz	100
10.0MHz ≤ fo < 14.0MHz	80
14.0MHz ≤ fo ≤ 25.0MHz	50



Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000	Citizen Part No.
3.579545	300-6101-1-ND	1.13	.98	.85	300-6101-2-ND	525.00	HCM49-3.579545MABJT
3.6864	300-6102-1-ND	1.13	.98	.85	300-6102-2-ND	525.00	HCM49-3.6864MABJT
4.000	300-6103-1-ND	1.13	.98	.85	300-6103-2-ND	525.00	HCM49-4.000MABJT
4.032	300-6104-1-ND	1.13	.98	.85	300-6104-2-ND	525.00	HCM49-4.032MABJT
4.096	300-6105-1-ND	1.13	.98	.85	300-6105-2-ND	525.00	HCM49-4.096MABJT
4.194304	300-6106-1-ND	1.13	.98	.85	300-6106-2-ND	525.00	HCM49-4.194304MABJT
4.433619	300-6107-1-ND	1.13	.98	.85	300-6107-2-ND	525.00	HCM49-4.433619MABJT
4.9152	300-6108-1-ND	1.13	.98	.85	300-6108-2-ND	525.00	HCM49-4.9152MABJT
5.000	300-6109-1-ND	1.13	.98	.85	300-6109-2-ND	525.00	HCM49-5.000MABJT
5.0688	300-6110-1-ND	1.13	.98	.85	300-6110-2-ND	525.00	HCM49-5.0688MABJT
5.9904	300-6111-1-ND	1.13	.98	.85	300-6111-2-ND	525.00	HCM49-5.9904MABJT
6.000	300-6112-1-ND	1.13	.98	.85	300-6112-2-ND	525.00	HCM49-6.000MABJT
6.144	300-6113-1-ND	1.13	.98	.85	300-6113-2-ND	525.00	HCM49-6.144MABJT
6.500	300-6114-1-ND	1.13	.98	.85	300-6114-2-ND	525.00	HCM49-6.500MABJT
7.3728	300-6115-1-ND	1.13	.98	.85	300-6115-2-ND	525.00	HCM49-7.3728MABJT
7.680	300-6116-1-ND	1.13	.98	.85	300-6116-2-ND	525.00	HCM49-7.680MABJT
8.000	300-6117-1-ND	1.13	.98	.85	300-6117-2-ND	525.00	HCM49-8.000MABJT
9.000	300-6118-1-ND	1.13	.98	.85	300-6118-2-ND	525.00	HCM49-9.000MABJT
9.8304	300-6120-1-ND	1.13	.98	.85	300-6120-2-ND	525.00	HCM49-9.8304MABJT
10.000	300-6121-1-ND	1.13	.98	.85	300-6121-2-ND	525.00	HCM49-10.000MABJT
10.240	300-6122-1-ND	1.13	.98	.85	300-6122-2-ND	525.00	HCM49-10.240MABJT
11.000	300-6123-1-ND	1.13	.98	.85	300-6123-2-ND	525.00	HCM49-11.000MABJT
11.0592	300-6124-1-ND	1.13	.98	.85	300-6124-2-ND	525.00	HCM49-11.0592MABJT
11.520	300-6125-1-ND	1.13	.98	.85	300-6125-2-ND	525.00	HCM49-11.520MABJT
12.000	300-6127-1-ND	1.13	.98	.85	300-6127-2-ND	525.00	HCM49-12.000MABJT
12.000393	300-6128-1-ND	1.13	.98	.85	300-6128-2-ND	525.00	HCM49-12.000393MABJT
12.288	300-6129-1-ND	1.13	.98	.85	300-6129-2-ND	525.00	HCM49-12.288MABJT
14.31818	300-6130-1-ND	1.13	.98	.85	300-6130-2-ND	525.00	HCM49-14.31818MABJT
14.7456	300-6131-1-ND	1.13	.98	.85	300-6131-2-ND	525.00	HCM49-14.7456MABJT
15.000	300-6132-1-ND	1.13	.98	.85	300-6132-2-ND	525.00	HCM49-15.000MABJT
15.360	300-6133-1-ND	1.13	.98	.85	300-6133-2-ND	525.00	HCM49-15.360MABJT
16.000	300-6134-1-ND	1.13	.98	.85	300-6134-2-ND	525.00	HCM49-16.000MABJT
16.000312	300-6135-1-ND	1.13	.98	.85	300-6135-2-ND	525.00	HCM49-16.000312MABJT
16.257	300-6136-1-ND	1.13	.98	.85	300-6136-2-ND	525.00	HCM49-16.257MABJT
16.384	300-6137-1-ND	1.13	.98	.85	300-6137-2-ND	525.00	HCM49-16.384MABJT
17.734475	300-6138-1-ND	1.13	.98	.85	300-6138-2-ND	525.00	HCM49-17.734475MABJT
18.000	300-6139-1-ND	1.13	.98	.85	300-6139-2-ND	525.00	HCM49-18.000MABJT
18.432	300-6140-1-ND	1.13	.98	.85	300-6140-2-ND	525.00	HCM49-18.432MABJT
19.6608	300-6141-1-ND	1.13	.98	.85	300-6141-2-ND	525.00	HCM49-19.6608MABJT
20.000	300-6142-1-ND	1.13	.98	.85	300-6142-2-ND	525.00	HCM49-20.000MABJT
21.47727	300-6143-1-ND	1.13	.98	.85	300-6143-2-ND	525.00	HCM49-21.47727MABJT
22.1184	300-6144-1-ND	1.13	.98	.85	300-6144-2-ND	525.00	HCM49-22.1184MABJT
24.000	300-6145-1-ND	1.13	.98	.85	300-6145-2-ND	525.00	HCM49-24.000MABJT
24.00014	300-6146-1-ND	1.13	.98	.85	300-6146-2-ND	525.00	HCM49-24.00014MABJT
24.576	300-6147-1-ND	1.13	.98	.85	300-6147-2-ND	525.00	HCM49-24.576MABJT
25.000	300-6148-1-ND	1.13	.98	.85	300-6148-2-ND	525.00	HCM49-25.000MABJT
25.175	300-6149-1-ND	1.13	.98	.85	300-6149-2-ND	525.00	HCM49-25.175MABJT
27.000	300-6150-1-ND	1.13	.98	.85	300-6150-2-ND	525.00	HCM49-27.000MABJT
28.63636	300-6152-1-ND	1.13	.98	.85	300-6152-2-ND	525.00	HCM49-28.63636MABJT
32.000	300-6153-1-ND	1.13	.98	.85	300-6153-2-ND	525.00	HCM49-32.000MABJT
33.8688	300-6156-1-ND	1.13	.98	.85	300-6156-2-ND	525.00	HCM49-33.8688MABJT
40.000	300-6157-1-ND	1.13	.98	.85	300-6157-2-ND	525.00	HCM49-40.000MABJT
48.000	300-6158-1-ND	1.13	.98	.85	300-6158-2-ND	525.00	HCM49-48.000MABJT
49.152	300-6159-1-ND	1.13	.98	.85	300-6159-2-ND	525.00	HCM49-49.152MABJT
50.000	300-6160-1-ND	1.13	.98	.85	300-6160-2-ND	525.00	HCM49-50.000MABJT

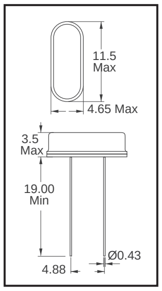
HC49US Series Through-Hole Crystals

SPECIFICATIONS:
- **Frequency Tolerance:** ±50ppm
- **Operating Temperature Range:** -10°C to +60°C
- **Storage Temperature Range:** -40°C to +85°C
- **Load Capacitance:** 18pfd
- **Shunt Capacitance:** 7.0pF Max.
- **Drive Level:** 100µW
- **Insulation Resistance:** 500MΩ Min.
- **Aging (first year):** ±5ppm Max.

Equivalent Series Resistance (ESR, R1) (Ohm Max.)

Frequency	ESR
3.5MHz ≤ fo < 4.0MHz	200
4.0MHz ≤ fo < 6.0MHz	150

Frequency	ESR
6.0MHz ≤ fo < 10.0MHz	100
10.0MHz ≤ fo < 14.0MHz	80
14.0MHz ≤ fo ≤ 25.0MHz	50



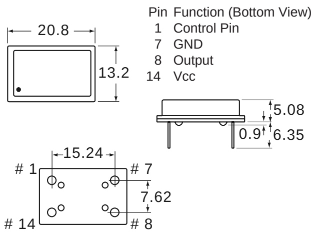
Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	50	Citizen Part No.
3.579545	300-6001-ND	.88	.75	.69	HC49US3.579545MABJ
3.6864	300-6002-ND	.88	.75	.69	HC49US3.6864MABJ
4.000	300-6003-ND	.88	.75	.69	HC49US4.000MABJ
4.032	300-6004-ND	.88	.75	.69	HC49US4.032MABJ
4.096	300-6005-ND	.88	.75	.69	HC49US4.096MABJ
4.194304	300-6006-ND	.88	.75	.69	HC49US4.194304MABJ
4.433619	300-6007-ND	.88	.75	.69	HC49US4.433619MABJ
4.9152	300-6008-ND	.88	.75	.69	HC49US4.9152MABJ
5.000	300-6009-ND	.88	.75	.69	HC49US5.000MABJ
5.0688	300-6010-ND	.88	.75	.69	HC49US5.0688MABJ
5.9904	300-6011-ND	.88	.75	.69	HC49US5.9904MABJ
6.000	300-6012-ND	.88	.75	.69	HC49US6.000MABJ
6.144	300-6013-ND	.88	.75	.69	HC49US6.144MABJ
6.500	300-6014-ND	.88	.75	.69	HC49US6.500MABJ
7.3728	300-6015-ND	.88	.75	.69	HC49US7.3728MABJ
7.680	300-6016-ND	.88	.75	.69	HC49US7.680MABJ
8.000	300-6017-ND	.88	.75	.69	HC49US8.000MABJ
9.000	300-6018-ND	.88	.75	.69	HC49US9.000MABJ
9.216	300-6019-ND	.88	.75	.69	HC49US9.216MABJ
9.8304	300-6020-ND	.88	.75	.69	HC49US9.8304MABJ
10.000	300-6021-ND	.88	.75	.69	HC49US10.000MABJ
10.240	300-6022-ND	.88	.75	.69	HC49US10.240MABJ
11.000	300-6023-ND	.88	.75	.69	HC49US11.00MABJ
11.0592	300-6024-ND	.88	.75	.69	HC49US11.0592MABJ
11.520	300-6025-ND	.88	.75	.69	HC49US11.520MABJ
12.000	300-6027-ND	.88	.75	.69	HC49US12.000MABJ
12.000393	300-6028-ND	.88	.75	.69	HC49US12.000393MABJ
12.288	300-6029-ND	.88	.75	.69	HC49US12.288MABJ
14.31818	300-6030-ND	.88	.75	.69	HC49US14.31818MABJ
14.7456	300-6031-ND	.88	.75	.69	HC49US14.7456MABJ
15.000	300-6032-ND	.88	.75	.69	HC49US15.000MABJ
15.360	300-6033-ND	.88	.75	.69	HC49US15.360MABJ
16.000	300-6034-ND	.88	.75	.69	HC49US16.000MABJ
16.000312	300-6035-ND	.88	.75	.69	HC49US16.000312MABJ
16.257	300-6036-ND	.88	.75	.69	HC49US16.257MABJ
16.384	300-6037-ND	.88	.75	.69	HC49US16.384MABJ
17.734475	300-6038-ND	.88	.75	.69	HC49US17.734475MABJ
18.000	300-6039-ND	.88	.75	.69	HC49US18.000MABJ
18.432	300-6040-ND	.88	.75	.69	HC49US18.432MABJ
19.6608	300-6041-ND	.88	.75	.69	HC49US19.6608MABJ
20.000	300-6042-ND	.88	.75	.69	HC49US20.000MABJ
21.47727	300-6043-ND	.88	.75	.69	HC49US21.47727MABJ
22.1184	300-6044-ND	.88	.75	.69	HC49US22.1184MABJ
24.000	300-6045-ND	.88	.75	.69	HC49US24.000MABJ
24.00014	300-6046-ND	.88	.75	.69	HC49US24.00014MABJ
24.576	300-6047-ND	.88	.75	.69	HC49US24.576MABJ
25.000	300-6048-ND	.88	.75	.69	HC49US25.000MABJ
25.175	300-6049-ND	.88	.75	.69	HC49US25.175MABJ
27.000	300-6050-ND	.88	.75	.69	HC49US27.000MABJ
28.224	300-6051-ND	.88	.75	.69	HC49US28.224MABJ
28.63636	300-6052-ND	.88	.75	.69	HC49US28.63636MABJ
32.000	300-6053-ND	.88	.75	.69	HC49US32.000MABJ
33.8688	300-6056-ND	.88	.75	.69	HC49US33.8688MABJ
40.000	300-6057-ND	.88	.75	.69	HC49US40.000MABJ
48.000	300-6058-ND	.88	.75	.69	HC49US48.000MABJ
50.000	300-6060-ND	.88	.75	.69	HC49US50.000MABJ

CARDINAL COMPONENTS, INC.

FIPO™ Field Instantly Programmable Oscillators

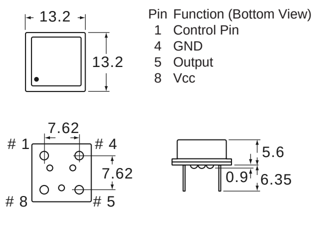
The FIPO system from Cardinal is indispensable for such things as prototypes, early stage design, unexpected design problems, modification, immediate service, a sudden ramp in production and volume production. Cardinal Oscillator Blanks are "Twice Programmable" to correct errors or to reuse the same part for two separate applications with different frequency and/or different output characteristics without having to dispose of the original part. Oscillator Blanks are available in four different package styles: Full Size 14 Pin Dip, Half Size 8 Pin Dip, 5x7 Ceramic SMD, and a Plastic SMD package. Frequency ranges are available from 1MHz to 133MHz in 5V, and 1MHz to 100MHz in 3.3V, and in ±100ppm, 50ppm and ±25ppm frequency stability options.

Fig. 1 (Style 1) Full Size 14 Pin Dip



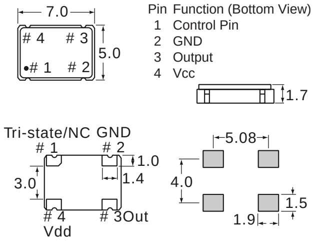
Pin	Function (Bottom View)
1	Control Pin
7	GND
8	Output
14	Vcc

Fig. 2 (Style 4) Half Size 8 Pin Dip



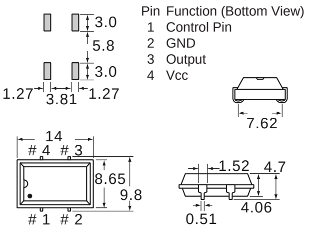
Pin	Function (Bottom View)
1	Control Pin
4	GND
5	Output
8	Vcc

Fig. 3 (Style 7) 5x7 Ceramic SMD



Pin	Function (Bottom View)
1	Control Pin
2	GND
3	Output
4	Vcc

Fig. 4 (Style 8) Plastic SMD



Pin	Function (Bottom View)
1	Control Pin
2	GND
3	Output
4	Vcc

Example Part Number:

CPP □□-□□□□□-ND

#1	Output
C	CMOS
T	TTL

#2	Package Style
1	Full Size
4	Half Size
7	5 x 7 Ceramic
8	Plastic SMD

#3	Voltage
H	5 Volt
L	3.3 Volt

H = 1 thru 133MHz
L = 1 thru 100MHz

#4	Packaging
T	Tube
Z	Tape & Reel

Package style 1 and 4 available in tube packaging only. Package style 7 and 8 available in tube and tape & reel

#5	Operating Temp.
0	0°C to 70°C
5	-20°C to 70°C
7	-40°C to 80°C

#6	Stability
6	±100ppm
P	±50ppm
R	±25ppm

R not available in -40°C to +80°C

#7	Function
T	Tri-State
P	Power Down

How to Select Base Number:

# 1 = Select Output
# 2 = Select Package Style
# 3 = Select Voltage
# 4 = Select Packaging
# 5 = Select Operating Temperature
# 6 = Select Stability
# 7 = Select Function

Call Digi-Key with your Selected Base Part Number, and a Sales Representative will enter your desired frequency.

Tri-State Mode – The output of the part is weakly pulled low when the control pin goes low. The active circuitry continues to operate, allowing a rapid return to normal operation when the control pin goes high.

Power Down Mode – When the control pin goes low, all active circuitry on the chip within the oscillator is shut down. For reactivation, time in which the part regains its output is minimal.

Fig.	Digi-Key* Base Part No.	Price Each 1	10	50	100
1	CPPC1-□T□R□-ND	6.20	5.74	5.12	4.66
	CPPC1-□T□□□-ND	5.40	5.00	4.46	4.05
1	CPPT1-□T□R□-ND	6.20	5.74	5.12	4.66
	CPPT1-□T□□□-ND	5.40	5.00	4.46	4.05
2	CPPC4-□T□R□-ND	6.20	5.74	5.12	4.66
	CPPC4-□T□□□-ND	5.40	5.00	4.46	4.05
2	CPPT4-□T□R□-ND	6.20	5.74	5.12	4.66
	CPPT4-□T□□□-ND	5.40	5.00	4.46	4.05

Fig.	Digi-Key* Base Part No.	Price Each 1	10	50	100	Tape & Reel Pricing 100	500	1,000
3	CPPC7-□□□R□-ND	5.76	5.33	4.76	4.31	438.48	1627.78	2930.00
	CPPC7-□□□□□-ND	5.00	4.63	4.13	3.75	382.50	1417.80	2550.00
3	CPPT7-□□□R□-ND	5.76	5.33	4.76	4.31	438.48	1627.78	2930.00
	CPPT7-□□□□□-ND	5.00	4.63	4.13	3.75	382.50	1417.80	2550.00
4	CPPC8-□□□R□-ND	6.20	5.74	5.12	4.66	473.52	1752.83	3160.16
	CPPC8-□□□□□-ND	5.40	5.00	4.46	4.05	412.50	1527.78	2750.00
4	CPPT8-□□□R□-ND	6.20	5.74	5.12	4.66	473.52	1752.83	3160.16
	CPPT8-□□□□□-ND	5.40	5.00	4.46	4.05	412.50	1527.78	2750.00

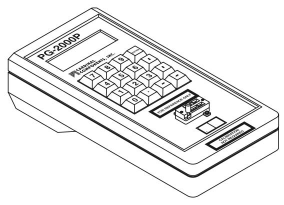
*Programmable parts are non-cancelable and non-returnable!

Stand-Alone Field Oscillator Programmer

Features:

- Create oscillators, at a user specified frequency, within seconds, IN THE FIELD
- No programming skills needed to create finished oscillators from sealed oscillator blanks
- Designed for low-volume program applications such as engineering, field sales, and sample quantity
- Internal frequency reference for single step programming
- Simple User Interface
- Cardinal 4-pin oscillators are easily inserted into a ZIF socket or SMD adapter for quick programming
- Oscillator characteristics are selected via keypad and 4-line LCD display

Stand Alone Programmer



PG-2000P-ND

Description	Digi-Key Part No.	Price Each
Blank Oscillator, Full Size, ±50ppm or ±100ppm	CPPX1-A7BR-ND	4.73
Blank Oscillator, Full Size, ±25ppm	CPPX1-A5BC-ND	5.43
Blank Oscillator, Half Size, ±50ppm or ±100ppm	CPPX4-A7BR-ND	4.73
Blank Oscillator, Half Size, ±25ppm	CPPX4-A5BC-ND	5.43
Blank Oscillator, 5x7 Ceramic SMD, ±50ppm or 100ppm	CPPX7-A7BR-ND	4.38
Blank Oscillator, 5x7 Ceramic SMD, ±25ppm	CPPX7-A5BC-ND	5.04
Blank Oscillator, Plastic SMD, ±50ppm or ±100ppm	CPPX8-A7BR-ND	4.73
Blank Oscillator, Plastic SMD, ±25ppm	CPPX8-A5BC-ND	5.43
SMD Programming Socket for 5x7 Ceramic Oscillators	SC2000-ND	47.38
SMD Programming Socket for Plastic SMD Oscillators	SC2500-ND	88.00
Stand Alone Programmer	PG2000P-ND	1560.00

See Figures Above for Package Specifications

EPSON ELECTRONICS
AMERICA, INC.

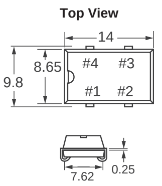
SG-8002 Programmable Oscillators

The SG-8002 Series gives you the flexibility to solve many different application problems with a one time programmable device. Programmable Oscillators provide the ability to pick a custom frequency in one of five different packages available in SMD and Thru-Hole styles. These five packages are pin compatible with the Epson SG-615, SG-636, SG-51, SG-531 and SG-710 Oscillators. Frequency ranges are available from 1Mhz to 125Mhz, in ±100ppm and ±50ppm frequency stability options and 3.3 or 5V power supply levels.

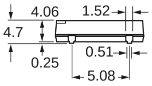
Dim. in mm

SG-615 Package (JA)

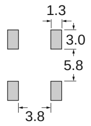
Top View



No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD

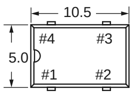


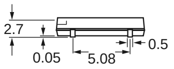
Recommended Soldering Pattern



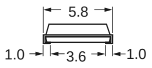
SG-636 Package (JC)

Top View

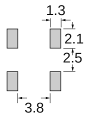




No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD

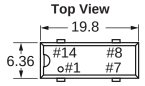


Recommended Soldering Pattern

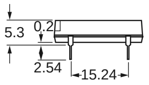


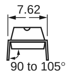
SG-51 Package (DB)

Top View



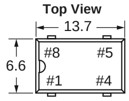
No.	Pin Terminal
1	OE or ST
7	GND
8	OUT
14	VDD



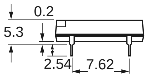


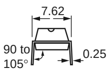
SG-531 Package (DC)

Top View



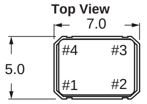
No.	Pin Terminal
1	OE or ST
4	GND
5	OUT
8	VDD



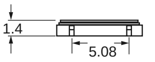


SG-710 Package (CA)

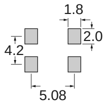
Top View



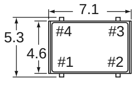
No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD



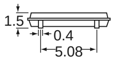
Recommended Soldering Pattern

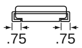


Package (JF)

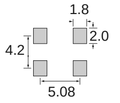


No.	Pin Terminal
1	OE or ST
2	GND
3	OUT
4	VDD





Recommended Soldering Pattern



Example Part Number:

SG-8002 ☐☐ - ☐ ☐ ☐ -ND

How to order:

#1 = Select *Package.*
#2 = Select *Function.*
#3 = Select *Power Supply Duty Level.*
#4 = Select *Frequency Stability and Operating Temperature.*

Call Digi-Key with your Base Part Number and an Operator will enter your desired frequency.

#1	Package
JA	SG-615
JC	SG-636
DB	SG-51
DC	SG-531
CA	SG-710
JF	—

#2	Function
P	Output Enable
S	Standby

#3	Power Supply Duty Level	*#4*	Frequency Stability	Operating Temperature	Available Frequency Range
H	5.0V, CMOS	*B*	±50ppm	-20°C to +70°C	1.00Mhz - 125.00Mhz
		C	±100ppm		
		M†	±100ppm	-40°C to +85°C	1.00Mhz - 55.00Mhz
T	5.0V, TTL	*B*	±50ppm	-20°C to +70°C	1.00Mhz - 125.00Mhz
		C	±100ppm		
		M†	±100ppm	-40°C to +85°C	1.00Mhz - 55.00Mhz
C	3.3V, CMOS	*B*	±50ppm	-20°C to +70°C	1.00Mhz - 106.25Mhz
		C	±100ppm		
		M†	±100ppm	-40°C to +85°C	1.00Mhz - 106.25Mh

† Not available in JC Package

"Parts come marked with Manufacture Date Lot Code only. Marked parts are available as a non-catalog order only."

One Time Programmable parts are non-cancelable, non-returnable!

Digi-Key * Base Part No.	Price Each 1	10	50	100
SG-8002JA-☐☐☐-ND	3.85	3.30	2.53	2.20
SG-8002JC-☐☐☐-ND	4.38	3.75	2.88	2.50
SG-8002DB-☐☐☐-ND	3.33	2.85	2.19	1.90
SG-8002DC-☐☐☐-ND	3.33	2.85	2.19	1.90
SG-8002CA-☐☐☐-ND	4.73	4.05	3.11	2.70
SG-8002JF-☐☐☐-ND	3.50	3.00	2.30	2.00

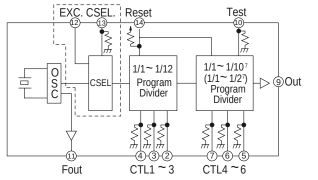
* For complete Base Part Number, substitute the corresponding letter for ☐.

Programmable Crystal Oscillators/Frequency Dividers

Electrical Characteristics:
- **Supply Voltage:** 4.5V~5.5V
- **Operating Temp.:** –10°C to +70°C
- **L. Output Voltage:** VOL = 0.4V.
- **H. Output Voltage:** VOH = VDD –1.0V.
- **L. Output Current:** IOL = 1.6mA.
- **H. Output Current:** IOH = –40µA.
- **Rise Time:** 30 nsec Typ.
- **Fall Time:** 25 nsec Typ.
- **Start-up Time:** 0.2 l sec.

Features: • Provides 57 different frequencies from a single quartz crystal. • Packaged in standard 16-pin DIP containing both IC and quartz crystal. • SPG Series is high precision time-base frequency generators each comprised of a small quartz-crystal element and a CMOS monolithic chip integrated hybrid configuration.

Function Block Diagram

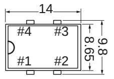


Set Of Output Frequency

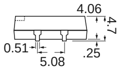
CTL1	CTL2	CTL3	Dividing Ratio	CTL4	CTL5	CTL6	Dividing Ratio
0	0	0	1/1	0	0	0	1/1
0	0	1	1/10	0	0	1	1/10
0	1	0	1/2	0	1	0	$1/10^2$
0	1	1	1/3	0	1	1	$1/10^3$
1	0	0	1/4	1	0	0	$1/10^4$
1	0	1	1/5	1	0	1	$1/10^5$
1	1	0	1/6	1	1	0	$1/10^6$
1	1	1	1/12	1	1	1	$1/10^7$

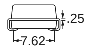
Base Frequency	Digi-Key Part No.	Price Each 1	10	50	100	Epson Part No.
60kHz±5ppm	SE3103-ND	19.20	16.00	11.38	10.24	SPG-8651A
100kHz±5ppm	SE3104-ND	19.20	16.00	11.38	10.24	SPG-8651B

HG-1000 Oscillators

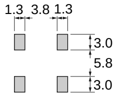


No.	Pin Terminal
1	Ts
2	GND
3	OUT
4	VDD





Recommended Soldering Pattern



Specifications:

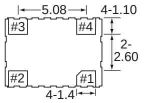
• **Max. Supply Voltage:** -0.5V to +7.0V • **Operating Voltage:** 5.0V ±.25°C • **Storage Temperature:** ±55°C to +125°C • **Operating Temperature:** -40°C to +85°C • **Frequency Tolerance:** ±25ppm @ -40°C to +85°C • **Current Consumption:** 10mA Max. • **Duty:** 40% to 60% @ 1/2 VDD Level • **Output Load Condition:** 15pf Max. • **Output Rise Time:** 8ns Max. • **Output Fall Time:** 8ns Max. • **Oscillation Startup Time:** 4ms max.

Frequency MHz	Digi-Key Part No.	Cut Tape Price Each 1	10	50	Digi-Key Part No.	Tape & Reel Pricing 1,000	Epson Part No.
1.544	SE2861CT-ND	8.73	7.28	5.09	SE2861TR-ND	3850.00	HG-1012JA 1.544M-BX0
16.384	SE2864CT-ND	8.73	7.28	5.09	SE2864TR-ND	3850.00	HG-1012JA 16.38M-BX0
19.440	SE2865CT-ND	8.73	7.28	5.09	SE2865TR-ND	3850.00	HG-1012JA 19.44M-BX0
20.000	SE2866CT-ND	8.73	7.28	5.09	SE2866TR-ND	3850.00	HG-1012JA 20.00M-BX0

EPSON ELECTRONICS AMERICA, INC.

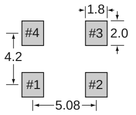
Surface-Mount Quartz Crystal Products

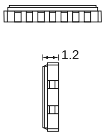
EG2001CA Series Oscillators



No.	Pin Conn.
1	OE
2	GND
3	Out
4	VDD

Recommended Soldering Pattern

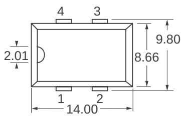




Specifications:
• **Max. Supply Voltage:** -0.5 to +5.5 • **Operating Voltage:** 3.0 to 3.6 • **Storage Temperature:** -55°C to +100°C • **Operating Temperature:** 0°C to +70°C • **Frequency Stability:** ±100ppm @ 0°C to +70°C • **Current Consumption:** 50mA Max. • **Duty:** 45% to 55% @ 50% VDD Level • **Output Load Condition:** 25pF Max. • **Output Rise/Fall Time:** 2ns Max. • **Oscillation Startup Time:** 10ms Max.

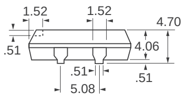
SG-615 Series Oscillators

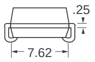
- SG-615/615P
  (C-MOS, TTL compatible type)
- 615PT
  (TTL compatible type)
- SG-615H/PCV
  (C-MOS compatible type)
- Provided with an OE (Output Enable) function
  (SG-615P/615PT) (Contains internal pull-up resistor.)



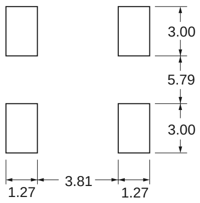
No.	Pin Conn.
1	OE or ST
2	GND
3	Out
4	VDD

( ) Indicates P Type





Recommended Soldering Pattern



Specifications:
• **Supply Voltage:** Operating: 5.0±0.5V; Maximum: –0.3~ +7.0V. • **Temperature Range:** Operating: -40°C to +85°C; Storage: -55°C to +125°C. • **Frequency Stability:** C: ±100ppm, –10°C to +70°C; C: ±200ppm, –40°C to +85°C. • **Current Consumption:** 25mA Max. (SG-615/615P); 35mA Max. (SG-615PT); 32mA Max. (SG-615H). Values are with no load. • **Duty Cycle:** 40~60%, 1.4V or 1/2VDD level. • **Output Voltage:** VDD -0.4V Min. (SG-615/615P), IOH = -400µA; VDD -0.4 Min. (SG-615PT), IOH = -400µA; VDD -0.37V Min. (SG-615H), IOH = 4mA; 0.4V Max. (SG-615/ 615P), IOL = 16mA; 0.4V Max. (SG-615PT), IOL =16mA; 0.37V Max. (SG-615H), IOL = 4mA. • **OE Input Voltage** (SG-615P/ 615PT): 2.0V Min., IOH = IµA (VIH = VDD); 0.8V Max., IIL = 100mA (VIL = GND). • **Rise Time:** 8 nsec Max., 5 nsec Typ. (SG-615/615P); 10 nsec Max., 5 nsec Typ. (SG-615PT); 7 nsec Max., 3.5 nsec Typ. (SG-615H). • **Fall Time:** 8 nsec Max., 5 nsec Typ. (SG-615/615P); 8 nsec Max., 3 nsec Typ. (SG-615PT); 7 nsec Max., 3.5 nsec Typ. (SG-615H). • **Oscillation Start Time:** 4 msec Max., (SG-615/615P); 10 msec Max., (SG-615PT); 10 msec Max., (SG-615H).

Series	Frequency (MHz)‡	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing 1,000	Epson Part No.
			1	10	50	100			
EG2001CA	106.25	SE1008CT-ND	13.00	11.70	10.40	9.10	SE1008TR-ND	7280.00	EG2001CA 106.25MPCH3
	125.000	SE1009CT-ND	14.38	12.94	11.50	10.07	SE1009TR-ND	8050.00	EG2001CA 125.00MPCH3
SG-615	6.000	SE2107CT-ND	6.03	5.40	—	4.50	—	—	SG-615-6.0MCQ
SG-615P (OE) (CMOS) (TTL)	1.544	SE2217CT-ND	3.45	2.88	2.00	1.81	SE2217TR-ND	1520.00	SG-615P 1.544MCQ
	1.8432	SE2201CT-ND†	3.45	2.88	2.00	1.81	SE2201TR-ND	1520.00	SG-615P 1.843MCQ
	2.000	SE2202CT-ND†	3.45	2.88	2.00	1.81	SE2202TR-ND	1520.00	SG-615P 2.000MCQ
	2.048	SE2218CT-ND	3.45	2.88	2.00	1.81	SE2218TR-ND	1520.00	SG-615P 2.048MCQ
	2.4576	SE2203CT-ND†	3.45	2.88	2.00	1.81	SE2203TR-ND	1520.00	SG-615P 2.457MCQ
	3.072	SE2219CT-ND	3.45	2.88	2.00	1.81	SE2219TR-ND	1520.00	SG-615P 3.072MCQ
	3.579	SE2222CT-ND	3.45	2.88	2.00	1.81	SE2222TR-ND	1520.00	SG-615P 3.579MCQ
	3.6864	SE2204CT-ND†	3.45	2.88	2.00	1.81	SE2204TR-ND	1520.00	SG-615P 3.686MCQ
	4.000	SE2205CT-ND†	3.45	2.88	2.00	1.81	SE2205TR-ND	1520.00	SG-615P 4.000MCQ
	4.096	SE2223CT-ND	3.45	2.88	2.00	1.81	SE2223TR-ND	1520.00	SG-615P 4.096MCQ
	5.000	SE2224CT-ND	3.45	2.88	2.00	1.81	SE2224TR-ND	1520.00	SG-615P 5.000MCQ
	6.000	SE2207CT-ND†	3.45	2.88	2.00	1.81	SE2207TR-ND	1520.00	SG-615P 6.000MCQ
	6.144	SE2226CT-ND	3.45	2.88	2.00	1.81	SE2226TR-ND	1520.00	SG-615P 6.144MCQ
	7.372	SE2227CT-ND	3.45	2.88	2.00	1.81	SE2227TR-ND	1520.00	SG-615P 7.372MCQ
	8.192	SE2228CT-ND	3.45	2.88	2.00	1.81	SE2228TR-ND	1520.00	SG-615P 8.192MCQ
	9.830	SE2229CT-ND	3.45	2.88	2.00	1.81	SE2229TR-ND	1520.00	SG-615P 9.830MCQ
	10.000	SE2209CT-ND†	3.45	2.88	2.00	1.81	SE2209TR-ND	1520.00	SG-615P 10.000MCQ
	11.059	SE2232CT-ND	3.45	2.88	2.00	1.81	SE2232TR-ND	1520.00	SG-615P 11.059MCQ
	12.000	SE2210CT-ND†	3.45	2.88	2.00	1.81	SE2210TR-ND	1520.00	SG-615P 12.000MCQ
	12.288	SE2233CT-ND	3.45	2.88	2.00	1.81	SE2233TR-ND	1520.00	SG-615P 12.288MCQ
	14.31818	SE2211CT-ND†	3.45	2.88	2.00	1.81	SE2211TR-ND	1520.00	SG-615P 14.318MCQ
	16.000	SE2212CT-ND†	3.45	2.88	2.00	1.81	SE2212TR-ND	1520.00	SG-615P 16.000MCQ
	16.257	SE2236CT-ND	3.45	2.88	2.00	1.81	SE2236TR-ND	1520.00	SG-615P 16.257MCQ
	18.432	SE2213CT-ND†	3.45	2.88	2.00	1.81	SE2213TR-ND	1520.00	SG-615P 18.432MCQ
	18.869	SE2238CT-ND	3.45	2.88	2.00	1.81	SE2238TR-ND	1520.00	SG-615P 18.869MCQ
	19.660	SE2239CT-ND	3.45	2.88	2.00	1.81	SE2239TR-ND	1520.00	SG-615P 19.660MCQ
	20.000	SE2214CT-ND†	3.45	2.88	2.00	1.81	SE2214TR-ND	1520.00	SG-615P 20.000MCQ
	20.480	SE2240CT-ND	3.45	2.88	2.00	1.81	SE2240TR-ND	1520.00	SG-615P 20.480MCQ
	22.118	SE2241CT-ND	3.45	2.88	2.00	1.81	SE2241TR-ND	1520.00	SG-615P 22.118MCQ
	24.000	SE2215CT-ND†	3.45	2.88	2.00	1.81	SE2215TR-ND	1520.00	SG-615P 24.000MCQ
	25.000	SE2242CT-ND	3.45	2.88	2.00	1.81	SE2242TR-ND	1520.00	SG-615P 25.000MCQ
	25.175	SE2216CT-ND†	3.45	2.88	2.00	1.81	SE2216TR-ND	1520.00	SG-615P 25.175MCQ
SG-615PT (OE)	36.000	SE2304CT-ND	6.20	5.55	—	4.63	—	—	SG-615PT36.0000MCQ
SG-615PTJ (TTL)	27.000	SE2326CT-ND	3.45	2.88	2.00	1.81	SE2326TR-ND	1520.00	SG-615PTJ 27.000MCQ
	28.322	SE2327CT-ND	3.45	2.88	2.00	1.81	SE2327TR-ND	1520.00	SG-615PTJ 28.322MCQ
	28.636	SE2328CT-ND	3.45	2.88	2.00	1.81	SE2328TR-ND	1520.00	SG-615PTJ 28.636MCQ
	29.491	SE2329CT-ND	3.45	2.88	2.00	1.81	SE2329TR-ND	1520.00	SG-615PTJ 29.491MCQ
	30.000	SE2330CT-ND	3.45	2.88	2.00	1.81	SE2330TR-ND	1520.00	SG-615PTJ 30.000MCQ
SG-615PH (CMOS)	32.000	SE2337CT-ND	3.45	2.88	2.00	1.81	SE2337TR-ND	1520.00	SG-615PH 32.000MCQ
	32.768	SE2338CT-ND	3.45	2.88	2.00	1.81	SE2338TR-ND	1520.00	SG-615PH 32.768MCQ
	33.000	SE2339CT-ND	3.45	2.88	2.00	1.81	SE2339TR-ND	1520.00	SG-615PH 33.000MCQ
	33.333	SE2340CT-ND	3.45	2.88	2.00	1.81	SE2340TR-ND	1520.00	SG-615PH 33.333MCQ
	36.000	SE2341CT-ND	3.45	2.88	2.00	1.81	SE2341TR-ND	1520.00	SG-615PH 36.000MCQ
	40.000	SE2343CT-ND	3.45	2.88	2.00	1.81	SE2343TR-ND	1520.00	SG-615PH 40.000MCQ
	44.900	SE2344CT-ND	3.45	2.88	2.00	1.81	SE2344TR-ND	1520.00	SG-615PH 44.900MCQ
	48.000	SE2345CT-ND	3.45	2.88	2.00	1.81	SE2345TR-ND	1520.00	SG-615PH 48.000MCQ
	50.000	SE2346CT-ND	3.45	2.88	2.00	1.81	SE2346TR-ND	1520.00	SG-615PH 50.000MCQ
	55.000	SE2347CT-ND	3.45	2.88	2.00	1.81	SE2347TR-ND	1520.00	SG-615PH 55.000MCQ
	60.000	SE2348CT-ND	3.63	3.03	2.13	1.92	SE2348TR-ND	1610.00	SG-615PH 60.000MCQ
	66.000	SE2351CT-ND	3.63	3.03	2.13	1.92	SE2351TR-ND	1610.00	SG-615PH 66.000MCQ
	66.666	SE2352CT-ND	3.63	3.03	2.13	1.92	SE2352TR-ND	1610.00	SG-615PH 66.6660MCQ
SG-615PCV (OE) (CMOS)	50.000	SE3503CT-ND	5.25	4.38	3.10	2.80	SE3503TR-ND	2300.00	SG-615PCV 50.000MCQ
	75.000	SE3511CT-ND	5.85	4.88	3.40	3.10	SE3511TR-ND	2550.00	SG-615PCV 75.000MCQ
	80.000	SE3512CT-ND	5.85	4.88	3.40	3.10	SE3512TR-ND	2550.00	SG-615PCV 80.000MCQ
	90.000	SE3513CT-ND	5.85	4.88	3.40	3.10	—	—	SG-615PCV 90.000MCQ
	100.000	SE3514CT-ND	5.85	4.88	3.40	3.10	—	—	SG-615PCV 100.000MCQ
	106.250	SE3515CT-ND	6.45	5.38	3.85	3.45	SE3515TR-ND	2900.00	SG-615PCV 106.250MCQ
	120.000	SE3516CT-ND	6.45	5.38	3.85	3.45	SE3516TR-ND	2900.00	SG-615PCV 120.000MCQ

‡ Except when otherwise noted.

† **SE3-KIT-ND** ***Digi-Key® SMT Crystal Kit*** 2 each of values denoted (32 total pieces). Notebook style storage case and bin storage guide included **$109.00**

EPSON ELECTRONICS
AMERICA, INC.

CMOS/TTL Oscillators

- High reliability by cylinder type AT Crystal
- Automatic mountable
- Lower current consumption by C-MOS IC
- TTL-10 output load by using C-MOS IC
- DIP 14-PIN plastic package compatible with metal package oscillator
- DIP 8-PIN plastic package compatible with half size metal package oscillator

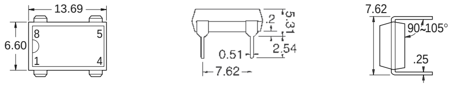
SG-51P, SG-531P, SG-51PH **Specifications: Operating Voltage:** 5.0±0.5V. **Operating Temperature Range:** -10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 25mA Max. Typ. **Output Voltage:** VDD -0.4V Min., IOH = -400mA; 0.4V Max., IOL = 16mA. **Input Voltage:** VIH 2.0V Min., IOH = ImA (VIH = VDD); VIL 0.8V Max., IIL = -100uA (VIL = GND). **Output Rise Time:** 8 nsec Max., 4 nsec Typ. **Output Fall Time:** 8 nsec Max., 5 nsec Typ. **Oscillation Time:** 4 msec Max., 0.3 msec.

SG-531PCV **Specifications: Operating Voltage:** 2.7V to 5.5V. **Operating Temperature Range:** -10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 50mA Max. **Output Rise Time:** 4 nsec. **Output Fall Time:** 4 nsec. **Oscillation Start-Up Time:** 10 msec Max.

SG-51KT, SG-531PTJ, SG-51PTJ **Specifications: Operating Voltage:** 5.0±0.5V. **Operating Temp. Range:** 10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 25mA (32MHz) without load Typ. **Output Voltage:** VDD -0.4V Min., IOH = -400 mA; 0.4V Max., IOL = 16mA. **Input Voltage:** VIH 2.0V Min., IIH = ImA (VIH = VDD); VIL 0.8V Max., IIL = 100uA (VIL = GND). **Output Rise Time:** 10 nsec Max., 5 nsec Typ. **Output Fall Time:** 8 nsec Max., 3 nsec Typ. **Oscillation Time:** 10 msec Max., 5 msec.

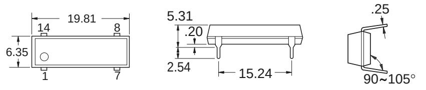
SG-531PH **Specifications: Operating Voltage:** 5.0±0.5V. **Operating Temp. Range:** -10°C to +70°C. **Frequency Stability:** C:±100ppm. **Current Consumption:** 32mA Max. Typ. **Output Voltage:** VDD -0.37V Min., IOH = -4mA; 0.37V Max., IOL = 4mA. **Output Rise Time:** 7 nsec Max., 3.5 nsec Typ. **Output Fall Time:** 7 nsec Max., 3.5 nsec Typ. **Oscillation Time:** 10 msec Max., 3 msec Typ.

SG-531P, SG-531PTJ, SG-531PH, SG-531PCV (Half Size)



Pin	SG-531P, PH, PTJ
1	OE
4	GND
5	Out
8	VDD

SG-51P, SG-51KT, SG-51PTJ, SG-51PH (Full Size)



Pin	SG-51KT
1	NC
7	GND
8	Out
14	VDD

Pin	51P, PH, PTJ
1	OE
7	GND
8	Out
14	VDD

Case	Frequency (MHz)	Digi-Key Part No.	Pricing 1	10	50	100	Epson Part No.
SG-531PH (OE) (CMOS)	32.000	SE1111-ND	3.00	25.00	87.00	158.00	SG-531PH 32.000MC
	32.514	SE1112-ND	3.00	25.00	87.00	158.00	SG-531PH 32.514MC
	32.768	SE1113-ND	3.00	25.00	87.00	158.00	SG-531PH 32.768MC
	33.000	SE1114-ND	3.00	25.00	87.00	158.00	SG-531PH 33.000MC
	33.333	SE1115-ND	3.00	25.00	87.00	158.00	SG-531PH 33.333MC
	36.000	SE1116-ND	3.00	25.00	87.00	158.00	SG-531PH 36.000MC
	38.000	SE1117-ND	3.00	25.00	87.00	158.00	SG-531PH 38.000MC
	42.000	SE1119-ND	3.00	25.00	87.00	158.00	SG-531PH 42.000MC
	44.900	SE1120-ND	3.00	25.00	87.00	158.00	SG-531PH 44.900MC
	46.000	SE1121-ND	3.00	25.00	87.00	158.00	SG-531PH 46.000MC
	48.000	SE1122-ND	3.00	25.00	87.00	158.00	SG-531PH 48.000MC
	55.000	SE1124-ND	3.00	25.00	87.00	158.00	SG-531PH 55.000MC
	64.000	SE1126-ND	3.18	26.50	92.50	167.00	SG-531PH 64.000MC
	65.000	SE1127-ND	3.18	26.50	92.50	167.00	SG-531PH 65.000MC
	66.000	SE1128-ND	3.18	26.50	92.50	167.00	SG-531PH 66.000MC
	66.666	SE1129-ND	3.18	26.50	92.50	167.00	SG-531PH 66.6667MC
SG-531P (OE) (CMOS/ TTL)	1.544	SE1216-ND	3.00	25.00	87.00	158.00	SG-531P 1.544MC
	1.8432	SE1201-ND	3.00	25.00	87.00	158.00	SG-531P 1.843MC
	2.000	SE1217-ND	3.00	25.00	87.00	158.00	SG-531P 2.000MC
	2.048	SE1218-ND	3.00	25.00	87.00	158.00	SG-531P 2.048MC
	2.4576	SE1202-ND	3.00	25.00	87.00	158.00	SG-531P 2.457MC
	3.072	SE1219-ND	3.00	25.00	87.00	158.00	SG-531P 3.072MC
	3.088	SE1220-ND	3.00	25.00	87.00	158.00	SG-531P 3.088MC
	3.276	SE1221-ND	3.00	25.00	87.00	158.00	SG-531P 3.276MC
	3.579	SE1222-ND	3.00	25.00	87.00	158.00	SG-531P 3.579MC
	3.686	SE1223-ND	3.00	25.00	87.00	158.00	SG-531P 3.686MC
	4.000	SE1203-ND	3.00	25.00	87.00	158.00	SG-531P 4.000MC
	4.096	SE1224-ND	3.00	25.00	87.00	158.00	SG-531P 4.096MC
	4.9152	SE1204-ND	3.00	25.00	87.00	158.00	SG-531P 4.915MC
	5.000	SE1205-ND	3.00	25.00	87.00	158.00	SG-531P 5.000MC
	5.068	SE1225-ND	3.00	25.00	87.00	158.00	SG-531P 5.068MC
	6.000	SE1206-ND	3.00	25.00	87.00	158.00	SG-531P 6.000MC
	6.144	SE1226-ND	3.00	25.00	87.00	158.00	SG-531P 6.144MC
	7.3728	SE1227-ND	3.00	25.00	87.00	158.00	SG-531P 7.3728MC
	8.000	SE1207-ND	3.00	25.00	87.00	158.00	SG-531P 8.000MC
	8.192	SE1228-ND	3.00	25.00	87.00	158.00	SG-531P 8.192MC
	9.830	SE1229-ND	3.00	25.00	87.00	158.00	SG-531P 9.830MC
	10.000	SE1208-ND	3.00	25.00	87.00	158.00	SG-531P 10.000MC
	10.240	SE1230-ND	3.00	25.00	87.00	158.00	SG-531P 10.240MC
	11.000	SE1231-ND	3.00	25.00	87.00	158.00	SG-531P 11.000MC
	11.059	SE1232-ND	3.00	25.00	87.00	158.00	SG-531P 11.059MC
	12.000	SE1209-ND	3.00	25.00	87.00	158.00	SG-531P 12.000MC
	12.288	SE1233-ND	3.00	25.00	87.00	158.00	SG-531P 12.288MC
	14.31818	SE1210-ND	3.00	25.00	87.00	158.00	SG-531P 14.318MC
	14.745	SE1234-ND	3.00	25.00	87.00	158.00	SG-531P 14.745MC
	15.000	SE1235-ND	3.00	25.00	87.00	158.00	SG-531P 15.000MC
	16.257	SE1236-ND	3.00	25.00	87.00	158.00	SG-531P 16.257MC
	18.000	SE1237-ND	3.00	25.00	87.00	158.00	SG-531P 18.000MC
	18.432	SE1238-ND	3.00	25.00	87.00	158.00	SG-531P 18.432MC
	18.869	SE1239-ND	3.00	25.00	87.00	158.00	SG-531P 18.869MC
	19.660	SE1240-ND	3.00	25.00	87.00	158.00	SG-531P 19.660MC
	20.480	SE1241-ND	3.00	25.00	87.00	158.00	SG-531P 20.480MC
	22.118	SE1242-ND	3.00	25.00	87.00	158.00	SG-531P 22.118MC
	24.000	SE1213-ND	3.00	25.00	87.00	158.00	SG-531P 24.000MC
	25.175	SE1215-ND	3.00	25.00	87.00	158.00	SG-531P 25.175MC
	25.576	SE1243-ND	3.00	25.00	87.00	158.00	SG-531P 25.576MC
SG-531PTJ (OE) (TTL)	27.000	SE1817-ND	3.00	25.00	87.00	158.00	SG-531PTJ 27.000MC
	28.000	SE1818-ND	3.00	25.00	87.00	158.00	SG-531PTJ 28.000MC
	28.322	SE1819-ND	3.00	25.00	87.00	158.00	SG-531PTJ 28.322MC
	28.636	SE1820-ND	3.00	25.00	87.00	158.00	SG-531PTJ 28.636MC
	29.491	SE1821-ND	3.00	25.00	87.00	158.00	SG-531PTJ 29.491MC
	30.000	SE1822-ND	3.00	25.00	87.00	158.00	SG-531PTJ 30.000MC
	32.514	SE1824-ND	3.00	25.00	87.00	158.00	SG-531PTJ 32.514MC
	32.768	SE1825-ND	3.00	25.00	87.00	158.00	SG-531PTJ 32.768MC
	33.000	SE1826-ND	3.00	25.00	87.00	158.00	SG-531PTJ 33.000MC
	33.333	SE1827-ND	3.00	25.00	87.00	158.00	SG-531PTJ 33.3333MC
	36.000	SE1828-ND	3.00	25.00	87.00	158.00	SG-531PTJ 36.000MC
SG-531PCV (OE) (CMOS)	44.900	SE2901-ND	4.80	40.00	142.50	255.00	SG-531PCV 44.900MC
	48.000	SE2902-ND	4.80	40.00	142.50	255.00	SG-531PCV 48.000MC
	50.000	SE2903-ND	4.80	40.00	142.50	255.00	SG-531PCV 50.000MC
	55.000	SE2904-ND	4.80	40.00	142.50	255.00	SG-531PCV 55.000MC
	60.000	SE2905-ND	4.80	40.00	142.50	255.00	SG-531PCV 60.000MC

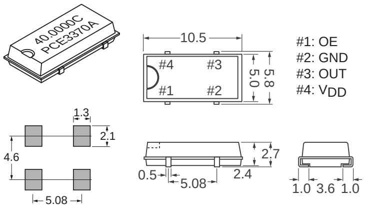
A462-ND	Aries Full-Size Socket for a 4-Pin Oscillator	$.60/1; $12.50/25; $40.48/100
A463-ND	Aries Half-Size Socket for a 4-Pin Oscillator..................	$.60/1; $12.50/25; $40.48/100

Case	Frequency (MHz)	Digi-Key Part No.	Pricing 1	10	50	100	Epson Part No.
SG-531PCV (OE) (CMOS)	65.000	SE2907-ND	4.80	40.00	142.50	255.00	SG-531PCV 65.000MC
	66.666	SE2909-ND	4.80	40.00	142.50	255.00	SG-531PCV 66.6667MC
	80.000	SE2912-ND	5.85	48.75	172.50	310.00	SG-531PCV 80.000MC
	90.000	SE2913-ND	5.85	48.75	172.50	310.00	SG-531PCV 90.000MC
	100.000	SE2914-ND	5.85	48.75	172.50	310.00	SG-531PCV 100.000MC
	106.250	SE2915-ND	7.95	66.25	232.50	420.00	SG-531PCV 106.250MC
	120.000	SE2916-ND	7.95	66.25	232.50	420.00	SG-531PCV 120.000MC
SG-51KT (TTL)	28.322	SE1602-ND	3.45	28.75	—	230.00	SG-51KT-28.3220MC
SG-51P (OE) (CMOS/ TTL)	1.544	SE1716-ND	3.00	25.00	87.00	158.00	SG-51P 1.544MC
	1.8432	SE1701-ND	3.00	25.00	87.00	158.00	SG-51P 1.843MC
	2.000	SE1717-ND	3.00	25.00	87.00	158.00	SG-51P 2.000MC
	2.048	SE1718-ND	3.00	25.00	87.00	158.00	SG-51P 2.048MC
	3.072	SE1719-ND	3.00	25.00	87.00	158.00	SG-51P 3.072MC
	3.088	SE1720-ND	3.00	25.00	87.00	158.00	SG-51P 3.088MC
	3.276	SE1721-ND	3.00	25.00	87.00	158.00	SG-51P 3.276MC
	3.579	SE1722-ND	3.00	25.00	87.00	158.00	SG-51P 3.579MC
	3.686	SE1723-ND	3.00	25.00	87.00	158.00	SG-51P 3.686MC
	4.000	SE1703-ND	3.00	25.00	87.00	158.00	SG-51P 4.000MC
	4.096	SE1724-ND	3.00	25.00	87.00	158.00	SG-51P 4.096MC
	4.9152	SE1704-ND	3.00	25.00	87.00	158.00	SG-51P 4.915MC
	5.000	SE1705-ND	3.00	25.00	87.00	158.00	SG-51P 5.000MC
	5.068	SE1725-ND	3.00	25.00	87.00	158.00	SG-51P 5.068MC
	6.000	SE1706-ND	3.00	25.00	87.00	158.00	SG-51P 6.000MC
	6.144	SE1726-ND	3.00	25.00	87.00	158.00	SG-51P 6.144MC
	7.372	SE1727-ND	3.00	25.00	87.00	158.00	SG-51P 7.372MC
	8.000	SE1707-ND	3.00	25.00	87.00	158.00	SG-51P 8.000MC
	8.192	SE1728-ND	3.00	25.00	87.00	158.00	SG-51P 8.192MC
	9.830	SE1729-ND	3.00	25.00	87.00	158.00	SG-51P 9.830MC
	10.000	SE1708-ND	3.00	25.00	87.00	158.00	SG-51P 10.000MC
	10.240	SE1730-ND	3.00	25.00	87.00	158.00	SG-51P 10.240MC
	11.000	SE1731-ND	3.00	25.00	87.00	158.00	SG-51P 11.000MC
	11.059	SE1732-ND	3.00	25.00	87.00	158.00	SG-51P 11.059MC
	12.000	SE1709-ND	3.00	25.00	87.00	158.00	SG-51P 12.000MC
	12.288	SE1733-ND	3.00	25.00	87.00	158.00	SG-51P 12.288MC
	14.31818	SE1710-ND	3.00	25.00	87.00	158.00	SG-51P 14.318MC
	14.745	SE1734-ND	3.00	25.00	87.00	158.00	SG-51P 14.745MC
	15.000	SE1735-ND	3.00	25.00	87.00	158.00	SG-51P 15.000MC
	16.000	SE1711-ND	3.00	25.00	87.00	158.00	SG-51P 16.000MC
	16.257	SE1736-ND	3.00	25.00	87.00	158.00	SG-51P 16.257MC
	18.000	SE1737-ND	3.00	25.00	87.00	158.00	SG-51P 18.000MC
	18.432	SE1738-ND	3.00	25.00	87.00	158.00	SG-51P 18.432MC
	18.869	SE1739-ND	3.00	25.00	87.00	158.00	SG-51P 18.869MC
	19.660	SE1740-ND	3.00	25.00	87.00	158.00	SG-51P 19.660MC
	20.000	SE1712-ND	3.00	25.00	87.00	158.00	SG-51P 20.000MC
	20.480	SE1741-ND	3.00	25.00	87.00	158.00	SG-51P 20.480MC
	22.118	SE1742-ND	3.00	25.00	87.00	158.00	SG-51P 22.118MC
	24.000	SE1713-ND	3.00	25.00	87.00	158.00	SG-51P 24.000MC
	24.576	SE1743-ND	3.00	25.00	87.00	158.00	SG-51P 24.576MC
	25.000	SE1714-ND	3.00	25.00	87.00	158.00	SG-51P 25.000MC
	25.175	SE1715-ND	3.00	25.00	87.00	158.00	SG-51P 25.175MC
SG-51PTJ (OE) (TTL)	28.000	SE1806-ND	3.00	25.00	87.00	158.00	SG-51PTJ 28.000MC
	28.322	SE1807-ND	3.00	25.00	87.00	158.00	SG-51PTJ 28.322MC
	28.636	SE1808-ND	3.00	25.00	87.00	158.00	SG-51PTJ 28.636MC
	29.491	SE1809-ND	3.00	25.00	87.00	158.00	SG-51PTJ 29.491MC
	30.000	SE1810-ND	3.00	25.00	87.00	158.00	SG-51PTJ 30.000MC
	32.000	SE1811-ND	3.00	25.00	87.00	158.00	SG-51PTJ 32.000MC
	32.514	SE1812-ND	3.00	25.00	87.00	158.00	SG-51PTJ 32.514MC
	32.768	SE1813-ND	3.00	25.00	87.00	158.00	SG-51PTJ 32.768MC
	33.000	SE1814-ND	3.00	25.00	87.00	158.00	SG-51PTJ 33.000MC
	33.333	SE1815-ND	3.00	25.00	87.00	158.00	SG-51PTJ 33.333MC
	36.000	SE1816-ND	3.00	25.00	87.00	158.00	SG-51PTJ 36.000MC
SG-51PH (OE) (CMOS)	32.768	SE1902-ND	3.00	25.00	87.00	158.00	SG-51PH 32.768MC
	33.000	SE1903-ND	3.00	25.00	87.00	158.00	SG-51PH 33.000MC
	33.333	SE1904-ND	3.00	25.00	87.00	158.00	SG-51PH 33.3330MC
	36.000	SE1905-ND	3.00	25.00	87.00	158.00	SG-51PH 36.000MC
	38.000	SE1906-ND	3.00	25.00	87.00	158.00	SG-51PH 38.000MC
	42.000	SE1908-ND	3.00	25.00	87.00	158.00	SG-51PH 42.000MC
	44.900	SE1909-ND	3.00	25.00	87.00	158.00	SG-51PH 44.900MC
	46.000	SE1910-ND	3.00	25.00	87.00	158.00	SG-51PH 46.000MC
	48.000	SE1911-ND	3.00	25.00	87.00	158.00	SG-51PH 48.000MC
	50.000	SE1912-ND	3.00	25.00	87.00	158.00	SG-51PH 50.000MC
	55.000	SE1913-ND	3.00	25.00	87.00	158.00	SG-51PH 55.000MC
	60.000	SE1914-ND	3.18	26.50	92.50	167.00	SG-51PH 60.000MC

EPSON ELECTRONICS AMERICA, INC.

Surface-Mount Quartz Crystal Products

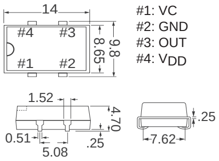
SG636PCE/636PCV Oscillator



FEATURES:
• 3.3 volt operation, low current consumption. • 45/55% duty cycle. • Small type SMD, thus allowing high density mounting. • Suitable for small handy equipments, especially “Energy Star Computers Program” products.

SPECIFICATIONS:
Max. Supply Voltage: –0.5V to +7.0V. **Operating Voltage:** 3.3V±0.3V, It is possible to work on 2.7 to 5.5 V_{DD}. **Storage Temperature:** –55°C to +100°C, Stored without Tape and Reel. **Operating Temperature:** –10°C to +70°C. **Soldering Condition:** Under 260°C within 10 sec. x 2 times or under 230°C within 3 min. **Frequency Stability:** C: ±100ppm, –10°C to +70°C. **Current Consumption:** 9mA Max., No Load Condition. **Output Disable Current:** 5.0mA Max. **Duty:** 45% to 55%. **High Output Voltage:** V_{DD} –0.4V Max., I_{OH}=–4mA. **Low Output Voltage:** 0.4V Max., I_{OL}=–4mA. **High Input Voltage:** 80% V_{DD} Min., OE Terminal. **Low Input Voltage:** 20% V_{DD} Max., OE Terminal. **Output Rise Time:** 5ns Max., 20% to 80% V_{DD} Level. **Output Fall Time:** 5ns Max., 80% to 20% V_{DD} Level. **Oscillation Start Up Time:** 4ms Max. **Aging:** ±5ppm/year Max. **Shock Resistance:** ±20ppm Max.

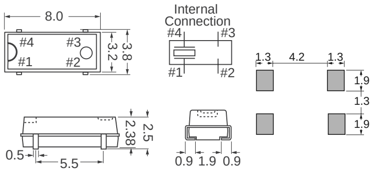
Voltage Controlled Crystal Oscillator (VCXO) VG-1011JA Series



FEATURES:
• Reflowable and high density mounting type SMD. • Using the heat-resisting type AT cut quartz crystal allows almost the same temperature soldering as universal SMD IC. • Using C-MOS IC allows low current consumption and assures high reliability. • Operating Supply Voltage: 5V. Control Voltage: 5V.

SPECIFICATIONS:
Supply Voltage (V_{DD}): –0.5V Min, 7.0V Max, **Control Voltage (VC):** –0.5V Min, 7.0V Max. **Soldering Condition (Tsol):** Under 260°C within 10 sec. x 2 times. **Supply Voltage (V_{DD}):** 4.5V Min, 5.5V Max. **Control Voltage (VC):** 0.5V Min, 4.5V Max. **Operable Temperature (Topr):** –40°C Min, 85°C Max. **Frequency Stability:** AV: Ta=–20 to 70°C, AV: ±20 Max. **Frequency Adjustment Range:** K=±75ppm. **Frequency Control Sensitivity:** VC= 2.5±2.0V, ±10%. **Supply Current:** V_{DD}=5.0V, No Load, 13mA Max. **Start-Up Time:** V_{DD}=4.5V to be 0 sec., 10 msec Max. **Duty:** 1/2 V_{DD} Level, 40% Min, 60% Max. **High Output Voltage:** IOH=-0.8mA, V_{DD}–0.4V. **Low Output Voltage:** IOL=0.8mA, 0.4V Max. **Output Rise Time:** 20% to 80% V_{DD} Level, 3 Typical, 8nS. **Output Fall Time:** 80% to 20% V_{DD} Level 3 Typical, 8nS.

MA-306



SPECIFICATIONS:
Storage Temperature: –55°C to +100°C, Stored as naked product after unpacking. **Operating Temperature:** –20°C to +70°C. **Maximum Drive Level:** 2mW Max., Only crystal oscillation is guaranteed. **Recommended Drive Level:** 10µW to 100µW. **Soldering Condition:** Twice at under 260°C within 10 seconds or under 230°C within 3 minutes. **Frequency Tolerance (standard):** ±100ppm. **Frequency Temperature Characteristics (standard):** ±30ppm, –20°C to +70°C, DL=100µW. **Load Capacitance:** 18pF. **Series Resistance:** 60Ω Max., –20°C to +70°C, DL=100µW. **Shunt Capacitance:** 5pF Max. **Aging:** ±5ppm/Y Max.

Series	Freq. (MHz)	Digi-Key Part No.	Cut Tape Pricing 1	10	50	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Epson Part No.
SG636PCE/ SG636PCV	2.4576	SE2801CT-ND	3.90	32.50	114.00	206.00	SE2801TR-ND	1730.00	SG-636PCE 2.457MCQ
	3.6864	SE2806CT-ND	3.90	32.50	114.00	206.00	SE2806TR-ND	1730.00	SG-636PCE 3.6864MCQ
	4.0000	SE2807CT-ND	3.90	32.50	114.00	206.00	SE2807TR-ND	1730.00	SG-636PCE 4.0000MCQ
	4.096	SE2808CT-ND	3.90	32.50	114.00	206.00	SE2808TR-ND	1730.00	SG-636PCE 4.096MCQ
	5.000	SE2810CT-ND	3.90	32.50	114.00	206.00	SE2810TR-ND	1730.00	SG-636PCE 5.000MCQ
	6.000	SE2812CT-ND	3.90	32.50	114.00	206.00	SE2812TR-ND	1730.00	SG-636PCE 6.000MCQ
	7.372	SE2814CT-ND	3.90	32.50	114.00	206.00	SE2814TR-ND	1730.00	SG-636PCE 7.372MCQ
	8.0000	SE2815CT-ND	3.90	32.50	114.00	206.00	SE2815TR-ND	1730.00	SG-636PCE 8.000MCQ
	8.192	SE2816CT-ND	3.90	32.50	114.00	206.00	SE2816TR-ND	1730.00	SG-636PCE 8.192MCQ
	10.000	SE2818CT-ND	3.90	32.50	114.00	206.00	SE2818TR-ND	1730.00	SG-636PCE 10.000MCQ
	10.240	SE2819CT-ND	3.90	32.50	114.00	206.00	SE2819TR-ND	1730.00	SG-636PCE 10.240MCQ
	12.000	SE2822CT-ND	3.90	32.50	114.00	206.00	SE2822TR-ND	1730.00	SG-636PCE 12.000MCQ
	14.3181	SE2824CT-ND	3.90	32.50	114.00	206.00	SE2824TR-ND	1730.00	SG-636PCE 14.318MCQ
	14.7456	SE2825CT-ND	3.90	32.50	114.00	206.00	SE2825TR-ND	1730.00	SG-636PCE 14.745MCQ
	15.000	SE2826CT-ND	3.90	32.50	114.00	206.00	SE2826TR-ND	1730.00	SG-636PCE 15.000MCQ
	16.000	SE2827CT-ND	3.90	32.50	114.00	206.00	SE2827TR-ND	1730.00	SG-636PCE 16.000MCQ
	18.000	SE2829CT-ND	3.90	32.50	114.00	206.00	SE2829TR-ND	1730.00	SG-636PCE 18.000MCQ
	18.432	SE2830CT-ND	3.90	32.50	114.00	206.00	SE2830TR-ND	1730.00	SG-636PCE 18.432MCQ
	20.000	SE2833CT-ND	3.90	32.50	114.00	206.00	SE2833TR-ND	1730.00	SG-636PCE 20.000MCQ
	24.000	SE2836CT-ND	3.90	32.50	114.00	206.00	SE2836TR-ND	1730.00	SG-636PCE 24.000MCQ
	25.000	SE2837CT-ND	3.90	32.50	114.00	206.00	SE2837TR-ND	1730.00	SG-636PCE 25.000MCQ
	25.175	SE2838CT-ND	3.90	32.50	114.00	206.00	SE2838TR-ND	1730.00	SG-636PCE 25.175MCQ
	27.000	SE2839CT-ND	3.90	32.50	114.00	206.00	SE2839TR-ND	1730.00	SG-636PCE 27.000MCQ
	28.636	SE2841CT-ND	3.90	32.50	114.00	206.00	SE2841TR-ND	1730.00	SG-636PCE 28.636MCQ
	29.491	SE2842CT-ND	3.90	32.50	114.00	206.00	SE2842TR-ND	1730.00	SG-636PCE 29.4912MCQ
	30.000	SE2843CT-ND	3.90	32.50	114.00	206.00	SE2843TR-ND	1730.00	SG-636PCE 30.000MCQ
	32.000	SE2844CT-ND	3.90	32.50	114.00	206.00	SE2844TR-ND	1730.00	SG-636PCE 32.000MCQ
	33.000	SE2847CT-ND	3.90	32.50	114.00	206.00	SE2847TR-ND	1730.00	SG-636PCE 33.000MCQ
	33.333	SE2848CT-ND	3.90	32.50	114.00	206.00	SE2848TR-ND	1730.00	SG-636PCE 33.333MCQ
	36.000	SE2849CT-ND	3.90	32.50	114.00	206.00	SE2849TR-ND	1730.00	SG-636PCE 36.000MCQ
	38.000	SE2850CT-ND	3.90	32.50	114.00	206.00	SE2850TR-ND	1730.00	SG-636PCE 38.000MCQ
	40.000	SE2851CT-ND	3.90	32.50	114.00	206.00	SE2851TR-ND	1730.00	SG-636PCE 40.000MCQ
	48.000	SE2853CT-ND	6.15	51.25	180.00	325.00	SE2853TR-ND	2700.00	SG-636PCV 48.000MCQ
	55.000	SE2855CT-ND	6.15	51.25	180.00	325.00	SE2855TR-ND	2700.00	SG-636PCV 55.000MCQ
	60.000	SE2856CT-ND	6.15	51.25	180.00	325.00	—	—	SG-636PCV 60.000MCQ
	66.000	SE2859CT-ND	6.15	51.25	180.00	325.00	—	—	SG-636PCV 66.000MCQ
	66.666	SE2860CT-ND	6.15	51.25	180.00	325.00	—	—	SG-636PCV 66.6667MCQ
VG1011JA	12.288	SE3601CT-ND	13.68	114.00	405.50	730.00	SE3601TR-ND	6080.00	VG-1011JA 12.28MAVK0
	16.384	SE3603CT-ND	13.68	114.00	405.50	730.00	SE3603TR-ND	6080.00	VG-1011JA 16.38MAVK0
	19.200	SE3605CT-ND	13.68	114.00	405.50	730.00	SE3605TR-ND	6080.00	VG-1011JA 19.20MAVK0
	19.440	SE3606CT-ND	13.68	114.00	405.50	730.00	SE3606TR-ND	6080.00	VG-1011JA 19.44MAVK0
	27.000	SE3607CT-ND	13.68	114.00	405.50	730.00	SE3607TR-ND	6080.00	VG-1011JA 27.00MAVK0
MA-306	18.000	SE2701CT-ND	1.89	15.75	55.50	100.00	SE2701TR-ND	830.00	MA-306 18.000M-CQ
	18.432	SE2702CT-ND	1.89	15.75	55.50	100.00	SE2702TR-ND	830.00	MA-306 18.432M-CQ
	19.660	SE2704CT-ND	1.89	15.75	55.50	100.00	SE2704TR-ND	830.00	MA-306 19.660M-CQ
	20.000	SE2705CT-ND	1.89	15.75	55.50	100.00	SE2705TR-ND	830.00	MA-306 20.000M-CQ
	22.118	SE2707CT-ND	1.89	15.75	55.50	100.00	SE2707TR-ND	830.00	MA-306 22.1180M-CQ
	24.000	SE2708CT-ND	1.89	15.75	55.50	100.00	SE2708TR-ND	830.00	MA-306 24.000M-CQ
	24.576	SE2709CT-ND	1.89	15.75	55.50	100.00	SE2709TR-ND	830.00	MA-306 24.576M-CQ
	25.000	SE2710CT-ND	1.89	15.75	55.50	100.00	SE2710TR-ND	830.00	MA-306 25.000M-CQ
	25.175	SE2711CT-ND	1.89	15.75	55.50	100.00	SE2711TR-ND	830.00	MA-306 25.175M-CQ
	27.000	SE2712CT-ND	1.89	15.75	55.50	100.00	SE2712TR-ND	830.00	MA-306 27.000M-CQ
	28.000	SE2713CT-ND	1.89	15.75	55.50	100.00	SE2713TR-ND	830.00	MA-306 28.000M-CQ
	28.636	SE2715CT-ND	1.89	15.75	55.50	100.00	SE2715TR-ND	830.00	MA-306 28.636M-CQ
	29.491	SE2716CT-ND	1.89	15.75	55.50	100.00	SE2716TR-ND	830.00	MA-306 29.491M-CQ
	32.000	SE2718CT-ND	1.89	15.75	55.50	100.00	SE2718TR-ND	830.00	MA-306 32.000M-CQ
	40.000	SE2725CT-ND	2.04	17.00	60.00	108.00	SE2725TR-ND	900.00	MA-306 40.000M-CQ

EPSON ELECTRONICS
AMERICA, INC.

Cylinder-Type Quartz Crystals

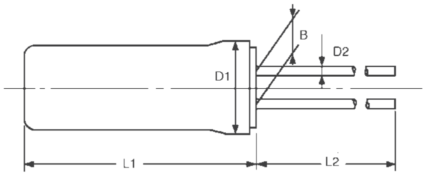
C-Type/C-2-Type

SPECIFICATIONS FOR C-TYPE (Characteristics):

• **Nominal Frequency:** 32.768KHz • **Operating Temperature:** -10°C ~ +60°C • **Maximum Drive Level:** 1.0µW Max. • **Frequency Tolerance (Standard):** ±20ppm • **Load Capacitance:** (SE3201, SE3202, SE3203) 12.5pf; (SE3204) 9pf • **Series Resistance:** C-001R – 35KΩ Max. (18KΩ Typ.); C-002RX and C-004R – 50KΩ Max. (30KΩ Typ.); and C-005R – 50KΩ Max. (37KΩ Typ.)

SPECIFICATIONS FOR C-2-TYPE (Characteristics):

• **Operating Temperature:** -10°C ~ +60°C • **Max. Drive Level:** 1.0µW Max. • **Crystal Load Capacitance/Tolerance:** All parts have 11 pfd. load capacitance, ±100 ppm except: **(SE3307)** C-2 31.200KI-AG, 7 pfd., ±200 ppm; **(SE3311)** C-2 32.560KH-AG, 7pfd., ±190 ppm; **(SE3314)** C-2 38.000KA-P 12.5 pfd., ±20 ppm • **Series Resistance Over 20KHz and Under 99KHz:** 35KΩ ~ 15KΩ • **Series Resistance Over 100KHz and Under 200KHz:** 12KΩ ~ 8KΩ.

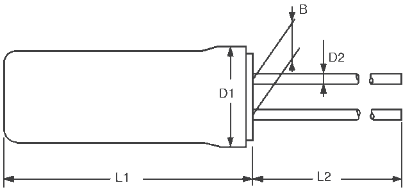


Model	L_1	L_2	D_1	D_2	B
C-2-Type	6.2 MAX	4.0 MIN	ø2.0 MAX	ø0.2	0.6
C-001R	8.0 MAX	9.0 MIN	ø3.1 MAX	ø0.3	1.1
C-002RX	6.0 MAX	4.0 MIN	ø2.0 MAX	ø0.2	0.6
C-004R	5.0 MAX	4.0 MIN	ø1.5 MAX	ø0.18	0.5
C-005R	4.6 MAX	4.0 MIN	ø1.2 MAX	ø0.15	0.3

CA-301 Type

SPECIFICATIONS (Characteristics):

• **Operating Temperature:** -20°C ~ +70°C • **Maximum Drive Level:** 2mW Max. • **Recommended Level:** 10µW ~ 100µW Typ. • **Frequency Tolerance (Standard):** ±30ppm • **Load Capacitance:** 18 pfd • **Series Resistance:** As per table below.



Model	L_1	L_2	D_1	D_2	B
Under 5.3MHz	10.3 MAX	9.0 MIN	ø3.1 MAX	ø0.3	1.1
Over 5.5 MHz	8.9 MAX	9.0 MIN	ø3.1 MAX	ø0.3	1.1

Frequency (MHz)	Series Resistance (Ω)	Mode
Over 4.0MHz Under 5.3MHz	150 Ω MAX.	Fundamental
Over 5.5MHz Under 6.0MHz	100 Ω MAX.	
Over 6.0MHz Under 10.0MHz	80 Ω MAX.	
Over 10.0MHz Under 12.0MHz	60 Ω MAX.	
Over 12.0MHz Under 16.0MHz	50 Ω MAX.	
Over 16.0MHz Under 26.0MHz	40 Ω MAX.	
Over 26.0MHz Under 36.0MHz	100 Ω MAX.	3rd Overtone
Exceeding 36.0MHz Below 60.0MHz	80 Ω MAX.	

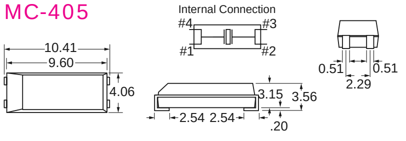
Series	Frequency	Digi-Key Part No.	Pricing					Epson Part No.
			1	10	50	100	1,000	
C-Type	32.768KHz	SE3201-ND	.42	3.50	12.00	22.00	180.00	C-001R 32.768K-A
	32.768KHz	SE3202-ND	.42	3.50	12.00	22.00	180.00	C-002RX 32.768K-A
	32.768KHz	SE3203-ND	1.38	11.50	41.00	74.00	620.00	C-004R 32.768K-A
	32.768KHz	SE3204-ND	5.64	47.00	166.50	300.00	2500.01	C-005R 32.768K-AC
C-2 Type	20.000KHz	SE3301-ND	1.23	10.25	36.50	66.00	550.00	C-2 20.000K-P
	25.600KHz	SE3302-ND	1.23	10.25	36.50	66.00	550.00	C-2 25.600K-P
	26.667KHz	SE3303-ND	1.23	10.25	36.50	66.00	550.00	C-2 26.667K-P
	28.000KHz	SE3304-ND	1.23	10.25	36.50	66.00	550.00	C-2 28.000K-P
	30.000KHz	SE3305-ND	1.23	10.25	36.50	66.00	550.00	C-2 30.000K-P
	30.760KHz	SE3306-ND	1.23	10.25	36.50	66.00	550.00	C-2 30.760K-P
	31.200KHz	SE3307-ND	1.23	10.25	36.50	66.00	550.00	C-2 31.200KI-AG
	31.250KHz	SE3308-ND	1.23	10.25	36.50	66.00	550.00	C-2 31.250K-P
	31.500KHz	SE3309-ND	1.23	10.25	36.50	66.00	550.00	C-2 31.500K-P
	32.000KHz	SE3310-ND	1.23	10.25	36.50	66.00	550.00	C-2 32.000K-P
	32.560KHz	SE3311-ND	1.23	10.25	36.50	66.00	550.00	C-2 32.560KH-AG
	32.919KHz	SE3312-ND	1.23	10.25	36.50	66.00	550.00	C-2 32.919KC-P
	36.000KHz	SE3313-ND	1.23	10.25	36.50	66.00	550.00	C-2 36.000K-P
	38.000KHz	SE3314-ND	1.35	11.25	36.50	66.00	550.00	C-2 38.000KA-P
	38.400KHz	SE3315-ND	1.23	10.25	36.50	66.00	550.00	C-2 38.400K-P
	40.000KHz	SE3316-ND	1.23	10.25	36.50	66.00	550.00	C-2 40.000K-P
	46.6084KHz	SE3317-ND	1.23	10.25	36.50	66.00	550.00	C-2 46.6084KC-P
	50.000KHz	SE3318-ND	1.23	10.25	36.50	66.00	550.00	C-2 50.000K-P
	59.787KHz	SE3319-ND	1.23	10.25	36.50	66.00	550.00	C-2 59.787KC-P
	60.000KHz	SE3320-ND	1.23	10.25	36.50	66.00	550.00	C-2 60.000K-P
	60.002KHz	SE3321-ND	1.23	10.25	36.50	66.00	550.00	C-2 60.002KC-P
	65.535KHz	SE3322-ND	1.23	10.25	36.50	66.00	550.00	C-2 65.535K-P
	75.000KHz	SE3323-ND	1.23	10.25	36.50	66.00	550.00	C-2 75.000K-P
	76.800KHz	SE3324-ND	1.23	10.25	36.50	66.00	550.00	C-2 76.800K-P
	83.000KHz	SE3330-ND	1.47	12.25	43.50	78.00	650.00	C-2 83.000K-P
	96.000KHz	SE3331-ND	1.47	12.25	43.50	78.00	650.00	C-2 96.000K-P
	100.000KHz	SE3333-ND	1.47	12.25	43.50	78.00	650.00	C-2 100.000K-P
	111.000KHz	SE3334-ND	1.47	12.25	43.50	78.00	650.00	C-2 111.000K-P
	120.000KHz	SE3335-ND	1.47	12.25	43.50	78.00	650.00	C-2 120.000K-P
	120.8475KHz	SE3336-ND	1.47	12.25	43.50	78.00	650.00	C-2 120.847K-P
	131.072KHz	SE3337-ND	1.77	14.75	52.00	94.00	780.00	C-2 131.072K-P
	149.475KHz	SE3338-ND	1.77	14.75	52.00	94.00	780.00	C-2 149.475K-P
CA-301 Type	4.0000MHz	SE3404-ND	2.13	17.75	62.55	112.70	935.40	CA-301 4.000M-C
	4.194304MHz	SE3405-ND	2.13	17.75	62.55	112.70	935.40	CA-301 4.194M-C
	4.433619MHz	SE3406-ND	2.13	17.75	62.55	112.70	935.40	CA-301 4.433M-C
	4.9152MHz	SE3407-ND	2.13	17.75	62.55	112.70	935.40	CA-301 4.915M-C
	5.500MHz	SE3408-ND	1.17	9.75	34.00	62.00	520.00	CA-301 5.500M-C
	6.000MHz	SE3409-ND	1.17	9.75	34.00	62.00	520.00	CA-301 6.000M-C
	6.144MHz	SE3410-ND	1.17	9.75	34.00	62.00	520.00	CA-301 6.144M-C
	6.757MHz	SE3411-ND	1.17	9.75	34.00	62.00	520.00	CA-301 6.757M-C
	7.200MHz	SE3412-ND	1.17	9.75	34.00	62.00	520.00	CA-301 7.200M-C
	7.3728MHz	SE3413-ND	1.17	9.75	34.00	62.00	520.00	CA-301 7.372M-C
	8.000MHz	SE3414-ND	1.17	9.75	34.00	62.00	520.00	CA-301 8.000M-C
	8.388608MHz	SE3415-ND	1.17	9.75	34.00	62.00	520.00	CA-301 8.388M-C
	8.432MHz	SE3416-ND	1.17	9.75	34.00	62.00	520.00	CA-301 8.432M-C
	9.600MHz	SE3418-ND	1.17	9.75	34.00	62.00	520.00	CA-301 9.600M-C
	9.8304MHz	SE3419-ND	1.17	9.75	34.00	62.00	520.00	CA-301 9.830M-C
	10.000MHz	SE3420-ND	1.17	9.75	34.00	62.00	520.00	CA-301 10.000M-C
	10.240MHz	SE3421-ND	1.17	9.75	34.00	62.00	520.00	CA-301 10.240M-C
	10.6244MHz	SE3422-ND	1.17	9.75	34.00	62.00	520.00	CA-301 10.624M-C
	11.0592MHz	SE3423-ND	1.17	9.75	34.00	62.00	520.00	CA-301 11.059M-C
	12.000MHz	SE3424-ND	1.17	9.75	34.00	62.00	520.00	CA-301 12.000M-C
	12.096MHz	SE3425-ND	1.17	9.75	34.00	62.00	520.00	CA-301 12.096M-C
	12.288MHz	SE3426-ND	1.17	9.75	34.00	62.00	520.00	CA-301 12.288M-C
	13.500MHz	SE3427-ND	1.17	9.75	34.00	62.00	520.00	CA-301 13.500M-C
	14.000MHz	SE3428-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.000M-C
	14.31818MHz	SE3429-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.318M-C
	14.500MHz	SE3430-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.500M-C
	14.7456MHz	SE3431-ND	1.17	9.75	34.00	62.00	520.00	CA-301 14.745M-C
	15.000MHz	SE3432-ND	1.17	9.75	34.00	62.00	520.00	CA-301 15.000M-C
	16.000MHz	SE3433-ND	1.17	9.75	34.00	62.00	520.00	CA-301 16.000M-C
	16.257MHz	SE3434-ND	1.17	9.75	34.00	62.00	520.00	CA-301 16.257M-C
	18.000MHz	SE3435-ND	1.17	9.75	34.00	62.00	520.00	CA-301 18.000M-C
	18.432MHz	SE3436-ND	1.17	9.75	34.00	62.00	520.00	CA-301 18.432M-C
	19.6608MHz	SE3437-ND	1.17	9.75	34.00	62.00	520.00	CA-301 19.660M-C
	20.000MHz	SE3438-ND	1.17	9.75	34.00	62.00	520.00	CA-301 20.000M-C
	22.1184MHz	SE3439-ND	1.17	9.75	34.00	62.00	520.00	CA-301 22.118M-C
	24.000MHz	SE3440-ND	1.17	9.75	34.00	62.00	520.00	CA-301 24.000M-C
	25.000MHz	SE3441-ND	1.17	9.75	34.00	62.00	520.00	CA-301 25.000M-C
	25.175MHz	SE3442-ND	1.17	9.75	34.00	62.00	520.00	CA-301 25.175M-C
	27.000MHz	SE3443-ND	1.20	10.00	35.00	63.00	530.00	CA-301 27.000M-C
	28.000MHz	SE3444-ND	1.20	10.00	35.00	63.00	530.00	CA-301 28.000M-C
	28.322MHz	SE3445-ND	1.20	10.00	35.00	63.00	530.00	CA-301 28.322M-C
	32.000MHz	SE3446-ND	1.20	10.00	35.00	63.00	530.00	CA-301 32.000M-C
	32.768MHz	SE3447-ND	1.20	10.00	35.00	63.00	530.00	CA-301 32.768M-C
	33.000MHz	SE3448-ND	1.20	10.00	35.00	63.00	530.00	CA-301 33.000M-C
	33.333MHz	SE3449-ND	1.20	10.00	35.00	63.00	530.00	CA-301 33.333M-C
	36.000MHz	SE3450-ND	1.20	10.00	35.00	63.00	530.00	CA-301 36.000M-C
	40.000MHz	SE3451-ND	1.20	10.00	35.00	63.00	530.00	CA-301 40.000M-C
	46.000MHz	SE3453-ND	1.20	10.00	35.00	63.00	530.00	CA-301 46.000M-C
	49.860MHz	SE3454-ND	1.20	10.00	35.00	63.00	530.00	CA-301 49.860M-C
	50.000MHz	SE3455-ND	1.20	10.00	35.00	63.00	530.00	CA-301 50.000M-C
	55.000MHz	SE3456-ND	1.20	10.00	35.00	63.00	530.00	CA-301 55.000M-C
	60.000MHz	SE3457-ND	1.29	10.75	37.00	67.00	560.00	CA-301 60.000M-C

EPSON ELECTRONICS
AMERICA, INC.

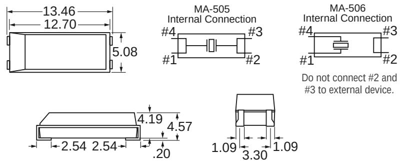
Surface-Mount Quartz Crystal Products

Storage Temperature: –55°C to +125°C.

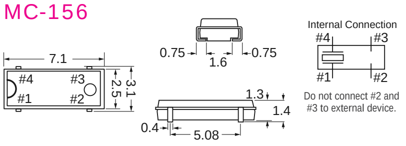
MC-405



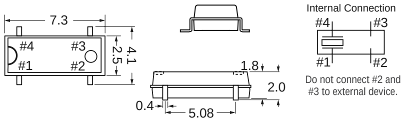
MA-505/MA-506



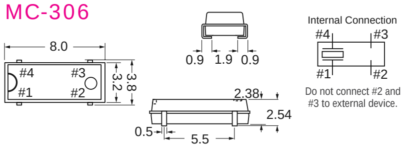
MC-156



MC-206

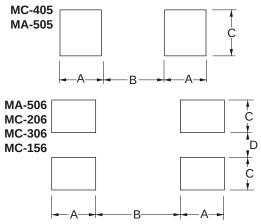


MC-306



Recommended Soldering Pattern

- Capable of withstanding reflow temperatures of 260°C for 20 seconds
- Suitable for use in today's high density surface mount boards



Type	A	B	C	D
	Dimensions (mm)			
MC-405	4.09	3.91	4.09	—
MA-505	4.09	7.01	5.61	—
MA-506	4.09	6.86	2.06	1.52
MC-156	1.2	3.88	1.5	1.0
MC-206	1.2	3.88	1.3	2.4
MC-306	1.3	4.2	1.9	1.3

Series	Frequency (MHz)◊	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	T/R Pricing 1,000	Epson Part No.
			1	10	50	100			
MC-405	32.768kHz	SE2405CT-ND	2.04	1.70	1.20	1.08	SE2405TR-ND	900.00	MC-405 32.768K-A2
MA-505	4.000	SE2518CT-ND	2.49	2.08	1.45	1.32	SE2518TR-ND	1103.00	MA-505 4.000M-C0
	4.096	SE2519CT-ND	2.49	2.08	1.45	1.32	SE2519TR-ND	1103.00	MA-505 4.096M-C0
	4.915	SE2520CT-ND	2.49	2.08	1.45	1.32	SE2520TR-ND	1103.00	MA-505 4.915M-C0
	6.000	SE2501CT-ND†	1.56	1.30	.91	.83	SE2501TR-ND	690.00	MA-505 6.000M-C0
	6.144	SE2502CT-ND†	1.56	1.30	.91	.83	SE2502TR-ND	690.00	MA-505 6.144M-C0
	7.3728	SE2503CT-ND†	1.56	1.30	.91	.83	SE2503TR-ND	690.00	MA-505 7.372M-C0
	8.000	SE2504CT-ND†	1.56	1.30	.91	.83	SE2504TR-ND	690.00	MA-505 8.000M-C0
	9.830	SE2524CT-ND	1.56	1.30	.91	.83	SE2524TR-ND	690.00	MA-505 9.830M-C0
	10.000	SE2505CT-ND†	1.56	1.30	.91	.83	SE2505TR-ND	690.00	MA-505 10.000M-C0
	10.240	SE2525CT-ND	1.56	1.30	.91	.83	SE2525TR-ND	690.00	MA-505 10.240M-C0
	11.0592	SE2506CT-ND†	1.56	1.30	.91	.83	SE2506TR-ND	690.00	MA-505 11.059M-C0
	12.000	SE2507CT-ND†	1.56	1.30	.91	.83	SE2507TR-ND	690.00	MA-505 12.000M-C0
	14.318	SE2528CT-ND	1.56	1.30	.91	.83	SE2528TR-ND	690.00	MA-505 14.318M-C0
	14.745	SE2529CT-ND	1.56	1.30	.91	.83	SE2529TR-ND	690.00	MA-505 14.745M-C0
	16.000	SE2508CT-ND†	1.56	1.30	.91	.83	SE2508TR-ND	690.00	MA-505 16.000M-C0
	18.432	SE2533CT-ND	1.56	1.30	.91	.83	SE2533TR-ND	690.00	MA-505 18.432M-C0
	19.660	SE2535CT-ND	1.56	1.30	.91	.83	SE2535TR-ND	690.00	MA-505 19.660M-C0
	20.000	SE2509CT-ND†	1.56	1.30	.91	.83	SE2509TR-ND	690.00	MA-505 20.000M-C0
	24.000	SE2510CT-ND†	1.56	1.30	.91	.83	SE2510TR-ND	690.00	MA-505 24.000M-C0
	24.576	SE2538CT-ND	1.56	1.30	.91	.83	SE2538TR-ND	690.00	MA-505 24.576M-C0
	25.000	SE2539CT-ND	1.56	1.30	.91	.83	SE2539TR-ND	690.00	MA-505 25.000M-C0
	27.000	SE2541CT-ND	1.56	1.30	.91	.83	SE2541TR-ND	690.00	MA-505 27.000M-C0
	28.636	SE2542CT-ND	1.56	1.30	.91	.83	SE2542TR-ND	690.00	MA-505 28.636M-C0
	29.491	SE2543CT-ND	1.56	1.30	.91	.83	SE2543TR-ND	690.00	MA-505 29.491M-C0
	30.000	SE2544CT-ND	1.56	1.30	.91	.83	SE2544TR-ND	690.00	MA-505 30.000M-C0
	32.768	SE2546CT-ND	1.62	1.35	.94	.85	SE2546TR-ND	710.00	MA-505 32.768M-C0
	33.3333	SE2514CT-ND†	1.62	1.35	.94	.85	SE2514TR-ND	710.00	MA-505 33.3330M-C0
	36.000	SE2548CT-ND	1.62	1.35	.94	.85	SE2548TR-ND	710.00	MA-505-36.000M-C0
	40.000	SE2515CT-ND†	1.62	1.35	.94	.85	SE2515TR-ND	710.00	MA-505 40.000M-C0
	60.000	SE2517CT-ND†	1.77	1.48	1.02	.92	SE2517TR-ND	770.00	MA-505-60.00M-C0
	64.000	SE2553CT-ND	1.77	1.48	1.02	.92	SE2553TR-ND	770.00	MA-505-64.000M-C0
MA-506	4.000	SE2618CT-ND	2.49	2.08	1.45	1.32	SE2618TR-ND	1103.00	MA-506 4.000M-C0
	4.096	SE2619CT-ND	2.49	2.08	1.45	1.32	SE2619TR-ND	1103.00	MA-506 4.096M-C0
	4.915	SE2620CT-ND	2.49	2.08	1.45	1.32	SE2620TR-ND	1103.00	MA-506 4.915M-C0
	6.000	SE2601CT-ND•	1.56	1.30	.91	.83	SE2601TR-ND	690.00	MA-506 6.0000M-C0
	6.144	SE2602CT-ND•	1.56	1.30	.91	.83	SE2602TR-ND	690.00	MA-506 6.144M-C0
	7.3728	SE2603CT-ND•	1.56	1.30	.91	.83	SE2603TR-ND	690.00	MA-506 7.372M-C0
	8.000	SE2604CT-ND•	1.56	1.30	.91	.83	SE2604TR-ND	690.00	MA-506 8.000M-C0
	9.830	SE2624CT-ND	1.56	1.30	.91	.83	SE2624TR-ND	690.00	MA-506 9.8300M-C0
	10.000	SE2605CT-ND•	1.56	1.30	.91	.83	SE2605TR-ND	690.00	MA-506 10.000M-C0
	10.240	SE2625CT-ND	1.56	1.30	.91	.83	SE2625TR-ND	690.00	MA-506 10.240M-C0
	11.000	SE2626CT-ND	1.56	1.30	.91	.83	SE2626TR-ND	690.00	MA-506 11.000M-C0
	11.0592	SE2606CT-ND•	1.56	1.30	.91	.83	SE2606TR-ND	690.00	MA-506 11.059M-C0
	12.000	SE2607CT-ND•	1.56	1.30	.91	.83	SE2607TR-ND	690.00	MA-506 12.000M-C0
	12.288	SE2627CT-ND	1.56	1.30	.91	.83	SE2627TR-ND	690.00	MA-506 12.288M-C0
	14.318	SE2628CT-ND	1.56	1.30	.91	.83	SE2628TR-ND	690.00	MA-506 14.318M-C0
	14.745	SE2629CT-ND	1.56	1.30	.91	.83	SE2629TR-ND	690.00	MA-506 14.745M-C0
	15.000	SE2630CT-ND	1.56	1.30	.91	.83	SE2630TR-ND	690.00	MA-506 15.000M-C0
	16.000	SE2608CT-ND•	1.56	1.30	.91	.83	SE2608TR-ND	750.00	MA-506 16.000M-C0
	16.257	SE2631CT-ND	1.56	1.30	.91	.83	SE2631TR-ND	690.00	MA-506 16.257M-C0
	18.000	SE2632CT-ND	1.56	1.30	.91	.83	SE2632TR-ND	690.00	MA-506 18.000M-C0
	18.432	SE2633CT-ND	1.56	1.30	.91	.83	SE2633TR-ND	690.00	MA-506 18.432M-C0
	19.660	SE2635CT-ND	1.56	1.30	.91	.83	SE2635TR-ND	690.00	MA-506 19.660M-C0
	20.000	SE2609CT-ND•	1.56	1.30	.91	.83	SE2609TR-ND	690.00	MA-506 20.000M-C0
	20.480	SE2636CT-ND	1.56	1.30	.91	.83	SE2636TR-ND	690.00	MA-506 20.480M-C0
	22.118	SE2637CT-ND	1.56	1.30	.91	.83	SE2637TR-ND	690.00	MA-506 22.118M-C0
	24.000	SE2610CT-ND•	1.56	1.30	.91	.83	SE2610TR-ND	690.00	MA-506 24.000M-C0
	24.576	SE2638CT-ND	1.56	1.30	.91	.83	SE2638TR-ND	690.00	MA-506 24.576M-C0
	25.000	SE2639CT-ND	1.56	1.30	.91	.83	SE2639TR-ND	690.00	MA-506 25.000M-C0
	27.000	SE2641CT-ND	1.56	1.30	.91	.83	SE2641TR-ND	690.00	MA-506 27.000M-C0
	28.636	SE2642CT-ND	1.56	1.30	.91	.83	SE2642TR-ND	690.00	MA-506 28.636M-C0
	32.000	SE2613CT-ND•	1.62	1.35	.94	.85	SE2613TR-ND	710.00	MA-506 32.000M-C0
	33.000	SE2647CT-ND	1.62	1.35	.94	.85	SE2647TR-ND	710.00	MA-506 33.000M-C0
	40.000	SE2615CT-ND•	1.62	1.35	.94	.85	SE2615TR-ND	710.00	MA-506 40.000M-C0
	48.000	SE2651CT-ND	1.62	1.35	.94	.85	SE2651TR-ND	710.00	MA-506 48.000M-C0
	50.000	SE2616CT-ND•	1.62	1.35	.94	.85	SE2616TR-ND	710.00	MA-506 50.000M-C0
	64.000	SE2653CT-ND	1.77	1.48	1.02	.92	SE2653TR-ND	770.00	MA-506-64.000M-C0
MC-156	32.768KHz	SE2412CT-ND	2.64	2.20	1.56	1.40	SE2412TR-ND	1170.00	MC-156 32.768KA-A2
MC-206	32.768KHz	SE2406CT-ND	1.77	1.48	1.04	.94	SE2406TR-ND	780.00	MC-206 32.768KA-A2
MC-306	32.768KHz	SE2407CT-ND	1.20	1.00	.73	.66	SE2407TR-ND	544.00	MC-306 32.768K-A0

Package	MC-405	MA-505	MA-506	MC-156	MC-206	MC-306
Operating Temperature	-40°C to +85°C	-20°C to +70°C	-20°C to +70°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Maximum Drive Level	1.0µW	2mW	2mW	1.0µW	1.0µW	1.0µW
Frequency Tolerance	±20ppm @ 25°C	±50ppm @ 25°C	±50ppm @ 25°C	±20ppm @ 25°C	±20ppm @ 25°C	±20ppm @ 25°C
Load Capacitance	12.5pf	18pf	18pf	12.5pf	12.5pf	12.5pf
Series Resistance	50K Ohm Max.	50 Ohm Max.	50 Ohm Max.	65K Ohm Max.	50K Ohm Max.	50K Ohm Max.
Shunt Capacitance	0.85pf Typ.	5pf Max.	5pf Max.	—	0.9pf max.	0.9pf Max.

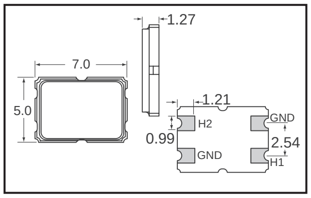
◊ Except when otherwise noted.

† **SE1-KIT-ND** ***Digi-Key® SMT Crystal Kit*** 3 each of values denoted (51 total pieces). Notebook style storage case and bin storage guide included. **$89.00**

• **SE2-KIT-ND** ***Digi-Key® SMT Crystal Kit*** 3 each of values denoted (51 total pieces). Notebook style storage case and bin storage guide included. **$89.00**

Surface Mount Reference Crystal

Features:
- Stable frequency over temperature and drive level
- Low Profile Seam Weld Package
- For use in cellular handsets, 2-way radios, pagers and other portable electronics requiring a stable frequency source



Specifications:
- Mode of Vibration: Fundamental
- Storage Temperature Range: -40°C to 85°C
- Frequency Stability over Temperature: ±15PPM (-10°C to 50°C)
- Frequency Make Tolerance: ±10PPM @25°C +/-3°C
- Resonance Resistance: 30Ω Max.
- Drive Level: 10µW Max.
- Load Capacitance: 12pf
- Shunt Capacitance: 5.0pf Max.
- Aging: +/-2PPM /Yr @25°C

Nom. Frequency (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	50	T&R Pricing* 1,000	CTS Wireless Part No.
14.40	12pF	410-1000-1-ND	5.99	5.52	3.17	1675.06	KXN6489B

*For Tape and Reel Part No., change –1 to –2.

Surface Mount Crystals

Fig. 1

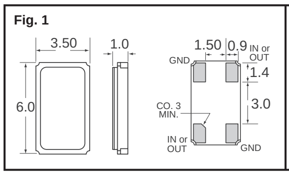
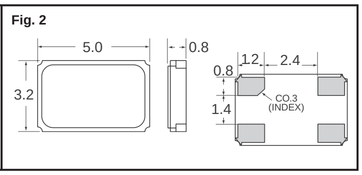


Fig. 2



Features:
- Stable frequency over temperature and drive level
- Low Profile Seam Weld Package
- Optional machine readable crystal temperature characteristics
- For use in GSM handsets, 2-way radios, pagers, and other portable electronics requiring a stable frequency source

Specifications:
- Storage Temperature Range: -40°C to 85°C
- Frequency Stability over Temperature: ±11PPM (-30°C to 85°C)
- Frequency Make Tolerance: ±10PPM @ 25°C +/-3°C

Fig.	Nom. Frequency (MHz.)	Max. Drive Level (µW)	Load Capacitance (pF)	Max. Shunt Capacitance (pF)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	T&R Pricing* 1,000	CTS Wireless Part No.
1	13.0	100	10.0	1.3	410-1001-1-ND	5.94	5.47	3.14	1661.76	ATXN6077A
	20.0	100	9.0	—	410-1002-1-ND	5.80	5.34	3.07	1621.88	ATXN6040D
2	26.0	300	9.5	4.0	410-1003-1-ND	5.80	5.34	3.07	1621.88	ATXN6073A

*For Tape and Reel Part No., change –1 to –2.

Surface Mount Crystal Filters

Fig. 1

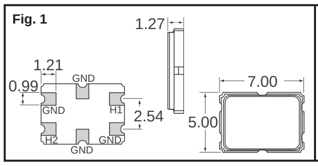
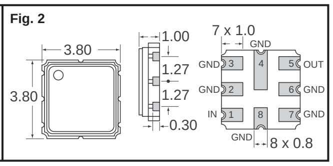


Fig. 2



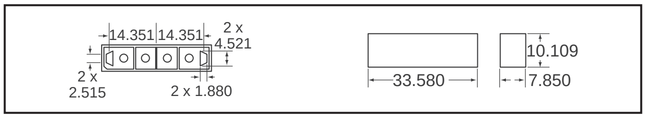
Features: 3-Pole IF Filter Performance • Low Profile Seam Weld Package • For use in analog wireless telecommunications equipment • Excellent Shock and Vibration Capability

Specifications	ATFN6036A	ATFN6033A	ATFN6024A	ATFN6030A
Operating Temp Range:	-30°C to +80°C	-30°C to +85°C	-40°C to +85°C	-30°C to +85°C
Pass Bandwidth:	3dB ±14Khz	3dB ±14Khz	.5dB ±10Khz	3dB ±15Khz
Stop Bandwidth:	25dB ±60Khz	25dB ±60Khz	3dB ±25Khz, 22dB ±60Khz	20dB ±60Khz, 30dB ±120Khz

Fig.	Ripple (Max.)	Insert. Loss	Term. Impedance OHMS//pf	FO (MHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	T&R Pricing* 1,000	CTS Wireless Part No.
1	1dB	3dB	1200//1.5	45.00	410-1004-1-ND	17.24	15.89	9.12	4825.76	ATFN6036A
2	1dB	3dB	2000//-1.0	85.38	410-1005-1-ND	17.53	16.15	9.27	4905.52	ATFN6033A
	.5dB	2.5dB	2000//-0.6	109.65	410-1006-1-ND	16.86	15.54	8.92	4719.41	ATFN6024A
	1.5dB	4dB	1000//-0.65	128.10	410-1007-1-ND	15.63	14.40	8.26	4373.76	ATFN6030A

*For Tape and Reel Part No., change –1 to –2.

Ceramic Monoblock Bandpass Filter



This small, high performance, 4-Pole monoblock filter is designed primarily for TCAS applications at 1090 MHz in the radio navigation band.

Specifications @ 25°C
Frequency: 1087MHz to 1093MHz

Insertion Loss (dB Max.)	Forward Return Loss (dB Min.)	Attenuation Stopbands	Power Rating (W)	Impedance (Ohms)	Digi-Key Part No.	Price Each 1	10	100	CTS Wireless Part No.
2.0	12.0	1030MHz @ 35.0dB Min.	1.0	50Ω	410-1021-ND	40.30	35.65	31.00	KFF6402A

Surface Mount VCTCXO

Surface mount Voltage Control Temperature Compensated Crystal Oscillator (VCTCXO) for use in 3G, GSM, TDMA, CDMA, PDA's, Satellite handsets, 2-way radios, Pagers, Analog applications, and other portable electronics requiring a Stable frequency source.

Features:
- Stable Frequency over temperature
- Good SSBN Noise performance

Fig. 1

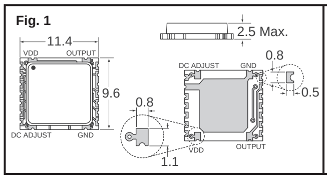


Fig. 2

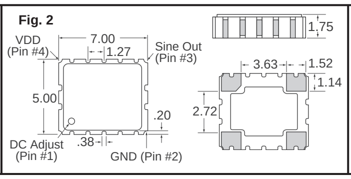


Fig. 3

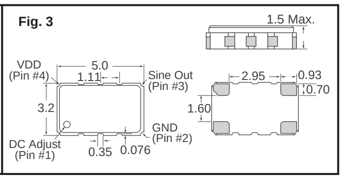


Fig.	Frequency (MHz)	Supply Voltage (Vdd)	Frequency Stability Over Temperature	Digi-Key Part No.	Cut Tape Price Each 1	10	50	T&R Pricing* 1,000	2,000	CTS Wireless Part No.
1	12.80	A: 3V ± 10%	± 1.5 PPM (-30°C to 80°C)	410-1008-1-ND	18.05	16.63	9.54	5051.76	—	OSC1212A
	13.00	A: 3V ± 10%	± 1.5 PPM (-30°C to 80°C)	410-1009-1-ND	18.05	16.63	9.54	5051.76	—	OSC1213A
	16.80	B: 3V ± 10%	± 2.5 PPM (-30°C to 85°C)	410-1010-1-ND	17.10	15.75	9.04	4785.88	—	OSC1215B
	19.20	B: 3V ± 10%	± 2.5 PPM (-30°C to 85°C)	410-1011-1-ND	17.10	15.75	9.04	4785.88	—	OSC1216B
	19.68	B: 3V ± 10%	± 2.5 PPM (-30°C to 85°C)	410-1012-1-ND	17.10	15.75	9.04	4785.88	—	OSC1217B
2	19.68	2.8V ± 0.14V	± 1.5 PPM (-30°C to 85°C)	410-1013-1-ND	19.00	17.50	10.04	5317.64	—	OSC1623A
	19.20	2.8V ± 0.1V	± 1.5 PPM (-30°C to 85°C)	410-1014-1-ND	19.00	17.50	10.04	5317.64	—	OSC1645A
3	16.80	2.75V ± 0.1V	± 2.0 PPM (-30°C to 85°C)	410-1015-1-ND	18.53	17.07	9.79	—	5184.70/M	OSC1601A
	19.44	2.75V ± 0.1V	± 2.5 PPM (-30°C to 75°C)	410-1016-1-ND	18.53	17.07	9.79	—	5184.70/M	OSC1602A
	26.00	2.75V ± 0.1V	± 3.0 PPM (-20°C to 70°C)	410-1017-1-ND	18.53	17.07	9.79	—	5184.70/M	OSC1604A
	19.20	2.75V ± 0.1V	± 2.5 PPM (-30°C to 80°C)	410-1018-1-ND	18.53	17.07	9.79	—	5184.70/M	OSC1606A

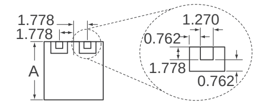
*For Tape and Reel Part No., change –1 to –2.

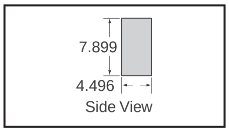
Surface Mount Ceramic Filters

KFF6193A: This 2 pole monoblock filter is primarily designed for ISM applications at 915 MHz.

KFF6338A: This 3 pole monoblock filter is primarily designed for GPS applications at 1575 MHz.

Part No.	A
KFF6193A	8.788
KFF6338	9.271





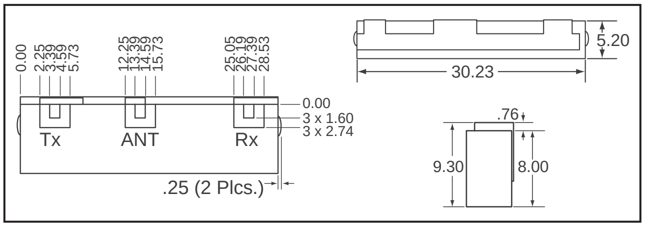
Side View

Passband (PB) (MHz)	Insertion Loss in PB (dB)	Return Loss in PB (dB)	Attenuation Stopbands	Power Rating (W)	Nominal Impedance (Ohms)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	T&R Pricing* 1,000	CTS Wireless Part No.
902 to 928	2.0	10.0	710 MHz @ 30.0 dB Min.	1.0	50Ω	410-1019-1-ND	19.00	17.50	10.04	5317.64	KFF6193A
1570 to 1581	1.5	16.0	1501 MHz @ 7.0 dB Min. 1625 MHz @ 20.0 dB Min.	1.0	50Ω	410-1020-1-ND	28.50	26.25	15.06	7976.46	KFF6338A

*For Tape and Reel Part No., change –1 to –2.

Ceramic Monoblock Duplexer Filters

AMPS Duplexer Surface Mount Ceramic Filter



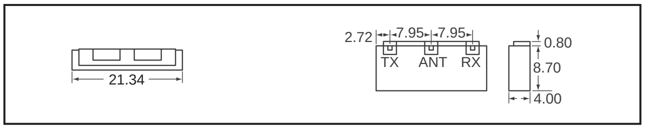
Electrical Specifications: • **Power Rating:** 3W Max.

Antenna to TX Response	Specifications @ 25°C	Typ. Variation –30°C to +85°C
Passband	824-849 MHz	—
Insertion Loss	2.5 dB max.	.2 dB
Return Loss @ TX	10.0 dB min.	1.0 dB
Attenuation @ 779-804 MHz	10.0 dB min.	1.0 dB
Attenuation @ 869-894 MHz	45.0 dB min.	2.0 dB
Antenna to RX Response	**Frequency**	**Specifications @ 25°C**
Passband	869-894 Mhz	—
Insertion Loss	3.3 dB max.	.25 dB
Return Loss @ RX	8.0 dB min.	1.0 dB
Attenuation @ 824-849 MHz	52.0 dB min.	2.0 dB
Attenuation @ 914-939 MHz	20.0 dB min.	1.0 dB
Attenuation @ 959-984 MHz	45.0 dB min.	1.0 dB

Digi-Key	Price Each			T&R Pricing*	CTS Wireless
Part No.	**1**	**10**	**50**	**160**	**Part No.**
410-1022-1-ND	27.55	25.38	14.56	1233.69	KFF6567A

*For Tape and Reel Part No., change –1 to –2.

Monoblock Duplexer Filter for Cellular Band Applications



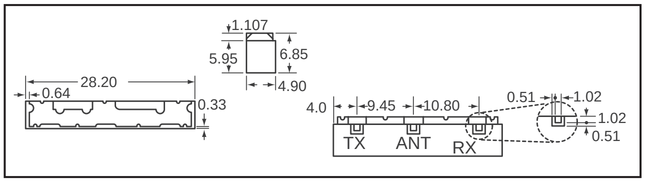
Features: • Small Size SMD • High Performance
Electrical Specifications:
• **Power Rating:** 3W • **Impedance:** 50Ω

Antenna to TX Response	Frequency	Specifications @ 25°C
Insertion Loss	824 MHz to 849 MHz	2.4 dB max.
Return Loss		13.0 dB max.
Rejection @ RX Band	869 MHz to 894 MHz	43.0 dB max.
Antenna to RX Response	**Frequency**	**Specifications @ 25°C**
Insertion Loss	869 MHz to 894 MHz	3.3 dB max.
Return Loss		13.0 dB min.
Rejection @ TX Band	824 MHz to 849 MHz	58.0 dB min.
TX to RX Response	**Frequency**	**Specifications @ 25°C**
Rejection @ RX Band	869 MHz to 894 MHz	44.0 dB min.
Rejection @ TX Band	824 MHz to 849 MHz	60.0 dB min.

Digi-Key	Price Each			T&R Pricing*	CTS Wireless
Part No.	**1**	**10**	**50**	**500**	**Part No.**
410-1023-1-ND	27.55	25.38	14.56	7250.00	KFF6636A

*For Tape and Reel Part No., change –1 to –2.

Monoblock Duplexer Filter for US PCS Applications



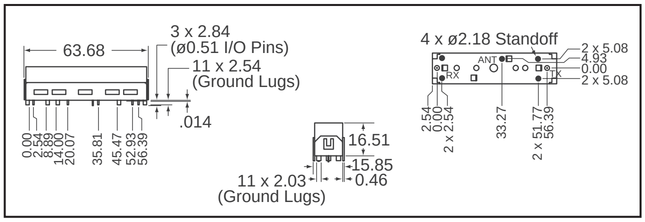
Features: • Small Size SMD • High Performance
Electrical Specifications:
• **Power Rating:** 2W • **Impedance:** 50Ω

Antenna to TX Response	Frequency	Specifications @ 25°C
Insertion Loss	1850 MHz to 1910 MHz	3.4 dB max.
Return Loss @ TX		11.0 dB min.
Return Loss @ ANT		11.0 dB min.
Attenuation	1930 MHz to 1990 MHz	40.0 dB min.
Antenna to RX Response	**Frequency**	**Specifications @ 25°C**
Insertion Loss	1930 MHz to 1990 MHz	3.4 dB max.
Return Loss @ RX		11.0 dB min.
Return Loss @ ANT		11.0 dB min.
Attenuation	1850 MHz to 1910 MHz	47.0 dB min.
TX to RX Response	**Frequency**	**Specifications @ 25°C**
Attenuation	1850 MHz to 1910 MHz	51.0 dB min.
Attenuation	1930 MHz to 1990 MHz	42.0 dB min.

Digi-Key	Price Each			T&R Pricing*	CTS Wireless
Part No.	**1**	**10**	**50**	**500**	**Part No.**
410-1024-1-ND	27.55	25.38	14.56	3855.29	KFF6666A

*For Tape and Reel Part No., change –1 to –2.

High Power Duplexer for Mobile Applications in the 800 MHz Cellular Band

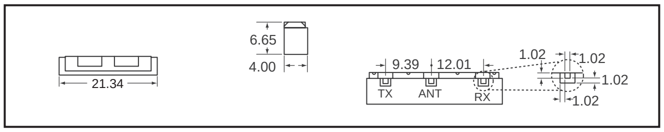


Features: • High Power • Exceptional Performance • Rugged Bracket Mounting
Electrical Specifications:
• **Power Rating:** 5W • **Impedance:** 50Ω

Antenna to TX Response	Frequency	Specifications @ 25°C
Insertion Loss	824 MHz to 849 MHz	2.5 dB max.
Return Loss		9.5 dB min.
Attenuation	869 MHz to 894 MHz	60.0 dB min.
Antenna to RX Response	**Frequency**	**Specifications @ 25°C**
Insertion Loss	869 MHz to 894 MHz	2.5 dB max.
Return Loss		7.5 dB min.
Attenuation	824 MHz to 849 MHz	65.0 dB min.

Digi-Key	Price Each			CTS Wireless
Part No.	**1**	**10**	**100**	**Part No.**
410-1025-ND	44.20	39.10	34.00	KFF6075B

Monoblock Duplexer Filter for US PCS Applications



Features:
• Small size SMD • High Performance

Digi-Key	Price Each			T&R Pricing*	CTS Wireless
Part No.	**1**	**10**	**50**	**500**	**Part No.**
410-1026-1-ND	27.55	25.38	14.56	3855.29	KFF6637A

*For Tape and Reel Part No., change –1 to –2.

Electrical Specifications:
• **Power Rating:** 3W • **Impedance:** 50Ω

Antenna to TX Response	Frequency	Specifications @ 25°C
Insertion Loss	1850 MHz to 1910 MHz	3.6 dB max.
Return Loss		10.0 dB min.
Rejection @ RX Band	1930 MHz to 1990 MHz	37.0 dB min.
Rejection	1720 MHz to 1780 MHz	25.0 dB min.
Antenna to RX Response	**Frequency**	**Specifications @ 25°C**
Insertion Loss	1930 MHz to 1990 MHz	4.2 dB max.
Return Loss		10.0 dB min.
Rejection @ TX Band	1850 MHz to 1910 MHz	55.0 dB min.
TX to RX Response	**Frequency**	**Specifications @ 25°C**
Rejection @ RX Band	1930 MHz to 1990 MHz	39.0 dB min.
Rejection @ TX Band	1850 MHz to 1910 MHz	56.0 dB min.

CTS Frequency Products

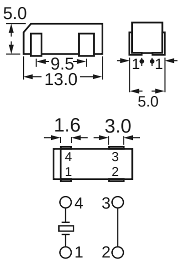
ATP-SM Series SMT Crystals

Electrical Specifications:
- **Calibration Tolerance:** ±0.005 ppm @ 25°C
- **Temperature Tolerance:** ±100 ppm
- **Operating Temperature Range:** 0°C to 70°C
- **Drive Level:** 100 Microwatts, typ.
- **Shunt Capacitance:** 7 pF, Max.
- **Aging:** <10 ppm/Yr.

Freq. (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	50	100	CTS Reeves Part No.
3.579545	18pf	CTX600-ND	2.89	2.51	2.17	1.51	ATP036SM
3.686400	20pf	CTX601-ND	2.89	2.51	2.17	1.51	ATP037SM
4.000000	20pf	CTX602-ND	2.89	2.51	2.17	1.51	ATP040SM
4.915200	20pf	CTX603-ND	2.89	2.51	2.17	1.51	ATP042SM
5.068800	20pf	CTX604-ND	2.89	2.51	2.17	1.51	ATP050SM
6.000000	20pf	CTX605-ND	2.89	2.51	2.17	1.51	ATP060SM
8.000000	20pf	CTX606-ND	2.89	2.51	2.17	1.51	ATP08ASM
9.830400	20pf	CTX607-ND	2.89	2.51	2.17	1.51	ATP098SM
10.000000	Series	CTX608-ND	2.89	2.51	2.17	1.51	ATP100SM
10.000000	20pf	CTX609-ND	2.89	2.51	2.17	1.51	ATP10ASM

Freq. (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	50	100	CTS Reeves Part No.
11.05920	20pf	CTX610-ND	2.89	2.51	2.17	1.51	ATP111SM
12.00000	Series	CTX611-ND	2.89	2.51	2.17	1.51	ATP120SM
12.28800	20pf	CTX612-ND	2.89	2.51	2.17	1.51	ATP122SM
14.31818	Series	CTX613-ND	2.89	2.51	2.17	1.51	ATP143SM
15.36000	20pf	CTX614-ND	2.89	2.51	2.17	1.51	ATP153SM
16.00000	Series	CTX615-ND	2.89	2.51	2.17	1.51	ATP160SM
16.00000	20pf	CTX616-ND	2.89	2.51	2.17	1.51	ATP16ASM
20.00000	Series	CTX617-ND	3.15	2.73	2.36	1.64	ATP200SM
20.48000	20pf	CTX618-ND	3.15	2.73	2.48	1.72	ATP204SM
24.57600	Series	CTX619-ND	3.15	2.73	2.48	1.72	ATP245SM

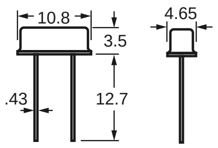
ATP-SM Series



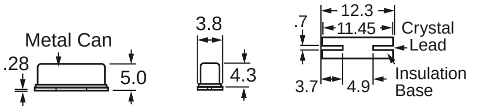
ATS and ATS-SM Series Crystals

Electrical Specifications:
- **Frequency Tolerance:** ±50ppm
- **Shunt Capacitance:** 7.0 pF, Max.
- **Drive Level:** 100 Microwatts
- **Operating Temperature Range:** 0°C to 70°C
- **Operating Mode:** Fundamental

ATS Series



ATS-SM Series



Freq. (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	50	100	CTS Reeves Part No.
ATS Series							
3.579545	18pf	CTX400-ND	1.31	1.14	1.03	.72	ATS036
3.686400	20pf	CTX401-ND	1.31	1.14	1.03	.72	ATS037
4.000000	20pf	CTX402-ND	1.31	1.14	1.03	.72	ATS040
4.915200	20pf	CTX403-ND	1.31	1.14	1.03	.72	ATS042
5.068800	20pf	CTX404-ND	1.31	1.14	1.03	.72	ATS050
6.000000	20pf	CTX405-ND	1.31	1.14	1.03	.72	ATS060
8.000000	20pf	CTX406-ND	1.31	1.14	1.03	.72	ATS08A
9.830400	20pf	CTX407-ND	1.31	1.14	1.03	.72	ATS098
10.000000	Series	CTX408-ND	1.31	1.14	1.03	.72	ATS100
11.059200	20pf	CTX409-ND	1.31	1.14	1.03	.72	ATS111
12.000000	Series	CTX410-ND	1.31	1.14	1.03	.72	ATS120
12.288000	20pf	CTX411-ND	1.31	1.14	1.03	.72	ATS122
14.318180	Series	CTX412-ND	1.31	1.14	1.03	.72	ATS143
15.360000	20pf	CTX413-ND	1.31	1.14	1.03	.72	ATS15A
16.000000	Series	CTX414-ND	1.31	1.14	1.03	.72	ATS160
16.000000	20pf	CTX415-ND	1.31	1.14	1.03	.72	ATS16A
20.000000	Series	CTX416-ND	1.31	1.14	1.03	.72	ATS200
20.480000	20pf	CTX417-ND	1.69	1.47	1.33	.92	ATS204
24.576000	Series	CTX418-ND	1.69	1.47	1.33	.92	ATS245
25.000000	Series	CTX419-ND	1.69	1.47	1.33	.92	ATS250
Base Insulator		HC49INS-ND	—	.09	—	.08	700-9001

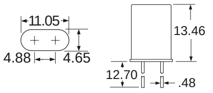
Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	50	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	CTS Reeves Part No.
ATS-SM Series — Surface Mount									
3.579545	18pf	CTX500-ND	1.50	1.30	1.13	.79	CTX500TR-ND	540.00	ATS036SM-T
3.686400	20pf	CTX501-ND	1.50	1.30	1.13	.79	CTX501TR-ND	540.00	ATS037SM-T
4.000000	20pf	CTX502-ND	1.50	1.30	1.13	.79	CTX502TR-ND	540.00	ATS040SM-T
4.915200	20pf	CTX503-ND	1.50	1.30	1.13	.79	CTX503TR-ND	540.00	ATS042SM-T
5.068800	20pf	CTX504-ND	1.50	1.30	1.13	.79	CTX504TR-ND	540.00	ATS050SM-T
6.000000	20pf	CTX505-ND	1.50	1.30	1.13	.79	CTX505TR-ND	540.00	ATS060SM-T
8.000000	20pf	CTX506-ND	1.50	1.30	1.13	.79	CTX506TR-ND	540.00	ATS08ASM-T
9.830400	20pf	CTX507-ND	1.50	1.30	1.13	.79	CTX507TR-ND	540.00	ATS098SM-T
10.000000	Series	CTX508-ND	1.50	1.30	1.13	.79	CTX508TR-ND	540.00	ATS100SM-T
11.059200	20pf	CTX509-ND	1.50	1.30	1.13	.79	CTX509TR-ND	540.00	ATS111SM-T
12.000000	Series	CTX510-ND	1.50	1.30	1.13	.79	CTX510TR-ND	540.00	ATS120SM-T
12.288000	20pf	CTX511-ND	1.50	1.30	1.13	.79	CTX511TR-ND	540.00	ATS122SM-T
14.318180	Series	CTX512-ND	1.50	1.30	1.13	.79	CTX512TR-ND	540.00	ATS143SM-T
15.360000	20pf	CTX513-ND	1.50	1.30	1.13	.79	CTX513TR-ND	540.00	ATS15ASM-T
16.000000	Series	CTX514-ND	1.50	1.30	1.13	.79	CTX514TR-ND	540.00	ATS160SM-T
20.000000	Series	CTX515-ND	1.50	1.30	1.13	.79	CTX515TR-ND	540.00	ATS200SM-T
20.480000	20pf	CTX516-ND	1.88	1.63	1.43	1.00	CTX516TR-ND	680.00	ATS204SM-T
24.576000	Series	CTX517-ND	1.88	1.63	1.43	1.00	CTX517TR-ND	680.00	ATS245SM-T

Microprocessor Crystals

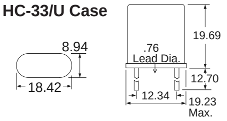
- Frequency Tolerance ±.005% (50PPM) @ 25°C
- ±.005% (50PPM) 0°C to +70°C
- Fully Hermetic Package
- Low Start-Up Resistance

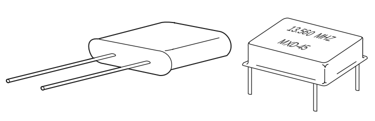
HC-49/U Case

Case Style HC-49 has same dimensions as Solder Welded Case HC-18.



HC-33/U Case





Freq. (MHz)	Case	Load Capacit.	Max. Series Resist.	Digi-Key Part No.	Price Each 1	10	100	Microprocessor	CTS Reeves Part No.
1.843200	HC-49/U	13pF	540	CTX067-ND	3.22	2.69	1.97	—	MP018S
2.000000	HC-49/U	20pF	300	CTX068-ND	3.22	2.69	1.97	—	MP020S
2.457600	HC-49/U	32pF	300	CTX069-ND	2.08	1.74	1.27	—	MP024S
3.276800	HC-33/U	15pF	100	CTX094-ND	3.92	3.28	2.40	IM6100C, 1CM7205; CDP1802, 1802C, 1804, 1804C; MC6802	MP032
3.579545	HC-49/U	18pF	150	CTX049-ND	.94	.79	.57	MM5369 (Color burst); IM6102; PPS-8; MC6801, 6803, MC6802, 6809; CDP1802, 1802C, 1804, 1804C	MP036S
3.686400	HC-49/U	20pF	150	CTX071-ND	.94	.79	.57	—	MP037
4.000000	HC-49/U	20pF	75	CTX006-ND	.94	.79	.57	MCS-40, 4004, 4040, 4201; MC-6802, 6808, 6809; MK-3870, 3872, 3883, 3876; IM 6102; CDP1802, 1802C, 1804, 1804C	MP040
4.000000	HC-49/U	Series	75	CTX080-ND	.94	.79	.57	Pace; MC6875; Z80, Z80A; TMS9940	MP04A
4.194304	HC-49/U	12pF	75	CTX007-ND	.94	.79	.57	ICM7038, 7213, 7049; CDP1802, 1802C, 1804, 1804C	MP041
4.915200	HC-49/U	20pF	75	CTX050-ND	.94	.79	.57	CDP1802, 1802C, 1804, 1804C	MP042
5.000000	HC-49/U	20pF	50	CTX051-ND	.94	.79	.57	General Purpose; CDP1802, 1802C, 1804, 1804C	MP05A
5.000000	HC-49/U	Series	50	CTX081-ND	.94	.79	.57	CDP1802, 1803, 1802C, 1804, 1804C; TMS 9985, 9940; IM6100A	MP05B
5.068800	HC-49/U	Series	50	CTX052-ND	.94	.79	.57	COM5016, 5016T Dual Brg.	MP050
6.000000	HC-49/U	20pF	50	CTX026-ND	.94	.79	.57	MCS-48, 8035, 8041, 8048, 8741, 8748; IM8048, IM8748; CDP1802, 1802C, 1804, 1804C, MC68A09	MP060
6.144000	HC-49/U	20pF	50	CTX054-ND	.94	.79	.57	MCS-85, 8086; CDP1802, 1802C, 1804, 1804C	MP061
7.372800	HC-49/U	Series	45	CTX074-ND	.94	.79	.57	—	MP073
8.000000	HC-49/U	Series	45	CTX056-ND	.94	.79	.57	8 x 300; MC6875, 68000; Z8000; AMZ8000	MP080
8.000000	HC-49/U	20pF	45	CTX082-ND	.94	.79	.57	IM6100A; CDP1807; Z8; 9940-B; MC68B09	MP080A
9.830400	HC-49/U	20pF	45	CTX084-ND	.94	.79	.57	General Purpose	MP098
10.000000	HC-49/U	Series	35	CTX057-ND	.94	.79	.57	General Purpose	MP100
10.000000	HC-49/U	30pF	35	CTX083-ND	.94	.79	.57	MCS-85, 8085A-2; 9940-10	MP101
10.738635	HC-49/U	32pF	35	CTX085-ND	.94	.79	.57	TI9918A	MP107
11.000000	HC-49/U	18pF	35	CTX086-ND	.94	.79	.57	MCS-48, 8039, 8049	MP110
11.059200	HC-49/U	Series	35	CTX078-ND	.94	.79	.57	—	MP111
12.000000	HC-49/U	Series	35	CTX058-ND	.94	.79	.57	MCS-86, 8086/8284; 8202 Ram Controller; 9940-12	MP120
12.288000	HC-49/U	32pF	35	CTX087-ND	.94	.79	.57	General Purpose	MP122
14.318180	HC-49/U	Series	35	CTX088-ND	.94	.79	.57	General Purpose	MP143
14.745600	HC-49/U	Series	35	CTX089-ND	.94	.79	.57	General Purpose	MP147
15.000000	HC-49/U	Series	35	CTX059-ND	.94	.79	.57	MCS-86, 8086/8284; 8202 Ram Controller	MP150
16.000000	HC-49/U	Series	35	CTX077-ND	.94	.79	.57	General Purpose	MP160
18.432000	HC-49/U	Series	35	CTX061-ND	.94	.79	.57	MCS-80, 8080A/8224	MP184
19.660800	HC-49/U	Series	35	CTX090-ND	.94	.79	.57	General Purpose	MP196
20.000000	HC-49/U	Series	35	CTX062-ND	.94	.79	.57	MCS-80, 8080A/8224	MP200
22.118400	HC-49/U	Series	35	CTX063-ND	1.51	1.26	.92	MCS-80, 8080A/8224	MP221
24.000000	HC-49/U	Series	35	CTX091-ND	1.51	1.26	.92	MCS-86, 8086, 8284	MP240
24.576000	HC-49/U	Series	35	CTX092-ND	1.51	1.26	.92	General Purpose	MP245
25.000000	HC-49/U	Series	35	CTX093-ND	1.51	1.26	.92	8202 Ram Controller	MP250
Base Insulators				HC49INS-ND	—	.09	.08	—	700-9001

CTS® Frequency Products

CB3 and CB3LV Series Surface Mount Clock Oscillator

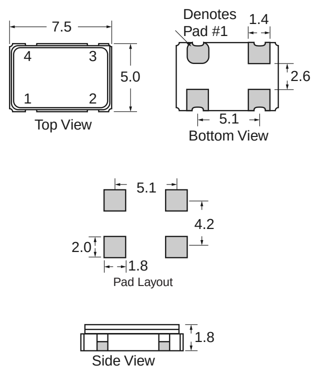
FEATURES:

- Standard miniature surface mount footprint
- PCMCIA Type II and III compatible
- CMOS/TTL compatible
- 16mm Tape and Reel
- Ceramic construction for long-term reliability
- Seam welded and shielded with Kovar cover

SPECIFICATIONS:

- **Frequency Stability:** ±50ppm
- **Supply Voltage:** CB3: 4.5V Min., 5.5V Max.; CB3LV: 3.0V Min., 3.6V Max.
- **Supply Current:** 1.5440MHz to 20.00MHz: CB3 (25mA), CB3LV (12mA); >20.00MHz: CB3 (50mA), CB3LV (40mA)
- **Operating Temperature:** 0°C to +70°C
- **Rise and Fall Time:** 1.5440MHz to 20.00MHz: 10ns; >20.00MHz to <50MHz: 8ns; >50.00MHz to 80.00MHz: 5ns
- **Output Load:** 1.5440MHz to 50.00MHz: 50pf; 50.10MHz to 80.00MHz: 30pf
- **Enable Input Voltage:** 2V Min.
- **Disable Input Voltage:** 0.8V Max.

CB3 and CB3LV Series



Pad	Function
1	Output Enable
2	Cover/CKT GND
3	Output
4	Vcc

Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing	CTS Freq. Products Part No.
		1	10	50	100		1,000	
CB3 SMD Clock Oscillator — 5V								
1.54400	CTX290CT-ND	5.08	4.69	2.69	1.87	CTX290TR-ND	1422.47	CB3-3C-1.5440-T
1.84320	CTX291CT-ND	5.08	4.69	2.69	1.87	CTX291TR-ND	1422.47	CB3-3C-1.8432-T
3.68640	CTX260CT-ND	5.08	4.69	2.69	1.87	CTX260TR-ND	1422.47	CB3-3C-3.6864-T
4.00000	CTX261CT-ND	5.08	4.69	2.69	1.87	CTX261TR-ND	1422.47	CB3-3C-4.0000-T
6.17600	CTX262CT-ND	5.08	4.69	2.69	1.87	CTX262TR-ND	1422.47	CB3-3C-6.1760-T
7.37280	CTX263CT-ND	5.08	4.69	2.69	1.87	CTX263TR-ND	1422.47	CB3-3C-7.3728-T
8.00000	CTX264CT-ND	5.08	4.69	2.69	1.87	CTX264TR-ND	1422.47	CB3-3C-8.0000-T
10.00000	CTX265CT-ND	5.08	4.69	2.69	1.87	CTX265TR-ND	1422.47	CB3-3C-10.0000-T
12.00000	CTX292CT-ND	5.08	4.69	2.69	1.87	CTX292TR-ND	1422.47	CB3-3C-12.0000-T
12.28800	CTX266CT-ND	5.08	4.69	2.69	1.87	CTX266TR-ND	1422.47	CB3-3C-12.2880-T
12.35200	CTX267CT-ND	5.08	4.69	2.69	1.87	CTX267TR-ND	1422.47	CB3-3C-12.3520-T
14.31818	CTX268CT-ND	5.08	4.69	2.69	1.87	CTX268TR-ND	1422.47	CB3-3C-14.31818-T
15.36000	CTX269CT-ND	5.08	4.69	2.69	1.87	CTX269TR-ND	1422.47	CB3-3C-15.3600-T
16.00000	CTX270CT-ND	5.08	4.69	2.69	1.87	CTX270TR-ND	1422.47	CB3-3C-16.0000-T
16.38400	CTX271CT-ND	5.08	4.69	2.69	1.87	CTX271TR-ND	1422.47	CB3-3C-16.3840-T
18.43200	CTX293CT-ND	5.08	4.69	2.69	1.87	CTX293TR-ND	1422.47	CB3-3C-18.4320-T
19.44000	CTX272CT-ND	5.08	4.69	2.69	1.87	CTX272TR-ND	1422.47	CB3-3C-19.4400-T
20.00000	CTX273CT-ND	5.08	4.69	2.69	1.87	CTX273TR-ND	1422.47	CB3-3C-20.0000-T
20.48000	CTX274CT-ND	5.08	4.69	2.69	1.87	CTX274TR-ND	1422.47	CB3-3C-20.4800-T
24.00000	CTX294CT-ND	5.08	4.69	2.69	1.87	CTX294TR-ND	1422.47	CB3-3C-24.0000-T
24.70400	CTX275CT-ND	5.08	4.69	2.69	1.87	CTX275TR-ND	1422.47	CB3-3C-24.7040-T
25.00000	CTX276CT-ND	5.08	4.69	2.69	1.87	CTX276TR-ND	1422.47	CB3-3C-25.0000-T
29.49120	CTX295CT-ND	5.08	4.69	2.69	1.87	CTX295TR-ND	1422.47	CB3-3C-29.4912-T
30.00000	CTX296CT-ND	5.08	4.69	2.69	1.87	CTX296TR-ND	1422.47	CB3-3C-30.0000-T
32.00000	CTX277CT-ND	5.08	4.69	2.69	1.87	CTX277TR-ND	1422.47	CB3-3C-32.0000-T
32.76800	CTX278CT-ND	5.08	4.69	2.69	1.87	CTX278TR-ND	1422.47	CB3-3C-32.7680-T
33.33300	CTX279CT-ND	5.08	4.69	2.69	1.87	CTX279TR-ND	1422.47	CB3-3C-33.3330-T
40.00000	CTX280CT-ND	5.37	4.95	2.84	1.98	CTX280TR-ND	1502.23	CB3-3C-40.0000-T
44.73600	CTX281CT-ND	5.37	4.95	2.84	1.98	CTX281TR-ND	1502.23	CB3-3C-44.7360-T
45.00000	CTX297CT-ND	5.37	4.95	2.84	1.98	CTX297TR-ND	1502.23	CB3-3C-45.0000-T
49.15200	CTX282CT-ND	5.37	4.95	2.84	1.98	CTX282TR-ND	1502.23	CB3-3C-49.1520-T
50.00000	CTX283CT-ND	5.37	4.95	2.84	1.98	CTX283TR-ND	1502.23	CB3-3C-50.0000-T
51.84000	CTX284CT-ND	5.70	5.25	3.02	2.10	CTX284TR-ND	1595.29	CB3-3C-51.8400-T
60.00000	CTX285CT-ND	5.70	5.25	2.95	2.05	CTX285TR-ND	1595.29	CB3-3C-60.0000-T
64.00000	CTX286CT-ND	5.70	5.25	2.95	2.05	CTX286TR-ND	1595.29	CB3-3C-64.0000-T
66.66660	CTX287CT-ND	5.70	5.25	2.95	2.05	CTX287TR-ND	1595.29	CB3-3C-66.6666-T
72.00000	CTX288CT-ND	5.70	5.25	3.06	2.13	CTX288TR-ND	1595.29	CB3-3C-72.0000-T
80.00000	CTX289CT-ND	5.70	5.25	3.06	2.13	CTX289TR-ND	1595.29	CB3-3C-80.0000-T
CB3LV SMD Clock Oscillator — 3.3V								
1.54400	CTX290LVCT-ND	5.08	4.69	2.69	1.87	CTX290LVTR-ND	1422.47	CB3LV-3C-1.5440-T
1.84320	CTX291LVCT-ND	5.08	4.69	2.69	1.87	CTX291LVTR-ND	1422.47	CB3LV-3C-1.8432-T
3.68640	CTX260LVCT-ND	5.08	4.69	2.69	1.87	CTX260LVTR-ND	1422.47	CB3LV-3C-3.6864-T
4.00000	CTX261LVCT-ND	5.08	4.69	2.69	1.87	CTX261LVTR-ND	1422.47	CB3LV-3C-4.0000-T
6.17600	CTX262LVCT-ND	5.08	4.69	2.69	1.87	CTX262LVTR-ND	1422.47	CB3LV-3C-6.1760-T
7.37280	CTX263LVCT-ND	5.08	4.69	2.69	1.87	CTX263LVTR-ND	1422.47	CB3LV-3C-7.3728-T
8.00000	CTX264LVCT-ND	5.08	4.69	2.69	1.87	CTX264LVTR-ND	1422.47	CB3LV-3C-8.0000-T
10.00000	CTX265LVCT-ND	5.08	4.69	2.69	1.87	CTX265LVTR-ND	1422.47	CB3LV-3C-10.0000-T
12.00000	CTX292LVCT-ND	5.08	4.69	2.69	1.87	CTX292LVTR-ND	1422.47	CB3LV-3C-12.0000-T
12.28800	CTX266LVCT-ND	5.08	4.69	2.69	1.87	CTX266LVTR-ND	1422.47	CB3LV-3C-12.2880-T
12.35200	CTX267LVCT-ND	5.08	4.69	2.69	1.87	CTX267LVTR-ND	1422.47	CB3LV-3C-12.3520-T
14.31818	CTX268LVCT-ND	5.08	4.69	2.69	1.87	CTX268LVTR-ND	1422.47	CB3LV-3C-14.31818-T
15.36000	CTX269LVCT-ND	5.08	4.69	2.69	1.87	CTX269LVTR-ND	1422.47	CB3LV-3C-15.3600-T
16.00000	CTX270LVCT-ND	5.08	4.69	2.69	1.87	CTX270LVTR-ND	1422.47	CB3LV-3C-16.0000-T
16.38400	CTX271LVCT-ND	5.08	4.69	2.69	1.87	CTX271LVTR-ND	1422.47	CB3LV-3C-16.3840-T
18.43200	CTX293LVCT-ND	5.08	4.69	2.69	1.87	CTX293LVTR-ND	1422.47	CB3LV-3C-18.4320-T
19.44000	CTX272LVCT-ND	5.08	4.69	2.69	1.87	CTX272LVTR-ND	1422.47	CB3LV-3C-19.4400-T
20.00000	CTX273LVCT-ND	5.08	4.69	2.69	1.87	CTX273LVTR-ND	1422.47	CB3LV-3C-20.0000-T
20.48000	CTX274LVCT-ND	5.08	4.69	2.69	1.87	CTX274LVTR-ND	1422.47	CB3LV-3C-20.4800-T
24.00000	CTX294LVCT-ND	5.08	4.69	2.69	1.87	CTX294LVTR-ND	1422.47	CB3LV-3C-24.0000-T
24.70400	CTX275LVCT-ND	5.08	4.69	2.69	1.87	CTX275LVTR-ND	1422.47	CB3LV-3C-24.7040-T
25.00000	CTX276LVCT-ND	5.08	4.69	2.69	1.87	CTX276LVTR-ND	1422.47	CB3LV-3C-25.0000-T
29.49120	CTX295LVCT-ND	5.08	4.69	2.69	1.87	CTX295LVTR-ND	1422.47	CB3LV-3C-29.4912-T
30.00000	CTX296LVCT-ND	5.08	4.69	2.69	1.87	CTX296LVTR-ND	1422.47	CB3LV-3C-30.0000-T
32.00000	CTX277LVCT-ND	5.08	4.69	2.69	1.87	CTX277LVTR-ND	1422.47	CB3LV-3C-32.0000-T
32.76800	CTX278LVCT-ND	5.08	4.69	2.69	1.87	CTX278LVTR-ND	1422.47	CB3LV-3C-32.7680-T
33.33300	CTX279LVCT-ND	5.08	4.69	2.69	1.87	CTX279LVTR-ND	1422.47	CB3LV-3C-33.3330-T
40.00000	CTX280LVCT-ND	5.37	4.95	2.84	1.98	CTX280LVTR-ND	1502.23	CB3LV-3C-40.0000-T
44.73600	CTX281LVCT-ND	5.37	4.95	2.84	1.98	CTX281LVTR-ND	1502.23	CB3LV-3C-44.7360-T
45.00000	CTX297LVCT-ND	5.37	4.95	2.84	1.98	CTX297LVTR-ND	1502.23	CB3LV-3C-45.0000-T
49.15200	CTX282LVCT-ND	5.37	4.95	2.84	1.98	CTX282LVTR-ND	1502.23	CB3LV-3C-49.1520-T
50.00000	CTX283LVCT-ND	5.37	4.95	2.84	1.98	CTX283LVTR-ND	1502.23	CB3LV-3C-50.0000-T
51.84000	CTX284LVCT-ND	5.70	5.25	3.02	2.10	CTX284LVTR-ND	1595.29	CB3LV-3C-51.8400-T
60.00000	CTX285LVCT-ND	5.70	5.25	3.02	2.10	CTX285LVTR-ND	1595.29	CB3LV-3C-60.0000-T
64.00000	CTX286LVCT-ND	5.70	5.25	3.02	2.10	CTX286LVTR-ND	1595.29	CB3LV-3C-64.0000-T
66.66660	CTX287LVCT-ND	5.70	5.25	3.02	2.10	CTX287LVTR-ND	1595.29	CB3LV-3C-66.6666-T
72.00000	CTX288LVCT-ND	5.70	5.25	3.02	2.10	CTX288LVTR-ND	1595.29	CB3LV-3C-72.0000-T
80.00000	CTX289LVCT-ND	5.70	5.25	3.02	2.10	CTX289LVTR-ND	1595.29	CB3LV-3C-80.0000-T

NEW! 350A Series PECL VCXO and 650A Series PECL Oscillator

FEATURES:

- Differential PECL outputs
- +3.3Vdc Operation
- Sealed AT strip crystal
- Output enable function
- Excellent solder reflow performance

SPECIFICATIONS:

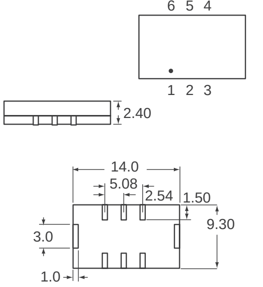
- **Frequency Stability:** ±15ppm
- **Supply Current:** 350A Series - 55mA@ Vcc=Max. 3.3Vdc; 650A Series - Typical 45mA @ Vcc=Max. 3.3Vdc
- **Power Supply:** 3.135Vdc Min., 3.30Vdc Typical, 3.465Vdc Max.

350A Series Only: Absolute Pull Range ±85ppm min.; Control Voltage 0.15-3.15V

WAVEFORM PARAMETERS:

- **Symmetry:** @50% level, 45% Min., 50% Typical, 55% Max.
- **Amplitude:** 50Ω load, Vcc-1.62V Min., Vcc-1.025V Max.
- **Rise/Fall Times:** 350pSec. Typical, 500pSec. Max. @ 20% to 80%
- **Load:** 50Ω Typical @ Output to Vcc-2.0V or Equivalent
- **Phase Jitter:** <3.3pSec. RMS 12KHz-20MHz

350A and 650A Series



350A Series	
Pad	**Function**
1	Vc, Tuning Voltage
2	Enable/Disable
3	GND
4	Output
5	Complementary Output
6	Vcc, Supply Voltage

350A Series Enable Truth Table	
Pin 2	**Pins 4 and 5**
PECL “0”	Disabled
PECL “1”	Enabled
Open	Enabled

650A Series	
Pad	**Function**
1	No Connection
2	Enable/Disable
3	GND
4	RF Output
5	Complementary RF Output
6	Vcc, Supply Voltage

650A Series Enable Truth Table	
Pin 2	**Pins 4 and 5**
GND	Disabled
Vcc	Enabled
Open	Enabled

Freq. (MHz)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing	CTS Freq. Products Part No.
		1	10	50		100	
622.08	CTX623CT-ND	105.00	89.25	75.25	CTX623TR-ND	6800.00	350ALBA-622.080
644.531	CTX624CT-ND	105.00	89.25	75.25	CTX624TR-ND	6800.00	350ALBA-644.531
666.514	CTX625CT-ND	105.00	89.25	75.25	CTX625TR-ND	6800.00	350ALBA-666.514
622.08	CTX620CT-ND	105.00	89.25	75.25	CTX620TR-ND	6800.00	650ALAA-622.080
644.531	CTX621CT-ND	105.00	89.25	75.25	CTX621TR-ND	6800.00	650ALAA-644.531
666.514	CTX622CT-ND	105.00	89.25	75.25	CTX622TR-ND	6800.00	650ALAA-666.514

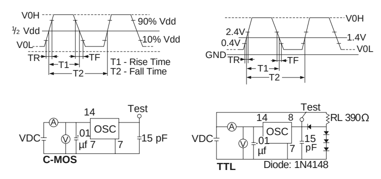
CTS Frequency Products

MXO45 Clock Oscillators

Tri-State Output

Tri-State Logic uses the two standard logic levels of high (logic 1) and low (logic 0) but has added a third state that is not a logic level but an open circuit condition that effectively disconnects the output from your circuit with a high impedance (floating) state. Thereby enabling the use of numerous oscillators on the same bus line. Also, by using the enable pin to control the output, the crystal is still running even when the output is disabled (stand-by mode), thus eliminating any start-up time for the oscillator. CTS HCMOS/TTL products utilize an Application Specific Integrated Circuit (ASIC) design strategy. Employing a single design family supporting both HCMOS/TTL applications helps in reducing costs and lead times. Utilizing ASIC technology reduces the number of components inside the XO (crystal oscillator), thus increasing reliability and further reducing cost. **Features** • C-MOS/TTL compatible • Drives up to 10 standard TTL loads • 100 PPM tolerance • Tri-State output • Fully hermetic resistance weld package

Wave Form Conditions

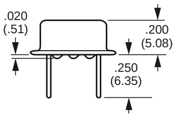


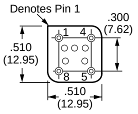
Parameter	Symbol	Condition	Minimum	Typical	Maximum	Units
Supply Voltage	VCC	—	4.5	5.0	5.5	V
Supply Current	ICC — —	1.0->7.0MHz >7.0->25MHz >25->50MHz	— — —	5 15 30	12 25 40	mA mA mA
Output Load	—	—	—	—	10	TTL
Output Current	IOH IOH	VOH = 3.9V VOH = 0.4V	— —	— —	-16 16	mA mA
Symmetry	Duty	1.0->50MHz >50->70MHz	45 40	— —	55 60	% %
Rise & Fall Time	Tr/Tf Tr/Tf	1.0->25MHz >25->70MHz	— —	5 3	8 5	ns ns
Enable Input V	VIH VIL	— —	2.0 —	— —	— 0.8	V V
Enable Input Load	Cin	—	—	—	10	pF
Tri-state Leakage	Iz	VIL = 0.8V	—	—	0.05	mA
Jitter	—	Peak-Peak	—	30	50	ps
Temperature	0-70°C					

Standard Output

• Frequency Tolerance: ±100 PPM 0°C to 70°C • C-MOS compatible • Fully hermetic resistance weld package • 8/14-pin compatible • Drives up to 10 standard TTL Loads • Input Voltage: +5 V DC ± .5V

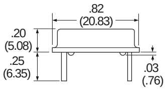
Half Size

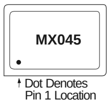


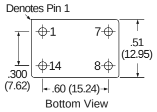


Pin #1 O/E (Tri-State)
NC (Standard)
Pin #4 Ground
Pin #5 Output
Pin #8 +5 V DC

Full Size







Pin #1 O/E (Tri-State)
NC (Standard)
Pin #7 Ground
Pin #8 Output
Pin #14 +5 V DC

Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	250	500	CTS Reeves Part No.
Half Size Clock Oscillator with Tri-State Output							
1.00000	CTX180-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-1.000
1.84320	CTX181-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-1.8432
2.00000	CTX182-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-2.000
2.45760	CTX183-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-2.4576
3.68640	CTX184-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-3.6864
4.00000	CTX185-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-4.000
4.91520	CTX186-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-4.9152
5.00000	CTX187-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-5.000
5.06880	CTX188-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-5.0688
6.00000	CTX189-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-6.000
6.14400	CTX190-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-6.144
7.37280	CTX191-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-7.3728
8.00000	CTX192-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-8.000
10.00000	CTX193-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-10.000
12.00000	CTX194-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-12.000
14.31818	CTX195-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-14.31818
16.00000	CTX196-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-16.000
18.43200	CTX197-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-18.432
19.66080	CTX198-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-19.6608
20.00000	CTX199-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-20.000
24.00000	CTX250-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-24.000
25.00000	CTX251-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-25.000
25.17500	CTX252-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-25.175
28.32200	CTX253-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-28.322
32.00000	CTX254-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-32.000
40.00000	CTX255-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-40.000
50.00000	CTX256-ND	2.78	2.47	1.87	1.66	1.42	MXO45HST-50.000
64.00000	CTX257-ND	3.64	3.22	2.45	2.17	1.86	MXO45HST-64.000
66.66660	CTX258-ND	3.64	3.22	2.45	2.17	1.86	MXO45HST-66.6666
80.00000	CTX259-ND	5.85	5.18	3.94	3.49	2.99	MXO45HST-80.000
Half Size Clock Oscillator with Standard Output							
1.00000	CTX150-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-1.0000
1.84320	CTX151-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-1.8432
2.00000	CTX152-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-2.0000
2.45760	CTX153-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-2.4576
3.68640	CTX154-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-3.6864
4.00000	CTX155-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-4.0000
4.91520	CTX156-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-4.9152
5.00000	CTX157-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-5.0000
5.06880	CTX158-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-5.0688
6.00000	CTX159-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-6.0000
6.14400	CTX160-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-6.1440
7.37280	CTX161-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-7.3728
8.00000	CTX162-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-8.0000
10.00000	CTX163-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-10.0000
12.00000	CTX164-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-12.0000
14.31818	CTX165-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-14.31818
16.00000	CTX166-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-16.0000
18.43200	CTX167-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-18.4320
19.66080	CTX168-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-19.6608
20.00000	CTX169-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-20.0000
24.00000	CTX170-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-24.0000
25.00000	CTX171-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-25.0000
25.17500	CTX172-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-25.1750
28.32200	CTX173-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-28.3220
32.00000	CTX174-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-32.0000
40.00000	CTX175-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-40.0000
50.00000	CTX176-ND	2.78	2.47	1.87	1.66	1.42	MXO45HS-50.0000
64.00000	CTX177-ND	3.64	3.22	2.45	2.17	1.86	MXO45HS-64.0000
66.66660	CTX178-ND	3.64	3.22	2.45	2.17	1.86	MXO45HS-66.6666
80.00000	CTX179-ND	5.85	5.18	3.94	3.49	2.99	MXO45HS-80.0000

Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	250	500	CTS Reeves Part No.
Full Size Clock Oscillator with Tri-State Output							
1.00000	CTX139-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-1.000
1.84320	CTX140-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-1.8432
2.00000	CTX141-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-2.000
2.45760	CTX142-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-2.4576
3.68640	CTX143-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-3.6864
4.00000	CTX144-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-4.000
4.91520	CTX145-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-4.9152
5.00000	CTX146-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-5.000
5.06880	CTX147-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-5.0688
6.00000	CTX148-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-6.000
6.14400	CTX200-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-6.144
7.37280	CTX201-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-7.3728
8.00000	CTX202-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-8.000
10.00000	CTX203-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-10.000
12.00000	CTX204-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-12.000
14.31818	CTX205-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-14.31818
16.00000	CTX206-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-16.000
18.43200	CTX207-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-18.432
19.66080	CTX208-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-19.6608
20.00000	CTX209-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-20.000
24.00000	CTX210-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-24.000
25.00000	CTX211-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-25.000
25.17500	CTX212-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-25.175
28.32200	CTX213-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-28.322
32.00000	CTX214-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-32.000
40.00000	CTX215-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-40.000
50.00000	CTX216-ND	2.78	2.47	2.19	1.87	1.66	MXO45T-50.000
64.00000	CTX217-ND	3.64	3.22	2.87	2.45	2.17	MXO45T-64.000
66.66660	CTX218-ND	3.64	3.22	2.87	2.45	2.17	MXO45T-66.6666
80.00000	CTX219-ND	5.85	5.18	4.61	3.94	3.49	MXO45T-80.000
Full Size Clock Oscillator with Standard Output							
1.00000	CTX101-ND	2.78	2.47	2.19	1.87	1.66	MXO45-1.0000
1.84320	CTX103-ND	2.78	2.47	2.19	1.87	1.66	MXO45-1.8432
2.00000	CTX104-ND	2.78	2.47	2.19	1.87	1.66	MXO45-2.0000
2.45760	CTX105-ND	2.78	2.47	2.19	1.87	1.66	MXO45-2.4576
3.68640	CTX106-ND	2.78	2.47	2.19	1.87	1.66	MXO45-3.6864
4.00000	CTX107-ND	2.78	2.47	2.19	1.87	1.66	MXO45-4.0000
4.91520	CTX108-ND	2.78	2.47	2.19	1.87	1.66	MXO45-4.9152
5.00000	CTX109-ND	2.78	2.47	2.19	1.87	1.66	MXO45-5.0000
5.06880	CTX110-ND	2.78	2.47	2.19	1.87	1.66	MXO45-5.0688
6.00000	CTX111-ND	2.78	2.47	2.19	1.87	1.66	MXO45-6.0000
6.14400	CTX122-ND	2.78	2.47	2.19	1.87	1.66	MXO45-6.1440
7.37280	CTX123-ND	2.78	2.47	2.19	1.87	1.66	MXO45-7.3728
8.00000	CTX112-ND	2.78	2.47	2.19	1.87	1.66	MXO45-8.0000
10.00000	CTX114-ND	2.78	2.47	2.19	1.87	1.66	MXO45-10.0000
12.00000	CTX131-ND	2.78	2.47	2.19	1.87	1.66	MXO45-12.0000
14.31818	CTX115-ND	2.78	2.47	2.19	1.87	1.66	MXO45-14.31818
16.00000	CTX116-ND	2.78	2.47	2.19	1.87	1.66	MXO45-16.0000
18.43200	CTX118-ND	2.78	2.47	2.19	1.87	1.66	MXO45-18.4320
19.66080	CTX124-ND	2.78	2.47	2.19	1.87	1.66	MXO45-19.6608
20.00000	CTX119-ND	2.78	2.47	2.19	1.87	1.66	MXO45-20.0000
24.00000	CTX125-ND	2.78	2.47	2.19	1.87	1.66	MXO45-24.0000
25.00000	CTX126-ND	2.78	2.47	2.19	1.87	1.66	MXO45-25.0000
25.17500	CTX127-ND	2.78	2.47	2.19	1.87	1.66	MXO45-25.1750
28.32200	CTX128-ND	2.78	2.47	2.19	1.87	1.66	MXO45-28.3220
32.00000	CTX129-ND	2.78	2.47	2.19	1.87	1.66	MXO45-32.0000
40.00000	CTX120-ND	2.78	2.47	2.19	1.87	1.66	MXO45-40.0000
50.00000	CTX121-ND	2.78	2.47	2.19	1.87	1.66	MXO45-50.0000
64.00000	CTX130-ND	3.64	3.22	2.87	2.45	2.18	MXO45-64.0000
66.66660	CTX137-ND	3.64	3.22	2.87	2.45	2.18	MXO45-66.6666
80.00000	CTX138-ND	5.85	5.18	4.61	3.94	3.49	MXO45-80.0000

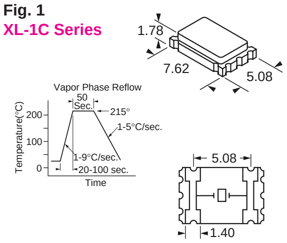
A462-ND	Aries Full-Size Socket for a 4-Pin Oscillator	$.60/1;	$12.50/25;	$40.48/100
A463-ND	Aries Half-Size Socket for a 4-Pin Oscillator	$.60/1;	$12.50/25;	$40.48/100

Connor-Winfield

Surface Mount Crystals and Oscillators

Fig. 1

XL-1C Series

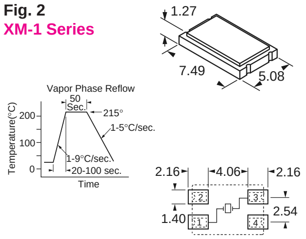


Specifications:

- **Frequency Tolerance:** ±50ppm (@ 25°C)
- **Temperature Stability:** ±50 ppm
- **Operating Temp,:** -10°C to +65°C
- **Drive Level:** .1MW Typical

Fig. 2

XM-1 Series

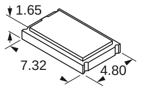


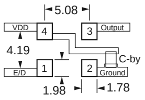
Specifications:

- **Frequency Tolerance:** ±50ppm (@ 25°C)
- **Temperature Stability:** ±50 ppm
- **Operating Temperature:** -10°C to +65°C
- **Drive Level:** .1 MW Typical

Fig. 3

HSM92 - HSM93 Series





Suggested Pad Layout

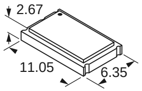
Pin #	Connection
1	Enable
2	GND
3	Output
4	VDD

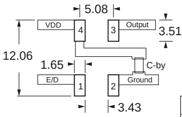
Specifications:

- **Frequency Stability:** HSM92: ±50ppm; HSM93: ±100ppm.
- **Temperature Range:** 0°C to +70°C.
- **Waveform:** HCMOS Squarewave, Tri-State
- **Output:** Voh: 4.5V Min., Vol: 0.5V Max.
- **Current:** Ioh: 16mA; Iol: 16mA.
- **Rise/Fall Time**: 7ns Max.
- **Duty Cycle**: 45/55 max.
- **Start Up Time**: 10mS Max.
- **Supply Voltage**: +5VDC ±10%.
- **Enable/Disable Time:** 100ns Max.
- **Output Load:** 50pF

Fig. 4

HSM 536 Series





Suggested Pad Layout

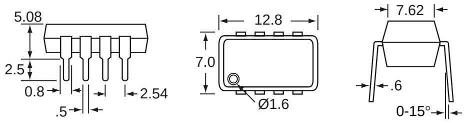
Pin #	Connection
1	Enable
2	GND
3	Output
4	VDD

Specifications:

- **Frequency Stability:** ±100ppm.
- **Temperature Range:** 0°C to +70°C.
- **Waveform:** HCMOS Squarewave.
- **Output:** Voh: 4.5V Min., Vol: 0.5V Max.
- **Rise/Fall Time**: 7ns Max.
- **Duty Cycle**: 50/50% ±10%.
- **Start Up Time**: 10mS Max.
- **Supply Voltage**: +5VDC ±10%.
- **Output Load:** 50pF

Fig.	Frequency (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	100	500	Connor-Winfield Part No.
SMT Quartz Crystals								
1	10.000	16pf	CW401-ND	4.73	3.94	3.15	2.54	XL-1C-10.0000
	12.000	16pf	CW402-ND	4.73	3.94	3.15	2.54	XL-1C-12.0000
	16.000	16pf	CW403-ND	4.73	3.94	3.15	2.54	XL-1C-16.0000
	18.432	16pf	CW404-ND	4.73	3.94	3.15	2.54	XL-1C-18.4320
	20.000	16pf	CW405-ND	4.73	3.94	3.15	2.54	XL-1C-20.0000
	29.4912	16pf	CW407-ND	5.54	4.62	3.69	2.98	XL-1C-29.4912
	40.000	Series	CW408-ND	5.13	4.28	3.42	2.76	XL-1C-40.0000
	44.2368	Series	CW409-ND	5.13	4.28	3.42	2.76	XL-1C-44.2368
	50.000	Series	CW410-ND	5.13	4.28	3.42	2.76	XL-1C-50.0000
2	10.000	16pf	CW421-ND	7.83	6.53	5.22	4.21	XM-1-10.0000
	12.000	16pf	CW422-ND	7.83	6.53	5.22	4.21	XM-1-12.0000
	16.000	16pf	CW423-ND	7.83	6.53	5.22	4.21	XM-1-16.0000
	18.432	16pf	CW424-ND	7.83	6.53	5.22	4.21	XM-1-18.4320
	20.000	16pf	CW425-ND	7.83	6.53	5.22	4.21	XM-1-20.0000
	29.4912	Series	CW427-ND	9.32	7.77	6.21	5.01	XM-1-29.4912
	40.000	Series	CW428-ND	8.51	7.09	5.67	4.57	XM-1-40.0000
	44.2368	Series	CW429-ND	8.51	7.09	5.67	4.57	XM-1-44.2368
	50.000	Series	CW430-ND	8.51	7.09	5.67	4.57	XM-1-50.0000
SMT Oscillator								
3	4.9152	—	CW301-ND	11.61	9.68	7.74	6.24	HSM93-4.9152
	8.000	—	CW302-ND	11.61	9.68	7.74	6.24	HSM93-8.0000
	10.000	—	CW303-ND	11.61	9.68	7.74	6.24	HSM93-10.0000
	16.000	—	CW304-ND	11.61	9.68	7.74	6.24	HSM93-16.0000
	20.000	—	CW305-ND	11.61	9.68	7.74	6.24	HSM93-20.0000
	25.000	—	CW306-ND	11.61	9.68	7.74	6.24	HSM93-25.0000
	29.4912	—	CW341-ND	12.15	10.13	8.10	6.53	HSM92-29.4912
	32.000	—	CW307-ND	11.61	9.68	7.74	6.24	HSM93-32.0000
	40.000	—	CW308-ND	11.61	9.68	7.74	6.24	HSM93-40.0000
	44.2368	—	CW342-ND	12.15	10.13	8.10	6.53	HSM92-44.2368
	50.000	—	CW309-ND	11.61	9.68	7.74	6.24	HSM93-50.0000
	60.000	—	CW310-ND	13.23	11.03	8.82	7.11	HSM93-60.0000
4	8.000	—	CW320-ND	10.80	9.00	7.20	5.80	HSM536-8.0000
	10.000	—	CW321-ND	10.80	9.00	7.20	5.80	HSM536-10.0000
	18.432	—	CW322-ND	10.80	9.00	7.20	5.80	HSM536-18.4320
	20.000	—	CW323-ND	10.80	9.00	7.20	5.80	HSM536-20.0000
	25.000	—	CW324-ND	10.80	9.00	7.20	5.80	HSM536-25.0000
	32.000	—	CW325-ND	10.80	9.00	7.20	5.80	HSM536-32.0000
	40.000	—	CW326-ND	10.80	9.00	7.20	5.80	HSM536-40.0000
	50.000	—	CW327-ND	10.80	9.00	7.20	5.80	HSM536-50.0000
	60.000	—	CW328-ND	11.07	9.23	7.38	5.95	HSM536-60.0000
	64.000	—	CW329-ND	11.07	9.23	7.38	5.95	HSM536-64.0000
	66.6666	—	CW330-ND	11.07	9.23	7.38	5.95	HSM536-66.6666

ECS INC. INTERNATIONAL Dual Output Oscillator - ECS-300C Series

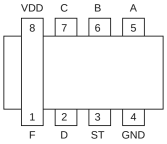


Electrical Characteristics:

- **Frequency Stability:** 0.01%
- **Operating Temperature Range:** Ta = -10°C to +70°C
- **Storage Temperature Range:** Ta = -55°C to +125°C
- **Supply Voltage:** 5V ±0.5V; 3-5V ±5V
- **Current Consumption:** 20mA max.
- **Input Current:** 35mA max.
- **Output Load:** 15pF
- **Output Level:** Voh: 4.5V min. Vol: 0.5V max.
- **Output Symmetry:** 40% to 60%
- **Rise Time/Fall Time:** 15nS
- **Start-up Time:** .2mS

SETTING OF DIVIDING OUTPUT

Input				Output	
Select				F (Original Frequency)	D (Divided Waveform)
C	B	A	ST		
X	X	X	L	L	L
L	L	L	H	fo clock	fo 1/2 clock
L	L	H	H	fo clock	fo 1/2^2 clock
L	H	L	H	fo clock	fo 1/2^3 clock
L	H	H	H	fo clock	fo 1/2^4 clock
H	L	L	H	fo clock	fo 1/2^5 clock
H	L	H	H	fo clock	fo 1/2^6 clock
H	H	L	H	fo clock	fo 1/2^7 clock
H	H	H	H	fo clock	fo 1/2^6 clock



Pin	Connection
1	Output
2	Dividing Ratio
3	Standby
4	GND
5	A (Programming)
6	B (Programming)
7	C (Programming)
8	VDD (5V)

Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
12.000	XC301-ND	5.54	4.62	3.69	2.98	ECS-300C-120
12.288	XC302-ND	5.54	4.62	3.69	2.98	ECS-300C-122.8
12.800	XC303-ND	5.54	4.62	3.69	2.98	ECS-300C-128
14.31818	XC304-ND	5.54	4.62	3.69	2.98	ECS-300C-143
14.7456	XC305-ND	5.54	4.62	3.69	2.98	ECS-300C-147.4
15.9744	XC306-ND	5.54	4.62	3.69	2.98	ECS-300C-159.7
16.000	XC307-ND	5.54	4.62	3.69	2.98	ECS-300C-160
16.3840	XC308-ND	5.54	4.62	3.69	2.98	ECS-300C-163.8
17.734476	XC309-ND	5.54	4.62	3.69	2.98	ECS-300C-177.3
18.432	XC310-ND	5.54	4.62	3.69	2.98	ECS-300C-184
19.6608	XC311-ND	5.54	4.62	3.69	2.98	ECS-300C-196.6
20.000	XC312-ND	5.54	4.62	3.69	2.98	ECS-300C-200
24.000	XC313-ND	5.54	4.62	3.69	2.98	ECS-300C-240

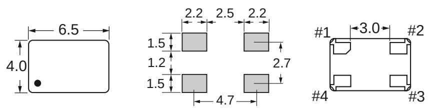
ECS INC. INTERNATIONAL SMD Clock Oscillator - 32.768 KHz

ECS-327SMO Series

Electrical Characteristics:

- **Frequency Stability:**
  - -10°C ~ +60°C: -60ppm min., +30ppm max.;
  - -40°C ~ +85°C: -140ppm min., +30ppm max.
- **Operating Temperature Range:** -40°C ~ +85°C
- **Storage Temperature Range:** -40°C ~ +85°C
- **Input Voltage (Vcc):** +3.3V DC typ.
- **Input Current:** 15µA max. (with 15pF load)
- **Symmetry:** 40% to 60% (at 1/2 Vcc Level and +25°C)
- **Rise and Fall Time:** 200ns
- **"0" Level:** Vcc x 0.1V max.
- **"1" Level:** Vcc x 0.9V min.
- **Load:** 15pF CMOS

Frequency (KHz)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	ECS Part No.
32.768	XC777CT-ND	6.74	5.52	4.90	XC777TR-ND	3430.00	ECS-327SMO



Pin	Connection
1	NC
2	GND
3	Output
4	Vcc

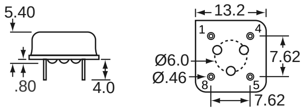
Package Thickness: 2.0mm

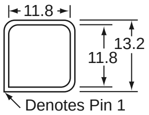
ECS INC. INTERNATIONAL

Half Size Clock Oscillators

Electrical Characteristics:

- **Frequency Stability:** ±50ppm max.
- **Supply Voltage:** 4.5V min., 5.5V max.
- **Input Current:**
  - 4.000 ~ 25.000MHz: 25mA
  - 25.000+ ~ 50.000MHz: 46mA
  - 50.000+ ~ 80.000MHz: 77mA
- **Output Symmetry @2.5V:**
  - 4.000 ~ 80.000MHz: 45% min., 55% max.
- **Operating Temp.:** -10°C to +70°C
- **Storage Temp.:** -55°C to +125°C
- **Rise Time (0.5V to 4.5V):** 5nS
- **Fall Time (4.5V to 0.5V):** 5nS
- **Output Voltage (4.000 ~ 80.000MHz):**
  - IOL = 16mA: 0.5V max.
  - IOH = -16mA: 4.5V min.
- **Output Current (4.000 ~ 80.000MHz):**
  - VOL = 0.5V: 16mA max.
  - VOH = 4.5V: -16mA max.
- **Output Load:**
  - TTL: 10 TTL max.
  - HCMOS: 50pf
- **Start up Time:** 4.000-80.000MHz: 10mS
- **Output Enable/Disable Time:** 100nS





Pin	Connection
1	Enable/Disable
4	GND (Case)
5	Output
8	+5 VDC

Enable / Disable Function	
INH (Pin 1)	OUTPUT (Pin 5)
OPEN†	ACTIVE
'1' Level $V_{IH} \geq 2.2V$	ACTIVE
'0' Level $V_{IL} \leq 0.8V$	High Z

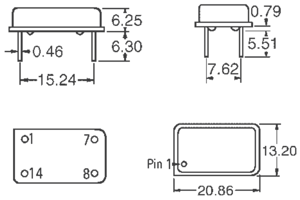
a† An internal pullup resistor from Pin 1 to Pin 8 allows active output if Pin 1 is left open

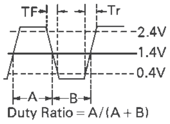
Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
4.000	XC259-ND	2.63	2.37	1.89	1.68	ECS-2200B-040
4.9152	XC260-ND	2.63	2.37	1.89	1.68	ECS-2200B-049
6.000	XC261-ND	2.63	2.37	1.89	1.68	ECS-2200B-060
6.144	XC262-ND	2.63	2.37	1.89	1.68	ECS-2200B-061
7.3728	XC263-ND	2.63	2.37	1.89	1.68	ECS-2200B-073
8.000	XC264-ND	2.63	2.37	1.89	1.68	ECS-2200B-080
9.216	XC265-ND	2.63	2.37	1.89	1.68	ECS-2200B-092.1
9.8304	XC266-ND	2.63	2.37	1.89	1.68	ECS-2200B-098
10.000	XC267-ND	2.63	2.37	1.89	1.68	ECS-2200B-100
11.0592	XC268-ND	2.63	2.37	1.89	1.68	ECS-2200B-110
12.000	XC269-ND	2.63	2.37	1.89	1.68	ECS-2200B-120
14.31818	XC270-ND	2.63	2.37	1.89	1.68	ECS-2200B-143
16.000	XC271-ND	2.63	2.37	1.89	1.68	ECS-2200B-160
18.432	XC272-ND	2.63	2.37	1.89	1.68	ECS-2200B-184
19.6608	XC273-ND	2.63	2.37	1.89	1.68	ECS-2200B-196
20.000	XC274-ND	2.63	2.37	1.89	1.68	ECS-2200B-200
24.000	XC275-ND	2.63	2.37	1.89	1.68	ECS-2200B-240
25.000	XC276-ND	2.63	2.37	1.89	1.68	ECS-2200B-250
28.322	XC277-ND	2.63	2.37	1.89	1.68	ECS-2200B-283
32.000	XC278-ND	2.63	2.37	1.89	1.68	ECS-2200B-320
40.000	XC279-ND	2.63	2.37	1.89	1.68	ECS-2200B-400
48.000	XC280-ND	2.63	2.37	1.89	1.68	ECS-2200B-480
50.000	XC281-ND	2.63	2.37	1.89	1.68	ECS-2200B-500
66.666	XC282-ND	2.63	2.37	1.89	1.68	ECS-2200B-666
80.000	XC283-ND	2.63	2.37	1.89	1.68	ECS-2200B-800

Full Size TTL Clock Oscillators

Electrical Characteristics:

- **Frequency Stability:** ±100ppm max.
- **Supply Voltage:** 4.5V min., 5.5V max.
- **Input Current:**
  - 1.000 ~ 8.000MHz: 15mA
  - 8.000+ ~ 24.000MHz: 30mA
  - 24.000+ ~ 66.666MHz: 70 mA
- **Output Symmetry @ 1.4V:**
  - 1.000 ~ 8.000MHz: 45% min., 55% max.
  - 8.000+ ~66.666MHz: 40% min., 60% max.
- **Operating Temp.:** 0°C to +70°C
- **Storage Temp.:** -55°C to +125C
- **Rise Time:**
  - 1.000 ~ 25.000MHz @ 0.4V to 2.4V: 10nS
  - 25.000+ ~ 66.666MHz @ 0.5 to 2.4V: 5nS
- **Fall Time:**
  - 1.000 ~ 25.000MHz @ 0.4V to 2.4V: 10nS
  - 25.000+ ~ 66.666MHz @ 0.5V to 2.4V: 5nS
- **Output Voltage (IOL = 20mA):**
  - 1.000 ~ 25.000MHz: 0.4V max.
  - 25.000+ ~ 66.666MHz: 0.5V max.
- **Output Voltage (IOH = 1mA):** 2.4V min.
- **Output Current:**
  - VOL = 0.5V: 16mA max.
  - VOH = 2.4V: -4mA max.
- **Output Load:** TTL: 10 TTL max.
- **Start up Time:**
  - 1.000~3.500MHz: 20mS
  - 3.500+~4.000MHz: 35mS
  - 4.000+~6.000MHz: 30mS
  - 6.000+~20.000MHz: 20mS
  - 20.000+~66.666MHz: 15mS





Pin	Connection
1	NC
7	Gnd/Case Gnd
8	Output
14	+V dc

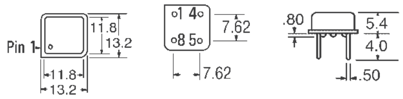
Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
1.000	X101-ND	2.88	2.59	2.07	1.84	ECS-100A-010
1.2288	X102-ND	2.88	2.59	2.07	1.84	ECS-100A-012.2
1.8432	X103-ND	2.88	2.59	2.07	1.84	ECS-100A-018
2.000	X104-ND	2.88	2.59	2.07	1.84	ECS-100A-020
2.4576	X105-ND	2.88	2.59	2.07	1.84	ECS-100A-024
3.579545	XC227-ND	2.88	2.59	2.07	1.84	ECS-100A-035
3.6864	X106-ND	2.88	2.59	2.07	1.84	ECS-100A-036
4.000	X107-ND	2.88	2.59	2.07	1.84	ECS-100A-040
4.9152	X108-ND	2.88	2.59	2.07	1.84	ECS-100A-049
5.000	X109-ND	2.88	2.59	2.07	1.84	ECS-100A-050
5.0688	X110-ND	2.88	2.59	2.07	1.84	ECS-100A-051
6.000	X111-ND	2.88	2.59	2.07	1.84	ECS-100A-060
6.144	X122-ND	2.88	2.59	2.07	1.84	ECS-100A-061
7.3728	X123-ND	2.88	2.59	2.07	1.84	ECS-100A-073
8.000	X112-ND	2.88	2.59	2.07	1.84	ECS-100A-080
9.216	X113-ND	2.88	2.59	2.07	1.84	ECS-100A-092.1
9.8304	X124-ND	2.88	2.59	2.07	1.84	ECS-100A-098.3
10.000	X114-ND	2.88	2.59	2.07	1.84	ECS-100A-100
11.0592	X125-ND	2.88	2.59	2.07	1.84	ECS-100A-110.5
12.000	X126-ND	2.88	2.59	2.07	1.84	ECS-100A-120
14.31818	X115-ND	2.88	2.59	2.07	1.84	ECS-100A-143
14.7456	X127-ND	2.88	2.59	2.07	1.84	ECS-100A-147.4
16.000	X116-ND	2.88	2.59	2.07	1.84	ECS-100A-160
16.257	X128-ND	2.88	2.59	2.07	1.84	ECS-100A-162.5
18.000	X117-ND	2.88	2.59	2.07	1.84	ECS-100A-180
18.432	X118-ND	2.88	2.59	2.07	1.84	ECS-100A-184
19.6608	XC314-ND	2.88	2.59	2.07	1.84	ECS-100A-196.6
20.000	X119-ND	2.88	2.59	2.07	1.84	ECS-100A-200
24.000	X129-ND	2.88	2.59	2.07	1.84	ECS-100A-240
25.000	XC315-ND	2.88	2.59	2.07	1.84	ECS-100A-250
25.175	X130-ND	2.88	2.59	2.07	1.84	ECS-100A-251.7
28.322	X131-ND	2.88	2.59	2.07	1.84	ECS-100A-283.2
30.000	XC316-ND	2.88	2.59	2.07	1.84	ECS-100A-300
32.000	X132-ND	2.88	2.59	2.07	1.84	ECS-100A-320
32.514	X133-ND	2.88	2.59	2.07	1.84	ECS-100A-325.1
35.000	X134-ND	2.88	2.59	2.07	1.84	ECS-100A-350
40.000	X120-ND	2.88	2.59	2.07	1.84	ECS-100A-400
48.000	X135-ND	2.88	2.59	2.07	1.84	ECS-100A-480
50.000	X121-ND	2.88	2.59	2.07	1.84	ECS-100A-500
64.000	X136-ND	2.88	2.59	2.07	1.84	ECS-100A-640
66.666	XC228-ND	2.88	2.59	2.07	1.84	ECS-100A-666

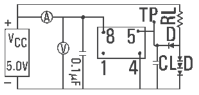
A462-ND	Aries Full-Size Socket for a 4-Pin Oscillator	$.60/1; $12.50/25; $40.48/100
A463-ND	Aries Half-Size Socket for a 4-Pin Oscillator	$.60/1; $12.50/25; $40.48/100

Half Size TTL Clock Oscillators

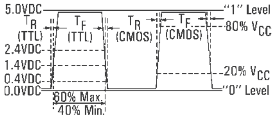
Electrical Characteristics:

- **Frequency Stability:**
  ±100ppm max.
- **Supply Voltage:**
  4.5V min., 5.5V max.
- **Input Current:**
  - 1.000 ~ 25.000MHz: 25mA
  - 25.000+ ~ 50.000MHz: 46mA
  - 50.000+ ~ 66.666MHz: 77mA
- **Output Symmetry @ 2.5V:**
  - 1.000 ~ 66.666MHz:
  - 45% min., 55% max.
- **Operating Temp.:**
  0°C to +70°C
- **Storage Temp.:**
  -55°C to +125C
- **Rise Time (0.5V to 4.5V):** 5nS
- **Fall Time (4.5V to 0.5V):** 5nS
- **Output Voltage**
  - IOL = 16mA: 0.5V max.
  - IOH = -16mA: 4.5V min.
- **Output Current:**
  - VOL = 0.5V: 16mA max.
  - VOH = 4.5V: -16mA max.
- **Output Load:**
  - TTL: 10 TTL max.
  - HCMOS: 50pf
- **Start up Time:** 10mS





R_L = 400Ω
D: Switching Diode 1N4148
C_L = 15pF Max.



Pin	Connection
1	NC
4	GND
5	Output
8	Vcc

Frequency (MHz)	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
1.000	XC229-ND	2.63	2.37	1.89	1.68	ECS-2100A-010
1.2288	XC230-ND	2.63	2.37	1.89	1.68	ECS-2100A-012.2
1.8432	XC231-ND	2.63	2.37	1.89	1.68	ECS-2100A-018
2.000	XC232-ND	2.63	2.37	1.89	1.68	ECS-2100A-020
2.4576	XC233-ND	2.63	2.37	1.89	1.68	ECS-2100A-024
3.6864	XC234-ND	2.63	2.37	1.89	1.68	ECS-2100A-036
3.579545	XC235-ND	2.63	2.37	1.89	1.68	ECS-2100A-035
4.000	X202-ND	2.63	2.37	1.89	1.68	ECS-2100A-040
4.9152	XC236-ND	2.63	2.37	1.89	1.68	ECS-2100A-049
5.000	XC237-ND	2.63	2.37	1.89	1.68	ECS-2100A-050
5.0688	XC238-ND	2.63	2.37	1.89	1.68	ECS-2100A-051
6.000	XC239-ND	2.63	2.37	1.89	1.68	ECS-2100A-060
6.144	XC240-ND	2.63	2.37	1.89	1.68	ECS-2100A-061
7.3728	X208-ND	2.63	2.37	1.89	1.68	ECS-2100A-073.2
8.000	X209-ND	2.63	2.37	1.89	1.68	ECS-2100A-080
9.216	XC241-ND	2.63	2.37	1.89	1.68	ECS-2100A-092.1
9.8304	XC242-ND	2.63	2.37	1.89	1.68	ECS-2100A-098.3
10.000	XC243-ND	2.63	2.37	1.89	1.68	ECS-2100A-100
11.0592	XC244-ND	2.63	2.37	1.89	1.68	ECS-2100A-110.5
12.000	XC245-ND	2.63	2.37	1.89	1.68	ECS-2100A-120
14.31818	XC246-ND	2.63	2.37	1.89	1.68	ECS-2100A-143
14.7456	XC247-ND	2.63	2.37	1.89	1.68	ECS-2100A-147.4
16.000	X216-ND	2.63	2.37	1.89	1.68	ECS-2100A-160
16.257	XC248-ND	2.63	2.37	1.89	1.68	ECS-2100A-162.5
18.000	XC249-ND	2.63	2.37	1.89	1.68	ECS-2100A-180
18.432	XC250-ND	2.63	2.37	1.89	1.68	ECS-2100A-184
19.6608	XC251-ND	2.63	2.37	1.89	1.68	ECS-2100A-196.6
20.000	X220-ND	2.63	2.37	1.89	1.68	ECS-2100A-200
24.000	X221-ND	2.63	2.37	1.89	1.68	ECS-2100A-240
25.000	XC252-ND	2.63	2.37	1.89	1.68	ECS-2100A-250
25.175	X222-ND	2.63	2.37	1.89	1.68	ECS-2100A-251.7
28.322	X223-ND	2.63	2.37	1.89	1.68	ECS-2100A-283.2
30.000	XC253-ND	2.63	2.37	1.89	1.68	ECS-2100A-300
32.000	XC254-ND	2.63	2.37	1.89	1.68	ECS-2100A-320
32.514	X224-ND	2.63	2.37	1.89	1.68	ECS-2100A-325.1
35.000	XC255-ND	2.63	2.37	1.89	1.68	ECS-2100A-350
40.000	X225-ND	2.63	2.37	1.89	1.68	ECS-2100A-400
48.000	XC256-ND	2.63	2.37	1.89	1.68	ECS-2100A-480
50.000	X226-ND	2.63	2.37	1.89	1.68	ECS-2100A-500
64.000	XC257-ND	2.63	2.37	1.89	1.68	ECS-2100A-640
66.666	XC258-ND	2.63	2.37	1.89	1.68	ECS-2100A-666

Surface Mount Oscillators

Electrical Specifications:

	ECS-3953C	ECS-3951C	ECS-3953M	ECS-3951M
Frequency Stability @25°C and over Operating Temp.	±100ppm	±100ppm	±50ppm	±50ppm
Supply Voltage - Min. to Max.	3.0V to 3.6V	4.5V to 5.5V	3.0V to 3.6V	4.5V to 5.5V
Input Current	20.00-32.00MHz - 8mA max. 32.00-50.00MHz - 12mA max. 66.666-80.00MHz - 30mA max.	1.8432 - 20.00MHz - 10mA max. 33.00MHz - 15mA max. 40.00-65.00MHz - 30mA max. 66.666MHz - 50mA max.	1.8432-32.00MHz - 15mA max. 40.00-66.6666MHz - 25mA max. 80.00MHz - 30mA max.	1.8432-33.00MHz - 20mA max. 40.00-66.666MHz - 55mA max.
Output Symmetry @ 1/2 Vcc Level	40% min., 60% max.	40% min., 60% max.	40% min., 60% max.	40% min., 60% max.
Operating Temperature	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C
Storage Temperature	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C
Rise and Fall Time	15nS	10nS	5nS	Up to 66.666MHz - 15nS 80.000MHz - 5nS
Output Current (IOL) VOL=0.5V/0.33V	4mA	4mA	4mA	4mA
Output Current (IOH) VOL=4.5V/2.97V	-4mA	-4mA	-4mA	-4mA
Output Load HCMOS	15pF	30pF	15pF	30pF
Enable/Disable Time	100nS	100nS	100nS	100nS

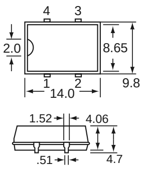
NOTE:

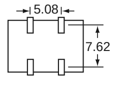
Frequency Stability for ECS-8FM, ECS-3953C, ECS-3953M, ECS-3951C, and ECS-3951M Series inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

NOTE:

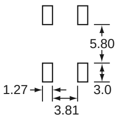
For the Enable/Disable Function in the ECS-8FM, ECS-3953C, ECS-3953M, ECS-3951C, and ECS-3951M Series, an internal pullup resistor from Pin 1 to Pin 4 allows active output if Pin 1 is left open. A 0.01µF bypass capacitor should be placed between V_{DD} (Pin 4) and GND (Pin 2) to minimize power supply line noise.

ECS-8FM Oscillator





Pin	Connection
1	Enable/Disable
2	GND
3	OUT
4	+5V DC

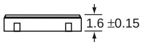


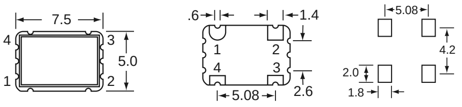
Pad Layout

ELECTRICAL CHARACTERISTICS:

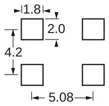
• **Frequency Stability:** ±100ppm @ 25°C and over operating temperature range • **Supply Voltage:** 4.5V min., 5.5V max. • **Input Current:** 1.00 ~ 32.00MHz: 27mA; 32.00+ ~ 50.00MHz: 45mA; 50.00+ ~ 66.666MHz: 60mA • **Output Symmetry @ 2.5V:** 1.00 ~ 50.00MHz: 45% min., 55% max.; 50.00+ ~ 66.666MHz: 40% min., 60% max. • **Operating Temperature:** -10°C to +70°C • **Storage Temp.:** -55°C to +125°C • **Rise Time (0.5V to 4.5V):** 7nS • **Fall Time (4.5V to 0.5V):** 7nS • **Output Voltage:** IOL = 16mA: 0.5V max.; IOH = -16mA: 4.5V min. • **Output Current:** VOL = 0.5V: 16mA max.; VOH = 4.5V: -16mA max. • **Output Load:** TTL: 10 TTL max.; HCMOS: 50pF max. • **Start-up Time:** 10mS max. • **Enable/Disable Time:** 100nS max.

ECS-3953C and ECS3953M 3.3 Volt Oscillator

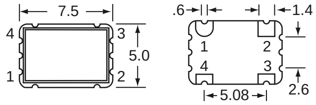




ECS-3951C and ECS-3951M Oscillator

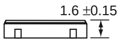


Pad Layout



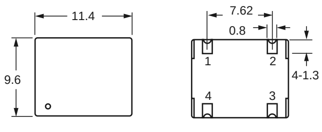
Top View

Bottom View



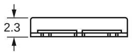
Pin	Connection
1	Enable/Disable
2	GND
3	Output
4	5.0V DC

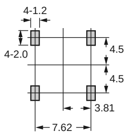
VC-TCXO Oscillator



Top View

Bottom View





Pad Layout

ELECTRICAL CHARACTERISTICS:

- **Frequency Range:** 10,000-19.440MHz
- **Frequency Stability** (@ -30°C to +75°C): 2.5ppm max.
- **Supply Voltage:** +2.85 V min., 3.15 V max.
- **Storage Temperature:** -40°C to +85°C
- **Output Voltage:** 0.8 Vp-p min.
- **Output Load:** 10kΩ ±10%//10pF ±10%
- **Control Voltage:** +1.5V typ.

Pin	Connection
1	Vcontrol
2	GND
3	Output
4	Vcc

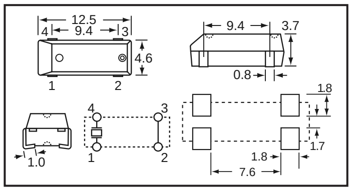
Frequency (MHz)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing		ECS Part No.
		1	10	100	500		500	1,000	
ECS-8FM Series Oscillators									
1.000	XC703CT-ND	2.97	2.48	1.98	1.82	XC703TR-ND	—	1503.00	ECS-8FM-010-TR
1.8432	XC704CT-ND	2.97	2.48	1.98	1.82	XC704TR-ND	—	1503.00	ECS-8FM-018-TR
2.000	XC705CT-ND	2.97	2.48	1.98	1.82	XC705TR-ND	—	1503.00	ECS-8FM-020-TR
2.4576	XC706CT-ND	2.97	2.48	1.98	1.82	XC706TR-ND	—	1503.00	ECS-8FM-024-TR
3.579545	XC707CT-ND	2.97	2.48	1.98	1.82	XC707TR-ND	—	1503.00	ECS-8FM-035-TR
3.6864	XC708CT-ND	2.97	2.48	1.98	1.82	XC708TR-ND	—	1503.00	ECS-8FM-036-TR
4.000	XC635CT-ND	3.30	2.97	2.48	1.98	XC635TR-ND	—	1503.00	ECS-8FM-040-TR
4.9152	XC636CT-ND	3.30	2.97	2.48	1.98	XC636TR-ND	—	1503.00	ECS-8FM-049-TR
6.000	XC637CT-ND	3.30	2.97	2.48	1.98	XC637TR-ND	—	1503.00	ECS-8FM-060-TR
7.3728	XC709CT-ND	2.97	2.48	1.98	1.82	XC709TR-ND	—	1503.00	ECS-8FM-073-TR
8.000	XC638CT-ND	3.30	2.97	2.48	1.98	XC638TR-ND	—	1503.00	ECS-8FM-080-TR
9.8304	XC710CT-ND	2.97	2.48	1.98	1.82	XC710TR-ND	—	1503.00	ECS-8FM-098.3-TR
10.000	XC639CT-ND	3.30	2.97	2.48	1.98	XC639TR-ND	—	1503.00	ECS-8FM-100-TR
11.0592	XC711CT-ND	2.97	2.48	1.98	1.82	XC711TR-ND	—	1503.00	ECS-8FM-100.5-TR
12.000	XC640CT-ND	3.30	2.97	2.48	1.98	XC640TR-ND	—	1503.00	ECS-8FM-120-TR
12.288	XC712CT-ND	2.97	2.48	1.98	1.82	XC712TR-ND	—	1503.00	ECS-8FM-122.8-TR
14.31818	XC641CT-ND	3.30	2.97	2.48	1.98	XC641TR-ND	—	1503.00	ECS-8FM-143-TR
16.000	XC642CT-ND	3.30	2.97	2.48	1.98	XC642TR-ND	—	1503.00	ECS-8FM-160-TR
18.432	XC643CT-ND	3.30	2.97	2.48	1.98	XC643TR-ND	—	1503.00	ECS-8FM-184-TR
19.6608	XC713CT-ND	2.97	2.48	1.98	1.82	XC713TR-ND	—	1503.00	ECS-8FM-196.6-TR
20.000	XC644CT-ND	3.30	2.97	2.48	1.98	XC644TR-ND	—	1503.00	ECS-8FM-200-TR
24.000	XC645CT-ND	3.30	2.97	2.48	1.98	XC645TR-ND	—	1503.00	ECS-8FM-240-TR
25.000	XC714CT-ND	2.97	2.48	1.98	1.82	XC714TR-ND	—	1503.00	ECS-8FM-250-TR
25.175	XC646CT-ND	3.30	2.97	2.48	1.98	XC646TR-ND	—	1503.00	ECS-8FM-251.7-TR
28.322	XC647CT-ND	3.30	2.97	2.48	1.98	XC647TR-ND	—	1503.00	ECS-8FM-283.2-TR
32.000	XC648CT-ND	3.30	2.97	2.48	1.98	XC648TR-ND	—	1503.00	ECS-8FM-320-TR
32.514	XC649CT-ND	3.30	2.97	2.48	1.98	XC649TR-ND	—	1503.00	ECS-8FM-325.1-TR
40.000	XC650CT-ND	3.30	2.97	2.48	1.98	XC650TR-ND	—	1503.00	ECS-8FM-400-TR
48.000	XC651CT-ND	3.30	2.97	2.48	1.98	XC651TR-ND	—	1503.00	ECS-8FM-480-TR
50.000	XC652CT-ND	3.30	2.97	2.48	1.98	XC652TR-ND	—	1503.00	ECS-8FM-500-TR
66.666	XC715CT-ND	2.97	2.48	1.98	1.82	XC715TR-ND	—	1503.00	ECS-8FM-666-TR
ECS-3953C Series Oscillators									
20.000	XC721CT-ND	5.25	4.73	3.94	3.15	XC721TR-ND	—	2625.00	ECS-3953C-200-TR
24.000	XC722CT-ND	5.25	4.73	3.94	3.15	XC722TR-ND	—	2625.00	ECS-3953C-240-TR
25.000	XC723CT-ND	5.25	4.73	3.94	3.15	XC723TR-ND	—	2625.00	ECS-3953C-250-TR
32.000	XC724CT-ND	5.25	4.73	3.94	3.15	XC724TR-ND	—	2625.00	ECS-3953C-320-TR
40.000	XC725CT-ND	5.25	4.73	3.94	3.15	XC725TR-ND	—	2625.00	ECS-3953C-400-TR
50.000	XC726CT-ND	5.25	4.73	3.94	3.15	XC726TR-ND	—	2625.00	ECS-3953C-500-TR
66.666	XC727CT-ND	5.25	4.73	3.94	3.15	XC727TR-ND	—	2625.00	ECS-3953C-666-TR
80.000	XC728CT-ND	5.25	4.73	3.94	3.15	XC728TR-ND	—	2625.00	ECS-3953C-800-TR
ECS-3953M Series Oscillators									
1.8432	XC284CT-ND	5.25	4.73	3.94	3.15	XC284TR-ND	—	2625.00	ECS-3953M-018-B-TR
3.6864	XC285CT-ND	5.25	4.73	3.94	3.15	XC285TR-ND	—	2625.00	ECS-3953M-036-B-TR
4.000	XC286CT-ND	5.25	4.73	3.94	3.15	XC286TR-ND	—	2625.00	ECS-3953M-040-B-TR
8.000	XC287CT-ND	5.25	4.73	3.94	3.15	XC287TR-ND	—	2625.00	ECS-3953M-080-B-TR
10.000	XC288CT-ND	5.25	4.73	3.94	3.15	XC288TR-ND	—	2625.00	ECS-3953M-100-B-TR
12.000	XC289CT-ND	5.25	4.73	3.94	3.15	XC289TR-ND	—	2625.00	ECS-3953M-120-B-TR
16.000	XC290CT-ND	5.25	4.73	3.94	3.15	XC290TR-ND	—	2625.00	ECS-3953M-160-B-TR
20.000	XC790CT-ND	5.25	4.73	3.94	3.15	XC790TR-ND	—	2625.00	ECS-3953M-200-B-TR
24.000	XC791CT-ND	5.25	4.73	3.94	3.15	XC791TR-ND	—	2625.00	ECS-3953M-240-B-TR
25.000	XC792CT-ND	5.25	4.73	3.94	3.15	XC792TR-ND	—	2625.00	ECS-3953M-250-B-TR
32.000	XC793CT-ND	5.25	4.73	3.94	3.15	XC793TR-ND	—	2625.00	ECS-3953M-320-B-TR
40.000	XC794CT-ND	5.25	4.73	3.94	3.15	XC794TR-ND	—	2625.00	ECS-3953M-400-B-TR
50.000	XC795CT-ND	5.25	4.73	3.94	3.15	XC795TR-ND	—	2625.00	ECS-3953M-500-B-TR
66.666	XC796CT-ND	5.25	4.73	3.94	3.15	XC796TR-ND	—	2625.00	ECS-3953M-666-B-TR
80.000	XC797CT-ND	5.25	4.73	3.94	3.15	XC797TR-ND	—	2625.00	ECS-3953M-800-B-TR
ECS-3951M Series Oscillators									
1.8432	XC780CT-ND	5.25	4.73	3.94	3.15	XC780TR-ND	—	2625.00	ECS-3951M-018-B-TR
3.6864	XC781CT-ND	5.25	4.73	3.94	3.15	XC781TR-ND	—	2625.00	ECS-3951M-036-B-TR
12.000	XC782CT-ND	5.25	4.73	3.94	3.15	XC782TR-ND	—	2625.00	ECS-3951M-120-B-TR
16.000	XC783CT-ND	5.25	4.73	3.94	3.15	XC783TR-ND	—	2625.00	ECS-3951M-160-B-TR
20.000	XC784CT-ND	5.25	4.73	3.94	3.15	XC784TR-ND	—	2625.00	ECS-3951M-200-B-TR
33.000	XC785CT-ND	5.25	4.73	3.94	3.15	XC785TR-ND	—	2625.00	ECS-3951M-330-B-TR
40.000	XC786CT-ND	5.25	4.73	3.94	3.15	XC786TR-ND	—	2625.00	ECS-3951M-400-B-TR
50.000	XC787CT-ND	5.25	4.73	3.94	3.15	XC787TR-ND	—	2625.00	ECS-3951M-500-B-TR
65.000	XC788CT-ND	5.25	4.73	3.94	3.15	XC788TR-ND	—	2625.00	ECS-3951M-650-B-TR
66.666	XC789CT-ND	5.25	4.73	3.94	3.15	XC789TR-ND	—	2625.00	ECS-3951M-666-B-TR
ECS-3951C Series Oscillators									
1.8432	XC653CT-ND	5.25	4.73	3.94	3.15	XC653TR-ND	—	2625.00	ECS-3951C-018-TR
3.6864	XC654CT-ND	5.25	4.73	3.94	3.15	XC654TR-ND	—	2625.00	ECS-3951C-036-TR
12.000	XC655CT-ND	5.25	4.73	3.94	3.15	XC655TR-ND	—	2625.00	ECS-3951C-120-TR
16.000	XC656CT-ND	5.25	4.73	3.94	3.15	XC656TR-ND	—	2625.00	ECS-3951C-160-TR
20.000	XC657CT-ND	5.25	4.73	3.94	3.15	XC657TR-ND	—	2625.00	ECS-3951C-200-TR
33.000	XC658CT-ND	5.25	4.73	3.94	3.15	XC658TR-ND	—	2625.00	ECS-3951C-330-TR
40.000	XC659CT-ND	5.25	4.73	3.94	3.15	XC659TR-ND	—	2625.00	ECS-3951C-400-TR
50.000	XC660CT-ND	5.25	4.73	3.94	3.15	XC660TR-ND	—	2625.00	ECS-3951C-500-TR
65.000	XC661CT-ND	5.25	4.73	3.94	3.15	XC661TR-ND	—	2625.00	ECS-3951C-650-TR
66.666	XC662CT-ND	5.25	4.73	3.94	3.15	XC662TR-ND	—	2625.00	ECS-3951C-666-TR1
VC-TXO Series Oscillators									
10.000	X493CT-ND	15.13	12.38	11.00	—	X493TR-ND	4950.00	7700.00	VC-TXO-39SM-100
12.800	X489CT-ND	15.13	12.38	11.00	—	X489TR-ND	4950.00	7700.00	VC-TXO-39SM-128
13.000	X490CT-ND	15.13	12.38	11.00	—	X490TR-ND	4950.00	7700.00	VC-TXO-39SM-130
16.800	X491CT-ND	15.13	12.38	11.00	—	X491TR-ND	4950.00	7700.00	VC-TXO-39SM-168
19.440	X492CT-ND	15.13	12.38	11.00	—	X492TR-ND	4950.00	7700.00	VC-TXO-39SM-194.4

ECS INC. INTERNATIONAL SMT Low Profile Quartz Crystals

ECX-3S

The ECX-3S Series has a special high temperature seal which is able to withstand SMD soldering techniques. Housing for this crystal is made from the same rugged thermoplastic that is standard for integrated circuits.

ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50 ppm @ +25°C and over operating temp. range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.1mW • **Operating Temperature:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Mode of Operation:** Fundamental

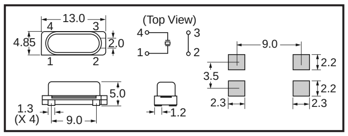


Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing	ECS Part No.
			1	10	100		1,000	
3.579545	17pF	XC501CT-ND•	2.03	1.69	1.35	XC501TR-ND	1012.50	ECS-35-17-7S
3.579545	Series	XC529CT-ND	2.03	1.69	1.35	XC529TR-ND	1012.50	ECS-35-S-7S
3.6864	Series	XC502CT-ND•	2.03	1.69	1.35	XC502TR-ND	1012.50	ECS-36-S-7S
3.6864	20pF	XC503CT-ND•	2.03	1.69	1.35	XC503TR-ND	1012.50	ECS-36-20-7S
4.000	Series	XC504CT-ND•	2.03	1.69	1.35	XC504TR-ND	1012.50	ECS-40-S-7S
4.000	20pF	XC505CT-ND•	2.03	1.69	1.35	XC505TR-ND	1012.50	ECS-40-20-7S
4.096	16pF	XC500CT-ND	2.03	1.69	1.35	XC500TR-ND	1125.00	ECS-41-16-7S
4.194304	12pF	XC530CT-ND	2.03	1.69	1.35	XC530TR-ND	1012.50	ECS-42-12-7S
4.433618	20pF	XC506CT-ND•	2.03	1.69	1.35	XC506TR-ND	1012.50	ECS-44-20-7S
4.9152	Series	XC507CT-ND•	2.03	1.69	1.35	XC507TR-ND	1012.50	ECS-49-S-7S
4.9152	20pF	XC508CT-ND•	2.03	1.69	1.35	XC508TR-ND	1012.50	ECS-49-20-7S
5.000	20pF	XC499CT-ND	2.03	1.69	1.35	XC499TR-ND	1125.00	ECS-50-20-7S
6.000	32pF	XC498CT-ND	2.03	1.69	1.35	XC498TR-ND	1125.00	ECS-60-32-7S
6.000	Series	XC497CT-ND	2.03	1.69	1.35	XC497TR-ND	1125.00	ECS-60-S-7S
6.144	32pF	XC509CT-ND•	2.03	1.69	1.35	XC509TR-ND	1012.50	ECS-61-32-7S
6.5536	12pF	XC496CT-ND	2.03	1.69	1.35	XC496TR-ND	1125.00	ECS-65-12-7S
7.3728	20pF	XC536CT-ND	2.03	1.69	1.35	XC536TR-ND	1012.50	ECS-73-20-7S
7.3728	Series	XC510CT-ND•	2.03	1.69	1.35	XC510TR-ND	1012.50	ECS-73-S-7S
8.000	Series	XC511CT-ND•	2.03	1.69	1.35	XC511TR-ND	1012.50	ECS-80-S-7S
8.000	16pF	XC495CT-ND	2.03	1.69	1.35	XC495TR-ND	1125.00	ECS-80-16-7S
9.8304	Series	XC512CT-ND•	2.03	1.69	1.35	XC512TR-ND	1012.50	ECS-98.3-S-7S
9.8304	20pF	XC513CT-ND•	2.03	1.69	1.35	XC513TR-ND	1012.50	ECS-98.3-20-7S
10.000	Series	XC514CT-ND•	2.03	1.69	1.35	XC514TR-ND	1012.50	ECS-100-S-7S
11.0592	Series	XC515CT-ND•	2.03	1.69	1.35	XC515TR-ND	1012.50	ECS-110.5-S-7S
11.0592	20pF	XC516CT-ND•	2.03	1.69	1.35	XC516TR-ND	1012.50	ECS-110.5-20-7S
12.000	18pF	XC548CT-ND	2.03	1.69	1.35	XC548TR-ND	1012.50	ECS-120-18-7S
12.000	Series	XC517CT-ND•	2.03	1.69	1.35	XC517TR-ND	1012.50	ECS-120-S-7S
12.000	32pF	XC494CT-ND	2.03	1.69	1.35	XC494TR-ND	1125.00	ECS-120-32-7S
12.288	Series	XC518CT-ND•	2.03	1.69	1.35	XC518TR-ND	1012.50	ECS-122.8-S-7S
12.288	20pF	XC493CT-ND	2.03	1.69	1.35	XC493TR-ND	1125.00	ECS-122.8-20-7S
14.31818	Series	XC519CT-ND•	2.03	1.69	1.35	XC519TR-ND	1012.50	ECS-143-S-7S
14.31818	20pF	XC492CT-ND	2.03	1.69	1.35	XC492TR-ND	1125.00	ECS-143-20-7S
14.7456	Series	XC520CT-ND•	2.03	1.69	1.35	XC520TR-ND	1012.50	ECS-147.4-S-7S
14.7456	20pF	XC491CT-ND	2.03	1.69	1.35	XC491TR-ND	1125.00	ECS-147.4-20-7S
16.000	20pF	XC550CT-ND	2.03	1.69	1.35	XC550TR-ND	1012.50	ECS-160-20-7S
16.000	Series	XC521CT-ND•	2.03	1.69	1.35	XC521TR-ND	1012.50	ECS-160-S-7S
18.432	Series	XC522CT-ND•	2.03	1.69	1.35	XC522TR-ND	1012.50	ECS-184-S-7S
19.6608	Series	XC523CT-ND•	2.03	1.69	1.35	XC523TR-ND	1012.50	ECS-196.6-S-7S
19.6608	20pF	XC490CT-ND	2.03	1.69	1.35	XC490TR-ND	1125.00	ECS-196.6-20-7S
20.000	Series	XC524CT-ND•	2.03	1.69	1.35	XC524TR-ND	1012.50	ECS-200-S-7S
20.000	16pF	XC489CT-ND	2.03	1.69	1.35	XC489TR-ND	1125.00	ECS-200-16-7S
20.000	20pF	XC525CT-ND•	2.03	1.69	1.35	XC525TR-ND	1012.50	ECS-200-20-7S
23.592	Series	XC559CT-ND	2.03	1.69	1.35	XC559TR-ND	1012.50	ECS-235.92-S-7S
24.000	Series	XC526CT-ND•	2.03	1.69	1.35	XC526TR-ND	1012.50	ECS-240-S-7S
24.000	20pF	XC527CT-ND•	2.03	1.69	1.35	XC527TR-ND	1012.50	ECS-240-20-7S
24.000	16pF	XC528CT-ND	2.03	1.69	1.35	XC528TR-ND	1012.50	ECS-240-16-7S

- **XC-KIT-ND** ***Digi-Key® SMT Low Profile Quartz Crystal Kit*** 3 each of values denoted (81 total pieces). Notebook style storage case and bin storage guide included...**$169.00**

CSM-4A

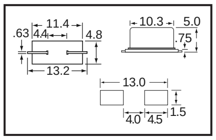
ELECTRICAL CHARACTERISTICS: • **Freq. Tolerance:** ±50ppm @ +25°C and over operating temperature range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.1mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Mode of Operation:** Fundamental. The CSM-4A is also pin-out compatible with the Epson MA-506.



Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing	ECS Part No.
			1	10	100		1,000	
3.579545	17pF	XC747CT-ND	1.35	1.24	1.02	XC747TR-ND	675.00	ECS-35-17-28A
3.6864	20pF	XC748CT-ND	1.35	1.24	1.02	XC748TR-ND	675.00	ECS-36-20-28A
4.000	20pF	XC749CT-ND	1.35	1.24	1.02	XC749TR-ND	675.00	ECS-40-20-28A
4.9152	20pF	XC751CT-ND	1.35	1.24	1.02	XC751TR-ND	675.00	ECS-49-20-28A
5.000	20pF	XC750CT-ND	1.35	1.24	1.02	XC750TR-ND	675.00	ECS-50-20-28A
6.000	32pF	XC752CT-ND	1.35	1.24	1.02	XC752TR-ND	675.00	ECS-60-32-28A
7.3728	20pF	XC753CT-ND	1.35	1.24	1.02	XC753TR-ND	675.00	ECS-73-20-28A
8.000	16pF	XC754CT-ND	1.35	1.24	1.02	XC754TR-ND	675.00	ECS-80-16-28A
9.8304	20pF	XC778CT-ND	1.35	1.24	1.02	XC778TR-ND	675.00	ECS-98.3-20-28A
10.000	Series	XC755CT-ND	1.35	1.24	1.02	XC755TR-ND	675.00	ECS-100-S-28A
10.000	20pF	XC756CT-ND	1.35	1.24	1.02	XC756TR-ND	675.00	ECS-100-20-28A
11.0592	Series	XC757CT-ND	1.35	1.24	1.02	XC757TR-ND	675.00	ECS-110.5-S-28A
11.0592	20pF	XC758CT-ND	1.35	1.24	1.02	XC758TR-ND	675.00	ECS-110.5-20-28A
12.000	Series	XC760CT-ND	1.35	1.24	1.02	XC760TR-ND	675.00	ECS-120-S-28A
12.000	18pF	XC759CT-ND	1.35	1.24	1.02	XC759TR-ND	675.00	ECS-120-18-28A
12.000	32pF	XC761CT-ND	1.35	1.24	1.02	XC761TR-ND	675.00	ECS-120-32-28A
12.288	20pF	XC762CT-ND	1.35	1.24	1.02	XC762TR-ND	675.00	ECS-122.8-20-28A
14.31818	Series	XC764CT-ND	1.35	1.24	1.02	XC764TR-ND	675.00	ECS-143-S-28A
14.31818	20pF	XC763CT-ND	1.35	1.24	1.02	XC763TR-ND	675.00	ECS-143-20-28A
14.7456	Series	XC765CT-ND	1.35	1.24	1.02	XC765TR-ND	675.00	ECS-147.4-S-28A
14.7456	20pF	XC766CT-ND	1.35	1.24	1.02	XC766TR-ND	675.00	ECS-147.4-20-28A
16.000	Series	XC768CT-ND	1.35	1.24	1.02	XC768TR-ND	675.00	ECS-160-S-28A
16.000	20pF	XC767CT-ND	1.35	1.24	1.02	XC767TR-ND	675.00	ECS-160-20-28A
18.432	Series	XC769CT-ND	1.35	1.24	1.02	XC769TR-ND	675.00	ECS-184-S-28A
18.432	20pF	XC770CT-ND	1.35	1.24	1.02	XC770TR-ND	675.00	ECS-184-20-28A
20.000	Series	XC771CT-ND	1.35	1.24	1.02	XC771TR-ND	675.00	ECS-200-S-28A
20.000	20pF	XC772CT-ND	1.35	1.24	1.02	XC772TR-ND	675.00	ECS-200-20-28A
24.000	Series	XC773CT-ND	1.35	1.24	1.02	XC773TR-ND	675.00	ECS-240-S-28A
24.000	20pF	XC774CT-ND	1.35	1.24	1.02	XC774TR-ND	675.00	ECS-240-20-28A
24.576	20pF	XC775CT-ND	1.35	1.24	1.02	XC775TR-ND	675.00	ECS-245.7-20-28A
25.000	20pF	XC776CT-ND	1.35	1.24	1.02	XC776TR-ND	675.00	ECS-250-20-28A-F

CSM-7 Case — HC-49USMD

ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50ppm @ +25°C and over operating temperature range • **Frequency Stability** (Extended Temp. Version)**:** ±100ppm, -40°C to +85°C • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temperature:** -10°C to +70°C (Extended Temperature Version: -40°C to +85°C) • **Storage Temperature:** -30°C to +85°C (Extended Temp. Version: -55°C to +125°C) • **Aging Characteristics (first year):** ±5.0ppm @ 25°C • **Mode of Operation:** Fundamental

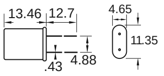


Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T&R Pricing	ECS Part No.
			1	10	100		1,000	
CSM-7 Case								
3.579545	17pF	XC560CT-ND	1.00	.84	.67	XC560TR-ND	499.50	ECS-35-17-5P
3.579545	Series	XC663CT-ND	1.00	.84	.67	XC663TR-ND	555.00	ECS-35-S-5P
3.6864	Series	XC561CT-ND	1.00	.84	.67	XC561TR-ND	499.50	ECS-36-S-5P
3.6864	20pF	XC562CT-ND	1.00	.84	.67	XC562TR-ND	499.50	ECS-36-20-5P
4.000	Series	XC563CT-ND	1.00	.84	.67	XC563TR-ND	499.50	ECS-40-S-5P
4.000	20pF	XC564CT-ND	1.00	.84	.67	XC564TR-ND	499.50	ECS-40-20-5P
4.032	20pF	XC664CT-ND	1.00	.84	.67	XC664TR-ND	555.00	ECS-40.3-20-5P
4.032	Series	XC665CT-ND	1.00	.84	.67	XC665TR-ND	555.00	ECS-40.3-S-5P
4.096	20pF	XC666CT-ND	1.00	.84	.67	XC666TR-ND	555.00	ECS-41-20-5P
4.194304	12pF	XC667CT-ND	1.00	.84	.67	XC667TR-ND	555.00	ECS-42-12-5P
4.194304	16pF	XC668CT-ND	1.00	.84	.67	XC668TR-ND	555.00	ECS-42-16-5P
4.433618	20pF	XC669CT-ND	1.00	.84	.67	XC669TR-ND	555.00	ECS-44-20-5P
4.9152	Series	XC565CT-ND	1.00	.84	.67	XC565TR-ND	499.50	ECS-49-S-5P
4.9152	20pF	XC566CT-ND	1.00	.84	.67	XC566TR-ND	499.50	ECS-49-20-5P
5.000	Series	XC670CT-ND	1.00	.84	.67	XC670TR-ND	555.00	ECS-50-S-5P
5.000	20pF	XC671CT-ND	1.00	.84	.67	XC671TR-ND	555.00	ECS-50-20-5P
5.0688	Series	XC672CT-ND	1.00	.84	.67	XC672TR-ND	555.00	ECS-51-S-5P
5.0688	20pF	XC673CT-ND	1.00	.84	.67	XC673TR-ND	555.00	ECS-51-20-5P
5.185	Series	XC674CT-ND	1.00	.84	.67	XC674TR-ND	555.00	ECS-52-S-5P
5.185	32pF	XC675CT-ND	1.00	.84	.67	XC675TR-ND	555.00	ECS-52-32-5P
5.9904	Series	XC676CT-ND	1.00	.84	.67	XC676TR-ND	555.00	ECS-59-S-5P
5.9904	20pF	XC677CT-ND	1.00	.84	.67	XC677TR-ND	555.00	ECS-59-20-5P
6.000	Series	XC678CT-ND	1.00	.84	.67	XC678TR-ND	555.00	ECS-60-S-5P
6.000	32pF	XC679CT-ND	1.00	.84	.67	XC679TR-ND	555.00	ECS-60-32-5P
6.144	32pF	XC567CT-ND	1.00	.84	.67	XC567TR-ND	499.50	ECS-61-32-5P
7.3728	Series	XC568CT-ND	1.00	.84	.67	XC568TR-ND	499.50	ECS-73-S-5P
7.3728	20pF	XC680CT-ND	1.00	.84	.67	XC680TR-ND	555.00	ECS-73-20-5P
8.000	Series	XC569CT-ND	1.00	.84	.67	XC569TR-ND	499.50	ECS-80-S-5P
8.000	18pF	XC681CT-ND	1.00	.84	.67	XC681TR-ND	555.00	ECS-80-18-5P
8.000	32pF	XC682CT-ND	1.00	.84	.67	XC682TR-ND	555.00	ECS-80-32-5P
9.216	Series	XC683CT-ND	1.00	.84	.67	XC683TR-ND	555.00	ECS-92.1-S-5P
9.216	20pF	XC684CT-ND	1.00	.84	.67	XC684TR-ND	555.00	ECS-92.1-20-5P
9.8304	Series	XC570CT-ND	1.00	.84	.67	XC570TR-ND	499.50	ECS-98.3-S-5P
9.8304	20pF	XC571CT-ND	1.00	.84	.67	XC571TR-ND	499.50	ECS-98.3-20-5P
10.000	Series	XC572CT-ND	1.00	.84	.67	XC572TR-ND	499.50	ECS-100-S-5P
10.000	18pF	XC716CT-ND	1.00	.84	.67	XC716TR-ND	499.50	ECS-100-18-5P
11.000	Series	XC685CT-ND	1.00	.84	.67	XC685TR-ND	555.00	ECS-110-S-5P
11.0592	Series	XC573CT-ND	1.00	.84	.67	XC573TR-ND	499.50	ECS-110.5-S-5P
11.0592	20pF	XC574CT-ND	1.00	.84	.67	XC574TR-ND	499.50	ECS-110.5-20-5P
11.0592	32pF	XC686CT-ND	1.00	.84	.67	XC686TR-ND	555.00	ECS-110.5-32-5P
12.000	Series	XC575CT-ND	1.00	.84	.67	XC575TR-ND	499.50	ECS-120-S-5P
12.000	18pF	XC717CT-ND	1.00	.84	.67	XC717TR-ND	499.50	ECS-120-18-5P
12.000	32pF	XC687CT-ND	1.00	.84	.67	XC687TR-ND	555.00	ECS-120-32-5P
12.000393	18pF	XC688CT-ND	1.00	.84	.67	XC688TR-ND	555.00	ECS-120.003-18-5P
12.288	Series	XC689CT-ND	1.00	.84	.67	XC689TR-ND	555.00	ECS-122.8-S-5P
12.288	20pF	XC690CT-ND	1.00	.84	.67	XC690TR-ND	555.00	ECS-122.8-20-5P
14.31818	Series	XC576CT-ND	1.00	.84	.67	XC576TR-ND	499.50	ECS-143-S-5P
14.31818	20pF	XC718CT-ND	1.00	.84	.67	XC718TR-ND	499.50	ECS-143-20-5P
14.7456	Series	XC691CT-ND	1.00	.84	.67	XC691TR-ND	555.00	ECS-147.4-S-5P
14.7456	20pF	XC692CT-ND	1.00	.84	.67	XC692TR-ND	555.00	ECS-147.4-20-5P
15.000	Series	XC693CT-ND	1.00	.84	.67	XC693TR-ND	555.00	ECS-150-S-5P
16.000	Series	XC577CT-ND	1.00	.84	.67	XC577TR-ND	499.50	ECS-160-S-5P
16.000	20pF	XC694CT-ND	1.00	.84	.67	XC694TR-ND	555.00	ECS-160-20-5P
16.000312	18pF	XC695CT-ND	1.00	.84	.67	XC695TR-ND	555.00	ECS-160.003-18-5P
16.257	20pF	XC696CT-ND	1.00	.84	.67	XC696TR-ND	555.00	ECS-162.5-20-5P
16.257	Series	XC697CT-ND	1.00	.84	.67	XC697TR-ND	555.00	ECS-162.5-S-5P
18.000	Series	XC698CT-ND	1.00	.84	.67	XC698TR-ND	555.00	ECS-180-S-5P
18.432	Series	XC578CT-ND	1.00	.84	.67	XC578TR-ND	499.50	ECS-184-S-5P
18.432	18pF	XC699CT-ND	1.00	.84	.67	XC699TR-ND	555.00	ECS-184-18-5P
18.432	20pF	XC700CT-ND	1.00	.84	.67	XC700TR-ND	555.00	ECS-184-20-5P
19.6608	Series	XC579CT-ND	1.00	.84	.67	XC579TR-ND	499.50	ECS-196.6-S-5P
19.6608	20pF	XC701CT-ND	1.00	.84	.67	XC701TR-ND	555.00	ECS-196.6-20-5P
20.000	Series	XC580CT-ND	1.00	.84	.67	XC580TR-ND	499.50	ECS-200-S-5P
20.000	16pF	XC719CT-ND	1.00	.84	.67	XC719TR-ND	499.50	ECS-200-16-5P
20.000	20pF	XC581CT-ND	1.00	.84	.67	XC581TR-ND	499.50	ECS-200-20-5P
20.480	20pF	XC743CT-ND	1.00	.84	.67	XC743TR-ND	499.50	ECS-204.8-20-5P
24.000	20pF	XC582CT-ND	1.00	.84	.67	XC582TR-ND	499.50	ECS-240-20-5P
24.000	16pF	XC583CT-ND	1.00	.84	.67	XC583TR-ND	499.50	ECS-240-16-5P
24.00014	18pF	XC702CT-ND	1.00	.84	.67	XC702TR-ND	555.00	ECS-240.001-18-5P
24.576	20pF	XC744CT-ND	1.00	.84	.67	XC744TR-ND	499.50	ECS-245.7-20-5P
25.000	18pF	XC745CT-ND	1.00	.84	.67	XC745TR-ND	499.50	ECS-250-18-5P-F
CSM-7 Case Industrial Temperature Range								
3.579545	17pF	XC730CT-ND	1.32	1.11	.89	XC730TR-ND	661.50	ECS-35-17-5PDN
3.6864	20pF	XC731CT-ND	1.32	1.11	.89	XC731TR-ND	661.50	ECS-36-20-5PDN
4.000	20pF	XC732CT-ND	1.32	1.11	.89	XC732TR-ND	661.50	ECS-40-20-5PDN
6.000	32pF	XC733CT-ND	1.32	1.11	.89	XC733TR-ND	661.50	ECS-60-32-5PDN
7.3728	20pF	XC734CT-ND	1.32	1.11	.89	XC734TR-ND	661.50	ECS-73-20-5PDN
8.000	18pF	XC735CT-ND	1.32	1.11	.89	XC735TR-ND	661.50	ECS-80-18-5PDN
12.000	20pF	XC736CT-ND	1.32	1.11	.89	XC736TR-ND	661.50	ECS-120-20-5PDN
14.31818	20pF	XC737CT-ND	1.32	1.11	.89	XC737TR-ND	661.50	ECS-143-20-5PDN
16.000	20pF	XC738CT-ND	1.32	1.11	.89	XC738TR-ND	661.50	ECS-160-20-5PDN
18.4320	20pF	XC739CT-ND	1.32	1.11	.89	XC739TR-ND	661.50	ECS-184-20-5PDN
19.6608	20pF	XC740CT-ND	1.32	1.11	.89	XC740TR-ND	661.50	ECS-196-20-5PDN
20.000	20pF	XC741CT-ND	1.32	1.11	.89	XC741TR-ND	661.50	ECS-200-20-5PDN
24.000	20pF	XC742CT-ND	1.32	1.11	.89	XC742TR-ND	661.50	ECS-240-20-5PDN

ECS INC. INTERNATIONAL Quartz Crystals

9256B-ND	ECS Crystal/Oscillator Databook	**$2.95**

Electrical Characteristics: • **Frequency Tolerance:** ±50ppm @ +25°C and over operating temperature range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 1.0mW • **Operating Temp.:** -10°C to +70°C • **Storage Temperature:** -40°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ +25°C



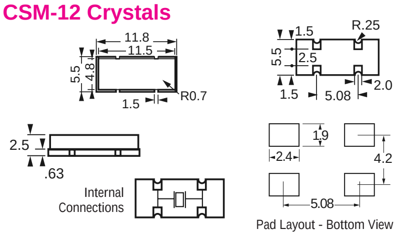
Series resonance appears resistive in the circuit and impedance at fs is at its minimum value. Unless load capacitance is specified, all crystals are manufactured at series resonance. When a crystal is operating at parallel resonance (fL) it will look inductive in a circuit. Crystal frequency varies depending on the value of load capacitance. The load capacitance is the dynamic capacitance of the total circuit as measured or computed across the crystal terminals. Always specify the load capacitance if the crystal will be operated in the parallel mode.

Frequency (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
		HC-49/UA					
1.000	13pF	X066B-ND*	17.88	14.85	8.09	7.54	ECS-10-13-1H
1.8432	13pF	X067-ND	2.83	2.35	1.88	1.45	ECS-18-13-1
1.8432	Series	X002-ND	3.02	2.52	2.00	1.55	ECS-18-S-1
2.000	20pF	X068-ND	2.57	2.14	1.70	1.32	ECS-20-20-1
2.000	Series	X004-ND	2.73	2.27	1.81	1.40	ECS-20-S-1
2.048	12pF	X098-ND	2.73	2.27	1.81	1.40	ECS-20.48-12-1
2.4576	32pF	X069-ND	2.57	2.14	1.70	1.32	ECS-24-32-1
2.500	Series	X070-ND	2.57	2.14	1.70	1.32	ECS-25-S-1
3.000	Series	X009-ND	3.02	2.52	2.00	1.55	ECS-30-S-1
3.2768	17pF	X022-ND	1.37	1.14	.91	.70	ECS-32-17-1
3.579545	17pF	X049-ND	.64	.58	.52	.46	ECS-35-17-1
3.579545	Series	X011-ND	.64	.58	.52	.46	ECS-35-S-1
3.6864	17-18pF	X071-ND	.64	.58	.52	.46	ECS-36-18-1
3.6864	Series	X080-ND	.64	.58	.52	.46	ECS-36-S-1
3.932160	17pF	X013-ND	.64	.58	.52	.46	ECS-39-17-1
4.000	20pF	X006-ND	.64	.58	.52	.46	ECS-40-20-1
4.000	Series	X081-ND	.64	.58	.52	.46	ECS-40-S-1
4.032	20pF	X072-ND	.64	.58	.52	.46	ECS-40.3-20-1
4.032	Series	X015-ND	.64	.58	.52	.46	ECS-40.3-S-1
4.096	20pF	X082-ND	.64	.58	.52	.46	ECS-41-20-1
4.194304	12pF	X007-ND	.64	.58	.52	.46	ECS-42-12-1
4.433618	20pF	X083-ND	.64	.58	.52	.46	ECS-44-20-1
4.9152	Series	X050-ND	.64	.58	.52	.46	ECS-49-S-1
4.9152	20pF	X084-ND	.64	.58	.52	.46	ECS-49-20-1
5.000	Series	X099-ND	.64	.58	.52	.46	ECS-50-S-1
5.000	20pF	X051-ND	.64	.58	.52	.46	ECS-50-20-1
5.0688	Series	X052-ND	.64	.58	.52	.46	ECS-51-S-1
5.0688	20pF	X085-ND	.64	.58	.52	.46	ECS-51-20-1
5.185	Series	X053-ND	.64	.58	.52	.46	ECS-52-S-1
5.185	32pF	X016-ND	.64	.58	.52	.46	ECS-52-32-1
5.9904	Series	X073-ND	.64	.58	.52	.46	ECS-59-S-1
5.9904	20pF	X017-ND	.64	.58	.52	.46	ECS-59.9-20-1
6.000	Series	X026-ND	.64	.58	.52	.46	ECS-60-S-1
6.000	32pF	X086-ND	.64	.58	.52	.46	ECS-60-32-1
6.144	32pF	X054-ND	.64	.58	.52	.46	ECS-61-32-1
6.5536	12pF	X018-ND	.64	.58	.52	.46	ECS-65-12-1
7.3728	Series	X074-ND	.64	.58	.52	.46	ECS-73-S-1
7.3728	20pF	X019-ND	.64	.58	.52	.46	ECS-73-20-1
7.680	20pF	X020-ND	.64	.58	.52	.46	ECS-76.8-20-1
8.000	Series	X056-ND	.64	.58	.52	.46	ECS-80-S-1
8.000	18pF	X100-ND	.64	.58	.52	.46	ECS-80-18-1
8.000	20pF	X021-ND	.64	.58	.52	.46	ECS-80-20-1
8.000	32pF	X137-ND	.64	.58	.52	.46	ECS-80-32-1
9.216	Series	X075-ND	.64	.58	.52	.46	ECS-92.1-S-1
9.216	20pF	X138-ND	.64	.58	.52	.46	ECS-92.1-20-1
9.8304	20pF	X087-ND	.64	.58	.52	.46	ECS-98.3-20-1
9.8304	Series	X023-ND	.64	.58	.52	.46	ECS-98.3-S-1
10.000	Series	X057-ND	.64	.58	.52	.46	ECS-100-S-1
10.738635	Series	X024-ND	.64	.58	.52	.46	ECS-107.3-S-1
11.000	Series	X088-ND	.64	.58	.52	.46	ECS-110-S-1
11.046	Series	X025-ND	.64	.58	.52	.46	ECS-110.4-S-1
11.0592	Series	X078-ND	.64	.58	.52	.46	ECS-110.5-S-1
11.0592	20pF	X089-ND	.64	.58	.52	.46	ECS-110.5-20-1
11.0592	32pF	X139-ND	.64	.58	.52	.46	ECS-110.5-32-1
11.228	Series	X028-ND	.64	.58	.52	.46	ECS-112.2-S-1
11.52	Series	X140-ND	.64	.58	.52	.46	ECS-115.2-S-1
11.98135	Series	X029-ND	.64	.58	.52	.46	ECS-119.8-S-1
12.000	Series	X058-ND	.64	.58	.52	.46	ECS-120-S-1
12.000	32pF	X030-ND	.64	.58	.52	.46	ECS-120-32-1
12.000393	18pF	X147-ND	.64	.58	.52	.46	ECS-120.003-18-1
12.096	Series	X031-ND	.64	.58	.52	.46	ECS-121-S-1
12.288	Series	X090-ND	.64	.58	.52	.46	ECS-122.8-S-1
12.288	20pF	X141-ND	.64	.58	.52	.46	ECS-122.8-20-1
13.5168	Series	X032-ND	.64	.58	.52	.46	ECS-135-S-1
14.31818	Series	X091-ND	.64	.58	.52	.46	ECS-143-S-1
14.690	Series	X033-ND	.64	.58	.52	.46	ECS-146-S-1
14.7456	Series	X092-ND	.64	.58	.52	.46	ECS-147.4-S-1
14.7456	20pF	X142-ND	.64	.58	.52	.46	ECS-147.4-20-1
15.000	Series	X059-ND	.64	.58	.52	.46	ECS-150-S-1
16.000	Series	X077-ND	.64	.58	.52	.46	ECS-160-S-1
16.000	20pF	X143-ND	.64	.58	.52	.46	ECS-160-20-1
16.000312	18pF	X148-ND	.64	.58	.52	.46	ECS-160.003-18-1
18.000	Series	X060-ND	.64	.58	.52	.46	ECS-180-S-1
18.000	20pF	X144-ND	.64	.58	.52	.46	ECS-180-20-1
18.432	Series	X061-ND	.64	.58	.52	.46	ECS-184-S-1
18.432	18pF	X145-ND	.64	.58	.52	.46	ECS-184-18-1
18.432	20pF	X146-ND	.64	.58	.52	.46	ECS-184-20-1
19.6608	Series	X094-ND	.64	.58	.52	.46	ECS-196.6-S-1
19.6608	20pF	X035-ND	.64	.58	.52	.46	ECS-196.6-20-1
20.000	Series	X062-ND	.64	.58	.52	.46	ECS-200-S-1
20.000	20pF	X036-ND	.64	.58	.52	.46	ECS-200-20-1
22.1184	Series	X063-ND	.64	.58	.52	.46	ECS-221-S-1
24.000	20pF	X037-ND	.64	.58	.52	.46	ECS-240-20-1
24.000	Series	X095-ND	.64	.58	.52	.46	ECS-240-S-1F
24.00014	18pF	X149-ND	.64	.58	.52	.46	ECS-240.001-18-1
35.2512	18pF	X151-ND	.80	.72	.58	.52	ECS-352.5-18-1
38.000530	18pF	X150-ND	.80	.72	.58	.52	ECS-380.005-18-1
40.32	18pF	X152-ND	.80	.72	.58	.52	ECS-403.2-18-1
48.000	Series	X065-ND	.64	.58	.52	.46	ECS-480-S-1
49.860	20pF	X038-ND	.64	.58	.52	.46	ECS-498.6-20-1
Base Insulator		HC49INS-ND	—	.09	.08	.06	700-9001

***** 1.0 Frequency (#*X066B-ND*): 100ppm @ +25°C; ±100ppm from 0°C to +60°C.

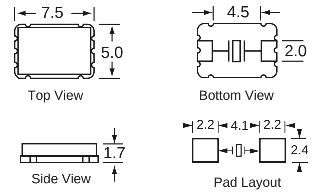
ECS INC. INTERNATIONAL SMT Quartz Crystals

CSM-12 Crystals



ELECTRICAL CHARACTERISTICS:
• **Frequency Tolerance:** ±50 ppm @ 25°C and over operating temperature range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ 25°C • **Mode of Operation:** Fundamental

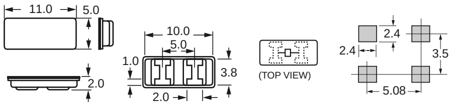
CSM-8 Crystals



ELECTRICAL CHARACTERISTICS:
• **Frequency Tolerance:** ±50ppm @ 25°C and over operating temp. range • **Shunt Capacitance:** 5.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ 25°C

ECX-19A Crystals

ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50 ppm @ 25°C and over operating temp. range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -30°C to +85°C • **Aging Characteristics (first year):** ±5.0ppm @ 25°C

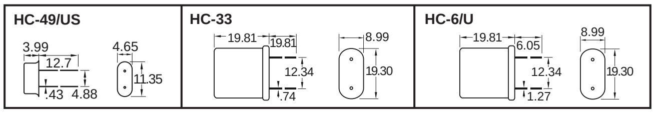


Frequency (MHz)	Load Cap.	Max. ESR (Ω)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 1,000	ECS Part No.
				CSM-12 Series Crystals						
3.579545	17pf	—	XC584CT-ND	1.95	1.76	1.47	1.17	XC584TR-ND	975.00	ECS-35-17-18-TR
3.6864	Series	200	XC585CT-ND	1.95	1.76	1.47	1.17	XC585TR-ND	975.00	ECS-36-S-18-TR
3.6864	20pf	—	XC586CT-ND	1.95	1.76	1.47	1.17	XC586TR-ND	975.00	ECS-36-20-18-TR
4.000	20pf	—	XC587CT-ND	1.95	1.76	1.47	1.17	XC587TR-ND	975.00	ECS-40-20-18-TR
4.000	Series	200	XC588CT-ND	1.95	1.76	1.47	1.17	XC588TR-ND	975.00	ECS-40-S-18-TR
4.9152	20pf	—	XC589CT-ND	1.95	1.76	1.47	1.17	XC589TR-ND	975.00	ECS-49-20-18-TR
4.9152	Series	150	XC590CT-ND	1.95	1.76	1.47	1.17	XC590TR-ND	975.00	ECS-49-S-18-TR
6.144	32pf	—	XC591CT-ND	1.95	1.76	1.47	1.17	XC591TR-ND	975.00	ECS-61-32-18-TR
7.3728	Series	100	XC592CT-ND	1.95	1.76	1.47	1.17	XC592TR-ND	975.00	ECS-73-S-18-TR
8.000	Series	100	XC593CT-ND	1.95	1.76	1.47	1.17	XC593TR-ND	975.00	ECS-80-S-18-TR
9.8304	Series	100	XC594CT-ND	1.95	1.76	1.47	1.17	XC594TR-ND	975.00	ECS-98.3-S-18-TR
9.8304	20pf	—	XC595CT-ND	1.95	1.76	1.47	1.17	XC595TR-ND	975.00	ECS-98.3-20-18-TR
10.000	Series	80	XC596CT-ND	1.95	1.76	1.47	1.17	XC596TR-ND	975.00	ECS-100-S-18-TR
11.0592	Series	80	XC597CT-ND	1.95	1.76	1.47	1.17	XC597TR-ND	975.00	ECS-110.5-S-18-TR
11.0592	20pf	—	XC598CT-ND	1.95	1.76	1.47	1.17	XC598TR-ND	975.00	ECS-110.5-20-18-TR
12.000	Series	80	XC599CT-ND	1.95	1.76	1.47	1.17	XC599TR-ND	975.00	ECS-120-S-18-TR
14.31818	Series	50	XC600CT-ND	1.95	1.76	1.47	1.17	XC600TR-ND	975.00	ECS-143-S-18-TR
16.000	Series	50	XC601CT-ND	1.95	1.76	1.47	1.17	XC601TR-ND	975.00	ECS-160-S-18-TR
18.432	Series	50	XC602CT-ND	1.95	1.76	1.47	1.17	XC602TR-ND	975.00	ECS-184-S-18-TR
19.6608	Series	50	XC603CT-ND	1.95	1.76	1.47	1.17	XC603TR-ND	975.00	ECS-196.6-S-18-TR
20.000	Series	50	XC604CT-ND	1.95	1.76	1.47	1.17	XC604TR-ND	975.00	ECS-200-S-18-TR
20.000	20pf	—	XC605CT-ND	1.95	1.76	1.47	1.17	XC605TR-ND	975.00	ECS-200-20-18-TR
24.000	20pf	—	XC606CT-ND	1.95	1.76	1.47	1.17	XC606TR-ND	975.00	ECS-240-20-18-TR
24.000	16pf	—	XC607CT-ND	1.95	1.76	1.47	1.17	XC607TR-ND	975.00	ECS-240-16-18-TR
				CSM-8 Series Crystals						
9.8304	Series	60	XC608CT-ND	3.30	2.97	2.48	1.98	XC608TR-ND	1650.00	ECS-98.3-S-20A-TR
9.8304	20pf	—	XC609CT-ND	3.30	2.97	2.48	1.98	XC609TR-ND	1650.00	ECS-98.3-20-20A-TR
10.000	Series	60	XC610CT-ND	3.30	2.97	2.48	1.98	XC610TR-ND	1650.00	ECS-100-S-20A-TR
11.0592	Series	60	XC611CT-ND	3.30	2.97	2.48	1.98	XC611TR-ND	1650.00	ECS-110.5-S-20A-TR
11.0592	20pf	—	XC612CT-ND	3.30	2.97	2.48	1.98	XC612TR-ND	1650.00	ECS-110.5-20-20A-TR
12.000	Series	60	XC613CT-ND	3.30	2.97	2.48	1.98	XC613TR-ND	1650.00	ECS-120-S-20A-TR
14.31818	Series	60	XC614CT-ND	3.30	2.97	2.48	1.98	XC614TR-ND	1650.00	ECS-143-S-20A-TR
14.7456	Series	60	XC615CT-ND	3.30	2.97	2.48	1.98	XC615TR-ND	1650.00	ECS-147.4-S-20A-TR
16.000	Series	40	XC616CT-ND	3.30	2.97	2.48	1.98	XC616TR-ND	1650.00	ECS-160-S-20A-TR
18.432	Series	40	XC617CT-ND	3.30	2.97	2.48	1.98	XC617TR-ND	1650.00	ECS-184-S-20A-TR
19.6608	Series	40	XC618CT-ND	3.30	2.97	2.48	1.98	XC618TR-ND	1650.00	ECS-196.6-S-20A-TR
20.000	Series	40	XC619CT-ND	3.30	2.97	2.48	1.98	XC619TR-ND	1650.00	ECS-200-S-20A-TR
20.000	20pf	—	XC620CT-ND	3.30	2.97	2.48	1.98	XC620TR-ND	1650.00	ECS-200-20-20A-TR
24.000	Series	40	XC621CT-ND	3.30	2.97	2.48	1.98	XC621TR-ND	1650.00	ECS-240-S-20A-TR
24.000	20pf	—	XC622CT-ND	3.30	2.97	2.48	1.98	XC622TR-ND	1650.00	ECS-240-20-20A-TR
24.00014	Series	40	XC623CT-ND	3.30	2.97	2.48	1.98	XC623TR-ND	1650.00	ECS-240.0014-S-20A-TR
30.000	Series	40	XC624CT-ND*	3.30	2.97	2.48	1.98	XC624TR-ND*	1650.00	ECS-300-S-20A-TR
32.000	Series	40	XC625CT-ND*	3.30	2.97	2.48	1.98	XC625TR-ND*	1650.00	ECS-320-S-20A-TR
33.000	Series	40	XC626CT-ND*	3.30	2.97	2.48	1.98	XC626TR-ND*	1650.00	ECS-330-S-20A-TR
36.000	Series	40	XC627CT-ND*	3.30	2.97	2.48	1.98	XC627TR-ND*	1650.00	ECS-360-S-20A-TR
40.000	Series	40	XC628CT-ND*	3.30	2.97	2.48	1.98	XC628TR-ND*	1650.00	ECS-400-S-20A-TR
40.320	Series	40	XC629CT-ND*	3.30	2.97	2.48	1.98	XC629TR-ND*	1650.00	ECS-403.2-S-20A-TR
30.000	Series	40	XC630CT-ND	3.30	2.97	2.48	1.98	XC630TR-ND	1650.00	ECS-300-S-20A-F-TR
32.000	Series	40	XC631CT-ND	3.30	2.97	2.48	1.98	XC631TR-ND	1650.00	ECS-320-S-20A-F-TR
35.2512	Series	40	XC632CT-ND	3.30	2.97	2.48	1.98	XC632TR-ND	1650.00	ECS-352.512-S-20A-F-TR
36.000	Series	40	XC633CT-ND	3.30	2.97	2.48	1.98	XC633TR-ND	1650.00	ECS-360-S-20A-F-TR
40.000	Series	40	XC634CT-ND	3.30	2.97	2.48	1.98	XC634TR-ND	1650.00	ECS-400-S-20A-F-TR
				ECX-19A Series Crystals						
3.579545	17pF	—	XC850CT-ND	3.30	2.97	2.48	1.98	XC850TR-ND	1650.00	ECS-35-17-19A
3.6864	20pF	—	XC851CT-ND	3.30	2.97	2.48	1.98	XC851TR-ND	1650.00	ECS-36-20-19A
4.000	20pF	—	XC852CT-ND	3.30	2.97	2.48	1.98	XC852TR-ND	1650.00	ECS-40-20-19A
4.9152	20pF	—	XC853CT-ND	3.30	2.97	2.48	1.98	XC853TR-ND	1650.00	ECS-49-20-19A
6.144	32pF	—	XC854CT-ND	3.30	2.97	2.48	1.98	XC854TR-ND	1650.00	ECS-61-32-19A
7.3728	20pF	—	XC855CT-ND	3.30	2.97	2.48	1.98	XC855TR-ND	1650.00	ECS-73-20-19A
8.000	20pF	—	XC856CT-ND	3.30	2.97	2.48	1.98	XC856TR-ND	1650.00	ECS-80-20-19A
9.8304	20pF	—	XC857CT-ND	3.30	2.97	2.48	1.98	XC857TR-ND	1650.00	ECS-98.3-20-19A
10.000	Series	—	XC858CT-ND	3.30	2.97	2.48	1.98	XC858TR-ND	1650.00	ECS-100-S-19A
11.0592	20pF	—	XC859CT-ND	3.30	2.97	2.48	1.98	XC859TR-ND	1650.00	ECS-110.5-20-19A
12.000	Series	—	XC860CT-ND	3.30	2.97	2.48	1.98	XC860TR-ND	1650.00	ECS-120-S-19A
12.000	20pF	—	XC861CT-ND	3.30	2.97	2.48	1.98	XC861TR-ND	1650.00	ECS-120-20-19A
14.31818	Series	—	XC862CT-ND	3.30	2.97	2.48	1.98	XC862TR-ND	1650.00	ECS-143-S-19A
14.31818	20pF	—	XC863CT-ND	3.30	2.97	2.48	1.98	XC863TR-ND	1650.00	ECS-143-20-19A
16.000	Series	—	XC864CT-ND	3.30	2.97	2.48	1.98	XC864TR-ND	1650.00	ECS-160-S-19A
18.432	Series	—	XC865CT-ND	3.30	2.97	2.48	1.98	XC865TR-ND	1650.00	ECS-184-S-19A
19.6608	Series	—	XC866CT-ND	3.30	2.97	2.48	1.98	XC866TR-ND	1650.00	ECS-196.6-S-19A
20.000	Series	—	XC867CT-ND	3.30	2.97	2.48	1.98	XC867TR-ND	1650.00	ECS-200-S-19A
20.000	20pF	—	XC868CT-ND	3.30	2.97	2.48	1.98	XC868TR-ND	1650.00	ECS-200-20-19A
24.000	20pF	—	XC869CT-ND	3.30	2.97	2.48	1.98	XC869TR-ND	1650.00	ECS-240-20-19A
24.000	Series	—	XC870CT-ND	3.30	2.97	2.48	1.98	XC870TR-ND	1650.00	ECS-240-S-19A

* 3rd Overtone

ECS INC. INTERNATIONAL Quartz Crystals

ELECTRICAL CHARACTERISTICS: • **Frequency Tolerance:** ±50ppm @ +25°C and over operating temp. range • **Frequency Stability (Extended Temp. Version):** ±100ppm from -40°C to +85°C • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.5mW • **Operating Temp.:** -10°C to +70°C (Extended Temperature Version: -40°C to +85°C) • **Storage Temp.:** -40°C to +85°C (Extended Temp. Version: -55°C to +125°C) • **Aging Characteristics (first year):** ±5.0ppm @ +25°C • **Mode of Operation:** Fundamental



Frequency (MHz)	Load Cap.	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
HC-49/US							
3.579545	17pF	X079-ND	.80	.72	.58	.52	ECS-35-17-4
3.579545	Series	X153-ND	.80	.72	.58	.52	ECS-35-S-4
3.6864	18pF	X402-ND	.80	.72	.58	.52	ECS-36-18-4
3.6864	Series	X403-ND	.80	.72	.58	.52	ECS-36-S-4
4.000	Series	X404-ND	.80	.72	.58	.52	ECS-40-S-4
4.000	20pF	X405-ND	.80	.72	.58	.52	ECS-40-20-4
4.032	20pF	X154-ND	.80	.72	.58	.52	ECS-40.3-20-4
4.032	Series	X155-ND	.80	.72	.58	.52	ECS-40.3-S-4
4.096	20pF	X156-ND	.80	.72	.58	.52	ECS-41-20-4
4.194304	12pF	X406-ND	.80	.72	.58	.52	ECS-42-12-4
4.194304	16pF	X157-ND	.80	.72	.58	.52	ECS-42-16-4
4.433618	20pF	X407-ND	.80	.72	.58	.52	ECS-44-20-4
4.9152	Series	X408-ND	.80	.72	.58	.52	ECS-49-S-4
4.9152	20pF	X409-ND	.80	.72	.58	.52	ECS-49-20-4
5.000	20pF	X410-ND	.80	.72	.58	.52	ECS-50-20-4
5.000	Series	X158-ND	.80	.72	.58	.52	ECS-50-S-4
5.0688	20pF	X411-ND	.80	.72	.58	.52	ECS-51-20-4
5.0688	Series	X159-ND	.80	.72	.58	.52	ECS-51-S-4
5.185	32pF	X064-ND	1.04	.87	.69	.54	ECS-52-32-4
5.185	Series	X160-ND	.80	.72	.58	.52	ECS-52-S-4
5.9904	Series	X161-ND	.80	.72	.58	.52	ECS-59-S-4
5.9904	20pF	X162-ND	.80	.72	.58	.52	ECS-59.9-20-4
6.000	Series	X412-ND	.80	.72	.58	.52	ECS-60-S-4
6.000	32pF	X413-ND	.80	.72	.58	.52	ECS-60-32-4
6.144	32pF	X414-ND	.80	.72	.58	.52	ECS-61-32-4
6.500	20pF	X415-ND	.80	.72	.58	.52	ECS-65-20-4
7.3728	20pF	X076-ND	1.04	.87	.69	.54	ECS-73-20-4
7.3728	Series	X416-ND	.80	.72	.58	.52	ECS-73-S-4
7.68	20pF	X163-ND	.80	.72	.58	.52	ECS-76.8-20-4
8.000	18pF	X164-ND	.80	.72	.58	.52	ECS-80-18-4
8.000	20pF	X165-ND	.80	.72	.58	.52	ECS-80-20-4
8.000	32pF	X166-ND	.80	.72	.58	.52	ECS-80-32-4
8.000	Series	X417-ND	.80	.72	.58	.52	ECS-80-S-4
8.500	Series	X418-ND	.80	.72	.58	.52	ECS-85-S-4
9.000	Series	X419-ND	.80	.72	.58	.52	ECS-90-S-4
9.216	Series	X167-ND	.80	.72	.58	.52	ECS-92.1-S-4
9.216	20pF	X168-ND	.80	.72	.58	.52	ECS-92.1-20-4
9.545	Series	X420-ND	.80	.72	.58	.52	ECS-95.4-S-4
9.8304	20pF	X169-ND	.80	.72	.58	.52	ECS-98.3-20-4
9.8304	Series	X421-ND	.80	.72	.58	.52	ECS-98.3-S-4
10.000	Series	X422-ND	.80	.72	.58	.52	ECS-100-S-4
10.000	18pF	X443-ND	.80	.72	.58	.52	ECS-100-18-4
10.738635	Series	X423-ND	.80	.72	.58	.52	ECS-107.3-S-4
11.000	Series	X424-ND	.80	.72	.58	.52	ECS-110-S-4
11.0592	Series	X425-ND	.80	.72	.58	.52	ECS-110.5-S-4
11.0592	20pF	X426-ND	.80	.72	.58	.52	ECS-110.5-20-4
11.0592	32pF	X170-ND	.80	.72	.58	.52	ECS-110.5-32-4
11.520	Series	X171-ND	.80	.72	.58	.52	ECS-115.2-S-4
11.98135	Series	X427-ND	.80	.72	.58	.52	ECS-119.8-S-4
12.000	20pF	X227-ND	.80	.72	.58	.52	ECS-120-20-4
12.000	32pF	X172-ND	.80	.72	.58	.52	ECS-120-32-4
12.000	Series	X428-ND	.80	.72	.58	.52	ECS-120-S-4
12.000393	18pF	X173-ND	.80	.72	.58	.52	ECS-120.003-18-4
12.096	Series	X429-ND	.80	.72	.58	.52	ECS-121-S-4
12.288	20pF	X228-ND	.80	.72	.58	.52	ECS-122.8-20-4
12.288	Series	X174-ND	.80	.72	.58	.52	ECS-122.8-S-4
12.960	18pF	X097-ND	1.04	.87	.69	.54	ECS-129.6-18-4
14.31818	Series	X430-ND	.80	.72	.58	.52	ECS-143-S-4
14.31818	20pF	X444-ND	.80	.72	.58	.52	ECS-143-20-4
14.7456	Series	X431-ND	.80	.72	.58	.52	ECS-147.4-S-4
14.7456	20pF	X175-ND	.80	.72	.58	.52	ECS-147.4-20-4
15.000	Series	X432-ND	.80	.72	.58	.52	ECS-150-S-4
15.360	20pF	X096-ND	1.04	.87	.69	.54	ECS-153-20-4
16.000	Series	X433-ND	.80	.72	.58	.52	ECS-160-S-4
16.000	20pF	X176-ND	.80	.72	.58	.52	ECS-160-20-4
16.000312	18pF	X177-ND	.80	.72	.58	.52	ECS-160.003-18-4
16.257	20pF	X039-ND	1.04	.87	.69	.54	ECS-162.5-20-4
16.257	Series	X434-ND	.80	.72	.58	.52	ECS-162.5-S-4
18.000	Series	X435-ND	.80	.72	.58	.52	ECS-180-S-4
18.000	20pF	X178-ND	.80	.72	.58	.52	ECS-180-20-4
18.432	Series	X436-ND	.80	.72	.58	.52	ECS-184-S-4
18.432	18pF	X179-ND	.80	.72	.58	.52	ECS-184-18-4
18.432	20pF	X180-ND	.80	.72	.58	.52	ECS-184-20-4
19.6608	Series	X437-ND	.80	.72	.58	.52	ECS-196.6-S-4
19.6608	20pF	X181-ND	.80	.72	.58	.52	ECS-196.6-20-4
20.000	Series	X438-ND	.80	.72	.58	.52	ECS-200-S-4
20.000	20pF	X439-ND	.80	.72	.58	.52	ECS-200-20-4
21.47727	Series	X044-ND	1.04	.87	.69	.54	ECS-214.7-S-4
22.1184	Series	X182-ND	.80	.72	.58	.52	ECS-221-S-4
24.000	Series	X440-ND	.80	.72	.58	.52	ECS-240-S-4
24.000	16pF	X441-ND	.80	.72	.58	.52	ECS-240-16-4
24.000	20pF	X442-ND	.80	.72	.58	.52	ECS-240-20-4
24.00014	18pF	X183-ND	.80	.72	.58	.52	ECS-240.001-18-4
20.480	20pF	X229-ND	.80	.72	.58	.52	ECS-204.8-20-4
24.576	20pF	X230-ND	.80	.72	.58	.52	ECS-245.7-20-4
25.000	18pF	X231-ND	.80	.72	.58	.52	ECS-250-18-4F
HC-49/US Industrial Temperature Range							
3.579545	17pF	X184-ND	.98	.88	.71	.63	ECS-35-17-4DN
3.6864	20pF	X185-ND	.98	.88	.71	.63	ECS-36-20-4DN
4.000	20pF	X186-ND	.98	.88	.71	.63	ECS-40-20-4DN
6.000	32pF	X187-ND	.98	.88	.71	.63	ECS-60-32-4DN
7.3728	20pF	X188-ND	.98	.88	.71	.63	ECS-73-20-4DN
8.000	18pF	X189-ND	.98	.88	.71	.63	ECS-80-18-4DN
12.000	20pF	X190-ND	.98	.88	.71	.63	ECS-120-20-4DN
14.31818	20pF	X191-ND	.98	.88	.71	.63	ECS-143-20-4DN
16.000	20pF	X192-ND	.98	.88	.71	.63	ECS-160-20-4DN
18.4320	20pF	X193-ND	.98	.88	.71	.63	ECS-184-20-4DN
19.6608	20pF	X194-ND	.98	.88	.71	.63	ECS-196-20-4DN
20.000	20pF	X195-ND	.98	.88	.71	.63	ECS-200-20-4DN
24.000	20pF	X196-ND	.98	.88	.71	.63	ECS-240-20-4DN
HC-33							
2.4576	Series	X043-ND	6.34	5.27	4.20	3.24	ECS-24-S-2
2.94912	32pF	X014-ND	1.37	1.14	.91	.70	ECS-29.4-32-2P
HC-6/U							
2.560	32pF	X003-ND	1.24	1.03	.82	.64	ECS-25.6-32-2P
3.640	32pF	X008-ND	1.24	1.03	.82	.64	ECS-36.4-32-2P
3.700	32pF	X012-ND	1.24	1.03	.82	.64	ECS-37-32-2P
Base Insulator		HC49INS-ND	—	.09	.08	.06	700-9001

ECS INC. INTERNATIONAL Quartz Crystals – 32.768KHz and 1.000MHz

Parabolic Temperature Curve

To determine frequency stability, use parabolic curvature. For example: What is the stability at 45°C?

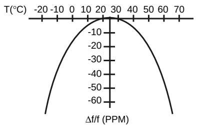
(1) Change in T (°C) = 45 - 25 = 20°C

(2) Change in frequency

= 0.04 PPM x $(\Delta T)^2$

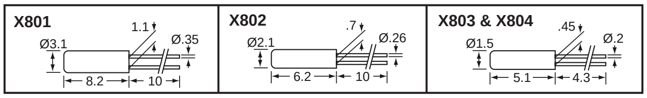
= 0.04 PPM x $(20)^2$

= -16.0 PPM



Cylinder Type

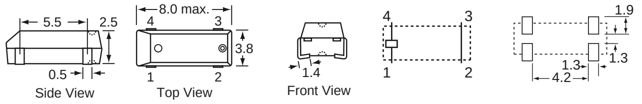
	X801-ND	X802-ND	X803-ND	X804-ND
Frequency	32.768KHz	32.768KHz	32.768KHz	1.00MHz
Frequency Tolerance @ 25°C	±20ppm	±20ppm	±20ppm	±3000ppm
Load Capacitance	12.5pf	12.5pf	8.0pf	8.0pf
Equivalent Series Resistance	35K Ohm	35K Ohm	40K Ohm	3K Ohm
Shunt Capacitance	1.6pF Typ.	1.35pF Typ.	1.00pF Typ.	0.4pF Typ.
Operating Temperature Range	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
Storage Temperature Range	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-30°C to +70°C



Drive Level	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
1µW	X801-ND	.30	.27	.22	.20	ECS-3X8
1µW	X802-ND	.30	.27	.22	.20	ECS-.327-12.5-13
1µW	X803-ND	2.63	2.37	1.89	1.68	ECS-.327-8-14
1.0µW	X804-ND	7.18	6.46	5.17	4.60	ECS-10-8-14

ECX-306 Series — SMT

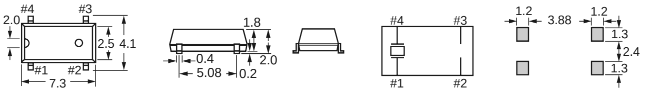
Specifications: • **Frequency:** 32.768KHz • **Frequency Tolerance @ 25°C:** ±20ppm • **Equivalent Series Resistance:** 50KΩ max. • **Shunt Capacitance:** 1.3pF typ. • **Drive Level:** 1µW max. • **Calibration Tolerance:** ±20 ppm @ 25°C • **Temperature Coefficient:** -0.040 ppm/°C² max. • **Operating Temperature Range:** -40°C to +85°C Max. • **Storage Temperature Range:** -55°C to +125°C • **Q Factor:** 50,000 min. • **Turnover Temperature:** +25°C (±5°C) • **Insulation Resistance:** 500MΩ min./DC 100V • **Motional Capacitance:** 0.003pF typ. • **Aging (first year):** ±3 ppm max. @ +25°C



Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No	Tape & Reel Size	Pricing
6pF	XC746CT-ND	1.08	.90	.72	XC746TR-ND	3,000	560.00/M
12.5pF	XC488CT-ND	1.08	.90	.72	XC488TR-ND	3,000	560.00/M

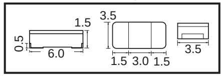
ECX-3TA Series — SMT

Specifications • **Frequency:** 32.768KHz • **Freq. Tolerance @ 25°C:** ±20ppm • **Equivalent Series Resistance:** 50KΩ max. • **Shunt Capacitance:** 2.0pF typ. • **Operating Temperature Range:** -40°C to +85°C • **Storage Temp. Range:** -55°C to +125°C



Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No	Tape & Reel Pricing 3,000
12.5pF	X488CT-ND	1.62	1.35	1.08	X488TR-ND	840.00/M

ECS INC. INTERNATIONAL SMT Ultra-Low Profile Quartz Crystals



ELECTRICAL CHARACTERISTICS: • **Mode:** Fundamental • **Drive Level:** 10 µW • **Frequency Tolerance:** ±50 ppm@25°C and over operating temp. range • **Frequency Stability:** ±50 ppm • **Operating Temp. Range:** -10°C to +70°C

Frequency (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	ECS Part No.
15.000	Series	XC801CT-ND	3.91	3.56	3.16	ECS-150-S-15
18.000	Series	XC804CT-ND	3.91	3.56	3.16	ECS-180-S-15
24.000	Series	XC808CT-ND	3.91	3.56	3.16	ECS-240-S-1

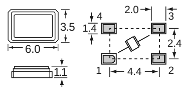
ECS INC. INTERNATIONAL SMT Low Profile Quartz Crystals

ECX-64 1.1mm

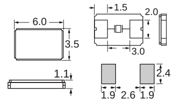
ELECTRICAL CHARACTERISTICS:

• **Freq. Tolerance:** ±50ppm @ +25°C and over operating temp. range • **Shunt Capacitance:** 7.0pF • **Drive Level:** 0.1mW • **Operating Temp.:** -10°C to +70°C • **Storage Temp.:** -40°C to +85°C • **Aging Characteristics (first year):** ±2.0 ppm @ 25°C • **Max. ESR:** 40Ω • **Mode of Operation:** Fundamental

ECX-64B (23B)



ECX-64A (23A)

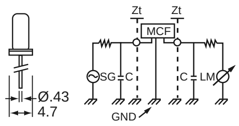


Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 1,000	ECS Part No.
ECX-64B								
14.31818	20pF	XC809CT-ND	3.75	3.38	2.82	XC809TR-ND	1875.00	ECS-143-20-23B-TR
14.31818	Series	XC810CT-ND	3.75	3.38	2.82	XC810TR-ND	1875.00	ECS-143-S-23B-TR
14.7456	20pF	XC811CT-ND	3.75	3.38	2.82	XC811TR-ND	1875.00	ECS-147-20-23B-TR
16.000	20pF	XC812CT-ND	3.75	3.38	2.82	XC812TR-ND	1875.00	ECS-160-20-23B-TR
16.000	Series	XC813CT-ND	3.75	3.38	2.82	XC813TR-ND	1875.00	ECS-160-S-23B-TR

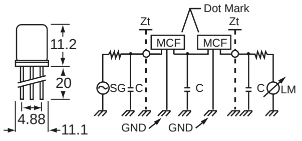
Freq. (MHz)	Load Cap.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T&R Digi-Key Part No.	Pricing 1,000	ECS Part No.
18.432	20pF	XC814CT-ND	3.75	3.38	2.82	XC814TR-ND	1875.00	ECS-184-20-23B-TR
18.432	Series	XC815CT-ND	3.75	3.38	2.82	XC815TR-ND	1875.00	ECS-184-S-23B-TR
19.6608	20pF	XC816CT-ND	3.75	3.38	2.82	XC816TR-ND	1875.00	ECS-196-20-23B-TR
19.6608	Series	XC817CT-ND	3.75	3.38	2.82	XC817TR-ND	1875.00	ECS-196-S-23B-TR
20.000	20pF	XC818CT-ND	3.75	3.38	2.82	XC818TR-ND	1875.00	ECS-200-20-23B-TR
20.000	Series	XC819CT-ND	3.75	3.38	2.82	XC819TR-ND	1875.00	ECS-200-S-23B-TR
24.000	Series	XC820CT-ND	3.75	3.38	2.82	XC820TR-ND	1875.00	ECS-240-S-23B-TR
ECX-64A								
14.31818	20pF	XC821CT-ND	3.30	2.97	2.48	XC821TR-ND	1650.00	ECS-143-20-23A-TR
14.31818	Series	XC822CT-ND	3.30	2.97	2.48	XC822TR-ND	1650.00	ECS-143-S-23A-TR
14.7456	20pF	XC823CT-ND	3.30	2.97	2.48	XC823TR-ND	1650.00	ECS-147-20-23A-TR
16.000	20pF	XC824CT-ND	3.30	2.97	2.48	XC824TR-ND	1650.00	ECS-160-20-23A-TR
16.000	Series	XC825CT-ND	3.30	2.97	2.48	XC825TR-ND	1650.00	ECS-160-S-23A-TR
18.432	20pF	XC826CT-ND	3.30	2.97	2.48	XC826TR-ND	1650.00	ECS-184-20-23A-TR
18.432	Series	XC827CT-ND	3.30	2.97	2.48	XC827TR-ND	1650.00	ECS-184-S-23A-TR
19.6608	20pF	XC828CT-ND	3.30	2.97	2.48	XC828TR-ND	1650.00	ECS-196-20-23A-TR
19.6608	Series	XC829CT-ND	3.30	2.97	2.48	XC829TR-ND	1650.00	ECS-196-S-23A-TR
20.000	20pF	XC830CT-ND	3.30	2.97	2.48	XC830TR-ND	1650.00	ECS-200-20-23A-TR
20.000	Series	XC831CT-ND	3.30	2.97	2.48	XC831TR-ND	1650.00	ECS-200-S-23A-TR
24.000	Series	XC832CT-ND	3.30	2.97	2.48	XC832TR-ND	1650.00	ECS-240-S-23A-TR

Monolithic Crystal Filters - “10.7MHz”

12.5KHz Channel Spacing: • **Operating Temp. Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±3.75KHz min. • **Stop Bandwidth:** 20dB ±18KHz for Model 10.7-7.5A; 40dB ±14KHz for Model 10.7-7.5B
25KHz Channel Spacing: • **Operating Temp. Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±7.5KHz min. • **Stop Bandwidth:** 18dB ±25KHz for Model 10.7-15A; 40dB ±25KHz for Model 10.7-15B
50KHz Channel Spacing: • **Operating Temperature Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±15KHz min. • **Stop Bandwidth:** 15dB ±50KHz for Model 10.7-30A; 30dB ±40KHz for Model 10.7-30B



2-Pole MCF Test Circuit
Zt: Terminating Impedance



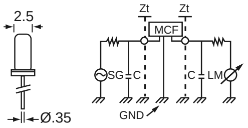
4-Pole MCF Test Circuit
Zt: Terminating Impedance

No. of Pole	Ripple (Max.)	Insert. Loss	Term. Impedance OHMS//pf	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
12.5KHz Channel Spacing									
2	0.5dB	1.5dB	1.8K//5	X701-ND	5.53	4.59	3.66	2.83	ECS-10.7-7.5A
4	1dB	2.5dB	1.8K//4	X702-ND†	12.51	10.40	8.28	6.40	ECS-10.7-7.5B
25KHz Channel Spacing									
2	0.5dB	2.0dB	3K//2	X703-ND	3.41	2.84	2.26	1.75	ECS-10.7-15A
4	1dB	2.5dB	3K//2	X704-ND†	6.66	5.54	4.41	3.41	ECS-10.7-15B
50KHz Channel Spacing									
2	0.5dB	1.5dB	5K//0	X705-ND	4.23	3.51	2.80	2.16	ECS-10.7-30A
4	1dB	2.5dB	5.5K//-1	X706-ND†	8.78	7.29	5.81	4.49	ECS-10.7-30B

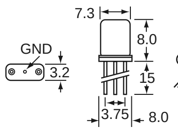
† Package is HC-49/U x 2

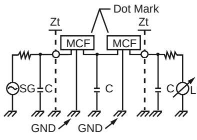
Monolithic Crystal Filters - “21.4MHz”

12.5KHz Channel Spacing: • **Operating Temp. Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±3.75KHz min. • **Stop Bandwidth:** 18dB ±12.5KHz for Model 21K-7.5A; 35dB ±12.5KHz for Model 21K7.5B
25KHz Channel Spacing: • **Operating Temperature Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±7.5KHz min. • **Stop Bandwidth:** 18dB ±25KHz for Model 21K15A; 40dB ±25KHz for Model 21K15B
50KHz Channel Spacing: • **Operating Temperature Range:** -20°C to +70°C • **Pass Bandwidth:** 3dB ±15KHz min. • **Stop Bandwidth:** 15dB ±45KHz for Model 21K30A; 40dB ±50KHz for Model 21K30B



2-Pole MCF Test Circuit
Zt: Terminating Impedance





4-Pole MCF Test Circuit
Zt: Terminating Impedance

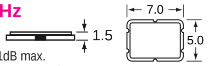
No. of Pole	Ripple (Max.)	Insert. Loss	Term. Impedance OHMS//pf	Digi-Key Part No.	Price Each 1	10	100	500	ECS Part No.
12.5KHz Channel Spacing									
2	0.5dB	2.0dB	1.5K//6	X707-ND	4.39	3.65	2.91	2.25	ECS-21K7.5A
4	1dB	2.5dB	850//5	X708-ND†	10.24	8.51	6.78	5.23	ECS-21K7.5B
25KHz Channel Spacing									
2	0.5dB	1.5dB	1.5K//3	X709-ND	4.39	3.65	2.91	2.25	ECS-21K15A
4	1dB	2dB	1.5K//2	X710-ND†	10.24	8.51	6.78	5.23	ECS-21K15B
50KHz Channel Spacing									
2	0.5dB	1.5dB	1.5K//1	X711-ND	4.39	3.65	2.91	2.25	ECS-21K30A
4	1dB	2dB	1.8K//0.5	X712-ND†	10.24	8.51	6.78	5.23	ECS-21K30B

† Package is UM-1 x 2

SMD Monolithic Crystal Filters

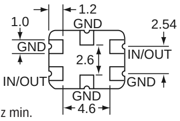
No. of Pole	Term. Impedance OHMS//pf	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 1,000	ECS Part No.
2	1500//2.5	X713CT-ND	7.31	6.08	4.84	X713TR-ND	3375.00	96SMF21A15-TR
2	1100//0	X714CT-ND	10.56	8.78	6.99	X714TR-ND	4875.00	96SMF45A30-TR

21.4MHz



- **Ripple:** 1dB max.
- **Insertion Loss:** 2.5dB
- **Operating Temperature:** -30°C to +85°C
- **Fo:** 21.4MHz
- **Pass Bandwidth:** 3dB ±7.5KHz min.
- **Stop Bandwidth:** 10dB ±25KHz

45MHz



- **Ripple:** 1dB max.
- **Insertion Loss:** 3dB
- **Operating Temp.:** -30°C to +85°C
- **Fo:** 45.0MHz
- **Pass Bandwidth:** 3dB ±15KHz min.
- **Stop Bandwidth:** 15dB ±60KHz

Ceramic Resonators

ZTT and SR1-B Series:

• Frequency Accuracy: ±0.5% • Stability in Temperature: -20°C to +80°C, ±0.3% • Aging for Ten Years: ±0.3% • Built-in Capacitance: 30pf ±20%

ZTA, ZTB and SR1-A Series:

• Frequency Accuracy: ±0.5% • Stability in Temperature: -20°C to +80°C, ±0.3% • Aging for Ten Years: ±0.5% • Operating Temperature: -20°C to +80°C

Fig.	Series	Frequency	Digi-Key Part No.	Price Each 1	10	100	ECS Part No.
1	ZTT with Caps	3.58MHz	X901-ND	.68	.57	.45	ZTT-3.58MG
		4.00MHz	X902-ND	.68	.57	.45	ZTT-4.00MG
		4.19MHz	X903-ND	.81	.68	.54	ZTT-4.19MG
		6.00MHz	X904-ND	.68	.57	.45	ZTT-6.00MT
		8.00MHz	X905-ND	.70	.59	.47	ZTT-8.00MT
		10.00MHz	X906-ND	.70	.59	.47	ZTT-10.00MT
		12.00MHz	X907-ND	.81	.68	.54	ZTT-12.00MT
		16.00MHz	X908-ND	.81	.68	.54	ZTT-16.00MX
		20.00MHz	X909-ND	.81	.68	.54	ZTT-20.00MX
2	ZTA without Caps	3.58MHz	X910-ND	.54	.45	.36	ZTA-3.58MG
		4.00MHz	X911-ND	.54	.45	.36	ZTA-4.00MG
		4.19MHz	X912-ND	.68	.57	.45	ZTA-4.19MG
3	ZTA without Caps	6.00MHz	X913-ND	.54	.45	.36	ZTA-6.00MT
		8.00MHz	X914-ND	.59	.50	.40	ZTA-8.00MT
		10.00MHz	X915-ND	.59	.50	.40	ZTA-10.00MT
		12.00MHz	X916-ND	.68	.57	.45	ZTA-12.00MT
		16.00MHz	X917-ND	.68	.57	.45	ZTA-16.00MX011
		20.00MHz	X918-ND	.68	.57	.45	ZTA-20.00MX011
4	ZTB without Caps	200KHz	X919-ND	.84	.70	.56	ZTB200D
		400KHz	X920-ND	.68	.57	.45	ZTB400D
		455KHz	X921-ND	.68	.57	.45	ZTB455E
		500KHz	X922-ND	.68	.57	.45	ZTB500E
		540KHz	X923-ND	.68	.57	.45	ZTB540P
		640KHz	X924-ND	.68	.57	.45	ZTB640P
		800KHz	X925-ND	.68	.57	.45	ZTB800J
		1000KHz	X926-ND	.68	.57	.45	ZTB1000J

Fig. 1

Dim. in ( ) is for Freq. Range 3.58-4.19

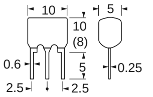


Fig. 2

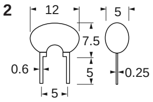


Fig. 3

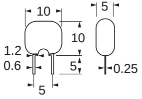
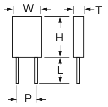


Fig. 4



Frequency Range	Dimensions W	T	H	P	L
200	13.5	3.8	14.7	10.0	8.0
400	7.9	3.6	9.3	5.0	4.0
455-640	7.0	3.5	9.0	5.0	4.0
800-1000	5.2	2.8	6.0	2.5	3.5

Fig. 5

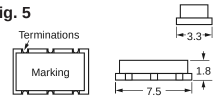


Fig. 5A

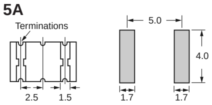


Fig. 5B

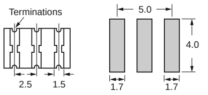
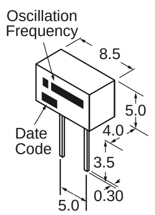


Fig.	Series	Freq.	Internal Cap. C1 & C2	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 2,500	ECS Part No.
5A	ECS-SR1-A	3.58	—	X932CT-ND	.70	.60	.47	X932TR-ND	280.00/M	ECS-SR1-3.58-A
		4.000	—	X933CT-ND	.70	.60	.47	X933TR-ND	280.00/M	ECS-SR1-4.00-A
		4.19	—	X934CT-ND	.70	.60	.47	X934TR-ND	280.00/M	ECS-SR1-4.19-A
		6.000	—	X935CT-ND	.70	.60	.47	X935TR-ND	280.00/M	ECS-SR1-6.00-A
		8.000	—	X936CT-ND	.70	.60	.47	X936TR-ND	280.00/M	ECS-SR1-8.00-A
5B	ECS-SR1-B	3.58	30 pF	X927CT-ND	.77	.66	.52	X927TR-ND	308.00/M	ECS-SR1-3.58-B
		4.000	30 pF	X928CT-ND	.77	.66	.52	X928TR-ND	308.00/M	ECS-SR1-4.00-B
		4.19	30 pF	X929CT-ND	.77	.66	.52	X929TR-ND	308.00/M	ECS-SR1-4.19-B
		6.000	30 pF	X930CT-ND	.77	.66	.52	X930TR-ND	308.00/M	ECS-SR1-6.00-B
		8.000	30 pF	X931CT-ND	.77	.66	.52	X931TR-ND	308.00/M	ECS-SR1-8.00-B

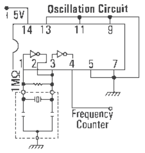
Panasonic Ceramic Resonators

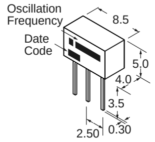
EFO-MN



EFO-MC

Built-In Capacitors Type: • Includes two capacitors, constructing Colpitts oscillation circuits. High accuracy and stable characteristics will be realized with the selected capacitors encased, small in size due to the new design of construction.

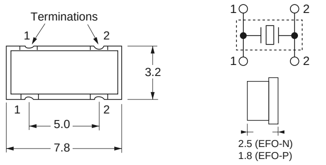




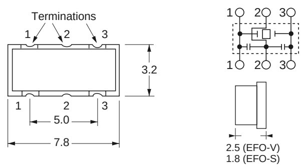
Type EFO-N, EFO-P, EFO-V, EFO-S:

Features: • Constructed with ceramic package • High reliability against soldering heat and mechanical stress • Moisture-proof sealing • Stable against solvent cleaning • Designed for reflow soldering • Flat-bottom plate for better mountings • Type EFO-V contributes simplification of oscillation circuits and reduces the numbers of circuit parts. **Applications:** • Clock generator for various microprocessers • Carrier between telecommunication equipments (telephone to telephone, personal computer to printer, etc.).

Type EFO-N, EFO-P Surface Mount



Type EFO-V, EFO-S Surface Mount

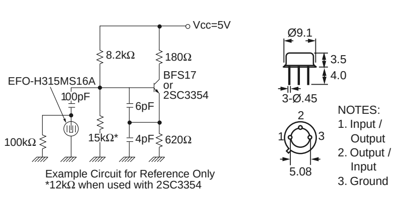


Osc. Freq.	Digi-Key Part No.	Pricing 1	10	100	1,000	5,000	Panasonic Part No.
Ceramic Resonators							
3.00MHz	PX300MN-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MN3004A4
3.58MHz	PX358MN-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MN3584A4
4.00MHz	PX400MN-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MN4004A4
5.00MHz	PX500MN-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MN5004A4
6.00MHz	PX600MN-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MN6004A4
8.00MHz	PX800MN-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MN8004A4
10.00MHz	PX1000MN-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MN1005B4
12.00MHz	PX1200MN-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MN1205B4
Ceramic Resonators With Built-In Capacitor							
5.00MHz	PX500-ND	.72	6.21	48.64	296.00	276.00/M	EFO-EC5004A4
2.00MHz	PX200MC-ND	1.03	8.79	68.86	419.00	391.00/M	EFO-MC2004A4
3.00MHz	PX300MC-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MC3004A4
3.58MHz	PX358MC-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MC3584A4
4.00MHz	PX400MC-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MC4004A4
5.00MHz	PX500MC-ND	.94	8.07	63.22	384.00	359.00/M	EFO-MC5004A4
6.00MHz	PX600MC-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MC6004A4
8.00MHz	PX800MC-ND	1.04	8.91	69.80	424.00	396.00/M	EFO-MC8004A4
10.00MHz	PX1000MC-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MC1005B4
12.00MHz	PX1200MC-ND	1.14	9.81	76.85	467.00	436.00/M	EFO-MC1205B4

Osc. Freq.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 2,500	5,000	Panasonic Part No.
Type N Surface Mount-General Purpose									
3.58MHz	PX358ECT-ND	1.70	14.59	114.32	511.00	—	—	—	EFO-N3584E5
4.00MHz	PX400ECT-ND	1.40	12.00	94.00	420.00	PX400ETR-ND	571.00/M	533.00/M	EFO-N4004E5
4.19MHz	PX419ECT-ND	1.40	12.00	94.00	420.00	—	—	—	EFO-N4194E5
5.00MHz	PX500ECT-ND	1.40	12.00	94.00	420.00	—	—	—	EFO-N5004E5
6.00MHz	PX600ECT-ND	1.75	15.04	117.83	526.50	—	—	—	EFO-N6004E5
8.00MHz	PX800ECT-ND	1.75	15.04	117.83	526.50	PX800ETR-ND	716.00/M	669.00/M	EFO-N8004E5
Type P Surface Mount-General Purpose Lo-Profile									
3.58MHz	PX358PCT-ND	1.58	13.50	105.75	472.50	PX358PTR-ND	642.86/M	599.99/M	EFO-P3584E5
4.00MHz	PX400PCT-ND	1.58	13.50	105.75	472.50	PX400PTR-ND	642.86/M	599.99/M	EFO-P4004E5
4.19MHz	PX419PCT-ND	1.58	13.50	105.75	472.50	PX419PTR-ND	642.86/M	599.99/M	EFO-P4194E5
5.00MHz	PX500PCT-ND	1.61	13.77	107.87	481.95	PX500PTR-ND	655.72/M	611.99/M	EFO-P5004E5
6.00MHz	PX600PCT-ND	1.61	13.77	107.87	481.95	PX600PTR-ND	655.72/M	611.99/M	EFO-P6004E5
8.00MHz	PX800PCT-ND	1.61	13.77	107.87	481.95	PX800PTR-ND	655.72/M	611.99/M	EFO-P8004E5
Type V Surface Mount With Built-In Capacitor									
5.00MHz	PX500NCT-ND	1.75	15.04	117.83	526.50	—	—	—	EFO-V5004E5
6.00MHz	PX600NCT-ND	1.46	12.51	98.00	438.00	PX600NTR-ND	596.00/M	556.00/M	EFO-V6004E5
Type S Surface Mount With Built-In Capacitor Lo-Profile									
3.58MHZ	PX358SCT-ND	1.61	13.77	107.87	481.95	PX358STR-ND	655.72/M	611.99/M	EFO-S3584E5
4.00MHz	PX400SCT-ND	1.61	13.77	107.87	481.95	PX400STR-ND	655.72/M	611.99/M	EFO-S4004E5
4.19MHz	PX419SCT-ND	1.61	13.77	107.87	481.95	PX419STR-ND	655.72/M	611.99/M	EFO-S4194E5
5.00MHz	PX500SCT-ND	1.64	14.04	109.98	491.40	PX500STR-ND	668.58/M	623.99/M	EFO-S5004E5
6.00MHz	PX600SCT-ND	1.64	14.04	109.98	491.40	PX600STR-ND	668.58/M	623.99/M	EFO-S6004E5
8.00MHz	PX800SCT-ND	1.64	14.04	109.98	491.40	PX800STR-ND	668.58/M	623.99/M	EFO-S8004E5

Panasonic SAW Resonators

Capable of fundamental wave oscillation, and it is particularly suited for simplification, size reduction and stabilization of the circuit, compared with conventional LC oscillation and quartz crystal oscillation. **Features:** • Capable of fundamental oscillation • Superior temperature characteristics. • Suited for simplification, size reduction and stabilization of the circuit. **Recommended Applications:** • Oscillation circuit for remote control (garage door opener, security system). • Various kinds of local oscillation circuit. **Characteristics:** • Operating Temperature: -20 to 80° C. • Maximum Frequency Drift: -150 to 50 ppm/°C (-20 to 80° C). **1 Port Type:** • Resonant Resist. (Ω); 30 max. • Cap. (pF); 2.0 ± 0.5. **2 Port Type:** • Insertion Loss (dB); 15 max. • Loaded Q; 7000 min. (5000 min. for 418.00 and 433.92 frequency). • Cap. (pF); 1.3 ± 0.3. • Phase Shift; 180°.



Example Circuit for Reference Only
*12kΩ when used with 2SC3354

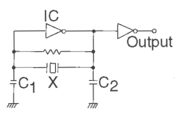
NOTES:
1. Input / Output
2. Output / Input
3. Ground

Resonant Frequency (MHz)	Digi-Key Part No.	Pricing 1	10	100	Panasonic Part No.
1 Port Type					
224.50 ±0.25	PX224S1-ND	6.87	58.86	461.07	EFO-H224MS12
418.00 ±0.25	PX418S1-ND	6.87	58.86	461.07	EFO-H418MS12
Center Frequency (MHz)	**Digi-Key Part No.**	**Pricing 1**	**10**	**100**	**Panasonic Part No.**
2 Port Type					
224.50 ±0.25	PX224S2-ND	6.87	58.86	461.07	EFO-H224MS03
315.00 ±0.25	PX315S2-ND	6.87	58.86	461.07	EFO-H315MS03
418.00 ±0.25	PX418S2-ND	6.87	58.86	461.07	EFO-H418MS03

TOKO Ceramic Resonators

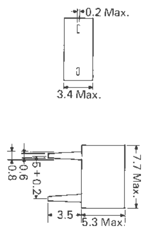
TOKO ceramic resonators utilize the piezoelectric principle converting a mechanical force (stress) into an electrical signal or converting an electrical signal into a mechanical force. The ceramic resonator is a thin section of piezoelectric ceramic material, such as quartz, whose sides are metallized into a corresponding pair of electrodes and upon the application of current produce a lengthwise vibration.

CRL, CRK

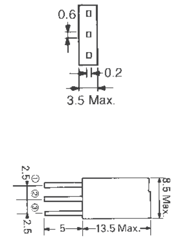


Output
IC : 1/5μ-PD4069
VDD : + 5V
X : Ceramic Element
C1,C2: External Capacitors

CRK



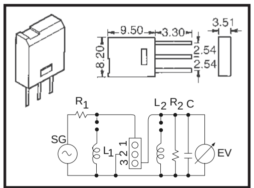
CRL



External Osc. Freq.	Capacitor C1(pF)	C2	Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
CRL Type							
220KHz ±3%	300	300	TK9920-ND	3.55	28.44	177.50	CRL220
262KHz ±3%	300	300	TK9921-ND	3.55	28.44	177.50	CRL262
CRK Type							
400KHz ±1%	560	200	TK9940-ND	1.88	15.20	94.00	BP11DCRK400
455KHz ±1%	560	200	TK9942-ND	1.88	15.20	94.00	BP11DCRK455
480KHz ±1%	560	200	TK9943-ND	1.88	15.20	94.00	BP11DCRK480
500KHz ±1%	560	200	TK9944-ND	1.88	15.20	94.00	BP11DCRK500

AM Ceramic Filters "455Khz"

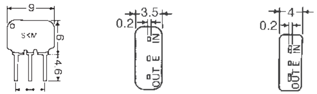
Center Frequency: 455Khz; **Insertion Loss:** 6dB; **Attn. within 100KHz:** 30dB.



Bw. –6dB (KHz)	Sel. Fo ± –9KHz (dB)	I/O Imp. (Ohms)	Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
CFM2 Type							
4	18	1K:1.5K	TK2330-ND	2.65	23.21	165.75	AHCFM2-455AL
6	16	1.5K:2K	TK2331-ND	2.65	23.21	165.75	AHCFM2-455BL
8	12	2K:2K	TK2332-ND	2.65	23.21	165.75	AHCFM2-455CL
10	9	2K:2K	TK2333-ND	2.89	25.27	180.50	AHCFM2-455DL
12	6	2.5K:2.5K	TK2334-ND	2.89	25.27	180.50	AHCFM2-455EL

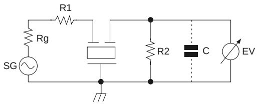
FM Ceramic Filters "10.7Mhz"

CFSK



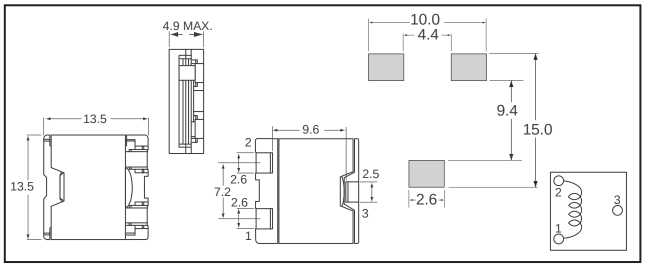
Impedance 330Ω

Test Circuit



Bw @3dB (KHz)	Ins. Loss (Max.)	Spurious Response (9-12 MHz)	Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
CFSK Type							
280	6dB	30dB	TK2304-ND	1.85	14.80	92.00	SK107M1N-AO-10
230	6dB	35dB	TK2306-ND	1.48	12.00	74.00	SK107M2N-AO-20
180	7dB	40dB	TK2307-ND	1.37	11.20	69.00	SK107M3N-AO-20
150	10dB	40dB	TK2308-ND	2.12	17.20	106.00	SK107M4N-AO-20
110	10dB	30dB	TK2309-ND	2.64	21.20	132.00	SK107M5N-AO-10
330	6dB	30dB	TK2310-ND	3.12	25.20	156.00	SK107MON-AO-10
360	5dB	30dB	TK2311-ND	3.12	25.20	156.00	SK107MAN-AO-10

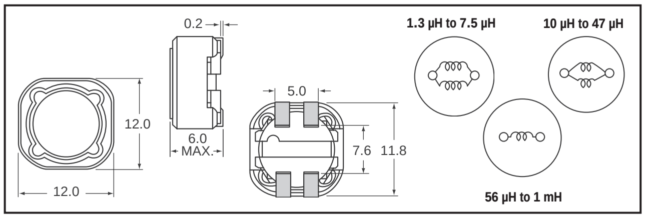
Series CDEP134



Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 500	Sumida Part No.
0.4µH	1.9 (1.6)	32.0	308-1000-1-ND	4.72	4.29	3.20	1197.00	CDEP134-0R4NC
0.9µH	2.5 (2.1)	21.6	308-1001-1-ND	4.72	4.29	3.20	1197.00	CDEP134-0R9MC
0.3µH	1.9 (1.6)	24.4	308-1002-1-ND	4.72	4.29	3.20	1197.00	CDEP134-0R3NC-H
0.66µH	2.5 (2.1)	29.0	308-1003-1-ND	4.72	4.29	3.20	1197.00	CDEP134-0R6NC-H
1.2µH	3.7 (3.1)	21.0	308-1004-1-ND	4.72	4.29	3.20	1197.00	CDEP134-1R2MC-H
1.6µH	3.7 (3.1)	16.0	308-1005-1-ND	4.72	4.29	3.20	1197.00	CDEP134-1R6MC
2.5µH	6.6 (5.5)	12.8	308-1006-1-ND	4.72	4.29	3.20	1197.00	CDEP134-2R5MC
3.6µH	10.8 (9.0)	10.9	308-1007-1-ND	4.72	4.29	3.20	1197.00	CDEP134-3R6MC
4.8µH	12.0 (10.0)	9.3	308-1008-1-ND	4.72	4.29	3.20	1197.00	CDEP134-4R8MC
6.4µH	16.3 (13.6)	8.0	308-1009-1-ND	4.72	4.29	3.20	1197.00	CDEP134-6R4MC
8.0µH	18.4 (15.3)	7.2	308-1010-1-ND	4.72	4.29	3.20	1197.00	CDEP134-8R0MC
1.8µH	6.6 (5.5)	17.6	308-1011-1-ND	4.72	4.29	3.20	1197.00	CDEP134-1R8MC-H
2.7µH	10.8 (9.0)	14.7	308-1012-1-ND	4.72	4.29	3.20	1197.00	CDEP134-2R7MC-H
3.6µH	12.0 (10.0)	12.5	308-1013-1-ND	4.72	4.29	3.20	1197.00	CDEP134-3R6MC-H
4.8µH	16.3 (13.6)	11.0	308-1014-1-ND	4.72	4.29	3.20	1197.00	CDEP134-4R8MC-H
6.0µH	18.4 (15.3)	9.6	308-1015-1-ND	4.72	4.29	3.20	1197.00	CDEP134-6R0MC-H

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

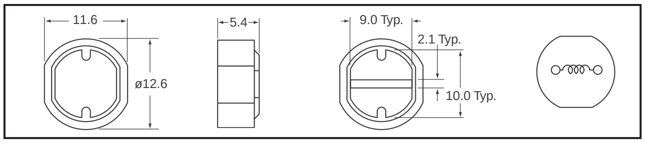
Series CDRH125



Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 500	Sumida Part No.
1.3µH	0.012 (.009)	8.00	308-1040-1-ND	2.13	1.94	1.44	540.00	CDRH125-1R3NC
2.1µH	0.014 (.011)	7.00	308-1041-1-ND	2.13	1.94	1.44	540.00	CDRH125-2R1NC
3.1µH	0.017 (.013)	6.00	308-1042-1-ND	2.13	1.94	1.44	540.00	CDRH125-3R1NC
4.4µH	0.020 (.016)	5.00	308-1043-1-ND	2.13	1.94	1.44	540.00	CDRH125-4R4NC
5.8µH	0.021 (.017)	4.40	308-1044-1-ND	2.13	1.94	1.44	540.00	CDRH125-5R8NC
7.5µH	0.024 (.019)	4.20	308-1045-1-ND	2.13	1.94	1.44	540.00	CDRH125-7R5NC
10µH	0.025 (.019)	4.00	308-1046-1-ND	2.13	1.94	1.44	540.00	CDRH125-100MC
12µH	0.027 (.021)	3.50	308-1047-1-ND	2.13	1.94	1.44	540.00	CDRH125-120MC
15µH	0.030 (.023)	3.30	308-1048-1-ND	2.13	1.94	1.44	540.00	CDRH125-150MC
18µH	0.034 (.026)	3.00	308-1049-1-ND	2.13	1.94	1.44	540.00	CDRH125-180MC
22µH	0.036 (.028)	2.80	308-1050-1-ND	2.13	1.94	1.44	540.00	CDRH125-220MC
27µH	0.051 (.039)	2.30	308-1051-1-ND	2.13	1.94	1.44	540.00	CDRH125-270MC
33µH	0.057 (.044)	2.10	308-1052-1-ND	2.13	1.94	1.44	540.00	CDRH125-330MC
39µH	0.068 (.052)	2.00	308-1053-1-ND	2.13	1.94	1.44	540.00	CDRH125-390MC
47µH	0.075 (.058)	1.80	308-1054-1-ND	2.13	1.94	1.44	540.00	CDRH125-470MC
56µH	0.11 (.084)	1.70	308-1055-1-ND	2.13	1.94	1.44	540.00	CDRH125-560MC
68µH	0.12 (.093)	1.50	308-1056-1-ND	2.13	1.94	1.44	540.00	CDRH125-680MC
82µH	0.14 (0.11)	1.40	308-1057-1-ND	2.13	1.94	1.44	540.00	CDRH125-820MC
100µH	0.16 (0.12)	1.30	308-1058-1-ND	2.13	1.94	1.44	540.00	CDRH125-101MC
120µH	0.17 (0.13)	1.10	308-1059-1-ND	2.13	1.94	1.44	540.00	CDRH125-121MC
150µH	0.23 (0.18)	1.00	308-1060-1-ND	2.13	1.94	1.44	540.00	CDRH125-151MC
180µH	0.29 (0.22)	0.90	308-1061-1-ND	2.13	1.94	1.44	540.00	CDRH125-181MC
220µH	0.40 (0.31)	0.80	308-1062-1-ND	2.13	1.94	1.44	540.00	CDRH125-221MC
270µH	0.46 (0.35)	0.75	308-1063-1-ND	2.13	1.94	1.44	540.00	CDRH125-271MC
330µH	0.51 (0.39)	0.68	308-1064-1-ND	2.13	1.94	1.44	540.00	CDRH125-331MC
390µH	0.69 (0.53)	0.65	308-1065-1-ND	2.13	1.94	1.44	540.00	CDRH125-391MC
470µH	0.77 (0.59)	0.58	308-1066-1-ND	2.13	1.94	1.44	540.00	CDRH125-471MC
560µH	0.86 (0.66)	0.54	308-1067-1-ND	2.13	1.94	1.44	540.00	CDRH125-561MC
680µH	1.20 (0.92)	0.48	308-1068-1-ND	2.13	1.94	1.44	540.00	CDRH125-681MC
820µH	1.34 (1.03)	0.43	308-1069-1-ND	2.13	1.94	1.44	540.00	CDRH125-821MC
1.0mH	1.53 (1.18)	0.40	308-1070-1-ND	2.13	1.94	1.44	540.00	CDRH125-102MC

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

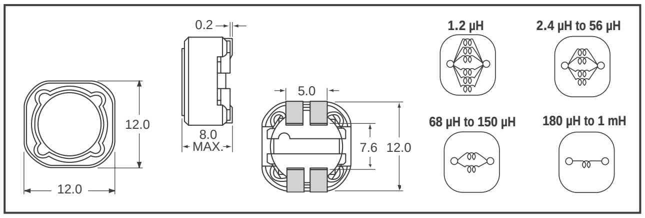
Series CDR125



Inductance	D.C.R. (Ω) (MAX. at 20°C)	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 500	Sumida Part No.
10µH	0.05	2.65	308-1016-1-ND	2.59	2.36	1.76	657.00	CDR125-100MC
12µH	0.05	2.50	308-1017-1-ND	2.59	2.36	1.76	657.00	CDR125-120MC
15µH	0.06	2.45	308-1018-1-ND	2.59	2.36	1.76	657.00	CDR125-150MC
18µH	0.06	2.40	308-1019-1-ND	2.59	2.36	1.76	657.00	CDR125-180MC
22µH	0.07	2.20	308-1020-1-ND	2.59	2.36	1.76	657.00	CDR125-220MC
27µH	0.08	2.00	308-1021-1-ND	2.59	2.36	1.76	657.00	CDR125-270MC
33µH	0.10	1.80	308-1022-1-ND	2.59	2.36	1.76	657.00	CDR125-330MC
39µH	0.11	1.65	308-1023-1-ND	2.59	2.36	1.76	657.00	CDR125-390MC
47µH	0.12	1.50	308-1024-1-ND	2.59	2.36	1.76	657.00	CDR125-470MC
56µH	0.15	1.38	308-1025-1-ND	2.59	2.36	1.76	657.00	CDR125-560MC
68µH	0.17	1.26	308-1026-1-ND	2.59	2.36	1.76	657.00	CDR125-680MC
82µH	0.20	1.14	308-1027-1-ND	2.59	2.36	1.76	657.00	CDR125-820MC
100µH	0.25	1.05	308-1028-1-ND	2.59	2.36	1.76	657.00	CDR125-101MC
120µH	0.28	0.95	308-1029-1-ND	2.59	2.36	1.76	657.00	CDR125-121MC
150µH	0.40	0.85	308-1030-1-ND	2.59	2.36	1.76	657.00	CDR125-151MC
180µH	0.48	0.77	308-1031-1-ND	2.59	2.36	1.76	657.00	CDR125-181MC
220µH	0.52	0.70	308-1032-1-ND	2.59	2.36	1.76	657.00	CDR125-221MC
270µH	0.70	0.63	308-1033-1-ND	2.59	2.36	1.76	657.00	CDR125-271MC
330µH	0.80	0.57	308-1034-1-ND	2.59	2.36	1.76	657.00	CDR125-331MC
390µH	1.08	0.52	308-1035-1-ND	2.59	2.36	1.76	657.00	CDR125-391MC
470µH	1.20	0.48	308-1036-1-ND	2.59	2.36	1.76	657.00	CDR125-471MC
560µH	1.34	0.44	308-1037-1-ND	2.59	2.36	1.76	657.00	CDR125-561MC
680µH	1.78	0.40	308-1038-1-ND	2.59	2.36	1.76	657.00	CDR125-681MC
820µH	2.00	0.36	308-1039-1-ND	2.59	2.36	1.76	657.00	CDR125-821MC

*For Tape & Reel part number, change 1-ND to 2-ND.

Series CDRH127

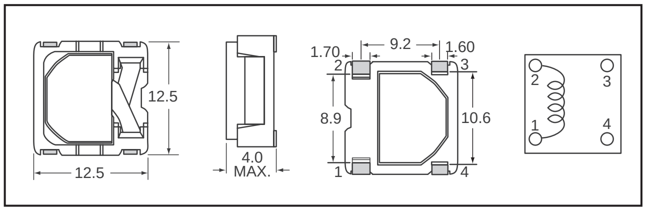


Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 500	Sumida Part No.
1.2µH	0.0070 (.0052)	9.80	308-1071-1-ND	3.05	2.78	2.07	774.00	CDRH127-1R2NC
2.4µH	0.0115 (.0085)	8.00	308-1072-1-ND	3.05	2.78	2.07	774.00	CDRH127-2R4NC
3.5µH	0.0135 (.0100)	7.50	308-1073-1-ND	3.05	2.78	2.07	774.00	CDRH127-3R5NC
4.7µH	0.0158 (.0117)	6.80	308-1074-1-ND	3.05	2.78	2.07	774.00	CDRH127-4R7NC
6.1µH	0.0176 (.0130)	6.60	308-1075-1-ND	3.05	2.78	2.07	774.00	CDRH127-6R1NC
7.6µH	0.0200 (.0150)	5.90	308-1076-1-ND	3.05	2.78	2.07	774.00	CDRH127-7R6NC
10µH	0.0216 (.0160)	5.40	308-1077-1-ND	3.05	2.78	2.07	774.00	CDRH127-100MC
12µH	0.0243 (.0180)	4.90	308-1078-1-ND	3.05	2.78	2.07	774.00	CDRH127-120MC
15µH	0.0270 (.0200)	4.50	308-1079-1-ND	3.05	2.78	2.07	774.00	CDRH127-150MC
18µH	0.0392 (.0290)	3.90	308-1080-1-ND	3.05	2.78	2.07	774.00	CDRH127-180MC
22µH	0.0432 (.0320)	3.60	308-1081-1-ND	3.05	2.78	2.07	774.00	CDRH127-220MC
27µH	0.0459 (.0340)	3.40	308-1082-1-ND	3.05	2.78	2.07	774.00	CDRH127-270MC
33µH	0.0648 (.0480)	3.00	308-1083-1-ND	3.05	2.78	2.07	774.00	CDRH127-330MC
39µH	0.0729 (.0540)	2.75	308-1084-1-ND	3.05	2.78	2.07	774.00	CDRH127-390MC
47µH	0.10 (.0760)	2.50	308-1085-1-ND	3.05	2.78	2.07	774.00	CDRH127-470MC
56µH	0.11 (.0830)	2.35	308-1086-1-ND	3.05	2.78	2.07	774.00	CDRH127-560MC
68µH	0.14 (0.10)	2.10	308-1087-1-ND	3.05	2.78	2.07	774.00	CDRH127-680MC
82µH	0.16 (0.12)	1.95	308-1088-1-ND	3.05	2.78	2.07	774.00	CDRH127-820MC
100µH	0.22 (0.17)	1.70	308-1089-1-ND	3.05	2.78	2.07	774.00	CDRH127-101MC
120µH	0.25 (0.18)	1.60	308-1090-1-ND	3.05	2.78	2.07	774.00	CDRH127-121MC
150µH	0.28 (0.21)	1.42	308-1091-1-ND	3.05	2.78	2.07	774.00	CDRH127-151MC
180µH	0.35 (0.26)	1.30	308-1092-1-ND	3.05	2.78	2.07	774.00	CDRH127-181MC
220µH	0.39 (0.29)	1.16	308-1093-1-ND	3.05	2.78	2.07	774.00	CDRH127-221MC
270µH	0.56 (0.42)	1.06	308-1094-1-ND	3.05	2.78	2.07	774.00	CDRH127-271MC
330µH	0.64 (0.47)	0.95	308-1095-1-ND	3.05	2.78	2.07	774.00	CDRH127-331MC
390µH	0.70 (0.52)	0.88	308-1096-1-ND	3.05	2.78	2.07	774.00	CDRH127-391MC
470µH	0.98 (0.73)	0.79	308-1097-1-ND	3.05	2.78	2.07	774.00	CDRH127-471MC
560µH	1.07 (0.79)	0.73	308-1098-1-ND	3.05	2.78	2.07	774.00	CDRH127-561MC
680µH	1.46 (1.12)	0.67	308-1099-1-ND	3.05	2.78	2.07	774.00	CDRH127-681MC
820µH	1.64 (1.26)	0.60	308-1100-1-ND	3.05	2.78	2.07	774.00	CDRH127-821MC
1.0mH	1.82 (1.40)	0.55	308-1101-1-ND	3.05	2.78	2.07	774.00	CDRH127-102MC

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

(*Continued*)

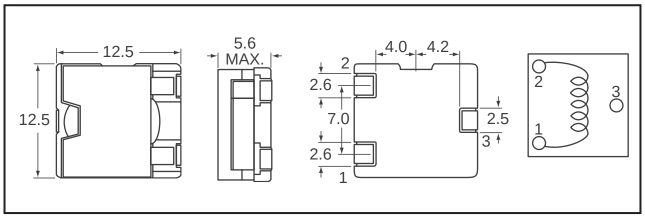
Series CEP12D38



Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Saturation Current (A)	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel* Pricing 1,000	Sumida Part No.
				1	10	100		
0.6µH	6.0 (5.0)	24.4	308-1102-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-0R6MC-H
1.1µH	7.2 (6.0)	18.1	308-1103-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-1R1MC-H
1.8µH	8.6 (7.1)	13.9	308-1104-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-1R8MC-H
2.6µH	12.1 (10.1)	12.2	308-1105-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-2R6MC-H
1.0µH	6.0 (5.0)	14.8	308-1106-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-1R0MC
1.8µH	7.2 (6.0)	11.0	308-1107-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-1R8MC
2.8µH	8.6 (7.1)	8.8	308-1108-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-2R8MC
4.0µH	12.1 (10.1)	7.2	308-1109-1-ND	4.22	3.84	2.86	2142.00	CEP12D38-4R0MC

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

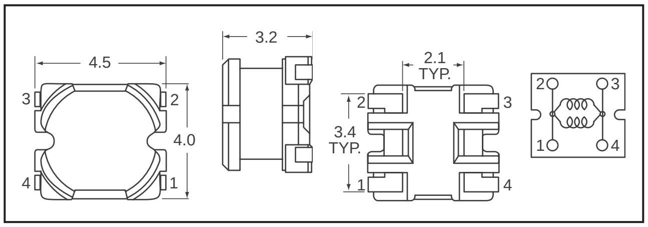
Series CEP125



Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Saturation Current (A)	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel* Pricing 500	Sumida Part No.
				1	10	100		
0.68µH	1.5 (1.2)	20.4	308-1110-1-ND	4.08	3.71	2.76	1035.00	CEP125-0R6NC-D
1.5µH	2.2 (1.8)	14.0	308-1111-1-ND	4.08	3.71	2.76	1035.00	CEP125-1R5MC-D
0.47µH	1.5 (1.2)	28.8	308-1112-1-ND	4.08	3.71	2.76	1035.00	CEP125-0R4NC-HD
1.0µH	2.2 (1.8)	20.0	308-1113-1-ND	4.08	3.71	2.76	1035.00	CEP125-1R0MC-HD
0.35µH	1.5 (1.2)	35.0	308-1114-1-ND	4.08	3.71	2.76	1035.00	CEP125-0R3NC-UD
0.8µH	2.2 (1.8)	25.7	308-1115-1-ND	4.08	3.71	2.76	1035.00	CEP125-0R8NC-UD

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

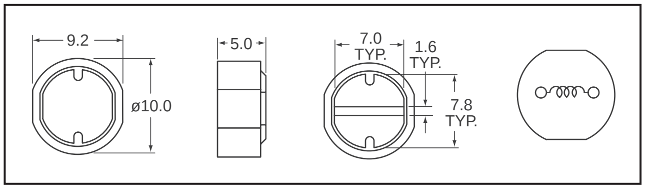
Series CR43



Inductance	D.C.R. (Ω) (MAX. at 20°C)	Current (A)	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel* Pricing 1,500	Sumida Part No.
				1	10	100		
1.0µH	48.7	2.56	308-1116-1-ND	1.24	1.13	.84	455.00/M	CR43-1R0MC
1.4µH	56.2	2.52	308-1117-1-ND	1.24	1.13	.84	455.00/M	CR43-1R4MC
1.8µH	63.7	1.95	308-1118-1-ND	1.24	1.13	.84	455.00/M	CR43-1R8MC
2.2µH	71.2	1.75	308-1119-1-ND	1.24	1.13	.84	455.00/M	CR43-2R2MC
2.7µH	78.7	1.58	308-1120-1-ND	1.24	1.13	.84	455.00/M	CR43-2R7MC
3.3µH	86.2	1.44	308-1121-1-ND	1.24	1.13	.84	455.00/M	CR43-3R3MC
3.9µH	93.7	1.33	308-1122-1-ND	1.24	1.13	.84	455.00/M	CR43-3R9MC
4.7µH	108.7	1.15	308-1123-1-ND	1.24	1.13	.84	455.00/M	CR43-4R7MC
5.6µH	125.7	0.99	308-1124-1-ND	1.24	1.13	.84	455.00/M	CR43-5R6MC
6.8µH	131.2	0.95	308-1125-1-ND	1.24	1.13	.84	455.00/M	CR43-6R8MC
8.2µH	146.2	0.84	308-1126-1-ND	1.24	1.13	.84	455.00/M	CR43-8R2MC

*For Tape & Reel part number, change 1-ND to 2-ND.

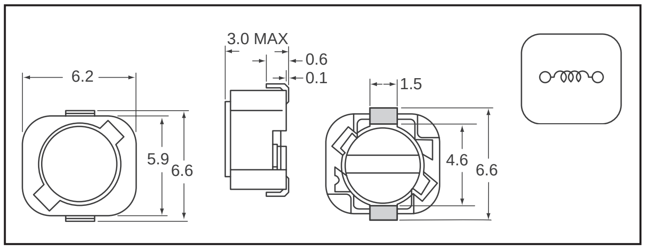
Series CDR105



Inductance	D.C.R. (Ω) (MAX. at 20°C)	Current (A)	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel* Pricing 500	Sumida Part No.
				1	10	100		
10µH	0.06	2.53	308-1127-1-ND	1.56	1.42	1.06	396.00	CDR105-100MC
12µH	0.06	2.31	308-1128-1-ND	1.56	1.42	1.06	396.00	CDR105-120MC
15µH	0.07	2.06	308-1129-1-ND	1.56	1.42	1.06	396.00	CDR105-150MC
18µH	0.08	1.89	308-1130-1-ND	1.56	1.42	1.06	396.00	CDR105-180MC
22µH	0.09	1.71	308-1131-1-ND	1.56	1.42	1.06	396.00	CDR105-220MC
27µH	0.11	1.54	308-1132-1-ND	1.56	1.42	1.06	396.00	CDR105-270MC
33µH	0.12	1.39	308-1133-1-ND	1.56	1.42	1.06	396.00	CDR105-330MC
39µH	0.16	1.28	308-1134-1-ND	1.56	1.42	1.06	396.00	CDR105-390MC
47µH	0.18	1.17	308-1135-1-ND	1.56	1.42	1.06	396.00	CDR105-470MC
56µH	0.19	1.07	308-1136-1-ND	1.56	1.42	1.06	396.00	CDR105-560MC
68µH	0.22	0.97	308-1137-1-ND	1.56	1.42	1.06	396.00	CDR105-680MC
82µH	0.28	0.88	308-1138-1-ND	1.56	1.42	1.06	396.00	CDR105-820MC
100µH	0.35	0.80	308-1139-1-ND	1.56	1.42	1.06	396.00	CDR105-101MC
120µH	0.38	0.73	308-1140-1-ND	1.56	1.42	1.06	396.00	CDR105-121MC
150µH	0.45	0.65	308-1141-1-ND	1.56	1.42	1.06	396.00	CDR105-151MC
180µH	0.62	0.60	308-1142-1-ND	1.56	1.42	1.06	396.00	CDR105-181MC
220µH	0.69	0.54	308-1143-1-ND	1.56	1.42	1.06	396.00	CDR105-221MC
270µH	0.78	0.49	308-1144-1-ND	1.56	1.42	1.06	396.00	CDR105-271MC
330µH	1.03	0.44	308-1145-1-ND	1.56	1.42	1.06	396.00	CDR105-331MC
390µH	1.18	0.41	308-1146-1-ND	1.56	1.42	1.06	396.00	CDR105-391MC
470µH	1.60	0.37	308-1147-1-ND	1.56	1.42	1.06	396.00	CDR105-471MC

*For Tape & Reel part number, change 1-ND to 2-ND.

Series CDRH62B

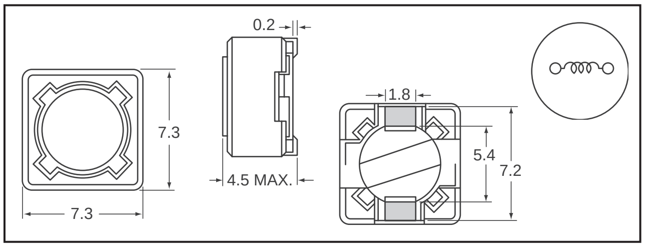


Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Current (A)	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel* Pricing 2,000	Sumida Part No.
				1	10	100		
2.9µH	0.068 (.050)	1.94	308-1148-1-ND	.96	.88	.65	486.00/M	CDRH62B-2R9NC
4.0µH	0.080 (.059)	1.63	308-1149-1-ND	.96	.88	.65	486.00/M	CDRH62B-4R0NC
5.5µH	0.096 (.071)	1.40	308-1150-1-ND	.96	.88	.65	486.00/M	CDRH62B-5R5NC
6.3µH	0.10 (.077)	1.30	308-1151-1-ND	.96	.88	.65	486.00/M	CDRH62B-6R3NC
7.1µH	0.11 (.081)	1.22	308-1152-1-ND	.96	.88	.65	486.00/M	CDRH62B-7R1NC
8.0µH	0.12 (.087)	1.15	308-1153-1-ND	.96	.88	.65	486.00/M	CDRH62B-8R0NC
10µH	0.15 (0.11)	1.10	308-1154-1-ND	.96	.88	.65	486.00/M	CDRH62B-100MC
12µH	0.20 (0.15)	1.00	308-1155-1-ND	.96	.88	.65	486.00/M	CDRH62B-120MC
15µH	0.23 (0.17)	0.90	308-1156-1-ND	.96	.88	.65	486.00/M	CDRH62B-150MC
18µH	0.27 (0.20)	0.80	308-1157-1-ND	.96	.88	.65	486.00/M	CDRH62B-180MC
22µH	0.34 (0.25)	0.74	308-1158-1-ND	.96	.88	.65	486.00/M	CDRH62B-220MC
27µH	0.38 (0.29)	0.66	308-1159-1-ND	.96	.88	.65	486.00/M	CDRH62B-270MC
33µH	0.45 (0.33)	0.59	308-1160-1-ND	.96	.88	.65	486.00/M	CDRH62B-330MC
39µH	0.49 (0.37)	0.54	308-1161-1-ND	.96	.88	.65	486.00/M	CDRH62B-390MC
47µH	0.69 (0.51)	0.50	308-1162-1-ND	.96	.88	.65	486.00/M	CDRH62B-470MC
56µH	0.78 (0.58)	0.46	308-1163-1-ND	.96	.88	.65	486.00/M	CDRH62B-560MC
68µH	1.07 (0.83)	0.42	308-1164-1-ND	.96	.88	.65	486.00/M	CDRH62B-680MC
82µH	1.21 (0.93)	0.38	308-1165-1-ND	.96	.88	.65	486.00/M	CDRH62B-820MC
100µH	1.39 (1.07)	0.34	308-1166-1-ND	.96	.88	.65	486.00/M	CDRH62B-101MC
120µH	1.90 (1.46)	0.31	308-1167-1-ND	.96	.88	.65	486.00/M	CDRH62B-121MC
150µH	2.18 (1.68)	0.28	308-1168-1-ND	.96	.88	.65	486.00/M	CDRH62B-151MC
180µH	2.77 (2.13)	0.26	308-1169-1-ND	.96	.88	.65	486.00/M	CDRH62B-181MC
220µH	3.12 (2.40)	0.23	308-1170-1-ND	.96	.88	.65	486.00/M	CDRH62B-221MC
270µH	4.38 (3.37)	0.22	308-1171-1-ND	.96	.88	.65	486.00/M	CDRH62B-271MC
330µH	4.94 (3.80)	0.19	308-1172-1-ND	.96	.88	.65	486.00/M	CDRH62B-331MC

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

(Continued)

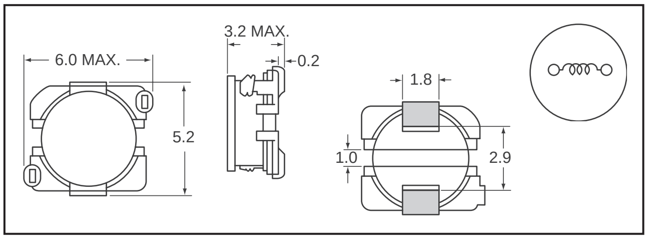
Series CDRH74



Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 1,000	Sumida Part No.
10µH	0.049 (.038)	1.84	308-1173-1-ND	1.49	1.36	1.01	756.00	CDRH74-100MC
12µH	0.058 (.044)	1.71	308-1174-1-ND	1.49	1.36	1.01	756.00	CDRH74-120MC
15µH	0.081 (.062)	1.47	308-1175-1-ND	1.49	1.36	1.01	756.00	CDRH74-150MC
18µH	0.091 (.070)	1.31	308-1176-1-ND	1.49	1.36	1.01	756.00	CDRH74-180MC
22µH	0.11 (.077)	1.23	308-1177-1-ND	1.49	1.36	1.01	756.00	CDRH74-220MC
27µH	0.15 (0.12)	1.12	308-1178-1-ND	1.49	1.36	1.01	756.00	CDRH74-270MC
33µH	0.17 (0.13)	0.96	308-1179-1-ND	1.49	1.36	1.01	756.00	CDRH74-330MC
39µH	0.23 (0.18)	0.91	308-1180-1-ND	1.49	1.36	1.01	756.00	CDRH74-390MC
47µH	0.26 (0.20)	0.88	308-1181-1-ND	1.49	1.36	1.01	756.00	CDRH74-470MC
56µH	0.35 (0.27)	0.75	308-1182-1-ND	1.49	1.36	1.01	756.00	CDRH74-560MC
68µH	0.38 (0.30)	0.69	308-1183-1-ND	1.49	1.36	1.01	756.00	CDRH74-680MC
82µH	0.43 (0.33)	0.61	308-1184-1-ND	1.49	1.36	1.01	756.00	CDRH74-820MC
100µH	0.61 (0.47)	0.60	308-1185-1-ND	1.49	1.36	1.01	756.00	CDRH74-101MC
120µH	0.66 (0.51)	0.52	308-1186-1-ND	1.49	1.36	1.01	756.00	CDRH74-121MC
150µH	0.88 (0.68)	0.46	308-1187-1-ND	1.49	1.36	1.01	756.00	CDRH74-151MC
180µH	0.98 (0.76)	0.42	308-1188-1-ND	1.49	1.36	1.01	756.00	CDRH74-181MC
220µH	1.17 (0.90)	0.36	308-1189-1-ND	1.49	1.36	1.01	756.00	CDRH74-221MC
270µH	1.64 (1.32)	0.34	308-1190-1-ND	1.49	1.36	1.01	756.00	CDRH74-271MC
330µH	1.86 (1.49)	0.32	308-1191-1-ND	1.49	1.36	1.01	756.00	CDRH74-331MC
390µH	2.85 (2.28)	0.29	308-1192-1-ND	1.49	1.36	1.01	756.00	CDRH74-391MC
470µH	3.01 (2.41)	0.26	308-1193-1-ND	1.49	1.36	1.01	756.00	CDRH74-471MC
560µH	3.62 (2.89)	0.23	308-1194-1-ND	1.49	1.36	1.01	756.00	CDRH74-561MC
680µH	4.63 (3.71)	0.22	308-1195-1-ND	1.49	1.36	1.01	756.00	CDRH74-681MC
820µH	5.20 (4.16)	0.20	308-1196-1-ND	1.49	1.36	1.01	756.00	CDRH74-821MC
1.0mH	6.00 (4.80)	0.18	308-1197-1-ND	1.49	1.36	1.01	756.00	CDRH74-102MC

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

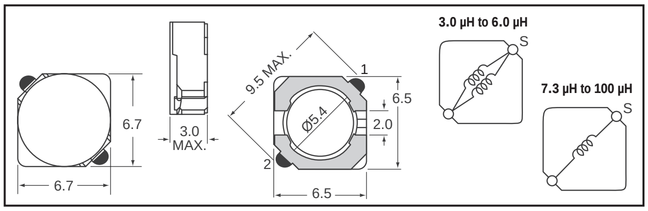
Series CDH53



Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 1,500	Sumida Part No.
2.2µH	0.066 (.051)	2.03	308-1198-1-ND	1.03	.94	.70	522.00/M	CDH53-2R2MC
3.3µH	0.088 (.068)	1.88	308-1199-1-ND	1.03	.94	.70	522.00/M	CDH53-3R3MC
4.7µH	0.096 (.074)	1.68	308-1200-1-ND	1.03	.94	.70	522.00/M	CDH53-4R7MC
10µH	0.16 (0.13)	1.23	308-1201-1-ND	1.03	.94	.70	522.00/M	CDH53-100LC
12µH	0.18 (0.14)	1.12	308-1202-1-ND	1.03	.94	.70	522.00/M	CDH53-120LC
15µH	0.25 (0.20)	1.00	308-1203-1-ND	1.03	.94	.70	522.00/M	CDH53-150KC
18µH	0.28 (0.21)	0.88	308-1204-1-ND	1.03	.94	.70	522.00/M	CDH53-180KC
22µH	0.39 (0.30)	0.80	308-1205-1-ND	1.03	.94	.70	522.00/M	CDH53-220KC
27µH	0.42 (0.32)	0.72	308-1206-1-ND	1.03	.94	.70	522.00/M	CDH53-270KC
33µH	0.49 (0.38)	0.67	308-1207-1-ND	1.03	.94	.70	522.00/M	CDH53-330KC
39µH	0.55 (0.43)	0.64	308-1208-1-ND	1.03	.94	.70	522.00/M	CDH53-390KC
47µH	0.77 (0.59)	0.53	308-1209-1-ND	1.03	.94	.70	522.00/M	CDH53-470KC
56µH	0.87 (0.67)	0.50	308-1210-1-ND	1.03	.94	.70	522.00/M	CDH53-560KC
68µH	1.21 (0.96)	0.45	308-1211-1-ND	1.03	.94	.70	522.00/M	CDH53-680JC
82µH	1.34 (1.07)	0.39	308-1212-1-ND	1.03	.94	.70	522.00/M	CDH53-820JC
100µH	1.57 (1.25)	0.37	308-1213-1-ND	1.03	.94	.70	522.00/M	CDH53-101JC
120µH	1.80 (1.44)	0.34	308-1214-1-ND	1.03	.94	.70	522.00/M	CDH53-121JC
150µH	2.40 (1.92)	0.31	308-1215-1-ND	1.03	.94	.70	522.00/M	CDH53-151JC
180µH	2.66 (2.13)	0.30	308-1216-1-ND	1.03	.94	.70	522.00/M	CDH53-181JC
220µH	3.73 (2.99)	0.26	308-1217-1-ND	1.03	.94	.70	522.00/M	CDH53-221JC

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

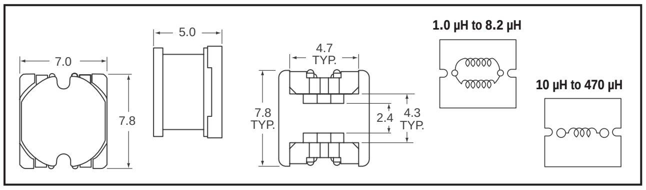
Series CDRH6D28



Inductance	D.C.R. (Ω) (MAX. at 20°C) †	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 1,500	Sumida Part No.
3.0µH	24 (18)	3.00	308-1218-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-3R0NC
3.9µH	27 (20)	2.60	308-1219-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-3R9NC
5.0µH	31 (23)	2.40	308-1220-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-5R0NC
6.0µH	35 (26)	2.25	308-1221-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-6R0NC
7.3µH	54 (40)	2.10	308-1222-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-7R3NC
8.6µH	58 (43)	1.85	308-1223-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-8R6NC
10µH	65 (48)	1.70	308-1224-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-100NC
12µH	70 (52)	1.55	308-1225-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-120NC
15µH	84 (62)	1.40	308-1226-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-150NC
18µH	95 (70)	1.32	308-1227-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-180NC
22µH	128 (95)	1.20	308-1228-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-220NC
27µH	142 (105)	1.05	308-1229-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-270NC
33µH	165 (122)	0.97	308-1230-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-330NC
39µH	210 (156)	0.86	308-1231-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-390NC
47µH	238 (176)	0.80	308-1232-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-470NC
56µH	277 (205)	0.73	308-1233-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-560NC
68µH	304 (225)	0.65	308-1234-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-680NC
82µH	390 (290)	0.60	308-1235-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-820NC
100µH	535 (397)	0.54	308-1236-1-ND	1.10	1.00	.75	558.00/M	CDRH6D28-101NC

*For Tape & Reel part number, change 1-ND to 2-ND. † D.C.R. ( ) typical value.

Series CR75



Inductance	D.C.R. (Ω) (MAX. at 20°C)	Current (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 1,000	Sumida Part No.
1.0µH	0.0156	6.0	308-1258-1-ND	1.46	1.33	.99	738.00	CR75-1R0MC
1.5µH	0.0170	5.5	308-1259-1-ND	1.46	1.33	.99	738.00	CR75-1R5MC
1.8µH	0.0195	4.5	308-1260-1-ND	1.46	1.33	.99	738.00	CR75-1R8MC
2.2µH	0.0221	4.2	308-1261-1-ND	1.46	1.33	.99	738.00	CR75-2R2MC
3.3µH	0.0247	3.7	308-1262-1-ND	1.46	1.33	.99	738.00	CR75-3R3MC
3.9µH	0.0273	3.5	308-1263-1-ND	1.46	1.33	.99	738.00	CR75-3R9MC
4.7µH	0.0300	3.1	308-1264-1-ND	1.46	1.33	.99	738.00	CR75-4R7MC
5.6µH	0.0325	2.8	308-1265-1-ND	1.46	1.33	.99	738.00	CR75-5R6MC
6.8µH	0.0364	2.7	308-1266-1-ND	1.46	1.33	.99	738.00	CR75-6R8MC
8.2µH	0.0416	2.5	308-1267-1-ND	1.46	1.33	.99	738.00	CR75-8R2MC
10µH	0.07	2.3	308-1237-1-ND	1.46	1.33	.99	738.00	CR75-100KC
12µH	0.08	2.0	308-1238-1-ND	1.46	1.33	.99	738.00	CR75-120KC
15µH	0.09	1.8	308-1239-1-ND	1.46	1.33	.99	738.00	CR75-150KC
18µH	0.10	1.6	308-1240-1-ND	1.46	1.33	.99	738.00	CR75-180KC
22µH	0.11	1.5	308-1241-1-ND	1.46	1.33	.99	738.00	CR75-220KC
27µH	0.12	1.3	308-1242-1-ND	1.46	1.33	.99	738.00	CR75-270KC
33µH	0.13	1.2	308-1243-1-ND	1.46	1.33	.99	738.00	CR75-330KC
39µH	0.16	1.1	308-1244-1-ND	1.46	1.33	.99	738.00	CR75-390KC
47µH	0.18	1.1	308-1245-1-ND	1.46	1.33	.99	738.00	CR75-470KC
56µH	0.24	0.94	308-1246-1-ND	1.46	1.33	.99	738.00	CR75-560KC
68µH	0.28	0.85	308-1247-1-ND	1.46	1.33	.99	738.00	CR75-680KC
82µH	0.37	0.78	308-1248-1-ND	1.46	1.33	.99	738.00	CR75-820KC
100µH	0.43	0.72	308-1249-1-ND	1.46	1.33	.99	738.00	CR75-101KC
120µH	0.47	0.66	308-1250-1-ND	1.46	1.33	.99	738.00	CR75-121KC
150µH	0.64	0.58	308-1251-1-ND	1.46	1.33	.99	738.00	CR75-151KC
180µH	0.71	0.51	308-1252-1-ND	1.46	1.33	.99	738.00	CR75-181KC
220µH	0.96	0.49	308-1253-1-ND	1.46	1.33	.99	738.00	CR75-221KC
270µH	1.11	0.42	308-1254-1-ND	1.46	1.33	.99	738.00	CR75-271KC
330µH	1.26	0.40	308-1255-1-ND	1.46	1.33	.99	738.00	CR75-331KC
390µH	1.77	0.36	308-1256-1-ND	1.46	1.33	.99	738.00	CR75-391KC
470µH	1.96	0.34	308-1257-1-ND	1.46	1.33	.99	738.00	CR75-471KC

*For Tape & Reel part number, change 1-ND to 2-ND.

Panasonic® Surface Mount Inductors

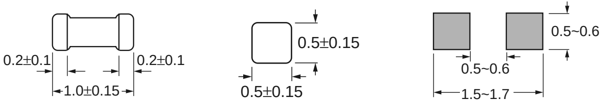
These are wire wound type chip inductors that can accommodate automatic and high-density mounting in electronic circuits.

Features:

- Very thin wires are wound on a high magnetic effect drum core, resulting in high Q and excellent frequency characteristics.
- High reliability because the coil is molded by heat-resistant epoxy resin.
- Flow and reflow soldering is possible due to adoption of metal terminals.

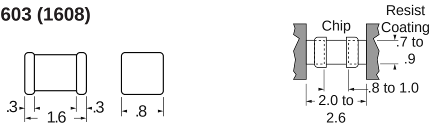
Size / Classification	Square Type 0402 (1005)	0603 (1608)	0805 (2012)	1008 (2520)	1210 (3225)	1812 (4532)
Air Core	ELJRF	ELJRE	ELJND	ELJNC	ELJNA	—
Regular	—	—	ELJFD	ELJFC	ELJFA	ELJFB
Magnetic Shield	—	—	—	ELJSC	ELJSA	—
High Power	—	ELJPE	—	ELJPC	ELJPA	—
Low DC Resistance	—	—	—	—	ELJEA	—

Fig. 1 - 0402 (1005)



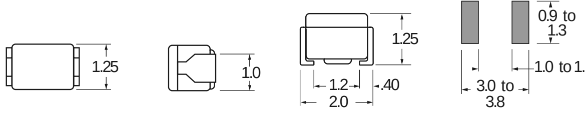
RF Type (Non-winding design)**:** • High Q • High self-resonant frequency • Non Polarity

Fig. 2 - 0603 (1608)



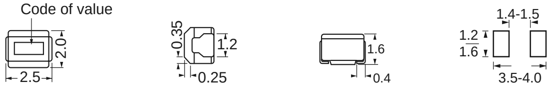
RE Type (Non-winding design)**:** • Small size • High self-resonant frequency • Tight tolerance
PE Type (Non-winding design): • Small size • High self-resonant frequency

Fig. 3 - 0805 (2012)



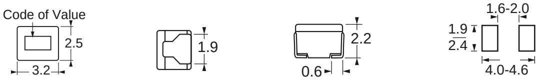
ND Type: • High Q • High self-resonant frequency **FD Type:** • High Q • Standard version of ND Type

Fig. 4 - 1008 (2520)



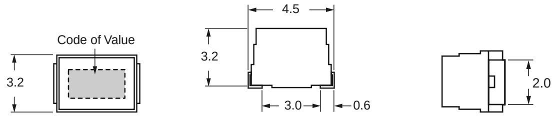
NC Type: • Low inductance, tight tolerance and small size • Suitable for high-frequency circuits •Coreless type • L is stable with respect to temperature and humidity **FC/SC Type:** • Smallest of the coil type inductors • Suitable for a variety of small processing circuits • SC type is equipped with a magnetic shield function **PC Type:** • High rated DC current • Low DC resistance • Suitable for power circuits

Fig. 5 - 1210 (3225)



FA Type: • Chip inductor for general use • Compact size with a wide inductance range **NA Type:** • Coreless Type • L is stable with respect to temperature and humidity suitable for high-frequency circuits **SA Type:** • Use of ferrite resin giving it an additional function of magnetic shield • Compact size with high inductance **PA Type:** • High power • High rated DC current • Suitable for power line as choke coil **EA Type:** • Low DC resistance

Fig. 6 - 1812 (4532)



FB Type: Chip inductor for general use • High inductance

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T/R Pricing 10,000	Panasonic Part No.
Fig. 1, 0402 (1005) — Type RF														
1.0nH	±0.3nH	8	21	100	6000	0.05	400	PCD1264CT-ND†	.29	.25	.19	PCD1264TR-ND	103.00/M	ELJ-RF1N0DF
1.2nH	±0.3nH	8	21	100	6000	0.06	400	PCD1265CT-ND†	.29	.25	.19	PCD1265TR-ND	103.00/M	ELJ-RF1N2DF
1.5nH	±0.3nH	8	21	100	6000	0.07	400	PCD1266CT-ND†	.29	.25	.19	PCD1266TR-ND	103.00/M	ELJ-RF1N5DF
1.8nH	±0.3nH	8	21	100	6000	0.08	400	PCD1267CT-ND†	.29	.25	.19	PCD1267TR-ND	103.00/M	ELJ-RF1N8DF
2.2nH	±0.3nH	8	21	100	6000	0.09	400	PCD1268CT-ND†	.29	.25	.19	PCD1268TR-ND	103.00/M	ELJ-RF2N2DF
2.7nH	±0.3nH	8	21	100	5500	0.10	400	PCD1269CT-ND†	.29	.25	.19	PCD1269TR-ND	103.00/M	ELJ-RF2N7DF
3.3nH	±0.3nH	7	21	100	5500	0.12	400	PCD1270CT-ND†	.29	.25	.19	PCD1270TR-ND	103.00/M	ELJ-RF3N3DF
3.9nH	±0.3nH	7	20	100	5200	0.15	360	PCD1271CT-ND†	.29	.25	.19	PCD1271TR-ND	103.00/M	ELJ-RF3N9DF
4.7nH	±0.3nH	7	20	100	4800	0.17	360	PCD1272CT-ND†	.29	.25	.19	PCD1272TR-ND	103.00/M	ELJ-RF4N7DF
5.6nH	±0.3nH	7	20	100	4600	0.19	340	PCD1273CT-ND†	.29	.25	.19	PCD1273TR-ND	103.00/M	ELJ-RF5N6DF
6.8nH	5%	7	19	100	4000	0.30	320	PCD1274CT-ND†	.29	.25	.19	PCD1274TR-ND	103.00/M	ELJ-RF6N8JF
8.2nH	5%	7	19	100	3500	0.35	320	PCD1275CT-ND†	.29	.25	.19	PCD1275TR-ND	103.00/M	ELJ-RF8N2JF
10.0nH	5%	7	19	100	2800	0.41	320	PCD1276CT-ND†	.29	.25	.19	PCD1276TR-ND	103.00/M	ELJ-RF10NJF
12.0nH	5%	7	19	100	2800	0.45	320	PCD1277CT-ND†	.29	.25	.19	PCD1277TR-ND	103.00/M	ELJ-RF12NJF
15.0nH	5%	7	19	100	2500	0.60	240	PCD1278CT-ND†	.29	.25	.19	PCD1278TR-ND	103.00/M	ELJ-RF15NJF
18.0nH	5%	7	19	100	2200	0.70	240	PCD1279CT-ND†	.29	.25	.19	PCD1279TR-ND	103.00/M	ELJ-RF18NJF
22.0nH	5%	7	19	100	2000	0.80	200	PCD1280CT-ND†	.29	.25	.19	PCD1280TR-ND	103.00/M	ELJ-RF22NJF
27.0nH	5%	7	19	100	1800	1.20	200	PCD1281CT-ND†	.29	.25	.19	PCD1281TR-ND	103.00/M	ELJ-RF27NJF
33.0nH	5%	7	18	100	1800	1.40	170	PCD1282CT-ND†	.29	.25	.19	PCD1282TR-ND	103.00/M	ELJ-RF33NJF
39.0nH	5%	7	18	100	1800	1.70	150	PCD1283CT-ND†	.29	.25	.19	PCD1283TR-ND	103.00/M	ELJ-RF39NJF
47.0nH	5%	7	—	100	1800	2.10	140	PCD1326CT-ND	.29	.25	.19	PCD1326TR-ND	103.00/M	ELJ-RF47NJF
56.0nH	5%	7	—	100	1500	2.50	130	PCD1327CT-ND	.72	.60	.47	PCD1327TR-ND	255.00/M	ELJ-RF56NJF
68.0nH	5%	7	—	100	1500	4.00	120	PCD1328CT-ND	.72	.60	.47	PCD1328TR-ND	255.00/M	ELJ-RF68NJF
82.0nH	5%	7	—	100	1400	4.50	110	PCD1329CT-ND	.72	.60	.47	PCD1329TR-ND	255.00/M	ELJ-RF82NJF
100.0nH	5%	7	—	100	1200	5.50	90	PCD1330CT-ND	.72	.60	.47	PCD1330TR-ND	255.00/M	ELJ-RFR10JF
† **PCD3-KIT-ND** ***Digi-Key® RF Surface Mount Inductors Kit*** 10 each of values denoted (200 total pieces)……………………**$69.95**														
Fig. 1, 0402 (1005) — Type PF														
2.2nH	±0.3nH	7	—	100	5300	0.04	1900	PCD1539CT-ND	.83	.69	.54	PCD1539TR-ND	294.00/M	ELJ-PF2N2DF
2.7nH	±0.3nH	7	—	100	5300	0.05	1800	PCD1540CT-ND	.83	.69	.54	PCD1540TR-ND	294.00/M	ELJ-PF2N7DF
3.3nH	±0.3nH	7	—	100	5000	0.07	1500	PCD1541CT-ND	.83	.69	.54	PCD1541TR-ND	294.00/M	ELJ-PF3N3DF
3.9nH	±0.3nH	7	—	100	4800	0.08	1400	PCD1542CT-ND	.83	.69	.54	PCD1542TR-ND	294.00/M	ELJ-PF3N9DF
4.7nH	±0.3nH	7	—	100	4600	0.10	1300	PCD1543CT-ND	.83	.69	.54	PCD1543TR-ND	294.00/M	ELJ-PF4N7DF
5.6nH	±0.3nH	7	—	100	4200	0.12	1200	PCD1544CT-ND	.83	.69	.54	PCD1544TR-ND	294.00/M	ELJ-PF5N6DF
6.8nH	5%	7	—	100	4000	0.16	1100	PCD1545CT-ND	.83	.69	.54	PCD1545TR-ND	294.00/M	ELJ-PF6N8JF
8.2nH	5%	7	—	100	3700	0.21	900	PCD1546CT-ND	.83	.69	.54	PCD1546TR-ND	294.00/M	ELJ-PF8N2JF
10.0nH	5%	7	—	100	3200	0.26	750	PCD1547CT-ND	.83	.69	.54	PCD1547TR-ND	294.00/M	ELJ-PF10NJF
Inductance	**Tolerance**	**Q Min**	**Q Typ @ 800 MHz**	**L,Q Test freq (MHz)**	**S.R.F. Min (MHz)**	**RDC Max (Ohm)**	**IDC Max (mA)**	**Digi-Key Part No.**	**Cut Tape Price Each 1**	**10**	**100**	**Digi-Key Part No.**	**T/R Pricing 3,000**	**Panasonic Part No.**
Fig. 2, 0603 (1608) — Type RE (2% Tolerance)														
1.5nH	±0.2nH	8	47	100	6000	0.07	500	PCD1284CT-ND	1.03	.86	.67	PCD1284TR-ND	364.50/M	ELJ-RE1N5ZF2
1.8nH	±0.2nH	8	45	100	6000	0.08	500	PCD1285CT-ND	1.03	.86	.67	PCD1285TR-ND	364.50/M	ELJ-RE1N8ZF2
2.2nH	±0.2nH	8	35	100	6000	0.09	500	PCD1286CT-ND	1.03	.86	.67	PCD1286TR-ND	364.50/M	ELJ-RE2N2ZF2
2.7nH	±0.2nH	8	35	100	6000	0.10	500	PCD1287CT-ND	1.03	.86	.67	PCD1287TR-ND	364.50/M	ELJ-RE2N7ZF2
3.3nH	±0.2nH	9	35	100	5500	0.12	500	PCD1288CT-ND	1.03	.86	.67	PCD1288TR-ND	364.50/M	ELJ-RE3N3ZF2
3.9nH	±0.2nH	9	36	100	5500	0.15	450	PCD1289CT-ND	1.03	.86	.67	PCD1289TR-ND	364.50/M	ELJ-RE3N9ZF2
4.7nH	±0.2nH	9	36	100	4800	0.17	450	PCD1290CT-ND	1.03	.86	.67	PCD1290TR-ND	364.50/M	ELJ-RE4N7ZF2
5.6nH	±0.2nH	9	36	100	4600	0.18	430	PCD1291CT-ND	1.03	.86	.67	PCD1291TR-ND	364.50/M	ELJ-RE5N6ZF2
6.8nH	±0.2nH	9	36	100	3550	0.20	430	PCD1292CT-ND	1.03	.86	.67	PCD1292TR-ND	364.50/M	ELJ-RE6N8ZF2
8.2nH	±0.2nH	9	36	100	3500	0.28	400	PCD1293CT-ND	1.03	.86	.67	PCD1293TR-ND	364.50/M	ELJ-RE8N2ZF2
10nH	2%	10	37	100	2800	0.32	400	PCD1294CT-ND	1.03	.86	.67	PCD1294TR-ND	364.50/M	ELJ-RE10NGF2
12nH	2%	10	37	100	2800	0.35	400	PCD1295CT-ND	1.03	.86	.67	PCD1295TR-ND	364.50/M	ELJ-RE12NGF2
15nH	2%	10	38	100	2500	0.41	350	PCD1296CT-ND	1.03	.86	.67	PCD1296TR-ND	364.50/M	ELJ-RE15NGF2
18nH	2%	10	39	100	2300	0.45	350	PCD1297CT-ND	1.03	.86	.67	PCD1297TR-ND	364.50/M	ELJ-RE18NGF2
22nH	2%	10	40	100	2000	0.50	300	PCD1298CT-ND	1.03	.86	.67	PCD1298TR-ND	364.50/M	ELJ-RE22NGF2
27nH	2%	10	41	100	2000	0.55	300	PCD1299CT-ND	1.03	.86	.67	PCD1299TR-ND	364.50/M	ELJ-RE27NGF2

(Continued)

Panasonic Surface Mount Inductors *(Cont.)*

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T/R Pricing 3,000	Panasonic Part No.
									1	10	100			
Fig. 2, 0603 (1608) — Type RE (2% Tolerance)														
33nH	2%	10	40	100	1800	0.60	300	PCD1300CT-ND	1.03	.86	.67	PCD1300TR-ND	364.50/M	ELJ-RE33NGF2
39nH	2%	11	39	100	1800	0.80	300	PCD1301CT-ND	1.03	.86	.67	PCD1301TR-ND	364.50/M	ELJ-RE39NGF2
47nH	2%	11	38	100	1800	0.95	250	PCD1302CT-ND	1.03	.86	.67	PCD1302TR-ND	364.50/M	ELJ-RE47NGF2
56nH	2%	12	35	100	1800	1.2	250	PCD1303CT-ND	1.03	.86	.67	PCD1303TR-ND	364.50/M	ELJ-RE56NGF3
68nH	2%	12	35	100	1500	1.3	250	PCD1304CT-ND	1.03	.86	.67	PCD1304TR-ND	364.50/M	ELJ-RE68NGF3
82nH	2%	12	33	100	1500	1.5	250	PCD1305CT-ND	1.03	.86	.67	PCD1305TR-ND	364.50/M	ELJ-RE82NGF3
100nH	2%	12	30	100	1300	1.8	200	PCD1306CT-ND	1.03	.86	.67	PCD1306TR-ND	364.50/M	ELJ-RER10GF3
PCD4-KIT-ND ***Digi-Key® RE (2% Tol.) Surface Mount Inductors Kit*** 10 each of all 23 values (230 total) **$79.95**														
Fig. 2, 0603 (1608) — Type RE (5% Tolerance)														
1.5nH	±0.3nH	8	47	100	6000	0.07	500	PCD1196CT-ND‡	.28	.23	.19	PCD1196TR-ND	98.00/M	ELJ-RE1N5DF2
1.8nH	±0.3nH	8	45	100	6000	0.08	500	PCD1197CT-ND‡	.28	.23	.19	PCD1197TR-ND	98.00/M	ELJ-RE1N8DF2
2.2nH	±0.3nH	8	35	100	6000	0.09	500	PCD1143CT-ND‡	.28	.23	.19	PCD1143TR-ND	98.00/M	ELJ-RE2N2DF2
2.7nH	±0.3nH	8	35	100	6000	0.10	500	PCD1144CT-ND‡	.28	.23	.19	PCD1144TR-ND	98.00/M	ELJ-RE2N7DF2
3.3nH	±0.3nH	9	35	100	5500	0.12	500	PCD1145CT-ND‡	.28	.23	.19	PCD1145TR-ND	98.00/M	ELJ-RE3N3DF2
3.9nH	5%	9	36	100	5500	0.15	450	PCD1146CT-ND‡	.28	.23	.19	PCD1146TR-ND	98.00/M	ELJ-RE3N9JF2
4.7nH	5%	9	36	100	4800	0.17	450	PCD1147CT-ND‡	.28	.23	.19	PCD1147TR-ND	98.00/M	ELJ-RE4N7JF2
5.6nH	5%	9	36	100	4600	0.18	430	PCD1148CT-ND‡	.28	.23	.19	PCD1148TR-ND	98.00/M	ELJ-RE5N6JF2
6.8nH	5%	9	36	100	3550	0.20	430	PCD1149CT-ND‡	.28	.23	.19	PCD1149TR-ND	98.00/M	ELJ-RE6N8JF2
8.2nH	5%	9	36	100	3500	0.28	400	PCD1150CT-ND‡	.28	.23	.19	PCD1150TR-ND	98.00/M	ELJ-RE8N2JF2
10nH	5%	10	37	100	2800	0.32	400	PCD1151CT-ND‡	.28	.23	.19	PCD1151TR-ND	98.00/M	ELJ-RE10NJF2
12nH	5%	10	37	100	2800	0.35	400	PCD1152CT-ND‡	.28	.23	.19	PCD1152TR-ND	98.00/M	ELJ-RE12NJF2
15nH	5%	10	38	100	2500	0.41	350	PCD1153CT-ND‡	.28	.23	.19	PCD1153TR-ND	98.00/M	ELJ-RE15NJF2
18nH	5%	10	39	100	2300	0.45	350	PCD1154CT-ND‡	.28	.23	.19	PCD1154TR-ND	98.00/M	ELJ-RE18NJF2
22nH	5%	10	40	100	2000	0.50	300	PCD1155CT-ND‡	.28	.23	.19	PCD1155TR-ND	98.00/M	ELJ-RE22NJF2
27nH	5%	10	41	100	2000	0.55	300	PCD1156CT-ND‡	.28	.23	.19	PCD1156TR-ND	98.00/M	ELJ-RE27NJF2
33nH	5%	10	40	100	1800	0.60	300	PCD1157CT-ND‡	.28	.23	.19	PCD1157TR-ND	98.00/M	ELJ-RE33NJF2
39nH	5%	11	39	100	1800	0.80	300	PCD1158CT-ND‡	.28	.23	.19	PCD1158TR-ND	98.00/M	ELJ-RE39NJF2
47nH	5%	11	38	100	1800	0.95	250	PCD1159CT-ND‡	.28	.23	.19	PCD1159TR-ND	98.00/M	ELJ-RE47NJF2
56nH	5%	12	35	100	1800	1.20	250	PCD1198CT-ND‡	.28	.23	.19	PCD1198TR-ND	98.00/M	ELJ-RE56NJF3
68nH	5%	12	35	100	1500	1.30	250	PCD1199CT-ND‡	.28	.23	.19	PCD1199TR-ND	98.00/M	ELJ-RE68NJF3
82nH	5%	12	33	100	1500	1.50	250	PCD1200CT-ND‡	.28	.23	.19	PCD1200TR-ND	98.00/M	ELJ-RE82NJF3
100nH	5%	12	30	100	1300	1.80	200	PCD1201CT-ND‡	.28	.23	.19	PCD1201TR-ND	98.00/M	ELJ-RER10JF3
120nH	5%	5	25	25.2	1200	3.00	130	PCD1322CT-ND	1.25	1.03	.81	PCD1322TR-ND	440.00/M	ELJ-RER12JF3
150nH	5%	5	22	25.2	1100	4.50	100	PCD1323CT-ND	1.25	1.03	.81	PCD1323TR-ND	440.00/M	ELJ-RER15JF3
180nH	5%	4	20	25.2	1000	6.50	80	PCD1324CT-ND	1.25	1.03	.81	PCD1324TR-ND	440.00/M	ELJ-RER18JF3
220nH	5%	4	—	25.2	900	7.50	70	PCD1325CT-ND	1.25	1.03	.81	PCD1325TR-ND	440.00/M	ELJ-RER22JF3
‡ **PCD1-KIT-ND** ***Digi-Key® RE (5% Tol.) Surface Mount Inductors Kit*** 10 Each of Denoted Values (230 Total Pieces) **$69.95**														
Fig. 2, 0603 (1608) — Type PE														
2.2nH	10%	8	—	100	6000	0.030	2.1	PCD1404CT-ND	.69	.58	.45	PCD1404TR-ND	245.00/M	ELJ-PE2N2KF
2.7nH	10%	8	—	100	5500	0.030	2.1	PCD1405CT-ND	.69	.58	.45	PCD1405TR-ND	245.00/M	ELJ-PE2N7KF
3.3nH	10%	8	—	100	5500	0.040	2.1	PCD1406CT-ND	.69	.58	.45	PCD1406TR-ND	245.00/M	ELJ-PE3N3KF
3.9nH	10%	9	—	100	5200	0.040	2.1	PCD1407CT-ND	.69	.58	.45	PCD1407TR-ND	245.00/M	ELJ-PE3N9KF
4.7nH	10%	9	—	100	4800	0.050	2.1	PCD1408CT-ND	.69	.58	.45	PCD1408TR-ND	245.00/M	ELJ-PE4N7KF
5.6nH	10%	9	—	100	4600	0.055	2.1	PCD1409CT-ND	.69	.58	.45	PCD1409TR-ND	245.00/M	ELJ-PE5N6KF
6.8nH	10%	9	—	100	4000	0.055	1.9	PCD1410CT-ND	.69	.58	.45	PCD1410TR-ND	245.00/M	ELJ-PE6N8KF
8.2nH	10%	9	—	100	3500	0.060	1.7	PCD1411CT-ND	.69	.58	.45	PCD1411TR-ND	245.00/M	ELJ-PE8N2KF
10nH	10%	9	—	100	2800	0.065	1.4	PCD1412CT-ND	.69	.58	.45	PCD1412TR-ND	245.00/M	ELJ-PE10NKF
12nH	10%	9	—	100	2500	0.080	1.3	PCD1413CT-ND	.69	.58	.45	PCD1413TR-ND	245.00/M	ELJ-PE12NKF
15nH	10%	9	—	100	2200	0.100	0.9	PCD1414CT-ND	.69	.58	.45	PCD1414TR-ND	245.00/M	ELJ-PE15NKF
18nH	10%	9	—	100	2000	0.120	0.8	PCD1415CT-ND	.69	.58	.45	PCD1415TR-ND	245.00/M	ELJ-PE18NKF
22nH	10%	9	—	100	1800	0.150	0.7	PCD1416CT-ND	.69	.58	.45	PCD1416TR-ND	245.00/M	ELJ-PE22NKF
Fig. 2, 0603 (1608) — Type NJ														
6.8nH	±0.5nH	35	—	250	6000	0.08	700	PCD1503CT-ND	.73	.60	.48	PCD1503TR-ND	256.50/M	ELJ-NJ6N8EF2
8.2nH	±0.5nH	35	—	250	6000	0.10	630	PCD1504CT-ND	.73	.60	.48	PCD1504TR-ND	256.50/M	ELJ-NJ8N2EF2
10nH	5%	35	—	250	6000	0.10	630	PCD1505CT-ND	.73	.60	.48	PCD1505TR-ND	256.50/M	ELJ-NJ10NJF2
12nH	5%	35	—	250	6000	0.13	550	PCD1506CT-ND	.73	.60	.48	PCD1506TR-ND	256.50/M	ELJ-NJ12NJF2
15nH	5%	40	—	250	5000	0.13	550	PCD1507CT-ND	.73	.60	.48	PCD1507TR-ND	256.50/M	ELJ-NJ15NJF2
18nH	5%	40	—	250	5000	0.15	510	PCD1508CT-ND	.73	.60	.48	PCD1508TR-ND	256.50/M	ELJ-NJ18NJF2
22nH	5%	40	—	250	4600	0.17	480	PCD1509CT-ND	.73	.60	.48	PCD1509TR-ND	256.50/M	ELJ-NJ22NJF2
27nH	5%	40	—	250	3800	0.20	440	PCD1510CT-ND	.73	.60	.48	PCD1510TR-ND	256.50/M	ELJ-NJ27NJF2
33nH	5%	40	—	250	3500	0.23	420	PCD1511CT-ND	.73	.60	.48	PCD1511TR-ND	256.50/M	ELJ-NJ33NJF2
39nH	5%	40	—	250	3200	0.25	400	PCD1512CT-ND	.73	.60	.48	PCD1512TR-ND	256.50/M	ELJ-NJ39NJF2
47nH	5%	38	—	200	3000	0.28	380	PCD1513CT-ND	.73	.60	.48	PCD1513TR-ND	256.50/M	ELJ-NJ47NJF2
56nH	5%	38	—	200	2700	0.30	360	PCD1514CT-ND	.73	.60	.48	PCD1514TR-ND	256.50/M	ELJ-NJ56NJF2
68nH	5%	38	—	200	2300	0.35	340	PCD1515CT-ND	.73	.60	.48	PCD1515TR-ND	256.50/M	ELJ-NJ68NJF2
82nH	5%	34	—	150	2200	0.48	290	PCD1516CT-ND	.73	.60	.48	PCD1516TR-ND	256.50/M	ELJ-NJ82NJF2
100nH	5%	34	—	150	2000	0.62	250	PCD1517CT-ND	.73	.60	.48	PCD1517TR-ND	256.50/M	ELJ-NJR10JF2
120nH	5%	32	—	150	1700	0.90	210	PCD1518CT-ND	.73	.60	.48	PCD1518TR-ND	256.50/M	ELJ-NJR12JF2
150nH	5%	32	—	150	1400	1.30	160	PCD1519CT-ND	.73	.60	.48	PCD1519TR-ND	256.50/M	ELJ-NJR15JF2
180nH	5%	25	—	100	1300	2.00	140	PCD1520CT-ND	.73	.60	.48	PCD1520TR-ND	256.50/M	ELJ-NJR18JF2
220nH	5%	25	—	100	1200	2.20	120	PCD1521CT-ND	.73	.60	.48	PCD1521TR-ND	256.50/M	ELJ-NJR22JF2
Fig. 2, 0805 (2012) — Type ND														
10nH	10%	10	48	100	3300	0.14	540	PCD1160CT-ND	.83	.69	.54	PCD1160TR-ND	294.00/M	ELJ-ND10NKF
12nH	10%	10	53	100	3300	0.18	535	PCD1161CT-ND	.83	.69	.54	PCD1161TR-ND	294.00/M	ELJ-ND12NKF
12nH	5%	10	53	100	3300	0.18	535	PCD1185CT-ND	.83	.69	.54	PCD1185TR-ND	328.00/M	ELJ-ND12NJF
15nH	10%	12	55	100	3000	0.18	520	PCD1162CT-ND	.83	.69	.54	PCD1162TR-ND	294.00/M	ELJ-ND15NKF
18nH	10%	12	55	100	3000	0.22	480	PCD1163CT-ND	.83	.69	.54	PCD1163TR-ND	294.00/M	ELJ-ND18NKF
22nH	10%	15	55	100	2600	0.22	465	PCD1164CT-ND	.83	.69	.54	PCD1164TR-ND	294.00/M	ELJ-ND22NKF
27nH	10%	15	57	100	2500	0.26	455	PCD1165CT-ND	.83	.69	.54	PCD1165TR-ND	294.00/M	ELJ-ND27NKF
33nH	10%	15	58	100	2050	0.30	395	PCD1166CT-ND	.83	.69	.54	PCD1166TR-ND	294.00/M	ELJ-ND33NKF
39nH	5%	15	55	100	2000	0.31	390	PCD1167CT-ND	.93	.77	.61	PCD1167TR-ND	328.00/M	ELJ-ND39NJF
47nH	5%	15	50	100	1650	0.35	385	PCD1168CT-ND	.93	.77	.61	PCD1168TR-ND	328.00/M	ELJ-ND47NJF
56nH	5%	15	45	100	1550	0.39	360	PCD1169CT-ND	.93	.77	.61	PCD1169TR-ND	328.00/M	ELJ-ND56NJF
68nH	5%	15	44	100	1450	0.44	340	PCD1170CT-ND	.93	.77	.61	PCD1170TR-ND	328.00/M	ELJ-ND68NJF
82nH	5%	15	40	100	1100	0.48	330	PCD1171CT-ND	.93	.77	.61	PCD1171TR-ND	328.00/M	ELJ-ND82NJF
100nH	5%	8	35	25.2	800	0.66	285	PCD1172CT-ND	.93	.77	.61	PCD1172TR-ND	328.00/M	ELJ-NDR10JF
120nH	5%	8	—	25.2	600	0.76	275	PCD1173CT-ND	.93	.77	.61	PCD1173TR-ND	328.00/M	ELJ-NDR12JF
150nH	5%	10	—	25.2	600	1.13	230	PCD1174CT-ND	.93	.77	.61	PCD1174TR-ND	328.00/M	ELJ-NDR15JF
180nH	5%	10	—	25.2	600	1.24	195	PCD1175CT-ND	.93	.77	.61	PCD1175TR-ND	328.00/M	ELJ-NDR18JF
220nH	5%	10	—	25.2	500	1.41	170	PCD1176CT-ND	.93	.77	.61	PCD1176TR-ND	328.00/M	ELJ-NDR22JF
270nH	5%	10	—	25.2	300	1.50	165	PCD1177CT-ND	.93	.77	.61	PCD1177TR-ND	328.00/M	ELJ-NDR27JF
330nH	5%	10	—	25.2	200	1.66	160	PCD1178CT-ND	.93	.77	.61	PCD1178TR-ND	328.00/M	ELJ-NDR33JF
390nH	5%	10	—	25.2	150	1.82	150	PCD1179CT-ND	.93	.77	.61	PCD1179TR-ND	328.00/M	ELJ-NDR39JF
470nH	5%	10	—	25.2	150	1.97	145	PCD1180CT-ND	.93	.77	.61	PCD1180TR-ND	328.00/M	ELJ-NDR47JF
560nH	5%	10	—	25.2	100	2.07	140	PCD1181CT-ND	.93	.77	.61	PCD1181TR-ND	328.00/M	ELJ-NDR56JF
680nH	5%	10	—	25.2	100	2.32	130	PCD1182CT-ND	.93	.77	.61	PCD1182TR-ND	328.00/M	ELJ-NDR68JF
820nH	5%	10	—	25.2	80	2.60	125	PCD1183CT-ND	.93	.77	.61	PCD1183TR-ND	328.00/M	ELJ-NDR82JF
1000nH	5%	8	—	7.96	80	2.98	120	PCD1184CT-ND	.93	.77	.61	PCD1184TR-ND	328.00/M	ELJ-ND1R0JF
PCD2-KIT-ND ***Digi-Key® ND Surface Mount Inductors Kit*** 10 Each of 25 Values (PCD1185CT-ND Not Included) (250 Total Pieces) **$99.95**														
Fig. 3, 0805 (2012) — Type FD														
0.82uH	10%	8	—	25.2	370	1.36	190	PCD1186CT-ND	1.76	1.46	1.15	PCD1186TR-ND	623.00/M	ELJ-FDR82KF
1.0uH	10%	15	—	7.96	300	1.56	160	PCD1187CT-ND	1.76	1.46	1.15	PCD1187TR-ND	623.00/M	ELJ-FD1R0KF
1.2uH	10%	15	—	7.96	200	1.60	155	PCD1188CT-ND	1.76	1.46	1.15	PCD1188TR-ND	623.00/M	ELJ-FD1R2KF
1.5uH	10%	15	—	7.96	100	1.85	150	PCD1189CT-ND	1.76	1.46	1.15	PCD1189TR-ND	623.00/M	ELJ-FD1R5KF

(Continued)

Panasonic Surface Mount Inductors *(Cont.)*

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L, Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T/R Pricing 3,000	Panasonic Part No.
									1	10	100			
Fig. 3, 0805 (2012) — Type FD														
1.8uH	10%	15	—	7.96	80	1.95	145	PCD1190CT-ND	1.76	1.46	1.15	PCD1190TR-ND	623.00/M	ELJ-FD1R8KF
2.2uH	10%	15	—	7.96	70	2.27	145	PCD1191CT-ND	1.76	1.46	1.15	PCD1191TR-ND	623.00/M	ELJ-FD2R2KF
2.7uH	10%	15	—	7.96	60	2.53	140	PCD1192CT-ND	1.76	1.46	1.15	PCD1192TR-ND	623.00/M	ELJ-FD2R7KF
3.3uH	10%	15	—	7.96	50	2.84	140	PCD1193CT-ND	1.76	1.46	1.15	PCD1193TR-ND	623.00/M	ELJ-FD3R3KF
3.9uH	10%	15	—	7.96	40	2.92	130	PCD1194CT-ND	1.76	1.46	1.15	PCD1194TR-ND	623.00/M	ELJ-FD3R9KF
4.7uH	10%	15	—	7.96	30	3.38	130	PCD1195CT-ND	1.76	1.46	1.15	PCD1195TR-ND	623.00/M	ELJ-FD4R7KF
Inductance	**Tolerance**	**Q Min**	**Q Typ @ 800 MHz**	**L, Q Test freq (MHz)**	**S.R.F. Min (MHz)**	**RDC Max (Ohm)**	**IDC Max (mA)**	**Digi-Key Part No.**	**Cut Tape Price Each 1**	**10**	**100**	**Digi-Key Part No.**	**T/R Pricing 2,000**	**Panasonic Part No.**
Fig. 4, 1008 (2520) — Type NC														
10nH	10%	10	—	100	2500	0.32	280	PCD1037CT-ND	1.01	.83	.66	PCD1037TR-ND	356.00/M	ELJ-NC10NKF
12nH	10%	10	—	100	2200	0.34	270	PCD1038CT-ND	1.01	.83	.66	PCD1038TR-ND	356.00/M	ELJ-NC12NKF
15nH	10%	10	—	100	1800	0.38	255	PCD1039CT-ND	1.01	.83	.66	PCD1039TR-ND	356.00/M	ELJ-NC15NKF
18nH	10%	10	—	100	1550	0.40	250	PCD1040CT-ND	1.01	.83	.66	PCD1040TR-ND	356.00/M	ELJ-NC18NKF
22nH	10%	15	—	100	1350	0.43	240	PCD1041CT-ND	1.01	.83	.66	PCD1041TR-ND	356.00/M	ELJ-NC22NKF
27nH	10%	15	—	100	1150	0.47	230	PCD1042CT-ND	1.01	.83	.66	PCD1042TR-ND	356.00/M	ELJ-NC27NKF
33nH	10%	15	—	100	1000	0.51	220	PCD1043CT-ND	1.01	.83	.66	PCD1043TR-ND	356.00/M	ELJ-NC33NKF
39nH	10%	15	—	100	890	0.55	215	PCD1044CT-ND	1.01	.83	.66	PCD1044TR-ND	356.00/M	ELJ-NC39NKF
47nH	10%	15	—	100	770	0.59	205	PCD1045CT-ND	1.01	.83	.66	PCD1045TR-ND	356.00/M	ELJ-NC47NKF
56nH	10%	15	—	100	670	0.63	200	PCD1046CT-ND	1.01	.83	.66	PCD1046TR-ND	356.00/M	ELJ-NC56NKF
68nH	10%	15	—	100	590	0.68	190	PCD1047CT-ND	1.01	.83	.66	PCD1047TR-ND	356.00/M	ELJ-NC68NKF
82nH	10%	15	—	100	520	0.73	185	PCD1048CT-ND	1.01	.83	.66	PCD1048TR-ND	356.00/M	ELJ-NC82NKF
100nH	10%	10	—	25.2	460	0.80	175	PCD1049CT-ND	1.01	.83	.66	PCD1049TR-ND	356.00/M	ELJ-NCR10KF
120nH	10%	10	—	25.2	400	0.87	170	PCD1050CT-ND	1.01	.83	.66	PCD1050TR-ND	356.00/M	ELJ-NCR12KF
150nH	10%	10	—	25.2	340	0.98	160	PCD1051CT-ND	1.01	.83	.66	PCD1051TR-ND	356.00/M	ELJ-NCR15KF
180nH	10%	10	—	25.2	300	1.05	155	PCD1052CT-ND	1.01	.83	.66	PCD1052TR-ND	356.00/M	ELJ-NCR18KF
33nH	5%	15	—	100	1000	0.51	220	PCD1202CT-ND	1.13	.93	.73	PCD1202TR-ND	398.00/M	ELJ-NC33NJF
39nH	5%	15	—	100	890	0.55	215	PCD1203CT-ND	1.13	.93	.73	PCD1203TR-ND	398.00/M	ELJ-NC39NJF
47nH	5%	15	—	100	770	0.59	205	PCD1204CT-ND	1.13	.93	.73	PCD1204TR-ND	398.00/M	ELJ-NC47NJF
56nH	5%	15	—	100	670	0.63	200	PCD1205CT-ND	1.13	.93	.73	PCD1205TR-ND	398.00/M	ELJ-NC56NJF
68nH	5%	15	—	100	590	0.68	190	PCD1206CT-ND	1.13	.93	.73	PCD1206TR-ND	398.00/M	ELJ-NC68NJF
82nH	5%	15	—	100	520	0.73	185	PCD1207CT-ND	1.13	.93	.73	PCD1207TR-ND	398.00/M	ELJ-NC82NJF
100nH	5%	10	—	25.2	460	0.80	175	PCD1208CT-ND	1.13	.93	.73	PCD1208TR-ND	398.00/M	ELJ-NCR10JF
120nH	5%	10	—	25.2	400	0.87	170	PCD1209CT-ND	1.13	.93	.73	PCD1209TR-ND	398.00/M	ELJ-NCR12JF
150nH	5%	10	—	25.2	340	0.98	160	PCD1210CT-ND	1.13	.93	.73	PCD1210TR-ND	398.00/M	ELJ-NCR15JF
180nH	5%	10	—	25.2	300	1.05	155	PCD1211CT-ND	1.13	.93	.73	PCD1211TR-ND	398.00/M	ELJ-NCR18JF
220nH	5%	10	—	25.2	260	1.15	145	PCD1212CT-ND	1.13	.93	.73	PCD1212TR-ND	398.00/M	ELJ-NCR22JF
270nH	5%	10	—	25.2	230	1.25	140	PCD1213CT-ND	1.13	.93	.73	PCD1213TR-ND	398.00/M	ELJ-NCR27JF
330nH	5%	10	—	25.2	200	1.37	135	PCD1214CT-ND	1.13	.93	.73	PCD1214TR-ND	398.00/M	ELJ-NCR33JF
390nH	5%	10	—	25.2	180	1.47	130	PCD1215CT-ND	1.13	.93	.73	PCD1215TR-ND	398.00/M	ELJ-NCR39JF
470nH	5%	10	—	25.2	160	1.58	125	PCD1216CT-ND	1.13	.93	.73	PCD1216TR-ND	398.00/M	ELJ-NCR47JF
560nH	5%	10	—	25.2	145	1.70	120	PCD1217CT-ND	1.13	.93	.73	PCD1217TR-ND	398.00/M	ELJ-NCR56JF
680nH	5%	10	—	25.2	130	1.85	110	PCD1218CT-ND	1.13	.93	.73	PCD1218TR-ND	398.00/M	ELJ-NCR68JF
820nH	5%	10	—	25.2	100	2.10	100	PCD1219CT-ND	1.13	.93	.73	PCD1219TR-ND	398.00/M	ELJ-NCR82JF
Fig. 4, 1008 (2520) — Type FC														
0.22uH	20%	25	—	25.2	230	0.7	190	PCD1053CT-ND	.77	.64	.51	PCD1053TR-ND	273.00/M	ELJ-FCR22MF
0.27uH	20%	25	—	25.2	210	0.75	180	PCD1054CT-ND	.77	.64	.51	PCD1054TR-ND	273.00/M	ELJ-FCR27MF
0.33uH	20%	25	—	25.2	190	0.85	170	PCD1055CT-ND	.77	.64	.50	PCD1055TR-ND	270.00/M	ELJ-FCR33MF
0.39uH	20%	25	—	25.2	175	0.95	160	PCD1056CT-ND	.77	.64	.50	PCD1056TR-ND	270.00/M	ELJ-FCR39MF
0.47uH	20%	25	—	25.2	160	1.0	155	PCD1057CT-ND	.77	.64	.50	PCD1057TR-ND	270.00/M	ELJ-FCR47MF
0.56uH	20%	25	—	25.2	150	1.1	150	PCD1058CT-ND	.77	.64	.50	PCD1058TR-ND	270.00/M	ELJ-FCR56MF
0.68uH	20%	25	—	25.2	135	1.25	140	PCD1059CT-ND	.77	.64	.50	PCD1059TR-ND	270.00/M	ELJ-FCR68MF
0.82uH	20%	25	—	25.2	125	1.4	130	PCD1060CT-ND	.77	.64	.50	PCD1060TR-ND	270.00/M	ELJ-FCR82MF
1.0uH	10%	25	—	7.96	115	0.65	195	PCD1061CT-ND	.77	.64	.50	PCD1061TR-ND	270.00/M	ELJ-FC1R0KF
1.2uH	10%	25	—	7.96	100	0.75	180	PCD1062CT-ND	.77	.64	.50	PCD1062TR-ND	270.00/M	ELJ-FC1R2KF
1.5uH	10%	25	—	7.96	90	0.85	170	PCD1063CT-ND	.77	.64	.50	PCD1063TR-ND	270.00/M	ELJ-FC1R5KF
1.8uH	10%	25	—	7.96	85	0.95	160	PCD1064CT-ND	.77	.64	.50	PCD1064TR-ND	270.00/M	ELJ-FC1R8KF
2.2uH	10%	25	—	7.96	80	1.05	155	PCD1065CT-ND	.77	.64	.50	PCD1065TR-ND	270.00/M	ELJ-FC2R2KF
2.7uH	10%	25	—	7.96	75	1.2	145	PCD1066CT-ND	.77	.64	.51	PCD1066TR-ND	273.00/M	ELJ-FC2R7KF
3.3uH	10%	25	—	7.96	65	1.3	135	PCD1067CT-ND	.77	.64	.51	PCD1067TR-ND	273.00/M	ELJ-FC3R3KF
3.9uH	10%	25	—	7.96	60	1.4	130	PCD1068CT-ND	.77	.64	.50	PCD1068TR-ND	270.00/M	ELJ-FC3R9KF
4.7uH	10%	25	—	7.96	55	1.55	125	PCD1069CT-ND	.77	.64	.50	PCD1069TR-ND	270.00/M	ELJ-FC4R7KF
5.6uH	10%	25	—	7.96	50	1.75	120	PCD1070CT-ND	.77	.64	.50	PCD1070TR-ND	270.00/M	ELJ-FC5R6KF
6.8uH	10%	25	—	7.96	45	1.95	115	PCD1071CT-ND	.77	.64	.50	PCD1071TR-ND	270.00/M	ELJ-FC6R8KF
8.2uH	10%	25	—	7.96	40	2.2	105	PCD1072CT-ND	.77	.64	.50	PCD1072TR-ND	270.00/M	ELJ-FC8R2KF
10uH	10%	25	—	2.52	32	3.5	80	PCD1073CT-ND	.77	.64	.50	PCD1073TR-ND	270.00/M	ELJ-FC100KF
12uH	10%	25	—	2.52	30	3.8	75	PCD1074CT-ND	.77	.64	.50	PCD1074TR-ND	270.00/M	ELJ-FC120KF
15uH	10%	25	—	2.52	28	4.4	70	PCD1075CT-ND	.77	.64	.50	PCD1075TR-ND	270.00/M	ELJ-FC150KF
18uH	10%	25	—	2.52	25	5.0	65	PCD1076CT-ND	.77	.64	.51	PCD1076TR-ND	273.00/M	ELJ-FC180KF
22uH	10%	25	—	2.52	22	5.8	60	PCD1077CT-ND	.77	.64	.50	PCD1077TR-ND	270.00/M	ELJ-FC220KF
0.22uH	10%	25	—	25.2	230	0.70	190	PCD1220CT-ND	.69	.57	.45	PCD1220TR-ND	244.00/M	ELJ-FCR22KF
0.27uH	10%	25	—	25.2	210	0.75	180	PCD1221CT-ND	.86	.71	.56	PCD1221TR-ND	303.00/M	ELJ-FCR27KF
0.33uH	10%	25	—	25.2	190	0.85	170	PCD1222CT-ND	.86	.71	.56	PCD1222TR-ND	303.00/M	ELJ-FCR33KF
0.39uH	10%	25	—	25.2	175	0.95	160	PCD1223CT-ND	.86	.71	.56	PCD1223TR-ND	303.00/M	ELJ-FCR39KF
0.47uH	10%	25	—	25.2	160	1.00	155	PCD1224CT-ND	.86	.71	.56	PCD1224TR-ND	303.00/M	ELJ-FCR47KF
0.56uH	10%	25	—	25.2	150	1.10	150	PCD1225CT-ND	.86	.71	.56	PCD1225TR-ND	303.00/M	ELJ-FCR56KF
0.68uH	10%	25	—	25.2	135	1.25	140	PCD1226CT-ND	.86	.71	.56	PCD1226TR-ND	303.00/M	ELJ-FCR68KF
0.82uH	10%	25	—	25.2	125	1.40	130	PCD1227CT-ND	.86	.71	.56	PCD1227TR-ND	303.00/M	ELJ-FCR82KF
1.0uH	5%	25	—	7.96	115	0.65	195	PCD1228CT-ND	.86	.71	.56	PCD1228TR-ND	303.00/M	ELJ-FC1R0JF
1.2uH	5%	25	—	7.96	100	0.75	180	PCD1229CT-ND	.86	.71	.56	PCD1229TR-ND	303.00/M	ELJ-FC1R2JF
1.5uH	5%	25	—	7.96	90	0.85	170	PCD1230CT-ND	.86	.71	.56	PCD1230TR-ND	303.00/M	ELJ-FC1R5JF
1.8uH	5%	25	—	7.96	85	0.95	160	PCD1231CT-ND	.86	.71	.56	PCD1231TR-ND	303.00/M	ELJ-FC1R8JF
2.2uH	5%	25	—	7.96	80	1.05	155	PCD1232CT-ND	.86	.71	.56	PCD1232TR-ND	303.00/M	ELJ-FC2R2JF
2.7uH	5%	25	—	7.96	75	1.20	145	PCD1233CT-ND	.86	.71	.56	PCD1233TR-ND	303.00/M	ELJ-FC2R7JF
3.3uH	5%	25	—	7.96	65	1.30	135	PCD1234CT-ND	.86	.71	.56	PCD1234TR-ND	303.00/M	ELJ-FC3R3JF
3.9uH	5%	25	—	7.96	60	1.40	130	PCD1235CT-ND	.86	.71	.56	PCD1235TR-ND	303.00/M	ELJ-FC3R9JF
4.7uH	5%	25	—	7.96	55	1.55	125	PCD1236CT-ND	.86	.71	.56	PCD1236TR-ND	303.00/M	ELJ-FC4R7JF
5.6uH	5%	25	—	7.96	50	1.75	120	PCD1237CT-ND	.86	.71	.56	PCD1237TR-ND	303.00/M	ELJ-FC5R6JF
6.8uH	5%	25	—	7.96	45	1.95	115	PCD1238CT-ND	.86	.71	.56	PCD1238TR-ND	303.00/M	ELJ-FC6R8JF
8.2uH	5%	25	—	7.96	40	2.2	105	PCD1239CT-ND	.86	.71	.56	PCD1239TR-ND	303.00/M	ELJ-FC8R2JF
10uH	5%	25	—	2.52	32	3.5	80	PCD1240CT-ND	.86	.71	.56	PCD1240TR-ND	303.00/M	ELJ-FC100JF
12uH	5%	25	—	2.52	30	3.8	75	PCD1241CT-ND	.86	.71	.56	PCD1241TR-ND	303.00/M	ELJ-FC120JF
15uH	5%	25	—	2.52	28	4.4	70	PCD1242CT-ND	.86	.71	.56	PCD1242TR-ND	303.00/M	ELJ-FC150JF
18uH	5%	25	—	2.52	25	5.0	65	PCD1243CT-ND	.86	.71	.56	PCD1243TR-ND	303.00/M	ELJ-FC180JF
22uH	5%	25	—	2.52	22	5.8	60	PCD1244CT-ND	.86	.71	.56	PCD1244TR-ND	303.00/M	ELJ-FC220JF
27uH	5%	20	—	2.52	21	6.3	115	PCD1245CT-ND	.86	.71	.56	PCD1245TR-ND	303.00/M	ELJ-FC270JF
33uH	5%	20	—	2.52	20	7.1	110	PCD1246CT-ND	.86	.71	.56	PCD1246TR-ND	303.00/M	ELJ-FC330JF
39uH	5%	20	—	2.52	18	9.5	90	PCD1247CT-ND	.86	.71	.56	PCD1247TR-ND	303.00/M	ELJ-FC390JF
47uH	5%	20	—	2.52	17	11.00	80	PCD1248CT-ND	.86	.71	.56	PCD1248TR-ND	303.00/M	ELJ-FC470JF
56uH	5%	20	—	2.52	16	12.1	75	PCD1249CT-ND	.86	.71	.56	PCD1249TR-ND	303.00/M	ELJ-FC560JF
68uH	5%	20	—	2.52	15	16.6	70	PCD1250CT-ND	.86	.71	.56	PCD1250TR-ND	303.00/M	ELJ-FC680JF
82uH	5%	20	—	2.52	13	19.0	65	PCD1251CT-ND	.86	.71	.56	PCD1251TR-ND	303.00/M	ELJ-FC820JF
100uH	5%	15	—	0.796	12	21.0	60	PCD1252CT-ND	.86	.71	.56	PCD1252TR-ND	303.00/M	ELJ-FC101JF
Fig. 4, 1008 (2520) — Type SC														
27uH	10%	40	—	2.52	20	4.5	18	PCD1078CT-ND	.85	.71	.56	PCD1078TR-ND	302.00/M	ELJ-SC270KF
33uH	10%	40	—	2.52	18	5.2	14	PCD1079CT-ND	.85	.71	.56	PCD1079TR-ND	302.00/M	ELJ-SC330KF

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Panasonic® Surface Mount Inductors *(Cont.)*

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	T/R Pricing 2,000	Panasonic Part No.
									1	10	100			
Fig. 4, 1008 (2520) — Type SC														
39uH	10%	40	—	2.52	15	5.7	13	PCD1080CT-ND	.85	.71	.56	PCD1080TR-ND	302.00/M	ELJ-SC390KF
47uH	10%	40	—	2.52	14	6.6	12	PCD1081CT-ND	.85	.71	.56	PCD1081TR-ND	302.00/M	ELJ-SC470KF
56uH	10%	40	—	2.52	13	7.1	10	PCD1082CT-ND	.85	.71	.56	PCD1082TR-ND	302.00/M	ELJ-SC560KF
68uH	10%	25	—	2.52	13	6.5	17	PCD1083CT-ND	.85	.71	.56	PCD1083TR-ND	302.00/M	ELJ-SC680KF
82uH	10%	25	—	2.52	13	7.4	14	PCD1084CT-ND	.85	.71	.56	PCD1084TR-ND	302.00/M	ELJ-SC820KF
100uH	10%	25	—	0.796	12	8.4	10	PCD1085CT-ND	.85	.71	.56	PCD1085TR-ND	302.00/M	ELJ-SC101KF
Fig. 4, 1008 (2520) — Type PC														
1.0uH	20%	10	—	7.96	95	0.45	475	PCD1086CT-ND	.86	.72	.56	PCD1086TR-ND	305.00/M	ELJ-PC1R0MF
1.5uH	20%	10	—	7.96	85	0.55	435	PCD1087CT-ND	.86	.72	.56	PCD1087TR-ND	305.00/M	ELJ-PC1R5MF
2.2uH	20%	10	—	7.96	65	0.65	390	PCD1088CT-ND	.86	.72	.56	PCD1088TR-ND	305.00/M	ELJ-PC2R2MF
3.3uH	20%	8	—	7.96	55	0.85	340	PCD1089CT-ND	.86	.72	.56	PCD1089TR-ND	305.00/M	ELJ-PC3R3MF
4.7uH	20%	8	—	7.96	43	1.2	285	PCD1090CT-ND	.86	.72	.56	PCD1090TR-ND	305.00/M	ELJ-PC4R7MF
6.8uH	10%	8	—	7.96	39	1.3	275	PCD1091CT-ND	.86	.72	.56	PCD1091TR-ND	305.00/M	ELJ-PC6R8KF
10uH	10%	20	—	2.52	32	2.2	210	PCD1092CT-ND	.86	.72	.56	PCD1092TR-ND	305.00/M	ELJ-PC100KF
12uH	10%	20	—	2.52	25	2.7	195	PCD1093CT-ND	.86	.72	.56	PCD1093TR-ND	305.00/M	ELJ-PC120KF
15uH	10%	20	—	2.52	21	3.2	175	PCD1094CT-ND	.86	.72	.56	PCD1094TR-ND	305.00/M	ELJ-PC150KF
22uH	10%	20	—	2.52	18	4.0	160	PCD1095CT-ND	.86	.72	.56	PCD1095TR-ND	305.00/M	ELJ-PC220KF
33uH	10%	20	—	2.52	16	6.5	120	PCD1096CT-ND	.86	.72	.56	PCD1096TR-ND	305.00/M	ELJ-PC330KF
Fig. 5, 1210 (3225) — Type FA														
0.22uH	20%	25	—	25.2	230	0.29	360	PCD1000CT-ND	.62	.52	.41	PCD1000TR-ND	219.00/M	ELJ-FAR22MF2
0.27uH	20%	25	—	25.2	210	0.32	345	PCD1001CT-ND	.62	.52	.41	PCD1001TR-ND	219.00/M	ELJ-FAR27MF2
0.33uH	20%	25	—	25.2	190	0.35	330	PCD1002CT-ND	.62	.52	.41	PCD1002TR-ND	219.00/M	ELJ-FAR33MF2
0.39uH	20%	25	—	25.2	175	0.39	305	PCD1003CT-ND	.62	.52	.41	PCD1003TR-ND	219.00/M	ELJ-FAR39MF2
0.47uH	20%	25	—	25.2	160	0.44	290	PCD1004CT-ND	.62	.52	.41	PCD1004TR-ND	219.00/M	ELJ-FAR47MF2
0.56uH	20%	25	—	25.2	150	0.49	275	PCD1005CT-ND	.62	.52	.41	PCD1005TR-ND	219.00/M	ELJ-FAR56MF2
0.68uH	20%	25	—	25.2	135	0.55	260	PCD1006CT-ND	.62	.52	.41	PCD1006TR-ND	219.00/M	ELJ-FAR68MF2
0.82uH	20%	25	—	25.2	125	0.61	245	PCD1007CT-ND	.62	.52	.41	PCD1007TR-ND	219.00/M	ELJ-FAR82MF2
1.0uH	10%	30	—	7.96	115	0.69	230	PCD1008CT-ND	.62	.52	.41	PCD1008TR-ND	219.00/M	ELJ-FA1R0KF2
1.2uH	10%	30	—	7.96	100	0.75	215	PCD1009CT-ND	.62	.52	.41	PCD1009TR-ND	219.00/M	ELJ-FA1R2KF2
1.5uH	10%	30	—	7.96	90	0.75	210	PCD1010CT-ND	.62	.52	.41	PCD1010TR-ND	219.00/M	ELJ-FA1R5KF
1.8uH	10%	30	—	7.96	85	0.82	200	PCD1011CT-ND	.62	.52	.41	PCD1011TR-ND	219.00/M	ELJ-FA1R8KF
2.2uH	10%	30	—	7.96	80	0.95	190	PCD1012CT-ND	.62	.52	.41	PCD1012TR-ND	219.00/M	ELJ-FA2R2KF
2.7uH	10%	30	—	7.96	75	1.1	180	PCD1013CT-ND	.62	.52	.41	PCD1013TR-ND	219.00/M	ELJ-FA2R7KF
3.3uH	10%	30	—	7.96	65	1.2	180	PCD1014CT-ND	.62	.52	.41	PCD1014TR-ND	219.00/M	ELJ-FA3R3KF
3.9uH	10%	30	—	7.96	60	1.3	175	PCD1015CT-ND	.62	.52	.41	PCD1015TR-ND	219.00/M	ELJ-FA3R9KF
4.7uH	10%	30	—	7.96	55	1.5	165	PCD1016CT-ND	.62	.52	.41	PCD1016TR-ND	219.00/M	ELJ-FA4R7KF
5.6uH	10%	30	—	7.96	50	1.6	160	PCD1261CT-ND	.62	.52	.41	PCD1261TR-ND	219.00/M	ELJ-FA5R6KF
6.8uH	10%	30	—	7.96	45	1.8	150	PCD1262CT-ND	.62	.52	.41	PCD1262TR-ND	219.00/M	ELJ-FA6R8KF
8.2uH	10%	30	—	7.96	40	2.0	140	PCD1263CT-ND	.62	.52	.41	PCD1263TR-ND	219.00/M	ELJ-FA8R2KF
10uH	10%	30	—	2.52	36	2.1	140	PCD1020CT-ND	.62	.52	.41	PCD1020TR-ND	219.00/M	ELJ-FA100KF
12uH	10%	30	—	2.52	33	2.5	125	PCD1021CT-ND	.62	.52	.41	PCD1021TR-ND	219.00/M	ELJ-FA120KF
15uH	10%	30	—	2.52	30	2.8	120	PCD1022CT-ND	.62	.52	.41	PCD1022TR-ND	219.00/M	ELJ-FA150KF
18uH	10%	30	—	2.52	27	3.3	110	PCD1023CT-ND	.62	.52	.41	PCD1023TR-ND	219.00/M	ELJ-FA180KF
22uH	10%	30	—	2.52	25	3.7	105	PCD1024CT-ND	.62	.52	.41	PCD1024TR-ND	219.00/M	ELJ-FA220KF
27uH	10%	30	—	2.52	22	5.0	90	PCD1025CT-ND	.62	.52	.41	PCD1025TR-ND	219.00/M	ELJ-FA270KF
33uH	10%	30	—	2.52	20	5.6	85	PCD1026CT-ND	.62	.52	.41	PCD1026TR-ND	219.00/M	ELJ-FA330KF
39uH	10%	30	—	2.52	20	6.4	80	PCD1027CT-ND	.62	.52	.41	PCD1027TR-ND	219.00/M	ELJ-FA390KF
47uH	10%	30	—	2.52	15	7.0	75	PCD1028CT-ND	.62	.52	.41	PCD1028TR-ND	219.00/M	ELJ-FA470KF
56uH	10%	30	—	2.52	15	8.0	70	PCD1029CT-ND	.62	.52	.41	PCD1029TR-ND	219.00/M	ELJ-FA560KF
68uH	10%	30	—	2.52	15	9.0	65	PCD1030CT-ND	.62	.52	.41	PCD1030TR-ND	219.00/M	ELJ-FA680KF
82uH	10%	30	—	2.52	11	10.0	60	PCD1031CT-ND	.62	.52	.41	PCD1031TR-ND	219.00/M	ELJ-FA820KF
100uH	10%	20	—	0.796	10	10.0	60	PCD1032CT-ND	.62	.52	.41	PCD1032TR-ND	219.00/M	ELJ-FA101KF
120uH	10%	20	—	0.796	10	11.0	55	PCD1033CT-ND	.62	.52	.41	PCD1033TR-ND	219.00/M	ELJ-FA121KF
150uH	10%	20	—	0.796	8.0	15.0	50	PCD1034CT-ND	.62	.52	.41	PCD1034TR-ND	219.00/M	ELJ-FA151KF
180uH	10%	20	—	0.796	7.0	17.0	50	PCD1035CT-ND	.62	.52	.41	PCD1035TR-ND	219.00/M	ELJ-FA181KF
220uH	10%	20	—	0.796	7.0	21.0	45	PCD1036CT-ND	.62	.52	.41	PCD1036TR-ND	219.00/M	ELJ-FA221KF
Fig 5, 1210 (3225) — Type NA														
0.047uH	20%	10	—	100	680	0.20	450	PCD1115CT-ND	.70	.58	.46	PCD1115TR-ND	248.00/M	ELJ-NA47NMF
0.056uH	20%	10	—	100	600	0.22	420	PCD1116CT-ND	.70	.58	.46	PCD1116TR-ND	248.00/M	ELJ-NA56NMF
0.068uH	20%	10	—	100	540	0.25	400	PCD1117CT-ND	.70	.58	.46	PCD1117TR-ND	248.00/M	ELJ-NA68NMF
0.082uH	20%	10	—	100	500	0.27	380	PCD1118CT-ND	.70	.58	.46	PCD1118TR-ND	248.00/M	ELJ-NA82NMF
0.10uH	20%	10	—	100	450	0.30	360	PCD1119CT-ND	.70	.58	.46	PCD1119TR-ND	248.00/M	ELJ-NAR10MF
0.12uH	20%	10	—	25.2	400	0.67	240	PCD1120CT-ND	.70	.58	.46	PCD1120TR-ND	248.00/M	ELJ-NAR12MF
0.15uH	20%	10	—	25.2	350	0.72	230	PCD1121CT-ND	.70	.58	.46	PCD1121TR-ND	248.00/M	ELJ-NAR15MF
0.18uH	20%	10	—	25.2	320	0.81	220	PCD1122CT-ND	.70	.58	.46	PCD1122TR-ND	248.00/M	ELJ-NAR18MF
0.22uH	10%	10	—	1.0, 25.2	280	0.90	210	PCD1123CT-ND	.70	.58	.46	PCD1123TR-ND	248.00/M	ELJ-NAR22KF
0.27uH	10%	10	—	1.0, 25.2	250	1.0	200	PCD1124CT-ND	.70	.58	.46	PCD1124TR-ND	248.00/M	ELJ-NAR27KF
0.33uH	10%	10	—	1.0, 25.2	220	1.1	190	PCD1125CT-ND	.70	.58	.46	PCD1125TR-ND	248.00/M	ELJ-NAR33KF
0.39uH	10%	10	—	1.0, 25.2	200	1.2	180	PCD1126CT-ND	.70	.58	.46	PCD1126TR-ND	248.00/M	ELJ-NAR39KF
0.47uH	10%	10	—	1.0, 25.2	180	1.4	175	PCD1127CT-ND	.70	.58	.46	PCD1127TR-ND	248.00/M	ELJ-NAR47KF
0.56uH	10%	10	—	1.0, 25.2	160	1.5	170	PCD1128CT-ND	.70	.58	.46	PCD1128TR-ND	248.00/M	ELJ-NAR56KF
0.68uH	10%	10	—	1.0, 25.2	150	1.7	155	PCD1129CT-ND	.70	.58	.46	PCD1129TR-ND	248.00/M	ELJ-NAR68KF
0.82uH	10%	10	—	1.0, 25.2	135	1.9	145	PCD1130CT-ND	.70	.58	.46	PCD1130TR-ND	248.00/M	ELJ-NAR82KF
1.0uH	5%	13	—	1.0, 7.96	120	2.1	125	PCD1131CT-ND	.70	.58	.46	PCD1131TR-ND	248.00/M	ELJ-NA1ROJF
1.2uH	5%	13	—	1.0, 7.96	110	2.3	120	PCD1132CT-ND	.70	.58	.46	PCD1132TR-ND	248.00/M	ELJ-NA1R2JF
1.5uH	5%	13	—	1.0, 7.96	95	2.7	115	PCD1133CT-ND	.70	.58	.46	PCD1133TR-ND	248.00/M	ELJ-NA1R5JF
1.8uH	5%	13	—	1.0, 7.96	85	3.0	110	PCD1134CT-ND	.70	.58	.46	PCD1134TR-ND	248.00/M	ELJ-NA1R8JF
2.2uH	5%	13	—	1.0, 7.96	80	3.2	110	PCD1135CT-ND	.70	.58	.46	PCD1135TR-ND	248.00/M	ELJ-NA2R2JF
2.7uH	5%	13	—	1.0, 7.96	70	3.6	105	PCD1136CT-ND	.70	.58	.46	PCD1136TR-ND	248.00/M	ELJ-NA2R7JF
3.3uH	5%	13	—	1.0, 7.96	62	4.2	100	PCD1137CT-ND	.70	.58	.46	PCD1137TR-ND	248.00/M	ELJ-NA3R3JF
3.9uH	5%	13	—	1.0, 7.96	57	4.4	95	PCD1138CT-ND	.70	.58	.46	PCD1138TR-ND	248.00/M	ELJ-NA3R9JF
4.7uH	5%	13	—	1.0, 7.96	52	7.7	70	PCD1139CT-ND	.70	.58	.46	PCD1139TR-ND	248.00/M	ELJ-NA4R7JF
5.6uH	5%	13	—	1.0, 7.96	46	8.7	65	PCD1140CT-ND	.70	.58	.46	PCD1140TR-ND	248.00/M	ELJ-NA5R6JF
6.8uH	5%	13	—	1.0, 7.96	42	10.0	60	PCD1141CT-ND	.70	.58	.46	PCD1141TR-ND	248.00/M	ELJ-NA6R8JF
8.2uH	5%	13	—	1.0, 7.96	38	11.0	60	PCD1142CT-ND	.70	.58	.46	PCD1142TR-ND	248.00/M	ELJ-NA8R2JF
Fig. 5, 1210 (3225) — Type SA														
10uH	10%	40	—	1.0, 5.0	30	1.8	18	PCD1097CT-ND	.70	.58	.46	PCD1097TR-ND	248.00/M	ELJ-SA100KF
12uH	10%	40	—	1.0, 5.0	28	2.0	17	PCD1098CT-ND	.70	.58	.46	PCD1098TR-ND	248.00/M	ELJ-SA120KF
15uH	10%	40	—	1.0, 5.0	25	2.2	15	PCD1099CT-ND	.70	.58	.46	PCD1099TR-ND	248.00/M	ELJ-SA150KF
18uH	10%	40	—	1.0, 5.0	23	2.5	13	PCD1100CT-ND	.70	.58	.46	PCD1100TR-ND	248.00/M	ELJ-SA180KF
22uH	10%	40	—	1.0, 5.0	20	2.8	12	PCD1101CT-ND	.70	.58	.46	PCD1101TR-ND	248.00/M	ELJ-SA220KF
27uH	10%	40	—	1.0, 5.0	18	3.2	10	PCD1102CT-ND	.70	.58	.46	PCD1102TR-ND	248.00/M	ELJ-SA270KF
33uH	10%	40	—	1.0, 5.0	17	3.5	10	PCD1103CT-ND	.70	.58	.46	PCD1103TR-ND	248.00/M	ELJ-SA330KF
39uH	10%	40	—	1.0, 5.0	15	3.8	9.0	PCD1104CT-ND	.70	.58	.46	PCD1104TR-ND	248.00/M	ELJ-SA390KF
47uH	10%	40	—	1.0, 5.0	14	4.0	8.0	PCD1105CT-ND	.70	.58	.46	PCD1105TR-ND	248.00/M	ELJ-SA470KF
56uH	10%	40	—	1.0, 5.0	13	4.5	7.0	PCD1106CT-ND	.70	.58	.46	PCD1106TR-ND	248.00/M	ELJ-SA560KF
68uH	10%	40	—	1.0, 1.5	12	5.0	6.0	PCD1107CT-ND	.70	.58	.46	PCD1107TR-ND	248.00/M	ELJ-SA680KF
82uH	10%	40	—	1.0, 1.5	11	6.0	6.0	PCD1108CT-ND	.70	.58	.46	PCD1108TR-ND	248.00/M	ELJ-SA820KF
100uH	10%	40	—	1.0, 1.5	10	7.0	5.0	PCD1109CT-ND	.70	.58	.46	PCD1109TR-ND	248.00/M	ELJ-SA101KF
120uH	10%	40	—	1.0, 1.5	9.0	8.0	5.0	PCD1110CT-ND	.70	.58	.46	PCD1110TR-ND	248.00/M	ELJ-SA121KF
150uH	10%	40	—	0.1, 1.5	5.0	9.0	5.0	PCD1111CT-ND	.70	.58	.46	PCD1111TR-ND	248.00/M	ELJ-SA151KF
180uH	10%	40	—	0.1, 1.5	5.0	11.0	5.0	PCD1112CT-ND	.70	.58	.46	PCD1112TR-ND	248.00/M	ELJ-SA181KF
220uH	10%	40	—	0.1, 1.5	4.0	12.0	5.0	PCD1113CT-ND	.70	.58	.46	PCD1113TR-ND	248.00/M	ELJ-SA221KF
270uH	10%	40	—	0.1, 1.5	4.0	14.0	5.0	PCD1114CT-ND	.70	.58	.46	PCD1114TR-ND	248.00/M	ELJ-SA271KF

(Continued)

Panasonic® Surface Mount Inductors *(Cont.)*

Inductance	Tolerance	Q Min	Q Typ @ 800 MHz	L,Q Test freq (MHz)	S.R.F. Min (MHz)	RDC Max (Ohm)	IDC Max (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T/R Pricing 2,000	Panasonic Part No.
Fig. 5, 1210 (3225) — Type EA														
1.0uH	20%	7	—	7.96	100	0.09	500	PCD1417CT-ND	.59	.49	.38	PCD1417TR-ND	207.00/M	ELJ-EA1R0MF
1.5uH	20%	7	—	7.96	80	0.10	390	PCD1418CT-ND	.67	.55	.44	PCD1418TR-ND	235.00/M	ELJ-EA1R5MF
2.2uH	20%	7	—	7.96	65	0.13	350	PCD1419CT-ND	.67	.55	.44	PCD1419TR-ND	235.00/M	ELJ-EA2R2MF
3.3uH	20%	7	—	7.96	50	0.16	270	PCD1420CT-ND	.67	.55	.44	PCD1420TR-ND	235.00/M	ELJ-EA3R3MF
4.7uH	20%	7	—	7.96	46	0.18	240	PCD1421CT-ND	.67	.55	.44	PCD1421TR-ND	235.00/M	ELJ-EA4R7MF
6.8uH	20%	7	—	7.96	36	0.25	200	PCD1422CT-ND	.67	.55	.44	PCD1422TR-ND	235.00/M	ELJ-EA6R8MF
10uH	10%	10	—	2.52	29	0.34	160	PCD1423CT-ND	.59	.49	.38	PCD1423TR-ND	207.00/M	ELJ-EA100KF
15uH	10%	10	—	2.52	25	0.42	145	PCD1424CT-ND	.67	.55	.44	PCD1424TR-ND	235.00/M	ELJ-EA150KF
22uH	10%	10	—	2.52	18	0.65	115	PCD1425CT-ND	.67	.55	.44	PCD1425TR-ND	235.00/M	ELJ-EA220KF
33uH	10%	10	—	2.52	16	0.91	95	PCD1426CT-ND	.59	.49	.38	PCD1426TR-ND	207.00/M	ELF-EA330KF
47uH	10%	10	—	2.52	13	1.30	80	PCD1427CT-ND	.67	.55	.44	PCD1427TR-ND	235.00/M	ELJ-EA470KF
68uH	10%	10	—	2.52	10	1.95	60	PCD1428CT-ND	.67	.55	.44	PCD1428TR-ND	235.00/M	ELJ-EA680KF
100uH	10%	20	—	0.796	8.0	3.12	50	PCD1429CT-ND	.67	.55	.44	PCD1429TR-ND	235.00/M	ELJ-EA101KF
150uH	10%	20	—	0.796	7.0	4.03	45	PCD1430CT-ND	.67	.55	.44	PCD1430TR-ND	235.00/M	ELJ-EA151KF
220uH	10%	20	—	0.796	5.0	7.15	35	PCD1431CT-ND	.67	.55	.44	PCD1431TR-ND	235.00/M	ELJ-EA221KF
330uH	10%	20	—	0.796	4.0	9.23	30	PCD1432CT-ND	.67	.55	.44	PCD1432TR-ND	235.00/M	ELJ-EA331KF
Fig. 5, 1210 (3225) — Type PA														
1.0uH	20%	7	—	7.96	150	0.15	600	PCD1478CT-ND	.67	.55	.44	PCD1478TR-ND	235.00/M	ELJ-PA1R0MF
1.5uH	20%	7	—	7.96	110	0.18	550	PCD1479CT-ND	.67	.55	.44	PCD1479TR-ND	235.00/M	ELJ-PA1R5MF
2.2uH	20%	7	—	7.96	80	0.23	500	PCD1480CT-ND	.67	.55	.44	PCD1480TR-ND	235.00/M	ELJ-PA2R2MF
3.3uH	20%	7	—	7.96	58	0.28	400	PCD1481CT-ND	.67	.55	.44	PCD1481TR-ND	235.00/M	ELJ-PA3R3MF
4.7uH	20%	7	—	7.96	46	0.34	350	PCD1482CT-ND	.67	.55	.44	PCD1482TR-ND	235.00/M	ELJ-PA4R7MF
6.8uH	20%	7	—	7.96	38	0.42	300	PCD1483CT-ND	.67	.55	.44	PCD1483TR-ND	235.00/M	ELJ-PA6R8MF
10uH	10%	15	—	2.52	23	0.50	240	PCD1484CT-ND	.67	.55	.44	PCD1484TR-ND	235.00/M	ELJ-PA100KF
12uH	10%	15	—	2.52	21	0.60	230	PCD1485CT-ND	.67	.55	.44	PCD1485TR-ND	235.00/M	ELJ-PA120KF
15uH	10%	15	—	2.52	18	0.74	220	PCD1486CT-ND	.67	.55	.44	PCD1486TR-ND	235.00/M	ELJ-PA150KF
18uH	10%	15	—	2.52	17	0.90	205	PCD1487CT-ND	.67	.55	.44	PCD1487TR-ND	235.00/M	ELJ-PA180KF
22uH	10%	15	—	2.52	15	1.15	185	PCD1488CT-ND	.67	.55	.44	PCD1488TR-ND	235.00/M	ELJ-PA220KF
27uH	10%	15	—	2.52	13	1.45	165	PCD1489CT-ND	.67	.55	.44	PCD1489TR-ND	235.00/M	ELJ-PA270KF
33uH	10%	15	—	2.52	12	1.65	155	PCD1490CT-ND	.67	.55	.44	PCD1490TR-ND	235.00/M	ELJ-PA330KF
39uH	10%	15	—	2.52	11	1.90	145	PCD1491CT-ND	.67	.55	.44	PCD1491TR-ND	235.00/M	ELJ-PA390KF
47uH	10%	15	—	2.52	9.5	2.25	135	PCD1492CT-ND	.67	.55	.44	PCD1492TR-ND	235.00/M	ELJ-PA470KF
56uH	10%	15	—	2.52	8.5	3.30	110	PCD1493CT-ND	.67	.55	.44	PCD1493TR-ND	235.00/M	ELJ-PA560KF
68uH	10%	15	—	2.52	7.5	3.70	105	PCD1494CT-ND	.67	.55	.44	PCD1494TR-ND	235.00/M	ELJ-PA680KF
82uH	10%	15	—	2.52	7.0	4.20	100	PCD1495CT-ND	.67	.55	.44	PCD1495TR-ND	235.00/M	ELJ-PA820KF
100uH	10%	20	—	0.796	6.5	5.00	90	PCD1496CT-ND	.67	.55	.44	PCD1496TR-ND	235.00/M	ELJ-PA101KF
120uH	10%	20	—	0.796	6.0	7.00	75	PCD1497CT-ND	.67	.55	.44	PCD1497TR-ND	235.00/M	ELJ-PA121KF
150uH	10%	20	—	0.796	5.5	8.00	70	PCD1498CT-ND	.67	.55	.44	PCD1498TR-ND	235.00/M	ELJ-PA151KF
180uH	10%	20	—	0.796	5.0	9.50	65	PCD1499CT-ND	.67	.55	.44	PCD1499TR-ND	235.00/M	ELJ-PA181KF
220uH	10%	20	—	0.796	4.0	11.0	60	PCD1500CT-ND	.67	.55	.44	PCD1500TR-ND	235.00/M	ELJ-PA221KF
270uH	10%	20	—	0.796	3.5	14.5	55	PCD1501CT-ND	.67	.55	.44	PCD1501TR-ND	235.00/M	ELJ-PA271KF
330uH	10%	20	—	0.796	3.0	16.0	50	PCD1502CT-ND	.67	.55	.44	PCD1502TR-ND	235.00/M	ELJ-PA331KF
Fig. 6, 1812 (4532) — Type FB														
Inductance	**Tolerance**	**Q Min**	**Q Typ @ 800 MHz**	**L,Q Test freq (MHz)**	**S.R.F. Min (MHz)**	**RDC Max (Ohm)**	**IDC Max (mA)**	**Digi-Key Part No.**	**Cut Tape Price Each 1**	**10**	**100**	**Digi-Key Part No.**	**T/R Pricing 500**	**Panasonic Part No.**
.22uH	20%	30	—	25.2	230	0.30	700	PCD1433CT-ND	.68	.57	.45	PCD1433TR-ND	180.00	ELJ-FBR22MF
.27uH	20%	30	—	25.2	200	0.32	650	PCD1434CT-ND	.68	.57	.45	PCD1434TR-ND	180.00	ELJ-FBR27MF
.33uH	20%	30	—	25.2	180	0.35	630	PCD1435CT-ND	.68	.57	.45	PCD1435TR-ND	180.00	ELJ-FBR33MF
.39uH	20%	30	—	25.2	155	0.37	620	PCD1436CT-ND	.68	.57	.45	PCD1436TR-ND	180.00	ELJ-FBR39MF
.47uH	20%	30	—	25.2	135	0.40	580	PCD1437CT-ND	.68	.57	.45	PCD1437TR-ND	180.00	ELJ-FBR47MF
.56uH	20%	30	—	25.2	120	0.42	560	PCD1438CT-ND	.68	.57	.45	PCD1438TR-ND	180.00	ELJ-FBR56MF
.68uH	20%	30	—	25.2	105	0.48	530	PCD1439CT-ND	.68	.57	.45	PCD1439TR-ND	180.00	ELJ-FBR68MF
.82uH	20%	30	—	25.2	90	0.50	500	PCD1440CT-ND	.68	.57	.45	PCD1440TR-ND	180.00	ELJ-FBR82MF
1.0uH	10%	30	—	25.2	80	0.52	470	PCD1441CT-ND	.71	.59	.47	PCD1441TR-ND	189.00	ELJ-FB1R0KF
1.2uH	10%	30	—	25.2	70	0.55	460	PCD1442CT-ND	.71	.59	.47	PCD1442TR-ND	189.00	ELJ-FB1R2KF
1.5uH	10%	30	—	25.2	60	0.61	430	PCD1443CT-ND	.71	.59	.47	PCD1443TR-ND	189.00	ELJ-FB1R5KF
1.8uH	10%	30	—	25.2	50	0.61	410	PCD1444CT-ND	.71	.59	.47	PCD1444TR-ND	189.00	ELJ-FB1R8KF
2.2uH	10%	30	—	7.96	45	0.61	410	PCD1445CT-ND	.71	.59	.47	PCD1445TR-ND	189.00	ELJ-FB2R2KF
2.7uH	10%	50	—	7.96	43	0.61	400	PCD1446CT-ND	.71	.59	.47	PCD1446TR-ND	189.00	ELJ-FB2R7KF
3.3uH	10%	50	—	7.96	39	0.66	380	PCD1447CT-ND	.71	.59	.47	PCD1447TR-ND	189.00	ELJ-FB3R3KF
3.9uH	10%	50	—	7.96	36	0.74	360	PCD1448CT-ND	.71	.59	.47	PCD1448TR-ND	189.00	ELJ-FB3R9KF
4.7uH	10%	50	—	5.0	33	0.81	350	PCD1449CT-ND	.71	.59	.47	PCD1449TR-ND	189.00	ELJ-FB4R7KF
5.6uH	10%	50	—	5.0	30	0.88	330	PCD1450CT-ND	.71	.59	.47	PCD1450TR-ND	189.00	ELJ-FB5R6KF
6.8uH	10%	50	—	5.0	26	1.0	310	PCD1451CT-ND	.71	.59	.47	PCD1451TR-ND	189.00	ELJ-FB6R8KF
8.2uH	10%	50	—	5.0	24	1.6	250	PCD1452CT-ND	.71	.59	.47	PCD1452TR-ND	189.00	ELJ-FB8R2KF
10uH	5%	50	—	5.0	22	1.8	235	PCD1453CT-ND	.74	.61	.48	PCD1453TR-ND	195.50	ELJ-FB100JF
12uH	5%	50	—	5.0	20	1.9	225	PCD1454CT-ND	.74	.61	.48	PCD1454TR-ND	195.50	ELJ-FB120JF
15uH	5%	50	—	5.0	18	2.1	215	PCD1455CT-ND	.74	.61	.48	PCD1455TR-ND	195.50	ELJ-FB150JF
18uH	5%	50	—	5.0	16	2.3	205	PCD1456CT-ND	.74	.61	.48	PCD1456TR-ND	195.50	ELJ-FB180JF
22uH	5%	50	—	2.52	15	2.6	195	PCD1457CT-ND	.74	.61	.48	PCD1457TR-ND	195.50	ELJ-FB220JF
27uH	5%	50	—	2.52	13	2.9	185	PCD1458CT-ND	.74	.61	.48	PCD1458TR-ND	195.50	ELJ-FB270JF
33uH	5%	50	—	2.52	12	3.1	175	PCD1459CT-ND	.74	.61	.48	PCD1459TR-ND	195.50	ELJ-FB330JF
39uH	5%	50	—	2.52	10	3.6	165	PCD1460CT-ND	.74	.61	.48	PCD1460TR-ND	195.50	ELJ-FB390JF
47uH	5%	50	—	2.52	9.7	4.2	130	PCD1461CT-ND	.74	.61	.48	PCD1461TR-ND	195.50	ELJ-FB470JF
56uH	5%	40	—	2.52	9.0	4.7	125	PCD1462CT-ND	.74	.61	.48	PCD1462TR-ND	195.50	ELJ-FB560JF
68uH	5%	40	—	2.52	8.2	5.3	115	PCD1463CT-ND	.74	.61	.48	PCD1463TR-ND	195.50	ELJ-FB680JF
82uH	5%	40	—	2.52	7.5	5.9	110	PCD1464CT-ND	.74	.61	.48	PCD1464TR-ND	195.50	ELJ-FB820JF
100uH	5%	40	—	2.52	6.7	8.8	105	PCD1465CT-ND	.74	.61	.48	PCD1465TR-ND	195.50	ELJ-FB101JF
120uH	5%	40	—	1.5	6.1	10	100	PCD1466CT-ND	.74	.61	.48	PCD1466TR-ND	195.50	ELJ-FB121JF
150uH	5%	40	—	1.5	5.5	11	95	PCD1467CT-ND	.74	.61	.48	PCD1467TR-ND	195.50	ELJ-FB151JF
180uH	5%	40	—	1.5	5.1	13	85	PCD1468CT-ND	.74	.61	.48	PCD1468TR-ND	195.50	ELJ-FB181JF
220uH	5%	40	—	0.796	4.5	13	85	PCD1469CT-ND	.74	.61	.48	PCD1469TR-ND	195.50	ELJ-FB221JF
270uH	5%	40	—	0.796	4.1	14	80	PCD1470CT-ND	.74	.61	.48	PCD1470TR-ND	195.50	ELJ-FB271JF
330uH	5%	40	—	0.796	3.7	16	75	PCD1471CT-ND	.74	.61	.48	PCD1471TR-ND	195.50	ELJ-FB331JF
390uH	5%	40	—	0.796	3.3	19	70	PCD1472CT-ND	.74	.61	.48	PCD1472TR-ND	195.50	ELJ-FB391JF
470uH	5%	30	—	0.796	3.3	31	55	PCD1473CT-ND	.74	.61	.48	PCD1473TR-ND	195.50	ELJ-FB471JF
560uH	5%	30	—	0.796	2.7	35	50	PCD1474CT-ND	.74	.61	.48	PCD1474TR-ND	195.50	ELJ-FB561JF
680uH	5%	30	—	0.796	2.5	39	50	PCD1475CT-ND	.74	.61	.48	PCD1475TR-ND	195.50	ELJ-FB681JF
820uH	5%	30	—	0.796	2.4	45	45	PCD1476CT-ND	.74	.61	.48	PCD1476TR-ND	195.50	ELJ-FB821JF
1000uH	5%	30	—	0.796	2.1	53	40	PCD1477CT-ND	.74	.61	.48	PCD1477TR-ND	195.50	ELJ-FB102JF
Fig. 6, 1812 (4532) — Type PB														
10uH	10%	10	—	2.52	19	0.65	360	PCD1522CT-ND	.97	.80	.63	PCD1522TR-ND	256.50	ELJ-PB100KF
12uH	10%	10	—	2.52	17	0.70	340	PCD1523CT-ND	.97	.80	.63	PCD1523TR-ND	256.50	ELJ-PB120KF
15uH	10%	10	—	2.52	15	0.80	320	PCD1524CT-ND	.97	.80	.63	PCD1524TR-ND	256.50	ELJ-PB150KF
18uH	10%	10	—	2.52	14	0.90	310	PCD1525CT-ND	.97	.80	.63	PCD1525TR-ND	256.50	ELJ-PB180KF
22uH	10%	10	—	2.52	13	1.00	300	PCD1526CT-ND	.97	.80	.63	PCD1526TR-ND	256.50	ELJ-PB220KF
27uH	10%	10	—	2.52	11	1.20	270	PCD1527CT-ND	.97	.80	.63	PCD1527TR-ND	256.50	ELJ-PB270KF
33uH	10%	10	—	2.52	10	1.40	250	PCD1528CT-ND	.97	.80	.63	PCD1528TR-ND	256.50	ELJ-PB330KF
39uH	10%	10	—	2.52	9.5	1.60	230	PCD1529CT-ND	.97	.80	.63	PCD1529TR-ND	256.50	ELJ-PB390KF
47uH	10%	10	—	2.52	8.5	1.90	210	PCD1530CT-ND	.97	.80	.63	PCD1530TR-ND	256.50	ELJ-PB470KF
56uH	10%	10	—	2.52	8	2.20	190	PCD1531CT-ND	.97	.80	.63	PCD1531TR-ND	256.50	ELJ-PB560KF
68uH	10%	10	—	2.52	7	2.60	170	PCD1532CT-ND	.97	.80	.63	PCD1532TR-ND	256.50	ELJ-PB680KF
82uH	10%	10	—	2.52	6.5	3.50	160	PCD1533CT-ND	.97	.80	.63	PCD1533TR-ND	256.50	ELJ-PB820KF
100uH	10%	20	—	0.796	6	4.00	150	PCD1534CT-ND	1.09	.90	.71	PCD1534TR-ND	287.28	ELJ-PB101KF
120uH	10%	20	—	0.796	5.5	4.50	130	PCD1535CT-ND	1.09	.90	.71	PCD1535TR-ND	287.28	ELJ-PB121KF
150uH	10%	20	—	0.796	5	6.50	120	PCD1536CT-ND	1.09	.90	.71	PCD1536TR-ND	287.28	ELJ-PB151KF
180uH	10%	20	—	0.796	4.5	7.50	110	PCD1537CT-ND	1.09	.90	.71	PCD1537TR-ND	287.28	ELJ-PB181KF
220uH	10%	20	—	0.796	4	9.00	90	PCD1538CT-ND	1.09	.90	.71	PCD1538TR-ND	287.28	ELJ-PB221KF

Panasonic

Voltage Step-Up Coil

Fig. 1

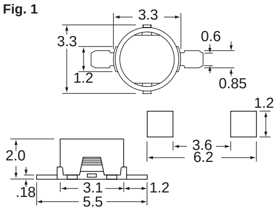


Fig. 2

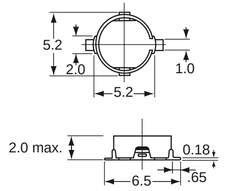
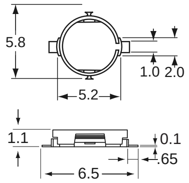


Fig. 3



High inductance Voltage Step-up coil chip series for piezo-electric buzzer and DC-DC circuit of EL

Features: • Small and thin • High inductance

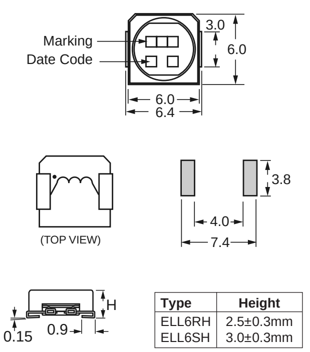
Recommended Applications: • Watches, Toys, Camera, Electronic thermometers, Pagers, PHS, Portable telephones

Operating Temperature: -20°C to +85°C (-20°C to +105°C for the 5KT Type).

Fig.	Inductance (µH)	Tolerance (%)	Rated Current mA	DCR Ohm ±15%	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
3KN Type												
1	560	—	45	15	PCD1397CT-ND	2.14	1.77	1.39	PCD1397TR-ND	1,000	756.00	ELT-3KN128B
	1.0	—	30	35	PCD1398CT-ND	2.14	1.77	1.39	PCD1398TR-ND	1,000	756.00	ELT-3KN104B
	1.0	—	40	23	PCD1399CT-ND	2.14	1.77	1.39	PCD1399TR-ND	1,000	756.00	ELT-3KN121B
	1.0	—	30	25	PCD1400CT-ND	2.14	1.77	1.39	PCD1400TR-ND	1,000	756.00	ELT-3KN123B
	2.0	—	20	44	PCD1401CT-ND	2.14	1.77	1.39	PCD1401TR-ND	1,000	756.00	ELT-3KN131B
	2.5	—	20	64	PCD1402CT-ND	2.14	1.77	1.39	PCD1402TR-ND	1,000	756.00	ELT-3KN118B
	4.0	—	15	85	PCD1403CT-ND	2.14	1.77	1.39	PCD1403TR-ND	1,000	756.00	ELT-3KN124B
5KN Type												
2	220.0	±10	100	2.4	PCD1550CT-ND	2.58	2.13	1.68	PCD1550TR-ND	4,000	912.00/M	ELT-5KN127C
	560.0	±10	60	6.0	PCD1551CT-ND	2.58	2.13	1.68	PCD1551TR-ND	4,000	912.00/M	ELT-5KN118C
	390	±10	120	2.8	PCD1552CT-ND	2.58	2.13	1.68	PCD1552TR-ND	4,000	912.00/M	ELT-5KN131C
	1000	±10	55	11.5	PCD1553CT-ND	2.58	2.13	1.68	PCD1553TR-ND	4,000	912.00/M	ELT-5KN134C
	1500	±10	40	20.0	PCD1554CT-ND	2.58	2.13	1.68	PCD1554TR-ND	4,000	912.00/M	ELT-5KN135C
	2700	±10	35	33.0	PCD1555CT-ND	2.58	2.13	1.68	PCD1555TR-ND	4,000	912.00/M	ELT-5KN120C
5KT Type												
3	3.3	±20	1000	0.17	PCD1556CT-ND	2.83	2.33	1.83	PCD1556TR-ND	5,000	998.00/M	ELT-5KT3R3M
	4.7	±20	950	0.20	PCD1557CT-ND	2.83	2.33	1.83	PCD1557TR-ND	5,000	998.00/M	ELT-5KT4R7M
	6.8	±20	760	0.30	PCD1558CT-ND	2.83	2.33	1.83	PCD1558TR-ND	5,000	998.00/M	ELT-5KT6R8M
	10.0	±20	680	0.36	PCD1559CT-ND	2.83	2.33	1.83	PCD1559TR-ND	5,000	998.00/M	ELT-5KT100M
	15.0	±15	510	0.58	PCD1560CT-ND	2.83	2.33	1.83	PCD1560TR-ND	5,000	998.00/M	ELT-5KT150L
	22.0	±15	420	0.90	PCD1561CT-ND	2.83	2.33	1.83	PCD1561TR-ND	5,000	998.00/M	ELT-5KT220L
	33.0	±15	360	1.20	PCD1562CT-ND	2.83	2.33	1.83	PCD1562TR-ND	5,000	998.00/M	ELT-5KT330L
	47.0	±15	300	1.70	PCD1563CT-ND	2.83	2.33	1.83	PCD1563TR-ND	5,000	998.00/M	ELT-5KT470L
	68.0	±15	260	2.60	PCD1564CT-ND	2.83	2.33	1.83	PCD1564TR-ND	5,000	998.00/M	ELT-5KT680L
	100.0	±15	190	4.30	PCD1565CT-ND	2.83	2.33	1.83	PCD1565TR-ND	5,000	998.00/M	ELT-5KT101L

SMD Power Choke Coils

ELL6RH and ELL6SH Types



Type	Height
ELL6RH	2.5±0.3mm
ELL6SH	3.0±0.3mm

Magnetic Shielded Series

Features:

- Thin type (ELL6RH – 2.5mm height, ELL6SH – 3.0mm height)
- Higher reliability in mounting by separated user terminal and internal connection
- High current

Recommended Applications:

- Video, audio, mobile communications, electric battery driving equipment
- Choke coils for chopper circuit, and decoupling choke in DC/DC convertor circuit

Cautions for Use:

- DC/DC convertor — Chopper type: 1W maximum
- Operating Temperature: 105°C maximum (including self-temperature rise)

*** Rated Current:**

This indicates the value of current when the inductance is 80% more than nominal value and temperature rising Δt=45°C lower at D.C. superposition (at 20°C).

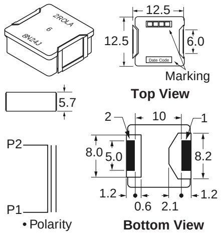
Inductance at 100kHz Tol. ±20%	DCR at 20°C Tol. ±20%	Rated Current* (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Panasonic Part No.
ELL6RH Series									
1.0µH	0.019Ω	3000	PCD1337CT-ND	1.62	1.34	1.05	PCD1337TR-ND	571.00	ELL-6RH1R0M
1.5µH	0.024Ω	2400	PCD1338CT-ND	1.62	1.34	1.05	PCD1338TR-ND	571.00	ELL-6RH1R5M
2.7µH	0.039Ω	1800	PCD1339CT-ND	1.62	1.34	1.05	PCD1339TR-ND	571.00	ELL-6RH2R7M
3.3µH	0.044Ω	1600	PCD1340CT-ND	1.62	1.34	1.05	PCD1340TR-ND	571.00	ELL-6RH3R3M
5.1µH	0.056Ω	1550	PCD1341CT-ND	1.62	1.34	1.05	PCD1341TR-ND	571.00	ELL-6RH5R1M
6.2µH	0.062Ω	1400	PCD1342CT-ND	1.62	1.34	1.05	PCD1342TR-ND	571.00	ELL-6RH6R2M
7.5µH	0.080Ω	1250	PCD1343CT-ND	1.62	1.34	1.05	PCD1343TR-ND	571.00	ELL-6RH7R5M
8.2µH	0.087Ω	1200	PCD1344CT-ND	1.62	1.34	1.05	PCD1344TR-ND	571.00	ELL-6RH8R2M
10µH	0.095Ω	1100	PCD1345CT-ND	1.62	1.34	1.05	PCD1345TR-ND	571.00	ELL-6RH100M
12µH	0.13Ω	1000	PCD1346CT-ND	1.62	1.34	1.05	PCD1346TR-ND	571.00	ELL-6RH120M
15µH	0.15Ω	850	PCD1347CT-ND	1.62	1.34	1.05	PCD1347TR-ND	571.00	ELL-6RH150M
18µH	0.17Ω	800	PCD1348CT-ND	1.62	1.34	1.05	PCD1348TR-ND	571.00	ELL-6RH180M
22µH	0.22Ω	700	PCD1349CT-ND	1.62	1.34	1.05	PCD1349TR-ND	571.00	ELL-6RH220M
27µH	0.26Ω	650	PCD1350CT-ND	1.62	1.34	1.05	PCD1350TR-ND	571.00	ELL-6RH270M
33µH	0.38Ω	600	PCD1351CT-ND	1.62	1.34	1.05	PCD1351TR-ND	571.00	ELL-6RH330M
39µH	0.41Ω	550	PCD1352CT-ND	1.62	1.34	1.05	PCD1352TR-ND	571.00	ELL-6RH390M
47µH	0.48Ω	500	PCD1353CT-ND	1.62	1.34	1.05	PCD1353TR-ND	571.00	ELL-6RH470M
56µH	0.54Ω	450	PCD1354CT-ND	1.62	1.34	1.05	PCD1354TR-ND	571.00	ELL-6RH560M
68µH	0.77Ω	400	PCD1355CT-ND	1.62	1.34	1.05	PCD1355TR-ND	571.00	ELL-6RH680M
82µH	0.87Ω	350	PCD1356CT-ND	1.62	1.34	1.05	PCD1356TR-ND	571.00	ELL-6RH820M
100µH	1.00Ω	300	PCD1357CT-ND	1.62	1.34	1.05	PCD1357TR-ND	571.00	ELL-6RH101M
120µH	1.50Ω	280	PCD1358CT-ND	1.62	1.34	1.05	PCD1358TR-ND	571.00	ELL-6RH121M
150µH	1.80Ω	250	PCD1359CT-ND	1.62	1.34	1.05	PCD1359TR-ND	571.00	ELL-6RH151M
180µH	2.00Ω	230	PCD1360CT-ND	1.62	1.34	1.05	PCD1360TR-ND	571.00	ELL-6RH181M
220µH	2.30Ω	200	PCD1361CT-ND	1.62	1.34	1.05	PCD1361TR-ND	571.00	ELL-6RH221M
ELL6SH Series									
1.0µH	0.019Ω	3400	PCD1362CT-ND	1.62	1.34	1.05	PCD1362TR-ND	571.00	ELL-6SH1R0M
1.5µH	0.024Ω	3200	PCD1363CT-ND	1.62	1.34	1.05	PCD1363TR-ND	571.00	ELL-6SH1R5M
2.7µH	0.031Ω	2400	PCD1364CT-ND	1.62	1.34	1.05	PCD1364TR-ND	571.00	ELL-6SH2R7M
3.3µH	0.034Ω	2200	PCD1365CT-ND	1.62	1.34	1.05	PCD1365TR-ND	571.00	ELL-6SH3R3M
4.7µH	0.042Ω	2000	PCD1366CT-ND	1.62	1.34	1.05	PCD1366TR-ND	571.00	ELL-6SH4R7M
5.6µH	0.049Ω	1800	PCD1367CT-ND	1.62	1.34	1.05	PCD1367TR-ND	571.00	ELL-6SH5R6M
6.8µH	0.052Ω	1500	PCD1368CT-ND	1.62	1.34	1.05	PCD1368TR-ND	571.00	ELL-6SH6R8M
8.2µH	0.061Ω	1400	PCD1369CT-ND	1.62	1.34	1.05	PCD1369TR-ND	571.00	ELL-6SH8R2M
10µH	0.065Ω	1300	PCD1370CT-ND	1.62	1.34	1.05	PCD1370TR-ND	571.00	ELL-6SH100M
12µH	0.071Ω	1200	PCD1371CT-ND	1.62	1.34	1.05	PCD1371TR-ND	571.00	ELL-6SH120M
15µH	0.096Ω	1100	PCD1372CT-ND	1.62	1.34	1.05	PCD1372TR-ND	571.00	ELL-6SH150M
18µH	0.13Ω	1000	PCD1373CT-ND	1.62	1.34	1.05	PCD1373TR-ND	571.00	ELL-6SH180M
22µH	0.14Ω	900	PCD1374CT-ND	1.62	1.34	1.05	PCD1374TR-ND	571.00	ELL-6SH220M
27µH	0.16Ω	800	PCD1375CT-ND	1.62	1.34	1.05	PCD1375TR-ND	571.00	ELL-6SH270M
33µH	0.18Ω	700	PCD1376CT-ND	1.62	1.34	1.05	PCD1376TR-ND	571.00	ELL-6SH330M
39µH	0.24Ω	650	PCD1377CT-ND	1.62	1.34	1.05	PCD1377TR-ND	571.00	ELL-6SH390M
47µH	0.27Ω	600	PCD1378CT-ND	1.62	1.34	1.05	PCD1378TR-ND	571.00	ELL-6SH470M
56µH	0.29Ω	550	PCD1379CT-ND	1.62	1.34	1.05	PCD1379TR-ND	571.00	ELL-6SH560M
68µH	0.52Ω	500	PCD1380CT-ND	1.62	1.34	1.05	PCD1380TR-ND	571.00	ELL-6SH680M
82µH	0.60Ω	450	PCD1381CT-ND	1.62	1.34	1.05	PCD1381TR-ND	571.00	ELL-6SH820M
100µH	0.68Ω	400	PCD1382CT-ND	1.62	1.34	1.05	PCD1382TR-ND	571.00	ELL-6SH101M
120µH	0.75Ω	370	PCD1383CT-ND	1.62	1.34	1.05	PCD1383TR-ND	571.00	ELL-6SH121M
150µH	0.86Ω	350	PCD1384CT-ND	1.62	1.34	1.05	PCD1384TR-ND	571.00	ELL-6SH151M
180µH	1.30Ω	300	PCD1385CT-ND	1.62	1.34	1.05	PCD1385TR-ND	571.00	ELL-6SH181M
220µH	1.40Ω	280	PCD1386CT-ND	1.62	1.34	1.05	PCD1386TR-ND	571.00	ELL-6SH221M
270µH	2.40Ω	260	PCD1387CT-ND	1.62	1.34	1.05	PCD1387TR-ND	571.00	ELL-6SH271M
330µH	2.70Ω	240	PCD1388CT-ND	1.62	1.34	1.05	PCD1388TR-ND	571.00	ELL-6SH331M
390µH	2.80Ω	210	PCD1389CT-ND	1.62	1.34	1.05	PCD1389TR-ND	571.00	ELL-6SH391M
470µH	3.20Ω	200	PCD1390CT-ND	1.62	1.34	1.05	PCD1390TR-ND	571.00	ELL-6SH471M
560µH	3.70Ω	180	PCD1391CT-ND	1.62	1.34	1.05	PCD1391TR-ND	571.00	ELL-6SH561M

Panasonic® SMD Power Choke Coils

PCC-N6 Type — Thin, Compact and High Power

Features:
- High power type
- Thin type (5.7mm height)
- Low leakage flux

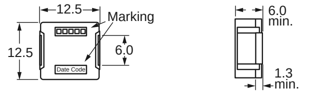
Recommended Applications:
- DC/DC converter for driving PC at high speed
- Thin type on-board power supply module for exchanger (10~40W)



Series	Inductance Initial at 25°C (100 KHz) L_0 (µH)	Inductance At Flat Point at 25°C (100 KHz) L_1 (µH)	Saturation Current At 25°C I sat (A) min.	Saturation Current At 100°C I sat (A) min.	Heat Rating Current ΔT=40K(°C) I_0 (A) Ref. Only	DC Resistance At 20°C DCR (mΩ) max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No.
HL	2.3±30%	1.2±30%	14.3	11.7	14.2	2.24	PCD1307CT-ND	2.75	2.36	1.58	PCD1307TR-ND	529.96	ETQ-P6F1R2HFA
	3.5±30%	2.0±30%	10.7	8.7	12.5	3.30	PCD1308CT-ND	2.75	2.36	1.58	PCD1308TR-ND	529.96	ETQ-P6F2R0HFA
	4.8±25%	3.2±25%	8.6	7.1	10.8	4.92	PCD1309CT-ND	2.75	2.36	1.58	PCD1309TR-ND	529.96	ETQ-P6F3R2HFA
	6.6±25%	4.6±25%	7.3	6.0	9.3	6.48	PCD1310CT-ND	2.75	2.36	1.58	PCD1310TR-ND	529.96	ETQ-P6F4R6HFA
	8.3±25%	6.4±25%	6.2	5.2	7.9	8.64	PCD1311CT-ND	2.75	2.36	1.58	PCD1311TR-ND	529.96	ETQ-P6F6R4HFA
	10.4±25%	8.2±25%	5.6	4.7	7.2	10.9	PCD1312CT-ND	2.75	2.36	1.58	PCD1312TR-ND	529.96	ETQ-P6F8R2HFA
	12.5±25%	10.2±25%	4.7	4.0	6.5	13.3	PCD1313CT-ND	2.75	2.36	1.58	PCD1313TR-ND	529.96	ETQ-P6F102HFA
SP	1.9±30%	1.0±30%	19.4	15.4	14.2	2.24	PCD1314CT-ND	2.75	2.36	1.58	PCD1314TR-ND	529.96	ETQ-P6F1R0SFA
	2.8±30%	1.6±30%	14.9	12.2	12.5	3.30	PCD1315CT-ND	2.75	2.36	1.58	PCD1315TR-ND	529.96	ETQ-P6F1R6SFA
	3.6±30%	2.5±30%	11.3	9.3	10.8	4.92	PCD1316CT-ND	2.75	2.36	1.58	PCD1316TR-ND	529.96	ETQ-P6F2R5SFA
	4.9±30%	3.5±30%	9.5	8.0	9.3	6.48	PCD1392CT-ND	2.75	2.36	1.58	PCD1392TR-ND	529.96	ETQ-P6F3R5SFA
LB	1.8±30%	0.8±30%	25.2	20.0	14.2	2.24	PCD1317CT-ND	2.75	2.36	1.58	PCD1317TR-ND	529.96	ETQ-P6F0R8LFA
	2.5±30%	1.3±30%	18.6	15.8	12.5	3.30	PCD1318CT-ND	2.75	2.36	1.58	PCD1318TR-ND	529.96	ETQ-P6F1R3LFA
	3.1±30%	2.0±30%	15.1	12.1	10.8	4.92	PCD1319CT-ND	2.75	2.36	1.58	PCD1319TR-ND	529.96	ETQ-P6F2R0LFA
	4.1±30%	2.9±30%	12.0	10.0	9.3	6.48	PCD1320CT-ND	2.75	2.36	1.58	PCD1320TR-ND	529.96	ETQ-P6F2R9LFA
	5.0±20%	4.1±20%	10.8	8.7	7.9	8.64	PCD1321CT-ND	2.75	2.36	1.58	PCD1321TR-ND	529.96	ETQ-P6F4R1LFA

N6B Type — High Rated Current, Low Profile and Low Loss

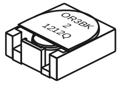
Applications:
- DC/DC converter for cpu in PC or video game machine
- Thin type on-board power supply for switchboards



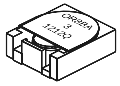
Inductance (at 20°C) (Tol. = ±20%) L1 (µH)	L1 Meas. Current	L2 (µH)	L2 Meas. Current	DC Resistance (at 20°C) DCR (mΩ) Max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No
0.58	at 19A	0.54	at 27A	1.44	PCD1393CT-ND	3.30	2.83	1.89	PCD1393TR-ND	635.80	ETQ-P6F0R6BFA
1.06	at 16A	0.99	at 22A	2.24	PCD1394CT-ND	3.30	2.83	1.89	PCD1394TR-ND	635.80	ETQ-P6F1R1BFA
1.71	at 14A	1.50	at 20A	3.30	PCD1395CT-ND	3.30	2.83	1.89	PCD1395TR-ND	635.80	ETQ-P6F1R8BFA
2.45	at 12A	2.17	at 17A	4.92	PCD1396CT-ND	3.30	2.83	1.89	PCD1396TR-ND	635.80	ETQ-P6F2R5BFA

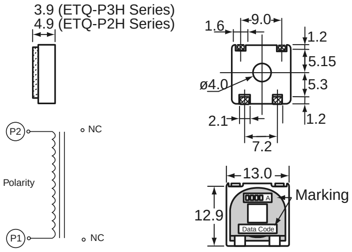
PCC-NX1/NX2 Type — Small and Ultra Thin, High Current and Low Loss

ETQ-P2H



ETQ-P3H





Features: • High Power: 1 sat(<29A) • High Inductance: 0.7-2.5 µH • Low Resistance: 1.3-5.0mΩ • Small Mount Area: 13.0-12.8 • Height: ETQ-P3H: 3.9mm, ETQ-P2H: 4.9mm

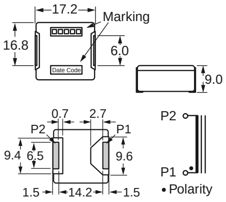
Applications: • PC High speed of CPU: Notebook PC

Series	Inductance (at 20°C) (Tol. = ±20%) L1 (µH)	L1 Meas. Current	L2* (µH)	L2* Meas. Current	DC Resist. (at 20°C) DCR (mΩ) Max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No
ETQ-P2H	0.33±20%	23A	0.30	32A	0.89	PCD1566CT-ND	3.90	3.34	2.23	PCD1566TR-ND	751.46	ETQ-P2H0R3BFK
	0.69±20%	21A	0.59	29A	1.30	PCD1567CT-ND	3.90	3.34	2.23	PCD1567TR-ND	751.46	ETQ-P2H0R7BFA
	1.22±20%	16A	1.04	22A	2.27	PCD1568CT-ND	3.90	3.34	2.23	PCD1568TR-ND	751.46	ETQ-P2H1R2BFA
	1.83±20%	14A	1.49	20A	3.48	PCD1569CT-ND	3.90	3.34	2.23	PCD1569TR-ND	751.46	ETQ-P2H1R8BFA
	2.61±20%	12A	2.12	17A	4.98	PCD1570CT-ND	3.90	3.34	2.23	PCD1570TR-ND	751.46	ETQ-P2H2R6BFA
ETQ-P3H	0.80±25%	16A	0.71	22A	2.59	PCD1571CT-ND	3.90	3.34	2.23	PCD1571TR-ND	751.46	ETQ-P3H0R8BFA
	1.43±25%	12A	1.25	17A	4.52	PCD1572CT-ND	3.90	3.34	2.23	PCD1572TR-ND	751.46	ETQ-P3H1R4BFA

* Reference only

PCC-S1 Type — High Inductance and High Current

Features: • High inductance • High current.
Recommended Applications: • DC/DC converter • Computer network • Telcom base station



Series	Inductance Initial at 25°C (100 KHz) L_0 (µH)	Inductance At Flat Point at 25°C (100 KHz) L_1 (µH)	Saturation Current At 25°C I sat (A) min.	Saturation Current At 100°C I sat (A) min.	Heat Rating Current ΔT=40K(°C) I_0 (A) Ref. Only	DC Resistance At 20°C DCR (mΩ) max.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 250	Panasonic Part No.
HL	2.9±30%	1.2±30%	21.4	18.0	22.6	1.00	PCD1331CT-ND	10.70	7.14	5.93	PCD1331TR-ND	1204.31	ETQ-PAF1R2HFA
	4.6±30%	2.7±30%	15.5	12.5	17.5	1.56	PCD1332CT-ND	10.70	7.14	5.93	PCD1332TR-ND	1204.31	ETQ-PAF2R7HFA
	6.8±30%	4.8±30%	10.6	9.0	14.4	2.29	PCD1333CT-ND	10.70	7.14	5.93	PCD1333TR-ND	1204.31	ETQ-PAF4R8HFA
	9.7±30%	7.2±30%	8.6	7.3	12.0	3.31	PCD1334CT-ND	10.70	7.14	5.93	PCD1334TR-ND	1204.31	ETQ-PAF7R2HFA
EX	1.9±30%	0.7±30%	50.4	42.3	22.6	1.00	PCD1335CT-ND	10.70	7.14	5.93	PCD1335TR-ND	1204.31	ETQ-PAF0R7EFA
	2.9±30%	1.3±30%	36.7	30.0	17.5	1.56	PCD1336CT-ND	10.70	7.14	5.93	PCD1336TR-ND	1204.31	ETQ-PAF1R3EFA

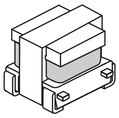
Panasonic® Current Transformers

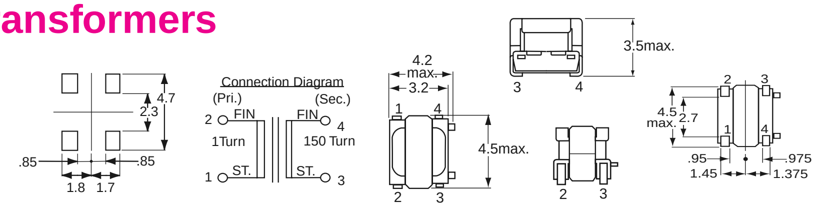
Transformer for over current detection of switching power supply.

Features:
- Small and low profile
- Low-loss
- Capable of automatic mounting

Recommended Applications:
- On-board power supply
- Power module

Performance Characteristics:
- Operating Temperature: -40°C to 115°C
- Frequency Range: f = 200 kHz to 500 kHz, Duty = 30% to 50%
- Dielectric Withstanding Voltage: P:S - AC 500 V[rms], 1 min.



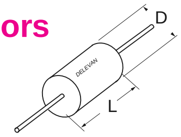


Inductance Term 3~4 ±50%	DCR (@20°C) Term 1~2 ±Max.	DCR (@20°C) Term 3~4 ±20%	Turns Ratio ±5%	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	Panasonic Part No.
2.6mH	0.003Ω	17Ω	0.0064	PCD1548CT-ND	4.85	3.23	2.69	PCD1548TR-ND	1090.13	ETJ-04K1AZ
1.18mH	0.003Ω	11.3Ω	0.0096	PCD1549CT-ND	4.85	3.23	2.69	PCD1549TR-ND	1090.13	ETJ-04K2AZ

API Delevan

Coils and Inductors

Series 1025 Molded Unshielded RF Coils



Dimensions L	Dimensions D	Lead Size AWG #24 (TWC)	Lead Length
.250" (6.35mm)	.095" (2.41mm)	.020" (.51mm)	1.5" (38.10mm)

Induct. (µH)	Q Min.	Test Freq. (MHz)	Max. Current Rating (mA)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	API Delevan Part No.
Series 1025 Phenolic Core (LT4K)								
.10	40	25.0	1380	DN2594-ND	.63	.54	.36	1025-94K
.12	40	25.0	1300	DN2596-ND	.63	.54	.36	1025-96K
.33	30	25.0	830	DN2508-ND	.63	.54	.36	1025-08K
.39	30	25.0	710	DN2510-ND	.63	.54	.36	1025-10K
.47	30	25.0	660	DN2512-ND	.63	.54	.36	1025-12K
.56	30	25.0	550	DN2514-ND	.63	.54	.36	1025-14K
.68	28	25.0	500	DN2516-ND	.63	.54	.36	1025-16K
.82	28	25.0	420	DN2518-ND	.63	.54	.36	1025-18K
1.0	25	25.0	390	DN2520-ND	.63	.54	.36	1025-20K
Series 1025 Iron Core (LT10K)								
1.2	25	7.9	620	DN2522-ND	.77	.66	.44	1025-22K
1.5	28	7.9	560	DN2524-ND	.77	.66	.44	1025-24K
1.8	30	7.9	480	DN2526-ND	.77	.66	.44	1025-26K
2.2	30	7.9	415	DN2528-ND	.77	.66	.44	1025-28K
2.7	37	7.9	355	DN2530-ND	.77	.66	.44	1025-30K
3.3	45	7.9	285	DN2532-ND	.77	.66	.44	1025-32K
3.9	45	7.9	263	DN2534-ND	.77	.66	.44	1025-34K
4.7	45	7.9	239	DN2536-ND	.77	.66	.44	1025-36K
5.6	50	7.9	195	DN2538-ND	.77	.66	.44	1025-38K
6.8	50	7.9	185	DN2540-ND	.77	.66	.44	1025-40K
8.2	55	7.9	160	DN2542-ND	.77	.66	.44	1025-42K
10.0	55	7.9	144	DN2544-ND	.77	.66	.44	1025-44K
12.0	45	2.5	160	DN2546-ND	.77	.66	.44	1025-46K
15.0	45	2.5	157	DN2548-ND	.77	.66	.44	1025-48K
18.0	50	2.5	149	DN2550-ND	.77	.66	.44	1025-50K
22.0	50	2.5	144	DN2552-ND	.77	.66	.44	1025-52K
27.0	50	2.5	140	DN2554-ND	.77	.66	.44	1025-54K
Series 1025 Ferrite (LT10K)								
33.0	45	2.5	130	DN2556-ND	.84	.72	.48	1025-56K
39.0	45	2.5	125	DN2558-ND	.84	.72	.48	1025-58K
47.0	45	2.5	110	DN2560-ND	.84	.72	.48	1025-60K
56.0	45	2.5	100	DN2562-ND	.84	.72	.48	1025-62K
68.0	50	2.5	92	DN2564-ND	.84	.72	.48	1025-64K
82.0	50	2.5	88	DN2566-ND	.98	.84	.56	1025-66K
100.0	50	2.5	84	DN2568-ND	.98	.84	.56	1025-68K
120.0	30	.79	66	DN2570-ND	.98	.84	.56	1025-70K
150.0	30	.79	61	DN2572-ND	.98	.84	.56	1025-72K
180.0	30	.79	57	DN2574-ND	.98	.84	.56	1025-74K
220.0	30	.79	52	DN2576-ND	.98	.84	.56	1025-76K
270.0	30	.79	47	DN2578-ND	1.05	.90	.60	1025-78K
330.0	30	.79	45	DN2580-ND	1.05	.90	.60	1025-80K
390.0	30	.79	40	DN2582-ND	1.05	.90	.60	1025-82K
470.0	30	.79	36	DN2584-ND	1.05	.90	.60	1025-84K
560.0	30	.79	35	DN2586-ND	1.05	.90	.60	1025-86K
680.0	30	.79	30	DN2588-ND	1.05	.90	.60	1025-88K
820.0	30	.79	29	DN2590-ND	1.16	.99	.66	1025-90K
1000.0	30	.79	28	DN2592-ND	1.16	.99	.66	1025-92K

Series 1641 Molded Shielded RF Coils

Dimensions L	Dimensions D	Lead Size AWG #22 (TWC)	Lead Length
.410" (10.41mm)	.162" (4.11mm)	.025" (.64mm)	1.44" (36.58mm)

Induct. (µH)	Q Min.	Test Freq. (MHz)	Max. Current Rating (mA)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	API Delevan Part No.
Series 1641 Phenolic Core Iron Sleeve (LT10K)								
.10	50	25.0	1830	DN41101-ND	1.16	.99	.66	1641-101K
.12	51	25.0	1570	DN41121-ND	1.16	.99	.66	1641-121K
.15	51	25.0	1500	DN41151-ND	1.16	.99	.66	1641-151K
.18	50	25.0	1330	DN41181-ND	1.16	.99	.66	1641-181K
.22	49	25.0	1120	DN41221-ND	1.16	.99	.66	1641-221K
.27	47	25.0	870	DN41271-ND	1.16	.99	.66	1641-271K
.33	46	25.0	800	DN41331-ND	1.16	.99	.66	1641-331K
.39	44	25.0	680	DN41391-ND	1.16	.99	.66	1641-391K
.47	44	25.0	580	DN41471-ND	1.16	.99	.66	1641-471K
.56	43	25.0	505	DN41561-ND	1.16	.99	.66	1641-561K
.68	42	25.0	430	DN41681-ND	1.16	.99	.66	1641-681K
.82	40	25.0	375	DN41821-ND	1.16	.99	.66	1641-821K
Series 1641 Iron Core Iron Sleeve (LT10K)								
1.0	44	25.0	1090	DN41102-ND	1.33	1.14	.76	1641-102K
1.2	44	7.9	900	DN41122-ND	1.33	1.14	.76	1641-122K
1.5	44	7.9	835	DN41152-ND	1.33	1.14	.76	1641-152K
1.8	44	7.9	775	DN41182-ND	1.33	1.14	.76	1641-182K
2.2	44	7.9	665	DN41222-ND	1.33	1.14	.76	1641-222K
2.7	44	7.9	545	DN41272-ND	1.33	1.14	.76	1641-272K
3.3	44	7.9	490	DN41332-ND	1.33	1.14	.76	1641-332K
3.9	44	7.9	455	DN41392-ND	1.33	1.14	.76	1641-392K
4.7	44	7.9	390	DN41472-ND	1.33	1.14	.76	1641-472K
5.6	44	7.9	340	DN41562-ND	1.33	1.14	.76	1641-562K
6.8	50	7.9	285	DN41682-ND	1.33	1.14	.76	1641-682K
8.2	50	7.9	250	DN41822-ND	1.33	1.14	.76	1641-822K
10.0	50	7.9	228	DN41103-ND	1.33	1.14	.76	1641-103K
12.0	55	2.5	205	DN41123-ND	1.33	1.14	.76	1641-123K
Series 1641 Ferrite Core Ferrite Sleeve (LT10K)								
15.0	45	2.5	325	DN41153-ND	1.33	1.14	.76	1641-153K
18.0	45	2.5	305	DN41183-ND	1.33	1.14	.76	1641-183K
22.0	45	2.5	295	DN41223-ND	1.33	1.14	.76	1641-223K
27.0	45	2.5	265	DN41273-ND	1.33	1.14	.76	1641-273K
33.0	45	2.5	248	DN41333-ND	1.33	1.14	.76	1641-333K
39.0	50	2.5	209	DN41393-ND	1.33	1.14	.76	1641-393K
47.0	50	2.5	200	DN41473-ND	1.33	1.14	.76	1641-473K
56.0	50	2.5	194	DN41563-ND	1.33	1.14	.76	1641-563K
68.0	50	2.5	176	DN41683-ND	1.33	1.14	.76	1641-683K
82.0	50	2.5	186	DN41823-ND	1.33	1.14	.76	1641-823K
100.0	50	2.5	164	DN41104-ND	1.33	1.14	.76	1641-104K
120.0	55	.79	153	DN41124-ND	1.33	1.14	.76	1641-124K
150.0	55	.79	143	DN41154-ND	1.33	1.14	.76	1641-154K
180.0	55	.79	138	DN41184-ND	1.33	1.14	.76	1641-184K
220.0	55	.79	130	DN41224-ND	1.33	1.14	.76	1641-224K
270.0	55	.79	120	DN41274-ND	1.33	1.14	.76	1641-274K
330.0	55	.79	115	DN41334-ND	1.33	1.14	.76	1641-334K
390.0	60	.79	107	DN41394-ND	1.33	1.14	.76	1641-394K
470.0	60	.79	94	DN41474-ND	1.40	1.20	.80	1641-474K
560.0	60	.79	90	DN41564-ND	1.40	1.20	.80	1641-564K
680.0	60	.79	84	DN41684-ND	1.40	1.20	.80	1641-684K
820.0	60	.79	80	DN41824-ND	1.40	1.20	.80	1641-824K
1000.0	60	.79	70	DN41105-ND	1.40	1.20	.80	1641-105K

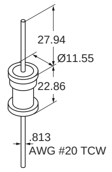
Series 2474 Power Inductors

Mechanical Configuration: Units are axial leaded for printed circuit mounting, encapsulated in an epoxy molded case. High resistivity ferrite core, allows for high inductance with low DC resistance. **Operating Temperature:** -55°C to +125°C. **Current Rating:** 40°C Rise over 85°C Ambient. **Power Dissipation at 85°C:** .50 Watts. **Inductance:** Measured at 1 V with no DC current.

Dimensions L	Dimensions D	Lead Size AWG #20 (TWC)	Lead Length
.740" (18.80mm)	.240" (6.10mm)	.032" (.81mm)	1.44" (36.58mm)

Induct. (µH)	Max. DC Resist. (Ohms)	Max. Current Rating (Amps)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	API Delevan Part No.
Series 2474 Ferrite Core							
1.0	0.009	6.27	DN7401-ND	2.33	2.00	1.34	2474-01L
1.2	0.010	5.95	DN7402-ND	2.33	2.00	1.34	2474-02L
1.5	0.011	5.67	DN7403-ND	2.33	2.00	1.34	2474-03L
1.8	0.012	5.43	DN7404-ND	2.33	2.00	1.34	2474-04L
2.2	0.013	5.22	DN7405-ND	2.33	2.00	1.34	2474-05L
2.7	0.014	5.03	DN7406-ND	2.33	2.00	1.34	2474-06L
3.3	0.016	4.70	DN7407-ND	2.33	2.00	1.34	2474-07L
3.9	0.017	4.56	DN7408-ND	2.33	2.00	1.34	2474-08L
4.7	0.022	4.01	DN7409-ND	2.33	2.00	1.34	2474-09L
5.6	0.024	3.84	DN7410-ND	2.33	2.00	1.34	2474-10L
6.8	0.026	3.69	DN7411-ND	2.33	2.00	1.34	2474-11L
8.2	0.028	3.55	DN7412-ND	2.33	2.00	1.34	2474-12L
10.0	0.033	3.27	DN7413-ND	2.76	2.37	1.58	2474-13L
12.0	0.037	3.09	DN7414-ND	2.76	2.37	1.58	2474-14L
15.0	0.040	2.97	DN7415-ND	2.76	2.37	1.58	2474-15L
18.0	0.044	2.84	DN7416-ND	2.76	2.37	1.58	2474-16L
22.0	0.050	2.66	DN7417-ND	2.76	2.37	1.58	2474-17L
27.0	0.070	2.25	DN7418-ND	2.76	2.37	1.58	2474-18L
33.0	0.075	2.17	DN7419-ND	2.76	2.37	1.58	2474-19L
39.0	0.084	2.05	DN7420-ND	2.76	2.37	1.58	2474-20L
47.0	0.104	1.84	DN7421-ND	2.76	2.37	1.58	2474-21L
56.0	0.130	1.65	DN7422-ND	2.76	2.37	1.58	2474-22L
68.0	0.145	1.56	DN7423-ND	2.76	2.37	1.58	2474-23L
82.0	0.152	1.53	DN7424-ND	2.76	2.37	1.58	2474-24L
100.0	0.208	1.30	DN7425-ND	2.94	2.52	1.68	2474-25L
120.0	0.283	1.12	DN7426-ND	2.94	2.52	1.68	2474-26L
150.0	0.330	1.04	DN7427-ND	2.94	2.52	1.68	2474-27L
180.0	0.362	0.99	DN7428-ND	2.94	2.52	1.68	2474-28L
220.0	0.505	0.84	DN7429-ND	2.94	2.52	1.68	2474-29L
270.0	0.557	0.80	DN7430-ND	2.94	2.52	1.68	2474-30L
330.0	0.650	0.74	DN7431-ND	2.94	2.52	1.68	2474-31L
390.0	0.770	0.68	DN7432-ND	2.94	2.52	1.68	2474-32L
470.0	1.03	0.59	DN7433-ND	2.94	2.52	1.68	2474-33L
560.0	1.14	0.56	DN7434-ND	2.94	2.52	1.68	2474-34L
680.0	1.50	0.49	DN7435-ND	2.94	2.52	1.68	2474-35L
820.0	1.98	0.42	DN7436-ND	2.94	2.52	1.68	2474-36L
1000.0	2.30	0.39	DN7437-ND	3.12	2.68	1.79	2474-37L
1200.0	2.55	0.37	DN7438-ND	3.12	2.68	1.79	2474-38L
1500.0	3.00	0.34	DN7439-ND	3.12	2.68	1.79	2474-39L
1800.0	4.00	0.30	DN7440-ND	3.12	2.68	1.79	2474-40L
2200.0	4.40	0.28	DN7441-ND	3.12	2.68	1.79	2474-41L
2700.0	5.80	0.25	DN7442-ND	3.12	2.68	1.79	2474-42L
3300.0	6.56	0.23	DN7443-ND	3.12	2.68	1.79	2474-43L
3900.0	8.63	0.20	DN7444-ND	3.12	2.68	1.79	2474-44L
4700.0	10.1	0.19	DN7445-ND	3.12	2.68	1.79	2474-45L
5600.0	11.2	0.18	DN7446-ND	3.12	2.68	1.79	2474-46L
6800.0	15.0	0.15	DN7447-ND	3.12	2.68	1.79	2474-47L
8200.0	20.8	0.13	DN7448-ND	3.12	2.68	1.79	2474-48L
10000.0	23.4	0.12	DN7449-ND	3.34	2.87	1.91	2474-49L
12000.0	26.0	0.12	DN7450-ND	3.34	2.87	1.91	2474-50L
15000.0	36.0	0.10	DN7451-ND	3.34	2.87	1.91	2474-51L
18000.0	40.0	0.09	DN7452-ND	3.34	2.87	1.91	2474-52L

Series 4590 High Current Filter Inductors

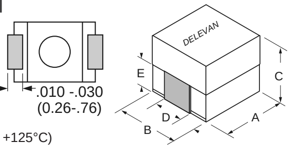


Mechanical Configuration:
Ferrite Bobbin protected with a flame retardant polyolefin sleeve.

Nom. Induct. ±10% (µH)	Max. DC Resist. (Ohms)	Max. Current Rating (Amps)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	API Delevan Part No.
3.9	0.007	9.75	DN4495-ND	1.82	1.57	1.05	4590-392K
4.7	0.008	9.11	DN4496-ND	1.82	1.57	1.05	4590-472K
5.6	0.011	7.77	DN4497-ND	1.82	1.57	1.05	4590-562K
6.8	0.011	7.60	DN4498-ND	1.82	1.57	1.05	4590-682K
8.2	0.013	7.15	DN4499-ND	1.82	1.57	1.05	4590-822K
10.0	0.016	6.44	DN4500-ND	2.08	1.79	1.19	4590-103K
12.0	0.018	6.07	DN4501-ND	2.08	1.79	1.19	4590-123K
15.0	0.020	5.76	DN4502-ND	2.08	1.79	1.19	4590-153K
18.0	0.020	5.49	DN4503-ND	2.08	1.79	1.19	4590-183K
22.0	0.024	5.26	DN4504-ND	2.08	1.79	1.19	4590-223K
27.0	0.025	5.15	DN4505-ND	2.08	1.79	1.19	4590-273K
33.0	0.028	4.87	DN4506-ND	2.08	1.79	1.19	4590-333K
39.0	0.028	4.87	DN4507-ND	2.08	1.79	1.19	4590-393K
47.0	0.034	4.45	DN4508-ND	2.08	1.79	1.19	4590-473K
56.0	0.043	3.93	DN4509-ND	2.08	1.79	1.19	4590-563K
68.0	0.059	3.35	DN4510-ND	2.08	1.79	1.19	4590-683K
82.0	0.066	3.17	DN4511-ND	2.08	1.79	1.19	4590-823K
100	0.084	2.81	DN4512-ND	2.08	1.79	1.19	4590-104K
120	0.113	2.43	DN4513-ND	2.08	1.79	1.19	4590-124K
150	0.129	2.27	DN4514-ND	2.08	1.79	1.19	4590-154K
180	0.150	2.10	DN4515-ND	2.08	1.79	1.19	4590-184K
220	0.162	2.02	DN4516-ND	2.08	1.79	1.19	4590-224K
270	0.226	1.71	DN4517-ND	2.08	1.79	1.19	4590-274K
330	0.257	1.61	DN4518-ND	2.08	1.79	1.19	4590-334K
390	0.288	1.52	DN4519-ND	2.08	1.79	1.19	4590-394K
470	0.393	1.30	DN4520-ND	2.08	1.79	1.19	4590-474K
560	0.504	1.15	DN4521-ND	2.08	1.79	1.19	4590-564K
680	0.570	1.08	DN4522-ND	2.08	1.79	1.19	4590-684K
820	0.643	1.01	DN4523-ND	2.08	1.79	1.19	4590-824K
1000	0.844	0.89	DN4524-ND	2.08	1.79	1.19	4590-105K
1200	0.977	0.82	DN4525-ND	1.97	1.70	1.13	4590-125K
1500	1.18	0.75	DN4526-ND	1.97	1.70	1.13	4590-155K
1800	1.50	0.66	DN4527-ND	1.97	1.70	1.13	4590-185K
2200	1.76	0.61	DN4528-ND	1.97	1.70	1.13	4590-225K
2700	2.13	0.56	DN4529-ND	1.97	1.70	1.13	4590-275K
3300	2.53	0.51	DN4530-ND	1.97	1.70	1.13	4590-335K
3900	2.84	0.48	DN4531-ND	1.97	1.70	1.13	4590-395K
4700	3.79	0.41	DN4532-ND	1.82	1.57	1.05	4590-475K
5600	4.24	0.39	DN4533-ND	1.82	1.57	1.05	4590-565K
6800	5.75	0.34	DN4534-ND	1.82	1.57	1.05	4590-685K
8200	6.44	0.32	DN4535-ND	1.82	1.57	1.05	4590-825K
10000	7.30	0.30	DN4536-ND	1.82	1.57	1.05	4590-106K
12000	9.34	0.26	DN4537-ND	1.82	1.57	1.05	4590-126K
15000	10.7	0.25	DN4538-ND	1.82	1.57	1.05	4590-156K
18000	14.8	0.21	DN4539-ND	1.82	1.57	1.05	4590-186K
22000	18.0	0.19	DN4540-ND	1.82	1.57	1.05	4590-226K
27000	22.7	0.17	DN4541-ND	1.82	1.57	1.05	4590-276K
33000	25.7	0.16	DN4542-ND	1.99	1.71	1.14	4590-336K
39000	29.7	0.15	DN4543-ND	1.99	1.71	1.14	4590-396K
47000	33.7	0.14	DN4544-ND	1.99	1.71	1.14	4590-476K
56000	38.0	0.13	DN4545-ND	1.99	1.71	1.14	4590-566K
68000	52.8	0.11	DN4546-ND	1.99	1.71	1.14	4590-686K
82000	67.3	0.10	DN4547-ND	1.99	1.71	1.14	4590-826K
100000	76.0	0.09	DN4548-ND	1.99	1.71	1.14	4590-107K

API Delevan

Series 1008 Unshielded Surface Mount Inductors



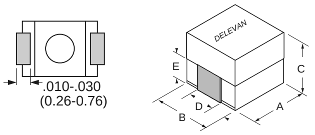
Operating Temperature Range: -67°F to +257°F (-55°C to +125°C)

Dimensions – Inch (mm)				
A	B	C	D	E
.100 (2.54)	.080 (2.03)	.080 (2.03)	.055 (1.40)	.046 (1.17)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max. (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 500	API Delevan Part No.
Series 1008 Phenolic Core — K Tolerance, ±10%										
.010	50.0	40	1562	DN08100CT-ND	1.61	1.38	.92	DN08100TR-ND	368.00	1008-100K
.012	50.0	40	1450	DN08120CT-ND	1.61	1.38	.92	DN08120TR-ND	368.00	1008-120K
.015	50.0	40	1381	DN08150CT-ND	1.61	1.38	.92	DN08150TR-ND	368.00	1008-150K
.018	50.0	40	1320	DN08180CT-ND	1.61	1.38	.92	DN08180TR-ND	368.00	1008-180K
.022	50.0	35	1235	DN08220CT-ND	1.61	1.38	.92	DN08220TR-ND	368.00	1008-220K
.027	50.0	35	1164	DN08270CT-ND	1.61	1.38	.92	DN08270TR-ND	368.00	1008-270K
.033	50.0	30	1105	DN08330CT-ND	1.61	1.38	.92	DN08330TR-ND	368.00	1008-330K
.039	50.0	30	1053	DN08390CT-ND	1.61	1.38	.92	DN08390TR-ND	368.00	1008-390K
.047	50.0	30	1108	DN08470CT-ND	1.61	1.38	.92	DN08470TR-ND	368.00	1008-470K
.056	50.0	25	847	DN08560CT-ND	1.61	1.38	.92	DN08560TR-ND	368.00	1008-560K
.068	50.0	25	823	DN08680CT-ND	1.61	1.38	.92	DN08680TR-ND	368.00	1008-680K
.082	50.0	25	801	DN08820CT-ND	1.61	1.38	.92	DN08820TR-ND	368.00	1008-820K
.100	25.0	15	728	DN08101CT-ND	1.61	1.38	.92	DN08101TR-ND	368.00	1008-101K
Series 1008 Ferrite Core — K Tolerance, ±10%										
.12	25.0	40	1225	DN08121CT-ND	1.61	1.38	.92	DN08121TR-ND	368.00	1008-121K
.15	25.0	40	1168	DN08151CT-ND	1.61	1.38	.92	DN08151TR-ND	368.00	1008-151K
.18	25.0	40	1119	DN08181CT-ND	1.61	1.38	.92	DN08181TR-ND	368.00	1008-181K
.22	25.0	40	1055	DN08221CT-ND	1.61	1.38	.92	DN08221TR-ND	368.00	1008-221K
.27	25.0	40	1000	DN08271CT-ND	1.61	1.38	.92	DN08271TR-ND	368.00	1008-271K
.33	25.0	40	954	DN08331CT-ND	1.61	1.38	.92	DN08331TR-ND	368.00	1008-331K
.39	25.0	40	913	DN08391CT-ND	1.61	1.38	.92	DN08391TR-ND	368.00	1008-391K
.47	25.0	40	846	DN08471CT-ND	1.61	1.38	.92	DN08471TR-ND	368.00	1008-471K
.56	25.0	40	808	DN08561CT-ND	1.61	1.38	.92	DN08681TR-ND	368.00	1008-561K
.68	25.0	40	760	DN08681CT-ND	1.61	1.38	.92	DN08681TR-ND	368.00	1008-681K
.82	25.0	40	708	DN08821CT-ND	1.61	1.38	.92	DN08821TR-ND	368.00	1008-821K
Series 1008 Ferrite Core — J Tolerance, ±5%										
1.0	7.9	30	685	DN08102JCT-ND	1.61	1.38	.92	DN08102JTR-ND	368.00	1008-102J
1.2	7.9	30	591	DN08122JCT-ND	1.93	1.65	1.10	DN08122JTR-ND	440.00	1008-122J
1.5	7.9	30	548	DN08152JCT-ND	1.93	1.65	1.10	DN08152JTR-ND	440.00	1008-152J
1.8	7.9	30	457	DN08182JCT-ND	1.93	1.65	1.10	DN08182JTR-ND	440.00	1008-182J
2.2	7.9	30	433	DN08222JCT-ND	1.93	1.65	1.10	DN08222JTR-ND	440.00	1008-222J
2.7	7.9	30	413	DN08272JCT-ND	1.93	1.65	1.10	DN08272JTR-ND	440.00	1008-272J
3.3	7.9	30	398	DN08332JCT-ND	1.93	1.65	1.10	DN08332JTR-ND	440.00	1008-332J
3.9	7.9	30	354	DN08392JCT-ND	1.93	1.65	1.10	DN08392JTR-ND	440.00	1008-392J
4.7	7.9	30	334	DN08472JCT-ND	1.93	1.65	1.10	DN08472JTR-ND	440.00	1008-472J
5.6	7.9	30	312	DN08562JCT-ND	1.93	1.65	1.10	DN08562JTR-ND	440.00	1008-562J
6.8	7.9	30	274	DN08682JCT-ND	1.93	1.65	1.10	DN08682JTR-ND	440.00	1008-682J
8.2	7.9	30	264	DN08822JCT-ND	1.93	1.65	1.10	DN08822JTR-ND	440.00	1008-822J
10.0	7.9	30	245	DN08103JCT-ND	1.93	1.65	1.10	DN08103JTR-ND	440.00	1008-103J
12.0	2.5	30	207	DN08123JCT-ND	1.93	1.65	1.10	DN08123JTR-ND	440.00	1008-123J
15.0	2.5	30	194	DN08153JCT-ND	1.93	1.65	1.10	DN08153JTR-ND	440.00	1008-153J
18.0	2.5	30	173	DN08183JCT-ND	1.93	1.65	1.10	DN08183JTR-ND	440.00	1008-183J
22.0	2.5	30	158	DN08223JCT-ND	1.93	1.65	1.10	DN08223JTR-ND	440.00	1008-223J
27.0	2.5	30	146	DN08273JCT-ND	1.93	1.65	1.10	DN08273JTR-ND	440.00	1008-273J
33.0	2.5	30	135	DN08333JCT-ND	1.93	1.65	1.10	DN08333JTR-ND	440.00	1008-333J
39.0	2.5	30	125	DN08393JCT-ND	1.93	1.65	1.10	DN08393JTR-ND	440.00	1008-393J
47.0	2.5	30	120	DN08473JCT-ND	1.93	1.65	1.10	DN08473JTR-ND	440.00	1008-473J

1008KIT-ND (API Delevan Part No. 1008KIT)
Series 1008 Inductor Kit. 5 each of 54 values (0.0018µH to 47.0µH), 270 total pieces. **$95.95**

Series S1008 Shielded Surface Mount Inductors

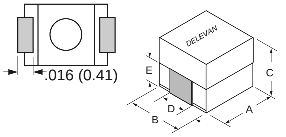


Dimensions – Inch (mm)				
A	B	C	D	E
.100 (2.54)	.080 (2.03)	.080 (2.03)	.055 (1.40)	.046 (1.17)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max. (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 500	API Delevan Part No.
Series S1008 Ferrite Core, ±10%										
.10	25	40	1120	DN1001CT-ND	1.72	1.47	.98	DN1001TR-ND	392.00	S1008-101K
.15	25	40	1015	DN1003CT-ND	1.72	1.47	.98	DN1003TR-ND	392.00	S1008-151K
.18	25	40	970	DN1004CT-ND	1.72	1.47	.98	DN1004TR-ND	392.00	S1008-181K
.22	25	40	930	DN1005CT-ND	1.72	1.47	.98	DN1005TR-ND	392.00	S1008-221K
.27	25	40	900	DN1006CT-ND	1.72	1.47	.98	DN1006TR-ND	392.00	S1008-271K
.33	25	40	865	DN1007CT-ND	1.72	1.47	.98	DN1007TR-ND	392.00	S1008-331K
.39	25	40	840	DN1008CT-ND	1.72	1.47	.98	DN1008TR-ND	392.00	S1008-391K
.47	25	40	815	DN1009CT-ND	1.72	1.47	.98	DN1009TR-ND	392.00	S1008-471K
.56	25	40	790	DN1010CT-ND	1.72	1.47	.98	DN1010TR-ND	392.00	S1008-561K
.62	25	40	770	DN1011CT-ND	1.72	1.47	.98	DN1011TR-ND	392.00	S1008-621K
.68	25	40	750	DN1012CT-ND	1.72	1.47	.98	DN1012TR-ND	392.00	S1008-681K
.75	25	40	735	DN1013CT-ND	1.72	1.47	.98	DN1013TR-ND	392.00	S1008-751K
.82	25	40	715	DN1014CT-ND	1.72	1.47	.98	DN1014TR-ND	392.00	S1008-821K
.91	25	40	685	DN1015CT-ND	1.72	1.47	.98	DN1015TR-ND	392.00	S1008-911K
1.0	7.9	30	670	DN1016CT-ND	1.72	1.47	.98	DN1016TR-ND	392.00	S1008-102K
1.2	7.9	30	625	DN1017CT-ND	1.72	1.47	.98	DN1017TR-ND	392.00	S1008-122K
1.5	7.9	30	545	DN1018CT-ND	1.72	1.47	.98	DN1018TR-ND	392.00	S1008-152K
1.8	7.9	30	435	DN1019CT-ND	1.72	1.47	.98	DN1019TR-ND	392.00	S1008-182K
2.2	7.9	30	375	DN1020CT-ND	1.72	1.47	.98	DN1020TR-ND	392.00	S1008-222K
2.7	7.9	30	365	DN1021CT-ND	1.72	1.47	.98	DN1021TR-ND	392.00	S1008-272K
3.3	7.9	30	355	DN1022CT-ND	1.72	1.47	.98	DN1022TR-ND	392.00	S1008-332K
3.9	7.9	30	335	DN1023CT-ND	1.72	1.47	.98	DN1023TR-ND	392.00	S1008-392K
4.7	7.9	30	305	DN1024CT-ND	1.72	1.47	.98	DN1024TR-ND	392.00	S1008-472K
5.6	7.9	30	295	DN1025CT-ND	1.72	1.47	.98	DN1025TR-ND	392.00	S1008-562K
6.8	7.9	30	250	DN1026CT-ND	1.72	1.47	.98	DN1026TR-ND	392.00	S1008-682K
8.2	7.9	30	240	DN1027CT-ND	1.72	1.47	.98	DN1027TR-ND	392.00	S1008-822K
10.0	7.9	30	230	DN1028CT-ND	1.72	1.47	.98	DN1028TR-ND	392.00	S1008-103K
12.0	2.5	30	220	DN1029CT-ND	1.72	1.47	.98	DN1029TR-ND	392.00	S1008-123K
15.0	2.5	30	210	DN1030CT-ND	1.72	1.47	.98	DN1030TR-ND	392.00	S1008-153K
18.0	2.5	30	200	DN1031CT-ND	1.72	1.47	.98	DN1031TR-ND	392.00	S1008-183K
22.0	2.5	30	170	DN1032CT-ND	1.72	1.47	.98	DN1032TR-ND	392.00	S1008-223K
27.0	2.5	30	160	DN1033CT-ND	1.72	1.47	.98	DN1033TR-ND	392.00	S1008-273K
33.0	2.5	30	125	DN1034CT-ND	1.72	1.47	.98	DN1034TR-ND	392.00	S1008-333K
47.0	2.5	30	110	DN1036CT-ND	1.72	1.47	.98	DN1036TR-ND	392.00	S1008-473K

S1008KIT-ND (API Delevan Part No. S1008KIT)
Series S1008 Inductor Kit. 5 each of 36 values (0.1µH to 47.0µH), 180 total pieces. **$95.95**

Series 1210 Unshielded Surface Mount Inductors



Operating Temperature Range:
-67°F to +257°F (-55°C to +125°C)

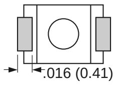
Min to Max Dimensions–Inch (mm)				
A	B	C (over terminals)	D	E
.118 – .138 (3.00 – 3.51)	.085 – .105 (2.16 – 2.67)	.081 – .101 (2.06 – 2.57)	.041 – .061 (1.04 – 1.55)	.054 (1.37)

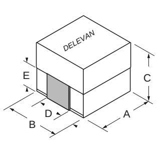
Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max. (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 500	API Delevan Part No.
Series 1210 Phenolic Core, ±10%										
.010	50.0	30	966	DN10100CT-ND	.84	.72	.48	DN10100TR-ND	192.00	1210-100K
.012	50.0	30	931	DN10120CT-ND	.84	.72	.48	DN10120TR-ND	192.00	1210-120K
.015	50.0	30	871	DN10150CT-ND	.84	.72	.48	DN10150TR-ND	192.00	1210-150K
.018	50.0	30	821	DN10180CT-ND	.84	.72	.48	DN10180TR-ND	192.00	1210-180K
.022	50.0	30	779	DN10220CT-ND	.84	.72	.48	DN10220TR-ND	192.00	1210-220K
.027	50.0	30	743	DN10270CT-ND	.84	.72	.48	DN10270TR-ND	192.00	1210-270K
.033	50.0	30	711	DN10330CT-ND	.84	.72	.48	DN10330TR-ND	192.00	1210-330K
.039	50.0	30	670	DN10390CT-ND	.84	.72	.48	DN10390TR-ND	192.00	1210-390K
.047	50.0	30	636	DN10470CT-ND	.84	.72	.48	DN10470TR-ND	192.00	1210-470K
.056	50.0	30	606	DN10560CT-ND	.84	.72	.48	DN10560TR-ND	192.00	1210-560K
.068	50.0	30	580	DN10680CT-ND	.74	.63	.42	DN10680TR-ND	168.00	1210-680K
.082	50.0	30	551	DN10820CT-ND	.84	.72	.48	DN10820TR-ND	192.00	1210-820K
Series 1210 Iron Core, ±10%										
.10	25.0	30	1018	DN10101CT-ND	.95	.81	.54	DN10101TR-ND	216.00	1210-101K
.12	25.0	30	971	DN10121CT-ND	.95	.81	.54	DN10121TR-ND	216.00	1210-121K
.15	25.0	30	910	DN10151CT-ND	.95	.81	.54	DN10151TR-ND	216.00	1210-151K
.18	25.0	30	860	DN10181CT-ND	.95	.81	.54	DN10181TR-ND	216.00	1210-181K
.22	25.0	30	805	DN10221CT-ND	.95	.81	.54	DN10221TR-ND	216.00	1210-221K
.27	25.0	30	759	DN10271CT-ND	.95	.81	.54	DN10271TR-ND	216.00	1210-271K
.33	25.0	30	720	DN10331CT-ND	.95	.81	.54	DN10331TR-ND	216.00	1210-331K
.39	25.0	30	679	DN10391CT-ND	.95	.81	.54	DN10391TR-ND	216.00	1210-391K
.47	25.0	30	644	DN10471CT-ND	.95	.81	.54	DN10471TR-ND	216.00	1210-471K
.56	25.0	30	614	DN10561CT-ND	.95	.81	.54	DN10561TR-ND	216.00	1210-561K
.68	25.0	30	588	DN10681CT-ND	.95	.81	.54	DN10681TR-ND	216.00	1210-681K
.82	25.0	30	556	DN10821CT-ND	.95	.81	.54	DN10821TR-ND	216.00	1210-821K
Series 1210 Ferrite Core, ±5%										
1.0	7.9	30	515	DN10102JCT-ND	.98	.84	.56	DN10102JTR-ND	224.00	1210-102J
1.2	7.9	30	497	DN10122JCT-ND	.98	.84	.56	DN10122JTR-ND	224.00	1210-122J
1.5	7.9	30	467	DN10152JCT-ND	.98	.84	.56	DN10152JTR-ND	224.00	1210-152J
1.8	7.9	30	454	DN10182JCT-ND	.98	.84	.56	DN10182JTR-ND	224.00	1210-182J
2.2	7.9	30	431	DN10222JCT-ND	.98	.84	.56	DN10222JTR-ND	224.00	1210-222J
2.7	7.9	30	411	DN10272JCT-ND	.98	.84	.56	DN10272JTR-ND	224.00	1210-272J
3.3	7.9	30	393	DN10332JCT-ND	.98	.84	.56	DN10332JTR-ND	224.00	1210-332J
3.9	7.9	30	378	DN10392JCT-ND	.98	.84	.56	DN10392JTR-ND	224.00	1210-392J
4.7	7.9	30	352	DN10472JCT-ND	.98	.84	.56	DN10472JTR-ND	224.00	1210-472J
5.6	7.9	30	341	DN10562JCT-ND	.98	.84	.56	DN10562JTR-ND	224.00	1210-562J
6.8	7.9	30	321	DN10682JCT-ND	.98	.84	.56	DN10682JTR-ND	224.00	1210-682J
8.2	7.9	30	305	DN10822JCT-ND	.98	.84	.56	DN10822JTR-ND	224.00	1210-822J
10.0	7.9	30	297	DN10103JCT-ND	1.02	.87	.58	DN10103JTR-ND	232.00	1210-103J
12.0	2.5	30	272	DN10123JCT-ND	1.02	.87	.58	DN10123JTR-ND	232.00	1210-123J
15.0	2.5	30	257	DN10153JCT-ND	1.02	.87	.58	DN10153JTR-ND	232.00	1210-153J
18.0	2.5	30	237	DN10183JCT-ND	1.02	.87	.58	DN10183JTR-ND	232.00	1210-183J
22.0	2.5	30	224	DN10223JCT-ND	1.02	.87	.58	DN10223JTR-ND	232.00	1210-223J
27.0	2.5	30	193	DN10273JCT-ND	1.02	.87	.58	DN10273JTR-ND	232.00	1210-273J
33.0	2.5	30	182	DN10333JCT-ND	1.02	.87	.58	DN10333JTR-ND	232.00	1210-333J
39.0	2.5	30	170	DN10393JCT-ND	1.02	.87	.58	DN10393JTR-ND	232.00	1210-393J
47.0	2.5	30	163	DN10473JCT-ND	1.02	.87	.58	DN10473JTR-ND	232.00	1210-473J
56.0	2.5	30	152	DN10563JCT-ND	1.02	.87	.58	DN10563JTR-ND	232.00	1210-563J
68.0	2.5	30	144	DN10683JCT-ND	1.02	.87	.58	DN10683JTR-ND	232.00	1210-683J
82.0	2.5	30	136	DN10823JCT-ND	1.02	.87	.58	DN10823JTR-ND	232.00	1210-823J
100.0	2.5	30	120	DN10104JCT-ND	1.02	.87	.58	DN10104JTR-ND	232.00	1210-104J

1210KIT-ND (API Delevan Part No. 1210KIT)
Series 1210 Inductor Kit. 5 each of 58 values (0.0018µH to 100.0µH), 290 total pieces. **$95.95**

(Continued)

Series S1210 Shielded Surface Mount Inductors



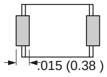


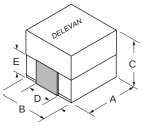
Min to Max Dimensions–Inch (mm)				
A	B	C (over terminals)	D	E
.118 – .138 (3.00–3.51)	.085 – .105 (2.16–2.67)	.081 – .101 (2.06–2.57)	.041 – .061 (1.04–1.55)	.054 (1.37)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 500	API Delevan Part No.
Series S1210 Iron Core, ±10%										
.10	25	40	1175	DN1050CT-ND	1.09	.93	.62	DN1050TR-ND	248.00	S1210-101K
.12	25	40	1104	DN1051CT-ND	1.09	.93	.62	DN1051TR-ND	248.00	S1210-121K
.15	25	40	1017	DN1052CT-ND	1.09	.93	.62	DN1052TR-ND	248.00	S1210-151K
.18	25	40	971	DN1053CT-ND	1.09	.93	.62	DN1053TR-ND	248.00	S1210-181K
.22	25	40	910	DN1054CT-ND	1.09	.93	.62	DN1054TR-ND	248.00	S1210-221K
.27	25	40	860	DN1055CT-ND	1.09	.93	.62	DN1055TR-ND	248.00	S1210-271K
.33	25	40	831	DN1056CT-ND	1.09	.93	.62	DN1056TR-ND	248.00	S1210-331K
.39	25	40	720	DN1057CT-ND	1.09	.93	.62	DN1057TR-ND	248.00	S1210-391K
.47	25	40	679	DN1058CT-ND	1.09	.93	.62	DN1058TR-ND	248.00	S1210-471K
.56	25	40	644	DN1059CT-ND	1.09	.93	.62	DN1059TR-ND	248.00	S1210-561K
.68	25	40	614	DN1060CT-ND	1.09	.93	.62	DN1060TR-ND	248.00	S1210-681K
.82	25	40	588	DN1061CT-ND	1.09	.93	.62	DN1061TR-ND	248.00	S1210-821K
Series S1210 Ferrite Core, ±10%										
1.0	7.9	40	679	DN1062CT-ND	1.02	.87	.58	DN1062TR-ND	232.00	S1210-102K
1.2	7.9	40	650	DN1063CT-ND	1.02	.87	.58	DN1063TR-ND	232.00	S1210-122K
1.5	7.9	40	603	DN1064CT-ND	1.02	.87	.58	DN1064TR-ND	232.00	S1210-152K
1.8	7.9	40	564	DN1065CT-ND	1.02	.87	.58	DN1065TR-ND	232.00	S1210-182K
2.2	7.9	40	533	DN1066CT-ND	1.02	.87	.58	DN1066TR-ND	232.00	S1210-222K
2.7	7.9	40	526	DN1067CT-ND	1.02	.87	.58	DN1067TR-ND	232.00	S1210-272K
3.3	7.9	40	509	DN1068CT-ND	1.02	.87	.58	DN1068TR-ND	232.00	S1210-332K
3.9	7.9	40	500	DN1069CT-ND	1.02	.87	.58	DN1069TR-ND	232.00	S1210-392K
4.7	7.9	40	455	DN1070CT-ND	1.02	.87	.58	DN1070TR-ND	232.00	S1210-472K
5.6	7.9	40	399	DN1071CT-ND	1.02	.87	.58	DN1071TR-ND	232.00	S1210-562K
6.8	7.9	40	372	DN1072CT-ND	1.02	.87	.58	DN1072TR-ND	232.00	S1210-682K
8.2	7.9	40	349	DN1073CT-ND	1.02	.87	.58	DN1073TR-ND	232.00	S1210-822K
10.0	2.5	40	330	DN1074CT-ND	1.02	.87	.58	DN1074TR-ND	232.00	S1210-103K
12.0	2.5	40	314	DN1075CT-ND	1.02	.87	.58	DN1075TR-ND	232.00	S1210-123K
15.0	2.5	40	288	DN1076CT-ND	1.02	.87	.58	DN1076TR-ND	232.00	S1210-153K
22.0	2.5	40	262	DN1078CT-ND	1.02	.87	.58	DN1078TR-ND	232.00	S1210-223K
27.0	2.5	40	228	DN1079CT-ND	1.02	.87	.58	DN1079TR-ND	232.00	S1210-273K
33.0	2.5	40	215	DN1080CT-ND	1.02	.87	.58	DN1080TR-ND	232.00	S1210-333K
39.0	2.5	40	204	DN1081CT-ND	1.02	.87	.58	DN1081TR-ND	232.00	S1210-393K
47.0	2.5	40	194	DN1082CT-ND	1.02	.87	.58	DN1082TR-ND	232.00	S1210-473K
56.0	2.5	40	181	DN1083CT-ND	1.02	.87	.58	DN1083TR-ND	232.00	S1210-563K
68.0	2.5	40	172	DN1084CT-ND	1.02	.87	.58	DN1084TR-ND	232.00	S1210-683K
82.0	2.5	40	156	DN1085CT-ND	1.02	.87	.58	DN1085TR-ND	232.00	S1210-823K
100.0	2.5	40	144	DN1086CT-ND	1.02	.87	.58	DN1086TR-ND	232.00	S1210-104K

S1210KIT-ND (API Delevan Part No. S1210KIT)
Series S1210 Inductor Kit. 5 each of 37 values (0.10µH to 100.0µH), 185 total pieces **$95.95**

Series 1812 Unshielded Surface Mount Inductors





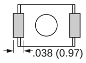
Operating Temperature Range: -67°F to +257°F (-55°C to +125°C)

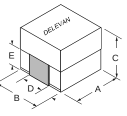
Min to Max Dimensions–Inch (mm)				
A	B	C (over terminals)	D	E
.166–.190 (4.22– 4.83)	.118–.134 (3.00–3.40)	.118 –.134 (3.00 – 3.40)	.054–.078 (1.37–1.98)	.066 (1.68)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	API Delevan Part No.
Series 1812 Iron Core, ±10%										
.10	25.0	30	818	DN12101CT-ND	.70	.60	.40	DN12101TR-ND	160.00	1812-101K
.12	25.0	30	818	DN12121CT-ND	.70	.60	.40	DN12121TR-ND	160.00	1812-121K
.15	25.0	30	818	DN12151CT-ND	.70	.60	.40	DN12151TR-ND	160.00	1812-151K
.18	25.0	30	757	DN12181CT-ND	.70	.60	.40	DN12181TR-ND	160.00	1812-181K
.22	25.0	30	708	DN12221CT-ND	.70	.60	.40	DN12221TR-ND	160.00	1812-221K
.27	25.0	30	668	DN12271CT-ND	.70	.60	.40	DN12271TR-ND	160.00	1812-271K
.33	25.0	30	604	DN12331CT-ND	.70	.60	.40	DN12331TR-ND	160.00	1812-331K
.39	25.0	30	535	DN12391CT-ND	.70	.60	.40	DN12391TR-ND	160.00	1812-391K
.47	25.0	30	501	DN12471CT-ND	.70	.60	.40	DN12471TR-ND	160.00	1812-471K
.56	25.0	30	409	DN12561CT-ND	.70	.60	.40	DN12561TR-ND	160.00	1812-561K
.68	25.0	30	379	DN12681CT-ND	.70	.60	.40	DN12681TR-ND	160.00	1812-681K
.82	25.0	30	354	DN12821CT-ND	.70	.60	.40	DN12821TR-ND	160.00	1812-821K
Series 1812 Ferrite Core — J Tolerance, ±5%										
1.0	7.9	50	634	DN12102JCT-ND	.77	.66	.44	DN12102JTR-ND	176.00	1812-102J
1.2	7.9	50	604	DN12122JCT-ND	.77	.66	.44	DN12122JTR-ND	176.00	1812-122J
1.5	7.9	50	578	DN12152JCT-ND	.77	.66	.44	DN12152JTR-ND	176.00	1812-152J
1.8	7.9	50	556	DN12182JCT-ND	.77	.66	.44	DN12182JTR-ND	176.00	1812-182J
2.2	7.9	50	535	DN12222JCT-ND	.77	.66	.44	DN12222JTR-ND	176.00	1812-222J
2.7	7.9	50	517	DN12272JCT-ND	.77	.66	.44	DN12272JTR-ND	176.00	1812-272J
3.3	7.9	50	501	DN12332JCT-ND	.77	.66	.44	DN12332JTR-ND	176.00	1812-332J
3.9	7.9	50	472	DN12392JCT-ND	.77	.66	.44	DN12392JTR-ND	176.00	1812-392J
4.7	7.9	50	448	DN12472JCT-ND	.77	.66	.44	DN12472JTR-ND	176.00	1812-472J
5.6	7.9	50	427	DN12562JCT-ND	.77	.66	.44	DN12562JTR-ND	176.00	1812-562J
6.8	7.9	50	409	DN12682JCT-ND	.77	.66	.44	DN12682JTR-ND	176.00	1812-682J
8.2	7.9	50	375	DN12822JCT-ND	.77	.66	.44	DN12822JTR-ND	176.00	1812-822J
10.0	7.9	50	354	DN12103JCT-ND	.77	.66	.44	DN12103JTR-ND	176.00	1812-103J
12.0	2.5	50	317	DN12123JCT-ND	.77	.66	.44	DN12123JTR-ND	176.00	1812-123J
15.0	2.5	50	283	DN12153JCT-ND	.77	.66	.44	DN12153JTR-ND	176.00	1812-153J
18.0	2.5	50	268	DN12183JCT-ND	.77	.66	.44	DN12183JTR-ND	176.00	1812-183J
22.0	2.5	50	250	DN12223JCT-ND	.77	.66	.44	DN12223JTR-ND	176.00	1812-223J
27.0	2.5	50	236	DN12273JCT-ND	.77	.66	.44	DN12273JTR-ND	176.00	1812-273J
33.0	2.5	50	224	DN12333JCT-ND	.77	.66	.44	DN12333JTR-ND	176.00	1812-333J
39.0	2.5	50	211	DN12393JCT-ND	.77	.66	.44	DN12393JTR-ND	176.00	1812-393J
47.0	2.5	50	200	DN12473JCT-ND	.77	.66	.44	DN12473JTR-ND	176.00	1812-473J
56.0	2.5	50	191	DN12563JCT-ND	.77	.66	.44	DN12563JTR-ND	176.00	1812-563J
68.0	2.5	50	183	DN12683JCT-ND	.77	.66	.44	DN12683JTR-ND	176.00	1812-683J
82.0	2.5	50	169	DN12823JCT-ND	.77	.66	.44	DN12823JTR-ND	176.00	1812-823J
100.0	2.5	50	158	DN12104JCT-ND	.77	.66	.44	DN12104JTR-ND	176.00	1812-104J
120.0	0.79	40	158	DN12124JCT-ND	.77	.66	.44	DN12124JTR-ND	176.00	1812-124J
150.0	0.79	40	149	DN12154JCT-ND	.77	.66	.44	DN12154JTR-ND	176.00	1812-154J
180.0	0.79	40	145	DN12184JCT-ND	.77	.66	.44	DN12184JTR-ND	176.00	1812-184J
220.0	0.79	40	142	DN12224JCT-ND	1.16	.99	.66	DN12224JTR-ND	264.00	1812-224J
270.0	0.79	40	129	DN12274JCT-ND	1.16	.99	.66	DN12274JTR-ND	264.00	1812-274J
330.0	0.79	40	120	DN12334JCT-ND	1.16	.99	.66	DN12334JTR-ND	264.00	1812-334J
390.0	0.79	40	100	DN12394JCT-ND	1.16	.99	.66	DN12394JTR-ND	264.00	1812-394J
470.0	0.79	40	88	DN12474JCT-ND	1.16	.99	.66	DN12474JTR-ND	264.00	1812-474J
560.0	0.79	30	82	DN12564JCT-ND	1.16	.99	.66	DN12564JTR-ND	264.00	1812-564J
680.0	0.79	30	82	DN12684JCT-ND	1.16	.99	.66	DN12684JTR-ND	264.00	1812-684J
820.0	0.79	30	67	DN12824JCT-ND	1.16	.99	.66	DN12824JTR-ND	264.00	1812-824J
1000.0	0.79	30	55	DN12105JCT-ND	1.16	.99	.66	DN12105JTR-ND	264.00	1812-105J

1812KIT-ND (API Delevan Part No. 1812KIT)
Series 1812 Inductor Kit. 5 each of 61 values (0.010µH to 1000.0µH), 305 total pieces **$95.95**

Series S1812 Shielded Surface Mount Inductors





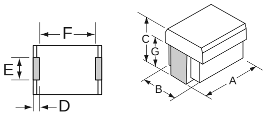
Min to Max Dimensions - Inch (mm)				
A	B	C (over terminals)	D	E
.166–.190 (4.22– 4.83)	.118 –.134 (3.00 –3.40)	.118–.134 (3.00 –3.40)	.054–.078 (1.37 –1.98)	.066 (1.68)

Induct. (µH)	Test Freq. (MHz)	Q Min.	Current Rating Max.(mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 500	Delevan Part No.
Series S1812 Iron Core, ±20%										
.10	25	50	1490	DN1100CT-ND	1.26	1.08	.72	DN1100TR-ND	288.00	S1812-101M
.12	25	50	1412	DN1101CT-ND	1.26	1.08	.72	DN1101TR-ND	288.00	S1812-121M
.15	25	50	1347	DN1102CT-ND	1.26	1.08	.72	DN1102TR-ND	288.00	S1812-151M
.18	25	50	1290	DN1103CT-ND	1.26	1.08	.72	DN1103TR-ND	288.00	S1812-181M
.47	25	40	802	DN1108CT-ND	1.26	1.08	.72	DN1108TR-ND	288.00	S1812-471M
.56	25	40	735	DN1109CT-ND	1.26	1.08	.72	DN1109TR-ND	288.00	S1812-561M
.82	25	40	614	DN1111CT-ND	1.26	1.08	.72	DN1111TR-ND	288.00	S1812-821M
Series S1812 Ferrite Core, ±10%										
1.0	7.9	40	755	DN1112CT-ND	1.30	1.11	.74	DN1112TR-ND	296.00	S1812-102K
1.2	7.9	40	725	DN1113CT-ND	1.30	1.11	.74	DN1113TR-ND	296.00	S1812-122K
1.5	7.9	40	706	DN1114CT-ND	1.30	1.11	.74	DN1114TR-ND	296.00	S1812-152K
1.8	7.9	40	681	DN1115CT-ND	1.30	1.11	.74	DN1115TR-ND	296.00	S1812-182K
2.2	7.9	40	658	DN1116CT-ND	1.30	1.11	.74	DN1116TR-ND	296.00	S1812-222K
2.7	7.9	40	638	DN1117CT-ND	1.30	1.11	.74	DN1117TR-ND	296.00	S1812-272K
3.3	7.9	40	534	DN1118CT-ND	1.30	1.11	.74	DN1118TR-ND	296.00	S1812-332K
3.9	7.9	40	487	DN1119CT-ND	1.30	1.11	.74	DN1119TR-ND	296.00	S1812-392K
4.7	7.9	40	471	DN1120CT-ND	1.30	1.11	.74	DN1120TR-ND	296.00	S1812-472K
5.6	7.9	40	447	DN1121CT-ND	1.30	1.11	.74	DN1121TR-ND	296.00	S1812-562K
6.8	7.9	40	408	DN1122CT-ND	1.30	1.11	.74	DN1122TR-ND	296.00	S1812-682K
8.2	7.9	40	372	DN1123CT-ND	1.30	1.11	.74	DN1123TR-ND	296.00	S1812-822K
10.0	2.5	50	333	DN1124CT-ND	1.30	1.11	.74	DN1124TR-ND	296.00	S1812-103K
12.0	2.5	50	315	DN1125CT-ND	1.30	1.11	.74	DN1125TR-ND	296.00	S1812-123K
15.0	2.5	50	301	DN1126CT-ND	1.30	1.11	.74	DN1126TR-ND	296.00	S1812-153K
18.0	2.5	50	288	DN1127CT-ND	1.30	1.11	.74	DN1127TR-ND	296.00	S1812-183K
22.0	2.5	50	277	DN1128CT-ND	1.30	1.11	.74	DN1128TR-ND	296.00	S1812-223K
27.0	2.5	50	267	DN1129CT-ND	1.30	1.11	.74	DN1129TR-ND	296.00	S1812-273K
33.0	2.5	50	258	DN1130CT-ND	1.30	1.11	.74	DN1130TR-ND	296.00	S1812-333K
39.0	2.5	50	250	DN1131CT-ND	1.30	1.11	.74	DN1131TR-ND	296.00	S1812-393K
47.0	2.5	50	242	DN1132CT-ND	1.30	1.11	.74	DN1132TR-ND	296.00	S1812-473K
56.0	2.5	50	235	DN1133CT-ND	1.30	1.11	.74	DN1133TR-ND	296.00	S1812-563K
68.0	2.5	50	215	DN1134CT-ND	1.30	1.11	.74	DN1134TR-ND	296.00	S1812-683K
82.0	2.5	50	196	DN1135CT-ND	1.30	1.11	.74	DN1135TR-ND	296.00	S1812-823K
100.0	.79	40	169	DN1136CT-ND	1.30	1.11	.74	DN1136TR-ND	296.00	S1812-104K
120.0	.79	40	163	DN1137CT-ND	1.30	1.11	.74	DN1137TR-ND	296.00	S1812-124K
150.0	.79	40	158	DN1138CT-ND	1.30	1.11	.74	DN1138TR-ND	296.00	S1812-154K
180.0	.79	40	153	DN1139CT-ND	1.30	1.11	.74	DN1139TR-ND	296.00	S1812-184K
220.0	.79	40	149	DN1140CT-ND	1.54	1.32	.88	DN1140TR-ND	352.00	S1812-224K
270.0	.79	40	135	DN1141CT-ND	1.54	1.32	.88	DN1141TR-ND	352.00	S1812-274K
330.0	.79	40	129	DN1142CT-ND	1.54	1.32	.88	DN1142TR-ND	352.00	S1812-334K
390.0	.79	40	105	DN1143CT-ND	1.54	1.32	.88	DN1143TR-ND	352.00	S1812-394K
470.0	.79	40	91	DN1144CT-ND	1.54	1.32	.88	DN1144TR-ND	352.00	S1812-474K
560.0	.79	40	84	DN1145CT-ND	1.54	1.32	.88	DN1145TR-ND	352.00	S1812-564K
680.0	.79	40	79	DN1146CT-ND	1.54	1.32	.88	DN1146TR-ND	352.00	S1812-684K
820.0	.79	40	71	DN1147CT-ND	1.54	1.32	.88	DN1147TR-ND	352.00	S1812-824K
1000.0	.25	40	60	DN1148CT-ND	1.54	1.32	.88	DN1148TR-ND	352.00	S1812-105K

S1812KIT-ND (API Delevan Part No. S1812KIT)
Series S1812 Inductor Kit. 5 each of 49 values (0.10µH to 1000.0µH), 245 total pieces..............**$95.95**

(Continued)

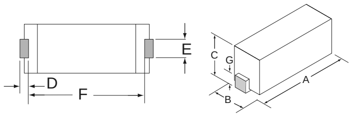
Series P1812 Surface Mount Power Inductors



Min to Max Dimensions–Inch (mm)			
A	**B**	**C**	**D**
.166-.190 (4.22-4.83)	.118-.134 (3.00-3.40)	.118-.134 (3.00-3.40)	.015 min. (.38 min.)
E	**F**	**G**	
.054-.078 (1.37-1.98)	.118 Ref. only (3.00)	.066 Ref. only (1.68)	

Induct. (µH) ±10% @ 1KHz	DC Resist. Max. (OHMS)	Current Rating (mA)	Incremental Current Rating (mA DC)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 500	API Delevan Part No.
1.0	0.113	1050	2400	DN3300CT-ND	.86	.75	.50	DN3300TR-ND	197.60	P1812-102K
1.2	0.199	1000	2158	DN3301CT-ND	.86	.75	.50	DN3301TR-ND	197.60	P1812-122K
1.5	0.222	950	1980	DN3302CT-ND	.86	.75	.50	DN3302TR-ND	197.60	P1812-152K
1.8	0.240	900	1828	DN3303CT-ND	.86	.75	.50	DN3303TR-ND	197.60	P1812-182K
2.2	0.268	850	1697	DN3304CT-ND	.86	.75	.50	DN3304TR-ND	197.60	P1812-222K
2.7	0.288	800	1513	DN3305CT-ND	.86	.75	.50	DN3305TR-ND	197.60	P1812-272K
3.3	0.323	750	1397	DN3306CT-ND	.86	.75	.50	DN3306TR-ND	197.60	P1812-332K
3.9	0.347	700	1250	DN3307CT-ND	.86	.75	.50	DN3307TR-ND	197.60	P1812-392K
4.7	0.401	650	1131	DN3308CT-ND	.86	.75	.50	DN3308TR-ND	197.60	P1812-472K
5.6	0.437	650	1060	DN3309CT-ND	.86	.75	.50	DN3309TR-ND	197.60	P1812-562K
6.8	0.472	600	990	DN3310CT-ND	.86	.75	.50	DN3310TR-ND	197.60	P1812-682K
8.2	0.548	600	871	DN3311CT-ND	.86	.75	.50	DN3311TR-ND	197.60	P1812-822K
10	0.608	550	772	DN3312CT-ND	.93	.80	.53	DN3312TR-ND	212.00	P1812-103K
12	0.670	550	752	DN3313CT-ND	.93	.80	.53	DN3313TR-ND	212.00	P1812-123K
15	0.780	450	693	DN3314CT-ND	.93	.80	.53	DN3314TR-ND	212.00	P1812-153K
18	0.875	400	614	DN3315CT-ND	.93	.80	.53	DN3315TR-ND	212.00	P1812-183K
22	1.200	370	515	DN3316CT-ND	.93	.80	.53	DN3316TR-ND	212.00	P1812-223K
27	1.404	330	465	DN3317CT-ND	.93	.80	.53	DN3317TR-ND	212.00	P1812-273K
33	1.578	300	425	DN3318CT-ND	.93	.80	.53	DN3318TR-ND	212.00	P1812-333K
39	1.848	280	376	DN3319CT-ND	.93	.80	.53	DN3319TR-ND	212.00	P1812-393K
47	2.064	260	366	DN3320CT-ND	.93	.80	.53	DN3320TR-ND	212.00	P1812-473K
56	2.268	240	336	DN3321CT-ND	.93	.80	.53	DN3321TR-ND	212.00	P1812-563K
68	3.408	220	297	DN3322CT-ND	.93	.80	.53	DN3322TR-ND	212.00	P1812-683K
82	3.648	200	267	DN3323CT-ND	.93	.80	.53	DN3323TR-ND	212.00	P1812-823K
100	4.320	180	238	DN3324CT-ND	.93	.80	.53	DN3324TR-ND	212.00	P1812-104K
120	6.000	160	208	DN3325CT-ND	.93	.80	.53	DN3325TR-ND	212.00	P1812-124K
150	6.432	140	183	DN3326CT-ND	.93	.80	.53	DN3326TR-ND	212.00	P1812-154K
180	8.400	120	158	DN3327CT-ND	.93	.80	.53	DN3327TR-ND	212.00	P1812-184K
220	9.680	120	143	DN3328CT-ND	.93	.80	.53	DN3328TR-ND	212.00	P1812-224K
270	12.720	100	129	DN3329CT-ND	.93	.80	.53	DN3329TR-ND	212.00	P1812-274K
330	15.240	90	118	DN3330CT-ND	.93	.80	.53	DN3330TR-ND	212.00	P1812-334K

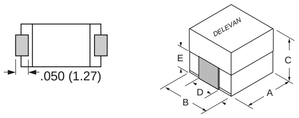
Series P1330 Surface Mount Power Inductors



Min to Max Dimensions–Inch (mm)			
A	**B**	**C**	**D**
0.300-0.325 (7.62-8.26)	0.105-0.125 (2.67-3.18)	0.125-0.145 (3.18-3.68)	0.020 Min.(0.506 Min.)
E	**F**	**G**	
0.040-0.060 (1.02-1.52)	0.190 (Ref. only) (4.83 Ref. only)	0.070 (Ref. only)(1.78 Ref. only)	

Induct. (µH) ±10% @ 1KHz	DC Resist. Max. (OHMS)	Current Rating (mA)	Incremental Current Rating (mA DC)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 500	API Delevan Part No.
1	0.035	2780	1526	DN3260CT-ND	1.56	1.34	.90	DN3260TR-ND	356.80	P1330-102K
1.2	0.041	2690	1400	DN3261CT-ND	1.56	1.34	.90	DN3261TR-ND	356.80	P1330-122K
1.5	0.043	2030	1291	DN3262CT-ND	1.56	1.34	.90	DN3262TR-ND	356.80	P1330-152K
1.8	0.048	1950	1180	DN3263CT-ND	1.56	1.34	.90	DN3263TR-ND	356.80	P1330-182K
2.2	0.075	1690	1104	DN3264CT-ND	1.56	1.34	.90	DN3264TR-ND	356.80	P1330-222K
2.7	0.080	1550	936	DN3265CT-ND	1.56	1.34	.90	DN3265TR-ND	356.80	P1330-272K
3.3	0.108	1460	840	DN3266CT-ND	1.56	1.34	.90	DN3266TR-ND	356.80	P1330-332K
3.9	0.118	1390	732	DN3267CT-ND	1.56	1.34	.90	DN3267TR-ND	356.80	P1330-392K
4.7	0.125	1330	720	DN3268CT-ND	1.56	1.34	.90	DN3268TR-ND	356.80	P1330-472K
5.6	0.145	1110	612	DN3269CT-ND	1.56	1.34	.90	DN3269TR-ND	356.80	P1330-562K
6.8	0.165	1080	600	DN3270CT-ND	1.56	1.34	.90	DN3270TR-ND	356.80	P1330-682K
8.2	0.180	1020	600	DN3271CT-ND	1.56	1.34	.90	DN3271TR-ND	356.80	P1330-822K
10	0.216	946	564	DN3272CT-ND	1.56	1.34	.90	DN3272TR-ND	356.80	P1330-103K
12	0.252	912	516	DN3273CT-ND	1.56	1.34	.90	DN3273TR-ND	356.80	P1330-123K
15	0.288	858	432	DN3274CT-ND	1.56	1.34	.90	DN3274TR-ND	356.80	P1330-153K
18	0.328	817	420	DN3275CT-ND	1.56	1.34	.90	DN3275TR-ND	356.80	P1330-183K
22	0.384	694	348	DN3276CT-ND	1.56	1.34	.90	DN3276TR-ND	356.80	P1330-223K
27	0.425	657	324	DN3277CT-ND	1.56	1.34	.90	DN3277TR-ND	356.80	P1330-273K
33	0.538	568	270	DN3278CT-ND	1.56	1.34	.90	DN3278TR-ND	356.80	P1330-333K
39	0.600	488	270	DN3279CT-ND	1.56	1.34	.90	DN3279TR-ND	356.80	P1330-393K
47	0.792	467	246	DN3280CT-ND	1.56	1.34	.90	DN3280TR-ND	356.80	P1330-473K
56	0.900	442	216	DN3281CT-ND	1.56	1.34	.90	DN3281TR-ND	356.80	P1330-563K
68	1.020	384	174	DN3282CT-ND	1.56	1.34	.90	DN3282TR-ND	356.80	P1330-683K
82	1.380	362	150	DN3283CT-ND	1.56	1.34	.90	DN3283TR-ND	356.80	P1330-823K
100	1.680	347	132	DN3284CT-ND	1.83	1.57	1.05	DN3284TR-ND	418.40	P1330-104K
120	1.800	327	111	DN3285CT-ND	1.83	1.57	1.05	DN3285TR-ND	418.40	P1330-124K
150	2.040	272	106	DN3286CT-ND	1.83	1.57	1.05	DN3286TR-ND	418.40	P1330-154K
180	2.400	261	89	DN3287CT-ND	1.83	1.57	1.05	DN3287TR-ND	418.40	P1330-184K
220	2.648	223	72	DN3288CT-ND	1.83	1.57	1.05	DN3288TR-ND	418.40	P1330-224K
270	4.320	191	60	DN3289CT-ND	1.83	1.57	1.05	DN3289TR-ND	418.40	P1330-274K
330	4.800	179	57	DN3290CT-ND	1.83	1.57	1.05	DN3290TR-ND	418.40	P1330-334K
390	5.640	171	48	DN3291CT-ND	1.83	1.57	1.05	DN3291TR-ND	418.40	P1330-394K
470	6.000	161	41	DN3292CT-ND	1.83	1.57	1.05	DN3292TR-ND	418.40	P1330-474K
560	6.960	138	35	DN3293CT-ND	1.83	1.57	1.05	DN3293TR-ND	418.40	P1330-564K
680	8.760	130	30	DN3294CT-ND	1.83	1.57	1.05	DN3294TR-ND	418.40	P1330-684K
820	9.960	113	26	DN3295CT-ND	1.83	1.57	1.05	DN3295TR-ND	418.40	P1330-824K
1000	11.160	105	22	DN3296CT-ND	1.83	1.57	1.05	DN3296TR-ND	418.40	P1330-105K

Series 4922 High Current Surface Mount Power Inductors



Mechanical Configuration: Units are encapsulated in a Surface Mount package, using an epoxy molded case. Leads are pre-tinned. A high resistivity ferrite core allows for high inductance with low DC resistance. Standard tolerance ±15%. **Operating Temp.:** -55°C to +125°C. **Current Rating:** 40°C rise over 85°C ambient. **Power Dissipation at 85°C**: .55 Watts. **Inductance:** Measured at 1V with no DC current

Min to Max Dimensions–Inch (mm)				
A	**B**	**C (Over Terminals)**	**D**	**E (Min.)**
.500 (12.70)	.240 (6.10)	.220 (5.59)	.065 (1.66)	.100 (2.54)

Ind. @ 1 khz (µH)	Max. DC Resist. (Ohms)	Rated Current (Max. Amps)	Incremental Current (Amps)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 800	API Delevan Part No.
Series 4922 Ferrite Core, ±15%										
0.22	0.0080	7.00	7.00	DN2193CT-ND	2.24	1.92	1.28	DN2193TR-ND	819.20	4922-221L
0.27	0.0085	6.75	6.75	DN2194CT-ND	2.24	1.92	1.28	DN2194TR-ND	819.20	4922-271L
0.33	0.0090	6.50	6.50	DN2195CT-ND	2.24	1.92	1.28	DN2195TR-ND	819.20	4922-331L
0.39	0.0095	6.25	6.25	DN2196CT-ND	2.24	1.92	1.28	DN2196TR-ND	819.20	4922-391L
0.47	0.0100	6.00	6.00	DN2197CT-ND	2.24	1.92	1.28	DN2197TR-ND	819.20	4922-471L
0.56	0.0105	5.80	5.80	DN2198CT-ND	2.24	1.92	1.28	DN2198TR-ND	819.20	4922-561L
0.68	0.0110	5.70	5.70	DN2199CT-ND	2.24	1.92	1.28	DN2199TR-ND	819.20	4922-681L
0.82	0.0120	5.60	5.60	DN2200CT-ND	2.24	1.92	1.28	DN2200TR-ND	819.20	4922-821L
1.0	0.013	5.50	5.50	DN2201CT-ND	2.24	1.92	1.28	DN2201TR-ND	819.20	4922-01L
1.2	0.018	4.69	4.69	DN2202CT-ND	2.24	1.92	1.28	DN2202TR-ND	819.20	4922-02L
1.5	0.020	4.45	4.45	DN2203CT-ND	2.24	1.92	1.28	DN2203TR-ND	819.20	4922-03L
1.8	0.021	4.34	4.34	DN2204CT-ND	2.24	1.92	1.28	DN2204TR-ND	819.20	4922-04L
2.2	0.029	3.70	3.70	DN2205CT-ND	2.24	1.92	1.28	DN2205TR-ND	819.20	4922-05L
2.7	0.034	3.41	3.41	DN2206CT-ND	2.24	1.92	1.28	DN2206TR-ND	819.20	4922-06L
3.3	0.038	3.23	3.23	DN2207CT-ND	2.24	1.92	1.28	DN2207TR-ND	819.20	4922-07L
3.9	0.042	3.07	3.07	DN2208CT-ND	2.24	1.92	1.28	DN2208TR-ND	819.20	4922-08L
4.7	0.047	2.90	2.90	DN2209CT-ND	2.24	1.92	1.28	DN2209TR-ND	819.20	4922-09L
5.6	0.051	2.79	2.79	DN2210CT-ND	2.38	2.04	1.36	DN2210TR-ND	870.40	4922-10L
6.8	0.058	2.61	2.61	DN2211CT-ND	2.38	2.04	1.36	DN2211TR-ND	870.40	4922-11L
8.2	0.063	2.51	2.51	DN2212CT-ND	2.38	2.04	1.36	DN2212TR-ND	870.40	4922-12L
10.0	0.071	2.36	2.36	DN2213CT-ND	2.38	2.04	1.36	DN2213TR-ND	870.40	4922-13L
12.0	0.079	2.24	2.24	DN2214CT-ND	2.38	2.04	1.36	DN2214TR-ND	870.40	4922-14L
15.0	0.089	2.11	2.11	DN2215CT-ND	2.38	2.04	1.36	DN2215TR-ND	870.40	4922-15L
18.0	0.119	1.82	1.82	DN2216CT-ND	2.38	2.04	1.36	DN2216TR-ND	870.40	4922-16L
22.0	0.152	1.61	1.61	DN2217CT-ND	2.56	2.19	1.46	DN2217TR-ND	934.40	4922-17L
27.0	0.179	1.48	1.48	DN2218CT-ND	2.56	2.19	1.46	DN2218TR-ND	934.40	4922-18L
33.0	0.222	1.33	1.33	DN2219CT-ND	2.56	2.19	1.46	DN2219TR-ND	934.40	4922-19L
39.0	0.315	1.12	1.12	DN2220CT-ND	2.56	2.19	1.46	DN2220TR-ND	934.40	4922-20L
47.0	0.362	1.04	1.04	DN2221CT-ND	2.56	2.19	1.46	DN2221TR-ND	934.40	4922-21L
56.0	0.397	1.00	1.00	DN2222CT-ND	2.56	2.19	1.46	DN2222TR-ND	934.40	4922-22L
68.0	0.418	0.97	0.97	DN2223CT-ND	2.56	2.19	1.46	DN2223TR-ND	934.40	4922-23L
82.0	0.604	0.81	0.81	DN2224CT-ND	2.73	2.34	1.56	DN2224TR-ND	998.40	4922-24L
100	0.672	0.76	0.76	DN2225CT-ND	2.73	2.34	1.56	DN2225TR-ND	998.40	4922-25L
120	0.735	0.73	0.73	DN2226CT-ND	2.73	2.34	1.56	DN2226TR-ND	998.40	4922-26L
150	0.998	0.63	0.63	DN2227CT-ND	2.73	2.34	1.56	DN2227TR-ND	998.40	4922-27L
180	1.37	0.53	0.53	DN2228CT-ND	2.73	2.34	1.56	DN2228TR-ND	998.40	4922-28L
220	1.58	0.50	0.50	DN2229CT-ND	2.73	2.34	1.56	DN2229TR-ND	998.40	4922-29L
270	1.77	0.47	0.47	DN2230CT-ND	2.73	2.34	1.56	DN2230TR-ND	998.40	4922-30L
330	2.51	0.39	0.39	DN2231CT-ND	2.73	2.34	1.56	DN2231TR-ND	998.40	4922-31L
390	2.73	0.38	0.38	DN2232CT-ND	2.73	2.34	1.56	DN2232TR-ND	998.40	4922-32L
470	3.25	0.35	0.35	DN2233CT-ND	2.73	2.34	1.56	DN2233TR-ND	998.40	4922-33L
560	3.75	0.33	0.33	DN2234CT-ND	2.80	2.40	1.60	DN2234TR-ND	1024.00	4922-34L
680	4.31	0.30	0.30	DN2235CT-ND	2.80	2.40	1.60	DN2235TR-ND	1024.00	4922-35L
820	6.04	0.26	0.26	DN2236CT-ND	2.80	2.40	1.60	DN2236TR-ND	1024.00	4922-36L
1000	6.90	0.24	0.24	DN2237CT-ND	2.80	2.40	1.60	DN2237TR-ND	1024.00	4922-37L
1200	10.00	0.20	0.20	DN2238CT-ND	2.80	2.40	1.60	DN2238TR-ND	1024.00	4922-38L
1500	12.50	0.178	0.178	DN2239CT-ND	2.80	2.40	1.60	DN2239TR-ND	1024.00	4922-39L
1800	16.00	0.157	0.157	DN2333CT-ND	2.80	2.40	1.60	DN2333TR-ND	1024.00	4922-40L
2200	20.00	0.141	0.141	DN2334CT-ND	2.80	2.40	1.60	DN2334TR-ND	1024.00	4922-41L
2700	23.00	0.131	0.131	DN2335CT-ND	2.80	2.40	1.60	DN2335TR-ND	1024.00	4922-42L
3300	25.00	0.126	0.126	DN2336CT-ND	2.80	2.40	1.60	DN2336TR-ND	1024.00	4922-43L
3900	33.00	0.110	0.110	DN2337CT-ND	2.80	2.40	1.60	DN2337TR-ND	1024.00	4922-44L
4700	37.00	0.103	0.103	DN2338CT-ND	2.80	2.40	1.60	DN2338TR-ND	1024.00	4922-45L
5600	40.00	0.100	0.100	DN2339CT-ND	2.80	2.40	1.60	DN2339TR-ND	1024.00	4922-46L
6800	62.00	0.080	0.080	DN2340CT-ND	2.94	2.52	1.68	DN2340TR-ND	1075.20	4922-47L
8200	66.00	0.077	0.077	DN2341CT-ND	2.94	2.52	1.68	DN2341TR-ND	1075.20	4922-48L
10000	74.00	0.071	0.071	DN2342CT-ND	2.94	2.52	1.68	DN2342TR-ND	1075.20	4922-49L
12000	93.00	0.065	0.065	DN2343CT-ND	2.94	2.52	1.68	DN2343TR-ND	1075.20	4922-50L
15000	105.00	0.061	0.061	DN2344CT-ND	2.94	2.52	1.68	DN2344TR-ND	1075.20	4922-51L
18000	143.00	0.052	0.052	DN2345CT-ND	3.29	2.82	1.88	DN2345TR-ND	1203.20	4922-52L
22000	160.00	0.050	0.050	DN2346CT-ND	3.29	2.82	1.88	DN2346TR-ND	1203.20	4922-53L

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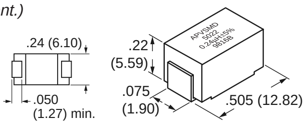
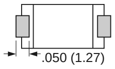
Series 5022 Surface Mount Inductors

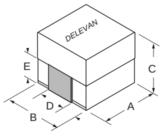


Mechanical Configuration: Units are encapsulated in a Surface Mount package, using an epoxy molded case. **Operating Temperature:** -55°C to +125°C. **Current Rating at 90°C Ambient:** 35°C rise. **Maximum Power Dissipation at 90°C**: 0.405 Watts. **Weight Max.:** 1.5 grams

Ind. (µH) ± 5%	Q Min.	Test Freq. (MHz)	DC Resist. Max. (Ohms)	Curr. Rating Max. (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 800	API Delevan Part No.
Series 5022 Phenolic Core											
0.15	50	25.0	0.030	3500	DN2240CT-ND	2.73	2.34	1.56	DN2240TR-ND	998.40	5022-151J
0.16	50	25.0	0.040	3025	DN2241CT-ND	2.73	2.34	1.56	DN2241TR-ND	998.40	5022-161J
0.18	50	25.0	0.043	2915	DN2242CT-ND	2.73	2.34	1.56	DN2242TR-ND	998.40	5022-181J
0.20	50	25.0	0.047	2790	DN2243CT-ND	2.73	2.34	1.56	DN2243TR-ND	998.40	5022-201J
0.22	50	25.0	0.055	2580	DN2244CT-ND	2.73	2.34	1.56	DN2244TR-ND	998.40	5022-221J
0.24	45	25.0	0.060	2470	DN2245CT-ND	2.10	1.80	1.20	DN2245TR-ND	768.00	5022-241J
0.27	45	25.0	0.070	2285	DN2246CT-ND	2.10	1.80	1.20	DN2246TR-ND	768.00	5022-271J
0.30	45	25.0	0.080	2140	DN2247CT-ND	2.10	1.80	1.20	DN2247TR-ND	768.00	5022-301J
0.33	45	25.0	0.090	2015	DN2248CT-ND	2.10	1.80	1.20	DN2248TR-ND	768.00	5022-331J
0.36	45	25.0	0.098	1935	DN2249CT-ND	2.10	1.80	1.20	DN2249TR-ND	768.00	5022-361J
0.39	45	25.0	0.100	1915	DN2250CT-ND	2.10	1.80	1.20	DN2250TR-ND	768.00	5022-391J
0.43	45	25.0	0.110	1825	DN2251CT-ND	2.10	1.80	1.20	DN2251TR-ND	768.00	5022-431J
0.47	45	25.0	0.120	1750	DN2252CT-ND	2.10	1.80	1.20	DN2252TR-ND	768.00	5022-471J
0.51	45	25.0	0.130	1680	DN2253CT-ND	2.10	1.80	1.20	DN2253TR-ND	768.00	5022-511J
0.56	50	25.0	0.135	1645	DN2254CT-ND	2.10	1.80	1.20	DN2254TR-ND	768.00	5022-561J
0.62	50	25.0	0.140	1615	DN2255CT-ND	2.10	1.80	1.20	DN2255TR-ND	768.00	5022-621J
0.68	50	25.0	0.150	1555	DN2256CT-ND	2.10	1.80	1.20	DN2256TR-ND	768.00	5022-681J
0.75	50	25.0	0.180	1425	DN2257CT-ND	2.10	1.80	1.20	DN2257TR-ND	768.00	5022-751J
0.82	50	25.0	0.220	1300	DN2258CT-ND	2.10	1.80	1.20	DN2258TR-ND	768.00	5022-821J
0.91	50	25.0	0.240	1240	DN2259CT-ND	2.10	1.80	1.20	DN2259TR-ND	768.00	5022-911J
1.00	50	25.0	0.290	1125	DN2260CT-ND	2.10	1.80	1.20	DN2260TR-ND	768.00	5022-102J
1.10	33	7.9	0.420	930	DN2261CT-ND	2.10	1.80	1.20	DN2261TR-ND	768.00	5022-112J
1.20	33	7.9	0.420	930	DN2262CT-ND	2.10	1.80	1.20	DN2262TR-ND	768.00	5022-122J
1.30	33	7.9	0.480	875	DN2263CT-ND	2.10	1.80	1.20	DN2263TR-ND	768.00	5022-132J
1.50	33	7.9	0.500	855	DN2264CT-ND	2.10	1.80	1.20	DN2264TR-ND	768.00	5022-152J
1.60	33	7.9	0.600	780	DN2265CT-ND	2.10	1.80	1.20	DN2265TR-ND	768.00	5022-162J
1.80	33	7.9	0.650	755	DN2266CT-ND	2.10	1.80	1.20	DN2266TR-ND	768.00	5022-182J
2.00	33	7.9	0.800	675	DN2267CT-ND	2.10	1.80	1.20	DN2267TR-ND	768.00	5022-202J
2.20	33	7.9	0.950	620	DN2268CT-ND	2.10	1.80	1.20	DN2268TR-ND	768.00	5022-222J
2.40	33	7.9	1.100	575	DN2269CT-ND	2.10	1.80	1.20	DN2269TR-ND	768.00	5022-242J
2.70	33	7.9	1.200	550	DN2270CT-ND	2.10	1.80	1.20	DN2270TR-ND	768.00	5022-272J
3.00	33	7.9	1.800	455	DN2271CT-ND	2.10	1.80	1.20	DN2271TR-ND	768.00	5022-302J
3.30	33	7.9	2.000	430	DN2272CT-ND	2.10	1.80	1.20	DN2272TR-ND	768.00	5022-332J
3.60	33	7.9	2.150	415	DN2273CT-ND	2.10	1.80	1.20	DN2273TR-ND	768.00	5022-362J
3.90	33	7.9	2.300	395	DN2274CT-ND	2.10	1.80	1.20	DN2274TR-ND	768.00	5022-392J
4.30	33	7.9	2.400	390	DN2275CT-ND	2.10	1.80	1.20	DN2275TR-ND	768.00	5022-432J
4.70	33	7.9	2.600	375	DN2276CT-ND	2.10	1.80	1.20	DN2276TR-ND	768.00	5022-472J
Series 5022 Iron Core											
5.10	35	7.9	0.300	1040	DN2277CT-ND	2.31	1.98	1.32	DN2277TR-ND	844.80	5022-512J
5.60	45	7.9	0.300	1030	DN2278CT-ND	2.31	1.98	1.32	DN2278TR-ND	844.80	5022-562J
6.20	45	7.9	0.470	830	DN2279CT-ND	2.31	1.98	1.32	DN2279TR-ND	844.80	5022-622J
6.80	50	7.9	0.500	820	DN2280CT-ND	2.31	1.98	1.32	DN2280TR-ND	844.80	5022-682J
7.50	50	7.9	0.550	765	DN2281CT-ND	2.31	1.98	1.32	DN2281TR-ND	844.80	5022-752J
8.20	50	7.9	0.600	748	DN2282CT-ND	2.31	1.98	1.32	DN2282TR-ND	844.80	5022-822J
9.10	55	7.9	0.800	638	DN2283CT-ND	2.31	1.98	1.32	DN2283TR-ND	844.80	5022-912J
10.0	55	7.9	0.900	610	DN2284CT-ND	2.31	1.98	1.32	DN2284TR-ND	844.80	5022-103J
11.0	60	2.5	1.050	565	DN2285CT-ND	2.31	1.98	1.32	DN2285TR-ND	844.80	5022-113J
12.0	65	2.5	1.100	555	DN2286CT-ND	2.31	1.98	1.32	DN2286TR-ND	844.80	5022-123J
13.0	65	2.5	1.200	520	DN2287CT-ND	2.31	1.98	1.32	DN2287TR-ND	844.80	5022-133J
15.0	65	2.5	1.400	495	DN2288CT-ND	2.31	1.98	1.32	DN2288TR-ND	844.80	5022-153J
16.0	70	2.5	1.800	420	DN2289CT-ND	2.31	1.98	1.32	DN2289TR-ND	844.80	5022-163J
18.0	75	2.5	2.250	388	DN2290CT-ND	2.31	1.98	1.32	DN2290TR-ND	844.80	5022-183J
20.0	75	2.5	2.500	372	DN2291CT-ND	2.31	1.98	1.32	DN2291TR-ND	844.80	5022-203J
22.0	75	2.5	2.500	368	DN2292CT-ND	2.31	1.98	1.32	DN2292TR-ND	844.80	5022-223J
24.0	60	2.5	2.500	368	DN2293CT-ND	2.31	1.98	1.32	DN2293TR-ND	844.80	5022-243J
27.0	60	2.5	2.600	360	DN2294CT-ND	2.31	1.98	1.32	DN2294TR-ND	844.80	5022-273J
30.0	65	2.5	2.800	348	DN2295CT-ND	2.31	1.98	1.32	DN2295TR-ND	844.80	5022-303J
33.0	65	2.5	3.000	337	DN2296CT-ND	2.31	1.98	1.32	DN2296TR-ND	844.80	5022-333J
36.0	60	2.5	2.500	368	DN2297CT-ND	2.31	1.98	1.32	DN2297TR-ND	844.80	5022-363J
39.0	60	2.5	2.600	361	DN2298CT-ND	2.31	1.98	1.32	DN2298TR-ND	844.80	5022-393J
43.0	60	2.5	2.700	353	DN2299CT-ND	2.31	1.98	1.32	DN2299TR-ND	844.80	5022-433J
47.0	55	2.5	2.750	351	DN2300CT-ND	2.31	1.98	1.32	DN2300TR-ND	844.80	5022-473J
51.0	55	2.5	2.850	344	DN2301CT-ND	2.31	1.98	1.32	DN2301TR-ND	844.80	5022-513J
56.0	55	2.5	3.000	335	DN2302CT-ND	2.31	1.98	1.32	DN2302TR-ND	844.80	5022-563J
62.0	55	2.5	3.150	328	DN2303CT-ND	2.31	1.98	1.32	DN2303TR-ND	844.80	5022-623J
68.0	55	2.5	3.300	320	DN2304CT-ND	2.31	1.98	1.32	DN2304TR-ND	844.80	5022-683J
75.0	55	2.5	3.700	302	DN2305CT-ND	2.31	1.98	1.32	DN2305TR-ND	844.80	5022-753J
82.0	50	2.5	3.900	295	DN2306CT-ND	2.31	1.98	1.32	DN2306TR-ND	844.80	5022-823J
91.0	50	2.5	4.300	280	DN2307CT-ND	2.31	1.98	1.32	DN2307TR-ND	844.80	5022-913J
100.0	50	2.5	4.500	275	DN2308CT-ND	2.31	1.98	1.32	DN2308TR-ND	844.80	5022-104J
110.0	60	0.79	4.900	262	DN2309CT-ND	2.31	1.98	1.32	DN2309TR-ND	844.80	5022-114J
120.0	65	0.79	5.200	255	DN2310CT-ND	2.31	1.98	1.32	DN2310TR-ND	844.80	5022-124J
130.0	65	0.79	5.450	250	DN2311CT-ND	2.31	1.98	1.32	DN2311TR-ND	844.80	5022-134J
150.0	65	0.79	6.050	237	DN2312CT-ND	2.31	1.98	1.32	DN2312TR-ND	844.80	5022-154J
160.0	65	0.79	6.400	230	DN2313CT-ND	2.31	1.98	1.32	DN2313TR-ND	844.80	5022-164J
180.0	65	0.79	6.750	244	DN2314CT-ND	2.31	1.98	1.32	DN2314TR-ND	844.80	5022-184J
200.0	65	0.79	7.100	219	DN2315CT-ND	2.31	1.98	1.32	DN2315TR-ND	844.80	5022-204J
220.0	65	0.79	7.450	213	DN2316CT-ND	2.31	1.98	1.32	DN2316TR-ND	844.80	5022-224J
240.0	65	0.79	7.800	210	DN2317CT-ND	2.31	1.98	1.32	DN2317TR-ND	844.80	5022-244J
270.0	65	0.79	11.000	182	DN2318CT-ND	2.49	2.13	1.42	DN2318TR-ND	908.80	5022-274J
300.0	65	0.79	11.500	178	DN2319CT-ND	2.49	2.13	1.42	DN2319TR-ND	908.80	5022-304J
330.0	65	0.79	12.000	173	DN2320CT-ND	2.49	2.13	1.42	DN2320TR-ND	908.80	5022-334J
360.0	65	0.79	12.500	171	DN2321CT-ND	2.49	2.13	1.42	DN2321TR-ND	908.80	5022-364J
390.0	65	0.79	16.300	149	DN2322CT-ND	2.49	2.13	1.42	DN2322TR-ND	908.80	5022-394J
430.0	65	0.79	17.100	147	DN2323CT-ND	2.49	2.13	1.42	DN2323TR-ND	908.80	5022-434J
470.0	65	0.79	17.900	143	DN2324CT-ND	2.49	2.13	1.42	DN2324TR-ND	908.80	5022-474J
510.0	65	0.79	18.800	139	DN2325CT-ND	2.49	2.13	1.42	DN2325TR-ND	908.80	5022-514J
560.0	65	0.79	19.500	136	DN2326CT-ND	2.49	2.13	1.42	DN2326TR-ND	908.80	5022-564J
620.0	65	0.79	25.900	119	DN2327CT-ND	2.49	2.13	1.42	DN2327TR-ND	908.80	5022-624J
680.0	65	0.79	27.200	116	DN2328CT-ND	2.49	2.13	1.42	DN2328TR-ND	908.80	5022-684J
750.0	65	0.79	28.600	112	DN2329CT-ND	2.49	2.13	1.42	DN2329TR-ND	908.80	5022-754J
820.0	65	0.79	30.000	110	DN2330CT-ND	2.49	2.13	1.42	DN2330TR-ND	908.80	5022-824J
910.0	65	0.79	31.500	107	DN2331CT-ND	2.49	2.13	1.42	DN2331TR-ND	908.80	5022-914J
1000.0	65	0.79	33.000	105	DN2332CT-ND	2.49	2.13	1.42	DN2332TR-ND	908.80	5022-105J

Series 8532 Surface Mount Power Inductors





Mechanical Configuration: Units are encapsulated in a surface mount package, using an epoxy molded case. High resistivity ferrite core, allows for high inductance with low DC resistance. **Operating Temperature:** -55°C to +125°C **Current Rating:** 40°C rise over 85°C ambient **Power Dissipation at 85°C**: .50 Watts **Inductance:** Measured at 1 V with no DC current

Min to Max Dimensions–Inch (mm)				
A	B	C (over terminals)	D	E
.840 – .860 (21.34 – 21.84)	.310 to .330 (7.87 – 8.38)	.266 to .286 (6.76 – 7.26)	.070 to .110 (1.78 – 2.79)	.20 (Ref. Only) 5.08 (Ref. Only)

Induct. @ 1 kHz (µH)±15%	Max DC Resist. (Ohms)	Current Rating Max. (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T&R Pricing 480	API Delevan Part No.
Series 8532 Ferrite Core, ±15%									
1.0	0.009	6.27	DN3201CT-ND	3.01	2.58	1.72	DN3201TR-ND	660.48	8532-01LTR
1.2	0.010	5.95	DN3202CT-ND	3.01	2.58	1.72	DN3202TR-ND	660.48	8532-02LTR
1.5	0.011	5.67	DN3203CT-ND	3.01	2.58	1.72	DN3203TR-ND	660.48	8532-03LTR
1.8	0.012	5.43	DN3204CT-ND	3.01	2.58	1.72	DN3204TR-ND	660.48	8532-04LTR
2.2	0.013	5.22	DN3205CT-ND	3.01	2.58	1.72	DN3205TR-ND	660.48	8532-05LTR
2.7	0.014	5.03	DN3206CT-ND	3.01	2.58	1.72	DN3206TR-ND	660.48	8532-06LTR
3.3	0.016	4.70	DN3207CT-ND	3.01	2.58	1.72	DN3207TR-ND	660.48	8532-07LTR
3.9	0.017	4.56	DN3208CT-ND	3.01	2.58	1.72	DN3208TR-ND	660.48	8532-08LTR
4.7	0.022	4.01	DN3209CT-ND	3.01	2.58	1.72	DN3209TR-ND	660.48	8532-09LTR
5.6	0.024	3.84	DN3210CT-ND	3.01	2.58	1.72	DN3210TR-ND	660.48	8532-10LTR
6.8	0.026	3.69	DN3211CT-ND	3.01	2.58	1.72	DN3211TR-ND	660.48	8532-11LTR
8.2	0.028	3.55	DN3212CT-ND	3.01	2.58	1.72	DN3212TR-ND	660.48	8532-12LTR
10.0	0.033	3.27	DN3213CT-ND	3.36	2.88	1.92	DN3213TR-ND	737.28	8532-13LTR
12.0	0.037	3.09	DN3214CT-ND	3.36	2.88	1.92	DN3214TR-ND	737.28	8532-14LTR
15.0	0.040	2.97	DN3215CT-ND	3.36	2.88	1.92	DN3215TR-ND	737.28	8532-15LTR
18.0	0.044	2.84	DN3216CT-ND	3.36	2.88	1.92	DN3216TR-ND	737.28	8532-16LTR
22.0	0.050	2.66	DN3217CT-ND	3.36	2.88	1.92	DN3217TR-ND	737.28	8532-17LTR
27.0	0.070	2.25	DN3218CT-ND	3.36	2.88	1.92	DN3218TR-ND	737.28	8532-18LTR
33.0	0.075	2.17	DN3219CT-ND	3.36	2.88	1.92	DN3219TR-ND	737.28	8532-19LTR
39.0	0.084	2.05	DN3220CT-ND	3.36	2.88	1.92	DN3220TR-ND	737.28	8532-20LTR
47.0	0.104	1.84	DN3221CT-ND	3.36	2.88	1.92	DN3221TR-ND	737.28	8532-21LTR
56.0	0.130	1.65	DN3222CT-ND	3.36	2.88	1.92	DN3222TR-ND	737.28	8532-22LTR
68.0	0.145	1.56	DN3223CT-ND	3.36	2.88	1.92	DN3223TR-ND	737.28	8532-23LTR
82.0	0.152	1.53	DN3224CT-ND	3.36	2.88	1.92	DN3224TR-ND	737.28	8532-24LTR
100.0	0.208	1.30	DN3225CT-ND	3.54	3.03	2.02	DN3225TR-ND	775.68	8532-25LTR
120.0	0.283	1.12	DN3226CT-ND	3.54	3.03	2.02	DN3226TR-ND	775.68	8532-26LTR
150.0	0.330	1.04	DN3227CT-ND	3.54	3.03	2.02	DN3227TR-ND	775.68	8532-27LTR
180.0	0.362	0.99	DN3228CT-ND	3.54	3.03	2.02	DN3228TR-ND	775.68	8532-28LTR
220.0	0.505	0.84	DN3229CT-ND	3.54	3.03	2.02	DN3229TR-ND	775.68	8532-29LTR
270.0	0.557	0.80	DN3230CT-ND	3.54	3.03	2.02	DN3230TR-ND	775.68	8532-30LTR
390.0	0.770	0.68	DN3232CT-ND	3.54	3.03	2.02	DN3232TR-ND	775.68	8532-32LTR
470.0	1.03	0.59	DN3233CT-ND	3.54	3.03	2.02	DN3233TR-ND	775.68	8532-33LTR
560.0	1.14	0.56	DN3234CT-ND	3.54	3.03	2.02	DN3234TR-ND	775.68	8532-34LTR
680.0	1.50	0.49	DN3235CT-ND	3.54	3.03	2.02	DN3235TR-ND	775.68	8532-35LTR
820.0	1.98	0.42	DN3236CT-ND	3.54	3.03	2.02	DN3236TR-ND	775.68	8532-36LTR
1000.0	2.30	0.39	DN3237CT-ND	3.75	3.21	2.14	DN3237TR-ND	821.76	8532-37LTR
1200.0	2.55	0.37	DN3238CT-ND	3.75	3.21	2.14	DN3238TR-ND	821.76	8532-38LTR
1500.0	3.00	0.34	DN3239CT-ND	3.75	3.21	2.14	DN3239TR-ND	821.76	8532-39LTR
1800.0	4.00	0.30	DN3240CT-ND	3.75	3.21	2.14	DN3240TR-ND	821.76	8532-40LTR
2200.0	4.40	0.28	DN3241CT-ND	3.75	3.21	2.14	DN3241TR-ND	821.76	8532-41LTR
2700.0	5.80	0.25	DN3242CT-ND	3.75	3.21	2.14	DN3242TR-ND	821.76	8532-42LTR
3300.0	6.56	0.23	DN3243CT-ND	3.75	3.21	2.14	DN3243TR-ND	821.76	8532-43LTR
3900.0	8.63	0.20	DN3244CT-ND	3.75	3.21	2.14	DN3244TR-ND	821.76	8532-44LTR
4700.0	10.1	0.19	DN3245CT-ND	3.75	3.21	2.14	DN3245TR-ND	821.76	8532-45LTR
5600.0	11.2	0.18	DN3246CT-ND	3.75	3.21	2.14	DN3246TR-ND	821.76	8532-46LTR
6800.0	15.0	0.15	DN3247CT-ND	3.75	3.21	2.14	DN3247TR-ND	821.76	8532-47LTR
8200.0	20.8	0.13	DN3248CT-ND	3.75	3.21	2.14	DN3248TR-ND	821.76	8532-48LTR
10000.0	23.4	0.12	DN3249CT-ND	3.75	3.21	2.14	DN3249TR-ND	821.76	8532-49LTR
12000.0	26.0	0.12	DN3250CT-ND	3.75	3.21	2.14	DN3250TR-ND	821.76	8532-50LTR
15000.0	36.0	0.10	DN3251CT-ND	3.75	3.21	2.14	DN3251TR-ND	821.76	8532-51LTR
18000.0	40.0	0.09	DN3252CT-ND	3.75	3.21	2.14	DN3252TR-ND	821.76	8532-52LTR

(Continued)

API Delevan Inductors *(Cont.)*

Series CM9900 PC Mount Common Mode Chokes

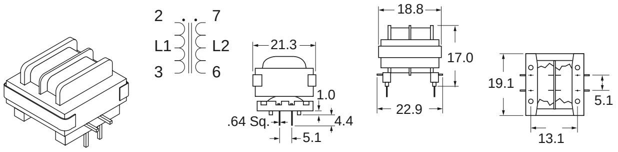
- **Operating Temperature Range:** -55°C to +125°C
- **Current Rating at 80°C Ambient:** 40°C rise
- **Mechanical Configuration:** Tape wrapped winding sections; varnish impregnated assembly

NOTES:

(1) Inductance in table is for either L1 or L2

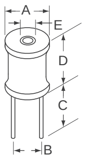
(2) Leakage inductance tested at L1 with L2 shorted or at L2 with L1 shorted

(3) Windings balanced within 1%



Inductance (µH) L1 or L2	Current Rating Max. (Amps)	Digi-Key Part No.	Price Each 1	10	100	API Delevan Part No.
47	3.5	DN4600-ND	3.61	3.09	2.06	CM9900-473
56	3.5	DN4601-ND	3.61	3.09	2.06	CM9900-563
68	3.5	DN4602-ND	3.61	3.09	2.06	CM9900-683
82	2.8	DN4603-ND	3.61	3.09	2.06	CM9900-823
100	2.8	DN4604-ND	3.61	3.09	2.06	CM9900-104
120	2.8	DN4605-ND	3.61	3.09	2.06	CM9900-124
150	2.8	DN4606-ND	3.61	3.09	2.06	CM9900-154
180	2.2	DN4607-ND	3.61	3.09	2.06	CM9900-184
220	2.2	DN4608-ND	3.61	3.09	2.06	CM9900-224
270	2.2	DN4609-ND	3.61	3.09	2.06	CM9900-274
330	1.7	DN4610-ND	3.61	3.09	2.06	CM9900-334
470	1.4	DN4611-ND	3.61	3.09	2.06	CM9900-474
560	1.4	DN4612-ND	3.61	3.09	2.06	CM9900-564
680	1.1	DN4613-ND	3.61	3.09	2.06	CM9900-684
820	1.1	DN4614-ND	3.61	3.09	2.06	CM9900-824
1000	.88	DN4615-ND	3.61	3.09	2.06	CM9900-105
1200	.88	DN4616-ND	3.61	3.09	2.06	CM9900-125
1500	.70	DN4617-ND	3.61	3.09	2.06	CM9900-155
1800	.70	DN4618-ND	3.61	3.09	2.06	CM9900-185
2200	.55	DN4619-ND	3.61	3.09	2.06	CM9900-225
2700	.55	DN4620-ND	3.61	3.09	2.06	CM9900-275
3300	.55	DN4621-ND	3.61	3.09	2.06	CM9900-335

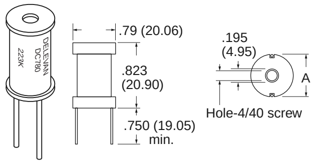
Series DC 630 High Current Power Line Chokes



Physical Parameters – Inch (mm)				
A	B	C	D	E
0.630±0.030 (16.00±7.62)	.49 (12.45) Max.	0.750 (19.05) Min.	0.180±0.020 (4.57±5.08)	Clearance Hole for 4/40 Screw

Nom. Induct. (µH)	Max. DCR (Ohms)	Max. Rated Current (A DC)	Lead Diameter In. (mm)	Digi-Key Part No.	Price Each 1	10	50	API Delevan Part No.
1.0	0.003	14.00	.051 (1.30)	DN3400-ND	5.12	4.65	4.47	DC630-102M
10.0	0.010	9.50	.051 (1.30)	DN3410-ND	5.89	5.35	5.14	DC630-103K
100	0.095	3.21	.029 (.74)	DN3422-ND	5.89	5.35	5.14	DC630-104K
12.0	0.011	9.10	.051 (1.30)	DN3411-ND	5.89	5.35	5.14	DC630-123K
120	0.100	3.12	.029 (.74)	DN3423-ND	5.89	5.35	5.14	DC630-124K
1.5	0.004	13.50	.051 (1.30)	DN3401-ND	5.12	4.65	4.47	DC630-152M
15.0	0.015	8.09	.045 (1.14)	DN3412-ND	5.89	5.35	5.14	DC630-153K
150	0.111	2.97	.029 (.74)	DN3424-ND	7.70	7.00	6.72	DC630-154K
18.0	0.020	7.00	.040 (1.02)	DN3413-ND	5.89	5.35	5.14	DC630-183K
180	0.125	2.80	.029 (.74)	DN3425-ND	7.70	7.00	6.72	DC630-184K
2.2	0.005	12.80	.051 (1.30)	DN3402-ND	5.12	4.65	4.47	DC630-222M
22.0	0.025	6.26	.040 (1.02)	DN3414-ND	5.89	5.35	5.14	DC630-223K
220	0.168	2.42	.025 (.64)	DN3426-ND	7.70	7.00	6.72	DC630-224K
2.7	0.005	12.80	.051 (1.30)	DN3403-ND	5.12	4.65	4.47	DC630-272M
27.0	0.030	5.72	.036 (.91)	DN3415-ND	5.89	5.35	5.14	DC630-273K
270	0.225	2.09	.023 (.58)	DN3427-ND	7.70	7.00	6.72	DC630-274K
3.3	0.005	12.80	.051 (1.30)	DN3404-ND	5.12	4.65	4.47	DC630-332M
33.0	0.040	4.95	.032 (.81)	DN3416-ND	5.89	5.35	5.14	DC630-333K
330	0.315	1.72	.020 (.51)	DN3428-ND	7.70	7.00	6.72	DC630-334K
3.9	0.006	12.30	.051 (1.30)	DN3405-ND	5.12	4.65	4.47	DC630-392M
39.0	0.050	4.43	.029 (.74)	DN3417-ND	5.89	5.35	5.14	DC630-393K
390	0.342	1.66	.020 (.51)	DN3429-ND	7.70	7.00	6.72	DC630-394K
4.7	0.007	11.70	.051 (1.30)	DN3406-ND	5.12	4.65	4.47	DC630-472M
47.0	0.062	3.98	.029 (.74)	DN3418-ND	5.89	5.35	5.14	DC630-473K
470	0.377	1.58	.020 (.51)	DN3430-ND	7.70	7.00	6.72	DC630-474K
5.6	0.007	11.70	.051 (1.30)	DN3407-ND	5.12	4.65	4.47	DC630-562M
56.0	0.069	3.77	.029 (.74)	DN3419-ND	5.89	5.35	5.14	DC630-563K
560	0.408	1.52	.020 (.51)	DN3431-ND	7.70	7.00	6.72	DC630-564K
6.8	0.008	10.50	.051 (1.30)	DN3408-ND	5.12	4.65	4.47	DC630-682M
68.0	0.077	3.57	.029 (.74)	DN3420-ND	5.89	5.35	5.14	DC630-683K
680	0.468	1.42	.020 (.51)	DN3432-ND	7.70	7.00	6.72	DC630-684K
8.2	0.009	10.00	.051 (1.30)	DN3409-ND	5.12	4.65	4.47	DC630-822M
82.0	0.083	3.44	.029 (.74)	DN3421-ND	5.89	5.35	5.14	DC630-823K

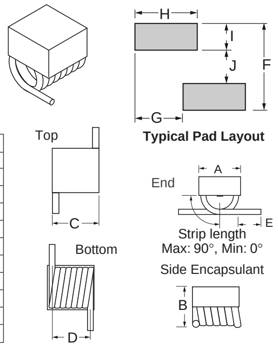
Series DC780 High Current Power Line Chokes



Mechanical Configuration: Ferrite Bobbin protected with a flame retardant polyolefin sleeve. Center hole allows for mechanical mounting. Insulated bobbins. **Operating Temperature:** -55°C to +125°C, -55°C to +80°C @ full rated current.

Nom. Induct. (µH)	Max. DCR (Ohms)	Max. Rated Current (A DC)	Dimension Inch (mm) A	Digi-Key Part No.	Price Each 1	10	50	API Delevan Part No.
Series DC780, ±15%								
1.0	0.003	11.4	.620 (15.748)	DN2400-ND	5.17	4.70	4.52	DC780-102L
1.2	0.003	11.4	.620 (15.748)	DN2401-ND	5.17	4.70	4.52	DC780-122L
1.5	0.003	11.4	.620 (15.748)	DN2402-ND	5.17	4.70	4.52	DC780-152L
1.8	0.003	11.4	.620 (15.748)	DN2403-ND	5.17	4.70	4.52	DC780-182L
2.2	0.004	11.4	.620 (15.748)	DN2404-ND	5.17	4.70	4.52	DC780-222L
2.7	0.005	11.4	.620 (15.748)	DN2405-ND	5.17	4.70	4.52	DC780-272L
3.3	0.005	11.4	.620 (15.748)	DN2406-ND	5.17	4.70	4.52	DC780-332L
3.9	0.005	11.4	.620 (15.748)	DN2407-ND	5.17	4.70	4.52	DC780-392L
4.7	0.005	11.4	.620 (15.748)	DN2408-ND	5.17	4.70	4.52	DC780-472L
5.6	0.006	11.4	.620 (15.748)	DN2409-ND	5.17	4.70	4.52	DC780-562L
6.8	0.007	11.4	.620 (15.748)	DN2410-ND	5.17	4.70	4.52	DC780-682L
8.2	0.007	11.4	.620 (15.748)	DN2411-ND	5.17	4.70	4.52	DC780-822L
Series DC780, ±10%								
10.0	0.009	11.4	.620 (15.748)	DN2412-ND	6.05	5.50	5.28	DC780-103K
12.0	0.009	11.4	.620 (15.748)	DN2413-ND	6.05	5.50	5.28	DC780-123K
15.0	0.013	9.0	.625 (15.875)	DN2414-ND	6.05	5.50	5.28	DC780-153K
18.0	0.018	7.2	.630 (16.002)	DN2415-ND	6.05	5.50	5.28	DC780-183K
22.0	0.019	7.2	.630 (16.002)	DN2416-ND	6.05	5.50	5.28	DC780-223K
27.0	0.026	5.5	.546 (13.868)	DN2417-ND	6.05	5.50	5.28	DC780-273K
33.0	0.029	5.5	.546 (13.868)	DN2418-ND	6.05	5.50	5.28	DC780-333K
39.0	0.030	5.5	.594 (15.087)	DN2419-ND	6.05	5.50	5.28	DC780-393K
47.0	0.035	5.5	.625 (15.875)	DN2420-ND	6.05	5.50	5.28	DC780-473K
56.0	0.039	5.5	.625 (15.875)	DN2421-ND	6.05	5.50	5.28	DC780-563K
68.0	0.053	4.8	.656 (16.662)	DN2422-ND	6.05	5.50	5.28	DC780-683K
82.0	0.060	4.8	.656 (16.662)	DN2423-ND	6.05	5.50	5.28	DC780-823K
100	0.080	4.0	.593 (15.062)	DN2424-ND	6.05	5.50	5.28	DC780-104K
120	0.090	4.0	.593 (15.062)	DN2425-ND	6.05	5.50	5.28	DC780-124K
150	0.098	4.0	.593 (15.062)	DN2426-ND	6.05	5.50	5.28	DC780-154K
180	0.110	4.0	.593 (15.062)	DN2427-ND	7.70	7.00	6.72	DC780-184K
220	0.150	2.8	.593 (15.062)	DN2428-ND	7.70	7.00	6.72	DC780-224K
270	0.213	2.0	.562 (14.274)	DN2429-ND	7.70	7.00	6.72	DC780-274K
330	0.305	1.6	.590 (14.986)	DN2430-ND	7.70	7.00	6.72	DC780-334K
390	0.320	1.6	.590 (14.986)	DN2431-ND	7.70	7.00	6.72	DC780-394K
470	0.355	1.6	.590 (14.986)	DN2432-ND	7.70	7.00	6.72	DC780-474K
560	0.388	1.6	.590 (14.986)	DN2433-ND	7.70	7.00	6.72	DC780-564K
680	0.430	1.6	.590 (14.986)	DN2434-ND	7.70	7.00	6.72	DC780-684K
820	0.590	1.3	.590 (14.986)	DN2435-ND	7.70	7.00	6.72	DC780-824K
1000	0.818	1.0	.590 (14.986)	DN2436-ND	7.70	7.00	6.72	DC780-105K
1200	1.140	0.8	.590 (14.986)	DN2437-ND	7.70	7.00	6.72	DC780-125K
1500	1.260	0.8	.590 (14.986)	DN2438-ND	7.70	7.00	6.72	DC780-155K
1800	1.390	0.8	.590 (14.986)	DN2439-ND	7.70	7.00	6.72	DC780-185K
2200	1.540	0.8	.590 (14.986)	DN2440-ND	7.70	7.00	6.72	DC780-225K

Series 4426 Surface Mount Air Core Inductors



High Q, wire wound air cores over a wide frequency range. Flat cap top is suitable for automatic placement.

	Size A		Size B	
	(inch)	(mm)	(inch)	(mm)
A Max	.120	3.05	.120	3.05
B Max	.125	3.18	.125	3.18
C Max	.145	3.68	.270	6.86
D	.115±.010	2.92±.25	.230±.010	5.84±.25
E	.05±.015	1.27±.38	.05±.015	1.27±.38
F	.165	4.19	.285	7.23
G	.110	2.79	.110	2.79
H	.130	3.30	.130	3.30
I	.050	1.27	.050	1.27
J	.065	1.65	.185	4.69

Size Code	Induct. (nH)	Turns	Q Min.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing	API Delevan Part No.
Series 4426 Air Core Inductors											
A	2.5±10%	1	145	DN4001CT-ND	.60	.51	.34	DN4001TR-ND	650	218.40	4426-1
	5.0±10%	2	140	DN4002CT-ND	.60	.51	.34	DN4002TR-ND	650	218.40	4426-2
	8.0±5%	3	140	DN4003CT-ND	.60	.51	.34	DN4003TR-ND	650	218.40	4426-3
	12.5±5%	4	137	DN4004CT-ND	.60	.51	.34	DN4004TR-ND	650	218.40	4426-4
	18.5±5%	5	132	DN4005CT-ND	.60	.51	.34	DN4005TR-ND	650	218.40	4426-5
B	17.5±5%	6	100	DN4006CT-ND	.60	.51	.34	DN4006TR-ND	400	134.40	4426-6
	22.0±5%	7	102	DN4007CT-ND	.60	.51	.34	DN4007TR-ND	400	134.40	4426-7
	28.0±5%	8	105	DN4008CT-ND	.60	.51	.34	DN4008TR-ND	400	134.40	4426-8
	35.5±5%	9	112	DN4009CT-ND	.60	.51	.34	DN4009TR-ND	400	134.40	4426-9
	43.0±5%	10	106	DN4010CT-ND	.60	.51	.34	DN4010TR-ND	400	134.40	4426-10

4426KIT-ND (API Delevan Part No. 4426KIT)

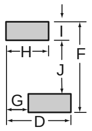
Series 4426 Inductor Kit. 5 each of 10 values (2.5nH to 43nH), 50 total pieces........................**$25.50**

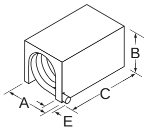
(Continued)

Series 5526 Air Core Inductors

High Q, wire wound air cores. Designed to operate over a wide frequency range.

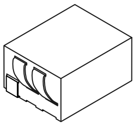
Physical Parameters Size A (mm)	
A Max	6.35
B Max	5.97
C Max	10.55
D	7.98±0.051
E	1.27±0.39
F	10.00
G	2.42
H	4.70
I	2.40
J	5.95

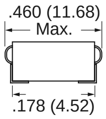


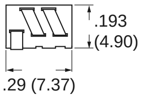


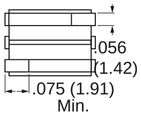
Induct. (nH) ±5%	Turns	Q Min.	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 800	API Delevan Part No.
90	9	95	DN4011CT-ND	1.48	1.27	.85	DN4011TR-ND	541.44	5526-1
111	10	87	DN4012CT-ND	1.48	1.27	.85	DN4012TR-ND	541.44	5526-2
130	11	87	DN4013CT-ND	1.48	1.27	.85	DN4013TR-ND	541.44	5526-3
169	12	95	DN4014CT-ND	1.48	1.27	.85	DN4014TR-ND	541.44	5526-4
206	13	95	DN4015CT-ND	1.48	1.27	.85	DN4015TR-ND	541.44	5526-5
222	14	92	DN4016CT-ND	1.48	1.27	.85	DN4016TR-ND	541.44	5526-6
246	15	95	DN4017CT-ND	1.48	1.27	.85	DN4017TR-ND	541.44	5526-7
307	16	95	DN4018CT-ND	1.48	1.27	.85	DN4018TR-ND	541.44	5526-8
380	17	95	DN4019CT-ND	1.48	1.27	.85	DN4019TR-ND	541.44	5526-9
420	18	95	DN4020CT-ND	1.48	1.27	.85	DN4020TR-ND	541.44	5526-10
491	19	95	DN4021CT-ND	1.48	1.27	.85	DN4021TR-ND	541.44	5526-11
538	20	87	DN4022CT-ND	1.48	1.27	.85	DN4022TR-ND	541.44	5526-12

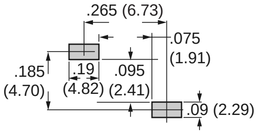
Series SMB 2.5 Surface Mount Shield Beads











Operating Temperature Range: –40°C to +125°C

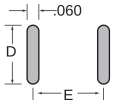
API Delevan Part No.	Turns	Minimum Impedance (Ohms). 10 MHz	100 MHz	150 MHz	220 MHz	Idc Max. (Amps)	DCR Max. (Ohms)
SMB2.5-1	2 1/2	210	385	400	375	9.5	0.005
SMB2.5-2	2 1/2	NA	490	635	650	9.5	0.005

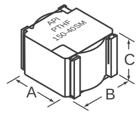
Digi-Key Part No.	Cut Tape Price Each 10	50	100	Digi-Key Part No.	Tape & Reel Pricing 700	API Delevan Part No.
DN4700CT-ND	.77	.66	.44	DN4700TR-ND	246.40	SMB2.5-1
DN4701CT-ND	.77	.66	.44	DN4701TR-ND	246.40	SMB2.5-2

Series PTHF-SM and PTKM-SM Surface Mount Toroidal Power Chokes

Excellent electromagnetic shielding performance for commercial and industrial applications

- Cost-effective surface mount design
- For Higher saturation levels use Series PTHF-SM
- Current rating from 0.92 to 7.36 amps
- Inductance values from 10µH to 330µH





Inductance (µH) ±10% @ 1KHz	DC Resistance Maximum (OHMS)	Current Rating	Dimensions - mm A Max.	B Max.	C Max.	D Nom.	E Nom.	Digi-Key Part No.	Price Each 1	10	50	100	API Delevan Part No.
Series PTHF-SM High Saturation Core													
100	0.30	0.92	8.636	8.636	7.62	7.62	7.62	DN3369-ND	17.38	15.80	15.17	14.22	PTHF100-180SM
100	0.15	1.50	11.18	11.18	10.16	10.16	10.16	DN3361-ND	16.45	14.95	14.36	13.46	PTHF100-30SM
100	0.16	1.60	14.48	14.22	10.16	12.70	12.70	DN3353-ND	19.80	18.00	17.28	16.20	PTHF100-40SM
100	0.06	3.14	17.78	17.02	10.16	15.24	15.24	DN3344-ND	17.77	16.15	15.51	14.54	PTHF100-50SM
10	0.10	1.60	8.636	8.636	7.62	7.62	7.62	DN3365-ND	17.38	15.80	15.17	14.22	PTHF10-180SM
10	0.05	2.56	11.18	11.18	10.16	10.16	10.16	DN3357-ND	16.45	14.95	14.36	13.46	PTHF10-30SM
10	0.02	4.84	14.48	14.22	10.16	12.70	12.70	DN3349-ND	19.80	18.00	17.28	16.20	PTHF10-40SM
10	0.01	7.36	17.78	17.02	10.16	15.24	15.24	DN3340-ND	17.77	16.15	15.51	14.54	PTHF10-50SM
150	0.19	1.33	11.18	11.18	10.16	10.16	10.16	DN3362-ND	16.45	14.95	14.36	13.46	PTHF150-30SM
150	0.19	1.45	14.48	14.22	10.16	12.70	12.70	DN3354-ND	19.80	18.00	17.28	16.20	PTHF150-40SM
150	0.10	2.33	17.78	17.02	10.16	15.24	15.24	DN3345-ND	17.77	16.15	15.51	14.54	PTHF150-50SM
200	0.30	1.04	11.18	11.18	10.16	10.16	10.16	DN3363-ND	16.45	14.95	14.36	13.46	PTHF200-30SM
200	0.32	1.12	14.48	14.22	10.16	12.70	12.70	DN3355-ND	19.80	18.00	17.28	16.20	PTHF200-40SM
200	0.14	1.97	17.78	17.02	10.16	15.24	15.24	DN3346-ND	17.77	16.15	15.51	14.54	PTHF200-50SM
250	0.36	0.96	11.18	11.18	10.16	10.16	10.16	DN3364-ND	16.45	14.95	14.36	13.46	PTHF250-30SM
250	0.36	1.05	14.48	14.22	10.16	12.70	12.70	DN3356-ND	19.80	18.00	17.28	16.20	PTHF250-40SM
250	0.16	1.84	17.78	17.02	10.16	15.24	15.24	DN3347-ND	17.77	16.15	15.51	14.54	PTHF250-50SM
25	0.15	1.33	8.636	8.636	7.62	7.62	7.62	DN3366-ND	17.38	15.80	15.17	14.22	PTHF25-180SM
25	0.07	2.16	11.18	11.18	10.16	10.16	10.16	DN3358-ND	16.45	14.95	14.36	13.46	PTHF25-30SM
25	0.04	3.38	14.48	14.22	10.16	12.70	12.70	DN3350-ND	19.80	18.00	17.28	16.20	PTHF25-40SM
25	0.02	5.20	17.78	17.02	10.16	15.24	15.24	DN3341-ND	17.77	16.15	15.51	14.54	PTHF25-50SM
330	0.19	1.69	17.78	17.02	10.16	15.24	15.24	DN3348-ND	17.77	16.15	15.51	14.54	PTHF330-50SM
50	0.21	1.12	8.636	8.636	7.62	7.62	7.62	DN3367-ND	17.38	15.80	15.17	14.22	PTHF50-180SM
50	0.10	1.81	11.18	11.18	10.16	10.16	10.16	DN3359-ND	16.45	14.95	14.36	13.46	PTHF50-30SM
50	0.11	1.90	14.48	14.22	10.16	12.70	12.70	DN3351-ND	19.80	18.00	17.28	16.20	PTHF50-40SM
50	0.04	3.93	17.78	17.02	10.16	15.24	15.24	DN3342-ND	17.77	16.15	15.51	14.54	PTHF50-50SM
75	0.26	0.99	8.636	8.636	7.62	7.62	7.62	DN3368-ND	17.33	15.75	15.12	14.18	PTHF75-180SM
75	0.13	1.62	11.18	11.18	10.16	10.16	10.16	DN3360-ND	16.45	14.95	14.36	13.46	PTHF75-30SM
75	0.14	1.69	14.48	14.22	10.16	12.70	12.70	DN3352-ND	19.80	18.00	17.28	16.20	PTHF75-40SM
75	0.05	3.47	17.78	17.02	10.16	15.24	15.24	DN3343-ND	17.77	16.15	15.51	14.54	PTHF75-50SM
Series PTKM-SM Ferrous Alloy Core													
100	0.30	0.92	8.636	8.636	7.62	7.62	7.62	DN3399-ND	11.17	10.15	9.75	9.14	PTKM100-180SM
100	0.15	1.50	11.18	11.18	10.16	10.16	10.16	DN3391-ND	9.30	8.45	8.12	7.61	PTKM100-30SM
100	0.16	1.60	14.48	14.22	10.16	12.70	12.70	DN3383-ND	13.53	12.30	11.81	11.07	PTKM100-40SM
100	0.06	3.14	17.78	17.02	10.16	15.24	15.24	DN3374-ND	12.98	11.80	11.33	10.62	PTKM100-50SM
10	0.10	1.60	8.636	8.636	7.62	7.62	7.62	DN3395-ND	11.17	10.15	9.75	9.14	PTKM10-180SM
10	0.05	2.56	11.18	11.18	10.16	10.16	10.16	DN3387-ND	9.30	8.45	8.12	7.61	PTKM10-30SM
10	0.02	4.84	14.48	14.22	10.16	12.70	12.70	DN3379-ND	13.53	12.30	11.81	11.07	PTKM10-40SM
10	0.01	7.36	17.78	17.02	10.16	15.240	15.24	DN3370-ND	12.98	11.80	11.33	10.62	PTKM10-50SM
150	0.19	1.33	11.18	11.18	10.16	10.16	10.16	DN3392-ND	9.30	8.45	8.12	7.61	PTKM150-30SM
150	0.19	1.45	14.48	14.22	10.16	12.70	12.70	DN3384-ND	13.53	12.30	11.81	11.07	PTKM150-40SM
150	0.10	2.33	17.78	17.02	10.16	15.24	15.24	DN3375-ND	12.98	11.80	11.33	10.62	PTKM150-50SM
200	0.30	1.04	11.18	11.18	10.16	10.16	10.16	DN3393-ND	9.30	8.45	8.12	7.61	PTKM200-30SM
200	0.32	1.12	14.48	14.22	10.16	12.70	12.70	DN3385-ND	13.53	12.30	11.81	11.07	PTKM200-40SM
200	0.14	1.97	17.78	17.02	10.16	15.24	15.24	DN3376-ND	12.98	11.80	11.33	10.62	PTKM200-50SM
250	0.36	0.96	11.18	11.18	10.16	10.16	10.16	DN3394-ND	9.30	8.45	8.12	7.61	PTKM250-30SM
250	0.36	1.05	14.48	14.22	10.16	12.70	12.70	DN3386-ND	13.53	12.30	11.81	11.07	PTKM250-40SM
250	0.16	1.84	17.78	17.02	10.16	15.24	15.24	DN3377-ND	12.98	11.80	11.33	10.62	PTKM250-50SM
25	0.15	1.33	8.636	8.636	7.62	7.62	7.62	DN3396-ND	11.17	10.15	9.75	9.14	PTKM25-180SM
25	0.07	2.16	11.18	11.18	10.16	10.16	10.16	DN3388-ND	9.30	8.45	8.12	7.61	PTKM25-30SM
25	0.04	3.38	14.48	14.22	10.16	12.70	12.70	DN3380-ND	13.53	12.30	11.81	11.07	PTKM25-40SM
25	0.02	5.20	17.78	17.02	10.16	15.24	15.24	DN3371-ND	12.98	11.80	11.33	10.62	PTKM25-50SM
330	0.19	1.69	17.78	17.02	10.16	15.24	15.24	DN3378-ND	12.98	11.80	11.33	10.62	PTKM330-50SM
50	0.21	1.12	8.636	8.636	7.62	7.62	7.62	DN3397-ND	11.17	10.15	9.75	9.14	PTKM50-180SM
50	0.10	1.81	11.18	11.18	10.16	10.16	10.16	DN3389-ND	9.30	8.45	8.12	7.61	PTKM50-30SM
50	0.11	1.90	14.48	14.22	10.16	12.70	12.70	DN3381-ND	13.53	12.30	11.81	11.07	PTKM50-40SM
50	0.04	3.93	17.78	17.02	10.16	15.24	15.24	DN3372-ND	12.98	11.80	11.33	10.62	PTKM50-50SM
75	0.26	0.99	8.636	8.636	7.62	7.62	7.62	DN3398-ND	11.17	10.15	9.75	9.14	PTKM75-180SM
75	0.13	1.62	11.18	11.18	10.16	10.16	10.16	DN3390-ND	9.30	8.45	8.12	7.61	PTKM75-30SM
75	0.14	1.69	14.48	14.22	10.16	12.70	12.70	DN3382-ND	13.53	12.30	11.81	11.07	PTKM75-40SM
75	0.05	3.47	17.78	17.02	10.16	15.24	15.24	DN3373-ND	12.98	11.80	11.33	10.62	PTKM75-50SM

TALEMA ELECTRONIC, LLC Inductors for National Simple Switchers™

Features:
- High energy storage with minimum saturation
- High stability from no load to full load
- Operating Temp. Range: -40°C to 125°C
- Electrical specifications at 25°C ambient
- Inductance is measured at 20KHz, 10mVrms

50KHz Inductors are compatible with National's LM2574, LM2475, and LM2576 Series of Regulators. 50KHz Inductance will be typical for the I_{DC} and ET_{OP} values listed.

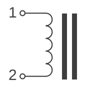
150 KHz Inductors are compatible with National Simple Switcher™ part numbers LM259X-L1 through LM259X-L44 and LM258X-L.

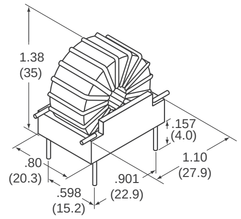
Size Code	Dimensions - Inches ±0.01 (mm ±0.25)			
	A	B	C	X= Coil O.D. +
C2	0.650 (16.5)	0.449 (11.4)	0.299 (7.6)	0.110 (2.8)
C3	0.827 (21.0)	0.449 (11.4)	0.299 (7.6)	0.110 (2.8)
C4	0.949 (24.1)	0.630 (16.0)	0.449 (11.4)	0.110 (2.8)
C5	1.252 (31.8)	0.701 (17.8)	0.500 (12.7)	0.130 (3.3)

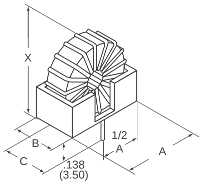
Size Code	Dimensions - Inches ±0.010 (mm ±0.25)			
	A	B	C	D
S1	0.339 (8.6)	0.339 (8.6)	0.177 (4.5)	0.268 (6.8)
S2	0.394 (10.0)	0.394 (10.0)	0.256 (6.5)	0.339 (8.6)
S3	0.503 (12.8)	0.503 (12.8)	0.276 (7.0)	0.449 (11.4)
S4	0.591 (15.0)	0.591 (15.0)	0.315 (8.0)	0.508 (12.9)
S5	0.669 (17.0)	0.701 (17.8)	0.354 (9.0)	0.591 (15.0)
S6	0.925 (23.5)	0.925 (23.5)	0.394 (10.0)	0.827 (21.0)
T1	0.339 (8.6)	0.339 (8.6)	0.146 (3.7)	0.250 (6.35)
T2	0.394 (10.0)	0.394 (10.0)	0.224 (5.7)	0.300 (7.62)
T3	0.503 (12.8)	0.503 (12.8)	0.244 (6.2)	0.375 (9.52)
T4	0.591 (15.0)	0.591 (15.0)	0.283 (7.2)	0.500 (12.70)
T5	0.669 (17.0)	0.701 (17.8)	0.323 (8.2)	0.600 (15.24)

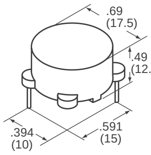
50 KHz Inductors

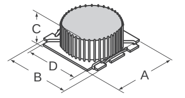
L_N (µH) Typ.	I_{DC} Current (A)	ET_{OP} (V-µSec) Max.	DCR (Ohms) Max.	Size Code (Dim.)	Digi-Key Part No.	Price Each 1	10	25	Talema Part No.
47	3.0	90	0.05	C2	TE2000-ND	.84	.75	.66	SWC-3.0-47
47	3.0	90	0.05	S5	TE2001-ND	.71	.63	.56	SWS-3.0-47
47	3.0	90	0.05	T5	TE2002-ND	.75	.67	.59	SWT-3.0-47
68	3.0	90	0.02	C4	TE2003-ND	1.38	1.23	1.08	SWC-3.0-68
100	3.0	90	0.04	C4	TE2004-ND	1.25	1.11	.98	SWC-3.0-100
150	2.0	90	0.10	C4	TE2005-ND	1.20	1.07	.94	SWC-2.0-150
150	2.0	90	0.10	S5	TE2006-ND	1.09	.97	.85	SWS-2.0-150
150	3.0	200	0.10	C4	TE2024-ND	1.18	1.05	.92	SWC-3.0-150
220	1.4	90	0.38	S5	TE2007-ND	1.02	.91	.80	SWS-1.4-220
220	1.4	90	0.38	T5	TE2008-ND	1.09	.97	.85	SWT-1.4-220
220	1.4	90	0.38	F2	TE2009-ND	1.11	.99	.87	SWF-1.4-220
220	1.4	90	0.38	V2	TE2010-ND	1.20	1.07	.94	SWV-1.4-220
220	1.4	90	0.14	C3	TE2011-ND	1.05	.93	.82	SWC-1.4-220
220	1.4	90	0.14	S6	TE2012-ND	1.00	.89	.78	SWS6-1.4-220
220	3.0	200	0.07	C5	TE2025-ND	1.67	1.48	1.30	SWC-3.0-220
330	0.9	90	0.74	S5	TE2013-ND	1.07	.95	.84	SWS-0.90-330
330	0.9	90	0.74	T5	TE2014-ND	1.11	.99	.87	SWT-0.90-330
330	0.9	90	0.74	F2	TE2015-ND	1.14	1.01	.89	SWF-0.90-330
330	0.9	90	0.74	V2	TE2016-ND	1.23	1.09	.96	SWV-0.90-330
330	0.9	90	0.18	C3	TE2017-ND	1.11	.99	.87	SWC-0.90-330
330	0.9	90	0.18	S6	TE2018-ND	1.05	.93	.82	SWS6-0.90-330
330	3.0	200	0.15	C5	TE2026-ND	1.64	1.46	1.28	SWC-3.0-330
470	0.64	90	0.16	C4	TE2019-ND	1.41	1.25	1.10	SWC-0.64-470
470	2.0	200	0.17	C5	TE2027-ND	1.69	1.50	1.32	SWC-2.0-470
680	0.85	90	1.25	S5	TE2020-ND	1.14	1.01	.89	SWS-0.85-680
680	0.85	90	1.25	T5	TE2021-ND	1.18	1.05	.92	SWT-0.85-680
680	0.85	90	1.25	F2	TE2022-ND	1.25	1.11	.98	SWF-0.85-680
680	0.85	90	1.25	V2	TE2023-ND	1.34	1.19	1.05	SWV-0.85-680
680	1.3	200	0.20	C5	TE2028-ND	1.76	1.56	1.37	SWC-1.3-680
1000	0.95	200	0.24	C5	TE2029-ND	1.89	1.68	1.47	SWC-0.95-1000
1500	0.62	200	1.00	B8	TE2030-ND	1.82	1.62	1.42	SWB-0.62-1500
2200	0.42	200	1.80	B8	TE2031-ND	1.82	1.62	1.42	SWB-0.42-2200

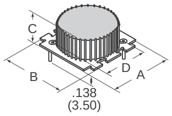

Typical Schematic

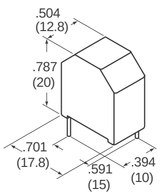

B Series — Base Mount


C Series — Clip Mount


F Series — Encapsulated Flat Mount


S Series — Surface Mount


T Series — Thru-Hole Mount


V Series — Encapsulated Vertical Mount

150 KHz Inductors

L_N (µH) ±20%	I_{DC} Current (A)	ET_{OP} (V-µSec) Max.	DCR (Ohms) Max.	Simple Switcher™ Reference No.†	Size Code (Dim.)	Digi-Key Part No.	Price Each 1	10	25	Talema Part No.	Size Code (Dim.)	Digi-Key Part No.	Price Each 1	10	25	Talema Part No.
					Surface Mount						Thru-Hole					
259	0.13	23.1	3.40	LM259X-L1	S1	TE2032-ND	.67	.60	.52	SWS-0.13-259	T1	TE2077-ND	.70	.63	.55	SWT-0.13-259
178	0.16	16.5	2.80	LM259X-L2	S1	TE2033-ND	.63	.57	.50	SWS-0.16-178	T1	TE2078-ND	.67	.60	.52	SWT-0.16-178
118	0.20	13.2	1.80	LM259X-L3	S1	TE2034-ND	.60	.54	.47	SWS-0.20-118	T1	TE2079-ND	.63	.57	.50	SWT-0.20-118
79	0.25	9.9	1.50	LM259X-L4	S1	TE2035-ND	.56	.51	.44	SWS-0.25-79	T1	TE2080-ND	.63	.57	.50	SWT-0.25-79
55	0.30	6.6	1.00	LM259X-L5	S1	TE2036-ND	.56	.51	.44	SWS-0.30-55	T1	TE2081-ND	.60	.54	.47	SWT-0.30-55
39	0.34	6.6	0.80	LM259X-L6	S1	TE2037-ND	.56	.51	.44	SWS-0.34-39	T1	TE2082-ND	.60	.54	.47	SWT-0.34-39
26	0.45	6.6	0.62	LM259X-L7	S1	TE2038-ND	.53	.48	.42	SWS-0.45-26	T1	TE2083-ND	.56	.51	.44	SWT-0.45-26
374	0.20	75.9	2.70	LM259X-L8	S2	TE2039-ND	.76	.68	.59	SWS-0.20-374	T2	TE2084-ND	.79	.71	.62	SWT-0.20-374
256	0.25	33.0	2.20	LM259X-L9	S2	TE2040-ND	.72	.65	.57	SWS-0.25-256	T2	TE2085-ND	.76	.68	.59	SWT-0.25-256
176	0.30	26.4	1.40	LM259X-L10	S2	TE2041-ND	.69	.62	.54	SWS-0.30-176	T2	TE2086-ND	.72	.65	.57	SWT-0.30-176
118	0.38	19.8	1.20	LM259X-L11	S2	TE2042-ND	.66	.59	.52	SWS-0.38-118	T2	TE2087-ND	.69	.62	.54	SWT-0.38-118
78	0.46	16.5	0.80	LM259X-L12	S2	TE2043-ND	.62	.56	.49	SWS-0.46-78	T2	TE2088-ND	.69	.62	.54	SWT-0.46-78
55	0.56	13.2	0.50	LM259X-L13	S2	TE2044-ND	.62	.56	.49	SWS-0.56-55	T2	TE2089-ND	.66	.59	.52	SWT-0.56-55
39	0.68	9.9	0.30	LM259X-L14	S2	TE2045-ND	.62	.56	.49	SWS-0.68-39	T2	TE2090-ND	.66	.59	.52	SWT-0.68-39
26	0.84	6.6	0.20	LM259X-L15	S2	TE2046-ND	.59	.53	.46	SWS-0.84-26	T2	TE2091-ND	.62	.56	.49	SWT-0.84-26
17	1.02	6.6	0.10	LM259X-L16	S2	TE2047-ND	.59	.53	.46	SWS-1.02-17	T2	TE2092-ND	.66	.59	.52	SWT-1.02-17
375	0.36	75.9	1.30	LM259X-L17	S3	TE2048-ND	.85	.76	.67	SWS-0.36-375	T3	TE2093-ND	.88	.79	.69	SWT-0.36-375
252	0.44	49.5	0.90	LM259X-L18	S3	TE2049-ND	.78	.70	.61	SWS-0.44-252	T3	TE2094-ND	.85	.76	.67	SWT-0.44-252
173	0.54	36.3	0.60	LM259X-L19	S3	TE2050-ND	.78	.70	.61	SWS-0.54-173	T3	TE2095-ND	.82	.73	.64	SWT-0.54-173
115	0.67	29.7	0.40	LM259X-L20	S3	TE2051-ND	.75	.67	.59	SWS-0.67-115	T3	TE2096-ND	.78	.70	.61	SWT-0.67-115
78	0.82	23.1	0.30	LM259X-L21	S3	TE2052-ND	.72	.64	.56	SWS-0.82-78	T3	TE2097-ND	.75	.67	.59	SWT-0.82-78
54	1.00	16.5	0.20	LM259X-L22	S3	TE2053-ND	.72	.64	.56	SWS-1.00-54	T3	TE2098-ND	.75	.67	.59	SWT-1.00-54
38	1.20	13.2	0.10	LM259X-L23	S3	TE2054-ND	.72	.64	.56	SWS-1.20-38	T3	TE2099-ND	.75	.67	.59	SWT-1.20-38
26	1.48	9.9	0.10	LM259X-L24	S3	TE2055-ND	.68	.61	.54	SWS-1.48-26	T3	TE2100-ND	.72	.64	.56	SWT-1.48-26
18	1.81	9.9	0.06	LM259X-L25	S3	TE2056-ND	.68	.61	.54	SWS-1.81-18	T3	TE2101-ND	.72	.64	.56	SWT-1.81-18
377	0.68	75.9	1.00	LM259X-L26	S4	TE2057-ND	.85	.76	.67	SWS-0.68-377	T4	TE2102-ND	.92	.82	.72	SWT-0.68-377
248	0.83	72.6	0.60	LM259X-L27	S4	TE2058-ND	.85	.76	.67	SWS-0.83-248	T4	TE2103-ND	.88	.79	.69	SWT-0.83-248
168	1.02	56.1	0.40	LM259X-L28	S4	TE2059-ND	.82	.73	.64	SWS-1.02-168	T4	TE2104-ND	.85	.76	.67	SWT-1.02-168
112	1.26	42.9	0.30	LM259X-L29	S4	TE2060-ND	.78	.70	.61	SWS-1.26-112	T4	TE2105-ND	.82	.73	.64	SWT-1.26-112
77	1.54	33.0	0.20	LM259X-L30	S4	TE2061-ND	.78	.70	.61	SWS-1.54-77	T4	TE2106-ND	.82	.73	.64	SWT-1.54-77
53	1.87	26.4	0.13	LM259X-L31	S4	TE2062-ND	.77	.69	.61	SWS-1.87-53	T4	TE2107-ND	.84	.75	.66	SWT-1.87-53
37	2.24	19.8	0.10	LM259X-L32	S4	TE2063-ND	.75	.67	.59	SWS-2.24-37	T4	TE2108-ND	.78	.70	.61	SWT-2.24-37
24	2.74	16.5	0.07	LM259X-L33	S4	TE2064-ND	.75	.67	.59	SWS-2.74-24	T4	TE2109-ND	.78	.70	.61	SWT-2.74-24
17	3.00	13.2	0.05	LM259X-L34	S4	TE2065-ND	.75	.67	.59	SWS-3.00-17	T4	TE2110-ND	.78	.70	.61	SWC-3.00-17
250	1.50	72.6	0.23	LM259X-L35	S6	TE2066-ND	1.80	1.60	1.40	SWS-1.50-250	C3	TE2111-ND	1.83	1.63	1.43	SWC-1.50-250
168	1.81	75.9	0.18	LM259X-L36	S6	TE2067-ND	1.73	1.54	1.35	SWS-1.81-168	C3	TE2112-ND	1.77	1.57	1.38	SWC-1.81-168
114	2.22	62.7	0.10	LM259X-L37	S6	TE2068-ND	1.73	1.54	1.35	SWS-2.22-114	C3	TE2113-ND	1.77	1.57	1.38	SWC-2.22-114
77	2.70	52.8	0.09	LM259X-L38	S6	TE2069-ND	1.69	1.51	1.32	SWS-2.70-77	C3	TE2114-ND	1.72	1.54	1.35	SWC-2.70-77
53	3.00	42.9	0.08	LM259X-L39	S6	TE2070-ND	1.63	1.45	1.27	SWS-3.00-53	C3	TE2115-ND	1.67	1.48	1.30	SWC-3.00-53
38	3.00	29.7	0.05	LM259X-L40	S6	TE2071-ND	1.63	1.45	1.27	SWS-3.00-38	C3	TE2116-ND	1.67	1.48	1.30	SWC-3.00-38
25	3.00	19.8	0.04	LM259X-L41	S5	TE2072-ND	1.04	.92	.81	SWS-3.00-25	C2	TE2117-ND	1.07	.95	.84	SWC-3.00-25
167	2.50	75.9	0.14	LM259X-L42	S6	TE2073-ND	2.23	1.99	1.74	SWS-2.50-167	C4	TE2118-ND	2.32	2.07	1.81	SWC-2.50-167
110	3.00	75.9	0.09	LM259X-L43	S6	TE2074-ND	2.29	2.04	1.78	SWS-3.00-110	C4	TE2119-ND	2.38	2.12	1.85	SWC-3.00-110
77	3.00	59.4	0.08	LM259X-L44	S6	TE2075-ND	1.72	1.54	1.35	SWS-3.00-77	C3	TE2120-ND	1.76	1.57	1.37	SWC-3.00-77
19	4.50	32.0‡	0.02	LM258X-L	S6	TE2076-ND	1.71	1.52	1.33	SWS-4.50-19	C3	TE2121-ND	1.74	1.55	1.36	SWC-4.5-19

† To be used for reference only. ‡ ET_{OP} for part number SW☐-4.50-19 is based on a frequency of 100KHz. All other items are rated at 150KHz. ***Note:*** Simple Switcher™ is a trademark of National Semiconductor.

TOKO

9139B-ND Toko Coils & Filter Book **$9.95**

Surface Mount Inductors

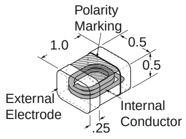
LL1005FH Type, LL1608FH Type, LL1608F Type, LL2012F Type, PTL1608F Type, PTL2012F Type

FEATURES:

LL1005FH – World's Smallest Chip Inductor. For reflow soldering • Temperature Coefficient: +250ppm/°C max. • Temperature Range: -40°C - +100°C. Miniature size (1.0mm x 0.5mm). **LL1608F & LL2012F** – For Reflow Soldering • Temperature Coefficient: +250ppm/°C max. • Temperature Range: -40°C +100°C • Features: Laminated ceramic allows high SRF.

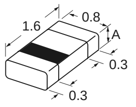
The **PTL1608** and **PTL2012 Series** is a photolithographically etched single layer ceramic chip inductor providing high SRF, excellent Q, and superior temperature stability. Highly stable and specifically designed for critical tolerance inductor needs. Solves the tight tolerance needs of GaAs matching and VCO circuits. **Tolerance:** C=±0.2nH, S=±0.3nH, T=3%

LL1005FH



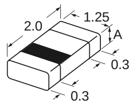
0402 Package

LL1608F, LL1608FH, PTL1608F



0603 Package

LL2012F, PTL2012F



0805 Package

Dim. A (mm)	Lo (nH)	Tol.	Q (typ)	SRF MHz (typ)	IDC mA (Max)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	★Tape & Reel Pricing	Toko Part No.
LL1005FH											
0.50	1.0	±0.3nH	30	>6000	300	TKS2580CT-ND	.68	.63	.32	1790.00/10000	LL1005-FH1N0S
0.50	1.2	±0.3nH	30	>6000	300	TKS2581CT-ND	.68	.63	.32	1790.00/10000	LL1005-FH1N2S
0.50	1.5	±0.3nH	30	>6000	300	TKS2582CT-ND	.68	.63	.32	1790.00/10000	LL1005-FH1N5S
0.50	1.8	±0.3nH	30	>6000	300	TKS2583CT-ND	.68	.63	.32	1790.00/10000	LL1005-FH1N8S
0.50	2.2	±0.3nH	30	>6000	300	TKS2584CT-ND	.68	.63	.32	1790.00/10000	LL1005-FH2N2S
0.50	2.7	±0.3nH	30	5500	300	TKS2585CT-ND	.68	.63	.32	1790.00/10000	LL1005-FH2N7S
0.50	3.3	±10%	28	5000	300	TKS2586CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH3N3K
0.50	3.9	±10%	30	4700	300	TKS2587CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH3N9K
0.50	4.7	±10%	28	4300	300	TKS2588CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH4N7K
0.50	5.6	±10%	28	4000	300	TKS2589CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH5N6K
0.50	6.8	±10%	28	3650	300	TKS2590CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH6N8K
0.50	8.2	±10%	28	3200	300	TKS2591CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH8N2K
0.50	10.0	±10%	23	2800	300	TKS2592CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH10NK
0.50	12.0	±10%	24	2700	300	TKS2593CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH12NK
0.50	15.0	±10%	25	2200	300	TKS2594CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH15NK
0.50	18.0	±10%	17	2000	300	TKS2595CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH18NK
0.50	22.0	±10%	23	1800	300	TKS2596CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH22NK
0.50	27.0	±10%	20	1600	300	TKS2597CT-ND	.60	.56	.28	1590.00/10000	LL1005-FH27NK
TK10-KIT-ND (SPK-LL1005FH-5%) LL1005-FH Chip Inductor Kit - 10 each of 25 values (250 parts), 1.0nH-47nH $40.50											
LL1608F											
0.80	1.5	±0.3nH	60	>6000	300	TKS2353CT-ND	.68	.61	.30	844.00/4000	LL1608-F1N5S
0.80	1.8	±0.3nH	37	>6000	300	TKS2354CT-ND	.68	.61	.30	844.00/4000	LL1608-F1N8S
0.80	2.2	±0.3nH	35	>6000	300	TKS2355CT-ND	.68	.61	.30	844.00/4000	LL1608-F2N2S
0.80	2.7	±0.3nH	30	>6000	300	TKS2356CT-ND	.68	.61	.30	844.00/4000	LL1608-F2N7S
0.80	3.3	±10%	30	5500	300	TKS2357CT-ND	.68	.61	.30	840.00/4000	LL1608-F3N3K
0.80	3.9	±10%	31	5700	300	TKS2340CT-ND	.68	.61	.30	840.00/4000	LL1608-F3N9K
0.80	4.7	±10%	31	4800	300	TKS2341CT-ND	.68	.61	.30	840.00/4000	LL1608-F4N7K
0.80	5.6	±10%	27	4600	300	TKS2342CT-ND	.68	.61	.30	840.00/4000	LL1608-F5N6K
0.80	6.8	±10%	27	3550	300	TKS2343CT-ND	.68	.61	.30	840.00/4000	LL1608-F6N8K
0.80	8.2	±10%	26	3500	300	TKS2344CT-ND	.68	.61	.30	840.00/4000	LL1608-F8N2K
0.80	10.0	±10%	26	2750	300	TKS2345CT-ND	.68	.61	.30	840.00/4000	LL1608-F10NK
0.80	12.0	±10%	24	2750	300	TKS2346CT-ND	.68	.61	.30	840.00/4000	LL1608-F12NK
0.80	15.0	±10%	24	2300	300	TKS2347CT-ND	.68	.61	.30	840.00/4000	LL1608-F15NK
0.80	18.0	±10%	24	2300	300	TKS2348CT-ND	.68	.61	.30	840.00/4000	LL1608-F18NK
0.80	22.0	±10%	25	2000	300	TKS2349CT-ND	.68	.61	.30	840.00/4000	LL1608-F22NK
0.80	27.0	±10%	25	1750	300	TKS2350CT-ND	.68	.61	.30	840.00/4000	LL1608-F27NK
0.80	33.0	±10%	24	1500	300	TKS2351CT-ND	.68	.61	.30	840.00/4000	LL1608-F33NK
0.80	39.0	±10%	20	1300	300	TKS2352CT-ND	.68	.61	.30	840.00/4000	LL1608-F39NK
0.80	47.0	±10%	18	1200	300	TKS2381CT-ND	.68	.63	.32	1004.00/4000	LL1608-F47NK
0.80	56.0	±10%	14	1100	300	TKS2382CT-ND	.68	.63	.32	1004.00/4000	LL1608-F56NK
0.80	82.0	±10%	18	900	300	TKS2384CT-ND	.68	.63	.32	1004.00/4000	LL1608-F82NK
0.80	100.0	±10%	3	830	300	TKS2385CT-ND	.68	.63	.32	1008.00/4000	LL1608-FR10K
LL1608FH											
0.80	1.2	±0.3nH	13	>6000	1000	TKS3700CT-ND	.68	.61	.30	840.00/4000	LL1608-FH1N2S
0.80	1.5	±0.3nH	13	>6000	1000	TKS3701CT-ND	.68	.61	.30	840.00/4000	LL1608-FH1N5S
0.80	1.8	±0.3nH	12	>6000	1000	TKS3702CT-ND	.68	.61	.30	840.00/4000	LL1608-FH1N8S
0.80	2.2	±0.3nH	12	>6000	1000	TKS3703CT-ND	.68	.61	.30	840.00/4000	LL1608-FH2N2S
0.80	2.7	±0.3nH	12	>6000	1000	TKS3704CT-ND	.68	.61	.30	840.00/4000	LL1608-FH2N7S
0.80	3.3	±0.3nH	12	5900	1000	TKS3705CT-ND	.68	.61	.30	840.00/4000	LL1608-FH3N3S
0.80	3.9	±0.3nH	13	5600	1000	TKS3706CT-ND	.68	.61	.30	840.00/4000	LL1608-FH3N9S
0.80	4.7	±0.3nH	12	4800	1000	TKS3707CT-ND	.68	.61	.30	840.00/4000	LL1608-FH4N7S
0.80	5.6	±0.3nH	12	4350	600	TKS3708CT-ND	.68	.61	.30	840.00/4000	LL1608-FH5N6S
0.80	6.8	±5%	12	3750	600	TKS3709CT-ND	.68	.61	.30	840.00/4000	LL1608-FH6N8J
0.80	8.2	±5%	13	3300	600	TKS3710CT-ND	.68	.61	.30	840.00/4000	LL1608-FH8N2J
0.80	10.0	±5%	13	2850	600	TKS3711CT-ND	.68	.61	.30	840.00/4000	LL1608-FH10NJ
0.80	12.0	±5%	15	2500	600	TKS3712CT-ND	.68	.61	.30	840.00/4000	LL1608-FH12NJ
0.80	15.0	±5%	15	2150	600	TKS3713CT-ND	.68	.61	.30	840.00/4000	LL1608-FH15NJ
0.80	18.0	±5%	16	2050	600	TKS3714CT-ND	.68	.61	.30	840.00/4000	LL1608-FH18NJ
0.80	22.0	±5%	17	1850	600	TKS3715CT-ND	.68	.61	.30	840.00/4000	LL1608-FH22NJ
0.80	27.0	±5%	17	1750	600	TKS3716CT-ND	.68	.61	.30	840.00/4000	LL1608-FH27NJ
0.80	33.0	±5%	18	1500	600	TKS3717CT-ND	.68	.61	.30	840.00/4000	LL1608-FH33NJ
0.80	39.0	±5%	17	1350	500	TKS3718CT-ND	.68	.61	.30	840.00/4000	LL1608-FH39NJ
0.80	47.0	±5%	17	1200	500	TKS3719CT-ND	.68	.61	.30	840.00/4000	LL1608-FH47NJ
0.80	56.0	±5%	17	1100	500	TKS3720CT-ND	.68	.61	.30	840.00/4000	LL1608-FH56NJ
0.80	68.0	±5%	18	1000	400	TKS3721CT-ND	.68	.61	.30	840.00/4000	LL1608-FH68NJ
0.80	82.0	±5%	18	900	300	TKS3722CT-ND	.68	.61	.30	840.00/4000	LL1608-FH82NJ
0.80	100	±5%	18	830	300	TKS3723CT-ND	.68	.61	.30	840.00/4000	LL1608-FHR10J
PTL1608F											
0.50	1.0	±0.2nH	11	12500	1000	TKS2900CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F1N0C
0.50	1.2	±0.2nH	10	11500	900	TKS2901CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F1N2C
0.50	1.5	±0.2nH	9	10000	800	TKS2902CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F1N5C
0.50	1.8	±0.2nH	10	9250	700	TKS2903CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F1N8C
0.50	2.2	±0.2nH	9	8400	650	TKS2904CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F2N2C
0.50	2.7	±0.2nH	10	7400	600	TKS2905CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F2N7C
0.50	3.3	±0.2nH	9	6600	500	TKS2906CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F3N3C
0.50	3.9	±0.2nH	9	5850	500	TKS2907CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F3N9C
0.50	4.7	±0.2nH	10	5200	450	TKS2908CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F4N7C
0.50	5.6	±0.2nH	10	4700	400	TKS2909CT-ND	.75	.67	.33	1398.00/6000	PTL1608-F5N6C
0.50	6.8	±0.3nH	9	4200	350	TKS2910CT-ND	.75	.67	.33	1260.00/6000	PTL1608-F6N8S
0.50	8.2	±0.3nH	9	3750	300	TKS2911CT-ND	.75	.67	.33	1260.00/6000	PTL1608-F8N2S
0.50	10	3%	9	3250	250	TKS2912CT-ND	.90	.81	.40	1260.00/6000	PTL1608-F10NT
0.50	12	3%	8	3100	200	TKS2913CT-ND	.90	.81	.40	1260.00/6000	PTL1608-F12NT
0.50	15	3%	8	2650	200	TKS2914CT-ND	.90	.81	.40	1260.00/6000	PTL1608-F15NT
0.50	18	3%	8	2400	180	TKS2915CT-ND	.90	.81	.40	1260.00/6000	PTL1608-F18NT
LL2012F											
0.60	1.8	±0.3nH	42	6000	300	TKS2360CT-ND	.90	.81	.40	1120.00/4000	LL2012-F1N8S
0.60	2.2	±0.3nH	44	6000	300	TKS2361CT-ND	.90	.81	.40	1120.00/4000	LL2012-F2N2S
0.60	2.7	±0.3nH	32	6000	300	TKS2362CT-ND	.90	.81	.40	1120.00/4000	LL2012-F2N7S
0.60	3.3	±10%	36	6000	300	TKS2363CT-ND	.75	.67	.33	932.00/4000	LL2012-F3N3K
0.60	3.9	±10%	46	5400	300	TKS2364CT-ND	.75	.67	.33	932.00/4000	LL2012-F3N9K
0.60	4.7	±10%	45	4500	300	TKS2365CT-ND	.75	.67	.33	932.00/4000	LL2012-F4N7K
0.60	5.6	±10%	47	4000	300	TKS2366CT-ND	.75	.67	.33	932.00/4000	LL2012-F5N6K
0.60	6.8	±10%	44	3650	300	TKS2367CT-ND	.75	.67	.33	932.00/4000	LL2012-F6N8K
0.60	8.2	±10%	46	3000	300	TKS2368CT-ND	.75	.67	.33	932.00/4000	LL2012-F8N2K
0.85	10.0	±10%	40	2500	300	TKS2369CT-ND	.75	.67	.33	932.00/4000	LL2012-F10NK
0.85	12.0	±10%	40	2450	300	TKS2370CT-ND	.75	.67	.33	932.00/4000	LL2012-F12NK
0.85	15.0	±10%	43	2000	300	TKS2371CT-ND	.75	.67	.33	932.00/4000	LL2012-F15NK
0.85	18.0	±10%	42	1750	300	TKS2372CT-ND	.75	.67	.33	932.00/4000	LL2012-F18NK
0.85	22.0	±10%	42	1700	300	TKS2373CT-ND	.75	.67	.33	932.00/4000	LL2012-F22NK
0.85	33.0	±10%	44	1350	300	TKS2375CT-ND	.75	.67	.33	932.00/4000	LL2012-F33NK
0.85	39.0	±10%	39	1300	300	TKS2376CT-ND	.75	.67	.33	932.00/4000	LL2012-F39NK
1.00	47.0	±10%	36	1200	300	TKS2377CT-ND	.75	.67	.33	699.00/3000	LL2012-F47NK
1.00	56.0	±10%	36	1150	300	TKS2378CT-ND	.75	.67	.33	699.00/3000	LL2012-F56NK
1.00	68.0	±10%	35	1000	300	TKS2379CT-ND	.75	.67	.33	699.00/3000	LL2012-F68NK
1.00	82.0	±10%	25	850	300	TKS2380CT-ND	.75	.67	.33	699.00/3000	LL2012-F82NK
1.00	100.0	±10%	18	730	300	TKS2386CT-ND	.75	.70	.35	840.00/3000	LL2012-FR10K
1.10	120.0	±10%	19	650	250	TKS2387CT-ND	.75	.70	.35	840.00/3000	LL2012-FR12K
1.10	150.0	±10%	20	550	250	TKS2388CT-ND	.75	.70	.35	840.00/3000	LL2012-FR15K
1.10	180.0	±10%	20	500	250	TKS2389CT-ND	.75	.70	.35	840.00/3000	LL2012-FR18K
1.10	220.0	±10%	20	450	200	TKS2390CT-ND	.75	.70	.35	840.00/3000	LL2012-FR22K
1.10	270.0	±10%	20	400	200	TKS2391CT-ND	.75	.70	.35	840.00/3000	LL2012-FR27K
1.10	330.0	±10%	20	380	150	TKS2392CT-ND	.75	.70	.35	840.00/3000	LL2012-FR33K
1.10	390.0	±10%	20	330	150	TKS2393CT-ND	.75	.70	.35	840.00/3000	LL2012-FR39K
1.10	470.0	±10%	19	300	100	TKS2394CT-ND	.75	.70	.35	840.00/3000	LL2012-FR47K
PTL2012F											
0.50	1.0	±0.2nH	11	10000	1300	TKS2950CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F1N0C
0.50	1.2	±0.2nH	10	9000	1100	TKS2951CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F1N2C
0.50	1.5	±0.2nH	8	8500	800	TKS2952CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F1N5C
0.50	1.8	±0.2nH	9	8000	800	TKS2953CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F1N8C
0.50	2.2	±0.2nH	10	7000	750	TKS2954CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F2N2C
0.50	2.7	±0.2nH	10	6000	750	TKS2955CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F2N7C
0.50	3.3	±0.2nH	10	5300	650	TKS2956CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F3N3C
0.50	3.9	±0.2nH	10	4800	600	TKS2957CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F3N9C
0.50	4.7	±0.2nH	10	4350	550	TKS2958CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F4N7C
0.50	5.6	±0.2nH	10	4000	500	TKS2959CT-ND	.98	.88	.43	1818.00/6000	PTL2012-F5N6C
0.50	6.8	±0.3nH	10	3600	450	TKS2960CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F6N8S
0.50	8.2	±0.3nH	10	3250	400	TKS2961CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F8N2S
0.50	10	3%	11	2850	350	TKS2962CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F10NT
0.50	12	3%	12	2500	350	TKS2963CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F12NT
0.50	15	3%	12	2250	300	TKS2964CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F15NT
0.50	18	3%	12	2000	300	TKS2965CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F18NT
0.50	22	3%	12	1800	250	TKS2966CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F22NT
0.50	27	3%	12	1650	200	TKS2967CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F27NT
0.50	33	3%	11	1450	200	TKS2968CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F33NT
0.50	39	3%	11	1350	180	TKS2969CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F39NT
0.50	47	3%	11	1180	130	TKS2970CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F47NT
0.50	56	3%	11	1070	120	TKS2971CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F56NT
0.50	68	3%	11	950	100	TKS2972CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F68NT
0.50	82	3%	11	900	90	TKS2973CT-ND	.90	.81	.40	1680.00/6000	PTL2012-F82NT
TK14-KIT-ND (SPK-PTL2012F-97) PTL2012-F - Chip Inductor Kit, Up to 3% Tolerance - 10 each of 20 values (200 parts), 1.0nH-39nH............ $49.00											

★ For Tape & Reel part number, change CT-ND to TR-ND.

TOKO

9139B-ND	Toko Coils & Filter Book	**$9.95**

Surface Mount Inductors

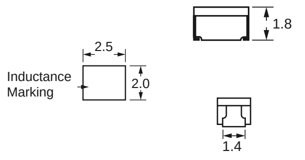
FSLU Type, FSLM Type, 3DF Type

Features:

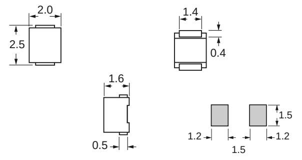
FSLU – Conforms to EIA Standard 1008 footprint. • Typical max Q: 40-50. • Proprietary wire-wound structure with welded terminations offers high reliability. • Operating Temperature Range: -40°C - +85°C. • Superior solderability and high heat-resistance for flow and reflow soldering.

FSLM – Ferrite core wirewound inductor conforms to EIA Standard 1008 footprint. Proprietary welded termination offers superior reliability and high heat-resistance for flow and reflow soldering capability. Recommended for general signal conditioning, RF or IF filtering applications and as matching elements.

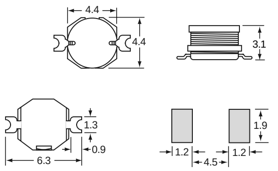
FSLU 1008 Package



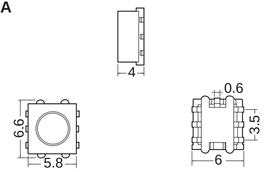
FSLM 1008 Package



3DF



5CA



TK9990-ND	Ceramic Tuning Driver (5CB, 5CE, 5CCE) (Requires Holder TK9999-ND, below)	**$41.66**
TK9993-ND	Ceramic Tuning Driver (5CD) (Requires Holder TK9999-ND, below)	**$31.84**
TK9994-ND	Ceramic Tuning Driver (5CCD) (Requires Holder TK9999-ND, below)	**$69.64**
TK9999-ND	Ceramic Driver Holder	**$4.16**

L Nom.	Tol.	Q Min.	Freq.	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
FSLU Type										
.010µH	±10%	15	100MHz	730mA	TKS2649CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-10NK
.012µH	±10%	15	100MHz	690mA	TKS2650CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-12NK
.015µH	±10%	15	100MHz	660mA	TKS2651CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-15NK
.018µH	±10%	15	100MHz	600mA	TKS2652CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-18NK
.022µH	±10%	15	100MHz	550mA	TKS2653CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-22NK
.027µH	±10%	15	100MHz	520mA	TKS2654CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-27NK
.033µH	±10%	20	100MHz	480mA	TKS2655CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-33NK
.039µH	±10%	20	100MHz	460mA	TKS2656CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-39NK
.047µH	±10%	20	100MHz	440mA	TKS2657CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-47NK
.056µH	±10%	20	100MHz	420mA	TKS2658CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-56NK
.068µH	±10%	20	100MHz	400mA	TKS2659CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-68NK
.082µH	±10%	20	100MHz	390mA	TKS2660CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-82NK
0.1µH	±10%	30	25.2MHz	540mA	TKS2661CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R10K
.12µH	±10%	30	25.2MHz	500mA	TKS2662CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R12K
.15µH	±10%	30	25.2MHz	480mA	TKS2663CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R15K
.18µH	±10%	30	25.2MHz	430mA	TKS2664CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R18K
.22µH	±10%	30	25.2MHz	420mA	TKS2665CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R22K
.27µH	±10%	30	25.2MHz	410mA	TKS2666CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R27K
.33µH	±10%	30	25.2MHz	380mA	TKS2667CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R33K
.39µH	±10%	30	25.2MHz	360mA	TKS2668CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R39K
.47µH	±10%	30	25.2MHz	350mA	TKS2669CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R47K
.68µH	±10%	30	25.2MHz	320mA	TKS2671CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R68K
.82µH	±10%	30	25.2MHz	290mA	TKS2672CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-R82K
1.0µH	±5%	25	7.96MHz	250mA	TKS2620CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-1R0J
1.2µH	±5%	25	7.96MHz	235mA	TKS2621CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-1R2J
1.5µH	±5%	25	7.96MHz	230mA	TKS2622CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-1R5J
1.8µH	±5%	25	7.96MHz	220mA	TKS2623CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-1R8J
2.2µH	±5%	25	7.96MHz	210mA	TKS2624CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-2R2J
2.7µH	±5%	25	7.96MHz	200mA	TKS2625CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-2R7J
3.3µH	±5%	25	7.96MHz	190mA	TKS2626CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-3R3J
3.9µH	±5%	25	7.96MHz	185mA	TKS2627CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-3R9J
4.7µH	±5%	25	7.96MHz	180mA	TKS2628CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-4R7J
5.6µH	±5%	20	7.96MHz	175mA	TKS2629CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-5R6J
6.8µH	±5%	20	7.96MHz	165mA	TKS2630CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-6R8J
8.2µH	±5%	20	7.96MHz	160mA	TKS2631CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-8R2J
10µH	±5%	20	2.52MHz	155mA	TKS2632CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-100J
12µH	±5%	20	2.52MHz	150mA	TKS2633CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-120J
15µH	±5%	20	2.52MHz	145mA	TKS2634CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-150J
18µH	±5%	20	2.52MHz	135mA	TKS2635CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-180J
22µH	±5%	20	2.52MHz	125mA	TKS2636CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-220J
27µH	±5%	20	2.52MHz	120mA	TKS2637CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-270J
33µH	±5%	20	2.52MHz	115mA	TKS2638CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-330J
39µH	±5%	20	2.52MHz	90mA	TKS2639CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-390J
47µH	±5%	20	2.52MHz	80mA	TKS2640CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-470J
56µH	±5%	20	2.52MHz	75mA	TKS2641CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-560J
68µH	±5%	20	2.52MHz	70mA	TKS2642CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-680J
82µH	±5%	20	2.52MHz	65mA	TKS2643CT-ND	1.28	1.00	.86	—	FSLU2520-820J
100µH	±5%	15	0.796MHz	60mA	TKS2644CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-101J
120µH	±5%	15	0.796MHz	52mA	TKS2645CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-121J
150µH	±5%	15	0.796MHz	50mA	TKS2646CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-151J
180µH	±5%	15	0.796MHz	48mA	TKS2647CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-181J
220µH	±5%	15	0.796MHz	45mA	TKS2648CT-ND	1.36	1.20	1.08	520.00/2000	FSLU2520-221J
FSLM Type										
0.10µH	±5%	30	25.2MHz	570mA	TKS3600CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R10J
0.12µH	±5%	30	25.2MHz	550mA	TKS3601CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R12J
0.15µH	±5%	30	25.2MHz	500mA	TKS3602CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R15J
0.18µH	±5%	30	25.2MHz	460mA	TKS3603CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R18J
022µH	±5%	30	25.2MHz	430mA	TKS3604CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R22J
0.27µH	±5%	30	25.2MHz	420mA	TKS3605CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R27J
0.33µH	±5%	30	25.2MHz	400mA	TKS3606CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R33J
0.47µH	±5%	30	25.2MHz	350mA	TKS3607CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R47J
0.56µH	±5%	30	25.2MHz	330mA	TKS3608CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R56J
0.68µH	±5%	30	25.2MHz	320mA	TKS3609CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R68J
0.82µH	±5%	30	25.2MHz	290mA	TKS3610CT-ND	.85	.75	.67	500.00/2000	FSLM2520-R82J
1.0µH	±5%	30	7.96MHz	250mA	TKS3611CT-ND	.85	.75	.67	500.00/2000	FSLM2520-1R0J
1.2µH	±5%	30	7.96MHz	240mA	TKS3612CT-ND	.85	.75	.67	500.00/2000	FSLM2520-1R2J
1.5µH	±5%	30	7.96MHz	230mA	TKS3613CT-ND	.85	.75	.67	500.00/2000	FSLM2520-1R5J
1.8µH	±5%	30	7.96MHz	220mA	TKS3614CT-ND	.85	.75	.67	500.00/2000	FSLM2520-1R8J
2.2µH	±5%	30	7.96MHz	210mA	TKS3615CT-ND	.85	.75	.67	500.00/2000	FSLM2520-2R2J
2.7µH	±5%	30	7.96MHz	200mA	TKS3616CT-ND	.85	.75	.67	500.00/2000	FSLM2520-2R7J
3.3µH	±5%	30	7.96MHz	190mA	TKS3617CT-ND	.85	.75	.67	500.00/2000	FSLM2520-3R3J
3.9µH	±5%	30	7.96MHz	185mA	TKS3618CT-ND	.85	.75	.67	500.00/2000	FSLM2520-3R9J
4.7µH	±5%	30	7.96MHz	180mA	TKS3619CT-ND	.85	.75	.67	500.00/2000	FSLM2520-4R7J
5.6µH	±5%	30	7.96MHz	170mA	TKS3620CT-ND	.85	.75	.67	500.00/2000	FSLM2520-5R6J
6.8µH	±5%	30	7.96MHz	165mA	TKS3621CT-ND	.85	.75	.67	500.00/2000	FSLM2520-6R8J
8.2µH	±5%	30	7.96MHz	160mA	TKS3622CT-ND	.85	.75	.67	500.00/2000	FSLM2520-8R2J
10µH	±5%	25	2.52MHz	155mA	TKS3623CT-ND	.85	.75	.67	500.00/2000	FSLM2520-100J
12µH	±5%	25	2.52MHz	150mA	TKS3624CT-ND	.85	.75	.67	500.00/2000	FSLM2520-120J
15µH	±5%	25	2.52MHz	140mA	TKS3625CT-ND	.85	.75	.67	500.00/2000	FSLM2520-150J
18µH	±5%	25	2.52MHz	130mA	TKS3626CT-ND	.85	.75	.67	500.00/2000	FSLM2520-180J
22µH	±5%	25	2.52MHz	125mA	TKS3627CT-ND	.85	.75	.67	500.00/2000	FSLM2520-220J
27µH	±5%	25	2.52MHz	115mA	TKS3628CT-ND	.85	.75	.67	500.00/2000	FSLM2520-270J
33µH	±5%	25	2.52MHz	110mA	TKS3629CT-ND	.85	.75	.67	500.00/2000	FSLM2520-330J
39µH	±5%	25	2.52MHz	85mA	TKS3630CT-ND	.85	.75	.67	500.00/2000	FSLM2520-390J
47µH	±5%	25	2.52MHz	80mA	TKS3631CT-ND	.85	.75	.67	500.00/2000	FSLM2520-470J
56µH	±5%	25	2.52MHz	75mA	TKS3632CT-ND	.85	.75	.67	500.00/2000	FSLM2520-560J
68µH	±5%	25	2.52MHz	70mA	TKS3633CT-ND	.85	.75	.67	500.00/2000	FSLM2520-680J
82µH	±5%	25	2.52MHz	65mA	TKS3634CT-ND	.85	.75	.67	500.00/2000	FSLM2520-820J
100µH	±5%	15	0.796MHz	60mA	TKS3635CT-ND	.85	.75	.67	500.00/2000	FSLM2520-101J
120µH	±5%	15	0.796MHz	55mA	TKS3636CT-ND	.85	.75	.67	500.00/2000	FSLM2520-121J
150µH	±5%	15	0.796MHz	50mA	TKS3637CT-ND	.85	.75	.67	500.00/2000	FSLM2520-151J
180µH	±5%	15	0.796MHz	47mA	TKS3638CT-ND	.85	.75	.67	500.00/2000	FSLM2520-181J
220µH	±5%	15	0.796MHz	44mA	TKS3639CT-ND	.85	.75	.67	500.00/2000	FSLM2520-221J
3DF Type										
95µH	—	—	100KHz	21mA	TKS1200-ND	1.31	1.30	1.22	—	682AE-014=P3
5CA Type										
1.2 mH	—	70	252 KHz	54mA	TKS2318CT-ND	4.46	3.54	2.59	3400.00/2000	395GN-0091IB=P3
110 µH	—	68	796 KHz	—	TKS2319CT-ND	4.46	3.54	2.59	3400.00/2000	395KN-0369AQ=P3

* For Tape & Reel Part No., change CT to TR.

TOKO

9139B-ND Toko Coils & Filter Book **$9.95**

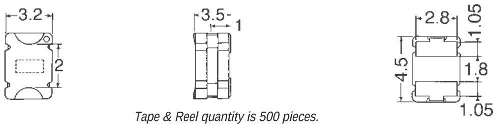
Surface Mount Inductors

43FS Type, 5CCD Type, 5CCE Type

FEATURES:

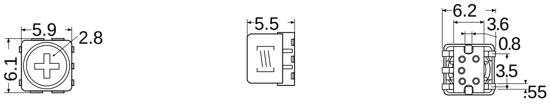
- **43FS** – For reflow soldering type. Small size.

43FS



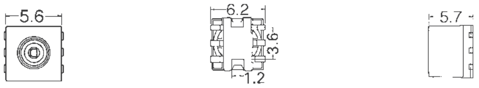
Tape & Reel quantity is 500 pieces.

5CCD



Tape & Reel quantity is 1000 pieces.

5CCE



Tape & Reel quantity is 750 pieces.

TK9990-ND	Ceramic Tuning Driver (5CB, 5CE, 5CCE) (Requires Holder TK9999-ND, below)	**$41.66**
TK9993-ND	Ceramic Tuning Driver (5CD) (Requires Holder TK9999-ND, below)	**$31.84**
TK9994-ND	Ceramic Tuning Driver (5CCD) (Requires Holder TK9999-ND, below)	**$69.64**
TK9999-ND	Ceramic Driver Holder	**$4.16**

L Nom.	Q Min.	Rated DC Freq.	Current	Digi-Key Part No.	Cut Tape Pricing 1	10	100	★Tape & Reel Pricing	Toko Part No.
43FS Type									
.22µH ± 20%	22	25.2MHz	190mA	TKS1205CT-ND	1.50	11.52	86.40	—	300NS-R22M
.56µH ± 20%	19	25.2MHz	145mA	TKS1210CT-ND	2.81	21.60	162.00	575.00/500	300NS-R56M
.68µH ± 20%	18	25.2MHz	140mA	TKS1211CT-ND	1.50	11.52	86.40	—	300NS-R68M
.82µH ± 20%	17	25.2MHz	135mA	TKS1212CT-ND	1.50	11.52	86.40	—	300NS-R82M
1.0µH ± 10%	50	7.96MHz	250mA	TKS1213CT-ND	2.81	21.60	162.00	575.00/500	300LS-1R0K
1.2µH ± 10%	50	7.96MHz	240mA	TKS1214CT-ND	2.81	21.60	162.00	575.00/500	300LS-1R2K
1.5µH ± 10%	50	7.96MHz	230mA	TKS1215CT-ND	2.81	21.60	162.00	575.00/500	300LS-1R5K
1.8µH ± 10%	50	7.96MHz	220mA	TKS1216CT-ND	2.81	21.60	162.00	575.00/500	300LS-1R8K
2.2µH ± 10%	50	7.96MHz	200mA	TKS1217CT-ND	2.81	21.60	162.00	575.00/500	300LS-2R2K
2.7µH ± 10%	50	7.96MHz	190mA	TKS1218CT-ND	2.81	21.60	162.00	575.00/500	300LS-2R7K
3.3µH ± 10%	50	7.96MHz	180mA	TKS1219CT-ND	2.81	21.60	162.00	575.00/500	300LS-3R3K
3.9µH ± 10%	50	7.96MHz	160mA	TKS1220CT-ND	2.81	21.60	162.00	575.00/500	300LS-3R9K
4.7µH ± 10%	50	7.96MHz	160mA	TKS1221CT-ND	2.81	21.60	162.00	575.00/500	300LS-4R7K
5.6µH ± 10%	50	7.96MHz	150mA	TKS1222CT-ND	2.81	21.60	162.00	575.00/500	300LS-5R6K
6.8µH ± 10%	50	7.96MHz	150mA	TKS1223CT-ND	2.81	21.60	162.00	575.00/500	300LS-6R8K
8.2µH ± 10%	50	7.96MHz	150mA	TKS1224CT-ND	2.81	21.60	162.00	575.00/500	300LS-8R2K
10.0µH ± 10%	50	7.96MHz	145mA	TKS1225CT-ND	2.81	21.60	162.00	575.00/500	300LS-100K
15.0µH ± 10%	50	2.52MHz	130mA	TKS1227CT-ND	2.81	21.60	162.00	575.00/500	300LS-150K
18.0µH ± 10%	50	2.52MHz	125mA	TKS1228CT-ND	2.81	21.60	162.00	575.00/500	300LS-180K
22.0µH ± 10%	50	2.52MHz	115mA	TKS1229CT-ND	2.81	21.60	162.00	575.00/500	300LS-220K
27.0µH ± 10%	50	2.52MHz	105mA	TKS1230CT-ND	2.81	21.60	162.00	575.00/500	300LS-270K
33.0µH ± 10%	50	2.52MHz	100mA	TKS1231CT-ND	2.81	21.60	162.00	575.00/500	300LS-330K
39.0µH ± 10%	50	2.52MHz	95mA	TKS1232CT-ND	2.81	21.60	162.00	575.00/500	300LS-390K
47.0µH ± 10%	50	2.52MHz	85mA	TKS1233CT-ND	2.81	21.60	162.00	575.00/500	300LS-470K
56.0µH ± 10%	50	2.52MHz	85mA	TKS1234CT-ND	2.81	21.60	162.00	575.00/500	300LS-560K
68.0µH ± 10%	50	2.52MHz	75mA	TKS1235CT-ND	2.81	21.60	162.00	575.00/500	300LS-680K
82.0µH ± 10%	50	2.52MHz	75mA	TKS1236CT-ND	2.81	21.60	162.00	575.00/500	300LS-820K
100µH ± 5%	50	2.52MHz	70mA	TKS1237CT-ND	2.81	21.60	162.00	575.00/500	300LS-101J
120µH ± 5%	50	796KHz	70mA	TKS1238CT-ND	2.81	21.60	162.00	575.00/500	300HS-121J
150µH ± 5%	50	796KHz	65mA	TKS1239CT-ND	2.81	21.60	162.00	575.00/500	300HS-151J
180µH ± 5%	50	796KHz	60mA	TKS1240CT-ND	2.81	21.60	162.00	575.00/500	300HS-181J
220µH ± 5%	50	796KHz	60mA	TKS1241CT-ND	2.81	21.60	162.00	575.00/500	300HS-221J
270µH ± 5%	50	796KHz	55mA	TKS1242CT-ND	2.81	21.60	162.00	575.00/500	300HS-271J
330µH ± 5%	50	796KHz	50mA	TKS1243CT-ND	2.81	21.60	162.00	575.00/500	300HS-331J
390µH ± 5%	50	796KHz	50mA	TKS1244CT-ND	2.81	21.60	162.00	575.00/500	300HS-391J
470µH ± 5%	50	796KHz	45mA	TKS1245CT-ND	2.81	21.60	162.00	575.00/500	300HS-471J
560µH ± 5%	50	796KHz	45mA	TKS1246CT-ND	2.81	21.60	162.00	575.00/500	300SS-561J
680µH ± 5%	50	796KHz	40mA	TKS1247CT-ND	2.81	21.60	162.00	575.00/500	300SS-681J
820µH ± 5%	50	796KHz	50mA	TKS1248CT-ND	2.81	21.60	162.00	575.00/500	300SS-821J
1000µH ± 5%	50	796KHz	40mA	TKS1249CT-ND	2.81	21.60	162.00	575.00/500	300SS-102J
5CCD Type									
1.8µH ± 3%	45	7.96MHz	—	TKS2245CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9018Z
2.2µH ± 3%	45	7.96MHz	—	TKS2246CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9022Z
2.7µH ± 3%	50	7.96MHz	—	TKS2247CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9027IB
3.3µH ± 3%	55	7.96MHz	—	TKS2248CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9033Z
3.9µH ± 3%	55	7.96MHz	—	TKS2249CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9039Z
4.7µH ± 3%	55	7.96MHz	—	TKS2250CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9047Z
5.6µH ± 3%	65	7.96MHz	—	TKS2251CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9056Z
6.8µH ± 3%	65	7.96MHz	—	TKS2252CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9068Z
8.2µH ± 3%	65	7.96MHz	—	TKS2253CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9082Z
10.0µH ± 3%	45	2.52MHz	—	TKS2254CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9100Z
18.0µH ± 3%	45	2.52MHz	—	TKS2257CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9180Z
22.0µH ± 3%	45	2.52MHz	—	TKS2258CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9220Z
39.0µH ± 3%	45	2.52MHz	—	TKS2261CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9390Z
47.0µH ± 3%	45	2.52MHz	—	TKS2262CT-ND	3.32	25.68	194.40	1168.00/1000	614BN-9470Z
68.0µH ± 3%	30	2.52MHz	—	TKS2264CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9680Z
82.0µH ± 3%	30	2.52MHz	—	TKS2265CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9820Z
100µH ± 3%	45	796KHz	—	TKS2266CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9101Z
120µH ± 3%	45	796KHz	—	TKS2267CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9121Z
150µH ± 3%	45	796KHz	—	TKS2268CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9151Z
180µH ± 3%	45	796KHz	—	TKS2269CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9181Z
220µH ± 3%	45	796KHz	—	TKS2270CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9221Z
270µH ± 3%	45	796KHz	—	TKS2271CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9271Z
330µH ± 3%	45	796KHz	—	TKS2272CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9331Z
390µH ± 3%	45	796KHz	—	TKS2273CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9391Z
560µH ± 3%	45	796KHz	—	TKS2275CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9561Z
680µH ± 3%	45	796KHz	—	TKS2276CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9681Z
820µH ± 3%	45	796KHz	—	TKS2277CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9821Z
1000µH ± 3%	30	252KHz	—	TKS2278CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9102Z
1200µH ± 3%	30	252KHz	—	TKS2279CT-ND	3.34	25.68	192.60	—	614AN-9122Z
1300µH ± 3%	30	252KHz	—	TKS2280CT-ND	3.32	25.68	194.40	1168.00/1000	614AN-9132Z

L Nom.	Q Min.	Freq.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	★Tape & Reel Pricing	Toko Part No.
5CCE Type								
68nH ± 5%	60	100MHz	TKS2420CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0150Z
82nH ± 5%	63	100MHz	TKS2421CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0151Z
100nH ± 5%	65	100MHz	TKS2422CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0152Z
120nH ± 5%	68	100MHz	TKS2423CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0153Z
150nH ± 5%	63	100MHz	TKS2424CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0154Z
180nH ± 5%	73	100MHz	TKS2425CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0155Z
220nH ± 5%	60	100MHz	TKS2426CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0156Z
270nH ± 5%	72	100MHz	TKS2427CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0157Z
330nH ± 5%	75	100MHz	TKS2428CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0158Z
390nH ± 5%	68	100MHz	TKS2429CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0159Z
470nH ± 5%	67	100MHz	TKS2430CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0160Z
560nH ± 5%	68	100MHz	TKS2431CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0161Z
680nH ± 5%	50	30MHz	TKS2432CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0162Z
820nH ± 5%	48	30MHz	TKS2433CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0163Z
1000nH ± 5%	50	30MHz	TKS2434CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0164Z
1200nH ± 5%	48	30MHz	TKS2435CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0165Z
1500nH ± 5%	48	30MHz	TKS2436CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0166Z
1800nH ± 5%	47	30MHz	TKS2437CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0167Z
2200nH ± 5%	47	30MHz	TKS2438CT-ND	5.80	46.40	348.00	2122.50/750	A638AN-0168Z

★ For Tape & Reel Part No., change CT to TR.

TOKO

9139B-ND Toko Coils & Filter Book **$9.95**

Fixed Surface Mount Inductors

32CS, 33CS, 36CS, D73C, D73F, D75C, D75F, D52FU, D62CB, D10F, D32FU, and D124C Types

Features:

32CS: • For dip-soldering type • Very small

33CS, 36CS: • High current • High Q for reflow soldering

D73F/C, D75F/C: • Miniature surface mount type • Low profile (3.2 or 4.8mm height) • Available in magnetically shielded or unshielded versions • Operating Temperature: -40°C to +80°C • Step up/Step down inductor for up to 4W DC/DC converter circuit • Current limiting inductor for DC/AC inverter circuit

D52FU: • Low profile (2.2mm typ. height) and 5mm square • Ideal for IC inverter EL lamp driver applications • Magnetically shielded version • Available on tape and reel for auto-insertion • Suitable for reflow soldering

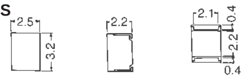
D62CB (with Ferrite Shield): • Low profile (2.5mm max.) • Ideal for a variety of DC-DC converter inductor applications • Magnetically shielded

D10F: • Low profile SMD type (5mm high) • Suitable for large current • Suitable for reflow soldering

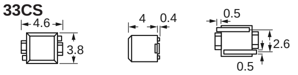
D32FU: • Low profile (2.2mm max.) and 3.5mm square • Ideal for IC inverter EL lamp driver applications • Available on tape and reel for auto-insertion • Suitable for reflow soldering

D124C: • Low profile (4.5mm max.) • Suitable for large currents

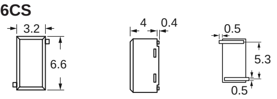
32CS



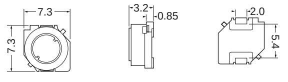
33CS



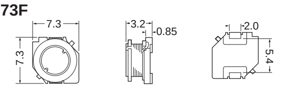
36CS



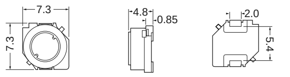
D73C



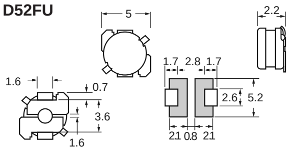
D73F



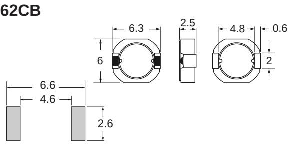
D75C/F



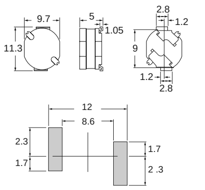
D52FU



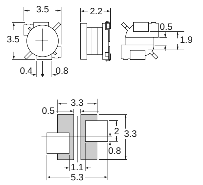
D62CB



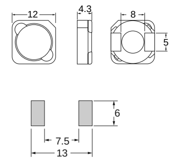
D10F



D32FU



D124C



Induct. L Nom.	L Tol. (%)	Q Min.	Test Freq.	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
32CS Type										
27nH	±20	22	100MHz	410mA	TKS1006CT-ND	1.50	1.16	.87	786.00/1500	380NB-27NM
33nH	±20	22	100MHz	390mA	TKS1007CT-ND	1.50	1.16	.87	—	380NB-33NM
47nH	±20	24	100MHz	360mA	TKS1009CT-ND	1.50	1.16	.87	—	380NB-47NM
56nH	±20	25	100MHz	340mA	TKS1010CT-ND	1.50	1.16	.87	786.00/1500	380NB-56NM
68nH	±20	26	100MHz	320mA	TKS1011CT-ND	1.50	1.16	.87	786.00/1500	380NB-68NM
.10µH	±20	27	100MHz	300mA	TKS1013CT-ND	1.50	1.16	.87	786.00/1500	380NB-R10M
.15µH	±20	17	25.2MHz	230mA	TKS1015CT-ND	1.50	1.16	.87	—	380NB-R15M
.56µH	±20	12	25.2MHz	160mA	TKS1022CT-ND	1.50	1.16	.87	786.00/1500	380NB-R56M
1.0µH	±10	30	7.96MHz	235mA	TKS1025CT-ND	1.50	1.16	.87	786.00/1500	380LB-1R0K
1.2µH	±10	30	7.96MHz	225mA	TKS1026CT-ND	1.50	1.16	.87	786.00/1500	380LB-1R2K
1.5µH	±10	30	7.96MHz	200mA	TKS1027CT-ND	1.50	1.16	.87	—	380LB-1R5K
2.2µH	±10	30	7.96MHz	180mA	TKS1029CT-ND	1.50	1.16	.87	786.00/1500	380LB-2R2K
4.7µH	±10	30	7.96MHz	160mA	TKS1033CT-ND	1.50	1.16	.87	786.00/1500	380LB-4R7K
22µH	±5	30	2.52MHz	73.3mA	TKS1041CT-ND	1.50	1.16	.87	786.00/1500	380KB-220J
39µH	±5	30	2.52MHz	56.7mA	TKS1044CT-ND	1.50	1.16	.87	786.00/1500	380KB-390J
47µH	±5	30	2.52MHz	51.7mA	TKS1045CT-ND	1.50	1.16	.87	786.00/1500	380KB-470J
100µH	±5	18	.796MHz	37.3mA	TKS1049CT-ND	1.50	1.16	.87	786.00/1500	380HB-101J
220µH	±5	18	.796MHz	30.0mA	TKS1053CT-ND	1.50	1.16	.87	786.00/1500	380HB-221J
33CS Type										
6.8nH	±10	70	150MHz	1000mA	TKS2673CT-ND	1.01	.78	.59	710.00/2000	Y655LY-01K
15.3nH	±10	75	150MHz	1000mA	TKS2675CT-ND	2.18	1.68	1.26	1520.00/2000	Y655LY-03K
36CS Type										
22nH	±10	85	150MHz	1000mA	TKS2677CT-ND	2.13	1.64	1.23	1500.00/2000	656LZ-05K
27.5nH	±10	85	150MHz	1000mA	TKS2678CT-ND	2.13	1.64	1.23	1500.00/2000	656LZ-06K
33.1nH	±10	85	150MHz	1000mA	TKS2679CT-ND	1.01	.78	.59	—	656LZ-07K
41.1nH	±10	85	150MHz	1000mA	TKS2680CT-ND	2.13	1.64	1.23	1500.00/2000	656LZ-08K
49.8nH	±10	85	150MHz	1000mA	TKS2681CT-ND	2.13	1.64	1.23	1500.00/2000	656LZ-09K

TK11-KIT-ND (SPK-3336CS-1993)
33/36CS Air Coil Kit - 10 each of 9 values (90 parts), 6.8nH - 49.8nH $49.00

Induct. L Nom.	L Tolerance (%)	Test Frequency	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D73C Type, with Ferrite Shield									
1.0µH	±20	100KHz	3.12A	TKS2501CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-1R0M
1.5µH	±20	100KHz	2.85A	TKS2502CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-1R5M
2.2µH	±20	100KHz	2.66A	TKS2503CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-2R2M
3.3µH	±20	100KHz	2.26A	TKS2504CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-3R3M
4.7µH	±20	100KHz	1.96A	TKS2505CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-4R7M
6.8µH	±20	100KHz	1.76A	TKS2506CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-6R8M
10µH	±20	100KHz	1.34A	TKS2507CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-100M
12µH	±20	100KHz	1.23A	TKS2508CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-120M
15µH	±20	100KHz	1.09A	TKS2509CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-150M
18µH	±20	100KHz	.99A	TKS2539CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-180M
22µH	±20	100KHz	.90A	TKS2540CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-220M
27µH	±20	100KHz	.81A	TKS2541CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-270M
33µH	±20	100KHz	.72A	TKS2542CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-330M
47µH	±20	100KHz	.60A	TKS2544CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-470M
68µH	±20	100KHz	.50A	TKS2546CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-680M
82µH	±20	100KHz	.46A	TKS2547CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-820M
100µH	±20	100KHz	.41A	TKS2548CT-ND	3.17	2.44	1.83	1110.00/1000	636CY-101M
D73F Type, Unshielded									
1.0µH	±20	100KHz	2.88A	TKS2520CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-1R0M
1.5µH	±20	100KHz	2.67A	TKS2521CT-ND	2.27	1.75	1.32	795.00/1000	636FY-1R5M
2.2µH	±20	100KHz	2.40A	TKS2522CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-2R2M
3.3µH	±20	100KHz	2.08A	TKS2523CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-3R3M
4.7µH	±20	100KHz	1.92A	TKS2524CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-4R7M
10µH	±20	100KHz	1.41A	TKS2526CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-100M
18µH	±20	100KHz	1.00A	TKS2529CT-ND	2.27	1.75	1.32	795.00/1000	636FY-180M
22µH	±20	100KHz	.93A	TKS2530CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-220M
47µH	±20	100KHz	.59A	TKS2534CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-470M
68µH	±20	100KHz	.49A	TKS2536CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-680M
82µH	±20	100KHz	.44A	TKS2537CT-ND	2.27	1.75	1.32	—	636FY-820M
100µH	±20	100KHz	.38A	TKS2538CT-ND	3.17	2.44	1.83	1110.00/1000	636FY-101M
D75C Type, with Ferrite Shield									
100µH	± 20	100KHz	0.5A	TKS2559CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-101M
120µH	± 20	100KHz	0.47A	TKS2560CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-121M
150µH	± 20	100KHz	0.4A	TKS2561CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-151M
180µH	± 20	100KHz	0.39A	TKS2562CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-181M
220µH	± 20	100KHz	0.33A	TKS2563CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-221M
270µH	± 20	100KHz	0.31A	TKS2564CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-271M
330µH	± 20	100KHz	0.27A	TKS2565CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-331M
470µH	± 20	100KHz	0.25A	TKS2567CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-471M
560µH	± 20	100KHz	0.22A	TKS2568CT-ND	3.17	2.44	1.83	1110.00/1000	646CY-561M
D75F Type, Unshielded									
100µH	± 20	100KHz	0.51A	TKS2550CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-101M
120µH	± 10	100KHz	0.42A	TKS2551CT-ND	2.27	1.75	1.32	—	646FY-121K
150µH	±10	100KHz	0.37A	TKS2552CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-151K
180µH	±10	100KHz	0.35A	TKS2553CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-181K
220µH	±10	100KHz	0.29A	TKS2554CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-221K
270µH	±10	100KHz	0.28A	TKS2555CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-271K
330µH	±10	100KHz	0.23A	TKS2556CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-331K
390µH	±10	100KHz	0.215A	TKS2557CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-391K
470µH	±10	100KHz	0.195A	TKS2558CT-ND	3.54	2.72	2.04	1240.00/1000	646FY-471K

Indct. L Nom.	L Tol. (%)	SRF† (MHz)	DC Resistance (Ω)	Rated DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D52FU Type										
470µH	±20	5.17	6.78	140mA	TKS3500CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-471M
560µH	±20	4.83	9.43	125mA	TKS3501CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-561M
680µH	±20	4.27	10.79	115mA	TKS3502CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-681M
820µH	±20	3.94	12.35	105mA	TKS3503CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-821M
1000µH	±20	3.61	16.32	95mA	TKS3504CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-102M
1200µH	±20	3.17	18.64	88mA	TKS3505CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-122M
1500µH	±20	2.65	22.19	83mA	TKS3506CT-ND	1.88	1.65	1.27	1602.00/2000	875FU-152M
1800µH	±20	2.51	27.73	74mA	TKS3507CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-182M
2200µH	±20	2.38	32.13	64mA	TKS3508CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-222M
2700µH	±20	2.11	37.61	61mA	TKS3509CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-272M
3200µH	±20	1.97	51.89	50mA	TKS3510CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-332M
3900µH	±20	1.81	58.84	50mA	TKS3511CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-392M
4700µH	±20	1.63	80.21	42mA	TKS3512CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-472M
5600µH	±20	1.46	92.12	40mA	TKS3513CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-562M
6800µH	±20	1.33	106.41	37mA	TKS3514CT-ND	1.88	1.41	1.30	1602.00/2000	875FU-682M

TK15-KIT-ND (SPK-D52FU-1998)
D52FU Series Fixed Inductor Kit - 3 each of 22 values (66 parts), 100µH-6800µH $49.00

Induct. L (µH)	L Tol. (%)	DC Resistance (mΩ)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D62CB Type									
1.0	±20	11	3.48A	TKS5510CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-1R0M
1.5	±20	14	2.83A	TKS5511CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-1R5M
2.0	±20	17	2.44A	TKS5512CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-2R0M
3.3	±20	24	1.89A	TKS5513CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-3R3M
4.3	±20	31	1.65A	TKS5514CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-4R3M
6.2	±20	43	1.37A	TKS5515CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-6R2M
10.0	±20	64	1.07A	TKS5516CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-100M
12.0	±20	75	0.97A	TKS5517CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-120M
15.0	±20	87	0.87A	TKS5518CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-150M
18.0	±20	110	0.79A	TKS5519CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-180M
22.0	±20	130	0.71A	TKS5520CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-220M
27.0	±20	170	0.64A	TKS5521CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-270M
33.0	±20	195	0.58A	TKS5522CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-330M
39.0	±20	245	0.53A	TKS5523CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-390M
47.0	±20	290	0.48A	TKS5524CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-470M
56.0	±20	345	0.44A	TKS5525CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-560M
68.0	±20	400	0.40A	TKS5526CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-680M
82.0	±20	465	0.36A	TKS5527CT-ND	3.22	2.48	1.86	1692.00/1500	A920CY-820M

TK18-KIT-ND (SPK-D62CB-1999)
D62CB Series Fixed Inductor Kit - 3 each of 18 values (54 parts), 1.0µH - 82.0µH $58.80

★ For Tape & Reel part number, change CT-ND to TR-ND. † Self Resonance Frequency (MHz)

(Continued)

TOKO Fixed Surface Mount Inductors *(Cont.)*

Induct. L (µH)	L Tol. (%)	Test Freq.	DC Resistance (Ω)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D10F Type										
10	±20	100KHz	0.047	2.60A	TKS5460CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-100M
12	±20	100KHz	0.050	2.48A	TKS5461CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-120M
15	±20	100KHz	0.058	2.27A	TKS5462CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-150M
18	±20	100KHz	0.067	2.15A	TKS5463CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-180M
22	±20	100KHz	0.075	2.00A	TKS5464CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-220M
27	±20	100KHz	0.087	1.84A	TKS5465CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-270M
33	±20	100KHz	0.095	1.72A	TKS5466CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-330M
39	±20	100KHz	0.12	1.58A	TKS5467CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-390M
47	±10	100KHz	0.15	1.44A	TKS5468CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-470K
56	±10	100KHz	0.18	1.28A	TKS5469CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-560K
68	±10	100KHz	0.20	1.20A	TKS5470CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-680K
82	±10	100KHz	0.23	1.09A	TKS5471CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-820K
100	±10	100KHz	0.27	1.05A	TKS5472CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-101K
120	±10	100KHz	0.33	0.92A	TKS5473CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-121K
150	±10	100KHz	0.40	0.80A	TKS5474CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-151K
180	±10	100KHz	0.53	0.73A	TKS5475CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-181K
220	±10	100KHz	0.60	0.69A	TKS5476CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-221K
270	±10	100KHz	0.84	0.60A	TKS5477CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-271K
330	±10	100KHz	1.00	0.53A	TKS5478CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-331K
390	±10	100KHz	1.09	0.49A	TKS5479CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-391K
470	±10	100KHz	1.25	0.46A	TKS5480CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-471K
560	±10	100KHz	1.63	0.41A	TKS5481CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-561K
680	±10	100KHz	1.90	0.38A	TKS5482CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-681K
820	±10	100KHz	2.44	0.34A	TKS5483CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-821K
1000	±10	100KHz	2.80	0.31A	TKS5484CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-102K
1200	±10	100KHz	3.67	0.27A	TKS5485CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-122K
1500	±10	100KHz	4.37	0.25A	TKS5486CT-ND	4.78	3.68	2.76	1050.00/500	A814AY-152K

Induct. L (mH)	L Tol. (%)	DC Resistance (Ω)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D32FU Type									
0.33	±20	9.7	109mA	TKS5530CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-331M
0.39	±20	12	98mA	TKS5531CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-391M
0.47	±20	14	90mA	TKS5532CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-471M
0.56	±20	18	81mA	TKS5533CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-561M
0.68	±20	20	74mA	TKS5534CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-681M
0.82	±20	30	71mA	TKS5535CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-821M
1.0	±20	34	66mA	TKS5536CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-102M
1.2	±20	35	57mA	TKS5537CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-122M
1.5	±20	56	52mA	TKS5538CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-152M
1.8	±20	59	46mA	TKS5539CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-182M
2.2	±20	67	43mA	TKS5540CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-222M
2.5	±20	81	42mA	TKS5541CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-252M
2.7	±20	93	38mA	TKS5542CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-272M
3.3	±20	113	36mA	TKS5543CT-ND	2.13	1.64	1.23	1320.00/2000	887FU-332M

TK19-KIT-ND (SPK-D32FU-1999)
D32FU Series Fixed Inductor Kit - 3 each of 14 values (42 parts), 0.33mH - 3.3mH $52.27

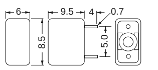
Induct. L (µH)	L Tol. (%)	Test Freq.	DC Resistance (Ω)	Max. DC Current	Digi-Key Part No.	Cut Tape Price Each 1	10	100	★Tape & Reel Pricing	Toko Part No.
D124C Type										
3.3	±20	100KHz	13.5 (9.70)	6.2A	TKS5490CT-ND	6.24	4.80	3.60	1305.00/500	892NAS-3R3M
4.7	±20	100KHz	15.5 (11.8)	5.6A	TKS5491CT-ND	6.24	4.80	3.60	1305.00/500	892NAS-4R7M
6.2	±20	100KHz	17.0 (13.5)	5.1A	TKS5492CT-ND	6.24	4.80	3.60	1305.00/500	892NAS-6R2M
8.2	±20	100KHz	19.0 (15.3)	4.4A	TKS5493CT-ND	6.24	4.80	3.60	1305.00/500	892NAS-8R2M
10.0	±20	100KHz	22.5 (18.0)	4.2A	TKS5494CT-ND	6.24	4.80	3.60	1305.00/500	892NAS-100M
15.0	±20	100KHz	35.5 (29.6)	3.2A	TKS5495CT-ND	5.23	4.50	3.50	1305.00/500	892NAS-150M
18.0	±20	100KHz	42.0 (34.4)	3.0A	TKS5496CT-ND	6.24	4.80	3.60	1305.00/500	892NAS-180M
22.0	±20	100KHz	45.0 (37.4)	2.5A	TKS5497CT-ND	6.24	4.80	3.60	1305.00/500	892NBS-220M
33.0	±20	100KHz	56.0 (45.7)	1.9A	TKS5498CT-ND	6.24	4.80	3.60	1305.00/500	892NCS-330M
47.0	±20	100KHz	94.5 (77.7)	1.7A	TKS5499CT-ND	6.24	4.80	3.60	1305.00/500	892NBS-470M
68.0	±20	100KHz	170 (133)	1.4A	TKS5500CT-ND	6.24	4.80	3.60	1305.00/500	892NBF-680M
82.0	±20	100KHz	190 (148)	1.3A	TKS5501CT-ND	6.24	4.80	3.60	1305.00/500	892NCF-820M
100.0	±20	100KHz	210 (167)	1.1A	TKS5502CT-ND	6.24	4.80	3.60	1305.00/500	892NCF-101M

TK17-KIT-ND (SPK-D124C-1999)
D124C Series Fixed Inductor Kit - 3 each of 13 values (39 parts), 3.3µH - 100.0µH $66.97

★ For Tape & Reel part number, change CT-ND to TR-ND. † Self Resonance Frequency (MHz)

TOKO Fixed Inductors

7BA



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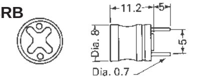

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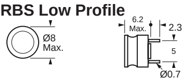

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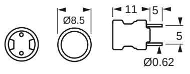

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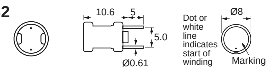

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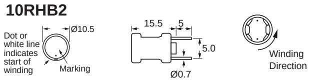

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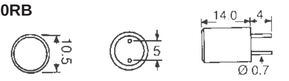


L. Nom.	Test Freq.	Q. Min.	Rated DC Current	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
7BA Type									
1.1µH	7.96MHz	30	30mA	TK4201-ND	1.23	1.00	.49	.42	144LY-1R1K
1.3µH	7.96MHz	30	30mA	TK4203-ND	1.23	1.00	.49	.42	144LY-1R3K
1.6µH	7.96MHz	30	30mA	TK4205-ND	1.23	1.00	.49	.42	144LY-1R6K
3.0µH	7.96MHz	30	30mA	TK4211-ND	1.23	1.00	.49	.42	144LY-3R0K
3.3µH	7.96MHz	30	30mA	TK4212-ND	1.23	1.00	.49	.42	144LY-3R3K
3.6µH	7.96MHz	30	30mA	TK4213-ND	1.23	1.00	.49	.42	144LY-3R6K
3.9µH	7.96MHz	30	30mA	TK4214-ND	1.23	1.00	.49	.42	144LY-3R9K
5.1µH	7.96MHz	30	30mA	TK4217-ND	1.23	1.00	.49	.42	144LY-5R1K
6.2µH	7.96MHz	30	30mA	TK4219-ND	1.23	1.00	.49	.42	144LY-6R2K
8.2µH	7.96MHz	30	30mA	TK4222-ND	1.23	1.00	.49	.42	144LY-8R2K
10µH	7.96MHz	30	30mA	TK4224-ND	1.23	1.00	.49	.42	144LY-100J
15µH	2.52MHz	30	30mA	TK4228-ND	1.23	1.00	.49	.42	144LY-150J
20µH	2.52MHz	30	30mA	TK4231-ND	1.23	1.00	.49	.42	144LY-200J
33µH	2.52MHz	30	30mA	TK4236-ND	1.23	1.00	.49	.42	144LY-330J
47µH	2.52MHz	30	30mA	TK4251-ND	1.23	1.00	.49	.42	144HY-470J
51µH	2.52MHz	30	30mA	TK4252-ND	1.23	1.00	.49	.42	144HY-510J
62µH	2.52MHz	30	30mA	TK4254-ND	1.23	1.00	.49	.42	144HY-620J
100µH	2.52MHz	30	30mA	TK4259-ND	1.23	1.00	.49	.42	144HY-101J
330µH	796KHz	30	30mA	TK4271-ND	1.23	1.00	.49	.42	144HY-331J
360µH	796KHz	30	30mA	TK4272-ND	1.23	1.00	.49	.42	144HY-361J
390µH	796KHz	30	30mA	TK4273-ND	1.23	1.00	.49	.42	144HY-391J
430µH	796KHz	30	30mA	TK4274-ND	1.23	1.00	.49	.42	144HY-431J
470µH	796KHz	30	30mA	TK4275-ND	1.23	1.00	.49	.42	144HY-471J
510µH	796KHz	30	30mA	TK4276-ND	1.23	1.00	.49	.42	144HY-511J
1000µH	796KHz	30	30mA	TK4283-ND	1.23	1.00	.49	.42	144HY-102J
8RB Type									
.10mH	796KHz	80	200mA	TK4300-ND	2.04	1.67	.83	.70	187LY-101J
.12mH	796KHz	80	200mA	TK4301-ND	2.04	1.67	.83	.70	187LY-121J
.15mH	796KHz	80	200mA	TK4302-ND	2.04	1.67	.83	.70	187LY-151J
.18mH	796KHz	80	200mA	TK4303-ND	2.04	1.67	.83	.70	187LY-181J
.22mH	796KHz	80	200mA	TK4304-ND	2.05	1.67	.82	.69	187LY-221J
.27mH	796KHz	80	200mA	TK4305-ND	2.04	1.67	.83	.70	187LY-271J
.33mH	796KHz	80	200mA	TK4306-ND	2.04	1.67	.83	.70	187LY-331J
.39mH	796KHz	80	200mA	TK4307-ND	2.04	1.67	.83	.70	187LY-391J
.47mH	796KHz	80	200mA	TK4308-ND	2.04	1.67	.83	.70	187LY-471J
.56mH	796KHz	80	200mA	TK4309-ND	2.04	1.67	.83	.70	187LY-561J
.68mH	796KHz	80	200mA	TK4310-ND	2.04	1.67	.83	.70	187LY-681J
.82mH	796KHz	80	200mA	TK4311-ND	2.04	1.67	.83	.70	187LY-821J
1.0mH	252KHz	80	150mA	TK4312-ND	2.04	1.67	.83	.70	187LY-102J
1.2mH	252KHz	90	150mA	TK4313-ND	2.04	1.67	.83	.70	187LY-122J
1.5mH	252KHz	90	150mA	TK4314-ND	2.04	1.67	.83	.70	187LY-152J
2.2mH	252KHz	90	100mA	TK4316-ND	2.04	1.67	.83	.70	187LY-222J
2.7mH	252KHz	90	100mA	TK4317-ND	2.04	1.67	.83	.70	187LY-272J
3.3mH	252KHz	90	100mA	TK4318-ND	2.04	1.67	.83	.70	187LY-332J
3.9mH	252KHz	90	50mA	TK4319-ND	2.04	1.67	.83	.70	187LY-392J
4.7mH	252KHz	90	50mA	TK4320-ND	2.04	1.67	.83	.70	187LY-472J
5.6mH	252KHz	90	50mA	TK4321-ND	2.04	1.67	.83	.70	187LY-562J
6.8mH	252KHz	90	50mA	TK4322-ND	2.04	1.67	.83	.70	187LY-682J
8.2mH	252KHz	90	50mA	TK4323-ND	2.04	1.67	.83	.70	187LY-822J
10mH	79.6KHz	100	40mA	TK4324-ND	2.04	1.67	.83	.70	187LY-103J
12mH	79.6KHz	100	40mA	TK4325-ND	2.04	1.67	.83	.70	187LY-123J
15mH	79.6KHz	100	40mA	TK4326-ND	2.04	1.67	.83	.70	187LY-153J
18mH	79.6KHz	100	30mA	TK4327-ND	2.04	1.67	.83	.70	187LY-183J
27mH	79.6KHz	100	30mA	TK4329-ND	2.04	1.67	.83	.70	187LY-273J
33mH	79.6KHz	100	30mA	TK4330-ND	2.04	1.67	.83	.70	187LY-333J
8RBS Type Low Profile									
.10mH	796kHz	60	200mA	TK4333-ND	2.41	1.71	.98	.82	262LY-101K
.47mH	796kHz	60	100mA	TK4388-ND	2.41	1.71	.98	.82	262LY-471K
1.0mH	252kHz	80	50mA	TK4392-ND	2.41	1.71	.98	.82	262LY-102K
1.5mH	252kHz	80	50mA	TK4394-ND	2.41	1.71	.98	.82	262LY-152K
2.2mH	252kHz	80	50mA	TK4396-ND	2.41	1.71	.98	.82	262LY-222K
4.7mH	252kHz	80	40mA	TK4340-ND	2.41	1.71	.98	.82	262LY-472K
8.2mH	252kHz	80	30mA	TK4337-ND	2.41	1.71	.98	.82	262LY-822K
10.0mH	79.6kHz	60	20mA	TK4336-ND	2.41	1.71	.98	.82	262LY-103K
15.0mH	79.6kHz	60	20mA	TK4334-ND	2.41	1.71	.98	.82	262LY-153K
8RHB Type									
1.0µH	7.96MHz	20	10A	TK4430-ND	2.51	2.04	1.02	.85	622LY-1R0M
1.5µH	7.96MHz	20	8.5A	TK4431-ND	2.51	2.04	1.02	.85	622LY-1R5M
2.2µH	7.96MHz	20	6.5A	TK4432-ND	2.51	2.04	1.02	.85	622LY-2R2M
3.3µH	7.96MHz	20	5.5A	TK4433-ND	2.51	2.04	1.02	.85	622LY-3R3M
4.7µH	7.96MHz	20	4.3A	TK4434-ND	2.51	2.04	1.02	.85	622LY-4R7M
6.8µH	7.96MHz	20	3.7A	TK4435-ND	2.51	2.04	1.02	.85	622LY-6R8M
10µH	2.52MHz	50	3.0A	TK4436-ND	2.51	2.04	1.02	.85	622LY-100K
12µH	2.52MHz	50	2.6A	TK4437-ND	2.51	2.04	1.02	.85	622LY-120K
15µH	2.52MHz	50	2.3A	TK4438-ND	2.51	2.04	1.02	.85	622LY-150K
18µH	2.52MHz	40	2.2A	TK4439-ND	2.51	2.04	1.02	.85	622LY-180K
22µH	2.52MHz	40	2.0A	TK4440-ND	2.51	2.04	1.02	.85	622LY-220K
27µH	2.52MHz	40	1.7A	TK4441-ND	2.51	2.04	1.02	.85	622LY-270K
33µH	2.52MHz	30	1.6A	TK4442-ND	2.51	2.04	1.02	.85	622LY-330K
39µH	2.52MHz	30	1.5A	TK4443-ND	2.51	2.04	1.02	.85	622LY-390K
47µH	2.52MHz	30	1.4A	TK4444-ND	2.51	2.04	1.02	.85	622LY-470K
56µH	2.52MHz	30	1.3A	TK4445-ND	2.51	2.04	1.02	.85	622LY-560K
68µH	2.52MHz	30	1.2A	TK4446-ND	2.51	2.04	1.02	.85	622LY-680K
82µH	2.52MHz	30	1.1A	TK4447-ND	2.51	2.04	1.02	.85	622LY-820K
100µH	0.796MHz	20	0.91A	TK4448-ND	2.51	2.04	1.02	.85	622LY-101K
120µH	0.796MHz	20	0.84A	TK4449-ND	2.51	2.04	1.02	.85	622LY-121K
150µH	0.796MHz	20	0.75A	TK4450-ND	2.51	2.04	1.02	.85	622LY-151K
180µH	0.796MHz	20	0.69A	TK4451-ND	2.51	2.04	1.02	.85	622LY-181K
220µH	0.796MHz	20	0.64A	TK4452-ND	2.51	2.04	1.02	.85	622LY-221K
270µH	0.796MHz	20	0.57A	TK4453-ND	2.51	2.04	1.02	.85	622LY-271K
330µH	0.796MHz	20	0.54A	TK4454-ND	2.51	2.04	1.02	.85	622LY-331K
390µH	0.796MHz	20	0.48A	TK4455-ND	2.51	2.04	1.02	.85	622LY-391K
470µH	0.796MHz	20	0.46A	TK4456-ND	2.51	2.04	1.02	.85	622LY-471K
560µH	0.796MHz	20	0.41A	TK4457-ND	2.51	2.04	1.02	.85	622LY-561K
680µH	0.796MHz	20	0.38A	TK4458-ND	2.51	2.04	1.02	.85	622LY-681K
820µH	0.796MHz	20	0.35A	TK4459-ND	2.51	2.04	1.02	.85	622LY-821K
1000µH	0.252MHz	50	0.29A	TK4460-ND	2.51	2.04	1.02	.85	622LY-102K

L. Nom.	Test Freq.	SRF	Rated DC Current	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
8RHB2 Type									
1.0µH	1kHz	150MHz	3.71A	TK4461-ND	2.51	2.22	1.02	.85	822MY-1R0M
1.5µH	1kHz	130MHz	3.32A	TK4462-ND	2.51	2.22	1.02	.85	822MY-1R5M
2.2µH	1kHz	100MHz	3.15A	TK4463-ND	2.51	2.22	1.02	.85	822MY-2R2M
3.3µH	1kHz	79MHz	2.66A	TK4464-ND	2.51	2.22	1.02	.85	822MY-3R3M
4.7µH	1kHz	51MHz	2.27A	TK4465-ND	2.51	2.22	1.02	.85	822MY-4R7M
6.8µH	1kHz	29MHz	2.10A	TK4466-ND	2.51	2.22	1.02	.85	822MY-6R8M
10µH	1kHz	14MHz	1.96A	TK4467-ND	2.51	2.22	1.02	.85	822MY-100K
12µH	1kHz	13MHz	1.82A	TK4468-ND	2.51	2.22	1.02	.85	822MY-120K
15µH	1kHz	12MHz	1.75A	TK4469-ND	2.51	2.22	1.02	.85	822MY-150K

TOKO Fixed Inductors *(Cont.)*

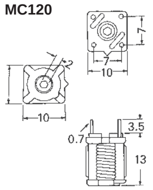
L. Nom.	Test Freq.	SRF	Rated DC Current	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
18µH	1kHz	11MHz	1.54A	TK4470-ND	2.51	2.22	1.02	.85	822MY-180K
22µH	1kHz	9.2MHz	1.29A	TK4471-ND	2.51	2.22	1.02	.85	822MY-220K
27µH	1kHz	8.5MHz	1.22A	TK4472-ND	2.51	2.22	1.02	.85	822MY-270K
33µH	1kHz	7.8MHz	1.17A	TK4473-ND	2.51	2.22	1.02	.85	822MY-330K
39µH	1kHz	6.9MHz	1.14A	TK4474-ND	2.51	2.22	1.02	.85	822MY-390K
47µH	1kHz	6.5MHz	0.79A	TK4475-ND	2.51	2.22	1.02	.85	822MY-470K
56µH	1kHz	5.4MHz	0.76A	TK4476-ND	2.51	2.22	1.02	.85	822MY-560K
68µH	1kHz	4.9MHz	0.70A	TK4477-ND	2.51	2.22	1.02	.85	822MY-680K
82µH	1kHz	4.1MHz	0.67A	TK4478-ND	2.51	2.22	1.02	.85	822MY-820K
100µH	1kHz	3.7MHz	0.58A	TK4479-ND	2.51	2.22	1.02	.85	822MY-101K
120µH	1kHz	3.4MHz	0.56A	TK4480-ND	2.51	2.22	1.02	.85	822MY-121K
150µH	1kHz	3.2MHz	0.42A	TK4481-ND	2.51	2.22	1.02	.85	822MY-151K
180µH	1kHz	2.8MHz	0.40A	TK4482-ND	2.51	2.22	1.02	.85	822MY-181K
220µH	1kHz	2.7MHz	0.38A	TK4483-ND	2.51	2.22	1.02	.85	822MY-221K
270µH	1kHz	2.4MHz	0.35A	TK4484-ND	2.51	2.22	1.02	.85	822MY-271K
330µH	1kHz	2.3MHz	0.33A	TK4485-ND	2.51	2.22	1.02	.85	822MY-331K
390µH	1kHz	2.1MHz	0.28A	TK4486-ND	2.51	2.22	1.02	.85	822MY-391K
470µH	1kHz	1.9MHz	0.25A	TK4487-ND	2.51	2.22	1.02	.85	822MY-471K
560µH	1kHz	1.8MHz	0.23A	TK4488-ND	2.51	2.22	1.02	.85	822MY-561K
680µH	1kHz	1.6MHz	0.21A	TK4489-ND	2.51	2.22	1.02	.85	822MY-681K
820µH	1kHz	1.5MHz	0.18A	TK4490-ND	2.51	2.22	1.02	.85	822MY-821K
1000µH	1kHz	1.3MHz	0.16A	TK4491-ND	2.51	2.22	1.02	.85	822MY-102K
10RHB2 Type									
10µH	1kHz	44.0MHz	2.20A	TK5152-ND	5.57	4.77	2.25	1.89	824MY-100K
12µH	1kHz	33.0MHz	2.00A	TK5153-ND	5.57	4.77	2.25	1.89	824MY-120K
15µH	1kHz	25.0MHz	1.93A	TK5154-ND	5.57	4.77	2.25	1.89	824MY-150K
18µH	1kHz	16.0MHz	1.77A	TK5155-ND	5.57	4.77	2.25	1.89	824MY-180K
22µH	1kHz	12.0MHz	1.72A	TK5156-ND	5.57	4.77	2.25	1.89	824MY-220K
27µH	1kHz	8.30MHz	1.56A	TK5157-ND	5.57	4.77	2.25	1.89	824MY-270K
33µH	1kHz	5.90MHz	1.49A	TK5158-ND	5.57	4.77	2.25	1.89	824MY-330K
39µH	1kHz	4.90MHz	1.40A	TK5159-ND	5.57	4.77	2.25	1.89	824MY-390K
47µH	1kHz	4.10MHz	1.29A	TK5160-ND	5.57	4.77	2.25	1.89	824MY-470K
56µH	1kHz	4.00MHz	1.25A	TK5161-ND	5.57	4.77	2.25	1.89	824MY-560K
68µH	1kHz	3.90MHz	1.24A	TK5162-ND	5.57	4.77	2.25	1.89	824MY-680K
82µH	1kHz	3.60MHz	1.04A	TK5163-ND	5.57	4.77	2.25	1.89	824MY-820K
100µH	1kHz	2.80MHz	1.02A	TK5164-ND	5.57	4.77	2.25	1.89	824MY-101K
120µH	1kHz	2.60MHz	0.94A	TK5165-ND	5.57	4.77	2.25	1.89	824MY-121K
150µH	1kHz	2.20MHz	0.92A	TK5166-ND	5.57	4.77	2.25	1.89	824MY-151K
180µH	1kHz	2.10MHz	0.85A	TK5167-ND	5.57	4.77	2.25	1.89	824MY-181K
220µH	1kHz	1.90MHz	0.82A	TK5168-ND	5.57	4.77	2.25	1.89	824MY-221K
270µH	1kHz	1.60MHz	0.60A	TK5169-ND	5.57	4.77	2.25	1.89	824MY-271K
330µH	1kHz	1.50MHz	0.56A	TK5170-ND	5.57	4.77	2.25	1.89	824MY-331K
390µH	1kHz	1.40MHz	0.52A	TK5171-ND	5.57	4.77	2.25	1.89	824MY-391K
470µH	1kHz	1.30MHz	0.48A	TK5172-ND	5.57	4.77	2.25	1.89	824MY-471K
560µH	1kHz	1.20MHz	0.45A	TK5173-ND	5.57	4.77	2.25	1.89	824MY-561K
680µH	1kHz	1.10MHz	0.44A	TK5174-ND	5.57	4.77	2.25	1.89	824MY-681K
820µH	1kHz	1.00MHz	0.40A	TK5175-ND	5.57	4.77	2.25	1.89	824MY-821K
1000µH	1kHz	0.87MHz	0.31A	TK5176-ND	5.57	4.77	2.25	1.89	824MY-102K
1200µH	1kHz	0.83MHz	0.28A	TK5177-ND	5.57	4.77	2.25	1.89	824MY-122K
1500µH	1kHz	0.77MHz	0.27A	TK5178-ND	5.57	4.77	2.25	1.89	824MY-152K
1800µH	1kHz	0.71MHz	0.24A	TK5179-ND	5.57	4.77	2.25	1.89	824MY-182K
2200µH	1kHz	0.66MHz	0.24A	TK5180-ND	5.57	4.77	2.25	1.89	824MY-222K
2700µH	1kHz	0.61MHz	0.19A	TK5181-ND	5.57	4.77	2.25	1.89	824MY-272K
3300µH	1kHz	0.52MHz	0.18A	TK5182-ND	5.57	4.77	2.25	1.89	824MY-332K
3900µH	1kHz	0.48MHz	0.16A	TK5183-ND	5.57	4.77	2.25	1.89	824MY-392K

L. Nom.	Test Freq.	Q. Min.	Rated DC Current	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
10RB Type									
1.0mH	50KHz	70	90mA	TK4400-ND	3.75	3.06	1.52	1.28	181LY-102J
2.2mH	50KHz	70	60mA	TK4404-ND	3.75	3.06	1.52	1.28	181LY-222J
3.3mH	50KHz	100	50mA	TK4406-ND	3.75	3.06	1.52	1.28	181LY-332J
4.7mH	50KHz	100	40mA	TK4408-ND	3.75	3.06	1.52	1.28	181LY-472J
5.6mH	50KHz	100	40mA	TK4409-ND	3.75	3.06	1.52	1.28	181LY-562J
6.8mH	50KHz	100	35mA	TK4410-ND	3.75	3.06	1.52	1.28	181LY-682J
8.2mH	50KHz	100	30mA	TK4411-ND	3.75	3.06	1.52	1.28	181LY-822J
10.0mH	50KHz	100	25mA	TK4412-ND	3.75	3.06	1.52	1.28	181LY-103J
18mH	50KHz	100	22mA	TK4415-ND	3.75	3.06	1.52	1.28	181LY-183J
22mH	50KHz	100	21mA	TK4416-ND	3.75	3.06	1.52	1.28	181LY-223J
33mH	50KHz	100	18mA	TK4418-ND	3.75	3.06	1.52	1.28	181LY-333J
39mH	50KHz	100	15mA	TK4420-ND	3.75	3.06	1.52	1.28	181LY-393J
47mH	50KHz	100	13mA	TK4421-ND	3.75	3.06	1.52	1.28	181LY-473J
100mH	50KHz	100	9mA	TK4425-ND	3.75	3.06	1.52	1.28	181LY-104J
120mH	50KHz	100	8mA	TK4426-ND	3.75	3.06	1.52	1.28	181LY-124J

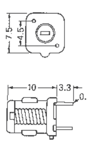
TOKO Molded Coils

9139B-ND	Toko Coils & Filter Book	**$9.95**

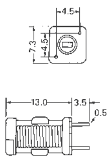
MC120



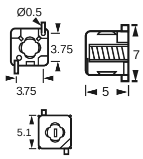
MC122



MC134



SMT MC152



TK9001-ND	Plastic Tuning Tool (MC120)	**$1.01**
TK9003-ND	Plastic Tuning Tool (MC122, MC134)	**$.35**
TK9992-ND	Ceramic Tuning Driver (MC122, MC134) (Requires Holder TK9999-ND, below)	**$23.71**
TK9995-ND	Ceramic Tuning Driver (MC152) (Requires Holder TK9999-ND, below)	**$44.85**
TK9996-ND	Ceramic Tuning Driver (MC120) (Requires Holder TK9999-ND, below)	**$31.39**
TK9999-ND	Ceramic Driver Holder	**$4.16**

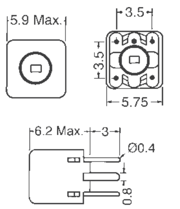
Turns/ Color	L Nom.	Freq.	Q.	Digi-Key Part No.	Price Each 1	10	100	500	Toko Part No.
MC120 with Case									
1 1/2 BRW	.0393µH	100MHz	80	TK2701-ND	5.44	4.76	2.07	1.55	E526HNA-100294
2 1/2 RED	.065µH	100MHz	90	TK2702-ND	5.44	4.76	2.07	1.55	E526HNA-100295
3 1/2 ORG	.0994µH	100MHz	100	TK2703-ND	5.44	4.76	2.07	1.55	E526HNA-100296
4 1/2 YEL	.141µH	100MHz	100	TK2704-ND	5.44	4.76	2.07	1.55	E526HNA-100297
5 1/2 GRN	.169µH	50MHz	80	TK2705-ND	5.44	4.76	2.07	1.55	E526HNA-100298
6 1/2 BLU	.211µH	50MHz	80	TK2706-ND	5.44	4.76	2.07	1.55	E526HNA-100299
7 1/2 VIO	.241µH	50MHz	80	TK2707-ND	5.44	4.76	2.07	1.55	E526HNA-100300
8 1/2 GRY	.29µH	50MHz	80	TK2708-ND	5.44	4.76	2.07	1.55	E526HNA-100301
9 1/2 WHT	.338µH	50MHz	80	TK2709-ND	5.44	4.76	2.07	1.55	E526HNA-100079
1 1/2 BRW	.0367µH	100MHz	80	TK2710-ND	5.44	4.76	2.07	1.55	E526HNA-100310
2 1/2 RED	.0583µH	100MHz	90	TK2711-ND	5.44	4.76	2.07	1.55	E526HNA-100311
3 1/2 ORG	.0845µH	100MHz	100	TK2712-ND	5.44	4.76	2.07	1.55	E526HNA-100312
4 1/2 YEL	.108µH	100MHz	110	TK2713-ND	5.44	4.76	2.07	1.55	E526HNA-100313
5 1/2 GRN	.137µH	100MHz	110	TK2714-ND	5.44	4.76	2.07	1.55	E526HNA-100314
MC120 without Case									
1 1/2 BRW	.0461µH	100MHz	120	TK2715-ND	5.44	4.76	2.07	1.55	E526HN-100302
2 1/2 RED	.0845µH	100MHz	130	TK2716-ND	5.44	4.76	2.07	1.55	E526HN-100303
3 1/2 ORG	.13µH	100MHz	130	TK2717-ND	5.44	4.76	2.07	1.55	E526HN-100304
4 1/2 YEL	.195µH	100MHz	140	TK2718-ND	5.44	4.76	2.07	1.55	E526HN-100305
5 1/2 GRN	.241µH	50MHz	100	TK2719-ND	5.44	4.76	2.07	1.55	E526HN-100306
6 1/2 BLU	.317µH	50MHz	100	TK2720-ND	5.44	4.76	2.07	1.55	E526HN-100307
7 1/2 VIO	.358µH	50MHz	100	TK2721-ND	5.44	4.76	2.07	1.55	E526HN-100308
8 1/2 GRY	.441µH	50MHz	100	TK2722-ND	5.44	4.76	2.07	1.55	E526HN-100309
9 1/2 WHT	.534µH	50MHz	100	TK2723-ND	5.44	4.76	2.07	1.55	E526HN-100109
1 1/2 BRW	.0437µH	100MHz	100	TK2724-ND	5.44	4.76	2.07	1.55	E526HN-100315
2 1/2 RED	.0745µH	100MHz	150	TK2725-ND	5.44	4.76	2.07	1.55	E526HN-100316
3 1/2 ORG	.118µH	100MHz	170	TK2726-ND	5.44	4.76	2.07	1.55	E526HN-100317
4 1/2 YEL	.154µH	100MHz	180	TK2727-ND	5.44	4.76	2.07	1.55	E526HN-100318
5 1/2 GRN	.211µH	100MHz	190	TK2728-ND	5.44	4.76	2.07	1.55	E526HN-100319
MC122 with Case									
1 1/2 WHT	.0323µH	100MHz	80	TK2801-ND	2.96	2.59	1.13	.85	E528SNAS-100072
2 1/2 RED	.0523µH	100MHz	80	TK2802-ND	2.96	2.59	1.13	.85	E528SNAS-100073
3 1/2 ORG	.078µH	100MHz	90	TK2803-ND	2.96	2.59	1.13	.85	E528SNAS-100074
4 1/2 YEL	.108µH	100MHz	90	TK2804-ND	2.96	2.59	1.13	.85	E528SNAS-100075
5 1/2 GRN	.149µH	100MHz	90	TK2805-ND	2.96	2.59	1.13	.85	E528SNAS-100076
3 1/2 ORG	.078µH	57MHz	70	TK2806-ND	2.96	2.59	1.13	.85	E528DNAS-100077
4 1/2 YEL	.103µH	57MHz	70	TK2807-ND	2.96	2.59	1.13	.85	E528DNAS-100078
5 1/2 GRN	.132µH	57MHz	70	TK2808-ND	2.96	2.59	1.13	.85	E528DNAS-100079
6 1/2 BLU	.159µH	57MHz	70	TK2809-ND	2.96	2.59	1.13	.85	E528DNAS-100080
7 1/2 VIO	.203µH	57MHz	70	TK2810-ND	2.96	2.59	1.13	.85	E528DNAS-100081
8 1/2 WHT	.226µH	45MHz	60	TK2811-ND	2.96	2.59	1.13	.85	E528DNAS-100082
9 1/2 RED	.25µH	45MHz	60	TK2812-ND	2.96	2.59	1.13	.85	E528DNAS-100083
10 1/2 ORG	.291µH	45MHz	60	TK2813-ND	2.96	2.59	1.13	.85	E528DNAS-100084
MC122 without Case									
1 1/2 WHT	.0352µH	100MHz	90	TK2814-ND	2.96	2.59	1.13	.85	E528SN-100059
2 1/2 RED	.0604µH	100MHz	110	TK2815-ND	2.96	2.59	1.13	.85	E528SN-100060
3 1/2 ORG	.0957µH	100MHz	120	TK2816-ND	2.96	2.59	1.13	.85	E528SN-100061
4 1/2 YEL	.137µH	100MHz	120	TK2817-ND	2.96	2.59	1.13	.85	E528SN-100062
5 1/2 GRN	.195µH	100MHz	110	TK2818-ND	2.96	2.59	1.13	.85	E528SN-100063
3 1/2 ORG	.0918µH	57MHz	100	TK2819-ND	2.96	2.59	1.13	.85	E528SN-100064
4 1/2 YEL	.130µH	57MHz	100	TK2820-ND	2.96	2.59	1.13	.85	E528SN-100065
5 1/2 GRN	.177µH	57MHz	100	TK2821-ND	2.96	2.59	1.13	.85	E528SN-100066
6 1/2 BLU	.214µH	57MHz	100	TK2822-ND	2.96	2.59	1.13	.85	E528SN-100067
7 1/2 VIO	.289µH	57MHz	90	TK2823-ND	2.96	2.59	1.13	.85	E528SN-100068
9 1/2 RED	.379µH	45MHz	80	TK2825-ND	2.96	2.59	1.13	.85	E528SN-100070
10 1/2 ORG	.447µH	45MHz	70	TK2826-ND	2.96	2.59	1.13	.85	E528SN-100071
MC134 with Case									
10 1/2 BLK	.260µH	50MHz	50	TK3001-ND	4.48	3.92	1.72	1.29	E540SNA-10005
11 1/2 BRW	.294µH	50MHz	50	TK3002-ND	4.48	3.92	1.72	1.29	E540SNA-11003
12 1/2 RED	.317µH	50MHz	60	TK3003-ND	4.48	3.92	1.72	1.29	E540SNA-12003
13 1/2 ORG	.350µH	50MHz	60	TK3004-ND	4.48	3.92	1.72	1.29	E540SNA-13003
14 1/2 YEL	.383µH	50MHz	55	TK3005-ND	4.48	3.92	1.72	1.29	E540SNA-14002
15 1/2 GRN	.422µH	50MHz	80	TK3006-ND	4.48	3.92	1.72	1.29	E540SNA-15002
MC134 without Case									
10 1/2 BLK	.398µH	50MHz	80	TK3007-ND	4.48	3.92	1.72	1.29	E540SN-10004
11 1/2 BRW	.451µH	50MHz	80	TK3008-ND	4.48	3.92	1.72	1.29	E540SN-11002
12 1/2 RED	.483µH	50MHz	80	TK3009-ND	4.48	3.92	1.72	1.29	E540SN-12002
13 1/2 ORG	.545µH	50MHz	80	TK3010-ND	4.48	3.92	1.72	1.29	E540SN-13002
14 1/2 YEL	.603µH	50MHz	80	TK3011-ND	4.48	3.92	1.72	1.29	E540SN-14001
15 1/2 GRN	.685µH	50MHz	80	TK3012-ND	4.48	3.92	1.72	1.29	E540SN-15001

Turns/ Color	L Nom.	Freq.	Q.	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	T & R Pricing 1,500	Toko Part No.
MC152 Ferrite Core — Surface Mount										
1 1/2 WHT	.032µH	100MHz	90	TKS2700CT-ND	3.95	34.80	310.00	TKS2700TR-ND	2370.00	E558CN-100020
3 1/2 ORG	.068µH	100MHz	110	TKS2702CT-ND	3.95	34.80	310.00	TKS2702TR-ND	2370.00	E558CN-100022
4 1/2 YEL	.090µH	100MHz	115	TKS2703CT-ND	3.95	34.80	310.00	TKS2703TR-ND	2370.00	E558CN-100023
5 1/2 WHT	.112µH	100MHz	120	TKS2704CT-ND	3.95	34.80	310.00	TKS2704TR-ND	2370.00	E558CN-100024
6 1/2 BLU	.142µH	100MHz	120	TKS2705CT-ND	3.95	34.80	310.00	TKS2705TR-ND	2370.00	E558CN-100025
MC152 Air Core — Surface Mount										
1 1/2 WHT	.029µH	100MHz	85	TKS2706CT-ND	1.48	13.04	98.78	—	—	E558HN-100096
2 1/2 VIO	.046µH	100MHz	100	TKS2707CT-ND	1.48	13.04	98.78	TKS2707TR-ND	880.50	E558HN-100097
4 1/2 YEL	.073µH	100MHz	105	TKS2709CT-ND	1.48	13.04	98.78	TKS2709TR-ND	880.50	E558HN-100099
5 1/2 WHT	.091µH	100MHz	120	TKS2710CT-ND	1.48	13.04	98.78	—	—	E558HN-100100
6 1/2 BLU	.111µH	100MHz	120	TKS2711CT-ND	1.48	13.04	98.78	—	—	E558HN-100101
MC152 Brass Core — Surface Mount										
2 1/2 VIO	.038µH	100MHz	63	TKS2713CT-ND	2.28	20.08	152.11	TKS2713TR-ND	1356.00	E558AN-100041
3 1/2 ORG	.048µH	100MHz	56	TKS2714CT-ND	3.95	34.80	310.00	TKS2714TR-ND	2370.00	E558AN-100042
5 1/2 WHT	.072µH	100MHz	50	TKS2716CT-ND	2.28	20.08	152.11	—	—	E558AN-100044
6 1/2 BLU	.084µH	100MHz	50	TKS2717CT-ND	2.28	20.08	152.11	—	—	E558AN-100045

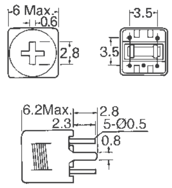
TOKO Coils

9139B-ND	Toko Coils and Filter Book	**$9.95**

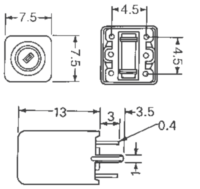
5K



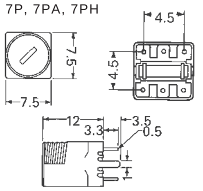
5P, 5PC, 5PH



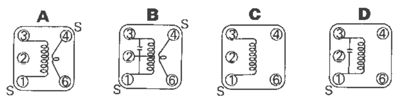
7KMM



7P, 7PA, 7PH



Diagrams



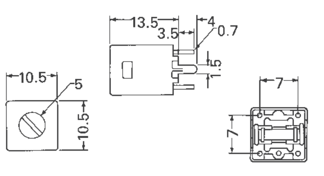
TK9001-ND	Plastic Tuning Tool (10NSF)	**$1.01**
TK9002-ND	Plastic Tuning Tool (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA)	**$1.18**
TK9003-ND	Plastic Tuning Tool (7KMM, 10K, 10KC, 12VXA)	**$.35**
TK9990-ND	Ceramic Tuning Driver (5K) (Requires Holder TK9999-ND, below)	**$41.66**
TK9991-ND	Ceramic Tuning Driver (7KMM, 10K, 10KC, 12VXA) Requires Holder TK9999-ND, below)	**$23.71**
TK9993-ND	Ceramic Tuning Driver (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA) (Requires Holder TK9999-ND, below)	**$31.84**
TK9998-ND	Ceramic Tuning Driver (5P, 5PC, 5PH) (Requires Holder TK9999-ND, below)	**$54.46**
TK9999-ND	Ceramic Driver Holder	**$4.16**

Diagram	L Nom.	Freq.	Q.	Digi-Key Part No.	Pricing				Toko Part No.
					1	10	100	500	
5K Type									
C	.08µH	75.0MHz	45	TK5001-ND*	4.85	41.23	325.80	974.50	294SN-T1008Z
	.10µH	75.0MHz	45	TK5002-ND*	4.85	41.23	325.80	974.50	294SN-T1009Z
	.15µH	75.0MHz	45	TK5003-ND*	4.85	41.23	325.80	974.50	294SN-T1010Z
	.22µH	45.0MHz	45	TK5004-ND*	4.85	41.23	325.80	974.50	294SN-T1011Z
	.33µH	45.0MHz	45	TK5005-ND*	4.85	41.23	325.80	974.50	294SN-T1012Z
	.47µH	45.0MHz	45	TK5006-ND*	4.85	41.23	325.80	974.50	294SN-T1013Z
	.68µH	45.0MHz	45	TK5007-ND*	4.85	41.23	325.80	974.50	294SN-T1014Z
	1.00µH	30.0MHz	45	TK5008-ND*	4.85	41.23	325.80	974.50	294SN-T1015Z
5P Type									
C	33µH	2.52MHz	40	TK5110-ND*	5.14	44.28	350.00	1040.00	5PNR-T1005Z
	39µH	2.52MHz	40	TK5111-ND*	5.14	44.28	350.00	1040.00	5PNR-T1006Z
	47µH	2.52MHz	40	TK5112-ND*	5.14	44.28	350.00	1040.00	5PNR-T1007Z
	68µH	2.52MHz	40	TK5114-ND*	5.14	44.28	350.00	1040.00	5PNR-T1009Z
	82µH	2.52MHz	40	TK5115-ND*	5.14	44.28	350.00	1040.00	5PNR-T1010Z
	100µH	.796MHz	40	TK5116-ND*	5.14	44.28	350.00	1040.00	5PNR-T1011Z
	120µH	.796MHz	40	TK5117-ND*	5.14	44.28	350.00	1040.00	5PNR-T1012Z
	150µH	.796MHz	40	TK5118-ND*	5.14	44.28	350.00	1040.00	5PNR-T1013Z
	270µH	.796MHz	40	TK5121-ND*	5.14	44.28	350.00	1040.00	5PNR-T1016Z
	390µH	.796MHz	40	TK5123-ND*	5.14	44.28	350.00	1040.00	5PNR-T1018Z
	470µH	.796MHz	40	TK5124-ND*	5.14	44.28	350.00	1040.00	5PNR-T1019Z
	560µH	.796MHz	40	TK5125-ND*	5.14	44.28	350.00	1040.00	5PNR-T1020Z
	680µH	.796MHz	40	TK5126-ND*	5.14	44.28	350.00	1040.00	5PNR-T1021Z
5PC Type									
D	680µH	455KHz	50	TK5128-ND	5.14	44.28	287.00	855.00	5PLC-1521Z
	680µH	455KHz	85	TK5129-ND	5.14	44.28	287.00	855.00	5PLC-1055Z
5PH Type									
C	1.0µH	7.96MHz	55	TK5130-ND*	4.21	36.23	287.00	855.00	332PN-T1012Z
	1.2µH	7.96MHz	55	TK5131-ND*	4.21	36.23	287.00	855.00	332PN-T1013Z
	1.5µH	7.96MHz	55	TK5132-ND*	4.21	36.23	287.00	855.00	332PN-T1014Z
	1.8µH	7.96MHz	55	TK5133-ND*	4.21	36.23	287.00	855.00	332PN-T1015Z
	2.2µH	7.96MHz	55	TK5134-ND*	4.21	36.23	287.00	855.00	332PN-T1016Z
	2.7µH	7.96MHz	55	TK5135-ND*	4.21	36.23	287.00	855.00	332PN-T1017Z
	3.3µH	7.96MHz	55	TK5136-ND*	4.21	36.23	287.00	855.00	332PN-T1018Z
	3.9µH	7.96MHz	55	TK5137-ND*	4.21	36.23	287.00	855.00	332PN-T1019Z
	4.7µH	7.96MHz	55	TK5138-ND*	4.21	36.23	287.00	855.00	332PN-T1020Z
	5.6µH	7.96MHz	55	TK5139-ND*	4.21	36.23	287.00	855.00	332PN-T1021Z
	6.8µH	7.96MHz	55	TK5140-ND*	4.21	36.23	287.00	855.00	332PN-T1022Z
	8.2µH	7.96MHz	55	TK5141-ND*	4.21	36.23	287.00	855.00	332PN-T1023Z
	10.0µH	2.52MHz	55	TK5142-ND*	4.21	36.23	287.00	855.00	332PN-T1024Z
	12.0µH	2.52MHz	55	TK5143-ND*	4.21	36.23	287.00	855.00	332PN-T1025Z
	15.0µH	2.52MHz	55	TK5144-ND*	4.21	36.23	287.00	855.00	332PN-T1026Z
	18.0µH	2.52MHz	55	TK5145-ND*	4.21	36.23	287.00	855.00	332PN-T1027Z
	22.0µH	2.52MHz	55	TK5146-ND*	4.21	36.23	287.00	855.00	332PN-T1028Z
***TK4-KIT-ND**	5mm Standard Coil Kit (2 each of values denoted above)								**$63.00**
7KMM Type									
C	0.1µH	50.0MHz	35	TK3101-ND	5.61	48.30	383.00	1140.00	292KNAS-T1028Z
	0.15µH	50.0MHz	35	TK3102-ND	5.61	48.30	383.00	1140.00	292KNAS-T1030Z
	0.22µH	50.0MHz	50	TK3103-ND	5.61	48.30	383.00	1140.00	292KNAS-T1032Z
	0.33µH	50.0MHz	50	TK3104-ND	5.61	48.30	383.00	1140.00	292KNAS-T1034Z
	0.47µH	50.0MHz	50	TK3105-ND	5.61	48.30	383.00	1140.00	292KNAS-T1036Z
C	0.68µH	50.0MHz	50	TK3106-ND	5.61	48.30	383.00	1140.00	292KNAS-T1038Z
	1.0µH	7.96MHz	40	TK3107-ND	5.61	48.30	383.00	1140.00	292CNS-T1040Z
	1.5µH	7.96MHz	40	TK3108-ND	5.61	48.30	383.00	1140.00	292CNS-T1042Z
	2.2µH	7.96MHz	40	TK3109-ND	5.61	48.30	383.00	1140.00	292CNS-T1044Z
	3.3µH	7.96MHz	40	TK3110-ND	5.61	48.30	383.00	1140.00	292CNS-T1046Z
	4.7µH	7.96MHz	40	TK3111-ND	5.61	48.30	383.00	1140.00	292CNS-T1048Z
	6.8µH	7.96MHz	40	TK3112-ND	5.61	48.30	383.00	1140.00	292CNS-T1050Z
	10.0µH	2.52MHz	35	TK3113-ND	5.61	50.40	383.00	1140.00	F292CNS-T1052Z
	15.0µH	2.52MHz	35	TK3114-ND*	5.61	50.40	383.00	1140.00	F292CNS-T1054Z
	6.6µH	4.0MHz	85	TK3115-ND	2.74	25.08	205.20	615.60	MF292CNS-T1082Z
	0.12µH	50.0MHz	35	TK3116-ND	5.61	48.30	383.00	1140.00	292KNAS-T1029Z
	0.18µH	50.0MHz	35	TK3117-ND	5.61	48.30	383.00	1140.00	292KNAS-T1031Z
	0.27µH	50.0MHz	50	TK3118-ND	5.61	48.30	383.00	1140.00	292KNAS-T1033Z
	0.39µH	50.0MHz	50	TK3119-ND	5.61	48.30	383.00	1140.00	292KNAS-T1035Z
	0.56µH	50.0MHz	50	TK3120-ND	5.61	48.30	383.00	1140.00	292KNAS-T1037Z
	0.82µH	50.0MHz	50	TK3121-ND	5.61	48.30	383.00	1140.00	292KNAS-T1039Z
	1.2µH	7.96MHz	40	TK3122-ND	5.61	48.30	383.00	1140.00	292CNS-T1041Z
	1.8µH	7.96MHz	40	TK3123-ND	5.61	48.30	383.00	1140.00	292CNS-T1043Z
	2.7µH	7.96MHz	40	TK3124-ND	5.61	48.30	383.00	1140.00	292CNS-T1045Z
	3.9µH	7.96MHz	40	TK3125-ND	5.61	48.30	383.00	1140.00	292CNS-T1047Z
	5.6µH	7.96MHz	40	TK3126-ND	5.61	48.30	383.00	1140.00	292CNS-T1049Z
	8.2µH	7.96MHz	40	TK3127-ND	5.61	48.30	383.00	1140.00	292CNS-T1051Z
	12.0µH	2.52MHz	35	TK3128-ND	5.61	50.40	383.00	1140.00	F292CNS-T1053Z
	22.0µH	2.52MHz	35	TK3130-ND*	5.61	50.40	383.00	1140.00	F292CNS-T1056Z
	33.0µH	2.52MHz	35	TK3132-ND*	5.61	50.40	383.00	1140.00	F292CNS-T1058Z
	47.0µH	2.52MHz	35	TK3134-ND*	5.61	50.40	383.00	1140.00	F292CNS-T1060Z
	56.0µH	2.52MHz	35	TK3135-ND*	2.74	25.08	205.20	615.60	F292CNS-T1061Z
	68.0µH	2.52MHz	35	TK3136-ND*	2.74	25.08	205.20	615.60	F292CNS-T1062Z
	82.0µH	2.52MHz	35	TK3137-ND*	2.74	25.08	205.20	615.60	F292CNS-T1063Z
7KMM High Frequency Type									
C	0.08µH	80.0MHz	50	TK3138-ND*	5.61	48.30	383.00	1140.00	292SNS-T1365Z
	0.10µH	80.0MHz	50	TK3139-ND*	5.61	48.30	383.00	1140.00	292SNS-T1366Z
	0.15µH	80.0MHz	60	TK3140-ND*	5.61	48.30	383.00	1140.00	292SNS-T1367Z
	0.22µH	80.0MHz	60	TK3141-ND*	5.61	48.30	383.00	1140.00	292SNS-T1368Z
	0.33µH	80.0MHz	60	TK3142-ND*	5.61	48.30	383.00	1140.00	292SNS-T1369Z
	0.47µH	50.0MHz	60	TK3143-ND*	5.61	48.30	383.00	1140.00	292SNS-T1370Z
	0.68µH	50.0MHz	60	TK3144-ND*	5.61	48.30	383.00	1140.00	292SNS-T1371Z
	1.00µH	7.96MHz	40	TK3145-ND*	5.61	48.30	383.00	1140.00	292KNS-T1372Z
	1.50µH	7.96MHz	40	TK3146-ND*	5.61	48.30	383.00	1140.00	292KNS-T1373Z
	2.20µH	7.96MHz	40	TK3147-ND*	5.61	48.30	383.00	1140.00	292KNS-T1374Z
	3.30µH	7.96MHz	40	TK3148-ND*	5.61	48.30	383.00	1140.00	292KNS-T1375Z
	4.70µH	7.96MHz	40	TK3149-ND*	5.61	48.30	383.00	1140.00	292KNS-T1376Z
	10.0µH	7.96MHz	40	TK3152-ND*	5.61	48.30	383.00	1140.00	292KNS-T1378Z
7P Type									
C	100µH	796KHz	80	TK2417-ND*	4.20	37.80	287.00	850.00	A7BRS-T1040Z
	120µH	796KHz	80	TK2418-ND*	4.20	37.80	287.00	850.00	A7BRS-T1041Z
	180µH	796KHz	80	TK2420-ND*	4.20	37.80	287.00	850.00	A7BRS-T1043Z
	220µH	796KHz	80	TK2421-ND*	4.20	37.80	287.00	850.00	A7BRS-T104
	270µH	796KHz	80	TK2422-ND*	4.20	37.80	287.00	850.00	A7BRS-T1045Z
C	330µH	796KHz	80	TK2423-ND*	4.20	37.80	287.00	850.00	A7BRS-T1046Z
B	679µH	455KHz	70	TK2501-ND	4.20	37.80	287.00	850.00	A7LC-T1153N
D	680µH	455KHz	70	TK2502-ND	4.20	37.80	287.00	850.00	A7LC-T1001Z
7PA Type									
C	1.0mH	252KHz	60	TK3201-ND	4.74	40.83	323.00	960.00	126ANS-T1094Z
	1.2mH	252KHz	60	TK3202-ND	4.74	40.83	323.00	960.00	126ANS-T1095Z
	1.5mH	252KHz	60	TK3203-ND	4.74	40.83	323.00	960.00	126ANS-T1096Z
	1.8mH	252KHz	60	TK3204-ND	4.74	40.83	323.00	960.00	126ANS-T1097Z
	2.2mH	252KHz	60	TK3205-ND	4.74	40.83	323.00	960.00	126ANS-T1098Z
	2.7mH	252KHz	60	TK3206-ND	4.74	40.83	323.00	960.00	126ANS-T1099Z
	3.3mH	252KHz	60	TK3207-ND	4.74	40.83	323.00	960.00	126ANS-T1100Z
	4.7mH	252KHz	60	TK3209-ND	4.74	40.83	323.00	960.00	126ANS-T1102Z
	5.6mH	252KHz	60	TK3210-ND	4.74	40.83	323.00	960.00	126ANS-T1103Z
	6.8mH	252KHz	60	TK3211-ND	4.74	40.83	323.00	960.00	126ANS-T1104Z
	8.2mH	252KHz	60	TK3212-ND	4.74	40.83	323.00	960.00	126ANS-T1105Z
	10.0mH	79.6KHz	60	TK3213-ND	4.74	40.83	323.00	960.00	126ANS-T1106Z
	12.0mH	79.6KHz	60	TK3214-ND	4.74	40.83	323.00	960.00	126ANS-T1107Z
	15.0mH	79.6KHz	60	TK3215-ND	4.74	40.83	323.00	960.00	126ANS-T1108Z
	18.0mH	79.6KHz	60	TK3216-ND	4.74	40.83	323.00	960.00	126ANS-T1109Z
	22.0mH	79.6KHz	60	TK3217-ND	4.74	40.83	323.00	960.00	126ANS-T1110Z
	5mH	252KHz	70	TK3218-ND	4.74	40.83	323.00	960.00	126LNS-6285Z
7PH Type									
C	4.7µH	7.96MHz	80	TK2401-ND*	4.31	37.38	294.00	875.00	A119ANS-T1029Z
	5.6µH	7.96MHz	80	TK2402-ND*	4.31	37.38	294.00	875.00	A119ANS-T1030Z
	6.8µH	7.96MHz	80	TK2403-ND*	4.31	37.38	294.00	875.00	A119ANS-T1031Z
	8.2µH	7.96MHz	80	TK2404-ND*	4.31	37.38	294.00	875.00	A119ANS-T1032Z
	10.0µH	2.52MHz	80	TK2405-ND*	4.31	37.38	294.00	875.00	A119ANS-T1033Z
	12.0µH	2.52MHz	80	TK2406-ND*	4.31	37.38	294.00	875.00	A119ANS-T1034Z
	15.0µH	2.52MHz	80	TK2407-ND*	4.31	37.38	294.00	875.00	A119ANS-T1035Z
	18.0µH	2.52MHz	80	TK2408-ND*	4.31	37.38	294.00	875.00	A119ANS-T1036Z
	22.0µH	2.52MHz	80	TK2409-ND*	4.31	37.38	294.00	875.00	A119ANS-T1037Z
	27.0µH	2.52MHz	80	TK2410-ND*	4.31	37.38	294.00	875.00	A119ANS-T1038Z
	33.0µH	2.52MHz	80	TK2411-ND*	4.31	37.38	294.00	875.00	A119ANS-T1039Z
	39.0µH	2.52MHz	80	TK2412-ND*	4.31	37.38	294.00	875.00	A119ANS-T1040Z
	47.0µH	2.52MHz	80	TK2413-ND*	4.31	37.38	294.00	875.00	A119ANS-T1041Z
	56.0µH	2.52MHz	80	TK2414-ND*	4.31	37.38	294.00	875.00	A119ANS-T1042Z
	68.0µH	2.52MHz	80	TK2415-ND*	4.31	37.38	294.00	875.00	A119ANS-T1043Z
C	82.0µH	2.52MHz	80	TK2416-ND*	4.31	37.38	294.00	875.00	A119ANS-T1044Z
C	10.7µH	2.52MHz	95	TK2427-ND	4.31	37.38	294.00	875.00	A119ANS-17152Z
—	10.7µH	2.52MHz	90	TK2428-ND	2.41	22.11	182.91	552.75	A119ANS-17153Y
C	11.8µH	2.52MHz	114	TK2429-ND	2.41	22.11	182.91	552.75	A119AN-T1018Z
—	10.9µH	4.4MHz	80	TK2430-ND	2.41	22.11	182.91	552.75	119LNS-A3753GO
A	12.5µH	4.4MHz	90	TK2431-ND	4.31	37.38	294.00	875.00	119LNS-A4451DY
***TK1-KIT-ND**	7mm Standard Coil Kit (2 each of values denoted above)								**$56.70**

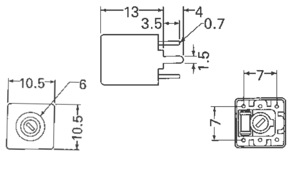
TOKO Coils

9139B-ND	Toko Coils & Filter Book	**$9.95**

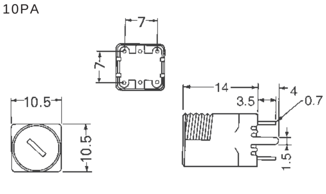
10EZ, 10EZC, 10EZH, 10EZHC



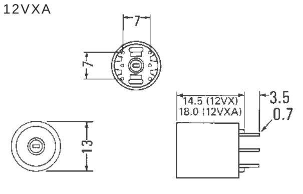
10K, 10KC

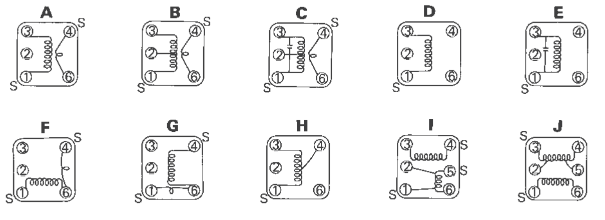


10PA



12VXA



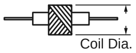


TK9001-ND	Plastic Tuning Tool (10NSF)	**$1.01**
TK9002-ND	Plastic Tuning Tool (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA)	**$1.18**
TK9003-ND	Plastic Tuning Tool (7KMM, 10K, 10KC, 12VXA)	**$.35**
TK9990-ND	Ceramic Tuning Driver (5K) (Requires Holder TK9999-ND, below)	**$41.66**
TK9991-ND	Ceramic Tuning Driver (7KMM, 10K, 10KC, 12VXA) Requires Holder TK9999-ND, below)	**$23.71**
TK9993-ND	Ceramic Tuning Driver (7P, 7PA, 7PH, 10EZ, 10EZC, 10EZH, 10EZHC, 10PA) (Requires Holder TK9999-ND, below)	**$31.84**
TK9998-ND	Ceramic Tuning Driver (5P, 5PC, 5PH) (Requires Holder TK9999-ND, below)	**$54.46**
TK9999-ND	Ceramic Driver Holder	**$4.16**

Dia-gram	L Nom.	Freq.	Q.	Digi-Key Part No.	Pricing 1	10	100	500	Toko Part No.
10EZ Type									
B	.63mH	200KHz	95	TK1201-ND	3.46	31.20	236.00	700.00	RAN-10A6729EK
B	.63mH	200KHz	95	TK1202-ND	3.46	31.20	236.00	700.00	RAN-10A6845EK
D	100µH	796KHz	100	TK1219-ND	3.46	31.20	236.00	700.00	RWRS-T1015Z
D	120µH	796KHz	100	TK1220-ND	3.46	31.20	236.00	700.00	RWRS-T1016Z
D	150µH	796KHz	100	TK1221-ND	3.46	31.20	236.00	700.00	RWRS-T1017Z
D	180µH	796KHz	100	TK1222-ND	3.46	31.20	236.00	700.00	RWRS-T1018Z
	220µH	796KHz	100	TK1223-ND	3.46	31.20	236.00	700.00	RWRS-T1019Z
	270µH	796KHz	100	TK1224-ND	3.46	31.20	236.00	700.00	RWRS-T1020Z
	470µH	796KHz	100	TK1227-ND	3.46	31.20	236.00	700.00	RWRS-T1023Z
	560µH	796KHz	100	TK1228-ND	3.46	31.20	236.00	700.00	RWRS-T1024Z
D	680µH	796KHz	100	TK1229-ND	3.46	31.20	236.00	700.00	RWRS-T1025Z
	820µH	796KHz	100	TK1230-ND	3.46	31.20	236.00	700.00	RWRS-T1026Z
	1000µH	252KHz	50	TK1231-ND	3.46	31.20	236.00	700.00	RUNS-T1027Z
	1200µH	252KHz	50	TK1232-ND	3.46	31.20	236.00	700.00	RUNS-T1028Z
10EZC Type									
C	.64mH	455KHz	110	TK1301-ND	3.46	31.20	236.00	700.00	RMC-202313NO
E	.64mH	455KHz	110	TK1302-ND	3.46	31.20	236.00	700.00	RMC-2A6597HM
E	.64mH	455KHz	110	TK1303-ND	3.46	31.20	236.00	700.00	RMC-2A7287HM
C	.64mH	455KHz	110	TK1304-ND	3.46	31.20	236.00	700.00	RMC-402503NO
	.64mH	455KHz	110	TK1305-ND	3.46	31.20	236.00	700.00	RMC-502182NO
	.64mH	455KHz	110	TK1306-ND	2.26	20.74	169.65	508.95	RMC-502503NO
10EZH Type									
D	4.7µH	7.96MHz	100	TK1203-ND	3.55	30.48	242.00	720.00	154ANS-T1005Z
	5.6µH	7.96MHz	100	TK1204-ND	3.55	30.48	242.00	720.00	154ANS-T1006Z
	6.8µH	7.96MHz	100	TK1205-ND	3.55	30.48	242.00	720.00	154ANS-T1007Z
D	8.2µH	7.96MHz	100	TK1206-ND	3.55	30.48	242.00	720.00	154ANS-T1008Z
	10µH	2.52MHz	60	TK1207-ND	3.55	30.48	242.00	720.00	154ANS-T1009Z
	12µH	2.52MHz	60	TK1208-ND	3.55	30.48	242.00	720.00	154ANS-T1010Z
	15.0µH	2.52MHz	60	TK1209-ND	3.55	30.48	242.00	720.00	154ANS-T1011Z
	18.0µH	2.52MHz	60	TK1210-ND	3.55	30.48	242.00	720.00	154ANS-T1012Z
D	22.0µH	2.52MHz	60	TK1211-ND	3.55	30.48	242.00	720.00	154ANS-T1013Z
	27.0µH	2.52MHz	60	TK1212-ND	3.55	30.48	242.00	720.00	154ANS-T1014Z
	33.0µH	2.52MHz	60	TK1213-ND	3.55	30.48	242.00	720.00	154ANS-T1015Z
	39.0µH	2.52MHz	60	TK1214-ND	3.55	30.48	242.00	720.00	154ANS-T1016Z
	47.0µH	2.52MHz	60	TK1215-ND	3.55	30.48	242.00	720.00	154ANS-T1017Z
D	56.0µH	2.52MHz	60	TK1216-ND	3.55	30.48	242.00	720.00	154ANS-T1018Z
	68.0µH	2.52MHz	60	TK1217-ND	3.55	30.48	242.00	720.00	154ANS-T1019Z
	82.0µH	2.52MHz	60	TK1218-ND	3.46	29.90	236.00	700.00	154ANS-T1020Z
10EZHC Type									
E	2.7µH	10.7MHz	98	TK1241-ND	3.55	30.48	242.00	720.00	154AC-T1038Z
C	8.2µH	10.7MHz	110	TK1237-ND	3.55	30.48	242.00	720.00	154AC-470072NO
C	27.0µH	10.7MHz	110	TK1238-ND	3.55	30.48	242.00	720.00	154AC-7A5681EK
C	47.0µH	10.7MHz	120	TK1239-ND	3.55	30.48	242.00	720.00	154FC-560061NO
C	68.0µH	10.7MHz	60	TK1240-ND	3.55	30.48	242.00	720.00	154PC-470033NO
10K Type									
D	0.08µH	75MHz	50	TK1401-ND	4.12	37.20	281.00	835.00	BTKENS-T1043Z
D	0.10µH	75MHz	60	TK1402-ND	4.12	37.20	281.00	835.00	BTKENS-T1044Z
A	0.12µH	72MHz	80	TK1403-ND	4.12	37.20	281.00	835.00	BKEN-K4857DZ
D	0.15µH	75MHz	60	TK1404-ND	4.12	37.20	281.00	835.00	BTKENS-T1045Z
D	0.22µH	75MHz	60	TK1405-ND	4.12	37.20	281.00	835.00	BTKENS-T1046Z
D	0.33µH	45MHz	60	TK1406-ND	4.12	37.20	281.00	835.00	BTKXNS-T1047Z
A	0.41µH	49MHz	75	TK1407-ND	4.12	37.20	281.00	835.00	KEN-K4028DZ
D	0.47µH	45MHz	70	TK1408-ND	4.12	37.20	281.00	835.00	BTKXNS-T1048Z
D	0.68µH	45MHz	70	TK1409-ND	4.12	37.20	281.00	835.00	BTKXNS-T1049Z
A	0.79µH	27MHz	55	TK1410-ND	4.12	37.20	281.00	835.00	KXNA-K4434DZ
D	1.0µH	25.2MHz	80	TK1411-ND	4.12	37.20	281.00	835.00	BTKXNS-T1050Z
	1.5µH	7.96MHz	60	TK1412-ND	4.12	37.20	281.00	835.00	BTKANS-9449HM
	2.2µH	7.96MHz	60	TK1413-ND	4.12	37.20	281.00	835.00	BTKANS-9447HM
	3.3µH	7.96MHz	70	TK1414-ND	4.12	37.20	281.00	835.00	BTKANS-9445HM
	4.7µH	7.96MHz	70	TK1415-ND	4.12	37.20	281.00	835.00	BTKANS-9443HM
D	6.8µH	7.96MHz	70	TK1416-ND	4.12	37.20	281.00	835.00	BTKANS-9441HM
D	10µH	7.96MHz	70	TK1417-ND	4.12	37.20	281.00	835.00	BTKANS-9439HM
F	0.16µH	27MHz	65	TK1418-ND	2.21	20.30	166.05	498.15	KXN-K4636BJF
G	0.34µH	49MHz	95	TK1419-ND	4.12	37.20	281.00	835.00	BKEN-K4635BJE
H	1.0µH	7.96MHz	60	TK1420-ND	4.12	37.20	281.00	835.00	BKAN-K5552AXX
H	66µH	2.52MHz	60	TK1421-ND	4.12	37.20	281.00	835.00	BKANS-K4087HUx
—	2.2µH	7.96MHz	54	TK1422-ND	4.12	37.20	281.00	835.00	TKANAS-T1390ADP
10KC Type									
E	2.7µH	10.7MHz	100	TK1501-ND	4.12	37.20	281.00	835.00	KACS-K586HM
10PA Type									
D	1.35mH	200KHz	70	TK1701-ND	3.75	33.60	255.00	760.00	CAN-1A901HM
	15.8mH	40KHz	58	TK1702-ND	3.75	33.60	255.00	760.00	CLN-2A900HM
	1.0mH	252KHz	80	TK1703-ND	3.75	33.60	255.00	760.00	CLNS-T1018Z
	1.2mH	252KHz	80	TK1704-ND	3.75	33.60	255.00	760.00	CLNS-T1019Z
	1.5mH	252KHz	80	TK1705-ND	3.75	33.60	255.00	760.00	CLNS-T1020Z
D	1.8mH	252KHz	80	TK1706-ND	3.75	33.60	255.00	760.00	CLNS-T1021Z
	2.2mH	252KHz	80	TK1707-ND	3.75	33.60	255.00	760.00	CLNS-T1022Z
	2.7mH	252KHz	80	TK1708-ND	3.75	33.60	255.00	760.00	CLNS-T1023Z
	3.3mH	252KHz	80	TK1709-ND	3.75	33.60	255.00	760.00	CLNS-T1024Z
	3.9mH	252KHz	80	TK1710-ND	3.75	33.60	255.00	760.00	CLNS-T1025Z
D	4.7mH	252KHz	80	TK1711-ND	3.75	33.60	255.00	760.00	CLNS-T1026Z
	5.6mH	252KHz	80	TK1712-ND	3.75	33.60	255.00	760.00	CLNS-T1027Z
	6.8mH	252KHz	80	TK1713-ND	3.75	33.60	255.00	760.00	CLNS-T1028Z
	8.2mH	252KHz	80	TK1714-ND	3.75	33.60	255.00	760.00	CLNS-T1029Z
	10.0mH	79.6KHz	70	TK1715-ND	3.75	33.60	255.00	760.00	CLNS-T1030Z
D	12.0mH	79.6KHz	70	TK1716-ND	3.75	33.60	255.00	760.00	CLNS-T1031Z
	15.0mH	79.6KHz	70	TK1717-ND	3.75	33.60	255.00	760.00	CLNS-T1032Z
	18.0mH	79.6KHz	70	TK1718-ND	3.75	33.60	255.00	760.00	CLNS-T1033Z
	22.0mH	79.6KHz	70	TK1719-ND	3.75	33.60	255.00	760.00	CLNS-T1034Z
	27.0mH	79.6KHz	70	TK1720-ND	3.75	33.60	255.00	760.00	CLNS-T1035Z
D	33.0mH	79.6KHz	70	TK1721-ND	3.75	33.60	255.00	760.00	CLNS-T1036Z
	39.0mH	79.6KHz	70	TK1722-ND	3.75	33.60	255.00	760.00	CLNS-T1037Z
	47.0mH	79.6KHz	70	TK1723-ND	3.75	33.60	255.00	760.00	CLNS-T1038Z
	56.0mH	79.6KHz	70	TK1724-ND	3.75	33.60	255.00	760.00	CLNS-T1039Z
	800µH	55KHz	50	TK1725-ND	3.75	33.60	255.00	760.00	CLN-T1069Z
12VXA Type									
I	49.1µH	125KHz	25	TK1901-ND	4.70	40.02	316.30	945.50	707VX-A042YUK
I	101µH	50KHz	25	TK1902-ND	4.70	40.02	316.30	945.50	707VX-A043YUK
B	217µH	100KHz	20	TK1903-ND	4.70	40.02	316.30	945.50	707VX-T1002N
A	1.0mH	252KHz	25	TK2001-ND	4.70	40.02	316.30	945.50	707VX-A062AO
J	.419mH	20KHz	30	TK2002-ND	4.70	40.02	316.30	945.50	707VX-A055YSU

J.W.Miller
MAGNETICS

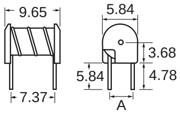
Coiled RF Chokes



L (µH) 5%	Q Min.	Test Freq. (MHz)	I, dc Max. (mA)	Coil Dia. In. (mm)	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
Iron Core								
1.0†	41	25	2041	.165 (4.19)	M7010-ND	1.03	.96	70F106AI
2.2††	43	7.9	1132	.16 (4.06)	M72R2-ND	1.25	1.17	70F226AI
3.3††	40	7.9	912	.15 (3.81)	M73R3-ND	1.25	1.17	70F336AI
4.7††	43	7.9	661	.15 (3.81)	M74R7-ND	1.25	1.17	70F476AI
6.8††	40	7.9	566	.15 (3.81)	M76R8-ND	1.25	1.17	70F686AI
10††	36	7.9	277	.16 (4.06)	M7100-ND	1.52	1.42	70F105AI
22	51	2.5	229	.165 (4.19)	M7220-ND	1.52	1.42	70F225AI
33	50	2.5	208	.17 (4.32)	M7330-ND	1.52	1.42	70F335AI
47	44	2.5	188	.175 (4.44)	M7470-ND	1.52	1.42	70F475AI
68	42	2.5	169	.18 (4.57)	M7680-ND	1.52	1.42	70F685AI
100	25	2.5	139	.165 (4.19)	M7101-ND	1.65	1.55	70F104AI
220	46	.79	114	.17 (4.32)	M7221-ND	1.65	1.55	70F224AI
330	41	.79	103	.175 (4.44)	M7331-ND	1.65	1.55	70F334AI
470	35	.79	95	.185 (4.70)	M7471-ND	1.65	1.55	70F474AI
680	37	.79	87	.2 (5.08)	M7681-ND	1.74	1.63	70F684AI
1000	30	.79	79	.225 (5.71)	M7102-ND	1.74	1.63	70F103AI
2200	40	.25	57	.24 (6.10)	M7222-ND	1.80	1.68	70F223AI
3300	52	.25	53	.26 (6.60)	M7332-ND	1.80	1.68	70F333AI
4700	49	.25	48	.285 (7.24)	M7472-ND	1.95	1.82	70F473AI
6800	51	.25	43	.31 (7.87)	M7682-ND	1.95	1.82	70F683AI
10,000	41	.25	38	.335 (8.51)	M7103-ND	1.85	1.73	70F102AI
22,000	50	.079	41	.33 (8.38)	M7223-ND	3.26	3.05	70F222AI
Ferrite Core								
33,000	61	.079	43	.353 (8.97)	M7333-ND	4.51	4.22	70F332AF
47,000	57	.079	38	.384 (9.75)	M7473-ND	4.51	4.22	70F472AF
68,000	57	.079	34	.415 (10.54)	M7683-ND	4.51	4.22	70F682AF
100,000	48	.079	29	.446 (11.33)	M7104-ND	3.10	2.90	70F101AF
220,000	51	.025	39	.54 (13.72)	M7224-ND	3.38	3.16	70F221AF
330,000	54	.025	34	.58 (14.73)	M7334-ND	3.76	3.52	70F331AF
470,000	55	.025	30	.615 (15.62)	M7474-ND	3.76	3.52	70F471AF

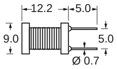
† 20%; †† 10% tolerance.

Molded Polypropylene RF Chokes



L (µH)	Dim. A (mm)	Q Min.	I, dc Max. (mA)	Digi-Key Part No.	Price Each 1	10	J.W.Miller Part No.
Hollow Core							
.049	3.76	104	1000	M7503-ND	1.35	1.27	75F518MPC
.364	4.01	93	500	M7507-ND	1.35	1.27	75F397MPC
.57	4.04	92	500	M7509-ND	1.35	1.27	75F597MPC

Radial Lead High Current RF Chokes



L (µH)	Q Min.	Test Freq. (MHz)	I, dc Max. (A)	R,dc Max. Ohms	Digi-Key Part No.	Price Each 1	10	J.W.Miller Part No.
1.0†	20	7.96	10	.013	M6001-ND	1.93	1.80	6000-1R0M
1.5†	20	7.96	8.5	.016	M6002-ND	1.93	1.80	6000-1R5M
2.2†	20	7.96	6.5	.021	M6003-ND	1.93	1.80	6000-2R2M
3.3†	20	7.96	5.5	.025	M6004-ND	1.93	1.80	6000-3R3M
4.7†	20	7.96	4.6	.030	M6005-ND	1.93	1.80	6000-4R7M
6.8†	20	7.96	4.1	.035	M6006-ND	1.93	1.80	6000-6R8M
10††	50	2.52	3.4	.045	M6007-ND	1.93	1.80	6000-100K
12††	50	2.52	3.1	.050	M6008-ND	1.93	1.80	6000-120K
15††	50	2.52	2.9	.056	M6009-ND	1.93	1.80	6000-150K
18††	40	2.52	2.66	.061	M6010-ND	1.93	1.80	6000-180K
22††	40	2.52	2.4	.070	M6011-ND	1.93	1.80	6000-220K
27††	40	2.52	2.22	.080	M6012-ND	1.93	1.80	6000-270K
33††	30	2.52	2.05	.090	M6013-ND	1.93	1.80	6000-330K
39††	30	2.52	1.85	.10	M6014-ND	1.93	1.80	6000-390K
47††	30	2.52	1.77	.16	M6015-ND	1.93	1.80	6000-470K
56††	30	2.52	1.48	.18	M6016-ND	1.93	1.80	6000-560K
68††	30	2.52	1.36	.21	M6017-ND	1.93	1.80	6000-680K
82††	30	2.52	1.3	.23	M6018-ND	1.93	1.80	6000-820K
100††	20	.796	1.4	.28	M6019-ND	1.93	1.80	6000-101K
120††	20	.796	1.25	.32	M6020-ND	1.93	1.80	6000-121K
150††	20	.796	1.15	.37	M6021-ND	1.93	1.80	6000-151K
180††	20	.796	1.08	.58	M6022-ND	1.93	1.80	6000-181K
220††	20	.796	1.0	.65	M6023-ND	1.93	1.80	6000-221K
270††	20	.796	.90	.75	M6024-ND	1.93	1.80	6000-271K
330††	20	.796	.78	.85	M6025-ND	1.93	1.80	6000-331K
390††	20	.796	.74	1.0	M6026-ND	1.93	1.80	6000-391K
470††	20	.796	.68	1.1	M6027-ND	1.93	1.80	6000-471K
560††	20	.796	.64	1.4	M6028-ND	1.93	1.80	6000-561K
680††	20	.796	.59	1.6	M6029-ND	1.93	1.80	6000-681K
820††	20	.796	.56	1.8	M6030-ND	1.93	1.80	6000-821K
1000††	50	.252	.51	2.9	M6031-ND	1.93	1.80	6000-102K

Parts finished with VWI Rated Sleeving.
† 20%; †† 10% tolerance.

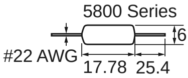
Molded RF Chokes

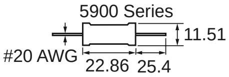
9230 Series Dimensions: Form Length: 6.35mm; Form Diameter: 2.41mm; Lead Length: 38.10mm; Leads: 24 AWG. Tolerance: ±10%.

9250 Series Dimensions: Form Length: 10.41mm; Form Diameter: 4.11mm; Lead Length: 36.53mm; Leads: 22 AWG. Tolerance: ±10%.

L (µH)	Q Min.	Test Freq. (MHz)	I, dc Max. (mA)	Coil Dia. In. (mm)	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
Phenolic Core								
0.1	40	25.0	1100	.095 (2.41)	M9R10-ND	1.15	1.07	9230-94
0.15	38	25.0	1100	.095 (2.41)	M9R15-ND	1.06	.99	9230-00
0.22	33	25.0	935	.095 (2.41)	M9R22-ND	1.06	.99	9230-04
0.33	30	25.0	780	.095 (2.41)	M9R33-ND	1.06	.99	9230-08
0.39	30	25.0	640	.095 (2.41)	M9R39-ND	1.06	.99	9230-10
0.47	30	25.0	590	.095 (2.41)	M9R47-ND	1.06	.99	9230-12
0.68	28	25.0	450	.095 (2.41)	M9R68-ND	1.06	.99	9230-16
0.82	28	25.0	380	.095 (2.41)	M9R82-ND	1.06	.99	9230-18
1.0	25	25.0	350	.095 (2.41)	M9010-ND	1.06	.99	9230-20
Iron Core								
2.2	30	7.9	550	.095 (2.41)	M92R2-ND	1.44	1.35	9230-28
3.3	45	7.9	380	.095 (2.41)	M93R3-ND	1.44	1.35	9230-32
4.7	45	7.9	320	.095 (2.41)	M94R7-ND	1.44	1.35	9230-36
6.8	50	7.9	245	.095 (2.41)	M96R8-ND	1.62	1.52	9230-40
10.0	55	7.9	180	.095 (2.41)	M9100-ND	1.62	1.52	9230-44
22.0	50	2.5	190	.095 (2.41)	M9220-ND	1.65	1.55	9230-52
Ferrite Core								
33.0	45	2.5	187	.095 (2.41)	M9330-ND	1.76	1.65	9230-56
47.0	45	2.5	165	.095 (2.41)	M9470-ND	1.76	1.65	9230-60
68.0	50	2.5	135	.095 (2.41)	M9680-ND	1.76	1.65	9230-64
100.0	50	2.5	125	.095 (2.41)	M9101-ND	1.94	1.81	9230-68
220.0	30	0.79	73	.095 (2.41)	M9221-ND	1.94	1.81	9230-76
330.0	30	0.79	62	.095 (2.41)	M9331-ND	1.94	1.81	9230-80
470.0	30	0.79	50	.095 (2.41)	M9471-ND	1.94	1.81	9230-84
680.0	30	0.79	42	.095 (2.41)	M9681-ND	1.94	1.81	9230-88
1000.0	30	0.79	38	.095 (2.41)	M9102-ND	2.37	2.21	9230-92
Phenolic Core (Shielded)								
0.1	50	25.0	1790	.162 (4.11)	M9201-ND	2.76	2.59	9250-101
0.12	51	25.0	1530	.162 (4.11)	M9202-ND	2.76	2.59	9250-121
0.15	51	25.0	1470	.162 (4.11)	M9203-ND	2.76	2.59	9250-151
0.18	50	25.0	1300	.162 (4.11)	M9204-ND	2.76	2.59	9250-181
0.22	49	25.0	1100	.162 (4.11)	M9205-ND	2.76	2.59	9250-221
0.27	47	25.0	855	.162 (4.11)	M9206-ND	2.76	2.59	9250-271
0.33	46	25.0	780	.162 (4.11)	M9207-ND	2.76	2.59	9250-331
0.39	44	25.0	670	.162 (4.11)	M9208-ND	2.76	2.59	9250-391
0.47	44	25.0	565	.162 (4.11)	M9209-ND	2.76	2.59	9250-471
0.56	43	25.0	490	.162 (4.11)	M9210-ND	2.76	2.59	9250-561
0.68	42	25.0	420	.162 (4.11)	M9211-ND	2.76	2.59	9250-681
0.82	40	25.0	370	.162 (4.11)	M9212-ND	2.76	2.59	9250-821
Iron Core (Shielded)								
1.0	44	25.0	1070	.162 (4.11)	M9213-ND	2.89	2.70	9250-102
1.2	44	7.9	895	.162 (4.11)	M9214-ND	2.89	2.70	9250-122
1.5	44	7.9	815	.162 (4.11)	M9215-ND	2.89	2.70	9250-152
1.8	44	7.9	775	.162 (4.11)	M9216-ND	2.89	2.70	9250-182
2.2	44	7.9	650	.162 (4.11)	M9217-ND	2.89	2.70	9250-222
2.7	44	7.9	535	.162 (4.11)	M9218-ND	2.89	2.70	9250-272
3.3	44	7.9	480	.162 (4.11)	M9219-ND	2.89	2.70	9250-332
3.9	44	7.9	450	.162 (4.11)	M9222-ND	2.89	2.70	9250-392
4.7	44	7.9	380	.162 (4.11)	M9223-ND	2.89	2.70	9250-472
5.6	44	7.9	335	.162 (4.11)	M9224-ND	2.89	2.70	9250-562
6.8	50	7.9	280	.162 (4.11)	M9225-ND	2.89	2.70	9250-682
8.2	50	7.9	250	.162 (4.11)	M9226-ND	2.89	2.70	9250-822
10.0	50	7.9	220	.162 (4.11)	M9227-ND	2.89	2.70	9250-103
12.0	55	2.5	200	.162 (4.11)	M9228-ND	2.89	2.70	9250-123
Ferrite Core (Shielded)								
15.0	45	2.5	315	.162 (4.11)	M9229-ND	2.89	2.70	9250-153
18.0	45	2.5	300	.162 (4.11)	M9230-ND	3.48	3.25	9250-183
22.0	45	2.5	290	.162 (4.11)	M9231-ND	2.89	2.70	9250-223
27.0	45	2.5	260	.162 (4.11)	M9232-ND	3.48	3.25	9250-273
33.0	45	2.5	240	.162 (4.11)	M9233-ND	3.18	2.97	9250-333
39.0	50	2.5	205	.162 (4.11)	M9234-ND	3.18	2.97	9250-393
47.0	50	2.5	195	.162 (4.11)	M9235-ND	3.18	2.97	9250-473
56.0	50	2.5	190	.162 (4.11)	M9236-ND	3.18	2.97	9250-563
68.0	50	2.5	170	.162 (4.11)	M9237-ND	3.18	2.97	9250-683
82.0	50	2.5	180	.162 (4.11)	M9238-ND	3.48	3.25	9250-823
100	50	2.5	160	.162 (4.11)	M9239-ND	3.48	3.25	9250-104
120	55	.79	150	.162 (4.11)	M9240-ND	3.48	3.25	9250-124
150	55	.79	140	.162 (4.11)	M9241-ND	3.48	3.25	9250-154
180	55	.79	135	.162 (4.11)	M9242-ND	3.48	3.25	9250-184
220	55	.79	125	.162 (4.11)	M9243-ND	3.48	3.25	9250-224
270	55	.79	115	.162 (4.11)	M9244-ND	3.48	3.25	9250-274
330	55	.79	110	.162 (4.11)	M9245-ND	3.48	3.25	9250-334
390	60	.79	105	.162 (4.11)	M9246-ND	3.48	3.25	9250-394
470	60	.79	92	.162 (4.11)	M9247-ND	3.48	3.25	9250-474
560	60	.79	90	.162 (4.11)	M9248-ND	3.48	3.25	9250-564
680	60	.79	80	.162 (4.11)	M9249-ND	3.48	3.25	9250-684
820	60	.79	80	.162 (4.11)	M9250-ND	3.48	3.25	9250-824
1,000	60	.79	70	.162 (4.11)	M9251-ND	3.48	3.25	9250-105
1,200	45	.25	60	.162 (4.11)	M9252-ND	3.98	3.73	9250-125
1,500	45	.25	55	.162 (4.11)	M9253-ND	3.98	3.73	9250-155
1,800	45	.25	50	.162 (4.11)	M9254-ND	3.98	3.73	9250-185
2,200	45	.25	50	.162 (4.11)	M9255-ND	3.98	3.73	9250-225
2,700	45	.25	40	.162 (4.11)	M9256-ND	3.98	3.73	9250-275
3,300	45	.25	40	.162 (4.11)	M9257-ND	3.98	3.73	9250-335
3,900	45	.25	35	.162 (4.11)	M9258-ND	3.98	3.73	9250-395
4,700	45	.25	31	.162 (4.11)	M9259-ND	4.29	4.01	9250-475
5,600	44	.25	28	.162 (4.11)	M9260-ND	4.29	4.01	9250-565
6,800	40	.25	27	.162 (4.11)	M9261-ND	4.29	4.01	9250-685
8,200	40	.25	26	.162 (4.11)	M9262-ND	4.29	4.01	9250-825
10,000	40	.25	24	.162 (4.11)	M9263-ND	4.29	4.01	9250-106
12,000	30	.079	23	.162 (4.11)	M9264-ND	4.76	4.45	9250-126
15,000	30	.079	22	.162 (4.11)	M9265-ND	3.99	3.73	9250-156
18,000	30	.079	21	.162 (4.11)	M9266-ND	6.36	5.94	9250-186
22,000	27	.079	17	.162 (4.11)	M9267-ND	8.39	7.84	9250-226
27,000	27	.079	16	.162 (4.11)	M9268-ND	8.39	7.84	9250-276
33,000	27	.079	15	.162 (4.11)	M9269-ND	8.39	7.84	9250-336
39,000	27	.079	15	.162 (4.11)	M9270-ND	8.39	7.84	9250-396
47,000	23	.079	13	.162 (4.11)	M9271-ND	8.39	7.84	9250-476
56,000	23	.079	13	.162 (4.11)	M9272-ND	10.68	9.98	9250-566
68,000	23	.079	12	.162 (4.11)	M9273-ND	10.69	9.98	9250-686
82,000	21	.079	11	.162 (4.11)	M9274-ND	11.10	10.36	9250-826
100,000	18	.079	11	.162 (4.11)	M9275-ND	13.74	12.83	9250-107

Filter and Miniature High Current Chokes





Inductance ± 15% @ 1 KHz. Coils finished with sleeving VW1 Rated. Leads No. 20 tinned copper 1" long min. Ambient Temp.: -55°C to +125°C.

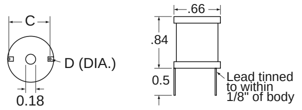
L (µH) @ 0 DC	Max. DCR Ω @ +20°C	Rated Current Amp	Digi-Key Part No.	Price Each 1	10	J.W.Miller Part No.
5800 Series						
3.9	.019	1.28	M5801-ND	1.88	1.76	5800-3R9
4.7	.022	1.28	M5802-ND	1.88	1.76	5800-4R7
5.6	.024	1.28	M5803-ND	1.88	1.76	5800-5R6
6.8	.026	1.28	M5804-ND	1.88	1.76	5800-6R8
8.2	.028	1.28	M5805-ND	1.88	1.76	5800-8R2
10	.033	1.28	M5806-ND	1.88	1.76	5800-100
12	.037	1.28	M5807-ND	1.88	1.76	5800-120
15	.040	1.28	M5808-ND	1.88	1.76	5800-150
18	.044	1.28	M5809-ND	1.88	1.76	5800-180
22	.050	1.28	M5810-ND	1.88	1.76	5800-220
27	.058	1.28	M5811-ND	1.88	1.76	5800-270
33	.075	1.008	M5812-ND	1.88	1.76	5800-330
39	.094	0.804	M5813-ND	1.88	1.76	5800-390
47	.109	0.804	M5814-ND	1.88	1.76	5800-470
56	.140	0.804	M5815-ND	1.88	1.76	5800-560
68	.145	0.804	M5816-ND	1.88	1.76	5800-680
82	.152	0.804	M5817-ND	1.88	1.76	5800-820
100	.208	0.632	M5818-ND	1.88	1.76	5800-101
120	.283	0.508	M5819-ND	1.88	1.76	5800-121
150	.340	0.508	M5820-ND	1.88	1.76	5800-151
180	.362	0.508	M5821-ND	1.88	1.76	5800-181
220	.430	0.508	M5822-ND	1.88	1.76	5800-221
270	.557	0.400	M5823-ND	1.88	1.76	5800-271
330	.665	0.400	M5824-ND	1.88	1.76	5800-331
390	.772	0.400	M5825-ND	1.88	1.76	5800-391
470	1.15	0.315	M5826-ND	1.88	1.76	5800-471
560	1.27	0.315	M5827-ND	1.88	1.76	5800-561
680	1.61	0.250	M5828-ND	1.88	1.76	5800-681
820	1.96	0.200	M5829-ND	1.88	1.76	5800-821
1000	2.30	0.200	M5830-ND	1.88	1.76	5800-102
1200	2.65	0.200	M5831-ND	1.88	1.76	5800-122
1500	3.45	0.158	M5832-ND	1.88	1.76	5800-152
1800	4.03	0.158	M5833-ND	1.88	1.76	5800-182
2200	4.48	0.158	M5834-ND	1.88	1.76	5800-222
2700	5.90	0.125	M5835-ND	1.88	1.76	5800-272
3300	6.56	0.125	M5836-ND	1.88	1.76	5800-332
3900	8.63	0.100	M5837-ND	1.88	1.76	5800-392
4700	10.5	0.100	M5838-ND	1.88	1.76	5800-472
5600	13.9	0.082	M5839-ND	1.88	1.76	5800-562
6800	16.3	0.082	M5840-ND	1.88	1.76	5800-682
8200	20.8	0.065	M5841-ND	1.88	1.76	5800-822
10000	26.4	0.050	M5842-ND	1.88	1.76	5800-103
12000	29.9	0.050	M5843-ND	1.88	1.76	5800-123
15000	42.5	0.039	M5844-ND	1.88	1.76	5800-153
18000	48.3	0.039	M5845-ND	1.88	1.76	5800-183
5900 Series						
3.9	.007	4.0	M5901-ND	3.82	3.57	5900-3R9
4.7	.008	4.0	M5902-ND	3.82	3.57	5900-4R7
10	.017	4.0	M5906-ND	3.82	3.57	5900-100
22	.026	4.0	M5910-ND	3.82	3.57	5900-220
33	.032	4.0	M5912-ND	3.82	3.57	5900-330
47	.035	4.0	M5914-ND	3.82	3.57	5900-470
56	.037	3.2	M5915-ND	3.82	3.57	5900-560
68	.047	2.5	M5916-ND	3.82	3.57	5900-680
82	.060	2.0	M5917-ND	3.82	3.57	5900-820
100	.090	1.6	M5918-ND	3.82	3.57	5900-101
150	.129	1.6	M5920-ND	3.82	3.57	5900-151
180	.150	1.6	M5921-ND	3.82	3.57	5900-181
220	.162	1.6	M5922-ND	3.82	3.57	5900-221
330	.212	1.6	M5924-ND	3.82	3.57	5900-331
390	.281	1.6	M5925-ND	3.82	3.57	5900-391
470	.380	1.2	M5926-ND	3.82	3.57	5900-471
560	.420	1.0	M5927-ND	3.82	3.57	5900-561
680	.548	1.0	M5928-ND	3.82	3.57	5900-681
1000	.844	0.8	M5930-ND	3.82	3.57	5900-102
2200	2.00	0.5	M5934-ND	3.82	3.57	5900-222
3900	2.75	0.4	M5937-ND	3.82	3.57	5900-392
4700	3.19	0.4	M5938-ND	3.82	3.57	5900-472
10000	7.30	0.250	M5942-ND	5.88	5.49	5900-103
100000	89.7	0.065	M5954-ND	5.88	5.49	5900-104

J.W. Miller
MAGNETICS

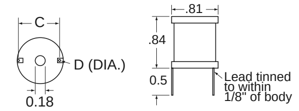
High Current RF Chokes

1110, 1120, 1130 and 1140 Series

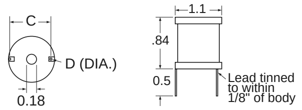
1110 Series



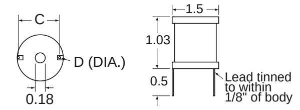
1120 Series



1130 Series



1140 Series



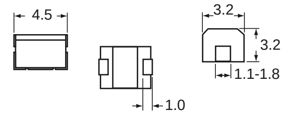
L (uH) ±20% @ 1KHz	DCR (Ω) Max.	I,dc (A)	Dim. C Approx.	Dim. D Nom.	Digi-Key Part No.	Price Each			J.W. Miller Part No.
						1	10	25	
RF Chokes 1110 Series 20%									
1.00	0.00	9.00	0.55	0.05	M6208-ND	2.90	2.71	2.61	1110-1R0M
1.20	0.00	9.00	0.55	0.05	M6209-ND	2.90	2.71	2.61	1110-1R2M
1.50	0.00	9.00	0.55	0.05	M6210-ND	2.90	2.71	2.61	1110-1R5M
1.80	0.00	9.00	0.55	0.05	M6211-ND	2.90	2.71	2.61	1110-1R8M
2.20	0.01	9.00	0.55	0.05	M6212-ND	2.90	2.71	2.61	1110-2R2M
2.70	0.01	9.00	0.55	0.05	M6213-ND	2.90	2.71	2.61	1110-2R7M
3.30	0.01	9.00	0.55	0.05	M6214-ND	2.90	2.71	2.61	1110-3R3M
3.90	0.01	9.00	0.55	0.05	M6215-ND	2.90	2.71	2.61	1110-3R9M
4.70	0.01	9.00	0.55	0.05	M6216-ND	2.90	2.71	2.61	1110-4R7M
5.60	0.01	9.00	0.55	0.05	M6217-ND	2.90	2.71	2.61	1110-5R6M
6.80	0.01	9.00	0.55	0.05	M6218-ND	2.90	2.71	2.61	1110-6R8M
8.20	0.01	9.00	0.55	0.05	M6219-ND	2.90	2.71	2.61	1110-8R2M
RF Chokes 1110 Series 10%									
10.00	0.01	9.00	0.55	0.05	M6220-ND	2.90	2.71	2.61	1110-100K
12.00	0.01	9.00	0.55	0.05	M6221-ND	2.90	2.71	2.61	1110-120K
15.00	0.02	7.20	0.53	0.05	M6222-ND	2.90	2.71	2.61	1110-150K
18.00	0.02	7.20	0.53	0.05	M6223-ND	2.90	2.71	2.61	1110-180K
22.00	0.02	5.50	0.53	0.05	M6224-ND	2.90	2.71	2.61	1110-220K
27.00	0.03	4.50	0.53	0.04	M6225-ND	2.90	2.71	2.61	1110-270K
33.00	0.04	4.00	0.53	0.04	M6226-ND	2.90	2.71	2.61	1110-330K
39.00	0.05	4.00	0.53	0.04	M6227-ND	2.90	2.71	2.61	1110-390K
47.00	0.06	2.80	0.53	0.04	M6228-ND	2.90	2.71	2.61	1110-470K
56.00	0.07	2.80	0.53	0.04	M6229-ND	2.90	2.71	2.61	1110-560K
68.00	0.08	2.80	0.50	0.03	M6230-ND	2.90	2.71	2.61	1110-680K
82.00	0.08	2.80	0.50	0.03	M6231-ND	2.90	2.71	2.61	1110-820K
100.00	0.10	2.80	0.50	0.03	M6232-ND	2.90	2.71	2.61	1110-101K
120.00	0.13	2.00	0.50	0.03	M6233-ND	2.90	2.71	2.61	1110-121K
150.00	0.18	1.60	0.50	0.03	M6234-ND	2.90	2.71	2.61	1110-151K
180.00	0.22	1.60	0.50	0.03	M6235-ND	2.90	2.71	2.61	1110-181K
220.00	0.24	1.60	0.50	0.03	M6236-ND	2.90	2.71	2.61	1110-221K
270.00	0.30	1.60	0.47	0.02	M6237-ND	2.90	2.71	2.61	1110-271K
330.00	0.34	1.30	0.47	0.02	M6238-ND	2.90	2.71	2.61	1110-331K
390.00	0.46	1.00	0.47	0.02	M6239-ND	2.90	2.71	2.61	1110-391K
470.00	0.64	0.80	0.47	0.02	M6240-ND	2.90	2.71	2.61	1110-471K
560.00	0.70	0.80	0.47	0.02	M6241-ND	2.90	2.71	2.61	1110-561K
RF Chokes 1120 Series 20%									
1.00	0.00	11.40	0.63	0.07	M6242-ND	3.33	3.10	3.00	1120-1R0M
1.20	0.00	11.40	0.63	0.07	M6243-ND	3.33	3.10	3.00	1120-1R2M
1.50	0.00	11.40	0.63	0.07	M6244-ND	3.33	3.10	3.00	1120-1R5M
1.80	0.00	11.40	0.63	0.07	M6245-ND	3.33	3.10	3.00	1120-1R8M
2.20	0.00	11.40	0.63	0.07	M6246-ND	3.33	3.10	3.00	1120-2R2M
2.70	0.01	11.40	0.63	0.06	M6247-ND	3.33	3.10	3.00	1120-2R7M
3.30	0.01	11.40	0.63	0.06	M6248-ND	3.33	3.10	3.00	1120-3R3M
3.90	0.01	11.40	0.63	0.06	M6249-ND	3.33	3.10	3.00	1120-3R9M
4.70	0.01	11.40	0.63	0.06	M6250-ND	3.33	3.10	3.00	1120-4R7M
5.60	0.01	11.40	0.63	0.06	M6251-ND	3.33	3.10	3.00	1120-5R6M
6.80	0.01	11.40	0.63	0.06	M6252-ND	3.33	3.10	3.00	1120-6R8M
8.20	0.01	11.40	0.63	0.06	M6253-ND	3.33	3.10	3.00	1120-8R2M
RF Chokes 1120 Series 10%									
10.00	0.01	11.40	0.63	0.06	M6254-ND	3.33	3.10	3.00	1120-100K
12.00	0.01	11.40	0.63	0.06	M6255-ND	3.33	3.10	3.00	1120-120K
15.00	0.01	9.00	0.63	0.06	M6256-ND	3.33	3.10	3.00	1120-150K
18.00	0.02	7.20	0.63	0.05	M6257-ND	3.33	3.10	3.00	1120-180K
22.00	0.02	7.20	0.63	0.05	M6258-ND	3.33	3.10	3.00	1120-220K
27.00	0.03	5.50	0.63	0.05	M6259-ND	3.33	3.10	3.00	1120-270K
33.00	0.03	5.50	0.60	0.05	M6260-ND	3.33	3.10	3.00	1120-330K
39.00	0.03	5.50	0.60	0.05	M6261-ND	3.33	3.10	3.00	1120-390K
47.00	0.04	5.50	0.62	0.05	M6262-ND	3.33	3.10	3.00	1120-470K
56.00	0.04	5.50	0.62	0.04	M6263-ND	3.33	3.10	3.00	1120-560K
68.00	0.05	4.80	0.62	0.04	M6264-ND	3.33	3.10	3.00	1120-680K
82.00	0.06	4.80	0.62	0.04	M6265-ND	3.33	3.10	3.00	1120-820K
100.00	0.08	4.00	0.62	0.04	M6266-ND	3.33	3.10	3.00	1120-101K
120.00	0.09	4.00	0.62	0.04	M6267-ND	3.33	3.10	3.00	1120-121K
150.00	0.10	4.00	0.62	0.03	M6268-ND	3.33	3.10	3.00	1120-151K
180.00	0.11	4.00	0.62	0.03	M6269-ND	3.33	3.10	3.00	1120-181K
220.00	0.15	2.80	0.62	0.03	M6270-ND	3.33	3.10	3.00	1120-221K
270.00	0.21	2.00	0.60	0.03	M6271-ND	3.33	3.10	3.00	1120-271K
330.00	0.31	1.60	0.60	0.03	M6272-ND	3.33	3.10	3.00	1120-331K
390.00	0.32	1.60	0.60	0.03	M6273-ND	3.33	3.10	3.00	1120-391K
470.00	0.36	1.60	0.60	0.03	M6274-ND	3.33	3.10	3.00	1120-471K
560.00	0.39	1.60	0.60	0.03	M6275-ND	3.33	3.10	3.00	1120-561K
680.00	0.43	1.60	0.60	0.03	M6276-ND	3.33	3.10	3.00	1120-681K
820.00	0.59	1.30	0.60	0.02	M6277-ND	3.33	3.10	3.00	1120-821K
1000.00	0.82	1.00	0.60	0.02	M6278-ND	3.33	3.10	3.00	1120-102K
1200.00	1.14	0.80	0.60	0.02	M6279-ND	3.33	3.10	3.00	1120-122K
1500.00	1.26	0.80	0.60	0.02	M6280-ND	3.33	3.10	3.00	1120-152K
1800.00	1.39	0.80	0.60	0.02	M6281-ND	3.33	3.10	3.00	1120-182K
2200.00	1.54	0.80	0.60	0.02	M6282-ND	3.33	3.10	3.00	1120-222K
RF Chokes 1130 Series 20%									
1.00	0.00	21.00	0.80	0.08	M6283-ND	5.13	4.78	4.62	1130-1R0M
1.20	0.00	21.00	0.80	0.08	M6284-ND	5.13	4.78	4.62	1130-1R2M
1.50	0.00	21.00	0.80	0.08	M6285-ND	5.13	4.78	4.62	1130-1R5M
1.80	0.00	21.00	0.80	0.08	M6286-ND	5.13	4.78	4.62	1130-1R8M
2.20	0.00	21.00	0.80	0.08	M6287-ND	5.13	4.78	4.62	1130-2R2M
2.70	0.00	21.00	0.80	0.08	M6288-ND	5.13	4.78	4.62	1130-2R7M
3.30	0.00	21.00	0.80	0.08	M6289-ND	5.13	4.78	4.62	1130-3R3M
3.90	0.00	21.00	0.80	0.08	M6290-ND	5.13	4.78	4.62	1130-3R9M
4.70	0.00	21.00	0.80	0.08	M6291-ND	5.13	4.78	4.62	1130-4R7M
5.60	0.00	21.00	0.82	0.08	M6292-ND	5.13	4.78	4.62	1130-5R6M
6.80	0.00	21.00	0.82	0.08	M6293-ND	5.13	4.78	4.62	1130-6R8M
8.20	0.00	21.00	0.82	0.08	M6294-ND	5.13	4.78	4.62	1130-8R2M
RF Chokes 1130 Series 10%									
10.00	0.01	17.00	0.82	0.08	M6295-ND	5.13	4.78	4.62	1130-100K
12.00	0.01	13.50	0.80	0.07	M6296-ND	5.13	4.78	4.62	1130-120K
15.00	0.01	13.50	0.80	0.07	M6297-ND	5.13	4.78	4.62	1130-150K
18.00	0.01	13.50	0.80	0.07	M6298-ND	5.13	4.78	4.62	1130-180K
22.00	0.01	13.50	0.79	0.06	M6299-ND	5.13	4.78	4.62	1130-220K
27.00	0.01	13.50	0.79	0.06	M6300-ND	5.13	4.78	4.62	1130-270K
33.00	0.02	13.50	0.79	0.06	M6301-ND	5.13	4.78	4.62	1130-330K
39.00	0.02	11.40	0.79	0.06	M6302-ND	5.13	4.78	4.62	1130-390K
47.00	0.02	9.00	0.79	0.06	M6303-ND	5.13	4.78	4.62	1130-470K
56.00	0.03	9.00	0.79	0.06	M6304-ND	5.13	4.78	4.62	1130-560K
68.00	0.03	9.00	0.79	0.06	M6305-ND	5.13	4.78	4.62	1130-680K
82.00	0.03	9.00	0.79	0.05	M6306-ND	5.13	4.78	4.62	1130-820K
100.00	0.03	9.00	0.79	0.05	M6307-ND	5.13	4.78	4.62	1130-101K
120.00	0.05	7.20	0.79	0.05	M6308-ND	5.13	4.78	4.62	1130-121K
150.00	0.06	5.50	0.77	0.05	M6309-ND	5.13	4.78	4.62	1130-151K
180.00	0.07	5.50	0.77	0.05	M6310-ND	5.13	4.78	4.62	1130-181K
220.00	0.08	5.50	0.77	0.04	M6311-ND	5.13	4.78	4.62	1130-221K
270.00	0.11	4.50	0.77	0.04	M6312-ND	5.13	4.78	4.62	1130-271K
330.00	0.12	4.50	0.77	0.04	M6313-ND	5.13	4.78	4.62	1130-331K
390.00	0.17	4.00	0.77	0.04	M6314-ND	5.13	4.78	4.62	1130-391K
470.00	0.19	4.00	0.77	0.04	M6315-ND	5.13	4.78	4.62	1130-471K
560.00	0.21	4.00	0.77	0.03	M6316-ND	5.13	4.78	4.62	1130-561K
680.00	0.26	2.80	0.77	0.03	M6317-ND	5.13	4.78	4.62	1130-681K
820.00	0.29	2.80	0.77	0.03	M6318-ND	5.13	4.78	4.62	1130-821K
1000.00	0.43	2.00	0.75	0.03	M6319-ND	5.13	4.78	4.62	1130-102K
1200.00	0.43	2.00	0.75	0.03	M6320-ND	5.13	4.78	4.62	1130-122K
1500.00	0.52	2.00	0.75	0.03	M6321-ND	5.13	4.78	4.62	1130-152K
1800.00	0.71	1.60	0.75	0.03	M6322-ND	5.13	4.78	4.62	1130-182K
2200.00	1.02	1.30	0.75	0.03	M6323-ND	5.13	4.78	4.62	1130-222K
2700.00	1.14	1.30	0.75	0.02	M6324-ND	5.13	4.78	4.62	1130-272K
3300.00	1.27	1.30	0.75	0.02	M6325-ND	5.13	4.78	4.62	1130-332K
3900.00	1.67	1.00	0.75	0.02	M6326-ND	5.13	4.78	4.62	1130-392K
4700.00	1.86	1.00	0.75	0.02	M6327-ND	5.13	4.78	4.62	1130-472K
RF Chokes 1140 Series 20%									
1.80	0.00	27.00	1.11	0.08	M6328-ND	10.63	9.91	9.57	1140-1R8M
2.20	0.00	27.00	1.11	0.08	M6329-ND	10.63	9.91	9.57	1140-2R2M
2.70	0.00	27.00	1.11	0.08	M6330-ND	10.63	9.91	9.57	1140-2R7M
3.30	0.00	27.00	1.11	0.08	M6331-ND	10.63	9.91	9.57	1140-3R3M
3.90	0.00	27.00	1.11	0.08	M6332-ND	10.63	9.91	9.57	1140-3R9M
4.70	0.00	27.00	1.11	0.08	M6333-ND	10.63	9.91	9.57	1140-4R7M
5.60	0.00	27.00	1.11	0.08	M6334-ND	10.63	9.91	9.57	1140-5R6M
6.80	0.00	27.00	1.15	0.08	M6335-ND	10.63	9.91	9.57	1140-6R8M
8.20	0.00	27.00	1.15	0.08	M6336-ND	10.63	9.91	9.57	1140-8R2M
RF Chokes 1140 Series 10%									
10.00	0.01	27.00	1.15	0.08	M6337-ND	10.63	9.91	9.57	1140-100K
12.00	0.01	27.00	1.15	0.08	M6338-ND	10.63	9.91	9.57	1140-120K
15.00	0.01	27.00	1.15	0.08	M6339-ND	10.63	9.91	9.57	1140-150K
18.00	0.01	27.00	1.15	0.08	M6340-ND	10.63	9.91	9.57	1140-180K
22.00	0.01	21.00	1.15	0.08	M6341-ND	10.63	9.91	9.57	1140-220K
27.00	0.01	21.00	1.15	0.08	M6342-ND	10.63	9.91	9.57	1140-270K
33.00	0.01	21.00	1.15	0.07	M6343-ND	10.63	9.91	9.57	1140-330K
39.00	0.01	21.00	1.15	0.07	M6344-ND	10.63	9.91	9.57	1140-390K
47.00	0.02	14.40	1.15	0.07	M6345-ND	10.63	9.91	9.57	1140-470K
56.00	0.02	14.40	1.15	0.06	M6346-ND	10.63	9.91	9.57	1140-560K
68.00	0.02	14.40	1.15	0.06	M6347-ND	10.63	9.91	9.57	1140-680K
82.00	0.02	14.40	1.15	0.06	M6348-ND	10.63	9.91	9.57	1140-820K
100.00	0.03	14.40	1.15	0.06	M6349-ND	10.63	9.91	9.57	1140-101K
120.00	0.03	14.40	1.15	0.06	M6350-ND	10.63	9.91	9.57	1140-121K
150.00	0.04	11.40	1.15	0.06	M6351-ND	10.63	9.91	9.57	1140-151K
180.00	0.05	11.40	1.15	0.06	M6352-ND	10.63	9.91	9.57	1140-181K
220.00	0.05	11.40	1.15	0.05	M6353-ND	10.63	9.91	9.57	1140-221K
270.00	0.06	11.40	1.15	0.05	M6354-ND	10.63	9.91	9.57	1140-271K
330.00	0.07	11.40	1.15	0.05	M6355-ND	10.63	9.91	9.57	1140-331K
390.00	0.08	9.00	1.15	0.05	M6356-ND	10.63	9.91	9.57	1140-391K
470.00	0.11	7.20	1.15	0.05	M6357-ND	10.63	9.91	9.57	1140-471K
560.00	0.13	7.20	1.15	0.04	M6358-ND	10.63	9.91	9.57	1140-561K
680.00	0.14	7.20	1.15	0.04	M6359-ND	10.63	9.91	9.57	1140-681K
820.00	0.15	7.20	1.15	0.04	M6360-ND	10.63	9.91	9.57	1140-821K
1000.00	0.22	5.50	1.15	0.04	M6361-ND	10.63	9.91	9.57	1140-102K
1200.00	0.23	5.50	1.14	0.04	M6362-ND	10.63	9.91	9.57	1140-122K
1500.00	0.32	4.50	1.14	0.04	M6363-ND	10.63	9.91	9.57	1140-152K
1800.00	0.36	4.50	1.14	0.04	M6364-ND	10.63	9.91	9.57	1140-182K
2200.00	0.49	4.00	1.10	0.03	M6365-ND	10.63	9.91	9.57	1140-222K
2700.00	0.56	4.00	1.12	0.03	M6366-ND	10.63	9.91	9.57	1140-272K
3300.00	0.77	2.80	1.10	0.03	M6367-ND	10.63	9.91	9.57	1140-332K
3900.00	0.85	2.80	1.10	0.03	M6368-ND	10.63	9.91	9.57	1140-392K
4700.00	1.14	2.00	1.12	0.03	M6369-ND	10.63	9.91	9.57	1140-472K
5600.00	1.60	2.00	1.09	0.03	M6370-ND	10.63	9.91	9.57	1140-562K
6800.00	1.76	1.60	1.12	0.03	M6371-ND	10.63	9.91	9.57	1140-682K
8200.00	1.95	1.60	1.09	0.02	M6372-ND	10.63	9.91	9.57	1140-822K
10,000.00	2.76	1.30	1.11	0.02	M6373-ND	10.63	9.91	9.57	1140-103K
12,000.00	3.04	1.30	1.08	0.02	M6374-ND	10.63	9.91	9.57	1140-123K
15,000.00	3.39	1.30	1.10	0.02	M6375-ND	10.63	9.91	9.57	1140-153K

J.W.Miller
MAGNETICS

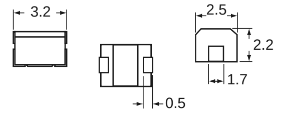
Surface Mount Chip Inductors

PM1812 Series and PM1210 Series

PM1812 Series



PM1210 Series



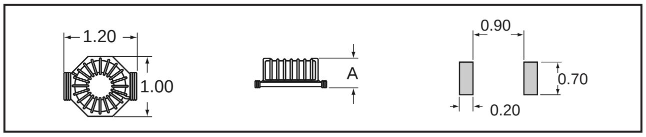
L (uH) ±10%	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (Ω) Max.	I,dc (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Price	J.W. Miller Part No.
PM1812 Series 10%													
0.10	28.00	25.20	300.00	0.18	800.00	M6032CT-ND	.70	.63	.53	M6032TR-ND	500	105.00	PM1812-R10K
0.12	30.00	25.20	280.00	0.20	770.00	M6033CT-ND	.70	.63	.53	M6033TR-ND	500	105.00	PM1812-R12K
0.15	30.00	25.20	250.00	0.22	730.00	M6034CT-ND	.70	.63	.53	M6034TR-ND	500	105.00	PM1812-R15K
0.18	30.00	25.20	220.00	0.24	700.00	M6035CT-ND	.70	.63	.53	M6035TR-ND	500	105.00	PM1812-R18K
0.22	30.00	25.20	200.00	0.25	665.00	M6036CT-ND	.70	.63	.53	M6036TR-ND	500	105.00	PM1812-R22K
0.27	30.00	25.20	180.00	0.26	635.00	M6037CT-ND	.70	.63	.53	M6037TR-ND	500	105.00	PM1812-R27K
0.33	30.00	25.20	165.00	0.28	605.00	M6038CT-ND	.70	.63	.53	M6038TR-ND	500	105.00	PM1812-R33K
0.39	30.00	25.20	150.00	0.30	575.00	M6039CT-ND	.70	.63	.53	M6039TR-ND	500	105.00	PM1812-R39K
0.47	30.00	25.20	145.00	0.32	545.00	M6040CT-ND	.70	.63	.53	M6040TR-ND	500	105.00	PM1812-R47K
0.56	30.00	25.20	140.00	0.36	520.00	M6041CT-ND	.70	.63	.53	M6041TR-ND	500	105.00	PM1812-R56K
0.68	30.00	25.20	135.00	0.40	500.00	M6042CT-ND	.70	.63	.53	M6042TR-ND	500	105.00	PM1812-R68K
0.82	30.00	25.20	130.00	0.45	475.00	M6043CT-ND	.70	.63	.53	M6043TR-ND	500	105.00	PM1812-R82K
PM1812 Series 5%													
1.00	50.00	7.96	100.00	0.50	450.00	M6044CT-ND	.70	.63	.53	M6044TR-ND	500	105.00	PM1812-1R0J
1.20	50.00	7.96	80.00	0.55	430.00	M6045CT-ND	.70	.63	.53	M6045TR-ND	500	105.00	PM1812-1R2J
1.50	50.00	7.96	70.00	0.60	410.00	M6046CT-ND	.70	.63	.53	M6046TR-ND	500	105.00	PM1812-1R5J
1.80	50.00	7.96	60.00	0.65	390.00	M6047CT-ND	.70	.63	.53	M6047TR-ND	500	105.00	PM1812-1R8J
2.20	50.00	7.96	55.00	0.70	380.00	M6048CT-ND	.70	.63	.53	M6048TR-ND	500	105.00	PM1812-2R2J
2.70	50.00	7.96	50.00	0.75	370.00	M6049CT-ND	.70	.63	.53	M6049TR-ND	500	105.00	PM1812-2R7J
3.30	50.00	7.96	45.00	0.80	355.00	M6050CT-ND	.70	.63	.53	M6050TR-ND	500	105.00	PM1812-3R3J
3.90	50.00	7.96	40.00	0.90	330.00	M6051CT-ND	.70	.63	.53	M6051TR-ND	500	105.00	PM1812-3R9J
4.70	50.00	7.96	35.00	1.00	315.00	M6052CT-ND	.70	.63	.53	M6052TR-ND	500	105.00	PM1812-4R7J
5.60	50.00	7.96	33.00	1.10	300.00	M6053CT-ND	.70	.63	.53	M6053TR-ND	500	105.00	PM1812-5R6J
6.80	50.00	7.96	27.00	1.20	285.00	M6054CT-ND	.70	.63	.53	M6054TR-ND	500	105.00	PM1812-6R8J
8.20	50.00	7.96	25.00	1.40	270.00	M6055CT-ND	.70	.63	.53	M6055TR-ND	500	105.00	PM1812-8R2J
10.00	50.00	2.52	20.00	1.60	250.00	M6056CT-ND	.70	.63	.53	M6056TR-ND	500	105.00	PM1812-100J
12.00	50.00	2.52	18.00	2.00	225.00	M6057CT-ND	.70	.63	.53	M6057TR-ND	500	105.00	PM1812-120J
15.00	50.00	2.52	17.00	2.50	200.00	M6058CT-ND	.70	.63	.53	M6058TR-ND	500	105.00	PM1812-150J
18.00	50.00	2.52	15.00	2.80	190.00	M6059CT-ND	.70	.63	.53	M6059TR-ND	500	105.00	PM1812-180J
22.00	50.00	2.52	13.00	3.20	180.00	M6060CT-ND	.70	.63	.53	M6060TR-ND	500	105.00	PM1812-220J
27.00	50.00	2.52	12.00	3.60	170.00	M6061CT-ND	.70	.63	.53	M6061TR-ND	500	105.00	PM1812-270J
33.00	50.00	2.52	11.00	4.00	160.00	M6062CT-ND	.70	.63	.53	M6062TR-ND	500	105.00	PM1812-330J
39.00	50.00	2.52	10.00	4.50	150.00	M6063CT-ND	.70	.63	.53	M6063TR-ND	500	105.00	PM1812-390J
47.00	50.00	2.52	10.00	5.00	140.00	M6064CT-ND	.70	.63	.53	M6064TR-ND	500	105.00	PM1812-470J
56.00	50.00	2.52	9.00	5.50	135.00	M6065CT-ND	.70	.63	.53	M6065TR-ND	500	105.00	PM1812-560J
68.00	50.00	2.52	9.00	6.00	130.00	M6066CT-ND	.70	.63	.53	M6066TR-ND	500	105.00	PM1812-680J
82.00	50.00	2.52	8.00	7.00	120.00	M6067CT-ND	.70	.63	.53	M6067TR-ND	500	105.00	PM1812-820J
100.00	40.00	0.796	7.00	8.00	110.00	M6068CT-ND	.70	.63	.53	M6068TR-ND	500	105.00	PM1812-101J
120.00	40.00	0.796	6.00	8.00	110.00	M6069CT-ND	.70	.63	.53	M6069TR-ND	500	105.00	PM1812-121J
150.00	40.00	0.796	5.00	9.00	105.00	M6070CT-ND	.70	.63	.53	M6070TR-ND	500	105.00	PM1812-151J
180.00	40.00	0.796	5.00	9.50	102.00	M6071CT-ND	.70	.63	.53	M6071TR-ND	500	105.00	PM1812-181J
220.00	40.00	0.796	4.00	10.00	100.00	M6072CT-ND	.70	.63	.53	M6072TR-ND	500	105.00	PM1812-221J
270.00	30.00	0.796	3.00	12.00	92.00	M6073CT-ND	.70	.63	.53	M6073TR-ND	500	105.00	PM1812-271J
330.00	30.00	0.796	3.00	14.00	85.00	M6074CT-ND	.70	.63	.53	M6074TR-ND	500	105.00	PM1812-331J
390.00	30.00	0.796	3.00	18.00	80.00	M6075CT-ND	.70	.63	.53	M6075TR-ND	500	105.00	PM1812-391J
470.00	30.00	0.796	3.00	26.00	62.00	M6076CT-ND	.70	.63	.53	M6076TR-ND	500	105.00	PM1812-471J
560.00	30.00	0.796	2.00	30.00	50.00	M6077CT-ND	.70	.63	.53	M6077TR-ND	500	105.00	PM1812-561J
680.00	30.00	0.796	2.00	30.00	50.00	M6078CT-ND	.70	.63	.53	M6078TR-ND	500	105.00	PM1812-681J
820.00	30.00	0.796	2.00	35.00	30.00	M6079CT-ND	.70	.63	.53	M6079TR-ND	500	105.00	PM1812-821J
1000.00	30.00	0.796	2.00	40.00	30.00	M6080CT-ND	.70	.63	.53	M6080TR-ND	500	105.00	PM1812-102J
PM1210 Series 10%													
0.01	15.00	100.00	2500.00	0.13	450.00	M6081CT-ND	.67	.61	.51	M6081TR-ND	2,000	201.00/M	PM1210-R010K
0.01	17.00	100.00	2300.00	0.14	450.00	M6082CT-ND	.67	.61	.51	M6082TR-ND	2,000	201.00/M	PM1210-R012K
0.02	19.00	100.00	2100.00	0.16	450.00	M6083CT-ND	.67	.61	.51	M6083TR-ND	2,000	201.00/M	PM1210-R015K
0.02	21.00	100.00	1900.00	0.18	450.00	M6084CT-ND	.67	.61	.51	M6084TR-ND	2,000	201.00/M	PM1210-R018K
0.02	23.00	100.00	1700.00	0.20	450.00	M6085CT-ND	.67	.61	.51	M6085TR-ND	2,000	201.00/M	PM1210-R022K
0.03	23.00	100.00	1500.00	0.22	450.00	M6086CT-ND	.67	.61	.51	M6086TR-ND	2,000	201.00/M	PM1210-R027K
PM1210 Series 5%													
0.03	25.00	100.00	1400.00	0.24	450.00	M6087CT-ND	.67	.61	.51	M6087TR-ND	2,000	201.00/M	PM1210-R033J
0.04	25.00	100.00	1300.00	0.27	450.00	M6088CT-ND	.67	.61	.51	M6088TR-ND	2,000	201.00/M	PM1210-R039J
0.05	26.00	100.00	1200.00	0.30	450.00	M6089CT-ND	.67	.61	.51	M6089TR-ND	2,000	201.00/M	PM1210-R047J
0.06	26.00	100.00	1100.00	0.33	450.00	M6090CT-ND	.67	.61	.51	M6090TR-ND	2,000	201.00/M	PM1210-R056J
0.07	27.00	100.00	1000.00	0.36	450.00	M6091CT-ND	.67	.61	.51	M6091TR-ND	2,000	201.00/M	PM1210-R068J
0.08	27.00	100.00	900.00	0.40	450.00	M6092CT-ND	.67	.61	.51	M6092TR-ND	2,000	201.00/M	PM1210-R082J
0.10	28.00	100.00	700.00	0.44	450.00	M6093CT-ND	.67	.61	.51	M6093TR-ND	2,000	201.00/M	PM1210-R10J
0.12	28.00	25.20	500.00	0.22	450.00	M6094CT-ND	.67	.61	.51	M6094TR-ND	2,000	201.00/M	PM1210-R12J
0.15	28.00	25.20	450.00	0.25	450.00	M6095CT-ND	.67	.61	.51	M6095TR-ND	2,000	201.00/M	PM1210-R15J
0.18	28.00	25.20	400.00	0.28	450.00	M6096CT-ND	.67	.61	.51	M6096TR-ND	2,000	201.00/M	PM1210-R18J
0.22	28.00	25.20	350.00	0.32	450.00	M6097CT-ND	.67	.61	.51	M6097TR-ND	2,000	201.00/M	PM1210-R22J
0.27	28.00	25.20	320.00	0.36	450.00	M6098CT-ND	.67	.61	.51	M6098TR-ND	2,000	201.00/M	PM1210-R27J
0.33	28.00	25.20	300.00	0.40	450.00	M6099CT-ND	.67	.61	.51	M6099TR-ND	2,000	201.00/M	PM1210-R33J
0.39	28.00	25.20	250.00	0.45	450.00	M6100CT-ND	.67	.61	.51	M6100TR-ND	2,000	201.00/M	PM1210-R39J
0.47	28.00	25.20	220.00	0.50	450.00	M6101CT-ND	.67	.61	.51	M6101TR-ND	2,000	201.00/M	PM1210-R47J
0.56	28.00	25.20	180.00	0.55	450.00	M6102CT-ND	.67	.61	.51	M6102TR-ND	2,000	201.00/M	PM1210-R56J
0.68	28.00	25.20	160.00	0.60	450.00	M6103CT-ND	.67	.61	.51	M6103TR-ND	2,000	201.00/M	PM1210-R68J
0.82	28.00	25.20	140.00	0.65	450.00	M6104CT-ND	.67	.61	.51	M6104TR-ND	2,000	201.00/M	PM1210-R82J
1.00	28.00	7.96	120.00	0.70	400.00	M6105CT-ND	.67	.61	.51	M6105TR-ND	2,000	201.00/M	PM1210-1R0J
1.20	28.00	7.96	100.00	0.75	390.00	M6106CT-ND	.67	.61	.51	M6106TR-ND	2,000	201.00/M	PM1210-1R2J
1.50	28.00	7.96	85.00	0.85	370.00	M6107CT-ND	.67	.61	.51	M6107TR-ND	2,000	201.00/M	PM1210-1R5J
1.80	28.00	7.96	80.00	0.90	350.00	M6108CT-ND	.67	.61	.51	M6108TR-ND	2,000	201.00/M	PM1210-1R8J

(Continued)

L (uH) ±10%	Q Min.	Test Freq. (MHz)	SRF (MHz) Min.	DCR (Ω) Max.	I,dc (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Price	J.W. Miller Part No.
PM1210 Series 5%													
2.20	30.00	7.96	75.00	1.00	320.00	M6109CT-ND	.67	.61	.51	M6109TR-ND	2,000	201.00/M	PM1210-2R2J
2.70	30.00	7.96	70.00	1.10	290.00	M6110CT-ND	.67	.61	.51	M6110TR-ND	2,000	201.00/M	PM1210-2R7J
3.30	30.00	7.96	60.00	1.20	260.00	M6111CT-ND	.67	.61	.51	M6111TR-ND	2,000	201.00/M	PM1210-3R3J
3.90	30.00	7.96	55.00	1.30	250.00	M6112CT-ND	.67	.61	.51	M6112TR-ND	2,000	201.00/M	PM1210-3R9J
4.70	30.00	7.96	50.00	1.70	220.00	M6113CT-ND	.67	.61	.51	M6113TR-ND	2,000	201.00/M	PM1210-4R7J
5.60	30.00	7.96	47.00	1.80	200.00	M6114CT-ND	.67	.61	.51	M6114TR-ND	2,000	201.00/M	PM1210-5R6J
6.80	30.00	7.96	43.00	2.00	180.00	M6115CT-ND	.67	.61	.51	M6115TR-ND	2,000	201.00/M	PM1210-6R8J
8.20	30.00	7.96	40.00	2.30	170.00	M6116CT-ND	.67	.61	.51	M6116TR-ND	2,000	201.00/M	PM1210-8R2J
10.00	30.00	2.52	36.00	2.50	150.00	M6117CT-ND	.67	.61	.51	M6117TR-ND	2,000	201.00/M	PM1210-100J
12.00	30.00	2.52	33.00	2.80	140.00	M6118CT-ND	.67	.61	.51	M6118TR-ND	2,000	201.00/M	PM1210-120J
15.00	30.00	2.52	30.00	3.20	130.00	M6119CT-ND	.67	.61	.51	M6119TR-ND	2,000	201.00/M	PM1210-150J
18.00	30.00	2.52	27.00	3.60	120.00	M6120CT-ND	.67	.61	.51	M6120TR-ND	2,000	201.00/M	PM1210-180J
22.00	30.00	2.52	25.00	4.00	110.00	M6121CT-ND	.67	.61	.51	M6121TR-ND	2,000	201.00/M	PM1210-220J
27.00	30.00	2.52	20.00	5.00	80.00	M6122CT-ND	.67	.61	.51	M6122TR-ND	2,000	201.00/M	PM1210-270J
33.00	30.00	2.52	17.00	5.60	70.00	M6123CT-ND	.67	.61	.51	M6123TR-ND	2,000	201.00/M	PM1210-330J
39.00	30.00	2.52	16.00	6.40	65.00	M6124CT-ND	.67	.61	.51	M6124TR-ND	2,000	201.00/M	PM1210-390J
47.00	30.00	2.52	15.00	7.00	60.00	M6125CT-ND	.67	.61	.51	M6125TR-ND	2,000	201.00/M	PM1210-470J
56.00	30.00	2.52	13.00	8.00	55.00	M6126CT-ND	.67	.61	.51	M6126TR-ND	2,000	201.00/M	PM1210-560J
68.00	30.00	2.52	12.00	9.00	50.00	M6127CT-ND	.67	.61	.51	M6127TR-ND	2,000	201.00/M	PM1210-680J
82.00	30.00	2.52	11.00	10.00	45.00	M6128CT-ND	.67	.61	.51	M6128TR-ND	2,000	201.00/M	PM1210-820J
100.00	20.00	0.796	10.00	10.00	40.00	M6129CT-ND	.67	.61	.51	M6129TR-ND	2,000	201.00/M	PM1210-101J
120.00	20.00	0.796	10.00	11.00	70.00	M6130CT-ND	.67	.61	.51	M6130TR-ND	2,000	201.00/M	PM1210-121J
150.00	20.00	0.796	8.00	15.00	65.00	M6131CT-ND	.67	.61	.51	M6131TR-ND	2,000	201.00/M	PM1210-151J
180.00	20.00	0.796	7.00	17.00	60.00	M6132CT-ND	.67	.61	.51	M6132TR-ND	2,000	201.00/M	PM1210-181J
220.00	20.00	0.796	7.00	21.00	50.00	M6133CT-ND	.67	.61	.51	M6133TR-ND	2,000	201.00/M	PM1210-221J

Surface Mount High Current Toroid Inductors

PM2110 Series

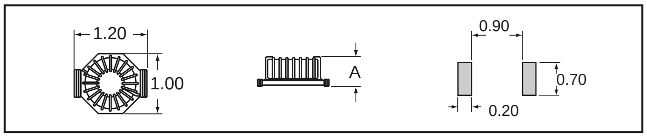


L (uH) ±10% @ 1KHz	I,dc (A)	L (uH) ±20% @ Rated I	DCR (Ω) Max.	Dim. A Max.	Digi-Key Part No.	Price Each 1	10	25	J.W. Miller Part No.
PM2110 Series 20%									
1.00*	22.70	0.80	0.00	0.57	M6134-ND	6.27	5.85	5.54	PM2110-1R0M
1.20*	20.30	1.00	0.00	0.57	M6135-ND	6.27	5.85	5.54	PM2110-1R2M
1.50*	20.30	1.20	0.00	0.57	M6136-ND	6.27	5.85	5.54	PM2110-1R5M
1.80*	18.50	1.40	0.00	0.57	M6137-ND	6.27	5.85	5.54	PM2110-1R8M
2.20*	17.20	1.70	0.00	0.57	M6138-ND	6.27	5.85	5.54	PM2110-2R2M
2.70*	16.00	2.00	0.00	0.57	M6139-ND	6.27	5.85	5.54	PM2110-2R7M
3.30*	16.00	2.50	0.00	0.57	M6140-ND	6.27	5.85	5.54	PM2110-3R3M
3.90*	15.10	2.80	0.00	0.57	M6141-ND	6.27	5.85	5.54	PM2110-3R9M
4.70*	14.40	3.40	0.00	0.57	M6142-ND	6.27	5.85	5.54	PM2110-4R7M
5.60*	13.70	3.90	0.01	0.57	M6143-ND	6.27	5.85	5.54	PM2110-5R6M
6.80*	13.10	4.60	0.01	0.57	M6144-ND	6.27	5.85	5.54	PM2110-6R8M
8.20*	12.60	5.50	0.01	0.57	M6145-ND	6.27	5.85	5.54	PM2110-8R2M
PM2110 Series 10%									
10.00	11.70	6.50	0.01	0.57	M6146-ND	6.27	5.85	5.54	PM2110-100K
12.00	11.30	7.60	0.01	0.57	M6147-ND	6.27	5.85	5.54	PM2110-120K
15.00	10.70	9.20	0.01	0.57	M6148-ND	6.27	5.85	5.54	PM2110-150K
18.00	10.20	10.70	0.01	0.57	M6149-ND	6.27	5.85	5.54	PM2110-180K
22.00	9.70	12.70	0.01	0.57	M6150-ND	6.27	5.85	5.54	PM2110-220K
27.00	8.20	16.00	0.01	0.54	M6151-ND	6.27	5.85	5.54	PM2110-270K
33.00	7.00	20.10	0.02	0.52	M6152-ND	6.27	5.85	5.54	PM2110-330K
39.00	6.80	23.20	0.02	0.62	M6153-ND	6.27	5.85	5.54	PM2110-390K
47.00	6.50	27.20	0.02	0.62	M6154-ND	6.27	5.85	5.54	PM2110-470K
56.00	6.20	31.60	0.02	0.62	M6155-ND	6.27	5.85	5.54	PM2110-560K
68.00	5.90	37.10	0.03	0.62	M6156-ND	6.27	5.85	5.54	PM2110-680K
82.00	5.60	43.40	0.03	0.62	M6157-ND	6.27	5.85	5.54	PM2110-820K
100.00	5.40	51.40	0.03	0.62	M6158-ND	6.27	5.85	5.54	PM2110-101K
120.00	5.10	59.60	0.04	0.62	M6159-ND	6.27	5.85	5.54	PM2110-121K
150.00	4.30	77.30	0.05	0.59	M6160-ND	6.27	5.85	5.54	PM2110-151K
180.00	3.70	96.30	0.07	0.53	M6161-ND	6.27	5.85	5.54	PM2110-181K
220.00	3.50	113.80	0.07	0.60	M6162-ND	6.27	5.85	5.54	PM2110-221K
270.00	3.40	134.90	0.08	0.60	M6163-ND	6.27	5.85	5.54	PM2110-271K
330.00	3.20	159.50	0.09	0.60	M6164-ND	6.27	5.85	5.54	PM2110-331K
390.00	3.10	182.90	0.10	0.60	M6165-ND	6.27	5.85	5.54	PM2110-391K
470.00	2.60	230.40	0.13	0.57	M6166-ND	6.27	5.85	5.54	PM2110-471K
560.00	2.50	266.00	0.15	0.57	M6167-ND	6.27	5.85	5.54	PM2110-561K
680.00	2.10	337.10	0.20	0.54	M6168-ND	6.27	5.85	5.54	PM2110-681K
820.00	2.00	394.10	0.22	0.60	M6169-ND	6.27	5.85	5.54	PM2110-821K
1000.00	1.90	463.70	0.24	0.60	M6170-ND	6.27	5.85	5.54	PM2110-102K

* L (uH) ±20% @ 1KHz

Surface Mount High Current Toroid Inductors

PM2120 Series



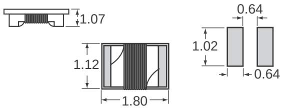
L (uH) ±10% @ 1KHz	I,dc (A)	L (uH) ±20% @ Rated I	DCR (Ω) Max.	Dim. A Max.	Digi-Key Part No.	Price Each 1	10	25	J.W. Miller Part No.
PM2120 Series 20%									
1.00*	25.40	0.90	0.00	0.82	M6171-ND	6.94	6.46	6.12	PM2120-1R0M
1.20*	25.40	1.10	0.00	0.82	M6172-ND	6.94	6.46	6.12	PM2120-1R2M
1.50*	22.00	1.30	0.00	0.82	M6173-ND	6.94	6.46	6.12	PM2120-1R5M
1.80*	22.00	1.50	0.00	0.82	M6174-ND	6.94	6.46	6.12	PM2120-1R8M
2.20*	19.70	1.80	0.00	0.82	M6175-ND	6.94	6.46	6.12	PM2120-2R2M
2.70*	19.70	2.20	0.00	0.82	M6176-ND	6.94	6.46	6.12	PM2120-2R7M
3.30*	18.00	2.60	0.00	0.82	M6177-ND	6.94	6.46	6.12	PM2120-3R3M
3.90*	18.00	3.10	0.00	0.82	M6178-ND	6.94	6.46	6.12	PM2120-3R9M
4.70*	16.60	3.70	0.01	0.82	M6179-ND	6.94	6.46	6.12	PM2120-4R7M
5.60*	15.60	4.20	0.01	0.82	M6180-ND	6.94	6.46	6.12	PM2120-5R6M
6.80*	14.70	5.00	0.01	0.82	M6181-ND	6.94	6.46	6.12	PM2120-6R8M
8.20*	14.70	6.10	0.01	0.82	M6182-ND	6.94	6.46	6.12	PM2120-8R2M
PM2120 Series 10%									
10.00	13.90	7.20	0.01	0.82	M6183-ND	6.94	6.46	6.12	PM2120-100K
12.00	12.70	8.30	0.01	0.82	M6184-ND	6.94	6.46	6.12	PM2120-120K
15.00	12.20	10.20	0.01	0.82	M6185-ND	6.94	6.46	6.12	PM2120-150K
18.00	11.80	12.00	0.01	0.82	M6186-ND	6.94	6.46	6.12	PM2120-180K
22.00	11.00	14.20	0.01	0.82	M6187-ND	6.94	6.46	6.12	PM2120-220K
27.00	10.40	16.90	0.01	0.82	M6188-ND	6.94	6.46	6.12	PM2120-270K
33.00	10.10	20.30	0.01	0.82	M6189-ND	6.94	6.46	6.12	PM2120-330K
39.00	9.60	23.30	0.01	0.82	M6190-ND	6.94	6.46	6.12	PM2120-390K
47.00	8.20	29.20	0.02	0.79	M6191-ND	6.94	6.46	6.12	PM2120-470K
56.00	7.90	33.90	0.02	0.79	M6192-ND	6.94	6.46	6.12	PM2120-560K
68.00	6.70	42.20	0.03	0.77	M6193-ND	6.94	6.46	6.12	PM2120-680K
82.00	6.40	49.50	0.03	0.87	M6194-ND	6.94	6.46	6.12	PM2120-820K
100.00	6.10	58.70	0.04	0.87	M6195-ND	6.94	6.46	6.12	PM2120-101K
120.00	5.80	68.10	0.04	0.87	M6196-ND	6.94	6.46	6.12	PM2120-121K
150.00	5.50	82.50	0.04	0.87	M6197-ND	6.94	6.46	6.12	PM2120-151K
180.00	5.30	96.20	0.05	0.83	M6198-ND	6.94	6.46	6.12	PM2120-181K
220.00	5.00	113.70	0.05	0.83	M6199-ND	6.94	6.46	6.12	PM2120-221K
270.00	4.20	144.50	0.07	0.80	M6200-ND	6.94	6.46	6.12	PM2120-271K
330.00	3.60	183.40	0.10	0.78	M6201-ND	6.94	6.46	6.12	PM2120-331K
390.00	3.50	211.60	0.11	0.78	M6202-ND	6.94	6.46	6.12	PM2120-391K
470.00	3.30	247.10	0.12	0.85	M6203-ND	6.94	6.46	6.12	PM2120-471K
560.00	3.20	285.80	0.13	0.85	M6204-ND	6.94	6.46	6.12	PM2120-561K
680.00	3.00	336.30	0.14	0.85	M6205-ND	6.94	6.46	6.12	PM2120-681K
820.00	2.90	392.50	0.16	0.85	M6206-ND	6.94	6.46	6.12	PM2120-821K
1000.00	2.50	499.70	0.22	0.82	M6207-ND	6.94	6.46	6.12	PM2120-102K

* L (uH) ±20% @ 1KHz

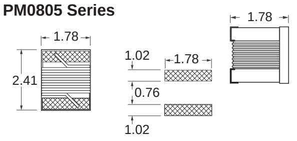
J.W.Miller
MAGNETICS

Surface Mount Chip Inductors

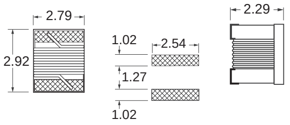
NEW! **PM0603 Series**



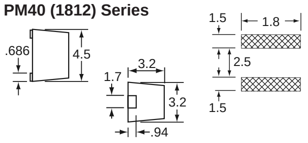
PM0805 Series



PM1008 Series



PM40 (1812) Series



Features: • Ceramic Core, Wire Wound for Superior Reliability • High Self-Resonant Frequency • Flat Top Surface for Automated Pick and Place

L (nH)	Tol.	Q Min.	L Test Freq. MHz	R,dc Max. Ohms	I,dc Max. mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 3,000	J.W.Miller Part No.
NEW! PM0603 Series NEW!											
2.2	±0.3 nH	18	250	0.08	700	M1243CT-ND	.64	.58	.48	190.50/M	PM0603-2N2
3.9	±0.3 nH	22	250	0.08	700	M1246CT-ND	.64	.58	.48	190.50/M	PM0603-3N9
4.7	±0.3 nH	20	250	0.13	700	M1248CT-ND	.64	.58	.48	190.50/M	PM0603-4N7
6.8	±5%	28	250	0.11	700	M1251CT-ND	.64	.58	.48	190.50/M	PM0603-6N8J
8.2	±5%	30	250	0.11	700	M1254CT-ND	.64	.58	.48	190.50/M	PM0603-8N2J
10	±5%	30	250	0.15	700	M1237CT-ND	.64	.58	.48	190.50/M	PM0603-10NJ
12	±5%	30	250	0.13	700	M1238CT-ND	.64	.58	.48	190.50/M	PM0603-12NJ
15	±5%	35	250	0.17	700	M1239CT-ND	.64	.58	.48	190.50/M	PM0603-15NJ
18	±5%	35	250	0.17	700	M1240CT-ND	.64	.58	.48	190.50/M	PM0603-18NJ
22	±5%	38	250	0.19	700	M1241CT-ND	.64	.58	.48	190.50/M	PM0603-22NJ
27	±5%	40	250	0.23	700	M1242CT-ND	.64	.58	.48	190.50/M	PM0603-27NJ
33	±5%	43	250	0.23	600	M1244CT-ND	.64	.58	.48	190.50/M	PM0603-33NJ
39	±5%	43	250	0.25	600	M1245CT-ND	.64	.58	.48	190.50/M	PM0603-39NJ
47	±5%	40	200	0.28	600	M1247CT-ND	.64	.58	.48	190.50/M	PM0603-47NJ
56	±5%	40	200	0.31	600	M1249CT-ND	.64	.58	.48	190.50/M	PM0603-56NJ
68	±5%	40	200	0.34	600	M1250CT-ND	.64	.58	.48	190.50/M	PM0603-68NJ
72	±5%	35	150	0.49	400	M1252CT-ND	.64	.58	.48	190.50/M	PM0603-72NJ
82	±5%	35	150	0.54	400	M1253CT-ND	.64	.58	.48	190.50/M	PM0603-82NJ
100	±5%	35	150	0.58	400	M1255CT-ND	.64	.58	.48	190.50/M	PM0603-R10J
120	±5%	35	150	0.65	300	M1256CT-ND	.64	.58	.48	190.50/M	PM0603-R12J
150	±5%	30	150	0.92	280	M1257CT-ND	.64	.58	.48	190.50/M	PM0603-R15J
180	±5%	30	100	1.25	240	M1258CT-ND	.64	.58	.48	190.50/M	PM0603-R18J
220	±5%	30	100	2.10	200	M1259CT-ND	.64	.58	.48	190.50/M	PM0603-R22J
270	±5%	30	100	2.30	170	M1260CT-ND	.64	.58	.48	190.50/M	PM0603-R27J

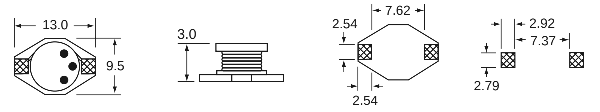
L	Tol. %	Q Min.	L Test Freq. MHz	R,dc Max. Ohms	I,dc Max. mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 3,000	J.W.Miller Part No.
PM0805 Series											
2.2nH	20	15	250	0.08	600	M1150CT-ND	.53	.48	.40	157.50/M	PM0805-2N2M
3.3nH	20	50	250	0.08	600	M1151CT-ND	.53	.48	.40	157.50/M	PM0805-3N3M
6.8nH	20	50	250	0.11	600	M1152CT-ND	.53	.48	.40	157.50/M	PM0805-6N8M
8.2nH	20	50	250	0.12	600	M1153CT-ND	.53	.48	.40	157.50/M	PM0805-8N2M
12nH	20	50	250	0.15	600	M1154CT-ND	.53	.48	.40	157.50/M	PM0805-12NM
15nH	20	50	250	0.17	600	M1155CT-ND	.53	.48	.40	157.50/M	PM0805-15NM
18nH	20	50	250	0.20	600	M1156CT-ND	.53	.48	.40	157.50/M	PM0805-18NM
22nH	20	55	250	0.22	500	M1157CT-ND	.53	.48	.40	157.50/M	PM0805-22NM
27nH	20	55	250	0.25	500	M1158CT-ND	.53	.48	.40	157.50/M	PM0805-27NM
33nH	20	60	250	0.27	500	M1159CT-ND	.53	.48	.40	157.50/M	PM0805-33NM
39nH	20	60	250	0.29	500	M1160CT-ND	.53	.48	.40	157.50/M	PM0805-39NM
47nH	20	60	200	0.31	500	M1161CT-ND	.53	.48	.40	157.50/M	PM0805-47NM
.056µH	10	60	200	0.34	500	M1162CT-ND	.53	.48	.40	157.50/M	PM0805-56NK
.068µH	10	60	200	0.38	500	M1163CT-ND	.53	.48	.40	157.50/M	PM0805-68NK
.082µH	10	65	150	0.42	400	M1164CT-ND	.53	.48	.40	157.50/M	PM0805-82NK
.10µH	10	65	150	0.46	400	M1165CT-ND	.53	.48	.40	157.50/M	PM0805-R10K
.12µH	10	50	150	0.51	400	M1166CT-ND	.53	.48	.40	157.50/M	PM0805-R12K
.15µH	10	50	100	0.56	400	M1167CT-ND	.53	.48	.40	157.50/M	PM0805-R15K
.18µH	10	50	100	0.64	400	M1168CT-ND	.53	.48	.40	157.50/M	PM0805-R18K
.22µH	10	50	100	0.70	400	M1169CT-ND	.53	.48	.40	157.50/M	PM0805-R22K
.27µH	10	40	100	1.1	280	M1170CT-ND	.53	.48	.40	157.50/M	PM0805-R27K
.33µH	10	40	100	1.2	260	M1171CT-ND	.53	.48	.40	157.50/M	PM0805-R33K
.39µH	10	40	100	1.5	200	M1172CT-ND	.53	.48	.40	157.50/M	PM0805-R39K

L	Tol. %	Q Min.	L Test Freq. MHz	R,dc Max. Ohms	I,dc Max. mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 2,000	J.W.Miller Part No.
PM1008 Series											
10nH	20	50	50	0.08	1000	M1176CT-ND	.68	.61	.51	202.50/M	PM1008-10NM
12nH	20	50	50	0.09	1000	M1177CT-ND	.68	.61	.51	202.50/M	PM1008-12NM
15nH	20	50	50	0.10	1000	M1178CT-ND	.68	.61	.51	202.50/M	PM1008-15NM
18nH	20	50	50	0.11	1000	M1179CT-ND	.68	.61	.51	202.50/M	PM1008-18NM
22nH	20	55	50	0.12	1000	M1180CT-ND	.68	.61	.51	202.50/M	PM1008-22NM
27nH	20	55	50	0.13	1000	M1181CT-ND	.68	.61	.51	202.50/M	PM1008-27NM
33nH	20	60	50	0.14	1000	M1182CT-ND	.68	.61	.51	202.50/M	PM1008-33NM
39nH	20	60	50	0.15	1000	M1183CT-ND	.68	.61	.51	202.50/M	PM1008-39NM
47nH	20	65	50	0.16	1000	M1184CT-ND	.68	.61	.51	202.50/M	PM1008-47NM
56nH	10	65	50	0.18	1000	M1185CT-ND	.68	.61	.51	202.50/M	PM1008-56NK
68nH	10	65	50	0.20	1000	M1186CT-ND	.68	.61	.51	202.50/M	PM1008-68NK
82nH	10	60	50	0.22	1000	M1187CT-ND	.68	.61	.51	202.50/M	PM1008-82NK
.10µH	10	60	25	0.56	650	M1188CT-ND	.68	.61	.51	202.50/M	PM1008-R10K
.12µH	10	60	25	0.68	650	M1189CT-ND	.68	.61	.51	202.50/M	PM1008-R12K
.15µH	10	45	25	0.70	580	M1190CT-ND	.68	.61	.51	202.50/M	PM1008-R15K
.18µH	10	45	25	0.77	620	M1191CT-ND	.68	.61	.51	202.50/M	PM1008-R18K
.22µH	10	45	25	0.84	500	M1192CT-ND	.68	.61	.51	202.50/M	PM1008-R22K
.27µH	10	45	25	0.91	500	M1193CT-ND	.68	.61	.51	202.50/M	PM1008-R27K
.33µH	10	45	25	1.05	450	M1194CT-ND	.68	.61	.51	202.50/M	PM1008-R33K
.39µH	10	45	25	1.12	470	M1195CT-ND	.68	.61	.51	202.50/M	PM1008-R39K
.47µH	10	45	25	1.19	470	M1196CT-ND	.68	.61	.51	202.50/M	PM1008-R47K
.56µH	10	45	25	1.33	400	M1197CT-ND	.68	.61	.51	202.50/M	PM1008-R56K
.68µH	10	45	25	1.47	400	M1198CT-ND	.68	.61	.51	202.50/M	PM1008-R68K
.82µH	10	45	25	1.61	400	M1199CT-ND	.68	.61	.51	202.50/M	PM1008-R82K
1.0µH	10	35	25	1.75	370	M1200CT-ND	.68	.61	.51	202.50/M	PM1008-1R0K
1.2µH	10	35	7.9	2.00	340	M1201CT-ND	.68	.61	.51	202.50/M	PM1008-1R2K
1.5µH	10	28	7.9	2.30	330	M1202CT-ND	.68	.61	.51	202.50/M	PM1008-1R5K
1.8µH	10	28	7.9	2.60	300	M1203CT-ND	.68	.61	.51	202.50/M	PM1008-1R8K
2.2µH	10	28	7.9	2.80	290	M1204CT-ND	.68	.61	.51	202.50/M	PM1008-2R2K
2.7µH	10	22	7.9	3.20	290	M1205CT-ND	.68	.61	.51	202.50/M	PM1008-2R7K
3.3µH	10	22	7.9	3.40	290	M1206CT-ND	.68	.61	.51	202.50/M	PM1008-3R3K
3.9µH	10	20	7.9	3.60	260	M1207CT-ND	.68	.61	.51	202.50/M	PM1008-3R9K
4.7µH	10	20	7.9	4.00	260	M1208CT-ND	.68	.61	.51	202.50/M	PM1008-4R7K

L (µH)	Tol. %	Q Min.	Test Freq. MHz	R,dc Max. Ohms	I,dc Max. mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 500	J.W.Miller Part No.
PM40 (1812) Series											
0.10	20	28	25.2	0.44	450	M1101CT-ND	.85	.77	.64	127.50	PM40-R10M
0.12	20	30	25.2	0.22	450	M1102CT-ND	.85	.77	.64	127.50	PM40-R12M
0.18	20	30	25.2	0.28	450	M1104CT-ND	.85	.77	.64	127.50	PM40-R18M
0.22	20	30	25.2	0.32	450	M1105CT-ND	.85	.77	.64	127.50	PM40-R22M
0.27	20	30	25.2	0.36	450	M1106CT-ND	.85	.77	.64	127.50	PM40-R27M
0.33	20	30	25.2	0.40	450	M1107CT-ND	.85	.77	.64	127.50	PM40-R33M
0.39	20	30	25.2	0.45	450	M1108CT-ND	.85	.77	.64	127.50	PM40-R39M
0.47	20	30	25.2	0.50	450	M1109CT-ND	.85	.77	.64	127.50	PM40-R47M
0.56	20	30	25.2	0.55	450	M1110CT-ND	.85	.77	.64	127.50	PM40-R56M
0.68	20	30	25.2	0.60	450	M1111CT-ND	.85	.77	.64	127.50	PM40-R68M
0.82	20	30	25.2	0.67	450	M1112CT-ND	.85	.77	.64	127.50	PM40-R82M
1.0	10	50	7.96	0.50	450	M1113CT-ND	.85	.77	.64	—	PM40-1R0K
1.2	10	50	7.96	0.55	430	M1114CT-ND	.85	.77	.64	127.50	PM40-1R2K
1.5	10	50	7.96	0.60	410	M1115CT-ND	.85	.77	.64	127.50	PM40-1R5K
1.8	10	50	7.96	0.65	390	M1116CT-ND	.85	.77	.64	127.50	PM40-1R8K
2.2	10	50	7.96	0.70	380	M1117CT-ND	.85	.77	.64	—	PM40-2R2K
2.7	10	50	7.96	0.75	370	M1118CT-ND	.85	.77	.64	—	PM40-2R7K
3.3	10	50	7.96	0.80	355	M1119CT-ND	.85	.77	.64	—	PM40-3R3K
3.9	10	50	7.96	0.90	330	M1120CT-ND	.85	.77	.64	127.50	PM40-3R9K
4.7	10	50	7.96	1.0	315	M1121CT-ND	.85	.77	.64	127.50	PM40-4R7K
5.6	10	50	7.96	1.1	300	M1122CT-ND	.85	.77	.64	127.50	PM40-5R6K
6.8	10	50	7.96	1.2	285	M1123CT-ND	.85	.77	.64	127.50	PM40-6R8K
8.2	10	50	7.96	1.4	270	M1124CT-ND	.85	.77	.64	—	PM40-8R2K
10	10	50	2.52	1.6	250	M1125CT-ND	.85	.77	.64	—	PM40-100K
12	10	50	2.52	2.0	225	M1126CT-ND	.85	.77	.64	—	PM40-120K
15	10	50	2.52	2.5	200	M1127CT-ND	.85	.77	.64	127.50	PM40-150K
18	10	50	2.52	2.8	190	M1128CT-ND	.85	.77	.64	127.50	PM40-180K
22	10	50	2.52	3.2	180	M1129CT-ND	.85	.77	.64	—	PM40-220K
27	10	50	2.52	3.6	170	M1130CT-ND	.85	.77	.64	127.50	PM40-270K
33	10	50	2.52	4.0	160	M1131CT-ND	.85	.77	.64	127.50	PM40-330K
47	10	50	2.52	5.0	140	M1133CT-ND	.85	.77	.64	127.50	PM40-470K
56	10	50	2.52	5.5	135	M1134CT-ND	1.33	1.20	1.00	198.75	PM40-560K
68	10	50	2.52	6.0	130	M1135CT-ND	1.33	1.20	1.00	198.75	PM40-680K
82	10	50	2.52	7.0	120	M1136CT-ND	1.33	1.20	1.00	198.75	PM40-820K
100	10	40	0.796	8.0	110	M1137CT-ND	1.33	1.20	1.00	198.75	PM40-101K
120	10	40	0.796	8.0	110	M1138CT-ND	1.33	1.20	1.00	—	PM40-121K
150	10	40	0.796	9.0	105	M1139CT-ND	1.33	1.20	1.00	198.75	PM40-151K
180	10	40	0.796	9.5	102	M1140CT-ND	1.33	1.20	1.00	—	PM40-181K
220	10	40	0.796	10	100	M1141CT-ND	1.33	1.20	1.00	198.75	PM40-221K
270	10	30	0.796	18	92	M1142CT-ND	1.33	1.20	1.00	198.75	PM40-271K
330	10	30	0.796	20	85	M1143CT-ND	1.33	1.20	1.00	—	PM40-331K
390	10	30	0.796	23	80	M1144CT-ND	1.33	1.20	1.00	198.75	PM40-391K
470	10	30	0.796	26	62	M1145CT-ND	1.33	1.20	1.00	198.75	PM40-471K
560	10	30	0.796	30	50	M1146CT-ND	1.33	1.20	1.00	198.75	PM40-561K
680	10	30	0.796	40	50	M1147CT-ND	1.33	1.20	1.00	198.75	PM40-681K
820	10	30	0.796	45	30	M1148CT-ND	1.33	1.20	1.00	198.75	PM40-821K
1000	10	30	0.796	50	30	M1149CT-ND	1.33	1.20	1.00	—	PM40-102K

* For Tape and Reel part number, change CT-ND to TR-ND.

Surface Mount Power Inductors —
PM3308 Series

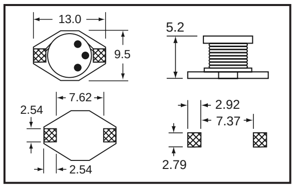


L ±20% (uH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.*	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 1,000	J.W.Miller Part No.
10	0.11	2.4	2.0	M9719CT-ND	2.90	2.61	2.18	870.00	PM3308-100M
15	0.15	2.0	1.5	M9720CT-ND	2.90	2.61	2.18	870.00	PM3308-150M
22	0.23	1.6	1.3	M9721CT-ND	2.90	2.61	2.18	870.00	PM3308-220M
33	0.30	1.4	1.1	M9722CT-ND	2.90	2.61	2.18	870.00	PM3308-330M
47	0.39	1.0	0.8	M9723CT-ND	2.90	2.61	2.18	870.00	PM3308-470M
68	0.66	0.9	0.7	M9724CT-ND	2.90	2.61	2.18	870.00	PM3308-680M
100	0.84	0.7	0.6	M9725CT-ND	2.90	2.61	2.18	870.00	PM3308-101M
150	1.2	0.6	0.5	M9726CT-ND	2.90	2.61	2.18	870.00	PM3308-151M
220	1.9	0.5	0.4	M9727CT-ND	2.90	2.61	2.18	870.00	PM3308-221M
330	2.7	0.4	0.3	M9728CT-ND	2.90	2.61	2.18	870.00	PM3308-331M
470	4.0	0.3	0.2	M9729CT-ND	2.90	2.61	2.18	870.00	PM3308-471M
680	5.3	0.2	0.1	M9730CT-ND	2.90	2.61	2.18	870.00	PM3308-681M
1000	8.4	0.1	0.05	M9731CT-ND	2.90	2.61	2.18	870.00	PM3308-102M

* For Tape and Reel part number, change CT-ND to TR-ND.

J.W.Miller
MAGNETICS

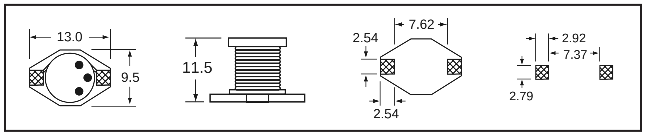
Surface Mount Power Inductors — PM3316 Series



L ±20% (uH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 500	J.W.Miller Part No.
1.0	0.009	9.0	6.8	M9700CT-ND	3.00	2.70	2.25	450.00	PM3316-1R0M
1.5	0.010	8.0	6.4	M9701CT-ND	3.00	2.70	2.25	450.00	PM3316-1R5M
2.2	0.012	7.0	6.1	M9702CT-ND	3.00	2.70	2.25	450.00	PM3316-2R2M
3.3	0.015	6.4	5.4	M9703CT-ND	3.00	2.70	2.25	450.00	PM3316-3R3M
4.7	0.018	5.4	4.8	M9704CT-ND	3.00	2.70	2.25	450.00	PM3316-4R7M
6.8	0.027	4.6	4.4	M9705CT-ND	3.00	2.70	2.25	450.00	PM3316-6R8M
10	0.038	3.8	3.9	M9706CT-ND	3.00	2.70	2.25	450.00	PM3316-100M
15	0.046	3.0	3.1	M9707CT-ND	3.00	2.70	2.25	450.00	PM3316-150M
22	0.085	2.6	2.7	M9708CT-ND	3.00	2.70	2.25	450.00	PM3316-220M
33	0.10	2.0	2.1	M9709CT-ND	3.00	2.70	2.25	450.00	PM3316-330M
47	0.14	1.6	1.8	M9710CT-ND	3.00	2.70	2.25	450.00	PM3316-470M
68	0.20	1.4	1.5	M9711CT-ND	3.00	2.70	2.25	450.00	PM3316-680M
100	0.28	1.2	1.3	M9712CT-ND	3.00	2.70	2.25	450.00	PM3316-101M
150	0.40	1.0	1.0	M9713CT-ND	3.00	2.70	2.25	450.00	PM3316-151M
220	0.61	0.8	0.8	M9714CT-ND	3.00	2.70	2.25	450.00	PM3316-221M
330	1.02	0.6	0.6	M9715CT-ND	3.00	2.70	2.25	450.00	PM3316-331M
470	1.27	0.5	0.5	M9716CT-ND	3.00	2.70	2.25	450.00	PM3316-471M
680	2.02	0.4	0.4	M9717CT-ND	3.00	2.70	2.25	450.00	PM3316-681M
1000	3.00	0.3	0.3	M9718CT-ND	3.00	2.70	2.25	450.00	PM3316-102M

* For Tape and Reel part number, change CT-ND to TR-ND.

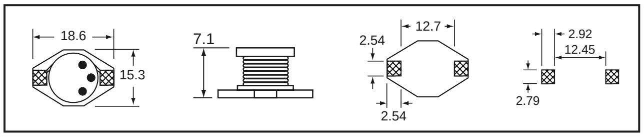
Surface Mount Power Inductors — PM3340 Series



L ±20% (uH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 225	J.W.Miller Part No.
10	0.033	8.0	3.5	M9732CT-ND	3.40	3.06	2.55	229.50	PM3340-100M
15	0.042	7.0	3.0	M9733CT-ND	3.40	3.06	2.55	229.50	PM3340-150M
22	0.054	5.5	2.5	M9734CT-ND	3.40	3.06	2.55	229.50	PM3340-220M
33	0.08	4.0	2.0	M9735CT-ND	3.40	3.06	2.55	229.50	PM3340-330M
47	0.1	3.8	1.6	M9736CT-ND	3.40	3.06	2.55	229.50	PM3340-470M
68	0.17	3.0	1.2	M9737CT-ND	3.40	3.06	2.55	229.50	PM3340-680M
100	0.22	2.5	1.2	M9738CT-ND	3.40	3.06	2.55	229.50	PM3340-101M
150	0.34	2.0	0.9	M9739CT-ND	3.40	3.06	2.55	229.50	PM3340-151M
220	0.44	1.6	0.7	M9740CT-ND	3.40	3.06	2.55	229.50	PM3340-221M
330	0.7	1.2	0.6	M9741CT-ND	3.40	3.06	2.55	229.50	PM3340-331M
470	0.95	1.0	0.3	M9742CT-ND	3.40	3.06	2.55	229.50	PM3340-471M
680	1.2	1.0	0.2	M9743CT-ND	3.40	3.06	2.55	229.50	PM3340-681M
1000	2.0	0.8	0.1	M9744CT-ND	3.40	3.06	2.55	229.50	PM3340-102M

* For Tape and Reel part number, change CT-ND to TR-ND.

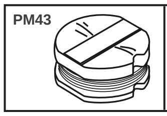
Surface Mount Power Inductors — PM5022 Series

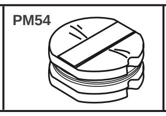


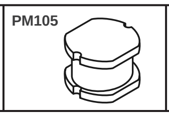
L ±20% (uH)	R, dc Max. Ohms	I, sat. Amp	I, rms Amp	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 250	J.W.Miller Part No.
1.0	0.011	20	8.6	M9745CT-ND	4.40	3.96	3.30	330.00	PM5022-1R0M
2.2	0.014	16	7.1	M9747CT-ND	4.40	3.96	3.30	330.00	PM5022-2R2M
3.3	0.016	14	6.2	M9748CT-ND	4.40	3.96	3.30	330.00	PM5022-3R3M
5.6	0.022	12	5.3	M9746CT-ND	4.40	3.96	3.30	330.00	PM5022-5R6M
10	0.032	10	4.3	M9751CT-ND	4.40	3.96	3.30	330.00	PM5022-100M
15	0.036	8	4.0	M9752CT-ND	4.40	3.96	3.30	330.00	PM5022-150M
22	0.047	7	3.5	M9753CT-ND	4.40	3.96	3.30	330.00	PM5022-220M
33	0.066	5.5	3.0	M9754CT-ND	4.40	3.96	3.30	330.00	PM5022-330M
47	0.087	4.5	2.6	M9755CT-ND	4.40	3.96	3.30	330.00	PM5022-470M
68	0.13	3.5	2.3	M9756CT-ND	4.40	3.96	3.30	330.00	PM5022-680M
100	0.19	3.0	1.8	M9757CT-ND	4.40	3.96	3.30	330.00	PM5022-101M
150	0.25	2.6	1.5	M9758CT-ND	4.40	3.96	3.30	330.00	PM5022-151M
220	0.38	2.4	1.2	M9759CT-ND	4.40	3.96	3.30	330.00	PM5022-221M
330	0.56	1.9	1.0	M9760CT-ND	4.40	3.96	3.30	330.00	PM5022-331M
470	0.85	1.4	0.82	M9761CT-ND	4.40	3.96	3.30	330.00	PM5022-471M
680	1.2	1.2	0.72	M9762CT-ND	4.40	3.96	3.30	330.00	PM5022-681M
1000	1.8	1.0	0.56	M9763CT-ND	4.40	3.96	3.30	330.00	PM5022-102M

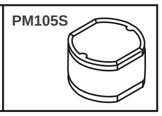
* For Tape and Reel part number, change CT-ND to TR-ND.

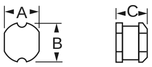
Surface Mount Power Inductors


PM43

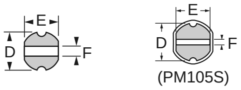

PM54


PM105


PM105S



Terminal Dimensions



Dimensions (mm)						
Series	**A**	**B**	**C**	**D Typ.**	**E Typ.**	**F Typ.**
PM43	4.0 ± 0.3	4.5 ± 0.3	3.2 ± 0.3	4.5	4.0	1.2
PM54	5.2 ± 0.3	5.8 ± 0.3	4.5 ± 0.3	5.8	5.2	1.3
PM105	9.0 ± 0.4	10.0 ± 0.4	5.4 ± 0.4	10.0	9.0	2.1
PM105S	9.2 ± 0.4	10.0 ± 0.4	5.0 ± 0.5	7.8	7.0	1.6

L (µH)	Tol. %	Test Freq	Max. DCR Ohms	Rated I Amps	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 1,500	J.W.Miller Part No.
PM43 Series											
10	20	2.5MHz	0.182	1.04	M3100CT-ND	1.63	1.47	1.23	M3100TR-ND	489.00/M	PM43-100M
12	20	2.5MHz	0.210	0.97	M3120CT-ND	1.63	1.47	1.23	M3120TR-ND	489.00/M	PM43-120M
15	20	2.5MHz	0.235	0.85	M3150CT-ND	1.63	1.47	1.23	M3150TR-ND	489.00/M	PM43-150M
18	20	2.5MHz	0.338	0.74	M3180CT-ND	1.63	1.47	1.23	M3180TR-ND	489.00/M	PM43-180M
22	20	2.5MHz	0.378	0.68	M3220CT-ND	1.63	1.47	1.23	M3220TR-ND	489.00/M	PM43-220M
27	20	2.5MHz	0.522	0.62	M3327CT-ND	1.63	1.47	1.23	M3327TR-ND	489.00/M	PM43-270M
33	10	2.5MHz	0.540	0.56	M3330CT-ND	1.63	1.47	1.23	M3330TR-ND	489.00/M	PM43-330K
39	10	2.5MHz	0.587	0.52	M3390CT-ND	1.63	1.47	1.23	M3390TR-ND	489.00/M	PM43-390K
47	10	2.5MHz	0.844	0.44	M3470CT-ND	1.63	1.47	1.23	M3470TR-ND	489.00/M	PM43-470K
56	10	2.5MHz	0.937	0.42	M3560CT-ND	1.63	1.47	1.23	M3560TR-ND	489.00/M	PM43-560K
68	10	2.5MHz	1.117	0.37	M3680CT-ND	1.63	1.47	1.23	M3680TR-ND	489.00/M	PM43-680K
PM54 Series											
10	20	2.5MHz	0.10	1.44	M4100CT-ND	1.63	1.47	1.23	M4100TR-ND	489.00/M	PM54-100M
12	20	2.5MHz	0.12	1.40	M4120CT-ND	1.63	1.47	1.23	M4120TR-ND	489.00/M	PM54-120M
15	20	2.5MHz	0.14	1.30	M4150CT-ND	1.63	1.47	1.23	M4150TR-ND	489.00/M	PM54-150M
18	20	2.5MHz	0.15	1.23	M4180CT-ND	1.63	1.47	1.23	M4180TR-ND	489.00/M	PM54-180M
22	20	2.5MHz	0.18	1.11	M4220CT-ND	1.63	1.47	1.23	M4220TR-ND	489.00/M	PM54-220M
27	20	2.5MHz	0.20	0.97	M4270CT-ND	1.63	1.47	1.23	M4270TR-ND	489.00/M	PM54-270M
33	15	2.5MHz	0.23	0.88	M4330CT-ND	1.63	1.47	1.23	M4330TR-ND	489.00/M	PM54-330L
39	15	2.5MHz	0.32	0.80	M4390CT-ND	1.63	1.47	1.23	M4390TR-ND	489.00/M	PM54-390L
47	15	2.5MHz	0.37	0.72	M4470CT-ND	1.63	1.47	1.23	M4470TR-ND	489.00/M	PM54-470L
56	10	2.5MHz	0.42	0.68	M4560CT-ND	1.63	1.47	1.23	M4560TR-ND	489.00/M	PM54-560K
68	10	2.5MHz	0.46	0.61	M4680CT-ND	1.63	1.47	1.23	M4680TR-ND	489.00/M	PM54-680K
82	10	2.5MHz	0.60	0.58	M4820CT-ND	1.63	1.47	1.23	M4820TR-ND	489.00/M	PM54-820K
100	10	1KHz	0.70	0.52	M4101CT-ND	1.63	1.47	1.23	M4101TR-ND	489.00/M	PM54-101K
120	10	1KHz	0.93	0.48	M4121CT-ND	1.63	1.47	1.23	M4121TR-ND	489.00/M	PM54-121K
150	10	1KHz	1.10	0.40	M4151CT-ND	1.63	1.47	1.23	M4151TR-ND	489.00/M	PM54-151K
180	10	1KHz	1.38	0.38	M4181CT-ND	1.63	1.47	1.23	M4181TR-ND	489.00/M	PM54-181K
220	10	1KHz	1.57	0.35	M4221CT-ND	1.63	1.47	1.23	M4221TR-ND	489.00/M	PM54-221K

L (µH)	Tol. %	Test Freq	Max. DCR Ohms	Rated I Amps	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing 500	J.W.Miller Part No.
PM105 Series											
10	20	2.5MHz	0.06	2.60	M1001CT-ND	2.75	2.48	2.07	M1001TR-ND	412.50	PM105-100M
12	20	2.5MHz	0.07	2.45	M1002CT-ND	2.75	2.48	2.07	M1002TR-ND	412.50	PM105-120M
15	20	2.5MHz	0.08	2.27	M1003CT-ND	2.75	2.48	2.07	M1003TR-ND	412.50	PM105-150M
18	20	2.5MHz	0.09	2.15	M1004CT-ND	2.75	2.48	2.07	M1004TR-ND	412.50	PM105-180M
22	20	2.5MHz	0.10	1.95	M1005CT-ND	2.75	2.48	2.07	M1005TR-ND	412.50	PM105-220M
27	20	2.5MHz	0.11	1.76	M1006CT-ND	2.75	2.48	2.07	M1006TR-ND	412.50	PM105-270M
33	20	2.5MHz	0.12	1.50	M1007CT-ND	2.75	2.48	2.07	M1007TR-ND	412.50	PM105-330M
39	20	2.5MHz	0.14	1.37	M1008CT-ND	2.75	2.48	2.07	M1008TR-ND	412.50	PM105-390M
47	10	2.5MHz	0.17	1.28	M1009CT-ND	2.75	2.48	2.07	M1009TR-ND	412.50	PM105-470K
56	10	2.5MHz	0.19	1.17	M1010CT-ND	2.75	2.48	2.07	M1010TR-ND	412.50	PM105-560K
68	10	2.5MHz	0.22	1.11	M1011CT-ND	2.75	2.48	2.07	M1011TR-ND	412.50	PM105-680K
82	10	2.5MHz	0.25	1.00	M1012CT-ND	2.75	2.48	2.07	M1012TR-ND	412.50	PM105-820K
100	10	1kHz	0.35	0.97	M1013CT-ND	2.75	2.48	2.07	M1013TR-ND	412.50	PM105-101K
120	10	1kHz	0.40	0.89	M1014CT-ND	2.75	2.48	2.07	M1014TR-ND	412.50	PM105-121K
150	10	1kHz	0.47	0.78	M1015CT-ND	2.75	2.48	2.07	M1015TR-ND	412.50	PM105-151K
180	10	1kHz	0.63	0.72	M1016CT-ND	2.75	2.48	2.07	M1016TR-ND	412.50	PM105-181K
220	10	1kHz	0.73	0.66	M1017CT-ND	2.75	2.48	2.07	M1017TR-ND	412.50	PM105-221K
270	10	1kHz	0.97	0.57	M1018CT-ND	2.75	2.48	2.07	M1018TR-ND	412.50	PM105-271K
330	10	1kHz	1.15	0.52	M1019CT-ND	2.75	2.48	2.07	M1019TR-ND	412.50	PM105-331K
390	10	1kHz	1.30	0.48	M1020CT-ND	2.75	2.48	2.07	M1020TR-ND	412.50	PM105-391K
470	10	1kHz	1.48	0.42	M1021CT-ND	2.75	2.48	2.07	M1021TR-ND	412.50	PM105-471K
560	10	1kHz	1.90	0.33	M1022CT-ND	2.75	2.48	2.07	M1022TR-ND	412.50	PM105-561K
680	10	1kHz	2.25	0.28	M1023CT-ND	2.75	2.48	2.07	M1023TR-ND	412.50	PM105-681K
820	10	1kHz	2.55	0.24	M1024CT-ND	2.75	2.48	2.07	M1024TR-ND	412.50	PM105-821K
PM105S (Shielded) Series											
10	20	2.5MHz	0.06	2.53	M1025CT-ND	4.40	3.96	3.30	M1025TR-ND	660.00	PM105S-100M
12	20	2.5MHz	0.06	2.31	M1026CT-ND	4.40	3.96	3.30	M1026TR-ND	660.00	PM105S-120M
15	20	2.5MHz	0.07	2.06	M1027CT-ND	4.40	3.96	3.30	M1027TR-ND	660.00	PM105S-150M
18	20	2.5MHz	0.08	1.89	M1028CT-ND	4.40	3.96	3.30	M1028TR-ND	660.00	PM105S-180M
22	20	2.5MHz	0.09	1.71	M1029CT-ND	4.40	3.96	3.30	M1029TR-ND	660.00	PM105S-220M
27	20	2.5MHz	0.11	1.54	M1030CT-ND	4.40	3.96	3.30	M1030TR-ND	660.00	PM105S-270M
33	20	2.5MHz	0.12	1.39	M1031CT-ND	4.40	3.96	3.30	M1031TR-ND	660.00	PM105S-330M
39	20	2.5MHz	0.16	1.28	M1032CT-ND	4.40	3.96	3.30	M1032TR-ND	660.00	PM105S-390M
47	20	2.5MHz	0.18	1.17	M1033CT-ND	4.40	3.96	3.30	M1033TR-ND	660.00	PM105S-470M
56	20	2.5MHz	0.19	1.07	M1034CT-ND	4.40	3.96	3.30	M1034TR-ND	660.00	PM105S-560M
68	20	2.5MHz	0.22	0.97	M1035CT-ND	4.40	3.96	3.30	M1035TR-ND	660.00	PM105S-680M
82	20	2.5MHz	0.28	0.88	M1036CT-ND	4.40	3.96	3.30	M1036TR-ND	660.00	PM105S-820M
100	20	1kHz	0.35	0.80	M1037CT-ND	4.40	3.96	3.30	M1037TR-ND	660.00	PM105S-101M
120	20	1kHz	0.38	0.73	M1038CT-ND	4.40	3.96	3.30	M1038TR-ND	660.00	PM105S-121M
150	20	1kHz	0.45	0.65	M1039CT-ND	4.40	3.96	3.30	M1039TR-ND	660.00	PM105S-151M
180	20	1kHz	0.62	0.60	M1040CT-ND	4.40	3.96	3.30	M1040TR-ND	660.00	PM105S-181M
220	20	1kHz	0.69	0.54	M1041CT-ND	4.40	3.96	3.30	M1041TR-ND	660.00	PM105S-221M
270	20	1kHz	.78	0.49	M1042CT-ND	4.40	3.96	3.30	M1042TR-ND	660.00	PM105S-271M
330	20	1kHz	1.03	0.44	M1043CT-ND	4.40	3.96	3.30	M1043TR-ND	660.00	PM105S-331M
390	20	1kHz	1.18	0.41	M1044CT-ND	4.40	3.96	3.30	M1044TR-ND	660.00	PM105S-391M
470	20	1kHz	1.60	0.37	M1045CT-ND	4.40	3.96	3.30	M1045TR-ND	660.00	PM105S-471M

J.W.Miller MAGNETICS

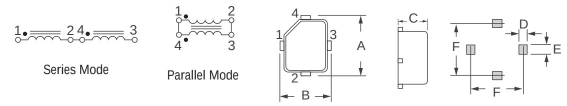
Surface Mount Dual Toroid Inductors

The PM3602 and PM3604 Series are versatile surface mount coils that can provide different functions in a single package. A bifilar method is used in the winding of these coils. The user can utilize these coils in four different ways, depending on the external connection chosen:

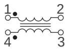
(1) Parallel Connection:	Doubles the current capacity
(2) Series Connection:	4 times the parallel inductance
(3) Dual Inductor:	Creates two differential mode inductors
(4) 1:1 Ratio Transformer:	For isolation and some flyback applications

Features:
• Toroidal core design to minimize RFI radiation • Low loss core material • Encapsulated in case for pick and place capability • Reflow soldering • Hi-pot 500V • Operating ambient temperature: -40°C to +85°C

Typical Applications:
• Switching power supplies • Converters • Data communications • Processor/controller circuits • Personal computers • Filters



Series or parallel connections are made at the circuit level (not an internal connection of the device.



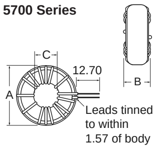
1:1 Transformer/ Dual Differential Mode

Part #	Dimensions (mm) A	B	C	D	E	F
PM3602	11.48	8.99	5.71	2.54	2.54	9.78
PM3604	13.97	11.48	6.73	4.06	2.54	12.70

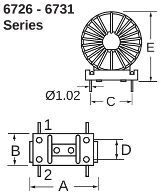
Parallel L ±20% µH	Parallel I,dc Max. Amps	Parallel L ±20% @ I,dc µH	Parallel R,dc Max. Ohms	Series L ±20% µH	Series I,dc Max. Amps	Series L ±20% @ I,dc µH	Series R,dc Max. Ohms	Digi-Key Part No.	Price Each 1	10	25	J.W.Miller Part No.
PM3602 Series												
5	2.41	3.8	0.023	20	1.20	15.2	0.092	M1209-ND	1.71	1.69	1.67	PM3602-5-B
8	1.90	6.1	0.037	32	0.95	23.2	0.15	M1210-ND	1.71	1.69	1.67	PM3602-8-B
10	1.83	7.4	0.040	40	0.92	29.6	0.16	M1211-ND	1.71	1.69	1.67	PM3602-10-B
15	1.45	11.1	0.063	60	0.73	44.4	0.25	M1212-ND	1.71	1.69	1.67	PM3602-15-B
20	1.25	15.2	0.086	80	0.63	60.8	0.34	M1213-ND	1.71	1.69	1.67	PM3602-20-B
25	1.17	18.5	0.098	100	0.59	74.0	0.39	M1214-ND	1.71	1.69	1.67	PM3602-25-B
33	0.98	24.8	0.14	132	0.49	99.2	0.56	M1215-ND	1.71	1.69	1.67	PM3602-33-B
50	0.78	37.5	0.22	200	0.38	150.0	0.88	M1216-ND	1.71	1.69	1.67	PM3602-50-B
68	0.72	49.6	0.26	272	0.36	198.4	1.04	M1217-ND	1.71	1.69	1.67	PM3602-68-B
100	0.58	74.0	0.40	400	0.29	296.0	1.60	M1218-ND	2.46	2.42	2.40	PM3602-100-B
150	0.47	111.0	0.60	600	0.24	444.0	2.40	M1219-ND	2.46	2.42	2.40	PM3602-150-B
200	0.40	150.0	0.84	800	0.20	600.0	3.36	M1220-ND	2.46	2.42	2.40	PM3602-200-B
250	0.33	192.5	1.19	1000	0.17	770.0	4.76	M1221-ND	2.46	2.42	2.40	PM3602-250-B
300	0.32	225.0	1.31	1200	0.16	900.0	5.24	M1222-ND	2.46	2.42	2.40	PM3602-300-B
PM3604 Series												
5	3.30	3.8	0.019	20	1.65	15.2	0.076	M1223-ND	1.81	1.78	1.76	PM3604-5-B
8	3.00	5.8	0.024	32	1.50	23.2	0.096	M1224-ND	1.81	1.78	1.76	PM3604-8-B
10	2.70	7.3	0.028	40	1.35	29.2	0.11	M1225-ND	1.81	1.78	1.76	PM3604-10-B
15	2.20	11.0	0.041	60	1.10	44.0	0.16	M1226-ND	1.81	1.78	1.76	PM3604-15-B
20	2.02	14.2	0.049	80	1.01	56.8	0.20	M1227-ND	1.81	1.78	1.76	PM3604-20-B
25	1.91	17.0	0.054	100	0.96	68.0	0.22	M1228-ND	1.81	1.78	1.76	PM3604-25-B
33	1.60	23.1	0.078	132	0.80	92.4	0.31	M1229-ND	1.81	1.78	1.76	PM3604-33-B
50	1.28	35.5	0.12	200	0.64	142.0	0.48	M1230-ND	1.81	1.78	1.76	PM3604-50-B
68	1.19	46.2	0.14	272	0.60	184.8	0.56	M1231-ND	1.81	1.78	1.76	PM3604-68-B
100	0.98	68.0	0.21	400	0.49	272.0	0.84	M1232-ND	2.45	2.42	2.40	PM3604-100-B
150	0.78	103.5	0.32	600	0.39	414.0	1.28	M1233-ND	2.45	2.42	2.40	PM3604-150-B
200	0.65	140.0	0.47	800	0.33	560.0	1.88	M1234-ND	2.45	2.42	2.40	PM3604-200-B
250	0.60	172.5	0.53	1000	0.30	690.0	2.12	M1235-ND	2.45	2.42	2.40	PM3604-250-B
300	0.52	213.0	0.73	1200	0.26	852.0	2.92	M1236-ND	2.45	2.42	2.40	PM3604-300-B

High Current Toroid Inductors

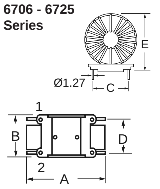
5700 Series



6701 - 6705 & 6726 - 6731 Series



6706 - 6725 Series

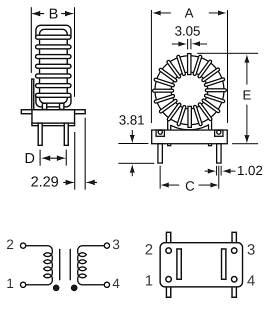


L (µH) ±15%	I,dc Max. Amps	R,dc Max. Ohms	Dimensions (mm) A Max.	B Max.	C Min.	Lead Ø Nom. (mm)	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
5700 Series										
10	11.00	.008	22.23	11.10	4.75	1.63	M5701-ND	8.63	8.05	5701
25	5.50	.014	22.23	11.10	4.75	1.02	M5702-ND	8.63	8.05	5702
125	2.75	.12	22.23	11.10	4.75	.51	M5703-ND	8.63	8.05	5703
275	2.00	.24	22.23	11.10	4.75	.41	M5704-ND	8.63	8.05	5704
450	1.50	.49	22.23	11.10	4.75	.30	M5705-ND	9.30	8.66	5705
25	9.00	.012	28.58	14.27	7.92	1.63	M5706-ND	9.30	8.66	5706
75	5.00	.04	28.58	14.27	7.92	.91	M5707-ND	9.30	8.66	5707
400	2.25	.33	28.58	14.27	7.92	.46	M5708-ND	9.30	8.66	5708
800	1.75	.64	28.58	14.27	7.92	.38	M5709-ND	9.30	8.66	5709
1000	1.50	.98	28.58	14.27	7.92	.30	M5710-ND	9.30	8.66	5710
50	9.50	.012	31.75	15.88	9.52	1.63	M5711-ND	10.61	9.89	5711
150	4.75	.046	31.75	15.88	9.52	.91	M5712-ND	10.61	9.89	5712
700	2.25	.42	31.75	15.88	9.52	.46	M5713-ND	10.61	9.89	5713
1250	1.75	.85	31.75	15.88	9.52	.38	M5714-ND	10.61	9.89	5714
1600	1.50	1.27	31.75	15.88	9.52	.30	M5715-ND	10.61	9.89	5715
125	7.75	.032	46.02	19.05	19.05	1.63	M5716-ND	15.94	14.85	5716
500	4.00	.15	46.02	19.05	19.05	.81	M5717-ND	15.94	14.85	5717
1100	2.50	.33	46.02	19.05	19.05	.64	M5718-ND	15.94	14.85	5718
2250	1.75	.92	46.02	19.05	19.05	.46	M5719-ND	15.94	14.85	5719
4500	1.25	2.64	46.02	19.05	19.05	.30	M5720-ND	15.94	14.85	5720
250	8.00	.041	53.98	23.80	15.88	1.57	M5721-ND	18.58	17.31	5721
900	3.75	.175	53.98	23.80	15.88	.81	M5722-ND	18.58	17.31	5722
1800	2.50	.55	53.98	23.80	15.88	.58	M5723-ND	18.58	17.31	5723
4000	1.75	1.16	53.98	23.80	15.88	.46	M5724-ND	19.91	18.55	5724
8000	1.00	3.34	53.98	23.80	15.88	.30	M5725-ND	19.91	18.55	5725
25	2.50	.040	13.97	5.59	3.81	.51	M5726-ND	8.00	7.45	5726
35	2.50	.035	17.78	8.13	3.81	.64	M5727-ND	8.00	7.45	5727
50	2.50	.060	19.05	8.13	3.81	.51	M5728-ND	8.00	7.45	5728
100	2.50	.080	21.59	9.14	5.08	.51	M5729-ND	8.00	7.45	5729
70	3.00	.050	21.59	9.14	5.08	.64	M5730-ND	8.57	7.98	5730
40	4.00	.025	21.59	9.14	5.08	.81	M5731-ND	8.00	7.45	5731

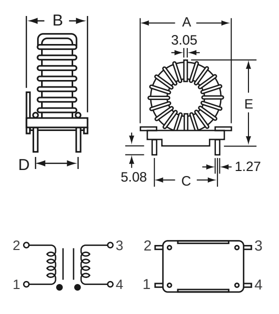
L (µH) ±15%	I,dc Max. Amps	R,dc Max. Ohms	Dimensions (mm) A Max.	B Max.	C ± .38	D ± .38	E Max.	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
6700 Series											
10	11.00	.008	22.23	10.77	15.24	6.35	25.40	M5732-ND	11.08	10.33	6701
25	5.50	.014	22.23	10.79	15.24	6.35	25.40	M5733-ND	11.08	10.33	6702
125	2.75	.12	22.23	10.79	15.24	6.35	25.40	M5734-ND	11.08	10.33	6703
275	2.00	.24	22.23	10.79	15.24	6.35	25.40	M5735-ND	11.08	10.33	6704
450	1.50	.49	22.23	10.79	15.24	6.35	25.40	M5736-ND	11.08	10.33	6705
25	9.00	.012	28.58	15.24	20.32	10.16	31.75	M5737-ND	12.00	11.18	6706
75	5.00	.04	28.58	15.24	20.32	10.16	31.75	M5738-ND	12.00	11.18	6707
400	2.25	.33	28.58	15.24	20.32	10.16	31.75	M5739-ND	12.00	11.18	6708
1000	1.50	.98	28.58	15.24	20.32	10.16	31.75	M5741-ND	12.00	11.18	6710
50	9.50	.012	31.75	20.32	22.86	15.24	34.93	M5742-ND	13.14	12.24	6711
150	4.75	.046	31.75	20.32	22.86	15.24	34.93	M5743-ND	13.14	12.24	6712
700	2.25	.42	31.75	20.32	22.86	15.24	34.93	M5744-ND	13.14	12.24	6713
1250	1.75	.85	31.75	20.32	22.86	15.24	34.93	M5745-ND	13.14	12.24	6714
1600	1.50	1.27	31.75	20.32	22.86	15.24	34.93	M5746-ND	13.14	12.24	6715
125	7.75	.032	46.02	22.86	30.48	17.78	49.53	M5747-ND	15.53	14.47	6716
500	4.00	.15	46.02	22.86	30.48	17.78	49.53	M5748-ND	15.53	14.47	6717
1100	2.50	.33	46.02	22.86	30.48	17.78	49.53	M5749-ND	15.53	14.47	6718
2250	1.75	.92	46.02	22.86	30.48	17.78	49.53	M5750-ND	15.53	14.47	6719
4500	1.25	2.64	46.02	22.86	30.48	17.78	49.53	M5751-ND	18.28	17.03	6720
250	8.00	.041	53.98	27.94	38.10	22.86	57.15	M5752-ND	18.28	17.03	6721
900	3.75	.175	53.98	27.94	38.10	22.86	57.15	M5753-ND	21.13	19.69	6722
1800	2.50	.55	53.98	27.94	38.10	22.86	57.15	M5754-ND	21.13	19.69	6723
4000	1.75	1.16	53.98	27.94	38.10	22.86	57.15	M5755-ND	21.13	19.69	6724
8000	1.00	3.34	53.98	27.94	38.10	22.86	57.15	M5756-ND	21.13	19.69	6725
25	2.50	.040	13.97	10.79	15.24	6.35	25.40	M5757-ND	12.11	11.28	6726
35	2.50	.035	17.78	10.79	15.24	6.35	25.40	M5758-ND	12.11	11.28	6727
50	2.50	.060	19.05	10.79	15.24	6.35	25.40	M5759-ND	12.11	11.28	6728
100	2.50	.080	21.59	10.79	15.24	6.35	25.40	M5760-ND	12.11	11.28	6729
70	3.00	.050	21.59	10.79	15.24	6.35	25.40	M5761-ND	12.11	11.28	6730
40	4.00	.025	21.59	10.79	15.24	6.35	25.40	M5762-ND	12.11	11.28	6731

Common Mode Choke with Header — 8100 Series

8101-8103 Series

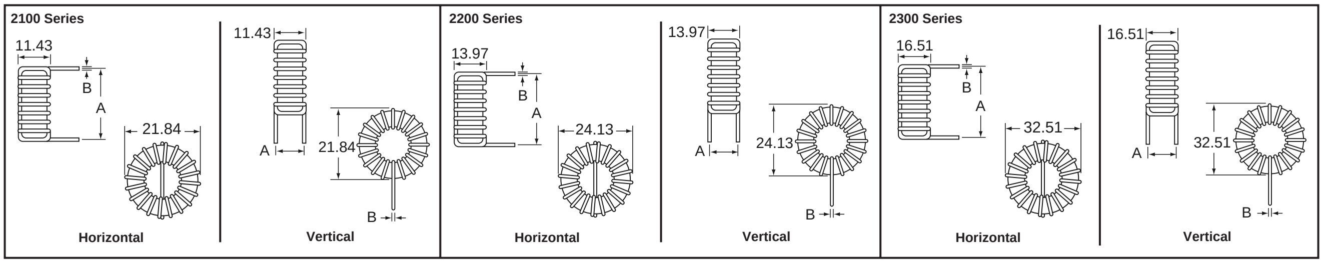


8104-8121 Series



L (mH) Min. @ 1KHz	I Max. (A)	R,dc Max. Ohms	Dimensions (mm) A Max.	B ±0.01	C ±0.015	D ±0.015	E Max.	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
4	1.7	0.173	19.30	10.79	15.24	6.35	22.86	M9836-ND	6.07	5.66	8101
2.5	2.4	0.09	19.30	10.79	15.24	6.35	22.86	M9837-ND	6.07	5.66	8102
1	4.8	0.022	19.30	10.79	15.24	6.35	22.86	M9838-ND	6.07	5.66	8103
10	2.4	0.17	30.48	15.24	20.32	10.16	30.48	M9839-ND	9.54	8.89	8104
7	2.8	0.12	30.48	15.24	20.32	10.16	30.48	M9840-ND	9.54	8.89	8105
5	3.7	0.07	30.48	15.24	20.32	10.16	30.48	M9841-ND	9.54	8.89	8106
2	6.6	0.022	30.48	15.24	20.32	10.16	30.48	M9842-ND	9.54	8.89	8107
1	10	0.01	30.48	15.24	20.32	10.16	30.48	M9843-ND	9.54	8.89	8108
30	2.3	0.33	34.29	20.32	22.86	15.24	36.83	M9844-ND	14.33	13.35	8109
20	2.9	0.21	34.29	20.32	22.86	15.24	36.83	M9845-ND	14.33	13.35	8110
12	4	0.11	34.29	20.32	22.86	15.24	36.83	M9846-ND	14.33	13.35	8111
8	5.6	0.055	34.29	20.32	22.86	15.24	36.83	M9847-ND	14.33	13.35	8112
5	8.9	0.022	36.83	20.32	22.86	15.24	38.10	M9848-ND	14.33	13.35	8113
2.5	12.5	0.011	36.83	20.32	22.86	15.24	38.10	M9849-ND	14.33	13.35	8114
1.2	16	0.006	38.10	20.32	22.86	15.24	38.86	M9850-ND	14.33	13.35	8115
50	2.3	0.45	39.37	20.32	22.86	15.24	41.91	M9851-ND	19.07	17.77	8116
36	2.9	0.3	39.37	20.32	22.86	15.24	41.91	M9852-ND	19.07	17.77	8117
7.3	9.3	0.032	41.91	20.32	22.86	15.24	41.91	M9853-ND	19.07	17.77	8118
4	14.5	0.012	43.18	22.86	30.48	17.78	41.91	M9854-ND	19.07	17.77	8119
2.4	17	0.008	43.18	22.86	30.48	17.78	41.91	M9855-ND	19.07	17.77	8120
1	20	0.007	43.18	22.86	30.48	17.78	41.91	M9856-ND	19.07	17.77	8121

High Current Toroid Inductor



L (uH) ±15% @ 1KHz	I, dc (A)	L (uH) ±15% @ I Rated	R,dc Max. Ohms	Dimensions (mm) A Max.	B Min.	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
2100 Series — Horizontal									
10	10.8	6.3	0.006	19.56	1.35	M9764-ND	3.10	2.89	2101-H
12	10.3	7.4	0.007	19.56	1.35	M9765-ND	3.10	2.89	2102-H
15	7.7	10.2	0.012	19.30	1.07	M9766-ND	3.10	2.89	2103-H
18	7.4	11.9	0.013	19.30	1.07	M9767-ND	3.10	2.89	2104-H
22	7.0	14.2	0.015	19.30	1.07	M9768-ND	3.10	2.89	2105-H
27	5.3	19.1	0.026	19.05	0.86	M9769-ND	3.10	2.89	2106-H
33	5.0	22.8	0.029	19.05	0.86	M9770-ND	3.10	2.89	2107-H
39	4.8	26.4	0.032	19.05	0.86	M9771-ND	3.10	2.89	2108-H
47	3.6	34.7	0.055	19.05	0.69	M9772-ND	3.10	2.89	2109-H
56	3.4	40.6	0.060	19.05	0.69	M9773-ND	3.10	2.89	2110-H
68	3.3	48.3	0.067	19.05	0.69	M9774-ND	3.10	2.89	2111-H
100	2.4	75.2	0.13	18.80	0.56	M9775-ND	3.10	2.89	2112-H
120	2.2	88.5	0.15	18.80	0.56	M9776-ND	3.10	2.89	2113-H
150	3.4	84.3	0.062	20.07	0.86	M9777-ND	3.10	2.89	2114-H
180	2.6	113.1	0.11	19.56	0.69	M9778-ND	3.10	2.89	2115-H
220	2.4	134.4	0.12	19.56	0.69	M9779-ND	3.10	2.89	2116-H
270	1.8	181.6	0.21	19.30	0.56	M9780-ND	3.51	3.27	2117-H
330	1.7	216.3	0.23	19.30	0.56	M9781-ND	3.51	3.27	2118-H
390	1.7	250.1	0.25	19.30	0.56	M9782-ND	3.51	3.27	2119-H
470	1.6	293.8	0.28	19.30	0.56	M9783-ND	3.51	3.27	2120-H
560	1.5	341.5	0.30	20.07	0.56	M9784-ND	3.51	3.27	2121-H
680	1.4	403.2	0.33	20.07	0.56	M9785-ND	3.51	3.27	2122-H
820	1.4	472.8	0.37	20.07	0.56	M9786-ND	3.51	3.27	2123-H
1000	1.3	559.2	0.40	20.57	0.56	M9787-ND	3.51	3.27	2124-H
2200 Series — Horizontal									
10	12.5	6.7	0.007	22.35	1.35	M9788-ND	3.92	3.65	2201-H
12	12.0	7.9	0.008	22.35	1.35	M9789-ND	3.92	3.65	2202-H
15	11.3	9.6	0.008	22.35	1.35	M9790-ND	3.92	3.65	2203-H
18	10.8	11.3	0.009	22.35	1.35	M9791-ND	3.92	3.65	2204-H
22	10.3	13.4	0.010	22.35	1.35	M9792-ND	3.92	3.65	2205-H
27	9.8	16.0	0.011	22.35	1.35	M9793-ND	3.92	3.65	2206-H
33	7.4	21.6	0.020	22.10	1.07	M9794-ND	3.92	3.65	2207-H
39	7.1	25.0	0.022	22.10	1.07	M9795-ND	3.92	3.65	2208-H
47	6.7	29.3	0.024	22.10	1.07	M9796-ND	3.92	3.65	2209-H
56	6.4	34.1	0.026	22.10	1.07	M9797-ND	3.92	3.65	2210-H
68	4.9	45.7	0.046	21.84	0.86	M9798-ND	3.92	3.65	2211-H
100	4.4	64.0	0.056	21.84	0.86	M9799-ND	3.92	3.65	2212-H
120	3.3	84.4	0.098	21.84	0.69	M9800-ND	3.92	3.65	2213-H
150	3.1	102.7	0.11	21.84	0.69	M9801-ND	3.92	3.65	2214-H
180	3.8	105.9	0.075	22.86	0.86	M9802-ND	3.92	3.65	2215-H
220	3.6	125.6	0.083	22.86	0.86	M9803-ND	3.92	3.65	2216-H
270	3.4	149.4	0.092	22.86	0.86	M9804-ND	4.32	4.03	2217-H
330	3.3	176.8	0.10	22.86	0.86	M9805-ND	4.32	4.03	2218-H
390	2.5	235.3	0.18	22.35	0.69	M9806-ND	4.32	4.03	2219-H
470	2.3	275.9	0.19	22.35	0.69	M9807-ND	4.32	4.03	2220-H
560	2.2	320.1	0.21	22.35	0.69	M9808-ND	4.32	4.03	2221-H
680	2.1	377.2	0.23	23.11	0.69	M9809-ND	4.32	4.03	2222-H
820	2.0	441.5	0.26	23.11	0.69	M9810-ND	4.32	4.03	2223-H
1000	1.9	521.3	0.28	23.11	0.69	M9811-ND	4.32	4.03	2224-H
2300 Series — Horizontal									
10	20.0	6.7	0.005	29.97	1.68	M9812-ND	4.73	4.41	2301-H
12	19.1	7.8	0.005	29.97	1.68	M9813-ND	4.73	4.41	2302-H
15	18.0	9.5	0.006	29.97	1.68	M9814-ND	4.73	4.41	2303-H
18	17.2	11.1	0.006	29.97	1.68	M9815-ND	4.73	4.41	2304-H
22	16.4	13.2	0.007	29.97	1.68	M9816-ND	4.73	4.41	2305-H
27	15.6	15.7	0.008	29.97	1.68	M9817-ND	4.73	4.41	2306-H
33	11.7	21.3	0.013	28.96	1.35	M9818-ND	4.73	4.41	2307-H
39	11.2	24.7	0.014	28.96	1.35	M9819-ND	4.73	4.41	2308-H
47	10.7	29.0	0.016	28.96	1.35	M9820-ND	4.73	4.41	2309-H
56	10.2	33.7	0.017	28.96	1.35	M9821-ND	4.73	4.41	2310-H
68	7.7	45.2	0.030	28.70	1.07	M9822-ND	4.73	4.41	2311-H
100	7.0	63.1	0.037	28.70	1.07	M9823-ND	4.73	4.41	2312-H
120	6.7	73.9	0.040	28.70	1.07	M9824-ND	4.73	4.41	2313-H
150	5.0	101.4	0.071	28.45	0.86	M9825-ND	4.73	4.41	2314-H
180	4.8	118.9	0.078	28.45	0.86	M9826-ND	4.73	4.41	2315-H
220	5.8	123.8	0.054	29.72	1.07	M9827-ND	4.73	4.41	2316-H
270	5.5	147.2	0.060	29.72	1.07	M9828-ND	4.73	4.41	2317-H
330	5.2	174.1	0.067	29.72	1.07	M9829-ND	4.73	4.41	2318-H
390	5.0	200.2	0.072	29.72	1.07	M9830-ND	4.73	4.41	2319-H
470	3.8	271.4	0.13	29.46	0.86	M9831-ND	4.73	4.41	2320-H
560	3.6	314.8	0.14	29.46	0.86	M9832-ND	4.73	4.41	2321-H
680	3.4	370.7	0.15	29.46	0.86	M9833-ND	4.73	4.41	2322-H
820	2.6	500.9	0.27	28.96	0.69	M9834-ND	4.73	4.41	2323-H
1000	2.4	593.6	0.30	28.96	0.69	M9835-ND	4.73	4.41	2324-H

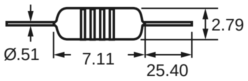
L (uH) ±15% @ 1KHz	I, dc (A)	L (uH) ±15% @ I Rated	R,dc Max. Ohms	Dimensions (mm) A Max.	B Min.	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
2100 Series — Vertical									
10	10.8	6.3	0.006	8.64	1.35	M9857-ND	3.10	2.89	2101-V
12	10.3	7.4	0.007	8.64	1.35	M9858-ND	3.10	2.89	2102-V
15	7.7	10.2	0.012	8.38	1.07	M9859-ND	3.10	2.89	2103-V
18	7.4	11.9	0.013	8.38	1.07	M9860-ND	3.10	2.89	2104-V
22	7.0	14.2	0.015	8.38	1.07	M9861-ND	3.10	2.89	2105-V
27	5.3	19.1	0.026	8.13	0.86	M9862-ND	3.10	2.89	2106-V
33	5.0	22.8	0.029	8.13	0.86	M9863-ND	3.10	2.89	2107-V
39	4.8	26.4	0.032	8.13	0.86	M9864-ND	3.10	2.89	2108-V
47	3.6	34.7	0.055	7.87	0.69	M9865-ND	3.10	2.89	2109-V
56	3.4	40.6	0.060	7.87	0.69	M9866-ND	3.10	2.89	2110-V
68	3.3	48.3	0.067	7.87	0.69	M9867-ND	3.10	2.89	2111-V
100	2.4	75.2	0.13	7.87	0.56	M9868-ND	3.10	2.89	2112-V
120	2.2	88.5	0.15	7.87	0.56	M9869-ND	3.10	2.89	2113-V
150	3.4	84.3	0.062	8.89	0.86	M9870-ND	3.10	2.89	2114-V
180	2.6	113.1	0.11	8.64	0.69	M9871-ND	3.10	2.89	2115-V
220	2.4	134.4	0.12	8.64	0.69	M9872-ND	3.10	2.89	2116-V
270	1.8	181.6	0.21	8.38	0.56	M9873-ND	3.51	3.27	2117-V
330	1.7	216.3	0.23	8.38	0.56	M9874-ND	3.51	3.27	2118-V
390	1.7	250.1	0.25	8.38	0.56	M9875-ND	3.51	3.27	2119-V
470	1.6	293.8	0.28	8.89	0.56	M9876-ND	3.51	3.27	2120-V
560	1.5	341.5	0.30	8.89	0.56	M9877-ND	3.51	3.27	2121-V
680	1.4	403.2	0.33	8.89	0.56	M9878-ND	3.51	3.27	2122-V
820	1.4	472.8	0.37	8.89	0.56	M9879-ND	3.51	3.27	2123-V
1000	1.3	559.2	0.40	9.40	0.56	M9880-ND	3.51	3.27	2124-V
2200 Series — Vertical									
10	12.5	6.7	0.007	11.68	1.35	M9881-ND	3.92	3.65	2201-V
12	12.0	7.9	0.008	11.68	1.35	M9882-ND	3.92	3.65	2202-V
15	11.3	9.6	0.008	11.68	1.35	M9883-ND	3.92	3.65	2203-V
18	10.8	11.3	0.009	11.68	1.35	M9884-ND	3.92	3.65	2204-V
22	10.3	13.4	0.010	11.68	1.35	M9885-ND	3.92	3.65	2205-V
27	9.8	16.0	0.011	11.68	1.35	M9886-ND	3.92	3.65	2206-V
33	7.4	21.6	0.020	11.43	1.07	M9887-ND	3.92	3.65	2207-V
39	7.1	25.0	0.022	11.43	1.07	M9888-ND	3.92	3.65	2208-V
47	6.7	29.3	0.024	11.43	1.07	M9889-ND	3.92	3.65	2209-V
56	6.4	34.1	0.026	11.43	1.07	M9890-ND	3.92	3.65	2210-V
68	4.9	45.7	0.046	11.18	0.86	M9891-ND	3.92	3.65	2211-V
100	4.4	64.0	0.056	11.18	0.86	M9892-ND	3.92	3.65	2212-V
120	3.3	84.4	0.098	11.18	0.69	M9893-ND	3.92	3.65	2213-V
150	3.1	102.7	0.11	11.18	0.69	M9894-ND	3.92	3.65	2214-V
180	3.8	105.9	0.075	12.19	0.86	M9895-ND	3.92	3.65	2215-V
220	3.6	125.6	0.083	12.19	0.86	M9896-ND	3.92	3.65	2216-V
270	3.4	149.4	0.092	12.19	0.86	M9897-ND	4.32	4.03	2217-V
330	3.3	176.8	0.10	12.19	0.86	M9898-ND	4.32	4.03	2218-V
390	2.5	235.3	0.18	11.68	0.69	M9899-ND	4.32	4.03	2219-V
470	2.3	275.9	0.19	11.68	0.69	M9900-ND	4.32	4.03	2220-V
560	2.2	320.1	0.21	11.68	0.69	M9901-ND	4.32	4.03	2221-V
680	2.1	377.2	0.23	12.45	0.69	M9902-ND	4.32	4.03	2222-V
820	2.0	441.5	0.26	12.45	0.69	M9903-ND	4.32	4.03	2223-V
1000	1.9	521.3	0.28	12.45	0.69	M9904-ND	4.32	4.03	2224-V
2300 Series — Vertical									
10	20.0	6.7	0.005	14.22	1.68	M9905-ND	4.73	4.41	2301-V
12	19.1	7.8	0.005	14.22	1.68	M9906-ND	4.73	4.41	2302-V
15	18.0	9.5	0.006	14.22	1.68	M9907-ND	4.73	4.41	2303-V
18	17.2	11.1	0.006	14.22	1.68	M9908-ND	4.73	4.41	2304-V
22	16.4	13.2	0.007	14.22	1.68	M9909-ND	4.73	4.41	2305-V
27	15.6	15.7	0.008	14.22	1.68	M9910-ND	4.73	4.41	2306-V
33	11.7	21.3	0.013	13.46	1.35	M9911-ND	4.73	4.41	2307-V
39	11.2	24.7	0.014	13.46	1.35	M9912-ND	4.73	4.41	2308-V
47	10.7	29.0	0.016	13.46	1.35	M9913-ND	4.73	4.41	2309-V
56	10.2	33.7	0.017	13.46	1.35	M9914-ND	4.73	4.41	2310-V
68	7.7	45.2	0.030	13.21	1.07	M9915-ND	4.73	4.41	2311-V
100	7.0	63.1	0.037	13.21	1.07	M9916-ND	4.73	4.41	2312-V
120	6.7	73.9	0.040	13.21	1.07	M9917-ND	4.73	4.41	2313-V
150	5.0	101.4	0.071	12.95	0.86	M9918-ND	4.73	4.41	2314-V
180	4.8	118.9	0.078	12.95	0.86	M9919-ND	4.73	4.41	2315-V
220	5.8	123.8	0.054	14.22	1.07	M9920-ND	4.73	4.41	2316-V
270	5.5	147.2	0.060	14.22	1.07	M9921-ND	4.73	4.41	2317-V
330	5.2	174.1	0.067	14.22	1.07	M9922-ND	4.73	4.41	2318-V
390	5.0	200.2	0.072	14.22	1.07	M9923-ND	4.73	4.41	2319-V
470	3.8	271.4	0.13	13.72	0.86	M9924-ND	4.73	4.41	2320-V
560	3.6	314.8	0.14	13.72	0.86	M9925-ND	4.73	4.41	2321-V
680	3.4	370.7	0.15	13.72	0.86	M9926-ND	4.73	4.41	2322-V
820	2.6	500.9	0.27	13.46	0.69	M9927-ND	4.73	4.41	2323-V
1000	2.4	593.6	0.30	13.46	0.69	M9928-ND	4.73	4.41	2324-V

Epoxy Conformal Coated Inductors

Form Length: .300" (7.62mm)
Lead Length: 2.62" (66.55mm)
Form Diameter: .120" (3.05mm)
Leads: .022"Ø (.56mm Ø)

L± 10% µH	Q Min.	Test Freq. MHz	I, dc Max. mA	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
Core							
.10	40	25.0	1100	M8001-ND	1.14	1.07	8230-94
.12	40	25.0	1100	M8002-ND	1.14	1.07	8230-96
.15	38	25.0	1100	M8003-ND	1.26	1.19	8230-00
.18	35	25.0	1010	M8004-ND	1.26	1.19	8230-02
.22	33	25.0	935	M8005-ND	1.26	1.19	8230-04
.27	33	25.0	875	M8006-ND	1.26	1.19	8230-06
.33	30	25.0	780	M8007-ND	1.26	1.19	8230-08
.39	30	25.0	640	M8008-ND	1.26	1.19	8230-10
.47	30	25.0	590	M8009-ND	1.26	1.19	8230-12
.56	30	25.0	495	M8010-ND	1.26	1.19	8230-14
.68	28	25.0	450	M8011-ND	1.26	1.19	8230-16
.82	28	25.0	380	M8012-ND	1.26	1.19	8230-18
1.00	25	25.0	350	M8013-ND	1.26	1.19	8230-20
Iron Core							
1.20	25	7.9	825	M8014-ND	1.51	1.42	8230-22
1.50	28	7.9	745	M8015-ND	1.51	1.42	8230-24
1.80	30	7.9	640	M8016-ND	1.51	1.42	8230-26
2.20	30	7.9	550	M8017-ND	1.51	1.42	8230-28
2.70	37	7.9	495	M8018-ND	1.51	1.42	8230-30
3.30	45	7.9	380	M8019-ND	1.51	1.42	8230-32
3.90	45	7.9	350	M8020-ND	1.51	1.42	8230-34
4.70	45	7.9	320	M8021-ND	1.51	1.42	8230-36
5.60	50	7.9	260	M8022-ND	1.52	1.42	8230-38
6.80	50	7.9	245	M8023-ND	1.52	1.42	8230-40
8.20	55	7.9	210	M8024-ND	1.52	1.42	8230-42
10.00	55	7.9	180	M8025-ND	1.52	1.42	8230-44
12.00	45	2.5	210	M8026-ND	1.52	1.42	8230-46
15.00	45	2.5	205	M8027-ND	1.52	1.42	8230-48
18.00	50	2.5	195	M8028-ND	1.52	1.42	8230-50
22.00	50	2.5	190	M8029-ND	1.52	1.42	8230-52
27.00	50	2.5	185	M8030-ND	1.52	1.42	8230-54
Ferrite Core							
33.00	45	2.5	187	M8031-ND	1.74	1.63	8230-56
39.00	45	2.5	180	M8032-ND	1.74	1.63	8230-58
47.00	45	2.5	165	M8033-ND	1.74	1.63	8230-60
56.00	45	2.5	145	M8034-ND	1.74	1.63	8230-62
68.00	50	2.5	135	M8035-ND	1.74	1.63	8230-64
82.00	50	2.5	130	M8036-ND	1.74	1.63	8230-66
100.00	50	2.5	125	M8037-ND	1.74	1.63	8230-68
120.00	30	.79	97	M8038-ND	1.74	1.63	8230-70
150.00	30	.79	85	M8039-ND	1.74	1.63	8230-72
180.00	30	.79	79	M8040-ND	1.74	1.63	8230-74
220.00	30	.79	73	M8041-ND	1.74	1.63	8230-76
270.00	30	.79	65	M8042-ND	1.85	1.74	8230-78
330.00	30	.79	62	M8043-ND	1.85	1.74	8230-80
390.00	30	.79	55	M8044-ND	1.85	1.74	8230-82
470.00	30	.79	50	M8045-ND	1.86	1.74	8230-84
560.00	30	.79	48	M8046-ND	1.86	1.74	8230-86
680.00	30	.79	42	M8047-ND	1.86	1.74	8230-88
820.00	30	.79	40	M8048-ND	2.10	1.97	8230-90
1,000.00	30	.79	38	M8049-ND	2.10	1.97	8230-92

High Quality Epoxy Conformal Coated Inductors

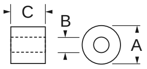


Operating Temperature: -20°C to +105°C
Working Voltage: 250 VDC max.
Material: Coating-Epoxy Leads-Tinned Copper
Core Material: Ferrite

L± 20% µH	Q Min.	Test Freq. MHz	I, dc Max. mA	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
.10	40	25.0	500	M7801-ND	.55	.52	78FR10M
.12	40	25.0	500	M7802-ND	.55	.52	78FR12M
.15	40	25.0	500	M7803-ND	.55	.52	78FR15M
.18	40	25.0	450	M7804-ND	.55	.52	78FR18M
.22*	40	25.0	1025	M7805-ND	.55	.52	78FR22K
.27*	40	25.0	950	M7806-ND	.55	.52	78FR27K
.33*	40	25.0	815	M7807-ND	.55	.52	78FR33K
.39*	40	25.0	700	M7808-ND	.55	.52	78FR39K
.47*	40	25.0	650	M7809-ND	.55	.52	78FR47K
.56*	40	25.0	545	M7810-ND	.55	.52	78FR56K
.68*	40	25.0	495	M7811-ND	.55	.52	78FR68K
.82*	40	25.0	415	M7812-ND	.55	.52	78FR82K
1.0*	40	25.0	385	M7813-ND	.55	.52	78F1R0K
1.2*	40	7.9	590	M7814-ND	.55	.52	78F1R2K
1.5*	45	7.9	535	M7815-ND	.55	.52	78F1R5K
1.8*	50	7.9	455	M7816-ND	.55	.52	78F1R8K
2.2*	50	7.9	395	M7817-ND	.55	.52	78F2R2K
2.7*	50	7.9	355	M7818-ND	.55	.52	78F2R7K
3.3†	50	7.9	270	M7819-ND	.55	.52	78F3R3J
3.9†	45	7.9	250	M7820-ND	.55	.52	78F3R9J
4.7†	45	7.9	230	M7821-ND	.55	.52	78F4R7J
5.6†	45	7.9	185	M7822-ND	.55	.52	78F5R6J
6.8†	40	7.9	175	M7823-ND	.55	.52	78F6R8J
8.2†	40	7.9	155	M7824-ND	.55	.52	78F8R2J
10†	40	2.5	130	M7825-ND	.55	.52	78F100J
12†	45	2.5	155	M7826-ND	.55	.52	78F120J
15†	50	2.5	150	M7827-ND	.55	.52	78F150J
18†	50	2.5	145	M7828-ND	.55	.52	78F180J
22†	50	2.5	140	M7829-ND	.55	.52	78F220J
27†	50	2.5	135	M7830-ND	.55	.52	78F270J
33†	50	2.5	193	M7831-ND	.55	.52	78F330J
39†	50	2.5	185	M7832-ND	.55	.52	78F390J
47†	60	2.5	167	M7833-ND	.55	.52	78F470J
56†	60	2.5	150	M7834-ND	.55	.52	78F560J
68†	60	2.5	137	M7835-ND	.55	.52	78F680J
82†	60	2.5	132	M7836-ND	.55	.52	78F820J
100†	60	2.5	125	M7837-ND	.55	.52	78F101J
120†	60	0.79	100	M7838-ND	.55	.52	78F121J
150†	60	0.79	90	M7839-ND	.55	.52	78F151J
180†	60	0.79	84	M7840-ND	.55	.52	78F181J
220†	60	0.79	76	M7841-ND	.55	.52	78F221J
270†	60	0.79	70	M7842-ND	.55	.52	78F271J
330†	60	0.79	65	M7843-ND	.55	.52	78F331J
390†	60	0.79	60	M7844-ND	.55	.52	78F391J
470†	60	0.79	53	M7845-ND	.55	.52	78F471J
560†	60	0.79	51	M7846-ND	.55	.52	78F561J
680†	60	0.79	45	M7847-ND	.55	.52	78F681J
820†	60	0.79	43	M7848-ND	.55	.52	78F821J
1000†	60	0.79	41	M7849-ND	.55	.52	78F102J

* Rated at L ± 10% µH. † Rated at L ± 5% µH.

Ferrite Beads



The addition of a Ferrite Bead to a piece of wire causes the impedance of the lead to increase and acts like a small RF choke at high frequencies. It is possible to dissipate high frequency parasitic signals and attenuate undesirable frequencies that travel on DC circuits by the use of beads.

Freq. Range	Dimensions (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	J.W.Miller Part No.
0-40 MHz	1.32	.69	2.16	M2301-ND	.29	2.64	FB73-085
40-200 MHz	3.30	1.19	5.74	M2302-ND	.15	1.35	FB43-226
0-40 MHz	3.30	1.19	5.74	M2303-ND	.22	1.98	FB73-226
40-200 MHz	3.30	1.19	3.00	M2304-ND	.08	.69	FB43-110
200+ MHz	3.30	1.19	3.00	M2305-ND	.15	1.35	FB64-110
0-40 MHz	3.30	1.19	3.00	M2306-ND	.15	1.35	FB73-110
40-200MHz	4.83	1.45	10.72	M2307-ND	.22	1.98	FB43-422
0-40 MHz	4.83	1.45	10.72	M2308-ND	.22	1.98	FB73-422
40-200 MHz	7.39	2.26	7.29	M2309-ND	.22	1.98	FB43-287
0-40 MHz	7.39	2.26	7.29	M2310-ND	.29	2.64	FB73-287

Wide-Band Chokes

Fig. 1

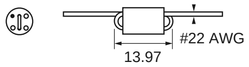


Fig. 2

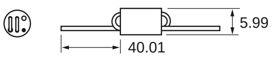


Fig. 3

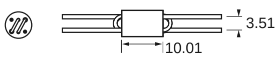


Fig.	No. of Turns	Min. Z (Ω)	Freq. (MHz)	Digi-Key Part No.	Price Each 1	10	J.W.Miller Part No.
1	1 1/2	225	10	M2093-ND	1.37	1.29	FB20009-3B
	1 1/2	175	10	M2194-ND	1.25	1.17	FB20019-4B
2	2 1/2	460	10	M2103-ND	1.25	1.17	FB20010-3B
	2 1/2	30	10	M2204-ND	1.25	1.17	FB20020-4B
3	2 x 1 1/2	215	10	M2113-ND	1.37	1.29	FB20011-3B
	2 x 1 1/2	175	10	M2214-ND	1.25	1.17	FB20021-4B

Hash Choke

Dimensions: Form Length: 31.75mm; Lead Length: 31.75mm

L (µH)	R, dc Max. (Ω)	I, dc Max. (A)	Coil Dia. Max. (mm)	Digi-Key Part No.	Price Each 1	10	J.W. Miller Part No.
Ferrite Core							
4	.012	8	9.65	M5230-ND	2.39	2.24	5230
40	.082	3	7.87	M5240-ND	2.39	2.24	5240
68	.054	5	14.22	M5248-ND	3.18	2.97	5248
100	.216	2	9.65	M5250-ND	3.18	2.97	5250
125	.08	3.5	12.70	M5252-ND	3.18	2.97	5252
250	.17	2.5	11.18	M5254-ND	3.18	2.97	5254
500	.26	2	14.22	M5256-ND	3.18	2.97	5256
1000	.55	1	12.70	M5258-ND	3.27	3.06	5258

TOKO Balun Transformers

Toko's high quality balun (balanced/unbalanced) transformers are precisely wound round a double ferrite core. Toko's baluns are ideally suited for designing double balanced mixers, directional couplers, signal splitters, signal distributors, and impedance matching circuits.

9179B-ND Toko Application Notes for 458DB-456DB......**$1.95**
9180B-ND Toko Application Notes for 458DS-456DS......**$1.95**

Fig. 1

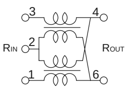


Fig. 2

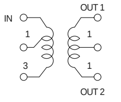
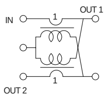
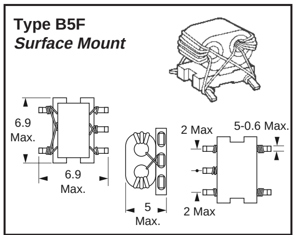


Fig. 3



Type B5F
Surface Mount



Type B7T
Leaded

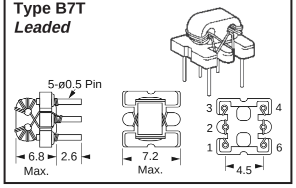
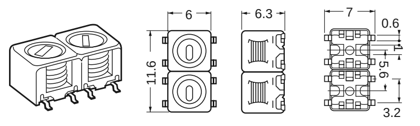


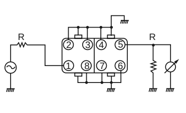
Fig.	Winding	Operating Frequency Range	Insertion Loss	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	Toko Part No.
Type B5F – Surface Mount										
1	n = 1	50MHz~400MHz	10dB max.	TKS2514CT-ND	2.89	2.58	1.87	TKS2514TR-ND	1061.00	458DB-1012
1	n = 4	6MHz~600MHz	2.5dB max.	TKS2512CT-ND	5.00	3.42	2.33	TKS2512TR-ND	1610.00	458DB-1008
1	n = 5	5MHz~500MHz	2dB max.	TKS2513CT-ND	5.00	3.42	2.33	TKS2513TR-ND	1610.00	458DB-1011
1	n = 2	400MHz~1.3GHz	4dB max.	TKS2511CT-ND	2.89	2.58	1.87	—	—	458DB-1005
2	—	20MHz~600MHz	IN to OUT-1,2 4.5dB max; OUT-1 to OUT-2 (ISOLATION) 10dBN min.	TKS2518CT-ND	5.00	3.42	2.33	TKS2518TR-ND	1610.00	458DS-1014
3	n = 4	6MHz~600MHz	IN to OUT-1 1.3dB max.; IN to OUT-2 11dB ~ 14dB	TKS2519CT-ND	5.00	3.42	2.33	TKS2519TR-ND	1610.00	458PS-1015
3	n = 6	6MHz~600MHz	IN to OUT-1 0.8dB max; IN to OUT-2 15db ~ 17dB	TKS2517CT-ND	5.00	3.42	2.33	TKS2517TR-ND	1610.00	458PS-1007
Type B7T – Leaded										
1	n = 5	5MHz~500 MHz	2dB max.	TK2513-ND	5.55	4.35	2.59	—	—	456DB-1007
2	—	20MHz~600MHz	IN to OUT-1,2 4.5dB max; OUT-1 to OUT-2 (ISOLATION) 10dBN min.	TK2518-ND	5.55	4.35	2.59	—	—	456DS-1012
3	n = 6	6MHz~600MHz	IN to OUT-1 0.8dB max; IN to OUT-2 15db ~ 17dB	TK2516-ND	5.55	4.35	2.59	—	—	456PS-1011

TOKO Helical Filters

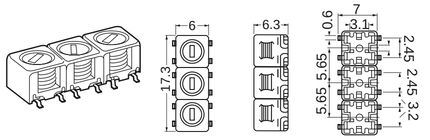
Examples of Connection Diagrams — Bottom View

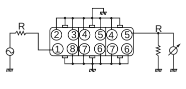
5CHW Type – Surface Mount



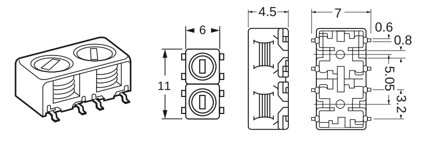


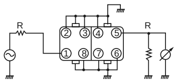
5CHT Type – Surface Mount



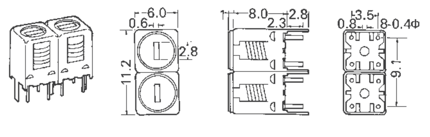


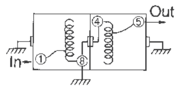
5CHLW Type – Surface Mount



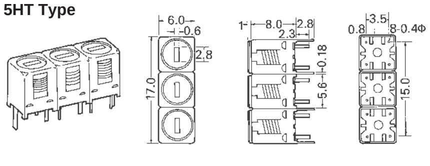


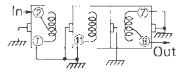
5HW Type



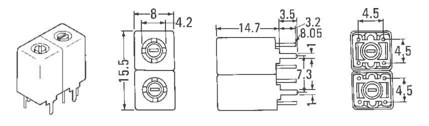


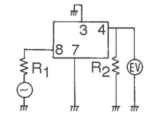
5HT Type



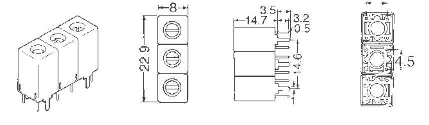


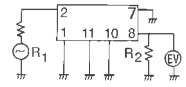
7HW Type



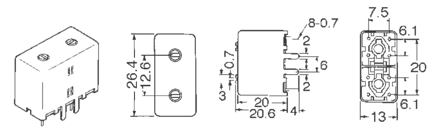


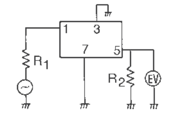
7HT Type



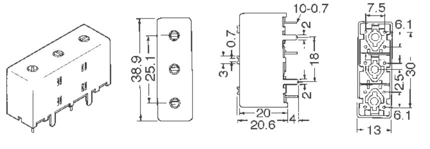


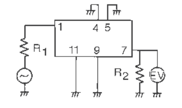
CBW Type





CBT Type



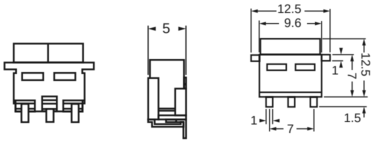


Test /Bw Freq./Min. (MHz)/(MHz)	Selectivity (Min.) dB (MHz) dB (MHz)	Ripple/ Loss dB / dB	Digi-Key Part No.	Cut Tape Pricing 1	10	Digi-Key Part No.	Tape & Reel Pricing	Toko Part No.
5CHW TYPE – Surface Mount								
420 / 10	20 (+50) 14 (–50)	0.5 / 3.0	TKS5440CT-ND	19.90	159.20	TKS5440TR-ND	5970.00/750	492S-1051A
427 / 10	20 (+50) 14 (–50)	0.5 / 3.0	TKS5441CT-ND	19.90	159.20	TKS5441TR-ND	5970.00/750	492S-1053A
435 / 10	20 (+50) 14 (–50)	0.5 / 3.5	TKS5442CT-ND	19.90	159.20	TKS5442TR-ND	5970.00/750	492S-1055A
450 / 10	17 (+50) 12 (–50)	0.5 / 3.5	TKS5443CT-ND	19.90	159.20	TKS5443TR-ND	5970.00/750	492S-1057A
456 / 10	16 (+50) 12 (–50)	0.5 / 3.5	TKS5444CT-ND	19.90	159.20	TKS5444TR-ND	5970.00/750	492S-1059A
463.5 / 10	16 (+50) 12 (–50)	0.5 / 3.5	TKS5445CT-ND	19.90	159.20	TKS5445TR-ND	5970.00/750	492S-1061A
470 / 10	15 (+50) 12 (–50)	0.5 / 3.5	TKS5446CT-ND	19.90	159.20	TKS5446TR-ND	5970.00/750	492S-1063A
5CHT TYPE – Surface Mount								
395 / 10	33 (+50) 33 (–50)	0.5 / 4.5	TKS5448CT-ND	27.25	218.00	TKS5448TR-ND	8175.00/750	493S-1066A
420 / 10	30 (+50) 30 (–50)	0.5 / 4.5	TKS5449CT-ND	27.25	218.00	TKS5449TR-ND	8175.00/750	493S-1067A
425 / 10	30 (+50) 30 (–50)	0.5 / 4.5	TKS5450CT-ND	27.25	218.00	TKS5450TR-ND	8175.00/750	493S-1068A
430 / 10	30 (+50) 30 (–50)	0.5 / 4.5	TKS5451CT-ND	27.25	218.00	TKS5451TR-ND	8175.00/750	493S-1069A
440 / 10	27 (+50) 27 (–50)	0.5 / 4.5	TKS5452CT-ND	27.25	218.00	TKS5452TR-ND	8175.00/750	493S-1071A
452 / 10	27 (+50) 27 (–50)	0.5 / 4.5	TKS5453CT-ND	27.25	218.00	TKS5453TR-ND	8175.00/750	493S-1073A
460 / 10	27 (+50) 27 (–50)	0.5 / 4.5	TKS5454CT-ND	27.25	218.00	TKS5454TR-ND	8175.00/750	493S-1075A
5CHLW TYPE – Surface Mount								
836 / 23	14 (+100) 22 (–100)	1.5 / 4.0	TKS5432CT-ND	13.17	104.23	—	—	477MS-1093A
850 / 25	17 (+100) 25 (–100)	1.0 / 2.5	TKS5433CT-ND	13.17	104.23	—	—	477MS-1032A
881 / 23	12 (+100) 19 (–100)	1.0 / 3.5	TKS5435CT-ND	13.17	104.23	—	—	477MS-1094A
902.5 / 25	18 (+100) 24 (–100)	1.0 / 2.5	TKS5436CT-ND	20.90	167.20	TKS5436TR-ND	5800.00/1000	477MS-1034A
915 / 25	18 (+100) 25 (–100)	1.0 / 2.5	TKS5437CT-ND	20.90	167.20	TKS5437TR-ND	5800.00/1000	477MS-1035A
933 / 25	18 (+100) 25 (–100)	1.0 / 2.5	TKS5438CT-ND	20.90	167.20	TKS5438TR-ND	5800.00/1000	477MS-1036A
947.5 / 25	18 (+100) 25 (–100)	1.0 / 2.5	TKS5439CT-ND	20.90	167.20	TKS5439TR-ND	5800.00/1000	477MS-1037A

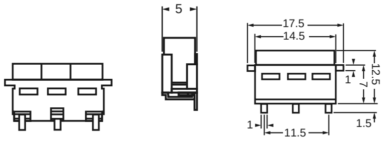
Test / Bw Freq. / Min. (MHz) / (MHz)	Selectivity (Min.) dB (MHz) dB (MHz)	Ripple/ Loss dB / dB	Digi-Key Part No.	Pricing 1	10	50	Toko Part No.
5HW Type							
365 / 6	20 (–50) 25 (+50)	1.0 / 4.5	TK5414-ND	26.05	208.40	989.90	5HW-35045A-365
475 / 8	18 (–50) 22 (+50)	1.0 / 4.5	TK5415-ND	26.05	208.40	989.90	5HW-44545A-475
530 / 10	16 (–50) 20 (+50)	1.0 / 4.5	TK5416-ND	26.05	208.40	989.90	5HW-51035A-530
700 / 16s	23 (–100) 26 (+100)	1.0 / 3.5	TK5418-ND	26.05	208.40	989.90	5HW-68050A-700
820 / 16	22 (–100) 24 (+100)	1.0 / 3.5	TK5419-ND	26.05	208.40	989.90	5HW-78045A-820
914 / 18	19 (–100) 24 (+100)	1.0 / 3.5	TK5420-ND	26.05	208.40	989.90	5HW-88560A-914
1010 / 16	14 (–100) 18 (+100)	1.0 / 3.5	TK5421-ND	26.05	208.40	989.90	5HW-100090A-1010
1305 / 25	18 (–100) 20 (+100)	1.0 / 3.5	TK5423-ND	26.05	208.40	989.90	5HW-125055F-1305
425 / 7	20 (–50) 25 (+50)	1.0 / 4.5	TK5424-ND	26.05	208.40	989.90	5HW-39545A-425
5HT Type							
360 / 16	33 (+50) 25 (–50)	1.0 / 4.0	TK5401-ND	23.70	189.60	900.60	5HT-36020AS-360
440 / 14	28 (+50) 25 (–50)	1.0 / 4.0	TK5403-ND	23.70	189.60	900.60	5HT-44020AS-440
480 / 14	26 (+50) 22 (–50)	1.0 / 4.0	TK5404-ND	23.70	189.60	900.60	5HT-48030AS-480
515 / 16	25 (+50) 20 (–50)	1.0 / 4.0	TK5405-ND	23.70	189.60	900.60	5HT-51535AS-515
590 / 12	34 (+50) 25 (–50)	1.0 / 4.0	TK5406-ND	23.70	189.60	900.60	5HT-59065F-590
655 / 12	30 (+50) 26 (–50)	1.0 / 4.0	TK5407-ND	23.70	189.60	900.60	5HT-65550F-655
735 / 15	28 (+50) 24 (–50)	1.0 / 4.0	TK5408-ND	23.70	189.60	900.60	5HT-73565F-735
830 / 15	26 (+50) 22 (–50)	1.0 / 4.0	TK5409-ND	23.70	189.60	900.60	5HT-83050F-830
945 / 15	22 (+50) 18 (–50)	1.0 / 4.0	TK5410-ND	23.70	189.60	900.60	5HT-94535F-945
1010 / 15	18 (+50) 14 (–50)	1.0 / 4.0	TK5411-ND	23.70	189.60	900.60	5HT-101045F-1010
1090 / 15	17 (+50) 15 (–50)	1.0 / 4.0	TK5412-ND	23.70	189.60	900.60	5HT-109065F-1090
1230 / 15	20 (+50) 16 (–50)	1.0 / 4.5	TK5413-ND	23.70	189.60	900.60	5HT-123080C-1230
7HW Type							
405 / 9	20 (–10) 15 (+10)	1.5 / 3.5	TK3301-ND	20.45	163.60	777.10	252MXPR-2535A
435 / 10.5	17 (–5) 14 (+15)	1.5 / 3.0	TK3302-ND	20.45	163.60	777.10	252MXPR-2537A
453 / 11.5	16 (–3) 13 (+7)	1.5 / 2.5	TK3303-ND	20.45	163.60	777.10	252MXPR-2767A
462 / 12	14 (–2) 11 (+8)	1.5 / 2.5	TK3304-ND	20.45	163.60	777.10	252MXPR-2689A
480 / 12.5	14 (–10) 11 (+10)	1.5 / 2.5	TK3305-ND	20.45	163.60	777.10	252MXPR-2765A
550 / 7	23 (–10) 20 (+15)	1.5 / 3.5	TK3307-ND	10.30	79.37	348.56	252HXPK-2736F
600 / 8	23 (–5) 21 (+15)	1.5 / 3.5	TK3308-ND	20.45	163.60	777.10	252HXPK-2733F
640 / 9	29 (–25) 27 (+5)	1.5 / 3.5	TK3309-ND	10.30	79.37	348.56	252HXPK-2708F
715 / 11	26 (–25) 24 (+10)	1.5 / 3.0	TK3310-ND	20.45	163.60	777.10	252HXPK-2702F
830 / 13.5	20 (–35) 18 (+10)	1.5 / 3.0	TK3311-ND	20.45	163.60	777.10	252HXPK-2774F
870 / 14	19 (–30) 16 (+15)	1.5 / 3.0	TK3312-ND	20.45	163.60	777.10	252HXPK-2770F
910 / 15	18 (–25) 15 (+10)	1.5 / 3.0	TK3313-ND	20.45	163.60	777.10	252HXPK-2737F
7HT Type							
904 / 8	40 (–60) 30 (+60)	1.0 / 5.0	TK3401-ND	28.65	229.20	1088.70	302HXPK-1278B
880 / 20	16 (–40) 10 (+40)	2.0 / 3.0	TK3404-ND	28.65	229.20	1088.70	302HXPK-1339D1
835 / 23	33 (–75) 10 (+35)	0.5 / 3.0	TK3403-ND	28.65	229.20	1088.70	302HXPK-1328D1
510 / 35	10 (–50) 9 (+50)	1.0 / 1.5	TK3405-ND	28.65	229.20	1088.70	302MXPR-1225G
1015 / 20	20 (–40) 16 (+40)	2.0 / 4.0	TK3406-ND	28.65	229.20	1088.70	302HXPK-1271B
813 / 17	23 (–50) 16 (+50)	0.5 / 3.0	TK3409-ND	28.65	229.20	1088.70	302HXPK-1341D1
456 / 4.5	29 (–20) 22 (+20)	0.5 / 5.0	TK3410-ND	28.65	229.20	1088.70	302HXPK-1035D
433 / 7.2	23 (–15) 17 (+15)	0.5 / 5.0	TK3411-ND	28.65	229.20	1088.70	302HXPK-1354D1
CBW Type							
220 / 2.0	20 (–15) 18 (+15)	0.5 / 3.0	TK3601-ND	32.25	258.00	1225.50	271MT-1166A
138 / 2.2	20 (–15) 18 (+10)	1.0 / 2.5	TK3606-ND	32.25	258.00	1225.50	271MT-1134A
167 / 2.4	19 (–10) 17 (+10)	1.0 / 2.5	TK3605-ND	32.25	258.00	1225.50	271MT-1136A
176 / 2.6	16 (–10) 15 (+10)	1.0 / 2.5	TK3604-ND	32.25	258.00	1225.50	271MT-1142A
187 / 2.8	15 (–10) 14 (+10)	1.0 / 2.5	TK3603-ND	32.25	258.00	1225.50	271MT-1143A
216 / 3.0	15 (–10) 14 (+10)	1.0 / 3.0	TK3602-ND	32.25	258.00	1225.50	271MT-1145A
CBT Type							
145 / 2.8	25 (–6) 25 (+6)	0.5 / 8.0	TK3506-ND	48.30	386.40	1835.40	272MT-1006A
145 / 1.2	30 (–6) 30 (+6)	0.5 / 8.0	TK3504-ND	48.30	386.40	1835.40	272MT-1008A
170 / 1.5	25 (–6) 25 (+6)	0.5 / 8.0	TK3502-ND	48.30	386.40	1835.40	272MT-1013A
170 / 1.0	25 (–5) 25 (+5)	0.5 / 8.0	TK3505-ND	48.30	386.40	1835.40	272MT-1007A
180 / 1.0	31 (–5) 30 (+5)	0.5 / 9.0	TK3503-ND	26.89	207.27	910.33	272MT-1009A
223 / 2.6	28 (–10) 40 (+20)	0.5 / 6.0	TK3501-ND	48.30	386.40	1835.40	272MT-1080A

TOKO Dielectric Filters

Type 4DFA



Type 4DFB

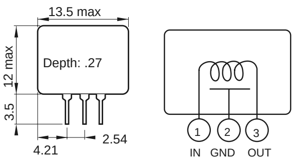


Applications: • Cellular - AMPS/TDMA/CDMA • RF Data • Cordless Phone • ISM • Pager • SMR • GPS • Ardis **Temperature Range:** -25°C to +85°C

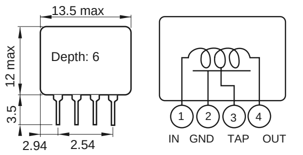
Center Freq. MHz	Bandwidth (fo ± MHz)	I.L (dB max.)	Selectivity dB min. @ MHz	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000	Toko Part No.
Type 4DFA (2 Pole SMD Type)											
902.5	±12.5	2.5	18(*fo* ± 77.5)	TKS2602CT-ND	24.06	161.60	971.00	TKS2602TR-ND	2780.00	3510.00	4DFA-902E-10
947.5	±12.5	2.5	18(*fo* ± 77.5)	TKS2603CT-ND	24.06	161.60	971.00	TKS2603TR-ND	2780.00	3510.00	4DFA-947E-10
904.0	±1.0	3.8	21,30(*fo* +21.5, +44)	TKS2604CT-ND	24.06	161.60	971.00	TKS2604TR-ND	2780.00	3510.00	4DFA-904A-10
926.5	±1.0	3.8	21,30(*fo* -21.5, -44)	TKS2605CT-ND	12.48	98.80	722.80	—	—	—	4DFA-926A-11
915.0	±13.0	2.2	18(*fo* ±77.5)	TKS2606CT-ND	24.06	161.60	971.00	TKS2606TR-ND	2780.00	3510.00	4DFA-915E-10
1227.0	±5.0	2.0	7,30(*fo* ±35, 140)	TKS2607CT-ND	24.06	161.60	971.00	TKS2607TR-ND	2780.00	3510.00	4DFA-1227B-10
1575.4	±5.0	2.0: 1.4 typ	7,30(*fo* ±35, 140)	TKS2608CT-ND	24.06	161.60	971.00	TKS2608TR-ND	2780.00	3510.00	4DFA-1575B-10
1575.4	±5.0	1.2: 0.7 typ	17,20(*fo* +140, -140)	TKS2609CT-ND	24.06	161.60	971.00	TKS2609TR-ND	2780.00	3510.00	4DFA-1575B-12
2450.0	±50.0	2.0	22(*fo* -280)	TKS2610CT-ND	24.06	161.60	971.00	TKS2610TR-ND	2780.00	3510.00	4DFA-2450T-10
Type 4DFB (3 Pole SMD Type)											
860.5	±10.0	2.5	15,35(*fo* ±35,80)	TKS2612CT-ND	36.16	242.80	1459.00	TKS2612TR-ND	4180.00	5280.00	4DFB-860D-10
915.0	±13.0	2.7	12(*fo* ±32.5)	TKS2617CT-ND	36.16	242.80	1459.00	TKS2617TR-ND	4180.00	5280.00	4DFB-915E-10
2450.0	±50.0	2.2	28(*fo* -280)	TKS2618CT-ND	40.19	269.90	1622.00	TKS2618TR-ND	4645.00	5870.00	4DFB-2450T-10

Delay Lines 4NS Rise Time

JF



JFT

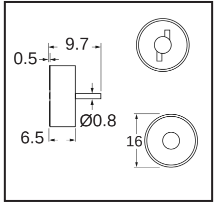


JF/JFT Features:

• Temperature Coefficient: ±200ppm/°C (typ.) • Waveform Distortion: Less than ±15% • Peak Pulse Voltage: 50V • Insulation Resistance: 100MΩ min., at 50V DC: • Compact single-in-line • High impedance, long delay time • Output available from intermediate tap

Total Delay Time	Digi-Key Part No.	Pricing 1	10	100	Toko Part No.
250ns ± 7%	TK5311-ND	10.46	83.65	697.05	JF3250G
300ns ± 7%	TK5312-ND	10.46	83.65	697.05	JF3300G

Dielectric Antenna Element



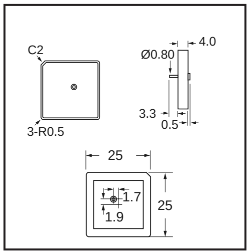
The DAC Series is a miniature dielectric antenna element for 2.4 GHz wireless LAN systems. This antenna has vertical polarization characteristics. The proprietary ceramic dielectric material provides excellent stability and sensitivity. It is mountable in Type II extended PCMCIA cards.

FEATURES: • Vertical polarization reception • Low profile (6.5mm max.) • Omni-directional in azimuth • Low interference design • Central feeding point terminal • Wide bandwidth • Light weight

SPECIFICATIONS: • Center Frequency: 2450 MHz • Receiving Bandwidth: ±50 MHz min. • Impedance: 50Ω • Peak Gain: 2.15 dBi (0dBi typ.) max. • Operating Temp.: -10°C to 60°C • Storage Temp.: -20°C to 85°C • Weight: 4g

TK5151-ND (DAC2450CT1T) $16.75

Dielectric Patch Antenna



The DAK Series is a miniature dielectric antenna element for Global Positioning Systems (GPS). This patch antenna has excellent stability and sensitivity through the use of high performance proprietary ceramic material well suited for GPS frequencies.

FEATURES: • One quarter the size of traditional antenna elements without loss of sensitivity • Excellent temperature stability via use of low temperature coefficient dielectric ceramics • Silver plated electrode allows very good high frequency characteristics

SPECIFICATIONS: • Center Frequency: 1580.5 MHz (Center frequency is shifted 5MHz down when covered with a radome.) • Bandwidth: 9 MHz min. • Impedance: 50Ω • Gain @ Zenith: +5 dBi typical • Gain @ 10° Elevation: -1 dBi typical • Temperature Coefficient: 20 ppm/°C max. (-40°C to 105°C)

TK5150-ND (DAK1575MS50T).. $17.33

YAGEO AMERICA *NEW!* Surface Mount Ceramic Antennas

Specifications: • Polarization: Linear • Azimuth: Omni-directional • Impedance: 50Ω • Operating Temperature: -55°C~125°C • Termination: Ni/Sn Environmentally-Friendly Leadless

Fig. 1

Multilayer Ceramic Antenna
870 MHz Linear Polarization Mode

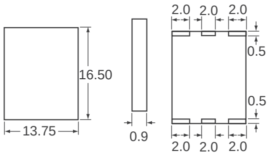


Fig. 2

Multilayer Ceramic Antenna for Global Position Systems
1.575 GHz Linear Polarization Mode

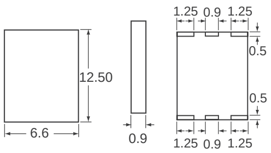


Fig. 3

Multilayer Ceramic Antenna for Bluetooth and WLAN IEEE 802.11b
2.45 GHz ISM Band

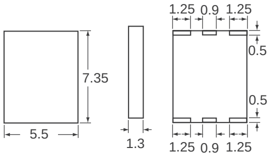


Fig. 4

Multilayer Ceramic Antenna for Bluetooth and WLAN IEEE 802.11b
2.45 GHz ISM Band Long Shape

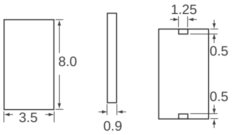


Fig. 5

Multilayer Ceramic Wideband Antenna for WLAN IEEE 802.11a
5GHz ISM Band

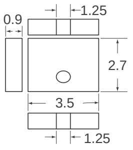


Fig. 6

Multilayer Ceramic Antenna for Bluetooth/WLAN IEEE 802.11b and WLAN IEEE 802.11a
2.45/5.2GHz SMD Ceramic Dual Band Antenna

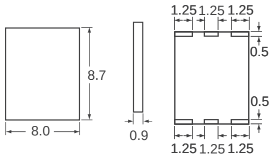


Fig.	Working Frequency	Bandwidth MHz	Gain (dBi Max.)	Digi-Key Part No.	Cut Tape Price Each 1	10	50	100	Digi-Key Part No.	Tape and Reel Pricing 1,000	Yageo America Part No.
1	870 MHz	100	1.5	311-1224-1-ND	2.80	2.40	2.20	2.00	311-1224-2-ND	1600.00	4311-119-00087
2	1.579 GHz	100	1.5	311-1225-1-ND	2.80	2.40	2.20	2.00	311-1225-2-ND	1600.00	4311-114-00158
3	2.450 GHz	100	1.2	311-1226-1-ND	4.55	3.90	3.58	3.25	311-1226-2-ND	2600.00	4311-111-00245
4	2.450 GHz	100	0	311-1227-1-ND	4.73	4.05	3.72	3.38	311-1227-2-ND	2700.00	4311-115-00245
5	5.2 GHz	200	4.0	311-1230-1-ND	4.55	3.90	3.58	3.25	311-1230-2-ND	2600.00	4311-127-00500
6	2.45GHz / 5.20GHz	100	0	311-1229-1-ND	8.75	7.50	6.88	6.25	311-1229-2-ND	5000.00	4311-117-00252

Steward Surface Mount EMI Suppression Ferrite Chips

Fig. 1 – Single Line

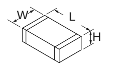


Fig. 2 – Single Line SMT

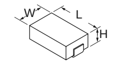
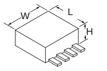


Fig. 3 – Multiline



Features: • Small footprint permits use in densely populated surface mount designs • Economical component for applications requiring discrete signal filtering **Applications:** • Filtering of power input pins of oscillators and logic devices using high speed clocks • Filtering of low frequency input/output signals entering/exiting shielded enclosures • High frequency filtering of medium speed clocks and video signals • Preventing oscillations in high frequency amplifiers

Fig.	Size Code	Dimensions - mm			Current Rating (mA)	Impedance @ 100 MHz	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing			Steward Part No.
		Length	Width	Height				10	50	100					
1	0402	1.01	0.50	0.50	400	120	240-1135-1-ND*	2.20	8.80	14.10	—	—	—	—	LI0402D121R-00
					100	300	240-1136-1-ND*	2.20	8.80	14.10	240-1136-2-ND	360.96/8,000	1200.19/32,000	1974.00/56,000	LI0402B301R-00
					500	30	240-1133-1-ND*	2.20	8.80	14.10	240-1133-2-ND	360.96/8,000	1200.19/32,000	1974.00/56,000	LI0402E300R-00
					500	60	240-1134-1-ND*	2.20	8.80	14.10	240-1134-2-ND	360.96/8,000	1200.19/32,000	1974.00/56,000	LI0402E600R-00
					100	600	240-1142-1-ND*	2.20	8.80	14.10	240-1142-2-ND	360.96/8,000	1200.19/32,000	1974.00/56,000	HZ0402A601R-00
1	0603	1.60	0.80	0.80	1,500	30	240-1130-1-ND*	1.72	6.86	11.00	240-1130-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	MI0603K300R-00
					1,000	60	240-1131-1-ND*	1.72	6.86	11.00	240-1131-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	MI0603J600R-00
					1,000	68	240-1132-1-ND*	1.72	6.86	11.00	240-1132-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	MI0603J680R-00
					700	80	240-1137-1-ND*	1.72	6.86	11.00	240-1137-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	LI0603G800R-00
					700	120	240-1138-1-ND*	1.72	6.86	11.00	240-1138-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	LI0603G121R-00
					500	150	240-1139-1-ND*	1.72	6.86	11.00	240-1139-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	LI0603E151R-00
					700	220	240-1140-1-ND*	1.72	6.86	11.00	240-1140-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	LI0603G221R-00
					400	300	240-1141-1-ND*	1.72	6.86	11.00	240-1141-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	LI0603D301R-00
					300	600	240-1143-1-ND*	1.72	6.86	11.00	240-1143-2-ND	140.80/4,000	351.1212,000	2750.00/100,000	HZ0603C601R-00
					200	750	240-1144-1-ND*	2.20	8.80	14.10	240-1144-2-ND	180.48/4,000	450.0712,000	3525.00/100,000	HZ0603B751R-00
					200	1,000	240-1145-1-ND*	2.20	8.80	14.10	240-1145-2-ND	180.48/4,000	450.0712,000	3525.00/100,000	HZ0603B102R-00
1	0805	2.00	1.32	.90	3,000	31	240-1007-1-ND*	2.44	9.77	15.65	240-1007-2-ND	200.32/4,000	499.55/12,000	3912.50/100,000	HI0805Q310R-00
					500	600	240-1018-1-ND*	1.72	6.86	11.00	240-1018-2-ND	140.80/4,000	351.12/12,000	2750.00/100,000	HZ0805E601R-00
					200	150	240-1021-1-ND*	1.72	6.86	11.00	240-1021-2-ND	140.80/4,000	351.12/12,000	2750.00/100,000	LI0805H151R-00
					800	120	240-1041-1-ND*	1.72	6.86	11.00	240-1041-2-ND	140.80/4,000	351.12/12,000	2750.00/100,000	LI0805H121R-00
					500	40	240-1024-1-ND*	1.72	6.86	11.00	240-1024-2-ND	140.80/4,000	351.12/12,000	2750.00/100,000	LI0805H400R-00
					1,500	11	240-1034-1-ND*	1.72	6.86	11.00	240-1034-2-ND	140.80/4,000	351.12/12,000	2750.00/100,000	MI0805K110R-00
					1,500	40	240-1035-1-ND*	1.72	6.86	11.00	240-1035-2-ND	140.80/4,000	351.12/12,000	2750.00/100,000	MI0805K400R-00
1	1206	3.20	1.60	1.10	3,000	100	240-1008-1-ND*	2.73	10.92	17.50	240-1008-2-ND	210.00/3,000	558.60/12,000	4462.50/102,000	HI1206N101R-00
					6,000	50	240-1009-1-ND*	2.73	10.92	17.50	240-1009-2-ND	210.00/3,000	558.60/12,000	4462.50/102,000	Hi1206T500R-00
					3,000	80	240-1010-1-ND*	2.73	10.92	17.50	240-1010-2-ND	210.00/3,000	336.00/6,000	558.60/12,000	HI1206N800R-00
					500	600	240-1019-1-ND*	1.72	6.86	11.00	240-1019-2-ND	132.00/3,000	211.20/6,000	351.12/12,000	HZ1206E601R-00
					200	90	240-1026-1-ND*	1.99	7.96	12.75	240-1026-2-ND	153.00/3,000	244.80/6,000	406.98/12,000	LI1206H900R-00
					1,500	26	240-1027-1-ND*	1.72	6.86	11.00	240-1027-2-ND	132.00/3,000	211.20/6,000	351.12/12,000	LI1206K260R-00
					1,500	31	240-1036-1-ND*	2.20	8.80	14.10	240-1036-2-ND	169.20/3,000	450.07/12,000	3595.50/102,000	MI1206K310R-00
					1,500	90	240-1037-1-ND*	2.20	8.80	14.10	240-1037-2-ND	169.20/3,000	450.07/12,000	3595.50/102,000	MI1206K900R-00
1	1210	3.20	2.50	1.30	400	60	240-1029-1-ND*	4.45	17.82	28.55	240-1029-2-ND	342.60/3,000	911.32/12,000	7280.25/102,000	LI1210E600R-00
					1,500	60	240-1038-1-ND*	2.88	11.51	18.45	240-1038-2-ND	221.40/3,000	588.92/12,000	4704.75/102,000	MI1210K600R-00
1	1612	4.06	3.05	2.28	10,000	56	240-1128-1-ND*	9.55	38.19	61.20	240-1128-2-ND	612.00/2,500	979.20/5,000	1627.92/10,000	DM1612X560R-00
1	1806	4.50	1.60	1.60	6,000	60	240-1012-1-ND*	4.98	19.91	31.90	240-1012-2-ND	255.20/2,000	423.63/4,000	574.20/6,000	HI1806T600R
					300	150	240-1030-1-ND*	3.73	14.91	23.90	240-1030-2-ND	191.20/2,000	317.39/4,000	430.20/6,000	LI1806C151R-00
					500	100	240-1031-1-ND*	3.73	14.91	23.90	240-1031-2-ND	191.20/2,000	317.39/4,000	430.20/6,000	LI1806E101R
					500	80	240-1032-1-ND*	3.73	14.91	23.90	240-1032-2-ND	191.20/2,000	317.39/4,000	430.20/6,000	LI1806E800R
					1,000	80	240-1039-1-ND*	3.34	13.35	21.40	240-1039-2-ND	342.40/5,000	569.24/10,000	5350.00/100,000	MI1806J800R
1	1812	4.50	3.20	1.50	6000	80	240-1013-1-ND*	4.11	16.44	26.35	240-1013-2-ND	263.50/2,500	421.60/5,000	700.91/10,000	HI1812T800R
					300	120	240-1033-1-ND*	3.21	12.85	20.60	240-1033-2-ND	206.00/2,500	329.60/5,000	547.96/10,000	LI1812D121R-00
					1,500	120	240-1040-1-ND*	3.21	12.85	20.60	240-1040-2-ND	206.00/2,500	329.60/5,000	547.96/10,000	MI1812K121R
1	2220	5.59	5.08	3.30	4,000	170	240-1014-1-ND*	7.81	32.53	50.09	240-1014-2-ND	520.40/2,000	863.86/4,000	1170.90/6,000	HI2220P171R
				3.30	4,000	250	240-1015-1-ND*	9.26	38.58	59.41	240-1015-2-ND	617.20/2,000	1024.55/4,000	1388.70/6,000	HI2220P251R
				3.30	4,000	600	240-1016-1-ND*	11.45	47.70	73.46	240-1016-2-ND	763.20/2,000	1266.91/4,000	1717.20/6,000	HI2220P601R
				3.45	6,000	100	240-1120-1-ND*	10.15	40.59	65.05	240-1120-2-ND	520.40/2,000	863.86/4,000	1170.90/6,000	HI2220T101R-00
				3.45	5,000	150	240-1121-1-ND*	10.15	40.59	65.05	240-1121-2-ND	520.40/2,000	863.86/4,000	1170.90/6,000	HI2220R151R-00
				3.45	5,000	180	240-1122-1-ND*	11.40	45.61	73.10	240-1122-2-ND	584.80/2,000	970.77/4,000	1315.80/6,000	HI2220R181R-00
				1.52	4,000	270	240-1123-1-ND*	12.44	49.76	79.75	240-1123-2-ND	638.00/2,000	1059.08/4,000	1435.50/6,000	HI2220P271R-00
				3.45	5,000	300	240-1124-1-ND*	13.12	52.48	84.10	240-1124-2-ND	672.80/2,000	1116.85/4,000	1513.80/6,000	HI2220R301R-00
				3.45	4,500	400	240-1125-1-ND*	13.26	53.04	85.00	240-1125-2-ND	680.00/2,000	1128.80/4,000	1530.00/6,000	HI2220Q401R-00
				3.45	4,000	700	240-1126-1-ND*	15.55	62.21	99.70	240-1126-2-ND	797.60/2,000	1324.02/4,000	1794.60/6,000	HI2220P701R-00
				3.45	8,000	800	240-1127-1-ND*	26.38	105.52	169.10	240-1127-2-ND	1352.80/2,000	2245.65/4,000	3043.80/6,000	HI2220V801R-00
1	3312	8.50	3.05	2.28	10,000	100	240-1129-1-ND*	13.71	54.85	87.90	240-1129-2-ND	879.00/2,500	1406.40/5,000	2338.14/10,000	DM3312X101R-00
2	—	8.51	3.05	2.54	3,000	100	240-1001-1-ND†	3.19	12.74	20.48	240-1001-2-ND	204.75/2,500	341.25/5,000	605.15/10,000	28F0121-1SR
	—	4.06	3.05	2.54	3,000	56	240-1002-1-ND†	3.14	12.54	20.16	240-1002-2-ND	201.60/2,500	336.00/5,000	595.84/10,000	28F0121-0SR

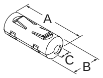
Fig.	Dimensions - mm			Lines	# of Impedance	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel Pricing			Steward Part No.
	Length	Width	Height				10	50	100					
3	4.83	2.92	4.50	3	83	240-1003-1-ND	12.97	54.05	83.24	240-1003-2-ND	486.45/900	778.32/1,800	969.01/2,700	29F0318-0SR
	8.33	6.35	10.87	3	200	240-1004-1-ND	12.41	51.70	79.62	240-1004-2-ND	279.18/450	372.24/900	463.44/1,350	29F0330-2SR
	6.10	4.19	4.50	4	119	240-1005-1-ND	14.35	59.80	92.09	240-1005-2-ND	538.20/900	861.12/1,800	1072.09/2,700	29F0418-1SR
	10.87	6.35	10.87	4	200	240-1006-1-ND	17.91	74.63	114.92	240-1006-2-ND	402.98/450	671.63/900	805.95/1,350	29F0430-2SR

NEW! 240-2110-ND **SMT EMI Suppression Ferrtite Chips Kit** 10 ea of size codes 0402 - 3312* and 5 each of 240-1001-1ND† and 240-1002-1-ND† (550 total pieces) $59.95

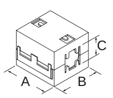
Clamp-On Ferrites

Commonly called "bisected" or "split" components, clip on parts are generally associated with after market retrofit applications or for use in gaining compliance during the testing of a product. These parts provide excellent common mode EMI suppression in round cable applications and for use with network cables.

Color	Dimensions (mm)			Typ. Imped. @ 100 MHz	Digi-Key Part No.	Price Each			Steward Part No.
	A	B	C			1	10	50	
Cylinder Snap									
White	29.3	12.8	5.3	131Ω	240-2068-ND	.87	.73	.63	28A0392-0A0
Black	29.3	12.8	5.3	131Ω	240-2070-ND	.87	.73	.63	28A0392-0A2
White	40.38	19.18	9.02	199Ω	240-2065-ND	1.90	1.58	1.36	28A0640-0A0
Black	40.38	19.18	9.02	199Ω	240-2066-ND	1.90	1.58	1.36	28A0640-0A2
Box Snap									
White	32.5	17.9	7.0	151Ω	240-2074-ND	2.05	1.70	1.47	28A2025-0A0
Black	32.5	17.9	7.0	151Ω	240-2075-ND	2.05	1.70	1.47	28A2025-0A2
White	32.5	21.5	10.0	209Ω	240-2076-ND	2.48	2.06	1.78	28A2029-0A0
Black	32.5	21.5	10.0	209Ω	240-2077-ND	2.48	2.06	1.78	28A2029-0A2
White	32.5	29.0	13.0	234Ω	240-2072-ND	3.99	3.31	2.85	28A2024-0A0
Black	32.5	29.0	13.0	234Ω	240-2073-ND	3.99	3.31	2.85	28A2024-0A2



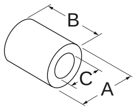
Cylinder Snap: A tube ferrite snap-on assembly designed for wires or small diameter cable.



Box Snap: A box shaped clip on ferrite assembly.

Tubular Bead

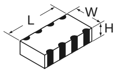
A solid ferrite EMI tubular bead for use in high volume applications where a plastic snap on a case is not required. Can be used in high volume over-mold applications where it is desired to have the filter molded in the same material as the connector backshell; or can be covered with heat shrink and shrunk in place.



Dimensions (mm)			Typical Impedance @ 100 MHz	Digi-Key Part No.	Price Each			Steward Part No.
A	B	C			1	10	50	
Tubular Bead								
9.53	14.48	5.08	112Ω	240-2067-ND	.25	.21	.18	28B0375-100
14.27	28.57	6.35	275Ω	240-2078-ND	.48	.40	.34	28B0562-200
17.42	28.57	9.52	200Ω	240-2079-ND	.62	.52	.45	28B0686-200
18.67	28.57	10.16	201Ω	240-2080-ND	.73	.61	.52	28B0735-000
25.91	28.58	12.70	240Ω	240-2081-ND	2.12	1.76	1.52	28B1020-100

Surface Mount Multi-Line Chip Arrays

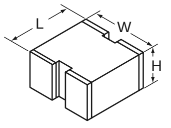
Features:
- Small footprint
- Rugged construction
- Broad range of impedance values
- Good high frequency performance (peaks well above 100 MHz)
- Lower installation cost (one pick and place motion instead of four discrete installations)



Size Code	Dimensions - mm			Filtered Circuits	Current Rating iMax (mA)	Impedance @ 100 MHz	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing			Steward Part No.
	Length	Width	Height					10	50	100					
1206	3.20	1.60	1.10	4	1000	30	240-1146-1-ND	.88	.71	.57	240-1146-2-ND	676.20/3,000	1081.92/6,000	1798.69/12,000	DA1206E300R-00
					300	120	240-1147-1-ND	.88	.71	.57	240-1147-2-ND	676.20/3,000	1081.92/6,000	1798.69/12,000	DA1206C121R-00
					400	300	240-1148-1-ND	.88	.71	.57	240-1148-2-ND	676.20/3,000	1081.92/6,000	1798.69/12,000	DA1206D301R-00
					200	600	240-1149-1-ND	.88	.71	.57	240-1149-2-ND	676.20/3,000	1081.92/6,000	1798.69/12,000	DA1206B601R-00
					200	1000	240-1150-1-ND	1.00	.80	.64	240-1150-2-ND	768.00/3,000	1228.80/6,000	2042.88/12,000	DA1206B102R-00

Steward Common Mode Chokes

Fig. 1



Features: • Monolithic • Compact size • High current carrying capability (up to 10A continuous) • Excellent ultra-high performance • Very low DCR to minimize signal distortion • Smaller, lighter and less susceptible to vibration than old-style wire-wound chokes

Fig. 2

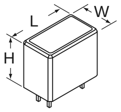
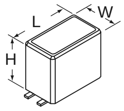


Fig. 3



Features: • High current capability (10A continuous operation) • Compact size • Up to 170 Ohms impedance @ 100MHz or 300 ohms @ 1GHz • Parts available in both thru-hole (B) and surface mount (R) versions • Parts available in broad band and high frequency materials • Economical common mode EMI filtering

Fig. 4

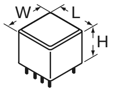
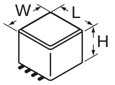
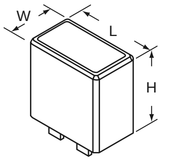


Fig. 5



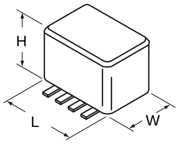
Features: • High current carrying capability (10A continuous operation) • Can be used as multi-turn device to multiply impedance • With two turns, up to 800 ohms impedance at 300 MHz • Available in both thru-hole (B) and surface mount (R) versions • The most economical common mode filter available for filtering groups of signals • Available in broad band and high frequency materials

Fig. 6



Features: • Ul 1950 compliant for creepage • Very high current capability • Small footprint • Low clearance height • Low cost • Parts available in broad band and high frequency materials • Lighter smaller and less susceptible to vibration than older wire-wound chokes

Fig. 7



Features: • Provides an effective EMI solution for filtering Data/Power modular connectors • CM 2718 for use with standard 4 line single module application • CM3813 for use with 6 line single module applications (4 line data and 2 line power) • Low cost • Smallest footprint EMI solution available on the market today

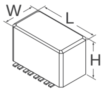
Fig.	Size Code	Dimensions (mm) Length	Width	Height	Current Rating iMax (mA)	Impedance @ 100 MHz	Digi-Key Part No.	Cut Tape Price Each 1	10	50	100	Digi-Key Part No.	Tape & Reel Pricing			Steward Part No.
Low Profile Surface Mount - Monolithic																
1	3322	8.50	5.60	2.10	4,000	40	240-1101-1-ND♦	—	1.66	1.33	1.06	240-1101-2-ND	1059.00/2,500	1694.40/5,000	2816.94/10,000	CM3322P400R-00
	3322	8.50	5.60	2.10	7,000	61	240-1102-1-ND♦	—	1.66	1.33	1.06	240-1102-2-ND	1059.00/2,500	1694.40/5,000	2816.94/10,000	CM3322U610R-00
	3322	8.50	5.60	2.84	10,000	63	240-1103-1-ND♦	—	1.82	1.46	1.17	240-1103-2-ND	1165.00/2,500	1864.00/5,000	3098.90/10,000	CM3322X630R-00
	1922	4.70	5.60	2.84	10,000	33	240-1104-1-ND♦	—	1.43	1.15	.92	240-1104-2-ND	915.00/2,500	1464.00/5,000	2433.90/10,000	CM1922X330R-00
High Power Surface Mount																
3	2545	11.38	6.30	9.32	10,000	170	240-1106-1-ND♦	—	2.38	1.91	1.53	240-1106-2-ND	243.84/400	607.16/1,200	1280.16/2,800	CM2545X171R-00
5	4545	11.38	11.38	9.32	10,000	130	240-1108-1-ND♦	—	2.54	2.03	1.63	240-1108-2-ND	260.00/400	647.40/1,200	1365.00/2,800	CM4545Z131R-00
High Current Thru Hole																
2	2545	11.38	6.30	9.32	10,000	170	240-1105-ND♦	1.52	1.41	1.18	.91	—	—	—	—	CM2545X171B-00
4	4545	11.38	11.38	9.32	10,000	130	240-1107-ND♦	1.70	1.57	1.31	1.01	—	—	—	—	CM4545Z131B-00
Ultra High Current Thru Hole																
6	5441	13.72	10.41	15.24	55,000	160	240-1109-ND♦	2.42	2.23	1.86	1.44	—	—	—	—	CM5441Z161B-00
	5441	13.72	10.41	10.52	55,000	100	240-1110-ND♦	2.26	2.09	1.75	1.35	—	—	—	—	CM5441Z101B-00
Slim Line Surface Mount																
7	2718	6.99	4.72	7.75	—	120	240-1112-1-ND♦	—	2.89	2.31	1.85	240-1112-2-ND	369.30/500	613.04/1,000	1384.88/2,500	CM2718R121R-00
	2718	6.99	4.72	13.72	—	200	240-1113-1-ND♦	—	3.04	2.43	—	240-1113-2-ND	145.80/150	466.56/600	677.68/1,050	CM2718R201R-00
	3818	9.80	4.72	7.75	—	120	240-1114-1-ND♦	—	3.95	3.16	2.53	240-1114-2-ND	404.32/400	1006.76/1,200	2122.68/2,800	CM3818R121R-00
	3818	9.80	4.70	13.72	—	200	240-1115-1-ND♦	—	4.10	3.28	—	240-1115-2-ND	196.80/150	629.76/600	914.73/1,050	CM3818R201R-00

NEW! **240-2111-ND Common Mode Chokes Kit;** ♦1 each of 14 values from Common Mode Chokes; †1 each of 4 values from the SMT Common Mode Choke Arrays Section below (19 total pieces) **$59.95**

Surface Mount Common Mode Choke Arrays

Features:

- Surface mount design
- Filters groups of signals
- Can be used as multi-turn device to multiply impedance
- With 2 turns, over 1000 ohms impedance @ 100 MHz
- Will fit behind an RJ45 jack
- High continuous operating current carrying capability
- Available in broad band and high frequency materials

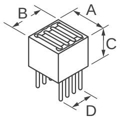


Size Code	Dimensions - mm Length	Width	Height	Filtered Circuits	Current Rating iMax (mA)	Impedance @ 100 MHz	Digi-Key Part No.	Cut Tape Price Each 10	50	100	Digi-Key Part No.	Tape & Reel Pricing			Steward Part No.
3032	7.62	8.13	9.45	4	8,000	200	240-1116-1-ND†	2.93	2.35	1.88	240-1116-2-ND	234.44/250	375.10/500	622.67/1,000	CM3032V201R-00
			14.48			300	240-1118-1-ND†	3.27	2.62	—	240-1118-2-ND	104.58/100	418.30/500	694.38/1,000	CM3032V301R-00
4732	11.94	8.13	9.45	6	8,000	200	240-1117-1-ND†	3.90	3.12	2.50	240-1117-2-ND	311.88/250	499.00/500	828.34/1,000	CM4732V201R-00
			14.48			300	240-1119-1-ND*†	4.23	3.39	—	240-1119-2-ND*	203.21/150	650.28/600	944.53/1,050	CM4732V301R-00

* High Frequency Material

NEW! **240-2111-ND Common Mode Chokes Kit;** †1 each of 4 values from SMT Common Mode Choke Arrays; ♦1 each of 15 values from Common Mode Chokes Section above (19 total pieces) **$59.95**

Through-Hole Suppression Ferrite Chips



No. of Lines	Dimensions (mm) A	B	C	D	Impedance	Digi-Key Part No.	Price Each 1	10	Steward Part No.
4	10.87	10.87	10.13	7.62	342	240-2001-ND	.74	.62	29F0428-0T0
4	10.87	5.49	10.01	2.54	285	240-2002-ND	.51	.43	29F0429-0T0
5	13.41	10.87	10.13	7.62	342	240-2003-ND	.78	.65	29F0528-0T0

Ribbon Cable Ferrites

Ribbon Cable Solids: Rectangular shaped solid ferrites for ribbon cable, flat cable and flex cable. Note: Ribbon cable must be slid through the solid ferrite before ends are connected.

Vinyl Dipped Ribbon Cable Solid: Rectangular shaped solid ferrite for ribbon cable, flat cable and flex cable. The ferrite is vinyl dipped to protect it from chipping and keep it from damaging other components.

Ribbon Cable Clip-On with Plastic Mounting Kit: Split ferrites for ribbon cable press fit into the plastic clamp ends protecting the ferrite and providing for secure retention. The plastic mounting clamps are designed to be attached with rivets, screws, nylon or other hardware.

Ribbon Cable Clip-On with Metal Clips: Split ferrites for ribbon cable clamp together with metal clips providing for secure retention of the two halves of ferrite.

Fig. 1
Solid Ferrite

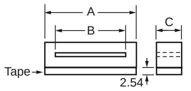
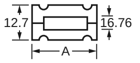
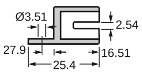


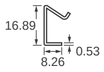
Fig. 2
Split Ferrite



Plastic Mounting Clip



Metal Clip



Max # Cond.	Dimensions (mm) A	B	C	Typ. Imped. @ 100 MHz	Digi-Key Part No.	Price Each 1	10	50	Steward Part No.
Fig. 1 Ribbon Cable Ferrites Solid									
10	22.35	14.00	19.05	171Ω	240-2082-ND	.84	.70	.60	28R0880-000
20	38.35	26.67	25.40	231Ω	240-2084-ND	2.20	1.83	1.58	28R1517-000
26	45.08	34.42	28.58	293Ω	240-2086-ND	2.95	2.45	2.11	28R1775-000
34	55.12	43.69	25.40	309Ω	240-2090-ND	3.32	2.75	2.38	28R2170-000
34	55.12	43.69	12.70	176Ω	240-2092-ND	1.75	1.46	1.26	28R2170-100
40	63.50	52.07	28.58	295Ω	240-2088-ND	4.30	3.56	3.07	28R1779-000
50	80.01	68.58	12.70	93Ω	240-2094-ND	1.94	1.61	1.39	28R3149-000
Fig. 1 Vinyl Dipped Ribbon Cable Ferrites Solid									
10	22.35	14.00	19.05	171Ω	240-2083-ND	5.36	4.44	3.83	28R0880-00V
34	55.12	43.69	25.40	309Ω	240-2091-ND	10.15	8.41	7.25	28R2170-00V
34	55.12	43.69	12.70	176Ω	240-2093-ND	11.06	9.17	7.90	28R2170-10V

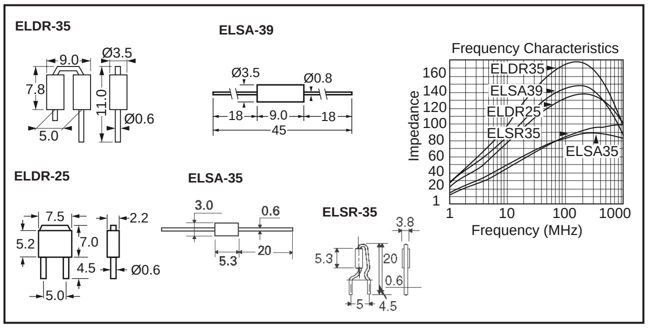
Max # Cond.	Dimensions (mm) A	B	C	Typ. Imped. @ 100 MHz	Digi-Key Part No.	Price Each 2	10	50	Steward Part No.
*Fig. 2 Ribbon Cable Split Ferrite with Plastic Clip **									
26	45.09	34.42	28.58	366Ω	240-2103-ND	1.89	1.57	1.36	28S2022-0P0
40	63.50	52.07	28.58	278Ω	240-2097-ND	2.55	2.12	1.83	28S2001-0P0
50	76.20	65.28	28.58	263Ω	240-2099-ND	2.97	2.46	2.13	28S2011-0P0
60	88.90	78.23	28.58	263Ω	240-2101-ND	3.43	2.85	2.45	28S2012-0P0
*Fig. 2 Ribbon Cable Split Ferrite with Metal Clip **									
20	38.10	26.67	25.40	245Ω	240-2104-ND	1.46	1.21	1.05	28S2023-0M0
26	45.09	34.42	28.58	366Ω	240-2102-ND	1.82	1.51	1.30	28S2022-0M0
40	63.50	52.07	28.58	278Ω	240-2096-ND	2.48	2.05	1.77	28S2001-0M0
50	76.20	65.28	28.58	263Ω	240-2098-ND	2.90	2.41	2.08	28S2011-0M0
60	88.90	78.23	28.58	263Ω	240-2100-ND	3.35	2.78	2.40	28S2012-0M0

* Note: Requires 2 pieces per unit.

Panasonic

EMI Bead Cores (For Electromagnetic Interference)

SPECIFICATIONS: • **DC Resistance:** 10mΩ maximum • **Insulation Resistance:** 10MΩ min.

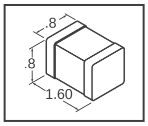


Description	Imped.*	Digi-Key Part No.	Pricing 10	100	1,000	2,000	Panasonic Part No.
Radial Dual Type (Tape & Box)	140 min.	P9817TB-ND	—	—	88.00	—	EXC-ELDR35V
Radial Dual Type (Bulk)	140 min.	P9817BK-ND	1.79	14.58	—	—	EXC-ELDR35C
Axial Single Type (Tape & Box)	110 min.	P9818TB-ND	—	—	58.00	—	EXC-ELSA39V
Axial Single Type (Bulk)	110 min.	P9818BK-ND	1.27	10.34	—	—	EXC-ELSA39
Radial Dual Type (Tape & Box)	100 min.	P9819TB-ND	—	—	—	82.00/M	EXC-ELDR25V
Radial Dual Type (Bulk)	100 min.	P9819BK-ND	1.79	14.58	118.00	—	EXC-ELDR25C
Axial Single Type (Tape & Box)	60 min.	P9820TB-ND	—	—	58.00	—	EXC-ELSA35V
Axial Lead Type (Bulk)	60 min.	P9820BK-ND	1.27	8.78	—	—	EXC-ELSA35
Radial Single Type (Tape & Box)	60 min.	P9821TB-ND	—	—	58.00	—	EXC-ELSR35T
Radial Form Type (Bulk)	60 min.	P9821BK-ND	1.27	8.78	—	—	EXC-ELSR35S

* Ω at 100MHz.

Surface Mount Bead Cores 0603

FEATURES:



EXC-3BB Series • High impedance for high speed signal line • Increase the A characteristics sharply above 40MHz and is applicable for radiated noise in the 100MHz to 300MHz range

EXC-3BP Series • Reduced DC resistance for EMI suppression • High current rating • Effective noise suppression at high frequency, up to 2GHz

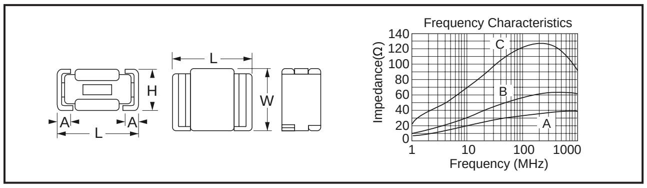
APPLICATIONS: Clock line, signal line, I/O interface circuit

Imp. 100 MHz (Ω)±25%	I (mA)	Rdc (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	T & R Pricing 4,000	Panasonic Part No.
220	150	0.5	P10188CT-ND	.16	.11	.07	P10188TR-ND	45.00/M	EXC-3BB221H
600	100	0.8	P10189CT-ND	.16	.11	.07	P10189TR-ND	45.00/M	EXC-3BB601H
1000	50	1	P10190CT-ND	.16	.11	.07	P10190TR-ND	45.00/M	EXC-3BB102H
60	1000	0.07	P10749CT-ND	.18	.13	.09	P10749TR-ND	66.00/M	EXC-3BP600H
120	500	0.1	P10750CT-ND	.18	.13	.09	P10750TR-ND	66.00/M	EXC-3BP121H

Surface Mount Bead Cores

SPECIFICATIONS:

• **Tolerance:** ±25% • **Test Frequency:** 100MHz • **Rated Current:** 2 (A) • **Flow/ Reflow Soldering**

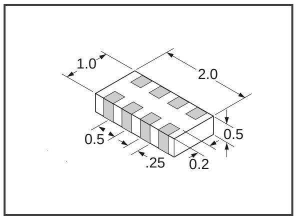


Dia.	Imp. (ohm)	Dimensions (mm) L	W	H	A	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	10,000	Panasonic Part No.
A	25	3.2	1.6	1.6	0.5	P9810CT-ND	.41	.31	P9810TR-ND	173.00/M	160.00/M	EXC-CL3216U1
B	45	3.2	2.5	1.6	0.5	P9811CT-ND	.53	.39	P9811TR-ND	221.00/M	205.00/M	EXC-CL3225U1
C	115	4.5	3.2	1.8	0.5	P9812CT-ND	.62	.46	P9812TR-ND	—	240.00/M	EXC-CL4532U1

Surface Mount Bead Cores

0804 (0402x4)

FEATURES:



.02 inch (0.51mm) height, lightweight (typically only 5mg), narrow pitch, compatible with SSOP pitch

EXC-28BB Series: Suitable for high speed signals (over 50Mhz), excellent cross talk characteristics (100Mhz: <-25dB) **Applications:** PC, LCD, DSC, Printer, PDA, MD, CD, NAVI

EXC-28BA Series: Suitable for ring suppression while maintaining wave form, excellent cross talk characteristics (100Mhz: <-30dB) **Applications:** HDD, E-IDE (Ultra DMA 33), DVD, CD-ROM, C-DR, CDR-RW

Imp. 100 MHz (Ω)±25%	I (mA)	Rdc (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 4,000	5,000	Panasonic Part No.
120	100	0.5	P10751CT-ND	.71	.52	.38	P10751TR-ND	—	298.00/M	EXC-28BB121U
220	100	0.7	P10752CT-ND	.71	.52	.38	P10752TR-ND	—	298.00/M	EXC-28BB221U
120	100	0.5	P10753CT-ND	.71	.52	.38	P10753TR-ND	—	298.00/M	EXC-28BA121U
200	100	0.7	P10754CT-ND	.71	.52	.38	P10754TR-ND	298.00/M	—	EXC-28BA221U

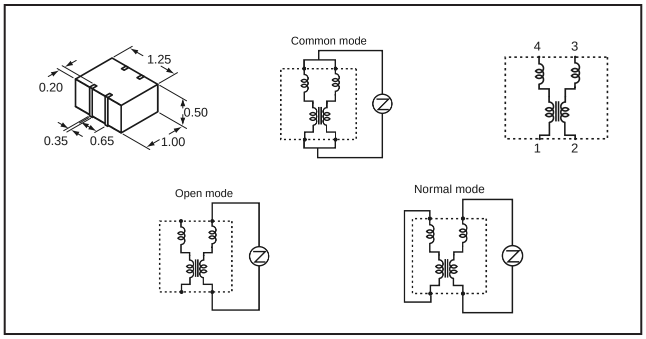
Surface Mount 2 Mode Noise Filters EXC-24CB Series

FEATURES:

• Acoustic quality improvement of mobile phone and portable audio equipment • Effectively suppresses both common mode noise and normal mode noise • Small size and light weight

APPLICATIONS:

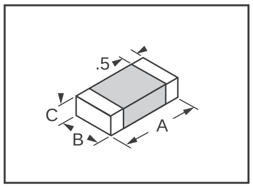
• Receiver line, microphone line and headset of mobile phone (GSM, TDMA, PDC, etc.) • Small digital equipment such as personal computers, printer, HDD, DVD-ROM, CD-ROM and LCD • Digital audio and video equipment such as PDA, DSC, DVC, CD Player, DVD Player and MD Player



Impedance (Open Mode) @100MHz (Ω)	Tol. (%)	Rated Volt. (VDC)	Rated Current (mA DC)	DC Resist. Max.(Ω)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 4,000	5,000	Panasonic Part No.
1000	±25	5	50	1.5	P11169CT-ND	.68	.51	.38	215.00/M	—	EXC-24CB102U
220	±25	5	100	0.7	P11170CT-ND	.68	.51	.38	—	215.00/M	EXC-24CB221U

* For Tape and Reel part number, change CT to TR.

Surface Mount Bead Cores High Current



FEATURES:

Super small, high self-resonant frequency and excellent tolerance.

SPECIFICATIONS:

• **Tolerance:** ±25% • **Test Frequency:** 100Mhz

Size	Imp (Ω)	I(A)	Rdc Max. (mΩ)	Dim. (mm) A	B	C	Digi-Key Part No.	Cut Tape Price Each 10	100	500	T & R Pricing* 3,000	4,000	Panasonic Part No.
0603	27	4	6	1.6	.8	.8	P10436CT-ND	.27	.19	.13	—	87.00/M	EXC-ML16A270U
0805	39	4	8	2.0	1.2	.9	P10191CT-ND	.27	.19	.13	—	87.00/M	EXC-ML20A390U
1206	68	3	12	3.2	1.6	.9	P10437CT-ND	.26	.19	.14	102.00/M	—	EXC-ML32A680U
1806	91	3	16	4.5	1.6	.9	P10438CT-ND	.27	.19	.13	101.00/M	—	EXC-ML45A910U

*For Tape and Reel number, change CT to TR.

Panasonic

Ring Core Ferrites

TT Series

Applications: General purpose noise reduction, such as for power circuits, motor areas, and TV circuits.

Measuring Wire: UL1015 AWG #14, 100mm, 1turn

Fig. 1

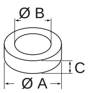


Fig. 2

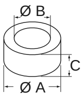


Fig. 3

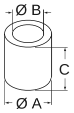


Fig.	Dimensions (mm) A	B	C	Typical Impedance 30MHz	50MHz	100MHz	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
1	12.0	8.0	5.5	20Ω	27Ω	42Ω	P11364-ND	.41	.30	.20	KR16TT120805
	13.0	7.1	6.3	30Ω	40Ω	55Ω	P11366-ND	.49	.36	.24	KR16TT130706
	16.0	12.0	8.0	20Ω	30Ω	45Ω	P11372-ND	.49	.36	.24	KR16TT161208
	18.0	10.0	6.0	30Ω	40Ω	55Ω	P11373-ND	.62	.45	.30	KR16TT181006
	18.0	10.0	10.0	35Ω	50Ω	80Ω	P11374-ND	.66	.48	.32	KR16TT181010
	18.5	10.0	8.0	42Ω	51Ω	68Ω	P11375-ND	.57	.42	.28	KR16TT191008
	18.5	10.0	10.0	35Ω	50Ω	80Ω	P11376-ND	.62	.45	.30	KR16TT191010
	20.5	10.6	10.3	55Ω	65Ω	80Ω	P11378-ND	.70	.51	.34	KR16TT201110
	20.5	10.6	12.0	65Ω	75Ω	95Ω	P11379-ND	.74	.54	.36	KR16TT201112
	22.0	14.0	6.0	25Ω	30Ω	48Ω	P11380-ND	.62	.45	.30	KR16TT221406
	22.0	14.0	10.0	35Ω	45Ω	60Ω	P11381-ND	.78	.57	.38	KR16TT221410
	25.0	15.0	8.0	35Ω	44Ω	64Ω	P11382-ND	1.07	.78	.52	KR16TT251508
	25.0	15.0	12.0	35Ω	50Ω	80Ω	P11383-ND	1.19	.87	.58	KR16TT251512
	28.5	18.0	7.5	30Ω	40Ω	60Ω	P11385-ND	.90	.66	.44	KR16TT281807
	28.5	18.0	15.0	53Ω	67Ω	88Ω	P11386-ND	1.52	1.11	.74	KR16TT281815
2	9.0	6.0	10.0	30Ω	38Ω	56Ω	P11361-ND	.49	.36	.24	KR16TT090610
	9.5	4.9	10.4	40Ω	50Ω	70Ω	P11362-ND	.57	.42	.28	KR16TT100510
	12.0	8.0	15.0	35Ω	50Ω	80Ω	P11365-ND	.49	.36	.24	KR16TT120815
	16.0	9.0	18.0	80Ω	95Ω	110Ω	P11370-ND	.94	.69	.46	KR16TT160918
	26.0	13.0	29.0	155Ω	170Ω	160Ω	P11384-ND	2.34	1.71	1.14	KR16TT261329
3	10.7	6.4	20.0	72Ω	88Ω	110Ω	P11363-ND	.82	.60	.40	KR16TT110620
	14.3	6.4	20.0	120Ω	140Ω	140Ω	P11367-ND	.90	.66	.44	KR16TT140620
	14.3	6.4	28.6	200Ω	220Ω	175Ω	P11368-ND	1.19	.87	.58	KR16TT140629
	16.0	7.8	28.0	150Ω	180Ω	170Ω	P11369-ND	1.31	.96	.64	KR16TT160828
	16.0	9.0	28.0	120Ω	140Ω	140Ω	P11371-ND	1.39	1.02	.68	KR16TT160928
	18.5	10.0	29.0	130Ω	150Ω	150Ω	P11377-ND	1.52	1.11	.74	KR16TT191029

Flat Cable Core Ferrites FP Series

Applications:

Noise reduction for flat cables.

Measuring Wire:

- 1 – 1UEW 0.5, 50mm, 1turn
- 2 – UL1007 AWG26, 65mm, 1turn
- 3 – 1UEW 0.5, 100mm, 1turn

Fig. 1

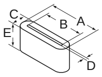


Fig. 2

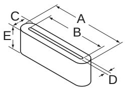


Fig. 3

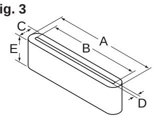


Fig.	Meas-uring Wire	Dimensions (mm) A	B	C	D	E	Typical Impedance 30MHz	50MHz	100MHz	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
1	1	22.5	17.5	6.0	1.0	10.3	32Ω	40Ω	56Ω	P11387-ND	.82	.60	.40	KR16FP220610
2	3	33.5	27.0	6.5	1.3	10.0	28Ω	38Ω	73Ω	P11388-ND	.86	.63	.42	KR16FP340710
	2	33.5	28.5	7.5	2.5	12.0	25Ω	32Ω	53Ω	P11389-ND	.90	.66	.44	KR16FP340812
	2	36.0	31.0	6.5	1.5	9.0	23Ω	30Ω	48Ω	P11390-ND	.86	.63	.42	KR16FP360709
3	2	40.0	34.8	6.5	1.3	10.0	24Ω	34Ω	65Ω	P11391-ND	1.03	.75	.50	KR16FP400710
	3	45.2	40.0	6.5	1.3	12.0	28Ω	40Ω	83Ω	P11392-ND	1.15	.84	.56	KR16FP450712

Ring Core with Casing Ferrites TA and TB Series

Applications:

Low frequency noise reduction. TB Series has Fixed Hole.

Material of Case: PP

Measuring Wire: UL1015 AWG #14, 100mm, 1turn

Fig. 1

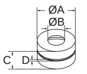


Fig. 2

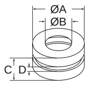


Fig. 3

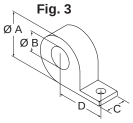


Fig.	Case Color	Dimensions (mm) A	B	C	D	Typical Impedance Ω / MHz			Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
TA Series													
1	White	19.6	8.7	11.0	1.0*	35/30	50/50	80/100	P11398-ND	1.15	.84	.56	KR16TA191010W
2	White	26.5	13.5	14.0	3.0*	35/30	50/50	80/100	P11399-ND	1.68	1.23	.82	KR16TA251512W
2	Black	26.5	13.5	14.0	3.0*	20/1	18/5	14/10	P11400-ND	1.80	1.32	.88	KR50TA251512B1
TB Series													
3	Black	29.5	13.4	13.5	23.0	35/30	50/50	80/100	P11401-ND	2.34	1.71	1.14	KR16TB251512B1

* Maximum

Snap-On Core Ferrites

KRCB Series

Applications: Noise reduction on AC power cable for PC's and other electronic devices. Their "snap-on" construction allows for easy installation at any point in the production cycle. **Material of Case:** Nylon 66 **Material of Core:** KR16 **Measuring Wire:** UL1015 AWG #14, 100mm, 1turn

Fig. 1

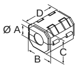


Fig. 2

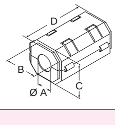


Fig. 3

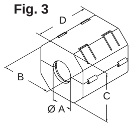


Fig.	Case Color	Dimensions (mm) A	B	C	D	Typical Impedance 30MHz	50MHz	100MHz	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
1	Black	6.5	19.0	15.5	21.0	35Ω	50Ω	80Ω	P11393-ND	1.39	1.02	.68	KRCBC130714B
	White	6.5	19.0	15.5	21.0	35Ω	50Ω	80Ω	P11394-ND	1.48	1.08	.72	KRCBG130714
2	Black	8.5	22.0	21.0	37.0	110Ω	140Ω	140Ω	P11395-ND	2.58	1.89	1.26	KRCBC160928B
	White	8.5	22.0	21.0	37.0	110Ω	140Ω	140Ω	P11396-ND	2.46	1.80	1.20	KRCBN160928
3	Black	12.8	33.0	31.5	34.0	130Ω	160Ω	170Ω	P11397-ND	5.74	4.20	2.80	KRCBC261329B

Digital Noise Filters

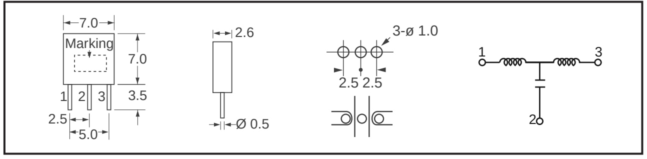
(ELKT Type)

Useful EMI noise filter when signal and noise frequency are close in frequency. T type radial lead EMI filter consisting of one capacitor and two inductors.

FEATURES: • Flat response at signal frequency and sharp noise attenuation characteristics • Minimal distortion of pulse signal wave form and excellent noise attenuation toward high frequency noise (good EMI filter for analog signal line such as video signal)

APPLICATIONS: • Reduction of EMI noise on the signal line, I/O line and DC line circuit within OA, AV, communication equipment

Replaces ELK-A series



Cut-off Freq.	Imped. Zo(Ω)	Rated Curr.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	Panasonic Part No.
2 MHz	15	100mA	P11086CT-ND	1.44	1.35	.97	P11086TB-ND	557.00	ELK-TT103EA
6 MHz	150	60mA	P11087CT-ND	1.44	1.35	.97	P11087TB-ND	557.00	ELK-TT331IA
10 MHz	100	90mA	P11088CT-ND	1.44	1.35	.97	P11088TB-ND	557.00	ELK-TT331FA
10 MHz	300	60mA	P11089CT-ND	1.44	1.35	.97	P11089TB-ND	557.00	ELK-TT101IA
15 MHz	50	120 mA	P11090CT-ND	1.44	1.35	.97	P11090TB-ND	557.00	ELK-TT391CA
15 MHz	200	90 mA	P11091CT-ND	1.44	1.35	.97	P11091TB-ND	557.00	ELK-TT101GA
20 MHz	100	100 mA	P11092CT-ND	1.44	1.35	.97	P11092TB-ND	557.00	ELK-TT151EA
20 MHz	300	90mA	P11093CT-ND	1.44	1.35	.97	P11093TB-ND	557.00	ELK-TT470GA
20 MHz	550	60mA	P11094CT-ND	1.44	1.35	.97	P11094TB-ND	557.00	ELK-TT330IA
25 MHz	75	120 mA	P11095CT-ND	1.44	1.35	.97	P11095TB-ND	557.00	ELK-TT181CA
30 MHz	90	120mA	P11096CT-ND	1.44	1.35	.97	P11096TB-ND	557.00	ELK-TT121CA
35 MHz	100	120mA	P11097CT-ND	1.44	1.35	.97	P11097TB-ND	557.00	ELK-TT820CA
35 MHz	300	90mA	P11098CT-ND	1.44	1.35	.97	P11098TB-ND	557.00	ELK-TT270FA
40 MHz	550	90mA	P11099CT-ND	1.44	1.35	.97	P11099TB-ND	557.00	ELK-TT150GA
50 MHz	100	130mA	P11100CT-ND	1.44	1.35	.97	P11100TB-ND	557.00	ELK-TT560BA
55 MHz	300	100mA	P11101CT-ND	1.44	1.35	.97	P11101TB-ND	557.00	ELK-TT180EA
60 MHz	550	90mA	P11102CT-ND	1.44	1.35	.97	P11102TB-ND	557.00	ELK-TT100FA

SMT Digital Noise Filters

Series K: Type E

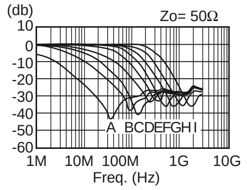
High performance noise filter for digital signal processing circuits. Wide attenuation band by low pass "T" filter constitution.

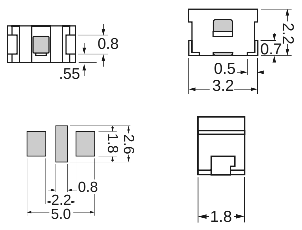
FEATURES:

• Wide attenuation band in noise signal • Minimal rounding of waveforms of the signal • High rated DC current: 2.0A • Rated Voltage VDC (V): 50 • DCR (DC Resistance Ω): 0.02 • High magnetic shielding characteristics • Selection for: high current in small size.

APPLICATIONS:

• Office automated equipment • TVs, VTRs • Communication equipment





Dia-meter	Cut-off Fre-quency	Imped-ance ZO.(Ω)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	6,000	Panasonic Part No.
I	380	84	P9870CT-ND	.94	.71	.52	P9870TR-ND	296.00/M	285.00/M	ELK-E100FA
H	257	56	P9871CT-ND	.94	.71	.52	P9871TR-ND	296.00/M	285.00/M	ELK-E220FA
G	175	39	P9872CT-ND	.94	.71	.52	P9872TR-ND	296.00/M	285.00/M	ELK-E470FA
F	120	26	P9873CT-ND	.94	.71	.52	P9873TR-ND	296.00/M	285.00/M	ELK-E101FA
E	81	18	P9874CT-ND	.94	.71	.52	P9874TR-ND	296.00/M	285.00/M	ELK-E221FA
D	55	12	P9875CT-ND	.94	.71	.52	P9875TR-ND	296.00/M	285.00/M	ELK-E471FA
C	38	8	P9876CT-ND	.94	.71	.52	P9876TR-ND	296.00/M	285.00/M	ELK-E102FA
B	26	6	P9877CT-ND	.94	.71	.52	P9877TR-ND	296.00/M	285.00/M	ELK-E222FA
A	12	3	P9878CT-ND	.94	.71	.52	P9878TR-ND	296.00/M	285.00/M	ELK-E103FA

Digital Noise Filters (ELKD Type)

FEATURES:

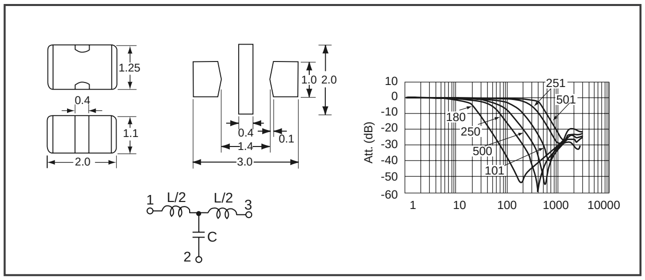
• Small size, applicable for high density mounting on the PCB • Applicable from 10 MHz to 500 MHz (fc) with 6 numbers • Small distortion of pulse signal and good noise reduction (Low inductance and resister type coil)

APPLICATIONS:

• Note PC • Communication equipment within busline and interface line • DigitalTV • DVD • Game machine • Display and PPC within video signal line and control signal line

SPECIFICATIONS:

• Rated Current: 0.1A max. • Rated Voltage: 10V max. • Rdc: 1Ω typ. • Operating Temperature: -20°C to +85°C.



L (1~3) ±30%	C (1~2) ±30%	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Box Pricing 3,000	Panasonic Part No.
			1	10	100			
1.4 µH	200pF	P11347CT-ND	1.06	.79	.59	P11347TR-ND	333.00/M	ELK-D180FB
0.55 µH	90pF	P11348CT-ND	1.06	.79	.59	P11348TR-ND	333.00/M	ELK-D250FB
0.25 µH	90pF	P11349CT-ND	1.06	.79	.59	P11349TR-ND	333.00/M	ELK-D500FB
0.25 µH	25pF	P11350CT-ND	1.06	.79	.59	P11350TR-ND	333.00/M	ELK-D101FB
0.045 µH	25pF	P11351CT-ND	1.06	.79	.59	P11351TR-ND	333.00/M	ELK-D251FB
0.045 µH	8pF	P11352CT-ND	1.06	.79	.59	P11352TR-ND	333.00/M	ELK-D501FB

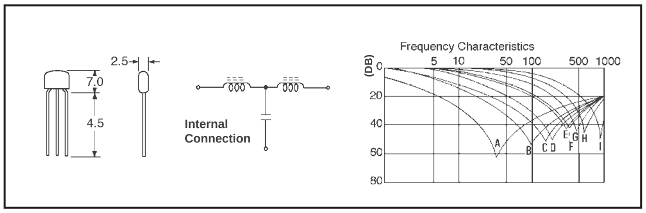
EMI Filters (For Electromagnetic Interference)

APPLICATIONS:

• Communication equipment, cordless phones, auto. phones • Digital audio and video equipment • Electronic auto. equipment such as engine controls, panels and audio systems • Electric musical instruments, and other digital devices

SPECIFICATIONS:

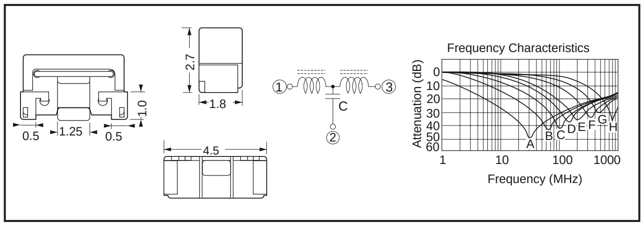
• Rated Voltage (Max): P9801-P9807: 50; P9808-P9809: 16 • Tolerance: ±10% (+20% to -30% on P9808 & P9809) • Characteristic: P9801-P9807: Y5P; P9808-P9809: Y5S • Rated Current (Max.): 5A



Dia.	Cap. (pF)	25dB AH. Freq. (MHz)	15dB AH. Freq. (MHz)	Digi-Key Part No.	Cut Tape Price Each		Digi-Key Part No.	Tape & Box Pricing 2,000	Panasonic Part No.
					10	100			
I	22	800~1000	600~1000	P9801CT-ND	.30	.24	P9801TB-ND	134.00/M	EXC-EMT220BT
H	47	450~700	400~1000	P9802CT-ND	.30	.24	P9802TB-ND	134.00/M	EXC-EMT470BT
G	100	350~550	250~900	P9803CT-ND	.30	.24	P9803TB-ND	134.00/M	EXC-EMT101BT
F	220	250~400	150~500	P9804CT-ND	.30	.24	P9804TB-ND	134.00/M	EXC-EMT221BT
E	270	250~400	150~500	P9805CT-ND	.30	.24	P9805TB-ND	134.00/M	EXC-EMT271BT
D	470	150~350	70~500	P9806CT-ND	.30	.24	P9806TB-ND	134.00/M	EXC-EMT471BT
C	1000	100~250	50~400	P9807CT-ND	.30	.24	P9807TB-ND	134.00/M	EXC-EMT102BT
B	2200	50~200	30~400	P9808CT-ND	.30	.24	P9808TB-ND	134.00/M	EXC-EMT222DT
A	10,000	25~120	15~400	P9809CT-ND	.30	.24	P9809TB-ND	134.00/M	EXC-EMT103DT

SMT EMI Filters

SPECIFICATIONS: • 50 Volts (DC) • 2A Max



Dia.	Cap. (pF)	25dB Freq. (MHz)	15dB Freq. (MHz)	Digi-Key Part No.	Cut Tape Price Each		Digi-Key Part No.	Tape & Reel Pricing 1,000	Panasonic Part No.
					10	100			
H	22	800~1000	600~1000	P9825CT-ND	.69	.51	P9825TR-ND	289.00	EXC-CET220U
G	47	450~550	350~1000	P9826CT-ND	.69	.51	P9826TR-ND	289.00	EXC-CET470U
F	100	300~450	200~900	P9827CT-ND	.69	.51	P9827TR-ND	289.00	EXC-CET101U
E	270	200~300	80~700	P9828CT-ND	.69	.51	P9828TR-ND	289.00	EXC-CET271U
D	470	100~220	50~700	P9829CT-ND	.69	.51	P9829TR-ND	289.00	EXC-CET471U
C	1000	65~200	30~700	P9830CT-ND	.69	.51	P9830TR-ND	289.00	EXC-CET102U
B	2200	35~180	15~700	P9831CT-ND	.69	.51	P9831TR-ND	289.00	EXC-CET222U
A	10000	15~120	5~700	P9832CT-ND	.69	.51	P9832TR-ND	289.00	EXC-CET103U

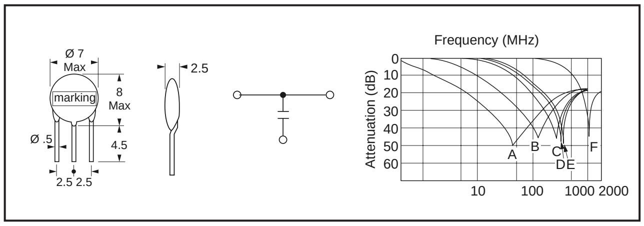
EMI Filters (EXC-ECT Type)

FEATURES:

• EMI 3 Lead Capacitors are connected as T circuit and have good noise filtering characteristic for high frequency

APPLICATIONS:

• Digital equipment • Communication equipment **SPECIFICATIONS:** • Dielectric Withstanding Voltage: P9833-P9837 • Tolerance: P9833-P9837: ±20 • Characteristic: P9833-P9837: YB



Dia.	Cap. (pF)	Voltage (DC)	Digi-Key Part No.	Cut Tape Price Each		Digi-Key Part No.	Tape & Box Pricing 2,000	Panasonic Part No.
				10	100			
F	22	50	P9833CT-ND	.17	.14	—	—	EXC-ECT220MBT
E	220	50	P9836CT-ND	.17	.14	—	—	EXC-ECT221MBT
D	270	50	P9837CT-ND	.17	.14	P9837TB-ND	74.00/M	EXC-ECT271MBT

Digital Noise Filters (ELKA Type)

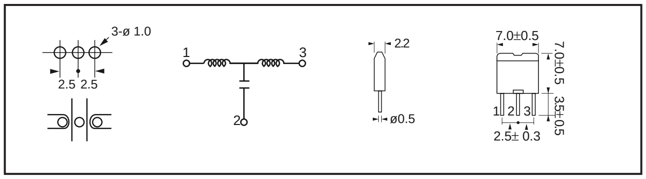
These filters are used to suppress spurious noise generated by digital equipment and to prevent external noise from being mixed in with the signal.

FEATURES:

• Thin design with a terminal pitch of 2.5 mm allowing automatic mounting (product thickness 2.2 mm) • Wide attenuation bands at high frequency • Minimal rounding of waveforms for the required signal • Optimum pulse response can be established for digital circuit • Effective in preventing noise interference generated in TV broadcast bands

APPLICATIONS:

• OA equipment, personal computers, printers • AV equipment such as digital TVs and VCRs • Digital devices for telephones, measuring equipment, medical equipment and electronic musical instruments.



Cut-off Freq.	Imped. Zo(Ω)	Rated Curr.	Digi-Key Part No.	Price Each				Panasonic Part No.
				1	10	100	1,000	
22 MHz	300	55mA	P9854-ND	1.06	.92	.75	.43	ELK-AH470GB

Panasonic Line Filters

V Series (290, 450, 650, 850 Types)
H Series (200, 270, 400, 600 Types)
F Series (23F, 25F Types)
N Series (15N, 18N, 20N Types)

These line filters can suppress conductive noise ranging from low to high frequencies generated at power supply circuits various electronic equipment.

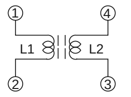
General Features: • These line filters are excellent in high frequency characteristics due to low stray capacitance realized by section windings. • Comply with all safety standards. **Applications:** • Video and audio equipment, office equipment, other electronic devices. **Specifications:** • Operating Temperature: -20°C ~ 105°C • F & N-series Operating Temperature: -20°C ~ 115°C • Rated Voltage: Less than AC250Vrms • Rated Current: Less than AC5Arms • F-series Rated Current: Less than AC3 Arms • Dielectric Strength: AC2KV 1 min.

V & H Series Features: • By using an unseparated closed magnetic circuit core, high inductance is obtained despite small size and distribution of inductance is reduced. • Leakage flux is greatly decreased.

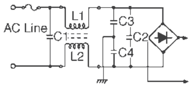
F Series Features: • F-series line filters are low profile 14mm for 23F, 15mm for 25F • Suitable for reducing both common mode and normal mode noise.

N Series Features: • Closed shape core, narrow inductance distribution, high inductance and small leakage flux • Suitable for automated production.

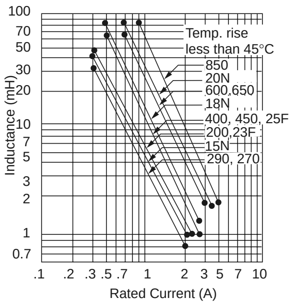
Standard Circuit Diag.



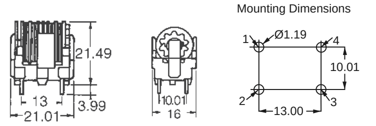
Circuit Example



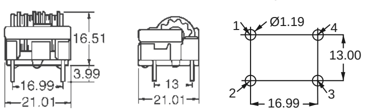
Current vs Inductance (reference only)



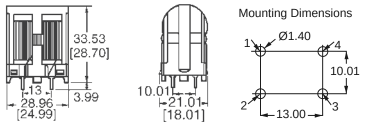
290 Type



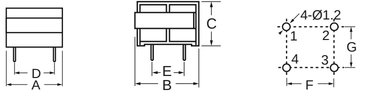
270 Type



450, 650 Type Dim.: shown in [ ] are for 450 type.

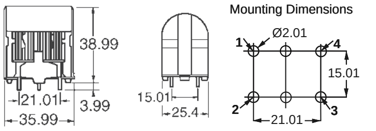


23F, 25F Types

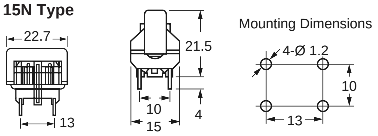


Type	A Max.	B Max.	C Max.	D	E	F	G
23F	24	23	14	16±0.5	10±0.5	16±0.1	10±0.1
25F	28	25	15	21±0.5	11±0.5	21±0.1	11±0.1

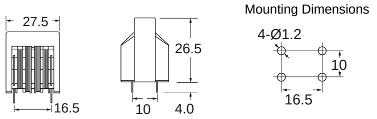
850 Type



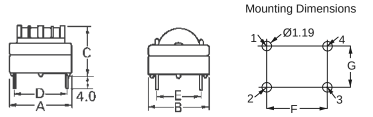
15N Type



18N Type

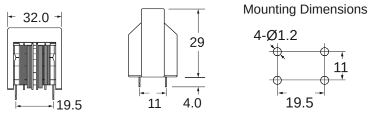


200, 400, 600 Type



Type	A	B	C	D	E	F	G
200	19.99	21.01	19.99	13.00	10.01	13.00	10.01
400	24.00	24.99	19.51	21.01	15.01	21.01	15.01
600	28.50	29.01	22.50	24.00	19.99	24.00	19.99

20N Type



Type	Inductance mH min.	Rated Current A rms	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic Part No.
V Series								
290	0.82	2.0	PLK1000-ND	3.36	28.80	240.00	1433.00	ELF-18D290B
	2.2	1.3	PLK1001-ND	3.36	28.80	240.00	1433.00	ELF-18D290T
	3.3	1.1	PLK1002-ND	3.36	28.80	240.00	1433.00	ELF-18D290S
	10.0	0.6	PLK1003-ND	3.36	28.80	240.00	1433.00	ELF-18D290G
	22.0	0.4	PLK1004-ND	3.36	28.80	240.00	1433.00	ELF-18D290C
	33.0	0.3	PLK1005-ND	3.36	28.80	240.00	1433.00	ELF-18D290H
450	2.7	2.0	PLK1006-ND	5.86	50.19	418.25	2497.00	ELF-18D450A
	18.0	0.8	PLK1007-ND	5.68	48.69	405.75	2422.00	ELF-18D450B
650	1.5	3.1	PLK1008-ND	6.61	56.67	472.25	2819.00	ELF-18D650M
	3.3	2.4	PLK1009-ND	6.61	56.67	472.25	2819.00	ELF-18D650B
	8.2	1.7	PLK1010-ND	6.61	56.67	472.25	2819.00	ELF-18D650C
	22.0	1.0	PLK1011-ND	6.61	56.67	472.25	2819.00	ELF-18D650L
	47.0	0.7	PLK1012-ND	6.61	56.67	472.25	2819.00	ELF-18D650U
	2.2	2.8	PLK1037-ND	6.61	56.67	472.25	2819.00	ELF-18D656A
	12.0	1.6	PLK1038-ND	6.61	56.67	472.25	2819.00	ELF-18D656J
850	1.5	5.0	PLK1013-ND	9.82	84.18	701.50	4188.00	ELF-18D850M
	3.3	4.2	PLK1014-ND	9.82	84.18	701.50	4188.00	ELF-18D850B
	4.7	3.5	PLK1015-ND	9.82	84.18	701.50	4188.00	ELF-18D850Y
	10.0	2.5	PLK1016-ND	9.82	84.18	701.50	4188.00	ELF-18D850W
	22.0	1.8	PLK1018-ND	9.82	84.18	701.50	4188.00	ELF-18D860C
	56.0	1.1	PLK1017-ND	9.82	84.18	701.50	4188.00	ELF-18D850T
H Series								
200	1.5	1.6	PLK1019-ND	3.84	32.88	274.00	1636.00	ELF-18D217
	3.9	1.0	PLK1020-ND	3.84	32.88	274.00	1636.00	ELF-18D216
	22.0	0.4	PLK1021-ND	3.84	32.88	274.00	1636.00	ELF-18D218
	1.0	2.1	PLK1022-ND	3.84	32.88	274.00	1636.00	ELF-18D212F
	2.2	1.5	PLK1023-ND	3.84	32.88	274.00	1636.00	ELF-18D228F
	33.0	0.4	PLK1024-ND	3.84	32.88	274.00	1636.00	ELF-18D221F
270	6.8	0.7	PLK1025-ND	3.36	28.80	240.00	1433.00	ELF-18D270A
400	1.5	2.4	PLK1026-ND	4.55	39.03	325.25	1942.00	ELF-18D419
	2.2	2.0	PLK1027-ND	4.55	39.03	325.25	1942.00	ELF-18D416
	12.0	0.9	PLK1028-ND	4.55	39.03	325.25	1942.00	ELF-18D430
	33.0	0.5	PLK1029-ND	4.55	39.03	325.25	1942.00	ELF-18D428
	2.2	2.2	PLK1030-ND	4.55	39.03	325.25	1942.00	ELF-18D435F
	10.0	1.0	PLK1031-ND	4.55	39.03	325.25	1942.00	ELF-18D431F
600	1.0	3.4	PLK1032-ND	7.19	61.62	513.50	3066.00	ELF-18D608
	3.3	2.5	PLK1033-ND	5.75	49.29	410.75	2452.00	ELF-18D605
	22.0	1.0	PLK1034-ND	5.75	49.29	410.75	2452.00	ELF-18D612
	2.2	2.8	PLK1035-ND	5.75	49.29	410.75	2452.00	ELF-18D617F
	33.0	0.8	PLK1036-ND	5.75	49.29	410.75	2452.00	ELF-18D624F
F Series								
23F	50.0	0.3	PLK1039-ND	9.85	84.39	703.25	4198.00	ELF-23F003A
	30.0	0.4	PLK1040-ND	9.85	84.39	703.25	4198.00	ELF-23F004A
	20.0	0.5	PLK1041-ND	9.85	84.39	703.25	4198.00	ELF-23F005A
	14.0	0.6	PLK1042-ND	9.85	84.39	703.25	4198.00	ELF-23F006A
	10.0	0.7	PLK1043-ND	9.85	84.39	703.25	4198.00	ELF-23F007A
	8.0	0.8	PLK1044-ND	9.85	84.39	703.25	4198.00	ELF-23F008A
	6.0	0.9	PLK1045-ND	9.85	84.39	703.25	4198.00	ELF-23F009A
	5.0	1.0	PLK1046-ND	9.85	84.39	703.25	4198.00	ELF-23F010A
	3.5	1.2	PLK1047-ND	9.85	84.39	703.25	4198.00	ELF-23F012A
	2.0	1.6	PLK1048-ND	9.85	84.39	703.25	4198.00	ELF-23F016A
	1.5	1.8	PLK1049-ND	9.85	84.39	703.25	4198.00	ELF-23F018A
	1.2	2.0	PLK1050-ND	9.85	84.39	703.25	4198.00	ELF-23F020A
	1.0	2.2	PLK1051-ND	9.85	84.39	703.25	4198.00	ELF-23F022A

Type	Inductance mH min.	Rated Current A rms	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic Part No.
25F	28.0	0.6	PLK1052-ND	11.49	98.46	820.50	4898.00	ELF-25F106A
	20.0	0.7	PLK1053-ND	11.49	98.46	820.50	4898.00	ELF-25F107A
	15.0	0.8	PLK1054-ND	11.49	98.46	820.50	4898.00	ELF-25F108A
	12.0	0.9	PLK1055-ND	11.49	98.46	820.50	4898.00	ELF-25F109A
	10.0	1.0	PLK1056-ND	11.49	98.46	820.50	4898.00	ELF-25F110A
	7.0	1.2	PLK1057-ND	11.49	98.46	820.50	4898.00	ELF-25F112A
	5.0	1.4	PLK1058-ND	11.49	98.46	820.50	4898.00	ELF-25F114A
	4.0	1.6	PLK1059-ND	11.49	98.46	820.50	4898.00	ELF-25F116A
	3.0	1.8	PLK1060-ND	11.49	98.46	820.50	4898.00	ELF-25F118A
	2.0	2.0	PLK1061-ND	11.49	98.46	820.50	4898.00	ELF-25F020A
	1.6	2.2	PLK1062-ND	11.49	98.46	820.50	4898.00	ELF-25F022A
	1.3	2.5	PLK1063-ND	11.49	98.46	820.50	4898.00	ELF-25F025A
N Series								
15N	104.0	0.2	PLK1064-ND	2.42	20.76	173.00	1033.00	ELF-15N002A
	43.0	0.3	PLK1065-ND	2.42	20.76	173.00	1033.00	ELF-15N003A
	26.0	0.4	PLK1066-ND	2.42	20.76	173.00	1033.00	ELF-15N004A
	19.0	0.5	PLK1067-ND	2.42	20.76	173.00	1033.00	ELF-15N005A
	12.0	0.6	PLK1068-ND	2.42	20.76	173.00	1033.00	ELF-15N006A
	10.0	0.7	PLK1069-ND	2.42	20.76	173.00	1033.00	ELF-15N007A
	6.8	0.8	PLK1070-ND	2.42	20.76	173.00	1033.00	ELF-15N008A
	5.3	1.0	PLK1071-ND	2.42	20.76	173.00	1033.00	ELF-15N010A
	4.0	1.1	PLK1072-ND	2.42	20.76	173.00	1033.00	ELF-15N011A
	2.7	1.3	PLK1073-ND	2.42	20.76	173.00	1033.00	ELF-15N013A
	2.1	1.5	PLK1074-ND	2.42	20.76	173.00	1033.00	ELF-15N015A
	1.7	1.7	PLK1075-ND	2.42	20.76	173.00	1033.00	ELF-15N017A
	1.0	2.2	PLK1076-ND	2.42	20.76	173.00	1033.00	ELF-15N022A
	0.6	3.0	PLK1077-ND	2.42	20.76	173.00	1033.00	ELF-15N030A
18N	80.0	0.4	PLK1078-ND	4.67	40.05	333.75	1993.00	ELF-18N004A
	50.0	0.5	PLK1079-ND	4.67	40.05	333.75	1993.00	ELF-18N005A
	35.0	0.6	PLK1080-ND	4.67	40.05	333.75	1993.00	ELF-18N006A
	20.0	0.8	PLK1081-ND	4.67	40.05	333.75	1993.00	ELF-18N008A
	15.0	1.0	PLK1082-ND	4.67	40.05	333.75	1993.00	ELF-18N010A
	9.5	1.2	PLK1083-ND	4.67	40.05	333.75	1993.00	ELF-18N012A
	6.0	1.6	PLK1084-ND	4.67	40.05	333.75	1993.00	ELF-18N016A
	4.2	2.0	PLK1085-ND	4.67	40.05	333.75	1993.00	ELF-18N020A
	2.4	2.5	PLK1086-ND	4.67	40.05	333.75	1993.00	ELF-18N025A
	1.4	3.2	PLK1087-ND	4.67	40.05	333.75	1993.00	ELF-18N032A
20N	69.0	0.6	PLK1088-ND	5.11	43.77	364.75	2178.00	ELF-20N006A
	43.0	0.8	PLK1089-ND	5.11	43.77	364.75	2178.00	ELF-20N008A
	28.0	1.0	PLK1090-ND	5.11	43.77	364.75	2178.00	ELF-20N010A
	18.0	1.3	PLK1091-ND	5.11	43.77	364.75	2178.00	ELF-20N013A
	14.0	1.5	PLK1092-ND	5.11	43.77	364.75	2178.00	ELF-20N015A
	12.0	1.6	PLK1093-ND	5.11	43.77	364.75	2178.00	ELF-20N016A
	7.5	1.8	PLK1094-ND	5.11	43.77	364.75	2178.00	ELF-20N018A
	7.0	2.0	PLK1095-ND	5.11	43.77	364.75	2178.00	ELF-20N020A
	6.2	2.2	PLK1096-ND	5.11	43.77	364.75	2178.00	ELF-20N022A
	4.9	2.4	PLK1097-ND	5.11	43.77	364.75	2178.00	ELF-20N024A
	4.7	2.7	PLK1098-ND	5.11	43.77	364.75	2178.00	ELF-20N027A
	2.9	3.0	PLK1099-ND	5.11	43.77	364.75	2178.00	ELF-20N030A
	2.0	3.5	PLK1100-ND	5.11	43.77	364.75	2178.00	ELF-20N035A
	1.5	4.0	PLK1101-ND	5.11	43.77	364.75	2178.00	ELF-20N040A

Power Entry Modules

C Series: The C series is a two-function power entry module combining a DPST switch and an IEC 320 power line connector. **EC Series:** This series of filtered power entry modules provides the highest attenuation of any standard filter available in a package size limited by the dimensions of the integral IEC connector. These filters combine high common-mode inductance with high differential-mode capacitance and minimal parasitic elements, for effective attenuation of line-to-ground and line-to-line noise across the frequency range. **ED Series:** These filtered power entry modules are more effective than general purpose filters in applications where line-to-line and low frequency line-to-ground noise must be controlled. **EEA Series:** A new design in both the internal structure and manufacturing process makes this series cost effective and compact. **EF Series:** This rugged international series of filtered power entry modules incorporates the special IEC power line connector. They are UL recognized, CSA certified, and VDE and SEV approved. Models with F suffix are SEMKO approved and comply with BSI standards. **GG Series:** The GG series power entry modules combine the functions of a general purpose RFI filter with IEC power cord connector and single or dual metric fusing, in the smallest possible panel space. **H Series:** The H series was developed specifically for health care applications. These products are suitable for uses in both patient care equipment and nonpatient care equipment. Their extremely low leakage current allows compliance with UL544 and CSA 22.2 health care specifications. **J Series:** The most widely accepted of all the power entry modules, the J series combines an IEC connector, 2 voltage, or 4 voltage selection, and a North American fuseholder. **P Series:** This series of power entry modules offers full flexibility of design in the most compact package. As the first 10 Amp module to provide all five power entry functions in one compact design, the "Chameleon" readily adapts to its environment and the needs of international markets. • Snap-in or flange mounting • IEC power line connector • Both North American and European fusing capabilities • Two voltage selection • Optional DPST on/off switch • Filtering options for general purpose and medical applications. **LA Series:** A multi-function power entry connector with a choice of filtering capabilities. The series features an IEC line connector, selectable North American or dual European fusing capabilities, DPST on/off switch, and 120/240 voltage selection. The filtered LA units provide a one piece solution to all power entry needs and provide a filtering solution for almost any RFI problem. Their vertical design is flange mounted and will meet requirements for worldwide markets. **M Series:** This series of power entry modules offers the most choices of power entry components and filtering options to fit a specific need. **SR Series:** The SR series includes a full line of popular AC receptacles. These male and female power line connectors include snap-in and flange mounted models. All have complete safety agency approvals for worldwide usage.

Part Numbering System for P Series (Figure 4A & 4B)

	Mounting Style	Extender Options	Switch Options	Voltage Select	Fuse Options	Filter Type	Filter Current	Shield Options
P	E = Mtg. Ears (horiz) S = Snap-in	0 = None C = FN260 J = J Series L = L Series	0 = Blank S = DPST	0 = Single AC volt. S = Dual AC volt. select (SMPS) X = Dual AC volt. select (series/parallel)	D = Dual fuse S = Single fuse	0 = No filter B = Intercon. block H = Medical Filter S = Gen. purpose	0 = No filter or Intercon. block 3 = 3 amps 6 = 6 amps X = 10 amps	0 = No shield A = Filter shield B = Complete shield

Fig.	Rated Cur. 120V (Amps)	Termination	Dimensions (mm) A	B	C	D	E	F	Digi-Key Part No.	Pricing 1	25	100	Corcom Part No.
Series C - Power Entry Modules													
1	10	Faston, Straight	31.24	24.64	41.17	26.92	38.74	—	CCM1647-ND*	8.15	142.50	476.00	10CS1
Series EC - Power Entry Modules													
2	3	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1623-ND	21.36	373.50	1247.00	3EC1
2	6	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1611-ND	21.36	373.50	1247.00	6EC1
2	10	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1646-ND	22.51	393.50	1314.00	10EC1
Series ED — Power Entry Modules													
2	3	Faston, Straight	55.88	20.57	—	—	—	—	CCM1204-ND	15.73	275.00	919.00	3ED1
	6	Faston, Straight	55.88	20.57	—	—	—	—	CCM1205-ND	15.73	275.00	919.00	6ED1
	10	Faston, Straight	66.55	20.57	—	—	—	—	CCM1206-ND	16.22	283.50	947.00	10ED1
	3	Wire Lead, Straight	39.37	20.57	—	—	—	—	CCM1214-ND	15.73	275.00	919.00	3ED8
	6	Wire Lead, Straight	39.37	20.57	—	—	—	—	CCM1215-ND	15.73	275.00	919.00	6ED8
	6	Wire Lead, Straight	50.29	20.57	—	—	—	—	CCM1218-ND	19.96	349.00	1166.00	6ED8C
	10	Faston, Straight	66.55	20.57	—	—	—	—	CCM1219-ND	21.45	375.00	1253.00	10ED1C
Series EEA - Power Entry Modules													
2	3	Faston, Straight	54.60	28.70	20.60	40.01	50.30	—	CCM1622-ND	9.72	170.00	568.00	3EEA1
2	6	Faston, Straight	54.60	28.70	20.60	40.01	50.30	—	CCM1610-ND	9.07	158.50	529.00	6EEA1
2	10	Faston, Straight	54.60	28.70	20.60	40.01	50.30	—	CCM1645-ND	9.87	172.50	576.00	10EEA1
Series EF - Power Entry Modules													
2	1	Faston, Straight	55.88	20.57	—	—	—	—	CCM1100-ND	13.10	229.00	765.00	1EF1F
	3	Faston, Straight	55.88	20.57	—	—	—	—	CCM1101-ND	13.10	229.00	765.00	3EF1F
	6	Faston, Straight	55.88	20.57	—	—	—	—	CCM1102-ND	13.10	229.00	765.00	6EF1F
	10	Faston, Straight	66.55	20.57	—	—	—	—	CCM1103-ND	13.44	235.00	785.00	10EF1F
	3	Faston, Straight	55.90	30.20	20.60	40.01	50.30	—	CCM1621-ND	14.96	261.50	873.00	3EF1
	6	Faston, Straight	55.90	30.20	20.60	40.01	50.30	—	CCM1609-ND	14.96	261.50	873.00	6EF1
	15	Faston, Straight	66.50	30.20	20.60	40.01	50.30	—	CCM1636-ND	19.36	338.50	1131.00	15EF1F
Series GG - Power Entry Modules With Fuseholders													
3	6	Faston, Straight	42.20	28.70	32.80	33.30	44.70	—	CCM1620-ND	14.30	250.00	835.00	6EGG1-1
	6	Faston, Straight	42.20	28.70	32.80	33.30	44.70	—	CCM1650-ND†	17.02	297.50	994.00	6EGG1-2
Series H - Power Entry Modules													
2	6	Faston, Straight	55.90	30.20	20.60	40.01	50.30	—	CCM1607-ND	15.62	273.00	912.00	6EH4
Series P, Chameleon — For General or Medical Applications (See chart for part number break down)													
4A	10	Faston	31.50	49.02	58.67	26.92	55.91	—	CCM1372-ND*	15.59	272.50	910.00	PS0SXS000
	10	Faston	31.50	49.02	58.67	26.92	55.91	—	CCM1373-ND*	12.16	212.50	710.00	PS000S000
	10	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1374-ND	18.59	325.00	1086.00	PS0S0SBX0
	3	Faston	31.50	54.10	58.67	28.50	55.91	—	CCM1376-ND	23.17	405.00	1353.00	PS000SS3B
	3	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1377-ND	22.74	397.50	1328.00	PS0SXSS30
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1378-ND	21.45	375.00	1253.00	PS0SXSS60
	10	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1379-ND	26.31	460.00	1536.00	PS0S0SSXA
	10	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1380-ND	24.60	430.00	1436.00	PS000SSXB
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1381-ND	21.45	375.00	1253.00	PS0SXDS60
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1382-ND	23.60	412.50	1378.00	PS0S0SS6A
	6	Faston	31.50	54.10	58.67	26.92	55.91	—	CCM1600-ND	21.45	375.00	1253.00	PS0S0SS60
4B	10	Faston	50.29	49.02	58.67	28.50	55.91	40.01	CCM1375-ND*	16.59	290.00	969.00	PE0SSS000
	6	Faston	50.29	54.10	58.67	28.50	55.91	40.01	CCM1383-ND	22.45	392.50	1311.00	PE0SSSS60
	10	Faston	50.29	54.10	58.67	28.50	55.91	40.01	CCM1384-ND	25.17	440.00	1470.00	PE0SSSSX0
	10	Faston	50.29	54.10	58.67	28.50	55.91	40.01	CCM1385-ND	23.74	415.00	1386.00	PE0S0SS30

* Unfiltered † Utilizes 2 5x20 fuses

Fig.	Rated Cur. 120V (Amps)	RFI Filter Type	Avail.Voltage Select. Pos.	DPST On/Off Switch	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 1	25	100	Corcom Part No.
Series J — Power Entry Modules													
5	6	Unfiltered	4	—	68.07	38.61	29.72	31.24	CCM1200-ND	15.39	269.00	898.00	6VJ1
	6	Gen. Purpose	4	—	69.85	47.50	29.732	40.13	CCM1201-ND	27.77	485.50	1622.00	6J4
Series LA - Power Entry Modules													
6	5	Gen. Purpose	2	—	50.50	39.90	65.79	61.21	CCM1614-ND	51.99	909.00	3036.01	5EFLA2S
Series M — Power Entry Modules													
7	6	Unfiltered	1	yes	105.92	91.95	36.83	—	CCM1001-ND	19.91	348.00	1162.00	6VM1S
	6	Unfiltered	2	yes	118.11	104.14	36.83	—	CCM1003-ND	23.22	406.00	1356.00	6VM2S
	6	Unfiltered	4	yes	118.11	104.14	36.83	—	CCM1005-ND	23.22	406.00	1356.00	6VM4S
	5	Medical	1	yes	105.92	91.95	55.63	—	CCM1011-ND	29.52	516.00	1723.00	5EHM1S
	5	Medical	4	no	98.55	84.33	55.63	—	CCM1012-ND	28.66	501.00	1673.00	5EHM4
	5	Gen. Purpose	1	no	86.11	72.14	55.63	—	CCM1020-ND	24.88	435.00	1453.00	5EFM1
	5	Gen. Purpose	1	yes	105.92	91.95	55.63	—	CCM1021-ND	29.03	507.50	1695.00	5EFM1S
	5	Gen. Purpose	4	yes	118.11	104.14	55.63	—	CCM1023-ND	32.35	565.50	1889.00	5EFM4S

Fig.	Rated Cur. 120V (Amps)	Output Terminals	Mounting Style	Input Config.	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 1	25	100	Corcom Part No.
Series SR — AC Connector													
8	15@125V	PC Terminals	Flange	Male	50.01	40.01	28.19	26.70	CCM1400-ND	3.06	53.50	179.00	6ESRM-P
	15@125V	Quick Disconnect	Flange	Male	50.22	40.01	22.76	31.09	CCM1401-ND	2.23	39.00	130.00	6ESRM-3
	15@125V	Quick Disconnect	Snap-In	Male	30.40	—	22.66	30.61	CCM1402-ND	2.35	41.00	137.00	6ESRMC2
	15@125V	Quick Disconnect	Snap-In	Female	35.31	—	28.19	35.71	CCM1403-ND	2.72	47.50	159.00	6ESRFC3
	15@125V	Quick Disconnect	Flange	Female	50.01	40.01	29.31	35.71	CCM1404-ND	2.72	47.50	159.00	6ESRF-3

Fig. 1

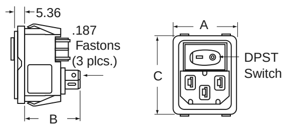


Fig. 2

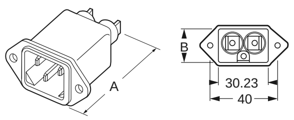


Fig. 3

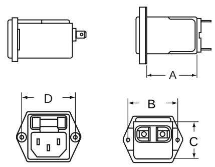


Fig. 4A See chart for part number break down.

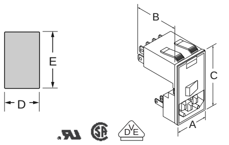


Fig. 4B See chart for part number break down.

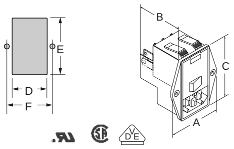


Fig. 5

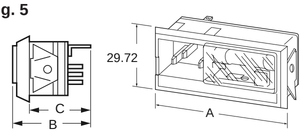


Fig. 6

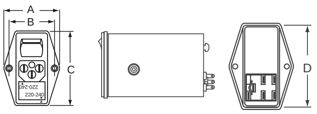
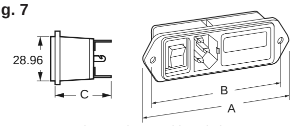
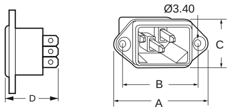


Fig. 7



Note: Picture shown with switch.

Fig. 8



Note: Picture shown with mounting flange.

RF Line Filters

B Series: These general purpose common-mode RFI power line filters effectively provide RFI control of line-to-ground noise in a small size at a low cost. **EP Series:** The EP/VP series of RFI filters has been developed to reduce conducted noise to acceptable limits for equipment that must comply with requirements of CISPAR in Europe and the FCC specifications in the USA. **H Series:** The H series filters were developed specifically for health care applications. These products are suitable for uses in both patient care equipment and nonpatient care equipment. Extremely low leakage current allows compliance with UL544 and CSA 22.2 health care specifications. **HT Series:** This series of power line filters provides superior common-mode and premium differential-mode attenuation to RFI noise on the frequency range from 10KHz to 30MHz, for IEC601 and UL544 patient-connected equipment, as well as all other electronic equipment that cannot tolerate any leakage current. **K Series:** These power line filters are general purpose common-mode and differential-mode filters. They are effective in the control of line-to-line as well as line-to-ground RFI interference. They are particularly suited in applications where pulsed, continuous and/or intermittent RFI interference is present. **MV Series:** This series answers the need for a medical filter to help equipment comply with increasing noise sources in medical applications while still meeting leakage current requirements of UL2601. **Q Series:** A series of RFI power line filters that has been developed specifically for switching power supplies and is designed to be all the line filtering needed to control conducted emissions all the way down to 10KHz. **R Series:** These dual T section RFI power line filters provide premium performance at a moderate cost. They are well suited for impedance loads where noisy RFI environments are present. They control pulsed, continuous and/or intermittent interference, insuring protection of your equipment from power noise in addition to protecting the line from equipment noise. **S Series:** The S series of RFI power line filters combines successful line-to-ground interference rejection filters with additional circuitry designed to reduce line-to-line noise and transients. **SK Series:** This series of RFI power line filters was designed to reduce conducted noise to acceptable limits for equipment that must comply with the FCC specifications in the USA and CISPAR specifications in Europe. **T Series:** These RFI power line filters provide superior common-mode and premium differential-mode attenuation, exceeded only by that of Q series filters. **U Series:** The U series was designed to meet the RFI needs created by power factor corrected power supplies. This high performance filter offers a high impedance circuit to mismatch the power supply's impedance characteristics. **V and W Series:** These RFI power line filters will protect equipment from malfunctions due to conducted interference coming into the equipment from the line, especially line-to-line noise and transients. The W series has a two-stage construction that provides excellent suppression at high frequency. **EDP Series:** These RFI power line filters provide enhanced differential-mode performance for applications requiring more line-to-line protection. **EOP Series:** A general purpose filter which is effective in removing both common and differential-mode noise for susceptibility applications. **X Series:** This series was designed to bring most digital equipment (including switching power supplies) into compliance with FCC Part 15J, Class B conducted emission limits. **Z Series:** A design that brings most digital equipment (including switching power supplies) into compliance with EN55022 Level B, (as well as FCC Part 15J, Class B) conducted emission limits. **N Series:** The N series RFI filters are designed to provide superior common-mode attenuation for most digital electronic equipment (particularly switching power supplies) over the frequency range of 10KHz to 30MHz.

Fig.	Rated Cur. 120 V (Amps)	Termination	Dimension (mm) A	B	C	D	Digi-Key Part No.	Pricing 1	25	100	Corcom Part No.
Series B — Line Filter											
1	1	Faston	57.15	46.23	16.76	53.98	CCM1300-ND	13.27	232.00	775.00	1VB1
	2	Faston	57.15	46.23	16.76	53.98	CCM1301-ND	11.93	208.50	696.00	2VB1
	3	Faston	66.29	46.23	19.81	53.98	CCM1302-ND	13.79	241.00	805.00	3VB1
	5	Faston	66.29	46.23	19.81	53.98	CCM1303-ND	12.78	223.50	746.00	5VB1
	10	Faston	66.29	46.23	29.46	53.98	CCM1304-ND	14.27	249.50	833.00	10VB1
	20	Faston	85.30	52.60	29.50	60.33	CCM1634-ND	22.11	386.50	1291.00	20EB1
	20	Faston	85.34	52.58	29.46	60.33	CCM1305-ND	22.11	386.50	1291.00	20VB1
10	1	Wire Lead	24.38	46.23	16.76	53.98	CCM1310-ND	14.13	247.00	825.00	1VB3
	2	Wire Lead	24.38	46.23	16.76	53.98	CCM1311-ND	12.87	225.00	752.00	2VB3
	3	Wire Lead	33.53	46.23	19.81	53.98	CCM1312-ND	14.70	257.00	858.00	3VB3
	5	Wire Lead	33.53	46.23	19.81	53.98	CCM1313-ND	13.53	236.50	790.00	5VB3
	10	Wire Lead	33.53	46.23	29.46	53.98	CCM1314-ND	14.93	261.00	872.00	10VB3
4	20	Stud	87.88	52.58	29.46	60.33	CCM1321-ND	26.05	455.50	1521.00	20VB6
Series EDP — For General Purpose Application											
6	1	PCB	36.58	31.50	24.13	—	CCM1364-ND	16.93	296.00	989.00	1EDP
	3	PCB	36.58	31.50	24.13	—	CCM1365-ND	15.82	276.50	924.00	3EDP
Series EOP — For General Purpose Application											
6	1	PCB	36.58	31.50	19.81	—	CCM1366-ND	13.99	244.50	817.00	1EOP
	3	PCB	36.58	31.50	19.81	—	CCM1367-ND	12.78	223.50	746.00	3EOP
Series EP — Line Filter For Switching Power Supply Noise Suppression											
2	3	Faston	97.80	52.60	45.20	74.63	CCM1619-ND	32.75	570.00	1912.00	3EP1
	10	Faston	168.10	52.60	70.60	142.88	CCM1644-ND	74.16	1296.50	4330.00	10EP1
Series EXP — For Emission Control Applications											
5	3	PCB	66.29	28.70	41.15	—	CCM1370-ND	21.16	370.00	1236.00	3EXP
	6	PCB	66.29	28.70	44.45	—	CCM1371-ND	34.26	599.00	2001.00	6EXP
Series EZP — For Emission Control Applications											
5	2	PCB	66.29	28.70	44.45	—	CCM1368-ND	26.37	461.00	1540.00	2EZP
	3	PCB	66.29	28.70	44.45	—	CCM1369-ND	27.08	473.50	1581.00	3EZP
Series H — Line Filter For Healthcare Equipment											
1	6	Faston	57.20	46.10	16.70	53.98	CCM1608-ND	13.01	227.50	760.00	6EH1
Series HT — High Performance Line Filter For Medical Equipment											
2	6	Faston	90.40	54.60	46.00	74.63	CCM1606-ND	44.02	769.50	2570.01	6EHT1
Series K — Line Filter											
1	2	Faston	78.70	52.60	23.10	60.33	CCM1627-ND	15.27	267.00	892.00	2VK1
	3	Faston	78.70	52.60	29.50	60.33	CCM1618-ND	18.13	317.00	1059.00	3VK1
	5	Faston	78.70	52.60	29.50	60.33	CCM1613-ND	15.53	271.50	907.00	5VK1
	10	Faston	85.10	52.60	29.50	60.33	CCM1641-ND	16.39	286.50	957.00	10VK1
	20	Faston	85.10	65.00	38.90	74.63	CCM1632-ND	24.71	432.00	1443.00	20VK1
	20	Faston	85.10	65.00	38.90	74.63	CCM1633-ND	24.71	432.00	1443.00	20EK1
4	20	Stud	87.90	65.00	38.90	74.63	CCM1631-ND	28.57	499.50	1668.00	20VK6
	30	Stud	135.60	85.90	38.90	95.25	CCM1625-ND	53.54	936.00	3126.00	30VK6
10	2	Wire Lead	46.00	52.60	23.10	60.33	CCM1626-ND	16.47	288.00	962.00	2VK3
	5	Wire Lead	46.00	52.60	29.50	60.33	CCM1612-ND	17.50	306.00	1022.00	5VK3
Series MV — Multipurpose Line Filter For Medical Applications											
2	10	Faston	98.00	52.80	38.90	74.63	CCM1642-ND	38.30	669.50	2236.00	10MV1
Series N - High Performance Line Filter for Switching Power Supplies											
2	10	Faston	119.10	57.70	45.70	103.20	CCM1649-ND	80.57	1408.50	4704.00	10VN1
Series Q — Line Filters For Switching Power Supply Emissions Down to 10kHz											
2	3	Faston	97.80	52.60	45.20	74.63	CCM1651-ND	49.76	870.00	2905.99	3EQ1
	6	Faston	126.50	57.70	45.70	103.20	CCM1605-ND	73.96	1293.00	4319.01	6EQ1
Series R — Line Filter, 2 Stage											
2	2	Faston	85.09	45.97	29.46	60.33	CCM1331-ND	21.94	383.50	1281.00	2VR1
	3	Faston	97.79	52.58	29.46	74.63	CCM1332-ND	23.54	411.50	1374.00	3VR1
	5	Faston	97.79	52.58	29.46	74.63	CCM1333-ND	22.14	387.00	1293.00	5VR1
	10	Faston	97.79	52.58	38.86	74.63	CCM1334-ND	23.22	406.00	1356.00	10VR1
	20	Faston	132.84	85.60	38.86	95.25	CCM1335-ND	56.34	985.00	3290.00	20VR1
	10	Stud	100.58	52.58	38.86	74.63	CCM1360-ND	27.54	481.50	1608.00	10VR6
9	2	Wire Lead	52.58	45.97	29.46	60.33	CCM1341-ND	24.25	424.00	1416.00	2VR3
	5	Wire Lead	65.02	52.58	29.46	74.63	CCM1343-ND	24.45	427.50	1428.00	5VR3
	10	Wire Lead	65.02	52.58	38.86	74.63	CCM1344-ND	24.02	420.00	1403.00	10VR3
Series S — Line Filter For Emission Control											
2	3	Faston	85.30	46.20	29.50	60.33	CCM1617-ND	28.83	504.00	1683.00	3VS1
	6	Faston	98.00	52.80	38.90	74.63	CCM1603-ND	28.83	504.00	1683.00	6VS1
	10	Faston	98.00	52.80	38.90	74.63	CCM1640-ND	33.95	593.50	1982.01	10VS1
	20	Faston	132.80	85.90	38.90	95.25	CCM1648-ND	75.05	1312.00	4382.00	20VS1
Series SK — Line Filter - High Performance K Series											
2	20	Stud	127.30	57.20	45.20	103.20	CCM1630-ND	54.63	955.00	3190.01	20VSK6
7	30	Stud	125.00	79.25	69.85	87.30	CCM1624-ND	65.69	1148.50	3835.99	30VSK6
	40	Stud	152.40	79.25	55.40	88.90	CCM1615-ND	72.76	1272.00	4248.00	40VSK6
Series T — High Performance Line Filter For Switching Power Supplies											
2	6	Faston	90.40	54.60	46.00	74.63	CCM1604-ND	44.27	774.00	2585.01	6ET1
	10	Faston	119.10	57.70	45.70	103.20	CCM1643-ND	63.95	1118.00	3734.01	10ET1
	10	Faston	119.10	57.70	45.70	103.20	CCM1639-ND	63.95	1118.00	3734.01	10VT1
3	15	Faston	138.40	79.20	55.40	88.90	CCM1635-ND	84.14	1471.00	4912.99	15ET1
Series U — For Power Factor Corrected Power Supplies											
8	6.5	6EUP PCB	119.38	63.75	30.99	—	CCM1362-ND	69.24	1210.50	4043.00	6EUP
2	6.5	6EU1 Faston	125.73	57.66	45.72	103.12	CCM1363-ND	56.31	984.50	3287.99	6EU1
Series V — Line Filter For Emission Control											
2	6	Faston	98.00	52.80	38.90	74.63	CCM1602-ND	32.58	569.50	1902.00	6VV1
	10	Faston	98.00	52.80	38.90	74.63	CCM1638-ND	36.75	642.50	2146.00	10VV1
3	20	Faston	132.80	85.90	38.90	95.25	CCM1629-ND	78.51	1372.50	4584.01	20VV1
Series W — Line Filter For Emission Control, 2 Stage											
2	3	Faston	85.30	46.20	32.50	60.33	CCM1616-ND	34.32	600.00	2004.00	3VW1
	6	Faston	98.00	52.80	38.90	74.63	CCM1601-ND	34.32	600.00	2004.00	6VW1
	10	Faston	98.00	52.80	38.90	74.63	CCM1637-ND	39.38	688.50	2300.00	10VW1
3	20	Faston	132.80	85.90	38.90	95.25	CCM1628-ND	80.25	1403.00	4685.99	20VW1

Fig. 1

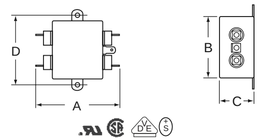


Fig. 2

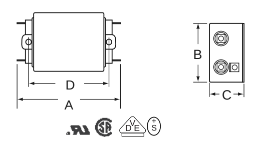


Fig. 3

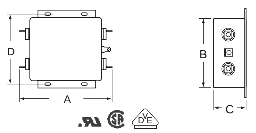


Fig. 4

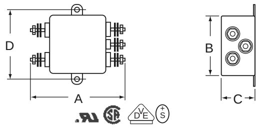


Fig. 5

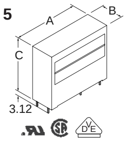


Fig. 6

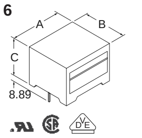


Fig. 7

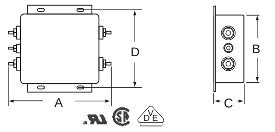


Fig. 8

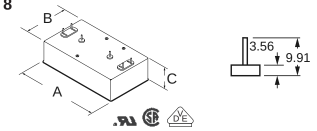


Fig. 9

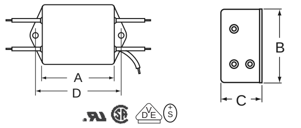
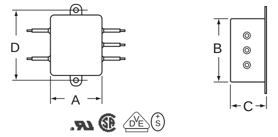


Fig. 10



PREO
A DIVISION OF EASTEK INTERNATIONAL

Power Line EMI Filters

The EB series are general purpose EMI filters, which suppress high frequency conducted noise both into and out of the equipment through the power lines. The compact and low cost designs make these a good choice for cleaning up noisy power lines.

The EK series are general purpose EMI filters with enhanced differential mode performance. They are effective in suppressing both common mode and differential mode noise. This series is a very good choice when it is required to comply with basic EMI emission regulations, such as FCC-A and VDE-A.

The ER series are high performance EMI filters with multi-stage design for both common mode and differential mode noise suppression. This series is most useful when attenuation is required for compliance with stringent EMI emission regulations such as FCC-B and VDE-B.

The HB series are general purpose EMI filters specially designed for medical and dental equipment, both patient care and nonpatient categories. The leakage current in this series is extremely low to satisfy the stringent leakage current limit imposed by safety regulations for medical and dental equipment, such as UL544 and IEC601.

Fig. 1

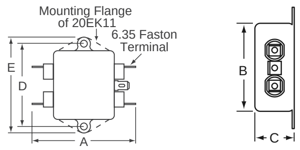


Fig. 2

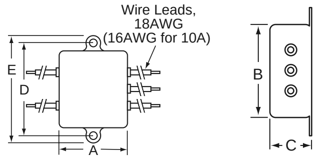


Fig. 3

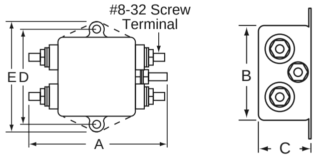


Fig. 4

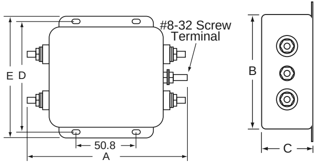


Fig. 5

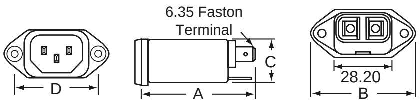


Fig. 6

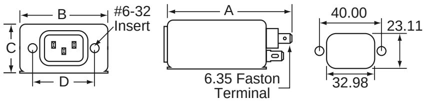


Fig. 7

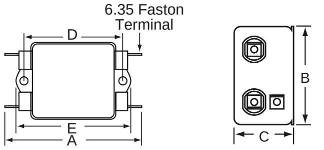


Fig. 8

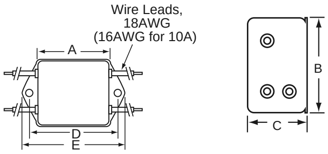


Fig. 9

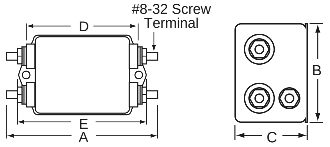


Fig.	Rated Amps	Termination	Dimensions (mm)					Digi-Key Part No.		Price Each		Eastek Part No.
			A	B	C	D	E		1	25	50	
Series EB												
1	2A	Faston	57.2	46.2	16.8	54.0	64.3	364-1000-ND	7.64	5.73	5.10	02EB11
	3A	Faston	66.3	46.2	19.8	54.0	64.3	364-1001-ND	8.83	6.62	5.89	03EB11
	6A	Faston	66.3	46.2	19.8	54.0	64.3	364-1002-ND	8.18	6.13	5.45	06EB11
	10A	Faston	66.3	46.2	29.5	54.0	64.3	364-1008-ND	9.21	6.91	6.14	10EB11
	20A	Faston	85.3	52.6	29.5	60.3	71.4	364-1003-ND	14.85	11.14	9.90	20EB11
2	2A	Wire	24.4	46.2	16.8	54.0	64.3	364-1004-ND	8.40	6.30	5.60	02EB33
	3A	Wire	33.5	46.2	19.8	54.0	64.3	364-1005-ND	9.58	7.19	6.39	03EB33
	6A	Wire	33.5	46.2	19.8	54.0	64.3	364-1006-ND	8.83	6.62	5.89	06EB33
	10A	Wire	33.5	46.2	29.5	54.0	64.3	364-1007-ND	9.74	7.31	6.49	10EB33
3	10A	Screw	69.1	46.2	29.5	54.0	64.3	364-1009-ND	11.78	8.84	7.85	10EB66
	20A	Screw	87.9	52.6	29.5	60.3	71.4	364-1010-ND	17.50	13.13	11.67	20EB66
4	30A	Screw	135.6	85.9	38.9	95.2	106.7	364-1011-ND	33.42	25.07	22.28	30EB66
5	1A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1012-ND	8.16	6.12	5.44	01EBM1
	3A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1013-ND	6.93	5.20	4.62	03EBM1
	6A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1014-ND	6.86	5.15	4.58	06EBM1
	10A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1015-ND	7.00	5.25	4.66	10EBM1
Series EK												
1	2A	Faston	78.7	52.6	23.1	60.3	71.4	364-1016-ND	9.76	7.32	6.51	02EK11
	3A	Faston	78.7	52.6	29.5	60.3	71.4	364-1017-ND	11.62	8.72	7.75	03EK11
	6A	Faston	78.7	52.6	29.5	60.3	71.4	364-1018-ND	9.94	7.45	6.63	06EK11
	10A	Faston	85.1	52.6	29.5	60.3	71.4	364-1019-ND	10.69	8.02	7.13	10EK11
	20A	Faston	85.1	65.0	38.9	74.6	85.1	364-1020-ND	16.61	12.46	11.07	20EK11
2	2A	Wire	46.0	52.6	23.1	60.3	71.4	364-1021-ND	10.75	8.06	7.17	02EK33
	3A	Wire	46.0	52.6	29.5	60.3	71.4	364-1022-ND	12.22	9.16	8.14	03EK33
	6A	Wire	46.0	52.6	29.5	60.3	71.4	364-1023-ND	11.42	8.57	7.62	06EK33
	10A	Wire	52.6	52.6	29.5	60.3	71.4	364-1024-ND	11.25	8.43	7.50	10EK33
6	3A	IEC320/Faston	81.5	57.2	32.5	40.0	—	364-1025-ND	13.15	9.86	8.76	03EKM1
	6A	IEC320/Faston	81.5	57.2	32.5	40.0	—	364-1026-ND	12.14	9.10	8.09	06EKM1
	10A	IEC320/Faston	94.2	57.2	32.5	40.0	—	364-1027-ND	13.48	10.11	8.99	10EKM1
3	10A	Screw	87.9	52.6	29.5	60.3	71.4	364-1028-ND	13.20	9.90	8.80	10EK66
	20A	Screw	87.9	65.0	38.9	74.6	85.1	364-1029-ND	19.21	14.40	12.80	20EK66
4	30A	Screw	135.6	85.9	38.9	95.2	106.7	364-1030-ND	35.98	26.98	23.98	30EK66
Series ER												
7	2A	Faston	85.1	46.0	29.5	60.3	70.6	364-1031-ND	14.75	11.06	9.83	02ER11
	3A	Faston	97.8	52.6	29.5	74.6	85.1	364-1032-ND	15.82	11.87	10.55	03ER11
	6A	Faston	97.8	52.6	29.5	74.6	85.1	364-1033-ND	14.87	11.15	9.91	06ER11
	10A	Faston	97.8	52.6	38.9	74.6	85.1	364-1034-ND	15.60	11.70	10.40	10ER11
	20A	Faston	132.8	85.6	38.9	95.2	106.7	364-1035-ND	37.88	28.41	25.25	20ER11
8	2A	Wire	52.6	46.0	29.5	60.3	70.6	364-1036-ND	16.28	12.21	10.85	02ER33
	3A	Wire	65.0	52.6	29.5	74.6	85.1	364-1037-ND	16.87	12.65	11.25	03ER33
	6A	Wire	65.0	52.6	29.5	74.6	85.1	364-1038-ND	16.43	12.33	10.96	06ER33
	10A	Wire	65.0	52.6	38.9	74.6	85.1	364-1039-ND	16.16	12.12	10.77	10ER33
6	3A	IEC320/Faston	110.0	57.2	32.5	40.0	—	364-1040-ND	18.26	13.69	12.17	03ERM1
	6A	IEC320/Faston	110.0	57.2	32.5	40.0	—	364-1041-ND	17.23	12.92	11.48	06ERM1
	10A	IEC320/Faston	110.0	57.2	38.9	40.0	—	364-1042-ND	18.53	13.90	12.36	10ERM1
9	10A	Screw	100.6	52.6	38.9	74.6	85.1	364-1043-ND	18.51	13.88	12.34	10ER66
4	20A	Screw	135.6	85.6	38.9	95.2	106.7	364-1044-ND	38.87	29.15	25.91	20ER66
	30A	Screw	151.1	79.2	55.4	88.9	100.6	364-1045-ND	66.00	49.50	44.00	30ER66
Series HB												
1	6A	Faston	66.3	46.2	19.8	54.0	64.3	364-1046-ND	8.34	6.25	5.56	06HB11
2	6A	Wire	33.5	46.2	19.8	54.0	64.3	364-1047-ND	9.48	7.11	6.32	06HB33
5	6A	IEC320/Faston	54.5	50.3	20.8	40.0	—	364-1048-ND	10.30	7.72	6.86	06HBM1

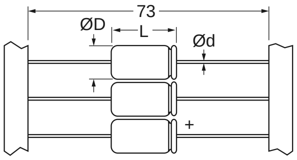
SAL-A 123

Axial Solid AL Electrolytic Capacitors

FEATURES:
- Polarized aluminum electrolytic capacitors, solid electrolyte MnO2
- Axial leads, aluminum case, ceramic seal, blue insulation sleeve.
- SAL-A: standard version
- Extremely long useful life: 20,000 hours at 125°C
- Extended usable temperature range up to 200°C
- Excellent low temperature impedance and ESR behavior
- Charge and discharge proof, application with 0 Ω resistance allowed
- Reverse DC voltage up to 0.3 x U_R allowed
- AC voltage up to 0.8 x U_R allowed
- Advanced technology to achieve high reliability and high stability

APPLICATIONS:
- EDP, telecommunications, general industrial, automotive, military and space
- Smoothing, filtering, buffering, timing
- For power supplies, DC/DC converters

Dimensions in mm.



Form BA: Taped in box (ammopack)

DESCRIPTION	VALUE
Case sizes (ØD_{nom} x L_{nom} in mm)	6.7 x 15.3 to 12.9 x 32.0
Rated capacitance range (E6 Series), C_R	1.5 to 2200 µF
Tolerance on C_R	±20%
Rated voltage range, U_R	6.3 to 40V
Category temperature range	-55°C to +125°C
Usable temperature range	-80°C to +200°C
Endurance test at 155 and 125°C	5000 and 8000 hours
Useful life at 40°C, I_R applied	450,000 hours
Shelf life at 0 V, 125°C	500 hours
Based on sectional specification	IEC 384-4/CECC 30300
Detail specification	IEC384-4-2/CECC 30302
Climatic category IEC 68 (DIN 40040; NF C20-600)	55/125/56 (FKD; 434)
Approvals	CNET LNZ 44-04 COS-C (PTT) Gam-t-1 (MIL) CECC 30302-003

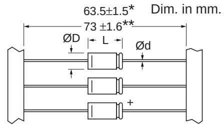
WV	Cap.	Leakage		Ripple	Dimensions (mm)			Digi-Key	Cut Tape Pricing		Digi-Key	Tape & Box Pricing				BC Components
(VDC)	(µF)	Curr. (µA)	tan δ	Curr. (mA)	L	D	d	Part No.	1	10	Part No.	100	500	1,000	5,000	Part No.
6.3	47	15	0.180	58	15.3	6.7	0.6	4264PHCT-ND	3.69	33.83	4264PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 13479
	68	21	0.180	83	15.3	6.7	0.6	4265PHCT-ND	3.69	33.83	4265PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 13689
	150	47	0.180	160	20.4	7.6	0.6	4266PHCT-ND	3.85	35.26	4266PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 13151
	330	104	0.180	330	23.3	9.3	0.6	4267PHCT-ND	4.11	37.68	4267PHTB-ND	321.95	1316.07	2044.77	1929.58/M	2222 123 13331
	680	214	0.180	680	32	10.3	0.6	4268PHCT-ND	4.49	41.11	4268PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 13681
	1000	315	0.180	940	32	12.9	0.6	4269PHCT-ND	5.17	47.41	4269PHTB-ND	405.14	1656.13	2573.12	2428.17/M	2222 123 13102
	1500	473	0.180	1220	32	12.9	0.6	4270PHCT-ND	6.01	55.11	4270PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 13152
10	33	17	0.180	63	15.3	6.7	0.6	4271PHCT-ND	3.69	33.83	4271PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 14339
	47	24	0.180	83	15.3	6.7	0.6	4272PHCT-ND	3.69	33.83	4272PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 14479
	68	34	0.180	110	20.4	7.6	0.6	4273PHCT-ND	3.85	35.26	4273PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 14689
	100	50	0.180	160	20.4	7.6	0.6	4274PHCT-ND	3.85	35.26	4274PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 14101
	150	75	0.180	240	23.3	9.3	0.6	4275PHCT-ND	4.13	37.87	4275PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 14151
	220	110	0.180	350	23.3	9.3	0.6	4276PHCT-ND	4.13	37.87	4276PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 14221
	330	165	0.180	490	32	10.3	0.8	4277PHCT-ND	4.46	40.92	4277PHTB-ND	349.68	1429.42	2220.88	2095.78/M	2222 123 14331
	470	235	0.180	570	32	10.3	0.8	4278PHCT-ND	4.49	41.11	4278PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 14471
	680	340	0.180	760	32	12.9	0.8	4279PHCT-ND	5.17	47.41	4279PHTB-ND	405.14	1656.13	2573.12	2428.17/M	2222 123 14681
	1000	500	0.180	1000	32	12.9	0.8	4280PHCT-ND	6.01	55.11	4280PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 14102
16	10	16	0.140	31	15.3	6.7	0.6	4281PHCT-ND	3.69	33.83	4281PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 15109
	15	24	0.140	47	15.3	6.7	0.6	4282PHCT-ND	3.69	33.83	4282PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 15159
	22	35	0.140	63	15.3	6.7	0.6	4283PHCT-ND	3.69	33.83	4283PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 15229
	33	55	0.140	89	20.4	7.6	0.6	4284PHCT-ND	3.85	35.26	4284PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 15339
	47	75	0.140	120	20.4	7.6	0.6	4285PHCT-ND	3.85	35.26	4285PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 15479
	68	110	0.140	180	20.4	7.6	0.6	4286PHCT-ND	3.85	35.26	4286PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 15689
	100	160	0.140	260	23.3	9.3	0.6	4287PHCT-ND	4.13	37.87	4287PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 15101
	150	240	0.160	310	23.3	9.3	0.6	4288PHCT-ND	4.13	37.87	4288PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 15151
	220	350	0.160	420	32	10.3	0.8	4289PHCT-ND	4.44	40.73	4289PHTB-ND	348.04	1422.70	2210.44	2085.92/M	2222 123 15221
	330	500	0.160	510	32	10.3	0.8	4290PHCT-ND	4.44	40.73	4290PHTB-ND	348.04	1422.70	2210.44	2085.92/M	2222 123 15331
	470	750	0.160	680	32	12.9	0.8	4291PHCT-ND	5.19	47.60	4291PHTB-ND	406.79	1662.86	2583.57	2438.03/M	2222 123 15471
	680	870	0.160	850	32	12.9	0.8	4292PHCT-ND	6.01	55.11	4292PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 15681
25	10	25	0.140	43	15.3	6.7	0.6	4293PHCT-ND	3.69	33.83	4293PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 16109
	15	35	0.140	60	15.3	6.7	0.6	4294PHCT-ND	3.69	33.83	4294PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 16159
	22	55	0.140	88	20.4	7.6	0.6	4295PHCT-ND	3.85	35.26	4295PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 16229
	33	85	0.140	130	20.4	7.6	0.6	4296PHCT-ND	3.65	33.49	4296PHTB-ND	286.21	1169.96	1817.75	1715.36/M	2222 123 16339
	47	100	0.140	160	20.4	7.6	0.6	4297PHCT-ND	3.85	35.26	4297PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 16479
	68	170	0.140	230	23.3	9.3	0.6	4298PHCT-ND	4.11	37.68	4298PHTB-ND	321.95	1316.07	2044.77	1929.58/M	2222 123 16689
	100	250	0.160	250	23.3	9.3	0.6	4299PHCT-ND	4.13	37.87	4299PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 16101
	150	400	0.160	350	32	10.3	0.8	4300PHCT-ND	4.42	40.51	4300PHTB-ND	346.16	1415.02	2198.50	2074.65/M	2222 123 16151
	220	550	0.160	460	32	12.9	0.8	4301PHCT-ND	5.15	47.19	4301PHTB-ND	403.26	1648.45	2561.18	2416.90/M	2222 123 16221
	330	800	0.160	600	32	12.9	0.8	4302PHCT-ND	5.95	54.51	4302PHTB-ND	465.77	1903.98	2958.19	2791.55/M	2222 123 16331
35	1.0	5.0	0.120	4.0	15.3	6.7	0.6	4303PHCT-ND	3.67	33.63	4303PHTB-ND	287.41	1174.86	1825.36	1722.54/M	2222 123 10108
	1.5	5.0	0.120	7.0	15.3	6.7	0.6	4304PHCT-ND	3.67	33.63	4304PHTB-ND	287.41	1174.86	1825.36	1722.54/M	2222 123 10158
	2.2	5.0	0.120	10	15.3	6.7	0.6	4305PHCT-ND	3.67	33.63	4305PHTB-ND	287.41	1174.86	1825.36	1722.54/M	2222 123 10228
	3.3	7.0	0.120	14	15.3	6.7	0.6	4306PHCT-ND	3.69	33.83	4306PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 10338
	4.7	10	0.120	20	15.3	6.7	0.6	4307PHCT-ND	3.69	33.83	4307PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 10478
	6.8	15	0.120	27	15.3	6.7	0.6	4308PHCT-ND	3.69	33.83	4308PHTB-ND	289.05	1181.58	1835.81	1732.40/M	2222 123 10688
	10	20	0.120	37	20.4	7.6	0.6	4309PHCT-ND	3.85	35.26	4309PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 10109
	15	30	0.120	53	20.4	7.6	0.6	4310PHCT-ND	3.85	35.26	4310PHTB-ND	301.27	1231.53	1913.42	1805.64/M	2222 123 10159
	22	45	0.120	78	20.4	7.6	0.6	4311PHCT-ND	3.89	35.64	4311PHTB-ND	304.56	1244.98	1934.32	1825.36/M	2222 123 10229
	33	65	0.120	120	23.3	9.3	0.6	4312PHCT-ND	4.13	37.87	4312PHTB-ND	323.60	1322.79	2055.21	1939.44/M	2222 123 10339
	47	95	0.120	140	23.3	9.3	0.6	4313PHCT-ND	4.11	37.68	4313PHTB-ND	321.95	1316.07	2044.77	1929.58/M	2222 123 10479
	68	135	0.160	170	32	10.3	0.8	4314PHCT-ND	4.42	40.51	4314PHTB-ND	346.16	1415.02	2198.50	2074.65/M	2222 123 10689
	100	200	0.160	220	32	12.9	0.8	4315PHCT-ND	5.17	47.41	4315PHTB-ND	405.14	1656.13	2573.12	2428.17/M	2222 123 10101
	150	300	0.160	290	32	12.9	0.8	4316PHCT-ND	6.01	55.11	4316PHTB-ND	470.94	1925.11	2991.03	2822.54/M	2222 123 10151
40	2.2	9.0	0.120	11	15.3	6.7	0.6	4317PHCT-ND	3.74	34.24	4317PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17228
	3.3	13	0.120	16	15.3	6.7	0.6	4318PHCT-ND	3.74	34.24	4318PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17338
	4.7	19	0.120	22	15.3	6.7	0.6	4319PHCT-ND	3.74	34.24	4319PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17478
	6.8	27	0.120	28	15.3	6.7	0.6	4320PHCT-ND	3.74	34.24	4320PHTB-ND	292.58	1195.99	1858.20	1753.52/M	2222 123 17688
	10	40	0.120	41	20.4	7.6	0.6	4321PHCT-ND	3.89	35.64	4321PHTB-ND	304.56	1244.98	1934.32	1825.36/M	2222 123 17109
	15	60	0.120	61	20.4	7.6	0.6	4322PHCT-ND	3.91	35.86	4322PHTB-ND	306.44	1252.67	1946.26	1836.62/M	2222 123 17159
	22	90	0.120	89	23.3	9.3	0.6	4323PHCT-ND	4.18	38.28	4323PHTB-ND	327.12	1337.20	2077.60	1960.57/M	2222 123 17229
	33	130	0.120	120	23.3	9.3	0.6	4324PHCT-ND	4.18	38.28	4324PHTB-ND	327.12	1337.20	2077.60	1960.57/M	2222 123 17339
	47	190	0.120	160	32	10.3	0.8	4325PHCT-ND	4.49	41.11	4325PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 17479
	68	270	0.160	170	32	10.3	0.8	4326PHCT-ND	4.49	41.11	4326PHTB-ND	351.33	1436.15	2231.33	2105.64/M	2222 123 17689
	100	400	0.160	220	32	12.9	0.8	4327PHCT-ND	5.24	48.02	4327PHTB-ND	410.31	1677.27	2605.96	2459.16/M	2222 123 17101

ASM 021

Axial Standard Miniature Electrolytic Capacitors

FEATURES: • Polarized aluminum electrolytic capacitors, non-solid • Axial leads, cylindrical aluminum case, insulated with a blue sleeve • Charge and discharge proof • Case Ø10mm x 30mm to 21mm x 40 mm with pressure relief • Taped versions up to case Ø15mm x 30 mm available for automatic insertion • Miniaturized, high CV-product per unit volume

APPLICATIONS: • General purpose, industrial, automotive, audio-video • Coupling, decoupling, smoothing, filtering, buffering and timing • Portable and mobile equipment (small size, low mass) • Low mounting height boards, vibration and shock resistant.



Case size 10 x 30 and above are bulk
Form BA: Taped in box (ammopack)
*Case ØD x L =
4.5 x 10 to 8 x 11 mm
**Case ØD x L =
6.5 x 18 to 10 x 25 mm

DESCRIPTION	VALUE	
Case sizes ($ØD_{nom}$ x L_{nom} in mm)	4.5 x 10 to 10 x 25	10 x 30 to 21 x 40
Rated capacitance range, C_R	0.47 to 15,000 µF	
Tolerance on C_R	±20%	
Rated voltage range, U_R	6.3 to 100V	
Category temperature range	–40°C to +85°C	
Endurance test at 85°C: U_R = 6.3 to 25 V U_R = 40 to 100 V	1,000 hours 2,000 hours	5,000 hours 5,000 hours
Useful life at 85°C	2,500 hours	8,000 hours
Useful life at 40°C, 1.4 x I_R applied	70,000 hours	200,000 hours
Shelf life at 0 V, 85°C	500 hours	500 hours
Based on sectional specification: U_R = 6.3 to 25 V U_R = 40 to 100 V	IEC 384-4/CECC 30300 GP grade LL grade	IEC384-4/CECC 30300 LL grade LL grade
Climatic category IEC 68 (DIN 40040)	40/085/56 (GPF)	

WV (VDC)	Cap. (µF)	Leakage Curr. (µA)	tan δ	Ripple Curr. (mA)	Dimensions (mm)			Digi-Key Part No.	Pricing*			Digi-Key Part No.	Pricing*				BC Components Part No.
					L	D	d		1	10	100		500	1,000	5,000	10,000	
6.3	470	22	0.250	260	11	8	0.6	4000PHCT-ND	.47	3.99	31.26	4000PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 33471
	1000	42	0.250	440	18	8	0.8	4001PHCT-ND	.53	4.50	35.25	4001PHTB-ND	144.10	223.88	211.27/M	194.81/M	2222 021 33102
	2200	87	0.290	710	25	10	0.8	4002PHCT-ND	.89	7.65	59.93	4002PHTB-ND	244.96	380.60	359.16/M	331.17/M	2222 021 90589
10	100	10	0.200	100	10	4.5	0.6	4003PHCT-ND	.32	2.76	21.62	4003PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 34101
	220	17	0.200	160	10	6	0.6	4004PHCT-ND	.36	3.12	24.44	4004PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 34221
	330	24	0.200	230	11	8	0.6	4005PHCT-ND	.47	3.99	31.26	4005PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 34331
	470	32	0.200	310	18	6.5	0.8	4006PHCT-ND	.49	4.17	32.67	4006PHTB-ND	—	207.46	195.78/M	180.52/M	2222 021 34471
	680	45	0.200	400	18	8	0.8	4007PHCT-ND	.53	4.50	35.25	4007PHTB-ND	144.10	223.88	211.27/M	194.81/M	2222 021 34681
	1000	64	0.200	550	18	10	0.8	4008PHCT-ND	.65	5.55	43.48	4008PHTB-ND	177.72	276.12	260.57/M	240.26/M	2222 021 34102
	1500	94	0.230	690	25	10	0.8	4009PHCT-ND	.85	7.29	57.11	4009PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90525
	1500	94	0.230	740	30	10	0.8	4010PHBK-ND	1.21	10.35	81.08	—	331.42	514.92	485.92/M	448.06/M	2222 021 14152
	2200	136	0.250	800	30	12.5	0.8	4011PHBK-ND	1.35	11.55	90.48	—	369.84	574.62	542.26/M	500.00/M	2222 021 14222
	3300	202	0.270	1000	30	12.5	0.8	4012PHBK-ND	1.38	11.82	92.59	—	378.49	588.06	554.93/M	511.69/M	2222 021 14332
	4700	286	0.290	1180	30	15	0.8	4013PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 021 14472
	6800	412	0.340	1480	30	18	0.8	4014PHBK-ND	1.84	15.75	123.38	—	504.33	783.58	739.44/M	681.82/M	2222 021 14682
	10000	604	0.400	1860	38	18	0.8	4015PHBK-ND	2.33	19.98	156.51	—	639.78	994.02	938.03/M	864.94/M	2222 021 14103
	15000	904	0.500	2250	38	21	0.8	4016PHBK-ND	2.94	25.20	197.40	—	806.93	1253.73	1183.10/M	1090.91/M	2222 021 14153
16	68	11	0.160	90	10	4.5	0.6	4017PHCT-ND	.32	2.76	21.62	4017PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 35689
	150	18	0.160	140	10	6	0.6	4018PHCT-ND	.36	3.12	24.44	4018PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 35151
	220	25	0.160	210	11	8	0.6	4019PHCT-ND	.47	3.99	31.26	4019PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 35221
	330	36	0.160	290	18	6.5	0.8	4020PHCT-ND	.47	3.99	31.26	4020PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 35331
	470	49	0.160	380	18	8	0.8	4021PHCT-ND	.55	4.68	36.66	4021PHTB-ND	149.86	232.83	219.72/M	202.60/M	2222 021 35471
	680	69	0.160	500	18	10	0.8	4022PHCT-ND	.67	5.70	44.65	4022PHTB-ND	182.52	283.58	267.61/M	246.76/M	2222 021 35681
	1000	100	0.160	660	25	10	0.8	4023PHCT-ND	.85	7.29	57.11	4023PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90518
	1000	100	0.160	700	30	10	0.8	4024PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 021 15102
	1500	148	0.190	740	30	12.5	0.8	4025PHBK-ND	1.35	11.61	90.95	—	371.77	577.61	545.07/M	502.60/M	2222 021 15152
	2200	216	0.210	890	30	12.5	0.8	4026PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	552.12/M	509.09/M	2222 021 15222
	3300	321	0.230	1130	30	15	0.8	4027PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 021 15332
	4700	455	0.250	1410	30	18	0.8	4028PHBK-ND	1.83	15.72	123.14	—	503.37	782.09	738.03/M	680.52/M	2222 021 15472
	6800	656	0.300	1780	38	18	0.8	4029PHBK-ND	2.31	19.83	155.34	—	634.98	986.56	930.99/M	858.45/M	2222 021 15682
	10000	964	0.360	2170	38	21	0.8	4030PHBK-ND	2.89	24.78	194.11	—	793.48	1232.83	1163.38/M	1072.73/M	2222 021 15103
25	47	11	0.140	80	10	4.5	0.6	4031PHCT-ND	.32	2.76	21.62	4031PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 36479
	100	19	0.140	150	10	6.0	0.6	4032PHCT-ND	.36	3.12	24.44	4032PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 36101
	150	27	0.140	190	11	8.0	0.6	4033PHCT-ND	.47	3.99	31.26	4033PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 90535
	150	27	0.140	210	18	6.5	0.8	4034PHCT-ND	.47	3.99	31.26	4034PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 36151
	220	37	0.140	250	18	6.5	0.8	4035PHCT-ND	.47	3.99	31.26	4035PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 36221
	330	54	0.140	340	18	8.0	0.8	4036PHCT-ND	.53	4.50	35.25	4036PHTB-ND	144.10	223.88	211.27/M	194.81/M	2222 021 36331
	470	75	0.140	450	18	10	0.8	4037PHCT-ND	.65	5.55	43.48	4037PHTB-ND	177.72	276.12	260.57/M	240.26/M	2222 021 36471
	680	106	0.140	560	25	10	0.8	4038PHCT-ND	.85	7.29	57.11	4038PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90528
	680	106	0.140	640	30	10	0.8	4039PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 021 16681
	1000	154	0.140	720	30	12.5	0.8	4040PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 021 16102
	1500	229	0.170	790	30	12.5	0.8	4041PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	552.12/M	509.09/M	2222 021 16152
	2200	334	0.190	1030	30	15	0.8	4042PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 021 16222
	3300	499	0.210	1310	30	18	0.8	4043PHBK-ND	1.85	15.84	124.08	—	507.22	788.06	743.67/M	685.72/M	2222 021 16332
	4700	709	0.230	1680	38	18	0.8	4044PHBK-ND	2.33	19.95	156.28	—	638.82	992.53	936.62/M	863.64/M	2222 021 16472
	6800	1024	0.280	2070	38	21	0.8	4045PHBK-ND	2.92	24.99	195.76	—	800.21	1243.28	1173.24/M	1081.82/M	2222 021 16682
40	22	9.0	0.110	60	10	4.5	0.6	4046PHCT-ND	.32	2.76	21.62	4046PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 37229
	47	15	0.110	110	10	6.0	0.6	4047PHCT-ND	.36	3.12	24.44	4047PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 37479
	100	28	0.110	170	11	8.0	0.6	4048PHCT-ND	.47	3.99	31.26	4048PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 90538
	100	28	0.110	190	18	6.5	0.8	4049PHCT-ND	.47	3.99	31.26	4049PHTB-ND	—	198.51	187.33/M	172.73/M	2222 021 37101
	150	40	0.110	250	18	8	0.8	4050PHCT-ND	.49	4.17	32.67	4050PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 37151
	220	57	0.110	330	18	10	0.8	4051PHCT-ND	.65	5.55	43.48	4051PHTB-ND	177.72	276.12	260.57/M	240.26/M	2222 021 37221
	330	83	0.110	430	25	10	0.8	4052PHCT-ND	.83	7.08	55.46	4052PHTB-ND	226.71	352.24	332.40/M	306.50/M	2222 021 37331
	470	117	0.110	520	25	10	0.8	4053PHCT-ND	.85	7.29	57.11	4053PHTB-ND	233.43	362.68	342.26/M	315.59/M	2222 021 90515
	470	117	0.120	570	30	10	0.8	4054PHBK-ND	1.22	10.44	81.78	—	334.30	519.40	490.14/M	451.95/M	2222 021 17471
	680	167	0.120	620	30	12.5	0.8	4055PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 021 17681
	1000	244	0.120	770	30	12.5	0.8	4056PHBK-ND	1.41	12.09	94.71	—	387.14	601.49	567.61/M	523.38/M	2222 021 17102
	1500	364	0.150	930	30	15	0.8	4057PHBK-ND	1.60	13.74	107.63	—	439.97	683.58	645.07/M	594.81/M	2222 021 17152
	2200	532	0.170	1200	30	18	0.8	4058PHBK-ND	2.14	18.30	143.35	—	585.99	910.44	859.16/M	792.21/M	2222 021 17222
	3300	796	0.190	1550	38	18	0.8	4059PHBK-ND	2.43	20.85	163.33	—	667.64	1037.31	978.88/M	902.60/M	2222 021 17332
	4700	1132	0.210	1880	38	21	0.8	4060PHBK-ND	2.99	25.62	200.69	—	820.38	1274.62	1202.82/M	1109.09/M	2222 021 17472
63	0.47	4.2	0.090	8.0	10	4.5	0.6	4061PHCT-ND	.28	2.40	18.80	4061PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38477
	1.0	4.4	0.090	12	10	4.5	0.6	4062PHCT-ND	.28	2.40	18.80	4062PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38108
	2.2	4.8	0.090	21	10	4.5	0.6	4063PHCT-ND	.28	2.40	18.80	4063PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38228
	3.3	5.2	0.090	25	10	4.5	0.6	4064PHCT-ND	.28	2.40	18.80	4064PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38338
	4.7	5.8	0.090	31	10	4.5	0.6	4065PHCT-ND	.28	2.40	18.80	4065PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38478
	10	7.8	0.080	50	10	4.5	0.6	4066PHCT-ND	.28	2.40	18.80	4066PHTB-ND	—	119.40	112.68/M	103.90/M	2222 021 38109
	15	9.5	0.080	55	10	4.5	0.6	4067PHCT-ND	.32	2.76	21.62	4067PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 38159
	22	12	0.080	90	10	6.0	0.6	4068PHCT-ND	.32	2.76	21.62	4068PHTB-ND	—	137.31	129.58/M	119.48/M	2222 021 38229
	33	16	0.080	100	10	6.0	0.6	4069PHCT-ND	.36	3.12	24.44	4069PHTB-ND	—	155.22	146.48/M	135.07/M	2222 021 38339
	47	22	0.080	140	11	8.0	0.6	4070PHCT-ND	.49	4.17	32.67	4070PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 90542
	47	22	0.080	150	18	6.5	0.8	4071PHCT-ND	.42	3.63	28.44	4071PHTB-ND	—	180.60	170.43/M	157.15/M	2222 021 38479
	68	30	0.080	160	11	8.0	0.6	4072PHCT-ND	.49	4.17	32.67	4072PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 90545
	68	30	0.080	170	18	6.5	0.8	4073PHCT-ND	.49	4.17	32.67	4073PHTB-ND	—	207.46	195.78/M	180.52/M	2222 021 38689
	100	42	0.080	250	18	8.0	0.8	4074PHCT-ND	.55	4.68	36.66	4074PHTB-ND	149.86	232.83	219.72/M	202.60/M	2222 021 38101
	150	61	0.080	320	18	10	0.8	4075PHCT-ND	.67	5.70	44.65	4075PHTB-ND	182.52	283.58	267.61/M	246.76/M	2222 021 38151
	220	88	0.080	430	25	10	0.8	4076PHCT-ND	.87	7.44	58.28	4076PHTB-ND	238.24	370.15	349.30/M	322.08/M	2222 021 90512
	220	88	0.080	480	30	10	0.8	4077PHBK-ND	1.20	10.32	80.84	—	330.46	513.43	484.51/M	446.76/M	2222 021 18221
	330	129	0.080	530	30	12.5	0.8	4078PHBK-ND	1.34	11.46	89.77	—	366.96	570.15	538.03/M	496.11/M	2222 021 18331
	470	182	0.080	630	30	12.5	0.8	4079PHBK-ND	1.37	11.73	91.89	—	375.61	583.58	550.71/M	507.80/M	2222 021 18471
	680	261	0.080	830	30	15	0.8	4080PHBK-ND	1.55	13.32	104.34	—	426.52	662.68	625.36/M	576.63/M	2222 021 18681
	1000	382	0.080	1120	30	18	0.8	4081PHBK-ND	1.80	15.45	121.03	—	494.73	768.65	725.36/M	668.84/M	2222 021 18102
	1500	571	0.110	1350	38	18	0.8	4082PHBK-ND	2.31	19.80	155.10	—	634.02	985.07	929.58/M	857.15/M	2222 021 18152
	2200	836	0.130	1780	38	21	0.8	4083PHBK-ND	2.87	24.57	192.47	—	786.76	1222.38	1153.52/M	1063.64/M	2222 021 18222
100	1.0	4.6	0.080	14	10	4.5	0.6	4084PHCT-ND	.30	2.61	20.45	4084PHTB-ND	—	129.85	122.54/M	112.99/M	2222 021 39108
	2.2	5.3	0.080	20	10	4.5	0.6	4085PHCT-ND	.30	2.61	20.45	4085PHTB-ND	—	129.85	122.54/M	112.99/M	2222 021 39228
	4.7	7.0	0.080	30	10	4.5	0.6	4086PHCT-ND	.34	2.94	23.03	4086PHTB-ND	—	146.27	138.03/M	127.28/M	2222 021 39478
	10	10	0.080	65	10	6.0	0.6	4087PHCT-ND	.34	2.94	23.03	4087PHTB-ND	—	146.27	138.03/M	127.28/M	2222 021 39109
	15	13	0.080	77	11	8.0	0.6	4088PHCT-ND	.47	3.99	31.26	4088PHTB-ND	127.76	198.51	187.33/M	172.73/M	2222 021 90548
	15	13	0.080	85	18	6.5	0.8	4089PHCT-ND	.42	3.63	28.44	4089PHTB-ND	—	180.60	170.43/M	157.15/M	2222 021 39159
	22	17	0.080	95	11	8.0	0.6	4090PHCT-ND	.49	4.17	32.67	4090PHTB-ND	133.53	207.46	195.78/M	180.52/M	2222 021 90552
	22	17	0.080	100	18	6.5	0.8	4091PHCT-ND	.44	3.81	29.85	4091PHTB-ND	—	189.55	178.88/M	164.94/M	2222 021 39229
	33	24	0.080	120	18	6.5	0.8	4092PHCT-ND	.49	4.17	32.67	4092PHTB-ND	—	207.46	195.78/M	180.52/M	2222 021 39339
	47	32	0.080	160	18	8.0	0.8	4093PHCT-ND	.57	4.86	38.07	4093PHTB-ND	155.62	241.79	228.17/M	210.39/M	2222 021 39479
	68	45	0.080	220	18	10	0.8	4094PHCT-ND	.69	5.91	46.30	4094PHTB-ND	189.25	294.03	277.47/M	255.85/M	2222 021 39689
	100	64	0.080	300	25	10	0.8	4095PHCT-ND	.91	7.80	61.10	4095PHTB-ND	249.77	388.06	366.20/M	337.67/M	2222 021 90532
	100	64	0.070	360	30	10	0.8	4096PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 021 19101
	150	94	0.070	420	30	12.5	0.8	4097PHBK-ND	1.38	11.82	92.59	—	378.49	588.06	554.93/M	511.69/M	2222 021 19151
	220	136	0.080	460	30	12.5	0.8	4098PHBK-ND	1.40	11.97	93.77	—	383.29	595.52	561.98/M	518.19/M	2222 021 19221
	330	202	0.090	580	30	15	0.8	4099PHBK-ND	1.60	13.74	107.63	—	439.97	683.58	645.07/M	594.81/M	2222 021 19331
	470	286	0.090	740	30	18	0.8	4100PHBK-ND	1.88	16.14	126.43	—	516.82	802.98	757.75/M	698.71/M	2222 021 19471
	680	412	0.090	1050	38	18	0.8	4101PHBK-ND	2.38	20.43	160.04	—	654.19	1016.41	959.16/M	884.42/M	2222 021 19681
	1000	604	0.100	1260	38	21	0.8	4102PHBK-ND	2.99	25.62	200.69	—	820.38	1274.62	1202.82/M	1109.09/M	2222 021 19102

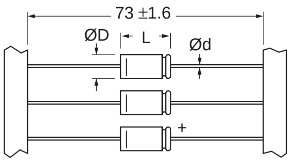
* “CT” stands for Cut Tape; “TB” stands for Tape and Box; “BK” stands for Bulk.

AHT 118 Axial High Temperature Electrolytic Capacitors

FEATURES:
- Polarized aluminum electrolytic capacitors, non-solid
- Axial leads, cylindrical aluminum case, insulated with a blue sleeve
- Case Ø10mm x 30mm to 21mm x 40 mm with pressure relief
- Taped versions up to case Ø15mm x 30 mm available for automatic insertion
- Charge and discharge proof
- Extra long useful life: 4,000 hours at 125°C, high reliability
- Extended temperature range: 125°C (usable up to 150°C)
- Miniaturized, high CV-product per unit volume

APPLICATIONS:
- Automotive, industrial and telecommunication
- Smoothing, filtering, coupling, decoupling, timing
- For use after very long storage (10 years) without voltage applied
- Portable and mobile equipment (small size, low mass)
- Low mounting height boards, vibration and shock resistant
- Outdoor applications, e.g. aerial amplifiers

Dimensions in mm.



Case size 10mm x 30mm and above are bulk
Form BA: Taped in box (ammopack)
Case ØD x L = 6.5mm x 18mm to 10mm x 25mm

DESCRIPTION	VALUE	
Case sizes ($ØD_{nom}$ x L_{nom} in mm)	6.5 x 18 to 10 x 25	10 x 30 to 21 x 40
Rated capacitance range, C_R	1 to 10,000 µF	
Tolerance on C_R	±20%	
Rated voltage range, U_R	6.3 to 200V	
Category temperature range	-40°C to +125°C	-55°C to +125°C
Endurance test at 150°C, with no I_R applied	500 hours	1,000 hours
Endurance test at 125°C	2,000 hours	3,000 hours
Useful life at 125°C	4,000 hours	4,000 hours
Useful life at 40°C, 1.8 x I_R applied	500,000 hours	500,000 hours
Shelf life at 0 V, 125°C U_R = 6.3 to 63V U_R = 100 and 200 V	 500 hours 100 hours	
Based on sectional specification	IEC 384-4/CECC 30300, LL grade	
Climatic category IEC 68 (DIN 40040)	40/125/56 (GKD)	55/125/56 (FKD)

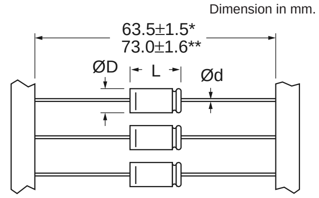
WV (VDC)	Cap. (µF)	Leakage Curr. (µA)	tan δ	Ripple Curr. (mA)	Dimensions (mm)			Digi-Key Part No.	Pricing*			Digi-Key Part No.	Pricing*				BC Components Part No.
					L	D	d		1	10	100		500	1,000	5,000	10,000	
6.3	1000	42	0.500	251	18	10	0.8	4103PHCT-ND	1.86	15.96	125.02	4103PHTB-ND	511.06	794.03	749.30/M	690.91/M	2222 118 33102
	1500	61	0.500	352	25	10	0.8	4104PHCT-ND	2.10	18.00	141.00	4104PHTB-ND	576.38	895.52	845.07/M	779.22/M	2222 118 90503
10	220	20	0.350	109	18	6.5	0.8	4105PHCT-ND	1.56	13.35	104.58	4105PHTB-ND	—	664.18	626.76/M	577.93/M	2222 118 34221
	330	24	0.350	150	18	8.0	0.8	4106PHCT-ND	1.63	14.01	109.75	4106PHTB-ND	448.62	697.01	657.75/M	606.50/M	2222 118 34331
	470	32	0.350	179	18	8.0	0.8	4107PHCT-ND	1.63	14.01	109.75	4107PHTB-ND	448.62	697.01	657.75/M	606.50/M	2222 118 34471
	1000	64	0.350	343	25	10	0.8	4108PHCT-ND	1.98	16.98	133.01	4108PHTB-ND	543.72	844.77	797.19/M	735.07/M	2222 118 90505
	1000	64	0.320	409	30	10	0.8	4109PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 118 14102
	1500	94	0.320	590	30	12.5	0.8	4110PHBK-ND	1.34	11.52	90.24	—	368.88	573.13	540.85/M	498.71/M	2222 118 14152
	2200	136	0.400	634	30	12.5	0.8	4111PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	552.12/M	509.09/M	2222 118 14222
	3300	202	0.400	826	30	15	0.8	4112PHBK-ND	1.58	13.53	105.99	—	433.25	673.13	635.21/M	585.72/M	2222 118 14332
	4700	286	0.460	1035	30	18	0.8	4113PHBK-ND	1.83	15.66	122.67	—	501.45	779.10	735.21/M	677.93/M	2222 118 14472
	6800	412	0.530	1395	38	18	0.8	4114PHBK-ND	2.30	19.74	154.63	—	632.10	982.08	926.76/M	854.55/M	2222 118 14682
	10000	604	0.530	1674	38	21	0.8	4115PHBK-ND	2.89	24.78	194.11	—	793.48	1232.83	1163.38/M	1072.73/M	2222 118 14103
16	220	25	0.250	145	18	8.0	0.8	4116PHCT-ND	1.70	14.55	113.98	4116PHTB-ND	465.91	723.88	683.10/M	629.87/M	2222 118 35221
	330	36	0.250	204	18	10	0.8	4117PHCT-ND	1.88	16.11	126.20	4117PHTB-ND	515.86	801.49	756.34/M	697.41/M	2222 118 35331
	470	49	0.250	243	18	10	0.8	4118PHCT-ND	1.86	15.96	125.02	4118PHTB-ND	511.06	794.03	749.30/M	690.91/M	2222 118 35471
	680	69	0.220	389	30	10	0.8	4119PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	488.74/M	450.65/M	2222 118 15681
	1000	100	0.220	557	30	12.5	0.8	4120PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 118 15102
	1500	148	0.290	609	30	12.5	0.8	4121PHBK-ND	1.38	11.79	92.36	—	377.53	586.56	553.52/M	510.39/M	2222 118 15152
	2200	215	0.290	790	30	15	0.8	4122PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 118 15222
	3300	321	0.340	1008	30	18	0.8	4123PHBK-ND	1.85	15.87	124.32	—	508.18	789.55	745.07/M	687.02/M	2222 118 15332
	4700	455	0.340	1363	38	18	0.8	4124PHBK-ND	2.33	19.95	156.28	—	638.82	992.53	936.62/M	863.64/M	2222 118 15472
	6800	657	0.380	1627	38	21	0.8	4125PHBK-ND	2.92	24.99	195.76	—	800.21	1243.28	1173.24/M	1081.82/M	2222 118 15682
25	100	20	0.180	102	18	6.5	0.8	4126PHCT-ND	1.56	13.35	104.58	4126PHTB-ND	—	664.18	626.76/M	577.93/M	2222 118 36101
	220	37	0.180	196	18	10	0.8	4127PHCT-ND	1.90	16.26	127.37	4127PHTB-ND	520.66	808.95	763.38/M	703.90/M	2222 118 36221
	330	54	0.180	274	25	10	0.8	4128PHCT-ND	2.12	18.18	142.41	4128PHTB-ND	582.14	904.47	853.52/M	787.02/M	2222 118 36331
	470	75	0.180	327	25	10	0.8	4129PHCT-ND	2.32	19.92	156.04	4129PHTB-ND	637.86	991.04	935.21/M	862.34/M	2222 118 90509
	470	75	0.180	366	30	10	0.8	4130PHBK-ND	1.22	10.47	82.02	—	335.26	520.89	491.55/M	453.25/M	2222 118 16471
	680	106	0.180	515	30	12.5	0.8	4131PHBK-ND	1.37	11.70	91.65	—	374.65	582.09	549.30/M	506.50/M	2222 118 16681
	1000	154	0.240	531	30	12.5	0.8	4132PHBK-ND	1.42	12.15	95.18	—	389.06	604.47	570.43/M	525.98/M	2222 118 16102
	1500	229	0.250	691	30	15	0.8	4133PHBK-ND	1.65	14.10	110.45	—	451.50	701.49	661.98/M	610.39/M	2222 118 16152
	2200	334	0.260	919	30	18	0.8	4134PHBK-ND	1.89	16.17	126.67	—	517.78	804.47	759.16/M	700.00/M	2222 118 16222
	3300	499	0.260	1280	38	18	0.8	4135PHBK-ND	2.43	20.85	163.33	—	667.64	1037.31	978.88/M	902.60/M	2222 118 16332
	4700	709	0.280	1464	38	21	0.8	4136PHBK-ND	3.01	25.83	202.34	—	827.11	1285.07	1212.68/M	1118.19/M	2222 118 16472
40	47	20	0.110	89.8	18	6.5	0.8	4137PHCT-ND	1.63	14.01	109.75	4137PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 37479
	100	28	0.110	147	18	8.0	0.8	4138PHCT-ND	1.72	14.73	115.39	4138PHTB-ND	471.67	732.83	691.55/M	637.67/M	2222 118 37101
	150	40	0.110	207	18	10	0.8	4139PHCT-ND	2.08	17.85	139.83	4139PHTB-ND	571.58	888.06	838.03/M	772.73/M	2222 118 37151
	220	57	0.110	287	25	10	0.8	4140PHCT-ND	2.30	19.74	154.63	4140PHTB-ND	632.10	982.08	926.76/M	854.55/M	2222 118 90512
	220	57	0.100	338	30	10	0.8	4141PHBK-ND	1.21	10.35	81.08	—	331.42	514.92	485.92/M	448.06/M	2222 118 17221
	330	83	0.100	484	30	12.5	0.8	4142PHBK-ND	1.37	11.70	91.65	—	374.65	582.09	549.30/M	506.50/M	2222 118 17331
	470	117	0.110	522	30	12.5	0.8	4143PHBK-ND	1.38	11.85	92.83	—	379.45	589.55	556.34/M	512.99/M	2222 118 17471
	680	167	0.110	695	30	15	0.8	4144PHBK-ND	1.58	13.56	106.22	—	434.21	674.62	636.62/M	587.02/M	2222 118 17681
	1000	244	0.130	852	30	18	0.8	4145PHBK-ND	1.84	15.78	123.61	—	505.29	785.07	740.85/M	683.12/M	2222 118 17102
	1500	364	0.130	1196	38	18	0.8	4146PHBK-ND	2.38	20.37	159.57	—	652.27	1013.43	956.34/M	881.82/M	2222 118 17152
	2200	532	0.150	1403	38	21	0.8	4147PHBK-ND	2.94	25.20	197.40	—	806.93	1253.73	1183.10/M	1090.91/M	2222 118 17222
63	1.0	20	0.070	16.4	18	6.5	0.8	4148PHCT-ND	1.63	14.01	109.75	4148PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38108
	2.2	20	0.070	24.3	18	6.5	0.8	4149PHCT-ND	1.63	14.01	109.75	4149PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38228
	4.7	20	0.070	35.6	18	6.5	0.8	4150PHCT-ND	1.63	14.01	109.75	4150PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38478
	10	20	0.070	51.9	18	6.5	0.8	4151PHCT-ND	1.63	14.01	109.75	4151PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 38109
	22	20	0.070	77	18	6.5	0.8	4152PHCT-ND	1.68	14.37	112.57	4152PHTB-ND	—	714.92	674.65/M	622.08/M	2222 118 38229
	47	22	0.070	126	18	8.0	0.8	4153PHCT-ND	1.78	15.24	119.38	4153PHTB-ND	488.00	758.21	715.50/M	659.74/M	2222 118 38479
	100	42	0.070	243	25	10	0.8	4154PHCT-ND	2.08	17.85	139.83	4154PHTB-ND	571.58	888.06	838.03/M	772.73/M	2222 118 90514
	100	42	0.070	262	30	10	0.8	4155PHBK-ND	1.22	10.44	81.78	—	334.30	519.40	490.14/M	451.95/M	2222 118 18101
	150	61	0.070	415	30	12.5	0.8	4156PHBK-ND	1.38	11.82	92.59	—	378.49	588.06	554.93/M	511.69/M	2222 118 18151
	220	87	0.080	454	30	12.5	0.8	4157PHBK-ND	1.40	12.03	94.24	—	385.21	598.50	564.79/M	520.78/M	2222 118 18221
	330	129	0.090	544	30	15	0.8	4158PHBK-ND	1.61	13.83	108.34	—	442.85	688.06	649.30/M	598.71/M	2222 118 18331
	470	182	0.090	695	30	18	0.8	4159PHBK-ND	1.88	16.14	126.43	—	516.82	802.98	757.75/M	698.71/M	2222 118 18471
	680	261	0.090	971	38	18	0.8	4160PHBK-ND	2.38	20.43	160.04	—	654.19	1016.41	959.16/M	884.42/M	2222 118 18681
	1000	383	0.100	1161	38	21	0.8	4161PHBK-ND	2.99	25.62	200.69	—	820.38	1274.62	1202.82/M	1109.09/M	2222 118 18102
100	4.7	20	0.070	36	18	6.5	0.8	4162PHCT-ND	1.63	14.01	109.75	4162PHTB-ND	—	697.01	657.75/M	606.50/M	2222 118 39478
	10	20	0.070	52	18	6.5	0.8	4163PHCT-ND	1.68	14.37	112.57	4163PHTB-ND	—	714.92	674.65/M	622.08/M	2222 118 39109
	22	20	0.070	91	18	8.0	0.8	4164PHCT-ND	1.82	15.60	122.20	4164PHTB-ND	499.53	776.12	732.40/M	675.33/M	2222 118 39229
	33	24	0.070	140	25	10	0.8	4165PHCT-ND	2.16	18.51	145.00	4165PHTB-ND	592.71	920.89	869.02/M	801.30/M	2222 118 39339
	47	33	0.070	170	25	10	0.8	4166PHCT-ND	2.36	20.25	158.63	4166PHTB-ND	648.43	1007.46	950.71/M	876.63/M	2222 118 90536
	47	33	0.080	178	30	10	0.8	4167PHBK-ND	1.23	10.53	82.49	—	337.18	523.88	494.37/M	455.85/M	2222 118 19479
	68	45	0.080	278	30	12.5	0.8	4168PHBK-ND	1.36	11.67	91.42	—	373.69	580.59	547.89/M	505.20/M	2222 118 19689
	100	64	0.090	303	30	12.5	0.8	4169PHBK-ND	1.40	12.03	94.24	—	385.21	598.50	564.79/M	520.78/M	2222 118 19101
	150	94	0.100	368	30	15	0.8	4170PHBK-ND	1.61	13.83	108.34	—	442.85	688.06	649.30/M	598.71/M	2222 118 19151
	220	136	0.100	481	30	18	0.8	4171PHBK-ND	1.89	16.17	126.67	—	517.78	804.47	759.16/M	700.00/M	2222 118 19221
	330	202	0.100	694	38	18	0.8	4172PHBK-ND	2.41	20.67	161.92	—	661.88	1028.35	970.43/M	894.81/M	2222 118 19331
	470	286	0.100	833	38	21	0.8	4173PHBK-ND	3.01	25.83	202.34	—	827.11	1285.07	1212.68/M	1118.19/M	2222 118 19471
200	2.2	20	0.060	27	18	6.5	0.8	4174PHCT-ND	1.78	15.24	119.38	4174PHTB-ND	—	758.21	715.50/M	659.74/M	2222 118 90538
	4.7	20	0.060	46	18	8.0	0.8	4175PHCT-ND	1.92	16.47	129.02	4175PHTB-ND	527.39	819.40	773.24/M	712.99/M	2222 118 90541
	10	20	0.060	85	25	10	0.8	4176PHCT-ND	2.65	22.68	177.66	4176PHTB-ND	726.24	1128.35	1064.79/M	981.82/M	2222 118 90543
	15	22	0.046	129	30	10	0.8	4177PHBK-ND	1.23	10.50	82.25	—	336.22	522.39	492.96/M	454.55/M	2222 118 92159
	22	31	0.046	198	30	12.5	0.8	4178PHBK-ND	1.36	11.64	91.18	—	372.73	579.10	546.48/M	503.90/M	2222 118 92229
	33	44	0.046	242	30	15	0.8	4179PHBK-ND	1.54	13.23	103.64	—	423.64	658.21	621.13/M	572.73/M	2222 118 92339
	47	61	0.046	317	30	18	0.8	4180PHBK-ND	1.78	15.24	119.38	—	488.00	758.21	715.50/M	659.74/M	2222 118 92479
	68	86	0.046	428	38	18	0.8	4181PHBK-ND	2.19	18.75	146.88	—	600.40	932.83	880.29/M	811.69/M	2222 118 92689
	100	124	0.046	551	38	21	0.8	4182PHBK-ND	2.70	23.10	180.95	—	739.69	1149.25	1084.51/M	1000.00/M	2222 118 92101

* "CT" stands for Cut Tape; "TB" stands for Tape and Box; "BK" stands for Bulk.

AML 138 Axial Miniature Long-Life Electrolytic Capacitors

FEATURES:
• Polarized aluminum electrolytic capacitors, non-solid • Axial leads, cylindrical aluminum case, insulated with a blue sleeve (case Ø6.3mm x 12.7mm and 7.7mm x 12.7 mm are molded with flame retardant plastic material) • Case Ø10mm x 30mm to 21mm x 40mm with pressure relief • Taped versions up to case Ø15mm x 30 mm available for automatic insertion • Charge and discharge proof • Long useful life: 2,000 to 10,000 hours at 105°C, high reliability • High ripple current capability • Miniaturized, high CV-product per unit volume

APPLICATIONS:
• Industrial, automotive, EDP and telecommunication • Smoothing, filtering, buffering in SMPS; coupling, decoupling, timing • Portable and mobile equipment (small size, low mass) • Standby applications • Low mounting height boards • Vibration and shock resistant



Case size 10mm x 30mm and above are bulk
Form BA: Taped in box (ammopack)
*Case ØD x L = 6.3mm x 12.7mm and 7.7mm x 12.7 mm
**Case ØD x L = 6.5mm x 18mm and 10mm x 25 mm

DESCRIPTION	VALUE	
Case sizes (ØD$_{nom}$ x L$_{nom}$ in mm)	6.3 x 2.7 to 10 x 25	10 x 30 to 21 x 40
Rated capacitance range, C$_R$	1.0 to 15,000 µF	
Tolerance on C$_R$	±20%	
Rated voltage range, U$_R$	6.3 to 100V	
Category temperature range	-40°C to +105°C	
Endurance test at 105°C	1,000 hours	5,000 hours
Useful life at 105°C	2,000 hours	10,000 hours
Useful life at 40°C, I$_R$ applied	1.3 x I$_R$ applied: 200,000 hours	1.8 x I$_R$ applied: 500,000 hours
Shelf life at 0 V, 105°C	500 hours	
Based on sectional specification	IEC 384-4/CECC 30300	
Climatic category IEC 68 (DIN 40040)	40/105/56 (GMF)	

WV (VDC)	Cap. (µF)	Leakage Curr. (µA)	tan δ	Ripple Curr. (mA)	Dimensions (mm)			Digi-Key Part No.	Pricing*			Digi-Key Part No.	Tape & Box Pricing		BC Components Part No.
					L	D	d		1	10	100		500	1,000	
6.3	100	16	0.240	99	12.7	6.3	0.6	4183PHCT-ND	.83	7.08	55.46	4183PHTB-ND	—	352.24	2222 138 33101
	220	31	0.240	160	12.7	7.7	0.6	4184PHCT-ND	.85	7.29	57.11	4184PHTB-ND	233.43	362.68	2222 138 33221
	470	22	0.240	250	18	6.5	0.8	4185PHCT-ND	.89	7.65	59.93	4185PHTB-ND	—	380.60	2222 138 33471
	1000	42	0.240	430	18	10	0.8	4186PHCT-ND	1.35	11.61	90.95	4186PHTB-ND	371.77	577.61	2222 138 33102
	2200	87	0.290	640	25	10	0.8	4187PHCT-ND	1.49	12.81	100.35	4187PHTB-ND	410.19	637.31	2222 138 33222
10	150	33	0.200	140	12.7	7.7	0.6	4188PHCT-ND	.85	7.29	57.11	4188PHTB-ND	233.43	362.68	2222 138 34151
	220	17	0.200	190	18	6.5	0.8	4189PHCT-ND	.87	7.44	58.28	4189PHTB-ND	—	370.15	2222 138 34221
	470	32	0.200	300	18	8.0	0.8	4190PHCT-ND	.91	7.80	61.10	4190PHTB-ND	249.77	388.06	2222 138 34471
	1000	64	0.200	520	25	10	0.8	4191PHCT-ND	1.31	11.25	88.13	4191PHTB-ND	360.24	559.70	2222 138 34102
	1500	94	0.260	560	30	10	0.8	4192PHBK-ND	1.23	10.56	82.72	—	338.14	525.37	2222 138 14152
	2200	140	0.270	750	30	12.5	0.8	4193PHBK-ND	1.37	11.76	92.12	—	376.57	585.07	2222 138 14222
	3300	200	0.280	990	30	15	0.8	4194PHBK-ND	1.57	13.44	105.28	—	430.36	668.65	2222 138 14332
	4700	290	0.310	1200	30	18	0.8	4195PHBK-ND	1.81	15.54	121.73	—	497.61	773.13	2222 138 14472
	6800	410	0.320	1700	38	18	0.8	4196PHBK-ND	2.29	19.65	153.93	—	629.22	977.61	2222 138 14682
	10000	600	0.370	1900	38	18	0.8	4197PHBK-ND	2.47	21.21	166.15	—	679.17	1055.22	2222 138 14103
	15000	900	0.510	2200	38	21	0.8	4198PHBK-ND	3.09	26.46	207.27	—	847.28	1316.41	2222 138 14153
16	22	10	0.120	58	12.7	6.3	0.6	4199PHCT-ND	.83	7.08	55.46	4199PHTB-ND	—	352.24	2222 138 35229
	47	18	0.160	83	12.7	6.3	0.6	4200PHCT-ND	.83	7.08	55.46	4200PHTB-ND	—	352.24	2222 138 35479
	100	35	0.160	130	12.7	7.7	0.6	4201PHCT-ND	.85	7.29	57.11	4201PHTB-ND	233.43	362.68	2222 138 35101
	220	25	0.160	230	18	8.0	0.8	4202PHCT-ND	.91	7.80	61.10	4202PHTB-ND	249.77	388.06	2222 138 35221
	470	49	0.160	360	18	10	0.8	4203PHCT-ND	1.25	10.74	84.13	4203PHTB-ND	343.91	534.33	2222 138 35471
	1000	100	0.190	530	30	10	0.8	4204PHBK-ND	1.23	10.53	82.49	—	337.18	523.88	2222 138 15102
	1500	150	0.190	730	30	12.5	0.8	4205PHBK-ND	1.37	11.73	91.89	—	375.61	583.58	2222 138 15152
	2200	210	0.210	950	30	15	0.8	4206PHBK-ND	1.56	13.38	104.81	—	428.44	665.67	2222 138 15222
	3300	320	0.230	1200	30	18	0.8	4207PHBK-ND	1.82	15.60	122.20	—	499.53	776.12	2222 138 15332
	4700	450	0.280	1400	30	18	0.8	4208PHBK-ND	1.91	16.35	128.08	—	523.55	813.43	2222 138 15472
	6800	660	0.280	1800	38	18	0.8	4209PHBK-ND	2.45	21.00	164.50	—	672.44	1044.77	2222 138 15682
	10000	960	0.350	2100	38	21	0.8	4210PHBK-ND	3.06	26.25	205.63	—	840.56	1305.96	2222 138 15103
25	10	8.0	0.090	46	12.7	6.3	0.6	4211PHCT-ND	.83	7.08	55.46	4211PHTB-ND	—	352.24	2222 138 36109
	22	14	0.140	61	12.7	6.3	0.6	4212PHCT-ND	.83	7.08	55.46	4212PHTB-ND	—	352.24	2222 138 36229
	33	20	0.140	74	12.7	6.3	0.6	4213PHCT-ND	.83	7.08	55.46	4213PHTB-ND	—	352.24	2222 138 36339
	47	27	0.140	96	12.7	7.7	0.6	4214PHCT-ND	.85	7.29	57.11	4214PHTB-ND	233.43	362.68	2222 138 36479
	100	19	0.130	160	18	6.5	0.8	4215PHCT-ND	.87	7.44	58.28	4215PHTB-ND	—	370.15	2222 138 36101
	220	37	0.130	270	18	10	0.8	4216PHCT-ND	1.25	10.74	84.13	4216PHTB-ND	343.91	534.33	2222 138 36221
	470	75	0.130	440	25	10	0.8	4217PHCT-ND	1.31	11.25	88.13	4217PHTB-ND	360.24	559.70	2222 138 36471
	680	110	0.140	500	30	10	0.8	4218PHBK-ND	1.23	10.56	82.72	—	338.14	525.37	2222 138 16681
	1000	150	0.140	670	30	12.5	0.8	4219PHBK-ND	1.38	11.79	92.36	—	377.53	586.56	2222 138 16102
	1500	230	0.150	890	30	15	0.8	4220PHBK-ND	1.58	13.50	105.75	—	432.29	671.64	2222 138 16152
	2200	330	0.160	1200	30	18	0.8	4221PHBK-ND	1.83	15.69	122.91	—	502.41	780.59	2222 138 16222
	3300	500	0.170	1600	38	18	0.8	4222PHBK-ND	2.33	19.98	156.51	—	639.78	994.02	2222 138 16332
	4700	710	0.200	1800	38	18	0.8	4223PHBK-ND	2.47	21.21	166.15	—	679.17	1055.22	2222 138 16472
	6800	1000	0.260	2100	38	21	0.8	4224PHBK-ND	3.19	27.30	213.85	—	874.18	1358.20	2222 138 16682
40	33	29	0.110	91	12.7	7.7	0.6	4225PHCT-ND	.85	7.29	57.11	4225PHTB-ND	233.43	362.68	2222 138 37339
	47	15	0.100	120	18	6.5	0.8	4226PHCT-ND	.87	7.44	58.28	4226PHTB-ND	—	370.15	2222 138 37479
	100	28	0.100	180	18	8.0	0.8	4227PHCT-ND	.91	7.80	61.10	4227PHTB-ND	249.77	388.06	2222 138 37101
	220	57	0.100	350	25	10	0.8	4228PHCT-ND	1.31	11.25	88.13	4228PHTB-ND	360.24	559.70	2222 138 37221
	330	83	0.100	410	30	10	0.8	4229PHBK-ND	1.23	10.50	82.25	—	336.22	522.39	2222 138 17331
	470	120	0.100	550	30	12.5	0.8	4230PHBK-ND	1.36	11.64	91.18	—	372.73	579.10	2222 138 17471
	680	170	0.110	650	30	12.5	0.8	4231PHBK-ND	1.40	12.00	94.00	—	384.25	597.01	2222 138 17681
	1000	240	0.110	840	30	15	0.8	4232PHBK-ND	1.62	13.86	108.57	—	443.81	689.55	2222 138 17102
	1500	360	0.120	1100	30	18	0.8	4233PHBK-ND	1.90	16.29	127.61	—	521.62	810.44	2222 138 17152
	2200	530	0.130	1500	38	18	0.8	4234PHBK-ND	2.42	20.76	162.62	—	664.76	1032.83	2222 138 17222
	3300	800	0.150	1700	38	21	0.8	4235PHBK-ND	3.06	26.25	205.63	—	840.56	1305.96	2222 138 17332
50	10	13	0.090	51	12.7	6.3	0.6	4236PHCT-ND	.83	7.08	55.46	4236PHTB-ND	—	352.24	2222 138 31109
	22	25	0.090	82	12.7	7.7	0.6	4237PHCT-ND	.85	7.29	57.11	4237PHTB-ND	233.43	362.68	2222 138 31229
	100	34	0.080	230	18	10	0.8	4238PHCT-ND	1.13	9.69	75.91	4238PHTB-ND	310.29	482.09	2222 138 31101
63	4.7	9.0	0.090	35	12.7	6.3	0.6	4239PHCT-ND	.83	7.08	55.46	4239PHTB-ND	—	352.24	2222 138 38478
	10	16	0.080	59	12.7	7.7	0.6	4240PHCT-ND	.85	7.29	57.11	4240PHTB-ND	233.43	362.68	2222 138 38109
	22	12	0.070	100	18	6.5	0.8	4241PHCT-ND	.87	7.44	58.28	4241PHTB-ND	—	370.15	2222 138 38229
	47	22	0.070	150	18	8.0	0.8	4242PHCT-ND	.91	7.80	61.10	4242PHTB-ND	249.77	388.06	2222 138 38479
	100	42	0.070	280	25	10	0.8	4243PHCT-ND	1.31	11.25	88.13	4243PHTB-ND	360.24	559.70	2222 138 38101
	150	61	0.110	340	30	10	0.8	4244PHBK-ND	1.21	10.41	81.55	—	333.34	517.91	2222 138 18151
	220	88	0.110	470	30	12.5	0.8	4245PHBK-ND	1.34	11.52	90.24	—	368.88	573.13	2222 138 18221
	330	130	0.120	570	30	12.5	0.8	4246PHBK-ND	1.39	11.91	93.30	—	381.37	592.53	2222 138 18331
	470	180	0.120	730	30	15	0.8	4247PHBK-ND	1.59	13.65	106.93	—	437.09	679.10	2222 138 18471
	680	260	0.120	930	30	18	0.8	4248PHBK-ND	1.85	15.87	124.32	—	508.18	789.55	2222 138 18681
	1000	380	0.120	1300	38	18	0.8	4249PHBK-ND	2.35	20.16	157.92	—	645.55	1002.98	2222 138 18102
	1500	570	0.130	1600	38	21	0.8	4250PHBK-ND	2.96	25.41	199.05	—	813.66	1264.17	2222 138 18152
100	1.0	5.0	0.090	16	12.7	6.3	0.6	4251PHCT-ND	.83	7.08	55.46	4251PHTB-ND	—	352.24	2222 138 39108
	2.2	7.0	0.090	24	12.7	6.3	0.6	4252PHCT-ND	.83	7.08	55.46	4252PHTB-ND	—	352.24	2222 138 39228
	4.7	12	0.080	40	12.7	7.7	0.6	4253PHCT-ND	.85	7.29	57.11	4253PHTB-ND	233.43	362.68	2222 138 39478
	10	10	0.070	67	18	6.5	0.8	4254PHCT-ND	.87	7.44	58.28	4254PHTB-ND	—	370.15	2222 138 39109
	22	17	0.070	100	18	8.0	0.8	4255PHCT-ND	.91	7.80	61.10	4255PHTB-ND	249.77	388.06	2222 138 39229
	47	32	0.070	190	25	10	0.8	4256PHCT-ND	1.31	11.25	88.13	4256PHTB-ND	360.24	559.70	2222 138 39479
	68	45	0.070	220	30	10	0.8	4257PHBK-ND	1.22	10.44	81.78	—	334.30	519.40	2222 138 19689
	100	64	0.070	290	30	12.5	0.8	4258PHBK-ND	1.35	11.58	90.71	—	370.81	576.12	2222 138 19101
	150	94	0.070	390	30	15	0.8	4259PHBK-ND	1.54	13.17	103.17	—	421.72	655.22	2222 138 19151
	220	140	0.070	470	30	15	0.8	4260PHBK-ND	1.62	13.89	108.81	—	444.77	691.04	2222 138 19221
	330	200	0.080	620	30	18	0.8	4261PHBK-ND	1.91	16.35	128.08	—	523.55	813.43	2222 138 19331
	470	290	0.080	840	38	18	0.8	4262PHBK-ND	2.41	20.64	161.68	—	660.92	1026.86	2222 138 19471
	680	410	0.090	1100	38	21	0.8	4263PHBK-ND	3.01	25.83	202.34	—	827.11	1285.07	2222 138 19681

* "CT" stands for Cut Tape and "BK" stands for Bulk

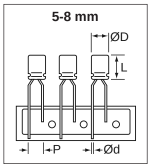
Panasonic® M Series Radial Lead Aluminum Electrolytic Capacitors

Ammo Box Packaging

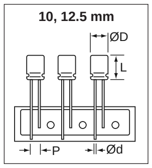
PANASONIC M SERIES CROSS REFERENCES
Nichicon: VR; **Chemicon:** SMG;
Marcon: DSM; **Rubycon:** YK; **Elna:** RE3;
Nitsuko: MK; **Sanyo:** HC/HPC

FEATURES: • Miniaturized size version for general purpose use • Life: 2000 hours at +85°C • Vent construction for ≥Ø6.3 mm products

5-8 mm



10, 12.5 mm



SPECIFICATIONS:

Operating Temperature Range	-40°C to +85°C	-25°C to +85°C
Rated Working Voltage Range	6.3 to 50 V DC	160 to 450 V DC
Nominal Capacitance Range	0.47 to 2200 µF	1 to 470 µF

Capacitance Tolerance: ±20% (120 Hz, +20°C)

Leakage Current	I≤ 0.03 CV or 4 (µA) after 1 minute I≤ 0.01 CV or 3 (µA) after 2 minutes Whichever is greater measured with rated working voltage at +20°C.	I≤ 0.06 CV + 10 (µA) after 2 minutes application of rated working voltage at +20°C.

tan δ: (at 120 Hz, +20°C)

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tan δ	0.28	0.24	0.20	0.16	0.14	0.12	0.11	0.10	0.16	0.18	0.18	0.20	0.20	0.20

For capacitance value > 1000 µF, add 0.02 per every 1000 µF.

Low Temperature Characteristics: Impedance ratio max. at 120 Hz

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
-25°C/+20°C	5	4	3	2	2	2	2	2	2	2	3	5	6	6
-40°C/+20°C	12	10	8	5	4	3	3	3	—	—	—	—	—	—

For capacitance value >1000 µF, add 0.5 per every 1000 µF for -25°C/+20°C.
add 1.0 per every 1000 µF for -40°C/+20°C.

Ripple Current: 120 Hz, +85°C

Frequency (Hz)	50/60	120	1k	10k
Correction Factor (Multiplier)	0.7	1	1.3	1.7

Endurance:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	2000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	Rated DC Working Voltage	**tan δ**	≤ 150% initial specified value

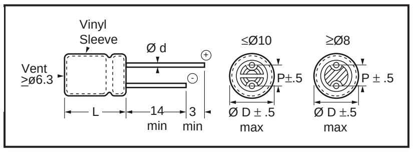
Shelf Life:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	1000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	—	**tan δ**	≤ 150% initial specified value

WV (VDC)	Cap (µF)	Leakage Current (µA)	tan δ max.	Ripple Current (mA) rms	Dimensions (mm)				Digi-Key Part No.	Pricing			Panasonic Part No.
					ØD	L	P	Ød		500	1,000	2,000	
6.3	220	13.8	0.28	240	5	11	5.0	0.5	P10357TB-ND	—	—	48.00/M	ECA-0JM221B
	220	13.8	0.28	240	5	11	2.5	0.5	P10401TB-ND	—	—	48.00/M	ECA-0JM221I
	470	29.6	0.28	380	6.3	11.2	5.0	0.5	P10358TB-ND	—	—	69.00/M	ECA-0JM471B
	470	29.6	0.28	380	6.3	11.2	2.5	0.5	P10402TB-ND	—	—	69.00/M	ECA-0JM471I
	1000	63	0.28	580	8	11.5	5.0	0.6	P10359TB-ND	—	105.00	—	ECA-0JM102B
	1000	63	0.28	580	8	11.5	3.5	0.6	P10403TB-ND	—	105.00	—	ECA-0JM102BJ
	2200	138.6	0.3	890	10	16	5.0	0.6	P10360TB-ND	95.50	—	148.00/M	ECA-0JM222B
	3300	207.9	0.32	1020	10	20	5.0	0.6	P10361TB-ND	124.00	—	197.00/M	ECA-0JM332B
	4700	296.1	0.34	1170	12.5	20	5.0	0.6	P10362TB-ND	169.00	—	269.00/M	ECA-0JM472B
10	100	10	0.24	150	5	11	5.0	0.5	P10363TB-ND	—	—	40.00/M	ECA-1AM101B
	100	10	0.24	150	5	11	2.5	0.5	P10404TB-ND	—	—	40.00/M	ECA-1AM101I
	220	22	0.24	250	5	11	5.0	0.5	P10364TB-ND	—	—	56.00/M	ECA-1AM221B
	220	22	0.24	250	6.3	11.2	2.5	0.5	P10405TB-ND	—	—	56.00/M	ECA-1AM221I
	330	33	0.24	330	6.3	11.2	5.0	0.5	P10365TB-ND	—	—	69.00/M	ECA-1AM331B
	330	33	0.24	330	6.3	11.2	2.5	0.5	P10406TB-ND	—	—	69.00/M	ECA-1AM331I
	470	47	0.24	400	8	11.5	5.0	0.6	P10366TB-ND	—	83.00	—	ECA-1AM471B
	470	47	0.24	400	8	11.5	3.5	0.6	P10407TB-ND	—	83.00	—	ECA-1AM471BJ
	1000	100	0.24	630	10	12.5	5.0	0.6	P10367TB-ND	79.00	—	123.00/M	ECA-1AM102B
	2200	220	0.26	920	10	20	5.0	0.6	P10368TB-ND	115.50	—	184.00/M	ECA-1AM222B
16	100	16	0.2	180	5	11	5.0	0.5	P10369TB-ND	—	—	48.00/M	ECA-1CM101B
	100	16	0.2	180	5	11	2.5	0.5	P10408TB-ND	—	—	48.00/M	ECA-1CM101I
	220	35.2	0.2	280	6.3	11.2	5.0	0.5	P10370TB-ND	—	—	72.00/M	ECA-1CM221B
	220	35.2	0.2	280	6.3	11.2	2.5	0.5	P10409TB-ND	—	—	72.00/M	ECA-1CM221I
	330	52.8	0.3	350	8	11.5	5.0	0.6	P10371TB-ND	—	83.00	—	ECA-1CM331B
	330	52.8	0.3	350	8	11.5	3.5	0.6	P10410TB-ND	—	83.00	—	ECA-1CM331BJ
	470	75.2	0.2	440	8	11.5	5.0	0.6	P10372TB-ND	—	101.00	—	ECA-1CM471B
	470	75.2	0.2	440	8	11.5	3.5	0.6	P10411TB-ND	—	101.00	—	ECA-1CM471BJ
	1000	160	0.2	680	10	16	5.0	0.6	P10373TB-ND	108.00	—	168.00/M	ECA-1CM102B
	2200	352	0.22	1000	12.5	20	5.0	0.6	P10374TB-ND	169.00	—	269.00/M	ECA-1CM222B
25	47	11.7	0.16	130	5	11	5.0	0.5	P10375TB-ND	—	—	40.00/M	ECA-1EM470B
	47	11.7	0.16	130	5	11	2.5	0.5	P10412TB-ND	—	—	40.00/M	ECA-1EM470I
	100	25	0.16	180	6.3	11.2	5.0	0.5	P10376TB-ND	—	—	58.00/M	ECA-1EM101B
	100	25	0.16	180	6.3	11.2	2.5	0.5	P10413TB-ND	—	—	58.00/M	ECA-1EM101I
	220	55	0.16	310	8	11.5	5.0	0.6	P10377TB-ND	—	86.00	—	ECA-1EM221B
	220	55	0.16	310	8	11.5	3.5	0.6	P10414TB-ND	—	86.00	—	ECA-1EM221BJ
	330	82.5	0.16	390	8	11.5	5.0	0.6	P10378TB-ND	—	105.00	—	ECA-1EM331B
	330	82.5	0.16	390	8	11.5	3.5	0.6	P10415TB-ND	—	105.00	—	ECA-1EM331BJ
	470	117.5	0.16	480	10	12.5	5.0	0.6	P10379TB-ND	83.50	—	130.00/M	ECA-1EM471B
	1000	250	0.16	850	10	20	5.0	0.6	P10380TB-ND	127.50	—	203.00/M	ECA-1EM102B
35	33	11.5	0.14	110	5	11	5.0	0.5	P10381TB-ND	—	—	40.00/M	ECA-1VM330B
	33	11.5	0.14	110	5	11	2.5	0.5	P10416TB-ND	—	—	40.00/M	ECA-1VM330I
	47	16.4	0.14	130	5	11	5.0	0.5	P10382TB-ND	—	—	48.00/M	ECA-1VM470B
	47	16.4	0.14	130	5	11	2.5	0.5	P10417TB-ND	—	—	48.00/M	ECA-1VM470I
	100	35	0.14	210	6.3	11.2	5.0	0.5	P10383TB-ND	—	—	69.00/M	ECA-1VM101B
	100	35	0.14	210	6.3	11.2	2.5	0.5	P10418TB-ND	—	—	69.00/M	ECA-1VM101I
	220	77	0.14	350	8	11.5	5.0	0.6	P10384TB-ND	—	101.00	—	ECA-1VM221B
	220	77	0.14	350	8	11.5	3.5	0.6	P10419TB-ND	—	101.00	—	ECA-1VM221BJ
	330	115.5	0.14	440	10	12.5	5.0	0.6	P10385TB-ND	90.00	—	140.00/M	ECA-1VM331B
	470	164.5	0.14	550	10	16	5.0	0.6	P10386TB-ND	108.00	—	168.00/M	ECA-1VM471B
	1000	350	0.14	900	12.5	20	5.0	0.6	P10387TB-ND	229.50	—	365.00/M	ECA-1VM102B
50	0.47	3	0.12	5	5	11	5.0	0.5	P10388TB-ND	—	—	38.00/M	ECA-1HMR47B
	0.47	3	0.12	5	5	11	2.5	0.5	P10420TB-ND	—	—	38.00/M	ECA-1HMR47I
	1	3	0.12	10	5	11	5.0	0.5	P10389TB-ND	—	—	37.00/M	ECA-1HM010B
	1	3	0.12	10	5	11	2.5	0.5	P10421TB-ND	—	—	37.00/M	ECA-1HM010I
	2.2	3	0.12	20	5	11	5.0	0.5	P10390TB-ND	—	—	37.00/M	ECA-1HM2R2B
	2.2	3	0.12	20	5	11	2.5	0.5	P10422TB-ND	—	—	37.00/M	ECA-1HM2R2I
	3.3	3	0.12	35	5	11	5.0	0.5	P10391TB-ND	—	—	37.00/M	ECA-1HM3R3B
	3.3	3	0.12	35	5	11	2.5	0.5	P10423TB-ND	—	—	37.00/M	ECA-1HM3R3I
	4.7	3	0.12	45	5	11	5.0	0.5	P10392TB-ND	—	—	38.00/M	ECA-1HM4R7B
	4.7	3	0.12	45	5	11	2.5	0.5	P10424TB-ND	—	—	38.00/M	ECA-1HM4R7I
	10	5	0.12	65	5	11	5.0	0.5	P10393TB-ND	—	—	38.00/M	ECA-1HM100B
	10	5	0.12	65	5	11	2.5	0.5	P10425TB-ND	—	—	38.00/M	ECA-1HM100I
	22	11	0.12	100	5	11	5.0	0.5	P10394TB-ND	—	—	40.00/M	ECA-1HM220B
	22	11	0.12	100	5	11	2.5	0.5	P10426TB-ND	—	—	40.00/M	ECA-1HM220I
	33	16.5	0.12	110	5	11	5.0	0.5	P10395TB-ND	—	—	48.00/M	ECA-1HM330B
	33	16.5	0.12	110	5	11	2.5	0.5	P10427TB-ND	—	—	48.00/M	ECA-1HM330I
	47	23.5	0.12	130	6.3	11.2	5.0	0.5	P10396TB-ND	—	—	58.00/M	ECA-1HM470B
	47	23.5	0.12	130	6.3	11.2	2.5	0.5	P10428TB-ND	—	—	58.00/M	ECA-1HM470I
	100	50	0.12	250	8	11.5	5.0	0.6	P10397TB-ND	—	90.00	—	ECA-1HM101B
	100	50	0.12	250	8	11.5	3.5	0.6	P10429TB-ND	—	90.00	—	ECA-1HM101BJ
	220	11	0.12	400	10	12.5	5.0	0.6	P10398TB-ND	92.50	—	144.00/M	ECA-1HM221B
	330	165	0.12	500	10	16	5.0	0.6	P10399TB-ND	112.50	—	175.00/M	ECA-1HM331B
	470	235	0.12	650	10	20	5.0	0.6	P10400TB-ND	153.00	—	243.00/M	ECA-1HM471B

Panasonic® M Series Radial Lead Aluminum Electrolytic Capacitors

PANASONIC M SERIES
CROSS REFERENCES
Nichicon: VR; **Chemicon:** SMG;
Marcon: DSM; **Rubycon:** YK;
Elna: RE3; **Nitsuko:** MK;
Sanyo: HC/HPC



FEATURES:

- Miniaturized size version for general purpose use
- Life: 2000 hours at +85°C
- Vent construction for ≥ϕ6.3 mm products

SPECIFICATIONS:

Operating Temperature Range	-40°C to +85°C	-25°C to +85°C
Rated Working Voltage Range	6.3 to 100 V DC	160 to 450 V DC
Nominal Capacitance Range	0.33 to 22000 µF	1 to 470 µF

Capacitance Tolerance: ±20% (120 Hz, +20°C)

Leakage Current	I≤ 0.03 CV or 4 (µA) after 1 minute I≤ 0.01 CV or 3 (µA) after 2 minutes Whichever is greater measured with rated working voltage at +20°C.	I≤ 0.06 CV + 10 (µA) after 2 minutes application of rated working voltage at +20°C.

tan δ: (at 120 Hz, +20°C)

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
tan δ	0.28	0.24	0.20	0.16	0.14	0.12	0.11	0.10	0.16	0.18	0.18	0.20	0.20	0.20

For capacitance value > 1000 µF, add 0.02 per every 1000 µF.

Low Temperature Characteristics: Impedance ratio max. at 120 Hz

W.V.	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
-25°C/+20°C	5	4	3	2	2	2	2	2	2	2	3	5	6	6
-40°C/+20°C	12	10	8	5	4	3	3	3	—	—	—	—	—	—

For capacitance value >1000 µF, add 0.5 per every 1000 µF for -25°C/+20°C.
add 1.0 per every 1000 µF for -40°C/+20°C.

Ripple Current: 120 Hz, +85°C

Frequency (Hz)	50/60	120	1k	10k
Correction Factor (Multiplier)	0.7	1	1.3	1.7

Endurance:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	2000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	Rated DC Working Voltage	**tan δ**	≤ 150% initial specified value

Shelf Life:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	1000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+85°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	—	**tan δ**	≤ 150% initial specified value

WV (VDC)	Cap. (µF)	Leakage Current (µA)	tan δ max.	Ripple Current (mA) rms	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
					øD	L	P	ød		1	10	100	500	1,000	5,000	
6.3	100	6.3	0.28	130	5	11	2.0	0.5	P5111-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-0JM101
	220	13.8	0.28	240	5	11	2.0	0.5	P5112-ND	.28	1.38	9.30	31.50	48.00	41.00/M	ECA-0JM221
	330	20.7	0.28	300	6.3	11.2	2.5	0.5	P5113-ND	.29	1.52	10.73	37.05	59.00	51.00/M	ECA-0JM331
	470	29.6	0.28	380	6.3	11.2	2.5	0.5	P5114-ND	.35	1.79	12.65	43.70	69.00	60.00/M	ECA-0JM471
	1000	63.0	0.28	580	8	11.5	3.5	0.6	P5115-ND	.41	2.45	17.50	63.00	98.00	91.00/M	ECA-0JM102
	2200	138.6	0.30	890	10	16	5.0	0.6	P5116-ND	.66	3.71	26.50	95.40	148.00	138.00/M	ECA-0JM222
	3300	207.9	0.32	1020	10	20	5.0	0.6	P5117-ND	.81	4.67	34.31	124.10	197.00	190.00/M	ECA-0JM332
	4700	296.1	0.34	1170	12.5	20	5.0	0.6	P5118-ND	1.13	6.37	46.77	169.15	269.00	259.00/M	ECA-0JM472
	6800	428.4	0.38	1270	12.5	25	5.0	0.6	P5119-ND	1.42	9.00	67.50	240.00	399.00	384.00/M	ECA-0JM682
	10000	630.0	0.46	1450	16	25	7.5	0.8	P5120-ND	2.03	11.58	86.85	308.80	513.00	494.00/M	ECA-0JM103
	15000	945.0	0.56	1700	16	31.5	7.5	0.8	P5121-ND	2.54	14.63	110.40	414.00	718.00	696.00/M	ECA-0JM153
	22000	1386.0	0.70	1900	18	35.5	7.5	0.8	P5122-ND	3.64	20.91	157.80	591.75	1026.00	994.00/M	ECA-0JM223
10	100	10.0	0.24	150	5	11	2.0	0.5	P5123-ND	.23	1.15	7.75	26.25	40.00	34.00/M	ECA-1AM101
	220	22.0	0.24	250	6.3	11.2	2.5	0.5	P5124-ND	.32	1.61	10.85	36.75	56.00	47.00/M	ECA-1AM221
	330	33.0	0.24	330	6.3	11.2	2.5	0.5	P5125-ND	.35	1.79	12.65	43.70	69.00	60.00/M	ECA-1AM331
	470	47.0	0.24	400	8	11.5	3.5	0.6	P5126-ND	.41	2.15	15.13	52.25	83.00	72.00/M	ECA-1AM471
	1000	100.0	0.24	630	10	12.5	5.0	0.6	P5127-ND	.52	3.08	22.00	79.20	123.00	114.00/M	ECA-1AM102
	2200	220.0	0.26	920	10	20	5.0	0.6	P5128-ND	.76	4.35	31.96	115.60	184.00	177.00/M	ECA-1AM222
	3300	330.0	0.28	1090	12.5	20	5.0	0.6	P5129-ND	1.08	6.75	49.59	179.35	285.00	274.00/M	ECA-1AM332
	4700	470.0	0.30	1200	12.5	25	5.0	0.6	P5130-ND	1.34	8.40	63.00	224.00	372.00	358.00/M	ECA-1AM472
	6800	680.0	0.34	1400	16	25	7.5	0.8	P5131-ND	1.88	10.74	80.55	286.40	476.00	458.00/M	ECA-1AM682
	10000	1000.0	0.42	1600	16	31.5	7.5	0.8	P5132-ND	2.27	13.52	102.00	382.50	663.00	643.00/M	ECA-1AM103
	15000	1500.0	0.52	1850	18	35.5	7.5	0.8	P5133-ND	3.50	20.14	152.00	570.00	988.00	958.00/M	ECA-1AM153
16	10	3.0	0.20	30	5	11	2.0	0.5	P5134-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1CM100
	22	3.5	0.20	75	5	11	2.0	0.5	P5135-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1CM220
	33	5.2	0.20	110	5	11	2.0	0.5	P5136-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1CM330
	47	7.5	0.20	130	5	11	2.0	0.5	P5137-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1CM470
	100	16.0	0.20	180	5	11	2.0	0.5	P5138-ND	.28	1.38	9.30	31.50	48.00	41.00/M	ECA-1CM101
	220	35.2	0.20	280	6.3	11.2	2.5	0.5	P5139-ND	.35	1.87	13.20	45.60	72.00	62.00/M	ECA-1CM221
	330	52.8	0.20	350	8	11.5	3.5	0.6	P5140-ND	.41	2.15	15.13	52.25	83.00	72.00/M	ECA-1CM331
	470	75.2	0.20	440	8	11.5	3.5	0.6	P5141-ND	.41	2.35	16.75	60.30	94.00	87.00/M	ECA-1CM471
	1000	160.0	0.20	680	10	16	5.0	0.6	P5142-ND	.65	4.20	30.00	108.00	168.00	156.00/M	ECA-1CM102
	2200	352.0	0.22	1000	12.5	20	5.0	0.6	P5143-ND	1.13	6.37	46.77	169.15	269.00	259.00/M	ECA-1CM222
	3300	528.0	0.24	1200	12.5	25	5.0	0.6	P5144-ND	1.45	8.28	62.10	220.80	367.00	353.00/M	ECA-1CM332
	4700	752.0	0.26	1360	16	25	7.5	0.8	P5145-ND	1.98	11.31	84.83	301.60	501.00	483.00/M	ECA-1CM472
	6800	1088.0	0.30	1600	16	31.5	7.5	0.8	P5146-ND	2.32	13.59	102.60	384.75	667.00	646.00/M	ECA-1CM682
	10000	1600.0	0.38	1800	18	35.5	7.5	0.8	P5147-ND	3.46	19.90	150.20	563.25	976.00	946.00/M	ECA-1CM103
25	10	3.0	0.16	50	5	11	2.0	0.5	P5148-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1EM100
	22	5.5	0.16	90	5	11	2.0	0.5	P5149-ND	.21	1.10	7.44	25.20	38.00	32.00/M	ECA-1EM220
	33	8.2	0.16	110	5	11	2.0	0.5	P5150-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1EM330
	47	11.7	0.16	130	5	11	2.0	0.5	P5151-ND	.23	1.15	7.75	26.25	40.00	34.00/M	ECA-1EM470
	100	25.0	0.16	180	6.3	11.2	2.5	0.5	P5152-ND	.32	1.66	11.16	37.80	58.00	49.00/M	ECA-1EM101
	220	55.0	0.16	310	8	11.5	3.5	0.6	P5153-ND	.41	2.22	15.68	54.15	86.00	74.00/M	ECA-1EM221
	330	82.5	0.16	390	8	11.5	3.5	0.6	P5154-ND	.41	2.45	17.50	63.00	98.00	91.00/M	ECA-1EM331
	470	117.5	0.16	480	10	12.5	5.0	0.6	P5155-ND	.55	3.26	23.25	83.70	130.00	121.00/M	ECA-1EM471
	1000	250.0	0.16	850	10	20	5.0	0.6	P5156-ND	.80	4.80	35.25	127.50	203.00	195.00/M	ECA-1EM102
	2200	550.0	0.18	1200	12.5	25	5.0	0.6	P5157-ND	1.38	7.86	58.95	209.60	348.00	335.00/M	ECA-1EM222
	3300	825.0	0.20	1300	16	25	7.5	0.8	P5158-ND	1.95	12.00	90.00	320.00	532.00	512.00/M	ECA-1EM332
	4700	1175.0	0.22	1500	16	31.5	7.5	0.8	P5159-ND	2.46	14.42	108.80	408.00	707.00	685.00/M	ECA-1EM472
	6800	1700.0	0.26	1750	18	35.5	7.5	0.8	P5160-ND	3.62	20.80	157.00	588.75	1021.00	989.00/M	ECA-1EM682

(Continued)

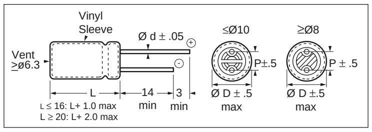
Panasonic M Series Radial Lead Aluminum Electrolytic Capacitors *(Cont.)*

WV (VDC)	Cap. (µF)	Leakage Current (µA)	tan δ max.	Ripple Current (mA) rms	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
					øD	L	P	ød		1	10	100	500	1,000	5,000	
35	10	3.5	0.14	60	5	11	2.0	0.5	P5161-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1VM100
	22	7.7	0.14	95	5	11	2.0	0.5	P5162-ND	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1VM220
	33	11.5	0.14	110	5	11	2.0	0.5	P5163-ND	.23	1.15	7.75	26.25	40.00	34.00/M	ECA-1VM330
	47	16.4	0.14	130	5	11	2.0	0.5	P5164-ND	.28	1.38	9.30	31.50	48.00	41.00/M	ECA-1VM470
	100	35.0	0.14	210	6.3	11.2	2.5	0.5	P5165-ND	.35	1.79	12.65	43.70	69.00	60.00/M	ECA-1VM101
	220	77.0	0.14	350	8	11.5	3.5	0.6	P5166-ND	.41	2.35	16.75	60.30	94.00	87.00/M	ECA-1VM221
	330	115.5	0.14	440	10	12.5	5.0	0.6	P5167-ND	.55	3.50	25.00	90.00	140.00	130.00/M	ECA-1VM331
	470	164.5	0.14	550	10	16	5.0	0.6	P5168-ND	.68	4.20	30.00	108.00	168.00	156.00/M	ECA-1VM471
	1000	350.0	0.14	900	12.5	20	5.0	0.6	P5169-ND	1.25	8.64	63.45	229.50	365.00	351.00/M	ECA-1VM102
	2200	770.0	0.16	1250	16	25	7.5	0.8	P5170-ND	2.05	13.50	101.25	360.00	599.00	576.00/M	ECA-1VM222
	3300	1155.0	0.18	1400	16	31.5	7.5	0.8	P5171-ND	2.51	16.96	128.00	480.00	832.00	806.00/M	ECA-1VM332
	4700	1645.0	0.20	1600	18	35.5	7.5	0.8	P5172-ND	3.76	22.84	172.40	646.50	1121.00	1086.00/M	ECA-1VM472
50	0.33	3.0	0.12	4.4	5	11	2.0	0.5	P5349-ND*	.21	1.33	8.99	30.45	46.00	39.00/M	ECA-1HMR33
	0.47	3.0	0.12	5	5	11	2.0	0.5	P5173-ND*	.21	1.10	7.44	25.20	38.00	32.00/M	ECA-1HMR47
	1.0	3.0	0.12	10	5	11	2.0	0.5	P5174-ND*	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1HM010
	2.2	3.0	0.12	20	5	11	2.0	0.5	P5175-ND*	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1HM2R2
	3.3	3.0	0.12	35	5	11	2.0	0.5	P5176-ND*	.21	1.06	7.13	24.15	37.00	31.00/M	ECA-1HM3R3
	4.7	3.0	0.12	45	5	11	2.0	0.5	P5177-ND*	.21	1.10	7.44	25.20	38.00	32.00/M	ECA-1HM4R7
	10	5.0	0.12	65	5	11	2.0	0.5	P5178-ND*	.21	1.10	7.44	25.20	38.00	32.00/M	ECA-1HM100
	22	11.0	0.12	100	5	11	2.0	0.5	P5179-ND*	.23	1.15	7.75	26.25	40.00	34.00/M	ECA-1HM220
	33	16.5	0.12	110	5	11	2.0	0.5	P5180-ND*	.28	1.38	9.30	31.50	48.00	41.00/M	ECA-1HM330
	47	23.5	0.12	130	6.3	11.2	2.5	0.5	P5181-ND*	.34	1.66	11.16	37.80	58.00	49.00/M	ECA-1HM470
	100	50.0	0.12	250	8	11.5	3.5	0.6	P5182-ND*	.41	2.34	16.50	57.00	90.00	78.00/M	ECA-1HM101
	220	110.0	0.12	400	10	12.5	5.0	0.6	P5183-ND*	.55	3.61	25.75	92.70	144.00	134.00/M	ECA-1HM221
	330	165.0	0.12	500	10	16	5.0	0.6	P5184-ND*	.67	4.00	29.38	106.25	169.00	163.00/M	ECA-1HM331
	470	235.0	0.12	650	10	20	5.0	0.6	P5185-ND*	.86	5.76	42.30	153.00	243.00	234.00/M	ECA-1HM471
	1000	500.0	0.12	1050	12.5	25	5.0	0.6	P5186-ND*	1.52	9.00	67.50	240.00	399.00	384.00/M	ECA-1HM102
	2200	1100.0	0.14	1300	16	31.5	7.5	0.8	P5187-ND*	2.51	14.68	110.80	415.50	720.00	698.00/M	ECA-1HM222
	3300	1650.0	0.16	1500	18	35.5	7.5	0.8	P5188-ND*	3.96	23.19	175.00	656.25	1138.00	1103.00/M	ECA-1HM332
63	10	6.3	0.11	70	5	11	2.0	0.5	P5189-ND	.24	1.20	8.06	27.30	42.00	35.00/M	ECA-1JM100
	22	13.8	0.11	105	5	11	2.0	0.5	P5190-ND	.28	1.38	9.30	31.50	48.00	41.00/M	ECA-1JM220
	33	20.7	0.11	130	6.3	11.2	2.5	0.5	P5191-ND	.28	1.48	10.45	36.10	57.00	49.00/M	ECA-1JM330
	47	29.6	0.11	160	6.3	11.2	2.5	0.5	P5192-ND	.37	1.95	13.75	47.50	75.00	65.00/M	ECA-1JM470
	100	63.0	0.11	270	8	11.5	3.5	0.6	P5193-ND	.43	2.45	17.50	63.00	98.00	91.00/M	ECA-1JM101
	220	138.6	0.11	450	10	16	5.0	0.6	P5194-ND	.65	3.74	27.50	99.45	158.00	152.00/M	ECA-1JM221
	330	207.9	0.11	550	10	20	5.0	0.6	P5195-ND	.86	4.93	36.19	130.90	208.00	200.00/M	ECA-1JM331
	470	296.1	0.11	750	12.5	20	5.0	0.6	P5196-ND	1.22	6.99	52.43	186.40	310.00	298.00/M	ECA-1JM471
	1000	630.0	0.11	1100	16	25	7.5	0.8	P5197-ND	2.26	13.35	100.13	356.00	592.00	570.00/M	ECA-1JM102
	2200	1386.0	0.13	1400	18	35.5	7.5	0.8	P5198-ND	3.94	23.03	173.80	651.75	1130.00	1095.00/M	ECA-1JM222
100	0.47	3.0	0.10	10	5	11	2.0	0.5	P5199-ND	.24	1.20	8.06	27.30	42.00	35.00/M	ECA-2AMR47
	1.0	3.0	0.10	20	5	11	2.0	0.5	P5305-ND	.24	1.20	8.06	27.30	42.00	35.00/M	ECA-2AM010
	2.2	3.0	0.10	30	5	11	2.0	0.5	P5306-ND	.25	1.24	8.37	28.35	43.00	36.00/M	ECA-2AM2R2
	3.3	3.3	0.10	40	5	11	2.0	0.5	P5307-ND	.25	1.24	8.37	28.35	43.00	36.00/M	ECA-2AM3R3
	4.7	4.7	0.10	50	5	11	2.0	0.5	P5308-ND	.25	1.24	8.37	28.35	43.00	36.00/M	ECA-2AM4R7
	10	10.0	0.10	70	5	11	2.0	0.5	P5309-ND	.35	1.75	11.78	39.90	61.00	51.00/M	ECA-2AM100
	22	22.0	0.10	115	6.3	11.2	2.5	0.5	P5310-ND	.40	2.07	14.58	50.35	80.00	69.00/M	ECA-2AM220
	33	33.0	0.10	145	8	11.5	3.5	0.6	P5311-ND	.49	2.61	18.43	63.65	101.00	87.00/M	ECA-2AM330
	47	47.0	0.10	180	8	11.5	3.5	0.6	P5312-ND	.50	2.98	21.25	76.50	119.00	111.00/M	ECA-2AM470
	100	100.0	0.10	350	10	16	5.0	0.6	P5313-ND	.80	4.77	35.02	126.65	201.00	194.00/M	ECA-2AM101
	220	220.0	0.10	550	12.5	20	5.0	0.6	P5314-ND	1.35	7.83	58.73	208.80	347.00	334.00/M	ECA-2AM221
	330	330.0	0.10	700	12.5	25	5.0	0.6	P5315-ND	1.85	10.71	80.33	285.60	475.00	457.00/M	ECA-2AM331
	470	470.0	0.10	900	16	25	7.5	0.8	P5316-ND	2.41	14.05	106.00	397.50	689.00	668.00/M	ECA-2AM471
	1000	1000.0	0.10	1300	18	35.5	7.5	0.8	P5317-ND	4.56	27.80	209.80	786.75	1364.00	1322.00/M	ECA-2AM102
160	1.0	19.6	0.16	36	6.3	11.2	2.5	0.5	P5318-ND	.44	1.91	13.48	46.55	74.00	64.00/M	ECA-2CM010
	2.2	31.1	0.16	53	6.3	11.2	2.5	0.5	P5319-ND	.46	1.91	13.48	46.55	74.00	64.00/M	ECA-2CM2R2
	3.3	41.6	0.16	66	6.3	11.2	2.5	0.5	P5320-ND	.40	1.72	12.25	44.10	69.00	64.00/M	ECA-2CM3R3
	4.7	55.1	0.16	78	6.3	11.2	2.5	0.5	P5321-ND	.43	1.72	12.25	44.10	69.00	64.00/M	ECA-2CM4R7
	10	103.0	0.16	105	10	12.5	5.0	0.6	P5322-ND	.57	3.12	22.25	80.10	125.00	116.00/M	ECA-2CM100
	22	221.0	0.16	175	10	16	5.0	0.6	P5323-ND	.72	3.62	26.56	96.05	153.00	147.00/M	ECA-2CM220
	33	326.0	0.16	235	10	20	5.0	0.6	P5324-ND	1.03	4.61	33.84	122.40	194.00	187.00/M	ECA-2CM330
	47	461.0	0.16	320	12.5	20	5.0	0.6	P5325-ND	1.34	6.51	48.83	173.60	289.00	278.00/M	ECA-2CM470
	100	970.0	0.16	515	12.5	25	5.0	0.6	P5326-ND	2.00	9.90	74.25	264.00	439.00	422.00/M	ECA-2CM101
	220	2122.0	0.16	830	16	31.5	7.5	0.8	P5327-ND	2.92	15.77	119.00	446.25	774.00	750.00/M	ECA-2CM221
	330	3178.0	0.16	1090	18	31.5	7.5	0.8	P5328-ND	4.07	24.54	185.20	694.50	1204.00	1167.00/M	ECA-2CM331
	470	4522.0	0.16	1440	18	40	7.5	0.8	P5329-ND	5.24	30.69	231.60	868.50	1505.00	1459.00/M	ECA-2CM471
250	1.0	25.0	0.18	34	6.3	11.2	2.5	0.5	P5330-ND	.40	1.72	12.25	44.10	69.00	64.00/M	ECA-2EM010
	2.2	43.0	0.18	50	6.3	11.2	2.5	0.5	P5331-ND	.41	1.72	12.25	44.10	69.00	64.00/M	ECA-2EM2R2
	3.3	59.5	0.18	72	8	11.5	3.5	0.6	P5332-ND	.51	2.56	18.25	65.70	102.00	95.00/M	ECA-2EM3R3
	4.7	80.5	0.18	86	8	11.5	3.5	0.6	P5333-ND	.59	2.56	18.25	65.70	102.00	95.00/M	ECA-2EM4R7
	10	160.0	0.18	110	10	16	5.0	0.6	P5334-ND	.71	3.62	26.56	96.05	153.00	147.00/M	ECA-2EM100
	22	340.0	0.18	180	10	20	5.0	0.6	P5335-ND	1.14	4.74	34.78	125.80	200.00	192.00/M	ECA-2EM220
	33	505.0	0.18	250	12.5	20	5.0	0.6	P5336-ND	1.39	6.66	49.95	177.60	295.00	284.00/M	ECA-2EM330
	47	715.0	0.18	350	12.5	25	5.0	0.6	P5337-ND	2.01	10.17	76.28	271.20	451.00	434.00/M	ECA-2EM470
	100	1510.0	0.18	530	16	31.5	7.5	0.8	P5338-ND	3.01	15.18	114.60	429.75	745.00	722.00/M	ECA-2EM101
	220	3310.0	0.18	930	18	40	7.5	0.8	P5339-ND	5.26	30.85	232.80	873.00	1513.00	1467.00/M	ECA-2EM221
450	1.0	37.0	0.20	37	8	11.5	3.5	0.6	P5340-ND	.62	2.73	19.50	70.20	109.00	101.00/M	ECA-2WM010
	2.2	69.4	0.20	44	10	12.5	5.0	0.6	P5341-ND	.69	3.54	25.25	90.90	141.00	131.00/M	ECA-2WM2R2
	3.3	99.1	0.20	60	10	16	5.0	0.6	P5342-ND	.83	3.90	28.67	103.70	165.00	159.00/M	ECA-2WM3R3
	4.7	136.0	0.20	79	10	20	5.0	0.6	P5343-ND	1.19	4.90	35.96	130.05	207.00	199.00/M	ECA-2WM4R7
	10	280.0	0.20	130	12.5	20	5.0	0.6	P5344-ND	1.62	7.50	56.25	200.00	333.00	320.00/M	ECA-2WM100
	22	604.0	0.20	210	16	25	7.5	0.8	P5345-ND	2.19	11.42	86.20	323.25	560.00	543.00/M	ECA-2WM220
	33	901.0	0.20	285	16	31.5	7.5	0.8	P5346-ND	2.95	16.35	123.40	462.75	802.00	777.00/M	ECA-2WM330

*** M-KIT-ND** ***Digi-Key® M Series Capacitors Kit*** 10 each of values denoted. 170 total pieces. Included notebook style storage case and bin storage guide..**$69.95**

Panasonic® NHG Series Radial Lead Aluminum Electrolytic Capacitors

Panasonic NHG Series Cross References:
Nippon Chemicon: KMG; **Nichicon:** VZ;
Elna: RJ4; **Rubycon:** YXA



FEATURES:

- Compact size (same case size with series M)
- Life: 1000 ~ 2000 hours at +105°C

SPECIFICATIONS:

Operating Temperature Range	-55°C to +105°C	-25°C to +105°C
Rated Working Voltage Range	6.3 to 100 VDC	160 to 450 VDC
Nominal Capacitance Range	0.1 to 22000 µF	1.0 to 330 µF

Capacitance Tolerance: ±20% (120 Hz, +20°C)

Leakage Current	I ≤ 0.01 CV µA or 3µA, whichever is greater after 2 minutes application of rated working voltage at +20°C.	I ≤ 0.06 CV + 10µA after 2 minutes application of rated working voltage at +20°C.

tan δ: (at 120 Hz, +20°C)

W.V.	6.3	10	16	25	35	50	63	100	160	250	450
tan δ max.	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.15	0.15	0.24

For capacitance value > 1000 µF, add 0.02 per every 1000 µF.

Ripple Current: 120 Hz, +105°C

		Frequency (Hz)				
W.V. (V.DC)	**Cap (µF)**	**60**	**120**	**1k**	**10k**	**100k**
6.3 ~ 100	**~ 33**	0.75	1	1.55	1.80	2.00
	47 ~ 470	0.80	1	1.35	1.50	1.50
	1000 ~	0.85	1	1.10	1.15	1.15
160 ~ 450	**1.0 ~ 330**	0.80	1	1.35	1.50	1.50

Endurance:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	2000 Hours*	**Leakage Current**	≤ initial specified value
Ambient Temperature	+105°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	Rated DC Working Voltage	**tan δ**	≤ 200% initial specified value

* 1000 Hours for ≤ Ø8mm products.

Shelf Life:

Test Conditions		**Post Test Requirements at +20°C**	
Duration	1000 Hours	**Leakage Current**	≤ initial specified value
Ambient Temperature	+105°C	**Capacitance Change**	±20% of initial measured value
Applied Voltage	—	**tan δ**	≤ 200% initial specified value

WV (VDC)	**Cap. µF**	**D.C.L. (+20°C) (µA) max.**	**tan δ max.**	**Ripple Current (mA) rms**	**Dimensions (mm)**				**Digi-Key Part No.**	**Pricing**						**Panasonic Part No.**
					øD	**L**	**P**	**ød**		**1**	**10**	**100**	**500**	**1,000**	**5,000**	
6.3	100	6.3	0.28	91	5	11	2.0	0.5	P5505-ND	.33	1.56	10.54	35.70	54.00	46.00/M	ECA-0JHG101
	220	13.8	0.28	140	5	11	2.0	0.5	P5506-ND	.32	1.60	11.28	38.95	62.00	53.00/M	ECA-0JHG221
	330	20.7	0.28	190	6.3	11.2	2.5	0.5	P5507-ND	.40	2.07	14.58	50.35	80.00	69.00/M	ECA-0JHG331
	470	29.6	0.28	230	6.3	11.2	2.5	0.5	P5508-ND	.40	2.31	16.50	59.40	92.00	86.00/M	ECA-0JHG471
	1000	63.0	0.28	380	8	11.5	3.5	0.6	P5509-ND	.57	3.36	24.00	86.40	134.00	125.00/M	ECA-0JHG102
	2200	138.6	0.30	710	10	16	5.0	0.6	P5510-ND	.83	4.67	34.31	124.10	197.00	190.00/M	ECA-0JHG222
	3300	207.9	0.32	840	10	20	5.0	0.6	P5511-ND	1.13	6.43	47.24	170.85	271.00	261.00/M	ECA-0JHG332
	4700	296.1	0.34	1090	12.5	20	5.0	0.6	P5512-ND	1.28	7.35	55.13	196.00	326.00	314.00/M	ECA-0JHG472
	6800	428.4	0.38	1350	12.5	25	5.0	0.6	P5513-ND	1.74	9.93	74.48	264.80	440.00	424.00/M	ECA-0JHG682
	10000	630.0	0.46	1650	16	25	7.5	0.8	P5514-ND	2.18	12.56	94.80	355.50	616.00	597.00/M	ECA-0JHG103
	15000	945.0	0.56	2010	16	31.5	7.5	0.8	P5515-ND	3.12	17.99	135.80	509.25	883.00	856.00/M	ECA-0JHG153
	22000	1386.0	0.70	2350	18	35.5	7.5	0.8	P5516-ND	4.47	25.71	194.00	727.50	1261.00	1222.00/M	ECA-0JHG223
10	100	10.0	0.24	110	5	11	2.0	0.5	P5517-ND	.28	1.44	10.18	35.15	56.00	48.00/M	ECA-1AHG101
	220	22.0	0.24	170	6.3	11.2	2.5	0.5	P5518-ND	.36	1.87	13.20	45.60	72.00	62.00/M	ECA-1AHG221
	330	33.0	0.24	200	6.3	11.2	2.5	0.5	P5519-ND	.40	2.21	15.75	56.70	88.00	82.00/M	ECA-1AHG331
	470	47.0	0.24	250	8	11.5	3.5	0.6	P5520-ND	.48	2.80	20.00	72.00	112.00	104.00/M	ECA-1AHG471
	1000	100.0	0.24	460	10	12.5	5.0	0.6	P5521-ND	.66	4.48	32.90	119.00	189.00	182.00/M	ECA-1AHG102
	2200	220.0	0.26	760	10	20	5.0	0.6	P5522-ND	1.06	5.95	43.71	158.10	251.00	242.00/M	ECA-1AHG222
	3300	330.0	0.28	1000	12.5	20	5.0	0.6	P5523-ND	1.22	7.26	54.45	193.60	322.00	310.00/M	ECA-1AHG332
	4700	470.0	0.30	1260	12.5	25	5.0	0.6	P5524-ND	1.66	9.75	73.13	260.00	432.00	416.00/M	ECA-1AHG472
	6800	680.0	0.34	1570	16	25	7.5	0.8	P5525-ND	2.32	13.20	99.00	352.00	585.00	563.00/M	ECA-1AHG682
	10000	1000.0	0.42	1890	16	31.5	7.5	0.8	P5526-ND	2.78	16.01	120.80	453.00	785.00	761.00/M	ECA-1AHG103
	15000	1500.0	0.52	2180	18	35.5	7.5	0.8	P5527-ND	4.30	24.75	186.80	700.50	1214.00	1177.00/M	ECA-1AHG153
16	47	7.5	0.20	77	5	11	2.0	0.5	P5528-ND	.33	1.56	10.54	35.70	54.00	46.00/M	ECA-1CHG470
	100	16.0	0.20	110	5	11	2.0	0.5	P5529-ND	.32	1.60	11.28	38.95	62.00	53.00/M	ECA-1CHG101
	220	35.2	0.20	180	6.3	11.2	2.5	0.5	P5530-ND	.40	2.21	15.75	56.70	88.00	82.00/M	ECA-1CHG221
	330	52.8	0.20	260	8	11.5	3.5	0.6	P5531-ND	.48	2.63	18.75	67.50	105.00	98.00/M	ECA-1CHG331
	470	75.2	0.20	310	8	11.5	3.5	0.6	P5532-ND	.58	3.26	23.25	83.70	130.00	121.00/M	ECA-1CHG471
	1000	160.0	0.20	560	10	16	5.0	0.6	P5533-ND	.82	4.61	33.84	122.40	194.00	187.00/M	ECA-1CHG102
	2200	352.0	0.22	920	12.5	20	5.0	0.6	P5534-ND	1.28	7.35˜	55.13	196.00	326.00	314.00/M	ECA-1CHG222
	3300	528.0	0.24	1170	12.5	25	5.0	0.6	P5535-ND	1.78	10.14	76.05	270.40	450.00	433.00/M	ECA-1CHG332
	4700	752.0	0.26	1480	16	25	7.5	0.8	P5536-ND	2.13	12.27	92.60	347.25	602.00	583.00/M	ECA-1CHG472
	6800	1088.0	0.30	1780	16	31.5	7.5	0.8	P5537-ND	2.90	17.33	130.80	490.50	850.00	824.00/M	ECA-1CHG682
	10000	1600.0	0.38	2060	18	35.5	7.5	0.8	P5538-ND	4.25	24.46	184.60	692.25	1200.00	1163.00/M	ECA-1CHG103
25	47	11.7	0.16	91	5	11	2.0	0.5	P5539-ND	.28	1.44	10.18	35.15	56.00	48.00/M	ECA-1EHG470
	100	25.0	0.16	130	6.3	11.2	2.5	0.5	P5540-ND	.36	1.95	13.75	47.50	75.00	65.00/M	ECA-1EHG101
	220	55.0	0.16	230	8	11.5	3.5	0.6	P5541-ND	.48	2.80	20.00	72.00	112.00	104.00/M	ECA-1EHG221
	330	82.5	0.16	310	8	11.5	3.5	0.6	P5542-ND	.58	3.26	23.25	83.70	130.00	121.00/M	ECA-1EHG331
	470	117.5	0.16	380	10	12.5	5.0	0.6	P5543-ND	.70	4.16	30.55	110.50	176.00	169.00/M	ECA-1EHG471
	1000	250.0	0.16	680	10	20	5.0	0.6	P5544-ND	1.12	6.37	46.77	169.15	269.00	259.00/M	ECA-1EHG102
	2200	550.0	0.18	1090	12.5	25	5.0	0.6	P5545-ND	1.69	10.02	75.15	267.20	444.00	428.00/M	ECA-1EHG222
	3300	825.0	0.20	1400	16	25	7.5	0.8	P5546-ND	2.10	12.53	94.60	354.75	615.00	596.00/M	ECA-1EHG332
	4700	1175.0	0.22	1750	16	31.5	7.5	0.8	P5547-ND	3.08	20.67	156.00	585.00	1014.00	983.00/M	ECA-1EHG472
	6800	1700.0	0.26	2040	18	35.5	7.5	0.8	P5548-ND	4.44	25.57	193.00	723.75	1255.00	1216.00/M	ECA-1EHG682
35	33	11.5	0.14	75	5	11	2.0	0.5	P5549-ND	.28	1.44	10.18	35.15	56.00	48.00/M	ECA-1VHG330
	47	16.4	0.14	90	5	11	2.0	0.5	P5550-ND	.32	1.60	11.28	38.95	62.00	53.00/M	ECA-1VHG470
	100	35.0	0.14	150	6.3	11.2	2.5	0.5	P5551-ND	.40	2.21	15.75	56.70	88.00	82.00/M	ECA-1VHG101
	220	77.0	0.14	270	8	11.5	3.5	0.6	P5552-ND	.58	3.26	23.25	83.70	130.00	121.00/M	ECA-1VHG221
	330	115.5	0.14	350	10	12.5	5.0	0.6	P5553-ND	.70	3.94	28.91	104.55	166.00	160.00/M	ECA-1VHG331
	470	164.5	0.14	460	10	16	5.0	0.6	P5554-ND	.86	5.44	39.95	144.50	230.00	221.00/M	ECA-1VHG471
	1000	350.0	0.14	810	12.5	20	5.0	0.6	P5555-ND	1.42	8.10	60.75	216.00	359.00	346.00/M	ECA-1VHG102
	2200	770.0	0.16	1260	16	25	7.5	0.8	P5556-ND	2.20	12.67	95.60	358.50	621.00	602.00/M	ECA-1VHG222
	3300	1155.0	0.18	1610	16	31.5	7.5	0.8	P5557-ND	3.13	18.02	136.00	510.00	884.00	857.00/M	ECA-1VHG332
	4700	1645.0	0.20	1910	18	35.5	7.5	0.8	P5558-ND	4.70	27.06	204.20	765.75	1327.00	1286.00/M	ECA-1VHG472
50	0.1	3.0	0.12	1.1	5	11	2.0	0.5	P5559-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHG0R1
	0.22	3.0	0.12	2.3	5	11	2.0	0.5	P5560-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHGR22
	0.33	3.0	0.12	3.5	5	11	2.0	0.5	P5561-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHGR33
	0.47	3.0	0.12	5	5	11	2.0	0.5	P5562-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHGR47
	1.0	3.0	0.12	10	5	11	2.0	0.5	P5563-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHG010
	2.2	3.0	0.12	18	5	11	2.0	0.5	P5564-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHG2R2
	3.3	3.0	0.12	22	5	11	2.0	0.5	P5565-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHG3R3
	4.7	3.0	0.12	26	5	11	2.0	0.5	P5566-ND*	.32	1.52	10.23	34.65	53.00	45.00/M	ECA-1HHG4R7
	10	5.0	0.12	39	5	11	2.0	0.5	P5567-ND*	.33	1.66	11.16	37.80	58.00	49.00/M	ECA-1HHG100
	22	11.0	0.12	65	5	11	2.0	0.5	P5568-ND*	.28	1.48	10.45	36.10	57.00	49.00/M	ECA-1HHG220
	33	16.5	0.12	90	5	11	2.0	0.5	P5569-ND*	.32	1.60	11.28	38.95	62.00	53.00/M	ECA-1HHG330
	47	23.5	0.12	110	6.3	11.2	2.5	0.5	P5570-ND*	.37	1.95	13.75	47.50	75.00	65.00/M	ECA-1HHG470
	100	50.0	0.12	180	8	11.5	3.5	0.6	P5571-ND*	.48	2.63	18.75	67.50	105.00	98.00/M	ECA-1HHG101
	220	110.0	0.12	330	10	12.5	5.0	0.6	P5572-ND*	.70	4.10	30.08	108.80	173.00	166.00/M	ECA-1HHG221
	330	165.0	0.12	410	10	16	5.0	0.6	P5573-ND*	.93	5.76	42.30	153.00	243.00	234.00/M	ECA-1HHG331
	470	235.0	0.12	530	10	20	5.0	0.6	P5574-ND*	1.20	8.00	58.75	212.50	338.00	325.00/M	ECA-1HHG471
	1000	500.0	0.12	950	12.5	25	5.0	0.6	P5575-ND*	1.87	12.00	90.00	320.00	532.00	512.00/M	ECA-1HHG102
	2200	1100.0	0.14	1470	16	31.5	7.5	0.8	P5576-ND*	3.13	22.26	168.00	630.00	1092.00	1058.00/M	ECA-1HHG222
	3300	1650.0	0.16	1770	18	35.5	7.5	0.8	P5577-ND	4.81	28.67	216.40	811.50	1407.00	1363.00/M	ECA-1HHG332

(Continued)

Panasonic® NHG Series Radial Lead Aluminum Electrolytic Capacitors *(Cont.)*

WV (VDC)	Cap. µF	D.C.L. (±20°C) (µA) max.	tan δ max.	Ripple Current (mA) rms	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
					øD	L	P	ød		1	10	100	500	1,000	5,000	
63	10	6.3	0.10	46	5	11	2.0	0.5	P5578-ND	.30	1.52	10.73	37.05	59.00	51.00/M	ECA-1JHG100
	22	13.8	0.10	71	5	11	2.0	0.5	P5579-ND	.32	1.60	11.28	38.95	62.00	53.00/M	ECA-1JHG220
	33	20.7	0.10	100	6.3	11.2	2.5	0.5	P5580-ND	.40	2.07	14.58	50.35	80.00	69.00/M	ECA-1JHG330
	47	29.6	0.10	120	6.3	11.2	2.5	0.5	P5581-ND	.43	2.42	17.25	62.10	97.00	90.00/M	ECA-1JHG470
	100	63.0	0.10	215	10	12.5	5.0	0.6	P5582-ND	.61	4.06	29.00	104.40	162.00	151.00/M	ECA-1JHG101
	220	138.6	0.10	335	10	16	5.0	0.6	P5583-ND	.92	5.15	37.84	136.85	217.00	209.00/M	ECA-1JHG221
	330	207.9	0.10	510	10	20	5.0	0.6	P5584-ND	1.21	6.82	50.06	181.05	288.00	277.00/M	ECA-1JHG331
	470	296.1	0.10	640	12.5	20	5.0	0.6	P5585-ND	1.50	8.58	64.35	228.80	380.00	366.00/M	ECA-1JHG471
	1000	630.0	0.10	930	16	25	7.5	0.8	P5586-ND	2.43	13.97	105.40	395.25	685.00	664.00/M	ECA-1JHG102
	2200	1386.0	0.12	1610	18	35.5	7.5	0.8	P5587-ND	4.92	28.30	213.60	801.00	1388.00	1346.00/M	ECA-1JHG222
100	0.47	3.0	0.08	9	5	11	2.0	0.5	P5588-ND	.29	1.48	10.45	36.10	57.00	49.00/M	ECA-2AHGR47
	1.0	3.0	0.08	14	5	11	2.0	0.5	P5589-ND	.29	1.48	10.45	36.10	57.00	49.00/M	ECA-2AHG010
	2.2	3.0	0.08	21	5	11	2.0	0.5	P5590-ND	.30	1.56	11.00	38.00	60.00	52.00/M	ECA-2AHG2R2
	3.3	3.3	0.08	31	5	11	2.0	0.5	P5591-ND	.30	1.56	11.00	38.00	60.00	52.00/M	ECA-2AHG3R3
	4.7	4.7	0.08	38	5	11	2.0	0.5	P5592-ND	.30	1.56	11.00	38.00	60.00	52.00/M	ECA-2AHG4R7
	10	10.0	0.08	54	6.3	11.2	2.5	0.5	P5593-ND	.40	2.11	14.85	51.30	81.00	70.00/M	ECA-2AHG100
	22	22.0	0.08	93	6.3	11.2	2.5	0.5	P5594-ND	.46	2.56	18.25	65.70	102.00	95.00/M	ECA-2AHG220
	33	33.0	0.08	130	8	11.5	3.5	0.6	P5595-ND	.57	3.22	23.00	82.80	129.00	120.00/M	ECA-2AHG330
	47	47.0	0.08	165	10	12.5	5.0	0.6	P5596-ND	.70	3.96	28.25	101.70	158.00	147.00/M	ECA-2AHG470
	100	100.0	0.08	265	10	20	5.0	0.6	P5597-ND	1.11	6.30	46.30	167.45	266.00	256.00/M	ECA-2AHG101
	220	220.0	0.08	440	12.5	25	5.0	0.6	P5598-ND	1.68	9.60	72.00	256.00	426.00	410.00/M	ECA-2AHG221
	330	330.0	0.08	540	16	25	7.5	0.8	P5599-ND	2.30	13.14	98.55	350.40	583.00	561.00/M	ECA-2AHG331
	470	470.0	0.08	715	16	25	7.5	0.8	P5850-ND	2.92	16.77	126.60	474.75	823.00	798.00/M	ECA-2AHG471
	1000	1000.0	0.08	985	18	35.5	7.5	0.8	P5851-ND	5.93	34.16	257.80	966.75	1676.00	1624.00/M	ECA-2AHG102
160	1.0	19.6	0.15	17	6.3	11.2	2.5	0.5	P5852-ND	.47	2.10	15.00	54.00	84.00	78.00/M	ECA-2CHG010
	2.2	31.1	0.15	25	6.3	11.2	2.5	0.5	P5853-ND	.52	2.10	15.00	54.00	84.00	78.00/M	ECA-2CHG2R2
	3.3	41.6	0.15	36	6.3	11.2	2.5	0.5	P5854-ND	.56	2.10	15.00	54.00	84.00	78.00/M	ECA-2CHG3R3
	4.7	55.1	0.15	43	6.3	11.2	2.5	0.5	P5855-ND	.61	2.10	15.00	54.00	84.00	78.00/M	ECA-2CHG4R7
	10	106.0	0.15	70	10	12.5	5.0	0.6	P5856-ND	.72	3.71	27.26	98.60	157.00	151.00/M	ECA-2CHG100
	22	221.0	0.15	130	10	20	5.0	0.6	P5857-ND	1.01	5.15	37.84	136.85	217.00	209.00/M	ECA-2CHG220
	33	326.0	0.15	180	10	20	5.0	0.6	P5858-ND	1.16	4.86	36.45	129.60	215.00	207.00/M	ECA-2CHG330
	47	461.0	0.15	220	12.5	20	5.0	0.6	P5859-ND	1.52	7.17	53.78	191.20	318.00	306.00/M	ECA-2CHG470
	100	970.0	0.15	335	16	25	7.5	0.8	P5860-ND	2.24	11.79	88.43	314.40	523.00	503.00/M	ECA-2CHG101
	220	2122.0	0.15	540	16	31.5	7.5	0.8	P5861-ND	3.35	15.85	119.60	448.50	777.00	753.00/M	ECA-2CHG221
	330	3178.0	0.15	705	18	31.5	7.5	0.8	P5862-ND	5.03	29.81	225.00	843.75	1463.00	1418.00/M	ECA-2CHG331
250	1.0	25.0	0.15	17	6.3	11.2	2.5	0.5	P5863-ND	.56	2.10	15.00	54.00	84.00	78.00/M	ECA-2EHG010
	2.2	43.0	0.15	29	6.3	11.2	2.5	0.5	P5864-ND	.58	2.10	15.00	54.00	84.00	78.00/M	ECA-2EHG2R2
	3.3	59.5	0.15	42	8	11.5	3.5	0.6	P5865-ND	.65	2.72	19.98	72.25	115.00	111.00/M	ECA-2EHG3R3
	4.7	80.5	0.15	50	8	11.5	3.5	0.6	P5866-ND	.75	3.01	22.09	79.90	127.00	122.00/M	ECA-2EHG4R7
	10	160.0	0.15	88	10	16	5.0	0.6	P5867-ND	1.00	4.58	33.61	121.55	193.00	186.00/M	ECA-2EHG100
	22	340.0	0.15	155	12.5	20	5.0	0.6	P5868-ND	1.34	7.17	53.78	191.20	318.00	306.00/M	ECA-2EHG220
	33	505.0	0.15	190	12.5	20	5.0	0.6	P5869-ND	1.62	7.95	59.63	212.00	352.00	339.00/M	ECA-2EHG330
	47	715.0	0.15	230	12.5	25	5.0	0.6	P5870-ND	2.13	10.26	76.95	273.60	455.00	438.00/M	ECA-2EHG470
	100	1510.0	0.15	365	16	31.5	7.5	0.8	P5871-ND	3.26	15.85	119.60	448.50	777.00	753.00/M	ECA-2EHG101
450	1.0	37.0	0.20	18	8	11.5	3.5	0.6	P5872-ND	.78	3.26	23.97	86.70	138.00	133.00/M	ECA-2WHG010
	2.2	69.4	0.20	29	10	12.5	5.0	0.6	P5873-ND	.87	4.03	29.61	107.10	170.00	164.00/M	ECA-2WHG2R2
	3.3	99.1	0.20	41	10	16	5.0	0.6	P5874-ND	1.14	4.93	36.19	130.90	208.00	200.00/M	ECA-2WHG3R3
	4.7	136.0	0.20	49	10	20	5.0	0.6	P5875-ND	1.48	6.24	46.80	166.40	277.00	266.00/M	ECA-2WHG4R7
	10	280.0	0.20	75	12.5	20	5.0	0.6	P5876-ND	2.02	8.82	66.15	235.20	391.00	376.00/M	ECA-2WHG100
	22	604.0	0.20	115	16	25	7.5	0.8	P5877-ND	2.73	12.67	95.60	358.50	621.00	602.00/M	ECA-2WHG220
	33	901.0	0.20	155	16	31.5	7.5	0.8	P5878-ND	3.68	17.41	131.40	492.75	854.00	828.00/M	ECA-2WHG330

* **NHG-KIT-ND** ***Digi-Key® NHG Series Capacitors Kit*** 10 each of values denoted. 180 total pieces. Included notebook style storage case and bin storage guide **$69.95**

Panasonic® Z Series Miniature Aluminum Electrolytic Capacitors

±20%, Low Leakage, Low Impedance

SPECIFICATIONS:

• **Operating Temperature:** -40°C to +85°C • **Rated Working Voltage:** 6.3 to 50VDC • **Rated Capacitance:** 0.1 to 2200µF • **Capacitance Tolerance:** ±20% • **Leakage Current:** I = 0.002CV + 1 (mA) max.; Where, I: DC leakage current (µA) C: rated capacitance (µF), V: DC rated working voltage (V). Leakage current is measured after 2-minute application of the rated DC working voltage. • **Surge Voltage:** The listed surge voltage is applied to the capacitor in series with 1,000 ohms resistor at a cycle of 0.5 minute "ON" and 4.5 minute "OFF" repeating 1,000 times at 25°C ±10°C. After the test, the capacitor should meet the following limits:

Working Voltage	Surge Voltage
10 V DC	13 V DC
50	63

Capacitance change	Within ±10% of the initial measured value
tan ∂	Less than 150% of the initial specified value
DC leakage current	Less than the initial specified value

• **tan ∂. (Dissipation Factor) Max.**

Working Voltage	tan ∂	D.F.
10V DC	0.17	17
50	0.08	8

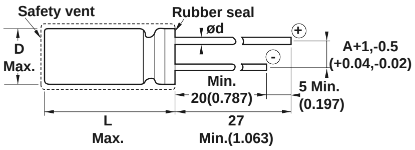
0.06 for 1µF or less.

• **Low Temperature Stability:** Maximum impedance ratio against +20°C at 120Hz

Working Voltage	-25°C to +20°C	-40°C to +20°C
10V	2	4
50	1.5	2

• **Load Life:** After 2,000 hour application of DC working voltage at +85°C with specified RMS ripple current, the measurements should meet the following requirements:

Capacitance change	Within ±20% of the initial measured value
tan ∂	Less than 200% of the initial specified value
DC leakage current	Less than the initial specified value



PANASONIC Z
CROSS REFERENCES

IC: RLR
Sprague: 30D
UCC: SX

Not recommended for new designs.

Rating		Dimensions mm (inch)				Max. RMS Ripple Current (mA) @ 120 Hz, 85°C	Max. Leakage Current µA	Digi-Key Part No.	Price Each				Panasonic Part No.
WV DC	Cap. µF	D	L	A	d				1	10	100	1,000	
10	2200	16.0 (.630)	31.5 (1.299)	7.5 (.295)	0.8 (.032)	850	45.0	P6614-ND	1.43	1.08	.81	.48	ECE-A10Z2200
50	0.47	5.0 (.197)	11.2 (0.433)	2.0 (.079)	0.5 (.020)	10	1.1	P6642-ND	.32	.22	.16	.09	ECE-A50ZR47
	0.68	5.0 (.197)	11.5 (0.433)	2.0 (.079)	0.5 (.020)	10	1.1	P6643-ND	.32	.22	.16	.09	ECE-A50ZR68
	3.3	5.0 (.197)	11 (0.433)	2.0 (.079)	0.5 (.020)	25	1.4	P6647-ND	.32	.22	.16	.09	ECE-A50Z3R3

Panasonic® FC Series Radial Lead Aluminum Electrolytic Capacitors

FEATURES:
- Low impedance • Long life: 1000 ~ 5000 hours at +105°C

SPECIFICATIONS:
• **Operating Temperature Range:** -55 to +105°C • **Rated Working Voltage Range:** 6.3 to 100V DC • **Nominal Capacitance Range:** 1.0 to 15000µF • **Capacitance Tolerance:** ±20% (120Hz, +20°C) • **Leakage Current:** I ≤ 0.01CV or 3 (µA) whichever is greater measured after 2 minutes application of rated working voltage at +20°C

- **tan** δ (120 Hz, +20°C)

Working volt. (V)	6.3	10	16	25	35	50	63	100
tan δ max.	0.22	0.19	0.16	0.14	0.12	0.10	0.08	0.07

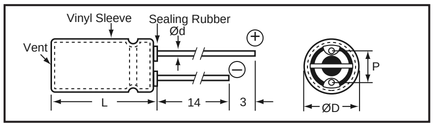
For capacitance value > 1000µF, add 0.02 per every 1000µF.

- **Impedance at High Frequency:** Refer to standard product table (100kHz, +20°C)
- **Ripple Current:** Refer to standard product table (100kHz, +105°C)

Endurance:
Test Conditions — Duration: 1000 hours (for Ø4 ~ Ø6.3mm), 2000 hours (for Ø8mm), 3000 hours (for Ø10mm), 5000 hours (for Ø12.5mm~) • **Ambient Temperature:** +105°C ±2°C • **Applied Voltage:** DC voltage with maximum permissible ripple current specified at +105°C (the sum of the DC voltage and super-imposed peak AC voltage for maximum permissible ripple current should be equal to rated DC working voltage.)
Post Test Requirements at +20°C — Leakage Current: ≤ Initial specified value • **Capacitance change:** ±20% of initial measured value • **tan** δ: ≤ 200% of initial specified value
Shelf Life:
Test Conditions — Duration: 1000 hours • **Ambient Temperature:** +105°C ±2°C • **Applied Voltage:** (none)
Post Test Requirements at +20°C — Leakage Current: ≤ Initial specified value • **Capacitance change:** ±20% of initial measured value • **tan** δ: ≤ 200% of initial specified value
• **Body Color:** Black Blue • **Marking Color:** Gold

Frequency Correction Factor for Ripple Current

W.V. (V DC)	**Frequency (Hz)** / **Cap. (µF)**	**60**	**120**	**1K**	**10K**	**100K**
6.3 ~ 100	1.0 ~ 330	0.55	0.65	0.85	0.90	1.00
	390 ~ 1000	0.70	0.75	0.90	0.95	1.00
	1200 ~ 2200	0.75	0.80	0.90	0.95	1.00
	2700 ~ 15000	0.80	0.85	0.95	1.00	1.00



W.V. (V)	**Cap. (µF)**	**Dimensions (mm)**				**Leakage Current (+20°C) (2 min.) (µA) Max**	**Impedance (100kHz) (+20°C) (Ω) Max**	**Ripple Current (+105°C) (mA) rms max.**	**Life Time (hours)**	**Digi-Key Part No.**	**Price Each**				**Panasonic Part No.**
		ØD	**L**	**P**	**Ød**						**1**	**10**	**100**	**1,000**	
6.3	68	4	11	1.5	0.45	4.28	1.30	120	1000	P11165-ND	.44	.30	.21	.12	EEU-FC0J680
	100	5	11	2.0	0.5	6.3	0.80	175	1000	P10195-ND	.46	.19	.14	.08	EEU-FC0J101
	150	5	15	2.0	0.5	9.4	0.50	235	1000	P10196-ND	.47	.32	.22	.12	EEU-FC0J151
	220	6.3	11.2	2.0	0.50	13.86	0.350	290	1000	P11166-ND	.51	.26	.18	.10	EEU-FC0J221
	330	6.3	11.2	2.5	0.5	20.7	0.35	290	1000	P10197-ND	.42	.23	.17	.10	EEU-FC0J331S
	330	6.3	15	2.5	0.50	20.79	0.250	400	1000	P11167-ND	.60	.40	.28	.16	EEU-FC0J331
	390	8	11.5	3.5	0.60	24.57	0.117	555	2000	P11168-ND	.76	.39	.28	.15	EEU-FC0J391
	470	8	11.5	3.5	0.60	29.61	0.117	555	2000	P11169-ND	.76	.39	.28	.15	EEU-FC0J471
	560	8	11.5	3.5	0.60	35.28	0.117	555	2000	P11170-ND	.76	.39	.28	.15	EEU-FC0J561
	820	10	12.5	5.0	0.60	51.66	0.090	755	3000	P11171-ND	1.01	.55	.39	.22	EEU-FC0J821
	820	8	15	3.5	0.6	51.6	0.085	730	2000	P10198-ND	.69	.40	.30	.17	EEU-FC0J821L
	1000	10	12.5	5.0	0.6	63.0	0.090	755	3000	P10199-ND	.76	.46	.34	.19	EEU-FC0J102
	1200	10	16	5.0	0.6	75.6	0.068	1050	3000	P10201-ND	.83	.51	.38	.22	EEU-FC0J122
	1200	8	20	3.5	0.6	75.6	0.065	995	2000	P10200-ND	.78	.48	.36	.21	EEU-FC0J122L
	1500	12.5	15	5.0	0.6	94.5	0.065	1205	5000	P10203-ND	1.13	.77	.57	.33	EEU-FC0J152S
	1500	10	20	5.0	0.6	94.5	0.052	1220	3000	P10202-ND	.99	.61	.45	.26	EEU-FC0J152
	1800	10	25	5.0	0.60	113.4	0.045	1440	3000	P11172-ND	1.43	.82	.58	.32	EEU-FC0J182
	2200	16	15	7.5	0.8	138.6	0.043	1690	5000	P10205-ND	1.48	1.02	.77	.46	EEU-FC0J222S
	2200	10	25	5.0	0.6	138.6	0.045	1440	3000	P10204-ND	1.07	.68	.50	.29	EEU-FC0J222
	2700	16	15	7.5	0.80	170.1	0.043	1690	5000	P11175-ND	2.13	1.33	.94	.51	EEU-FC0J272S
	2700	12.5	20	5.0	0.60	170.1	0.038	1655	5000	P11174-ND	1.86	1.10	.78	.43	EEU-FC0J272
	2700	10	30	5.0	0.60	170.1	0.035	1815	3000	P11173-ND	1.67	1.06	.75	.41	EEU-FC0J272L
	3300	18	15	7.5	0.8	207.9	0.038	2000	5000	P10207-ND	1.97	1.38	1.04	.62	EEU-FC0J332S
	3300	12.5	20	5.0	0.6	207.9	0.038	1655	5000	P10206-ND	1.29	.85	.64	.38	EEU-FC0J332
	3900	12.5	25	5.0	0.6	245.7	0.030	1945	5000	P10208-ND	1.57	.94	.71	.42	EEU-FC0J392
	4700	16	20	7.5	0.8	296.1	0.029	2205	5000	P10210-ND	1.88	1.23	.92	.55	EEU-FC0J472S
	4700	12.5	30	5.0	0.8	296.1	0.025	2310	5000	P10209-ND	1.72	1.05	.79	.47	EEU-FC0J472
	5600	16	20	7.5	0.80	352.8	0.029	2205	5000	P11176-ND	2.70	1.59	1.12	.62	EEU-FC0J562
	5600	12.5	35	5.0	0.8	352.8	0.022	2510	5000	P10211-ND	1.97	1.41	1.06	.63	EEU-FC0J562L
	6800	18	20	7.5	0.8	428.4	0.028	2490	5000	P10214-ND	2.23	1.53	1.15	.75	EEU-FC0J682S
	6800	16	25	7.5	0.8	428.4	0.022	2555	5000	P10213-ND	2.37	1.56	1.17	.70	EEU-FC0J682
	6800	12.5	40	5.0	0.8	428.4	0.018	2655	5000	P10212-ND	2.24	1.61	1.21	.72	EEU-FC0J682L
	8200	16	31.5	7.5	0.80	516.6	0.018	3010	5000	P11177-ND	4.15	2.34	1.65	.90	EEU-FC0J822
	10000	18	25	7.5	0.8	630.0	0.020	2740	5000	P10216-ND	2.75	1.88	1.42	.92	EEU-FC0J103S
	10000	16	35.5	7.5	0.8	630.0	0.016	3150	5000	P10215-ND	2.75	1.96	1.48	.96	EEU-FC0J103
	12000	18	31.5	7.5	0.80	756.0	0.016	3635	5000	P11178-ND	5.19	3.32	2.34	1.28	EEU-FC0J123
	12000	16	40	7.5	0.80	756.0	0.015	3360	5000	P11179-ND	5.30	3.24	2.28	1.25	EEU-FC0J123L
	15000	18	35.5	7.5	0.8	945.0	0.015	3680	5000	P10217-ND	3.57	2.30	1.74	1.13	EEU-FC0J153
10	47	4	11	1.5	0.45	4.7	1.30	120	1000	P11180-ND	.44	.30	.21	.12	EEU-FC1A470
	82	5	11	2.0	0.5	8.2	0.80	175	1000	P10218-ND	.46	.19	.14	.08	EEU-FC1A820
	100	5	11	2.0	0.50	10.0	0.80	175	1000	P11181-ND	.47	.19	.14	.08	EEU-FC1A101S
	100	5	15	2.0	0.5	10.0	0.50	235	1000	P10219-ND	.47	.32	.22	.12	EEU-FC1A101
	180	6.3	11.2	2.5	0.50	18.0	0.35	290	1000	P11182-ND	.51	.26	.18	.10	EEU-FC1A181
	220	6.3	11.2	2.5	0.5	22.0	0.35	290	1000	P10220-ND	.42	.23	.17	.10	EEU-FC1A221S
	220	6.3	15	2.5	0.50	22.0	0.25	400	1000	P11183-ND	.60	.40	.28	.16	EEU-FC1A221
	330	8	11.5	3.5	0.60	33.0	0.117	555	2000	P11184-ND	.76	.39	.28	.15	EEU-FC1A331
	390	8	11.5	3.5	0.60	39.0	0.117	555	2000	P11185-ND	.76	.39	.28	.15	EEU-FC1A391
	470	8	11.5	3.5	0.6	47.0	0.117	555	2000	P10221-ND	.63	.35	.25	.14	EEU-FC1A471
	560	10	12.5	5.0	0.60	56.0	0.09	755	3000	P11186-ND	1.01	.55	.39	.22	EEU-FC1A561
	680	10	12.5	5.0	0.6	68.0	0.090	755	3000	P10223-ND	.76	.47	.35	.20	EEU-FC1A681
	680	8	15	3.5	0.6	68.0	0.085	730	2000	P10222-ND	.69	.40	.30	.17	EEU-FC1A681L
	820	10	16	5.0	0.60	82.0	0.068	1050	3000	P11187-ND	1.11	.62	.44	.24	EEU-FC1A821
	1000	10	16	5.0	0.6	100.0	0.068	1050	3000	P10225-ND	.83	.53	.39	.23	EEU-FC1A102
	1000	8	20	3.5	0.6	82.0	0.065	995	2000	P10224-ND	.78	.48	.36	.21	EEU-FC1A102L
	1200	12.5	15	5.0	0.6	120.0	0.065	1205	5000	P10227-ND	1.13	.77	.57	.33	EEU-FC1A122S
	1200	10	20	5.0	0.6	120.0	0.052	1220	3000	P10226-ND	.99	.62	.46	.27	EEU-FC1A122
	1500	10	25	5.0	0.6	150.0	0.045	1440	3000	P10228-ND	1.07	.68	.50	.29	EEU-FC1A152
	1800	16	15	7.5	0.8	180.0	0.043	1690	5000	P10229-ND	1.48	1.02	.77	.46	EEU-FC1A182S
	1800	12.5	20	5.0	0.60	180.0	0.038	1655	5000	P11188-ND	1.86	1.10	.78	.43	EEU-FC1A182
	2200	12.5	20	5.0	0.6	220.0	0.038	1655	5000	P10230-ND	1.29	.85	.64	.38	EEU-FC1A222
	2200	10	30	5.0	0.60	220.0	0.035	1815	3000	P11189-ND	1.67	1.06	.75	.41	EEU-FC1A222L
	2700	18	15	7.5	0.8	270.0	0.038	2000	5000	P10232-ND	1.97	1.38	1.04	.62	EEU-FC1A272S
	2700	12.5	25	5.0	0.6	270.0	0.030	1945	5000	P10231-ND	1.57	.98	.74	.44	EEU-FC1A272
	3300	16	20	7.5	0.8	330.0	0.029	2205	5000	P10234-ND	1.88	1.23	.92	.55	EEU-FC1A332S
	3300	12.5	30	5.0	0.8	330.0	0.025	2310	5000	P10233-ND	1.72	1.05	.79	.47	EEU-FC1A332
	3900	16	20	7.5	0.80	390.0	0.029	2205	5000	P11190-ND	2.83	1.59	1.12	.62	EEU-FC1A392
	3900	12.5	35	5.0	0.8	390.0	0.022	2510	5000	P10235-ND	1.97	1.41	1.06	.63	EEU-FC1A392L
	4700	16	25	7.5	0.8	470.0	0.022	2555	5000	P10237-ND	2.37	1.44	1.08	.64	EEU-FC1A472
	4700	12.5	40	5.0	0.8	470.0	0.018	2655	5000	P10236-ND	2.24	1.67	1.26	.74	EEU-FC1A472L
	5600	18	20	7.5	0.8	560.0	0.028	2490	5000	P10238-ND	2.23	1.53	1.15	.75	EEU-FC1A562S
	5600	16	25	7.5	0.80	560.0	0.022	2555	5000	P11191-ND	3.41	1.86	1.32	.72	EEU-FC1A562
	6800	18	25	7.5	0.8	680.0	0.020	2740	5000	P10240-ND	2.65	1.88	1.42	.92	EEU-FC1A682S
	6800	16	31.5	7.5	0.8	680.0	0.018	3010	5000	P10239-ND	2.52	1.59	1.20	.78	EEU-FC1A682
	8200	18	31.5	7.5	0.80	820.0	0.016	3635	5000	P11193-ND	5.19	3.32	2.34	1.28	EEU-FC1A822
	8200	16	35.5	7.5	0.80	820.0	0.016	3150	5000	P11192-ND	4.51	2.88	2.03	1.11	EEU-FC1A822L
	10000	18	35.5	7.5	0.8	1000.0	0.015	3680	5000	P10241-ND	3.57	2.30	1.74	1.13	EEU-FC1A103
	12000	18	40	7.5	0.80	1200.0	0.014	3735	5000	P11194-ND	6.72	4.24	2.99	1.64	EEU-FC1A123
16	39	4	11	1.5	0.45	6.24	1.30	120	1000	P11195-ND	.44	.30	.21	.12	EEU-FC1C390
	47	5	11	2.0	0.50	7.52	0.80	175	1000	P11196-ND	.46	.19	.14	.08	EEU-FC1C470
	56	5	11	2.0	0.50	8.96	0.80	175	1000	P11197-ND	.46	.19	.14	.08	EEU-FC1C560
	68	5	11	2.0	0.5	10.8	0.80	175	1000	P10242-ND	.46	.19	.14	.08	EEU-FC1C680
	82	5	15	2.0	0.5	13.1	0.50	235	1000	P10243-ND	.47	.32	.22	.12	EEU-FC1C820
	100	6.3	11.2	2.5	0.50	16.0	0.35	290	1000	P11198-ND	.51	.26	.18	.10	EEU-FC1C101
	120	6.3	11.2	2.5	0.5	19.2	0.35	290	1000	P10244-ND	.42	.23	.17	.10	EEU-FC1C121
	180	6.3	15	2.5	0.5	28.8	0.25	400	1000	P10245-ND	.49	.36	.26	.15	EEU-FC1C181
	220	8	11.5	3.5	0.60	35.2	0.117	555	2000	P11199-ND	.76	.39	.28	.15	EEU-FC1C221
	270	8	11.5	3.5	0.60	43.2	0.117	555	2000	P11200-ND	.76	.41	.29	.16	EEU-FC1C271
	330	8	11.5	3.5	0.6	52.8	0.117	555	2000	P10246-ND	.63	.35	.25	.14	EEU-FC1C331
	390	10	12.5	5.0	0.60	62.4	0.09	755	3000	P11201-ND	1.01	.55	.39	.22	EEU-FC1C391

(Continued)

Panasonic FC Series Radial Lead Aluminum Electrolytic Capacitors *(Cont.)*

W.V. (V)	Cap. (µF)	Dimensions (mm)				Leakage Current (+20°C) (2 min.) (µA) Max	Impedance (100kHz) (+20°C) (Ω) Max	Ripple Current (+105°C) (mA) rms max.	Life Time (hours)	Digi-Key Part No.	Price Each				Panasonic Part No.
		ØD	L	P	Ød						1	10	100	1,000	
16	470	10	12.5	5.0	0.6	75.2	0.090	755	3000	P10248-ND	.76	.46	.34	.19	EEU-FC1C471
	470	8	15	3.5	0.6	75.2	0.085	730	2000	P10247-ND	.69	.41	.31	.18	EEU-FC1C471L
	560	10	16	5.0	0.60	89.6	0.068	1050	3000	P11202-ND	1.11	.62	.44	.24	EEU-FC1C561
	680	10	16	5.0	0.6	108.8	0.068	1050	3000	P10250-ND	.83	.61	.45	.26	EEU-FC1C681
	680	8	20	3.5	0.6	108.8	0.065	995	2000	P10249-ND	.78	.46	.34	.20	EEU-FC1C681L
	820	12.5	15	5.0	0.6	131.2	0.065	1205	5000	P10252-ND	1.13	.77	.57	.33	EEU-FC1C821S
	820	10	20	5.0	0.6	131.2	0.052	1220	3000	P10251-ND	.99	.60	.44	.26	EEU-FC1C821
	1000	10	20	5.0	0.60	160.0	0.052	1220	3000	P11203-ND	1.37	.73	.52	.28	EEU-FC1C102S
	1000	10	25	5.0	0.6	160.0	0.045	1440	3000	P10253-ND	1.07	.70	.52	.30	EEU-FC1C102
	1200	16	15	7.5	0.80	192.0	0.043	1690	5000	P11205-ND	2.13	1.33	.94	.51	EEU-FC1C122S
	1200	10	25	5.0	0.60	192.0	0.045	1440	3000	P11204-ND	1.43	.82	.58	.32	EEU-FC1C122
	1500	16	15	7.5	0.80	240.0	0.043	1690	5000	P11206-ND	2.19	1.33	.94	.51	EEU-FC1C152S
	1500	12.5	20	5.0	0.6	240.0	0.038	1655	5000	P10254-ND	1.29	.85	.64	.38	EEU-FC1C152
	1500	10.0	30	5.0	0.6	240.0	0.035	1815	3000	P10255-ND	1.25	.87	.64	.37	EEU-FC1C152L
	1800	18	15	7.5	0.8	288.0	0.038	2000	5000	P10256-ND	1.97	1.38	1.04	.62	EEU-FC1C182S
	1800	12.5	25	5.0	0.60	288.0	0.03	1945	5000	P11207-ND	2.25	1.23	.87	.47	EEU-FC1C182
	2200	16	20	7.5	0.8	352.0	0.029	2205	5000	P10258-ND	1.88	1.23	.92	.55	EEU-FC1C222S
	2200	12.5	25	5.0	0.6	352.0	0.030	1945	5000	P10257-ND	1.57	1.02	.77	.46	EEU-FC1C222
	2700	16	20	7.5	0.80	432.0	0.029	2205	5000	P11208-ND	2.70	1.59	1.12	.62	EEU-FC1C272
	2700	12.5	30	5.0	0.8	432.0	0.025	2310	5000	P10259-ND	1.72	1.05	.79	.47	EEU-FC1C272L
	3300	18	20	7.5	0.8	528.0	0.028	2490	5000	P10261-ND	2.23	1.53	1.15	.75	EEU-FC1C332S
	3300	12.5	35	5.0	0.8	528.0	0.022	2510	5000	P10260-ND	1.97	1.46	1.10	.65	EEU-FC1C332
	3900	18	20	7.5	0.80	624.0	0.028	2490	5000	P11209-ND	3.67	2.25	1.59	.87	EEU-FC1C392S
	3900	16	25	7.5	0.8	624.0	0.022	2555	5000	P10262-ND	2.37	1.62	1.22	.72	EEU-FC1C392
	4700	18	25	7.5	0.8	752.0	0.020	2740	5000	P10264-ND	2.65	1.88	1.42	.92	EEU-FC1C472S
	4700	16	31.5	7.5	0.8	752.0	0.018	3010	5000	P10263-ND	2.52	1.59	1.20	.78	EEU-FC1C472
	5600	18	31.5	7.5	0.80	896.0	0.016	3635	5000	P11210-ND	5.19	3.32	2.34	1.28	EEU-FC1C562
	5600	16	35.5	7.5	0.8	896.0	0.016	3150	5000	P10265-ND	2.80	2.12	1.60	1.04	EEU-FC1C562L
	6800	16	40	7.5	0.80	1088.0	0.015	3360	5000	P11211-ND	5.14	3.24	2.28	1.25	EEU-FC1C682
	8200	18	35.5	7.5	0.8	1312.0	0.015	3680	5000	P10266-ND	3.57	2.30	1.74	1.13	EEU-FC1C822
25	10	4	7	1.5	0.45	2.5	2	65	1000	P11212-ND	.43	.18	.13	.07	EEA-FC1E100
	22	5	7	2	0.45	5.5	0.95	120	1000	P11213-ND	.44	.19	.14	.08	EEA-FC1E220
	27	4	11	1.5	0.45	6.75	1.3	120	1000	P11214-ND	.44	.30	.21	.12	EEU-FC1E270
	39	5	11	2	0.50	9.75	0.8	175	1000	P11215-ND	.46	.32	.22	.12	EEU-FC1E390
	47	5	11	2.0	0.5	11.7	0.80	175	1000	P10267-ND	.46	.32	.22	.12	EEU-FC1E470
	56	5	15	2.0	0.5	14.0	0.50	235	1000	P10268-ND	.47	.32	.22	.12	EEU-FC1E560
	82	6.3	11.2	2.5	0.50	20.5	0.35	290	1000	P11216-ND	.51	.27	.19	.11	EEU-FC1E820
	100	6.3	11.2	2.5	0.5	25.0	0.35	290	1000	P10269-ND	.35	.23	.17	.10	EEU-FC1E101S
	120	6.3	15	2.5	0.5	30.0	0.25	400	1000	P10270-ND	.49	.36	.26	.15	EEU-FC1E121
	180	8	11.5	3.5	0.60	45.0	0.117	555	2000	P11217-ND	.76	.39	.28	.15	EEU-FC1E181
	220	8	11.5	3.5	0.6	55.0	0.117	555	2000	P10271-ND	.63	.37	.26	.15	EEU-FC1E221
	270	10	12.5	5	0.60	67.5	0.09	755	3000	P11218-ND	1.01	.55	.39	.22	EEU-FC1E271
	330	10	12.5	5.0	0.6	82.5	0.090	755	3000	P10273-ND	.76	.48	.36	.21	EEU-FC1E331
	330	8	15	3.5	0.6	82.5	0.085	730	2000	P10272-ND	.69	.41	.31	.18	EEU-FC1E331L
	390	10	16	5	0.60	97.5	0.068	1050	3000	P11219-ND	1.11	.62	.44	.24	EEU-FC1E391
	470	10	16	5.0	0.6	117.5	0.068	1050	3000	P10275-ND	.83	.55	.40	.23	EEU-FC1E471
	470	8	20	3.5	0.6	117.5	0.065	995	2000	P10274-ND	.78	.48	.36	.21	EEU-FC1E471L
	560	12.5	15	5.0	0.6	140.0	0.065	1205	5000	P10276-ND	1.13	.77	.57	.33	EEU-FC1E561S
	560	10	20	5	0.60	140.0	0.052	1220	3000	P11220-ND	1.32	.78	.55	.30	EEU-FC1E561
	680	10	20	5.0	0.6	170.0	0.052	1220	3000	P10277-ND	.99	.62	.46	.27	EEU-FC1E681
	820	12.5	20	5	0.60	205.0	0.038	1655	5000	P11222-ND	1.86	1.10	.78	.43	EEU-FC1E821S
	820	10	25	5	0.60	205.0	0.045	1440	3000	P11221-ND	1.43	.82	.58	.32	EEU-FC1E821
	1000	16	15	7.5	0.8	250.0	0.043	1690	5000	P10279-ND	1.48	1.02	.77	.46	EEU-FC1E102S
	1000	12.5	20	5.0	0.6	250.0	0.038	1655	5000	P10278-ND	1.29	.88	.66	.39	EEU-FC1E102
	1000	10	30	5	0.60	250.0	0.035	1815	3000	P11223-ND	1.67	1.06	.75	.41	EEU-FC1E102L
	1200	18	15	7.5	0.8	300.0	0.038	2000	5000	P10280-ND	1.97	1.38	1.04	.62	EEU-FC1E122S
	1200	12.5	25	5	0.60	300.0	0.03	1945	5000	P11224-ND	2.25	1.23	.87	.47	EEU-FC1E122
	1500	16	20	7.5	0.8	375.0	0.029	2205	5000	P10282-ND	1.88	1.23	.92	.55	EEU-FC1E152S
	1500	12.5	25	5.0	0.6	375.0	0.030	1945	5000	P10281-ND	1.57	.94	.71	.42	EEU-FC1E152
	1800	16	20	7.5	0.80	450.0	0.029	2205	5000	P11225-ND	2.70	1.59	1.12	.62	EEU-FC1E182
	1800	12.5	30	5.0	0.8	450.0	0.025	2310	5000	P10283-ND	1.72	1.05	.79	.47	EEU-FC1E182L
	2200	18	20	7.5	0.8	550.0	0.028	2490	5000	P10285-ND	2.23	1.53	1.15	.75	EEU-FC1E222S
	2200	12.5	35	5.0	0.8	550.0	0.022	2510	5000	P10284-ND	1.97	1.46	1.10	.65	EEU-FC1E222
	2700	16	25	7.5	0.8	675.0	0.022	2555	5000	P10286-ND	2.37	1.44	1.08	.64	EEU-FC1E272
	3300	18	25	7.5	0.8	825.0	0.020	2740	5000	P10288-ND	2.65	1.88	1.42	.92	EEU-FC1E332S
	3300	16	31.5	7.5	0.8	825.0	0.018	3010	5000	P10287-ND	2.52	1.59	1.20	.78	EEU-FC1E332
	3900	18	31.5	7.5	0.80	975.0	0.016	3635	5000	P11227-ND	5.19	3.32	2.34	1.28	EEU-FC1E392
	3900	16	35.5	7.5	0.80	975.0	0.016	3150	5000	P11226-ND	4.51	2.88	2.03	1.11	EEU-FC1E392L
	4700	18	35.5	7.5	0.8	1175.0	0.015	3680	5000	P10289-ND	3.57	2.30	1.74	1.13	EEU-FC1E472
	5600	18	40	7.5	0.80	1400.0	0.014	3735	5000	P11228-ND	6.72	4.24	2.99	1.64	EEU-FC1E562
35	18	4	11	1.5	0.45	6.3	1.3	120	1000	P11229-ND	.44	.30	.21	.12	EEU-FC1V180
	22	5	11	2	0.50	7.7	0.8	175	1000	P11230-ND	.46	.19	.14	.08	EEU-FC1V220
	27	5	11	2	0.50	9.45	0.8	175	1000	P11231-ND	.46	.19	.14	.08	EEU-FC1V270
	33	5	11	2.0	0.5	11.5	0.80	175	1000	P10290-ND	.46	.19	.14	.08	EEU-FC1V330
	39	5	15	2.0	0.5	13.6	0.50	235	1000	P10291-ND	.47	.32	.22	.12	EEU-FC1V390
	47	6.3	11.2	2.5	0.50	16.45	0.35	290	1000	P11232-ND	.51	.26	.18	.10	EEU-FC1V470
	56	6.3	11.2	2.5	0.50	19.6	0.35	290	1000	P11233-ND	.51	.27	.19	.11	EEU-FC1V560
	68	6.3	11.2	2.5	0.5	23.8	0.35	290	1000	P10292-ND	.42	.23	.17	.10	EEU-FC1V680
	82	6.3	15	2.5	0.5	28.7	0.25	400	1000	P10293-ND	.49	.36	.26	.15	EEU-FC1V820
	100	8	11.5	3.5	0.6	35.0	0.117	555	2000	P10294-ND	.63	.37	.26	.15	EEU-FC1V101
	120	8	11.5	3.5	0.60	42.0	0.117	555	2000	P11234-ND	.76	.41	.29	.16	EEU-FC1V121
	150	8	11.5	3.5	0.6	52.5	0.117	555	2000	P10295-ND	.63	.39	.28	.16	EEU-FC1V151
	180	10	12.5	5	0.60	63.0	0.09	755	3000	P11235-ND	1.01	.55	.39	.22	EEU-FC1V181
	220	10	12.5	5.0	0.6	77.0	0.090	755	3000	P10297-ND	.76	.48	.36	.21	EEU-FC1V221
	220	8	15	3.5	0.6	77.0	0.085	730	2000	P10296-ND	.69	.40	.30	.17	EEU-FC1V221L
	270	10	16	5	0.60	94.5	0.068	1050	3000	P11236-ND	1.11	.62	.44	.24	EEU-FC1V271
	390	12.5	15	5.0	0.6	136.5	0.065	1205	5000	P10300-ND	1.13	.77	.57	.33	EEU-FC1V391S
	330	10	16	5.0	0.6	115.5	0.068	1050	3000	P10299-ND	.83	.51	.38	.22	EEU-FC1V331
	330	8	20	3.5	0.6	115.5	0.065	995	2000	P10298-ND	.78	.46	.34	.20	EEU-FC1V331L
	390	10	20	5	0.60	136.5	0.052	1220	3000	P11237-ND	1.32	.76	.54	.29	EEU-FC1V391
	470	10	20	5.0	0.6	164.5	0.052	1220	3000	P10301-ND	.99	.62	.46	.27	EEU-FC1V471
	560	12.5	20	5	0.60	196.0	0.038	1655	5000	P11239-ND	1.86	1.14	.81	.44	EEU-FC1V561S
	560	10	25	5	0.60	196.0	0.045	1440	3000	P11238-ND	1.43	.82	.58	.32	EEU-FC1V561
	680	16	15	7.5	0.8	238.0	0.043	1690	5000	P10303-ND	1.48	1.06	.80	.47	EEU-FC1V681S
	680	12.5	20	5.0	0.6	238.0	0.038	1655	5000	P10302-ND	1.29	.85	.64	.38	EEU-FC1V681
	680	10	30	5	0.60	238.0	0.035	1815	3000	P11240-ND	1.67	1.06	.75	.41	EEU-FC1V681L
	820	18	15	7.5	0.8	287.0	0.038	2000	5000	P10304-ND	1.97	1.44	1.08	.64	EEU-FC1V821
	820	12.5	25	5	0.60	287.0	0.03	1945	5000	P11241-ND	2.25	1.23	.87	.47	EEU-FC1V821L
	1000	16	20	7.5	0.8	350.0	0.029	2205	5000	P10876-ND	1.89	1.23	.92	.55	EEU-FC1V102S
	1000	12.5	25	5.0	0.6	350.0	0.030	1945	5000	P10305-ND	1.57	1.05	.79	.47	EEU-FC1V102
	1200	16	20	7.5	0.80	420.0	0.029	2205	5000	P11242-ND	2.70	1.59	1.12	.62	EEU-FC1V122
	1200	12.5	30	5.0	0.8	420.0	0.025	2310	5000	P10306-ND	1.72	1.05	.79	.47	EEU-FC1V122L
	1500	18	20	7.5	0.80	525.0	0.028	2490	5000	P11243-ND	3.67	2.25	1.59	.87	EEU-FC1V152S
	1500	16	25	7.5	0.8	525.0	0.022	2555	5000	P10308-ND	2.37	1.44	1.08	.64	EEU-FC1V152
	1500	12.5	35	5.0	0.8	525.0	0.022	2510	5000	P10307-ND	1.97	1.41	1.06	.63	EEU-FC1V152L
	1800	18	20	7.5	0.80	630.0	0.028	2490	5000	P11246-ND	3.67	2.25	1.59	.87	EEU-FC1V182S
	1800	16	25	7.5	0.80	630.0	0.022	2555	5000	P11245-ND	3.41	2.03	1.43	.78	EEU-FC1V182
	1800	12.5	40	5	0.80	630.0	0.018	2655	5000	P11244-ND	3.22	2.09	1.48	.81	EEU-FC1V182L

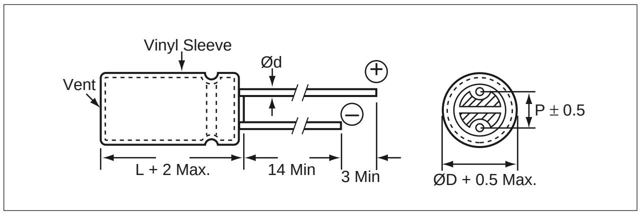
(Continued)

W.V. (V)	Cap. (µF)	Dimensions (mm)				Leakage Current (+20°C) (2 min.) (µA) Max	Impedance (100kHz) (+20°C) (Ω) Max	Ripple Current (+105°C) (mA) rms max.	Life Time (hours)	Digi-Key Part No.	Price Each				Panasonic Part No.
		ØD	L	P	Ød						1	10	100	1,000	
35	2200	18	25	7.5	0.8	770.0	0.020	2740	5000	P10310-ND	2.65	1.88	1.42	.92	EEU-FC1V222S
	2200	16	31.5	7.5	0.8	770.0	0.018	3010	5000	P10309-ND	2.52	1.75	1.32	.86	EEU-FC1V222
	2700	18	31.5	7.5	0.80	945.0	0.016	3635	5000	P11248-ND	5.19	3.32	2.34	1.28	EEU-FC1V272
	2700	16	35.5	7.5	0.80	945.0	0.016	3150	5000	P11247-ND	4.51	2.88	2.03	1.11	EEU-FC1V272L
	3300	18	35.5	7.5	0.8	1155.0	0.015	3680	5000	P10311-ND	3.57	2.30	1.74	1.13	EEU-FC1V332
	3900	18	40	7.5	0.80	1365.0	0.014	3735	5000	P11249-ND	6.72	4.24	2.99	1.64	EEU-FC1V392
50	1.0	5	11	2.0	0.5	0.5	2.40	20	1000	P10312-ND	.46	.24	.17	.09	EEU-FC1H1R0
	2.2	5	11	2.0	0.5	1.1	1.30	45	1000	P10313-ND	.46	.24	.17	.09	EEU-FC1H2R2
	3.3	5	11	2.0	0.5	1.6	1.30	65	1000	P10314-ND	.46	.19	.14	.08	EEU-FC1H3R3
	4.7	5	11	2.0	0.5	2.3	1.30	95	1000	P10315-ND	.46	.24	.17	.09	EEU-FC1H4R7
	10	4	11	1.5	0.45	5.0	2.5	90	1000	P11250-ND	.44	.30	.21	.12	EEU-FC1H100
	10	5	11	2.0	0.5	5.0	1.30	125	1000	P10316-ND	.46	.19	.14	.08	EEU-FC1H100L
	15	5	11	2.0	0.5	7.5	1.30	145	1000	P10317-ND	.46	.19	.14	.08	EEU-FC1H150
	18	5	11	2	0.50	9.0	1.3	155	1000	P11251-ND	.46	.19	.14	.08	EEU-FC1H180
	22	5	11	2.0	0.5	11.0	1.30	155	1000	P10318-ND	.46	.19	.14	.08	EEU-FC1H220
	27	5	15	2.0	0.5	13.5	0.90	215	1000	P10319-ND	.47	.32	.22	.12	EEU-FC1H270
	33	6.3	11.2	2.5	0.5	16.5	0.60	260	1000	P10320-ND	.42	.24	.17	.10	EEU-FC1H330
	47	6.3	11.2	2.5	0.5	23.5	0.60	260	1000	P10321-ND	.42	.23	.17	.10	EEU-FC1H470
	56	6.3	15	2.5	0.5	28.0	0.40	360	1000	P10322-ND	.49	.36	.26	.15	EEU-FC1H560
	68	8	11.5	3.5	0.60	34.0	0.234	485	2000	P11252-ND	.76	.39	.28	.15	EEU-FC1H680
	82	8	11.5	3.5	0.60	41.0	0.234	485	2000	P11253-ND	.76	.43	.31	.17	EEU-FC1H820
	100	10	12.5	5.0	0.6	50.0	0.162	615	3000	P10323-ND	.76	.48	.36	.21	EEU-FC1H101
	120	10	12.5	5	0.60	60.0	0.162	615	3000	P11255-ND	1.01	.55	.39	.22	EEU-FC1H121
	120	8	15	3.5	0.60	60.0	0.155	635	2000	P11254-ND	.92	.49	.35	.19	EEU-FC1H121L
	150	10	16	5	0.60	75.0	0.119	850	3000	P11256-ND	1.11	.62	.44	.24	EEU-FC1H151
	180	8	20	3.5	0.6	90.0	0.120	860	2000	P10324-ND	.78	.46	.34	.20	EEU-FC1H181L
	220	12.5	15	5.0	0.6	110.0	0.110	1150	5000	P10326-ND	1.13	.77	.57	.33	EEU-FC1H221S
	220	10	20	5.0	0.6	110.0	0.090	1030	3000	P10325-ND	.99	.62	.46	.27	EEU-FC1H221
	270	10	25	5	0.60	135.0	0.082	1200	3000	P11257-ND	1.43	.82	.58	.32	EEU-FC1H271
	330	12.5	20	5	0.60	165.0	0.063	1480	5000	P11258-ND	1.86	1.10	.78	.43	EEU-FC1H331
	390	16	15	7.5	0.8	195.0	0.080	1610	5000	P10327-ND	1.48	1.02	.77	.46	EEU-FC1H391S
	390	12.5	20	5	0.60	195.0	0.063	1480	5000	P11259-ND	1.86	1.10	.78	.43	EEU-FC1H391
	470	12.5	25	5.0	0.6	235.0	0.050	1832	5000	P10328-ND	1.57	1.08	.81	.48	EEU-FC1H471
	470	10	30	5	0.60	235.0	0.06	1610	3000	P11260-ND	1.67	1.06	.75	.41	EEU-FC1H471L
	560	18	15	7.5	0.8	280.0	0.068	1900	5000	P10329-ND	1.97	1.38	1.04	.62	EEU-FC1H561S
	560	12.5	25	5	0.60	280.0	0.05	1832	5000	P11261-ND	2.25	1.23	.87	.47	EEU-FC1H561
	680	16	20	7.5	0.8	340.0	0.048	1835	5000	P10331-ND	1.88	1.23	.92	.55	EEU-FC1H681
	680	12.5	30	5.0	0.8	340.0	0.040	2215	5000	P10330-ND	1.72	1.05	.79	.47	EEU-FC1H681L
	820	18	20	7.5	0.80	410.0	0.042	2420	5000	P11262-ND	3.67	2.25	1.59	.87	EEU-FC1H821
	820	12.5	35	5.0	0.8	410.0	0.034	2285	5000	P10332-ND	1.97	1.41	1.06	.63	EEU-FC1H821L
	1000	16	25	7.5	0.8	500.0	0.034	2235	5000	P10333-ND	2.37	1.49	1.12	.66	EEU-FC1H102
	1000	12.5	40	5	0.80	500.0	0.03	2590	5000	P11263-ND	3.22	2.09	1.48	.81	EEU-FC1H102L
	1200	18	25	7.5	0.80	600.0	0.029	2610	5000	P11265-ND	4.35	2.76	1.95	1.07	EEU-FC1H122S
	1200	16	31.5	7.5	0.80	600.0	0.028	2700	5000	P11264-ND	4.15	2.34	1.65	.90	EEU-FC1H122
	1500	16	35.5	7.5	0.8	750.0	0.025	2790	5000	P10334-ND	2.75	1.96	1.48	.96	EEU-FC1H152L
	1800	18	31.5	7.5	0.80	900.0	0.025	3000	5000	P11267-ND	5.19	3.44	2.42	1.32	EEU-FC1H182
	1800	16	40	7.5	0.80	900.0	0.023	2845	5000	P11266-ND	5.14	3.36	2.37	1.29	EEU-FC1H182L
	2200	18	35.5	7.5	0.8	1100.0	0.023	3100	5000	P10335-ND	3.57	2.39	1.80	1.17	EEU-FC1H222
63	6.8	4	11	1.5	0.45	4.284	3.5	80	1000	P11268-ND	.44	.30	.21	.12	EEU-FC1J6R8
	12	5	11	2.0	0.5	7.5	2.00	145	1000	P10336-ND	.46	.19	.14	.08	EEU-FC1J120
	18	5	15	2.0	0.5	11.3	1.30	200	1000	P10337-ND	.47	.32	.22	.12	EEU-FC1J180
	22	6.3	11.2	2.5	0.5	13.8	1.00	240	1000	P10338-ND	.42	.24	.17	.10	EEU-FC1J220
	33	6.3	11.2	2.5	0.5	20.7	1.000	240	1000	P10764-ND	.43	.23	.17	.10	EEU-FC1J330
	39	6.3	15	2.5	0.5	24.5	0.70	330	1000	P10339-ND	.49	.36	.26	.15	EEU-FC1J390
	47	8	11.5	3.5	0.6	29.6	0.342	405	2000	P10340-ND	.63	.37	.26	.15	EEU-FC1J470
	68	8	11.5	3.5	0.6	42.8	0.342	405	2000	P10341-ND	.63	.35	.25	.14	EEU-FC1J680
	56	8	11.5	3.5	0.60	35.28	0.342	405	2000	P11269-ND	.76	.39	.28	.15	EEU-FC1J560
	82	10	12.5	5	0.60	51.66	0.256	535	3000	P11270-ND	1.01	.55	.39	.22	EEU-FC1J820
	100	10	12.5	5.0	0.6	63.0	0.256	535	3000	P10343-ND	.76	.48	.36	.21	EEU-FC1J101
	100	8	15	3.5	0.6	63.0	0.230	535	2000	P10342-ND	.69	.48	.36	.21	EEU-FC1J101L
	120	10	16	5	0.60	75.6	0.194	600	3000	P11271-ND	1.11	.62	.44	.24	EEU-FC1J121
	150	8	20	3.5	0.6	94.5	0.178	690	2000	P10344-ND	.78	.46	.34	.20	EEU-FC1J151
	180	12.5	15	5.0	0.6	113.4	0.150	1020	5000	P10345-ND	1.13	.77	.57	.33	EEU-FC1J181S
	180	10	20	5	0.60	113.4	0.147	885	3000	P11272-ND	1.32	.73	.52	.28	EEU-FC1J181
	220	12.5	20	5.0	0.6	138.6	0.085	1285	5000	P10347-ND	1.29	.85	.64	.38	EEU-FC1J221S
	220	10	25	5.0	0.6	138.6	0.130	1050	3000	P10346-ND	.94	.70	.52	.30	EEU-FC1J221
	270	16	15	7.5	0.8	170.1	0.090	1410	5000	P10348-ND	1.48	1.02	.77	.46	EEU-FC1J271
	330	12.5	20	5.0	0.6	207.9	0.085	1285	5000	P10349-ND	1.29	.88	.66	.39	EEU-FC1J331
	330	10	30	5	0.60	207.9	0.09	1300	3000	P11273-ND	1.67	1.06	.75	.41	EEU-FC1J331L
	390	18	15	7.5	0.8	245.7	0.086	1690	5000	P10350-ND	1.97	1.38	1.04	.62	EEU-FC1J391S
	390	12.5	25	5	0.60	245.7	0.07	1720	5000	P11274-ND	2.25	1.23	.87	.47	EEU-FC1J391
	470	16	20	7.5	0.8	296.1	0.059	1765	5000	P10352-ND	1.88	1.27	.95	.57	EEU-FC1J471
	470	12.5	30	5.0	0.8	296.1	0.055	2090	5000	P10351-ND	1.72	1.05	.79	.47	EEU-FC1J471L
	560	16	25	7.5	0.8	352.8	0.05	2160	5000	P11275-ND	3.41	1.86	1.32	.72	EEU-FC1J561
	680	18	20	7.5	0.80	428.4	0.055	2290	5000	P11276-ND	3.67	2.25	1.59	.87	EEU-FC1J681S
	680	16	25	7.5	0.8	428.4	0.050	2160	5000	P10354-ND	2.37	1.46	1.10	.65	EEU-FC1J681
	680	12.5	35	5.0	0.8	428.4	0.047	2265	5000	P10353-ND	1.97	1.46	1.10	.65	EEU-FC1J681L
	820	18	25	7.5	0.80	516.6	0.043	2585	5000	P11279-ND	4.35	2.76	1.95	1.07	EEU-FC1J821S
	820	16	31.5	7.5	0.80	516.6	0.043	2670	5000	P11278-ND	4.15	2.34	1.65	.90	EEU-FC1J821
	820	12.5	40	5	0.80	516.6	0.042	2560	5000	P11277-ND	3.22	2.09	1.48	.81	EEU-FC1J821L
	1000	16	31.5	7.5	0.80	630.0	0.043	2670	5000	P11280-ND	4.27	2.34	1.65	.90	EEU-FC1J102U
	1000	16	35.5	7.5	0.8	630.0	0.036	2770	5000	P10355-ND	2.75	1.96	1.48	.96	EEU-FC1J102
	1200	16	40	7.5	0.80	756.0	0.032	2950	5000	P11282-ND	5.14	3.24	2.28	1.25	EEU-FC1J122L
	1200	18	31.5	7.5	0.80	756.0	0.03	2825	5000	P11281-ND	5.19	3.32	2.34	1.28	EEU-FC1J122
	1500	18	35.5	7.5	0.8	945.0	0.030	3095	5000	P10356-ND	3.57	2.30	1.74	1.13	EEU-FC1J152
	1800	18	40	7.5	0.80	1134.0	0.025	3205	5000	P11283-ND	6.72	4.24	2.99	1.64	EEU-FC1J182
100	1.0	5	11	2.0	0.5	1.0	7.500	15	1000	P10765-ND	.34	.19	.14	.08	EEU-FC2A1R0
	2.2	5	11	2.0	0.5	2.2	5.400	35	1000	P10766-ND	.42	.19	.14	.08	EEU-FC2A2R2
	3.3	5	11	2.0	0.5	3.3	4.400	50	1000	P10767-ND	.42	.19	.14	.08	EEU-FC2A3R3
	4.7	5	11	2.0	0.5	4.7	4.400	65	1000	P10768-ND	.42	.19	.14	.08	EEU-FC2A4R7
	10	6.3	11.2	2.5	0.5	10.0	1.800	114	1000	P10769-ND	.47	.26	.18	.11	EEU-FC2A100
	22	8	11.5	3.5	0.6	22.0	0.680	260	2000	P10770-ND	.70	.39	.28	.16	EEU-FC2A220
	33	10	12.5	5.0	0.6	33.0	0.530	306	3000	P10771-ND	.83	.50	.37	.22	EEU-FC2A330
	33	8	15	3.5	0.6	33.0	0.450	340	2000	P10772-ND	.76	.44	.32	.19	EEU-FC2A330L
	47	10	20	5.0	0.6	47.0	0.240	463	3000	P10773-ND	1.10	.66	.49	.28	EEU-FC2A470
	68	10	25	5.0	0.6	68.0	0.210	599	3000	P10774-ND	1.18	.75	.55	.32	EEU-FC2A680L
	100	12.5	20	5.0	0.6	100.0	0.180	671	5000	P10776-ND	1.44	.93	.70	.42	EEU-FC2A101
	100	10	30	5.0	0.6	100.0	0.150	698	3000	P10775-ND	1.30	.90	.67	.40	EEU-FC2A101L
	150	18	15	7.5	0.8	150.0	0.120	917	5000	P10778-ND	2.19	1.52	1.14	.68	EEU-FC2A151S
	150	12.5	25	5.0	0.6	150.0	0.110	807	5000	P10777-ND	1.50	1.04	.78	.46	EEU-FC2A151
	220	16	25	7.5	0.8	220.0	0.089	1170	5000	P10780-ND	2.30	1.40	1.05	.69	EEU-FC2A221
	220	12.5	35	5.0	0.8	220.0	0.087	1040	5000	P10779-ND	2.19	1.55	1.17	.69	EEU-FC2A221L
	270	12.5	40	5.0	0.8	270.0	0.072	1130	5000	P10781-ND	2.18	1.57	1.18	.77	EEU-FC2A271L
	330	18	25	7.5	0.8	330.0	0.070	1420	5000	P10783-ND	2.95	2.07	1.56	1.02	EEU-FC2A331S
	330	16	31.5	7.5	0.8	330.0	0.062	1520	5000	P10782-ND	2.80	1.75	1.32	.86	EEU-FC2A331
	390	16	35.5	7.5	0.8	390.0	0.053	1730	5000	P10784-ND	3.05	2.15	1.63	1.06	EEU-FC2A391L
	470	16	40	7.5	0.8	470.0	0.047	1920	5000	P10874-ND	3.48	2.42	1.83	1.19	EEU-FC2A471
	680	18	40	7.5	0.8	680.0	0.036	2300	5000	P10875-ND	4.54	3.12	2.36	1.53	EEU-FC2A681

Panasonic® EB Series

Radial Lead Type Capacitor for High Ripple Long Life Applications (High Voltage)

FEATURES: • High Ripple (High Frequency) • Life Time: 105°C 5000 hours
MAIN APPLICATION: • Electronic Ballast, Power supply
SPECIFICATIONS:
Operating Temperature Range: -25 to +105°C
Rated Working Voltage Range: 160 to 450 V.DC
Nominal Capacitance Range: 10 to 330 µF
Capacitance Tolerance: ±20% (120 Hz, +20°C)
Leakage Current: I ≤0.06 CV + 10 (µA) after 2 minutes application of rated working voltage at +20°C.



Working Voltage:	160	200	250	350	400	450
Dissipation Factor-max. (at 120 Hz, +20°C):	0.15	0.15	0.15	0.20	0.24	0.24
Temperature Char. Z(-25°C)/Z (+20°C): (Impedance ratio at 120Hz)	3	3	3	6	6	6

Ripple Current Frequency Multiplier:

W.V.	Frequency (Hz) 120	1k	10k ~ 30k	30k ~ 100k
160 ~ 250	0.55	0.85	0.90	1.00
350 ~ 450	0.50	0.80	0.90	1.00

Endurance:

Test Conditions		Post Test Requirements at +20°C	
Duration	5000 Hours	DC Leakage Current	≤initial specified value
Ambient Temperature	+105°C	Capacitance Change	±20% of initial measured value
Applied Voltage	≤Rated DC Working Voltage	Dissipation Factor	≤ 200% initial specified value

Shelf Life:

Test Conditions		Post Test Requirements at +20°C	
Duration	1000 Hours	DC Leakage Current	≤ initial specified value
Ambient Temperature	+105°C	Capacitance Change	±20% of initial measured value
Applied Voltage	—	Dissipation Factor	≤ 200% initial specified value

WV (VDC)	Cap. (µF)	D.C.L. (+20°C/2mm) (µA) max.	DF (120Hz/20°C) max.	Ripple Current (100kHz/+105°C) (mA) rms max.	Dimensions (mm) øD	L	P	ød	Digi-Key Part No.	Pricing 1	10	100	1,000	5,000	10,000	Panasonic Part No.
160	22	221.2	0.15	470	10	20	5.0	0.6	P5900-ND	1.03	7.53	58.99	375.00	354.00/M	326.00/M	EEU-EB2C220
	33	326.8	0.15	470	10	20	5.0	0.6	P5901-ND	1.27	7.53	58.99	375.00	354.00/M	326.00/M	EEU-EB2C330
	47	461.2	0.15	600	12.5	20	5.0	0.6	P5902-ND	1.67	11.58	90.71	576.00	544.00/M	501.00/M	EEU-EB2C470
	68	662.8	0.15	750	12.5	25	5.0	0.6	P5903-ND	2.06	12.78	100.11	636.00	600.00/M	553.00/M	EEU-EB2C680
	68	662.8	0.15	750	16	20	7.5	0.8	P5904-ND	2.27	18.81	147.35	936.00	883.00/M	814.00/M	EEU-EB2C680S
	100	970.0	0.15	1060	16	25	7.5	0.8	P5905-ND	2.46	18.81	147.35	936.00	883.00/M	814.00/M	EEU-EB2C101
	100	970.0	0.15	1060	18	20	7.5	0.8	P5906-ND	2.81	24.06	188.47	1197.00	1130.00/M	1042.00/M	EEU-EB2C101S
	150	1450.0	0.15	1280	16	31.5	7.5	0.8	P5907-ND	3.15	26.31	206.10	1309.00	1235.00/M	1139.00/M	EEU-EB2C151
	150	1450.0	0.15	1280	18	25	7.5	0.8	P5908-ND	3.47	27.09	212.21	1348.00	1272.00/M	1173.00/M	EEU-EB2C151S
	220	2122.0	0.15	1280	16	31.5	7.5	0.8	P5909-ND	3.84	26.31	206.10	1309.00	1235.00/M	1139.00/M	EEU-EB2C221
	220	2122.0	0.15	1280	18	25	7.5	0.8	P5910-ND	4.13	27.09	212.21	1348.00	1272.00/M	1173.00/M	EEU-EB2C221S
	330	3178.0	0.15	1690	18	31.5	7.5	0.8	P5911-ND	5.50	47.16	369.42	2346.00	2214.00/M	2042.00/M	EEU-EB2C331
200	22	274.0	0.15	470	10	20	5.0	0.6	P5912-ND	1.22	7.53	58.99	375.00	354.00/M	326.00/M	EEU-EB2D220
	33	406.0	0.15	600	12.5	20	5.0	0.6	P5913-ND	1.53	11.58	90.71	576.00	544.00/M	501.00/M	EEU-EB2D330
	47	574.0	0.15	600	12.5	20	5.0	0.6	P5914-ND	1.84	11.58	90.71	576.00	544.00/M	501.00/M	EEU-EB2D470
	68	826.0	0.15	750	12.5	25	5.0	0.6	P5915-ND	2.54	15.03	117.74	748.00	706.00/M	651.00/M	EEU-EB2D680
	68	826.0	0.15	750	16	20	7.5	0.8	P5916-ND	2.79	18.81	147.35	936.00	883.00/M	814.00/M	EEU-EB2D680S
	100	1210.0	0.15	1060	16	25	7.5	0.8	P5917-ND	3.22	18.81	147.35	936.00	883.00/M	814.00/M	EEU-EB2D101
	100	1210.0	0.15	1060	18	20	7.5	0.8	P5918-ND	3.54	24.06	188.47	1197.00	1130.00/M	1042.00/M	EEU-EB2D101S
	150	1810.0	0.15	1280	16	31.5	7.5	0.8	P5919-ND	3.82	26.31	206.10	1309.00	1235.00/M	1139.00/M	EEU-EB2D151
	150	1810.0	0.15	1280	18	25	7.5	0.8	P5920-ND	4.20	27.09	212.21	1348.00	1272.00/M	1173.00/M	EEU-EB2D151S
	220	2650.0	0.15	1690	18	31.5	7.5	0.8	P5921-ND	6.18	52.95	414.78	2634.00	2486.00/M	2292.00/M	EEU-EB2D221
250	22	340.0	0.15	560	12.5	20	5.0	0.6	P5922-ND	1.46	12.03	94.24	599.00	565.00/M	521.00/M	EEU-EB2E220
	33	505.0	0.15	560	12.5	20	5.0	0.6	P5923-ND	1.78	12.03	94.24	599.00	565.00/M	521.00/M	EEU-EB2E330
	47	715.0	0.15	710	12.5	25	5.0	0.6	P5924-ND	2.34	15.03	117.74	748.00	706.00/M	651.00/M	EEU-EB2E470
	47	715.0	0.15	710	16	20	7.5	0.8	P5925-ND	2.57	18.81	147.35	936.00	883.00/M	814.00/M	EEU-EB2E470S
	68	1030.0	0.15	990	16	25	7.5	0.8	P5926-ND	3.08	18.81	147.35	936.00	883.00/M	814.00/M	EEU-EB2E680
	68	1030.0	0.15	990	18	20	7.5	0.8	P5927-ND	3.39	24.06	188.47	1197.00	1130.00/M	1042.00/M	EEU-EB2E680S
	100	1510.0	0.15	1200	16	31.5	7.5	0.8	P5928-ND	3.82	26.31	206.10	1309.00	1235.00/M	1139.00/M	EEU-EB2E101
	100	1510.0	0.15	1200	18	25	7.5	0.8	P5929-ND	4.20	30.00	235.00	1493.00	1408.00/M	1299.00/M	EEU-EB2E101S
	150	2260.0	0.15	1470	18	31.5	7.5	0.8	P5930-ND	5.50	47.16	369.42	2346.00	2214.00/M	2042.00/M	EEU-EB2E151
350	10	220.0	0.20	270	10	20	5.0	0.6	P5931-ND	1.40	9.03	70.74	449.00	424.00/M	391.00/M	EEU-EB2V100
	22	472.0	0.20	350	12.5	20	5.0	0.6	P5932-ND	1.84	13.32	104.34	663.00	625.00/M	577.00/M	EEU-EB2V220
	33	703.0	0.20	480	16	20	7.5	0.8	P5933-ND	2.90	20.31	159.10	1010.00	954.00/M	879.00/M	EEU-EB2V330S
	47	997.0	0.20	640	16	25	7.5	0.8	P5934-ND	3.58	22.56	176.72	1122.00	1059.00/M	977.00/M	EEU-EB2V470
	47	997.0	0.20	640	18	20	7.5	0.8	P5935-ND	3.94	27.09	212.21	1348.00	1272.00/M	1173.00/M	EEU-EB2V470S
	68	1438.0	0.20	780	16	31.5	7.5	0.8	P5936-ND	4.19	31.59	247.46	1572.00	1483.00/M	1368.00/M	EEU-EB2V680
	68	1438.0	0.20	780	18	25	7.5	0.8	P5937-ND	4.61	31.59	247.46	1572.00	1483.00/M	1368.00/M	EEU-EB2V680S
	100	2110.0	0.20	970	18	31.5	7.5	0.8	P5938-ND	7.13	61.08	478.46	3039.00	2868.00/M	2644.00/M	EEU-EB2V101
400	10	250.0	0.24	250	10	20	5.0	0.6	P5939-ND	1.54	9.03	70.74	449.00	424.00/M	391.00/M	EEU-EB2G100
	22	538.0	0.24	410	12.5	25	5.0	0.6	P5940-ND	2.41	17.31	135.60	861.00	813.00/M	749.00/M	EEU-EB2G220
	22	538.0	0.24	410	16	20	7.5	0.8	P5941-ND	2.65	20.31	159.10	1010.00	954.00/M	879.00/M	EEU-EB2G220S
	33	802.0	0.24	600	16	25	7.5	0.8	P5942-ND	3.58	22.56	176.72	1122.00	1059.00/M	977.00/M	EEU-EB2G330
	33	802.0	0.24	600	18	20	7.5	0.8	P5943-ND	3.94	27.09	212.21	1348.00	1272.00/M	1173.00/M	EEU-EB2G330S
	47	1138.0	0.24	730	16	31.5	7.5	0.8	P5944-ND	4.55	31.59	247.46	1572.00	1483.00/M	1368.00/M	EEU-EB2G470
	47	1138.0	0.24	730	18	25	7.5	0.8	P5945-ND	5.01	31.59	247.46	1572.00	1483.00/M	1368.00/M	EEU-EB2G470S
450	10	280.0	0.24	310	12.5	20	5.0	0.6	P5946-ND	2.04	13.32	104.34	663.00	625.00/M	577.00/M	EEU-EB2W100
	22	604.0	0.24	560	16	25	7.5	0.8	P5947-ND	3.43	22.56	176.72	1122.00	1059.00/M	977.00/M	EEU-EB2W220
	22	604.0	0.24	560	18	20	7.5	0.8	P5948-ND	3.78	28.11	220.20	1399.00	1320.00/M	1217.00/M	EEU-EB2W220S
	33	901.0	0.24	680	16	31.5	7.5	0.8	P5949-ND	4.24	31.59	247.46	1572.00	1483.00/M	1368.00/M	EEU-EB2W330
	33	901.0	0.24	680	18	25	7.5	0.8	P5950-ND	4.67	28.59	223.96	1422.00	1342.00/M	1238.00/M	EEU-EB2W330S
	47	1279.0	0.24	850	18	31.5	7.5	0.8	P5951-ND	6.60	56.55	442.98	2813.00	2655.00/M	2448.00/M	EEU-EB2W470

Panasonic® Bi-Polar Series SU Capacitors

FEATURES:

- Ideal for circuits where polarity is not constant or reverse voltage is applied when switches are turned on or off.
- Life: 2000 hours at +85°C.

SPECIFICATIONS:

Operating Temp. Range: –40°C to +85°C.

Capacitance Tolerance: ±20% (120Hz, +20°C).

Leakage Current: I ≤ 0.03CV + 3(µA) after 5 minutes application of rated working voltage at +20°C.

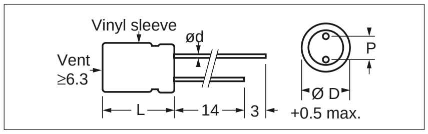
Low Temperature Characteristics: Impedance ratio max. at 120Hz. Following specified values.

Working Volt.		6.3V	10V	16V	25V	35V	50V
Impedance	-25°C/+20°C	4	3	2	2	2	2
	-40°C/+20°C	8	6	4	4	4	3

ENDURANCE:

Test Conditions: Duration: 2000 hours. Ambient Temperature: +85°C. Applied Voltage: Rated DC working voltage to each polarity for 1000 hours.

Post Test Requirements: +20°C. Leakage Current: ≤Initial specified value. Capacitance Change: ±20% of initial measured value. tan ∂: ≤150% of initial specified value.



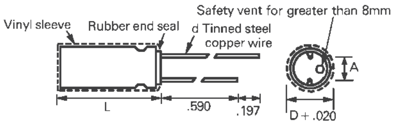
SHELF LIFE:

Test Conditions: Duration: 1000 hours. Ambient Temperature: +85°C. Applied Voltage: none

Post Test Requirements (+20°C): Same limits for "Endurance".

WV	Cap. (µF)	D.C.L. (+20°C/5min.) [µA] max.	tan δ (120Hz/+20°C) (max.)	Ripple Current (mA) rms	Dimensions				Digi-Key Part No.	Pricing						Panasonic Part No.
					D	L	P	d		1	10	100	1,000	5,000	10,000	
6.3	33	9.2	0.30	80	5	11	2.0	0.5	P1141-ND	.37	2.38	16.78	92.00	79.00/M	76.00/M	ECE-A0JN330U
	47	11.8	0.30	90	5	11	2.0	0.5	P1142-ND	.40	2.57	18.15	99.00	86.00/M	83.00/M	ECE-A0JN470U
	100	21.9	0.30	130	6.3	11.2	2.5	0.5	P1143-ND	.44	3.05	21.75	122.00	113.00/M	109.00/M	ECE-A0JN101U
	220	44.5	0.30	200	8	11.5	3.5	0.6	P1144-ND	.54	3.71	26.50	148.00	138.00/M	133.00/M	ECE-A0JN221U
	330	65.3	0.30	250	8	11.5	3.5	0.6	P1145-ND	.67	4.73	33.75	189.00	176.00/M	169.00/M	ECE-A0JN331U
	470	91.8	0.30	310	10	12.5	5.0	0.6	P1146-ND	.88	6.21	45.59	262.00	252.00/M	243.00/M	ECE-A0JN471X
	1000	192.0	0.30	430	10	20	5.0	0.6	P1147-ND	1.23	8.61	63.22	363.00	350.00/M	336.00/M	ECE-A0JN102U
	2200	418.8	0.30	660	12.5	25	5.0	0.6	P1148-ND	1.64	11.61	87.08	515.00	495.00/M	484.00/M	ECE-A0JN222U
	3300	626.7	0.30	760	16	25	7.5	0.8	P1149-ND	2.21	15.66	117.45	694.00	668.00/M	653.00/M	ECE-A0JN332U
	4700	891.3	0.30	1170	16	31.5	7.5	0.8	P1150-ND	2.75	19.64	148.20	963.00	934.00/M	911.00/M	ECE-A0JN472U
	6800	1288.2	0.30	1450	18	35.5	7.5	0.8	P1151-ND	3.75	26.77	202.00	1313.00	1273.00/M	1242.00/M	ECE-A0JN682U
10	22	9.6	0.25	60	5	11	2.0	0.5	P1152-ND	.37	2.38	16.78	92.00	79.00/M	76.00/M	ECE-A1AN220U
	33	12.9	0.25	80	5	11	2.0	0.5	P1153-ND	.40	2.57	18.15	99.00	86.00/M	83.00/M	ECE-A1AN330U
	47	17.1	0.25	90	5	11	2.0	0.5	P1154-ND	.47	2.96	20.90	114.00	99.00/M	95.00/M	ECE-A1AN470U
	100	33.0	0.25	130	6.3	11.2	2.5	0.5	P1155-ND	.84	6.27	46.06	265.00	255.00/M	245.00/M	ECE-A1AN101U
	100	33.0	0.25	130	6.3	11.2	2.5	0.5	P1370-ND	.84	3.23	23.74	136.00	131.00/M	126.00/M	ECE-A1AN101X
	220	69.0	0.25	200	8	11.5	3.5	0.6	P1156-ND	.66	4.59	32.75	183.00	170.00/M	164.00/M	ECE-A1AN221U
	330	102.0	0.25	280	10	16	5.0	0.6	P1157-ND	.81	5.66	41.60	239.00	230.00/M	221.00/M	ECE-A1AN331U
	470	144.0	0.25	340	10	16	5.0	0.6	P1158-ND	1.15	8.10	59.46	342.00	329.00/M	316.00/M	ECE-N1AN471U
	1000	303.0	0.25	470	12.5	20	5.0	0.6	P1159-ND	1.46	10.35	77.63	459.00	442.00/M	431.00/M	ECE-A1AN102X
	2200	663.0	0.25	690	16	25	7.5	0.8	P1160-ND	2.14	15.15	113.63	672.00	646.00/M	631.00/M	ECE-A1AN222U
	3300	993.0	0.25	1090	16	31.5	7.5	0.8	P1161-ND	2.68	19.19	144.80	941.00	912.00/M	891.00/M	ECE-A1AN332U
	4700	1413.0	0.25	1200	18	35.5	7.5	0.8	P1162-ND	3.75	26.77	202.00	1313.00	1273.00/M	1242.00/M	ECE-A1AN472U
16	10	7.8	0.20	40	5	11	2.0	0.5	P1163-ND	.37	2.38	16.78	92.00	79.00/M	76.00/M	ECE-A1CN100U
	22	13.5	0.20	60	5	11	2.0	0.5	P1164-ND	.40	2.57	18.15	99.00	86.00/M	83.00/M	ECE-A1CN220U
	33	18.8	0.20	80	5	11	2.0	0.5	P1165-ND	.39	2.70	19.25	108.00	100.00/M	96.00/M	ECE-A1CN330U
	47	25.5	0.20	100	6.3	11.2	2.5	0.5	P1166-ND	.49	3.43	24.50	137.00	127.00/M	123.00/M	ECE-A1CN470U
	100	51.0	0.20	180	8	11.5	3.5	0.6	P1167-ND	.66	4.55	32.50	182.00	169.00/M	163.00/M	ECE-A1CN101U
	220	108.6	0.20	260	10	12.5	5.0	0.6	P1168-ND	.81	5.66	41.60	239.00	230.00/M	221.00/M	ECE-A1CN221X
	330	161.4	0.20	330	10	16	5.0	0.6	P1169-ND	1.08	7.55	55.46	319.00	307.00/M	295.00/M	ECE-A1CN331U
	470	228.6	0.20	380	10	20	5.0	0.6	P1170-ND	1.36	9.60	72.00	426.00	410.00/M	400.00/M	ECE-A1CN471U
	1000	483.0	0.20	560	12.5	25	5.0	0.6	P1171-ND	1.92	13.62	102.15	604.00	581.00/M	568.00/M	ECE-A1CN102U
	2200	1059.0	0.20	750	16	31.5	7.5	0.8	P1172-ND	2.57	18.29	138.00	897.00	869.00/M	849.00/M	ECE-A1CN222U
	3300	1587.0	0.20	900	18	35.5	7.5	0.8	P1173-ND	3.75	26.77	202.00	1313.00	1273.00/M	1242.00/M	ECE-A1CN332U
25	3.3	5.4	0.15	20	5	11	2.0	0.5	P1174-ND	.37	2.38	16.78	92.00	79.00/M	76.00/M	ECE-A1EN3R3U
	4.7	6.5	0.15	25	5	11	2.0	0.5	P1175-ND	.37	2.38	16.78	92.00	79.00/M	76.00/M	ECE-A1EN4R7U
	10	10.5	0.15	45	5	11	2.0	0.5	P1176-ND	.40	2.57	18.15	99.00	86.00/M	83.00/M	ECE-A1EN100U
	22	19.5	0.15	60	5	11	2.0	0.5	P1177-ND	.47	2.96	20.90	114.00	99.00/M	95.00/M	ECE-A1EN220X
	33	27.7	0.15	90	6.3	11.2	2.5	0.5	P1178-ND	.50	3.54	25.25	141.00	131.00/M	126.00/M	ECE-A1EN330U
	47	38.2	0.15	110	6.3	11.2	2.5	0.5	P1179-ND	.64	4.41	31.50	176.00	164.00/M	158.00/M	ECE-A1EN470U
	100	78.0	0.15	180	8	11.5	3.5	0.6	P1180-ND	.77	5.38	39.48	227.00	218.00/M	210.00/M	ECE-A1EN101U
	220	168.0	0.15	320	10	16	5.0	0.6	P1181-ND	1.00	7.01	51.47	296.00	285.00/M	274.00/M	ECE-A1EN221U
	330	250.5	0.15	350	12.5	20	5.0	0.6	P1182-ND	1.25	8.85	66.38	392.00	378.00/M	369.00/M	ECE-A1EN331U
	470	355.5	0.15	430	12.5	20	5.0	0.6	P1183-ND	1.79	12.63	94.73	560.00	539.00/M	526.00/M	ECE-A1EN471U
	1000	753.0	0.15	680	16	25	7.5	0.8	P1184-ND	2.50	17.83	134.60	875.00	848.00/M	828.00/M	ECE-A1EN102U
	2200	1653.0	0.15	900	18	35.5	7.5	0.8	P1185-ND	3.87	27.64	208.60	1356.00	1314.00/M	1283.00/M	ECE-A1EN222U
35	4.7	7.9	0.15	30	5	11	2.0	0.5	P1186-ND	.40	2.57	18.15	99.00	86.00/M	83.00/M	ECE-A1VN4R7U
	10	13.5	0.15	43	5	11	2.0	0.5	P1187-ND	.47	2.96	20.90	114.00	99.00/M	95.00/M	ECE-A1VN100U
	22	26.1	0.15	80	6.3	11.2	2.5	0.5	P1188-ND	.51	3.54	25.25	141.00	131.00/M	126.00/M	ECE-A1VN220U
	33	37.6	0.15	100	8	11.5	3.5	0.6	P1189-ND	.66	4.59	32.75	183.00	170.00/M	164.00/M	ECE-A1VN330U
	47	52.3	0.15	120	8	11.5	3.5	0.6	P1190-ND	.77	5.38	39.48	227.00	218.00/M	210.00/M	ECE-A1VN470U
	100	108.0	0.15	230	10	16	5.0	0.6	P1191-ND	1.00	7.01	51.47	296.00	285.00/M	274.00/M	ECE-A1VN101U
	220	234.0	0.15	360	12.5	20	5.0	0.6	P1192-ND	1.28	9.09	68.18	403.00	388.00/M	379.00/M	ECE-A1VN221U
	330	349.5	0.15	450	12.5	20	5.0	0.6	P1193-ND	1.64	11.61	87.08	515.00	495.00/M	484.00/M	ECE-A1VN331U
	470	496.5	0.15	590	12.5	25	5.0	0.6	P1194-ND	2.06	14.71	111.00	722.00	699.00/M	683.00/M	ECE-A1VN471U
50	0.47	3.7	0.15	10	5	11	2.0	0.5	P1195-ND	.37	2.38	16.78	92.00	79.00/M	76.00/M	ECE-A1HNR47U
	1	4.5	0.15	10	5	11	2.0	0.5	P1196-ND	.37	2.38	16.78	92.00	79.00/M	76.00/M	ECE-A1HN010U
	2.2	6.3	0.15	18	5	11	2.0	0.5	P1197-ND	.40	2.57	18.15	99.00	86.00/M	83.00/M	ECE-A1HN2R2U
	3.3	7.9	0.15	25	5	11	2.0	0.5	P1198-ND	.43	2.69	18.98	104.00	90.00/M	86.00/M	ECE-A1HN3R3U
	4.7	10.0	0.15	30	5	11	2.0	0.5	P1199-ND	.44	2.81	19.80	108.00	94.00/M	90.00/M	ECE-A1HN4R7U
	10	18.0	0.15	50	6.3	11.2	2.5	0.5	P1280-ND	.50	3.54	25.25	141.00	131.00/M	126.00/M	ECE-A1HN100U
	22	36.0	0.15	90	8	11.5	3.5	0.6	P1281-ND	.67	4.73	33.75	189.00	176.00/M	169.00/M	ECE-A1HN220U
	33	52.5	0.15	110	8	11.5	3.5	0.6	P1282-ND	.77	5.38	39.48	227.00	218.00/M	210.00/M	ECE-A1HN330U
	47	73.5	0.15	140	10	12.5	5.0	0.6	P1283-ND	1.04	7.26	53.35	306.00	295.00/M	284.00/M	ECE-A1HN470U
	100	153.0	0.15	250	10	20	5.0	0.6	P1284-ND	1.32	9.33	69.98	414.00	398.00/M	389.00/M	ECE-A1HN101U
	220	333.0	0.15	360	12.5	25	5.0	0.6	P1285-ND	1.79	12.63	94.73	560.00	539.00/M	526.00/M	ECE-A1HN221U
	330	498.0	0.15	450	16	25	7.5	0.8	P1286-ND	2.06	14.71	111.00	722.00	699.00/M	683.00/M	ECE-A1HN331U
	470	708.0	0.15	590	16	31.5	7.5	0.8	P1287-ND	2.94	20.96	158.20	1028.00	997.00/M	973.00/M	ECE-A1HN471U

Panasonic® Bi-Polar Aluminum Electrolytic Capacitors



This bi-polar miniature aluminum electrolytic capacitor is ideal for reversal circuit of DC voltage. This series is the miniaturized case size and expanded products range from previous series.

FEATURES:

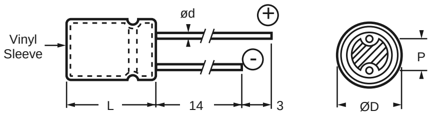
- Close capacitance tolerance (±20%)
- Compact size
- Stable characteristics at −40°C ~ +85°C

SPECIFICATIONS:

- Operating temperature range: −40°C ~ +85°C
- Rated DC working voltage range: 6.3 ~ 50V DC
- Rated capacitance range: 0.47 ~ 1000 µF
- Capacitance tolerance: ±20% • DC leakage current: I = 0.03 CV +3 (µA) (After 5 minutes application of DC working voltage at +20°C)
- tan δ: max. at 120 Hz/20°C

WV	Cap. (µF)	Max. Leakage (µA)	tan δ (120Hz/20°C)	Ripple Current (mA) rms	Dimensions D	L	A	d	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
6.3	33	9.3	0.30	60	5	11	2	0.5	P1100-ND	.28	.24	.19	.12	ECE-A0JN330S
	47	11.9	0.30	100	6.3	11.2	2.5	0.6	P1101-ND	.47	.41	.32	.21	ECE-A0JN470S
	470	91.9	0.30	380	10	20	5	0.6	P1105-ND	1.09	.94	.74	.47	ECE-A0JN471S
	47	17.7	0.25	100	6.3	11.2	2.5	0.6	P1109-ND	.49	.42	.33	.21	ECE-A1AN470S
10	330	102.0	0.25	340	10	20	5	0.6	P1112-ND	.95	.82	.64	.41	ECE-A1AN331S
25	220	168.0	0.15	400	12.5	25	5	0.6	P1130-ND	1.24	1.07	.84	.53	ECE-A1EN221S
50	33	52.5	0.15	140	10	16	5	0.6	P1138-ND	.52	.49	.44	.38	ECE-A1HN330S

KS Capacitors



Body dia. D	3	4	5	6.3	8
Lead dia. d	0.4	0.45	0.45	0.45	0.45
Lead space P	1.0	1.5	2.0	2.5	2.5

Features:

- Low profile 5mm height for Ø3 ~ Ø8 mm

Specifications:

- **Operating Temperature Range:** -40°C to +85°C
- **Rated Working Voltage Range:** 4 to 50V DC
- **Nominal Capacitance Range:** 0.1 to 330µF
- **Capacitance Tolerance:** ±20% (120Hz, +20°C)
- **Leakage Current:** I ≤ 0.01CV or 3 (µA), whichever is greater measured after 2 minutes application of rated working voltage at +20°C
- **tan δ:** (120Hz, +20°C)

Working voltage (V)	4	6.3	10	16	25	35	50
tan δ max.	0.35	0.24	0.20	0.16	0.14	0.12	0.10

- **Characteristics at Low Temperature:** Impedance ratio max. at 120Hz

Working voltage (V)	4	6.3	10	16	25	35	50
-25°C/+25°C	7	4	3	2	2	2	2
-40°C/+20°C	15	8	6	4	4	3	3

Endurance:

- **Test Conditions — Duration:** 1000 hours
- **Ambient Temperature:** +85°C
- **Applied Voltage:** Rated DC working voltage
- **Post Test Requirements at +20°C — Leakage Current:** ≤ Initial specified value
- **Capacitance Change:** ±20% of initial measured value (4V: ±30%)
- **tan δ:** ≤ 200% of initial specified value

Shelf Life:

- **Test Conditions — Duration:** 1000 hours
- **Ambient Temperature:** +85°C
- **Applied voltage:** (None)
- **Post Test Requirements at +20°C — Leakage Current:** ≤ Initial specified value
- **Capacitance Change:** ±20% of initial measured value (4V: ±30%)
- **tan δ:** ≤ 200% of initial specified value

Panasonic KS Cross Reference:

Nippon Chemi-Con: SRE, Nichicon: MA, Elna: RC3, Rubycon: MS5, Marcon: LSM

Recommended Applications:

AV (TV, Audio, Video), Office, Home Appliance

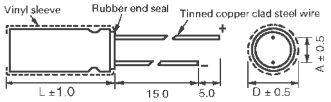
WV (VDC)	Cap. (µF)	D.C.L. (+20°C/2 min)	tan δ (120Hz/+20°C)	Ripple Current	Dimensions(mm) ØD	L	P	Digi-Key Part No.	Price Each 10	100	1,000	Panasonic Part No.
4	22	3.0	0.35	19	3	5	1.0	P950-ND	.20	.16	.09	ECE-A0GKK220
	33	3.0	0.35	26	4	5	1.5	P951-ND	.14	.11	.06	ECE-A0GKS330
	47	3.0	0.35	34	4	5	1.5	P952-ND	.14	.11	.06	ECE-A0GKS470
	100	4.0	0.35	61	5	5	2.0	P953-ND	.17	.13	.07	ECE-A0GKS101
	220	8.8	0.35	82	6.3	5	2.5	P954-ND	.20	.16	.09	ECE-A0GKS221
6.3	22	3.0	0.24	29	4	5	1.5	P955-ND	.14	.11	.06	ECEA0JKS220
	33	3.0	0.24	38	5	5	2.0	P956-ND	.17	.13	.07	ECE-A0JKS330
	47	3.0	0.24	46	5	5	2.0	P957-ND	.17	.13	.07	ECE-A0JKS470
	100	6.3	0.24	71	6.3	5	2.5	P958-ND	.20	.16	.09	ECE-A0JKS101
	330	20.7	0.24	130	8	5	2.5	P959-ND	.32	.25	.14	ECE-A0JKS331
10	22	3.0	0.20	35	5	5	2.0	P960-ND	.17	.13	.07	ECE-A1AKS220
	33	3.3	0.20	43	5	5	2.0	P961-ND	.17	.13	.07	ECE-A1AKS330
	47	4.7	0.20	65	6.3	5	2.5	P962-ND	.20	.16	.09	ECE-A1AKS470
	100	10.0	0.20	80	6.3	5	2.5	P963-ND	.20	.16	.09	ECE-A1AKS101
	220	22.0	0.20	120	8	5	2.5	P964-ND	.36	.29	.16	ECE-A1AKS221
16	10	3.0	0.16	20	3	5	1.0	P965-ND	.20	.16	.09	ECE-A1CKK100
	10	3.0	0.16	28	4	5	1.5	P966-ND	.14	.11	.06	ECE-A1CKS100
	22	3.5	0.16	39	5	5	2.0	P967-ND	.17	.13	.07	ECE-A1CKS220
	33	5.2	0.16	60	6.3	5	2.5	P968-ND	.20	.16	.09	ECE-A1CKS330
	47	7.5	0.16	70	6.3	5	2.5	P969-ND	.20	.16	.09	ECE-A1CKS470
	100	16.0	0.16	91	8	5	2.5	P970-ND	.34	.27	.15	ECE-A1CKS101
25	2.2	3.0	0.14	8	3	5	1.0	P971-ND	.20	.16	.09	ECE-A1EKK2R2
	3.3	3.0	0.14	10	3	5	1.0	P972-ND	.20	.16	.09	ECE-A1EKK3R3
	4.7	3.0	0.14	12	3	5	1.0	P973-ND	.20	.16	.09	ECE-A1EKK4R7
	4.7	3.0	0.14	22	4	5	1.5	P974-ND	.14	.11	.06	ECE-A1EKS4R7
	10	3.0	0.14	28	5	5	2.0	P975-ND	.17	.13	.07	ECE-A1EKS100
	22	5.5	0.14	55	6.3	5	2.5	P976-ND	.20	.16	.09	ECE-A1EKS220
	33	8.2	0.14	65	6.3	5	2.5	P977-ND	.20	.16	.09	ECE-A1EKS330
35	3.3	3.0	0.12	16	4	5	1.5	P978-ND	.14	.11	.06	ECE-A1VKS3R3
	4.7	3.0	0.12	22	4	5	1.5	P979-ND	.14	.11	.06	ECE-A1VKS4R7
	10	3.5	0.12	30	5	5	2.0	P980-ND	.17	.13	.07	ECE-A1VKS100
	22	7.7	0.12	60	6.3	5	2.5	P981-ND	.20	.16	.09	ECE-A1VKS220
	33	11.6	0.12	65	8	5	2.5	P982-ND	.34	.27	.15	ECE-A1VKS330
	47	16.4	0.12	85	8	5	2.5	P983-ND	.35	.28	.15	ECE-A1VKS470
50	0.1	3.0	0.10	1	4	5	1.5	P984-ND	.14	.11	.06	ECE-A1HKS0R1
	0.1	3.0	0.10	1	3	5	1.0	P985-ND	.20	.16	.09	ECE-A1HKK0R1
	0.22	3.0	0.10	2	4	5	1.5	P986-ND	.14	.11	.06	ECE-A1HKSR22
	0.22	3.0	0.10	2	3	5	1.0	P987-ND	.20	.16	.09	ECE-A1HKKR22
	0.33	3.0	0.10	3	4	5	1.5	P988-ND	.14	.11	.06	ECE-A1HKSR33
	0.33	3.0	0.10	3	3	5	1.0	P989-ND	.20	.16	.09	ECE-A1HKKR33
	0.47	3.0	0.10	5	4	5	1.5	P990-ND	.14	.11	.06	ECE-A1HKSR47
	0.47	3.0	0.10	5	3	5	1.0	P991-ND	.20	.16	.09	ECE-A1HKKR47
	1.0	3.0	0.10	8	3	5	1.0	P992-ND	.20	.16	.09	ECE-A1HKK010
	1.0	3.0	0.10	10	4	5	1.5	P993-ND	.14	.11	.06	ECE-A1HKS010
	2.2	3.0	0.10	16	4	5	1.5	P994-ND	.14	.11	.06	ECE-A1HKS2R2
	3.3	3.0	0.10	16	4	5	1.5	P995-ND	.14	.11	.06	ECE-A1HKS3R3
	4.7	3.0	0.10	23	5	5	2.0	P996-ND	.17	.13	.07	ECE-A1HKS4R7
	10	5.0	0.10	35	6.3	5	2.5	P997-ND	.20	.16	.09	ECE-A1HKS100
	22	11.0	0.10	60	8	5	2.5	P998-ND	.30	.24	.13	ECE-A1HKS220

Panasonic® KA-Series Miniature Aluminum Electrolytic Capacitors

Rating		Dimensions (mm)			Digi-Key	Pricing						Panasonic
WV DC	µF	D	L	A	Part No.	1	10	100	500	1,000	5,000	Part No.
6.3	22	4.0	7.0	1.5	P800-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A0JKA220
	33	4.0	7.0	1.5	P801-ND	.30	1.93	13.02	44.10	67.00	57.00/M	ECE-A0JKA330
	47	4.0	7.0	1.5	P802-ND	.30	1.93	13.02	44.10	67.00	57.00/M	ECE-A0JKA470
	100	5.0	7.0	2.0	P803-ND*	.36	2.30	15.50	52.50	80.00	68.00/M	ECE-A0JKA101
	220	6.3	7.0	2.5	P829-ND	.37	2.50	17.60	60.80	96.00	83.00/M	ECE-A0JKA221
	330	8.0	7.0	3.5	P830-ND	.44	3.26	23.25	83.70	130.00	121.00/M	ECE-A0JKA331
10	22	4.0	7.0	1.5	P804-ND	.30	1.93	13.02	44.10	67.00	57.00/M	ECE-A1AKA220
	33	4.0	7.0	1.5	P805-ND	.30	1.93	13.02	44.10	67.00	57.00/M	ECE-A1AKA330
	47	5.0	7.0	2.0	P806-ND	.33	2.12	14.26	48.30	74.00	62.00/M	ECE-A1AKA470
	100	6.3	7.0	2.5	P831-ND	.33	2.26	15.95	55.10	87.00	75.00/M	ECE-A1AKA101
	220	8.0	7.0	3.5	P832-ND	.44	3.26	23.25	83.70	130.00	121.00/M	ECE-A1AKA221
16	10	4.0	7.0	1.5	P807-ND	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1CKA100
	22	4.0	7.0	1.5	P808-ND	.30	1.93	13.02	44.10	67.00	57.00/M	ECE-A1CKA220
	33	5.0	7.0	2.0	P809-ND*	.36	2.30	15.50	52.50	80.00	68.00/M	ECE-A1CKA330
	47	5.0	7.0	2.0	P810-ND*	.36	2.30	15.50	52.50	80.00	68.00/M	ECE-A1CKA470
	100	6.3	7.0	2.5	P833-ND	.37	2.50	17.60	60.80	96.00	83.00/M	ECE-A1CKA101
25	4.7	4.0	7.0	1.5	P812-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1EKA4R7
	10	4.0	7.0	1.5	P813-ND	.30	1.93	13.02	44.10	67.00	57.00/M	ECE-A1EKA100
	22	5.0	7.0	2.0	P814-ND	.33	2.12	14.26	48.30	74.00	62.00/M	ECE-A1EKA220
	33	6.3	7.0	2.5	P815-ND	.33	2.26	15.95	55.10	87.00	75.00/M	ECE-A1EKA330
	47	6.3	7.0	2.5	P834-ND	.37	2.50	17.60	60.80	96.00	83.00/M	ECE-A1EKA470
35	4.7	4.0	7.0	1.5	P817-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1VKA4R7
	10	5.0	7.0	2.0	P818-ND*	.33	2.12	14.26	48.30	74.00	62.00/M	ECE-A1VKA100
	22	6.3	7.0	2.5	P819-ND*	.33	2.26	15.95	55.10	87.00	75.00/M	ECE-A1VKA220
	33	6.3	7.0	2.5	P835-ND	.37	2.50	17.60	60.80	96.00	83.00/M	ECE-A1VKA330
	47	8.0	7.0	3.5	P836-ND	.44	3.26	23.25	83.70	130.00	121.00/M	ECE-A1VKA470
50	0.1	4.0	7.0	1.5	P820-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKA0R1
	0.22	4.0	7.0	1.5	P821-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKAR22
	0.33	4.0	7.0	1.5	P822-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKAR33
	0.47	4.0	7.0	1.5	P823-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKAR47
	1.0	4.0	7.0	1.5	P824-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKA010
	2.2	4.0	7.0	1.5	P825-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKA2R2
	3.3	4.0	7.0	1.5	P826-ND*	.28	1.79	12.09	40.95	62.00	53.00/M	ECE-A1HKA3R3
	4.7	4.0	7.0	1.5	P827-ND*	.30	1.93	13.02	44.10	67.00	57.00/M	ECE-A1HKA4R7
	10	5.0	7.0	2.0	P828-ND*	.36	2.30	15.50	52.50	80.00	68.00/M	ECE-A1HKA100
	22	6.3	7.0	2.5	P837-ND	.37	2.50	17.60	60.80	96.00	83.00/M	ECE-A1HKA220
	33	8.0	7.0	3.5	P838-ND	.44	3.26	23.25	83.70	130.00	121.00/M	ECE-A1HKA330

*** P835-KIT-ND** ***Digi-Key® KA-Series Capacitors Kit*** 10 each of parts indicated. (160 total pieces) Notebook style storage case **$29.95**

The KA-Series is a tantalum substitute for many applications.



- **Operating Temperature Range:** –40°C to +85°C.
- **Rated DC Voltage Range:** 6.3 to 63VDC.
- **Rated Capacitance Range:** 1.0 to 100µF.
- **Capacitance Tolerance:** ±20%.
- **tan ∂:** Max. at 120Hz.

W.V.	6.3	10	16	25	35	50	63
tan	0.24	0.2	0.16	0.14	0.12	0.10	0.08

- **DC Leakage Current, Max.:** After 5 minutes application of the DC working voltage, I=0.01 C V or 3µA, whichever is greater.
- **Load Life:** 1,000 hours application of the rated DC working voltage at +85°C, the capacitor shall meet the following limits:

Capacitance Change	Within ±20% of the initial measured value
tan δ	Less than 200% of the initial specified value
DC Leakage Current	Less than the initial specified value

- **Stability at Low and High Temperature:** Impedance ratio at 120Hz –25/20°C, –40/20°C.

W.V.	6.3	10	16	25	35	50
–25/20°C	4	3	2	2	2	2
–40/20°C	8	6	4	4	3	3

- **Shelf Life:** After 1,000 hours storage without load at +85°C, the capacitor shall meet the above "Load life."
- **Others shall be in accordance with JIS-C-5141 (1976).**

PANASONIC K CROSS REFERENCES:

Elna: RC2, **IC:** RSS, **Marcon:** SSM, **Nichicon:** SR/SA, **Rubycon:** MS7, **UCC:** SRG/SRA

Panasonic® KG-Series Miniature Aluminum Electrolytic Capacitors 105°C

Rating		Size	Digi-Key	Pricing						Panasonic
WV/DC	µF	Code	Part No.	1	10	100	500	1,000	5,000	Part No.
6.3	22	A	P900-ND	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A0JKG220
	33	B	P901-ND	.32	1.68	11.83	40.85	65.00	56.00/M	ECE-A0JKG330
	47	B	P902-ND	.33	1.68	11.83	40.85	65.00	56.00/M	ECE-A0JKG470
	68	C	P903-ND	.36	2.22	15.68	54.15	86.00	74.00/M	ECE-A0JKG680
	100	C	P904-ND•	.42	2.22	15.68	54.15	86.00	74.00/M	ECE-A0JKG101
	220	D	P941-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A0JKG221
10	22	A	P905-ND	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1AKG220
	33	B	P906-ND	.35	1.68	11.83	40.85	65.00	56.00/M	ECE-A1AKG330
	47	C	P907-ND	.37	2.22	15.68	54.15	86.00	74.00/M	ECE-A1AKG470
	68	C	P908-ND	.42	2.22	15.68	54.15	86.00	74.00/M	ECE-A1AKG680
	100	C	P942-ND	.42	2.00	14.25	51.30	80.00	74.00/M	ECE-A1AKG101
16	6.8	A	P909-ND	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1CKG6R8
	10	A	P910-ND	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1CKG100
	15	A	P911-ND	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1CKG150
	22	B	P912-ND	.35	1.68	11.83	40.85	65.00	56.00/M	ECE-A1CKG220
	33	C	P913-ND•	.39	2.22	15.68	54.15	86.00	74.00/M	ECE-A1CKG330
	47	C	P914-ND•	.40	2.22	15.68	54.15	86.00	74.00/M	ECE-A1CKG470
	68	D	P943-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1CKG680
	100	D	P944-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1CKG101
25	6.8	A	P915-ND•	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1EKG6R8
	10	A	P916-ND•	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1EKG100
	15	B	P917-ND	.35	1.68	11.83	40.85	65.00	56.00/M	ECE-A1EKG150
	22	B	P918-ND•	.36	1.68	11.83	40.85	65.00	56.00/M	ECE-A1EKG220
	33	C	P919-ND	.44	2.22	15.68	54.15	86.00	74.00/M	ECE-A1EKG330
	47	D	P945-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1EKG470
	68	D	P946-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1EKG680
35	4.7	A	P920-ND•	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1VKG4R7
	6.8	A	P921-ND	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1VKG6R8
	10	B	P922-ND•	.34	1.68	11.83	40.85	65.00	56.00/M	ECE-A1VKG100
	15	C	P923-ND	.44	2.22	15.68	54.15	86.00	74.00/M	ECE-A1VKG150
	22	C	P924-ND•	.45	2.22	15.68	54.15	86.00	74.00/M	ECE-A1VKG220
	33	D	P947-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1VKG330
	47	D	P948-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1VKG470
50	0.1	A	P925-ND•	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKG0R1
	0.15	A	P926-ND	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKGR15
	0.22	A	P927-ND•	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKGR22
	0.33	A	P928-ND•	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKGR33
	0.47	A	P929-ND•	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKGR47
	0.68	A	P930-ND	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKGR68
	1	A	P931-ND•	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKG010
	1.5	A	P932-ND	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKG1R5
	2.2	A	P933-ND•	.30	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKG2R2
	3.3	A	P934-ND•	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKG3R3
	4.7	A	P935-ND•	.32	1.48	10.45	36.10	57.00	49.00/M	ECE-A1HKG4R7
	6.8	B	P936-ND	.35	1.68	11.83	40.85	65.00	56.00/M	ECE-A1HKG6R8
	10	C	P937-ND•	.45	2.22	15.68	54.15	86.00	74.00/M	ECE-A1HKG100
	15	C	P938-ND	.46	2.22	15.68	54.15	86.00	74.00/M	ECE-A1HKG150
	22	D	P939-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1HKG220
	33	D	P940-ND	.62	2.98	21.25	76.50	119.00	111.00/M	ECE-A1HKG330

• **P900-KIT-ND** ***Digi-Key® KG-Series Capacitors Kit*** 10 each of parts indicated. (180 pieces total) Notebook style storage case........... **$34.95**

The KG-Series is a tantalum substitute for many applications.

Features: • Height is 7mm. • Anti-solvent in Freon.

Operating Temperature Range: –55°C to +105°C.

Capacitance Tolerance: ±20% at 120Hz, +20°C.

DC Leakage Current: I◀0.01CV or 3[µA] after 2 min. (whichever is greater).

tan δ (120Hz/120°C):

W.V.	6.3	10	16	25	35	50
tan δ (max.)	0.22	0.19	0.16	0.14	0.12	0.10

Low Temperature Impedance Stability at 120Hz:

W.V.	6.3	10	16	25	35	50
Z(−25°C)/Z(+20°C)	3	2	2	2	2	2
Z(−40°C)/Z(+20°C)	6	5	3	3	3	3
Z(−55°C)/Z(+20°C)	8	6	4	4	4	4

Load Life: After 1,000 hours application of DC rated working voltage at +105°C, the capacitor shall meet the following limits.

Capacitance change: < ±20% of the initial measured value.

tan ∂: < 200% of the initial specified value.

DC leakage current: < the initial specified value.

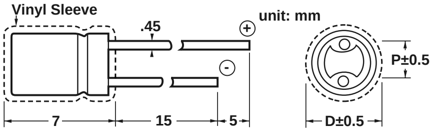
Anti-solvent: Can withstand circuit-board cleaning within 5 minutes in Freon TE, TES, or TP-35 at +40°C by dipping, steaming, or ultrasonic.

unit: in (mm)

Size Code	Body Dia. D	x	Body Length L
A	.157 (4)	x	.276 (7)
B	.197 (5)	x	.276 (7)
C	.248 (6.3)	x	.276 (7)
D	.315 (8)	x	.276 (7)

(mm)

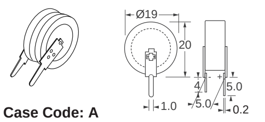
Body Dia. ØD	4	5	6.3	8
Lead Space P	1.5	2	2.5	3.5



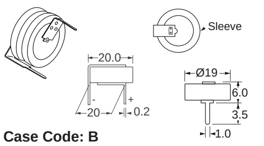
Panasonic

SG Series Gold Capacitors

Electric Double Layer Capacitors



Case Code: A



Case Code: B

Specifications:

Operating Temp. Range: Rated Working Voltage: Nom. Capacitance Range: Capacitance Tolerance:	-25 to +70°C 5.5V DC 0.022F to 1.0F (+20°C) -20% to +80%

Temperature Characteristics:

Capacitance Change -25°C & 70°C: Internal Resistance −25°C: Inflow Current at 70°C:	≤±30% at 20°C ≤5X at 20°C ≤4X at 20°C

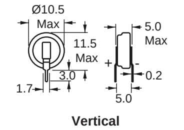
Load Life Characteristics:
(after 1000 hrs. with rated voltage of 5.5V DC applied at 70°C.)

Capacitance Change: Internal Resistance: Inflow Current:	≤±30% of initial measured value ≤4X of initial specified value ≤2X of initial specified value

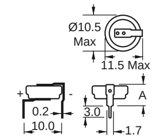
Case Code	WV DC	Nom. Cap. (F)	Internal Resist. Ω (1KHz)	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
Vertical									
A	5.5	0.47	30	P6974-ND	6.64	5.29	4.15	2.66	EEC-S5R5V474
A	5.5	1.0	30	P6975-ND	6.64	5.29	4.15	2.66	EEC-S5R5V105
B	5.5	1.5	30	P11343-ND	7.64	6.08	4.76	3.05	EEC-S5R5V155
Horizontal									
B	5.5	0.47	30	P6980-ND	6.64	5.29	4.15	2.66	EEC-S5R5H474
B	5.5	1.0	30	P6981-ND	6.64	5.29	4.15	2.66	EEC-S5R5H105
B	5.5	1.5	30	P11342-ND	7.64	6.08	4.76	3.05	EEC-S5R5H155

SD Series Gold Capacitors

Electric Double Layer Capacitors



Vertical



Horizontal

Features: • 30% smaller than SG series • Terminal solderability 95% • Longer life than a secondary battery • Best choice for µA range IC memory back-up

Specifications:

Operating Temperature Range: Rated Working Voltage: Capacitance Tolerance:	-25 to +70°C 5.5V DC -20% to +80%

Temperature Characteristics:

Capacitance Change -25°C & 70°C: Internal Resistance −25°C:	≤±30% at 20°C ≤5X at 20°C

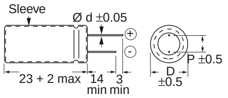
Endurance:
(after 1000 hrs. w/ rated volt. of 5.5V DC applied at 70°C.)

Capacitance Change: Internal Resistance:	±30% of initial measured value ≤ 4 times the initial specified value

WV DC	Nom. Cap. (F)	Internal Resist. Ω (1KHz)	Dim. A mm (max.)	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
Vertical									
5.5	0.022	≤150	—	P10789-ND	2.70	1.80	1.41	.91	EEC-S0HD223V
5.5	0.047	≤120	—	P10790-ND	2.89	1.94	1.52	.97	EEC-S0HD473V
5.5	0.10	≤75	—	P10791-ND	2.89	1.94	1.52	.97	EEC-S0HD104V
5.5	0.22	≤75	—	P10792-ND	3.16	2.10	1.65	1.06	EEC-S0HD224V
5.5	0.33	≤75	—	P11065-ND	2.91	2.23	1.75	1.12	EEC-S0HD334V
Horizontal									
5.5	0.022	≤150	5.5	P10785-ND	2.70	1.80	1.41	.91	EEC-S0HD223H
5.5	0.047	≤120	5.5	P10786-ND	2.89	1.94	1.52	.97	EEC-S0HD473H
5.5	0.10	≤75	5.5	P10787-ND	2.89	1.94	1.52	.97	EEC-S0HD104H
5.5	0.22	≤75	6.0	P10788-ND	3.16	2.10	1.65	1.06	EEC-S0HD224H
5.5	0.33	≤75	6.5	P11064-ND	2.91	2.23	1.75	1.12	EEC-S0HD334H

HW Series Gold Capacitors

Electric Double Layer Capacitors



Specifications:

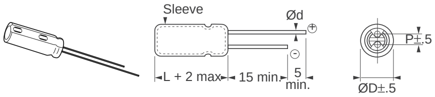
Operating Temperature Range: Rated Working Voltage: Terminal Polarity: Capacitance Range: Self Discharge:	-25°C to +60°C 2.3V DC (—) Negative 40°F to 70°F 0.2 V.DC or Less

øD	L	ød	P	WV DC	Nom. Cap. (F)	Internal Resist. Ω (1KHz)	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
12.5	23	0.8	5.0	2.3	4.7	0.3	P11344-ND	5.93	5.09	3.99	2.55	EEC-HW0D475
12.5	35	0.8	5.0	2.3	10.0	0.2	P11345-ND	7.11	6.10	4.78	3.06	EEC-HW0D106
18.0	35	0.8	7.5	2.3	22.0	0.1	P11346-ND	11.85	10.17	7.96	5.10	EEC-HW0D226
18.0	40	0.8	7.5	2.3	50.0	0.1	P11066-ND	25.07	21.50	16.84	10.78	EEC-HW0D506

Warning: If the voltage balance beaks down, an over voltage condition could result. To prevent this from occurring, add a voltage dividing resistor in parallel with each capacitor, allowing for the capacitor's leakage current.

AL Series Gold Capacitors

Electric Double Layer Capacitors



Specifications:

Operating Temp. Range: Rated Working Voltage: Nom. Capacitance Range: Capacitance Tolerance:	-25 to +70°C 2.5V DC 0.22F to 10F (+20°C) -20% to +80%

Temperature Characteristics:

Capacitance Change -25°C & 70°C: Internal Resistance −40°C: Inflow Current at 70°C:	≤±30% at 20°C ≤3X at 20°C ≤3X at 20°C

Load Life Characteristics:
(after 1000 hrs. with rated voltage of 2.5V DC applied at 70°C.)

Capacitance Change: Internal Resistance: Inflow Current:	≤±30% of initial measured value ≤2X of initial specified value ≤2X of initial specified value

Shelf Life: The capacitor shall meet the limits for "High Temperature Loading" after 1,000 hours exposure at +70°C with no voltage applied.

Loading with Moisture: The capacitor shall meet the limits for "High Temperature Loading" after 500 hours exposure at +55°C/90 to 95%RH with 2.5V DC applied.

WV DC	Capacitance (F)	Inflow Current* (mA)	Internal Resist. Ω (1KHz)	Dimensions (mm) øD	L	ød	P	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
2.5	1.0	0.18	1.0	8.0	22	0.7	3.5	P6963-ND	4.15	3.21	2.52	1.61	EEC-A0EL105
2.5	3.3	0.30	0.3	12.5	23	0.8	5.0	P6966-ND	5.22	4.04	3.17	2.03	EEC-A0EL335
2.5	4.7	0.44	0.2	12.5	35	0.8	5.0	P6967-ND	6.11	4.73	3.71	2.37	EEC-A0EL475
2.5	10	0.60	0.1	18.0	35	0.8	7.5	P6969-ND	8.71	7.43	5.82	3.73	EEC-A0EL106

* Inflow current is measured after 90 minutes application of rated working voltage. In use, current will decrease to several µA level after approx. 10 hrs. application of rated working voltage.

NF Series Gold Capacitors

Wet Type Electric Double Layer Capacitors

Gold capacitors provide super large capacitance by unique electrode and miniaturization technology meeting the trend of compactness. Suitable for a memory back-up for CMOS type RAM in microcomputers.

Specifications:

	P6951-P11063	P6956
Operating Temp. Range: Surge Voltage: Capacitance Tolerance:	−25° ~ +70°C 6.3 VDC −20 ~ +80%	−25° ~ +70°C 6.3 VDC −20 ~ +40%

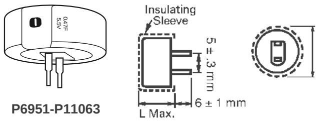
Temperature Characteristics:

	P6951-P11063	P6956
Capacitance Change: Internal Resistance −25°C: Leakage Current at 70°C:	±30% at 20°C less than 5x at 20°C less than 4x at 20°C	±30% at 20°C less than 3x at 20°C less than 3x at 20°C

Load Life Char.: (after 1000 hrs. with rated voltage applied at 70°C.)

	P6951-P11063	P6956
Capacitance Change: Internal Resistance: Leakage Current:	±30% less than 4x less than 2x	±30% less than 2x less than 2x

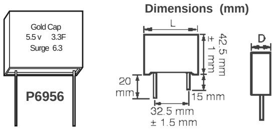
Features:
- A long period memory backup is available by excellent self-discharging characteristics.
- Low profile design is 9.5 mm maximum in height and has a standardized 5 mm terminal spacing.
- Superior to primary or second-ary batteries in operating temperature range, charge/ discharge characteristics, long time reliability and performance stability.



P6951-P11063

Features:
- Can be added in most typical microcomputer circuits.
- Memory backup from a second up to a month.
- Minimum self-discharging.
- High reliability, and more convenience than batteries.
- Cubic shape design. Compact design allows maximum density, easy mounting on PC Board.
- Very good stability over repeated charge/discharge cycles.

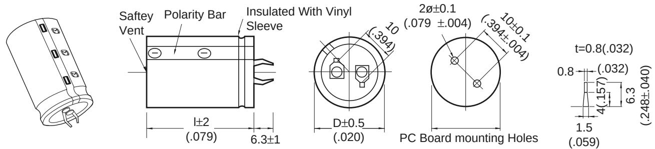
Dimensions (mm)



WV DC	Cap. Farads	Capacitance Range	Inflow Current* µA (30 min.)	Internal Resist. V (1KHz)	Dim. (mm) L	D	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
5.5	0.047	0.0376 ~ 0.0846	69	120	7.5	13.5	P6951-ND	2.91	2.50	1.96	1.25	EEC-F5R5U473
5.5	0.1	0.08 ~ 0.18	100	75	7.5	13.5	P6952-ND	3.12	2.22	1.74	1.12	EEC-F5R5U104
5.5	0.47	0.376 ~ 0.846	216	30	8.0	21.5	P6954-ND	7.11	5.34	4.18	2.68	EEC-F5R5U474
5.5	1.0	0.8 ~ 1.8	315	30	8.0	21.5	P6955-ND	7.11	5.34	4.18	2.68	EEC-F5R5U105
5.5	1.5	1.2 ~ 2.7	385	30	8.0	21.5	P11063-ND	8.08	5.87	4.60	2.95	EEC-F5R5U155
5.5	3.3	2.64 ~ 4.62	440*	2.5	42.5	15.0	P6956-ND	13.90	11.91	9.33	5.97	EEC-W5R5D335

* Inflow current after 60 minutes.

Panasonic® TS-Series Large Aluminum Electrolytic Capacitors



Specifications:

- **TSW Series: Standard Type** (16 ~ 250V/ –40 ~ +85°C/220 ~ 15,000µF)
- **TSU Series: Miniaturized Type** (16 ~ 250V/ –40 ~ +85°C/220 ~ 47,000µF)
  (400 ~ 450V/ –25 ~+ 85°C/68~330uF)
- **TSUP Series: Large Can Type** (16 ~ 250V/ –40 ~ +85°C/180 ~ 68,000µF)
- **TSNH Series: 105°C Type** (16 ~ 100V/ –40° ~ +105°C/470 ~ 33,000µF)
- **TSHA Series: Large Can Type** (10 ~ 250V/ –40 ~ +105°C/180 ~ 68,000µF)
- **TSHB Series: Large Can Type** (200 ~ 450V/ –40 ~ +105°C/82 ~ 2,200µF)

- **Capacitance Tolerance (at 120Hz):**

Type:	**TSW**	**TSU**	**TSUP**	**TSNH**	**TSHA**	**TSHB**
Tol.:	–10 ~ +30%	±20%	±20%	±20%	±20%	±20%

Surge Voltage & Surge Voltage Test: The DC surge voltage is the maximum voltage to which the capacitor should be subjected. The surge voltage listed below is applied in series with a 1,000 ohm resistor at a cycle of 0.5 minutes "ON" and 4.5 minutes "OFF", repeated 1,000 times at 25°C.

Rated DC Voltage:	16	25	35	50	63	100	200	250	400	450
Surge Voltage:	20	32	44	63	79	125	250	300	450	500

After the test, the capacitor shall meet the following limits: Capacitance change of ±20% of initial measured value; DC leakage current less than initial limits; and D.F. less than 150% of initial limits.

CROSS REFERENCES

PANASONIC TSU
Elna: LP; **Marcon:** FTW/FHW; **Nichicon:** UB/PS; **Rubycon:** LP/RP; **Sprague:** 80D; **UCC:** NMA.

PANASONIC TSUP
Matsushita: TSUP; **Nichichemi:** SMH; **Nichicon:** LQ; **Rubycon:** USP; **Marcon:** DWF & CEFHW; **UCC:** SMH; **Sprague:** 82D; **ICI:** LPR/LUG; **Mepco:** 3487.

PANASONIC TSNH
Elna: LPS/LPJ; **Marcon:** FTU/FHU; **Nichicon:** GH/GL/GM; **Rubycon:** XLP/XRP; **Sprague:** 81D; **UCC:** KM.

PANASONIC TSHA
Matsushita: TSHA; **Nichichemi:** KMH; **Nichicon:** GQ; **Rubycon:** MXP; **Marcon:** DUF & CEFHU; **UCC:** KMH; **Sprague:** 81D; **Mepco:** 3488.

Ripple Voltage: The sum of the DC voltage plus the AC peak ripple voltage shall not exceed the rated DC voltage and there shall be no application of reversed voltage.

Ripple Current (mA):

Frequency (Hz):	**50Hz**	**60Hz**	**120Hz**	**500Hz**	**1KHz**	**10 ~ 50KHz**
16V ~ 100V:	0.93	0.95	1.0	1.05	1.06	1.15
160V ~ 450V:	0.75	0.8	1.0	1.2	1.25	1.4

D.C. Leakage Current: Measurements shall be made at rated working voltage at 20°C. The voltage shall be applied to the capacitor for a minimum period of 5 minutes before reading the leakage current. Maximum leakage current shall not exceed the value given by the following formula: 16 ~ 100V: in case of C X V = 100,000µFV I = 0.01CVµA max. in case of C X V = 100,000µFV I = 3 v C x VµA max. 160 ~ 450V: 1 = 3 v C x VµA max. where I = leakage current in mA, C = rated capacitance in µF V = DC rated WV in volts.

Load Life Test: The capacitor shall be subjected to application of the DC rated voltage with full rated ripple current in the specified ambient temperature for the specified life period. The capacitor shall then be removed from the test chamber and stabilized at room temperature. After reaching temperature stability; the capacitor shall not exceed the following specified values listed: Capacitance change within ±20% of the initial measured value. D.F. 150% of the initial limits. DC leakage current ≤5 initial limits.

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	85° (rms) Ripple Current (120Hz) A	Dimensions (mm) D	L	Digi-Key Part No.	Price Each 1	10	50	200	Panasonic Part No.
TSW General Purpose +85°C (Not recommended for new design. Use TSU/TSUP series)											
35	1000	0.35	1.35	22	25	P6511-ND	1.90	1.53	1.26	.82	ECE-T35R102SW
TSU General Purpose +85°C, 2000 Hour Life											
16	4700	0.75	2.0	22	25	P6445-ND	2.54	2.04	1.68	1.09	ECE-S1CU472D
	6800	0.98	2.3	22	31.5	P6446-ND	3.13	2.51	2.06	1.35	ECE-S1CU682E
	10000	1.20	3.0	22	40	P6447-ND	3.13	2.57	2.16	1.51	ECE-S1CU103G
	22000	1.77	4.6	25	50	P6420-ND	5.19	4.26	3.58	2.50	ECE-S1CU223N
	33000	2.17	5.2	30	50	P6421-ND	6.13	5.20	4.49	3.37	ECE-S1CU333U
	47000	2.6	5.4	35	51	P6422-ND	7.92	6.71	5.79	4.35	ECE-S1CU473Z
25	3300	0.82	2.0	22	25	P6448-ND	3.11	2.49	2.05	1.34	ECE-S1EU332D
	4700	1.02	2.0	22	31.5	P6449-ND	3.09	2.48	2.04	1.33	ECE-S1EU472E
	6800	1.23	2.9	22	40	P6475-ND	3.12	2.56	2.15	1.50	ECE-S1EU682G
	10000	1.6	3.4	25	40	P6480-ND	3.85	3.16	2.65	1.85	ECE-S1EU103M
	22000	2.22	5.3	30	50	P6423-ND	6.24	5.28	4.56	3.42	ECE-S1EU223U
	33000	2.72	5.8	35	51	P6424-ND	8.42	7.13	6.16	4.62	ECE-S1EU333Z
35	2200	0.77	1.8	22	25	P6481-ND	3.22	2.58	2.12	1.38	ECE-S1VU222D
	3300	1.01	2.2	22	40	P6482-ND	3.26	2.61	2.14	1.40	ECE-S1VU332E
	4700	1.21	2.5	22	40	P6483-ND	3.45	2.77	2.27	1.48	ECE-S1VU472G
	6800	1.46	3.0	25	40	P6484-ND	3.85	3.16	2.65	1.85	ECE-S1VU682M
	10000	1.77	3.8	30	40	P6485-ND	4.85	3.98	3.34	2.33	ECE-S1VU103T
	15000	2.17	4.7	30	50	P6425-ND	5.58	4.72	4.08	3.06	ECE-S1VU153U
	22000	2.63	5.1	35	51	P6426-ND	7.76	6.57	5.68	4.26	ECE-S1VU223Z
50	2200	0.99	1.9	22	31.5	P6486-ND	3.19	2.56	2.10	1.37	ECE-S1HU222E
	3300	1.21	2.2	22	40	P6487-ND	3.46	2.78	2.28	1.49	ECE-S1HU332G
	4700	1.45	2.7	25	40	P6488-ND	3.76	3.09	2.60	1.81	ECE-S1HU472M
	6800	1.74	3.3	30	40	P6489-ND	5.04	4.13	3.47	2.42	ECE-S1HU682T
	10000	2.12	4.3	30	50	P6427-ND	5.78	4.89	4.23	3.17	ECE-S1HU103U
	15000	2.59	4.7	35	51	P6428-ND	7.72	6.66	5.85	4.61	ECE-S1HU153Z
63	1000	0.63	1.5	22	25	P6490-ND	3.28	2.63	2.16	1.41	ECE-S1JU102D
	2200	1.11	1.9	22	40	P6491-ND	3.27	2.68	2.25	1.57	ECE-S1JU222G
	3300	1.36	2.4	25	40	P6492-ND	4.20	3.45	2.90	2.02	ECE-S1JU332M
	4700	1.63	2.9	25	50	P6493-ND	5.29	4.34	3.65	2.54	ECE-S1JU472N
	6800	1.96	3.8	30	50	P6494-ND	6.00	5.08	4.39	3.29	ECE-S1JU682U
	10000	2.38	4.2	35	51	P6495-ND	7.78	6.71	5.90	4.64	ECE-S1JU103Z
100	470	0.47	1.2	22	25	P6496-ND	3.14	2.57	2.16	1.51	ECE-S2AU471D
	680	0.68	1.4	22	31.5	P6497-ND	3.22	2.58	2.12	1.38	ECE-S2AU681E
	1000	1.00	1.5	22	40	P6498-ND	3.90	3.20	2.69	1.87	ECE-S2AU102G
	2200	1.40	2.3	25	50	P6499-ND	5.47	4.63	4.00	3.00	ECE-S2AU222N
	3300	1.72	3.0	30	50	P6429-ND	7.65	6.48	5.59	4.20	ECE-S2AU332U
	4700	2.05	3.4	35	51	P6430-ND	9.25	7.98	7.01	5.52	ECE-S2AU472Z
200	220	0.62	1.15	22	31.5	P6540-ND	3.21	2.57	2.11	1.38	ECE-S2DU221E
	470	0.91	1.7	25	40	P6542-ND	4.02	3.30	2.77	1.93	ECE-S2DU471M
	680	1.10	2.15	30	40	P6544-ND	5.46	4.48	3.76	2.62	ECE-S2DU681T
	1000	1.34	2.8	35	40	P6546-ND	6.24	5.28	4.56	3.42	ECE-S2DU102Y
250	220	0.70	1.15	22	40	P6548-ND	3.30	2.71	2.28	1.59	ECE-S2EU221G
	330	0.86	1.4	25	40	P6549-ND	4.27	3.51	2.95	2.05	ECE-S2EU331M
	470	1.02	1.7	30	40	P6551-ND	5.73	4.70	3.95	2.75	ECE-S2EU471T
	680	1.23	2.15	30	50	P6553-ND	6.24	5.28	4.56	3.42	ECE-S2EU681U
	1000	1.5	2.8	35	51	P6431-ND	8.09	6.85	5.92	4.44	ECE-S2EU102Z
400	68	0.49	.44	25	25	P6432-ND	3.09	2.54	2.13	1.49	ECE-S2GU680J
	100	0.6	.59	25	31.5	P6433-ND	3.73	3.06	2.57	1.79	ECE-S2GU101K
	100	0.60	.59	22	40	P6533-ND	3.57	2.93	2.46	1.71	ECE-S2GU101G
	220	0.88	.95	30	40	P6435-ND	5.41	4.58	3.96	2.97	ECE-S2GU221T
450	47	0.43	.37	25	25	P6438-ND	3.12	2.56	2.15	1.50	ECE-S2WU470J
	68	0.52	.48	25	31.5	P6439-ND	3.62	2.97	2.50	1.74	ECE-S2WU680K
	100	0.63	.66	30	31.5	P6440-ND	4.84	3.97	3.33	2.32	ECE-S2WU101R
	220	0.94	1.2	35	40	P6442-ND	6.94	5.88	5.08	3.81	ECE-S2WU221Y
	330	1.15	1.4	35	51	P6443-ND	8.30	7.16	6.29	4.95	ECE-S2WU331Z
TSUP Miniaturized Size General Purpose +85°C, 3000 Hour Life†											
16	4700	0.82	1.77	22	25	P7345-ND	2.20	1.86	1.34	1.01	ECO-S1CP472BA
	6800	0.98	3.15	20	25	P6858-ND	2.99	2.45	1.72	1.20	ECO-S1CP682AA
	6800	0.98	2.57	22	25	P7346-ND	2.39	2.03	1.46	1.10	ECO-S1CP682BA
	8200	1.08	3.47	20	30	P6859-ND	3.14	2.58	1.80	1.26	ECO-S1CP822AA
	8200	1.08	3.10	22	25	P7347-ND	2.50	2.12	1.53	1.15	ECO-S1CP822BA
	10000	1.20	3.78	20	35	P6860-ND	3.34	2.74	1.92	1.34	ECO-S1CP103AA
	10000	1.20	3.78	25	25	P6861-ND	3.78	3.03	2.07	1.35	ECO-S1CP103CA
	12000	1.31	4.52	20	35	P6862-ND	3.47	2.85	2.00	1.39	ECO-S1CP123AA
	12000	1.31	4.52	25	25	P6863-ND	3.50	2.88	2.01	1.40	ECO-S1CP123CA
	15000	1.46	5.26	20	40	P6864-ND	3.79	3.11	2.18	1.52	ECO-S1CP153AA
16	15000	1.46	5.26	25	30	P6865-ND	3.81	3.13	2.19	1.53	ECO-S1CP153CA
	18000	1.60	5.57	22	40	P6866-ND	3.94	3.23	2.26	1.58	ECO-S1CP183BA
	18000	1.60	5.57	25	30	P6867-ND	4.00	3.29	2.30	1.60	ECO-S1CP183CA
	22000	1.77	6.10	22	45	P6868-ND	4.38	3.60	2.52	1.76	ECO-S1CP223BA
	22000	1.77	6.10	30	30	P6869-ND	4.84	3.97	2.78	1.94	ECO-S1CP223DA
	27000	1.97	6.31	25	45	P6870-ND	5.13	4.21	2.95	2.06	ECO-S1CP273CA
	27000	1.97	6.31	30	35	P6871-ND	5.38	4.41	3.09	2.15	ECO-S1CP273DA
	33000	2.17	6.84	25	50	P6872-ND	4.82	4.09	2.94	2.21	ECO-S1CP333CA
	33000	2.17	6.84	35	30	P6873-ND	5.47	4.63	3.33	2.50	ECO-S1CP333EA
	39000	2.36	6.94	30	45	P6874-ND	5.75	4.87	3.51	2.63	ECO-S1CP393DA
	39000	2.36	6.94	35	35	P6875-ND	6.03	5.11	3.68	2.76	ECO-S1CP393EA
	47000	2.60	7.47	30	50	P6876-ND	6.34	5.37	3.87	2.90	ECO-S1CP473DA
	47000	2.60	7.47	35	40	P6877-ND	6.89	5.84	4.20	3.15	ECO-S1CP473EA
	56000	2.83	8.73	35	45	P6878-ND	7.65	6.48	4.66	3.50	ECO-S1CP563EA
	68000	3.12	9.05	35	50	P6879-ND	7.80	6.73	4.93	3.88	ECO-S1CP683EA
25	3300	0.86	1.68	22	25	P7348-ND	2.20	2.20	1.35	1.01	ECO-S1EP332BA
	4700	1.02	3.05	20	25	P6880-ND	3.00	2.46	1.73	1.20	ECO-S1EP472AA
	4700	1.02	2.39	22	25	P7349-ND	2.39	2.03	1.46	1.10	ECO-S1EP472BA
	5600	1.12	3.36	20	30	P6881-ND	3.14	2.58	1.81	1.26	ECO-S1EP562AA
	5600	1.12	2.86	22	25	P7350-ND	2.51	2.12	1.53	1.15	ECO-S1EP562BA
	6800	1.23	3.47	20	35	P6882-ND	3.35	2.75	1.93	1.34	ECO-S1EP682AA
	6800	1.23	3.47	25	25	P6883-ND	3.78	3.03	2.08	1.36	ECO-S1EP682CA
	8200	1.35	3.57	20	40	P6884-ND	3.58	2.94	2.06	1.44	ECO-S1EP822AA
	8200	1.35	3.57	25	25	P6885-ND	3.52	2.89	2.02	1.41	ECO-S1EP822CA
	10000	1.50	3.78	22	35	P6886-ND	3.71	3.05	2.14	1.49	ECO-S1EP103BA
	10000	1.50	3.78	30	25	P6887-ND	4.06	3.33	2.34	1.63	ECO-S1EP103DA
	12000	1.64	4.10	22	40	P6888-ND	4.04	3.31	2.32	1.62	ECO-S1EP123BA
	12000	1.64	4.10	30	30	P6889-ND	4.38	3.60	2.52	1.76	ECO-S1EP123DA
	15000	1.83	4.63	22	50	P6890-ND	4.47	3.67	2.57	1.79	ECO-S1EP153BA
	15000	1.83	4.63	30	30	P6891-ND	4.85	3.98	2.79	1.94	ECO-S1EP153DA
	18000	2.01	5.47	25	45	P6892-ND	5.09	4.18	2.93	2.04	ECO-S1EP183CA
	18000	2.01	5.47	30	35	P6893-ND	5.33	4.38	3.06	2.14	ECO-S1EP183DA
	22000	2.22	6.10	25	50	P6894-ND	5.61	4.61	3.23	2.25	ECO-S1EP223CA
	22000	2.22	6.10	30	40	P6895-ND	5.09	4.32	3.11	2.33	ECO-S1EP223DA
	27000	2.46	6.21	30	45	P6896-ND	5.82	4.93	3.55	2.66	ECO-S1EP273DA
	27000	2.46	6.21	35	35	P6897-ND	6.11	5.17	3.72	2.79	ECO-S1EP273EA
	33000	2.72	6.84	30	50	P6898-ND	6.49	5.50	3.96	2.97	ECO-S1EP333DA
	33000	2.72	6.84	35	40	P6899-ND	7.04	5.96	4.29	3.22	ECO-S1EP333EA
	39000	2.96	7.36	35	45	P6900-ND	7.03	6.06	4.44	3.49	ECO-S1EP393EA
	47000	3.25	8.00	35	50	P6901-ND	7.90	6.81	4.99	3.93	ECO-S1EP473EA
35	2200	0.83	1.52	22	25	P7351-ND	2.22	1.88	1.35	1.02	ECO-S1VP222BA
	3300	1.01	2.73	20	25	P6902-ND	3.02	2.48	1.74	1.21	ECO-S1VP332AA
	3300	1.01	2.29	22	25	P7352-ND	2.42	2.05	1.48	1.11	ECO-S1VP332BA
	3900	1.10	2.94	20	30	P6903-ND	3.21	2.63	1.84	1.29	ECO-S1VP392AA
	3900	1.10	2.71	22	25	P7353-ND	2.54	2.16	1.55	1.17	ECO-S1VP392BA
	4700	1.21	3.26	20	35	P6904-ND	3.41	2.80	1.96	1.37	ECO-S1VP472AA
	4700	1.21	3.26	25	25	P6905-ND	3.85	3.09	2.11	1.38	ECO-S1VP472CA
	5600	1.32	3.36	20	40	P6906-ND	3.64	2.99	2.09	1.46	ECO-S1VP562AA
	5600	1.32	3.36	25	25	P6907-ND	4.03	3.23	2.21	1.44	ECO-S1VP562CA
	6800	1.46	3.68	22	35	P6908-ND	3.71	3.04	2.13	1.49	ECO-S1VP682BA
	6800	1.46	3.68	25	30	P6909-ND	3.85	3.16	2.21	1.54	ECO-S1VP682CA
	8200	1.60	4.00	22	40	P6910-ND	4.03	3.31	2.32	1.62	ECO-S1VP822BA
	8200	1.60	4.00	25	35	P6911-ND	4.18	3.43	2.40	1.68	ECO-S1VP822CA
	10000	1.77	4.42	22	45	P6913-ND	4.48	3.67	2.57	1.79	ECO-S1VP103BA
	10000	1.77	4.42	35	25	P6914-ND	5.33	4.37	3.06	2.13	ECO-S1VP103EA
	12000	1.94	5.05	25	45	P6915-ND	5.15	4.22	2.96	2.06	ECO-S1VP123CA
	12000	1.94	5.05	35	30	P6916-ND	5.79	4.75	3.33	2.32	ECO-S1VP123EA
	15000	2.17	5.57	25	50	P6917-ND	5.60	4.59	3.22	2.24	ECO-S1VP153CA
	15000	2.17	5.57	35	30	P6918-ND	5.55	4.70	3.38	2.54	ECO-S1VP153EA
	18000	2.38	5.68	30	45	P6919-ND	5.90	5.00	3.60	2.70	ECO-S1VP183DA
	18000	2.38	5.68	35	35	P6920-ND	6.19	5.24	3.77	2.83	ECO-S1VP183EA
	22000	2.63	6.10	30	50	P6921-ND	6.39	5.41	3.90	2.92	ECO-S1VP223DA
	22000	2.63	6.10	35	40	P6922-ND	6.93	5.87	4.22	3.17	ECO-S1VP223EA
	27000	2.91	6.84	35	45	P6923-ND	7.09	6.12	4.48	3.53	ECO-S1VP273EA
	33000	3.22	7.15	35	50	P6924-ND	8.05	6.94	5.09	4.00	ECO-S1VP333EA
50	1500	0.82	1.24	22	25	P7354-ND	2.28	1.93	1.39	1.05	ECO-S1HP152BA
	2200	0.99	2.26	20	25	P6925-ND	3.09	2.54	1.78	1.24	ECO-S1HP222AA
	2200	0.99	1.82	22	25	P7355-ND	2.45	2.08	1.50	1.12	ECO-S1HP222BA
	2700	1.10	2.52	20	30	P6926-ND	3.29	2.70	1.89	1.32	ECO-S1HP272AA

† 2000 hour life for can sizes of 20mm diameter or length

(Continued)

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	85° (rms) Ripple Current (120Hz) A	Dimensions (mm)		Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L		1	10	50	200	
TSUP Miniaturized Size General Purpose +85°C, 3000 Hour Life† (cont.)											
50	2700	1.10	2.23	22	25	P7356-ND	2.62	2.22	1.60	1.20	ECO-S1HP272BA
	3300	1.21	2.73	20	35	P6927-ND	3.54	2.90	2.03	1.42	ECO-S1HP332AA
	3300	1.21	2.73	25	25	P6928-ND	3.48	2.85	2.00	1.39	ECO-S1HP332CA
	3900	1.32	2.75	20	40	P6929-ND	3.77	3.09	2.17	1.51	ECO-S1HP392AA
	3900	1.32	2.75	25	25	P6930-ND	3.68	3.02	2.12	1.48	ECO-S1HP392CA
	4700	1.45	3.03	22	35	P6931-ND	3.90	3.20	2.24	1.56	ECO-S1HP472BA
	4700	1.45	3.03	30	25	P6932-ND	4.28	3.51	2.46	1.71	ECO-S1HP472DA
	5600	1.58	3.42	22	40	P6933-ND	4.24	3.48	2.44	1.70	ECO-S1HP562BA
	5600	1.58	3.42	30	30	P6934-ND	4.63	3.80	2.66	1.85	ECO-S1HP562DA
	6800	1.74	3.85	22	50	P6935-ND	4.70	3.86	2.70	1.88	ECO-S1HP682BA
	6800	1.74	3.85	30	30	P6936-ND	5.07	4.16	2.92	2.03	ECO-S1HP682DA
	8200	1.92	4.41	25	45	P6937-ND	5.37	4.41	3.09	2.15	ECO-S1HP822CA
	8200	1.92	4.41	30	35	P6938-ND	5.62	4.61	3.23	2.25	ECO-S1HP822DA
	10000	2.12	4.97	25	50	P6939-ND	5.01	4.25	3.06	2.29	ECO-S1HP103CA
	10000	2.12	4.97	35	30	P6940-ND	5.71	4.83	3.48	2.61	ECO-S1HP103EA
	12000	2.32	5.58	30	45	P6941-ND	6.10	5.16	3.72	2.79	ECO-S1HP123DA
	12000	2.32	5.58	35	35	P6942-ND	6.38	5.40	3.89	2.92	ECO-S1HP123EA
	15000	2.59	6.44	30	50	P6943-ND	6.51	5.51	3.97	2.98	ECO-S1HP153DA
	15000	2.59	6.44	35	40	P6944-ND	7.41	6.27	4.52	3.39	ECO-S1HP153EA
	18000	2.84	6.94	35	45	P6945-ND	7.51	6.48	4.75	3.73	ECO-S1HP183EA
	22000	3.15	7.57	35	50	P6946-ND	8.21	7.08	5.19	4.08	ECO-S1HP223EA
80	680	0.69	1.02	22	25	P7357-ND	2.24	1.90	1.37	1.03	ECO-S1KP681BA
	1000	0.84	1.51	22	25	P7358-ND	2.46	2.09	1.50	1.13	ECO-S1KP102BA
	1200	0.92	1.81	22	25	P7359-ND	2.55	2.16	1.56	1.17	ECO-S1KP122BA
	1500	1.03	2.26	22	30	P7360-ND	2.82	2.39	1.72	1.29	ECO-S1KP152BA
	1500	1.03	2.26	25	25	P7361-ND	2.90	2.46	1.77	1.33	ECO-S1KP152CA
	1800	1.13	2.52	22	35	P7362-ND	3.04	2.58	1.86	1.39	ECO-S1KP182BA
	1800	1.13	2.52	25	30	P7363-ND	3.10	2.63	1.89	1.42	ECO-S1KP182CA
	2200	1.25	2.73	22	40	P7364-ND	3.31	2.81	2.02	1.52	ECO-S1KP222BA
	2200	1.25	2.73	30	25	P7365-ND	3.60	3.05	2.20	1.65	ECO-S1KP222DA
	2700	1.39	2.78	22	45	P7366-ND	3.68	3.12	2.25	1.69	ECO-S1KP272BA
	2700	1.39	2.78	30	30	P7367-ND	3.94	3.34	2.40	1.80	ECO-S1KP272DA
	3300	1.54	3.21	22	50	P7368-ND	3.95	3.34	2.41	1.81	ECO-S1KP332BA
	3300	1.54	3.21	30	30	P7369-ND	4.27	3.62	2.61	1.96	ECO-S1KP332DA
	3900	1.67	3.59	25	45	P7370-ND	4.47	3.79	2.73	2.05	ECO-S1KP392CA
	3900	1.67	3.59	30	35	P7371-ND	4.76	4.04	2.91	2.18	ECO-S1KP392DA
	4700	1.83	4.09	25	50	P7372-ND	4.88	4.13	2.98	2.23	ECO-S1KP472CA
	4700	1.83	4.09	30	40	P7373-ND	5.21	4.41	3.18	2.38	ECO-S1KP472DA
	5600	2.00	4.55	30	45	P7374-ND	5.85	4.95	3.57	2.68	ECO-S1KP562DA
	5600	2.00	4.55	35	35	P7375-ND	6.14	5.20	3.75	2.81	ECO-S1KP562EA
	6800	2.21	5.16	30	50	P7376-ND	6.48	5.49	3.95	2.96	ECO-S1KP682DA
	6800	2.21	5.16	35	40	P7377-ND	7.06	5.98	4.31	3.23	ECO-S1KP682EA
	8200	2.42	5.83	35	50	P7378-ND	7.97	6.75	4.86	3.65	ECO-S1KP822EA
100	470	0.65	1.11	22	25	P7379-ND	2.31	1.96	1.41	1.06	ECO-S2AP471BA
	560	0.70	1.32	22	25	P7380-ND	2.41	2.05	1.48	1.11	ECO-S2AP561BA
	680	0.78	1.61	22	25	P7381-ND	2.56	2.17	1.56	1.17	ECO-S2AP681BA
	1000	0.94	1.96	20	35	P6947-ND	3.54	2.91	2.04	1.42	ECO-S2AP102AA
	1000	0.94	1.96	25	25	P6948-ND	3.50	2.88	2.01	1.40	ECO-S2AP102CA
	1200	1.03	2.31	20	40	P6949-ND	3.81	3.13	2.19	1.53	ECO-S2AP122AA
	1200	1.03	2.31	25	30	P6990-ND	3.73	3.06	2.15	1.50	ECO-S2AP122CA
	1500	1.16	2.57	22	40	P6991-ND	4.05	3.32	2.33	1.62	ECO-S2AP152BA
	1500	1.16	2.57	30	25	P6992-ND	4.35	3.57	2.50	1.74	ECO-S2AP152DA
	1800	1.27	2.84	22	45	P6993-ND	4.47	3.67	2.57	1.79	ECO-S2AP182BA
	1800	1.27	2.84	30	30	P6101-ND	4.71	3.87	2.71	1.89	ECO-S2AP182DA
	2200	1.40	3.14	22	50	P6102-ND	4.89	4.01	2.81	1.96	ECO-S2AP222BA
	2200	1.40	3.14	30	30	P6103-ND	4.45	3.77	2.71	2.04	ECO-S2AP222DA
	2700	1.55	3.71	25	45	P6104-ND	4.91	4.16	3.00	2.25	ECO-S2AP272CA
	2700	1.55	3.71	30	35	P6105-ND	5.00	4.24	3.05	2.29	ECO-S2AP272DA
	3300	1.72	4.06	25	50	P6106-ND	5.44	4.61	3.32	2.49	ECO-S2AP332CA
	3300	1.72	4.06	30	40	P6107-ND	5.73	4.85	3.49	2.62	ECO-S2AP332DA
	3900	1.87	4.54	30	45	P6108-ND	6.36	5.39	3.88	2.91	ECO-S2AP392DA
	3900	1.87	4.54	35	35	P6109-ND	6.74	5.70	4.11	3.08	ECO-S2AP392EA
	4700	2.05	5.13	30	50	P6110-ND	6.44	5.56	4.07	3.20	ECO-S2AP472DA
	4700	2.05	5.13	35	40	P6111-ND	6.99	6.03	4.42	3.48	ECO-S2AP472EA
	5600	2.24	5.75	35	45	P6112-ND	7.83	6.76	4.95	3.89	ECO-S2AP562EA
	6800	2.47	6.60	35	50	P6113-ND	7.92	6.98	5.22	4.33	ECO-S2AP682EA
200	150	0.51	0.71	22	25	P7382-ND	2.19	1.86	1.34	1.01	ECO-S2DP151BA
	220	0.62	1.04	22	25	P7383-ND	2.37	2.01	1.45	1.09	ECO-S2DP221BA
	270	0.69	1.41	20	30	P6114-ND	3.08	2.53	1.77	1.24	ECO-S2DP271AA
	270	0.69	1.41	22	25	P6115-ND	3.39	2.72	1.86	1.22	ECO-S2DP271BA
	330	0.77	1.56	20	35	P6116-ND	3.29	2.70	1.89	1.32	ECO-S2DP331AA
	330	0.77	1.56	25	25	P6117-ND	3.25	2.67	1.87	1.30	ECO-S2DP331CA
	390	0.83	1.68	22	30	P6118-ND	3.31	2.72	1.91	1.33	ECO-S2DP391BA
	390	0.83	1.68	25	25	P6119-ND	3.44	2.82	1.98	1.38	ECO-S2DP391CA
	470	0.91	1.85	22	35	P6120-ND	3.59	2.95	2.07	1.44	ECO-S2DP471BA
	470	0.91	1.85	30	25	P6121-ND	4.11	3.37	2.36	1.65	ECO-S2DP471DA
	560	1.00	2.43	22	40	P6122-ND	3.77	3.10	2.17	1.51	ECO-S2DP561BA
	560	1.00	2.43	30	25	P6123-ND	4.43	3.63	2.55	1.77	ECO-S2DP561DA
	680	1.10	2.68	22	45	P6124-ND	4.13	3.39	2.37	1.65	ECO-S2DP681BA
	680	1.10	2.68	30	30	P6125-ND	4.79	3.93	2.75	1.92	ECO-S2DP681DA
	820	1.21	2.93	25	45	P6126-ND	4.69	3.85	2.70	1.88	ECO-S2DP821CA
	820	1.21	2.93	35	25	P6127-ND	5.66	4.64	3.25	2.27	ECO-S2DP821EA
	1000	1.34	3.25	25	45	P7384-ND	4.35	3.68	2.65	1.99	ECO-S2DP102CX
	1000	1.34	3.25	25	50	P6128-ND	4.52	3.83	2.76	2.07	ECO-S2DP102CA
	1000	1.34	3.25	35	30	P6129-ND	5.37	4.55	3.27	2.46	ECO-S2DP102EA
	1200	1.46	3.50	30	40	P7385-ND	5.44	4.60	3.31	2.49	ECO-S2DP122DX
	1200	1.46	3.50	30	45	P6130-ND	5.58	4.73	3.40	2.55	ECO-S2DP122DA
	1200	1.46	3.50	35	30	P7386-ND	5.82	4.93	3.55	2.66	ECO-S2DP122EX
	1200	1.46	3.50	35	35	P6131-ND	5.97	5.06	3.64	2.73	ECO-S2DP122EA
	1500	1.64	3.87	30	45	P7387-ND	6.30	5.33	3.84	2.88	ECO-S2DP152DX
	1500	1.64	3.87	30	50	P6132-ND	6.55	5.54	3.99	2.99	ECO-S2DP152DA
	1500	1.64	3.87	35	35	P7388-ND	6.68	5.65	4.07	3.05	ECO-S2DP152EX
	1500	1.64	3.87	35	40	P6133-ND	6.93	5.87	4.22	3.17	ECO-S2DP152EA
	1800	1.80	4.32	35	40	P7389-ND	7.60	6.43	4.63	3.47	ECO-S2DP182EX
	1800	1.80	4.32	35	45	P6134-ND	6.94	5.98	4.38	3.45	ECO-S2DP182EA
	2200	1.98	4.92	35	45	P7390-ND	8.60	7.28	5.24	3.93	ECO-S2DP222EX
	2200	1.98	4.92	35	50	P6135-ND	7.97	6.87	5.04	3.96	ECO-S2DP222EA
250	120	0.51	0.71	22	25	P7391-ND	2.34	1.99	1.43	1.08	ECO-S2EP121BA
	150	0.58	0.89	22	25	P7392-ND	2.47	2.09	1.51	1.13	ECO-S2EP151BA
	180	0.63	1.07	20	30	P7393-ND	2.73	2.31	1.67	1.25	ECO-S2EP181AA
	180	0.63	1.07	22	25	P7394-ND	2.62	2.22	1.60	1.20	ECO-S2EP181BA
250	220	0.70	1.17	22	25	P7395-ND	2.76	2.34	1.69	1.27	ECO-S2EP221BX
	270	0.77	1.31	22	30	P7396-ND	2.97	2.52	1.82	1.36	ECO-S2EP271BA
	270	0.77	1.31	25	25	P7397-ND	3.09	2.62	1.89	1.42	ECO-S2EP271CA
	330	0.86	1.75	22	35	P7398-ND	3.27	2.77	2.00	1.50	ECO-S2EP331BA
	330	0.86	1.75	25	30	P7399-ND	3.34	2.83	2.04	1.53	ECO-S2EP331CA
	390	0.93	1.91	22	40	P7400-ND	3.49	2.96	2.13	1.60	ECO-S2EP391BA
	390	0.93	1.91	30	25	P7401-ND	3.80	3.22	2.32	1.74	ECO-S2EP391DA
	470	1.02	2.11	22	45	P7402-ND	3.85	3.26	2.35	1.76	ECO-S2EP471BA
	470	1.02	2.11	30	25	P7403-ND	4.16	3.52	2.54	1.90	ECO-S2EP471DX
	560	1.12	2.25	25	40	P7404-ND	4.33	3.67	2.64	1.98	ECO-S2EP561CX
	560	1.12	2.25	35	25	P7405-ND	4.91	4.16	3.00	2.25	ECO-S2EP561EA
	680	1.23	2.50	25	45	P7406-ND	4.80	4.06	2.93	2.20	ECO-S2EP681CX
	680	1.23	2.50	35	30	P7407-ND	5.43	4.60	3.31	2.49	ECO-S2EP681EA
	820	1.35	2.50	30	40	P7408-ND	5.67	4.80	3.46	2.60	ECO-S2EP821DX
	820	1.35	2.77	35	30	P7409-ND	6.05	5.12	3.69	2.77	ECO-S2EP821EX
	1000	1.50	3.32	30	45	P7410-ND	6.45	5.46	3.93	2.95	ECO-S2EP102DX
	1000	1.50	3.32	35	35	P7411-ND	6.85	5.80	4.18	3.13	ECO-S2EP102EX
	1200	1.64	3.53	35	40	P7412-ND	7.80	6.60	4.75	3.57	ECO-S2EP122EX
	1500	1.83	4.04	35	50	P7413-ND	9.05	7.66	5.51	4.14	ECO-S2EP152EA
400	47	0.41	0.47	22	25	P7414-ND	2.64	2.24	1.61	1.21	ECO-S2GP470BA
	68	0.49	0.76	20	30	P6136-ND	3.20	2.63	1.84	1.28	ECO-S2GP680AA
	68	0.49	0.76	22	25	P6137-ND	3.58	2.87	1.97	1.28	ECO-S2GP680BA
	82	0.54	0.83	20	30	P6138-ND	3.37	2.77	1.94	1.35	ECO-S2GP820AA
	82	0.54	0.83	22	25	P6139-ND	3.30	2.71	1.90	1.32	ECO-S2GP820BA
	100	0.60	0.92	20	35	P6140-ND	3.63	2.98	2.09	1.45	ECO-S2GP101AA
	100	0.60	0.92	25	25	P6141-ND	3.60	2.96	2.07	1.44	ECO-S2GP101CA
	120	0.65	1.02	20	40	P6142-ND	3.90	3.20	2.24	1.56	ECO-S2GP121AA
	120	0.65	1.02	25	25	P7415-ND	3.30	2.79	2.01	1.51	ECO-S2GP121CX
	120	0.65	1.02	25	30	P6143-ND	3.84	3.15	2.21	1.54	ECO-S2GP121CA
	150	0.73	1.16	22	40	P6144-ND	4.22	3.47	2.43	1.69	ECO-S2GP151BA
	150	0.73	1.16	30	25	P6145-ND	4.51	3.70	2.59	1.81	ECO-S2GP151DA
	180	0.80	1.44	22	45	P6146-ND	4.63	3.80	2.66	1.86	ECO-S2GP181BA
	180	0.80	1.44	30	30	P6147-ND	4.90	4.02	2.82	1.96	ECO-S2GP181DA
	220	0.88	1.49	22	50	P6148-ND	5.23	4.29	3.01	2.09	ECO-S2GP221BA
	220	0.88	1.49	30	30	P6149-ND	5.43	4.46	3.12	2.18	ECO-S2GP221DA
	270	0.98	1.67	25	45	P6150-ND	5.02	4.25	3.06	2.30	ECO-S2GP271CA
	270	0.98	1.67	35	30	P6151-ND	5.58	4.72	3.40	2.55	ECO-S2GP271EA
	330	1.08	1.90	30	40	P6152-ND	5.93	5.03	3.62	2.72	ECO-S2GP331DA
	330	1.08	1.90	35	30	P7416-ND	6.25	5.29	3.81	2.86	ECO-S2GP331EX
	330	1.08	1.90	35	35	P6153-ND	6.25	5.30	3.81	2.86	ECO-S2GP331EA
	390	1.18	2.13	30	45	P6154-ND	6.57	5.57	4.01	3.01	ECO-S2GP391DA
	390	1.18	2.13	35	35	P7417-ND	6.95	5.88	4.23	3.18	ECO-S2GP391EX
	390	1.18	2.13	35	40	P6155-ND	7.07	5.99	4.31	3.23	ECO-S2GP391EA
	470	1.30	2.39	35	40	P7418-ND	7.98	6.75	4.86	3.65	ECE-S2GP471EX
	470	1.30	2.39	35	45	P6156-ND	7.09	6.12	4.48	3.53	ECO-S2GP471EA
	560	1.41	2.69	35	45	P7419-ND	8.88	7.52	5.41	4.06	ECO-S2GP561EX
	560	1.41	2.69	35	50	P6157-ND	8.23	7.10	5.20	4.09	ECO-S2GP561EA
	680	1.56	3.00	35	50	P7420-ND	10.60	8.97	6.46	4.85	ECO-S2GP681EX
450	33	0.36	0.41	22	25	P7421-ND	2.42	2.05	1.48	1.11	ECO-S2WP330BA
	47	0.43	0.59	22	25	P7422-ND	2.64	2.24	1.61	1.21	ECO-S2WP470BA
	56	0.47	0.70	20	30	P7423-ND	2.85	2.41	1.74	1.30	ECO-S2WP560AA
	56	0.47	0.70	22	25	P7424-ND	2.79	2.36	1.70	1.28	ECO-S2WP560BA
	82	0.57	0.83	22	30	P7425-ND	3.25	2.75	1.98	1.49	ECO-S2WP820BA
	82	0.57	0.83	25	25	P7426-ND	3.27	2.77	2.00	1.50	ECO-S2WP820CA
	100	0.63	0.93	22	35	P7427-ND	3.59	3.04	2.19	1.64	ECO-S2WP101BA
	120	0.69	1.04	22	40	P7428-ND	3.92	3.32	2.39	1.79	ECO-S2WP121BA
	120	0.69	1.04	30	25	P7429-ND	4.16	3.52	2.54	1.90	ECO-S2WP121DA
	150	0.77	1.19	22	50	P7430-ND	4.38	3.71	2.67	2.01	ECO-S2WP151BA
	150	0.77	1.19	30	30	P7431-ND	4.55	3.85	2.78	2.08	ECO-S2WP151DA
	180	0.85	1.35	25	40	P7432-ND	4.90	4.15	2.99	2.24	ECO-S2WP181CX
	180	0.85	1.35	35	25	P7433-ND	5.57	4.72	3.40	2.55	ECO-S2WP181EA
	220	0.94	1.55	25	45	P7434-ND	5.55	4.70	3.39	2.54	ECO-S2WP221CX
	220	0.94	1.55	35	30	P7435-ND	6.05	5.13	3.69	2.77	ECO-S2WP221EA
	270	1.04	1.78	30	45	P7436-ND	6.50	5.50	3.96	2.97	ECO-S2WP271DA
	270	1.04	1.78	35	30	P7437-ND	6.93	5.87	4.22	3.17	ECO-S2WP271EX
	330	1.15	2.01	30	50	P7438-ND	7.58	6.41	4.62	3.46	ECO-S2WP331DA
	330	1.15	2.01	35	35	P7439-ND	8.13	6.88	4.96	3.72	ECE-S2WP331EX
	390	1.25	2.24	35	45	P7440-ND	8.79	7.44	5.36	4.02	ECO-S2WP391EA
	470	1.37	2.53	35	45	P7441-ND	10.48	8.87	6.39	4.79	ECO-S2WP471EX
500	47	0.45	0.63	22	25	P7442-ND	3.32	2.81	2.02	1.52	ECO-S2HP470BA
	56	0.50	0.70	22	30	P7443-ND	3.51	2.98	2.14	1.61	ECO-S2HP560BA
	68	0.55	0.78	22	35	P7444-ND	3.87	3.28	2.36	1.77	ECO-S2HP680BA
	68	0.55	0.78	25	25	P7445-ND	3.91	3.32	2.39	1.79	ECO-S2HP680CA
	82	0.60	0.88	22	40	P7446-ND	4.21	3.57	2.57	1.93	ECO-S2HP820BA
	82	0.60	0.88	25	30	P7447-ND	4.22	3.58	2.58	1.93	ECO-S2HP820CA
	100	0.67	0.99	22	45	P7448-ND	4.66	3.95	2.85	2.14	ECO-S2HP101BA
	100	0.67	0.99	25	35	P7449-ND	4.68	3.97	2.86	2.14	ECO-S2HP101CA
	120	0.73	1.13	22	50	P7450-ND	5.23	4.43	3.19	2.39	ECO-S2HP121BA
	120	0.73	1.13	30	30	P7451-ND	5.39	4.57	3.29	2.47	ECO-S2HP121DA
	150	0.82	1.29	25	45	P7452-ND	5.96	5.05	3.63	2.73	ECO-S2HP151CA
	150	0.82	1.20	35	25	P7453-ND	6.60	5.59	4.02	3.02	ECO-S2HP151EA
	180	0.90	1.38	25	50	P7454-ND	6.81	5.76	4.15	3.11	ECO-S2HP181CA
	180	0.90	1.36	35	30	P7455-ND	7.28	6.16	4.44	3.33	ECO-S2HP181EA
	220	0.99	1.50	30	45	P7456-ND	7.91	6.70	4.82	3.62	ECO-S2HP221DA
	220	0.99	1.54	35	35	P7457-ND	8.28	7.01	5.05	3.79	ECO-S2HP221EA
	270	1.10	1.76	35	40	P7458-ND	9.57	8.10	5.83	4.38	ECO-S2HP271EA
	330	1.21	1.99	35	45	P7459-ND	11.06	9.36	6.74	5.06	ECO-S2HP331EA
	390	1.32	2.22	35	50	P7460-ND	12.75	10.79	7.77	5.83	ECO-S2HP391EA
TSNH Long Life and High Ripple Current +105°C, 2000 Hour Life											
16	4700	0.75	2.0*	22	31.5	P6450-ND	3.10	2.49	2.04	1.33	ECE-S1CG472E
	6800	0.98	2.4*	22	40	P6451-ND	3.07	2.52	2.12	1.48	ECE-S1CG682G
	10000	1.2	2.9*	25	40	P6452-ND	3.61	2.96	2.49	1.74	ECE-S1CG103M
	15000	1.46	3.5*	25	50	P6453-ND	4.51	3.70	3.11	2.17	ECE-S1CG153N
	22000	1.77	4.2*	30	50	P6454-ND	5.38	4.56	3.94	2.96	ECE-S1CG223U
	33000	2.17	4.8*	35	51	P6455-ND	7.85	6.64	5.74	4.31	ECE-S1CG333Z
25	3300	.86	1.7*	22	31.5	P6456-ND	3.07	2.46	2.02	1.32	ECE-S1EG332E
	4700	1.02	2.2*	22	40	P6457-ND	3.31	2.65	2.18	1.42	ECE-S1EG472G
	6800	1.23	2.6*	25	40	P6458-ND	3.79	3.11	2.61	1.82	ECE-S1EG682M
	10000	1.50	3.1*	25	50	P6459-ND	4.69	3.85	3.24	2.25	ECE-S1EG103N
	22000	2.22	4.0*	35	51	P6461-ND	8.16	6.91	5.96	4.47	ECE-S1EG223Z
35	2200	.77	1.6*	22	31.5	P6462-ND	2.91	2.33	1.92	1.25	ECE-S1VG222E
	2200	.77	1.6*	25	25	P6589-ND	2.97	2.38	1.96	1.28	ECE-S1VG222J

* Ripple Current at 105°C † 2000 hour life for can sizes of 20mm diameter or length.

(Continued)

Panasonic TS-Series Large Aluminum Electrolytic Capacitors *(Cont.)*

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	85° (rms) Ripple Current (120Hz) A	Dimensions (mm)		Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L		1	10	50	200	
TSNH Long Life and High Ripple Current +105°C, 2000 Hour Life (Cont.)											
35	3300	1.01	1.8*	22	40	P6463-ND	3.31	2.65	2.18	1.42	ECE-S1VG332G
	4700	1.21	2.3*	25	40	P6464-ND	3.40	2.79	2.35	1.64	ECE-S1VG472M
	6800	1.46	2.9*	25	50	P6465-ND	4.17	3.42	2.87	2.00	ECE-S1VG682N
	10000	1.77	3.5*	30	50	P6466-ND	5.64	4.63	3.89	2.71	ECE-S1VG103U
	15000	2.17	3.9*	35	51	P6467-ND	6.92	5.86	5.06	3.80	ECE-S1VG153Z
50	2200	0.99	1.9	22	40	P6469-ND	3.27	2.62	2.16	1.41	ECE-S1HG222G
	3300	1.21	2.3	25	40	P6470-ND	3.50	2.88	2.42	1.68	ECE-S1HG332M
	4700	1.45	2.8	25	50	P6471-ND	4.26	3.49	2.94	2.05	ECE-S1HG472N
	6800	1.74	3.2	30	50	P6472-ND	5.82	4.78	4.01	2.80	ECE-S1HG682U
	10000	2.12	3.7	35	51	P6473-ND	6.61	5.60	4.84	3.63	ECE-S1HG103Z
63	1000	0.63	1.3	22	31.5	P6534-ND	3.02	2.42	1.99	1.30	ECE-S1JG102E
	2200	1.11	2.0	25	40	P6535-ND	3.50	2.88	2.42	1.68	ECE-S1JG222M
	3300	1.36	2.5	25	50	P6536-ND	4.51	3.70	3.11	2.17	ECE-S1JG332N
	4700	1.63	2.9	30	50	P6537-ND	5.99	4.92	4.13	2.88	ECE-S1JG472U
	6800	1.96	3.3	35	51	P6538-ND	7.08	5.99	5.18	3.88	ECE-S1JG682Z
100	470	0.47	1.2	22	31.5	P6474-ND	3.31	2.65	2.18	1.42	ECE-S2AG471E
	680	0.68	1.4	22	40	P6539-ND	3.32	2.73	2.29	1.60	ECE-S2AG681G
	1000	1.0	1.7	25	40	P6476-ND	4.12	3.38	2.84	1.98	ECE-S2AG102M
	2200	1.4	2.6	30	50	P6478-ND	6.92	5.86	5.06	3.80	ECE-S1AG222U
	3300	1.72	2.0	35	51	P6479-ND	8.33	7.18	6.31	4.97	ECE-S2AG332Z
200	220	0.62	1.0	22	40	P6554-ND	3.10	2.55	2.14	1.49	ECE-S2DG221G
	330	0.77	1.2	25	40	P6555-ND	3.79	3.11	2.61	1.82	ECE-S2DG331M
	470	0.91	1.4	25	50	P6556-ND	4.51	3.70	3.11	2.17	ECE-S2DG471N
	680	1.1	1.7	30	50	P6557-ND	5.85	4.80	4.03	2.81	ECE-S2DG681U
250	100	0.47	.72	22	31.5	P6579-ND	3.06	2.45	2.02	1.32	ECE-S2EG101E
	220	0.7	1.05	25	40	P6580-ND	3.87	3.18	2.67	1.86	ECE-S2EG221M
	330	0.86	1.25	25	50	P6581-ND	4.87	4.00	3.36	2.34	ECE-S2EG331N
	470	1.02	1.45	30	50	P6582-ND	5.26	4.46	3.85	2.89	ECE-S2EG471U
	680	1.23	1.8	35	51	P6583-ND	6.71	5.68	4.91	3.68	ECE-S2EG681Z
400	47	0.41	.47	22	31.5	P6584-ND	3.48	2.79	2.29	1.50	ECE-S2GG470E
	68	0.49	.56	22	40	P6585-ND	3.25	2.67	2.24	1.56	ECE-S2GG680G
	100	0.6	.69	25	40	P6586-ND	3.86	3.17	2.67	1.86	ECE-S2GG101M
	220	0.88	1.0	30	50	P6587-ND	6.00	5.08	4.39	3.29	ECE-S2GG221U
	330	1.08	1.2	35	51	P6588-ND	7.65	6.60	5.80	4.56	ECE-S2GG331Z
TSHA Miniaturized Size, Long Life and High Ripple Current +105°C, 3000 Hour Life†											
16	3300	0.68	1.30	22	25	P7461-ND	2.83	2.27	1.56	1.02	ECO-S1CA332BA
	4700	0.82	1.52	22	25	P7462-ND	3.03	2.43	1.67	1.09	ECO-S1CA472BA
	6800	0.98	2.20	20	30	P6434-ND	3.07	2.52	1.77	1.23	ECO-S1CA682AA
	6800	0.98	2.20	22	25	P6436-ND	3.28	2.63	1.80	1.18	ECO-S1CA682BA
	8200	1.08	2.40	20	35	P6437-ND	3.25	2.67	1.87	1.30	ECO-S1CA822AA
	8200	1.08	2.40	22	30	P6441-ND	3.56	2.85	1.96	1.28	ECO-S1CA822BA
	10000	1.20	2.60	20	40	P6444-ND	3.48	2.85	2.00	1.39	ECO-S1CA103AA
	10000	1.20	2.60	25	25	P6460-ND	3.41	2.80	1.96	1.37	ECO-S1CA103CA
	12000	1.31	2.90	22	35	P6468-ND	3.56	2.93	2.05	1.43	ECO-S1CA123BA
	12000	1.31	2.90	30	25	P6477-ND	3.92	3.22	2.25	1.57	ECO-S1CA123DA
	15000	1.46	3.20	30	30	P6541-ND	4.28	3.51	2.46	1.72	ECO-S1CA153DA
	18000	1.60	3.50	22	45	P6543-ND	4.19	3.44	2.41	1.68	ECO-S1CA183BA
	18000	1.60	3.50	35	25	P6545-ND	5.05	4.14	2.90	2.02	ECO-S1CA183EA
	22000	1.77	3.80	25	45	P6547-ND	4.86	3.99	2.79	1.95	ECO-S1CA223CA
	22000	1.77	3.80	35	30	P6550-ND	5.52	4.53	3.17	2.21	ECO-S1CA223EA
	27000	1.97	4.20	25	50	P6552-ND	5.36	4.40	3.08	2.15	ECO-S1CA273CA
	27000	1.97	4.20	35	30	P6558-ND	6.10	5.01	3.51	2.44	ECO-S1CA273EA
	33000	2.17	4.70	30	45	P6559-ND	5.53	4.69	3.38	2.53	ECO-S1CA333DA
	33000	2.17	4.70	35	35	P6560-ND	5.83	4.94	3.55	2.67	ECO-S1CA333EA
	39000	2.36	5.10	30	50	P6561-ND	6.03	5.10	3.68	2.76	ECO-S1CA393DA
	39000	2.36	5.10	35	40	P6562-ND	6.56	5.55	4.00	3.00	ECO-S1CA393EA
	47000	2.60	5.50	35	45	P6563-ND	7.29	6.18	4.45	3.34	ECO-S1CA473EA
	56000	2.83	6.00	35	50	P6999-ND	7.77	6.58	4.73	3.55	ECO-S1CA563EA
25	2200	0.70	1.30	22	25	P7463-ND	2.81	2.26	1.55	1.01	ECO-S1EA222BA
	3300	0.86	1.62	22	25	P7464-ND	3.03	2.43	1.66	1.09	ECO-S1EA332BA
	4700	1.02	2.00	20	30	P6998-ND	3.09	2.54	1.78	1.24	ECO-S1EA472AA
	4700	1.02	2.00	22	25	P6566-ND	3.29	2.64	1.81	1.18	ECO-S1EA472BA
	5600	1.12	2.20	20	35	P6567-ND	3.26	2.67	1.87	1.31	ECO-S1EA562AA
	5600	1.12	2.20	22	30	P6997-ND	3.57	2.86	1.96	1.28	ECO-S1EA562BA
	6800	1.23	2.40	20	40	P6569-ND	3.47	2.85	2.00	1.39	ECO-S1EA682AA
	6800	1.23	2.40	25	25	P6570-ND	3.41	2.80	1.96	1.37	ECO-S1EA682CA
	8200	1.35	2.70	22	35	P6571-ND	3.58	2.94	2.06	1.44	ECO-S1EA822BA
	8200	1.35	2.70	30	25	P6572-ND	3.92	3.22	2.26	1.57	ECO-S1EA822DA
	10000	1.50	3.00	22	40	P6573-ND	3.80	3.12	2.19	1.52	ECO-S1EA103BA
	10000	1.50	3.00	30	30	P6574-ND	4.25	3.48	2.44	1.70	ECO-S1EA103DA
	12000	1.64	3.20	22	45	P6575-ND	4.27	3.50	2.45	1.71	ECO-S1EA123BA
	12000	1.64	3.20	35	25	P6576-ND	5.01	4.11	2.88	2.01	ECO-S1EA123EA
	15000	1.83	3.60	25	45	P6577-ND	4.87	4.00	2.80	1.95	ECO-S1EA153CA
	15000	1.83	3.60	35	30	P6578-ND	5.52	4.53	3.17	2.21	ECO-S1EA153EA
	18000	2.01	3.90	25	50	P6996-ND	5.29	4.34	3.04	2.12	ECO-S1EA183CA
	18000	2.01	3.90	35	35	P6590-ND	6.07	4.98	3.49	2.43	ECO-S1EA183EA
	22000	2.22	4.30	30	45	P6591-ND	5.46	4.63	3.33	2.50	ECO-S1EA223DA
	22000	2.22	4.30	35	35	P6592-ND	5.75	4.87	3.51	2.63	ECO-S1EA223EA
	27000	2.46	4.80	35	45	P6593-ND	6.56	5.56	4.00	3.00	ECO-S1EA273EA
	33000	2.72	5.50	35	50	P6594-ND	7.40	6.27	4.51	3.39	ECO-S1EA333EA
35	1500	0.68	1.10	22	25	P7465-ND	2.88	2.31	1.58	1.03	ECO-S1VA152BA
	2200	0.83	1.48	22	25	P7466-ND	3.12	2.50	1.72	1.12	ECO-S1VA222BA
	3300	1.01	1.90	20	30	P6595-ND	3.19	2.62	1.83	1.28	ECO-S1VA332AA
	3300	1.01	1.90	22	25	P6596-ND	3.44	2.76	1.89	1.23	ECO-S1VA332BA
	3900	1.10	2.00	20	35	P6597-ND	3.37	2.77	1.94	1.35	ECO-S1VA392AA
	3900	1.10	2.00	22	30	P6598-ND	3.70	2.97	2.03	1.33	ECO-S1VA392BA
	4700	1.21	2.20	20	40	P6599-ND	3.65	3.00	2.10	1.46	ECO-S1VA472AA
	4700	1.21	2.20	25	25	P6600-ND	3.58	2.94	2.06	1.43	ECO-S1VA472CA
	5600	1.32	2.40	22	35	P6658-ND	3.76	3.08	2.16	1.51	ECO-S1VA562BA
	5600	1.32	2.40	30	25	P6659-ND	4.06	3.33	2.33	1.63	ECO-S1VA562DA
	6800	1.46	2.60	22	40	P6660-ND	4.11	3.37	2.36	1.65	ECO-S1VA682BA
	6800	1.46	2.60	30	30	P6661-ND	4.41	3.62	2.53	1.77	ECO-S1VA682DA
	8200	1.60	2.90	22	50	P6662-ND	4.41	3.62	2.53	1.77	ECO-S1VA822BA
	8200	1.60	2.90	35	25	P6663-ND	5.22	4.28	3.00	2.09	ECO-S1VA822EA
	10000	1.77	3.20	25	45	P6664-ND	5.13	4.21	2.95	2.05	ECO-S1VA103CA
	10000	1.77	3.20	35	30	P6665-ND	5.71	4.69	3.28	2.29	ECO-S1VA103EA
	12000	1.94	3.50	25	50	P6666-ND	5.60	4.59	3.22	2.24	ECO-S1VA123CA
	12000	1.94	3.50	35	30	P6667-ND	6.35	5.21	3.65	2.54	ECO-S1VA123EA
	15000	2.17	3.90	30	45	P6668-ND	5.88	4.98	3.58	2.69	ECO-S1VA153DA
	15000	2.17	3.90	35	35	P6669-ND	6.17	5.23	3.76	2.82	ECO-S1VA153EA
	18000	2.38	4.30	35	40	P6670-ND	7.04	5.96	4.29	3.22	ECO-S1VA183EA
50	1000	0.67	0.90	22	25	P7467-ND	2.91	2.34	1.60	1.05	ECO-S1HA102BA
	1500	0.82	1.25	22	25	P7468-ND	3.12	2.50	1.72	1.12	ECO-S1HA152BA
	1800	0.90	1.50	20	30	P6672-ND	3.07	2.52	1.77	1.23	ECO-S1HA182AA
	1800	0.90	1.50	22	25	P6673-ND	3.28	2.63	1.80	1.18	ECO-S1HA182BA
	2200	0.99	1.70	20	35	P6674-ND	3.26	2.68	1.88	1.31	ECO-S1HA222AA
	2200	0.99	1.70	22	30	P6675-ND	3.57	2.86	1.96	1.28	ECO-S1HA222BA
	2700	1.10	1.80	20	40	P6676-ND	3.50	2.88	2.01	1.40	ECO-S1HA272AA
	2700	1.10	1.80	25	25	P6677-ND	3.43	2.82	1.97	1.38	ECO-S1HA272CA
	3300	1.21	2.00	22	35	P6678-ND	3.63	2.98	2.09	1.45	ECO-S1HA332BA
	3300	1.21	2.00	25	30	P6679-ND	3.69	3.03	2.12	1.48	ECO-S1HA332CA
	3900	1.32	2.20	22	40	P6680-ND	3.88	3.19	2.23	1.56	ECO-S1HA392BA
	3900	1.32	2.20	30	25	P6681-ND	4.23	3.48	2.43	1.70	ECO-S1HA392DA
	4700	1.45	2.50	22	45	P6682-ND	4.27	3.51	2.46	1.71	ECO-S1HA472BA
	4700	1.45	2.50	35	25	P6683-ND	5.02	4.12	2.89	2.01	ECO-S1HA472EA
	5600	1.58	2.80	22	50	P6684-ND	4.62	3.79	2.65	1.85	ECO-S1HA562BA
	5600	1.58	2.80	35	30	P6685-ND	5.41	4.44	3.11	2.17	ECO-S1HA562EA
	6800	1.74	3.30	25	50	P6686-ND	5.20	4.27	2.99	2.08	ECO-S1HA682CA
	6800	1.74	3.30	35	30	P6687-ND	5.94	4.87	3.41	2.38	ECO-S1HA682EA
	8200	1.92	3.60	30	45	P6688-ND	6.25	5.13	3.59	2.50	ECO-S1HA822DA
	8200	1.92	3.60	35	35	P6689-ND	5.61	4.75	3.42	2.57	ECO-S1HA822EA
	10000	2.12	4.00	30	50	P6690-ND	5.89	4.99	3.59	2.69	ECO-S1HA103DA
	10000	2.12	4.00	35	40	P6691-ND	6.42	5.43	3.91	2.94	ECO-S1HA103EA
	12000	2.32	4.50	35	45	P6692-ND	7.11	6.02	4.34	3.25	ECO-S1HA123EA
	15000	2.59	4.80	35	50	P6693-ND	8.17	6.92	4.98	3.74	ECO-S1HA153EA
63	680	0.62	0.90	22	25	P7469-ND	2.89	2.31	1.59	1.04	ECO-S1JA681BA
	1000	0.75	1.17	22	25	P7470-ND	3.07	2.46	1.68	1.10	ECO-S1JA102BA
	1200	0.82	1.40	20	30	P7471-ND	3.47	2.78	1.90	1.24	ECO-S1JA122AA
	1200	0.82	1.40	22	25	P7472-ND	3.22	2.58	1.77	1.15	ECO-S1JA122BA
	1500	0.92	1.50	20	35	P7473-ND	3.69	2.95	2.02	1.32	ECO-S1JA152AA
	1500	0.92	1.50	22	30	P7474-ND	3.52	2.82	1.93	1.26	ECO-S1JA152BA
	1800	1.01	1.70	22	30	P7475-ND	3.73	2.99	2.05	1.34	ECO-S1JA182BA
	1800	1.01	1.70	25	25	P7476-ND	3.83	3.07	2.10	1.37	ECO-S1JA182CA
	2200	1.11	2.00	22	35	P7477-ND	4.03	3.23	2.21	1.44	ECO-S1JA222BA
	2200	1.11	2.00	25	30	P7478-ND	4.11	3.29	2.25	1.47	ECO-S1JA222CA
	2700	1.23	2.20	22	40	P7479-ND	4.38	3.51	2.41	1.57	ECO-S1JA272BA
	2700	1.23	2.20	30	25	P7480-ND	4.78	3.83	2.62	1.71	ECO-S1JA272DA
	3300	1.36	2.50	22	50	P7481-ND	4.79	3.83	2.63	1.71	ECO-S1JA332BA
	3300	1.36	2.50	35	25	P7482-ND	5.70	4.56	3.13	2.04	ECO-S1JA332EA
	3900	1.48	2.70	25	45	P7483-ND	5.37	4.30	2.95	1.92	ECO-S1JA392CA
	3900	1.48	2.70	35	30	P7484-ND	6.12	4.90	3.36	2.19	ECO-S1JA392EA
	4700	1.63	3.00	25	50	P7485-ND	5.84	4.67	3.20	2.09	ECO-S1JA472CA
	4700	1.63	3.00	35	30	P7486-ND	6.68	5.35	3.66	2.39	ECO-S1JA472EA
	5600	1.78	3.30	30	45	P7487-ND	6.96	5.57	3.82	2.49	ECO-S1JA562DA
	5600	1.78	3.30	35	35	P7488-ND	7.34	5.88	4.03	2.63	ECO-S1JA562EA
	6800	1.96	3.60	30	50	P7489-ND	7.66	6.13	4.20	2.74	ECO-S1JA682DA
	6800	1.96	3.60	35	40	P7490-ND	8.38	6.71	4.59	3.00	ECO-S1JA682EA
	8200	2.15	3.90	35	45	P7491-ND	9.28	7.43	5.09	3.32	ECO-S1JA822EA
	10000	2.38	4.40	35	50	P7492-ND	10.47	8.38	5.74	3.74	ECO-S1JA103EA
80	470	0.58	0.80	22	25	P7493-ND	2.92	2.34	1.60	1.05	ECO-S1KA471BA
	680	0.69	1.00	22	25	P7494-ND	3.16	2.53	1.73	1.13	ECO-S1KA681BA
	820	0.76	1.20	20	30	P7495-ND	3.62	2.90	1.99	1.30	ECO-S1KA821AA
	820	0.76	1.20	22	25	P7496-ND	3.28	2.63	1.80	1.18	ECO-S1KA821BA
	1000	0.84	1.30	22	30	P7497-ND	3.70	2.97	2.03	1.33	ECO-S1KA102BA
	1000	0.84	1.30	25	25	P7498-ND	3.83	3.07	2.10	1.37	ECO-S1KA102CA
	1200	0.92	1.50	22	30	P7499-ND	3.88	3.11	2.13	1.39	ECO-S1KA122BA
	1200	0.92	1.50	25	25	P7500-ND	3.92	3.14	2.15	1.41	ECO-S1KA122CA
	1500	1.03	1.70	22	35	P7501-ND	4.18	3.35	2.30	1.50	ECO-S1KA152BA
	1500	1.03	1.70	25	30	P7502-ND	4.44	3.56	2.44	1.59	ECO-S1KA152CA
	1800	1.13	1.80	22	40	P7503-ND	4.43	3.55	2.43	1.59	ECO-S1KA182BA
	1800	1.13	1.80	30	25	P7504-ND	4.80	3.85	2.64	1.72	ECO-S1KA182DA
	2200	1.25	2.10	22	45	P7505-ND	4.89	3.92	2.68	1.75	ECO-S1KA222BA
	2200	1.25	2.10	35	25	P7506-ND	6.15	4.93	3.37	2.20	ECO-S1KA222EA
	2700	1.39	2.40	25	45	P7507-ND	5.69	4.55	3.12	2.04	ECO-S1KA272CA
	2700	1.39	2.40	35	30	P7508-ND	6.74	5.39	3.69	2.41	ECO-S1KA272EA
	3300	1.54	2.60	25	50	P7509-ND	6.23	4.99	3.42	2.23	ECO-S1KA332CA
	3300	1.54	2.60	35	30	P7510-ND	7.09	5.68	3.89	2.54	ECO-S1KA332EA
	4700	1.83	3.30	30	50	P7511-ND	8.15	6.53	4.47	2.92	ECO-S1KA472DA
	4700	1.83	3.30	35	40	P7512-ND	8.90	7.12	4.88	3.18	ECO-S1KA472EA
	5600	2.00	3.70	35	45	P7513-ND	9.84	7.87	5.39	3.52	ECO-S1KA562EA
	6800	2.21	3.90	35	50	P7514-ND	11.06	8.85	6.06	3.96	ECO-S1KA682EA
100	330	0.54	0.80	22	25	P7515-ND	3.05	2.44	1.67	1.09	ECO-S2AA331BA
	470	0.65	0.92	22	25	P7516-ND	3.11	2.49	1.71	1.11	ECO-S2AA471BA
	560	0.70	1.10	20	30	P6694-ND	3.04	2.50	1.75	1.22	ECO-S2AA561AA
	560	0.70	1.10	22	25	P6695-ND	2.84	2.34	1.64	1.14	ECO-S2AA561BA
	820	0.85	1.40	20	35	P6696-ND	3.53	2.90	2.03	1.42	ECO-S2AA821AA
	820	0.85	1.40	25	25	P6697-ND	3.38	2.77	1.94	1.35	ECO-S2AA821CA
	1000	0.94	1.70	20	40	P6698-ND	3.82	3.14	2.20	1.53	ECO-S2AA102AA
	1000	0.94	1.70	25	30	P6699-ND	3.60	2.96	2.07	1.44	ECO-S2AA102CA
	1200	1.03	1.80	22	40	P6700-ND	4.05	3.33	2.33	1.62	ECO-S2AA122BA
	1200	1.03	1.80	30	25	P6701-ND	4.13	3.39	2.37	1.65	ECO-S2AA122DA
	1500	1.16	2.10	22	45	P6702-ND	4.49	3.69	2.58	1.80	ECO-S2AA152BA
	1500	1.16	2.10	35	25	P6712-ND	4.97	4.08	2.86	1.99	ECO-S2AA152EA
	1800	1.27	2.30	25	45	P6728-ND	4.70	3.86	2.70	1.88	ECO-S2AA182CA
	1800	1.27	2.30	35	30	P6806-ND	4.57	3.87	2.79	2.09	ECO-S2AA182EA
	2200	1.40	2.60	25	50	P6994-ND	4.52	3.83	2.76	2.07	ECO-S2AA222CA
	2200	1.40	2.60	35	30	P6995-ND	5.04	4.27	3.07	2.31	ECO-S2AA222EA
	2700	1.55	2.90	30	45	P6807-ND	5.26	4.46	3.21	2.41	ECO-S2AA272DA
	2700	1.55	2.90	35	35	P6808-ND	5.62	4.76	3.42	2.57	ECO-S2AA272EA
	3300	1.72	3.20	30	50	P6809-ND	6.04	5.12	3.69	2.77	ECO-S2AA332DA
	3300	1.72	3.20	35	40	P6810-ND	6.43	5.44	3.92	2.94	ECO-S2AA332EA
	3900	1.87	3.60	35	45	P6811-ND	6.33	5.45	4.00	3.15	ECO-S2AA392EA
	4700	2.05	3.80	35	50	P6812-ND	7.87	6.78	4.97	3.91	ECO-S2AA472EA
200	100	0.42	0.50	22	25	P7517-ND	2.79	2.24	1.53	1.00	ECO-S2DA101BA
	150	0.51	0.68	22	25	P7518-ND	3.07	2.46	1.68	1.10	ECO-S2DA151BA
	220	0.62	1.00	20	30	P6813-ND	3.08	2.53	1.77	1.23	ECO-S2DA221AA
	220	0.62	1.00	22	25	P6814-ND	3.38	2.71	1.85	1.21	ECO-S2DA221BA
	270	0.69	1.10	20	35	P6815-ND	3.27	2.69	1.88	1.31	ECO-S2DA271AA
	270	0.69	1.10	25	25	P6816-ND	3.31	2.72	1.91	1.33	ECO-S2DA271CA

* Ripple Current at 105°C   † 2000 hour life for can sizes of 20mm diameter or length

(Continued)

Panasonic TS-Series Large Aluminum Electrolytic Capacitors *(Cont.)*

W.V. DC	Cap. (µF)	Max. DC (mA) Leakage Current	85° (rms) Ripple Current (120Hz) A	Dimensions (mm)		Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L		1	10	50	200	
TSHA Miniaturized Size, Long Life and High Ripple Current +105°C, 3000 Hour Life† (Cont.)											
200	330	0.77	1.20	20	40	P6817-ND	3.49	2.86	2.01	1.40	ECO-S2DA331AA
	330	0.77	1.20	25	25	P6818-ND	3.55	2.91	2.04	1.42	ECO-S2DA331CA
	390	0.83	1.30	22	35	P6819-ND	3.61	2.96	2.07	1.45	ECO-S2DA391BA
	390	0.83	1.30	30	25	P6820-ND	4.02	3.30	2.31	1.61	ECO-S2DA391DA
	470	0.91	1.40	22	40	P6821-ND	3.88	3.18	2.23	1.56	ECO-S2DA471BA
	470	0.91	1.40	30	25	P6822-ND	4.33	3.56	2.49	1.74	ECO-S2DA471DA
	560	1.00	1.50	22	45	P6823-ND	4.21	3.46	2.42	1.69	ECO-S2DA561BA
	560	1.00	1.50	30	30	P6824-ND	4.63	3.80	2.66	1.86	ECO-S2DA561DA
	680	1.10	1.70	25	40	P6825-ND	4.78	3.93	2.75	1.92	ECO-S2DA681CA
	680	1.10	1.70	30	30	P6826-ND	5.10	4.18	2.93	2.04	ECO-S2DA681DA
	820	1.21	2.00	25	50	P6829-ND	4.66	3.95	2.85	2.14	ECO-S2DA821CA
	820	1.21	2.00	35	30	P6830-ND	5.17	4.38	3.15	2.37	ECO-S2DA821EA
	1000	1.34	2.20	30	45	P6831-ND	5.41	4.58	3.30	2.48	ECO-S2DA102DA
	1000	1.34	2.20	35	35	P6832-ND	5.85	4.95	3.57	2.68	ECO-S2DA102EA
	1200	1.46	2.30	30	50	P6833-ND	6.14	5.20	3.74	2.81	ECO-S2DA122DA
	1200	1.46	2.30	35	40	P6834-ND	6.53	5.53	3.98	2.99	ECO-S2DA122EA
	1500	1.64	2.50	35	50	P6835-ND	6.85	5.91	4.33	3.41	ECO-S2DA152EA
400	33	0.34	0.30	22	25	P7519-ND	3.17	2.54	1.74	1.14	ECO-S2GA330BA
	47	0.41	0.43	22	25	P7520-ND	3.45	2.77	1.90	1.24	ECO-S2GA470BA
	56	0.44	0.51	20	30	P6836-ND	3.23	2.65	1.86	1.30	ECO-S2GA560AA
	56	0.44	0.51	22	25	P6837-ND	3.16	2.60	1.82	1.27	ECO-S2GA560BA
	68	0.49	0.56	20	35	P6838-ND	3.46	2.84	1.99	1.39	ECO-S2GA680AA
	68	0.49	0.56	25	25	P6839-ND	3.42	2.81	1.97	1.37	ECO-S2GA680CA
	82	0.54	0.64	20	40	P6840-ND	3.69	3.03	2.12	1.48	ECO-S2GA820AA
	82	0.54	0.64	25	25	P6841-ND	3.67	3.01	2.11	1.47	ECO-S2GA820CA
	100	0.60	0.69	22	35	P6842-ND	3.95	3.24	2.27	1.58	ECO-S2GA101BA
	100	0.60	0.69	25	30	P6843-ND	3.96	3.25	2.28	1.59	ECO-S2GA101CA
	120	0.65	0.75	22	40	P6844-ND	4.26	3.49	2.45	1.71	ECO-S2GA121BA
	120	0.65	0.75	30	25	P6845-ND	4.54	3.72	2.61	1.82	ECO-S2GA121DA
	150	0.73	0.82	22	50	P6846-ND	4.85	3.98	2.79	1.94	ECO-S2GA151BA
	150	0.73	0.82	30	30	P6847-ND	5.03	4.13	2.89	2.01	ECO-S2GA151DA
	180	0.80	0.90	25	45	P6848-ND	5.33	4.37	3.06	2.13	ECO-S2GA181CA
	180	0.80	0.90	35	25	P6849-ND	5.14	4.36	3.14	2.35	ECO-S2GA181EA
	220	0.88	1.00	25	50	P6850-ND	5.21	4.41	3.18	2.38	ECO-S2GA221CA
	220	0.88	1.00	35	30	P6851-ND	5.68	4.81	3.46	2.60	ECO-S2GA221EA
	270	0.98	1.10	30	45	P6852-ND	6.04	5.12	3.69	2.77	ECO-S2GA271DA
	270	0.98	1.10	35	35	P6853-ND	6.40	5.42	3.90	2.93	ECO-S2GA271EA
	330	1.08	1.20	30	50	P6854-ND	7.01	5.94	4.28	3.21	ECO-S2GA331DA
	330	1.08	1.20	35	40	P6855-ND	7.39	6.25	4.50	3.38	ECO-S2GA331EA
	390	1.18	1.30	35	45	P6856-ND	7.35	6.34	4.64	3.65	ECO-S2GA391EA
	470	1.30	1.40	35	50	P6857-ND	8.59	7.41	5.43	4.27	ECO-S2GA471EA
TSHB Compact Size, Long Life and High Ripple Current +105°C, 3000 Hour Life											
200	390	0.83	1.30	22	30	P10106-ND	3.51	2.88	2.02	1.41	ECO-S2DB391BA
	390	0.83	1.30	25	25	P10107-ND	3.74	3.07	2.15	1.50	ECO-S2DB391CA
	470	0.91	1.40	22	35	P10108-ND	3.83	3.15	2.20	1.54	ECO-S2DB471BA
	470	0.91	1.40	25	30	P10109-ND	3.99	3.27	2.29	1.60	ECO-S2DB471CA
	560	1.00	1.50	30	25	P10110-ND	4.63	3.80	2.66	1.85	ECO-S2DB561DA
	820	1.21	2.00	25	45	P10111-ND	4.54	3.84	2.77	2.08	ECO-S2DB821CA
	820	1.21	2.00	35	25	P10112-ND	5.17	4.38	3.15	2.37	ECO-S2DB821EA
	1000	1.34	2.20	25	50	P10113-ND	5.19	4.39	3.16	2.37	ECO-S2DB102CA
	1000	1.34	2.20	35	30	P10114-ND	5.76	4.88	3.51	2.64	ECO-S2DB102EA
	1200	1.46	2.30	30	40	P10115-ND	5.68	4.81	3.46	2.60	ECO-S2DB122DA
	1200	1.46	2.30	35	35	P10116-ND	6.44	5.46	3.93	2.95	ECO-S2DB122EA
200	1500	1.64	2.50	30	50	P10117-ND	7.00	5.93	4.27	3.20	ECO-S2DB152DA
	1500	1.64	2.50	35	40	P10118-ND	7.37	6.24	4.49	3.37	ECO-S2DB152EA
	1800	1.80	2.70	35	45	P10119-ND	7.42	6.40	4.69	3.69	ECO-S2DB182EA
	2200	1.98	2.90	35	50	P10120-ND	8.79	7.58	5.55	4.37	ECO-S2DB222EA
250	330	0.86	1.20	25	30	P10121-ND	4.25	3.49	2.45	1.70	ECO-S2EB331CA
	390	0.93	1.30	30	25	P10122-ND	4.90	4.02	2.81	1.96	ECO-S2EB391DA
	470	1.02	1.40	22	50	P10123-ND	5.11	4.19	2.94	2.05	ECO-S2EB471BA
	470	1.02	1.40	30	30	P10124-ND	4.57	3.87	2.79	2.09	ECO-S2EB471DA
	560	1.12	1.50	25	45	P10125-ND	4.82	4.09	2.94	2.21	ECO-S2EB561CA
	560	1.12	1.50	35	25	P10126-ND	5.45	4.61	3.32	2.49	ECO-S2EB561EA
	680	1.23	1.70	25	50	P10127-ND	5.55	4.70	3.39	2.54	ECO-S2EB681CA
	680	1.23	1.70	35	30	P10128-ND	6.03	5.11	3.68	2.76	ECO-S2EB681EA
	820	1.35	2.00	30	45	P10129-ND	6.41	5.43	3.91	2.93	ECO-S2EB821DA
	820	1.35	2.00	35	35	P10130-ND	6.77	5.73	4.13	3.10	ECO-S2EB821EA
	1000	1.50	2.20	30	50	P10131-ND	7.43	6.29	4.53	3.40	ECO-S2EB102DA
	1000	1.50	2.20	35	40	P10132-ND	7.82	6.63	4.77	3.58	ECO-S2EB102EA
	1200	1.64	2.30	35	45	P10133-ND	10.08	8.69	7.64	6.01	ECO-S2EB122EA
	1500	1.83	2.50	35	50	P10134-ND	9.54	8.22	6.02	4.74	ECO-S2EB152EA
400	82	0.54	0.64	22	30	P10135-ND	3.59	2.95	2.07	1.44	ECO-S2GB820BA
	100	0.60	0.69	22	30	P10136-ND	3.93	3.23	2.26	1.58	ECO-S2GB101BA
	100	0.60	0.69	25	25	P10137-ND	4.00	3.29	2.30	1.60	ECO-S2GB101CA
	120	0.65	0.75	22	35	P10138-ND	4.29	3.52	2.47	1.72	ECO-S2GB121BA
	120	0.65	0.75	25	30	P10139-ND	4.29	3.52	2.46	1.72	ECO-S2GB121CA
	150	0.73	0.82	22	40	P10140-ND	4.82	3.95	2.77	1.93	ECO-S2GB151BA
	150	0.73	0.82	30	25	P10141-ND	5.11	4.19	2.93	2.05	ECO-S2GB151DA
	180	0.80	0.90	22	45	P10142-ND	4.53	3.84	2.77	2.08	ECO-S2GB181BA
	180	0.80	0.90	30	30	P10143-ND	4.74	4.01	2.89	2.17	ECO-S2GB181DA
	220	0.88	1.00	25	45	P10144-ND	5.13	4.34	3.13	2.35	ECO-S2GB221CA
	220	0.88	1.00	35	25	P10145-ND	5.77	4.89	3.52	2.64	ECO-S2GB221EA
	270	0.98	1.10	25	50	P10146-ND	5.92	5.02	3.61	2.71	ECO-S2GB271CA
	270	0.98	1.10	35	30	P10147-ND	6.39	5.41	3.90	2.92	ECO-S2GB271EA
	330	1.08	1.20	30	45	P10148-ND	6.29	5.43	3.98	3.13	ECO-S2GB331DA
	330	1.08	1.20	35	35	P10149-ND	6.63	5.72	4.19	3.30	ECO-S2GB331EA
	390	1.18	1.30	30	50	P10150-ND	7.19	6.20	4.54	3.57	ECO-S2GB391DA
	390	1.18	1.30	35	40	P10151-ND	7.54	6.50	4.77	3.75	ECO-S2GB391EA
	470	1.30	1.40	35	45	P10152-ND	8.37	7.22	5.29	4.16	ECO-S2GB471EA
	560	1.30	1.40	35	50	P10153-ND	8.83	7.79	5.82	4.82	ECO-S2GB561EA
450	82	0.57	0.56	22	30	P10154-ND	4.18	3.43	2.40	1.67	ECO-S2WB820BA
	100	0.63	0.64	22	35	P10155-ND	4.65	3.82	2.67	1.86	ECO-S2WB101BA
	100	0.63	0.64	25	30	P10156-ND	4.56	3.74	2.62	1.83	ECO-S2WB101CA
	120	0.69	0.72	22	40	P10157-ND	5.08	4.17	2.92	2.04	ECO-S2WB121BA
	120	0.69	0.72	25	35	P10158-ND	5.01	4.11	2.88	2.01	ECO-S2WB121CA
	150	0.77	0.79	22	50	P10159-ND	5.86	4.80	3.36	2.34	ECO-S2WB151BA
	150	0.77	0.79	30	30	P10160-ND	5.15	4.37	3.14	2.36	ECO-S2WB151DA
	180	0.85	0.87	25	45	P10161-ND	5.57	4.72	3.40	2.55	ECO-S2WB181CA
	180	0.85	0.87	30	35	P10162-ND	5.76	4.88	3.51	2.64	ECO-S2WB181DA
	220	0.94	1.00	25	50	P10163-ND	6.48	5.49	3.95	2.96	ECO-S2WB221CA
	220	0.94	1.00	30	40	P10164-ND	6.57	5.56	4.01	3.01	ECO-S2WB221DA
	270	1.04	1.19	30	45	P10165-ND	7.58	6.42	4.62	3.47	ECO-S2WB271DA
	270	1.04	1.19	35	35	P10166-ND	7.95	6.73	4.85	3.64	ECO-S2WB271EA
	330	1.15	1.38	30	50	P10167-ND	8.12	7.01	5.13	4.04	ECO-S2WB331DA
	330	1.15	1.38	35	40	P10168-ND	8.37	7.22	5.29	4.16	ECO-S2WB331EA
	390	1.25	1.55	35	45	P10169-ND	9.36	8.07	5.91	4.65	ECO-S2WB391EA
	470	1.37	1.74	35	50	P10170-ND	12.55	11.06	9.93	8.22	ECO-S2WB471EA

† 2000 hour life for can sizes of 20mm diameter or length.

Panasonic AA-Series Computer Grade Capacitors

Features:
- Standard 10-32, high post screw threads (included)
- High ripple current capability with low ESR

Specifications:
- Working Voltage Range: 10 ~ 450VDC • Capacitance Tolerance: -10/+50% • Operating Temperature Range: -40 / +85°C • Rated Endurance: +85°C for 3000 hours
- DC Leakage Current: $3\sqrt{CV}$ (µA) or 5mA maximum after 5 minutes at 20°C

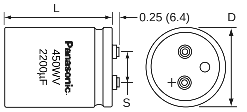
Rated Voltage:	25	40	50	100	250	350	450
Surge Voltage:	32	50	63	125	300	400	500

Ripple Current Frequency Correction Factors

Frequency (Hz):	50	60	100~ 120	300~ 360	1k	10k~ 50k~
25~100 WV:	0.9	0.95	1.0	1.05	1.08	1.15
250~450 WV:	0.75	0.8	1.0	1.2	1.25	1.4

CROSS REFERENCES

Sprague: 36D, 36DX, 36DE
Mallory: CGS, CGH
GE: 23A, 23M **UCC:** 36DA
Philips: 3186 **CDE:** DCMX

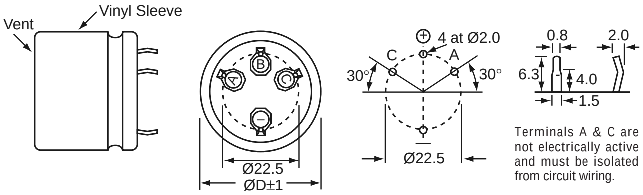


Ripple Current Temperature Correction Factors

Max Temperature	85°C	70°C	60°C	≤45°C
G-AA	1.0	1.6	2.0	2.2

WV DC	Cap. (µF)	120Hz, 20°C ESR (Ω)	120Hz, 85°C R.C. (A)	Dimensions – In. (mm)			Digi-Key Part No.	Price Each				Panasonic Part No.
				D	L	S		1	10	50	200	
25	12000	0.042	5.13	1.375 (35)	2.125 (54)	0.500 (12.7)	P10072-ND	19.38	17.53	16.03	13.79	EEG-AA1E123CCE
	22000	0.023	6.05	2.000 (51)	2.125 (54)	0.875 (22.2)	P10073-ND	21.83	19.74	18.06	15.53	EEG-AA1E223FCE
	47000	0.010	12.72	2.000 (51)	3.125 (79)	0.875 (22.2)	P10074-ND	22.85	21.34	19.97	17.90	EEG-AA1E473FGE
	68000	0.009	17.14	2.000 (51)	3.625 (92)	0.875 (22.2)	P10075-ND	25.17	23.51	21.99	19.72	EEG-AA1E683FHE
40	6000	0.073	6.06	1.375 (35)	3.125 (79)	0.500 (12.7)	P10076-ND	19.40	17.55	16.05	13.81	EEG-AA1G602CGE
	13000	0.034	11.76	2.000 (51)	4.125 (105)	0.875 (22.2)	P10077-ND	20.36	19.01	17.79	15.95	EEG-AA1G133FKE
	22000	0.020	13.06	2.000 (51)	3.125 (79)	0.875 (22.2)	P10078-ND	22.03	20.58	19.25	17.26	EEG-AA1G223FGE
50	4100	0.107	5.40	1.375 (35)	3.125 (79)	0.500 (12.7)	P10079-ND	19.48	17.62	16.12	13.86	EEG-AA1H412CGE
	6800	0.065	6.42	1.375 (35)	3.125 (79)	0.500 (12.7)	P10080-ND	20.43	18.48	16.90	14.54	EEG-AA1H682CGE
	10000	0.044	8.79	1.375 (35)	4.125 (105)	0.500 (12.7)	P10081-ND	21.30	19.27	17.63	15.16	EEG-AA1H103CKE
	15000	0.029	11.35	2.000 (51)	4.125 (105)	0.875 (22.2)	P10082-ND	22.08	20.62	19.29	17.29	EEG-AA1H153FKE
	20000	0.022	14.15	2.000 (51)	4.125 (105)	0.875 (22.2)	P10083-ND	23.71	22.14	20.72	18.57	EEG-AA1H203FKE
100	2500	0.117	4.12	1.375 (35)	2.125 (54)	0.500 (12.7)	P10084-ND	21.00	19.00	17.38	14.95	EEG-AA2A252CCE
	4000	0.073	6.53	2.000 (51)	2.125 (54)	0.875 (22.2)	P10085-ND	20.97	19.59	18.33	16.43	EEG-AA2A402FCE
	10000	0.029	8.16	2.000 (51)	3.625 (92)	0.875 (22.2)	P10086-ND	27.58	25.75	24.09	21.60	EEG-AA2A103FHE
	18000	0.016	12.85	2.500 (64)	4.125 (105)	1.125 (28.6)	P10087-ND	37.77	35.28	33.00	29.59	EEG-AA2A183GKE
250	550	0.401	2.91	1.375 (35)	4.125 (105)	0.500 (12.7)	P10088-ND	20.58	18.61	17.03	14.65	EEG-AA2E551CKE
	1200	0.184	4.18	2.000 (51)	2.125 (54)	0.875 (22.2)	P10089-ND	20.73	19.36	18.11	16.24	EEG-AA2E122FCE
	6000	0.036	13.20	3.000 (76)	3.125 (79)	1.250 (31.8)	P10090-ND	48.42	45.21	42.30	37.92	EEG-AA2E602HGE
	10000	0.022	17.75	3.000 (76)	4.625 (117)	1.250 (31.8)	P10091-ND	66.35	61.95	57.96	51.96	EEG-AA2E103HLE
350	1000	0.221	4.11	2.000 (51)	2.625 (67)	0.875 (22.2)	P10092-ND	30.25	28.25	26.43	23.69	EEG-AA2V102FEE
	5600	0.039	10.06	3.000 (76)	4.625 (117)	1.250 (31.8)	P10093-ND	79.53	74.26	69.47	62.28	EEG-AA2V562HLE
450	450	0.491	2.93	2.000 (51)	3.125 (79)	0.875 (22.2)	P10094-ND	27.46	25.65	24.00	21.51	EEG-AA2W451FGE
	1000	0.221	5.85	2.000 (51)	3.625 (92)	0.875 (22.2)	P10095-ND	36.14	33.75	31.57	28.31	EEG-AA2W102FHE
	1800	0.122	7.47	2.000 (51)	5.625 (143)	0.875 (22.2)	P10096-ND	49.63	46.35	43.36	38.87	EEG-AA2W182FPE
	1800	0.122	9.46	3.000 (76)	5.625 (143)	1.250 (31.8)	P10097-ND	58.53	54.65	51.13	45.84	EEG-AA2W182HPE
	2200	0.100	9.27	2.500 (64)	4.125 (105)	1.125 (28.6)	P10098-ND	57.62	53.81	50.34	45.13	EEG-AA2W222GKE
	2400	0.092	7.74	3.000 (76)	5.125 (130)	1.250 (31.8)	P10099-ND	62.46	58.32	54.56	48.92	EEG-AA2W242HNE
	3100	0.071	11.18	2.500 (64)	5.625 (143)	1.125 (28.6)	P10100-ND	72.35	67.56	63.20	56.66	EEG-AA2W312GPE
	3600	0.061	12.07	3.000 (76)	4.625 (117)	1.250 (31.8)	P10101-ND	84.96	79.33	74.21	66.54	EEG-AA2W362HLE
Mounting Clamp, 1.375" (34.9mm) diameter with 2 tabs							P10102-ND	2.57	2.06	1.69	1.11	MC36B2
Mounting Clamp, 2.000" (50.8mm) diameter with 3 tabs							P10103-ND	3.07	2.46	2.02	1.32	MC51B3
Mounting Clamp, 2.500" (63.5mm) diameter with 3 tabs							P10104-ND	3.34	2.67	2.20	1.43	MC64B3
Mounting Clamp, 3.000" (76.2mm) diameter with 3 tabs							P10105-ND	3.14	2.58	2.17	1.51	MC77B3

Panasonic T-UP Series Snap-In Capacitors



Terminals A & C are not electrically active and must be isolated from circuit wiring.

FEATURES:

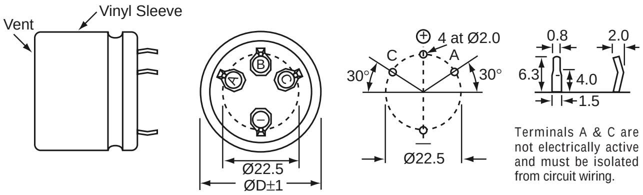
• 4 terminal mounting provides stability and keyed polarity • Replaces T-U series with higher capacitance and ripple current per case size • General purpose rated at 85°C, 3000 hour endurance • 35 and 40 mm diameter case sizes up to 80 mm in length • Top vent construction

Rated Working Voltage	16 ~ 250 VDC	350 ~ 450 VDC
Operating Temperature	-40 ~ +85°C	-25 ~ +85°C
Nominal Capacitance	1500 ~ 120000µF	470 ~ 1800µF
Endurance	2000 hours at +85°C with maximum specified ripple current	

Rated DC Voltage:	16	25	35	50	63	80	100	200	250	350	400	450
Surge Voltage:	20	32	44	63	79	100	125	250	300	400	450	500

Cap (µF)	Size (mm) D X L	Max. 85°C Ripple (Arms) 120 Hz	10k~50kHz	Max. 20°C 120Hz ESR (Ω)	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
16WV DC									
68000	35 x 50	9.05	10.41	0.018	P10000-ND	10.21	8.81	6.45	ECE-T1CP683EA
82000	35 x 60	9.94	11.43	0.018	P10001-ND	11.68	10.07	7.38	ECE-T1CP823EA
82000	40 x 50	10.29	11.83	0.019	P10003-ND	10.93	9.42	8.28	ECE-T1CP823FA
100000	35 x 80	11.00	12.65	0.019	P10002-ND	12.33	10.87	9.75	ECE-T1CP104EA
100000	40 x 60	11.36	13.06	0.020	P10004-ND	12.13	10.69	8.00	ECE-T1CP104FA
120000	40 x 80	12.42	14.28	0.018	P10005-ND	13.20	11.63	8.70	ECE-T1CP124FA
25WV DC									
47000	35 x 50	8.00	9.20	0.017	P10006-ND	10.28	8.86	6.49	ECE-T1EP473EA
56000	35 x 60	8.64	9.94	0.017	P10007-ND	11.68	10.07	7.38	ECE-T1EP563EA
56000	40 x 50	8.96	10.30	0.018	P10009-ND	11.69	10.08	7.38	ECE-T1EP563FA
68000	35 x 80	9.44	10.86	0.017	P10008-ND	11.56	10.19	7.62	ECE-T1EP683EA
68000	40 x 60	9.76	11.22	0.018	P10010-ND	12.10	10.66	7.98	ECE-T1EP683FA
100000	40 x 80	11.68	13.43	0.018	P10011-ND	13.36	12.08	9.21	ECE-T1EP104FA
35WV DC									
33000	35 x 50	7.15	8.22	0.018	P10012-ND	10.80	9.31	6.82	ECE-T1VP333EA
39000	35 x 60	7.94	9.13	0.015	P10013-ND	12.31	10.61	7.78	ECE-T1VP393EA
39000	40 x 50	7.79	8.96	0.017	P10015-ND	10.96	9.66	7.23	ECE-T1VP393FA
47000	35 x 80	9.53	10.96	0.015	P10014-ND	12.13	10.69	8.00	ECE-T1VP473EA
47000	40 x 60	8.58	9.87	0.017	P10016-ND	12.72	11.21	8.38	ECE-T1VP473FA
56000	40 x 80	10.17	11.70	0.017	P10017-ND	13.77	12.13	9.08	ECE-T1VP563FA
50WV DC									
22000	35 x 50	7.57	8.71	0.023	P10018-ND	11.27	9.72	7.12	ECE-T1HP223EA
27000	35 x 60	8.31	9.56	0.018	P10019-ND	13.20	11.38	8.34	ECE-T1HP273EA
27000	40 x 50	8.12	9.34	0.021	P10021-ND	11.72	10.33	7.72	ECE-T1HP273FA
33000	35 x 80	9.23	10.51	0.015	P10020-ND	13.16	11.60	8.68	ECE-T1HP333EA
33000	40 x 60	8.86	10.19	0.018	P10022-ND	13.80	12.16	9.10	ECE-T1HP333FA
39000	40 x 80	9.79	11.26	0.015	P10023-ND	14.92	13.15	9.83	ECE-T1HP393FA
63WV DC									
12000	35 x 50	7.15	8.22	0.035	P10024-ND	9.96	8.59	6.29	ECE-T1JP123EA
15000	35 x 60	7.71	8.87	0.028	P10025-ND	11.60	10.00	7.32	ECE-T1JP153EA
15000	40 x 50	7.53	8.66	0.033	P10027-ND	11.60	10.00	7.32	ECE-T1JP153FA
18000	35 x 80	9.41	10.82	0.023	P10026-ND	11.39	10.03	7.50	ECE-T1JP183EA
18000	40 x 60	8.28	9.52	0.028	P10028-ND	11.91	10.50	7.85	ECE-T1JP183FA
22000	40 x 80	9.97	11.47	0.023	P10029-ND	13.09	11.54	8.63	ECE-T1JP223FA
80WV DC									
8200	35 x 50	5.83	6.70	0.051	P10030-ND	9.76	8.41	6.16	ECE-T1KP822EA
10000	35 x 60	6.38	7.34	0.041	P10031-ND	11.82	10.19	7.47	ECE-T1KP103EA
10000	40 x 50	6.56	7.54	0.041	P10033-ND	10.08	8.88	6.64	ECE-T1KP103FA
12000	35 x 80	6.92	7.96	0.035	P10032-ND	11.06	9.75	7.29	ECE-T1KP123EA
12000	40 x 60	7.29	8.38	0.035	P10034-ND	11.59	10.22	7.64	ECE-T1KP123FA
15000	40 x 80	8.93	10.27	0.028	P10035-ND	12.84	11.32	8.46	ECE-T1KP153FA
100WV DC									
6800	35 x 50	6.60	7.59	0.049	P10036-ND	10.26	9.05	6.77	ECE-T2AP682EA
8200	35 x 60	7.05	8.12	0.040	P10037-ND	12.03	10.60	7.93	ECE-T2AP822EA
8200	40 x 50	7.28	8.37	0.040	P10039-ND	11.89	10.48	7.84	ECE-T2AP822FA
10000	35 x 80	7.74	8.90	0.033	P10038-ND	11.96	10.82	8.25	ECE-T2AP103EA
10000	40 x 60	7.97	9.17	0.033	P10040-ND	14.08	12.41	9.28	ECE-T2AP103FA
12000	40 x 80	8.65	9.95	0.026	P10041-ND	13.99	12.66	9.65	ECE-T2AP123FA
200WV DC									
2200	35 x 50	4.92	6.89	0.113	P10042-ND	10.83	9.34	6.84	ECE-T2DP222EA
2700	35 x 60	5.41	7.57	0.092	P10043-ND	12.11	10.44	7.65	ECE-T2DP272EA
2700	40 x 50	5.41	7.57	0.092	P10045-ND	11.28	9.95	7.44	ECE-T2DP272FA
3300	35 x 80	5.90	8.26	0.075	P10044-ND	12.58	11.09	8.29	ECE-T2DP332EA
3300	40 x 60	5.90	8.26	0.075	P10046-ND	12.60	11.10	8.30	ECE-T2DP332FA
3900	40 x 80	6.40	8.96	0.064	P10047-ND	14.28	12.59	9.41	ECE-T2DP392FA
250WV DC									
1500	35 x 50	4.04	5.66	0.166	P10048-ND	11.04	9.52	6.98	ECE-T2EP152EA
1800	35 x 60	4.49	6.29	0.138	P10049-ND	12.22	10.54	7.72	ECE-T2EP182EA
1800	40 x 50	4.49	6.29	0.138	P10051-ND	12.75	10.99	8.05	ECE-T2EP182FA
2200	35 x 80	4.94	6.92	0.113	P10050-ND	12.73	11.22	8.39	ECE-T2EP222EA
2200	40 x 60	4.94	6.92	0.113	P10052-ND	12.72	11.21	8.38	ECE-T2EP222FA
2700	40 x 80	5.39	7.55	0.092	P10053-ND	14.78	13.02	9.74	ECE-T2EP272FA
350WV DC									
680	35 x 50	2.96	4.14	0.366	P10054-ND	11.21	9.66	7.08	ECE-T2VP681EA
1000	35 x 60	3.19	4.47	0.249	P10055-ND	12.61	11.12	8.31	ECE-T2VP102EA
1000	40 x 50	3.19	4.47	0.249	P10057-ND	13.13	11.57	8.65	ECE-T2VP102FA
1200	35 x 80	3.64	5.10	0.207	P10056-ND	14.56	12.83	9.60	ECE-T2VP122EA
1200	40 x 60	3.64	5.10	0.207	P10058-ND	14.64	12.90	9.65	ECE-T2VP122FA
1800	40 x 80	4.10	5.74	0.136	P10059-ND	17.68	16.00	12.19	ECE-T2VP182FA
400WV DC									
560	35 x 50	2.69	3.77	0.444	P10060-ND	11.10	9.57	7.01	ECE-T2GP561EA
680	35 x 60	2.93	4.10	0.366	P10061-ND	11.05	9.74	7.29	ECE-T2GP681EA
820	40 x 50	3.18	4.45	0.303	P10063-ND	12.83	11.31	8.46	ECE-T2GP821FA
1000	35 x 80	3.42	4.79	0.249	P10062-ND	14.48	12.76	9.54	ECE-T2GP102EA
1000	40 x 60	3.42	4.79	0.249	P10064-ND	14.59	12.86	9.61	ECE-T2GP102FA
1500	40 x 80	3.91	5.47	0.166	P10065-ND	17.62	15.94	12.15	ECE-T2GP152FA
450WV DC									
470	35 x 50	2.53	3.54	0.529	P10066-ND	12.50	10.78	7.90	ECE-T2WP471EA
560	35 x 60	2.76	3.86	0.444	P10067-ND	13.87	11.96	8.76	ECE-T2WP561EA
680	40 x 50	2.99	4.19	0.366	P10069-ND	14.53	12.80	9.57	ECE-T2WP681FA
820	35 x 80	3.22	4.51	0.303	P10068-ND	14.75	13.34	10.17	ECE-T2WP821EA
820	40 x 60	3.22	4.51	0.303	P10070-ND	16.36	14.41	10.78	ECE-T2WP821FA
1200	40 x 80	3.45	4.83	0.207	P10071-ND	17.40	16.25	12.67	ECE-T2WP122FA

Panasonic T-HA Series Snap-In Capacitors



Terminals A & C are not electrically active and must be isolated from circuit wiring.

FEATURES:

• 4 terminal mounting provides stability and keyed polarity • Replaces T-NHE series with higher capacitance and ripple current per case size • Industrial grade with 3000 hour endurance at 105° C • 35 and 40 mm diameter case sizes up to 80 mm in length • Top vent construction

Rated Working Voltage	16 ~ 250 VDC	350 ~ 450 VDC
Operating Temperature	-40 ~ +105°C	-25 ~ +105°C
Nominal Capacitance	1200 ~ 120000µF	470 ~ 1500µF
Endurance	2000 hours at +105°C with maximum specified ripple current	

Rated DC Voltage:	16	25	35	50	63	80	100	200	250	350	400	450
Surge Voltage:	20	32	44	63	79	100	125	250	300	400	450	500

Cap (µF)	Size (mm) D X L	Max. 85°C Ripple (Arms) 120 Hz	10k~50kHz	Max. 20°C 120Hz ESR (Ω)	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
16WV DC									
56000	35 x 50	6.00	6.90	0.018	P10612-ND	9.77	8.42	6.17	ECE-T1CA563EA
68000	35 x 60	6.62	7.61	0.017	P10613-ND	9.97	8.79	6.58	ECE-T1CA683EA
68000	40 x 50	7.29	8.38	0.019	P10614-ND	10.01	8.82	6.60	ECE-T1CA683FA
82000	40 x 60	7.29	8.38	0.017	P10615-ND	11.49	10.12	7.57	ECE-T1CA823FA
100000	35 x 80	8.03	9.23	0.015	P10616-ND	12.30	10.84	8.11	ECE-T1CA104EA
120000	40 x 80	8.79	10.11	0.014	P10617-ND	12.55	11.36	8.66	ECE-T1CA124FA
25WV DC									
33000	35 x 50	5.50	6.33	0.020	P10618-ND	9.23	7.96	5.83	ECE-T1EA333EA
47000	35 x 60	6.56	7.54	0.017	P10619-ND	10.14	8.94	6.68	ECE-T1EA473EA
47000	40 x 50	6.47	7.44	0.019	P10620-ND	10.16	8.95	6.69	ECE-T1EA473FA
56000	35 x 80	7.25	8.34	0.017	P10621-ND	11.10	9.78	7.32	ECE-T1EA563EA
56000	40 x 60	7.17	8.25	0.015	P10622-ND	11.59	10.22	7.64	ECE-T1EA563FA
82000	40 x 80	8.68	9.98	0.014	P10623-ND	12.71	11.49	8.76	ECE-T1EA823FA
35WV DC									
22000	35 x 50	5.00	5.75	0.026	P10624-ND	9.86	8.50	6.23	ECE-T1VA223EA
27000	35 x 60	5.53	6.36	0.021	P10625-ND	10.15	8.95	6.69	ECE-T1VA273EA
27000	40 x 50	5.44	6.26	0.025	P10626-ND	10.16	8.96	6.70	ECE-T1VA273FA
33000	40 x 60	6.61	7.60	0.020	P10627-ND	11.77	10.37	7.76	ECE-T1VA333FA
39000	35 x 80	6.52	7.50	0.015	P10628-ND	12.39	10.92	8.16	ECE-T1VA393EA
47000	40 x 80	7.79	8.96	0.014	P10629-ND	14.20	12.51	9.36	ECE-T1VA473FA
50WV DC									
15000	35 x 50	4.80	5.52	0.033	P10630-ND	9.99	8.61	6.31	ECE-T1HA153EA
18000	35 x 60	5.27	6.06	0.028	P10631-ND	10.18	8.97	6.71	ECE-T1HA183EA
22000	40 x 50	5.15	5.92	0.026	P10632-ND	11.31	9.97	7.45	ECE-T1HA223FA
27000	35 x 80	6.16	7.08	0.018	P10633-ND	12.70	11.20	8.37	ECE-T1HA273EA
27000	40 x 60	6.05	6.96	0.021	P10634-ND	13.28	11.70	8.75	ECE-T1HA273FA
39000	40 x 80	7.55	8.68	0.015	P10635-ND	14.66	13.26	10.11	ECE-T1HA393FA
63WV DC									
12000	35 x 50	4.40	5.06	0.035	P10636-ND	9.39	8.28	6.19	ECE-T1JA123EA
15000	35 x 60	4.92	5.66	0.028	P10637-ND	11.00	9.70	7.25	ECE-T1JA153EA
15000	40 x 50	4.80	5.52	0.033	P10638-ND	10.97	9.67	7.23	ECE-T1JA153FA
18000	35 x 80	5.79	6.66	0.023	P10639-ND	12.12	10.68	7.99	ECE-T1JA183EA
18000	40 x 60	5.39	6.20	0.028	P10640-ND	12.70	11.19	8.37	ECE-T1JA183FA
27000	40 x 80	6.59	7.58	0.018	P10641-ND	14.28	12.92	9.85	ECE-T1JA273FA
80WV DC									
6800	35 x 50	3.90	4.49	0.061	P10642-ND	9.05	7.98	5.97	ECE-T1KA682EA
8200	35 x 60	4.39	5.05	0.051	P10643-ND	10.47	9.23	6.90	ECE-T1KA822EA
8200	40 x 50	4.29	4.93	0.051	P10644-ND	11.21	9.88	7.39	ECE-T1KA822FA
10000	35 x 80	4.88	5.61	0.041	P10645-ND	12.54	11.05	8.26	ECE-T1KA103EA
10000	40 x 60	4.73	5.44	0.041	P10646-ND	12.51	11.02	8.25	ECE-T1KA103FA
15000	40 x 80	5.97	6.87	0.028	P10647-ND	13.58	12.29	9.37	ECE-T1KA153FA
100WV DC									
4700	35 x 50	3.80	4.37	0.071	P10648-ND	9.37	8.26	6.18	ECE-T2AA472EA
5600	35 x 60	4.06	4.67	0.059	P10649-ND	10.81	9.52	7.12	ECE-T2AA562EA
6800	40 x 50	4.57	5.26	0.049	P10650-ND	11.96	10.55	7.89	ECE-T2AA682FA
8200	35 x 80	5.15	5.92	0.040	P10651-ND	13.37	11.78	8.81	ECE-T2AA822EA
8200	40 x 60	5.02	5.77	0.040	P10652-ND	12.59	11.39	8.68	ECE-T2AA822FA
12000	40 x 80	6.44	7.41	0.028	P10653-ND	15.70	14.20	10.83	ECE-T2AA123FA
200WV DC									
2200	35 x 50	2.90	4.06	0.113	P10654-ND	10.41	9.18	6.86	ECE-T2DA222EA
2700	35 x 60	3.65	5.11	0.092	P10655-ND	11.70	10.31	7.71	ECE-T2DA272EA
2700	40 x 50	3.55	4.97	0.092	P10656-ND	12.19	10.74	8.03	ECE-T2DA272FA
3300	35 x 80	4.52	6.33	0.075	P10657-ND	13.71	12.08	9.04	ECE-T2DA332EA
3300	40 x 60	4.40	6.16	0.075	P10658-ND	13.68	12.06	9.02	ECE-T2DA332FA
4700	40 x 80	5.76	8.06	0.053	P10659-ND	15.80	14.29	10.89	ECE-T2DA472FA
250WV DC									
1200	35 x 50	2.30	3.22	0.207	P10660-ND	10.12	8.92	6.67	ECE-T2EA122EA
1500	35 x 60	2.57	3.60	0.166	P10661-ND	11.48	10.12	7.57	ECE-T2EA152EA
1800	40 x 50	3.15	4.41	0.138	P10662-ND	13.33	11.74	8.78	ECE-T2EA182FA
2200	35 x 80	3.75	5.25	0.113	P10663-ND	13.53	12.24	9.33	ECE-T2EA222EA
2200	40 x 60	3.68	5.15	0.113	P10664-ND	13.47	12.19	9.29	ECE-T2EA222FA
3300	40 x 80	4.68	5.80	0.075	P10665-ND	16.14	15.07	11.75	ECE-T2EA332FA
350WV DC									
680	35 x 50	2.15	3.01	0.366	P10666-ND	11.13	9.81	7.34	ECE-T2VA681EA
820	35 x 60	2.65	3.71	0.303	P10667-ND	12.43	10.95	8.19	ECE-T2VA821EA
820	40 x 50	2.65	3.71	0.303	P10668-ND	12.93	11.39	8.52	ECE-T2VA821FA
1200	35 x 80	3.22	4.51	0.207	P10669-ND	14.78	13.37	10.19	ECE-T2VA122EA
1200	40 x 60	3.22	4.51	0.207	P10670-ND	14.68	13.27	10.12	ECE-T2VA122FA
1500	40 x 80	3.75	5.25	0.166	P10671-ND	17.59	15.91	12.13	ECE-T2VA152FA
400WV DC									
560	35 x 50	1.80	2.52	0.444	P10672-ND	11.42	10.07	7.53	ECE-T2GA561EA
680	40 x 50	2.17	3.04	0.366	P10673-ND	13.36	11.77	8.80	ECE-T2GA681FA
820	35 x 60	2.44	3.42	0.303	P10674-ND	14.76	13.01	9.73	ECE-T2GA821EA
1000	35 x 80	3.00	4.20	0.249	P10675-ND	15.36	13.89	10.59	ECE-T2GA102EA
1000	40 x 60	3.00	4.20	0.249	P10676-ND	15.24	13.78	10.51	ECE-T2GA102FA
1200	40 x 80	3.30	4.62	0.207	P10677-ND	17.80	16.10	12.27	ECE-T2GA122FA
450WV DC									
470	35 x 50	1.74	2.44	0.529	P10678-ND	12.45	10.98	8.21	ECE-T2WA471EA
560	35 x 60	2.15	3.01	0.444	P10679-ND	13.90	12.25	9.16	ECE-T2WA561EA
560	40 x 50	2.10	2.94	0.444	P10680-ND	14.44	12.72	9.52	ECE-T2WA561FA
680	40 x 60	2.50	3.78	0.303	P10681-ND	14.60	13.21	10.07	ECE-T2WA681FA
820	35 x 80	2.70	3.50	0.303	P10682-ND	16.77	15.17	11.56	ECE-T2WA821EA
1000	40 x 80	3.50	4.90	0.249	P10683-ND	19.73	17.84	13.60	ECE-T2WA102FA

Panasonic® VV/TA/HD/VA/VS/HA/HB/FC/FK/EB Series Aluminum Electrolytic Capacitors, Surface Mount Type

FEATURES:

• Surface Mount Type • High CV Volumetric Efficiency • Tape and Reel Packaging for Automatic Placement • Anti-solvent: Freon-TE, TES, TP-35

SPECIFICATIONS:

• **Operating Temperature Range:** TA Series: -40°C to +125°C, HD/VV/HA/HB/FC Series: -40°C to +105°C, VA/VS/VS-BP Series -40 to +85°C, EB Series -20 to +105°C, FK Series: -55 to +105°C

• **Capacitance Tolerance:** ±20% (120Hz, +20°C)

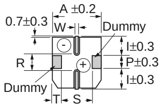
• **Leakage Current:** I ≤ 0.01CV or 3(µA) whichever is greater measured after a 2 min. application of rated working voltage at +20°C, EB Series: I ≤ 0.06CV +10(µA) after 2 minutes application of rated working voltage at +20°C

• **Low Temperature Characteristics:** Impedance ratio (120Hz) ≤ Following specified values.

Impedance 120Hz	Series	Working Voltage 4.0V	6.3V	10V	16V	25V	35V	50V	63V	100V
-25°C/+20°C -40°C/+20°C	VV/VA/VS	7 15	4 8	3 6	2 4	2 4	2 3	2 3	3 4	3 4
-25°C/+20°C -40°C/+20°C	TA	— —	— —	8 14	8 12	4 10	3 8	3 8	— —	— —
-25°C/+20°C -40°C/+20°C	HD	— —	— —	6 12	2 5	2 3	2 3	2 3	— —	— —
-25°C/+20°C -40°C/+20°C	HA	— —	4 8	3 6	2 4	2 4	2 3	2 3	3 4	3 4
-25°C/+20°C -40°C/+20°C	HB	7 15	4 8	3 6	2 4	2 4	2 3	2 3	— —	— —
-25°C/+20°C -40°C/+20°C	FC	— —	2 3	2 3	2 3	2 3	2 3	2 3	2 3	2 3
-25°C/+20°C -40°C/+20°C -55°C/+20°C	FK	— — —	2 3 4	2 3 4	2 3 4	2 3 3	2 3 3	— — —	— — —	— — —

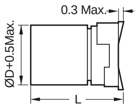
Impedance 120Hz	Series	Working Voltage 160V	200V	250V	350V	400V	450V
-25°C/+20°C	EB	2	2	3	5	6	6

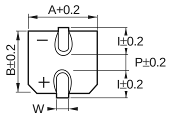
Land/Pad dimensions as mounting guideline.



Series FC
Case Sizes J and K

Case Code	R	S	T
J16	5.0	12.0	2.5
K16	5.0	14.0	3.5
K21	5.0	14.0	3.5





Series	Case Code	Dimensions D	L	A	B	I	W	P
VV	B	4	5.4	4.3	4.3	1.8	0.65±0.1	1.0
TA	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
HD	B	4.0	5.8	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.8	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.8	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
VA	B	4.0	5.7	4.3	4.3 max.	1.8	0.65±0.1	1.0
	C	5.0	5.7	5.3	5.3 max.	2.2	0.65±0.1	1.5
	D	6.3	5.7	6.6	6.6 max.	2.4	0.65±0.1	2.2
VS	A	3.0	5.4	3.3	4.5 max.	1.5	0.55±0.1	0.6
	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8
	D2	6.3	5.7	6.6	7.8 max.	2.6	0.65±0.1	1.8
	D8	6.3	7.9	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6

Series	Case Code	Dimensions D	L	A	B	I	W	P
HA	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8
	D8	6.3	7.9	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
HB	B	4.0	5.8	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.8	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.8	6.6	7.8 max.	2.6	0.65±0.1	1.8
FC	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max.	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8
	E	8.0	6.2	8.3	9.5 max.	3.4	0.65±0.1	2.2
	F	8.0	10.2	8.3	10.0 max.	3.4	0.90±0.2	3.1
	G	10.0	10.2	10.3	12.0 max.	3.5	0.90±0.2	4.6
	H16	12.5	16.5	13.5	15.0 max.	4.7	0.90±0.3	4.4
	J16	16	16.5	17.0	19.0 max.	5.5	1.2±0.3	6.7
	K16	18	16.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
	K21	18	21.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
FK	B	4	5.8	4.3	5.5	1.8	0.65±0.1	1.0
	C	5	5.8	5.3	6.5	2.2	0.65±0.1	1.5
	D	6.3	5.8	6.6	7.8	2.6	0.65±0.1	1.8
	D8	6.3	7.7	6.6	7.8	2.6	0.65±0.1	1.8
	E	8	6.2	8.3	9.5	3.4	0.65±0.1	2.2
	F	8	10.2	8.3	10.0	3.4	0.90±0.3	3.1
	G	10	10.2	10.3	12.0	3.5	0.90±0.3	4.6
	H13	12.5	13.5	13.5	15.0	4.7	0.90±0.3	4.4
	J16	16	16.5	17.0	19.0	5.5	1.2±0.3	6.7
	K16	18	16.5	19.0	21.0	6.7	1.2±0.3	6.7
EB	G13	10	13.5	10.3	12.0 max.	3.5	0.90±0.2	4.6
	G17	10	17.5	10.3	12.0 max.	3.5	0.90±0.2	4.6
	H16	12.5	16.5	13.5	15.0 max.	4.7	0.90±0.3	4.4
	J16	16	16.5	17.0	19.0 max.	5.5	1.2±0.3	6.7
	J21	16	21.5	17.0	19.0 max.	5.5	1.2±0.3	6.7
	K16	18	16.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
	K21	18	21.5	19.0	21.0 max.	6.5	1.2±0.3	6.7
VS-BIPOLAR	B	4.0	5.4	4.3	5.5 max.	1.8	0.65±0.1	1.0
	C	5.0	5.4	5.3	6.5 max	2.2	0.65±0.1	1.5
	D	6.3	5.4	6.6	7.8 max.	2.6	0.65±0.1	1.8

Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impedance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								5	10	25	100		Size	Pricing	
VV Series: –40°C to +105°C (2000 Hour Life) - NOT RECOMMENDED FOR NEW DESIGN															
50	0.15	0.12	—	3.0	B	1.5	PCE1010CT-ND	—	.34	—	.30	PCE1010TR-ND	2,000	148.00/M	ECE-V1HVR15SR
	0.22	0.12	—	3.0	B	2.3	PCE1012CT-ND	—	.34	—	.30	PCE1012TR-ND	2,000	148.00/M	ECE-V1HVR22SR
TA Automotive Series: –40°C to +125°C (1000 Hour Life)															
10	100	0.32	—	10.0	E	62	PCE3143CT-ND	1.06	.87	.81	.75	PCE3143TR-ND	1,000	372.00	EEV-TA1A101P
	220	0.32	—	22.0	F	93	PCE3144CT-ND	1.36	1.12	1.04	.96	PCE3144TR-ND	500	239.50	EEV-TA1A221P
	330	0.32	—	33.0	G	118	PCE3145CT-ND	1.60	1.32	1.23	1.13	PCE3145TR-ND	500	282.00	EEV-TA1A331P
16	100	0.24	—	16.0	F	89	PCE3146CT-ND	1.36	1.12	1.04	.96	PCE3146TR-ND	500	239.50	EEV-TA1C101P
	220	0.24	—	35.2	G	113	PCE3147CT-ND	1.60	1.32	1.23	1.13	PCE3147TR-ND	500	282.00	EEV-TA1C221P
25	47	0.21	—	11.8	E	56	PCE3148CT-ND	1.06	.87	.81	.75	PCE3148TR-ND	1,000	372.00	EEV-TA1E470P
	100	0.21	—	25.0	F	84	PCE3149CT-ND	1.36	1.12	1.04	.96	PCE3149TR-ND	500	239.50	EEV-TA1E101P
35	33	0.18	—	11.6	E	53	PCE3150CT-ND	1.06	.87	.81	.75	PCE3150TR-ND	1,000	372.00	EEV-TA1V330P
	47	0.18	—	16.5	F	79	PCE3151CT-ND	1.36	1.12	1.04	.96	PCE3151TR-ND	500	239.50	EEV-TA1V470P
	100	0.18	—	3.5	G	101	PCE3152CT-ND	1.60	1.32	1.23	1.13	PCE3152TR-ND	500	282.00	EEV-TA1V101P
50	10	0.18	—	5.0	E	25	PCE3153CT-ND	1.06	.87	.81	.75	PCE3153TR-ND	1,000	372.00	EEV-TA1H100P
	22	0.18	—	11.0	E	50	PCE3154CT-ND	1.06	.87	.81	.75	PCE3154TR-ND	1,000	372.00	EEV-TA1H220P
	33	0.18	—	16.5	F	74	PCE3155CT-ND	1.41	1.16	1.08	1.00	PCE3155TR-ND	500	248.50	EEV-TA1H330P
	47	0.18	—	23.5	G	94	PCE3156CT-ND	1.60	1.32	1.23	1.13	PCE3156TR-ND	500	282.00	EEV-TA1H470P
HD Series: –40°C to +105°C (5000 Hour Life)															
10	100	—	2.0	10.0	E	62	PCE3364CT-ND	.76	.63	.58	.54	PCE3364TR-ND	1,000	267.00	EEV-HD1A101P
	220	—	1.5	22.0	F	93	PCE3365CT-ND	.99	.81	.76	.70	PCE3365TR-ND	500	173.50	EEV-HD1A221P
	330	—	0.8	33.0	G	118	PCE3366CT-ND	1.22	1.01	.94	.87	PCE3366TR-ND	500	215.50	EEV-HD1A331P
16	10	—	12.0	3.0	B	20	PCE3338CT-ND	.37	.31	.28	.26	PCE3338TR-ND	2,000	129.00/M	EEV-HD1C100R
	22	—	7.2	3.5	C	33	PCE3339CT-ND	.43	.36	.33	.31	PCE3339TR-ND	1,000	152.00	EEV-HD1C220R
	47	—	4.0	7.5	D	55	PCE3340CT-ND	.50	.41	.38	.35	PCE3340TR-ND	1,000	174.00	EEV-HD1C470P
	100	—	1.5	16.0	F	89	PCE3367CT-ND	.99	.81	.76	.70	PCE3367TR-ND	500	173.50	EEV-HD1C101P
	220	—	0.8	35.2	G	113	PCE3368CT-ND	1.25	1.03	.95	.88	PCE3368TR-ND	500	219.00	EEV-HD1C221P
25	33	—	4.0	8.3	D	52	PCE3341CT-ND	.50	.41	.38	.35	PCE3341TR-ND	1,000	174.00	EEV-HD1E330P
	47	—	2.0	11.8	E	56	PCE3369CT-ND	.76	.63	.58	.54	PCE3369TR-ND	1,000	267.00	EEV-HD1E470P
	100	—	1.5	25.0	F	84	PCE3370CT-ND	.99	.81	.76	.70	PCE3370TR-ND	500	173.50	EEV-HD1E101P
35	4.7	—	12.0	3.0	B	17	PCE3342CT-ND	.37	.31	.28	.26	PCE3342TR-ND	2,000	129.00/M	EEV-HD1V4R7R
	10	—	7.2	3.5	C	28	PCE3343CT-ND	.43	.36	.33	.31	PCE3343TR-ND	1,000	152.00	EEV-HD1V100R
	22	—	4.0	7.7	D	47	PCE3344CT-ND	.50	.41	.38	.35	PCE3344TR-ND	1,000	174.00	EEV-HD1V220P
	33	—	2.0	11.6	E	53	PCE3371CT-ND	.76	.63	.58	.54	PCE3371TR-ND	1,000	267.00	EEV-HD1V330P
	47	—	1.5	16.5	F	79	PCE3372CT-ND	.99	.81	.76	.70	PCE3372TR-ND	500	173.50	EEV-HD1V470P
	100	—	0.8	35.0	G	101	PCE3373CT-ND	1.22	1.01	.94	.87	PCE3373TR-ND	500	215.50	EEV-HD1V101P
50	0.47	—	12.0	3.0	B	5	PCE3345CT-ND	.37	.31	.28	.26	PCE3345TR-ND	2,000	129.00/M	EEV-HD1HR47R
	1.0	—	12.0	3.0	B	7	PCE3346CT-ND	.37	.31	.28	.26	PCE3346TR-ND	2,000	129.00/M	EEV-HD1H1R0R
	2.2	—	12.0	3.0	B	12	PCE3347CT-ND	.37	.31	.28	.26	PCE3347TR-ND	2,000	129.00/M	EEV-HD1H2R2R
	3.3	—	12.0	3.0	B	16	PCE3348CT-ND	.37	.31	.28	.26	PCE3348TR-ND	2,000	129.00/M	EEV-HD1H3R3R
	4.7	—	7.2	3.0	C	21	PCE3349CT-ND	.43	.36	.33	.31	PCE3349TR-ND	1,000	152.00	EEV-HD1H4R7R
	10	—	4.0	5.0	D	33	PCE3350CT-ND	.50	.41	.38	.35	PCE3350TR-ND	1,000	174.00	EEV-HD1H100P
	22	—	2.0	11.0	E	50	PCE3374CT-ND	.76	.63	.58	.54	PCE3374TR-ND	1,000	267.00	EEV-HD1H220P
	33	—	1.5	16.5	F	74	PCE3375CT-ND	.99	.81	.76	.70	PCE3375TR-ND	500	173.50	EEV-HD1H330P
	47	—	0.8	23.5	G	94	PCE3376CT-ND	1.22	1.01	.94	.87	PCE3376TR-ND	500	215.50	EEV-HD1H470P
VA General Purpose Series: –40°C to +85°C (1000 Hour Life)															
4.0	33	0.35	—	3.0	B	26	PCE2023CT-ND	—	.31	—	.27	PCE2023TR-ND	2,000	123.00/M	ECE-V0GA330R
	47	0.35	—	3.0	B	34	PCE2024CT-ND	—	.31	—	.27	—	—	—	ECE-V0GA470R
6.3	33	0.26	—	3.0	C	38	PCE2001CT-ND	—	.45	—	.39	—	—	—	ECE-V0JA330P
10	47	0.20	—	4.7	D	65	PCE2006CT-ND	—	.43	—	.37	PCE2006TR-ND	1,000	170.00	ECE-V1AA470P
50	0.15	0.12	—	3.0	B	1.5	PCE2028CT-ND	—	.32	—	.28	PCE2028TR-ND	2,000	128.00/M	ECE-V1HAR15R
	0.68	0.12	—	3.0	B	7	PCE2052CT-ND	—	.30	—	.26	—	—	—	ECE-V1HAR68R
	2.2	0.12	—	3.0	B	16	PCE2029CT-ND	—	.31	—	.27	PCE2029TR-ND	2,000	123.00/M	ECE-V1HA2R2R
	4.7	0.12	—	3.0	C	16	PCE2031CT-ND	—	.36	—	.31	—	—	—	ECE-V1HA4R7P

(Continued)

Panasonic VV/TA/HD/VA/VS/HA/HB/FC/FK/EB Series Aluminum Electrolytic Capacitors, Surface Mount Type *(Cont.)*

Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impe-dance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								5	10	25	100		Size	Pricing	
VS General Purpose Low Profile Series: –40°C to +85°C (2000 Hour Life)															
4	22	0.37	—	3.0	A	19	PCE3051CT-ND	.24	.20	.19	.17	PCE3051TR-ND	2,000	84.00/M	ECE-V0GS220SR
	33	0.35	—	3.0	B	26	PCE3052CT-ND	.21	.17	.16	.15	PCE3052TR-ND	2,000	72.00/M	ECE-V0GA330SR
	47	0.35	—	3.0	B	34	PCE3053CT-ND	.21	.17	.16	.15	PCE3053TR-ND	2,000	72.00/M	ECE-V0GA470SR
	100	0.35	—	4.0	C	61	PCE3054CT-ND	.30	.25	.23	.21	PCE3054TR-ND	1,000	105.00	ECE-V0GA101SR
	220	0.35	—	8.8	D	82	PCE3055CT-ND	.28	.23	.21	.20	PCE3055TR-ND	1,000	96.00	ECE-V0GA221SP
6.3	22	0.35	—	3.0	A	20	PCE3308CT-ND	.24	.20	.19	.17	PCE3308TR-ND	2,000	84.00/M	ECE-V0JS220WR
	22	0.26	—	3.0	B	29	PCE3056CT-ND	.26	.21	.20	.18	PCE3056TR-ND	2,000	90.00/M	ECE-V0JA220SR
	47	0.35	—	3.0	B	36	PCE3309CT-ND	.23	.19	.18	.16	PCE3309TR-ND	2,000	80.00/M	ECE-V0JA470WR
	47	0.26	—	3.0	C	46	PCE3057CT-ND	.30	.25	.23	.21	PCE3057TR-ND	1,000	105.00	ECE-V0JA470SR
	100	0.26	—	6.3	D	71	PCE3058CT-ND	.34	.28	.26	.24	PCE3058TR-ND	1,000	120.00	ECE-V0JA101SP
	220	0.35	—	13.8	D	74	PCE3310CT-ND	.35	.29	.27	.25	PCE3310TR-ND	1,000	123.00	ECE-V0JA221WP
	330	0.26	—	20.8	D8	150	PCE3351CT-ND	.43	.35	.33	.30	PCE3351TR-ND	900	135.00	ECE-V0JA331XP
	330	0.35	—	20.8	E	300	PCE2034CT-ND	.56	.46	.43	.39	PCE2034TR-ND	1,000	195.00	ECE-V0JA331P
	470	0.35	—	29.6	F	380	PCE2035CT-ND	.55	.46	.42	.39	PCE2035TR-ND	500	97.00	ECE-V0JA471P
	1000	0.35	—	63.0	F	500	PCE3173CT-ND	.61	.50	.47	.43	PCE3173TR-ND	500	106.50	ECE-V0JA102UP
	1000	0.35	—	63.0	G	700	PCE2038CT-ND	.69	.57	.53	.49	PCE2038TR-ND	500	121.00	ECE-V0JA102P
	1500	0.35	—	94.5	G	750	PCE3174CT-ND	.76	.62	.58	.54	PCE3174TR-ND	500	133.00	ECE-V0JA152P
10	33	0.30	—	3.3	B	29	PCE3175CT-ND	.23	.19	.17	.16	PCE3175TR-ND	2,000	78.00/M	ECE-V1AA330WR
	33	0.20	—	3.3	C	43	PCE3059CT-ND	.24	.20	.19	.17	PCE3059TR-ND	1,000	84.00	ECE-V1AA330SR
	47	0.20	—	4.7	D	65	PCE3060CT-ND	.41	.34	.31	.29	PCE3060TR-ND	1,000	142.00	ECE-V1AA470SP
	100	0.30	—	10.0	C	50	PCE3311CT-ND	.35	.29	.27	.25	PCE3311TR-ND	1,000	123.00	ECE-V1AA101WR
	100	0.20	—	10.0	D	70	PCE3176CT-ND	.37	.30	.28	.26	PCE3176TR-ND	1,000	128.00	ECE-V1AA101SP
	220	0.20	—	22.0	D8	150	PCE3352CT-ND	.51	.42	.39	.36	PCE3352TR-ND	900	162.00	ECE-V1AA221XP
	220	0.26	—	22.0	E	250	PCE2040CT-ND	.51	.42	.39	.36	PCE2040TR-ND	1,000	180.00	ECE-V1AA221P
	330	0.26	—	33.0	F	330	PCE2041CT-ND	.55	.46	.42	.39	PCE2041TR-ND	500	97.00	ECE-V1AA331P
	470	0.26	—	47.0	G	400	PCE2042CT-ND	.69	.57	.53	.49	PCE2042TR-ND	500	121.00	ECE-V1AA471P
	470	0.26	—	47.0	F	330	PCE3177CT-ND	.55	.46	.42	.39	PCE3177TR-ND	500	97.00	ECE-V1AA471UP
	1000	0.26	—	100.0	G	580	PCE3178CT-ND	.69	.57	.53	.49	PCE3178TR-ND	500	121.00	ECE-V1AA102P
16	10	0.18	—	3.0	A	20	PCE3061CT-ND	.24	.20	.19	.17	PCE3061TR-ND	2,000	84.00/M	ECE-V1CS100SR
	10	0.16	—	3.0	B	28	PCE3062CT-ND	.32	.26	.25	.23	PCE3062TR-ND	2,000	111.00/M	ECE-V1CA100SR
	22	0.26	—	3.5	B	28	PCE3179CT-ND	.29	.24	.22	.21	PCE3179TR-ND	2,000	101.00/M	ECE-V1CA220WR
	22	0.16	—	3.5	C	39	PCE3063CT-ND	.30	.25	.23	.21	PCE3063TR-ND	1,000	105.00	ECE-V1CA220SR
	33	0.26	—	5.3	C	35	PCE3180CT-ND	.26	.21	.20	.18	PCE3180TR-ND	1,000	90.00	ECE-V1CA330WR
	47	0.26	—	7.5	C	39	PCE3181CT-ND	.33	.27	.26	.24	PCE3181TR-ND	1,000	116.00	ECE-V1CA470WR
	47	0.16	—	7.5	D	70	PCE3064CT-ND	.34	.28	.26	.24	PCE3064TR-ND	1,000	120.00	ECE-V1CA470SP
	100	0.26	—	16.0	D	70	PCE3182CT-ND	.43	.35	.33	.30	PCE3182TR-ND	1,000	150.00	ECE-V1CA101WP
	100	0.20	—	16.0	E	200	PCE2043CT-ND	.51	.42	.39	.36	PCE2043TR-ND	1,000	180.00	ECE-V1CA101P
	220	0.16	—	35.2	D8	150	PCE3353CT-ND	.64	.53	.49	.45	PCE3353TR-ND	900	202.50	ECE-V1CA221XP
	220	0.20	—	35.2	E	200	PCE3275CT-ND	.64	.53	.49	.45	PCE3275TR-ND	1,000	225.00	ECE-V1CA221UP
	220	0.20	—	35.2	F	280	PCE2044CT-ND	.77	.63	.59	.54	PCE2044TR-ND	500	135.00	ECE-V1CA221P
	330	0.20	—	52.8	F	320	PCE3183CT-ND	.81	.67	.62	.57	PCE3183TR-ND	500	142.50	ECE-V1CA331UP
	330	0.20	—	52.8	G	380	PCE2045CT-ND	.94	.77	.72	.66	PCE2045TR-ND	500	165.00	ECE-V1CA331P
	470	0.20	—	75.2	F	350	PCE3184CT-ND	.85	.70	.65	.60	PCE3184TR-ND	500	150.00	ECE-V1CA471UP
	470	0.20	—	75.2	G	420	PCE2046CT-ND	.94	.77	.72	.66	PCE2046TR-ND	500	165.00	ECE-V1CA471P
25	4.7	0.16	—	3.0	A	12	PCE3065CT-ND	.24	.20	.19	.17	PCE3065TR-ND	2,000	84.00/M	ECE-V1ES4R7SR
	4.7	0.14	—	3.0	B	22	PCE3066CT-ND	.21	.17	.16	.15	PCE3066TR-ND	2,000	72.00/M	ECE-V1EA4R7SR
	10	0.14	—	3.0	C	28	PCE3067CT-ND	.34	.28	.26	.24	PCE3067TR-ND	1,000	120.00	ECE-V1EA100SR
	22	0.14	—	5.5	D	55	PCE3068CT-ND	.28	.23	.21	.20	PCE3068TR-ND	1,000	96.00	ECE-V1EA220SP
	33	0.20	—	8.2	C	42	PCE3276CT-ND	.33	.27	.26	.24	PCE3276TR-ND	1,000	116.00	ECE-V1EA330WR
	33	0.14	—	8.3	D	65	PCE3069CT-ND	.34	.28	.26	.24	PCE3069TR-ND	1,000	120.00	ECE-V1EA330SP
	47	0.16	—	11.8	D2	70	PCE3185CT-ND	.35	.29	.27	.25	PCE3185TR-ND	1,000	122.00	ECE-V1EA470UP
	100	0.14	—	25.0	D8	150	PCE3354CT-ND	.51	.42	.39	.36	PCE3354TR-ND	900	162.00	ECE-V1EA101XP
	100	0.16	—	25.0	E	91	PCE3186CT-ND	.51	.42	.39	.36	PCE3186TR-ND	1,000	180.00	ECE-V1EA101UP
	100	0.16	—	25.0	F	180	PCE2047CT-ND	.64	.53	.49	.45	PCE2047TR-ND	500	112.50	ECE-V1EA101P
	220	0.16	—	55.0	F	140	PCE3187CT-ND	.68	.56	.52	.48	PCE3187TR-ND	500	120.00	ECE-V1EA221UP
	220	0.16	—	55.0	G	310	PCE2048CT-ND	.77	.63	.59	.54	PCE2048TR-ND	500	135.00	ECE-V1EA221P
	330	0.16	—	82.5	F	270	PCE3188CT-ND	.61	.50	.47	.43	PCE3188TR-ND	500	106.50	ECE-V1EA331UP
	470	0.16	—	117.5	G	380	PCE3189CT-ND	.90	.74	.69	.63	PCE3189TR-ND	500	157.50	ECE-V1EA471P
35	2.2	0.14	—	3.0	A	8	PCE3070CT-ND	.24	.20	.19	.17	PCE3070TR-ND	2,000	84.00/M	ECE-V1VS2R2SR
	3.3	0.14	—	3.0	A	10	PCE3071CT-ND	.24	.20	.19	.17	PCE3071TR-ND	2,000	84.00/M	ECE-V1VS3R3SR
	4.7	0.12	—	3.0	B	22	PCE3072CT-ND	.26	.21	.20	.18	PCE3072TR-ND	2,000	90.00/M	ECE-V1VA4R7SR
	10	0.16	—	3.5	B	22	PCE3277CT-ND	.29	.24	.22	.21	PCE3277TR-ND	2,000	101.00/M	ECE-V1VA100WR
	10	0.12	—	3.5	C	30	PCE3073CT-ND	.30	.25	.23	.21	PCE3073TR-ND	1,000	105.00	ECE-V1VA100SR
	22	0.16	—	7.7	C	36	PCE3278CT-ND	.33	.27	.26	.24	PCE3278TR-ND	1,000	116.00	ECE-V1VA220WR
	22	0.12	—	7.7	D	60	PCE3074CT-ND	.34	.28	.26	.24	PCE3074TR-ND	1,000	120.00	ECE-V1VA220SP
	33	0.16	—	11.5	D	60	PCE3279CT-ND	.35	.29	.27	.25	PCE3279TR-ND	1,000	123.00	ECE-V1VA330WP
	33	0.14	—	11.6	D2	65	PCE3190CT-ND	.35	.29	.27	.25	PCE3190TR-ND	1,000	122.00	ECE-V1VA330UP
	33	0.14	—	11.6	E	130	PCE2049CT-ND	.43	.35	.33	.30	PCE2049TR-ND	1,000	150.00	ECE-V1VA330P
	47	0.16	—	16.4	D	70	PCE3280CT-ND	.43	.35	.33	.30	PCE3280TR-ND	1,000	150.00	ECE-V1VA470WP
	47	0.14	—	16.5	E	165	PCE2050CT-ND	.51	.42	.39	.36	PCE2050TR-ND	1,000	180.00	ECE-V1VA470P
	100	0.12	—	35.0	D8	130	PCE3355CT-ND	.64	.53	.49	.45	PCE3355TR-ND	900	202.50	ECE-V1VA101XP
	100	0.14	—	35.0	F	140	PCE3191CT-ND	.77	.63	.59	.54	PCE3191TR-ND	500	135.00	ECE-V1VA101UP
	100	0.14	—	35.0	G	210	PCE2051CT-ND	.90	.74	.69	.63	PCE2051TR-ND	500	157.50	ECE-V1VA101P
	220	0.14	—	77.0	F	200	PCE3192CT-ND	.61	.50	.47	.43	PCE3192TR-ND	500	106.50	ECE-V1VA221UP
	330	0.14	—	115.5	G	350	PCE3193CT-ND	.76	.62	.58	.54	PCE3193TR-ND	500	133.00	ECE-V1VA331P
50	0.1	0.14	—	3.0	A	1	PCE3075CT-ND	.24	.20	.19	.17	PCE3075TR-ND	2,000	84.00/M	ECE-V1HS0R1SR
	0.1	0.12	—	3.0	B	1	PCE3076CT-ND	.22	.18	.17	.15	PCE3076TR-ND	2,000	75.00/M	ECE-V1HA0R1SR
	0.22	0.14	—	3.0	A	2	PCE3077CT-ND	.24	.20	.19	.17	PCE3077TR-ND	2,000	84.00/M	ECE-V1HSR22SR
	0.22	0.12	—	3.0	B	2	PCE3078CT-ND	.21	.17	.16	.15	PCE3078TR-ND	2,000	72.00/M	ECE-V1HAR22SR
	0.33	0.14	—	3.0	A	3	PCE3079CT-ND	.24	.20	.19	.17	PCE3079TR-ND	2,000	84.00/M	ECE-V1HSR33SR
	0.33	0.12	—	3.0	B	3	PCE3080CT-ND	.21	.17	.16	.15	PCE3080TR-ND	2,000	72.00/M	ECE-V1HAR33SR
	0.47	0.14	—	3.0	A	5	PCE3081CT-ND	.24	.20	.19	.17	PCE3081TR-ND	2,000	84.00/M	ECE-V1HSR47SR
	0.47	0.12	—	3.0	B	5	PCE3082CT-ND	.21	.17	.16	.15	PCE3082TR-ND	2,000	72.00/M	ECE-V1HAR47SR
	1	0.14	—	3.0	A	8	PCE3083CT-ND	.24	.20	.19	.17	PCE3083TR-ND	2,000	84.00/M	ECE-V1HS010SR
	1	0.12	—	3.0	B	10	PCE3084CT-ND	.22	.18	.17	.15	PCE3084TR-ND	2,000	75.00/M	ECE-V1HA010SR
	2.2	0.14	—	3.0	A	10	PCE3085CT-ND	.24	.20	.19	.17	PCE3085TR-ND	2,000	84.00/M	ECE-V1HS2R2SR
	2.2	0.12	—	3.0	B	16	PCE3086CT-ND	.21	.17	.16	.15	PCE3086TR-ND	2,000	72.00/M	ECE-V1HA2R2SR
	3.3	0.12	—	3.0	B	16	PCE3087CT-ND	.26	.21	.20	.18	PCE3087TR-ND	2,000	90.00/M	ECE-V1HA3R3SR
	4.7	0.14	—	3.0	B	18	PCE3281CT-ND	.23	.19	.18	.16	PCE3281TR-ND	2,000	80.00/M	ECE-V1HA4R7WR
	4.7	0.12	—	3.0	C	23	PCE3088CT-ND	.24	.20	.19	.17	PCE3088TR-ND	1,000	84.00	ECE-V1HA4R7SR
	10	0.14	—	5.0	C	27	PCE3282CT-ND	.34	.28	.26	.24	PCE3282TR-ND	1,000	120.00	ECE-V1HA100WR
	10	0.12	—	5.0	D	35	PCE3089CT-ND	.37	.30	.28	.26	PCE3089TR-ND	1,000	128.00	ECE-V1HA100SP
	22	0.14	—	11.0	D	40	PCE3283CT-ND	.43	.35	.33	.30	PCE3283TR-ND	1,000	150.00	ECE-V1HA220WP
	22	0.12	—	11.0	D2	60	PCE3194CT-ND	.43	.35	.33	.30	PCE3194TR-ND	1,000	150.00	ECE-V1HA220UP
	22	0.12	—	11.0	E	120	PCE2053CT-ND	.51	.42	.39	.36	PCE2053TR-ND	1,000	180.00	ECE-V1HA220P
	33	0.12	—	16.5	D8	85	PCE3356CT-ND	.43	.35	.33	.30	PCE3356TR-ND	900	135.00	ECE-V1HA330XP
	33	0.12	—	16.5	E	65	PCE3195CT-ND	.43	.35	.33	.30	PCE3195TR-ND	1,000	150.00	ECE-V1HA330UP
	33	0.12	—	16.5	F	110	PCE2054CT-ND	.55	.46	.42	.39	PCE2054TR-ND	500	97.00	ECE-V1HA330P
	47	0.12	—	23.5	D8	90	PCE3357CT-ND	.43	.35	.33	.30	PCE3357TR-ND	900	135.00	ECE-V1HA470XP
	47	0.12	—	23.5	F	110	PCE3196CT-ND	.55	.46	.42	.39	PCE3196TR-ND	500	97.00	ECE-V1HA470UP
	47	0.12	—	23.5	G	130	PCE2055CT-ND	.71	.59	.55	.51	PCE2055TR-ND	500	125.50	ECE-V1HA470P
	100	0.12	—	50.0	F	200	PCE3197CT-ND	.61	.50	.47	.43	PCE3197TR-ND	500	106.50	ECE-V1HA101UP
	220	0.12	—	110.0	G	300	PCE3198CT-ND	.76	.62	.58	.54	PCE3198TR-ND	500	133.00	ECE-V1HA221P
63	10	0.18	—	6.3	E	35	PCE3199CT-ND	.35	.29	.27	.25	PCE3199TR-ND	1,000	122.00	ECE-V1JA100P
	22	0.18	—	13.9	E	40	PCE3284CT-ND	.54	.45	.41	.38	PCE3284TR-ND	1,000	189.00	ECE-V1JA220UP
	22	0.18	—	13.9	F	40	PCE3200CT-ND	.61	.50	.47	.43	PCE3200TR-ND	500	106.50	ECE-V1JA220P
	33	0.18	—	20.8	F	45	PCE3201CT-ND	.61	.50	.47	.43	PCE3201TR-ND	500	106.50	ECE-V1JA330P

(Continued)

Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impe-dance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								5	10	25	100		Size	Pricing	
63	47	0.18	—	29.6	G	45	PCE3202CT-ND	.76	.62	.58	.54	PCE3202TR-ND	500	133.00	ECE-V1JA470P
	100	0.18	—	63.0	G	60	PCE3203CT-ND	.76	.62	.58	.54	PCE3203TR-ND	500	133.00	ECE-V1JA101P
100	3.3	0.18	—	3.3	E	50	PCE3204CT-ND	.45	.38	.35	.32	PCE3204TR-ND	1,000	159.00	ECE-V2AA3R3P
	4.7	0.18	—	4.7	E	50	PCE3285CT-ND	.54	.45	.41	.38	PCE3285TR-ND	1,000	189.00	ECE-V2AA4R7UP
	4.7	0.18	—	4.7	F	80	PCE3205CT-ND	.61	.50	.47	.43	PCE3205TR-ND	500	106.50	ECE-V2AA4R7P
	10	0.18	—	10.0	E	50	PCE3286CT-ND	.54	.45	.41	.38	PCE3286TR-ND	1,000	189.00	ECE-V2AA100UP
	10	0.18	—	10.0	F	85	PCE3206CT-ND	.61	.50	.47	.43	PCE3206TR-ND	500	106.50	ECE-V2AA100P
	22	0.18	—	22.0	F	70	PCE3287CT-ND	.69	.57	.53	.49	PCE3287TR-ND	500	121.00	ECE-V2AA220UP
	22	0.18	—	22.0	G	85	PCE3207CT-ND	.76	.62	.58	.54	PCE3207TR-ND	500	133.00	ECE-V2AA220P
	33	0.18	—	33.0	G	90	PCE3208CT-ND	.76	.62	.58	.54	PCE3208TR-ND	500	133.00	ECE-V2AA330P
HA Long Life Series: –40°C to +105°C (1000 Hour Life)															
6.3	22	0.30	—	3.0	B	29	PCE3000CT-ND	.25	.21	.20	.18	PCE3000TR-ND	2,000	89.00/M	EEV-HA0J220R
	47	0.35	—	3.0	B	36	PCE3288CT-ND	.28	.23	.22	.20	PCE3288TR-ND	2,000	98.00/M	EEV-HA0J470WR
	47	0.30	—	3.0	C	46	PCE3001CT-ND	.30	.25	.23	.21	PCE3001TR-ND	1,000	104.00	EEV-HA0J470R
	100	0.35	—	6.3	C	47	PCE3289CT-ND	.32	.26	.25	.23	PCE3289TR-ND	1,000	111.00	EEV-HA0J101WR
	100	0.30	—	6.3	D	71	PCE3002CT-ND	.34	.28	.26	.24	PCE3002TR-ND	1,000	117.00	EEV-HA0J101P
	220	0.35	—	13.8	D	74	PCE3290CT-ND	.43	.35	.33	.30	PCE3290TR-ND	1,000	150.00	EEV-HA0J221WP
	330	0.30	—	20.8	D8	105	PCE3358CT-ND	.52	.43	.40	.37	PCE3358TR-ND	900	163.80	EEV-HA0J331XP
	1000	0.35	—	63.0	F	300	PCE3209CT-ND	.74	.61	.56	.52	PCE3209TR-ND	500	129.00	EEV-HA0J102UP
	1500	0.35	—	94.5	G	480	PCE3210CT-ND	.92	.76	.70	.65	PCE3210TR-ND	500	161.50	EEV-HA0J152P
10	33	0.30	—	3.3	B	29	PCE3291CT-ND	.28	.23	.22	.20	PCE3291TR-ND	2,000	98.00/M	EEV-HA1A330WR
	33	0.22	—	3.3	C	43	PCE3003CT-ND	.30	.25	.23	.21	PCE3003TR-ND	1,000	104.00	EEV-HA1A330R
	100	0.30	—	10.0	D	71	PCE3211CT-ND	.34	.28	.26	.24	PCE3211TR-ND	1,000	117.00	EEV-HA1A101WP
	220	0.22	—	22.0	D8	105	PCE3359CT-ND	.52	.43	.40	.37	PCE3359TR-ND	900	163.80	EEV-HA1A221XP
	470	0.26	—	47.0	F	200	PCE3212CT-ND	.67	.55	.51	.47	PCE3212TR-ND	500	117.00	EEV-HA1A471UP
	1000	0.26	—	100.0	G	580	PCE3292CT-ND	.92	.76	.70	.65	PCE3292TR-ND	500	161.50	EEV-HA1A102P
16	10	0.16	—	3.0	B	28	PCE3004CT-ND	.32	.27	.25	.23	PCE3004TR-ND	2,000	113.00/M	EEV-HA1C100R
	22	0.26	—	3.5	B	28	PCE3293CT-ND	.28	.23	.22	.20	PCE3293TR-ND	2,000	98.00/M	EEV-HA1C220WR
	22	0.16	—	3.5	C	39	PCE3005CT-ND	.30	.25	.23	.21	PCE3005TR-ND	1,000	104.00	EEV-HA1C220R
	47	0.26	—	7.5	C	39	PCE3294CT-ND	.32	.26	.25	.23	PCE3294TR-ND	1,000	111.00	EEV-HA1C470WR
	47	0.16	—	7.5	D	70	PCE3006CT-ND	.34	.28	.26	.24	PCE3006TR-ND	1,000	117.00	EEV-HA1C470P
	100	0.26	—	16.0	D	70	PCE3295CT-ND	.42	.35	.32	.30	PCE3295TR-ND	1,000	147.00	EEV-HA1C101WP
	220	0.16	—	35.2	D8	105	PCE3360CT-ND	.52	.43	.40	.37	PCE3360TR-ND	900	163.80	EEV-HA1C221XP
	220	0.20	—	35.2	F	150	PCE3213CT-ND	.67	.55	.51	.47	PCE3213TR-ND	500	117.00	EEV-HA1C221UP
	330	0.20	—	52.8	F	170	PCE3214CT-ND	.67	.55	.51	.47	PCE3214TR-ND	500	117.00	EEV-HA1C331UP
	470	0.20	—	75.2	F	190	PCE3215CT-ND	.74	.61	.56	.52	PCE3215TR-ND	500	129.00	EEV-HA1C471UP
	470	0.20	—	75.2	G	340	PCE3216CT-ND	.83	.69	.64	.59	PCE3216TR-ND	500	146.50	EEV-HA1C471P
25	4.7	0.14	—	3.0	B	22	PCE3007CT-ND	.25	.21	.20	.18	PCE3007TR-ND	2,000	89.00/M	EEV-HA1E4R7R
	10	0.14	—	3.0	C	28	PCE3008CT-ND	.30	.25	.23	.21	PCE3008TR-ND	1,000	104.00	EEV-HA1E100R
	22	0.14	—	5.5	D	55	PCE3009CT-ND	.34	.28	.26	.24	PCE3009TR-ND	1,000	117.00	EEV-HA1E220P
	33	0.20	—	8.2	C	42	PCE3296CT-ND	.32	.26	.25	.23	PCE3296TR-ND	1,000	111.00	EEV-HA1E330WR
	33	0.14	—	8.3	D	65	PCE3010CT-ND	.34	.28	.26	.24	PCE3010TR-ND	1,000	117.00	EEV-HA1E330P
	47	0.20	—	11.7	D	70	PCE3297CT-ND	.43	.35	.33	.30	PCE3297TR-ND	1,000	150.00	EEV-HA1E470WP
	47	0.16	—	11.8	F	91	PCE3217CT-ND	.52	.43	.40	.37	PCE3217TR-ND	1,000	182.00	EEV-HA1E470P
	100	0.16	—	25.0	E	91	PCE3298CT-ND	.52	.43	.40	.37	PCE3298TR-ND	1,000	182.00	EEV-HA1E101UP
	100	0.16	—	25.0	F	130	PCE3218CT-ND	.67	.55	.51	.47	PCE3218TR-ND	500	117.00	EEV-HA1E101P
	220	0.16	—	55.0	F	160	PCE3219CT-ND	.74	.61	.56	.52	PCE3219TR-ND	500	129.00	EEV-HA1E221UP
	330	0.16	—	82.5	F	180	PCE3220CT-ND	.74	.61	.56	.52	PCE3220TR-ND	500	129.00	EEV-HA1E331UP
	470	0.16	—	117.5	G	360	PCE3221CT-ND	.92	.76	.70	.65	PCE3221TR-ND	500	161.50	EEV-HA1E471P
35	4.7	0.12	—	3.0	B	22	PCE3011CT-ND	.25	.21	.20	.18	PCE3011TR-ND	2,000	89.00/M	EEV-HA1V4R7R
	10	0.16	—	3.5	B	22	PCE3299CT-ND	.28	.23	.22	.20	PCE3299TR-ND	2,000	98.00/M	EEV-HA1V100WR
	10	0.12	—	3.5	C	30	PCE3012CT-ND	.30	.25	.23	.21	PCE3012TR-ND	1,000	104.00	EEV-HA1V100R
	22	0.16	—	7.7	C	35	PCE3300CT-ND	.32	.26	.25	.23	PCE3300TR-ND	1,000	111.00	EEV-HA1V220WR
	22	0.12	—	7.7	D	60	PCE3013CT-ND	.34	.28	.26	.24	PCE3013TR-ND	1,000	117.00	EEV-HA1V220P
	33	0.16	—	11.5	D	42	PCE3301CT-ND	.43	.35	.33	.30	PCE3301TR-ND	1,000	150.00	EEV-HA1V330WP
	33	0.14	—	11.6	E	84	PCE3222CT-ND	.52	.43	.40	.37	PCE3222TR-ND	1,000	182.00	EEV-HA1V330P
	47	0.14	—	16.5	E	84	PCE3302CT-ND	.52	.43	.40	.37	PCE3302TR-ND	1,000	182.00	EEV-HA1V470UP
	47	0.14	—	16.5	F	98	PCE3223CT-ND	.67	.55	.51	.47	PCE3223TR-ND	500	117.00	EEV-HA1V470P
	100	0.12	—	35.0	D8	84	PCE3361CT-ND	.52	.43	.40	.37	PCE3361TR-ND	900	163.80	EEV-HA1V101XP
	100	0.14	—	35.0	F	120	PCE3224CT-ND	.67	.55	.51	.47	PCE3224TR-ND	500	117.00	EEV-HA1V101UP
	220	0.14	—	77.0	F	170	PCE3225CT-ND	.74	.61	.56	.52	PCE3225TR-ND	500	129.00	EEV-HA1V221UP
	220	0.14	—	77.0	G	210	PCE3226CT-ND	.83	.69	.64	.59	PCE3226TR-ND	500	146.50	EEV-HA1V221P
	330	0.14	—	115.5	G	250	PCE3227CT-ND	.92	.76	.70	.65	PCE3227TR-ND	500	161.50	EEV-HA1V331P
50	0.1	0.12	—	3.0	B	1	PCE3014CT-ND	.25	.21	.20	.18	PCE3014TR-ND	2,000	89.00/M	EEV-HA1HR10 R
	0.22	0.12	—	3.0	B	2	PCE3015CT-ND	.25	.21	.20	.18	PCE3015TR-ND	2,000	89.00/M	EEV-HA1HR22R
	0.33	0.12	—	3.0	B	3	PCE3016CT-ND	.25	.21	.20	.18	PCE3016TR-ND	2,000	89.00/M	EEV-HA1HR33R
	0.47	0.12	—	3.0	B	5	PCE3017CT-ND	.25	.21	.20	.18	PCE3017TR-ND	2,000	89.00/M	EEV-HA1HR47R
	1.0	0.12	—	3.0	B	10	PCE3018CT-ND	.26	.22	.20	.19	PCE3018TR-ND	2,000	92.00/M	EEV-HA1H010R
	2.2	0.12	—	3.0	B	16	PCE3019CT-ND	.25	.21	.20	.18	PCE3019TR-ND	2,000	89.00/M	EEV-HA1H2R2R
	3.3	0.12	—	3.0	B	16	PCE3020CT-ND	.25	.21	.20	.18	PCE3020TR-ND	2,000	89.00/M	EEV-HA1H3R3R
	4.7	0.12	—	3.0	C	23	PCE3021CT-ND	.30	.25	.23	.21	PCE3021TR-ND	1,000	104.00	EEV-HA1H4R7R
	10	0.12	—	5.0	D	35	PCE3022CT-ND	.43	.35	.33	.30	PCE3022TR-ND	1,000	150.00	EEV-HA1H100P
	22	0.12	—	11.0	E	70	PCE3228CT-ND	.52	.43	.40	.37	PCE3228TR-ND	1,000	182.00	EEV-HA1H220P
	33	0.12	—	16.5	D8	60	PCE3362CT-ND	.52	.43	.40	.37	PCE3362TR-ND	900	163.80	EEV-HA1H33Ï0XP
	33	0.12	—	16.5	E	70	PCE3303CT-ND	.52	.43	.40	.37	PCE3303TR-ND	1,000	182.00	EEV-HA1H330UP
	33	0.12	—	16.5	F	91	PCE3229CT-ND	.67	.55	.51	.47	PCE3229TR-ND	500	117.00	EEV-HA1H330P
	47	0.12	—	23.5	D8	63	PCE3363CT-ND	.52	.43	.40	.37	PCE3363TR-ND	900	163.80	EEV-HA1H470XP
	47	0.12	—	23.5	F	95	PCE3230CT-ND	.67	.55	.51	.47	PCE3230TR-ND	500	117.00	EEV-HA1H470UP
	100	0.12	—	50.0	F	110	PCE3231CT-ND	.74	.61	.56	.52	PCE3231TR-ND	500	129.00	EEV-HA1H101UP
	100	0.12	—	50.0	G	120	PCE3232CT-ND	.83	.69	.64	.59	PCE3232TR-ND	500	146.50	EEV-HA1H101P
	220	0.12	—	110.0	G	150	PCE3233CT-ND	.92	.76	.70	.65	PCE3233TR-ND	500	161.50	EEV-HA1H221P
63	10	0.18	—	6.3	E	25	PCE3234CT-ND	.55	.46	.42	.39	PCE3234TR-ND	1,000	194.00	EEV-HA1J100P
	22	0.18	—	13.9	E	30	PCE3304CT-ND	.65	.54	.50	.46	PCE3304TR-ND	1,000	230.00	EEV-HA1J220UP
	22	0.18	—	13.9	F	30	PCE3235CT-ND	.74	.61	.56	.52	PCE3235TR-ND	500	129.00	EEV-HA1J220P
	33	0.18	—	20.8	G	45	PCE3236CT-ND	.92	.76	.70	.65	PCE3236TR-ND	500	161.50	EEV-HA1J330P
	47	0.18	—	29.7	E	50	PCE3305CT-ND	.74	.61	.56	.52	PCE3305TR-ND	500	129.00	EEV-HA1J470UP
	47	0.18	—	29.6	G	50	PCE3237CT-ND	.92	.76	.70	.65	PCE3237TR-ND	500	161.50	EEV-HA1J470P
100	3.3	0.18	—	3.3	E	30	PCE3238CT-ND	.55	.46	.42	.39	PCE3238TR-ND	1,000	194.00	EEV-HA2A3R3P
	4.7	0.18	—	4.7	E	30	PCE3306CT-ND	.65	.54	.50	.46	PCE3306TR-ND	1,000	230.00	EEV-HA2A4R7UP
	4.7	0.18	—	4.7	F	50	PCE3239CT-ND	.74	.61	.56	.52	PCE3239TR-ND	500	129.00	EEV-HA2A4R7P
	10	0.18	—	10.0	F	55	PCE3240CT-ND	.74	.61	.56	.52	PCE3240TR-ND	500	129.00	EEV-HA2A100P
	22	0.18	—	22.0	E	55	PCE3307CT-ND	.83	.69	.64	.59	PCE3307TR-ND	500	146.50	EEV-HA2A220UP
	22	0.18	—	22.0	G	60	PCE3241CT-ND	.92	.76	.70	.65	PCE3241TR-ND	500	161.50	EEV-HA2A220P
	33	0.18	—	33.0	G	65	PCE3242CT-ND	.92	.76	.70	.65	PCE3242TR-ND	500	161.50	EEV-HA2A330P
HB Long Life High Reliability Series: –40°C to +105°C (2000 Hour Life)															
4	47	0.50	—	3.0	B	34	PCE3023CT-ND	.28	.23	.22	.20	PCE3023TR-ND	2,000	98.00/M	EEV-HB0G470R
	100	0.50	—	4.0	C	61	PCE3024CT-ND	.34	.28	.26	.24	PCE3024TR-ND	1,000	117.00	EEV-HB0G101R
	220	0.50	—	8.8	D	82	PCE3025CT-ND	.37	.31	.28	.26	PCE3025TR-ND	1,000	129.00	EEV-HB0G221P
6.3	22	0.30	—	3.0	B	26	PCE3026CT-ND	.28	.23	.22	.20	PCE3026TR-ND	2,000	98.00/M	EEV-HB0J220R
	33	0.30	—	3.0	B	29	PCE3027CT-ND	.28	.23	.22	.20	PCE3027TR-ND	2,000	98.00/M	EEV-HB0J330R
	47	0.30	—	3.0	C	46	PCE3028CT-ND	.32	.27	.25	.23	PCE3028TR-ND	1,000	113.00	EEV-HB0J470R
	100	0.30	—	6.3	D	71	PCE3029CT-ND	.37	.31	.28	.26	PCE3029TR-ND	1,000	129.00	EEV-HB0J101P
10	33	0.22	—	3.3	C	43	PCE3030CT-ND	.32	.27	.25	.23	PCE3030TR-ND	1,000	113.00	EEV-HB1A330R
16	10	0.16	—	3.0	B	28	PCE3031CT-ND	.28	.23	.22	.20	PCE3031TR-ND	2,000	98.00/M	EEV-HB1C100R
	22	0.16	—	3.5	C	39	PCE3032CT-ND	.32	.27	.25	.23	PCE3032TR-ND	1,000	113.00	EEV-HB1C220R
	47	0.16	—	7.5	D	70	PCE3033CT-ND	.37	.31	.28	.26	PCE3033TR-ND	1,000	129.00	EEV-HB1C470P

(Continued)

Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impedance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								5	10	25	100		Size	Pricing	
25	4.7	0.14	—	3.0	B	22	PCE3034CT-ND	.28	.23	.22	.20	PCE3034TR-ND	2,000	98.00/M	EEV-HB1E4R7R
	6.8	0.14	—	3.0	B	25	PCE3035CT-ND	.28	.23	.22	.20	PCE3035TR-ND	2,000	98.00/M	EEV-HB1E6R8R
	10	0.14	—	3.0	C	28	PCE3036CT-ND	.74	.61	.56	.52	PCE3036TR-ND	1,000	258.00	EEV-HB1E100R
	22	0.14	—	5.5	D	55	PCE3037CT-ND	.85	.70	.65	.60	PCE3037TR-ND	1,000	300.00	EEV-HB1E220P
	33	0.14	—	8.3	D	65	PCE3038CT-ND	.37	.31	.28	.26	PCE3038TR-ND	1,000	129.00	EEV-HB1E330P
35	10	0.12	—	3.5	C	28	PCE3039CT-ND	.32	.27	.25	.23	PCE3039TR-ND	1,000	113.00	EEV-HB1V100R
	22	0.12	—	7.7	D	55	PCE3040CT-ND	.37	.31	.28	.26	PCE3040TR-ND	1,000	129.00	EEV-HB1V220P
50	0.1	0.12	—	3.0	B	1	PCE3041CT-ND	.28	.23	.22	.20	PCE3041TR-ND	2,000	98.00/M	EEV-HB1HR10R
	0.22	0.12	—	3.0	B	2	PCE3042CT-ND	.28	.23	.22	.20	PCE3042TR-ND	2,000	98.00/M	EEV-HB1HR22R
	0.33	0.12	—	3.0	B	3	PCE3043CT-ND	.28	.23	.22	.20	PCE3043TR-ND	2,000	98.00/M	EEV-HB1HR33R
	0.47	0.12	—	3.0	B	5	PCE3044CT-ND	.28	.23	.22	.20	PCE3044TR-ND	2,000	98.00/M	EEV-HB1HR47R
	1	0.12	—	3.0	B	10	PCE3045CT-ND	.28	.23	.22	.20	PCE3045TR-ND	2,000	98.00/M	EEV-HB1H1R0R
	2.2	0.12	—	3.0	B	16	PCE3046CT-ND	.28	.23	.22	.20	PCE3046TR-ND	2,000	98.00/M	EEV-HB1H2R2R
	3.3	0.12	—	3.0	B	16	PCE3047CT-ND	.28	.23	.22	.20	PCE3047TR-ND	2,000	98.00/M	EEV-HB1H3R3R
	4.7	0.12	—	3.0	C	23	PCE3048CT-ND	.32	.27	.25	.23	PCE3048TR-ND	1,000	113.00	EEV-HB1H4R7R
	6.8	0.12	—	3.4	C	23	PCE3049CT-ND	.32	.27	.25	.23	PCE3049TR-ND	1,000	113.00	EEV-HB1H6R8R
	10.0	0.12	—	5.0	D	35	PCE3050CT-ND	.37	.31	.28	.26	PCE3050TR-ND	1,000	129.00	EEV-HB1H100P
FC Low Impedance High Reliability Series: –40°C to +105°C (1000 Hour Life; 5000 Hours for Case Sizes H, J, and K)															
6.3	22	0.26	3.00	3.0	B	60	PCE3090CT-ND	.31	.26	.24	.22	PCE3090TR-ND	2,000	110.00/M	EEV-FC0J220R
	47	0.26	1.80	3.0	C	95	PCE3091CT-ND	.37	.30	.28	.26	PCE3091TR-ND	1,000	128.00	EEV-FC0J470R
	68	0.26	1.00	4.3	D	140	PCE3092CT-ND	.42	.34	.32	.30	PCE3092TR-ND	1,000	146.00	EEV-FC0J680P
	100	0.26	1.00	6.3	D	140	PCE3093CT-ND	.42	.34	.32	.30	PCE3093TR-ND	1,000	146.00	EEV-FC0J101P
	220	0.26	0.40	13.9	E	230	PCE3094CT-ND	.64	.53	.49	.45	PCE3094TR-ND	1,000	226.00	EEV-FC0J221P
	330	0.26	0.30	20.8	F	450	PCE3095CT-ND	.83	.68	.64	.59	PCE3095TR-ND	500	145.50	EEV-FC0J331P
	1000	0.26	0.15	63.0	G	670	PCE3243CT-ND	1.03	.85	.79	.73	PCE3243TR-ND	500	181.50	EEV-FC0J102P
	1500	0.26	0.15	94.5	G	670	PCE3244CT-ND	1.13	.94	.87	.80	PCE3244TR-ND	500	199.50	EEV-FC0J152P
10	33	0.19	1.80	3.3	C	95	PCE3096CT-ND	.37	.30	.28	.26	PCE3096TR-ND	1,000	128.00	EEV-FC1A330R
	100	0.19	0.40	10.0	E	230	PCE3097CT-ND	.77	.63	.59	.54	PCE3097TR-ND	1,000	270.00	EEV-FC1A101P
	150	0.19	0.40	15.0	E	230	PCE3098CT-ND	.64	.53	.49	.45	PCE3098TR-ND	1,000	225.00	EEV-FC1A151P
	220	0.19	0.30	22.0	F	450	PCE3099CT-ND	.83	.68	.64	.59	PCE3099TR-ND	500	145.50	EEV-FC1A221P
	470	0.19	0.15	47.0	G	670	PCE3100CT-ND	1.03	.85	.79	.73	PCE3100TR-ND	500	181.50	EEV-FC1A471P
	1000	0.22	0.15	100.0	G	670	PCE3245CT-ND	1.03	.85	.79	.73	PCE3245TR-ND	500	181.50	EEV-FC1A102P
	1000	0.19	0.065	100.0	H16	1205	PCE3312CT-ND	2.05	1.69	1.57	—	PCE3312TR-ND	150	108.36	EEV-FC1A102LQ
	2200	0.21	0.043	220.0	J16	1690	PCE3313CT-ND	2.50	2.06	1.91	—	PCE3313TR-ND	125	110.00	EEV-FC1A222N
	3300	0.23	0.038	330.0	K16	2000	PCE3314CT-ND	3.02	2.49	2.31	—	PCE3314TR-ND	125	132.88	EEV-FC1A332N
	4700	0.25	0.028	470.0	K21	2490	PCE3315CT-ND	3.60	2.96	2.75	—	PCE3315TR-ND	75	95.10	EEV-FC1A472N
	6800	0.29	0.028	680.0	K21	2490	PCE3316CT-ND	3.60	2.96	2.75	—	PCE3316TR-ND	75	95.10	EEV-FC1A682N
16	10	0.16	3.00	3.0	B	60	PCE3101CT-ND	.31	.26	.24	.22	PCE3101TR-ND	2,000	110.00/M	EEV-FC1C100R
	22	0.16	1.80	3.5	C	95	PCE3102CT-ND	.37	.30	.28	.26	PCE3102TR-ND	1,000	128.00	EEV-FC1C220R
	47	0.16	1.00	7.5	D	140	PCE3103CT-ND	.43	.35	.33	.30	PCE3103TR-ND	1,000	150.00	EEV-FC1C470P
	68	0.16	0.40	10.9	E	230	PCE3104CT-ND	.64	.53	.49	.45	PCE3104TR-ND	1,000	225.00	EEV-FC1C680P
	100	0.16	0.40	16.0	E	230	PCE3105CT-ND	.64	.53	.49	.45	PCE3105TR-ND	1,000	225.00	EEV-FC1C101P
	220	0.16	0.15	35.2	G	670	PCE3106CT-ND	1.07	.88	.82	.76	PCE3106TR-ND	500	188.50	EEV-FC1C221P
	330	0.16	0.15	52.8	G	670	PCE3107CT-ND	1.07	.88	.82	.76	PCE3107TR-ND	500	188.50	EEV-FC1C331P
	470	0.16	0.15	75.2	G	670	PCE3246CT-ND	1.03	.85	.79	.73	PCE3246TR-ND	500	181.50	EEV-FC1C471P
	1000	0.16	0.043	160.0	J16	1690	PCE3317CT-ND	2.50	2.06	1.91	—	PCE3317TR-ND	125	110.00	EEV-FC1C102N
	2200	0.18	0.038	352.0	K16	2000	PCE3318CT-ND	3.02	2.49	2.31	—	PCE3318TR-ND	125	132.88	EEV-FC1C222N
	3300	0.20	0.028	528.0	K21	2490	PCE3319CT-ND	3.61	2.97	2.76	—	PCE3319TR-ND	75	95.40	EEV-FC1C332N
25	6.8	0.14	3.00	3.0	B	60	PCE3108CT-ND	.32	.27	.25	.23	PCE3108TR-ND	2,000	113.00/M	EEV-FC1E6R8R
	22	0.14	1.00	5.5	D	140	PCE3109CT-ND	.42	.34	.32	.30	PCE3109TR-ND	1,000	146.00	EEV-FC1E220P
	33	0.14	1.00	8.2	D	140	PCE3110CT-ND	.42	.34	.32	.30	PCE3110TR-ND	1,000	146.00	EEV-FC1E330P
	47	0.14	0.40	11.8	E	230	PCE3111CT-ND	.67	.55	.51	.47	PCE3111TR-ND	1,000	234.00	EEV-FC1E470P
	68	0.14	0.30	17.0	F	450	PCE3112CT-ND	.83	.68	.64	.59	PCE3112TR-ND	500	145.50	EEV-FC1E680P
	100	0.14	0.30	25.0	F	450	PCE3247CT-ND	.83	.68	.64	.59	PCE3247TR-ND	500	145.50	EEV-FC1E101P
	330	0.14	0.15	82.5	G	670	PCE3248CT-ND	1.03	.85	.79	.73	PCE3248TR-ND	500	181.50	EEV-FC1E331P
	470	0.14	0.15	117.5	G	670	PCE3249CT-ND	1.13	.94	.87	.80	PCE3249TR-ND	500	199.50	EEV-FC1E471P
	470	0.14	0.065	118.0	H16	1205	PCE3320CT-ND	2.05	1.69	1.57	—	PCE3320TR-ND	150	108.30	EEV-FC1E471LQ
35	1.0	0.12	3.00	3.0	B	50	PCE3113CT-ND	.31	.26	.24	.22	PCE3113TR-ND	2,000	110.00/M	EEV-FC1V1R0R
	2.2	0.12	3.00	3.0	B	50	PCE3114CT-ND	.31	.26	.24	.22	PCE3114TR-ND	2,000	110.00/M	EEV-FC1V2R2R
	3.3	0.12	3.00	3.0	B	50	PCE3115CT-ND	.31	.26	.24	.22	PCE3115TR-ND	2,000	110.00/M	EEV-FC1V3R3R
	4.7	0.12	3.00	3.0	B	60	PCE3116CT-ND	.32	.27	.25	.23	PCE3116TR-ND	2,000	113.00/M	EEV-FC1V4R7R
	6.8	0.12	1.80	3.0	C	95	PCE3117CT-ND	.37	.30	.28	.26	PCE3117TR-ND	1,000	128.00	EEV-FC1V6R8R
	10	0.12	1.80	3.5	C	95	PCE3118CT-ND	.38	.31	.29	.27	PCE3118TR-ND	1,000	132.00	EEV-FC1V100R
	22	0.12	1.00	7.7	D	140	PCE3119CT-ND	.42	.34	.32	.30	PCE3119TR-ND	1,000	146.00	EEV-FC1V220P
	33	0.12	0.40	11.6	E	230	PCE3120CT-ND	.64	.53	.49	.45	PCE3120TR-ND	1,000	225.00	EEV-FC1V330P
	47	0.12	0.40	16.5	E	230	PCE3121CT-ND	.64	.53	.49	.45	PCE3121TR-ND	1,000	225.00	EEV-FC1V470P
	100	0.12	0.15	35.0	G	670	PCE3122CT-ND	1.03	.85	.79	.73	PCE3122TR-ND	500	181.50	EEV-FC1V101P
	220	0.12	0.15	77.0	G	670	PCE3250CT-ND	1.03	.85	.79	.73	PCE3250TR-ND	500	181.50	EEV-FC1V221P
	330	0.12	0.15	115.5	G	670	PCE3251CT-ND	1.13	.94	.87	.80	PCE3251TR-ND	500	199.50	EEV-FC1V331P
	330	0.12	0.065	116.0	H16	1205	PCE3321CT-ND	2.05	1.69	1.57	—	PCE3321TR-ND	150	108.30	EEV-FC1V331LQ
	470	0.12	0.043	165.0	J16	1690	PCE3322CT-ND	2.50	2.06	1.91	—	PCE3322TR-ND	125	110.00	EEV-FC1V471N
	1000	0.12	0.038	350.0	K16	2000	PCE3323CT-ND	3.02	2.49	2.31	—	PCE3323TR-ND	125	132.88	EEV-FC1V102N
	2200	0.14	0.028	770.0	K21	2490	PCE3324CT-ND	3.61	2.97	2.76	—	PCE3324TR-ND	75	95.40	EEV-FC1V222N
50	1	0.12	5.00	3.0	B	30	PCE3252CT-ND	.31	.26	.24	.22	PCE3252TR-ND	2,000	110.00/M	EEV-FC1H1R0R
	2.2	0.12	5.00	3.0	B	30	PCE3253CT-ND	.31	.26	.24	.22	PCE3253TR-ND	2,000	110.00/M	EEV-FC1H2R2R
	3.3	0.12	5.00	3.0	B	30	PCE3254CT-ND	.31	.26	.24	.22	PCE3254TR-ND	2,000	110.00/M	EEV-FC1H3R3R
	4.7	0.12	3.00	3.0	C	50	PCE3255CT-ND	.37	.30	.28	.26	PCE3255TR-ND	1,000	128.00	EEV-FC1H4R7R
	10	0.12	2.00	5.0	D	70	PCE3256CT-ND	.42	.34	.32	.30	PCE3256TR-ND	1,000	146.00	EEV-FC1H100P
	22	0.12	0.70	11.0	E	120	PCE3257CT-ND	.67	.55	.51	.47	PCE3257TR-ND	1,000	234.00	EEV-FC1H220P
	33	0.12	0.60	16.5	F	300	PCE3258CT-ND	.83	.68	.64	.59	PCE3258TR-ND	500	145.50	EEV-FC1H330P
	47	0.12	0.30	23.5	G	500	PCE3259CT-ND	1.03	.85	.79	.73	PCE3259TR-ND	500	181.50	EEV-FC1H470P
	100	0.12	0.30	50.0	G	500	PCE3260CT-ND	1.07	.88	.82	.76	PCE3260TR-ND	500	188.50	EEV-FC1H101P
	220	0.12	0.30	110.0	G	500	PCE3261CT-ND	1.13	.94	.87	.80	PCE3261TR-ND	500	199.50	EEV-FC1H221P
	220	0.10	0.110	110.0	H16	1150	PCE3325CT-ND	2.05	1.69	1.57	—	PCE3325TR-ND	150	108.30	EEV-FC1H221LQ
	470	0.10	0.068	235.0	K16	1900	PCE3327CT-ND	3.02	2.49	2.31	—	PCE3327TR-ND	125	132.88	EEV-FC1H471N
	1000	0.10	0.042	500.0	K21	2420	PCE3328CT-ND	3.61	2.97	2.76	—	PCE3328TR-ND	75	95.40	EEV-FC1H102N
63	100	0.08	0.150	63.0	H16	1020	PCE3329CT-ND	2.05	1.69	1.57	—	PCE3329TR-ND	150	108.30	EEV-FC1J101Q
	220	0.08	0.090	139.0	J16	1410	PCE3330CT-ND	2.50	2.06	1.91	—	PCE3330TR-ND	125	110.00	EEV-FC1J221N
	330	0.08	0.086	208.0	K16	1690	PCE3331CT-ND	3.02	2.49	2.31	—	PCE3331TR-ND	125	132.88	EEV-FC1J331N
	470	0.08	0.055	296.0	K21	2290	PCE3332CT-ND	3.61	2.97	2.76	—	PCE3332TR-ND	75	95.40	EEV-FC1J471N
100	47	0.07	0.300	47.0	H16	511	PCE3333CT-ND	2.05	1.69	1.57	—	PCE3333TR-ND	150	108.30	EEV-FC2A470Q
	68	0.07	0.300	68.0	H16	511	PCE3334CT-ND	2.05	1.69	1.57	—	PCE3334TR-ND	150	108.30	EEV-FC2A680Q
	100	0.07	0.180	100.0	J16	793	PCE3335CT-ND	2.50	2.06	1.91	—	PCE3335TR-ND	125	110.00	EEV-FC2A101N
	220	0.07	0.155	220.0	K16	917	PCE3336CT-ND	3.02	2.49	2.31	—	PCE3336TR-ND	125	132.88	EEV-FC2A221N
	330	0.07	0.083	330.0	K21	1230	PCE3337CT-ND	3.61	2.97	2.76	—	PCE3337TR-ND	75	95.40	EEV-FC2A331N
FK Series: Low Impedance (40-60% lower than FC), High Reliability, Life Time 2000 hrs. at 105°C -55°C to +105°C															
6.3	22	0.26	1.35	3.0	B	90	PCE3377CT-ND	.37	.31	.29	.27	PCE3377TR-ND	2,000	131.00/M	EEV-FK0J220R
	47	0.26	1.35	3.0	B	90	PCE3378CT-ND	.37	.31	.29	.27	PCE3378TR-ND	2,000	131.00/M	EEV-FK0J470UR
	47	0.26	0.70	3.0	C	160	PCE3379CT-ND	.43	.36	.33	.31	PCE3379TR-ND	1,000	152.00	EEV-FK0J470R
	100	0.26	0.70	6.3	C	160	PCE3380CT-ND	.43	.36	.33	.31	PCE3380TR-ND	1,000	152.00	EEV-FK0J101UR
	100	0.26	0.36	6.3	D	240	PCE3381CT-ND	.50	.41	.38	.35	PCE3381TR-ND	1,000	174.00	EEV-FK0J101P
	220	0.26	0.36	13.9	D	240	PCE3382CT-ND	.50	.41	.38	.35	PCE3382TR-ND	1,000	174.00	EEV-FK0J221P
	330	0.26	0.26	20.8	E	300	PCE3383CT-ND	.82	.68	.63	.58	PCE3383TR-ND	1,000	288.00	EEV-FK0J331P
	330	0.26	0.34	20.8	D8	280	PCE3507CT-ND *NEW!*	.60	.50	.46	.43	PCE3507TR-ND *NEW!*	900	189.00	EEV-FK0J331XP
	470	0.26	0.16	29.6	F	600	PCE3384CT-ND	1.05	.87	.81	.75	PCE3384TR-ND	500	185.50	EEV-FK0J471P
	1000	0.26	0.16	63.0	F	600	PCE3385CT-ND	1.05	.87	.81	.75	PCE3385TR-ND	500	185.50	EEV-FK0J102P

(Continued)

Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impedance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								5	10	25	100		Size	Pricing	
6.3	1500	0.26	0.08	94.5	G	850	PCE3386CT-ND	1.24	1.02	.95	.87	PCE3386TR-ND	500	217.50	EEV-FK0J152P
	3300	0.30	0.060	207.9	H13	1100	PCE3454CT-ND	1.93	1.59	1.47	1.36	PCE3454TR-ND	200	135.60	EEV-FK0J332Q
	6800	0.36	0.035	428.4	J16	1800	PCE3455CT-ND	3.13	2.58	2.39	—	PCE3455TR-ND	125	137.88	EEV-FK0J682M
10	22	0.19	1.35	3.0	B	90	PCE3387CT-ND	.37	.31	.29	.27	PCE3387TR-ND	2,000	262.00	EEV-FK1A220R
	33	0.19	1.35	3.3	B	90	PCE3388CT-ND	.37	.31	.29	.27	PCE3388TR-ND	2,000	262.00	EEV-FK1A330UR
	33	0.19	0.70	3.3	C	160	PCE3389CT-ND	.43	.36	.33	.31	PCE3389TR-ND	1,000	152.00	EEV-FK1A330R
	150	0.19	0.36	15.0	D	240	PCE3508CT-ND *NEW!*	.45	.37	.35	.32	PCE3508TR-ND *NEW!*	1,000	158.00	EEV-FK1A151P
	220	0.19	0.34	22.0	D8	280	PCE3509CT-ND *NEW!*	.60	.50	.46	.43	PCE3509TR-ND *NEW!*	900	189.00	EEV-FK1A221XP
	220	0.19	0.26	22.0	E	300	PCE3390CT-ND	.82	.68	.63	.58	PCE3390TR-ND	1,000	288.00	EEV-FK1A221P
	330	0.19	0.16	33.0	F	600	PCE3391CT-ND	1.05	.87	.81	.75	PCE3391TR-ND	500	185.50	EEV-FK1A331P
	470	0.19	0.16	47.0	F	600	PCE3392CT-ND	1.05	.87	.81	.75	PCE3392TR-ND	500	185.50	EEV-FK1A471P
	680	0.49	0.016	68.0	G	600	PCE3510CT-ND *NEW!*	.96	.79	.73	.68	PCE3510TR-ND *NEW!*	500	168.50	EEV-FK1A681P
	1000	0.19	0.08	100.0	G	850	PCE3393CT-ND	1.24	1.02	.95	.87	PCE3393TR-ND	500	217.50	EEV-FK1A102P
	2200	0.21	0.060	220.0	H13	1100	PCE3456CT-ND	1.93	1.59	1.47	1.36	PCE3456TR-ND	200	135.60	EEV-FK1A222Q
	4700	0.25	0.035	470.0	J16	1800	PCE3457CT-ND	3.13	2.58	2.39	—	PCE3457TR-ND	125	137.88	EEV-FK1A472M
	6800	0.29	0.033	680.0	K16	2060	PCE3458CT-ND	3.69	3.04	2.82	—	PCE3458TR-ND	125	162.63	EEV-FK1A682M
16	10	0.16	1.35	3.0	B	90	PCE3394CT-ND	.37	.31	.29	.27	PCE3394TR-ND	2,000	131.00/M	EEV-FK1C100R
	22	0.16	1.35	3.5	B	90	PCE3395CT-ND	.37	.31	.29	.27	PCE3395TR-ND	2,000	131.00/M	EEV-FK1C220UR
	22	0.16	0.70	3.5	C	160	PCE3396CT-ND	.43	.36	.33	.31	PCE3396TR-ND	1,000	152.00	EEV-FK1C220R
	47	0.16	0.70	7.5	C	160	PCE3397CT-ND	.43	.36	.33	.31	PCE3397TR-ND	1,000	152.00	EEV-FK1C470UR
	47	0.16	0.36	7.5	D	240	PCE3398CT-ND	.50	.41	.38	.35	PCE3398TR-ND	1,000	174.00	EEV-FK1C470P
	68	0.16	0.36	10.9	D	240	PCE3511CT-ND *NEW!*	.45	.37	.35	.32	PCE3511TR-ND *NEW!*	1,000	158.00	EEV-FK1C680P
	100	0.16	0.36	16.0	D	240	PCE3399CT-ND	.50	.41	.38	.35	PCE3399TR-ND	1,000	174.00	EEV-FK1C101P
	150	0.16	0.34	24.0	D8	280	PCE3512CT-ND *NEW!*	.60	.50	.46	.43	PCE3512TR-ND *NEW!*	900	189.00	EEV-FK1C151XP
	220	0.16	0.34	35.2	D8	280	PCE3513CT-ND *NEW!*	.60	.50	.46	.43	PCE3513TR-ND *NEW!*	900	189.00	EEV-FK1C221XP
	220	0.16	0.26	35.2	E	300	PCE3400CT-ND	.82	.68	.63	.58	PCE3400TR-ND	1,000	288.00	EEV-FK1C221P
	330	0.16	0.16	52.8	F	600	PCE3401CT-ND	1.05	.87	.81	.75	PCE3401TR-ND	500	185.50	EEV-FK1C331P
	470	0.16	0.16	75.2	F	600	PCE3402CT-ND	1.05	.87	.81	.75	PCE3402TR-ND	500	185.50	EEV-FK1C471P
	680	0.16	0.08	108.8	G	850	PCE3501CT-ND	1.24	1.02	.95	.87	PCE3501TR-ND	500	217.50	EEV-FK1C681P
	1500	0.16	0.060	240.0	H13	1100	PCE3459CT-ND	1.93	1.59	1.47	1.36	PCE3459TR-ND	200	135.60	EEV-FK1C152Q
	3300	0.20	0.035	528.0	J16	1800	PCE3460CT-ND	3.13	2.58	2.39	—	PCE3460TR-ND	125	137.88	EEV-FK1C332M
	4700	0.22	0.033	752.0	K16	2060	PCE3461CT-ND	3.69	3.04	2.82	—	PCE3461TR-ND	125	162.63	EEV-FK1C472M
25	10	0.14	1.35	3.0	B	90	PCE3403CT-ND	.37	.31	.29	.27	PCE3403TR-ND	2,000	131.00/M	EEV-FK1E100R
	22	0.14	0.70	5.5	C	160	PCE3404CT-ND	.43	.36	.33	.31	PCE3404TR-ND	1,000	152.00	EEV-FK1E220R
	33	0.14	0.70	8.3	C	160	PCE3405CT-ND	.43	.36	.33	.31	PCE3405TR-ND	1,000	152.00	EEV-FK1E330UR
	33	0.14	0.36	8.3	D	240	PCE3406CT-ND	.50	.41	.38	.35	PCE3406TR-ND	1,000	174.00	EEV-FK1E330P
	47	0.14	0.36	11.8	D	240	PCE3407CT-ND	.50	.41	.38	.35	PCE3407TR-ND	1,000	174.00	EEV-FK1E470P
	68	0.14	0.36	17.0	D	240	PCE3514CT-ND *NEW!*	.45	.37	.35	.32	PCE3514TR-ND *NEW!*	1,000	158.00	EEV-FK1E680P
	100	0.14	0.34	25.0	D8	280	PCE3515CT-ND *NEW!*	.60	.50	.46	.43	PCE3515TR-ND *NEW!*	900	189.00	EEV-FK1E101XP
	100	0.14	0.26	25.0	E	300	PCE3408CT-ND	.82	.68	.63	.58	PCE3408TR-ND	1,000	288.00	EEV-FK1E101P
	150	0.14	0.16	37.5	F	600	PCE3516CT-ND *NEW!*	.96	.79	.73	.68	PCE3516TR-ND *NEW!*	500	168.50	EEV-FK1E151P
	220	0.14	0.16	55.0	F	600	PCE3409CT-ND	1.05	.87	.81	.75	PCE3409TR-ND	500	185.50	EEV-FK1E221P
	330	0.14	0.16	82.5	F	600	PCE3410CT-ND	1.05	.87	.81	.75	PCE3410TR-ND	500	185.50	EEV-FK1E331P
	470	0.14	0.08	117.5	G	850	PCE3411CT-ND	1.24	1.02	.95	.87	PCE3411TR-ND	500	217.50	EEV-FK1E471P
	1000	0.14	0.060	250.0	H13	1100	PCE3462CT-ND	1.93	1.59	1.47	1.36	PCE3462TR-ND	200	135.60	EEV-FK1E102Q
	2200	0.16	0.035	550.0	J16	1800	PCE3463CT-ND	3.13	2.58	2.39	—	PCE3463TR-ND	125	137.88	EEV-FK1E222M
	3300	0.18	0.033	825.0	K16	2060	PCE3506CT-ND	3.69	3.04	2.82	—	PCE3506TR-ND	125	162.63	EEV-FK1E332M
35	4.7	0.12	1.35	3.0	B	90	PCE3412CT-ND	.37	.31	.29	.27	PCE3412TR-ND	2,000	131.00/M	EEV-FK1V4R7R
	10	0.12	1.35	3.5	B	90	PCE3413CT-ND	.37	.31	.29	.27	PCE3413TR-ND	2,000	131.00/M	EEV-FK1V100UR
	10	0.12	0.70	3.5	C	160	PCE3414CT-ND	.43	.36	.33	.31	PCE3414TR-ND	1,000	152.00	EEV-FK1V100R
	22	0.12	0.70	7.7	C	160	PCE3415CT-ND	.43	.36	.33	.31	PCE3415TR-ND	1,000	152.00	EEV-FK1V220R
	33	0.12	0.36	11.6	D	240	PCE3416CT-ND	.50	.41	.38	.35	PCE3416TR-ND	1,000	174.00	EEV-FK1V330P
	47	0.12	0.36	16.5	D	240	PCE3417CT-ND	.50	.41	.38	.35	PCE3417TR-ND	1,000	174.00	EEV-FK1V470P
	68	0.12	0.34	23.8	D8	280	PCE3517CT-ND *NEW!*	.60	.50	.46	.43	PCE3517TR-ND *NEW!*	900	189.00	EEV-FK1V680XP
	100	0.12	0.34	35.0	D8	280	PCE3518CT-ND *NEW!*	.60	.50	.46	.43	PCE3518TR-ND *NEW!*	900	189.00	EEV-FK1V101XP
	100	0.12	0.16	35.0	F	600	PCE3418CT-ND	1.05	.87	.81	.75	PCE3418TR-ND	500	185.50	EEV-FK1V101P
	150	0.12	0.16	52.5	F	600	PCE3519CT-ND *NEW!*	.96	.79	.73	.68	PCE3519TR-ND *NEW!*	500	168.50	EEV-FK1V151P
	220	0.12	0.16	77.0	F	600	PCE3419CT-ND	1.05	.87	.81	.75	PCE3419TR-ND	500	185.50	EEV-FK1V221P
	330	0.12	0.08	115.5	G	850	PCE3420CT-ND	1.24	1.02	.95	.87	PCE3420TR-ND	500	217.50	EEV-FK1V331P
	470	0.12	0.060	164.5	H13	1100	PCE3464CT-ND	1.93	1.59	1.47	1.36	PCE3464TR-ND	200	135.60	EEV-FK1V471Q
	680	0.12	0.060	238.0	H13	1100	PCE3465CT-ND	1.93	1.59	1.47	1.36	PCE3465TR-ND	200	135.60	EEV-FK1V681Q
	1500	0.12	0.035	525.0	J16	1800	PCE3466CT-ND	3.13	2.58	2.39	—	PCE3466TR-ND	125	137.88	EEV-FK1V152M
50	4.7	0.10	2.90	3.0	B	60	PCE3467CT-ND	.40	.33	.30	.28	PCE3467TR-ND	2,000	138.00/M	EEV-FK1H4R7R
	10	0.10	1.52	5.0	C	85	PCE3468CT-ND	.46	.38	.35	.33	PCE3468TR-ND	1,000	161.00	EEV-FK1H100UR
	10	0.10	0.88	5.0	D	165	PCE3469CT-ND	.52	.43	.40	.37	PCE3469TR-ND	1,000	183.00	EEV-FK1H100P
	22	0.10	0.88	11.0	D	165	PCE3470CT-ND	.52	.43	.40	.37	PCE3470TR-ND	1,000	183.00	EEV-FK1H220P
	33	0.10	0.68	16.5	D8	195	PCE3520CT-ND *NEW!*	.63	.52	.48	.45	PCE3520TR-ND *NEW!*	900	198.90	EEV-FK1H330XP
	33	0.10	0.68	16.5	E	195	PCE3471CT-ND	.86	.71	.66	.61	PCE3471TR-ND	1,000	302.00	EEV-FK1H330P
	47	0.10	0.68	23.5	D8	195	PCE3521CT-ND *NEW!*	.63	.52	.48	.45	PCE3521TR-ND *NEW!*	900	198.90	EEV-FK1H470XP
	47	0.10	0.68	23.5	E	195	PCE3472CT-ND	.86	.71	.66	.61	PCE3472TR-ND	1,000	302.00	EEV-FK1H470P
	100	0.10	0.34	50.0	F	350	PCE3473CT-ND	1.10	.91	.85	.78	PCE3473TR-ND	500	194.50	EEV-FK1H101P
	150	0.10	0.18	75.0	G	670	PCE3522CT-ND *NEW!*	1.18	.97	.90	.83	PCE3522TR-ND *NEW!*	500	206.50	EEV-FK1H151P
	220	0.10	0.18	110.0	G	670	PCE3474CT-ND	1.29	1.07	.99	.91	PCE3474TR-ND	500	227.50	EEV-FK1H221P
	330	0.10	0.12	165.0	H13	900	PCE3475CT-ND	2.02	1.67	1.55	1.43	PCE3475TR-ND	200	142.60	EEV-FK1H331Q
	680	0.10	0.073	340.0	J16	1610	PCE3523CT-ND *NEW!*	2.91	2.39	2.22	—	PCE3523TR-ND *NEW!*	125	128.00	EEV-FK1H681M
	1000	0.10	0.073	500.0	J16	1610	PCE3477CT-ND	3.20	2.63	2.45	—	PCE3477TR-ND	125	140.88	EEV-FK1H102M
63	4.7	0.08	3.00	3.0	C	50	PCE3478CT-ND	.46	.38	.35	.33	PCE3478TR-ND	1,000	161.00	EEV-FK1J4R7R
	10	0.08	1.50	6.3	D	80	PCE3479CT-ND	.52	.43	.40	.37	PCE3479TR-ND	1,000	183.00	EEV-FK1J100P
	22	0.08	1.20	13.9	D8	120	PCE3524CT-ND *NEW!*	.63	.52	.48	.45	PCE3524TR-ND *NEW!*	900	198.90	EEV-FK1J220XP
	22	0.08	1.20	13.9	E	120	PCE3480CT-ND	.86	.71	.66	.61	PCE3480TR-ND	1,000	302.00	EEV-FK1J220P
	33	0.08	0.65	20.8	F	250	PCE3481CT-ND	1.10	.91	.85	.78	PCE3481TR-ND	500	194.50	EEV-FK1J330P
	47	0.08	0.65	29.6	F	250	PCE3482CT-ND	1.10	.91	.85	.78	PCE3482TR-ND	500	194.50	EEV-FK1J470P
	68	0.08	0.35	42.8	G	400	PCE3525CT-ND *NEW!*	1.18	.97	.90	.83	PCE3525TR-ND *NEW!*	500	206.50	EEV-FK1J680P
	100	0.08	0.35	63.0	G	400	PCE3483CT-ND	1.29	1.07	.99	.91	PCE3483TR-ND	500	227.50	EEV-FK1J101P
	150	0.08	0.16	94.5	H13	800	PCE3526CT-ND *NEW!*	1.84	1.52	1.41	1.30	PCE3526TR-ND *NEW!*	200	129.60	EEV-FK1J151Q
	220	0.08	0.16	138.6	H13	800	PCE3484CT-ND	2.02	1.67	1.55	1.43	PCE3484TR-ND	200	142.60	EEV-FK1J221Q
	470	0.08	0.082	296.1	J16	1410	PCE3485CT-ND	3.20	2.63	2.45	—	PCE3485TR-ND	125	140.88	EEV-FK1J471M
	680	0.08	0.080	428.4	K16	1690	PCE3486CT-ND	3.88	3.19	2.97	—	PCE3486TR-ND	125	170.88	EEV-FK1J681M
80	3.3	0.08	5.00	3.0	C	25	PCE3487CT-ND	.46	.38	.35	.33	PCE3487TR-ND	1,000	161.00	EEV-FK1K3R3R
	4.7	0.08	3.00	3.76	D	40	PCE3488CT-ND	.52	.43	.40	.37	PCE3488TR-ND	1,000	183.00	EEV-FK1K4R7P
	10	0.08	2.40	8.0	D8	60	PCE3527CT-ND *NEW!*	.63	.52	.48	.45	PCE3527TR-ND *NEW!*	900	198.90	EEV-FK1K100XP
	10	0.08	2.40	8.0	E	60	PCE3489CT-ND	.86	.71	.66	.61	PCE3489TR-ND	1,000	302.00	EEV-FK1K100P
	22	0.08	1.30	17.6	F	130	PCE3490CT-ND	1.10	.91	.85	.78	PCE3490TR-ND	500	194.50	EEV-FK1K220P
	33	0.08	1.30	26.4	F	130	PCE3491CT-ND	1.10	.91	.85	.78	PCE3491TR-ND	500	194.50	EEV-FK1K330P
	47	0.08	0.70	37.6	G	200	PCE3492CT-ND	1.29	1.07	.99	.91	PCE3492TR-ND	500	227.50	EEV-FK1K470P
	68	0.08	0.32	54.4	H13	500	PCE3528CT-ND *NEW!*	1.84	1.52	1.41	1.30	PCE3528TR-ND *NEW!*	200	129.60	EEV-FK1K680Q
	100	0.08	0.32	80.0	H13	500	PCE3493CT-ND	2.02	1.67	1.55	1.43	PCE3493TR-ND	200	142.60	EEV-FK1K101Q
	150	0.08	0.32	120.0	H13	500	PCE3494CT-ND	2.02	1.67	1.55	1.43	PCE3494TR-ND	200	142.60	EEV-FK1K151Q
	330	0.08	0.17	264.0	J16	793	PCE3495CT-ND	3.20	2.63	2.45	—	PCE3495TR-ND	125	140.88	EEV-FK1K331M
	470	0.08	0.153	376.0	K16	917	PCE3496CT-ND	3.88	3.19	2.97	—	PCE3496TR-ND	125	170.88	EEV-FK1K471M
100	22	0.07	1.30	22.0	F	130	PCE3502CT-ND	1.10	.91	.85	.78	PCE3502TR-ND	500	194.50	EEV-FK2A220P
	33	0.07	0.70	33.0	G	200	PCE3503CT-ND	1.29	1.07	.99	.91	PCE3503TR-ND	500	227.50	EEV-FK2A330P
	47	0.07	0.32	47.0	H13	500	PCE3497CT-ND	2.02	1.67	1.55	1.43	PCE3497TR-ND	200	142.60	EEV-FK2A470Q
	68	0.07	0.32	68.0	H13	500	PCE3498CT-ND	2.02	1.67	1.55	1.43	PCE3498TR-ND	200	142.60	EEV-FK2A680Q
	100	0.07	0.17	100.0	J16	793	PCE3504CT-ND	2.95	2.43	2.25	—	PCE3504TR-ND	125	129.75	EEV-FK2A101M
	150	0.07	0.17	150.0	J16	793	PCE3499CT-ND	3.20	2.63	2.45	—	PCE3499TR-ND	125	140.88	EEV-FK2A151M
	220	0.07	0.153	220.0	K16	917	PCE3500CT-ND	3.88	3.19	2.97	—	PCE3500TR-ND	125	170.88	EEV-FK2A221M
	330	0.07	0.153	330.0	K16	917	PCE3505CT-ND	3.88	3.19	2.97	—	PCE3505TR-ND	125	170.88	EEV-FK2A331M

(Continued)

Panasonic® VV/TA/HD/VA/VS/HA/HB/FC/FK/EB Series Aluminum Electrolytic Capacitors, Surface Mount Type *(Cont.)*

Rated W.V. (VDC)	Nom. Cap. (µF)	tan δ ≤ spec. values (120Hz, +20°C)	Impedance (ohms)	Max. Leak. Current (µA)	Size Code	Max. Ripple Cur. 120Hz, 105°C (mA rms)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
								5	10	25	100		Size	Pricing	
EB Long Life, High Ripple Series: -20°C to +105°C															
160	10	0.15	—	16.0	G13	70	PCE3421CT-ND	1.45	1.20	1.11	—	PCE3421TR-ND	250	128.00	EEV-EB2C100Q
	33	0.15	—	52.8	H16	470	PCE3422CT-ND	2.40	1.98	1.84	—	PCE3422TR-ND	150	126.90	EEV-EB2C330SQ
	47	0.15	—	75.2	J16	600	PCE3423CT-ND	2.74	2.26	2.10	—	PCE3423TR-ND	125	120.75	EEV-EB2C470SN
	68	0.15	—	108.8	J21	750	PCE3424CT-ND	3.30	2.72	2.53	—	PCE3424TR-ND	75	87.30	EEV-EB2C680N
	68	0.15	—	108.8	K16	750	PCE3425CT-ND	3.30	2.72	2.53	—	PCE3425TR-ND	125	145.50	EEV-EB2C680SN
	100	0.15	—	160.0	K21	1060	PCE3426CT-ND	3.46	2.85	2.65	—	PCE3426TR-ND	75	91.50	EEV-EB2C101N
200	22	0.15	—	44.0	H16	470	PCE3427CT-ND	2.40	1.98	1.84	—	PCE3427TR-ND	150	126.90	EEV-EB2D220SQ
	33	0.15	—	66.0	J16	600	PCE3428CT-ND	2.74	2.26	2.10	—	PCE3428TR-ND	125	120.75	EEV-EB2D330SN
	47	0.15	—	94.0	K16	600	PCE3429CT-ND	3.30	2.72	2.53	—	PCE3429TR-ND	125	145.50	EEV-EB2D470SN
	68	0.15	—	136.0	J21	750	PCE3430CT-ND	3.30	2.72	2.53	—	PCE3430TR-ND	75	87.30	EEV-EB2D680N
	100	0.15	—	200.0	K21	1060	PCE3431CT-ND	2.63	2.17	2.01	—	PCE3431TR-ND	75	69.53	EEV-EB2D101N
250	10	0.15	—	25.0	G17	88	PCE3432CT-ND	1.67	1.38	1.28	—	PCE3432TR-ND	200	118.00	EEV-EB2E100Q
	22	0.15	—	55.0	J16	560	PCE3433CT-ND	2.74	2.26	2.10	—	PCE3433TR-ND	125	120.75	EEV-EB2E220SN
	33	0.15	—	82.5	K16	560	PCE3434CT-ND	3.30	2.72	2.53	—	PCE3434TR-ND	125	145.50	EEV-EB2E330SN
	47	0.15	—	117.5	J21	710	PCE3435CT-ND	3.30	2.72	2.53	—	PCE3435TR-ND	75	87.30	EEV-EB2E470N
	68	0.15	—	170.0	K21	990	PCE3436CT-ND	3.95	3.25	3.02	—	PCE3436TR-ND	75	104.33	EEV-EB2E680N
350	10	0.20	—	35.0	J16	270	PCE3437CT-ND	2.74	2.26	2.10	—	PCE3437TR-ND	125	120.75	EEV-EB2V100SN
	22	0.20	—	77.0	K16	350	PCE3438CT-ND	3.30	2.72	2.53	—	PCE3438TR-ND	125	145.50	EEV-EB2V220SN
	47	0.20	—	164.5	K21	670	PCE3440CT-ND	3.95	3.25	3.02	—	PCE3440TR-ND	75	104.33	EEV-EB2V470N
400	3.3	0.24	—	13.2	G13	40	PCE3441CT-ND	1.45	1.20	1.11	—	PCE3441TR-ND	250	128.00	EEV-EB2G3R3Q
	4.7	0.24	—	18.8	G17	50	PCE3442CT-ND	1.67	1.38	1.28	—	PCE3442TR-ND	200	118.00	EEV-EB2G4R7Q
	10	0.24	—	40.0	J16	250	PCE3443CT-ND	2.74	2.26	2.10	—	PCE3443TR-ND	125	120.75	EEV-EB2G100SN
	22	0.24	—	88.0	J21	410	PCE3444CT-ND	3.30	2.72	2.53	—	PCE3444TR-ND	75	87.30	EEV-EB2G220N
	33	0.24	—	132.0	K21	600	PCE3445CT-ND	3.95	3.25	3.02	—	PCE3445TR-ND	75	104.33	EEV-EB2G330N
450	2.2	0.24	—	9.9	G13	29	PCE3446CT-ND	1.45	1.20	1.11	—	PCE3446TR-ND	250	128.00	EEV-EB2W2R2Q
	3.3	0.24	—	14.9	G17	41	PCE3447CT-ND	1.67	1.38	1.28	—	PCE3447TR-ND	200	118.00	EEV-EB2W3R3Q
	4.7	0.24	—	21.2	H16	49	PCE3448CT-ND	2.40	1.98	1.84	—	PCE3448TR-ND	150	126.90	EEV-EB2W4R7SQ
	10	0.24	—	45.0	K16	310	PCE3449CT-ND	3.30	2.72	2.53	—	PCE3449TR-ND	125	145.50	EEV-EB2W100SN
	22	0.24	—	99.0	K21	560	PCE3450CT-ND	3.95	3.25	3.02	—	PCE3450TR-ND	75	104.33	EEV-EB2W220N
VS BI-POLAR General Purpose Series: –40°C to +85°C (1000 Hour Life)															
6.3	22	0.52	—	6.0	C	29	PCE3123CT-ND	.37	.30	.28	.26	PCE3123TR-ND	1,000	128.00	ECE-V0JA220NR
	47	0.52	—	6.0	D	46	PCE3124CT-ND	.42	.34	.32	.30	PCE3124TR-ND	1,000	146.00	ECE-V0JA470NP
10	10	0.40	—	6.0	B	25	PCE3125CT-ND	.31	.26	.24	.22	PCE3125TR-ND	2,000	110.00/M	ECE-V1AA100NR
	33	0.40	—	6.6	D	43	PCE3126CT-ND	.42	.34	.32	.30	PCE3126TR-ND	1,000	146.00	ECE-V1AA330NP
16	4.7	0.32	—	6.0	B	20	PCE3127CT-ND	.31	.26	.24	.22	PCE3127TR-ND	2,000	110.00/M	ECE-V1CA4R7NR
	10	0.32	—	6.0	C	25	PCE3128CT-ND	.37	.30	.28	.26	PCE3128TR-ND	1,000	128.00	ECE-V1CA100NR
	22	0.32	—	7.0	D	39	PCE3129CT-ND	.42	.34	.32	.30	PCE3129TR-ND	1,000	146.00	ECE-V1CA220NP
25	3.3	0.28	—	6.0	B	12	PCE3130CT-ND	.31	.26	.24	.22	PCE3130TR-ND	2,000	110.00/M	ECE-V1EA3R3NR
	4.7	0.28	—	6.0	C	21	PCE3131CT-ND	.37	.30	.28	.26	PCE3131TR-ND	1,000	128.00	ECE-V1EA4R7NR
	10	0.28	—	6.0	D	28	PCE3132CT-ND	.43	.35	.33	.30	PCE3132TR-ND	1,000	150.00	ECE-V1EA100NP
35	2.2	0.24	—	6.0	B	12	PCE3133CT-ND	.31	.26	.24	.22	PCE3133TR-ND	2,000	110.00/M	ECE-V1VA2R2NR
	4.7	0.24	—	6.0	C	22	PCE3134CT-ND	.37	.30	.28	.26	PCE3134TR-ND	1,000	128.00	ECE-V1VA4R7NR
	10	0.24	—	7.0	D	30	PCE3135CT-ND	.42	.34	.32	.30	PCE3135TR-ND	1,000	146.00	ECE-V1VA100NP
50	0.22	0.24	—	6.0	B	2	PCE3136CT-ND	.31	.26	.24	.22	PCE3136TR-ND	2,000	110.00/M	ECE-V1HAR22NR
	0.33	0.24	—	6.0	B	3	PCE3137CT-ND	.31	.26	.24	.22	PCE3137TR-ND	2,000	110.00/M	ECE-V1HAR33NR
	0.47	0.24	—	6.0	B	5	PCE3138CT-ND	.31	.26	.24	.22	PCE3138TR-ND	2,000	110.00/M	ECE-V1HAR47NR
	1	0.24	—	6.0	B	10	PCE3139CT-ND	.31	.26	.24	.22	PCE3139TR-ND	2,000	110.00/M	ECE-V1HA010NR
	2.2	0.24	—	6.0	C	16	PCE3140CT-ND	.37	.30	.28	.26	PCE3140TR-ND	1,000	128.00	ECE-V1HA2R2NR
	3.3	0.24	—	6.0	C	21	PCE3141CT-ND	.68	.56	.52	.48	PCE3141TR-ND	1,000	239.00	ECE-V1HA3R3NP
	4.7	0.24	—	6.0	D	31	PCE3142CT-ND	.42	.34	.32	.30	PCE3142TR-ND	1,000	146.00	ECE-V1HA4R7NP

BC COMPONENTS 085 CS Series Aluminum Electrolytic Capacitors, Surface Mount (Chip) Standard

FEATURES:

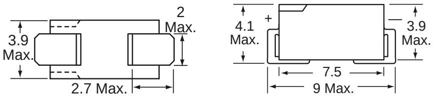
- Polarized aluminum electrolytic capacitors, non-solid electrolyte, self-healing
- SMD-version, rectangular case, insulated
- Miniaturized, high CV per unit volume, low height
- Flexible terminals, reflow and wave solderable
- Charge and discharge proof
- Supplied in blister tape on reel

SPECIFICATIONS:

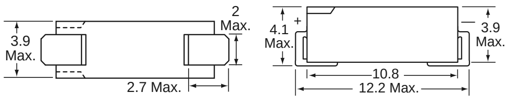
- Tolerance: ±20%
- Temperature Range: -40°C to +85°C
- Useful life at 85°C: 1500 hours

Case Code	Case Size (mm)		
	L	W	H
A	8.8	3.7	3.9
B	11.9	3.7	3.9

Case A



Case B



Voltage	Nom. Cap. (µF)	Max. Leak. Current (µA)	Case Code	Max. Ripple Current 100Hz, 85°C (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing 2,000	BC Components Part No.
						10	100	500			
6.3	10	4	A	11	BC1169CT-ND	1.19	.86	.60	BC1169TR-ND	394.50/M	2222 085 63109
6.3	22	6	B	20	BC1170CT-ND	1.19	.86	.60	BC1170TR-ND	394.50/M	2222 085 63229
16	4.7	5	A	9	BC1171CT-ND	1.19	.86	.60	BC1171TR-ND	394.50/M	2222 085 65478
16	10	6	B	16	BC1172CT-ND	1.19	.86	.60	BC1172TR-ND	394.50/M	2222 085 65109
25	3.3	5	A	8	BC1173CT-ND	1.19	.86	.60	BC1173TR-ND	394.50/M	2222 085 66338
40	2.2	5	A	7	BC1174CT-ND	1.19	.86	.60	BC1174TR-ND	394.50/M	2222 085 67228
40	4.7	7	B	13	BC1175CT-ND	1.19	.86	.60	BC1175TR-ND	394.50/M	2222 085 67478
63	1.0	4	A	6	BC1176CT-ND	1.19	.86	.60	BC1176TR-ND	394.50/M	2222 085 68108

BC COMPONENTS 139 CLL Series Aluminum Electrolytic Capacitors, Surface Mount (Chip) Long Life

FEATURES:

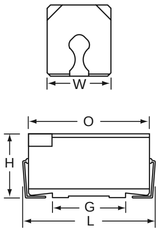
- Polarized aluminum electrolytic capacitors, non-solid electrolyte, self-healing
- SMD-version, fully molded, insulated
- Flexible terminals, reflow and wave solderable
- Compact, rectangular shape
- Charge and discharge proof, no-peak current limitation
- Supplied in blister tape on reel

SPECIFICATIONS:

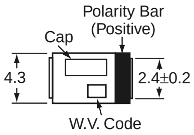
- Tolerance: ±20%
- Temperature Range: -55°C to +105°C
- Useful life at 105°C: 2000 hours

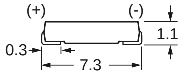
Nominal Case Size L x W x H (mm)	Dimensions (mm)					
	Case Code	L (max.)	W (max.)	H (max.)	O (max.)	G (max.)
14.3 x 6.2 x 6.9	2	14.5	6.3	7.05	13.0	7.5
14.3 x 7.6 x 8.2	3	14.5	7.7	8.35	13.0	7.5

Voltage	Nom. Cap. (µF)	Max. Leak. Current (µA)	Case Code	Max. Ripple Current 100Hz, 105°C (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing 700	BC Components Part No.
						10	100	500			
6.3	100	16	2	79	BC1177CT-ND	1.35	.98	.68	BC1177TR-ND	315.00	2222 139 63101
6.3	220	32	3	120	BC1178CT-ND	1.58	1.14	.79	BC1178TR-ND	367.50	2222 139 63221
16	47	18	2	66	BC1179CT-ND	1.35	.98	.68	BC1179TR-ND	315.00	2222 139 65479
16	100	35	3	100	BC1180CT-ND	1.58	1.14	.79	BC1180TR-ND	367.50	2222 139 65101
25	22	14	2	48	BC1181CT-ND	1.35	.98	.68	BC1181TR-ND	315.00	2222 139 66229
25	47	27	3	79	BC1182CT-ND	1.58	1.14	.79	BC1182TR-ND	367.50	2222 139 66479
40	33	29	3	75	BC1183CT-ND	1.58	1.14	.79	BC1183TR-ND	367.50	2222 139 67339
50	22	25	3	67	BC1184CT-ND	1.58	1.14	.79	BC1184TR-ND	367.50	2222 139 61229
63	4.7	9	2	28	BC1185CT-ND	1.35	.98	.68	BC1185TR-ND	315.00	2222 139 68478
63	10	16	3	48	BC1186CT-ND	1.58	1.14	.79	BC1186TR-ND	367.50	2222 139 68109
100	4.7	12	3	33	BC1187CT-ND	1.58	1.14	.79	BC1187TR-ND	367.50	2222 139 69478



Panasonic® FD Series Specialty Polymer Aluminum Electrolytic Chip Capacitors, Surface Mount



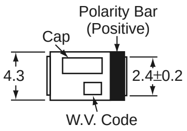


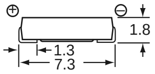
FEATURES: • Low profile type (1.1mm Height) • Low impedance at high frequency (10kHz-10MHz) as low as ceramic capacitors (reduced ESR due to applying specialty polymer with high conductivity) • Excellent noise-absorbent characteristics • Surface mount (reflow soldering method avail.) • Very stable capacitance, impedance and ESR against temp. • Excellent endurance character due to adoption of solid electrolyte

SPECIFICATIONS: • **Operating Temp. Range:** -40 to +105°C • **Capacitance Tolerance:** +20% (120Hz/+20°C) • **DC Leakage Current:** I ≤ 0.04 CV or 3 (μA) after 2 minutes (whichever is the greater) (2 W.V. to 4 W.V : I ≤ 0.06 CV) • **Dissipation Factor:** ≤0.06 (120Hz/+20°C) • **Surge Voltage:** Rated Working Voltage x 1.25 (15 to 35°C) • **Endurance:** After applying rated working voltage for 1000 hours at +105±2°C, and then being stabilized at +20°C, capacitor shall meet the following limits: Capacitance change (±10% of initial measured value). tan (≤initial specified value). DC leakage current (≤initial specified value). • **Moisture Resistance:** (After storing for 500 hours at +60°C, 90% R.H.) Capacitance Change +40%, -20% of initial measured value (4 W.V.: +60%, -20%; 6.3 W.V.: +50%, -20%). D.F.≤200% initial specified value. DC leakage current (≤initial specified value).

W.V.	Cap. (μF)	Impedance (400kHz/+20°C)	Ripple Current (100kHz/+20 to +105°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,500	Panasonic Part No.
2	68	0.035	1.6	PCE2105CT-ND *NEW!*	2.83	1.70	1.47	PCE2105TR-ND *NEW!*	678.00/M	EEF-FD0D680R
2.5	56	0.035	1.6	PCE2106CT-ND *NEW!*	2.83	1.70	1.47	PCE2106TR-ND *NEW!*	678.00/M	EEF-FD0E560R
4	39	0.035	1.6	PCE3451CT-ND	2.83	1.70	1.47	PCE3451TR-ND	678.00/M	EEF-FD0G390R
6.3	33	0.035	1.6	PCE3452CT-ND	2.83	1.70	1.47	PCE3452TR-ND	678.00/M	EEF-FD0J330R
8	22	0.035	1.6	PCE3453CT-ND	2.83	1.70	1.47	PCE3453TR-ND	678.00/M	EEF-FD0K220R

CD Series Specialty Polymer Aluminum Electrolytic Chip Capacitors, Surface Mount





FEATURES:

• Low profile type (1.8mm Height) of D size • Low impedance at high frequency (10kHz-10MHz) as low as ceramic capacitors (reduced ESR due to an applying speciality polymer with high conductivity) • Excellent noise-absorbent characteristics • Surface mount (reflow soldering method avail.) • Very stable capacitance, impedance and ESR against temp. • Excellent endurance characteristics due to adoption of solid electrolyte

SPECIFICATIONS:

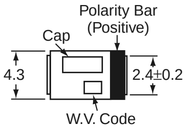
• **Operating Temperature Range:** –40°C ~ +105°C • **Capacitance Tolerance:** ±20% (120Hz/+20°C) • **DC Leakage Current:** I≤ 0.04CV or 3μA after 2 minutes (whichever is greater) • **Dissipation Factor:** ≤0.06 (120Hz/+20°C) • **Surge Voltage:** Rated Working Voltage x 1.25 • **Endurance:** After applying rated working voltage for 1000 hours at +105°C, and then being stabilized at +20°C, capacitor shall meet following limits: Capacitance Change (±10% of initial measured value) DF and DC leakage current (initial specified value) • **Moisture Resistance:** (After storing for 500 hours at +60°C, 90-95% R.H.) Capacitance Change (+40%, of initial measured value, -20% (6.3V: +50%, -20%). DF ≤200% initial specified value. DC leakage current (initial specified value).

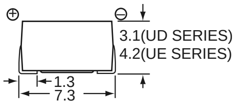
W.V.	Cap. (μF)	Impedance (400kHz/+20°C)	Ripple Current * (100kHz/+20~+100°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,500	Panasonic Part No.
2	100	0.025Ω	1.8 Ar.m.s	PCE3271CT-ND†	3.23	1.55	1.34	PCE3271TR-ND	617.00/M	EEF-CD0D101R
	120	0.018Ω	1.8 Ar.m.s	PCE2107CT-ND *NEW!*	2.17	1.63	1.41	PCE2107TR-ND *NEW!*	650.00/M	EEF-CD0D121R
2.5	82	0.025Ω	1.8 Ar.m.s	PCE3272CT-ND	3.23	1.55	1.34	PCE3272TR-ND	617.00/M	EEF-CD0E820R
	100	0.018Ω	1.8 Ar.m.s	PCE2108CT-ND *NEW!*	2.19	1.64	1.43	PCE2108TR-ND *NEW!*	656.00/M	EEF-CD0E101R
4	56	0.025Ω	1.8 Ar.m.s	PCE3274CT-ND†	3.13	1.55	1.34	PCE3274TR-ND	617.00/M	EEF-CD0G560R
	82	0.018Ω	1.8 Ar.m.s	PCE2109CT-ND *NEW!*	2.17	1.63	1.41	PCE2109TR-ND *NEW!*	650.00/M	EEF-CD0G820R
6.3	10	0.060Ω	1 Ar.m.s	PCE3157CT-ND	2.72	1.32	1.15	PCE3157TR-ND	528.00/M	EEF-CD0J100R
	22	0.045Ω	1.3 Ar.m.s	PCE3158CT-ND	2.97	1.40	1.21	PCE3158TR-ND	557.00/M	EEF-CD0J220R
	33	0.035Ω	1.6 Ar.m.s	PCE3159CT-ND	3.21	1.47	1.27	PCE3159TR-ND	585.00/M	EEF-CD0J330R
	47	0.025Ω	1.8 Ar.m.s	PCE3160CT-ND†	3.46	1.55	1.34	PCE3160TR-ND	617.00/M	EEF-CD0J470R
	68	0.018Ω	1.8 Ar.m.s	PCE2110CT-ND *NEW!*	2.17	1.63	1.41	PCE2110TR-ND *NEW!*	650.00/M	EEF-CD0J680R
8	8.2	0.060Ω	1 Ar.m.s	PCE3161CT-ND	2.72	1.32	1.15	PCE3161TR-ND	528.00/M	EEF-CD0K8R2R
	15	0.045Ω	1.3 Ar.m.s	PCE3162CT-ND	2.97	1.40	1.21	PCE3162TR-ND	557.00/M	EEF-CD0K150R
	22	0.035Ω	1.6 Ar.m.s	PCE3163CT-ND	3.21	1.47	1.27	PCE3163TR-ND	585.00/M	EEF-CD0K220R
	33	0.025Ω	1.8 Ar.m.s	PCE3164CT-ND†	3.46	1.55	1.34	PCE3164TR-ND	617.00/M	EEF-CD0K330R
12.5	4.7	0.080Ω	1 Ar.m.s	PCE3165CT-ND	2.72	1.32	1.15	PCE3165TR-ND	528.00/M	EEF-CD1B4R7R
	10	0.060Ω	1 Ar.m.s	PCE3166CT-ND	2.97	1.40	1.21	PCE3166TR-ND	557.00/M	EEF-CD1B100R
	15	0.050Ω	1.3 Ar.m.s	PCE3167CT-ND	3.21	1.47	1.27	PCE3167TR-ND	585.00/M	EEF-CD1B150R
	22	0.040Ω	1.3 Ar.m.s	PCE3168CT-ND	3.46	1.55	1.34	PCE3168TR-ND	617.00/M	EEF-CD1B220R
16	2.2	0.110Ω	1 Ar.m.s	PCE3169CT-ND	2.72	1.32	1.15	PCE3169TR-ND	528.00/M	EEF-CD1C2R2R
	4.7	0.080Ω	1 Ar.m.s	PCE3170CT-ND	2.97	1.40	1.21	PCE3170TR-ND	557.00/M	EEF-CD1C4R7R
	6.8	0.070Ω	1 Ar.m.s	PCE3171CT-ND	3.21	1.47	1.27	PCE3171TR-ND	585.00/M	EEF-CD1C6R8R
	8.2	0.060Ω	1 Ar.m.s	PCE3172CT-ND	3.46	1.55	1.34	PCE3172TR-ND	617.00/M	EEF-CD1C8R2R

* Must be corrected for frequency using the Frequency Correction Factor (Sinewave current, Ambient temperature: Room temperature to 100°C): 10k(0.6), 20k(0.7), 50k(0.8), 100k(1.0), 250k(1.1), 500k(1.2), & 1M(1.3).

† **SP1-KIT-ND** ***Digi-Key® CD/UD/UE-Series Capacitors Kit*** 30 each of values denoted (360 total pieces). Kit consists of parts, hinged plastic storage box with selector guide, and a business card CDROM containing data sheets and application guide **$59.00**

UD/UE Series Specialty Polymer Aluminum Electrolytic Chip Capacitors, Surface Mount





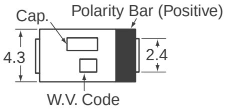
FEATURES: • Low impedance at high frequency (10kHz to 10MHz) as low as ceramic capacitors (Reduced ESR due to applying speciality polymer with high conductivity) • Stable temperature characteristics: capacitance, impedance and ESR • Excellent noise-absorbent characteristics • Voltage derating not necessary • Excellent endurance characteristics due to adoption of solid electrolyte

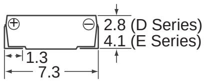
SPECIFICATIONS: • **Operating Temp. Range:** –40°C ~ +105°C • **Capacitance Tolerance:** ±20% (120Hz/+20°C) • **DC Leakage Current:** I≤ 0.06CV after 2 minutes • **Dissipation Factor:** ≤0.1 (120Hz/+20°C) • **Surge Voltage:** Rated Working Voltage x 1.25 • **Endurance:** After applying rated working voltage for 1000 hours at +105°C, and then being stabilized at +20°C, capacitor shall meet following limits: Capacitance Change (±10% of initial measured value). DF (initial specified value). DC leakage current (initial specified value). • **Moisture Resistance:** (After storing for 500 hours at +60°C, 90% R.H.) Capacitance Change (*2V:* +70%, -20%, *4V:* +60%, -20%, *6.3V:* +50%, -20% of initial measured value). DF ≤200% initial specified value. DC leakage current (initial specified value).

† **SP1-KIT-ND** ***Digi-Key® CD/UD/UE-Series Capacitors Kit*** 30 each of values denoted (360 total pieces). Kit consists of parts, hinged plastic storage box with selector guide, and a business card CDROM containing data sheets and application guide **$59.00**

W.V.	Cap. (μF)	E.S.R. (100KHz/ +20°C)	Ripple Current (100KHz/ 105°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	Panasonic Part No.
UD Series										
2	180	.018Ω	2A	PCE3262CT-ND†	6.62	3.03	2.63	PCE3262TR-ND	1212.00/M	EEF-UD0D181R
2	270	.015Ω	2A	PCE2111CT-ND *NEW!*	4.45	3.34	2.89	PCE2111TR-ND *NEW!*	1334.00/M	EEF-UD0D271R
2.5	150	.018Ω	2A	PCE3273CT-ND	6.62	3.03	2.63	PCE3273TR-ND	1212.00/M	EEF-UD0E151R
2.5	220	.015Ω	2A	PCE2112CT-ND *NEW!*	4.45	3.34	2.89	PCE2112TR-ND *NEW!*	1334.00/M	EEF-UD0E221R
4	120	.018Ω	2A	PCE3263CT-ND†	5.88	3.03	2.63	PCE3263TR-ND	1212.00/M	EEF-UD0G121R
4	150	.015Ω	2A	PCE2113CT-ND *NEW!*	4.45	3.34	2.89	PCE2113TR-ND *NEW!*	1334.00/M	EEF-UD0G151R
6.3	100	.018Ω	2A	PCE3264CT-ND†	5.88	3.03	2.63	PCE3264TR-ND	1212.00/M	EEF-UD0J101R
6.3	120	.015Ω	2A	PCE2114CT-ND *NEW!*	4.45	3.34	2.89	PCE2114TR-ND *NEW!*	1334.00/M	EEF-UD0J121R
8	68	.018Ω	2A	PCE3265CT-ND†	5.88	3.03	2.63	PCE3265TR-ND	1212.00/M	EEF-UD0K680R
UE Series										
2	270	.015Ω	3A	PCE3266CT-ND†	8.32	4.20	3.64	PCE3266TR-ND	1677.00/M	EEF-UE0D271R
2	390	.012Ω	3A	PCE2115CT-ND *NEW!*	6.15	4.62	4.00	PCE2115TR-ND *NEW!*	1845.00/M	EEF-UE0D391R
2.5	220	.015Ω	3A	PCE3267CT-ND	8.32	4.20	3.64	PCE3267TR-ND	1677.00/M	EEF-UE0E221R
2.5	330	.012Ω	3A	PCE2116CT-ND *NEW!*	6.15	4.62	4.00	PCE2116TR-ND *NEW!*	1845.00/M	EEF-UE0E331R
4	180	.015Ω	3A	PCE3268CT-ND†	7.42	4.20	3.64	PCE3268TR-ND	1677.00/M	EEF-UE0G181R
4	220	.012Ω	3A	PCE2117CT-ND *NEW!*	6.15	4.62	4.00	PCE2117TR-ND *NEW!*	1845.00/M	EEF-UE0G221R
6.3	150	.015Ω	3A	PCE3269CT-ND†	7.42	4.20	3.64	PCE3269TR-ND	1677.00/M	EEF-UE0J151R
6.3	180	.012Ω	3A	PCE2118CT-ND *NEW!*	6.15	4.62	4.00	PCE2118TR-ND *NEW!*	1845.00/M	EEF-UE0J181R
8	100	.015Ω	3A	PCE3270CT-ND†	7.42	4.20	3.64	PCE3270TR-ND	1677.00/M	EEF-UE0K101R

NEW! H Series Specialty Polymer Aluminum Electrolytic Chip Capacitors, Surface Mount





FEATURES: • High Reliability (125°C) • Low ESR and High Ripple Current

SPECIFICATIONS: • **Operating Temp. Range:** –40°C ~ +125°C • **Capacitance Tolerance:** ±20% (120Hz/+20°C) • **DC Leakage Current:** I≤ 0.1CV after 2 minutes • **Dissipation Factor:** 0.1 max (120Hz/+20°C) • **Surge Voltage:** Rated Working Voltage x 1.25 (+15 to +35°C) • **Endurance:** After applying rated working voltage for 1,000 hours or derated voltage (working voltage x 0.875 at 115°C or working voltage x 0.75 at 125°C) and then being stabilized at 20°C, the capacitor shall meet the following limits. Capacitance change ±10% of initial measured value. D.F.≤Initial specified value. • **Moisture Resistance:** (After storing for 500 hours at +60°C, 90% R.H.) Capacitance Change (*2, 2.5V:* +70%, -20%, *4V:* +60%, -20%, *6.3V:* +50%, -20%, 8V: +40%, -20% of initial measured value). DF ≤200% initial specified value. DC leakage current (initial specified value).

W.V.	Cap. (μF)	E.S.R. (100KHz/ +20°C)	Ripple Current (100KHz/ 105°C)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	Panasonic Part No.
D Series										
2	180	.015Ω	2.2A	PCE2119CT-ND	4.45	3.34	2.89	PCE2119TR-ND	1334.00/M	EEF-HD0D181R
2.5	150	.015Ω	2.2A	PCE2120CT-ND	4.45	3.34	2.89	PCE2120TR-ND	1334.00/M	EEF-HD0E151R
4	120	.015Ω	2.2A	PCE2121CT-ND	4.45	3.34	2.89	PCE2121TR-ND	1334.00/M	EEF-HD0G121R
6.3	100	.015Ω	2.2A	PCE2122CT-ND	4.45	3.34	2.89	PCE2122TR-ND	1334.00/M	EEF-HD0J101R
8	68	.015Ω	2.2A	PCE2123CT-ND	4.45	3.34	2.89	PCE2123TR-ND	1334.00/M	EEF-HD0K680R
E Series										
2	270	.012Ω	3A	PCE2124CT-ND	6.15	4.62	4.00	PCE2124TR-ND	1845.00/M	EEF-HE0D271R
2.5	220	.012Ω	3A	PCE2125CT-ND	6.15	4.62	4.00	PCE2125TR-ND	1845.00/M	EEF-HE0E221R
4	180	.012Ω	3A	PCE2126CT-ND	6.15	4.62	4.00	PCE2126TR-ND	1845.00/M	EEF-HE0G181R
6.3	150	.012Ω	3A	PCE2127CT-ND	6.15	4.62	4.00	PCE2127TR-ND	1845.00/M	EEF-HE0J151R
8	100	.012Ω	3A	PCE2128CT-ND	6.15	4.62	4.00	PCE2128TR-ND	1845.00/M	EEF-HE0K101R

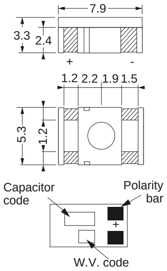
Panasonic® SP/CB Series Specialty Polymer Aluminum Electrolytic Capacitors, Surface Mount

FEATURES:

• Excellent noise-absorbent characteristics • Surface mountable (Flow and reflow soldering method available) • Very stable capacitance, impedance and ESR against temperature • Excellent endurance characteristics due to an adoption of solid electrolyte

SPECIFICATIONS:

• **Operating Temperature Range:** –40°C to +105°C • **Capacitance Tolerance:** ±20% (120Hz, +20°C) • **Leakage Current:** 1≤ 0.04 CV or 3µA after 2 min. • **Dissipation Factor:** ≤0.06 (120kHz/+20°C) • **Permissible Current Between Terminals with Same Polarity:** 2A DC max. (This shall be applicable only when each terminal is landed individually as shown in Fig. 2.) • **Surge Voltage:** Rated working voltage x 1.25 • **Endurance:** After applying rated working voltage for 1000 hours at +105°C, and then being stabilized at +20°C, capacitor shall meet the following limits: Capacitance Change (±10% of initial measured value); tan, Impedance and DC Leakage Current (Initial specified value).



Rated W.V. (VDC)	Nom. Cap. (µF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	6,000	12,000	Panasonic Part No.
6.3	10	PCS1100BCT-ND	2.41	2.01	1.74	PCS1100BTR-ND	804.00/M	754.00/M	699.00/M	ECG-C0JB100R
6.3	22	PCS1220JBCT-ND	2.92	2.44	2.11	PCS1220JBTR-ND	976.00/M	914.00/M	848.00/M	ECG-C0JB220R
6.3	33	PCS1330BCT-ND	3.56	2.97	2.57	PCS1330BTR-ND	1188.00/M	1113.00/M	1033.00/M	ECG-C0JB330R
8	8.2	PCS18R2BCT-ND	2.41	2.01	1.74	PCS18R2BTR-ND	804.00/M	754.00/M	699.00/M	ECG-C0KB8R2R
8	15	PCS1150BCT-ND	2.92	2.44	2.11	PCS1150BTR-ND	976.00/M	914.00/M	848.00/M	ECG-C0KB150R
8	22	PCS1220BCT-ND	3.56	2.97	2.57	PCS1220BTR-ND	1188.00/M	1113.00/M	1033.00/M	ECG-C0KB220R
12.5	4.7	—	—	—	—	PCE2101TR-ND	1354.00/M	1268.00/M	1177.00/M	ECG-C1BA4R7R
16	4.7	PCS34R7BCT-ND	2.41	2.01	1.74	PCS34R7BTR-ND	804.00/M	754.00/M	699.00/M	ECG-C1CB4R7R
16	6.8	PCS36R8BCT-ND	2.92	2.44	2.11	PCS36R8BTR-ND	976.00/M	914.00/M	848.00/M	ECG-C1CB6R8R
16	2.7	PCE2102BK-ND*	2.70	2.26	2.03	—	—	—	—	ECG-C1CA2R7R

*Bulk

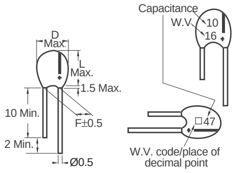
EF Series

Resin Dipped Solid Tantalum Capacitors

Specifications:

- Operating Temperature Range: -55°C to +105°C (4 to 6.3V, -55°C to +85°C)
- Rated Working Voltage Range: 6.3 to 50 WV DC
- Rated Capacitance Range: .1 to 330 µF
- Capacitance Tolerance: As Specified
- Leakage Current: I = 0.008 CV or 0.05 µA whichever is greater; I in µA, C in µF, V in volts
- Leads are not less than 0.394" in length

Working Voltage	Surge Voltage
3.15V, DC	4V, DC
6.3	8
10	13
16	20
25	32
35	44
50	63

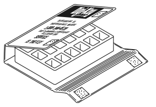


PANASONIC EF CROSS REFERENCES
Sprague: 196D; **Kemet:** T350/T360; **Mepco:** 49GS; **NEC:** DN; **Nichicon:** 599; **Hitachi:** TSD-3; **Matsuo:** 202; **AVX:** Tap.

Panasonic® Tantalum Capacitors

Assortment of 15 Popular Values — Panasonic Quality

Digi-Key® EF-Series Capacitors Kit



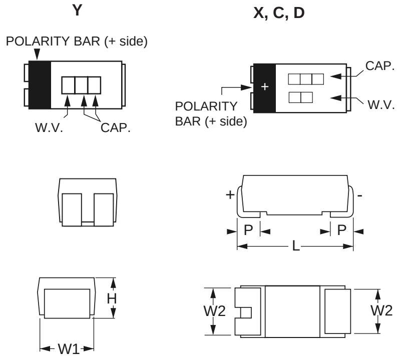
F-KIT-ND
ONLY
$39.95

180 TANTALUM CAPACITORS. Price includes notebook style storage case and bin storage guide for easy storage and quick access.

Voltage Volt. DC	Cap. (µF)	Cap. Tol. (%)	Dimensions (mm) D	L	F	Digi-Key Part No.	Pricing 1	10	100	1,000	5,000	10,000	Panasonic Part No.
6.3	4.7	±10	3.5	5.5	2.5	P2011-ND	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F0JE475K
	6.8	±10	3.5	5.5	2.5	P2012-ND	.53	4.53	35.49	225.00	210.00/M	196.00/M	ECS-F0JE685K
	10	±10	3.7	6.5	2.5	P2013-ND	.60	5.16	40.42	257.00	239.00/M	223.00/M	ECS-F0JE106K
	15	±10	4.0	7.0	2.5	P2014-ND	.69	5.91	46.30	294.00	274.00/M	256.00/M	ECS-F0JE156K
	22	±10	4.5	7.0	2.5	P2015-ND	.81	6.96	54.52	346.00	322.00/M	301.00/M	ECS-F0JE226K
	33	±10	4.7	8.0	2.5	P2016-ND	.97	8.31	65.10	413.00	385.00/M	360.00/M	ECS-F0JE336K
	47	±20	5.2	8.5	2.5	P2017-ND	1.25	10.74	84.13	534.00	497.00/M	465.00/M	ECS-F0JE476
	68	±20	5.5	9.5	2.5	P2018-ND	1.87	16.05	125.73	799.00	743.00/M	695.00/M	ECS-F0JE686
	100	±20	6.0	11.0	2.5	P2019-ND	2.85	24.42	191.29	1215.00	1131.00/M	1057.00/M	ECS-F0JE107
	150	±20	7.5	12.5	5.0	P2020-ND	6.46	55.38	433.81	2755.00	2564.00/M	2397.00/M	ECS-F0JE157
10	2.2	±10	3.3	5.5	2.5	P2022-ND	.43	3.66	28.67	182.00	169.00/M	158.00/M	ECS-F1AE225K
	3.3	±10	3.5	5.5	2.5	P2023-ND	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F1AE335K
	4.7	±10	3.5	5.5	2.5	P2024-ND	.53	4.53	35.49	225.00	210.00/M	196.00/M	ECS-F1AE475K
	6.8	±10	3.7	6.5	2.5	P2025-ND	.60	5.16	40.42	257.00	239.00/M	223.00/M	ECS-F1AE685K
	10	±10	4.0	7.0	2.5	P2026-ND	.74	6.33	49.59	315.00	293.00/M	274.00/M	ECS-F1AE106K
	15	±10	4.5	7.0	2.5	P2027-ND	.81	6.96	54.52	346.00	322.00/M	301.00/M	ECS-F1AE156K
	22	±10	4.7	8.0	2.5	P2028-ND	1.08	9.24	72.38	460.00	428.00/M	400.00/M	ECS-F1AE226K
	33	±10	5.2	8.5	2.5	P2029-ND	1.30	11.13	87.19	554.00	515.00/M	482.00/M	ECS-F1AE336K
	47	±10	5.5	9.5	2.5	P2030-ND	1.84	15.78	123.61	785.00	731.00/M	683.00/M	ECS-F1AE476K
	68	±20	6.0	11.0	2.5	P2031-ND	2.85	24.42	191.29	1215.00	1131.00/M	1057.00/M	ECS-F1AE686
	100	±20	7.5	12.5	5.0	P2032-ND	6.46	55.38	433.81	2755.00	2564.00/M	2397.00/M	ECS-F1AE107
16	1.0	±10	3.3	5.0	2.5	P2105-ND	.42	3.60	28.20	179.00	167.00/M	156.00/M	ECS-F1CE105K
	1.5	±10	3.3	5.5	2.5	P2033-ND*	.45	3.87	30.32	193.00	179.00/M	168.00/M	ECS-F1CE155K
	2.2	±10	3.5	5.5	2.5	P2034-ND*	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F1CE225K
	3.3	±10	3.5	5.5	2.5	P2035-ND*	.50	4.32	33.84	215.00	200.00/M	187.00/M	ECS-F1CE335K
	4.7	±10	3.7	6.5	2.5	P2036-ND*	.59	5.04	39.48	251.00	233.00/M	218.00/M	ECS-F1CE475K
	6.8	±10	4.0	7.0	2.5	P2037-ND*	.70	6.03	47.24	300.00	279.00/M	261.00/M	ECS-F1CE685K
	10	±10	4.5	7.0	2.5	P2038-ND*	.99	8.46	66.27	421.00	392.00/M	366.00/M	ECS-F1CE106K
	15	±10	4.7	8.0	2.5	P2039-ND*	1.14	9.75	76.38	485.00	451.00/M	422.00/M	ECS-F1CE156K
	22	±10	5.2	8.5	2.5	P2040-ND*	1.30	11.13	87.19	554.00	515.00/M	482.00/M	ECS-F1CE226K
	33	±10	5.5	9.5	2.5	P2041-ND	1.85	15.87	124.32	790.00	735.00/M	687.00/M	ECS-F1CE336K
	47	±20	6.0	11.0	2.5	P2042-ND	2.85	24.42	191.29	1215.00	1131.00/M	1057.00/M	ECS-F1CE476
	68	±20	7.5	12.5	5.0	P2043-ND	6.46	55.38	433.81	2755.00	2564.00/M	2397.00/M	ECS-F1CE686
25	1.5	±10	3.5	5.5	2.5	P2044-ND	.49	4.17	32.67	207.00	193.00/M	181.00/M	ECS-F1EE155K
	2.2	±10	3.5	5.5	2.5	P2045-ND	.54	4.62	36.19	230.00	214.00/M	200.00/M	ECS-F1EE225K
	3.3	±10	3.7	6.5	2.5	P2046-ND	.64	5.49	43.01	273.00	254.00/M	238.00/M	ECS-F1EE335K
	4.7	±10	4.0	7.0	2.5	P2047-ND	.83	7.11	55.70	354.00	329.00/M	308.00/M	ECS-F1EE475K
	6.8	±10	4.5	7.0	2.5	P2048-ND	.98	8.43	66.04	419.00	390.00/M	365.00/M	ECS-F1EE685K
	10	±10	5.2	8.5	2.5	P2049-ND	1.61	13.83	108.34	688.00	640.00/M	599.00/M	ECS-F1EE106K
	15	±10	5.5	9.5	2.5	P2050-ND	1.86	15.90	124.55	791.00	736.00/M	688.00/M	ECS-F1EE156K
	22	±20	6.0	11.0	2.5	P2051-ND	2.64	22.62	177.19	1125.00	1047.00/M	979.00/M	ECS-F1EE226
	33	±20	7.5	12.5	5.0	P2052-ND	3.92	33.60	263.20	1672.00	1556.00/M	1455.00/M	ECS-F1EE336
35	0.1	±20	3.3	5.0	2.5	P2053-ND*	.39	3.33	26.09	166.00	154.00/M	144.00/M	ECS-F1VE104
	0.15	±20	3.3	5.0	2.5	P2054-ND*	.39	3.33	26.09	166.00	154.00/M	144.00/M	ECS-F1VE154
	0.22	±20	3.3	5.0	2.5	P2055-ND*	.39	3.33	26.09	166.00	154.00/M	144.00/M	ECS-F1VE224
	0.33	±20	3.3	5.0	2.5	P2056-ND*	.40	3.42	26.79	170.00	158.00/M	148.00/M	ECS-F1VE334
	0.47	±20	3.3	5.5	2.5	P2057-ND*	.42	3.60	28.20	179.00	167.00/M	156.00/M	ECS-F1VE474
	0.68	±20	3.3	5.5	2.5	P2058-ND*	.45	3.87	30.32	193.00	179.00/M	168.00/M	ECS-F1VE684
	1.0	±10	3.5	5.5	2.5	P2059-ND*	.56	4.83	37.84	240.00	224.00/M	209.00/M	ECS-F1VE105K
	1.5	±10	3.5	5.5	2.5	P2060-ND	.54	4.62	36.19	230.00	214.00/M	200.00/M	ECS-F1VE155K
	2.2	±10	3.7	6.5	2.5	P2061-ND	.64	5.49	43.01	273.00	254.00/M	238.00/M	ECS-F1VE225K
	3.3	±10	4.0	7.0	2.5	P2062-ND	.83	7.11	55.70	354.00	329.00/M	308.00/M	ECS-F1VE335K
	4.7	±10	4.5	7.0	2.5	P2063-ND	.98	8.43	66.04	419.00	390.00/M	365.00/M	ECS-F1VE475K
	6.8	±10	5.2	8.5	2.5	P2064-ND	1.65	14.13	110.69	703.00	654.00/M	612.00/M	ECS-F1VE685K
	10	±10	5.5	9.5	2.5	P2065-ND	1.86	15.90	124.55	791.00	736.00/M	688.00/M	ECS-F1VE106K
	15	±20	6.0	11.0	2.5	P2066-ND	2.95	25.29	198.11	1258.00	1171.00/M	1095.00/M	ECS-F1VE156
	22	±20	7.5	12.5	5.0	P2101-ND	4.02	34.44	269.78	1713.00	1594.00/M	1491.00/M	ECS-F1VE226
50	0.1	±20	3.3	5.0	2.5	P2067-ND	.43	3.66	28.67	182.00	169.00/M	158.00/M	ECS-F1HE104
	0.15	±20	3.3	5.0	2.5	P2068-ND	.43	3.66	28.67	182.00	169.00/M	158.00/M	ECS-F1HE154
	0.22	±20	3.3	5.5	2.5	P2069-ND	.47	4.02	31.49	200.00	186.00/M	174.00/M	ECS-F1HE224
	0.33	±20	3.5	5.5	2.5	P2070-ND	.47	4.02	31.49	200.00	186.00/M	174.00/M	ECS-F1HE334
	0.47	±20	3.7	6.5	2.5	P2071-ND	.51	4.38	34.31	218.00	203.00/M	190.00/M	ECS-F1HE474
	0.68	±20	3.7	6.5	2.5	P2072-ND	.63	5.40	42.30	269.00	250.00/M	234.00/M	ECS-F1HE684
	1.0	±10	4.0	7.0	2.5	P2073-ND	.78	6.72	52.64	334.00	311.00/M	291.00/M	ECS-F1HE105K
	1.5	±10	4.5	7.0	2.5	P2074-ND	1.31	11.25	88.13	560.00	521.00/M	487.00/M	ECS-F1HE155K
	2.2	±10	4.7	8.0	2.5	P2075-ND	1.60	13.71	107.40	682.00	635.00/M	594.00/M	ECS-F1HE225K
	3.3	±10	5.2	8.5	2.5	P2076-ND	2.30	19.74	154.63	982.00	914.00/M	855.00/M	ECS-F1HE335K
	4.7	±10	5.5	9.5	2.5	P2077-ND	3.05	26.13	204.69	1300.00	1210.00/M	1131.00/M	ECS-F1HE475K

* Included in F-KIT-ND.

Panasonic® TE Series Tantalum Electrolytic Chip Capacitors



Dimensions (mm)

EIA Size	Size Code	L ± 0.2	W_1 ± 0.2	W_2 ± 0.1	H ± 0.2	P ± 0.3
A	Y	3.2	1.6	1.2	1.6	0.8
B	X	3.5	2.8	2.2	1.9	0.8
C	C	6.0	3.2	2.2	2.5	1.3
D	D	7.3	4.3	3.65	2.8	1.3

Packing Quantity	Size Y, X	2,000 pieces/reel
	Size C, D	750 pieces/reel

Features

• Wide capacitance range • High performance in temperature and frequency characteristics • Excellent solderability • Excellent terminal construction against bending of P.W.B • Low inductance structure.

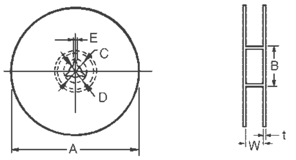
Specifications

• **Operating Temp. Range:** –55 to +125°C • **Capacitance Tolerance:** ±20% at 120Hz, +20°C • **DC Leakage Current:** I = 0.01CV or 0.5µA max. whichever is greater DC leakage current shall be measured after 2 minutes application or rated working voltage at +20°C • **tan ∂:** ≤3.3µF – 0.04 max.; 4.7 ~ 68µF – 0.06 max.; 100µF – 0.08 max • **Solder Heat Resistance:** The capacitor shall withstand dipping into solder bath for 5 ±1 sec at 260 ±5°C • **Moisture Resistance:** Capacitor shall be tested for 500 hours at +40°C and 90-95% R.H. without load After the test, capacitor shall meet the following limits.

Cap. change	± 10% of the initial measured value.
DC leakage	≤ current initial specified value.
tan ∂	≤ initial specified value.

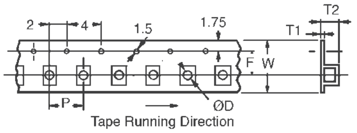
• **Endurance:** After 2000 hours application of DC rated working voltage at +85°C, or derated voltage at +125°C, the capacitor shall meet the following limits.

Cap. change	± 10% of the initial measured value.
DC leakage	≤ 125% of the current initial specified value.
tan ∂	≤ initial specified value.



Dimensions (mm)

	∂A ± 2	∂B Min.	C ± 0.5	D ± 0.8	E ± 0.5	W ± 1.5	t ± 0.5
12mm tape	178	50	13.0	21.0	2.0	14.0	2.0
8mm tape	178	50	13.0	21.0	2.0	10.0	2.0



Dimensions (mm)

Size Code	W ± 0.3	A ± 0.2	B ± 0.2	P ± 0.1	T_1 ± 0.2	F ± 0.1	T_2	∂D ± 0.1
Y X	8.0	1.9 3.3	3.5 3.8	4.0 4.0	1.9 2.1	3.5	0.2	1.1
C D	12.0	3.7 4.7	6.4 7.7	8.0 8.0	3.0 3.3	5.5	0.3	1.6

WV	Cap.	EIA	Size	Digi-Key	Cut Tape Price Each			Digi-Key	Tape & Reel		Panasonic
(DC)	(µF)	Size	Code	Part No.	10	100	500	Part No.	Size	Pricing	Part No.
6.3	3.3	A	Y	PCS1335CT-ND	.43	.38	.30	PCS1335TR-ND	2,000	168.00/M	ECS-TOJY335R
	4.7	A	Y	PCS1475CT-ND	.45	.39	.31	PCS1475TR-ND	2,000	175.00/M	ECS-TOJY475R
	6.8	A	Y	PCS1685CT-ND	.47	.42	.33	PCS1685TR-ND	2,000	185.00/M	ECS-TOJY685R
	10	A	Y	PCS1106CT-ND	.52	.46	.36	PCS1106TR-ND	2,000	204.00/M	ECS-TOJY106R
	15	B	X	PCS1156CT-ND	.61	.53	.42	PCS1156TR-ND	2,000	239.00/M	ECS-TOJX156R
	15	A	Y	P11303CT-ND	.54	.47	.37	P11303TR-ND	2,000	211.00/M	ECS-T0JY156R
	22	A	Y	P11304CT-ND	.85	.75	.59	P11304TR-ND	2,000	335.00/M	ECS-T0JY226R
	22	B	X	PCS1226CT-ND	.63	.55	.43	PCS1226TR-ND	2,000	245.00/M	ECS-TOJX226R
	33	C	C	PCS1336CT-ND	1.17	1.02	.81	PCS1336TR-ND	750	366.75	ECS-TOJC336R
	47	B	X	P11305CT-ND	.80	.70	.56	P11305TR-ND	2,000	316.00/M	ECS-T0JX476R
	47	D	D	PCS1476CT-ND	1.41	1.24	.98	PCS1476TR-ND	750	443.25	ECS-TOJD476R
	68	C	C	P11306CT-ND	1.17	1.02	.81	P11306TR-ND	750	366.75	ECS-T0JC686R
	68	D	D	PCS1686CT-ND	1.56	1.37	1.08	PCS1686TR-ND	750	489.75	ECS-TOJD686R
	100	D	D	P11307CT-ND	1.65	1.44	1.14	P11307TR-ND	750	517.50	ECS-T0JD107R
	220	D	D	P11308CT-ND	2.26	1.97	1.56	P11308TR-ND	750	709.50	ECS-T0JD227R
10	2.2	A	Y	PCS2225CT-ND	.43	.38	.30	PCS2225TR-ND	2,000	168.00/M	ECS-T1AY225R
	3.3	A	Y	PCS2335CT-ND	.44	.38	.30	PCS2335TR-ND	2,000	172.00/M	ECS-T1AY335R
	4.7	A	Y	PCS2475CT-ND	.48	.42	.33	PCS2475TR-ND	2,000	189.00/M	ECS-T1AY475R
	10	A	Y	P11309CT-ND	.55	.48	.38	P11309TR-ND	2,000	215.00/M	ECS-T1AY106R
	10	B	X	PCS2106CT-ND	.61	.53	.42	PCS2106TR-ND	2,000	239.00/M	ECS-T1AX106R
	15	B	X	PCS2156CT-ND	.63	.55	.43	PCS2156TR-ND	2,000	245.00/M	ECS-T1AX156R
	22	B	X	P11310CT-ND	.71	.62	.49	P11310TR-ND	2,000	280.00/M	ECS-T1AX226R
	22	C	C	PCS2226CT-ND	1.14	.99	.78	PCS2226TR-ND	750	356.25	ECS-T1AC226R
	33	B	X	P11311CT-ND	.81	.71	.56	P11311TR-ND	2,000	319.00/M	ECS-T1AX336R
	33	D	D	PCS2336CT-ND	1.41	1.24	.98	PCS2336TR-ND	750	443.25	ECS-T1AD336R
	47	C	C	P11312CT-ND	1.23	1.08	.85	P11312TR-ND	750	386.25	ECS-T1AC476R
	47	D	D	PCS2476CT-ND	1.53	1.34	1.06	PCS2476TR-ND	750	480.75	ECS-T1AD476R
	100	D	D	P11313CT-ND	1.71	1.50	1.18	P11313TR-ND	750	537.75	ECS-T1AD107R
	150	D	D	P11314CT-ND	2.14	1.87	1.48	P11314TR-ND	750	673.50	ECS-T1AD157R
16	0.68	A	Y	PCS3684CT-ND	.43	.38	.30	PCS3684TR-ND	2,000	168.00/M	ECS-T1CY684R
	1.0	A	Y	PCS3105CT-ND	.43	.38	.30	PCS3105TR-ND	2,000	168.00/M	ECS-T1CY105R
	1.5	A	Y	PCS3155CT-ND	.43	.38	.30	PCS3155TR-ND	2,000	168.00/M	ECS-T1CY155R
	2.2	A	Y	PCS3225CT-ND	.44	.38	.30	PCS3225TR-ND	2,000	172.00/M	ECS-T1CY225R
	3.3	A	Y	PCS3335CT-ND	.48	.42	.33	PCS3335TR-ND	2,000	189.00/M	ECS-T1CY335R
	4.7	A	Y	PCS3475CT-ND	.52	.46	.36	PCS3475TR-ND	2,000	204.00/M	ECS-T1CY475R
	6.8	A	Y	P11315CT-ND	.57	.50	.39	P11315TR-ND	2,000	223.00/M	ECS-T1CY685R
	6.8	B	X	PCS3685CT-ND	.66	.58	.46	PCS3685TR-ND	2,000	259.00/M	ECS-T1CX685R
	10	B	X	PCS3106CT-ND	.63	.55	.43	PCS3106TR-ND	2,000	245.00/M	ECS-T1CX106R
	15	B	X	P11316CT-ND	.71	.62	.49	P11316TR-ND	2,000	280.00/M	ECS-T1CX156R
	15	C	C	PCS3156CT-ND	1.14	.99	.78	PCS3156TR-ND	750	356.25	ECS-T1CC156R
	22	C	C	P11317CT-ND	1.23	1.08	.85	P11317TR-ND	750	386.25	ECS-T1CC226R
	22	D	D	PCS3226CT-ND	1.41	1.24	.98	PCS3226TR-ND	750	443.25	ECS-T1CD226R
	33	C	C	P11318CT-ND	1.23	1.08	.85	P11318TR-ND	750	386.25	ECS-T1CC336R
	33	D	D	PCS3336CT-ND	1.53	1.34	1.06	PCS3336TR-ND	750	480.75	ECS-T1CD336R
	47	D	D	P11319CT-ND	1.65	1.44	1.14	P11319TR-ND	750	517.50	ECS-T1CD476R
	68	D	D	P11320CT-ND	1.71	1.50	1.18	P11320TR-ND	750	537.75	ECS-T1CD686R
20	0.68	A	Y	PCS4684CT-ND	.43	.38	.30	PCS4684TR-ND	2,000	168.00/M	ECS-T1DY684R
	1.5	A	Y	PCS4155CT-ND	.44	.38	.30	PCS4155TR-ND	2,000	172.00/M	ECS-T1DY155R
	2.2	B	X	PCS4225CT-ND	.62	.54	.43	PCS4225TR-ND	2,000	244.00/M	ECS-T1DX225R
	3.3	A	Y	P11321CT-ND	.52	.46	.36	P11321TR-ND	2,000	204.00/M	ECS-T1DY335R
	3.3	B	X	PCS4335CT-ND	.59	.51	.41	PCS4335TR-ND	2,000	230.00/M	ECS-T1DX335R
	4.7	A	Y	P11322CT-ND	.57	.50	.39	P11322TR-ND	2,000	223.00/M	ECS-T1DY475R
	4.7	B	X	PCS4475CT-ND	.61	.53	.42	PCS4475TR-ND	2,000	239.00/M	ECS-T1DX475R
	6.8	B	X	P11323CT-ND	.63	.55	.43	P11323TR-ND	2,000	245.00/M	ECS-T1DX685R
	6.8	C	C	PCS4685CT-ND	1.06	.92	.73	PCS4685TR-ND	750	331.50	ECS-T1DC685R
	10	B	X	P11324CT-ND	.71	.62	.49	P11324TR-ND	2,000	280.00/M	ECS-T1DX106R
	10	C	C	PCS4106CT-ND	1.14	.99	.78	PCS4106TR-ND	750	356.25	ECS-T1DC106R
	15	C	C	P11325CT-ND	1.23	1.08	.85	P11325TR-ND	750	386.25	ECS-T1DC156R
	15	D	D	PCS4156CT-ND	1.41	1.24	.98	PCS4156TR-ND	750	443.25	ECS-T1DD156R
	22	C	C	P11326CT-ND	1.54	1.34	1.06	P11326TR-ND	750	482.25	ECS-T1DC226R
	22	D	D	PCS4226CT-ND	1.52	1.33	1.05	PCS4226TR-ND	750	476.25	ECS-T1DD226R
	33	D	D	P11327CT-ND	1.65	1.44	1.14	P11327TR-ND	750	517.50	ECS-T1DD336R
25	0.47	A	Y	PCS5474CT-ND	.44	.38	.30	PCS5474TR-ND	2,000	172.00/M	ECS-T1EY474R
	1.0	A	Y	PCS5105CT-ND	.44	.38	.30	PCS5105TR-ND	2,000	172.00/M	ECS-T1EY105R
	1.5	A	Y	P11328CT-ND	.48	.42	.33	P11328TR-ND	2,000	189.00/M	ECS-T1EY155R
	1.5	B	X	PCS5155CT-ND	.59	.51	.41	PCS5155TR-ND	2,000	230.00/M	ECS-T1EX155R
	2.2	A	Y	P11329CT-ND	.57	.50	.39	P11329TR-ND	2,000	223.00/M	ECS-T1EY225R
	2.2	B	X	PCS5225CT-ND	.61	.53	.42	PCS5225TR-ND	2,000	239.00/M	ECS-T1EX225R
	3.3	B	X	PCS5335CT-ND	.61	.53	.42	PCS5335TR-ND	2,000	239.00/M	ECS-T1EX335R
	4.7	B	X	P11330CT-ND	.62	.54	.43	P11330TR-ND	2,000	242.00/M	ECS-T1EX475R
	4.7	C	C	PCS5475CT-ND	1.07	.94	.74	PCS5475TR-ND	750	336.75	ECS-T1EC475R
	6.8	C	C	PCS5685CT-ND	1.17	1.02	.81	PCS5685TR-ND	750	366.75	ECS-T1EC685R
	10	C	C	P11331CT-ND	1.19	1.04	.82	P11331TR-ND	750	373.50	ECS-T1EC106R
	10	D	D	PCS5106CT-ND	1.41	1.23	.97	PCS5106TR-ND	750	441.00	ECS-T1ED106R
	15	D	D	PCS5156CT-ND	1.58	1.38	1.09	PCS5156TR-ND	750	495.75	ECS-T1ED156R
	22	D	D	PCS5226CT-ND	1.62	1.41	1.12	PCS5226TR-ND	750	507.75	ECS-T1ED226R
35	.1	A	Y	PCS6104CT-ND	.45	.39	.31	PCS6104TR-ND	2,000	175.00/M	ECS-T1VY104R
	.15	A	Y	PCS6154CT-ND	.45	.39	.31	PCS6154TR-ND	2,000	175.00/M	ECS-T1VY154R
	.22	A	Y	PCS6224CT-ND	.43	.38	.30	PCS6224TR-ND	2,000	168.00/M	ECS-T1VY224R
	.33	A	Y	PCS6334CT-ND	.43	.38	.30	PCS6334TR-ND	2,000	168.00/M	ECS-T1VY334R
	.47	A	Y	PCS6474CT-ND	.43	.38	.30	PCS6474TR-ND	2,000	168.00/M	ECS-T1VY474R
	.68	A	Y	PCS6684CT-ND	.44	.38	.30	PCS6684TR-ND	2,000	172.00/M	ECS-T1VY684R
	1.0	A	Y	P11332CT-ND	.48	.42	.33	P11332TR-ND	2,000	189.00/M	ECS-T1VY105R
	1.0	B	X	PCS6105CT-ND	.59	.51	.41	PCS6105TR-ND	2,000	230.00/M	ECS-T1VX105R
	1.5	B	X	PCS6155CT-ND	.61	.53	.42	PCS6155TR-ND	2,000	239.00/M	ECS-T1VX155R
	2.2	B	X	PCS6225CT-ND	.61	.53	.42	PCS6225TR-ND	2,000	239.00/M	ECS-T1VX225R
	3.3	B	X	P11333CT-ND	.62	.54	.43	P11333TR-ND	2,000	242.00/M	ECS-T1VX335R
	3.3	C	C	PCS6335CT-ND	1.07	.94	.74	PCS6335TR-ND	2,000	336.75	ECS-T1VC335R
	4.7	C	C	PCS6475CT-ND	1.16	1.02	.80	PCS6475TR-ND	750	364.50	ECS-T1VC475R
	6.8	C	C	P11334CT-ND	1.19	1.04	.82	P11334TR-ND	750	373.50	ECS-T1VC685R
	6.8	D	D	PCS6685CT-ND	1.41	1.23	.97	PCS6685TR-ND	750	441.00	ECS-T1VD685R
	10	D	D	PCS6106CT-ND	1.58	1.38	1.09	PCS6106TR-ND	750	495.75	ECS-T1VD106R
	15	D	D	P11335CT-ND	1.62	1.41	1.12	P11335TR-ND	750	507.75	ECS-T1VD156R

Panasonic® TES Series

Tantalum Electrolytic Chip Capacitors

Features: • Ultra miniature sizes • Low profile 1.2mm max. height

Specifications: • **Operating Temperature Range:** –55°C to +125°C • **Rated Working Voltage Range:** 2.5 to 20VDC • **Nominal Capacitance Range:** 0.1 to 4.7 µF • **Capacitance Tolerance:** ±20% (120Hz, +20°) • **Leakage Current:** I ≤ 0.01CV or 0.5 (µA), whichever is greater measured after 2 minutes application of rated working voltage at +20°C • **tan ∂:** 0.04 max. for ≤ 3.3µF, 0.08 max. for 2.5W.V., 0.10 max. for Z size • **Characteristics at High and Low Temperature:**

-55°C	**Capacitance Change**	±12% of Initial Measured Value at +20°C
+125°C	**Leakage Current**	≤12.5 Times of Initial Specified Value
	Capacitance Change	±15% of Initial Measured Value at +20°C

Moisture Resistance: • **Test conditions — Relative humidity:** 90-95% without load • **Ambient temperature:** +40°C • **Duration:** 500 hours. **Post test requirements at +20°C:** • **Leakage current:** ≤ Initial specified value • **Capacitance change:** ±10% of initial measured value • **tan ∂:** ≤ Initial specified value • **Endurance:** Test Conditions

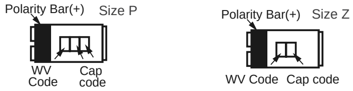
Conditions / Item	Derating	Rating
Duration	2000 Hours	2000 Hours
Ambient Temperature	+125°C	+85°C
Applied Voltage	Derated Working Voltage	Rated Working Voltage
Source Impedance	1Ω/V	1Ω/V

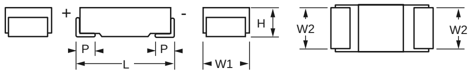
Derating voltage at +125°C

Working Voltage [V] DC	2.5	4	6.3	10	16	20
Derating Voltage [V] DC	1.6	2.5	4	6.3	10	13

Post Test Requirements at +20°C: • **Leakage Current:** ≤125% of initial specified value • **Capacitance Change:** ±10% of initial measured value • **tan ∂:** ≤ Initial specified value

• **Shelf Life:** Test conditions: — Duration 2000 hours, Ambient Temperature +125°C, No applied voltage. Post test requirements at +20°C, same limits for "Endurance" • **Solder Heat Resistance:** The capacitor shall withstand dipping into solder bath for 5 ± 1 seconds at 260 ± 5°C.





Size Code	L ± 0.2	W1 ± 0.2	H max.	P	W2 ± 0.1
Z	2.0	1.25	1.2	0.5 ± 0.2	0.9
P	3.2	1.6	1.2	0.8 ± 0.3	1.2

W.V. (D.C.)	Cap. (µF)	Size Code	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing		Panasonic Part No.
				10	100	500		3,000	6,000	
4	2.2	Z	PCS0255CCT-ND	.72	.63	.50	PCS0255CTR-ND	283.00/M	267.00/M	ECS-T0GZ225R
	2.2	P	PCS0255BCT-ND	.74	.65	.51	PCS0255BTR-ND	292.00/M	275.00/M	ECS-T0GP225R
	3.3	P	PCS0335BCT-ND	.74	.65	.51	PCS0335BTR-ND	292.00/M	275.00/M	ECS-T0GP335R
	22	Z	P11336CT-ND	.80	.70	.55	P11336TR-ND	315.00/M	297.00/M	ECS-T0GZ226R
6.3	1.5	Z	PCS1155CCT-ND	.72	.63	.50	PCS1155CTR-ND	283.00/M	267.00/M	ECS-T0JZ155R
	1.5	P	PCS1155BCT-ND	.74	.65	.51	PCS1155BTR-ND	292.00/M	275.00/M	ECS-T0JP155R
	2.2	P	PCS1225BCT-ND	.74	.65	.51	PCS1225BTR-ND	292.00/M	275.00/M	ECS-T0JP225R
	1.0	P	PCS2105BCT-ND	.90	.78	.62	PCS2105BTR-ND	352.00/M	332.00/M	ECS-T1AP105R
	10	Z	P11337CT-ND	.77	.68	.54	P11337TR-ND	304.00/M	287.00/M	ECS-T0JZ106R
10	1.0	Z	PCS2105CCT-ND	.72	.63	.50	PCS2105CTR-ND	283.00/M	267.00/M	ECS-T1AZ105R
	1.5	P	PCS2155BCT-ND	.74	.65	.51	—	—	—	ECS-T1AP155R
	2.2	Z	P11338CT-ND	.71	.62	.49	P11338TR-ND	277.00/M	261.00/M	ECS-T1AZ225R
	3.3	Z	P11339CT-ND	.73	.64	.50	P11339TR-ND	285.00/M	269.00/M	ECS-T1AZ335R
	4.7	Z	P11340CT-ND	.75	.66	.52	P11340TR-ND	296.00/M	279.00/M	ECS-T1AZ475R
16	0.68	P	PCS3684BCT-ND	.74	.65	.51	PCS3684BTR-ND	292.00/M	275.00/M	ECS-T1CP684R
	0.68	Z	PCS3684CCT-ND	.72	.63	.50	PCS3684CTR-ND	283.00/M	267.00/M	ECS-T1CZ684R
	1.0	P	PCS3105BCT-ND	.84	.74	.58	PCS3105BTR-ND	331.00/M	313.00/M	ECS-T1CP105R
	1.0	Z	P11341CT-ND	.68	.59	.47	P11341TR-ND	266.00/M	251.00/M	ECS-T1CZ105R
20	0.10	P	PCS4104BCT-ND	.74	.65	.51	PCS4104BTR-ND	292.00/M	275.00/M	ECS-T1DP104R
	0.15	P	PCS4154BCT-ND	.74	.65	.51	PCS4154BTR-ND	292.00/M	275.00/M	ECS-T1DP154R
	0.22	P	PCS4224BCT-ND	.74	.65	.51	PCS4224BTR-ND	292.00/M	275.00/M	ECS-T1DP224R
	0.33	P	PCS4334BCT-ND	.74	.65	.51	PCS4334BTR-ND	292.00/M	275.00/M	ECS-T1DP334R
	0.47	P	PCS4474BCT-ND	.74	.65	.51	—	—	—	ECS-T1DP474R
	0.68	P	PCS4684BCT-ND	.74	.65	.51	PCS4684BTR-ND	292.00/M	275.00/M	ECS-T1DP684R

TEL Series

Features: • Low ESR

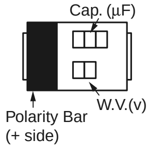
Specifications: • **Category Temperature Range:** -55 to + 125°C • **Capacitance Tolerance:** ± 20% (120Hz/+20°C) • **DC Leakage Current:** 1<0.01CV or 0.5(µA) after 2 minutes application of rated working voltage at 20°C. (Whichever is the greater) • **Resistance to Soldering Heat:** The capacitor shall withstand dipping into solder for 5±1 seconds at +260±5°C

Moisture Resistance: After 500 hours exposure at +40°C and 90 to 95% R.H. without load, the capacitor shall meet the following limits.

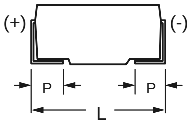
Capacitance Change	± 10% of the Initial Measured Value
D.F.	< Initial Specified Value
DC Leakage Current	< Initial Specified Value

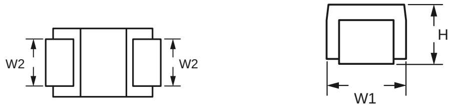
Endurance: After 2000 hours application of rated DC working voltage at + 85°C or derated voltage at +125°C, the capacitor shall meet the following limits.

Capacitance Change	± 10% of the Initial Measured Value
D.F.	< Initial Specified Value
DC Leakage Current	< 125% of Initial Specified Value



(for 6.3W.V. abbreviated to 6V)





EIA Code	Size Code	L±0.2	W1±0.2	W2±0.1	H±0.2	P±0.3
6032	C	6.0	3.2	2.2	2.5	1.3
7343	D	7.3	4.3	2.4	2.8	1.3

W.V. (D.C.)	Cap. (µF)	Size Code	D.F. (120Hz) (+20° C)	L.C. (µA)	ESR (100kHz) (ohms)	Ripple Cur. (100kHz) (+20°C) (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing		Panasonic Part No.
								10	100	500		750	1,500	
6.3	100	C	0.08	6.3	0.3	606	P11284CT-ND	2.17	1.90	1.50	P11284TR-ND	681.75	881.00/M	EEJ-L0JC107R
	150	D	0.08	9.5	0.1	1225	P11285CT-ND	2.97	2.60	2.05	P11285TR-ND	934.50	1208.00/M	EEJ-L0JD157R
	220	D	0.12	13.9	0.1	1225	P11286CT-ND	3.13	2.74	2.16	P11286TR-ND	984.75	1273.00/M	EEJ-L0JD227R
10	47	C	0.06	4.7	0.4	524	P11287CT-ND	2.01	1.76	1.39	P11287TR-ND	631.50	816.00/M	EEJ-L1AC476R
	100	D	0.08	10	0.1	1225	P11288CT-ND	2.97	2.60	2.05	P11288TR-ND	934.50	1208.00/M	EEJ-L1AD107R
	150	D	0.10	15	0.1	1225	P11289CT-ND	3.13	2.74	2.16	P11289TR-ND	984.75	1273.00/M	EEJ-L1AD157R
16	33	C	0.06	5.3	0.4	524	P11290CT-ND	2.01	1.76	1.39	P11290TR-ND	631.50	816.00/M	EEJ-L1CC336R
	47	D	0.06	7.6	0.15	1000	P11291CT-ND	2.97	2.60	2.05	P11291TR-ND	934.50	1208.00/M	EEJ-L1CD476R
20	10	C	0.06	2	0.45	494	P11292CT-ND	2.01	1.76	1.39	P11292TR-ND	631.50	816.00/M	EEJ-L1DC106R
	15	D	0.06	3	0.45	494	P11293CT-ND	2.17	1.90	1.50	P11293TR-ND	681.75	881.00/M	EEJ-L1DC156R
	33	D	0.06	6.6	0.2	866	P11294CT-ND	2.97	2.60	2.05	P11294TR-ND	934.50	1208.00/M	EEJ-L1DD336R
25	10	C	0.06	2.5	0.45	494	P11295CT-ND	2.17	1.90	1.50	P11295TR-ND	681.75	881.00/M	EEJ-L1EC106R
	15	D	0.06	3.8	0.25	775	P11296CT-ND	2.97	2.60	2.05	P11296TR-ND	934.50	1208.00/M	EEJ-L1ED156R
	22	D	0.06	5.5	0.2	866	P11297CT-ND	3.13	2.74	2.16	P11297TR-ND	984.75	1273.00/M	EEJ-L1ED226R
	33	D	0.08	8.3	0.2	866	P11298CT-ND	3.30	2.88	2.27	P11298TR-ND	1035.75	1338.00/M	EEJ-L1ED336R
35	6.8	C	0.06	2.4	0.6	428	P11299CT-ND	2.17	1.90	1.50	P11299TR-ND	681.75	881.00/M	EEJ-L1VC685R
	10	D	0.06	3.5	0.3	707	P11300CT-ND	2.97	2.60	2.05	P11300TR-ND	934.50	1208.00/M	EEJ-L1VD106R
	15	D	0.06	5.3	0.3	707	P11301CT-ND	3.13	2.74	2.16	P11301TR-ND	984.75	1273.00/M	EEJ-L1VD156R
	22	D	0.08	7.7	0.3	866	P11302CT-ND	3.30	2.88	2.27	P11302TR-ND	1035.75	1338.00/M	EEJ-L1VD226R

Panasonic® TEH Series

Resin Molded Chip Tantalum Electrolytic Capacitors

Specifications

- **Operating temperature range:** —55 to + 125°C
- **Rated working voltage range:** 6.3, 10, 16, 25 and 35V DC
- **Rated capacitance range:** .068 ~ 68µF
- **Capacitance tolerance:** ±20% at 120Hz, +20°C
- **DC leakage current:** I = 0.01CV or 0.5µA max. whichever is greater. DC leakage current shall be measured after 2 minutes application or rated working voltage at +20°C.
- **tan ∂:** less than 3.3µF — 0.04 max.; 4.7 ~ 68µF — 0.06 max.
- **Stability at low and high temperature:**

	–55°C	+125°C
Cap. change	±12% max.	±15% max.
DC leakage current	0.1CV or 5µA whichever is greater.	

- **Surge voltage test:**

Rated VDC	6.3	10	16	25	35
Surge VDC	8	13	20	30	44

Capacitor shall withstand the surge test voltage applied through a 1000 ohm resistor at the rate of 1/2 minute "ON," 5-1/2 minutes "OFF," for 1000 successive test cycles at +85°C. After the test, capacitor shall meet the following limits.

Cap. change	Within ±5% of the initial measured value.
DC leakage current	Less than initial specified value.
tan δ	Less than initial specified value.

- **Humidity test:**

Capacitor shall be tested for 500 hours at –40°C and 90–95% R.H. without load. After the test, capacitor shall meet the following limits.

Cap. change	Within ±10% of the initial measured value.
DC leakage current	Less than initial specified value.
tan δ	Less than initial specified value.

- **Load life test:**

After 2000 hours application of DC rated working voltage at +85°C, or derated voltage at +125°C, the capacitor shall meet the following limits.

W.V.	Derated voltage
6.3	4
10	6.3
16	10
25	16
35	22

Cap. change	Within ±10% of the initial measured value.
DC leakage current	Less than 125% of the initial specified value.
tan δ	Less than initial specified value.

- **Reverse voltage.**

Reverse voltage shall be less than 5% of the rated working voltage or 1 volt, whichever is smaller.

Rated working voltage	Reverse voltage
6.3 V	–0.32 max.
10 V	–0.50 max.
16 V	–0.80 max.
25 V	–1.00 max.
35 V	–1.00 max.

Test condition
Temperature: 85 ±2°C
Charging voltage: DC voltage as shown above.
Test time: 500 ±12 hours through the resistance or more than 3 times of charging voltage.
(Example: 1V — more than 3Q)

After this test, capacitor shall meet the value after load life test.

- **Cleaning Solvents:**

The organic solvents such as Freon, 1,1,1-Trichlorethane are acceptable for 5 minutes cleaning. However, Acid and Alkaline solvents shall not be used.

- **Solder heat resistance:**

The capacitor shall withstand dipping into solder bath for 5 ±1 sec at 260 ±5°C.

- **Solderability:**

Lead tabs shall be uniformly covered with solder uniformity on the following conditions.

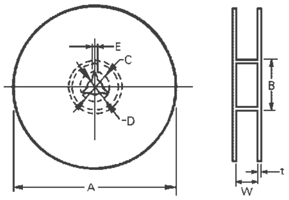
Solder bath temp ....230 ± 5°C
Solder dipping time ....2 ±0.5 sec. after dipping flux.

- **Maximum pressure:**

When the capacitor is taken and mounted by the mounting machine, pressure given to the capacitor shall not exceed 500g at 1.5mm (0.059 inch) diameter of the tip.

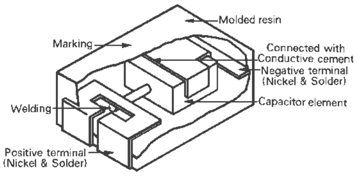
PANASONIC TE CROSS REFERENCES

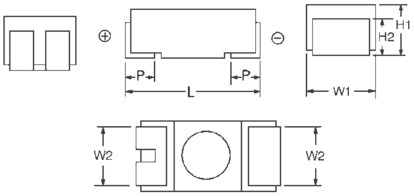
Sprague: 293D; **Kemet:** T491; **Mepco:** 49MC; **NEC:** SV; **Nichicon:** F93; **Hitachi:** TMC; **Matsuo:** 267.



Dimensions (mm)

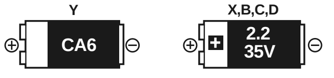
	ϕA ±2	ϕB Min.	C ±0.5	D ±0.8	E ±0.5	W ±1.5	t ±0.5
12mm tape	178	50	13.0	21.0	2.0	14.0	2.0
8mm tape	178	50	13.0	21.0	2.0	10.0	2.0

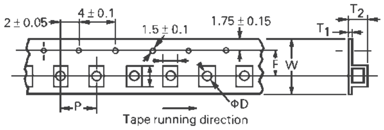

Molded resin
Marking
Connected with Conductive cement
Negative terminal (Nickel & Solder)
Welding
Capacitor element
Positive terminal (Nickel & Solder)



Dimensions (mm)

EIA Size	Size Code	L ±0.2	W_1 ±0.2	W_2 ±0.1	H_1 ±0.2	H_2 Typ.	P ±0.3
A	Y	3.2	1.6	1.2	1.6	1.0	0.8
B	X	3.5	2.8	2.2	1.9	1.2	0.8
C	C	6.0	3.2	2.2	2.5	1.5	1.3
D	D	7.3	4.3	2.4	2.8	1.6	1.3





Dimensions (mm)

Size Code	W ±0.3	A ±0.2	B ±0.2	P ±0.1	T_1 ±0.2	F ±0.1	T_2	ϕD ±0.1
Y	8.0	1.9	3.5	4.0	1.9	3.5	0.2	1.1
X		3.3	3.8	4.0	2.1			
C	12.0	3.7	6.4	8.0	3.0	5.5	0.3	1.6
D		4.7	7.7	8.0	3.3			

Packing Quantity	
Size Y, X	2,000 pieces/reel
Size C, D	750 pieces/reel

W.V. (D.C.)	Cap. (µF)	EIA Size	Size Code	Digi-Key Part No.	Cut Tape Pricing		Digi-Key Part No.	Tape & Reel Pricing					Panasonic Part No.
					10	100		750	1,500	2,000	4,000	6,000	
6.3	3.3	A	Y	PCT1335CT-ND	4.70	41.04	PCT1335TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H0JY335R
	6.8	B	X	PCT1685CT-ND	6.31	55.10	PCT1685TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H0JX685R
	15	C	C	PCT1156CT-ND	11.09	96.90	PCT1156TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H0JC156R
	22	C	C	PCT1226CT-ND	11.66	101.84	PCT1226TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H0JC226R
	47	D	D	PCT1476CT-ND	15.36	134.14	PCT1476TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H0JD476R
	68	D	D	PCT1686CT-ND	17.01	148.58	PCT1686TR-ND	535.50	692.00/M	—	—	633.00/M	ECS-H0JD686R
10	2.2	A	Y	PCT2225CT-ND	4.70	41.04	PCT2225TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1AY225R
	4.7	B	X	PCT2475CT-ND	6.31	55.10	PCT2475TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H1AX475R
	10	C	C	PCT2106CT-ND	11.09	96.90	PCT2106TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H1AC106R
	15	C	C	PCT2156CT-ND	11.66	101.84	PCT2156TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H1AC156R
	33	D	D	PCT2336CT-ND	15.36	134.14	PCT2336TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1AD336R
	47	D	D	PCT2476CT-ND	16.79	146.68	PCT2476TR-ND	528.75	683.00/M	—	—	625.00/M	ECS-H1AD476R
16	0.68	A	Y	PCT3684CT-ND	4.70	41.04	PCT3684TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1CY684R
	1.0	A	Y	PCT3105CT-ND	4.70	41.04	PCT3105TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1CY105R
	1.5	A	Y	PCT3155CT-ND	4.70	41.04	PCT3155TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1CY155R
	2.2	B	X	PCT3225CT-ND	6.31	55.10	PCT3225TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H1CX225R
	3.3	B	X	PCT3335CT-ND	6.39	55.86	PCT3335TR-ND	—	—	252.00/M	242.00/M	238.00/M	ECS-H1CX335R
	4.7	C	C	PCT3475CT-ND	11.35	99.18	PCT3475TR-ND	357.00	462.00/M	—	—	423.00/M	ECS-H1CC475R
	6.8	C	C	PCT3685CT-ND	11.09	96.90	PCT3685TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H1CC685R
	10	C	C	PCT3106CT-ND	11.66	101.84	PCT3106TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H1CC106R
	22	D	D	PCT3226CT-ND	15.36	134.14	PCT3226TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1CD226R
	33	D	D	PCT3336CT-ND	16.79	146.68	PCT3336TR-ND	528.75	683.00/M	—	—	625.00/M	ECS-H1CD336R
20	0.68	A	Y	PCT4684CT-ND	4.70	41.04	PCT4684TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1DY684R
	2.2	B	X	PCT4225CT-ND	6.31	55.10	PCT4225TR-ND	—	—	249.00/M	238.00/M	235.00/M	ECS-H1DX225R
	4.7	C	C	PCT4475CT-ND	11.09	96.90	PCT4475TR-ND	348.75	451.00/M	—	—	413.00/M	ECS-H1DC475R
	6.8	C	C	PCT4685CT-ND	11.66	101.84	PCT4685TR-ND	366.75	474.00/M	—	—	434.00/M	ECS-H1DC685R
	15	D	D	PCT4156CT-ND	15.36	134.14	PCT4156TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1DD156R
25	0.47	A	Y	PCT5474CT-ND	4.79	41.80	PCT5474TR-ND	—	—	189.00/M	181.00/M	178.00/M	ECS-H1EY474R
	1.5	B	X	PCT5155CT-ND	6.39	55.86	PCT5155TR-ND	—	—	252.00/M	242.00/M	238.00/M	ECS-H1EX155R
	3.3	C	C	PCT5335CT-ND	9.40	82.08	PCT5335TR-ND	295.50	382.00/M	—	—	350.00/M	ECS-H1EC335R
	10	D	D	PCT5106CT-ND	15.36	134.14	PCT5106TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1ED106R
35	.1	A	Y	PCT6104CT-ND	4.96	43.32	PCT6104TR-ND	—	—	196.00/M	187.00/M	185.00/M	ECS-H1VY104R
	.15	A	Y	PCT6154CT-ND	4.96	43.32	PCT6154TR-ND	—	—	196.00/M	187.00/M	185.00/M	ECS-H1VY154R
	.22	A	Y	PCT6224CT-ND	4.70	41.04	PCT6224TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1VY224R
	.33	A	Y	PCT6334CT-ND	4.70	41.04	PCT6334TR-ND	—	—	185.00/M	178.00/M	175.00/M	ECS-H1VY334R
	.47	B	X	PCT6474CT-ND	6.79	59.28	PCT6474TR-ND	—	—	268.00/M	256.00/M	253.00/M	ECS-H1VX474R
	0.68	B	X	PCT6684CT-ND	6.79	59.28	PCT6684TR-ND	—	—	268.00/M	256.00/M	253.00/M	ECS-H1VX684R
	1.0	B	X	PCT6105CT-ND	6.39	55.86	PCT6105TR-ND	—	—	252.00/M	242.00/M	238.00/M	ECS-H1VX105R
	1.5	C	C	PCT6155CT-ND	11.01	96.14	PCT6155TR-ND	346.50	448.00/M	—	—	410.00/M	ECS-H1VC155R
	2.2	C	C	PCT6225CT-ND	11.22	98.04	PCT6225TR-ND	353.25	456.00/M	—	—	418.00/M	ECS-H1VC225R
	3.3	D	D	PCT6335CT-ND	13.53	118.18	PCT6335TR-ND	426.00	550.00/M	—	—	504.00/M	ECS-H1VD335R
	4.7	D	D	PCT6475CT-ND	13.79	120.46	PCT6475TR-ND	434.25	561.00/M	—	—	513.00/M	ECS-H1VD475R
	6.8	D	D	PCT6685CT-ND	15.36	134.14	PCT6685TR-ND	483.00	625.00/M	—	—	572.00/M	ECS-H1VD685R

KEMET

Tantalum Dipped / Radial Capacitors

T350 and T356 “UltraDip II” Series

The KEMET “UltraDip II” Series, miniature dipped solid tantalum capacitors, provide the designer with the advantage of compactness plus low leakage and low DF performance characteristics for filtering, bypassing, coupling, blocking and RC timing circuits.

The plastic case provides a tough barrier coating and maintains precision of lead wire spacing within ±0.015 inch.

All case sizes are printed with capacitance, voltage, polarity and vendor identification, these self-insulating cases are resistant to shock and vibration.

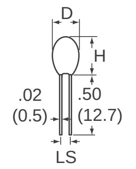
The gold color epoxy permits Laser marking with outstanding permanency and legibility.

Solid tantalum devices exhibit no degradation failure mode during shelf storage.

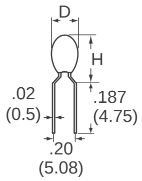
These capacitors exhibit low DCL, ESR and Impedance and have excellent temperature stability. *The ESR values provided are for reference only.*

Capacitance Tolerance (%): ±10

T350 Series



T356 Series



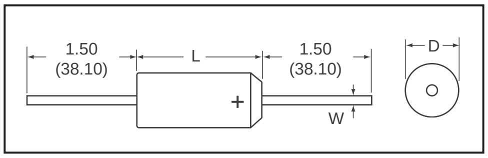
WV (DC)	Cap. (µF)	ESR @100K Hz @ +25°C	D.C.L. µA@ 25°C	Max. DF % @25°C 120Hz	Dim. (mm)			Digi-Key Part No.	Price Each			Kemet Part No.
					D	H	LS		1	10	100	
T350 Series												
6	4.7	10	0.5	5	4.5	7.1	2.54	399-1377-ND	.39	.34	.27	T350A475K006AS
	6.8	8	0.5	5	4.5	7.1	2.54	399-1378-ND	.48	.42	.33	T350A685K006AS
	10	6	0.5	6	4.5	7.6	2.54	399-1379-ND	.59	.51	.40	T350B106K006AS
	15	5	0.7	6	5.0	8.4	2.54	399-1380-ND	.66	.57	.45	T350C156K006AS
	22	3.7	1.1	6	5.0	8.6	2.54	399-1381-ND	.78	.68	.53	T350D226K006AS
	33	3	1.6	6	5.5	8.9	2.54	399-1382-ND	.83	.72	.56	T350E336K006AS
	47	2	2.3	6	6.0	9.9	2.54	399-1383-ND	.93	.80	.63	T350F476K006AS
	68	1.8	3.3	6	6.3	10.2	2.54	399-1384-ND	1.10	.95	.75	T350G686K006AS
	100	1.6	4.8	8	7.6	10.2	2.54	399-1385-ND	2.60	2.23	1.75	T350H107K006AS
	150	0.9	7.2	8	8.4	12.7	5.08	399-1386-ND	3.33	2.86	2.24	T350J157K006AS
10	2.2	13	0.5	5	4.5	7.1	2.54	399-1387-ND	.48	.42	.33	T350A225K010AS
	3.3	10	0.5	5	4.5	7.1	2.54	399-1388-ND	.48	.42	.33	T350A335K010AS
	4.7	8	0.5	5	4.5	7.1	2.54	399-1389-ND	.48	.42	.33	T350A475K010AS
	6.8	6	0.5	5	4.5	7.6	2.54	399-1390-ND	.66	.57	.45	T350B685K010AS
	10	5	0.8	6	5.0	8.4	2.54	399-1391-ND	.66	.57	.45	T350C106K010AS
	15	3.7	1.2	6	5.5	8.9	2.54	399-1392-ND	.78	.68	.53	T350E156K010AS
	22	2.7	1.8	6	5.5	8.9	2.54	399-1393-ND	.88	.76	.60	T350E226K010AS
	33	2.1	2.6	6	6.0	9.9	2.54	399-1394-ND	1.03	.89	.70	T350F336K010AS
	47	1.7	3.8	6	7.6	10.2	2.54	399-1395-ND	1.81	1.56	1.22	T350H476K010AS
	68	1.3	5.4	6	7.6	10.2	2.54	399-1396-ND	2.60	2.23	1.75	T350H686K010AS
	100	1	8.0	8	8.4	12.7	5.08	399-1397-ND	3.33	2.86	2.24	T350J107K010AS
16	1.5	10	0.5	5	4.5	7.1	2.54	399-1398-ND	.48	.42	.33	T350A155K016AS
	2.2	8	0.5	5	4.5	7.1	2.54	399-1399-ND	.48	.42	.33	T350A225K016AS
	3.3	6	0.5	5	4.5	7.1	2.54	399-1400-ND	.48	.42	.33	T350A335K016AS
	4.7	5	0.6	5	4.5	7.6	2.54	399-1401-ND	.59	.51	.40	T350B475K016AS
	6.8	4	0.9	5	5.0	8.4	2.54	399-1402-ND	.69	.59	.47	T350C685K016AS
	10	3.2	1.3	6	5.5	8.9	2.54	399-1403-ND	.71	.61	.48	T350E106K016AS
	15	2.5	1.8	6	5.5	8.9	2.54	399-1404-ND	.93	.80	.63	T350E156K016AS
	22	2	2.6	6	6.0	9.9	2.54	399-1405-ND	.93	.80	.63	T350F226K016AS
	33	1.6	4.0	6	7.6	10.2	2.54	399-1406-ND	1.81	1.56	1.22	T350H336K016AS
	47	1.3	5.6	6	8.4	12.7	5.08	399-1407-ND	2.77	2.38	1.87	T350J476K016AS
	68	1	8.2	6	8.9	13.5	5.08	399-1408-ND	3.33	2.86	2.24	T350K686K016AS
	100	0.8	10.0	8	8.9	16.0	5.08	399-1409-ND	7.14	6.12	4.80	T350L107K016AS
20	10	2.9	1.6	6	5.5	8.9	2.54	399-1410-ND	.88	.76	.60	T350E106K020AS
	100	0.6	10.0	8	10.2	17.0	5.08	399-1411-ND	8.18	7.02	5.50	T350M107K020AS
25	1.0	10	0.5	3	4.5	7.1	2.54	399-1412-ND	.48	.42	.33	T350A105K025AS
	1.5	8	0.5	5	4.5	7.1	2.54	399-1413-ND	.48	.42	.33	T350A155K025AS
	2.2	6	0.5	5	4.5	7.6	2.54	399-1414-ND	.59	.51	.40	T350B225K025AS
	3.3	5	0.7	5	4.5	7.6	2.54	399-1415-ND	.59	.51	.40	T350B335K025AS
	4.7	4	0.9	5	5.0	8.4	2.54	399-1416-ND	.71	.61	.48	T350C475K025AS
	6.8	3.1	1.4	5	5.5	8.9	2.54	399-1417-ND	.93	.80	.63	T350E685K025AS
	10	2.5	2.0	6	5.5	8.9	2.54	399-1418-ND	.93	.80	.63	T350E106K025AS
	15	2	3.0	6	6.3	10.2	2.54	399-1419-ND	2.00	1.71	1.34	T350G156K025AS
	22	1.5	4.4	6	7.6	10.2	2.54	399-1420-ND	2.60	2.23	1.75	T350H226K025AS
	33	1.2	6.6	6	8.4	12.7	5.08	399-1421-ND	3.33	2.86	2.24	T350J336K025AS
	47	1	9.4	6	8.9	13.5	5.08	399-1422-ND	5.07	4.35	3.41	T350K476K025AS
35	.10	26	0.5	3	4.5	7.1	2.54	399-1423-ND	.48	.42	.33	T350A104K035AS
	.15	21	0.5	3	4.5	7.1	2.54	399-1424-ND	.48	.42	.33	T350A154K035AS
	.22	17	0.5	3	4.5	7.1	2.54	399-1425-ND	.48	.42	.33	T350A224K035AS
	.33	15	0.5	3	4.5	7.1	2.54	399-1426-ND	.48	.42	.33	T350A334K035AS
	.47	13	0.5	3	4.5	7.1	2.54	399-1427-ND	.48	.42	.33	T350A474K035AS
	.68	10	0.5	3	4.5	7.1	2.54	399-1428-ND	.48	.42	.33	T350A684K035AS
	1.0	8	0.5	3	4.5	7.1	2.54	399-1429-ND	.48	.42	.33	T350A105K035AS
	1.5	6	0.5	5	4.5	7.6	2.54	399-1430-ND	.54	.47	.37	T350B155K035AS
	2.2	5	0.6	5	5.0	8.4	2.54	399-1431-ND	.59	.51	.40	T350C225K035AS
	3.3	4	0.9	5	5.0	8.6	2.54	399-1432-ND	.74	.63	.50	T350D335K035AS
	4.7	3	1.3	5	5.5	8.9	2.54	399-1433-ND	.78	.68	.53	T350E475K035AS
	6.8	2.5	1.9	5	6.0	9.9	2.54	399-1434-ND	.88	.76	.60	T350F685K035AS
	10	2	2.8	6	6.3	10.2	2.54	399-1435-ND	1.50	1.29	1.01	T350G106K035AS
	15	1.6	4.2	6	8.4	12.7	5.08	399-1436-ND	3.14	2.69	2.11	T350J156K035AS
	22	1.3	6.2	6	8.9	13.5	5.08	399-1437-ND	3.14	2.69	2.11	T350K226K035AS
	47	0.8	10.0	6	10.2	17.0	5.08	399-1438-ND	8.18	7.02	5.50	T350M476K035AS
50	.10	26	0.5	3	4.5	7.1	2.54	399-1439-ND	.53	.45	.36	T350A104K050AS
	.15	21	0.5	3	4.5	7.1	2.54	399-1440-ND	.53	.45	.36	T350A154K050AS
	.22	17	0.5	3	4.5	7.1	2.54	399-1441-ND	.53	.45	.36	T350A224K050AS
	.33	15	0.5	3	4.5	7.1	2.54	399-1442-ND	.53	.45	.36	T350A334K050AS
	.47	13	0.5	3	4.5	7.6	2.54	399-1443-ND	.59	.51	.40	T350B474K050AS
	.68	10	0.5	3	4.5	7.6	2.54	399-1444-ND	.59	.51	.40	T350B684K050AS
	1.0	8	0.5	3	4.5	7.6	2.54	399-1445-ND	.59	.51	.40	T350B105K050AS
	1.5	5	0.6	5	5.5	8.9	2.54	399-1446-ND	.88	.76	.60	T350E155K050AS
	2.2	3.5	0.9	5	5.5	8.9	2.54	399-1447-ND	.93	.80	.63	T350E225K050AS
	3.3	3	1.3	5	6.0	9.9	2.54	399-1448-ND	1.03	.89	.70	T350F335K050AS
	4.7	2.5	1.9	5	6.3	10.2	2.54	399-1449-ND	1.29	1.11	.87	T350G475K050AS
	6.8	2	2.7	5	8.4	12.7	5.08	399-1450-ND	3.02	2.60	2.04	T350J685K050AS
	10	1.6	4.0	6	8.9	13.5	5.08	399-1451-ND	5.32	4.56	3.58	T350K106K050AS

WV (DC)	Cap. (µF)	ESR @100K Hz @ +25°C	D.C.L. µA@ 25°C	Max. DF % @25°C 120Hz	Dim. (mm)			Digi-Key Part No.	Price Each			Kemet Part No.
					D	H	LS		1	10	100	
T356 Series												
6	4.7	10	0.5	5	4.5	8.6	5.08	399-1302-ND	.39	.34	.27	T356A475K006AS
	6.8	8	0.5	5	4.5	8.6	5.08	399-1303-ND	.48	.42	.33	T356A685K006AS
	10	6	0.5	6	4.5	8.9	5.08	399-1304-ND	.59	.51	.40	T356B106K006AS
	15	5	0.7	6	5.0	9.6	5.08	399-1305-ND	.66	.57	.45	T356C156K006AS
	22	3.7	1.1	6	5.0	9.9	5.08	399-1306-ND	.78	.68	.53	T356D226K006AS
	33	3	1.6	6	5.5	10.2	5.08	399-1307-ND	.83	.72	.56	T356E336K006AS
	47	2	2.3	6	6.0	11.2	5.08	399-1308-ND	.93	.80	.63	T356F476K006AS
	68	1.8	3.3	6	6.3	11.4	5.08	399-1309-ND	1.10	.95	.75	T356G686K006AS
	100	1.6	4.8	8	7.6	11.9	5.08	399-1310-ND	2.60	2.23	1.75	T356H107K006AS
	150	0.9	7.2	8	8.4	14.0	5.08	399-1311-ND	3.33	2.86	2.24	T356J157K006AS
10	2.2	13	0.5	5	4.5	8.6	5.08	399-1312-ND	.48	.42	.33	T356A225K010AS
	3.3	10	0.5	5	4.5	8.6	5.08	399-1313-ND	.48	.42	.33	T356A335K010AS
	4.7	8	0.5	5	4.5	8.6	5.08	399-1314-ND	.48	.42	.33	T356A475K010AS
	6.8	6	0.5	5	4.5	8.9	5.08	399-1315-ND	.66	.57	.45	T356B685K010AS
	10	5	0.8	6	5.0	9.6	5.08	399-1316-ND	.66	.57	.45	T356C106K010AS
	15	3.7	1.2	6	5.5	10.2	5.08	399-1317-ND	.78	.68	.53	T356E156K010AS
	22	2.7	1.8	6	5.5	10.2	5.08	399-1318-ND	.88	.76	.60	T356E226K010AS
	33	2.1	2.6	6	6.0	11.2	5.08	399-1319-ND	1.03	.89	.70	T356F336K010AS
	47	1.7	3.8	6	7.6	11.9	5.08	399-1320-ND	1.81	1.56	1.22	T356H476K010AS
	68	1.3	5.4	6	7.6	11.9	5.08	399-1321-ND	2.60	2.23	1.75	T356H686K010AS
	100	1	8.0	8	8.4	14.0	5.08	399-1322-ND	3.33	2.86	2.24	T356J107K010AS
16	1.5	10	0.5	5	4.5	8.6	5.08	399-1323-ND	.48	.42	.33	T356A155K016AS
	2.2	8	0.5	5	4.5	8.6	5.08	399-1324-ND	.48	.42	.33	T356A225K016AS
	3.3	6	0.5	5	4.5	8.6	5.08	399-1325-ND	.48	.42	.33	T356A335K016AS
	4.7	5	0.6	5	4.5	8.9	5.08	399-1326-ND	.59	.51	.40	T356B475K016AS
	6.8	4	0.9	5	5.0	9.6	5.08	399-1327-ND	.69	.59	.47	T356C685K016AS
	10	3.2	1.3	6	5.5	10.2	5.08	399-1328-ND	.71	.61	.48	T356E106K016AS
	15	2.5	1.8	6	5.5	10.2	5.08	399-1329-ND	.93	.80	.63	T356E156K016AS
	22	2	2.6	6	6.0	11.2	5.08	399-1330-ND	.93	.80	.63	T356F226K016AS
	33	1.6	4.0	6	7.6	11.9	5.08	399-1331-ND	1.81	1.56	1.22	T356H336K016AS
	47	1.3	5.6	6	8.4	14.0	5.08	399-1332-ND	2.77	2.38	1.87	T356J476K016AS
	68	1	8.2	6	8.9	15.5	5.08	399-1333-ND	3.33	2.86	2.24	T356K686K016AS
	100	0.8	10.0	8	8.9	18.1	5.08	399-1334-ND	7.14	6.12	4.80	T356L107K016AS
20	10	2.9	1.6	6	5.5	10.2	5.08	399-1335-ND	.88	.76	.60	T356E106K020AS
	100	0.6	10.0	8	10.2	18.8	5.08	399-1336-ND	8.18	7.02	5.50	T356M107K020AS
25	1.0	10	0.5	3	4.5	8.6	5.08	399-1337-ND	.48	.42	.33	T356A105K025AS
	1.5	8	0.5	5	4.5	8.6	5.08	399-1338-ND	.48	.42	.33	T356A155K025AS
	2.2	6	0.5	5	4.5	8.9	5.08	399-1339-ND	.59	.51	.40	T356B225K025AS
	3.3	5	0.7	5	4.5	8.9	5.08	399-1340-ND	.59	.51	.40	T356B335K025AS
	4.7	4	0.9	5	5.0	9.6	5.08	399-1341-ND	.71	.61	.48	T356C475K025AS
	6.8	3.1	1.4	5	5.5	10.2	5.08	399-1342-ND	.93	.80	.63	T356E685K025AS
	10	2.5	2.0	6	5.5	10.2	5.08	399-1343-ND	.93	.80	.63	T356E106K025AS
	15	2	3.0	6	6.3	11.4	5.08	399-1344-ND	2.00	1.71	1.34	T356G156K025AS
	22	1.5	4.4	6	7.6	11.9	5.08	399-1345-ND	2.60	2.23	1.75	T356H226K025AS
	33	1.2	6.6	6	8.4	14.0	5.08	399-1346-ND	3.33	2.86	2.24	T356J336K025AS
	47	1	9.4	6	8.9	15.5	5.08	399-1347-ND	5.07	4.35	3.41	T356K476K025AS
35	.10	26	0.5	3	4.5	8.6	5.08	399-1348-ND	.48	.42	.33	T356A104K035AS
	.15	21	0.5	3	4.5	8.6	5.08	399-1349-ND	.48	.42	.33	T356A154K035AS
	.22	17	0.5	3	4.5	8.6	5.08	399-1350-ND	.48	.42	.33	T356A224K035AS
	.33	15	0.5	3	4.5	8.6	5.08	399-1351-ND	.48	.42	.33	T356A334K035AS
	.47	13	0.5	3	4.5	8.6	5.08	399-1352-ND	.48	.42	.33	T356A474K035AS
	.68	10	0.5	3	4.5	8.6	5.08	399-1353-ND	.48	.42	.33	T356A684K035AS
	1.0	8	0.5	3	4.5	8.6	5.08	399-1354-ND	.48	.42	.33	T356A105K035AS
	1.5	6	0.5	5	4.5	8.9	5.08	399-1355-ND	.54	.47	.37	T356B155K035AS
	2.2	5	0.6	5	5.0	9.6	5.08	399-1356-ND	.59	.51	.40	T356C225K035AS
	3.3	4	0.9	5	5.0	9.9	5.08	399-1357-ND	.74	.63	.50	T356D335K035AS
	4.7	3	1.3	5	5.5	10.2	5.08	399-1358-ND	.78	.68	.53	T356E475K035AS
	6.8	2.5	1.9	5	6.0	11.2	5.08	399-1359-ND	.88	.76	.60	T356F685K035AS
	10	2	2.8	6	6.3	11.4	5.08	399-1360-ND	1.50	1.29	1.01	T356G106K035AS
	15	1.6	4.2	6	8.4	14.0	5.08	399-1361-ND	3.14	2.69	2.11	T356J156K035AS
	22	1.3	6.2	6	8.9	15.5	5.08	399-1362-ND	3.14	2.69	2.11	T356K226K035AS
	47	0.8	10.0	6	10.2	18.8	5.08	399-1363-ND	8.18	7.02	5.50	T356M476K035AS
50	.10	26	0.5	3	4.5	8.6	5.08	399-1364-ND	.53	.45	.36	T356A104K050AS
	.15	21	0.5	3	4.5	8.6	5.08	399-1365-ND	.53	.45	.36	T356A154K050AS
	.22	17	0.5	3	4.5	8.6	5.08	399-1366-ND	.53	.45	.36	T356A224K050AS
	.33	15	0.5	3	4.5	8.6	5.08	399-1367-ND	.53	.45	.36	T356A334K050AS
	.47	13	0.5	3	4.5	8.9	5.08	399-1368-ND	.59	.51	.40	T356B474K050AS
	.68	10	0.5	3	4.5	8.9	5.08	399-1369-ND	.59	.51	.40	T356B684K050AS
	1.0	8	0.5	3	4.5	8.9	5.08	399-1370-ND	.59	.51	.40	T356B105K050AS
	1.5	5	0.6	5	5.5	10.2	5.08	399-1371-ND	.88	.76	.60	T356E155K050AS
	2.2	3.5	0.9	5	5.5	10.2	5.08	399-1372-ND	.93	.80	.63	T356E225K050AS
	3.3	3	1.3	5	6.0	11.2	5.08	399-1373-ND	1.03	.89	.70	T356F335K050AS
	4.7	2.5	1.9	5	6.3	11.4	5.08	399-1374-ND	1.29	1.11	.87	T356G475K050AS
	6.8	2	2.7	5	8.4	14.0	5.08	399-1375-ND	3.02	2.60	2.04	T356J685K050AS
	10	1.6	4.0	6	8.9	15.5	5.08	399-1376-ND	5.32	4.56	3.58	T356K106K050AS

KEMET

Molded Axial Tantalum Capacitors

T322 Series



The KEMET T322 Series offers a complete line of extended range molded solid tantalum capacitors. These capacitors offer an extremely high capacitance-to-volume ratio while still maintaining excellent performance characteristics.

Applications: Decoupling, blocking, bypassing and filtering in commercial computers, data processing, communications, and other electronic equipment. The low ESR/impedance at high frequencies offered by this capacitor is especially suitable for decoupling required by high speed computers. *The ESR values provided are for reference only.* **Capacitance Tolerance (%):** ±10

WV (DC)	Cap. (µF)	ESR @ 100K Hz @ +25°C	D.C. Leakage µA@25°C	Max. DF %@25°C 120Hz	Dimensions (mm)			Digi-Key Part No.	Price Each			Kemet Part No.
					D	L	W		1	10	100	
6	3.3	13	0.5	4	2.4	6.6	.51	399-1452-ND	.65	.56	.44	T322A335K006AS
	4.7	10	0.5	4	2.4	6.6	.51	399-1453-ND	.65	.56	.44	T322A475K006AS
	6.8	8	0.5	6	2.8	7.4	.51	399-1454-ND	.71	.61	.48	T322B685K006AS
	10	6	0.5	6	2.8	7.4	.51	399-1455-ND	.71	.61	.48	T322B106K006AS
	15	5	0.7	6	2.8	7.4	.51	399-1456-ND	.71	.61	.48	T322B156K006AS
	22	3.7	1.1	6	4.6	8.8	.51	399-1457-ND	1.36	1.17	.92	T322C226K006AS
	33	3.0	1.5	6	4.6	8.8	.51	399-1458-ND	1.36	1.17	.92	T322C336K006AS
	47	2.0	2.3	6	4.6	10.7	.51	399-1459-ND	1.52	1.31	1.02	T322D476K006AS
	68	1.8	3.3	6	4.6	10.7	.51	399-1460-ND	1.64	1.41	1.11	T322D686K006AS
	100	1.6	4.8	8	7.1	13.5	.64	399-1461-ND	4.14	3.55	2.78	T322E107K006AS
	150	0.9	5.0	8	7.1	13.5	.64	399-1462-ND	4.14	3.55	2.78	T322E157K006AS
	220	0.9	10.0	8	7.1	13.5	.64	399-1463-ND	5.51	4.73	3.70	T322E227K006AS
	330	0.7	10.0	8	7.6	18.0	.64	399-1464-ND	10.96	9.40	7.37	T322F337K006AS
10	2.2	13	0.5	4	2.4	6.6	.51	399-1465-ND	.65	.56	.44	T322A225K010AS
	3.3	10	0.5	4	2.4	6.6	.51	399-1466-ND	.65	.56	.44	T322A335K010AS
	4.7	8	0.5	4	2.8	7.4	.51	399-1467-ND	.71	.61	.48	T322B475K010AS
	6.8	6	0.5	6	2.8	7.4	.51	399-1468-ND	.71	.61	.48	T322B685K010AS
	10	5	0.8	6	2.8	7.4	.51	399-1469-ND	.71	.61	.48	T322B106K010AS
	15	3.7	1.2	6	4.6	8.8	.51	399-1470-ND	1.36	1.17	.92	T322C156K010AS
	22	2.7	1.5	6	4.6	8.8	.51	399-1471-ND	1.36	1.17	.92	T322C226K010AS
	33	2.1	2.6	6	4.6	10.7	.51	399-1472-ND	1.52	1.31	1.02	T322D336K010AS
	47	1.7	3.8	6	4.6	10.7	.51	399-1473-ND	1.64	1.41	1.11	T322D476K010AS
	68	1.3	5.0	6	7.1	13.5	.64	399-1474-ND	4.14	3.55	2.78	T322E686K010AS
	100	1.0	8.0	8	7.1	13.5	.64	399-1475-ND	4.14	3.55	2.78	T322E107K010AS
	150	0.8	10.0	8	7.1	13.5	.64	399-1476-ND	5.51	4.73	3.70	T322E157K010AS
	220	0.6	10.0	8	7.6	18.0	.64	399-1477-ND	10.96	9.40	7.37	T322F227K010AS
15	1.5	10	0.5	4	2.4	6.6	.51	399-1478-ND	.65	.56	.44	T322A155K015AS
	2.2	8	0.5	4	2.4	6.6	.51	399-1479-ND	.65	.56	.44	T322A225K015AS
	3.3	6	0.5	4	2.8	7.4	.51	399-1480-ND	.71	.61	.48	T322B335K015AS
	4.7	5	0.6	4	2.8	7.4	.51	399-1481-ND	.80	.69	.54	T322B475K015AS
	6.8	4	0.8	6	2.8	7.4	.51	399-1482-ND	.80	.69	.54	T322B685K015AS
	10	3.2	1.2	6	4.6	8.8	.51	399-1483-ND	1.36	1.17	.92	T322C106K015AS
	15	2.5	1.5	6	4.6	8.8	.51	399-1484-ND	1.36	1.17	.92	T322C156K015AS
	22	2.0	2.6	6	4.6	10.7	.51	399-1485-ND	1.52	1.31	1.02	T322D226K015AS
	33	1.6	4.0	6	4.6	10.7	.51	399-1486-ND	1.64	1.41	1.11	T322D336K015AS
	47	1.3	5.0	6	7.1	13.5	.64	399-1487-ND	4.14	3.55	2.78	T322E476K015AS
	56	1.3	6.7	6	7.1	13.5	.64	399-1488-ND	4.14	3.55	2.78	T322E566K015AS
	68	1.0	8.2	6	7.1	13.5	.64	399-1489-ND	4.14	3.55	2.78	T322E686K015AS
	100	0.8	10.0	8	7.1	13.5	.64	399-1490-ND	5.51	4.73	3.70	T322E107K015AS
	150	0.6	10.0	8	7.6	18.0	.64	399-1491-ND	10.96	9.40	7.37	T322F157K015AS
20	1.0	10	0.5	4	2.4	6.6	.51	399-1492-ND	.65	.56	.44	T322A105K020AS
	1.5	9	0.5	4	2.4	6.6	.51	399-1493-ND	.65	.56	.44	T322A155K020AS
	2.2	7	0.5	4	2.8	7.4	.51	399-1494-ND	.71	.61	.48	T322B225K020AS
	3.3	5.5	0.5	4	2.8	7.4	.51	399-1495-ND	.71	.61	.48	T322B335K020AS
	4.7	4.5	0.8	4	2.8	7.4	.51	399-1496-ND	.80	.69	.54	T322B475K020AS
	10	2.9	1.6	6	4.6	8.8	.51	399-1497-ND	1.36	1.17	.92	T322C106K020AS
	15	2.3	2.4	6	4.6	10.7	.51	399-1498-ND	1.52	1.31	1.02	T322D156K020AS
	22	1.8	3.5	6	4.6	10.7	.51	399-1499-ND	1.64	1.41	1.11	T322D226K020AS
	33	1.4	5.0	6	7.1	13.5	.64	399-1500-ND	4.14	3.55	2.78	T322E336K020AS
	47	1.2	7.5	6	7.1	13.5	.64	399-1501-ND	4.14	3.55	2.78	T322E476K020AS
	68	0.9	10.0	6	7.1	13.5	.64	399-1502-ND	5.51	4.73	3.70	T322E686K020AS
	100	0.6	10.0	8	7.6	18.0	.64	399-1503-ND	10.96	9.40	7.37	T322F107K020AS
25	.47	16	0.5	3	2.4	6.6	.51	399-1504-ND	.65	.56	.44	T322A474K025AS
	.68	12	0.5	3	2.4	6.6	.51	399-1505-ND	.65	.56	.44	T322A684K025AS
	1.0	10	0.5	3	2.4	6.6	.51	399-1506-ND	.65	.56	.44	T322A105K025AS
	1.5	8	0.5	3	2.8	7.4	.51	399-1507-ND	.80	.69	.54	T322B155K025AS
	2.2	6	0.5	3	2.8	7.4	.51	399-1508-ND	.80	.69	.54	T322B225K025AS
	3.3	5	0.7	3	2.8	7.4	.51	399-1509-ND	.80	.69	.54	T322B335K025AS
	4.7	4	0.9	4	4.6	8.8	.51	399-1510-ND	1.36	1.17	.92	T322C475K025AS
	6.8	3.1	1.4	4	4.6	8.8	.51	399-1511-ND	1.36	1.17	.92	T322C685K025AS
	15	2	3.0	4	4.6	10.7	.51	399-1512-ND	1.64	1.41	1.11	T322D156K025AS
	22	1.5	4.4	6	7.1	13.5	.64	399-1513-ND	4.14	3.55	2.78	T322E226K025AS
	33	1.2	6.6	6	7.1	13.5	.64	399-1514-ND	4.14	3.55	2.78	T322E336K025AS
	47	1.0	9.4	6	7.1	13.5	.64	399-1515-ND	5.51	4.73	3.70	T322E476K025AS
	68	0.8	10.0	6	7.6	18.0	.64	399-1516-ND	10.96	9.40	7.37	T322F686K025AS
35	.10	26	0.5	3	2.4	6.6	.51	399-1517-ND	.65	.56	.44	T322A104K035AS
	.15	21	0.5	3	2.4	6.6	.51	399-1518-ND	.65	.56	.44	T322A154K035AS
	.22	17	0.5	3	2.4	6.6	.51	399-1519-ND	.65	.56	.44	T322A224K035AS
	.33	15	0.5	3	2.4	6.6	.51	399-1520-ND	.65	.56	.44	T322A334K035AS
	.47	13	0.5	3	2.4	6.6	.51	399-1521-ND	.65	.56	.44	T322A474K035AS
	.68	10	0.5	3	2.8	7.4	.51	399-1522-ND	.71	.61	.48	T322B684K035AS
	1.0	8	0.5	3	2.8	7.4	.51	399-1523-ND	.71	.61	.48	T322B105K035AS
	1.5	6	0.5	3	2.8	7.4	.51	399-1524-ND	.80	.69	.54	T322B155K035AS
	2.2	5	0.6	3	4.6	8.8	.51	399-1525-ND	1.36	1.17	.92	T322C225K035AS
	3.3	4	0.9	4	4.6	8.8	.51	399-1526-ND	1.36	1.17	.92	T322C335K035AS
	4.7	3	1.3	4	4.6	8.8	.51	399-1527-ND	1.36	1.17	.92	T322C475K035AS
	6.8	2.5	1.9	4	4.6	10.7	.51	399-1528-ND	1.52	1.31	1.02	T322D685K035AS
	10	2	2.8	4	4.6	10.7	.51	399-1529-ND	1.64	1.41	1.11	T322D106K035AS
	15	1.6	4.2	6	7.1	13.5	.64	399-1530-ND	4.14	3.55	2.78	T322E156K035AS
	22	1.3	6.2	6	7.1	13.5	.64	399-1531-ND	4.14	3.55	2.78	T322E226K035AS
	33	1	9.2	6	7.1	13.5	.64	399-1532-ND	5.51	4.73	3.70	T322E336K035AS
	47	0.8	10.0	6	7.6	18.0	.64	399-1533-ND	10.96	9.40	7.37	T322F476K035AS
50	.10	26	0.5	3	2.4	6.6	.51	399-1534-ND	.74	.63	.50	T322A104K050AS
	.15	21	0.5	3	2.4	6.6	.51	399-1535-ND	.74	.63	.50	T322A154K050AS
	.22	17	0.5	3	2.4	6.6	.51	399-1536-ND	.74	.63	.50	T322A224K050AS
	.33	15	0.5	3	2.8	7.4	.51	399-1537-ND	.87	.75	.59	T322B334K050AS
	.47	13	0.5	3	2.8	7.4	.51	399-1538-ND	.87	.75	.59	T322B474K050AS
	.68	10	0.5	3	2.8	7.4	.51	399-1539-ND	.87	.75	.59	T322B684K050AS
	1.0	8	0.5	3	2.8	7.4	.51	399-1540-ND	.96	.83	.65	T322B105K050AS
	1.5	5	0.6	4	4.6	8.8	.51	399-1541-ND	1.54	1.33	1.04	T322C155K050AS
	2.2	3.5	0.9	4	4.6	8.8	.51	399-1542-ND	1.54	1.33	1.04	T322C225K050AS
	3.3	3	1.3	4	4.6	10.7	.51	399-1543-ND	2.06	1.77	1.39	T322D335K050AS
	4.7	2.5	1.9	4	4.6	10.7	.51	399-1544-ND	2.06	1.77	1.39	T322D475K050AS
	6.8	2	2.7	4	7.1	13.5	.64	399-1545-ND	4.54	3.90	3.06	T322E685K050AS
	10	1.6	4.0	6	7.1	13.5	.64	399-1546-ND	4.54	3.90	3.06	T322E106K050AS
	15	1.2	6.0	6	7.6	18.0	.64	399-1547-ND	13.62	11.68	9.15	T322F156K050AS
	22	1	8.8	6	7.6	18.0	.64	399-1548-ND	13.62	11.68	9.15	T322F226K050AS

KEMET Surface Mount Tantalum Chip Capacitors

KEMET's family of solid tantalum chip capacitors are designed and manufactured with the requirements of surface mount technology in mind. These devices extend the advantages of solid tantalum technology to today's surface mount circuit applications.

Operating Temperature Range: -55°C to +125°C

T491 Series — Industrial

The leading choice in surface mount designs. This product meets or exceeds the requirements of EIA standard 535BAAC. The physical outline and dimensions of this series conform to this global standard.

This product was designed specifically for highly automated surface mount processes and equipment.

T494 Series — Low ESR, Industrial Grade

The T494 is a low ESR series that is available in all the same case sizes and CV ratings as the T491 Series. The T494 offers low ESR performance with the economy of an industrial grade device. This series is targeted for output filtering.

T495 Series — Low ESR, Surge Robust

Designed primarily for output filtering in switch-mode power supplies and DC-to-DC converters, the standard CV T495 values are an excellent choice for battery-to-ground input filter applications.

This series offers several important advantages: Very low ESR, high ripple current capability, excellent capacitance stability and improved ability to withstand high inrush currents.

T496 Series — Fused

KEMET also offers a "fail-safe" fused solid tantalum chip capacitor. The built-in fuse element provides excellent protection from damaging short circuit conditions in applications where high fault currents exist. Protection from costly circuit damage due to reversed installation is offered with this device.

T510 Series — Ultra-Low ESR

KEMET's T510 Series offers the industry's lowest ESR in the popular EIA 7343-43 case size. The ultra-low ESR and high ripple current capability make it an ideal choice for SMPS filtering and power decoupling.

KEMET has developed an innovative construction platform that incorporates multiple capacitor elements, in parallel, inside a single package.

T520 Series — KO-CAP Polymer Tantalum

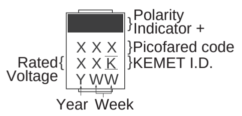
The KO-CAP in a Tantalum capacitor, with Ta anode and Ta2O5 dielectric. A conductive, organic, polymer replaces the MnO2 as the cathode plate of the capacitor. This results in very low ESR and improved cap retention at high frequency. The KO-CAP also exhibits a benign failure mode, which eliminates the ignition failures that can occur in standard MnO2 Tantalum types.

KO-CAPs may be operated at voltages up to 80% of rated voltage with equivalent or better reliability than standard tantalums operated at 50% of rated voltage.

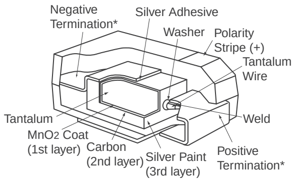
The T520 series captures the best features of multilayer ceramic caps (low ESR and high frequency cap retention), aluminum electrolytics (benign failure mode), and proven solid tantalum technology (volumetric efficiency, surface mount capability, and no wearout mechanism).

The KO-CAP can reduce component counts, eliminate through-hole assembly by replacing leaded aluminum capacitors, and offer a more cost effective solution to high-cost high-cap ceramic capacitors.

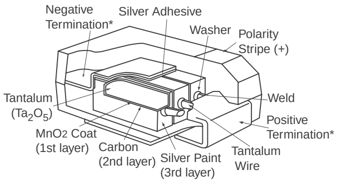
Capacitor Markings



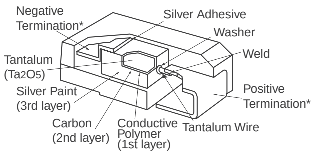
T491, T494, T495, and T496 Series



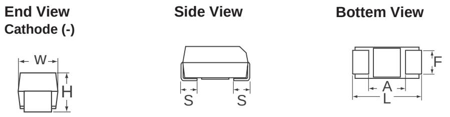
T510 Series



T520 Series



* Termination Solder Coating 90 Sn/10Pb


End View Cathode (-)

Side View

Bottom View

Size Code	EIA Code	L	W	H	F ±0.1 ±(.004)	S ±0.3 ±(.012)	A (Min.)
A	3216-18	3.2±0.2 (.126±.008)	1.6±0.2 (.063±.008)	1.6±0.2 (.063±.008)	1.2 (.047)	0.8 (.031)	0.8 (.031)
B	3528-21	3.5±0.2 (.138±.008)	2.8±0.2 (.110±.008)	1.9±0.2 (.075±.008)	2.2 (.087)	0.8 (.031)	1.1 (.043)
C	6032-28	6.0±0.3 (.236±.012)	3.2±0.3 (.126±.012)	2.5±0.3 (.098±.012)	2.2 (.087)	1.3 (.051)	2.5 (.098)
D	7343-31	7.3±0.3 (.287±.012)	4.3±0.3 (.169±.012)	2.8±0.3 (.110±.012)	2.4 (.094)	1.3 (.051)	3.8 (.150)
E	7260-38	7.3±0.3 (.287±.012)	6.0±0.3 (.236±.012)	3.6±0.2 (.142±.008)	4.1 (.161)	1.3 (.051)	3.8 (.150)
V	7343-20	7.3±0.3 (.287±.012)	4.3±0.3 (.169±.012)	2.0 (0.079)	2.4 (.094)	1.3 (.051)	3.8 (.150)
X	7343-43	7.3±0.3 (.287±.012)	4.3±0.3 (.169±.012)	4.0±0.3 (.157±.012)	2.4 (.094)	1.3 (.051)	3.8 (.150)

WV (DC)	Cap. (µF)	Cap. Tol. (%)	DC Leakage µA@+25°C Max.	DF % @+25°C 120Hz Max.	ESR Ω @+25°C 100KHz Max.	Size Code	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		Kemet Part No.
								1	10	100		Size	Pricing	
T491 Series — Industrial														
4	68	±10	2.7	6.0	0.8	D	399-1549-1-ND	1.23	1.07	.94	399-1549-2-ND	500	223.00	T491D686K004AS
	100	±20	4.0	8.0	1.0	B	399-3000-1-ND *NEW!*	.93	.81	.71	399-3000-2-ND *NEW!*	2,000	315.00/M	T491B107M004AS
	100	±20	4.0	8.0	0.8	D	399-1550-1-ND	1.23	1.07	.94	399-1550-2-ND	500	223.00	T491D107M004AS
6	10	±10	0.6	6.0	4.0	A	399-1551-1-ND	.35	.31	.27	399-1551-2-ND	2,000	119.00/M	T491A106K006AS
	10	±20	0.6	6.0	4.0	A	399-1552-1-ND	.35	.31	.27	399-1552-2-ND	2,000	119.00/M	T491A106M006AS
	10	±10	0.6	6.0	3.5	B	399-1553-1-ND	.43	.37	.33	399-1553-2-ND	2,000	145.00/M	T491B106K006AS
	22	±10	1.4	6.0	3.5	B	399-1554-1-ND	.49	.43	.37	399-1554-2-ND	2,000	165.00/M	T491B226K006AS
	22	±10	1.4	6.0	1.8	C	399-1555-1-ND	.68	.59	.52	399-1555-2-ND	500	123.00	T491C226K006AS
	47	±10	2.9	6.0	1.6	C	399-1556-1-ND	.75	.65	.57	399-1556-2-ND	500	135.50	T491C476K006AS
	68	±20	4.1	8.0	1.0	B	399-3001-1-ND *NEW!*	.93	.81	.71	399-3001-2-ND *NEW!*	2,000	315.00/M	T491B686M006AS
	68	±10	4.1	6.0	1.2	C	399-1557-1-ND	.92	.80	.70	399-1557-2-ND	500	166.50	T491C686K006AS
	68	±10	4.1	6.0	0.8	D	399-1558-1-ND	1.23	1.07	.94	399-1558-2-ND	500	223.00	T491D686K006AS
	470	±20	28.2	12.0	0.5	D	399-3002-1-ND *NEW!*	4.63	4.03	3.52	399-3002-2-ND *NEW!*	500	842.00	T491D477M006AS
10	2.2	±10	0.5	6.0	8.0	A	399-1559-1-ND	.33	.29	.25	399-1559-2-ND	2,000	111.00/M	T491A225K010AS
	3.3	±10	0.5	6.0	6.0	A	399-1560-1-ND	.33	.29	.25	399-1560-2-ND	2,000	111.00/M	T491A335K010AS
	4.7	±10	0.5	6.0	6.0	A	399-1561-1-ND	.33	.29	.25	399-1561-2-ND	2,000	111.00/M	T491A475K010AS
	4.7	±20	0.5	6.0	6.0	A	399-1562-1-ND	.33	.29	.25	399-1562-2-ND	2,000	111.00/M	T491A475M010AS
	4.7	±10	0.5	6.0	3.5	B	399-1565-1-ND	.43	.37	.33	399-1565-2-ND	2,000	145.00/M	T491B475K010AS
	4.7	±20	0.5	6.0	3.5	B	399-1566-1-ND	.43	.37	.33	399-1566-2-ND	2,000	145.00/M	T491B475M010AS
	6.8	±10	0.7	6.0	3.5	B	399-1567-1-ND	.43	.37	.33	399-1567-2-ND	2,000	145.00/M	T491B685K010AS
	10	±10	1.0	6.0	4.0	A	399-1563-1-ND	.40	.35	.31	399-1563-2-ND	2,000	134.00/M	T491A106K010AS
	10	±20	1.0	6.0	4.0	A	399-1564-1-ND	.40	.35	.31	399-1564-2-ND	2,000	134.00/M	T491A106M010AS
	10	±10	1.0	6.0	3.5	B	399-1568-1-ND	.43	.37	.33	399-1568-2-ND	2,000	145.00/M	T491B106K010AS
	10	±20	1.0	6.0	3.5	B	399-1569-1-ND	.43	.37	.33	399-1569-2-ND	2,000	145.00/M	T491B106M010AS
	10	±10	1.0	6.0	1.8	C	399-1571-1-ND	.68	.59	.52	399-1571-2-ND	500	123.00	T491C106K010AS
	15	±10	1.5	6.0	3.5	B	399-1570-1-ND	.49	.43	.37	399-1570-2-ND	2,000	165.00/M	T491B156K010AS
	15	±10	1.5	6.0	1.8	C	399-1572-1-ND	.68	.59	.52	399-1572-2-ND	500	123.00	T491C156K010AS
	22	±10	2.2	6.0	1.8	C	399-1573-1-ND	.68	.59	.52	399-1573-2-ND	500	123.00	T491C226K010AS
	33	±10	3.3	6.0	0.8	D	399-1574-1-ND	1.23	1.07	.94	399-1574-2-ND	500	223.00	T491D336K010AS
	47	±20	4.7	8.0	1.0	B	399-3003-1-ND *NEW!*	.93	.81	.71	399-3003-2-ND *NEW!*	2,000	315.00/M	T491B476M010AS
	47	±10	4.7	6.0	1.2	C	399-1575-1-ND	.92	.80	.70	399-1575-2-ND	500	166.50	T491C476K010AS
	47	±20	4.7	6.0	1.2	C	399-1576-1-ND	.92	.80	.70	399-1576-2-ND	500	166.50	T491C476M010AS
	47	±10	4.7	6.0	0.8	D	399-1577-1-ND	1.23	1.07	.94	399-1577-2-ND	500	223.00	T491D476K010AS
	47	±20	4.7	6.0	0.8	D	399-1578-1-ND	1.23	1.07	.94	399-1578-2-ND	500	223.00	T491D476M010AS
	100	±10	10.0	8.0	0.7	D	399-1579-1-ND	1.53	1.33	1.16	399-1579-2-ND	500	277.50	T491D107K010AS
	100	±20	10.0	8.0	0.7	D	399-1580-1-ND	1.53	1.33	1.16	399-1580-2-ND	500	277.50	T491D107M010AS
	150	±20	15.0	8.0	0.7	D	399-1581-1-ND	1.98	1.72	1.51	399-1581-2-ND	500	359.50	T491D157M010AS
	220	±10	22.0	8.0	0.5	X	399-1582-1-ND	4.50	3.92	3.42	399-1582-2-ND	500	819.00	T491X227K010AS
16	1.0	±10	0.5	4.0	10.0	A	399-1583-1-ND	.33	.29	.25	399-1583-2-ND	2,000	111.00/M	T491A105K016AS
	1.0	±20	0.5	4.0	10.0	A	399-1584-1-ND	.33	.29	.25	399-1584-2-ND	2,000	111.00/M	T491A105M016AS

(Continued)

WV (DC)	Cap. (µF)	Cap. Tol. (%)	DC Leakage µA@+25°C Max.	DF % @+25°C 120Hz Max.	ESR Ω @+25°C 100KHz Max.	Size Code	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		Kemet Part No.
								1	10	100		Size	Pricing	
16	1.5	±10	0.5	6.0	8.0	A	399-1585-1-ND	.33	.29	.25	399-1585-2-ND	2,000	111.00/M	T491A155K016AS
	2.2	±10	0.5	6.0	6.0	A	399-1586-1-ND	.33	.29	.25	399-1586-2-ND	2,000	111.00/M	T491A225K016AS
	3.3	±10	0.5	6.0	3.5	B	399-1589-1-ND	.43	.37	.33	399-1589-2-ND	2,000	145.00/M	T491B335K016AS
	4.7	±10	0.8	6.0	6.0	A	399-1587-1-ND	.35	.31	.27	399-1587-2-ND	2,000	119.00/M	T491A475K016AS
	4.7	±20	0.8	6.0	6.0	A	399-1588-1-ND	.35	.31	.27	399-1588-2-ND	2,000	119.00/M	T491A475M016AS
	4.7	±10	0.8	6.0	3.5	B	399-1590-1-ND	.43	.37	.33	399-1590-2-ND	2,000	145.00/M	T491B475K016AS
	4.7	±20	0.8	6.0	3.5	B	399-1591-1-ND	.43	.37	.33	399-1591-2-ND	2,000	145.00/M	T491B475M016AS
	6.8	±20	1.1	6.0	1.9	C	399-1592-1-ND	.68	.59	.52	399-1592-2-ND	500	123.00	T491C685M016AS
	10	±10	1.6	6.0	3.5	B	399-1593-1-ND	.49	.43	.37	399-1593-2-ND	2,000	165.00/M	T491B106K016AS
	10	±20	1.6	6.0	3.5	B	399-1594-1-ND	.49	.43	.37	399-1594-2-ND	2,000	165.00/M	T491B106M016AS
	10	±10	1.6	6.0	1.8	C	399-1595-1-ND	.68	.59	.52	399-1595-2-ND	500	123.00	T491C106K016AS
	10	±20	1.6	6.0	1.8	C	399-1596-1-ND	.68	.59	.52	399-1596-2-ND	500	123.00	T491C106M016AS
	22	±10	3.6	6.0	1.6	C	399-1597-1-ND	.75	.65	.57	399-1597-2-ND	500	135.50	T491C226K016AS
	22	±20	3.6	6.0	1.6	C	399-1598-1-ND	.75	.65	.57	399-1598-2-ND	500	135.50	T491C226M016AS
	22	±10	3.6	6.0	0.8	D	399-1600-1-ND	1.23	1.07	.94	399-1600-2-ND	500	223.00	T491D226K016AS
	33	±10	5.3	6.0	1.2	C	399-1599-1-ND	.92	.80	.70	399-1599-2-ND	500	166.50	T491C336K016AS
	33	±10	5.3	6.0	0.8	D	399-1601-1-ND	1.23	1.07	.94	399-1601-2-ND	500	223.00	T491D336K016AS
	33	±20	5.3	6.0	0.8	D	399-1602-1-ND	1.23	1.07	.94	399-1602-2-ND	500	223.00	T491D336M016AS
	47	±10	7.5	6.0	0.8	D	399-1603-1-ND	1.23	1.07	.94	399-1603-2-ND	500	223.00	T491D476K016AS
	100	±10	16.0	8.0	0.7	D	399-1604-1-ND	1.98	1.72	1.51	399-1604-2-ND	500	359.50	T491D107K016AS
	100	±20	16.0	8.0	0.7	D	399-1605-1-ND	1.98	1.72	1.51	399-1605-2-ND	500	359.50	T491D107M016AS
	100	±10	16.0	8.0	0.7	X	399-1606-1-ND	3.65	3.18	2.78	399-1606-2-ND	500	664.50	T491X107K016AS
	100	±20	16.0	8.0	0.7	X	399-1607-1-ND	3.65	3.18	2.78	399-1607-2-ND	500	664.50	T491X107M016AS
	150	±10	24.0	8.0	0.5	X	399-1608-1-ND	4.50	3.92	3.42	399-1608-2-ND	500	819.00	T491X157K016AS
20	1.0	±10	0.5	4.0	10.0	A	399-1609-1-ND	.33	.29	.25	399-1609-2-ND	2,000	111.00/M	T491A105K020AS
	1.0	±20	0.5	4.0	10.0	A	399-1610-1-ND	.33	.29	.25	399-1610-2-ND	2,000	111.00/M	T491A105M020AS
	2.2	±10	0.5	6.0	3.5	B	399-1611-1-ND	.43	.37	.33	399-1611-2-ND	2,000	145.00/M	T491B225K020AS
	4.7	±10	1.0	6.0	3.5	B	399-1612-1-ND	.43	.37	.33	399-1612-2-ND	2,000	145.00/M	T491B475K020AS
	6.8	±10	1.4	6.0	1.9	C	399-1613-1-ND	.68	.59	.52	399-1613-2-ND	500	123.00	T491C685K020AS
	10	±10	2.0	6.0	1.8	C	399-1614-1-ND	.68	.59	.52	399-1614-2-ND	500	123.00	T491C106K020AS
	22	±10	4.4	6.0	1.2	C	399-1615-1-ND	.92	.80	.70	399-1615-2-ND	500	166.50	T491C226K020AS
	22	±10	4.4	6.0	0.8	D	399-1616-1-ND	1.23	1.07	.94	399-1616-2-ND	500	223.00	T491D226K020AS
	22	±10	4.4	6.0	0.8	D	399-1617-1-ND	1.23	1.07	.94	399-1617-2-ND	500	223.00	T491D226M020AS
	33	±10	6.6	6.0	0.8	D	399-1618-1-ND	1.23	1.07	.94	399-1618-2-ND	500	223.00	T491D336K020AS
	47	±10	9.4	6.0	0.7	D	399-1619-1-ND	1.53	1.33	1.16	399-1619-2-ND	500	277.50	T491D476K020AS
	68	±10	13.6	8.0	0.7	D	399-1620-1-ND	3.39	2.95	2.58	399-1620-2-ND	500	616.00	T491D686K020AS
	68	±10	13.6	6.0	0.7	X	399-1621-1-ND	3.65	3.18	2.78	399-1621-2-ND	500	664.50	T491X686K020AS
	100	±20	20.0	8.0	0.5	X	399-1622-1-ND	4.50	3.92	3.42	399-1622-2-ND	500	819.00	T491X107M020AS
25	.47	±10	0.5	4.0	14.0	A	399-1623-1-ND	.33	.29	.25	399-1623-2-ND	2,000	111.00/M	T491A474K025AS
	1.0	±10	0.5	4.0	8.0	A	399-1624-1-ND	.35	.31	.27	399-1624-2-ND	2,000	119.00/M	T491A105K025AS
	1.5	±10	0.5	6.0	5.0	B	399-1625-1-ND	.43	.37	.33	399-1625-2-ND	2,000	145.00/M	T491B155K025AS
	2.2	±10	0.6	6.0	4.5	B	399-1626-1-ND	.49	.43	.37	399-1626-2-ND	2,000	165.00/M	T491B225K025AS
	2.2	±10	0.6	6.0	3.5	C	399-1627-1-ND	.68	.59	.52	399-1627-2-ND	500	123.00	T491C225K025AS
	2.2	±20	0.6	6.0	3.5	C	399-1628-1-ND	.68	.59	.52	399-1628-2-ND	500	123.00	T491C225M025AS
	4.7	±10	1.2	6.0	2.4	C	399-1629-1-ND	.68	.59	.52	399-1629-2-ND	500	123.00	T491C475K025AS
	4.7	±20	1.2	6.0	2.4	C	399-1630-1-ND	.68	.59	.52	399-1630-2-ND	500	123.00	T491C475M025AS
	6.8	±10	1.7	6.0	1.9	C	399-1631-1-ND	.68	.59	.52	399-1631-2-ND	500	123.00	T491C685K025AS
	6.8	±20	1.7	6.0	1.9	C	399-1632-1-ND	.68	.59	.52	399-1632-2-ND	500	123.00	T491C685M025AS
	10	±10	2.5	6.0	1.5	C	399-1633-1-ND	.75	.65	.57	399-1633-2-ND	500	135.50	T491C106K025AS
	10	±20	2.5	6.0	1.5	C	399-1634-1-ND	.75	.65	.57	399-1634-2-ND	500	135.50	T491C106M025AS
	10	±10	2.5	6.0	1.0	D	399-1635-1-ND	1.23	1.07	.94	399-1635-2-ND	500	223.00	T491D106K025AS
	10	±20	2.5	6.0	1.0	D	399-1636-1-ND	1.23	1.07	.94	399-1636-2-ND	500	223.00	T491D106M025AS
	15	±10	3.8	6.0	1.0	D	399-1637-1-ND	1.23	1.07	.94	399-1637-2-ND	500	223.00	T491D156K025AS
	15	±20	3.8	6.0	1.0	D	399-1638-1-ND	1.23	1.07	.94	399-1638-2-ND	500	223.00	T491D156M025AS
	22	±10	5.5	6.0	0.8	D	399-1639-1-ND	1.23	1.07	.94	399-1639-2-ND	500	223.00	T491D226K025AS
	22	±20	5.5	6.0	0.8	D	399-1640-1-ND	1.23	1.07	.94	399-1640-2-ND	500	223.00	T491D226M025AS
	33	±10	8.3	6.0	0.7	X	399-1641-1-ND	3.65	3.18	2.78	399-1641-2-ND	500	664.50	T491X336K025AS
	33	±20	8.3	6.0	0.7	X	399-1642-1-ND	3.65	3.18	2.78	399-1642-2-ND	500	664.50	T491X336M025AS
35	.10	±10	0.5	4.0	10.0	A	399-1643-1-ND	.33	.29	.25	399-1643-2-ND	2,000	111.00/M	T491A104K035AS
	.10	±20	0.5	4.0	10.0	A	399-1644-1-ND	.33	.29	.25	399-1644-2-ND	2,000	111.00/M	T491A104M035AS
	.33	±10	0.5	4.0	15.0	A	399-1645-1-ND	.33	.29	.25	399-1645-2-ND	2,000	111.00/M	T491A334K035AS
	1.0	±10	0.5	4.0	5.0	B	399-1646-1-ND	.43	.37	.33	399-1646-2-ND	2,000	145.00/M	T491B105K035AS
	1.0	±20	0.5	4.0	5.0	B	399-1647-1-ND	.43	.37	.33	399-1647-2-ND	2,000	145.00/M	T491B105M035AS
	2.2	±10	0.8	6.0	3.5	C	399-1648-1-ND	.68	.59	.52	399-1648-2-ND	500	123.00	T491C225K035AS
	3.3	±20	1.2	6.0	2.5	C	399-1649-1-ND	.68	.59	.52	399-1649-2-ND	500	123.00	T491C335M035AS
	4.7	±10	1.7	6.0	2.5	C	399-1650-1-ND	.75	.65	.57	399-1650-2-ND	500	135.50	T491C475K035AS
	4.7	±10	1.7	6.0	1.5	D	399-1651-1-ND	1.23	1.07	.94	399-1651-2-ND	500	223.00	T491D475K035AS
	6.8	±20	2.4	6.0	2.0	C	399-1652-1-ND	.92	.80	.70	399-1652-2-ND	500	166.50	T491C685M035AS
	6.8	±10	2.4	6.0	1.3	D	399-1653-1-ND	1.23	1.07	.94	399-1653-2-ND	500	223.00	T491D685K035AS
	10	±10	3.5	6.0	1.0	D	399-1654-1-ND	1.23	1.07	.94	399-1654-2-ND	500	223.00	T491D106K035AS
	10	±20	3.5	6.0	1.0	D	399-1655-1-ND	1.23	1.07	.94	399-1655-2-ND	500	223.00	T491D106M035AS
	15	±10	5.3	6.0	0.8	D	399-1656-1-ND	1.53	1.33	1.16	399-1656-2-ND	500	277.50	T491D156K035AS
	22	±10	7.7	6.0	0.7	X	399-1657-1-ND	3.65	3.18	2.78	399-1657-2-ND	500	664.50	T491X226K035AS
	22	±20	7.7	6.0	0.7	X	399-1658-1-ND	3.65	3.18	2.78	399-1658-2-ND	500	664.50	T491X226M035AS
50	.33	±20	0.5	4.0	10.0	B	399-1659-1-ND	.85	.74	.65	399-1659-2-ND	2,000	289.00/M	T491B334M050AS
	.47	±10	0.5	4.0	8.0	C	399-1660-1-ND	1.10	.96	.84	399-1660-2-ND	500	200.00	T491C474K050AS
	1.0	±10	0.5	4.0	5.5	C	399-1661-1-ND	1.10	.96	.84	399-1661-2-ND	500	200.00	T491C105K050AS
	2.2	±10	1.1	6.0	2.5	D	399-1662-1-ND	2.10	1.83	1.60	399-1662-2-ND	500	382.00	T491D225K050AS
	3.3	±20	1.7	6.0	2.0	D	399-1663-1-ND	2.10	1.83	1.60	399-1663-2-ND	500	382.00	T491D335M050AS
	4.7	±10	2.4	6.0	1.5	D	399-1664-1-ND	2.10	1.83	1.60	399-1664-2-ND	500	382.00	T491D475K050AS
T494 Series — Low ESR, Industrial Grade														
4	100	±20	4.0	8.0	1.0	B	399-3004-1-ND *NEW!*	1.39	1.21	1.06	399-3004-2-ND *NEW!*	2,000	473.00/M	T494B107M004AS
6	68	±20	4.1	8.0	1.0	B	399-3005-1-ND *NEW!*	1.39	1.21	1.06	399-3005-2-ND *NEW!*	2,000	473.00/M	T494B686M006AS
	470	±20	28.2	12.0	0.5	D	399-3006-1-ND *NEW!*	8.20	7.14	6.24	399-3006-2-ND *NEW!*	500	1492.50	T494D477M006AS
10	2.2	±10	0.5	6.0	6.0	A	399-1772-1-ND	.54	.53	.46	399-1772-2-ND	2,000	204.00/M	T494A225K010AS
	4.7	±10	0.5	6.0	1.5	B	399-1773-1-ND	.74	.72	.63	399-1773-2-ND	2,000	281.00/M	T494B475K010AS
	10	±20	1.0	6.0	0.8	B	399-1774-1-ND	.72	.70	.61	399-1774-2-ND	2,000	272.00/M	T494B106M010AS
	33	±10	3.3	6.0	2.00	B	399-1775-1-ND	1.22	1.18	1.03	399-1775-2-ND	2,000	459.00/M	T494B336K010AS
	47	±20	4.7	8.0	1.0	B	399-3007-1-ND *NEW!*	1.39	1.21	1.06	399-3007-2-ND *NEW!*	2,000	473.00/M	T494B476M010AS
	47	±10	4.7	6.0	0.30	C	399-1776-1-ND	1.46	1.42	1.24	399-1776-2-ND	500	296.00	T494C476K010AS
	100	±10	10.0	8.0	0.15	D	399-1777-1-ND	2.34	2.27	1.98	399-1777-2-ND	500	473.00	T494D107K010AS
	330	±10	33.0	10.0	0.10	X	399-1778-1-ND	9.07	8.77	7.66	399-1778-2-ND	500	1833.50	T494X337K010AS
16	10	±10	1.6	6.0	0.8	B	399-1779-1-ND	.81	.79	.69	399-1779-2-ND	2,000	306.00/M	T494B106K016AS
	22	±10	3.6	6.0	0.35	C	399-1780-1-ND	1.29	1.25	1.09	399-1780-2-ND	500	260.50	T494C226K016AS
	22	±20	3.6	6.0	0.35	C	399-1781-1-ND	1.15	1.12	.98	399-1781-2-ND	500	233.00	T494C226M016AS
	22	±10	3.6	6.0	0.25	D	399-1782-1-ND	1.96	1.90	1.66	399-1782-2-ND	500	396.50	T494D226K016AS
	150	±10	24.0	8.0	0.15	X	399-1783-1-ND	7.90	7.64	6.67	399-1783-2-ND	500	1597.00	T494X157K016AS
20	100	±20	20.0	8.0	0.15	X	399-1784-1-ND	7.49	7.24	6.33	399-1784-2-ND	500	1514.00	T494X107M020AS
25	10	±10	2.5	6.0	0.6	C	399-1785-1-ND	1.29	1.25	1.09	399-1785-2-ND	500	260.50	T494C106K025AS
	10	±20	2.5	6.0	0.6	C	399-1786-1-ND	1.15	1.12	.98	399-1786-2-ND	500	233.00	T494C106M025AS

(Continued)

WV (DC)	Cap. (µF)	Cap. Tol. (%)	DC Leakage µA@+25°C Max.	DF % @+25°C 120Hz Max.	ESR Ω @+25°C 100KHz Max.	Size Code	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		Kemet Part No.
								1	10	100		Size	Pricing	
25	10	±10	2.5	6.0	0.4	D	399-1787-1-ND	1.96	1.90	1.66	399-1787-2-ND	500	396.50	T494D106K025AS
35	4.7	±10	1.7	6.0	0.7	D	399-1788-1-ND	1.96	1.90	1.66	399-1788-2-ND	500	396.50	T494D475K035AS
	10	±20	3.5	6.0	0.4	D	399-1789-1-ND	1.90	1.84	1.61	399-1789-2-ND	500	384.50	T494D106M035AS
	22	±10	7.7	6.0	0.30	X	399-1790-1-ND	6.44	6.23	5.44	399-1790-2-ND	500	1301.50	T494X226K035AS
50	2.2	±10	1.1	6.0	0.8	D	399-1791-1-ND	2.57	2.49	2.18	399-1791-2-ND	500	520.50	T494D225K050AS
	4.7	±10	2.4	6.0	0.6	D	399-1792-1-ND	2.57	2.49	2.18	399-1792-2-ND	500	520.50	T494D475K050AS
T495 Series — Low ESR, Surge Robust														
6	330	±10	19.8	8.0	0.10	X	399-1793-1-ND	9.45	9.14	7.98	399-1793-2-ND	500	1911.00	T495X337K006AS
10	100	±10	10.0	8.0	0.10	D	399-1794-1-ND	3.60	3.48	3.04	399-1794-2-ND	500	728.00	T495D107K010AS
	220	±10	22.0	8.0	0.10	X	399-1795-1-ND	9.45	9.14	7.98	399-1795-2-ND	500	1911.00	T495X227K010AS
16	100	±10	16.0	8.0	0.10	X	399-1796-1-ND	9.23	8.92	7.79	399-1796-2-ND	500	1865.50	T495X107K016AS
	100	±20	16.0	8.0	0.10	X	399-1797-1-ND	8.10	7.83	6.84	399-1797-2-ND	500	1638.00	T495X107M016AS
20	47	±10	7.5	4.0	0.15	X	399-1798-1-ND	7.20	6.96	6.08	399-1798-2-ND	500	1456.00	T495X476K020AS
	68	±10	13.6	6.0	0.15	X	399-1799-1-ND	9.23	8.92	7.79	399-1799-2-ND	500	1865.50	T495X686K020AS
25	33	±10	6.6	4.0	0.175	X	399-1800-1-ND	7.20	6.96	6.08	399-1800-2-ND	500	1456.00	T495X336K025AS
35	22	±10	7.7	6.0	0.275	X	399-1801-1-ND	9.23	8.92	7.79	399-1801-2-ND	500	1865.50	T495X226K035AS
T496 Series — Fused														
4	330	±10	13.2	8.0	0.7	X	399-1665-1-ND	7.50	6.53	5.70	399-1665-2-ND	500	1365.00	T496X337K004AS
	330	±20	13.2	8.0	0.7	X	399-1666-1-ND	7.00	6.09	5.32	399-1666-2-ND	500	1274.00	T496X337M004AS
6	10	±10	0.6	6.0	3.5	B	399-1667-1-ND	1.80	1.57	1.37	399-1667-2-ND	2,000	612.00/M	T496B106K006AS
	10	±20	0.6	6.0	3.5	B	399-1668-1-ND	1.65	1.44	1.26	399-1668-2-ND	2,000	561.00/M	T496B106M006AS
	100	±10	6.0	8.0	0.8	D	399-1669-1-ND	3.90	3.40	2.97	399-1669-2-ND	500	710.00	T496D107K006AS
	100	±20	6.0	8.0	0.8	D	399-1670-1-ND	3.75	3.27	2.85	399-1670-2-ND	500	682.50	T496D107M006AS
	100	±10	6.0	8.0	0.9	X	399-1671-1-ND	7.00	6.09	5.32	399-1671-2-ND	500	1274.00	T496X107K006AS
	100	±20	6.0	8.0	0.9	X	399-1672-1-ND	6.50	5.66	4.94	399-1672-2-ND	500	1183.00	T496X107M006AS
10	4.7	±10	0.5	6.0	3.5	B	399-1673-1-ND	1.80	1.57	1.37	399-1673-2-ND	2,000	612.00/M	T496B475K010AS
	4.7	±20	0.5	6.0	3.5	B	399-1674-1-ND	1.65	1.44	1.26	399-1674-2-ND	2,000	561.00/M	T496B475M010AS
	22	±10	2.2	6.0	2.0	C	399-1675-1-ND	3.00	2.61	2.28	399-1675-2-ND	500	546.00	T496C226K010AS
	22	±20	2.2	6.0	2.0	C	399-1676-1-ND	2.75	2.40	2.09	399-1676-2-ND	500	500.50	T496C226M010AS
	33	±10	3.3	6.0	1.0	D	399-1677-1-ND	3.90	3.40	2.97	399-1677-2-ND	500	710.00	T496D336K010AS
	33	±20	3.3	6.0	1.0	D	399-1678-1-ND	3.75	3.27	2.85	399-1678-2-ND	500	682.50	T496D336M010AS
	47	±10	4.7	6.0	1.0	D	399-1679-1-ND	3.90	3.40	2.97	399-1679-2-ND	500	710.00	T496D476K010AS
	47	±20	4.7	6.0	1.0	D	399-1680-1-ND	3.75	3.27	2.85	399-1680-2-ND	500	682.50	T496D476M010AS
	68	±10	6.8	6.0	0.9	X	399-1683-1-ND	7.00	6.09	5.32	399-1683-2-ND	500	1274.00	T496X686K010AS
	68	±20	6.8	6.0	0.9	X	399-1684-1-ND	6.50	5.66	4.94	399-1684-2-ND	500	1183.00	T496X686M010AS
	100	±10	10.0	8.0	0.7	D	399-1681-1-ND	4.15	3.62	3.16	399-1681-2-ND	500	755.50	T496D107K010AS
	100	±20	10.0	8.0	0.7	D	399-1682-1-ND	4.00	3.48	3.04	399-1682-2-ND	500	728.00	T496D107M010AS
	220	±10	22.0	8.0	0.5	X	399-1685-1-ND	9.00	7.83	6.84	399-1685-2-ND	500	1638.00	T496X227K010AS
	220	±20	22.0	8.0	0.5	X	399-1686-1-ND	8.50	7.40	6.46	399-1686-2-ND	500	1547.00	T496X227M010AS
16	2.2	±10	0.5	6.0	3.5	B	399-1687-1-ND	1.80	1.57	1.37	399-1687-2-ND	2,000	612.00/M	T496B225K016AS
	2.2	±20	0.5	6.0	3.5	B	399-1688-1-ND	1.65	1.44	1.26	399-1688-2-ND	2,000	561.00/M	T496B225M016AS
	4.7	±10	0.8	6.0	3.5	B	399-1689-1-ND	1.80	1.57	1.37	399-1689-2-ND	2,000	612.00/M	T496B475K016AS
	4.7	±20	0.8	6.0	3.5	B	399-1690-1-ND	1.65	1.44	1.26	399-1690-2-ND	2,000	561.00/M	T496B475M016AS
	10	±10	1.6	6.0	3.5	B	399-1691-1-ND	1.90	1.66	1.45	399-1691-2-ND	2,000	646.00/M	T496B106K016AS
	10	±20	1.6	6.0	3.5	B	399-1692-1-ND	1.80	1.57	1.37	399-1692-2-ND	2,000	612.00/M	T496B106M016AS
	10	±10	1.6	6.0	2.0	C	399-1693-1-ND	3.00	2.61	2.28	399-1693-2-ND	500	546.00	T496C106K016AS
	10	±20	1.6	6.0	2.0	C	399-1694-1-ND	2.75	2.40	2.09	399-1694-2-ND	500	500.50	T496C106M016AS
	15	±10	2.4	6.0	2.0	C	399-1695-1-ND	3.00	2.61	2.28	399-1695-2-ND	500	546.00	T496C156K016AS
	15	±20	2.4	6.0	2.0	C	399-1696-1-ND	2.75	2.40	2.09	399-1696-2-ND	500	500.50	T496C156M016AS
	22	±10	3.6	6.0	1.6	C	399-1697-1-ND	3.15	2.75	2.40	399-1697-2-ND	500	573.50	T496C226K016AS
	22	±20	3.6	6.0	1.6	C	399-1698-1-ND	2.90	2.53	2.21	399-1698-2-ND	500	528.00	T496C226M016AS
	33	±10	5.3	6.0	1.0	D	399-1699-1-ND	3.90	3.40	2.97	399-1699-2-ND	500	710.00	T496D336K016AS
	33	±20	5.3	6.0	1.0	D	399-1700-1-ND	3.75	3.27	2.85	399-1700-2-ND	500	682.50	T496D336M016AS
	47	±10	7.5	6.0	0.8	D	399-1701-1-ND	3.90	3.40	2.97	399-1701-2-ND	500	710.00	T496D476K016AS
	47	±20	7.5	6.0	0.8	D	399-1702-1-ND	3.75	3.27	2.85	399-1702-2-ND	500	682.50	T496D476M016AS
	47	±10	7.5	6.0	0.9	X	399-1703-1-ND	7.00	6.09	5.32	399-1703-2-ND	500	1274.00	T496X476K016AS
	47	±20	7.5	6.0	0.9	X	399-1704-1-ND	6.50	5.66	4.94	399-1704-2-ND	500	1183.00	T496X476M016AS
	100	±10	16.0	8.0	0.7	X	399-1705-1-ND	7.50	6.53	5.70	399-1705-2-ND	500	1365.00	T496X107K016AS
20	100	±20	16.0	8.0	0.7	X	399-1706-1-ND	7.00	6.09	5.32	399-1706-2-ND	500	1274.00	T496X107M016AS
	2.2	±10	0.5	6.0	3.5	B	399-1707-1-ND	1.80	1.57	1.37	399-1707-2-ND	2,000	612.00/M	T496B225K020AS
	2.2	±20	0.5	6.0	3.5	B	399-1708-1-ND	1.65	1.44	1.26	399-1708-2-ND	2,000	561.00/M	T496B225M020AS
	6.8	±10	1.4	6.0	2.0	C	399-1709-1-ND	3.00	2.61	2.28	399-1709-2-ND	500	546.00	T496C685K020AS
	6.8	±20	1.4	6.0	2.0	C	399-1710-1-ND	2.75	2.40	2.09	399-1710-2-ND	500	500.50	T496C685M020AS
	10	±10	2.0	6.0	2.0	C	399-1711-1-ND	3.00	2.61	2.28	399-1711-2-ND	500	546.00	T496C106K020AS
	10	±20	2.0	6.0	2.0	C	399-1712-1-ND	2.75	2.40	2.09	399-1712-2-ND	500	500.50	T496C106M020AS
	22	±10	4.4	6.0	1.0	D	399-1713-1-ND	3.90	3.40	2.97	399-1713-2-ND	500	710.00	T496D226K020AS
	22	±20	4.4	6.0	1.0	D	399-1714-1-ND	3.75	3.27	2.85	399-1714-2-ND	500	682.50	T496D226M020AS
	33	±10	6.6	6.0	0.9	X	399-1715-1-ND	7.00	6.09	5.32	399-1715-2-ND	500	1274.00	T496X336K020AS
	33	±20	6.6	6.0	0.9	X	399-1716-1-ND	6.50	5.66	4.94	399-1716-2-ND	500	1183.00	T496X336M020AS
25	4.7	±10	1.2	6.0	2.5	C	399-1717-1-ND	3.00	2.61	2.28	399-1717-2-ND	500	546.00	T496C475K025AS
	4.7	±20	1.2	6.0	2.5	C	399-1718-1-ND	2.75	2.40	2.09	399-1718-2-ND	500	500.50	T496C475M025AS
	10	±10	2.5	6.0	1.2	D	399-1719-1-ND	3.90	3.40	2.97	399-1719-2-ND	500	710.00	T496D106K025AS
	10	±20	2.5	6.0	1.2	D	399-1720-1-ND	3.75	3.27	2.85	399-1720-2-ND	500	682.50	T496D106M025AS
	22	±10	5.5	6.0	0.8	D	399-1721-1-ND	3.90	3.40	2.97	399-1721-2-ND	500	710.00	T496D226K025AS
	22	±20	5.5	6.0	0.8	D	399-1722-1-ND	3.75	3.27	2.85	399-1722-2-ND	500	682.50	T496D226M025AS
	22	±10	5.5	6.0	0.9	X	399-1723-1-ND	7.00	6.09	5.32	399-1723-2-ND	500	1274.00	T496X226K025AS
	22	±20	5.5	6.0	0.9	X	399-1724-1-ND	6.50	5.66	4.94	399-1724-2-ND	500	1183.00	T496X226M025AS
35	1.0	±10	0.5	4.0	5.0	B	399-1725-1-ND	1.80	1.57	1.37	399-1725-2-ND	2,000	612.00/M	T496B105K035AS
	1.0	±20	0.5	4.0	5.0	B	399-1726-1-ND	1.65	1.44	1.26	399-1726-2-ND	2,000	561.00/M	T496B105M035AS
	2.2	±10	0.8	6.0	3.5	C	399-1727-1-ND	3.00	2.61	2.28	399-1727-2-ND	500	546.00	T496C225K035AS
	2.2	±20	0.8	6.0	3.5	C	399-1728-1-ND	2.75	2.40	2.09	399-1728-2-ND	500	500.50	T496C225M035AS
	4.7	±10	1.7	6.0	1.5	D	399-1729-1-ND	3.90	3.40	2.97	399-1729-2-ND	500	710.00	T496D475K035AS
	4.7	±20	1.7	6.0	1.5	D	399-1730-1-ND	3.75	3.27	2.85	399-1730-2-ND	500	682.50	T496D475M035AS
	6.8	±10	2.4	6.0	1.3	D	399-1731-1-ND	3.90	3.40	2.97	399-1731-2-ND	500	710.00	T496D685K035AS
	6.8	±20	2.4	6.0	1.3	D	399-1732-1-ND	3.75	3.27	2.85	399-1732-2-ND	500	682.50	T496D685M035AS
	10	±10	3.5	6.0	1.0	X	399-1733-1-ND	7.00	6.09	5.32	399-1733-2-ND	500	1274.00	T496X106K035AS
	10	±20	3.5	6.0	1.0	X	399-1734-1-ND	6.50	5.66	4.94	399-1734-2-ND	500	1183.00	T496X106M035AS
	15	±10	5.3	6.0	0.9	X	399-1735-1-ND	7.50	6.53	5.70	399-1735-2-ND	500	1365.00	T496X156K035AS
	15	±20	5.3	6.0	0.9	X	399-1736-1-ND	7.00	6.09	5.32	399-1736-2-ND	500	1274.00	T496X156M035AS
50	1.0	±10	0.5	4.0	5.5	C	399-1737-1-ND	3.38	2.94	2.57	399-1737-2-ND	500	614.50	T496C105K050AS
	1.0	±20	0.5	4.0	5.5	C	399-1738-1-ND	3.30	2.88	2.51	399-1738-2-ND	500	600.50	T496C105M050AS
	4.7	±10	2.4	6.0	1.5	X	399-1739-1-ND	8.00	6.96	6.08	399-1739-2-ND	500	1456.00	T496X475K050AS
	4.7	±20	2.4	6.0	1.5	X	399-1740-1-ND	7.50	6.53	5.70	399-1740-2-ND	500	1365.00	T496X475M050AS
T510 Series — Ultra-Low ESR														
4	1000	±10	40.0	6.0	0.018	E	399-1741-1-ND	18.00	15.66	13.68	399-1741-2-ND	500	3276.00	T510E108K004AS
	1000	±10	40.0	6.0	0.010	E	399-1742-1-ND	18.50	16.10	14.06	399-1742-2-ND	500	3367.00	T510E108K004AS4115*
	1000	±20	40.0	6.0	0.018	E	399-1743-1-ND	16.75	14.58	12.73	399-1743-2-ND	500	3048.50	T510E108M004AS

* Lower ESR Rated Part.

(Continued)

WV (DC)	Cap. (µF)	Cap. Tol. (%)	DC Leakage µA@ +25°C Max.	DF % @ +25°C 120Hz Max.	ESR Ω @ +25°C 100KHz Max.	Size Code	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape and Reel		Kemet Part No.
								1	10	100		Size	Pricing	
4	1000	±20	40.0	6.0	0.010	E	399-1744-1-ND	17.25	15.01	13.11	399-1744-2-ND	500	3139.50	T510E108M004AS4115*
6	680	±10	40.8	6.0	0.023	E	399-1745-1-ND	18.00	15.66	13.68	399-1745-2-ND	500	3276.00	T510E687K006AS
	680	±10	40.8	6.0	0.012	E	399-1746-1-ND	18.50	16.10	14.06	399-1746-2-ND	500	3367.00	T510E687K006AS4115*
	680	±20	40.8	6.0	0.023	E	399-1747-1-ND	16.75	14.58	12.73	399-1747-2-ND	500	3048.50	T510E687M006AS
	680	±20	40.8	6.0	0.012	E	399-1748-1-ND	17.25	15.01	13.11	399-1748-2-ND	500	3139.50	T510E687M006AS4115*
4	680	±10	27.2	6.0	0.030	X	399-1749-1-ND	14.75	12.84	11.21	399-1749-2-ND	500	2684.50	T510X687K004AS
	680	±20	27.2	6.0	0.030	X	399-1750-1-ND	14.00	12.18	10.64	399-1750-2-ND	500	2548.00	T510X687M004AS
6	470	±10	28.2	6.0	0.030	X	399-1751-1-ND	14.75	12.84	11.21	399-1751-2-ND	500	2684.50	T510X477K006AS
	470	±20	28.2	6.0	0.030	X	399-1752-1-ND	14.00	12.18	10.64	399-1752-2-ND	500	2548.00	T510X477M006AS
10	330	±10	33.0	6.0	0.035	X	399-1753-1-ND	14.75	12.84	11.21	399-1753-2-ND	500	2684.50	T510X337K010AS
	330	±20	33.0	6.0	0.035	X	399-1754-1-ND	14.00	12.18	10.64	399-1754-2-ND	500	2548.00	T510X337M010AS
T520 Series — KO-CAP Polymer Tantalum														
4	220	±20	88	10	0.045	V	399-1755-1-ND	3.75	3.27	2.85	399-1755-2-ND	1,000	1275.00	T520V227M004AS
	220	±20	88	10	0.030	V	399-1756-1-ND	4.25	3.70	3.23	399-1756-2-ND	1,000	1445.00	T520V227M004AS4350*
	470	±20	188	10	0.040	D	399-1757-1-ND	4.50	3.92	3.42	399-1757-2-ND	500	819.00	T520D477M004AS
6	150	±20	95	10	0.045	V	399-1758-1-ND	3.75	3.27	2.85	399-1758-2-ND	1,000	1275.00	T520V157M006AS
	150	±20	95	10	0.055	D	399-1759-1-ND	3.25	2.83	2.47	399-1759-2-ND	500	591.50	T520D157M006AS
	220	±20	139	10	0.050	D	399-1760-1-ND	3.50	3.05	2.66	399-1760-2-ND	500	637.00	T520D227M006AS
	220	±20	88	10	0.040	D	399-1761-1-ND	4.00	3.48	3.04	399-1761-2-ND	500	728.00	T520D227M006AS4350*
	330	±20	208	10	0.045	D	399-1762-1-ND	4.25	3.70	3.23	399-1762-2-ND	500	773.50	T520D337M006AS
	330	±20	132	10	0.040	D	399-1763-1-ND	4.75	4.14	3.61	399-1763-2-ND	500	864.50	T520D337M006AS4350*
	470	±20	296	10	0.040	X	399-1764-1-ND	12.25	10.66	9.31	399-1764-2-ND	500	2229.50	T520X477M006AS
	470	±20	296	10	0.035	X	399-1765-1-ND	12.75	11.10	9.69	399-1765-2-ND	500	2320.50	T520X477M006AS4350*
10	68	±20	68	10	0.060	V	399-1766-1-ND	3.75	3.27	2.85	399-1766-2-ND	1,000	1275.00	T520V686M010AS
	100	±20	100	10	0.080	D	399-1767-1-ND	3.50	3.05	2.66	399-1767-2-ND	500	637.00	T520D107M010AS
	100	±20	100	10	0.055	D	399-1768-1-ND	4.00	3.48	3.04	399-1768-2-ND	500	728.00	T520D107M010AS4350*
	150	±20	150	10	0.055	D	399-1769-1-ND	3.75	3.27	2.85	399-1769-2-ND	500	682.50	T520D157M010AS
	150	±20	150	10	0.040	D	399-1770-1-ND	4.25	3.70	3.23	399-1770-2-ND	500	773.50	T520D157M010AS4350*
	330	±20	330	10	0.040	X	399-1771-1-ND	12.25	10.66	9.31	399-1771-2-ND	500	2229.50	T520X337M010AS

* Lower ESR rated part.

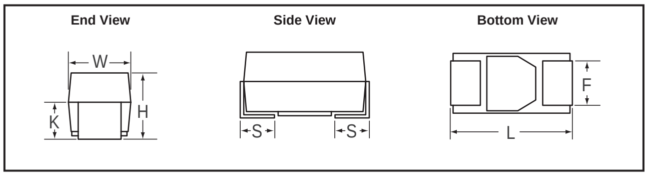
NEW! A700 Series AO-CAP Aluminum Organic Capacitors

KEMET's AO-CAP, designated the A700 Series, has been targeted for power management applications. The structure of the AO-CAP uses aluminum as the anode material, aluminum oxide as the dielectric, and a conductive organic polymer for its counter-electrode material. The AO-CAP offers many advantages:

- Extremely low ESR
- High capacitance retention for superior performance at high operating frequencies
- No voltage derating up to 125°C
- Robust to the surface-mount process
- No dry-out-related failure mechanism
- Pb free

The A700 Series has a molded case and wraparound terminations. This provides strong protection against cracks (flex) making it an ideal alternative to high-capacitance ceramics, and also offers true surface-mountable solutions to the existing aluminum organic capacitors found in the industry. The high-frequency performance of the AO-CAP can reduce component counts, which allows the designer to save board space and offers a more cost-effective solution.

Please note that the AO-CAP is introduced as a totally lead (Pb)-free device. The AO-CAP has excellent surge current performance and longterm reliability. There is no recommended derating of application voltage to reduce failure rate. The operating temperature is -55°C to +125°C. The approximate capacitance shift over the temperature range for -55°C is -15%, and for +125°C is +15%. **Capacitance Tolerance:** ±20%



Case Size		L	W	H	K Min.	F ±0.1	S ±0.2
Kemet	EIA						
V	7343-20	7.3 ± 0.3	4.3 ± 0.3	1.9 ± 0.1	1.1	2.4	1.3
D	7343-31	7.3 ± 0.3	4.3 ± 0.3	2.8 ± 0.3	1.3	2.4	1.3
X	7343-43	7.3 ± 0.3	4.3 ± 0.3	4.0 ± 0.3	2.1	2.4	1.3

WV (DC)	Cap (µF)	Size Code	DC Leakage µA @ +25°C Max.	DF % @ +25°C 120Hz Max.	ESR Ω @ +25°C 100KHz Max.	Ripple Current A rms 100KHz, at Max ESR 25°C to 105°C	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Kemet Part No.
								1	10	100		Size	Pricing	
2	100	V	12.0	6%	0.028	2.1	399-3030-1-ND	1.73	1.49	1.37	399-3030-2-ND	1,000	990.00	A700V107M002AT
	150	V	18.0	6%	0.028	2.1	399-3031-1-ND	1.73	1.49	1.37	399-3031-2-ND	1,000	990.00	A700V157M002AT
	180	D	21.6	6%	0.018	2.9	399-3032-1-ND	2.61	2.24	2.05	399-3032-2-ND	500	745.00	A700D187M002AT
	220	D	26.4	6%	0.018	2.9	399-3033-1-ND	2.61	2.24	2.05	399-3033-2-ND	500	745.00	A700D227M002AT
	220	D	26.4	6%	0.015	3.2	399-3034-1-ND	2.78	2.39	2.19	399-3034-2-ND	500	795.00	A700D227M002AT6050
	220	D	26.4	6%	0.012	3.5	399-3035-1-ND	2.96	2.54	2.33	399-3035-2-ND	500	845.00	A700D227M002AT6051
	270	X	26.4	6%	0.015	3.2	399-3036-1-ND	3.50	3.00	2.75	399-3036-2-ND	500	1000.00	A700X277M002AT
	330	X	39.6	6%	0.015	3.3	399-3037-1-ND	3.50	3.00	2.75	399-3037-2-ND	500	1000.00	A700X337M002AT
	390	X	46.8	6%	0.015	3.3	399-3038-1-ND	3.50	3.00	2.75	399-3038-2-ND	500	1000.00	A700X397M002AT
	390	X	46.8	6%	0.010	4.1	399-3039-1-ND	3.68	3.15	2.89	399-3039-2-ND	500	1050.00	A700X397M002AT6050
	470	X	56.4	6%	0.008	4.5	399-3040-1-ND	3.50	3.00	2.75	399-3040-2-ND	500	1000.00	A700X477M002AT
2.5	82	V	12.3	6%	0.028	2.1	399-3041-1-ND	1.73	1.49	1.37	399-3041-2-ND	1,000	990.00	A700V826M004AT6003
	150	D	22.5	6%	0.018	2.9	399-3042-1-ND	2.61	2.24	2.05	399-3042-2-ND	500	745.00	A700D157M004AT6003
	220	X	33.0	6%	0.015	3.3	399-3043-1-ND	3.50	3.00	2.75	399-3043-2-ND	500	1000.00	A700X227M004AT6003
4	82	V	19.7	6%	0.028	2.1	399-3044-1-ND	1.73	1.49	1.37	399-3044-2-ND	1,000	990.00	A700V826M004AT
	120	D	28.8	6%	0.018	2.9	399-3045-1-ND	2.61	2.24	2.05	399-3045-2-ND	500	745.00	A700D127M004AT
	150	D	36.0	6%	0.018	2.9	399-3046-1-ND	2.61	2.24	2.05	399-3046-2-ND	500	745.00	A700D157M004AT
	180	X	43.2	6%	0.015	3.3	399-3047-1-ND	3.50	3.00	2.75	399-3047-2-ND	500	1000.00	A700X187M004AT
	220	X	52.8	6%	0.015	3.3	399-3048-1-ND	3.50	3.00	2.75	399-3048-2-ND	500	1000.00	A700X227M004AT
	270	X	64.8	6%	0.015	3.3	399-3049-1-ND	3.50	3.00	2.75	399-3049-2-ND	500	1000.00	A700X277M004AT
6.3	33	V	8.3	6%	0.028	2.1	399-3050-1-ND	1.73	1.49	1.37	399-3050-2-ND	1,000	990.00	A700V336M006AT
	47	V	11.8	6%	0.028	2.1	399-3051-1-ND	1.73	1.49	1.37	399-3051-2-ND	1,000	990.00	A700V476M006AT
	56	V	14.1	6%	0.028	2.1	399-3052-1-ND	1.73	1.49	1.37	399-3052-2-ND	1,000	990.00	A700V566M006AT
	68	V	17.1	6%	0.028	2.1	399-3053-1-ND	1.73	1.49	1.37	399-3053-2-ND	1,000	990.00	A700V686M006AT
	100	D	25.2	6%	0.018	2.9	399-3054-1-ND	2.61	2.24	2.05	399-3054-2-ND	500	745.00	A700D107M006AT
	150	X	37.8	6%	0.015	3.3	399-3055-1-ND	3.50	3.00	2.75	399-3055-2-ND	500	1000.00	A700X157M006AT
	180	X	43.2	6%	0.015	3.3	399-3056-1-ND	3.50	3.00	2.75	399-3056-2-ND	500	1000.00	A700X187M006AT
8	33	V	10.6	6%	0.028	2.1	399-3057-1-ND	1.73	1.49	1.37	399-3057-2-ND	1,000	990.00	A700V336M008AT
10	33	V	13.2	6%	0.028	2.1	399-3058-1-ND	1.73	1.49	1.37	399-3058-2-ND	1,000	990.00	A700V336M010AT

Panasonic® B-Series Polyester Capacitors

PANASONIC ECQ-B CROSS REFERENCE:

Sprague: 225P, 418P; **Mepco:** 713D1, 711D1, 719D1; **TRW:** 601PE, 601CPE; **Packtron:** PE, FM; **Secor:** MFDW, MFDR; **Roederstein:** KT1805, KT1806, KT1807, KT1898; **Wima:** FKS; **CSF Thompson:** ED (Dip); **Rubycon:** F2X, F2S, F3U; **Nichicon:** TDY; **Nissei:** AMZ, AMX, AMR, AMM.

SPECIFICATIONS:

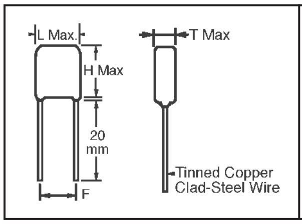
• **Operating Temp. Range:** -40° ~ +85°C • **Rated Voltage:** DC 50V, 100V, 200V • **Capacitance Range:** .0001 ~ 0.47µF • **Capacitance Tolerance:** ±5% (J), ±10% (K) • **Dissipation Factor:** 1.0% (20°C, 1kHz) • **Withstand Voltage:** Between Terminals: rated voltage(V, DC) x 250% 1 ~ 5 sec. • **Insulation Resistance:** C ≤0.33µF: 30000MΩ min. (20°C, 50VDC 60s: ECQB1H(F), C>0.33µF: 10000MΩ·µF min. (20°C, 100VDC 60s: ECQB1(F), ECQB2(F) • **Construction:** Polyester film, non-inductive, epoxy coating.

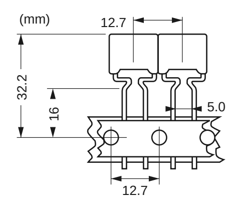
FEATURES:

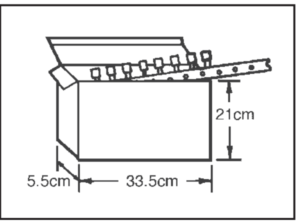
High volumetric efficiency; non-inductive construction; low-loss, high stability; and epoxy resin coating.

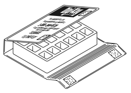
APPLICATIONS:

Blocking, by-pass and coupling of DC and signal to VHF range; pulse, logic and timing circuits; light duty pulse forming networks; filter & noise suppression circuits; and general purpose usage.









Panasonic Polyester Capacitors

Digi-Key® B-Series Kit

300 capacitors in all.

P4550-KIT-ND . . . $29.95

Includes those parts listed below (*).

P4551-ND . . 80 pc.	P4555-ND . . 30 pc.	P4559-ND . . 30 pc.
P4552-ND . . 10 pc.	P4556-ND . . 10 pc.	P4560-ND . . 10 pc.
P4553-ND . . 20 pc.	P4557-ND . . 20 pc.	P4561-ND . . 30 pc.
P4554-ND . . 20 pc.	P4558-ND . . 20 pc.	P4562-ND . . 20 pc.

Volts	Cap. µF	Toler-ance	Dimensions (mm)				Digi-Key	Pricing					Panasonic
			L	T	H	F	Part No.	10	100	1,000	5,000	10,000	Part No.
50WV (Bulk Pkg.)	.0001	±10%	6.5	3.0	5.5	5.0	P4570-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H101KF
	.00012	±10%	6.5	3.0	5.5	5.0	P4571-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H121KF
	.00015	±10%	6.5	3.0	5.5	5.0	P4572-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H151KF
	.00018	±10%	6.5	3.0	5.5	5.0	P4573-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H181KF
	.00022	±10%	6.5	3.0	5.5	5.0	P4574-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H221KF
	.00027	±10%	6.5	3.0	5.5	5.0	P4575-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H271KF
	.00033	±10%	6.5	3.0	5.5	5.0	P4576-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H331KF
	.00039	±10%	6.5	3.0	5.5	5.0	P4577-ND	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H391KF
	.00047	±5%	6.5	3.0	5.5	5.0	P4578-ND	.84	5.60	44.00	42.00/M	38.00/M	ECQ-B1H471JF
	.00056	±5%	6.5	3.0	5.5	5.0	P4579-ND	.84	5.60	44.00	42.00/M	38.00/M	ECQ-B1H561JF
	.00068	±5%	6.5	3.0	5.5	5.0	P4580-ND	.84	5.60	44.00	42.00/M	38.00/M	ECQ-B1H681JF
	.00082	±5%	6.5	3.0	5.5	5.0	P4581-ND	.84	5.60	44.00	42.00/M	38.00/M	ECQ-B1H821JF
	.001	±5%	6.5	3.0	5.5	5.0	P4551-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H102JF
	.0012	±5%	6.5	3.0	5.5	5.0	P4552-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H122JF
	.0015	±5%	6.5	3.0	5.5	5.0	P4553-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H152JF
	.0018	±5%	6.5	3.0	5.5	5.0	P4554-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H182JF
	.0022	±5%	6.5	3.0	5.5	5.0	P4555-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H222JF
	.0027	±5%	6.5	3.0	5.5	5.0	P4556-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H272JF
	.0033	±5%	6.5	3.0	5.5	5.0	P4557-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H332JF
	.0039	±5%	6.5	3.0	5.5	5.0	P4558-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H392JF
	.0047	±5%	6.5	3.0	5.5	5.0	P4559-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H472JF
	.0056	±5%	6.5	3.0	5.5	5.0	P4560-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H562JF
	.0068	±5%	6.5	3.0	5.5	5.0	P4561-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H682JF
	.0082	±5%	6.5	3.0	5.5	5.0	P4562-ND*	.81	5.40	42.00	41.00/M	37.00/M	ECQ-B1H822JF
	.01	±5%	6.5	3.0	5.5	5.0	P4582-ND	.84	5.60	44.00	42.00/M	38.00/M	ECQ-B1H103JF
	.012	±5%	7.0	3.0	6.0	5.0	P4583-ND	.84	5.60	44.00	42.00/M	38.00/M	ECQ-B1H123JF
	.015	±5%	7.0	3.0	6.0	5.0	P4584-ND	.90	6.00	47.00	45.00/M	41.00/M	ECQ-B1H153JF
	.018	±5%	7.0	3.0	6.0	5.0	P4585-ND	.93	6.20	48.00	47.00/M	42.00/M	ECQ-B1H183JF
	.022	±5%	7.0	3.0	6.0	5.0	P4586-ND	.93	6.20	48.00	47.00/M	42.00/M	ECQ-B1H223JF
	.027	±5%	7.0	3.5	6.5	5.0	P4587-ND	.96	6.40	50.00	48.00/M	44.00/M	ECQ-B1H273JF
	.033	±5%	7.5	3.5	6.5	5.0	P4569-ND	.99	6.60	52.00	50.00/M	45.00/M	ECQ-B1H333JF
	.039	±5%	7.5	3.5	6.5	5.0	P4588-ND	1.02	6.80	53.00	51.00/M	47.00/M	ECQ-B1H393JF
	.047	±5%	7.5	4.0	6.5	5.0	P4589-ND	1.08	7.20	56.00	54.00/M	49.00/M	ECQ-B1H473JF
	.056	±5%	8.0	4.0	7.5	5.0	P4590-ND	1.11	7.40	58.00	56.00/M	51.00/M	ECQ-B1H563JF
	.068	±5%	8.0	4.0	8.5	5.0	P4591-ND	1.29	8.60	67.00	65.00/M	59.00/M	ECQ-B1H683JF
	.082	±5%	8.0	4.5	8.5	5.0	P4592-ND	1.38	9.20	72.00	69.00/M	63.00/M	ECQ-B1H823JF
	.1	±5%	8.0	4.5	9.5	5.0	P4593-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1H104JF
	.12	±5%	11.0	4.5	9.5	7.5	P4594-ND	3.15	21.00	164.00	159.00/M	144.00/M	ECQ-B1H124JF
	.15	±5%	11.0	5.0	9.5	7.5	P4595-ND	3.39	22.60	177.00	171.00/M	155.00/M	ECQ-B1H154JF
	.18	±5%	11.0	5.5	10.0	7.5	P4596-ND	3.54	23.60	184.00	178.00/M	162.00/M	ECQ-B1H184JF
	.22	±5%	11.0	6.0	11.0	7.5	P4597-ND	3.96	26.40	206.00	199.00/M	181.00/M	ECQ-B1H224JF
	.27	±5%	13.0	6.0	12.0	10.0	P4598-ND	4.95	33.00	258.00	249.00/M	226.00/M	ECQ-B1H274JF
	.33	±5%	13.0	6.0	13.0	10.0	P4599-ND	5.34	35.60	278.00	269.00/M	244.00/M	ECQ-B1H334JF
	.39	±5%	13.0	6.5	14.0	10.0	P4734-ND	5.76	38.40	300.00	290.00/M	263.00/M	ECQ-B1H394JF
	.47	±5%	13.0	7.0	14.5	10.0	P4735-ND	6.33	42.20	330.00	319.00/M	289.00/M	ECQ-B1H474JF
100WV (Bulk Pkg.)	.0001	±5%	7.0	3.0	5.5	5.0	P4773-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1101JF
	.00012	±5%	7.0	3.0	5.5	5.0	P4774-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1121JF
	.00015	±5%	7.0	3.0	5.5	5.0	P4775-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1151JF
	.00018	±5%	7.0	3.0	5.5	5.0	P4776-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1181JF
	.00022	±5%	7.0	3.0	5.5	5.0	P4777-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1221JF
	.00027	±5%	7.0	3.0	5.5	5.0	P4778-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1271JF
	.00033	±5%	7.0	3.0	5.5	5.0	P4779-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1331JF
	.00039	±5%	7.0	3.0	5.5	5.0	P4780-ND	2.04	13.60	106.00	103.00/M	93.00/M	ECQ-B1391JF
	.00047	±5%	7.0	3.0	5.5	5.0	P4781-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1471JF
	.00056	±5%	7.0	3.0	5.5	5.0	P4782-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1561JF
	.00068	±5%	7.0	3.0	5.5	5.0	P4783-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1681JF
	.00082	±5%	7.0	3.0	5.5	5.0	P4784-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1821JF
	.001	±5%	7.0	3.0	5.5	5.0	P4785-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1102JF
	.0012	±5%	7.0	3.0	5.5	5.0	P4786-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1122JF
	.0015	±5%	7.0	3.0	5.5	5.0	P4787-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1152JF
	.0018	±5%	7.0	3.0	6.5	5.0	P4788-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1182JF
	.0022	±5%	7.0	3.0	6.5	5.0	P4789-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1222JF
	.0027	±5%	7.0	3.0	6.5	5.0	P4790-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1272JF
	.0033	±5%	7.0	3.0	6.5	5.0	P4791-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1332JF
	.0039	±5%	7.0	3.0	6.5	5.0	P4792-ND	1.80	12.00	94.00	91.00/M	82.00/M	ECQ-B1392JF
	.0047	±5%	7.0	3.0	6.5	5.0	P4793-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1472JF
	.0056	±5%	7.0	3.0	6.5	5.0	P4794-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1562JF
	.0068	±5%	7.0	3.0	6.5	5.0	P4795-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1682JF
	.0082	±5%	7.0	3.2	7.0	5.0	P4796-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1822JF
	.01	±5%	7.0	3.2	7.0	5.0	P4797-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1103JF

(Continued)

Panasonic B-Series Polyester Capacitors *(Cont.)*

Volts	Cap. µF	Toler- ance	Dimensions (mm)				Digi-Key Part No.	Pricing					Panasonic Part No.
			L	T	H	F		10	100	1,000	5,000	10,000	
100WV (Bulk Pkg.)	.012	±5%	7.2	3.5	7.0	5.0	P4798-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1123JF
	.015	±5%	7.2	4.0	7.5	5.0	P4799-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1153JF
	.018	±5%	7.2	4.5	8.0	5.0	P4647-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1183JF
	.022	±5%	7.2	4.5	9.0	5.0	P4648-ND	1.83	12.20	95.00	92.00/M	84.00/M	ECQ-B1223JF
	.027	±5%	7.5	5.0	9.5	5.0	P4649-ND	1.92	12.80	100.00	97.00/M	88.00/M	ECQ-B1273JF
	.033	±5%	7.5	5.5	10.0	5.0	P4650-ND	2.10	14.00	109.00	106.00/M	96.00/M	ECQ-B1333JF
	.039	±5%	7.5	6.0	10.5	5.0	P4651-ND	2.22	14.80	116.00	112.00/M	101.00/M	ECQ-B1393JF
	.047	±5%	7.5	6.5	11.5	5.0	P4652-ND	2.34	15.60	122.00	118.00/M	107.00/M	ECQ-B1473JF
	.056	±5%	10.0	5.0	9.5	7.5	P4653-ND	2.52	16.80	131.00	127.00/M	115.00/M	ECQ-B1563JF
	.068	±5%	10.0	5.5	10.0	7.5	P4654-ND	2.70	18.00	141.00	136.00/M	123.00/M	ECQ-B1683JF
	.082	±5%	10.0	5.5	12.0	7.5	P4655-ND	2.94	19.60	153.00	148.00/M	134.00/M	ECQ-B1823JF
	.1	±5%	10.5	6.0	12.5	7.5	P4656-ND	3.12	20.80	163.00	157.00/M	142.00/M	ECQ-B1104JF
	.12	±5%	10.5	7.0	13.5	7.5	P4657-ND	3.75	25.00	195.00	189.00/M	171.00/M	ECQ-B1124JF
	.15	±5%	13.0	7.0	12.0	10.0	P4658-ND	4.35	29.00	227.00	219.00/M	199.00/M	ECQ-B1154JF
	.18	±5%	13.0	7.5	12.5	10.0	P4659-ND	5.04	33.60	263.00	254.00/M	230.00/M	ECQ-B1184JF
	.22	±5%	13.0	8.0	13.0	10.0	P4660-ND	5.67	37.80	295.00	285.00/M	259.00/M	ECQ-B1224JF
	.27	±5%	13.0	8.5	15.0	10.0	P4661-ND	6.33	42.20	330.00	319.00/M	289.00/M	ECQ-B1274JF
	.33	±5%	13.0	9.0	16.0	10.0	P4662-ND	6.99	46.60	364.00	352.00/M	319.00/M	ECQ-B1334JF
	.39	±5%	13.0	10.5	17.0	10.0	P4663-ND	7.62	50.80	397.00	384.00/M	348.00/M	ECQ-B1394JF
	.47	±5%	13.0	11.5	17.5	10.0	P4664-ND	8.25	55.00	430.00	415.00/M	377.00/M	ECQ-B1474JF
200V (B Series Poly.)	.001	±5%	8.5	4.0	7.0	5.0	P4537A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2102JF
	.0012	±5%	8.5	4.0	7.5	5.0	P4538A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2122JF
	.0015	±5%	8.5	4.0	7.5	5.0	P4539A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2152JF
	.0018	±5%	8.5	4.5	7.5	5.0	P4540A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2182JF
	.0022	±5%	8.5	4.5	7.5	5.0	P4541A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2222JF
	.0027	±5%	8.5	4.5	8.0	5.0	P4542A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2272JF
	.0033	±5%	11.0	4.5	7.5	7.5	P4543A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2332JF
	.0039	±5%	11.0	4.5	7.5	7.5	P4544A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2392JF
	.0047	±5%	11.0	4.5	8.5	7.5	P4545A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2472JF
	.0056	+5%	11.0	4.5	8.5	7.5	P4546A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2562JF
	.0068	±5%	11.0	4.5	9.0	7.5	P4547A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2682JF
	.0082	±5%	11.0	4.5	9.0	7.5	P4548A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2822JF
	.01	±5%	11.0	4.5	10.0	7.5	P4549A-ND	2.19	14.60	114.00	110.00/M	100.00/M	ECQ-B2103JF
	.012	±5%	11.0	5.0	10.5	7.5	P4550A-ND	2.22	14.80	116.00	112.00/M	101.00/M	ECQ-B2123JF
	.015	±5%	11.0	5.5	10.5	7.5	P4551A-ND	2.22	14.80	116.00	112.00/M	101.00/M	ECQ-B2153JF
	.018	±5%	11.0	5.5	10.0	7.5	P4552A-ND	2.31	15.40	120.00	116.00/M	105.00/M	ECQ-B2183JF
	.022	±5%	11.0	6.0	10.5	7.5	P4553A-ND	2.52	16.80	131.00	127.00/M	115.00/M	ECQ-B2223JF
	.027	±5%	11.0	6.5	11.5	7.5	P4554A-ND	2.58	17.20	134.00	130.00/M	118.00/M	ECQ-B2273JF
	.033	±5%	11.0	7.0	12.0	7.5	P4555A-ND	2.79	18.60	145.00	140.00/M	127.00/M	ECQ-B2333JF
	.039	±5%	13.5	5.0	12.5	10.0	P4556A-ND	2.88	19.20	150.00	145.00/M	132.00/M	ECQ-B2393JF
	.047	±5%	13.5	5.5	13.0	10.0	P4557A-ND	2.94	19.60	153.00	148.00/M	134.00/M	ECQ-B2473JF
	.056	±5%	13.5	6.0	13.5	10.0	P4558A-ND	3.15	21.00	164.00	159.00/M	144.00/M	ECQ-B2563JF
	.068	±5%	16.0	5.5	13.0	12.5	P4559A-ND	3.30	22.00	172.00	166.00/M	151.00/M	ECQ-B2683JF
	.082	±5%	16.0	6.0	13.5	12.5	P4560A-ND	3.51	23.40	183.00	177.00/M	160.00/M	ECQ-B2823JF
	.1	±5%	16.0	7.0	14.5	12.5	P4561A-ND	4.14	27.60	216.00	208.00/M	189.00/M	ECQ-B2104JF
	.12	±5%	19.0	6.5	16.0	15.0	P4562A-ND	4.98	33.20	259.00	251.00/M	227.00/M	ECQ-B2124JF
	.15	±5%	19.0	7.5	17.0	15.0	P4563A-ND	5.82	38.80	303.00	293.00/M	266.00/M	ECQ-B2154JF
	.18	±5%	19.0	8.0	17.5	15.0	P4564A-ND	7.14	47.60	372.00	359.00/M	326.00/M	ECQ-B2184JF
	.22	±5%	19.0	9.0	18.5	15.0	P4565A-ND	7.86	52.40	409.00	396.00/M	359.00/M	ECQ-B2224JF
	.27	±5%	24.0	8.0	17.5	20.0	P4566A-ND	8.94	59.60	466.00	450.00/M	408.00/M	ECQ-B2274JF
	.33	±5%	24.0	9.0	18.5	20.0	P4567A-ND	11.13	74.20	580.00	560.00/M	508.00/M	ECQ-B2334JF
	.39	±5%	24.0	10.0	19.5	20.0	P4568A-ND	12.42	82.80	647.00	625.00/M	567.00/M	ECQ-B2394JF
	.47	±5%	24.0	11.5	20.5	20.0	P4569A-ND	14.13	94.20	736.00	711.00/M	645.00/M	ECQ-B2474JF

Volts	Cap. µF	Toler- ance	Dimensions (mm)				Digi-Key Part No.	Tape & Box Pricing								Panasonic Part No.
			L	T	H	F		500	1,000	2,000	5,000	6,000	10,000	25,000	26,000	
50WV (Ammo Box Pkg.)	.0001	±10%	6.5	3.0	5.5	5.0	P4570TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H101KF3
	.00012	±10%	6.5	3.0	5.5	5.0	P4571TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H121KF3
	.00015	±10%	6.5	3.0	5.5	5.0	P4572TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H151KF3
	.00018	±10%	6.5	3.0	5.5	5.0	P4573TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H181KF3
	.00022	±10%	6.5	3.0	5.5	5.0	P4574TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H221KF3
	.00027	±10%	6.5	3.0	5.5	5.0	P4575TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H271KF3
	.00033	±10%	6.5	3.0	5.5	5.0	P4576TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H331KF3
	.00039	±10%	6.5	3.0	5.5	5.0	P4577TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H391KF3
	.00047	±5%	6.5	3.0	5.5	5.0	P4578TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H471JF3
	.00056	±5%	6.5	3.0	5.5	5.0	P4579TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H561JF3
	.00068	±5%	6.5	3.0	5.5	5.0	P4580TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H681JF3
	.00082	±5%	6.5	3.0	5.5	5.0	P4581TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H821JF3
	.001	±5%	6.5	3.0	5.5	5.0	P4551TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H102JF3
	.0012	±5%	6.5	3.0	5.5	5.0	P4552TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H122JF3
	.0015	±5%	6.5	3.0	5.5	5.0	P4553TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H152JF3
	.0018	±5%	6.5	3.0	5.5	5.0	P4554TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H182JF3
	.0022	±5%	6.5	3.0	5.5	5.0	P4555TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H222JF3
	.0027	±5%	6.5	3.0	5.5	5.0	P4556TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H272JF3
	.0033	±5%	6.5	3.0	5.5	5.0	P4557TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H332JF3
	.0039	±5%	6.5	3.0	5.5	5.0	P4558TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H392JF3
	.0047	±5%	6.5	3.0	5.5	5.0	P4559TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H472JF3
	.0056	±5%	6.5	3.0	5.5	5.0	P4560TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H562JF3
	.0068	±5%	6.5	3.0	5.5	5.0	P4561TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H682JF3
	.0082	±5%	6.5	3.0	5.5	5.0	P4562TB-ND	—	—	42.00/M	—	41.00/M	37.00/M	—	33.00/M	ECQ-B1H822JF3
	.01	±5%	6.5	3.0	5.5	5.0	P4582TB-ND	—	—	44.00/M	—	42.00/M	38.00/M	—	34.00/M	ECQ-B1H103JF3
	.012	±5%	7.0	3.0	6.0	5.0	P4583TB-ND	—	—	45.00/M	—	44.00/M	40.00/M	—	35.00/M	ECQ-B1H123JF3
	.015	±5%	7.0	3.0	6.0	5.0	P4584TB-ND	—	—	47.00/M	—	45.00/M	41.00/M	—	36.00/M	ECQ-B1H153JF3
	.018	±5%	7.0	3.0	6.0	5.0	P4585TB-ND	—	—	48.00/M	—	47.00/M	42.00/M	—	38.00/M	ECQ-B1H183JF3
	.022	±5%	7.0	3.0	6.0	5.0	P4586TB-ND	—	—	50.00/M	—	48.00/M	44.00/M	—	39.00/M	ECQ-B1H223JF3
	.027	±5%	7.0	3.5	6.5	5.0	P4587TB-ND	—	—	50.00/M	—	48.00/M	44.00/M	—	39.00/M	ECQ-B1H273JF3
	.033	±5%	7.5	3.5	6.5	5.0	P4569TB-ND	—	—	52.00/M	—	50.00/M	45.00/M	—	40.00/M	ECQ-B1H333JF3
	.039	±5%	7.5	3.5	6.5	5.0	P4588TB-ND	—	—	53.00/M	—	51.00/M	47.00/M	—	41.00/M	ECQ-B1H393JF3
	.047	±5%	7.5	4.0	6.5	5.0	P4589TB-ND	—	56.00	—	54.00/M	—	49.00/M	44.00/M	—	ECQ-B1H473JF3
	.056	±5%	8.0	4.0	7.5	5.0	P4590TB-ND	—	58.00	—	56.00/M	—	51.00/M	45.00/M	—	ECQ-B1H563JF3
	.068	±5%	8.0	4.0	8.5	5.0	P4591TB-ND	—	67.00	—	65.00/M	—	59.00/M	52.00/M	—	ECQ-B1H683JF3
	.082	±5%	8.0	4.5	8.5	5.0	P4592TB-ND	—	72.00	—	69.00/M	—	63.00/M	56.00/M	—	ECQ-B1H823JF3
	.1	±5%	8.0	4.5	9.5	5.0	P4593TB-ND	—	89.00	—	86.00/M	—	78.00/M	69.00/M	—	ECQ-B1H104JF3
	.12	±5%	11.0	4.5	9.5	5.0	P4594TB-ND	—	172.00	—	166.00/M	—	151.00/M	133.00/M	—	ECQ-B1H124JF3
	.15	±5%	11.0	5.0	9.5	5.0	P4595TB-ND	—	184.00	—	178.00/M	—	162.00/M	143.00/M	—	ECQ-B1H154JF3
	.18	±5%	11.0	5.5	10.0	5.0	P4596TB-ND	97.50	—	—	189.00/M	—	171.00/M	151.00/M	—	ECQ-B1H184JF3
	.22	±5%	11.0	6.0	11.0	5.0	P4597TB-ND	—	214.00	—	207.00/M	—	188.00/M	166.00/M	—	ECQ-B1H224JF3

Panasonic® V-Series ±5% Stacked Metallized Film Capacitors

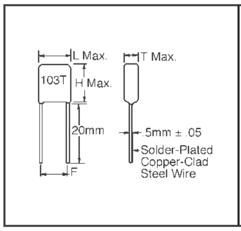
Suitable for Replacement of Monolithic Ceramic Capacitors in Most Cases

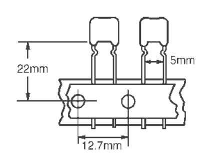
FEATURES: • High volumetric efficiency • Low dissipation factor • Stacked and non-inductive construction • Operating temperature range: –40°C to +85°C • Temperature coefficientΔc/c: 200 ppm • Dissipation factor (max.): 1.0% • Insulation resistance (25°C): 1000MΩ µF • Self-healing

APPLICATIONS: • Blocking, by-pass and coupling of DC • Pulse, logic and timing circuits • Light duty pulse forming • Filter and noise suppression

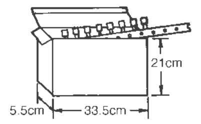
PANASONIC ECQ-V CROSS REFERENCE
Sprague: 453P/454P. **CSF Thompson:** IRD. **Siemens:** B32509.

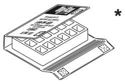
(To convert millimeters to inches divide by 25.4.)





* All taped parts have 5mm lead space.





*** Panasonic V-Series Stacked Metallized Film Capacitors**

Digi-Key® V-Series Capacitors Kit

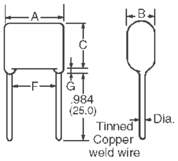
P4542-KIT-ND* **(50 Volt K)** **$49.95**
P4700-KIT-ND† **(100 Volt K)** **$49.95**

Includes 10 each of those parts indicated below (* or †). 180 capacitors. 10 each of the values listed in the chart. Price includes a notebook style storage box with bin guide for easy storage and quick access.

Working Voltage	Cap. µF	Dimensions (mm)				Digi-Key Part No.	Pricing					Panasonic Part No.
		L	T	H	F		10	100	1,000	5,000	10,000	
Bulk Package												
50	0.01	7.3	3.2	5.0	5.0	P4513-ND*	1.35	11.25	67.00	62.00/M	58.00/M	ECQ-V1H103JL
	0.012	7.3	3.2	5.0	5.0	P4514-ND	1.35	11.25	67.00	62.00/M	58.00/M	ECQ-V1H123JL
	0.015	7.3	3.2	5.0	5.0	P4515-ND*	1.41	11.75	70.00	65.00/M	61.00/M	ECQ-V1H153JL
	0.018	7.3	3.2	5.0	5.0	P4516-ND	1.44	12.00	72.00	67.00/M	62.00/M	ECQ-V1H183JL
	0.022	7.3	3.2	5.0	5.0	P4517-ND*	1.47	12.25	73.00	68.00/M	64.00/M	ECQ-V1H223JL
	0.027	7.3	3.2	5.0	5.0	P4518-ND*	1.53	12.75	76.00	71.00/M	66.00/M	ECQ-V1H273JL
	0.033	7.3	3.2	5.0	5.0	P4519-ND*	1.59	13.25	79.00	74.00/M	69.00/M	ECQ-V1H333JL
	0.039	7.3	3.2	5.0	5.0	P4520-ND	1.59	13.25	79.00	74.00/M	69.00/M	ECQ-V1H393JL
	0.047	7.3	3.2	5.0	5.0	P4521-ND*	1.41	11.75	70.00	65.00/M	61.00/M	ECQ-V1H473JL
	0.056	7.3	3.2	5.0	5.0	P4522-ND	1.44	12.00	72.00	67.00/M	62.00/M	ECQ-V1H563JL
	0.068	7.3	3.2	5.0	5.0	P4523-ND*	1.47	12.25	73.00	68.00/M	64.00/M	ECQ-V1H683JL
	0.082	7.3	3.6	5.0	5.0	P4524-ND*	1.50	12.50	75.00	69.00/M	65.00/M	ECQ-V1H823JL
	0.1	7.3	4.0	5.0	5.0	P4525-ND*	1.80	15.00	90.00	83.00/M	78.00/M	ECQ-V1H104JL
	0.12	7.3	4.0	5.0	5.0	P4526-ND	1.98	16.50	99.00	92.00/M	86.00/M	ECQ-V1H124JL
	0.15	10.2	3.4	9.0	7.5	P4538-ND	2.07	17.25	103.00	96.00/M	90.00/M	ECQ-V1H154JC
	0.15	7.3	4.4	5.5	5.0	P4665-ND*	2.07	17.25	103.00	96.00/M	90.00/M	ECQ-V1H154JL
	0.18	7.3	4.5	5.5	5.0	P4666-ND*	2.10	17.50	104.00	97.00/M	91.00/M	ECQ-V1H184JL
	0.22	7.3	4.8	5.5	5.0	P4667-ND	2.10	17.50	104.00	97.00/M	91.00/M	ECQ-V1H224JL
	0.27	7.3	4.6	7.0	5.0	P4668-ND*	2.25	18.75	112.00	104.00/M	97.00/M	ECQ-V1H274JL
	0.33	7.3	5.2	7.0	5.0	P4669-ND*	2.37	19.75	118.00	110.00/M	103.00/M	ECQ-V1H334JL
	0.39	7.3	5.7	7.3	5.0	P4670-ND	2.58	21.50	128.00	119.00/M	112.00/M	ECQ-V1H394JL
	0.47	7.3	6.0	7.3	5.0	P4671-ND*	3.30	27.50	164.00	153.00/M	143.00/M	ECQ-V1H474JL
	0.56	7.3	5.8	10.0	5.0	P4672-ND*	3.39	28.25	169.00	157.00/M	147.00/M	ECQ-V1H564JL
	0.68	7.3	6.5	10.0	5.0	P4673-ND*	5.10	42.50	254.00	236.00/M	221.00/M	ECQ-V1H684JL
	0.82	7.3	6.8	10.0	5.0	P4674-ND*	5.10	42.50	254.00	236.00/M	221.00/M	ECQ-V1H824JL
	1.0	7.3	8.0	11.0	5.0	P4675-ND*	6.30	52.50	313.00	292.00/M	273.00/M	ECQ-V1H105JL
63	0.18	10.2	3.5	9.0	7.5	P4539-ND	2.28	19.00	113.00	106.00/M	99.00/M	ECQ-V1J184JM
	0.22	10.2	3.5	9.0	7.5	P4540-ND	2.34	19.50	116.00	108.00/M	101.00/M	ECQ-V1J224JM
	0.27	10.2	3.5	9.0	7.5	P4541-ND	2.70	22.50	134.00	125.00/M	117.00/M	ECQ-V1J274JM
	0.33	10.2	3.8	9.0	7.5	P4549-ND	3.06	25.50	152.00	142.00/M	132.00/M	ECQ-V1J334JM
	0.39	10.2	4.0	9.0	7.5	P4543-ND	3.42	28.50	170.00	158.00/M	148.00/M	ECQ-V1J394JM
	0.47	10.2	4.5	9.0	7.5	P4544-ND	3.84	32.00	191.00	178.00/M	166.00/M	ECQ-V1J474JM
	0.56	10.2	4.9	9.0	7.5	P4545-ND	4.56	38.00	227.00	211.00/M	197.00/M	ECQ-V1J564JM
	0.68	10.2	5.5	10.0	7.5	P4546-ND	5.40	45.00	269.00	250.00/M	234.00/M	ECQ-V1J684JM
	0.82	10.2	6.1	10.0	7.5	P4547-ND	6.39	53.25	318.00	296.00/M	277.00/M	ECQ-V1J824JM
	1.0	10.2	6.9	10.0	7.5	P4548-ND	7.35	61.25	366.00	340.00/M	318.00/M	ECQ-V1J105JM
100	0.01	7.3	3.2	7.0	5.0	P4713-ND†	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1103JM
	0.012	7.3	3.2	7.0	5.0	P4714-ND	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1123JM
	0.015	7.3	3.2	7.0	5.0	P4715-ND†	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1153JM
	0.018	7.3	3.2	7.0	5.0	P4716-ND	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1183JM
	0.022	7.3	3.2	7.0	5.0	P4717-ND†	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-V1223JM
	0.027	7.3	3.2	7.0	5.0	P4718-ND†	2.01	16.75	100.00	93.00/M	87.00/M	ECQ-V1273JM
	0.033	7.3	3.2	7.0	5.0	P4719-ND†	2.01	16.75	100.00	93.00/M	87.00/M	ECQ-V1333JM
	0.039	7.3	3.2	7.0	5.0	P4720-ND†	2.04	17.00	101.00	94.00/M	88.00/M	ECQ-V1393JM
	0.047	7.3	4.0	7.0	5.0	P4721-ND†	2.04	17.00	101.00	94.00/M	88.00/M	ECQ-V1473JM
	0.056	7.3	4.2	7.0	5.0	P4722-ND†	2.10	17.50	104.00	97.00/M	91.00/M	ECQ-V1563JM
	0.068	7.3	4.5	7.0	5.0	P4723-ND†	2.22	18.50	110.00	103.00/M	96.00/M	ECQ-V1683JM
	0.082	7.3	5.0	7.0	5.0	P4724-ND†	2.28	19.00	113.00	106.00/M	99.00/M	ECQ-V1823JM
	0.1	7.3	5.8	7.0	5.0	P4725-ND†	2.31	19.25	115.00	107.00/M	100.00/M	ECQ-V1104JM
	0.12	10.0	3.4	9.0	7.5	P4726-ND	2.58	21.50	128.00	119.00/M	112.00/M	ECQ-V1124JM
	0.15	10.0	3.8	9.0	7.5	P4727-ND†	2.64	22.00	131.00	122.00/M	114.00/M	ECQ-V1154JM
	0.18	10.0	4.0	9.0	7.5	P4728-ND†	2.76	23.00	137.00	128.00/M	119.00/M	ECQ-V1184JM
	0.22	10.0	4.3	9.0	7.5	P4729-ND†	2.91	24.25	145.00	135.00/M	126.00/M	ECQ-V1224JM
	0.27	10.0	5.2	10.0	7.5	P4730-ND†	3.36	28.00	167.00	156.00/M	145.00/M	ECQ-V1274JM
	0.33	10.0	5.9	10.0	7.5	P4731-ND†	3.84	32.00	191.00	178.00/M	166.00/M	ECQ-V1334JM
	0.39	10.0	7.5	11.0	7.5	P4732-ND†	4.23	35.25	210.00	196.00/M	183.00/M	ECQ-V1394JM
	0.47	10.0	8.1	11.0	7.5	P4733-ND†	4.71	39.25	234.00	218.00/M	204.00/M	ECQ-V1474JM

Working Voltage	Cap. µF	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
		L	T	H	F		1,000	2,000	5,000	6,000	10,000	26,000	
Ammo Box Package													
50	0.01	7.3	3.2	7.0	5.0	P4513TB-ND	—	76.00/M	—	71.00/M	66.00/M	62.00/M	ECQ-V1H103JZ3
	0.012	7.3	3.2	7.0	5.0	P4514TB-ND	—	76.00/M	—	71.00/M	66.00/M	62.00/M	ECQ-V1H123JZ3
	0.015	7.3	3.2	7.0	5.0	P4515TB-ND	—	79.00/M	—	74.00/M	69.00/M	65.00/M	ECQ-V1H153JZ3
	0.018	7.3	3.2	7.0	5.0	P4516TB-ND	—	82.00/M	—	76.00/M	71.00/M	67.00/M	ECQ-V1H183JZ3
	0.022	7.3	3.2	5.0	5.0	P4517TB-ND	—	84.00/M	—	78.00/M	73.00/M	68.00/M	ECQ-V1H223JL3
	0.027	7.3	3.2	7.0	5.0	P4518TB-ND	—	85.00/M	—	79.00/M	74.00/M	70.00/M	ECQ-V1H273JZ3
	0.033	7.3	3.2	7.0	5.0	P4519TB-ND	—	88.00/M	—	82.00/M	77.00/M	72.00/M	ECQ-V1H333JZ3
	0.039	7.3	3.2	5.0	5.0	P4520TB-ND	—	88.00/M	—	82.00/M	77.00/M	72.00/M	ECQ-V1H393JL3
	0.047	7.3	3.2	7.0	5.0	P4521TB-ND	—	70.00/M	—	65.00/M	61.00/M	57.00/M	ECQ-V1H473JZ3
	0.056	7.3	3.2	5.0	5.0	P4522TB-ND	—	72.00/M	—	67.00/M	62.00/M	59.00/M	ECQ-V1H563JL3
	0.068	7.3	3.9	7.0	5.0	P4523TB-ND	—	73.00/M	—	68.00/M	64.00/M	60.00/M	ECQ-V1H683JZ3
	0.082	7.3	4.1	7.0	5.0	P4524TB-ND	—	75.00/M	—	69.00/M	65.00/M	61.00/M	ECQ-V1H823JZ3
	0.1	7.3	4.4	7.0	5.0	P4525TB-ND	—	90.00/M	—	83.00/M	78.00/M	73.00/M	ECQ-V1H104JZ3
	0.12	7.3	4.7	7.0	5.0	P4526TB-ND	—	93.00/M	—	86.00/M	81.00/M	76.00/M	ECQ-V1H124JZ3
	0.15	10.0	3.4	9.0	5.0	P4527TB-ND	103.00	—	96.00/M	—	90.00/M	—	ECQ-V1H154JZ3
	0.18	10.0	3.5	9.0	5.0	P4528TB-ND	104.00	—	97.00/M	—	91.00/M	—	ECQ-V1H184JZ3
	0.22	10.0	3.7	9.0	5.0	P4529TB-ND	104.00	—	97.00/M	—	91.00/M	—	ECQ-V1H224JZ3
	0.27	10.0	4.0	9.0	5.0	P4530TB-ND	112.00	—	104.00/M	—	97.00/M	—	ECQ-V1H274JZ3
	0.33	10.0	4.2	9.0	5.0	P4531TB-ND	118.00	—	110.00/M	—	103.00/M	—	ECQ-V1H334JZ3
	0.39	10.0	4.9	9.0	5.0	P4532TB-ND	128.00	—	119.00/M	—	112.00/M	—	ECQ-V1H394JZ3
	0.47	10.0	5.5	10.0	5.0	P4533TB-ND	164.00	—	153.00/M	—	143.00/M	—	ECQ-V1H474JZ3
	0.56	10.0	6.1	10.0	5.0	P4534TB-ND	169.00	—	157.00/M	—	147.00/M	—	ECQ-V1H564JZ3
	0.68	10.0	6.8	10.0	5.0	P4535TB-ND	254.00	—	236.00/M	—	221.00/M	—	ECQ-V1H684JZ3
	0.82	7.3	6.8	10.0	5.0	P4536TB-ND	254.00	—	236.00/M	—	221.00/M	—	ECQ-V1H824JL3
	1.0	7.3	8.0	11.0	5.0	P4537TB-ND	313.00	—	292.00/M	—	273.00/M	—	ECQ-V1H105JL3

Panasonic® E-Series Metallized Polyester Capacitors



GENERAL SPECIFICATIONS:
ELECTRICAL: Rated Voltage 100 V.D.C., 250 V.D.C., 400 V.D.C., 630 V.D.C. **Capacitance Tolerance** ±10% (K)
Insulation Resistance: Less than 0.33 µF: 9,000 MΩ; More than 0.33 µF: 3,000 MΩ. **Dissipation Factor** = 1.0% at 1kHz

Withstanding Voltage Rated Voltage X 1.5 (1 min.)
Operating Temperature -40°C ~ +85°C

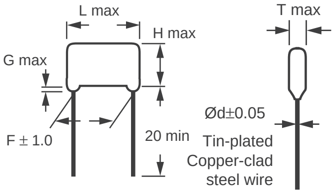
PANASONIC ECQ-E CROSS REFERENCES:
Sprague: DF/450P/451P/453P; **Westlake:** 160/168/185/167/184/186; **Mepco:** 713A1/ 719A1/C280; **TRW:** X601PE/X601CPE; **Packtron:** MF/RB; **Secor:** MMKS/MMKR/MMDR; **RIFA:** PHE353/PHE354; **Roederstein:** MKT1818/MKT1822; **WIMA:** MKS; **CSF Thompson:** MD/MC; **Siemens:** B325X-XX; **Rubycon:** MC/MN; **Nichicon:** DDXM.

Working Voltage	µF	Dimensions (mm) A	B	C	F	G	Dia.	Digi-Key Part No.	Pricing 1	10	100	1,000	5,000	10,000	Panasonic Part No.
100	.1	12.0	4.0	7.4	10.0	1.0	.6	E1104-ND	.34	2.94	23.03	147.00	138.00/M	127.00/M	ECQ-E1104KZ
	.12	12.0	4.5	7.4	10.0	1.0	.6	E1124-ND	.35	3.03	23.74	151.00	142.00/M	131.00/M	ECQ-E1124KZ
	.15	12.0	4.0	9.5	10.0	1.0	.6	E1154-ND	.36	3.12	24.44	156.00	147.00/M	135.00/M	ECQ-E1154KZ
	.18	12.0	4.5	10.0	10.0	1.0	.6	E1184-ND	.39	3.30	25.85	165.00	155.00/M	143.00/M	ECQ-E1184KZ
	.22	12.0	5.0	10.5	10.0	1.0	.6	E1224-ND	.41	3.54	27.73	177.00	166.00/M	153.00/M	ECQ-E1224KZ
	.27	17.0	4.5	8.0	15.0	1.0	.6	E1274-ND	.46	3.90	30.55	195.00	183.00/M	169.00/M	ECQ-E1274KZ
	.33	17.0	4.5	10.0	15.0	1.0	.6	E1334-ND	.51	4.35	34.08	217.00	205.00/M	188.00/M	ECQ-E1334KZ
	.39	17.0	5.0	10.0	15.0	1.0	.6	E1394-ND	.53	4.50	35.25	225.00	212.00/M	195.00/M	ECQ-E1394KZ
	.47	17.0	5.5	11.0	15.0	1.0	.6	E1474-ND	.55	4.74	37.13	237.00	223.00/M	205.00/M	ECQ-E1474KZ
	.56	17.0	6.5	11.5	15.0	1.0	.6	E1564-ND	.64	5.46	42.77	272.00	257.00/M	236.00/M	ECQ-E1564KZ
	.68	17.0	7.0	12.0	15.0	1.0	.8	E1684-ND	.72	6.21	48.65	310.00	292.00/M	269.00/M	ECQ-E1684KZ
	.82	17.0	7.5	13.0	15.0	1.0	.8	E1824-ND	.79	6.81	53.35	340.00	320.00/M	295.00/M	ECQ-E1824KZ
	1.0	17.0	8.0	14.0	15.0	1.0	.8	E1105-ND	.86	7.41	58.05	370.00	348.00/M	321.00/M	ECQ-E1105KZ
	1.2	17.0	8.5	16.0	15.0	1.0	.8	E1125-ND	1.00	8.58	67.21	428.00	403.00/M	371.00/M	ECQ-E1125KZ
	1.5	25.5	7.5	14.5	22.5	1.0	.8	E1155-ND	1.17	10.02	78.49	500.00	471.00/M	434.00/M	ECQ-E1155KZ
	1.8	25.5	8.5	16.0	22.5	1.0	.8	E1185-ND	1.30	11.13	87.19	555.00	523.00/M	482.00/M	ECQ-E1185KZ
	2.2	25.5	9.5	16.5	22.5	1.0	.8	E1225-ND	1.47	12.60	98.70	629.00	592.00/M	545.00/M	ECQ-E1225KZ
	2.7	25.5	10.0	18.5	22.5	1.0	.8	E1275-ND	1.67	14.31	112.10	714.00	673.00/M	619.00/M	ECQ-E1275KZ
	3.3	25.5	10.0	19.0	22.5	1.0	.8	E1335-ND	2.13	18.24	142.88	910.00	858.00/M	790.00/M	ECQ-E1335KZ
	3.9	30.5	11.0	18.0	27.5	1.5	.8	E1395-ND	2.41	20.67	161.92	1031.00	972.00/M	895.00/M	ECQ-E1395KZ
	4.7	30.5	11.0	20.5	27.5	1.5	.8	E1475-ND	2.72	23.31	182.60	1163.00	1096.00/M	1009.00/M	ECQ-E1475KZ
	5.6	30.5	12.5	21.0	27.5	1.5	.8	E1565-ND	3.23	27.72	217.14	1383.00	1303.00/M	1200.00/M	ECQ-E1565KZ
	6.8	30.5	13.0	24.0	27.5	1.5	.8	E1685-ND	3.67	31.47	246.52	1570.00	1480.00/M	1362.00/M	ECQ-E1685KZ
	8.2	30.5	15.0	25.0	27.5	1.5	.8	E1825-ND	4.24	36.30	284.35	1811.00	1707.00/M	1571.00/M	ECQ-E1825KZ
	10.0	30.5	16.0	27.0	27.5	1.5	.8	E1106-ND	4.93	42.24	330.88	2108.00	1986.00/M	1829.00/M	ECQ-E1106KZ
250	.01	12.5	5.0	8.5	10.0	1.0	.6	E2103-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2103KS
	.012	12.5	5.0	8.5	10.0	1.0	.6	E2123-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2123KS
	.015	12.5	5.0	8.5	10.0	1.0	.6	E2153-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2153KS
	.018	12.5	5.0	8.5	10.0	1.0	.6	E2183-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2183KS
	.022	12.5	5.0	8.5	10.0	1.0	.6	E2223-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2223KS
	.027	12.5	5.0	8.5	10.0	1.0	.6	E2273-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2273KS
	.033	12.5	5.0	8.5	10.0	1.0	.6	E2333-ND*	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2333KS
	.039	12.5	5.0	8.5	10.0	1.0	.6	E2393-ND	.31	2.67	20.92	133.00	126.00/M	116.00/M	ECQ-E2393KS
	.047	12.5	5.0	8.0	10.0	1.0	.6	E2473-ND*	.26	2.19	17.16	109.00	103.00/M	95.00/M	ECQ-E2473KS
	.056	12.5	5.5	8.5	10.0	1.0	.6	E2563-ND	.32	2.76	21.62	138.00	130.00/M	119.00/M	ECQ-E2563KS
	.068	12.5	5.5	8.5	10.0	1.0	.6	E2683-ND*	.33	2.82	22.09	141.00	133.00/M	122.00/M	ECQ-E2683KS
	.082	12.5	5.5	10.0	10.0	1.0	.6	E2823-ND	.34	2.94	23.03	147.00	138.00/M	127.00/M	ECQ-E2823KS
	.10	12.5	5.5	10.5	10.0	1.0	.6	E2104-ND*	.31	2.64	20.68	132.00	124.00/M	114.00/M	ECQ-E2104KS
	.12	17.5	5.5	10.0	15.0	1.0	.8	E2124-ND	.40	3.42	26.79	171.00	161.00/M	148.00/M	ECQ-E2124KS
	.15	17.5	6.0	10.5	15.0	1.0	.8	E2154-ND*	.43	3.72	29.14	186.00	175.00/M	161.00/M	ECQ-E2154KS
	.18	17.5	6.0	10.5	15.0	1.0	.8	E2184-ND	.46	3.90	30.55	195.00	183.00/M	169.00/M	ECQ-E2184KS
	.22	17.5	6.0	11.0	15.0	1.0	.8	E2224-ND*	.48	4.08	31.96	204.00	192.00/M	177.00/M	ECQ-E2224KS
	.27	23.0	6.0	10.5	20.0	1.0	.8	E2274-ND	.55	4.71	36.90	235.00	221.00/M	204.00/M	ECQ-E2274KS
	.33	23.0	6.0	11.0	20.0	1.0	.8	E2334-ND*	.60	5.16	40.42	257.00	243.00/M	223.00/M	ECQ-E2334KS
	.39	23.0	6.5	11.5	20.0	1.0	.8	E2394-ND	.65	5.55	43.48	277.00	261.00/M	240.00/M	ECQ-E2394KS
	.47	23.0	7.0	12.0	20.0	1.0	.8	E2474-ND*	.69	5.94	46.53	296.00	279.00/M	257.00/M	ECQ-E2474KS
	.56	23.0	7.5	13.0	20.0	1.0	.8	E2564-ND	.76	6.51	51.00	325.00	306.00/M	282.00/M	ECQ-E2564KS
	.68	23.0	8.5	14.0	20.0	1.0	.8	E2684-ND	.84	7.17	56.17	358.00	337.00/M	310.00/M	ECQ-E2684KS
	.82	31.0	7.5	13.0	27.5	1.0	.8	E2824-ND	.92	7.89	61.81	394.00	371.00/M	342.00/M	ECQ-E2824KS
	1.0	31.0	8.5	14.0	27.5	1.0	.8	E2105-ND*	.98	8.37	65.57	418.00	394.00/M	362.00/M	ECQ-E2105KS
	1.2	31.0	8.5	16.0	27.5	1.0	.8	E2125-ND*	1.07	9.18	71.91	458.00	432.00/M	397.00/M	ECQ-E2125KS
	1.5	31.0	9.5	17.0	27.5	1.0	.8	E2155-ND*	1.38	11.82	92.59	590.00	556.00/M	512.00/M	ECQ-E2155KS
	1.8	31.0	9.5	18.5	27.5	1.0	.8	E2185-ND	1.66	14.25	111.63	711.00	670.00/M	617.00/M	ECQ-E2185KS
	2.2	31.0	10.5	19.5	27.5	1.0	.8	E2225-ND*	1.67	14.31	112.10	714.00	673.00/M	619.00/M	ECQ-E2225KS
400	.01	14.0	5.0	8.5	10.5	1.0	.6	E4103-ND	.42	3.60	28.20	180.00	169.00/M	156.00/M	ECQ-E4103KZ
	.012	14.0	5.5	8.5	10.5	1.0	.6	E4123-ND	.42	3.60	28.20	180.00	169.00/M	156.00/M	ECQ-E4123KZ
	.015	14.0	5.0	8.5	10.5	1.0	.6	E4153-ND	.43	3.72	29.14	186.00	175.00/M	161.00/M	ECQ-E4153KZ
	.018	14.0	5.5	8.5	10.5	1.0	.6	E4183-ND	.43	3.72	29.14	186.00	175.00/M	161.00/M	ECQ-E4183KZ
	.022	14.0	5.5	10.0	10.5	1.0	.6	E4223-ND	.44	3.75	29.38	187.00	176.00/M	162.00/M	ECQ-E4223KZ
	.027	14.0	5.5	10.5	10.5	1.0	.6	E4273-ND	.47	3.99	31.26	199.00	188.00/M	173.00/M	ECQ-E4273KZ
	.033	14.0	6.0	11.0	10.5	1.0	.6	E4333-ND	.49	4.20	32.90	210.00	197.00/M	182.00/M	ECQ-E4333KZ
	.039	14.0	6.5	11.5	10.5	1.0	.6	E4393-ND	.50	4.26	33.37	213.00	200.00/M	184.00/M	ECQ-E4393KZ
	.047	14.0	7.0	12.0	10.5	1.0	.6	E4473-ND	.50	4.26	33.37	213.00	200.00/M	184.00/M	ECQ-E4473KZ
	.056	17.0	6.5	11.0	13.5	1.0	.6	E4563-ND	.54	4.59	35.96	229.00	216.00/M	199.00/M	ECQ-E4563KZ
	.068	17.0	7.0	12.0	13.5	1.0	.6	E4683-ND	.57	4.86	38.07	243.00	228.00/M	210.00/M	ECQ-E4683KZ
	.082	17.0	7.5	12.5	13.5	1.0	.6	E4823-ND	.59	5.07	39.72	253.00	238.00/M	219.00/M	ECQ-E4823KZ
	.10	17.0	7.5	14.5	13.5	1.0	.6	E4104-ND	.58	4.98	39.01	249.00	234.00/M	216.00/M	ECQ-E4104KZ
	.12	17.0	8.5	15.5	13.5	1.0	.6	E4124-ND	.66	5.67	44.42	283.00	267.00/M	245.00/M	ECQ-E4124KZ
	.15	17.0	9.0	16.5	13.5	1.0	.8	E4154-ND	.72	6.21	48.65	310.00	292.00/M	269.00/M	ECQ-E4154KZ
	.18	17.0	10.0	17.0	13.5	1.0	.8	E4184-ND	.77	6.63	51.94	331.00	312.00/M	287.00/M	ECQ-E4184KZ
	.22	24.5	8.5	15.5	20.5	1.0	.8	E4224-ND	.83	7.11	55.70	355.00	334.00/M	308.00/M	ECQ-E4224KZ
	.27	24.5	9.0	16.5	20.5	1.0	.8	E4274-ND	.92	7.86	61.57	392.00	370.00/M	340.00/M	ECQ-E4274KZ
	.33	24.5	9.5	17.0	20.5	1.0	.8	E4334-ND	.99	8.46	66.27	422.00	398.00/M	366.00/M	ECQ-E4334KZ
	.39	29.5	9.5	16.5	25.5	1.5	.8	E4394-ND	1.07	9.18	71.91	458.00	432.00/M	397.00/M	ECQ-E4394KZ
	.47	29.5	10.0	17.5	25.5	1.5	.8	E4474-ND	1.16	9.90	77.55	494.00	465.00/M	429.00/M	ECQ-E4474KZ
	.56	29.5	11.0	18.0	25.5	1.5	.8	E4564-ND	1.26	10.80	84.60	539.00	508.00/M	468.00/M	ECQ-E4564KZ
	.68	29.5	12.0	19.0	25.5	1.5	.8	E4684-ND	1.41	12.09	94.71	603.00	568.00/M	523.00/M	ECQ-E4684KZ
	.82	29.5	13.0	21.0	25.5	1.5	.8	E4824-ND	1.54	13.20	103.40	659.00	621.00/M	571.00/M	ECQ-E4824KZ
	1.0	29.5	15.0	22.0	25.5	1.5	.8	E4105-ND	1.68	14.43	113.04	720.00	678.00/M	625.00/M	ECQ-E4105KZ
	1.2	29.5	15.0	25.0	25.5	1.5	.8	E4125-ND	2.38	20.40	159.80	1018.00	959.00/M	883.00/M	ECQ-E4125KZ
	1.5	43.5	13.0	22.0	38.5	1.5	.8	E4155-ND	2.56	21.96	172.02	1096.00	1032.00/M	951.00/M	ECQ-E4155KZ
	1.8	43.5	14.5	24.0	38.5	1.5	.8	E4185-ND	3.03	26.01	203.75	1298.00	1223.00/M	1126.00/M	ECQ-E4185KZ
	2.2	43.5	16.0	25.5	38.5	1.5	.8	E4225-ND	3.47	29.70	232.65	1482.00	1396.00/M	1286.00/M	ECQ-E4225KZ
630	.01	14.0	5.5	8.5	10.5	1.0	.6	E6103-ND	.45	3.87	30.32	193.00	182.00/M	168.00/M	ECQ-E6103KZ
	.015	14.0	6.0	10.5	10.5	1.0	.6	E6153-ND	.48	4.14	32.43	207.00	195.00/M	179.00/M	ECQ-E6153KZ
	.018	14.0	6.0	11.0	10.5	1.0	.6	E6183-ND	.50	4.26	33.37	213.00	200.00/M	184.00/M	ECQ-E6183KZ
	.022	14.0	6.5	12.0	10.5	1.0	.6	E6223-ND	.52	4.44	34.78	222.00	209.00/M	192.00/M	ECQ-E6223KZ
	.027	17.0	5.5	12.5	13.5	1.0	.6	E6273-ND	.54	4.59	35.96	229.00	216.00/M	199.00/M	ECQ-E6273KZ
	.033	17.0	6.0	12.0	13.5	1.0	.6	E6333-ND	.55	4.74	37.13	237.00	223.00/M	205.00/M	ECQ-E6333KZ
	.039	17.0	6.5	12.0	13.5	1.0	.6	E6393-ND	.57	4.86	38.07	243.00	228.00/M	210.00/M	ECQ-E6393KZ
	.047	17.0	7.0	13.5	13.5	1.0	.6	E6473-ND	.58	4.98	39.01	249.00	234.00/M	216.00/M	ECQ-E6473KZ
	.056	17.0	7.5	14.0	13.5	1.0	.6	E6563-ND	.62	5.34	41.83	266.00	251.00/M	231.00/M	ECQ-E6563KZ
	.068	17.0	8.5	15.0	13.5	1.0	.6	E6683-ND	.67	5.76	45.12	287.00	271.00/M	249.00/M	ECQ-E6683KZ
	.082	17.0	9.0	16.0	13.5	1.0	.8	E6823-ND	.72	6.15	48.18	307.00	289.00/M	266.00/M	ECQ-E6823KZ
	.10	24.5	7.0	14.0	20.5	1.5	.8	E6104-ND	.77	6.57	51.47	328.00	309.00/M	284.00/M	ECQ-E6104KZ
	.12	24.5	8.5	15.5	20.5	1.5	.8	E6124-ND	.85	7.26	56.87	362.00	341.00/M	314.00/M	ECQ-E6124KZ
	.15	24.5	9.0	16.5	20.5	1.5	.8	E6154-ND	.95	8.13	63.69	406.00	382.00/M	352.00/M	ECQ-E6154KZ
	.18	24.5	10.0	17.0	20.5	1.5	.8	E6184-ND	1.01	8.67	67.92	433.00	408.00/M	375.00/M	ECQ-E6184KZ
	.22	29.5	9.5	17.0	25.5	1.5	.8	E6224-ND	1.10	9.45	74.03	472.00	444.00/M	409.00/M	ECQ-E6224KZ
	.27	29.5	10.5	17.5	25.5	1.5	.8	E6274-ND	1.24	10.65	83.43	531.00	501.00/M	461.00/M	ECQ-E6274KZ
	.33	29.5	11.5	18.5	25.5	1.5	.8	E6334-ND	1.40	12.00	94.00	599.00	564.00/M	519.00/M	ECQ-E6334KZ
	.39	29.5	12.0	19.5	25.5	1.5	.8	E6394-ND	1.52	13.05	102.23	651.00	614.00/M	565.00/M	ECQ-E6394KZ
	.47	29.5	13.0	20.5	25.5	1.5	.8	E6474-ND	1.64	14.07	110.22	702.00	661.00/M	609.00/M	ECQ-E6474KZ
	.56	29.5	15.0	21.5	25.5	1.5	.8	E6564-ND	1.95	16.68	130.66	832.00	784.00/M	722.00/M	ECQ-E6564KZ
	.68	43.5	12.5	19.5	38.5	1.5	.8	E6684-ND	2.52	21.60	169.20	1078.00	1016.00/M	935.00/M	ECQ-E6684KZ
	.82	43.5	14.0	21.0	38.5	1.5	.8	E6824-ND	2.77	23.70	185.65	1183.00	1114.00/M	1026.00/M	ECQ-E6824KZ
	1.0	43.5	14.5	24.0	38.5	1.5	.8	E6105-ND	3.36	28.77	225.37	1436.00	1353.00/M	1245.00/M	ECQ-E6105KZ
	1.2	43.5	16.0	25.5	38.5	1.5	.8	E6125-ND	3.53	30.24	236.88	1509.00	1422.00/M	1309.00/M	ECQ-E6125KZ
	1.5	43.5	18.5	27.0	38.5	1.5	.8	E6155-ND	4.31	36.96	289.52	1844.00	1738.00/M	1600.00/M	ECQ-E6155KZ

*** E-KIT-ND** ***Digi-Key® E-Series Capacitors Kit*** 10 each of all values denoted (except #E2104 which has 30 pcs.) - 170 total pieces. Notebook style storage case **$59.95**

Panasonic® ECQ-E(B) Series

Miniaturized Metallized Polyester Film Capacitors



The type ECQ-E(B) series is a down-sized version of the popular ECQ-E(F) series. It provides similar electrical characteristics in a smaller package.

FEATURES:

- Non-inductive construction
- Wound metallized polyester dielectric

APPLICATIONS:

- Blocking, by-passing, filtering, timing, interference suppression, low pulse applications.

SPECIFICATIONS:

Operating temperature range: -40°C to +85°C

Rated voltage: 250VDC

Capacitance tolerance: ±10%(K) @ 1kHZ

Dissipation factor: ≤1.0% (20°C 1kHz)

Withstand voltage: 250VDC X 150% for 60 seconds between terminals

Insulation resistance: ≥9,000MΩ (C ≤ 0.33µF) @ 100VDC, 20° for 60 seconds. ≥3,000MΩ · µF (C > 0.33µF) @ 100VDC, 20° for 60 seconds.

Voltage (VDC)	Cap. (µF)	Dimensions (mm) L	T	H	F	G	dø	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Panasonic Part No.
250	0.01	7.9	4.2	7.1	5.0	1.0	0.5	P10955-ND	.36	.25	.18	.12	.10	ECQ-E2103KB
	0.012	7.9	4.2	7.1	5.0	1.0	0.5	P10956-ND	.36	.25	.18	.12	.10	ECQ-E2123KB
	0.015	7.9	4.2	7.1	5.0	1.0	0.5	P10957-ND	.36	.25	.18	.12	.10	ECQ-E2153KB
	0.018	7.9	4.3	7.2	5.0	1.0	0.5	P10958-ND	.36	.25	.18	.12	.10	ECQ-E2183KB
	0.022	7.9	4.3	7.2	5.0	1.0	0.5	P10959-ND	.36	.25	.18	.12	.10	ECQ-E2223KB
	0.027	7.9	4.3	7.2	5.0	1.0	0.5	P10960-ND	.36	.25	.18	.12	.10	ECQ-E2273KB
	0.033	7.9	4.3	7.2	5.0	1.0	0.5	P10961-ND	.36	.25	.18	.12	.10	ECQ-E2333KB
	0.039	7.9	4.5	7.4	5.0	1.0	0.5	P10962-ND	.36	.25	.18	.12	.10	ECQ-E2393KB
	0.047	7.9	4.5	7.4	5.0	1.0	0.5	P10963-ND	.30	.21	.15	.10	.08	ECQ-E2473KB
	0.056	7.9	4.7	7.7	5.0	1.0	0.5	P10964-ND	.36	.25	.18	.12	.10	ECQ-E2563KB
	0.068	7.9	5.1	8.0	5.0	1.0	0.5	P10965-ND	.29	.22	.16	.12	.09	ECQ-E2683KB
	0.082	7.9	5.4	8.6	5.0	1.0	0.5	P10966-ND	.33	.25	.18	.13	.10	ECQ-E2823KB
	0.1	7.9	5.9	9.0	5.0	1.0	0.5	P10967-ND	.36	.25	.18	.12	.10	ECQ-E2104KB
	0.12	7.9	5.7	10.6	5.0	1.0	0.5	P10968-ND	.38	.28	.20	.15	.12	ECQ-E2124KB
	0.15	7.9	6.3	11.2	5.0	1.0	0.5	P10969-ND	.40	.30	.21	.16	.12	ECQ-E2154KB
	0.18	10.3	5.0	9.7	7.5	1.0	0.5	P10970-ND	.43	.32	.23	.17	.13	ECQ-E2184KB
	0.22	10.3	5.4	10.1	7.5	1.0	0.5	P10971-ND	.44	.33	.24	.17	.13	ECQ-E2224KB
	0.27	10.3	5.9	10.8	7.5	1.0	0.5	P10972-ND	.51	.38	.27	.20	.16	ECQ-E2274KB
	0.33	10.3	6.4	11.3	7.5	1.0	0.5	P10973-ND	.56	.42	.30	.22	.17	ECQ-E2334KB
	0.39	12.3	5.7	10.9	10.0	1.0	0.6	P10974-ND	.55	.41	.31	.22	.18	ECQ-E2394KB
	0.47	12.3	6.2	11.4	10.0	1.0	0.6	P10975-ND	.50	.38	.28	.20	.16	ECQ-E2474KB
	0.56	12.3	6.7	11.9	10.0	1.0	0.6	P10976-ND	.64	.48	.36	.26	.21	ECQ-E2564KB
	0.68	12.3	7.3	12.7	10.0	1.0	0.6	P10977-ND	.71	.53	.39	.28	.23	ECQ-E2684KB
	0.82	15.3	6.3	13.3	12.5	1.0	0.6	P10978-ND	.79	.59	.44	.32	.25	ECQ-E2824KB
	1.0	15.3	7.0	14.0	12.5	1.0	0.6	P10979-ND	.63	.47	.35	.25	.20	ECQ-E2105KB
	1.2	15.3	7.6	14.6	12.5	1.0	0.6	P10980-ND	.93	.70	.51	.37	.30	ECQ-E2125KB
	1.5	15.3	8.6	15.7	12.5	1.0	0.6	P10981-ND	1.08	.82	.61	.44	.36	ECQ-E2155KB
	1.8	20.8	7.6	14.6	17.5	1.0	0.8	P10982-ND	1.20	.90	.68	.48	.40	ECQ-E2185KB
	2.2	20.8	8.4	15.6	17.5	1.0	0.8	P10983-ND	1.31	.99	.74	.53	.44	ECQ-E2225KB
	2.7	20.8	9.3	16.7	17.5	1.0	0.8	P10984-ND	1.48	1.11	.84	.60	.50	ECQ-E2275KB
	3.3	20.8	10.5	17.9	17.5	1.0	0.8	P10985-ND	1.79	1.35	1.01	.72	.60	ECQ-E2335KB
	3.9	20.8	10.8	19.8	17.5	1.0	0.8	P10986-ND	2.53	1.92	1.45	1.09	.94	ECQ-E2395KB
	4.7	20.8	11.9	21.0	17.5	1.0	0.8	P10987-ND	2.81	2.13	1.61	1.21	1.05	ECQ-E2475KB

Panasonic® ECQ-E(F) Series

Miniaturized Metallized Polyester Film Capacitors

The type ECQ-E(F) series is using a dual side metallized polyester film with high dielectric constant(e) which makes it possible to produce large C-values in small dimensions, and is economical capacitor meeting high requirements for professional circuit design.

FEATURES:

- Self-healing property
- Flame retardant epoxy resin coating

APPLICATIONS:

- Blocking, by-passing, filtering, timing, interference suppression, low pulse applications.

SPECIFICATIONS:

Reference standard: JIS C5115, C5151

Operating temperature range: -40°C to +85°C (+105°C, 75% of Rated voltage)

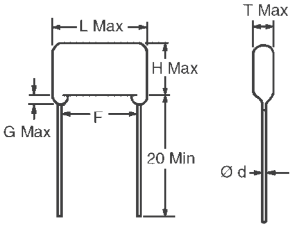
Rated voltage: 100V, 250V, 400V, 630V

Capacitance tolerance: ±10% (K)

Dissipation factor: 1.0% Max. (20°C 1kHz)

Withstand voltage: Rated voltage DC100V ~ 630V (V.DC) X 150% 1 minute between terminals

Insulation resistance: DC100V ~ 630V: C ≤ 0.33µF 9,000MΩ Min., C > 0.33µF 3,000ΩVµF Min.



Working Voltage (VDC)	Capacitance (µF)	Dimensions (mm) L	T	H	F	G	d	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Panasonic Part No.
100	.01	7.8	4.6	7.7	5.0	1.0	0.5	EF1103-ND	.42	.32	.23	.17	.13	ECQ-E1103KF
	.012	7.8	4.5	7.6	5.0	1.0	0.5	EF1123-ND	.42	.32	.23	.17	.13	ECQ-E1123KF
	.015	7.8	4.5	7.6	5.0	1.0	0.5	EF1153-ND	.42	.32	.23	.17	.13	ECQ-E1153KF
	.018	7.8	4.6	7.7	5.0	1.0	0.5	EF1183-ND	.42	.32	.23	.17	.13	ECQ-E1183KF
	.022	7.8	4.9	8.0	5.0	1.0	0.5	EF1223-ND	.42	.32	.23	.17	.13	ECQ-E1223KF
	.027	7.8	4.7	7.8	5.0	1.0	0.5	EF1273-ND	.42	.32	.23	.17	.13	ECQ-E1273KF
	.033	7.8	4.6	7.7	5.0	1.0	0.5	EF1333-ND	.42	.32	.23	.17	.13	ECQ-E1333KF
	.039	7.8	4.9	8.0	5.0	1.0	0.5	EF1393-ND	.42	.32	.23	.17	.13	ECQ-E1393KF
	.047	7.8	4.5	7.5	5.0	1.0	0.5	EF1473-ND	.42	.32	.23	.17	.13	ECQ-E1473KF
	.056	7.8	4.8	7.9	5.0	1.0	0.5	EF1563-ND	.42	.32	.23	.17	.13	ECQ-E1563KF
	.068	7.8	4.8	7.9	5.0	1.0	0.5	EF1683-ND	.42	.32	.23	.17	.13	ECQ-E1683KF
	.082	7.8	4.7	9.9	5.0	1.0	0.5	EF1823-ND	.42	.32	.23	.17	.13	ECQ-E1823KF
	.1	7.8	5.0	10.0	5.0	1.0	0.5	EF1104-ND	.42	.32	.23	.17	.13	ECQ-E1104KF
	.12	10.3	4.5	7.5	7.5	1.0	0.6	EF1124-ND	.45	.33	.24	.17	.14	ECQ-E1124KF
	.15	10.3	4.5	7.5	7.5	1.0	0.6	EF1154-ND	.46	.34	.24	.18	.14	ECQ-E1154KF
	.18	10.3	4.8	7.9	7.5	1.0	0.6	EF1184-ND	.49	.37	.26	.19	.15	ECQ-E1184KF
	.22	10.3	5.0	8.0	7.5	1.0	0.6	EF1224-ND	.52	.39	.28	.20	.16	ECQ-E1224KF
	.27	10.3	4.5	12.0	7.5	1.0	0.6	EF1274-ND	.57	.42	.30	.22	.17	ECQ-E1274KF
	.33	10.3	6.0	10.7	7.5	1.0	0.6	EF1334-ND	.65	.48	.34	.25	.19	ECQ-E1334KF
	.39	10.3	6.3	11.0	7.5	1.0	0.6	EF1394-ND	.67	.49	.35	.26	.20	ECQ-E1394KF
	.47	10.3	6.0	12.0	7.5	1.0	0.6	EF1474-ND	.69	.52	.37	.27	.21	ECQ-E1474KF
	.56	12.0	5.5	10.9	10.0	1.0	0.6	EF1564-ND	.73	.55	.40	.29	.23	ECQ-E1564KF
	.68	12.0	6.0	11.9	10.0	1.0	0.6	EF1684-ND	.83	.62	.46	.33	.27	ECQ-E1684KF
	.82	12.0	6.0	13.5	10.0	1.0	0.6	EF1824-ND	.91	.68	.50	.36	.29	ECQ-E1824KF
	1.0	12.0	6.7	14.0	10.0	1.0	0.6	EF1105-ND	.99	.74	.55	.40	.32	ECQ-E1105KF
	1.2	18.5	5.5	12.8	15.0	1.0	0.6	EF1125-ND	1.14	.86	.63	.46	.36	ECQ-E1125KF
	1.5	18.5	6.0	13.4	15.0	1.0	0.8	EF1155-ND	1.24	.93	.70	.50	.42	ECQ-E1155KF
	1.8	18.5	6.5	14.4	15.0	1.0	0.8	EF1185-ND	1.38	1.04	.78	.56	.46	ECQ-E1185KF
	2.2	18.5	7.0	15.0	15.0	1.0	0.8	EF1225-ND	1.56	1.17	.88	.63	.52	ECQ-E1225KF
	2.7	18.5	8.0	15.8	15.0	1.0	0.8	EF1275-ND	1.78	1.34	1.00	.72	.60	ECQ-E1275KF
	3.3	18.5	8.5	16.5	15.0	1.0	0.8	EF1335-ND	2.26	1.70	1.27	.91	.75	ECQ-E1335KF
	3.9	26.0	7.0	16.4	22.5	1.0	0.8	EF1395-ND	2.24	1.70	1.29	.97	.84	ECQ-E1395KF
	4.7	26.0	7.5	17.0	22.5	1.0	0.8	EF1475-ND	2.53	1.92	1.45	1.09	.95	ECQ-E1475KF
	5.6	26.0	8.3	17.5	22.5	1.0	0.8	EF1565-ND	3.01	2.28	1.72	1.29	1.12	ECQ-E1565KF
	6.8	26.0	9.0	18.5	22.5	1.0	0.8	EF1685-ND	3.42	2.59	1.96	1.47	1.27	ECQ-E1685KF
	8.2	26.0	10.0	20.0	22.5	1.5	0.8	EF1825-ND	3.94	2.99	2.25	1.69	1.47	ECQ-E1825KF
	10.0	26.0	11.5	21.0	22.5	1.5	0.8	EF1106-ND	4.58	3.47	2.62	1.97	1.71	ECQ-E1106KF

(Continued)

Working Voltage (VDC)	Capaci-tance (µF)	Dimensions (mm)						Digi-Key	Price Each					Panasonic
		L	T	H	F	G	d	Part No.	1	10	100	500	1,000	Part No.
250	.01	10.3	4.3	7.4	7.5	1.0	0.6	EF2103-ND	.37	.28	.20	.15	.11	ECQ-E2103KF
	.012	10.3	4.4	7.5	7.5	1.0	0.6	EF2123-ND	.30	.21	.15	.10	.08	ECQ-E2123KF
	.015	10.3	4.4	7.5	7.5	1.0	0.6	EF2153-ND	.30	.21	.15	.10	.08	ECQ-E2153KF
	.018	10.3	4.4	7.5	7.5	1.0	0.6	EF2183-ND	.30	.21	.15	.10	.08	ECQ-E2183KF
	.022	10.3	4.4	7.5	7.5	1.0	0.6	EF2223-ND	.34	.26	.18	.13	.11	ECQ-E2223KF
	.027	10.3	4.4	7.5	7.5	1.0	0.6	EF2273-ND	.54	.37	.26	.18	.14	ECQ-E2273KF
	.033	10.3	4.5	7.5	7.5	1.0	0.6	EF2333-ND	.25	.19	.13	.10	.08	ECQ-E2333KF
	.039	10.3	4.5	7.5	7.5	1.0	0.6	EF2393-ND	.30	.21	.15	.10	.08	ECQ-E2393KF
	.047	10.3	4.5	7.5	7.5	1.0	0.6	EF2473-ND	.37	.26	.18	.13	.10	ECQ-E2473KF
	.056	10.3	4.8	7.9	7.5	1.0	0.6	EF2563-ND	.59	.40	.29	.20	.16	ECQ-E2563KF
	.068	10.3	4.5	7.5	7.5	1.0	0.6	EF2683-ND	.31	.23	.17	.12	.10	ECQ-E2683KF
	.082	10.3	4.9	8.0	7.5	1.0	0.6	EF2823-ND	.27	.20	.15	.11	.08	ECQ-E2823KF
	.1	10.3	5.8	8.4	7.5	1.0	0.6	EF2104-ND	.45	.31	.22	.15	.12	ECQ-E2104KF
	.12	10.3	6.0	9.0	7.5	1.0	0.6	EF2124-ND	.31	.24	.17	.12	.10	ECQ-E2124KF
	.15	10.3	6.0	10.8	7.5	1.0	0.6	EF2154-ND	.47	.35	.25	.18	.14	ECQ-E2154KF
	.18	12.0	5.0	10.3	10.0	1.0	0.6	EF2184-ND	.40	.30	.22	.16	.12	ECQ-E2184KF
	.22	12.0	5.5	10.5	10.0	1.0	0.6	EF2224-ND	.54	.40	.29	.21	.16	ECQ-E2224KF
	.27	12.0	6.0	11.5	10.0	1.0	0.6	EF2274-ND	.64	.48	.34	.25	.19	ECQ-E2274KF
	.33	12.0	6.5	12.0	10.0	1.0	0.6	EF2334-ND	.58	.43	.32	.23	.19	ECQ-E2334KF
	.39	18.5	4.9	12.0	15.0	1.0	0.6	EF2394-ND	.74	.56	.41	.30	.24	ECQ-E2394KF
	.47	18.5	5.3	12.5	15.0	1.0	0.6	EF2474-ND	.58	.44	.32	.24	.19	ECQ-E2474KF
	.56	18.5	5.5	13.0	15.0	1.0	0.6	EF2564-ND	.66	.50	.37	.27	.21	ECQ-E2564KF
	.68	18.5	6.0	13.5	15.0	1.0	0.8	EF2684-ND	.92	.69	.51	.37	.29	ECQ-E2684KF
	.82	18.5	6.5	14.5	15.0	1.0	0.8	EF2824-ND	.70	.53	.39	.28	.22	ECQ-E2824KF
	1.0	18.5	7.4	15.0	15.0	1.0	0.8	EF2105-ND	.86	.64	.47	.34	.27	ECQ-E2105KF
	1.2	18.5	8.0	15.9	15.0	1.0	0.8	EF2125-ND	1.21	.91	.67	.48	.39	ECQ-E2125KF
	1.5	18.5	9.0	16.8	15.0	1.0	0.8	EF2155-ND	1.42	1.07	.81	.57	.48	ECQ-E2155KF
	1.8	26.0	7.5	15.5	22.5	1.0	0.8	EF2185-ND	1.20	.90	.68	.48	.40	ECQ-E2185KF
	2.2	26.0	8.5	16.3	22.5	1.0	0.8	EF2225-ND	1.72	1.30	.97	.69	.58	ECQ-E2225KF
	2.7	26.0	9.4	17.0	22.5	1.0	0.8	EF2275-ND	1.77	1.33	1.00	.71	.59	ECQ-E2275KF
	3.3	26.0	10.3	18.0	22.5	1.5	0.8	EF2335-ND	2.36	1.77	1.33	.95	.79	ECQ-E2335KF
	3.9	26.0	11.0	20.5	22.5	1.5	0.8	EF2395-ND	1.42	1.08	.82	.61	.53	ECQ-E2395KF
	4.7	26.0	12.0	21.5	22.5	1.5	0.8	EF2475-ND	1.59	1.21	.91	.69	.60	ECQ-E2475KF
	5.6	31.0	11.8	21.0	27.5	1.5	0.8	EF2565-ND	2.73	2.07	1.56	1.17	1.02	ECQ-E2565KF
	6.8	31.0	13.0	22.4	27.5	1.5	0.8	EF2685-ND	3.84	2.91	2.20	1.65	1.43	ECQ-E2685KF
	8.2	31.0	14.3	23.5	27.5	1.5	0.8	EF2825-ND	3.13	2.38	1.79	1.35	1.17	ECQ-E2825KF
	10.0	31.0	15.9	25.8	27.5	1.5	0.8	EF2106-ND	7.01	5.32	4.01	3.01	2.61	ECQ-E2106KF
400	.01	10.3	4.3	7.4	7.5	1.0	0.6	EF4103-ND	.51	.38	.27	.20	.16	ECQ-E4103KF
	.012	10.3	4.4	7.5	7.5	1.0	0.6	EF4123-ND	.29	.21	.15	.11	.09	ECQ-E4123KF
	.015	10.3	4.4	7.5	7.5	1.0	0.6	EF4153-ND	.29	.21	.15	.11	.09	ECQ-E4153KF
	.018	10.3	4.4	7.5	7.5	1.0	0.6	EF4183-ND	.29	.21	.15	.11	.09	ECQ-E4183KF
	.022	10.3	4.8	7.9	7.5	1.0	0.6	EF4223-ND	.53	.40	.28	.21	.16	ECQ-E4223KF
	.027	10.3	5.5	8.0	7.5	1.0	0.6	EF4273-ND	.56	.42	.30	.22	.17	ECQ-E4273KF
	.033	10.3	6.0	9.0	7.5	1.0	0.6	EF4333-ND	.57	.42	.30	.22	.17	ECQ-E4333KF
	.039	12.0	4.9	8.0	10.0	1.0	0.6	EF4393-ND	.40	.30	.21	.16	.12	ECQ-E4393KF
	.047	12.0	5.0	8.3	10.0	1.0	0.6	EF4473-ND	.60	.45	.32	.23	.18	ECQ-E4473KF
	.056	12.0	5.0	10.0	10.0	1.0	0.6	EF4563-ND	.65	.48	.35	.25	.20	ECQ-E4563KF
	.068	12.0	5.4	10.5	10.0	1.0	0.6	EF4683-ND	.68	.51	.36	.26	.21	ECQ-E4683KF
	.082	12.0	5.8	11.0	10.0	1.0	0.6	EF4823-ND	.72	.54	.38	.28	.22	ECQ-E4823KF
	.1	12.0	6.3	12.0	10.0	1.0	0.6	EF4104-ND	.53	.40	.28	.21	.16	ECQ-E4104KF
	.12	18.5	5.0	10.0	15.0	1.0	0.6	EF4124-ND	.58	.44	.32	.23	.19	ECQ-E4124KF
	.15	18.5	5.0	12.4	15.0	1.0	0.6	EF4154-ND	.60	.45	.33	.24	.19	ECQ-E4154KF
	.18	18.5	5.4	12.5	15.0	1.0	0.6	EF4184-ND	.85	.64	.47	.34	.27	ECQ-E4184KF
	.22	18.5	5.9	13.0	15.0	1.0	0.6	EF4224-ND	.90	.67	.50	.36	.29	ECQ-E4224KF
	.27	18.5	6.5	14.3	15.0	1.0	0.8	EF4274-ND	.88	.66	.48	.35	.28	ECQ-E4274KF
	.33	18.5	7.0	14.9	15.0	1.0	0.8	EF4334-ND	.95	.71	.52	.38	.30	ECQ-E4334KF
	.39	18.5	7.5	15.4	15.0	1.0	0.8	EF4394-ND	.88	.66	.48	.35	.28	ECQ-E4394KF
	.47	18.5	7.8	17.0	15.0	1.0	0.8	EF4474-ND	1.27	.95	.70	.51	.40	ECQ-E4474KF
	.56	26.0	6.5	16.0	22.5	1.0	0.8	EF4564-ND	1.01	.76	.57	.41	.34	ECQ-E4564KF
	.68	26.0	7.0	16.5	22.5	1.0	0.8	EF4684-ND	1.44	1.08	.81	.58	.48	ECQ-E4684KF
	.82	26.0	7.9	17.3	22.5	1.0	0.8	EF4824-ND	1.17	.88	.66	.47	.39	ECQ-E4824KF
	1.0	26.0	8.5	18.9	22.5	1.0	0.8	EF4105-ND	1.24	.93	.70	.50	.42	ECQ-E4105KF
	1.2	26.0	9.5	18.9	22.5	1.0	0.8	EF4125-ND	1.86	1.41	1.07	.80	.70	ECQ-E4125KF
	1.5	31.0	9.5	19.0	27.5	1.0	0.8	EF4155-ND	2.29	1.73	1.31	.98	.85	ECQ-E4155KF
	1.8	31.0	11.0	20.5	27.5	1.5	0.8	EF4185-ND	2.28	1.73	1.30	.98	.85	ECQ-E4185KF
	2.2	31.0	11.0	22.0	27.5	1.5	0.8	EF4225-ND	3.09	2.34	1.77	1.33	1.15	ECQ-E4225KF
630	.01	12.0	4.5	7.5	10.0	1.0	0.6	EF6103-ND	.54	.40	.29	.21	.16	ECQ-E6103KF
	.012	12.0	4.5	7.8	10.0	1.0	0.6	EF6123-ND	.43	.32	.23	.17	.13	ECQ-E6123KF
	.015	12.0	5.0	8.2	10.0	1.0	0.6	EF6153-ND	.59	.44	.31	.23	.18	ECQ-E6153KF
	.018	12.0	4.9	10.0	10.0	1.0	0.6	EF6183-ND	.48	.36	.26	.19	.15	ECQ-E6183KF
	.022	12.0	5.3	10.5	10.0	1.0	0.6	EF6223-ND	.63	.47	.34	.24	.19	ECQ-E6223KF
	.027	12.0	5.5	10.9	10.0	1.0	0.6	EF6273-ND	.50	.37	.27	.19	.15	ECQ-E6273KF
	.033	12.0	6.0	11.9	10.0	1.0	0.6	EF6333-ND	.59	.44	.31	.23	.18	ECQ-E6333KF
	.039	12.0	6.0	13.4	10.0	1.0	0.6	EF6393-ND	.51	.38	.27	.20	.15	ECQ-E6393KF
	.047	12.0	6.5	13.5	10.0	1.0	0.6	EF6473-ND	.69	.52	.37	.27	.21	ECQ-E6473KF
	.056	18.5	5.4	10.5	15.0	1.0	0.6	EF6563-ND	.51	.39	.28	.21	.17	ECQ-E6563KF
	.068	18.5	5.8	11.0	15.0	1.0	0.6	EF6683-ND	.67	.50	.37	.27	.22	ECQ-E6683KF
	.082	18.5	6.5	12.0	15.0	1.0	0.6	EF6823-ND	.70	.52	.39	.28	.22	ECQ-E6823KF
	.1	18.5	6.3	14.0	15.0	1.0	0.6	EF6104-ND	.85	.63	.47	.34	.27	ECQ-E6104KF
	.12	18.5	6.3	14.5	15.0	1.0	0.8	EF6124-ND	.61	.46	.34	.25	.20	ECQ-E6124KF
	.15	18.5	7.5	15.4	15.0	1.0	0.8	EF6154-ND	1.04	.78	.57	.42	.33	ECQ-E6154KF
	.18	18.5	8.0	16.0	15.0	1.0	0.8	EF6184-ND	.89	.66	.49	.36	.28	ECQ-E6184KF
	.22	18.5	9.0	16.5	15.0	1.0	0.8	EF6224-ND	1.06	.79	.59	.42	.34	ECQ-E6224KF
	.27	26.0	7.0	16.5	22.5	1.0	0.8	EF6274-ND	.90	.68	.51	.37	.31	ECQ-E6274KF
	.33	26.0	7.8	17.0	22.5	1.0	0.8	EF6334-ND	.92	.70	.52	.37	.31	ECQ-E6334KF
	.39	26.0	8.5	17.9	22.5	1.0	0.8	EF6394-ND	1.16	.87	.66	.47	.39	ECQ-E6394KF
	.47	26.0	9.3	18.5	22.5	1.0	0.8	EF6474-ND	1.58	1.19	.89	.64	.53	ECQ-E6474KF
	.56	26.0	10.0	20.0	22.5	1.5	0.8	EF6564-ND	1.82	1.37	1.03	.73	.61	ECQ-E6564KF
	.68	26.0	11.5	21.0	22.5	1.5	0.8	EF6684-ND	1.27	.97	.73	.55	.48	ECQ-E6684KF
	.82	31.0	11.3	20.5	27.5	1.5	0.8	EF6824-ND	2.05	1.56	1.18	.89	.77	ECQ-E6824KF
	1.0	31.0	12.5	21.9	27.5	1.5	0.8	EF6105-ND	2.99	2.27	1.71	1.29	1.12	ECQ-E6105KF
	1.2	31.0	13.5	23.0	27.5	1.5	0.8	EF6125-ND	3.16	2.40	1.81	1.36	1.18	ECQ-E6125KF
	1.5	31.0	15.3	24.7	27.5	1.5	0.8	EF6155-ND	2.21	1.68	1.27	.95	.82	ECQ-E6155KF
	1.8	31.0	16.8	27.0	27.5	1.5	0.8	EF6185-ND	2.45	1.86	1.41	1.06	.92	ECQ-E6185KF
	2.2	31.0	19.5	29.0	27.5	1.5	0.8	EF6225-ND	3.77	2.86	2.16	1.62	1.41	ECQ-E6225KF

Panasonic PPS Film Capacitors - ECHS

Non-inductive construction using PPS film as designed for high heat resistance and high frequency applications.

Features:

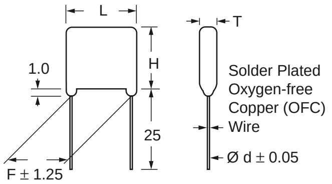
- Wide operating temperature range -40 to +125°C
- Excellent temperature coefficient -100PPM/°C
- Excellent frequency characteristics

Applications:

- Automotive
- Oscillation circuits

Electrical Specifications:

- Temperature Range: -40°C to +125°C
- Rated Voltage: 50V DC, 100VDC
- Capacitance Range: 0.0001 to 0.47µF
- Capacitance Tolerance: ±2%(G) & ±5%(J)
- Dissipation Factor: 0.3% max. at 1kHz and 20°C
- Withstand Voltage: 1-5 seconds at 250% of rated voltage between terminals
- Insulation Resistance: 45,000 MΩ min., for values equal to or less than .33µF. 15,000 MΩ/µF min., for greater than .33µF (20°C, 100VDC, 60s)



WV DC	Cap. µF	Tolerance	Dimensions (mm)					Digi-Key Part No.	Price Each				Panasonic Part No.
			L	T	H	F	d		1	10	100	1,000	
50	.001	2%	8.5	4.0	6.5	5.0	0.60	PS1H102G-ND	.80	.69	.58	.35	ECH-S1H102GZ
	.0012	2%	8.5	4.0	7.0	5.0	0.60	PS1H122G-ND	.80	.69	.58	.35	ECH-S1H122GZ
	.0015	2%	8.5	4.0	7.0	5.0	0.60	PS1H152G-ND	.80	.69	.58	.35	ECH-S1H152GZ
	.0018	2%	8.5	4.0	7.0	5.0	0.60	PS1H182G-ND	.80	.69	.58	.35	ECH-S1H182GZ
	.0022	2%	8.5	4.0	7.0	5.0	0.60	PS1H222G-ND	.80	.69	.58	.35	ECH-S1H222GZ
	.0027	2%	8.5	4.0	7.0	5.0	0.60	PS1H272G-ND	.80	.69	.58	.35	ECH-S1H272GZ
	.0033	2%	8.5	4.0	7.0	5.0	0.60	PS1H332G-ND	.80	.69	.58	.35	ECH-S1H332GZ
	.0039	2%	8.5	4.0	7.0	5.0	0.60	PS1H392G-ND	.80	.69	.58	.35	ECH-S1H392GZ
	.0047	2%	8.5	4.0	7.0	5.0	0.60	PS1H472G-ND	.80	.69	.58	.35	ECH-S1H472GZ
	.0056	2%	8.5	4.0	7.0	5.0	0.60	PS1H562G-ND	.82	.71	.59	.36	ECH-S1H562GZ
	.0068	2%	8.5	4.0	7.0	5.0	0.60	PS1H682G-ND	.85	.73	.61	.37	ECH-S1H682GZ
	.0082	2%	8.5	4.0	6.5	5.0	0.60	PS1H822G-ND	.86	.75	.62	.37	ECH-S1H822GZ
	.01	2%	8.5	4.0	7.0	5.0	0.60	PS1H103G-ND	.89	.77	.64	.38	ECH-S1H103GZ
	.012	2%	8.5	4.0	7.0	5.0	0.60	PS1H123G-ND	.97	.84	.70	.42	ECH-S1H123GZ
	.015	2%	12.0	4.5	7.0	7.5	0.60	PS1H153G-ND	1.06	.91	.76	.46	ECH-S1H153GZ
	.018	2%	12.0	4.5	7.0	7.5	0.60	PS1H183G-ND	1.16	1.00	.83	.50	ECH-S1H183GZ
	.022	2%	12.0	4.5	7.0	7.5	0.60	PS1H223G-ND	1.26	1.08	.90	.54	ECH-S1H223GZ
	.027	2%	12.0	4.5	8.5	7.5	0.60	PS1H273G-ND	1.38	1.19	.99	.60	ECH-S1H273GZ
	.033	2%	12.0	4.5	9.0	7.5	0.60	PS1H333G-ND	1.51	1.29	1.08	.65	ECH-S1H333GZ
	.039	2%	12.0	5.0	9.5	7.5	0.60	PS1H393G-ND	1.62	1.40	1.16	.70	ECH-S1H393GZ
	.047	2%	12.0	5.0	9.5	7.5	0.60	PS1H473G-ND	1.75	1.51	1.26	.75	ECH-S1H473GZ
	.056	2%	12.0	5.5	10.0	7.5	0.60	PS1H563G-ND	1.94	1.67	1.39	.84	ECH-S1H563GZ
	.068	2%	14.5	5.0	9.5	10.00	0.60	PS1H683G-ND	2.14	1.83	1.53	.92	ECH-S1H683GZ
	.082	2%	14.5	5.5	10.0	10.00	0.60	PS1H823G-ND	2.33	2.00	1.67	1.00	ECH-S1H823GZ
	.1	2%	14.5	6.0	10.5	10.00	0.60	PS1H104G-ND	2.54	2.18	1.82	1.09	ECH-S1H104GZ
	.12	2%	14.5	6.5	11.0	10.00	0.60	PS1H124G-ND	2.95	2.53	2.11	1.27	ECH-S1H124GZ
	.15	2%	17.0	6.5	11.0	12.50	0.60	PS1H154G-ND	3.39	2.91	2.42	1.45	ECH-S1H154GZ
	.18	2%	17.0	6.5	12.5	12.50	0.60	PS1H184G-ND	3.81	3.27	2.72	1.63	ECH-S1H184GZ
	.22	2%	17.0	7.0	13.5	12.50	0.60	PS1H224G-ND	4.31	3.69	3.08	1.85	ECH-S1H224GZ
	.27	2%	17.0	7.5	14.5	12.50	0.80	PS1H274G-ND	4.87	4.17	3.48	2.09	ECH-S1H274GZ
	.33	2%	17.0	8.5	15.5	12.50	0.80	PS1H334G-ND	5.46	4.69	3.91	2.34	ECH-S1H334GZ
	.39	2%	17.0	9.0	16.0	12.50	0.80	PS1H394G-ND	6.05	5.19	4.33	2.59	ECH-S1H394GZ
	.47	2%	17.0	10.0	16.5	12.50	0.80	PS1H474G-ND	6.70	5.75	4.79	2.87	ECH-S1H474GZ
50	.001	5%	8.5	4.0	6.5	5.0	0.60	PS1H102J-ND	.35	.31	.26	.16	ECH-S1H102JZ
	.0012	5%	8.5	4.0	7.0	5.0	0.60	PS1H122J-ND	.35	.31	.26	.16	ECH-S1H122JZ
	.0015	5%	8.5	4.0	7.0	5.0	0.60	PS1H152J-ND	.35	.31	.26	.16	ECH-S1H152JZ
	.0018	5%	8.5	4.0	7.0	5.0	0.60	PS1H182J-ND	.35	.31	.26	.16	ECH-S1H182JZ
	.0022	5%	8.5	4.0	7.0	5.0	0.60	PS1H222J-ND	.35	.31	.26	.16	ECH-S1H222JZ
	.0027	5%	8.5	4.0	7.0	5.0	0.60	PS1H272J-ND	.35	.31	.26	.16	ECH-S1H272JZ
	.0033	5%	8.5	4.0	7.0	5.0	0.60	PS1H332J-ND	.35	.31	.26	.16	ECH-S1H332JZ
	.0039	5%	8.5	4.0	7.0	5.0	0.60	PS1H392J-ND	.35	.31	.26	.16	ECH-S1H392JZ
	.0047	5%	8.5	4.0	7.0	5.0	0.60	PS1H472J-ND	.35	.31	.26	.16	ECH-S1H472JZ
	.0056	5%	8.5	4.0	7.0	5.0	0.60	PS1H562J-ND	.36	.32	.26	.16	ECH-S1H562JZ
	.0068	5%	8.5	4.0	7.0	5.0	0.60	PS1H682J-ND	.36	.32	.26	.16	ECH-S1H682JZ
	.0082	5%	8.5	4.0	6.5	5.0	0.60	PS1H822J-ND	.37	.32	.27	.16	ECH-S1H822JZ
	.01	5%	8.5	4.0	7.0	5.0	0.60	PS1H103J-ND	.37	.32	.27	.16	ECH-S1H103JZ
	.012	5%	8.5	4.0	7.0	5.0	0.60	PS1H123J-ND	.42	.37	.31	.19	ECH-S1H123JZ
	.015	5%	12.0	4.5	7.0	7.5	0.60	PS1H153J-ND	.48	.42	.35	.21	ECH-S1H153JZ
	.018	5%	12.0	4.5	7.0	7.5	0.60	PS1H183J-ND	.50	.44	.36	.22	ECH-S1H183JZ
	.022	5%	12.0	4.5	7.0	7.5	0.60	PS1H223J-ND	.59	.51	.43	.26	ECH-S1H223JZ
	.027	5%	12.0	4.5	8.5	7.5	0.60	PS1H273J-ND	.63	.55	.46	.28	ECH-S1H273JZ
	.033	5%	12.0	4.5	9.0	7.5	0.60	PS1H333J-ND	.67	.58	.48	.29	ECH-S1H333JZ
	.039	5%	12.0	5.0	9.5	7.5	0.60	PS1H393J-ND	.69	.60	.50	.30	ECH-S1H393JZ
	.047	5%	12.0	5.0	9.5	7.5	0.60	PS1H473J-ND	.71	.61	.51	.31	ECH-S1H473JZ
	.056	5%	12.0	5.5	10.0	7.5	0.60	PS1H563J-ND	.82	.70	.59	.35	ECH-S1H563JZ
	.068	5%	14.5	5.0	9.5	10.00	0.60	PS1H683J-ND	.92	.79	.66	.40	ECH-S1H683JZ
	.082	5%	14.5	5.5	10.0	10.00	0.60	PS1H823J-ND	1.02	.88	.73	.44	ECH-S1H823JZ
	.1	5%	14.5	6.0	10.5	10.00	0.60	PS1H104J-ND	1.12	.96	.80	.48	ECH-S1H104JZ
	.12	5%	14.5	6.5	11.0	10.00	0.60	PS1H124J-ND	1.34	1.15	.96	.58	ECH-S1H124JZ
	.15	5%	17.0	6.5	11.0	12.50	0.60	PS1H154J-ND	1.57	1.35	1.12	.68	ECH-S1H154JZ
	.18	5%	17.0	6.5	12.5	12.50	0.60	PS1H184J-ND	1.81	1.55	1.29	.78	ECH-S1H184JZ
	.22	5%	17.0	7.0	13.5	12.50	0.60	PS1H224J-ND	2.05	1.77	1.47	.88	ECH-S1H224JZ
	.27	5%	17.0	7.5	14.5	12.50	0.80	PS1H274J-ND	2.26	1.94	1.62	.97	ECH-S1H274JZ
	.33	5%	17.0	8.5	15.5	12.50	0.80	PS1H334J-ND	2.52	2.16	1.80	1.08	ECH-S1H334JZ
	.39	5%	17.0	9.0	16.0	12.50	0.80	PS1H394J-ND	2.83	2.43	2.03	1.22	ECH-S1H394JZ
	.47	5%	17.0	10.0	16.5	12.50	0.80	PS1H474J-ND	3.17	2.72	2.27	1.36	ECH-S1H474JZ

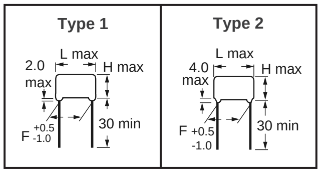
(Continued)

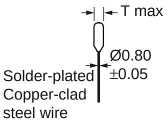
Panasonic PPS Film Capacitors - ECHS *(Cont.)*

WV DC	Cap. µF	Toler-ance	Dimensions (mm) L	T	H	F	d	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
100	.0001	5%	8.5	4.0	6.5	5.0	0.60	PS1101J-ND	.60	.51	.43	.26	ECH-S1101JZ
	.00012	5%	8.5	4.0	6.5	5.0	0.60	PS1121J-ND	.60	.51	.43	.26	ECH-S1121JZ
	.00015	5%	8.5	4.0	6.5	5.0	0.60	PS1151J-ND	.60	.51	.43	.26	ECH-S1151JZ
	.00018	5%	8.5	4.0	6.5	5.0	0.60	PS1181J-ND	.60	.51	.43	.26	ECH-S1181JZ
	.00022	5%	8.5	4.0	6.5	5.0	0.60	PS1221J-ND	.60	.51	.43	.26	ECH-S1221JZ
	.00027	5%	8.5	4.0	6.5	5.0	0.60	PS1271J-ND	.60	.51	.43	.26	ECH-S1271JZ
	.00033	5%	8.5	4.0	6.5	5.0	0.60	PS1331J-ND	.60	.51	.43	.26	ECH-S1331JZ
	.00039	5%	8.5	4.0	6.5	5.0	0.60	PS1391J-ND	.60	.51	.43	.26	ECH-S1391JZ
	.00047	5%	8.5	4.0	6.5	5.0	0.60	PS1471J-ND	.60	.51	.43	.26	ECH-S1471JZ
	.00056	5%	8.5	4.0	6.5	5.0	0.60	PS1561J-ND	.60	.51	.43	.26	ECH-S1561JZ
	.00068	5%	8.5	4.0	6.5	5.0	0.60	PS1681J-ND	.60	.51	.43	.26	ECH-S1681JZ
	.00082	5%	8.5	4.0	6.5	5.0	0.60	PS1821J-ND	.60	.51	.43	.26	ECH-S1821JZ
	.001	5%	10.0	4.5	7.0	5.0	0.60	PS1102J-ND	.39	.34	.28	.17	ECH-S1102JZ
	.0012	5%	10.0	4.5	7.0	5.0	0.60	PS1122J-ND	.39	.34	.28	.17	ECH-S1122JZ
	.0015	5%	10.0	4.5	7.0	5.0	0.60	PS1152J-ND	.39	.34	.28	.17	ECH-S1152JZ
	.0018	5%	10.0	4.5	7.0	5.0	0.60	PS1182J-ND	.39	.34	.28	.17	ECH-S1182JZ
	.0022	5%	10.0	4.5	7.5	5.0	0.60	PS1222J-ND	.39	.34	.28	.17	ECH-S1222JZ
	.0027	5%	10.0	4.5	7.0	5.0	0.60	PS1272J-ND	.39	.34	.28	.17	ECH-S1272JZ
	.0033	5%	10.0	4.5	7.5	5.0	0.60	PS1332J-ND	.39	.34	.28	.17	ECH-S1332JZ
	.0039	5%	10.0	4.5	7.0	5.0	0.60	PS1392J-ND	.39	.34	.28	.17	ECH-S1392JZ
	.0047	5%	10.0	5.0	7.5	5.0	0.60	PS1472J-ND	.40	.35	.29	.18	ECH-S1472JZ
	.0056	5%	12.0	4.5	7.5	7.5	0.60	PS1562J-ND	.41	.36	.30	.18	ECH-S1562JZ
	.0068	5%	12.0	4.5	7.0	7.5	0.60	PS1682J-ND	.44	.38	.32	.19	ECH-S1682JZ
	.0082	5%	12.0	4.5	7.5	7.5	0.60	PS1822J-ND	.47	.40	.34	.20	ECH-S1822JZ
	.01	5%	12.0	4.5	7.0	7.5	0.60	PS1103J-ND	.49	.43	.36	.22	ECH-S1103JZ
	.012	5%	12.0	5.0	7.5	7.5	0.60	PS1123J-ND	.54	.47	.39	.24	ECH-S1123JZ
	.015	5%	12.0	5.0	7.5	7.5	0.60	PS1153J-ND	.60	.51	.43	.26	ECH-S1153JZ
	.018	5%	12.0	5.5	8.0	7.5	0.60	PS1183J-ND	.65	.56	.47	.28	ECH-S1183JZ
	.022	5%	12.0	5.0	10.0	7.5	0.60	PS1223J-ND	.70	.61	.51	.31	ECH-S1223JZ
	.027	5%	12.0	5.5	10.5	7.5	0.60	PS1273J-ND	.74	.64	.53	.32	ECH-S1273JZ
	.033	5%	14.5	5.5	10.0	10.0	0.60	PS1333J-ND	.79	.68	.57	.34	ECH-S1333JZ
	.039	5%	14.5	6.0	10.0	10.0	0.60	PS1393J-ND	.83	.72	.60	.36	ECH-S1393JZ
	.047	5%	14.5	6.0	10.5	10.0	0.60	PS1473J-ND	.88	.76	.63	.38	ECH-S1473JZ
	.056	5%	14.5	6.5	11.0	10.0	0.60	PS1563J-ND	.98	.85	.71	.43	ECH-S1563JZ
	.068	5%	17.0	6.5	10.5	12.5	0.60	PS1683J-ND	1.11	.96	.80	.48	ECH-S1683JZ
	.082	5%	17.0	6.5	12.0	12.5	0.60	PS1823J-ND	1.23	1.05	.88	.53	ECH-S1823JZ
	.1	5%	17.0	7.0	13.5	12.5	0.60	PS1104J-ND	1.37	1.18	.98	.59	ECH-S1104JZ
	.12	5%	17.0	7.5	14.0	12.5	0.60	PS1124J-ND	1.62	1.39	1.16	.70	ECH-S1124JZ
	.15	5%	20.5	7.5	14.0	15.0	0.80	PS1154J-ND	1.91	1.64	1.37	.82	ECH-S1154JZ
	.18	5%	20.5	7.5	14.5	15.0	0.80	PS1184J-ND	2.17	1.87	1.56	.93	ECH-S1184JZ
	.22	5%	20.5	8.5	15.5	15.0	0.80	PS1224J-ND	2.48	2.13	1.77	1.06	ECH-S1224JZ
	.27	5%	20.5	9.0	16.5	15.0	0.80	PS1274J-ND	2.76	2.37	1.98	1.19	ECH-S1274JZ
	.33	5%	20.5	10.0	17.0	15.0	0.80	PS1334J-ND	3.09	2.65	2.21	1.32	ECH-S1334JZ
	.39	5%	20.5	10.5	18.0	15.0	0.80	PS1394J-ND	3.37	2.90	2.41	1.45	ECH-S1394JZ
	.47	5%	20.5	11.5	19.5	15.0	0.80	PS1474J-ND	3.78	3.24	2.70	1.62	ECH-S1474JZ

Panasonic Metallized Polyester/Polypropylene Film Capacitors

ECHAX Type – Equipped with a Safety Mechanism





Features:
- Non-inductive construction
- Excellent safety characteristics
- Flame-retardant epoxy resin dipped enclosure
- Small and compact

Application:
- Motor running
- Fluorescent lamp ballast

Electrical Specifications:
- Temperature Range: -25°C to +70°C
- Rated Voltage: 180, 220 and 250VAC
- Capacitance Range: 1.0 to 6.0µF
- Capacitance Tolerance: ±5%(J)
- Dissipation Factor: 0.4% max. at 50/60Hz and 20°C
- Withstand Voltage: Between Terminals; VAC (rated voltage) x 175% 60s. Between Terminals to Enclosure; 2000VAC 60s
- Insulation Resistance: Between Terminals; 1000Ω Fmin. (20°C 100VDC 60s). Between Terminals to Enclosure; 1000MΩmin. (20°C 500 VDC 60s)

WV AC	Cap. µF	Toler-ance	Dimensions (mm) L	T	H	F	Type	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
180	1.0	5%	26.5	8.5	17.5	22.5	1	P10937-ND	3.00	2.57	2.02	1.29	ECH-A18105JX
	2.0	5%	26.5	11.5	21.0	22.5	1	P10938-ND	4.04	3.47	2.72	1.74	ECH-A18205JX
	3.0	5%	26.5	14.0	24.0	22.5	1	P10939-ND	5.07	4.35	3.41	2.18	ECH-A18305JX
	4.0	5%	31.5	14.5	24.0	27.5	1	P10940-ND	6.00	5.15	4.03	2.58	ECH-A18405JX
	5.0	5%	31.5	16.5	26.0	27.5	1	P10941-ND	6.87	5.89	4.62	2.95	ECH-A18505JX
	6.0	5%	37.0	16.5	25.5	32.5	1	P10942-ND	8.46	7.25	5.68	3.63	ECH-A18605JX
220	1.0	5%	26.5	10.0	19.5	22.5	1	P10943-ND	3.14	2.69	2.11	1.35	ECH-A22105JX
	2.0	5%	26.5	14.0	23.5	22.5	1	P10944-ND	4.36	3.74	2.93	1.87	ECH-A22205JX
	3.0	5%	31.5	15.5	25.0	27.5	1	P10945-ND	5.24	4.49	3.52	2.25	ECH-A22305JX
	4.0	5%	37.0	16.0	25.5	32.5	1	P10946-ND	6.55	5.62	4.40	2.81	ECH-A22405JX
	5.0	5%	37.0	18.0	27.5	32.5	1	P10947-ND	7.53	6.46	5.06	3.23	ECH-A22505JX
	6.0	5%	37.0	19.5	29.5	32.5	1	P10948-ND	8.45	7.25	5.68	3.63	ECH-A22605JX
250	1.0	5%	26.5	12.0	21.5	22.5	1	P10949-ND	3.27	2.81	2.20	1.41	ECH-A25105JX
	2.0	5%	31.5	15.0	24.5	27.5	1	P10950-ND	4.80	4.12	3.23	2.06	ECH-A25205JX
	3.0	5%	37.0	16.5	26.0	32.5	1	P10951-ND	6.27	5.38	4.22	2.69	ECH-A25305JX
	4.0	5%	37.0	19.5	29.0	32.5	1	P10952-ND	7.31	6.27	4.91	3.14	ECH-A25405JX
	5.0	5%	40.5	20.0	30.0	30.0	2	P10953-ND	9.00	7.72	6.05	3.86	ECH-A25505JX
	6.0	5%	40.5	22.0	32.0	30.0	2	P10954-ND	10.91	9.36	7.33	4.68	ECH-A25605JX

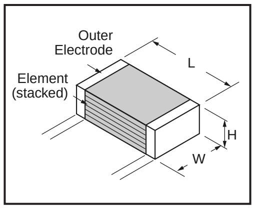
Panasonic® SMT Capacitors ECW-U (PEN Film, Stand. Type) & ECH-U (PPS Film, High Grade Type)

aFEATURES: • Small in size • High moisture resistance

APPLICATIONS: Type ECH-U: • Time constant • Filtering • Oscillation and resonance **Type ECW-U:** • Coupling • By-pass • General purpose **TYPE ECH-U:** • Operating Temperature: -55°C to +125°C • Rated Voltage: 16VDC, 50VDC • Capacitance Tolerance: 5%, 2% • Withstand Voltage: Between terminals: Rated voltage (VDC) x 175% 1 to 5s • Dissipation Factor: ≤0.6% (20°C, 1kHz) • Insulation Resistance: **16VDC:** ≥3000MΩ (20°C, 10VDC 60s), **50VDC:** ≥3000MΩ (20°C, 50VDC 60s) • Soldering Conditions: Flow Soldering: 260°C max., 5sec. max. • Reflow Soldering: 260°C max. and 30 sec. max. at more than 230°C (temp. at cap surface). **TYPE ECW-U:** • Operating Temperature: -55°C to +105°C • Rated Voltage: 16VDC, 50VDC • Capacitance Tolerance: 5% • Withstand Voltage: Between terminals: Rated Voltage (VDC) x 175% 1 to 5s • Dissipation Factor: ≤1.0% (20°C, 1kHz) • Insulation Resistance: **C ≤0.33µF: 16VDC:** ≥3000MΩ (20°C, 10VDC 60s), **50VDC:** ≥3000MΩ (20°C, 50VDC 60s), **C >0.33µF: 16VDC:** 1000MΩ (20°C, 10VDC 60s) • Soldering Conditions: Reflow Soldering: 240°C max. and 30 sec. max. at more than 210°C (temp. at cap surface).

Size Code	Dim. (mm)* L	Dim. (mm)* W	Size Code	Dim. (mm)* L	Dim. (mm)* W
0603 (1608)	1.6	0.8	2820 (7150)	7.1	5.0
0805 (2012)	2.0	1.25	2825 (7163)	7.1	6.3
1206 (3216)	3.2	1.6	3022 (7755)	7.7	5.5
1210 (3225)	3.2	2.5	3925 (9863)	9.8	6.3
1913 (4833)	4.8	3.3	3931 (9880)	9.8	8.0
2416 (6041)	6.0	4.1	6031 (1580)	15.2	8.0
2420 (6050)	6.0	5.0	6039 (1510)	15.2	10.0

* For H measurement see chart



Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Panasonic Part No.
					10	100	500		Size	Pricing	
ECW-U(B) (Standard Type) 5% Tolerance Reflow Only NOT RECOMMENDED FOR NEW DESIGN											
1913 (4833)	16	.15	1.4	PCF1060CT-ND	.73	.63	.49	—	—	—	ECW-U1C154JB9
1206 (3216) Size	50	.0033	0.8	PCF1040CT-ND	.50	.44	.34	PCF1040TR-ND	3,000	200.00/M	ECW-U1H332JB5
		.0039	0.8	PCF1041CT-ND	.50	.44	.34	PCF1041TR-ND	3,000	200.00/M	ECW-U1H392JB5
		.0047	0.8	PCF1042CT-ND	.50	.44	.34	PCF1042TR-ND	3,000	200.00/M	ECW-U1H472JB5
		.0056	0.8	PCF1043CT-ND	.53	.46	.36	PCF1043TR-ND	3,000	212.00/M	ECW-U1H562JB5
		.0068	0.8	PCF1044CT-ND	.53	.46	.36	PCF1044TR-ND	3,000	212.00/M	ECW-U1H682JB5
		.0082	1.0	PCF1045CT-ND	.54	.47	.36	PCF1045TR-ND	3,000	217.00/M	ECW-U1H822JB5
		.01	1.0	PCF1046CT-ND	.55	.48	.37	PCF1046TR-ND	3,000	218.00/M	ECW-U1H103JB5
1210 (3225) Size	50	.012	1.0	PCF1047CT-ND	.56	.49	.37	PCF1047TR-ND	2,000	223.00/M	ECW-U1H123JB5
		.015	1.0	PCF1048CT-ND	.57	.49	.38	PCF1048TR-ND	2,000	226.00/M	ECW-U1H153JB5
		.018	1.4	PCF1049CT-ND	.58	.51	.39	PCF1049TR-ND	2,000	232.00/M	ECW-U1H183JB5
		.022	1.4	PCF1050CT-ND	.59	.52	.40	PCF1050TR-ND	2,000	236.00/M	ECW-U1H223JB5
		.027	1.4	PCF1051CT-ND	.60	.52	.40	PCF1051TR-ND	2,000	241.00/M	ECW-U1H273JB5
		.033	2.0	PCF1052CT-ND	.61	.53	.41	PCF1052TR-ND	2,000	242.00/M	ECW-U1H333JB5
		.039	2.0	PCF1053CT-ND	.63	.55	.42	PCF1053TR-ND	2,000	253.00/M	ECW-U1H393JB5
		.047	2.0	PCF1054CT-ND	.65	.56	.43	PCF1054TR-ND	2,000	259.00/M	ECW-U1H473JB5
1913 (4833)	50	.082	2.0	PCF1057CT-ND	.71	.61	.47	PCF1057TR-ND	3,000	281.00/M	ECW-U1H823JB9
ECW-U(C) (Standard Type) 5% Tolerance, Reflow Only											
1913 (4833) Size	16	.12	1.4	PCF1137CT-ND	.79	.68	.53	PCF1137TR-ND	3,000	314.00/M	ECW-U1C124JC9
		.15	2.0	PCF1138CT-ND	.86	.75	.58	PCF1138TR-ND	3,000	344.00/M	ECW-U1C154JC9
		.18	4.8	PCF1139CT-ND	.94	.82	.63	PCF1139TR-ND	3,000	376.00/M	ECW-U1C184JC9
		.22	4.8	PCF1140CT-ND	1.04	.91	.70	PCF1140TR-ND	2,000	417.00/M	ECW-U1C224JC9
2416 (6041) Size	16	.27	1.8	PCF1141CT-ND	1.13	.98	.75	PCF1141TR-ND	3,000	451.00/M	ECW-U1C274JC9
		.33	2.0	PCF1142CT-ND	1.22	1.06	.81	PCF1142TR-ND	3,000	487.00/M	ECW-U1C334JC9
		.39	2.4	PCF1143CT-ND	1.31	1.13	.87	PCF1143TR-ND	2,000	522.00/M	ECW-U1C394JC9
		.47	2.8	PCF1144CT-ND	1.39	1.21	.93	PCF1144TR-ND	2,000	556.00/M	ECW-U1C474JC9
1913 (4833) Size	50	.056	2.0	PCF1145CT-ND	.70	.61	.47	PCF1145TR-ND	3,000	278.00/M	ECW-U1H563JC9
		.068	2.0	PCF1146CT-ND	.70	.61	.47	PCF1146TR-ND	3,000	278.00/M	ECW-U1H683JC9
		.082	2.4	PCF1147CT-ND	.78	.68	.52	PCF1147TR-ND	2,000	313.00/M	ECW-U1H823JC9
		.1	2.8	PCF1148CT-ND	.87	.76	.58	PCF1148TR-ND	2,000	347.00/M	ECW-U1H104JC9
2416 (6041) Size	50	.12	1.8	PCF1149CT-ND	1.04	.91	.70	PCF1149TR-ND	3,000	417.00/M	ECW-U1H124JC9
		.15	2.0	PCF1150CT-ND	1.22	1.06	.81	PCF1150TR-ND	3,000	487.00/M	ECW-U1H154JC9
		.18	2.4	PCF1151CT-ND	1.39	1.21	.93	PCF1151TR-ND	2,000	556.00/M	ECW-U1H184JC9
		.22	2.8	PCF1152CT-ND	1.56	1.36	1.04	PCF1152TR-ND	2,000	626.00/M	ECW-U1H224JC9
1913 (4833) Size	100	.012	1.4	PCF1209CT-ND	.70	.61	.47	PCF1209TR-ND	3,000	278.00/M	ECW-U1123JC9
		.015	1.4	PCF1210CT-ND	.98	.85	.65	PCF1210TR-ND	3,000	389.00/M	ECW-U1153JC9
		.018	1.4	PCF1211CT-ND	1.00	.87	.67	PCF1211TR-ND	3,000	400.00/M	ECW-U1183JC9
		.022	1.4	PCF1212CT-ND	.70	.61	.47	PCF1212TR-ND	3,000	278.00/M	ECW-U1223JC9
		.027	1.4	PCF1213CT-ND	1.02	.89	.68	PCF1213TR-ND	3,000	408.00/M	ECW-U1273JC9
		.033	1.4	PCF1214CT-ND	.70	.61	.47	PCF1214TR-ND	3,000	278.00/M	ECW-U1333JC9
		.039	1.4	PCF1215CT-ND	1.12	.97	.75	PCF1215TR-ND	3,000	447.00/M	ECW-U1393JC9
		.047	2.0	PCF1216CT-ND	1.16	1.01	.77	PCF1216TR-ND	3,000	463.00/M	ECW-U1473JC9
		.056	2.0	PCF1217CT-ND	1.24	1.08	.83	PCF1217TR-ND	3,000	496.00/M	ECW-U1563JC9
		.068	2.4	PCF1218CT-ND	1.22	1.06	.82	PCF1218TR-ND	2,000	489.00/M	ECW-U1683JC9
		.082	2.8	PCF1219CT-ND	1.26	1.10	.84	PCF1219TR-ND	2,000	505.00/M	ECW-U1823JC9
2416 (6041) Size	100	.1	1.8	PCF1220CT-ND	1.30	1.13	.87	PCF1220TR-ND	3,000	520.00/M	ECW-U1104JC9
		.12	2.4	PCF1221CT-ND	1.42	1.23	.95	PCF1221TR-ND	2,000	568.00/M	ECW-U1124JC9
		.15	2.8	PCF1222CT-ND	1.50	1.30	1.00	PCF1222TR-ND	2,000	600.00/M	ECW-U1154JC9
1913 (4833) Size	250	.001	1.4	PCF1361CT-ND	.78	.68	.52	PCF1361TR-ND	3,000	313.00/M	ECW-U2102JC9
		.0012	1.4	PCF1362CT-ND	.78	.68	.52	PCF1362TR-ND	3,000	313.00/M	ECW-U2122JC9
		.0015	1.4	PCF1363CT-ND	.78	.68	.52	PCF1363TR-ND	3,000	313.00/M	ECW-U2152JC9
		.0018	1.4	PCF1364CT-ND	.78	.68	.52	PCF1364TR-ND	3,000	313.00/M	ECW-U2182JC9
		.0022	1.4	PCF1365CT-ND	.78	.68	.52	PCF1365TR-ND	3,000	313.00/M	ECW-U2222JC9
		.0027	1.4	PCF1366CT-ND	.78	.68	.52	PCF1366TR-ND	3,000	313.00/M	ECW-U2272JC9
		.0033	1.4	PCF1367CT-ND	.78	.68	.52	PCF1367TR-ND	3,000	313.00/M	ECW-U2332JC9
		.0039	1.4	PCF1368CT-ND	.78	.68	.52	PCF1368TR-ND	3,000	313.00/M	ECW-U2392JC9
		.0047	1.4	PCF1369CT-ND	.78	.68	.52	PCF1369TR-ND	3,000	313.00/M	ECW-U2472JC9
		.0056	1.4	PCF1370CT-ND	.78	.68	.52	PCF1370TR-ND	3,000	313.00/M	ECW-U2562JC9
		.0068	1.4	PCF1371CT-ND	.78	.68	.52	PCF1371TR-ND	3,000	313.00/M	ECW-U2682JC9
		.0082	1.4	PCF1372CT-ND	.63	.55	.42	PCF1372TR-ND	3,000	250.00/M	ECW-U2822JC9
		.01	1.4	PCF1373CT-ND	.78	.68	.52	PCF1373TR-ND	3,000	313.00/M	ECW-U2103JC9
		.012	1.4	PCF1374CT-ND	.78	.68	.52	PCF1374TR-ND	3,000	313.00/M	ECW-U2123JC9
		.015	1.4	PCF1375CT-ND	.78	.68	.52	PCF1375TR-ND	3,000	313.00/M	ECW-U2153JC9
		.018	2.0	PCF1376CT-ND	.87	.76	.58	PCF1376TR-ND	3,000	347.00/M	ECW-U2183JC9
		.022	2.0	PCF1377CT-ND	.87	.76	.58	PCF1377TR-ND	3,000	347.00/M	ECW-U2223JC9
		.027	2.4	PCF1378CT-ND	1.04	.91	.70	PCF1378TR-ND	2,000	417.00/M	ECW-U2273JC9
		.033	2.8	PCF1379CT-ND	1.13	.98	.75	PCF1379TR-ND	2,000	451.00/M	ECW-U2333JC9
2416 (6041) Size	250	.039	2.0	PCF1380CT-ND	1.22	1.06	.81	PCF1380TR-ND	3,000	487.00/M	ECW-U2393JC9
		.047	2.4	PCF1381CT-ND	1.31	1.13	.87	PCF1381TR-ND	2,000	522.00/M	ECW-U2473JC9
		.056	2.8	PCF1382CT-ND	1.39	1.21	.93	PCF1382TR-ND	2,000	556.00/M	ECW-U2563JC9
		.068	3.2	PCF1383CT-ND	.99	.86	.66	PCF1383TR-ND	2,000	394.00/M	ECW-U2683JC9
2420 (6050) Size	250	.082	3.2	PCF1384CT-ND	1.56	1.36	1.04	PCF1384TR-ND	1,500	626.00/M	ECW-U2823JC9
		.1	3.8	PCF1385CT-ND	1.38	1.20	.92	PCF1385TR-ND	1,500	552.00/M	ECW-U2104JC9
		.12	4.5	PCF1386CT-ND	1.74	1.51	1.16	PCF1386TR-ND	1,500	695.00/M	ECW-U2124JC9

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Panasonic Part No.
					10	100	500		Size	Pricing	
ECW-U(C) (Standard Type) 10% Tolerance, Reflow Only											
1913 (4833) Size	100	.012	1.4	PCF1223CT-ND	.50	.44	.34	PCF1223TR-ND	3,000	200.00/M	ECW-U1123KC9
		.015	1.4	PCF1224CT-ND	.50	.44	.34	PCF1224TR-ND	3,000	200.00/M	ECW-U1153KC9
		.018	1.4	PCF1225CT-ND	.63	.54	.42	PCF1225TR-ND	3,000	250.00/M	ECW-U1183KC9
		.022	1.4	PCF1226CT-ND	.63	.54	.42	PCF1226TR-ND	3,000	250.00/M	ECW-U1223KC9
		.027	1.4	PCF1227CT-ND	.63	.54	.42	PCF1227TR-ND	3,000	250.00/M	ECW-U1273KC9
		.033	1.4	PCF1228CT-ND	.63	.54	.42	PCF1228TR-ND	3,000	250.00/M	ECW-U1333KC9
		.039	1.4	PCF1229CT-ND	.63	.54	.42	PCF1229TR-ND	3,000	250.00/M	ECW-U1393KC9
		.047	2.0	PCF1230CT-ND	.78	.68	.52	PCF1230TR-ND	3,000	313.00/M	ECW-U1473KC9
		.056	2.0	PCF1231CT-ND	.78	.68	.52	PCF1231TR-ND	3,000	313.00/M	ECW-U1563KC9
		.068	2.4	PCF1232CT-ND	.94	.82	.63	PCF1232TR-ND	2,000	376.00/M	ECW-U1683KC9
		.082	2.8	PCF1233CT-ND	1.02	.88	.68	PCF1233TR-ND	2,000	406.00/M	ECW-U1823KC9
2416 (6041) Size	100	.1	1.8	PCF1234CT-ND	1.10	.95	.73	PCF1234TR-ND	3,000	438.00/M	ECW-U1104KC9
		.12	2.4	PCF1235CT-ND	1.25	1.09	.84	PCF1235TR-ND	2,000	501.00/M	ECW-U1124KC9
		.15	2.8	PCF1236CT-ND	1.13	.98	.75	PCF1236TR-ND	2,000	450.00/M	ECW-U1154KC9
2820 (7150) Size	100	.18	2.0	PCF1237CT-ND	1.32	1.14	.88	PCF1237TR-ND	1,500	526.00/M	ECW-U1184KC9
		.22	2.4	PCF1238CT-ND	1.40	1.21	.93	PCF1238TR-ND	1,500	558.00/M	ECW-U1224KC9
		.27	2.9	PCF1239CT-ND	1.78	1.55	1.19	PCF1239TR-ND	1,500	713.00/M	ECW-U1274KC9
		.33	3.5	PCF1240CT-ND	1.51	1.31	1.01	PCF1240TR-ND	1,500	604.00/M	ECW-U1334KC9
3022 (7755)	100	.39	3.4	PCF1241CT-ND	1.50	1.30	1.00	PCF1241TR-ND	1,000	598.00	ECW-U1394KCV
		.47	4.0	PCF1242CT-ND	1.63	1.41	1.09	PCF1242TR-ND	1,000	651.00	ECW-U1474KCV
3925 (9863) Size	100	.56	3.0	PCF1243CT-ND	1.74	1.51	1.16	PCF1243TR-ND	1,000	696.00	ECW-U1564KCV
		.68	3.6	PCF1244CT-ND	1.81	1.57	1.21	PCF1244TR-ND	1,000	723.00	ECW-U1684KCV
		.82	4.3	PCF1245CT-ND	1.84	1.59	1.23	PCF1245TR-ND	1,000	735.00	ECW-U1824KCV
		1.0	5.1	PCF1246CT-ND	1.85	1.61	1.24	PCF1246TR-ND	1,000	741.00	ECW-U1105KCV
1913 (4833) Size	250	.001	1.4	PCF1247CT-ND	.99	.86	.66	PCF1247TR-ND	3,000	394.00/M	ECW-U2102KC9
		.0012	1.4	PCF1248CT-ND	.99	.86	.66	PCF1248TR-ND	3,000	394.00/M	ECW-U2122KC9
		.0015	1.4	PCF1249CT-ND	.70	.61	.47	PCF1249TR-ND	3,000	278.00/M	ECW-U2152KC9
		.0018	1.4	PCF1250CT-ND	.99	.86	.66	PCF1250TR-ND	3,000	394.00/M	ECW-U2182KC9
		.0022	1.4	PCF1251CT-ND	.99	.86	.66	PCF1251TR-ND	3,000	394.00/M	ECW-U2222KC9
		.0027	1.4	PCF1252CT-ND	.99	.86	.66	PCF1252TR-ND	3,000	394.00/M	ECW-U2272KC9
		.0033	1.4	PCF1253CT-ND	.99	.86	.66	PCF1253TR-ND	3,000	394.00/M	ECW-U2332KC9
		.0039	1.4	PCF1254CT-ND	.70	.61	.47	PCF1254TR-ND	3,000	278.00/M	ECW-U2392KC9
		.0047	1.4	PCF1255CT-ND	.99	.86	.66	PCF1255TR-ND	3,000	394.00/M	ECW-U2472KC9
		.0056	1.4	PCF1256CT-ND	.99	.86	.66	PCF1256TR-ND	3,000	394.00/M	ECW-U2562KC9
		.0068	1.4	PCF1257CT-ND	.99	.86	.66	PCF1257TR-ND	3,000	394.00/M	ECW-U2682KC9
		.0082	1.4	PCF1258CT-ND	.56	.48	.37	PCF1258TR-ND	3,000	222.00/M	ECW-U2822KC9
		.01	1.4	PCF1259CT-ND	.99	.86	.66	PCF1259TR-ND	3,000	394.00/M	ECW-U2103KC9
		.012	1.4	PCF1260CT-ND	.99	.86	.66	PCF1260TR-ND	3,000	394.00/M	ECW-U2123KC9
		.015	1.4	PCF1261CT-ND	.99	.86	.66	PCF1261TR-ND	3,000	394.00/M	ECW-U2153KC9
		.018	2.0	PCF1262CT-ND	.99	.86	.66	PCF1262TR-ND	3,000	394.00/M	ECW-U2183KC9
		.022	2.0	PCF1263CT-ND	.99	.86	.66	PCF1263TR-ND	3,000	394.00/M	ECW-U2223KC9
		.027	2.4	PCF1264CT-ND	1.02	.89	.68	PCF1264TR-ND	2,000	408.00/M	ECW-U2273KC9
		.033	2.8	PCF1265CT-ND	1.05	.91	.70	PCF1265TR-ND	2,000	421.00/M	ECW-U2333KC9
2416 (6041) Size	250	.039	2.0	PCF1266CT-ND	1.08	.94	.72	PCF1266TR-ND	3,000	433.00/M	ECW-U2393KC9
		.047	2.4	PCF1267CT-ND	1.12	.97	.75	PCF1267TR-ND	2,000	447.00/M	ECW-U2473KC9
		.056	2.8	PCF1268CT-ND	1.19	1.03	.79	PCF1268TR-ND	2,000	474.00/M	ECW-U2563KC9
		.068	3.2	PCF1269CT-ND	1.25	1.08	.83	PCF1269TR-ND	2,000	499.00/M	ECW-U2683KC9
2420 (6050) Size	250	.082	3.2	PCF1270CT-ND	1.32	1.14	.88	PCF1270TR-ND	1,500	526.00/M	ECW-U2823KC9
		.1	3.8	PCF1271CT-ND	1.38	1.20	.92	PCF1271TR-ND	1,500	552.00/M	ECW-U2104KC9
		.12	2.8	PCF1272CT-ND	1.51	1.31	1.01	PCF1272TR-ND	1,500	604.00/M	ECW-U2124KC9
2825 (7163) Size	250	.15	3.5	PCF1273CT-ND	1.64	1.43	1.10	PCF1273TR-ND	1,000	657.00	ECW-U2154KCV
		.18	4.1	PCF1274CT-ND	1.77	1.54	1.18	PCF1274TR-ND	1,000	710.00	ECW-U2184KCV
		.22	5.1	PCF1275CT-ND	1.84	1.59	1.23	PCF1275TR-ND	1,000	735.00	ECW-U2224KCV
3925 (9863)	250	.27	3.9	PCF1276CT-ND	2.04	1.77	1.36	PCF1276TR-ND	1,000	815.00	ECW-U2274KCV
		.33	4.8	PCF1277CT-ND	2.17	1.88	1.45	PCF1277TR-ND	1,000	868.00	ECW-U2334KCV
3931 (9880)	250	.39	4.4	PCF1278CT-ND	2.30	1.99	1.53	PCF1278TR-ND	1,000	920.00	ECW-U2394KCV
		.47	5.3	PCF1279CT-ND	2.43	2.11	1.62	PCF1279TR-ND	1,000	973.00	ECW-U2474KCV
6031 (1580)	250	.56	3.7	PCF1280CT-ND	2.82	2.45	1.88	PCF1280TR-ND	750	848.25	ECW-U2564KCZ
		.68	4.4	PCF1281CT-ND	3.61	3.13	2.41	PCF1281TR-ND	750	1083.75	ECW-U2684KCZ
6039 (1510)	250	.82	4.2	PCF1282CT-ND	3.94	3.41	2.63	PCF1282TR-ND	750	1182.75	ECW-U2824KCZ
		1.0	5.1	PCF1283CT-ND	4.26	3.70	2.84	PCF1283TR-ND	750	1281.00	ECW-U2105KCZ
ECW-U(X) (Standard Type) 5% Tolerance, Reflow Only											
1206 (3216) Size	100	.001	1.1	PCF1348CT-ND	.66	.57	.44	PCF1348TR-ND	3,000	263.00/M	ECW-U1102JX5
		.0012	1.1	PCF1349CT-ND	.66	.57	.44	PCF1349TR-ND	3,000	263.00/M	ECW-U1122JX5
		.0015	1.1	PCF1350CT-ND	.66	.57	.44	PCF1350TR-ND	3,000	263.00/M	ECW-U1152JX5
		.0018	1.1	PCF1351CT-ND	.67	.58	.45	PCF1351TR-ND	3,000	268.00/M	ECW-U1182JX5
		.0022	1.1	PCF1352CT-ND	.67	.58	.45	PCF1352TR-ND	3,000	268.00/M	ECW-U1222JX5
		.0027	1.1	PCF1353CT-ND	.67	.58	.45	PCF1353TR-ND	3,000	268.00/M	ECW-U1272JX5
		.0033	1.5	PCF1354CT-ND	.67	.58	.45	PCF1354TR-ND	2,000	268.00/M	ECW-U1332JX5
		.0039	1.5	PCF1355CT-ND	.69	.60	.46	PCF1355TR-ND	2,000	274.00/M	ECW-U1392JX5
		.0047	1.5	PCF1356CT-ND	.70	.61	.47	PCF1356TR-ND	2,000	280.00/M	ECW-U1472JX5
1210 (3225) Size	100	.0056	1.5	PCF1357CT-ND	.74	.64	.49	PCF1357TR-ND	2,000	293.00/M	ECW-U1562JX5
		.0068	1.5	PCF1358CT-ND	.74	.64	.49	PCF1358TR-ND	2,000	293.00/M	ECW-U1682JX5
		.0082	2.1	PCF1359CT-ND	.75	.65	.50	PCF1359TR-ND	2,000	298.00/M	ECW-U1822JX5
		.01	2.1	PCF1360CT-ND	.77	.66	.51	PCF1360TR-ND	2,000	305.00/M	ECW-U1103JX5

(Continued)

Panasonic SMT Capacitors ECW-U (PEN Film, Stand. Type) & ECH-U (PPS Film, High Grade Type) *(Cont.)*

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Panasonic Part No.
					10	100	500		Size	Pricing	
ECW-U(V16) (Standard Type) 5% Tolerance, Reflow Only											
1913 (4883) Size	250	.001	1.4	PCF1390CT-ND	.47	.41	.32	PCF1390TR-ND	3,000	188.00/M	ECW-U2102V16
		.0012	1.4	PCF1391CT-ND	.47	.41	.32	PCF1391TR-ND	3,000	188.00/M	ECW-U2122V16
		.0015	1.4	PCF1392CT-ND	.47	.41	.32	PCF1392TR-ND	3,000	188.00/M	ECW-U2152V16
		.0018	1.4	PCF1393CT-ND	.47	.41	.32	PCF1393TR-ND	3,000	188.00/M	ECW-U2182V16
		.0022	1.4	PCF1394CT-ND	.47	.41	.32	PCF1394TR-ND	3,000	188.00/M	ECW-U2222V16
		.0033	1.4	PCF1395CT-ND	.47	.41	.32	PCF1395TR-ND	3,000	188.00/M	ECW-U2332V16
		.0047	1.4	PCF1396CT-ND	.47	.41	.32	PCF1396TR-ND	3,000	188.00/M	ECW-U2472V16
		.0056	1.4	PCF1397CT-ND	.47	.41	.32	PCF1397TR-ND	3,000	188.00/M	ECW-U2562V16
		.0068	1.4	PCF1398CT-ND	.47	.41	.32	PCF1398TR-ND	3,000	188.00/M	ECW-U2682V16
		.0082	1.4	PCF1399CT-ND	.47	.41	.32	PCF1399TR-ND	3,000	187.00/M	ECW-U2822V16
		.01	1.4	PCF1400CT-ND	.47	.41	.32	PCF1400TR-ND	3,000	188.00/M	ECW-U2103V16
		.012	1.4	PCF1401CT-ND	.47	.41	.32	PCF1401TR-ND	3,000	188.00/M	ECW-U2123V16
		.015	1.4	PCF1402CT-ND	.47	.41	.32	PCF1402TR-ND	3,000	188.00/M	ECW-U2153V16
		.018	2.0	PCF1403CT-ND	.53	.46	.35	PCF1403TR-ND	3,000	209.00/M	ECW-U2183V16
		.022	2.0	PCF1404CT-ND	.53	.46	.35	PCF1404TR-ND	3,000	209.00/M	ECW-U2223V16
		.027	2.4	PCF1405CT-ND	.63	.54	.42	PCF1405TR-ND	2,000	250.00/M	ECW-U2273V16
		.033	2.8	PCF1406CT-ND	.68	.59	.45	PCF1406TR-ND	2,000	271.00/M	ECW-U2333V16
2416 (6041) Size	250	.039	2.0	PCF1407CT-ND	.73	.64	.49	PCF1407TR-ND	3,000	292.00/M	ECW-U2393V16
		.047	2.4	PCF1408CT-ND	.78	.68	.52	PCF1408TR-ND	2,000	313.00/M	ECW-U2473V16
		.056	2.8	PCF1409CT-ND	.84	.73	.56	PCF1409TR-ND	2,000	334.00/M	ECW-U2563V16
		.068	3.2	PCF1410CT-ND	.89	.77	.59	PCF1410TR-ND	2,000	355.00/M	ECW-U2683V16
2420 (6050) Size	250	.082	3.2	PCF1411CT-ND	.94	.82	.63	PCF1411TR-ND	1,500	376.00/M	ECW-U2823V16
		.1	3.8	PCF1412CT-ND	.99	.86	.66	PCF1412TR-ND	1,500	395.00/M	ECW-U2104V16
		.12	4.5	PCF1413CT-ND	1.04	.91	.70	PCF1413TR-ND	1,500	417.00/M	ECW-U2124V16
ECW-U(V17) (Standard Type) 5% Tolerance, Reflow Only											
1913 (4833) Size	400	.001	1.4	PCF1414CT-ND	.53	.46	.35	PCF1414TR-ND	3,000	209.00/M	ECW-U4102V17
		.0012	1.4	PCF1415CT-ND	.53	.46	.35	PCF1415TR-ND	3,000	209.00/M	ECW-U4122V17
		.0015	1.4	PCF1416CT-ND	.53	.46	.35	PCF1416TR-ND	3,000	209.00/M	ECW-U4152V17
		.0018	1.4	PCF1417CT-ND	.53	.46	.35	PCF1417TR-ND	3,000	209.00/M	ECW-U4182V17
		.0022	1.4	PCF1418CT-ND	.53	.46	.35	PCF1418TR-ND	3,000	209.00/M	ECW-U4222V17
		.0027	1.4	PCF1419CT-ND	.53	.46	.35	PCF1419TR-ND	3,000	209.00/M	ECW-U4272V17
		.0033	1.4	PCF1420CT-ND	.53	.46	.35	PCF1420TR-ND	3,000	209.00/M	ECW-U4332V17
		.0039	1.4	PCF1421CT-ND	.53	.46	.35	PCF1421TR-ND	3,000	209.00/M	ECW-U4392V17
		.0047	1.4	PCF1422CT-ND	.53	.46	.35	PCF1422TR-ND	3,000	209.00/M	ECW-U4472V17
		.0056	2.0	PCF1423CT-ND	.53	.46	.35	PCF1423TR-ND	3,000	209.00/M	ECW-U4562V17
		.0068	2.0	PCF1424CT-ND	.53	.46	.35	PCF1424TR-ND	3,000	209.00/M	ECW-U4682V17
		.0082	2.4	PCF1425CT-ND	.60	.52	.40	PCF1425TR-ND	2,000	239.00/M	ECW-U4822V17
		.01	2.8	PCF1426CT-ND	.63	.54	.42	PCF1426TR-ND	2,000	250.00/M	ECW-U4103V17
2416 (6041) Size	400	.012	2.0	PCF1427CT-ND	.68	.59	.45	PCF1427TR-ND	3,000	271.00/M	ECW-U4123V17
		.015	2.4	PCF1428CT-ND	.73	.64	.49	PCF1428TR-ND	2,000	292.00/M	ECW-U4153V17
		.018	2.8	PCF1429CT-ND	.78	.68	.52	PCF1429TR-ND	2,000	313.00/M	ECW-U4183V17
		.022	3.2	PCF1430CT-ND	.84	.73	.56	PCF1430TR-ND	2,000	334.00/M	ECW-U4223V17
2420 (6050)	400	.027	3.0	PCF1431CT-ND	.92	.79	.61	PCF1431TR-ND	1,500	365.00/M	ECW-U4273V17
		.033	3.6	PCF1432CT-ND	.99	.86	.66	PCF1432TR-ND	1,500	395.00/M	ECW-U4333V17
2820 (7150)	400	.039	3.2	PCF1433CT-ND	.99	.86	.66	PCF1433TR-ND	1,500	395.00/M	ECW-U4393V17
		.047	3.8	PCF1434CT-ND	1.04	.91	.70	PCF1434TR-ND	1,500	417.00/M	ECW-U4473V17
2825 (7163)	400	.056	3.6	PCF1435CT-ND	1.04	.91	.70	PCF1435TR-ND	1,000	417.00/M	ECW-U4563V17
		.068	4.4	PCF1436CT-ND	1.10	.95	.73	PCF1436TR-ND	1,000	438.00/M	ECW-U4683V17
3925 (9863)	400	.082	3.4	PCF1437CT-ND	1.10	.95	.73	PCF1437TR-ND	1,000	438.00/M	ECW-U4823V17
		.1	4.0	PCF1438CT-ND	1.17	1.02	.78	PCF1438TR-ND	1,000	469.00/M	ECW-U4104V17
3931 (9880)	400	.12	3.8	PCF1439CT-ND	1.17	1.02	.78	PCF1439TR-ND	1,000	469.00/M	ECW-U4124V17
		.15	4.6	PCF1440CT-ND	1.25	1.09	.84	PCF1440TR-ND	1,000	501.00/M	ECW-U4154V17
ECH-U(B) (High Grade Type) 2% Tolerance Reflow/Flow											
0805 (2012) Size	50	.0001	0.8	PCF1089CT-ND	.62	.54	.42	PCF1089TR-ND	3,000	248.00/M	ECH-U1H101GB5
		.00012	0.8	PCF1090CT-ND	.62	.54	.42	PCF1090TR-ND	3,000	248.00/M	ECH-U1H121GB5
		.00015	0.8	PCF1091CT-ND	.62	.54	.42	PCF1091TR-ND	3,000	248.00/M	ECH-U1H151GB5
		.00018	0.8	PCF1092CT-ND	.62	.54	.42	PCF1092TR-ND	3,000	248.00/M	ECH-U1H181GB5
		.00022	0.8	PCF1093CT-ND	.62	.54	.42	PCF1093TR-ND	3,000	248.00/M	ECH-U1H221GB5
		.00027	0.8	PCF1094CT-ND	.62	.54	.42	PCF1094TR-ND	3,000	248.00/M	ECH-U1H271GB5
		.00033	0.8	PCF1095CT-ND	.62	.54	.42	PCF1095TR-ND	3,000	248.00/M	ECH-U1H331GB5
		.00039	0.8	PCF1096CT-ND	.62	.54	.42	PCF1096TR-ND	3,000	248.00/M	ECH-U1H391GB5
		.00047	0.8	PCF1097CT-ND	.62	.54	.42	PCF1097TR-ND	3,000	248.00/M	ECH-U1H471GB5
		.00056	0.8	PCF1098CT-ND	.62	.54	.42	PCF1098TR-ND	3,000	248.00/M	ECH-U1H561GB5
		.00068	0.8	PCF1099CT-ND	.62	.54	.42	PCF1099TR-ND	3,000	248.00/M	ECH-U1H681GB5
		.00082	0.8	PCF1100CT-ND	.62	.54	.42	PCF1100TR-ND	3,000	248.00/M	ECH-U1H821GB5
		.001	0.8	PCF1101CT-ND	.62	.54	.42	PCF1101TR-ND	3,000	248.00/M	ECH-U1H102GB5
		.0012	0.8	PCF1102CT-ND	.62	.54	.42	PCF1102TR-ND	3,000	248.00/M	ECH-U1H122GB5
		.0015	0.8	PCF1103CT-ND	.62	.54	.42	PCF1103TR-ND	3,000	248.00/M	ECH-U1H152GB5
		.0018	0.8	PCF1104CT-ND	.62	.54	.42	PCF1104TR-ND	3,000	248.00/M	ECH-U1H182GB5
		.0022	0.8	PCF1105CT-ND	.62	.54	.42	PCF1105TR-ND	3,000	248.00/M	ECH-U1H222GB5
		.0027	0.8	PCF1106CT-ND	.62	.54	.42	PCF1106TR-ND	3,000	248.00/M	ECH-U1H272GB5
1206 (3216) Size	50	.0033	0.8	PCF1107CT-ND	.73	.63	.49	PCF1107TR-ND	3,000	290.00/M	ECH-U1H332GB5
		.0039	0.8	PCF1108CT-ND	.74	.65	.50	PCF1108TR-ND	3,000	296.00/M	ECH-U1H392GB5
		.0047	0.8	PCF1109CT-ND	.77	.66	.51	PCF1109TR-ND	3,000	305.00/M	ECH-U1H472GB5
		.0056	0.8	PCF1110CT-ND	.79	.68	.53	PCF1110TR-ND	3,000	314.00/M	ECH-U1H562GB5
		.0068	0.8	PCF1111CT-ND	.81	.70	.54	PCF1111TR-ND	3,000	323.00/M	ECH-U1H682GB5
		.0082	1.0	PCF1112CT-ND	.83	.72	.56	PCF1112TR-ND	3,000	332.00/M	ECH-U1H822GB5
		.01	1.0	PCF1113CT-ND	.86	.74	.57	PCF1113TR-ND	3,000	341.00/M	ECH-U1H103GB5
1210 (3225) Size	50	.012	1.0	PCF1114CT-ND	.87	.76	.58	PCF1114TR-ND	2,000	347.00/M	ECH-U1H123GB5
		.015	1.0	PCF1115CT-ND	.90	.78	.60	PCF1115TR-ND	2,000	358.00/M	ECH-U1H153GB5
		.018	1.4	PCF1116CT-ND	.92	.80	.62	PCF1116TR-ND	2,000	368.00/M	ECH-U1H183GB5
		.022	1.4	PCF1117CT-ND	.96	.83	.64	PCF1117TR-ND	2,000	382.00/M	ECH-U1H223GB5
		.027	1.4	PCF1118CT-ND	1.00	.87	.67	PCF1118TR-ND	2,000	400.00/M	ECH-U1H273GB5
		.033	2.0	PCF1119CT-ND	1.05	.91	.70	PCF1119TR-ND	2,000	418.00/M	ECH-U1H333GB5
		.039	2.0	PCF1120CT-ND	1.10	.95	.73	PCF1120TR-ND	2,000	438.00/M	ECH-U1H393GB5
1913 (4833) Size	50	.047	1.4	PCF1162CT-ND	.60	.52	.40	PCF1162TR-ND	3,000	239.00/M	ECH-U1H473GC9
		.056	2.0	PCF1163CT-ND	.64	.55	.43	PCF1163TR-ND	3,000	254.00/M	ECH-U1H563GC9
		.068	2.0	PCF1164CT-ND	.68	.59	.45	PCF1164TR-ND	3,000	269.00/M	ECH-U1H683GC9
		.082	2.4	PCF1165CT-ND	.75	.65	.50	PCF1165TR-ND	2,000	299.00/M	ECH-U1H823GC9
		.1	2.8	PCF1166CT-ND	.83	.72	.55	PCF1166TR-ND	2,000	329.00/M	ECH-U1H104GC9

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Panasonic Part No.
					10	100	500		Size	Pricing	
ECH-U(B) (High Grade Type) 5% Tolerance Reflow/Flow											
2416 (6041) Size	50	.12	1.8	PCF1167CT-ND	1.01	.88	.68	PCF1167TR-ND	3,000	404.00/M	ECH-U1H124GC9
		.15	2.4	PCF1168CT-ND	1.15	1.00	.77	PCF1168TR-ND	2,000	460.00/M	ECH-U1H154GC9
		.18	2.8	PCF1169CT-ND	1.32	1.14	.88	PCF1169TR-ND	2,000	526.00/M	ECH-U1H184GC9
		.22	3.2	PCF1170CT-ND	1.50	1.30	1.00	PCF1170TR-ND	2,000	598.00/M	ECH-U1H224GC9
0805 (2012) Size	16	.0033	0.8	PCF1070CT-ND	.49	.43	.33	PCF1070TR-ND	3,000	195.00/M	ECH-U1C332JB5
		.0039	0.8	PCF1071CT-ND	.49	.43	.33	PCF1071TR-ND	3,000	195.00/M	ECH-U1C392JB5
		.0047	0.8	PCF1072CT-ND	.49	.43	.33	PCF1072TR-ND	3,000	195.00/M	ECH-U1C472JB5
		.0056	0.8	PCF1073CT-ND	.49	.43	.33	PCF1073TR-ND	3,000	195.00/M	ECH-U1C562JB5
		.0068	0.8	PCF1074CT-ND	.49	.43	.33	PCF1074TR-ND	3,000	195.00/M	ECH-U1C682JB5
		.0082	1.0	PCF1075CT-ND	.49	.43	.33	PCF1075TR-ND	3,000	195.00/M	ECH-U1C822JB5
		.01	1.0	PCF1076CT-ND	.49	.43	.33	PCF1076TR-ND	3,000	195.00/M	ECH-U1C103JB5
1206 (3216) Size	16	.012	0.8	PCF1077CT-ND	.52	.45	.35	PCF1077TR-ND	3,000	206.00/M	ECH-U1C123JB5
		.015	0.8	PCF1078CT-ND	.54	.47	.36	PCF1078TR-ND	3,000	214.00/M	ECH-U1C153JB5
		.018	0.8	PCF1079CT-ND	.54	.47	.36	PCF1079TR-ND	3,000	214.00/M	ECH-U1C183JB5
		.022	0.8	PCF1080CT-ND	.58	.50	.39	PCF1080TR-ND	3,000	230.00/M	ECH-U1C223JB5
		.027	1.0	PCF1081CT-ND	.59	.52	.40	PCF1081TR-ND	3,000	236.00/M	ECH-U1C273JB5
		.033	1.0	PCF1082CT-ND	.61	.53	.41	PCF1082TR-ND	3,000	244.00/M	ECH-U1C333JB5
		.039	1.4	PCF1083CT-ND	.64	.55	.43	PCF1083TR-ND	2,000	254.00/M	ECH-U1C393JB5
		.047	1.4	PCF1084CT-ND	.67	.58	.45	PCF1084TR-ND	2,000	268.00/M	ECH-U1C473JB5
1210 (3225) Size	16	.056	1.4	PCF1085CT-ND	.74	.64	.49	PCF1085TR-ND	2,000	295.00/M	ECH-U1C563JB5
	16	.068	1.4	PCF1086CT-ND	.79	.69	.53	PCF1086TR-ND	2,000	316.00/M	ECH-U1C683JB5
	16	.082	2.0	PCF1087CT-ND	.85	.74	.57	PCF1087TR-ND	2,000	340.00/M	ECH-U1C823JB5
	16	.1	2.0	PCF1088CT-ND	.90	.78	.60	PCF1088TR-ND	2,000	359.00/M	ECH-U1C104JB5
	50	.0001	0.8	PCF1000CT-ND•	.50	.44	.34	PCF1000TR-ND	3,000	200.00/M	ECH-U1H101JB5
	50	.00012	0.8	PCF1001CT-ND	.50	.44	.34	PCF1001TR-ND	3,000	200.00/M	ECH-U1H121JB5
	50	.00015	0.8	PCF1002CT-ND•	.50	.44	.34	PCF1002TR-ND	3,000	200.00/M	ECH-U1H151JB5
	50	.00018	0.8	PCF1003CT-ND	.50	.44	.34	PCF1003TR-ND	3,000	200.00/M	ECH-U1H181JB5
	50	.00022	0.8	PCF1004CT-ND•	.50	.44	.34	PCF1004TR-ND	3,000	200.00/M	ECH-U1H221JB5
0805 (2012) Size	50	.00027	0.8	PCF1005CT-ND	.50	.44	.34	PCF1005TR-ND	3,000	200.00/M	ECH-U1H271JB5
		.00033	0.8	PCF1006CT-ND•	.50	.44	.34	PCF1006TR-ND	3,000	200.00/M	ECH-U1H331JB5
		.00039	0.8	PCF1007CT-ND	.50	.44	.34	PCF1007TR-ND	3,000	200.00/M	ECH-U1H391JB5
		.00047	0.8	PCF1008CT-ND•	.50	.44	.34	PCF1008TR-ND	3,000	200.00/M	ECH-U1H471JB5
		.00056	0.8	PCF1009CT-ND	.50	.44	.34	PCF1009TR-ND	3,000	200.00/M	ECH-U1H561JB5
		.00068	0.8	PCF1010CT-ND	.50	.44	.34	PCF1010TR-ND	3,000	200.00/M	ECH-U1H681JB5
		.00082	0.8	PCF1011CT-ND	.50	.44	.34	PCF1011TR-ND	3,000	200.00/M	ECH-U1H821JB5
		.001	0.8	PCF1012CT-ND•	.50	.44	.34	PCF1012TR-ND	3,000	200.00/M	ECH-U1H102JB5
		.0012	0.8	PCF1013CT-ND	.50	.44	.34	PCF1013TR-ND	3,000	200.00/M	ECH-U1H122JB5
		.0015	0.8	PCF1014CT-ND•	.50	.44	.34	PCF1014TR-ND	3,000	200.00/M	ECH-U1H152JB5
		.0018	0.8	PCF1015CT-ND	.50	.44	.34	PCF1015TR-ND	3,000	200.00/M	ECH-U1H182JB5
		.0022	0.8	PCF1016CT-ND•	.50	.44	.34	PCF1016TR-ND	3,000	200.00/M	ECH-U1H222JB5
		.0027	0.8	PCF1017CT-ND	.50	.44	.34	PCF1017TR-ND	3,000	200.00/M	ECH-U1H272JB5
1206 (3216) Size	50	.0033	0.8	PCF1018CT-ND•	.59	.51	.39	PCF1018TR-ND	3,000	235.00/M	ECH-U1H332JB5
		.0039	0.8	PCF1019CT-ND	.60	.52	.40	PCF1019TR-ND	3,000	241.00/M	ECH-U1H392JB5
		.0047	0.8	PCF1020CT-ND•	.62	.54	.42	PCF1020TR-ND	3,000	248.00/M	ECH-U1H472JB5
		.0056	0.8	PCF1021CT-ND	.64	.55	.43	PCF1021TR-ND	3,000	254.00/M	ECH-U1H562JB5
		.0068	0.8	PCF1022CT-ND•	.66	.57	.44	PCF1022TR-ND	3,000	262.00/M	ECH-U1H682JB5
		.0082	1.0	PCF1023CT-ND	.67	.58	.45	PCF1023TR-ND	3,000	266.00/M	ECH-U1H822JB5
		.01	1.0	PCF1024CT-ND•	.69	.60	.46	PCF1024TR-ND	3,000	277.00/M	ECH-U1H103JB5
1210 (3225) Size	50	.012	1.0	PCF1025CT-ND	.71	.62	.47	PCF1025TR-ND	2,000	283.00/M	ECH-U1H123JB5
		.015	1.0	PCF1026CT-ND•	.73	.63	.49	PCF1026TR-ND	2,000	290.00/M	ECH-U1H153JB5
		.018	1.4	PCF1027CT-ND	.75	.65	.50	PCF1027TR-ND	2,000	298.00/M	ECH-U1H183JB5
		.022	1.4	PCF1028CT-ND•	.77	.67	.52	PCF1028TR-ND	2,000	308.00/M	ECH-U1H223JB5
		.027	1.4	PCF1029CT-ND	.80	.70	.54	PCF1029TR-ND	2,000	320.00/M	ECH-U1H273JB5
		.033	2.0	PCF1030CT-ND•	.85	.74	.57	PCF1030TR-ND	2,000	338.00/M	ECH-U1H333JB5
		.039	2.0	PCF1031CT-ND	.88	.77	.59	PCF1031TR-ND	2,000	352.00/M	ECH-U1H393JB5
1913 (4833) Size	50	.047	1.4	PCF1153CT-ND	.57	.50	.38	PCF1153TR-ND	3,000	229.00/M	ECH-U1H473JC9
		.056	2.0	PCF1154CT-ND	.61	.53	.41	PCF1154TR-ND	3,000	242.00/M	ECH-U1H563JC9
		.068	2.0	PCF1155CT-ND•	.65	.56	.43	PCF1155TR-ND	3,000	257.00/M	ECH-U1H683JC9
		.082	2.4	PCF1156CT-ND	.72	.62	.48	PCF1156TR-ND	2,000	286.00/M	ECH-U1H823JC9
		.1	2.8	PCF1157CT-ND•	.78	.68	.52	PCF1157TR-ND	2,000	311.00/M	ECH-U1H104JC9
2416 (6041) Size	50	.12	1.8	PCF1158CT-ND	.96	.84	.64	PCF1158TR-ND	3,000	385.00/M	ECH-U1H124JC9
		.15	2.4	PCF1159CT-ND	1.10	.95	.73	PCF1159TR-ND	2,000	439.00/M	ECH-U1H154JC9
		.18	2.8	PCF1160CT-ND	1.25	1.09	.84	—	—	—	ECH-U1H184JC9
		.22	3.2	PCF1161CT-ND	1.43	1.24	.95	PCF1161TR-ND	2,000	570.00/M	ECH-U1H224JC9
ECH-U(X) (High Grade Type) 2% Tolerance, Reflow Only											
0603 (1608) Size	16	.0001	.7	PCF1441CT-ND	.28	.24	.19	PCF1441TR-ND	4,000	110.00/M	ECH-U1C101GX5
		.00012	.7	PCF1442CT-ND	.28	.24	.19	PCF1442TR-ND	4,000	110.00/M	ECH-U1C121GX5
		.00015	.7	PCF1443CT-ND	.28	.24	.19	PCF1443TR-ND	4,000	110.00/M	ECH-U1C151GX5
		.00018	.7	PCF1444CT-ND	.28	.24	.19	PCF1444TR-ND	4,000	110.00/M	ECH-U1C181GX5
		.00022	.7	PCF1445CT-ND	.28	.24	.19	PCF1445TR-ND	4,000	110.00/M	ECH-U1C221GX5
		.00027	.7	PCF1446CT-ND	.28	.24	.19	PCF1446TR-ND	4,000	110.00/M	ECH-U1C271GX5
		.00033	.7	PCF1447CT-ND	.28	.24	.19	PCF1447TR-ND	4,000	110.00/M	ECH-U1C331GX5
		.00039	.7	PCF1448CT-ND	.28	.24	.19	PCF1448TR-ND	4,000	110.00/M	ECH-U1C391GX5
		.00047	.7	PCF1449CT-ND	.28	.24	.19	PCF1449TR-ND	4,000	110.00/M	ECH-U1C471GX5
		.00056	.7	PCF1450CT-ND	.28	.24	.19	PCF1450TR-ND	4,000	110.00/M	ECH-U1C561GX5
		.00068	.7	PCF1451CT-ND	.28	.24	.19	PCF1451TR-ND	4,000	110.00/M	ECH-U1C681GX5
		.00082	.7	PCF1452CT-ND	.28	.24	.19	PCF1452TR-ND	4,000	110.00/M	ECH-U1C821GX5
		.001	.7	PCF1453CT-ND	.28	.24	.19	PCF1453TR-ND	4,000	110.00/M	ECH-U1C102GX5
		.0012	.7	PCF1454CT-ND	.28	.24	.19	PCF1454TR-ND	4,000	110.00/M	ECH-U1C122GX5
		.0015	.7	PCF1455CT-ND	.28	.24	.19	PCF1455TR-ND	4,000	110.00/M	ECH-U1C152GX5
		.0018	.7	PCF1456CT-ND	.28	.24	.19	PCF1456TR-ND	4,000	110.00/M	ECH-U1C182GX5
		.0022	.7	PCF1457CT-ND	.28	.24	.19	PCF1457TR-ND	4,000	110.00/M	ECH-U1C222GX5
		.0027	.7	PCF1458CT-ND	.28	.24	.19	PCF1458TR-ND	4,000	110.00/M	ECH-U1C272GX5
0805 (2012) Size	16	.0033	0.9	PCF1171CT-ND	.34	.30	.23	PCF1171TR-ND	3,000	135.00/M	ECH-U1C332GX5
		.0039	0.9	PCF1172CT-ND	.34	.30	.23	PCF1172TR-ND	3,000	135.00/M	ECH-U1C392GX5
		.0047	0.9	PCF1173CT-ND	.34	.30	.23	PCF1173TR-ND	3,000	135.00/M	ECH-U1C472GX5
		.0056	0.9	PCF1174CT-ND	.34	.30	.23	PCF1174TR-ND	3,000	135.00/M	ECH-U1C562GX5
		.0068	0.9	PCF1175CT-ND	.34	.30	.23	PCF1175TR-ND	3,000	135.00/M	ECH-U1C682GX5
		.0082	1.1	PCF1176CT-ND	.38	.33	.25	PCF1176TR-ND	3,000	150.00/M	ECH-U1C822GX5
		.01	1.1	PCF1177CT-ND	.38	.33	.25	PCF1177TR-ND	3,000	150.00/M	ECH-U1C103GX5

(Continued)

Panasonic® SMT Capacitors ECW-U (PEN Film, Stand. Type) & ECH-U (PPS Film, High Grade Type) *(Cont.)*

Item Code	WV DC	Cap. µF	Dim. H (mm)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Panasonic Part No.
					10	100	500		Size	Pricing	
1206 (3216) Size	16	.012	0.9	PCF1178CT-ND	.42	.36	.28	PCF1178TR-ND	3,000	165.00/M	ECH-U1C123GX5
		.015	0.9	PCF1179CT-ND	.42	.36	.28	PCF1179TR-ND	3,000	165.00/M	ECH-U1C153GX5
		.018	0.9	PCF1180CT-ND	.42	.36	.28	PCF1180TR-ND	3,000	165.00/M	ECH-U1C183GX5
		.022	0.9	PCF1181CT-ND	.42	.36	.28	PCF1181TR-ND	3,000	165.00/M	ECH-U1C223GX5
		.027	1.1	PCF1182CT-ND	.45	.39	.30	PCF1182TR-ND	3,000	180.00/M	ECH-U1C273GX5
		.033	1.1	PCF1183CT-ND	.45	.39	.30	PCF1183TR-ND	3,000	180.00/M	ECH-U1C333GX5
		.039	1.5	PCF1184CT-ND	.49	.43	.33	PCF1184TR-ND	2,000	195.00/M	ECH-U1C393GX5
		.047	1.5	PCF1185CT-ND	.49	.43	.33	PCF1185TR-ND	2,000	195.00/M	ECH-U1C473GX5
1210 (3225) Size	16	.056	1.5	PCF1186CT-ND	.56	.49	.38	PCF1186TR-ND	2,000	224.00/M	ECH-U1C563GX5
		.068	1.5	PCF1187CT-ND	.56	.49	.38	PCF1187TR-ND	2,000	224.00/M	ECH-U1C683GX5
		.082	2.1	PCF1188CT-ND	.68	.59	.45	PCF1188TR-ND	2,000	269.00/M	ECH-U1C823GX5
		0.1	2.1	PCF1189CT-ND	.68	.59	.45	PCF1189TR-ND	2,000	269.00/M	ECH-U1C104GX5
0805 (2012) Size	50	.0001	0.9	PCF1284CT-ND	.33	.28	.22	PCF1284TR-ND	3,000	129.00/M	ECH-U1H101GX5
		.00012	0.9	PCF1285CT-ND	.33	.28	.22	PCF1285TR-ND	3,000	129.00/M	ECH-U1H121GX5
		.00015	0.9	PCF1286CT-ND	.33	.28	.22	PCF1286TR-ND	3,000	129.00/M	ECH-U1H151GX5
		.00018	0.9	PCF1287CT-ND	.33	.28	.22	PCF1287TR-ND	3,000	129.00/M	ECH-U1H181GX5
		.00022	0.9	PCF1288CT-ND	.33	.28	.22	PCF1288TR-ND	3,000	129.00/M	ECH-U1H221GX5
		.00027	0.9	PCF1289CT-ND	.33	.28	.22	PCF1289TR-ND	3,000	129.00/M	ECH-U1H271GX5
		.00033	0.9	PCF1290CT-ND	.33	.28	.22	PCF1290TR-ND	3,000	129.00/M	ECH-U1H331GX5
0805 (2012) Size	50	.00039	0.9	PCF1291CT-ND	.33	.28	.22	PCF1291TR-ND	3,000	129.00/M	ECH-U1H391GX5
		.00047	0.9	PCF1292CT-ND	.33	.28	.22	PCF1292TR-ND	3,000	129.00/M	ECH-U1H471GX5
		.00056	0.9	PCF1293CT-ND	.33	.28	.22	PCF1293TR-ND	3,000	129.00/M	ECH-U1H561GX5
		.00068	0.9	PCF1294CT-ND	.33	.28	.22	PCF1294TR-ND	3,000	129.00/M	ECH-U1H681GX5
		.00082	0.9	PCF1295CT-ND	.33	.28	.22	PCF1295TR-ND	3,000	129.00/M	ECH-U1H821GX5
		.001	0.9	PCF1296CT-ND	.33	.28	.22	PCF1296TR-ND	3,000	129.00/M	ECH-U1H102GX5
		.0012	0.9	PCF1297CT-ND	.33	.28	.22	PCF1297TR-ND	3,000	129.00/M	ECH-U1H122GX5
		.0015	0.9	PCF1298CT-ND	.33	.28	.22	PCF1298TR-ND	3,000	129.00/M	ECH-U1H152GX5
		.0018	0.9	PCF1299CT-ND	.33	.28	.22	PCF1299TR-ND	3,000	129.00/M	ECH-U1H182GX5
		.0022	0.9	PCF1300CT-ND	.33	.28	.22	PCF1300TR-ND	3,000	129.00/M	ECH-U1H222GX5
		.0027	0.9	PCF1301CT-ND	.33	.28	.22	PCF1301TR-ND	3,000	129.00/M	ECH-U1H272GX5
1206 (3216) Size	50	.0033	0.9	PCF1302CT-ND	.42	.36	.28	PCF1302TR-ND	3,000	165.00/M	ECH-U1H332GX5
		.0039	0.9	PCF1303CT-ND	.42	.36	.28	PCF1303TR-ND	3,000	165.00/M	ECH-U1H392GX5
		.0047	0.9	PCF1304CT-ND	.42	.36	.28	PCF1304TR-ND	3,000	165.00/M	ECH-U1H472GX5
		.0056	0.9	PCF1305CT-ND	.42	.36	.28	PCF1305TR-ND	3,000	165.00/M	ECH-U1H562GX5
		.0068	0.9	PCF1306CT-ND	.42	.36	.28	PCF1306TR-ND	3,000	165.00/M	ECH-U1H682GX5
		.0082	1.1	PCF1307CT-ND	.45	.39	.30	PCF1307TR-ND	3,000	180.00/M	ECH-U1H822GX5
1210 (3225) Size	50	.01	1.1	PCF1308CT-ND	.45	.39	.30	PCF1308TR-ND	3,000	180.00/M	ECH-U1H103GX5
		.012	1.1	PCF1309CT-ND	.45	.39	.30	PCF1309TR-ND	2,000	180.00/M	ECH-U1H123GX5
		.015	1.1	PCF1310CT-ND	.45	.39	.30	PCF1310TR-ND	2,000	180.00/M	ECH-U1H153GX5
		.018	1.5	PCF1311CT-ND	.49	.43	.33	PCF1311TR-ND	2,000	195.00/M	ECH-U1H183GX5
		.022	1.5	PCF1312CT-ND	.49	.43	.33	PCF1312TR-ND	2,000	195.00/M	ECH-U1H223GX5
		.027	1.5	PCF1313CT-ND	.49	.43	.33	PCF1313TR-ND	2,000	195.00/M	ECH-U1H273GX5
		.033	2.1	PCF1314CT-ND	.56	.49	.38	PCF1314TR-ND	2,000	224.00/M	ECH-U1H333GX5
		.039	2.1	PCF1315CT-ND	.56	.49	.38	PCF1315TR-ND	2,000	224.00/M	ECH-U1H393GX5
ECH-U(X) (High Grade Type) 5% Tolerance, Reflow Only											
0603 (1608) Size	16	.0001	.7	PCF1459CT-ND	.27	.23	.18	PCF1459TR-ND	4,000	105.00/M	ECH-U1C101JX5
		.00012	.7	PCF1460CT-ND	.27	.23	.18	PCF1460TR-ND	4,000	105.00/M	ECH-U1C121JX5
		.00015	.7	PCF1461CT-ND	.27	.23	.18	PCF1461TR-ND	4,000	105.00/M	ECH-U1C151JX5
		.00018	.7	PCF1462CT-ND	.27	.23	.18	PCF1462TR-ND	4,000	105.00/M	ECH-U1C181JX5
		.00022	.7	PCF1463CT-ND	.27	.23	.18	PCF1463TR-ND	4,000	105.00/M	ECH-U1C221JX5
		.00027	.7	PCF1464CT-ND	.27	.23	.18	PCF1464TR-ND	4,000	105.00/M	ECH-U1C271JX5
		.00033	.7	PCF1465CT-ND	.27	.23	.18	PCF1465TR-ND	4,000	105.00/M	ECH-U1C331JX5
		.00039	.7	PCF1466CT-ND	.27	.23	.18	PCF1466TR-ND	4,000	105.00/M	ECH-U1C391JX5
		.00047	.7	PCF1467CT-ND	.27	.23	.18	PCF1467TR-ND	4,000	105.00/M	ECH-U1C471JX5
		.00056	.7	PCF1468CT-ND	.27	.23	.18	PCF1468TR-ND	4,000	105.00/M	ECH-U1C561JX5
		.00068	.7	PCF1469CT-ND	.27	.23	.18	PCF1469TR-ND	4,000	105.00/M	ECH-U1C681JX5
0603 (1608) Size	16	.00082	.7	PCF1470CT-ND	.27	.23	.18	PCF1470TR-ND	4,000	105.00/M	ECH-U1C821JX5
		.001	.7	PCF1471CT-ND	.27	.23	.18	PCF1471TR-ND	4,000	105.00/M	ECH-U1C102JX5
		.0012	.7	PCF1472CT-ND	.27	.23	.18	PCF1472TR-ND	4,000	105.00/M	ECH-U1C122JX5
		.0015	.7	PCF1473CT-ND	.27	.23	.18	PCF1473TR-ND	4,000	105.00/M	ECH-U1C152JX5
		.0018	.7	PCF1474CT-ND	.27	.23	.18	PCF1474TR-ND	4,000	105.00/M	ECH-U1C182JX5
		.0022	.7	PCF1475CT-ND	.27	.23	.18	PCF1475TR-ND	4,000	105.00/M	ECH-U1C222JX5
		.0027	.7	PCF1476CT-ND	.27	.23	.18	PCF1476TR-ND	4,000	105.00/M	ECH-U1C272JX5
0805 (2012) Size	16	.0033	0.9	PCF1190CT-ND	.33	.28	.22	PCF1190TR-ND	3,000	129.00/M	ECH-U1C332JX5
		.0039	0.9	PCF1191CT-ND	.33	.28	.22	PCF1191TR-ND	3,000	129.00/M	ECH-U1C392JX5
		.0047	0.9	PCF1192CT-ND	.33	.28	.22	PCF1192TR-ND	3,000	129.00/M	ECH-U1C472JX5
		.0056	0.9	PCF1193CT-ND	.33	.28	.22	PCF1193TR-ND	3,000	129.00/M	ECH-U1C562JX5
		.0068	0.9	PCF1194CT-ND	.33	.28	.22	PCF1194TR-ND	3,000	129.00/M	ECH-U1C682JX5
		.0082	1.1	PCF1195CT-ND	.36	.31	.24	PCF1195TR-ND	3,000	143.00/M	ECH-U1C822JX5
		.01	1.1	PCF1196CT-ND	.36	.31	.24	PCF1196TR-ND	3,000	143.00/M	ECH-U1C103JX5
1206 (3216) Size	16	.012	0.9	PCF1197CT-ND	.39	.34	.26	PCF1197TR-ND	3,000	156.00/M	ECH-U1C123JX5
		.015	0.9	PCF1198CT-ND	.39	.34	.26	PCF1198TR-ND	3,000	156.00/M	ECH-U1C153JX5
		.018	0.9	PCF1199CT-ND	.39	.34	.26	PCF1199TR-ND	3,000	156.00/M	ECH-U1C183JX5
		.022	0.9	PCF1200CT-ND	.39	.34	.26	PCF1200TR-ND	3,000	156.00/M	ECH-U1C223JX5
1206 (3216) Size	16	.027	1.1	PCF1201CT-ND	.43	.38	.29	PCF1201TR-ND	3,000	171.00/M	ECH-U1C273JX5
		.033	1.1	PCF1202CT-ND	.43	.38	.29	PCF1202TR-ND	3,000	171.00/M	ECH-U1C333JX5
		.039	1.5	PCF1203CT-ND	.47	.40	.31	PCF1203TR-ND	2,000	185.00/M	ECH-U1C393JX5
		.047	1.5	PCF1204CT-ND	.47	.40	.31	PCF1204TR-ND	2,000	185.00/M	ECH-U1C473JX5
1210 (3225) Size	16	.056	1.5	PCF1205CT-ND	.54	.47	.36	PCF1205TR-ND	2,000	214.00/M	ECH-U1C563JX5
		.068	1.5	PCF1206CT-ND	.54	.47	.36	PCF1206TR-ND	2,000	214.00/M	ECH-U1C683JX5
		.082	2.1	PCF1207CT-ND	.65	.56	.43	PCF1207TR-ND	2,000	257.00/M	ECH-U1C823JX5
		0.1	2.1	PCF1208CT-ND	.65	.56	.43	PCF1208TR-ND	2,000	257.00/M	ECH-U1C104JX5
0805 (2012) Size	50	.0001	0.9	PCF1316CT-ND	.31	.27	.21	PCF1316TR-ND	3,000	123.00/M	ECH-U1H101JX5
		.00012	0.9	PCF1317CT-ND	.31	.27	.21	PCF1317TR-ND	3,000	123.00/M	ECH-U1H121JX5
		.00015	0.9	PCF1318CT-ND	.31	.27	.21	PCF1318TR-ND	3,000	123.00/M	ECH-U1H151JX5
		.00018	0.9	PCF1319CT-ND	.31	.27	.21	PCF1319TR-ND	3,000	123.00/M	ECH-U1H181JX5
		.00022	0.9	PCF1320CT-ND	.31	.27	.21	PCF1320TR-ND	3,000	123.00/M	ECH-U1H221JX5
		.00027	0.9	PCF1321CT-ND	.31	.27	.21	PCF1321TR-ND	3,000	123.00/M	ECH-U1H271JX5
		.00033	0.9	PCF1322CT-ND	.31	.27	.21	PCF1322TR-ND	3,000	123.00/M	ECH-U1H331JX5
		.00039	0.9	PCF1323CT-ND	.31	.27	.21	PCF1323TR-ND	3,000	123.00/M	ECH-U1H391JX5
		.00047	0.9	PCF1324CT-ND	.31	.27	.21	PCF1324TR-ND	3,000	123.00/M	ECH-U1H471JX5
		.00056	0.9	PCF1325CT-ND	.31	.27	.21	PCF1325TR-ND	3,000	123.00/M	ECH-U1H561JX5
		.00068	0.9	PCF1326CT-ND	.31	.27	.21	PCF1326TR-ND	3,000	123.00/M	ECH-U1H681JX5
		.00082	0.9	PCF1327CT-ND	.31	.27	.21	PCF1327TR-ND	3,000	123.00/M	ECH-U1H821JX5
		.001	0.9	PCF1328CT-ND	.31	.27	.21	PCF1328TR-ND	3,000	123.00/M	ECH-U1H102JX5
		.0012	0.9	PCF1329CT-ND	.31	.27	.21	PCF1329TR-ND	3,000	123.00/M	ECH-U1H122JX5
		.0015	0.9	PCF1330CT-ND	.31	.27	.21	PCF1330TR-ND	3,000	123.00/M	ECH-U1H152JX5
		.0018	0.9	PCF1331CT-ND	.31	.27	.21	PCF1331TR-ND	3,000	123.00/M	ECH-U1H182JX5
		.0022	0.9	PCF1332CT-ND	.31	.27	.21	PCF1332TR-ND	3,000	123.00/M	ECH-U1H222JX5
		.0027	0.9	PCF1333CT-ND	.31	.27	.21	PCF1333TR-ND	3,000	123.00/M	ECH-U1H272JX5
1206 (3216) Size	50	.0033	0.9	PCF1334CT-ND	.39	.34	.26	PCF1334TR-ND	3,000	156.00/M	ECH-U1H332JX5
		.0039	0.9	PCF1335CT-ND	.39	.34	.26	PCF1335TR-ND	3,000	156.00/M	ECH-U1H392JX5
		.0047	0.9	PCF1336CT-ND	.39	.34	.26	PCF1336TR-ND	3,000	156.00/M	ECH-U1H472JX5
		.0056	0.9	PCF1337CT-ND	.39	.34	.26	PCF1337TR-ND	3,000	156.00/M	ECH-U1H562JX5
		.0068	0.9	PCF1338CT-ND	.53	.46	.35	PCF1338TR-ND	3,000	209.00/M	ECH-U1H682JX5
		.0082	1.1	PCF1339CT-ND	.43	.38	.29	PCF1339TR-ND	3,000	171.00/M	ECH-U1H822JX5
		.01	1.1	PCF1340CT-ND	.43	.38	.29	PCF1340TR-ND	3,000	171.00/M	ECH-U1H103JX5
1210 (3225) Size	50	.012	1.1	PCF1341CT-ND	.43	.38	.29	PCF1341TR-ND	2,000	171.00/M	ECH-U1H123JX5
		.015	1.1	PCF1342CT-ND	.43	.38	.29	PCF1342TR-ND	2,000	171.00/M	ECH-U1H153JX5
		.018	1.5	PCF1343CT-ND	.47	.40	.31	PCF1343TR-ND	2,000	185.00/M	ECH-U1H183JX5
		.022	1.5	PCF1344CT-ND	.47	.40	.31	PCF1344TR-ND	2,000	185.00/M	ECH-U1H223JX5
		.027	1.5	PCF1345CT-ND	.47	.40	.31	PCF1345TR-ND	2,000	185.00/M	ECH-U1H273JX5
		.033	2.1	PCF1346CT-ND	.54	.47	.36	PCF1346TR-ND	2,000	214.00/M	ECH-U1H333JX5
		.039	2.1	PCF1347CT-ND	.54	.47	.36	PCF1347TR-ND	2,000	214.00/M	ECH-U1H393JX5

- **PCF1-KIT-ND** ***Digi-Key® ECH-U Series Capacitors Kit*** 10 each of parts indicated (180 pieces). Notebook style storage and bin, storage guide included **$59.95**

Panasonic® SMT Capacitors ECP-U (SF Submicron)

FEATURES: • Small in size • Low ESR • Anti-shock • Excellent sound quality

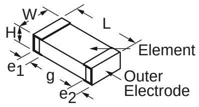
APPLICATIONS: • Coupling • Decoupling • Noise Reduction

SPECIFICATIONS: • Operating Temperature: -40°C to +85°C • Rated Voltage: 16VDC • Capacitance Range: 0.1 to 1.0µF (E6 series) • Capacitance Tolerance: ±20% (M) • Dissipation Factor: 1.5% max. (20°C, 1kHz) • CWithstand Voltage: Between terminals rated volt (VDC) x 175%, 1 to 5s • Insulation Resistance: C≤0.33µF: 1000MΩ min. (20°C, 10VDC 60s), C>0.33µF: 300MΩ min. (20°C, 10VDC 60s) • Soldering Reflow Conditions: 240°C max. and 30 sec. max. at more than 210°C (temp. at cap. surface)

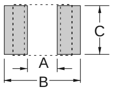
Note: Solder paste/flux shall have less than 0.1wt% halogen content.

Storage: The unpacked products shall be kept in polyethylene bag together with well-dried silica-gel (from 5g to 10g) or be kept in storage at a temperature of 25°C, with a humidity less than 50%RH.

This capacitor shall be used in only reflow method. Don't use in flow, dipping, or VPS soldering method.



A recommended solder paste thickness is between 0.10mm and 0.15mm.



Type	Dimensions (mm)	
	e1 • e2	g
J2	0.45 ± 0.25	0.6min.
H1-H2-H3	0.65 ± 0.3	1.0min.
G2	0.65 ± 0.3	1.0min.

Type / Size Code	Dim. of Land (mm)		
	A	B	C
J2 (2012)	0.8	2.4	1.1
H1-H2-H3 (3216)	1.8	3.6	1.4
G2 (3225)	1.8	3.6	2.3

Item Code	WV DC	Cap. µF	Dimensions (±0.2)			Type	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing		Panasonic Part No.
			L	W	H			10	100	500		2,000	3,000	
ECP-U (A) Type — 20% Tolerance														
0805	16	.10	2.0	1.25	1.0	J2	PCF1126CT-ND	.33	.29	.22	PCF1126TR-ND	—	132.00/M	ECP-U1C104MA5
1206	16	.15	3.2	1.60	.80	H1	PCF1127CT-ND	.40	.35	.27	PCF1127TR-ND	—	158.00/M	ECP-U1C154MA5
1206	16	.22	3.2	1.60	.80	H1	PCF1128CT-ND	.47	.40	.31	PCF1128TR-ND	—	185.00/M	ECP-U1C224MA5
1206	16	.33	3.2	1.60	1.0	H2	PCF1129CT-ND	.47	.40	.31	PCF1129TR-ND	—	185.00/M	ECP-U1C334MA5
1206	16	.47	3.2	1.60	1.4	H3	PCF1130CT-ND	.53	.46	.35	PCF1130TR-ND	211.00/M	—	ECP-U1C474MA5
1206	16	.68	3.2	1.60	1.4	H3	PCF1131CT-ND	.53	.46	.35	PCF1131TR-ND	211.00/M	—	ECP-U1C684MA5
1210	16	1.0	3.2	2.5	1.4	G2	PCF1132CT-ND	.59	.51	.39	PCF1132TR-ND	235.00/M	—	ECP-U1C105MA5

Panasonic® M-Series Polyester and Foil Capacitors

Features:
High insulation resistance. Non-inductive construction: with tinned copper leads welded to the foils. High peak current capability. Solvent-resistant resin coated body.

Applications:
Blocking, by-pass and coupling of D.C. and signals to VHF range. Pulse, logic and timing circuits. Light-duty pulse forming networks. Filter and noise suppression circuits. General purpose usage.

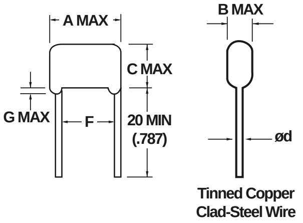
Specifications:
Reference standard: JIS C5113 Characteristic M. Operating temperature range: -40°C ~ +85°C. Construction: Polyester film, non-inductive, phenolic/epoxy resin coating, wax impregnation.

Electrical Specifications:
Capacitance Tolerance: ±10% (K). Insulation Resistance: Greater than 10,000 MV. Dissipation Factor: Less than 1.0% at 1 KHZ. Dielectric Withstanding Voltage: 250% of rated voltage for 5 seconds. Operating Temperature: -40°C ~+80°C.

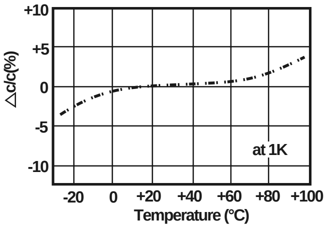
PANASONIC ECQ CROSS REFERENCE

Sprague: 225P, 418P; **Mepco:** 713D1, 711D1, 719D1; **TWR:** 601PE, 601CPE; **Pactron:** PE, FM; **Secor:** MFDN, MFDR; **Roederstein:** KT1805, KT1806, KT1807, KT1808; **Wima:** FKS; **CSF Thompson:** ED (Dip); **Rubycon:** F2X, F2S, F3U; **Nichicon:** TDY; **Nissiei:** AMZ, AMX, AMR, AMM.

Style: Straight Radial Leads



Typical Capacitance Change



Cap.	Dimensions (mm)						Digi-Key	Pricing					Panasonic
µF	A	B	C	F±1.25	G	d	Part No.	10	100	1,000	5,000	10,000	Part No.
100 WV DC													
.056	16.0	6.0	13.5	11.5	3	0.6	P1021-ND	1.38	11.50	68.67	64.00/M	60.00/M	ECQ-M1563KZ
200 WV DC													
.001	9.0	5.0	9.0	5.5	2	0.6	P1029-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2102KZ
.0012	9.0	5.0	9.0	5.5	2	0.6	P1030-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2122KZ
.0015	9.0	5.0	9.5	5.5	3	0.6	P1031-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2152KZ
.0018	9.0	5.5	9.5	5.5	3	0.6	P1032-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2182KZ
.0022	9.0	6.0	10.0	5.5	3	0.6	P1033-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2222KZ
.0027	9.0	5.0	9.0	5.5	3	0.6	P1034-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2272KZ
.0033	9.0	5.0	9.0	5.5	3	0.6	P1035-ND*	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2332KZ
.0039	12.0	5.5	9.5	7.5	3	0.6	P1036-ND	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2392KZ
.0047	12.0	6.0	9.5	7.5	3	0.6	P1037-ND*	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2472KZ
.0056	12.0	6.0	9.5	7.5	3	0.6	P1038-ND	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2562KZ
.0068	12.0	6.0	10.5	7.5	3	0.6	P1039-ND*	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2682KZ
.0082	14.0	5.5	10.0	9.5	3	0.6	P1040-ND	1.35	11.24	67.00	62.00/M	58.00/M	ECQ-M2822KZ
.01	14.0	6.0	10.0	9.5	3	0.6	P1041-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2103KZ
.012	14.0	6.0	10.5	9.5	3	0.6	P1042-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2123KZ
.015	14.0	6.5	11.5	9.5	3	0.6	P1043-ND*	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2153KZ
.018	17.0	5.5	10.0	12.5	3	0.6	P1044-ND	1.32	10.97	65.00	61.00/M	57.00/M	ECQ-M2183KZ
.022	17.0	5.5	11.0	12.5	3	0.6	P1045-ND*	1.44	12.04	72.00	67.00/M	63.00/M	ECQ-M2223KZ
.027	17.0	6.0	11.0	12.5	3	0.6	P1046-ND	1.48	12.31	73.00	68.00/M	64.00/M	ECQ-M2273KZ
.033	17.0	6.5	11.5	12.5	3	0.6	P1047-ND*	1.57	13.11	78.00	73.00/M	68.00/M	ECQ-M2333KZ
.039	17.0	6.0	13.5	12.5	3	0.6	P1048-ND	1.64	13.64	81.00	76.00/M	71.00/M	ECQ-M2393KZ
.047	17.0	6.5	14.0	12.5	3	0.6	P1049-ND*	1.67	13.91	83.00	77.00/M	72.00/M	ECQ-M2473KZ
.056	20.0	6.5	14.0	14.5	3	0.6	P1050-ND	1.80	14.98	89.00	83.00/M	78.00/M	ECQ-M2563KZ
.068	20.0	7.0	14.5	14.5	3	0.6	P1051-ND*	1.89	15.78	94.00	88.00/M	82.00/M	ECQ-M2683KZ
.082	20.0	7.5	15.0	15.0	3	0.6	P1052-ND	1.93	16.05	96.00	89.00/M	83.00/M	ECQ-M2823KZ
.1	20.0	8.0	17.0	15.0	3	0.6	P1053-ND*	2.38	19.80	118.00	110.00/M	103.00/M	ECQ-M2104KZ
.12	20.0	8.5	17.5	15.0	3	0.8	P1054-ND	2.82	23.54	141.00	131.00/M	122.00/M	ECQ-M2124KZ
.15	20.0	9.5	18.5	15.0	3	0.8	P1055-ND*	2.79	23.27	139.00	129.00/M	121.00/M	ECQ-M2154KZ
.18	23.0	13.0	22.0	18.5	3	0.8	P1056-ND	4.21	35.04	209.00	195.00/M	182.00/M	ECQ-M2184KZ
.22	23.0	14.0	23.0	18.5	3	0.8	P1057-ND*	4.21	35.04	209.00	195.00/M	182.00/M	ECQ-M2224KZ
400 WV DC													
.001	11.0	5.5	9.5	6.5	2	0.6	P1058-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4102KZ
.0012	11.0	6.0	10.0	6.5	2	0.6	P1059-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4122KZ
.0015	11.0	6.0	10.0	6.5	2	0.6	P1060-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4152KZ
.0018	11.0	6.0	10.0	6.5	2	0.6	P1061-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4182KZ
.0022	11.0	6.5	10.5	6.5	2	0.6	P1062-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4222KZ
.0027	12.0	6.0	10.0	7.5	2	0.6	P1063-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4272KZ
.0033	12.0	6.5	10.5	7.5	2	0.6	P1064-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4332KZ
.0039	12.0	6.5	10.5	7.5	2	0.6	P1065-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4392KZ
.0047	14.0	6.0	10.0	9.5	2	0.6	P1066-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4472KZ
.0056	14.0	6.0	10.0	9.5	2	0.6	P1067-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4562KZ
.0068	14.0	6.5	10.5	9.5	3	0.6	P1068-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4682KZ
.0082	14.0	6.5	12.0	9.5	3	0.6	P1069-ND	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4822KZ
.01	14.0	7.0	12.5	9.5	3	0.6	P1070-ND†	1.68	14.00	84.00	78.00/M	73.00/M	ECQ-M4103KZ
.012	17.0	6.0	12.0	12.5	3	0.6	P1071-ND	1.80	15.00	90.00	83.00/M	78.00/M	ECQ-M4123KZ
.015	17.0	6.5	12.5	12.5	3	0.6	P1072-ND†	1.80	15.00	90.00	83.00/M	78.00/M	ECQ-M4153KZ
.018	17.0	7.0	13.0	12.5	3	0.6	P1073-ND	1.92	16.00	96.00	89.00/M	83.00/M	ECQ-M4183KZ
.022	17.0	7.5	13.5	12.5	3	0.6	P1074-ND†	1.95	16.25	97.00	90.00/M	84.00/M	ECQ-M4223KZ
.027	20.0	7.0	14.5	15.0	2	0.7	P1075-ND	2.16	18.00	107.00	100.00/M	94.00/M	ECQ-M4273KZ
.033	20.0	7.5	15.0	15.0	2	0.7	P1076-ND†	2.28	19.00	113.00	106.00/M	99.00/M	ECQ-M4333KZ
.039	20.0	8.5	16.0	15.0	3	0.7	P1077-ND	2.40	20.00	119.00	111.00/M	104.00/M	ECQ-M4393KZ
.047	20.0	9.0	16.5	15.0	3	0.7	P1078-ND†	2.55	21.25	127.00	118.00/M	110.00/M	ECQ-M4473KZ
.056	23.0	8.5	15.5	18.0	3	0.7	P1079-ND	2.88	24.00	143.00	133.00/M	125.00/M	ECQ-M4563KZ
.068	23.0	9.0	16.5	18.0	3	0.7	P1080-ND†	3.12	26.00	155.00	144.00/M	135.00/M	ECQ-M4683KZ
.082	24.0	9.5	17.0	18.0	3	0.8	P1081-ND	3.42	28.50	170.00	158.00/M	148.00/M	ECQ-M4823KZ
.1	24.0	10.0	19.0	18.0	3	0.8	P1082-ND†	3.99	33.25	199.00	185.00/M	173.00/M	ECQ-M4104KZ

M200-KIT-ND** ***Digi-Key® M-Series Capacitors Kit 200 Volt Assortment. 10 each of parts indicated. Notebook style storage case and bin storage guide included. **$29.95**

†M400-KIT-ND ***Digi-Key® M-Series Capacitors Kit*** 400 Volt Assortment. 10 each of parts indicated. Notebook style storage case and bin storage guide included. **$29.95**

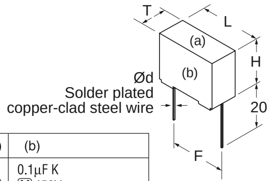
Panasonic® Metallized Polyester Capacitors – ECQE(C) Type

Features:
- Box-type construction (case meets UL94V-0 flame classification, meets requirements of IEC950)
- Operating temperature range: -25°C to +85°C (105°C*)

(* Requires voltage, current and pulse current de-rating)

Application:
Interference suppressor for active circuits

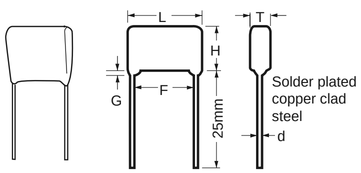
Electrical Specifications:
- Rated Voltage: 450VDC
- Capacitance Tolerance: ±10%
- Withstand Voltage: Between Terminals: 1 minute at 150% of rated voltage (The capacitor shall be applied the voltage through a resistor of 2kΩ or more when charged and discharged.) Between Terminals connected together and case: 1-5 seconds at 200% of rated voltage
- Insulation Resistance Between Terminals: 9,000 MΩ or more (when C≤0.33µF) 3,000 MΩ/µF or more (when C>0.33µF) at 100VDC±15V for 60±5 seconds, at 20°C
- Dissipation Factor: 1.0% or less (measured at a frequency of 1±0.2kHz, at 20°C)

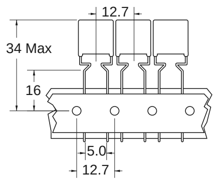


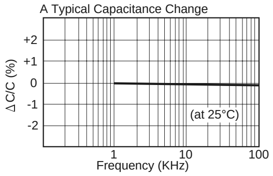
(a)	(b)
Ⓜ	0.1µF K Ⓜ450V ECQEC▭(Date Code)

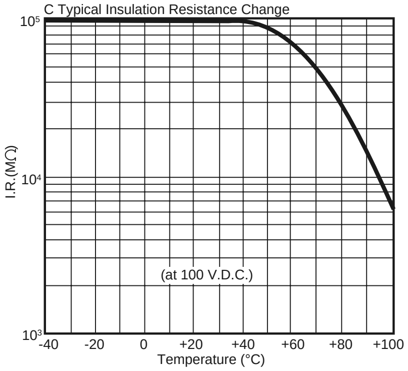
WV DC	Cap. µF	Toler-ance	Dimensions (mm)					Digi-Key Part No.	Price Each				Panasonic Part No.
			L	T	H	F	d		1	10	100	1,000	
450	.10	10%	18.5	5.5	14.5	15.0	0.6	P10755-ND	.62	.53	.44	.27	ECQ-E2W104KC
	.15	10%	18.5	6.0	16.5	15.0	0.6	P10756-ND	.75	.65	.54	.32	ECQ-E2W154KC
	.22	10%	18.5	7.0	18.0	15.0	0.6	P10757-ND	.89	.77	.64	.38	ECQ-E2W224KC
	.33	10%	18.0	9.0	17.5	15.0	0.8	P10758-ND	1.10	.94	.79	.47	ECQ-E2W334KC
	.47	10%	18.0	9.5	17.5	15.0	0.8	P10759-ND	1.30	1.12	.93	.56	ECQ-E2W474KC
	.68	10%	25.5	10.5	20.0	22.5	0.8	P10760-ND	1.77	1.53	1.27	.76	ECQ-E2W684KC
	1.0	10%	25.5	12.5	22.0	22.5	0.8	P10761-ND	2.32	2.00	1.66	1.00	ECQ-E2W105KC
	1.5	10%	25.5	15.5	24.5	22.5	0.8	P10762-ND	3.07	2.64	2.20	1.31	ECQ-E2W155KC
	2.2	10%	31.0	14.0	24.5	27.5	0.8	P10763-ND	4.03	3.45	2.88	1.72	ECQ-E2W225KC

Panasonic P-Series Polypropylene Capacitors









Features: • Wide capacitance range • Close capacitance tolerance • High insulation resistance • Low dissipation factor • Non-inductive const. • Epoxy resin coating

Applications: • Blocking, by-pass and coupling of DC and signal to UHF range • Pulse, logic and timing circuit • Light duty pulse forming network • Filter and noise suppression circuit

Electrical Specifications: • Reference Standard: EIAJ RC-3670A • Temperature Range: –40°C to +85°C • Dissipation Factor: .1% max. at 1KHz and 25°C • Withstand Voltage: 1-5 seconds at 250% of rated voltage • Insulation Resistance: 45,000 MΩ min., for values less than .33µF. 15,000 MΩ/µF min., for .33µF and greater. (Measured after a 2-minute charge at rated voltage and 25°C.)

PANASONIC ECQ-P CROSS REF.

Sprague: 715P
Westlake: 173/174
Mepco: 719E1/719H1
Secor: PFDS/PFDR
Roderstein: KP1835
Wima: FKP
CSF Thompson: PL/PS
Rubycon: PP
Nissel: APS/APA.

WV DC	Cap. µF	Toler-ance	Dimensions (mm) L	T	H	F	G	d	Digi-Key Part No.	Pricing 1	10	100	1,000	5,000	10,000	Panasonic Part No.
50	.0001	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3101-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H101JZ
	.00012	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3121-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H121JZ
	.00015	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3151-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H151JZ
	.00018	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3181-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H181JZ
	.00022	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3221-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H221JZ
	.00027	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3271-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H271JZ
	.00033	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3331-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H331JZ
	.00039	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3391-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H391JZ
	.00047	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3471-ND*	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H471JZ
	.00056	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3561-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H561JZ
	.00068	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3681-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H681JZ
	.00082	5%	8.5	4.5	7.5	5.0	1.0	0.5	P3821-ND	.28	2.43	20.25	121.00	112.00/M	105.00/M	ECQ-P1H821JZ
	.001	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3102-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H102GZ
	.0012	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3122-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H122GZ
	.0015	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3152-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H152GZ
	.0018	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3182-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H182GZ
	.0022	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3222-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H222GZ
	.0027	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3272-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H272GZ
	.0033	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3332-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H332GZ
	.0039	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3392-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H392GZ
	.0047	2%	8.5	4.5	7.5	5.0	1.0	0.5	P3472-ND*	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P1H472GZ
	.0056	2%	8.5	4.5	8.0	5.0	1.0	0.5	P3562-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P1H562GZ
	.0068	2%	8.5	5.0	8.0	5.0	1.0	0.5	P3682-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P1H682GZ
	.0082	2%	12.0	5.5	9.0	7.5	1.0	0.6	P3822-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P1H822GZ
	.01	2%	12.0	5.0	8.5	7.5	1.0	0.6	P3103-ND*	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P1H103GZ
	.012	2%	12.0	5.5	9.0	7.5	1.0	0.6	P3123-ND	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P1H123GZ
	.015	2%	12.0	5.0	9.0	7.5	1.0	0.6	P3153-ND	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P1H153GZ
	.018	2%	12.0	5.5	9.5	7.5	1.0	0.6	P3183-ND	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P1H183GZ
	.022	2%	12.0	5.5	10.5	7.5	1.0	0.6	P3223-ND*	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P1H223GZ
	.027	2%	12.0	6.0	11.0	7.5	1.0	0.6	P3273-ND	.59	5.07	42.25	252.00	235.00/M	219.00/M	ECQ-P1H273GZ
	.033	2%	12.0	6.5	11.5	7.5	1.0	0.6	P3333-ND*	.59	5.07	42.25	252.00	235.00/M	219.00/M	ECQ-P1H333GZ
	.039	2%	14.5	5.5	12.0	10.0	1.0	0.6	P3393-ND	.64	5.52	46.00	275.00	256.00/M	239.00/M	ECQ-P1H393GZ
	.047	2%	14.5	6.0	12.5	10.0	1.0	0.6	P3473-ND*	.64	5.52	46.00	275.00	256.00/M	239.00/M	ECQ-P1H473GZ
	.056	2%	14.5	6.5	13.5	10.0	1.0	0.6	P3563-ND	.72	6.15	51.25	306.00	285.00/M	266.00/M	ECQ-P1H563GZ
	.068	2%	14.5	7.0	14.0	10.0	1.0	0.6	P3683-ND	.72	6.15	51.25	306.00	285.00/M	266.00/M	ECQ-P1H683GZ
	.082	2%	17.0	7.0	14.0	12.5	1.0	0.6	P3823-ND	.86	7.41	61.75	369.00	343.00/M	321.00/M	ECQ-P1H823GZ
	.1	2%	17.0	7.5	14.5	12.5	1.0	0.6	P3104-ND*	.86	7.41	61.75	369.00	343.00/M	321.00/M	ECQ-P1H104GZ
	.12	2%	17.0	8.5	15.5	12.5	1.0	0.6	P3124-ND	1.06	9.06	75.50	451.00	419.00/M	392.00/M	ECQ-P1H124GZ
	.15	2%	20.0	8.0	15.5	15.0	1.0	0.6	P3154-ND	1.06	9.06	75.50	451.00	419.00/M	392.00/M	ECQ-P1H154GZ
	.18	2%	20.0	9.0	16.0	15.0	1.0	0.6	P3184-ND	1.28	11.01	91.75	548.00	510.00/M	477.00/M	ECQ-P1H184GZ
	.22	2%	20.0	9.5	17.0	15.0	1.0	0.6	P3224-ND*	1.28	11.01	91.75	548.00	510.00/M	477.00/M	ECQ-P1H224GZ
	.27	2%	20.0	10.5	18.0	15.0	1.0	0.6	P3274-ND	1.58	13.56	113.00	675.00	628.00/M	587.00/M	ECQ-P1H274GZ
	.33	2%	22.5	10.0	19.5	17.5	1.0	0.8	P3334-ND*	1.58	13.56	113.00	675.00	628.00/M	587.00/M	ECQ-P1H334GZ
	.39	2%	22.5	11.0	20.0	17.5	1.0	0.8	P3394-ND	1.89	16.20	135.00	806.00	750.00/M	701.00/M	ECQ-P1H394GZ
	.47	2%	22.5	12.0	21.0	17.5	1.0	0.8	P3474-ND	1.89	16.20	135.00	806.00	750.00/M	701.00/M	ECQ-P1H474GZ

WV DC	Cap. µF	Toler-ance	Dimensions (mm) L	T	H	F	d	Digi-Key Part No.	Tape & Box Pricing 500	1,000	5,000	10,000	25,000	Panasonic Part No.
50	.0001	5%	8.5	4.5	7.5	5.0	0.5	P3101TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H101JZ3
	.00012	5%	8.5	4.5	7.5	5.0	0.5	P3121TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H121JZ3
	.00015	5%	8.5	4.5	7.5	5.0	0.5	P3151TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H151JZ3
	.00018	5%	8.5	4.5	7.5	5.0	0.5	P3181TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H181JZ3
	.00022	5%	8.5	4.5	7.5	5.0	0.5	P3221TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H221JZ3
	.00027	5%	8.5	4.5	7.5	5.0	0.5	P3271TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H271JZ3
	.00033	5%	8.5	4.5	7.5	5.0	0.5	P3331TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H331JZ3
	.00039	5%	8.5	4.5	7.5	5.0	0.5	P3391TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H391JZ3
	.00047	5%	8.5	4.5	7.5	5.0	0.5	P3471TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H471JZ3
	.00056	5%	8.5	4.5	7.5	5.0	0.5	P3561TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H561JZ3
	.00068	5%	8.5	4.5	7.5	5.0	0.5	P3681TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H681JZ3
	.00082	5%	8.5	4.5	7.5	5.0	0.5	P3821TB-ND	—	138.00	133.00/M	121.00/M	106.00/M	ECQ-P1H821JZ3
	.001	2%	8.5	4.5	7.5	5.0	0.5	P3102TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H102GZ3
	.0012	2%	8.5	4.5	7.5	5.0	0.5	P3122TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H122GZ3
	.0015	2%	8.5	4.5	7.5	5.0	0.5	P3152TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H152GZ3
	.0018	2%	8.5	4.5	7.5	5.0	0.5	P3182TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H182GZ3
	.0022	2%	8.5	4.5	7.5	5.0	0.5	P3222TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H222GZ3
	.0027	2%	8.5	4.5	7.5	5.0	0.5	P3272TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H272GZ3
	.0033	2%	8.5	4.5	7.5	5.0	0.5	P3332TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H332GZ3
	.0039	2%	8.5	4.5	7.5	5.0	0.5	P3392TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H392GZ3
	.0047	2%	8.5	4.5	7.5	5.0	0.5	P3472TB-ND	—	214.00	207.00/M	188.00/M	166.00/M	ECQ-P1H472GZ3
	.0056	2%	8.5	4.5	8.0	5.0	0.5	P3562TB-ND	—	228.00	221.00/M	200.00/M	177.00/M	ECQ-P1H562GZ3
	.0068	2%	8.5	5.0	8.0	5.0	0.5	P3682TB-ND	—	228.00	221.00/M	200.00/M	177.00/M	ECQ-P1H682GZ3
	.0082	2%	12.0	5.5	9.0	5.0	0.6	P3822TB-ND	—	228.00	221.00/M	200.00/M	177.00/M	ECQ-P1H822GZ3
	.01	2%	12.0	5.0	8.5	5.0	0.6	P3103TB-ND	—	245.00	237.00/M	215.00/M	190.00/M	ECQ-P1H103GZ3
	.012	2%	12.0	5.5	9.0	5.0	0.6	P3123TB-ND	—	245.00	237.00/M	215.00/M	190.00/M	ECQ-P1H123GZ3
	.015	2%	12.0	5.0	9.0	5.0	0.6	P3153TB-ND	—	245.00	237.00/M	215.00/M	190.00/M	ECQ-P1H153GZ3
	.018	2%	12.0	5.5	9.5	5.0	0.6	P3183TB-ND	—	264.00	255.00/M	232.00/M	204.00/M	ECQ-P1H183GZ3
	.022	2%	12.0	5.5	10.5	5.0	0.6	P3223TB-ND	—	264.00	255.00/M	232.00/M	204.00/M	ECQ-P1H223GZ3
	.027	2%	12.0	6.0	11.0	5.0	0.6	P3273TB-ND	137.50	—	266.00/M	241.00/M	213.00/M	ECQ-P1H273GZ3
	.033	2%	12.0	6.5	11.5	5.0	0.6	P3333TB-ND	137.50	—	266.00/M	241.00/M	213.00/M	ECQ-P1H333GZ3

*** P3100-KIT-ND** ***Digi-Key® P-Series Capacitors Kit*** 10 each of parts indicated. Notebook style storage and bin, storage guide included...**$69.95**

Panasonic

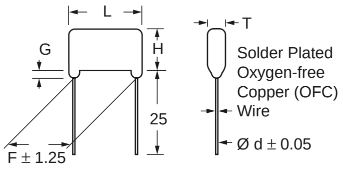
Polypropylene Film Capacitors - ECQP(U)

Non-inductive construction using Polypropylene film with flame retardant epoxy resin coating.

Features:
- Low loss and excellent frequency characteristics.
- Excellent temperature characteristics.
- High insulation resistance.

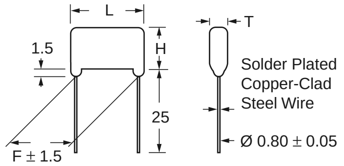
Applications:
- High frequency and high current circuits.
- General purpose circuit.

Electrical Specifications:
- Reference Standard: EIAJ RC-3670B. Characteristics P.
- Temperature Range: −40°C to +85°C. Derating of rated voltage at more than 85°C. (rated voltage x 50%).
- Capacitance Tolerance: ±5%
- Dissipation Factor: 0.1% max. at 1kHz and 20°C.
- Withstand Voltage: 1-5 seconds at 250% of rated voltage between terminals
- Insulation Resistance: 45,000 MΩ min., for values equal to or less than .33µF. 15,000 MΩ/µF min., for greater than.33µF (20°C, 100VDC, 60s).



WV	Cap.	Toler-	Dimensions (mm)						Digi-Key	Pricing						Panasonic
DC	µF	ance	L	T	H	F	G	d	Part No.	1	10	100	1,000	5,000	10,000	Part No.
400 WV	.0082	5%	19.5	6.0	11.0	15.0	1.0	0.60	P3475-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P4822JU
	.01	5%	19.5	6.5	11.5	15.0	1.0	0.60	P3476-ND	.51	4.35	36.25	216.00	201.00/M	188.00/M	ECQ-P4103JU
	.012	5%	19.5	6.5	13.5	15.0	1.0	0.60	P3477-ND	.53	4.50	37.50	224.00	208.00/M	195.00/M	ECQ-P4123JU
	.015	5%	19.5	6.0	13.5	15.0	1.0	0.60	P3478-ND	.55	4.71	39.25	234.00	218.00/M	204.00/M	ECQ-P4153JU
	.018	5%	19.5	6.0	13.5	15.0	1.0	0.60	P3479-ND	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P4183JU
	.022	5%	19.5	6.0	13.5	15.0	1.0	0.60	P3480-ND	.59	5.04	42.00	251.00	233.00/M	218.00/M	ECQ-P4223JU
	.027	5%	19.5	6.5	14.0	15.0	1.0	0.60	P3481-ND	.60	5.16	43.00	257.00	239.00/M	223.00/M	ECQ-P4273JU
	.033	5%	19.5	7.0	15.0	15.0	1.0	0.60	P3482-ND	.62	5.34	44.50	266.00	247.00/M	231.00/M	ECQ-P4333JU
	.039	5%	19.5	7.5	16.0	15.0	1.0	0.60	P3483-ND	.64	5.46	45.50	272.00	253.00/M	236.00/M	ECQ-P4393JU
	.047	5%	19.5	8.0	17.0	15.0	1.0	0.60	P3484-ND	.70	6.03	50.25	300.00	279.00/M	261.00/M	ECQ-P4473JU
	.056	5%	24.5	7.0	16.0	20.0	1.5	0.80	P3485-ND	.76	6.54	54.50	325.00	303.00/M	283.00/M	ECQ-P4563JU
	.068	5%	24.5	7.5	16.5	20.0	1.5	0.80	P3486-ND	.82	7.02	58.50	349.00	325.00/M	304.00/M	ECQ-P4683JU
	.082	5%	24.5	8.5	17.5	20.0	1.5	0.80	P3487-ND	.88	7.53	62.75	375.00	349.00/M	326.00/M	ECQ-P4823JU
	.1	5%	24.5	9.0	18.0	20.0	1.5	0.80	P3488-ND	.94	8.07	67.25	401.00	374.00/M	349.00/M	ECQ-P4104JU
	.12	5%	24.5	10.0	19.0	20.0	1.5	0.80	P3489-ND	1.05	9.03	75.25	449.00	418.00/M	391.00/M	ECQ-P4124JU
	.15	5%	24.5	11.0	20.5	20.00	1.5	0.80	P3490-ND	1.18	10.08	84.00	501.00	467.00/M	436.00/M	ECQ-P4154JU
	.18	5%	29.5	10.5	20.0	25.00	1.5	0.80	P3491-ND	1.30	11.10	92.50	552.00	514.00/M	481.00/M	ECQ-P4184JU
	.22	5%	29.5	11.5	21.0	25.00	1.5	0.80	P3492-ND	1.38	11.82	98.50	588.00	547.00/M	512.00/M	ECQ-P4224JU
	.27	5%	29.5	13.0	22.5	25.00	1.5	0.80	P3493-ND	1.65	14.13	117.75	703.00	654.00/M	612.00/M	ECQ-P4274JU
	.33	5%	29.5	15.0	23.5	25.00	1.5	0.80	P3494-ND	1.78	15.24	127.00	758.00	706.00/M	660.00/M	ECQ-P4334JU
	.39	5%	35.0	15.0	24.0	30.00	1.5	0.80	P3495-ND	1.90	16.32	136.00	812.00	756.00/M	706.00/M	ECQ-P4394JU
	.47	5%	35.0	16.5	26.0	30.00	1.5	0.80	P3496-ND	2.03	17.40	145.00	866.00	806.00/M	753.00/M	ECQ-P4474JU
630 WV	.001	5%	14.5	5.0	10.5	10.00	1.0	0.60	P3497-ND	.42	3.60	30.00	179.00	167.00/M	156.00/M	ECQ-P6102JU
	.0012	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3498-ND	.43	3.66	30.50	182.00	169.00/M	158.00/M	ECQ-P6122JU
	.0015	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3499-ND	.43	3.72	31.00	185.00	172.00/M	161.00/M	ECQ-P6152JU
	.0018	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3500-ND	.44	3.78	31.50	188.00	175.00/M	164.00/M	ECQ-P6182JU
	.0022	5%	14.5	5.5	10.5	10.00	1.0	0.60	P3501-ND	.45	3.84	32.00	191.00	178.00/M	166.00/M	ECQ-P6222JU
	.0027	5%	14.5	5.5	11.0	10.00	1.0	0.60	P3502-ND	.46	3.90	32.50	194.00	181.00/M	169.00/M	ECQ-P6272JU
	.0033	5%	14.5	6.0	11.5	10.00	1.0	0.60	P3503-ND	.47	4.02	33.50	200.00	186.00/M	174.00/M	ECQ-P6332JU
	.0039	5%	14.5	6.0	13.5	10.00	1.0	0.60	P3504-ND	.49	4.20	35.00	209.00	194.00/M	182.00/M	ECQ-P6392JU
	.0047	5%	14.5	6.5	13.5	10.00	1.0	0.60	P3505-ND	.51	4.35	36.25	216.00	201.00/M	188.00/M	ECQ-P6472JU
	.0056	5%	14.5	7.0	14.0	10.00	1.0	0.60	P3506-ND	.54	4.59	38.25	228.00	212.00/M	199.00/M	ECQ-P6562JU
	.0068	5%	19.5	5.5	12.0	15.00	1.0	0.60	P3507-ND	.55	4.71	39.25	234.00	218.00/M	204.00/M	ECQ-P6682JU
	.0082	5%	19.5	6.0	13.0	15.00	1.0	0.60	P3508-ND	.57	4.86	40.50	242.00	225.00/M	210.00/M	ECQ-P6822JU
	.01	5%	19.5	6.0	13.5	15.00	1.0	0.60	P3509-ND	.58	4.98	41.50	248.00	231.00/M	216.00/M	ECQ-P6103JU
	.012	5%	19.5	6.5	14.0	15.00	1.0	0.60	P3510-ND	.60	5.16	43.00	257.00	239.00/M	223.00/M	ECQ-P6123JU
	.015	5%	19.5	7.0	14.5	15.00	1.0	0.60	P3511-ND	.62	5.34	44.50	266.00	247.00/M	231.00/M	ECQ-P6153JU
	.018	5%	19.5	7.0	16.0	15.00	1.0	0.60	P3512-ND	.64	5.46	45.50	272.00	253.00/M	236.00/M	ECQ-P6183JU
	.022	5%	19.5	8.0	17.0	15.00	1.0	0.60	P3513-ND	.65	5.58	46.50	278.00	258.00/M	242.00/M	ECQ-P6223JU
	.027	5%	19.5	8.5	17.5	15.00	1.0	0.60	P3514-ND	.70	6.00	50.00	299.00	278.00/M	260.00/M	ECQ-P6273JU
	.033	5%	24.5	8.0	16.5	20.00	1.5	0.80	P3515-ND	.72	6.15	51.25	306.00	285.00/M	266.00/M	ECQ-P6333JU
	.039	5%	24.5	8.5	17.5	20.00	1.5	0.80	P3516-ND	.80	6.87	57.25	342.00	318.00/M	297.00/M	ECQ-P6393JU
	.047	5%	24.5	9.0	18.0	20.00	1.5	0.80	P3517-ND	.90	7.71	64.25	384.00	357.00/M	334.00/M	ECQ-P6473JU
	.056	5%	24.5	10.0	19.0	20.00	1.5	0.80	P3518-ND	.91	7.83	65.25	390.00	362.00/M	339.00/M	ECQ-P6563JU
	.068	5%	24.5	11.0	20.5	20.00	1.5	0.80	P3519-ND	1.01	8.67	72.25	431.00	401.00/M	375.00/M	ECQ-P6683JU
	.082	5%	29.5	10.5	20.0	25.00	1.5	0.80	P3520-ND	1.09	9.33	77.75	464.00	432.00/M	404.00/M	ECQ-P6823JU
	.1	5%	29.5	11.5	21.0	25.00	1.5	0.80	P3521-ND	1.18	10.14	84.50	504.00	469.00/M	439.00/M	ECQ-P6104JU

Panasonic® Metallized Polypropylene Film Capacitors - ECWF(B)



Designed for applications where high current and high frequency are required.

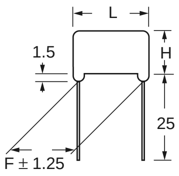
Features:
- Low-loss
- Excellent frequency characteristics
- Flame retardant epoxy resin coating

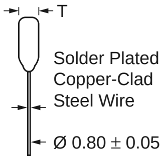
Applications:
- High frequency and high current circuits (TV, display, monitor, power supply, etc.)

Electrical Specifications:
- Temperature Range: −25°C to +85°C
- Rated Voltage: 250VDC (150Vrms, 250Vp-p)
  400VDC (200Vrms, 400Vp-p)
- Capacitance Tolerance: ±5%
- Dissipation Factor:
  .068 to .51µF: 0.05%max.(20°C, 1kHz) 250VDC
  .56 to 4.7µF: 0.1%max. (20°C, 1kHz) 250VDC
  .068 to 4.7µF: 0.2%max. (20°C, 10kHz) 250VDC
  .068 to 1.5µF: 0.1%max. (20°C, 1kHz) 400VDC
- Withstand Voltage: Between terminals.- Rated vol. (VDC) x 150% for 60s
- Insulation Resistance:
  9,000 MΩ min., for values 0.068 to .33µF
  3,000 MΩ/µF min., for 0.36 to 4.7µF (20°C, 100VDC, 60s)

WV DC	Cap. µF	Toler-ance	Freq-uency	Dimensions (mm)				Digi-Key Part No.	Pricing					Panasonic Part No.
				L	T	H	F		1	10	100	1,000	5,000	
250 WV	.068	5%	2.3	18.0	6.0	13.0	15.0	PF2683-ND	1.77	15.15	126.25	756.00	712.00/M	ECW-F2683JB
	.082	5%	2.7	18.0	6.5	13.5	15.0	PF2823-ND	1.84	15.75	131.25	786.00	740.00/M	ECW-F2823JB
	.1	5%	3.1	18.0	7.0	14.0	15.0	PF2104-ND	1.87	16.05	133.75	801.00	755.00/M	ECW-F2104JB
	.12	5%	3.5	18.0	7.5	14.5	15.0	PF2124-ND	1.94	16.65	138.75	831.00	783.00/M	ECW-F2124JB
	.15	5%	3.9	18.0	8.5	15.0	15.0	PF2154-ND	2.06	17.64	147.00	880.00	829.00/M	ECW-F2154JB
	.18	5%	3.3	18.0	6.5	13.5	15.0	PF2184-ND	2.10	17.97	149.75	897.00	845.00/M	ECW-F2184JB
	.22	5%	3.8	18.0	7.0	14.0	15.0	PF2224-ND	2.13	18.24	152.00	910.00	858.00/M	ECW-F2224JB
	.27	5%	4.1	18.0	8.0	14.5	15.0	PF2274-ND	2.15	18.39	153.25	918.00	865.00/M	ECW-F2274JB
	.33	5%	4.4	18.0	8.5	15.0	15.0	PF2334-ND	2.17	18.60	155.00	928.00	874.00/M	ECW-F2334JB
	.39	5%	4.7	18.0	9.0	16.0	15.0	PF2394-ND	2.36	20.19	168.25	1007.00	949.00/M	ECW-F2394JB
	.47	5%	4.5	23.0	8.0	15.0	20.0	PF2474-ND	2.55	21.87	182.25	1091.00	1028.00/M	ECW-F2474JB
	.56	5%	4.8	23.0	8.5	15.5	20.0	PF2564-ND	2.68	22.98	191.50	1147.00	1080.00/M	ECW-F2564JB
	.68	5%	5.1	23.0	9.5	16.5	20.0	PF2684-ND	2.79	23.91	199.25	1193.00	1124.00/M	ECW-F2684JB
	.82	5%	5.4	23.0	10.5	17.0	20.0	PF2824-ND	2.89	24.81	206.75	1238.00	1166.00/M	ECW-F2824JB
	1.0	5%	5.7	23.0	11.5	18.0	20.0	PF2105-ND	2.94	25.17	209.75	1256.00	1183.00/M	ECW-F2105JB
	1.2	5%	6.0	23.0	12.5	19.5	20.0	PF2125-ND	3.06	26.25	218.75	1310.00	1234.00/M	ECW-F2125JB
	1.5	5%	6.4	23.0	14.0	21.0	20.0	PF2155-ND	3.40	29.16	243.00	1455.00	1371.00/M	ECW-F2155JB
	1.8	5%	6.7	28.0	12.5	21.0	25.0	PF2185-ND	3.83	32.85	273.75	1639.00	1544.00/M	ECW-F2185JB
	2.2	5%	7.1	28.0	14.0	22.5	25.0	PF2225-ND	4.60	39.39	328.25	1966.00	1852.00/M	ECW-F2225JB
	2.7	5%	7.3	28.0	15.5	24.0	25.0	PF2275-ND	5.11	43.77	364.75	2184.00	2058.00/M	ECW-F2275JB
	3.3	5%	7.9	28.0	17.0	26.0	25.0	PF2335-ND	5.52	47.28	394.00	2359.00	2223.00/M	ECW-F2335JB
	3.9	5%	8.1	33.0	16.5	25.5	30.0	PF2395-ND	5.86	50.22	418.50	2506.00	2361.00/M	ECW-F2395JB
	4.7	5%	8.5	33.0	18.0	27.0	30.0	PF2475-ND	6.33	54.27	452.25	2708.00	2551.00/M	ECW-F2475JB
400 WV	.068	5%	2.3	18.0	6.5	13.0	15.0	PF4683-ND	1.80	15.45	121.03	772.50	721.00/M	ECW-F4683JB
	.082	5%	2.7	18.0	7.0	13.5	15.0	PF4823-ND	1.83	15.72	123.14	786.00	733.60/M	ECW-F4823JB
	.1	5%	3.1	18.0	7.5	14.0	15.0	PF4104-ND	1.87	15.99	125.26	799.50	746.20/M	ECW-F4104JB
	.12	5%	3.5	18.0	8.0	15.0	15.0	PF4124-ND	1.92	16.47	129.02	823.50	768.60/M	ECW-F4124JB
	.15	5%	3.9	18.0	8.5	15.5	15.0	PF4154-ND	2.00	17.13	134.19	856.50	799.40/M	ECW-F4154JB
	.18	5%	4.2	18.0	9.5	16.5	15.0	PF4184-ND	2.02	17.28	135.36	864.00	806.40/M	ECW-F4184JB
	.22	5%	4.4	20.0	9.5	16.5	17.0	PF4224-ND	2.05	17.61	137.95	880.50	821.80/M	ECW-F4224JB
	.27	5%	4.7	20.0	10.5	17.0	17.0	PF4274-ND	2.14	18.36	143.82	918.00	856.80/M	ECW-F4274JB
	.33	5%	5.0	20.0	11.5	18.0	17.0	PF4334-ND	2.37	20.28	158.86	1014.00	946.40/M	ECW-F4334JB
	.39	5%	5.3	23.0	13.5	20.5	20.0	PF4394-ND	2.57	21.99	172.26	1099.50	1026.20/M	ECW-F4394JB
	.47	5%	5.9	23.0	14.5	21.5	20.0	PF4474-ND	2.78	23.82	186.59	1191.00	1111.60/M	ECW-F4474JB
	.56	5%	6.1	23.0	13.0	20.0	20.0	PF4564-ND	2.92	25.02	195.99	1251.00	1167.60/M	ECW-F4564JB
	.68	5%	6.5	23.0	14.5	21.5	20.0	PF4684-ND	3.03	26.01	203.75	1300.50	1213.80/M	ECW-F4684JB
	.82	5%	6.8	28.0	14.0	20.5	25.0	PF4824-ND	3.15	27.00	211.50	1350.00	1260.00/M	ECW-F4824JB
	1.0	5%	7.0	28.0	15.0	22.0	25.0	PF4105-ND	3.20	27.42	214.79	1371.00	1279.60/M	ECW-F4105JB
	1.2	5%	7.4	28.0	16.5	23.5	25.0	PF4125-ND	3.34	28.62	224.19	1431.00	1335.60/M	ECW-F4125JB
	1.5	5%	7.8	28.0	18.5	25.5	25.0	PF4155-ND	3.71	31.77	248.87	1588.50	1482.60/M	ECW-F4155JB

Panasonic® High Voltage Metallized Polypropylene Film Capacitors - ECWH(V)





Designed for applications where high frequency and high pulse are required.

Features:
- Low-loss and inherent temperature rise
- Excellent electrical characteristics
- Flame-retardant epoxy resin coating

Recommended Applications:
- High pulse circuits (TV, displays, electronic ballast, etc.)

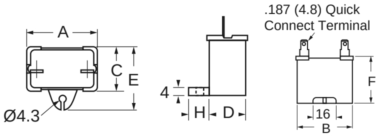
Electrical Specifications:
- Temperature Range: −25°C to +85°C
- Rated Voltage: 1250Vdc
  1600Vdc
- Capacitance Tolerance: ±5%
- Dissipation Factor: 0.1% or less at 1kHz
  0.2% or less at 10kHz
- Withstand Voltage:
  Between terminals - Rated vol. (VDC) x 150% for 60s
  Terminal to Enclosure - 1500Vac for 60s
- Insulation Resistance: 30,000 MΩ min., at 500Vdc, 20° for 60s

WV DC	Cap. µF	Toler-ance	Dimensions (mm)				Digi-Key Part No.	Pricing						Panasonic Part No.
			L	T	H	F		1	10	100	1,000	5,000	10,000	
1250 WV	.0010	5%	18.0	6.5	13.5	15.0	P10470-ND	.86	7.41	58.05	370.50	345.80/M	321.10/M	ECW-H12102JV
	.0012	5%	18.0	7.0	13.5	15.0	P10471-ND	.86	7.41	58.05	370.50	345.80/M	321.10/M	ECW-H12122JV
	.0015	5%	18.0	6.5	13.5	15.0	P10472-ND	.91	7.77	60.87	388.50	362.60/M	336.70/M	ECW-H12152JV
	.0018	5%	18.0	7.0	14.0	15.0	P10473-ND	.91	7.77	60.87	388.50	362.60/M	336.70/M	ECW-H12182JV
	.0022	5%	18.0	6.5	13.5	15.0	P10474-ND	.94	8.07	63.22	403.50	376.60/M	349.70/M	ECW-H12222JV
	.0027	5%	18.0	7.0	14.0	15.0	P10475-ND	.97	8.34	65.33	417.00	389.20/M	361.40/M	ECW-H12272JV
	.0033	5%	18.0	7.5	14.5	15.0	P10476-ND	1.00	8.58	67.21	429.00	400.40/M	371.80/M	ECW-H12332JV
	.0039	5%	18.0	6.0	12.5	15.0	P10477-ND	1.00	8.58	67.21	429.00	400.40/M	371.80/M	ECW-H12392JV
	.0047	5%	18.0	6.0	13.0	15.0	P10478-ND	1.00	8.58	67.21	429.00	400.40/M	371.80/M	ECW-H12472JV
	.0056	5%	18.0	6.5	13.5	15.0	P10479-ND	1.04	8.91	69.80	445.50	415.80/M	386.10/M	ECW-H12562JV
	.0068	5%	18.0	7.0	13.5	15.0	P10480-ND	1.16	9.90	77.55	495.00	462.00/M	429.00/M	ECW-H12682JV
	.0082	5%	18.0	7.5	14.0	15.0	P10481-ND	1.21	10.38	81.31	519.00	484.40/M	449.80/M	ECW-H12822JV
	.010	5%	18.0	8.0	15.0	15.0	P10482-ND	1.24	10.65	83.43	532.50	497.00/M	461.50/M	ECW-H12103JV
	.012	5%	18.0	8.5	15.5	15.0	P10483-ND	1.30	11.16	87.42	558.00	520.80/M	483.60/M	ECW-H12123JV
	.015	5%	18.0	9.5	16.0	15.0	P10484-ND	1.44	12.30	96.35	615.00	574.00/M	533.00/M	ECW-H12153JV
	.018	5%	23.0	7.5	16.0	20.0	P10485-ND	1.60	13.68	107.16	684.00	638.40/M	592.80/M	ECW-H12183JV
	.022	5%	23.0	8.5	16.5	20.0	P10486-ND	1.74	14.91	116.80	745.50	695.80/M	646.10/M	ECW-H12223JV
	.027	5%	23.0	9.0	17.5	20.0	P10487-ND	2.11	18.12	141.94	906.00	845.60/M	785.20/M	ECW-H12273JV
	.033	5%	23.0	10.0	18.5	20.0	P10488-ND	2.26	19.35	151.58	967.50	903.00/M	838.50/M	ECW-H12333JV
	.039	5%	23.0	10.5	19.5	20.0	P10489-ND	2.43	20.79	162.86	1039.50	970.20/M	900.90/M	ECW-H12393JV
	.047	5%	23.0	11.5	20.5	20.0	P10490-ND	2.73	23.37	183.07	1168.50	1090.60/M	1012.70/M	ECW-H12473JV
	.056	5%	28.0	11.5	20.5	25.0	P10491-ND	2.93	25.11	196.70	1255.50	1171.80/M	1088.10/M	ECW-H12563JV
	.068	5%	28.0	12.5	21.5	25.0	P10492-ND	3.34	28.65	224.43	1432.50	1337.00/M	1241.50/M	ECW-H12683JV
	.082	5%	28.0	14.0	22.5	25.0	P10493-ND	4.68	40.14	314.43	2007.00	1873.20/M	1739.40/M	ECW-H12823JV
	.10	5%	28.0	15.5	24.0	25.0	P10494-ND	5.58	47.79	374.36	2389.50	2230.20/M	2070.90/M	ECW-H12104JV
1600 WV	.0010	5%	18.0	6.5	13.5	15.0	P10495-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16102JV
	.0012	5%	18.0	7.0	13.5	15.0	P10496-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16122JV
	.0015	5%	18.0	6.5	13.5	15.0	P10497-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16152JV
	.0018	5%	18.0	7.0	14.0	15.0	P10498-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16182JV
	.0022	5%	18.0	6.0	12.5	15.0	P10499-ND	.99	8.49	66.51	424.50	396.20/M	367.90/M	ECW-H16222JV
	.0027	5%	18.0	6.0	13.0	15.0	P10500-ND	1.02	8.73	68.39	436.50	407.40/M	378.30/M	ECW-H16272JV
	.0033	5%	18.0	6.5	13.5	15.0	P10501-ND	1.09	9.33	73.09	466.50	435.40/M	404.30/M	ECW-H16332JV
	.0039	5%	18.0	7.0	14.0	15.0	P10502-ND	1.16	9.90	77.55	495.00	462.00/M	429.00/M	ECW-H16392JV
	.0047	5%	23.0	6.5	14.5	20.0	P10503-ND	1.20	10.32	80.84	516.00	481.60/M	447.20/M	ECW-H16472JV
	.0056	5%	23.0	6.5	15.0	20.0	P10504-ND	1.23	10.56	82.72	528.00	492.80/M	457.60/M	ECW-H16562JV
	.0068	5%	23.0	7.0	15.5	20.0	P10505-ND	1.27	10.86	85.07	543.00	506.80/M	470.60/M	ECW-H16682JV
	.0082	5%	23.0	7.5	16.0	20.0	P10506-ND	1.37	11.73	91.89	586.50	547.40/M	508.30/M	ECW-H16822JV
	.010	5%	23.0	8.0	16.5	20.0	P10507-ND	1.44	12.36	96.82	618.00	576.80/M	535.60/M	ECW-H16103JV
	.012	5%	23.0	9.0	17.0	20.0	P10508-ND	1.55	13.29	104.11	664.50	620.20/M	575.90/M	ECW-H16123JV
	.015	5%	23.0	9.5	18.0	20.0	P10509-ND	1.85	15.87	124.32	793.50	740.60/M	687.70/M	ECW-H16153JV
	.018	5%	23.0	10.5	19.5	20.0	P10510-ND	2.06	17.67	138.42	883.50	824.60/M	765.70/M	ECW-H16183JV
	.022	5%	28.0	9.5	18.0	25.0	P10511-ND	2.23	19.14	149.93	957.00	893.20/M	829.40/M	ECW-H16223JV
	.027	5%	28.0	10.5	19.5	25.0	P10512-ND	2.73	23.37	183.07	1168.50	1090.60/M	1012.70/M	ECW-H16273JV
	.033	5%	28.0	11.5	20.5	25.0	P10513-ND	2.91	24.93	195.29	1246.50	1163.40/M	1080.30/M	ECW-H16333JV
	.039	5%	28.0	13.5	22.0	25.0	P10514-ND	3.13	26.82	210.09	1341.00	1251.60/M	1162.20/M	ECW-H16393JV
	.047	5%	28.0	15.0	23.5	25.0	P10515-ND	3.55	30.39	238.06	1519.50	1418.20/M	1316.90/M	ECW-H16473JV
	.056	5%	28.0	16.0	24.5	25.0	P10516-ND	3.81	32.64	255.68	1632.00	1523.20/M	1414.40/M	ECW-H16563JV

Panasonic® Dry Film AC Capacitors

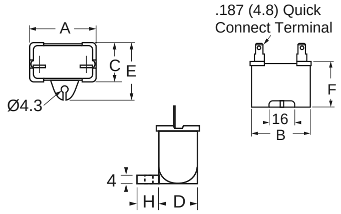
Stack Type

Panasonic's "stack type" construction offers significant reduction in case size (compared to oil-filled can type) with a built-in mounting foot. **Features:** • Compact size compared to oil-filled type capacitors. • 0.187 inch (4.75mm) terminals standard (0.250 inch [6.35mm] available). • 180, 200, 230 are standard voltages. • U.L. 810 (File # E76560) and C.S.A listed. (CSA-C22.2 No. 0-M91 File # LR99617) • JIS standard is available. (JIS C 4908). • Primary applications: refrigeration, motor run, lighting, etc. • Flame retardant plastic case is rated 94 V-0.



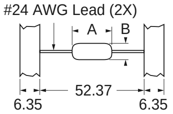
Wound Type

Panasonic's "wound type" construction brings dry film technology to higher voltage and microfarad applications, not available from our "stack type" construction.
Features: • Replacement for typical oil-filled aluminum or plastic can capacitor. • Compact size —ideal where space is a premium. • Built-in mounting bracket eliminates need for mounting strap. • Meets U.L. 810 (File #E76560). • Primary applications: motor run, lighting, etc. • Terminals: 0.187 inch (4.75mm).



Voltage VAC	Cap. µF	Dimensions A	B	C	D	E	F	H	Digi-Key Part No	Pricing 1	10	100	500	Panasonic Part No.
Stack Type - SQ Case														
180	7.5	39.5	38.0	17.5	16.0	28.0	30.5	11.0	P9400-ND	3.38	27.00	229.50	1012.50	JSU18X755AQF
180	10	39.5	38.0	22.0	20.5	32.5	30.5	11.0	P9401-ND	4.03	32.20	273.70	1207.50	JSU18X106AQJ
180	12	39.5	38.0	22.0	20.5	34.2	32.0	13.0	P9402-ND	4.50	36.00	306.00	1350.00	JSU18X126AQH
180	15	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9403-ND	5.03	40.20	341.70	1507.50	JSU18X156AQP
180	20	39.5	38.0	26.7	25.2	37.0	41.0	11.0	P9404-ND	6.43	51.40	436.90	1927.50	JSU18X206AQD
210	10	39.5	38.0	22.0	20.5	34.2	32.0	13.0	P9405-ND	4.15	33.20	282.20	1245.00	JSU21X106AQB
210	12	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9406-ND	4.65	37.20	316.20	1395.00	JSU21X126AQE
210	15	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9407-ND	5.58	44.60	379.10	1672.50	JSU21X156AQH
230	10	39.5	38.0	22.0	20.5	34.2	32.0	13.0	P9408-ND	4.88	39.00	331.50	1462.50	JSU23X106AQC
230	12	39.5	38.0	26.7	25.2	37.0	32.0	11.0	P9409-ND	5.38	43.00	365.50	1612.50	JSU23X126AQE
230	15	39.5	38.0	26.7	25.2	37.0	41.0	11.0	P9410-ND	6.95	55.60	472.60	2085.00	JSU23X156AQE
Wound Type - Q Case														
250	10	49.7	48.3	24.0	22.5	34.5	34.5	11.5	P9411-ND	6.68	53.40	453.90	2002.50	SPU25X106AQSD
250	12	50.0	48.5	26.7	25.3	37.5	38.0	11.5	P9412-ND	7.60	60.80	516.80	2280.00	SPU25X126AQSA
250	15	50.0	48.5	30.5	28.8	41.0	36.0	11.5	P9413-ND	8.98	71.80	610.30	2692.50	SPU25X156AQSA

BC COMPONENTS Axial Ceramic Capacitors



Taped and Reeled per EIA RS-296E

Size Code	A	B
15	3.81mm Max	2.54mm Max
20	5.08mm Max	3.05mm Max
29	7.37mm Max	3.81mm Max

MECHANICAL PARAMETERS:

Terminal Strength: 2.2 Kg (5 lbs.) Minimum pull to destruction, per Method B5 of RS-198-CII, Test Condition A.

Lead Materials: #24 AWG (.020" ±0.001") Tinned, Copper Clad Steel. 30% Conductivity. Temper: Soft; Tensile Strength: 65000 PSI Max.

Body: Conformally coated Epoxy.

ELECTRICAL PARAMETERS:

Capacitance: Measured @ 1Mhz @ 1.0 ±0.2 VRMS @ 25°C for C0G types with C ≤1000pF. Measured @ Khz @ 1.0 ±0.2 VRMS @ 25°C for C0G types with C >1000pF. Measured @ 1Khz @ 1.0 VRMS ±.2 VRMS @ 25°C for X7R types. Measure @ 1Khz @ .0.5 VRMS ±.1 VRMS @ 25°C for Z5U types.

Dissipation Factor: .1% Maximum for C0G types, 2.5% Maximum for X7R types and 4.0% for Z5U types; measurement conditions are the same as for capacitance measurement.

Dielectric Strength: Parts are subjected for up to 5 seconds @ 25°C to 250% of Rated Voltage and will exhibit no evidence of breakdown.

Insulation Resistance: When measured @ 25°C and Rated Voltage, the following Minimum Values will be met: 100K MegΩ or 1000 MegΩ x µF (whichever is less) for C0G and X7R types, 10K MegΩ or 1000 MegΩ x µF (whichever is less) for Z5U types.

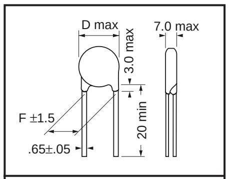
Body Insulation: 500VDC Minimum, in accordance with RS-198-CII.

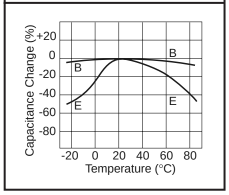
Operating Temperature Range: -55°C to +125°C for C0G, -55°C to +125°C for X7R, -55°C to +85°C for Z5U

Packaging: Mono-Axial parts are supplied in tape and reel and form per EIA RS-296.

Type	Volt.	Cap.	Cap. Tol.(%)	Size Code	Digi-Key Part No.	Cut Tape Pricing 10	100	1,000	Digi-Key Part No.	Tape & Reel Size	Price	BC Components Part No.
COG	100V	10pf	±5	15	1011PHCT-ND	1.91	13.81	95.63	1011PHTR-ND	5,000	63.75/M	A100J15C0GHVVWA
		15pf	±5	15	1012PHCT-ND	1.91	13.81	95.63	1012PHTR-ND	5,000	63.75/M	A150J15C0GHVVWA
		18pf	±5	15	1013PHCT-ND	1.91	13.81	95.63	1013PHTR-ND	7,000	63.75/M	A180J15C0GHVVWA
		22pf	±5	15	1014PHCT-ND	1.91	13.81	95.63	1014PHTR-ND	5,000	63.75/M	A220J15C0GHVVWA
		27pf	±5	15	1015PHCT-ND	1.91	13.81	95.63	1015PHTR-ND	5,000	63.75/M	A270J15C0GHVVWA
		33pf	±5	15	1016PHCT-ND	1.91	13.81	95.63	1016PHTR-ND	7,000	63.75/M	A330J15C0GHVVWA
		47pf	±5	15	1017PHCT-ND	1.95	14.11	97.65	1017PHTR-ND	5,000	65.10/M	A470J15C0GHVVWA
		68pf	±5	15	1018PHCT-ND	1.99	14.37	99.45	1018PHTR-ND	7,000	66.30/M	A680J15C0GH5TAA
		82pf	±5	15	1019PHCT-ND	2.03	14.63	101.25	1019PHTR-ND	7,000	67.50/M	A820J15C0GH5TAA
	50V	100pf	±5	15	1001PHCT-ND	2.03	14.63	101.25	1001PHTR-ND	5,000	67.50/M	A101J15C0GFVVWA
		150pf	±5	15	1002PHCT-ND	2.14	15.47	107.10	1002PHTR-ND	5,000	71.40/M	A151J15C0GFVVWA
		180pf	±5	15	1003PHCT-ND	2.14	15.47	107.10	1003PHTR-ND	7,000	71.40/M	A181J15C0GF5TAA
		220pf	±5	15	1004PHCT-ND	2.14	15.47	107.10	1004PHTR-ND	5,000	71.40/M	A221J15C0GFVVWA
		330pf	±5	15	1005PHCT-ND	2.14	15.47	107.10	1005PHTR-ND	7,000	71.40/M	A331J15C0GF5TAA
		390pf	±5	15	1006PHCT-ND	2.14	15.47	107.10	1006PHTR-ND	5,000	71.40/M	A391J15C0GFVVWA
		470pf	±5	15	1007PHCT-ND	2.14	15.47	107.10	1007PHTR-ND	5,000	71.40/M	A471J15C0GFVVWA
		560pf	±5	15	1008PHCT-ND	2.14	15.47	107.10	1008PHTR-ND	5,000	71.40/M	A561J15C0GFVVWA
		680pf	±5	15	1009PHCT-ND	2.14	15.47	107.10	1009PHTR-ND	7,000	71.40/M	A681J15C0GFVVWA
		1000pf	±5	15	1010PHCT-ND	2.37	17.13	118.58	1010PHTR-ND	7,000	79.05/M	A102J15C0GFVVWA
X7R	100V	220pf	±10	15	1110PHCT-ND	1.84	13.26	91.80	1110PHTR-ND	5,000	61.20/M	A221K15X7RHVVWA
		270pf	±10	15	1111PHCT-ND	1.84	13.26	91.80	1111PHTR-ND	5,000	61.20/M	A271K15X7RHVVWA
		330pf	±10	15	1112PHCT-ND	1.84	13.26	91.80	1112PHTR-ND	7,000	61.20/M	A331K15X7RHVVWA
		470pf	±10	15	1113PHCT-ND	1.84	13.26	91.80	1113PHTR-ND	5,000	61.20/M	A471K15X7RHVVWA
		680pf	±10	15	1114PHCT-ND	1.84	13.26	91.80	1114PHTR-ND	5,000	61.20/M	A681K15X7RHVVWA
		820pf	±10	15	1115PHCT-ND	1.84	13.26	91.80	1115PHTR-ND	5,000	61.20/M	A821K15X7RHVVWA
		.001µf	±10	15	1116PHCT-ND	1.84	13.26	91.80	1116PHTR-ND	7,000	61.20/M	A102K15X7RHVVWA
		.0012µf	±10	15	1117PHCT-ND	1.84	13.26	91.80	1117PHTR-ND	5,000	61.20/M	A122K15X7RHVVWA
		.0015µf	±10	15	1118PHCT-ND	1.84	13.26	91.80	1118PHTR-ND	5,000	61.20/M	A152K15X7RHVVWA
		.0022µf	±10	15	1119PHCT-ND	1.84	13.26	91.80	1119PHTR-ND	7,000	61.20/M	A222K15X7RH5TAA
	50V	.0033µf	±10	15	1101PHCT-ND	1.87	13.52	93.60	1101PHTR-ND	7,000	62.40/M	A332K15X7RF5TAA
		.0047µf	±10	15	1102PHCT-ND	1.87	13.52	93.60	1102PHTR-ND	5,000	62.40/M	A472K15X7RFVVWA
		.01µf	±10	15	1103PHCT-ND	1.19	8.58	59.40	1103PHTR-ND	5,000	39.60/M	A103K15X7RFVVWA
		.015µf	±10	15	1104PHCT-ND	2.14	15.47	107.10	1104PHTR-ND	5,000	71.40/M	A153K15X7RFVVWC
		.022µf	±10	15	1105PHCT-ND	2.37	17.13	118.58	1105PHTR-ND	5,000	79.05/M	A223K15X7RFVVWE
		.033µf	±10	15	1106PHCT-ND	2.57	18.53	128.25	1106PHTR-ND	5,000	85.50/M	A333K15X7RFVVWG
		.047µf	±10	20	1107PHCT-ND	2.64	19.08	132.08	1107PHTR-ND	5,000	88.05/M	A473K20X7RFVVWJ
		.056µf	±10	20	1108PHCT-ND	2.87	20.74	143.55	1108PHTR-ND	7,000	95.70/M	A563K15X7RF5TAA
		.1µf	±10	29	1109PHCT-ND	3.44	24.86	172.13	1109PHTR-ND	5,000	114.75/M	A104K20X7RFVVWN
Z5U	50V	.01µf	±20	15	1206PHCT-ND	1.15	8.29	57.38	1206PHTR-ND	5,000	38.25/M	A103M15Z5UFVVWA
		.01µf	+80, -20	15	1201PHCT-ND	1.15	8.29	57.38	1201PHTR-ND	5,000	38.25/M	A103Z15Z5UFVVWA
		.022µf	±20	15	1207PHCT-ND	1.38	9.95	68.85	1207PHTR-ND	5,000	45.90/M	A223M15Z5UFVVWE
		.033µf	±20	15	1208PHCT-ND	1.38	9.95	68.85	1208PHTR-ND	5,000	45.90/M	A333M15Z5UFVVWG
		.047µf	±20	15	1209PHCT-ND	1.45	10.50	72.68	1209PHTR-ND	5,000	48.45/M	A473M15Z5UFVVWJ
		.047µf	+80, -20	15	1202PHCT-ND	1.38	9.95	68.85	1202PHTR-ND	7,000	45.90/M	A473Z15Z5UFVVWJ
		.1µf	±20	15	1210PHCT-ND	1.15	8.29	57.38	1210PHTR-ND	5,000	38.25/M	A104M15Z5UFVVWN
		.1µf	+80, -20	15	1203PHCT-ND	1.15	8.29	57.38	1203PHTR-ND	5,000	38.25/M	A104Z15Z5UFVVWN
		.22µf	±20	20	1211PHCT-ND	3.02	21.84	151.20	1211PHTR-ND	7,000	100.80/M	A224M15Z5UFTAA
		.22µf	+80, -20	20	1204PHCT-ND	2.95	21.29	147.38	1204PHTR-ND	7,000	98.25/M	A224Z20Z5UFVVWT
		.27µf	+80, -20	29	1212PHCT-ND	2.95	21.29	147.38	1212PHTR-ND	7,000	98.25/M	A274Z20Z5UFVVWV
		.33µf	±20	29	1213PHCT-ND	3.06	22.10	153.00	1213PHTR-ND	5,000	102.00/M	A334M20Z5UFVVWW
		.33µf	+80, -20	29	1205PHCT-ND	2.98	21.55	149.18	1205PHTR-ND	5,000	99.45/M	A334Z20Z5UFVVWW
		.47µf	+80, -20	29	1214PHCT-ND	5.70	41.18	285.08	1214PHTR-ND	5,000	190.05/M	A474Z20Z5UFVVWY

Ceramic Disc Capacitors for Safety Regulations – Type RS (IEC384-14 2nd Ed. Sub-Class Y2/X1)





The Type RS is recognized by UL and CSA (UL1414 and CSA C22.2 No. 1).
SPECIFICATIONS: • **Operating Temp. Range:** -25°C to 85°C
• **Rated Voltage:**

Applicable Standards	Rated Voltage
UL, CSA	125 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class Y2	250 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class X1	400 VAC
IEC 65 5th Ed.: 1985 BSI (BS415: 1990), VDE 560-2, SEV1016	400 VAC

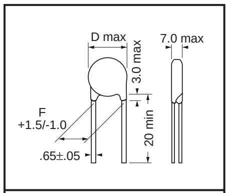
• **Dielectric Withstanding Voltage:** 2600 VAC (50/60 Hz) for 1 minute • **Capacitance:** Within the tolerance, when measured at 1 kHz ± 20%, 1 Vrms and 20°C • **Dissipation Factor (tan δ)**: 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C • **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification

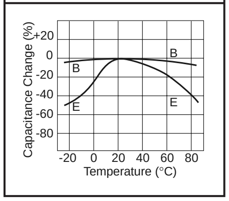
Temperature Characteristics:

Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
The reference temperature: 20°C		

Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
100	±20	B	9.5	7.5	P10430-ND	2.23	3.29	23.50	ECK-DRS101MBY
150	±20	B	9.5	7.5	P10431-ND	2.23	3.29	23.50	ECK-DRS151MBY
220	±20	B	9.5	7.5	P10432-ND	2.23	3.29	23.50	ECK-DRS221MBY
470	±20	B	9.5	7.5	P10433-ND	2.23	3.29	23.50	ECK-DRS471MBY
1000	±20	B	10.0	7.5	P10434-ND	2.71	3.99	28.50	ECK-DRS102MBY
1500	±20	E	10.0	7.5	P10435-ND	3.42	5.04	36.00	ECK-DRS152MEY
2200	±20	E	10.5	7.5	P10439-ND	3.46	5.15	37.84	ECK-DRS222MEY
3300	±20	E	12.5	7.5	P10440-ND	3.98	5.92	43.48	ECK-DRS332MEY
4700	±20	E	16.5	10.0	P10441-ND	4.58	6.82	50.06	ECK-DRS472MEY

Ceramic Disc Capacitors for Safety Regulations – Type NS-A (IEC384-14 2nd Ed. Sub-Class Y1)





Class II Equipment. The Type NS-A is recognized by UL and CSA (UL1414/250 VAC and CSA C22.2 No. 1).
SPECIFICATIONS: • **Operating Temp. Range:** -25°C to 85°C

Applicable Standards	Rated Voltage
UL	250 VAC
CSA	125 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class Y1	250 VAC
SEV 1016 (3300 to 4700 pF)	250 VAC
BSI (BS415: 1990), VDE 560-2, SEV1016 (100 to 2200 pF)	400 VAC

• **Rated Voltage:**

• **Dielectric Withstanding Voltage:** 4000 VAC (50/60 Hz) for 1 minute • **Capacitance:** Within the tolerance, when measured at 1 kHz ± 20%, 1 Vrms and 20°C • **Dissipation Factor (tan δ)**: 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C • **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification

Temperature Characteristics:

Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
The reference temperature: 20°C		

Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
100	±20	B	11.0	10.0	P10446-ND	3.42	5.04	36.00	ECK-DNA101MB
150	±20	B	11.0	10.0	P10447-ND	3.42	5.04	36.00	ECK-DNA151MB
220	±20	B	11.0	10.0	P10448-ND	3.48	5.18	38.07	ECK-DNA221MB
470	±20	B	11.0	10.0	P10449-ND	3.48	5.18	38.07	ECK-DNA471MB
1000	±20	B	11.0	10.0	P10450-ND	3.89	5.79	42.54	ECK-DNA102MB
1500	±20	E	11.0	10.0	P10451-ND	4.30	6.40	47.00	ECK-DNA152ME
2200	±20	E	11.0	10.0	P10452-ND	4.86	7.23	53.11	ECK-DNA222ME
3300	±20	E	13.0	10.0	P10453-ND	5.61	8.35	61.34	ECK-DNA332ME
4700	±20	E	16.0	10.0	P10454-ND	6.30	9.38	68.86	ECK-DNA472ME

Ceramic Disc Capacitors for Safety Regulations – Type TS (IEC384-14 2nd Ed. Sub-Class Y2/X1)

Fig. 1

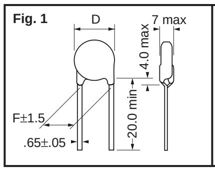
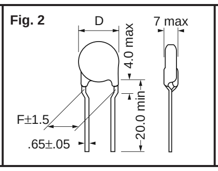
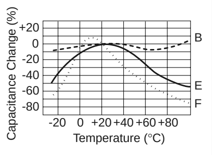


Fig. 2





Approved by UL and CSA for rated voltage 250 VAC.

RECOMMENDED APPLICATIONS:
Noise suppression circuit for switching power supply.

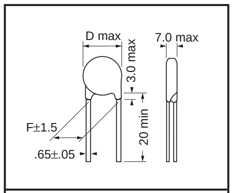
SPECIFICATIONS:
- **Operating Temperature Range:** –25°C to 125°C
- **Rated Voltage:** 250 VAC
- **Voltage Proof:** 2600 VAC for 1 minute
- **Capacitance:** Within the tolerance, when measured at 1 kHz±20%, 1 Vrms and 20ºC
- **Dissipation Factor (tan δ)**: 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C
- **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification
- **Temperature Characteristics:**

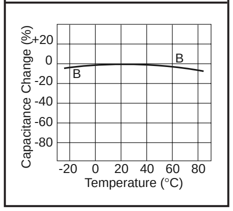
Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
F/Y5V/2F4	+30/-80% Max.	-25°C to 85°C
The reference temperature: 20°C		

Fig.	Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D ± 1.0	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
1	100	±20	B	7.0	7.5	P10455-ND	1.73	2.34	16.50	ECK-ATS101MB
1	150	±20	B	7.0	7.5	P10456-ND	1.77	2.40	16.94	ECK-ATS151MB
1	220	±20	B	7.0	7.5	P10457-ND	1.77	2.40	16.94	ECK-ATS221MB
1	330	±20	B	7.0	7.5	P10458-ND	1.77	2.40	16.94	ECK-ATS331MB
1	470	±20	B	7.0	7.5	P10459-ND	1.73	2.34	16.50	ECK-ATS471MB
1	680	±20	B	7.0	7.5	P10460-ND	1.77	2.40	16.94	ECK-ATS681MB
1	1000	±20	E	7.0	7.5	P10461-ND	1.73	2.34	16.50	ECK-ATS102ME
1	1500	±20	E	8.0	7.5	P10462-ND	2.13	2.89	20.35	ECK-ATS152ME
1	2200	±20	E	9.0	7.5	P10463-ND	2.21	3.00	21.18	ECK-ATS222ME
2	3300	±20	E	11.5	7.5	P10464-ND	3.66	5.39	38.50	ECK-ATS332ME
1	4700	±20	E	14.0	10.0	P10465-ND	2.61	3.85	27.50	ECK-ATS472ME
2	4700	±20	F	11.5	7.5	P10466-ND	2.19	3.22	23.00	ECK-ATS472MF
1	10000	±20	F	16.0*	10.0	P10467-ND	3.38	5.02	36.90	ECK-ATS103MF
2	4700	±20	E	14.0	7.5	P10468-ND	3.38	5.02	36.90	ECK-ATS472ME6
2	10000	±20	F	16.0*	7.5	P10469-ND	2.84	4.23	31.06	ECK-ATS103MF6

* D is ± 1.5.

Ceramic Disc Capacitors for Safety Regulations – Type NS-B (IEC384-14 2nd Ed. Sub-Class Y2)





Class I Equipment. The Type NS-B is recognized by UL and CSA (UL1414/250 VAC and CSA C22.2 No. 1).
SPECIFICATIONS:
- **Operating Temperature Range:** -25°C to 85°C
- **Rated Voltage:**

Applicable Standards	Rated Voltage
UL	250 VAC
CSA	125 VAC
IEC 384-14 2nd Ed. (EN 132 400) Sub-Class Y2	250 VAC
SEV 1016 (3300 to 4700 pF)	250 VAC
BSI (BS415: 1990), VDE 560-2, SEV1016 (100 to 2200 pF)	400 VAC

• **Dielectric Withstanding Voltage:** 2600 VAC (50/60 Hz) for 1 minute • **Capacitance:** Within the tolerance, when measured at 1 kHz ± 20%, 1 Vrms and 20°C • **Dissipation Factor (tan δ)**: 0.025 max., when measured at 1 kHz ± 20%, 1 Vrms and 20°C • **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 1 minute electrification

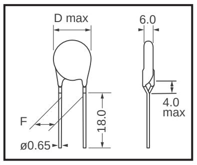
Temperature Characteristics:

Temp. Char.	Cap. Change	Temp. Range
B/Y5P/2B4	±10% Max.	-25°C to 85°C
E/Y5U/2E4	+20/-55% Max.	-25°C to 85°C
The reference temperature: 20°C		

Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D	Dimensions (mm) F	Digi-Key Part No.	Pricing 5	Pricing 10	Pricing 100	Panasonic Part No.
100	±20	B	10.5	7.5	P10442-ND	1.68	2.47	17.64	ECK-DNB101MB
150	±20	B	10.5	7.5	P10443-ND	1.70	2.51	17.92	ECK-DNB151MB
220	±20	B	10.5	7.5	P10445-ND	1.70	2.51	17.92	ECK-DNB221MB

Ceramic Disc Capacitors for Safety Regulations – Type VS (Sub-Class Y2/X1)

Type VS is Recognized by VDE (IEC60384-14) and UL/CSA.
FEATURES: • Miniature size, 30% is smaller than conventional Type TS
RECOMMENDED APPLICATIONS: • AC adapter, Battery charger for PC, Mobile-phone • Terminal peripheral equipment as MODEM, xDSL
SPECIFICATIONS: • **Operating Temperature Range**: -25ºC to 125ºC (-25ºC to 85°C for UL and CSA) • **Rating Voltage:** 250VAC/Y2, 440VAC/X1 • **Voltage Proof:** 1500VAC, 1 minute • **Dissipation Factor (tan δ):** 0.025 max, when measured at 1kHz±20%, 1.0±0.2 Vrms and 20°C (For Temp. Char. B, E, and F) • **Insulation Resistance:** 10,000 MΩ min. at 500 VDC and 60±5 sec. electrification



Temp. Char.	Cap. Change	Temp. Range
SL	+350 to -1000ppm/°C	+20°C to +85°C
B	±10% Max.	-20°C to +85°C
E	+20, -55% Max.	-20°C to +85°C
F	+30, -80% Max.	-20°C to +85°C
The reference temperature: 20°C		

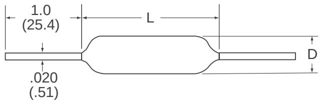
Nominal Cap. (pF)	Cap. Tol. (%)	Temp. Char.	Dimensions (mm) D	Dimensions (mm) F	Digi-Key Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Digi-Key Part No.	Tape & Box Size	Tape & Box Pricing	Panasonic Part No
5	±0.5pF	SL	8.0	5.0	P11408CT-ND	.32	2.18	15.40	P11408TB-ND	1,000	84.00	ECC-NVS050DG
10	±0.5pF	SL	8.0	5.0	P11409CT-ND	.32	2.18	15.40	P11409TB-ND	1,000	84.00	ECC-NVS100DG
22	±5%	SL	8.0	5.0	P11410CT-ND	.32	2.18	15.40	P11410TB-ND	1,000	84.00	ECC-NVS220JG
47	±5%	SL	8.0	5.0	P11411CT-ND	.32	2.18	15.40	P11411TB-ND	1,000	84.00	ECC-NVS470JG
100	±10%	B	8.0	5.0	P11412CT-ND	.29	1.97	13.87	P11412TB-ND	1,000	76.00	ECK-NVS101KB
150	±10%	B	8.0	5.0	P11413CT-ND	.39	2.64	18.58	P11413TB-ND	1,000	101.00	ECK-NVS151KB
220	±10%	B	8.0	5.0	P11414CT-ND	.35	2.37	16.74	P11414TB-ND	1,000	91.00	ECK-NVS221KB
330	±10%	B	8.0	5.0	P11415CT-ND	.35	2.61	18.61	P11415TB-ND	1,000	104.00	ECK-NVS331KB
470	±10%	B	8.0	5.0	P11416CT-ND	.39	2.64	18.58	P11416TB-ND	1,000	101.00	ECK-NVS471KB
1000	±10%	B	9.0	5.0	P11417CT-ND	.34	2.51	17.92	P11417TB-ND	1,000	100.00	ECK-NVS102KB
1000	±20%	E	8.0	5.0	P11418CT-ND	.29	1.97	13.87	P11418TB-ND	1,000	76.00	ECK-NVS102ME
1500	±20%	E	8.0	5.0	P11419CT-ND	.35	2.61	18.61	P11419TB-ND	1,000	104.00	ECK-NVS152ME
2200	±20%	E	9.0	5.0	P11420CT-ND	.39	2.64	18.58	P11420TB-ND	1,000	101.00	ECK-NVS222ME
4700	±20%	E	11.0	5.0	P11421CT-ND	.35	2.61	18.61	P11421TB-ND	1,000	104.00	ECK-NVS472ME
4700	±20%	F	10.0	5.0	P11422CT-ND	.59	4.36	31.12	P11422TB-ND	1,000	174.00	ECK-NVS472MF
10000	±20%	F	14.0	7.5	P11423CT-ND	.60	4.49	33.00	P11423TB-ND	500	119.50	ECK-NVS103MF

KEMET® Ceramic Conformally Coated Axial Leaded Capacitors “AXIMAX”

The “Aximax” series of multi-layer ceramic capacitors starts with a capacitor element that consists of formulated dielectric materials which have been cast into thin layers, interspersed with metal electrodes alternately exposed on opposite edges of the laminated structure. The entire structure is fired at high temperature to produce a monolithic block, which provides high capacitance values in a small physical volume. After firing, conductive terminations are applied to opposite ends of the chip to make contact with the exposed electrodes.

KEMET leaded ceramic capacitors are offered in the three most popular temperature characteristics: **COG:** Class 1, with a temperature coefficient of 0 ± 30ppm per degree C over an operating temperature range of -55°C to +125°C (Also known as “NPO”). **X7R:** Class II, with a maximum capacitance change of ±15% over an operating temperature range of -55°C to +125°C. **Z5U:** Class III, with a maximum capacitance change of +22% - 56% over an operating temperature range of +10°C to +85°C.

Style	L Max. In. (mm)	D Max. In. (mm)
C410	.170 (4.32)	.100 (2.54)
C412	.170 (4.32)	.120 (3.05)
C420	.260 (6.60)	.100 (5.54)
C430	.290 (7.37)	.150 (3.81)
C440	.400 (10.16)	.150 (3.81)

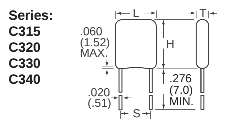


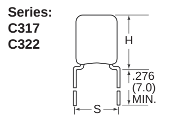
Dielectric	Volt.	Cap.	Cap. Tol.(%)	Size Code	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Kemet Part No.
						1	10	100	1,000		Size	Pricing	
COG	100	10pF	±5	410	399-1806-1-ND	.29	2.79	20.18	139.73	399-1806-2-ND	5,000	93.00/M	C410C100J1G5CA7200
	100	15pF	±5	410	399-1807-1-ND	.29	2.79	20.18	139.73	399-1807-2-ND	5,000	93.00/M	C410C150J1G5CA7200
	100	22pF	±5	410	399-1808-1-ND	.29	2.79	20.18	139.73	399-1808-2-ND	5,000	93.00/M	C410C220J1G5CA7200
	100	33pF	±5	410	399-1809-1-ND	.29	2.79	20.18	139.73	399-1809-2-ND	5,000	93.00/M	C410C330J1G5CA7200
	100	47pF	±5	410	399-1810-1-ND	.29	2.79	20.18	139.73	399-1810-2-ND	5,000	93.00/M	C410C470J1G5CA7200
	100	68pF	±5	410	399-1811-1-ND	.29	2.79	20.18	139.73	399-1811-2-ND	5,000	93.00/M	C410C680J1G5CA7200
	100	100pF	±5	410	399-1812-1-ND	.26	2.48	17.94	124.20	399-1812-2-ND	5,000	83.00/M	C410C101J1G5CA7200
	100	150pF	±5	410	399-1813-1-ND	.29	2.79	20.18	139.73	399-1813-2-ND	5,000	93.00/M	C410C151J1G5CA7200
	100	220pF	±5	410	399-1814-1-ND	.29	2.79	20.18	139.73	399-1814-2-ND	5,000	93.00/M	C410C221J1G5CA7200
	100	330pF	±5	410	399-1815-1-ND	.29	2.79	20.18	139.73	399-1815-2-ND	5,000	93.00/M	C410C331J1G5CA7200
	100	470pF	±5	410	399-1816-1-ND	.29	2.79	20.18	139.73	399-1816-2-ND	5,000	93.00/M	C410C471J1G5CA7200
	100	680pF	±5	410	399-1817-1-ND	.29	2.79	20.18	139.73	399-1817-2-ND	5,000	93.00/M	C410C681J1G5CA7200
	100	1000pF	±5	410	399-1818-1-ND	.27	2.59	18.69	129.38	399-1818-2-ND	5,000	86.00/M	C410C102J1G5CA7200
	100	1500pF	±5	420	399-1819-1-ND	.44	4.14	29.90	207.00	399-1819-2-ND	5,000	138.00/M	C420C152J1G5CA7200
	100	2200pF	±5	420	399-1820-1-ND	.46	4.35	31.40	217.35	399-1820-2-ND	5,000	145.00/M	C420C222J1G5CA7200
	100	3300pF	±5	430	399-1821-1-ND	.75	7.14	51.58	357.08	399-1821-2-ND	2,500	238.00/M	C430C332J1G5CA7200
	100	4700pF	±5	430	399-1822-1-ND	.75	7.14	51.58	357.08	399-1822-2-ND	2,500	238.00/M	C430C472J1G5CA7200
	100	6800pF	±5	430	399-1823-1-ND	1.02	9.63	69.52	481.28	399-1823-2-ND	2,500	321.00/M	C430C682J1G5CA7200
	100	.01µF	±5	440	399-1824-1-ND	1.17	11.13	80.37	556.43	399-1824-2-ND	2,500	371.00/M	C440C103J1G5CA7200
	100	.015µF	±5	440	399-1825-1-ND	1.17	11.13	80.37	556.43	399-1825-2-ND	2,500	371.00/M	C440C153J1G5CA7200
	50	680pF	±5	410	399-1826-1-ND	.30	2.85	20.57	142.43	399-1826-2-ND	5,000	95.00/M	C410C681J5G5CA7200
	50	1000pF	±5	410	399-1827-1-ND	.27	2.59	18.69	129.38	399-1827-2-ND	5,000	86.00/M	C410C102J5G5CA7200
	50	1500pF	±5	412	399-1828-1-ND	.46	4.35	31.40	217.35	399-1828-2-ND	5,000	145.00/M	C412C152J5G5CA7200
	50	2200pF	±5	412	399-1829-1-ND	.46	4.35	31.40	217.35	399-1829-2-ND	5,000	145.00/M	C412C222J5G5CA7200
	50	1500pF	±5	420	399-1830-1-ND	.46	4.35	31.40	217.35	399-1830-2-ND	5,000	145.00/M	C420C152J5G5CA7200
	50	2200pF	±5	420	399-1831-1-ND	.46	4.35	31.40	217.35	399-1831-2-ND	5,000	145.00/M	C420C222J5G5CA7200
	50	3300pF	±5	430	399-1832-1-ND	.85	8.02	57.95	401.18	399-1832-2-ND	2,500	267.00/M	C430C332J5G5CA7200
	50	4700pF	±5	430	399-1833-1-ND	.85	8.02	57.95	401.18	399-1833-2-ND	2,500	267.00/M	C430C472J5G5CA7200
	50	6800pF	±5	430	399-1834-1-ND	.85	8.02	57.95	401.18	399-1834-2-ND	2,500	267.00/M	C430C682J5G5CA7200
	50	.01µF	±5	440	399-1835-1-ND	1.17	11.13	80.37	556.43	399-1835-2-ND	2,500	371.00/M	C440C103J5G5CA7200
	50	.015µF	±5	440	399-1836-1-ND	1.44	13.66	98.67	683.10	399-1836-2-ND	2,500	455.00/M	C440C153J5G5CA7200
X7R	100	470pF	±10	410	399-1837-1-ND	.22	2.13	15.37	106.43	399-1837-2-ND	5,000	71.00/M	C410C471K1R5CA7200
	100	680pF	±10	410	399-1838-1-ND	.22	2.13	15.37	106.43	399-1838-2-ND	5,000	71.00/M	C410C681K1R5CA7200
	100	1000pF	±10	410	399-1839-1-ND	.21	1.98	14.30	99.00	399-1839-2-ND	5,000	66.00/M	C410C102K1R5CA7200
	100	1500pF	±10	410	399-1840-1-ND	.22	2.13	15.37	106.43	399-1840-2-ND	5,000	71.00/M	C410C152K1R5CA7200
	100	2200pF	±10	410	399-1841-1-ND	.22	2.13	15.37	106.43	399-1841-2-ND	5,000	71.00/M	C410C222K1R5CA7200
	100	3300pF	±10	410	399-1842-1-ND	.22	2.13	15.37	106.43	399-1842-2-ND	5,000	71.00/M	C410C332K1R5CA7200
	100	4700pF	±10	410	399-1843-1-ND	.22	2.13	15.37	106.43	399-1843-2-ND	5,000	71.00/M	C410C472K1R5CA7200
	100	6800pF	±10	410	399-1844-1-ND	.22	2.13	15.37	106.43	399-1844-2-ND	5,000	71.00/M	C410C682K1R5CA7200
	100	.01µF	±10	410	399-1845-1-ND	.18	1.68	12.16	84.15	399-1845-2-ND	5,000	56.00/M	C410C103K1R5CA7200
	100	.015µF	±10	412	399-1846-1-ND	.26	2.48	17.88	123.75	399-1846-2-ND	5,000	83.00/M	C412C153K1R5CA7200
	100	.022µF	±10	412	399-1847-1-ND	.33	3.17	22.88	158.40	399-1847-2-ND	5,000	106.00/M	C412C223K1R5CA7200
	100	.015µF	±10	420	399-1848-1-ND	.26	2.48	17.88	123.75	399-1848-2-ND	5,000	83.00/M	C420C153K1R5CA7200
	100	.022µF	±10	420	399-1849-1-ND	.37	3.47	25.03	173.25	399-1849-2-ND	5,000	116.00/M	C420C223K1R5CA7200
	100	.033µF	±10	420	399-1850-1-ND	.37	3.47	25.03	173.25	399-1850-2-ND	5,000	116.00/M	C420C333K1R5CA7200
	100	.047µF	±10	430	399-1851-1-ND	.47	4.46	32.18	222.75	399-1851-2-ND	2,500	149.00/M	C430C473K1R5CA7200
	100	.068µF	±10	430	399-1852-1-ND	.65	6.14	44.33	306.90	399-1852-2-ND	2,500	205.00/M	C430C683K1R5CA7200
	100	.1µF	±10	430	399-1853-1-ND	.52	4.95	35.75	247.50	399-1853-2-ND	2,500	165.00/M	C430C104K1R5CA7200
	100	.15µF	±10	440	399-1854-1-ND	.96	9.11	65.78	455.40	399-1854-2-ND	2,500	304.00/M	C440C154K1R5CA7200
	50	.01µF	±10	410	399-1855-1-ND	.17	1.58	11.44	79.20	399-1855-2-ND	5,000	53.00/M	C410C103K5R5CA7200
	50	.015µF	±10	410	399-1856-1-ND	.29	2.72	19.66	136.13	399-1856-2-ND	5,000	91.00/M	C410C153K5R5CA7200
	50	.022µF	±10	410	399-1857-1-ND	.29	2.72	19.66	136.13	399-1857-2-ND	5,000	91.00/M	C410C223K5R5CA7200
	50	.033µF	±10	410	399-1858-1-ND	.29	2.72	19.66	136.13	399-1858-2-ND	5,000	91.00/M	C410C333K5R5CA7200
	50	.047µF	±10	410	399-1859-1-ND	.31	2.97	21.45	148.50	399-1859-2-ND	5,000	99.00/M	C410C473K5R5CA7200
	50	.068µF	±10	412	399-1860-1-ND	.31	2.97	21.45	148.50	399-1860-2-ND	5,000	99.00/M	C412C683K5R5CA7200
	50	.1µF	±10	412	399-1861-1-ND	.20	1.88	13.59	94.05	399-1861-2-ND	5,000	63.00/M	C412C104K5R5CA7200
	50	.068µF	±10	420	399-1862-1-ND	.31	2.97	21.45	148.50	399-1862-2-ND	5,000	99.00/M	C420C683K5R5CA7200
	50	.1µF	±10	420	399-1863-1-ND	.20	1.88	13.59	94.05	399-1863-2-ND	5,000	63.00/M	C420C104K5R5CA7200
	50	.15µF	±10	430	399-1864-1-ND	.65	6.14	44.33	306.90	399-1864-2-ND	2,500	205.00/M	C430C154K5R5CA7200
	50	.22µF	±10	430	399-1865-1-ND	.96	9.11	65.78	455.40	399-1865-2-ND	2,500	304.00/M	C430C224K5R5CA7200
	50	.33µF	±10	440	399-1866-1-ND	1.06	10.00	72.22	499.95	399-1866-2-ND	2,500	333.00/M	C440C334K5R5CA7200
	50	.47µF	±10	440	399-1867-1-ND	1.57	14.85	107.25	742.50	399-1867-2-ND	2,500	495.00/M	C440C474K5R5CA7200
Z5U	100	.01µF	±20	410	399-1868-1-ND	.14	1.29	9.30	64.35	399-1868-2-ND	5,000	43.00/M	C410C103M1U5CA7200
	100	.015µF	±20	410	399-1869-1-ND	.19	1.83	13.23	91.58	399-1869-2-ND	5,000	61.00/M	C410C153M1U5CA7200
	100	.022µF	±20	410	399-1870-1-ND	.19	1.83	13.23	91.58	399-1870-2-ND	5,000	61.00/M	C410C223M1U5CA7200
	100	.033µF	±20	420	399-1871-1-ND	.30	2.87	20.74	143.55	399-1871-2-ND	5,000	96.00/M	C420C333M1U5CA7200
	100	.047µF	±20	420	399-1872-1-ND	.30	2.87	20.74	143.55	399-1872-2-ND	5,000	96.00/M	C420C473M1U5CA7200
	100	.068µF	±20	430	399-1873-1-ND	.52	4.95	35.75	247.50	399-1873-2-ND	2,500	165.00/M	C430C683M1U5CA7200
	100	.1µF	±20	430	399-1874-1-ND	.34	3.22	23.24	160.88	399-1874-2-ND	2,500	107.00/M	C430C104M1U5CA7200
	100	.15µF	±20	430	399-1875-1-ND	.57	5.45	39.33	272.25	399-1875-2-ND	2,500	182.00/M	C430C154M1U5CA7200
	100	.22µF	±20	440	399-1876-1-ND	.57	5.45	39.33	272.25	399-1876-2-ND	2,500	182.00/M	C440C224M1U5CA7200
	50	.033µF	±20	410	399-1877-1-ND	.18	1.68	12.16	84.15	399-1877-2-ND	5,000	56.00/M	C410C333M5U5CA7200
	50	.047µF	±20	410	399-1878-1-ND	.18	1.68	12.16	84.15	399-1878-2-ND	5,000	56.00/M	C410C473M5U5CA7200
	50	.068µF	±20	410	399-1879-1-ND	.18	1.68	12.16	84.15	399-1879-2-ND	5,000	56.00/M	C410C683M5U5CA7200
	50	.1µF	±20	410	399-1880-1-ND	.13	1.19	8.58	59.40	399-1880-2-ND	5,000	40.00/M	C410C104M5U5CA7200
	50	.15µF	±20	410	399-1881-1-ND	.26	2.48	17.88	123.75	399-1881-2-ND	5,000	83.00/M	C410C154M5U5CA7200
	50	.22µF	±20	410	399-1882-1-ND	.26	2.48	17.88	123.75	399-1882-2-ND	5,000	83.00/M	C410C224M5U5CA7200
	50	.33µF	±20	412	399-1883-1-ND	.40	3.81	27.53	190.58	399-1883-2-ND	5,000	127.00/M	C412C334M5U5CA7200
	50	.33µF	±20	420	399-1884-1-ND	.40	3.81	27.53	190.58	399-1884-2-ND	5,000	127.00/M	C420C334M5U5CA7200
	50	.47µF	±20	430	399-1885-1-ND	.65	6.19	44.69	309.38	399-1885-2-ND	2,500	206.00/M	C430C474M5U5CA7200
	50	.68µF	±20	430	399-1886-1-ND	.65	6.19	44.69	309.38	399-1886-2-ND	2,500	206.00/M	C430C684M5U5CA7200
	50	1µF	±20	440	399-1887-1-ND	.84	7.92	57.20	396.00	399-1887-2-ND	2,500	264.00/M	C440C105M5U5CA7200

KEMET Ceramic Conformally Coated Radial Leaded Capacitors “GOLDEN MAX”

The “Golden Max” series of multi-layer ceramic capacitors starts with a capacitor element that consists of formulated dielectric materials which have been cast into thin layers, and interspersed with metal electrodes alternately exposed on opposite edges of the laminated structure. The entire structure is fired at high temperature to produce a monolithic block, which provides high capacitance values in a small physical volume. After firing, conductive terminations are applied to opposite ends of the chip to make contact with the exposed electrodes.

KEMET leaded ceramic capacitors are offered in the three most popular temperature characteristics: **COG:** Class 1, with a temperature coefficient of 0 ± 30ppm per degree C over an operating temperature range of -55°C to +125°C (Also known as “NPO”). **X7R:** Class II, with a maximum capacitance change of ±15% over an operating temperature range of -55°C to +125°C. **Z5U:** Class III, with a maximum capacitance change of +22% - 56% over an operating temperature range of +10°C to +85°C.





Dielectric	VDC	Cap.	Dimensions - Inches (mm) S (1) + .030	L Max.	H Max.	T Max.	Digi-Key Part No.	Pricing 1	10	100	500	Kemet Part No.
C315 Series												
COG ±5%	100	150pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1900-ND	.27	1.96	14.00	50.40	C315C151J1G5CA
	100	220pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1901-ND	.27	1.96	14.00	50.40	C315C221J1G5CA
	100	330pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1902-ND	.27	1.96	14.00	50.40	C315C331J1G5CA
	100	470pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1903-ND	.27	1.96	14.00	50.40	C315C471J1G5CA
	100	680pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1904-ND	.38	2.82	20.15	72.54	C315C681J1G5CA
	100	1000pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1905-ND	.31	2.28	16.25	58.50	C315C102J1G5CA
	200	10pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1888-ND	.26	1.93	13.75	49.50	C315C100J2G5CA
	200	15pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1889-ND	.28	2.08	14.85	53.46	C315C150J2G5CA
	200	22pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1890-ND	.28	2.08	14.85	53.46	C315C220J2G5CA
	200	27pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1891-ND	.28	2.08	14.85	53.46	C315C270J2G5CA
	200	33pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1892-ND	.28	2.08	14.85	53.46	C315C330J2G5CA
	200	47pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1893-ND	.28	2.08	14.85	53.46	C315C470J2G5CA
	200	68pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1894-ND	.30	2.19	15.68	56.43	C315C680J2G5CA
	200	100pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1895-ND	.28	2.08	14.85	53.46	C315C101J2G5CA
	200	150pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1896-ND	.32	2.35	16.80	60.48	C315C151J2G5CA
	200	220pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1897-ND	.32	2.35	16.80	60.48	C315C221J2G5CA
	200	330pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1898-ND	.38	2.82	20.15	72.54	C315C331J2G5CA
	200	470pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1899-ND	.38	2.82	20.15	72.54	C315C471J2G5CA
X7R ±10%	50	3300pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2001-ND	.19	1.39	9.90	35.64	C315C332K5R5CA
	50	4700pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2002-ND	.21	1.54	11.00	39.60	C315C472K5R5CA
	50	6800pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2003-ND	.21	1.54	11.00	39.60	C315C682K5R5CA
	50	.01µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2004-ND	.20	1.51	10.75	38.70	C315C103K5R5CA
	50	.015µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2005-ND	.21	1.54	11.00	39.60	C315C153K5R5CA
	50	.022µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2006-ND	.22	1.66	11.83	42.57	C315C223K5R5CA
	50	.033µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2007-ND	.22	1.66	11.83	42.57	C315C333K5R5CA
	100	1000pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1994-ND	.17	1.27	9.08	32.67	C315C102K1R5CA
	100	1500pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1995-ND	.19	1.39	9.90	35.64	C315C152K1R5CA
	100	2200pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1996-ND	.19	1.39	9.90	35.64	C315C222K1R5CA
	100	3300pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1997-ND	.19	1.39	9.90	35.64	C315C332K1R5CA
	100	4700pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1998-ND	.21	1.54	11.00	39.60	C315C472K1R5CA
	100	6800pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1999-ND	.21	1.54	11.00	39.60	C315C682K1R5CA
	100	.01µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2000-ND	.19	1.39	9.90	35.64	C315C103K1R5CA
	200	100pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1985-ND	.22	1.65	11.75	42.30	C315C101K2R5CA
	200	150pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1986-ND	.24	1.80	12.88	46.35	C315C151K2R5CA
	200	220pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1987-ND	.24	1.80	12.88	46.35	C315C221K2R5CA
	200	330pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1988-ND	.24	1.80	12.88	46.35	C315C331K2R5CA
	200	470pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1989-ND	.24	1.80	12.88	46.35	C315C471K2R5CA
	200	680pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1990-ND	.24	1.80	12.88	46.35	C315C681K2R5CA
	200	1000pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1991-ND	.22	1.65	11.75	42.30	C315C102K2R5CA
	200	1500pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1992-ND	.24	1.80	12.88	46.35	C315C152K2R5CA
	200	2200pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-1993-ND	.24	1.80	12.88	46.35	C315C222K2R5CA
Z5U ±20%	50	4700pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2119-ND	.19	1.37	9.78	35.19	C315C472M5U5CA
	50	6800pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2120-ND	.19	1.37	9.78	35.19	C315C682M5U5CA
	50	.01µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2121-ND	.16	1.21	8.63	31.05	C315C103M5U5CA
	50	.015µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2122-ND	.18	1.33	9.50	34.20	C315C153M5U5CA
	50	.022µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2123-ND	.18	1.33	9.50	34.20	C315C223M5U5CA
	50	.033µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2124-ND	.18	1.33	9.50	34.20	C315C333M5U5CA
	50	.047µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2125-ND	.18	1.33	9.50	34.20	C315C473M5U5CA
	50	.068µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2126-ND	.20	1.49	10.65	38.34	C315C683M5U5CA
	50	.1µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2127-ND	.16	1.21	8.63	31.05	C315C104M5U5CA
	100	1000pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2111-ND	.17	1.25	8.93	32.13	C315C102M1U5CA
	100	1500pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2112-ND	.19	1.37	9.78	35.19	C315C152M1U5CA
	100	2200pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2113-ND	.19	1.37	9.78	35.19	C315C222M1U5CA
	100	3300pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2114-ND	.19	1.37	9.78	35.19	C315C332M1U5CA
	100	4700pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2115-ND	.19	1.37	9.78	35.19	C315C472M1U5CA
	100	6800pF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2116-ND	.19	1.37	9.78	35.19	C315C682M1U5CA
	100	.01µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2117-ND	.17	1.25	8.93	32.13	C315C103M1U5CA
	100	.015µF	.100 (2.54)	.150 (3.81)	.210 (5.33)	.100 (2.54)	399-2118-ND	.21	1.53	10.93	39.33	C315C153M1U5CA
C317 Series												
COG ±5%	100	150pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1918-ND	.27	1.96	14.00	50.40	C317C151J1G5CA
	100	220pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1919-ND	.27	1.96	14.00	50.40	C317C221J1G5CA
	100	330pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1920-ND	.27	1.96	14.00	50.40	C317C331J1G5CA
	100	470pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1921-ND	.27	1.96	14.00	50.40	C317C471J1G5CA
	100	680pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1922-ND	.38	2.82	20.15	72.54	C317C681J1G5CA
	100	1000pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1923-ND	.31	2.28	16.25	58.50	C317C102J1G5CA
	200	10pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1906-ND	.26	1.93	13.75	49.50	C317C100J2G5CA
	200	15pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1907-ND	.28	2.08	14.85	53.46	C317C150J2G5CA
	200	22pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1908-ND	.28	2.08	14.85	53.46	C317C220J2G5CA
	200	33pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1909-ND	.28	2.08	14.85	53.46	C317C330J2G5CA
	200	39pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1910-ND	.28	2.08	14.85	53.46	C317C390J2G5CA
	200	47pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1911-ND	.28	2.08	14.85	53.46	C317C470J2G5CA
	200	68pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1912-ND	.30	2.19	15.68	56.43	C317C680J2G5CA
	200	100pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1913-ND	.28	2.08	14.85	53.46	C317C101J2G5CA
	200	150pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1914-ND	.32	2.35	16.80	60.48	C317C151J2G5CA
	200	220pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1915-ND	.32	2.35	16.80	60.48	C317C221J2G5CA
	200	330pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1916-ND	.38	2.82	20.15	72.54	C317C331J2G5CA
	200	470pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-1917-ND	.38	2.82	20.15	72.54	C317C471J2G5CA
X7R ±10%	50	3300pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2024-ND	.19	1.39	9.90	35.64	C317C332K5R5CA
	50	4700pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2025-ND	.21	1.54	11.00	39.60	C317C472K5R5CA
	50	6800pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2026-ND	.21	1.54	11.00	39.60	C317C682K5R5CA
	50	.01µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2027-ND	.20	1.51	10.75	38.70	C317C103K5R5CA
	50	.015µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2028-ND	.21	1.54	11.00	39.60	C317C153K5R5CA
	50	.022µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2029-ND	.22	1.66	11.83	42.57	C317C223K5R5CA
	50	.033µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2030-ND	.22	1.66	11.83	42.57	C317C333K5R5CA
	100	1000pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2017-ND	.17	1.27	9.08	32.67	C317C102K1R5CA
	100	1500pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2018-ND	.19	1.39	9.90	35.64	C317C152K1R5CA
	100	2200pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2019-ND	.19	1.39	9.90	35.64	C317C222K1R5CA
	100	3300pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2020-ND	.19	1.39	9.90	35.64	C317C332K1R5CA
	100	4700pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2021-ND	.21	1.54	11.00	39.60	C317C472K1R5CA
	100	6800pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2022-ND	.21	1.54	11.00	39.60	C317C682K1R5CA
	100	.01µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2023-ND	.19	1.39	9.90	35.64	C317C103K1R5CA
	200	100pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2008-ND	.22	1.65	11.75	42.30	C317C101K2R5CA
	200	150pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2009-ND	.24	1.80	12.88	46.35	C317C151K2R5CA
	200	220pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2010-ND	.24	1.80	12.88	46.35	C317C221K2R5CA
	200	330pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2011-ND	.24	1.80	12.88	46.35	C317C331K2R5CA
	200	470pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2012-ND	.24	1.80	12.88	46.35	C317C471K2R5CA
	200	680pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2013-ND	.24	1.80	12.88	46.35	C317C681K2R5CA

(Continued)

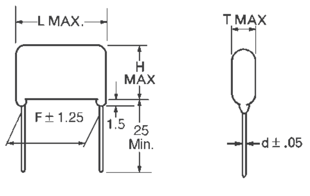
			Dimensions - Inches (mm)				Digi-Key	Pricing				Kemet
Dielectric	**VDC**	**Cap.**	**S (1) + .030**	**L Max.**	**H Max.**	**T Max.**	**Part No.**	**1**	**10**	**100**	**500**	**Part No.**
X7R ±10%	200	1000pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2014-ND	.22	1.65	11.75	42.30	C317C102K2R5CA
	200	1500pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2015-ND	.24	1.80	12.88	46.35	C317C152K2R5CA
	200	2200pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2016-ND	.24	1.80	12.88	46.35	C317C222K2R5CA
Z5U ±20%	50	6800pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2136-ND	.19	1.37	9.78	35.19	C317C682M5U5CA
	50	.01µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2137-ND	.16	1.21	8.63	31.05	C317C103M5U5CA
	50	.015µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2138-ND	.18	1.33	9.50	34.20	C317C153M5U5CA
	50	.022µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2139-ND	.18	1.33	9.50	34.20	C317C223M5U5CA
	50	.033µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2140-ND	.18	1.33	9.50	34.20	C317C333M5U5CA
	50	.047µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2141-ND	.18	1.33	9.50	34.20	C317C473M5U5CA
	50	.068µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2142-ND	.20	1.49	10.65	38.34	C317C683M5U5CA
	50	.1µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2143-ND	.16	1.21	8.63	31.05	C317C104M5U5CA
	100	1000pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2128-ND	.17	1.25	8.93	32.13	C317C102M1U5CA
	100	1500pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2129-ND	.19	1.37	9.78	35.19	C317C152M1U5CA
	100	2200pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2130-ND	.19	1.37	9.78	35.19	C317C222M1U5CA
	100	3300pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2131-ND	.19	1.37	9.78	35.19	C317C332M1U5CA
	100	4700pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2132-ND	.19	1.37	9.78	35.19	C317C472M1U5CA
	100	6800pF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2133-ND	.19	1.37	9.78	35.19	C317C682M1U5CA
	100	.01µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2134-ND	.17	1.25	8.93	32.13	C317C103M1U5CA
	100	.015µF	.200 (5.08)	.150 (3.81)	.230 (5.84)	.100 (2.54)	399-2135-ND	.21	1.53	10.93	39.33	C317C153M1U5CA
C320 Series												
COG ±5%	100	680pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1940-ND	.39	2.85	20.35	73.26	C320C681J1G5CA
	100	1000pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1941-ND	.31	2.29	16.38	58.95	C320C102J1G5CA
	100	1500pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1942-ND	.39	2.90	20.70	74.52	C320C152J1G5CA
	100	2200pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1943-ND	.39	2.90	20.70	74.52	C320C222J1G5CA
	100	3300pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1944-ND	.45	3.30	23.58	84.87	C320C332J1G5CA
	100	4700pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1945-ND	.48	3.54	25.30	91.08	C320C472J1G5CA
	200	10pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1924-ND	.27	1.96	14.00	50.40	C320C100J2G5CA
	200	15pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1925-ND	.29	2.12	15.13	54.45	C320C150J2G5CA
	200	22pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1926-ND	.29	2.12	15.13	54.45	C320C220J2G5CA
	200	33pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1927-ND	.29	2.12	15.13	54.45	C320C330J2G5CA
	200	47pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1928-ND	.29	2.12	15.13	54.45	C320C470J2G5CA
	200	68pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1929-ND	.30	2.23	15.95	57.42	C320C680J2G5CA
	200	100pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1930-ND	.29	2.12	15.13	54.45	C320C101J2G5CA
	200	150pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1931-ND	.32	2.37	16.95	61.02	C320C151J2G5CA
	200	220pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1932-ND	.32	2.37	16.95	61.02	C320C221J2G5CA
	200	330pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1933-ND	.39	2.85	20.35	73.26	C320C331J2G5CA
	200	470pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1934-ND	.39	2.85	20.35	73.26	C320C471J2G5CA
	200	680pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1935-ND	.42	3.08	22.03	79.29	C320C681J2G5CA
	200	1000pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1936-ND	.40	2.97	21.20	76.32	C320C102J2G5CA
	200	1500pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1937-ND	.45	3.30	23.58	84.87	C320C152J2G5CA
	200	2200pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1938-ND	.45	3.30	23.58	84.87	C320C222J2G5CA
	200	3300pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1939-ND	.55	4.07	29.05	104.58	C320C332J2G5CA
X7R ±10%	50	.015µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2049-ND	.21	1.57	11.20	40.32	C320C153K5R5CA
	50	.022µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2050-ND	.23	1.69	12.05	43.38	C320C223K5R5CA
	50	.033µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2051-ND	.23	1.69	12.05	43.38	C320C333K5R5CA
	50	.047µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2052-ND	.26	1.92	13.73	49.41	C320C473K5R5CA
	50	.068µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2053-ND	.26	1.92	13.73	49.41	C320C683K5R5CA
	50	.1µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2054-ND	.21	1.57	11.20	40.32	C320C104K5R5CA
	50	.15µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2055-ND	.37	2.71	19.33	69.57	C320C154K5R5CA
	50	.22µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2056-ND	.53	3.92	28.00	100.80	C320C224K5R5CA
	100	4700pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2040-ND	.21	1.58	11.30	40.68	C320C472K1R5CA
	100	6800pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2041-ND	.21	1.58	11.30	40.68	C320C682K1R5CA
	100	.01µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2042-ND	.19	1.42	10.18	36.63	C320C103K1R5CA
	100	.015µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2043-ND	.24	1.74	12.43	44.73	C320C153K1R5CA
	100	.022µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2044-ND	.27	2.02	14.40	51.84	C320C223K1R5CA
	100	.033µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2045-ND	.27	2.02	14.40	51.84	C320C333K1R5CA
	100	.047µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2046-ND	.34	2.49	17.80	64.08	C320C473K1R5CA
	100	.068µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2047-ND	.34	2.49	17.80	64.08	C320C683K1R5CA
	100	.1µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2048-ND	.34	2.49	17.80	64.08	C320C104K1R5CA
	200	1000pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2031-ND	.23	1.69	12.08	43.47	C320C102K2R5CA
	200	1500pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2032-ND	.25	1.85	13.23	47.61	C320C152K2R5CA
	200	2200pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2033-ND	.25	1.85	13.23	47.61	C320C222K2R5CA
	200	3300pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2034-ND	.25	1.85	13.23	47.61	C320C332K2R5CA
	200	4700pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2035-ND	.27	2.01	14.38	51.75	C320C472K2R5CA
	200	6800pF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2036-ND	.27	2.01	14.38	51.75	C320C682K2R5CA
	200	.01µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2037-ND	.25	1.85	13.23	47.61	C320C103K2R5CA
	200	.015µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2038-ND	.31	2.30	16.40	59.04	C320C153K2R5CA
	200	.022µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2039-ND	.31	2.30	16.40	59.04	C320C223K2R5CA
Z5U ±20%	50	.033µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2152-ND	.18	1.33	9.50	34.20	C320C333M5U5CA
	50	.047µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2153-ND	.18	1.33	9.50	34.20	C320C473M5U5CA
	50	.068µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2154-ND	.20	1.49	10.65	38.34	C320C683M5U5CA
	50	.1µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2155-ND	.16	1.21	8.63	31.05	C320C104M5U5CA
	50	.15µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2156-ND	.24	1.73	12.38	44.55	C320C154M5U5CA
	50	.22µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2157-ND	.32	2.33	16.68	60.03	C320C224M5U5CA
	50	.33µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2158-ND	.32	2.33	16.68	60.03	C320C334M5U5CA
	50	.47µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2159-ND	.40	2.94	21.00	75.60	C320C474M5U5CA
	100	.01µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2144-ND	.17	1.25	8.93	32.13	C320C103M1U5CA
	100	.015µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2145-ND	.21	1.53	10.93	39.33	C320C153M1U5CA
	100	.022µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2146-ND	.21	1.53	10.93	39.33	C320C223M1U5CA
	100	.033µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2147-ND	.24	1.73	12.38	44.55	C320C333M1U5CA
	100	.047µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2148-ND	.24	1.73	12.38	44.55	C320C473M1U5CA
	100	.068µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2149-ND	.28	2.05	14.68	52.83	C320C683M1U5CA
	100	.1µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2150-ND	.21	1.53	10.93	39.33	C320C104M1U5CA
	100	.15µF	.100 (2.54)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2151-ND	.38	2.78	19.85	71.46	C320C154M1U5CA
C322 Series												
COG ±5%	100	680pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1962-ND	.39	2.85	20.35	73.26	C322C681J1G5CA
	100	1000pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1963-ND	.31	2.29	16.38	58.95	C322C102J1G5CA
	100	1500pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1964-ND	.39	2.90	20.70	74.52	C322C152J1G5CA
	100	2200pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1965-ND	.39	2.90	20.70	74.52	C322C222J1G5CA
	100	3300pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1966-ND	.45	3.30	23.58	84.87	C322C332J1G5CA
	100	4700pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1967-ND	.48	3.54	25.30	91.08	C322C472J1G5CA
	200	10pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1946-ND	.27	1.96	14.00	50.40	C322C100J2G5CA
	200	15pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1947-ND	.29	2.12	15.13	54.45	C322C150J2G5CA
	200	22pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1948-ND	.29	2.12	15.13	54.45	C322C220J2G5CA
	200	33pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1949-ND	.29	2.12	15.13	54.45	C322C330J2G5CA
	200	47pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1950-ND	.29	2.12	15.13	54.45	C322C470J2G5CA
	200	68pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1951-ND	.30	2.23	15.95	57.42	C322C680J2G5CA
	200	100pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1952-ND	.29	2.12	15.13	54.45	C322C101J2G5CA
	200	150pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1953-ND	.32	2.37	16.95	61.02	C322C151J2G5CA
	200	220pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1954-ND	.32	2.37	16.95	61.02	C322C221J2G5CA
	200	330pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1955-ND	.39	2.85	20.35	73.26	C322C331J2G5CA
	200	470pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1956-ND	.39	2.85	20.35	73.26	C322C471J2G5CA
	200	680pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1957-ND	.42	3.08	22.03	79.29	C322C681J2G5CA
	200	1000pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1958-ND	.40	2.97	21.20	76.32	C322C102J2G5CA
	200	1500pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1959-ND	.45	3.30	23.58	84.87	C322C152J2G5CA
	200	2200pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1960-ND	.45	3.30	23.58	84.87	C322C222J2G5CA
	200	3300pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-1961-ND	.55	4.07	29.05	104.58	C322C332J2G5CA

(Continued)

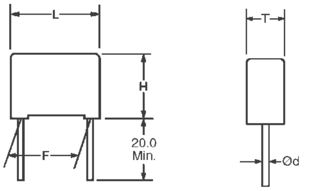
Dielectric	VDC	Cap.	Dimensions - Inches (mm)				Digi-Key	Pricing				Kemet
			S (1) + .030	L Max.	H Max.	T Max.	Part No.	1	10	100	500	Part No.
X7R ±10%	50	.01µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2075-ND	.18	1.30	9.25	33.30	C322C103K5R5CA
	50	.015µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2076-ND	.21	1.57	11.20	40.32	C322C153K5R5CA
	50	.022µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2077-ND	.23	1.69	12.05	43.38	C322C223K5R5CA
	50	.033µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2078-ND	.23	1.69	12.05	43.38	C322C333K5R5CA
	50	.047µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2079-ND	.26	1.92	13.73	49.41	C322C473K5R5CA
	50	.068µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2080-ND	.26	1.92	13.73	49.41	C322C683K5R5CA
	50	.1µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2081-ND	.21	1.57	11.20	40.32	C322C104K5R5CA
	50	.15µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2082-ND	.37	2.71	19.33	69.57	C322C154K5R5CA
	50	.22µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2083-ND	.53	3.92	28.00	100.80	C322C224K5R5CA
	100	4700pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2066-ND	.21	1.58	11.30	40.68	C322C472K1R5CA
	100	6800pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2067-ND	.21	1.58	11.30	40.68	C322C682K1R5CA
	100	.01µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2068-ND	.19	1.42	10.18	36.63	C322C103K1R5CA
	100	.015µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2069-ND	.24	1.74	12.43	44.73	C322C153K1R5CA
	100	.022µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2070-ND	.27	2.02	14.40	51.84	C322C223K1R5CA
	100	.033µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2071-ND	.27	2.02	14.40	51.84	C322C333K1R5CA
	100	.047µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2072-ND	.34	2.49	17.80	64.08	C322C473K1R5CA
	100	.068µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2073-ND	.34	2.49	17.80	64.08	C322C683K1R5CA
	100	.1µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2074-ND	.34	2.49	17.80	64.08	C322C104K1R5CA
	200	1000pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2057-ND	.23	1.69	12.08	43.47	C322C102K2R5CA
	200	1500pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2058-ND	.25	1.85	13.23	47.61	C322C152K2R5CA
	200	2200pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2059-ND	.25	1.85	13.23	47.61	C322C222K2R5CA
	200	3300pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2060-ND	.25	1.85	13.23	47.61	C322C332K2R5CA
	200	4700pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2061-ND	.27	2.01	14.38	51.75	C322C472K2R5CA
	200	6800pF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2062-ND	.27	2.01	14.38	51.75	C322C682K2R5CA
	200	.01µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2063-ND	.25	1.85	13.23	47.61	C322C103K2R5CA
	200	.015µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2064-ND	.31	2.30	16.40	59.04	C322C153K2R5CA
	200	.022µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2065-ND	.31	2.30	16.40	59.04	C322C223K2R5CA
Z5U ±20%	50	.033µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2168-ND	.18	1.33	9.50	34.20	C322C333M5U5CA
	50	.047µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2169-ND	.18	1.33	9.50	34.20	C322C473M5U5CA
	50	.068µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2170-ND	.20	1.49	10.65	38.34	C322C683M5U5CA
	50	.1µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2171-ND	.16	1.21	8.63	31.05	C322C104M5U5CA
	50	.15µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2172-ND	.24	1.73	12.38	44.55	C322C154M5U5CA
	50	.22µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2173-ND	.32	2.33	16.68	60.03	C322C224M5U5CA
	50	.33µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2174-ND	.32	2.33	16.68	60.03	C322C334M5U5CA
	50	.47µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2175-ND	.40	2.94	21.00	75.60	C322C474M5U5CA
	100	.01µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2160-ND	.17	1.25	8.93	32.13	C322C103M1U5CA
	100	.015µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2161-ND	.21	1.53	10.93	39.33	C322C153M1U5CA
	100	.022µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2162-ND	.21	1.53	10.93	39.33	C322C223M1U5CA
	100	.033µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2163-ND	.24	1.73	12.38	44.55	C322C333M1U5CA
	100	.047µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2164-ND	.24	1.73	12.38	44.55	C322C473M1U5CA
	100	.068µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2165-ND	.28	2.05	14.68	52.83	C322C683M1U5CA
	100	.1µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2166-ND	.21	1.53	10.93	39.33	C322C104M1U5CA
	100	.15µF	.200 (5.08)	.200 (5.08)	.260 (6.60)	.125 (3.18)	399-2167-ND	.38	2.78	19.85	71.46	C322C154M1U5CA
C330 Series												
COG ±5%	100	3300pF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1973-ND	.84	6.16	44.00	158.40	C330C332J1G5CA
	100	4700pF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1974-ND	.84	6.16	44.00	158.40	C330C472J1G5CA
	100	6800pF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1975-ND	.91	6.68	47.73	171.81	C330C682J1G5CA
	100	.01µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1976-ND	1.11	8.21	58.65	211.14	C330C103J1G5CA
	100	.015µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1977-ND	1.41	10.38	74.18	267.03	C330C153J1G5CA
	100	.022µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1978-ND	2.10	15.46	110.40	397.44	C330C223J1G5CA
	200	3300pF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1968-ND	.94	6.92	49.45	178.02	C330C332J2G5CA
	200	4700pF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1969-ND	.94	6.92	49.45	178.02	C330C472J2G5CA
	200	6800pF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1970-ND	1.33	9.78	69.88	251.55	C330C682J2G5CA
	200	.01µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1971-ND	1.26	9.30	66.43	239.13	C330C103J2G5CA
	200	.015µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-1972-ND	2.49	18.32	130.83	470.97	C330C153J2G5CA
X7R ±10%	50	.15µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2097-ND	.60	4.43	31.65	113.94	C330C154K5R5CA
	50	.22µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2098-ND	.77	5.68	40.60	146.16	C330C224K5R5CA
	50	.33µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2099-ND	.83	6.11	43.68	157.23	C330C334K5R5CA
	50	.47µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2100-ND	.83	6.11	43.68	157.23	C330C474K5R5CA
	50	.68µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2101-ND	1.73	12.74	91.00	327.60	C330C684K5R5CA
	50	1µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2102-ND	1.40	10.31	73.65	265.14	C330C105K5R5CA
	100	.068µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2091-ND	.46	3.36	24.03	86.49	C330C683K1R5CA
	100	.1µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2092-ND	.40	2.97	21.20	76.32	C330C104K1R5CA
	100	.15µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2093-ND	.62	4.59	32.78	117.99	C330C154K1R5CA
	100	.22µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2094-ND	.91	6.72	48.03	172.89	C330C224K1R5CA
	100	.33µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2095-ND	1.13	8.34	59.60	214.56	C330C334K1R5CA
	100	.47µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2096-ND	1.74	12.86	91.83	330.57	C330C474K1R5CA
	200	.015µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2084-ND	.46	3.42	24.45	88.02	C330C153K2R5CA
	200	.022µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2085-ND	.46	3.42	24.45	88.02	C330C223K2R5CA
	200	.033µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2086-ND	.46	3.42	24.45	88.02	C330C333K2R5CA
	200	.047µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2087-ND	.46	3.42	24.45	88.02	C330C473K2R5CA
	200	.056µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2088-ND	.46	3.42	24.45	88.02	C330C563K2R5CA
	200	.068µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2089-ND	.63	4.63	33.08	119.07	C330C683K2R5CA
	200	.1µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2090-ND	.96	7.05	50.33	181.17	C330C104K2R5CA
Z5U ±20%	50	.33µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2181-ND	.52	3.83	27.33	98.37	C330C334M5U5CA
	50	.47µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2182-ND	.52	3.83	27.33	98.37	C330C474M5U5CA
	50	.68µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2183-ND	.72	5.27	37.68	135.63	C330C684M5U5CA
	50	1µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2184-ND	.65	4.79	34.23	123.21	C330C105M5U5CA
	50	1.5µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2185-ND	1.06	7.81	55.78	200.79	C330C155M5U5CA
	50	2.2µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2186-ND	1.11	8.19	58.50	210.60	C330C225M5U5CA
	100	.1µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2176-ND	.41	3.02	21.58	77.67	C330C104M1U5CA
	100	.15µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2177-ND	.48	3.54	25.30	91.08	C330C154M1U5CA
	100	.22µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2178-ND	.55	4.03	28.75	103.50	C330C224M1U5CA
	100	.33µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2179-ND	.55	4.03	28.75	103.50	C330C334M1U5CA
	100	.47µF	.200 (5.08)	.300 (7.62)	.360 (9.14)	.150 (3.81)	399-2180-ND	.66	4.83	34.50	124.20	C330C474M1U5CA
C340 Series												
COG ±5%	100	.033µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-1982-ND	4.53	33.39	238.50	858.60	C340C333J1G5CA
	100	.047µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-1983-ND	5.06	37.25	266.10	957.96	C340C473J1G5CA
	100	.068µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-1984-ND	5.67	41.75	298.20	1073.52	C340C683J1G5CA
	200	.022µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-1979-ND	4.53	33.39	238.50	858.60	C340C223J2G5CA
	200	.033µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-1980-ND	5.06	37.25	266.10	957.96	C340C333J2G5CA
	200	.047µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-1981-ND	5.67	41.75	298.20	1073.52	C340C473J2G5CA
X7R ±10%	50	1.5µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2109-ND	3.55	26.16	186.88	672.75	C340C155K5R5CA
	50	2.2µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2110-ND	4.44	32.73	233.75	841.50	C340C225K5R5CA
	100	.47µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2106-ND	1.85	13.65	97.50	351.00	C340C474K1R5CA
	100	.68µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2107-ND	4.63	34.15	243.90	878.04	C340C684K1R5CA
	100	1µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2108-ND	4.63	34.15	243.90	878.04	C340C105K1R5CA
	200	.1µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2103-ND	1.00	7.35	52.50	189.00	C340C104K2R5CA
	200	.15µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2104-ND	4.13	30.45	217.50	783.00	C340C154K2R5CA
	200	.22µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2105-ND	4.63	34.15	243.90	878.04	C340C224K2R5CA
Z5U ±20%	50	2.2µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2191-ND	3.17	23.35	166.75	600.30	C340C225M5U5CA
	50	3.3µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2192-ND	3.96	29.18	208.45	750.42	C340C335M5U5CA
	50	4.7µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2193-ND	4.78	35.22	251.58	905.67	C340C475M5U5CA
	100	.47µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2187-ND	.66	4.83	34.50	124.20	C340C474M1U5CA
	100	.68µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2188-ND	1.78	13.08	93.45	336.42	C340C684M1U5CA
	100	1µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2189-ND	3.14	23.15	165.33	595.17	C340C105M1U5CA
	100	1.5µF	.200 (5.08)	.400 (10.16)	.460 (11.68)	.150 (3.81)	399-2190-ND	3.82	28.18	201.25	724.50	C340C155M1U5CA

Panasonic® Interference Suppressor Capacitors X-Y Series-Metallized Film

ECQ - UN, EW, UF



ECQ - UV, UG, UL



Electrical Specifications:

- **Operating Temperature Range:** -40°C to +85°C (-40°C to +100°C for ECQ-UG/UL)
- **Capacitance Tolerance:** ±20% (M)
- **Dissipation Factor:** Less than 1.0% (at 25°C 1 kHz)

ECQ-UN Series: **Rated Voltage:** 250VAC. **Standards: UL (UL 1414);** Across-The-Line Capacitor. Antenna Coupling and Line-By-Pass Components. File No. E62674. **CSA (CSA C22.2);** No. 0-M1982, No. 1-M1981. Across-The-Line, antenna-isolation and line-by-pass capacitor. File No. LR35752. **VDE (VED0565-1);** class X2 File No. 4811.6-4670-1041. **SEV (SEV1055);** class X, Ref No. 89, 5 50251,05. **DEMKO (AFSNIT21);** class X2, Ref No. 70726EC. **SEMKO (SS4430414);** class X2 Reg No. 8602146. **NEMKO (NEMKO);** class X2 Ref No. E 25082 02. **EI (E384-14);** class X2, Reg No. 062521 01~14(0.001~0.012µF), Reg No. 062522 01~15(0.015~0.22µF).

ECQ-EW Series: **Rated Voltage:** 250VAC. **Standards: UL (UL 1283);** Electromagnetic Interference Filters Class X File No. E79502. **SEMKO (SS 443 04 14);** class X2 Reg No. 8932009. **DEMKO (AFSNIT21);** class X2 Ref No. 94911EC. **VDE (VDE0565-1);** class X2 File No. 4811. 6-4670-1035.

ECQ-UF Series: **Rated Voltage:** 250VAC **Standards: SEMKO (SEMKO 101)** Reg. No. 61-88271/1-4. **DEMKO (AFSNIT 21);** class Y/X, Ref No. 61254EC. **VDE (VDE 0565-1)** class Y/X2, File No. 4811-6-1-4670-1032. **BSI (BS415);** certified No. 6026. **UL (UL1414)** Across-The-Line Capacitor & Antenna-Coupling and Line-by-pass. File No. E62674. **CSA (CSA C22.2)** No. 0-M1982, No.1-M1981, Across-The-Line, Antenna-Isolation & LIne-by-Pass Capacitor, File No. LR35752.

ECQ-UV Series: **Rated Voltage:** 250VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. File No. E62674. **(UL1283);** Electromagnetic Interference Filters, File No. E79502. **CSA (CSA C22.2);** Across-The-Line, Antenna-Isolation and Line-by-Pass Capacitor, No. 0-M1982, No. 1-M1981. **SEMKO (SS 443 04 14);** Class X2/Y Reg No. 8804123. **DEMKO (AFSNIT21);** Class X2/Y Ref No. 89275EC. **NEMKO (NEMKO 132);** Class X2 Ref No. 37892, Class Y Ref No. 37894. **EI (IEC 384/14);** Class X2/Y Reg No. 110918-01-02. **VDE (VDE 0565-1);** Class X2/Y File No. 4811.6-4670-1070. **SEV (SEV 1055);** Class X ref No. 88,1 00318,01.

ECQ-UG — Class X2 Series: **Rated Voltage:** 250/275VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. **CSA (Standard C22.2 No. 1-94);** Across-The-Line Capacitors. Antenna-Isolation and Line-by-Pass Capacitors. **SEMKO, DEMKO, NEMKO, FIMCO, VDE, SEV;** IEC384-14, 1993, EN132400, Class X2.

ECQ-UG — Class X1 Series: **Rated Voltage:** 250/300VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. **CSA (Standard C22.2 No. 1-94);** Across-The-Line Capacitors. Antenna-Isolation and Line-by-Pass Capacitors. **FIMCO and VDE;** IEC384-14, 1993, A1 - 1995, EN132400, Class X1.

ECQ-UL Series: **Rated Voltage:** 250/275VAC **Standards: UL (UL1414);** Across-The-Line Capacitors. Antenna-Coupling and Line-by-Pass Components. **CSA (Standard C22.2 No. I-94);** Across-The-Line Capacitors. Antenna-Isolation and Line-by-Pass Capacitors. **VDE;** IEC384-14, 1993, EN132400, Class X2.

Voltage (VAC)	Cap. (µF)	Dimensions (mm)					Digi-Key Part No.	Price Each			Panasonic Part No.
		L	T	H	F	dø		1	10	100	
ECQ-UN											
250	0.0047	17.0	6.5	13.5	13.5	0.6	P4600-ND†	.93	.80	.67	ECQ-U2A472MN
	0.01	17.0	7.0	14.0	13.5	0.6	P4601-ND†	.93	.80	.67	ECQ-U2A103MN
	0.047	25.5	7.0	14.0	21.5	0.6	P4602-ND†	1.18	1.01	.84	ECQ-U2A473MN
	0.1	30.5	7.5	17.01	26.5	0.8	P4603-ND†	1.44	1.24	1.03	ECQ-U2A104MN
ECQ-EW											
250	0.047	17.0	7.5	13.0	13.5	0.6	P4604-ND†	.79	.69	.57	ECQ-E2A473MW
	0.1	24.0	8.0	13.5	20.5	0.8	P4605-ND†	.95	.81	.68	ECQ-E2A104MW
	0.22	24.0	10.5	17.5	20.5	0.8	P4606-ND†	1.34	1.15	.96	ECQ-E2A224MW
	0.47	29.0	13.0	20.5	25.5	0.8	P4607-ND†	1.79	1.54	1.28	ECQ-E2A474MW
ECQ-UF											
250	0.0047	20.0	7.0	14.5	16.5	0.6	P4608-ND†	.90	.78	.65	ECQ-U2A472MF
	0.01	23.0	7.5	15.0	19.5	0.6	P4609-ND†	.95	.81	.68	ECQ-U2A103MF
ECQ-UV											
250	0.001	17.5	4.0	10.5	15.0	0.6	P4617-ND	.89	.76	.64	ECQ-U2A102MV
	0.0012	17.5	4.0	10.5	15.0	0.6	P4618-ND	.89	.76	.64	ECQ-U2A122MV
	0.0015	17.5	4.0	10.5	15.0	0.6	P4619-ND	.89	.76	.64	ECQ-U2A152MV
	0.0018	17.5	4.0	10.5	15.0	0.6	P4620-ND	.89	.76	.64	ECQ-U2A182MV
	0.0022	17.5	4.0	10.5	15.0	0.6	P4621-ND	.89	.76	.64	ECQ-U2A222MV
	0.0027	17.5	4.0	10.5	15.0	0.6	P4622-ND	.89	.76	.64	ECQ-U2A272MV
	0.0033	17.5	4.0	10.5	15.0	0.6	P4623-ND	.89	.76	.64	ECQ-U2A332MV
	0.0039	17.5	4.0	10.5	15.0	0.6	P4624-ND	.89	.76	.64	ECQ-U2A392MV
	0.0047	17.5	4.0	10.5	15.0	0.6	P4625-ND	.89	.76	.64	ECQ-U2A472MV
	0.0056	17.5	4.0	10.5	15.0	0.6	P4626-ND	.89	.76	.64	ECQ-U2A562MV
	0.0068	17.5	4.0	10.5	15.0	0.6	P4627-ND	.89	.76	.64	ECQ-U2A682MV
	0.0082	17.5	4.0	10.5	15.0	0.6	P4628-ND	.89	.76	.64	ECQ-U2A822MV
	0.01	17.5	4.0	10.5	15.0	0.6	P4629-ND	.89	.76	.64	ECQ-U2A103MV
	0.012	17.5	4.0	10.5	15.0	0.6	P4630-ND	.89	.76	.64	ECQ-U2A123MV
	0.015	17.5	4.0	10.5	15.0	0.6	P4631-ND	.91	.79	.66	ECQ-U2A153MV
	0.018	17.5	4.5	10.5	15.0	0.6	P4632-ND	.93	.80	.67	ECQ-U2A183MV
	0.022	17.5	4.5	10.5	15.0	0.6	P4633-ND	.95	.82	.68	ECQ-U2A223MV
	0.027	17.5	4.5	13.0	15.0	0.6	P4634-ND	.97	.84	.70	ECQ-U2A273MV
	0.033	17.5	4.5	13.0	15.0	0.6	P4635-ND	1.00	.87	.72	ECQ-U2A333MV
	0.039	17.5	5.5	12.5	15.0	0.6	P4636-ND	1.02	.88	.73	ECQ-U2A393MV
	0.047	17.5	5.5	12.5	15.0	0.6	P4637-ND	1.04	.90	.75	ECQ-U2A473MV
	0.056	17.5	7.0	14.0	15.0	0.6	P4638-ND	1.08	.93	.78	ECQ-U2A563MV
	0.068	17.5	7.0	14.0	15.0	0.6	P4639-ND	1.14	.98	.82	ECQ-U2A683MV
	0.082	17.5	8.0	15.0	15.0	0.6	P4640-ND	1.17	1.01	.84	ECQ-U2A823MV
	0.1	17.5	8.0	15.0	15.0	0.8	P4610-ND	1.10	.95	.79	ECQ-U2A104MV
	0.12	25.5	6.5	16.5	22.5	0.6	P4641-ND	1.31	1.13	.94	ECQ-U2A124MV
	0.15	25.5	6.5	16.5	22.5	0.8	P4611-ND	1.41	1.22	1.01	ECQ-U2A154MV
	0.18	25.5	8.5	17.0	22.5	0.6	P4642-ND	1.51	1.29	1.08	ECQ-U2A184MV
	0.22	25.5	8.5	17.0	22.5	0.8	P4612-ND	1.48	1.27	1.06	ECQ-U2A224MV
	0.27	30.5	10.0	18.0	27.5	0.6	P4643-ND	2.07	1.78	1.48	ECQ-U2A274MV
	0.33	30.5	10.0	18.0	27.5	0.8	P4613-ND	2.44	2.10	1.75	ECQ-U2A334MV
	0.39	30.5	12.0	20.0	27.5	0.6	P4644-ND	2.71	2.33	1.94	ECQ-U2A394MV
	0.47	30.5	12.0	20.0	27.5	0.8	P4614-ND	2.49	2.14	1.78	ECQ-U2A474MV
	0.56	30.5	13.5	23.5	27.5	0.6	P4645-ND	3.13	2.69	2.24	ECQ-U2A564MV
	0.68	30.5	13.5	23.5	27.5	0.8	P4615-ND	3.40	2.91	2.43	ECQ-U2A684MV
	0.82	30.5	16.5	26.5	27.5	0.6	P4646-ND	3.88	3.33	2.77	ECQ-U2A824MV
	1.0	30.5	16.5	26.5	27.5	0.8	P4616-ND	3.77	3.24	2.70	ECQ-U2A105MV
ECQ-UG — Class X2											
250/ 275	0.033	15.0	6.0	13.0	12.5	0.60	P10520-ND	.94	.81	.64	ECQ-U2A333MG
	0.047	15.0	6.0	13.0	12.5	0.60	P10521-ND	.97	.84	.66	ECQ-U2A473MG
	0.068	15.0	8.0	15.0	12.5	0.60	P10522-ND	1.07	.92	.72	ECQ-U2A683MG
	0.1	15.0	8.0	16.5	12.5	0.60	P10523-ND	1.07	.93	.73	ECQ-U2A104MG
	0.1	17.5	6.0	15.0	15.0	0.80	P10524-ND	.91	.78	.61	ECQ-U2A104BC1

Voltage (VAC)	Cap. (µF)	Dimensions (mm)					Digi-Key Part No.	Price Each			Panasonic Part No.
		L	T	H	F	dø		1	10	100	
250/ 275	0.15	17.5	8.0	16.5	15.0	0.80	P10525-ND	1.34	1.15	.90	ECQ-U2A154MG
	0.22	17.5	9.0	17.5	15.0	0.80	P10526-ND	1.39	1.19	.94	ECQ-U2A224MG
	0.33	25.5	9.0	18.5	22.5	0.80	P10527-ND	2.30	1.97	1.55	ECQ-U2A334MG
	0.47	25.5	10.5	20.0	22.5	0.80	P10528-ND	2.35	2.01	1.58	ECQ-U2A474MG
	0.68	25.5	12.5	22.0	22.5	0.80	P10529-ND	3.19	2.74	2.15	ECQ-U2A684MG
	1.0	25.5	15.5	24.5	22.5	0.80	P10530-ND	3.55	3.05	2.39	ECQ-U2A105MG
NEW! ECQ-UG — Class X1 NEW!											
250/ 300	0.01	15.0	5.0	11.5	12.5	0.60	P11110-ND	.37	.32	.25	ECQ-U3A103MG
	0.015	15.0	5.0	11.5	12.5	0.60	P11111-ND	.37	.32	.25	ECQ-U3A153MG
	0.022	15.0	5.0	11.5	12.5	0.60	P11112-ND	.37	.32	.25	ECQ-U3A223MG
	0.033	15.0	6.0	13.0	12.5	0.60	P11113-ND	.37	.32	.25	ECQ-U3A333MG
	0.047	15.0	6.0	13.0	12.5	0.60	P11114-ND	.37	.32	.25	ECQ-U3A473MG
	0.068	15.0	8.0	15.0	12.5	0.60	P11115-ND	.37	.32	.25	ECQ-U3A683MG
	0.1	15.0	8.0	15.0	12.5	0.60	P11116-ND	.37	.32	.25	ECQ-U3A104MG
	0.15	17.5	8.0	16.5	15.0	0.80	P11117-ND	.51	.44	.35	ECQ-U3A154MG
	0.22	17.5	9.0	17.5	15.0	0.80	P11118-ND	.61	.53	.42	ECQ-U3A224MG
	0.33	25.5	9.0	18.5	22.5	0.80	P11119-ND	.92	.79	.62	ECQ-U3A334MG
	0.47	25.5	10.5	20.0	22.5	0.80	P11120-ND	1.22	1.05	.83	ECQ-U3A474MG
	0.68	25.5	12.5	22.0	22.5	0.80	P11121-ND	1.63	1.40	1.10	ECQ-U3A684MG
	1.0	27.0	16.5	25.5	22.5	0.80	P11122-ND	2.03	1.75	1.37	ECQ-U3A105MG
ECQ-UL											
250/ 275	0.001	15.0	5.0	11.5	12.5	0.60	P10988-ND	.20	.18	.14	ECQ-U2A102ML
	0.0012	15.0	5.0	11.5	12.5	0.60	P10989-ND	.20	.18	.14	ECQ-U2A122ML
	0.0015	15.0	5.0	11.5	12.5	0.60	P10990-ND	.20	.18	.14	ECQ-U2A152ML
	0.0018	15.0	5.0	11.5	12.5	0.60	P10991-ND	.20	.18	.14	ECQ-U2A182ML
	0.0022	15.0	5.0	11.5	12.5	0.60	P10992-ND	.20	.18	.14	ECQ-U2A222ML
	0.0027	15.0	5.0	11.5	12.5	0.60	P10993-ND	.20	.18	.14	ECQ-U2A272ML
	0.0033	15.0	5.0	11.5	12.5	0.60	P10994-ND	.20	.18	.14	ECQ-U2A332ML
	0.0039	15.0	5.0	11.5	12.5	0.60	P10995-ND	.20	.18	.14	ECQ-U2A392ML
	0.0047	15.0	5.0	11.5	12.5	0.60	P10996-ND	.20	.18	.14	ECQ-U2A472ML
	0.0056	15.0	5.0	11.5	12.5	0.60	P10997-ND	.20	.18	.14	ECQ-U2A562ML
	0.0068	15.0	5.0	11.5	12.5	0.60	P10998-ND	.20	.18	.14	ECQ-U2A682ML
	0.0082	15.0	5.0	11.5	12.5	0.60	P10999-ND	.20	.18	.14	ECQ-U2A822ML
	0.01	15.0	5.0	11.5	12.5	0.60	P10724-ND	.20	.18	.14	ECQ-U2A103ML
	0.012	15.0	5.0	11.5	12.5	0.60	P11000-ND	.20	.18	.14	ECQ-U2A123ML
	0.015	15.0	5.0	11.5	12.5	0.60	P10725-ND	.20	.18	.14	ECQ-U2A153ML
	0.018	15.0	5.0	13.0	12.5	0.60	P11001-ND	.20	.18	.14	ECQ-U2A183ML
	0.022	15.0	5.0	11.5	12.5	0.60	P10726-ND	.20	.18	.14	ECQ-U2A223ML
	0.027	15.0	5.0	11.5	12.5	0.60	P11002-ND	.20	.18	.14	ECQ-U2A273ML
	0.033	15.0	6.0	13.0	12.5	0.60	P10727-ND	.20	.18	.14	ECQ-U2A333ML
	0.039	15.0	6.0	13.0	12.5	0.60	P11003-ND	.20	.18	.14	ECQ-U2A393ML
	0.047	15.0	6.0	13.0	12.5	0.60	P10728-ND	.20	.18	.14	ECQ-U2A473ML
	0.056	17.5	4.5	11.5	15.0	0.60	P11004-ND	.20	.18	.14	ECQ-U2A563ML
	0.068	17.5	4.5	11.5	15.0	0.60	P10729-ND	.20	.18	.14	ECQ-U2A683ML
	0.082	17.5	5.5	12.0	15.0	0.60	P11005-ND	.20	.18	.14	ECQ-U2A823ML
	0.1	17.5	5.5	12.0	15.0	0.60	P10730-ND	.20	.18	.14	ECQ-U2A104ML
	0.12	17.5	6.5	14.5	15.0	0.60	P11006-ND	.21	.19	.15	ECQ-U2A124ML
	0.15	17.5	6.5	14.5	15.0	0.60	P10731-ND	.23	.20	.16	ECQ-U2A154ML
	0.18	17.5	8.0	16.0	15.0	0.60	P11007-ND	.26	.22	.18	ECQ-U2A184ML
	0.22	17.5	8.0	16.0	15.0	0.60	P10732-ND	.28	.24	.19	ECQ-U2A224ML
	0.27	17.5	9.5	17.5	15.0	0.80	P11008-ND	.33	.28	.22	ECQ-U2A274ML
	0.33	17.5	9.5	17.5	15.0	0.80	P10733-ND	.37	.32	.25	ECQ-U2A334ML
	0.39	25.5	8.5	17.5	22.5	0.80	P11009-ND	.42	.36	.29	ECQ-U2A394ML
	0.47	25.5	8.5	17.5	22.5	0.80	P10734-ND	.47	.40	.32	ECQ-U2A474ML
	0.56	25.5	10.5	19.5	22.5	0.80	P11010-ND	.58	.50	.40	ECQ-U2A564ML
	0.68	25.5	10.5	19.5	22.5	0.80	P10735-ND	.69	.59	.47	ECQ-U2A684ML
	0.82	25.5	12.5	22.0	22.5	0.80	P11011-ND	.72	.63	.49	ECQ-U2A824ML
	1.0	25.5	12.0	22.0	22.5	0.80	P10736-ND	.76	.66	.52	ECQ-U2A105ML
	1.2	30.5	16.5	26.5	27.5	0.80	P11012-ND	.92	.79	.62	ECQ-U2A125ML
	1.5	30.5	16.5	26.5	27.5	0.80	P10737-ND	1.07	.92	.72	ECQ-U2A155ML
	1.8	30.5	19.0	29.5	27.5	0.80	P11013-ND	1.17	1.01	.79	ECQ-U2A185ML
	2.2	30.5	19.0	29.5	27.5	0.80	P10738-ND	1.27	1.10	.86	ECQ-U2A225ML

† P4650-KIT-ND ***Digi-Key® X-Y Series Capacitors Kit*** 10 each of all values denoted. (100 pcs.) Notebook style box included. **$59.95**

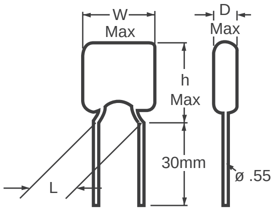
Panasonic® Monolithic Ceramic Capacitors

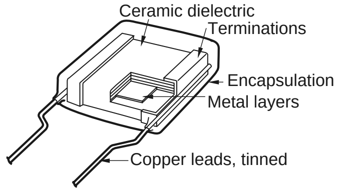
Type COG, X7R, Z5U

Features:
- High capacitance per unit volume
- Suitable for automatic assembly in accordance with IEC standard
- High reliability and damp heat resistance
- Non-polar
- Low-loss
- Pulse strength

Applications:
- Data processing
- Communications engineering
- Measuring and control equipment
- Photo industry
- Entertainment industry
- Medical engineering
- Automotive electronic systems

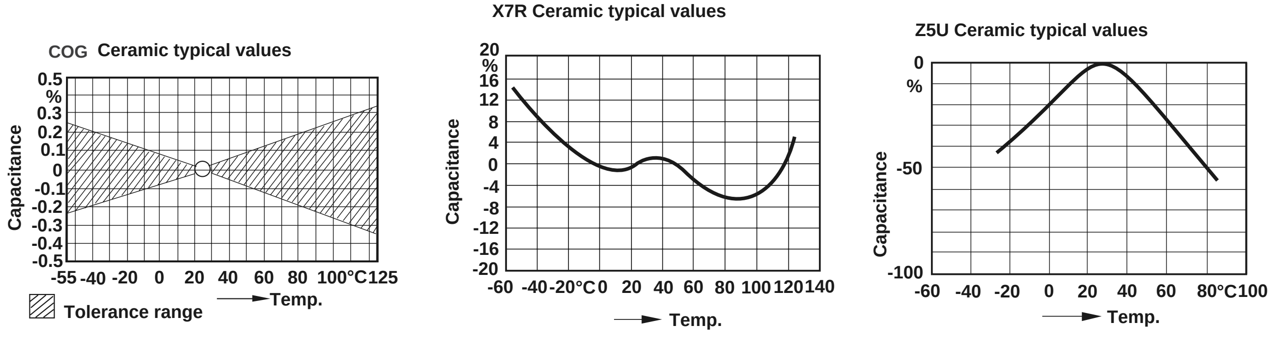
Temperature Range:
COG/X7R: -55 to +125°C
Z5U: -25 to +85°C





Marking: Rated capacitance, tolerance, manufacturer's logo, ceramic material, voltage

Capacitance Change vs. Temperature



			Dimensions (mm)				Digi-Key	Pricing						Panasonic
Type	VDC	Cap.	W*	D*	H*	L	Part No.	1	10	100	500	1,000	5,000	Part No.
COG ±5%	50	100pf	5.0	2.5	5.5	2.5	P4925-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H101JCA
	50	120pf	5.0	2.5	5.5	2.5	P4926-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H121JCA
	50	150pf	5.0	2.5	5.5	2.5	P4927-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H151JCA
	50	180pf	5.0	2.5	5.5	2.5	P4928-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H181JCA
	50	220pf	5.0	2.5	5.5	2.5	P4929-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H221JCA
	50	270pf	5.0	2.5	5.5	2.5	P4930-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H271JCA
	50	330pf	5.0	2.5	5.5	2.5	P4931-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S1H331JCA
	50	390pf	5.0	2.5	5.5	2.5	P4932-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S1H391JCA
	50	470pf	5.0	2.5	5.5	2.5	P4933-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S1H471JCA
	50	560pf	5.0	2.5	5.5	2.5	P4934-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S1H561JCA
	50	680pf	5.0	3.1	6.5	5.0	P4935-ND	.46	3.38	24.15	86.94	135.24	125.58/M	ECU-S1H681JCB
	50	820pf	5.0	3.1	6.5	5.0	P4936-ND	.46	3.38	24.15	86.94	135.24	125.58/M	ECU-S1H821JCB
	50	1000pf	5.0	3.1	6.5	5.0	P4937-ND	.46	3.38	24.15	86.94	135.24	125.58/M	ECU-S1H102JCB
	50	1200pf	5.0	3.1	6.5	5.0	P4938-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H122JCB
	50	1500pf	5.0	3.1	6.5	5.0	P4939-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H152JCB
	50	1800pf	5.0	3.1	6.5	5.0	P4940-ND	.68	4.99	35.65	128.34	199.64	185.38/M	ECU-S1H182JCB
	50	2200pf	5.0	3.1	6.5	5.0	P4941-ND	.68	4.99	35.65	128.34	199.64	185.38/M	ECU-S1H222JCB
	50	2700pf	5.0	3.1	6.5	5.0	P4942-ND	.82	6.07	44.59	161.29	256.16	246.68/M	ECU-S1H272JCB
	50	3300pf	5.0	3.1	6.5	5.0	P4943-ND	.82	6.07	44.59	161.29	256.16	246.68/M	ECU-S1H332JCB
	50	4700pf	5.0	3.1	6.5	5.0	P4944-ND	1.00	7.43	54.59	197.46	313.61	301.99/M	ECU-S1H472JCB
	50	5600pf	7.5	3.8	9.0	5.0	P4945-ND	1.63	12.21	91.60	325.68	541.44	521.09/M	ECU-S1H562JCB
	50	6800pf	7.5	3.8	9.0	5.0	P4946-ND	1.63	12.21	91.60	325.68	541.44	521.09/M	ECU-S1H682JCB
	50	8200pf	7.5	3.8	9.0	5.0	P4947-ND	1.92	14.42	108.16	384.56	639.33	615.30/M	ECU-S1H822JCB
	50	.01µf	7.5	3.8	9.0	5.0	P4948-ND	1.92	14.42	108.16	384.56	639.33	615.30/M	ECU-S1H103JCB
	100	10pf	5.0	2.5	5.5	2.54	P4837-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A100JCA
	100	12pf	5.0	2.5	5.5	2.54	P4838-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A120JCA
	100	15pf	5.0	2.5	5.5	2.54	P4839-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A150JCA
	100	18pf	5.0	2.5	5.5	2.54	P4840-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A180JCA
	100	22pf	5.0	2.5	5.5	2.54	P4841-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A220JCA
	100	27pf	5.0	2.5	5.5	2.54	P4842-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A270JCA
	100	33pf	5.0	2.5	5.5	2.54	P4843-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A330JCA
	100	39pf	5.0	2.5	5.5	2.54	P4844-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A390JCA
	100	47pf	5.0	2.5	5.5	2.54	P4845-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A470JCA

* Max Dimensions. Actual Dimensions may be smaller.

(Continued)

Panasonic Monolithic Ceramic Capacitors *(Cont.)*

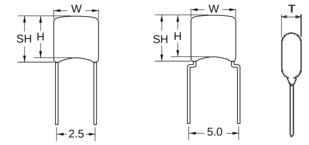
			Dimensions (mm)				Digi-Key	Pricing						Panasonic
Type	**VDC**	**Cap.**	**W***	**D***	**H***	**L**	**Part No.**	**1**	**10**	**100**	**500**	**1,000**	**5,000**	**Part No.**
COG ±5%	100	56pf	5.0	2.5	5.5	2.54	P4846-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A560JCA
	100	68pf	5.0	2.5	5.5	2.54	P4847-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A680JCA
	100	82pf	5.0	2.5	5.5	2.54	P4848-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A820JCA
	100	100pf	5.0	2.5	5.5	2.54	P4849-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A101JCA
	100	120pf	5.0	2.5	5.5	2.54	P4850-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A121JCA
	100	150pf	5.0	2.5	5.5	2.54	P4851-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A151JCA
	100	180pf	5.0	2.5	5.5	2.54	P4852-ND	.38	2.56	18.03	62.27	98.33	85.22/M	ECU-S2A181JCA
	100	220pf	5.0	3.1	6.5	5.08	P4853-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A221JCB
	100	270pf	5.0	3.1	6.5	5.08	P4854-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A271JCB
	100	330pf	5.0	3.1	6.5	5.08	P4855-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A331JCB
	100	390pf	5.0	3.1	6.5	5.08	P4856-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A391JCB
	100	470pf	5.0	3.1	6.5	5.08	P4857-ND	.50	3.41	24.04	83.03	131.10	113.62/M	ECU-S2A471JCB
	100	560pf	5.0	3.1	6.5	5.08	P4858-ND	.49	3.62	25.88	93.15	144.90	134.55/M	ECU-S2A561JCB
	100	680pf	5.0	3.1	6.5	5.08	P4859-ND	.49	3.62	25.88	93.15	144.90	134.55/M	ECU-S2A681JCB
	100	820pf	5.0	3.1	6.5	5.08	P4860-ND	.57	4.23	30.19	108.68	169.05	156.98/M	ECU-S2A821JCB
	100	1000pf	5.0	3.1	6.5	5.08	P4861-ND	.57	4.23	30.19	108.68	169.05	156.98/M	ECU-S2A102JCB
	100	1200pf	5.0	3.1	6.5	5.08	P4862-ND	.69	5.07	36.23	130.41	202.86	188.37/M	ECU-S2A122JCB
	100	1500pf	5.0	3.1	6.5	5.08	P4863-ND	.69	5.07	36.23	130.41	202.86	188.37/M	ECU-S2A152JCB
	100	1800pf	7.5	3.8	9.0	5.08	P4864-ND	1.25	9.31	68.37	247.31	392.78	378.24/M	ECU-S2A182JCB
	100	2200pf	7.5	3.8	9.0	5.08	P4865-ND	1.25	9.31	68.37	247.31	392.78	378.24/M	ECU-S2A222JCB
	100	.018µf	10.0	5.0	11.5	5.08	P4876-ND	3.84	29.09	219.52	823.20	1427.00	1383.00/M	ECU-S2A183JCB
X7R ±10%	50	3300pf	5.0	2.5	5.5	2.5	P4949-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H332KBA
	50	4700pf	5.0	2.5	5.5	2.5	P4950-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H472KBA
	50	6800pf	5.0	2.5	5.5	2.5	P4951-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H682KBA
	50	.010µf	5.0	2.5	5.5	2.5	P4922-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H103KBA
	50	.015µf	5.0	2.5	5.5	2.5	P4952-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S1H153KBA
	50	.022µf	5.0	2.5	5.5	2.5	P4953-ND	.40	2.69	18.98	65.55	103.50	89.70/M	ECU-S1H223KBA
	50	.033µf	5.0	2.5	5.5	5.0	P4954-ND	.49	3.32	23.40	80.85	127.65	110.63/M	ECU-S1H333KBB
	50	.047µf	5.0	2.5	5.5	5.0	P4955-ND	.49	3.32	23.40	80.85	127.65	110.63/M	ECU-S1H473KBB
	50	.068µf	5.0	2.5	5.5	5.0	P4956-ND	.48	3.54	25.30	91.08	141.68	131.56/M	ECU-S1H683KBB
	50	.10µf	5.0	2.5	5.5	5.0	P4923-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H104KBB
	50	.15µf	5.0	2.5	5.5	5.0	P4957-ND	.79	5.80	41.40	149.04	231.84	215.28/M	ECU-S1H154KBB
	50	.22µf	7.5	3.8	9.0	5.0	P4958-ND	1.18	8.80	64.59	233.62	371.05	357.31/M	ECU-S1H224KBB
	50	.33µf	7.5	3.8	9.0	5.0	P4959-ND	1.45	10.82	79.45	287.39	456.44	439.53/M	ECU-S1H334KBB
	50	.47µf	7.5	3.8	9.0	5.0	P4960-ND	1.74	13.08	98.07	348.68	579.68	557.89/M	ECU-S1H474KBB
	50	.68µf	7.5	3.8	9.0	5.0	P4961-ND	2.42	18.11	135.84	483.00	802.99	772.80/M	ECU-S1H684KBB
	50	1.0µf	10.0	5.0	11.5	5.0	P4962-ND	3.12	23.59	178.02	667.58	1157.13	1121.53/M	ECU-S1H105KBB
	63	.15µf	5.0	2.5	5.5	5.08	P4888-ND	.58	4.27	30.51	109.84	171.00	159.00/M	ECU-S1J154KBB
	100	470pf	5.0	2.5	5.5	2.54	P4896-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A471KBA
	100	680pf	5.0	2.5	5.5	2.54	P4897-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A681KBA
	100	1000pf	5.0	2.5	5.5	2.54	P4898-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A102KBA
	100	1500pf	5.0	2.5	5.5	2.54	P4899-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A152KBA
	100	2200pf	5.0	2.5	5.5	2.54	P4900-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A222KBA
	100	3300pf	5.0	2.5	5.5	2.54	P4901-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A332KBA
	100	4700pf	5.0	2.5	5.5	2.54	P4902-ND	.35	2.38	16.76	57.90	91.43	79.24/M	ECU-S2A472KBA
	100	6800pf	5.0	3.1	6.5	2.54	P4903-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S2A682KBA
	100	.010µf	5.0	3.1	6.5	2.54	P4904-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S2A103KBA
	100	.015µf	5.0	3.1	6.5	2.54	P4905-ND	.44	3.00	21.19	73.20	115.58	100.17/M	ECU-S2A153KBA
	100	.022µf	5.0	3.1	6.5	2.54	P4906-ND	.48	3.23	22.77	78.66	124.20	107.64/M	ECU-S2A223KBA
	100	.033µf	5.0	3.1	6.5	2.54	P4907-ND	.54	3.68	25.93	89.59	141.45	122.59/M	ECU-S2A333KBA
	100	.047µf	5.0	3.1	6.5	2.54	P4908-ND	.51	3.78	27.03	97.29	151.34	140.53/M	ECU-S2A473KBA
	100	.068µf	5.0	3.1	6.5	2.54	P4909-ND	.60	4.39	31.34	112.82	175.49	162.96/M	ECU-S2A683KBA
	100	.10µf	5.0	3.1	6.5	2.54	P4910-ND	.74	5.47	39.10	140.76	218.96	203.32/M	ECU-S2A104KBA
	100	.15µf	7.5	3.8	9.0	5.08	P4911-ND	1.24	9.20	67.56	244.38	388.13	373.75/M	ECU-S2A154KBB
Z5U ±20%	50	.010µf	5.0	2.5	5.5	2.5	P4963-ND	.32	2.15	15.18	52.44	82.80	71.76/M	ECU-S1H103MEA
	50	.022µf	5.0	2.5	5.5	2.5	P4964-ND	.32	2.15	15.18	52.44	82.80	71.76/M	ECU-S1H223MEA
	50	.047µf	5.0	2.5	5.5	2.5	P4965-ND	.37	2.51	17.71	61.18	96.60	83.72/M	ECU-S1H473MEA
	50	.10µf	5.0	3.1	6.5	2.5	P4924-ND	.43	2.92	20.56	71.01	112.13	97.18/M	ECU-S1H104MEA
	50	.22µf	5.0	3.1	6.5	2.5	P4966-ND	.55	4.07	29.04	104.54	162.61	151.00/M	ECU-S1H224MEA
	50	.47µf	7.5	3.8	9.0	5.0	P4967-ND	.99	7.36	54.05	195.50	310.50	299.00/M	ECU-S1H474MEB
	50	1.0µf	7.5	3.8	9.0	5.0	P4968-ND	1.44	10.71	78.64	284.45	451.78	435.05/M	ECU-S1H105MEB
	50	2.2µf	10.0	5.0	11.5	5.0	P4969-ND	3.24	24.56	185.38	695.18	1204.97	1167.90/M	ECU-S1H225MEB
	63	.022µf	5.0	2.5	5.5	2.54	P4915-ND	.23	1.59	11.19	38.65	61.00	53.00/M	ECU-S1J223MEA

* Max Dimensions. Actual Dimensions may be smaller.

Mono-Kap™ Leaded Ceramic Multilayer Capacitors

These conformally coated radial leaded capacitors are designed for commercial and industrial applications, such as: timing, coupling/decoupling, signal comparison and biasing.

Size Code	Dimensions (mm)			SH Max.	
	W Max.	H Max.	T Max.	2.5mm LS	5.08mm LS
15	4.0	4.0	2.5	5.58	6.5
20	5.0	5.0	3.2	6.58	7.5
30	7.5	7.5	3.8	9.08	10.7

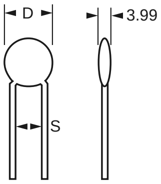


2.5mm Lead Spacing   5.08mm Lead Spacing

Cap. Value	Size Code	LS	Digi-Key Part No.	Cut Tape Price Each		Digi-Key Part No.	Tape & Reel Pricing	BC Components Part No.
				10	100			
Type COG 50V ±5%								
10 pf	15	2.54	BC1001CT-ND	.11	.08	BC1001TR-ND	144.00/4000	K100J15C0GF5TL2
12 pf	15	2.54	BC1002CT-ND	.11	.08	BC1002TR-ND	144.00/4000	K120J15C0GF5TL2
15 pf	15	2.54	BC1003CT-ND	.11	.08	BC1003TR-ND	144.00/4000	K150J15C0GF5TL2
18 pf	15	2.54	BC1004CT-ND	.11	.08	BC1004TR-ND	144.00/4000	K180J15C0GF5TL2
22 pf	15	2.54	BC1005CT-ND	.11	.08	BC1005TR-ND	144.00/4000	K220J15C0GF5TL2
27 pf	15	2.54	BC1006CT-ND	.11	.08	BC1006TR-ND	144.00/4000	K270J15C0GF5TL2
33 pf	15	2.54	BC1007CT-ND	.11	.08	BC1007TR-ND	144.00/4000	K330J15C0GF5TL2
39 pf	15	2.54	BC1008CT-ND	.11	.08	BC1008TR-ND	144.00/4000	K390J15C0GF5TL2
47 pf	15	2.54	BC1009CT-ND	.11	.08	BC1009TR-ND	144.00/4000	K470J15C0GF5TL2
56 pf	15	2.54	BC1010CT-ND	.12	.09	BC1010TR-ND	151.20/4000	K560J15C0GF5TL2
68 pf	15	2.54	BC1011CT-ND	.12	.09	BC1011TR-ND	151.20/4000	K680J15C0GF5TL2
82 pf	15	2.54	BC1012CT-ND	.12	.09	BC1012TR-ND	151.20/4000	K820J15C0GF5TL2
100 pf	15	2.54	BC1013CT-ND	.12	.09	BC1013TR-ND	151.20/4000	K101J15C0GF5TL2
120 pf	15	2.54	BC1014CT-ND	.13	.09	BC1014TR-ND	165.60/4000	K121J15C0GF5TL2
150 pf	15	2.54	BC1015CT-ND	.13	.09	BC1015TR-ND	165.60/4000	K151J15C0GF5TL2
180 pf	15	2.54	BC1016CT-ND	.13	.09	BC1016TR-ND	165.60/4000	K181J15C0GF5TL2
220 pf	15	2.54	BC1017CT-ND	.13	.09	BC1017TR-ND	165.60/4000	K221J15C0GF5TL2
270 pf	15	2.54	BC1018CT-ND	.14	.10	BC1018TR-ND	180.00/4000	K271J15C0GF5TL2
330 pf	15	2.54	BC1019CT-ND	.14	.10	BC1019TR-ND	180.00/4000	K331J15C0GF5TL2
390 pf	15	2.54	BC1020CT-ND	.15	.11	BC1020TR-ND	194.40/4000	K391J15C0GF5TL2
470 pf	15	2.54	BC1021CT-ND	.16	.11	BC1021TR-ND	201.60/4000	K471J15C0GF5TL2
560 pf	15	2.54	BC1022CT-ND	.16	.12	BC1022TR-ND	208.80/4000	K561J15C0GF5TL2
680 pf	15	2.54	BC1023CT-ND	.17	.12	BC1023TR-ND	216.00/4000	K681J15C0GF5TL2
820 pf	15	2.54	BC1024CT-ND	.18	.13	BC1024TR-ND	230.40/4000	K821J15C0GF5TL2
1000 pf	15	2.54	BC1025CT-ND	.17	.13	BC1025TR-ND	223.20/4000	K102J15C0GF5TL2
1200 pf	15	2.54	BC1026CT-ND	.18	.13	BC1026TR-ND	230.40/4000	K122J15C0GF5TL2
1500 pf	15	2.54	BC1027CT-ND	.18	.13	BC1027TR-ND	230.40/4000	K152J15C0GF5TL2
1800 pf	15	2.54	BC1028CT-ND	.21	.15	BC1028TR-ND	273.60/4000	K182J15C0GF5TL2
2200 pf	15	2.54	BC1029CT-ND	.22	.16	BC1029TR-ND	280.80/4000	K222J15C0GF5TL2
10 pf	15	5.08	BC1030CT-ND	.11	.08	BC1030TR-ND	144.00/4000	K100J15C0GF5TH5
12 pf	15	5.08	BC1031CT-ND	.11	.08	BC1031TR-ND	144.00/4000	K120J15C0GF5TH5
15 pf	15	5.08	BC1032CT-ND	.11	.08	BC1032TR-ND	144.00/4000	K150J15C0GF5TH5
18 pf	15	5.08	BC1033CT-ND	.11	.08	BC1033TR-ND	144.00/4000	K180J15C0GF5TH5
22 pf	15	5.08	BC1034CT-ND	.11	.08	BC1034TR-ND	144.00/4000	K220J15C0GF5TH5
27 pf	15	5.08	BC1035CT-ND	.11	.08	BC1035TR-ND	144.00/4000	K270J15C0GF5TH5
33 pf	15	5.08	BC1036CT-ND	.11	.08	BC1036TR-ND	144.00/4000	K330J15C0GF5TH5
39 pf	15	5.08	BC1037CT-ND	.11	.08	BC1037TR-ND	144.00/4000	K390J15C0GF5TH5
47 pf	15	5.08	BC1038CT-ND	.11	.08	BC1038TR-ND	144.00/4000	K470J15C0GF5TH5
56 pf	15	5.08	BC1039CT-ND	.12	.09	BC1039TR-ND	151.20/4000	K560J15C0GF5TH5
68 pf	15	5.08	BC1040CT-ND	.12	.09	BC1040TR-ND	151.20/4000	K680J15C0GF5TH5
82 pf	15	5.08	BC1041CT-ND	.12	.09	BC1041TR-ND	151.20/4000	K820J15C0GF5TH5
100 pf	15	5.08	BC1042CT-ND	.12	.09	BC1042TR-ND	151.20/4000	K101J15C0GF5TH5
150 pf	15	5.08	BC1043CT-ND	.13	.09	BC1043TR-ND	165.60/4000	K151J15C0GF5TH5
220 pf	15	5.08	BC1044CT-ND	.13	.09	BC1044TR-ND	165.60/4000	K221J15C0GF5TH5
330 pf	15	5.08	BC1045CT-ND	.14	.10	BC1045TR-ND	180.00/4000	K331J15C0GF5TH5
470 pf	15	5.08	BC1046CT-ND	.16	.11	BC1046TR-ND	201.60/4000	K471J15C0GF5TH5
680 pf	15	5.08	BC1047CT-ND	.17	.12	BC1047TR-ND	216.00/4000	K681J15C0GF5TH5
1000 pf	15	5.08	BC1048CT-ND	.17	.13	BC1048TR-ND	223.20/4000	K102J15C0GF5TH5
1500 pf	15	5.08	BC1049CT-ND	.18	.13	BC1049TR-ND	230.40/4000	K152J15C0GF5TH5
2200 pf	15	5.08	BC1050CT-ND	.21	.15	BC1050TR-ND	273.60/4000	K222J15C0GF5TH5
3300 pf	20	5.08	BC1051CT-ND	.30	.22	BC1051TR-ND	297.00/3000	K332J20C0GF5TH5
4700 pf	20	5.08	BC1052CT-ND	.37	.27	BC1052TR-ND	361.80/3000	K472J20C0GF5TH5
Type COG 100V ±5%								
10 pf	15	2.54	BC1054CT-ND	.11	.08	BC1054TR-ND	144.00/4000	K100J15C0GH5TL2
22 pf	15	2.54	BC1055CT-ND	.11	.08	BC1055TR-ND	144.00/4000	K220J15C0GH5TL2
47 pf	15	2.54	BC1056CT-ND	.11	.08	BC1056TR-ND	144.00/4000	K470J15C0GH5TL2
100 pf	15	2.54	BC1057CT-ND	.12	.09	BC1057TR-ND	151.20/4000	K101J15C0GH5TL2
220 pf	15	2.54	BC1058CT-ND	.15	.11	BC1058TR-ND	194.40/4000	K221J15C0GH5TL2
470 pf	15	2.54	BC1059CT-ND	.20	.15	BC1059TR-ND	259.20/4000	K471J15C0GH5TL2
1000 pf	20	2.54	BC1060CT-ND	.30	.22	BC1060TR-ND	297.00/3000	K102J20C0GH5TL2
10 pf	15	5.08	BC1061CT-ND	.11	.08	BC1061TR-ND	144.00/4000	K100J15C0GH5TH5
22 pf	15	5.08	BC1062CT-ND	.11	.08	BC1062TR-ND	144.00/4000	K220J15C0GH5TH5
47 pf	15	5.08	BC1063CT-ND	.11	.08	BC1063TR-ND	144.00/4000	K470J15C0GH5TH5
100 pf	15	5.08	BC1064CT-ND	.12	.09	BC1064TR-ND	151.20/4000	K101J15C0GH5TH5
220 pf	15	5.08	BC1065CT-ND	.15	.11	BC1065TR-ND	194.40/4000	K221J15C0GH5TH5
470 pf	15	5.08	BC1066CT-ND	.20	.15	BC1066TR-ND	259.20/4000	K471J15C0GH5TH5
1000 pf	20	5.08	BC1067CT-ND	.30	.22	BC1067TR-ND	297.00/3000	K102J20C0GH5TH5
Type X7R 50V ±10%								
220 pf	15	2.54	BC1068CT-ND	.11	.08	BC1068TR-ND	136.80/4000	K221K15X7RF5TL2
330 pf	15	2.54	BC1069CT-ND	.11	.08	BC1069TR-ND	136.80/4000	K331K15X7RF5TL2
470 pf	15	2.54	BC1070CT-ND	.11	.08	BC1070TR-ND	136.80/4000	K471K15X7RF5TL2
680 pf	15	2.54	BC1071CT-ND	.11	.08	BC1071TR-ND	136.80/4000	K681K15X7RF5TL2
1000 pf	15	2.54	BC1072CT-ND	.11	.08	BC1072TR-ND	136.80/4000	K102K15X7RF5TL2
1500 pf	15	2.54	BC1073CT-ND	.11	.08	BC1073TR-ND	136.80/4000	K152K15X7RF5TL2
2200 pf	15	2.54	BC1074CT-ND	.11	.08	BC1074TR-ND	136.80/4000	K222K15X7RF5TL2
3300 pf	15	2.54	BC1075CT-ND	.12	.09	BC1075TR-ND	151.20/4000	K332K15X7RF5TL2
4700 pf	15	2.54	BC1076CT-ND	.12	.09	BC1076TR-ND	151.20/4000	K472K15X7RF5TL2
6800 pf	15	2.54	BC1077CT-ND	.12	.09	BC1077TR-ND	151.20/4000	K682K15X7RF5TL2
.01 µf	15	2.54	BC1078CT-ND	.11	.08	BC1078TR-ND	144.00/4000	K103K15X7RF5TL2
.015 µf	15	2.54	BC1079CT-ND	.12	.09	BC1079TR-ND	158.40/4000	K153K15X7RF5TL2
.022 µf	15	2.54	BC1080CT-ND	.13	.09	BC1080TR-ND	165.60/4000	K223K15X7RF5TL2
.033 µf	15	2.54	BC1081CT-ND	.14	.10	BC1081TR-ND	180.00/4000	K333K15X7RF5TL2
.047 µf	15	2.54	BC1082CT-ND	.14	.11	BC1082TR-ND	187.20/4000	K473K15X7RF5TL2
.068 µf	20	2.54	BC1083CT-ND	.20	.15	BC1083TR-ND	259.20/4000	K683K15X7RF5TL2
.1 µf	20	2.54	BC1084CT-ND	.19	.14	BC1084TR-ND	244.80/4000	K104K15X7RF5TL2
220 pf	15	5.08	BC1085CT-ND	.11	.08	BC1085TR-ND	136.80/4000	K221K15X7RF5TH5
330 pf	15	5.08	BC1086CT-ND	.11	.08	BC1086TR-ND	136.80/4000	K331K15X7RF5TH5
470 pf	15	5.08	BC1087CT-ND	.11	.08	BC1087TR-ND	136.80/4000	K471K15X7RF5TH5
680 pf	15	5.08	BC1088CT-ND	.11	.08	BC1088TR-ND	136.80/4000	K681K15X7RF5TH5
1000 pf	15	5.08	BC1089CT-ND	.11	.08	BC1089TR-ND	136.80/4000	K102K15X7RF5TH5
1500 pf	15	5.08	BC1090CT-ND	.11	.08	BC1090TR-ND	136.80/4000	K152K15X7RF5TH5
2200 pf	15	5.08	BC1091CT-ND	.11	.08	BC1091TR-ND	136.80/4000	K222K15X7RF5TH5
3300 pf	15	5.08	BC1092CT-ND	.12	.09	BC1092TR-ND	151.20/4000	K332K15X7RF5TH5
4700 pf	15	5.08	BC1093CT-ND	.12	.09	BC1093TR-ND	151.20/4000	K472K15X7RF5TH5
6800 pf	15	5.08	BC1094CT-ND	.12	.09	BC1094TR-ND	151.20/4000	K682K15X7RF5TH5
.01 µf	15	5.08	BC1095CT-ND	.11	.08	BC1095TR-ND	144.00/4000	K103K15X7RF5TH5
.015 µf	15	5.08	BC1096CT-ND	.12	.09	BC1096TR-ND	158.40/4000	K153K15X7RF5TH5
.022 µf	15	5.08	BC1097CT-ND	.13	.09	BC1097TR-ND	165.60/4000	K223K15X7RF5TH5
.033 µf	15	5.08	BC1098CT-ND	.14	.10	BC1098TR-ND	180.00/4000	K333K15X7RF5TH5
.047 µf	15	5.08	BC1099CT-ND	.14	.11	BC1099TR-ND	187.20/4000	K473K15X7RF5TH5
.068 µf	20	5.08	BC1100CT-ND	.20	.15	BC1100TR-ND	259.20/4000	K683K20X7RF5TH5
.1 µf	20	5.08	BC1101CT-ND	.19	.14	BC1101TR-ND	244.80/4000	K104K15X7RF5TH5
.15 µf	20	5.08	BC1102CT-ND	.38	.27	BC1102TR-ND	372.60/3000	K154K20X7RF5TH5
.22 µf	20	5.08	BC1103CT-ND	.40	.29	BC1103TR-ND	399.60/3000	K224K20X7RF5TH5
Type X7R 100V ±10%								
220 pf	15	2.54	BC1106CT-ND	.11	.08	BC1106TR-ND	136.80/4000	K221K15X7RH5TL2
470 pf	15	2.54	BC1107CT-ND	.11	.08	BC1107TR-ND	136.80/4000	K471K15X7RH5TL2
1000 pf	15	2.54	BC1108CT-ND	.11	.08	BC1108TR-ND	136.80/4000	K102K15X7RH5TL2
2200 pf	15	2.54	BC1109CT-ND	.11	.08	BC1109TR-ND	144.00/4000	K222K15X7RH5TL2
4700 pf	15	2.54	BC1110CT-ND	.12	.09	BC1110TR-ND	151.20/4000	K472K15X7RH5TL2
.01 µf	15	2.54	BC1111CT-ND	.13	.10	BC1111TR-ND	172.80/4000	K103K15X7RH5TL2
.022 µf	20	2.54	BC1112CT-ND	.17	.12	BC1112TR-ND	216.00/4000	K223K20X7RH5TL2
.047 µf	20	2.54	BC1113CT-ND	.21	.15	BC1113TR-ND	205.20/3000	K473K20X7RH5TL2
.1 µf	20	2.54	BC1114CT-ND	.26	.19	BC1114TR-ND	259.20/3000	K104K20X7RH5TL2
220 pf	15	5.08	BC1115CT-ND	.11	.08	BC1115TR-ND	136.80/4000	K221K15X7RH5TH5
470 pf	15	5.08	BC1116CT-ND	.11	.08	BC1116TR-ND	136.80/4000	K471K15X7RH5TH5
1000 pf	15	5.08	BC1117CT-ND	.11	.08	BC1117TR-ND	136.80/4000	K102K15X7RH5TH5
2200 pf	15	5.08	BC1118CT-ND	.11	.08	BC1118TR-ND	144.00/4000	K222K15X7RH5TH5
4700 pf	15	5.08	BC1119CT-ND	.12	.09	BC1119TR-ND	151.20/4000	K472K15X7RH5TH5
.01 µf	15	5.08	BC1120CT-ND	.13	.10	BC1120TR-ND	172.80/4000	K103K15X7RH5TH5
.022 µf	20	5.08	BC1121CT-ND	.17	.12	BC1121TR-ND	216.00/4000	K223K15X7RH5TH5
.047 µf	20	5.08	BC1122CT-ND	.21	.15	BC1122TR-ND	205.20/3000	K473K20X7RH5TH5
.1 µf	20	5.08	BC1123CT-ND	.26	.19	BC1123TR-ND	259.20/3000	K104K15X7RH5TH5
Type Z5U 50V ±20%								
.01 µf	15	2.54	BC1124CT-ND	.11	.08	BC1124TR-ND	136.80/4000	K103M15Z5UF5TL2
.022 µf	15	2.54	BC1125CT-ND	.11	.08	BC1125TR-ND	144.00/4000	K223M15Z5UF5TL2
.047 µf	15	2.54	BC1126CT-ND	.12	.09	BC1126TR-ND	151.20/4000	K473M15Z5UF5TL2
.1 µf	15	2.54	BC1127CT-ND	.11	.08	BC1127TR-ND	144.00/4000	K104M15Z5UF5TL2
.15 µf	15	2.54	BC1128CT-ND	.13	.10	BC1128TR-ND	172.80/4000	K154M15Z5UF5TL2
.22 µf	15	2.54	BC1129CT-ND	.18	.13	BC1129TR-ND	237.60/4000	K224M15Z5UF5TL2
.01 µf	15	5.08	BC1130CT-ND	.11	.08	BC1130TR-ND	136.80/4000	K103M15Z5UF5TH5
.022 µf	15	5.08	BC1131CT-ND	.11	.08	BC1131TR-ND	144.00/4000	K223M15Z5UF5TH5
.047 µf	15	5.08	BC1132CT-ND	.12	.09	BC1132TR-ND	151.20/4000	K473M15Z5UF5TH5
.1 µf	15	5.08	BC1133CT-ND	.11	.08	BC1133TR-ND	144.00/4000	K104M15Z5UF5TH5
.15 µf	15	5.08	BC1134CT-ND	.13	.10	BC1134TR-ND	172.80/4000	K154M15Z5UF5TH5
.22 µf	15	5.08	BC1135CT-ND	.18	.13	BC1135TR-ND	237.60/4000	K224M15Z5UF5TH5
.33 µf	20	5.08	BC1136CT-ND	.23	.17	BC1136TR-ND	226.80/3000	K334M20Z5UF5TH5
.47 µf	20	5.08	BC1137CT-ND	.29	.21	BC1137TR-ND	280.80/3000	K474M20Z5UF5TH5
.68 µf	20	5.08	BC1138CT-ND	.41	.30	BC1138TR-ND	410.40/3000	K684M20Z5UF5TH5
1 µf	20	5.08	BC1139CT-ND	.48	.35	BC1139TR-ND	475.20/3000	K105M20Z5UF5TH5
Type Z5U 100V ±20%								
.01 µf	15	2.54	BC1140CT-ND	.12	.09	BC1140TR-ND	158.40/4000	K103M15Z5UH5TL2
.022 µf	20	2.54	BC1141CT-ND	.15	.11	BC1141TR-ND	145.80/3000	K223M20Z5UH5TL2
.047 µf	20	2.54	BC1142CT-ND	.19	.14	BC1142TR-ND	183.60/3000	K473M20Z5UH5TL2
.1 µf	20	2.54	BC1143CT-ND	.26	.19	BC1143TR-ND	253.80/3000	K104M20Z5UH5TL2
.01 µf	15	5.08	BC1144CT-ND	.12	.09	BC1144TR-ND	158.40/4000	K103M15Z5UH5TH5
.1 µf	20	5.08	BC1145CT-ND	.26	.19	BC1145TR-ND	253.80/3000	K104M20Z5UH5TH5
Type Y5V 25V +80 -20%								
.01 µf	15	2.54	BC1146CT-ND	.11	.08	BC1146TR-ND	136.80/4000	K103Z15Y5VE5TL2
.022 µf	15	2.54	BC1147CT-ND	.11	.08	BC1147TR-ND	136.80/4000	K223Z15Y5VE5TL2
.1 µf	15	2.54	BC1148CT-ND	.11	.08	BC1148TR-ND	144.00/4000	K104Z15Y5VE5TL2
.22 µf	15	2.54	BC1149CT-ND	.18	.13	BC1149TR-ND	230.40/4000	K224Z15Y5VE5TL2
.47 µf	20	2.54	BC1150CT-ND	.27	.20	BC1150TR-ND	270.00/3000	K474Z20Y5VE5TL2
1 µf	20	2.54	BC1151CT-ND	.47	.34	BC1151TR-ND	464.40/3000	K105Z20Y5VE5TL2
.01 µf	15	5.08	BC1152CT-ND	.11	.08	BC1152TR-ND	136.80/4000	K103Z15Y5VE5TH5
.022 µf	15	5.08	BC1153CT-ND	.11	.08	BC1153TR-ND	136.80/4000	K223Z15Y5VE5TH5
.1 µf	15	5.08	BC1154CT-ND	.11	.08	BC1154TR-ND	144.00/4000	K104Z15Y5VE5TH5
.22 µf	15	5.08	BC1155CT-ND	.18	.13	BC1155TR-ND	230.40/4000	K224Z15Y5VE5TH5
.47 µf	20	5.08	BC1156CT-ND	.27	.20	BC1156TR-ND	270.00/3000	K474Z20Y5VE5TH5
1 µf	20	5.08	BC1157CT-ND	.47	.34	BC1157TR-ND	464.40/3000	K105Z20Y5VE5TH5
Type Y5V 50V +80 -20%								
.01 µf	15	2.54	BC1158CT-ND	.11	.08	BC1158TR-ND	136.80/4000	K103Z15Y5VF5TL2
.022 µf	15	2.54	BC1159CT-ND	.11	.08	BC1159TR-ND	144.00/4000	K223Z15Y5VF5TL2
.1 µf	15	2.54	BC1160CT-ND	.11	.08	BC1160TR-ND	144.00/4000	K104Z15Y5VF5TL2
.22 µf	15	2.54	BC1161CT-ND	.18	.13	BC1161TR-ND	237.60/4000	K224Z15Y5VF5TL2
1 µf	20	2.54	BC1162CT-ND	.48	.35	BC1162TR-ND	475.20/3000	K105Z20Y5VF5TL2
.01 µf	15	5.08	BC1163CT-ND	.11	.08	BC1163TR-ND	136.80/4000	K103Z15Y5VF5TH5
.022 µf	15	5.08	BC1164CT-ND	.11	.08	BC1164TR-ND	144.00/4000	K223Z15Y5VF5TH5
.1 µf	15	5.08	BC1165CT-ND	.11	.08	BC1165TR-ND	144.00/4000	K104Z15Y5VF5TH5
.22 µf	15	5.08	BC1166CT-ND	.18	.13	BC1166TR-ND	237.60/4000	K224Z15Y5VF5TH5
.47 µf	20	5.08	BC1167CT-ND	.28	.20	BC1167TR-ND	275.40/3000	K474Z20Y5VF5TH5
1 µf	20	5.08	BC1168CT-ND	.48	.35	BC1168TR-ND	475.20/3000	K105Z20Y5VF5TH5

Ceramic Disc Capacitors

EIA Temperature Coefficient Code	COG	U2M	Y5V	Y5P
Capacitance Temperature Coefficient	30PPM/°C	+150 to N1500PPM/°C	+22%, -82%	±10%
Operating Temperature Range	-25 to +85°C	-25 to +85°C	-30 to +85°C	-30 to +85°C
Tolerance on Capacitance	±5%	±5%	+80/-20%	±10%
Q Factor	C ≥ 30pf: Q ≥ 1000 C < 30pf: Q ≥ 400 +20°C	C ≥ 30pf: Q ≥ 1000 C < 30pf: Q ≥ 400 +20°C	— —	— —
Dissipation Factor	—	—	4.0% max.	2.5% max.
Insulation Resistance	10000 MΩ	10000 MΩ min.	10000 MΩ min.	10000 MΩ min.



	Dimensions (mm)		Capacitance	Digi-Key	Pricing				BC Components
Tolerance	D	S	Value	Part No.	10	100	500	1,000	Part No.
				Type U2M, 100V					
5%	5.00	6.35	15pF	1303PH-ND•	.72	5.67	20.60	30.00	D150J20U2MHAAAC
5%	5.00	6.35	18pF	1304PH-ND•	.72	5.67	20.60	30.00	D180J20U2MHAAAC
5%	5.00	6.35	22pF	1305PH-ND•	.72	5.67	20.60	30.00	D220J20U2MHAAAC
5%	5.00	6.35	27pF	1306PH-ND•	.72	5.67	20.60	30.00	D270J20U2MHAAAC
5%	5.00	6.35	33pF	1307PH-ND•	.72	5.67	20.60	30.00	D330J20U2MHAAAC
5%	5.00	6.35	39pF	1308PH-ND•	.72	5.67	20.60	30.00	D390J20U2MHAAAC
5%	5.00	6.35	47pF	1309PH-ND•	.72	5.67	20.60	30.00	D470J20U2MHAAAC
5%	5.00	6.35	56pF	1310PH-ND•	.72	5.67	20.60	30.00	D560J20U2MHAAAC
5%	6.50	6.35	68pF	1311PH-ND•	.72	5.67	20.60	30.00	D680J25U2MHAAAC
5%	7.37	6.35	150pF	1315PH-ND•	.80	6.27	22.80	34.00	D151J33COGH63L6
5%	7.37	6.35	180pF	1316PH-ND•	.80	6.27	22.80	34.00	D181J31U2MHAAAC
5%	10.01	6.35	220pF	1317PH-ND•	.80	6.27	22.80	34.00	D221J39U2MHAAAC
5%	10.01	6.35	270pF	1318PH-ND•	.89	6.96	25.30	37.00	D271J39U2MHAAAC
5%	10.01	6.35	330pF	1319PH-ND•	.89	6.96	25.30	37.00	D331J39U2MHAAAC
5%	11.99	6.35	470pF	1321PH-ND•	1.10	8.61	31.30	46.00	D471J47U2MHAAAC
5%	11.99	6.35	1000pF	1325PH-ND•	1.40	11.00	40.00	59.00	D102J69U2MHAAAC
				Type COG, 100V					
±.5	5.00	6.35	10pF	1326PH-ND	.72	5.67	20.60	30.00	D100D20COGHAAAC
5%	5.00	6.35	15pF	1328PH-ND	.72	5.67	20.60	30.00	D150J20COGHAAAC
5%	5.00	6.35	18pF	1329PH-ND	.72	5.67	20.60	30.00	D180J20COGHAAAC
5%	5.00	6.35	22pF	1330PH-ND	.72	5.67	20.60	30.00	D220J20COGHAAAC
5%	5.00	6.35	27pF	1331PH-ND	.72	5.67	20.60	30.00	D270J20COGHAAAC
5%	5.00	6.35	33pF	1332PH-ND	.72	5.67	20.60	30.00	D330J20COGHAAAC
5%	6.50	6.35	39pF	1333PH-ND	.72	5.67	20.60	30.00	D390J25COGHAAAC
5%	6.50	6.35	47pF	1334PH-ND	.80	6.27	22.80	34.00	D470J25COGH63L6
5%	6.50	6.35	56pF	1335PH-ND	.80	6.27	22.80	34.00	D560J25COGHAAAC
5%	6.50	6.35	68pF	1336PH-ND	.80	6.27	22.80	34.00	D680J25COGHAAAC
5%	7.37	6.35	100pF	1338PH-ND	.88	6.88	25.00	37.00	D101J29COGHAAAC
5%	7.37	6.35	120pF	1339PH-ND	.88	6.88	25.00	37.00	D121J33COGH63L6
5%	10.01	6.35	150pF	1340PH-ND	1.10	8.66	31.50	46.00	D151J33COGH63L6
5%	10.01	6.35	220pF	1342PH-ND	1.10	8.66	31.50	46.00	D221J39COGHAAAC
				Type U2M, 500V					
10%	5.00	6.35	22pF	1347PH-ND	1.37	10.73	39.00	57.00	D220K20U2MLAAAA
10%	6.50	6.35	33pF	1349PH-ND	1.72	13.48	49.00	72.00	D330K25U2MLAAAA
				Type COG, 500V					
±.5	5.00	6.35	10pF	1355PH-ND	1.37	10.73	39.00	57.00	D100D20COGLAAAA
5%	5.00	6.35	15pF	1356PH-ND	1.37	10.73	39.00	57.00	D150J20COGLAAAA
5%	6.50	6.35	22pF	1358PH-ND	1.72	13.48	49.00	72.00	D220J25COGLAAAA
				Type Y5P, 100V					
10%	5.00	6.35	100pF	1371PH-ND	.77	6.05	22.00	32.00	D101K20Y5PHAAEU
10%	5.00	6.35	180pF	1374PH-ND	.77	6.05	22.00	32.00	D181K20Y5PHAAEU
10%	5.00	6.35	220pF	1375PH-ND	.77	6.05	22.00	32.00	D221K20Y5PHAAEU
10%	5.00	6.35	330pF	1377PH-ND	.77	6.05	22.00	32.00	D331K20Y5PHAAEU
10%	5.00	6.35	470pF	1379PH-ND	.77	6.05	22.00	32.00	D471K20Y5PHAAEU
10%	5.00	6.35	1000pF	1383PH-ND	.77	6.05	22.00	32.00	D102K20Y5PHAAEU
10%	6.50	6.35	2200pF	1387PH-ND	.77	6.05	22.00	32.00	D222K25Y5PHAAEU
10%	7.37	6.35	2700pF	1388PH-ND	.84	6.60	24.00	35.00	D272K33Y5PL63L6
10%	7.37	6.35	3300pF	1389PH-ND	.84	6.60	24.00	35.00	D332K29Y5PHAAEU
10%	10.01	6.35	4700pF	1391PH-ND	1.10	8.61	31.30	46.00	D472K39Y5PHAAEU
				Type Y5V, 100V					
+80/-20	5.00	6.35	1000pF	1394PH-ND	.77	6.05	22.00	32.00	D102Z20Y5VHAAEU
+80/-20	5.00	6.35	1500pF	1395PH-ND	.77	6.05	22.00	32.00	D152Z20Y5VHAAEU
+80/-20	6.50	6.35	4700pF	1398PH-ND	.84	6.60	24.00	35.00	D472Z25Y5VHAAEU
+80/-20	7.87	6.35	0.01µf	1400PH-ND	.84	6.60	24.00	35.00	D103Z31Y5VHAAEU
				Type Y5P, 500V					
10%	5.00	6.35	100pF	1401PH-ND	1.37	10.73	39.00	57.00	D101K20Y5PLAAEU
10%	5.00	6.35	150pF	1402PH-ND	1.37	10.73	39.00	57.00	D151K20Y5PL63L6
10%	5.00	6.35	220pF	1404PH-ND	1.37	10.73	39.00	57.00	D221K20Y5PL63L6
10%	5.00	6.35	270pF	1405PH-ND	1.37	10.73	39.00	57.00	D271K20Y5PLAAEU
10%	5.00	6.35	330pF	1406PH-ND	1.37	10.73	39.00	57.00	D331K20Y5PLAAEU
10%	5.00	6.35	470pF	1408PH-ND	1.37	10.73	39.00	57.00	D471K20Y5PLAAEU
10%	6.50	6.35	1000pF	1412PH-ND	1.72	13.48	49.00	72.00	D102K25Y5PL63L6
10%	9.91	9.52	2200pF	1415PH-ND	2.07	16.23	59.00	87.00	D222K33Y5PL63L6
10%	11.99	9.52	3300pF	1417PH-ND	2.77	21.73	79.00	116.00	D332K39Y5PL63L0
10%	17.53	9.52	0.01µf	1424PH-ND	5.25	41.25	150.00	221.00	D103K69Y5PLABEC

Panasonic® Ceramic Disc Capacitors

PANASONIC ECC SERIES (CLASS I)

Features:

- Conform to EIA Standard
- Linear temperature coefficient of capacitance
- High stability of capacitance
- Low loss at wide range of frequency

Specifications:

- Operating temperature range: –55°C to +85°C
- Temperature characteristics: Conform to EIA classes GP & NPO. GP: General purpose capacitors with temp. char. between +150 and –1500PPM/°C (EIA U2M char.)
  NPO: Max. cap. change of ±5% from –55°C to +85°C.

PANASONIC ECK SERIES (CLASS II)

Features: • Conform to EIA Standard • Large capacitance in small sizes • Non linear temperature coefficient of capacitance • High temperature stability (for 1-3KV, Y5P char.) • Low loss at pulse voltage (for pulse circuit only)

Specifications: • **Operating temperature range:** –30°C to +85°C (25-500V), –25°C to +125°C (1-3KV) • **Dissipation factor:** Y5P: 2.5% max., Y5V and Z4V: 5% max., 1K (tan.): 25 x 10^{-3} at 1KHz 1 to 5Vrms, and 20°C • **Temperature characteristics:** Per EIA code. Y5P: Max. cap. change of ±10% from –25°C to +85°C, Y5V: Max. cap. change of +22, –82% from +10°C to +60°C, E: Max. cap. change is +20 ~ –55% over temp. range of –25°C to +85°C, B: Max. cap. change is ±10% over temp. range of –25°C to +85°C, V: Max. cap. change is +30 ~ –80% over temp. range of 0°C to +70°C • **Insulation resistance:** 10,000M ohms min. • **Dielectric strength:** 250% (200% for 1-3KV) of rated voltage for 1-5 sec.

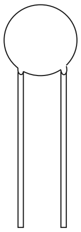
PANASONIC ECF SERIES (CLASS III)

Features: SB/SR (Intergranular barrier layer type)

- Linear temperature characteristics of capacitance
- Stable capacitance change over the specified temperature
- Low loss at wide range of frequency
- Cost saving by replacing film capacitors
  SF (Surface barrier layer type)
- Ultra large capacitance in small sizes

Specifications:

- Operating temperature range: –25°C to +85°C
- Dissipation factor/tan (at 1KHz, 1 ±0.2 Vrms, 20°C): SR, SB 1 ±0.2 V, SF 0.1 ±0.2 V; SB, SR...25 x 10^{-3} max., SF...75 x 10^{-3} max.
- Insulation resistance (at 20°C): SB, SR, SF...1,000M ohms or 100M ohms mF, whichever is the smaller
- Temperature characteristics: SB: +10% from –25° to +85°C, SR: ±15% from –25° to +85°C, SF: +30, –85% from –25° to +85°C



Voltage	Capacitance	Tolerance	Temp. Char.	Dimensions (mm)			Digi-Key Part No.	Pricing						Panasonic Part No.
				Dia.	Thickness	Lead Space		10	100	1,000	5,000	10,000	25,000	
500	82pf	±5%	NPO	13.0	3.5	9.5	P4411-ND	2.98	21.28	119.17	110.66/M	106.40/M	102.15/M	ECC-D2H820JCE
25	.047µf	+80%-20%	Z4V	8.5	3.5	6.35	P4307-ND	1.34	9.03	46.59	39.32/M	37.13/M	36.40/M	ECK-F1E473ZVE
25	.1µf	+80%-20%	Z4V	12.5	3.5	5.0	P4201-ND	2.23	15.71	85.68	74.26/M	71.40/M	68.55/M	ECK-F1E104ZV
1K	100pf	±10%	Y5P	6.0	5.0	5.00	P4116-ND	2.61	18.43	100.50	87.10/M	83.75/M	80.40/M	ECK-D3A101KBN
1K	120pf	±10%	Y5P	6.0	5.0	5.00	P4117-ND	2.61	18.43	100.50	87.10/M	83.75/M	80.40/M	ECK-D3A121KBN
1K	150pf	±10%	Y5P	6.0	5.0	5.00	P4118-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A151KBN
1K	180pf	±10%	Y5P	6.0	5.0	5.00	P4119-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A181KBN
1K	220pf	±10%	Y5P	6.0	5.0	5.00	P4120-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A221KBN
1K	270pf	±10%	Y5P	6.0	5.0	5.00	P4121-ND	2.54	17.88	97.50	84.50/M	81.25/M	78.00/M	ECK-D3A271KBN
1K	330pf	±10%	Y5P	8.0	5.0	5.00	P4122-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A331KBN
1K	390pf	±20%	Y5P	8.0	5.0	5.00	P4123-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A391KBN
1K	470pf	±10%	Y5P	8.0	5.0	5.00	P4124-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A471KBN
1K	560pf	±10%	Y5P	8.0	5.0	5.00	P4125-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A561KBN
1K	680pf	±10%	Y5P	8.0	5.0	5.00	P4126-ND	3.12	22.00	120.00	104.00/M	100.00/M	96.00/M	ECK-D3A681KBN
1K	820pf	±10%	Y5P	10.0	5.0	5.00	P4127-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A821KBN
1K	1000pf	±10%	Y5P	10.0	5.0	5.00	P4128-ND	2.98	21.25	119.00	110.50/M	106.25/M	102.00/M	ECK-D3A102KBN
1K	1200pf	±10%	Y5P	10.0	5.0	5.00	P4129-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A122KBN
1K	1500pf	±10%	Y5P	11.0	5.0	5.00	P4130-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A152KBN
1K	1800pf	±10%	Y5P	11.0	5.0	5.00	P4131-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A182KBN
1K	2200pf	±10%	Y5P	13.0	5.0	5.00	P4199-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A222KBP
1K	2700pf	±10%	Y5P	13.0	5.0	5.00	P4211-ND	3.71	26.50	148.40	137.80/M	132.50/M	127.20/M	ECK-D3A272KBP
1K	3300pf	±10%	Y5P	13.5	5.0	10.00	P4134-ND	4.20	30.00	168.00	156.00/M	150.00/M	144.00/M	ECK-D3A332KBN
1K	3900pf	±10%	Y5P	15.5	5.0	10.00	P4135-ND	5.41	39.72	228.15	219.70/M	211.25/M	202.80/M	ECK-D3A392KBN
1K	4700pf	±10%	Y5P	18.0	5.0	10.00	P4136-ND	6.40	47.00	270.00	260.00/M	250.00/M	240.00/M	ECK-D3A472KBN
1K	5600pf	±10%	Y5P	18.0	5.0	10.00	P4137-ND	6.40	47.00	270.00	260.00/M	250.00/M	240.00/M	ECK-D3A562KBN
1K	6800pf	±10%	Y5P	22.0	5.0	10.00	P4138-ND	8.96	65.80	378.00	364.00/M	350.00/M	336.00/M	ECK-D3A682KBN
1K	8200pf	±10%	Y5P	22.0	5.0	10.00	P4139-ND	8.96	65.80	378.00	364.00/M	350.00/M	336.00/M	ECK-D3A822KBN
1K	10000pf	±10%	Y5P	22.0	5.0	10.00	P4140-ND	9.57	71.78	424.27	408.32/M	398.75/M	382.80/M	ECK-D3A103KBN
2K	100pf	±10%	Y5P	7.0	5.0	7.5	P4474A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D101KBP
2K	120pf	±10%	Y5P	7.0	5.0	7.5	P4475A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D121KBP
2K	150pf	±10%	Y5P	7.0	5.0	7.5	P4476A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D151KBP
2K	180pf	±10%	Y5P	7.0	5.0	7.5	P4477A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D181KBP
2K	220pf	±10%	Y5P	7.0	5.0	7.5	P4478A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D221KBP
2K	270pf	±10%	Y5P	7.0	5.0	7.5	P4479A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D271KBP
2K	330pf	±10%	Y5P	7.0	5.0	7.5	P4480A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D331KBP
2K	390pf	±10%	Y5P	7.0	5.0	7.5	P4481A-ND	3.78	27.00	151.20	140.40/M	135.00/M	129.60/M	ECK-D3D391KBP
2K	470pf	±10%	Y5P	7.5	5.0	7.5	P4482A-ND	4.06	29.00	162.40	150.80/M	145.00/M	139.20/M	ECK-D3D471KBP
2K	560pf	±10%	Y5P	8.0	5.0	7.5	P4483A-ND	4.06	29.00	162.40	150.80/M	145.00/M	139.20/M	ECK-D3D561KBP
2K	680pf	±10%	Y5P	9.0	5.0	7.5	P4484A-ND	4.27	30.50	170.80	158.60/M	152.50/M	146.40/M	ECK-D3D681KBP
2K	820pf	±10%	Y5P	9.0	5.0	7.5	P4485A-ND	4.27	30.50	170.80	158.60/M	152.50/M	146.40/M	ECK-D3D821KBP
2K	1000pf	±10%	Y5P	10.0	5.0	7.5	P4486A-ND	5.22	37.25	208.60	193.70/M	186.25/M	178.80/M	ECK-D3D102KBP
2K	1200pf	±10%	Y5P	10.5	5.0	7.5	P4487A-ND	5.41	39.72	228.15	219.70/M	211.25/M	202.80/M	ECK-D3D122KBP
2K	1500pf	±10%	Y5P	12.0	5.0	7.5	P4488A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3D152KBP
2K	1800pf	±10%	Y5P	12.5	5.0	7.5	P4489A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3D182KBP
2K	2200pf	±10%	Y5P	14.0	5.0	10.0	P4490A-ND	9.70	71.21	409.05	393.90/M	378.75/M	363.60/M	ECK-D3D222KBP
2K	2700pf	±10%	Y5P	16.0	5.0	10.0	P4491A-ND	9.63	72.23	426.93	410.88/M	401.25/M	385.20/M	ECK-D3D272KBP
2K	3300pf	±10%	Y5P	17.0	5.0	10.0	P4492A-ND	11.61	87.08	514.71	495.36/M	483.75/M	464.40/M	ECK-D3D332KBP
2K	3900pf	±10%	Y5P	18.0	5.0	10.0	P4493A-ND	12.33	92.48	546.63	526.08/M	513.75/M	493.20/M	ECK-D3D392KBP
2K	4700pf	±10%	Y5P	25.0	5.0	10.0	P4494A-ND	13.50	101.25	598.50	576.00/M	562.50/M	540.00/M	ECK-D3D472KBP
2K	5600pf	±10%	Y5P	25.0	5.0	10.0	P4495A-ND	13.50	101.25	598.50	576.00/M	562.50/M	540.00/M	ECK-D3D562KBP
3K	100pf	±10%	Y5P	7.5	6.0	7.5	P4496A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F101KBP
3K	120pf	±10%	Y5P	7.5	6.0	7.5	P4497A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F121KBP
3K	150pf	±10%	Y5P	7.5	6.0	7.5	P4498A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F151KBP
3K	180pf	±10%	Y5P	7.5	6.0	7.5	P4499A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F181KBP
3K	220pf	±10%	Y5P	7.5	6.0	7.5	P4500A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F221KBP
3K	270pf	±10%	Y5P	7.5	6.0	7.5	P4501A-ND	3.85	27.50	154.00	143.00/M	137.50/M	132.00/M	ECK-D3F271KBP
3K	330pf	±10%	Y5P	8.0	6.0	7.5	P4502A-ND	4.10	29.25	163.80	152.10/M	146.25/M	140.40/M	ECK-D3F331KBP
3K	390pf	±10%	Y5P	9.0	6.0	7.5	P4503A-ND	4.34	31.00	173.60	161.20/M	155.00/M	148.80/M	ECK-D3F391KBP
3K	470pf	±10%	Y5P	9.5	6.0	7.5	P4504A-ND	4.66	33.25	186.20	172.90/M	166.25/M	159.60/M	ECK-D3F471KBP
3K	560pf	±10%	Y5P	10.0	6.0	7.5	P4505A-ND	4.97	35.50	198.80	184.60/M	177.50/M	170.40/M	ECK-D3F561KBP
3K	680pf	±10%	Y5P	11.0	6.0	7.5	P4506A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3F681KBP
3K	820pf	±10%	Y5P	11.0	6.0	7.5	P4507A-ND	6.30	46.30	265.95	256.10/M	246.25/M	236.40/M	ECK-D3F821KBP
3K	1000pf	±10%	Y5P	12.5	6.0	7.5	P4508A-ND	6.43	47.24	271.35	261.30/M	251.25/M	241.20/M	ECK-D3F102KBP
3K	1200pf	±10%	Y5P	14.5	6.0	10.0	P4509A-ND	9.69	72.68	429.59	413.44/M	403.75/M	387.60/M	ECK-D3F122KBP
3K	1500pf	±10%	Y5P	14.5	6.0	10.0	P4510A-ND	9.54	71.55	422.94	407.04/M	397.50/M	381.60/M	ECK-D3F152KBP
3K	1800pf	±10%	Y5P	16.0	6.0	10.0	P4511A-ND	13.17	98.78	583.87	561.92/M	548.75/M	526.80/M	ECK-D3F182KBP
3K	2200pf	±10%	Y5P	17.0	6.0	10.0	P4512A-ND	13.86	103.95	614.46	591.36/M	577.50/M	554.40/M	ECK-D3F222KBP
3K	2700pf	±10%	Y5P	18.5	6.0	10.0	P4513A-ND	16.41	123.08	727.51	700.16/M	683.75/M	656.40/M	ECK-D3F272KBP
25	4700pf	±20%	SR	4.5	3.5	2.50	P4422-ND	1.49	10.07	51.97	43.85/M	41.42/M	40.60/M	ECF-F1E472MR
50	6800pf	±10%	SB	6.5	3.5	5.00	P4157-ND	2.66	18.79	102.48	88.82/M	85.40/M	81.99/M	ECF-F1H682KB

Panasonic® Ceramic Disc Capacitors

Type RS, Class 1 Safety

Ceramic disc capacitors, Type RS, are recognized by the following safety regulations: • UL1414 (125 VAC) and CSA (125 VAC) • European safety regulations for "Class I" equipment: VDE, SEV, BSI, SEMKO, FIMKO, NEMKO and DEMKO.

Specifications:

Oper. Temp. Range	-25°C to 85°C		
Rated Voltage	Applicable Standards		Rated Voltage
	UL, CSA		125 VAC
	VDE (565-1)		250 VAC
	VDE (560-2), FIMKO, SEV, BS, SEMKO, NEMKO, DEMKO		400 VAC
Dielectric Withstanding Voltage	T.C.		Voltage
	B, E		2600 VAC for 1 min.
	V		2500 VAC for 1 min.
Capacitance	Within the tolerance, when measured at 1 kHz, 5 Vrms max. and 20°C		
Dissipation Factor	B, E: 0.025 max. V: 0.05 max when measured at 1 kHz, 5 Vrms max. and 20°C		
Insulation Resist.	10000 MΩ min.. at 500 VDC, 1 minute		
Temperature Characteristics	T.C.	Cap. Change	Temp. Range
	B	±10% max.	-25°C to 85°C
	E	+20/-55% max	-25°C to 85°C
	V	+30/-80% max	0°C to 70°C
	The reference temperature: 20°C		

Class 2, High Dielectric Constant

Features: • Large capacitance in small size • Minimum coating resin on leads **Applications:** • Coupling and By-pass, where low losses and high stability of capacitance are not so important **Specifications:** • Operating Temperature Range: -25°C to 85°C • Rated Voltage: 25 VDC, 50VDC, 500VDC • Dielectric Withstanding Voltage: 250% of the rated voltage for 1 to 5 seconds (no damage occurs when the test voltage is applied between terminals) • Capacitance: measured at 1kHz ±10%, 1 Vrms and 20°C within the specified tolerance - standard capacitance tolerance [Y5P]: ±10% [Y5V, Z4V]: +80/-20% • Dissipation Factor: [Y5P]: D.F. ≤0.025 [Y5V, Z4V]: D.F. ≤0.05 • Insulation Resistance: C≤0.02 µF: ≥10000 MΩ, C>0.02 µF: CR products ≥ 200 MΩ (measured at the rated voltage and 1 minute electrification) • Temperature Characteristics:

$$\text{Cap. Change} = \frac{\triangle C}{C20} \times 100\%$$

Where C20: Capacitance value in pF at the specified reference temperature of 20°C.
△C: Capacitance drifts in pF from the capacitance value at 20°C over the specified temperature range.

Temp. Char.	Max. Cap. Change	Temp. Range
Y5P	± 10%	-25°C to 85°C
Y5V	+30/-80%	-25°C to 85°C
Z4V	+30/-80%	0°C to 70°C

Class 1, Temperature Compensating

Features: • Wide product range for temperature compensation • Liner temperature coefficient of capacitance • High stability of capacitance and close tolerance • Low loss at wide range of frequency **Applications:** • Temperature compensation of resonant circuit and filters • Where low losses and high stability of capacitance tolerance and high insulation resistance are required **Specifications:** Operating Temperature Range: -25°C to 85°C • Rated Voltage: 50 VDC, 500 VDC • Dielectric Withstanding Voltage: 300% of the rated voltage for 1 to 5 seconds (no damage occurs when the test voltage is applied between terminals) • Capacitance: measured at 1MHz ±20%, 5 Vrms. max. and 20°C within the specified tolerance - standard capacitance tolerance: ±0.25 pF (1 to 5 pF), ±0.5 pF (1 to 10 pF), ±1 pF (10pF), ±5% (Over 10 pF NPO), ±10% (Over 10 pF GP) • Q Factor: Cap. <30 pF: Q≥400+20XC (c: Rated capacitance in pF), Cap≥30 pF: Q≥1000 • Insulation Resistance: ≥10000 MΩ (measured at the rated voltage and 1 minute electrification) • Temperature Coefficient of Capacitance: Temperature Range: -25°C to 85°C, Reference Temperature: 20°C, T.C. = $\frac{\triangle C}{C_{20} \times \triangle T}$

Where: C20: Capacitance value in pF at the specified reference temperature of 20°C. △C: Capacitance drifts in pF from the capacitance value at 20°C. △T: The specified temperature range to be measured in °C.

Capacitance (pF)	Rated temperature Coefficient (ppm/°C)	
	NPO	GP
1 to 2	±250	+350 to -1000
3	±120	
4 and above	±60	

Volt-age	Capac-itance	Tolerance	Temp. Char.	Dimensions (mm)			Digi-Key	Pricing			Panasonic
				Dia.	Thick-ness	Lead Space	Part No.	10	100	1,000	Part No.
RS Safety Type Class 1											
125	150pf	±20%	B	9.5	7.0	7.5	P4463A-ND	2.86	20.44	114.46	ECK-DRS151MB
125	1500pf	±20%	E	10.0	7.0	7.5	P4467A-ND	4.23	30.24	169.34	ECK-DRS152ME
125	4700pf	+80, -20%	V	11.5	7.0	7.5	P4472A-ND	3.57	25.48	142.69	ECK-DRS472ZV
Class 2 High Dielectric Constant											
25	.01µF	+80, -20%	Z4V	5.0	3.5	2.5	P4300A-ND	.93	6.25	32.26	ECK-F1E103ZV
25	.022µF	+80, -20%	Z4V	6.5	3.5	5.0	P4303A-ND	1.13	7.64	39.42	ECK-F1E223ZV
25	.033µF	+80, -20%	Z4V	8.5	3.5	5.0	P4305A-ND	1.29	8.68	44.80	ECK-F1E333ZV
25	.047µF	+80, -20%	Z4V	8.5	3.5	5.0	P4307A-ND	1.44	9.72	50.18	ECK-F1E473ZV
25	.1µF	+80, -20%	Z4V	12.5	3.5	5.0	P4201-ND	2.23	15.71	85.68	ECK-F1E104ZV
50	100pf	±10%	Y5P	5.0	3.5	2.5	P4037A-ND	.98	6.60	34.05	ECK-F1H101KB
50	120pf	±10%	Y5P	5.0	3.5	2.5	P4038A-ND	.98	6.60	34.05	ECK-F1H121KB
50	220pf	±10%	Y5P	5.0	3.5	2.5	P4041A-ND	.98	6.60	34.05	ECK-F1H221KB
50	270pf	±10%	Y5P	5.0	3.5	2.5	P4042A-ND	.98	6.60	34.05	ECK-F1H271KB
50	330pf	±10%	Y5P	5.0	3.5	2.5	P4043A-ND	.98	6.60	34.05	ECK-F1H331KB
50	390pf	±10%	Y5P	5.0	3.5	2.5	P4044A-ND	.98	6.60	34.05	ECK-F1H391KB
50	470pf	±10%	Y5P	5.0	3.5	2.5	P4045A-ND	.98	6.60	34.05	ECK-F1H471KB
50	820pf	±10%	Y5P	5.0	3.5	2.5	P4048A-ND	.98	6.60	34.05	ECK-F1H821KB
50	1000pf	±10%	Y5P	5.0	3.5	2.5	P4049A-ND	1.08	7.29	37.63	ECK-F1H102KB
50	1800pf	±10%	Y5P	6.5	3.5	5.0	P4052A-ND	1.08	7.29	37.63	ECK-F1H182KB
50	2200pf	±10%	Y5P	6.5	3.5	5.0	P4053A-ND	1.18	7.99	41.22	ECK-F1H222KB
50	2700pf	±10%	Y5P	6.5	3.5	5.0	P4054A-ND	1.18	7.99	41.22	ECK-F1H272KB
50	3300pf	±10%	Y5P	8.0	3.5	5.0	P4055A-ND	1.18	7.99	41.22	ECK-F1H332KB
50	3900pf	±10%	Y5P	8.0	3.5	5.0	P4056A-ND	1.29	8.68	44.80	ECK-F1H392KB
50	4700pf	±10%	Y5P	8.0	3.5	5.0	P4057A-ND	1.29	8.68	44.80	ECK-F1H472KB
50	5600pf	±10%	Y5P	9.5	3.5	5.0	P4058A-ND	1.29	8.68	44.80	ECK-F1H562KB
50	1000pf	+80, -20%	Y5V	4.5	3.5	2.5	P4060A-ND	.93	6.25	32.26	ECK-F1H102ZF
50	1500pf	+80, -20%	Y5V	5.0	3.5	2.5	P4061A-ND	.93	6.25	32.26	ECK-F1H152ZF
50	2200pf	+80, -20%	Y5V	5.0	3.5	2.5	P4062A-ND	.93	6.25	32.26	ECK-F1H222ZF
50	3300pf	+80, -20%	Y5V	5.0	3.5	2.5	P4063A-ND	1.03	6.94	35.84	ECK-F1H332ZF
50	4700pf	+80, -20%	Y5V	5.0	3.5	2.5	P4064A-ND	.98	6.60	34.05	ECK-F1H472ZF
50	6800pf	+80, -20%	Y5V	6.5	3.5	5.0	P4065A-ND	1.03	6.94	35.84	ECK-F1H682ZF
50	22000pf	+80, -20%	Y5V	8.5	3.5	5.0	P4067A-ND	2.01	14.17	77.28	ECK-F1H223ZF
500	100pf	±10%	Y5P	6.0	4.0	5.0	P4100A-ND	1.13	7.64	39.42	ECK-D2H101KB5
500	150pf	±10%	Y5P	6.0	4.0	5.0	P4102A-ND	1.13	7.64	39.42	ECK-D2H151KB5
500	330pf	±10%	Y5P	6.0	4.0	5.0	P4106A-ND	1.13	7.64	39.42	ECK-D2H331KB5
500	390pf	±10%	Y5P	6.0	4.0	5.0	P4107A-ND	1.13	7.64	39.42	ECK-D2H391KB5
500	470pf	±10%	Y5P	6.0	4.0	5.0	P4108A-ND	1.13	7.64	39.42	ECK-D2H471KB5
500	820pf	±10%	Y5P	7.0	4.0	5.0	P4111A-ND	1.13	7.64	39.42	ECK-D2H821KB5
500	1000pf	±10%	Y5P	7.0	4.0	5.0	P4112A-ND	1.75	11.80	60.93	ECK-D2H102KB5
500	1500pf	±10%	Y5P	7.0	4.0	5.0	P4115A-ND	1.75	11.80	60.93	ECK-D2H152KB5
500	1800pf	±10%	Y5P	8.5	4.0	5.0	P4116A-ND	1.75	11.80	60.93	ECK-D2H182KB5
500	2200pf	±10%	Y5P	8.5	4.0	5.0	P4165A-ND	1.75	11.80	60.93	ECK-D2H222KB5
500	2700pf	±10%	Y5P	10.0	4.0	5.0	P4166A-ND	1.75	12.32	67.20	ECK-D2H272KB5
500	3900pf	±10%	Y5P	11.0	4.0	5.0	P4168A-ND	1.75	12.32	67.20	ECK-D2H392KB5
500	10000pf	±10%	Y5P	17.5	4.0	10.0	P4198A-ND	2.32	16.32	89.04	ECK-D2H103KB5

Volt-age	Capac-itance	Tolerance	Temp. Char.	Dimensions (mm)			Digi-Key	Pricing			Panasonic
				Dia.	Thick-ness	Lead Space	Part No.	10	100	1,000	Part No.
Class 1 Temperature Compensating											
50	10pf	±0.5pf	GP	5.0	3.5	2.5	P4012A-ND	.82	5.56	28.67	ECC-F1H100D
50	12pf	±5%	GP	5.0	3.5	2.5	P4013A-ND	.93	6.25	32.26	ECC-F1H120J
50	15pf	±5%	GP	5.0	3.5	2.5	P4014A-ND	.93	6.25	32.26	ECC-F1H150J
50	18pf	±5%	GP	5.0	3.5	2.5	P4015A-ND	.93	6.25	32.26	ECC-F1H180J
50	22pf	±5%	GP	5.0	3.5	2.5	P4016A-ND	.93	6.25	32.26	ECC-F1H220J
50	33pf	±5%	GP	5.0	3.5	2.5	P4018A-ND	.93	6.25	32.26	ECC-F1H330J
50	39pf	±5%	GP	5.0	3.5	2.5	P4019A-ND	.93	6.25	32.26	ECC-F1H390J
50	56pf	±5%	GP	5.0	3.5	2.5	P4021A-ND	.93	6.25	32.26	ECC-F1H560J
50	120pf	±5%	GP	5.0	3.5	2.5	P4025A-ND	.93	6.25	32.26	ECC-F1H121J
50	150pf	±5%	GP	5.0	3.5	2.5	P4026A-ND	.93	6.25	32.26	ECC-F1H151J
50	180pf	±5%	GP	5.0	3.5	2.5	P4027A-ND	.93	6.25	32.26	ECC-F1H181J
50	220pf	±5%	GP	6.5	3.5	5.0	P4028A-ND	.93	6.25	32.26	ECC-F1H221J
50	270pf	±5%	GP	6.5	3.5	5.0	P4029A-ND	1.18	7.99	41.22	ECC-F1H271J
50	560pf	±5%	GP	9.5	3.5	5.0	P4033A-ND	1.24	8.33	43.01	ECC-F1H561J
50	820pf	±5%	GP	10.5	3.5	5.0	P4035A-ND	1.24	8.33	43.01	ECC-F1H821J
50	1000pf	±5%	GP	10.5	3.5	5.0	P4036A-ND	1.83	12.94	70.56	ECC-F1H102J
50	12pf	±5%	NPO	5.0	3.5	2.5	P4445A-ND	1.60	10.76	55.55	ECC-F1H120JC
50	15pf	±5%	NPO	5.0	3.5	2.5	P4446A-ND	1.60	10.76	55.55	ECC-F1H150JC
50	18pf	±5%	NPO	5.0	3.5	2.5	P4447A-ND	1.60	10.76	55.55	ECC-F1H180JC
50	22pf	±5%	NPO	5.0	3.5	2.5	P4448A-ND	1.60	10.76	55.55	ECC-F1H220JC
50	27pf	±5%	NPO	5.0	3.5	2.5	P4449A-ND	1.60	10.76	55.55	ECC-F1H270JC
50	33pf	±5%	NPO	5.0	3.5	2.5	P4450A-ND	1.60	10.76	55.55	ECC-F1H330JC
50	39pf	±5%	NPO	5.0	3.5	2.5	P4451A-ND	1.60	10.76	55.55	ECC-F1H390JC
50	47pf	±5%	NPO	5.0	3.5	2.5	P4452A-ND	1.97	13.86	75.60	ECC-F1H470JC4
50	56pf	±5%	NPO	6.5	3.5	5.0	P4453A-ND	1.97	13.86	75.60	ECC-F1H560JC
50	68pf	±5%	NPO	6.5	3.5	5.0	P4454A-ND	1.97	13.86	75.60	ECC-F1H680JC
50	82pf	±5%	NPO	6.5	3.5	5.0	P4455A-ND	1.97	13.86	75.60	ECC-F1H820JC4
50	100pf	±5%	NPO	6.5	3.5	5.0	P4456A-ND	2.36	16.63	90.72	ECC-F1H101JC4
50	120pf	±5%	NPO	8.0	3.5	5.0	P4457A-ND	2.36	16.63	90.72	ECC-F1H121JC4
50	150pf	±5%	NPO	8.0	3.5	5.0	P4458A-ND	2.62	18.48	100.80	ECC-F1H151JC4
50	270pf	±5%	NPO	10.5	3.5	5.0	P4461A-ND	2.62	18.48	100.80	ECC-F1H271JC4
500	15pf	±10%	GP	6.0	3.5	5.0	P4002A-ND	1.66	11.16	57.60	ECC-D2H150K5
500	18pf	±10%	GP	6.0	3.5	5.0	P4003A-ND	1.66	11.16	57.60	ECC-D2H180K5
500	22pf	±10%	GP	6.0	3.5	5.0	P4004A-ND	1.66	11.16	57.60	ECC-D2H220K5
500	27pf	±10%	GP	6.0	3.5	5.0	P4005A-ND	1.66	11.16	57.60	ECC-D2H270K5
500	33pf	±10%	GP	6.0	3.5	5.0	P4006A-ND	1.66	11.16	57.60	ECC-D2H330K5
500	39pf	±10%	GP	6.0	3.5	5.0	P4007A-ND	1.66	11.16	57.60	ECC-D2H390K5
500	47pf	±10%	GP	6.0	3.5	5.0	P4008A-ND	1.66	11.16	57.60	ECC-D2H470K5
500	82pf	±10%	GP	7.0	3.5	5.0	P4011A-ND	1.66	11.16	57.60	ECC-D2H820K5
500	15pf	±5%	NPO	6.0	3.5	5.0	P4402A-ND	2.54	17.88	97.50	ECC-D2H150JC5
500	18pf	±5%	NPO	6.0	3.5	5.0	P4403A-ND	2.54	17.88	97.50	ECC-D2H180JC5
500	27pf	±5%	NPO	7.0	3.5	5.0	P4405A-ND	2.54	17.88	97.50	ECC-D2H270JC5
500	33pf	±5%	NPO	7.0	3.5	5.0	P4406A-ND	2.54	17.88	97.50	ECC-D2H330JC5
500	39pf	±5%	NPO	7.0	3.5	5.0	P4407A-ND	2.65	18.70	102.00	ECC-D2H390JC5
500	47pf	±5%	NPO	8.5	3.5	5.0	P4408A-ND	3.00	21.18	115.50	ECC-D2H470JC5
500	68pf	±5%	NPO	8.5	3.5	5.0	P4410A-ND	3.04	21.45	117.00	ECC-D2H680JC5
500	82pf	±5%	NPO	10.0	3.5	5.0	P4411A-ND	4.69	33.50	187.60	ECC-D2H820JC5
500	100pf	±5%	NPO	10.0	3.5	5.0	P4412A-ND	4.66	33.25	186.20	ECC-D2H101JC5
500	150pf	±5%	NPO	13.0	3.5	10.0	P4414A-ND	4.94	35.25	197.40	ECC-D2H151JC5

Panasonic® Ceramic Disc Capacitors - KGE Series

High Voltage - Rated 1 to 3 kVDC,
Temperature Char. SL/GP

FEATURES:
- Wide operating temperature range: -25°C to 105°C
- Low loss at wide frequency range and stable against high voltage pulses
- Temperature stable (Char. SL/GP)
- Flame-retardant insulating coating applied

RECOMMENDED APPLICATIONS:
- Ballast circuit of LCD backlighting inverter
- Snubber circuit of switching power supply
- Horizontal resonance circuit of TV and CRT display
- Inverter type lighting apparatus
- High voltage pulse and DC circuits

SPECIFICATIONS:

Operating Temperature Range: -25°C to +105°C

Rated Voltage: 1kVDC, 2kVDC, 3kVDC

Dielectric Withstanding Voltage: 200% of the rated voltage for 1 to 5 seconds

Capacitance: Within tolerance, when measured at 1 MHz ±20%, 1 to 5 Vrms, and 20°C

Q Factor: Capacitance <30pF: Q≥400+20xC (C: Rated Capacitance in pF). Capacitance ≥30pF: Q≥1000 at 1 MHz±20%, 1 to 5 Vrms, and 20°C

Insulation Resistance: 10,000 MΩ min. at 500 VDC and 1 minute electrification

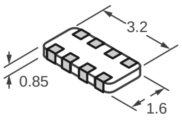
Temperature Characteristics: Temperature Coefficient: +350 to -1000 ppm/°C over the temperature range of 20°C to 85°C

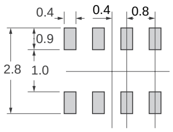
Voltage	Capacitance	Tolerance	Temperature Char.	Dimensions (mm)			Digi-Key Part No.	Price Each			Panasonic Part No.
				Diameter	Thickness	Lead Space		10	100	1,000	
1K	12pf	±5%	GP	6.0	5.0	5.0	P10793-ND	.29	.20	.11	ECC-D3A120JGE
1K	15pf	±5%	GP	6.0	5.0	5.0	P10794-ND	.29	.20	.11	ECC-D3A150JGE
1K	18pf	±5%	GP	6.0	5.0	5.0	P10795-ND	.29	.20	.11	ECC-D3A180JGE
1K	22pf	±5%	GP	6.0	5.0	5.0	P10796-ND	.29	.20	.11	ECC-D3A220JGE
1K	27pf	±5%	GP	6.0	5.0	5.0	P10797-ND	.29	.20	.11	ECC-D3A270JGE
1K	33pf	±5%	GP	6.0	5.0	5.0	P10798-ND	.30	.21	.12	ECC-D3A330JGE
1K	39pf	±5%	GP	6.0	5.0	5.0	P10799-ND	.30	.21	.12	ECC-D3A390JGE
1K	47pf	±5%	GP	6.0	5.0	5.0	P10800-ND	.30	.21	.12	ECC-D3A470JGE
1K	56pf	±5%	GP	6.0	5.0	5.0	P10801-ND	.30	.21	.12	ECC-D3A560JGE
1K	68pf	±5%	GP	6.0	5.0	5.0	P10802-ND	.30	.21	.12	ECC-D3A680JGE
1K	82pf	±5%	GP	6.0	5.0	5.0	P10803-ND	.30	.21	.12	ECC-D3A820JGE
1K	100pf	±5%	GP	7.0	5.0	5.0	P10804-ND	.32	.23	.13	ECC-D3A101JGE
1K	120pf	±5%	GP	7.0	5.0	5.0	P10805-ND	.32	.23	.13	ECC-D3A121JGE
1K	150pf	±5%	GP	8.0	5.0	5.0	P10806-ND	.31	.22	.13	ECC-D3A151JGE
1K	180pf	±5%	GP	8.0	5.0	5.0	P10807-ND	.31	.22	.13	ECC-D3A181JGE
1K	220pf	±5%	GP	9.0	5.0	5.0	P10808-ND	.33	.24	.14	ECC-D3A221JGE
1K	270pf	±5%	GP	9.0	5.0	5.0	P10809-ND	.34	.24	.14	ECC-D3A271JGE
1K	330pf	±5%	GP	11.0	5.0	5.0	P10810-ND	.38	.27	.15	ECC-D3A331JGE
1K	390pf	±5%	GP	11.0	5.0	5.0	P10811-ND	.40	.28	.16	ECC-D3A391JGE
1K	470pf	±5%	GP	13.0	5.0	7.5	P10812-ND	.45	.32	.18	ECC-D3A471JGE
2K	12pf	±5%	GP	7.0	5.5	7.5	P10813-ND	.32	.23	.13	ECC-D3D120JGE
2K	15pf	±5%	GP	7.0	5.5	7.5	P10814-ND	.32	.23	.13	ECC-D3D150JGE
2K	18pf	±5%	GP	7.0	5.5	7.5	P10815-ND	.32	.23	.13	ECC-D3D180JGE
2K	22pf	±5%	GP	7.0	5.5	7.5	P10816-ND	.32	.23	.13	ECC-D3D220JGE
2K	27pf	±5%	GP	7.0	5.5	7.5	P10817-ND	.32	.23	.13	ECC-D3D270JGE
2K	33pf	±5%	GP	7.0	5.5	7.5	P10818-ND	.33	.23	.13	ECC-D3D330JGE
2K	39pf	±5%	GP	7.0	5.5	7.5	P10819-ND	.33	.23	.13	ECC-D3D390JGE
2K	47pf	±5%	GP	7.0	5.5	7.5	P10820-ND	.33	.23	.13	ECC-D3D470JGE
2K	56pf	±5%	GP	7.0	5.5	7.5	P10821-ND	.34	.24	.14	ECC-D3D560JGE
2K	68pf	±5%	GP	7.0	5.5	7.5	P10822-ND	.34	.24	.14	ECC-D3D680JGE
2K	82pf	±5%	GP	7.0	5.5	7.5	P10823-ND	.35	.25	.14	ECC-D3D820JGE
2K	100pf	±5%	GP	8.0	5.5	7.5	P10824-ND	.35	.25	.14	ECC-D3D101JGE
2K	120pf	±5%	GP	8.0	5.5	7.5	P10825-ND	.37	.26	.15	ECC-D3D121JGE
2K	150pf	±5%	GP	9.0	5.5	7.5	P10826-ND	.38	.27	.16	ECC-D3D151JGE
2K	180pf	±5%	GP	10.0	5.5	7.5	P10827-ND	.39	.28	.16	ECC-D3D181JGE
2K	220pf	±5%	GP	10.0	5.5	7.5	P10828-ND	.39	.28	.16	ECC-D3D221JGE
3K	12pf	±5%	GP	7.0	6.0	7.5	P10829-ND	.41	.29	.17	ECC-D3F120JGE
3K	15pf	±5%	GP	7.0	6.0	7.5	P10830-ND	.41	.29	.17	ECC-D3F150JGE
3K	18pf	±5%	GP	7.0	6.0	7.5	P10831-ND	.41	.29	.17	ECC-D3F180JGE
3K	22pf	±5%	GP	7.0	6.0	7.5	P10832-ND	.41	.29	.17	ECC-D3F220JGE
3K	27pf	±5%	GP	7.0	6.0	7.5	P10833-ND	.41	.29	.17	ECC-D3F270JGE
3K	33pf	±5%	GP	7.0	6.0	7.5	P10834-ND	.42	.30	.17	ECC-D3F330JGE
3K	39pf	±5%	GP	7.0	6.0	7.5	P10835-ND	.42	.30	.17	ECC-D3F390JGE
3K	47pf	±5%	GP	7.0	6.0	7.5	P10836-ND	.42	.30	.17	ECC-D3F470JGE
3K	56pf	±5%	GP	8.0	6.0	7.5	P10837-ND	.44	.31	.18	ECC-D3F560JGE
3K	68pf	±5%	GP	8.0	6.0	7.5	P10838-ND	.44	.31	.18	ECC-D3F680JGE
3K	82pf	±5%	GP	9.0	6.0	7.5	P10839-ND	.44	.31	.18	ECC-D3F820JGE
3K	100pf	±5%	GP	10.0	6.0	7.5	P10840-ND	.50	.36	.20	ECC-D3F101JGE
3K	120pf	±5%	GP	10.0	6.0	7.5	P10841-ND	.51	.36	.21	ECC-D3F121JGE
3K	150pf	±5%	GP	11.0	6.0	7.5	P10842-ND	.52	.37	.21	ECC-D3F151JGE

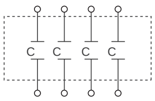
Multilayer Ceramic Chip Capacitor Arrays - ECJ-R Series

FEATURES:
- Four elements in a 1206 pkg.
- Compact design (3.2mm x 1.6mm) for high density PWB assembly
- Improvement of placement time on mounting machines

RECOMMENDED APPLICATIONS:
- EMI noise suppression
- Digital noise reduction







Size Code	Type	WV DC	Cap.	Tolerance	Digi-Key Part No.	Cut Tape Price Each					Digi-Key Part No.	Tape & Reel Pricing 4,000	Panasonic Part No.
						1	10	100	500	1,000			
1206	NPO	50	10pF	±1pF	P10580CT-ND	.40	.36	.31	.26	.22	P10580TR-ND	141.00/M	ECJ-RVC1H100F
		50	12pF	±10%	P10581CT-ND	.40	.36	.31	.26	.22	P10581TR-ND	141.00/M	ECJ-RVC1H120K
		50	15pF	±10%	P10582CT-ND	.29	.26	.22	.19	.16	P10582TR-ND	102.00/M	ECJ-RVC1H150K
		50	18pF	±10%	P10583CT-ND	.40	.36	.31	.26	.22	P10583TR-ND	141.00/M	ECJ-RVC1H180K
		50	22pF	±10%	P10584CT-ND	.29	.26	.22	.19	.16	P10584TR-ND	102.00/M	ECJ-RVC1H220K
		50	27pF	±10%	P10585CT-ND	.49	.43	.37	.31	.27	P10585TR-ND	171.00/M	ECJ-RVC1H270K
		50	33pF	±10%	P10586CT-ND	.43	.38	.32	.27	.23	P10586TR-ND	149.00/M	ECJ-RVC1H330K
		50	39pF	±10%	P10587CT-ND	.49	.43	.37	.31	.27	P10587TR-ND	171.00/M	ECJ-RVC1H390K
		50	47pF	±10%	P10588CT-ND	.35	.31	.27	.22	.19	P10588TR-ND	122.00/M	ECJ-RVC1H470K
		50	56pF	±10%	P10589CT-ND	.50	.44	.38	.32	.27	P10589TR-ND	175.00/M	ECJ-RVC1H560K
		50	68pF	±10%	P10590CT-ND	.36	.32	.27	.23	.20	P10590TR-ND	125.00/M	ECJ-RVC1H680K
		50	82pF	±10%	P10591CT-ND	.50	.44	.38	.32	.27	P10591TR-ND	175.00/M	ECJ-RVC1H820K
		50	100pF	±10%	P10592CT-ND	.44	.39	.34	.28	.24	P10592TR-ND	155.00/M	ECJ-RVC1H101K
		50	120pF	±10%	P10593CT-ND	.51	.45	.39	.32	.28	P10593TR-ND	179.00/M	ECJ-RVC1H121K
		50	150pF	±10%	P10594CT-ND	.37	.33	.28	.24	.20	P10594TR-ND	130.00/M	ECJ-RVC1H151K
		50	180pF	±10%	P10595CT-ND	.52	.46	.39	.33	.28	P10595TR-ND	182.00/M	ECJ-RVC1H181K
		50	220pF	±10%	P10596CT-ND	.45	.40	.34	.29	.25	P10596TR-ND	158.00/M	ECJ-RVC1H221K
		50	270pF	±10%	P10597CT-ND	.52	.46	.39	.33	.28	P10597TR-ND	182.00/M	ECJ-RVC1H271K
		50	330pF	±10%	P10598CT-ND	.37	.33	.28	.24	.20	P10598TR-ND	130.00/M	ECJ-RVC1H331K
		50	390pF	±10%	P10599CT-ND	.52	.46	.39	.33	.28	P10599TR-ND	182.00/M	ECJ-RVC1H391K
		50	470pF	±10%	P10600CT-ND	.45	.40	.34	.29	.25	P10600TR-ND	158.00/M	ECJ-RVC1H471K
	X7R	50	330pF	±20%	P10601CT-ND	.40	.35	.30	.25	.22	P10601TR-ND	140.00/M	ECJ-RVB1H331M
		50	470pF	±20%	P10602CT-ND	.40	.35	.30	.25	.22	P10602TR-ND	140.00/M	ECJ-RVB1H471M
		50	680pF	±20%	P10603CT-ND	.40	.35	.30	.25	.22	P10603TR-ND	140.00/M	ECJ-RVB1H681M
		50	1000pF	±20%	P10604CT-ND	.40	.35	.30	.25	.22	P10604TR-ND	140.00/M	ECJ-RVB1H102M
		50	1500pF	±20%	P10605CT-ND	.40	.36	.31	.26	.22	P10605TR-ND	141.00/M	ECJ-RVB1H152M
		50	2200pF	±20%	P10606CT-ND	.40	.36	.31	.26	.22	P10606TR-ND	141.00/M	ECJ-RVB1H222M
		50	3300pF	±20%	P10607CT-ND	.41	.36	.31	.26	.22	P10607TR-ND	143.00/M	ECJ-RVB1H332M
		50	4700pF	±20%	P10608CT-ND	.41	.36	.31	.26	.22	P10608TR-ND	143.00/M	ECJ-RVB1H472M
		50	6800pF	±20%	P10609CT-ND	.41	.36	.31	.26	.22	P10609TR-ND	143.00/M	ECJ-RVB1H682M
		50	10000pF	±20%	P10610CT-ND	.41	.36	.31	.26	.22	P10610TR-ND	143.00/M	ECJ-RVB1H103M
		16	.1µF	±20%	P11148CT-ND	.57	.50	.43	.36	.31	P11148TR-ND	198.00/M	ECJ-RVB1C104M
	Y5V	25	.1µF	+80%/-20%	P10611CT-ND	.34	.31	.26	.22	.19	P10611TR-ND	121.00/M	ECJ-RVF1E104Z

Panasonic High Voltage Ceramic Capacitors (SMD)

FEATURES:

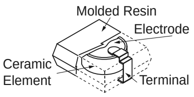
• Resin molded type for reflow solderings • High reliability through disc capacitor element molded construction • Excellent “Voltage vs. Temperature Rise” through low loss ceramic dielectric • Temperature stable (SL/GP) & (B/Y5P)

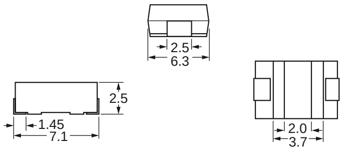
SPECIFICATIONS:

• Operating Temperature Range: -25°C to 105°C • Insulation Resistance: 10000 MΩ min. at 500 VDC & 1 min. electrification • Q or Dissipation Factor (tan δ): *SL/GP Temp. Char.:* C < 30pF: Q ≥ 400+20 C (C:cap.pF), C ≥ 30 pF: Q ≥ 1000 at 1 MHz, 1-5 Vrms and 20°C *B/Y5P Temp. Char.:* D.F. (tan δ)≤0.025 at 1kHz, 1 to 5 Vrms and 20°C • Temperature Characteristics: *SL/GP* Temp. Coefficient: +350 to -1000ppm/°C *B/Y5P* Max. Capacitance Change: ΔC/C≤±10% (Temperature Range: -25 to 85°C) • Capacitance: *SL/GP Temp. Char.:* 1MHz, 1-5 Vrms and 20°C *B/Y5P Temp. Char.:* 1kHz, 1-5 Vrms and 20°C • Dielectric Withstanding Voltage: *SL/GP Temp. Char.,* (voltage 4kVDC): 150% of the rated voltage for 1-5 seconds *SL/GP Temp. Char.,* (voltage 2-3kVDC): 200% of the rated voltage for 1-5 sec. *B/Y5P Temp. Char.:* 200% of the rated voltage for 1-5 seconds

RECOMMENDED APPLICATIONS:

• Output circuit of LCD backlighting inverter • Snubber circuit of switching power supply • High voltage circuit





Volt-age	Capac-itance	Capac. Tol. %	Temp. Char.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	TR Pricing 2,000	Panasonic Part No.
3KVDC	10pF	±5	SL/GP	PCC100JCT-ND	2.92	2.21	1.67	PCC100JTR-ND	1084.00/M	ECC-T3F100JG
3KVDC	12pF	±5	SL/GP	PCC120JCT-ND	2.92	2.21	1.67	PCC120JTR-ND	1084.00/M	ECC-T3F120JG
3KVDC	15pF	±5	SL/GP	PCC150JCT-ND	2.92	2.21	1.67	PCC150JTR-ND	1084.00/M	ECC-T3F150JG
3KVDC	18pF	±5	SL/GP	PCC180JCT-ND	2.92	2.21	1.67	PCC180JTR-ND	1084.00/M	ECC-T3F180JG
3KVDC	22pF	±5	SL/GP	PCC220JCT-ND	2.92	2.21	1.67	PCC220JTR-ND	1084.00/M	ECC-T3F220JG
3KVDC	27pF	±5	SL/GP	PCC270JCT-ND	2.92	2.21	1.67	PCC270JTR-ND	1084.00/M	ECC-T3F270JG
3KVDC	33pF	±5	SL/GP	PCC330JCT-ND	2.92	2.21	1.67	PCC330JTR-ND	1084.00/M	ECC-T3F330JG
3KVDC	39pF	±5	SL/GP	PCC390JCT-ND	2.92	2.21	1.67	PCC390JTR-ND	1084.00/M	ECC-T3F390JG
3KVDC	47pF	±5	SL/GP	PCC470JCT-ND	2.92	2.21	1.67	PCC470JTR-ND	1084.00/M	ECC-T3F470JG
3KVDC	56pF	±5	SL/GP	PCC560JCT-ND	2.92	2.21	1.67	PCC560JTR-ND	1084.00/M	ECC-T3F560JG

Volt-age	Capaci-tance	Capac. Tol. %	Temp. Char.	Digi-Key Part No.	Bulk Price Each 1	10	100	Panasonic Part No.
4KVDC	10pF	±5	SL/GP	PCC2082-ND	2.76	2.08	1.56	ECC-S3G100JG
4KVDC	12pF	±5	SL/GP	PCC2083-ND	2.76	2.08	1.56	ECC-S3G120JG
4KVDC	15pF	±5	SL/GP	PCC2084-ND	2.76	2.08	1.56	ECC-S3G150JG
4KVDC	18pF	±5	SL/GP	PCC2085-ND	2.76	2.08	1.56	ECC-S3G180JG
4KVDC	22pF	±5	SL/GP	PCC2086-ND	2.76	2.08	1.56	ECC-S3G220JG
4KVDC	27pF	±5	SL/GP	PCC2087-ND	2.76	2.08	1.56	ECC-S3G270JG
4KVDC	33pF	±5	SL/GP	PCC2088-ND	2.76	2.08	1.56	ECC-S3G330JG
4KVDC	39pF	±5	SL/GP	PCC2089-ND	2.76	2.08	1.56	ECC-S3G390JG
4KVDC	47pF	±5	SL/GP	PCC2090-ND	2.76	2.08	1.56	ECC-S3G470JG
2KVDC	68pF	±5	SL/GP	PCC2091-ND	1.58	1.19	.90	ECC-S3D680JG
2KVDC	100pF	±10	B/Y5P	PCC2092-ND	1.58	1.19	.90	ECK-S3D101KB
2KVDC	120pF	±10	B/Y5P	PCC2093-ND	1.58	1.19	.90	ECK-S3D121KB
2KVDC	150pF	±10	B/Y5P	PCC2094-ND	1.58	1.19	.90	ECK-S3D151KB
2KVDC	180pF	±10	B/Y5P	PCC2095-ND	1.58	1.19	.90	ECK-S3D181KB
2KVDC	220pF	±10	B/Y5P	PCC2096-ND	1.58	1.19	.90	ECK-S3D221KB
2KVDC	270pF	±10	B/Y5P	PCC2097-ND	1.58	1.19	.90	ECK-S3D271KB
2KVDC	330pF	±10	B/Y5P	PCC2098-ND	1.58	1.19	.90	ECK-S3D331KB
1KVDC	390pF	±10	B/Y5P	PCC2099-ND	1.34	1.01	.76	ECK-S3A391KB
1KVDC	470pF	±10	B/Y5P	PCC2100-ND	1.34	1.01	.76	ECK-S3A471KB

Panasonic Ceramic Capacitors for Safety Regulations - Type BC (SMD)

FEATURES: • Resin molded type for reflow soldering surface mountings • High reliability through disc capacitor element molded construction • Related by IEC 384-14 sub-class Y2/X1 and Japan Domestic Safety Regulations • One standard size cover wide capacitance range for 1000pF to 4700pF

APPLICATIONS: • On-board type power module • DC-DC Converter • FAX Modulator-Demodulator

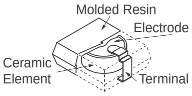


Fig. 1

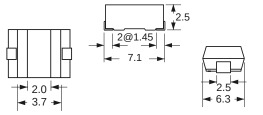
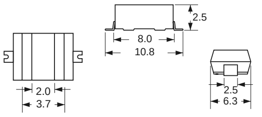


Fig. 2



Volt-age	Capaci-tance	Capac. Tol. %	Temp. Char.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	Panasonic Part No.
Fig. 1 – J-Lead										
250VAC	1000pF	±20	E	P10739CT-ND	1.86	1.46	1.07	P10739TR-ND	1062.00/M	ECK-TBC102ME
250VAC	1500pF	±20	E	P10740CT-ND	1.86	1.46	1.07	P10740TR-ND	1062.00/M	ECK-TBC152ME
250VAC	2200pF	±20	E	P10741CT-ND	1.86	1.46	1.07	P10741TR-ND	1062.00/M	ECK-TBC222ME
250VAC	3300pF	±20	F	P10742CT-ND	1.86	1.46	1.07	P10742TR-ND	1062.00/M	ECK-TBC332MF
250VAC	4700pF	±20	F	P10743CT-ND	1.86	1.46	1.07	P10743TR-ND	1062.00/M	ECK-TBC472MF
Fig. 2 – Gull-Wing										
250VAC	1000pF	±20	E	P10744CT-ND	1.86	1.46	1.07	P10744TR-ND	1062.00/M	ECK-TBC102MEM
250VAC	1500pF	±20	E	P10745CT-ND	1.86	1.46	1.07	P10745TR-ND	1062.00/M	ECK-TBC152MEM
250VAC	2200pF	±20	E	P10746CT-ND	1.86	1.46	1.07	P10746TR-ND	1062.00/M	ECK-TBC222MEM
250VAC	3300pF	±20	F	P10747CT-ND	1.86	1.46	1.07	P10747TR-ND	1062.00/M	ECK-TBC332MFM
250VAC	4700pF	±20	F	P10748CT-ND	1.86	1.46	1.07	P10748TR-ND	1062.00/M	ECK-TBC472MFM

Panasonic Ceramic Capacitors for Safety Regulations - Type FC (Sub-Class Y2) (SMD)

FEATURES:

• Safety Capacitor for reflow soldering process. • Approved by SEMKO (IEC60384-14/EN132400 Sub-class Y2) and UL/CSA (Line by pass Capacitors) • High reliability through disc capacitor element with resin molded construction.

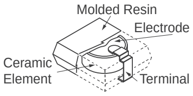
RECOMMENDED APPLICATIONS:

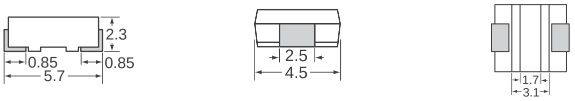
• DC-DC Converter, Power module • MODEM, xDSL • Application EX. (MODEM)

RATINGS:

• **Dimensions:** 5.7L x 4.5W X 2.3T (mm) • **Operating Temperature Range:** -25ºC to 100ºC • **Voltage Proof:** 1500VAC, 1 minute

Temp. Char.	Cap. Change	Temp. Range
SL	+350 to -1000ppm/°C	+20°C to +85°C
B	±10% Max.	-20°C to +85°C
E	+20, -55% Max.	-20°C to +85°C
F	+30, -80% Max.	-20°C to +85°C
The reference temperature: 20°C		





Voltage	Capacitance	Capacitance Tol. %	Temp. Char.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	Panasonic Part No.
250 VAC	5pF	±0.5pF	SL	P11424CT-ND	1.32	1.04	.76	P11424TR-ND	755.00/M	ECC-TFC050DG
250 VAC	10pF	±0.5pF	SL	P11425CT-ND	1.32	1.04	.76	P11425TR-ND	755.00/M	ECC-TFC100DG
250 VAC	22pF	±5%	SL	P11426CT-ND	1.32	1.04	.76	P11426TR-ND	755.00/M	ECC-TFC220JG
250 VAC	47pF	±10%	B	P11427CT-ND	1.26	1.00	.73	P11427TR-ND	721.00/M	ECK-TFC470KB
250 VAC	100pF	±10%	B	P11428CT-ND	1.26	1.00	.73	P11428TR-ND	721.00/M	ECK-TFC101KB
250 VAC	150pF	±10%	B	P11429CT-ND	1.26	1.00	.73	P11429TR-ND	721.00/M	ECK-TFC151KB
250 VAC	220pF	±10%	B	P11430CT-ND	1.26	1.00	.73	P11430TR-ND	721.00/M	ECK-TFC221KB
250 VAC	330pF	±10%	B	P11431CT-ND	1.26	1.00	.73	P11431TR-ND	721.00/M	ECK-TFC331KB
250 VAC	470pF	±10%	B	P11432CT-ND	1.26	1.00	.73	P11432TR-ND	721.00/M	ECK-TFC471KB
250 VAC	1000pF	±10%	B	P11433CT-ND	1.79	1.41	1.03	P11433TR-ND	1024.00/M	ECK-TFC102KB
250 VAC	1000pF	±20%	E	P11434CT-ND	1.26	1.00	.73	P11434TR-ND	721.00/M	ECK-TFC102ME
250 VAC	1500pF	±20%	F	P11435CT-ND	1.26	1.00	.73	P11435TR-ND	721.00/M	ECK-TFC152MF
250 VAC	2200pF	±20%	F	P11436CT-ND	1.32	1.04	.76	P11436TR-ND	755.00/M	ECK-TFC222MF

Panasonic Ceramic Disc Capacitors - Type GL

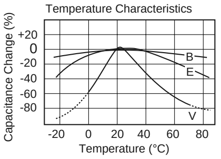
UL 1414 • CSA C22.2 APPROVED

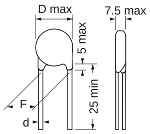
FEATURES:

• Rated 250 VAC.
• CSA rating: 125 VAC

APPLICATIONS:

• Antenna coupling
• Line-bypass and Across-the-line
• Switching surge killer etc.





Volt-age	Capaci-tance	Tolerance	Temp. Char.	Dimensions (mm) Dia.	Thick-ness	Lead Space	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
250	100pF	±20%	B	8.0	5.5	7.5	P4484-ND	.61	.46	.33	.19	ECK-DGL101MB
250	150pF	±20%	B	8.0	5.5	7.5	P4485-ND	.61	.46	.33	.19	ECK-DGL150MB
250	220pF	±20%	B	8.0	5.5	7.5	P4486-ND	.61	.46	.33	.19	ECK-DGL221MB
250	330pF	±20%	B	8.0	5.5	7.5	P4487-ND	.61	.46	.33	.19	ECK-DGL331MB
250	470pF	±20%	B	9.0	5.5	7.5	P4488-ND	.61	.46	.33	.19	ECK-DGL471MB
250	680pF	±20%	B	9.0	5.5	7.5	P4489-ND	.65	.48	.34	.20	ECK-DGL681MB
250	1000pF	±20%	E	9.0	5.5	7.5	P4490-ND	.52	.39	.28	.16	ECK-DGL102ME
250	1500pF	±20%	E	11.0	5.5	7.5	P4491-ND	.70	.52	.39	.22	ECK-DGL152ME
250	2200pF	±20%	E	12.0	5.5	7.5	P4492-ND	.83	.63	.46	.27	ECK-DGL222ME
250	3300pF	±20%	E	15.0	5.5	10.0	P4493-ND	.93	.70	.51	.30	ECK-DGL332ME
250	4700pF	±20%	E	17.0	5.5	10.0	P4494-ND	1.20	.90	.68	.40	ECK-DGL472ME
250	4700pF	+80%, -20%	V	12.0	5.5	7.5	P4495-ND	1.14	.85	.63	.36	ECK-DGL472ZV
250	10000pF	+80%, -20%	V	17.0	5.5	10.0	P4496-ND	1.58	1.19	.89	.53	ECK-DGL103ZV

Panasonic® Multilayer Ceramic Chip Capacitors

0201, 0402, 0508, 0603, 0612, 0805, 1206, 1210 and 1812

FEATURES:

- Small in size and wide capacitance range
- Superior humidity characteristic and long life due to the monolithic construction
- Excellent solderability and resistance to soldering heat due to terminals with three layers of silver nickel and solder
- Low self-inductance and excellent frequency characteristic

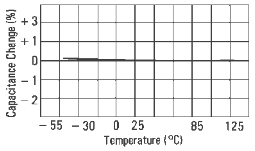
RECOMMENDED APPLICATIONS:

Class 1 (T.C. Type): Temperature compensations, tuned circuits and filter circuits, where low loss and high stability of capacitance and high insulation resistance are required.

Class 2 (HI-K type): Coupling and By-pass, where low loss and high stability of capacitance are not so important.

NPO Type - Class 1:
- Operating temperature range: -55°C ~+125°C

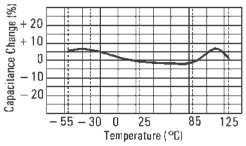
Temperature Coefficient



X7R Type - Class 2:
- Operating temperature range: -55°C ~+125°C

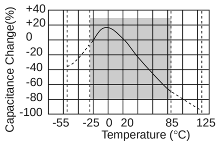
X5R Type - Class 2:
- Operating temperature range: -35°C ~+85°C (-25°C ~+85°C for 0201 series)

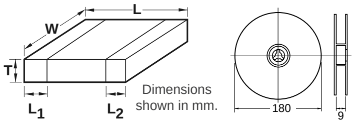
Temperature Coefficient



Y5V Type - Class 2:
- Operating temperature range: -25°C ~+85°C

Temperature Coefficient





Size Code (EIA)	L	W	L1 / L2
0201	0.6±0.03	0.3±0.03	0.15±0.05
0402	1.00±0.05	0.50±0.05	0.20±0.10
0508	1.25±0.15	2.00±0.15	0.20±0.10
0603	1.60±0.10	0.80±0.10	0.30±0.20
0612	1.60±0.20	3.20±0.20	0.30±0.20
0805	2.00±0.10	1.25±0.10	0.50±0.25
1206	3.20±0.15	1.60±0.15	0.80±0.30
1210	3.20±0.30	2.50±0.20	0.60±0.30
1812	4.50±0.30	3.20±0.30	0.60±0.30

† *NOTE:* Panasonic is in the process of changing all MLCC part numbers to a standardized system. This is a part number change only and does not affect the electrical or mechanical specifications. As a result of this change, Digi-Key may ship parts labeled with either the old or new number. Parts that **do not** have a new Panasonic part number listed will be subject to availability beginning March 2001 and are not recommended for new design. Please contact Digi-Key for a direct replacement.

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0201	NPO	25	0.5pF	±.25pF	0.30	PCC2101CT-ND	2.08	14.84	53.42	83.10	PCC2101TR-ND	15,000	74.00/M	ECJ-ZEC1E0R5C	ECJ-ZEC1E0R5C
			1.0pF	±.25pF	0.30	PCC2102CT-ND	2.08	14.84	53.42	83.10	PCC2102TR-ND	15,000	74.00/M	ECJ-ZEC1E010C	ECJ-ZEC1E010C
			1.5pF	±.25pF	0.30	PCC2103CT-ND	2.08	14.84	53.42	83.10	PCC2103TR-ND	15,000	74.00/M	ECJ-ZEC1E1R5C	ECJ-ZEC1E1R5C
			2.0pF	±.25pF	0.30	PCC2104CT-ND	2.08	14.84	53.42	83.10	PCC2104TR-ND	15,000	74.00/M	ECJ-ZEC1E020C	ECJ-ZEC1E020C
			3.0pF	±.25pF	0.30	PCC2105CT-ND	2.08	14.84	53.42	83.10	PCC2105TR-ND	15,000	74.00/M	ECJ-ZEC1E030C	ECJ-ZEC1E030C
			4.0pF	±.25pF	0.30	PCC2106CT-ND	2.08	14.84	53.42	83.10	PCC2106TR-ND	15,000	74.00/M	ECJ-ZEC1E040C	ECJ-ZEC1E040C
			5.0pF	±.25pF	0.30	PCC2107CT-ND	2.08	14.84	53.42	83.10	PCC2107TR-ND	15,000	74.00/M	ECJ-ZEC1E050C	ECJ-ZEC1E050C
			6.0pF	±.5pF	0.30	PCC2108CT-ND	2.08	14.84	53.42	83.10	PCC2108TR-ND	15,000	74.00/M	ECJ-ZEC1E060D	ECJ-ZEC1E060D
			7.0pF	±.5pF	0.30	PCC2109CT-ND	2.08	14.84	53.42	83.10	PCC2109TR-ND	15,000	74.00/M	ECJ-ZEC1E070D	ECJ-ZEC1E070D
			8.0pF	±.5pF	0.30	PCC2110CT-ND	2.08	14.84	53.42	83.10	PCC2110TR-ND	15,000	74.00/M	ECJ-ZEC1E080D	ECJ-ZEC1E080D
			9.0pF	±.5pF	0.30	PCC2111CT-ND	2.08	14.84	53.42	83.10	PCC2111TR-ND	15,000	74.00/M	ECJ-ZEC1E090D	ECJ-ZEC1E090D
			10pF	±.5pF	0.30	PCC2112CT-ND	2.08	14.84	53.42	83.10	PCC2112TR-ND	15,000	74.00/M	ECJ-ZEC1E100D	ECJ-ZEC1E100D
			12pF	±5%	0.30	PCC2113CT-ND	2.08	14.84	53.42	83.10	PCC2113TR-ND	15,000	74.00/M	ECJ-ZEC1E120J	ECJ-ZEC1E120J
			15pF	±5%	0.30	PCC2114CT-ND	2.08	14.84	53.42	83.10	PCC2114TR-ND	15,000	74.00/M	ECJ-ZEC1E150J	ECJ-ZEC1E150J
			18pF	±5%	0.30	PCC2115CT-ND	2.08	14.84	53.42	83.10	PCC2115TR-ND	15,000	74.00/M	ECJ-ZEC1E180J	ECJ-ZEC1E180J
			22pF	±5%	0.30	PCC2116CT-ND	2.08	14.84	53.42	83.10	PCC2116TR-ND	15,000	74.00/M	ECJ-ZEC1E220J	ECJ-ZEC1E220J
			27pF	±5%	0.30	PCC2117CT-ND	2.08	14.84	53.42	83.10	PCC2117TR-ND	15,000	74.00/M	ECJ-ZEC1E270J	ECJ-ZEC1E270J
			33pF	±5%	0.30	PCC2118CT-ND	2.08	14.84	53.42	83.10	PCC2118TR-ND	15,000	74.00/M	ECJ-ZEC1E330J	ECJ-ZEC1E330J
		16	39pF	±5%	0.30	PCC2119CT-ND	2.74	19.60	70.56	109.76	PCC2119TR-ND	15,000	98.00/M	ECJ-ZEC1C390J	ECJ-ZEC1C390J
			47pF	±5%	0.30	PCC2120CT-ND	2.74	19.60	70.56	109.76	PCC2120TR-ND	15,000	98.00/M	ECJ-ZEC1C470J	ECJ-ZEC1C470J
			56pF	±5%	0.30	PCC2121CT-ND	2.74	19.60	70.56	109.76	PCC2121TR-ND	15,000	98.00/M	ECJ-ZEC1C560J	ECJ-ZEC1C560J
			68pF	±5%	0.30	PCC2122CT-ND	2.74	19.60	70.56	109.76	PCC2122TR-ND	15,000	98.00/M	ECJ-ZEC1C680J	ECJ-ZEC1C680J
			82pF	±5%	0.30	PCC2123CT-ND	2.74	19.60	70.56	109.76	PCC2123TR-ND	15,000	98.00/M	ECJ-ZEC1C820J	ECJ-ZEC1C820J
			100pF	±5%	0.30	PCC2124CT-ND	2.74	19.60	70.56	109.76	PCC2124TR-ND	15,000	98.00/M	ECJ-ZEC1C101J	ECJ-ZEC1C101J
	X7R	25	150pF	±10%	0.30	PCC2125CT-ND	2.08	14.84	53.42	83.10	PCC2125TR-ND	15,000	74.00/M	ECJ-ZEB1E151K	ECJ-ZEB1E151K
			220pF	±10%	0.30	PCC2126CT-ND	2.08	14.84	53.42	83.10	PCC2126TR-ND	15,000	74.00/M	ECJ-ZEB1E221K	ECJ-ZEB1E221K
			331pF	±10%	0.30	PCC2127CT-ND	2.08	14.84	53.42	83.10	PCC2127TR-ND	15,000	74.00/M	ECJ-ZEB1E331K	ECJ-ZEB1E331K
			470pF	±10%	0.30	PCC2128CT-ND	2.08	14.84	53.42	83.10	PCC2128TR-ND	15,000	74.00/M	ECJ-ZEB1E471K	ECJ-ZEB1E471K
			680pF	±10%	0.30	PCC2129CT-ND	2.08	14.84	53.42	83.10	PCC2129TR-ND	15,000	74.00/M	ECJ-ZEB1E681K	ECJ-ZEB1E681K
			1000pF	±10%	0.30	PCC2130CT-ND	2.08	14.84	53.42	83.10	PCC2130TR-ND	15,000	74.00/M	ECJ-ZEB1E102K	ECJ-ZEB1E102K
		16	1500pF	±10%	0.30	PCC2131CT-ND	2.74	19.60	70.56	109.76	PCC2131TR-ND	15,000	98.00/M	ECJ-ZEB1C152K	ECJ-ZEB1C152K
			2200pF	±10%	0.30	PCC2132CT-ND	2.74	19.60	70.56	109.76	PCC2132TR-ND	15,000	98.00/M	ECJ-ZEB1C222K	ECJ-ZEB1C222K
		10	3300pF	±10%	0.30	PCC2133CT-ND	2.98	21.28	76.61	119.17	PCC2133TR-ND	15,000	106.00/M	ECJ-ZEB1A332K	ECJ-ZEB1A332K
	X5R	6.3	4700pF	±10%	0.30	PCC2134CT-ND	3.21	22.96	82.66	128.58	PCC2134TR-ND	15,000	115.00/M	ECJ-ZEB0J472K	ECJ-ZEB0J472K
			6800pF	±10%	0.30	PCC2135CT-ND	3.21	22.96	82.66	128.58	PCC2135TR-ND	15,000	115.00/M	ECJ-ZEB0J682K	ECJ-ZEB0J682K
			10000pF	±10%	0.30	PCC2136CT-ND	3.21	22.96	82.66	128.58	PCC2136TR-ND	15,000	115.00/M	ECJ-ZEB0J103K	ECJ-ZEB0J103K
0402	NPO	50	0.5pF	±.25pF	0.50	PCC0R5CQCT-ND•	2.05	14.48	50.01	78.96	PCC0R5CQTR-ND	10,000	66.00/M	ECU-E1H0R5CCQ	ECJ-0EC1H0R5C
			1.0pF	±.25pF	0.50	PCC010CQCT-ND•	2.05	14.48	50.01	78.96	PCC010CQTR-ND	10,000	66.00/M	ECU-E1H010CCQ	ECJ-0EC1H010C
			1.5pF	±.25pF	0.50	PCC1R5CQCT-ND•	2.05	14.48	50.01	78.96	PCC1R5CQTR-ND	10,000	66.00/M	ECU-E1H1R5CCQ	ECJ-0EC1H1R5C
			2.0pF	±.25pF	0.50	PCC020CQCT-ND•	2.05	14.48	50.01	78.96	PCC020CQTR-ND	10,000	66.00/M	ECU-E1H020CCQ	ECJ-0EC1H020C
			3.0pF	±.25pF	0.50	PCC030CQCT-ND•	2.05	14.48	50.01	78.96	PCC030CQTR-ND	10,000	66.00/M	ECU-E1H030CCQ	ECJ-0EC1H030C
			4.0pF	±.25pF	0.50	PCC040CQCT-ND•	2.05	14.48	50.01	78.96	PCC040CQTR-ND	10,000	66.00/M	ECU-E1H040CCQ	ECJ-0EC1H040C
			5.0pF	±.25pF	0.50	PCC050CQCT-ND•	2.05	14.48	50.01	78.96	PCC050CQTR-ND	10,000	66.00/M	ECU-E1H050CCQ	ECJ-0EC1H050C
			6.0pF	±.5pF	0.50	PCC060CQCT-ND•	2.05	14.48	50.01	78.96	PCC060CQTR-ND	10,000	66.00/M	ECU-E1H060DCQ	ECJ-0EC1H060D
			7.0pF	±.5pF	0.50	PCC070CQCT-ND•	2.05	14.48	50.01	78.96	PCC070CQTR-ND	10,000	66.00/M	ECU-E1H070DCQ	ECJ-0EC1H070D
			8.0pF	±.5pF	0.50	PCC080CQCT-ND•	2.05	14.48	50.01	78.96	PCC080CQTR-ND	10,000	66.00/M	ECU-E1H080DCQ	ECJ-0EC1H080D
			9.0pF	±.5pF	0.50	PCC090CQCT-ND•	2.05	14.48	50.01	78.96	PCC090CQTR-ND	10,000	66.00/M	ECU-E1H090DCQ	ECJ-0EC1H090D
			10pF	±.5pF	0.50	PCC100CQCT-ND•	2.05	14.48	50.01	78.96	PCC100CQTR-ND	10,000	66.00/M	ECU-E1H100DCQ	ECJ-0EC1H100D
			11pF	±5%	0.50	PCC110CQCT-ND	2.38	16.78	57.95	91.50	PCC110CQTR-ND	10,000	76.00/M	ECU-E1H110JCQ	(Not for new design)
			12pF	±5%	0.50	PCC120CQCT-ND•	2.05	14.48	50.01	78.96	PCC120CQTR-ND	10,000	66.00/M	ECU-E1H120JCQ	ECJ-0EC1H120J
			13pF	±5%	0.50	PCC130CQCT-ND	2.38	16.78	57.95	91.50	—	—	—	ECU-E1H130JCQ	(Not for new design)
			15pF	±5%	0.50	PCC150CQCT-ND•	2.05	14.48	50.01	78.96	PCC150CQTR-ND	10,000	66.00/M	ECU-E1H150JCQ	ECJ-0EC1H150J
			18pF	±5%	0.50	PCC180CQCT-ND•	2.05	14.48	50.01	78.96	PCC180CQTR-ND	10,000	66.00/M	ECU-E1H180JCQ	ECJ-0EC1H180J
			20pF	±5%	0.50	PCC200CQCT-ND	2.38	16.78	57.95	91.50	PCC200CQTR-ND	10,000	76.00/M	ECU-E1H200JCQ	(Not for new design)
			22pF	±5%	0.50	PCC220CQCT-ND•	2.05	14.48	50.01	78.96	PCC220CQTR-ND	10,000	66.00/M	ECU-E1H220JCQ	ECJ-0EC1H220J
			24pF	±5%	0.50	PCC240CQCT-ND	2.38	16.78	57.95	91.50	—	—	—	ECU-E1H240JCQ	(Not for new design)
			27pF	±5%	0.50	PCC270CQCT-ND•	2.05	14.48	50.01	78.96	PCC270CQTR-ND	10,000	66.00/M	ECU-E1H270JCQ	ECJ-0EC1H270J
			30pF	±5%	0.50	PCC300CQCT-ND	2.38	16.78	57.95	91.50	PCC300CQTR-ND	10,000	76.00/M	ECU-E1H300JCQ	(Not for new design)
			33pF	±5%	0.50	PCC330CQCT-ND•	2.05	14.48	50.01	78.96	PCC330CQTR-ND	10,000	66.00/M	ECU-E1H330JCQ	ECJ-0EC1H330J
			36pF	±5%	0.50	PCC360CQCT-ND	2.38	16.78	57.95	91.50	PCC360CQTR-ND	10,000	76.00/M	ECU-E1H360JCQ	(Not for new design)
			39pF	±5%	0.50	PCC390CQCT-ND•	2.05	14.48	50.01	78.96	PCC390CQTR-ND	10,000	66.00/M	ECU-E1H390JCQ	ECJ-0EC1H390J
			43pF	±5%	0.50	PCC430CQCT-ND	2.38	16.78	57.95	91.50	PCC430CQTR-ND	10,000	76.00/M	ECU-E1H430JCQ	(Not for new design)
			47pF	±5%	0.50	PCC470CQCT-ND•	2.05	14.48	50.01	78.96	PCC470CQTR-ND	10,000	66.00/M	ECU-E1H470JCQ	ECJ-0EC1H470J
			51pF	±5%	0.50	PCC510CQCT-ND	2.38	16.78	57.95	91.50	PCC510CQTR-ND	10,000	76.00/M	ECU-E1H510JCQ	(Not for new design)
			56pF	±5%	0.50	PCC560CQCT-ND•	2.05	14.48	50.01	78.96	PCC560CQTR-ND	10,000	66.00/M	ECU-E1H560JCQ	ECJ-0EC1H560J
			62pF	±5%	0.50	PCC620CQCT-ND	2.38	16.78	57.95	91.50	PCC620CQTR-ND	10,000	76.00/M	ECU-E1H620JCQ	(Not for new design)
			68pF	±5%	0.50	PCC680CQCT-ND•	2.05	14.48	50.01	78.96	PCC680CQTR-ND	10,000	66.00/M	ECU-E1H680JCQ	ECJ-0EC1H680J
			75pF	±5%	0.50	PCC750CQCT-ND	2.38	16.78	57.95	91.50	PCC750CQTR-ND	10,000	76.00/M	ECU-E1H750JCQ	(Not for new design)
			82pF	±5%	0.50	PCC820CQCT-ND•	2.18	15.40	53.20	84.00	PCC820CQTR-ND	10,000	70.00/M	ECU-E1H820JCQ	ECJ-0EC1H820J
			91pF	±5%	0.50	PCC910CQCT-ND	2.61	18.43	63.65	100.50	PCC910CQTR-ND	10,000	84.00/M	ECU-E1H910JCQ	(Not for new design)
			100pF	±5%	0.50	PCC101CQCT-ND•	2.18	15.40	53.20	84.00	PCC101CQTR-ND	10,000	70.00/M	ECU-E1H101JCQ	ECJ-0EC1H101J
			110pF	±5%	0.50	PCC111CQCT-ND	2.69	18.98	65.55	103.50	PCC111CQTR-ND	10,000	86.00/M	ECU-E1H111JCQ	(Not for new design)
			120pF	±5%	0.50	PCC121CQCT-ND•	2.27	16.02	55.33	87.36	PCC121CQTR-ND	10,000	73.00/M	ECU-E1H121JCQ	ECJ-0EC1H121J
			130pF	±5%	0.50	PCC131CQCT-ND	2.81	19.80	68.40	108.00	—	—	—	ECU-E1H131JCQ	(Not for new design)
			150pF	±5%	0.50	PCC151CQCT-ND•	2.40	16.94	58.52	92.40	PCC151CQTR-ND	10,000	77.00/M	ECU-E1H151JCQ	ECJ-0EC1H151J
			160pF	±5%	0.50	PCC161CQCT-ND	3.00	21.18	73.15	115.50	PCC161CQTR-ND	10,000	96.00/M	ECU-E1H161JCQ	(Not for new design)
			180pF	±5%	0.50	PCC181CQCT-ND•	2.39	17.08	61.49	95.65	PCC181CQTR-ND	10,000	85.00/M	ECU-E1H181JCQ	ECJ-0EC1H181J

(Continued)

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Old *†* Panasonic Part No.	New *†* Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0402	NPO	50	200pF	±5%	0.50	PCC201CQCT-ND	3.01	21.50	77.40	120.40	PCC201CQTR-ND	10,000	108.00/M	ECU-E1H201JCQ	(Not for new design)
			220pF	±5%	0.50	PCC221CQCT-ND•	2.67	19.04	68.54	106.62	PCC221CQTR-ND	10,000	95.00/M	ECU-E1H221JCQ	ECJ-0EC1H221J
	X7R	50	100pF	±10%	0.50	PCC1709CT-ND•	2.10	14.78	51.07	80.64	PCC1709TR-ND	10,000	67.00/M	ECU-E1H101KBQ	ECJ-0EB1H101K
			120pF	±10%	0.50	PCC1710CT-ND•	2.10	14.78	51.07	80.64	PCC1710TR-ND	10,000	67.00/M	ECU-E1H121KBQ	ECJ-0EB1H121K
			150pF	±10%	0.50	PCC1711CT-ND•	2.10	14.78	51.07	80.64	PCC1711TR-ND	10,000	67.00/M	ECU-E1H151KBQ	ECJ-0EB1H151K
			180pF	±10%	0.50	PCC1712CT-ND•	2.10	14.78	51.07	80.64	PCC1712TR-ND	10,000	67.00/M	ECU-E1H181KBQ	ECJ-0EB1H181K
			220pF	±10%	0.50	PCC1713CT-ND•	2.10	14.78	51.07	80.64	PCC1713TR-ND	10,000	67.00/M	ECU-E1H221KBQ	ECJ-0EB1H221K
			270pF	±10%	0.50	PCC1714CT-ND•	2.10	14.78	51.07	80.64	PCC1714TR-ND	10,000	67.00/M	ECU-E1H271KBQ	ECJ-0EB1H271K
			330pF	±10%	0.50	PCC1715CT-ND•	2.10	14.78	51.07	80.64	PCC1715TR-ND	10,000	67.00/M	ECU-E1H331KBQ	ECJ-0EB1H331K
			390pF	±10%	0.50	PCC1716CT-ND•	2.10	14.78	51.07	80.64	PCC1716TR-ND	10,000	67.00/M	ECU-E1H391KBQ	ECJ-0EB1H391K
			470pF	±10%	0.50	PCC1717CT-ND•	2.10	14.78	51.07	80.64	PCC1717TR-ND	10,000	67.00/M	ECU-E1H471KBQ	ECJ-0EB1H471K
			560pF	±10%	0.50	PCC1718CT-ND•	2.10	14.78	51.07	80.64	PCC1718TR-ND	10,000	67.00/M	ECU-E1H561KBQ	ECJ-0EB1H561K
			680pF	±10%	0.50	PCC1719CT-ND•	2.10	14.78	51.07	80.64	PCC1719TR-ND	10,000	67.00/M	ECU-E1H681KBQ	ECJ-0EB1H681K
			820pF	±10%	0.50	PCC1720CT-ND•	2.10	14.78	51.07	80.64	PCC1720TR-ND	10,000	67.00/M	ECU-E1H821KBQ	ECJ-0EB1H821K
			1000pF	±10%	0.50	PCC1721CT-ND•	2.10	14.78	51.07	80.64	PCC1721TR-ND	10,000	67.00/M	ECU-E1H102KBQ	ECJ-0EB1H102K
			1200pF	±10%	0.50	PCC1722CT-ND•	2.10	14.78	51.07	80.64	PCC1722TR-ND	10,000	67.00/M	ECU-E1H122KBQ	ECJ-0EB1H122K
			1500pF	±10%	0.50	PCC1723CT-ND•	2.10	14.78	51.07	80.64	PCC1723TR-ND	10,000	67.00/M	ECU-E1H152KBQ	ECJ-0EB1H152K
			1800pF	±10%	0.50	PCC1724CT-ND•	2.10	14.78	51.07	80.64	PCC1724TR-ND	10,000	67.00/M	ECU-E1H182KBQ	ECJ-0EB1H182K
			2200pF	±10%	0.50	PCC1725CT-ND•	2.10	14.78	51.07	80.64	PCC1725TR-ND	10,000	67.00/M	ECU-E1H222KBQ	ECJ-0EB1H222K
			2700pF	±10%	0.50	PCC1726CT-ND•	2.27	16.02	55.33	87.36	PCC1726TR-ND	10,000	73.00/M	ECU-E1H272KBQ	ECJ-0EB1H272K
			3300pF	±10%	0.50	PCC1727CT-ND•	2.45	17.25	59.58	94.08	PCC1727TR-ND	10,000	78.00/M	ECU-E1H332KBQ	ECJ-0EB1H332K
			3900pF	±10%	0.50	PCC1728CT-ND•	2.49	17.56	60.65	95.76	PCC1728TR-ND	10,000	80.00/M	ECU-E1H392KBQ	ECJ-0EB1H392K
		25	100pF	±10%	0.50	PCC1702CT-ND	2.05	14.48	50.01	78.96	PCC1702TR-ND	10,000	66.00/M	ECU-E1E101KBQ	ECJ-0EB1E101K
			120pF	±10%	0.50	PCC1703CT-ND	2.05	14.48	50.01	78.96	PCC1703TR-ND	10,000	66.00/M	ECU-E1E121KBQ	ECJ-0EB1E121K
			150pF	±10%	0.50	PCC1704CT-ND	2.05	14.48	50.01	78.96	PCC1704TR-ND	10,000	66.00/M	ECU-E1E151KBQ	ECJ-0EB1E151K
			180pF	±10%	0.50	PCC1705CT-ND	2.05	14.48	50.01	78.96	PCC1705TR-ND	10,000	66.00/M	ECU-E1E181KBQ	ECJ-0EB1E181K
			220pF	±10%	0.50	PCC1706CT-ND	2.05	14.48	50.01	78.96	PCC1706TR-ND	10,000	66.00/M	ECU-E1E221KBQ	ECJ-0EB1E221K
			270pF	±10%	0.50	PCC271BQCT-ND	2.05	14.48	50.01	78.96	PCC271BQTR-ND	10,000	66.00/M	ECU-E1E271KBQ	ECJ-0EB1E271K
			330pF	±10%	0.50	PCC331BQCT-ND	2.05	14.48	50.01	78.96	PCC331BQTR-ND	10,000	66.00/M	ECU-E1E331KBQ	ECJ-0EB1E331K
			391pF	±10%	0.50	PCC391BQCT-ND	2.05	14.48	50.01	78.96	PCC391BQTR-ND	10,000	66.00/M	ECU-E1E391KBQ	ECJ-0EB1E391K
			470pF	±10%	0.50	PCC471BQCT-ND	2.05	14.48	50.01	78.96	PCC471BQTR-ND	10,000	66.00/M	ECU-E1E471KBQ	ECJ-0EB1E471K
			560pF	±10%	0.50	PCC561BQCT-ND	2.05	14.48	50.01	78.96	PCC561BQTR-ND	10,000	66.00/M	ECU-E1E561KBQ	ECJ-0EB1E561K
			680pF	±10%	0.50	PCC681BQCT-ND	2.05	14.48	50.01	78.96	PCC681BQTR-ND	10,000	66.00/M	ECU-E1E681KBQ	ECJ-0EB1E681K
			820pF	±10%	0.50	PCC821BQCT-ND	2.05	14.48	50.01	78.96	PCC821BQTR-ND	10,000	66.00/M	ECU-E1E821KBQ	ECJ-0EB1E821K
			1000pF	±10%	0.50	PCC102BQCT-ND	2.05	11.84	50.01	78.96	PCC102BQTR-ND	10,000	66.00/M	ECU-E1E102KBQ	ECJ-0EB1E102K
			1200pF	±10%	0.50	PCC122BQCT-ND	2.05	14.48	50.01	78.96	PCC122BQTR-ND	10,000	66.00/M	ECU-E1E122KBQ	ECJ-0EB1E122K
			1500pF	±10%	0.50	PCC152BQCT-ND	2.05	14.48	50.01	78.96	PCC152BQTR-ND	10,000	66.00/M	ECU-E1E152KBQ	ECJ-0EB1E152K
			1800pF	±10%	0.50	PCC182BQCT-ND	2.05	14.48	50.01	78.96	PCC182BQTR-ND	10,000	66.00/M	ECU-E1E182KBQ	ECJ-0EB1E182K
			2200pF	±10%	0.50	PCC222BQCT-ND	2.05	14.48	50.01	78.96	PCC222BQTR-ND	10,000	66.00/M	ECU-E1E222KBQ	ECJ-0EB1E222K
			2700pF	±10%	0.50	PCC272BQCT-ND	2.23	15.71	54.26	85.68	PCC272BQTR-ND	10,000	71.00/M	ECU-E1E272KBQ	ECJ-0EB1E272K
			3300pF	±10%	0.50	PCC332BQCT-ND	2.40	16.94	58.52	92.40	PCC332BQTR-ND	10,000	77.00/M	ECU-E1E332KBQ	ECJ-0EB1E332K
			3900pF	±10%	0.50	PCC392BQCT-ND	2.45	17.25	59.58	94.08	PCC392BQTR-ND	10,000	78.00/M	ECU-E1E392KBQ	ECJ-0EB1E392K
			4700pF	±10%	0.50	PCC472BQCT-ND•	2.53	17.86	61.71	97.44	PCC472BQTR-ND	10,000	81.00/M	ECU-E1E472KBQ	ECJ-0EB1E472K
			5600pF	±10%	0.50	PCC1707CT-ND•	1.79	12.63	43.62	68.88	PCC1707TR-ND	10,000	57.00/M	ECU-E1E562KBQ	ECJ-0EB1E562K
			6800pF	±10%	0.50	PCC1708CT-ND•	1.79	12.63	43.62	68.88	PCC1708TR-ND	10,000	57.00/M	ECU-E1E682KBQ	ECJ-0EB1E682K
		16	5600pF	±10%	0.50	PCC562BQCT-ND	1.70	12.01	41.50	65.52	PCC562BQTR-ND	10,000	55.00/M	ECU-E1C562KBQ	ECJ-0EB1C562K
			6800pF	±10%	0.50	PCC682BQCT-ND	1.75	12.32	42.56	67.20	PCC682BQTR-ND	10,000	56.00/M	ECU-E1C682KBQ	ECJ-0EB1C682K
			8200pF	±10%	0.50	PCC822BQCT-ND•	1.79	12.63	43.62	68.88	PCC822BQTR-ND	10,000	57.00/M	ECU-E1C822KBQ	ECJ-0EB1C822K
			10000pF	±10%	0.50	PCC103BQCT-ND•	1.83	12.94	44.69	70.56	PCC103BQTR-ND	10,000	59.00/M	ECU-E1C103KBQ	ECJ-0EB1C103K
			12000pF	±10%	0.50	PCC1700CT-ND•	1.83	12.94	44.69	70.56	PCC1700TR-ND	10,000	59.00/M	ECU-E1C123KBQ	ECJ-0EB1C123K
			15000pF	±10%	0.50	PCC1701CT-ND•	1.83	12.94	44.69	70.56	PCC1701TR-ND	10,000	59.00/M	ECU-E1C153KBQ	ECJ-0EB1C153K
			18000pF	±10%	0.50	PCC2137CT-ND•	1.92	13.55	46.82	73.92	PCC2137TR-ND	10,000	62.00/M	ECJ-0EB1C183K	ECJ-0EB1C183K
			22000pF	±10%	0.50	PCC2138CT-ND•	1.92	13.55	46.82	73.92	PCC2138TR-ND	10,000	62.00/M	ECJ-0EB1C223K	ECJ-0EB1C223K
	X5R	10	27000pF	±10%	0.50	PCC2139CT-ND	1.92	13.55	46.82	73.92	PCC2139TR-ND	10,000	62.00/M	ECJ-0EB1A273K	ECJ-0EB1A273K
			33000pF	±10%	0.50	PCC2140CT-ND	1.92	13.55	46.82	73.92	PCC2140TR-ND	10,000	62.00/M	ECJ-0EB1A333K	ECJ-0EB1A333K
			39000pF	±10%	0.50	PCC2141CT-ND	1.92	13.55	46.82	73.92	PCC2141TR-ND	10,000	62.00/M	ECJ-0EB1A393K	ECJ-0EB1A393K
			47000pF	±10%	0.50	PCC2142CT-ND	2.01	14.17	48.94	77.28	PCC2142TR-ND	10,000	64.00/M	ECJ-0EB1A473K	ECJ-0EB1A473K
			56000pF	±10%	0.50	PCC2143CT-ND	2.01	14.17	48.94	77.28	PCC2143TR-ND	10,000	64.00/M	ECJ-0EB1A563K	ECJ-0EB1A563K
			68000pF	±10%	0.50	PCC2144CT-ND	2.01	14.17	48.94	77.28	PCC2144TR-ND	10,000	64.00/M	ECJ-0EB1A683K	ECJ-0EB1A683K
			82000pF	±10%	0.50	PCC2145CT-ND	2.14	15.09	52.14	82.32	PCC2145TR-ND	10,000	69.00/M	ECJ-0EB1A823K	ECJ-0EB1A823K
			.1µF	±10%	0.50	PCC2146CT-ND•	2.14	15.09	52.14	82.32	PCC2146TR-ND	10,000	69.00/M	ECJ-0EB1A104K	ECJ-0EB1A104K
	Y5V	50	1000pF	+80%/-20%	0.50	PCC1741CT-ND	1.88	13.24	45.75	72.24	PCC1741TR-ND	10,000	60.00/M	ECU-E1H102ZFQ	ECJ-0EF1H102Z
			1500pF	+80%/-20%	0.50	PCC1742CT-ND	1.88	13.24	45.75	72.24	PCC1742TR-ND	10,000	60.00/M	ECU-E1H152ZFQ	ECJ-0EF1H152Z
			2200pF	+80%/-20%	0.50	PCC1743CT-ND	1.88	13.24	45.75	72.24	PCC1743TR-ND	10,000	60.00/M	ECU-E1H222ZFQ	ECJ-0EF1H222Z
			3300pF	+80%/-20%	0.50	PCC1744CT-ND	1.88	13.24	45.75	72.24	PCC1744TR-ND	10,000	60.00/M	ECU-E1H332ZFQ	ECJ-0EF1H332Z
			4700pF	+80%/-20%	0.50	PCC1745CT-ND	1.88	13.24	45.75	72.24	PCC1745TR-ND	10,000	60.00/M	ECU-E1H472ZFQ	ECJ-0EF1H472Z
			6800pF	+80%/-20%	0.50	PCC1746CT-ND	1.88	13.24	45.75	72.24	PCC1746TR-ND	10,000	60.00/M	ECU-E1H682ZFQ	ECJ-0EF1H682Z
			10000pF	+80%/-20%	0.50	PCC1747CT-ND	1.88	13.24	45.75	72.24	PCC1747TR-ND	10,000	60.00/M	ECU-E1H103ZFQ	ECJ-0EF1H103Z
		25	1000pF	+80%/-20%	0.50	PCC1732CT-ND	1.88	13.24	45.75	72.24	PCC1732TR-ND	10,000	60.00/M	ECU-E1E102ZFQ	ECJ-0EF1E102Z
			1500pF	+80%/-20%	0.50	PCC1733CT-ND	1.88	13.24	45.75	72.24	PCC1733TR-ND	10,000	60.00/M	ECU-E1E152ZFQ	ECJ-0EF1E152Z
			2200pF	+80%/-20%	0.50	PCC1734CT-ND	1.88	13.24	45.75	72.24	PCC1734TR-ND	10,000	60.00/M	ECU-E1E222ZFQ	ECJ-0EF1E222Z
			3300pF	+80%/-20%	0.50	PCC1735CT-ND	1.88	13.24	45.75	72.24	PCC1735TR-ND	10,000	60.00/M	ECU-E1E332ZFQ	ECJ-0EF1E332Z
			4700pF	+80%/-20%	0.50	PCC1736CT-ND	1.88	13.24	45.75	72.24	PCC1736TR-ND	10,000	60.00/M	ECU-E1E472ZFQ	ECJ-0EF1E472Z
			6800pF	+80%/-20%	0.50	PCC1737CT-ND	1.88	13.24	45.75	72.24	PCC1737TR-ND	10,000	60.00/M	ECU-E1E682ZFQ	ECJ-0EF1E682Z
			10000pF	+80%/-20%	0.50	PCC1738CT-ND	2.01	14.17	48.94	77.28	PCC1738TR-ND	10,000	64.00/M	ECU-E1E103ZFQ	ECJ-0EF1E103Z
			15000pF	+80%/-20%	0.50	PCC1739CT-ND	2.18	15.40	53.20	84.00	PCC1739TR-ND	10,000	70.00/M	ECU-E1E153ZFQ	ECJ-0EF1E153Z
			22000pF	+80%/-20%	0.50	PCC1740CT-ND	2.18	15.40	53.20	84.00	PCC1740TR-ND	10,000	70.00/M	ECU-E1E223ZFQ	ECJ-0EF1E223Z
		16	15000pF	+80%/-20%	0.50	PCC153FQCT-ND	2.18	15.40	53.20	84.00	PCC153FQTR-ND	10,000	70.00/M	ECU-E1C153ZFQ	ECJ-0EF1C153Z
			22000pF	+80%/-20%	0.50	PCC223FQCT-ND	2.27	16.02	55.33	87.36	PCC223FQTR-ND	10,000	73.00/M	ECU-E1C223ZFQ	ECJ-0EF1C223Z
			33000pF	+80%/-20%	0.50	PCC333FQCT-ND	2.40	16.94	58.52	92.40	PCC333FQTR-ND	10,000	77.00/M	ECU-E1C333ZFQ	ECJ-0EF1C333Z
			47000pF	+80%/-20%	0.50	PCC1729CT-ND	2.45	17.25	59.58	94.08	PCC1729TR-ND	10,000	78.00/M	ECU-E1C473ZFQ	ECJ-0EF1C473Z
			68000pF	+80%/-20%	0.50	PCC1730CT-ND	2.45	17.25	59.58	94.08	PCC1730TR-ND	10,000	78.00/M	ECU-E1C683ZFQ	ECJ-0EF1C683Z
			.1µF	+80%/-20%	0.50	PCC1731CT-ND	2.71	19.10	65.97	104.16	PCC1731TR-ND	10,000	87.00/M	ECU-E1C104ZFQ	ECJ-0EF1C104Z
0508	X7R	50	.01µF	±10%	0.85	PCC2187CT-ND	5.07	36.23	130.41	217.35	PCC2187TR-ND	4,000	188.00/M	ECJ-VVB1H103K	ECY-29RH103KV
		25	.1µF	±10%	0.85	PCC2188CT-ND	5.07	36.23	130.41	217.35	PCC2188TR-ND	4,000	188.00/M	ECJ-VVB1E104K	ECY-29RE104KV
	X5R	10	1µF	±10%	0.85	PCC2189CT-ND	7.65	54.63	196.65	327.75	PCC2189TR-ND	4,000	284.00/M	ECJ-VVB1A105K	ECY-29RA105KV
0603	NPO	100	10pF	±0.5pF	0.80	PCC1941CT-ND	1.60	10.76	36.46	59.02	PCC1941TR-ND	4,000	47.00/M	ECJ-1VC2A100D	ECJ-1VC2A100D
			15pF	±5%	0.80	PCC1942CT-ND	1.65	11.11	37.63	60.93	PCC1942TR-ND	4,000	48.00/M	ECJ-1VC2A150J	ECJ-1VC2A150J
			22pF	±5%	0.80	PCC1943CT-ND	1.65	11.11	37.63	60.93	PCC1943TR-ND	4,000	48.00/M	ECJ-1VC2A220J	ECJ-1VC2A220J
			33pF	±5%	0.80	PCC1944CT-ND	1.66	11.70	40.43	68.10	PCC1944TR-ND	4,000	55.00/M	ECJ-1VC2A330J	ECJ-1VC2A330J
			47pF	±5%	0.80	PCC1945CT-ND	1.66	11.70	40.43	68.10	PCC1945TR-ND	4,000	55.00/M	ECJ-1VC2A470J	ECJ-1VC2A470J
			68pF	±5%	0.80	PCC1946CT-ND	1.92	13.55	46.82	78.85	PCC1946TR-ND	4,000	64.00/M	ECJ-1VC2A680J	ECJ-1VC2A680J
			100pF	±5%	0.80	PCC1947CT-ND	2.10	14.78	51.07	86.02	PCC1947TR-ND	4,000	70.00/M	ECJ-1VC2A101J	ECJ-1VC2A101J
		50	0.5pF	±0.25pF	0.80	PCC0R5CVCT-ND•	.67	4.51	15.29	24.75	PCC0R5CVTR-ND	4,000	20.00/M	ECU-V1H0R5CCV	ECJ-1VC1H0R5C
			1pF	±0.25pF	0.80	PCC010CVCT-ND•	.67	4.51	15.29	24.75	PCC010CVTR-ND	4,000	20.00/M	ECU-V1H010CCV	ECJ-1VC1H010C
			1.5pF	±0.25pF	0.80	PCC1R5CVCT-ND•	.67	4.51	15.29	24.75	PCC1R5CVTR-ND	4,000	20.00/M	ECU-V1H1R5CCV	ECJ-1VC1H1R5C
			2pF	±0.25pF	0.80	PCC020CVCT-ND•	.67	4.51	15.29	24.75	PCC020CVTR-ND	4,000	20.00/M	ECU-V1H020CCV	ECJ-1VC1H020C
			3pF	±0.25pF	0.80	PCC030CVCT-ND•	.67	4.51	15.29	24.75	PCC030CVTR-ND	4,000	20.00/M	ECU-V1H030CCV	ECJ-1VC1H030C
			4pF	±0.25pF	0.80	PCC040CVCT-ND•	.67	4.51	15.29	24.75	PCC040CVTR-ND	4,000	20.00/M	ECU-V1H040CCV	ECJ-1VC1H040C
			5pF	±0.25pF	0.80	PCC050CVCT-ND•	.67	4.51	15.29	24.75	PCC050CVTR-ND	4,000	20.00/M	ECU-V1H050CCV	ECJ-1VC1H050C
			6pF	±0.5pF	0.80	PCC060CVCT-ND•	.67	4.51	15.29	24.75	PCC060CVTR-ND	4,000	20.00/M	ECU-V1H060DCV	ECJ-1VC1H060D
			7pF	±0.5pF	0.80	PCC070CVCT-ND•	.67	4.51	15.29	24.75	PCC070CVTR-ND	4,000	20.00/M	ECU-V1H070DCV	ECJ-1VC1H070D
			8pF	±0.5pF	0.80	PCC080CVCT-ND•	.67	4.51	15.29	24.75	PCC080CVTR-ND	4,000	20.00/M	ECU-V1H080DCV	ECJ-1VC1H080D
			9pF	±0.5pF	0.80	PCC090CVCT-ND•	.67	4.51	15.29	24.75	PCC090CVTR-ND	4,000	20.00/M	ECU-V1H090DCV	ECJ-1VC1H090D
			10pF	±0.5pF	0.80	PCC100CVCT-ND•	.67	4.51	15.29	24.75	PCC100CVTR-ND	4,000	20.00/M	ECU-V1H100DCV	ECJ-1VC1H100D
			12pF	±5%	0.80	PCC120ACVCT-ND	.67	4.51	15.29	24.75	PCC120ACVTR-ND	4,000	20.00/M	ECU-V1H120JCV	ECJ-1VC1H120J
			15pF	±5%	0.80	PCC150ACVCT-ND•	.67	4.51	15.29	24.75	PCC150ACVTR-ND	4,000	20.00/M	ECU-V1H150JCV	ECJ-1VC1H150J
			18pF	±5%	0.80	PCC180ACVCT-ND•	.67	4.51	15.29	24.75	PCC180ACVTR-ND	4,000	20.00/M	ECU-V1H180JCV	ECJ-1VC1H180J
			22pF	±5%	0.80	PCC220ACVCT-ND•	.46	3.12	10.58	17.14	PCC220ACVTR-ND	4,000	14.00/M	ECU-V1H220JCV	ECJ-1VC1H220J

(Continued)

Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0508, 0603, 0612, 0805, 1206, 1210 and 1812 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Pricing 10	100	500	1,000	Digi-Key Part No.	Tape & Reel Size	Pricing	Old † Panasonic Part No.	New † Panasonic Part No.
0603	NPO	50	27pF	±5%	0.80	PCC270ACVCT-ND•	.57	3.82	12.94	20.94	PCC270ACVTR-ND	4,000	17.00/M	ECU-V1H270JCV	ECJ-1VC1H270J
			33pF	±5%	0.80	PCC330ACVCT-ND•	.57	3.82	12.94	20.94	PCC330ACVTR-ND	4,000	17.00/M	ECU-V1H330JCV	ECJ-1VC1H330J
			39pF	±5%	0.80	PCC390ACVCT-ND•	.57	3.82	12.94	20.94	PCC390ACVTR-ND	4,000	17.00/M	ECU-V1H390JCV	ECJ-1VC1H390J
			47pF	±5%	0.80	PCC470ACVCT-ND•	.57	3.82	12.94	20.94	PCC470ACVTR-ND	4,000	17.00/M	ECU-V1H470JCV	ECJ-1VC1H470J
			56pF	±5%	0.80	PCC560ACVCT-ND•	.57	3.82	12.94	20.94	PCC560ACVTR-ND	4,000	17.00/M	ECU-V1H560JCV	ECJ-1VC1H560J
			68pF	±5%	0.80	PCC680ACVCT-ND•	.92	6.20	21.00	34.00	PCC680ACVTR-ND	4,000	27.00/M	ECU-V1H680JCV	ECJ-1VC1H680J
			82pF	±5%	0.80	PCC820ACVCT-ND•	.57	3.82	12.94	20.94	PCC820ACVTR-ND	4,000	17.00/M	ECU-V1H820JCV	ECJ-1VC1H820J
			100pF	±5%	0.80	PCC101ACVCT-ND•	.62	4.17	14.11	22.85	PCC101ACVTR-ND	4,000	18.00/M	ECU-V1H101JCV	ECJ-1VC1H101J
			120pF	±5%	0.80	PCC121ACVCT-ND•	.62	4.17	14.11	22.85	PCC121ACVTR-ND	4,000	18.00/M	ECU-V1H121JCV	ECJ-1VC1H121J
			150pF	±5%	0.80	PCC151ACVCT-ND•	.62	4.17	14.11	22.85	PCC151ACVTR-ND	4,000	18.00/M	ECU-V1H151JCV	ECJ-1VC1H151J
			180pF	±5%	0.80	PCC181ACVCT-ND•	.62	4.17	14.11	22.85	PCC181ACVTR-ND	4,000	18.00/M	ECU-V1H181JCV	ECJ-1VC1H181J
			220pF	±5%	0.80	PCC221ACVCT-ND•	.67	4.51	15.29	24.75	PCC221ACVTR-ND	4,000	20.00/M	ECU-V1H221JCV	ECJ-1VC1H221J
			270pF	±5%	0.80	PCC271ACVCT-ND•	1.03	6.94	23.52	38.08	PCC271ACVTR-ND	4,000	30.00/M	ECU-V1H271JCV	ECJ-1VC1H271J
			330pF	±5%	0.80	PCC331ACVCT-ND•	1.08	7.29	24.70	39.98	PCC331ACVTR-ND	4,000	32.00/M	ECU-V1H331JCV	ECJ-1VC1H331J
			390pF	±5%	0.80	PCC391ACVCT-ND•	1.18	7.99	27.05	43.79	PCC391ACVTR-ND	4,000	35.00/M	ECU-V1H391JCV	ECJ-1VC1H391J
			470pF	±5%	0.80	PCC2147CT-ND	1.18	7.99	27.05	43.79	PCC2147TR-ND	4,000	35.00/M	ECJ-1VC1H471J	ECJ-1VC1H471J
			560pF	±5%	0.80	PCC2148CT-ND	1.49	10.07	34.10	55.22	PCC2148TR-ND	4,000	44.00/M	ECJ-1VC1H561J	ECJ-1VC1H561J
			680pF	±5%	0.80	PCC2149CT-ND	1.49	10.07	34.10	55.22	PCC2149TR-ND	4,000	44.00/M	ECJ-1VC1H681J	ECJ-1VC1H681J
			820pF	±5%	0.80	PCC2150CT-ND	1.80	12.15	41.16	66.64	PCC2150TR-ND	4,000	53.00/M	ECJ-1VC1H821J	ECJ-1VC1H821J
			1000pF	±5%	0.80	PCC2151CT-ND	1.80	12.15	41.16	66.64	PCC2151TR-ND	4,000	53.00/M	ECJ-1VC1H102J	ECJ-1VC1H102J
	X7R	200	220pF	±10%	0.80	PCC1953CT-ND	2.27	16.02	55.33	93.18	PCC1953TR-ND	4,000	76.00/M	ECJ-1VB2D221K	ECJ-1VB2D221K
			330pF	±10%	0.80	PCC1954CT-ND	2.27	16.02	55.33	93.18	PCC1954TR-ND	4,000	76.00/M	ECJ-1VB2D331K	ECJ-1VB2D331K
			470pF	±10%	0.80	PCC1955CT-ND	2.27	16.02	55.33	93.18	PCC1955TR-ND	4,000	76.00/M	ECJ-1VB2D471K	ECJ-1VB2D471K
			680pF	±10%	0.80	PCC1956CT-ND	2.27	16.02	55.33	93.18	PCC1956TR-ND	4,000	76.00/M	ECJ-1VB2D681K	ECJ-1VB2D681K
			1000pF	±10%	0.80	PCC1957CT-ND	2.27	16.02	55.33	93.18	PCC1957TR-ND	4,000	76.00/M	ECJ-1VB2D102K	ECJ-1VB2D102K
		100	220pF	±10%	0.80	PCC1948CT-ND	1.60	10.76	36.46	59.02	PCC1948TR-ND	4,000	47.00/M	ECJ-1VB2A221K	ECJ-1VB2A221K
			330pF	±10%	0.80	PCC1949CT-ND	1.60	10.76	36.46	59.02	PCC1949TR-ND	4,000	47.00/M	ECJ-1VB2A331K	ECJ-1VB2A331K
			470pF	±10%	0.80	PCC1950CT-ND	1.60	10.76	36.46	59.02	PCC1950TR-ND	4,000	47.00/M	ECJ-1VB2A471K	ECJ-1VB2A471K
			680pF	±10%	0.80	PCC1951CT-ND	1.60	10.76	36.46	59.02	PCC1951TR-ND	4,000	47.00/M	ECJ-1VB2A681K	ECJ-1VB2A681K
			1000pF	±10%	0.80	PCC1952CT-ND	1.60	10.76	36.46	59.02	PCC1952TR-ND	4,000	47.00/M	ECJ-1VB2A102K	ECJ-1VB2A102K
		50	220pF	±10%	0.80	PCC221BVCT-ND	.83	5.58	18.90	30.60	PCC221BVTR-ND	4,000	24.00/M	ECU-V1H221KBV	(Not for new design)
			270pF	±10%	0.80	PCC271BVCT-ND	.83	5.58	18.90	30.60	PCC271BVTR-ND	4,000	24.00/M	ECU-V1H271KBV	(Not for new design)
			330pF	±10%	0.80	PCC331BVCT-ND	.83	5.58	18.90	30.60	PCC331BVTR-ND	4,000	24.00/M	ECU-V1H331KBV	(Not for new design)
			390pF	±10%	0.80	PCC391BVCT-ND	.83	5.58	18.90	30.60	PCC391BVTR-ND	4,000	24.00/M	ECU-V1H391KBV	(Not for new design)
			470pF	±10%	0.80	PCC471BVCT-ND	.87	5.89	19.95	32.30	PCC471BVTR-ND	4,000	26.00/M	ECU-V1H471KBV	(Not for new design)
			560pF	±10%	0.80	PCC561BVCT-ND	.87	5.89	19.95	32.30	PCC561BVTR-ND	4,000	26.00/M	ECU-V1H561KBV	(Not for new design)
			680pF	±10%	0.80	PCC681BVCT-ND	.87	5.89	19.95	32.30	PCC681BVTR-ND	4,000	26.00/M	ECU-V1H681KBV	(Not for new design)
			820pF	±10%	0.80	PCC821BVCT-ND	.87	5.89	19.95	32.30	PCC821BVTR-ND	4,000	26.00/M	ECU-V1H821KBV	(Not for new design)
			1000pF	±10%	0.80	PCC102BVCT-ND	.87	5.89	19.95	32.30	PCC102BVTR-ND	4,000	26.00/M	ECU-V1H102KBV	(Not for new design)
			1000pF	±10%	0.80	PCC1772CT-ND•	.41	2.78	9.41	15.23	PCC1772TR-ND	4,000	12.00/M	ECJ-1VB1H102K	ECJ-1VB1H102K
			1200pF	±10%	0.80	PCC122BVCT-ND	.92	6.21	21.04	34.07	PCC122BVTR-ND	4,000	27.00/M	ECU-V1H122KBV	(Not for new design)
			1200pF	±10%	0.80	PCC1773CT-ND•	.41	2.78	9.41	15.23	PCC1773TR-ND	4,000	12.00/M	ECJ-1VB1H122K	ECJ-1VB1H122K
			1500pF	±10%	0.80	PCC152BVCT-ND	.90	6.08	20.60	33.35	PCC152BVTR-ND	4,000	26.00/M	ECU-V1H152KBV	(Not for new design)
			1500pF	±10%	0.80	PCC1774CT-ND•	.41	2.78	9.41	15.23	PCC1774TR-ND	4,000	12.00/M	ECJ-1VB1H152K	ECJ-1VB1H152K
			1800pF	±10%	0.80	PCC182BVCT-ND	.96	6.49	21.98	35.58	PCC182BVTR-ND	4,000	28.00/M	ECU-V1H182KBV	(Not for new design)
			1800pF	±10%	0.80	PCC1775CT-ND•	.46	3.12	10.58	17.14	PCC1775TR-ND	4,000	14.00/M	ECJ-1VB1H182K	ECJ-1VB1H182K
			2200pF	±10%	0.80	PCC222BVCT-ND	.96	6.49	21.98	35.58	PCC222BVTR-ND	4,000	28.00/M	ECU-V1H222KBV	(Not for new design)
			2200pF	±10%	0.80	PCC1776CT-ND•	.46	3.12	10.58	17.14	PCC1776TR-ND	4,000	14.00/M	ECJ-1VB1H222K	ECJ-1VB1H222K
			2700pF	±10%	0.80	PCC272BVCT-ND	.96	6.49	21.98	35.58	PCC272BVTR-ND	4,000	28.00/M	ECU-V1H272KBV	(Not for new design)
			2700pF	±10%	0.80	PCC1777CT-ND•	.46	3.12	10.58	17.14	PCC1777TR-ND	4,000	14.00/M	ECJ-1VB1H272K	ECJ-1VB1H272K
			3300pF	±10%	0.80	PCC332BVCT-ND	.73	4.90	16.59	26.86	PCC332BVTR-ND	4,000	21.00/M	ECU-V1H332KBV	(Not for new design)
			3300pF	±10%	0.80	PCC1778CT-ND•	.67	4.51	15.29	24.75	PCC1778TR-ND	4,000	20.00/M	ECJ-1VB1H332K	ECJ-1VB1H332K
			3900pF	±10%	0.80	PCC1779CT-ND•	.52	3.47	11.76	19.04	PCC1779TR-ND	4,000	15.00/M	ECJ-1VB1H392K	ECJ-1VB1H392K
			4700pF	±10%	0.80	PCC472BVCT-ND	1.14	7.70	26.09	42.25	PCC472BVTR-ND	4,000	34.00/M	ECU-V1H472KBV	(Not for new design)
			4700pF	±10%	0.80	PCC1780CT-ND•	.57	3.82	12.94	20.94	PCC1780TR-ND	4,000	17.00/M	ECJ-1VB1H472K	ECJ-1VB1H472K
			5600pF	±10%	0.80	PCC562BVCT-ND	1.14	7.70	26.09	42.25	PCC562BVTR-ND	4,000	34.00/M	ECU-V1H562KBV	(Not for new design)
			5600pF	±10%	0.80	PCC1781CT-ND•	.83	5.58	18.90	30.60	PCC1781TR-ND	4,000	24.00/M	ECJ-1VB1H562K	ECJ-1VB1H562K
			6800pF	±10%	0.80	PCC682BVCT-ND	1.26	8.52	28.84	46.70	PCC682BVTR-ND	4,000	37.00/M	ECU-V1H682KBV	(Not for new design)
			6800pF	±10%	0.80	PCC1782CT-ND•	.62	4.17	14.11	22.85	PCC1782TR-ND	4,000	18.00/M	ECJ-1VB1H682K	ECJ-1VB1H682K
			8200pF	±10%	0.80	PCC822BVCT-ND	1.32	8.92	30.22	48.93	PCC822BVTR-ND	4,000	46.00/M	ECU-V1H822KBV	(Not for new design)
			8200pF	±10%	0.80	PCC1783CT-ND•	.67	4.51	15.29	24.75	PCC1783TR-ND	4,000	20.00/M	ECJ-1VB1H822K	ECJ-1VB1H822K
			10000pF	±10%	0.80	PCC103BVCT-ND	1.32	8.92	30.22	48.93	PCC103BVTR-ND	4,000	39.00/M	ECU-V1H103KBV	(Not for new design)
			10000pF	±10%	0.80	PCC1784CT-ND•	.67	4.51	15.29	24.75	PCC1784TR-ND	4,000	20.00/M	ECJ-1VB1H103K	ECJ-1VB1H103K
			12000pF	±10%	0.80	PCC123BVCT-ND	1.38	9.32	31.58	51.14	PCC123BVTR-ND	4,000	41.00/M	ECU-V1H123KBV	(Not for new design)
			12000pF	±10%	0.80	PCC1785CT-ND•	.72	4.86	16.46	26.66	PCC1785TR-ND	4,000	21.00/M	ECJ-1VB1H123K	ECJ-1VB1H123K
			15000pF	±10%	0.80	PCC1786CT-ND•	.79	5.31	18.00	29.14	PCC1786TR-ND	4,000	23.00/M	ECJ-1VB1H153K	ECJ-1VB1H153K
		25	10000pF	±10%	0.80	PCC1763CT-ND	.72	4.86	16.46	26.66	PCC1763TR-ND	4,000	21.00/M	ECJ-1VB1E103K	ECJ-1VB1E103K
			12000pF	±10%	0.80	PCC1764CT-ND	.77	5.21	17.64	28.56	PCC1764TR-ND	4,000	23.00/M	ECJ-1VB1E123K	ECJ-1VB1E123K
			15000pF	±10%	0.80	PCC1765CT-ND	.77	5.21	17.64	28.56	PCC1765TR-ND	4,000	23.00/M	ECJ-1VB1E153K	ECJ-1VB1E153K
			18000pF	±10%	0.80	PCC183BVCT-ND	1.66	11.16	37.80	61.20	PCC183BVTR-ND	4,000	49.00/M	ECU-V1E183KBV	(Not for new design)
			18000pF	±10%	0.80	PCC1766CT-ND•	.77	5.21	17.64	28.56	PCC1766TR-ND	4,000	23.00/M	ECJ-1VB1E183K	ECJ-1VB1E183K
		25	22000pF	±10%	0.80	PCC223BVCT-ND	1.43	9.61	32.55	52.70	PCC223BVTR-ND	4,000	42.00/M	ECU-V1E223KBV	(Not for new design)
			22000pF	±10%	0.80	PCC1767CT-ND•	.82	5.56	18.82	30.46	PCC1767TR-ND	4,000	24.00/M	ECJ-1VB1E223K	ECJ-1VB1E223K
			27000pF	±10%	0.80	PCC1768CT-ND•	.88	5.90	19.99	32.37	PCC1768TR-ND	4,000	26.00/M	ECJ-1VB1E273K	ECJ-1VB1E273K
			33000pF	±10%	0.80	PCC1769CT-ND•	.88	5.90	19.99	32.37	PCC1769TR-ND	4,000	26.00/M	ECJ-1VB1E333K	ECJ-1VB1E333K
			39000pF	±10%	0.80	PCC1770CT-ND•	.88	5.90	19.99	32.37	PCC1770TR-ND	4,000	26.00/M	ECJ-1VB1E393K	ECJ-1VB1E393K
			47000pF	±10%	0.80	PCC1771CT-ND•	.88	5.90	19.99	32.37	PCC1771TR-ND	4,000	26.00/M	ECJ-1VB1E473K	ECJ-1VB1E473K
		16	10000pF	±10%	0.80	PCC1750CT-ND	.72	4.86	16.46	26.66	PCC1750TR-ND	4,000	21.00/M	ECJ-1VB1C103K	ECJ-1VB1C103K
			12000pF	±10%	0.80	PCC1751CT-ND	.77	5.21	17.64	28.56	PCC1751TR-ND	4,000	23.00/M	ECJ-1VB1C123K	ECJ-1VB1C123K
			15000pF	±10%	0.80	PCC1752CT-ND	.82	5.56	18.82	30.46	PCC1752TR-ND	4,000	24.00/M	ECJ-1VB1C153K	ECJ-1VB1C153K
			18000pF	±10%	0.80	PCC1753CT-ND	.82	5.56	18.82	30.46	PCC1753TR-ND	4,000	24.00/M	ECJ-1VB1C183K	ECJ-1VB1C183K
			22000pF	±10%	0.80	PCC1754CT-ND	.88	5.90	19.99	32.37	PCC1754TR-ND	4,000	26.00/M	ECJ-1VB1C223K	ECJ-1VB1C223K
			27000pF	±10%	0.80	PCC1755CT-ND	.88	5.90	19.99	32.37	PCC1755TR-ND	4,000	26.00/M	ECJ-1VB1C273K	ECJ-1VB1C273K
			33000pF	±10%	0.80	PCC1756CT-ND	.88	5.90	19.99	32.37	PCC1756TR-ND	4,000	26.00/M	ECJ-1VB1C333K	ECJ-1VB1C333K
			39000pF	±10%	0.80	PCC1757CT-ND	.88	5.90	19.99	32.37	PCC1757TR-ND	4,000	26.00/M	ECJ-1VB1C393K	ECJ-1VB1C393K
			47000pF	±10%	0.80	PCC1758CT-ND	.88	5.90	19.99	32.37	PCC1758TR-ND	4,000	26.00/M	ECJ-1VB1C473K	ECJ-1VB1C473K
			56000pF	±10%	0.80	PCC1759CT-ND•	.88	5.90	19.99	32.37	PCC1759TR-ND	4,000	26.00/M	ECJ-1VB1C563K	ECJ-1VB1C563K
			68000pF	±10%	0.80	PCC1760CT-ND•	.88	5.90	19.99	32.37	PCC1760TR-ND	4,000	26.00/M	ECJ-1VB1C683K	ECJ-1VB1C683K
			82000pF	±10%	0.80	PCC1761CT-ND•	.98	6.60	22.34	36.18	PCC1761TR-ND	4,000	29.00/M	ECJ-1VB1C823K	ECJ-1VB1C823K
			.1µF	±10%	0.80	PCC1762CT-ND•	1.03	6.94	23.52	38.08	PCC1762TR-ND	4,000	30.00/M	ECJ-1VB1C104K	ECJ-1VB1C104K
	X5R	16	1.0µF	±10%	0.80	PCC2224CT-ND	1.36	9.72	35.00	54.45	PCC2224TR-ND	4,000	51.00/M	ECJ-1VB1C105K	ECJ-1VB1C105K
		10	.12µF	±10%	0.80	PCC1906CT-ND•	1.18	8.32	28.73	48.38	PCC1906TR-ND	4,000	39.00/M	ECJ-1VB1A124K	ECJ-1VB1A124K
			.15µF	±10%	0.80	PCC1748CT-ND•	1.18	8.32	28.73	48.38	PCC1748TR-ND	4,000	39.00/M	ECJ-1VB1A154K	ECJ-1VB1A154K
			.18µF	±10%	0.80	PCC1907CT-ND•	1.22	8.62	29.79	50.18	PCC1907TR-ND	4,000	41.00/M	ECJ-1VB1A184K	ECJ-1VB1A184K
			.22µF	±10%	0.80	PCC1749CT-ND•	1.22	8.62	29.79	50.18	PCC1749TR-ND	4,000	41.00/M	ECJ-1VB1A224K	ECJ-1VB1A224K
			1µF	±10%	0.80	PCC2174CT-ND	2.54	18.11	65.21	108.68	PCC2174TR-ND	4,000	94.00/M	ECJ-1VB1A105K	ECJ-1VB1A105K
		6.3	.27µF	±10%	0.80	PCC1908CT-ND	1.57	11.09	38.30	64.51	PCC1908TR-ND	4,000	52.00/M	ECJ-1VB0J274K	ECJ-1VB0J274K
			.33µF	±10%	0.80	PCC1909CT-ND	1.57	11.09	38.30	64.51	PCC1909TR-ND	4,000	52.00/M	ECJ-1VB0J334K	ECJ-1VB0J334K
			.39µF	±10%	0.80	PCC1910CT-ND	1.57	11.09	38.30	64.51	PCC1910TR-ND	4,000	52.00/M	ECJ-1VB0J394K	ECJ-1VB0J394K
			.47µF	±10%	0.80	PCC1911CT-ND	1.57	11.09	38.30	64.51	PCC1911TR-ND	4,000	52.00/M	ECJ-1VB0J474K	ECJ-1VB0J474K
			.56µF	±10%	0.80	PCC1912CT-ND	1.62	11.40	39.37	66.30	PCC1912TR-ND	4,000	54.00/M	ECJ-1VB0J564K	ECJ-1VB0J564K
			.68µF	±10%	0.80	PCC1913CT-ND	1.70	12.01	41.50	69.89	PCC1913TR-ND	4,000	57.00/M	ECJ-1VB0J684K	ECJ-1VB0J684K
			.82µF	±10%	0.80	PCC1914CT-ND	1.70	12.01	41.50	69.89	PCC1914TR-ND	4,000	57.00/M	ECJ-1VB0J824K	ECJ-1VB0J824K
			1µF	±10%	0.80	PCC1915CT-ND•	1.70	12.01	41.50	69.89	PCC1915TR-ND	4,000	57.00/M	ECJ-1VB0J105K	ECJ-1VB0J105K
	Y5V	50	1000pF	+80%/-20%	0.80	PCC1795CT-ND	.69	4.65	15.75	25.50	PCC1795TR-ND	4,000	20.00/M	ECU-V1H102ZFV	(Not for new design)
			1500pF	+80%/-20%	0.80	PCC1796CT-ND	.70	4.75	16.08	26.03	PCC1796TR-ND	4,000	21.00/M	ECU-V1H152ZFV	(Not for new design)

(Continued)

Panasonic® Multilayer Ceramic Chip Capacitors 0201, 0402, 0508, 0603, 0612, 0805, 1206, 1210 and 1812 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0603	Y5V	50	3300pF	+80%/-20%	0.80	PCC1798CT-ND	.70	4.75	16.08	26.03	—	—	—	ECU-V1H332ZFV	(Not for new design)
			4700pF	+80%/-20%	0.80	PCC1799CT-ND	.70	4.75	16.08	26.03	PCC1799TR-ND	4,000	21.00/M	ECU-V1H472ZFV	(Not for new design)
			6800pF	+80%/-20%	0.80	PCC1800CT-ND	.70	4.75	16.08	26.03	—	—	—	ECU-V1H682ZFV	(Not for new design)
			10000pF	+80%/-20%	0.80	PCC1801CT-ND	.41	2.78	9.41	15.23	PCC1801TR-ND	4,000	12.00/M	ECJ-1VF1H103Z	ECJ-1VF1H103Z
			15000pF	+80%/-20%	0.80	PCC1802CT-ND	.52	3.47	11.76	19.04	PCC1802TR-ND	4,000	15.00/M	ECJ-1VF1H153Z	ECJ-1VF1H153Z
			22000pF	+80%/-20%	0.80	PCC1803CT-ND	.57	3.82	12.94	20.94	PCC1803TR-ND	4,000	17.00/M	ECJ-1VF1H223Z	ECJ-1VF1H223Z
			33000pF	+80%/-20%	0.80	PCC1804CT-ND	.67	4.51	15.29	24.75	PCC1804TR-ND	4,000	20.00/M	ECJ-1VF1H333Z	ECJ-1VF1H333Z
			47000pF	+80%/-20%	0.80	PCC1805CT-ND	.67	4.51	15.29	24.75	PCC1805TR-ND	4,000	20.00/M	ECJ-1VF1H473Z	ECJ-1VF1H473Z
			68000pF	+80%/-20%	0.80	PCC2152CT-ND	.77	5.21	17.64	28.56	PCC2152TR-ND	4,000	23.00/M	ECJ-1VF1H683Z	ECJ-1VF1H683Z
			.1µF	+80%/-20%	0.80	PCC2153CT-ND	.82	5.56	18.82	30.46	PCC2153TR-ND	4,000	24.00/M	ECJ-1VF1H104Z	ECJ-1VF1H104Z
		25	68000pF	+80%/-20%	0.80	PCC1793CT-ND	.77	5.21	17.64	28.56	PCC1793TR-ND	4,000	23.00/M	ECJ-1VF1E683Z	ECJ-1VF1E683Z
			.1µF	+80%/-20%	0.80	PCC1794CT-ND	.71	4.79	16.23	26.28	PCC1794TR-ND	4,000	21.00/M	ECJ-1VF1E104Z	ECJ-1VF1E104Z
		16	.1µF	+80%/-20%	0.80	PCC1788CT-ND	.71	4.79	16.23	26.28	PCC1788TR-ND	4,000	21.00/M	ECJ-1VF1C104Z	ECJ-1VF1C104Z
			.15µF	+80%/-20%	0.80	PCC1789CT-ND	.71	4.79	16.23	26.28	PCC1789TR-ND	4,000	21.00/M	ECJ-1VF1C154Z	ECJ-1VF1C154Z
			.22µF	+80%/-20%	0.80	PCC1790CT-ND	.77	5.21	17.64	28.56	PCC1790TR-ND	4,000	23.00/M	ECJ-1VF1C224Z	ECJ-1VF1C224Z
			.33µF	+80%/-20%	0.80	PCC1791CT-ND	.93	6.25	21.17	34.27	PCC1791TR-ND	4,000	27.00/M	ECJ-1VF1C334Z	ECJ-1VF1C334Z
			.47µF	+80%/-20%	0.80	PCC1792CT-ND	1.08	7.29	24.70	39.98	PCC1792TR-ND	4,000	32.00/M	ECJ-1VF1C474Z	ECJ-1VF1C474Z
		10	.68µF	+80%/-20%	0.80	PCC2154CT-ND	1.27	8.93	30.86	51.97	PCC2154TR-ND	4,000	42.00/M	ECJ-1VF1A684Z	ECJ-1VF1A684Z
			1µF	+80%/-20%	0.80	PCC1787CT-ND	1.27	8.93	30.86	51.97	PCC1787TR-ND	4,000	42.00/M	ECJ-1VF1A105Z	ECJ-1VF1A105Z
		6.3	2.2µF	+80%/-20%	0.80	PCC2181CT-ND	3.06	21.85	78.66	131.10	PCC2181TR-ND	4,000	114.00/M	ECJ-1VF0J225Z	ECJ-1VF0J225Z
	F	10	2.2µF	+80%/-20%	0.80	PCC2229CT-ND	3.82	27.31	98.33	152.95	PCC2229TR-ND	4,000	142.00/M	ECJ-1VF1A225Z	ECJ-1VF1A225Z
0612	X7R	50	15000pF	±10%	0.85	PCC2173CT-ND	3.62	25.88	93.15	155.25	PCC2173TR-ND	4,000	135.00/M	ECJ-WVB1H153K	ECY-39RH153KV
		16	.33µF	±10%	0.85	PCC2185CT-ND	9.18	65.55	235.98	393.30	PCC2185TR-ND	4,000	341.00/M	ECJ-WVB1C334K	ECY-39RC334KV
	X5R	16	1µF	±10%	0.85	PCC2186CT-ND	10.18	72.74	261.86	436.43	PCC2186TR-ND	4,000	378.00/M	ECJ-WVB1C105K	ECY-39RC105KV
0805	NPO	200	10pF	±0.5pF	0.85	PCC1971CT-ND	2.55	18.20	65.52	109.20	PCC1971TR-ND	4,000	95.00/M	ECJ-2VC2D100D	ECJ-2VC2D100D
			15pF	±5%	0.85	PCC1972CT-ND	2.59	18.48	66.53	110.88	PCC1972TR-ND	4,000	96.00/M	ECJ-2VC2D150J	ECJ-2VC2D150J
			22pF	±5%	0.85	PCC1973CT-ND	2.59	18.48	66.53	110.88	PCC1973TR-ND	4,000	96.00/M	ECJ-2VC2D220J	ECJ-2VC2D220J
			33pF	±5%	0.85	PCC1974CT-ND	2.63	18.76	67.54	112.56	PCC1974TR-ND	4,000	98.00/M	ECJ-2VC2D330J	ECJ-2VC2D330J
			47pF	±5%	0.85	PCC1975CT-ND	2.63	18.76	67.54	112.56	PCC1975TR-ND	4,000	98.00/M	ECJ-2VC2D470J	ECJ-2VC2D470J
			68pF	±5%	1.25	PCC1976CT-ND	3.18	22.68	81.65	136.08	PCC1976TR-ND	2,000	127.00/M	ECJ-2YC2D680J	ECJ-2YC2D680J
			100pF	±5%	1.25	PCC1977CT-ND	3.21	22.96	82.66	137.76	PCC1977TR-ND	2,000	129.00/M	ECJ-2YC2D101J	ECJ-2YC2D101J
			150pF	±5%	1.25	PCC1978CT-ND	3.33	23.80	85.68	142.80	PCC1978TR-ND	2,000	133.00/M	ECJ-2YC2D151J	ECJ-2YC2D151J
			220pF	±5%	1.25	PCC1979CT-ND	3.33	23.80	85.68	142.80	PCC1979TR-ND	2,000	133.00/M	ECJ-2YC2D221J	ECJ-2YC2D221J
			330pF	±5%	1.25	PCC1980CT-ND	3.33	23.80	85.68	142.80	PCC1980TR-ND	2,000	133.00/M	ECJ-2YC2D331J	ECJ-2YC2D331J
		100	10pF	±0.5pF	0.85	PCC1958CT-ND	1.70	12.01	41.50	69.89	PCC1958TR-ND	4,000	57.00/M	ECJ-2VC2A100D	ECJ-2VC2A100D
			15pF	±5%	0.85	PCC1959CT-ND	1.75	12.32	42.56	71.68	PCC1959TR-ND	4,000	58.00/M	ECJ-2VC2A150J	ECJ-2VC2A150J
			22pF	±5%	0.85	PCC1960CT-ND	1.75	12.32	42.56	71.68	PCC1960TR-ND	4,000	58.00/M	ECJ-2VC2A220J	ECJ-2VC2A220J
			33pF	±5%	0.85	PCC1961CT-ND	1.75	12.32	42.56	71.68	PCC1961TR-ND	4,000	58.00/M	ECJ-2VC2A330J	ECJ-2VC2A330J
			47pF	±5%	0.85	PCC1962CT-ND	1.75	12.32	42.56	71.68	PCC1962TR-ND	4,000	58.00/M	ECJ-2VC2A470J	ECJ-2VC2A470J
			68pF	±5%	0.85	PCC1963CT-ND	2.14	15.09	52.14	87.81	PCC1963TR-ND	4,000	71.00/M	ECJ-2VC2A680J	ECJ-2VC2A680J
			100pF	±5%	0.85	PCC1964CT-ND	2.14	15.09	52.14	87.81	PCC1964TR-ND	4,000	71.00/M	ECJ-2VC2A101J	ECJ-2VC2A101J
			150pF	±5%	0.85	PCC1965CT-ND	2.23	15.71	54.26	91.39	PCC1965TR-ND	4,000	74.00/M	ECJ-2VC2A151J	ECJ-2VC2A151J
			220pF	±5%	0.85	PCC1966CT-ND	2.23	15.71	54.26	91.39	PCC1966TR-ND	4,000	74.00/M	ECJ-2VC2A221J	ECJ-2VC2A221J
			330pF	±5%	0.85	PCC1967CT-ND	2.23	15.71	54.26	91.39	PCC1967TR-ND	4,000	74.00/M	ECJ-2VC2A331J	ECJ-2VC2A331J
			470pF	±5%	0.85	PCC1968CT-ND	2.53	17.86	61.71	103.94	PCC1968TR-ND	4,000	84.00/M	ECJ-2VC2A471J	ECJ-2VC2A471J
			680pF	±5%	0.85	PCC1969CT-ND	2.51	17.92	64.51	107.52	PCC1969TR-ND	4,000	93.00/M	ECJ-2VC2A681J	ECJ-2VC2A681J
			1000pF	±5%	0.85	PCC1970CT-ND	3.61	25.76	92.74	154.56	PCC1970TR-ND	4,000	134.00/M	ECJ-2VC2A102J	ECJ-2VC2A102J
		50	0.5pF	±0.25pF	0.60	PCC0R5CNCT-ND•	.62	4.17	14.11	21.50	PCC0R5CNTR-ND	5,000	18.00/M	ECU-V1H0R5CCN	ECJ-2VC1H0R5C
			1.0pF	±0.25pF	0.60	PCC010CNCT-ND•	.62	4.17	14.11	21.50	PCC010CNTR-ND	5,000	18.00/M	ECU-V1H010CCN	ECJ-2VC1H010C
			1.5pF	±0.25pF	0.60	PCC1R5CNCT-ND•	.62	4.17	14.11	21.50	PCC1R5CNTR-ND	5,000	18.00/M	ECU-V1H1R5CCN	ECJ-2VC1H1R5C
			2.0pF	±0.25pF	0.60	PCC020CNCT-ND•	.62	4.17	14.11	21.50	PCC020CNTR-ND	5,000	18.00/M	ECU-V1H020CCN	ECJ-2VC1H020C
			3.0pF	±0.25pF	0.60	PCC030CNCT-ND•	.62	4.17	14.11	21.50	PCC030CNTR-ND	5,000	18.00/M	ECU-V1H030CCN	ECJ-2VC1H030C
			4.0pF	±0.25pF	0.60	PCC040CNCT-ND•	.62	4.17	14.11	21.50	PCC040CNTR-ND	5,000	18.00/M	ECU-V1H040CCN	ECJ-2VC1H040C
			5.0pF	±0.25pF	0.60	PCC050CNCT-ND•	.62	4.17	14.11	21.50	PCC050CNTR-ND	5,000	18.00/M	ECU-V1H050CCN	ECJ-2VC1H050C
			6.0pF	±0.5pF	0.60	PCC060CNCT-ND•	.62	4.17	14.11	21.50	PCC060CNTR-ND	5,000	18.00/M	ECU-V1H060DCN	ECJ-2VC1H060D
			7.0pF	±0.5pF	0.60	PCC070CNCT-ND•	.62	4.17	14.11	21.50	PCC070CNTR-ND	5,000	18.00/M	ECU-V1H070DCN	ECJ-2VC1H070D
			8.0pF	±0.5pF	0.60	PCC080CNCT-ND•	.62	4.17	14.11	21.50	PCC080CNTR-ND	5,000	18.00/M	ECU-V1H080DCN	ECJ-2VC1H080D
			9.0pF	±0.5pF	0.60	PCC090CNCT-ND•	.62	4.17	14.11	21.50	PCC090CNTR-ND	5,000	18.00/M	ECU-V1H090DCN	ECJ-2VC1H090D
			10pF	±0.5pF	0.60	PCC100CNCT-ND•	.62	4.17	14.11	21.50	PCC100CNTR-ND	5,000	18.00/M	ECU-V1H100DCN	ECJ-2VC1H100D
			12pF	±5%	0.60	PCC120CNCT-ND	.62	4.17	14.11	21.50	PCC120CNTR-ND	5,000	18.00/M	ECU-V1H120JCN	ECJ-2VC1H120J
			15pF	±5%	0.60	PCC150CNCT-ND•	.62	4.17	14.11	21.50	PCC150CNTR-ND	5,000	18.00/M	ECU-V1H150JCN	ECJ-2VC1H150J
			18pF	±5%	0.60	PCC180CNCT-ND	.62	4.17	14.11	21.50	PCC180CNTR-ND	5,000	18.00/M	ECU-V1H180JCN	ECJ-2VC1H180J
			22pF	±5%	0.60	PCC220CNCT-ND•	.46	3.12	10.58	16.13	PCC220CNTR-ND	5,000	14.00/M	ECU-V1H220JCN	ECJ-2VC1H220J
			27pF	±5%	0.60	PCC270CGCT-ND	.46	3.12	10.58	16.13	PCC270CGTR-ND	5,000	14.00/M	ECU-V1H270JCG	ECJ-2VC1H270J
			33pF	±5%	0.60	PCC330CGCT-ND•	.46	3.12	10.58	16.13	PCC330CGTR-ND	5,000	14.00/M	ECU-V1H330JCG	ECJ-2VC1H330J
			39pF	±5%	0.60	PCC390CGCT-ND	.46	3.12	10.58	16.13	PCC390CGTR-ND	5,000	14.00/M	ECU-V1H390JCG	ECJ-2VC1H390J
			47pF	±5%	0.60	PCC470CGCT-ND•	.46	3.12	10.58	16.13	PCC470CGTR-ND	5,000	14.00/M	ECU-V1H470JCG	ECJ-2VC1H470J
			56pF	±5%	0.60	PCC560CGCT-ND	.46	3.12	10.58	16.13	PCC560CGTR-ND	5,000	14.00/M	ECU-V1H560JCG	ECJ-2VC1H560J
			68pF	±5%	0.60	PCC680CGCT-ND•	.46	3.12	10.58	16.13	PCC680CGTR-ND	5,000	14.00/M	ECU-V1H680JCG	ECJ-2VC1H680J
			82pF	±5%	0.60	PCC820CGCT-ND	.46	3.12	10.58	16.13	PCC820CGTR-ND	5,000	14.00/M	ECU-V1H820JCG	ECJ-2VC1H820J
			100pF	±5%	0.60	PCC101CGCT-ND•	.52	3.47	11.76	17.92	PCC101CGTR-ND	5,000	15.00/M	ECU-V1H101JCG	ECJ-2VC1H101J
			120pF	±5%	0.60	PCC121CGCT-ND•	.52	3.47	11.76	17.92	PCC121CGTR-ND	5,000	15.00/M	ECU-V1H121JCG	ECJ-2VC1H121J
			150pF	±5%	0.60	PCC151CGCT-ND•	.52	3.47	11.76	17.92	PCC151CGTR-ND	5,000	15.00/M	ECU-V1H151JCG	ECJ-2VC1H151J
			180pF	±5%	0.60	PCC181CGCT-ND•	.57	3.82	12.94	19.71	PCC181CGTR-ND	5,000	17.00/M	ECU-V1H181JCG	ECJ-2VC1H181J
			220pF	±5%	0.60	PCC221CGCT-ND•	.62	4.17	14.11	21.50	PCC221CGTR-ND	5,000	18.00/M	ECU-V1H221JCG	ECJ-2VC1H221J
			270pF	±5%	0.60	PCC271CGCT-ND•	.62	4.17	14.11	21.50	PCC271CGTR-ND	5,000	18.00/M	ECU-V1H271JCG	ECJ-2VC1H271J
			330pF	±5%	0.60	PCC331CGCT-ND•	.67	4.51	15.29	23.30	PCC331CGTR-ND	5,000	20.00/M	ECU-V1H331JCG	ECJ-2VC1H331J
			390pF	±5%	0.60	PCC391CGCT-ND•	.72	4.86	16.46	25.09	PCC391CGTR-ND	5,000	21.00/M	ECU-V1H391JCG	ECJ-2VC1H391J
			470pF	±5%	0.60	PCC471CGCT-ND•	.77	5.21	17.64	26.88	PCC471CGTR-ND	5,000	23.00/M	ECU-V1H471JCX	ECJ-2VC1H471J
			560pF	±5%	0.60	PCC561CGCT-ND•	.82	5.56	18.82	28.67	PCC561CGTR-ND	5,000	24.00/M	ECU-V1H561JCX	ECJ-2VC1H561J
			680pF	±5%	0.60	PCC681CGCT-ND•	.93	6.25	21.17	32.26	PCC681CGTR-ND	5,000	27.00/M	ECU-V1H681JCX	ECJ-2VC1H681J
			820pF	±5%	0.60	PCC821CGCT-ND•	.98	6.60	22.34	34.05	PCC821CGTR-ND	5,000	29.00/M	ECU-V1H821JCX	ECJ-2VC1H821J
			1000pF	±5%	0.60	PCC102CGCT-ND•	1.13	7.64	25.87	39.42	PCC102CGTR-ND	5,000	33.00/M	ECU-V1H102JCX	ECJ-2VC1H102J
			1200pF	±5%	0.60	PCC2155CT-ND	1.49	10.07	34.10	51.97	PCC2155TR-ND	5,000	42.00/M	ECJ-2VC1H122J	ECJ-2VC1H122J
			1500pF	±5%	0.60	PCC2156CT-ND	1.49	10.07	34.10	51.97	PCC2156TR-ND	5,000	42.00/M	ECJ-2VC1H152J	ECJ-2VC1H152J
			1800pF	±5%	0.60	PCC2157CT-ND	1.96	13.19	44.69	68.10	PCC2157TR-ND	5,000	55.00/M	ECJ-2VC1H182J	ECJ-2VC1H182J
			2200pF	±5%	0.60	PCC2158CT-ND	1.96	13.19	44.69	68.10	PCC2158TR-ND	5,000	55.00/M	ECJ-2VC1H222J	ECJ-2VC1H222J
			2700pF	±5%	0.60	PCC2159CT-ND	1.96	13.19	44.69	68.10	PCC2159TR-ND	4,000	55.00/M	ECJ-2VC1H272J	ECJ-2VC1H272J
	X7R	200	220pF	±10%	0.85	PCC1993CT-ND	2.39	17.08	61.49	102.48	PCC1993TR-ND	4,000	89.00/M	ECJ-2VB2D221K	ECJ-2VB2D221K
			330pF	±10%	0.85	PCC1994CT-ND	2.39	17.08	61.49	102.48	PCC1994TR-ND	4,000	89.00/M	ECJ-2VB2D331K	ECJ-2VB2D331K
			470pF	±10%	0.85	PCC1995CT-ND	2.43	17.36	62.50	104.16	PCC1995TR-ND	4,000	90.00/M	ECJ-2VB2D471K	ECJ-2VB2D471K
			680pF	±10%	0.85	PCC1996CT-ND	2.55	18.20	65.52	109.20	PCC1996TR-ND	4,000	95.00/M	ECJ-2VB2D681K	ECJ-2VB2D681K
			1000pF	±10%	0.85	PCC1997CT-ND	2.55	18.20	65.52	109.20	PCC1997TR-ND	4,000	95.00/M	ECJ-2VB2D102K	ECJ-2VB2D102K
			1500pF	±10%	0.85	PCC1998CT-ND	2.67	19.04	68.54	114.24	PCC1998TR-ND	4,000	99.00/M	ECJ-2VB2D152K	ECJ-2VB2D152K
			2200pF	±10%	0.85	PCC1999CT-ND	2.74	19.60	70.56	117.60	PCC1999TR-ND	4,000	102.00/M	ECJ-2VB2D222K	ECJ-2VB2D222K
			3300pF	±10%	0.85	PCC2000CT-ND	2.74	19.60	70.56	117.60	PCC2000TR-ND	4,000	102.00/M	ECJ-2VB2D332K	ECJ-2VB2D332K
			4700pF	±10%	0.85	PCC2001CT-ND	2.94	21.00	75.60	126.00	PCC2001TR-ND	4,000	109.00/M	ECJ-2VB2D472K	ECJ-2VB2D472K
			6800pF	±10%	1.25	PCC2002CT-ND	2.94	21.00	75.60	126.00	PCC2002TR-ND	2,000	118.00/M	ECJ-2YB2D682K	ECJ-2YB2D682K
			10000pF	±10%	1.25	PCC2003CT-ND	5.52	40.53	146.61	250.10	PCC2003TR-ND	2,000	233.00/M	ECJ-2YB2D103K	ECJ-2YB2D103K
		100	220pF	±10%	0.85	PCC1981CT-ND	1.62	11.40	39.37	66.30	PCC1981TR-ND	4,000	54.00/M	ECJ-2VB2A221K	ECJ-2VB2A221K
			330pF	±10%	0.85	PCC1982CT-ND	1.62	11.40	39.37	66.30	PCC1982TR-ND	4,000	54.00/M	ECJ-2VB2A331K	ECJ-2VB2A331K
			470pF	±10%	0.85	PCC1983CT-ND	1.62	11.40	39.37	66.30	PCC1983TR-ND	4,000	54.00/M	ECJ-2VB2A471K	ECJ-2VB2A471K
			680pF	±10%	0.85	PCC1984CT-ND	1.70	12.01	41.50	69.89	PCC1984TR-ND	4,000	57.00/M	ECJ-2VB2A681K	ECJ-2VB2A681K
			1000pF	±10%	0.85	PCC1985CT-ND	1.70	12.01	41.50	69.89	PCC1985TR-ND	4,000	57.00/M	ECJ-2VB2A102K	ECJ-2VB2A102K
			1500pF	±10%	0.85	PCC1986CT-ND	1.79	12.63	43.62	73.47	PCC1986TR-ND	4,000	60.00/M	ECJ-2VB2A152K	ECJ-2VB2A152K
			2200pF	±10%	0.85	PCC1987CT-ND	1.83	12.94	44.69	75.26	PCC1987TR-ND	4,000	61.00/M	ECJ-2VB2A222K	ECJ-2VB2A222K
			3300pF	±10%	0.85	PCC1988CT-ND	1.83	12.94	44.69	75.26	PCC1988TR-ND	4,000	61.00/M	ECJ-2VB2A332K	ECJ-2VB2A332K
			4700pF	±10%	0.85	PCC1989CT-ND	1.97	13.86	47.88	80.64	PCC1989TR-ND	4,000	66.00/M	ECJ-2VB2A472K	ECJ-2VB2A472K
			6800pF	±10%	0.85	PCC1990CT-ND	1.97	13.86	47.88	80.64	PCC1990TR-ND	4,000	66.00/M	ECJ-2VB2A682K	ECJ-2VB2A682K

(Continued)

Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0508, 0603, 0612, 0805, 1206, 1210 and 1812 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Old *†* Panasonic Part No.	New *†* Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
0805	X7R	100	10000pF	±10%	0.85	PCC1991CT-ND	3.61	25.76	92.74	154.56	PCC1991TR-ND	4,000	134.00/M	ECJ-2VB2A103K	ECJ-2VB2A103K
			15000pF	±10%	1.25	PCC1992CT-ND	3.61	25.76	92.74	154.56	PCC1992TR-ND	2,000	144.00/M	ECJ-2YB2A153K	ECJ-2YB2A153K
		50	220pF	±10%	0.60	PCC221BNCT-ND	.77	5.18	17.54	26.72	PCC221BNTR-ND	5,000	23.00/M	ECU-V1H221KBN	(Not for new design)
			270pF	±10%	0.60	PCC271BNCT-ND	.77	5.18	17.54	26.72	PCC271BNTR-ND	5,000	23.00/M	ECU-V1H271KBN	(Not for new design)
			330pF	±10%	0.60	PCC331BNCT-ND	.77	5.18	17.54	26.72	PCC331BNTR-ND	5,000	23.00/M	ECU-V1H331KBN	(Not for new design)
			390pF	±10%	0.60	PCC391BNCT-ND	.77	5.18	17.54	26.72	PCC391BNTR-ND	5,000	23.00/M	ECU-V1H391KBN	(Not for new design)
			470pF	±10%	0.60	PCC471BNCT-ND	.77	5.18	17.54	26.72	PCC471BNTR-ND	5,000	23.00/M	ECU-V1H471KBN	(Not for new design)
			560pF	±10%	0.60	PCC561BNCT-ND	.77	5.18	17.54	26.72	PCC561BNTR-ND	5,000	23.00/M	ECU-V1H561KBN	(Not for new design)
			680pF	±10%	0.60	PCC681BNCT-ND	.77	5.18	17.54	26.72	PCC681BNTR-ND	5,000	23.00/M	ECU-V1H681KBN	(Not for new design)
			820pF	±10%	0.60	PCC821BNCT-ND	.77	5.18	17.54	26.72	PCC821BNTR-ND	5,000	23.00/M	ECU-V1H821KBN	(Not for new design)
			1000pF	±10%	0.60	PCC102BNCT-ND•	.62	4.17	14.11	21.50	PCC102BNTR-ND	5,000	18.00/M	ECU-V1H102KBN	ECJ-2VB1H102K
			1200pF	±10%	0.60	PCC122BNCT-ND•	.62	4.17	14.11	21.50	PCC122BNTR-ND	5,000	18.00/M	ECU-V1H122KBN	ECJ-2VB1H122K
			1500pF	±10%	0.60	PCC152BNCT-ND•	.82	5.52	18.70	28.50	PCC152BNTR-ND	5,000	24.00/M	ECU-V1H152KBN	ECJ-2VB1H152K
			1800pF	±10%	0.60	PCC182BNCT-ND•	.62	4.17	14.11	21.50	PCC182BNTR-ND	5,000	18.00/M	ECU-V1H182KBN	ECJ-2VB1H182K
			2200pF	±10%	0.60	PCC222BNCT-ND•	.62	4.17	14.11	21.50	PCC222BNTR-ND	5,000	18.00/M	ECU-V1H222KBN	ECJ-2VB1H222K
			2700pF	±10%	0.60	PCC272BNCT-ND•	.67	4.51	15.29	23.30	PCC272BNTR-ND	5,000	20.00/M	ECU-V1H272KBN	ECJ-2VB1H272K
			3300pF	±10%	0.60	PCC332BNCT-ND•	.67	4.51	15.29	23.30	PCC332BNTR-ND	5,000	20.00/M	ECU-V1H332KBN	ECJ-2VB1H332K
			3900pF	±10%	0.60	PCC392BNCT-ND•	.67	4.51	15.29	23.30	PCC392BNTR-ND	5,000	20.00/M	ECU-V1H392KBN	ECJ-2VB1H392K
			4700pF	±10%	0.60	PCC472BNCT-ND•	.72	4.86	16.46	25.09	PCC472BNTR-ND	5,000	21.00/M	ECU-V1H472KBG	ECJ-2VB1H472K
			5600pF	±10%	0.60	PCC562BNCT-ND•	.80	5.42	18.34	27.95	PCC562BNTR-ND	5,000	24.00/M	ECU-V1H562KBG	ECJ-2VB1H562K
			6800pF	±10%	0.60	PCC682BNCT-ND•	.77	5.21	17.64	26.88	PCC682BNTR-ND	5,000	23.00/M	ECU-V1H682KBG	ECJ-2VB1H682K
			8200pF	±10%	0.60	PCC822BNCT-ND•	.82	5.56	18.82	28.67	PCC822BNTR-ND	5,000	24.00/M	ECU-V1H822KBG	ECJ-2VB1H822K
			10000pF	±10%	0.60	PCC103BNCT-ND•	.93	6.25	21.17	32.26	PCC103BNTR-ND	5,000	27.00/M	ECU-V1H103KBG	ECJ-2VB1H103K
			12000pF	±10%	0.60	PCC123BGCT-ND•	.93	6.25	21.17	32.26	PCC123BGTR-ND	5,000	27.00/M	ECU-V1H123KBX	ECJ-2VB1H123K
			15000pF	±10%	0.60	PCC153BGCT-ND•	.98	6.60	22.34	34.05	PCC153BGTR-ND	5,000	29.00/M	ECU-V1H153KBX	ECJ-2VB1H153K
			18000pF	±10%	0.60	PCC183BGCT-ND•	1.08	7.29	24.70	37.63	PCC183BGTR-ND	5,000	32.00/M	ECU-V1H183KBX	ECJ-2VB1H183K
			22000pF	±10%	0.60	PCC223BGCT-ND•	1.18	7.99	27.05	41.22	PCC223BGTR-ND	5,000	35.00/M	ECU-V1H223KBX	ECJ-2VB1H223K
			27000pF	±10%	1.00	PCC273BGCT-ND	1.59	10.70	36.24	58.67	PCC273BGTR-ND	4,000	47.00/M	ECU-V1H273KBX	(Not for new design)
			27000pF	±10%	0.85	PCC1833CT-ND•	.82	5.56	18.82	30.46	PCC1833TR-ND	4,000	24.00/M	ECJ-2VB1H273K	ECJ-2VB1H273K
			33000pF	±10%	0.85	PCC1834CT-ND•	.82	5.56	18.82	30.46	PCC1834TR-ND	4,000	24.00/M	ECJ-2VB1H333K	ECJ-2VB1H333K
			39000pF	±10%	0.85	PCC1835CT-ND•	1.03	6.94	23.52	38.08	PCC1835TR-ND	4,000	30.00/M	ECJ-2VB1H393K	ECJ-2VB1H393K
			47000pF	±10%	1.25	PCC1836CT-ND•	1.61	10.85	36.75	59.50	PCC1836TR-ND	2,000	56.00/M	ECJ-2YB1H473K	ECJ-2YB1H473K
			56000pF	±10%	1.25	PCC1837CT-ND•	1.61	10.85	36.75	59.50	PCC1837TR-ND	2,000	56.00/M	ECJ-2YB1H563K	ECJ-2YB1H563K
			68000pF	±10%	1.25	PCC1838CT-ND•	1.61	10.85	36.75	59.50	PCC1838TR-ND	2,000	56.00/M	ECJ-2YB1H683K	ECJ-2YB1H683K
			82000pF	±10%	1.25	PCC1839CT-ND•	1.61	10.85	36.75	59.50	PCC1839TR-ND	2,000	56.00/M	ECJ-2YB1H823K	ECJ-2YB1H823K
			.1µF	±10%	1.25	PCC1840CT-ND•	1.61	10.85	36.75	59.50	PCC1840TR-ND	2,000	56.00/M	ECJ-2YB1H104K	ECJ-2YB1H104K
		25	39000pF	±10%	0.85	PCC1819CT-ND	.93	6.25	21.17	34.27	PCC1819TR-ND	4,000	27.00/M	ECJ-2VB1E393K	ECJ-2VB1E393K
			47000pF	±10%	0.85	PCC1820CT-ND	.93	6.25	21.17	34.27	PCC1820TR-ND	4,000	27.00/M	ECJ-2VB1E473K	ECJ-2VB1E473K
			56000pF	±10%	0.85	PCC1825CT-ND	1.13	7.64	25.87	41.89	PCC1825TR-ND	4,000	33.00/M	ECJ-2VB1E563K	ECJ-2VB1E563K
			68000pF	±10%	0.85	PCC1826CT-ND	1.18	7.99	27.05	43.79	PCC1826TR-ND	4,000	35.00/M	ECJ-2VB1E683K	ECJ-2VB1E683K
			82000pF	±10%	0.85	PCC1827CT-ND	1.24	8.33	28.22	45.70	PCC1827TR-ND	4,000	36.00/M	ECJ-2VB1E823K	ECJ-2VB1E823K
			.1µF	±10%	0.85	PCC1828CT-ND	1.24	8.33	28.22	45.70	PCC1828TR-ND	4,000	36.00/M	ECJ-2VB1E104K	ECJ-2VB1E104K
			.12µF	±10%	1.25	PCC1829CT-ND•	1.44	10.18	35.15	59.20	PCC1829TR-ND	2,000	56.00/M	ECJ-2YB1E124K	ECJ-2YB1E124K
			.15µF	±10%	1.25	PCC1830CT-ND•	1.48	10.45	36.10	60.80	PCC1830TR-ND	2,000	57.00/M	ECJ-2YB1E154K	ECJ-2YB1E154K
			.18µF	±10%	1.25	PCC1831CT-ND•	1.52	10.73	37.05	62.40	PCC1831TR-ND	2,000	59.00/M	ECJ-2YB1E184K	ECJ-2YB1E184K
			.22µF	±10%	1.25	PCC1832CT-ND•	1.91	13.48	46.55	78.40	PCC1832TR-ND	2,000	74.00/M	ECJ-2YB1E224K	ECJ-2YB1E224K
		16	47000pF	±10%	0.85	PCC1808CT-ND	.88	5.90	19.99	32.37	PCC1808TR-ND	4,000	26.00/M	ECJ-2VB1C473K	ECJ-2VB1C473K
			56000pF	±10%	0.85	PCC1809CT-ND	1.13	7.64	25.87	41.89	PCC1809TR-ND	4,000	33.00/M	ECJ-2VB1C563K	ECJ-2VB1C563K
			68000pF	±10%	0.85	PCC1810CT-ND	1.05	7.39	25.54	43.01	PCC1810TR-ND	4,000	35.00/M	ECJ-2VB1C683K	ECJ-2VB1C683K
			82000pF	±10%	0.85	PCC1811CT-ND	1.05	7.39	25.54	43.01	PCC1811TR-ND	4,000	35.00/M	ECJ-2VB1C823K	ECJ-2VB1C823K
			.1µF	±10%	0.85	PCC1812CT-ND	1.05	7.39	25.54	43.01	PCC1812TR-ND	4,000	35.00/M	ECJ-2VB1C104K	ECJ-2VB1C104K
			.12µF	±10%	0.85	PCC1813CT-ND	1.09	7.70	26.60	44.80	PCC1813TR-ND	4,000	36.00/M	ECJ-2VB1C124K	ECJ-2VB1C124K
			.15µF	±10%	0.85	PCC1814CT-ND	1.22	8.62	29.79	50.18	PCC1814TR-ND	4,000	41.00/M	ECJ-2VB1C154K	ECJ-2VB1C154K
			.18µF	±10%	0.85	PCC1815CT-ND	1.61	11.48	41.33	68.88	PCC1815TR-ND	4,000	60.00/M	ECJ-2VB1C184K	ECJ-2VB1C184K
			.22µF	±10%	0.85	PCC1816CT-ND	1.61	11.48	41.33	68.88	PCC1816TR-ND	4,000	60.00/M	ECJ-2VB1C224K	ECJ-2VB1C224K
			.27µF	±10%	1.25	PCC1916CT-ND	2.38	17.00	61.20	102.00	PCC1916TR-ND	2,000	95.00/M	ECJ-2YB1C274K	ECJ-2YB1C274K
			.33µF	±10%	1.25	PCC1817CT-ND	2.45	17.50	63.00	105.00	PCC1817TR-ND	2,000	98.00/M	ECJ-2YB1C334K	ECJ-2YB1C334K
			.39µF	±10%	1.25	PCC1917CT-ND	2.38	17.00	61.20	102.00	PCC1917TR-ND	2,000	95.00/M	ECJ-2YB1C394K	ECJ-2YB1C394K
			.47µF	±10%	1.25	PCC1818CT-ND•	2.45	17.50	63.00	105.00	PCC1818TR-ND	2,000	98.00/M	ECJ-2YB1C474K	ECJ-2YB1C474K
	X5R	16	1µF	±10%	1.25	PCC2249CT-ND *NEW!*	1.39	9.39	31.79	48.45	PCC2249TR-ND *NEW!*	3,000	41.00/M	ECJ-2FB1C105K	ECJ-2FB1C105K
		10	.56µF	±10%	1.25	PCC1918CT-ND	3.99	28.50	102.60	171.00	PCC1918TR-ND	2,000	160.00/M	ECJ-2YB1A564K	ECJ-2YB1A564K
			.68µF	±10%	1.25	PCC1806CT-ND	4.10	29.25	105.30	175.50	PCC1806TR-ND	2,000	164.00/M	ECJ-2YB1A684K	ECJ-2YB1A684K
			.82µF	±10%	1.25	PCC1919CT-ND	4.03	29.61	107.10	182.70	PCC1919TR-ND	2,000	170.00/M	ECJ-2YB1A824K	ECJ-2YB1A824K
			1µF	±10%	1.25	PCC1807CT-ND	4.13	30.32	109.65	187.05	PCC1807TR-ND	2,000	174.00/M	ECJ-2YB1A105K	ECJ-2YB1A105K
			2.2µF	±20%	1.25	PCC2175CT-ND	5.07	36.23	130.41	217.35	PCC2175TR-ND	3,000	188.00/M	ECJ-2FB1A225M	ECJ-2FB1A225M
		6.3	1.2µF	±10%	1.25	PCC1920CT-ND	4.19	30.79	111.35	189.95	—	—	—	ECJ-2YB0J125K	(Not for new design)
			1.5µF	±10%	1.25	PCC1921CT-ND	4.35	31.96	115.60	197.20	PCC1921TR-ND	2,000	184.00/M	ECJ-2YB0J155K	ECJ-2YB0J155K
			2.2µF	±10%	1.25	PCC1923CT-ND	3.19	23.42	84.73	144.54	PCC1923TR-ND	2,000	135.00/M	ECJ-2YB0J225K	ECJ-2YB0J225K
			2.7µF	±10%	1.25	PCC1924CT-ND	4.90	35.96	130.05	221.85	PCC1924TR-ND	2,000	207.00/M	ECJ-2YB0J275K	(Not for new design)
			3.3µF	±10%	1.25	PCC1925CT-ND	3.44	25.27	91.39	155.90	PCC1925TR-ND	2,000	145.00/M	ECJ-2YB0J335K	ECJ-2YB0J335K
			4.7µF	±20%	1.25	PCC2176CT-ND	10.18	72.74	261.86	436.43	PCC2176TR-ND	3,000	378.00/M	ECJ-2FB0J475M	ECJ-2FB0J475M
			10µF	±20%	1.25	PCC2225CT-ND	10.90	81.77	290.72	483.32	PCC2225TR-ND	3,000	472.00/M	ECJ-2FB0J106M	ECJ-2FB0J106M
	Y5V	50	10000pF	+80%/-20%	0.60	PCC1858CT-ND	.41	2.78	9.41	14.34	PCC1858TR-ND	5,000	12.00/M	ECJ-2VF1H103Z	ECJ-2VF1H103Z
			15000pF	+80%/-20%	0.60	PCC1859CT-ND	.46	3.12	10.58	16.13	PCC1859TR-ND	5,000	14.00/M	ECJ-2VF1H153Z	ECJ-2VF1H153Z
			22000pF	+80%/-20%	0.60	PCC1860CT-ND	.46	3.12	10.58	16.13	PCC1860TR-ND	5,000	14.00/M	ECJ-2VF1H223Z	ECJ-2VF1H223Z
			33000pF	+80%/-20%	0.60	PCC1861CT-ND	.46	3.12	10.58	16.13	PCC1861TR-ND	5,000	14.00/M	ECJ-2VF1H333Z	ECJ-2VF1H333Z
			47000pF	+80%/-20%	0.60	PCC1862CT-ND	.57	3.82	12.94	19.71	PCC1862TR-ND	5,000	17.00/M	ECJ-2VF1H473Z	ECJ-2VF1H473Z
			68000pF	+80%/-20%	0.60	PCC1863CT-ND	.62	4.17	14.11	21.50	PCC1863TR-ND	5,000	18.00/M	ECJ-2VF1H683Z	ECJ-2VF1H683Z
			.1µF	+80%/-20%	0.85	PCC1864CT-ND	.77	5.21	17.64	28.56	PCC1864TR-ND	4,000	23.00/M	ECJ-2VF1H104Z	ECJ-2VF1H104Z
			.15µF	+80%/-20%	0.85	PCC1865CT-ND	.98	6.60	22.34	36.18	PCC1865TR-ND	4,000	29.00/M	ECJ-2VF1H154Z	ECJ-2VF1H154Z
			.22µF	+80%/-20%	0.85	PCC1866CT-ND	.98	6.60	22.34	36.18	PCC1866TR-ND	4,000	29.00/M	ECJ-2VF1H224Z	ECJ-2VF1H224Z
		25	68000pF	+80%/-20%	0.60	PCC1852CT-ND	.62	4.17	14.11	21.50	PCC1852TR-ND	5,000	18.00/M	ECJ-2VF1E683Z	ECJ-2VF1E683Z
			.1µF	+80%/-20%	0.60	PCC1853CT-ND	.72	4.86	16.46	25.09	PCC1853TR-ND	5,000	21.00/M	ECJ-2VF1E104Z	ECJ-2VF1E104Z
			.15µF	+80%/-20%	0.60	PCC1854CT-ND	.82	5.56	18.82	28.67	PCC1854TR-ND	5,000	24.00/M	ECJ-2VF1E154Z	ECJ-2VF1E154Z
			.22µF	+80%/-20%	0.85	PCC1855CT-ND	1.03	6.94	23.52	38.08	PCC1855TR-ND	4,000	30.00/M	ECJ-2VF1E224Z	ECJ-2VF1E224Z
			.33µF	+80%/-20%	1.25	PCC1856CT-ND	2.30	16.23	56.05	94.40	PCC1856TR-ND	2,000	89.00/M	ECJ-2YF1E334Z	ECJ-2YF1E334Z
			.47µF	+80%/-20%	1.25	PCC1857CT-ND	2.38	16.78	57.95	97.60	PCC1857TR-ND	2,000	92.00/M	ECJ-2YF1E474Z	ECJ-2YF1E474Z
		16	.1µF	+80%/-20%	0.60	PCC1843CT-ND	.81	5.45	18.46	28.13	PCC1843TR-ND	5,000	24.00/M	ECJ-2VF1C104Z	ECJ-2VF1C104Z
			.15µF	+80%/-20%	0.60	PCC1844CT-ND	.77	5.21	17.64	26.88	PCC1844TR-ND	5,000	23.00/M	ECJ-2VF1C154Z	ECJ-2VF1C154Z
			.22µF	+80%/-20%	0.60	PCC1845CT-ND	.98	6.60	22.34	34.05	PCC1845TR-ND	5,000	29.00/M	ECJ-2VF1C224Z	ECJ-2VF1C224Z
			.33µF	+80%/-20%	0.85	PCC1846CT-ND	1.08	7.29	24.70	39.98	PCC1846TR-ND	4,000	32.00/M	ECJ-2VF1C334Z	ECJ-2VF1C334Z
			.47µF	+80%/-20%	0.85	PCC1847CT-ND	1.09	7.70	26.60	44.80	PCC1847TR-ND	4,000	36.00/M	ECJ-2VF1C474Z	ECJ-2VF1C474Z
			.68µF	+80%/-20%	0.85	PCC1848CT-ND	1.27	8.93	30.86	51.97	PCC1848TR-ND	4,000	42.00/M	ECJ-2VF1C684Z	ECJ-2VF1C684Z
			1µF	+80%/-20%	0.85	PCC1849CT-ND	1.49	10.64	38.30	63.84	PCC1849TR-ND	4,000	55.00/M	ECJ-2VF1C105Z	ECJ-2VF1C105Z
			1.5µF	+80%/-20%	1.25	PCC1850CT-ND	3.43	24.50	88.20	147.00	PCC1850TR-ND	2,000	137.00/M	ECJ-2YF1C155Z	ECJ-2YF1C155Z
			2.2µF	+80%/-20%	1.25	PCC1851CT-ND	3.85	27.50	99.00	165.00	PCC1851TR-ND	2,000	154.00/M	ECJ-2YF1C225Z	ECJ-2YF1C225Z
		10	3.3µF	+80%/-20%	1.25	PCC1841CT-ND	4.03	29.61	107.10	182.70	PCC1841TR-ND	2,000	170.00/M	ECJ-2YF1A335Z	(Not for new design)
			4.7µF	+80%/-20%	1.25	PCC1842CT-ND	4.42	32.43	117.30	200.10	PCC1842TR-ND	2,000	186.00/M	ECJ-2YF1A475Z	ECJ-2YF1A475Z
		6.3	10µF	+80%/-20%	1.25	PCC2182CT-ND	6.60	47.15	169.74	282.90	PCC2182TR-ND	3,000	245.00/M	ECJ-2FF0J106Z	ECJ-2FF0J106Z
	F	25	1.0µF	+80%/-20%	1.25	PCC2230CT-ND	2.29	16.13	55.72	87.98	PCC2230TR-ND	3,000	78.00/M	ECJ-2FF1E105Z	ECJ-2FF1E105Z
			2.2µF	+80%/-20%	1.25	PCC2231CT-ND	3.30	23.58	84.87	132.02	PCC2231TR-ND	3,000	125.00/M	ECJ-2FF1E225Z	ECJ-2FF1E225Z
		16	4.7µF	+80%/-20%	1.25	PCC2232CT-ND	4.31	30.76	110.75	172.27	PCC2232TR-ND	3,000	164.00/M	ECJ-2FF1C475Z	ECJ-2FF1C475Z
		10	10µF	+80%/-20%	1.25	PCC2233CT-ND	4.64	34.05	123.17	195.62	PCC2233TR-ND	3,000	193.00/M	ECJ-2FF1A106Z	ECJ-2FF1A106Z
1206	NPO	200	470pF	±5%	1.15	PCC2007CT-ND•	4.77	35.01	126.62	215.99	PCC2007TR-ND	2,000	201.00/M	ECJ-3YC2D471J	ECJ-3YC2D471J
			680pF	±5%	1.15	PCC2008CT-ND•	5.99	43.95	158.98	271.21	PCC2008TR-ND	2,000	253.00/M	ECJ-3YC2D681J	ECJ-3YC2D681J
			1000pF	±5%	1.15	PCC2009CT-ND•	6.95	51.06	184.69	315.06	PCC2009TR-ND	2,000	293.00/M	ECJ-3YC2D102J	ECJ-3YC2D102J
		100	1500pF	±5%	0.85	PCC2004CT-ND•	4.84	35.53	128.52	219.24	PCC2004TR-ND	4,000	197.00/M	ECJ-3VC2A152J	ECJ-3VC2A152J
			2200pF	±5%	0.85	PCC2005CT-ND•	5.63	41.32	149.46	254.97	PCC2005TR-ND	4,000	229.00/M	ECJ-3VC2A222J	ECJ-3VC2A222J
			3300pF	±5%	0.85	PCC2006CT-ND•	7.56	55.54	200.87	342.66	PCC2006TR-ND	4,000	307.00/M	ECJ-3VC2A332J	ECJ-3VC2A332J

(Continued)

Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0508, 0603, 0612, 0805, 1206, 1210 and 1812 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
1206	NPO	50	.5pF	±0.25pF	0.60	PCC0R5CCT-ND	1.11	7.51	25.42	38.74	PCC0R5CTR-ND	5,000	33.00/M	ECU-V1H0R5CCM	(Not for new design)
			1.0pF	±0.25pF	0.60	PCC010CCT-ND	1.13	7.59	25.71	39.18	PCC010CTR-ND	5,000	33.00/M	ECU-V1H010CCM	(Not for new design)
			1.5pF	±0.25pF	0.60	PCC1R5CCT-ND	.93	6.27	21.25	32.38	PCC1R5CTR-ND	5,000	27.00/M	ECU-V1H1R5CCM	(Not for new design)
			2.2pF	±0.25pF	0.60	PCC2R2CCT-ND	.93	6.27	21.25	32.38	PCC2R2CTR-ND	5,000	27.00/M	ECU-V1H2R2CCM	(Not for new design)
			2.7pF	±0.25pF	0.60	PCC2R7CCT-ND	1.13	7.59	25.71	39.18	—	—	—	ECU-V1H2R7CCM	(Not for new design)
			3.3pF	±0.25pF	0.60	PCC3R3CCT-ND	.93	6.27	21.25	32.38	PCC3R3CTR-ND	5,000	27.00/M	ECU-V1H3R3CCM	(Not for new design)
			3.9pF	±0.25pF	0.60	PCC3R9CCT-ND	.93	6.27	21.25	32.38	PCC3R9CTR-ND	5,000	27.00/M	ECU-V1H3R9CCM	(Not for new design)
			4.7pF	±0.25pF	0.60	PCC4R7CCT-ND	1.13	7.59	25.71	39.18	PCC4R7CTR-ND	5,000	33.00/M	ECU-V1H4R7CCM	(Not for new design)
			5.6pF	±0.25pF	0.60	PCC5R6CCT-ND	1.13	7.59	25.71	39.18	PCC5R6CTR-ND	5,000	33.00/M	ECU-V1H5R6CCM	(Not for new design)
			7.5pF	±0.5pF	0.60	PCC7R5CCT-ND	1.13	7.61	25.78	39.28	—	—	—	ECU-V1H7R5DCM	(Not for new design)
			8.2pF	±0.5pF	0.60	PCC8R2CCT-ND	1.13	7.61	25.78	39.28	—	—	—	ECU-V1H8R2DCM	(Not for new design)
			9.1pF	±0.5pF	0.60	PCC9R1CCT-ND	.93	6.27	21.25	32.38	PCC9R1CTR-ND	5,000	27.00/M	ECU-V1H9R1DCM	(Not for new design)
			10pF	±0.5pF	0.60	PCC100CCT-ND	1.13	7.61	25.78	39.28	PCC100CTR-ND	5,000	33.00/M	ECU-V1H100DCM	(Not for new design)
			12pF	±5%	0.60	PCC120CCT-ND	1.00	6.75	22.85	34.82	—	—	—	ECU-V1H120JCM	(Not for new design)
			15pF	±5%	0.60	PCC150CCT-ND	1.21	8.15	27.62	42.08	PCC150CTR-ND	5,000	36.00/M	ECU-V1H150JCM	(Not for new design)
			20pF	±5%	0.60	PCC200CCT-ND	1.21	8.15	27.62	42.08	PCC200CTR-ND	5,000	36.00/M	ECU-V1H200JCM	(Not for new design)
			22pF	±5%	0.60	PCC220CCT-ND	1.21	8.15	27.62	42.08	PCC220CTR-ND	5,000	36.00/M	ECU-V1H220JCM	(Not for new design)
			27pF	±5%	0.60	PCC270CCT-ND	1.21	8.15	27.62	42.08	PCC270CTR-ND	5,000	36.00/M	ECU-V1H270JCM	(Not for new design)
			33pF	±5%	0.60	PCC330CCT-ND	1.21	8.15	27.62	42.08	PCC330CTR-ND	5,000	36.00/M	ECU-V1H330JCM	(Not for new design)
			47pF	±5%	0.60	PCC470CCT-ND	1.35	9.13	30.91	47.10	PCC470CTR-ND	5,000	40.00/M	ECU-V1H470JCM	(Not for new design)
			56pF	±5%	0.60	PCC560CCT-ND	1.35	9.13	30.91	47.10	PCC560CTR-ND	5,000	40.00/M	ECU-V1H560JCM	(Not for new design)
			68pF	±5%	0.60	PCC680CCT-ND	1.35	9.13	30.91	47.10	PCC680CTR-ND	5,000	40.00/M	ECU-V1H680JCM	(Not for new design)
			100pF	±5%	0.60	PCC101CCT-ND	1.35	9.13	30.91	47.10	PCC101CTR-ND	5,000	40.00/M	ECU-V1H101JCH	(Not for new design)
			120pF	±5%	0.60	PCC121CCT-ND	1.35	9.11	30.86	47.02	PCC121CTR-ND	5,000	40.00/M	ECU-V1H121JCH	(Not for new design)
			1000pF	±5%	0.60	PCC102CCT-ND	1.98	13.96	48.22	76.14	PCC102CTR-ND	5,000	66.00/M	ECU-V1H102JCH	(Not for new design)
			2700pF	±5%	0.60	PCC2160CT-ND•	12.15	85.70	296.07	467.48	PCC2160TR-ND	5,000	405.00/M	ECJ-3VC1H272J	ECJ-3VC1H272J
			3300pF	±5%	0.60	PCC2161CT-ND•	15.20	107.21	370.36	584.78	PCC2161TR-ND	5,000	507.00/M	ECJ-3VC1H332J	ECJ-3VC1H332J
			3900pF	±5%	0.60	PCC2162CT-ND•	16.86	118.91	410.78	648.60	PCC2162TR-ND	5,000	562.00/M	ECJ-3VC1H392J	ECJ-3VC1H392J
			4700pF	±5%	0.60	PCC2163CT-ND•	17.76	125.24	432.63	683.10	PCC2163TR-ND	5,000	592.00/M	ECJ-3VC1H472J	ECJ-3VC1H472J
			5600pF	±5%	0.85	PCC2164CT-ND•	18.70	131.88	455.57	719.33	PCC2164TR-ND	4,000	623.00/M	ECJ-3VC1H562J	ECJ-3VC1H562J
			6800pF	±5%	0.85	PCC2165CT-ND•	18.70	131.88	455.57	719.33	PCC2165TR-ND	4,000	623.00/M	ECJ-3VC1H682J	ECJ-3VC1H682J
			8200pF	±5%	1.15	PCC2166CT-ND•	11.49	86.18	306.43	555.41	PCC2166TR-ND	3,000	509.00/M	ECJ-3YC1H822J	ECJ-3FC1H822J
			10000pF	±5%	1.15	PCC2167CT-ND•	14.94	105.34	363.89	574.56	PCC2167TR-ND	3,000	497.96/M	ECJ-3YC1H103J	ECJ-3FC1H103J
	X7R	200	15000pF	±10%	1.15	PCC2013CT-ND	6.98	51.23	185.30	316.10	PCC2013TR-ND	2,000	294.00/M	ECJ-3YB2D153K	ECJ-3YB2D153K
			22000pF	±10%	1.15	PCC2014CT-ND	6.98	51.23	185.30	316.10	PCC2014TR-ND	2,000	294.00/M	ECJ-3YB2D223K	ECJ-3YB2D223K
		100	22000pF	±10%	1.15	PCC2010CT-ND	4.55	32.50	117.00	195.00	PCC2010TR-ND	2,000	182.00/M	ECJ-3YB2A223K	ECJ-3YB2A223K
			33000pF	±10%	1.15	PCC2011CT-ND	5.04	36.00	129.60	216.00	PCC2011TR-ND	2,000	202.00/M	ECJ-3YB2A333K	ECJ-3YB2A333K
			47000pF	±10%	1.15	PCC2012CT-ND	5.04	36.00	129.60	216.00	PCC2012TR-ND	2,000	202.00/M	ECJ-3YB2A473K	ECJ-3YB2A473K
			0.1µF	±10%	1.60	PCC2239CT-ND	4.34	31.89	115.35	183.20	PCC2239TR-ND	2,000	180.00/M	ECJ-3YB2A104K	ECJ-3YB2A104K
		50	220pF	±10%	0.60	PCC221BCT-ND	1.08	7.25	24.55	37.41	PCC221BTR-ND	5,000	32.00/M	ECU-V1H221KBM	(Not for new design)
			270pF	±10%	0.60	PCC271BCT-ND	1.08	7.25	24.55	37.41	PCC271BTR-ND	5,000	32.00/M	ECU-V1H271KBM	(Not for new design)
			330pF	±10%	0.60	PCC331BCT-ND	1.08	7.25	24.55	37.41	PCC331BTR-ND	5,000	32.00/M	ECU-V1H331KBM	(Not for new design)
			390pF	±10%	0.60	PCC391BCT-ND	1.08	7.25	24.55	37.41	PCC391BTR-ND	5,000	32.00/M	ECU-V1H391KBM	(Not for new design)
			470pF	±10%	0.60	PCC471BCT-ND	1.08	7.25	24.55	37.41	PCC471BTR-ND	5,000	32.00/M	ECU-V1H471KBM	(Not for new design)
			560pF	±10%	0.60	PCC561BCT-ND	1.08	7.25	24.55	37.41	PCC561BTR-ND	5,000	32.00/M	ECU-V1H561KBM	(Not for new design)
			680pF	±10%	0.60	PCC681BCT-ND	1.07	7.21	24.43	37.23	PCC681BTR-ND	5,000	31.00/M	ECU-V1H681KBM	(Not for new design)
			1000pF	±10%	0.60	PCC102BCT-ND	1.17	7.88	26.68	40.66	PCC102BTR-ND	5,000	34.00/M	ECU-V1H102KBM	(Not for new design)
			1200pF	±10%	0.60	PCC122BCT-ND	1.17	7.88	26.68	40.66	PCC122BTR-ND	5,000	34.00/M	ECU-V1H122KBM	(Not for new design)
			1500pF	±10%	0.60	PCC152BCT-ND	1.17	7.88	26.68	40.66	PCC152BTR-ND	5,000	34.00/M	ECU-V1H152KBM	(Not for new design)
			1800pF	±10%	0.60	PCC182BCT-ND	1.17	7.88	26.68	40.66	PCC182BTR-ND	5,000	34.00/M	ECU-V1H182KBM	(Not for new design)
			2200pF	±10%	0.60	PCC222BCT-ND	1.17	7.88	26.68	40.66	PCC222BTR-ND	5,000	34.00/M	ECU-V1H222KBM	(Not for new design)
			2700pF	±10%	0.60	PCC272BCT-ND	1.18	7.97	27.00	41.14	PCC272BTR-ND	5,000	35.00/M	ECU-V1H272KBM	(Not for new design)
			3300pF	±10%	0.60	PCC332BCT-ND	1.18	7.94	26.88	40.96	PCC332BTR-ND	5,000	35.00/M	ECU-V1H332KBM	(Not for new design)
			3900pF	±10%	0.60	PCC392BCT-ND	1.30	8.73	29.57	45.06	PCC392BTR-ND	5,000	38.00/M	ECU-V1H392KBM	(Not for new design)
			4700pF	±10%	0.60	PCC472BCT-ND	1.31	8.83	29.90	45.57	PCC472BTR-ND	5,000	38.00/M	ECU-V1H472KBM	(Not for new design)
			5600pF	±10%	0.60	PCC562BCT-ND	1.35	9.13	30.91	47.10	PCC562BTR-ND	5,000	40.00/M	ECU-V1H562KBM	(Not for new design)
			6800pF	±10%	0.60	PCC682BCT-ND	1.40	9.42	31.92	48.64	PCC682BTR-ND	5,000	41.00/M	ECU-V1H682KBM	(Not for new design)
			8200pF	±10%	0.60	PCC822BCT-ND	1.44	9.72	32.93	50.18	PCC822BTR-ND	5,000	42.00/M	ECU-V1H822KBM	(Not for new design)
			10000pF	±10%	0.60	PCC103BCT-ND	1.47	9.94	33.66	51.30	PCC103BTR-ND	5,000	43.00/M	ECU-V1H103KBM	(Not for new design)
			12000pF	±10%	0.60	PCC123BCT-ND	1.56	10.48	35.50	54.10	PCC123BTR-ND	5,000	46.00/M	ECU-V1H123KBM	(Not for new design)
			15000pF	±10%	0.60	PCC153BCT-ND	1.65	11.13	37.71	57.46	PCC153BTR-ND	5,000	48.00/M	ECU-V1H153KBM	(Not for new design)
			18000pF	±10%	0.60	PCC183BCT-ND	1.73	11.63	39.41	60.05	PCC183BTR-ND	5,000	51.00/M	ECU-V1H183KBM	(Not for new design)
			22000pF	±10%	0.60	PCC223BCT-ND	1.82	12.24	41.46	63.18	PCC223BTR-ND	5,000	53.00/M	ECU-V1H223KBM	(Not for new design)
			27000pF	±10%	0.60	PCC273BCT-ND	1.82	12.24	41.46	63.18	PCC273BTR-ND	5,000	53.00/M	ECU-V1H273KBW	(Not for new design)
			33000pF	±10%	0.60	PCC333BCT-ND	2.13	14.34	48.58	74.03	PCC333BTR-ND	5,000	62.00/M	ECU-V1H333KBW	(Not for new design)
			39000pF	±10%	0.60	PCC393BCT-ND	2.17	14.64	49.57	75.54	PCC393BTR-ND	5,000	64.00/M	ECU-V1H393KBW	(Not for new design)
			47000pF	±10%	0.60	PCC473BCT-ND	1.91	13.47	46.53	73.47	PCC473BTR-ND	5,000	64.00/M	ECU-V1H473KBW	(Not for new design)
			.1µF	±10%	1.00	PCC104BCT-ND	3.43	24.53	88.29	147.15	PCC104BTR-ND	4,000	128.00/M	ECU-V1H104KBW	ECJ-3VB1H104K
		25	.1µF	±10%	0.85	PCC1883CT-ND	1.83	12.94	44.69	75.26	PCC1883TR-ND	4,000	61.00/M	ECJ-3VB1E104K	ECJ-3VB1E104K
			.12µF	±10%	0.85	PCC1884CT-ND	1.83	12.94	44.69	75.26	PCC1884TR-ND	4,000	61.00/M	ECJ-3VB1E124K	ECJ-3VB1E124K
			.15µF	±10%	0.85	PCC1885CT-ND	1.83	12.94	44.69	75.26	PCC1885TR-ND	4,000	61.00/M	ECJ-3VB1E154K	ECJ-3VB1E154K
			.18µF	±10%	0.85	PCC1886CT-ND	1.83	12.94	44.69	75.26	PCC1886TR-ND	4,000	61.00/M	ECJ-3VB1E184K	ECJ-3VB1E184K
			.22µF	±10%	0.85	PCC1887CT-ND	2.27	16.02	55.33	93.18	PCC1887TR-ND	4,000	76.00/M	ECJ-3VB1E224K	ECJ-3VB1E224K
			.27µF	±10%	0.85	PCC1888CT-ND	2.27	16.02	55.33	93.18	PCC1888TR-ND	4,000	76.00/M	ECJ-3VB1E274K	ECJ-3VB1E274K
			.33µF	±10%	0.85	PCC1889CT-ND	2.27	16.02	55.33	93.18	PCC1889TR-ND	4,000	76.00/M	ECJ-3VB1E334K	ECJ-3VB1E334K
			.39µF	±10%	1.15	PCC1890CT-ND	3.36	24.00	86.40	144.00	PCC1890TR-ND	2,000	134.00/M	ECJ-3YB1E394K	ECJ-3YB1E394K
			.47µF	±10%	1.15	PCC1891CT-ND	4.17	29.75	107.10	178.50	PCC1891TR-ND	2,000	167.00/M	ECJ-3YB1E474K	ECJ-3YB1E474K
			.56µF	±10%	1.60	PCC1926CT-ND	2.98	21.28	76.61	127.68	PCC1926TR-ND	2,000	119.00/M	ECJ-3YB1E564K	ECJ-3YB1E564K
			.68µF	±10%	1.60	PCC1892CT-ND	2.98	21.28	76.61	127.68	PCC1892TR-ND	2,000	119.00/M	ECJ-3YB1E684K	ECJ-3YB1E684K
			.82µF	±10%	1.60	PCC1927CT-ND	2.87	21.06	76.16	129.92	PCC1927TR-ND	2,000	121.00/M	ECJ-3YB1E824K	ECJ-3YB1E824K
			1µF	±10%	1.60	PCC1893CT-ND	3.23	23.69	85.68	146.16	PCC1893TR-ND	2,000	136.00/M	ECJ-3YB1E105K	ECJ-3YB1E105K
		16	.1µF	±10%	0.85	PCC1870CT-ND	1.53	10.92	39.31	65.52	PCC1870TR-ND	4,000	57.00/M	ECJ-3VB1C104K	ECJ-3VB1C104K
			.12µF	±10%	0.85	PCC1871CT-ND	1.69	12.04	43.34	72.24	PCC1871TR-ND	4,000	63.00/M	ECJ-3VB1C124K	ECJ-3VB1C124K
			.15µF	±10%	0.85	PCC1872CT-ND	1.69	12.04	43.34	72.24	PCC1872TR-ND	4,000	63.00/M	ECJ-3VB1C154K	ECJ-3VB1C154K
			.18µF	±10%	0.85	PCC1873CT-ND	1.76	12.60	45.36	75.60	PCC1873TR-ND	4,000	66.00/M	ECJ-3VB1C184K	ECJ-3VB1C184K
			.22µF	±10%	0.85	PCC1874CT-ND	1.84	13.16	47.38	78.96	PCC1874TR-ND	4,000	68.00/M	ECJ-3VB1C224K	ECJ-3VB1C224K
			.27µF	±10%	0.85	PCC1875CT-ND	1.92	13.72	49.39	82.32	PCC1875TR-ND	4,000	71.00/M	ECJ-3VB1C274K	ECJ-3VB1C274K
			.33µF	±10%	0.85	PCC1876CT-ND	2.00	14.28	51.41	85.68	PCC1876TR-ND	4,000	74.00/M	ECJ-3VB1C334K	ECJ-3VB1C334K
			.39µF	±10%	0.85	PCC1877CT-ND	2.31	16.52	59.47	99.12	PCC1877TR-ND	4,000	86.00/M	ECJ-3VB1C394K	ECJ-3VB1C394K
			.47µF	±10%	0.85	PCC1878CT-ND	2.55	18.20	65.52	109.20	PCC1878TR-ND	4,000	95.00/M	ECJ-3VB1C474K	ECJ-3VB1C474K
			.56µF	±10%	0.85	PCC1879CT-ND	2.62	19.21	69.50	118.55	PCC1879TR-ND	4,000	106.00/M	ECJ-3VB1C564K	ECJ-3VB1C564K
			.68µF	±10%	0.85	PCC1880CT-ND	2.76	20.27	73.30	125.05	PCC1880TR-ND	4,000	116.00/M	ECJ-3VB1C684K	ECJ-3VB1C684K
			.82µF	±10%	1.15	PCC1881CT-ND	5.41	39.72	143.65	245.05	PCC1881TR-ND	2,000	228.00/M	ECJ-3YB1C824K	ECJ-3YB1C824K
			1µF	±10%	1.15	PCC1882CT-ND	6.30	46.30	167.45	285.65	PCC1882TR-ND	2,000	266.00/M	ECJ-3YB1C105K	ECJ-3YB1C105K
			1.2µF	±10%	1.60	PCC1928CT-ND	6.53	47.94	173.40	295.80	PCC1928TR-ND	2,000	275.00/M	ECJ-3YB1C125K	(Not for new design)
			1.5µF	±10%	1.60	PCC1929CT-ND	1.47	10.79	39.03	66.58	PCC1929TR-ND	2,000	62.00/M	ECJ-3YB1C155K	ECJ-3YB1C155K
			1.8µF	±10%	1.60	PCC1930CT-ND	7.50	56.25	200.00	362.50	—	—	—	ECJ-3YB1C185K	(Not for new design)
	X5R	25	4.7µF	±20%	1.60	PCC2241CT-ND	14.25	106.86	379.96	631.68	PCC2241TR-ND	2,000	617.00/M	ECJ-3YB1E475M	ECJ-3YB1E475M
		16	2.2µF	±10%	1.60	PCC1931CT-ND	6.18	46.37	164.86	298.82	PCC1931TR-ND	2,000	274.00/M	ECJ-3YB1C225K	ECJ-3YB1C225K
			4.7µF	±20%	1.60	PCC2226CT-ND	11.73	87.98	312.80	520.03	PCC2226TR-ND	2,000	508.00/M	ECJ-3YB1C475M	ECJ-3YB1C475M
			4.7µF	±10%	1.60	PCC2250CT-ND *NEW!*	5.94	43.65	157.89	250.76	PCC2250TR-ND *NEW!*	2,000	251.00/M	ECJ-3YB1C475K	ECJ-3YB1C475K
			10µF	±20%	1.60	PCC2227CT-ND	11.73	87.98	312.80	520.03	PCC2227TR-ND	2,000	508.00/M	ECJ-3YB1C106M	ECJ-3YB1C106M
		10	1.2µF	±10%	1.60	PCC1932CT-ND	6.53	47.94	173.40	295.80	PCC1932TR-ND	2,000	275.00/M	ECJ-3YB1A125K	(Not for new design)
			1.5µF	±10%	1.60	PCC1867CT-ND	5.07	38.05	135.30	245.22	PCC1867TR-ND	2,000	225.00/M	ECJ-3YB1A155K	ECJ-3YB1A155K
			1.8µF	±10%	1.60	PCC1933CT-ND	7.50	56.25	200.00	362.50	PCC1933TR-ND	2,000	333.00/M	ECJ-3YB1A185K	(Not for new design)

(Continued)

Panasonic Multilayer Ceramic Chip Capacitors 0201, 0402, 0508, 0603, 0612, 0805, 1206, 1210 and 1812 *(Cont.)*

Size Code	Type	WV DC	Cap.	Tolerance	Dim. (mm) T	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Tape & Reel		Old † Panasonic Part No.	New † Panasonic Part No.
							10	100	500	1,000		Size	Pricing		
1206	X5R	10	2.2µF	±10%	1.60	PCC1868CT-ND	9.34	70.06	249.09	451.47	PCC1868TR-ND	2,000	414.00/M	ECJ-3YB1A225K	ECJ-3YB1A225K
			2.7µF	±10%	1.60	PCC1934CT-ND	8.52	63.90	227.20	411.80	PCC1934TR-ND	2,000	378.00/M	ECJ-3YB1A275K	(Not for new design)
			3.3µF	±10%	1.60	PCC1869CT-ND	9.34	70.06	249.09	451.47	PCC1869TR-ND	2,000	414.00/M	ECJ-3YB1A335K	ECJ-3YB1A335K
			4.7µF	±20%	1.60	PCC2177CT-ND	13.97	104.79	372.60	675.34	PCC2177TR-ND	2,000	619.00/M	ECJ-3YB1A475M	ECJ-3YB1A475M
			10µF	±20%	1.60	PCC2178CT-ND	13.97	104.79	372.60	675.34	PCC2178TR-ND	2,000	619.00/M	ECJ-3YB1A106M	ECJ-3YB1A106M
		6.3	3.9µF	±10%	1.60	PCC1935CT-ND	9.90	74.25	264.00	478.50	—	—	—	ECJ-3YB0J395K	(Not for new design)
			4.7µF	±10%	1.60	PCC1936CT-ND	9.34	70.06	249.09	451.47	PCC1936TR-ND	2,000	414.00/M	ECJ-3YB0J475K	ECJ-3YB0J475K
			5.6µF	±10%	1.60	PCC1937CT-ND	10.20	76.50	272.00	493.00	PCC1937TR-ND	2,000	452.00/M	ECJ-3YB0J565K	(Not for new design)
			6.8µF	±10%	1.60	PCC1938CT-ND	9.34	70.06	249.09	451.47	PCC1938TR-ND	2,000	414.00/M	ECJ-3YB0J685K	ECJ-3YB0J685K
			8.2µF	±10%	1.60	PCC1939CT-ND	11.58	86.85	308.80	559.70	PCC1939TR-ND	2,000	513.00/M	ECJ-3YB0J825K	(Not for new design)
			10µF	±10%	1.60	PCC1940CT-ND	9.34	70.06	249.09	451.47	PCC1940TR-ND	2,000	414.00/M	ECJ-3YB0J106K	ECJ-3YB0J106K
			22µF	±20%	1.60	PCC2242CT-ND	17.34	130.87	490.76	850.66	PCC2242TR-ND	2,000	838.00/M	ECJ-3YB0J226M	ECJ-3YB0J226M
	Y5V	25	.47µF	+80%/-20%	0.85	PCC1901CT-ND	1.83	12.94	44.69	75.26	PCC1901TR-ND	4,000	61.00/M	ECJ-3VF1E474Z	ECJ-3VF1E474Z
			.68µF	+80%/-20%	1.15	PCC1902CT-ND	2.87	20.50	73.80	123.00	PCC1902TR-ND	2,000	115.00/M	ECJ-3YF1E684Z	ECJ-3YF1E684Z
			1µF	+80%/-20%	1.15	PCC1903CT-ND	3.29	23.50	84.60	141.00	PCC1903TR-ND	2,000	132.00/M	ECJ-3YF1E105Z	ECJ-3YF1E105Z
			1.5µF	+80%/-20%	1.15	PCC1904CT-ND	4.19	30.79	111.35	189.95	PCC1904TR-ND	2,000	177.00/M	ECJ-3YF1E155Z	ECJ-3YF1E155Z
			2.2µF	+80%/-20%	1.15	PCC1905CT-ND	4.19	30.79	111.35	189.95	PCC1905TR-ND	2,000	177.00/M	ECJ-3YF1E225Z	ECJ-3YF1E225Z
		16	.68µF	+80%/-20%	0.85	PCC1895CT-ND	2.86	20.44	73.58	122.64	PCC1895TR-ND	4,000	106.00/M	ECJ-3VF1C684Z	ECJ-3VF1C684Z
			1µF	+80%/-20%	0.85	PCC1896CT-ND	3.18	22.68	81.65	136.08	PCC1896TR-ND	4,000	118.00/M	ECJ-3VF1C105Z	ECJ-3VF1C105Z
			1.5µF	+80%/-20%	0.85	PCC1897CT-ND	4.17	29.75	107.10	178.50	PCC1897TR-ND	4,000	155.00/M	ECJ-3VF1C155Z	(Not for new design)
			2.2µF	+80%/-20%	0.85	PCC1898CT-ND	3.18	22.68	81.65	136.08	PCC1898TR-ND	4,000	118.00/M	ECJ-3VF1C225Z	ECJ-3VF1C225Z
			4.7µF	+80%/-20%	1.15	PCC1900CT-ND	5.16	37.90	137.09	233.86	PCC1900TR-ND	2,000	218.00/M	ECJ-3YF1C475Z	ECJ-3YF1C475Z
		10	10µF	+80%/-20%	1.60	PCC1894CT-ND	4.91	36.79	130.82	237.10	PCC1894TR-ND	2,000	217.00/M	ECJ-3YF1A106Z	ECJ-3YF1A106Z
	F	50	1.0µF	+80%/-20%	1.15	PCC2234CT-ND	4.07	29.04	104.54	162.61	PCC2234TR-ND	3,000	154.00/M	ECJ-3FF1H105Z	ECJ-3FF1H105Z
		25	4.7µF	+80%/-20%	1.15	PCC2235CT-ND	6.51	47.83	173.02	274.79	PCC2235TR-ND	3,000	271.00/M	ECJ-3FF1E475Z	ECJ-3FF1E475Z
		10	22µF	+80%/-20%	1.60	PCC2236CT-ND	8.73	65.46	232.76	386.96	PCC2236TR-ND	2,000	378.00/M	ECJ-3YF1A226Z	ECJ-3YF1A226Z
1210	X7R	100	0.47µF	±10%	2.00	PCC2240CT-ND	7.84	57.56	208.21	330.68	PCC2240TR-ND	2,000	326.00/M	ECJ-4YB2A474K	ECJ-4YB2A474K
			0.68µF	±20%	2.50	PCC2247CT-ND	8.14	61.07	217.12	—	PCC2247TR-ND	1,000	361.00	ECJ-4YB2A684M	ECJ-4YB2A684M
	X5R	25	10µF	±20%	2.50	PCC2243CT-ND	14.06	105.42	374.82	—	PCC2243TR-ND	1,000	623.00	ECJ-4YB1E106M	ECJ-4YB1E106M
			4.7µF	±10%	2.00	PCC2251CT-ND *NEW!*	7.28	53.45	193.32	307.04	PCC2251TR-ND *NEW!*	2,000	307.00/M	ECJ-4YB1E475K	ECJ-4YB1E475K
		16	4.7µF	±10%	2.00	PCC2168CT-ND	7.76	58.22	207.00	375.19	PCC2168TR-ND	2,000	344.00/M	ECJ-4YB1C475K	ECJ-4YB1C475K
			10µF	±10%	2.00	PCC2169CT-ND	7.06	52.92	188.16	341.04	PCC2169TR-ND	2,000	313.00/M	ECJ-4YB1C106K	ECJ-4YB1C106K
		10	10µF	±10%	2.00	PCC2170CT-ND	7.76	58.22	207.00	375.19	PCC2170TR-ND	2,000	344.00/M	ECJ-4YB1A106K	ECJ-4YB1A106K
			10µF	±20%	1.40	PCC2238CT-ND	8.35	62.62	222.64	370.14	PCC2238TR-ND	2,000	362.00/M	ECJ-8YB1A106M	ECJ-8YB1A106M
			22µF	±20%	2.50	PCC2228CT-ND	23.13	174.57	654.64	—	PCC2228TR-ND	1,000	1135.00	ECJ-4YB1A226M	ECJ-4YB1A226M
		6.3	22µF	±20%	2.50	PCC2179CT-ND	26.19	196.39	698.28	—	PCC2179TR-ND	1,000	1161.00	ECJ-4YB0J226M	ECJ-4YB0J226M
	Y5V	25	10µF	+80%/-20%	1.60	PCC2171CT-ND	12.39	92.89	330.28	598.63	PCC2171TR-ND	2,000	549.00/M	ECJ-4YF1E106Z	ECJ-4YF1E106Z
		10	22µF	+80%/-20%	2.00	PCC2172CT-ND	11.90	89.27	317.40	575.29	PCC2172TR-ND	2,000	528.00/M	ECJ-4YF1A226Z	ECJ-4YF1A226Z
	F	6.3	47µF	+80%/-20%	2.00	PCC2237CT-ND	19.26	145.36	545.10	944.84	PCC2237TR-ND	2,000	930.00/M	ECJ-4YF0J476Z	ECJ-4YF0J476Z
1812	X7R	100	1.0µF	±20%	2.50	PCC2248CT-ND	15.42	116.38	—	—	PCC2248TR-ND	500	436.50	ECJ-5YB2A105M	ECJ-5YB2A105M
	X5R	25	10µF	±20%	2.50	PCC2180CT-ND	30.53	228.99	—	—	PCC2180TR-ND	500	677.00	ECJ-5YB1E106M	ECJ-5YB1E106M
		16	22µF	±20%	3.20	PCC2244CT-ND	35.99	271.63	—	—	PCC2244TR-ND	500	1018.50	ECJ-5YB1C226M	ECJ-5YB1C226M
		6.3	47µF	±20%	3.20	PCC2245CT-ND	30.39	229.33	—	—	PCC2245TR-ND	500	860.00	ECJ-5YB0J476M	ECJ-5YB0J476M
	Y5V	35	10µF	+80%/-20%	2.50	PCC2183CT-ND	26.19	196.39	—	—	PCC2183TR-ND	500	580.50	ECJ-5YF1V106Z	ECJ-5YF1V106Z
		16	22µF	+80%/-20%	2.50	PCC2184CT-ND	26.19	196.39	—	—	PCC2184TR-ND	500	580.50	ECJ-5YF1C226Z	ECJ-5YF1C226Z
	F	6.3	100µF	+80%/-20%	3.20	PCC2246CT-ND	57.78	436.08	—	—	PCC2246TR-ND	500	1635.50	ECJ-5YF0J107Z	ECJ-5YF0J107Z

Digi-Key® Notebook Style Kit Boxes

Notebook style kit box with velcro closure can be stored as a normal kit box, or vertically as a book. Each compartment is identified with an easy-to-read kit index.

- **PCC7-KIT-ND** ***0805/NPO Series Kit*** 10 each of values denoted (300 total pieces) **$29.95**
- **PCC9-KIT-ND** ***0603/NPO Series Kit*** 10 each of values denoted (300 total pieces) **$29.95**
- **PCC13-KIT-ND** ***0402/NPO Series Kit*** 10 each of values denoted (280 total pieces).................. **$59.95**
- **PCC14-KIT-ND** ***0402/X7R Series Kit*** 10 each of values denoted (300 total pieces) **$54.95**
- **PCC15-KIT-ND** ***0603/X7R-X5R Series Kit*** 10 each of values denoted (300 total pieces)............. **$31.95**
- **PCC16-KIT-ND** ***0805/X7R Series Kit*** 10 each of values denoted (300 total pieces) **$31.95**
- **PCC17-KIT-ND** ***1206/NPO Series Kit*** 10 each of values denoted (140 total pieces).................. **$99.95**

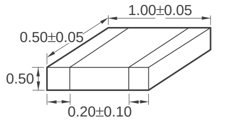
Panasonic

Microwave Multilayer Chip Capacitors 0402 High-Accuracy/High-Frequency

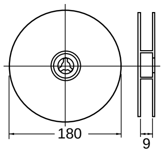
Features:
- Low Cap. with tight tolerance
- High Q value / Low ESR at High Freq.
- Ultra-Stable COG Performance (0±30 ppm/°C)
- 0402 Miniature Size

Applications (At Microwave Freq.):
- Impedance Matching Circuit
- Resonant Circuit
- Coupling Circuit

Application Examples:
- RF modules, VCO, BPF, DUP, PA, etc.
- Cellular Phone, Bluetooth, Wireless LAN, etc.



Dimensions shown in mm.

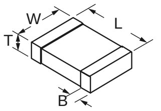


Size Code	Type	WV DC	Cap.	Tolerance	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing 10,000	Panasonic Part No.
						10	100	500	1,000			
0402	COG	25	.10pF	±0.05pF	PCC2190CT-ND	.65	.46	.32	.25	PCC2190TR-ND	206.00/M	ECD-G0ER108
			.15pF	±0.05pF	PCC2191CT-ND	.65	.46	.32	.25	PCC2191TR-ND	206.00/M	ECD-G0ER158
			.20pF	±0.05pF	PCC2192CT-ND	.65	.46	.32	.25	PCC2192TR-ND	206.00/M	ECD-G0ER208
			.25pF	±0.05pF	PCC2193CT-ND	.65	.46	.32	.25	PCC2193TR-ND	206.00/M	ECD-G0ER258
			.30pF	±0.05pF	PCC2194CT-ND	.65	.46	.32	.25	PCC2194TR-ND	206.00/M	ECD-G0ER308
			.35pF	±0.05pF	PCC2195CT-ND	.65	.46	.32	.25	PCC2195TR-ND	206.00/M	ECD-G0ER358
			.40pF	±0.05pF	PCC2196CT-ND	.65	.46	.32	.25	PCC2196TR-ND	206.00/M	ECD-G0ER408
			.45pF	±0.05pF	PCC2197CT-ND	.65	.46	.32	.25	PCC2197TR-ND	206.00/M	ECD-G0ER458
			.50pF	±0.05pF	PCC2198CT-ND	.65	.46	.32	.25	PCC2198TR-ND	206.00/M	ECD-G0ER508
			.55pF	±0.075pF	PCC2199CT-ND	.65	.46	.32	.25	PCC2199TR-ND	206.00/M	ECD-G0ER559
			.60pF	±0.075pF	PCC2200CT-ND	.65	.46	.32	.25	PCC2200TR-ND	206.00/M	ECD-G0ER609
			.65pF	±0.075pF	PCC2201CT-ND	.65	.46	.32	.25	PCC2201TR-ND	206.00/M	ECD-G0ER659
			.70pF	±0.075pF	PCC2202CT-ND	.65	.46	.32	.25	PCC2202TR-ND	206.00/M	ECD-G0ER709
			.75pF	±0.075pF	PCC2203CT-ND	.65	.46	.32	.25	PCC2203TR-ND	206.00/M	ECD-G0ER759
			.80pF	±0.075pF	PCC2204CT-ND	.65	.46	.32	.25	PCC2204TR-ND	206.00/M	ECD-G0ER809
			.85pF	±0.075pF	PCC2205CT-ND	.65	.46	.32	.25	PCC2205TR-ND	206.00/M	ECD-G0ER859
			.90pF	±0.075pF	PCC2206CT-ND	.65	.46	.32	.25	PCC2206TR-ND	206.00/M	ECD-G0ER909
			.95pF	±0.075pF	PCC2207CT-ND	.65	.46	.32	.25	PCC2207TR-ND	206.00/M	ECD-G0ER959
			1.0pF	±0.075pF	PCC2208CT-ND	.65	.46	.32	.25	PCC2208TR-ND	206.00/M	ECD-G0E1R09
			1.1pF	±0.10pF	PCC2209CT-ND	.65	.46	.32	.25	PCC2209TR-ND	206.00/M	ECD-G0E1R1B
			1.2pF	±0.10pF	PCC2210CT-ND	.65	.46	.32	.25	PCC2210TR-ND	206.00/M	ECD-G0E1R2B
			1.3pF	±0.10pF	PCC2211CT-ND	.65	.46	.32	.25	PCC2211TR-ND	206.00/M	ECD-G0E1R3B
			1.4pF	±0.10pF	PCC2212CT-ND	.65	.46	.32	.25	PCC2212TR-ND	206.00/M	ECD-G0E1R4B
			1.5pF	±0.10pF	PCC2213CT-ND	.65	.46	.32	.25	PCC2213TR-ND	206.00/M	ECD-G0E1R5B
			1.6pF	±0.10pF	PCC2214CT-ND	.65	.46	.32	.25	PCC2214TR-ND	206.00/M	ECD-G0E1R6B
			1.7pF	±0.10pF	PCC2215CT-ND	.65	.46	.32	.25	PCC2215TR-ND	206.00/M	ECD-G0E1R7B
			1.8pF	±0.10pF	PCC2216CT-ND	.65	.46	.32	.25	PCC2216TR-ND	206.00/M	ECD-G0E1R8B
			1.9pF	±0.10pF	PCC2217CT-ND	.65	.46	.32	.25	PCC2217TR-ND	206.00/M	ECD-G0E1R9B
			2.0pF	±0.10pF	PCC2218CT-ND	.65	.46	.32	.25	PCC2218TR-ND	206.00/M	ECD-G0E2R0B
			2.2pF	±5%	PCC2219CT-ND	.65	.46	.32	.25	PCC2219TR-ND	206.00/M	ECD-G0E2R2J
			2.4pF	±5%	PCC2220CT-ND	.65	.46	.32	.25	PCC2220TR-ND	206.00/M	ECD-G0E2R4J
			2.6pF	±5%	PCC2221CT-ND	.65	.46	.32	.25	PCC2221TR-ND	206.00/M	ECD-G0E2R6J
			2.8pF	±5%	PCC2222CT-ND	.65	.46	.32	.25	PCC2222TR-ND	206.00/M	ECD-G0E2R8J
			3.0pF	±5%	PCC2223CT-ND	.65	.46	.32	.25	PCC2223TR-ND	206.00/M	ECD-G0E3R0J

KEMET

Multilayer Ceramic Chip Capacitors

KEMET multilayer ceramic chip capacitors are produced in plants designed specifically for chip capacitor manufacture. The process features a high degree of mechanization as well as precise controls over raw materials and process conditions. Manufacturing is supplemented by extensive technology, Engineering and Quality Assurance programs. Standard end terminations use a nickel barrier layer and a tin overplate to provide excellent solderability.



Size Code (EIA)	L	W	B	T
0402	1.00±0.05	0.50±0.05	0.20 thru 0.40	.55
0603	1.60±0.15	0.80±0.15	0.35±0.15	.9
0805	2.00±0.20	1.25±0.20	0.50±0.25	1.3
1206	3.20±0.20	1.60±0.20	0.50±0.25	1.5
1210	3.20±0.20	2.50±0.20	0.50±0.25	1.7

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Kemet Part No.
						10	100	500		Size	Pricing	
0402	C0G (NPO)	50	.5pF	±0.25pF	399-1000-1-ND	3.88	22.95	66.19	399-1000-2-ND	10,000	64.00/M	C0402C508C5GACTU
		50	1.2pF	±0.25pF	399-1001-1-ND	.66	3.90	11.25	399-1001-2-ND	10,000	11.00/M	C0402C129C5GACTU
		50	1.5pF	±0.25pF	399-1002-1-ND	.66	3.90	11.25	399-1002-2-ND	10,000	11.00/M	C0402C159C5GACTU
		50	1.8pF	±0.25pF	399-1003-1-ND	.66	3.90	11.25	399-1003-2-ND	10,000	11.00/M	C0402C189C5GACTU
		50	2.0pF	±0.25pF	399-1004-1-ND	4.09	24.18	69.75	399-1004-2-ND	10,000	67.00/M	C0402C209C5GACTU
		50	2.7pF	±0.25pF	399-1005-1-ND	.66	3.90	11.25	399-1005-2-ND	10,000	11.00/M	C0402C279C5GACTU
		50	3.0pF	±0.25pF	399-1006-1-ND	4.09	24.18	69.75	399-1006-2-ND	10,000	67.00/M	C0402C309C5GACTU
		50	3.3pF	±0.25pF	399-1007-1-ND	.66	3.90	11.25	399-1007-2-ND	10,000	11.00/M	C0402C339C5GACTU
		50	5.6pF	±0.5pF	399-1008-1-ND	3.41	20.15	58.13	399-1008-2-ND	10,000	56.00/M	C0402C569D5GACTU
		50	8.2pF	±0.5pF	399-1009-1-ND	3.41	20.15	58.13	399-1009-2-ND	10,000	56.00/M	C0402C829D5GACTU
		50	9.1pF	±0.5pF	399-1010-1-ND	4.09	24.18	69.75	399-1010-2-ND	10,000	67.00/M	C0402C919D5GACTU
		50	10pF	±5%	399-1011-1-ND	.65	3.84	11.06	399-1011-2-ND	10,000	11.00/M	C0402C100J5GACTU
		50	11pF	±5%	399-1012-1-ND	4.62	27.30	78.75	399-1012-2-ND	10,000	76.00/M	C0402C110J5GACTU
		50	12pF	±5%	399-1013-1-ND	.68	4.03	11.63	399-1013-2-ND	10,000	11.00/M	C0402C120J5GACTU
		50	15pF	±5%	399-1014-1-ND	.68	4.03	11.63	399-1014-2-ND	10,000	11.00/M	C0402C150J5GACTU
		50	22pF	±5%	399-1015-1-ND	.68	4.03	11.63	399-1015-2-ND	10,000	11.00/M	C0402C220J5GACTU
		50	27pF	±5%	399-1016-1-ND	.68	4.03	11.63	399-1016-2-ND	10,000	11.00/M	C0402C270J5GACTU
		50	33pF	±5%	399-1017-1-ND	.68	4.03	11.63	399-1017-2-ND	10,000	11.00/M	C0402C330J5GACTU
		50	39pF	±5%	399-1018-1-ND	.68	4.03	11.63	399-1018-2-ND	10,000	11.00/M	C0402C390J5GACTU
		50	47pF	±5%	399-1019-1-ND	.68	4.03	11.63	399-1019-2-ND	10,000	11.00/M	C0402C470J5GACTU
		50	56pF	±5%	399-1020-1-ND	.68	4.03	11.63	399-1020-2-ND	10,000	11.00/M	C0402C560J5GACTU
		25	82pF	±5%	399-1021-1-ND	3.85	22.75	65.63	399-1021-2-ND	10,000	63.00/M	C0402C820J3GACTU
		25	100pF	±5%	399-1022-1-ND	.65	3.84	11.06	399-1022-2-ND	10,000	11.00/M	C0402C101J3GACTU
	X7R	50	220pF	±10%	399-1030-1-ND	4.07	24.05	69.38	399-1030-2-ND	10,000	67.00/M	C0402C221K5RACTU
		50	330pF	±10%	399-1023-1-ND	4.07	24.05	69.38	399-1023-2-ND	10,000	67.00/M	C0402C331K5RACTU
		50	470pF	±10%	399-1025-1-ND	4.07	24.05	69.38	399-1025-2-ND	10,000	67.00/M	C0402C471K5RACTU
		50	560pF	±10%	399-1026-1-ND	.79	4.68	13.50	399-1026-2-ND	10,000	13.00/M	C0402C561K5RACTU
		50	680pF	±10%	399-1027-1-ND	.79	4.68	13.50	399-1027-2-ND	10,000	13.00/M	C0402C681K5RACTU
		50	1000pF	±10%	399-1032-1-ND	.63	3.71	10.69	399-1032-2-ND	10,000	10.00/M	C0402C102K5RACTU
		50	1200pF	±10%	399-1028-1-ND	.73	4.29	12.38	399-1028-2-ND	10,000	12.00/M	C0402C122K5RACTU
		50	1500pF	±10%	399-1029-1-ND	4.07	24.05	69.38	399-1029-2-ND	10,000	67.00/M	C0402C152K5RACTU
		25	470pF	±10%	399-1024-1-ND	4.07	24.05	69.38	399-1024-2-ND	10,000	67.00/M	C0402C471K3RACTU
		25	1000pF	±10%	399-1031-1-ND	3.85	22.75	65.63	399-1031-2-ND	10,000	63.00/M	C0402C102K3RACTU
		25	2200pF	±10%	399-1033-1-ND	.63	3.71	10.69	399-1033-2-ND	10,000	10.00/M	C0402C222K3RACTU
		25	3900pF	±10%	399-1034-1-ND	.73	4.29	12.38	399-1034-2-ND	10,000	12.00/M	C0402C392K3RACTU
		25	4700pF	±10%	399-1035-1-ND	.73	4.29	12.38	399-1035-2-ND	10,000	12.00/M	C0402C472K3RACTU
		25	5600pF	±10%	399-1276-1-ND	2.44	14.43	41.63	399-1276-2-ND	10,000	40.00/M	C0402C562K3RACTU
		25	8200pF	±10%	399-1277-1-ND	2.44	14.43	41.63	399-1277-2-ND	10,000	40.00/M	C0402C822K3RACTU
		25	10000pF	±5%	399-1279-1-ND	5.39	31.85	91.88	399-1279-2-ND	10,000	88.00/M	C0402C103J3RACTU
		25	10000pF	±10%	399-1278-1-ND	.65	3.84	11.06	399-1278-2-ND	10,000	11.00/M	C0402C103K3RACTU
		16	5600pF	±10%	399-1036-1-ND	4.07	24.05	69.38	399-1036-2-ND	10,000	67.00/M	C0402C562K4RACTU
		16	8200pF	±10%	399-1037-1-ND	4.07	24.05	69.38	399-1037-2-ND	10,000	67.00/M	C0402C822K4RACTU
		16	10000pF	±5%	399-1039-1-ND	5.39	31.85	91.88	399-1039-2-ND	10,000	88.00/M	C0402C103J4RACTU
		16	10000pF	±10%	399-1038-1-ND	.65	3.84	11.06	399-1038-2-ND	10,000	11.00/M	C0402C103K4RACTU
	X5R	10	12000pF	±10%	399-3009-1-ND *NEW!*	2.31	13.65	39.38	399-3009-2-ND *NEW!*	10,000	38.00/M	C0402C123K8PACTU
		10	15000pF	±10%	399-3011-1-ND *NEW!*	2.31	13.65	39.38	399-3011-2-ND *NEW!*	10,000	38.00/M	C0402C153K8PACTU
		10	18000pF	±10%	399-3013-1-ND *NEW!*	2.31	13.65	39.38	399-3013-2-ND *NEW!*	10,000	38.00/M	C0402C183K8PACTU
		10	22000pF	±10%	399-3015-1-ND *NEW!*	2.42	14.30	41.25	399-3015-2-ND *NEW!*	10,000	40.00/M	C0402C223K8PACTU
		10	27000pF	±10%	399-3017-1-ND *NEW!*	2.42	14.30	41.25	399-3017-2-ND *NEW!*	10,000	40.00/M	C0402C273K8PACTU
		10	33000pF	±10%	399-3019-1-ND *NEW!*	2.53	14.95	43.13	399-3019-2-ND *NEW!*	10,000	41.00/M	C0402C333K8PACTU
		10	47000pF	±10%	399-3021-1-ND *NEW!*	2.64	15.60	45.00	399-3021-2-ND *NEW!*	10,000	43.00/M	C0402C473K8PACTU
		10	68000pF	±10%	399-3023-1-ND *NEW!*	2.75	16.25	46.88	399-3023-2-ND *NEW!*	10,000	45.00/M	C0402C683K8PACTU
		10	.1µF	±10%	399-3027-1-ND *NEW!*	2.86	16.90	48.75	399-3027-2-ND *NEW!*	10,000	47.00/M	C0402C104K8PACTU
		6.3	12000pF	±10%	399-3008-1-ND *NEW!*	2.31	13.65	39.38	399-3008-2-ND *NEW!*	10,000	38.00/M	C0402C123K9PACTU
		6.3	15000pF	±10%	399-3010-1-ND *NEW!*	2.31	13.65	39.38	399-3010-2-ND *NEW!*	10,000	38.00/M	C0402C153K9PACTU
		6.3	18000pF	±10%	399-3012-1-ND *NEW!*	2.31	13.65	39.38	399-3012-2-ND *NEW!*	10,000	38.00/M	C0402C183K9PACTU
		6.3	22000pF	±10%	399-3014-1-ND *NEW!*	2.42	14.30	41.25	399-3014-2-ND *NEW!*	10,000	40.00/M	C0402C223K9PACTU
		6.3	27000pF	±10%	399-3016-1-ND *NEW!*	2.42	14.30	41.25	399-3016-2-ND *NEW!*	10,000	40.00/M	C0402C273K9PACTU
		6.3	33000pF	±10%	399-3018-1-ND *NEW!*	2.53	14.95	43.13	399-3018-2-ND *NEW!*	10,000	41.00/M	C0402C333K9PACTU
		6.3	47000pF	±10%	399-3020-1-ND *NEW!*	2.64	15.60	45.00	399-3020-2-ND *NEW!*	10,000	43.00/M	C0402C473K9PACTU
		6.3	68000pF	±10%	399-3022-1-ND *NEW!*	2.75	16.25	46.88	399-3022-2-ND *NEW!*	10,000	45.00/M	C0402C683K9PACTU
		6.3	.1µF	±10%	399-3026-1-ND *NEW!*	2.86	16.90	48.75	399-3026-2-ND *NEW!*	10,000	47.00/M	C0402C104K9PACTU
0603	C0G (NPO)	50	.5pF	±0.25pF	399-1044-1-ND	4.88	28.86	83.25	399-1044-2-ND	4,000	80.00/M	C0603C508C5GACTU
		50	1.0pF	±0.25pF	399-1045-1-ND	4.07	24.05	69.38	399-1045-2-ND	4,000	67.00/M	C0603C109C5GACTU
		50	1.5pF	±0.25pF	399-1046-1-ND	4.07	24.05	69.38	399-1046-2-ND	4,000	67.00/M	C0603C159C5GACTU
		50	2.0pF	±0.25pF	399-1047-1-ND	4.88	28.86	83.25	399-1047-2-ND	4,000	80.00/M	C0603C209C5GACTU
		50	3.0pF	±0.25pF	399-1048-1-ND	4.88	28.86	83.25	399-1048-2-ND	4,000	80.00/M	C0603C309C5GACTU
		50	10pF	±5%	399-1049-1-ND	.91	5.40	15.56	399-1049-2-ND	4,000	15.00/M	C0603C100J5GACTU
		50	12pF	±5%	399-1050-1-ND	2.31	13.65	39.38	399-1050-2-ND	4,000	38.00/M	C0603C120J5GACTU
		50	15pF	±5%	399-1051-1-ND	.91	5.40	15.56	399-1051-2-ND	4,000	15.00/M	C0603C150J5GACTU
		50	18pF	±5%	399-1052-1-ND	2.31	13.65	39.38	399-1052-2-ND	4,000	38.00/M	C0603C180J5GACTU
		50	22pF	±5%	399-1053-1-ND	.91	5.40	15.56	399-1053-2-ND	4,000	15.00/M	C0603C220J5GACTU
		50	27pF	±5%	399-1054-1-ND	.91	5.40	15.56	399-1054-2-ND	4,000	15.00/M	C0603C270J5GACTU
		50	33pF	±5%	399-1055-1-ND	2.31	13.65	39.38	399-1055-2-ND	4,000	38.00/M	C0603C330J5GACTU
		50	47pF	±5%	399-1056-1-ND	.91	5.40	15.56	399-1056-2-ND	4,000	15.00/M	C0603C470J5GACTU
		50	56pF	±5%	399-1057-1-ND	2.31	13.65	39.38	399-1057-2-ND	4,000	38.00/M	C0603C560J5GACTU
		50	68pF	±5%	399-1058-1-ND	2.31	13.65	39.38	399-1058-2-ND	4,000	38.00/M	C0603C680J5GACTU
		50	82pF	±5%	399-1060-1-ND	2.31	13.65	39.38	399-1060-2-ND	4,000	38.00/M	C0603C820J5GACTU
		50	82pF	±10%	399-1059-1-ND	2.20	13.00	37.50	399-1059-2-ND	4,000	36.00/M	C0603C820K5GACTU
		50	100pF	±5%	399-1061-1-ND	.94	5.53	15.94	399-1061-2-ND	4,000	15.00/M	C0603C101J5GACTU
		50	120pF	±5%	399-1062-1-ND	2.53	14.95	43.13	399-1062-2-ND	4,000	41.00/M	C0603C121J5GACTU
		50	150pF	±5%	399-1063-1-ND	1.10	6.50	18.75	399-1063-2-ND	4,000	18.00/M	C0603C151J5GACTU
		50	180pF	±5%	399-1064-1-ND	2.53	14.95	43.13	399-1064-2-ND	4,000	41.00/M	C0603C181J5GACTU
		50	220pF	±5%	399-1066-1-ND	1.33	7.87	22.69	399-1066-2-ND	4,000	22.00/M	C0603C221J5GACTU
		50	220pF	±10%	399-1065-1-ND	2.64	15.60	45.00	399-1065-2-ND	4,000	43.00/M	C0603C221K5GACTU
		50	270pF	±5%	399-1067-1-ND	2.75	16.25	46.88	399-1067-2-ND	4,000	45.00/M	C0603C271J5GACTU
		50	330pF	±5%	399-1068-1-ND	2.97	17.55	50.63	399-1068-2-ND	4,000	49.00/M	C0603C331J5GACTU
		50	390pF	±5%	399-1069-1-ND	2.97	17.55	50.63	399-1069-2-ND	4,000	49.00/M	C0603C391J5GACTU
	X7R	50	220pF	±10%	399-1071-1-ND	.99	5.85	16.88	399-1071-2-ND	4,000	16.00/M	C0603C221K5RACTU
		50	220pF	±20%	399-1070-1-ND	2.75	16.25	46.88	399-1070-2-ND	4,000	45.00/M	C0603C221M5RACTU
		50	270pF	±10%	399-1072-1-ND	2.86	16.90	48.75	399-1072-2-ND	4,000	47.00/M	C0603C271K5RACTU
		50	330pF	±10%	399-1073-1-ND	2.86	16.90	48.75	399-1073-2-ND	4,000	47.00/M	C0603C331K5RACTU
		50	390pF	±10%	399-1074-1-ND	2.86	16.90	48.75	399-1074-2-ND	4,000	47.00/M	C0603C391K5RACTU
		50	470pF	±10%	399-1075-1-ND	1.05	6.18	17.81	399-1075-2-ND	4,000	17.00/M	C0603C471K5RACTU
		50	560pF	±10%	399-1076-1-ND	2.86	16.90	48.75	399-1076-2-ND	4,000	47.00/M	C0603C561K5RACTU
		50	680pF	±10%	399-1077-1-ND	2.86	16.90	48.75	399-1077-2-ND	4,000	47.00/M	C0603C681K5RACTU
		50	820pF	±10%	399-1078-1-ND	2.86	16.90	48.75	399-1078-2-ND	4,000	47.00/M	C0603C821K5RACTU
		50	1000pF	±5%	399-1083-1-ND	4.29	25.35	73.13	399-1083-2-ND	4,000	70.00/M	C0603C102J5RACTU
		50	1000pF	±10%	399-1082-1-ND	.53	3.12	9.00	399-1082-2-ND	4,000	9.00/M	C0603C102K5RACTU
		50	1500pF	±10%	399-1084-1-ND	2.86	16.90	48.75	399-1084-2-ND	4,000	47.00/M	C0603C152K5RACTU
		50	2200pF	±10%	399-1085-1-ND	.64	3.77	10.88	399-1085-2-ND	4,000	10.00/M	C0603C222K5RACTU
		50	3300pF	±10%	399-1086-1-ND	2.86	16.90	48.75	399-1086-2-ND	4,000	47.00/M	C0603C332K5RACTU

***NOTE*: Parts with improved tolerances or voltages may be substituted within the same case size. These parts will provide performance equal to or better than those which you ordered.**

(Continued)

Multilayer Ceramic Chip Capacitors *(Cont.)*

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Kemet Part No.
						10	100	500		Size	Pricing	
0603	X7R	50	4700pF	±5%	399-1088-1-ND	4.29	25.35	73.13	399-1088-2-ND	4,000	70.00/M	C0603C472J5RACTU
		50	4700pF	±10%	399-1087-1-ND	2.86	16.90	48.75	399-1087-2-ND	4,000	47.00/M	C0603C472K5RACTU
		50	6800pF	±5%	399-1090-1-ND	4.29	25.35	73.13	399-1090-2-ND	4,000	70.00/M	C0603C682J5RACTU
		50	6800pF	±10%	399-1089-1-ND	2.86	16.90	48.75	399-1089-2-ND	4,000	47.00/M	C0603C682K5RACTU
		50	10000pF	±5%	399-1092-1-ND	4.29	25.35	73.13	399-1092-2-ND	4,000	70.00/M	C0603C103J5RACTU
		50	10000pF	±10%	399-1091-1-ND	.53	3.12	9.00	399-1091-2-ND	4,000	9.00/M	C0603C103K5RACTU
		50	22000pF	±10%	399-1280-1-ND	3.19	18.85	54.38	399-1280-2-ND	4,000	52.00/M	C0603C223K5RACTU
		25	22000pF	±10%	399-1094-1-ND	2.31	13.65	39.38	399-1094-2-ND	4,000	38.00/M	C0603C223K3RACTU
		25	.10uF	±5%	399-1282-1-ND	4.62	27.30	78.75	399-1282-2-ND	4,000	76.00/M	C0603C104J3RACTU
		25	.10uF	±10%	399-1281-1-ND	3.30	19.50	56.25	399-1281-2-ND	4,000	54.00/M	C0603C104K3RACTU
		25	.10uF	±20%	399-1283-1-ND	3.23	19.11	55.13	399-1283-2-ND	4,000	53.00/M	C0603C104M3RACTU
		16	22000pF	±10%	399-1093-1-ND	2.31	13.65	39.38	399-1093-2-ND	4,000	38.00/M	C0603C223K4RACTU
		16	.10uF	±5%	399-1097-1-ND	4.62	27.30	78.75	399-1097-2-ND	4,000	76.00/M	C0603C104J4RACTU
		16	.10uF	±10%	399-1096-1-ND	.79	4.68	13.50	399-1096-2-ND	4,000	13.00/M	C0603C104K4RACTU
		16	.10uF	±20%	399-1099-1-ND	.79	4.68	13.50	399-1099-2-ND	4,000	13.00/M	C0603C104M4RACTU
		10	.10uF	±10%	399-1095-1-ND	1.08	6.37	18.38	399-1095-2-ND	4,000	18.00/M	C0603C104K8RACTU
	Z5U	16	.10uF	+80%, -20%	399-1098-1-ND	.55	3.25	9.38	399-1098-2-ND	4,000	9.00/M	C0603C104Z4VACTU
	Y5V	25	.10µF	+80%, -20%	399-1100-1-ND	.55	3.25	9.38	399-1100-2-ND	4,000	9.00/M	C0603C104Z3VACTU
		25	.10µF	±20%	399-1101-1-ND	.69	4.10	11.81	399-1101-2-ND	4,000	11.00/M	C0603C104M3VACTU
		25	.15µF	+80%, -20%	399-1290-1-ND	2.90	17.16	49.50	399-1290-2-ND	4,000	48.00/M	C0603C154Z3VACTU
		25	.22µF	+80%, -20%	399-1103-1-ND	3.10	18.33	52.88	399-1103-2-ND	4,000	51.00/M	C0603C224Z3VACTU
		25	.33µF	+80%, -20%	399-1291-1-ND	2.97	17.55	50.63	399-1291-2-ND	4,000	49.00/M	C0603C334Z4VACTU
		25	.33µF	+80%, -20%	399-1292-1-ND	3.41	20.15	58.13	399-1292-2-ND	4,000	56.00/M	C0603C334Z3VACTU
		16	.15µF	+80%, -20%	399-1289-1-ND	2.83	16.71	48.19	399-1289-2-ND	4,000	46.00/M	C0603C154Z4VACTU
		16	.22µF	+80%, -20%	399-1102-1-ND	1.49	8.78	25.31	399-1102-2-ND	4,000	24.00/M	C0603C224Z4VACTU
0805	C0G (NPO)	100	10pF	±5%	399-1109-1-ND	1.43	8.45	24.38	399-1109-2-ND	4,000	23.00/M	C0805C100J1GACTU
		100	100pF	±5%	399-1123-1-ND	1.54	9.10	26.25	399-1123-2-ND	4,000	25.00/M	C0805C101J1GACTU
		100	220pF	±5%	399-1128-1-ND	3.08	18.20	52.50	399-1128-2-ND	4,000	50.00/M	C0805C221J1GACTU
		100	330pF	±5%	399-1131-1-ND	1.98	11.70	33.75	399-1131-2-ND	4,000	32.00/M	C0805C331J1GACTU
		100	1000pF	±5%	399-1137-1-ND	4.07	24.05	69.38	399-1137-2-ND	2,500	67.00/M	C0805C102J1GACTU
		50	1.0pF	±0.25pF	399-1104-1-ND	3.85	22.75	65.63	399-1104-2-ND	4,000	63.00/M	C0805C109C5GACTU
		50	1.5pF	±0.25pF	399-1105-1-ND	3.85	22.75	65.63	399-1105-2-ND	4,000	63.00/M	C0805C159C5GACTU
		50	2.0pF	±0.25pF	399-1106-1-ND	4.62	27.30	78.75	399-1106-2-ND	4,000	76.00/M	C0805C209C5GACTU
		50	3.0pF	±0.25pF	399-1107-1-ND	4.62	27.30	78.75	399-1107-2-ND	4,000	76.00/M	C0805C309C5GACTU
		50	10pF	±5%	399-1108-1-ND	1.07	6.31	18.19	399-1108-2-ND	4,000	17.00/M	C0805C100J5GACTU
		50	12pF	±5%	399-1110-1-ND	1.07	6.31	18.19	399-1110-2-ND	4,000	17.00/M	C0805C120J5GACTU
		50	15pF	±5%	399-1111-1-ND	1.07	6.31	18.19	399-1111-2-ND	4,000	17.00/M	C0805C150J5GACTU
		50	18pF	±5%	399-1112-1-ND	1.07	6.31	18.19	399-1112-2-ND	4,000	17.00/M	C0805C180J5GACTU
		50	22pF	±5%	399-1113-1-ND	1.07	6.31	18.19	399-1113-2-ND	4,000	17.00/M	C0805C220J5GACTU
		50	27pF	±5%	399-1114-1-ND	1.07	6.31	18.19	399-1114-2-ND	4,000	17.00/M	C0805C270J5GACTU
		50	33pF	±5%	399-1115-1-ND	1.07	6.31	18.19	399-1115-2-ND	4,000	17.00/M	C0805C330J5GACTU
		50	39pF	±5%	399-1116-1-ND	2.20	13.00	37.50	399-1116-2-ND	4,000	36.00/M	C0805C390J5GACTU
		50	47pF	±5%	399-1117-1-ND	1.07	6.31	18.19	399-1117-2-ND	4,000	17.00/M	C0805C470J5GACTU
		50	56pF	±5%	399-1118-1-ND	1.07	6.31	18.19	399-1118-2-ND	4,000	17.00/M	C0805C560J5GACTU
		50	68pF	±5%	399-1119-1-ND	1.07	6.31	18.19	399-1119-2-ND	4,000	17.00/M	C0805C680J5GACTU
		50	82pF	±5%	399-1120-1-ND	2.20	13.00	37.50	399-1120-2-ND	4,000	36.00/M	C0805C820J5GACTU
		50	100pF	±5%	399-1122-1-ND	1.07	6.31	18.19	399-1122-2-ND	4,000	17.00/M	C0805C101J5GACTU
		50	100pF	±10%	399-1121-1-ND	1.07	6.31	18.19	399-1121-2-ND	4,000	17.00/M	C0805C101K5GACTU
		50	120pF	±5%	399-1124-1-ND	1.38	8.13	23.44	399-1124-2-ND	4,000	23.00/M	C0805C121J5GACTU
		50	150pF	±5%	399-1125-1-ND	1.43	8.45	24.38	399-1125-2-ND	4,000	23.00/M	C0805C151J5GACTU
		50	180pF	±5%	399-1126-1-ND	2.42	14.30	41.25	399-1126-2-ND	4,000	40.00/M	C0805C181J5GACTU
		50	220pF	±5%	399-1127-1-ND	1.21	7.15	20.63	399-1127-2-ND	4,000	20.00/M	C0805C221J5GACTU
		50	270pF	±5%	399-1129-1-ND	2.64	15.60	45.00	399-1129-2-ND	4,000	43.00/M	C0805C271J5GACTU
		50	330pF	±5%	399-1130-1-ND	1.43	8.45	24.38	399-1130-2-ND	4,000	23.00/M	C0805C331J5GACTU
		50	390pF	±5%	399-1132-1-ND	2.86	16.90	48.75	399-1132-2-ND	4,000	47.00/M	C0805C391J5GACTU
		50	470pF	±5%	399-1133-1-ND	1.65	9.75	28.13	399-1133-2-ND	4,000	27.00/M	C0805C471J5GACTU
		50	560pF	±5%	399-1134-1-ND	3.08	18.20	52.50	399-1134-2-ND	4,000	50.00/M	C0805C561J5GACTU
		50	680pF	±5%	399-1135-1-ND	3.30	19.50	56.25	399-1135-2-ND	4,000	54.00/M	C0805C681J5GACTU
		50	1000pF	±5%	399-1136-1-ND	1.75	10.34	29.81	399-1136-2-ND	4,000	29.00/M	C0805C102J5GACTU
	X7R	100	1000pF	±10%	399-1148-1-ND	1.38	8.13	23.44	399-1148-2-ND	4,000	23.00/M	C0805C102K1RACTU
		100	10000pF	±10%	399-1159-1-ND	1.38	8.13	23.44	399-1159-2-ND	4,000	23.00/M	C0805C103K1RACTU
		50	10000pF	±10%	399-1158-1-ND	.62	3.64	10.50	399-1158-2-ND	4,000	10.00/M	C0805C103K5RACTU
		50	10000pF	±20%	399-1160-1-ND	.61	3.58	10.31	399-1160-2-ND	4,000	10.00/M	C0805C103M5RACTU
		50	15000pF	±10%	399-1161-1-ND	3.08	18.20	52.50	399-1161-2-ND	4,000	50.00/M	C0805C153K5RACTU
		50	18000pF	±10%	399-1162-1-ND	3.08	18.20	52.50	399-1162-2-ND	4,000	50.00/M	C0805C183K5RACTU
		50	22000pF	±10%	399-1163-1-ND	3.08	18.20	52.50	399-1163-2-ND	4,000	50.00/M	C0805C223K5RACTU
		50	27000pF	±10%	399-1164-1-ND	1.21	7.15	20.63	399-1164-2-ND	4,000	20.00/M	C0805C273K5RACTU
		50	33000pF	±10%	399-1165-1-ND	3.41	20.15	58.13	399-1165-2-ND	4,000	56.00/M	C0805C333K5RACTU
		50	47000pF	±10%	399-1166-1-ND	1.32	7.80	22.50	399-1166-2-ND	4,000	22.00/M	C0805C473K5RACTU
		50	.10µF	±5%	399-1171-1-ND	1.71	10.08	29.06	399-1171-2-ND	4,000	28.00/M	C0805C104J5RACTU
		50	.10µF	±10%	399-1170-1-ND	1.05	6.18	17.81	399-1170-2-ND	4,000	17.00/M	C0805C104K5RACTU
		50	.10µF	±20%	399-1169-1-ND	1.02	6.05	17.44	399-1169-2-ND	4,000	17.00/M	C0805C104M5RACTU
		50	220pF	±10%	399-1138-1-ND	3.63	21.45	61.88	399-1138-2-ND	4,000	59.00/M	C0805C221K5RACTU
		50	270pF	±10%	399-1139-1-ND	3.63	21.45	61.88	399-1139-2-ND	4,000	59.00/M	C0805C271K5RACTU
		50	330pF	±10%	399-1140-1-ND	3.63	21.45	61.88	399-1140-2-ND	4,000	59.00/M	C0805C331K5RACTU
		50	390pF	±10%	399-1141-1-ND	3.63	21.45	61.88	399-1141-2-ND	4,000	59.00/M	C0805C391K5RACTU
		50	470pF	±10%	399-1142-1-ND	.98	5.79	16.69	399-1142-2-ND	4,000	16.00/M	C0805C471K5RACTU
		50	560pF	±10%	399-1143-1-ND	2.75	16.25	46.88	399-1143-2-ND	4,000	45.00/M	C0805C561K5RACTU
		50	680pF	±10%	399-1144-1-ND	2.75	16.25	46.88	399-1144-2-ND	4,000	45.00/M	C0805C681K5RACTU
		50	820pF	±10%	399-1145-1-ND	2.75	16.25	46.88	399-1145-2-ND	4,000	45.00/M	C0805C821K5RACTU
		50	1000pF	±5%	399-1149-1-ND	.99	5.85	16.88	399-1149-2-ND	4,000	16.00/M	C0805C102J5RACTU
		50	1000pF	±10%	399-1147-1-ND	.61	3.58	10.31	399-1147-2-ND	4,000	10.00/M	C0805C102K5RACTU
		50	1000pF	±20%	399-1146-1-ND	.58	3.45	9.94	399-1146-2-ND	4,000	10.00/M	C0805C102M5RACTU
		50	1500pF	±10%	399-1150-1-ND	2.75	16.25	46.88	399-1150-2-ND	4,000	45.00/M	C0805C152K5RACTU
		50	2200pF	±10%	399-1151-1-ND	2.75	16.25	46.88	399-1151-2-ND	4,000	45.00/M	C0805C222K5RACTU
		50	2700pF	±10%	399-1152-1-ND	2.75	16.25	46.88	399-1152-2-ND	4,000	45.00/M	C0805C272K5RACTU
		50	3300pF	±10%	399-1153-1-ND	2.75	16.25	46.88	399-1153-2-ND	4,000	45.00/M	C0805C332K5RACTU
		50	3900pF	±10%	399-1154-1-ND	2.75	16.25	46.88	399-1154-2-ND	4,000	45.00/M	C0805C392K5RACTU
		50	4700pF	±10%	399-1155-1-ND	.83	4.88	14.06	399-1155-2-ND	4,000	14.00/M	C0805C472K5RACTU
		50	5600pF	±10%	399-1156-1-ND	2.75	16.25	46.88	399-1156-2-ND	4,000	45.00/M	C0805C562K5RACTU
		50	6800pF	±10%	399-1157-1-ND	2.75	16.25	46.88	399-1157-2-ND	4,000	45.00/M	C0805C682K5RACTU
		25	.10µF	±10%	399-1168-1-ND	1.08	6.37	18.38	399-1168-2-ND	4,000	18.00/M	C0805C104K3RACTU
		16	.10µF	±10%	399-1167-1-ND	1.21	7.15	20.63	399-1167-2-ND	4,000	20.00/M	C0805C104K4RACTU
		16	1.0µF	±10%	399-1284-1-ND	11.00	65.00	187.50	399-1284-2-ND	2,500	180.00/M	C0805C105K4RACTU
		10	1.0µF	±10%	399-1172-1-ND	4.62	27.30	78.75	399-1172-2-ND	2,500	76.00/M	C0805C105K8RACTU
	Z5U	50	10000pF	+80%, -20%	399-1173-1-ND	1.07	6.31	18.19	399-1173-2-ND	4,000	17.00/M	C0805C103Z5UACTU
		50	10000pF	±20%	399-1174-1-ND	1.07	6.31	18.19	399-1174-2-ND	4,000	17.00/M	C0805C103M5UACTU
		50	.10µF	+80%, -20%	399-1175-1-ND	1.21	7.15	20.63	399-1175-2-ND	4,000	20.00/M	C0805C104Z5UACTU
		50	.10µF	±20%	399-1176-1-ND	1.21	7.15	20.63	399-1176-2-ND	4,000	20.00/M	C0805C104M5UACTU
	Y5V	50	.10µF	+80%, -20%	399-1177-1-ND	1.21	7.15	20.63	399-1177-2-ND	4,000	20.00/M	C0805C104Z5VACTU
		25	1.0µF	+80%, -20%	399-1293-1-ND	5.94	35.10	101.25	399-1293-2-ND	2,500	97.00/M	C0805C105Z3VACTU
		16	1.5µF	+80%, -20%	399-1294-1-ND	6.53	38.61	111.38	399-1294-2-ND	2,500	107.00/M	C0805C155Z4VACTU
		16	2.2µF	+80%, -20%	399-1295-1-ND	7.18	42.45	122.44	399-1295-2-ND	2,500	118.00/M	C0805C225Z4VACTU
1206	C0G (NPO)	50	1.0pF	±0.25pF	399-1178-1-ND	7.28	43.03	124.13	399-1178-2-ND	4,000	119.00/M	C1206C109C5GACTU
		50	1.5pF	±0.25pF	399-1179-1-ND	7.28	43.03	124.13	399-1179-2-ND	4,000	119.00/M	C1206C159C5GACTU
		50	1.8pF	±0.25pF	399-1180-1-ND	7.28	43.03	124.13	399-1180-2-ND	4,000	119.00/M	C1206C189C5GACTU
		50	2.2pF	±0.25pF	399-1181-1-ND	7.28	43.03	124.13	399-1181-2-ND	4,000	119.00/M	C1206C229C5GACTU
		100	100pF	±5%	399-1206-1-ND	2.64	15.60	45.00	399-1206-2-ND	4,000	43.00/M	C1206C101J1GACTU

***NOTE*: Parts with improved tolerances or voltages may be substituted within the same case size. These parts will provide performance equal to or better than those which you ordered.**

(Continued)

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape and Reel		Kemet Part No.
						10	100	500		Size	Pricing	
1206	C0G (NPO)	100	470pF	±5%	399-1214-1-ND	5.46	32.24	93.00	399-1214-2-ND	4,000	89.00/M	C1206C471J1GACTU
		100	1000pF	±5%	399-1219-1-ND	4.51	26.65	76.88	399-1219-2-ND	4,000	74.00/M	C1206C102J1GACTU
		50	2.7pF	±0.25pF	399-1182-1-ND	7.28	43.03	124.13	399-1182-2-ND	4,000	119.00/M	C1206C279C5GACTU
		50	3.3pF	±0.25pF	399-1183-1-ND	7.28	43.03	124.13	399-1183-2-ND	4,000	119.00/M	C1206C339C5GACTU
		50	3.9pF	±0.25pF	399-1184-1-ND	7.28	43.03	124.13	399-1184-2-ND	4,000	119.00/M	C1206C399C5GACTU
		50	4.7pF	±0.25pF	399-1185-1-ND	7.28	43.03	124.13	399-1185-2-ND	4,000	119.00/M	C1206C479C5GACTU
		50	5.1pF	±0.25pF	399-1186-1-ND	10.54	62.27	179.63	399-1186-2-ND	4,000	172.00/M	C1206C519C5GACTU
		50	5.6pF	±0.25pF	399-1187-1-ND	8.78	51.87	149.63	399-1187-2-ND	4,000	144.00/M	C1206C569C5GACTU
		50	6.8pF	±0.5pF	399-1188-1-ND	4.16	24.57	70.88	399-1188-2-ND	4,000	68.00/M	C1206C689D5GACTU
		50	7.5pF	±0.5pF	399-1189-1-ND	4.99	29.51	85.13	399-1189-2-ND	4,000	82.00/M	C1206C759D5GACTU
		50	8.2pF	±0.5pF	399-1190-1-ND	4.16	24.57	70.88	399-1190-2-ND	4,000	68.00/M	C1206C829D5GACTU
		50	9.1pF	±0.5pF	399-1191-1-ND	4.99	29.51	85.13	399-1191-2-ND	4,000	82.00/M	C1206C919D5GACTU
		50	10pF	±5%	399-1192-1-ND	1.71	10.08	29.06	399-1192-2-ND	4,000	28.00/M	C1206C100J5GACTU
		50	12pF	±5%	399-1193-1-ND	1.71	10.08	29.06	399-1193-2-ND	4,000	28.00/M	C1206C120J5GACTU
		50	15pF	±5%	399-1194-1-ND	1.71	10.08	29.06	399-1194-2-ND	4,000	28.00/M	C1206C150J5GACTU
		50	18pF	±5%	399-1195-1-ND	1.71	10.08	29.06	399-1195-2-ND	4,000	28.00/M	C1206C180J5GACTU
		50	20pF	±5%	399-1196-1-ND	4.99	29.51	85.13	399-1196-2-ND	4,000	82.00/M	C1206C200J5GACTU
		50	22pF	±5%	399-1197-1-ND	1.71	10.08	29.06	399-1197-2-ND	4,000	28.00/M	C1206C220J5GACTU
		50	27pF	±5%	399-1198-1-ND	1.71	10.08	29.06	399-1198-2-ND	4,000	28.00/M	C1206C270J5GACTU
		50	33pF	±5%	399-1199-1-ND	1.71	10.08	29.06	399-1199-2-ND	4,000	28.00/M	C1206C330J5GACTU
		50	39pF	±5%	399-1200-1-ND	4.16	24.57	70.88	399-1200-2-ND	4,000	68.00/M	C1206C390J5GACTU
		50	47pF	±5%	399-1201-1-ND	1.71	10.08	29.06	399-1201-2-ND	4,000	28.00/M	C1206C470J5GACTU
		50	51pF	±5%	399-1202-1-ND	4.99	29.51	85.13	399-1202-2-ND	4,000	82.00/M	C1206C510J5GACTU
		50	56pF	±5%	399-1203-1-ND	4.16	24.57	70.88	399-1203-2-ND	4,000	68.00/M	C1206C560J5GACTU
		50	68pF	±5%	399-1204-1-ND	4.16	24.57	70.88	399-1204-2-ND	4,000	68.00/M	C1206C680J5GACTU
		50	100pF	±5%	399-1205-1-ND	1.71	10.08	29.06	399-1205-2-ND	4,000	28.00/M	C1206C101J5GACTU
		50	120pF	±5%	399-1207-1-ND	4.16	24.57	70.88	399-1207-2-ND	4,000	68.00/M	C1206C121J5GACTU
		50	220pF	±10%	399-1208-1-ND	4.28	25.29	72.94	399-1208-2-ND	4,000	70.00/M	C1206C221K5GACTU
		50	270pF	±10%	399-1209-1-ND	4.39	25.94	74.81	399-1209-2-ND	4,000	72.00/M	C1206C271K5GACTU
		50	330pF	±10%	399-1210-1-ND	4.39	25.94	74.81	399-1210-2-ND	4,000	72.00/M	C1206C331K5GACTU
		50	390pF	±10%	399-1211-1-ND	4.51	26.65	76.88	399-1211-2-ND	4,000	74.00/M	C1206C391K5GACTU
		50	470pF	±5%	399-1213-1-ND	3.30	19.50	56.25	399-1213-2-ND	4,000	54.00/M	C1206C471J5GACTU
		50	470pF	±10%	399-1212-1-ND	4.51	26.65	76.88	399-1212-2-ND	4,000	74.00/M	C1206C471K5GACTU
		50	560pF	±10%	399-1215-1-ND	4.74	28.02	80.81	399-1215-2-ND	4,000	78.00/M	C1206C561K5GACTU
		50	680pF	±10%	399-1216-1-ND	4.97	29.38	84.75	399-1216-2-ND	4,000	81.00/M	C1206C681K5GACTU
		50	820pF	±10%	399-1217-1-ND	5.20	30.75	88.69	399-1217-2-ND	4,000	85.00/M	C1206C821K5GACTU
		50	1000pF	±5%	399-1218-1-ND	4.13	24.38	70.31	399-1218-2-ND	4,000	68.00/M	C1206C102J5GACTU
		50	4700pF	±2%	399-1220-1-ND	34.39	203.19	586.13	399-1220-2-ND	4,000	563.00/M	C1206C472G5GACTU
	X7R	100	1000pF	±10%	399-1222-1-ND	2.86	16.90	48.75	399-1222-2-ND	4,000	47.00/M	C1206C102K1RACTU
		100	10000pF	±5%	399-1238-1-ND	2.75	16.25	46.88	399-1238-2-ND	4,000	45.00/M	C1206C103J1RACTU
		100	10000pF	±10%	399-1236-1-ND	3.30	19.50	56.25	399-1236-2-ND	4,000	54.00/M	C1206C103K1RACTU
		100	10000pF	±20%	399-1235-1-ND	3.41	20.15	58.13	399-1235-2-ND	4,000	56.00/M	C1206C103M1RACTU
		100	56000pF	±10%	399-1802-1-ND	5.54	32.76	94.50	399-1802-2-ND	4,000	91.00/M	C1206C563K1RACTU
		100	68000pF	±10%	399-1803-1-ND	6.01	35.49	102.38	399-1803-2-ND	4,000	98.00/M	C1206C683K1RACTU
		100	82000pF	±10%	399-1804-1-ND	6.31	37.31	107.63	399-1804-2-ND	4,000	103.00/M	C1206C823K1RACTU
		100	.10µF	±10%	399-1805-1-ND	6.62	39.13	112.88	399-1805-2-ND	4,000	108.00/M	C1206C104K1RACTU
		50	1000pF	±10%	399-1221-1-ND	2.20	13.00	37.50	399-1221-2-ND	4,000	36.00/M	C1206C102K5RACTU
		50	1200pF	±10%	399-1223-1-ND	3.30	19.50	56.25	399-1223-2-ND	4,000	54.00/M	C1206C122K5RACTU
		50	1500pF	±10%	399-1224-1-ND	3.30	19.50	56.25	399-1224-2-ND	4,000	54.00/M	C1206C152K5RACTU
		50	1800pF	±10%	399-1225-1-ND	3.30	19.50	56.25	399-1225-2-ND	4,000	54.00/M	C1206C182K5RACTU
		50	2200pF	±10%	399-1226-1-ND	1.71	10.08	29.06	399-1226-2-ND	4,000	28.00/M	C1206C222K5RACTU
		50	2700pF	±10%	399-1227-1-ND	3.30	19.50	56.25	399-1227-2-ND	4,000	54.00/M	C1206C272K5RACTU
		50	3300pF	±10%	399-1228-1-ND	3.30	19.50	56.25	399-1228-2-ND	4,000	54.00/M	C1206C332K5RACTU
		50	3900pF	±10%	399-1229-1-ND	3.30	19.50	56.25	399-1229-2-ND	4,000	54.00/M	C1206C392K5RACTU
		50	4700pF	±10%	399-1230-1-ND	1.71	10.08	29.06	399-1230-2-ND	4,000	28.00/M	C1206C472K5RACTU
		50	5600pF	±10%	399-1231-1-ND	3.30	19.50	56.25	399-1231-2-ND	4,000	54.00/M	C1206C562K5RACTU
		50	6800pF	±10%	399-1232-1-ND	3.30	19.50	56.25	399-1232-2-ND	4,000	54.00/M	C1206C682K5RACTU
		50	8200pF	±10%	399-1233-1-ND	3.30	19.50	56.25	399-1233-2-ND	4,000	54.00/M	C1206C822K5RACTU
		50	10000pF	±5%	399-1237-1-ND	1.84	10.86	31.31	399-1237-2-ND	4,000	30.00/M	C1206C103J5RACTU
		50	10000pF	±10%	399-1234-1-ND	1.62	9.56	27.56	399-1234-2-ND	4,000	26.00/M	C1206C103K5RACTU
		50	12000pF	±10%	399-1239-1-ND	3.74	22.10	63.75	399-1239-2-ND	4,000	61.00/M	C1206C123K5RACTU
		50	15000pF	±10%	399-1240-1-ND	3.74	22.10	63.75	399-1240-2-ND	4,000	61.00/M	C1206C153K5RACTU
		50	18000pF	±10%	399-1241-1-ND	3.74	22.10	63.75	399-1241-2-ND	4,000	61.00/M	C1206C183K5RACTU
		50	22000pF	±10%	399-1242-1-ND	1.84	10.86	31.31	399-1242-2-ND	4,000	30.00/M	C1206C223K5RACTU
		50	27000pF	±10%	399-1243-1-ND	3.74	22.10	63.75	399-1243-2-ND	4,000	61.00/M	C1206C273K5RACTU
		50	33000pF	±10%	399-1244-1-ND	3.74	22.10	63.75	399-1244-2-ND	4,000	61.00/M	C1206C333K5RACTU
		50	39000pF	±10%	399-1245-1-ND	3.85	22.75	65.63	399-1245-2-ND	4,000	63.00/M	C1206C393K5RACTU
		50	47000pF	±10%	399-1246-1-ND	1.98	11.70	33.75	399-1246-2-ND	4,000	32.00/M	C1206C473K5RACTU
		50	68000pF	±5%	399-1247-1-ND	4.03	23.79	68.63	399-1247-2-ND	4,000	66.00/M	C1206C683J5RACTU
		50	.10µF	±5%	399-1250-1-ND	2.70	15.93	45.94	399-1250-2-ND	4,000	44.00/M	C1206C104J5RACTU
		50	.10µF	±10%	399-1249-1-ND	1.43	8.45	24.38	399-1249-2-ND	4,000	23.00/M	C1206C104K5RACTU
		50	.10µF	±20%	399-1248-1-ND	1.43	8.45	24.38	399-1248-2-ND	4,000	23.00/M	C1206C104M5RACTU
		50	.22µF	±5%	399-1252-1-ND	13.75	81.25	234.38	399-1252-2-ND	2,500	225.00/M	C1206C224J5RACTU
		50	.22µF	±10%	399-1251-1-ND	4.18	24.70	71.25	399-1251-2-ND	2,500	68.00/M	C1206C224K5RACTU
		25	.33µF	±10%	399-1285-1-ND	9.90	58.50	168.75	399-1285-2-ND	4,000	162.00/M	C1206C334K3RACTU
		25	1.0µF	±10%	399-1255-1-ND	14.52	85.80	247.50	399-1255-2-ND	2,500	238.00/M	C1206C105K3RACTU
		16	.33µF	±10%	399-1253-1-ND	9.90	58.50	168.75	399-1253-2-ND	4,000	162.00/M	C1206C334K4RACTU
		16	1.0µF	±10%	399-1254-1-ND	4.51	26.65	76.88	399-1254-2-ND	2,500	74.00/M	C1206C105K4RACTU
		16	1.2µF	±10%	399-1286-1-ND	14.30	84.50	243.75	399-1286-2-ND	2,500	234.00/M	C1206C125K4RACTU
		16	2.2µF	±10%	399-1257-1-ND	17.05	100.75	290.63	399-1257-2-ND	2,500	279.00/M	C1206C225K4RACTU
		10	1.2µF	±10%	399-1256-1-ND	14.30	84.50	243.75	399-1256-2-ND	4,000	234.00/M	C1206C125K8RACTU
	Z5U	50	.10µF	+80%, -20%	399-1258-1-ND	1.63	9.62	27.75	399-1258-2-ND	4,000	27.00/M	C1206C104Z5UACTU
		50	.10µF	±20%	399-1259-1-ND	1.63	9.62	27.75	399-1259-2-ND	4,000	27.00/M	C1206C104M5UACTU
	Y5V	25	1.0µF	+80%, -20%	399-1296-1-ND	6.16	36.40	105.00	399-1296-2-ND	4,000	101.00/M	C1206C105Z3VACTU
		16	1.5µF	+80%, -20%	399-1297-1-ND	8.25	48.75	140.63	399-1297-2-ND	4,000	135.00/M	C1206C155Z4VACTU
		16	2.2µF	+80%, -20%	399-1260-1-ND	8.25	48.75	140.63	399-1260-2-ND	2,500	135.00/M	C1206C225Z4VACTU
		16	3.3µF	+80%, -20%	399-1261-1-ND	9.35	55.25	159.38	399-1261-2-ND	2,000	153.00/M	C1206C335Z4VACTU
		16	4.7µF	+80%, -20%	399-1262-1-ND	10.45	61.75	178.13	399-1262-2-ND	2,000	171.00/M	C1206C475Z4VACTU
		10	6.8µF	+80%, -20%	399-1298-1-ND	13.07	77.22	222.75	399-1298-2-ND	2,000	214.00/M	C1206C685Z8VACTU
		10	10µF	+80%, -20%	399-1299-1-ND	15.68	92.63	267.19	399-1299-2-ND	2,500	257.00/M	C1206C106Z8VACTU
		6.3	15µF	+80%, -20%	399-3024-1-ND *NEW!*	22.00	130.00	375.00	399-3024-2-ND *NEW!*	2,000	360.00/M	C1206C156Z9VACTU
		6.3	22µF	+80%, -20%	399-3028-1-ND *NEW!*	25.85	152.75	440.63	399-3028-2-ND *NEW!*	2,000	423.00/M	C1206C226Z9VACTU
	X5R	16	2.2µF	±10%	399-1263-1-ND	8.80	52.00	150.00	399-1263-2-ND	2,500	144.00/M	C1206C225K4PACTU
		16	3.3µF	±10%	399-1264-1-ND	11.00	65.00	187.50	399-1264-2-ND	2,500	180.00/M	C1206C335K4PACTU
		16	4.7µF	±10%	399-1265-1-ND	14.91	88.08	254.06	399-1265-2-ND	2,000	244.00/M	C1206C475K4PACTU
		6.3	6.8µF	±10%	399-3025-1-ND *NEW!*	14.96	88.40	255.00	399-3025-2-ND *NEW!*	2,000	245.00/M	C1206C685K9PACTU
		6.3	10µF	±10%	399-3029-1-ND *NEW!*	17.05	100.75	290.63	399-3029-2-ND *NEW!*	2,000	279.00/M	C1206C106K9PACTU
1210	C0G(NPO)	50	10000pF	±5%	399-1266-1-ND	34.77	205.47	592.69	399-1266-2-ND	2,500	569.00/M	C1210C103J5GACTU
	X7R	100	.10µF	±10%	399-1268-1-ND	5.06	29.90	86.25	399-1268-2-ND	2,500	83.00/M	C1210C104K1RACTU
		50	.10µF	±10%	399-1267-1-ND	5.06	29.90	86.25	399-1267-2-ND	4,000	83.00/M	C1210C104K5RACTU
		50	.22µF	±10%	399-1269-1-ND	4.40	26.00	75.00	399-1269-2-ND	2,500	72.00/M	C1210C224K5RACTU
	Y5V	16	4.7µF	+80%, -20%	399-1270-1-ND	15.40	91.00	262.50	399-1270-2-ND	2,500	252.00/M	C1210C475Z4VACTU
		16	6.8µF	+80%, -20%	399-1271-1-ND	18.70	110.50	318.75	399-1271-2-ND	2,500	306.00/M	C1210C685Z4VACTU
		16	10.0µF	+80%, -20%	399-1272-1-ND	20.90	123.50	356.25	399-1272-2-ND	2,000	342.00/M	C1210C106Z4VACTU
		10	15µF	+80%, -20%	399-1300-1-ND	26.13	154.38	445.31	399-1300-2-ND	2,000	428.00/M	C1210C156Z8VACTU
		10	22µF	+80%, -20%	399-1301-1-ND	31.35	185.25	534.38	399-1301-2-ND	2,000	513.00/M	C1210C226Z8VACTU
	X5R	10	4.7µF	±10%	399-1273-1-ND	18.15	107.25	309.38	399-1273-2-ND	2,000	297.00/M	C1210C475K8PACTU
		10	6.8µF	±10%	399-1274-1-ND	24.20	143.00	412.50	399-1274-2-ND	2,000	396.00/M	C1210C685K8PACTU
		10	10µF	±10%	399-1275-1-ND	36.30	214.50	618.75	399-1275-2-ND	2,000	594.00/M	C1210C106K8PACTU

***NOTE*: Parts with improved tolerances or voltages may be substituted within the same case size. These parts will provide performance equal to or better than those which you ordered.**

BC COMPONENTS

Surface Mount Multilayer Ceramic Chip Capacitors

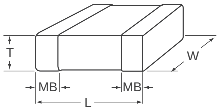
Features:
- High capacitance per unit volume
- For high frequency applications
- Ni-barrier terminations.

Applications:
- Consumer electronics
- Telecommunications
- Automotive
- Data processing.

The capacitor consists of a rectangular block of ceramic dielectric in which a number of interleaved metal electrodes are contained.

This structure gives rise to a high capacitance per unit volume.

The inner electrodes are connected to the two terminations by silver or copper dipping with a barrier layer of plated nickel and finally covered with a layer of plated tin (NiSn).



Case Size	L	W	T		MB
			Min.	Max.	
0402	.040" (1.0mm)	.020" (0.5mm)	.018" (.45mm)	.022" (.55mm)	.010" (.25mm)
0603	.063" (1.6mm)	.030" (0.8mm)	.029" (.73mm)	.035" (.87mm)	.015" (.40mm)
0805	.080" (2.0mm)	.050" (1.25mm)	.020" (.50mm)	.053" (1.35mm)	.020" (.50mm)
1206	.080" (2.0mm)	.050" (1.25mm)	.020" (.50mm)	.053" (1.35mm)	.020" (.50mm)
1812	.180" (4.5mm)	.125" (3.2mm)	.020" (.50mm)	.072" (1.80mm)	.030" (.75mm)

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key Part No.	Cut Tape Pricing 10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	BC Components Part No.
0402	NPO	50	1.2pF	±0.25pF	BC1188CT-ND	.59	3.51	10.13	BC1188TR-ND	10,000	8.10/M	0402N1R2C500NT
		50	1.5pF	±0.25pF	BC1189CT-ND	.66	3.90	11.25	BC1189TR-ND	10,000	9.00/M	0402N1R5C500NT
		50	1.8pF	±0.25pF	BC1190CT-ND	.55	3.25	9.38	BC1190TR-ND	10,000	7.50/M	0402N1R8C500NT
		50	2.7pF	±0.25pF	BC1191CT-ND	.66	3.90	11.25	BC1191TR-ND	10,000	9.00/M	0402N2R7C500NT
		50	3.3pF	±0.25pF	BC1192CT-ND	.59	3.51	10.13	BC1192TR-ND	10,000	8.10/M	0402N3R3C500NT
		50	5.6pF	±0.50pF	BC1193CT-ND	.59	3.51	10.13	BC1193TR-ND	10,000	8.10/M	0402N5R6D500NT
		50	8.2pF	±0.50pF	BC1194CT-ND	.62	3.64	10.50	BC1194TR-ND	10,000	8.40/M	0402N8R2D500NT
		50	10pF	±5%	BC1195CT-ND	.55	3.25	9.38	BC1195TR-ND	10,000	7.50/M	0402N100J500NT
		50	12pF	±5%	BC1196CT-ND	.55	3.25	9.38	BC1196TR-ND	10,000	7.50/M	0402N120J500NT
		50	22pF	±5%	BC1197CT-ND	.59	3.51	10.13	BC1197TR-ND	10,000	8.10/M	0402N220J500NT
		50	27pF	±5%	BC1198CT-ND	.66	3.90	11.25	BC1198TR-ND	10,000	9.00/M	0402N270J500NT
		50	33pF	±5%	BC1199CT-ND	.59	3.51	10.13	BC1199TR-ND	10,000	8.10/M	0402N330J500NT
		50	39pF	±5%	BC1200CT-ND	.59	3.51	10.13	BC1200TR-ND	10,000	8.10/M	0402N390J500NT
		50	47pF	±5%	BC1201CT-ND	.55	3.25	9.38	BC1201TR-ND	10,000	7.50/M	0402N470J500NT
		50	56pF	±5%	BC1202CT-ND	.62	3.64	10.50	BC1202TR-ND	10,000	8.40/M	0402N560J500NT
		50	82pF	±5%	BC1203CT-ND	.59	3.51	10.13	BC1203TR-ND	10,000	8.10/M	0402N820J500NT
		50	100pF	±5%	BC1204CT-ND	.66	3.90	11.25	BC1204TR-ND	10,000	9.00/M	0402N101J500NT
	X7R	50	220pF	±10%	BC1205CT-ND	.68	4.03	11.63	BC1205TR-ND	10,000	9.30/M	0402B221K500BT
		50	330pF	±10%	BC1206CT-ND	.68	4.03	11.63	BC1206TR-ND	10,000	9.30/M	0402B331K500BT
		50	470pF	±10%	BC1207CT-ND	.68	4.03	11.63	BC1207TR-ND	10,000	9.30/M	0402B471K500BT
		50	560pF	±10%	BC1208CT-ND	.68	4.03	11.63	BC1208TR-ND	10,000	9.30/M	0402B561K500BT
		50	680pF	±10%	BC1209CT-ND	.68	4.03	11.63	BC1209TR-ND	10,000	9.30/M	0402B681K500BT
		50	1000pF	±10%	BC1210CT-ND	.68	4.03	11.63	BC1210TR-ND	10,000	9.30/M	0402B102K500BT
		50	1200pF	±10%	BC1211CT-ND	.72	4.23	12.19	BC1211TR-ND	10,000	9.75/M	0402B122K500BT
		50	1500pF	±10%	BC1212CT-ND	.72	4.23	12.19	BC1212TR-ND	10,000	9.75/M	0402B152K500BT
		50	2200pF	±10%	BC1213CT-ND	.73	4.29	12.38	BC1213TR-ND	10,000	9.90/M	0402B222K500BT
		16	4700pF	±10%	BC1214CT-ND	.73	4.29	12.38	BC1214TR-ND	10,000	9.90/M	0402B472K160BT
		16	5600pF	±10%	BC1215CT-ND	.81	4.81	13.88	BC1215TR-ND	10,000	11.10/M	0402B562K160BT
		16	8200pF	±10%	BC1216CT-ND	.55	3.25	9.38	BC1216TR-ND	10,000	7.50/M	0402B822K160BT
		16	10000pF	±10%	BC1217CT-ND	.72	4.23	12.19	BC1217TR-ND	10,000	9.75/M	0402B103K160BT
	Y5V	16	10000pF	+80/-20%	BC1218CT-ND	.51	2.99	8.63	BC1218TR-ND	10,000	6.90/M	0402F103Z160BT
		16	22000pF	+80/-20%	BC1219CT-ND	.55	3.25	9.38	BC1219TR-ND	10,000	7.50/M	0402F223Z160BT
		16	33000pF	+80/-20%	BC1220CT-ND	.55	3.25	9.38	BC1220TR-ND	10,000	7.50/M	0402F333Z160BT
		16	47000pF	+80/-20%	BC1221CT-ND	.53	3.12	9.00	BC1221TR-ND	10,000	7.20/M	0402F473Z160BT
		16	.10µF	+80/-20%	BC1222CT-ND	.51	2.99	8.63	BC1222TR-ND	10,000	6.90/M	0402F104Z160BT
0603	NPO	50	1.0pF	±0.25pF	BC1223CT-ND	.59	3.51	10.13	BC1223TR-ND	4,000	9.72/M	0603N1R0C500NT
		50	1.5pF	±0.25pF	BC1224CT-ND	.62	3.64	10.50	BC1224TR-ND	4,000	10.08/M	0603N1R5C500NT
		50	10pF	±5%	BC1225CT-ND	.55	3.25	9.38	BC1225TR-ND	4,000	9.00/M	0603N100J500NT
		50	12pF	±5%	BC1226CT-ND	.55	3.25	9.38	BC1226TR-ND	4,000	9.00/M	0603N120J500NT
		50	15pF	±5%	BC1227CT-ND	.55	3.25	9.38	BC1227TR-ND	4,000	9.00/M	0603N150J500NT
		50	18pF	±5%	BC1228CT-ND	.55	3.25	9.38	BC1228TR-ND	4,000	9.00/M	0603N180J500NT
		50	22pF	±5%	BC1229CT-ND	.55	3.25	9.38	BC1229TR-ND	4,000	9.00/M	0603N220J500NT
		50	27pF	±5%	BC1230CT-ND	.61	3.58	10.31	BC1230TR-ND	4,000	9.90/M	0603N270J500NT
		50	33pF	±5%	BC1231CT-ND	.62	3.64	10.50	BC1231TR-ND	4,000	10.08/M	0603N330J500NT
		50	47pF	±5%	BC1232CT-ND	.59	3.51	10.13	BC1232TR-ND	4,000	9.72/M	0603N470J500NT
		50	56pF	±5%	BC1233CT-ND	.64	3.77	10.88	BC1233TR-ND	4,000	10.44/M	0603N560J500NT
		50	68pF	±5%	BC1234CT-ND	.64	3.77	10.88	BC1234TR-ND	4,000	10.44/M	0603N680J500NT
		50	82pF	±5%	BC1235CT-ND	.65	3.84	11.06	BC1235TR-ND	4,000	10.62/M	0603N820J500NT
		50	100pF	±5%	BC1236CT-ND	.57	3.38	9.75	BC1236TR-ND	4,000	9.36/M	0603N101J500NT
		50	120pF	±5%	BC1237CT-ND	.66	3.90	11.25	BC1237TR-ND	4,000	10.80/M	0603N121J500NT
		50	150pF	±5%	BC1238CT-ND	.72	4.23	12.19	BC1238TR-ND	4,000	11.70/M	0603N151J500NT
		50	180pF	±5%	BC1239CT-ND	.72	4.23	12.19	BC1239TR-ND	4,000	11.70/M	0603N181J500NT
		50	220pF	±5%	BC1240CT-ND	.68	4.03	11.63	BC1240TR-ND	4,000	11.16/M	0603N221J500NT
		50	270pF	±5%	BC1241CT-ND	.79	4.68	13.50	BC1241TR-ND	4,000	12.96/M	0603N271J500NT
		50	330pF	±5%	BC1242CT-ND	.98	5.79	16.69	BC1242TR-ND	4,000	16.02/M	0603N331J500NT
		50	390pF	±5%	BC1243CT-ND	1.10	6.50	18.75	BC1243TR-ND	4,000	18.00/M	0603N391J500NT
	X7R	50	220pF	±10%	BC1244CT-ND	.50	2.93	8.44	BC1244TR-ND	4,000	8.10/M	0603B221K500NT
		50	470pF	±10%	BC1245CT-ND	.50	2.93	8.44	BC1245TR-ND	4,000	8.10/M	0603B471K500NT
		50	560pF	±10%	BC1246CT-ND	.50	2.93	8.44	BC1246TR-ND	4,000	8.10/M	0603B561K500NT
		50	1000pF	±10%	BC1247CT-ND	.59	3.51	10.13	BC1247TR-ND	4,000	9.72/M	0603B102K500BT
		50	2200pF	±10%	BC1248CT-ND	.50	2.93	8.44	BC1248TR-ND	4,000	8.10/M	0603B222K500NT
		50	3300pF	±10%	BC1249CT-ND	.55	3.25	9.38	BC1249TR-ND	4,000	9.00/M	0603B332K500NT
		50	4700pF	±10%	BC1250CT-ND	.55	3.25	9.38	BC1250TR-ND	4,000	9.00/M	0603B472K500BT
		50	6800pF	±10%	BC1251CT-ND	.55	3.25	9.38	BC1251TR-ND	4,000	9.00/M	0603B682K500BT
		50	10000pF	±10%	BC1252CT-ND	.55	3.25	9.38	BC1252TR-ND	4,000	9.00/M	0603B103K500BT

(Continued)

Surface Mount Multilayer Ceramic Chip Capacitors *(Cont.)*

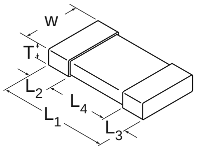
Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key Part No.	Cut Tape Pricing 10	Cut Tape Pricing 100	Cut Tape Pricing 500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	BC Components Part No.
0603	X7R	16	22000pF	±10%	BC1253CT-ND	.69	4.10	11.81	BC1253TR-ND	4,000	11.34/M	0603B223K160BT
		16	.10µF	±10%	BC1254CT-ND	.77	4.55	13.13	BC1254TR-ND	4,000	12.60/M	0603B104K160BT
	Y5V	25	.10µF	+80/-20%	BC1255CT-ND	.58	3.45	9.94	BC1255TR-ND	4,000	9.54/M	0603F104Z250BT
0805	NPO	50	10pF	±5%	BC1256CT-ND	.61	3.58	10.31	BC1256TR-ND	4,000	9.90/M	0805N100J500NT
		50	12pF	±5%	BC1257CT-ND	.69	4.06	11.72	BC1257TR-ND	4,000	11.25/M	0805N120J500NT
		50	15pF	±5%	BC1258CT-ND	.69	4.10	11.81	BC1258TR-ND	4,000	11.34/M	0805N150J500NT
		50	18pF	±5%	BC1259CT-ND	.69	4.06	11.72	BC1259TR-ND	4,000	11.25/M	0805N180J500NT
		50	22pF	±5%	BC1260CT-ND	.63	3.71	10.69	BC1260TR-ND	4,000	10.26/M	0805N220J500NT
		50	27pF	±5%	BC1261CT-ND	.69	4.06	11.72	BC1261TR-ND	4,000	11.25/M	0805N270J500NT
		50	33pF	±5%	BC1262CT-ND	.69	4.06	11.72	BC1262TR-ND	4,000	11.25/M	0805N330J500NT
		50	39pF	±5%	BC1263CT-ND	.69	4.06	11.72	BC1263TR-ND	4,000	11.25/M	0805N390J500NT
		50	47pF	±5%	BC1264CT-ND	.63	3.71	10.69	BC1264TR-ND	4,000	10.26/M	0805N470J500NT
		50	56pF	±5%	BC1265CT-ND	.69	4.06	11.72	BC1265TR-ND	4,000	11.25/M	0805N560J500NT
		50	68pF	±5%	BC1266CT-ND	.69	4.06	11.72	BC1266TR-ND	4,000	11.25/M	0805N680J500NT
		50	82pF	±5%	BC1267CT-ND	.69	4.06	11.72	BC1267TR-ND	4,000	11.25/M	0805N820J500NT
		50	100pF	±5%	BC1268CT-ND	.69	4.06	11.72	BC1268TR-ND	4,000	11.25/M	0805N101J500NT
		50	120pF	±5%	BC1269CT-ND	.94	5.53	15.94	BC1269TR-ND	4,000	15.30/M	0805N121J500NT
		50	150pF	±5%	BC1270CT-ND	.91	5.40	15.56	BC1270TR-ND	4,000	14.94/M	0805N151J500NT
		50	180pF	±5%	BC1271CT-ND	.94	5.53	15.94	BC1271TR-ND	4,000	15.30/M	0805N181J500NT
		50	220pF	±5%	BC1272CT-ND	.94	5.53	15.94	BC1272TR-ND	4,000	15.30/M	0805N221J500NT
		50	270pF	±5%	BC1273CT-ND	1.08	6.37	18.38	BC1273TR-ND	4,000	17.64/M	0805N271J500NT
		50	330pF	±5%	BC1274CT-ND	.98	5.79	16.69	BC1274TR-ND	4,000	16.02/M	0805N331J500NT
		50	390pF	±5%	BC1275CT-ND	1.01	5.98	17.25	BC1275TR-ND	4,000	16.56/M	0805N391J500NT
		50	470pF	±5%	BC1276CT-ND	1.10	6.50	18.75	BC1276TR-ND	4,000	18.00/M	0805N471J500NT
		50	560pF	±5%	BC1277CT-ND	1.18	6.96	20.06	BC1277TR-ND	4,000	19.26/M	0805N561J500NT
		50	680pF	±5%	BC1278CT-ND	1.40	8.26	23.81	BC1278TR-ND	4,000	22.86/M	0805N681J500NT
		50	1000pF	±5%	BC1279CT-ND	1.54	9.10	26.25	BC1279TR-ND	4,000	25.20/M	0805N102J500NT
	X7R	50	220pF	±10%	BC1280CT-ND	.55	3.25	9.38	BC1280TR-ND	4,000	9.00/M	0805B221K500NT
		50	470pF	±10%	BC1281CT-ND	.58	3.45	9.94	BC1281TR-ND	4,000	9.54/M	0805B471K500NT
		50	560pF	±10%	BC1282CT-ND	.58	3.45	9.94	BC1282TR-ND	4,000	9.54/M	0805B561K500NT
		50	680pF	±10%	BC1283CT-ND	.58	3.45	9.94	BC1283TR-ND	4,000	9.54/M	0805B681K500NT
		50	1000pF	±10%	BC1284CT-ND	.58	3.45	9.94	BC1284TR-ND	4,000	9.54/M	0805B102K500NT
		50	1500pF	±10%	BC1285CT-ND	.58	3.45	9.94	BC1285TR-ND	4,000	9.54/M	0805B152K500NT
		50	2200pF	±10%	BC1286CT-ND	.55	3.25	9.38	BC1286TR-ND	4,000	9.00/M	0805B222K500NT
		50	2700pF	±10%	BC1287CT-ND	.55	3.25	9.38	BC1287TR-ND	4,000	9.00/M	0805B272K500NT
		50	3300pF	±10%	BC1288CT-ND	.58	3.45	9.94	BC1288TR-ND	4,000	9.54/M	0805B332K500NT
		50	3900pF	±10%	BC1289CT-ND	.58	3.45	9.94	BC1289TR-ND	4,000	9.54/M	0805B392K500NT
		50	4700pF	±10%	BC1290CT-ND	.58	3.45	9.94	BC1290TR-ND	4,000	9.54/M	0805B472K500NT
		50	5600pF	±10%	BC1291CT-ND	.58	3.45	9.94	BC1291TR-ND	4,000	9.54/M	0805B562K500NT
		50	6800pF	±10%	BC1292CT-ND	.58	3.45	9.94	BC1292TR-ND	4,000	9.54/M	0805B682K500NT
		50	10000pF	±10%	BC1293CT-ND	.61	3.58	10.31	BC1293TR-ND	4,000	9.90/M	0805B103K500BT
		50	15000pF	±10%	BC1294CT-ND	.77	4.55	13.13	BC1294TR-ND	4,000	12.60/M	0805B153K500BT
		50	18000pF	±10%	BC1295CT-ND	.77	4.55	13.13	BC1295TR-ND	4,000	12.60/M	0805B183K500BT
		50	22000pF	±10%	BC1296CT-ND	.88	5.20	15.00	BC1296TR-ND	4,000	14.40/M	0805B223K500BT
		50	27000pF	±10%	BC1297CT-ND	.94	5.53	15.94	BC1297TR-ND	4,000	15.30/M	0805B273K500BT
		50	.10µF	±10%	BC1298CT-ND	1.32	7.80	22.50	BC1298TR-ND	3,000	21.60/M	0805B104K500BP
		25	.10µF	±10%	BC1299CT-ND	1.21	7.15	20.63	BC1299TR-ND	4,000	19.80/M	0805B104K250BT
		16	.10µF	±10%	BC1300CT-ND	.79	4.68	13.50	BC1300TR-ND	4,000	12.96/M	0805B104K160BT
1206	NPO	50	2.2pF	±0.25pF	BC1301CT-ND	1.46	8.65	24.94	BC1301TR-ND	4,000	23.94/M	1206N2R2C500NT
		50	3.3pF	±0.25pF	BC1302CT-ND	1.46	8.65	24.94	BC1302TR-ND	4,000	23.94/M	1206N3R3C500NT
		50	5.6pF	±0.25pF	BC1303CT-ND	3.14	18.53	53.44	BC1303TR-ND	4,000	51.30/M	1206N5R6C500NT
		50	10pF	±5%	BC1304CT-ND	1.38	8.13	23.44	BC1304TR-ND	4,000	22.50/M	1206N100J500NT
		50	15pF	±5%	BC1305CT-ND	1.38	8.13	23.44	BC1305TR-ND	4,000	22.50/M	1206N150J500NT
		50	18pF	±5%	BC1306CT-ND	1.38	8.13	23.44	BC1306TR-ND	4,000	22.50/M	1206N180J500NT
		50	22pF	±5%	BC1307CT-ND	1.38	8.13	23.44	BC1307TR-ND	4,000	22.50/M	1206N220J500NT
		50	27pF	±5%	BC1308CT-ND	1.38	8.13	23.44	BC1308TR-ND	4,000	22.50/M	1206N270J500NT
		50	33pF	±5%	BC1309CT-ND	1.38	8.13	23.44	BC1309TR-ND	4,000	22.50/M	1206N330J500NT
		50	39pF	±5%	BC1310CT-ND	1.49	8.78	25.31	BC1310TR-ND	4,000	24.30/M	1206N390J500NT
		50	47pF	±5%	BC1311CT-ND	1.49	8.78	25.31	BC1311TR-ND	4,000	24.30/M	1206N470J500NT
		50	56pF	±5%	BC1312CT-ND	1.60	9.43	27.19	BC1312TR-ND	4,000	26.10/M	1206N560J500NT
		50	68pF	±5%	BC1313CT-ND	1.72	10.14	29.25	BC1313TR-ND	4,000	28.08/M	1206N680J500NT
		50	100pF	±5%	BC1314CT-ND	1.54	9.10	26.25	BC1314TR-ND	4,000	25.20/M	1206N101J500NT
		50	120pF	±5%	BC1315CT-ND	1.71	10.08	29.06	BC1315TR-ND	4,000	27.90/M	1206N121J500NT
		50	1000pF	±5%	BC1316CT-ND	2.42	14.30	41.25	BC1316TR-ND	4,000	39.60/M	1206N102J500NT
	X7R	50	1000pF	±10%	BC1317CT-ND	1.27	7.48	21.56	BC1317TR-ND	4,000	20.70/M	1206B102K500NT
		50	2200pF	±10%	BC1318CT-ND	1.38	8.13	23.44	BC1318TR-ND	4,000	22.50/M	1206B222K500NT
		50	3300pF	±10%	BC1319CT-ND	1.38	8.13	23.44	BC1319TR-ND	4,000	22.50/M	1206B332K500NT
		50	4700pF	±10%	BC1320CT-ND	1.30	7.67	22.13	BC1320TR-ND	4,000	21.24/M	1206B472K500NT
		50	10000pF	±10%	BC1321CT-ND	1.32	7.80	22.50	BC1321TR-ND	4,000	21.60/M	1206B103K500NT
		50	15000pF	±10%	BC1322CT-ND	1.42	8.39	24.19	BC1322TR-ND	4,000	23.22/M	1206B153K500NT
		50	22000pF	±10%	BC1323CT-ND	1.49	8.78	25.31	BC1323TR-ND	4,000	24.30/M	1206B223K500BT
		50	33000pF	±10%	BC1324CT-ND	1.52	8.97	25.88	BC1324TR-ND	4,000	24.84/M	1206B333K500BT
		50	47000pF	±10%	BC1325CT-ND	1.61	9.49	27.38	BC1325TR-ND	4,000	26.28/M	1206B473K500BT
		50	.10µF	±10%	BC1326CT-ND	1.58	9.36	27.00	BC1326TR-ND	4,000	25.92/M	1206B104K500BT
		25	.33µF	±10%	BC1327CT-ND	5.89	34.78	100.31	BC1327TR-ND	3,000	96.30/M	1206B334K250BP
		16	1.0µF	±10%	BC1328CT-ND	7.48	44.20	127.50	BC1328TR-ND	3,000	122.40/M	1206B105K160BP
1812	X7R	1KV	1000pF	±10%	BC1329CT-ND	15.18	89.70	258.75	BC1329TR-ND	1,000	276.00	1812B102K102BP

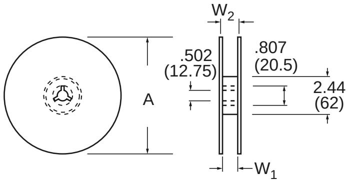
YAGEO AMERICA

Surface Mount Ceramic Multilayer Chip Capacitors –
0402, 0603, 0805, 1206, 1812

Features:
- High capacitance per unit volume
- For high frequency applications
- NiSn terminations

Applications:
- Consumer electronics
- Telecommunications
- Automotive
- Data processing





Case Size	L_1	W	T		L_2 and L_3		L_4
			Min.	Max.	Min.	Max.	Min.
0402	.040” (1.0mm)	.020” (0.5mm)	.018” (0.45mm)	.022” (0.55mm)	.008” (0.20mm)	.012” (0.30mm)	.016” (0.40mm)
0603	.063” (1.6mm)	.032” (0.8mm)	.029” (0.73mm)	.035” (0.87mm)	.010” (0.25mm)	.026” (0.65mm)	.016” (0.40mm)
0805	.079” (2.0mm)	.049” (1.25mm)	.020” (0.51mm)	.053” (1.35mm)	.010” (0.25mm)	.030” (0.75mm)	.022” (0.55mm)
1206	.126” (3.2mm)	.063” (1.6mm)	.020” (0.51mm)	.069” (1.75mm)	.010” (0.25mm)	030” (0.75mm)	.056” (1.40mm)
1812	.177” (4.5mm)	.126” (3.2mm)	.020” (0.51mm)	.072” (1.80mm)	.010” (0.25mm)	030” (0.75mm)	.088” (2.20mm)

Case Size	Tape Width (mm)	A (mm)	W1 (mm)	W2 Max. (mm)
0402, 0603 0805, 1206	.315” (8mm)	7.087” (180mm)	.331” (8.4mm)	.567” (14.4mm)
1812	.472” (12mm)	7.087” (180mm)	.488” (12.4mm)	.724” (18.4mm)

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key Part No.	Cut Tape Pricing 10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Yageo America Part No.
0402	NPO	50	.5pF	±0.25pF	311-1001-1-ND	1.05	6.18	17.81	311-1001-2-ND	10,000	17.10/M	0402CG508C9B200
		50	1.2pF	±0.25pF	311-1002-1-ND	.99	5.85	16.88	311-1002-2-ND	10,000	16.20/M	0402CG129C9B200
		50	1.5pF	±0.25pF	311-1003-1-ND	.99	5.85	16.88	311-1003-2-ND	10,000	16.20/M	0402CG159C9B200
		50	1.8pF	±0.25pF	311-1004-1-ND	.99	5.85	16.88	311-1004-2-ND	10,000	16.20/M	0402CG189C9B200
		50	2.0pF	±0.25pF	311-1006-1-ND	1.05	6.18	17.81	311-1006-2-ND	10,000	17.10/M	0402CG209C9B200
		50	2.7pF	±0.25pF	311-1005-1-ND	.99	5.85	16.88	311-1005-2-ND	10,000	16.20/M	0402CG279C9B200
		50	3.0pF	±0.25pF	311-1007-1-ND	.99	5.85	16.88	311-1007-2-ND	10,000	16.20/M	0402CG309C9B200
		50	3.3pF	±0.25pF	311-1008-1-ND	.99	5.85	16.88	311-1008-2-ND	10,000	16.20/M	0402CG339C9B200
		50	5.0pF	±0.25pF	311-1010-1-ND	.99	5.85	16.88	311-1010-2-ND	10,000	16.20/M	0402CG509C9B200
		50	5.6pF	±0.5pF	311-1011-1-ND	.99	5.85	16.88	311-1011-2-ND	10,000	16.20/M	0402CG569D9B200
		50	8.2pF	±0.5pF	311-1012-1-ND	.99	5.85	16.88	311-1012-2-ND	10,000	16.20/M	0402CG829D9B200
		50	9.1pF	±0.5pF	311-1013-1-ND	.70	4.25	14.00	311-1013-2-ND	10,000	18.00/M	0402CG919D9B200
		50	10pF	±5%	311-1014-1-ND	.77	4.55	13.13	311-1014-2-ND	10,000	12.60/M	0402CG100D9B200
		50	11pF	±5%	311-1015-1-ND	1.09	6.44	18.56	311-1015-2-ND	10,000	17.82/M	0402CG110J9B200
		50	12pF	±5%	311-1016-1-ND	.88	5.20	15.00	311-1016-2-ND	10,000	14.40/M	0402CG120J9B200
		50	15pF	±5%	311-1017-1-ND	.88	5.20	15.00	311-1017-2-ND	10,000	14.40/M	0402CG150J9B200
		50	22pF	±5%	311-1018-1-ND	.88	5.20	15.00	311-1018-2-ND	10,000	14.40/M	0402CG220J9B200
		50	27pF	±5%	311-1019-1-ND	.94	5.53	15.94	311-1019-2-ND	10,000	15.30/M	0402CG270J9B200
		50	33pF	±5%	311-1020-1-ND	.94	5.53	15.94	311-1020-2-ND	10,000	15.30/M	0402CG330J9B200
		50	39pF	±5%	311-1009-1-ND	.94	5.53	15.94	311-1009-2-ND	10,000	15.30/M	0402CG390J9B200
		50	47pF	±5%	311-1021-1-ND	.88	5.20	15.00	311-1021-2-ND	10,000	14.40/M	0402CG470J9B200
		50	56pF	±5%	311-1022-1-ND	.94	5.53	15.94	311-1022-2-ND	10,000	15.30/M	0402CG560J9B200
		50	82pF	±5%	311-1023-1-ND	.99	5.85	16.88	311-1023-2-ND	10,000	16.20/M	0402CG820J9B200
		50	100pF	±5%	311-1024-1-ND	.83	4.88	14.06	311-1024-2-ND	10,000	13.50/M	0402CG101J9B200
		50	150pF	±5%	311-1025-1-ND	.77	4.68	15.40	311-1025-2-ND	10,000	19.80/M	0402CG151J9B200
		25	220pF	±5%	311-1026-1-ND	.99	5.85	16.88	311-1026-2-ND	10,000	16.20/M	0402CG221J9B200
	X7R	50	330pF	±10%	311-1027-1-ND	.77	4.55	13.13	311-1027-2-ND	10,000	12.60/M	04022R331K9B20D
		50	470pF	±10%	311-1028-1-ND	.77	4.55	13.13	311-1028-2-ND	10,000	12.60/M	04022R471K9B20D
		50	560pF	±10%	311-1029-1-ND	.77	4.55	13.13	311-1029-2-ND	10,000	12.60/M	04022R561K9B20D
		50	680pF	±10%	311-1030-1-ND	.77	4.55	13.13	311-1030-2-ND	10,000	12.60/M	04022R681K9B20D
		50	1200pF	±10%	311-1031-1-ND	.77	4.55	13.13	311-1031-2-ND	10,000	12.60/M	04022R122K9B20D
		50	1500pF	±10%	311-1032-1-ND	.77	4.55	13.13	311-1032-2-ND	10,000	12.60/M	04022R152K9B20D
		50	2700pF	±10%	311-1033-1-ND	.77	4.55	13.13	311-1033-2-ND	10,000	12.60/M	04022R272K9B20D
		50	3300pF	±10%	311-1034-1-ND	.83	4.88	14.06	311-1034-2-ND	10,000	13.50/M	04022R332K9B20D
		50	220pF	±10%	311-1035-1-ND	.77	4.55	13.13	311-1035-2-ND	10,000	12.60/M	04022R221K9B20D
		50	1000pF	±10%	311-1036-1-ND	.83	4.88	14.06	311-1036-2-ND	10,000	13.50/M	04022R102K9B20D
		50	2200pF	±10%	311-1037-1-ND	.77	4.55	13.13	311-1037-2-ND	10,000	12.60/M	04022R222K9B20D
		25	3900pF	±10%	311-1038-1-ND	.83	4.88	14.06	311-1038-2-ND	10,000	13.50/M	04022R392K8B20D
		25	4700pF	±10%	311-1039-1-ND	.77	4.55	13.13	311-1039-2-ND	10,000	12.60/M	04022R472K8B20D
		16	5600pF	±10%	311-1040-1-ND	.88	5.20	15.00	311-1040-2-ND	10,000	14.40/M	04022R562K7B20D
		16	8200pF	±10%	311-1041-1-ND	.94	5.53	15.94	311-1041-2-ND	10,000	15.30/M	04022R822K7B20D
		16	10000pF	±10%	311-1042-1-ND	.77	4.55	13.13	311-1042-2-ND	10,000	12.60/M	04022R103K7B20D
	Y5V	16	22000pF	-20%/+80%	311-1043-1-ND	.86	5.07	14.63	311-1043-2-ND	10,000	14.04/M	04022F223Z7B20D
		16	33000pF	-20%/+80%	311-1044-1-ND	.88	5.20	15.00	311-1044-2-ND	10,000	14.40/M	04022F333Z7B20D
		16	10000pF	-20%/+80%	311-1045-1-ND	.74	4.36	12.56	311-1045-2-ND	10,000	12.06/M	04022F103Z7B20D
		16	47000pF	-20%/+80%	311-1046-1-ND	.94	5.53	15.94	311-1046-2-ND	10,000	15.30/M	04022F473Z7B20D
		16	.10µF	-20%/+80%	311-1047-1-ND	.88	5.20	15.00	311-1047-2-ND	10,000	14.40/M	04022F104Z7B20D
0603	NPO	50	.5pF	±0.25pF	311-1048-1-ND	.75	4.42	12.75	311-1048-2-ND	4,000	12.24/M	0603CG508C9B200
		50	1.0pF	±0.25pF	311-1049-1-ND	.66	3.90	11.25	311-1049-2-ND	4,000	10.80/M	0603CG109C9B200
		50	1.5pF	±0.25pF	311-1050-1-ND	.66	3.90	11.25	311-1050-2-ND	4,000	10.80/M	0603CG159C9B200
		50	2.0pF	±0.25pF	311-1051-1-ND	.72	4.23	12.19	311-1051-2-ND	4,000	11.70/M	0603CG209C9B200
		50	3.0pF	±0.25pF	311-1052-1-ND	.72	4.23	12.19	311-1052-2-ND	4,000	11.70/M	0603CG309C9B200
		50	4.0pF	±0.25pF	311-1053-1-ND	.75	4.42	12.75	311-1053-2-ND	4,000	12.24/M	0603CG409C9B200
		50	5.0pF	±0.25pF	311-1054-1-ND	.72	4.23	12.19	311-1054-2-ND	4,000	11.70/M	0603CG509C9B200
		50	6.0pF	±0.5pF	311-1055-1-ND	.66	3.90	11.25	311-1055-2-ND	4,000	10.80/M	0603CG609C9B200
		50	7.0pF	±0.5pF	311-1056-1-ND	.75	4.42	12.75	311-1056-2-ND	4,000	12.24/M	0603CG709D9B200
		50	8.0pF	±0.5pF	311-1057-1-ND	.75	4.42	12.75	311-1057-2-ND	4,000	12.24/M	0603CG809D9B200
		50	10pF	±5%	311-1058-1-ND	.57	3.38	9.75	311-1058-2-ND	4,000	9.36/M	0603CG100J9B200
		50	12pF	±5%	311-1059-1-ND	.55	3.25	9.38	311-1059-2-ND	4,000	9.00/M	0603CG120J9B200
		50	15pF	±5%	311-1060-1-ND	.57	3.38	9.75	311-1060-2-ND	4,000	9.36/M	0603CG150J9B200
		50	18pF	±5%	311-1061-1-ND	.57	3.38	9.75	311-1061-2-ND	4,000	9.36/M	0603CG180J9B200
		50	22pF	±5%	311-1062-1-ND	.58	3.45	9.94	311-1062-2-ND	4,000	9.54/M	0603CG220J9B200
		50	27pF	±5%	311-1063-1-ND	.66	3.90	11.25	311-1063-2-ND	4,000	10.80/M	0603CG270J9B200
		50	33pF	±5%	311-1064-1-ND	.65	3.84	11.06	311-1064-2-ND	4,000	10.62/M	0603CG330J9B200

(Continued)

Surface Mount Ceramic Multilayer Chip Capacitors – 0402, 0603, 0805, 1206, 1812 *(Cont.)*

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key	Cut Tape Pricing			Digi-Key	Tape & Reel		Yageo America
					Part No.	10	100	500	Part No.	Size	Pricing	Part No.
0603	NPO	50	47pF	±5%	311-1065-1-ND	.65	3.84	11.06	311-1065-2-ND	4,000	10.62/M	0603CG470J9B200
		50	56pF	±5%	311-1066-1-ND	.68	4.03	11.63	311-1066-2-ND	4,000	11.16/M	0603CG560J9B200
		50	68pF	±5%	311-1067-1-ND	.68	4.03	11.63	311-1067-2-ND	4,000	11.16/M	0603CG680J9B200
		50	82pF	±5%	311-1068-1-ND	.73	4.29	12.38	311-1068-2-ND	4,000	11.88/M	0603CG820J9B200
		50	100pF	±5%	311-1069-1-ND	.62	3.64	10.50	311-1069-2-ND	4,000	10.08/M	0603CG101J9B200
		50	120pF	±5%	311-1070-1-ND	.73	4.29	12.38	311-1070-2-ND	4,000	11.88/M	0603CG121J9B200
		50	150pF	±5%	311-1071-1-ND	.86	5.07	14.63	311-1071-2-ND	4,000	14.04/M	0603CG151J9B200
		50	180pF	±5%	311-1072-1-ND	.94	5.53	15.94	311-1072-2-ND	4,000	15.30/M	0603CG181J9B200
		50	220pF	±5%	311-1073-1-ND	1.02	6.05	17.44	311-1073-2-ND	4,000	16.74/M	0603CG221J9B200
		50	270pF	±5%	311-1074-1-ND	.70	4.25	14.00	311-1074-2-ND	4,000	15.00/M	0603CG271J9B200
		50	330pF	±5%	311-1075-1-ND	.77	4.68	15.40	311-1075-2-ND	4,000	16.50/M	0603CG331J9B200
		50	390pF	±5%	311-1076-1-ND	.84	5.10	16.80	311-1076-2-ND	4,000	18.00/M	0603CG391J9B200
	X7R	50	220pF	±10%	311-1077-1-ND	.55	3.25	9.38	311-1077-2-ND	4,000	9.00/M	06032R221K9B20D
		50	270pF	±10%	311-1185-1-ND	.55	3.25	9.38	311-1185-2-ND	4,000	9.00/M	06032R271K9B20D
		50	330pF	±10%	311-1186-1-ND	.55	3.25	9.38	311-1186-2-ND	4,000	9.00/M	06032R331K9B20D
		50	390pF	±10%	311-1187-1-ND	.55	3.25	9.38	311-1187-2-ND	4,000	9.00/M	06032R391K9B20D
		50	470pF	±10%	311-1078-1-ND	.55	3.25	9.38	311-1078-2-ND	4,000	9.00/M	06032R471K9B20D
		50	560pF	±10%	311-1079-1-ND	.55	3.25	9.38	311-1079-2-ND	4,000	9.00/M	06032R561K9B20D
		50	680pF	±10%	311-1188-1-ND	.55	3.25	9.38	311-1188-2-ND	4,000	9.00/M	06032R681K9B20D
		50	820pF	±10%	311-1189-1-ND	.55	3.25	9.38	311-1189-2-ND	4,000	9.00/M	06032R821K9B20D
		50	1000pF	±10%	311-1080-1-ND	.55	3.25	9.38	311-1080-2-ND	4,000	9.00/M	06032R102K9B20D
		50	1500pF	±10%	311-1184-1-ND	.57	3.38	9.75	311-1184-2-ND	4,000	9.36/M	06032R152K9B20D
		50	2200pF	±10%	311-1081-1-ND	.55	3.25	9.38	311-1081-2-ND	4,000	9.00/M	06032R222K9B20D
		50	3300pF	±10%	311-1082-1-ND	.57	3.38	9.75	311-1082-2-ND	4,000	9.36/M	06032R332K9B20D
		50	4700pF	±10%	311-1083-1-ND	.55	3.25	9.38	311-1083-2-ND	4,000	9.00/M	06032R472K9B20D
		50	6800pF	±10%	311-1084-1-ND	.61	3.58	10.31	311-1084-2-ND	4,000	9.90/M	06032R682K9B20D
		50	10000pF	±10%	311-1085-1-ND	.59	3.51	10.13	311-1085-2-ND	4,000	9.72/M	06032R103K9B20D
		25	22000pF	±10%	311-1086-1-ND	.88	5.20	15.00	311-1086-2-ND	4,000	14.40/M	06032R223K8B20D
		16	.10µF	±10%	311-1088-1-ND	1.05	6.18	17.81	311-1088-2-ND	4,000	17.10/M	06032R104K7B20D
	Y5V	25	.10µF	-20%/+80%	311-1087-1-ND	.64	3.77	10.88	311-1087-2-ND	4,000	10.44/M	06032F104Z8B20D
0805	NPO	50	1.0pF	±0.25pF	311-1089-1-ND	.75	4.42	12.75	311-1089-2-ND	4,000	12.24/M	0805CG109C9B200
		50	1.5pF	±0.25pF	311-1090-1-ND	.75	4.42	12.75	311-1090-2-ND	4,000	12.24/M	0805CG159C9B200
		50	2.0pF	±0.25pF	311-1091-1-ND	.81	4.81	13.88	311-1091-2-ND	4,000	13.32/M	0805CG209C9B200
		50	3.0pF	±0.25pF	311-1092-1-ND	.81	4.81	13.88	311-1092-2-ND	4,000	13.32/M	0805CG309C9B200
		50	4.0pF	±0.25pF	311-1093-1-ND	.81	4.81	13.88	311-1093-2-ND	4,000	13.32/M	0805CG409C9B200
		50	.50pF	±0.25pF	311-1094-1-ND	.86	5.07	14.63	311-1094-2-ND	4,000	14.04/M	0805CG508C9B200
		50	6.0pF	±0.5pF	311-1095-1-ND	.81	4.81	13.88	311-1095-2-ND	4,000	13.32/M	0805CG609D9B200
		50	7.0pF	±0.5pF	311-1096-1-ND	.81	4.81	13.88	311-1096-2-ND	4,000	13.32/M	0805CG709D9B200
		50	8.0pF	±0.5pF	311-1097-1-ND	.81	4.81	13.88	311-1097-2-ND	4,000	13.32/M	0805CG809D9B200
		50	9.0pF	±0.5pF	311-1098-1-ND	.81	4.81	13.88	311-1098-2-ND	4,000	13.32/M	0805CG909D9B200
		50	10pF	±5%	311-1099-1-ND	.66	3.90	11.25	311-1099-2-ND	4,000	10.80/M	0805CG100J9B200
		50	12pF	±5%	311-1100-1-ND	.75	4.42	12.75	311-1100-2-ND	4,000	12.24/M	0805CG120J9B200
		50	15pF	±5%	311-1101-1-ND	.75	4.42	12.75	311-1101-2-ND	4,000	12.24/M	0805CG150J9B200
		50	18pF	±5%	311-1102-1-ND	.75	4.42	12.75	311-1102-2-ND	4,000	12.24/M	0805CG180J9B200
		50	22pF	±5%	311-1103-1-ND	.75	4.42	12.75	311-1103-2-ND	4,000	12.24/M	0805CG220J9B200
		50	27pF	±5%	311-1104-1-ND	.75	4.42	12.75	311-1104-2-ND	4,000	12.24/M	0805CG270J9B200
		50	33pF	±5%	311-1105-1-ND	.76	4.49	12.94	311-1105-2-ND	4,000	12.42/M	0805CG330J9B200
		50	39pF	±5%	311-1106-1-ND	.77	4.55	13.13	311-1106-2-ND	4,000	12.60/M	0805CG390J9B200
		50	47pF	±5%	311-1107-1-ND	.78	4.62	13.31	311-1107-2-ND	4,000	12.78/M	0805CG470J9B200
		50	56pF	±5%	311-1108-1-ND	.81	4.81	13.88	311-1108-2-ND	4,000	13.32/M	0805CG560J9B200
		50	68pF	±5%	311-1109-1-ND	.83	4.88	14.06	311-1109-2-ND	4,000	13.50/M	0805CG680J9B200
		50	82pF	±5%	311-1110-1-ND	.99	5.85	16.88	311-1110-2-ND	4,000	16.20/M	0805CG820J9B200
		50	100pF	±5%	311-1111-1-ND	.95	5.62	16.20	311-1111-2-ND	4,000	15.56/M	0805CG101J9B200
		50	120pF	±5%	311-1112-1-ND	.97	5.72	16.50	311-1112-2-ND	4,000	15.84/M	0805CG121J9B200
		50	150pF	±5%	311-1113-1-ND	.97	5.72	16.50	311-1113-2-ND	4,000	15.84/M	0805CG151J9B200
		50	180pF	±5%	311-1114-1-ND	.99	5.85	16.88	311-1114-2-ND	4,000	16.20/M	0805CG181J9B200
		50	220pF	±5%	311-1115-1-ND	.99	5.85	16.88	311-1115-2-ND	4,000	16.20/M	0805CG221J9B200
		50	270pF	±5%	311-1116-1-ND	.76	4.59	15.12	311-1116-2-ND	4,000	16.20/M	0805CG271J9B200
		50	330pF	±5%	311-1117-1-ND	1.01	5.98	17.25	311-1117-2-ND	4,000	16.56/M	0805CG331J9B200
		50	390pF	±5%	311-1118-1-ND	.70	4.25	14.00	311-1118-2-ND	4,000	15.00/M	0805CG391J9B200
		50	470pF	±5%	311-1119-1-ND	.77	4.68	15.40	311-1119-2-ND	4,000	16.50/M	0805CG471J9B200
		50	560pF	±5%	311-1120-1-ND	.84	5.10	16.80	311-1120-2-ND	4,000	18.00/M	0805CG561J9B200
		50	680pF	±5%	311-1121-1-ND	.92	5.61	18.48	311-1121-2-ND	4,000	19.80/M	0805CG681J9B200
		50	1000pF	±5%	311-1122-1-ND	1.05	6.38	21.00	311-1122-2-ND	4,000	22.50/M	0805CG102J9B200
	X7R	50	220pF	±10%	311-1123-1-ND	.61	3.58	10.31	311-1123-2-ND	4,000	9.90/M	08052R221K9B20D
		50	270pF	±10%	311-1191-1-ND	.77	4.55	13.13	311-1191-2-ND	4,000	12.60/M	08052R271K9B20D
		50	330pF	±10%	311-1192-1-ND	.77	4.55	13.13	311-1192-2-ND	4,000	12.60/M	08052R331K9B20D
		50	390pF	±10%	311-1193-1-ND	.77	4.55	13.13	311-1193-2-ND	4,000	12.60/M	08052R391K9B20D
		50	470pF	±10%	311-1124-1-ND	.64	3.77	10.88	311-1124-2-ND	4,000	10.44/M	08052R471K9B20D
		50	560pF	±10%	311-1125-1-ND	.64	3.77	10.88	311-1125-2-ND	4,000	10.44/M	08052R561K9B20D
		50	680pF	±10%	311-1126-1-ND	.64	3.77	10.88	311-1126-2-ND	4,000	10.44/M	08052R681K9B20D
		50	820pF	±10%	311-1194-1-ND	.77	4.55	13.13	311-1194-2-ND	4,000	12.60/M	08052R821K9B20D
		50	1000pF	±10%	311-1127-1-ND	.64	3.77	10.88	311-1127-2-ND	4,000	10.44/M	08052R102K9B20D
		50	1500pF	±10%	311-1128-1-ND	.64	3.77	10.88	311-1128-2-ND	4,000	10.44/M	08052R152K9B20D
		50	2200pF	±10%	311-1129-1-ND	.61	3.58	10.31	311-1129-2-ND	4,000	9.90/M	08052R222K9B20D
		50	2700pF	±10%	311-1130-1-ND	.61	3.58	10.31	311-1130-2-ND	4,000	9.90/M	08052R272K9B20D
		50	3300pF	±10%	311-1131-1-ND	.64	3.77	10.88	311-1131-2-ND	4,000	10.44/M	08052R332K9B20D
		50	3900pF	±10%	311-1132-1-ND	.64	3.77	10.88	311-1132-2-ND	4,000	10.44/M	08052R392K9B20D
		50	4700pF	±10%	311-1133-1-ND	.64	3.77	10.88	311-1133-2-ND	4,000	10.44/M	08052R472K9B20D

(Continued)

Surface Mount Ceramic Multilayer Chip Capacitors – 0402, 0603, 0805, 1206, 1812 *(Cont.)*

Case Size	Type	WV DC	Capacitance	Tolerance	Digi-Key	Cut Tape Pricing			Digi-Key	Tape & Reel		Yageo America
					Part No.	10	100	500	Part No.	Size	Pricing	Part No.
0805	X7R	50	5600pF	±10%	311-1134-1-ND	.64	3.77	10.88	311-1134-2-ND	4,000	10.44/M	08052R562K9B20D
		50	6800pF	±10%	311-1135-1-ND	.64	3.77	10.88	311-1135-2-ND	4,000	10.44/M	08052R682K9B20D
		50	10000pF	±10%	311-1136-1-ND	.66	3.90	11.25	311-1136-2-ND	4,000	10.80/M	08052R103K9B20D
		50	18000pF	±10%	311-1137-1-ND	.66	3.90	11.25	311-1137-2-ND	4,000	10.80/M	08052R183K9B20D
		50	22000pF	±10%	311-1138-1-ND	.77	4.55	13.13	311-1138-2-ND	4,000	12.60/M	08052R223K9B20D
		50	27000pF	±10%	311-1139-1-ND	.83	4.88	14.06	311-1139-2-ND	4,000	13.50/M	08052R273K9B20D
		50	.10µF	±10%	311-1140-1-ND	.91	5.53	18.20	311-1140-2-ND	3,000	19.50/M	08052R104K9BB0D
		25	.10µF	±10%	311-1141-1-ND	.84	5.10	16.80	311-1141-2-ND	4,000	18.00/M	08052R104K8B20D
		16	.10µF	±10%	311-1142-1-ND	.77	4.68	15.40	311-1142-2-ND	4,000	16.50/M	08052R104K7B20D
		50	15000pF	±10%	311-1143-1-ND	.66	3.90	11.25	311-1143-2-ND	4,000	10.80/M	08052R153K9B20D
	Y5V	10	3.3uF	±20%+80%	311-1190-1-ND	1.75	11.78	39.90	311-1190-2-ND	3,000	51.30/M	08052F335Z6BB0D
1206	NPO	50	.5pF	±0.25pF	311-1145-1-ND	.98	5.95	19.60	311-1145-2-ND	4,000	21.00/M	1206CG508C9B200
		50	1pF	±0.25pF	311-1212-1-ND	.92	6.20	21.00	311-1212-2-ND	4,000	27.00/M	1206CG109C9B200
		50	1.5pF	±0.25pF	311-1214-1-ND	.92	6.20	21.00	311-1214-2-ND	4,000	27.00/M	1206CG159C9B200
		50	1.8pF	±0.25pF	311-1215-1-ND	.92	6.20	21.00	311-1215-2-ND	4,000	27.00/M	1206CG189C9B200
		50	2.2pF	±0.25pF	311-1146-1-ND	.95	5.78	19.04	311-1146-2-ND	4,000	20.40/M	1206CG229C9B200
		50	2.7pF	±0.25pF	311-1216-1-ND	.92	6.20	21.00	311-1216-2-ND	4,000	27.00/M	1206CG279C9B200
		50	3.3pF	±0.25pF	311-1147-1-ND	.95	5.74	18.90	311-1147-2-ND	4,000	20.25/M	1206CG339C9B200
		50	3.9pF	±0.25pF	311-1217-1-ND	.92	6.20	21.00	311-1217-2-ND	4,000	27.00/M	1206CG399C9B200
		50	4.7pF	±0.25pF	311-1218-1-ND	.92	6.20	21.00	311-1218-2-ND	4,000	27.00/M	1206CG479C9B200
		50	5.1pF	±0.25pF	311-1148-1-ND	1.02	6.16	20.30	311-1148-2-ND	4,000	21.75/M	1206CG519C9B200
		50	5.6pF	±0.25pF	311-1149-1-ND	.95	5.74	18.90	311-1149-2-ND	4,000	20.25/M	1206CG569C9B200
		50	6.8pF	±0.5pF	311-1220-1-ND	.92	6.20	21.00	311-1220-2-ND	4,000	27.00/M	1206CG689D9B200
		50	7.5pF	±0.5pF	311-1221-1-ND	1.15	7.75	26.25	311-1221-2-ND	4,000	33.75/M	1206CG759D9B200
		50	8.2pF	±0.5pF	311-1222-1-ND	.92	6.20	21.00	311-1222-2-ND	4,000	27.00/M	1206CG829D9B200
		50	9.1pF	±0.5pF	311-1223-1-ND	1.15	7.75	26.25	311-1223-2-ND	4,000	33.75/M	1206CG919D9B200
		50	10pF	±5%	311-1150-1-ND	.90	5.48	18.06	311-1150-2-ND	4,000	19.35/M	1206CG100J9B200
		50	12pF	±5%	311-1213-1-ND	1.33	8.08	26.60	311-1213-2-ND	4,000	28.50/M	1206CG120J9B200
		50	15pF	±5%	311-1151-1-ND	.90	5.48	18.06	311-1151-2-ND	4,000	19.35/M	1206CG150J9B200
		50	18pF	±5%	311-1152-1-ND	.90	5.48	18.06	311-1152-2-ND	4,000	19.35/M	1206CG180J9B200
		50	20pF	±5%	311-1153-1-ND	.95	5.74	18.90	311-1153-2-ND	4,000	20.25/M	1206CG200J9B200
		50	22pF	±5%	311-1154-1-ND	.90	5.48	18.06	311-1154-2-ND	4,000	19.35/M	1206CG220J9B200
		50	27pF	±5%	311-1155-1-ND	.90	5.48	18.06	311-1155-2-ND	4,000	19.35/M	1206CG270J9B200
		50	33pF	±5%	311-1156-1-ND	.90	5.48	18.06	311-1156-2-ND	4,000	19.35/M	1206CG330J9B200
		50	39pF	±5%	311-1157-1-ND	.98	5.95	19.60	311-1157-2-ND	4,000	21.00/M	1206CG390J9B200
		50	47pF	±5%	311-1158-1-ND	.98	5.95	19.60	311-1158-2-ND	4,000	21.00/M	1206CG470J9B200
		50	51pF	±5%	311-1219-1-ND	1.56	10.54	35.70	311-1219-2-ND	4,000	45.90/M	1206CG510J9B200
		50	56pF	±5%	311-1159-1-ND	1.05	6.38	21.00	311-1159-2-ND	4,000	22.50/M	1206CG560J9B200
		50	68pF	±5%	311-1160-1-ND	1.12	6.80	22.40	311-1160-2-ND	4,000	24.00/M	1206CG680J9B200
		50	100pF	±5%	311-1161-1-ND	1.05	6.38	21.00	311-1161-2-ND	4,000	22.50/M	1206CG101J9B200
		50	120pF	±5%	311-1162-1-ND	1.12	6.80	22.40	311-1162-2-ND	4,000	24.00/M	1206CG121J9B200
		50	1000pF	±5%	311-1163-1-ND	1.10	7.44	25.20	311-1163-2-ND	4,000	32.40/M	1206CG102J9B200
	X7R	1KV	1000pF	±10%	311-1144-1-ND	2.98	21.25	76.50	311-1144-2-ND	3,000	110.50/M	12062R102KEBB00
		50	220pF	±10%	311-1164-1-ND	.90	5.48	18.06	311-1164-2-ND	4,000	19.35/M	12062R221K9B20D
		50	270pF	±10%	311-1165-1-ND	.90	5.48	18.06	311-1165-2-ND	4,000	19.35/M	12062R271K9B20D
		50	330pF	±10%	311-1166-1-ND	.90	5.48	18.06	311-1166-2-ND	4,000	19.35/M	12062R331K9B20D
		50	390pF	±10%	311-1205-1-ND	.98	5.95	19.60	311-1205-2-ND	4,000	21.00/M	12062R391K9B20D
		50	470pF	±10%	311-1167-1-ND	.84	5.10	16.80	311-1167-2-ND	4,000	18.00/M	12062R471K9B20D
		50	560pF	±10%	311-1168-1-ND	.84	5.10	16.80	311-1168-2-ND	4,000	18.00/M	12062R561K9B20D
		50	680pF	±10%	311-1169-1-ND	.84	5.10	16.80	311-1169-2-ND	4,000	18.00/M	12062R681K9B20D
		50	820pF	±10%	311-1210-1-ND	.98	5.95	19.60	311-1210-2-ND	4,000	21.00/M	12062R821K9B20D
		50	1000pF	±10%	311-1170-1-ND	.84	5.10	16.80	311-1170-2-ND	4,000	18.00/M	12062R102K9B20D
		50	1200pF	±10%	311-1197-1-ND	.98	5.95	19.60	311-1197-2-ND	4,000	21.00/M	12062R122K9B20D
		50	1500pF	±10%	311-1200-1-ND	.98	5.95	19.60	311-1200-2-ND	4,000	21.00/M	12062R152K9B20D
		50	1800pF	±10%	311-1201-1-ND	.98	5.95	19.60	311-1201-2-ND	4,000	21.00/M	12062R182K9B20D
		50	2200pF	±10%	311-1171-1-ND	.90	5.48	18.06	311-1171-2-ND	4,000	19.35/M	12062R222K9B20D
		50	2700pF	±10%	311-1203-1-ND	.98	5.95	19.60	311-1203-2-ND	4,000	21.00/M	12062R272K9B20D
		50	3300pF	±10%	311-1172-1-ND	.90	5.48	18.06	311-1172-2-ND	4,000	19.35/M	12062R332K9B20D
		50	3900pF	±10%	311-1206-1-ND	.98	5.95	19.60	311-1206-2-ND	4,000	21.00/M	12062R392K9B20D
		50	4700pF	±10%	311-1173-1-ND	.84	5.10	16.80	311-1173-2-ND	4,000	18.00/M	12062R472K9B20D
		50	5600pF	±10%	311-1208-1-ND	1.05	6.38	21.00	311-1208-2-ND	4,000	22.50/M	12062R562K9B20D
		50	6800pF	±10%	311-1209-1-ND	1.05	6.38	21.00	311-1209-2-ND	4,000	22.50/M	12062R682K9B20D
		50	8200pF	±10%	311-1211-1-ND	1.12	6.80	22.40	311-1211-2-ND	4,000	24.00/M	12062R822K9B20D
		50	10000pF	±10%	311-1174-1-ND	.84	5.10	16.80	311-1174-2-ND	4,000	18.00/M	12062R103K9B20D
		50	12000pF	±10%	311-1198-1-ND	1.33	8.08	26.60	311-1198-2-ND	4,000	28.50/M	12062R123K9B20D
		50	15000pF	±10%	311-1175-1-ND	.90	5.48	18.06	311-1175-2-ND	4,000	19.35/M	12062R153K9B20D
		50	18000pF	±10%	311-1202-1-ND	1.33	8.08	26.60	311-1202-2-ND	4,000	28.50/M	12062R183K9B20D
		50	22000pF	±10%	311-1176-1-ND	.97	5.91	19.46	311-1176-2-ND	4,000	20.85/M	12062R223K9B20D
		50	27000pF	±10%	311-1204-1-ND	.92	6.20	21.00	311-1204-2-ND	4,000	27.00/M	12062R273K9B20D
		50	33000pF	±10%	311-1177-1-ND	1.02	6.16	20.30	311-1177-2-ND	4,000	21.75/M	12062R333K9B20D
		50	39000pF	±10%	311-1207-1-ND	.92	6.20	21.00	311-1207-2-ND	4,000	27.00/M	12062R393K9B20D
		50	47000pF	±10%	311-1178-1-ND	1.04	6.33	20.86	311-1178-2-ND	4,000	22.35/M	12062R473K9B20D
		50	.10µF	±10%	311-1179-1-ND	.98	5.95	19.60	311-1179-2-ND	4,000	21.00/M	12062R104K9B20D
		25	.33µF	±10%	311-1180-1-ND	2.30	16.23	56.05	311-1180-2-ND	3,000	76.70/M	12062R334K8BB0D
		16	1.0µF	±10%	311-1181-1-ND	2.45	17.50	63.00	311-1181-2-ND	3,000	91.00/M	12062R105K7BB0D
		10	1.2uF	±10%	311-1199-1-ND	3.08	22.00	79.20	311-1199-2-ND	4,000	114.40/M	12062R125K6B20D
	Y5V	16	3.3uF	±20%+80%	311-1196-1-ND	1.75	11.78	39.90	311-1196-2-ND	3,000	51.30/M	12062F335Z7BB0D
1812	NPO	3KV	220pF	±5%	311-1182-1-ND	6.08	44.65	161.50	311-1182-2-ND	1,500	247.00/M	1812CG221JGBB00
	X7R	1KV	1000pF	±10%	311-1183-1-ND	4.42	32.43	117.30	311-1183-2-ND	1,000	179.40	18122R102KEBB00

Surface Mount MICA Capacitors

Cornell Dubilier mica capacitors are made of pure India Ruby muscovite mica. It is among the most inert and stable materials in the universe. When used as the insulator (dielectric) in a capacitor, the result is an electronic component with the ultimate in stability and reliability.

The capacitance change from zero to full rated operating voltage is generally less than ±0.1%. The series inductance of these capacitors is as little as eight nanohenrys (nH). The stability characteristics also apply to frequency which is why mica capacitors are so useful in the gigahertz range.

Mica capacitors are so efficient that less that 0.05% of the applied volt-amperes is lost as heat. Dipped silver mica capacitors such as the Standard Types are manufactured by applying pure silver to ultra-thin mica plates. The plates are stacked and secured by brass clips with copper-clad steel leads welded to each clip. The extra mass of the metal acts as a heat sink and enables these capacitors to absorb voltage transients up to 100,000 volts per microsecond.

Type MC - High-Frequency, High Stability Chip for Instruments and RF

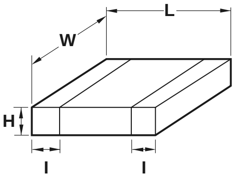
- Low impedance to beyond 1 GHz, • Near-zero capacitance change, all environments

SPECIFICATIONS:

Capacitance Tolerance:

- **Manufacture's part number suffix letter:** D = ±0.5pF
- **Manufacture's part number suffix letter:** J = ±5%

Temperature Range: -55°C to +125°C

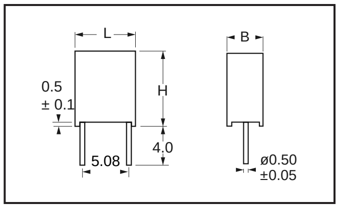


Tape and Reel packaging available with lead time.

Size Code	Vdc	Temperature Coefficient ppm/°C	Capacitance	Dimension - Inch (mm) L	W	H	I (Max)	Digi-Key Part No.	Price Each 1	10	100	Cornell Dubilier Part No.
0805	100	100±100	2.0pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1034-ND	1.75	1.50	1.25	MC08CA020D
		100±100	3.0pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1014-ND	1.75	1.50	1.25	MC08CA030D
		100±100	5.0pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1027-ND	1.75	1.50	1.25	MC08CA050D
		100±100	10pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1010-ND	1.75	1.50	1.25	MC08CA100D
		50±50	15pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1009-ND	1.75	1.50	1.25	MC08EA150J
		50±50	20pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1012-ND	1.75	1.50	1.25	MC08EA200J
		50±50	22pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1037-ND	1.75	1.50	1.25	MC08EA220J
		50±50	27pF	.079 (2.0)	.049 (1.25)	.055 (1.4)	.035 (.9)	338-1031-ND	1.75	1.50	1.25	MC08EA270J
1210	100	25±25	47pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1017-ND	2.00	1.71	1.43	MC12FA470J
		25±25	68pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1041-ND	2.00	1.71	1.43	MC12FA680J
		25±25	100pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1001-ND	2.17	1.86	1.55	MC12FA101J
		25±25	150pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1007-ND	2.21	1.89	1.58	MC12FA151J
		25±25	150pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1028-ND†	5.32	4.56	3.80	MC12FA151F
		25±25	200pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1024-ND	2.38	2.04	1.70	MC12FA201J
		25±25	220pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1003-ND	2.38	2.04	1.70	MC12FA221J
		25±25	240pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1029-ND	2.38	2.04	1.70	MC12FA241J
1812	100	25±25	470pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1022-ND	3.15	2.70	2.25	MC18FA471J
2220	100	25±25	1000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1008-ND	5.01	4.29	3.58	MC22FA102J
		25±25	2000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1019-ND	6.58	5.64	4.70	MC22FA202J
1210	500	100±100	5.0pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1032-ND	2.17	1.86	1.55	MC12CD050D
		100±100	10pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1002-ND	2.17	1.86	1.55	MC12CD100D
		50±50	15pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1013-ND	2.21	1.89	1.58	MC12ED150J
		50±50	18pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1030-ND	2.21	1.89	1.58	MC12ED180J
		25±25	33pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1006-ND	2.21	1.89	1.58	MC12FD330J
		25±25	47pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1023-ND	2.21	1.89	1.58	MC12FD470J
		25±25	62pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1038-ND	2.21	1.89	1.58	MC12FD620J
		25±25	68pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1033-ND	2.21	1.89	1.58	MC12FD680J
		25±25	100pF	.126 (3.2)	.098 (2.5)	.059 (1.5)	.043 (1.1)	338-1015-ND	2.70	2.31	1.93	MC12FD101J
1812	500	25±25	100pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1025-ND	2.70	2.31	1.93	MC18FD101J
		25±25	120pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1020-ND	2.70	2.31	1.93	MC18FD121J
		25±25	220pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1016-ND	3.01	2.58	2.15	MC18FD221J
		25±25	300pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1026-ND	3.26	2.79	2.33	MC18FD301J
		25±25	330pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1039-ND	3.26	2.79	2.33	MC18FD331J
		25±25	390pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1021-ND	3.75	3.21	2.68	MC18FD391J
		25±25	470pF	.177 (4.5)	.126 (3.2)	.079 (2.0)	.051 (1.3)	338-1018-ND	3.75	3.21	2.68	MC18FD471J
2220	500	25±25	500pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1040-ND	4.59	3.93	3.28	MC22FD501J
		25±25	750pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1011-ND	5.11	4.38	3.65	MC22FD751J
		25±25	1000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1004-ND	5.67	4.86	4.05	MC22FD102J
2220	1000	25±25	430pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1005-ND	5.11	4.38	3.65	MC22FF431J
		25±25	470pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1036-ND	5.11	4.38	3.65	MC22FF471J
		25±25	1000pF	.224 (5.7)	.197 (5.0)	.079 (2.0)	.051 (1.3)	338-1035-ND	6.90	5.91	4.93	MC22FF102J

† 1% Tolerance

Metallized Polyester Film Capacitors



Features: • Low-inductive wound cell of metallized(PETP) film • Potted with blue epoxy resin in a blue flame retardant case • Radial leads of solder-coated wire • Withstand solvents and rinsing liquids • Small stand-off pips to allow removal of solder flux • Suitable for high density packaging

Applications: • Blocking and coupling • Bypass and energy reservoir applications

Specifications: • Capacitance Range: .001 to 1.0µf • Capacitance Tolerance: ±5% • Rated Voltage: U_{Rdc} 63V, 100V, 250V, 400V • Climatic Category: 55/100/56 • Maximum Application Temperature: 100°C • Rated Temperature: 85°C • Tangent of Loss Angle: 10 kHz 100 x 10^{-4} • Reference Specification: IEC 384-2, DIN 44122, DIN 45910 Draft • Performance Grade: Grade 1 (long life) • Qualified in accordance with CECC 30 401-801

Working Voltage (VDC)	Capacitance (µF)	Dimensions (mm) B Max.	H Max.	L Max.	Digi-Key Part No.	Price Each 10	100	1,000	BC Components Part No.
400	.0010*	2.5	6.5	7.2	3001PH-ND	.13	.09	.07	2222 370 52102
	.0015*	2.5	6.5	7.2	3002PH-ND	.13	.09	.07	2222 370 52152
	.0022*	2.5	6.5	7.2	3003PH-ND	.13	.09	.07	2222 370 52222
	.0033*	2.5	6.5	7.2	3004PH-ND	.13	.09	.07	2222 370 52332
250	.0047*	2.5	6.5	7.2	3005PH-ND	.13	.09	.07	2222 370 42472
	.0068*	2.5	6.5	7.2	3006PH-ND	.13	.09	.07	2222 370 42682
	.010	2.5	6.5	7.2	3007PH-ND	.13	.09	.07	2222 370 42103
	.015	3.5	8.0	7.2	3008PH-ND	.13	.09	.07	2222 370 42153
	.022	3.5	8.0	7.2	3009PH-ND	.15	.10	.08	2222 370 42223
	.033	3.5	8.0	7.2	3010PH-ND	.18	.12	.09	2222 370 42333
100	.047	2.5	6.5	7.2	3011PH-ND	.15	.10	.08	2222 370 22473
	.068	3.5	8.0	7.2	3012PH-ND	.19	.13	.10	2222 370 22683
	.10	3.5	8.0	7.2	3013PH-ND	.21	.14	.11	2222 370 22104
63	.15	3.5	8.0	7.2	3014PH-ND	.18	.12	.09	2222 370 12154
	.22	3.5	8.0	7.2	3015PH-ND	.22	.15	.11	2222 370 12224
	.33	3.5	8.0	7.2	3016PH-ND	.16	.11	.08	2222 370 12334
	.47	4.5	9.0	7.2	3017PH-ND	.35	.24	.18	2222 370 12474
	.68	5.0	10.0	7.2	3018PH-ND	.47	.32	.24	2222 370 12684
	1.0	6.0	11.0	7.2	3019PH-ND	.51	.34	.26	2222 370 12105

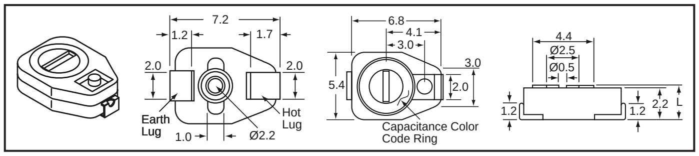
* Marked capacitance values are not CECC qualified.

SMD Trimmer Capacitors

Film Dielectric Capacitors

Description: SMD trimmer capacitors use a PTE Teflon film dielectric for excellent long-term stability and low temperature coefficient of capacitance. These units consist of brass rotors and stators separated by film dielectric and enclosed in a plastic case.

Specifications: • Insulation Resistance between Stator and Rotor: 10,000MΩ min. • Voltage Rating: 100 VDC • Minimum Q @ 10MHz: 1000 • Temperature Coefficient: –100 ± 100 PPM/°C • Soldering Maximum: 260°C for 5 seconds • Operating Temperature Range: –40°C to +85°C • Effective Angle of Rotation: 360° • Operating Torque: 20 - 300 g.cm • Ratio of Maximum to Minimum Torque: Within 3:1



Capacitance (pF) Min.	Max.	Dim. L (mm)	Color Code	Digi-Key Part No.	Price Each 1	10	100	500	1,000	BC Components Part No.
0.3 ±0.2	5-0.5/+3	2.2	Orange	2807S505-ND	1.68	1.46	1.32	1.12	.98	2807S0R505NHA4BAA
0.4 ±0.2	10-1/+5	2.2	Black	2807S610-ND	1.68	1.46	1.32	1.12	.98	2807S0R610NHB4BAA
0.5 ±0.3	15-0/+7	2.4	Blue	2807S815-ND	1.68	1.46	1.32	1.12	.98	2807S0R815NHC4BAA
0.7 ±0.3	20-0/+10	2.55	Green	2807S020-ND	1.68	1.46	1.32	1.12	.98	2807S1R020NHD4BAA

CDE CORNELL DUBILIER GC/Waldom

Dipped Silver MICA Capacitors — Radial Lead

Cornell Dubilier mica capacitors are made of pure India Ruby muscovite mica. It is among the most inert and stable materials in the universe. When used as the insulator (dielectric) in a capacitor, the result is an electronic component with the ultimate in stability and reliability.

The capacitance change from zero to full rated operating voltage is generally less than ±0.1%. The series inductance of these capacitors is as little as eight nanohenrys (nH). The stability characteristics also apply to frequency which is why mica capacitors are so useful in the gigahertz range.

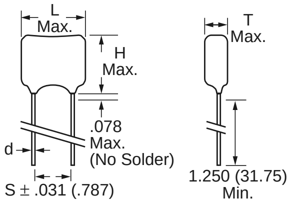
Mica capacitors are so efficient that less that 0.05% of the applied volt-amperes is lost as heat. Dipped silver mica capacitors such as the Standard Types are manufactured by applying pure silver to ultra-thin mica plates. The plates are stacked and secured by brass clips with copper-clad steel leads welded to each clip. The extra mass of the metal acts as a heat sink and enables these capacitors to absorb voltage transients up to 100,000 volts per microsecond.

SPECIFICATIONS:

Capacitance Tolerance:

- **Manufacture's part number letter:** D03 = ±1/2 pF
- **Manufacture's part number letter:** J03 = ±5%
- **Manufacture's part number letter:** F03 = ±1%

Temperature Range: -55°C to +125°C



Voltage	Capacitance	Temperature Coefficient ppm/°C	Dimension - Inch (mm) L Max	H Max	T Max	S	d	Digi-Key Part No.	Price Each 1	10	100	Cornell Dubilier Part No.
Standard												
100	1000pF	0 to +70	.480 (12.2)	.400 (10.2)	.230 (5.8)	.234 (5.9)	.025 (.6)	338-1048-ND	2.63	2.25	1.88	CD15FA102J03
	1000pF	0 to +70	.480 (12.2)	.400 (10.2)	.230 (5.8)	.234 (5.9)	.025 (.6)	338-1092-ND	4.48	3.84	3.20	CD15FA102F03
300	680pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1060-ND	1.75	1.50	1.25	CD15FC681J03
	560pF	0 to +70	.460 (11.7)	.380 (9.7)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1081-ND	2.00	1.71	1.43	CD15FC561J03
500	5pF	-200 to +200	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1064-ND	1.23	1.05	.88	CD10CD050D03
	10pF	-200 to +200	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1061-ND	.81	.69	.58	CD15CD100J03
	10pF	-200 to +200	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1068-ND	.81	.69	.58	CD15CD100D03
	15pF	-200 to +200	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1088-ND	1.23	1.05	.88	CD10CD150J03
	15pF	-200 to +200	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1054-ND	.74	.63	.53	CD15CD150J03
	20pF	-20 to +100	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1095-ND	1.26	1.08	.90	CD10ED200J03
	20pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1051-ND	.74	.63	.53	CD15ED200J03
	22pF	-20 to +100	.360 (9.1)	.330 (8.4)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1070-ND	.91	.78	.65	CD10ED220J03
	22pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1049-ND	.81	.69	.58	CD15ED220J03
	27pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1085-ND	.81	.69	.58	CD15ED270J03
	30pF	-20 to +100	.370 (9.4)	.340 (8.6)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1076-ND	.91	.78	.65	CD10ED300J03
	30pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1056-ND	.81	.69	.58	CD15ED300J03
	33pF	-20 to +100	.370 (9.4)	.340 (8.6)	.190 (4.8)	.141 (3.6)	.016 (.4)	338-1072-ND	.91	.78	.65	CD10ED330J03
	33pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1047-ND	.81	.69	.58	CD15ED330J03
	39pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1093-ND	.81	.69	.58	CD15ED390J03
	47pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1053-ND	.81	.69	.58	CD15ED470J03
	68pF	-20 to +100	.450 (11.4)	.360 (9.1)	.170 (4.3)	.234 (5.9)	.025 (.6)	338-1091-ND	.81	.69	.58	CD15ED680J03
	100pF	0 to +70	.370 (9.4)	.350 (8.9)	.200 (5.1)	.141 (3.6)	.016 (.4)	338-1050-ND	1.12	.96	.80	CD10FD101J03
	100pF	0 to +70	.460 (11.7)	.360 (9.1)	.180 (4.6)	.234 (5.9)	.025 (.6)	338-1042-ND	.81	.69	.58	CD15FD101J03
	120pF	0 to +70	.460 (11.7)	.370 (9.4)	.180 (4.6)	.234 (5.9)	.025 (.6)	338-1058-ND	.91	.78	.65	CD15FD121J03
	150pF	0 to +70	.460 (11.7)	.370 (9.4)	.190 (4.8)	.234 (5.9)	.025 (.6)	338-1052-ND	.91	.78	.65	CD15FD151J03
	180pF	0 to +70	.460 (11.7)	.370 (9.4)	.190 (4.8)	.234 (5.9)	.025 (.6)	338-1082-ND	1.05	.90	.75	CD15FD181J03
	200pF	0 to +70	.460 (11.7)	.380 (9.7)	.190 (4.8)	.234 (5.9)	.025 (.6)	338-1063-ND	1.05	.90	.75	CD15FD201J03
	220pF	0 to +70	.460 (11.7)	.380 (9.7)	.200 (5.1)	.234 (5.9)	.025 (.6)	338-1046-ND	1.12	.96	.80	CD15FD221J03
	240pF	0 to +70	.460 (11.7)	.380 (9.7)	.200 (5.1)	.234 (5.9)	.025 (.6)	338-1079-ND	1.16	.99	.83	CD15FD241J03
	270pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1062-ND	1.26	1.08	.90	CD15FD271J03
	300pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1065-ND	1.47	1.26	1.05	CD15FD301J03
	330pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1045-ND	1.37	1.17	.98	CD15FD331J03
	390pF	0 to +70	.470 (11.9)	.390 (9.9)	.210 (5.3)	.234 (5.9)	.025 (.6)	338-1057-ND	1.65	1.41	1.18	CD15FD391J03
	470pF	0 to +70	.470 (11.9)	.400 (10.2)	.220 (5.6)	.234 (5.9)	.025 (.6)	338-1043-ND	1.89	1.62	1.35	CD15FD471J03
	470pF	0 to +70	.640 (16.3)	.510 (13.0)	.200 (5.1)	.344 (8.7)	.032 (.8)	338-1089-ND	1.58	1.35	1.13	CD19FD471J03
	500pF	0 to +70	.470 (11.9)	.400 (10.2)	.220 (5.6)	.234 (5.9)	.025 (.6)	338-1069-ND	1.89	1.62	1.35	CD15FD501J03
	510pF	0 to +70	.470 (11.9)	.400 (10.2)	.220 (5.6)	.234 (5.9)	.025 (.6)	338-1077-ND	2.00	1.71	1.43	CD15FD511J03
	680pF	0 to +70	.650 (16.5)	.510 (13.0)	.210 (5.3)	.344 (8.7)	.032 (.8)	338-1086-ND	1.86	1.59	1.33	CD19FD681J03
	820pF	0 to +70	.650 (16.5)	.510 (13.0)	.210 (5.3)	.344 (8.7)	.032 (.8)	338-1094-ND	1.86	1.59	1.33	CD19FD821J03
	1000pF	0 to +70	.650 (16.5)	.520 (13.2)	.220 (5.6)	.344 (8.7)	.025 (.6)	338-1044-ND	2.00	1.71	1.43	CD19FD102J03
	1500pF	0 to +70	.660 (16.8)	.520 (13.2)	.230 (5.8)	.344 (8.7)	.032 (.8)	338-1071-ND	2.59	2.22	1.85	CD19FD152J03
	2000pF	0 to +70	.670 (17.0)	.530 (13.5)	.240 (6.1)	.344 (8.7)	.032 (.8)	338-1074-ND	3.26	2.79	2.33	CD19FD202J03
	2200pF	0 to +70	.670 (17.0)	.530 (13.5)	.250 (6.4)	.344 (8.7)	.032 (.8)	338-1055-ND	3.26	2.79	2.33	CD19FD222J03
	4700pF	0 to +70	.700 (17.8)	.580 (14.7)	.350 (8.9)	.344 (8.7)	.032 (.8)	338-1067-ND	5.43	4.65	3.88	CD19FD472J03
	10000pF	0 to +70	.800 (20.3)	.890 (22.6)	.340 (8.6)	.438 (11.1)	.040 (1.0)	338-1078-ND	11.97	10.26	8.55	CD30FD103J03
Miniature												
300	5pF	-200 to +200	.270 (6.9)	.190 (4.8)	.110 (2.8)	.120 (3.0)	.016 (.4)	338-1073-ND	1.47	1.26	1.05	CD5CC050D03
	10pF	-200 to +200	.270 (6.9)	.190 (4.8)	.110 (2.8)	.120 (3.0)	.016 (.4)	338-1090-ND	1.05	.90	.75	CD5CC100J03
	15pF	-200 to +200	.270 (6.9)	.190 (4.8)	.120 (3.0)	.120 (3.0)	.016 (.4)	338-1083-ND	1.12	.96	.80	CD5CC150J03
	20pF	-20 to +100	.270 (6.9)	.200 (5.1)	.120 (3.0)	.120 (3.0)	.016 (.4)	338-1075-ND	1.12	.96	.80	CD5EC200J03
	22pF	-20 to +100	.270 (6.9)	.200 (5.1)	.120 (3.0)	.120 (3.0)	.016 (.4)	338-1080-ND	1.16	.99	.83	CD5EC220J03
	30pF	-20 to +100	.270 (6.9)	.200 (5.1)	.130 (3.3)	.120 (3.0)	.016 (.4)	338-1087-ND	1.26	1.08	.90	CD5EC300J03
	33pF	-20 to +100	.270 (6.9)	.200 (5.1)	.130 (3.3)	.120 (3.0)	.016 (.4)	338-1066-ND	1.33	1.14	.95	CD5EC330J03
	47pF	-20 to +100	.270 (6.9)	.210 (5.3)	.140 (3.6)	.120 (3.0)	.016 (.4)	338-1084-ND	1.47	1.26	1.05	CD5EC470J03
	100pF	0 to +70	.270 (6.9)	.240 (6.1)	.180 (4.6)	.120 (3.0)	.016 (.4)	338-1059-ND	2.17	1.86	1.55	CD5FC101J03

Hybrid Passive RF/Microwave Devices

Note: All drawings are top view.

These components are especially suited for Mobile Phones (Handsets and Base Stations), Navigation Devices (GPS), Pagers, Mobile Computing (PCs and PDAs), Mobile Data Terminals, Wireless Microphones, Cordless Phones as well as Wireless Local Area Network (WLAN) applications.
SPECIFICATIONS: Operating Temperature: -40°C to +85°C **Soldering:** 230°C for 5 seconds
BALUN: Ultra small, thin, high precision, with ultra-fine geometry baluns to meet your single-ended to double-ended to electronic circuitry interface requirements. Typical Application: Single/Double Ended Mixer, Differential Amp, Matching. **DIRECTIONAL COUPLER:** Miniaturized, high coupling efficiency, low-cost, with ultra-fine geometry directional couplers to meet your most demanding coupling needs. Typical Application: To control transmitted power. **DIRECTIONAL COUPLER with LC FILTER:** A directional coupler having the above same features and benefits, but also incorporating a LC Filter. Typical Application: To control transmitted power while suppressing spurious noise. **POWER DIVIDER:** Miniaturized, high efficiency/low-loss, with ultra-fine geometry, three port power divider to meet your circuitry power handling requirements. Typical Application: To divide internal signals (ex. VCO).

Fig. 1

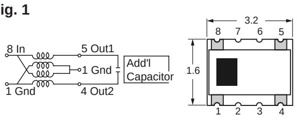


Fig. 2

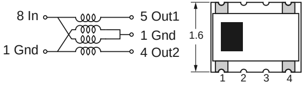


Fig. 3

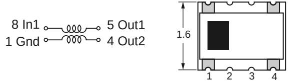


Fig. 4

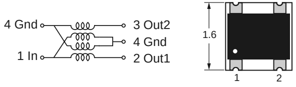


Fig. 5

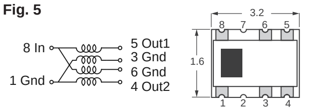


Fig. 6

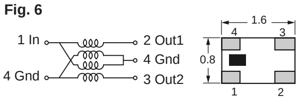


Fig. 7

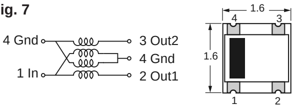


Fig. 8

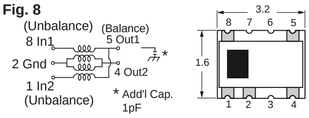


Fig. 9

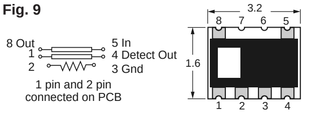


Fig. 10

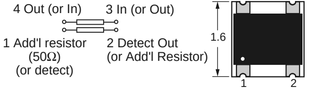


Fig. 11

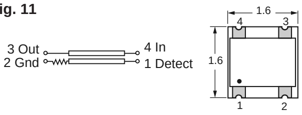


Fig. 12

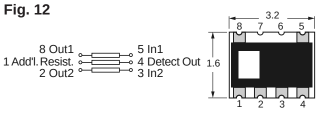


Fig. 13

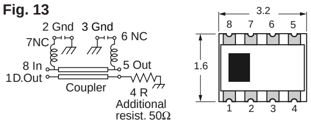


Fig. 14

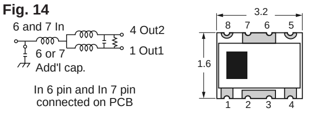


Fig. 15

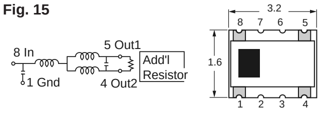


Fig. 16

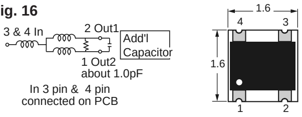


Fig. 17

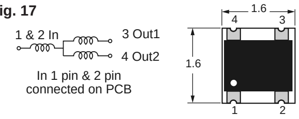


Fig.	Description	Operating Freq. (Mhz)	Impedance In/Out (ohms)	Insertion Loss (max.)	Difference of Phase (deg.)	Size (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Tape & Reel Pricing 4,000	Panasonic Part No.
1	Balun	130~500	50/200	3dB	180±15	3.2 x 1.6	P10702-ND	1.89	1.58	1.26	—	EHF-FD1617
2		670~900	50/200	1dB	180±15	3.2 x 1.6	P10704-ND	1.89	1.58	1.26	—	EHA-FD1615
3		700~1300	50/50	1dB	180±15	3.2 x 1.6	P10705CT-ND†	1.71	1.43	1.14	756.72/M	EHF-FD1618
4		750~950	50/200	1dB	180±15	1.6 x 1.6	P10703-ND	1.89	1.58	1.26	—	EHF-FD1622
4		950~1250	50/200	1dB	180±15	1.6 x 1.6	P10706CT-ND†	1.89	1.58	1.26	837.16/M	EHF-FD1620
2		1100~1450	50/200	1dB	180±15	3.2 x 1.6	P10707CT-ND†	1.89	1.58	1.26	837.16/M	EHF-FD1621
3		1200~2200	50/50	1dB	180±15	3.2 x 1.6	P10708CT-ND†	1.71	1.43	1.14	756.72/M	EHF-FD1619
5		1600~1800	50/200	1dB	180±15	3.2 x 1.6	P10709-ND	1.71	1.43	1.14	—	EHA-FD1611
6		1600~1950	50/200	1dB	180±15	1.6 x 0.8	P10701-ND	2.43	2.03	1.62	—	EHF-FD1750
5		1700~1900	50/200	1dB	180±15	3.2 x 1.6	P10711-ND	1.71	1.43	1.14	—	EHF-FD1626
7		1750~2300	50/200	1dB	180±15	1.6 x 1.6	P10710-ND	1.89	1.58	1.26	—	EHF-FD1624B
		3400~4000	50/200	2dB	180±15	1.6 x 1.6	P10712-ND	1.89	1.58	1.26	—	EHF-FD1624
8	Dual Balun	1805~1880 1930~1990	50/50	1.3dB	180±20	3.2 x 1.6	P10713-ND	1.89	1.58	1.26	—	EHF-FD1631

† For Tape & Reel Part Number, change CT to TR

Fig.	Description	Operating Freq. (Mhz)	Coupling Factor (dB±2)	Insertion Loss (max.)	Isolation (min.)	Volt. Standing Wave Ratio (max.)	Size (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Tape & Reel Pricing 4,000	Panasonic Part No.
9	Directional Coupler	800~1000	14	.35dB	20dB	1.3	3.2 x 1.6	P10686CT-ND††*	1.71	1.43	1.14	756.72/M	EHF-FD1736
10		800~1000	17	.25dB	25dB	1.3	1.6 x 1.6	P10684CT-ND††	1.62	1.35	1.08	717.99/M	EHF-FD1540
9		800~1000	17	.25dB	25dB	1.3	3.2 x 1.6	P10687-ND*	1.71	1.43	1.14	—	EHF-FD1746
10		800~1000	20	.20dB	25dB	1.3	1.6 x 1.6	P10692CT-ND††	1.62	1.35	1.08	717.99/M	EHF-FD1549
9		800~1000	20	.20dB	28dB	1.3	3.2 x 1.6	P10685-ND*	1.71	1.43	1.14	—	EHF-FD1555
9		1400~1600	17	.30dB	23dB	1.3	3.2 x 1.6	P10688-ND*	1.71	1.43	1.14	—	EHF-FD1745
9		1850~1950	14	.35dB	20dB	1.3	3.2 x 1.6	P10689-ND*	1.71	1.43	1.14	—	EHF-FD1735
9		1850~2000	20	.30dB	26dB	1.3	3.2 x 1.6	P10690-ND*	1.71	1.43	1.14	—	EHF-FD1550
10		1850~2000	14	.35dB	20dB	1.3	1.6 x 1.6	P10691-ND	1.62	1.35	1.08	—	EHF-FD1541
11		800~1000	17	.20dB	25dB	1.3	1.6 x 1.6	P10693-ND*	1.71	1.43	1.14	—	EHF-FD1546
12	Dual Directional Coupler	800~1000 1850~1950	14	.35dB	20dB	1.3	3.2 x 1.6	P10698-ND	1.93	1.61	1.29	—	EHF-FD1552

†† For Tape & Reel Part Number, change CT to TR * Requires 50 ohm termination resistor

Fig.	Description	Operating Freq. (Mhz)	Coupling Factor (dB)	Insertion Loss (max.)	2FO Attenuation (min.)	3FO Attenuation (min.)	Size (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Panasonic Part No.
13	Direct. Coupler with LC Filter	824~849	17	.50dB	20dB	18dB	3.2 x 1.6	P10694-ND	2.16	1.80	1.44	EHF-FD1724
		880~915	16.5	.45dB	20dB	18dB	3.2 x 1.6	P10695-ND	2.16	1.80	1.44	EHF-FD1722

Fig.	Description	Operating Freq. (Mhz)	Insertion Loss (max.)	Isolation (min.)	Volt. Standing Wave Ratio (max.)	Size (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Panasonic Part No.
14	Power Divider	720~760	4.0dB	18dB	1.9	3.2 x 1.6	P10715-ND	2.02	1.69	1.35	EHF-FD1502
15		1000~1050	4.0dB	18dB	1.9	3.2 x 1.6	P10716-ND	2.02	1.69	1.35	EHF-FD1508
15		1546~1630	4.0dB	18dB	1.9	3.2 x 1.6	P10717-ND	1.93	1.61	1.29	EHF-FD1503
15		1607~1685	4.0dB	18dB	1.7	3.2 x 1.6	P10718-ND	1.93	1.61	1.29	EHF-FD1506
15		1720~1790	4.0dB	18dB	1.9	3.2 x 1.6	P10719-ND	1.93	1.61	1.29	EHF-FD1513
15		1880~1920	4.0dB	18dB	1.9	3.2 x 1.6	P10720-ND	1.93	1.61	1.29	EHF-FD1507
15		2100~2200	4.0dB	18dB	1.7	3.2 x 1.6	P10721-ND	1.93	1.61	1.29	EHF-FD1509
16		2500	4.0dB	18dB	2.1	1.6 x 1.6	P10714-ND	1.93	1.61	1.29	EHF-FD1495

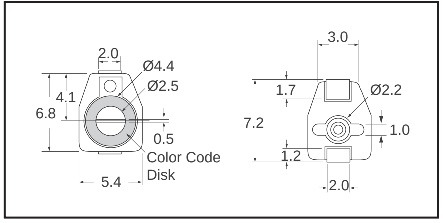
Fig.	Description	Operating Freq. (Mhz)	Insertion Loss In/Out1 (max.)	Insertion Loss In/Out2 (max.)	Divided Level Balance (max.)	Size (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Panasonic Part No.
17	Power Splitter	650~2000	4.0dB	4.0dB	2.0dB	1.6 x 1.6	P10699-ND	1.71	1.43	1.14	EHF-FD1545

SPRAGUE GOODMAN

GSX Series SMD Trimmer Capacitors

SPECIFICATIONS:
• **Operating Temperature Range:** –25°C to +85°C • **Voltage Rating:** 100 VDC • **Dielectric Withstanding Voltage:** 200 VDC • **Insulation Resistance:** 10^4 MΩ min. • **Torque:** 20 to 300 g-cm (0.28 to 4.2 oz-in)

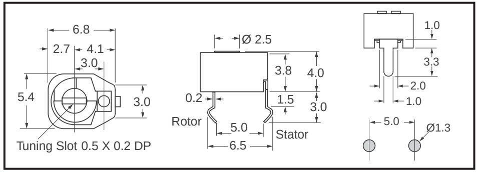
Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.) 10MHz	Color Code	Digi-Key Part No.	Cut Tape Pricing 10	100	Digi-Key Part No.	Tape/Reel Pricing 3,000	Sprague-Goodman Part No.
0.4	10.0	N100	1000	Black	SG2017CT-ND	14.70	126.00	SG2017TR-ND	625.41/M	GSX358
0.3	5.0	N100	1000	Orange	SG2018CT-ND	12.90	111.00	SG2018TR-ND	550.00/M	GSX364
0.5	15.0	N100	1000	Blue	SG2019CT-ND	16.30	140.00	SG2019TR-ND	700.00/M	GSX365
0.7	20.0	N100	1000	Green	SG2020CT-ND	23.44	200.94	SG2020TR-ND	1004.71/M	GSX366



GCL Series Trimmer Capacitors

SPECIFICATIONS:
- **Operating Temperature Range:** -25°C to 85°C
- **Voltage Rating:** 50 VDC
- **Dielectric Withstanding Voltage:** 100 VDC
- **Insulation Resistance:** 20 x 10^4 MΩ
- **Torque:** 0.21-3 oz-in (15-200 g-cm)

Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.) 1 MHz	Color Code	Digi-Key Part No.	Pricing 1	10	100	Sprague-Goodman Part No.
0.7	10.0	P350	1000	Brown	SG1034-ND	.58	5.00	35.00	GCL10000
0.8	20.0	P350	1000	Green	SG1035-ND	.58	5.00	35.00	GCL20000
0.9	30.0	P350	1000	Yellow	SG1036-ND	.85	7.30	51.00	GCL30000
1.0	40.0	P350	1000	Blue	SG1037-ND	.93	8.00	56.00	GCL40000



GKG Series Ceramic Trimmer Capacitors

SPECIFICATIONS: • **Operating Temperature Range:** –25°C to +85°C • **Voltage Rating:** 100 VDC • **Dielectric Withstanding Voltage:** 220 VDC • **Insulation Resistance:** 10^4 Megohms min.

Fig.	Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.)	Color Code	Digi-Key Part No.	Pricing 1	10	100	Sprague-Goodman Part No.
Top Adjust Ceramic Trimmer Capacitors										
1	2.8	10.0	0±250	300	White	SG1002-ND	.98	8.40	77.00	GKG10011
	4.0	20.0	N600±300	300	Red	SG1003-ND	.98	8.40	77.00	GKG20011
	5.5	30.0	N750±300	200	Green	SG1004-ND	.98	8.40	77.00	GKG30011
	6.5	40.0	N750±400	200	Yellow	SG1005-ND	.98	8.40	77.00	GKG40011
	8.0	50.0	N1200±600	200	Orange	SG1006-ND	1.05	9.00	82.50	GKG50011
	10.5	60.0	N1200±600	200	Brown	SG1007-ND	1.05	9.00	82.50	GKG60011
	12.0	70.0	N1200±600	200	Grey	SG1008-ND	1.05	9.00	82.50	GKG70011
	20.0	90.0	N1200±600	200	Black	SG1009-ND	1.05	9.00	82.50	GKG90011
Top Adjust Ceramic Trimmer Capacitors										
2	1.7	3.0	0±200	300	Red Dot*	SG1020-ND	.56	4.80	44.00	GKG3R021
	2.5	6.0	0±200	500	Blue	SG1021-ND	.56	4.80	44.00	GKG6R021
	3.5	10.0	0±200	500	White	SG1022-ND	.56	4.80	44.00	GKG10021
	5.5	20.0	N900±350	500	Red	SG1023-ND	.56	4.80	44.00	GKG20021
	7.5	30.0	N1100±450	300	Green	SG1024-ND	.56	4.80	44.00	GKG30021
	15.0	50.0	N1700±500	300	Orange	SG1026-ND	.56	4.80	44.00	GKG50021
Top Adjust Ceramic Trimmer Capacitors										
3	1.7	3.0	0±200	300	Red Dot*	SG1027-ND	.56	4.80	44.00	GKG3R024
	2.5	6.0	0±200	500	Blue	SG1028-ND	.56	4.80	44.00	GKG6R024
	3.5	10.0	0±200	500	White	SG1029-ND	.56	4.80	44.00	GKG10024
	5.5	20.0	N900±350	500	Red	SG1030-ND	.56	4.80	44.00	GKG20024
	7.5	30.0	N1100±450	300	Green	SG1031-ND	.56	4.80	44.00	GKG30024
	15.0	50.0	N1700±500	300	Orange	SG1033-ND	.56	4.80	44.00	GKG50024
Bottom Adjust Ceramic Trimmer Capacitors										
4A	1.0	3.0	NPO±250	300	Black	SG3R016-ND	.28	2.45	21.00	GKG3R016
	2.0	5.0	NPO±250	300	Blue	SG5R016-ND	.28	2.45	21.00	GKG5R016
	3.0	10.0	NPO±250	300	White	SG10016-ND	.28	2.45	21.00	GKG10016
	5.0	20.0	N750±250	300	Red	SG20016-ND	.28	2.45	21.00	GKG20016
	6.5	30.0	N1000±500	200	Green	SG30016-ND	.28	2.45	21.00	GKG30016
	7.0	40.0	N2200±800	200	Yellow	SG40016-ND	.28	2.45	21.00	GKG40016
	10.0	50.0	N2200±800	200	Brown	SG50016-ND	.44	3.85	33.00	GKG50016
	12.0	60.0	N2200±800	200	Brown	SG60016-ND	.44	3.85	33.00	GKG60016
	15.0	70.0	N2200±800	200	Brown	SG70016-ND	.44	3.85	33.00	GKG70016
Top Adjust Ceramic Trimmer Capacitors										
4B	1.0	3.0	NPO±250	300	Black	SG3R015-ND	.24	2.10	18.00	GKG3R015
	2.0	5.0	NPO±250	300	Blue	SG5R015-ND	.24	2.10	18.00	GKG5R015
	3.0	10.0	NPO±250	300	White	SG10015-ND	.24	2.10	18.00	GKG10015
	5.0	20.0	N750±250	300	Red	SG20015-ND	.24	2.10	18.00	GKG20015
	6.5	30.0	N1000±500	200	Green	SG30015-ND	.24	2.10	18.00	GKG30015
	7.0	40.0	N2200±800	200	Yellow	SG40015-ND	.24	2.10	18.00	GKG40015
	10.0	50.0	N2200±800	200	Brown	SG50015-ND	.40	3.50	30.00	GKG50015
	12.0	60.0	N2200±800	200	Brown	SG60015-ND	.40	3.50	30.00	GKG60015
	15.0	70.0	N2200±800	200	Brown	SG70015-ND	.40	3.50	30.00	GKG70015

* Marking on bottom of capacitor.

Tuning Tool

SG9007-ND 5mm Type (SG1002 through SG1019) $13.00
SG9005-ND 4 x 4.5mm Type (SG1020 through SG1033) $13.00

Fig. 1

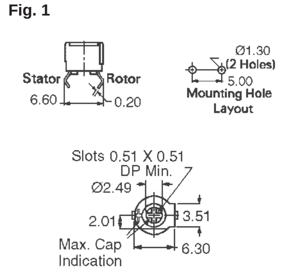


Fig. 2

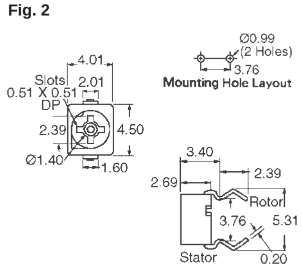


Fig. 3

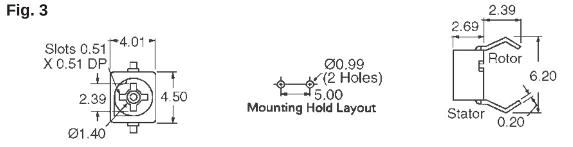


Fig. 4

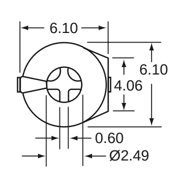


Fig. 4A

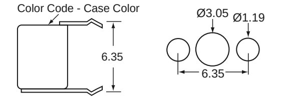
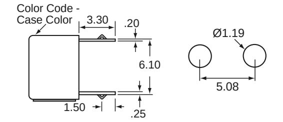


Fig. 4B



SURFTRIM® Surface Mount Variable Capacitors

• Sealed Construction • 4 x 4.5 x 2.7mm

FEATURES:
- Process seal provides protection against contaminants (flux, solvents, etc.) during production.
- Designed for vapor phase reflow soldering.

SPECIFICATIONS:
- **Operating Temperature Range:** –25°C to 85°C
- **Dielectric Withstanding Voltage:** 220 VDC
- **Insulation Resistance:** 10^4 Megohms min.
- **Voltage Rating:** 100 VDC
- **Torque:** 15 to 100 g-cm (0.2 to 1.39 in.-oz.)

Fig.	Capacitance (pF) Min.	Max.	TCC (ppm / °C)	Q (min.) 1MHz	Color Code	Digi-Key Part No.	Cut Tape Pricing 5	25	100	Digi-Key Part No.	Tape/Reel Pricing 700	Sprague-Goodman Part No.
1	1.4	3.0	0±200	300	Red Dot*	SG2000CT-ND	5.40	23.63	74.25	SG2000TR-ND	313.60	GKG3R066-07
	2.0	6.0	0±200	500	Blue	SG2001CT-ND	5.40	23.63	74.25	SG2001TR-ND	313.60	GKG6R066-07
	3.0	10.0	0±300	500	White	SG2002CT-ND	5.40	23.63	74.25	SG2002TR-ND	313.60	GKG10066-07
	4.5	20.0	N750±300	500	Red	SG2003CT-ND	5.40	23.63	74.25	SG2003TR-ND	313.60	GKG20066-07
	6.5	30.0	N900±450	300	Green	SG2004CT-ND	5.40	23.63	74.25	SG2004TR-ND	313.60	GKG30066-07
2	1.4	3.0	0±200	300	Red Dot*	SG2007CT-ND	6.40	28.00	88.00	SG2007TR-ND	371.70	GKG3R067-07
	2.0	6.0	0±200	500	Blue	SG2008CT-ND	6.40	28.00	88.00	SG2008TR-ND	371.70	GKG6R067-07
	3.0	10.0	0±300	500	White	SG2009CT-ND	6.40	28.00	88.00	SG2009TR-ND	371.70	GKG10067-07
	4.5	20.0	N750±300	500	Red	SG2010CT-ND	6.40	28.00	88.00	SG2010TR-ND	371.70	GKG20067-07
	6.5	30.0	N900±450	300	Green	SG2011CT-ND	6.40	28.00	88.00	SG2011TR-ND	371.70	GKG30067-07

*Marking on bottom of capacitor.

SG9005-ND Tuning Tool $13.00

Fig. 1

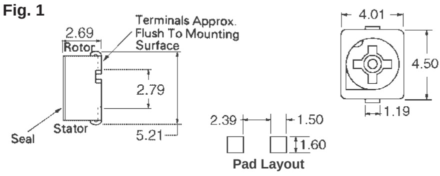
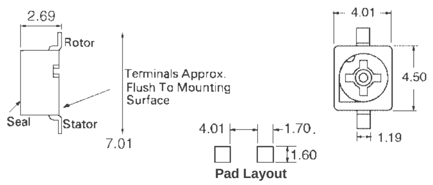


Fig. 2



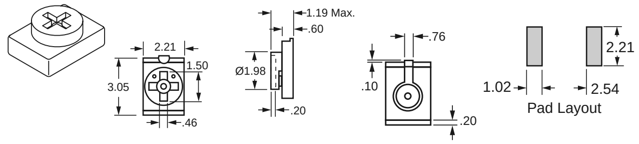
SPRAGUE GOODMAN

SURFTRIM® Surface Mount GKP and GKY Series Capacitors

Tuning Tool

GTT-11-ND (SG2014 - SG2016) **$3.75**
GTT-9-ND *NEW!* (SG2021 - SG2025) **$2.30**

GKP Series — 2.2mm x 3.1mm x 1.2mm



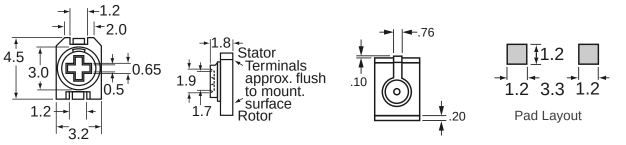
FEATURES:

• Thinnest and smallest chip type • Multilayer construction • Carrier and reel packaging standard

SPECIFICATIONS:

• **Operating Temperature Range:** -25°C – 85°C • **Dielectric Withstanding Voltage:** 55 VDC • **Insulation Resistance:** 10⁴ Megohms min. • **Voltage Rating:** 25 VDC • **Torque:** 0.14 to 1.39 oz-in.

GKY Series — 3.2mm x 4.5mm x 1.8mm



FEATURES:

• Designed for reflow soldering • Carrier and reel packaging standard

SPECIFICATIONS:

• **Operating Temperature Range:** -25°C to +85°C • **Dielectric Withstanding Voltage:** 220VDC • **Insulation Resistance:** 10⁴ Megohms min. • **Voltage Rating:** 100 VDC • **Torque:** 0.14 to 2.08 oz-in.

Capacitance (pF) Min.	Capacitance (pF) Max.	TCC (ppm / °C)	Q (min.) Code (1 MHz)	Color Code	Digi-Key Part No.	Cut Tape Pricing 5	25	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Sprague-Goodman Part No.
GKP Series												
2.5	6.0	NPO±500	200	—	SG2016CT-ND	7.20	31.50	99.00	SG2016TR-ND	2,000	540.00/M	GKP6R066
3.0	10.0	NPO±500	200	—	SG2014CT-ND	7.20	31.50	99.00	SG2014TR-ND	2,000	540.00/M	GKP10066
4.5	20.0	N750±500	200	—	SG2015CT-ND	7.20	31.50	99.00	SG2015TR-ND	2,000	540.00/M	GKP20066
GKY Series												
3.0	10.0	N400 +/- 400	500	White	SG2021CT-ND	5.20	22.75	71.50	SG2021TR-ND	1,000	431.60	GKY10066
5.0	20.0	N900 +/- 400	300	Red	SG2022CT-ND	5.20	22.75	71.50	SG2022TR-ND	1,000	431.60	GKY20066
6.0	30.0	N1200 +/- 500	300	Green	SG2023CT-ND	5.20	22.75	71.50	SG2023TR-ND	1,000	431.60	GKY30066
1.7	3.0	0 +/- 300	500	Brown	SG2024CT-ND	5.20	22.75	71.50	SG2024TR-ND	1,000	431.60	GKY3R066
2.5	6.0	0 +/- 300	500	Blue	SG2025CT-ND	5.20	22.75	71.50	SG2025TR-ND	1,000	431.60	GKY6R066

Top and Bottom/Side Adjust FILMTRIM® Plastic Dielectric Capacitors

GYA, GYB Series — 8mm; GYC, GYD, GZC, GZD Series — 10mm

Fig. 1

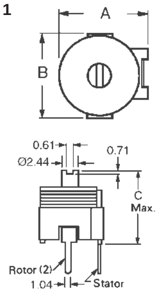


Fig. 1A
8 mm

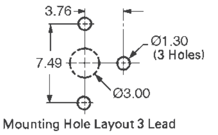


Fig. 1B
10 mm

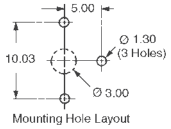


Fig. 2

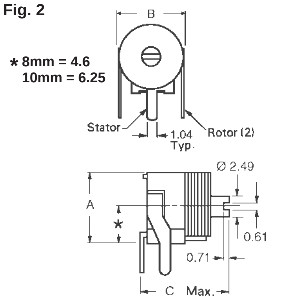


Fig. 2A
8 mm

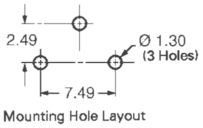
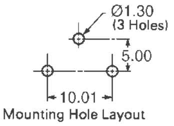


Fig. 2B
10 mm



FEATURES:

- Compact size
- Most stable TCC for single turn trimmers
- Low cost for commercial/industrial applications
- Linear capacitance change vs. rotation
- Typical applications: Mobile radios, transmitters, pagers, electronic games, wireless equipment, CATV

SPECIFICATIONS:

- **Dielectric Construction:** GYA, GYB, GYC, GYD Series: Polypropylene; GZC and GZD Series: Polycarbonate
- **Voltage Rating:** 100 WVDC
- **Dielectric Withstanding Voltage:** 200 VDC
- **Operating Temperature:** GYA and GYB Series: –40°C to 70°C; GYC, GYD, GZC, GZD Series: –40°C to 85°C
- **Contact Resistance:** <0.010 Ohm
- **Insulation Resistance:** >10,000 M Ohm
- **Torque:** GYA and GYB Series: 0.2-3.0 in.-oz.; GYC, GYD, GZC, GZD Series: 0.2-5.5 in.-oz.
- **Q (min) @ 1 MHz:** GYA, GYB, GYC, GYD Series: 1000; GZC and GZD Series: 200

Tuning Tool

SG9004-ND...................... **$15.44**

Fig.	Capacitance (pF) Min.	Capacitance (pF) Max.	TCC (ppm/°C)	Dimensions A	Dimensions B	Dimensions C	Color Code	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Sprague-Goodman Part No.
8mm												
1A	1.6	5.0	0±300	8.51	7.87	10.2	Gray	SG3000-ND	1.19	10.20	93.50	GYA5R000
	2.0	10.0	0±300	8.51	7.87	10.2	Yellow	SG3001-ND	1.19	10.20	93.50	GYA10000
	2.0	15.0	0±400	8.51	7.87	10.2	Blue	SG3002-ND	1.30	11.10	101.75	GYA15000
	2.2	22.0	0±400	8.51	7.87	10.2	Green	SG3003-ND	1.30	11.10	101.75	GYA22000
	2.3	27.0	0±350	8.51	7.87	10.2	Red	SG3004-ND	1.37	11.70	107.25	GYA27000
	3.0	36.0	0±300	8.51	7.87	10.2	Violet	SG3005-ND	2.00	17.10	156.75	GYA36000
2A	1.6	5.0	0±300	8.51	7.87	10.2	Gray	SG3020-ND	2.14	18.30	167.75	GYB5R000
	2.0	10.0	0±300	8.51	7.87	10.2	Yellow	SG3021-ND	2.14	18.30	167.75	GYB10000
	2.0	15.0	0±400	8.51	7.87	10.2	Blue	SG3022-ND	2.28	19.50	178.75	GYB15000
	2.2	22.0	0±400	8.51	7.87	10.2	Green	SG3023-ND	2.31	19.80	181.50	GYB22000
	2.3	27.0	0±350	8.51	7.87	10.2	Red	SG3024-ND	2.38	20.40	187.00	GYB27000
10mm												
1B	2.0	15.0	0±400	11	10.16	10.2	Blue	SG3006-ND	1.68	14.40	132.00	GYC15000
	3.0	20.0	0±400	11	10.16	10.2	Green	SG3007-ND	1.68	14.40	132.00	GYC20000
	3.5	40.0	0±350	11	10.16	10.2	Clear	SG3008-ND	1.65	14.10	129.25	GYC40000
	4.5	65.0	0±350	11	10.16	10.2	Yellow	SG3009-ND	1.68	14.40	132.00	GYC65000
2B	2.0	15.0	0±400	11	10.16	10.2	Blue	SG3025-ND	2.28	19.50	178.75	GYD15000
	3.0	20.0	0±400	11	10.16	10.2	Green	SG3026-ND	2.35	20.10	184.25	GYD20000
	3.0	40.0	0±350	11	10.16	10.2	Clear	SG3027-ND	2.52	21.60	198.00	GYD40000
	4.5	65.0	0±350	11	10.16	10.2	Yellow	SG3028-ND	2.77	23.70	217.25	GYD65000
1B	8.0	80.0	0±200	11	10.16	11.4	Red	SG3010-ND	2.28	19.50	178.75	GZC80000
	9.0	100.0	0±400	11	10.16	11.4	Violet	SG3011-ND	3.61	30.90	283.25	GZC10100
	9.0	120.0	0±350	11	10.16	11.4	Orange	SG3012-ND	5.36	45.90	420.75	GZC12100
	10.0	150.0	0±350	11	10.16	12.0	Orange	SG3013-ND	6.23	53.40	489.50	GZC15100
	10.0	180.0	0±350	11	10.16	12.0	Orange	SG3014-ND	7.32	62.70	574.75	GZC18100
2B	8.0	80.0	0±200	11	10.16	11.4	Red	SG3015-ND	3.05	26.10	239.25	GZD80000
	9.0	100.0	0±400	11	10.16	11.4	Violet	SG3016-ND	4.55	39.00	357.50	GZD10100
	9.0	120.0	0±350	11	10.16	11.4	Orange	SG3017-ND	6.16	52.80	484.00	GZD12100
	10.0	150.0	0±350	11	10.16	12.0	Orange	SG3018-ND	6.97	59.70	547.25	GZD15100
	10.0	180.0	0±350	11	10.16	12.0	Orange	SG3019-ND	7.77	66.60	610.50	GZD18100

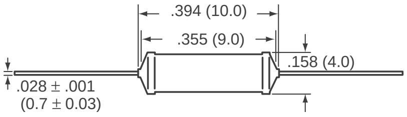
COMPONENTS NEW! 10% Metal Glazed Film Resistors — .50 Watt Low Ohm Surge Resistor LSR37

Features:

• High pulse-loading capability (flashes) • Good replacement for carbon-composite resistors **Applications**: • Application for overload and high voltage pulse hazard circuits **Description:** • A metal glazed film is deposited on a high grade ceramic body. After that caps are applied to the rods and electrolytic copper wires are welded to these end caps. The resistors are coated with a light-blue lacquer which provides electrical, mechanical and climatic protection.

CHARACTERISTICS:

• Dielectric Withstanding Voltage of the Insulation for 1 Minute: 700V



BC Components Standard Resistor Values

220	560	1.8K	4.7K
270	680	2.2K	5.6K
330	820	2.7K	6.8K
390	1.0K	3.3K	8.2K
470	1.5K	3.9K	10K

Description	Value Range	Digi-Key Part No.			Pricing			BC Components Part No.
			5	100	1,000	5,000	10,000	
.50 Watt, 10% Metal Glazed Film Reisistor; Tape & Reel (5,000/Reel)	220-10KΩ	BC + Value + "LTR-ND"	—	—	—	100.70/M	91.20/M	2322 245 22xxx
.50 Watt, 10% Metal Glazed Film Resistor; Cut Tape	220-10KΩ	BC + Value + "LCT-ND"	1.60	18.06	124.74	—	—	2322 245 22xxx

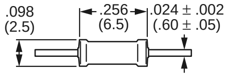
1% Metal Film Fixed Resistors — .40 Watt 5043ED Series

- Solder plated
- Copper leads

The resistors are coated with a light green lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:

• **Resistance Tolerance:** ±1% • **Temp.Coefficient:** ≤ ±100 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 0.40W • **Thermal Resistance, RTH:** 200°C/W • **Maximum Continuous Oper. Volt.:** 250 V (DC or RMS) • **Noise R ≤ 1 MΩ:** Maximum 0.1 µV/V • **Operating Temperature Range:** -55°C to +155°C



Description	Value Range	Digi-Key Part No.			Pricing			BC Components Part No.
			5	200	1,000	5,000	10,000	
.40 Watt, 1% Metal Film Fixed Resistor; Tape & Reel (5,000/Reel)	10.0 - 2.00M Ω	BC + Value + "YTR-ND"	—	—	—	22.50/M	19.20/M	5043EDxxxxxF12AF5
.40 Watt, 1% Metal Film Fixed Resistor; Cut Tape	10.0 - 2.00M Ω	BC + Value + "YCT-ND"	.95	14.50	37.50	—	—	5043EDxxxxxF12AF5

1% Metal Film Fixed Resistor Kits

Digi-Key® Assortment Kits

5 Each of Values 10.0Ω to 97.6Ω.
BCY1-KIT-ND **$34.95**

5 Each of Values 100Ω to 976Ω.
BCY2-KIT-ND **$34.95**

5 Each of Values 1.00KΩ to 9.76KΩ.
BCY3-KIT-ND **$34.95**

5 Each of Values 10.0KΩ to 97.6KΩ.
BCY4-KIT-ND **$34.95**

5 Each of Values 100KΩ to 2.00MΩ.
BCY5-KIT-ND **$46.95**

BC Components Standard Resistor Values

10.0	17.4	30.9	54.9	93.1	165	287	499	887	1.58K	2.80K	4.99K	8.66K	15.4K	27.4K	47.5K	82.5K	143K	255K	442K	787K	1.37M
10.2	17.8	31.6	56.2	95.3	169	294	511	909	1.62K	2.87K	5.10K	8.87K	15.8K	28.0K	48.7K	84.5K	147K	261K	453K	806K	1.40M
10.5	18.2	32.4	57.6	97.6	174	301	523	931	1.65K	2.94K	5.11K	9.09K	16.2K	28.7K	49.9K	86.6K	150K	267K	464K	825K	1.43M
10.7	18.7	33.2	59.0	100	178	309	536	953	1.69K	3.01K	5.23K	9.31K	16.5K	29.4K	51.1K	88.7K	154K	270K	475K	845K	1.47M
11.0	19.1	34.0	60.4	102	182	316	549	976	1.74K	3.09K	5.36K	9.53K	16.9K	30.1K	52.3K	90.9K	158K	274K	487K	866K	1.50M
11.3	19.6	34.8	61.9	105	187	324	562	1.00K	1.78K	3.16K	5.49K	9.76K	17.4K	30.9K	53.6K	93.1K	162K	280K	499K	887K	1.54M
11.5	20.0	35.7	62.0	107	191	332	576	1.02K	1.82K	3.24K	5.60K	10.0K	17.8K	31.6K	54.9K	95.3K	165K	287K	511K	909K	1.58M
11.8	20.5	36.5	63.4	110	196	340	590	1.05K	1.87K	3.32K	5.62K	10.2K	18.2K	32.4K	56.0K	97.6K	169K	294K	523K	910K	1.60M
12.0	21.0	37.4	64.9	113	200	348	604	1.07K	1.91K	3.40K	5.76K	10.5K	18.7K	33.2K	56.2K	100K	174K	301K	536K	931K	1.62M
12.1	21.5	38.3	66.5	115	205	357	619	1.10K	1.96K	3.48K	5.90K	10.7K	19.1K	34.0K	57.6K	102K	178K	309K	549K	953K	1.65M
12.4	22.1	39.2	68.1	118	210	365	634	1.13K	2.00K	3.57K	6.04K	11.0K	19.6K	34.8K	59.0K	105K	182K	316K	562K	976K	1.69M
12.7	22.6	40.2	69.8	121	215	374	649	1.15K	2.05K	3.65K	6.19K	11.3K	20.0K	35.7K	60.4K	107K	187K	324K	576K	1.00M	1.74M
13.0	23.2	41.2	71.5	124	220	383	665	1.18K	2.10K	3.74K	6.34K	11.5K	20.5K	36.0K	61.9K	110K	191K	332K	590K	1.02M	1.78M
13.3	23.7	42.2	73.2	127	221	392	681	1.21K	2.15K	3.83K	6.49K	11.8K	21.0K	36.5K	63.4K	113K	196K	340K	604K	1.05M	1.80M
13.7	24.3	43.2	75.0	130	226	402	698	1.24K	2.21K	3.92K	6.65K	12.1K	21.5K	37.4K	64.9K	115K	200K	348K	619K	1.07M	1.82M
14.0	24.9	44.2	76.8	133	232	412	715	1.27K	2.26K	4.02K	6.81K	12.4K	22.1K	38.3K	66.5K	118K	205K	357K	634K	1.10M	1.87M
14.3	25.5	45.3	78.7	137	237	422	732	1.30K	2.32K	4.12K	6.98K	12.7K	22.6K	39.2K	68.1K	120K	210K	365K	649K	1.13M	1.91M
14.7	26.1	46.4	80.6	140	243	430	750	1.33K	2.37K	4.22K	7.15K	13.0K	23.2K	40.2K	69.8K	121K	215K	374K	665K	1.15M	1.96M
15.0	26.7	47.5	82.0	143	249	432	768	1.37K	2.43K	4.32K	7.32K	13.3K	23.7K	41.2K	71.5K	124K	221K	383K	681K	1.18M	2.00M
15.4	27.4	48.7	82.5	147	255	442	787	1.40K	2.49K	4.42K	7.50K	13.7K	24.3K	42.2K	73.2K	127K	226K	392K	698K	1.21M	
15.8	28.0	49.9	84.5	150	261	453	806	1.43K	2.55K	4.53K	7.68K	14.0K	24.9K	43.2K	75.0K	130K	232K	402K	715K	1.24M	
16.2	28.7	51.1	86.6	154	267	464	825	1.47K	2.61K	4.64K	8.06K	14.3K	25.5K	44.2K	76.8K	133K	237K	412K	732K	1.27M	
16.5	29.4	52.3	88.7	158	274	475	845	1.50K	2.67K	4.75K	8.25K	14.7K	26.1K	45.3K	78.7K	137K	243K	422K	750K	1.30M	
16.9	30.1	53.6	90.9	162	280	487	866	1.54K	2.74K	4.87K	8.45K	15.0K	26.7K	46.4K	80.6K	140K	249K	432K	768K	1.33M	

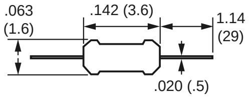
1% Metal Film Fixed Resistors — .40 Watt 5063JD "Spacemiser" Series

- Tin plated
- Copper leads

The resistors are coated with a blue lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:

• **Resistance Tolerance:** ±1% • **Temperature Coefficient:** ≤ ±100 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 0.40W • **Thermal Resistance, RTH:** 200°C/W • **Maximum Continuous Operating Voltage:** 200 V (DC or RMS) • **Noise R ≤ 1 MΩ:** Maximum 0.1 µV/V • **Operating Temperature Range:** -55°C to +125°C



Description	Value Range	Digi-Key Part No.			Pricing			BC Components Part No.
			5	200	1,000	5,000	10,000	
.40 Watt, 1% Metal Film Fixed Resistor; Tape & Reel (5,000/Reel)	10.0 - 2.00M Ω	BC + Value + "XTR-ND"	—	—	—	61.88/M	52.80/M	5063JDxxxxxF12AF5
.40 Watt, 1% Metal Film Fixed Resistor; Cut Tape	10.0 - 2.00M Ω	BC + Value + "XCT-ND"	1.95	29.73	76.88	—	—	5063JDxxxxxF12AF5

1% Metal Film Fixed Resistor Kits

Digi-Key® Assortment Kits

5 Each of Values 10.0Ω to 97.6Ω.
BCX1-KIT-ND **$69.95**

5 Each of Values 100Ω to 976Ω.
BCX2-KIT-ND **$69.94**

5 Each of Values 1.00KΩ to 9.76KΩ.
BCX3-KIT-ND **$69.94**

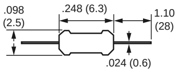
5 Each of Values 10.0KΩ to 97.6KΩ.
BCX4-KIT-ND **$69.94**

5 Each of Values 100KΩ to 2.00MΩ.
BCX5-KIT-ND **$94.96**

BC Components Standard Resistor Values

10.0	17.8	31.6	56.2	100	178	316	549	976	1.74K	3.09K	5.49K	9.53K	16.9K	30.1K	53.6K	93.1K	165K	287K	511K	866K	1.54M
10.2	18.2	32.4	57.6	102	182	324	562	1.00K	1.78K	3.16K	5.62K	9.76K	17.4K	30.9K	54.9K	95.3K	169K	294K	523K	887K	1.58M
10.5	18.7	33.2	59.0	105	187	332	576	1.02K	1.82K	3.24K	5.76K	10.0K	17.8K	31.6K	56.2K	97.6K	174K	301K	536K	909K	1.60M
10.7	19.1	34.0	60.4	107	191	340	590	1.05K	1.87K	3.32K	5.90K	10.2K	18.2K	32.4K	57.6K	100K	178K	309K	549K	931K	1.62M
11.0	19.6	34.8	61.9	110	196	348	604	1.07K	1.91K	3.40K	6.04K	10.5K	18.7K	33.2K	59.0K	102K	182K	316K	562K	953K	1.65M
11.3	20.0	35.7	63.4	113	200	357	619	1.10K	1.96K	3.48K	6.19K	10.7K	19.1K	34.0K	60.4K	105K	187K	324K	576K	976K	1.69M
11.5	20.5	36.5	64.9	115	205	365	634	1.13K	2.00K	3.57K	6.34K	11.0K	19.6K	34.8K	61.9K	107K	191K	332K	590K	1.00M	1.74M
11.8	21.0	37.4	66.5	118	210	374	649	1.15K	2.05K	3.65K	6.49K	11.3K	20.0K	35.7K	63.4K	110K	196K	340K	604K	1.02M	1.78M
12.1	21.5	38.3	68.1	121	215	383	665	1.18K	2.10K	3.74K	6.65K	11.5K	20.5K	36.5K	64.9K	113K	200K	348K	619K	1.05M	1.80M
12.4	22.1	39.2	69.8	124	221	390	681	1.21K	2.15K	3.83K	6.81K	11.8K	21.0K	37.4K	66.5K	115K	205K	357K	634K	1.07M	1.82M
12.7	22.6	40.2	71.5	127	226	392	698	1.24K	2.21K	3.92K	6.98K	12.1K	21.5K	38.3K	68.1K	118K	210K	365K	649K	1.10M	1.87M
13.0	23.2	41.2	73.2	130	232	402	715	1.27K	2.26K	4.02K	7.15K	12.4K	22.1K	39.2K	69.8K	121K	215K	374K	665K	1.13M	1.91M
13.3	23.7	42.2	75.0	133	237	412	732	1.30K	2.32K	4.12K	7.32K	12.7K	22.6K	40.2K	71.5K	124K	220K	383K	680K	1.15M	1.96M
13.7	24.3	43.2	76.8	137	243	422	750	1.33K	2.37K	4.22K	7.50K	13.0K	23.2K	41.2K	73.2K	127K	221K	392K	681K	1.18M	2.00M
14.0	24.9	44.2	78.7	140	249	432	768	1.37K	2.43K	4.32K	7.68K	13.3K	23.7K	42.2K	75.0K	130K	226K	402K	698K	1.21M	
14.3	25.5	45.3	80.6	143	255	442	787	1.40K	2.49K	4.42K	7.87K	13.7K	24.3K	43.2K	76.8K	133K	232K	412K	715K	1.24M	
14.7	26.1	46.4	82.5	147	261	453	806	1.43K	2.55K	4.53K	8.06K	14.0K	24.9K	44.2K	78.7K	137K	237K	422K	732K	1.27M	
15.0	26.7	47.5	84.5	150	267	464	825	1.47K	2.61K	4.64K	8.20K	14.3K	25.5K	45.3K	80.6K	140K	243K	432K	750K	1.30M	
15.4	27.4	48.7	86.6	154	274	475	845	1.50K	2.67K	4.75K	8.25K	14.7K	26.1K	46.4K	82.5K	143K	249K	442K	768K	1.33M	
15.8	28.0	49.9	88.7	158	280	487	866	1.54K	2.74K	4.87K	8.45K	15.0K	26.7K	47.5K	84.5K	147K	255K	453K	787K	1.37M	
16.2	28.7	51.1	90.9	162	287	499	887	1.58K	2.80K	4.99K	8.66K	15.4K	27.4K	48.7K	86.6K	150K	261K	464K	806K	1.40M	
16.5	29.4	52.3	93.1	165	294	511	909	1.62K	2.87K	5.11K	8.87K	15.8K	28.0K	49.9K	88.7K	154K	267K	475K	820K	1.43M	
16.9	30.1	53.6	95.3	169	301	523	931	1.65K	2.94K	5.23K	9.09K	16.2K	28.7K	51.1K	90.9K	158K	274K	487K	825K	1.47M	
17.4	30.9	54.9	97.6	174	309	536	953	1.69K	3.01K	5.36K	9.31K	16.5K	29.4K	52.3K	91.0K	162K	280K	499K	845K	1.50M	

1% Metal Film Fixed Resistors — .60 Watt B0207C-F Series



- Tin plated
- Copper leads

The resistors are coated with a blue lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±1% • **Temperature Coefficient:** ±50 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 0.60W • **Thermal Resistance, RTH:** 140°C/W • **Maximum Continuous Operating Voltage:** 300 V (DC or RMS) • **Noise R ≤ 1 MΩ:** Maximum 1.0 µV/V • **Operating Temperature Range:** -55°C to +155°C

1% Metal Film Fixed Resistor Kits

Digi-Key® Assortment Kits

5 Each of Values 10.0Ω to 97.6Ω.
BCZ1-KIT-ND **$57.95**

5 Each of Values 100Ω to 976Ω.
BCZ2-KIT-ND **$57.95**

5 Each of Values 1.00KΩ to 9.76KΩ.
BCZ3-KIT-ND **$57.95**

5 Each of Values 10.0KΩ to 97.6KΩ.
BCZ4-KIT-ND **$57.94**

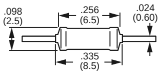
5 Each of Values 100KΩ to 2.20MΩ.
BCZ5-KIT-ND **$59.95**

BC Components Standard Resistor Values

10.0	19.6	38.3	75.0	147	287	562	1.10K	2.15K	4.22K	8.25K	16.2K	31.6K	63.4K	124K	243K	475K	931K
10.2	20.0	39.2	76.8	150	294	576	1.13K	2.21K	4.32K	8.45K	16.5K	32.4K	64.9K	127K	249K	487K	953K
10.5	20.5	40.2	78.7	154	301	590	1.15K	2.26K	4.42K	8.66K	16.9K	33.2K	66.5K	130K	255K	499K	976K
10.7	21.0	41.2	80.6	158	309	604	1.18K	2.32K	4.53K	8.87K	17.4K	34.0K	68.1K	133K	261K	511K	1.10M
11.0	21.5	42.2	82.5	162	316	619	1.21K	2.37K	4.64K	9.09K	17.8K	34.8K	69.8K	137K	267K	523K	1.20M
11.3	22.1	43.2	84.5	165	324	634	1.24K	2.43K	4.75K	9.31K	18.2K	35.7K	71.5K	140K	274K	536K	1.30M
11.5	22.6	44.2	86.6	169	332	649	1.27K	2.49K	4.87K	9.53K	18.7K	36.5K	73.2K	143K	280K	549K	1.50M
11.8	23.2	45.3	88.7	174	340	665	1.30K	2.55K	4.99K	9.76K	19.1K	37.4K	75.0K	147K	287K	562K	1.60M
12.1	23.7	46.4	90.9	178	348	681	1.33K	2.61K	5.11K	10.0K	19.6K	38.3K	76.8K	150K	294K	576K	1.80M
12.4	24.3	47.5	93.1	182	357	698	1.37K	2.67K	5.23K	10.2K	20.0K	39.2K	78.7K	154K	301K	590K	2.00M
12.7	24.9	48.7	95.3	187	365	715	1.40K	2.74K	5.36K	10.5K	20.5K	40.2K	80.6K	158K	309K	604K	2.20M
13.0	25.5	49.9	97.6	191	374	732	1.43K	2.80K	5.49K	10.7K	21.0K	41.2K	82.5K	162K	316K	619K	
13.3	26.1	51.1	100	196	383	750	1.47K	2.87K	5.62K	11.0K	21.5K	43.2K	84.5K	165K	324K	634K	
13.7	26.7	52.3	102	200	392	768	1.50K	2.94K	5.76K	11.3K	22.1K	44.2K	86.6K	169K	332K	649K	
14.0	27.4	53.6	105	205	402	787	1.54K	3.01K	5.90K	11.5K	22.6K	45.3K	88.7K	174K	340K	665K	
14.3	28.0	54.9	107	210	412	806	1.58K	3.09K	6.04K	11.8K	23.2K	46.4K	90.9K	178K	348K	681K	
14.7	28.7	56.2	110	215	422	825	1.62K	3.16K	6.19K	12.1K	23.7K	47.5K	93.1K	182K	357K	698K	
15.0	29.4	57.6	113	221	432	845	1.65K	3.24K	6.34K	12.4K	24.3K	48.7K	95.3K	187K	365K	715K	
15.4	30.1	59.0	115	226	442	866	1.69K	3.32K	6.49K	12.7K	24.9K	49.9K	97.6K	191K	374K	732K	
15.8	30.9	60.4	118	232	453	887	1.74K	3.40K	6.65K	13.0K	25.5K	51.1K	100K	196K	383K	750K	
16.2	31.6	61.9	121	237	464	909	1.78K	3.48K	6.81K	13.3K	26.1K	52.3K	102K	200K	392K	768K	
16.5	32.4	63.4	124	243	475	931	1.82K	3.57K	6.98K	13.7K	26.7K	53.6K	105K	205K	402K	787K	
16.9	33.2	64.9	127	249	487	953	1.87K	3.65K	7.15K	14.0K	27.4K	54.9K	107K	210K	412K	806K	
17.4	34.0	66.5	130	255	499	976	1.91K	3.74K	7.32K	14.3K	28.0K	56.2K	110K	215K	422K	825K	
17.8	34.8	68.1	133	261	511	1.00K	1.96K	3.83K	7.50K	14.7K	28.7K	57.6K	113K	221K	432K	845K	
18.2	35.7	69.8	137	267	523	1.02K	2.00K	3.92K	7.68K	15.0K	29.4K	59.0K	115K	226K	442K	866K	
18.7	36.5	71.5	140	274	536	1.05K	2.05K	4.02K	7.87K	15.4K	30.1K	60.4K	118K	232K	453K	887K	
19.1	37.4	73.2	143	280	549	1.07K	2.10K	4.12K	8.06K	15.8K	30.9K	61.9K	121K	237K	464K	909K	

Description	Value Range	Digi-Key Part No.			Pricing			BC Components Part No.
			5	200	1,000	5,000	10,000	
.60 Watt, 1% Metal Film Fixed Resistor; Tape & Reel (5,000/Reel)	10.0 - 2.20M Ω	BC + Value + “ZTR-ND”	—	—	—	50.63/M	43.20/M	B0207CxxxxxF5T
.60 Watt, 1% Metal Film Fixed Resistor; Cut Tape	10.0 - 2.20M Ω	BC + Value + “ZCT-ND”	1.66	25.38	65.63	—	—	B0207CxxxxxF5T

5% Power Metal Film Resistors — 1 Watt 5073NW Series



- Solder plated
- Copper leads

The resistors are coated with a red, nonflammable lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±5% • **Temperature Coefficient:** ±250 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 1.00W • **Maximum Continuous Operating Voltage:** 350 V (DC or RMS) • **Operating Temperature Range:** -55°C to +155°C

5% Power Metal Film Resistor Kits

Digi-Key® Assortment Kits

5 Each of Values 1.0Ω to 91Ω.
BCAW1-KIT-ND **$29.95**

5 Each of Values 100Ω to 9.1KΩ.
BCBW1-KIT-ND **$29.95**

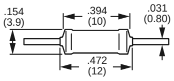
5 Each of Values 10KΩ to 1.0MΩ.
BCCW1-KIT-ND **$29.96**

BC Components Standard Resistor Values

1.0	3.6	12	43	150	510	1.8K	6.2K	22K	75K	270K	910K
1.1	3.9	13	47	160	560	2.0K	6.8K	24K	82K	300K	1.0M
1.2	4.3	15	51	180	620	2.2K	7.5K	27K	91K	330K	
1.3	4.7	16	56	200	680	2.4K	8.2K	30K	100K	360K	
1.5	5.1	18	62	220	750	2.7K	9.1K	33K	110K	390K	
1.6	5.6	20	68	240	820	3.0K	10K	36K	120K	430K	
1.8	6.2	22	75	270	910	3.3K	11K	39K	130K	470K	
2.0	6.8	24	82	300	1.0K	3.6K	12K	43K	150K	510K	
2.2	7.5	27	91	330	1.1K	3.9K	13K	47K	160K	560K	
2.4	8.2	30	100	360	1.2K	4.3K	15K	51K	180K	620K	
2.7	9.1	33	110	390	1.3K	4.7K	16K	56K	200K	680K	
3.0	10	36	120	430	1.5K	5.1K	18K	62K	220K	750K	
3.3	11	39	130	470	1.6K	5.6K	20K	68K	240K	820K	

Description	Value Range	Digi-Key Part No.			Pricing			BC Components Part No.
			5	100	1,000	5,000	10,000	
1 Watt, 5% Power Metal Film Resistor; Tape & Reel (5,000/Reel)	1.0 - 1.0M Ω	BC + Value + “W-1TR-ND”	—	—	—	50.62/M	45.84/M	5073NWxxxxxJ12AFX
1 Watt, 5% Power Metal Film Resistor; Cut Tape	1.0 - 1.0M Ω	BC + Value + “W-1CT-ND”	.80	8.40	62.37	—	—	5073NWxxxxxJ12AFX

5% Power Metal Film Resistors — 2 Watt 5083NW Series



- Solder plated
- Copper leads

The resistors are coated with a red, nonflammable lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±5% • **Temperature Coefficient:** ±250 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 2.00W • **Maximum Continuous Operating Voltage:** 500 V (DC or RMS) • **Operating Temperature Range:** -55°C to +155°C

5% Power Metal Film Resistor Kits

Digi-Key® Assortment Kits

5 Each of Values 1.0Ω to 91Ω.
BCAW2-KIT-ND.................................... **$39.95**

5 Each of Values 100Ω to 9.1KΩ.
BCBW2-KIT-ND.................................... **$39.95**

5 Each of Values 10KΩ to 1.0MΩ.
BCCW2-KIT-ND.................................... **$39.95**

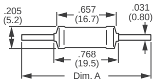
BC Components Standard Resistor Values

1.0	3.6	12	43	150	510	1.8K	6.2K	22K	75K	270K	910K
1.1	3.9	13	47	160	560	2.0K	6.8K	24K	82K	300K	1.0M
1.2	4.3	15	51	180	620	2.2K	7.5K	27K	91K	330K	
1.3	4.7	16	56	200	680	2.4K	8.2K	30K	100K	360K	
1.5	5.1	18	62	220	750	2.7K	9.1K	33K	110K	390K	
1.6	5.6	20	68	240	820	3.0K	10K	36K	120K	430K	
1.8	6.2	22	75	270	910	3.3K	11K	39K	130K	470K	
2.0	6.8	24	82	300	1.0K	3.6K	12K	43K	150K	510K	
2.2	7.5	27	91	330	1.1K	3.9K	13K	47K	160K	560K	
2.4	8.2	30	100	360	1.2K	4.3K	15K	51K	180K	620K	
2.7	9.1	33	110	390	1.3K	4.7K	16K	56K	200K	680K	
3.0	10	36	120	430	1.5K	5.1K	18K	62K	220K	750K	
3.3	11	39	130	470	1.6K	5.6K	20K	68K	240K	820K	

Description	Value Range	Digi-Key Part No.			Pricing			BC Components Part No.
			5	100	1,000	5,000	10,000	
2 Watt, 5% Power Metal Film Resistor; Tape & Reel (5,000/Reel)	1.0 - 1.0M Ω	BC + Value + “W-2TR-ND”	—	—	—	100.70/M	91.20/M	5083NWxxxxxJ12AFX
2 Watt, 5% Power Metal Film Resistor; Cut Tape	1.0 - 1.0M Ω	BC + Value + “W-2CT-ND”	1.60	18.06	124.74	—	—	5083NWxxxxxJ12AFX

5% Power Metal Film Resistors — 3 Watt 5093NW Series

- Solder plated • Copper leads



The resistors are coated with a red, nonflammable lacquer which provides electrical, mechanical, and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with MIL-STD-202E, Method 215, and IEC 68-2-45.

CHARACTERISTICS:
• **Resistance Tolerance:** ±5% • **Temperature Coefficient:** ±250 ppm/°C • **Abs. Maximum Dissipation at TAMB = 70°C:** 3.00W • **Maximum Continuous Operating Voltage:** 750 V (DC or RMS) • **Operating Temperature Range:** -55°C to +155°C

5 % Power Metal Film Resistor Kits

Digi-Key® Assortment Kits

NEW! 5 Each of Values 10Ω to 430Ω
BCAW3J-KIT-ND **$59.95**

NEW! 5 Each of Values 470Ω to 20KΩ
BCBW3J-KIT-ND.. **$59.95**

NEW! 5 Each of Values 22KΩ to 1.0MΩ
BCCW3J-KIT-ND.. **$59.95**

BC Components Standard Resistor Values

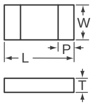
10	30	82	240	680	2.0K	5.6K	16K	47K	130K	390K
11	33	91	270	750	2.2K	6.2K	18K	51K	150K	430K
12	36	100	300	820	2.4K	6.8K	20K	56K	160K	470K
13	39	110	330	910	2.7K	7.5K	22K	62K	180K	510K
15	43	120	360	1.0K	3.0K	8.2K	24K	68K	200K	560K
16	47	130	390	1.1K	3.3K	9.1K	27K	75K	220K	620K
18	51	150	430	1.2K	3.6K	10K	30K	82K	240K	680K
20	56	160	470	1.3K	3.9K	11K	33K	91K	270K	750K
22	62	180	510	1.5K	4.3K	12K	36K	100K	300K	820K
24	68	200	560	1.6K	4.7K	13K	39K	110K	330K	910K
27	75	220	620	1.8K	5.1K	15K	43K	120K	360K	1.0M

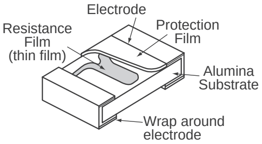
Description	Value Range	Digi-Key Part No.			Pricing			BC Components Part No.
			5	100	500	1,000	5,000	
3 Watt, 5% Power Metal Film Resistors; Tape & Box (500/AMMO Pack), Dim. A = 3.15” (80mm)	10 - 1.0M Ω	BC + Value + “W-3TB-ND”	—	—	107.52	199.58	178.08/M	5093NWxxxxxJ08AFX
3 Watt, 5% Power Metal Film Resistors; Cut Tape, Dim. A = 3.15” (80mm)	10 - 1.0M Ω	BC + Value + “W-3CT-ND”	2.71	30.62	—	—	—	5093NWxxxxxJ08AFX
3 Watt, 5% Power Metal Film Resistors; Tape & Box (500/AMMO Pack), Dim. A = 2.48” (63mm)	10 - 1.0M Ω	BC + Value + “W-3JTB-ND” *NEW!*	—	—	107.52	199.58	178.08/M	5093NWxxxxxJ
3 Watt, 5% Power Metal Film Resistors; Cut Tape, Dim. A = 2.48” (63mm)	10 - 1.0M Ω	BC + Value + “W-3JCT-ND” *NEW!*	2.71	30.62	—	—	—	5093NWxxxxxJ

THIN FILM TECHNOLOGY
SSM SUSUMU CO., LTD

SMT Thin Film Chip Resistors – High Precision RR Series

Excellent in resistance tolerance, thermal coefficient of resistance, high-frequency characteristics, current-noise-free characteristics, and minimized third harmonic distortion. The SMD components contribute to lead-free composistion of electronics products.





Dimension (mm)	RR0306 (0201)	RR0510 (0402)	RR0816 (0603)	RR1220 (0805)
L	0.60 ±0.05	1.00 ±0.05	1.60 ±0.20	2.00 ±0.20
W	0.30 ±0.05	0.50 ±0.05	0.80 ±0.20	1.25 ±0.20
P	0.12 ±0.05	0.20 ±0.10	0.30 ±0.20	0.40 ±0.20
T	0.23 ±0.03	0.35 ±0.05	0.40 ±0.10	0.40 ±0.10

Types – RR0816, RR1220

Type	RR0816	RR1220
Package Size	**(0603)**	**(0805)**
Power	1/16W	1/10W
Resistance Tolerance	±0.1% (B)	±0.1% (B)
TCR ppm/°C	±25	±25
Resistance Values	E24/E-96	E-24/E-96
Max. Operating Voltage	75V	100V

.1%, 1/16 Watt – 0603 Series

Resistor Values

100	1.0K	10.0K	15.0K	22.0K	33.0K	130K
330	2.4K	11.0K	18.0K	24.0K	51.0K	200K
560	5.6K	13.0K	20.0K	27.0K	100K	220K

Value Range	Digi-Key Part No.	Pricing					Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
100 - 220KΩ	RR08P + Value + BTR-ND	—	—	—	126.00/M	113.40/M	RR0816P-xxx-B
Cut Tape							
100 - 220KΩ	RR08P + Value + BCT-ND	6.33	17.02	39.10	—	—	RR0816P-xxx-B

.1%, 1/10 Watt – 0805 Series

Resistor Values

100	1.2K	2.2K	10.0K	24.0K	51.0K	120K
750	1.3K	3.0K	11.0K	27.0K	62.0K	1.0M
820	1.5K	4.7K	15.0K	33.0K	100K	
1.0K	2.0K	7.5K	20.0K	39.0K	110K	

Value Range	Digi-Key Part No.	Pricing					Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
100 - 1.0MΩ	RR12P + Value + BTR-ND	—	—	—	126.00/M	113.40/M	RR1220P-xxx-B
Cut Tape							
100 - 1.0MΩ	RR12P + Value + BCT-ND	6.33	17.02	39.10	—	—	RR1220P-xxx-B

Types – RR0306, RR0510, RR0816, RR1220

Type	RR0306	RR0510	RR0816	RR1220
Package Size	**(0201)**	**(0402)**	**(0603)**	**(0805)**
Power	1/20W	1/16W	1/16W	1/10W
Res. Tolerance	±0.5%(D)	±0.5%(D)	±0.5%(D)	±0.5%(D)
TCR ppm/°C	±25(P)	±100(R) ±25 (P)	±50(Q) ±25(P)	±25(P) ±50(Q)
Resistance Values	E-24	E-24/E-96	E24/E-96	E-24/E-96
Max. Operating Voltage	15V	25V	75V	100V

.5%, 1/20 Watt – 0201 Series

Resistor Values

82	100	120	130	560	3.3K	3.9K	5.6K	6.8K	8.2K

Value Range	Digi-Key Part No.	Pricing					Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
82 - 8.2KΩ	RR03P + Value + DTR-ND	—	—	—	54.00/M	48.60/M	RR0306P-xxx-D
Cut Tape							
82 - 8.2KΩ	RR03P + Value + DCT-ND	3.03	8.14	18.70	—	—	RR0306P-xxx-D

.5%, 1/16 Watt – 0402 Series

Resistor Values

10	56	160	360	750	1.8K	3.9K	8.2K	20.0K	43.0K	100K
15	68	180	390	820	2.0K	4.3K	9.1K	22.0K	47.0K	
24	75	200	430	910	2.2K	4.7K	10.0K	24.0K	51.0K	
27	82	220	470	1.0K	2.4K	5.1K	12.0K	27.0K	56.0K	
30	100	240	510	1.2K	2.7K	5.6K	13.0K	30.0K	62.0K	
33	110	270	560	1.3K	3.0K	6.2K	15.0K	33.0K	68.0K	
39	130	300	620	1.5K	3.3K	6.8K	16.0K	36.0K	75.0K	
51	150	330	680	1.6K	3.6K	7.5K	18.0K	39.0K	82.0K	

Value Range	Digi-Key Part No.	Pricing					Susumu Part No.
		10	50	200	10,000	30,000	
Tape & Reel (10,000 / Reel)							
10 - 82Ω	RR05R + Value + DTR-ND	—	—	—	12.69/M	11.28/M	RR0510R-xxx-D
Cut Tape							
10 - 82Ω	RR05R + Value + DCT-ND	1.20	3.22	7.40	—	—	RR0510R-xxx-D
Tape & Reel (10,000 Per Reel)							
100 - 100KΩ	RR05P + Value + DTR-ND	—	—	—	12.69/M	11.28/M	RR0510P-xxx-D
Cut Tape							
100 - 100KΩ	RR05P + Value + DCT-ND	1.20	3.22	7.40	—	—	RR0510P-xxx-D

.5%, 1/16 Watt – 0603 Series

Resistor Values

10	56	270	680	2.4K	7.5K	20.5K	47.5K	180K
12	62	300	750	2.7K	8.2K	22.0K	49.9K	200K
15	68	301	820	3.0K	8.25K	22.1K	51.0K	220K
18	68.1	330	825	3.01K	9.1K	22.6K	56.0K	221K
20	75	332	910	3.3K	10.0K	23.2K	56.2K	240K
22	82	348	1.0K	3.32K	10.5K	24.0K	62.0K	249K
22.1	91	360	1.02K	3.6K	11.0K	27.0K	68.0K	270K
24	100	390	1.1K	3.9K	12.0K	28.0K	68.1K	284K
27	110	392	1.2K	4.22K	12.4K	30.0K	75.0K	300K
33	120	422	1.3K	4.3K	13.0K	30.1K	82.0K	301K
33.2	130	430	1.47K	4.7K	13.3K	33.0K	90.9K	309K
36	150	470	1.5K	4.75K	15.0K	34.0K	91.0K	330K
39	160	475	1.6K	4.99K	16.0K	36.0K	100K	332K
39.2	180	499	1.69K	5.1K	16.5K	39.0K	110K	357K
43	200	510	1.8K	5.11K	17.8K	40.2K	120K	360K
47	220	560	2.0K	5.6K	18.0K	43.0K	130K	
47.5	221	562	2.2K	6.2K	18.2K	44.2K	150K	
51	240	620	2.21K	6.8K	20.0K	47.0K	160K	

Value Range	Digi-Key Part No.	Pricing					Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
10 - 91Ω	RR08Q + Value + DTR-ND	—	—	—	19.50/M	17.55/M	RR0816Q-xxx-D
Cut Tape							
10 - 91Ω	RR08Q + Value + DCT-ND	1.44	3.89	8.93	—	—	RR0816Q-xxx-D
Tape & Reel (5,000 Per Reel)							
100 - 360KΩ	RR08P + Value + DTR-ND	—	—	—	19.50/M	17.55/M	RR0816P-xxx-D
Cut Tape							
100 - 360KΩ	RR08P + Value + DCT-ND	1.44	3.89	8.93	—	—	RR0816P-xxx-D

.5%, 1/10 Watt – 0805 Series

Resistor Values

10	75	390	1.6K	4.7K	9.53K	22.1K	56.2K	220K
12	82	430	1.8K	4.75K	10.0K	24.0K	59.0K	240K
15	91	470	2.0K	4.87K	10.2K	24.9K	62.0K	249K
16	100	499	2.05K	4.99K	10.5K	25.5K	64.9K	270K
18	110	510	2.15K	5.1K	11.0K	27.0K	68.0K	300K
20	120	560	2.2K	5.11K	12.0K	30.0K	71.5K	330K
22	130	620	2.4K	5.6K	12.4K	30.1K	75.0K	360K
24	150	680	2.43K	5.62K	12.7K	33.0K	82.0K	390K
27	160	681	2.7K	6.04K	13.0K	33.2K	84.5K	430K
30	180	750	2.94K	6.2K	13.3K	36.0K	91.0K	470K
33	200	820	3.0K	6.65K	14.0K	39.0K	100K	510K
39	215	910	3.01K	6.8K	15.0K	43.0K	110K	560K
47	220	1.0K	3.24K	6.81K	16.0K	44.2K	120K	680K
49.9	240	1.1K	3.3K	7.15K	18.0K	45.3K	130K	750K
51	270	1.2K	3.32K	7.5K	18.7K	47.0K	150K	820K
56	300	1.3K	3.6K	8.06K	19.1K	49.9K	160K	910K
62	330	1.5K	3.9K	8.2K	20.0K	51.0K	180K	1.0M
68	360	1.58K	4.3K	9.1K	22.0K	56.0K	200K	

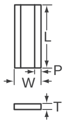
Value Range	Digi-Key Part No.	Pricing					Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
10 - 91Ω	RR12Q + Value + DTR-ND	—	—	—	19.50/M	17.55/M	RR1220Q-xxx-D
Cut Tape							
10 - 91Ω	RR12Q + Value + DCT-ND	1.44	3.89	8.93	—	—	RR1220Q-xxx-D
Tape & Reel (5,000 Per Reel)							
100 - 1.0MΩ	RR12P + Value + DTR-ND	—	—	—	19.50/M	17.55/M	RR1220P-xxx-D
Cut Tape							
100 - 1.0MΩ	RR12P + Value + DCT-ND	1.44	3.89	8.93	—	—	RR1220P-xxx-D

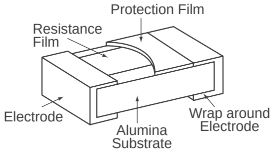
THIN FILM TECHNOLOGY

SSM SUSUMU CO., LTD

SMT Thin Film Chip Resistors – Low Resistance RL Series

A specially designed construction assures small dimensions and repressed surface temperature increase due to heat radiation and thermal conduction. This construction also minimizes the thermal effects on peripheral areas. Patent 2963671.
The SMD components contribute to lead-free composition of electronics products.





Dimension (mm)	RL3720 (0815)	RL3720W (0815)	RL7520W (0830)
L	3.75 ± 0.30	3.75 ± 0.30	7.50 ± 0.30
W	2.00 ± 0.20	2.00 ± 0.20	2.00 ± 0.20
P	0.40 ± 0.20	0.40 ± 0.20	0.40 ± 0.20
T	0.40 ± 0.10	0.40 + 0.15/-0.10	0.40 + 0.15/-0.10

Types – RL3720, RL3720W, RL7520W

Type	RL3720	RL3720W	RL7520W
Package Size	(0815)	(0815)	(0830)
Power	1/2W	1W	2W
Res. Tolerance	±1% (F) ±2% (G)	±1% (F) ±2 %(G)	±1% (F) ±2% (G)
TCR ppm/°C	0~+350 (T) 0~+200 (S)	0~+350 (T)	0~+350 (T)
Resistance Values	E-6	E-6	E-6

1%, 1/2 Watt – 0815 Series

Resistor Values .018 .022 .047 .10

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	4,000	12,000	
Tape & Reel (4,000 Per Reel)							
.018 - .047Ω	RL37T + Value + FTR-ND	—	—	—	283.50/M	255.15/M	RL3720T-xxx-F
Cut Tape							
.018 - .047Ω	RL37T + Value + FCT-ND	13.54	36.45	83.73	—	—	RL3720T-xxx-F
Tape & Reel (4,000 Per Reel)							
.10Ω	RL37S + Value + FTR-ND	—	—	—	283.50/M	255.15/M	RL3720S-xxx-F
Cut Tape							
.10Ω	RL37S + Value + FCT-ND	13.54	36.45	83.73	—	—	RL3720S-xxx-F

1%, 1 Watt – 0815 Series

Value	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	4,000	12,000	
Tape & Reel (4,000 Per Reel)							
.01Ω	RL37WT.01FTR-ND	—	—	—	378.00/M	340.20/M	RL3720WT-R010-F
Cut Tape							
.01Ω	RL37WT .01FCT-ND	17.88	48.10	110.50	—	—	RL3720WT-R010-F

1%, 2 Watt – 0830 Series

Resistor Values .01 .02

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	4,000	12,000	
Tape & Reel (4,000 Per Reel)							
.01 - .02Ω	RL75WT + Value + FTR-ND	—	—	—	409.50/M	368.55/M	RL7520WT-xxx-F
Cut Tape							
.01 - .02Ω	RL75WT + Value + FCT-ND	19.32	51.99	119.43	—	—	RL7520WT-xxx-F

2%, 1/2 Watt – 0815 Series

Resistor Values .018 .022 .047 .10

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	4,000	12,000	
Tape & Reel (4,000 Per Reel)							
.018 - .047Ω	RL37T + Value +GTR-ND	—	—	—	258.00/M	232.20/M	RL3720T-xxx-G
Cut Tape							
.018 - .047Ω	RL37T + Value + GCT-ND	12.38	33.30	76.50	—	—	RL3720T-xxx-G
Tape & Reel (4,000 Per Reel)							
.10Ω	RL37S + Value + GTR-ND	—	—	—	258.00.M	232.20.M	RL3720S-xxx-G
Cut Tape							
.10Ω	RL37S + Value + GCT-ND	12.38	33.30	76.50	—	—	RL3720S-xxx-G

2%, 1 Watt – 0815 Series

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	4,000	12,000	
Tape & Reel (4,000 Per Reel)							
.01Ω	RL37WT.01GTR-ND	—	—	—	348.00/M	313.20/M	RL3720WT-R010-G
(Cut Tape)							
.01Ω	RL37WT.01GCT-ND	16.50	44.40	102.00	—	—	RL3720WT-xxx-G

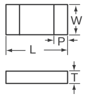
2%, 2 Watt – 0830 Series

Resistor Values .01 .02

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	4,000	12,000	
Tape & Reel (4,000 Per Reel)							
.01 - .02Ω	RL75WT + Value + GTR-ND	—	—	—	393.00/M	353.70/M	RL7520WT-xxx-G
Cut Tape							
.01 - .02Ω	RL75WT + Value + GCT-ND	18.56	49.95	114.75	—	—	RL7520WT-xxx-G

Types – RL0510, RL1220

Dimension (mm)	RL0510 (0402)	RL1220 (0805)
L	1.00 ± 0.10	2.00 ± 0.20
W	0.50 ± 0.10	1.25 ± 0.20
P	0.20 ± 0.10	0.40 ± 0.20
T	0.35 ± 0.10	0.40 ± 0.20



Type	RL0510	RL1220		
Package Size	(0402)	(0805)		
Power	1/8W	1/4W		
Res. Tolerance	±1%(F) ±2%(G)	±1%(F)	±2%(G)	±5%(J)
TCR ppm/°C	0 ~ +200 (S)	0 ~ +200 (S)		0 ~ +350 (T)
Resistance Values	E-6	E-12		

1%, 1/4 Watt – 0805 Series

Resistor Values

.10	.15	.20	.24	.33	.47	.82	1.30	1.80	2.70	4.70
.12	.18	.22	.30	.36	.68	1.00	1.50	2.20	3.30	10.0

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
.10 - 10.0Ω	RL12S + Value + FTR-ND	—	—	—	63.00/M	56.70/M	RL1220S-xxx-F
Cut Tape							
.10 - 10.0Ω	RL12S + Value + FCT-ND	3.44	9.25	21.25	—	—	RL1220S-xxx-F

1%, 1/8 Watt – 0402 Series

Resistor Values .15 .22 1.0 2.2 3.3

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	10,000	30,000	
Tape & Reel (10,000 Per Reel)							
.15 - 3.3Ω	RL05S + Value + FTR-ND	—	—	—	105.30/M	93.60/M	RL0510S-xxx-F
Cut Tape							
.15 - 3.3Ω	RL05S + Value + FCT-ND	5.91	15.91	36.55	—	—	RL0510S-xxx-F

2%, 1/8 Watt – 0402 Series

Resistor Values .15 .22 1.0 2.2

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	10,000	30,000	
Tape & Reel (10,000 Per Reel)							
.15 - 2.2Ω	RL05S + Value + GTR-ND	—	—	—	99.90/M	88.80/M	RL0510S-xxx-G
Cut Tape							
.15 - 2.2Ω	RL05S + Value + GCT-ND	5.64	15.17	34.85	—	—	RL0510S-xxx-G

2%, 1/4 Watt – 0805 Series

Resistor Values

.022	.056	.082	.15	.22	.33	.68	1.30	2.20	4.70
.033	.068	.10	.18	.24	.36	.82	1.50	2.70	10.0
.047	.075	.12	.20	.30	.47	1.00	1.80	3.30	

Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
.022 - .082Ω	RL12T + Value +GTR-ND	—	—	—	105.00/M	94.50/M	RL1220T-xxx-G
Cut Tape							
.022 - .082Ω	RL12T + Value + GCT-ND	5.36	14.43	33.15	—	—	RL1220T-xxx-G
Tape & Reel (5,000 Per Reel)							
.10 - 10.0Ω	RL12S + Value + GTR-ND	—	—	—	63.00/M	56.70/M	RL1220T-xxx-G
Cut Tape							
.10 - 10.0Ω	RL12S + Value + GCT-ND	3.44	9.25	21.25	—	—	RL1220T-xxx-G

5%, 1/4 Watt – 0805 Series

Resistor Values

.022	.033	.047	.056	.068	.075	.082

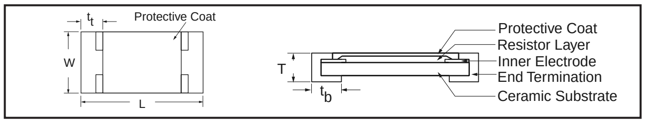
Value Range	Digi-Key Part No.			Pricing			Susumu Part No.
		10	50	200	5,000	10,000	
Tape & Reel (5,000 Per Reel)							
.022 - .082Ω	RL12T + Value + JTR-ND	—	—	—	78.00/M	70.20/M	RL1220T-xxx-J
Cut Tape							
.022 - .082Ω	RL12T + Value + JCT-ND	4.13	11.10	25.50	—	—	RL1220T-xxx-J

YAGEO AMERICA Surface Mount 1% & 5% Thick Film Chip Resistors

DESCRIPTION: The resistors are constructed on a high grade ceramic body (aluminum oxide). Internal metal electrodes are added at each end and connected by a resistive paste which is applied to the top surface of the substrate. The composition of the paste is adjusted to give the approximate resistance required and the value is trimmed to within tolerance, by laser cutting of the resistive layer. The resistive layer is covered with a protective coat. Finally, the two external end terminations are added. For ease of soldering the outerlayer of these end terminations is a lead/tin alloy.

Size Code	**0402**		**0603**	
	1%	**5%**	**1%**	**5%**
Temperature Coefficient **1Ω ≤ R ≤ 10Ω** **10Ω ≤ R ≤ 10MΩ**	≤250±250 ≤±200	≤250±250x10^{-6}/K ≤±200x10^{-6}/K	≤250±250 ≤±100	≤250±250x10^{-6}/K ≤±200x10^{-6}/K
Maximum dissipation at T_{amb} = 70°C	0.063W		0.063W/0.1W	
Maximum permissible voltage	50V (DC or RMS)		50V (DC or RMS)	

Size Code	**0805**		**1206**	
	1%	**5%**	**1%**	**5%**
Temperature Coefficient **1Ω ≤ R ≤ 10Ω** **10Ω ≤ R ≤ 10MΩ**	≤250±250 ≤±100	≤250±250x10^{-6}/K ≤±200x10^{-6}/K	≤250±250 ≤±100	≤250±250x10^{-6}/K ≤±200x10^{-6}/K
Maximum dissipation at T_{amb} = 70°C	0.125W		0.25W	
Maximum permissible voltage	150V (DC or RMS)		200V (DC or RMS)	



Type	**Dimension (mm)**				
	L	**W**	**T**	**t_t**	**t_b**
0402	1.00	0.50	0.35	0.20	0.25
0603	1.60	0.80	0.45	0.30	0.30
0805	2.00	1.25	0.55	0.40	0.40
1206	3.20	1.60	0.55	0.45	0.50

1%, 1/16 Watt — 0603 Series

Resistor Values

1.00	14.7	33.0	69.8	165	365	787	1.82K	4.02K	8.87K	21.0K	44.2K	100K	232K	475K	1.21M
2.00	15.0	33.2	71.5	169	374	806	1.87K	4.12K	9.09K	21.5K	45.3K	102K	234K	487K	1.50M
2.10	15.4	34.0	73.2	174	383	820	1.91K	4.22K	9.10K	22.0K	46.4K	105K	237K	499K	2.00M
2.15	15.8	34.8	75.0	178	390	825	1.96K	4.30K	9.31K	22.1K	47.0K	107K	240K	500K	2.21M
2.21	16.0	35.7	76.8	180	392	845	2.00K	4.32K	9.53K	22.6K	47.5K	110K	243K	510K	2.49M
2.43	16.2	36.0	78.7	182	402	866	2.05K	4.42K	9.76K	23.2K	48.7K	113K	249K	511K	2.94M
2.47	16.5	36.5	80.6	187	412	887	2.10K	4.53K	10.0K	23.7K	49.9K	115K	255K	523K	3.01M
2.49	16.9	37.4	82.0	191	422	909	2.15K	4.64K	10.2K	24.0K	51.0K	118K	261K	536K	4.70M
2.74	17.4	38.3	82.5	196	430	910	2.20K	4.70K	10.5K	24.3K	51.1K	120K	267K	549K	4.75M
3.01	17.8	39.0	84.5	200	432	931	2.21K	4.75K	10.7K	24.9K	52.3K	121K	270K	560K	10.0M
3.32	18.0	39.2	86.6	205	442	953	2.26K	4.87K	11.0K	25.5K	53.6K	124K	274K	562K	
3.92	18.2	40.2	88.7	210	453	976	2.32K	4.99K	11.3K	26.1K	54.9K	127K	280K	576K	
4.02	18.7	41.2	90.9	215	464	1.00K	2.37K	5.10K	11.5K	26.7K	56.2K	130K	287K	590K	
4.42	19.1	42.2	91.0	220	470	1.02K	2.40K	5.11K	11.8K	27.0K	57.6K	133K	294K	604K	
4.75	19.6	43.0	93.1	221	475	1.05K	2.43K	5.23K	12.0K	27.4K	59.0K	137K	300K	619K	
4.99	20.0	43.2	95.3	226	487	1.07K	2.49K	5.36K	12.1K	28.0K	60.4K	140K	301K	620K	
5.11	20.5	44.2	97.6	232	499	1.10K	2.55K	5.49K	12.4K	28.7K	61.9K	143K	309K	634K	
5.23	21.0	45.3	100	237	510	1.13K	2.61K	5.60K	12.7K	29.4K	62.0K	147K	316K	649K	
5.62	21.5	46.4	102	240	511	1.15K	2.67K	5.62K	13.0K	30.0K	63.4K	150K	324K	665K	
5.76	22.0	47.0	105	243	523	1.18K	2.70K	5.76K	13.3K	30.1K	64.9K	154K	330K	680K	
6.04	22.1	47.5	107	249	536	1.20K	2.74K	5.90K	13.7K	30.9K	66.5K	158K	332K	681K	
6.81	22.6	48.7	110	255	549	1.21K	2.80K	6.04K	14.0K	31.6K	68.0K	160K	340K	698K	
7.50	23.2	49.9	113	261	560	1.24K	2.87K	6.19K	14.3K	32.4K	68.1K	162K	348K	715K	
10.0	23.7	51.0	115	267	562	1.27K	2.94K	6.20K	14.7K	33.0K	69.8K	165K	357K	732K	
10.2	24.0	51.1	118	270	576	1.30K	3.00K	6.34K	15.0K	33.2K	71.5K	169K	360K	750K	
10.5	24.3	52.3	120	274	590	1.33K	3.01K	6.49K	15.4K	34.0K	73.2K	174K	365K	768K	
10.7	24.9	53.6	121	280	600	1.37K	3.09K	6.65K	15.8K	34.8K	75.0K	178K	374K	787K	
11.0	25.5	54.9	124	287	604	1.40K	3.16K	6.80K	16.0K	35.7K	76.8K	180K	383K	806K	
11.3	26.1	56.0	127	294	619	1.43K	3.24K	6.81K	16.2K	36.0K	78.7K	182K	390K	820K	
11.5	26.7	56.2	130	300	620	1.47K	3.30K	6.98K	16.5K	36.5K	80.6K	187K	392K	825K	
11.8	27.0	57.6	133	301	634	1.50K	3.32K	7.15K	16.9K	37.4K	82.0K	190K	400K	845K	
12.0	27.4	59.0	137	309	649	1.54K	3.40K	7.32K	17.4K	38.3K	82.5K	191K	402K	866K	
12.1	28.0	60.4	140	316	665	1.58K	3.48K	7.50K	17.8K	39.0K	84.5K	196K	412K	887K	
12.4	28.7	61.9	143	324	680	1.60K	3.57K	7.68K	18.0K	39.2K	86.6K	200K	422K	909K	
12.7	29.4	62.0	147	330	681	1.62K	3.60K	7.87K	18.2K	40.0K	88.7K	205K	430K	910K	
13.0	30.0	63.4	150	332	698	1.65K	3.65K	8.06K	18.7K	40.2K	90.9K	210K	432K	931K	
13.3	30.1	64.9	154	340	715	1.69K	3.74K	8.20K	19.1K	41.2K	91.0K	215K	442K	953K	
13.7	30.9	66.5	158	348	732	1.74K	3.83K	8.25K	19.6K	42.2K	93.1K	220K	453K	976K	
14.0	31.6	68.0	160	357	750	1.78K	3.90K	8.45K	20.0K	43.0K	95.3K	221K	464K	1.00M	
14.3	32.4	68.1	162	360	768	1.80K	3.92K	8.66K	20.5K	43.2K	97.6K	226K	470K	1.20M	

Value Range	**Digi-Key Part No.**	**Pricing 10**	**50**	**200**	**5,000**	**10,000**	**Yageo America Part No.**
1/16 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel							
1.00 - 10.0M Ω	311 - Value + “HTR-ND”	—	—	—	7.65/M	6.89/M	9C06031AXXXXFKHFT
1/16 Watt, 1% Thick Film Chip Resistors (Cut Tape)							
1.00 - 10.0M Ω	311 - Value + “HCT-ND”	.90	2.42	5.57	—	—	9C06031AXXXXFKHFT

Digi-Key™ Assortment Kits 0603 Series 1% Thick Film Chip Resistor Kits - 1/16 Watt

PHH1-KIT-ND 50 each of values 1.00Ω to 7.50Ω
23 values (1150 total pieces) **$49.95**

PHH2-KIT-ND 50 each of values 10.0Ω to 97.6Ω
114 values (5700 total pieces)................. **$199.00**

PHH3-KIT-ND 50 each of values 100Ω to 976Ω
115 values (5750 total pieces)................. **$199.00**

PHH4-KIT-ND 50 each of values 1.00KΩ to 9.76KΩ
114 values (5700 total pieces)................. **$199.00**

PHH5-KIT-ND 50 each of values 10.0KΩ to 97.6KΩ
114 values (5700 total pieces)................. **$199.00**

PHH6-KIT-ND 50 each of values 100KΩ to 1.00MΩ
120 values (6000 total pieces)................. **$199.00**

1%, 1/16 Watt — 0402 Series

Resistor Values

1.00	51.0	220	511	1.80K	3.92K	7.87K	12.0K	21.0K	36.0K	51.0K	82.0K	124K	261K	560K
4.70	56.0	280	560	1.82K	4.30K	8.06K	12.1K	22.0K	39.0K	51.1K	82.5K	127K	270K	562K
10.0	62.0	300	620	1.96K	4.64K	8.20K	13.0K	22.1K	39.2K	53.6K	88.7K	150K	300K	620K
22.0	68.0	301	680	2.20K	5.10K	8.87K	14.0K	24.9K	40.2K	56.0K	90.9K	180K	301K	649K
24.9	68.1	330	715	2.21K	5.36K	9.10K	15.0K	26.1K	42.2K	60.4K	91.0K	187K	332K	768K
26.1	75.0	332	910	2.40K	5.49K	9.53K	16.0K	27.0K	43.0K	61.9K	95.3K	200K	360K	1.00M
28.0	100	430	1.00K	2.70K	5.62K	10.0K	16.2K	28.0K	45.3K	62.0K	97.6K	210K	430K	3.30M
33.0	120	464	1.10K	3.01K	6.20K	10.7K	17.4K	30.0K	46.4K	64.9K	100K	220K	442K	3.60M
36.0	150	470	1.20K	3.30K	6.49K	11.0K	18.0K	30.1K	47.0K	68.0K	110K	226K	470K	
39.0	160	499	1.21K	3.74K	6.80K	11.3K	19.1K	33.0K	47.5K	78.7K	120K	240K	499K	
49.9	180	510	1.50K	3.90K	7.50K	11.5K	20.0K	35.7K	49.9K	80.6K	121K	249K	510K	

Value Range	**Digi-Key Part No.**	**Pricing 10**	**50**	**200**	**10,000**	**30,000**	**Yageo America Part No.**
1/16 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 10,000 / Reel							
1.00 - 3.60M Ω	311 - Value + “LTR-ND”	—	—	—	9.62/M	8.55/M	9C04021AXXXXFLHF3
1/16 Watt, 1% Thick Film Chip Resistors (Cut Tape)							
1.00 - 3.60M Ω	311 - Value + “LCT-ND”	1.04	2.80	6.43	—	—	9C0402A1XXXXFLHF3

Digi-Key™ Assortment Kits 0402 Series 1% Thick Film Chip Resistor Kits - 1/16 Watt

PHL1-KIT-ND 50 each of values 1.00Ω to 75.0Ω
17 values (850 total pieces) **$39.95**

PHL2-KIT-ND 50 each of values 100Ω to 910Ω
22 values (1100 total pieces).................... **$49.95**

PHL3-KIT-ND 50 each of values 1.00KΩ to 9.53KΩ
33 values (1650 total pieces).................... **$74.95**

PHL4-KIT-ND 50 each of values 10.0KΩ to 97.6KΩ
56 values (2800 total pieces) **$119.95**

PHL5-KIT-ND 50 each of values 100KΩ to 1.00MΩ
32 values (1600 total pieces).................... **$74.95**

1%, 1/8 Watt — 0805 Series

Resistor Values

1.00	3.01	8.66	24.9	63.4	180	470	1.27K	3.40K	8.87K	24.9K	63.4K	180K	470K	1.40M	4.32M
1.02	3.09	8.87	25.5	64.9	182	475	1.30K	3.48K	9.09K	25.5K	64.9K	182K	475K	1.43M	4.42M
1.05	3.16	9.09	26.1	66.5	187	487	1.33K	3.57K	9.10K	26.1K	66.5K	187K	487K	1.47M	4.53M
1.07	3.24	9.31	26.7	68.0	191	499	1.37K	3.60K	9.31K	26.7K	68.0K	191K	499K	1.50M	4.64M
1.10	3.32	9.53	27.0	68.1	196	510	1.40K	3.65K	9.53K	27.0K	68.1K	196K	510K	1.54M	4.70M
1.13	3.40	9.76	27.4	69.8	200	511	1.43K	3.74K	9.76K	27.4K	69.8K	200K	511K	1.58M	4.75M
1.15	3.48	10.0	28.0	71.5	205	523	1.47K	3.83K	10.0K	28.0K	71.5K	205K	523K	1.62M	4.87M
1.18	3.57	10.2	28.7	73.2	210	536	1.50K	3.90K	10.2K	28.7K	73.2K	210K	536K	1.65M	4.99M
1.21	3.65	10.5	29.4	75.0	215	549	1.54K	3.92K	10.5K	29.4K	75.0K	215K	549K	1.69M	5.11M
1.24	3.74	10.7	30.0	76.8	220	560	1.58K	4.02K	10.7K	30.0K	76.8K	220K	560K	1.74M	5.23M
1.27	3.83	11.0	30.1	78.7	221	562	1.60K	4.12K	11.0K	30.1K	78.7K	221K	562K	1.80M	5.36M
1.30	3.90	11.3	30.9	80.6	226	576	1.62K	4.22K	11.3K	30.9K	80.6K	226K	576K	1.82M	5.49M
1.33	3.92	11.5	31.6	82.0	232	590	1.65K	4.30K	11.5K	31.6K	82.0K	232K	590K	1.87M	5.62M
1.37	4.02	11.8	32.4	82.5	237	604	1.69K	4.32K	11.8K	32.4K	82.5K	237K	604K	1.91M	5.76M
1.40	4.12	12.0	33.0	84.5	240	619	1.74K	4.42K	12.0K	33.0K	84.5K	240K	619K	1.96M	5.90M
1.43	4.22	12.1	33.2	86.6	243	620	1.78K	4.53K	12.1K	33.2K	86.6K	243K	620K	2.00M	6.04M
1.47	4.32	12.4	34.0	88.7	249	634	1.80K	4.64K	12.4K	34.0K	88.7K	249K	634K	2.05M	6.19M
1.50	4.42	12.7	34.8	90.9	255	649	1.82K	4.70K	12.7K	34.8K	90.9K	255K	649K	2.10M	6.34M
1.54	4.53	13.0	35.7	91.0	261	665	1.87K	4.75K	13.0K	35.7K	91.0K	261K	665K	2.15M	6.49M
1.58	4.64	13.3	36.0	93.1	267	680	1.91K	4.87K	13.3K	36.0K	93.1K	267K	680K	2.20M	6.65M
1.62	4.70	13.7	36.5	95.3	270	681	1.96K	4.99K	13.7K	36.5K	95.3K	270K	681K	2.21M	6.81M
1.65	4.75	14.0	37.4	97.6	274	698	2.00K	5.10K	14.0K	37.4K	97.6K	274K	698K	2.26M	6.98M
1.69	4.87	14.3	38.3	100	280	715	2.05K	5.11K	14.3K	38.3K	100K	280K	715K	2.32M	7.15M
1.74	4.99	14.7	39.0	102	287	732	2.10K	5.23K	14.7K	39.0K	102K	287K	732K	2.37M	7.32M
1.78	5.11	15.0	39.2	105	294	750	2.15K	5.36K	15.0K	39.2K	105K	294K	750K	2.43M	7.50M
1.80	5.23	15.4	40.2	107	300	768	2.20K	5.49K	15.4K	40.2K	107K	300K	768K	2.49M	7.68M
1.82	5.36	15.8	41.2	110	301	787	2.21K	5.60K	15.8K	41.2K	110K	301K	787K	2.55M	7.87M
1.87	5.49	16.0	42.2	113	309	806	2.26K	5.62K	16.0K	42.2K	113K	309K	806K	2.61M	8.06M
1.91	5.60	16.2	43.0	115	316	820	2.32K	5.76K	16.2K	43.0K	115K	316K	820K	2.67M	8.25M
1.96	5.62	16.5	43.2	118	324	825	2.37K	5.90K	16.5K	43.2K	118K	324K	825K	2.74M	8.45M
2.00	5.76	16.9	44.2	120	330	845	2.40K	6.04K	16.9K	44.2K	120K	330K	845K	2.80M	8.66M
2.05	5.90	17.4	45.3	121	332	866	2.43K	6.19K	17.4K	45.3K	121K	332K	866K	2.87M	8.87M
2.10	6.04	17.8	46.4	124	340	887	2.49K	6.20K	17.8K	46.4K	124K	340K	887K	2.94M	9.09M
2.15	6.19	18.0	47.0	127	348	909	2.50K	6.34K	18.0K	47.0K	127K	348K	909K	3.01M	9.31M
2.20	6.20	18.2	47.5	130	357	910	2.55K	6.49K	18.2K	47.5K	130K	357K	931K	3.09M	9.53M
2.21	6.34	18.7	48.7	133	360	931	2.61K	6.65K	18.7K	48.7K	133K	360K	953K	3.16M	9.76M
2.26	6.49	19.1	49.9	137	365	953	2.67K	6.80K	19.1K	49.9K	137K	365K	976K	3.24M	10.0M
2.32	6.65	19.6	51.0	140	374	976	2.70K	6.81K	19.6K	51.0K	140K	374K	1.00M	3.30M	
2.37	6.80	20.0	51.1	143	383	1.00K	2.74K	6.98K	20.0K	51.1K	143K	383K	1.10M	3.32M	
2.43	6.81	20.5	52.3	147	390	1.02K	2.80K	7.15K	20.5K	52.3K	147K	390K	1.13M	3.40M	
2.49	6.98	21.0	53.6	150	392	1.05K	2.87K	7.32K	21.0K	53.6K	150K	392K	1.15M	3.48M	
2.55	7.15	21.5	54.9	154	402	1.07K	2.94K	7.50K	21.5K	54.9K	154K	402K	1.18M	3.57M	
2.61	7.32	22.0	56.0	158	412	1.10K	3.00K	7.68K	22.0K	56.0K	158K	412K	1.20M	3.65M	
2.67	7.50	22.1	56.2	160	422	1.13K	3.01K	7.87K	22.1K	56.2K	160K	422K	1.21M	3.74M	
2.74	7.68	22.6	57.6	162	430	1.15K	3.09K	8.06K	22.6K	57.6K	162K	430K	1.24M	3.83M	
2.80	7.87	23.2	59.0	165	432	1.18K	3.16K	8.20K	23.2K	59.0K	165K	432K	1.27M	3.92M	
2.87	8.06	23.7	60.4	169	442	1.20K	3.24K	8.25K	23.7K	60.4K	169K	442K	1.30M	4.02M	
2.94	8.25	24.0	61.9	174	453	1.21K	3.30K	8.45K	24.0K	61.9K	174K	453K	1.33M	4.12M	
3.00	8.45	24.3	62.0	178	464	1.24K	3.32K	8.66K	24.3K	62.0K	178K	464K	1.37M	4.22M	

Value Range	**Digi-Key Part No.**	**Pricing 10**	**50**	**200**	**5,000**	**10,000**	**Yageo America Part No.**
1/8 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel							
1.00 - 10.0M Ω	311 - Value + “CTR-ND”	—	—	—	9.99/M	9.00/M	9C08052AXXXXFKHFT
1/8 Watt, 1% Thick Film Chip Resistors (Cut Tape)							
1.00 - 10.0M Ω	311 - Value + “CCT-ND”	1.01	2.71	6.23	—	—	9C08052AXXXXFKHFT

Digi-Key™ Assortment Kits 0805 Series 1% Thick Film Chip Resistor Kits - 1/8 Watt

PHC1A-KIT-ND 50 each of values 1.00Ω to 9.76Ω
104 values (5200 total pieces) **$199.00**

PHC1-KIT-ND 200 each of values 1.00Ω to 9.76Ω
104 values (20800 total pieces) **$399.00**

PHC2A-KIT-ND 50 each of values 10.0Ω to 97.6Ω
114 values (5700 total pieces) **$199.00**

PHC2-KIT-ND 200 each of values 10.0Ω to 97.6Ω
114 values (22800 total pieces) **$399.00**

PHC3A-KIT-ND 50 each of values 100Ω to 976Ω
114 values (5700 total pieces) **$199.00**

PHC3-KIT-ND 200 each of values 100Ω to 976Ω
114 values (22800 total pieces) **$399.00**

PHC4A-KIT-ND 50 each of values 1.00KΩ to 9.76KΩ
115 values (5750 total pieces) **$199.00**

PHC4-KIT-ND 200 each of values 1.00KΩ to 9.76KΩ
115 values (23000 total pieces) **$399.00**

PHC5A-KIT-ND 50 each of values 10.0KΩ to 97.6KΩ
113 values (5650 total pieces) **$199.00**

PHC5-KIT-ND 200 each of values 10.0KΩ to 97.6KΩ
113 values (22600 total pieces) **$399.00**

PHC6A-KIT-ND 50 each of values 100KΩ to 1.00MΩ
115 values (5750 total pieces) **$199.00**

PHC6-KIT-ND 200 each of values 100KΩ to 1.00MΩ
115 values (23000 total pieces) **$399.00**

(Continued)

1%, 1/4 Watt — 1206 Series

Resistor Values

1.00	2.94	7.87	23.2	61.9	180	464	1.30K	3.65K	10.0K	29.4K	76.8K	226K	590K	1.74M	4.64M
1.02	3.00	8.06	23.7	62.0	182	470	1.33K	3.74K	10.2K	30.0K	78.7K	232K	604K	1.78M	4.70M
1.05	3.01	8.20	24.0	63.4	187	475	1.37K	3.83K	10.5K	30.1K	80.6K	237K	619K	1.80M	4.75M
1.07	3.09	8.25	24.3	64.9	191	487	1.40K	3.90K	10.7K	30.9K	82.0K	240K	620K	1.82M	4.87M
1.10	3.16	8.45	24.9	66.5	196	499	1.43K	3.92K	11.0K	31.6K	82.5K	243K	634K	1.87M	4.99M
1.13	3.24	8.66	25.5	68.0	200	510	1.47K	4.02K	11.3K	32.4K	84.5K	246K	649K	1.91M	5.10M
1.15	3.30	8.87	26.1	68.1	205	511	1.50K	4.12K	11.5K	33.0K	86.6K	249K	665K	1.92M	5.11M
1.18	3.32	9.09	26.7	69.8	210	523	1.54K	4.22K	11.8K	33.2K	88.7K	255K	680K	1.96M	5.23M
1.20	3.40	9.10	27.0	71.5	215	536	1.58K	4.30K	12.0K	34.0K	90.9K	261K	681K	2.00M	5.36M
1.21	3.48	9.31	27.4	73.2	220	549	1.60K	4.32K	12.1K	34.8K	91.0K	267K	698K	2.05M	5.49M
1.24	3.57	9.53	28.0	75.0	221	560	1.62K	4.42K	12.4K	35.7K	93.1K	270K	715K	2.10M	5.60M
1.27	3.60	9.76	28.7	76.8	226	562	1.65K	4.53K	12.7K	36.0K	95.3K	274K	732K	2.15M	5.62M
1.30	3.65	10.0	29.4	78.7	232	576	1.69K	4.64K	13.0K	36.5K	97.6K	280K	750K	2.20M	5.76M
1.33	3.74	10.2	30.0	80.6	237	590	1.74K	4.70K	13.3K	37.4K	100K	287K	768K	2.21M	5.90M
1.37	3.83	10.5	30.1	82.0	240	604	1.78K	4.75K	13.7K	38.3K	102K	294K	787K	2.26M	6.04M
1.40	3.90	10.7	30.9	82.5	243	619	1.80K	4.87K	14.0K	39.0K	105K	300K	806K	2.32M	6.19M
1.43	3.92	11.0	31.6	84.5	249	620	1.82K	4.99K	14.3K	39.2K	107K	301K	820K	2.37M	6.20M
1.47	4.02	11.3	32.4	86.6	255	634	1.87K	5.10K	14.7K	40.2K	110K	309K	825K	2.40M	6.34M
1.50	4.12	11.5	33.0	88.7	261	649	1.91K	5.11K	15.0K	41.2K	113K	316K	845K	2.43M	6.49M
1.54	4.22	11.8	33.2	90.9	267	665	1.96K	5.23K	15.4K	42.2K	115K	324K	866K	2.49M	6.65M
1.58	4.30	12.0	34.0	91.0	270	680	2.00K	5.36K	15.8K	43.0K	118K	330K	887K	2.55M	6.80M
1.60	4.32	12.1	34.8	93.1	274	681	2.05K	5.49K	16.0K	43.2K	120K	332K	909K	2.61M	6.81M
1.62	4.42	12.4	35.7	95.3	280	698	2.10K	5.60K	16.2K	44.2K	121K	340K	910K	2.67M	6.98M
1.65	4.53	12.7	36.0	97.6	287	715	2.15K	5.62K	16.5K	45.3K	124K	348K	931K	2.70M	7.15M
1.69	4.64	13.0	36.5	100	294	732	2.20K	5.76K	16.9K	46.4K	127K	357K	953K	2.74M	7.32M
1.74	4.70	13.3	37.4	102	300	750	2.21K	5.90K	17.4K	47.0K	130K	360K	976K	2.80M	7.50M
1.78	4.75	13.7	38.3	105	301	768	2.26K	6.04K	17.8K	47.5K	133K	365K	1.00M	2.87M	7.68M
1.80	4.87	14.0	39.0	107	309	787	2.32K	6.19K	18.0K	48.7K	137K	374K	1.02M	2.94M	7.87M
1.82	4.99	14.3	39.2	110	316	806	2.37K	6.20K	18.2K	49.9K	140K	383K	1.05M	3.00M	8.06M
1.87	5.10	14.7	40.2	113	320	820	2.40K	6.34K	18.7K	51.0K	143K	390K	1.07M	3.01M	8.20M
1.91	5.11	15.0	41.2	115	324	825	2.43K	6.49K	19.1K	51.1K	147K	392K	1.10M	3.09M	8.25M
1.96	5.23	15.4	42.2	118	330	845	2.49K	6.65K	19.6K	52.3K	150K	402K	1.13M	3.16M	8.45M
2.00	5.36	15.8	43.0	120	331	866	2.55K	6.80K	20.0K	53.6K	154K	412K	1.15M	3.24M	8.66M
2.05	5.49	16.0	43.2	121	332	887	2.61K	6.81K	20.5K	54.9K	158K	422K	1.18M	3.30M	8.87M
2.10	5.60	16.2	44.2	124	340	909	2.67K	6.98K	21.0K	56.0K	160K	430K	1.20M	3.32M	9.09M
2.15	5.62	16.5	45.3	127	348	910	2.70K	7.15K	21.5K	56.2K	162K	432K	1.21M	3.40M	9.10M
2.20	5.76	16.9	46.4	130	357	931	2.74K	7.32K	22.0K	57.6K	165K	442K	1.24M	3.48M	9.31M
2.21	5.90	17.4	47.0	133	360	953	2.80K	7.50K	22.1K	59.0K	169K	453K	1.27M	3.57M	9.53M
2.26	6.04	17.8	47.5	137	365	976	2.87K	7.68K	22.6K	60.4K	174K	464K	1.30M	3.60M	9.76M
2.32	6.19	18.0	48.7	140	374	1.00K	2.94K	7.87K	23.2K	61.9K	178K	470K	1.33M	3.65M	10.0M
2.37	6.20	18.2	49.9	143	382	1.02K	3.00K	8.06K	23.7K	62.0K	180K	475K	1.37M	3.74M	
2.40	6.34	18.7	51.0	147	383	1.05K	3.01K	8.20K	24.0K	63.4K	182K	487K	1.40M	3.83M	
2.43	6.49	19.1	51.1	150	390	1.07K	3.09K	8.25K	24.3K	64.9K	187K	499K	1.43M	3.90M	
2.49	6.65	19.6	52.3	154	392	1.10K	3.16K	8.45K	24.9K	66.2K	191K	510K	1.47M	3.92M	
2.55	6.80	20.0	53.6	158	402	1.13K	3.24K	8.66K	25.5K	66.5K	196K	511K	1.50M	4.02M	
2.61	6.81	20.5	54.9	160	412	1.15K	3.30K	8.87K	26.1K	68.0K	200K	523K	1.54M	4.12M	
2.67	6.98	21.0	56.0	162	422	1.18K	3.32K	9.09K	26.7K	68.1K	205K	536K	1.58M	4.22M	
2.70	7.15	21.5	56.2	165	430	1.20K	3.40K	9.10K	27.0K	69.8K	210K	549K	1.60M	4.30M	
2.74	7.32	22.0	57.6	169	432	1.21K	3.48K	9.31K	27.2K	71.5K	215K	560K	1.62M	4.32M	
2.80	7.50	22.1	59.0	174	442	1.24K	3.57K	9.53K	28.0K	73.2K	220K	562K	1.65M	4.42M	
2.87	7.68	22.6	60.4	178	453	1.27K	3.60K	9.76K	28.7K	75.0K	221K	576K	1.69M	4.53M	

Value Range	Digi-Key Part No.	Pricing 10	50	200	5,000	10,000	Yageo America Part No.
1/4 Watt, 1% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel							
1.00 - 10.0M Ω	311 - Value + “FTR-ND”	—	—	—	17.40/M	15.66/M	9C12063AXXXXFKHFT
1/4 Watt, 1% Thick Film Chip Resistors (Cut Tape)							
1.00 - 10.0M Ω	311 - Value + “FCT-ND”	1.35	3.63	8.33	—	—	9C12063AXXXXFKHFT

Digi-Key™ Assortment Kits 1206 Series 1% Thick Film Chip Resistor Kits - 1/4 Watt

PHF1A-KIT-ND 50 each of values 1.00Ω to 9.76Ω 114 values (5700 total pieces) **$249.00**

PHF1-KIT-ND 200 each of values 1.00Ω to 9.76Ω 114 values (22800 total pieces) **$499.00**

PHF2A-KIT-ND 50 each of values 10.0Ω to 97.6Ω 114 values (5700 total pieces) **$249.00**

PHF2-KIT-ND 200 each of values 10.0Ω to 97.6Ω 114 values (22800 total pieces) **$499.00**

PHF3A-KIT-ND 50 each of values 100Ω to 976Ω 117 values (5850 total pieces) **$249.00**

PHF3-KIT-ND 200 each of values 100Ω to 976Ω 117 values (23400 total pieces) **$499.00**

PHF4A-KIT-ND 50 each of values 1.00KΩ to 9.76KΩ 114 values (5700 total pieces) **$249.00**

PHF4-KIT-ND 200 each of values 1.00KΩ to 9.76KΩ 114 values (22800 total pieces) **$499.00**

PHF5A-KIT-ND 50 each of values 10.0KΩ to 97.6KΩ 115 values (5750 total pieces) **$249.00**

PHF5-KIT-ND 200 each of values 10.0KΩ to 97.6KΩ 115 values (23000 total pieces) **$499.00**

PHF6A-KIT-ND 50 each of values 100KΩ to 1.00MΩ 116 values (5800 total pieces) **$249.00**

PHF6-KIT-ND 200 each of values 100KΩ to 1.00MΩ 116 values (23200 total pieces) **$499.00**

5%, 1/16 Watt — 0402 Series

Resistor Values

0.0	3.9	12	33	68	180	360	680	2.0K	3.9K	7.5K	22K	47K	120K	330K	3.0M
1.0	4.3	15	36	75	200	390	820	2.2K	4.3K	8.2K	24K	56K	150K	430K	3.3M
1.1	4.7	18	39	82	220	430	910	2.4K	4.7K	10K	27K	62K	180K	470K	
2.0	5.1	20	43	91	240	470	1.0K	2.7K	5.1K	11K	30K	68K	200K	560K	
2.2	5.6	22	47	100	270	510	1.2K	3.0K	5.6K	12K	33K	82K	220K	680K	
3.0	8.2	27	51	150	300	560	1.5K	3.3K	6.2K	15K	39K	100K	270K	1.0M	
3.3	10	30	56	160	330	620	1.8K	3.6K	6.8K	18K	43K	110K	300K	1.5M	

Value Range	Digi-Key Part No.	Pricing 10	50	200	10,000	30,000	Yageo America Part No.
1/16 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 10,000 / Reel							
0.0 - 3.30M Ω	311 - Value + “JTR-ND”	—	—	—	6.48/M	5.76/M	9C04021AXXXXJLHF3
1/16 Watt, 5% Thick Film Chip Resistors (Cut Tape)							
0.0 - 3.30M Ω	311 - Value + “JCT-ND”	.88	2.37	5.44	—	—	9C04021AXXXXJLHF3

Digi-Key™ Assortment Kits 0402 Series 5% Thick Film Chip Resistor Kits - 1/16 Watt

PHJ1A-KIT-ND 50 each of every other value from 1.0, 2.0, 3.0, 3.9, etc. to 1.0MΩ 52 values (2600 total pieces) **$89.95**

PHJ1-KIT-ND 200 each of every other value from 1.0, 2.0, 3.0, 3.9, etc. to 1.0MΩ 52 values (10400 total pieces) **$199.00**

PHJ2A-KIT-ND 50 each of every other value from 1.1, 2.2, 3.3, 4.3, etc. to 680KΩ 51 values (2550 total pieces) **$89.95**

PHJ2-KIT-ND 200 each of every other value from 1.1, 2.2, 3.3, 4.3, etc. to 680KΩ 51 values (10200 total pieces) **$199.00**

5%, 1/16 Watt — 0603 Series

Resistor Values

0.0	3.0	8.2	24	68	200	560	1.6K	4.7K	13K	39K	110K	330K	910K	2.7M	8.2M
1.0	3.3	9.1	27	75	220	620	1.8K	5.1K	15K	43K	120K	360K	1.0M	3.0M	10M
1.1	3.6	10	30	82	240	680	2.0K	5.6K	16K	47K	130K	390K	1.1M	3.3M	
1.2	3.9	11	33	91	270	750	2.2K	6.2K	18K	51K	150K	430K	1.2M	3.6M	
1.3	4.3	12	36	100	300	820	2.4K	6.8K	20K	56K	160K	470K	1.3M	3.9M	
1.5	4.7	13	39	110	330	910	2.7K	7.5K	22K	62K	180K	510K	1.5M	4.3M	
1.6	5.1	15	43	120	360	1.0K	3.0K	8.2K	24K	68K	200K	560K	1.6M	4.7M	
1.8	5.6	16	47	130	390	1.1K	3.3K	9.1K	27K	75K	220K	620K	1.8M	5.1M	
2.2	6.2	18	51	150	430	1.2K	3.6K	10K	30K	82K	240K	680K	2.0M	5.6M	
2.4	6.8	20	56	160	470	1.3K	3.9K	11K	33K	91K	270K	750K	2.2M	6.2M	
2.7	7.5	22	62	180	510	1.5K	4.3K	12K	36K	100K	300K	820K	2.4M	6.8M	

Value Range	Digi-Key Part No.	Pricing 10	50	200	5,000	10,000	Yageo America Part No.
1/16 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel							
0.0 - 10M Ω	311 - Value + “GTR-ND”	—	—	—	4.68/M	4.22/M	9C06031AXXXXJLHFT
1/16 Watt, 5% Thick Film Chip Resistors (Cut Tape)							
0.0 - 10M Ω	311 - Value + “GCT-ND”	.76	2.06	4.73	—	—	9C06031AXXXXJLHFT

Digi-Key™ Assortment Kits 0603 Series 5% Thick Film Chip Resistor Kits - 1/16 Watt

PHG1A-KIT-ND 50 each of every other value from 1.0, 1.2, 1.5, 1.8, etc. to 910KΩ 72 values (3600 total pieces) **$99.95**

PHG1-KIT-ND 200 each of every other value from 1.0, 1.2, 1.5, 1.8, etc. to 910KΩ 72 values (14400 total pieces)............................. **$199.00**

PHG2A-KIT-ND 50 each of every other value from 1.1, 1.3, 1.6, 2.2, etc. to 1.0MΩ 72 values (3600 total pieces) **$99.95**

PHG2-KIT-ND 200 each of every other value from 1.1, 1.3, 1.6, 2.2, etc. to 1.0MΩ 72 values (14400 total pieces)............................. **$199.00**

5%, 1/8 Watt — 0805 Series

Resistor Values

0.0	2.7	7.5	22	62	180	510	1.5K	4.3K	12K	36K	100K	300K	820K	2.4M	6.8M
1.0	3.0	8.2	24	68	200	560	1.6K	4.7K	13K	39K	110K	330K	910K	2.7M	7.5M
1.1	3.3	9.1	27	75	220	620	1.8K	5.1K	15K	43K	120K	360K	1.0M	3.0M	8.2M
1.2	3.6	10	30	82	240	680	2.0K	5.6K	16K	47K	130K	390K	1.1M	3.3M	9.1M
1.3	3.9	11	33	91	270	750	2.2K	6.2K	18K	51K	150K	430K	1.2M	3.6M	10M
1.5	4.3	12	36	100	300	820	2.4K	6.8K	20K	56K	160K	470K	1.3M	3.9M	
1.6	4.7	13	39	110	330	910	2.7K	7.5K	22K	62K	180K	510K	1.5M	4.3M	
1.8	5.1	15	43	120	360	1.0K	3.0K	8.2K	24K	68K	200K	560K	1.6M	4.7M	
2.0	5.6	16	47	130	390	1.1K	3.3K	9.1K	27K	75K	220K	620K	1.8M	5.1M	
2.2	6.2	18	51	150	430	1.2K	3.6K	10K	30K	82K	240K	680K	2.0M	5.6M	
2.4	6.8	20	56	160	470	1.3K	3.9K	11K	33K	91K	270K	750K	2.2M	6.2M	

Value Range	Digi-Key Part No.	Pricing 10	50	200	5,000	10,000	Yageo America Part No.
1/8 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel							
0.0 - 10M Ω	311 - Value + “ATR-ND”	—	—	—	7.20/M	6.48/M	9C08052AXXXXJLHFT
1/8 Watt, 5% Thick Film Chip Resistors (Cut Tape)							
0.0 - 10M Ω	311 - Value + “ACT-ND”	.88	2.37	5.44	—	—	9C08052AXXXXJLHFT

Digi-Key™ Assortment Kits 0805 Series 5% Thick Film Chip Resistor Kits - 1/8 Watt

PHA1A-KIT-ND 50 each of every other value from 1.0, 1.2, 1.5, 1.8, to 910KΩ 73 values (3650 total pieces) **$119.00**

PHA1-KIT-ND 200 each of every other value from 1.0, 1.2, 1.5, 1.8, to 910KΩ 73 values (14600 total pieces) **$199.00**

PHA2A-KIT-ND 50 each of every other value from 1.1, 1.3, 1.6, 2.0, to 1.0MΩ 73 values (3650 total pieces) **$119.00**

PHA2-KIT-ND 200 each of every other value from 1.1, 1.3, 1.6, 2.0, to 1.0MΩ 73 values (14600 total pieces) **$199.00**

5%, 1/4 Watt — 1206 Series

Resistor Values

0.0	2.7	7.5	22	68	200	560	1.6K	4.7K	13K	39K	110K	330K	910K	2.7M	7.5M
1.0	3.0	8.2	24	75	220	620	1.8K	5.1K	15K	43K	120K	360K	1.0M	3.0M	8.2M
1.1	3.3	9.1	27	82	240	680	2.0K	5.6K	16K	47K	130K	390K	1.1M	3.3M	9.1M
1.2	3.6	10	30	91	270	750	2.2K	6.2K	18K	51K	150K	430K	1.2M	3.6M	10M
1.3	3.9	11	33	100	300	820	2.4K	6.8K	20K	56K	160K	470K	1.3M	3.9M	11M
1.5	4.3	12	36	110	330	910	2.7K	7.5K	22K	62K	180K	510K	1.5M	4.3M	12M
1.6	4.7	13	39	120	360	1.0K	3.0K	8.2K	24K	68K	200K	560K	1.6M	4.7M	13M
1.8	5.1	15	43	130	390	1.1K	3.3K	9.1K	27K	75K	220K	620K	1.8M	5.1M	
2.0	5.6	16	51	150	430	1.2K	3.6K	10K	30K	82K	240K	680K	2.0M	5.6M	
2.2	6.2	18	56	160	470	1.3K	3.9K	11K	33K	91K	270K	750K	2.2M	6.2M	
2.4	6.8	20	62	180	510	1.5K	4.3K	12K	36K	100K	300K	820K	2.4M	6.8M	

Value Range	Digi-Key Part No.	Pricing 10	50	200	5,000	10,000	Yageo America Part No.
1/4 Watt, 5% Thick Film Chip Resistors (Tape & Reel) 5,000 / Reel							
0.0 - 13M Ω	311 - Value + “ETR-ND”	—	—	—	9.12/M	8.21/M	9C12063AXXXXJLHFT
1/4Watt, 5% Thick Film Chip Resistors (Cut Tape)							
0.0 - 13M Ω	311 - Value + “ECT-ND”	.97	2.60	5.98	—	—	9C12063AXXXXJLHFT

Digi-Key™ Assortment Kits 1206 Series 5% Thick Film Chip Resistor Kits - 1/4 Watt

PHE1A-KIT-ND 50 each of every other value from 1.0, 1.2, 1.5, 1.8, etc. to 910KΩ 72 values (3600 total pieces) **$119.00**

PHE1-KIT-ND 200 each of every other value from 1.0, 1.2, 1.5, 1.8, etc. to 910KΩ 72 values (14400 total pieces) **$249.00**

PHE2A-KIT-ND 50 each of every other value from 1.1, 1.3, 1.6, 2.0, etc. to 1.0MΩ 72 values (3600 total pieces) **$119.00**

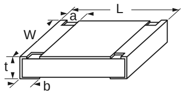
PHE2-KIT-ND 200 each of every other value from 1.1, 1.3, 1.6, 2.0, etc. to 1.0MΩ 72 values (14400 total pieces) **$249.00**

PANASONIC® ERA 0603/0805 .1% Metal Film Chip Resistors
Surface Mount — Available In 1/16 and 1/10 Watt

Standard Resistor Values
See below for complete part numbers when ordering.

100	130	180	240	330	430	560	750	1.0K	1.3K	1.8K	2.4K	3.3K	4.3K	5.6K	7.5K	10K	13K	18K	24K	33K	43K	56K	75K	100K
110	150	200	270	360	470	620	820	1.1K	1.5K	2.0K	2.7K	3.6K	4.7K	6.2K	8.2K	11K	15K	20K	27K	36K	47K	62K	82K	
120	160	220	300	390	510	680	910	1.2K	1.6K	2.2K	3.0K	3.9K	5.1K	6.8K	9.1K	12K	16K	22K	30K	39K	51K	68K	91K	

Features:
- High reliability
- Low TCR and current noise
- Excellent non-linearity

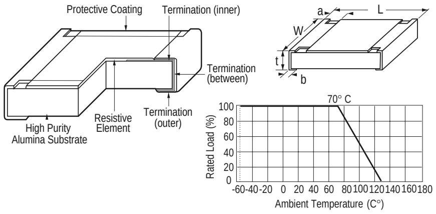


Type	Type (Power Rating)	Max. RCWV	Max. Overload Voltage	Dimensions (mm)					Temperature Coefficient	Panasonic Part No.
				L	W	t	a	b		
0603	1/16 Watt	75V	150V	1.60	0.80	0.45	0.30	0.30	±25ppm / °C	ERA-3YE
0805	1/10 Watt	100V	200V	2.00	1.25	0.50	0.40	0.40	±25ppm / °C	ERA-6YE

Description	Value Range	Digi-Key Part No.	Pricing				Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing				Panasonic Part No.
			10	50	200	1,000			5,000	10,000	25,000	50,000	
0603, 1/16 W, .1%	100 ~ 33K	P+ Value + “YCT-ND”	6.84	24.23	79.80	330.60	P + Value + “YTR-ND”	5,000	228.00/M	190.00/M	157.70/M	142.50/M	ERA-3YEBxxxV
0805, 1/10 W, .1%	100 ~ 100K	P+ Value + “ZCT-ND”	6.84	24.22	79.80	330.60	P + Value + “ZTR-ND”	5,000	240.00/M	200.00/M	166.00/M	150.00/M	ERA-6YEBxxxV

0402 / 0603 / 0805 / 1206 / 1210 / 2010 / 2512 1% Precision Thick Film Chip Resistors
Surface Mount Available In 1/16, 1/10, 1/8, 1/4, 1/2 and 1 Watt

Panasonic 0402 0603 0805 1206 1210 2010 2512 Available in 1/16, 1/10, 1/8, 1/4, 1/2 and 1 Watt



Size	Power Rating at 70°	Maximum RCWV*	Maximum Overload Voltage	Dimensions					Temperature Coefficient	Panasonic Part No.
				L	W	a	b	t		
0402	1/16 W	50 V	100 V	1.00	0.50	0.20	0.25	0.35	10 ~ 91Ω±100ppm/°C, 100 ~ 100K±50ppm/°C 110K ~ 1MΩ±100ppm/°C	ERJ-2RKFxxxxX
0603	1/16 W - (1/10 W)**	50 V	100 V	1.60	0.80	0.30	0.30	0.45	10 ~ 1MΩ±100ppm/°C	ERJ-3EKFxxxxV
0805	1/10 W - (1/8 W)**	150 V	200 V	2.00	1.25	0.40	0.40	0.60	10 ~ 2.2MΩ±100ppm/°C	ERJ-6ENFxxxxV
1206	1/8 W - (1/4 W)**	200 V	400 V	3.20	1.60	0.50	0.50	0.60		ERJ-8ENFxxxxV
1210	1/4 W	200 V	400 V	3.20	2.50	0.50	0.50	0.60	10 ~ 1MΩ±100ppm/°C	ERJ-14NFxxxxU
2010	1/2 W	200 V	400 V	5.00	2.50	0.60	0.60	0.60		ERJ-12SFxxxxU
2512	1 W	200 V	400 V	6.40	3.20	0.65	0.60	0.60		ERJ-1TYFxxxU

* Rated Continuous Working Voltage (RCWV) shall be determined from RCWV = $\sqrt{\text{Power Rating x Resistance Values}}$, or max. RCWV listed above, whichever is less.

** Available for reduction of load of pulse characteristics (RCWV x 2.5 RCWV x 2.0, R≥1.1kΩ).

Description	Value Range	Digi-Key Part No.	Cut Tape Pricing				Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing							Panasonic Part No.
			10	50	200	1,000			4,000	5,000	10,000	12,000	24,000	25,000	30,000	
0402, 1/16 Watt, 1%	10.0 ~ 1.00M Ω	P + Value + “LCT-ND”	.98	2.65	6.08	20.74	P + Value + “LTR-ND”	10,000	—	—	8.51/M	—	—	—	7.56/M	ERJ-2RKFxxxxX
0603, 1/16 Watt, 1%	10.0 ~ 2.20M Ω	P + Value + “HCT-ND”	.90	2.42	5.57	18.99	P + Value + “HTR-ND”	5,000	—	7.35/M	6.62/M	—	—	5.88/M	—	ERJ-3EKFxxxxV
0805, 1/10 Watt, 1%	10.0 ~ 2.20M Ω	P + Value + “CCT-ND”	.91	2.44	5.61	19.14	P + Value + “CTR-ND”	5,000	—	7.80/M	7.02/M	—	—	6.24/M	—	ERJ-6ENFxxxxV
1206, 1/8 Watt, 1%	10.0 ~ 2.20M Ω	P + Value + “FCT-ND”	1.17	3.15	7.23	24.65	P + Value + “FTR-ND”	5,000	—	13.50/M	12.15/M	—	—	10.80/M	—	ERJ-8ENFxxxxV
1210, 1/4 Watt, 1%	10.0 ~ 1.00M Ω	P + Value + “AACT-ND”	3.78	10.18	23.38	79.75	P + Value + “AATR-ND”	5,000	—	70.50/M	63.45/M	—	—	56.40/M	—	ERJ-14NFxxxxU
2010, 1/2 Watt, 1%	See Chart	P + Value + “ACCT-ND”	3.00	10.63	35.00	145.00	P + Value + “ACTR-ND”	5,000	—	138.00/M	124.20/M	—	—	110.40/M	—	ERJ-12SFxxxxU
2512, 1 Watt, 1%	See Chart	PT + Value + “AECT-ND”	7.08	25.08	82.60	342.20	PT + Value + “AETR-ND”	4,000	273.60/M	—	—	228.00/M	189.24/M	—	—	ERJ-1TYFxxxU

Panasonic Standard Resistor Values

10.0	20.0	40.2	80.6	162	324	649	1.30K	2.61K	5.23K	10.5K	21.0K	42.2K	84.5K	169K	340K	681K
10.2	20.5	41.2	82.5	165	332	665	1.33K	2.67K	5.36K	10.7K	21.5K	43.2K	86.6K	174K	348K	698K
10.5	21.0	42.2	84.5	169	340	681	1.37K	2.74K	5.49K	11.0K	22.1K	44.2K	88.7K	178K	357K	715K
10.7	21.5	43.2	86.6	174	348	698	1.40K	2.80K	5.62K	11.3K	22.6K	45.3K	90.9K	182K	365K	732K
11.0	22.1	44.2	88.7	178	357	715	1.43K	2.87K	5.76K	11.5K	23.2K	46.4K	93.1K	187K	374K	750K
11.3	22.6	45.3	90.9	182	365	732	1.47K	2.94K	5.90K	11.8K	23.7K	47.5K	95.3K	191K	383K	768K
11.5	23.2	46.4	93.1	187	374	750	1.50K	3.01K	6.04K	12.1K	24.3K	48.7K	97.6K	196K	392K	787K
11.8	23.7	47.5	95.3	191	383	768	1.54K	3.09K	6.19K	12.4K	24.9K	49.9K	100K	200K	402K	806K
12.1	24.3	48.7	97.6	196	392	787	1.58K	3.16K	6.34K	12.7K	25.5K	51.1K	102K	205K	412K	825K
12.4	24.9	49.9	100	200	402	806	1.62K	3.24K	6.49K	13.0K	26.1K	52.3K	105K	210K	422K	845K
12.7	25.5	51.1	102	205	412	825	1.65K	3.32K	6.65K	13.3K	26.7K	53.6K	107K	215K	432K	866K
13.0	26.1	52.3	105	210	422	845	1.69K	3.40K	6.81K	13.7K	27.4K	54.9K	110K	221K	442K	887K
13.3	26.7	53.6	107	215	432	866	1.74K	3.48K	6.98K	14.0K	28.0K	56.2K	113K	226K	453K	909K
13.7	27.4	54.9	110	221	442	887	1.78K	3.57K	7.15K	14.3K	28.7K	57.6K	115K	232K	464K	931K
14.0	28.0	56.2	113	226	453	909	1.82K	3.65K	7.32K	14.7K	29.4K	59.0K	118K	237K	475K	953K
14.3	28.7	57.6	115	232	464	931	1.87K	3.74K	7.50K	15.0K	30.1K	60.4K	121K	243K	487K	976K
14.7	29.4	59.0	118	237	475	953	1.91K	3.83K	7.68K	15.4K	30.9K	61.9K	124K	249K	499K	1.00M
15.0	30.1	60.4	121	243	487	976	1.96K	3.92K	7.87K	15.8K	31.6K	63.4K	127K	255K	511K	1.10M
15.4	30.9	61.9	124	249	499	1.00K	2.00K	4.02K	8.06K	16.2K	32.4K	64.9K	130K	261K	523K	1.20M
15.8	31.6	63.4	127	255	511	1.02K	2.05K	4.12K	8.25K	16.5K	33.2K	66.5K	133K	267K	536K	1.30M
16.2	32.4	64.9	130	261	523	1.05K	2.10K	4.22K	8.45K	16.9K	34.0K	68.1K	137K	274K	549K	1.50M
16.5	33.2	66.5	133	267	536	1.07K	2.15K	4.32K	8.66K	17.4K	34.8K	69.8K	140K	280K	562K	1.60M
16.9	34.0	68.1	137	274	549	1.10K	2.21K	4.42K	8.87K	17.8K	35.7K	71.5K	143K	287K	576K	1.80M
17.4	34.8	69.8	140	280	562	1.13K	2.26K	4.53K	9.09K	18.2K	36.5K	73.2K	147K	294K	590K	2.00M
17.8	35.7	71.5	143	287	576	1.15K	2.32K	4.64K	9.31K	18.7K	37.4K	75.0K	150K	301K	604K	2.20M
18.2	36.5	73.2	147	294	590	1.18K	2.37K	4.75K	9.53K	19.1K	38.3K	76.8K	154K	309K	619K	
18.7	37.4	75.0	150	301	604	1.21K	2.43K	4.87K	9.76K	19.6K	39.2K	78.7K	158K	316K	634K	
19.1	38.3	76.8	154	309	619	1.24K	2.49K	4.99K	10.0K	20.0K	40.2K	80.6K	162K	324K	649K	
19.6	39.2	78.7	158	316	634	1.27K	2.55K	5.11K	10.2K	20.5K	41.2K	82.5K	165K	332K	665K	

Panasonic 2512 Values

10	100	270	1K	10K	100K	150K	330K	1M

Panasonic 2010 Values

10.0	33.2	110	365	1.21K	4.02K	13.3K	44.2K	147K	487K
10.5	34.8	115	383	1.27K	4.22K	14.0K	46.4K	154K	511K
11.0	36.5	121	402	1.33K	4.42K	14.7K	48.7K	162K	536K
11.5	38.3	127	422	1.40K	4.64K	15.4K	51.1K	169K	562K
12.1	40.2	133	442	1.47K	4.87K	16.2K	53.6K	178K	590K
12.7	42.2	140	464	1.54K	5.11K	16.9K	56.2K	187K	619K
13.3	44.2	147	487	1.62K	5.36K	17.8K	59.0K	196K	649K
14.0	46.4	154	511	1.69K	5.62K	18.7K	61.9K	205K	681K
14.7	48.7	162	536	1.78K	5.90K	19.6K	64.9K	215K	715K
15.4	51.1	169	562	1.87K	6.19K	20.5K	68.1K	226K	750K
16.2	53.6	178	590	1.96K	6.49K	21.5K	71.5K	237K	787K
16.9	56.2	187	619	2.05K	6.81K	22.6K	75.0K	249K	825K
17.8	59.0	196	649	2.15K	7.15K	23.7K	78.7K	261K	866K
18.7	61.9	205	681	2.26K	7.50K	24.9K	82.5K	274K	909K
19.6	64.9	215	715	2.37K	7.87K	26.1K	86.6K	287K	953K
20.5	68.1	226	750	2.49K	8.25K	27.4K	90.9K	301K	1.00M
21.5	71.5	237	787	2.61K	8.66K	28.7K	95.3K	316K	
22.6	75.0	249	825	2.74K	9.09K	30.1K	100K	332K	
23.7	78.7	261	866	2.87K	9.53K	31.6K	105K	348K	
24.9	82.5	274	909	3.01K	10.0K	33.2K	110K	365K	
26.1	86.6	287	953	3.16K	10.5K	34.8K	115K	383K	
27.4	90.9	301	1.00K	3.32K	11.0K	36.5K	121K	402K	
28.7	95.3	316	1.05K	3.48K	11.5K	38.3K	127K	422K	
30.1	100	332	1.10K	3.65K	12.1K	40.2K	133K	442K	
31.6	105	348	1.15K	3.83K	12.7K	42.2K	140K	464K	

Panasonic 1% Chip Resistors

Digi-Key® Assortment Kits

Digi-Key® 0402 1% Chip Resistor Kits

RSM1L-ND 50 ea. of Values 10.0Ω to 97.6Ω **$189.00**
RSM2L-ND 50 ea. of Values 100Ω to 976Ω **$189.00**
RSM3L-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$189.00**
RSM4L-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$189.00**
RSM5L-ND 50 ea. of Values 100KΩ to 1.00MΩ **$189.00**

Digi-Key® 0603 1% Chip Resistor Kits

RSM1H-ND 50 ea. of Values 10.0Ω to 97.6Ω **$129.00**
RSM2H-ND 50 ea. of Values 100Ω to 976Ω **$129.00**
RSM3H-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$129.00**
RSM4H-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$129.00**
RSM5H-ND 50 ea. of Values 100KΩ to 1.00MΩ **$129.00**

Digi-Key® 1206 1% Chip Resistor Kits

RSM1FA-ND 50 ea. of Values 10Ω to 97.6Ω **$129.95**
RSM1F-ND 200 ea. of Values 10Ω to 97.6Ω **$495.00**

RSM2FA-ND 50 ea. of Values 100Ω to 976Ω **$129.95**
RSM2F-ND 200 ea. of Values 100Ω to 976Ω **$495.00**

RSM3FA-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$129.95**
RSM3F-ND 200 ea. of Values 1.00KΩ to 9.76KΩ **$495.00**

RSM4FA-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$129.95**
RSM4F-ND 200 ea. of Values 10.0KΩ to 97.6KΩ **$495.00**

RSM5FA-ND 50 ea. of Values 100KΩ to 1.00MΩ **$129.95**
RSM5F-ND 200 ea. of Values 100KΩ to 1.00MΩ **$495.00**

Digi-Key® 0805 1% Chip Resistor Kits

RSM1CA-ND 50 ea. of Values 10Ω to 97.6Ω **$129.95**
RSM1C-ND 200 ea. of Values 10Ω to 97.6Ω **$495.00**

RSM2CA-ND 50 ea. of Values 100Ω to 976Ω **$129.95**
RSM2C-ND 200 ea. of Values 100Ω to 976Ω **$495.00**

RSM3CA-ND 50 ea. of Values 1.00KΩ to 9.76KΩ **$129.95**
RSM3C-ND 200 ea. of Values 1.00KΩ to 9.76KΩ **$495.00**

RSM4CA-ND 50 ea. of Values 10.0KΩ to 97.6KΩ **$129.95**
RSM4C-ND 200 ea. of Values 10.0KΩ to 97.6KΩ **$495.00**

RSM5CA-ND 50 ea. of Values 100KΩ to 1.00MΩ **$129.95**
RSM5C-ND 200 ea. of Values 100KΩ to 1.00MΩ **$495.00**

PANASONIC® 0201/0402/0603/0805/1206/1210/2010/2512
Surface Mount 5% Thick Film Chip Resistors — 1/20, 1/16, 1/10, 1/8, 1/4, 1/2 and 1 Watt

0201 Series — Standard Resistor Values
See below for complete part numbers when ordering.

10	47	220	1.0K	4.7K	22K	100K	470K
12	56	270	1.2K	5.6K	27K	120K	560K
15	68	330	1.5K	6.8K	33K	150K	680K
18	82	390	1.8K	8.2K	39K	180K	820K
22	100	470	2.2K	10K	47K	220K	1.0M
27	120	560	2.7K	12K	56K	270K	
33	150	680	3.3K	15K	68K	330K	
39	180	820	3.9K	18K	82K	390K	

0402/0603/0805/1206/1210/2010/2512 Series — Standard Resistor Values
See below for complete part numbers when ordering.

* 12M, 15M, 18M and 22M are 10% Tolerance

1.0	2.4	5.6	13	33	75	180	430	1.0K	2.4K	5.6K	13K	33K	75K	180K	430K	1.0M	2.4M	5.6M	18M*
1.1	2.7	6.2	15	36	82	200	470	1.1K	2.7K	6.2K	15K	36K	82K	200K	470K	1.1M	2.7M	6.2M	22M*
1.2	3.0	6.8	16	39	91	220	510	1.2K	3.0K	6.8K	16K	39K	91K	220K	510K	1.2M	3.0M	6.8M	
1.3	3.3	7.5	18	43	100	240	560	1.3K	3.3K	7.5K	18K	43K	100K	240K	560K	1.3M	3.3M	7.5M	
1.5	3.6	8.2	20	47	110	270	620	1.5K	3.6K	8.2K	20K	47K	110K	270K	620K	1.5M	3.6M	8.2M	
1.6	3.9	9.1	22	51	120	300	680	1.6K	3.9K	9.1K	22K	51K	120K	300K	680K	1.6M	3.9M	9.1M	
1.8	4.3	10	24	56	130	330	750	1.8K	4.3K	10K	24K	56K	130K	330K	750K	1.8M	4.3M	10M	
2.0	4.7	11	27	62	150	360	820	2.0K	4.7K	11K	27K	62K	150K	360K	820K	2.0M	4.7M	12M*	
2.2	5.1	12	30	68	160	390	910	2.2K	5.1K	12K	30K	68K	160K	390K	910K	2.2M	5.1M	15M*	

Digi-Key® 1206, 1/8W, 5% Chip Resistor Assortments

CR1A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, etc. 1.0M (3,050) **$89.95**

CR1-KIT-ND 200 ea. (same values as kit above) . . **$329.00**

CR2A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$89.95**

CR2-KIT-ND 200 ea. (same values as kit above) . . . **$329.00**

Digi-Key® 0805, 1/10W, 5% Chip Resistor Assortments

CR3A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, etc. 1.0M (3,050) **$89.95**

CR3-KIT-ND 200 ea. (same values as kit above). . . . **$349.00**

CR4A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$89.95**

CR4-KIT-ND 200 ea. (same values as kit above). . . . **$349.00**

Digi-Key® 0603, 1/16W, 5% Chip Resistor Assortments

CR5A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, etc. 1.0M (3,050). **$94.95**

CR5-KIT-ND 200 ea. (same values as kit above) . . **$379.00**

CR6A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$94.95**

CR6-KIT-ND 200 ea. (same values as kit above) . . **$379.00**

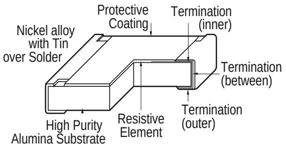
Digi-Key® 0402, 1/16W, 5% Chip Resistor Assortments

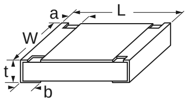
CR7A-KIT-ND 50 ea. of every other value from 10, 12, 15, 18, 22, 1.0M (3,050) **$99.95**

CR7-KIT-ND 200 ea. (same values as kit above) . . **$399.00**

CR8A-KIT-ND 50 ea. of every other value from 11, 13, 16, 20, etc. 910K (3,000) **$99.95**

CR8-KIT-ND 200 ea. (same values as kit above) . . **$399.00**





Type	Power Rating	Max. RCWV	Overload Voltage	Dimensions (mm) L	W	t	a	b	Temperature Coefficient (ppm/°C)	Panasonic Part No.
0201	1/20W	15V	30V	0.60	0.30	0.20	0.15	0.15	<10Ω: -100ppm/°C to +600ppm/°C 10Ω ~ 1MΩ: ±200ppm°C 1MΩ >: -400ppm/°C to +600ppm/°C	ERJ-1GEJ
0402	1/16W	50V	100V	1.00	0.50	0.35	0.20	0.25		ERJ-2GEJ
0603	1/16W	50V	100V	1.60	0.80	0.45	0.30	0.30		ERJ-3GEY
0805	1/10W	150V	200V	2.00	1.25	0.60	0.40	0.40		ERJ-6GEY
1206	1/8W	200V	400V	3.20	1.60	0.60	0.50	0.50		ERJ-8GEY
1210	1/4W	200V	400V	3.20	2.50	0.60	0.50	0.50		ERJ-14Y
2010	1/2W	200V	400V	5.00	2.50	0.60	0.60	0.60		ERJ-12ZY
2512	1W	250V	500V	6.40	3.20	0.60	0.65	0.60		ERJ-1TY

Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	1,000	Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing 4,000	5,000	10,000	12,000	Panasonic Part No.
0201, 1/20 W, 5%	(10-1.0MΩ)	P + Value + “AGCT-ND”†	5.64	15.17	34.85	118.90	P + Value + “AGTR-ND”†	10,000	—	—	99.90/M	—	ERJ-1GEJxxxX
0402, 1/16 W, 5%	(1~10MΩ)	P + Value + “JCT-ND”†	.84	2.26	5.19	17.69	P + Value + “JTR-ND”†	10,000	—	—	5.67/M	—	ERJ-2GEJxxxX
0603, 1/16 W, 5%	(1~22MΩ)*	P + Value + “GCT-ND”†	.80	2.15	4.93	16.82	P + Value + “GTR-ND”†	5,000	—	4.50/M	4.05/M	—	ERJ-3GEYJxxxV
0805, 1/10 W, 5%	(1~22MΩ)*	P + Value + “ACT-ND”†	.80	2.15	4.93	16.82	P + Value + “ATR-ND”†	5,000	—	4.80/M	4.32/M	—	ERJ-6GEYJxxxV
1206, 1/8 W, 5%	(1~22MΩ)*	P + Value + “ECT-ND”†	.94	2.53	5.82	19.87	P + Value + “ETR-ND”†	5,000	—	8.55/M	7.70/M	—	ERJ-8GEYJxxxV
1210, 1/4 W, 5%	(1~10MΩ)	P + Value + “VCT-ND”	2.70	7.25	16.66	56.84	P + Value + “VTR-ND”	5,000	—	46.80/M	42.12/M	—	ERJ-14YJxxxU
2010, 1/2 W, 5%	(1~10MΩ)	P + Value + “WCT-ND”	4.00	10.77	24.74	84.39	P + Value + “WTR-ND”	5,000	—	75.30/M	67.77/M	—	ERJ-12ZYJxxxU
2512, 1 W, 5%	(1~2.2MΩ)	PT + Value + “XCT-ND”	3.96	14.03	46.20	191.40	PT + Value + “XTR-ND”	4,000	148.80/M	—	—	124.00/M	ERJ-1TYJxxxU

† 0.0Ω (zerohm) value also available. ⁎ 12M, 15M, 18M and 22M are 10% tolerance.

PANASONIC® 0603/0805/1206/1210/2010/2512 5% and 0603/0805/1206 1%
Surface Mount Ultra Low Ohm Thick Film Chip Resistors — 1/10, 1/8, 1/4, 1/2 and 1 Watt

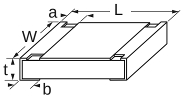
Standard Resistor Values
See below for complete part numbers when ordering.

.10	.15	.22	.33	.47	.68	1.0	1.5	2.2	3.3	4.7	6.8	9.1
.12	.18	.27	.39	.56	.82	1.2	1.8	2.7	3.9	5.6	8.2	

Rated Continuous Working Voltage (RCWV): The rated voltage at each resistance should be calculated from the following equation: RCWV=$\sqrt{P \times R}$

RCWV(V):P(W):R(Ω)

Max. overload voltage = RCWVx2.5



Type	Type (Power Rating)	Dimensions (mm) L	W	t	a	b	Temperature Coefficient (ppm/°C)	Panasonic Part No.
0603	1/10 (1/5)* Watt	1.6	0.8	0.45	0.30	0.30	.1 ~ .82Ω ±300ppm / °C/1.0 ~ 8.2 Ω + ±200ppm/C	ERJ-3RS/Q
0805	1/8 (1/4)* Watt	2.00	1.25	0.60	0.40	0.40	.1 ~ .91Ω ±250ppm / °C/1.0 ~ 9.1 Ω + ±200ppm/C	ERJ-6RS/Q
1206	1/4 (1/3)* Watt	3.20	1.60	0.60	0.50	0.50	.1 ~ .91Ω ±250ppm / °C/1.0 ~ 9.1 Ω + ±200ppm/C	ERJ-8RS/Q
1210	1/4 (1/2)* Watt	3.20	2.50	0.60	0.50	0.50	.1 ~ .91Ω ±200ppm / °C/1.0 ~ 9.1 Ω + ±100ppm/C	ERJ-14RS/Q
2010	1/2 Watt	5.00	2.50	0.60	0.60	0.60	.22 ~ 1.0Ω ±200ppm / °C	ERJ-12ZQJ
2512	1 Watt	6.40	3.20	0.60	0.65	0.60	.1 ~ .91Ω ±200ppm / °C/1.0 ~ 9.1 Ω + ±100ppm/C	ERJ-1TRS/Q

Description	Value Range	Digi-Key Part No.	Pricing 10	50	200	1,000	Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing 4,000	5,000	10,000	12,000	Panasonic Part No.
0603, 1/10 (1/5)* W, 5%	(.1 ~ .18Ω)	P + Value + “AHCT-ND”	3.26	8.77	20.15	68.76	P + Value + “AHTR-ND”	5,000	—	59.13/M	53.22/M	—	ERJ-3RSJxxxV
0603, 1/10 (1/5)* W, 5%	(.22 ~ 8.2Ω)	P + Value + “AHCT-ND”	1.91	5.13	11.78	40.19	P + Value + “AHTR-ND”	5,000	—	29.58/M	26.63/M	—	ERJ-3RQJxxxV
0603, 1/10 (1/5)* W, 1%	(.1 ~ .18Ω)	P + Value + “AJCT-ND”	5.36	14.43	33.15	113.10	P + Value + “AJTR-ND”	5,000	—	105.00/M	94.50/M	—	ERJ-3RSFxxxV
0603, 1/10 (1/5)* W, 1%	(.22 ~ 8.2Ω)	P + Value + “AJCT-ND”	3.03	8.14	18.70	63.80	P + Value + “AJTR-ND”	5,000	—	54.00/M	48.60/M	—	ERJ-3RQFxxxV
0805, 1/8 (1/4)* W, 5%	(.1 ~ .18Ω)	P + Value + “BCT-ND”	14.03	37.74	86.70	295.80	P + Value + “BTR-ND”	5,000	—	294.00/M	264.60/M	—	ERJ-6RSJxxxV
0805, 1/8 (1/4)* W, 5%	(.22 ~ 9.1Ω)	P + Value + “BCT-ND”	6.33	17.02	39.10	133.40	P + Value + “BTR-ND”	5,000	—	126.00/M	113.40/M	—	ERJ-6RQJxxxV
0805, 1/8 (1/4)* W, 1%	(.22 ~ 9.1Ω)	P + Value + “DCT-ND”	4.26	15.09	49.70	205.90	P + Value + “DTR-ND”	5,000	—	74.40/M	62.00/M	—	ERJ-6RQFxxxV
1206, 1/4 (1/3)* W, 5%	(.1 ~ .18Ω)	P + Value + “PCT-ND”	13.34	35.89	82.45	281.30	P + Value + “PTR-ND”	5,000	—	279.00/M	251.10/M	—	ERJ-8RSJxxxV
1206, 1/4 (1/3)* W, 5%	(.22 ~ 9.1Ω)	P + Value + “PCT-ND”	5.64	15.17	34.85	118.90	P + Value + “PTR-ND”	5,000	—	111.00/M	99.90/M	—	ERJ-8RQJxxxV
1206, 1/4 (1/3)* W, 1%	(.22 ~ 9.1Ω)	P + Value + “RCT-ND”	3.90	13.81	45.50	188.50	P + Value + “RTR-ND”	5,000	—	98.40/M	82.00/M	—	ERJ-8RQFxxxV
1210, 1/4 (1/2)* W, 5%	(.1 ~ .18Ω)	P + Value + “SCT-ND”	5.52	19.55	64.40	266.80	P + Value + “STR-ND”	5,000	—	211.20/M	176.00/M	—	ERJ-14RSJxxxU
1210, 1/4 (1/2)* W, 5%	(.22 ~ 9.1Ω)	P + Value + “SCT-ND”	3.42	12.11	39.90	165.30	P + Value + “STR-ND”	5,000	—	127.20/M	106.00/M	—	ERJ-14RQJxxxU
2010, 1/2 (1/2)* W, 5%	(.22 ~ 1.0Ω)	P + Value + “AFCT-ND”	6.48	22.95	75.60	313.20	P + Value + “AFTR-ND”	5,000	—	214.80/M	179.00/M	—	ERJ-12ZQJxxxU
2512, 1 W, 5%	(.1 ~ .18Ω)	PT + Value + “UCT-ND”	10.68	43.39	154.86	694.20	PT + Value + “UTR-ND”	4,000	591.75/M	—	—	499.70/M	ERJ-1TRSJxxxU
2512, 1 W, 5%	(.22 ~ 9.1Ω)	PT + Value + “UCT-ND”	8.64	30.60	100.80	417.60	PT + Value + “UTR-ND”	4,000	336.00/M	—	—	280.00/M	ERJ-1TRQJxxxU

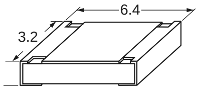
⁎ Available for reduction of load pulse characteristic (RSWV x 2.0)

PANASONIC® SMT Thick Film Chip Resistors / Low Resistance Type

For Current Sensing Applications

Features:

- 2512 Package (1 watt)
- Available in both 1% and 5% tolerance
- Operating temperature of -55°C to 125°C (derating required above 70°C)
- Resistance Range of 1.0-100mΩ
- Temperature Coefficient: ±100ppm >5mΩ
  ±350ppm <5mΩ



Standard Resistor Values (mΩ)
See below for complete part numbers when ordering.

1.0*	2.0*	4.0	8.0	12	16	47*	100
1.5*	3.0	5.0	10	15	20	50	

* not available in 1% tolerance

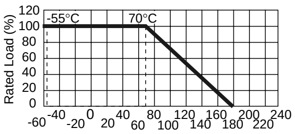
Description	Value Range (mΩ)	Digi-Key Part No.	Cut Tape Pricing 10	50	200	Digi-Key Part No.	Tape & Reel Pricing 3,000	Panasonic Part No.
2512, 1 W, 5%	1.0 ~ 1.5	P + Value + “TCT-ND”	18.60	75.56	269.69	P + Value + "TTR-ND"	684.00/M	ERJ-M1WTJxxxU
2512, 1 W, 5%	2.0	P + Value + “TCT-ND”	13.02	52.90	188.80	P + Value + “TTR-ND”	468.00/M	ERJ-M1WTJxxxU
2512, 1 W, 5%	3.0 ~ 20	P + Value + “TCT-ND”	11.47	46.62	166.39	P + Value + “TTR-ND”	452.25/M	ERJ-M1WSJxxxU
2512, 1 W, 5%	47 ~ 100	P + Value + “TCT-ND”	7.88	32.01	114.26	P + Value + “TTR-ND”	434.25/M	ERJ-L1WKJxxxU
2512, 1 W, 1%	3.0 ~ 20	P + Value + “MCT-ND”	12.18	49.47	176.59	P + Value + “MTR-ND”	515.25/M	ERJ-M1WSFxxxU
2512, 1 W, 1%	50 ~ 100	P + Value + “MCT-ND”	9.40	38.19	136.30	P + Value + “MTR-ND”	519.75/M	ERJ-L1WKFxxxU

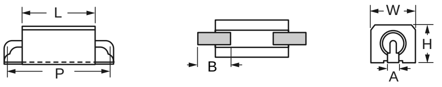
PANASONIC® 1 & 2 Watt — 5% SMD Metal Film Fixed Resistors

FEATURES:

- Non-flammable nature
- High reliability
- Approved under the ISO 9001 system

Derating Curve





Type	Dimensions (mm) P	L	W	H	A	B
1W	12.5	9.0	5.6	5.0	1.5	3.0
2W	15.0	12.0	6.4	5.8	1.5	4.0

Standard Resistor Values (Ω)
See below for complete part numbers when ordering.

.022	.068	.22	.68	2.2	6.8
.027	.082	.27	.82	2.7	8.2
.033	.10	.33	1.0	3.3	
.039	.12	.39	1.2	3.9	
.047	.15	.47	1.5	4.7	
.056	.18	.56	1.8	5.6	

Description	Value Range (Ω)	Digi-Key Part No.	Cut Tape Pricing 10	50	200	Digi-Key Part No.	Pkg. Size	Tape & Reel Pricing 1,000	2,000	5,000	6,000	Panasonic Part No
1 Watt, 5%	.022 ~ .082	PRX1W + Value + “CT-ND”	57.99	156.05	358.50	PRX1W + Value + “TR-ND”	2,000	—	835.52/M	—	668.42/M	ERX-1HQJxxMH
1 Watt, 5%	.10 ~ .18	PRX1W + Value + “CT-ND”	39.51	106.32	244.26	PRX1W + Value + “TR-ND”	2,000	—	566.72/M	—	453.38/M	ERX-1HZJxxxH
1 Watt, 5%	.22 ~ 8.2	PRX1W + Value + “CT-ND”	35.51	95.55	219.50	PRX1W + Value + “TR-ND”	2,000	—	508.48/M	—	406.79/M	ERX-1HJxxxH
2 Watt, 5%	.022 ~ .082	PRX2W + Value + “CT-ND”	62.15	167.24	384.20	PRX2W + Value + “TR-ND”	1,000	896.00	—	716.80/M	—	ERX-2HQJxxMH
2 Watt, 5%	.10 ~ .18	PRX2W + Value + “CT-ND”	45.67	122.90	282.34	PRX2W + Value + “TR-ND”	1,000	656.32	—	525.06/M	—	ERX-2HZJxxxH
2 Watt, 5%	.22 ~ 8.2	PRX2W + Value + “CT-ND”	39.51	106.32	244.26	PRX2W + Value + “TR-ND”	1,000	566.72	—	453.38/M	—	ERX-2HJxxxH

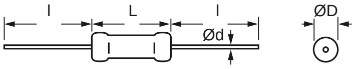
PANASONIC® 5 % Metal Oxide Film Resistors

Now Available In Tape and Reel

Matsushita fixed metal oxide film resistors feature small sized dimensions and have higher power rating at the same size as the conventional type.

Features:

Flame retardancy of the exclusively formulated inorganic insulative material exhibits an equivalent performance requirements of UL-94 (VE-O) and when operated at a potential less than 16 times RCWV, Matsushita metal (oxide) film resistors never flame nor arc. The coating and markings resist normal washing of solvents, such as Freon (TE, TMC, TF), trichloroethane.



Type	Max. Working Volt.	Dimensions (mm) L	l	D	d
1W	350	9.0	30.0	2.8	0.65
2W	350	12.0	30.0	4.0	0.80
3W	350	15.0	38.0	5.5	0.80

Characteristics:

Temperature Coefficient	R. Wattage of 1, 2, 3 ±350ppm/°C
Voltage Coefficient	25ppm/V Max
Insulation Resist.	10,000 MΩ Min
Temp. Cycling	±(1% + 0.05Ω) Max
Short-time Overload	±(2% + 0.05Ω) Max
Humidity (Steady State)	±(2% + 0.05Ω) Max
Load Life in Humidity	±(5% + 0.05Ω) Max
Load Life	±(5% + 0.05Ω) Max
Resistance to Soldering Heat	±(1% + 0.05Ω) Max
Vibration Low Freq	±(1% + 0.05Ω) Max
Thermal Shock	±(2% + 0.05Ω) Max
Noise	1.0µV/V Max

Standard Resistor Values — See below for complete part numbers when ordering.

0.47	0.82	1.5	2.7	4.7	8.2	15	27	47	82	150	270	470	820	1.5K	2.7K	4.7K	8.2K	15K	27K	47K	82K
0.51	0.91	1.6	3.0	5.1	9.1	16	30	51	91	160	300	510	910	1.6K	3.0K	5.1K	9.1K	16K	30K	51K	91K
0.56	1.0	1.8	3.3	5.6	10	18	33	56	100	180	330	560	1.0K	1.8K	3.3K	5.6K	10K	18K	33K	56K	100K
0.62	1.1	2.0	3.6	6.2	11	20	36	62	110	200	360	620	1.1K	2.0K	3.6K	6.2K	11K	20K	36K	62K	
0.68	1.2	2.2	3.9	6.8	12	22	39	68	120	220	390	680	1.2K	2.2K	3.9K	6.8K	12K	22K	39K	68K	
0.75	1.3	2.4	4.3	7.5	13	24	43	75	130	240	430	750	1.3K	2.4K	4.3K	7.5K	13K	24K	43K	75K	

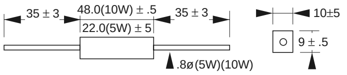
Description	Digi-Key Part Number	Pricing 1	5	100	1M	5M	10M
1 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-68KΩ)	“P” + Value + “W-1BK-ND” (i.e., P20W-1BK-ND)	.24	.89	10.07	69.47	61.86/M	55.58/M
1 Watt, 5% Metal Oxide Film Resistors Tape and Reel (0.47-68KΩ)	“P” + Value + “W-1TR-ND” (i.e., P1.0KW-1TR-ND)	—	—	—	—	64.95/M	58.36/M
2 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-100KΩ)	“P” + Value + “W-2BK-ND” (i.e., P20W-2BK-ND)	.29	1.06	13.65	83.58	74.38/M	66.71/M
2 Watt, 5% Metal Oxide Film Resistors Tape and Reel (0.47-100KΩ)	“P” + Value + “W-2TR-ND” (i.e., P1.0KW-2TR-ND)		283.13/3M	504.19/6M	906.01/12M		1761.79/27M
3 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-100KΩ)	“P” + Value + “W-3BK-ND” (i.e., P20W-3BK-ND)	.52	2.44	31.39	188.33	181.35/M	174.38/M
3 Watt, 5% Metal Oxide Film Resistors Tape and Reel (0.47-100KΩ)	“P” + Value + “W-3TR-ND” (i.e., P1.0KW-3TR-ND)		315.37/1,500	1123.21/6M	1766.08/10,500		3706.82/25,500

YAGEO 5 and 10 Watt Wirewound Rectangular Resistors 5%

Axial Lead Type

- **Operating Temperature Range: −55° to +250°C**

• Exceptionally small and sturdy; mechanically safe. Excellent electrical characteristics. • The materials used and the construction techniques ensure excellent flame resistance, arc resistance and moisture resistance as well as self-extinguishing capabilities. They will withstand the most rigorous loading test. • Applicable specifications: EIA RS-344 and EIA RC649.



5 Watt Standard Resistor Values — See below for complete part numbers when ordering.

0.30	0.62	1.2	2.2	3.9	6.8	12	22	39	68	120	220	390	680	1.2K
0.33	0.68	1.3	2.4	4.3	7.5	13	24	43	75	130	240	430	750	1.3K
0.39	0.75	1.5	2.7	4.7	8.2	15	27	47	82	150	270	470	820	1.5K
0.43	0.82	1.6	3.0	5.1	9.1	16	30	51	91	160	300	510	910	1.6K
0.47	0.91	1.8	3.3	5.6	10	18	33	56	100	180	330	560	1.0K	1.8K
0.51	1.0	2.0	3.6	6.2	11	20	36	62	110	200	360	620	1.1K	2.0K
0.56	1.1													

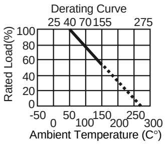
10 Watt Standard Resistor Values — See below for complete part numbers when ordering.

1.0	1.8	3.3	5.6	10	18	33	56	100	180	300	470	750	1.2K	2.0K
1.1	2.0	3.6	6.2	11	20	36	62	110	200	330	510	820	1.3K	2.2K
1.2	2.2	3.9	6.8	12	22	39	68	120	220	360	560	910	1.5K	2.4K
1.3	2.4	4.3	7.5	13	24	43	75	130	240	390	620	1.0K	1.6K	2.7K
1.5	2.7	4.7	8.2	15	27	47	82	150	270	430	680	1.1K	1.8K	3.0K
1.6	3.0	5.1	9.1	16	30	51	91	160						

Description	Digi-Key Part Number	Pricing 1	10	100	1M	5M	10M
5 Watt, 5% Metal Wirewound Rectangular Resistors, Bulk Package	Value + “W-5-ND” (i.e. 0.30W-5-ND)	.41	3.41	27.28	163.68	146.63/M	129.58/M
10 Watt, 5% Wirewound Rectangular Resistors, Bulk Package	Value + “W-10-ND” (i.e. 1.0W-10-ND)	.60	5.01	40.08	240.48	215.43/M	190.38/M

Characteristics

Temperature Coefficient	±300 PPM/°C
Insulation Resistance	100 MΩ
Load Life (1,000 hours)	±5% + 0.05Ω
Short-Time Overload	±2% + 0.05Ω
Dielectric Withstanding Volt	±2% + 0.05Ω
Moisture Resistance	±5% + 0.05Ω
Shock and Vibration	±1% + 0.05Ω
Effect of Soldering	±2% + 0.05Ω



Digi-Key® 5 Watt Resistor Assortment Kit

RS105-ND 0.30Ω-0.91Ω — 5 each 60 Resistors **$23.95**

RS205-ND 1.0Ω-9.1Ω — 4 each 96 Resistors **$32.95**

RS305-ND 10Ω-91Ω — 4 each 96 Resistors **$32.95**

RS405-ND 100Ω-2.0KΩ — 3 each 96 Resistors **$32.95**

Digi-Key® 10 Watt Resistor Assortment Kit

2 each of all 10 watt standard resistor values listed above. A total of 168 resistors.

RS110-ND **$72.95**

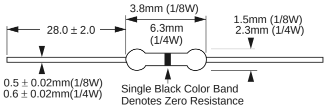
YAGEO Zerohm Jumper Wires

Applications:

Generally they are used for the following reasons:

- Inability to connect two points on a P.C. Board due to other circuit paths which must be crossed over.
- An After-the-Fact design change that requires new point connections.
- Circuit tuning by changing point connections.

Specifications:
Maximum Resistance: 0.004 ohm on 1/8 watt, 0.003 ohm on 1/4 watt; Typical Resistance: 0.002 ohm on both; Lead Material: tin-plated copper; Body Material: electrical grade, high performance molding compound; Min. Insulation Resistance — Dry: 10,000 megΩ, Wet: 100 megΩ; Min. Dielectric Withstanding Voltage — Atmospheric: 500V RMS, Reduced: 325V RMS; Insulation Flammability: resistor-insulation is self extinguishing within 10 seconds after externally applied flame is removed; Current Rating: 25 Amps at 25°C, derating to 0 amps at 150°C.



Description	Digi-Key Part No.	Pricing 5	200	1M	5M	10M	50M
1/8 Watt, Zerohm Jumper, Bulk Package	0.0EBK-ND	.26	8.11	16.28	14.93/M	13.52/M	12.48/M
1/8 Watt, Zerohm Jumper, Tape/Reel (5M Pcs./Reel)	0.0ETR-ND	—	—	—	18.37/M	17.29/M	14.14/M
1/4 Watt, Zerohm Jumper, Bulk Package	0.0QBK-ND	.27	4.93	10.03	9.23/M	8.37/M	7.73/M
1/4 Watt, Zerohm Jumper, Tape/Reel (5M Pcs./Reel)	0.0QTR-ND	—	—	—	11.53/M	10.85/M	8.90/M

YAGEO 5% Carbon Film Resistors

Available In 1/8, 1/4 and 1/2 Watt

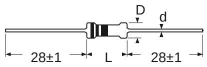
Standard Resistor Values
See below for complete part numbers when ordering.

1.0	1.8	3.3	5.6	10	18	33	56	100	180	330	560	1.0K	1.8K	3.3K	5.6K	10K	18K	33K	56K	100K	180K	330K	560K	1.0M	1.8M	3.3M	5.6M	10M
1.1	2.0	3.6	6.2	11	20	36	62	110	200	360	620	1.1K	2.0K	3.6K	6.2K	11K	20K	36K	62K	110K	200K	360K	620K	1.1M	2.0M	3.6M	6.2M	
1.2	2.2	3.9	6.8	12	22	39	68	120	220	390	680	1.2K	2.2K	3.9K	6.8K	12K	22K	39K	68K	120K	220K	390K	680K	1.2M	2.2M	3.9M	6.8M	
1.3	2.4	4.3	7.5	13	24	43	75	130	240	430	750	1.3K	2.4K	4.3K	7.5K	13K	24K	43K	75K	130K	240K	430K	750K	1.3M	2.4M	4.3M	7.5M	
1.5	2.7	4.7	8.2	15	27	47	82	150	270	470	820	1.5K	2.7K	4.7K	8.2K	15K	27K	47K	82K	150K	270K	470K	820K	1.5M	2.7M	4.7M	8.2M	
1.6	3.0	5.1	9.1	16	30	51	91	160	300	510	910	1.6K	3.0K	5.1K	9.1K	16K	30K	51K	91K	160K	300K	510K	910K	1.6M	3.0M	5.1M	9.1M	

Characteristics

Terminal Strength	Soldering	Temperature Change	Vibration	Moisture Resistance	Load Life	Dielectric Strength	Insulation Resistance	Short-Time Overload	Voltage Coefficient	Solvents Resistance
0.6mm load 10N (1kg): 10s Δ Rmax. 0.25% + 0.05Ω	2s 230°C 0.5% activated flux Δ Rmax. 0.25% + 0.25Ω	½ hr. @ −55°C, ½ hr. @ +155°C 5 cycles; Δ Rmax. 0.25% + 0.25Ω	1.5mm displacement @ 10 to 500 Hz; Δ Rmax. 0.25% + 0.05Ω	Δ Rmax. ±3%	Δ Rmax. ±2.5%	1000 hrs.: 70°C: Pnom or Vmax. Δ Rmax. 1% + 0.05Ω	500Vrms appl. for 1 min.: No breakdown	Room temp., dissipation 6.25× Pnom. 10 cycles, 5 sec. on, 45 sec. off; Δ Rmax. 0.25% +0.05Ω	5 ppm	No damage

CFR Series

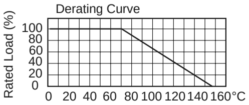


General Specifications

Type (Power Rating)	Dimensions (mm) L	D	d	Max. Working Voltage	Max. Overload Voltage	Rated Ambient Temperature	Temperature Cycling	Resistance Range	Resistance Tolerance
1/8 Watt *****	3.3 ± 0.4	1.8 ± 0.3	0.5 ± 0.05	200V	400V	70°C	−55°C to +155°C	1.0Ω to 10 MΩ	±5%
1/4 Watt	6.3 ± 0.5	2.3 ± 0.3	0.6 ± 0.05	250V	500V	70°C	−55°C to +155°C	1.0Ω to 10MΩ	±5%
1/2 Watt	9.0 ± 0.5	3.2 ± 0.5	0.6 ± 0.05	350V	700V	70°C	−55°C to +155°C	1.0Ω to 10MΩ	±5%

Features

- Industry’s lowest cost!
- Available in 1/8, 1/4, 1/2 watt; packaged in bulk or tape/reel (except 1/2 watt)
- Exceeds carbon comp MIL-R-11 performance
- Standard tolerance: 65%
- Exceptional long-term stability



Description	Digi-Key Part No.	Pricing 5	200	1M	5M	10M	50M
1/8 **Watt, 5% Carbon Film Resistors (* Power rating at 70°C = 1/6W)** Bulk Package	(Value)EBK-ND (i.e. 1.0EBK-ND)	.28	4.70	13.63	12.22/M	11.28/M	10.34/M
1/8 **Watt, 5% Carbon Film Resistors — Tape and Reel (* Power rating at 70°C = 1/6W)** (5,000 pcs./reel — Order in multiples of 5,000)	(Value)ETR-ND (i.e. 1.0ETR-ND)	—	—	—	14.95/M	13.80/M	11.04/M
1/4 **Watt, 5% Carbon Film Resistors** Bulk Package	(Value)QBK-ND (i.e. 1.0QBK-ND)	.28	3.89	8.70	8.27/M	7.69/M	6.24/M
1/4 **Watt, 5% Carbon Film Resistors — Tape and Reel** (5,000 pcs./reel — Order in multiples of 5,000)	(Value)QTR-ND (i.e. 1.0QTR-ND)	—	—	—	8.94/M	8.25/M	6.60/M
1/2 **Watt, 5% Carbon Film Resistors** Bulk Package	(Value)H-ND (i.e. 1.0H-ND)	.27	3.96	12.87	11.88/M	10.89/M	9.90/M

“E” = Eighth Watt; “Q” = Quarter Watt; “H” = Half Watt. Please be sure to specify. Half watt available in bulk package only.

Digi-Key® 1/8 Watt Resistor Assortment

RSE200-ND 200 each of all std. values 5% 1/8 watt carbon film resistors in the series 1.0 - 10 megohms (33,800 total pcs.) **$409.00**

RS112-ND Set of 5 each of 73 standard 5% 1/8 watt carbon film resistors in the series 1.0, 1.2, 1.5, 1.8, 2.2, etc., through 1.0 megohm (365 total pieces) **$16.96**

RS212-ND Set of 5 each of the 72 standard 5% 1/8 watt carbon film resistors in the series 1.1, 1.3, 1.6, 2.0, 2.4, etc., through 910 kilohm (360 total pieces) **$16.99**

Digi-Key® 1/4 Watt Resistor Assortment

RSQ200-ND 200 each of all std. values 5% 1/4 watt carbon film resistors in the series 1.0 - 10 megohms (33,800 total pcs.) **$239.00**

RS125-ND Set of 5 each of 73 standard 5% 1/4 watt carbon film resistors in the series 1.0, 1.2, 1.5, 1.8, 2.2, etc., through 1.0 megohm (365 total pieces) **$14.95**

RS225-ND Set of 5 each of the 72 standard 5% 1/4 watt carbon film resistors in the series 1.1, 1.3, 1.6, 2.0, 2.4, etc., through 910 kilohm (360 total pieces) **$14.95**

Digi-Key® 1/2 Watt Resistor Assortment

RSH200-ND 200 each of all std. values 5% 1/2 watt carbon film resistors in the series 1.0 - 10 megohms (33,800 total pcs.) **$335.00**

RS150-ND Set of 5 each of 73 standard 5% 1/2 watt carbon film resistors in the series 1.0, 1.2, 1.5, 1.8, 2.2, etc., through 1.0 megohm (365 total pieces) **$16.95**

RS250-ND Set of 5 each of the 72 standard 5% 1/2 watt carbon film resistors in the series 1.1, 1.3, 1.6, 2.0, 2.4, etc., through 910 kilohm (360 total pieces **$16.95**

YAGEO 1% Metal Film Fixed Resistors 1/4 Watt

MFR Series

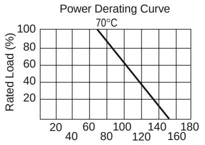
The MFR series Metal Film Resistors are manufactured using vacuum sputtering system to deposit multiple layers of mixed metals and passivative materials onto a carefully treated high grade ceramic substrate, the resistors are coated with layers of light-blue lacquer.

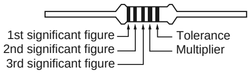
General Specifications:

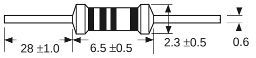
Power Rating: 1/4 Watt. **Max. Working Voltage:** 250V. **Max. Overload Voltage:** 500V. **Rated Ambient Temperature:** 70°C. **Temperature Cycling:** –65°C to +150°C. **Resistance Range:** 10.0Ω to 1.00MΩ. **Resistance Tolerance:** ±1%.

Electrical Specifications:

All measurements are taken at +25°C at 1KHz and 65% relative humidity, unless stated otherwise. **Type:** MF-25 **Style:** RN-55 **Power Rating:** 1/4 Watt **Resistance Tolerance:** ±1% **Temperature Coefficient:** ±100PPM/°C







Characteristics

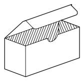
Temperature Cycling, -65°C to +150°C	(%) ....±0.25
Low Temperature Operation, -65°C	(%) ....±0.25
Short Time Overload	(%) ....±0.20
Terminal Strength, 5 lb. pull	(%) ....±0.20
Resistance to Soldering Heat, +350°C	(%) ....±0.10
Moisture Resistance, Mil Std 202	(%) ....±0.50
Life 1000 hrs. (Rated Power)	(%) ....±0.50
Shock, 50G, 11ms	(%) ....±0.20
Vibration-High Frequency, 10-2000Hz	(%) ....±0.20
Insulation Resistance	(%) ......=10^{10}Ω
Failure-Rate	(%) ....10^{-8}/h

1% Metal Film Resistors

Digi-Key® Assortment Kits

35% SAVINGS

Over Parts Purchased Separately



5 Each of Values 10Ω to 97.6Ω
RS1X-ND....................**$29.95**

5 Each of Values 100Ω to 976Ω
RS2X-ND....................**$29.95**

5 Each of Values 1.00KΩ to 9.76KΩ
RS3X-ND....................**$29.95**

5 Each of Values 10.0KΩ to 97.6KΩ
RS4X-ND....................**$29.95**

5 Each of Values 100KΩ to 1.00MΩ
RS5X-ND....................**$29.95**

Description	Value Range	Digi-Key Part No.	Pricing 5	200	1M	5M	10M	50M	100M	500M	1,000M
1/4 Watt, 1% Metal Film Resistors Bulk Package	10.0 ~ 1.00M Ω 10.0 ~ 1.0M Ω	Value + “X” +“BK-ND” (i.e. 10.0XBK-ND)	.54	8.27	21.38	18.24/M	15.68/M	12.54/M	—	—	—
1/4 Watt, 1% Metal Film Resistors Order in multiples of 5,000 (5,000 pcs./reel)	10.0 ~ 1.00M Ω 10.0 ~ 1.00M Ω	Value + “X” + “TR-ND” (i.e. 10.0XTR-ND)	—	—	—	20.63/M	17.60/M	14.30/M	12.10/M	9.90/M	8.80/M

YAGEO Standard Resistor Values

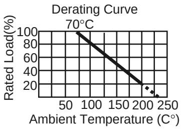
10.0	18.7	34.8	64.9	121	226	422	787	1.47K	2.74K	5.11K	9.53K	17.8K	33.2K	61.9K	115K	215K	402K	750K
10.2	19.1	35.7	66.5	124	232	432	806	1.50K	2.80K	5.23K	9.76K	18.2K	34.0K	63.4K	118K	221K	412K	768K
10.5	19.6	36.5	68.1	127	237	442	825	1.54K	2.87K	5.36K	10.0K	18.7K	34.8K	64.9K	121K	226K	422K	787K
10.7	20.0	37.4	69.8	130	243	453	845	1.58K	2.94K	5.49K	10.2K	19.1K	35.7K	66.5K	124K	232K	432K	806K
11.0	20.5	38.3	71.5	133	249	464	866	1.62K	3.01K	5.62K	10.5K	19.6K	36.5K	68.1K	127K	237K	442K	825K
11.3	21.0	39.2	73.2	137	255	475	887	1.65K	3.09K	5.76K	10.7K	20.0K	37.4K	69.8K	130K	243K	453K	845K
11.5	21.5	40.2	75.0	140	261	487	909	1.69K	3.16K	5.90K	11.0K	20.5K	38.3K	71.5K	133K	249K	464K	866K
11.8	22.1	41.2	76.8	143	267	499	931	1.74K	3.24K	6.04K	11.3K	21.0K	39.2K	73.2K	137K	255K	475K	887K
12.1	22.6	42.2	78.7	147	274	511	953	1.78K	3.32K	6.19K	11.5K	21.5K	40.2K	75.0K	140K	261K	487K	909K
12.4	23.2	43.2	80.6	150	280	523	976	1.82K	3.40K	6.34K	11.8K	22.1K	41.2K	76.8K	143K	267K	499K	931K
12.7	23.7	44.2	82.5	154	287	536	1.00K	1.87K	3.48K	6.49K	12.1K	22.6K	42.2K	78.7K	147K	274K	511K	953K
13.0	24.3	45.3	84.5	158	294	549	1.02K	1.91K	3.57K	6.65K	12.4K	23.2K	43.2K	80.6K	150K	280K	523K	976K
13.3	24.9	46.4	86.6	162	301	562	1.05K	1.96K	3.65K	6.81K	12.7K	23.7K	44.2K	82.5K	154K	287K	536K	1.00M
13.7	25.5	47.5	88.7	165	309	576	1.07K	2.00K	3.74K	6.98K	13.0K	24.3K	45.3K	84.5K	158K	294K	549K	
14.0	26.1	48.7	90.9	169	316	590	1.10K	2.05K	3.83K	7.15K	13.3K	24.9K	46.4K	86.6K	162K	301K	562K	
14.3	26.7	49.9	93.1	174	324	604	1.13K	2.10K	3.92K	7.32K	13.7K	25.5K	47.5K	88.7K	165K	309K	576K	
14.7	27.4	51.1	95.3	178	332	619	1.15K	2.15K	4.02K	7.50K	14.0K	26.1K	48.7K	90.9K	169K	316K	590K	
15.0	28.0	52.3	97.6	182	340	634	1.18K	2.21K	4.12K	7.68K	14.3K	26.7K	49.9K	93.1K	174K	324K	604K	
15.4	28.7	53.6	100	187	348	649	1.21K	2.26K	4.22K	7.87K	14.7K	27.4K	51.1K	95.3K	178K	332K	619K	
15.8	29.4	54.9	102	191	357	665	1.24K	2.32K	4.32K	8.06K	15.0K	28.0K	52.3K	97.6K	182K	340K	634K	
16.2	30.1	56.2	105	196	365	681	1.27K	2.37K	4.42K	8.25K	15.4K	28.7K	53.6K	100K	187K	348K	649K	
16.5	30.9	57.6	107	200	374	698	1.30K	2.43K	4.53K	8.45K	15.8K	29.4K	54.9K	102K	191K	357K	665K	
16.9	31.6	59.0	110	205	383	715	1.33K	2.49K	4.64K	8.66K	16.2K	30.1K	56.2K	105K	196K	365K	681K	
17.4	32.4	60.4	113	210	392	732	1.37K	2.55K	4.75K	8.87K	16.5K	30.9K	57.6K	107K	200K	374K	698K	
17.8	33.2	61.9	115	215	402	750	1.40K	2.61K	4.87K	9.09K	16.9K	31.6K	59.0K	110K	205K	383K	715K	
18.2	34.0	63.4	118	221	412	768	1.43K	2.67K	4.99K	9.31K	17.4K	32.4K	60.4K	113K	210K	392K	732K	

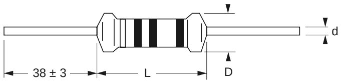
YAGEO 5% Metal Oxide Film Resistors

RSF Series

These Metal Oxide Resistors offer lower cost alternatives to Carbon Composition Resistors and General Purpose Metal Films. They can replace many low power General Purpose wirewound applications. These Metal Oxides meet overload tests in accordance with UL specification #1412 without producing a fire hazard. They withstand solvents in accordance with article Mil-Std-202E without producing mechanical or electrical damage.

Features: High surge/overload capability. Non-inductive design. Coating and marking resist Trichlorethelyne, Freon, and other cleaning agents.





Type	Max. Working Volt.	Dimensions (mm) L	D	d
1W	350	11.5 ± 1.0	4.5 ± 0.5	0.8 ± 0.05
2W	350	15.5 ± 1.0	5.0 ± 0.5	0.8 ± 0.05

Digi-Key® 1 and 2 Watt Resistor Assortment Kits

255 resistors per assortment. 5 each of the values in the ranges listed:

	0.47Ω - 56Ω	62Ω- 7.5KΩ	8.2KΩ - 1.0M	
1 Watt	RS101-ND	RS201-ND	RS301-ND	**$26.95**
2 Watt	RS102-ND	RS202-ND	RS302-ND	**$29.95**

Characteristics:

Temperature Coefficient	±100 PPM Typ. ±200 Max
Insulation Resist.	10,000 MΩ Min
Load Life (1,000 hours)	◄1% Typ. ±3% Max
Short-time Overload	±0.5% Max
Temp. Cycling	±0.5% Max
Moisture Resistance	±1.0% Max
Shock & Vibration	±0.2% Max
Effect of Soldering	±0.5% Max
Voltage Coefficient	.001%/V
Current Noise	◄.1µV/V

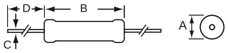
Standard Resistor Values — See below for complete part numbers when ordering.

0.47	0.82	1.5	2.7	4.3	6.8	11	18	30	47	75	120	200	330	510	820	1.3K	2.2K	3.6K	5.6K	9.1K	15K	24K	39K	62K	100K	160K	270K	430K	680K
0.51	0.91	1.6	3.0	4.7	7.5	12	20	33	51	82	130	220	360	560	910	1.5K	2.4K	3.9K	6.2K	10K	16K	27K	43K	68K	110K	180K	300K	470K	750K
0.56	1.0	1.8	3.3	5.1	8.2	13	22	36	56	91	150	240	390	620	1.0K	1.6K	2.7K	4.3K	6.8K	11K	18K	30K	47K	75K	120K	200K	330K	510K	820K
0.62	1.1	2.0	3.6	5.6	9.1	15	24	39	62	100	160	270	430	680	1.1K	1.8K	3.0K	4.7K	7.5K	12K	20K	33K	51K	82K	130K	220K	360K	560K	910K
0.68	1.2	2.2	3.9	6.2	10	16	27	43	68	110	180	300	470	750	1.2K	2.0K	3.3K	5.1K	8.2K	13K	22K	36K	56K	91K	150K	240K	390K	620K	1.0M
0.75	1.3	2.4																											

Description	Digi-Key Part Number	Pricing 1	10	100	1M	5M	10M
1 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-0.91Ω)	Value + “W-1-ND” (i.e. 0.47W-1-ND)	.27	1.96	12.60	77.00	68.60/M	61.60/M
1 Watt, 5% Metal Oxide Film Resistors Bulk Package (1.0-1.0MΩ)	Value + “W-1-ND” (i.e. 1.0W-1-ND)	.19	1.40	9.00	55.00	49.00/M	44.00/M
2 Watt, 5% Metal Oxide Film Resistors Bulk Package (0.47-0.91Ω)	Value + “W-2-ND” (i.e. 0.47W-2-ND)	.29	2.10	13.50	82.50	73.50/M	66.00/M
2 Watt, 5% Metal Oxide Film Resistors Bulk Package (1.0-1.0MΩ)	Value + “W-2-ND (i.e. 1.0W-2-ND)	.23	1.68	10.80	66.00	58.80/M	52.80/M

HUNTINGTON ELECTRIC, INC.

Silicone Coated Wirewound Resistors – 1, 3, 5 Watt, 1%



Series	A ±.81mm	B ±.81mm	C	D
ALSR-1	2.79	9.78	.51	38.10
ALSR-3	5.08	13.46	.81	38.10
ALSR-5	7.92	23.80	.81	38.10

Electrical Specifications

Series	ALSR-1	ALSR-3, ALSR-5
Resistance Tolerance	±1%	±1%
Dielectric Withstanding Voltage	500 VAC	1000 VAC
Short Time Overload	5 X rated wattage for 5 seconds	

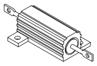
RESISTANCE VALUE CHART

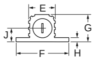
.10	.50	5.0	22	40	100	225	400	750	1.5K	3.5K	6.8K	20.0K
.13	.75	7.5	25	47	120	250	470	800	1.8K	3.9K	7.5K	25.0K
.15	1.0	10	27	50	125	270	500	820	2.0K	4.0K	8.0K	
.20	1.5	12	30	56	150	300	560	900	2.2K	4.7K	8.2K	
.25	2.0	15	33	68	180	330	600	1.0K	2.5K	5.0K	10.0K	
.30	3.0	18	35	75	200	350	680	1.1K	2.7K	5.6K	12.5K	
.33	4.0	20	39	82	220	390	700	1.2K	3.0K	6.0K	15.0K	

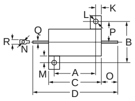
Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	50	100	Huntington Part No.
.10-.75	1	ALSR1F-(Value)-ND	1.98	1.77	—	1.50	1.10	ALSR-1-(Value)-1%
1.0-900	1	ALSR1F-(Value)-ND	1.95	1.74	—	1.47	1.08	ALSR-1-(Value)-1%
1.0K-3.0K	1	ALSR1F-(Value)-ND	2.08	1.86	—	1.57	1.16	ALSR-1-(Value)-1%
.10-900	3	ALSR3F-(Value)-ND	1.38	—	1.16	—	.97	ALSR-3-(Value)-1%
1.0K-2.7K	3	ALSR3F-(Value)-ND	1.33	—	1.12	—	.93	ALSR-3-(Value)-1%
3.0K-4.7K	3	ALSR3F-(Value)-ND	1.38	—	1.16	—	.97	ALSR-3-(Value)-1%
5.0K-10.0K	3	ALSR3F-(Value)-ND	1.40	—	1.18	—	.98	ALSR-3-(Value)-1%
.10-900	5	ALSR5F-(Value)-ND	1.35	—	1.14	—	.95	ALSR-5-(Value)-1%
1.0K-4.7K	5	ALSR5F-(Value)-ND	1.33	—	1.12	—	.93	ALSR-5-(Value)-1%
5.0K-8.2K	5	ALSR5F-(Value)-ND	1.30	—	1.10	—	.91	ALSR-5-(Value)-1%
10.0K-20.0K	5	ALSR5F-(Value)-ND	1.35	—	1.14	—	.95	ALSR-5-(Value)-1%
25.0K	5	ALSR5F-(Value)-ND	1.33	—	1.12	—	.93	ALSR-5-(Value)-1%

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Aluminum Housed Chassis Mount Resistors – 5, 10, 25, 50 Watt, 1% (Precision Power Wirewound)







HEI's high power aluminum housed resistors use centerless ground ceramic cores for uniform heat distribution. Molded in a special high temperature material and mounted in an extruded aluminum finned housing, these designs provide maximum power dissipation and reliability. They have tinned copperweld leads for solderability and meet or exceed MIL-R-18546, including "N" characteristic, and MIL-R-39009. **Specifications:** • Power Rating: Based on full power operation at 25°C, and maximum hotspot 275°C. • Mounting on proper heat sink as follows: For 5 and 10 Watt – use 4" x 6" x 2" x .040" (101.60 x 152.40 x 50.80 x 1.02mm) aluminum chassis; For 25 and 50 Watt – use 5" x 7" x 2" x .040" (127.00 x 177.80 x 50.80 x 1.02mm) aluminum chassis.

Electrical Specifications:

Series	TMC-5	TMC-10	TMC-25	TMC-50
MIL-R-39009/MIL-R-18546	RER-60/RE-60	RER-65/RE-65	RER-70/RE-70	RER-75/RE-75
HEI Power	7.5 Watts	12.5 Watts	25 Watts	50 Watts
MIL Power	5 Watts	10 Watts	20 Watts	30 Watts
Working Voltage	160	265	550	1250
Dielectric Strength	1000 VAC	1000 VAC	2500 VAC	2500 VAC

Series	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q AWG	R
TMC-5	11.40	12.57	16.03	30.15	8.86	16.79	8.51	1.91	3.81	2.24	2.49	2.36	1.40	8.33	7.01	16	2.97
TMC-10	14.40	16.00	19.84	36.50	11.30	20.70	10.54	2.16	5.08	2.62	2.49	2.97	2.31	9.50	8.71	12	4.37
TMC-25	18.39	19.96	27.76	50.80	13.84	27.81	14.61	2.41	6.86	4.62	3.30	3.56	2.31	12.70	10.72	12	4.37
TMC-50	39.83	21.56	50.77	72.21	16.00	29.34	16.00	2.41	7.87	5.23	3.30	3.56	2.31	12.70	11.51	12	4.37

RESISTANCE VALUE CHART

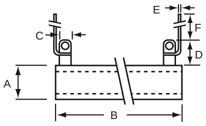
TMC-5			TMC-10			TMC-25			TMC-50				
.10	25	2.0K	.20	33	330	.10	20	500	.15	1.5	8.0	40	300
.50	30	10.0K	1.0	35	1.0K	1.0	25	1.0K	.20	2.0	10	50	500
1.0	100	15.0K	2.0	50	2.0K	2.0	40	2.0K	.25	2.5	12	75	1.0K
5.0	150		2.5	75	2.5K	3.0	100	3.0K	.30	3.3	16	100	1.5K
10	300		10	100	10.0K	12	200		.50	5.0	20	150	2.5K
12	390		25	300		15	300		1.0	6.0	30	250	5.0K

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	50	100	250	Huntington* Part No.
.10-15.0K	5	TMC5-(Value)-ND	3.10	2.65	2.19	1.87	1.72	TMC-5-(Value)-1%
.20-10.0K	10	TMC10-(Value)-ND	3.28	2.80	2.29	1.98	1.81	TMC-10-(Value)-1%
.10-3.0K	25	TMC25-(Value)-ND	4.66	3.98	3.27	2.81	2.58	TMC-25-(Value)-1%
.15-5.0K	50	TMC50-(Value)-ND	4.90	4.17	3.43	2.95	2.70	TMC-50-(Value)-1%

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Vitreous Enamel Wirewound Power Resistors – 8, 12 Watt

Series	A	B	C	D	E	F
FVTS-5	7.94	25.40	4.76	11.11	.81	50.80
FVTS-10	7.94	44.45	4.76	11.11	.81	50.80



Electrical Specifications:

Series	FVTS-5	FVTS-10
Resistance Tolerance	±5% 1Ω & above ±10% 1Ω & below	±5% 1Ω & above ±10% 1Ω & below
Power Rating	8 Watts at 25°C	12 Watts at 25°C
Dielectric Withstanding Voltage	1000 VAC	1000 VAC
Short Time Overload	5 X rated wattage for 5 seconds	10 X rated wattage for 5 seconds

RESISTANCE VALUE CHART

2.0	10	35	125	300	600	1.2K	2.5K	4.5K	7.5K	12.0K	40.0K
3.0	15	50	150	400	750	1.25K	3.0K	5.0K	8.0K	15.0K	50.0K
5.0	20	75	200	450	900	1.5K	3.5K	6.0K	9.0K	20.0K	
7.5	25	100	250	500	1.0K	2.0K	4.0K	7.0K	10.0K	25.0K	

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	25	100	250	Huntington Part No.
5.0-900	8	FVTS5-(Value)-ND	1.84	1.58	1.21	1.08	FVTS-5-(Value)
1.0K-4.5K	8	FVTS5-(Value)-ND	1.98	1.70	1.30	1.16	FVTS-5-(Value)
5.0K-9.0K	8	FVTS5-(Value)-ND	2.12	1.81	1.39	1.24	FVTS-5-(Value)
10.0K	8	FVTS5-(Value)-ND	1.95	1.67	1.28	1.14	FVTS-5-(Value)
2.0-450	12	FVTS10-(Value)-ND	2.09	1.79	1.37	1.22	FVTS-10-(Value)
500-900	12	FVTS10-(Value)-ND	2.31	1.98	1.52	1.35	FVTS-10-(Value)
1.0K-5.0K, 7.5K-9.0K	12	FVTS10-(Value)-ND	2.56	2.19	1.68	1.49	FVTS-10-(Value)
10.0K-20.0K	12	FVTS10-(Value)-ND	2.83	2.43	1.86	1.65	FVTS-10-(Value)
25.0K	12	FVTS10-(Value)-ND	3.19	2.73	2.09	1.86	FVTS-10-(Value)
40.0K, 50.0K	12	FVTS10-(Value)-ND	4.26	3.65	2.79	2.48	FVTS-10-(Value)

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Vitreous Enamel Wirewound Power Resistors – 25, 50, 100, 225 Watt

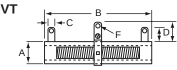
ADJUSTABLE AVT SERIES: • **Resistance Tolerance:** ±10%, wattage rating applied only when the entire resistance is in the circuit • **Dielectric Withstanding Voltage:** 1000VAC • **Short Time Overload:** 10 times the rated wattage for 5 seconds

FIXED FVT SERIES: • **Resistance Tolerance:** ±5% above 1 ohm, ±10% below 1 ohm • **Dielectric Withstanding Voltage:** 1000VAC • **Short Time Overload:** 10 times the rated wattage for 5 seconds

RESISTANCE VALUE CHART

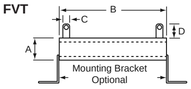
1.0	10	150	750	5.0K	50.0K
2.0	25	200	1.0K	10.0K	
3.0	50	250	2.5K	12.0K	
5.0	100	500	4.0K	25.0K	

AVT



Series	A	B	C	D	E	F
AVT25	14.29	50.80	6.35	14.29	17.46	4.22
AVT50	14.29	101.60	6.35	14.29	17.46	4.22
AVT100	19.05	165.10	6.35	14.29	17.46	4.22
AVT200	28.58	266.70	7.94	15.88	22.23	4.22

FVT



Series	A	B	C	D
FVT25	14.29	50.80	6.35	14.29
FVT50	14.29	101.60	6.35	14.29
FVT100	19.05	165.10	6.35	14.29
FVT200	28.58	266.70	7.94	15.88

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	100	Huntington Part No.
2.0-3.0	25	FVT25-(Value)-ND	3.31	—	2.40	1.89	FVT-25-(Value)
10, 25, 100	25	FVT25-(Value)-ND	3.28	—	2.38	1.87	FVT-25-(Value)
500-4.0K	25	FVT25-(Value)-ND	3.28	—	2.38	1.87	FVT-25-(Value)
5.0K	25	FVT25-(Value)-ND	3.54	—	2.57	2.02	FVT-25-(Value)
10.0K-12.0K	25	FVT25-(Value)-ND	3.77	—	2.73	2.15	FVT-25-(Value)
25.0K-50.0K	25	FVT25-(Value)-ND	4.76	—	3.45	2.71	FVT-25-(Value)
1.0-5.0	50	FVT50-(Value)-ND	4.79	—	3.47	2.73	FVT-50-(Value)
10-100, 500, 1.0K	50	FVT50-(Value)-ND	4.50	—	3.26	2.56	FVT-50-(Value)
5.0K	50	FVT50-(Value)-ND	4.79	—	3.47	2.73	FVT-50-(Value)
1.0, 2.0, 5.0	100	FVT100-(Value)-ND	8.21	—	5.95	4.67	FVT-100-(Value)
10, 50, 100, 250, 1.0K	100	FVT100-(Value)-ND	7.48	—	5.42	4.26	FVT-100-(Value)
1.0, 3.0, 5.0	225	FVT200-(Value)-ND	12.36	11.13	9.89	9.27	FVT-200-(Value)
10, 50, 100, 250, 500	225	FVT200-(Value)-ND	10.30	9.27	8.24	7.73	FVT-200-(Value)
1.0K	225	FVT200-(Value)-ND	10.30	9.27	8.24	7.73	FVT-200-(Value)
1.0, 3.0, 5.0	25	AVT25-(Value)-ND	5.63	5.18	4.28	3.60	AVT-25-(Value)
10-100, 250, 500	25	AVT25-(Value)-ND	4.65	4.28	3.54	2.98	AVT-25-(Value)
1.0-5.0	50	AVT50-(Value)-ND	6.58	6.05	5.00	4.21	AVT-50-(Value)
10-100, 500	50	AVT50-(Value)-ND	5.65	5.20	4.30	3.62	AVT-50-(Value)
1.0K	50	AVT50-(Value)-ND	5.93	5.46	4.51	3.80	AVT-50-(Value)
1.0, 2.0	100	AVT100-(Value)-ND	12.83	11.80	9.75	8.21	AVT-100-(Value)
10, 50, 100, 250	100	AVT100-(Value)-ND	9.48	8.72	7.21	6.07	AVT-100-(Value)
1.0K	100	AVT100-(Value)-ND	10.95	10.08	8.33	7.01	AVT-100-(Value)
1.0-5.0	225	AVT200-(Value)-ND	22.35	20.57	16.99	14.31	AVT-200-(Value)
10-500	225	AVT200-(Value)-ND	16.10	14.82	12.24	10.31	AVT-200-(Value)
1.0K	225	AVT200-(Value)-ND	16.90	15.55	12.85	10.82	AVT-200-(Value)
Mounting Bracket for 25/50W Res.‡		B1003-ND	.45	—	.35	.25	B1003-1
Mounting Bracket for 100W Res.‡		B1002-ND	.54	—	.42	.30	B1002-1
Mounting Bracket for 200W Res.‡		B1001-ND	.59	—	.46	.33	B1001-1

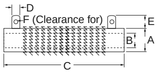
* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).
‡ Requires 2 brackets per resistor

HUNTINGTON ELECTRIC, INC.

Edgewound Resistors – 300, 1000 Watt

HEI Edgewound Resistors are designed for applications demanding maximum power dissipation in minimum space. Edgewounds are constructed of special alloy resistance wire, crimped, and wound on edge. High quality ceramic cores are used with a coating of either vitreous enamel or silicone to provide heat sink for short term overloads and maximum dissipation.

Specifications: • **Dielectric Withstanding Voltage:** Measured from terminals to brackets, 1000 VAC • **Overload:** 10 X rated power for 5 seconds • **Tolerance:** ±10% • Wattage is based on 25°C free air rating.



Series	A	(Core) B	C	D	(Terminal) E	F
FVE-300	28.58	19.05	215.90	7.94	15.88	254.00 - 812.80
AVE-300	28.58	19.05	215.90	7.94	15.88	254.00 - 812.80
FSE-1000	63.50	44.45	381.00	12.70	15.88	6.35 - 508.00

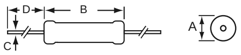
RESISTANCE VALUE CHART

FVE-300 Fixed			AVE-300 Adj.				FSE-1000 Fixed		
.50	5.0	12	.10	.20	1.6	20	.25	3.5	15
1.2	8.0	16	.12	.80	8.0		.50	4.5	
2.0	10	20	.16	1.0	16		1.0	10	

Resistance Range (Ω)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	Huntington* Part No.
.50 - 20	300	FVE300-(Value)-ND	16.48	14.81	12.54	FVE-300-(Value)
.10 - 20	300	AVE300-(Value)-ND	25.76	20.58	14.42	AVE-300-(Value)
.25 - 15	1000	FSE1000-(Value)-ND	51.50	46.35	—	FSE-1000-(Value)
FVE-300 and AVE-300 Mounting Kit		K1016-ND	9.75 each			K1016
FSE-1000 Mounting Kit		K3003-ND	16.69 each			K3003

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

Silicone Coated Wirewound Resistors – 1, 3, 5, 10 Watt, 5%



Series	A ±.81mm	B ±.81mm	C	D
ALSR-1	2.79	9.78	.51	38.10
ALSR-3	5.08	13.46	.81	38.10
ALSR-5	7.92	23.80	.81	38.10
ALSR-10	7.92	45.72	.81	38.10

Electrical Specifications:

Series	ALSR-1	ALSR-3	ALSR-5	ALSR-10
Resistance Tolerance	±5%	±5%	±5%	±5%
Power Rating	1 Watts at 25°C	3 Watts at 25°C	5 Watts at 25°C	10 Watts at 25°C
Dielectric Withstanding Voltage	500 VAC	1000 VAC	1000 VAC	1000 VAC
Short Time Overload	5 X rated wattage for 5 seconds		10 X rated wattage for 5 seconds	

RESISTANCE VALUE CHART

.10	2.0	25	75	270	680	1.75K	4.0K	8.5K	20.0K
.13	3.0	27	82	300	700	1.8K	4.5K	9.0K	22.0K
.15	4.0	30	100	330	750	2.0K	4.7K	10.0K	22.5K
.20	5.0	33	120	350	800	2.2K	5.0K	11.0K	25.0K
.25	7.5	35	125	390	820	2.25K	5.6K	12.0K	
.30	10	39	150	400	900	2.5K	6.0K	12.5K	
.33	12	40	180	450	1.0K	2.7K	6.8K	13.5K	
.50	15	47	200	470	1.1K	3.0K	7.0K	15.0K	
.75	18	50	220	500	1.2K	3.3K	7.5K	16.0K	
1.0	20	56	225	560	1.25K	3.5K	8.0K	17.5K	
1.5	22	68	250	600	1.5K	3.9K	8.2K	18.0K	

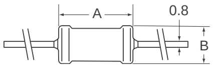
Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	50	100	Huntington* Part No.
.10-.75	1	ALSR1J-(Value)-ND	1.63	1.45	1.23	.90	ALSR-1-(Value)
1.0-900	1	ALSR1J-(Value)-ND	1.59	1.43	1.21	.89	ALSR-1-(Value)
1.0K-5.6K	1	ALSR1J-(Value)-ND	1.85	1.66	1.40	1.03	ALSR-1-(Value)
6.0K-10.0K	1	ALSR1J-(Value)-ND	1.95	1.74	1.47	1.08	ALSR-1-(Value)
.10-900	3	ALSR3J-(Value)-ND	1.40	1.25	1.06	.78	ALSR-3-(Value)
1.0K-4.7K	3	ALSR3J-(Value)-ND	1.27	1.14	.96	.71	ALSR-3-(Value)
5.0K-10.0K	3	ALSR3J-(Value)-ND	1.53	1.37	1.16	.85	ALSR-3-(Value)
.10-.75	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
1.0-7.5	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
10-2.7K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
3.0K-4.7K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
5.0K-9.0K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
10.0K-22.5K	5	ALSR5J-(Value)-ND	1.56	1.40	1.18	.87	ALSR-5-(Value)
25.0K	5	ALSR5J-(Value)-ND	1.53	1.37	1.16	.85	ALSR-5-(Value)
.10-.75	10	ALSR10-(Value)-ND	1.98	1.77	1.50	1.10	ALSR-10-(Value)
1.0-680, 750-900	10	ALSR10-(Value)-ND	1.69	1.51	1.28	.94	ALSR-10-(Value)
1.0K-2.7K	10	ALSR10-(Value)-ND	1.82	1.63	1.38	1.01	ALSR-10-(Value)
3.0K-9.0K	10	ALSR10-(Value)-ND	2.11	1.89	1.60	1.17	ALSR-10-(Value)
10.0K-22.5K	10	ALSR10-(Value)-ND	2.31	2.06	1.74	1.28	ALSR-10-(Value)
25.0K	10	ALSR10-(Value)-ND	2.60	2.32	1.96	1.44	ALSR-10-(Value)

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

BC COMPONENTS

NEW! 1% and 5% Cemented Wirewound Precision Resistors

The resistor element is a resistive wire which is wound in a single layer on a ceramic rod. Metal caps are pressed over the ends of the rod. The ends of the resistance wire and the leads are connected to the caps by welding. Tinned copper-clad iron leads with poor heat conductivity are employed permitting the use of relatively short leads to obtain stable mounting without overheating the solder joint. The resistor is coated with a green silicon cement which is not resistant to aggressive fluxes. The coating is non-flammable, will not drip even at high overloads and is resistant to most commonly used cleaning solvents, in accordance with MIL-STD-202E, method 215 and IEC 60068-2-45.



Type	A Max. (mm)	B Max. (mm)
PAC01	10	4.3
PAC03	17	5.5
PAC05	23	7.5
AC01	10	4.3
AC03	13	5.5
AC05	17	7.5
AC07	25	7.5

Value Range (Ohms)	Wattage	Res. Tol.	Digi-Key* Part No.	Pricing 5	200	500	Digi-Key* Part No.	Tube Pricing 500	1,000	5,000	10,000	BC Components Part No.
.10-910	1	1%	PAC1D(Value)CT-ND	13.68	208.80	288.00	PAC1D(Value)TB-ND	—	525.00	448.00/M	406.00/M	2306 327 5xxxx
1.0K-2.5K			PAC1D(Value)CT-ND	17.01	259.55	358.00	PAC1D(Value)TB-ND	—	656.25	560.00/M	507.50/M	2306 327 5xxxx
.10-910	3	1%	PAC3D(Value)CT-ND	16.53	252.30	—	PAC3D(Value)TB-ND	—	544.00	493.00/M	442.00/M	2306 327 1xxxx
1.0K-5.0K			PAC3D(Value)CT-ND	19.29	294.35	—	PAC3D(Value)TB-ND	—	636.80	577.10/M	517.40/M	2306 327 1xxxx
.10-1.0K	5	1%	PAC5D(Value)CT-ND	18.81	287.10	—	PAC5D(Value)TB-ND	363.75	620.80	562.60/M	504.40/M	2306 327 3xxxx
1.1K-10.0K			PAC5D(Value)CT-ND	21.28	324.80	—	PAC5D(Value)TB-ND	412.50	704.00	638.00/M	572.00/M	2306 327 3xxxx
.10-750	1	5%	AC1W(Value)CT-ND	8.65	131.95	182.00	AC1W(Value)TB-ND	—	326.25	278.40/M	252.30/M	2306 328 33xxx
820-2.4K			AC1W(Value)CT-ND	9.41	143.55	198.00	AC1W(Value)TB-ND	—	356.25	304.00/M	275.50/M	2306 328 33xxx
.10-750	3	5%	AC3W(Value)CT-ND	10.12	154.43	—	AC3W(Value)TB-ND	192.19	328.00	297.25/M	266.50/M	2322 329 03xxx
820-5.0K			AC3W(Value)CT-ND	13.87	211.70	—	AC3W(Value)TB-ND	266.25	454.40	411.80/M	369.20/M	2322 329 03xxx
.10-1.0K	5	5%	AC5W(Value)CT-ND	11.78	179.80	—	AC5W(Value)TB-ND	225.00	384.00	348.00/M	312.00/M	2322 329 05xxx
1.1K-10.0K			AC5W(Value)CT-ND	14.92	227.65	—	AC5W(Value)TB-ND	286.88	489.60	443.70/M	397.80/M	2322 329 05xxx
.10-1.0K	7	5%	AC7W(Value)CT-ND	14.92	227.65	—	AC7W(Value)TB-ND	286.88	489.60	443.70/M	397.80/M	2322 329 07xxx
1.1K-15.0K			AC7W(Value)CT-ND	19.14	292.18	—	AC7W(Value)TB-ND	370.31	632.00	572.75/M	513.50/M	2322 329 07xxx

* For complete part number, substitute Digi-Key value (from Resistance Value Chart) for (Value).

1% PAC Resistance Values

1W			3W			5W		
.10	33.0	750	.10	33.0	750	.10	33.0	750
.13	36.0	820	.13	36.0	820	.13	36.0	820
.15	39.0	910	.15	39.0	910	.15	39.0	910
.20	47.0	1.0K	.20	47.0	1.0K	.20	47.0	1.0K
.25	50.0	1.1K	.25	50.0	1.1K	.25	50.0	1.1K
.30	56.0	1.2K	.30	56.0	1.2K	.30	56.0	1.2K
.33	68.0	1.5K	.33	68.0	1.5K	.33	68.0	1.5K
.47	75.0	1.8K	.47	75.0	1.8K	.47	75.0	1.8K
.50	82.0	2.0K	.50	82.0	2.0K	.50	82.0	2.0K
.75	100	2.2K	.75	100	2.2K	.75	100	2.2K
1.0	120	2.5K	1.0	120	2.5K	1.0	120	2.5K
1.5	124		1.5	124	2.7K	1.5	124	2.7K
2.0	150		2.0	150	3.0K	2.0	150	3.0K
3.0	180		3.0	180	3.6K	3.0	180	3.6K
3.9	200		3.9	200	3.9K	3.9	200	3.9K
4.7	220		4.7	220	4.7K	4.7	220	4.7K
5.0	250		5.0	250	5.0K	5.0	250	5.0K
7.5	270		7.5	270		7.5	270	5.6K
10.0	300		10.0	300		10.0	300	6.2K
12.0	330		12.0	330		12.0	330	6.8K
15.0	360		15.0	360		15.0	360	7.5K
18.0	390		18.0	390		18.0	390	8.2K
20.0	470		20.0	470		20.0	470	9.1K
22.0	500		22.0	500		22.0	500	10.0K
25.0	560		25.0	560		25.0	560	
27.0	620		27.0	620		27.0	620	
30.0	680		30.0	680		30.0	680	

5% AC Resistance Values

1W			3W			5W			7W		
.10	39.0	1.0K	.10	39.0	1.0K	.10	39.0	1.0K	.10	39.0	1.0K
.13	43.0	1.1K	.13	43.0	1.1K	.13	43.0	1.1K	.13	43.0	1.1K
.15	47.0	1.2K	.15	47.0	1.2K	.15	47.0	1.2K	.15	47.0	1.2K
.20	50.0	1.5K	.20	50.0	1.5K	.20	50.0	1.5K	.20	50.0	1.5K
.24	56.0	1.8K	.24	56.0	1.8K	.24	56.0	1.8K	.24	56.0	1.8K
.30	68.0	2.0K	.30	68.0	2.0K	.30	68.0	2.0K	.30	68.0	2.0K
.33	75.0	2.2K	.33	75.0	2.2K	.33	75.0	2.2K	.33	75.0	2.2K
.47	82.0	2.4K	.47	82.0	2.4K	.47	82.0	2.4K	.47	82.0	2.4K
.50	100		.50	100	2.7K	.50	100	2.7K	.50	100	2.7K
.75	120		.75	120	3.0K	.75	120	3.0K	.75	120	3.0K
1.0	150		1.0	150	3.3K	1.0	150	3.3K	1.0	150	3.3K
1.5	180		1.5	180	3.6K	1.5	180	3.6K	1.5	180	3.6K
2.0	200		2.0	200	3.9K	2.0	200	3.9K	2.0	200	3.9K
3.0	220		3.0	220	4.3K	3.0	220	4.3K	3.0	220	4.3K
3.9	240		3.9	240	4.7K	3.9	240	4.7K	3.9	240	4.7K
4.7	270		4.7	270	5.0K	4.7	270	5.0K	4.7	270	5.0K
5.0	300		5.0	300		5.0	300	5.6K	5.0	300	5.6K
7.5	330		7.5	330		7.5	330	6.2K	7.5	330	6.2K
10.0	360		10.0	360		10.0	360	6.8K	10.0	360	6.8K
12.0	390		12.0	390		12.0	390	7.5K	12.0	390	7.5K
15.0	430		15.0	430		15.0	430	8.2K	15.0	430	8.2K
18.0	470		18.0	470		18.0	470	9.1K	18.0	470	9.1K
20.0	500		20.0	500		20.0	500	10.0K	20.0	500	10.0K
22.0	560		22.0	560		22.0	560		22.0	560	11.0K
24.0	620		24.0	620		24.0	620		24.0	620	12.0K
27.0	680		27.0	680		27.0	680		27.0	680	13.0K
30.0	750		30.0	750		30.0	750		30.0	750	15.0K
33.0	820		33.0	820		33.0	820		33.0	820	
36.0	910		36.0	910		36.0	910		36.0	910	

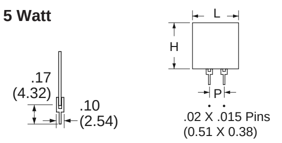
OHMITE TA Series Power Chip® Resistors - Thick Film on Alumina Substrate

5, 10 and 25 Watt

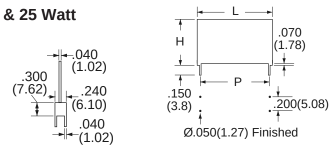
Ohmite Power Chip Resistors are thick film on alumina oxide substrates with copper plated silver conductors, Ruthenium oxide resistance material, and a glass passivation layer. These resistors offer very low inductance (50nh measured at 1MHz) and outstanding power density (10W/in2). Repetitive transient capability is 5 times rated power as long as one second average dissipation remains equal to or less than the free air rating.

Features: • Wide resistance range • Low inductance • High power density • Easy to install. PC-mountable. **Material:** • Terminals: Solder Plated Phosphor Bronze • Coating: Glass. **Electrical:** • Resistance Tolerance: ±5% • Power Rating: Based on 25°C free air with linear derating to 0 watts at 350°C • Maximum Operating Voltage: 350 VAC, 500 VDC through glass 1000 VAC, 1500 VDC through substrate • Overload: Five times rated power, as long as the one second average dissipation does not exceed the wattage rating • DR: ±2%, 2000 hours • Derating: Linearly from 100% @ +25°C to 0% @ 350°C

5 Watt



10 & 25 Watt



Res. Series	Maximum Dim. - in. (mm)		
	P	L (length)	H (height)
TA205	.200 (5.08)	.50 (12.70)	1.00 (25.40)
TA810	.800 (20.32)	1.00 (25.40)	1.00 (25.40)
TA025	1.90 (48.3)	2.220 (56.39)	1.170 (29.70)

RESISTANCE VALUE CHART

5 Watt			10 Watt		25 Watt
Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
1.0 (1R00)	15 (15R0)	200 (200R)	1.0 (1R00)	100 (100R)	2.0 (2R00)
1.2 (1R20)	18 (18R0)	240 (240R)	1.5 (1R50)	150 (150R)	3.0 (3R00)
1.5 (1R50)	20 (20R0)	300 (300R)	2.0 (2R00)	200 (200R)	3.9 (3R90)
1.8 (1R80)	24 (24R0)	330 (330R)	3.0 (3R00)	300 (300R)	5.1 (5R10)
2.0 (2R00)	30 (30R0)	390 (390R)	3.9 (3R90)	390 (390R)	8.2 (8R20)
2.4 (2R40)	33 (33R0)	470 (470R)	5.1 (5R10)	510 (510R)	20 (20R0)
3.0 (3R00)	39 (39R0)	510 (510R)	6.8 (6R80)	680 (680R)	30 (30R0)
3.3 (3R30)	47 (47R0)	560 (560R)	8.2 (8R20)	820 (820R)	39 (39R0)
3.9 (3R90)	51 (51R0)	680 (680R)	10 (10R0)	1K (1K00)	51 (51R0)
4.7 (4R70)	56 (56R0)	820 (820R)	15 (15R0)	1.5K (1K50)	82 (82R0)
5.1 (5R10)	68 (68R0)	1K (1K00)	20 (20R0)	2.0K (2K00)	200 (200R)
5.6 (5R60)	82 (82R0)	1.2K (1K20)	30 (30R0)		300 (300R)
6.8 (6R80)	100 (100R)	1.5K (1K50)	39 (39R0)		390 (390R)
8.2 (8R20)	120 (120R)	1.8K (1K80)	51 (51R0)		510 (510R)
10 (10R0)	150 (150R)	2K (2K00)	68 (68R0)		820 (820R)
12 (12R0)	180 (180R)	2.4K (2K40)	82 (82R0)		2.0K (2K00)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	50	100	500
1.0-8.2	5	TA205PA(Code)J-ND	1.50	1.28	1.05	.90
10-2.4K	5	TA205PA(Code)J-ND	1.50	1.28	1.05	.90
1.0-2.0K	10	TA810PW(Code)J-ND	3.50	2.80	2.00	1.85
2.0-2K	25	TA025PW(Code)J-ND	5.85	5.20	4.39	3.22

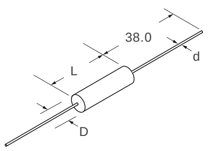
* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

OX / OY Resistor Series - Ceramic Composition

Features: • Replaces 1 and 2 watt carbon composition resistors • Meets high energy density demands • High peak power • 10% Tolerance. **Material:** • Terminals: Solder-coated axial leads • Coating: UL-94 V0 approved silicone. **Derating:** • Linear from 100% @ +70°C to 0% @ +200°C. **Electrical:** • Resistance Tolerance: ±10% standard • Power Rating: Based on 70°C free air rating • Temperature Coefficient: -1300 ±300ppm/°C • Dielectric Withstanding Voltage: 500VAC (750VAC for OY Series) • Joules Maximum (For a single impulse): 50 (80 for OY Series)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	100	1,000
3.3-100	1	OX(Code)-ND	.77	.62	.50
120-100K	1	OX(Code)-ND	.71	.57	.46
3.3-100	2	OY(Code)-ND	1.00	.80	.65
120-100K	2	OY(Code)-ND	.93	.74	.60
120K-1MEG	2	OY(Code)-ND	1.09	.87	.71

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).



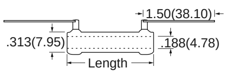
Res. Series	Maximum Dim. - in. (mm)		
	D	L	d
OX	.256 (6.5)	.748 (19.0)	.030 (.81)
OY	.315 (8.0)	.886 (22.5)	.030 (.81)

RESISTANCE VALUE CHART

Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
3.3 (33GK)	47 (470K)	680 (681K)	10K (103K)	150K (154K)
3.9 (39GK)	56 (560K)	820 (821K)	12K (123K)	180K (184K)
4.7 (47GK)	68 (680K)	1K (102K)	15K (153K)	220K (224K)
5.6 (56GK)	82 (820K)	1.2K (122K)	18K (183K)	270K (274K)
6.8 (68GK)	100 (101K)	1.5K (152K)	22K (223K)	330K (334K)
8.2 (82GK)	120 (121K)	1.8K (182K)	27K (273K)	390K (394K)
10 (100K)	150 (151K)	2.2K (222K)	33K (333K)	470K (474K)
12 (120K)	180 (181K)	2.7K (272K)	39K (393K)	560K (564K)
15 (150K)	220 (221K)	3.3K (332K)	47K (473K)	680K (684K)
18 (180K)	270 (271K)	3.9K (392K)	56K (563K)	820K (824K)
22 (220K)	330 (331K)	4.7K (472K)	68K (683K)	1MEG (105K)
27 (270K)	390 (391K)	5.6K (562K)	82K (823K)	
33 (330K)	470 (471K)	6.8K (682K)	100K (104K)	
39 (390K)	560 (561K)	8.2K (822K)	120K (124K)	

Vitreous Enamel Power Resistors

8 and 12 Watt



	B8J	B12J
Max. Voltage	250	625
Overload	10 times rated wattage for 5 seconds	
Length	1.000" (25.40mm)	1.750" (44.45mm)

RESISTANCE VALUE CHART

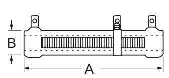
Value (Code)	Value (Code)	Value (Code)	Value (Code)	Value (Code)
2.0 (2R0)	75 (75R)	600 (600)	3.5K (3K5)	12.0K (12K)
3.0 (3R0)	100 (100)	750 (750)	4.0K (4K0)	15.0K (15K)
5.0 (5R0)	125 (125)	900 (900)	4.5K (4K5)	20.0K (20K)
7.5 (7R5)	150 (150)	1.0K (1K0)	5.0K (5K0)	25.0K (25K)
10 (10R)	200 (200)	1.2K (1K2)	6.0K (6K0)	40.0K (40K)
15 (15R)	250 (250)	1.25K (1K25)	7.0K (7K0)	50.0K (50K)
20 (20R)	300 (300)	1.5K (1K5)	7.5K (7K5)	
25 (25R)	400 (400)	2.0K (2K0)	8.0K (8K0)	
35 (35R)	450 (450)	2.5K (2K5)	9.0K (9K0)	
50 (50R)	500 (500)	3.0K (3K0)	10.0K (10K)	

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	25	100	250
5.0-7.5	8	B8J(Code)-ND	2.88	2.59	2.30	2.02
10-500	8	B8J(Code)-ND	2.78	2.50	2.22	1.95
600-1.0K	8	B8J(Code)-ND	2.58	2.32	2.06	1.81
2.0K-9.0K	8	B8J(Code)-ND	2.63	2.37	2.10	1.84
10.0K	8	B8J(Code)-ND	2.85	2.57	2.28	2.00
2.0-7.5	12	B12J(Code)-ND	2.78	2.50	2.22	1.95
10-900	12	B12J(Code)-ND	2.46	2.21	1.97	1.72
1.0K-1.5K	12	B12J(Code)-ND	2.67	2.40	2.14	1.87
2.0K-4.0K	12	B12J(Code)-ND	2.74	2.47	2.19	1.92
4.5K-9.0K	12	B12J(Code)-ND	2.88	2.59	2.30	2.02
10.0K-15.0K	12	B12J(Code)-ND	2.95	2.66	2.36	2.07
20.0K-40.0K	12	B12J(Code)-ND	3.06	2.75	2.45	2.14
50.0K	12	B12J(Code)-ND	3.85	3.47	3.08	2.70

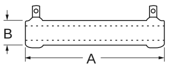
*For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

25, 50, 100, and 225 Watt

Adjustable with Tabs - Type 210
D25K, D50K, D100K, D225K



Fixed with Tabs - Type 270
L25J, L50J, L100J, L225J



RESISTANCE VALUE CHART

Value (Code)	Value (Code)	Value (Code)
1.0 (1R0)	100 (100)	2.5K (2K5)
2.0 (2R0)	150 (150)	4.0K (4K0)
3.0 (3R0)	200 (200)	5.0K (5K0)
5.0 (5R0)	250 (250)	10.0K (10K)
10 (10R)	500 (500)	12.0K (12K)
25 (25R)	750 (750)	25.0K (25K)
50 (50R)	1.0K (1K0)	50.0K (50K)

	L25J/D25K	L50J/D50K	L100J/D100K	L225J/D225K
Max. Volt.	625	1625	2845	4595
Overload	10 times rated wattage for 5 seconds			
DWV	1000VAC	1000VAC	1000VAC	3000VAC
Length A	2" (50.80mm)	4" (101.60mm)	6.5" (165.10mm)	10.5" (266.70mm)
Diameter B	.5625" (14.29mm)	.5625" (14.29mm)	.750" (19.05mm)	1.125" (28.58mm)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	25	50	100
2.0-3.0	25	L25J(Code)-ND	4.80	4.08	—	3.36
10, 25, 100, 500, 750	25	L25J(Code)-ND	4.57	3.88	—	3.20
1.0K, 2.5K	25	L25J(Code)-ND	4.79	4.07	—	3.35
4.0K, 5.0K	25	L25J(Code)-ND	4.84	4.11	—	3.39
10.0K-12.0K	25	L25J(Code)-ND	5.80	4.93	—	4.06
25.0K	25	L25J(Code)-ND	5.80	4.93	—	4.06
50.0K	25	L25J(Code)-ND	6.23	5.30	—	4.36
Mtg. Bracket 25/50W‡	25	9-100-ND	.65	—	.33	.21
1.0	25	D25K(Code)-ND	8.94	7.60	—	6.26
3.0, 5.0, 10, 25, 50, 100, 250, 500	25	D25K(Code)-ND	7.60	6.46	—	5.32
1.0	50	L50J(Code)-ND	7.18	6.10	—	5.03
2.0-5.0	50	L50J(Code)-ND	6.73	5.72	—	4.71
10, 25, 50, 100, 500	50	L50J(Code)-ND	6.60	5.61	—	4.62
1.0K, 5.0K	50	L50J(Code)-ND	6.54	5.56	—	4.58
1.0-3.0	50	D50K(Code)-ND	12.70	10.80	—	8.89
5.0	50	D50K(Code)-ND	12.47	10.60	—	8.73
10, 25, 50	50	D50K(Code)-ND	10.87	9.24	—	7.61
100, 500	50	D50K(Code)-ND	10.87	9.24	—	7.61
1.0K	50	D50K(Code)-ND	11.37	9.66	—	7.96

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	25	50	100
1.0-2.0	100	L100J(Code)-ND	9.88	8.40	—	7.41
5.0	100	L100J(Code)-ND	9.50	8.08	—	7.13
10, 50	100	L100J(Code)-ND	9.00	7.65	—	6.75
100, 250	100	L100J(Code)-ND	8.80	7.48	—	6.60
1.0K	100	L100J(Code)-ND	8.46	7.19	—	6.35
1.0	100	D100K(Code)-ND	15.70	14.13	—	12.56
2.0,10	100	D100K(Code)-ND	15.29	13.76	—	12.23
50, 100, 250	100	D100K(Code)-ND	13.74	12.37	—	10.99
1.0K	100	D100K(Code)-ND	13.74	12.37	—	10.99
1.0	225	L225J(Code)-ND	28.05	25.25	—	22.44
5.0	225	L225J(Code)-ND	16.25	14.63	—	13.00
10, 50, 100	225	L225J(Code)-ND	14.10	12.69	—	11.28
250, 500	225	L225J(Code)-ND	13.45	12.11	—	10.76
1.0K	225	L225J(Code)-ND	13.00	11.70	—	10.40
1.0	225	D225K(Code)-ND	32.44	29.20	25.95	—
2.0-3.0	225	D225K(Code)-ND	27.52	24.77	22.02	—
5.0	225	D225K(Code)-ND	24.83	22.35	19.86	—
10, 25, 50	225	D225K(Code)-ND	22.11	19.90	17.69	—
100, 150, 200, 250, 500, 1.0K	225	D225K(Code)-ND	18.67	16.80	14.94	—
Mtg. Bracket 100W‡	100	12-100-ND	1.40	—	.71	.45
Mtg. Bracket 200W‡	200	18-100-ND	1.47	—	.74	.47

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code). ‡ Requires 2 brackets per resistor.

NOTE: *Not all values are stocked at all wattages. Please see chart.*

OHMITE®

SMD Power Resistors

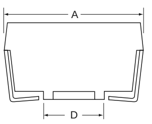
1, 1.5, 2, 3 and 3.5 Watt

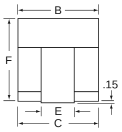
Electrical Specifications

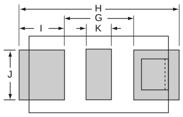
	RW1S0BA	RW1S5CA	RW2S0CB	RW2R0DA	RW3R0DB	RW3R5EA
Power at 25°C Ambient	1 watt	1.5 watt	2 watt	2 watt	3 watt	3.5 watt
Max. Voltage	50	75	100	100	200	350
Temperature Coefficient	0.1 to 1 ohm — ±90 ppm/°C 1 to 10 ohms — ±50 ppm/°C 10 ohms and over — ±20 ppm/°C					
Dielectric Withstanding Voltage	1000 V					

RESISTANCE VALUE CHART

RW1S0BA( )F 1%	RW1S0BA( )J 5%		RW1S5CA 5%	RW2R0DA 5%	RW2S0CB 5%	RW3R0DB 5%	RW3R5EA 5%
Value (Code)	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**
.010 (R010)	.005 (R005)	.100 (R100)	.005 (R005)	.005 (R005)	.005 (R005)	.005 (R005)	.010 (R010)
.015 (R015)	.010 (R010)	.150 (R150)	.010 (R010)	.010 (R010)	.010 (R010)	.010 (R010)	.020 (R020)
.020 (R020)	.015 (R015)	.200 (R200)	.015 (R015)	.015 (R015)	.020 (R020)	.015 (R015)	.025 (R025)
.030 (R030)	.020 (R020)	.240 (R240)	.030 (R030)	.020 (R020)	.030 (R030)	.025 (R025)	.030 (R030)
.033 (R033)	.024 (R024)	.300 (R300)	.040 (R040)	.025 (R025)	.050 (R050)	.036 (R036)	.036 (R036)
.039 (R039)	.027 (R027)	.360 (R360)	.080 (R080)	.030 (R030)	.150 (R150)	.050 (R050)	.050 (R050)
.047 (R047)	.030 (R030)	.470 (R470)	.100 (R100)	.050 (R050)	.200 (R200)	.075 (R075)	.100 (R100)
.050 (R050)	.036 (R036)	.680 (R680)	.150 (R150)	.100 (R100)	.300 (R300)	.100 (R100)	.200 (R200)
.100 (R100)	.050 (R050)	.750 (R750)	.200 (R200)	.470 (R470)	.500 (R500)	.500 (R500)	.500 (R500)
	.075 (R075)	1.00 (1R00)	.500 (R500)	1.00 (1R00)	1.00 (1R00)	1.00 (1R00)	1.00 (1R00)







Series	Max. Dimensions (mm)										
	A	B	C	D	E	F	G	H	I	J	K
RW1S0BA	6.76	3.58	3.38 Ref.	3.05	1.63	3.58	3.81	8.79	2.49	3.20	1.27
RW1S5CA	10.52	4.17	3.96 Ref.	5.84	2.24	4.17	6.50	13.31	3.40	3.20	1.52
RW2S0CB	10.85	5.87	5.64 Ref.	6.86	2.46	5.77	7.01	13.64	3.33	3.20	2.36
RW2R0DA	12.06	6.22	5.99 Ref.	6.86	3.94	5.87	8.05	14.86	3.40	3.94	2.36
RW3R0DB	16.05	7.06	6.81 Ref.	10.85	3.94	5.87	12.04	18.85	3.40	3.94	2.36
RW3R5EA	21.11	7.06	6.81 Ref.	14.78	3.94	6.98	15.52	25.40	4.95	3.94	2.36

Resistance Range (Ohms)	Wattage	Tolerance	Digi-Key* Part No.	Bulk Price Each			Digi-Key* Part No.	Tape & Reel Pricing			
				1	100	500		750	1,000	1,500	2,000
.010 - .050	1	1%	RW1S0BA(Code)FBK-ND	2.53	2.10	1.79	RW1S0BA(Code)FTTR-ND	—	—	—	1680.00/M
.100	1	1%	RW1S0BA(Code)FBK-ND	3.22	2.68	2.28	RW1S0BA(Code)FTTR-ND	—	—	—	2140.00/M
.005 - .050	1	5%	RW1S0BA(Code)JBK-ND	2.05	1.70	1.45	RW1S0BA(Code)JTTR-ND	—	—	—	1360.00/M
.075 - 1.00	1	5%	RW1S0BA(Code)JBK-ND	2.48	2.06	1.75	RW1S0BA(Code)JTTR-ND	—	—	—	1650.01/M
.005 - .040	1.5	5%	RW1S5CA(Code)JBK-ND	1.81	1.50	1.28	RW1S5CA(Code)JTTR-ND	—	—	1200.00/M	—
.080 - .500	1.5	5%	RW1S5CA(Code)JBK-ND	2.39	1.98	1.68	RW1S5CA(Code)JTTR-ND	—	—	1580.00/M	—
.050	2	1%	RW2R0DAR050FBK-ND	2.13	1.77	1.50	RW2R0DAR050FTTR-ND	—	1420.00	—	—
.005 - .050	2	5%	RW2R0DA(Code)JBK-ND	1.87	1.55	1.32	RW2R0DA(Code)JTTR-ND	—	1240.00	—	—
.100 - 1.00	2	5%	RW2R0DA(Code)JBK-ND	2.24	1.86	1.58	RW2R0DA(Code)JTTR-ND	—	1490.00	—	—
.005 - 050	2	5%	RW2S0CB(Code)JBK-ND	1.79	1.49	1.27	RW2S0CB(Code)JTTR-ND	—	1190.00	—	—
.150 - 1.00	2	5%	RW2S0CB(Code)JBK-ND	2.28	1.89	1.61	RW2S0CB(Code)JTTR-ND	—	1510.00	—	—
.005- .050	3	5%	RW3R0DB(Code)JBK-ND	2.15	1.78	1.51	RW3R0DB(Code)JTTR-ND	—	1420.00	—	—
.075 - 1.00	3	5%	RW3R0DB(Code)JBK-ND	2.42	2.01	1.71	RW3R0DB(Code)JTTR-ND	—	1610.00	—	—
.010 - .050	3.5	5%	RW3R5EA(Code)JBK-ND	2.28	1.89	1.61	RW3R5EA(Code)JTTR-ND	1132.50	—	—	—
.100 - 1.00	3.5	5%	RW3R5EA(Code)JBK-ND	2.42	2.02	1.72	RW3R5EA(Code)JTTR-ND	1215.00	—	—	—

*For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

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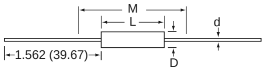
10 Series - Molded Silicone Axial Lead Wire Element Resistors

Ideal for Current Sensing

Electrical Specifications: • **Resistance Tolerance:** ±1% (F Type) • **Power Rating:** Based on 25°C free air rating • **Overload:** 5x rated power for 5 seconds • **Dielectric Withstanding Volt.:** 2 watt – 500 VRMS, 3 and 5 watt – 1000 VRMS • **Insulation Resistance:** Not less than 1000MΩ • **Temp. Range:** -55°C to 275°C



Watts	Maximum Dim. – mm			
	D	L	d	M
2	2.64	10.57	.86	29.36
3	5.46	14.48	.86	33.27
5	8.64	23.50	1.07	42.55

RESISTANCE VALUE CHART

12F Series	13F Series	15F Series
Value (Code)	**Value (Code)**	**Value (Code)**
.005 (R005)	.005 (R005)	.005 (R005)
.010 (R010)	.010 (R010)	.010 (R010)
.015 (R015)	.015 (R015)	.015 (R015)
.020 (R020)	.020 (R020)	.020 (R020)
.025 (R025)	.025 (R025)	.025 (R025)
.030 (R030)	.030 (R030)	.030 (R030)
.040 (R040)	.040 (R040)	.040 (R040)
.050 (R050)	.050 (R050)	.050 (R050)
.070 (R070)	.070 (R070)	.070 (R070)
.100 (R100)	.100 (R100)	.100 (R100)
	.150 (R150)	.150 (R150)
	.200 (R200)	.200 (R200)
		.250 (R250)
		.300 (R300)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each			
			1	10	100	250
.005 - .020	2	12F(Code)-ND	1.56	1.40	1.25	1.17
.025 - .040	2	12F(Code)-ND	1.54	1.39	1.23	1.16
.050	2	12F(Code)-ND	1.45	1.31	1.16	1.09
.070	2	12F(Code)-ND	1.56	1.40	1.25	1.17
.100	2	12F(Code)OH-ND	1.70	1.53	1.36	1.28
.005	3	13F(Code)-ND	1.55	1.40	1.24	1.16
.010 - .015	3	13F(Code)-ND	1.46	1.31	1.17	1.10
.020 - .030	3	13F(Code)-ND	1.40	1.26	1.12	1.05
.040 - .050	3	13F(Code)-ND	1.38	1.24	1.10	1.04
.070 - .200	3	13F(Code)-ND	1.55	1.40	1.24	1.16
.005	5	15F(Code)-ND	1.85	1.67	1.48	1.39
.010 - .030	5	15F(Code)-ND	1.79	1.61	1.43	1.34
.040 - .050	5	15F(Code)-ND	1.75	1.58	1.40	1.31
.070 - .300	5	15F(Code)-ND	1.72	1.55	1.38	1.29

*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

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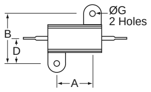
89 Type - Aluminum Housed Axial Lead Wirewound Resistors

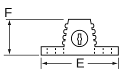
The 89 Type are high performance axial-lead-type resistors. They are better suited to withstand vibration, shock and harsh environmental conditions than standard axial-lead resistors. The 89 Type are aluminum housed to maintain high stability during operation and to permit secure mounting to chassis surfaces. The housing also provides heat-sinking capabilities. The 89 Type resistors meet or exceed MIL-R-18546 specifications.

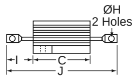
Electrical Specifications

	5 Watt	10 Watt	25 Watt	50 Watt
Resistance Tolerance	±1%	±1%	±1%	±1%
Power Rating* (mm) Proper Heat	101.60 x 152.40 x 50.80 x 1.02 aluminum chassis		127.00 x 177.80 x 50.80 x 1.02 aluminum chassis	304.80 x 304.80 x 1.50 aluminum panel
Max. Operating Voltage	210	320	520	1170
Overload	5 times rated power for 5 seconds			
Temperature Coefficient	Under 1 ohm — ±90 ppm/°C 1 to 9.99 ohms — ±50 ppm/°C 10 ohms and over — ±20 ppm/°C			
Dielectric Withstanding Voltage	1000VAC	1000VAC	2500VAC	2500VAC

* Based on chassis mounting area and temperature stability.







Watts	Max. Dimensions (mm)									
	A	B	C	D	E	F	G	H	I	J
5	11.40	12.57	16.03	6.30	16.79	8.51	2.49	1.40	8.33	30.15
10	14.40	16.00	19.84	8.00	20.70	10.29	2.49	2.31	9.50	36.50
25	18.39	19.96	27.76	10.01	27.81	14.25	3.30	2.31	12.70	50.80
50	39.83	21.56	50.77	10.79	29.34	15.88	3.30	2.31	12.70	72.21

RESISTANCE VALUE CHART

5 Watt		10 Watt		25 Watt		50 Watt	
Value (Code)	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**	**Value (Code)**
1.0 (1R0)	75 (75R)	1.0 (1R0)	250 (250)	.10 (R10)	100 (100)	.10 (R10)	150 (150)
2.0 (2R0)	100 (100)	2.0 (2R0)	500 (500)	1.0 (1R0)	150 (150)	1.0 (1R0)	250 (250)
5.0 (5R0)	150 (150)	5.0 (5R0)	750 (750)	2.0 (2R0)	250 (250)	2.0 (2R0)	500 (500)
7.5 (7R5)	250 (250)	10 (10R)	1.0K (1K0)	5.0 (5R0)	500 (500)	5.0 (5R0)	750 (750)
10 (10R)	500 (500)	15 (15R)	2.5K (2K5)	7.5 (7R5)	750 (750)	10 (10R)	1.0K (1K0)
15 (15R)	750 (750)	20 (20R)	5.0K (5K0)	10 (10R)	1.0K (1K0)	15 (15R)	2.5K (2K5)
25 (25R)	1.0K (1K0)	50 (50R)	10.0K 10K	20 (20R)	2.5K (2K5)	25 (25R)	5.0K (5K0)
40 (40R)	2.5K (2K5)	75 (75R)	25.0K 25K	25 (25R)	5.0K (5K0)	40 (40R)	10.0K (10K)
50 (50R)	5.0K (5K0)	100 (100)		50 (50R)	10.0K (10K)	50 (50R)	25.0K (25K)
				75 (75R)	25.0K (25K)	75 (75R)	100K (100K)
						100 (100)	

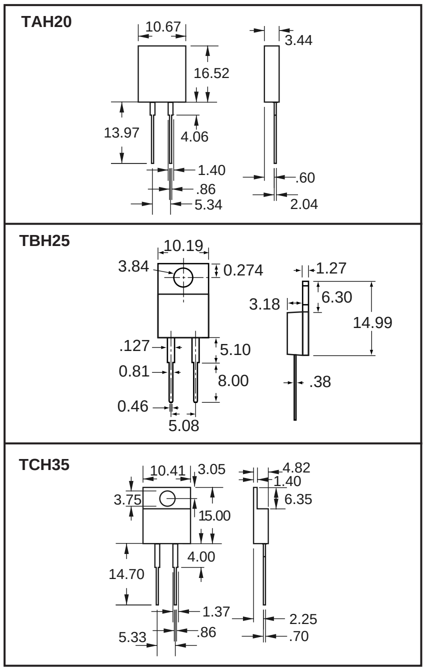
Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each			
			1	10	50	100
1.0 - 25	5	805F(Code)-ND	3.45	3.11	2.76	2.59
40 - 750	5	805F(Code)-ND	3.78	3.40	3.02	2.84
1.0K - 2.5K	5	805F(Code)-ND	4.69	4.22	3.75	3.52
5.0K	5	805F(Code)-ND	5.24	4.72	4.19	3.93
1.0 - 750	10	810F(Code)-ND	3.62	3.26	2.90	2.72
1.0K - 2.5K	10	810F(Code)-ND	4.00	3.60	3.20	3.00
5.0K	10	810F(Code)-ND	4.49	4.04	3.59	3.37
10.0K	10	810F(Code)-ND	5.15	4.64	4.12	3.86
25.0K	10	810F(Code)-ND	6.47	5.82	5.18	4.85
.10	25	825F(Code)-ND	5.15	4.64	4.12	3.86
1.0 - 75	25	825F(Code)-ND	4.66	4.19	3.73	3.50
100 - 750	25	825F(Code)-ND	4.80	4.32	3.84	3.60
1.0K - 5.0K	25	825F(Code)-ND	5.38	4.84	4.30	4.04
10.0K	25	825F(Code)-ND	5.91	5.32	4.73	4.43
25.0K	25	825F(Code)-ND	7.40	6.66	5.92	5.55
.10	50	850F(Code)-ND	6.55	5.90	5.24	4.91
1.0 - 750	50	850F(Code)-ND	5.38	4.84	4.30	4.04
1.0K - 5.0K	50	850F(Code)-ND	6.09	5.48	4.87	4.57
10.0K	50	850F(Code)-ND	6.42	5.78	5.14	4.82
25.0K	50	850F(Code)-ND	7.23	6.51	5.78	5.42
100K	50	850F(Code)-ND	9.81	8.83	7.85	7.36

*For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

OHMITE

TO220 Style Thick Film Power Resistors - Heat Sink Mountable

TAH20, TBH25 and TCH35 Series



Electrical Specifications:

	TAH20	TBH25	TCH35
Res. Tolerance	±5%	±5%	±5%
Max. Operating Volt.	350V	350V	350V
Dielectric Strength	1800VAC	1000VDC	1800VAC
Insulation Res.	10GΩ Min.	10GΩ Min.	10GΩ Min.
Power Rating	20W @ 25°C	25W @ 25°C	35W @ 25°C
Mounting:	Requires use of a snap-on heat sink. A thermal compound should be properly applied.	Single screw mounting tab (with thermal compound recommended).	Single screw mounting tab (with thermal compound recommended).

TAH20 and TCH35 Series
RESISTANCE VALUE CHART

Value	(Code)	Value	(Code)	Value	(Code)
.05•	(R050)•	5.6	(5R60)	150	(150R)
.10	(R100)	7.5•	(7R50)•	220	(220R)
.22	(R220)	10	(10R0)	470	(470R)
.33	(R330)	15	(15R0)	510	(510R)
.51	(R510)	22	(22R0)	750	(750R)
1.0	(1R00)	33	(33R0)	1.0K	(1K00)
1.5	(1R50)	47	(47R0)	2.7K	(2K70)
2.2	(2R20)	51	(51R0)	5.1K	(5K10)
3.3	(3R30)	75	(75R0)	10K	(10K0)
3.9	(3R90)	100	(100R)		

• Not available in the TCH35 Series.

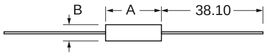
TBH25 Series
RESISTANCE VALUE CHART

Value	(Code)	Value	(Code)	Value	(Code)
.05	(R050)	7.5	(7R50)	51	(51R0)
.10	(R100)	10	(10R0)	75	(75R0)
.15	(R150)	15	(15R0)	100	(100R)
.22	(R220)	22	(22R0)	150	(150R)
.51	(R510)	24	(24R0)	470	(470R)
1.0	(1R00)	33	(33R0)	1.0K	(1K00)
5.1	(5R10)	39	(39R0)	1.5K	(1K50)
5.6	(5R60)	47	(47R0)	2.7K	(2K70)

Series	Res. Range (Ω)	Watt-age	Digi-Key* Part No.	Price Each 1	100	250	500
TAH20	.05 - 10K	20	TAH20P(Code)J-ND	6.73	5.38	4.57	4.04
TBH25	.05 - 2.7K	25	TBH25P(Code)J-ND	5.23	4.18	3.55	3.14
TCH35	.10 - 10K	35	TCH35P(Code)J-ND	7.78	6.21	5.28	4.66

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

Silicone - Ceramic Conformal Wirewound Resistors



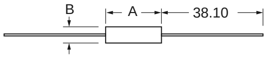
Resistor Series	Power Rating	Max. Length A (mm)	Max. Dia. B (mm)	Lead Dia. C (mm)
41F	1W	11.10	3.18	.51
43F	3W	15.06	5.54	.81
45F	5W	23.80	8.71	1.02

Electrical Specifications:

	41F Series	43F Series	45F Series
Resistance Tolerance	±1%	±1%	±1%
Power Rating	1 watt at 25°C ambient temperature	3 watts at 25°C ambient temperature	5 watts at 25°C ambient temperature
Temperature Coefficient of Resistance	Under 1 ohm — ±90ppm/°C 1 to 9.99 ohms — ±50ppm/°C 10 ohms and over — ±20ppm/ °C		
Dielectric Withstanding Voltage	500 VAC	1000 VAC	1000 VAC
Short Time Overload	5 times rated wattage for 5 seconds	5 times rated wattage for 5 seconds	10 times rated wattage for 5 seconds

Resistance Range (Ω)	Watt-age	Digi-Key* Part No.	Price Each 1	25	100	250
.33	1	41F(Code)-ND	2.30	1.96	1.73	1.50
1.0-5.0	1	41F(Code)-ND	2.22	1.89	1.67	1.44
10-68	1	41F(Code)-ND	1.92	1.63	1.44	1.25
100-470	1	41F(Code)-ND	2.15	1.83	1.61	1.40
500-900	1	41F(Code)-ND	2.38	2.02	1.79	1.55
1.0K-1.2K	1	41F(Code)-ND	2.71	2.30	2.03	1.76
2.0K-3.0K	1	41F(Code)-ND	3.26	2.77	2.45	2.12
.10-.75	3	43F(Code)-ND	1.76	1.50	1.32	1.14
1.0-5.0	3	43F(Code)-ND	1.40	1.19	1.05	.91
10-82	3	43F(Code)-ND	1.14	.97	.86	.74
100-900	3	43F(Code)-ND	1.04	.88	.78	.68
1.0K-1.8K	3	43F(Code)-ND	1.19	1.01	.89	.77
2.2K-2.7K	3	43F(Code)-ND	1.58	1.34	1.19	1.03
3.5K-4.7K	3	43F(Code)-ND	1.91	1.62	1.43	1.24
5.0K-6.8K	3	43F(Code)-ND	2.30	1.96	1.73	1.50
7.5K-10.0K	3	43F(Code)-ND	2.38	2.02	1.79	1.55
.10-.50	5	45F(Code)-ND	1.97	1.67	1.48	1.28
1.0-7.5	5	45F(Code)-ND	1.37	1.16	1.03	.89
10-50	5	45F(Code)-ND	1.19	1.01	.89	.77
100-900	5	45F(Code)-ND	1.14	.97	.86	.74
1.0K-2.7K	5	45F(Code)-ND	1.32	1.12	.99	.86
3.0K-6.8K	5	45F(Code)-ND	1.54	1.31	1.16	1.00
7.5K-8.0K	5	45F(Code)-ND	2.02	1.72	1.52	1.31
10.0K-15.0K	5	45F(Code)-ND	2.14	1.82	1.61	1.39
20.0K-25.0K	5	45F(Code)-ND	2.65	2.25	1.99	1.72

Vitreous Enamel Conformal Wirewound Resistors



Resistor Series	Power Rating	Max. Length A (mm)	Max. Dia. B (mm)	Lead Dia. C (mm)
23J	3W	12.70	5.59	.81
25J	5W	23.01	7.01	.81
20J	10W	46.84	10.01	.81

Electrical Specifications:

	23J Series	25J Series	20J Series
Resistance Tolerance	±5%	±5%	±5%
Power Rating	3W	5W	10W
Dielectric Withstanding Voltage	1000V	1000V	1000V
Short Time Overload	5 times rated wattage for 5 seconds	10 times rated wattage for 5 seconds	10 times rated wattage for 5 seconds

Resistance Range (Ω)	Watt-age	Digi-Key* Part No.	Price Each 1	50	100	250
.15-.75	3	23J(Code)-ND	1.82	1.55	1.37	1.18
1.0-7.5	3	23J(Code)-ND	1.20	1.02	.90	.78
10-82	3	23J(Code)-ND	1.07	.91	.80	.70
100-450	3	23J(Code)-ND	.97	.82	.73	.63
470-900	3	23J(Code)-ND	1.06	.90	.80	.69
1.0K-4.7K	3	23J(Code)-ND	1.44	1.22	1.08	.94
5.0K-7.0K	3	23J(Code)-ND	1.85	1.57	1.39	1.20
7.5K-10.0K	3	23J(Code)-ND	2.15	1.83	1.61	1.40
.15-.75	5	25J(Code)-ND	1.50	1.28	1.13	.98
1.0-7.5	5	25J(Code)-ND	1.44	1.22	1.08	.94
10-82	5	25J(Code)-ND	1.37	1.16	1.03	.89
100-470	5	25J(Code)-ND	1.13	.96	.85	.73
500-900	5	25J(Code)-ND	1.32	1.12	.99	.86
1.0K-4.7K	5	25J(Code)-ND	1.58	1.34	1.19	1.03
5.0K-9.0K	5	25J(Code)-ND	1.99	1.69	1.49	1.29
10.0K-15.0K	5	25J(Code)-ND	2.20	1.87	1.65	1.43
16.0K-25.0K	5	25J(Code)-ND	2.60	2.21	1.95	1.69
.10-.75	10	20J(Code)-ND	1.96	1.67	1.47	1.27
1.0-5.0	10	20J(Code)-ND	1.90	1.62	1.43	1.24
10-82	10	20J(Code)-ND	1.78	1.51	1.34	1.16
100-680	10	20J(Code)-ND	1.62	1.38	1.22	1.05
1.0K-2.7K	10	20J(Code)-ND	1.94	1.65	1.46	1.26
3.0K-4.7K	10	20J(Code)-ND	2.21	1.88	1.66	1.44
5.0K-8.5K	10	20J(Code)-ND	2.53	2.15	1.90	1.64
10.0K-22.5K	10	20J(Code)-ND	2.88	2.45	2.16	1.87
25.0K	10	20J(Code)-ND	3.25	2.76	2.44	2.11

* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

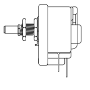
RESISTANCE VALUE CHART (for Silicone and Vitreous Wirewound Resistors)

Value	(Code)	Value	(Code)	Value	(Code)	Value	(Code)	Value	(Code)	Value	(Code)	Value	(Code)	Value	(Code)
.10	(R10)	4.0	(4R0)	35	(35R)	180	(180)	500	(500)	1.5K	(1K5)	4.5K•	(4K5)•	11.0K•	(11K)•
.13	(R13)	5.0	(5R0)	39	(39R)	200	(200)	560	(560)	1.75K•	(1K75)•	4.7K	(4K7)	12.0K•	(12K)•
.15	(R15)	7.5	(7R5)	40	(40R)	220	(220)	600	(600)	1.8K	(1K8)	5.0K	(5K0)	12.5K	(12K5)
.20	(R20)	10	(10R)	47	(47R)	225	(225)	680	(680)	2.0K	(2K0)	5.6K	(5K6)	13.5K•	(13K5)•
.25	(R25)	12	(12R)	50	(50R)	250	(250)	700	(700)	2.2K	(2K2)	6.0K	(6K0)	15.0K	(15K)
.30	(R30)	15	(15R)	56	(56R)	270	(270)	750	(750)	2.25K•	(2K25)•	6.8K	(6K8)	16.0K•	(16K)•
.33	(R33)	18	(18R)	68	(68R)	300	(300)	800	(800)	2.5K	(2K5)	7.0K•	(7K0)•	17.5K•	(17K5)•
.50	(R50)	20	(20R)	75	(75R)	330	(330)	820	(820)	2.7K	(2K7)	7.5K	(7K5)	18.0K•	(18K)•
.75	(R75)	22	(22R)	82	(82R)	350	(350)	900	(900)	3.0K	(3K0)	8.0K	(8K0)	20.0K	(20K)
1.0	(1R0)	25	(25R)	100	(100)	390	(390)	1.0K	(1K0)	3.3K•	(3K3)•	8.2K	(8K2)	22.0K•	(22K)•
1.5	(1R5)	27	(27R)	120	(120)	400	(400)	1.1K	(1K1)	3.5K	(3K5)	8.5K•	(8K5)•	22.5K•	(22K5)•
2.0	(2R0)	30	(30R)	125	(125)	450•	(450)•	1.2K	(1K2)	3.9K	(3K9)	9.0K•	(9K0)•	25.0K	(25K)
3.0	(3R0)	33	(33R)	150	(150)	470	(470)	1.25K•	(1K25)•	4.0K	(4K0)	10.0K	(10K)		

• Value not available in Silicone-Ceramic Conformal

Wirewound Rheostats

12-1/2, 25 and 50W



† 12-1/2 watt uses knob **5151-ND**

†† 25 and 50 watt uses knob **5150-ND**

	RES	RHS	RJS
Wattage	12-1/2 W†	25W†	50W†
Res. Tolerance	±10%	±10%	±10%
Core Diameter (mm)	22.23	39.69	58.74
Shaft Diameter (mm)	3.18	6.35	6.35
Running Torque	1 to 6 in. oz.	.25 to .5 in. lb.	.25 to 2 in. lb.
Weight	.6 oz.	.19 lbs.	.32 lbs.
Rotation	300° ±5%	300° ±5%	300° ±5%
Memcor-Truohm Equivalent	RH12	RH25	RH50

RESISTANCE VALUE CHARTS

12.5 / 25 Watt

Value	(Code)	Value	(Code)	Value	(Code)	Value	(Code)
1.0	(1R0)	15	(15R)	175	(175)	1.5K	(1K5)
2.0	(2R0)	25	(25R)	250	(250)	2.5K	(2K5)
3.0	(3R0)	50	(50R)	350	(350)	3.5K	(3K5)
6.0	(6R0)	75	(75R)	500	(500)	5.0K	(5K0)
8.0	(8R0)	100	(100)	750	(750)	10.0K	(10K)
10	(10R)	125	(125)	1.0K	(1K0)		

50 Watt

Value	(Code)	Value	(Code)	Value	(Code)
.50	(R50)	125	(125)	500	(500)
1.0	(1R0)	225	(225)	2.5K	(2K5)
6.0	(6R0)	1.0K	(1K0)	10.0K	(10K)
35	(35R)	5.0K	(5K0)		
50	(50R)	150	(150)		

Resistance Range (Ω)	Watt-age	Digi-Key* Part No.	Price Each 1	10	100	250
1.0-8.0	12.5	RES(Code)-ND†	21.63	19.47	15.14	14.06
10-350	12.5	RES(Code)-ND†	20.50	18.45	14.35	13.33
500-1.5K	12.5	RES(Code)-ND†	21.05	18.95	14.74	13.68
2.5K-5.0K	12.5	RES(Code)-ND†	22.40	20.16	15.68	14.56
10.0K	12.5	RES(Code)-ND†	24.20	21.78	16.94	15.73
1.0-8.0	25	RHS(Code)-ND††	24.10	21.69	16.87	—
10-750	25	RHS(Code)-ND††	23.03	20.73	16.12	—
1.0K-5.0K	25	RHS(Code)-ND††	23.82	21.44	16.67	—
10.0K	25	RHS(Code)-ND††	25.84	23.26	18.10	—
.50	50	RJS(Code)-ND††	34.89	31.40	24.42	20.93
1.0-6.0	50	RJS(Code)-ND††	31.16	28.04	21.81	18.70
35-150	50	RJS(Code)-ND††	27.26	24.53	19.08	16.36
225-500	50	RJS(Code)-ND††	26.20	23.58	18.35	15.72
1.0K-10.0K	50	RJS(Code)-ND††	28.64	25.78	20.05	17.18
Knob for 25/50W Rheostat		5150-ND	6.30	4.41	—	—
Knob for 12.5W Rheostat		5151-ND	4.57	3.20	—	—

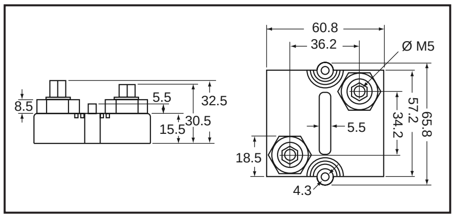
* For complete part number, substitute the corresponding code from the Resistance Value Chart for (Code).

TAP600 Heat Sinkable Planar Resistors - 600 Watt

TAP600 delivers 600 watts of reliable power to a variety of power conditioning, power transmission, and power control applications. These resistors can be used designed for liquid, or air cooled heat sink systems used in variable speed drives, power supplies, robotics, motor control, and other control devices.

Features: • Dielectric Strength: Up to 12KV • Special Design for Low Inductive and Capacitance Values • Easy termination to contacts with M5 screws • Calibrated Mounting Simplifies Assembly

Electrical Specifications: • Resistance Tolerance: ±10% Std. • Max. Operating Voltage: 5000VDC • Power Rating: 600W at 70°C heat sink temperature • Temperature Coefficient: ±150ppm/°C • Operating Temperature Range: -55°C to 150°C • Electric Strength Voltage: Up to 12000Vrms, 50HZ, 1min. @ 500V • Insulation Resistance: 10G ohms min at 500V • Air Distance: 14mm min. • Inductance: ≤80nH



RESISTANCE VALUE CHART

Value (Code)	Value (Code)
1 (1R0)	30 (30R)
2 (2R0)	50 (50R)
3 (3R0)	75 (75R)
4 (4R0)	100 (100)
5 (5R0)	500 (500)
10 (10R)	1000 (1K0)
22 (22R)	10000 (10K)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	50
1-10000 (see chart)	600W	TAP600K(Code)-ND	103.30	80.39	73.69	63.80

*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

TAP1000 Heat Sinkable Planar Resistors - 1000 Watt

TAP1000 Series resistors deliver 1000 watts of continuous power with thick film on alumina substrate technology. Up to 30% smaller, the TAP1000 is capable of 2 to 4 times the power dissipation of traditional heat sinkable resistor technologies. Designed for use with liquid cooled heat sinks, TAP1000 resistors are capable of dissipating 1000 watts of continuous power when properly mounted (based on 70°C base temperature).

Offering the highest power available in a heat sinkable package, the TAP1000 is well suited for power conditioning, power distribution, power conversion, and power control applications. Constructed of durable, lightweight materials, the TAP1000 package is easy to design and mount.

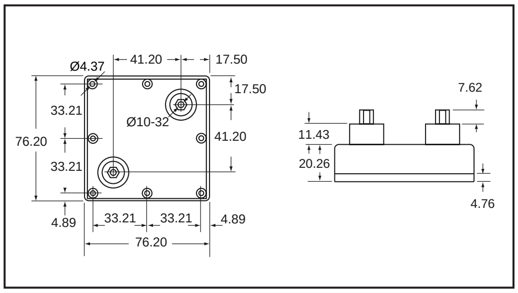
Features: • Dissipates 1000 Watts @ 70°C Mounting Plate Temperature • High Energy Rating • Low Inductance • Resistor Element Electrically Isolated • High Dielectric Strength • Small Footprint

Applications: • Power semiconductor balancing • Motor control • Inrush current limiting

Material Specifications: Resistor element - thick film on alumina substrate

Electrical Specifications: • Resistance Tolerance: ±10% Std. • Max. Operating Voltage: 2000VDC • Power Rating: 1000W @70°C • Temperature Coefficient: ±250 ppm/°C • Dielectric Strength: 6KV • Operating Temperature Range: -55°C to 150°C

Case Specifications: • Terminal Screws (#10 - 32), Max Contacts Torque: 10 in-lb. • Mounting Screws (#8 - 32), Max Mounting Torque: 15 in-lb.



RESISTANCE VALUE CHART

Value (Code)
2.5 (2R50)
3.0 (3R00)
5.0 (5R00)
8.0 (8R00)
10 (10R0)
15 (15R0)
25 (25R0)
30 (30R0)
50 (50R0)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	10	25	50
2.5-50 (see chart)	1000W	TA1K0PH(Code)K-ND	115.00	85.00	78.00	70.01

*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

TL88 Series - Heat Sinkable Thick Film Power Resistors

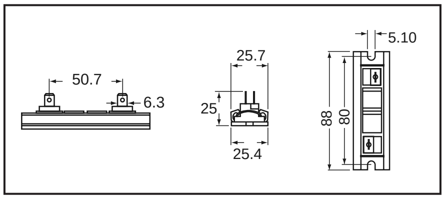
The TL88 Series add heat sinkable options to the thick film resistor family. The resistor element is packaged with plastic insulators, and quick-connect terminals in a symmetrical aluminum profile for easy heat sink mounting. Self-insulating package design increases voltage withstanding characteristics when compared to traditional aluminum housings. The in-line mounting profile makes the TL88 Series easily adaptable to most heat sink systems. Thermal compound is always recommended when heat sinking.

Features: • Very low inductance • Low profile design • In-Line Mounting Profile • 1/4" Quick connect terminals

Applications: • Semiconductor Balancing • Frequency Converters • Snubber • In-Rush Current Limiter • Bleeder Resistor • Power Switching • Voltage Dividers

Material Specifications: • Resistive Element: Thick film on alumina • Housing: Aluminum • Insulators: Glass reinforced high temperature Valox® • Terminals: Tinned brass

Electrical Specifications: • Tolerance: ± 10% Std. • Temperature Coefficient: ±250 PPM • Working Voltage: 1200 VAC • Temperature Limits: -40°C to +125°C • Air Distance, Terminal to Ground: 7mm • Inductance: 50-100 nH • Max. Voltage Between Terminal: 2500V



RESISTANCE VALUE CHART

Value (Code)	Value (Code)
1 (1R00)	47 (47R0)
3 (3R00)	50 (50R0)
5 (5R00)	75 (75R0)
10 (10R0)	100 (100R)
15 (15R0)	240 (240R)
25 (25R0)	470 (470R)
33 (33R0)	

Resistance Range (Ohms)	Wattage†	Digi-Key* Part No.	Price Each 10	25	100
1-470 (see chart)	114W	TL88K(Code)-ND	44.00	17.60	13.20

* For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

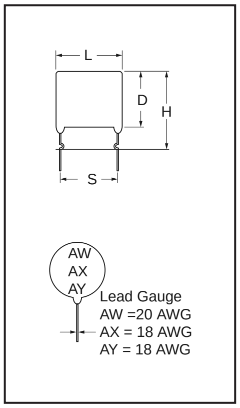
† Standard wattage for properly heat sinked resistors.

Ceramic Composition Resistors

The "A" Series of non-inductive, ceramic composite resistors are designed for a variety of applications where high energy handling capabilities are crucial. Designed for use in motor drives, UPS and other power conversion systems, these resistors are ideal for any application which is subject to surges, high peak power, impulse energy, or inrush current limiting.

Material Specifications: • Resistance Element: Bulk Ceramic • Terminals: Solder coated radial leads (axial lead version available upon request) • Coating: UL94V0, solvent resistant epoxy

Electrical Specifications: • Tolerance: ± 10% Standard • Derating: Derates linearly from 100% @ 50°C to 0% @ 150°C • Temperature Rise: 100°C @ 100% rated power, 50°C ambient



Series	L max in. (mm)	D max in. (mm)	H max in. (mm)	S norm in. (mm)
AW	.78 (20)	.51 (13)	.87 (22)	.69 (17.5)
AX	.59 (15)	.83 (21)	1.22 (31)	.49 (12.5)
AY	.98 (25)	.83 (21)	1.22 (31)	.89 (22.5)

RESISTANCE VALUE CHART

2.5W Value (Code)	3.5W Value (Code)	4.5W Value (Code)
4.7 (47G)	1.0 (10G)	2.2 (22G)
6.8 (68G)	2.2 (22G)	3.3 (33G)
10 (100)	3.3 (33G)	4.7 (47G)
15 (150)	4.7 (47G)	10 (100)
22 (220)	10 (100)	15 (150)
33 (330)	22 (220)	22 (220)
47 (470)	33 (330)	33 (330)
56 (560)	47 (470)	39 (390)
68 (680)	68 (680)	47 (470)
100 (101)	100 (101)	68 (680)
		100 (101)

Resistance Range (Ohms)	Wattage	Digi-Key* Part No.	Price Each 1	50	250
4.7-100	2.5W	AW(Code)K-ND	8.45	8.03	7.61
1.0-100	3.5W	AX(Code)K-ND	9.25	8.79	8.33
2.2-100	4.5W	AY(Code)K-ND	9.75	9.26	8.78

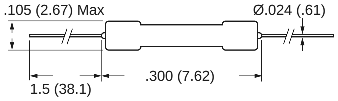
*For complete part number, substitute the corresponding code from Resistance Value Chart for (Code).

Metal Oxide / Epoxy Coated Resistors

"Mini-Mox" Series

Applications: • Avionics • Medical Electronics • High Gain Feedback • Current Pulse Limiters

Electrical: • Voltage Rating: 500V • Operating Temperature: -55°C to +220°C • Dielectric Withstanding Voltage: 750 Volts



Resistance Range (Ω)	Tol.	Wattage	Digi-Key Part No.	Price Each 1	10	50	100
10M - 1,000M	1%	.25	MOX200F-10M-ND	2.51	2.18	1.743	1.15
			MOX200F-100M-ND	4.28	3.71	2.31	1.74
			MOX200F-1000M-ND	14.63	11.70	7.60	7.42
	5%	.25	MOX200J-10M-ND	2.03	1.76	1.50	.92
			MOX200J-100M-ND	3.04	2.64	1.65	1.15
			MOX200J-1000M-ND	3.68	2.94	2.65	2.07

CANTHERM

Encapsulated Thermal Switches

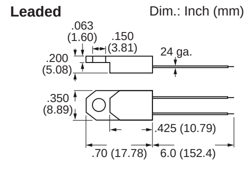
Encapsulated Thermal Switches are ideal for sensing the temperature of a surface or of stagnant air in an enclosure. Available with PC pins or with flexible wire leads for remote installation. Their high temperature resistance and high dielectric strength make it ideal for protecting heatsink-mounted semiconductors. Other applications would be protecting power supplies, or simply turning on a fan at a desired temperature.

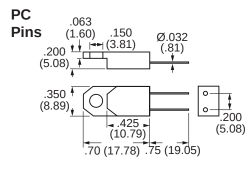
Current Sensitivity: The thermal switches are not current sensitive at rated currents. At loads above the rated values, up to maximum loading there is self-heating of the current carrying contacts.

Insulation Resistance: 2500 V @ 25°C, Leads to Earth 1500 V @ 100°C. Across open contacts, dependent on response temperature: 500 V eff. AC.

Marking: Response temperature in clear text (5°C steps). Normally Closed = blue or black (epoxy); Normally Open = red (epoxy)

UL E46827 VDE 4523-4510-1015





Electrical Specifications

Type	N/C	N/O
Voltage Rating 50-60 Hz	120 V / 250 V	120 V / 250 V
Current Rating Resistive	3.0 A / 2.0 A	1 A / 1 A*
Current Rating Inductive	1.8 A / 1.2 A	1 A / 1 A
Max. Load Resistive	4.0 A	4.0 A
Short Circuit Current Up to	6.3 A	6.3 A
Contact Arrangement Normally Closed N/C Normally Open N/O	—○—○—	—○╲○—
Contact Resistance	< 40 mΩ	< 40 mΩ
Response Temperature Range	+70°C to +160° C	+70°C to +150°C
Tolerance Range	±5°C	±5°C
Max. Permanent Temperature of Housing - G410	220°C	220°C
Housing Material - G410	PPS	PPS
Thermal Conductivity	4.0 BTU - in. / hr. / ft² / °F	

* When N/O contacts are closed, self heating will occur at currents exceeding normal rating. It is possible that, given certain combinations of set temperature current and ambient temperature, the contacts will not reset.

Thermal Switches With Leads

Switch Temp. (°C)	Digi-Key Part No.	Price Each 1	10	50	100	Cantherm Part No.
Normally Closed						
70	317-1000-ND	6.24	5.46	4.60	3.16	F1107025ACFA06E
75	317-1001-ND	6.24	5.46	4.60	3.16	F1107525ACFA06E
80	317-1002-ND	6.24	5.46	4.60	3.16	F1108025ACFA06E
85	317-1003-ND	6.24	5.46	4.60	3.16	F1108525ACFA06E
90	317-1004-ND	6.24	5.46	4.60	3.16	F1109025ACFA06E
95	317-1005-ND	6.24	5.46	4.60	3.16	F1109525ACFA06E
100	317-1006-ND	6.24	5.46	4.60	3.16	F1110025ACFA06E
105	317-1007-ND	6.24	5.46	4.60	3.16	F1110525ACFA06E
110	317-1008-ND	6.24	5.46	4.60	3.16	F1111025ACFA06E
115	317-1009-ND	6.24	5.46	4.60	3.16	F1111525ACFA06E
120	317-1010-ND	6.24	5.46	4.60	3.16	F1112025ACFA06E
125	317-1011-ND	6.24	5.46	4.60	3.16	F1112525ACFA06E
130	317-1012-ND	6.24	5.46	4.60	3.16	F1113025ACFA06E
135	317-1013-ND	6.24	5.46	4.60	3.16	F1113525ACFA06E
140	317-1014-ND	6.24	5.46	4.60	3.16	F1114025ACFA06E
145	317-1015-ND	6.24	5.46	4.60	3.16	F1114525ACFA06E
150	317-1016-ND	6.24	5.46	4.60	3.16	F1115025ACFA06E
155	317-1017-ND	6.24	5.46	4.60	3.16	F1115525ACFA06E
160	317-1018-ND	6.24	5.46	4.60	3.16	F1116025ACFA06E
Normally Open						
70	317-1019-ND	8.12	7.11	5.98	4.11	F1107015ACFA06E
75	317-1020-ND	8.12	7.11	5.98	4.11	F1107515ACFA06E
80	317-1021-ND	8.12	7.11	5.98	4.11	F1108015ACFA06E
85	317-1022-ND	8.12	7.11	5.98	4.11	F1108515ACFA06E
90	317-1023-ND	8.12	7.11	5.98	4.11	F1109015ACFA06E
95	317-1024-ND	8.12	7.11	5.98	4.11	F1109515ACFA06E
100	317-1025-ND	8.12	7.11	5.98	4.11	F1110015ACFA06E
105	317-1026-ND	8.12	7.11	5.98	4.11	F1110515ACFA06E
110	317-1027-ND	8.12	7.11	5.98	4.11	F1111015ACFA06E
115	317-1028-ND	8.12	7.11	5.98	4.11	F1111515ACFA06E
120	317-1029-ND	8.12	7.11	5.98	4.11	F1112015ACFA06E
125	317-1030-ND	8.12	7.11	5.98	4.11	F1112515ACFA06E
130	317-1031-ND	8.12	7.11	5.98	4.11	F1113015ACFA06E
135	317-1032-ND	8.12	7.11	5.98	4.11	F1113515ACFA06E
140	317-1033-ND	8.12	7.11	5.98	4.11	F1114015ACFA06E
145	317-1034-ND	8.12	7.11	5.98	4.11	F1114515ACFA06E
150	317-1035-ND	8.12	7.11	5.98	4.11	F1115015ACFA06E

Thermal Switches With PC Pins

Switch Temp. (°C)	Digi-Key Part No.	Price Each 1	10	50	100	Cantherm Part No.
Normally Closed						
70	317-1038-ND	6.24	5.46	4.60	3.16	F11070251ZA0060
75	317-1039-ND	6.24	5.46	4.60	3.16	F11075251ZA0060
80	317-1040-ND	6.24	5.46	4.60	3.16	F11080251ZA0060
85	317-1041-ND	6.24	5.46	4.60	3.16	F11085251ZA0060
90	317-1042-ND	6.24	5.46	4.60	3.16	F11090251ZA0060
95	317-1043-ND	6.24	5.46	4.60	3.16	F11095251ZA0060
100	317-1044-ND	6.24	5.46	4.60	3.16	F11100251ZA0060
105	317-1045-ND	6.24	5.46	4.60	3.16	F11105251ZA0060
110	317-1046-ND	6.24	5.46	4.60	3.16	F11110251ZA0060
115	317-1047-ND	6.24	5.46	4.60	3.16	F11115251ZA0060
120	317-1048-ND	6.24	5.46	4.60	3.16	F11120251ZA0060
125	317-1049-ND	6.24	5.46	4.60	3.16	F11125251ZA0060
130	317-1050-ND	6.24	5.46	4.60	3.16	F11130251ZA0060
135	317-1051-ND	6.24	5.46	4.60	3.16	F11135251ZA0060
140	317-1052-ND	6.24	5.46	4.60	3.16	F11140251ZA0060
145	317-1053-ND	6.24	5.46	4.60	3.16	F11145251ZA0060
150	317-1054-ND	6.24	5.46	4.60	3.16	F11150251ZA0060
155	317-1055-ND	6.24	5.46	4.60	3.16	F11155251ZA0060
160	317-1056-ND	6.24	5.46	4.60	3.16	F11160251ZA0060
Normally Open						
70	317-1057-ND	8.12	7.11	5.98	4.11	F11070151ZA0060
75	317-1058-ND	8.12	7.11	5.98	4.11	F11075151ZA0060
80	317-1059-ND	8.12	7.11	5.98	4.11	F11080151ZA0060
85	317-1060-ND	8.12	7.11	5.98	4.11	F11085151ZA0060
90	317-1061-ND	8.12	7.11	5.98	4.11	F11090151ZA0060
95	317-1062-ND	8.12	7.11	5.98	4.11	F11095151ZA0060
100	317-1063-ND	8.12	7.11	5.98	4.11	F11100151ZA0060
105	317-1064-ND	8.12	7.11	5.98	4.11	F11105151ZA0060
110	317-1065-ND	8.12	7.11	5.98	4.11	F11110151ZA0060
115	317-1066-ND	8.12	7.11	5.98	4.11	F11115151ZA0060
120	317-1067-ND	8.12	7.11	5.98	4.11	F11120151ZA0060
125	317-1068-ND	8.12	7.11	5.98	4.11	F11125151ZA0060
130	317-1069-ND	8.12	7.11	5.98	4.11	F11130151ZA0060
135	317-1070-ND	8.12	7.11	5.98	4.11	F11135151ZA0060
140	317-1071-ND	8.12	7.11	5.98	4.11	F11140151ZA0060
145	317-1072-ND	8.12	7.11	5.98	4.11	F11145151ZA0060
150	317-1073-ND	8.12	7.11	5.98	4.11	F11150151ZA0060
155	317-1074-ND	8.12	7.11	5.98	4.11	F11155151ZA0060
160	317-1075-ND	8.12	7.11	5.98	4.11	F11160151ZA0060

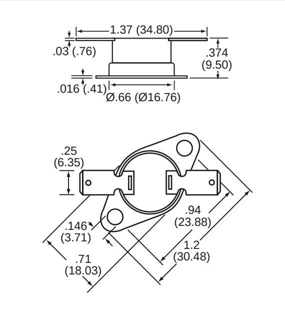
Bi-metal Cutouts, Temperature Regulators / Temperature Limiters

The thermal response works a bimetal snap element electrically connected to the switch contact. The switch system is current insensitive. The thermal switches react only to external thermal effects. Double contacts ensure high switch performance and long service life. The housing, base, and the mounting brackets are voltage-free (Standard version: base and mounting brackets are aluminum-plated steel). Heat transfer occurs directly through the metallic base via convection, radiation and conduction in gaseous and solid media. The mounting flange is floating and can be rotated to any desired position with respect to the electrical terminals.

ADVANTAGES:
- * High pressure resistance
- * High response sensitivity
- * Numerous applications
- * Various housings, connections and mounting styles

Electrical Specifications

Voltage Rating 50-60 Hz	120 V / 250 V
Current Rating Resistive	15 A / 10.0 A
Current Rating Inductive	6.3 A
Maximum Load Resistive	20 A / 16 A
Contact Resistance	< 50 mΩ
Nominal Temperature Range	0° to +170° C
Tolerance Range	±5°C
Maximum Permanent Temperature	175°C
Housing Material	Duroplast
Overall Height (mm)	9.5 (+0.2)
Contacts: Normally Closed —○—○—	Normally Open —○╲○—



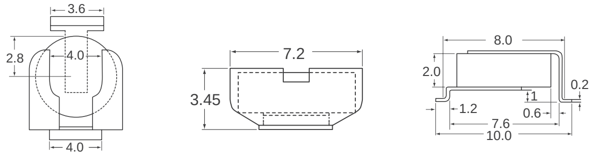
Switch Temp. (°C)	Digi-Key Part No.	Price Each 1	10	50	100	Cantherm Part No.
Normally Closed						
15	317-1076-ND	8.40	7.35	6.10	4.02	R2001525
30	317-1077-ND	8.40	7.35	6.10	4.02	R2003025
35	317-1078-ND	8.40	7.35	6.10	4.02	R2003525
40	317-1079-ND	8.40	7.35	6.10	4.02	R2004025
45	317-1080-ND	8.40	7.35	6.10	4.02	R2004525
50	317-1081-ND	6.60	5.78	4.86	3.20	R2005025
60	317-1082-ND	6.60	5.78	4.86	3.20	R2006025
65	317-1083-ND	6.60	5.78	4.86	3.20	R2006525
70	317-1084-ND	6.60	5.78	4.86	3.20	R2007025
75	317-1085-ND	6.60	5.78	4.86	3.20	R2007525
80	317-1086-ND	6.60	5.78	4.86	3.20	R2008025
85	317-1087-ND	6.60	5.78	4.86	3.20	R2008525
90	317-1088-ND	6.60	5.78	4.86	3.20	R2009025
95	317-1089-ND	6.60	5.78	4.86	3.20	R2009525
100	317-1090-ND	6.60	5.78	4.86	3.20	R2010025
115	317-1091-ND	6.60	5.78	4.86	3.20	R2011525
Normally Open						
35	317-1092-ND	10.80	9.45	7.95	5.24	R2003515
40	317-1093-ND	10.80	9.45	7.95	5.24	R2004015
50	317-1094-ND	9.00	7.88	6.55	4.31	R2005015
60	317-1095-ND	9.00	7.88	6.55	4.31	R2006015
80	317-1096-ND	9.00	7.88	6.55	4.31	R2008015
100	317-1097-ND	9.00	7.88	6.55	4.31	R2010015

BC COMPONENTS Surface Mount PTC Thermistors For Overload Protection

The component consists of a high-performance PTC ceramic disc mounted in a lead-frame, for direct soldering onto a printed-circuit board (PCB) or substrate.
The ceramic is soldered to the lead-frame by a local reflow process, during which the solder layer is melted to the metallized ceramic surface using a low residue flux.

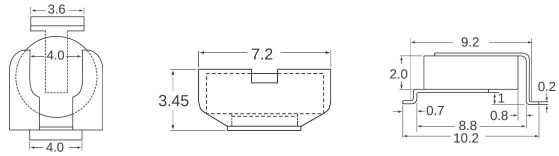
Features:
• Ideal for pick-and-place circuit assembly • Low mounting height • Suitable for reflow soldering • Small ceramic diameter for faster response • Low heat transfer to substrate • Flat terminations for stable positioning and good solderability

Fig. 1



Ceramic size: 6.5mm

Fig. 2



Ceramic size: 7.1mm

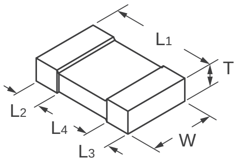
Fig.	Res. @ 25°C (Ω)	V Max. (V)	I_{nt} @		I_t @ 25°C	Ceramic Size inch (mm)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing 1,500	BC Components Part No.
			25°C	70°C				1	10	100			
Telecommunication Type													
1	10	245	165	100	270	0.25 (6.5)	BC1566CT-ND	1.93	1.70	1.33	BC1566TR-ND	724.50/M	2322 661 97012
	10	245	165	100	270	0.25 (6.5)	BC1568CT-ND	1.93	1.70	1.33	BC1568TR-ND	724.50/M	2322 661 97016
	17.5	300	150	100	250	0.25 (6.5)	BC1561CT-ND	1.93	1.70	1.33	BC1561TR-ND	724.50/M	2322 661 97003
	17.5	300	150	100	250	0.25 (6.5)	BC1562CT-ND	1.93	1.70	1.33	BC1562TR-ND	724.50/M	2322 661 97004
	20	300	120	70	250	0.25 (6.5)	BC1569CT-ND	1.93	1.70	1.33	BC1569TR-ND	724.50/M	2322 661 97018
	25	265	120	70	220	0.25 (6.5)	BC1563CT-ND	1.93	1.70	1.33	BC1563TR-ND	724.50/M	2322 661 97005
	35	425	110	70	175	0.25 (6.5)	BC1564CT-ND	1.93	1.70	1.33	BC1564TR-ND	724.50/M	2322 661 97009
	40	265	80	50	130	0.25 (6.5)	BC1560CT-ND	1.93	1.70	1.33	BC1560TR-ND	724.50/M	2322 661 97002
	50	425	90	60	150	0.25 (6.5)	BC1570CT-ND	1.93	1.70	1.33	BC1570TR-ND	724.50/M	2322 661 97019
2	10	300	150	100	250	0.28 (7.1)	BC1571CT-ND	1.93	1.70	1.33	BC1571TR-ND	724.50/M	2322 661 97203
	50	600	70	40	140	0.28 (7.1)	BC1573CT-ND	1.93	1.70	1.33	BC1573TR-ND	724.50/M	2322 661 97205
General Industrial Type													
1	3.3	24	400	—	650	0.25 (6.5)	BC1567CT-ND	1.93	1.70	1.33	BC1567TR-ND	724.50/M	2322 661 97013
	9.4	60	150	100	300	0.25 (6.5)	BC1565CT-ND	1.93	1.70	1.33	BC1565TR-ND	724.50/M	2322 661 97011

Surface Mount NTC Chip Thermistors (0603 and 0805 Size)

Size 0603 and 0805 chip thermistors have a negative temperature coefficient and nickel barrier contacts. The device has no marking.

Features:
• High sensitivity • High accuracy over wide ranges of operating temperature (-40°C to 150°C)
• Taped on reel • Suitable for wave or reflow soldering

Applications:
• Temperature compensation, sensing and protection in: battery chargers, consumer equipment, and office equipment



Size Code	Dimensions (mm)					
	L_1	W	T Min.	T Max.	L_2 and L_3	L_4 Min.
A	1.6 ±0.15	0.8 ±0.15	0.5	1.0	0.2	0.4
B	2.0 ±0.2	1.25 ±0.2	0.5	1.25	0.5 ±0.25	0.5

Size Code	Res. @ 25°C	Tol. @ 25°C	B Value/B Tolerance @ B25/85	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing 4,000	BC Components Part No.
					1	10	100			
0603 Size										
A	4.7kΩ	±3%	3830K±1%	BC1543CT-ND*	.62	.55	.43	BC1543TR-ND*	232.20/M	2322 615 36472
	10kΩ	±3%	3590K±1%	BC1544CT-ND*	.62	.55	.43	BC1544TR-ND*	232.20/M	2322 615 36103
	15kΩ	±3%	3600K±1%	BC1545CT-ND*	.62	.55	.43	BC1545TR-ND*	232.20/M	2322 615 36153
	47kΩ	±3%	3960K±1%	BC1546CT-ND*	.62	.55	.43	BC1546TR-ND*	232.20/M	2322 615 36473
	68kΩ	±3%	3985K±1%	BC1547CT-ND*	.62	.55	.43	BC1547TR-ND*	232.20/M	2322 615 36683
	100kΩ	±3%	4090K±1%	BC1548CT-ND*	.62	.55	.43	BC1548TR-ND*	232.20/M	2322 615 36104
	4.7kΩ	±5%	3830K±1%	BC1538CT-ND*	.59	.52	.41	BC1538TR-ND*	220.50/M	2322 615 33472
	10kΩ	±5%	3590K±1%	BC1539CT-ND*	.59	.52	.41	BC1539TR-ND*	220.50/M	2322 615 33103
	15kΩ	±5%	3600K±1%	BC1540CT-ND*	.59	.52	.41	BC1540TR-ND*	220.50/M	2322 615 33153
	47kΩ	±5%	3960K±1%	BC1541CT-ND*	.59	.52	.41	BC1541TR-ND*	220.50/M	2322 615 33473
	100kΩ	±5%	4090K±1%	BC1542CT-ND*	.59	.52	.41	BC1542TR-ND*	220.50/M	2322 615 33104
0805 Size										
B	2.2kΩ	±5%	3680K±3%	BC1514CT-ND	.52	.46	.36	BC1514TR-ND	195.00/M	2322 615 53222
	4.7kΩ	±5%	3560K±1%	BC1516CT-ND	.52	.46	.36	BC1516TR-ND	195.00/M	2322 615 53472
	10kΩ	±5%	3620K±1%	BC1518CT-ND	.52	.46	.36	BC1518TR-ND	195.00/M	2322 615 53103
	15kΩ	±5%	3528K±1%	BC1519CT-ND	.52	.46	.36	BC1519TR-ND	195.00/M	2322 615 53153
	22kΩ	±5%	3930K±1.5%	BC1520CT-ND	.52	.46	.36	BC1520TR-ND	195.00/M	2322 615 53223
	33kΩ	±5%	3960K±3%	BC1521CT-ND	.52	.46	.36	BC1521TR-ND	195.00/M	2322 615 53333
	47kΩ	±5%	4090K±1.5%	BC1522CT-ND	.52	.46	.36	BC1522TR-ND	195.00/M	2322 615 53473
	68kΩ	±5%	3740K±3%	BC1523CT-ND	.52	.46	.36	BC1523TR-ND	195.00/M	2322 615 53683

***** 0603 Size Code A have NiSn terminations.

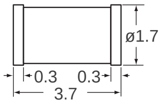
Surface Mount NTC Thermistors - SOD80

High Temperature Sensors

These thermistors have a negative temperature coefficient and are mounted in a glass envelope, without leads and suitable for surface mounting.

Features: • Small Diameter • Quick response to temperature change • High stability over a long life • Wide temperature range from -40°C to +300°C • Resistant to corrosive atmospheres and harsh environments.

Applications: • High temperature measurement control: Domestic appliances, Automotive systems, and Industrial process control.



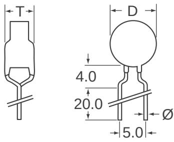
Res. @ 25°C	B Value/B Tolerance @ B25/85	Tol. @ 25°C	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,500	BC Components Part No.
10kΩ	3977K±1.3%	±5%	BC1549CT-ND	1.06	.94	.74	BC1549TR-ND	399.00/M	2322 633 53103
20kΩ	3977K±1.3%	±5%	BC1550CT-ND	1.06	.94	.74	BC1550TR-ND	399.00/M	2322 633 53203
30kΩ	3977K±1.3%	±5%	BC1551CT-ND	1.06	.94	.74	BC1551TR-ND	399.00/M	2322 633 53303
100kΩ	3977K±1.3%	±5%	BC1552CT-ND	1.06	.94	.74	BC1552TR-ND	399.00/M	2322 633 53104

Leaded PTC Thermistors

For Overload Protection

These directly heated thermistors have a positive temperature coefficient and are primarily intended for overload protection.

Features:
- Switch Temperature: Ts = 140°C, (Series 2322 660 5: Ts = 120°C)
- Small ratio between trip and non-trip currents
- High maximum inrush current
- Excellent long term behavior, also in humidity
- UL approved PTCs are guaranteed to withstand severe test programs
- UL file E148885 according to XGPU2 standard UL1434.



Res. @ 25°C ±20% (Ω)	I_{nt} Max @ 25°C (mA)	I_t Min. @ 25°C (mA)	V Max. (V)	Typical øD (mm)	Dim. D Max. (mm)	Dim. T Max. (mm)	Digi-Key Part No.	Price Each 1	10	100	BC Components Part No.
0.9	920	1380	30	12	12.5	4.0	BC1345-ND	1.98	1.78	1.41	2322 662 59211
1.1	830	1245	30	12	12.5	4.0	BC1344-ND	1.45	1.30	1.03	2322 662 58311
1.3	700	1050	30	10	10.5	4.0	BC1343-ND	1.34	1.20	.95	2322 662 57011
1.7	610	915	30	10	10.5	4.0	BC1342-ND	1.34	1.20	.95	2322 662 56111
1.9	540	810	30	8.0	8.5	4.0	BC1341-ND	1.46	1.32	1.04	2322 661 55411
2.5	470	705	30	8.0	8.5	4.0	BC1340-ND	1.46	1.32	1.04	2322 661 54711
3	410	615	30	6.5	7.0	4.0	BC1339-ND	1.46	1.32	1.04	2322 661 54111
5	320	480	30	6.5	7.0	4.0	BC1338-ND	1.46	1.32	1.04	2322 661 53211
6	270	405	30	4.5	5.0	4.0	BC1337-ND	1.09	.99	.78	2322 660 52711
13	180	270	30	4.5	5.0	4.0	BC1336-ND	1.03	.93	.73	2322 660 51811
25	130	195	60	4.5	5.0	4.0	BC1335-ND	1.09	.99	.78	2322 660 51311
50	94	145	60	4.5	5.0	4.0	BC1334-ND	1.09	.99	.78	2322 660 59491
1.3	1000	1500	145	20	20.5	5.0	BC1359-ND	5.43	4.88	3.85	2322 664 51022
1.7	880	1320	145	20	20.5	5.0	BC1358-ND	5.96	5.36	4.23	2322 664 58812
2.1	710	1065	145	16	16.5	5.0	BC1357-ND	3.64	3.28	2.58	2322 663 57112
2.9	600	900	145	16	16.5	5.0	BC1356-ND	3.59	3.23	2.55	2322 663 56012
3.8	450	675	145	12	12.5	5.0	BC1355-ND	1.67	1.50	1.19	2322 662 54512
4.6	410	615	145	12	12.5	5.0	BC1354-ND	1.45	1.30	1.03	2322 662 54112
6.7	320	480	145	10	10.5	5.0	BC1353-ND	1.98	1.78	1.41	2322 662 53212
8	270	405	145	8.0	8.5	5.0	BC1352-ND	1.46	1.32	1.04	2322 661 52712
12	210	315	145	6.5	7.0	5.0	BC1351-ND	1.17	1.05	.83	2322 661 52112
19	170	255	145	6.5	7.0	5.0	BC1350-ND	1.17	1.06	.83	2322 661 51712
28	130	195	145	4.5	5.0	5.0	BC1349-ND	1.09	.99	.78	2322 660 51312
40	110	165	145	4.5	5.0	5.0	BC1348-ND	.81	.74	.58	2322 660 51112
55	93	140	145	4.5	5.0	5.0	BC1347-ND	1.09	.99	.78	2322 660 59392
240	47	70	145	4.5	5.0	5.0	BC1346-ND	1.09	.99	.78	2322 660 54792
8.4	320	480	265	12	12.5	5.5	BC1375-ND	1.98	1.78	1.41	2322 662 53213
11	280	420	265	12	12.5	5.5	BC1374-ND	1.98	1.78	1.41	2322 662 52813
12	250	375	265	10	10.5	5.5	BC1373-ND	1.89	1.70	1.34	2322 662 52513
17	210	315	265	10	10.5	5.5	BC1372-ND	1.28	1.16	.91	2322 662 52113
18	190	285	265	8.0	8.5	5.5	BC1371-ND	1.41	1.27	1.00	2322 661 51913
22	170	255	265	8.0	8.5	5.5	BC1370-ND	1.41	1.27	1.00	2322 661 51713
29	140	210	265	6.5	7.0	5.5	BC1369-ND	1.41	1.27	1.00	2322 661 51413
48	110	165	265	6.5	7.0	5.5	BC1368-ND	1.41	1.27	1.00	2322 661 51113
56	95	143	265	4.5	5.0	5.5	BC1367-ND	.71	.64	.51	2322 660 59593
85	76	115	265	4.5	5.0	5.5	BC1366-ND	1.09	.99	.78	2322 660 57693
120	63	95	265	4.5	5.0	5.5	BC1365-ND	1.09	.99	.78	2322 660 56393
260	39	59	265	4.5	5.0	5.5	BC1364-ND	1.09	.99	.78	2322 660 53993
500	28	42	265	4.5	5.0	5.5	BC1363-ND	1.09	.99	.78	2322 660 52893
1200	19	29	265	4.5	5.0	5.5	BC1362-ND	1.09	.99	.78	2322 660 51993
1900	15	23	265	4.5	5.0	5.5	BC1361-ND	1.22	1.10	.87	2322 660 51593
3000	11	17	265	4.5	5.0	5.5	BC1360-ND	1.09	.99	.78	2322 660 51193

Leaded PTC Thermistors

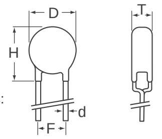
Overload Protection for Telecommunication

Advanced developments in telephone equipment in recent years have radically altered the protection requirements for both exchange and subscriber equipment. The BC Components range of Positive Temperature Coefficient (PTC) thermistors includes devices specially designed to provide overcurrent protection.

Features:
- Fast protection against power contact faults
- Withstand high overload currents of up to 10 A
- High voltage withstanding capabilities for the larger sized thermistors
- Good tracking over a wide temperature range for all matched or binned types
- Excellent stability over extended time
- All telecom PTCs are coated with a high temperature silicon lacquer (UL94V0) to protect them from any harsh environments and to improve their lifetime.

Lead Pitch:
F = 5mm

Lead Thickness:
d = 0.6mm



Res. @ 25°C (Ω)	V Max. (V)	Non-Trip Current I_{nt} (mA)	Trip Current I_{nt} (mA)	Dimensions (mm) Max. D	T	H	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500	BC Components Part No.
4	100	85	280	7.0	4.0	11.0	BC1553CT-ND	.88	.78	.61	BC1553TR-ND	331.50/M	2322 661 91066
25	220	70	200	8.5	5.0	11.5	BC1554CT-ND	1.00	.88	.69	BC1554TR-ND	373.50/M	2322 661 93048
25	245	70	200	8.3	4.0	11.0	BC1555CT-ND	1.00	.88	.69	BC1555TR-ND	373.50/M	2322 661 93043
10	245	140	270	11.0	4.5	15.5	BC1556CT-ND	2.24	1.96	1.54	BC1556TR-ND	838.50/M	2322 662 93074
25	250	70	175	7.0	4.0	9.8	BC1557CT-ND	1.00	.88	.69	BC1557TR-ND	373.50/M	2322 661 93148
10	350	100	270	8.5	4.0	11.5	BC1376-ND*	.98	.89	.70	—	—	2322 661 93124
35	600	70	600	8.0	5.0	11.0	BC1558CT-ND	1.08	.95	.75	BC1558TR-ND	405.00/M	2322 661 93056
25	600	70	170	10.5	5.0	12.6	BC1559CT-ND	1.08	.95	.75	BC1559TR-ND	405.00/M	2322 662 93129
10	600	175	400	13.0	5.5	18.0	BC1377-ND*	1.73	1.56	1.23	—	—	2322 662 93114

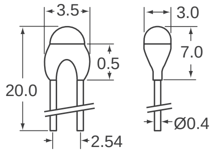
* Bulk Pricing

Leaded PTC Thermistors For Temperature Protection

These directly heated thermistors have a positive temperature coefficient and are primarily intended for sensing.

Transition Temp. Tn (°C)	Color Code	Digi-Key Part No.	Price Each 1	10	100	BC Components Part No.
90	Red	BC1378-ND	1.18	1.07	.84	2322 671 91104
100	Orange	BC1379-ND	1.18	1.07	.84	2322 671 91105
110	Yellow	BC1380-ND	1.18	1.07	.84	2322 671 91106
120	Green	BC1381-ND	1.18	1.07	.84	2322 671 91107

120 Ω	Maximum resistance at 25°C
4000 Ω	Minimum resistance at (Tn + 15) °C
30 V	Maximum (DC) voltage
-20 to (Tn + 15) °C	Temperature range
30 to 250 Ω	Resistance from -20°C to Tn -20°C (Ω)
50 to 570 Ω	Resistance at Tn -5°C (Ω)
1.33 to 50 kΩ	Resistance at Tn +5°C (kΩ)



Leaded NTC Thermistors

Accuracy Line

These thermistors have a negative temperature coefficient.

Figure (A) - The device consists of a chip with two tinned Ni-leads, and is color coded.

Figure (B) - The device consists of a chip with two tinned solid copper-plated leads. It is gray lacquered and color coded, but not insulated.

Applications: Temperature sensing and control.

Fig.	Dimensions (mm) B Max.	d	H_1 Max.	H_2 Max.	L	M	P	T Max.
A	3.4	0.4	2.0±1.0	—	—	40.0 ±1.5	2.54	3.0
B	3.3 ±0.5	0.6 ±0.06	2.0 ±1.0	6.0	24.0 ±1.5	—	2.54	3.0

Fig. A

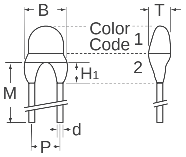


Fig. B

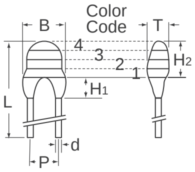
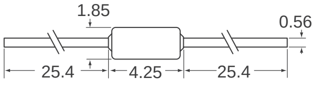


Fig.	Res. @ 25°C	Tol. @ 25°C	B Value/B Tolerance @ B25/85	Color Code 1	2	3	4	Digi-Key Part No.	Price Each 1	10	100	BC Components Part No.
A	10kΩ	±1%	3977K±0.75%	Blue	Blue	—	—	BC1489-ND	1.81	1.63	1.29	2322 640 55103
	100kΩ	±1%	4190K±1.5%	Brown	Brown	—	—	BC1490-ND	1.81	1.63	1.29	2322 640 55104
	10kΩ	±2%	3977K±0.75%	Blue	Blue	—	—	BC1486-ND	1.24	1.12	.88	2322 640 54103
	47kΩ	±2%	4090K±1.5%	Black	Black	—	—	BC1487-ND	1.24	1.12	.88	2322 640 54473
	100kΩ	±2%	4190K±1.5%	Brown	Brown	—	—	BC1488-ND	1.24	1.12	.88	2322 640 54104
B	2.7kΩ	±3%	3977K±0.75%	Red	Violet	Red	Orange	BC1480-ND	.68	.62	.49	2322 640 66272
	4.7kΩ	±3%	3977K±0.75%	Yellow	Violet	Red	Orange	BC1481-ND	.68	.62	.49	2322 640 66472
	10kΩ	±3%	3977K±0.75%	Brown	Black	Orange	Orange	BC1482-ND	.68	.62	.49	2322 640 66103
	47kΩ	±3%	4090K±1.5%	Yellow	Violet	Orange	Orange	BC1483-ND	.68	.62	.49	2322 640 66473
	100kΩ	±3%	4190K±1.5%	Brown	Black	Yellow	Orange	BC1484-ND	.68	.62	.49	2322 640 66104
	470kΩ	±3%	4570K±1.5%	Yellow	Violet	Yellow	Orange	BC1485-ND	.68	.62	.49	2322 640 66474
B	470kΩ	±5%	3560K±0.5%	Yellow	Violet	Brown	Gold	BC1462-ND	.57	.52	.41	2322 640 63471
	1.0kΩ	±5%	3528K±0.5%	Brown	Black	Red	Gold	BC1463-ND	.57	.52	.41	2322 640 63102
	1.5kΩ	±5%	3528K±0.5%	Brown	Green	Red	Gold	BC1464-ND	.57	.52	.41	2322 640 63152
	2.0kΩ	±5%	3528K±0.5%	Red	Black	Red	Gold	BC1465-ND	.57	.52	.41	2322 640 63202
	2.2kΩ	±5%	3977K±0.75%	Red	Red	Red	Gold	BC1466-ND	.57	.52	.41	2322 640 63222
	3.3kΩ	±5%	3977K±0.75%	Orange	Orange	Red	Gold	BC1467-ND	.57	.52	.41	2322 640 63332
	4.7kΩ	±5%	3977K±0.75%	Yellow	Violet	Red	Gold	BC1468-ND	.57	.52	.41	2322 640 63472
	6.8kΩ	±5%	3977K±0.75%	Blue	Gray	Red	Gold	BC1469-ND	.57	.52	.41	2322 640 63682
	10kΩ	±5%	3977K±0.75%	Brown	Black	Orange	Gold	BC1470-ND	.57	.52	.41	2322 640 63103
	15kΩ	±5%	3740K±2%	Brown	Green	Orange	Gold	BC1471-ND	.57	.52	.41	2322 640 63153
	22kΩ	±5%	3740K±2%	Red	Red	Orange	Gold	BC1472-ND	.57	.52	.41	2322 640 63223
	33kΩ	±5%	4090K±1.5%	Orange	Orange	Orange	Gold	BC1473-ND	.57	.52	.41	2322 640 63333
	47kΩ	±5%	4090K±1.5%	Yellow	Violet	Orange	Gold	BC1474-ND	.57	.52	.41	2322 640 63473
	68kΩ	±5%	4190K±1.5%	Blue	Gray	Orange	Gold	BC1475-ND	.57	.52	.41	2322 640 63683
	100kΩ	±5%	4190K±1.5%	Brown	Black	Yellow	Gold	BC1476-ND	.57	.52	.41	2322 640 63104
	150kΩ	±5%	4370K±2.5%	Brown	Green	Yellow	Gold	BC1477-ND	.57	.52	.41	2322 640 63154
	220kΩ	±5%	4370K±2.5%	Red	Red	Yellow	Gold	BC1478-ND	.57	.52	.41	2322 640 63224
	470kΩ	±5%	4570K±1.5%	Yellow	Violet	Yellow	Gold	BC1479-ND	.57	.52	.41	2322 640 63474

Leaded NTC Thermistors - SOD27 High Temperature Sensors

These thermistors have a negative temperature coefficient and are mounted in a glass envelope, with tinned copper-clad iron leads.

Res. @ 25°C	B Value/B Tolerance @ B25/85	Tol. @ 25°C	Digi-Key Part No.	Price Each 1	10	100	BC Components Part No.
10kΩ	3977K±1.3%	±5%	BC1491-ND	1.07	.97	.77	2322 633 83103
20kΩ	3977K±1.3%	±5%	BC1492-ND	1.07	.97	.77	2322 633 83203
30kΩ	3977K±1.3%	±5%	BC1493-ND	1.07	.97	.77	2322 633 83303
100kΩ	3977K±1.3%	±5%	BC1494-ND	1.07	.97	.77	2322 633 83104

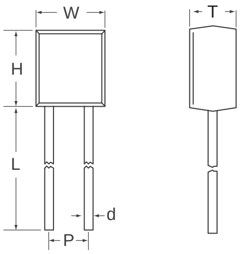


Leaded NTC Thermistors

Molded Range

These thermistors have a negative temperature coefficient.
The device consists of a molded chip with two tin-plated solid copper leads.

Dimensions (mm) W	H	L	P	T	d
4.0 ±0.2	4.4 ±0.2	21.0 ±1.0	2.54 ±0.3	2.5 ±0.2	0.6 ±0.06



Res. @ 25°C	B Value/B Tolerance @ B25/85	Digi-Key Part No.	Price Each 1	10	100	BC Components Part No.
2.7kΩ	3977K±0.75%	BC1495-ND	1.21	1.09	.86	2322 641 66272
12kΩ	3740K±2.0%	BC1496-ND	1.21	1.09	.86	2322 641 66123
15kΩ	3740K±2.0%	BC1497-ND	1.21	1.09	.86	2322 641 66153
470kΩ	4570K±1.5%	BC1499-ND	1.21	1.09	.86	2322 641 66474

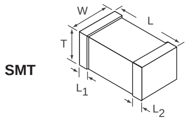
Panasonic

Multilayer Chip NTC Thermistors (ERTJ)

The Multilayer Chip NTC Thermistors are especially designed for surface mountings featuring the miniature sizes of “0402” and “0603” type (EIA) with highly reliable multilayer and monolithic structure.

FEATURES:

- Highly reliable multilayer/monolithic structure
- Superior heat resistance to reflow soldering and excellent solderability thanks to the unique external electrodes of three metallic layers
- Wide ranges of operating temperature (-40°C to 125°C)
- Low Capacitance (less 3pF)
- Soldering Temperature (270±5°C), Dipping Time (3.0±0.5 sec.)
- Heat Dissipation Constant: Series 0402 at approx. 2mw/°C; Series 0603 at approx. 3mw/°C
- Mounted on a glass epoxy (1.6t)



Size Code (EIA)	Dimensions (mm) L	W	T	L1 L2
0402	1.00	0.50	0.50	0.20
0603	1.60	0.80	0.80	0.30

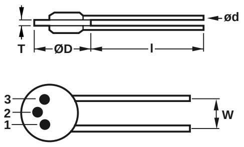
Zero-Power Resist. (at 25°C)	B Value B25/50	B25/85	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
						0402					
22Ω	2750K±3%	(2700K)	P10557CT-ND	1.05	.93	.73	.60	P10557TR-ND	10,000	355.05/M	ERT-J0EA220J
33Ω	2750K±3%	(2700K)	P10558CT-ND	1.05	.93	.73	.60	P10558TR-ND	10,000	355.05/M	ERT-J0EA330J
40Ω	2750K±3%	(2700K)	P10559CT-ND	1.05	.93	.73	.60	P10559TR-ND	10,000	355.05/M	ERT-J0EA400J
47Ω	2750K±3%	(2700K)	P10560CT-ND	1.05	.93	.73	.60	P10560TR-ND	10,000	355.05/M	ERT-J0EA470J
68Ω	2800K±3%	(2750K)	P10561CT-ND	1.05	.93	.73	.60	P10561TR-ND	10,000	355.05/M	ERT-J0EA680J
100Ω	2800K±3%	(2750K)	P10562CT-ND	1.05	.93	.73	.60	P10562TR-ND	10,000	355.05/M	ERT-J0EA101J
150Ω	2800K±3%	(2750K)	P10563CT-ND	1.05	.93	.73	.60	P10563TR-ND	10,000	355.05/M	ERT-J0EA151J
1kΩ	4500K±3%	(4450K)	P10564CT-ND	1.05	.93	.73	.60	P10564TR-ND	10,000	355.05/M	ERT-J0ET102J
1.5kΩ	4500K±3%	(4450K)	P10565CT-ND	1.05	.93	.73	.60	P10565TR-ND	10,000	355.05/M	ERT-J0ET152J
2.0kΩ	4500K±3%	(4450K)	P10566CT-ND	1.05	.93	.73	.60	P10566TR-ND	10,000	355.05/M	ERT-J0ET202J
2.2kΩ	4500K±3%	(4450K)	P10567CT-ND	1.05	.93	.73	.60	P10567TR-ND	10,000	355.05/M	ERT-J0ET222J
3.0kΩ	4500K±3%	(4450K)	P10568CT-ND	1.05	.93	.73	.60	P10568TR-ND	10,000	355.05/M	ERT-J0ET302J
3.3kΩ	4500K±3%	(4450K)	P10569CT-ND	1.05	.93	.73	.60	P10569TR-ND	10,000	355.05/M	ERT-J0ET332J
4.7kΩ	4500K±3%	(4450K)	P10570CT-ND	1.05	.93	.73	.60	P10570TR-ND	10,000	355.05/M	ERT-J0ET472J
3.3kΩ	4250K±3%	(4300K)	P10571CT-ND	1.05	.93	.73	.60	P10571TR-ND	10,000	355.05/M	ERT-J0ER332J
4.7kΩ	4250K±3%	(4300K)	P10572CT-ND	1.05	.93	.73	.60	P10572TR-ND	10,000	355.05/M	ERT-J0ER472J
6.8kΩ	4250K±3%	(4300K)	P10573CT-ND	1.05	.93	.73	.60	P10573TR-ND	10,000	355.05/M	ERT-J0ER682J
10kΩ	4250K±3%	(4300K)	P10574CT-ND	1.05	.93	.73	.60	P10574TR-ND	10,000	355.05/M	ERT-J0ER103J
15kΩ	4250K±3%	(4300K)	P10575CT-ND	1.05	.93	.73	.60	P10575TR-ND	10,000	355.05/M	ERT-J0ER153J
22kΩ	4250K±3%	(4300K)	P10576CT-ND	1.05	.93	.73	.60	P10576TR-ND	10,000	355.05/M	ERT-J0ER223J
33kΩ	4250K±3%	(4300K)	P10577CT-ND	1.05	.93	.73	.60	P10577TR-ND	10,000	355.05/M	ERT-J0ER333J
47kΩ	4700K±3%	(4750K)	P10578CT-ND	1.05	.93	.73	.60	P10578TR-ND	10,000	355.05/M	ERT-J0EV473J
68kΩ	4700K±3%	(4750K)	P10579CT-ND	1.05	.93	.73	.60	P10579TR-ND	10,000	355.05/M	ERT-J0EV683J
47kΩ	4050K±2%	(4100K)	P11441CT-ND	.47	.42	.33	.27	P11441TR-ND	10,000	160.28/M	ERT-J0EP473J
100kΩ	4700K±2%	(4750K)	P11442CT-ND	.47	.42	.33	.27	P11442TR-ND	10,000	160.28/M	ERT-J0EV104J
150kΩ	4700K±2%	(4750K)	P11443CT-ND	.89	.78	.61	.50	P11443TR-ND	10,000	299.38/M	ERT-J0EV154J
220kΩ	4700K±2%	(4750K)	P11444CT-ND	.58	.51	.41	.33	P11444TR-ND	10,000	196.56/M	ERT-J0EV224J
330kΩ	4700K±2%	(4750K)	P11445CT-ND	.58	.51	.41	.33	P11445TR-ND	10,000	196.56/M	ERT-J0EV334J
470kΩ	4700K±2%	(4750K)	P11446CT-ND	.58	.51	.41	.33	P11446TR-ND	10,000	196.56/M	ERT-J0EV474J
						0603					
22Ω	2750K±3%	(2700K)	P10531CT-ND	.96	.84	.66	.54	P10531TR-ND	4,000	358.50/M	ERT-J1VA220J
33Ω	2750K±3%	(2700K)	P10532CT-ND	.96	.84	.66	.54	P10532TR-ND	4,000	358.50/M	ERT-J1VA330J
40Ω	2800K±3%	(2750K)	P10533CT-ND	.96	.84	.66	.54	P10533TR-ND	4,000	358.50/M	ERT-J1VA400J
47Ω	2800K±3%	(2750K)	P10534CT-ND	.96	.84	.66	.54	P10534TR-ND	4,000	358.50/M	ERT-J1VA470J
68Ω	2800K±3%	(2750K)	P10535CT-ND	.96	.84	.66	.54	P10535TR-ND	4,000	358.50/M	ERT-J1VA680J
100Ω	2800K±3%	(2750K)	P10536CT-ND	.96	.84	.66	.54	P10536TR-ND	4,000	358.50/M	ERT-J1VA101J
1kΩ	4500K±3%	(4450K)	P10537CT-ND	.96	.84	.66	.54	P10537TR-ND	4,000	358.50/M	ERT-J1VT102J
1.5kΩ	4500K±3%	(4450K)	P10538CT-ND	.96	.84	.66	.54	P10538TR-ND	4,000	358.50/M	ERT-J1VT152J
2.0kΩ	4500K±3%	(4450K)	P10539CT-ND	.96	.84	.66	.54	P10539TR-ND	4,000	358.50/M	ERT-J1VT202J
2.2kΩ	4500K±3%	(4450K)	P10540CT-ND	.96	.84	.66	.54	P10540TR-ND	4,000	358.50/M	ERT-J1VT222J
3.0kΩ	4500K±3%	(4450K)	P10541CT-ND	.96	.84	.66	.54	P10541TR-ND	4,000	358.50/M	ERT-J1VT302J
3.3kΩ	4500K±3%	(4450K)	P10542CT-ND	.96	.84	.66	.54	P10542TR-ND	4,000	358.50/M	ERT-J1VT332J
4.7kΩ	4500K±3%	(4450K)	P10543CT-ND	.96	.84	.66	.54	P10543TR-ND	4,000	358.50/M	ERT-J1VT472J
3.3kΩ	4250K±3%	(4300K)	P10544CT-ND	.96	.84	.66	.54	P10544TR-ND	4,000	358.50/M	ERT-J1VR332J
4.7kΩ	4250K±3%	(4300K)	P10545CT-ND	.96	.84	.66	.54	P10545TR-ND	4,000	358.50/M	ERT-J1VR472J
6.8kΩ	4250K±3%	(4300K)	P10546CT-ND	.96	.84	.66	.54	P10546TR-ND	4,000	358.50/M	ERT-J1VR682J
10kΩ	4250K±3%	(4300K)	P10547CT-ND	.96	.84	.66	.54	P10547TR-ND	4,000	358.50/M	ERT-J1VR103J
15kΩ	4250K±3%	(4300K)	P10548CT-ND	.96	.84	.66	.54	P10548TR-ND	4,000	358.50/M	ERT-J1VR153J
22kΩ	4250K±3%	(4300K)	P10549CT-ND	.96	.84	.66	.54	P10549TR-ND	4,000	358.50/M	ERT-J1VR223J
33kΩ	4250K±3%	(4300K)	P10550CT-ND	.96	.84	.66	.54	P10550TR-ND	4,000	358.50/M	ERT-J1VR333J
47kΩ	4250K±3%	(4300K)	P10551CT-ND	.96	.84	.66	.54	P10551TR-ND	4,000	358.50/M	ERT-J1VR473J
68kΩ	4250K±3%	(4300K)	P10552CT-ND	.96	.84	.66	.54	P10552TR-ND	4,000	358.50/M	ERT-J1VR683J
47kΩ	4700K±3%	(4750K)	P10553CT-ND	.96	.84	.66	.54	P10553TR-ND	4,000	358.50/M	ERT-J1VV473J
68kΩ	4700K±3%	(4750K)	P10554CT-ND	.96	.84	.66	.54	P10554TR-ND	4,000	358.50/M	ERT-J1VV683J
100kΩ	4700K±3%	(4750K)	P10555CT-ND	.96	.84	.66	.54	P10555TR-ND	4,000	358.50/M	ERT-J1VV104J
150kΩ	4700K±3%	(4750K)	P10556CT-ND	.96	.84	.66	.54	P10556TR-ND	4,000	358.50/M	ERT-J1VV154J

Panasonic

NTC Thermistors

1&2: Significant digit;
3: Multiplier

Uses standard resistance color codes.



FEATURES:

- Resistance temperature coefficient is negative and extremely large
- Wide selection of temperature coefficient (constant B)
- Excellent electrical and thermal stability
- Color coded to indicate resistance value @ 25°C

SPECIFICATIONS:

Max. Watt Rtg. (W): PNT100-123 – 0.4; PNT124-138 – 0.6. Nom. Time Constant (sec.): PNT100-123 – 20; PNT124-138 – 27.

APPLICATIONS:

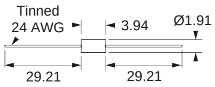
- For measuring equipment: thermometer, wind gauge, liquid level gauge, temperature controller
- For temperature compensation: transistor circuit, measuring equipment
- For driving: Delay setting in relay operation, inrush current surge protection, communication equipment, AGC, time lag

F Type Dimensions	øD	T	l	W	ød
PNT100 ~ PNT123 (D2)	5.0 ± 0.5	1.3 ± 0.5	30 min.	2.5 ± 1	0.4
PNT124 ~ PNT138 (D3)	7.5 ± 0.5	1.4 ± 0.5	30 min.	5 ± 1	0.5

Res. at 25°C (Ω)	Temp. Coef. (25°C) %/°C	Res. Ratio R_{25}/R_{50}	Digi-Key Part No.	Price Each 1	10	100	1,000	Panasonic Part No.
20	–3.4	2.18	PNT100-ND	1.07	.92	.62	.39	ERT-D2FEL200S
40	–3.9	2.48	PNT101-ND	1.07	.92	.62	.39	ERT-D2FFL400S
75	–4.2	2.62	PNT102-ND	1.07	.92	.62	.39	ERT-D2FGL750S
100	–3.9	2.48	PNT104-ND	1.07	.92	.62	.39	ERT-D2FFL101S
100	–4.2	2.62	PNT105-ND	1.07	.92	.62	.39	ERT-D2FGL101S
170	–4.2	2.62	PNT106-ND	1.07	.92	.62	.39	ERT-D2FGL171S
250	–3.9	2.48	PNT107-ND	1.07	.92	.62	.39	ERT-D2FFL251S
250	–4.2	2.62	PNT108-ND	1.07	.92	.62	.39	ERT-D2FGL251S
300	–4.2	2.62	PNT109-ND	1.07	.92	.62	.39	ERT-D2FGL301S
350	–3.9	2.48	PNT110-ND	1.07	.92	.62	.39	ERT-D2FFL351S
600	–4.5	2.83	PNT111-ND	1.07	.92	.62	.39	ERT-D2FGL601S
800	–4.4	2.76	PNT112-ND	1.07	.92	.62	.39	ERT-D2FGL801S
1,000	–4.1	2.55	PNT113-ND	1.07	.92	.62	.39	ERT-D2FGL102S
1,400	–4.4	2.76	PNT114-ND	1.07	.92	.62	.39	ERT-D2FGL142S
2,000	–4.5	2.83	PNT115-ND	1.07	.92	.62	.39	ERT-D2FGL202S
3,300	–4.5	2.83	PNT116-ND	1.07	.92	.62	.39	ERT-D2FGL332S
4,600	–4.6	2.90	PNT117-ND	1.07	.92	.62	.39	ERT-D2FHL462S
8,000	–4.6	2.90	PNT118-ND	1.07	.92	.62	.39	ERT-D2FHL802S
10,000	–4.6	2.90	PNT119-ND	1.07	.92	.62	.39	ERT-D2FHL103S
15,000	–4.7	2.98	PNT120-ND	1.07	.92	.62	.39	ERT-D2FHL153S
33,000	–5.1	3.22	PNT121-ND	1.07	.92	.62	.39	ERT-D2FHL333S
50,000	–5.1	3.48	PNT122-ND	1.07	.92	.62	.39	ERT-D2FHL503S
150,000	–5.4	3.48	PNT123-ND	1.07	.92	.62	.39	ERT-D2FIL154S
8	–3.4	2.18	PNT124-ND	2.25	1.94	1.29	.81	ERT-D3FEL8R0S
13	–3.6	2.30	PNT125-ND	2.25	1.94	1.29	.81	ERT-D3FFL130S
16	–3.6	2.30	PNT126-ND	2.25	1.94	1.29	.81	ERT-D3FFL160S
20	–3.6	2.30	PNT127-ND	2.25	1.94	1.29	.81	ERT-D3FFL200S
30	–3.7	2.30	PNT128-ND	2.25	1.94	1.29	.81	ERT-D3FFL300S
40	–3.2	2.30	PNT130-ND	2.25	1.94	1.29	.81	ERT-D3FFL400S
75	–4.2	2.62	PNT131-ND	2.25	1.94	1.29	.81	ERT-D3FGL750S
80	–4.2	2.62	PNT132-ND	2.25	1.94	1.29	.81	ERT-D3FGL800S
130	–4.5	2.62	PNT134-ND	2.25	1.94	1.29	.81	ERT-D3FGL131S
500	–4.6	2.83	PNT135-ND	2.25	1.94	1.29	.81	ERT-D3FGL501S
4,000	–4.6	2.90	PNT136-ND	2.25	1.94	1.29	.81	ERT-D3FHL402S
20,000	–5.1	3.22	PNT137-ND	2.25	1.94	1.29	.81	ERT-D3FHL203S
80,000	–5.6	3.70	PNT138-ND	2.25	1.94	1.29	.81	ERT-D3FIL803S

THERMOMETRICS
GLOBAL BUSINESS

Glass Encapsulated Thermistors



SPECIFICATIONS:

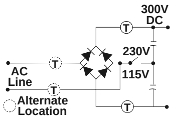
- Temp. Range: -50°C to 204°C
- Dissipation Constant: 2.0mW/°C
- Time Constant: 3 sec.

Thermometrics glass encapsulated NTC thermistors are tiny pellets of thermistor material thermetically sealed in glass bodies with a controlled amount of selected atmosphere. The thermetic seal makes these parts extremely stable in applications up to 204°C (400°F).

Ro @ 25°C	Temp. Coef. %/°C @ 25°C	Material	Digi-Key Part No.	Price Each 1	10	100	250
250	-3.34	GE55*	KC001G-ND	2.66	2.39	1.89	1.50
500	-3.34	GE55*	KC002G-ND	2.66	2.39	1.89	1.50
1K	-3.83	GE73	KC003G-ND	2.66	2.39	1.89	1.50
2K	-3.83	GE73	KC004G-ND	2.66	2.39	1.89	1.50
2786	-4.68	GE101	KC005G-ND	2.66	2.39	1.89	1.50
3K	-3.85	GE76	KC006G-ND	2.66	2.39	1.89	1.50
4K	-3.85	GE76	KC007G-ND	2.66	2.39	1.89	1.50
5K	-3.85	GE76	KC008G-ND	2.66	2.39	1.89	1.50
10K	-4.41	GE97A	KC009G-ND	2.66	2.39	1.89	1.50
20K	-4.34	GE98	KC010G-ND	2.66	2.39	1.89	1.50
30K	-4.34	GE98	KC011G-ND	2.66	2.39	1.89	1.50
50K	-4.32	GE97B	KC012G-ND	2.66	2.39	1.89	1.50
100K	-4.32	GE97B	KC013G-ND	2.66	2.39	1.89	1.50
200K	-4.71	GE123	KC014G-ND	2.66	2.39	1.89	1.50
500K	-4.99	GE138	KC015G-ND	2.66	2.39	1.89	1.50
1M	-5.07	GE145	KC016G-ND	2.66	2.39	1.89	1.50

* Maximum Operating Temperature: 150°C.

Inrush Current Limiters



SPECIFICATIONS:

Inrush Current Limiters protect against high peak inrush current, especially in AC/DC switching power supplies.

All resistances ±25% @ 25°C.

All parts insulated with a protective coating.

Resistance under load is for reference only. Actual values may vary due to ambient temperature, air flow, or mounting conditions.

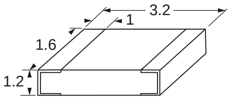
No Load Res. @ 25°C (Ω)	Max.• Steady State Current (Amps)	Approx. Res. @ I Max. (Ω)	Dia. (mm)	Digi-Key Part No.	Price Each 1	10	100
0.7	12.0	.02	19.56	KC022L-ND	2.58	2.32	1.83
1.3	8.0	.04	13.97	KC023L-ND	2.39	2.15	1.69
2.5	8.0	.06	19.56	KC003L-ND	2.58	2.32	1.83
5.0	6.0	.11	19.56	KC004L-ND	2.58	2.32	1.83
7.0	5.0	.16	19.56	KC005L-ND	2.58	2.32	1.83
10.0	5.0	.18	19.56	KC006L-ND	2.58	2.32	1.83
16.0	4.0	.27	19.56	KC007L-ND	2.58	2.32	1.83
47.0	3.0	.49	19.56	KC008L-ND	2.58	2.32	1.83
120.0	2.0	1.18	23.62	KC009L-ND	2.91	2.62	2.06
0.5	16.0	.02	23.62	KC024L-ND	4.18	3.76	2.96
10.0	3.2	.18	10.16	KC011L-ND	2.35	2.11	1.67
10.0	1.7	.34	10.16	KC012L-ND	2.35	2.11	1.67
50.0	1.6	.75	11.43	KC013L-ND	2.35	2.11	1.67
50.0	1.1	.89	11.43	KC014L-ND	2.35	2.11	1.67
5.0	4.7	.11	13.97	KC015L-ND	2.39	2.15	1.69
5.0	2.8	.20	13.97	KC016L-ND	2.39	2.15	1.69
16.0	2.7	.33	13.97	KC017L-ND	2.39	2.15	1.69
16.0	1.7	.49	13.97	KC018L-ND	2.39	2.15	1.69
25.0	2.4	.41	13.97	KC019L-ND	2.39	2.15	1.69
25.0	1.7	.49	13.97	KC020L-ND	2.39	2.15	1.69
30.0	1.5	.60	15.24	KC021L-ND	2.35	2.11	1.67

- These values are suggested maximums based upon 25°C ambient, no air flow environment with the thermistor mounted 1/2" from circuit board.

THERMOMETRICS
GLOBAL BUSINESS

NTC Thermistors

NHQ Series SMT Chip 1206



These devices are ceramic chip thermistors with a negative temperature coefficient of resistance intended for surface mount applications. The electrode material is palladium silver, nickel-plated with a solder-plated covering. The ceramic between the electrodes is glass covered.

Res. @ 25°C. Ω	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 3,000	Thermometrics Part No.
3K	235-1108-1-ND	2.64	2.31	1.82	990.00/M	NHQ302B410T10
10K	235-1109-1-ND	2.64	2.31	1.82	990.00/M	NHQ103B375T10
15K	235-1110-1-ND	2.64	2.31	1.82	990.00/M	NHQ153B400T10
50K	235-1111-1-ND	2.64	2.31	1.82	990.00/M	NHQ503B400T10
100K	235-1112-1-ND	2.64	2.31	1.82	990.00/M	NHQ104B425T10
150K	235-1113-1-ND	2.64	2.31	1.82	990.00/M	NHQ154B425T10
500K	235-1114-1-ND	2.64	2.31	1.82	990.00/M	NHQ504B435T10

*For Tape and Reel part number, change -1-ND to -2-ND.

NHQM Series SMT Chip 0805

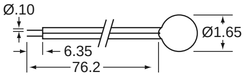
These devices are ceramic chip thermistors with a negative temperature coefficient of resistance intended for surface mount applications. The electrode material is palladium silver, nickel-plated with solder-plated covering. The ceramic between the electrodes is glass covered.

Res. @ 25°C. Ω	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Pricing 3,000	Thermometrics Part No.
3K	235-1115-1-ND	2.00	1.75	1.38	750.00/M	NHQM302B410T10
10K	235-1116-1-ND	2.00	1.75	1.38	750.00/M	NHQM103B375T10
15K	235-1117-1-ND	2.00	1.75	1.38	750.00/M	NHQM153B400T10
50K	235-1118-1-ND	2.00	1.75	1.38	750.00/M	NHQM503B415T10
100K	235-1119-1-ND	2.00	1.75	1.38	750.00/M	NHQM104B425T10

*For Tape and Reel part number, change -1-ND to -2-ND.

MC65 Series

These thermistors are epoxy-coated for stability and have a maximum diameter of .065 inch (1.65mm). Standard leads are 3 inches (76.20mm) of 38 gauge, nickel alloy, bifilar, heavy isomid insulated wire. Each unit tracks a specified curve over the temperature range of 0°C to 50°C (see table).

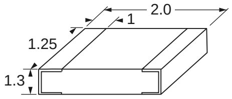


Temperature Range	Tolerance Code (±°C) 235-1057-ND	235-1058-ND	235-1059-ND
0°C - 20°C	±.15	±.2	±.25
20°C - 35°C	±.1	±.15	±.2
35°C - 39°C	±.05	±.1	±.15
39°C - 42°C	±.075	±.15	±.2
42°C - 45°C	±.1	±.15	±.2
45°C - 50°C	±.15	±.2	±.25

Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
10K	235-1057-ND	9.48	7.47	5.93	MC65F103A
10K	235-1058-ND	6.76	5.33	4.23	MC65F103B
10K	235-1059-ND	5.28	4.16	3.30	MC65F103C

NC0805 Series

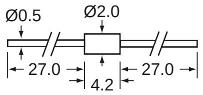
This series of ceramic chip thermistors offer an EIA "0805" case style in a variety of resistance values with a resistance tolerance of ±10% at 25°C. The electrode material is palladium silver. Temperature range is -40°C to 125°C.



Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
50K	KC004NC-ND	1.79	1.42	1.12	NC0805R503T10
100K	KC005NC-ND	1.79	1.42	1.12	NC0805R104T10

DK Series

The DK range of DO-35 packaged NTC thermistors is designed for temperature measurement and control in applications which demand cost effective reliability. Typical applications include domestic appliances, automotive systems, data processing equipment and heating/ventilating/air conditioning control.

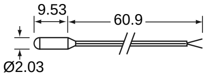


The hermetically-sealed construction combines the advantages of high temperature operation and high reliability of glass bead types with the closer tolerances associated with chip devices. The glass encapsulation offers the additional benefit of high voltage insulation.

Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
5K	235-1103-ND	2.09	1.80	1.24	DKA502N5
10K	235-1104-ND	2.09	1.80	1.24	DKF103N5
20K	235-1105-ND	2.09	1.80	1.24	DKF203N5
30K	235-1106-ND	2.09	1.80	1.24	DKF303N5
50K	235-1107-ND	2.09	1.80	1.24	DKF503N5

MA100 Series

These biomedical thermistor chips and subassemblies are designed to be interchangeable over a 0°C to 50°C range (see table). Best overall stability is maintained when exposure and storage temperatures remain below 70°C.

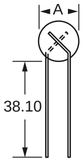


Temperature Range	Tolerance Code (±°C) 235-1060/ 235-1064-ND	235-1061/ 235-1065-ND	235-1062/ 235-1063-ND
0°C - 20°C	±.15	±.2	±.25
20°C - 35°C	±.1	±.15	±.2
35°C - 39°C	±.05	±.1	±.15
39°C - 42°C	±.075	±.15	±.2
42°C - 45°C	±.1	±.15	±.2
45°C - 50°C	±.15	±.2	±.25

Res. @ 25°C. Ω	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
10K	235-1060-ND	13.44	10.59	8.40	MA100GG103A
10K	235-1061-ND	9.56	7.53	5.98	MA100GG103B
10K	235-1062-ND	8.64	6.81	5.40	MA100GG103C
2252	235-1063-ND	8.64	6.81	5.40	MA100GG232C
10K	235-1064-ND	13.44	10.59	8.40	MA100BF103A
10K	235-1065-ND	9.56	7.53	5.98	MA100BF103B

Standard Thermistors For Temperature Measurement

Accuracy ±1°C (0°C - 120°C)



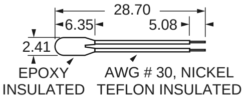
Operating Range: -50°C to +150°C **D.C.:** Dissipation Constant (mW/°C) **T.C.:** Time Constant (Seconds)

R25°	A Max. (mm)	D.C. mW/°C	T.C. Sec.	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
1000	8.13	3.5	30	KC001E-ND	2.39	2.15	1.69	RL3005-574.0-103-SA
2000	5.59	2.5	20	KC002E-ND	2.30	2.07	1.63	RL2005-1148-103-SA
2786	5.59	2.5	20	KC003E-ND	2.30	2.07	1.63	RL2006-1600-103-SA
3000	5.59	2.5	20	KC004E-ND	2.30	2.07	1.63	RL2007-1723-103-SA
5000	2.79	1.0	10	KC005E-ND	2.88	2.60	2.05	RL1003-2871-103-SA
10000	2.79	1.0	10	KC006E-ND	2.88	2.60	2.05	RL1005-5744-103-SA

Miniature Sensors 1°C Accuracy

SPECIFICATIONS:

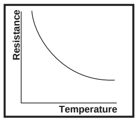
- Temp. Accuracy: ±1°C @ 25°C
- Dissipation Constant: 1.4 mW/°C
- Time Constant: 15 sec.
- Operating Range: -50°C to +150°C.



Ro @ 25°C	Temp. Coef. %/°C . @ 25°C	Material	Digi-Key Part No.	Price Each 1	10	100	250	Thermometrics Part No.
2K	-3.83	MS73	KC001T-ND	2.71	2.44	1.92	1.52	RL0503-1248-73-MS
5K	-4.43	MS95	KC002T-ND	2.71	2.44	1.92	1.52	RL0503-2890-95-MS
10K	-4.40	MS97	KC003T-ND	2.71	2.44	1.92	1.52	RL0503-5820-97-MS
30K	-4.32	MS96	KC004T-ND	2.71	2.44	1.92	1.52	RL0503-17.56K-96-MS
50K	-4.84	MS120	KC005T-ND	2.71	2.44	1.92	1.52	RL0503-27.53K-120-MS
100K	-4.78	MS122	KC006T-ND	2.71	2.44	1.92	1.52	RL0503-55.36K-122-MS

THERMOMETRICS
GLOBAL BUSINESS

NTC Thermistors



NTC (Negative Temperature Coefficient) Thermistors decrease in resistance as temperature increases. Temperature coefficients range from –20%/°C to –5%/°C @ 25°C. Maximum operating temperature: 150°C. Tolerance: ±20% 100-5Ω; ±10% 1K-100KΩ.

Res. @ 25°C (Ω)	Res. Ratio ††	D.C.†	Dim. A (mm)	Digi-Key Part No.	Price Each 1	10	100	250
100	5.53	2.5	2.79	KC001N-ND⋆	2.76	2.48	1.96	1.55
50	5.53	6.5	5.59	KC012N-ND⋆	2.19	1.97	1.55	1.23
25	5.53	6.5	5.59	KC011N-ND⋆	2.19	1.97	1.55	1.23
10	5.53	7.0	8.13	KC021N-ND⋆	2.24	2.02	1.59	1.26
5	5.53	10.0	12.19	KC024N-ND⋆	2.40	2.16	1.71	1.35
1K	6.85	2.8	2.79	KC003N-ND⋆	2.72	2.45	1.93	1.53
500	6.85	2.5	2.79	KC002N-ND	2.72	2.45	1.93	1.53
300	6.85	6.5	5.59	KC015N-ND⋆	2.14	1.93	1.52	1.21
200	6.85	6.5	5.59	KC014N-ND⋆	2.14	1.93	1.52	1.21
100	6.85	6.5	5.59	KC013N-ND	2.14	1.93	1.52	1.21
50	6.85	7.5	9.40	KC022N-ND	2.19	1.98	1.56	1.24
10K	9.60	2.5	2.79	KC025N-ND⋆	2.72	2.45	1.93	1.53
5K	9.10	2.5	2.79	KC005N-ND⋆	2.72	2.45	1.93	1.53
3K	9.10	2.5	2.79	KC004N-ND⋆	2.72	2.45	1.93	1.53
2K	9.10	6.5	5.59	KC017N-ND⋆	2.14	1.93	1.52	1.21
1K	9.10	6.5	5.59	KC016N-ND	2.14	1.93	1.52	1.21
300	9.10	9.0	10.92	KC023N-ND	2.36	2.13	1.68	1.33
25K	11.41	2.8	2.79	KC007N-ND⋆	2.88	2.60	2.05	1.62
10K	11.41	7.2	5.59	KC018N-ND	2.44	2.20	1.73	1.38
100K	12.90	2.7	2.79	KC009N-ND⋆	2.88	2.60	2.05	1.62
50K	12.90	2.5	2.79	KC008N-ND	2.88	2.60	2.05	1.62
25K	12.90	6.5	5.59	KC019N-ND	2.35	2.12	1.67	1.33
200K	13.82	2.5	2.79	KC010N-ND⋆	2.88	2.60	2.05	1.62
100K	13.82	6.5	5.59	KC020N-ND	2.35	2.12	1.67	1.33

† D.C. — Dissipation Constant (MW/°C)
†† Resistance Ratio — ratio of zero power resistance @ 0°C to zero power resistance @ 50°C; AWG.

⋆ **KCNTC-KIT-ND** ***Digi-Key® NTC Thermistors Kit*** 2 each of 15 values denoted (30 total pieces). Notebook style storage case and bin storage guide included. **$39.95**

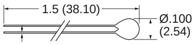
NTC Thermistors

THERMAL AND ELECTRICAL PROPERTIES: Dissipation Constant: (Still Air) 1 m w/Deg C., (Stirred Oil) 8 m w/Deg C. **Thermal Time Constant:** (Still Air) 10 Seconds, (Stirred Oil) 1 Second. **Maximum Power Rating:** .075 Watts (Derated from 100% at 25°C to 0% at 100°C.

Type EC95 and Type DC95 Thermistors may be used at temperatures as low as -80°C and as high as 150°C, however, best over-all stability is achieved with exposure or storage temperatures lower than 105°C.

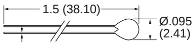
Thermometrics Type C100 Thermochips are low cost, epoxy coated chip thermistors which represent the highest level of thermistor technology. Thermometrics exclusive “state of the art” materials processing techniques have been proven through extensive field use and long term testing to provide stable, rugged, easy handling thermistors suitable for applications in the temperature range of -80°C to +150°C. Best stability is achieved at temperatures not exceeding 105°C.

Type C100



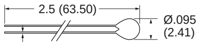
Ø.012 (0.30)-Tinned copper leads
Epoxy coated thermochip

Type EC95 Thermistors are designed to be interchangeable over 0°C to 70° and 0°C to 100°C.



Ø.012 (0.30)-Tinned copper leads
Epoxy coated thermochip

Type EC95 Thermistors are designed to be interchangeable over -20°C to 50°C and 0°C to 70°C.

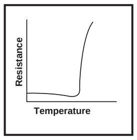


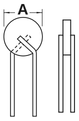
Ø.008 (0.20)-Tinned copper alloy leads
Epoxy coated thermochip

Res. @ 25°C (Ω)	Res. Ratio†	Digi Key Part No.	Price Each 1	10	100	250	Thermometrics Part No.
10K	9.06	235-1001-ND	5.80	4.57	3.63	2.69	C100F103G
10K	9.06	235-1002-ND	4.56	3.60	2.85	2.11	C100F103J
10K	7.60	235-1003-ND	4.56	3.60	2.85	2.11	C100Y103J
10K	9.06	235-1004-ND	6.36	5.01	3.98	2.95	DC95F103W
2K	9.06	235-1005-ND	6.36	5.01	3.98	2.95	DC95F202W
2252	9.06	235-1006-ND	6.36	5.01	3.98	2.95	DC95F232W
5K	9.06	235-1007-ND	6.36	5.01	3.98	2.95	DC95F502W
100K	10.45	235-1008-ND	6.36	5.01	3.98	2.95	DC95G104W
50K	10.45	235-1009-ND	6.36	5.01	3.98	2.95	DC95G503W
10K	9.06	235-1010-ND	6.36	5.01	3.98	2.95	EC95F103W
2K	9.06	235-1011-ND	5.52	4.35	3.45	2.56	EC95F202W
3K	9.06	235-1012-ND	6.36	5.01	3.98	2.95	EC95F302W
100K	10.45	235-1013-ND	6.36	5.01	3.98	2.95	EC95G104W
50K	10.45	235-1014-ND	6.36	5.01	3.98	2.95	EC95G503W
30K	8.69	235-1015-ND	6.36	5.01	3.98	2.95	EC95H303W

† 0°C/50°C Ratio

PTC Thermistors





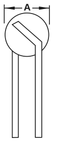
PTC (Positive Temperature Coefficient) Thermistors are thermally sensitive resistors made of polycrystalline ceramic materials. They are characterized by an extremely large resistance change in a small temperature span. All PTC resistances ±30% at 25°C. Tolerance on transition temperature is ±7°C.

Oper. Volt.	R @ 25°C (Ω)	Transition Temp.	D.C.†	Dim. A (mm)	Digi-Key* Part No.	Price Each 1	10	100
12	1	120°C	14.0	15.24	KC012P-ND	2.98	2.68	2.11
12	2	120°C	14.0	15.24	KC013P-ND	2.98	2.68	2.11
12	10	110°C	7.0	8.89	KC014P-ND	2.54	2.28	1.80
12	25	110°C	7.0	8.89	KC015P-ND	2.54	2.28	1.80
25	50	30°C	7.0	7.62	KC001P-ND*	2.54	2.28	1.80
25	50	40°C	7.0	7.62	KC002P-ND*	2.54	2.28	1.80
25	50	50°C	7.0	7.62	KC003P-ND*	2.54	2.28	1.80
25	50	60°C	7.0	7.62	KC004P-ND*	2.54	2.28	1.80
25	50	100°C	7.0	7.62	KC009P-ND*	2.54	2.28	1.80
25	50	110°C	7.0	7.62	KC010P-ND*	2.54	2.28	1.80
25	50	120°C	7.0	7.62	KC011P-ND*	2.54	2.28	1.80
50	10	110°C	10.0	11.43	KC017P-ND	3.26	2.93	2.31
50	50	110°C	12.0	11.43	KC018P-ND	2.98	2.68	2.11
50	200	110°C	9.0	10.16	KC019P-ND	3.26	2.93	2.31
120	20	120°C	18.0	16.51	KC021P-ND	3.05	2.74	2.16
120	25	60°C	15.0	15.24	KC022P-ND	3.05	2.74	2.16
120	50	120°C	12.0	12.70	KC023P-ND	2.98	2.68	2.11
240	40	110°C	18.0	16.51	KC024P-ND	3.26	2.93	2.31
240	50	65°C	17.0	15.24	KC025P-ND	3.26	2.93	2.31
240	50	110°C	18.0	16.51	KC026P-ND	3.26	2.93	2.31
240	100	120°C	18.0	16.51	KC027P-ND	3.26	2.93	2.31
240	1500	100°C	12.0	8.89	KC028P-ND	3.29	2.93	2.31
480	1000	100°C	18.0	19.05	KC029P-ND	3.81	3.43	2.70
480	2000	100°C	15.0	13.97	KC030P-ND	2.98	2.68	2.11
480	5000	100°C	12.0	8.89	KC031P-ND	3.26	2.93	2.31

† D.C. – Dissipation Constant (MW/°C)

* **KCPTC1-KIT-ND** ***Digi-Key® PTC Thermistors Kits*** 2 each of all values denoted (20 total pieces). Notebook style storage case and bin storage guide included. **$37.95**

PTC Resettable Fuses



- Telephone line fault protection
- Over-current protection for transformers
- Locked rotor protection for FHP motors

Minimum Limit Current: The minimum amount of current required by the PTC to guarantee switching at the minimum ambient temperatures.

Maximum Limit Current: The maximum amount of current the PTC must be able to pass without switching at the maximum ambient temperature.

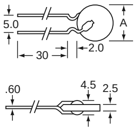
Oper. Volt.	No Ld. Res. @25°C	Dim. A (mm)	Min. Switch Current 0°C	Min. Switch Current 20°C	Max. No-Switch Current 30°C	Max. No-Switch Current 55°C	Type Number	Digi-Key Part No.	Price Each 1	10	100
12	1	15.24	1.45	1.32	0.84	0.64	RL5305-1-110-12-PTF	KC001R-ND	3.11	2.80	2.20
	2.5	15.24	0.92	0.84	0.53	0.40	RL5305-2.5-110-12-PTF	KC014R-ND	3.11	2.80	2.20
	5	11.43	0.55	0.50	0.32	0.24	RL4005-5-110-12-PTF	KC002R-ND	2.87	2.58	2.03
25	1.5	19.05	1.34	1.22	0.77	0.59	RL7008-1.5-110-25-PTF	KC015R-ND	3.87	3.48	2.75
	3.0	13.97	0.84	0.76	0.48	0.37	RL5008-3.0-110-25-PTF	KC016R-ND	3.22	2.90	2.29
50	5.0	15.24	0.65	0.59	0.37	0.29	RL5506-5-110-50-PTF	KC005R-ND	3.11	2.80	2.20
	10	11.43	0.39	0.35	0.22	0.17	RL4006-10-110-50-PTF	KC006R-ND	2.87	2.58	2.03
	25	12.70	0.27	0.24	0.15	0.12	RL4508-25-110-50-PTF	KC017R-ND	3.22	2.90	2.29
	50	11.43	0.19	0.17	0.11	0.08	RL4010-50-110-50-PTF	KC012R-ND	2.87	2.58	2.03
	100	10.67	0.13	0.12	0.08	0.06	RL3810-100-110-50-PTF	KC008R-ND	3.02	2.72	2.14
120	10	20.32	0.55	0.50	0.32	0.24	RL7510-10-110-120-PTF	KC009R-ND	3.87	3.48	2.75
	20	16.51	0.37	0.34	0.21	0.16	RL6010-20-110-120-PTF	KC018R-ND	3.11	2.80	2.20
	50	12.70	0.19	0.17	0.11	0.08	RL4510-50-110-120-PTF	KC010R-ND	3.22	2.90	2.29
	100	10.16	0.13	0.12	0.07	0.06	RL3510-100-110-120-PTF	KC011R-ND	3.02	2.72	2.14
240	50	16.51	0.23	0.21	0.13	0.10	RL6315-50-110-240-PTF	KC019R-ND	3.87	3.48	2.75
	100	16.51	0.16	0.15	0.09	0.04	RL6315-100-110-240-PTF	KC020R-ND	3.87	3.48	2.75
	250	16.51	0.10	0.06	0.06	0.05	RL6315-250-110-240-PTF	KC021R-ND	3.87	3.48	2.75

PTC Thermistors YM120 Series

Electrical Specifications Res. @ 25°C. Ω	Int(25°C)mA	It(25°C) mA	Int(55°C) mA	It(10°C) mA	Imo A	Vmax Vrms	Dim. A max	Digi-Key Part No.	Price Each 1	10	100	Thermometrics Part No.
1800	16	23	12	25	0.1	730	4.0mm	235-1072-ND	2.41	2.11	1.64	YM120C15N182
1200	20	28	16	31	0.1	610	4.0mm	235-1073-ND	2.41	2.11	1.64	YM120C20N122
600	28	40	22	44	0.2	540	4.0mm	235-1074-ND	2.41	2.11	1.64	YM120C30N601
300	39	55	30	60	0.2	450	4.0mm	235-1075-ND	2.41	2.11	1.64	YM120C45N301
150	57	80	44	88	0.2	265	4.0mm	235-1076-ND	2.41	2.11	1.64	YM120C60N151
100	70	98	54	108	0.4	265	4.5mm	235-1077-ND	1.46	1.28	.99	YM120C80N101
60	93	131	72	144	0.6	265	6.0mm	235-1078-ND	1.46	1.28	.99	YM120D105N600
45	110	155	85	170	0.7	265	7.0mm	235-1079-ND	1.46	1.28	.99	YM120D125N450
33	128	181	99	198	0.9	265	7.5mm	235-1080-ND	2.07	1.82	1.41	YM120D150N330
25	161	228	125	250	1.1	265	8.5mm	235-1081-ND	2.07	1.82	1.41	YM120D170N250
20	192	265	149	298	1.3	265	9.5mm	235-1082-ND	2.07	1.82	1.41	YM120D200N200
15	234	330	181	362	1.7	265	11.5mm	235-1083-ND	2.88	2.53	1.96	YM120D260N150
10	314	444	243	486	2.7	265	14.0mm	235-1084-ND	4.17	3.66	2.84	YM120D370N100
6	407	575	315	630	3.9	265	16.5mm	235-1085-ND	5.12	4.49	3.48	YM120D480N060

This range of PTC thermistors is designed to operate at main voltages and is intended for general purpose usage in over-current, over-voltage and direct over-temperature protection.

Each device in the range consists of a disc of barium titanate thermistor material with silvered faces and solder coated copper lead wires. A painted finish is applied which is not intended to confer insulating properties.



R25	Resistance at 25°C
20%	Tolerance on resistance at 25°C
Int(25°C)	Current which will not trip thermistor (25°C ambient)
It(25°C)	Current which will trip thermistor (25°C ambient)
Int(55°C)	Current which will not trip thermistor (55°C ambient)
It(10°C)	Current which will trip thermistor (10°C ambient)
I mo	Maximum overload current at 265V rms (10° ambient)
V max	Maximum voltage V ms
D max	Maximum disc diameter
T max	Maximum overall thickness

Panasonic® Surface Mount Chip Resistor Networks

Chip Resistor Networks - Series EXB-A, EXB-E and EXB-D:

FEATURES:

- High Density: Bussed 8 resistors for pull up/down circuit in EXB-A Type 2512 (6.4mm x 3.1mm x 0.55mm), EXB-E Type 1608 (4.0mm x 2.1mm x 0.55mm), and EXB-D Type 1206 (3.2mm x 1.6mm x .55mm) size
- Automatic Placement: Taped and reeled packaging is suitable for high speed automatic placement machine
- 2 common terminals without directional problem
- Superior Solderability: Self-alignment by unique concave terminal design with reflow soldering

SPECIFICATIONS:

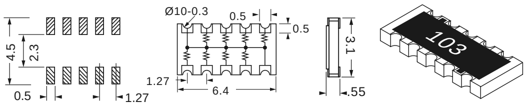
- Resistance Range: 47Ω to 1MΩ
- Resistance Tolerance: ±5%
- Number of Terminals: 10 terminals
- Number of Resistors: 8 resistors
- Power Rating at 70°C: 62.5mW/element (50mW/element for EXB-D)
- Maximum Rated Continuous Working Voltage†: EXB-A: 50V, EXB-E: 25V, and EXB-D: 25V
- Maximum Overload Voltage: EXB-A: 100V, EXB-E: 50V, and EXB-D: 50V
- Temperature Characteristic Range: ±200 ppm/°C
- Operating Temperature Range: -55°C to 125°C
- Solderability: 95% coverage (Test temperature at solder 230±5°C; Dwell time in solder: 5±1 seconds)

Resistance Codes
(Values listed in ohms)

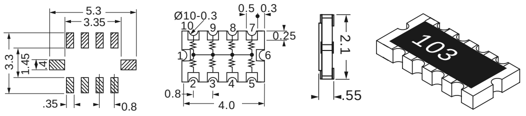
Code (Value)	Code (Value)	Code (Value)
470 (47)	152 (1.5K)	473 (47K)
560 (56)	182 (1.8K)	563 (56K)
680 (68)	222 (2.2K)	683 (68K)
820 (82)	272 (2.7K)	823 (82K)
101 (100)	332 (3.3K)	104 (100K)
121 (120)	392 (3.9K)	124 (120K)
151 (150)	472 (4.7K)	154 (150K)
181 (180)	562 (5.6K)	184 (180K)
221 (220)	682 (6.8K)	224 (220K)
271 (270)	822 (8.2K)	274 (270K)
331 (330)	103 (10K)	334 (330K)
391 (390)	123 (12K)	394 (390K)
471 (470)	153 (15K)	474 (470K)
561 (560)	183 (18K)	564 (560K)
681 (680)	223 (22K)	684 (680K)
821 (820)	273 (27K)	824 (820K)
102 (1.0K)	333 (33K)	105 (1M)
122 (1.2K)	393 (39K)	

† Rated continuous working voltage (RCWV) shall be determined from RCWV = $\sqrt{\text{Power Rating x Resistance}}$ Value, or max. RCWV listed above, whichever is less.

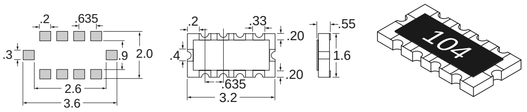
EXB-A



EXB-E



EXB-D



Digi-Key* Part No.	Cut Tape Pricing 1	10	100	500	1,000	Digi-Key* Part No.	Tape & Reel Pricing 4,000	5,000	8,000	10,000	Panasonic* Part No.
U7□□□CT-ND	.46	4.26	34.50	143.75	230.00	U7□□□TR-ND	209.00/M	—	177.00/M	—	EXB-A10P□□□J
U8□□□CT-ND	.42	3.89	31.50	131.25	210.00	U8□□□TR-ND	155.00/M	—	131.00/M	—	EXB-E10C□□□J
U9□□□CT-ND	.44	4.03	32.70	136.25	218.00	U9□□□TR-ND	—	155.00/M	—	131.00/M	EXB-D10C□□□J

* For complete part number, substitute the corresponding resistance code (listed above) for □□□.

Surface Mount Chip Resistor Arrays

FEATURES: **High Density:** • 2 resistors in 1.6mm x 1.6mm size (EXB-V4V) • 4 resistors in 3.2mm x 1.6mm size (EXB-V8V) • 2 resistors in 1.0mm x 1.0mm size (EXB-24V) • 4 resistors in 2.0mm x 1.0mm size (EXB-28V) • 2 resistors in 1.6mm x 1.6mm size (EXB-34V) • 4 resistors in 3.2mm x 1.6mm size (EXB-38V) • 8 resistors in 3.8mm x 1.6mm size (EXB-2HVa) • Improvement of placement efficiency: Placement efficiency of Chip Resistor Array is two or four times that of discrete chip resistors.

SPECIFICATIONS: • Resistance Range: 10Ω to 1MΩ • Resistance Tolerance: J: ±5% • Power Rating at 70°C: 1/16 with element • Maximum Rated Continuous Working Voltage‡: 50V; 25V for EXB-2HV • Maximum Overload Voltage: 100V; 50V for EXB-2HV • Temperature Characteristic Range: ±200ppm/°C • Operating Temperature Range: -55°C to 125°C • Storage Temperature Range: -55°C to 125°C

Isolated Terminals Resistance Codes (E12 Values)
(Value listed in ohms)

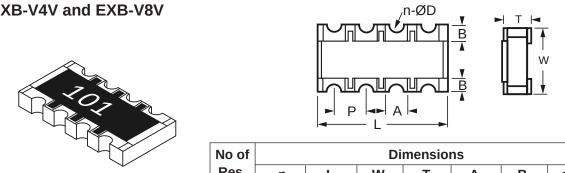
Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
100 (10)	680 (68)	471 (470)	332 (3.3K)	223 (22K)	154 (150K)	105 (1M)
120 (12)	820 (82)	561 (560)	392 (3.9K)	273 (27K)	184 (180K)	000 (0.0)†
150 (15)	101 (100)	681 (680)	472 (4.7K)	333 (33K)	224 (220K)	
180 (18)	121 (120)	821 (820)	562 (5.6K)	393 (39K)	274 (270K)	† Zero ohm jumper for EXB-24V Series is not stocked
220 (22)	151 (150)	102 (1K)	682 (6.8K)	473 (47K)	334 (330K)	
270 (27)	181 (180)	122 (1.2K)	822 (8.2K)	563 (56K)	394 (390K)	
330 (33)	221 (220)	152 (1.5K)	103 (10K)	683 (68K)	474 (470K)	
390 (39)	271 (270)	182 (1.8K)	123 (12K)	823 (82K)	564 (560K)	
470 (47)	331 (330)	222 (2.2K)	153 (15K)	104 (100K)	684 (680K)	
560 (56)	391 (390)	272 (2.7K)	183 (18K)	124 (120K)	824 (820K)	

EXB-28V Series
Isolated Terminals Resistance Codes (E24 Values)
(Value listed in ohms)

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
100 (10)	560 (56)	331 (330)	182 (1.8K)	103 (10K)	563 (56K)	334 (330K)
110 (11)	620 (62)	361 (360)	202 (2.0K)	113 (11K)	623 (62K)	364 (360K)
120 (12)	680 (68)	391 (390)	222 (2.2K)	123 (12K)	683 (68K)	394 (390K)
130 (13)	750 (75)	431 (430)	242 (2.4K)	133 (13K)	753 (75K)	434 (430K)
150 (15)	820 (82)	471 (470)	272 (2.7K)	153 (15K)	823 (82K)	474 (470K)
160 (16)	910 (91)	511 (510)	302 (3.0K)	163 (16K)	913 (91K)	514 (510K)
180 (18)	101 (100)	561 (560)	332 (3.3K)	183 (18K)	104 (100K)	564 (560K)
200 (20)	111 (110)	621 (620)	362 (3.6K)	203 (20K)	114 (110K)	624 (620K)
220 (22)	121 (120)	681 (680)	392 (3.9K)	223 (22K)	124 (120K)	684 (680K)
240 (24)	131 (130)	751 (750)	432 (4.3K)	243 (24K)	134 (130K)	754 (750K)
270 (27)	151 (150)	821 (820)	472 (4.7K)	273 (27K)	154 (150K)	824 (820K)
300 (30)	161 (160)	911 (910)	512 (5.1K)	303 (30K)	164 (160K)	914 (910K)
330 (33)	181 (180)	102 (1K)	562 (5.6K)	333 (33K)	184 (180K)	105 (1M)
360 (36)	201 (200)	112 (1.1K)	622 (6.2K)	363 (36K)	204 (200K)	000 (0.0)
390 (39)	221 (220)	122 (1.2K)	682 (6.8K)	393 (39K)	224 (220K)	
430 (43)	241 (240)	132 (1.3K)	752 (7.5K)	433 (43K)	244 (240K)	
470 (47)	271 (270)	152 (1.5K)	822 (8.2K)	473 (47K)	274 (270K)	
510 (51)	301 (300)	162 (1.6K)	912 (9.1K)	513 (51K)	304 (300K)	

‡ Rated continuous working voltage (RCWV) shall be determined from RCWV = $\sqrt{\text{Power Rating x Resistance Value}}$, or max. RCWV listed, whichever is less.

EXB-V4V and EXB-V8V



No of Res.	Dimensions n	L	W	T	A	B	øD	P
2	4	1.60	1.60	0.60	0.50	0.3	0.3	0.80
4	8	3.20	1.60	0.60	0.60	0.3	0.3	0.80

Isolated Terminals

Fig. 1 — 2 Resistors

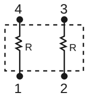


Fig. 2 — 4 Resistors

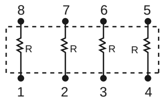
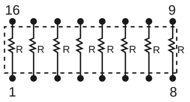
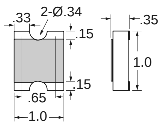


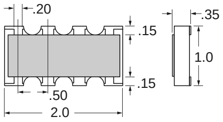
Fig. 3 — 8 Resistors



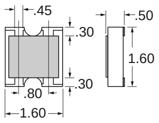
EXB-24V



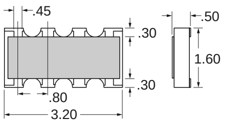
EXB-28V



EXB-34V



EXB-38V



EXB-2HV

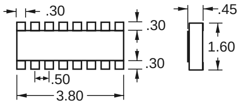


Fig.	No. of Res.	Resistor Value Range‡	Digi-Key* Part No.	Cut Tape Pricing 10	100	500	1,000	Digi-Key* Part No.	Tape & Reel Pricing 5,000	10,000	20,000	Panasonic* Part No.
1	2	E12	Y2□□□CT-ND	.48	4.20	15.00	25.80	Y2□□□TR-ND	17.00/M	16.00/M	—	EXB-V4V□□□JV
2	4	E12	Y4□□□CT-ND	.80	7.00	25.00	43.00	Y4□□□TR-ND	28.00/M	26.00/M	—	EXB-V8V□□□JV
1	2	E12	Y5□□□CT-ND	1.56	13.65	48.75	83.85	Y5□□□TR-ND	—	53.00/M	51.00/M	EXB-24V□□□JX
2	4	E24	Y7□□□CT-ND	2.56	22.40	80.00	137.60	Y7□□□TR-ND	—	34.00/M	33.00/M	EXB-28V□□□JX
1	2	E12	Y8□□□CT-ND	.52	4.55	16.25	27.95	Y8□□□TR-ND	15.00/M	14.00/M	—	EXB-34V□□□JV
2	4	E12	Y9□□□CT-ND	.96	8.40	30.00	51.60	Y9□□□TR-ND	11.00/M	10.00/M	—	EXB-38V□□□JV
3	8	E12	Y1□□□CT-ND	1.80	15.75	56.25	96.75	Y1□□□TR-ND	61.00/M	59.00/M	—	EXB-2HV□□□JV

* For complete part number, substitute the corresponding resistance code (listed above) for □□□.

‡ E24 Resistance Values are available for other series. Please call Digi-Key for details.

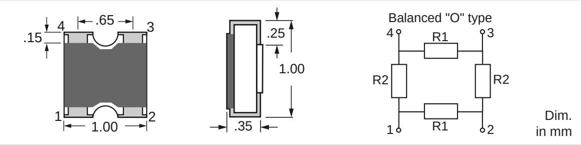
Panasonic

Surface Mount 0404 Balanced 0 Type Chip Attenuator Series EXB-24AB

FEATURES: • Balanced "0" type attenuator circuit in one 0404 chip (1.0mm x 1.0mm) • Mounting occupation area reduction; –approx. 65% reduction compared with the attenuator circuit and consists of four discrete 0402 chip resistors; –approx. 26% reduction compared with the attenuator circuit and consists of four discrete 0201 chip resistors • Mounting time reduction: 4 times >>> 1time • Attenuation: 0dB to 10dB

APPLICATIONS: • Attenuation/level control/impedance matching of high frequency signals of communication equipment – cellular phones (GSM, CDMA, PDC, etc.), PHS, PDA, for example.

SPECIFICATIONS: • Rated Power: 0.040 W (40mW)/package • Frequency Range: DC to 2.5 GHz • VSWR (Voltage Standing Wave Ratio) 1.2 maximum (typical), 1.5 maximum (0 dB, typical) • Operating Temperature Range: -55°C to +125°C



Tolerance of Attenuation	Attenuation Value (dB)	R1 (Ω)	R2 (Ω)	Characteristic Impedance (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 10,000	Panasonic Part No.
±0.8	0	0	open	0	P11153CT-ND	.26	.23	.17	P11153TR-ND	87.00/M	EXB-24AB00R8X
	1	5.77	1.74k	100	P11154CT-ND	.26	.23	.17	P11154TR-ND	87.00/M	EXB-24AB1CR8X
	2	11.6	872	100	P11155CT-ND	.26	.23	.17	P11155TR-ND	87.00/M	EXB-24AB2CR8X
	3	17.6	585	100	P11156CT-ND	.26	.23	.17	P11156TR-ND	87.00/M	EXB-24AB3CR8X
±1.0	6	37.4	301	100	P11157CT-ND	.26	.23	.17	P11157TR-ND	87.00/M	EXB-24AB6C1RX
±2.0	10	71.2	192	100	P11158CT-ND	.26	.23	.17	P11158TR-ND	87.00/M	EXB-24ABAC2RX
±0.8	1	11.5	3.48k	200	P11159CT-ND	.26	.23	.17	P11159TR-ND	87.00/M	EXB-24AB1ER8X
	2	23.2	1.74k	200	P11160CT-ND	.26	.23	.17	P11160TR-ND	87.00/M	EXB-24AB2ER8X
	3	35.2	1.17k	200	P11161CT-ND	.26	.23	.17	P11161TR-ND	87.00/M	EXB-24AB3ER8X
	6	74.7	602	200	P11162CT-ND	.26	.23	.17	P11162TR-ND	87.00/M	EXB-24AB6E1RX
	10	142	385	200	P11163CT-ND	.26	.23	.17	P11163TR-ND	87.00/M	EXB-24ABAE2RX
	1	17.3	5.22k	300	P11164CT-ND	.26	.23	.17	P11164TR-ND	87.00/M	EXB-24AB1GR8X
	2	34.8	2.62k	300	P11165CT-ND	.26	.23	.17	P11165TR-ND	87.00/M	EXB-24AB2GR8X
	3	52.8	1.75k	300	P11166CT-ND	.26	.23	.17	P11166TR-ND	87.00/M	EXB-24AB3GR8X
±1.0	6	112	903	300	P11167CT-ND	.26	.23	.17	P11167TR-ND	87.00/M	EXB-24AB6G1RX
±2.0	10	213	577	300	P11168CT-ND	.26	.23	.17	P11168TR-ND	87.00/M	EXB-24ABAG2RX

Panasonic

Surface Mount 0404 Chip Attenuator

Series EXB-24AT

FEATURES:

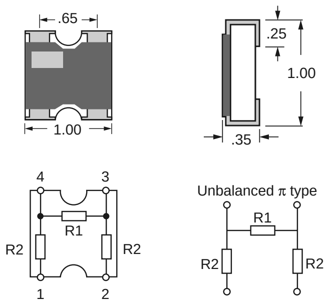
- Unbalanced π type attenuator circuit in one chip (1.0mm x 1.0mm) • Mounting occupation area reduction: about 50% reduction compared with attenuator circuit consisting of three 0402 chip resistors • Mounting Times reduction: 3 time >>> 1 time
- Attenuation: 1dB to 10dB

APPLICATIONS:

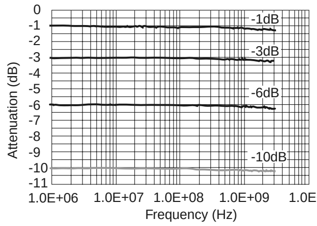
- Attenuation/level control/impedance matching of high frequency signals of communication equipment – cellular phones (GSM, CDMA, PDC, etc.), PHS, PDA, for example.

SPECIFICATIONS:

- Characteristic Impedance: 50Ω • Rated Power: 0.040 W (40 mW)/package
- Frequency Range: DC to 2 GHz • VSWR (Voltage Standing Wave Ratio) 1.3 maximum



Attenuation - Frequency Characteristics (Typical)



Dim. in mm

Tolerance of Attenuation	Attenuation Value (dB)	R1 (Ω)	R2 (Ω)	Digi-Key Part No.	Cut Tape Price Each 10	100	500	Digi-Key Part No.	Tape & Reel Pricing 10,000	Panasonic Part No.
±0.3	1	5.77	870	P11103CT-ND	.19	.17	.12	P11103TR-ND	64.00/M	EXB-24AT1AR3X
	2	11.6	436	P11104CT-ND	.19	.17	.12	P11104TR-ND	64.00/M	EXB-24AT2AR3X
	3	17.6	292	P11105CT-ND	.19	.17	.12	P11105TR-ND	64.00/M	EXB-24AT3AR3X
	4	23.9	221	P11106CT-ND	.19	.17	.12	P11106TR-ND	64.00/M	EXB-24AT4AR3X
	5	30.4	179	P11107CT-ND	.19	.17	.12	P11107TR-ND	64.00/M	EXB-24AT5AR3X
±0.5	6	37.4	151	P11108CT-ND	.19	.17	.12	P11108TR-ND	64.00/M	EXB-24AT6AR5X
	10	71.2	96.3	P11109CT-ND	.19	.17	.12	P11109TR-ND	64.00/M	EXB-24ATAAR5X

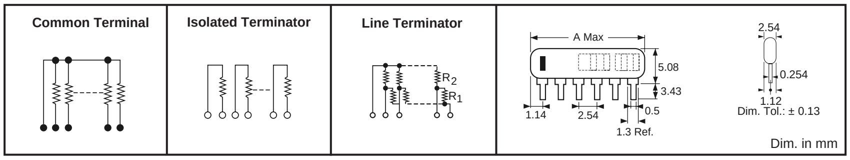
Panasonic

2% Thick Film Resistor Networks

Low Profile, Single-In-Line Package, Highly Stable, Equivalent to MIL-R-83401

General Specifications:

Rated Power: Common: 125mW (70°C); Isolated: 200mW (60°C); Line Terminator: 75mW (70°C). **Rated Continuous Working Voltage** (RCWV): √ Rated Power x Resistance Value or 100V, whichever is less. **Operating Temperature Range:** –55°C ~ +125°C. **Storage Temperature Range:** –55°C ~ +150°C.



Common Terminal: Isolated Terminal: Resistance Codes

Code (Value)	Code (Value)
101 (100)	474 (470K)
151 (150)	561 (560)
152 (1.5K)	562 (5.6K)
153 (15K)	563 (56K)
154 (150K)	564 (560K)
221 (220)	681 (680)
223 (22K)	682 (6.8K)
224 (220K)	683 (68K)
331 (330)	684 (680K)
333 (33K)	821 (820)
334 (330K)	822 (8.2K)
473 (47K)	823 (82K)

Line Terminator: Resistance Codes

Code (R1/R2)
TO1 (160/240)
TO2 (180/390)
TO3 (220/270)
TO4 (220/330)
TO5 (330/390)
TO6 (330/470)
TO7 (330/680)
TO8 (1.5K/3.3K)

Res. Elements	No. of Pins	Dim. A (mm)	Digi-Key* Part No.	Pricing 1	10	100	1,000	5,000	Panasonic Part No.
Common Terminal									
5	6	14.88	Q5☐☐☐-ND	.25	2.03	15.23	102.00	92.00/M	EXB-F6E☐☐☐G
7	8	19.96	Q7☐☐☐-ND	.33	2.67	19.99	133.00	121.00/M	EXB-F8E☐☐☐G
9	10	25.04	Q9☐☐☐-ND	.42	3.35	25.14	168.00	152.00/M	EXB-F10E☐☐☐G
Isolated Terminator									
3	6	14.88	Q2☐☐☐-ND	.25	2.03	15.23	102.00	92.00/M	EXB-F6V☐☐☐G
4	8	19.96	Q4☐☐☐-ND	.33	2.67	19.99	133.00	121.00/M	EXB-F8V☐☐☐G
5	10	25.04	Q6☐☐☐-ND	.42	3.35	25.14	168.00	152.00/M	EXB-F10V☐☐☐G
Line Terminator									
8	6	14.88	Q0☐☐☐-ND	.40	3.23	24.22	161.00	147.00/M	EXB-F6WT☐☐G
12	8	19.96	Q1☐☐☐-ND	.54	4.32	32.39	216.00	196.00/M	EXB-F8WT☐☐G
16	10	25.04	Q3☐☐☐-ND	.67	5.38	40.37	269.00	245.00/M	EXB-F10WT☐☐G

* For complete part number, substitute the corresponding resistance code (listed at left) for ☐☐☐.

Panasonic

Surface Mount Chip 3-Terminal Capacitor Array Series EZA-SC

FEATURES:

Suitable for EMI suppression filtering:

- The low residual inductance at high frequency range provides effective reduction of noise
- Equivalent noise reduction to the EMI filters with low cost design

Compact design for high density PWB assembly:

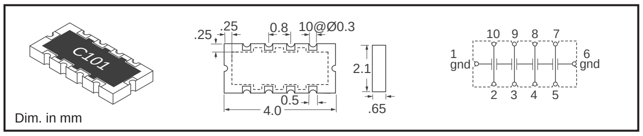
- 4.0 x 2.1 x 0.65mm
- Flat and square packages suitable for high speed automatic placement machine

Superior mountability with concave terminals:

- Firm solder joint (two times of convex terminal)
- Self-alignment of placement at reflow process

SPECIFICATIONS:

- Capacitance Tolerance: ±20% (+30% / -20% in the case of 22pf)
- Temperature Characteristic: △C: +20% / -55% (-25°C to +85°C)
- Dissipation Factor: Less than 2.0% (25°C, 1kHz – In measuring at 1MHz, capacitance value and dissipation factor are different, 1 Vrms)
- Rated Voltage: 25V
- Rated Current: 200mA (between input terminal and output terminal)
- Resistance: Less than 1.0Ω (between input terminal and output terminal)
- Operating Temperature Range: -25°C to +85°C



Volts (DC)	Cap. (pF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 4,000	Panasonic Part No.
25	22	P10192CT-ND	1.18	1.04	.89	.74	P10192TR-ND	414.00/M	EZA-SCE220M
25	47	P10193CT-ND	1.18	1.04	.89	.74	P10193TR-ND	414.00/M	EZA-SCE470M
25	100	P10194CT-ND	1.18	1.04	.89	.74	P10194TR-ND	414.00/M	EZA-SCE101M

Surface Mount Chip Capacitor Networks

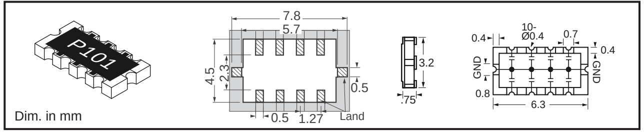
Series EZA-NP

FEATURES:

- Chip Capacitor Networks, exclusively developed by Panasonic thick film technology. Bussed 8 capacitors in one package (6.3 mm x 3.2 mm x 0.75 mm), half-pitch (0.65 mm) spacing for high density automatic placing
- Superior noise reduction by using two ground terminals
- Superior solderability by using Ni + Solder plating with unique concave terminals

SPECIFICATIONS:

- Capacitance Range: 47 pF, 100 pF, 220 pF
- Capacitance Tolerance: ±20%
- Temperature Characteristic:
  E Characteristic: +20% / -55% (-25°C to +85°C)
- Dissipation Factor: Less than 3.0% (25°C, 1 kHz, 1 Vrms)
- Rated Voltage: 25V
- Operating Temperature Range: -25°C to +85°C

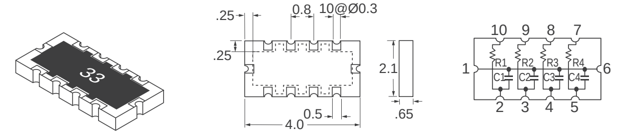


Volts (DC)	Cap. (pF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Pricing 4,000	Panasonic Part No.
25	47	PCN1001CT-ND	2.03	1.78	1.53	1.27	PCN1001TR-ND	710.00/M	EZA-NPE470M
25	100	PCN1002CT-ND	2.03	1.78	1.53	1.27	PCN1002TR-ND	710.00/M	EZA-NPE101M
25	220	PCN1003CT-ND	2.03	1.78	1.53	1.27	PCN1003TR-ND	710.00/M	EZA-NPE221M

Surface Mount Chip RC Networks

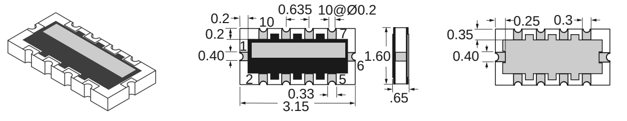
Series EZA-ST, EZA-DT and EZA-DL

EZA-ST Series



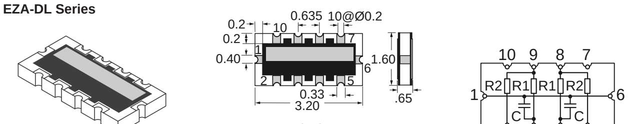
Dim. in mm

EZA-DT Series



Dim. in mm

EZA-DL Series



GND Terminal : 1,2,5,6
I/O Terminal : 3,4,8,9
Dummy Terminal : 7,10

Dim. in mm

Res. (Ohms)	Cap. (pF)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
EZA-ST Series										
22	22	PST11CT-ND	1.18	1.04	.89	.74	PST11TR-ND	4,000	414.00/M	EZA-ST11AAAJ
	47	PST12CT-ND	1.18	1.04	.89	.74	PST12TR-ND	4,000	414.00/M	EZA-ST12AAAJ
	100	PST13CT-ND	1.18	1.04	.89	.74	PST13TR-ND	4,000	414.00/M	EZA-ST13AAAJ
47	22	PST21CT-ND	1.18	1.04	.89	.74	PST21TR-ND	4,000	414.00/M	EZA-ST21AAAJ
	47	PST22CT-ND	1.18	1.04	.89	.74	PST22TR-ND	4,000	414.00/M	EZA-ST22AAAJ
	100	PST23CT-ND	1.18	1.04	.89	.74	PST23TR-ND	4,000	414.00/M	EZA-ST23AAAJ
100	22	PST31CT-ND	1.18	1.04	.89	.74	PST31TR-ND	4,000	414.00/M	EZA-ST31AAAJ
	47	PST32CT-ND	1.18	1.04	.89	.74	PST32TR-ND	4,000	414.00/M	EZA-ST32AAAJ
	100	PST33CT-ND	1.18	1.04	.89	.74	PST33TR-ND	4,000	414.00/M	EZA-ST33AAAJ
220	22	PST41CT-ND	1.18	1.04	.89	.74	PST41TR-ND	4,000	414.00/M	EZA-ST41AAAJ
	47	PST42CT-ND	1.18	1.04	.89	.74	PST42TR-ND	4,000	414.00/M	EZA-ST42AAAJ
	100	PST43CT-ND	1.18	1.04	.89	.74	PST43TR-ND	4,000	414.00/M	EZA-ST43AAAJ
470	22	PST51CT-ND	1.18	1.04	.89	.74	PST51TR-ND	4,000	414.00/M	EZA-ST51AAAJ
	47	PST52CT-ND	1.18	1.04	.89	.74	PST52TR-ND	4,000	414.00/M	EZA-ST52AAAJ
	100	PST53CT-ND	1.18	1.04	.89	.74	PST53TR-ND	4,000	414.00/M	EZA-ST53AAAJ
1K	22	PST61CT-ND	1.18	1.04	.89	.74	PST61TR-ND	4,000	414.00/M	EZA-ST61AAAJ
	47	PST62CT-ND	1.18	1.04	.89	.74	PST62TR-ND	4,000	414.00/M	EZA-ST62AAAJ
	100	PST63CT-ND	1.18	1.04	.89	.74	PST63TR-ND	4,000	414.00/M	EZA-ST63AAAJ
EZA-DT Series										
22	22	PDT11CT-ND	.64	.56	.48	.40	PDT11TR-ND	5,000	223.00/M	EZA-DT11AAAJ
	47	PDT12CT-ND	.64	.56	.48	.40	PDT12TR-ND	5,000	223.00/M	EZA-DT12AAAJ
	100	PDT13CT-ND	.64	.56	.48	.40	PDT13TR-ND	5,000	223.00/M	EZA-DT13AAAJ
47	22	PDT21CT-ND	.64	.56	.48	.40	PDT21TR-ND	5,000	223.00/M	EZA-DT21AAAJ
	47	PDT22CT-ND	.64	.56	.48	.40	PDT22TR-ND	5,000	223.00/M	EZA-DT22AAAJ
	100	PDT23CT-ND	.64	.56	.48	.40	PDT23TR-ND	5,000	223.00/M	EZA-DT23AAAJ
100	22	PDT31CT-ND	.64	.56	.48	.40	PDT31TR-ND	5,000	223.00/M	EZA-DT31AAAJ
	47	PDT32CT-ND	.64	.56	.48	.40	PDT32TR-ND	5,000	223.00/M	EZA-DT32AAAJ
	100	PDT33CT-ND	.64	.56	.48	.40	PDT33TR-ND	5,000	223.00/M	EZA-DT33AAAJ
220	22	PDT41CT-ND	.64	.56	.48	.40	PDT41TR-ND	5,000	223.00/M	EZA-DT41AAAJ
	47	PDT42CT-ND	.64	.56	.48	.40	PDT42TR-ND	5,000	223.00/M	EZA-DT42AAAJ
	100	PDT43CT-ND	.64	.56	.48	.40	PDT43TR-ND	5,000	223.00/M	EZA-DT43AAAJ
470	22	PDT51CT-ND	.64	.56	.48	.40	PDT51TR-ND	5,000	223.00/M	EZA-DT51AAAJ
	47	PDT52CT-ND	.64	.56	.48	.40	PDT52TR-ND	5,000	223.00/M	EZA-DT52AAAJ
	100	PDT53CT-ND	.64	.56	.48	.40	PDT53TR-ND	5,000	223.00/M	EZA-DT53AAAJ
1K	22	PDT61CT-ND	.64	.56	.48	.40	PDT61TR-ND	5,000	223.00/M	EZA-DT61AAAJ
	47	PDT62CT-ND	.64	.56	.48	.40	PDT62TR-ND	5,000	223.00/M	EZA-DT62AAAJ
	100	PDT63CT-ND	.64	.56	.48	.40	PDT63TR-ND	5,000	223.00/M	EZA-DT63AAAJ
EZA-DL Series										
27/15K	47	PDLU01CT-ND	.41	.36	.31	.26	PDLU01TR-ND	5,000	143.00/M	EZA-DLU01AAJ
15/15K	47	PDLU02CT-ND	.41	.36	.31	.26	PDLU02TR-ND	5,000	143.00/M	EZA-DLU02AAJ

FEATURES:

EZA-DT Series: Smallest SMD R/C networks

- Four popular noise reduction circuits made from damping resistors and bypass capacitors in a smallest chip
  EZAST: 4.0 x 2.1 x 0.65 mm, 0.8 mm pitch
  EZADT: 3.2 x 1.6 x 0.65 mm, 0.635 mm pitch
- Smaller occupied space than discrete 0402 (1.0 x 0.5 mm) chips
  EZAST: 70% of 0402 (1.0x0.5 mm) chips placing area
  EZADT: 50% of 0402 (1.0x0.5 mm) chips placing area

EZA-DL Series: Smallest SMD R/C filter for USB interface

- Including 2 circuits of π type R/C filter in a chip (Chip size: 3.2 x 1.6 mm)
- Space saving and low placing cost

EZA-ST, EZA-DT and EZA-DL Series: Superior mountability with concave terminal

- Firm solder joint (two times of convex terminal)
- Self-alignment of placement at reflow soldering

Recommended Applications for EZA-DL Series:

- Information and amusement equipment containing USB interface

SPECIFICATIONS:

- Resistance Tolerance: ±5%
- TCR: ±200 ppm/°C
- Rated Power: 0.063 W (≤70°C) – *For resistors operated in ambient temperature above 70°C, rated power shall be derated*
- Maximum Rated Continuous Working Voltage: 25 V *(Rated Voltage for resistor shall be determined from* $\sqrt{\text{Rated Power x Resistance Value}}$*, or Limiting Element Voltage [Max. Rated Continuous Working Voltage], whichever is less.)*
- Capacitance Tolerance: +30%/-20%
- Capacitance Temperature Characteristic: E Characteristic: +20% / -55% (-25°C to +85°C)
- Dissipation Factor: Less than 3.% (25°C, 1kHz - *In measuring at 1MHz, capacitance and dissipation factor are different*, 1 Vrms)
- Rated Voltage:
  EZA-ST: 25V
  EZA-DT and EZA-DL: 12V
- Operating Temperature Range: -25°C to +85°C

CTS CLEARONE™ **BGA Terminators and Bias Networks**

• Ceramic BGA Packaging • High density form factor • Designed for termination of parallel data busses • Designed for high frequency data transmission • Virtually eliminates parasitic capacitance and inductance • Ultra low channel capacitance • Flexible form factor; 1mm and 1.27mm pitch • *All dimensions in mm*

DDR SDRAM Terminators

Fig. 1

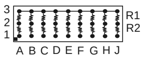


Fig. 2

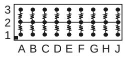
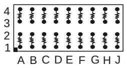


Fig. 3



Features: • 18 Bit SSTL_2 Termination Sets • Compliant to JEDEC Std. 8-9

Electrical Specifications:

- **Resistor Tolerance:** ±1.0%
- **Maximum Resistor Power:** 0.05 Watts at 70°C (Not to Exceed Total Network Power)
- **Package Power Rating:** 1.0 Watt at 70°C
- **Temperature Coefficient of Resistance:** ±200 ppm/°C
- **Operating Temperature Range:** -55°C to +125°C

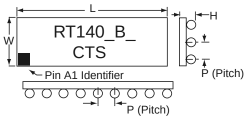


Fig. 1 and 2

Pitch	L	W	H
1.27	11.43	3.81	1.32
1.00	9.00	3.00	1.19

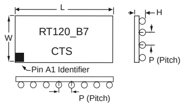
Fig. 3

Pitch	L	W	H
1.27	11.43	5.08	1.32
1.00	9.00	4.00	1.19

Fig.	R1 Ohms	R2 Ohms	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Tape & Reel Pricing* 1,000	CTS Part No.
1	50	25	3x9	1.27	RT1400B6CT-ND	2.29	1.83	885.00	RT1400B6TR7
	50	25	3x9	1.00	RT1400B7CT-ND	2.45	1.96	947.00	RT1400B7TR7
	25	22	3x9	1.27	RT1401B6CT-ND	2.29	1.83	885.00	RT1401B6TR7
	25	22	3x9	1.00	RT1401B7CT-ND	2.45	1.96	947.00	RT1401B7TR7
2	50	—	3x9	1.27	RT1402B6CT-ND	2.29	1.83	885.00	RT1402B6TR7
	50	—	3x9	1.00	RT1402B7CT-ND	2.45	1.96	947.00	RT1402B7TR7
	25	—	3x9	1.27	RT1403B6CT-ND	2.29	1.83	885.00	RT1403B6TR7
	25	—	3x9	1.00	RT1403B7CT-ND	2.45	1.96	947.00	RT1403B7TR7
3	25	—	4x9	1.27	RT1404B6CT-ND	2.69	2.16	1040.00	RT1404B6TR7
	25	—	4x9	1.00	RT1404B7CT-ND	2.85	2.28	1102.00	RT1404B7TR7
	22	—	4x9	1.27	RT1405B6CT-ND	2.69	2.16	1040.00	RT1405B6TR7
	22	—	4x9	1.00	RT1405B7CT-ND	2.85	2.28	1102.00	RT1405B7TR7

*For Tape & Reel Part No., change CT to TR.

CompactPCI Terminators



Features: 16 or 32 Bit Terminators

Electrical Specifications:

- **Resistor Tolerance:** ±5.0%
- **Maximum Resistor Power:** 0.05 Watts at 70°C
- **Maximum Package Power:** RT1200B7 = 0.8 Watts at 70°C, RT1201B7 = 1.6 Watts at 70°C
- **Temperature Coefficient of Resistance:** ±200 ppm/°C
- **Operating Temp. Range:** -55°C to +125°C

Part No.	L	W	H
RT1200B7	8.00	4.00	1.19
RT1201B7	16.00	4.00	1.19

Fig. 1

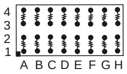


Fig. 2

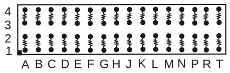


Fig.	R1 Ohms	No. Bits	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Tape & Reel Pricing* 1,000	CTS Part No.
1	10	16	4x8	1.00	RT1200B7CT-ND	2.17	1.74	838.00	RT1200B7TR7
2	10	32	4x16	1.00	RT1201B7CT-ND	3.61	2.89	1396.00	RT1201B7TR7

*For Tape & Reel Part No. change CT to TR

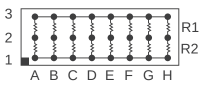
NEW! LVPECL Terminators

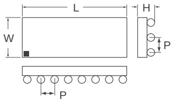
Part No.	L	W	H
RT1250B6	10.16	3.81	1.32
RT1250B7	8.00	3.00	1.19

Features: • 8 Bit Thevenin Termination Set • Compliant for LVPECL Termination

Electrical Specifications:

• **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** R1= 0.08 Watts at 70°C, R2 = 0.08 Watts at 70°C • **Maximum Package Power:** 1.0 Watts at 70°C • **Temperature Coefficient of Resistance:** ±200 ppm /°C • **Operating Temperature Range:** -55° to +125°C

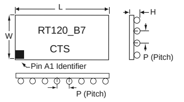




R1 Ohms	R2 Ohms	No. Bits	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Tape & Reel Pricing* 1,000	CTS Part No.
127	82.5	8	1.27	RT1250B6CT-ND	2.09	1.67	806.00	RT1250B6TR7
127	82.5	8	1.00	RT1250B7CT-ND	2.25	1.80	870.00	RT1250B7TR7

*For Tape & Reel Part No., change CT to TR.

Memory and IDE Terminators



Features: • 16 or 32 Bit Terminators • Ultra Low I/O Coupling

Electrical Specifications: • **Resistor Tolerance:** ±5.0%

- **Maximum Resistor Power:** 0.05 Watts at 70°C
- **Maximum Package Power:** RT1202B7 = 0.8 Watts at 70°C, RT1203B7 = 1.6 Watts at 70°C
- **Temperature Coefficient of Resistance:** ±200 ppm/°C
- **Operating Temperature Range:** -55°C to +125°C

Part No.	L	W	H
RT1202B7	8.00	4.00	1.19
RT1203B7	16.00	4.00	1.19

Fig. 1

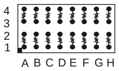


Fig. 2

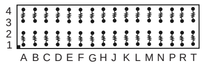
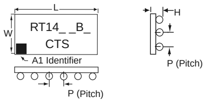


Fig.	R1 Ohms	No. Bits	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Tape & Reel Pricing* 1,000	CTS Part No.
1	33	16	4 x 8	1.00	RT1202B7CT-ND	2.17	1.74	838.00	RT1202B7TR7
2	33	32	4 x 16	1.00	RT1203B7CT-ND	3.98	3.18	1537.00	RT1203B7TR7

*For Tape & Reel Part No., change CT to TR.

GTL, GTL+, AGTL+ Terminators



Features: • 8-Bit, 16-Bit, and 32-Bit Termination Sets • Compliant for GTL, GTL+, and AGTL+ Termination

Electrical Specifications:

- **Resistor Tolerance:** ±1.0%
- **Maximum Resistor Power:** 0.05 Watts at 70°C (Not to Exceed Maximum Package Power)
- **Maximum Package Power (70°C):** 8 bit = 0.3 Watts, 16 bit = 0.6 Watts, 32 bit = 1.2 Watts
- **Temperature Coefficient of Resistance:** ±200 ppm/°C
- **Operating Temperature Range:** -55°C to +125°C

No. Bits	Pitch (mm)	L	W	H
8	1.27	3.81	3.81	1.32
16	1.27	7.62	3.81	1.32
32	1.27	15.24	3.81	1.32
32	1.00	12.00	3.00	1.19

Fig. 1

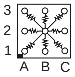


Fig. 2

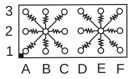


Fig. 3

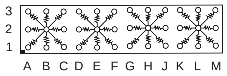
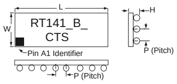


Fig.	R1 Ohms	No. Bits	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Tape & Reel Pricing* 1,000	CTS Part No.
1	25	8	1.27	RT1450B6CT-ND *NEW!*	1.25	1.00	481.00	RT1450B6TR7
	56	8	1.27	RT1453B6CT-ND *NEW!*	1.25	1.00	481.00	RT1453B6TR7
	150	8	1.27	RT1410B6CT-ND	1.25	1.00	481.00	RT1410B6TR7
2	25	16	1.27	RT1451B6CT-ND *NEW!*	1.89	1.51	729.00	RT1451B6TR7
	56	16	1.27	RT1454B6CT-ND *NEW!*	1.89	1.51	729.00	RT1454B6TR7
	150	16	1.27	RT1411B6CT-ND	1.89	1.51	729.00	RT1411B6TR7
3	25	32	1.27	RT1452B6CT-ND *NEW!*	3.05	2.44	1179.00	RT1452B6TR7
	56	32	1.27	RT1427B6CT-ND *NEW!*	3.05	2.44	1179.00	RT1427B6TR7
	150	32	1.27	RT1412B6CT-ND	3.05	2.44	1179.00	RT1412B6TR7
	150	32	1.00	RT1412B7CT-ND	3.21	2.57	1241.00	RT1412B7TR7

*For Tape & Reel Part No., change CT to TR.

PCI and PCIX Bias Networks



Features: • 8 or 16 Bit Bias Network • Compliant to PCI and PCIX

Electrical Specifications:

- **Resistor Tolerance:** ±1.0%
- **Maximum Resistor Power:** 0.05 Watts at 70°C
- **Maximum Package Power:** 1.0 Watts at 70°C
- **Temperature Coefficient of Resistance:** ±100 ppm/°C
- **Operating Temperature Range:** -55° to +125°C

1.27 mm Pitch	L	W	H
RT1415B6 RT1416B6	5.08	3.81	1.32
RT1417B6 RT1418B6	10.16	3.81	1.32

1.00 mm Pitch	L	W	H
RT1415B7 RT1416B7	4.00	3.00	1.19
RT1417B7 RT1418B7	8.00	3.00	1.19

Fig. 1

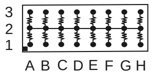


Fig. 2 *NEW!*

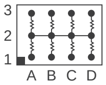


Fig.	R Ohms	No. Bits	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Tape & Reel Pricing* 1,000	CTS Part No.
1	4.7K	16	3x8	1.27	RT1417B6CT-ND	1.81	1.45	699.00	RT1417B6TR7
	4.7K	16	3x8	1.00	RT1417B7CT-ND	1.97	1.58	760.00	RT1417B7TR7
	8.2K	16	3x8	1.27	RT1418B6CT-ND	1.81	1.45	699.00	RT1418B6TR7
	8.2K	16	3x8	1.00	RT1418B7CT-ND	1.97	1.58	760.00	RT1418B7TR7
2	4.7K	8	3x4	1.27	RT1415B6CT-ND *NEW!*	1.32	1.06	512.00	RT1415B6TR7
	4.7K	8	3x4	1.00	RT1415B7CT-ND *NEW!*	1.49	1.19	574.00	RT1415B7TR7
	8.2K	8	3x4	1.27	RT1416B6CT-ND *NEW!*	1.32	1.06	512.00	RT1416B6TR7
	8.2K	8	3x4	1.00	RT1416B7CT-ND *NEW!*	1.49	1.19	574.00	RT1416B7TR7

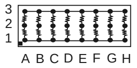
*For Tape & Reel Part No., change CT to TR.

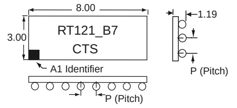
(Continued)

VME64, VME64x Terminator

Features: • 8-Bit Termination Network • VME64, VME64x Compliant

Electrical Specifications: • **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C • **Maximum Package Power:** 1.0 Watts at 70°C • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temperature Range:** -55°C to +125°C





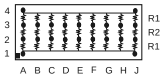
R1 Ohms	R2 Ohms	Array Size	Pitch (mm)	Digi-Key Part No.	Cut Tape Price Each 1	10	Tape & Reel Pricing* 1,000	CTS Part No.
330	470	3 x 8	1.00	RT1210B7CT-ND	1.97	1.58	760.00	RT1210B7TR7
220	1800	3 x 8	1.00	RT1211B7CT-ND	1.97	1.58	760.00	RT1211B7TR7

*For Tape & Reel Part No., change CT to TR.

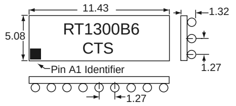
RT1300 Low Voltage Differential SCSI Active Termination Network

Features: • 9-Line LVD Termination Network • Ultra2, Ultra3 Compliant • Low Channel Capacitance Less Than 0.25pF • Laser Trimmed to 1% Tolerance

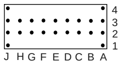
Electrical Specifications: • **Resistor Tolerance:** ±1.0% • **Maximum Resistor Power:** 0.05 Watts at 70°C (Not to exceed maximum package power) • **Maximum Package Power (70°C):** 1.0 Watt • **Temperature Coefficient of Resistance:** ±200 ppm/°C • **Operating Temperature Range:** -55°C to +125°C



R1=475Ω R2=121Ω



Bottom View



Digi-Key Part No.	Cut Tape Price Each 1	10	Digi-Key Part No.	Tape & Reel Pricing 1,000	CTS Part No.
RT1300B6CT-ND	2.81	2.25	RT1300B6TR-ND	1086.00	RT1300B6TR7

CTS®

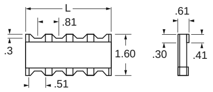
Thick Film Chip Resistor Arrays

Features: • **Thick Film Chip Resistor Arrays High Density Packaging:** 30% less space per resistor than 0603 chip resistors and 75% less space per resistor than 0805 chip resistors • **Placement Efficiency:** Require fewer placements than discrete components, larger overall size eases handling compared to discrete components • **Low Profile:** Suitable for PCMCIA applications • **Solder Coated Nickel Barrier Pads** • **Resistance Tolerance Standard:** ±5% or .5 ohms, whichever is greater • **Operating Temperature Range:** -55°C to +125°C • **Temperature Coefficient (TCR) Standard:** ±200ppm/°C

Environmental Performance Specifications

Test	Max. Deltar	Test Description
Thermal Cycle	1.0%	5 Cycles -55°C to 125°C
Short Time Overload	1.0%	2 1/2 x Rated voltage. 5 sec. (or max voltage)
Moisture Resistance	2.0%	240 hours .1 rated load, -10°C +65°C, 90%RH
High Temperature Exposure	1.0%	1000 hours. no load @ 125°C
Load Life	5.0%	1000 hours @ 70°C, rated load
Resistance to Solder Heat	1.0%	10 seconds @ 260°C solder
Resistance to Leach	—	120 seconds @ 260°C solder
Resistance to Solvents	—	Isopropyl alcohol, Freon TMC
Solderability	—	RMA flux, 230°C, 5 seconds dip, 95% coverage

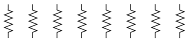
742 SERIES



Electrical Specifications:

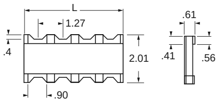
- **PCB Area (in²) per Resistor:** .0037
- **Circuit Type:** Isolated
- **Resistance Range Ω:** 10-1M
- **Power per Resistor:** .063W
- **Maximum Operating Voltage:** 50V

Series 742 Only



16 Terminations / 8 Resistors

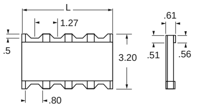
743 SERIES



Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0071
- **Circuit Type:** Isolated
- **Resistance Range Ω:** 10-1M
- **Power per Resistor:** .100W
- **Maximum Operating Voltage:** 100V

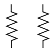
744 SERIES



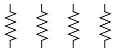
Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0094
- **Circuit Type:** Isolated
- **Resistance Range Ω:** 10-1M
- **Power per Resistor:** .125W
- **Maximum Operating Voltage:** 200V

Series 742, 743, 744

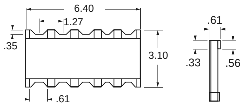


4 Terminations / 2 Resistors



8 Terminations / 4 Resistors

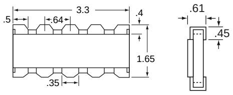
745 SERIES



Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0058
- **Circuit Type:** Bussed
- **Resistance Range Ω:** 100-100K
- **Power per Resistor:** .063W
- **Maximum Operating Voltage:** 50V

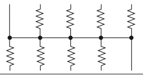
746 SERIES



Electrical Specifications:

- **PCB Area (in²) per Resistor:** .0013
- **Circuit Type:** Bussed
- **Resistance Range Ω:** 100-100K
- **Power per Resistor:** .031W
- **Maximum Operating Voltage:** 25V

Series 745 and 746



10 Terminations / 8 Resistors

Resistance Values
742C043, 742C163, 743C043, 744C043 Series Chip Arrays

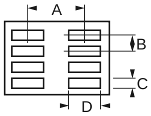
All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)
220 (22)	331 (330)	472 (4.7K)	104 (100K)
330 (33)	471 (470)	103 (10K)	224 (220K)
470 (47)	102 (1K)	223 (22K)	334 (330K)
101 (100)	222 (2.2K)	333 (33K)	474 (470K)
221 (220)	332 (3.3K)	473 (47K)	105 (1MEG)

Resistance Values
745 Series Chip Arrays

All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100)	681 (680)	222 (2.2K)	103 (10K)	473 (47K)
151 (150)	471 (470)	332 (3.3K)	153 (15K)	683 (68K)
221 (220)	102 (1K)	472 (4.7K)	223 (22K)	104 (100K)
331 (330)	152 (1.5K)	682 (6.8K)	333 (33K)	



Series	Dimensions - mm A	B	C	D
742	1.80	.80	.50	.90
743	1.90	1.27	.80	1.20
744	3.00	1.27	.80	1.30
745	3.00	1.27	.80	1.30
746	1.52	.64	.35	.80

Resistance Values
742C083, 743C083, 744C083 Series Chip Arrays

All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
100 (10)	111 (110)	122 (1.2K)	153 (15K)	184 (180K)
120 (12)	121 (120)	152 (1.5K)	183 (18K)	224 (220K)
150 (15)	151 (150)	182 (1.8K)	223 (22K)	274 (270K)
180 (18)	181 (180)	222 (2.2K)	273 (27K)	334 (330K)
220 (22)	221 (220)	272 (2.7K)	333 (33K)	394 (390K)
270 (27)	271 (270)	332 (3.3K)	393 (39K)	474 (470K)
330 (33)	331 (330)	392 (3.9K)	473 (47K)	514 (510K)
390 (39)	391 (390)	472 (4.7K)	513 (51K)	564 (560K)
470 (47)	471 (470)	512 (5.1K)	563 (56K)	684 (680K)
510 (51)	511 (510)	562 (5.6K)	683 (68K)	824 (820K)
560 (56)	561 (560)	682 (6.8K)	823 (82K)	105 (1MEG)
680 (68)	681 (680)	822 (8.2K)	104 (100K)	
820 (82)	821 (820)	103 (10K)	124 (120K)	
101 (100)	102 (1K)	123 (12K)	154 (150K)	

Resistance Values
746 Series Chip Arrays

All values listed in ohms

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100)	331 (330)	152 (1.5K)	332 (3.3K)	153 (15K)	473 (47K)
151 (150)	471 (470)	222 (2.2K)	472 (4.7K)	223 (22K)	104 (100K)
221 (220)	102 (1K)	272 (2.7K)	103 (10K)	333 (33K)	

Series	No. of Term.	No. of Res.	Dim. "L" (mm)	Resistor Power Rating (mW@70°C)	Digi-Key* Part No.	Cut Tape Pricing 1	10	100	1,000	Digi-Key* Part No.	Tape & Reel Pricing 4,000	5,000
742	4	2	1.60	63	742C043□□□JCT-ND	.07	.60	4.68	39.95	742C043□□□JTR-ND	—	34.00/M
	8	4	3.20		742C083□□□JCT-ND	.12	1.09	8.56	72.85	742C083□□□JTR-ND	—	62.00/M
	16	8	6.40		742C163□□□JCT-ND	.32	2.84	22.28	190.35	742C163□□□JTR-ND	162.00/M	—
743	4	2	2.54	100	743C043□□□JCT-ND	.13	1.16	9.08	77.55	743C043□□□JTR-ND	66.00/M	—
	8	4	5.08		743C083□□□JCT-ND	.17	1.51	11.87	101.05	743C083□□□JTR-ND	86.00/M	—
744	4	2	2.54	125	744C043□□□JCT-ND	.13	1.16	9.08	77.55	744C043□□□JTR-ND	66.00/M	—
	8	4	5.08		744C083□□□JCT-ND	.19	1.65	12.97	110.45	744C083□□□JTR-ND	94.00/M	—
745	10	8	—	63	745C101□□□JCT-ND	.40	3.54	27.78	237.35	745C101□□□JTR-ND	202.00/M	—
746	10	8	—	31	746X101□□□JCT-ND	.40	3.54	27.78	237.35	746X101□□□JTR-ND	—	202.00/M

***** For complete part number, substitute the corresponding resistance code (listed above) for □□□.

753 SERIES In-Line Surface Mount Leadless Resistor Networks

Series 753 in-line surface mount leadless resistor networks provide the highest density per area of any conventional surface mount solution. In a bussed configuration, the networks provide two times the resistors per area compared to 0603 sized chips, and more than six times that offered by 0805 sized chips.

SPECIFICATIONS: • **Resistance Tolerance:** ±2% or 0.5Ω, whichever is greater • **Max. Operating Voltage:** 25V, not to exceed rated power • **Temp. Coefficient:** ±200ppm/°C • **Operating Temperature Range:** -55°C to +125°C

FEATURES: • High density packaging • Solid ceramic construction • Available terminations per package: Single Row Terminations: 8, 9, 10; Dual Row Terminations: 16, 18, 20, 24 • Solder coated pads • Designed for visual inspection of solder joints and board cleaning

Fig. 1 — SRT Isolated

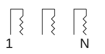


Fig. 2 — SRT Bussed

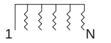


Fig. 3 — DRT Bussed

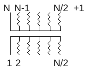


Fig. 4 — DRT Isolated

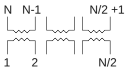
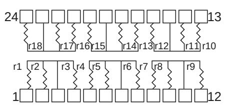


Fig. 5 — GTL Termination



RESISTANCE VALUES

(All values listed in ohms)

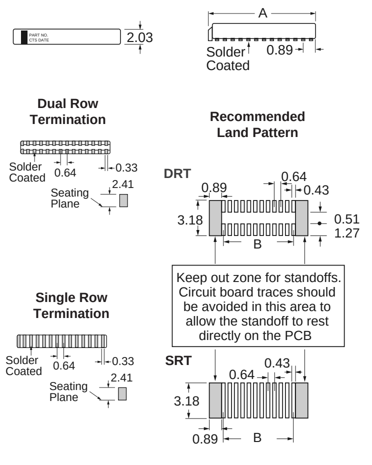
SRT Bussed 8 Terminal	SRT Isolated 8 Terminal	SRT Bussed 9 Terminal	SRT Bussed 10 Terminal	DRT Bussed 16 Terminal	DRT Isolated 16 Terminal	DRT Bussed 18 Terminal	DRT Bussed 20 Terminal	DRT Bussed 24 Terminal	DRT Isolated 24 Terminal	DRT GTL 24 Terminal
(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value	(Code) Value
(102) 1K (103) 10K	(330) 33 (101) 100 (104) 100K	(101) 100 (102) 1K (222) 2.2K (472) 4.7K (103) 10K (223) 22K (104) 100K	(102) 1K (103) 10K (332) 3.3K (472) 4.7K (473) 47K	(111) 110 (103) 10K	(220) 22 (390) 39 (470) 47 (101) 100 (103) 10K	(102) 1K (472) 4.7K (562) 5.6K (103) 10K (223) 22K	(103) 10K	(103) 10K	(220) 22 (101) 100	(390) 39 (510) 51 (680) 68

Fig.	No. of Term.	No. of Resistors	Dim. (mm) A	Dim. (mm) B	Res. Pwr. Rating (mW@70°C)	Digi-Key† Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Digi-Key† Part No.	Tape & Reel Size	Tape & Reel Price
1	8	4	6.22	4.44	80	753083☐☐☐GCT-ND	2.43	22.28	202.50	753083☐☐☐GTR-ND	1,000	1215.00
2	9	8	6.86	4.90	40	753091☐☐☐GCT-ND	2.52	23.10	210.00	753091☐☐☐GTR-ND	1,000	1260.00
2	10	9	7.49	5.72	40	753101☐☐☐GCT-ND	2.52	23.10	210.00	753101☐☐☐GTR-ND	1,000	1260.00
3	16	14	6.22	4.44	40	753161☐☐☐GCT-ND	2.52	23.10	210.00	753161☐☐☐GTR-ND	1,000	1260.00
4	16	8	6.22	4.44	80	753163☐☐☐GCT-ND	2.43	22.28	202.50	753163☐☐☐GTR-ND	1,000	1215.00
3	18	16	6.86	4.90	40	753181☐☐☐GCT-ND	2.52	23.10	210.00	753181☐☐☐GTR-ND	1,000	1260.00
3	20	18	7.49	5.72	40	753201☐☐☐GCT-ND	2.52	23.10	210.00	753201☐☐☐GTR-ND	1,000	1260.00
3	24	22	8.76	6.98	40	753241☐☐☐GCT-ND	2.52	23.10	210.00	753241☐☐☐GTR-ND	1,000	1260.00
4	24	12	8.76	6.98	80	753243☐☐☐GCT-ND	2.43	22.28	202.50	753243☐☐☐GTR-ND	1,000	1215.00
5	24	18	8.76	6.98	60	75324G☐☐☐GCT-ND	2.43	22.28	202.50	75324G☐☐☐GTR-ND	1,000	1215.00

Fig.	No. of Term.	No. of Res.	Dim. (mm) A	Dim. (mm) B	Res. Pwr. Rating (mW@70°C)	Res. Value (ohms)	Digi-Key† Part No.	Cut Tape Pricing 1	Cut Tape Pricing 10	Cut Tape Pricing 100	Digi-Key† Part No.	Tape & Reel Size	Tape & Reel Price
2	8	7	6.22	4.44	40	1K	753081102GBK-ND	3.15	25.20	176.40	753081102GTR-ND	1,000	1092.00
2	8	7	6.22	4.44	40	10K	753081103GBK-ND	3.15	25.20	176.40	753081103GTR-ND	1,000	1092.00
2	9	8	6.86	4.90	40	4.7K	753091472GBK-ND	3.15	25.20	176.40	753091472GTR-ND	1,000	1092.00
3	18	16	6.86	4.90	40	22K	753181223GBK-ND	3.15	25.20	176.40	753181223GTR-ND	1,000	1092.00
3	18	16	6.86	4.90	40	4.7K	753181472GBK-ND	3.15	25.20	176.40	753181472GTR-ND	1,000	1092.00

† For complete part number, substitute the corresponding resistance ***"code"*** (from chart above) in ☐☐☐.

Series 753



Keep out zone for standoffs. Circuit board traces should be avoided in this area to allow the standoff to rest directly on the PCB

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752 SERIES — Surface Mount Single Row & Dual Row Termination

Fig. 1 — SRT Bussed

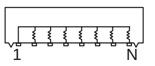


Fig. 2 — DRT Bussed

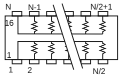


Fig. 3 — SRT Isolated

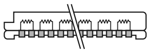


Fig. 4 — SRT Dual Term.

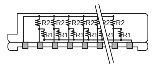
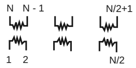
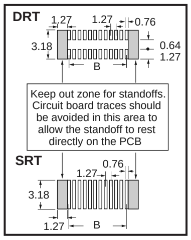


Fig. 5 — DRT Isolated





Keep out zone for standoffs. Circuit board traces should be avoided in this area to allow the standoff to rest directly on the PCB

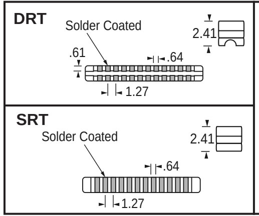
SPECIFICATIONS: Res. Range: Standard: 22Ω to 1 MegΩ. **Res. Tolerance:** The Bussed and Isolated circuits are 2%, the Dual Terminator circuit is 5% **Max. Operating Voltage:** 25V not to exceed rated power **Temp. Coefficient:** Standard: ±200 PPM/°C **Dielectric Strength:** 100 VAC. **Operating Temp. Range:** -55°C to +125°C **In-line Surface Mount Resistor Networks:** • High density packaging • Low profile • Input/outputs available: Dual Row Terminations 16, 18, 20, 24; Single Row Terminations 8, 9, 10, 12 • Solder coated pads • Designed for visual inspection of solder joints and for board cleaning • 24mm tape and reel packaging • Meets UL-94VO requirements

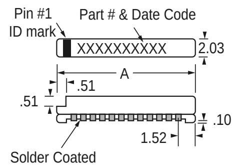
RESISTANCE VALUES

SRT Bussed 9 Term.			SRT Bussed 10 Term.	DRT Bussed 16,18,20,24 Term.		SRT Isolated 8,10,12 Term.			DRT Isolated 24 Term.
100	1K	10K	1K	1K	47K	22	100	3.3K	22
560	2.2K	22K	3.3K	10K	100K	33	1K	4.7K	
680	4.7K	100K	10K			47	2.2K	10K	

	Bussed & Dual Terminator Schematic	Isolated Schematic
@25°C	.12w	.24w
@70°C	.08w	.16w

All values listed in ohms





Max. Resistor Power (Not to exceed total network power)

Fig.	No. of Term.	No. of Res.	Dim. (mm) A	Dim. (mm) B	Res. Pwr. Rating (mW@70°C)	Digi-Key† Part No.	Bulk Pricing 1	Bulk Pricing 10	Bulk Pricing 100	Tape & Reel* Size	Tape & Reel* Pricing
1	9	8	13.08	10.16	80	752-091-(Value)BK-ND	2.51	20.10	140.70	1,000	871.00
2	16	14	11.81	8.89	80	752-161-(Value)BK-ND	2.51	20.10	140.70	1,000	871.00
2	18	16	13.08	10.16	80	752-181-(Value)BK-ND	2.51	20.10	140.70	1,000	871.00
2	20	18	14.35	11.43	80	752-201-(Value)BK-ND	2.51	20.10	140.70	1,000	871.00
2	24	22	16.89	13.97	80	752-241-(Value)BK-ND	2.51	20.10	140.70	1,000	871.00
3	8	4	11.81	8.89	160	752-083-(Value)BK-ND	2.36	18.90	132.30	1,000	819.00
3	10	5	14.35	11.43	160	752-103-(Value)BK-ND	2.36	18.90	132.30	1,000	819.00
3	12	6	16.89	13.97	160	752-123-(Value)BK-ND	2.36	18.90	132.30	1,000	819.00
4	10	16	14.35	11.43	80	752-105-220/330BK-ND	2.70	21.60	151.20	1,000	936.00
1	10	9	14.35	11.43	80	752-101-(Value)BK-ND	2.51	20.10	140.70	1,000	871.00
5	24	12	16.89	13.97	16	752-243-(Value)BK-ND	2.36	18.90	132.30	1,000	819.00

* For Tape & Reel Part No. change BK to TR   † For complete part number, substitute the corresponding value from chart above in (value).

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773 SERIES Single-In-Line

SPECIFICATIONS: • **Resistance Tolerance:** 2% • **Maximum Operating Voltage:** 100VDC • **Temperature Coefficient:** ±100 PPM/°C≥50Ω, ±200 PPM/°C≤50Ω • **Dielectric Withstand Voltage:** 200VDC • **Operating Temperature Range:** -55°C to +125°C • **Resistance Power @ 70°C:** -1 and -5 Schematic = .10 Watts and -3 Schematic = .20 Watts

FEATURES: • Low cost • High reliability cermet resistors • 2% standard resistor tolerance • Laser marking for permanent identification • High temperature solder • Low profile

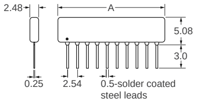


Fig. 1 - Bussed

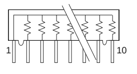


Fig. 2 - Isolated

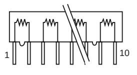


Fig. 3 - Dual Term

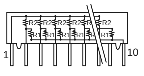


Fig.	No. of Pins	No. of Res.	Dim. "A" (mm)	Res. Pwr. Rating (mW@70°C)	Digi-Key* Part No.	Pricing 1	Pricing 10	Pricing 100	Pricing 1,000
1	6	5	15.55	100	773061☐☐☐-ND	.35	2.78	18.50	92.50
2	6	3	15.55	200	773063☐☐☐-ND	.35	2.78	18.50	92.50
1	8	7	20.65	100	773081☐☐☐-ND	.46	3.60	24.00	120.00
2	8	4	20.65	200	773083☐☐☐-ND	.46	3.60	24.00	120.00
3	8	12	20.65	100	773085☐☐☐/☐☐☐-ND	.97	7.65	51.00	255.00
1	9	8	23.15	100	773091☐☐☐-ND	.71	5.63	37.50	187.50
1	10	9	25.65	100	773101☐☐☐-ND	.57	4.50	30.00	150.00
2	10	5	25.65	200	773103☐☐☐-ND	.57	4.50	30.00	150.00
3	10	16	25.65	100	773105☐☐☐/☐☐☐-ND	1.22	9.60	64.00	320.00

*For complete part number, substitute the corresponding resistance ***"code"*** (listed to the right) in ☐☐☐.

All Resistance values listed in ohms

773061 Series (Bussed)

(Code) Value	(Code) Value
(151) 150	(472) 4.7K
(221) 220	(103) 10K
(271) 270	(153) 15K
(331) 330	(203) 20K
(471) 470	(223) 22K
(102) 1K	(333) 33K
(152) 1.5K	(473) 47K
(272) 2.7K	(104) 100K

773063 Series (Isolated)

(Code) Value	(Code) Value
(561) 560	(104) 100K
(102) 1K	(224) 220K
(222) 2.2K	(105) 1MEG
(103) 10K	

773081 Series (Bussed)

(Code) Value	(Code) Value
(151) 150	(102) 1K
(181) 180	(222) 2.2K
(271) 270	(472) 4.7K
(331) 330	(103)10K
(471) 470	(473) 47K
(511) 510	(104) 100K

773083 Series (Isolated)

(Code) Value	(Code) Value
(220) 22	(102) 1K
(270) 27	(122) 1.2K
(330) 33	(152) 1.5K
(470) 47	(222) 2.2K
(510) 51	(272) 2.7K
(560) 56	(332) 3.3K
(101) 100	(472) 4.7K
(121) 120	(103) 10K
(151) 150	(153) 15K
(181) 180	(203) 20K
(221) 220	(223) 22K
(271) 270	(333) 33K
(331) 330	(563) 56K
(471) 470	(104) 100K
(511) 510	(474) 470K
(681) 680	(105) 1MEG

773085 Series (Dual Term)

(Code) Value
(221/331) 220/330

773091 Series (Bussed)

(Code) Value
(270) 27
(103) 10K

773101 Series (Bussed)

(Code) Value	(Code) Value
(470) 47	(332) 3.3K
(101) 100	(472) 4.7K
(121) 120	(512) 5.1K
(221) 220	(103) 10K
(271) 270	(153) 15K
(331) 330	(203) 20K
(471) 470	(223) 22K
(681) 680	(333) 33K
(102) 1K	(473) 47K
(152) 1.5K	(104) 100K
(222) 2.2K	(105) 1MEG
(272) 2.7K	

773103 Series (Isolated)

(Code) Value	(Code) Value
(330) 33	(152) 1.5K
(470) 47	(103) 10K
(101) 100	(333) 33K
(471) 470	(473) 47K
(561) 560	(104) 100K
(102) 1K	(224) 220K

773105 Series (Dual Term)

(Code) Value
(221/331) 220/330
(331/471) 330/470

CTS®

Resistor Networks

OVER 1,500 VALUES AVAILABLE

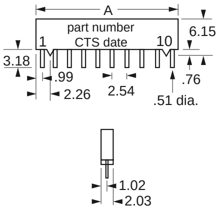
750 SERIES

Single-In-Line

Solid ceramic networks are more efficient because they operate at lower temperatures. This translates into long term reliability in a resistor network.

Specifications:
- **Resistance Values:** 22Ω through 1 MegΩ
- **Resistance Tolerance:** ±2% • **Temperature Coefficient:** ±100PPM/°C typical

Features:
- Low-profile construction • Excellent power dissipation • High reliability • Alumina substrate



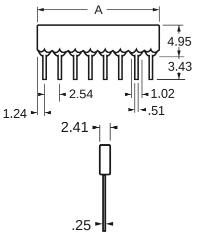
770 SERIES

Single-In-Line Conformal

Standard Products 770 series is available in 6, 8, and 10 pin sizes, and in many available resistance values.

Specifications:
- **Resistance Values:** 22Ω through 1 MegΩ
- **Resistance Tolerance:** ±2% • **Temperature Coefficient:** ±100PPM/°C typical

Features:
- High reliability resistors • Low-profile construction
- .100" lead spacing • High reliability • Alumina substrate

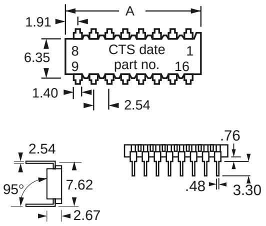


760/761 SERIES

Dual-In-Line

Thin cover coating generates higher power ratings. Thin proprietary cover protection keeps resistors near the surface, allowing the alumina substrate to act as a heat sink. That means higher power ratings than molded networks.

Specifications:
- **Resistance Values:** 22Ω through 1 MegΩ
- **Resistance Tolerance:** ±2%. • **Temperature Coefficient:** ±100PPM/°C typical

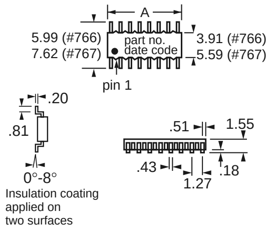


766/767 SERIES

Dual-In-Line Surface Mount

Requires 30% less board space than molded networks of the same power rating.

Specifications:
- **Resistance Range:** 22Ω through 1 MegΩ
- **Resistance Tolerance:** Standard: ±2% • **Max. Operating Voltage:** 50V not to exceed rated power
- **Temp. Coefficient:** 100Ω through 1 MegΩ ±100PPM/°C typical, Below 100Ω ±200PPM/°C typical • **Operating Temp. Range:** –55°C to 125°C
- **Storage Temp. Range:** –55°C to 125°C
- **Dielectric Strength**: 100V

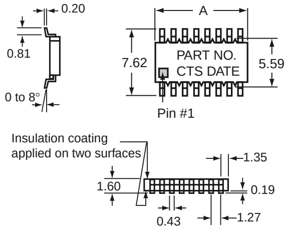


768 SERIES

Dual-In-Line Surface Mount

Medium body, small outline products. Low profile — board to network clearance of 0.005"/0.010".

Specifications:
- **Resistance Range:** Standard: 10Ω to 1MegΩ
- **Resistance Tolerance:** Standard: ±2% or 0.5Ω (whichever is greater) • **Max. Operating Voltage:** 50V not to exceed rated power • **Temp. Coefficient:** Standard: 100Ω to 1 MegΩ ±100PPM/°C typical, 10Ω to 99Ω ±200PPM/°C typical • **Operating Temp. Range:** -55°C to 125°C
- **Dielectric Strength:** 100VAC



AVAILABLE VALUES
(listed in ohms)

Isolated and Bussed Circuits

22
27
33
39
47
51
56
68
82
100
120
150
180
200
220
270
330
390
470
510
560
680
820
1K
1.2K
1.5K
1.8K
2K
2.2K
2.7K
3.3K
3.9K
4.7K
5.1K
5.6K
6.8K
8.2K
10K
12K
15K
18K
20K
22K
27K
33K
39K
47K
56K
68K
82K
100K
120K
150K
180K
220K
270K
330K
390K
470K
560K
680K
820K
1 Meg

AVAILABLE VALUES
(listed in ohms)

750 and 770 SERIES Dual Terminator Circuits
81/130
121/195
162/260
180/390
220/330
330/390

AVAILABLE VALUES
(listed in ohms)

760/761 SERIES Dual Terminator Circuits
180/390
220/270
220/330
330/390
680/1.5K
1.5K/3.3K

AVAILABLE VALUES
(listed in ohms)

766/767 and 768 SERIES Dual Terminator Circuits
180/390
220/330
330/390
330/470

Fig. 1 - Bussed

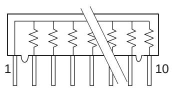


Fig. 2 - Isolated

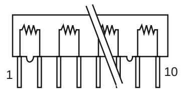


Fig. 3 - Dual Term

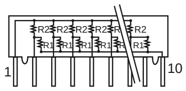


Fig. 4 - Bussed

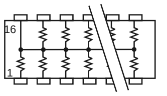


Fig. 5 - Isolated

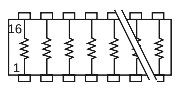
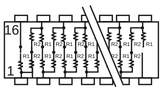


Fig. 6 - Dual Term



Series	Fig.	No. of Pins	No. of Res.	Dim. "A" (mm)	Resistor Power Rating (mW@70°C)	Digi-Key* Part No.	Pricing 1	10	100	1,000
750	1	6	5	14.68	250	750-61-R(Value)-ND	.91	7.95	62.43	454.00
	1	8	7	19.76	250	750-81-R(Value)-ND	1.05	9.17	72.05	524.00
	1	10	9	24.84	250	750-101-R(Value)-ND	1.25	10.92	85.80	624.00
	2	6	3	14.68	400	750-63-R(Value)-ND	.91	7.95	62.43	454.00
	2	8	4	19.76	400	750-83-R(Value)-ND	1.05	9.17	72.05	524.00
	2	10	5	24.84	400	750-103-R(Value)-ND	1.25	10.92	85.80	624.00
	3	8	12	19.76	250	750-85-R(Value)-ND	1.41	12.36	97.08	706.00
	3	10	16	24.84	250	750-105-R(Value)-ND	1.70	14.91	117.15	852.00
770	1	6	5	15.19	100	770-61-R(Value)-ND	.21	1.80	13.50	90.00
	1	8	7	20.27	100	770-81-R(Value)-ND	.29	2.40	18.00	120.00
	1	10	9	25.35	100	770-101-R(Value)-ND	.30	2.63	20.63	150.00
	2	6	3	15.19	200	770-63-R(Value)-ND	.21	1.80	13.50	90.00
	2	8	4	20.27	200	770-83-R(Value)-ND	.29	2.40	18.00	120.00
	2	10	5	25.35	200	770-103-R(Value)-ND	.30	2.63	20.63	150.00
	3	8	12	20.27	100	770-85-R(Value)-ND	.55	4.60	34.50	230.00
	3	10	16	25.35	100	770-105-R(Value)-ND	.52	4.55	35.75	260.00
760/ 761	4	14	13	19.05	150	760-1-R(Value)-ND	.98	8.13	68.25	422.50
	4	16	15	21.59	150	761-1-R(Value)-ND	1.00	9.16	83.25	499.50
	5	14	7	19.05	300	760-3-R(Value)-ND	.98	8.13	68.25	422.50
	5	16	8	21.59	300	761-3-R(Value)-ND	1.00	9.16	83.25	499.50
	6	14	24	19.05	150	760-5-R(Value)-ND	1.35	11.28	94.71	586.30
	6	16	28	21.59	150	761-5-R(Value)-ND	1.38	12.62	114.75	688.50
766	4	14	13	8.64	80	766-141-R(Value)-ND	1.22	9.72	68.04	421.20
	4	16	15	9.91	80	766-161-R(Value)-ND	1.22	9.72	68.04	421.20
	5	14	7	8.64	160	766-143-R(Value)-ND	1.22	9.72	68.04	421.20
	5	16	8	9.91	160	766-163-R(Value)-ND	1.22	9.72	68.04	421.20
	6	14	24	8.64	80	766-145-R(Value)-ND	1.43	11.40	79.80	494.00
	6	16	28	9.91	80	766-165-R(Value)-ND	1.43	11.40	79.80	494.00
767	4	14	13	9.91	100	767-141-R(Value)-ND	.75	6.00	42.00	260.00
	4	16	15	11.18	100	767-161-R(Value)-ND	.75	6.00	42.00	260.00
	5	14	7	9.91	200	767-143-R(Value)-ND	.75	6.00	42.00	260.00
	5	16	8	11.18	200	767-163-R(Value)-ND	.75	6.00	42.00	260.00
	6	14	24	9.91	100	767-145-R(Value)-ND	.90	7.20	50.40	312.00
	6	16	28	11.18	100	767-165-R(Value)-ND	.90	7.20	50.40	312.00
768	4	14	13	9.91	130	768-141-R(Value)-ND	.75	6.00	42.00	260.00
	4	16	15	11.18	150	768-161-R(Value)-ND	.75	6.00	42.00	260.00
	5	14	7	9.91	130	768-143-R(Value)-ND	.75	6.00	42.00	260.00
	5	16	8	11.18	150	768-163-R(Value)-ND	.75	6.00	42.00	260.00
	6	14	24	9.91	130	768-145-R(Value)-ND	.90	7.20	50.40	312.00
	6	16	28	11.18	150	768-165-R(Value)-ND	.90	7.20	50.40	312.00

***** For complete part number, substitute the corresponding value from above chart in (Value).

Digi-Key® 766 Series Assortment Kits

Bussed Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
*Kit does not include value 330K ohm.
766-141-KIT-ND..**$249.00**

Set of 5 each of values in the series. 63 values (315 total pieces).
766-161-KIT-ND..**$249.00**

Isolated Circuits

Set of 5 each of values in the series. 63 values (315 total pieces).
766-143-KIT-ND..**$249.00**

Set of 5 each of values in the series. 61 values (305 total pieces).
*Kit does not include values 820, or 1.2K ohm.
766-163-KIT-ND..**$249.00**

Dual Terminator Circuits

Set of 5 each of values in the series. 8 values (40 total pieces).
766-DUAL-KIT-ND **$46.95**

Digi-Key® 767 Series Assortment Kits

Bussed Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
*Kit does not include value 3.9K ohm.
767-141-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
767-161-KIT-ND **$159.95**

Isolated Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
*Kit does not include value 27 ohm.
767-143-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
767-163-KIT-ND **$159.95**

Dual Terminator Circuits

Set of 5 each of values in the series. 8 values (40 total pieces).
767-DUAL-KIT-ND...**$34.95**

Digi-Key® 768 Series Assortment Kits

Bussed Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
* Kit does not include value 3.9K ohm.
768-141-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
768-161-KIT-ND **$159.95**

Isolated Circuits

Set of 5 each of values in the series. 62 values (310 total pieces).
* Kit does not include value 27 ohm.
768-143-KIT-ND **$159.95**

Set of 5 each of values in the series. 63 values (315 total pieces).
768-163-KIT-ND **$159.95**

Dual Terminator Circuits

Set of 5 each of values in the series. 8 values (40 total pieces).
768-DUAL-KIT-ND **$34.95**

Resistor Networks

4100R Series
4116R
Thick Film Molded DIPs

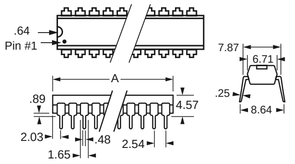
• Compatible with automatic insertion equipment • Copper leads for excellent heat dissipation • High temperature lead attachment to withstand reflow solder temperatures up to 260°C • Trifurcated Krimp-Joint™ lead attachment for product reliability and strength

Electrical Characteristics:
• **Max. Operating Voltage:** 100V. • **Temp. Coefficient of Resistance:** 50Ω to 2.2MΩ: ±100ppm/°C, below 50Ω: ±250ppm°C. • **Operating Temperature:** -55°C to +125°C

Environmental Characteristics:
• **Insulation Resistance:** 10,000 megohms minimum • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:
• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 90/10 electroplate • **Body Material**: Novolac Epoxy

Resistance Tolerance:
• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



4800P Series
4816P
Thick Film Surface Mount Medium Body (5.59mm)

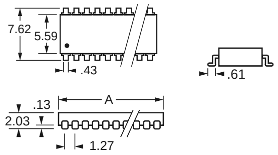
• Standard E.I.A. (SOGN-0002) package compatible with automatic placement equipment. • High temperature lead attachment to withstand reflow temperatures up to 260°C.

Electrical Characteristics:
• **Max. Operating Voltage:** 50V • **Temp. Coefficient of Resistance:** 50Ω and above: ±100ppm/°C; below 50Ω: ±250ppm°C • **Operating Temperature:** -55°C to +125°C

Environmental Characteristics:
• **Insulation Resistance:** 10,000 megohms minimum. • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:
• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 60/40 solder dip • **Body Material**: Novolac Epoxy

Resistance Tolerance:
• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



All values listed in ohms.

Resistance Values (001 and 002) Isolated and Bussed Circuits

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
220 (22)	221 (220)	202 (2K)	183 (18K)	154 (150K)
270 (27)	271 (270)	222 (2.2K)	203 (20K)	184 (180K)
330 (33)	331(330)	272 (2.7K)	223 (22K)	224 (220K)
390 (39)	391 (390)	332 (3.3K)	273 (27K)	274 (270K)
470 (47)	471 (470)	392 (3.9K)	333 (33K)	334 (330K)
560 (56)	561 (560)	472 (4.7K)	393 (39K)	394 (390K)
680 (68)	681 (680)	562 (5.6K)	473 (47K)	474 (470K)
820 (82)	821 (820)	682 (6.8K)	563 (56K)	564 (560K)
101 (100)	102 (1K)	822 (8.2K)	683 (68K)	684 (680K)
121 (120)	122 (1.2K)	103 (10K)	823 (82K)	824 (820K)
151 (150)	152 (1.5K)	123 (12K)	104 (100K)	105 (1M)
181 (180)	182 (1.8K)	153 (15K)	124 (120K)	

Resistance Values (003) Dual Terminator Circuits

Code (Value)
181/391 (180/390)
221/271 (220/270)
221/331 (220/230)
331/391 (330/390)
331/471 (330/470)
302/622 (3K/6.2K)

4300R Series
4306R, 4308R and 4310R
Thick Film Molded SIPs, Low Profile

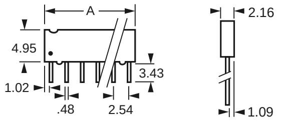
• Low profile provides compatibility with DIPs • Compatible with automatic insertion equipment • High temperature lead attachment to withstand reflow temperatures up to 260°C • Copper leads for excellent heat dissipation

Electrical Characteristics:
• **Max. Operating Voltage:** 100V • **Temp. Coefficient of Resistance:** 50Ω to 2.2MΩ: ±100ppm/°C; below 50Ω: ±250ppm°C • **Operating Temp.:** -55°C to +125°C • **Power Rating:** Derate to zero power from + 70°C to +125°C

Environmental Characteristics:
• **Insulation Resistance:** 10,000 megohms minimum • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:
• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 90/10 plated • **Body Material**: Novolac Epoxy

Resistance Tolerance:
• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



4600X Series
4606X, 4608X and 4610X
Thick Film Conformal SIPs, Low Profile

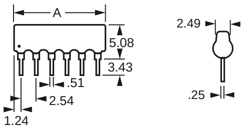
• Low Profile is compatible with DIPs • High temperature lead attachment to withstand reflow temperatures up to 260°C

Electrical Characteristics:
• **Max. Operating Voltage:** 100V • **Temp. Coefficient of Resistance:** 50Ω to 2.2MΩ: ±100ppm/°C, below 50Ω: ±250ppm°C • **Operating Temperature:** -55°C to +125°C

Environmental Characteristics:
• **Insulation Resistance:** 10,000 megohms minimum • **Dielectric Withstanding Voltage:** 200 VRMS • **Lead Solderability/Solvent Resistance:** Meet requirements of MIL-R-83401

Physical Characteristics:
• **Flammability:** Conforms to UL94V-0 • **Lead Frame Material:** Copper (OLIN 194) 60/40 solder dip • **Body Material**: Epoxy resin/anhydride disphenol A

Resistance Tolerance:
• **Isolated/Bussed:** Below 50 ohms ±1 ohms; Above 50 ohms ±2% • **Dual Terminated:** Below 100 ohms ±2 ohms; Above 100 ohms ±2%



All values listed in ohms.

Resistance Values (001 and 002) Isolated and Bussed Circuits

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
220 (22)	221 (220)	202 (2K)	183 (18K)	154 (150K)
270 (27)	271 (270)	222 (2.2K)	203 (20K)	184 (180K)
330 (33)	331(330)	272 (2.7K)	223 (22K)	224 (220K)
390 (39)	391 (390)	332 (3.3K)	273 (27K)	274 (270K)
470 (47)	471 (470)	392 (3.9K)	333 (33K)	334 (330K)
560 (56)	561 (560)	472 (4.7K)	393 (39K)	394 (390K)
680 (68)	681 (680)	562 (5.6K)	473 (47K)	474 (470K)
820 (82)	821 (820)	682 (6.8K)	563 (56K)	564 (560K)
101 (100)	102 (1K)	822 (8.2K)	683 (68K)	684 (680K)
121 (120)	122 (1.2K)	103 (10K)	823 (82K)	824 (820K)
151 (150)	152 (1.5K)	123 (12K)	104 (100K)	105 (1M)
181 (180)	182 (1.8K)	153 (15K)	124 (120K)	

Resistance Values (004) Dual Terminator Circuits

Code (Value)
161/241 (160/240)
181/391 (180/390)
221/271 (220/270)
221/331 (220/330)
331/391 (330/390)
331/471 (330/470)
302/622 (3K/6.2K)

Fig. 1 – Isolated

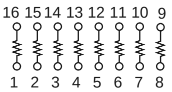


Fig. 2 – Bussed

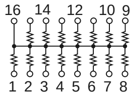


Fig. 3 – Dual Term

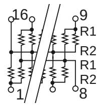


Fig. 4 – Dual Term

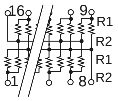


Fig. 5 – Isolated

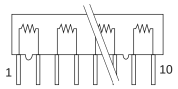


Fig. 6 – Bussed

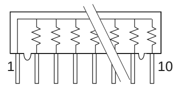
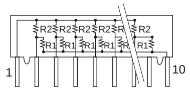


Fig. 7 – Dual Term



Series	Fig.	No. of Pins	No. of Res.	Dim. “A” (mm)	Element Power Rating (W @ 70°C)	Digi-Key* Part No.	Pricing						Bourns* Part No.
							1	10	50	100	500	1,000	
4100	1	16	8	21.97	.25	4116R-1-□□□-ND	.60	5.27	22.10	37.78	157.41	264.00	4116R-001-□□□
	2	16	15	21.97	.125	4116R-2-□□□-ND	.60	5.27	22.10	37.78	157.41	264.00	4116R-002-□□□
	3	16	28	21.97	.125	4116R-3-□□□/□□□-ND	1.27	11.28	47.32	80.89	337.04	566.00	4116R-003-□□□/□□□
4300	6	6	5	14.83	.20	4306R-1-□□□-ND	.47	4.19	17.55	30.00	125.00	210.00	4306R-101-□□□
	5	6	3	14.83	.30	4306R-2-□□□-ND	.47	4.19	17.55	30.00	125.00	210.00	4306R-102-□□□
	7	6	8	14.83	.20	4306R-4-□□□/□□□-ND	.67	5.89	24.70	42.22	175.93	296.00	4306R-104-□□□/□□□
	6	8	7	19.91	.20	4308R-1-□□□-ND	.54	4.81	20.15	34.44	143.52	241.00	4308R-101-□□□
	5	8	4	19.91	.30	4308R-2-□□□-ND	.54	4.81	20.15	34.44	143.52	241.00	4308R-102-□□□
	7	8	12	19.91	.20	4308R-4-□□□/□□□-ND	.74	6.51	27.30	46.67	194.44	327.00	4308R-104-□□□/□□□
	6	10	9	24.99	.20	4310R-1-□□□-ND	.65	5.74	24.05	41.11	171.30	288.00	4310R-101-□□□
	5	10	5	24.99	.30	4310R-2-□□□-ND	.65	5.74	24.05	41.11	171.30	288.00	4310R-102-□□□
	7	10	16	24.99	.20	4310R-4-□□□/□□□-ND	.88	7.75	32.50	55.56	231.48	389.00	4310R-104-□□□/□□□
4600	6	6	5	15.19	.20	4606X-1-□□□-ND	.25	2.23	9.36	16.00	66.67	112.00	4606X-101-□□□
	5	6	3	15.19	.30	4606X-2-□□□-ND	.25	2.23	9.36	16.00	66.67	112.00	4606X-102-□□□
	7	6	8	15.19	.20	4606X-4-□□□/□□□-ND	.53	4.65	19.50	33.33	138.89	233.00	4606X-104-□□□/□□□
	6	8	7	20.27	.20	4608X-1-□□□-ND	.32	2.79	11.70	20.00	83.33	140.00	4608X-101-□□□
	5	8	4	20.27	.30	4608X-2-□□□-ND	.32	2.79	11.70	20.00	83.33	140.00	4608X-102-□□□
	7	8	12	20.27	.20	4608X-4-□□□/□□□-ND	.63	5.58	23.40	40.00	166.67	280.00	4608X-104-□□□/□□□
	6	10	9	25.35	.20	4610X-1-□□□-ND	.39	3.41	14.30	24.44	101.85	171.00	4610X-101-□□□
	5	10	5	25.35	.30	4610X-2-□□□-ND	.39	3.41	14.30	24.44	101.85	171.00	4610X-102-□□□
	7	10	16	25.35	.20	4610X-4-□□□/□□□-ND	.70	6.20	26.00	44.44	185.19	311.00	4610X-104-□□□/□□□
4800	1	16	8	12.45	.160	4816P-1-□□□-ND	1.12	9.92	41.60	71.00	300.00	500.00	4816P-T01-□□□
	2	16	15	12.45	.080	4816P-2-□□□-ND	1.12	9.92	41.60	71.00	300.00	500.00	4816P-T02-□□□
	4	16	28	12.45	.080	4816P-3-□□□/□□□-ND	1.75	15.50	65.00	110.94	468.75	781.00	4816P-T03-□□□/□□□

* For complete part number, substitute the corresponding resistance code (listed above) for □□□.

Panasonic® "ZNR" Transient/Surge Absorbers Type D and E

Features: • Excellent clamping voltage characteristic and fast response time (50nsec.) when subjected to impulse surges. Eliminates the discharge lag that is indurative of gap-type arrestors. • Bilateral and symmetrical V-1 characteristic curve. The ZNR can, therefore, be used both in AC and DC circuits, for protection of either positive or negative transients. Panasonic ZNRs are zinc oxide nonlinear resistors whose resistance changes as a function of the applied voltage. The ZNR has a bilateral and symmetrical V-1 characteristic curve and can therefore be used in circuits in place of back-to-back zener diodes. This gives your circuit clamping protection in either direction. The ZNR thus provides a highly reliable and economical way to protect against repeated high voltage transients and surges such as those produced by lightning, switching surges and noise spikes.

Ratings: Varistor Voltage: The voltage between two terminals with the specified measuring current CmA DC applied is called Vc. The measurement shall be made as fast as possible to avoid heat affection.

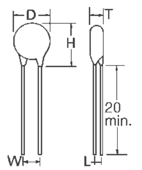
Maximum Allowable Voltage: The recommended maximum sine wave voltage (rms) or the maximum DC voltage that can be applied continuously.

Withstanding Surge Current: The maximum current within the varistor voltage change of 510% with the standard impulse current (8/20µ sec.) applied one time.

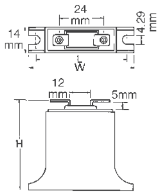
Maximum Clamping Voltage: The maximum voltage between two terminals with the specified standard impulse current (8/20µ sec.) illustrated.

V Series: ZNR Surge Absorbers Type D, Series V, have been put on the market as a result of the development of a new ceramic material composition, higher quality of parts and materials used in the varistor and an improvement of manufacturing process control. They have a smaller size but a larger surge current and energy ratings so that they can be used in smaller equipment and exhibit their excellent surge protection ability in severe conditions. **Features:** • Improved in "Surge Current Handling Capability (@ 8/20 µs, 2 times)" by 1.6 to 3.0 times over the current conventional type. • Very large "Energy Handling Capability" absorbing transient overvoltages in compact sizes • Varistor voltages 250V-1850V are listed under UL1414, UL1449 and CSA 2221 01, varistor voltages 82-150V are UL1449 only • Wide products range for transient/surge protection on AC 100V to AC 480V nominal system with the maximum peak current ratings of 600A to 6500A (@ 8/20 µs, 2 times) • Operating Temperature Range -40°C to 85°C

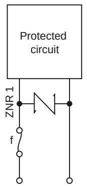
D-Type
Series V



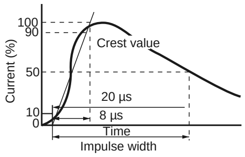
E-Type



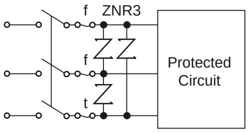
Line to Line Protection
DC AC Single Phase



Maximum Clamping Voltage



AC Three Phase



Ser-ies	Type	Max. Allow. Volt. (V)		Var-istor Volt. ±10% (V)	Max. Clamp Volt. @ Test Current (8/20µsec.)		Surge Cur-rent (A)	Dimensions (mm)					Digi-Key Part No.	Pricing						Panasonic Part No.
		AC	DC		Vc(V)	Ip(A)		D Max.	T Max.	W ±1	H Max.	L ±1		1	10	100	1,000	5,000	10,000	
5	D Ser.V	11	14	18	40	1	125	7.0	4.5	5.0	10.0	1.5	P7282-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D180
		14	18	22	48	1	125	7.0	4.5	5.0	10.0	1.5	P7283-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D220
		17	22	27	60	1	125	7.0	4.5	5.0	10.0	1.5	P7284-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D270
		20	26	33	73	1	125	7.0	4.5	5.0	10.0	1.5	P7285-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D330
		25	31	39	86	1	125	7.0	4.5	5.0	10.0	1.5	P7286-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D390
		30	38	47	104	1	125	7.0	4.5	5.0	10.0	1.5	P7287-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D470
		35	45	56	123	1	125	7.0	4.5	5.0	10.0	1.5	P7288-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D560
		40	56	68	150	1	125	7.0	4.5	5.0	10.0	1.5	P7289-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D680
		50	65	82	145	5	600	7.0	4.1	5.0	10.0	1.4	P7180-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D820
		60	85	100	175	5	600	7.0	4.3	5.0	10.0	1.6	P7240-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D101
		75	100	120	210	5	600	7.0	4.5	5.0	10.0	1.8	P7241-ND	.23	1.98	16.52	94.00	88.00/M	85.00/M	ERZ-V05D121
		95	125	150	260	5	600	7.0	4.8	5.0	10.0	2.1	P7242-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D151
		130	170	200	355	5	600	7.0	4.4	5.0	10.0	1.7	P7181-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D201
		140	180	220	380	5	600	7.0	4.5	5.0	10.0	1.8	P7182-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D221
		150	200	240	415	5	600	7.0	4.6	5.0	10.0	1.9	P7183-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D241
		175	225	270	475	5	600	7.0	4.8	5.0	10.0	2.1	P7184-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D271
		210	270	330	570	5	600	7.0	5.1	5.0	10.0	2.4	P7185-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D331
		230	300	360	620	5	600	7.0	5.3	5.0	10.0	2.5	P7243-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D361
		250	320	390	675	5	600	7.0	5.4	5.0	10.0	2.7	P7244-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D391
		275	350	430	745	5	600	7.0	5.6	5.0	10.0	2.9	P7245-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D431
		300	385	470	810	5	600	7.0	5.8	5.0	10.0	3.1	P7186-ND	.27	2.28	19.00	108.00	101.00/M	98.00/M	ERZ-V05D471
7	D Ser.V	11	14	18	36	2.5	250	8.5	4.5	5.0	11.5	1.3	P7290-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D180
		14	18	22	43	2.5	250	8.5	4.6	5.0	11.5	1.4	P7291-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D220
		17	22	27	53	2.5	250	8.5	4.7	5.0	11.5	1.5	P7292-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D270
		20	26	33	65	2.5	250	8.5	4.9	5.0	11.5	1.7	P7293-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D330
		25	31	39	77	2.5	250	8.5	4.8	5.0	11.5	1.6	P7294-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D390
		30	38	47	93	2.5	250	8.5	4.9	5.0	11.5	1.7	P7295-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D470
		35	45	56	110	2.5	250	8.5	5.0	5.0	11.5	1.8	P7296-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D560
		40	56	68	135	2.5	250	8.5	5.2	5.0	11.5	2.0	P7297-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D680
		50	65	82	135	10	1250	8.5	4.1	5.0	11.5	1.4	P7187-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D820
		60	85	100	165	10	1250	8.5	4.3	5.0	11.5	1.6	P7246-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D101
		75	100	120	200	10	1250	8.5	4.5	5.0	11.5	1.8	P7247-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D121
		95	125	150	250	10	1250	8.5	4.8	5.0	11.5	2.1	P7248-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D151
		130	170	200	340	10	1250	8.5	4.4	5.0	11.5	1.7	P7188-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D201
		140	180	220	360	10	1250	8.5	4.5	5.0	11.5	1.8	P7189-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D221
		150	200	240	395	10	1250	8.5	4.6	5.0	11.5	1.9	P7190-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D241
		175	225	270	455	10	1250	8.5	4.8	5.0	11.5	2.1	P7200-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D271
		210	270	330	545	10	1250	8.5	5.1	5.0	11.5	2.4	P7201-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D331
		230	300	360	595	10	1250	8.5	5.3	5.0	11.5	2.5	P7249-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D361
		250	320	390	650	10	1250	8.5	5.4	5.0	11.5	2.7	P7250-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D391
		275	350	430	710	10	1250	8.5	5.8	5.0	11.5	2.9	P7251-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D431
		300	385	470	775	10	1250	8.5	5.8	5.0	11.5	3.1	P7202-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D471
		320	410	510	845	10	1250	8.5	6.0	5.0	11.5	3.3	P7203-ND	.28	2.40	20.00	114.00	107.00/M	103.00/M	ERZ-V07D511
10	D Ser.V	11	14	18	36	5	500	11.5	4.6	7.5	14.5	1.3	P7298-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D180
		14	18	22	43	5	500	11.5	4.7	7.5	14.5	1.4	P7299-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D220
		17	22	27	53	5	500	11.5	4.8	7.5	14.5	1.5	P7300-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D270
		20	26	33	65	5	500	11.5	5.0	7.5	14.5	1.7	P7301-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D330
		25	31	39	77	5	500	11.5	4.9	7.5	14.5	1.6	P7302-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D390
		30	38	47	93	5	500	11.5	5.0	7.5	14.5	1.7	P7303-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D470
		35	45	56	110	5	500	11.5	5.1	7.5	14.5	1.8	P7304-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D560
		40	56	68	135	5	500	11.5	5.3	7.5	14.5	2.0	P7305-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D680
		50	65	82	135	25	2500	11.5	4.5	7.5	14.5	1.6	P7204-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D820
		60	85	100	165	25	2500	11.5	4.7	7.5	14.5	1.8	P7252-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D101

(Continued)

Panasonic® “ZNR” Transient/Surge Absorbers Type D and E *(Cont.)*

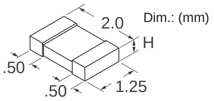
Series	Type	Max. Allow. Volt. (V)		Varistor Volt. ±10% (V)	Max. Clamp Volt. @ Test Current (8/20µsec.)		Surge Current (A)	Dimensions (mm)					Digi-Key Part No.	Pricing						Panasonic Part No.
		AC	DC		Vc(V)	Ip(A)		D Max.	T Max.	W ±1	H Max.	L ±1		1	10	100	1,000	5,000	10,000	
10	D Ser.V	75	100	120	200	25	2500	11.5	4.9	7.5	14.5	2.0	P7253-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D121
		95	125	150	250	25	2500	11.5	5.2	7.5	14.5	2.3	P7254-ND	.48	4.13	34.44	196.00	184.00/M	178.00/M	ERZ-V10D151
		130	170	200	340	25	2500	11.5	4.8	7.5	14.5	1.9	P7205-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D201
		140	180	220	360	25	2500	11.5	4.9	7.5	14.5	2.0	P7206-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D221
		150	200	240	395	25	2500	11.5	5.0	7.5	14.5	2.1	P7207-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D241
		175	225	270	455	25	2500	11.5	5.2	7.5	14.5	2.3	P7208-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D271
		210	270	330	545	25	2500	11.5	5.5	7.5	14.5	2.6	P7209-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D331
		230	300	360	595	25	2500	11.5	5.7	7.5	14.5	2.8	P7255-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D361
		250	320	390	650	25	2500	11.5	5.8	7.5	14.5	2.9	P7256-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D391
		275	350	430	710	25	2500	11.5	6.0	7.5	14.5	3.1	P7257-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D431
		300	385	470	775	25	2500	11.5	6.2	7.5	14.5	3.3	P7210-ND	.42	3.60	30.00	171.00	160.00/M	155.00/M	ERZ-V10D471
		320	410	510	845	25	2500	11.5	6.4	7.5	14.5	3.5	P7211-ND	.57	4.92	41.00	234.00	219.00/M	212.00/M	ERZ-V10D511
		385	505	620	1025	25	2500	12.5	7.1	7.5	15.5	4.2	P7258-ND	.56	4.83	40.25	229.00	215.00/M	208.00/M	ERZ-V10D621
		420	560	680	1120	25	2500	12.5	7.4	7.5	15.5	4.5	P7259-ND	.56	4.83	40.25	229.00	215.00/M	208.00/M	ERZ-V10D681
		460	615	750	1240	25	2500	12.5	7.8	7.5	15.5	4.9	P7260-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V10D751
		510	670	820	1355	25	2500	12.5	8.1	7.5	15.5	5.2	P7212-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V10D821
		550	745	910	1500	25	2500	12.5	8.6	7.5	15.5	5.7	P7213-ND	.77	6.57	54.75	312.00	292.00/M	283.00/M	ERZ-V10D911
		625	825	1000	1650	25	2500	12.5	9.1	7.5	15.5	6.2	P7261-ND	.77	6.57	54.75	312.00	292.00/M	283.00/M	ERZ-V10D102
		680	895	1100	1815	25	2500	12.5	9.7	7.5	15.5	6.8	P7214-ND	.77	6.57	54.75	312.00	292.00/M	283.00/M	ERZ-V10D112
		1000	1465	1800	2970	25	2500	13.5	14.4	11.0	16.5	10.5	P7215-ND	1.33	11.40	95.00	542.00	507.00/M	490.00/M	ERZ-V10D182
14	D Ser.V	11	14	18	36	10	1000	15.5	4.6	7.5	18.5	1.3	P7306-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D180
		14	18	22	43	10	1000	15.5	4.7	7.5	18.5	1.4	P7307-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D220
		17	22	27	53	10	1000	15.5	4.8	7.5	18.5	1.5	P7308-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D270
		20	26	33	65	10	1000	15.5	5.0	7.5	18.5	1.7	P7309-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D330
		25	31	39	77	10	1000	15.5	4.9	7.5	18.5	1.6	P7310-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D390
		30	38	47	93	10	1000	15.5	5.0	7.5	18.5	1.7	P7311-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D470
		35	45	56	110	10	1000	15.5	5.1	7.5	18.5	1.8	P7312-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D560
		40	56	68	135	10	1000	15.5	5.3	7.5	18.5	2.0	P7313-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D680
		50	65	82	135	50	4500	15.5	4.5	7.5	18.5	1.6	P7216-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D820
		60	85	100	165	50	4500	15.5	4.7	7.5	18.5	1.8	P7262-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D101
		75	100	120	200	50	4500	15.5	4.9	7.5	18.5	2.0	P7263-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D121
		95	125	150	250	50	4500	15.5	5.2	7.5	18.5	2.3	P7264-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V14D151
		130	170	200	340	50	4500	15.5	4.8	7.5	18.5	1.9	P7217-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V14D201
		140	180	220	360	50	4500	15.5	4.9	7.5	18.5	2.0	P7218-ND	.58	4.95	41.25	235.00	220.00/M	213.00/M	ERZ-V14D221
		150	200	240	395	50	4500	15.5	5.0	7.5	18.5	2.1	P7219-ND	.58	4.95	41.25	235.13	220.00/M	213.00/M	ERZ-V14D241
		175	225	270	455	50	4500	15.5	5.2	7.5	18.5	2.3	P7220-ND	.47	4.02	33.50	191.00	179.00/M	173.00/M	ERZ-V14D271
		210	270	330	545	50	4500	15.5	5.5	7.5	18.5	2.6	P7221-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D331
		230	300	360	595	50	4500	15.5	5.7	7.5	18.5	2.8	P7265-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D361
		250	320	390	650	50	4500	15.5	5.8	7.8	18.5	2.9	P7266-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D391
		275	350	430	710	50	4500	15.5	6.0	7.5	18.5	3.1	P7267-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D431
		300	385	470	775	50	4500	15.5	6.2	7.5	18.5	3.3	P7222-ND	.67	5.70	47.50	271.00	253.00/M	245.00/M	ERZ-V14D471
		320	410	510	845	50	4500	15.5	6.4	7.5	18.5	3.5	P7223-ND	1.02	8.70	72.50	413.00	387.00/M	374.00/M	ERZ-V14D511
		385	505	620	1025	50	4500	16.0	7.1	7.5	19.0	4.2	P7268-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D621
		420	560	680	1120	50	4500	16.0	7.4	7.5	19.0	4.5	P7269-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D681
		460	615	750	1240	50	4500	16.0	7.8	7.5	19.0	4.9	P7270-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D751
		510	670	820	1355	50	4500	16.0	8.1	7.5	19.0	5.2	P7224-ND	1.05	8.97	74.75	426.00	399.00/M	386.00/M	ERZ-V14D821
		550	745	910	1500	50	4500	16.0	8.6	7.5	19.0	5.7	P7225-ND	1.44	12.33	102.75	586.00	548.00/M	530.00/M	ERZ-V14D911
		625	825	1000	1650	50	4500	16.0	9.1	7.5	19.0	6.2	P7271-ND	1.44	12.33	102.75	586.00	548.00/M	530.00/M	ERZ-V14D102
		680	895	1100	1815	50	4500	16.0	9.7	7.5	19.0	6.8	P7226-ND	1.44	12.33	102.75	586.00	548.00/M	530.00/M	ERZ-V14D112
		1000	1465	1800	2970	50	4500	17.0	14.4	15.0	20.5	10.5	P7227-ND	1.99	17.04	142.00	809.00	757.00/M	733.00/M	ERZ-V14D182
20	D Ser.V	11	14	18	36	20	2000	21.5	5.1	10.0	24.5	1.5	P7314-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D180
		14	18	22	43	20	2000	21.5	5.2	10.0	24.5	1.6	P7315-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D220
		17	22	27	53	20	2000	21.5	5.3	10.0	24.5	1.7	P7316-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D270
		20	26	33	65	20	2000	21.5	5.5	10.0	24.5	1.9	P7317-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D330
		25	31	39	77	20	2000	21.5	5.5	10.0	24.5	1.9	P7318-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D390
		30	38	47	93	20	2000	21.5	5.6	10.0	24.5	2.0	P7319-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D470
		35	45	56	110	20	2000	21.5	5.7	10.0	24.5	2.1	P7320-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D560
		40	56	68	135	20	2000	21.5	5.8	10.0	24.5	2.2	P7321-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D680
		50	65	82	135	100	6500	21.5	4.9	10.0	24.5	1.8	P7228-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D820
		60	85	100	165	100	6500	21.5	5.1	10.0	24.5	2.0	P7272-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D101
		75	100	120	200	100	6500	21.5	5.3	10.0	24.5	2.2	P7273-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D121
		95	125	150	250	100	6500	21.5	5.6	10.0	24.5	2.5	P7274-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D151
		130	170	200	340	100	6500	21.5	5.2	7.5	24.5	2.1	P7322-ND	1.14	9.75	81.25	463.00	433.00/M	419.00/M	ERZ-V20R201
		130	170	200	340	100	6500	21.5	5.2	10.0	24.5	2.1	P7229-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D201
		140	180	220	360	100	6500	21.5	5.3	7.5	24.5	2.2	P7323-ND	1.14	9.75	81.25	463.00	433.00/M	419.00/M	ERZ-V20R221
		140	180	220	360	100	6500	21.5	5.3	10.0	24.5	2.2	P7230-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D221
		150	200	240	395	100	6500	21.5	5.4	7.5	24.5	2.3	P7324-ND	.85	7.29	60.75	346.28	324.00/M	313.47/M	ERZ-V20R241
		150	200	240	395	100	6500	21.5	5.4	10.0	24.5	2.3	P7231-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D241
		175	225	270	455	100	6500	21.5	5.6	7.5	24.5	2.5	P7325-ND	.85	7.29	60.75	346.28	324.00/M	313.47/M	ERZ-V20R271
		175	225	270	455	100	6500	21.5	5.6	10.0	24.5	2.5	P7232-ND	.78	6.66	55.50	316.00	296.00/M	286.00/M	ERZ-V20D271
		210	270	330	545	100	6500	21.5	5.9	7.5	24.5	2.8	P7326-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R331
		210	270	330	545	100	6500	21.5	5.9	10.0	24.5	2.8	P7233-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D331
		230	300	360	595	100	6500	21.5	6.1	7.5	24.5	3.0	P7327-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R361
		230	300	360	595	100	6500	21.5	6.1	10.0	24.5	3.0	P7275-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D361

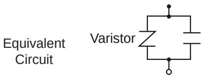
(Continued)

Panasonic "ZNR" Transient/Surge Absorbers Type D and E *(Cont.)*

Series	Type	Max. Allow. Volt. (V)		Varistor Volt. ±10% (V)	Max. Clamp Volt. @ Test Current (8/20μsec.)		Surge Current (A)	Dimensions (mm)					Digi-Key Part No.	Pricing						Panasonic Part No.
		AC	DC		Vc(V)	Ip(A)		D Max.	T Max.	W ±1	H Max.	L ±1		1	10	100	1,000	5,000	10,000	
20	D Ser.V	250	320	390	650	100	6500	21.5	6.2	7.5	24.5	3.1	P7328-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R391
		250	320	390	650	100	6500	21.5	6.2	10.0	24.5	3.1	P7276-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D391
		275	350	430	710	100	6500	21.5	6.4	7.5	24.5	3.3	P7329-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R431
		275	350	430	710	100	6500	21.5	6.4	10.0	24.5	3.3	P7277-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D431
		300	385	470	775	100	6500	21.5	6.6	7.5	24.5	3.5	P7330-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R471
		300	385	470	775	100	6500	21.5	6.6	10.0	24.5	3.5	P7234-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D471
		320	410	510	845	100	6500	21.5	6.8	7.5	24.5	3.7	P7331-ND	1.26	10.77	89.75	511.58	478.67/M	463.11/M	ERZ-V20R511
		320	410	510	845	100	6500	21.5	6.8	10.0	24.5	3.7	P7235-ND	1.14	9.81	81.75	466.00	436.00/M	422.00/M	ERZ-V20D511
		385	505	620	1025	100	6500	22.5	7.5	10.0	25.5	4.4	P7278-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D621
		420	560	680	1120	100	6500	22.5	7.8	10.0	25.5	4.7	P7279-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D681
		460	615	750	1240	100	6500	22.5	8.2	10.0	25.5	5.1	P7280-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D751
		510	670	820	1355	100	6500	22.5	8.5	10.0	25.5	5.4	P7236-ND	1.82	15.63	130.25	742.00	695.00/M	672.00/M	ERZ-V20D821
		550	745	910	1500	100	6500	22.5	9.0	10.0	25.5	5.9	P7237-ND	2.41	20.67	172.25	982.00	919.00/M	889.00/M	ERZ-V20D911
		625	825	1000	1650	100	6500	22.5	9.5	10.0	25.5	6.4	P7281-ND	2.41	20.67	172.25	982.00	919.00/M	889.00/M	ERZ-V20D102
		680	895	1100	1815	100	6500	22.5	10.1	10.0	25.5	7.0	P7238-ND	2.41	20.67	172.25	982.00	919.00/M	889.00/M	ERZ-V20D112
		1000	1465	1800	2970	100	6500	23.5	14.8	15.0	28.0	10.7	P7239-ND	3.75	32.13	267.75	1526.00	1428.00/M	1382.00/M	ERZ-V20D182
7	D	140	180	220	360	10	1200	9.0	5.3	5.0	12.0	2.1	P7066-ND	.46	3.90	32.50	185.00	173.00/M	168.00/M	ERZ-C07DK221U
10	D	95	125	150	250	25	2500	13.5	5.5	7.5	16.5	2.2	P7057-ND	.63	5.40	45.00	257.00	240.00/M	232.00/M	ERZ-C10DK151
20	D	60	85	100	165	100	6500	23.0	5.6	10.0	27.0	2.0	P7049-ND	1.13	9.69	80.75	460.00	431.00/M	417.00/M	ERZ-C20DK101
		385	505	620	1025	100	6500	24.0	7.6	10.0	28.0	4.1	P7102-ND	2.65	22.68	189.00	1077.00	1008.00/M	975.00/M	ERZ-C20DK621U
20	E	130	170	200	340	100	8000	—	—	48.0	42.0	39.0	P7126-ND	20.58	176.40	1470.00	8379.00	7840.00/M	7585.00/M	ERZ-C20EK201
		150	200	240	395	100	8000	—	—	48.0	42.0	39.0	P7127-ND	20.58	176.40	1470.00	8379.00	7840.00/M	7585.00/M	ERZ-C20EK241
		250	320	390	650	100	8000	—	—	48.0	42.0	39.0	P7128-ND	24.50	210.00	1750.00	9975.00	9333.00/M	9030.00/M	ERZ-C20EK391
25	E	130	170	200	340	150	15000	—	—	60.0	55.0	51.0	P7129-ND	36.72	314.73	2622.75	14950.00	13988.00/M	13533.00/M	ERZ-C25EK201
		150	200	240	395	150	15000	—	—	60.0	55.0	51.0	P7130-ND	36.72	314.73	2622.75	14950.00	13988.00/M	13533.00/M	ERZ-C25EK241
		250	320	390	650	150	15000	—	—	60.0	55.0	51.0	P7131-ND	43.72	374.70	3122.50	17798.00	16653.00/M	16112.00/M	ERZ-C25EK391
		510	670	820	1355	150	15000	—	—	60.0	55.0	51.0	P7157-ND	45.17	387.15	3226.25	18390.00	17207.00/M	16647.00/M	ERZ-C25EK821
32	E	130	170	200	340	200	25000	—	—	60.0	55.0	51.0	P7132-ND	45.56	390.51	3254.25	18549.00	17356.00/M	16792.00/M	ERZ-C32EK201
		150	200	240	395	200	25000	—	—	60.0	55.0	51.0	P7133-ND	45.56	390.51	3254.25	18549.00	17356.00/M	16792.00/M	ERZ-C32EK241
		250	320	390	650	200	25000	—	—	60.0	55.0	51.0	P7134-ND	47.39	406.17	3384.75	19293.00	18052.00/M	17465.00/M	ERZ-C32EK391
		550	1500	910	1500	200	25000	—	—	60.0	55.0	51.0	P7135-ND	62.70	537.42	4478.50	25527.00	23885.00/M	23109.00/M	ERZ-C32EK911

Panasonic Multilayer Varistor Strontium Titanate (0805 Size) Surface Mount

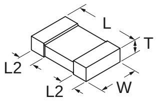




For EMI noise suppression and transient surge protection. **Features:** • Multilayer monolithic construction of SrTiO3 ceramics • Low varistor voltage with high parallel capacitance • Fast response to high speed transient overvoltage for ESD protection (IEC1000-4-2) • dV/dt reduction resulting from the large capacitance • Large withstanding surge and energy capabilities • Operating Temperature Range: -40°C to 85°C

Appl. Circuit DC	Max. Allow. Volt.	Varistor Voltage (V0.1mA)	Cap. @ 1KHz	Tolerance	Max. Peak Current (8/20μs, 2 times)	Max. Energy (2ms)	Dim. (mm) H	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing		Panasonic Part No.
									1	10	100		2,000	5,000	
5V Line	DC06	8-15V	22000	+80%/-20%	25A	0.2J	1.0	P223ZJCT-ND	1.46	1.30	1.09	P223ZJTR-ND	—	597.00/M	EZJ-S2VB223Z
12V Line	DC18	24-35V	8200	+80%/-20%	25A	0.2J	1.45	P822ZJCT-ND	1.46	1.30	1.09	P822ZJTR-ND	597.00/M	—	EZJ-S2YC822Z
24V Line	DC30	40-60V	4700	+80%/-20%	25A	0.2J	1.45	P472ZJCT-ND	1.46	1.30	1.09	P472ZJTR-ND	597.00/M	—	EZJ-S2YD472Z

Multilayer Varistor Zinc Oxide Type (0402, 0603 and 0805 Sizes) Surface Mount



Features:
Multilayer Varistor of Zinc Oxide ceramics suppresses pulse noise (ESD, burst-noise) and protects equipment from the transient surges. This Varistor is suitable for high-speed signal line due to small capacitance. • Low insertion signal loss due to small capacitance • Large withstanding capabilities to ESD (Max. 8kV by IEC test method) • Excellent solderability and superior heat resistance due to plate (Ni/solder) electrode

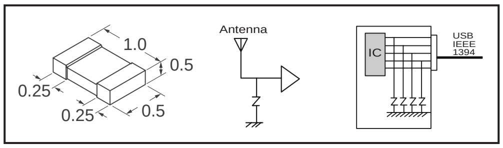
Application:
For suppression of pulse noise (ESD etc.) in electronic equipment • Cellular phone • PDA • PC and Peripheral equipment

Size	Varistor Voltage	Max. Voltage VDC	Clamping Voltage 8/20μs, 2A	Cap. (pF)	Peak Current (A)	Dimensions (mm)				Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing		Panasonic Part No.
						L	W	T	L2		1	10	100		4,000	10,000	
0402	12	6.7	30	220	10	1.0	0.5	0.5	0.25	P11403CT-ND	.57	.51	.43	P11403TR-ND	—	232.00/M	EZJ-Z0V120JA
0402	27	16	50	47	10	1.0	0.5	0.5	0.25	P11404CT-ND	.57	.51	.43	P11404TR-ND	—	232.00/M	EZJ-Z0V270EA
0603	27	20	50	100	20	1.6	0.8	0.8	0.3	P10862CT-ND	1.09	.97	.81	P10862TR-ND	443.00/M	—	EZJ-Z1V270G
0603	33	26	58	100	20	1.6	0.8	0.8	0.3	P10863CT-ND	1.09	.97	.81	P10863TR-ND	443.00/M	—	EZJ-Z1V330G
0805	27	20	50	100	30	2.0	1.25	0.8	0.5	P10864CT-ND	1.19	1.06	.89	—	—	—	EZJ-Z2V270G
0805	33	26	58	100	30	2.0	1.25	0.8	0.5	P10865CT-ND	1.19	1.06	.89	—	—	—	EZJ-Z2V330G

Multilayer Varistor – Ultra-Low Capacitance Zinc Oxide Type (0402 Size) Surface Mount

Features:
Multilayer Varistor of Zinc Oxide ceramics suppresses pulse noise (ESD, burst-noise) and protects equipment from transient surges. This Varistor is suitable for RF antenna/RF amplifier due to ultra-low capacitance.
• Low insertion signal loss due to ultra-low capacitance (3pF) • Large withstanding capabilities to ESD (Max. 8kV by IEC test method)
• Excellent solderability and superior heat resistance due to plate (Ni/solder) electrode

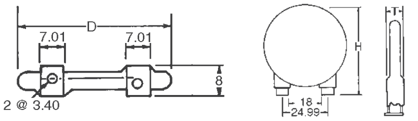
Application:
For suppression of pulse noise (ESD etc.) in RF antenna/RF amplifier • Cellular phone • PDA • Wireless LAN applications • PC and Peripheral equipment • Interface: USB, IEEE 1394



Size	Varistor Voltage	Max. Voltage VDC	ESD Max. (KV)	Cap. (pF)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing	Panasonic Part No.
						1	10	100		10,000	
0402	170	18	8	3	P11402CT-ND	.57	.51	.43	P11402TR-ND	232.00/M	EZJ-Z0V171AA

Panasonic® ZNR/Surge Absorbers With Tabs – Type C Series 32 and 40

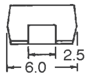
These are heavy duty type ZNR with very unique tab terminals which are used as electrical connecting terminals and also its mounting legs. This ZNR is meant for application in power supplies or transient voltage surge suppressor units where high surge current or high surge energy absorption is required.



Features: • High energy handling capability (210 to 710 joules) • Large withstanding surge current (25 to 30kA) • Compact size • Common terminals for electrical connection and mounting • UL recognized

Series	Type	Max. Allow. Volt. (V)		Varistor Volt. ±10%	Max. Clamp Volt. @ Test Current (8/20µsec.)		Surge Current	Dimensions (mm)			Digi-Key	Pricing						Panasonic
		AC	DC	(V)	Vc(V)	Lp(A)	(kA)	D max.	T ±.99	H max.	Part No.	1	10	100	1,000	5,000	10,000	Part No.
32	C	130	170	200	340	200	25	35.99	7.49	46.00	P7158-ND	16.53	141.69	1180.75	6730.00	6297.00/M	6093.00/M	ERZ-C32CK201B
		150	200	240	395	200	25	35.99	7.49	46.00	P7159-ND	16.53	141.69	1180.75	6730.00	6297.00/M	6093.00/M	ERZ-C32CK241B
		230	300	360	595	200	25	35.99	8.99	46.00	P7160-ND	17.70	151.71	1264.25	7206.00	6743.00/M	6524.00/M	ERZ-C32CK361B
		250	320	390	650	200	25	35.99	8.99	46.00	P7161-ND	17.70	151.71	1264.25	7206.00	6743.00/M	6524.00/M	ERZ-C32CK391B
		275	350	430	710	200	25	35.99	8.99	46.00	P7162-ND	17.70	151.71	1264.25	7206.00	6743.00/M	6524.00/M	ERZ-C32CK431B
		385	505	620	1025	200	25	35.99	9.70	46.00	P7163-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK621B
		420	560	680	1120	200	25	35.99	9.70	46.00	P7164-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK681B
		460	615	750	1240	200	25	35.99	11.51	46.00	P7165-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK751B
		485	640	780	1290	200	25	35.99	11.51	46.00	P7166-ND	19.96	171.09	1425.75	8127.00	7604.00/M	7357.00/M	ERZ-C32CK781B
		510	670	820	1355	200	25	35.99	11.51	46.00	P7167-ND	21.75	186.45	1553.75	8856.00	8287.00/M	8017.00/M	ERZ-C32CK821B
		550	745	910	1500	200	25	35.99	11.51	46.00	P7168-ND	23.39	200.49	1670.75	9523.00	8911.00/M	8621.00/M	ERZ-C32CK911B
40	C	130	170	200	340	250	30	43.99	7.49	50.01	P7169-ND	24.79	212.52	1771.00	10095.00	9445.00/M	9138.00/M	ERZ-C40CK201B
		150	200	240	395	250	30	43.99	7.49	50.01	P7170-ND	24.79	212.52	1771.00	10095.00	9445.00/M	9138.00/M	ERZ-C40CK241B
		230	300	360	595	250	30	43.99	8.99	50.01	P7171-ND	26.43	226.56	1888.00	10762.00	10069.00/M	9742.00/M	ERZ-C40CK361B
		250	320	390	650	250	30	43.99	8.99	50.01	P7172-ND	26.43	226.56	1888.00	10762.00	10069.00/M	9742.00/M	ERZ-C40CK391B
		275	350	430	710	250	30	43.99	8.99	50.01	P7173-ND	26.43	226.56	1888.00	10762.00	10069.00/M	9742.00/M	ERZ-C40CK431B
		385	505	620	1025	250	30	43.99	9.70	50.01	P7174-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK621B
		420	560	680	1120	250	30	43.99	9.70	50.01	P7175-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK681B
		460	615	750	1240	250	30	43.99	11.51	50.01	P7176-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK751B
		485	640	780	1290	250	30	43.99	11.51	50.01	P7177-ND	31.03	265.98	2216.50	12634.00	11821.00/M	11437.00/M	ERZ-C40CK781B
		510	670	820	1355	250	30	43.99	11.51	50.01	P7178-ND	32.28	276.66	2305.50	13141.00	12296.00/M	11896.00/M	ERZ-C40CK821B
		550	745	910	1500	250	30	43.99	11.51	50.01	P7179-ND	33.84	290.04	2417.00	13777.00	12891.00/M	12472.00/M	ERZ-C40CK911B

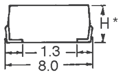
Surface Mount ZNR/Surge Absorbers Type CF, SF, VFM and VFT



Dim.: (mm)

Features:
- Temperature Char. of Varistor Voltage 0 to -0.05%/°C
- Operating Temperature Range: -40°C to 85°C
- Storage Temperature Range: -40°C to 125°C
- Designed for flow/reflow soldering
- Excellent response against high steep surge voltage
- Compact package with large withstanding surge capability
- Low Clamping Voltage for better surge protection
- SF Type has the ability to withstand 2 or 3 times the surge current of the CF Type
- VFT Type has low height

Applications:
- For suppression of surge in electronic equipment
- Semiconductors
- Telephone or telecommunication system
- DAA modules, modem
- Router, Terminal adapter (Digital modem)
- Power supply



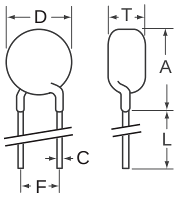
Type	Height*
CF	3.2
SF	3.2
VFM	3.2
VFT	2.4

Type	Varistor Voltage ±10% (V)	Max. Allowable Voltage (V)		Max. Clamping Voltage Vxa(V)♦	Rated Power (W)	Energy (2ms) (J)	Maximum† Peak Current	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing			Panasonic Part No.
		AC	DC						10	100	1,000		2,000	6,000	10,000	
CF	22	14	18	48	0.01	0.4	50	P220ZFCT-ND	1.85	1.55	1.25	P220ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK220
	27	17	22	60	0.01	0.5	50	P270ZFCT-ND	1.85	1.55	1.25	P270ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK270
	33	20	26	73	0.01	0.6	50	P330ZFCT-ND	1.85	1.55	1.25	P330ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK330
	39	25	31	86	0.01	0.8	50	P390ZFCT-ND	1.85	1.55	1.25	P390ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK390
	47	30	38	104	0.01	1.0	50	P470ZFCT-ND	1.85	1.55	1.25	P470ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK470
	56	35	45	123	0.01	1.0	50	P560ZFCT-ND	1.85	1.55	1.25	P560ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK560
	68	40	56	150	0.01	1.2	50	P680ZFCT-ND	1.85	1.55	1.25	P680ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK680
	82	50	65	145	0.1	1.7	200	P820ZFCT-ND	1.85	1.55	1.25	P820ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK820
	100	60	85	175	0.1	2.0	200	P101ZFCT-ND	1.85	1.55	1.25	P101ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK101
	120	75	100	210	0.1	2.5	200	P121ZFCT-ND	1.85	1.55	1.25	P121ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK121
	150	95	125	200	0.1	3.0	200	P151ZFCT-ND	1.85	1.55	1.25	P151ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK151
	200	130	170	355	0.1	4.0	200	P201ZFCT-ND	1.85	1.55	1.25	P201ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK201
	220	140	180	380	0.1	4.5	200	P221ZFCT-ND	1.85	1.55	1.25	P221ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK221
	240	150	200	415	0.1	5.0	200	P241ZFCT-ND	1.85	1.55	1.25	P241ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK241
	270	175	225	475	0.1	6.0	200	P271ZFCT-ND	1.85	1.55	1.25	P271ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK271
	360	230	300	620	0.1	6.0	200	P361ZFCT-ND	1.85	1.55	1.25	P361ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK361
	390	260	320	675	0.1	6.0	200	P391ZFCT-ND	1.85	1.55	1.25	P391ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK391
	430	275	350	745	0.1	6.3	200	P431ZFCT-ND	1.85	1.55	1.25	P431ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK431
	470	300	385	810	0.1	7.0	200	P471ZFCT-ND	1.85	1.55	1.25	P471ZFTR-ND	851.00/M	793.00/M	744.00/M	ERZ-CF2MK471
SF	22	14	18	43	0.02	0.9	125	P220ZSCT-ND	2.01	1.68	1.36	P220ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK220
	27	17	22	53	0.02	1.0	125	P270ZSCT-ND	2.01	1.68	1.36	P270ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK270
	33	20	26	65	0.02	1.2	125	P330ZSCT-ND	2.01	1.68	1.36	P330ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK330
	39	25	31	77	0.02	1.5	125	P390ZSCT-ND	2.01	1.68	1.36	P390ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK390
	47	30	38	93	0.02	1.8	125	P470ZSCT-ND	2.01	1.68	1.36	P470ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK470
	56	35	45	110	0.02	2.2	125	P560ZSCT-ND	2.01	1.68	1.36	P560ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK560
	68	40	56	135	0.02	2.5	125	P680ZSCT-ND	2.01	1.68	1.36	P680ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK680
	82	50	65	135	0.25	3.5	600	P820ZSCT-ND	2.01	1.68	1.36	P820ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK820
	120	75	100	200	0.25	5.0	600	P121ZSCT-ND	2.01	1.68	1.36	P121ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK121
	220	140	180	360	0.25	9.0	600	P221ZSCT-ND	2.01	1.68	1.36	P221ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK221
	240	150	200	395	0.25	10.0	600	P241ZSCT-ND	2.01	1.68	1.36	P241ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK241
	270	175	225	455	0.25	12.0	600	P271ZSCT-ND	2.01	1.68	1.36	P271ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK271
	390	250	320	650	0.25	12.0	400	P391ZSCT-ND	2.01	1.68	1.36	P391ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK391
	470	300	385	775	0.25	12.0	400	P471ZSCT-ND	2.01	1.68	1.36	P471ZSTR-ND	924.00/M	861.00/M	808.00/M	ERZ-SF2MK471
VFM	82	50	65	135	0.1	2.5	600	P7337CT-ND	1.49	1.25	1.01	P7337TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M820
	100	60	85	165	0.1	3.0	600	P7338CT-ND	1.49	1.25	1.01	P7338TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M101
	120	75	100	200	0.1	3.5	600	P7339CT-ND	1.49	1.25	1.01	P7339TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M121
	150	95	125	250	0.1	4.5	600	P7340CT-ND	1.49	1.25	1.01	P7340TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M151
	200	130	170	340	0.1	6.0	600	P7341CT-ND	1.49	1.25	1.01	P7341TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M201
	220	140	180	360	0.1	6.5	600	P7342CT-ND	1.49	1.25	1.01	P7342TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M221
	240	150	200	395	0.1	7.5	600	P7343CT-ND	1.49	1.25	1.01	P7343TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M241
	270	175	225	455	0.1	8.0	600	P7344CT-ND	1.49	1.25	1.01	P7344TR-ND	687.00/M	641.00/M	601.00/M	ERZ-VF2M271
VFT	82	50	65	145	0.1	1.7	400	P7332CT-ND	1.59	1.34	1.08	P7332TR-ND	732.00/M	682.00/M	640.00/M	ERZ-VF2T820
	100	60	85	175	0.1	2.0	400	P7333CT-ND	1.59	1.34	1.08	P7333TR-ND	732.00/M	682.00/M	640.00/M	ERZ-VF2T101
	150	95	125	260	0.1	3.0	400	P7334CT-ND	1.59	1.34	1.08	P7334TR-ND	732.00/M	682.00/M	640.00/M	ERZ-VF2T151
	240	150	200	415	0.1	5.0	400	P7335CT-ND	1.59	1.34	1.08	P7335TR-ND	732.00/M	682.00/M	640.00/M	ERZ-VF2T241
	270	175	225	475	0.1	6.0	400	P7336CT-ND	1.59	1.34	1.08	P7336TR-ND	732.00/M	682.00/M	640.00/M	ERZ-VF2T271

† (8/20 us, 2 times), ♦ Measuring Current of Maximum Clamping Voltage is as follows: For Varistor Voltage of 22 to 68 V: xA=1A, For Varistor Voltage of 82 to 470 V: xA=5A, For Varistor Voltage of VFM: xA=10A

Leaded Varistors

The varistors consist of a disc of low-B ceramic material with two tinned solid copper leads. They are coated with a layer of ochre colored epoxy, which provides electrical, mechanical and climatic protection.
The encapsulation is resistant to all cleaning solvents in accordance with "IEC 60068-2-45".

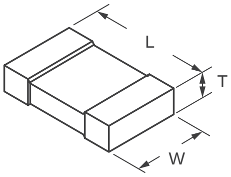


Size Code	Dimensions (mm)						
	D Max.	A Max.	L Min.	T Max.	T Min.	C	F
A	7.0	9.0	27.0	6.0	4.1	0.6 ±0.05	5.0 +0.6/-0.1
B	9.0	11.0	27.0	6.0	4.1	0.6 ±0.05	5.0 +0.6/-0.1
C	13.5	15.5	17.0	7.0	4.4	0.8 ±0.05	7.5 ±0.8
D	17.0	19.0	16.0	7.0	4.4	0.8 ±0.05	7.5 ±0.8

Size Code	Maximum Continuous Volt.		Varistor Voltage@	Max. Volt. Stated Current		Digi-Key Part No.	Price Each			BC Components Part No.
	AC (V)	DC (V)	@ 1mA (V)	V (V)	I (A)		1	10	100	
A	30	38	47	96	1.0	BC1382-ND	.30	.26	.22	2322 592 53006
A	35	45	56	123	1.0	BC1383-ND	.30	.26	.22	2322 592 53506
A	40	56	68	145	1.0	BC1384-ND	.30	.26	.22	2322 592 54006
A	50	65	82	145	5.0	BC1385-ND	.30	.26	.22	2322 592 55006
A	60	85	100	165	5.0	BC1386-ND	.30	.26	.22	2322 592 56006
A	75	100	120	190	5.0	BC1387-ND	.30	.26	.22	2322 592 57506
A	95	125	150	230	5.0	BC1388-ND	.30	.26	.22	2322 592 59506
A	130	170	205	310	5.0	BC1389-ND	.30	.26	.22	2322 592 51316
A	140	180	220	350	5.0	BC1390-ND	.30	.26	.22	2322 592 51416
A	150	200	240	395	5.0	BC1391-ND	.30	.26	.22	2322 592 51516
A	175	225	275	410	5.0	BC1392-ND	.30	.26	.22	2322 592 51716
A	230	300	360	560	5.0	BC1393-ND	.30	.26	.22	2322 592 52316
A	250	320	390	600	5.0	BC1394-ND	.30	.26	.22	2322 592 52516
A	275	350	430	695	5.0	BC1395-ND	.30	.26	.22	2322 592 52716
A	300	385	470	750	5.0	BC1396-ND	.30	.26	.22	2322 592 53016
A	320	420	510	800	5.0	BC1397-ND	.30	.26	.22	2322 592 53216
A	385	505	620	1000	5.0	BC1398-ND	.30	.26	.22	2322 592 53816
A	420	560	680	1100	5.0	BC1399-ND	.30	.26	.22	2322 592 54216
A	460	615	750	1200	5.0	BC1400-ND	.30	.26	.22	2322 592 54616
B	30	38	47	93	2.5	BC1401-ND	.35	.30	.25	2322 593 53006
B	35	45	56	115	2.5	BC1402-ND	.35	.30	.25	2322 593 53506
B	40	56	68	135	2.5	BC1403-ND	.35	.30	.25	2322 593 54006
B	50	65	82	140	10.0	BC1404-ND	.35	.30	.25	2322 593 55006
B	60	85	100	165	10.0	BC1405-ND	.35	.30	.25	2322 593 56006
B	75	100	120	200	10.0	BC1406-ND	.35	.30	.25	2322 593 57506
B	95	125	150	250	10.0	BC1407-ND	.35	.30	.25	2322 593 59506
B	130	170	205	340	10.0	BC1408-ND	.35	.30	.25	2322 593 51316
B	140	180	220	370	10.0	BC1409-ND	.35	.30	.25	2322 593 51416
B	150	200	240	400	10.0	BC1410-ND	.35	.30	.25	2322 593 51516
B	175	225	275	455	10.0	BC1411-ND	.35	.30	.25	2322 593 51716
B	230	300	360	600	10.0	BC1412-ND	.35	.30	.25	2322 593 52316
B	250	320	390	650	10.0	BC1413-ND	.35	.30	.25	2322 593 52516
B	275	350	430	710	10.0	BC1414-ND	.35	.30	.25	2322 593 52716
B	300	385	470	800	10.0	BC1415-ND	.35	.30	.25	2322 593 53016
B	320	420	510	850	10.0	BC1416-ND	.35	.30	.25	2322 593 53216
B	385	505	620	1025	10.0	BC1417-ND	.35	.30	.25	2322 593 53816
B	420	560	680	1120	10.0	BC1418-ND	.35	.30	.25	2322 593 54216
B	460	615	750	1240	10.0	BC1419-ND	.35	.30	.25	2322 593 54616
C	30	38	47	93	5.0	BC1420-ND	.53	.46	.38	2322 594 53006
C	35	45	56	110	5.0	BC1421-ND	.53	.46	.38	2322 594 53506
C	40	56	68	130	5.0	BC1422-ND	.53	.46	.38	2322 594 54006
C	50	65	82	140	25.0	BC1423-ND	.53	.46	.38	2322 594 55006
C	60	85	100	165	25.0	BC1424-ND	.53	.46	.38	2322 594 56006
C	75	100	120	200	25.0	BC1425-ND	.53	.46	.38	2322 594 57506
C	95	125	150	250	25.0	BC1426-ND	.53	.46	.38	2322 594 59506
C	130	170	205	340	25.0	BC1427-ND	.53	.46	.38	2322 594 51316
C	140	180	220	370	25.0	BC1428-ND	.53	.46	.38	2322 594 51416
C	150	200	240	400	25.0	BC1429-ND	.53	.46	.38	2322 594 51516
C	175	225	275	455	25.0	BC1430-ND	.53	.46	.38	2322 594 51716
C	230	300	360	600	25.0	BC1431-ND	.53	.46	.38	2322 594 52316
C	250	320	390	650	25.0	BC1432-ND	.53	.46	.38	2322 594 52516
C	275	350	430	710	25.0	BC1433-ND	.53	.46	.38	2322 594 52716
C	300	385	470	800	25.0	BC1434-ND	.53	.46	.38	2322 594 53016
C	320	420	510	850	25.0	BC1435-ND	.53	.46	.38	2322 594 53216
C	385	505	620	1025	25.0	BC1436-ND	.53	.46	.38	2322 594 53816
C	420	560	680	1120	25.0	BC1437-ND	.53	.46	.38	2322 594 54216
C	460	615	750	1240	25.0	BC1438-ND	.53	.46	.38	2322 594 54616
C	510	670	820	1355	25.0	BC1439-ND	.53	.46	.38	2322 594 55116
C	550	745	910	1500	25.0	BC1440-ND	.53	.46	.38	2322 594 55516
D	30	38	47	90	10.0	BC1441-ND	.67	.58	.49	2322 595 53006
D	35	45	56	105	10.0	BC1442-ND	.67	.58	.49	2322 595 53506
D	40	56	68	130	10.0	BC1443-ND	.67	.58	.49	2322 595 54006
D	50	65	82	140	50.0	BC1444-ND	.67	.58	.49	2322 595 55006
D	60	85	100	165	50.0	BC1445-ND	.67	.58	.49	2322 595 56006
D	75	100	120	200	50.0	BC1446-ND	.67	.58	.49	2322 595 57506
D	95	125	150	250	50.0	BC1447-ND	.67	.58	.49	2322 595 59506
D	130	170	205	340	50.0	BC1448-ND	.67	.58	.49	2322 595 51316
D	140	180	220	370	50.0	BC1449-ND	.67	.58	.49	2322 595 51416
D	150	200	240	400	50.0	BC1450-ND	.67	.58	.49	2322 595 51516
D	175	225	275	455	50.0	BC1451-ND	.67	.58	.49	2322 595 51716
D	230	300	360	600	50.0	BC1452-ND	.67	.58	.49	2322 595 52316
D	250	320	390	650	50.0	BC1453-ND	.67	.58	.49	2322 595 52516
D	275	350	430	710	50.0	BC1454-ND	.67	.58	.49	2322 595 52716
D	300	385	470	800	50.0	BC1455-ND	.67	.58	.49	2322 595 53016
D	320	420	510	850	50.0	BC1456-ND	.67	.58	.49	2322 595 53216
D	385	505	620	1025	50.0	BC1457-ND	.67	.58	.49	2322 595 53816
D	420	560	680	1120	50.0	BC1458-ND	.67	.58	.49	2322 595 54216
D	460	615	750	1240	50.0	BC1459-ND	.67	.58	.49	2322 595 54616
D	510	670	820	1355	50.0	BC1460-ND	.67	.58	.49	2322 595 55116
D	550	745	910	1500	50.0	BC1461-ND	.67	.58	.49	2322 595 55516

Multilayer Chip Varistor

(0805 Size) Surface Mount



Features:

- Multilayer Surface Mount surge suppressor
- Inherent bidirectional clamping
- Low capacitance types available
- Excellent energy/volume ratio
- Suitable for wave or reflow soldering
- Compliance to IEC 1 000-4-2
- Operating Temperature Range: -55°C to 125°C

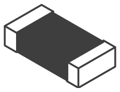
Applications:

- Data lines and I/O port protection
- Protection against EMI and ESD transients
- On-board protection of ICs and transistors
- Modem protection
- LCD protection

Size	Dimensions (mm)		
	L	W	T Max.
0805	2.0 ±0.2	1.25 ±0.15	1.2

Max. Operating Voltage		Varistor Volt. @ 1mA		Max. Clamping Volt. @ 1mA (V)	Max. Peak Current 8 x 20 µs (A)	Max. Surge Energy 10 x 1000 µs (J)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel Pricing 4,000	BC Components Part No.
RMS (VAC)	DC (VDC)	Min. (V)	Max. (V)					1	10	100			
4	5.5	6.4	9.6	21	30	0.1	BC1500CT-ND	.46	.41	.34	BC1500TR-ND	188.50/M	2322 574 10403
6	8	_	_	27	80	0.3	BC1501CT-ND	.46	.41	.34	BC1501TR-ND	188.50/M	2322 574 10601
8	11	_	_	33	80	0.3	BC1502CT-ND	.46	.41	.34	BC1502TR-ND	188.50/M	2322 574 10801
10	14	15.3	21.0	35	30	0.1	BC1503CT-ND	.46	.41	.34	BC1503TR-ND	188.50/M	2322 574 10003
14	18	19.8	25.7	40	30	0.1	BC1504CT-ND	.46	.41	.34	BC1504TR-ND	188.50/M	2322 574 11403
17	22	24.3	29.7	46	30	0.1	BC1505CT-ND	.46	.41	.34	BC1505TR-ND	188.50/M	2322 574 11703
20	26	29.7	38.6	56	80	0.3	BC1506CT-ND	.46	.41	.34	BC1506TR-ND	188.50/M	2322 574 12001
25	31	_	_	65	80	0.3	BC1507CT-ND	.46	.41	.34	BC1507TR-ND	188.50/M	2322 574 12501

Littelfuse® Multilayer Surface Mount Transient Voltage Surge Suppressors ML Series



These components are designed to suppress a variety of transient events, including those specified in by the IEC and other standards used for Electromagnetic Compliance (EMC). The ML Series is typically applied to protect integrated circuits and other components at the circuit board level.

SPECIFICATIONS:

- Typical leakage at 25°C<25uA, maximum leakage 50uA at V_M(DC)
- Average power dissipation of transients for 0603, 0805, 1206 and 1210 sizes not to exceed 0.03W, 0.05@, 0.1W, 0.1W and 0.15W respectively

FEATURES:

- Multilayer ceramic construction technology
- Operating Temperature Range: -55°C to +125°C
- Operating Voltage Range: 5.5V to 120V
- Inherent Bi-directional clamping
- No plastic or epoxy packaging assures better than 94V-0 flammability rating

APPLICATIONS:

- Suppression of inductive switching or other transient events such as EFT and surge voltage at the circuit board level
- ESD Protection for components sensitive to IEC 61000-4-2, MIL-STD 883C Method 3015.7 and other industry specifications. (See also the MLE Series)
- Replace larger surface mount TVS zeners in many applications

Part Number Breakdown for ML and MLE Series

V18MLA1206xxx

PACKING OPTIONS

H: Diameter Reel; 7in (178mm)

END TERMINATION OPTION

No Letter: Ag/Pt (Standard)

W: Ag/Pd

N: Nickel

CAPACITANCE OPTION

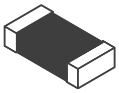
No Letter: Standard

L: Low Capacitance Version. (Where available – see device ratings for standard version).

	Max. Cont. Working Voltage		Max. Non-Repetitive Surge Current	Max. Non-Repetitive Surge Current	Nominal Voltage @ 1mA DC Test Current		Cap-acitance		Cut Tape Pricing				Tape & Reel		
Package	**DC**	**AC**	**(8/20µs) (A)**	**(10/1000µs) (J)**	**Min.**	**Max.**	**(pF)**	**Digi-Key Part No.**	**1**	**10**	**100**	**Digi-Key Part No.**	**Size**	**Price**	**Littelfuse Part No.**
0603	3.5	2.5	30	0.1	3.7	7.0	1100	F2205CT-ND	.53	4.88	36.75	F2205TR-ND	2,500	202.50/M	V3.5MLA0603H
0805	3.5	2.5	40	0.1	3.7	7.0	1200	F2207CT-ND	.56	5.20	39.20	F2207TR-ND	2,500	216.00/M	V3.5MLA0805LH
0805	3.5	2.5	120	0.3	3.7	7.0	2200	F2206CT-ND	.56	5.20	39.20	F2206TR-ND	2,500	216.00/M	V3.5MLA0805H
1206	3.5	2.5	100	0.3	3.7	7.0	6000	F2208CT-ND	1.26	11.70	88.20	F2208TR-ND	2,500	486.00/M	V3.5MLA1206H
0603	5.5	4.0	30	0.1	7.1	9.3	660	F2214CT-ND	.53	4.88	36.75	F2214TR-ND	2,500	202.50/M	V5.5MLA0603H
0805	5.5	4.0	40	0.1	7.1	9.3	860	F2216CT-ND	.56	5.20	39.20	F2216TR-ND	2,500	216.00/M	V5.5MLA0805LH
0805	5.5	4.0	40	0.1	7.1	9.3	860	F2217CT-ND	.70	6.50	49.00	F2217TR-ND	2,500	270.00/M	V5.5MLA0805LNH*
0805	5.5	4.0	120	0.3	7.1	9.3	1600	F2215CT-ND	.56	5.20	39.20	F2215TR-ND	2,500	216.00/M	V5.5MLA0805H
1206	5.5	4.0	150	0.4	7.1	9.3	4500	F2218CT-ND	1.19	11.05	83.30	F2218TR-ND	2,500	459.00/M	V5.5MLA1206H
1206	5.5	4.0	150	0.4	7.1	9.3	4500	F2219CT-ND	.88	8.13	61.25	F2219TR-ND	2,500	337.50/M	V5.5MLA1206NH*
0603	9	6.5	30	0.1	11	16	420	F2226CT-ND	.53	4.88	36.75	F2226TR-ND	2,500	202.50/M	V9MLA0603H
0603	9	6.5	30	0.1	11	16	420	F2227CT-ND	.67	6.18	46.55	F2227TR-ND	2,500	256.50/M	V9MLA0603NH
0805	9	6.5	40	0.1	11	14	450	F2228CT-ND	.56	5.20	39.20	F2228TR-ND	2,500	216.00/M	V9MLA0805LH
0805	12	9.0	40	0.1	14	18.5	350	F2171CT-ND	.56	5.20	39.20	F2171TR-ND	2,500	216.00/M	V12MLA0805LH
0603	14	10	30	0.1	15.9	20.3	150	F2173CT-ND	.53	4.88	36.75	F2173TR-ND	2,500	202.50/M	V14MLA0603H
0603	14	10	30	0.1	15.9	20.3	150	F2174CT-ND	.67	6.18	46.55	F2174TR-ND	2,500	256.50/M	V14MLA0603NH*
0805	14	10	40	0.1	15.9	20.3	270	F2176CT-ND	.56	5.20	39.20	F2176TR-ND	2,500	216.00/M	V14MLA0805LH
0805	14	10	40	0.1	15.9	20.3	270	F2177CT-ND	.70	6.50	49.00	F2177TR-ND	2,500	270.00/M	V14MLA0805LNH*
0805	14	10	120	0.3	15.9	20.3	480	F2175CT-ND	.56	5.20	39.20	F2175TR-ND	2,500	216.00/M	V14MLA0805H
1206	14	10	150	0.4	15.9	20.3	1600	F2178CT-ND	1.19	11.05	83.30	F2178TR-ND	2,500	459.00/M	V14MLA1206H
1206	14	10	150	0.4	15.9	20.3	1600	F2179CT-ND	.81	7.48	56.35	F2179TR-ND	2,500	310.50/M	V14MLA1206NH*
0603	18	14	30	0.1	22	28	125	F2181CT-ND	.53	4.88	36.75	F2181TR-ND	2,500	202.50/M	V18MLA0603H
0805	18	14	40	0.1	22	28	250	F2183CT-ND	.56	5.20	39.20	F2183TR-ND	2,500	216.00/M	V18MLA0805LH
0805	18	14	40	0.1	22	28	250	F2184CT-ND	.70	6.50	49.00	F2184TR-ND	2,500	270.00/M	V18MLA0805LNH*
0805	18	14	120	0.3	22	28	450	F2182CT-ND	.56	5.20	39.20	F2182TR-ND	2,500	216.00/M	V18MLA0805H
1206	18	14	150	0.4	22	28	1100	F2185CT-ND	1.19	11.05	83.30	F2185TR-ND	2,500	459.00/M	V18MLA1206H
1210	18	14	500	2.5	22	28	1250	F2186CT-ND	1.72	15.93	120.05	F2186TR-ND	2,000	661.50/M	V18MLA1210H
0603	26	20	30	0.1	31	38	90	F2191CT-ND	.39	3.58	26.95	F2191TR-ND	2,500	148.50/M	V26MLA0603H
0805	26	20	40	0.1	29.5	38.5	115	F2193CT-ND	.56	5.20	39.20	F2193TR-ND	2,500	216.00/M	V26MLA0805LH
0805	26	20	40	0.1	29.5	38.5	115	F2194CT-ND	.70	6.50	49.00	F2194TR-ND	2,500	270.00/M	V26MLA0805LNH*
0805	26	20	100	0.3	29.5	38.5	190	F2192CT-ND	.56	5.20	39.20	F2192TR-ND	2,500	216.00/M	V26MLA0805H
0805	26	20	100	0.3	29.5	38.5	190	F2195CT-ND	.70	6.50	49.00	F2195TR-ND	2,500	270.00/M	V26MLA0805NH*
1206	26	20	150	0.6	29.5	38.5	900	F2196CT-ND	.88	8.13	61.25	F2196TR-ND	2,500	337.50/M	V26MLA1206H
1206	26	20	150	0.6	29.5	38.5	900	F2197CT-ND	.81	7.48	56.35	F2197TR-ND	2,500	310.50/M	V26MLA1206NH*
1210	26	20	300	1.2	29.5	38.5	1000	F2198CT-ND	1.09	10.08	75.95	F2198TR-ND	2,000	418.50/M	V26MLA1210H
0603	30	25	30	0.1	37	46	75	F2199CT-ND	.53	4.88	36.75	F2199TR-ND	2,500	202.50/M	V30MLA0603H
0805	30	25	30	0.1	37	46	80	F2200CT-ND	.56	5.20	39.20	F2200TR-ND	2,500	216.00/M	V30MLA0805LH
1210	30	25	220	0.9	35	43	1530	F2202CT-ND	1.72	15.93	120.05	F2202TR-ND	2,000	661.50/M	V30MLA1210LH
1210	30	25	280	1.2	35	43	1575	F2201CT-ND	1.09	10.08	75.95	F2201TR-ND	2,000	418.50/M	V30MLA1210H
1206	33	26	180	0.8	38	49	550	F2203CT-ND	.88	8.13	61.25	F2203TR-ND	2,500	337.50/M	V33MLA1206H
1206	33	26	180	0.8	38	49	550	F2204CT-ND	1.40	13.00	98.00	F2204TR-ND	2,500	540.00/M	V33MLA1206NH*
1206	42	30	180	0.8	46	60	550	F2209CT-ND	.88	8.13	61.25	F2209TR-ND	2,500	337.50/M	V42MLA1206H
1206	42	30	180	0.8	46	60	550	F2210CT-ND	.81	7.48	56.35	F2210TR-ND	2,500	310.50/M	V42MLA1206NH*
1210	48	40	250	1.2	54.5	66.5	450	F2211CT-ND	1.09	10.08	75.95	F2211TR-ND	2,000	418.50/M	V48MLA1210H
1206	56	40	180	1.0	61	77	150	F2212CT-ND	.84	7.80	58.80	F2212TR-ND	2,500	324.00/M	V56MLA1206H
1210	60	50	250	1.5	67	83	375	F2220CT-ND	1.72	15.93	120.05	F2220TR-ND	2,000	661.50/M	V60MLA1210H
1206	68	50	180	1.0	76	90	150	F2221CT-ND	.84	7.80	58.80	F2221TR-ND	2,500	324.00/M	V68MLA1206H
1206	68	50	180	1.0	76	90	150	F2222CT-ND	1.40	13.00	98.00	F2222TR-ND	2,500	540.00/M	V68MLA1206NH*
1210	85	67	250	2.5	95	115	225	F2223CT-ND	1.09	10.08	75.95	F2223TR-ND	2,000	418.50/M	V85MLA1210H
1210	85	67	250	2.5	95	115	225	F2224CT-ND	1.05	9.75	73.50	F2224TR-ND	2,000	405.00/M	V85MLA1210NH*
1210	120	107	125	2.0	135	165	65	F2170CT-ND	1.09	10.08	75.95	F2170TR-ND	2,000	418.50/M	V120MLA1210H

* Nickel Plated Terminations

Multilayer Surface Mount ESD Suppressor/ Filter



MLE Series

These components are designed to suppress ESD events, including those specified in IEC61000-4-2 or other Standards used for Electromagnetic Compliance testing.

FEATURES:

- Rated for ESD (IEC 61000-4-2)
- Characterized for Impedance and Capacitance
- Operating Temperature Range: -55°C to +125°C
- Multilayer Ceramic Construction Technology

APPLICATIONS:

- Protection of components and circuits sensitive to ESD Transients occurring on power supplies; control and signal lines.
- Suppression of ESD events such as specified in IEC 61000-4-2 or MIL-STD-883C method 3015-7: for Electromagnetic Compliance (EMC).

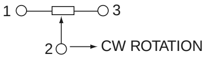
	Max. Cont. Working Voltage†	Nominal Voltage @1mA DC		Max. ESD Clamp Voltage§		Max. Leakage	Cap-acitance		Cut Tape Price Each				Tape & Reel Pricing	
Package		**Min.**	**Max.**	**8kV Contact‡**	**15kV Air‡‡**	**IL@18V(µA)**	**(pF)**	**Digi-Key Part No.**	**1**	**10**	**100**	**Digi-Key Part No.**	**2,500**	**Littelfuse Part No.**
0603	18	22	28	75	85	25	100	F2188CT-ND	.54	.51	.38	F2188TR-ND	208.44/M	V18MLE0603H
0805	18	22	28	70	75	25	500	F2189CT-ND	.56	.52	.40	F2189TR-ND	216.00/M	V18MLE0805H
1206	18	22	28	65	65	25	1700	F2190CT-ND	1.19	1.11	.84	F2190TR-ND	459.00/M	V18MLE1206H

NOTE: † For applications of 18VDC or less. Higher voltages available. § Tested to IEC6100-4-2 Human Body Model (HBM) discharge test circuit. ‡ Direct discharge to device terminals (IEC preferred test method). ‡‡ Corona discharge through air (represents actual ESD event). Capacitance may be customized, contact your Littelfuse Sales Representative.

Cermet Potentiometers

Model ST-32

Surface Mount, Single-Turn

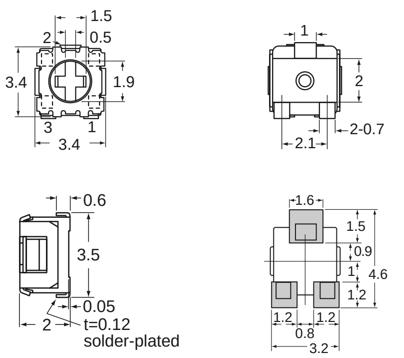


FEATURES: • Top and side adjustment styles • Has a rotor with a cross slot for ease of adjustment • Leaded terminals provide strong as adhesive strength against P.C.B. bending • J-hook, Gull wing and leaded terminal configurations • Compatible with P.C. B. pad outline dimensions for ST-3 series • Sealed/Washable

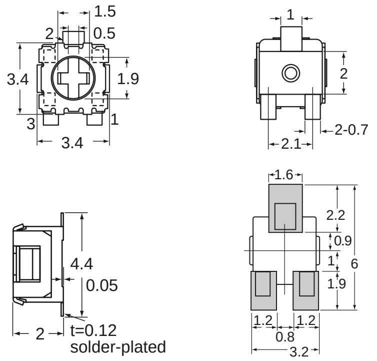
ELECTRICAL: **Resistance Tolerance:** ±20%. **Power Rating:** 0.125W at 70°C, 0W at 125°C. **Input Voltage Maximum:** 200VDC or power rating, whichever is less. **Wiper Current Maximum:** 100mA or power rating, whichever is less. **Effective Electrical Angle:** 210° (1 turn). **End Resistance:** 1% or 2 Ohms, whichever is greater. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is greater. **Operating Temperature Range:** -55°C to +125°C. **Insulation Resistance:** 1000 MΩ minimum at 500VDC. **Dielectric Strength:** 500VAC, 60s.

MECHANICAL: **Mechanical Angle:** 250° (1 turn). **Operating Torque:** 51 gram force-cm maximum. **Stop Strength:** 204 gram force-cm minimum. **Rotational Life:** 100 cycles (▲ R/R ≤ 2 Ω +3%).

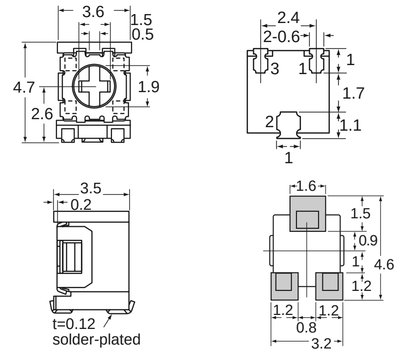
ST-32TA - Top Adjustment, J-Hook



ST-32TB - Top Adjustment, Gull Wing



ST-32TG - Side Adjustment, J-Hook



Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
10	ST32TA100CT-ND	ST32TB100CT-ND	2.21	1.60	ST32TA100TR-ND	ST32TB100TR-ND	551.25
20	ST32TA200CT-ND	ST32TB200CT-ND	2.21	1.60	ST32TA200TR-ND	ST32TB200TR-ND	551.25
50	ST32TA500CT-ND	ST32TB500CT-ND	2.07	1.50	ST32TA500TR-ND	ST32TB500TR-ND	517.50
100	ST32TA101CT-ND	ST32TB101CT-ND	2.07	1.50	ST32TA101TR-ND	ST32TB101TR-ND	517.50
200	ST32TA201CT-ND	ST32TB201CT-ND	2.07	1.50	ST32TA201TR-ND	ST32TB201TR-ND	517.50
300	ST32TA301CT-ND	ST32TB301CT-ND	2.48	1.79	ST32TA301TR-ND	ST32TB301TR-ND	618.75
500	ST32TA501CT-ND	ST32TB501CT-ND	2.07	1.50	ST32TA501TR-ND	ST32TB501TR-ND	517.50
1K	ST32TA102CT-ND	ST32TB102CT-ND	2.07	1.50	ST32TA102TR-ND	ST32TB102TR-ND	517.50
2K	ST32TA202CT-ND	ST32TB202CT-ND	2.07	1.50	ST32TA202TR-ND	ST32TB202TR-ND	517.50
3K	ST32TA302CT-ND	ST32TB302CT-ND	2.48	1.79	ST32TA302TR-ND	ST32TB302TR-ND	618.75
5K	ST32TA502CT-ND	ST32TB502CT-ND	2.07	1.50	ST32TA502TR-ND	ST32TB502TR-ND	517.50
10K	ST32TA103CT-ND	ST32TB103CT-ND	2.07	1.50	ST32TA103TR-ND	ST32TB103TR-ND	517.50
20K	ST32TA203CT-ND	ST32TB203CT-ND	2.07	1.50	ST32TA203TR-ND	ST32TB203TR-ND	517.50
30K	ST32TA303CT-ND	ST32TB303CT-ND	2.48	1.79	ST32TA303TR-ND	ST32TB303TR-ND	618.75
50K	ST32TA503CT-ND	ST32TB503CT-ND	2.07	1.50	ST32TA503TR-ND	ST32TB503TR-ND	517.50
100K	ST32TA104CT-ND	ST32TB104CT-ND	2.07	1.50	ST32TA104TR-ND	ST32TB104TR-ND	517.50
200K	ST32TA204CT-ND	ST32TB204CT-ND	2.07	1.50	ST32TA204TR-ND	ST32TB204TR-ND	517.50
500K	ST32TA504CT-ND	ST32TB504CT-ND	2.07	1.50	ST32TA504TR-ND	ST32TB504TR-ND	517.50
1M	ST32TA105CT-ND	ST32TB105CT-ND	2.07	1.50	ST32TA105TR-ND	ST32TB105TR-ND	517.50

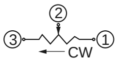
Res. (Ohms)	Digi-Key Part No.	Cut Tape Price Each 10	100	Digi-Key Part No.	T&R Pricing* 500
10	ST32TG100CT-ND	2.66	1.92	ST32TG100TR-ND	663.75
20	ST32TG200CT-ND	2.66	1.92	ST32TG200TR-ND	663.75
50	ST32TG500CT-ND	2.48	1.79	ST32TG500TR-ND	618.75
100	ST32TG101CT-ND	2.48	1.79	ST32TG101TR-ND	618.75
200	ST32TG201CT-ND	2.48	1.79	ST32TG201TR-ND	618.75
300	ST32TG301CT-ND	2.70	1.95	ST32TG301TR-ND	675.00
500	ST32TG501CT-ND	2.48	1.79	ST32TG501TR-ND	618.75
1K	ST32TG102CT-ND	2.48	1.79	ST32TG102TR-ND	618.75
2K	ST32TG202CT-ND	2.48	1.79	ST32TG202TR-ND	618.75
3K	ST32TG302CT-ND	2.70	1.95	ST32TG302TR-ND	675.00
5K	ST32TG502CT-ND	2.48	1.79	ST32TG502TR-ND	618.75
10K	ST32TG103CT-ND	2.48	1.79	ST32TG103TR-ND	618.75
20K	ST32TG203CT-ND	2.48	1.79	ST32TG203TR-ND	618.75
30K	ST32TG303CT-ND	2.70	1.95	ST32TG303TR-ND	675.00
50K	ST32TG503CT-ND	2.48	1.79	ST32TG503TR-ND	618.75
100K	ST32TG104CT-ND	2.48	1.79	ST32TG104TR-ND	618.75
200K	ST32TG204CT-ND	2.48	1.79	ST32TG204TR-ND	618.75
500K	ST32TG504CT-ND	2.48	1.79	ST32TG504TR-ND	618.75
1M	ST32TG105CT-ND	2.48	1.79	ST32TG105TR-ND	618.75

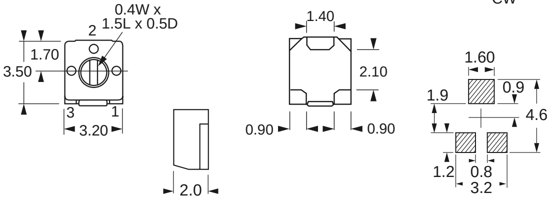
*T&R Denotes Tape & Reel Pricing.

Model ST3

Surface Mount, 3mm Squared Single-Turn

ST3A - Top Adjust





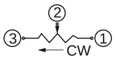
FEATURES: • Sealed to Allow for Automatic Processing • Precious Metal Alloy Contact • Chip Style Design for Compact Size. ***ELECTRICAL:*** **Resistance Tolerance:** ±20% Standard. **Temp. Coeff. of Resistance:** 10 Ohms to 50 Ohms ± 250 ppm/°C, 100 Ohms to 1 Meg. Ohm ± 100 ppm/°C. **Power Rating:** 0.125W at 70°C. **Operating Voltage Max.:** 200VDC or Power Rating, whichever is less. **Wiper Current Max.:** 100mA or Power Rating, whichever is less. **Nom. Electrical Angle:** 210°. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, whichever is greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is greater. **Oper. Temperature Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC. **Dielectric Strength:** 500VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 240°. **Operating Torque:** 50 gram-cm max. (.69 Oz. in.). **Min. Stop Strength:** 200 gram-cm min (2.8 Oz. in.). **Rotational Life:** 100 cycles (▲ R/R ≤ 2 Ω +3%).

Res. (Ohms)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	T & R Pricing* 1,000
1K	ST3A102CT-ND	1.56	1.44	1.35	ST3A102TR-ND	843.00
2K	ST3A202CT-ND	1.56	1.44	1.35	ST3A202TR-ND	843.00
5K	ST3A502CT-ND	1.56	1.44	1.35	ST3A502TR-ND	843.00
10K	ST3A103CT-ND	1.56	1.44	1.35	ST3A103TR-ND	843.00
20K	ST3A203CT-ND	1.56	1.44	1.35	ST3A203TR-ND	843.00
50K	ST3A503CT-ND	1.56	1.44	1.35	ST3A503TR-ND	843.00
100K	ST3A104CT-ND	1.56	1.44	1.35	ST3A104TR-ND	843.00

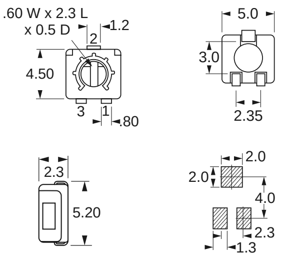
Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

Model ST4

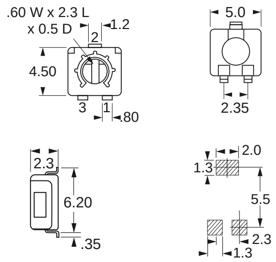
Surface Mount, 4mm Squared Single-Turn



ST4A - J Lead, Top Adjust



ST4B - Gull Wing, Top Adjust



FEATURES: • Sealed to Allow for Automatic Processing • Vertical and Horizontal Adjustment Styles • Precious Metal Alloy Contact • Gull Wing, J Lead and Thru Hole Pin Styles. ***ELECTRICAL:*** **Resistance Tolerance:** ±20% Standard. **Temp. Coeff. of Resistance:** 100 Ohms to 2 Meg. ± 100 ppm, other ±250 ppm. **Power Rating:** 1/4W at 70°C. **Operating Voltage Max.:** 200VDC or Power Rating, whichever is less. **Wiper Current Max.:** 100mA or Power Rating, whichever is Less. **Nom. Electrical Angle:** 210°. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 500VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 240°. **Operating Torque:** 100 gram-cm max. (1.39 Oz. in.). **Min. Stop Strength:** 300 gram-cm min (4.17 Oz. in.). **Rotational Life:** 100 cycles (▲ R/R ≤ 2 Ω +3%).

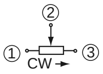
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
1K	ST4A102CT-ND	ST4B102CT-ND	1.46	1.35	1.26	ST4A102TR-ND	ST4B102TR-ND	486.50
2K	ST4A202CT-ND	ST4B202CT-ND	1.46	1.35	1.26	ST4A202TR-ND	ST4B202TR-ND	486.50
5K	ST4A502CT-ND	ST4B502CT-ND	1.46	1.35	1.26	ST4A502TR-ND	ST4B502TR-ND	486.50
10K	ST4A103CT-ND	ST4B103CT-ND	1.46	1.35	1.26	ST4A103TR-ND	ST4B103TR-ND	486.50
20K	ST4A203CT-ND	ST4B203CT-ND	1.46	1.35	1.26	ST4A203TR-ND	ST4B203TR-ND	486.50
50K	ST4A503CT-ND	ST4B503CT-ND	1.46	1.35	1.26	ST4A503TR-ND	ST4B503TR-ND	486.50
100K	ST4A104CT-ND	ST4B104CT-ND	1.46	1.35	1.26	ST4A104TR-ND	ST4B104TR-ND	486.50

Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

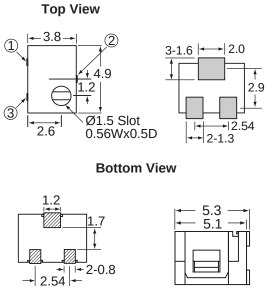
(Continued)

Cermet Potentiometers *(Cont.)*

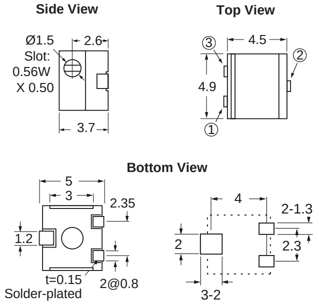
Model SM4 *Surface Mount 4mm, 12-Turn, Sealed*



SM4W - J Lead, Top Adjust



SM4A - Side Adjust



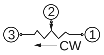
FEATURES: • Sealed to Allow for Automatic Processing • Stable Cermet Element • Precious Metal Contact. ***ELECTRICAL:*** **Resistance Range:** 10Ω – 2MΩ. **Resistance Tolerance:** ±10%. **Max. Temp. Coefficient:** ± 100 ppm/°C. **Power Rating:** 0.25 W at 85°C, 0 W at 150°C. **Max. Input Voltage:** 300VDC or Power Rating, whichever is less. **Max. Wiper Current:** 100mA or Power Rating, whichever is less. **Max. End Resistance:** 1% or 2Ω, whichever is greater. **Contact Resistance Variation:** 1% or 3Ω, whichever is greater. **Operating Temp. Range:** -65°C to +150°C. **Min. Insulation Resistance:** 1000MΩ at 500VDC **Dielectric Strength:** 600VAC, 1 minute. ***MECHANICAL:*** **Mechanical Turn:** 12 Turns. **Operating Torque:** 20-300 g.cm. **Min. Stop Strength:** Clutch Action. **Rotational Life:** 200 cycles, ±3Ω +3%.

Res. (Ohms)	Digi-Key Part No.	Price Each 1	10	100	500
100	SM4W101-ND	3.75	3.25	2.94	2.50
200	SM4W201-ND	3.75	3.25	2.94	2.50
500	SM4W501-ND	3.75	3.25	2.94	2.50
1K	SM4W102-ND	3.75	3.25	2.94	2.50
2K	SM4W202-ND	3.75	3.25	2.94	2.50
5K	SM4W502-ND	3.75	3.25	2.94	2.50
10K	SM4W103-ND	3.75	3.25	2.94	2.50
20K	SM4W203-ND	3.75	3.25	2.94	2.50
50K	SM4W503-ND	3.75	3.25	2.94	2.50
100K	SM4W104-ND	3.75	3.25	2.94	2.50
10	SM4A100-ND	3.75	3.25	2.94	2.50
20	SM4A200-ND	3.75	3.25	2.94	2.50
50	SM4A500-ND	3.75	3.25	2.94	2.50

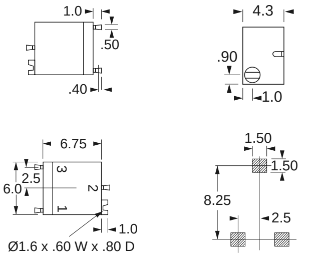
Res. (Ohms)	Digi-Key Part No.	Price Each 1	10	100	500
100	SM4A101-ND	3.75	3.25	2.94	2.50
200	SM4A201-ND	3.75	3.25	2.94	2.50
500	SM4A501-ND	3.75	3.25	2.94	2.50
1K	SM4A102-ND	3.75	3.25	2.94	2.50
2K	SM4A202-ND	3.75	3.25	2.94	2.50
5K	SM4A502-ND	3.75	3.25	2.94	2.50
10K	SM4A103-ND	3.75	3.25	2.94	2.50
20K	SM4A203-ND	3.75	3.25	2.94	2.50
50K	SM4A503-ND	3.75	3.25	2.94	2.50
100K	SM4A104-ND	3.75	3.25	2.94	2.50
500K	SM4A504-ND	3.75	3.25	2.94	2.50
1 Meg.	SM4A105-ND	3.75	3.25	2.94	2.50

Units Marked with Resistance Code and 2-Digit Date Code.

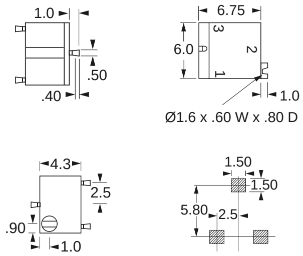
Model ST5 *Surface Mount, 6mm Squared Multi-Turn*



ST5P - Gull Wing, Side Adjust



ST5W - Gull Wing, Top Adjust

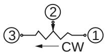


FEATURES: • Sealed to Allow for Automatic Processing • Vertical and Horizontal Mount • Precious Metal Alloy Contact. ***ELECTRICAL:*** **Resistance Tolerance:** ±10% Standard. **Temp. Coeff. of Resistance:** 100 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/4W at 85°C. **Operating Voltage Max.:** 200VDC or Power Rating, whichever is less. **Wiper Current Max.:** 100mA or Power Rating, whichever is less. **Nom. Electrical Angle:** 11 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, whichever is greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, whichever is greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 600VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 14 Turns. **Operating Torque:** 200 gram-cm max. (2.78 Oz. in.). **Min. Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 200 cycles, 10Ω to 200 (▲ R/R ≤ 0.5 Ω +3%), 500Ω to 2MΩ (▲ R/R ≤ 0.5 Ω +2%).

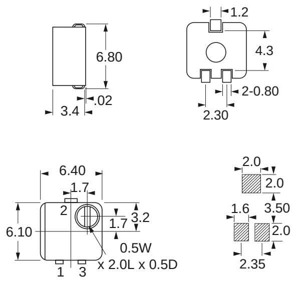
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
1K	ST5P102CT-ND	ST5W102CT-ND	3.51	3.18	2.70	ST5P102TR-ND	ST5W102TR-ND	1200.50
2K	ST5P202CT-ND	ST5W202CT-ND	3.51	3.18	2.70	ST5P202TR-ND	ST5W202TR-ND	1200.50
5K	ST5P502CT-ND	ST5W502CT-ND	3.51	3.18	2.70	ST5P502TR-ND	ST5W502TR-ND	1200.50
10K	ST5P103CT-ND	ST5W103CT-ND	3.51	3.18	2.70	ST5P103TR-ND	ST5W103TR-ND	1200.50
20K	ST5P203CT-ND	ST5W203CT-ND	3.51	3.18	2.70	ST5P203TR-ND	ST5W203TR-ND	1200.50
50K	ST5P503CT-ND	ST5W503CT-ND	3.51	3.18	2.70	ST5P503TR-ND	ST5W503TR-ND	1200.50
100K	ST5P104CT-ND	ST5W104CT-ND	3.51	3.18	2.70	ST5P104TR-ND	ST5W104TR-ND	1200.50

Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

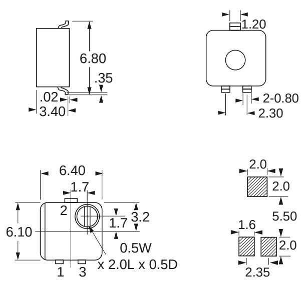
Model ST7 *Low Profile, Surface Mount, 7mm Squared Multi-Turn*



ST7A - J Lead, Top Adjust



ST7B - Gull Wing, Top Adjust

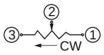


FEATURES: • Sealed to Allow for Auto. Processing • Precious Metal Alloy Contact. ***ELECTRICAL:*** **Resistance Tolerance:** ±20% Standard. **Temp. Coeff. of Resistance:** 100 Ohms to 1 Meg. ± 100 ppm/°C, 50Ω ±250 ppm/°C. **Power Rating:** 1/4W at 70°C. **Operating Volt. Max.:** 200VDC or Power Rating, Whichever is less. **Wiper Current Max.:** 100mA or Power Rating, Whichever is Less. **Nom. Electrical Angle:** 2.5 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 3 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 500VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 3 Turns. **Operating Torque:** 50 gram-cm max. (0.70 Oz. in.). **Min. Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 100 cycles (▲ R/R ≤ 2.0 Ω +3%).

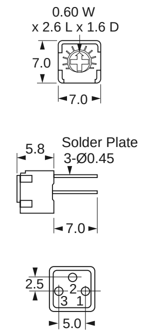
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Digi-Key Part No.	T&R Pricing* 500
1K	ST7A102CT-ND	ST7B102CT-ND	5.33	4.82	4.10	ST7A102TR-ND	ST7B102TR-ND	1710.00
2K	ST7A202CT-ND	ST7B202CT-ND	5.33	4.82	4.10	ST7A202TR-ND	ST7B202TR-ND	1710.00
5K	ST7A502CT-ND	ST7B502CT-ND	5.33	4.82	4.10	ST7A502TR-ND	ST7B502TR-ND	1710.00
10K	ST7A103CT-ND	ST7B103CT-ND	5.33	4.82	4.10	ST7A103TR-ND	ST7B103TR-ND	1710.00
20K	ST7A203CT-ND	ST7B203CT-ND	5.33	4.82	4.10	ST7A203TR-ND	ST7B203TR-ND	1710.00
50K	ST7A503CT-ND	ST7B503CT-ND	5.33	4.82	4.10	ST7A503TR-ND	ST7B503TR-ND	1710.00
100K	ST7A104CT-ND	ST7B104CT-ND	5.33	4.82	4.10	ST7A104TR-ND	ST7B104TR-ND	1710.00

Units Marked with Resistance Mark and 1 Digit Date Code. *T&R Denotes Tape & Reel Pricing.

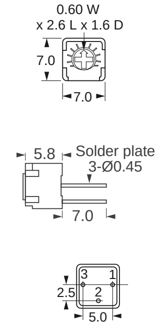
Model CT6 *6mm Squared Single Turn*



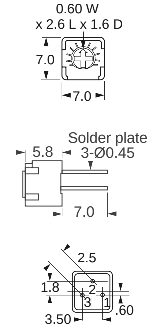
CT6P - Top Adjust



CT6R - Top Adjust

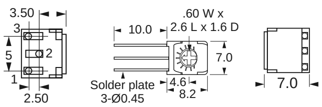


CT6W - Top Adjust



FEATURES: • Sealed to Allow for Automatic Processing • Precious Metal Alloy Contact • Highly Automated Assembly. ***ELECTRICAL:*** **Resistance Tolerance:** ±10% Standard. **Temp. Coeff. of Resistance:** 50 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/2W at 70°C. **Operating Voltage Max.:** 200VDC or Power Rating, Whichever is less. **Wiper Current Max.:** 100mA or Power Rating, Whichever is Less. **Nom. Electrical Angle:** 220°. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 900VAC rms, 1 min., 1 milliamp max. ***MECHANICAL:*** **Nom. Mechanical Angle:** 260°. **Operating Torque:** 20-200 gram-cm max. (0.27-2.78 Oz. in.). **Min. Stop Strength:** 500 gram-cm min. (6.94 Oz.-in.). **Rotational Life:** 200 cycles (▲ R/R ≤ 2 Ω +3%) **Solderability:** Mil-Std-202 Method 208. **Min. Terminal Strength:** 1 Kg.

CT6X - Side Adjust



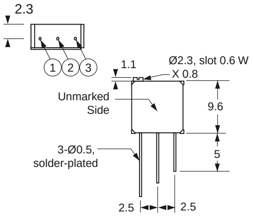
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500	1,000
1K	CT6P102-ND	CT6R102-ND	CT6W102-ND	CT6X102-ND	.84	.73	.66	.56	.49
2K	CT6P202-ND	CT6R202-ND	CT6W202-ND	CT6X202-ND	.84	.73	.66	.56	.49
5K	CT6P502-ND	CT6R502-ND	CT6W502-ND	CT6X502-ND	.84	.73	.66	.56	.49
10K	CT6P103-ND	CT6R103-ND	CT6W103-ND	CT6X103-ND	.84	.73	.66	.56	.49
20K	CT6P203-ND	CT6R203-ND	CT6W203-ND	CT6X203-ND	.84	.73	.66	.56	.49
50K	CT6P503-ND	CT6R503-ND	CT6W503-ND	CT6X503-ND	.84	.73	.66	.56	.49
100K	CT6P104-ND	CT6R104-ND	CT6W104-ND	CT6X104-ND	.84	.73	.66	.56	.49

Units Marked with Resistance Mark and 1 Digit Date Code.

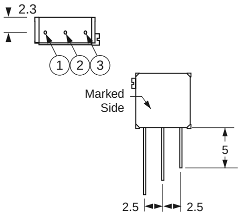
(Continued)

Model CT94 *9mm Squared Multi-Turn*

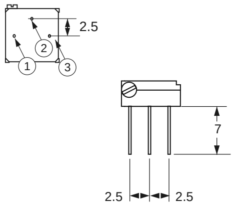
CT94W - Top Adjust



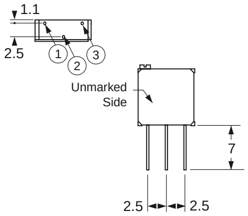
CT94X - Side Adjust



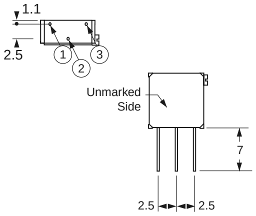
CT94P - Side Adjust

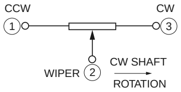


CT94Y - Top Adjust



CT94Z- Side Adjust





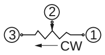
ELECTRICAL: **Resistance Tol.:** ±10%. **Temp. Coeff. of Resistance:** 50 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/2W at 70°C, 0W at 125°C. **Operating Voltage Max.:** 300VDC or Power Rating, Whichever is less. **Wiper Current Max.:** 100mA or Power Rating, Whichever is Less. **End Resistance Max.:** 1% or 2 Ohms, Whichever is Greater. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Oper. Temp. Range:** -55°C to +125°C. **Min. Insulation Resistance:** 1000 Meg Ohms. at 500VDC. **Dielectric Strength:** 900VAC rms, 1 min. **Number of Mechanical Turns:** 18 turns. ***MECHANICAL:*** **Operating Torque:** 357 gram-cm max. **Mechanical Stop:** Clutch Action. **Minimum Terminal Strength:** 1.02Kg. **Rotational Life:** 200 cycles (▲ R/R ± 2 Ω +3%)

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500
10	CT94W100-ND	CT94X100-ND	1.43	1.33	1.20	1.02
20	CT94W200-ND	CT94X200-ND	1.43	1.33	1.20	1.02
50	CT94W500-ND	CT94X500-ND	1.43	1.33	1.20	1.02
100	CT94W101-ND	CT94X101-ND	1.43	1.33	1.20	1.02
200	CT94W201-ND	CT94X201-ND	1.43	1.33	1.20	1.02
500	CT94W501-ND	CT94X501-ND	1.43	1.33	1.20	1.02
1K	CT94W102-ND	CT94X102-ND	1.43	1.33	1.20	1.02
2K	CT94W202-ND	CT94X202-ND	1.43	1.33	1.20	1.02
5K	CT94W502-ND	CT94X502-ND	1.43	1.33	1.20	1.02
10K	CT94W103-ND	CT94X103-ND	1.43	1.33	1.20	1.02
20K	CT94W203-ND	CT94X203-ND	1.43	1.33	1.20	1.02
50K	CT94W503-ND	CT94X503-ND	1.43	1.33	1.20	1.02
100K	CT94W104-ND	CT94X104-ND	1.43	1.33	1.20	1.02
200K	CT94W204-ND	CT94X204-ND	1.43	1.33	1.20	1.02
500K	CT94W504-ND	CT94X504-ND	1.43	1.33	1.20	1.02
1 Meg	CT94W105-ND	CT94X105-ND	1.43	1.33	1.20	1.02
2 Meg	CT94W205-ND	CT94X205-ND	1.43	1.33	1.20	1.02

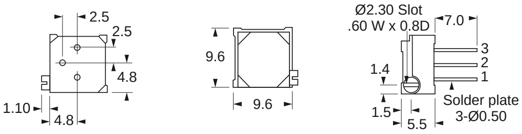
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500
10	CT94P100-ND	CT94Y100-ND	CT94Z100-ND	1.57	1.46	1.32	1.12
20	CT94P200-ND	CT94Y200-ND	CT94Z200-ND	1.57	1.46	1.32	1.12
50	CT94P500-ND	CT94Y500-ND	CT94Z500-ND	1.57	1.46	1.32	1.12
100	CT94P101-ND	CT94Y101-ND	CT94Z101-ND	1.57	1.46	1.32	1.12
200	CT94P201-ND	CT94Y201-ND	CT94Z201-ND	1.57	1.46	1.32	1.12
500	CT94P501-ND	CT94Y501-ND	CT94Z501-ND	1.57	1.46	1.32	1.12
1K	CT94P102-ND	CT94Y102-ND	CT94Z102-ND	1.57	1.46	1.32	1.12
2K	CT94P202-ND	CT94Y202-ND	CT94Z202-ND	1.57	1.46	1.32	1.12
5K	CT94P502-ND	CT94Y502-ND	CT94Z502-ND	1.57	1.46	1.32	1.12
10K	CT94P103-ND	CT94Y103-ND	CT94Z103-ND	1.57	1.46	1.32	1.12
20K	CT94P203-ND	CT94Y203-ND	CT94Z203-ND	1.57	1.46	1.32	1.12
50K	CT94P503-ND	CT94Y503-ND	CT94Z503-ND	1.57	1.46	1.32	1.12
100K	CT94P104-ND	CT94Y104-ND	CT94Z104-ND	1.57	1.46	1.32	1.12
200K	CT94P204-ND	CT94Y204-ND	CT94Z204-ND	1.57	1.46	1.32	1.12
500K	CT94P504-ND	CT94Y504-ND	CT94Z504-ND	1.57	1.46	1.32	1.12
1 Meg	CT94P105-ND	CT94Y105-ND	CT94Z105-ND	1.57	1.46	1.32	1.12
2 Meg	CT94P205-ND	CT94Y205-ND	CT94Z205-ND	1.57	1.46	1.32	1.12

Units Marked with Resistance Code and 1 Digit Date Code.

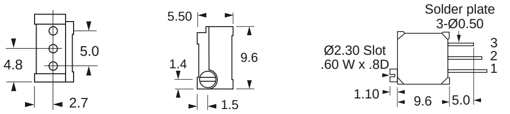
Model CT9P *9mm Squared Multi-Turn*



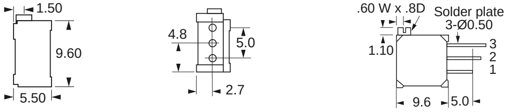
CT9P — Side Adjust



CT9W — Top Adjust



CT9X, Side Adjust



FEATURES:
- Sealed to Withstand Board Washing
- Precious Metal Contact
- Highly Automated Assembly.

ELECTRICAL:
Resistance Tolerance: ±10% Standard. **Temperature Coefficient of Resistance:**. 50 Ohms to 2 Meg. ± 100 ppm/°C, others ±250 ppm/°C. **Power Rating:** 1/2W at 70°C. **Operating Voltage Maximum:** 300VDC or Power Rating, Whichever is less. **Wiper Current Maximum:** 100mA or Power Rating, Whichever is Less. **Nominal Electrical Angle:** 16 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Operating Temperature Range:** -55°C to +125°C. **Minimum Insulation Resistance:** 1000 Meg. at 500VDC for 2 minutes. **Dielectric Strength:** 900VAC rms, 1 min., 1 milliamp max.

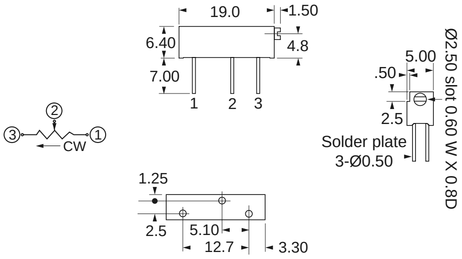
MECHANICAL:
Nominal Mechanical Angle: 18 Turns. **Operating Torque:** 360 gram-cm max. (5 Oz.-in.). **Min. Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 200 cycles, 10 Ω - 200 Ω, ▲ R/R ≤ ± (0.5 Ω + 3%), 500 Ω - 5M Ω ▲ R/R ≤ ± (0.5 Ω + 2%). **Solderability:** Mil-Std-202 Method 208. **Minimum Terminal Strength:** 1 Kg.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Price Each 1	10	100	500	1,000
1K	CT9P102-ND	CT9W102-ND	CT9X102-ND	1.65	1.56	1.32	1.23	1.07
2K	CT9P202-ND	CT9W202-ND	CT9X202-ND	1.65	1.56	1.32	1.23	1.07
5K	CT9P502-ND	CT9W502-ND	CT9X502-ND	1.65	1.56	1.32	1.23	1.07
10K	CT9P103-ND	CT9W103-ND	CT9X103-ND	1.65	1.56	1.32	1.23	1.07
20K	CT9P203-ND	CT9W203-ND	CT9X203-ND	1.65	1.56	1.32	1.23	1.07
50K	CT9P503-ND	CT9W503-ND	CT9X503-ND	1.65	1.56	1.32	1.23	1.07
100K	CT9P104-ND	CT9W104-ND	CT9X104-ND	1.65	1.56	1.32	1.23	1.07

Units Marked with Resistance Mark and 1 Digit Date Code.

Model CT20 *20mm Rectangular Multi-Turn*

CT20P — Side Adjust



FEATURES: • Sealed to Allow for Automatic Processing • Precious Metal Alloy Contact • Highly Automated Assembly.

ELECTRICAL: **Resistance Tolerance:** ±10% Standard. **Temperature Coefficient of Resistance:** 50 Ohms to 2 Meg. ± 100 ppm/°C, others ± 250 ppm/°C. **Power Rating:** 3/4W at 70°C. **Operating Voltage Maximum:** 300VDC or Power Rating, Whichever is less. **Wiper Current Maximum:** 100mA or Power Rating, Whichever is Less. **Nominal Electrical Angle:** 12 Turns. **Electrical Continuity:** Continuous Over Full Mechanical Range. **End Resistance:** 1% or 2 Ohms, Whichever is Greater. **Resolution:** Essentially Infinite. **Contact Resistance Variation:** 1% or 3 Ohms, Whichever is Greater. **Operating Temperature Range:** -55°C to +125°C. **Minimum Insulation Resistance:** 1000 Meg. at 500VDC for 2 min. **Dielectric Strength:** 600VAC rms, 1 min., 1 milliamp max.

MECHANICAL: **Nominal Mechanical Angle:** 15 Turns. **Operating Torque:** 360 gram-cm max. (5 Oz.-in.). **Minimum Stop Strength:** N/A, Wiper Idles. **Rotational Life:** 200 cycles, 10Ω-200Ω ▲ R/R ≤ ± (0.5 Ω + 3%), 500 Ω - 5M Ω ▲ R/R ≤ ± (0.5 Ω + 2%) **Solderability:** Mil-Std-202 Method 208.

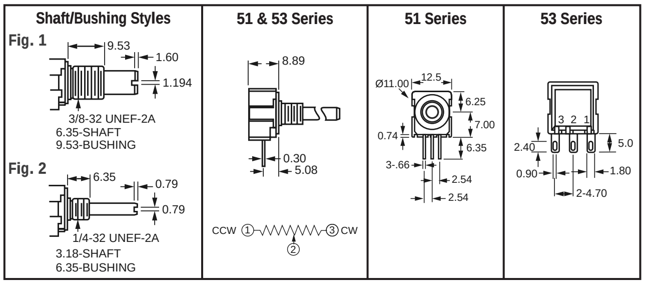
Res. (Ohms)	Digi-Key Part No.	Price Each 1	10	100	500	1,000
1K	CT20P102-ND	1.65	1.54	1.39	1.18	1.07
2K	CT20P202-ND	1.65	1.54	1.39	1.18	1.07
5K	CT20P502-ND	1.65	1.54	1.39	1.18	1.07
10K	CT20P103-ND	1.65	1.54	1.39	1.18	1.07
20K	CT20P203-ND	1.65	1.54	1.39	1.18	1.07
50K	CT20P503-ND	1.65	1.54	1.39	1.18	1.07
100K	CT20P104-ND	1.65	1.54	1.39	1.18	1.07

Units Marked with Resistance Mark and 1 Digit Date Code.

BOURNS Precision Potentiometers

SERIES 50 Sealed 1/2" (12.5mm) Square Control

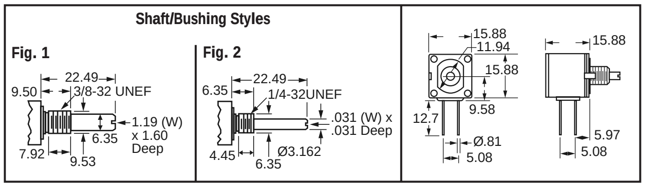
• **Effective Electrical Angle:** 270° ±5° • **Contact Resistance Variation:** 2.0% • **Dielectric Withstanding Voltage:** Sea Level: 1,500 VAC minimum; 70,000 Feet: 500 VAC minimum • **Insulation Resistance:** 1,000 megohms minimum



Bush. Fig.	Taper	Resis. Tolerance	Ohms	Watts	Element Material	Digi-Key Part No.	Price Each 1	25	50	100
2	Linear	±10%	1K	1	Cermet	51CAD-E28-A10-ND	7.39	5.75	4.70	3.98
2	Linear	±10%	5K	1	Cermet	51CAD-E28-A13-ND	7.39	5.75	4.70	3.98
1	Audio	±20%	10K	1/4	Conductive Plastic	51AAD-B28-D15-ND	7.97	6.21	5.07	4.29
2	Audio	±20%	10K	1/4	Conductive Plastic	51CAD-E28-D15-ND	7.97	6.21	5.07	4.29
2	Linear	±20%	10K	1/2	Conductive Plastic	51CAD-E24-B15-ND	7.39	5.75	4.70	3.98
1	Linear	±10%	10K	1	Cermet	51AAD-B24-A15-ND	7.39	5.75	4.70	3.98
2	Linear	±10%	10K	1	Cermet	51CAD-E24-A15-ND	7.39	5.75	4.70	3.98
2	Linear	±10%	100K	1	Cermet	51CAD-E28-A20-ND	7.39	5.75	4.70	3.98
1	Linear	±20%	10K	1/2	Conductive Plastic	53AAA-B28-B15-ND	8.51	6.63	5.41	4.58

SERIES 81 2 Watt Cermet - 5/8" (15.88mm) Square Single - Turn

• **Resistance Tolerance:** ±10% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 240° ±6° • **Contact Resistance Variation:** ±1% or 3 ohms (whichever is greater) • **Theoretical Resolution:** Essentially Infinite • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 1500 VAC minimum; 70,000 Feet: 500 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum

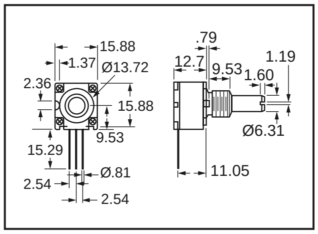


Bushing Fig.	Ohms	Digi-Key Part No.	Price Each 1	25	50	100
1	1K	81A1A-B28-A10-ND	9.02	7.02	5.74	4.85
1	5K	81A1A-B28-A13-ND	9.02	7.02	5.74	4.85
2	5K	81C1A-E28-A13-ND	9.02	7.02	5.74	4.85
1	10K	81A1A-B28-A15-ND	9.02	7.02	5.74	4.85
2	10K	81C1A-E28-A15-ND	9.02	7.02	5.74	4.85
2	100K	81C1A-E28-A20-ND	9.02	7.02	5.74	4.85

SERIES 91

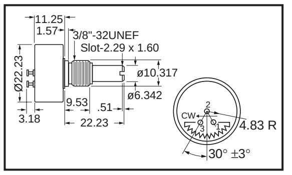
5/8" Square Single-Turn Conductive Plastic - Bushing Mount

• **Resistance Tolerance:** ±20% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 240° ±5° • **Contact Resistance Variation:** ±1% • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 1,500 VAC minimum; 70,000 Feet: 500 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum • **Theoretical Resolution:** Essentially infinite



Taper	Ohms	Watts	Shaft Length From Mtg. Surface inches (mm)	Digi-Key Part No.	Price Each 1	25	50	100
Linear	1K	1/2	7/8" (22.23)	91A1A-B28-B10-ND	4.74	3.69	3.01	2.55
Linear	5K	1/2	3/4" (19.05)	91A1A-B24-B13-ND	4.74	3.69	3.01	2.55
Linear	5K	1/2	7/8" (22.23)	91A1A-B28-B13-ND	4.74	3.69	3.01	2.55
Audio	10K	1/4	3/4" (19.05)	91A1A-B24-D15-ND	5.37	4.18	3.42	2.89
Linear	10K	1/2	3/4" (19.05)	91A1A-B24-B15-ND	4.74	3.69	3.01	2.55
Linear	10K	1/2	7/8" (22.23)	91A1A-B28-B15-ND	4.74	3.69	3.01	2.55

SERIES 6639 1 Watt Conductive Plastic - Bushing Mount

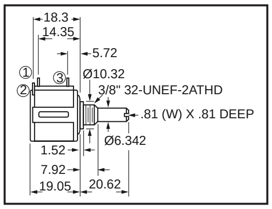


• **Resistance Tolerance:** Standard ±15% • **Resolution:** Essentially infinite • **Effective Electrical Angle:** 340° +3° • **End Voltage:** 0.5% max. • **Output Smoothness:** 0.1% • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 750 VAC min.) • **Insulation Resistance (500 VDC):** 500 megohms min.

Ohms	Digi-Key Part No.	Price Each 1	50	100	500
1K	6639S-1-102-ND	11.46	9.29	8.48	8.30
5K	6639S-1-502-ND	11.46	9.29	8.48	8.30
10K	6639S-1-103-ND	11.46	9.29	8.48	8.30

SERIES 3540/3541

2 Watt -10 Turn Wirewound/Hybritron®

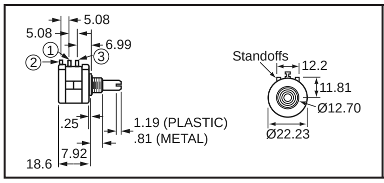


• **Resistance Tolerance:** ±5% for 3540 series ±10% for 3541 series • **Effective Electrical Angle:** 3600° +10°, -0° • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 1,000 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum

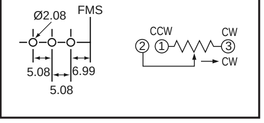
Ohms	Reso-lution %	Digi-Key Part No.	Price Each 1	50	100	500
Wirewound						
1K	.027	3540S-1-102-ND	13.38	10.84	9.90	9.37
5K	.021	3540S-1-502-ND	13.38	10.84	9.90	9.37
10K	.019	3540S-1-103-ND	13.38	10.84	9.90	9.37
100K	.008	3540S-1-104-ND	16.72	13.54	12.37	11.70
Hybritron						
1K	Essen-tially Infinite	3541H-1-102-ND	28.28	22.91	20.93	19.80
5K		3541H-1-502-ND	28.28	22.91	20.93	19.80
10K		3541H-1-103-ND	28.28	22.91	20.93	19.80

SERIES 3590 2 Watt - 10 Turn Wirewound

• **Resistance Tolerance:** ±5% • **Effective Electrical Angle:** 3600° +10°, -0° • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 2,000 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum



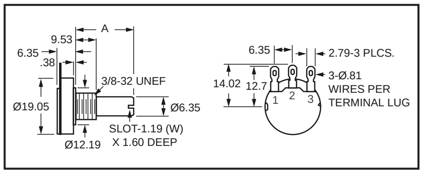
Recommended PC Board Mounting Hole Locations



Ohms	Resolu-tion%	Bushing Type & Dim.	Shaft Diameter Inches (mm)	Digi-Key Part No.	Price Each 1	50	100	500
1K	.029	3/8" x 5/16" Plastic	.2480" (6.30)	3590S-1-102-ND	8.10	6.56	5.99	5.67
2K	.023			3590S-1-202-ND	8.10	6.56	5.99	5.67
5K	.025			3590S-1-502-ND	8.10	6.56	5.99	5.67
10K	.020			3590S-1-103-ND	8.10	6.56	5.99	5.67
20K	.016			3590S-1-203-ND	8.10	6.56	5.99	5.67
50K	.013			3590S-1-503-ND	10.24	8.29	7.58	7.17
100K	.009			3590S-1-104-ND	11.08	8.97	8.20	7.76
500	.033	3/8" x 5/16" Metal	.2497" (6.34)	3590S-2-501-ND	10.02	8.12	7.41	7.02
1K	.029			3590S-2-102-ND	10.02	8.12	7.41	7.01
2K	.023			3590S-2-202-ND	10.02	8.12	7.41	7.02
5K	.025			3590S-2-502-ND	10.02	8.12	7.41	7.01
10K	.020			3590S-2-103-ND	10.02	8.12	7.41	7.01
20K	.016			3590S-2-203-ND	10.02	8.12	7.41	7.01
50K	.013			3590S-2-503-ND	12.10	9.80	8.95	8.47
100K	.009			3590S-2-104-ND	12.98	10.51	9.61	9.09
10K	.020	9mm x 7.94mm Metal	.2362" (6.00)	3590S-6-103-ND	12.10	9.80	8.95	8.47

SERIES 3852 2 Watt Cermet 3/4" (19.05mm) Diameter Panel Control

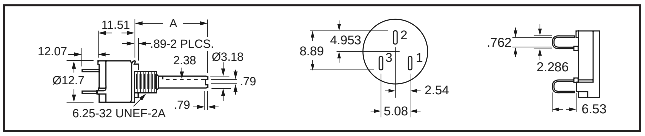
• **Resistance Tolerance:** ±10% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 250° ±5° • **Contact Resistance Variation:** ±3% of total resistance or 3 ohms (whichever is greater) • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 900 VAC minimum; 70,000 Feet: 350 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum



Ohms	Dim. A (mm)	Shaft Dia. (mm)	Digi-Key Part No.	Price Each 1	25	50	100	250
1K	12.7	3.18	3852A-162-102A-ND	9.16	7.13	5.83	4.93	4.58
1K	22.20	6.35	3852A-282-102A-ND	9.16	7.13	5.83	4.93	4.58
10K	22.20	6.35	3852A-282-103A-ND	9.16	7.13	5.83	4.93	4.58

SERIES 3862 1 Watt Cermet 1/2" (12.5mm) Diameter Single-Turn Panel Control

• **Resistance Tolerance:** ±10% • **Continuity:** Maintained for full mechanical angle • **Effective Electrical Angle:** 260° ±10° • **Contact Resistance Variation:** ±3% of total resistance • **Theoretical Resolution:** Essentially infinite • **Dielectric Withstanding Voltage:** MIL-STD-202, Method 301 (Sea Level: 750 VAC minimum; 70,000 Feet: 350 VAC minimum) • **Insulation Resistance (500 VDC):** 1,000 megohms minimum

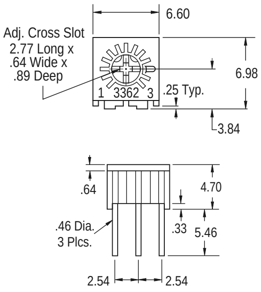


Ohms	Dim. A (mm)	Shaft Dia. (mm)	Digi-Key Part No.	Price Each 1	25	50	100	250
10K	12.7	3.18	3862C-162-103A-ND	14.69	11.44	9.34	7.90	7.35
10K	22.20	6.35	3862C-282-103A-ND	14.69	11.44	9.34	7.90	7.35

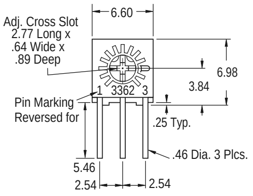
BOURNS Trimmer Potentiometers

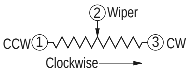
SERIES 3362 1/4" (6.35mm) Square/Single-Turn Cermet/Industrial/Sealed

Common Dimensions
3362H, P, R, U

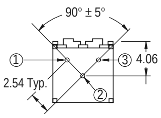


Common Dimensions
3362M, W, X

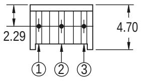




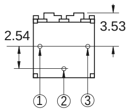
3362H



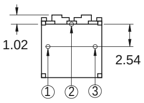
3362M



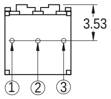
3362P



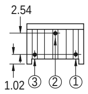
3362R



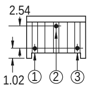
3362U



3362W



3362X



• Miniature package • Rotor designed for automatic machine adjust interface • Multi-wire wiper to minimize CRV • Withstands harsh environments and immersion cleaning process. **Resistance Tolerance:** ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 240° nom. **Power Rating** (300 volts max.): 70°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** —55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Mechanical Angle:** 270° nom. **Torque:** 3.0 oz-in. max. **Stop Strength:** 7.0 oz-in. min.

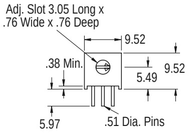
Res. (Ohms)	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key Part No.	Digi-Key* Part No.
100	3362H-101-ND	3362M-101-ND	3362P-101-ND	3362R-101-ND	3362U-101-ND	3362W-101-ND	3362X-101-ND
200	3362H-201-ND	3362M-201-ND	3362P-201-ND	3362R-201-ND	3362U-201-ND	3362W-201-ND	3362X-201-ND
500	3362H-501-ND	3362M-501-ND	3362P-501-ND	3362R-501-ND	3362U-501-ND	3362W-501-ND	3362X-501-ND
1K	3362H-102-ND	3362M-102-ND	3362P-102-ND	3362R-102-ND	3362U-102-ND	3362W-102-ND	3362X-102-ND
2K	3362H-202-ND	3362M-202-ND	3362P-202-ND	3362R-202-ND	3362U-202-ND	3362W-202-ND	3362X-202-ND
5K	3362H-502-ND	3362M-502-ND	3362P-502-ND	3362R-502-ND	3362U-502-ND	3362W-502-ND	3362X-502-ND
10K	3362H-103-ND	3362M-103-ND	3362P-103-ND	3362R-103-ND	3362U-103-ND	3362W-103-ND	3362X-103-ND
20K	3362H-203-ND	3362M-203-ND	3362P-203-ND	3362R-203-ND	3362U-203-ND	3362W-203-ND	3362X-203-ND
25K	3362H-253-ND	3362M-253-ND	3362P-253-ND	3362R-253-ND	3362U-253-ND	3362W-253-ND	3362X-253-ND
50K	3362H-503-ND	3362M-503-ND	3362P-503-ND	3362R-503-ND	3362U-503-ND	3362W-503-ND	3362X-503-ND
100K	3362H-104-ND	3362M-104-ND	3362P-104-ND	3362R-104-ND	3362U-104-ND	3362W-104-ND	3362X-104-ND
200K	3362H-204-ND	3362M-204-ND	3362P-204-ND	3362R-204-ND	3362U-204-ND	3362W-204-ND	3362X-204-ND
500K	3362H-504-ND	3362M-504-ND	3362P-504-ND	3362R-504-ND	3362U-504-ND	3362W-504-ND	3362X-504-ND
1M	3362H-105-ND	3362M-105-ND	3362P-105-ND	3362R-105-ND	3362U-105-ND	3362W-105-ND	3362X-105-ND

Series	Pricing 1	10	50
3362H / 3362M / 3362P / 3362R / 3362U / 3362W / 3362X	.83	7.50	36.75

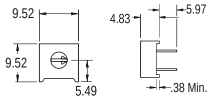
*** 3362☐-KIT-ND** ***Digi-Key® Series 3362 Trimmer Potentiometers Kit***
10 each of all values in denoted series (140 total pieces). Notebook style storage case and bin storage guide included. For complete number, substitute corresponding letter (H,R,U,M,X) for ☐ **$89.95**

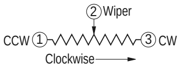
SERIES 3386 3/8" (9.52mm) Square/Single-Turn Cermet/Industrial/Sealed

Common Dimensions
Side Adjust

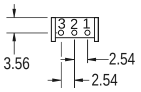


Common Dimensions
Top Adjust

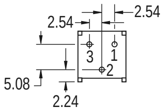




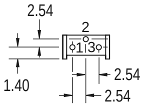
3386C



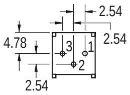
3386F



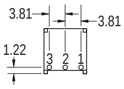
3386H



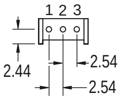
3386P



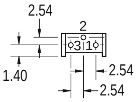
3386R



3386W



3386X



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 280°. **Power Rating** (300 volts max.): 85°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Mechanical Angle:** 310° nom. **Torque:** 5.0 oz-in. max. **Stop Strength:** 15.0 oz-in. min.

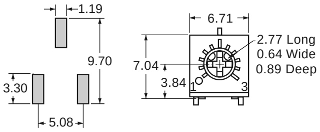
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
50	3386C-500-ND*	3386F-500-ND*	3386H-500-ND	3386P-500-ND*	3386R-500-ND*	3386W-500-ND	3386X-500-ND*
100	3386C-101-ND*	3386F-101-ND*	3386H-101-ND	3386P-101-ND*	3386R-101-ND*	3386W-101-ND	3386X-101-ND*
200	3386C-201-ND*	3386F-201-ND*	3386H-201-ND	3386P-201-ND*	3386R-201-ND*	3386W-201-ND	3386X-201-ND*
500	3386C-501-ND*	3386F-501-ND*	3386H-501-ND	3386P-501-ND*	3386R-501-ND*	3386W-501-ND	3386X-501-ND*
1K	3386C-102-ND*	3386F-102-ND*	3386H-102-ND	3386P-102-ND*	3386R-102-ND*	3386W-102-ND	3386X-102-ND*
2K	3386C-202-ND*	3386F-202-ND*	3386H-202-ND	3386P-202-ND*	3386R-202-ND*	3386W-202-ND	3386X-202-ND*
5K	3386C-502-ND*	3386F-502-ND*	3386H-502-ND	3386P-502-ND*	3386R-502-ND*	3386W-502-ND	3386X-502-ND*
10K	3386C-103-ND*	3386F-103-ND*	3386H-103-ND	3386P-103-ND*	3386R-103-ND*	3386W-103-ND	3386X-103-ND*
20K	3386C-203-ND*	3386F-203-ND*	3386H-203-ND	3386P-203-ND*	3386R-203-ND*	3386W-203-ND	3386X-203-ND*
25K	3386C-253-ND	3386F-253-ND	3386H-253-ND	3386P-253-ND	3386R-253-ND	3386W-253-ND	3386X-253-ND
50K	3386C-503-ND*	3386F-503-ND*	3386H-503-ND	3386P-503-ND*	3386R-503-ND*	3386W-503-ND	3386X-503-ND*
100K	3386C-104-ND*	3386F-104-ND*	3386H-104-ND	3386P-104-ND*	3386R-104-ND*	3386W-104-ND	3386X-104-ND*
200K	3386C-204-ND*	3386F-204-ND*	3386H-204-ND	3386P-204-ND*	3386R-204-ND*	—	3386X-204-ND*
250K	3386C-254-ND	3386F-254-ND	3386H-254-ND	3386P-254-ND	3386R-254-ND	3386W-254-ND	3386X-254-ND
500K	3386C-504-ND*	3386F-504-ND*	3386H-504-ND	3386P-504-ND*	3386R-504-ND*	3386W-504-ND	3386X-504-ND*
1M	3386C-105-ND*	3386F-105-ND*	3386H-105-ND	3386P-105-ND*	3386R-105-ND*	3386W-105-ND	3386X-105-ND*
2M	3386C-205-ND*	3386F-205-ND*	3386H-205-ND	3386P-205-ND*	3386R-205-ND*	3386W-205-ND	3386X-205-ND*

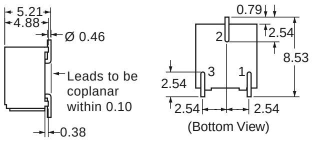
Series	Pricing 1	10	50
3386C/3386R	1.43	13.00	55.90
3386F/3386H/3386P/3386W/3386X	1.29	11.75	50.53

* **3386☐-KIT-ND** ***Digi-Key® Series 3386 Trimmer Potentiometer Kit***
5 each of values denoted in series (75 total pieces). Notebook style kit box and bin storage guide included. For complete number, substitute corresponding letter (C,F,P,R,X) for ☐... **$65.95**

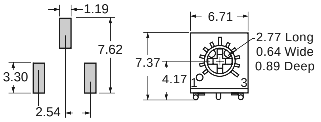
SERIES 3361 1/4" (6.35mm) Square SMD/Single-Turn Cermet/Industrial/Sealed

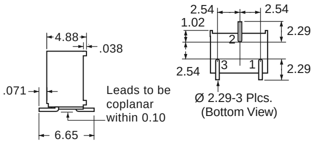
3361P

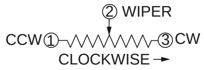




3361S







Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 240° nom. **Power Rating** (300 volts max.): 70°C — 0.50 watt; 125°C — 0 watt. **Temperature Range:** -55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Mechanical Angle:** 270° nom. **Torque:** 3.0 oz-in. max. **Stop Strength:** 7.0 oz-in. min.

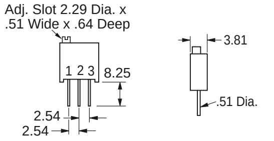
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3361P-101G☐☐-ND	3361S-101G☐☐-ND
200	3361P-201G☐☐-ND	3361S-201G☐☐-ND
500	3361P-501G☐☐-ND	3361S-501G☐☐-ND
1K	3361P-102G☐☐-ND	3361S-102G☐☐-ND
2K	3361P-202G☐☐-ND	3361S-202G☐☐-ND
5K	3361P-502G☐☐-ND	3361S-502G☐☐-ND
10K	3361P-103G☐☐-ND	3361S-103G☐☐-ND
20K	3361P-203G☐☐-ND	3361S-203G☐☐-ND
50K	3361P-503G☐☐-ND	3361S-503G☐☐-ND
100K	3361P-104G☐☐-ND	3361S-104G☐☐-ND

Series	Part No.	Cut Tape Pricing 1	10	50	Part No.	Tape & Reel Pricing 500	750
3361P	Add "CT-ND"	.96	8.75	42.00	Add "TR-ND"	__	459.75
3361S	Add "CT-ND"	.96	8.75	42.00	Add "TR-ND"	306.50	—

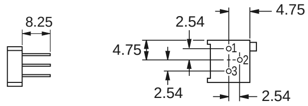
BOURNS Trimmer Potentiometers

SERIES 3292 3/8" (9.52mm) Square/Multiturn (25) Cermet/Industrial/Sealed

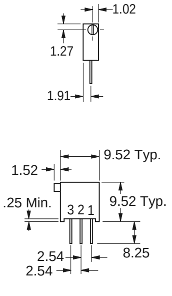
3292W

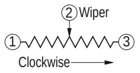


3292P



3292X





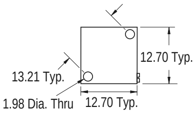
Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (400 volts max.): 85°C — 0.5 watt; 150°C — 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

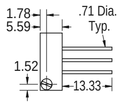
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3292P-101-ND	3292W-101-ND	3292X-101-ND
200	3292P-201-ND	3292W-201-ND	3292X-201-ND
500	3292P-501-ND	3292W-501-ND	3292X-501-ND
1K	3292P-102-ND	3292W-102-ND	3292X-102-ND
2K	3292P-202-ND	3292W-202-ND	3292X-202-ND
5K	3292P-502-ND	3292W-502-ND	3292X-502-ND
10K	3292P-103-ND	3292W-103-ND	3292X-103-ND
20K	3292P-203-ND	3292W-203-ND	3292X-203-ND
50K	3292P-503-ND	3292W-503-ND	3292X-503-ND
100K	3292P-104-ND	3292W-104-ND	3292X-104-ND
200K	3292P-204-ND	3292W-204-ND	3292X-204-ND
500K	3292P-504-ND	3292W-504-ND	3292X-504-ND
1M	3292P-105-ND	3292W-105-ND	3292X-105-ND

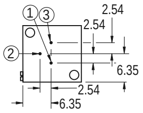
Series	Pricing 1	10	50
3292P/3292W/3292X	15.51	141.00	606.30

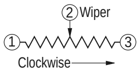
SERIES 3252 1/2" (12.70mm) Square/Multiturn (25) Cermet/Industrial/Sealed

3252P

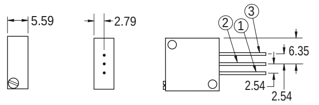




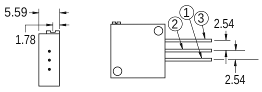




3252W



3252X



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (400 volts max.): 85°C — 0.75 watt; 150°C — 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.75 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3252P-101-ND*	3252W-101-ND*	3252X-101-ND*
200	3252P-201-ND	3252W-201-ND	—
500	3252P-501-ND*	3252W-501-ND*	3252X-501-ND*
1K	3252P-102-ND*	3252W-102-ND*	3252X-102-ND*
2K	3252P-202-ND	3252W-202-ND	3252X-202-ND
5K	3252P-502-ND*	3252W-502-ND*	3252X-502-ND*
10K	3252P-103-ND*	3252W-103-ND*	3252X-103-ND*
20K	3252P-203-ND	3252W-203-ND	3252X-203-ND
50K	3252P-503-ND*	3252W-503-ND*	3252X-503-ND*
100K	3252P-104-ND	3252W-104-ND	3252X-104-ND
200K	3252P-204-ND	3252W-204-ND	3252X-204-ND

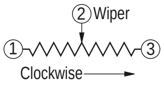
Series	Pricing 1	10	50
3252P/3252W/3252X	14.44	131.25	564.38

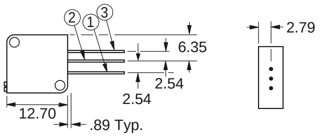
* **3252-KIT-ND** ***Digi-Key® Series 3252 Trimmer Potentiometer Kit***
5 each of values denoted (90 total pieces). Notebook style kit box and bin storage guide included **$599.00**

SERIES 3250 1/2" (12.70mm) Square/Multiturn (25) Wirewound/Sealed

Resistance Tolerance: ±5% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Travel:** 25 turns nom. **Power Rating:** 85°C – 1 watt; 150°C – 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±70 ppm/°C. **Load Life:** 1,000 hours 1 watt @ 85°C (2% ΔTR; ENR, 500 ohms). **Rotational Life:** 200 cycles (2% ΔTR; ENR, 500 ohms). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

3250W



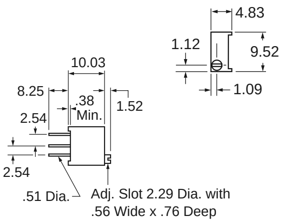


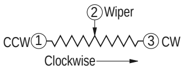
Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
200	3250W-201-ND	0.70
500	3250W-501-ND	0.60
1K	3250W-102-ND	0.40
2K	3250W-202-ND	0.30
5K	3250W-502-ND	0.25
10K	3250W-103-ND	0.19
20K	3250W-203-ND	0.16

Series	Pricing 1	10	50
3250W	12.49	113.50	488.05

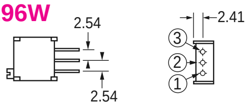
SERIES 3296 3/8" (9.52mm) Square/Multiturn (25) Cermet/Industrial/Sealed

Common Dimensions

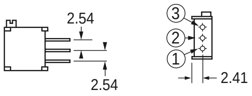




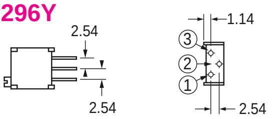
3296W



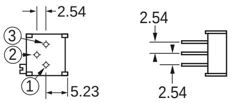
3296X



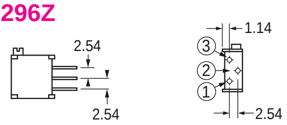
3296Y



3296P



3296Z



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (300 volts max.): 70°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** -55°C to +125°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

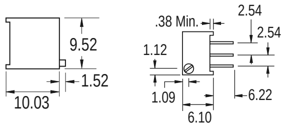
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
10	3296P-100-ND*	3296W-100-ND*	3296X-100-ND*	3296Y-100-ND*	—
20	3296P-200-ND	3296W-200-ND	3296X-200-ND	3296Y-200-ND	3296Z-200-ND
50	3296P-500-ND*	3296W-500-ND*	3296X-500-ND*	3296Y-500-ND*	3296Z-500-ND*
100	3296P-101-ND*	3296W-101-ND*	3296X-101-ND*	3296Y-101-ND*	3296Z-101-ND*
200	3296P-201-ND	3296W-201-ND	3296X-201-ND	3296Y-201-ND	3296Z-201-ND
500	3296P-501-ND*	3296W-501-ND*	3296X-501-ND*	3296Y-501-ND*	3296Z-501-ND*
1K	3296P-102-ND*	3296W-102-ND*	3296X-102-ND*	3296Y-102-ND*	3296Z-102-ND*
2K	3296P-202-ND*	3296W-202-ND*	3296X-202-ND*	3296Y-202-ND*	3296Z-202-ND*
5K	3296P-502-ND*	3296W-502-ND*	3296X-502-ND*	3296Y-502-ND*	3296Z-502-ND*
10K	3296P-103-ND*	3296W-103-ND*	3296X-103-ND*	3296Y-103-ND*	3296Z-103-ND*
20K	3296P-203-ND*	3296W-203-ND*	3296X-203-ND*	3296Y-203-ND*	3296Z-203-ND*
25K	3296P-253-ND	3296W-253-ND	3296X-253-ND	3296Y-253-ND	3296Z-253-ND
50K	3296P-503-ND*	3296W-503-ND*	3296X-503-ND*	3296Y-503-ND*	3296Z-503-ND*
100K	3296P-104-ND*	3296W-104-ND*	3296X-104-ND*	3296Y-104-ND*	3296Z-104-ND*
200K	3296P-204-ND*	3296W-204-ND*	3296X-204-ND*	3296Y-204-ND*	3296Z-204-ND*
250K	3296P-254-ND	3296W-254-ND	3296X-254-ND	3296Y-254-ND	3296Z-254-ND
500K	3296P-504-ND*	3296W-504-ND*	3296X-504-ND*	3296Y-504-ND*	3296Z-504-ND*
1M	3296P-105-ND*	3296W-105-ND*	3296X-105-ND*	3296Y-105-ND*	3296Z-105-ND*
2M	3296P-205-ND*	3296W-205-ND*	3296X-205-ND*	3296Y-205-ND*	3296Z-205-ND*
5M	3296P-505-ND	3296W-505-ND	3296X-505-ND	—	3296Z-505-ND

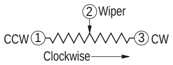
Series	Pricing 1	10	50
3296P/3296Z	2.70	24.50	105.35
3296W/3296X/3296Y	2.50	22.75	97.83

* **3296☐ -KIT-ND** ***Digi-Key® Series 3296 Trimmer Potentiometer Kit***
5 each of values denoted in series (75 total pieces). Notebook style case and bin storage guide included. For complete number, substitute corresponding letter (P,W,X,Y,Z) for ☐ **$139.00**

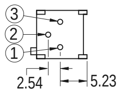
BOURNS Trimmer Potentiometers

SERIES 3299 3/8" (9.52mm) Square/Multiturn (25) Cermet/Industrial/Sealed

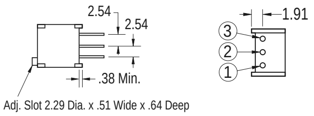




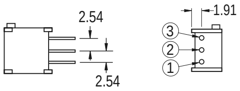
3299P



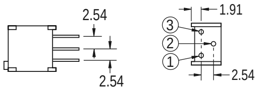
3299W



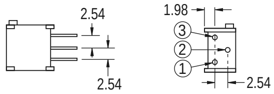
3299X



3299Y



3299Z



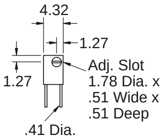
Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 25 turns nom. **Power Rating** (300 volts max.): 70°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

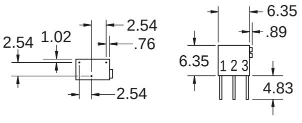
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
10	3299P-100-ND	3299W-100-ND	3299X-100-ND	3299Y-100-ND	3299Z-100-ND
20	3299P-200-ND	3299W-200-ND	3299X-200-ND	3299Y-200-ND	3299Z-200-ND
50	3299P-500-ND	3299W-500-ND	3299X-500-ND	3299Y-500-ND	3299Z-500-ND
100	3299P-101-ND	3299W-101-ND	3299X-101-ND	3299Y-101-ND	3299Z-101-ND
200	3299P-201-ND	3299W-201-ND	3299X-201-ND	3299Y-201-ND	3299Z-201-ND
500	3299P-501-ND	3299W-501-ND	3299X-501-ND	3299Y-501-ND	3299Z-501-ND
1K	3299P-102-ND	3299W-102-ND	3299X-102-ND	3299Y-102-ND	3299Z-102-ND
2K	3299P-202-ND	3299W-202-ND	3299X-202-ND	3299Y-202-ND	3299Z-202-ND
5K	3299P-502-ND	3299W-502-ND	3299X-502-ND	3299Y-502-ND	3299Z-502-ND
10K	3299P-103-ND	3299W-103-ND	3299X-103-ND	3299Y-103-ND	3299Z-103-ND
20K	3299P-203-ND	3299W-203-ND	3299X-203-ND	3299Y-203-ND	3299Z-203-ND
25K	3299P-253-ND	3299W-253-ND	—	3299Y-253-ND	3299Z-253-ND
50K	3299P-503-ND	3299W-503-ND	3299X-503-ND	3299Y-503-ND	3299Z-503-ND
100K	3299P-104-ND	3299W-104-ND	3299X-104-ND	3299Y-104-ND	3299Z-104-ND
200K	3299P-204-ND	3299W-204-ND	3299X-204-ND	3299Y-204-ND	3299Z-204-ND
250K	3299P-254-ND	3299W-254-ND	3299X-254-ND	3299Y-254-ND	3299Z-254-ND
500K	3299P-504-ND	3299W-504-ND	3299X-504-ND	3299Y-504-ND	3299Z-504-ND
1M	3299P-105-ND	3299W-105-ND	3299X-105-ND	3299Y-105-ND	3299Z-105-ND
2M	3299P-205-ND	3299W-205-ND	3299X-205-ND	3299Y-205-ND	3299Z-205-ND
5M	3299P-505-ND	3299W-505-ND	3299X-505-ND	3299Y-505-ND	3299Z-505-ND

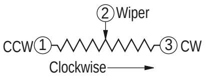
	Pricing		
Series	1	10	50
3299P/3299Z	3.14	28.50	122.55
3299W/3299X/3299Y	2.92	26.50	113.95

SERIES 3260 1/4" (6.35mm) Square/Multiturn (11) Wirewound/Industrial/Sealed

3260H







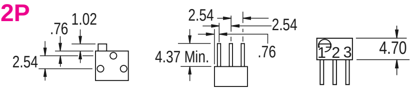
Resistance Tolerance: ±5% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 11 turns nom. **Power Rating:** 85°C – 0.25 watt; 150°C – 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** +70ppm/°C. **Load Life:** 1,000 hours 0.25 watt @ 85°C (2% DTR; ENR, 500 ohms). **Rotational Life:** 200 cycles (2% DTR; ENR, 500 ohms). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

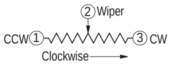
Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
100	3260H-101-ND	1.00
200	3260H-201-ND	0.94
500	3260H-501-ND	0.58
1K	3260H-102-ND	0.50
2K	3260H-202-ND	0.45
10K	3260H-103-ND	0.29
20K	3260H-203-ND	0.28

	Pricing		
Series	1	10	50
3260H	27.17	247.00	1062.10

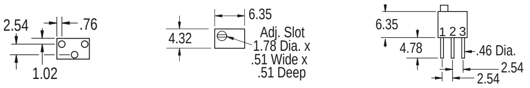
SERIES 3262 1/4" (6.35mm) Square/Multiturn (12) Cermet/Industrial/Sealed

3262P

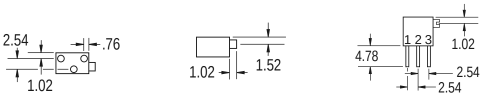




3262W



3262X

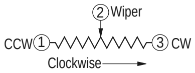


Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 12 turns nom. **Power Rating:** (300 volts max.) 85°C — 0.25 watt; 150°C — 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.25 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
10	3262P-100-ND	3262W-100-ND	3262X-100-ND
20	3262P-200-ND	3262W-200-ND	3262X-200-ND
50	3262P-500-ND	3262W-500-ND	3262X-500-ND
100	3262P-101-ND	3262W-101-ND	3262X-101-ND
200	3262P-201-ND	3262W-201-ND	3262X-201-ND
500	3262P-501-ND	3262W-501-ND	3262X-501-ND
1K	3262P-102-ND	3262W-102-ND	3262X-102-ND
2K	3262P-202-ND	3262W-202-ND	3262X-202-ND
5K	3262P-502-ND	3262W-502-ND	3262X-502-ND
10K	3262P-103-ND	3262W-103-ND	3262X-103-ND
20K	3262P-203-ND	3262W-203-ND	3262X-203-ND
25K	3262P-253-ND	3262W-253-ND	3262X-253-ND
50K	3262P-503-ND	3262W-503-ND	3262X-503-ND
100K	3262P-104-ND	3262W-104-ND	3262X-104-ND
200K	3262P-204-ND	3262W-204-ND	3262X-204-ND
250K	3262P-254-ND	3262W-254-ND	3262X-254-ND
500K	3262P-504-ND	3262W-504-ND	3262X-504-ND
1M	3262P-105-ND	3262W-105-ND	3262X-105-ND

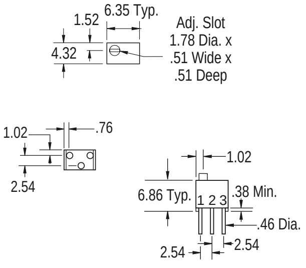
	Pricing		
Series	1	10	50
3262P/3262W/3262X	14.30	130.00	559.00

SERIES 3266 1/4" (6.35mm) Square/Multiturn (12) Cermet/Industrial/Sealed

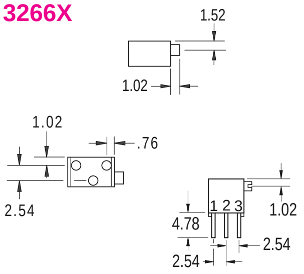


Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 12 turns nom. **Power Rating (300 volts max.):** 70°C — 0.25 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.25 watt @ 70°C (3% ΔTR; CRV, 3%). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

3266W



3266X



Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
10	3266W-100-ND*	3266X-100-ND*
20	3266W-200-ND*	3266X-200-ND*
50	3266W-500-ND*	3266X-500-ND*
100	3266W-101-ND*	3266X-101-ND*
200	3266W-201-ND*	3266X-201-ND*
500	3266W-501-ND*	3266X-501-ND*
1K	3266W-102-ND*	3266X-102-ND*
2K	3266W-202-ND*	3266X-202-ND*
5K	3266W-502-ND*	3266X-502-ND*
10K	3266W-103-ND*	3266X-103-ND*
20K	3266W-203-ND*	3266X-203-ND*
25K	3266W-253-ND*	3266X-253-ND*
50K	3266W-503-ND*	3266X-503-ND*
100K	3266W-104-ND*	3266X-104-ND*
200K	3266W-204-ND*	3266X-204-ND*
250K	3266W-254-ND*	3266X-254-ND*
500K	3266W-504-ND*	3266X-504-ND*
1M	3266W-105-ND	3266X-105-ND

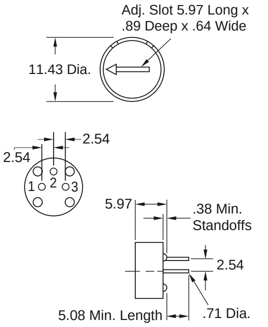
	Pricing		
Series	1	10	50
3266W/3266X	3.58	32.50	139.75

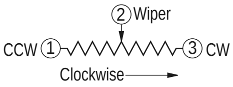
*** 3266☐-KIT-ND** ***Digi-Key® Series 3266 Trimmer Potentiometer Kit***

5 each in values denoted in series (85 total pieces). Notebook style storage case and bin storage guide included. For complete number, substitute corresponding letter (W,X) for ☐ **$199.00**

SERIES 3345 1/2" (12.70mm) Round/Single-Turn Wirewound/Industrial/Sealed

3345P





• Industrial wirewound. • 1.0 watt power rating at 70°C. **Resistance Tolerance:** ±5% std. **Adjustment Angle:** 280° nom. **Power Rating:** 70°C — 1 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±50ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C. **Rotational Life:** 200 cycles (2% ΔTR; ENR, 500 ohms). **Mechanical Angle:** 310° nom. **Torque:** 5.0 oz-in. max. **Stop Strength:** 15 oz-in. min.

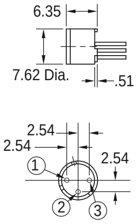
Res. (Ohms)	Digi-Key* Part No.	Nominal Resolution (Percent)
50	3345P-500-ND	0.58
100	3345P-101-ND	0.49
200	3345P-201-ND	0.49
500	3345P-501-ND	0.38
1K	3345P-102-ND	0.30
2K	3345P-202-ND	0.24
5K	3345P-502-ND	0.18
10K	3345P-103-ND	0.14
20K	3345P-203-ND	0.13

Series	Pricing 1	10	50
3345P	8.28	75.25	323.58

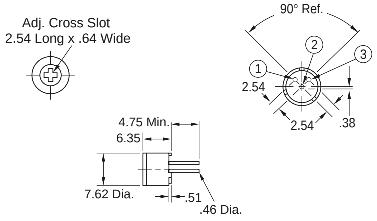
* **3345P-KIT-ND** ***Digi-Key® Series 3345 Trimmer Potentiometers Kit*** 5 each of all values (45 total pieces). Notebook style case and bin storage guide included **$199.95**

SERIES 3339 5/16" (7.95mm) Round/Four-Turn Cermet/Industrial/Sealed

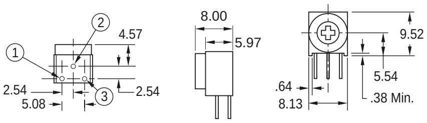
3339P

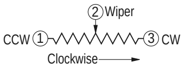


3339H



3339W





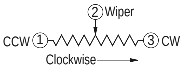
• Unique planetary drive offers precise wiper setting of a multiturn in a single-turn package size. • Top and side adjust styles. **Resistance Tolerance:** ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 4 turns nom. **Power Rating** (300 volts max.): 85°C — 0.5 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Torque:** 3.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Digi-Key* Part No.	Digi-Key* Part No.
50	3339H-500-ND	3339P-500-ND	3339W-500-ND
100	3339H-101-ND	3339P-101-ND	3339W-101-ND
200	3339H-201-ND	3339P-201-ND	3339W-201-ND
500	3339H-501-ND	3339P-501-ND	3339W-501-ND
1K	3339H-102-ND	3339P-102-ND	3339W-102-ND
2K	3339H-202-ND	3339P-202-ND	3339W-202-ND
5K	3339H-502-ND	3339P-502-ND	3339W-502-ND
10K	3339H-103-ND	3339P-103-ND	3339W-103-ND
20K	3339H-203-ND	3339P-203-ND	3339W-203-ND
50K	3339H-503-ND	3339P-503-ND	3339W-503-ND
100K	3339H-104-ND	3339P-104-ND	3339W-104-ND
200K	3339H-204-ND	3339P-204-ND	3339W-204-ND
500K	3339H-504-ND	3339P-504-ND	3339W-504-ND
1M	3339H-105-ND	3339P-105-ND	3339W-105-ND

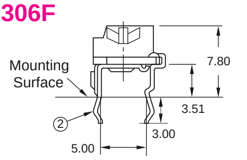
Series	Pricing 1	10	50
3339H/3339P	5.28	48.00	206.40
3339W	7.59	69.00	296.70

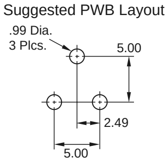
* **3339☐-KIT-ND** ***Digi-Key® Series 3339 Trimmer Potentiometers Kit***
5 each of all values in denoted series (70 total pieces). Notebook style case and bin storage guide included. For complete number, substitute corresponding letter (P,W) for ☐ **$269.00**

SERIES 3306 6mm Round/Single-Turn Cermet/Industrial/Open Frame

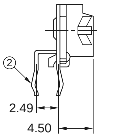


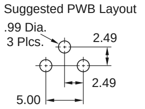
3306F



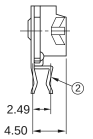


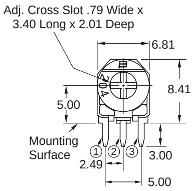
3306K



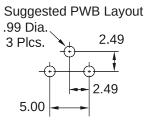


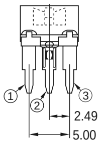
3306W

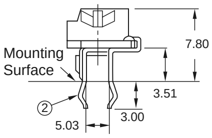


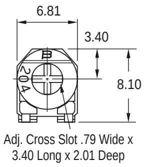


3306P









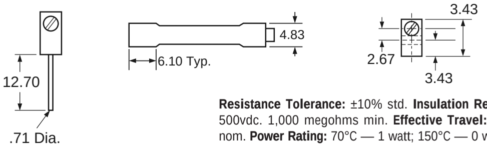
• Cross slot rotor design suitable for automatic adjustment equipment. • Board retention feature. • Dust resistant/splash resistant cover. • Front and top adjust styles. **Resistance Tolerance:** ±25% std. **Adjustment Angle:** 215° nom. **Power Rating** (100 volts max.): 70°C — 0.2 watt. **Temperature Range:** –25°C to +100°C. **Temperature Coefficient:** ±250ppm/°C. **Load Life:** 1,000 hours 0.2 watt @ 70°C (5% ΔTR). **Torque** (Operating): 4.5 oz-in. max. **Stop Strength:** 6.5 oz-in. min.

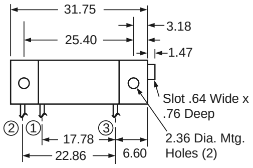
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3306F-101-ND	3306K-101-ND	3306P-101-ND	3306W-101-ND
200	3306F-201-ND	3306K-201-ND	3306P-201-ND	3306W-201-ND
500	3306F-501-ND	3306K-501-ND	3306P-501-ND	3306W-501-ND
1K	3306F-102-ND	3306K-102-ND	3306P-102-ND	3306W-102-ND
2K	3306F-202-ND	3306K-202-ND	3306P-202-ND	3306W-202-ND
5K	3306F-502-ND	3306K-502-ND	3306P-502-ND	3306W-502-ND
10K	3306F-103-ND	3306K-103-ND	3306P-103-ND	3306W-103-ND
20K	3306F-203-ND	3306K-203-ND	3306P-203-ND	3306W-203-ND
50K	3306F-503-ND	3306K-503-ND	3306P-503-ND	3306W-503-ND
100K	3306F-104-ND	3306K-104-ND	3306P-104-ND	3306W-104-ND
200K	3306F-204-ND	3306K-204-ND	3306P-204-ND	3306W-204-ND
500K	3306F-504-ND	3306K-504-ND	3306P-504-ND	3306W-504-ND
1M	3306F-105-ND	3306K-105-ND	3306P-105-ND	3306W-105-ND

Series	Pricing 1	10	100
3306F / 3306K / 3306P / 3306W	.57	4.30	40.16

SERIES 3059 1-1/4" (31.75mm) Rectangular/Multiturn (22) Cermet/Industrial/Sealed

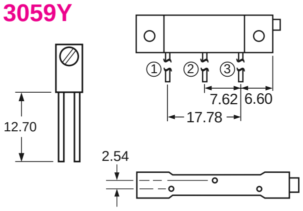
3059P





Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Effective Travel:** 22 turns nom. **Power Rating:** 70°C — 1 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Rotational Life:** 200 cycles (2% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

3059Y



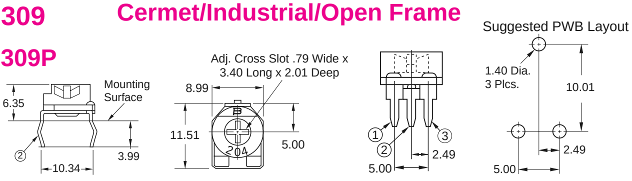
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3059P-101-ND	3059Y-101-ND
200	3059P-201-ND	3059Y-201-ND
500	3059P-501-ND	3059Y-501-ND
1K	3059P-102-ND	3059Y-102-ND
2K	3059P-202-ND	3059Y-202-ND
5K	3059P-502-ND	3059Y-502-ND
10K	3059P-103-ND	3059Y-103-ND
20K	3059P-203-ND	3059Y-203-ND
50K	3059P-503-ND	3059Y-503-ND
100K	3059P-104-ND	3059Y-104-ND
200K	3059P-204-ND	3059Y-204-ND
500K	3059P-504-ND	3059Y-504-ND
1M	3059P-105-ND	3059Y-105-ND

Series	Pricing 1	10	50
3059P/3059Y	6.49	59.00	253.70

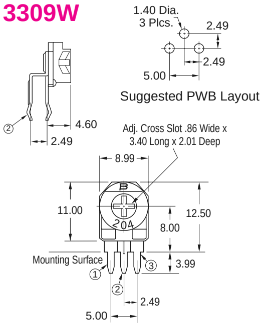
BOURNS Trimmer Potentiometers

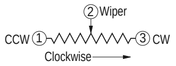
SERIES 3309 9mm Round/Single-Turn Cermet/Industrial/Open Frame

3309P



3309W





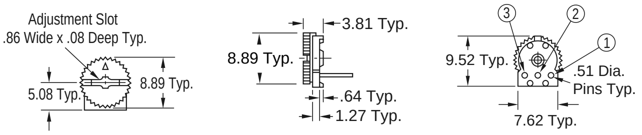
Resistance Tolerance: ±25% std. **Adjustment Angle:** 235° nom. **Power Rating** (250 volts max.): 70°C — 0.5 watt. **Temperature Range:** –25°C to +100°C. **Temperature Coefficient:** ±250ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 70°C (5% ΔTR). **Torque:** 5.0 oz-in. max. **Stop Strength:** 11.0 oz-in. min.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3309P-101-ND*	3309W-101-ND*
200	3309P-201-ND	3309W-201-ND
500	3309P-501-ND*	3309W-501-ND*
1K	3309P-102-ND*	3309W-102-ND*
2K	3309P-202-ND*	3309W-202-ND*
5K	3309P-502-ND*	3309W-502-ND*
10K	3309P-103-ND*	3309W-103-ND*
20K	3309P-203-ND*	3309W-203-ND*
50K	3309P-503-ND*	3309W-503-ND*
100K	3309P-104-ND*	3309W-104-ND*
200K	3309P-204-ND	3309W-204-ND
500K	3309P-504-ND	3309W-504-ND
1M	3309P-105-ND	3309W-105-ND

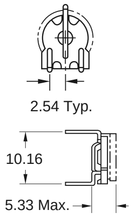
Series	Pricing 1	10	100
3309P / 3309W	.56	4.77	39.54

* **3309-KIT-ND** ***Digi-Key® Series 3309 Trimmer Potentiometers Kit*** 10 each of values denoted (180 total pieces). Notebook style storage case and bin storage guide included. **$69.95**

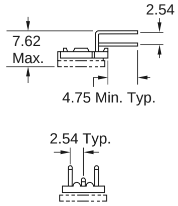
SERIES 3352 3/8" (9.52mm) Round/Single-Turn Cermet/Industrial/Open Frame



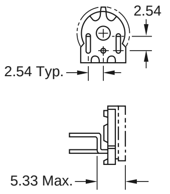
3352E



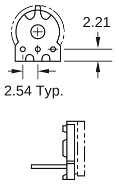
3352H



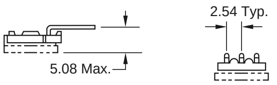
3352P

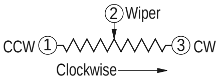


3352T



3352W





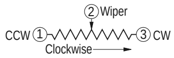
Resistance Tolerance: ±20% std. **Adjustment Angle:** 205° nom. **Power Rating** (250 volts max.): 85°C — 0.5 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** Below 2K — ±150ppm/°C; 2K & up — +100ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (3% ΔTR). **Rotational Life:** 200 cycles (10% DTR). **Mechanical Angle:** 250° nom. **Torque:** 3.0 oz-in. max. **Stop Strength:** 8 oz-in. min.

Res. (Ohms)	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.
100	3352E-101-ND	3352H-101-ND	3352P-101-ND	3352T-101-ND	3352W-101-ND
200	3352E-201-ND	3352H-201-ND	3352P-201-ND	3352T-201-ND	3352W-201-ND
500	3352E-501-ND	3352H-501-ND	3352P-501-ND	3352T-501-ND	3352W-501-ND
1K	3352E-102-ND	3352H-102-ND	3352P-102-ND	3352T-102-ND	3352W-102-ND
2K	3352E-202-ND	3352H-202-ND	3352P-202-ND	3352T-202-ND	3352W-202-ND
5K	3352E-502-ND	3352H-502-ND	3352P-502-ND	3352T-502-ND	3352W-502-ND
10K	3352E-103-ND	3352H-103-ND	3352P-103-ND	3352T-103-ND	3352W-103-ND
20K	3352E-203-ND	3352H-203-ND	3352P-203-ND	3352T-203-ND	3352W-203-ND
25K	3352E-253-ND	3352H-253-ND	3352P-253-ND	3352T-253-ND	3352W-253-ND
50K	3352E-503-ND	3352H-503-ND	3352P-503-ND	3352T-503-ND	3352W-503-ND
100K	3352E-104-ND	3352H-104-ND	3352P-104-ND	3352T-104-ND	3352W-104-ND
200K	3352E-204-ND	3352H-204-ND	3352P-204-ND	3352T-204-ND	3352W-204-ND
250K	3352E-254-ND	3352H-254-ND	3352P-254-ND	3352T-254-ND	3352W-254-ND
500K	3352E-504-ND	3352H-504-ND	3352P-504-ND	3352T-504-ND	3352W-504-ND
1M	3352E-105-ND	3352H-105-ND	3352P-105-ND	3352T-105-ND	3352W-105-ND

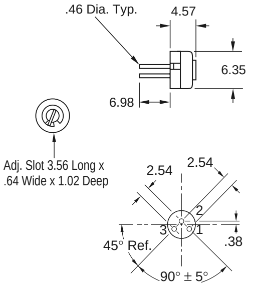
Series	Pricing 1	10	50
3352E / 3352H / 3352P / 3352T / 3352W	1.10	10.00	43.00

* **3352☐-KIT-ND** ***Digi-Key® Series 3352 Trimmer Potentiometers Kit*** 5 each of all values in denoted series (75 total pieces). Notebook style kit box and bin storage guide included. For complete number, substitute corresponding letter (E,H,P,T,W,) for ☐ **$49.95**

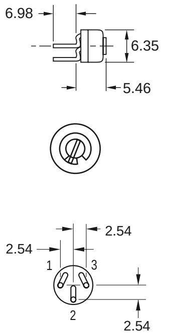
SERIES 3329 1/4" (6.35mm) Round/Single-Turn Cermet/Industrial/Sealed



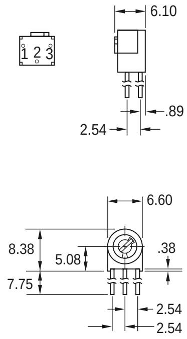
3329H



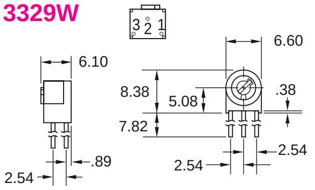
a3329P



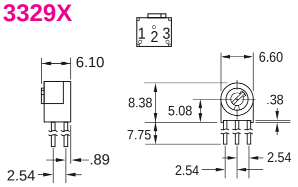
3329S



3329W



3329X



Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms min. **Adjustment Angle:** 240° nom. **Power Rating** (300 volts max.): 85°C — 0.5 watt; 150°C — 0 watt. **Temperature Range:** –55°C to +150°C. **Temperature Coefficient:** ±100 ppm/°C. **Load Life:** 1,000 hours 0.5 watt @ 85°C (3% ΔTR; CRV, 3%). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 4%). **Mechanical Angle:** 260° nom. **Torque:** 5.0 oz-in. max. **Stop Strength:** 5.0 oz-in. min.

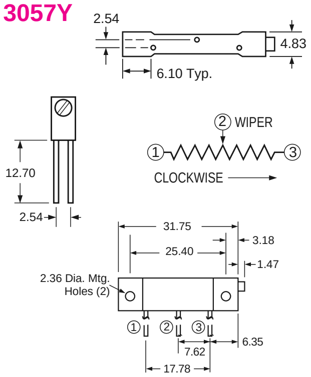
Res. (Ohms)	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.	Digi-Key* Part No.
50	3329H-500-ND	3329P-500-ND	3329S-500-ND	3329W-500-ND	3329X-500-ND
100	3329H-101-ND	3329P-101-ND	3329S-101-ND	3329W-101-ND	3329X-101-ND
200	3329H-201-ND	3329P-201-ND	3329S-201-ND	3329W-201-ND	3329X-201-ND
500	3329H-501-ND	3329P-501-ND	3329S-501-ND	3329W-501-ND	3329X-501-ND
1K	3329H-102-ND	3329P-102-ND	3329S-102-ND	3329W-102-ND	3329X-102-ND
2K	3329H-202-ND	3329P-202-ND	3329S-202-ND	3329W-202-ND	3329X-202-ND
5K	3329H-502-ND	3329P-502-ND	3329S-502-ND	3329W-502-ND	3329X-502-ND
10K	3329H-103-ND	3329P-103-ND	3329S-103-ND	3329W-103-ND	3329X-103-ND
20K	3329H-203-ND	3329P-203-ND	3329S-203-ND	3329W-203-ND	3329X-203-ND
50K	3329H-503-ND	3329P-503-ND	3329S-503-ND	3329W-503-ND	3329X-503-ND
100K	3329H-104-ND	3329P-104-ND	3329S-104-ND	3329W-104-ND	3329X-104-ND
200K	3329H-204-ND	3329P-204-ND	3329S-204-ND	3329W-204-ND	3329X-204-ND
500K	3329H-504-ND	3329P-504-ND	3329S-504-ND	3329W-504-ND	3329X-504-ND
1M	3329H-105-ND	3329P-105-ND	3329S-105-ND	3329W-105-ND	3329X-105-ND

Series	Pricing 1	10	50
3329H/3329P	2.61	23.75	102.13
3329S/3329W/3329X	3.14	28.50	122.55

* **3329☐-KIT-ND** ***Digi-Key® Series 3329 Trimmer Potentiometers Kit*** 5 each of all values in denoted series (70 total pieces). Notebook style case and bin storage guide included. For complete number, substitute corresponding letter (H,P,S,W,X) for ☐ **$129.95**

SERIES 3057 1-1/4" (31.75mm) Rectangular/Multiturn (22) Wirewound/Industrial/Sealed

3057Y



Resistance Tolerance: ±5% std. **Insulation Resistance:** 500vdc. 1,000 MΩ min. **Adjustment Travel:** 22 turns nom. **Power Rating:** 70°C — 1 watt; 150°C — 0 watt. **Temperature Range:** -55°C to +150°C. **Temperature Coefficient:** ±50ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C (2% ΔTR). **Rotational Life:** 200 cycles (2% ΔTR). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
200	3057Y-201-ND	0.86
500	3057Y-501-ND	0.89
1K	3057Y-102-ND	0.72
2K	3057Y-202-ND	0.58
5K	3057Y-502-ND	0.43
10K	3057Y-103-ND	0.34
20K	3057Y-203-ND	0.31

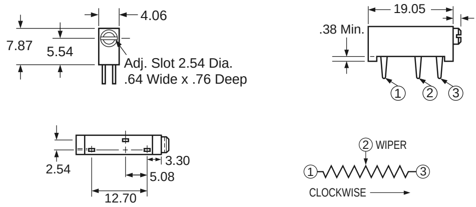
Series	Pricing 1	10	50
3057Y	17.99	163.50	703.05

BOURNS INC

Trimmer Potentiometers

SERIES 3005 3/4" (19.05mm) Rectangular/Multiturn (20) Wirewound/Industrial/Sealed

3005P

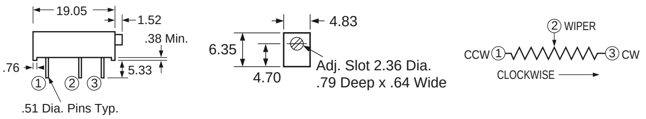


Sealed to prevent contamination from fluxing, soldering and cleaning. **Resistance Tolerance:** ±10% std. **Insulation Resistance:** 500vdc. 1,000 MΩ min. **Adjustment Travel:** 20 turns nom. **Power Rating:** 70°C — 1 watt; 125°C — 0 watt. **Temperature Range:** –65°C to +125°C. **Temperature Coefficient:** ±50ppm/°C. **Load Life:** 1,000 hours 1 watt @ 70°C (3% ΔTR). **Rotational Life:** 200 cycles (4% ΔTR). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

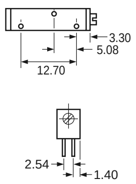
Series	Pricing 1	10	50
3005P	10.15	92.25	396.68

Res. (Ohms)	Digi-Key Part No.	Nominal Resolution (Percent)
100	3005P-101-ND	0.8
200	3005P-201-ND	0.7
500	3005P-501-ND	0.5
1K	3005P-102-ND	0.5
2K	3005P-202-ND	0.4
5K	3005P-502-ND	0.3
10K	3005P-103-ND	0.3
20K	3005P-203-ND	0.2

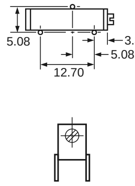
SERIES 3006 3/4" (19.05mm) Rectangular/Multiturn (15) Cermet/Industrial/Sealed



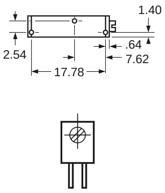
3006P



3006W



3006Y



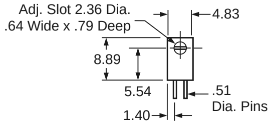
Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms minimum. **Adjustment Angle:** 15 turns nominal. **Power Rating** (400 volts max.): 70°C – 0.75 watt; 150°C – 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.75 watt @ 70°C (4% ΔTR). **Rotational Life:** 200 cycles (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

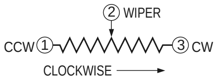
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3006P-101-ND*	3006W-101-ND	3006Y-101-ND
200	3006P-201-ND*	3006W-201-ND	3006Y-201-ND
500	3006P-501-ND*	3006W-501-ND	3006Y-501-ND
1K	3006P-102-ND*	3006W-102-ND	3006Y-102-ND
2K	3006P-202-ND*	3006W-202-ND	3006Y-202-ND
5K	3006P-502-ND*	3006W-502-ND	3006Y-502-ND
10K	3006P-103-ND*	3006W-103-ND	3006Y-103-ND
20K	3006P-203-ND*	3006W-203-ND	3006Y-203-ND
25K	3006P-253-ND*	3006W-253-ND	3006Y-253-ND
50K	3006P-503-ND*	3006W-503-ND	3006Y-503-ND
100K	3006P-104-ND*	3006W-104-ND	3006Y-104-ND
200K	3006P-204-ND*	3006W-204-ND	3006Y-204-ND
250K	3006P-254-ND	3006W-254-ND	3006Y-254-ND
500K	3006P-504-ND*	3006W-504-ND	3006Y-504-ND
1M	3006P-105-ND*	3006W-105-ND	3006Y-105-ND
2M	3006P-205-ND*	3006W-205-ND	3006Y-205-ND

Series	Pricing 1	10	50
3006P	1.73	15.75	67.73
3006W/3006Y	1.87	17.00	73.10

* **3006P-KIT-ND** ***Digi-Key® Series 3006 Potentiometers Kit***
10 each of values denoted (150 total pieces). Notebook style storage case & bin storage guide included **$159.00**

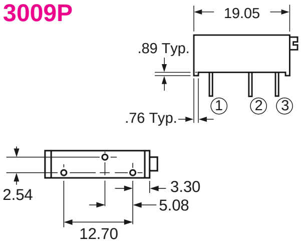
SERIES 3009 3/4" (19.05mm) Rectangular/Multiturn (15) Cermet/Industrial/Sealed



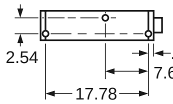


Resistance Tolerance: ±10% std. **Insulation Resistance:** 500vdc. 1,000 megohms minimum. **Adjustment Travel:** 15 turns nominal.**Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.75 watt @ 70°C (4% ΔTR). **Rotational Life:** 200 cycles (3% ΔTR; CRV, 1% or 1 ohm, whichever is greater). **Torque:** 5.0 oz-in. max. **Mechanical Stops:** Wiper idles.

3009P



3009Y

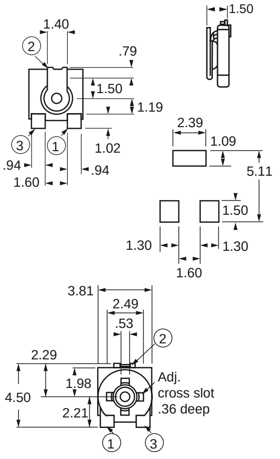


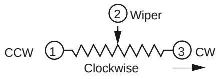
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3009P-101-ND	3009Y-101-ND
200	3009P-201-ND	3009Y-201-ND
500	3009P-501-ND	3009Y-501-ND
1K	3009P-102-ND	3009Y-102-ND
2K	3009P-202-ND	3009Y-202-ND
5K	3009P-502-ND	3009Y-502-ND
10K	3009P-103-ND	3009Y-103-ND
20K	3009P-203-ND	3009Y-203-ND
25K	3009P-253-ND	3009Y-253-ND
50K	3009P-503-ND	3009Y-503-ND
100K	3009P-104-ND	3009Y-104-ND
200K	3009P-204-ND	3009Y-204-ND
500K	3009P-504-ND	3009Y-504-ND
1M	3009P-105-ND	3009Y-105-ND

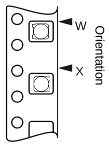
Series	Pricing 1	10	50
3009P/3009Y	2.72	24.75	106.43

SERIES 3364 SMD 4mm Square/Single-Turn Cermet/Industrial/Open Frame

3364W and X







Cross-slot rotor designs suitable for automatic adjustment equipment. Supplied in 12mm embossed tape, compatible with automatic pick-and-place assembly equipment . Rear adjust versions available. **Resistance Tolerance:** ±25% std. **Adjustment Angle:** 260°±20°. **Power Rating** (50 volts max.): 70°C — 0.2 watt. **Temperature Range:** -40°C to +100°C. **Temperature Coefficient:** ±250ppm/°C. **Load Life:** 1,000 hours 0.2 watt @ 70°C (5% ΔTR). **Rotational Life:** 20 cycles (15% ΔTR). **Torque:** 20 to 200g-cm. **Mechanical Angle:** Continuous.

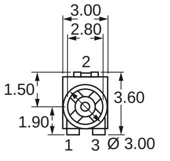
Res. (Ohms)	Digi-Key* Part No.	Digi-Key Part No.
500	3364W-501E☐☐-ND	3364X-501E☐☐-ND
1K	3364W-102E☐☐-ND	3364X-102E☐☐-ND
2K	3364W-202E☐☐-ND	3364X-202E☐☐-ND
5K	3364W-502E☐☐-ND	3364X-502E☐☐-ND
10K	3364W-103E☐☐-ND	3364X-103E☐☐-ND
20K	3364W-203E☐☐-ND	3364X-203E☐☐-ND
50K	3364W-503E☐☐-ND	3364X-503E☐☐-ND
100K	3364W-104E☐☐-ND	3364X-104E☐☐-ND
200K	3364W-204E☐☐-ND	3364X-204E☐☐-ND
500K	3364W-504E☐☐-ND	3364X-504E☐☐-ND
1M	3364W-105E☐☐-ND	3364X-105E☐☐-ND

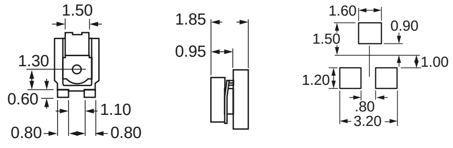
Series	Part No.	Cut Tape Pricing 5	100	Part No.	Tape & Reel Pricing 1,000
3364W/3364X	Add “CT”-ND	4.23	56.55	Add “TR”-ND	321.00

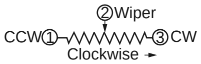
* **3364W-KIT-ND** ***Digi-Key® Series 3364W Trimmer Potentiometers Kit*** 5 each of all values (55 total pieces) **$35.95**

SERIES TC03 Surface Mount 3mm Single-Turn Top Adjust Cermet

TC03X







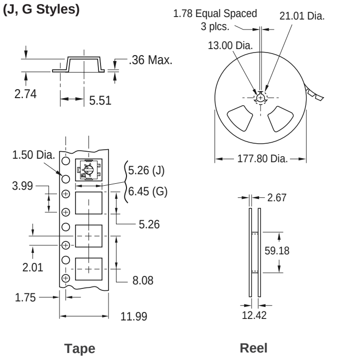
Res. (Ohms)	Digi-Key Part No.
100	TC03X-101E☐☐-ND
1K	TC03X-102E☐☐-ND
2K	TC03X-202E☐☐-ND
5K	TC03X-502E☐☐-ND
10K	TC03X-103E☐☐-ND
20K	TC03X-203E☐☐-ND

Resistance Tolerance: ±25%. **Adjustment Angle:** 270°. **Power Rating:** .1 watt. **Temperature Range:** -40°C to +85°C. **Temperature Coefficient:** ±250ppm/°C. **Rotational Life:** 20 turns. **Rotational Torque:** 20-200g-cm max.

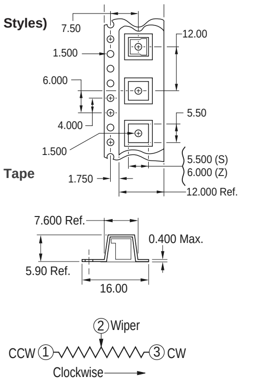
Series	Part No.	Cut Tape Pricing 1	10	100	Part No.	Tape & Reel Pricing 2,000
TC03X	Add “CT-ND”	.20	1.65	14.40	Add “TR-ND”	100.00/M

SERIES 3314 SMD 4mm Square/Single-Turn Cermet/Industrial/Sealed

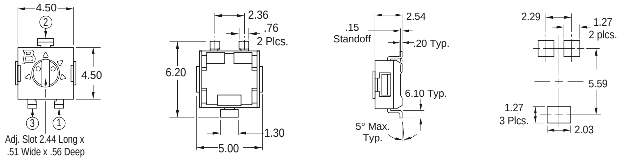
(J, G Styles)



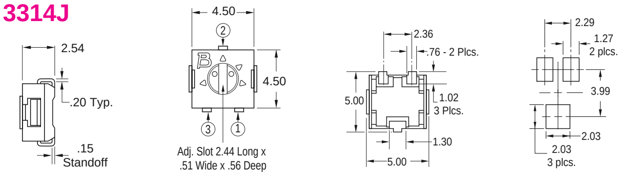
(S, Z Styles)



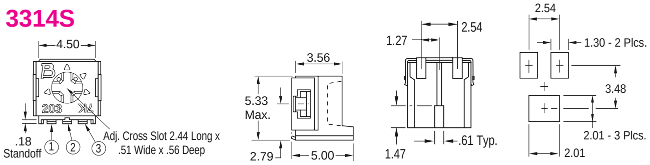
3314G



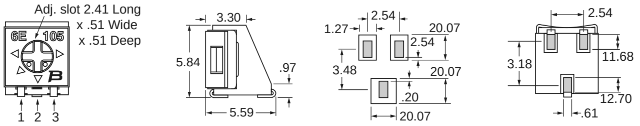
3314J



3314S



3314Z



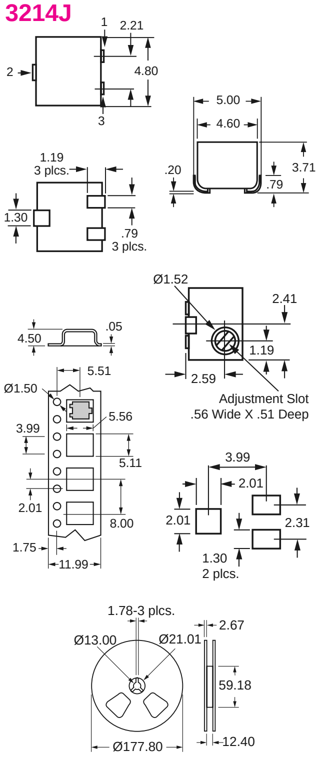
• Compatible with all surface mount soldering processes. • Very low CRV — 1%. • Standoffs facilitate boardwashing and mechanical stability. **Resistance Tolerance:** ±20% std. **Insulation Resistance:** 500vdc. 100 megohms min. **Adjustment Angle:** 210° nom. **Soldering Heat:** 260°C, 10 seconds, TRS ±1%. **Power Rating** (300 volts max.): 70°C — 0.25 watt; 125°C — 0 watt. **Temperature Range:** –55°C to +125°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** (@ 70°C Rated Power 1,000 hours) TRS ±3%. **Rotational Life:** 100 cycles TRS ±3%. **Mechanical Angle:** 240° nom. **Torque:** 180 g-cm. typical. **Stop Strength:** 300 g-cm. typical.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	3314G-101E☐☐-ND	3314J-101E☐☐-ND	—	3314Z-101E☐☐-ND
200	3314G-201E☐☐-ND	3314J-201E☐☐-ND	—	3314Z-201E☐☐-ND
500	3314G-501E☐☐-ND	3314J-501E☐☐-ND	—	3314Z-501E☐☐-ND
1K	3314G-102E☐☐-ND	3314J-102E☐☐-ND	—	3314Z-102E☐☐-ND
2K	3314G-202E☐☐-ND	3314J-202E☐☐-ND	—	3314Z-202E☐☐-ND
5K	3314G-502E☐☐-ND	3314J-502E☐☐-ND	3314S-502E☐☐-ND	3314Z-502E☐☐-ND
10K	3314G-103E☐☐-ND	3314J-103E☐☐-ND	—	3314Z-103E☐☐-ND
20K	3314G-203E☐☐-ND	3314J-203E☐☐-ND	—	3314Z-203E☐☐-ND
25K	3314G-253E☐☐-ND	3314J-253E☐☐-ND	—	3314Z-253E☐☐-ND
50K	3314G-503E☐☐-ND	3314J-503E☐☐-ND	—	3314Z-503E☐☐-ND
100K	3314G-104E☐☐-ND	3314J-104E☐☐-ND	—	3314Z-104E☐☐-ND
200K	3314G-204E☐☐-ND	3314J-204E☐☐-ND	3314S-204E☐☐-ND	3314Z-204E☐☐-ND
250K	3314G-254E☐☐-ND	3314J-254E☐☐-ND	3314S-254E☐☐-ND	3314Z-254E☐☐-ND
500K	3314G-504E☐☐-ND	3314J-504E☐☐-ND	3314S-504E☐☐-ND	3314Z-504E☐☐-ND
1M	3314G-105E☐☐-ND	3314J-105E☐☐-ND	—	3314Z-105E☐☐-ND
2M	3314G-205E☐☐-ND	3314J-205E☐☐-ND	3314S-205E☐☐-ND	3314Z-205E☐☐-ND

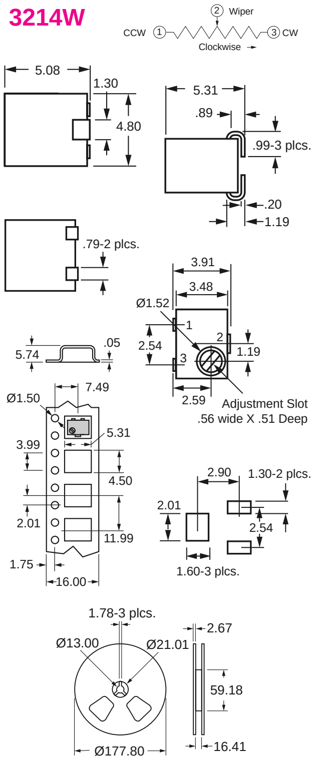
Series	Part No.	Cut Tape Pricing 5	100	Part No.	Tape & Reel Pricing 200	500
3314G/3314J	Add “CT-ND”	9.00	156.00	Add “TR-ND”	—	489.00
3314S	Add “CT-ND”	9.90	170.28	—	—	—
3314Z	Add “CT-ND”	9.90	170.28	Add “TR-ND”	244.20	—

SERIES 3214 Surface Mount 4mm Square/ Multi-Turn Cermet/Industrial/Sealed

3214J



3214W



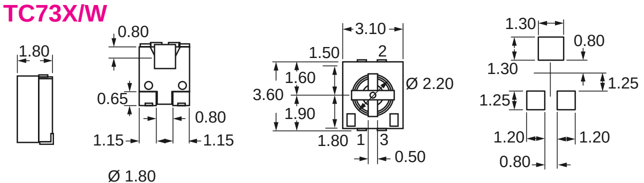
• Sealed to withstand board wash processing • Pick and place centering design, with flush adjustment • Patent #5047746 advanced drive/wiper mechanism. **Resistance Tolerance:** ±10% std. **Absolute Minimum Resistance:** 1% or 2.0 ohms (whichever is greater). **Contact Resistance Variation:** 3% or 3 ohms max. **Resolution:** Essentially Infinite. **Insulation Resistance:** 500 vdc., 100 megohms min. **Dielectric Strength: Sea Level:** 600 vac (1 minute). **Adjustment Angle:** 5 turns nom. **Power Rating (300 volts max.):** 85°C: 0.25 watt, 150°C: 0 watt. **Temperature Range:** -65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Humidity:** MIL-STD 202 Method 106, TRS ±2%; IR 10 megohms. **Vibration:** 20G TRS ±1%; VRS ±1%. **Shock:** 100G TRS ±1%; VRS ±1%. **Load Life (@ 85°C Rated Power 1000 Hours):** TRS 3 ohms or 3% (whichever is greater). **Rotational Cycling:** 200 cycles, TRS 3 ohms or 3% (whichever is greater). **Thermal Shock:** 5 cycles, TRS ±2%; VRS ±1%. **Mechanical Stop:** wiper idles. **Torque:** 180g-cm max. **Weight:** Approximately 0.01 oz. **Marking:** Manufacturer’s code, resistance code and date code. **Solderability:** Per MIL-STD-202, Method 208. **Wiper:** Set at 50% nominal. **Flammability:** UL94V0

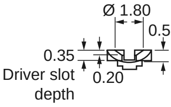
Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	3214J-101E☐☐-ND	3214W-101E☐☐-ND
200	3214J-201E☐☐-ND	3214W-201E☐☐-ND
500	3214J-501E☐☐-ND	3214W-501E☐☐-ND
1K	3214J-102E☐☐-ND	3214W-102E☐☐-ND
2K	3214J-202E☐☐-ND	3214W-202E☐☐-ND
5K	3214J-502E☐☐-ND	3214W-502E☐☐-ND
10K	3214J-103E☐☐-ND	3214W-103E☐☐-ND
20K	3214J-203E☐☐-ND	3214W-203E☐☐-ND
50K	3214J-503E☐☐-ND	3214W-503E☐☐-ND
100K	3214J-104E☐☐-ND	3214W-104E☐☐-ND

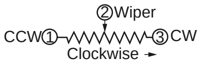
Series	Part No.	Cut Tape Pricing 1	10	100	Part No.	Tape & Reel Pricing 250	500
3214J	Add “CT-ND”	3.22	27.60	239.20	Add “TR-ND”	—	750.00
3214W	Add “CT-ND”	3.22	27.60	239.20	Add “TR-ND”	414.00	750.00

SERIES TC73 Surface Mount 3mm Single-Turn Top Adjust Carbon

TC73X/W





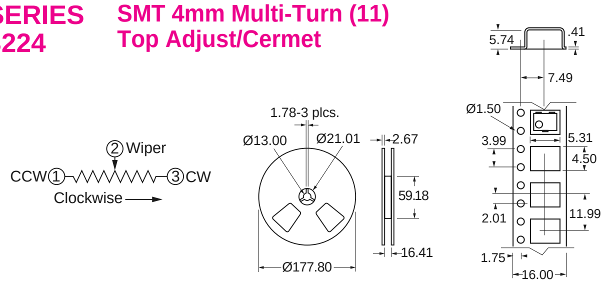


Resistance Tolerance: ±30%. **Adjustment Angle:** 260°. **Power Rating:** .05 watt. **Temperature Range:** -25°C to +85°C. **Temperature Coefficient:** ±250ppm/°C. **Rotational Life:** 20 turns. **Rotational Torque:** 10-150g-cm max.

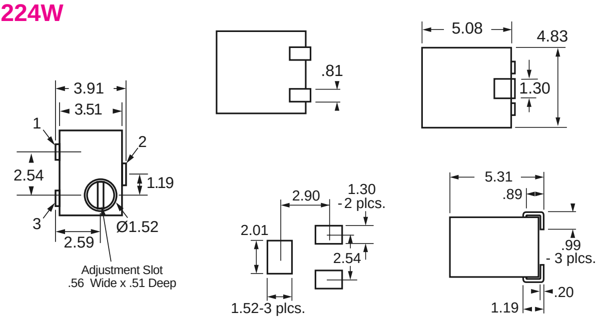
Res. (Ohms)	Digi-Key Part No.
500	TC73X-501E☐☐-ND
1K	TC73X-102E☐☐-ND
2K	TC73X-202E☐☐-ND
5K	TC73X-502E☐☐-ND
10K	TC73X-103E☐☐-ND
20K	TC73X-203E☐☐-ND

Series	Part No.	Cut Tape Pricing 1	10	100	Part No.	Tape & Reel Pricing 2,000
TC73X	Add “CT-ND”	.20	1.65	14.40	Add “TR-ND”	100.00/M

SERIES 3224 SMT 4mm Multi-Turn (11) Top Adjust/Cermet



3224W



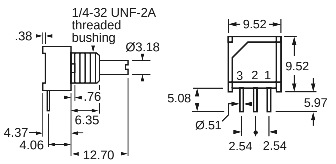
Resistance Tolerance: ±10% standard. **Absolute Minimum Resistance:** 1% or 2.0 ohms (whichever is greater). **Contact Resistance Variation:** 1% or 3 ohms maximum. **Resolution:** Essentially Infinite. **Insulation Resistance:** 500 vdc., 100 megohms minimum. **Dielectric Strength: Sea Level:** 600 vac (1 minute), **Adjustment Angle:** 11 turns nominal. **Power Rating (300 volts max.):** 85°C: 0.25 watt, 150°C: 0 watt. **Temperature Range:** –65°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Humidity:** MIL-STD 202 Method 106, TRS ±2%; IR 10 megohms. **Vibration:** 20G TRS ±1%, VRS ±1%. **Shock:** 100G TRS ±1%, VRS ±1%. **Load Life (@ 85°C Rated Power 1000 Hours):** TRS 3 ohms or 3% (whichever is greater). **Rotational Cycling:** 200 cycles, TRS 3 ohms or 3% (whichever is greater). **Thermal Shock:** 5 cycles, TRS ±2%, VRS ±1%. **Mechanical Stop:** Wiper idles. **Torque:** 180g-cm maximum. **Weight:** Approximately 0.01 oz. **Marking:** Manufacturer's code, resistance code and date code.

Res. (Ohms)	Digi-Key Part No.
2K	3224W-202E☐☐-ND
5K	3224W-502E☐☐-ND
10K	3224W-103E☐☐-ND
20K	3224W-203E☐☐-ND

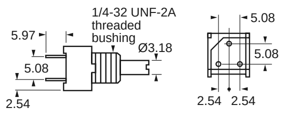
Series	Part No.	Cut Tape Pricing 1	10	100	Part No.	Tape & Reel Pricing 250
3224W	Add "CT-ND"	5.22	44.70	387.40	Add "TR-ND"	670.50

SERIES 3310 9mm Square Panel Control Conductive Plastic, Sealed

3310C



3310Y



- Conductive plastic
- Linear
- PC board and bushing mount
- Plastic bushing and plastic shaft
- Withstands typical industrial washing processes
- Compact package saves board and panel space

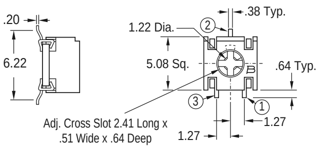
Standard Resistance Range (Linear): 1K ohms to 1 megohm **Total Resistance Tolerance (Linear Tapers):** ±20% **Independent LInearity:** ±5% **Absolute Minimum Resistance:** 2 ohms maximum **Effective Electrical Angle:** 270° ±15° **Contact Resistance Variation:** 1% or 1 ohm (whichever is greater) **Dielectric Withstanding Voltage: (Sea Level)** 900 VAC minimum; **(70,000 Feet)** 350 VAC minimum **Insulation Resistance:** 1,000 megohms minimum **Power Rating @ 70°C:** (Derate to 0 at 125°C - Voltage limited by power dissipation or 200 VAC, whichever is less) 0.25 watts **Stop Strength:** 5.65 nominal **Mechanical Angle:** 300° nominal **Torque (Running):** 3.53 nominal.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
1K	3310C-1-102-ND	3310Y-1-102-ND
2K	3310C-1-202-ND	3310Y-1-202-ND
5K	3310C-1-502-ND	3310Y-1-502-ND
10K	3310C-1-103-ND	3310Y-1-103-ND
20K	3310C-1-203-ND	3310Y-1-203-ND
50K	3310C-1-503-ND	3310Y-1-503-ND
100K	3310C-1-104-ND	3310Y-1-104-ND
200K	3310C-1-204-ND	3310Y-1-204-ND
500K	3310C-1-504-ND	3310Y-1-504-ND
1M	3310C-1-105-ND	3310Y-1-105-ND

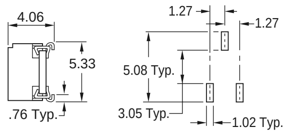
Series	Pricing 1	10	50
3310C/3310Y	2.94	26.04	109.20

SERIES 3335 SMD 5mm Square/Single-Turn Cermet/Industrial/Sealed

Common Dimensions 3335A, B

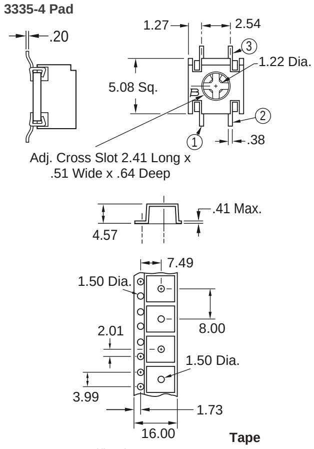


3335A

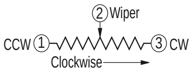


Common Dimensions 3335W, X

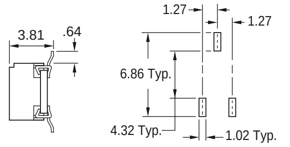
3335-4 Pad



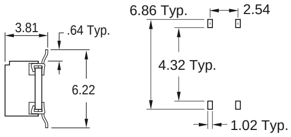
Meets EIA specification 481



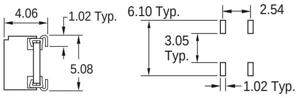
3335B



3335W



3335X



- Available in 3 and 4 pad SMD design
- Auto adjust rotor design, packaged in 16mm wide (7' reel) embossed tape, compatible with automatic placement equipment
- Rugged lead frame construction
- Multi-wire hoetip wiper
- Recommended for reflow processing only.

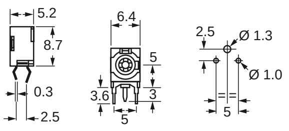
Resistance Tolerance: ±20% standard. **Insulation Resistance:** 500vdc. 1,000 megohms minimum. **Adjustment Travel:** 240° nominal. **Maximum Exposure** (Temp./Time): +215°C/3 minimum. **Power Rating** (100 volts max.): 85°C — 0.2 watt; 150°C — 0 watt. **Temperature Range:** -55°C to +150°C. **Temperature Coefficient:** ±100ppm/°C. **Load Life:** 1,000 hours 0.2 watt @ 85°C (3% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Rotational Life:** 200 cycles (4% ΔTR; CRV, 3% or 3 ohms, whichever is greater). **Mechanical Angle:** 270° nominal. **Torque:** 3.0 oz-in. maximum. **Stop Strength:** 4.0 oz-in. minimum.

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.	Digi-Key Part No.
100	—	3335B-101ECT-ND	3335W-101ECT-ND	3335X-101ECT-ND
200	—	—	—	3335X-201ECT-ND
500	—	—	—	3335X-501ECT-ND
1K	—	—	3335W-102ECT-ND	3335X-102ECT-ND
2K	—	3335B-202ECT-ND	3335W-202ECT-ND	—
10K	—	—	—	3335X-103ECT-ND
20K	3335A-203ECT-ND	3335B-203ECT-ND	—	—
25K	—	—	3335W-253ECT-ND	3335X-253ECT-ND
50K	3335A-503ECT-ND	3335B-503ECT-ND	—	3335X-503ECT-ND
200K	3335A-204ECT-ND	3335B-204ECT-ND	—	—
250K	—	—	—	3335X-254ECT-ND
500K	3335A-504ECT-ND	3335B-504ECT-ND	—	—

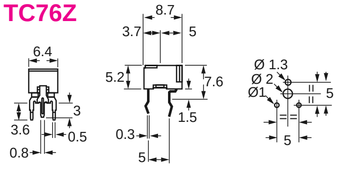
Series	Pricing 5
3335A / 3335B / 3335W / 3335X	12.00

SERIES TC76 6mm Single-Turn Carbon

TC76B



TC76Z



Resistance Tolerance: ±30% **Adjustment Angle:** 280° **Power Rating:** .1 watt **Temperature Range:** -25°C to +70°C **Temperature Coefficient:** ±300ppm/°C **Rotational Life:** 100 turns **Rotational Torque:** .2 to 3 Ncm maximum

Series	Pricing 1	10	100
TC76B	.20	1.65	14.40
TC76Z	.20	1.65	14.40

Res. (Ohms)	Digi-Key Part No.	Digi-Key Part No.
100	TC76B-101-ND	TC76Z-101-ND
1K	TC76B-102-ND	TC76Z-102-ND
2K	TC76B-202-ND	TC76Z-202-ND
5K	TC76B-502-ND	TC76Z-502-ND
10K	TC76B-103-ND	TC76Z-103-ND
20K	TC76B-203-ND	TC76Z-203-ND
50K	YC76B-503-ND	TC76Z-503-ND
100K	TC76B-104-ND	TC76Z-104-ND

CTS® Stock Pot™ Potentiometers 23.81mm Diameter

Series 450

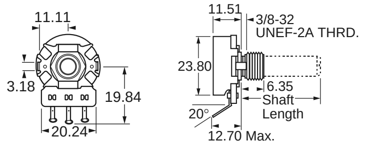


Fig. 1 — SD Slot

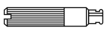


Fig. 2 — Flat

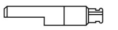
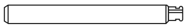


Fig. 3 — Round



To determine shaft length, use appropriate variable (1-8) shown below.

Shaft Length (mm)	12.70	15.88	19.05	22.23	25.40	50.80
Figure 1 - Slot	1	2	3	4	5	—
Figure 2 - Flat	—	—	—	6	7	—
Figure 3 - Round	—	—	—	—	—	8

Res. Ohms	Digi-Key Part No. *	Price Each 1	10	100	250	500	1,000
500	450D501-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
1K	450D102-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
2.5K	450D252-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
5K	450D502-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
10K	450D103-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
25K	450D253-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
50K	450D503-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
100K	450D104-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
250K	450D254-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41
500K	450D504-☐-ND	3.18	2.87	2.44	2.02	1.70	1.41

***For complete part number, substitute corresponding variable (from chart above) for ☐.**

Features:

• Off the shelf availability • Wide Resistance Range • Available with three shaft styles: knurled & slotted, flatted or round • Economical in limited volume applications

Electrical and Mechanical Specifications:

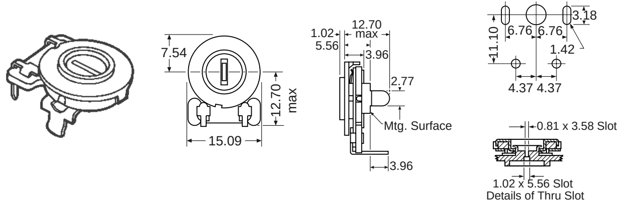
• **Resistance Range:** 500Ω through 500KΩ • **Resistance Tolerance:** ±20% • **Power Rating, Watt:** Through 10KΩ, 1/2 watt; above 10KΩ through 100KΩ, 1/3 watt; above 100KΩ, 1/4 watt • **Voltage Rating:** Bushing to terminals: High pot test, one minute - 1080 VAC • **Shaft Information:** Diameter: 6.35mm (Dia. over knurl 6.10mm – 6.25mm) • **Angle of Rotation:** Total rotation – 300° ±5°; Effective Rotation approximately 300° • **Bushing Information:** Material - Diecast zinc; Diameter – EIA st. 3/8" - 32 UNEF-2A thread; Length - 6.35mm ± .40mm • **Terminal Information:** Solder lug, formed to rear • **Locating Lug:** Left side, terminals down

Mounting hardware included

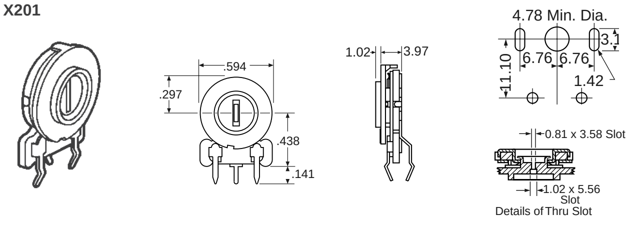
CTS® Miniature 15.08mm Trimmer Potentiometers

Series 201

U201



X201



Features:

• Miniature size — knob 15.08mm diameter • Rim to guide screwdriver • Printed circuit mounting with knob parallel or perpendicular to printed circuit board • Wide resistance range • Knob slotted for front or rear screwdriver adjustment • Reliable CTS composition resistance element • Press fit self-supporting mounting

Electrical and Mechanical Specifications:

• **Resistance Range:** 100Ω through 1 Megohm • **Resistance Tolerance:** ±20% • **Power Rating, Watts:** Below 5000Ω — 1/4 watt @ 40°C; 5000Ω and above — 1/4 watt @ 55°C • **Voltage Rating:** 350 VDC • **Resistance Tapers:** Linear • **Adjusting Knob Information:** Blue nylon knob, 15.08mm diameter, slotted for front or rear screwdriver adjustment with rim to guide screwdriver. • **Angle of Rotation:** Total rotation — 260° ± 5°

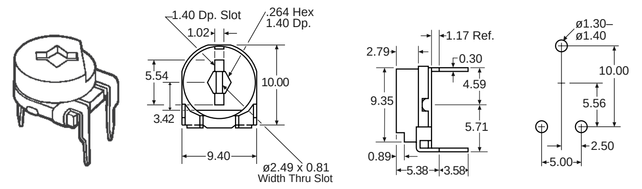
Res. Ohms.	Digi-Key Part No.* Laydown Version	Digi-Key Part No.** Standup Version	Price Each 1	10	100	500	1,000	CTS Part No. Laydown Version	CTS Part No. Standup Version
100	201UR101B-ND	201XR101B-ND	.50	.46	.42	.33	.27	201UR101B	201XR101B
250	201UR251B-ND	201XR251B-ND	.50	.46	.42	.33	.27	201UR251B	201XR251B
500	201UR501B-ND	201XR501B-ND	.50	.46	.42	.33	.27	201UR501B	201XR501B
1K	201UR102B-ND	201XR102B-ND	.50	.46	.42	.33	.27	201UR102B	201XR102B
2.5K	201UR252B-ND	201XR252B-ND	.50	.46	.42	.33	.27	201UR252B	201XR252B
5K	201UR502B-ND	201XR502B-ND	.50	.46	.42	.33	.27	201UR502B	201XR502B
10K	201UR103B-ND	201XR103B-ND	.50	.46	.42	.33	.27	201UR103B	201XR103B
25K	201UR253B-ND	201XR253B-ND	.50	.46	.42	.33	.27	201UR253B	201XR253B
50K	201UR503B-ND	201XR503B-ND	.50	.46	.42	.33	.27	201UR503B	201XR503B
100K	201UR104B-ND	201XR104B-ND	.50	.46	.42	.33	.27	201UR104B	201XR104B
250K	201UR254B-ND	201XR254B-ND	.50	.46	.42	.33	.27	201UR254B	201XR254B
500K	201UR504B-ND	201XR504B-ND	.50	.46	.42	.33	.27	201UR504B	201XR504B
1M	201UR105B-ND	201XR105B-ND	.50	.46	.42	.33	.27	201UR105B	201XR105B

* **201U-KIT-ND** ***Digi-Key® Series 201 Potentiometer Kit (Q656225)*** - 5 each of 13 values **$29.95**
** **201X-KIT-ND** ***Digi-Key® Series 201 Potentiometer Kit (Q656235)*** - 5 each of 13 values **$29.95**

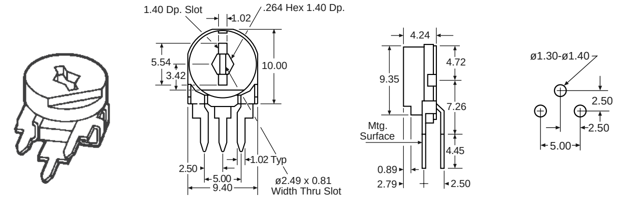
CTS® Miniature 10mm Trimmer Potentiometers

Series 262

U262



X262



Features:

• Miniature size • Adjustment knob slotted for front or rear screwdriver adjustment • P.C. mounting with knob parallel or perpendicular to printed circuit board • Low height profile • Wide resistance range • Reliable screened CTS composition element

Electrical and Mechanical Specifications:

Resistance Range: Standard — 500 ohms through 1 megohm • **Resistance Tolerance:** Standard – ±20% • **Power Rating Watts:** 0.15 watts @ 40°C • **Voltage Rating:** Operating maximum — 350 VDC. • **Resistance Tapers:** Linear • **Adjustment Knob:** Color coded nylon knob with hex hole for top adjustment plus slot for either top or bottom screwdriver adjustment. • **Angle of Rotation:** Total rotation — 265° ±5% • **Rotational Torque:** .3 to 5 inch ounces • **Stop Strength:** 16 inch ounces

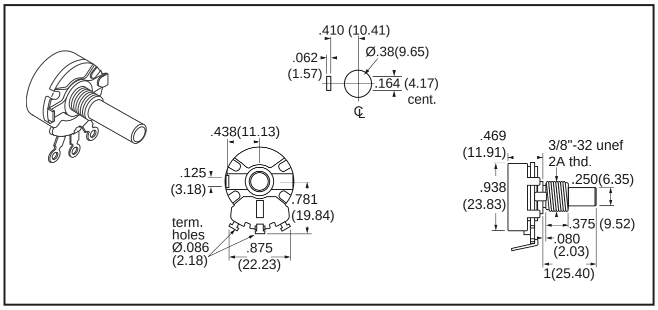
Res. Ohms.	Color	Digi-Key Part No.* Laydown Version	Digi-Key Part No.** Standup Version	Price Each 1	10	100	500	1,000	CTS Part No. Laydown Version	CTS Part No. Standup Version
500	Green	U262R501B-ND	X262R501B-ND	.51	.48	.43	.34	.28	U262R501B	X262R501B
1K	Yellow	U262R102B-ND	X262R102B-ND	.51	.48	.43	.34	.28	U262R102B	X262R102B
2.5K	Red	U262R252B-ND	X262R252B-ND	.51	.48	.43	.34	.28	U262R252B	X262R252B
5K	Blue	U262R502B-ND	X262R502B-ND	.51	.48	.43	.34	.28	U262R502B	X262R502B
10K	White	U262R103B-ND	X262R103B-ND	.51	.48	.43	.34	.28	U262R103B	X262R103B
25K	Black	U262R253B-ND	X262R253B-ND	.51	.48	.43	.34	.28	U262R253B	X262R253B
50K	Orange	U262R503B-ND	X262R503B-ND	.51	.48	.43	.34	.28	U262R503B	X262R503B
100K	Gray	U262R104B-ND	X262R104B-ND	.51	.48	.43	.34	.28	U262R104B	X262R104B
250K	Violet	U262R254B-ND	X262R254B-ND	.51	.48	.43	.34	.28	U262R254B	X262R254B
500K	Brown	U262R504B-ND	X262R504B-ND	.51	.48	.43	.34	.28	U262R504B	X262R504B
1M	Lt. Blue	U262R105B-ND	X262R105B-ND	.51	.48	.43	.34	.28	U262R105B	X262R105B

* **U262-KIT-ND** ***Digi-Key® Series 262 Potentiometer Kit (Q656346)*** - 5 each of 11 values **$27.95**
** **X262-KIT-ND** ***Digi-Key® Series 262 Potentiometer Kit (Q656436)*** - 5 each of 11 values **$27.95**

CTS Wirewound Potentiometers - 5 Watt Series 026

SPECIFICATIONS:

Resistance Range: 5Ω through 25KΩ **Resistance Tolerance:** ±20% **Power Rating Watts:** 5 Watts @ 25°C Derated to No Load @ 105°C **Voltage Rating:** Operating Max. 500VDC **Shaft Information:** 1" FMS x .250" (25.40mm FMS x 6.35mm) Diameter, Metal, Plain Round **Angle of Rotation:** 300° ±5° **Bushing Information:** Diameter: EIA Std. 3/8"-32, UNEF-2A Thread Length: 3/8" ± 1/64" (9.52mm ± .40mm) **Terminal Information:** Solder Lug, Formed to Rear **Locating Lug:** Left Side, Terminals Down



Ohms	Digi-Key Part No.	Price Each 1	10	50	100	CTS Part No.
5	CT2150-ND	3.61	3.36	2.79	2.52	026T332R5AOB1A4
10	CT2151-ND*	3.61	3.36	2.79	2.52	026T332R100B1A4
25	CT2152-ND	3.61	3.36	2.79	2.52	026T332R250B1A4
50	CT2153-ND*	3.61	3.36	2.79	2.52	026T332R500B1A4
100	CT2154-ND*	3.61	3.36	2.79	2.52	026T332R101B1A4
250	CT2155-ND	3.61	3.36	2.79	2.52	026T332R251B1A4
500	CT2156-ND*	3.61	3.36	2.79	2.52	026T332R501B1A4
1K	CT2157-ND*	3.61	3.36	2.79	2.52	026T332R102B1A4
5K	CT2158-ND	3.61	3.36	2.79	2.52	026T332R502B1A4
10K	CT2159-ND*	3.61	3.36	2.79	2.52	026T332R103B1A4
25K	CT2160-ND*	3.61	3.36	2.79	2.52	026T332R253B1A4

* **26-KIT-ND** ***Digi-Key® Series 026 Potentiometer Kit (Q656163)*** - 5 each of 7 values **$99.95**

CTS Carbon Potentiometers - 1/8 Watt Series 296

SPECIFICATIONS:

Resistance Range: 500 ohms through 1 megohm.

Resistance tolerance: ±20%.

Power Rating Watts: 0.15 Watts @ 40°C derated to no load @ 85°C.

Voltage Rating: Across End Terminals: 250VDC.

Rotational Torque: 20-144gcm.

Angle of Rotation: Total rotation: 300° ±5°, Effective Rotation: 280° (Approx.)

Stops: 0.57 N-m Minimum Stop Strength.

Shaft Information: Length: 13.72mm Beyond Cover, Style: KnurFFled, Diameter: 6mm.

Mounting Information: P.C. Board Mounting.

Fig. 1 - Vertical Adjust

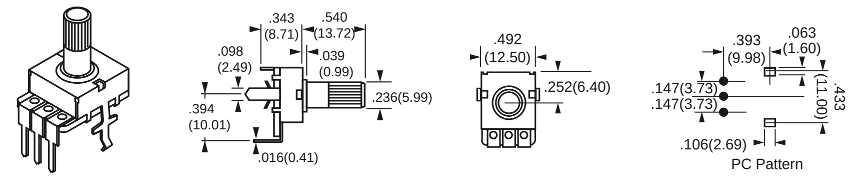


Fig. 2 - Horizontal Adjust

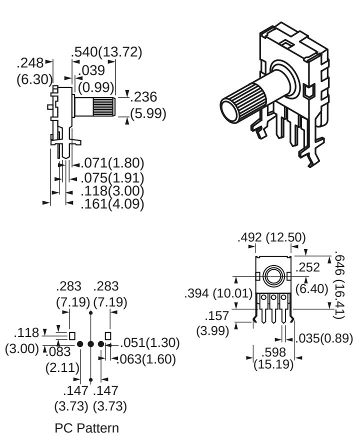


Fig.	Ohms	Description	Digi-Key Part No.	Price Each 1	10	50	100	CTS Part No.
1	500	Vertical	CT2261-ND*	1.51	1.26	1.05	.84	296UD501B1N
	1K	Vertical	CT2262-ND*	1.51	1.26	1.05	.84	296UD102B1N
	2.5K	Vertical	CT2263-ND*	1.51	1.26	1.05	.84	296UD252B1N
	5K	Vertical	CT2264-ND*	1.51	1.26	1.05	.84	296UD502B1N
	10K	Vertical	CT2265-ND*	1.51	1.26	1.05	.84	296UD103B1N
	25K	Vertical	CT2266-ND*	1.51	1.26	1.05	.84	296UD253B1N
	50K	Vertical	CT2267-ND*	1.51	1.26	1.05	.84	296UD503B1N
	100K	Vertical	CT2268-ND*	1.51	1.26	1.05	.84	296UD104B1N
	250K	Vertical	CT2269-ND*	1.51	1.26	1.05	.84	296UD254B1N
	500K	Vertical	CT2270-ND*	1.51	1.26	1.05	.84	296UD504B1N
	1MEG	Vertical	CT2271-ND*	1.51	1.26	1.05	.84	296UD105B1N
2	500	Horizontal	CT2250-ND**	1.51	1.26	1.05	.84	296XD501B1N
	1K	Horizontal	CT2251-ND**	1.51	1.26	1.05	.84	296XD102B1N
	2.5K	Horizontal	CT2252-ND**	1.51	1.26	1.05	.84	296XD252B1N
	5K	Horizontal	CT2253-ND**	1.51	1.26	1.05	.84	296XD502B1N
	10K	Horizontal	CT2254-ND**	1.51	1.26	1.05	.84	296XD103B1N
	25K	Horizontal	CT2255-ND**	1.51	1.26	1.05	.84	296XD253B1N
	50K	Horizontal	CT2256-ND**	1.51	1.26	1.05	.84	296XD503B1N
	100K	Horizontal	CT2257-ND**	1.51	1.26	1.05	.84	296XD104B1N
	250K	Horizontal	CT2258-ND**	1.51	1.26	1.05	.84	296XD254B1N
	500K	Horizontal	CT2259-ND**	1.51	1.26	1.05	.84	296XD504B1N
	1MEG	Horizontal	CT2260-ND**	1.51	1.26	1.05	.84	296XD105B1N

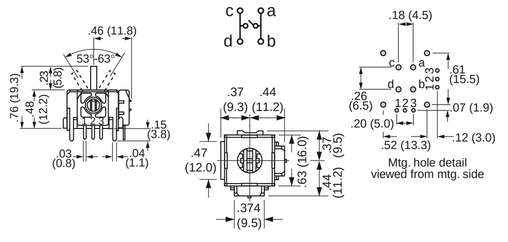
* **296U-KIT-ND** ***Digi-Key® Series 296 Potentiometer Kit (Q656135)*** - 5 each of 11 values **$59.95**
** **296X-KIT-ND** ***Digi-Key® Series 296 Potentiometer Kit (Q656146)*** - 5 each of 11 values **$59.95**

CTS Two Axis, Ministick Controller with Optional Momentary Switch Series 252

SPECIFICATIONS:

Controller without Switch: **Resistance Tolerance:** Standard: ±20% **Resistance Taper:** Linear ±5% **Insulation Resistance:** 100MΩ min @ 250 VDC **Rotational Torque:** 153 ±102 gf-cm **Power Rating:** 0.01 watt @50°C, 0.003 watt @ 70°C **Maximum Operating Voltage:** Maximum 50 VAC or 5 VDC **Angle of Rotation:** 60° **Life:** 1,000,000 cycles

Controller with Momentary Switch: **Contact Resistance:** 100 mΩ max. **Dielectric Strength:** 250 VAC 50/60 Hz for 1 minute **Insulation Resistance:** 100 MΩ min @ 100 VDC **Operational Force:** 520 ±260 gf **Power Rating:** 12 VDC, 50 Milliamps **Travel:** 0.5 +0.5 -0.4mm **Life:** 100,000 cycles



Ohms	Description	Digi-Key Part No.	Price Each 1	10	50	100	250	CTS Part No.
10K	Controller without Switch	252A103B60NA-ND	5.74	5.33	5.18	4.15	3.32	252A103B60NA
10K	Controller with Switch	252A103B60NB-ND	6.09	5.66	5.53	4.43	3.54	252A103B60NB
100K	Controller without Switch	252A104B60NA-ND	5.74	5.33	5.18	4.15	3.32	252A104B60NA
100K	Controller with Switch	252A104B60NB-ND	6.09	5.66	5.53	4.43	3.54	252A104B60NB

CTS Carbon Slide Potentiometers - 1/5 Watt

Series 448

Fig. 1 - Vertical

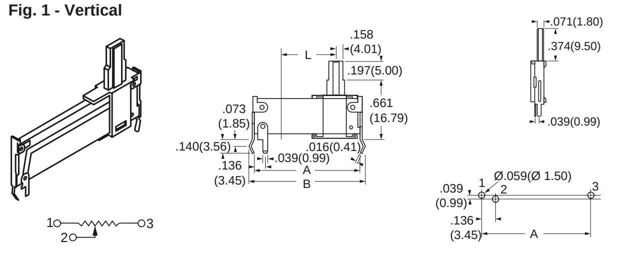
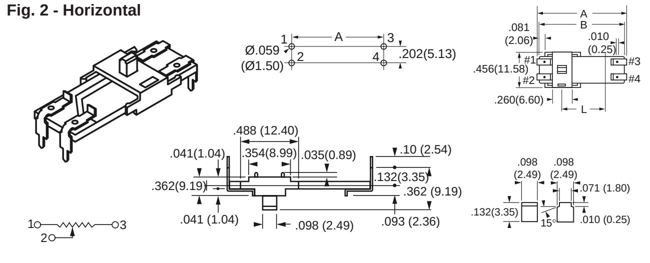


Fig. 2 - Horizontal



Vertical Version

SPECIFICATIONS: Resistance Range: 5K ohms through 1 megohm **Resistance Tolerance:** ±20% **Power Rating Watts:** 0.2 Watts @ 55°C Derated to No Load @ 85°C **Voltage Rating:** Across End Terminals: 300VDC **Operating Life:** 10,000 Cycles **Stop Strength:** Maximum: 3K gf **Resistance Taper:** Linear **Slide Travel:** Mechanical - 20, 30, 45mm **Terminal Information:** Printed Circuit: Vertical or Horizontal Mounting Available **Mounting Information:** Type "X" - Vertical Mount, See Figure 1 for Dimensional Details.

Digi-Key Part No.	Price Each 1	10	50	100	500
CT2312-ND - CT2316-ND	1.44	1.20	1.00	.80	.67
CT2320-ND - CT2323-ND	1.51	1.26	1.05	.84	.70

Ohms	Dimensions – In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No.	Ohms	Dimensions – In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No.
50K	1.18 x 1.75 x 1.834 (29.97 x 44.48 x 46.58)	CT2312-ND	448XD2503BDN	50K	1.77 x 2.3242 x 2.245 (44.96 x 59.03 x 57.02)	CT2320-ND	448XE2503BDN
250K		CT2314-ND	448XD2254BDN	250K		CT2322-ND	448XE2254BDN
500K		CT2315-ND	448XD2504BDN	500K		CT2323-ND	448XE2504BDN
1MEG		CT2316-ND	448XD2105BDN	—		—	—

Horizontal Version

SPECIFICATIONS: Resistance Range: 5K ohms through 1 megohm **Resistance Tolerance:** ±20% **Power Rating Watts:** 0.2 Watts @ 55°C Derated to No Load @ 85°C **Voltage Rating:** Across End Terminals: 300VDC **Operating Life:** 10,000 Cycles **Stop Strength:** Maximum: 3K gf **Resistance Taper:** Linear **Slide Travel:** Mechanical - 10, 15mm. **Terminal Information:** Printed Circuit: Vertical or Horizontal Mounting Available **Mounting Information:** Type "V" - Horizontal Mount, See Figure 2 for Dimensional Details.

Digi-Key Part No.	Price Each 1	10	50	100	500
CT2331-ND - CT2333-ND	1.51	1.26	1.05	.84	.70
CT2337-ND - CT2341-ND	1.51	1.26	1.05	.84	.70

Ohms	Dimensions - In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No	Ohms	Dimensions - In. (mm) L x A x B (L = Travel)	Digi-Key Part No.	CTS Part No.
—	.393 x 1.188 x 1.129 (9.98 x 30.18 x 28.68)	—	—	50K	.590 x 1.385 x 1.326 (14.99 x 35.18 x 33.68)	CT2337-ND	448VB1503BDN
250K		CT2331-ND	448VA1254BDN	—		—	—
500K		CT2332-ND	448VA1504BDN	500K		CT2340-ND	448VB1504BDN
1MEG		CT2333-ND	448VA1105BDN	1MEG		CT2341-ND	448VB1105BDN

CTS Carbon Potentiometers - 1/4 Watt

Series 270

Fig. 1

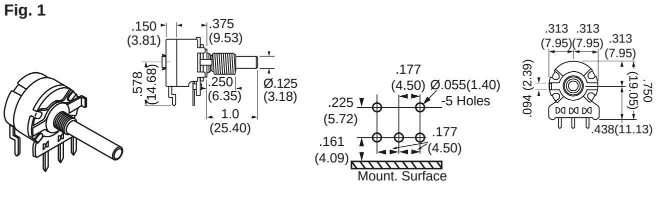
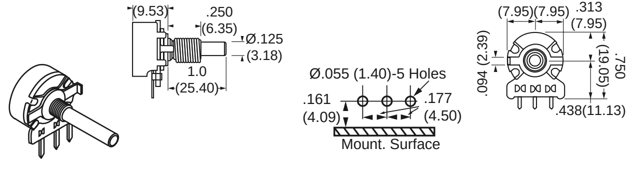


Fig. 2



SPECIFICATIONS:
Resistance Range: 500 ohms through 1 megohm
Resistance Tolerance: ±20%
Power Rating Watts: 1/4 Watt through 100K, 1/5 Watt above 100K
Voltage Rating: Operating Maximum: 500 VDC
Mechanical Rotation: 300° ±5°
Available Power Switch: Type: Rotary Rating: 3A @ 125VAC (UL Approved)
Effective Rotation: Without Switch 300° (Approximate), with Switch 290° (Approximate)
Resistance Taper: Linear, Logarithmic
Locating Lug: Left Side, Terminals Down
Bushing Information: Length: 1/4" (6.35mm), Thread Size: 1/4"-32, diameter: 1/4" (6.35mm)
Shaft Information: Length: 1" (25.40mm) including bushing, Diameter: .125" (3.18mm)

Digi-Key Part No.	Price Each 1	10	50	100	250
CT2223-ND - CT2233-ND	3.48	3.24	2.69	2.43	2.16
CT2201-ND - CT2211-ND	2.71	2.52	2.10	1.89	1.68
CT2212-ND - CT2222-ND	3.53	3.28	2.73	2.46	2.19
CT2234-ND - CT2244-ND	2.77	2.58	2.15	1.94	1.72

Linear Taper with Switch Fig. 1			Linear Taper without Switch Fig. 2			Logarithmic Taper with Switch Fig. 1			Logarithmic Taper without Switch Fig. 2		
Ohms	Digi-Key Part No.	CTS Part No.	Ohms	Digi-Key Part No.	CTS Part No.	Ohms	Digi-Key Part No.	CTS Part No.	Ohms	Digi-Key Part No.	CTS Part No.
500	CT2223-ND*	270-XS8773	500	CT2201-ND**	270-XS8784	500	CT2212-ND†	270-XS8762	500	CT2234-ND††	270-XS8751
1K	CT2224-ND*	270-XS8774	1K	CT2202-ND**	270-XS8785	1K	CT2213-ND†	270-XS8763	1K	CT2235-ND††	270-XS8752
2.5K	CT2225-ND	270-XS8775	2.5K	CT2203-ND	270-XS8786	2.5K	CT2214-ND	270-XS8764	2.5K	CT2236-ND	270-XS8753
5K	CT2226-ND	270-XS8776	5K	CT2204-ND	270-XS8787	5K	CT2215-ND	270-XS8765	5K	CT2237-ND	270-XS8754
10K	CT2227-ND*	270-XS8777	10K	CT2205-ND**	270-XS8788	10K	CT2216-ND†	270-XS8766	10K	CT2238-ND††	270-XS8755
25K	CT2228-ND*	270-XS8778	25K	CT2206-ND**	270-XS8789	25K	CT2217-ND†	270-XS8767	25K	CT2239-ND††	270-XS8756
50K	CT2229-ND*	270-XS8779	50K	CT2207-ND**	270-XS8790	50K	CT2218-ND†	270-XS8768	50K	CT2240-ND††	270-XS8757
100K	CT2230-ND*	270-XS8780	100K	CT2208-ND**	270-XS8791	100K	CT2219-ND†	270-XS8769	100K	CT2241-ND††	270-XS8758
250K	CT2231-ND	270-XS8781	250K	CT2209-ND	270-XS8792	250K	CT2220-ND	270-XS8770	250K	CT2242-ND	270-XS8759
500K	CT2232-ND*	270-XS8782	500K	CT2210-ND**	270-XS8793	500K	CT2221-ND†	270-XS8771	500K	CT2243-ND††	270-XS8760
1MEG	CT2233-ND*	270-XS8783	1 MEG	CT2211-ND**	270-XS8794	1 MEG	CT2222-ND†	270-XS8772	1 MEG	CT2244-ND††	270-XS8761

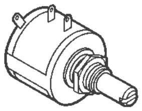
* **270-A-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q652415)*** - 5 each of 8 values............**$109.95**
** **270-B-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q653056)*** - 5 each of 8 values.............**$89.95**
† **270-C-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q653103)*** - 5 each of 8 values **$109.95**
†† **270-D-KIT-ND** ***Digi-Key® Series 270 Potentiometer Kit (Q655519)*** - 5 each of 8 values..............**$89.95**

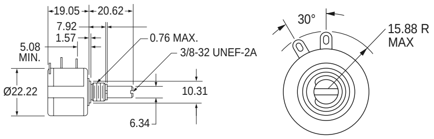
Precision Electronic Components Ltd.

Wirewound Precision Ten-Turn Potentiometers – 2 Watt

Specifications:
- **Resistance Tolerance**: ±5%
- **Electrical/Mechanical Rotation:** 3600° + 10° -0°
- **Effective Rotation:** 3600° nominal
- **Dielectric Strength:** 1000 VAC for 60 seconds at ATM
- **Working Voltage:** 500 volts max
- **Power rating:** 2 watt at 70° C
- **Shaft Length and Size:** 13/16" (20.64mm) FMS screwdriver slotted, stainless steel
- **Bushing Style:** 5/16" (7.95mm) Plain
- **Temp. Coefficient of Wire:** ± 20 PPM/°C wire

GU Series:





Resistance Code Chart

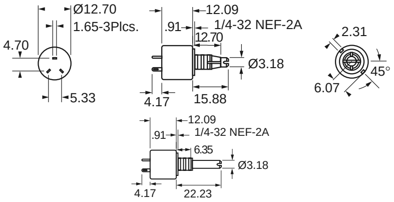
Code (Value)	Code (Value)	Code (Value)
101 (100) 201 (200) 501 (500) 102 (1K)	202 (2K) 502 (5K) 103 (10K) 203 (20K)	253 (25K) 503 (50K) 104 (100K)

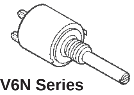
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	Precision Part No.
100-100K	GU ☐☐☐ 1S26-ND	16.29	13.45	12.63	12.14	11.10	GU☐☐☐ 1S26

* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

MIL Style RV6 - 1/2 Watt Carbon Potentiometer

RV6L Series





RV6N Series

Specifications: • **Resistance Tolerance:** ±10% through 500K, ±20% from 1 Meg • **Resistance Taper:** Linear • **Power Rating:** .5 Watts @ 70°C • **Dielectric Strength:** 750V RMS • **Working Voltage:** 350VDC Maximum, but power not to exceed rating • **Operating Temperature:** -55°C to 120°C • **Mechanical Rotation:** 295°

QPL listed under MIL R 94 Specifications. Metal housing, stainless steel shaft

Resistance Code Chart

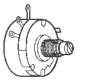
Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100) 251 (250) 501 (500)	102 (1K) 252 (2.5K) 502 (5K)	103 (10K) 253 (25K) 503 (50K)	104 (100K) 254 (250K) 504 (500K)	105 (1Meg) 505 (5Meg)

Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	Precision Part No.
100-5Meg	RV6L ☐☐☐ C-ND	8.81	8.13	6.10	3.93	3.61	RV6LAYSA(Code)A
100-5Meg	RV6N ☐☐☐ C-ND	7.93	7.32	5.49	3.54	3.25	RV6NAYSD(Code)A

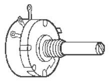
* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

MIL Style RV4 - 2 Watt Carbon Potentiometer

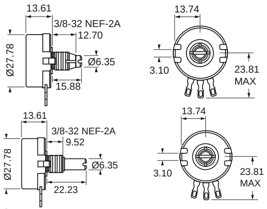
Specifications:
- **Resistance Tolerance:** ±10% through 500K, ±20% from 1 Meg
- **Resistance Taper:** Linear
- **Power Rating:** 2 Watts @ 70°C, Derate to 0 Watt @ 120°C
- **Dielectric Strength:** 900V RMS
- **Working Voltage:** 500 volts, but power not to exceed rating
- **Operating Temperature:** -55°C to 120°C
- **Mechanical Rotation:** 314° QPL listed under MIL R 94 Specifications. Metal housing, stainless steel shaft.



RV4L Series



RV4N Series



Resistance Code Chart

RV4L SERIES

Code (Value)	Code (Value)	Code (Value)	Code (Value)
500 (50) 101 (100) 251 (250) 501 (500)	102 (1K) 252 (2.5K) 502 (5K) 103 (10K)	153 (15K) 253 (25K) 353 (35K) 503 (50K)	104 (100K) 254 (250K) 504 (500K) 105 (1 Meg)

RV4N SERIES

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
500 (50) 101 (100) 151 (150) 251 (250)	501 (500) 102 (1K) 152 (1.5K) 252 (2.5K)	502 (5K) 752 (7.5K) 103 (10K) 153 (15K)	253 (25K) 353 (35K) 503 (50K) 104 (100K)	254 (250K) 504 (500K) 105 (1 Meg)

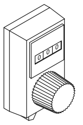
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	Precision Part No.
50-1Meg	RV4L ☐☐☐ C-ND	7.05	6.37	5.42	4.50	3.93	RV4LAYSA(Code)A
50-1Meg	RV4N ☐☐☐ C-ND	5.95	5.39	4.58	3.81	3.33	RV4NAYSD(Code)A

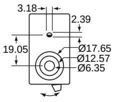
* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

Model 15 Turns Counting Dial

E15-1-11-ND: The left digit indicates the number of complete revolutions of the turning knob and the right two digits indicate the percent of a revolution. The unit registers a total count of 999.

E15-2-11-ND: The left two digits indicates the number of complete revolutions of the turning knob and the right two digits indicate the percent of a revolution. The unit registers a total count of 9999.



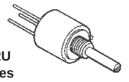


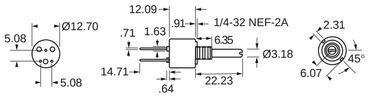
Rear View

Description	Digi-Key Part No.	Price Each	Precision Part No.
Digital Dial (3 Digit/10 turn)	E15-1-11-ND	29.37	E15-1-11
Digital Dial (4 Digit/100 turn)	E15-2-11-ND *NEW!*	31.40	E15-2-11

Type SPR Washable, 1/2 Watt - Carbon Potentiometer

SPRU Series





Specifications:
• **Resistance Tolerance:** ±10% through 500K, ±20% from 1Meg to 5Meg • **Resistance Taper:** Linear • **Power Rating:** .5 Watts @ 70°C • **Dielectric Strength:** 750V RMS • **Working Voltage:** 350VDC Maximum, but power not to exceed rating • **Operating Temperature:** -55°C to 120°C • **Mechanical Rotation:** 295°.

Meets or exceeds MIL R 94 Specifications. Metal housing, stainless steel shaft.

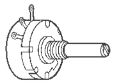
Resistance Code Chart

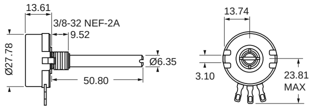
Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100) 251 (250) 501 (500) 102 (1K)	252 (2.5K) 502 (5K) 103 (10K) 253 (25K)	503 (50K) 104 (100K) 254(250K) 504 (500K)	105 (1Meg) 255 (2.5Meg) 505 (5Meg)

Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	Precision Part No.
100-5Meg	SPRU ☐☐☐ C-ND	6.42	5.81	4.94	4.11	3.59	SPRU(Code)1S28

* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

MIL Style RV4 - 2 Watt Carbon Potentiometer





RV4NJ Series

Specifications:
• **Resistance Tolerance:** ±10% through 500K, ±20% for 1 Meg • **Resistance Taper:** Linear • **Power Rating:** 2 Watts @ 70°C, derate to 0 Watt @ 120°C • **Dielectric Strength:** 900V RMS • **Working Voltage:** 500VDC Max., but power not to exceed rating • **Operating Temperature:** -55°C to 120°C • **Mechanical Rotation:** 314°

QPL listed under MIL R 94 Specifications. Metal housing, stainless steel shaft

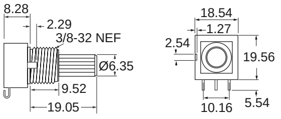
Resistance Code Chart

Code (Value)	Code (Value)
500 (50) 101 (100) 251 (250) 501 (500) 102 (1K) 252 (2.5K)	502 (5K) 103 (10K) 253 (25K) 104 (100K) 504 (500K) 105 (1Meg)

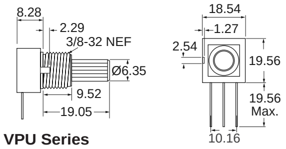
Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	Precision Part No.
50-1Meg	RV4NJ ☐☐☐ C-ND	5.95	5.39	4.58	3.81	3.33	RV4NAYSJ(Code)A

* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

Style V - 2 Watt Cermet Potentiometer



VU Series



VPU Series

Specifications:
- **Resistance Tolerance:** ±10%
- **Resistance Taper:** Linear
- **Power Rating:** 2 Watts @ 70°C, derated to 0 Watts @ 120°C
- **Dielectric Strength:** 2500V RMS at sea level
- **Operating Voltage:** 1000 V, subject to power rating
- **Operating Temperature:** -50°C to +110°C
- **Mechanical Rotation:** 274°

Resistance Code Chart

Code (Value)	Code (Value)
101 (100) 251 (250) 501 (500) 102 (1K) 252 (2.5K)	502 (5K) 103 (10K) 253 (25K) 503 (50K) 104 (100K)

Resistance Range (Ohms)	Digi-Key* Part No.	Price Each 1	10	50	100	250	Precision Part No.
100-100K	VU ☐☐☐ -ND	5.75	5.20	4.42	3.67	3.21	VU(Code)1SS24
100-100K	VPU ☐☐☐ -ND	5.23	4.73	4.02	3.34	2.92	VPU(Code)1SS24

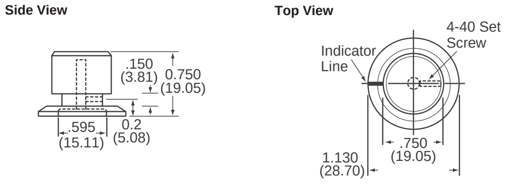
* For complete number, substitute corresponding code (from Resistance Code Chart) for ☐☐☐.

KILO INTERNATIONAL

Push-to-Turn Aluminum Knobs

DDSPT Series

Made in the USA



Features:

Precision aluminum machined surfaces from bar stock.

Anodized finish gloss or matte. Colors are clear or black. DDSPT Series knobs have a single 4-40 set screw.

Shaft Dia. Inch (mm)	Color/ Finish	Digi-Key Part No.	Price Each 1	10	50	100
.250 (6.35)	Clear/Gloss	226-1045-ND	16.76	14.90	12.30	11.18
.125 (3.18)	Clear/Gloss	226-1046-ND	16.76	14.90	12.30	11.18
.236 (6.00)	Clear/Gloss	226-1047-ND	16.76	14.90	12.30	11.18
.250 (6.35)	Black/Gloss	226-1048-ND	16.76	14.90	12.30	11.18
.125 (3.18)	Black/Gloss	226-1049-ND	16.76	14.90	12.30	11.18
.236 (6.00)	Black/Gloss	226-1050-ND	16.76	14.90	12.30	11.18
.250 (6.35)	Clear/Matte	226-1051-ND	16.76	14.90	12.30	11.18
.125 (3.18)	Clear/Matte	226-1052-ND	16.76	14.90	12.30	11.18
.236 (6.00)	Clear/Matte	226-1053-ND	16.76	14.90	12.30	11.18
.250 (6.35)	Black/Matte	226-1054-ND	16.76	14.90	12.30	11.18
.125 (3.18)	Black/Matte	226-1055-ND	16.76	14.90	12.30	11.18
.236 (6.00)	Black/Matte	226-1056-ND	16.76	14.90	12.30	11.18

Concentric Scale Dials

SERIES: 400, 500, 600, 3400

Made in the USA

Fig. 1

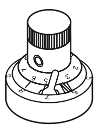


Fig. 2

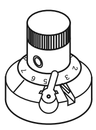


Fig. 3

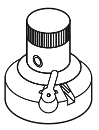
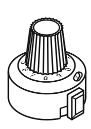


Fig. 4



Features:

Anodized precision machined aluminum exterior. Accommodates potentiometer shaft - 1/4" (6.35mm) with 3/8" x 32-NEF-2A bushing. Requires only one square inch of panel space.

400 Series:

1" (25.40mm) **10 Turn Calibration**. This world class turns-counting dial is designed for multi-turn potentiometers up to ten turns or other rotary devices. The knob/scale attaches directly to the shaft, and the body of the dial is mounted rigidly to the panel, therefore, accurate readings with a ratio of 1000 to 1 for ten turns are provided with no backlash or reading error. Available with or without locking mechanism.

500 Series:

1" (25.40mm) **1 Turn Calibrated scale.**

600 Series:

1" (25.40mm) **Uncalibrated dial.**

3400 Series:

7/8" (22.23mm) **20 Turn Calibration.** Calibrated dial designed for multi-turn potentiometers up to twenty turns or other rotary devices. The turns counting digit appears in the window as the dial is rotated. Mounting bracket plate is installed between panel and panel nut, with the dial mounting directly to the potentiometer shaft.

Fig.	Description	Digi-Key Part No.	Price Each 1	5	10	Kilo Part No.
	Commercial 10 Turn					
1	Black Anodize, No Lock	411KL-ND	19.32	17.94	16.56	411
	Black Anodize, With Lock	412KL-ND	18.71	17.38	16.04	412
	Clear Anodize, No Lock	461KL-ND	17.77	16.50	15.23	461
	Clear Anodize, With Lock	462KL-ND	18.71	17.38	16.04	462
	Commercial Single Turn					
2	Black Anodize, With Lock	512KL-ND	17.24	16.09	15.32	512
	Clear Anodize, No Lock	561KL-ND	13.28	12.39	11.80	561
	Clear Anodize, With Lock	562KL-ND	17.24	16.09	15.32	562
3	Black Anodize, With Lock	612KL-ND	16.67	15.57	14.82	612
	Clear Anodize, With Lock	662KL-ND	16.67	15.57	14.82	662
	Commercial 20 Turn					
4	Black Anodize, With Lock	3412KL-ND	16.70	15.51	14.31	3412
	Clear Anodize, With Lock	3462KL-ND	16.70	15.51	14.31	3462

Machined Aluminum Instrumentation Knobs

Made in the USA

Features:

- Knobs are anodized in construction
- Set screws accept a 1/16" hex allen wrench
- All knobs will accept round shafts with sizes indicated below. DDS, DD and JD Series: Two 6-32 set screws set 120° apart. HD Series: Two 6-32 set screws set 90° apart. ML Series: One 6-32 set screw.

Fig. 1 - ML Series *"Soft Touch"*

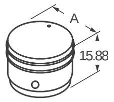


Fig. 2 - DD Series

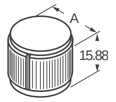


Fig. 3 - JD Series

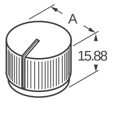


Fig. 4 - HD Series

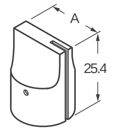


Fig. 5 - DDS Series

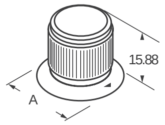


Fig.	Shaft Dia. Inch (mm)	Dim. A Inch (mm)	Digi-Key* Part No.	Price Each 1	10	50	100
1	.125 (3.18)	.50 (12.70)	226-☐000-ND	5.13	4.56	3.77	3.42
	.125 (3.18)	.75 (19.05)	226-☐026-ND	6.26	5.56	4.59	4.17
	.125 (3.18)	.925 (23.50)	226-☐027-ND	6.86	6.10	5.04	4.58
	.250 (6.35)	.50 (12.70)	226-☐025-ND	5.13	4.56	3.77	3.42
	.250 (6.35)	.75 (19.05)	226-☐001-ND	6.26	5.56	4.59	4.17
	.250 (6.35)	.925 (23.50)	226-☐002-ND	6.86	6.10	5.04	4.58
	.236 (6.00)	.50 (12.70)	226-☐003-ND	5.13	4.56	3.77	3.42
	.236 (6.00)	.75 (19.05)	226-☐004-ND	6.26	5.56	4.59	4.17
	.236 (6.00)	.925 (23.50)	226-☐028-ND	6.86	6.10	5.04	4.58
2	.125 (3.18)	.50 (12.70)	226-☐005-ND	4.73	4.20	3.47	3.15
	.125 (3.18)	.75 (19.05)	226-☐042-ND	4.88	4.34	3.59	3.26
	.125 (3.18)	.925 (23.50)	226-☐043-ND	5.13	4.34	3.59	3.26
	.250 (6.35)	.50 (12.70)	226-☐041-ND	4.73	4.34	3.59	3.26
	.250 (6.35)	.75 (19.05)	226-☐006-ND	4.88	4.34	3.59	3.26
	.250 (6.35)	.925 (23.50)	226-☐007-ND	5.13	4.56	3.77	3.42
	.236 (6.00)	.50 (12.70)	226-☐008-ND	4.73	4.20	3.47	3.15
	.236 (6.00)	.75 (19.05)	226-☐009-ND	4.88	4.34	3.59	3.26
	.236 (6.00)	.925 (23.50)	226-☐044-ND	5.13	4.56	3.77	3.42
3	.125 (3.18)	.50 (12.70)	226-☐010-ND	4.73	4.20	3.47	3.15
	.125 (3.18)	.75 (19.05)	226-☐034-ND	4.88	4.34	3.59	3.26
	.125 (3.18)	.925 (23.50)	226-☐035-ND	5.13	4.56	3.77	3.42
	.250 (6.35)	.50 (12.70)	226-☐033-ND	4.73	4.20	3.47	3.15
	.250 (6.35)	.75 (19.05)	226-☐011-ND	4.88	4.34	3.59	3.26
	.250 (6.35)	.925 (23.50)	226-☐012-ND	5.13	4.56	3.77	3.42
	.236 (6.00)	.50 (12.70)	226-☐013-ND	4.73	4.20	3.47	3.15
	.236 (6.00)	.75 (19.05)	226-☐014-ND	4.88	4.34	3.59	3.26
	.236 (6.00)	.925 (23.50)	226-☐036-ND	5.13	4.56	3.77	3.42
4	.125 (3.18)	.50 (12.70)	226-☐015-ND	5.38	4.78	3.95	3.59
	.125 (3.18)	.75 (19.05)	226-☐030-ND	6.48	5.76	4.76	4.32
	.125 (3.18)	.925 (23.50)	226-☐031-ND	7.29	6.48	5.35	4.86
	.250 (6.35)	.50 (12.70)	226-☐029-ND	5.38	4.78	3.95	3.59
	.250 (6.35)	.75 (19.05)	226-☐016-ND	6.48	5.76	4.76	4.32
	.250 (6.35)	.925 (23.50)	226-☐017-ND	7.29	6.48	5.35	4.86
	.236 (6.00)	.50 (12.70)	226-☐018-ND	5.38	4.78	3.95	3.59
	.236 (6.00)	.75 (19.05)	226-☐019-ND	6.48	5.76	4.76	4.32
	.236 (6.00)	.925 (23.50)	226-☐032-ND	7.29	6.48	5.35	4.86
5	.125 (3.18)	.685 (17.40)	226-☐020-ND	5.20	4.62	3.82	3.47
	.125 (3.18)	1.00 (25.40)	226-☐038-ND	6.21	5.52	4.56	4.14
	.125 (3.18)	1.25 (31.75)	226-☐039-ND	6.71	5.96	4.92	4.47
	.250 (6.35)	.685 (17.40)	226-☐037-ND	5.20	4.62	3.82	3.47
	.250 (6.35)	1.00 (25.40)	226-☐021-ND	6.21	5.52	4.56	4.14
	.250 (6.35)	1.25 (31.75)	226-☐022-ND	6.71	5.96	4.92	4.47
	.236 (6.00)	.685 (17.40)	226-☐023-ND	5.20	4.62	3.82	3.47
	.236 (6.00)	1.00 (25.40)	226-☐024-ND	6.21	5.52	4.56	4.14
	.236 (6.00)	1.25 (31.75)	226-☐040-ND	6.71	5.96	4.92	4.47

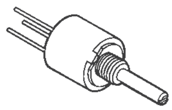
* For complete part number, substitute the corresponding color choice (listed below) for ☐:
1 = Black Gloss **2** = Aluminum Gloss **3** = Aluminum Matte **4** = Black Matte

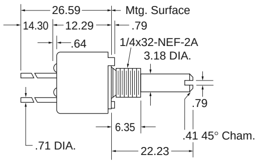
CLAROSTAT Washable, Conductive Plastic Potentiometers — 1/2 Watt

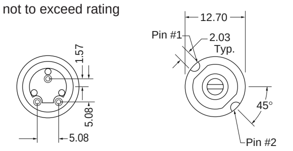
SERIES 392JB

SPECIFICATIONS:

- **Power Rating:** .5 Watts at 70 C. voltage not to exceed rating.
- **Electrical Rotation:** 295° ±5°
- **Effective Rotation:** 265° +0°, -10°
- **Mechanical Rotation:** 295° ±5°
- **Resistance Tolerance:** ±10% through 500k. ±20% @ 1 Meg
- **Dielectric Strength:** 750 VAC for 60 sec., @ ATM pressure. 350 VAC for 60 sec., in. Hg
- **Working Voltage:** 350 VDC across terminals, but power not to exceed rating
- **Operational Temperature Range:** -40 C. to + 120 C.







Series 392JB: Plastic Shaft and Bushing

RESISTANCE CODE CHART
(Resistance Value — Linear)

Code (Value)	Code (Value)	Code (Value)
101 (100) 251 (250) 501 (500) 102 (1K) 252 (2.5K)	502 (5K) 103 (10K) 253 (25K) 503 (50K)	104 (100K) 254 (250K) 504 (500K) 105 (1 Meg.)

Resistance Range (Ohms)	Digi-Key⁎ Part No.	Price Each 1	10	50	100	250	500	Clarostat Part No.
100-1 Meg.	392JB □□□ -ND	7.30	6.41	5.38	3.99	3.41	3.07	392JB (Value)

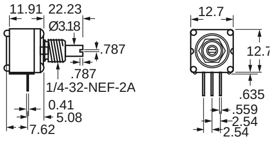
⁎ For complete number, substitute corresponding code (from chart above) for □□□.

Conductive Plastic Potentiometers — 1/2 Watt

SERIES 590SX

SPECIFICATIONS:

- **Resistance Tolerance:** ±10%
- **Power Rating (Watts):** 0.5W @ 70°C. Derated linearly to 0 Watts at 120°C
- **Mechanical and Electrical Rotation:** 295° ±5°
- **Working Voltage:** 350 VAC Max. across end terminals, but within Power Rating
- **Effective Rotation:** 265° ±5°. Hardware included.



RESISTANCE CODE CHART
(Resistance Value — Linear)

Code (Value)	Code (Value)	Code (Value)
102 (1K)	502 (5K)	103 (10K)

Resistance Range (Ohms)	Digi-Key⁎ Part No.	Price Each 1	10	50	100	Clarostat Part No.
1K-10K	590SX □□□ -ND	4.90	4.45	4.05	3.50	590SX1N56S □□□ SP

* For complete number, substitute corresponding code (from chart above) for □□□.

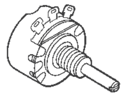
Conductive Plastic Potentiometers — 1 Watt

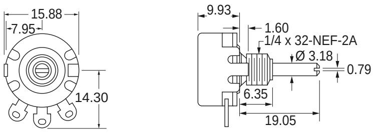
SERIES 381

The “Quiet One” with 1% dynamic noise and 5% independent linearity. Manufactured to MIL-R-94D specification. 381N — Bushing, Plain, 1/4” (6.35mm) long. Shaft 3/4” (19.05mm) FMS screwdriver slotted.

SPECIFICATIONS:

- **Resistance Tolerance:** Linear, up to 500K, ±10%, above 500K, ±20%
- **Power Rating (Watts):** 1 watt maximum continuous power rating for linear taper, but voltage not to exceed rating. Full rating at 70°C, derated linearly to zero watts at 120°C
- **Mechanical and Electrical Rotation:** 300° ±5° without switch
- **Working Voltage:** 350 VDC across end terminals, but power not to exceed rating
- **Effective Rotation:** 270° +0° -10°
- **Dielectric Strength:** 1,000 VAC for 60 Sec. ATM





RESISTANCE CODE CHART
(Value — Linear)

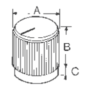
Code (Value)	Code (Value)
101 (100)	503 (50K)
251 (250)	104 (100K)
501 (500)	254 (250K)
102 (1K)	504 (500K)
252 (2.5K)	105 (1 Meg.)
502 (5K)	255 (2.5 Meg.)
103 (10K)	505 (5 Meg.)
253 (25K)	

Resistance Range (Ohms)	Digi-Ke sy⁎ Part No.	Price Each 1	10	50	Clarostat Part No.
100-5 Meg.	381N □□□ -ND	13.35	11.77	10.19	381N (Value)

⁎ For complete number, substitute corresponding code (from chart above) for □□□.

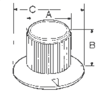
KEYSTONE ELECTRONICS CORP. Instrumentation Knobs

Fig. 1



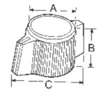
Skirted Round

Fig. 2



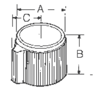
Round with Dial

Fig. 3



Double Bar

Fig. 4



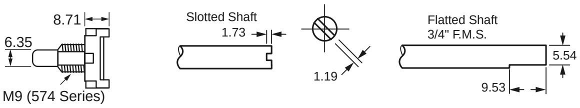
Single Bar

Fig.	Shaft Dia.	Dimensions A	B	C	Digi-Key Part No.	Price Each 1	10	100
1	3.18	12.70	12.95	3.81	8554K-ND	3.47	3.08	2.72
	6.35	17.78	15.49	4.32	8555K-ND	3.60	3.20	2.84
	6.35	22.86	20.07	5.59	8556K-ND	3.71	3.30	2.93
2	3.18	12.70	13.97	22.86	8558K-ND	4.34	3.86	3.41
	6.35	17.78	18.03	29.21	8559K-ND	5.20	4.62	4.08
	6.35	22.86	22.10	38.74	8560K-ND	5.92	5.26	4.66
3	6.35	17.78	15.49	29.21	8565K-ND	4.41	3.92	3.46
	6.35	22.86	16.26	38.74	8566K-ND	4.73	4.20	3.70
4	3.18	12.70	12.95	8.89	8567K-ND	5.22	4.64	4.11
	6.35	17.78	15.49	11.68	8568K-ND	6.01	5.34	4.73
	6.35	22.86	20.07	14.99	8569K-ND	6.50	5.78	5.12

Knobs have a spun aluminum inlay with a clear coat finish.

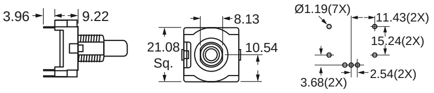
CLAROSTAT Conductive Plastic Potentiometers — 1/4 Watt

SERIES 574SFX 575SSX

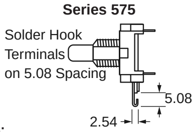


Series 574 and 575

Series 574



Series 575



RESISTANCE CODE CHART
(Resistance Value — Linear)

Code (Value)	Code (Value)
102 (1K) 103 (10K)	503 (50K) 104 (100K)

SPECIFICATIONS:

- **Resistance Tolerance:** ±20% • **Power Rating (Watts):** 0.25W @ 70°C • **Mechanical and Electrical Rotation:** 300° ±5° • **Working Voltage:** 350VAC Max • **Effective Rotation:** 270°

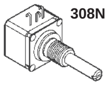
Hardware must be ordered separately.

Resistance Range (Ohms)	Shaft Type	Digi-Key⁎ Part No.	Price Each 1	10	50	100	Clarostat Part No.
10K-100K	Flatted	574SF □□□ -ND	2.40	2.19	1.99	1.72	574SX1M48F □□□ SD
10K-100K	Slotted	574SS □□□ -ND	2.40	2.19	1.99	1.72	574SX1M48S □□□ SD
1K-50K	Flatted	575SF □□□ -ND	1.94	1.76	1.60	1.39	575SX1A48F □□□ SS
1K-50K	Slotted	575SS □□□ -ND	1.94	1.76	1.60	1.39	575SX1A48S □□□ SS
Mounting Nut (574 Series)		02318603-ND	—	.14	.12	.11	02318603
Mounting Nut (575 Series)		01051301-ND	—	.29	.26	.23	01051301
Lock Washer		01070602-ND	—	.29	.26	.23	01070602

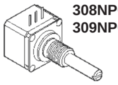
⁎ For complete number, substitute corresponding code (from chart above) for □□□.

Conductive Plastic Potentiometers — 1/2 Watt, 1 Watt

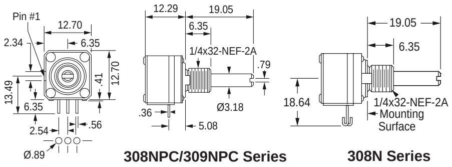
SERIES 308N 308NPC 309NPC



308N Series



308NPC Series
309NPC Series



308NPC/309NPC Series
PC Terminals

308N Series
Hook Terminals

RESISTANCE CODE CHART
(Resistance Value — Linear)

Code (Value)	Code (Value)	Code (Value)
101 (100)	502 (5K)	254 (250K)
251 (250)	103 (10K)	504 (500K)
501 (500)	253 (25K)	105 (1 Meg.)
102 (1K)	503 (50K)	255 (2.5 Meg.)
252 (2.5K)	104 (100K)	505 (5 Meg.)

SPECIFICATIONS:

- **Resistance Tolerance:** ±10% up to 500K, ±20% above
- **Electrical and Mechanical Rotation:** 295° ±5°
- **Dielectric Strength:** 750 VAC (308 Series), 900 VAC (309 Series), for 60 SEC ATM
- **Working Voltage:** 350 VDC across terminals
- **Power Rating:** .5 watt at 70°C (308 Series), 1 watt at 150°C (309 Series)
- **Operating Temperature:** -40° to +120°C (308 Series), -40°C to +150°C (309 Series)
- **Rotational Life:** 50,000 cycles under load (308 Series), 25,000 cycles under load (309 Series).

Resistance Range (Ohms)	Digi-Key⁎ Part No.	Price Each 1	10	50	100	250	Clarostat Part No.
100-5 Meg.	308N □□□ -ND	10.70	8.23	7.16	5.73	4.09	308N (Value)
100-1 Meg.	308NPC □□□ -ND	10.74	8.27	7.20	5.77	4.13	308NPC (Value)
100-5 Meg.	309NPC □□□ -ND	10.92	8.87	7.40	6.77	5.18	309NPC (Value)

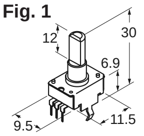
⁎ For complete number, substitute corresponding code (from chart above) for □□□.
N = Shaft: 1/8 in. (3.18mm) diameter x 3/4 in. (19.05mm)

Panasonic® Audio Potentiometers

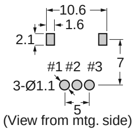
9mm Potentiometers

Specifications: Resistance Range: 5K ohm through 50K ohm • Tolerance: ±20%
• Power Rating: .05w @ 50°C • Voltage Rating: E = √PR but E ≤ 50VAC/20VDC
• Rotation Angle: 300° ±5° • Life: 10000 turns min. • Application: Audio mixer

Fig. 1



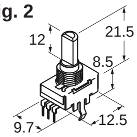
Shaft :Ø 6.0 mm



(View from mtg. side)

Footprint Applies to Figures 1, 2 & 3

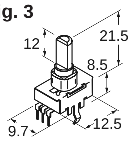
Fig. 2



Shaft :Ø 6.0 mm

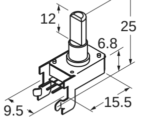
*** Hardware Included**

Fig. 3

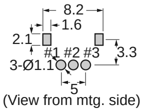


Shaft :Ø 6.0 mm

Fig. 4



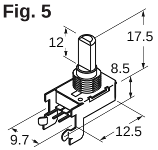
Shaft :Ø 6.0 mm



(View from mtg. side)

Footprint Applies to Figures 4, 5, & 6

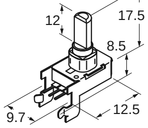
Fig. 5



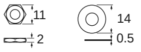
Shaft :Ø 6.0 mm

*** Hardware Included**

Fig. 6



Shaft :Ø 6.0 mm

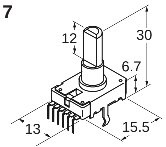


*** Hardware for Fig. 2 and Fig. 5**

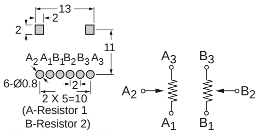
12mm Potentiometers

Specifications: Resistance Range: 5K ohm through 50K ohm • Tolerance: ±20%
• Power Rating: .05w @ 50°C • Voltage Rating: E = √PR but E ≤ 50VAC/20VDC
(Do not use DC Voltage) • Rotation Angle: 300° ±5° • Life: 15000 turns min.
• Application: Audio mixer

Fig. 7



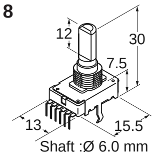
Shaft :Ø 6.0 mm



(A-Resistor 1
B-Resistor 2)
(View from mtg. side)

Footprint Applies to Figures 7, 8, & 9

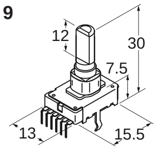
Fig. 8



Shaft :Ø 6.0 mm

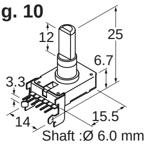
*** Hardware Included**

Fig. 9

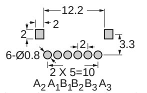


Shaft :Ø 6.0 mm

Fig. 10



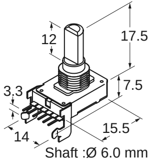
Shaft :Ø 6.0 mm



(A-Resistor 1, B-Resistor 2)
(View from mtg. side)

Footprint Applies to Figures 7, 8, & 9

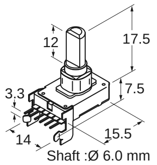
Fig. 11



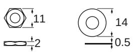
Shaft :Ø 6.0 mm

*** Hardware Included**

Fig. 12



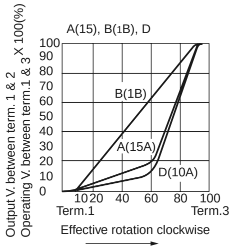
Shaft :Ø 6.0 mm



*** Hardware for Fig. 8 and Fig. 11**

Resistance Code Chart
Code (Resistance Value)

Code (Value)	Code (Value)
502 (5K)	103 (10K)
203 (20K)	503 (50K)



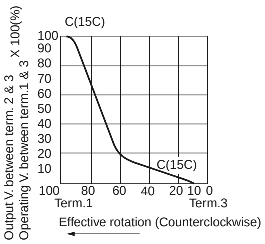


Fig.	Taper	Center Detent	Bushing	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic* Part No.
9MM Audio Potentiometers									
1	B	Y	None	P3A1□□□-ND	1.05	8.73	65.48	483.06	EVU-F3AF30B□□
	D	Y	None	P3B2□□□-ND	1.05	8.73	65.48	483.06	EVU-F3AF30D□□
	B	N	None	P3C3□□□-ND	1.12	9.33	69.98	516.26	EVU-F2AF30B□□
	D	N	None	P3D4□□□-ND	.99	8.22	61.65	454.84	EVU-F2AF30D□□
2	B	Y	Metal	P3E5□□□-ND	1.90	15.84	118.80	876.48	EVU-F3MFL3B□□
	D	Y	Metal	P3F6□□□-ND	1.90	15.84	118.80	876.48	EVU-F3MFL3D□□
	B	N	Metal	P3G7□□□-ND	1.84	15.33	114.98	848.26	EVU-F2MFL3B□□
	D	N	Metal	P3H8□□□-ND	1.84	15.33	114.98	848.26	EVU-F2MFL3D□□
3	B	Y	Plastic	P3I9□□□-ND	1.25	10.44	78.30	577.68	EVU-F3LFL3B□□
	D	Y	Plastic	P3J0□□□-ND	1.25	10.44	78.30	577.68	EVU-F3LFL3D□□
	B	N	Plastic	P3K1□□□-ND	1.19	9.90	74.25	547.80	EVU-F2LFL3B□□
	D	N	Plastic	P3L2□□□-ND	1.19	9.90	74.25	547.80	EVU-F2LFL3D□□
4	B	Y	None	P3M3□□□-ND	1.08	9.03	67.73	499.66	EVU-E3AF25B□□
	D	Y	None	P3N4□□□-ND	1.08	9.03	67.73	499.66	EVU-E3AF25D□□
	B	N	None	P3P5□□□-ND	1.02	8.49	63.68	469.78	EVU-E2AF25B□□
	D	N	None	P3Q6□□□-ND	1.02	8.49	63.68	469.78	EVU-E2AF25D□□
5	B	Y	Metal	P3R7□□□-ND	1.94	16.17	121.28	894.74	EVU-E3JFK4B□□
	D	Y	Metal	P3S8□□□-ND	1.94	16.17	121.28	894.74	EVU-E3JFK4D□□
	B	N	Metal	P3T9□□□-ND	1.87	15.60	117.00	863.20	EVU-E2JFK4B□□
	D	N	Metal	P3U0□□□-ND	1.87	15.60	117.00	863.20	EVU-E2JFK4D□□
6	B	Y	Plastic	P3W1□□□-ND	1.29	10.77	80.78	595.94	EVU-E3KFK4B□□
	D	Y	Plastic	P3X2□□□-ND	1.29	10.77	80.78	595.94	EVU-E3KFK4D□□
	B	N	Plastic	P3Y3□□□-ND	1.22	10.20	76.50	564.40	EVU-E2KFK4B□□
	D	N	Plastic	P3Z4□□□-ND	1.22	10.20	76.50	564.40	EVU-E2KFK4D□□
12MM Audio Potentiometers									
7	B	Y	None	P2A5□□□-ND	2.36	19.68	147.60	1088.96	EVJ-Y81F30B□□
	AC	Y	None	P2B6□□□-ND	2.36	19.68	147.60	1088.96	EVJ-YE1F30□□□
	A	N	None	P2C7□□□-ND	2.29	19.11	143.33	1057.42	EVJ-Y00F30A□□
	D	N	None	P2D8□□□-ND	2.29	19.11	143.33	1057.42	EVJ-Y00F30D□□
8	B	Y	Metal	P2E9□□□-ND	2.69	22.41	168.08	1240.02	EVJ-Y91F03B□□
	AC	Y	Metal	P2F0□□□-ND	2.69	22.41	168.08	1240.02	EVJ-YK1F03□□□
	A	N	Metal	P2G1□□□-ND	2.62	21.87	164.03	1210.14	EVJ-Y10F03A□□
	D	N	Metal	P2H2□□□-ND	2.62	21.87	164.03	1210.14	EVJ-Y10F03D□□
9	B	Y	Plastic	P2I3□□□-ND	2.57	21.39	160.43	1183.58	EVJ-Y96F03B□□
	AC	Y	Plastic	P2J4□□□-ND	2.57	21.39	160.43	1183.58	EVJ-YK6F03□□□
	A	N	Plastic	P2K5□□□-ND	2.51	20.88	156.60	1155.36	EVJ-Y15F03A□□
	D	N	Plastic	P2L6□□□-ND	2.51	20.88	156.60	1155.36	EVJ-Y15F03D□□
10	B	Y	None	P2M7□□□-ND	2.39	19.95	149.63	1103.90	EVJ-C31F25B□□
	AC	Y	None	P2N8□□□-ND	2.39	19.95	149.63	1103.90	EVJ-CV1F25□□□
	A	N	None	P2P9□□□-ND	2.33	19.38	145.35	1072.36	EVJ-C00F25A□□
	D	N	None	P2Q0□□□-ND	2.33	19.38	145.35	1072.36	EVJ-C00F25D□□
11	B	Y	Metal	P2R1□□□-ND	2.73	22.71	170.33	1256.62	EVJ-C51F02B□□
	AC	Y	Metal	P2S2□□□-ND	2.73	22.71	170.33	1256.62	EVJ-CC1F02□□□
	A	N	Metal	P2T3□□□-ND	2.66	22.14	166.05	1225.08	EVJ-C20F02A□□
	D	N	Metal	P2U4□□□-ND	2.66	22.14	166.05	1225.08	EVJ-C20F02D□□
12	B	Y	Plastic	P2W5□□□-ND	2.60	21.66	162.45	1198.52	EVJ-C56F02B□□
	AC	Y	Plastic	P2X6□□□-ND	2.60	21.66	162.45	1198.52	EVJ-CC6F02□□□
	A	N	Plastic	P2Y7□□□-ND	2.53	21.12	158.40	1168.64	EVJ-C25F02A□□
	D	N	Plastic	P2Z8□□□-ND	2.53	21.12	158.40	1168.64	EVJ-C25F02D□□

For complete number, substitute corresponding code (from above chart) for □□□.
* Call Digi-Key for help in assembling manufacturer part number.

Thumbwheel Potentiometers

Resistance Code Chart
Code (Resistance Value)

Code (Value)	Code (Value)
502 (5K) 103 (10K)	203 (20K) 503 (50K)

FIg. 13

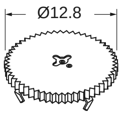
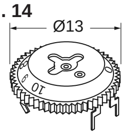
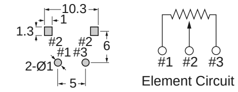


Fig. 14



Footprint Applies to both Fig. 13 & 14



(View from mtg. side)

Element Circuit Diagram

Resistance Range: 5K ohm through 50K ohm • Tolerance: ±20% • Power Rating: B taper - .03W, All others .01W • Voltage Rating: 50VAC/20VDC • Rotation Angle: 260° ±10° • Life: 10000 turns min.

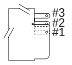
Fig.	Taper	Center Detent	Digi-Key Part No.	Pricing 1	10	100	1,000	Panasonic* Part No.
13	A	N	P4A9□□□-ND	2.07	17.25	129.38	954.50	EVL-HFAA01A□□
	B	N	P4B0□□□-ND	2.07	17.25	129.38	954.50	EVL-HFAA01B□□
14	A	N	P4C1□□□-ND	2.07	17.25	129.38	954.50	EVL-HFAA06A□□
	B	N	P4D2□□□-ND	2.07	17.25	129.38	954.50	EVL-HFAA06B□□
13	A	Y	P4E3□□□-ND	2.32	19.32	144.90	1069.04	EVL-HFKA01A□□
	B	Y	P4F4□□□-ND	2.32	19.32	144.90	1069.04	EVL-HFKA01B□□

For complete number, substitute corresponding code (from chart at left) for □□□.
* Call Digi-Key for help in assembling manufacturer part number.

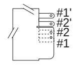
Panasonic Slide Potentiometers for Audio Mixer Applications

Fig. 1 – Rail Guide Type

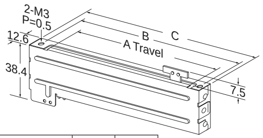
Features: • Wobbleless, smooth travel with wet slide feel • High reliability due to exclusive specular glossing resistive elements for low distortion and precise precious metal contacts • Precise attenuation characteristics • Long life 100,000 cycles min. **Recommended Applications:** • Fader controls for audio mixers • Audio Equipment



Single (EVA) Details



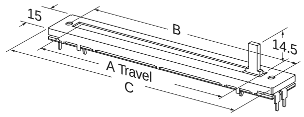
Dual (EVB) Details

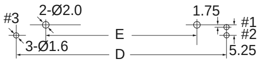


Travel = A	B	C
100	120	129.3
60	80	89.3

Fig. 2 – Thin Type

Features: • Thin and compact design with 8mm body height and 15mm width • Light sliding force and excellent operation • Highly accurate attenuation characteristics, maximum attenuation of more than 100dB, and low noise **Recommended Applications:** • Fade control for common type audio mixers

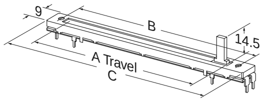


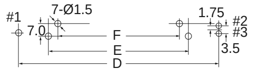


Travel = A	B	C	D	E
100	120	128	127.5	96
60	80	88	87.5	56

Fig. 3 – Mono Type

Features: • Slim type fader, 9mm width, 8mm height • Excellent cost performance applicable to audio mixers for amateur use **Recommended Applications:** • Fade control for audio mixers • Multi-Track Recorders • Paper position sensors for copiers

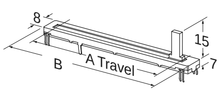


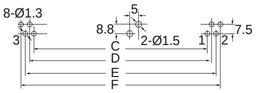


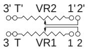
Travel = A	B	C	D	E	F
100	120	128	127.5	92.5	87.5
60	80	88	87.5	52.5	47.5

Fig. 4 – Standard Type

Features: • Excellent operational feeling • Low noise, long operational life, highly accurate attenuation **Recommended Applications:** • Fade control for audio mixers and musical key boards • Heat control or mode switching for car air conditioners • Measurement instruments





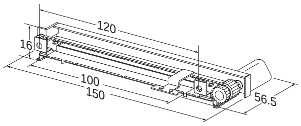


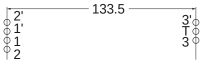
CIRCUIT DIAGRAM
(Note for Single: Do not connect dummy terminal 1' and others
3 and T- short terminals
1', 2', 3' and T'- dummy terminals
Note for Dual: 3 and T- short terminals
3' and T'- short terminals)

Travel = A	B	C	D	E	F
60	75	64	67	70	73
45	60	49	52	55	58

Fig. 5 – Motor Type

Features: • Excellent operation feeling, high speed driving and power saving design • Dust-proof mounting possible by 90° off set lever design **Recommended Application:** • Automated Audio Mixers (Common/Amateur Type)





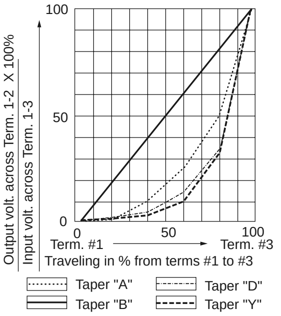
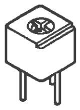
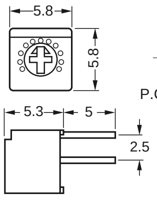


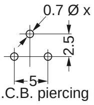
Fig.	Resist. (ohms)	Style	Travel (mm)	Single/ Dual	Taper	Digi-Key Part No.	Price Each 1	10	50	100	Panasonic Part No.
1	10K	Rail	100	S	Y	PJY100SY-ND	37.67	34.04	31.77	30.19	EVA-JYBP08Y14
	10K	Rail	100	S	B	PJY100SB-ND	37.67	34.04	31.77	30.19	EVA-JYMP08B14
	10K	Rail	100	D	Y	PJY100DY-ND	47.09	42.55	39.72	37.73	EVB-JYBP08Y14
	10K	Rail	60	S	Y	PJX060SY-ND	31.39	28.37	26.48	25.16	EVA-JXCP08Y14
	10K	Rail	60	D	Y	PJX060DY-ND	40.81	36.88	34.42	32.70	EVB-JXCP08Y14
2	10K	Thin	100	S	Y	PJQ100SY-ND	8.51	6.81	5.65	5.11	EVA-JQKR15Y14
	10K	Thin	100	S	A	PJQ100SA-ND	8.51	6.81	5.65	5.11	EVA-JQKR15A14
	10K	Thin	100	S	D	PJQ100SD-ND	8.51	6.81	5.65	5.11	EVA-JQKR15D14
	10K	Thin	100	S	B	PJQ100SB-ND	8.51	6.81	5.65	5.11	EVA-JQLR15B14
	10K	Thin	100	D	Y	PJQ100DY-ND	10.88	8.70	7.23	6.53	EVB-JQKR15Y14
	10K	Thin	100	D	A	PJQ100DA-ND	10.88	8.70	7.23	6.53	EVB-JQKR15A14
	10K	Thin	100	D	D	PJQ100DD-ND	10.88	8.70	7.23	6.53	EVB-JQKR15D14
	10K	Thin	60	S	Y	PNA060SY-ND	8.04	6.43	5.34	4.83	EVA-NADR15Y14
	10K	Thin	60	S	A	PNA060SA-ND	8.04	6.43	5.34	4.83	EVA-NADR15A14
	10K	Thin	60	S	D	PNA060SD-ND	8.04	6.43	5.34	4.83	EVA-NADR15D14
	10K	Thin	60	S	B	PNA060SB-ND	8.04	6.43	5.34	4.83	EVA-NAHR15B14
	10K	Thin	60	D	Y	PNA060DY-ND	10.40	8.32	6.91	6.24	EVB-NADR15Y14
	10K	Thin	60	D	A	PNA060DA-ND	10.40	8.32	6.91	6.24	EVB-NADR15A14
	10K	Thin	60	D	D	PNA060DD-ND	10.40	8.32	6.91	6.24	EVB-NADR15D14
3	10K	Mono	100	S	Y	PNF100SY-ND	7.09	5.68	4.71	4.26	EVA-NF4R15Y14
	10K	Mono	100	S	A	PNF100SA-ND	7.09	5.68	4.71	4.26	EVA-NF4R15A14
	10K	Mono	100	S	D	PNF100SD-ND	7.09	5.68	4.71	4.26	EVA-NF4R15D14
	10K	Mono	100	S	B	PNF100SB-ND	7.09	5.68	4.71	4.26	EVA-NF3R15B14
	10K	Mono	60	S	Y	PNE060SY-ND	6.15	4.92	4.09	3.69	EVA-NE4R15Y14
	10K	Mono	60	S	A	PNE060SA-ND	6.15	4.92	4.09	3.69	EVA-NE4R15A14
	10K	Mono	60	S	D	PNE060SD-ND	6.15	4.92	4.09	3.69	EVA-NE4R15D14
	10K	Mono	60	S	B	PNE060SB-ND	6.15	4.92	4.09	3.69	EVA-NE3R15B14
4	10K	Std.	60	S	A	PQ1060SA-ND	3.31	2.65	2.20	1.99	EWA-Q10C15A14
	10K	Std.	60	S	D	PQ1060SD-ND	3.31	2.65	2.20	1.99	EWA-Q10C15D14
	10K	Std.	60	S	B	PQ1060SB-ND	3.31	2.65	2.20	1.99	EWA-Q12C15B14
	10K	Std.	60	D	A	PQ3060DA-ND	4.02	3.22	2.67	2.42	EWA-Q30C15A14
	10K	Std.	60	D	D	PQ3060DD-ND	4.02	3.22	2.67	2.42	EWA-Q30C15D14
	10K	Std.	45	S	A	PP1045SA-ND	2.84	2.27	1.89	1.71	EWA-P10C15A14
	10K	Std.	45	S	D	PP1045SD-ND	2.84	2.27	1.89	1.71	EWA-P10C15D14
	10K	Std.	45	S	B	PP1045SB-ND	2.84	2.27	1.89	1.71	EWA-P12C15B14
	10K	Std.	45	D	A	PP3045DA-ND	3.55	2.84	2.36	2.13	EWA-P30C15A14
	10K	Std.	45	D	D	PP3045DD-ND	3.55	2.84	2.36	2.13	EWA-P30C15D14
5	10K	Motor	100	S	Y	PNC100SY-ND	47.09	42.55	39.72	37.73	EVB-NC2P088BL

Panasonic 5mm Square Single-Turn Cermet Potentiometers

MAG Series

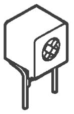


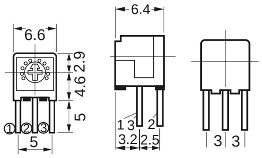


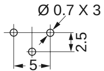


P.C.B. piercing plan

MBG Series

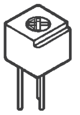


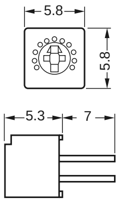


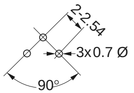


P.C.B. piercing plan
(pitch ± 0.1)

MSG Series







P.C.B. piercing plan

SPECIFICATIONS:

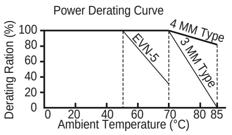
• **Mechanical Characteristics:** • Total rotation angle: Adjustment angle 200° nom. • Soldering: Within 5 seconds max. at 300°C • **Electrical Characteristics:** • Resistance Range: 100Ω to 2 MΩ • Tolerance: ±20% • Power Rating: 0.5W at 70°C • Maximum Voltage: 200V • Dielectric Withstanding Voltage: 600V AC for one minute • Temperature Coefficient: ±100ppm/°C • Insulation Resistance: 100MΩ • **Environmental Characteristics:** • Operating Temperature Range: –55°C to +125°C • Vibration: 20G • Shock: 180G • Seal: MIL-R-22097 Immersion

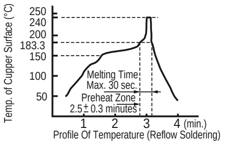
Panasonic/Matsushita Electric has announced a change in the Corporate Trademark. Present trademark: ⚠. New trademark: Ⓜ.

Res. (Ohms)	Digi-Key Part No. Top Adjust	Digi-Key Part No. Side Adjust	Digi-Key Part No. Top Adjust	Pricing 1	10	100	1,000	5,000	Panasonic Part No. Top Adjust	Panasonic Part No. Side Adjust	Panasonic Part No. Top Adjust
500	—	MBG52-ND	—	1.59	13.23	121.67	814.00	756.00/M	—	EVM-MBGA01B52	—
1K	—	—	MSG13-ND	1.59	13.23	121.67	814.00	756.00/M	—	—	EVM-MSGA01B13
20K	—	MBG24-ND	—	1.59	13.23	121.67	814.00	756.00/M	—	EVM-MBGA01B24	—
200K	MAG25-ND	MBG25-ND	—	1.59	13.23	121.67	814.00	756.00/M	EVM-MAGA01B25	EVM-MBGA01B25	—
500K	—	—	MSG55-ND	1.59	13.23	121.67	814.00	756.00/M	—	—	EVM-MSGA01B55
1M	—	MBG16-ND	—	1.59	13.23	121.67	814.00	756.00/M	—	EVM-MBGA01B16	—
2M	—	—	MSG26-ND	1.59	13.23	121.67	814.00	756.00/M	—	—	EVM-MSGA01B26

Panasonic®

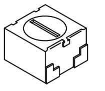
Surface Mount Trimmer Potentiometers



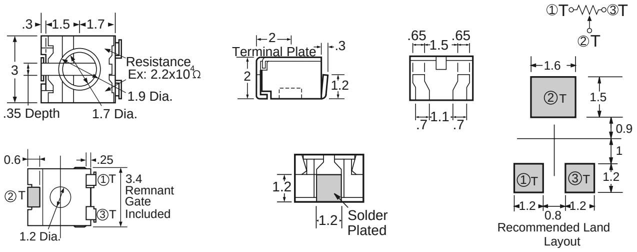


Profile for Reflow Soldering
Pre-Heat: 130°C to 160°C
Melting Temp.: TM = 183.3°C
Peak Time: Tp ≤ 240°C
Melting Temp.: TM ≤ 30s
Solder: Eutectic
Flux: Rosin Flux

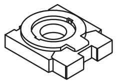
Series P7J – Panasonic Series #EVM-7JSX30BXX



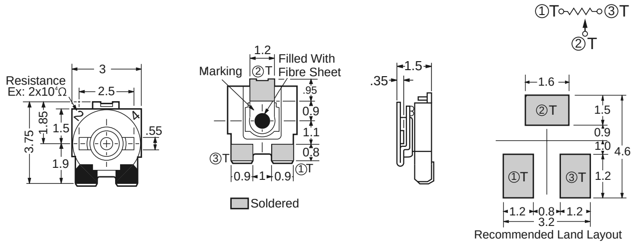
Features: • 3mm sealed type for flow and reflow soldering • Labor cost saving filmless sealed construction; **Resistance Range:** 220-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .05W; **Adjustment Angle:** 260 ±20.; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 10; **Soldering Heat:** 250C 10s/260C 5s



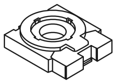
Series P1S – Panasonic Series #EVM-1SSX50BXX



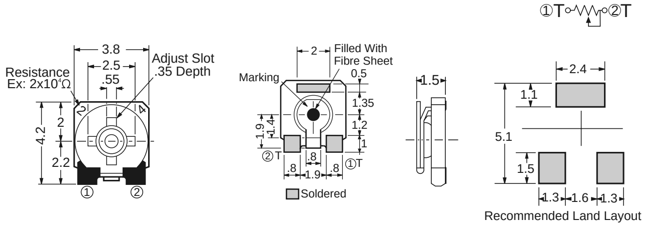
Features: • 3mm open frame type for reflow soldering • Excellent mounting efficiency; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



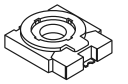
Series P1G – Panasonic Series #EVM-1GSX30BXX



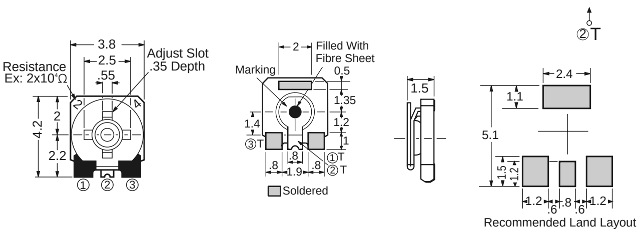
Features: • 4mm open frame type for reflow soldering • Two terminal construction; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



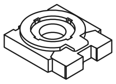
Series P1E – Panasonic Series #EVM-1ESX30BXX



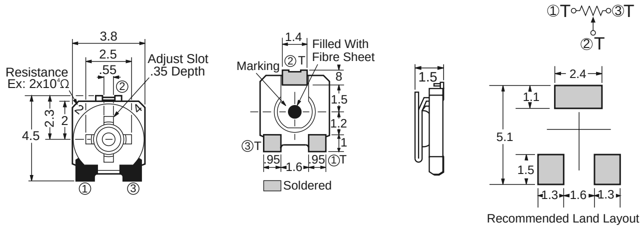
Features: • 4mm open frame type for reflow soldering • Inline terminal construction; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



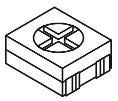
Series P1D – Panasonic Series #EVM-1DSX30BXX



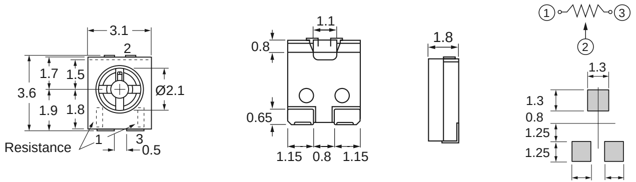
Features: • 4mm open frame type for reflow soldering • Triangle terminal construction; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -40°C to +100°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 260C 10s



Series P5C – Panasonic Series #EVN-5CSX50BXX*
Series P5E – Panasonic Series #EVN-5ESX50BXX



Features: • 3mm carbon dust proof type for reflow soldering • Excellent mounting efficiency for pick and place assembly; • Rotation stopper feature (EVN-5E); **Resistance Range:** 500-1M OHM; **Tolerance:** ±30%; **Taper:** Linear; **Power Rating:** .05W @50C; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -20°C to +70°C; **Temperature Coefficient:** ±500 ppm/C(+25°C to +70°C) / ±750 ppm/C (-20°C to +25°C); **Rotation Life:** 20; **Soldering Heat:** 280C 3s



* No stopper, 360° mechanical rotation.

Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	2,000	Panasonic Part No.
P7J☐☐☐CT-ND†	.63	5.28	48.53	P7J☐☐☐TR-ND†	325.00	—	EVM-7JSX30BXX*
P1S☐☐☐CT-ND†	.46	3.85	35.42	P1S☐☐☐TR-ND†	—	237.00/M	EVM-1SSX50BXX*
P1G☐☐☐CT-ND†	.44	3.65	33.58	P1G☐☐☐TR-ND†	225.00	—	EVM-1GSX30BXX*
P1E☐☐☐CT-ND†	.54	4.50	41.40	P1E☐☐☐TR-ND†	277.00	—	EVM-1ESX30BXX*
P1D☐☐☐CT-ND†	.50	4.13	37.95	P1D☐☐☐TR-ND†	254.00	—	EVM-1DSX30BXX*
P5C☐☐☐CT-ND†	.31	2.55	23.46	P5C☐☐☐TR-ND†	—	157.00/M	EVN-5CSX50BXX*
P5E☐☐☐CT-ND†	.28	2.35	21.62	P5E☐☐☐TR-ND†	—	145.00/M	EVN-5ESX50BXX*

* For assistance with Panasonic Part Number please call Digi-Key.
† For complete number, substitute corresponding code (from chart) for ☐☐☐.

Code Resistance Value For P7J Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
221 (220)	331 (330)	471 (470)	102 (1.0K)	222 (2.2K)	332 (3.3K)	472 (4.7K)
103 (10K)	223 (22K)	333 (33K)	473 (47K)	104 (100K)	224 (220K)	334 (330K)
474 (470K)	105 (1.0M)					

Code Resistance Value For P1 / P5C Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
201 (200)	501 (500)	102 (1.0K)	202 (2.0K)	502 (5.0K)	103 (10K)	
203 (20K)	503 (50K)	104 (100K)	204 (200K)	504 (500K)	105 (1.0M)	

Code Resistance Value For P5E Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
501 (500)	102 (1K)	202 (2K)	502 (5K)	103 (10K)	203 (20K)	503 (50K)
104 (100K)	204 (200K)	504 (500K)	105(1M)			

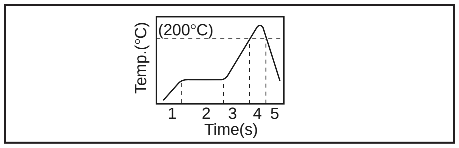
Digi-Key® **SMT Trimmer Potentiometers Kits**

P7J-KIT-ND	10 each of Series P7J, values 220–22K, 47K–1.0M (150 pieces)	**$59.95**
P1S-KIT-ND	10 each of Series P1S, values 200 - 1.0M (120 pieces)	**$43.95**
P1E-KIT-ND	10 each of Series P1E, values 100 - 1.0M (130 pieces)	**$43.95**
P1D-KIT-ND	10 each of Series P1D, values 100 - 1.0M (130 pieces)	**$43.95**

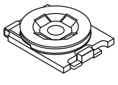
(Continued)

Profile for Reflow Soldering

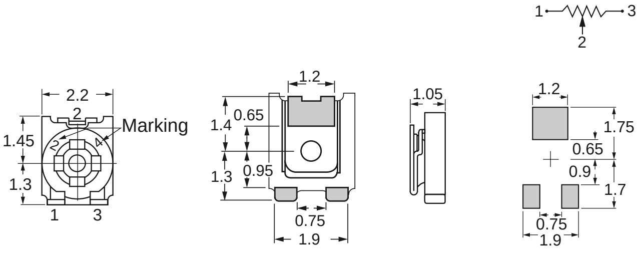
1. Heat-Up Zone:
   Room Temperature - (Preheat Zone 30~60s)
2. Pre-Heat Zone:
   140°C to 160°C (60~120s)
3. Heat-Up Zone:
   Preheat Zone ~200°C (20~40s)
4. Melting-Heat Zone:
   Peak Temperature (5s max.)
5. Cooling Zone:
   200°C to 100°C (1~4C/s)



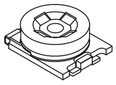
Series P2W – Panasonic Series #EVM-2WSX80BXX



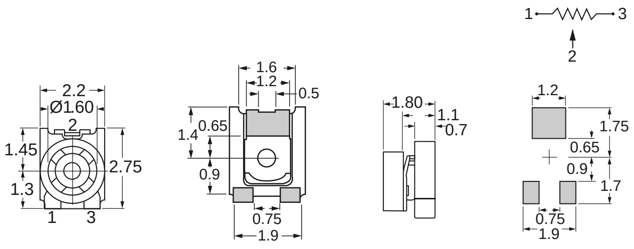
Features: • 2mm open frame type for reflow soldering; **Resistance Range:** 200-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20.; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



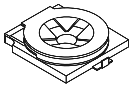
Series P2X – Panasonic Series #EVM-2XSX50BXX



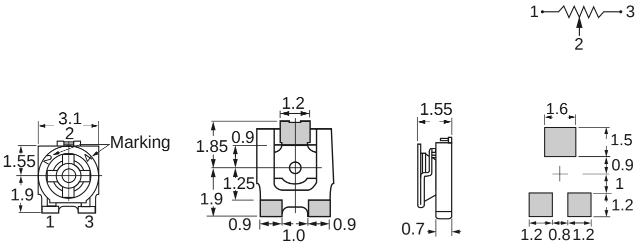
Features: • 2mm open frame type for reflow soldering; **Resistance Range:** 200-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 10-150 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



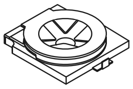
Series P3Y – Panasonic Series #EVM-3YSX50BXX



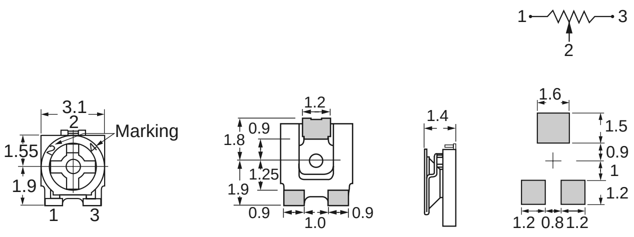
Features: • 3mm open frame type for reflow soldering; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C) ; **Rotation Life:** 20; **Soldering Heat:** 240C 5s



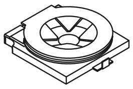
Series P3V – Panasonic Series #EVM-3VSX50BXX



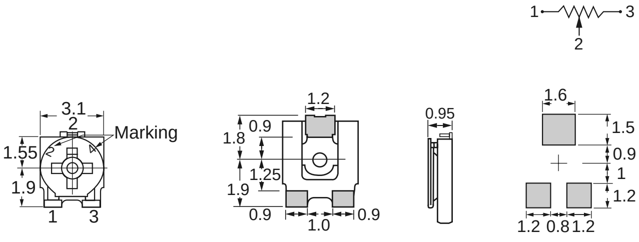
Features: • 3mm open frame type for reflow soldering • Rotation stopper feature; **Resistance Range:** 500-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 240 ±20; **Rotation Torque:** 20-100 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



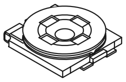
Series P3W – Panasonic Series #EVM-3WSX80BXX



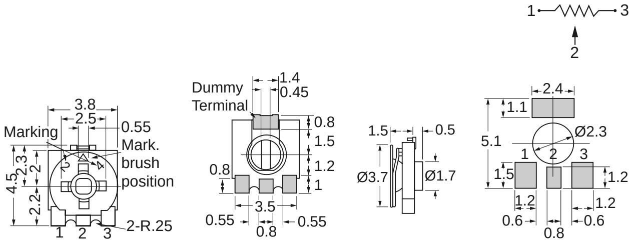
Features: • 3mm open frame type for reflow soldering; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .15W; **Adjustment Angle:** 240 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -20°C to +85°C; **Temperature Coefficient:** ±250 ppm/C (-20°C to +85°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



Series P1U – Panasonic Series #EVM-1USX30BXX



Features: • 4mm open frame type for reflow soldering; **Resistance Range:** 100-1M OHM; **Tolerance:** ±25%; **Taper:** Linear; **Power Rating:** .2W; **Adjustment Angle:** 260 ±20; **Rotation Torque:** 20-200 gF; **Operating Temperature:** -20°C to +100°C; **Temperature Coefficient:** ±250 ppm/C(+25°C to +100°C); **Rotation Life:** 20; **Soldering Heat:** 240C 5s



Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000	2,000	3,000	Panasonic Part No.
P2W□ □ □ CT-ND†	.63	5.25	48.30	P2W□ □ □ TR-ND†	—	—	323.00/M	EVM-2WSX80BXX*
P2X□ □ □ CT-ND†	.61	5.05	46.46	P2X□ □ □ TR-ND†	—	311.00/M	—	EVM-2XSX50BXX*
P3Y□ □ □ CT-ND†	.42	3.50	32.20	P3Y□ □ □ TR-ND†	—	215.00/M	—	EVM-3YSX50BXX*
P3V□ □ □ CT-ND†	.52	4.35	40.02	P3V□ □ □ TR-ND†	—	268.00/M	—	EVM-3VSX50BXX*
P3W□ □ □ CT-ND†	.52	4.35	40.02	P3W□ □ □ TR-ND†	—	—	268.00/M	EVM-3WSX80BXX*
P1U□ □ □ CT-ND†	.61	5.05	46.46	P1U□ □ □ TR-ND†	311.00	—	—	EVM-1USX30BXX*

***** For assistance with Panasonic Part Number please call Digi-Key.

† For complete number, substitute corresponding code (from chart) for □ □ □.

Code Resistance Value For P2W / P2X Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
201 (200) 203 (20K)	501 (500) 503 (50K)	102 (1.0K) 104 (100K)	202 (2.0K) 204 (200K)	502 (5.0K) 504 (500K)	103 (10K) 105 (1.0M)

Code Resistance Value For P3Y / P3W / P1U Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
101 (100) 203 (20K)	201 (200) 503 (50K)	501 (500) 104 (100K)	102 (1.0K) 204 (200K)	202 (2.0K) 504 (500K)	502 (5.0K) 105 (1.0M)	103 (10K)

Code Resistance Value For P3V Series

Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)	Code (Value)
501 (500) 104 (100K)	102 (1K) 204 (200K)	202 (2K) 504 (500K)	502 (5K) 105(1M)	103 (10K)	203 (20K)	503 (50K)

Panasonic 6mm Square Ceramic Trimmer Potentiometers

EVM-EAG / EAS / EGG / EGS Series:

Dustproof Type with Knob Protection: Features: • No readjustment needed through knob protected construction • Excellent mounting efficiency due to cubic shape • Automated adjustment available. Face side: Standard cross slot screwdriver suited to automatic adjustment applicable. Back side: Penetrated slot for easy driving. **Applications:** • Audio visual equipment, home appliances.

Specifications • Rotation Torque: 20 to 300gf•cm. • Stopper Strength: 500gf•cm. • Rotation Angle: 210°C ±20°C. • TCR: ±200ppm (-30°C - 100°C) • Nominal Total Resistance & Tolerance: ±25% • Power Rating & Max. Operating Voltage: 0.3W, 100V (70°C) • Residual Resistance: 10Ω max. for R≤1kΩ, 1% max. for 1kΩ<R<100kΩ, 5% max. for R≥100kΩ • Soldering Heat: 5s max. 240 to 280°C, 3s max. 280 to 300°C • Rotation Life: 50 turns.

EVM-EYG and EVM-EYS Series:

Specifications: • Rotation Torque: 20 to 300gf•cm. • Stopper Strength: 500gf•cm. • Rotation Angle: 210°C ±20°C. • TCR: ±100ppm (-40°C – 120°C) • Nominal Total Resistance & Tolerance: ±20% • Power Rating & Max. Operating Voltage: 0.5W, 200V (70°C) • Residual Resistance: 2% • Soldering Heat: 260°C ±5°C for 5 ±1 Sec. • Rotation Life: 50 turns.

EVM-AAS Series:

Specifications: • Resistance Range: 100Ω – 1mΩ • Tolerance: ±25% • Taper: Linear • Residual Resistance: 2% • Wattage Rating: 0.3W • Volt Rating: 100V • TCR: ±200ppm • Torque: 20 to 300gf • Stopper Strength: 350gf • Rotational Angle: 240°C ±20°C • Operational Temperature: -30°C – +100°C.

EVM-F6S Series:

Features: • Higher performance dustproof type. • Excellent reliability for heat and humidity. • High speed radial automatic mounting and excellent mounting performance.

Applications: • Audio visual equipment, home appliances.

Specifications: • Rotation Torque: 20 to 300gf cm. • Stopper Strength: 350gf cm. • Rotation Angle: 240°C ±20°C. • TCR: ±300ppm (-30°C - 100°C) • Nominal Total Resistance & Tolerance: ±25% • Power Rating & Max. Operating Voltage: 0.3W, 100V (70°C) • Residual Resistance: 10Ω max. for R≤1kΩ, 1% max. for 1kΩ<R<100kΩ, 5% max. for R≥100kΩ • Soldering Heat: 5s max. 240 to 280°C, 3s max. 280 to 300°C • Rotation Life: 50 turns.

Fig. 1 - Top Adjust

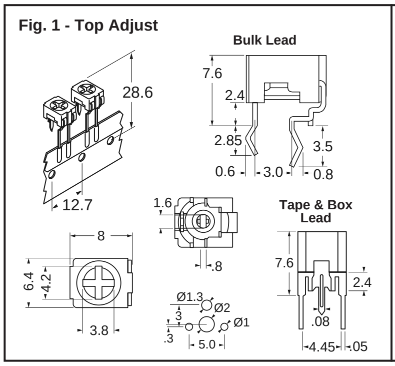


Fig. 2 - Side Adjust

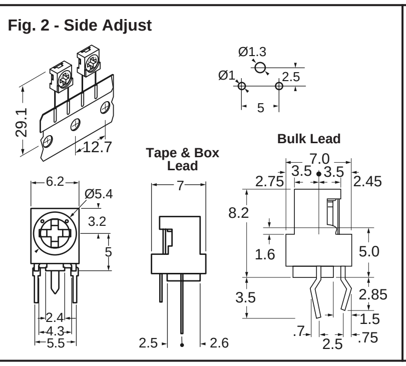


Fig. 3 - Top Adjust

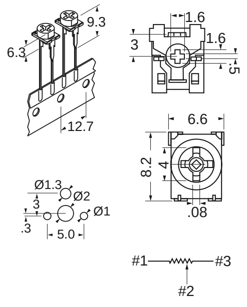
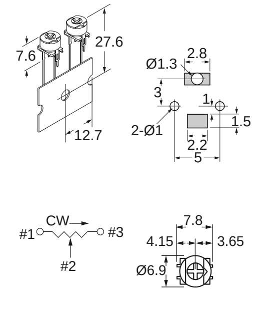


Fig. 4 - Top Adjust



EVM-EAG Series - Top Adjust (Bulk)

Fig.	Res. (Ω)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
1	100	EAG12BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B12
	200	EAG22BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B22
	500	EAG52BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B52
	1K	EAG13BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B13
	2K	EAG23BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B23
	5K	EAG53BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B53
	10K	EAG14BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B14
	20K	EAG24BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B24
	50K	EAG54BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B54
	100K	EAG15BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B15
	200K	EAG25BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B25
	500K	EAG55BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B55
	1M	EAG16BK-ND	.73	6.05	55.66	242.00	EVM-EAGA00B16

EVM-EAS Series - Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	Panasonic Part No.
1	100	EAS12CT-ND	.59	4.90	45.08	EAS12TB-ND	362.00	336.00/M	EVM-EASA00B12
	200	EAS22CT-ND	.59	4.90	45.08	EAS22TB-ND	362.00	336.00/M	EVM-EASA00B22
	500	—	—	—	—	EAS52TB-ND	362.00	336.00/M	EVM-EASA00B52
	1K	EAS13CT-ND	.59	4.90	45.08	EAS13TB-ND	362.00	336.00/M	EVM-EASA00B13
	2K	EAS23CT-ND	.59	4.90	45.08	EAS23TB-ND	362.00	336.00/M	EVM-EASA00B23
	5K	EAS53CT-ND	.59	4.90	45.08	EAS53TB-ND	362.00	336.00/M	EVM-EASA00B53
	10K	—	—	—	—	EAS14TB-ND	362.00	336.00/M	EVM-EASA00B14
	20K	EAS24CT-ND	.59	4.90	45.08	EAS24TB-ND	362.00	336.00/M	EVM-EASA00B24
	50K	—	—	—	—	EAS54TB-ND	362.00	336.00/M	EVM-EASA00B54
	100K	—	—	—	—	EAS15TB-ND	362.00	336.00/M	EVM-EASA00B15
	200K	—	—	—	—	EAS25TB-ND	362.00	336.00/M	EVM-EASA00B25
	500K	EAS55CT-ND	.59	4.90	45.08	EAS55TB-ND	362.00	336.00/M	EVM-EASA00B55
	1M	EAS16CT-ND	.66	5.49	50.48	EAS16TB-ND	362.00	336.00/M	EVM-EASA00B16

EVM-EYG Series — High Grade, Top Adjust (Bulk)

Fig.	Res. (Ω)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
1	1K	EYG13BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B13
	2K	EYG23BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B23
	5K	EYG53BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B53
	10K	EYG14BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B14
	20K	EYG24BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B24
	50K	EYG54BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B54
	100K	EYG15BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B15
	200K	EYG25BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B25
	500K	EYG55BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B55
	1M	EYG16BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B16
	2M	EYG26BK-ND	.79	6.58	60.49	263.00	EVM-EYGA00B26

EVM-EYS Series — High Grade, Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	10,000	Panasonic Part No.
1	1K	EYS13TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B13
	2K	EYS23TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B23
	5K	EYS53TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B53
	10K	EYS14TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B14
	20K	EYS24TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B24
	50K	EYS54TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B54
	100K	EYS15TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B15
	200K	EYS25TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B25
	500K	EYS55TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B55
	1M	EYS16TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B16
	2M	EYS26TB-ND	405.00	375.00/M	351.00/M	EVM-EYSA00B26

EVM-EGG Series - Side Adjust (Bulk)

Fig.	Res. (Ω)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
2	100	EGG12BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B12
	200	EGG22BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B22
	500	EGG52BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B52
	1K	EGG13BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B13
	2K	EGG23BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B23
	5K	EGG53BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B53
	10K	EGG14BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B14
	20K	EGG24BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B24
	50K	EGG54BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B54
	100K	EGG15BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B15
	200K	EGG25BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B25
	500K	EGG55BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B55
	1M	EGG16BK-ND	.71	5.88	54.05	235.00	EVM-EGGA00B16

EVM-EGS Series - Side Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	Panasonic Part No.
2	100	EGS12CT-ND	.65	5.40	49.68	EGS12TB-ND	372.00	346.00/M	EVM-EGSA00B12
	200	EGS22CT-ND	.65	5.40	49.68	EGS22TB-ND	372.00	346.00/M	EVM-EGSA00B22
	500	EGS52CT-ND	.65	5.40	49.68	EGS52TB-ND	372.00	346.00/M	EVM-EGSA00B52
	1K	EGS13CT-ND	.65	5.40	49.68	EGS13TB-ND	372.00	346.00/M	EVM-EGSA00B13
	2K	EGS23CT-ND	.65	5.40	49.68	EGS23TB-ND	372.00	346.00/M	EVM-EGSA00B23
	5K	EGS53CT-ND	.65	5.40	49.68	EGS53TB-ND	372.00	346.00/M	EVM-EGSA00B53
	10K	EGS14CT-ND	.65	5.40	49.68	EGS14TB-ND	372.00	346.00/M	EVM-EGSA00B14
	20K	EGS24CT-ND	.65	5.40	49.68	EGS24TB-ND	372.00	346.00/M	EVM-EGSA00B24
	50K	EGS54CT-ND	.65	5.40	49.68	EGS54TB-ND	372.00	346.00/M	EVM-EGSA00B54
	100K	EGS15CT-ND	.65	5.40	49.68	EGS15TB-ND	372.00	346.00/M	EVM-EGSA00B15
	200K	—	—	—	—	EGS25TB-ND	372.00	346.00/M	EVM-EGSA00B25
	500K	EGS55CT-ND	.65	5.40	49.68	EGS55TB-ND	372.00	346.00/M	EVM-EGSA00B55
	1M	—	—	—	—	EGS16TB-ND	372.00	346.00/M	EVM-EGSA00B16

EVM-F6S Series — Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	5,000	Panasonic Part No.
3	500	F6SA52CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B52
	1K	—	—	—	—	F6SA13TB-ND	213.00	197.00/M	EVM-F6SA00B13
	5K	F6SA53CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B53
	50K	F6SA54CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B54
	100K	F6SA15CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B15
	200K	F6SA25CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B25
	500K	F6SA55CT-ND	.38	3.28	27.20	F6SA55TB-ND	213.00	197.00/M	EVM-F6SA00B55
	1M	F6SA16CT-ND	.38	3.28	27.20	—	—	—	EVM-F6SA00B16

EVM-AAS Series - Top Adjust (Tape)

Fig.	Res. (Ω)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Box Pricing 1,000	Panasonic Part No.
4	100	AAS12CT-ND	.50	4.15	38.18	AAS12TB-ND	255.00	EVM-AASA00B12
	200	AAS22CT-ND	.50	4.15	38.18	AAS22TB-ND	255.00	EVM-AASA00B22
	500	AAS52CT-ND	.50	4.15	38.18	AAS52TB-ND	255.00	EVM-AASA00B52
	1K	AAS13CT-ND	.50	4.15	38.18	AAS13TB-ND	255.00	EVM-AASA00B13
	2K	AAS23CT-ND	.50	4.15	38.18	AAS23TB-ND	255.00	EVM-AASA00B23
	5K	AAS53CT-ND	.50	4.15	38.18	AAS53TB-ND	255.00	EVM-AASA00B53
	10K	AAS14CT-ND	.50	4.15	38.18	AAS14TB-ND	255.00	EVM-AASA00B14
	20K	AAS24CT-ND	.50	4.15	38.18	AAS24TB-ND	255.00	EVM-AASA00B24
	50K	AAS54CT-ND	.50	4.15	38.18	AAS54TB-ND	255.00	EVM-AASA00B54
	100K	AAS15CT-ND	.50	4.15	38.18	AAS15TB-ND	255.00	EVM-AASA00B15
	200K	AAS25CT-ND	.50	4.15	38.18	AAS25TB-ND	255.00	EVM-AASA00B25
	500K	AAS55CT-ND	.50	4.15	38.18	AAS55TB-ND	255.00	EVM-AASA00B55
	1M	AAS16CT-ND	.50	4.15	38.18	AAS16TB-ND	255.00	EVM-AASA00B16

Panasonic Ceramic Trimmer Potentiometers

Series EVM-L4G, EVM-L1G, EVM-5AG, and EVM-4LG

Specifications:

- Resistance Range: 100Ω – 1mΩ
- Tolerance: 25%
- Taper: Linear
- Residual: EVM-L4G and EVM-L1G: 5%
  EVM-5AG and EVM-4LG: 2%
- Wattage Rating: EVM-L4G and EVM-L1G: .2W;
  EVM-5AG and EVM-4LG: .3W
- Voltage Rating: EVM-L4G and EVM-L1G: 50V;
  EVM-5AG and EVM-4LG: 100V
- TCR: EVM-L4G and EVM-L1G: ±300ppm;
  EVM-5AG and EVM-4LG: ±200ppm
- Torque: 20-250 gf
- Stopper Strength: EVM-L4G and EVM-L1G: 400gF;
  EVM-5AG and EVM-4LG: 300gF
- Angle of Rotation: 200° ±20°
- Operating Temperature: –30°C ~ +100°C.

Fig. 1 — 4mm,Vertical

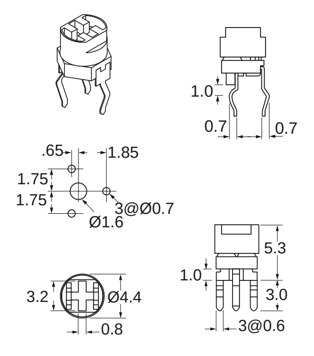


Fig. 2 — 4mm, Right Angle

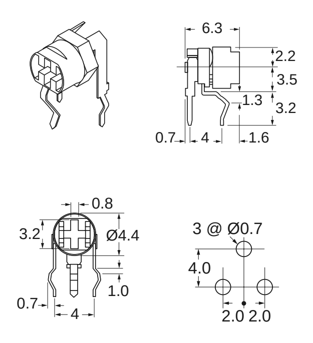


Fig. 3 — 5mm, Vertical

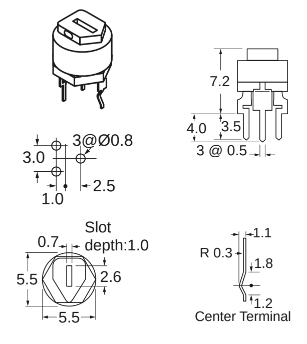


Fig. 4 — 6mm, Vertical

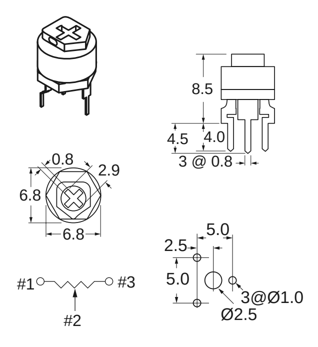
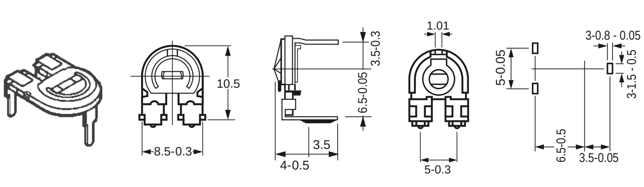


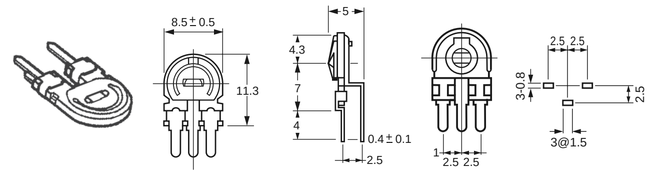
Fig.	Res. (Ohms)	Digi-Key Part No.	Pricing 1	10	100	500	Panasonic Part No.
		EVM-L4G Series — 4mm, Vertical, Top Adjust					
1	100	L4G12BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B12
	200	L4G22BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B22
	500	L4G52BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B52
	1K	L4G13BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B13
	2K	L4G23BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B23
	5K	L4G53BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B53
	10K	L4G14BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B14
	20K	L4G24BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B24
	50K	L4G54BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B54
	100K	L4G15BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B15
	200K	L4G25BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B25
	500K	L4G55BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B55
	1M	L4G16BK-ND	.77	6.43	59.11	257.00	EVM-L4GA00B16
		EVM-L1G Series — 4mm, Right Angle, Side Adjust					
2	100	L1G12BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B12
	200	L1G22BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B22
	500	L1G52BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B52
	1K	L1G13BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B13
	2K	L1G23BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B23
	5K	L1G53BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B53
	10K	L1G14BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B14
	20K	L1G24BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B24
	50K	L1G54BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B54
	100K	L1G15BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B15
	200K	L1G25BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B25
	500K	L1G55BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B55
	1M	L1G16BK-ND	.83	6.88	63.25	275.00	EVM-L1GA00B16
		EVM-5AG Series — 5mm, Vertical, Top Adjust					
3	100	5AG12BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B12
	200	5AG22BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B22
	500	5AG52BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B52
	1K	5AG13BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B13
	2K	5AG23BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B23
	5K	5AG53BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B53
	10K	5AG14BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B14
	20K	5AG24BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B24
	50K	5AG54BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B54
	100K	5AG15BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B15
	200K	5AG25BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B25
	500K	5AG55BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B55
	1M	5AG16BK-ND	.71	5.95	54.74	238.00	EVM-5AGA00B16
		EVM-4LG Series — 6mm, Vertical, Top Adjust					
4	100	4LG12BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B12
	200	4LG22BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B22
	500	4LG52BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B52
	1K	4LG13BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B13
	2K	4LG23BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B23
	5K	4LG53BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B53
	10K	4LG14BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B14
	20K	4LG24BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B24
	50K	4LG54BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B54
	100K	4LG15BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B15
	200K	4LG25BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B25
	500K	4LG55BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B55
	1M	4LG16BK-ND	.59	4.93	45.31	197.00	EVM-4LGA00B16

8mm Trimmer Potentiometers EVN-Series

K4A Series



K0A Series

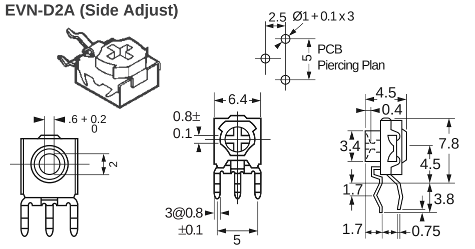


Specifications: • Resistance Range: 300 to 2MΩ • Taper: Linear • Tolerance: ±30% • Working Voltage: 200 V max. • Power Rating: 0.1 W/50°C • Residual Resistance:Up to 1kΩ: 10Ω max. Over 1kΩ: 5% of total resistance • Rotation Angle: 260° ± 20° • Rotation Torque: 0.4 to 4.2 in-oz. • Stop Strength: 1 in. lb. • Operating Temperature: –25°C to 75°C

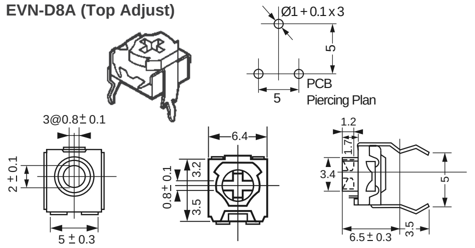
Res. Ohms	Digi-Key Part No. Laydown Version	Digi-Key Part No. Standup Version	Pricing 1	10	100	1,000	5,000	10,000	Panasonic Part No. Laydown Version	Panasonic Part No. Standup Version
300	—	K0A32-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	—	EVN-64AA00B32
2K	K4A23-ND	K0A23-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B23	EVN-64AA00B23
50K	K4A54-ND	—	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B54	—
200K	K4A25-ND	K0A25-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B25	EVN-64AA00B25
1M	K4A16-ND	—	.31	2.59	23.81	159.00	148.00/M	138.00/M	EVN-65AA00B16	—
2M	—	K0A26-ND	.31	2.59	23.81	159.00	148.00/M	138.00/M	—	EVN-64AA00B26

Panasonic® 6mm Carbon Trimmer Potentiometers

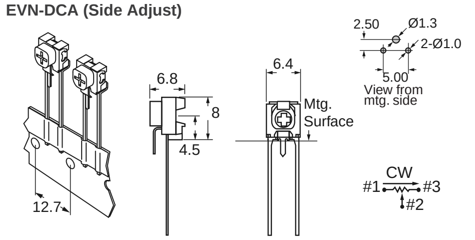
EVN-D2A (Side Adjust)



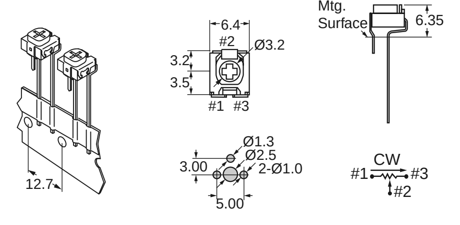
EVN-D8A (Top Adjust)



EVN-DCA (Side Adjust)



EVN-DJA (Top Adjust)



SPECIFICATIONS:

Mechanical: • **Rotation angle:** 210° ±20° • **Rotation torque:** 20 to 250g-cm • **Stopper Strength:** 750gfcm • **Soldering Heat:** 240°C to 280°C, 5 sec. max.; 280°C to 300°C, 3 sec. max. • **Rotation life:** 100 cycles

Electrical: • Power rating: 0.1W (when under 50°C) • Max. operating voltage: 50V • Taper: B (Linear) • Resistance: 200Ω to 1MΩ • Tolerance: ±30%.

FEATURES:

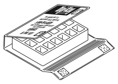
• Miniature size, lightweight, 6.4 x 6.7mm • Suitable for automatic insertion as square housing • Suitable for automatic adjustment as stable rotation torque • Dust proof and flux proof construction • Adjustable from both top and bottom sides • Snap-in mounting terminal for EVN-D8A/D2A

Applications:

• Consumer equipment such as TV, VTR (VCR), stereo, radio.

Panasonic®

Carbon Trimmer Potentiometers



Digi-Key® Assortment Kit
14 Panasonic 6mm Carbon
Trimmer Potentiometers
Panasonic Quality

Cat. No. DXA-KIT-ND ....*ONLY* **$29.95**

140 6mm Carbon Trimmer Potentiometers: Price includes convenient divided notebook style storage case with bin guide for easy storage and quick access.

EVN-D2A Side Adjust (Bulk) Series
EVN-D8A Top Adjust (Bulk) Series

Res. (Ω)	Digi-Key Part No. Side Adjust Version	Digi-Key Part No. Top Adjust Version	Bulk Price Each 1	10	100	500	1,000	Panasonic Part No. Side Adjust Version	Panasonic Part No. Top Adjust Version
200	D1AA22-ND*	D4AA22-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B22	EVN-D8AA03B22
500	D1AA52-ND*	D4AA52-ND	.36	.27	.20	.15	.12	EVN-D2AA03B52	EVN-D8AA03B52
1K	D1AA13-ND*	D4AA13-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B13	EVN-D8AA03B13
2K	D1AA23-ND	D4AA23-ND	.36	.27	.20	.15	.12	EVN-D2AA03B23	EVN-D8AA03B23
5K	D1AA53-ND*	D4AA53-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B53	EVN-D8AA03B53
10K	D1AA14-ND	D4AA14-ND	.36	.27	.20	.15	.12	EVN-D2AA03B14	EVN-D8AA03B14
20K	D1AA24-ND*	D4AA24-ND	.36	.27	.20	.15	.12	EVN-D2AA03B24	EVN-D8AA03B24
50K	D1AA54-ND*	D4AA54-ND	.36	.27	.20	.15	.12	EVN-D2AA03B54	EVN-D8AA03B54
100K	D1AA15-ND*	D4AA15-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B15	EVN-D8AA03B15
200K	D1AA25-ND*	D4AA25-ND	.36	.27	.20	.15	.12	EVN-D2AA03B25	EVN-D8AA03B25
500K	D1AA55-ND*	D4AA55-ND*	.36	.27	.20	.15	.12	EVN-D2AA03B55	EVN-D8AA03B55

* Denotes part included in DXA-KIT.

EVN-DCA Side Adjust (Tape) Series
EVN-DJA Top Adjust (Tape) Series

Res. (Ω)	Digi-Key Part No. Side Adjust Version	Digi-Key Part No. Top Adjust Version	Cut Tape Price Each 1	10	100	500	Tape & Box * Pricing 1,000	Panasonic Part No. Side Adjust Version	Panasonic Part No. Top Adjust Version
200	DCA22CT-ND	DJA22CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B22	EVN-DJAA03B22
500	DCA52CT-ND	DJA52CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B52	EVN-DJAA03B52
1K	DCA13CT-ND	DJA13CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B13	EVN-DJAA03B13
2K	DCA23CT-ND	DJA23CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B23	EVN-DJAA03B23
5K	DCA53CT-ND	DJA53CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B53	EVN-DJAA03B53
10K	DCA14CT-ND	DJA14CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B14	EVN-DJAA03B14
20K	DCA24CT-ND	DJA24CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B24	EVN-DJAA03B24
50K	DCA54CT-ND	DJA54CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B54	EVN-DJAA03B54
100K	DCA15CT-ND	DJA15CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B15	EVN-DJAA03B15
200K	DCA25CT-ND	DJA25CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B25	EVN-DJAA03B25
500K	DCA55CT-ND	DJA55CT-ND	.41	.30	.23	.17	129.00	EVN-DCAA03B55	EVN-DJAA03B55

* For Tape and Box Part No. change “CT-ND” to “TB-ND”

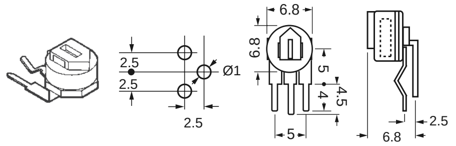
Panasonic® Cermet Series Trimmer Potentiometers
6mm Diameter Cermet Dust-Proof Type

SPECIFICATIONS:

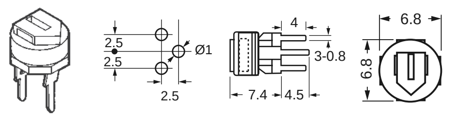
- **Resistance Range:** 100 to 1MΩ
- **Tolerance:** +25%
- **Taper:** Linear
- **Residual Resistance:** 5% max.
- **Wattage Rating:** 0.3W max. (70°C)
- **Voltage Rating:** 100V max.
- **TCR:** +200PPM/°C
- **Rotation Torque:** 20 to 250g-cm
- **Stopper Strength**: 300g-cm min.
- **Rotation Angle:** 200° +20°C
- **Operating Temperature:** 20°C to 100°C (EVN-36CA)
  -40° to 101°C (EVM-31G/36G)

Cross Reference Chart	
Series	**Bourns**
31G	**3306W**
36C/36GA	**3306P**

EVM-31GA (Horizontal Both Sides Adjust)

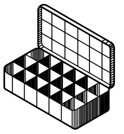


EVN-36CA*
EVM-36GA (Vertical Both Sides Adjust)



Panasonic®

Cermet Potentiometers



Digi-Key® Assortment Kits
13 Popular Cermet Trimmers
Panasonic Quality

31G-KIT-ND..............................**$52.95**
36G-KIT-ND..............................**$52.95**

130 Cermet Trimmers
Price includes convenient divided plastic box with bin guide for easy storage and quick access.

Res. Ohms	Digi-Key Part No. Horizontal 31GA	Digi-Key Part No. Vertical 36CA	36GA	Price Each 1	10	100	Panasonic Part No. Horizontal 31GA	Panasonic Part No. Vertical 36CA	36GA
100	31G12-ND	—	36G12-ND	.67	.53	.47	EVM-31GA00B12	—	EVM-36GA00B12
200	31G22-ND	—	36G22-ND	.67	.53	.47	EVM-31GA00B22	—	EVM-36GA00B22
500	31G52-ND	—	36G52-ND	.67	.53	.47	EVM-31GA00B52	—	EVM-36GA00B52
1K	31G13-ND	—	36G13-ND	.67	.53	.47	EVM-31GA00B13	—	EVM-36GA00B13
2K	31G23-ND	—	36G23-ND	.67	.53	.47	EVM-31GA00B23	—	EVM-36GA00B23
5K	31G53-ND	—	36G53-ND	.67	.53	.47	EVM-31GA00B53	—	EVM-36GA00B53
10K	31G14-ND	—	36G14-ND	.67	.53	.47	EVM-31GA00B14	—	EVM-36GA00B14
20K	31G24-ND	—	36G24-ND	.67	.53	.47	EVM-31GA00B24	—	EVM-36GA00B24
50K	31G54-ND	—	36G54-ND	.67	.53	.47	EVM-31GA00B54	—	EVM-36GA00B54
100K	31G15-ND	—	36G15-ND	.67	.53	.47	EVM-31GA00B15	—	EVM-31GA00B15
200K	31G25-ND	36C25-ND*	36G25-ND	.67	.53	.47	EVM-31GA00B25	EVN-36CA00B25*	EVM-36GA00B25
500K	31G55-ND	—	36G55-ND	.67	.53	.47	EVM-31GA00B55	—	EVM-36GA00B55
1M	31G16-ND	—	36G16-ND	.67	.53	.47	EVM-31GA00B16	—	EVM-36GA00B16

***** Not for new design, use EVM-36GA type

Panasonic Slide Switches

Fig. 1

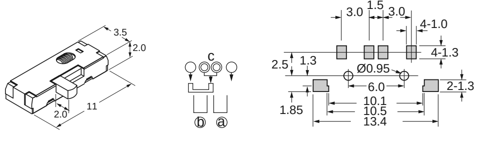


Fig. 2

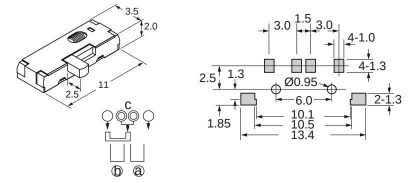


Fig. 3

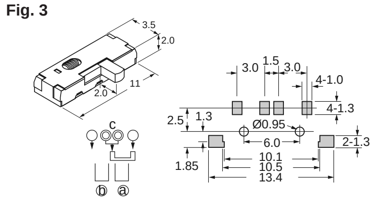


Fig. 4

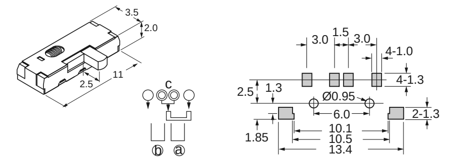


Fig. 5

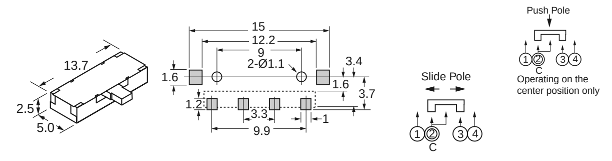


Fig. 6

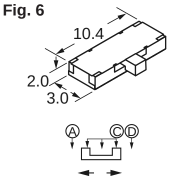


Fig.	Description	Rating	OP Force	Digi-Key Part No.	Cut Tape Price Each 1	10	100	500	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
1	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11157SCT-ND	2.35	1.77	1.53	1.18	P11157STR-ND	2,000	853.00/M	ESD-165225
2	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11158SCT-ND	2.35	1.77	1.53	1.18	P11158STR-ND	2,000	853.00/M	ESD-165226
3	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11159SCT-ND	2.35	1.77	1.53	1.18	P11159STR-ND	2,000	853.00/M	ESD-165235
4	SMD 2mm Horizontal Self-return	5VDC 200mA	216gf	P11160SCT-ND	2.35	1.77	1.53	1.18	P11160STR-ND	2,000	853.00/M	ESD-165236
5	SMD Multi Function Slide + Push	10VDC 1mA	40gf	P11155SCT-ND	6.72	5.04	4.37	3.36	P11155STR-ND	1,400	2520.00/M	ESE-15700
6	SMD Multi Function Slide	10VDC 1mA	125gf	P11156SCT-ND	2.02	1.52	1.32	1.01	P11156STR-ND	1,500	756.00/M	ESE-15800

Panasonic Detector Switches

Fig. 1

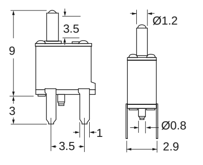


Fig. 2

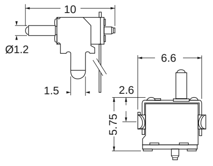


Fig. 3 — Surface Mount

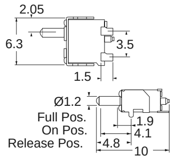


Fig. 4

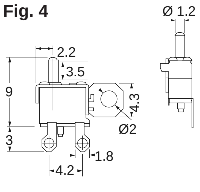


Fig. 5

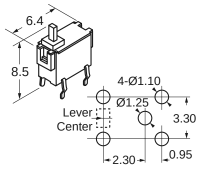


Fig. 6

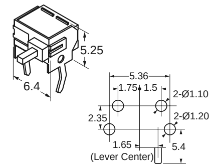


Fig. 7

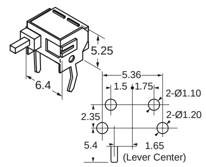


Fig. 8

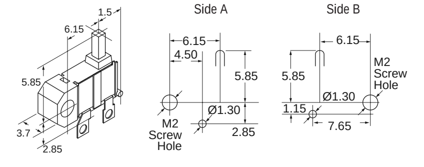


Fig. 9

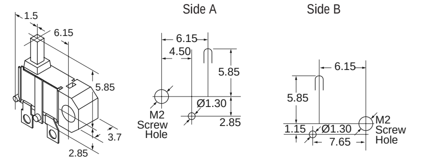


Fig. 10 — Surface Mount

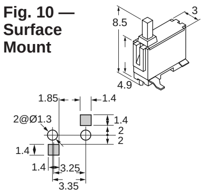


Fig. 11

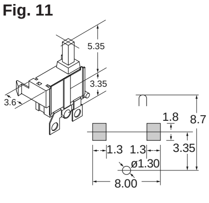


Fig. 12 — Surface Mount

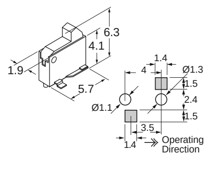


Fig. 13

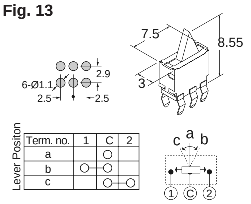


Fig. 14

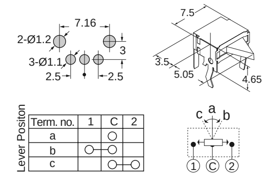


Fig. 15 — Surface Mount

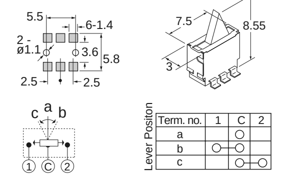


Fig.	Description	Rating	OP Force	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Panasonic Part No.
1	PC 5mm Vertical Mount	5VDC 10mA	35gf	P8039S-ND	.95	.71	.62	—	.40	ESE-105SV1
2	PC 5mm Horizontal Mount	5VDC 10mA	35gf	P8040S-ND	1.08	.81	.70	—	.45	ESE-105SH1
3	Surface Mount, 5mm Horiz. Mount	5VDC 10mA	35gf	P8043S-ND	.86	.73	.67	—	.41	ESE-105MH1
4	Panel 5mm w/ Mounting Hole	5VDC 10mA	35gf	P8041S-ND	.99	.75	.65	—	.42	ESE-105HS1
5	PC 5mm Vertical Mount	5VDC 10mA	35gf	P8062S-ND	.71	.54	.47	.38	.32	ESE-11SV1
6	PC 5mm Horizontal Mount	5VDC 10mA	35gf	P10862S-ND	.71	.54	.47	.36	.30	ESE-11SH1C
7	PC 5mm Horizontal Mount	5VDC 10mA	35gf	P10863S-ND	.71	.54	.47	.36	.30	ESE-11SH2C
8	Tabbed 5mm with Mounting Hole	5VDC 10mA	35gf	P10864S-ND	.78	.59	.51	.40	.33	ESE-11HS1
9	Tabbed 5mm with Mounting Hole	5VDC 10mA	35gf	P10865S-ND	.78	.59	.51	.40	.33	ESE-11HS2
10	SMD 5mm Vertical Mount	5VDC 10mA	35gf	P10866S-ND	.78	.59	.51	.40	.33	ESE-11MV1
11	Snap-In 5mm w/Tabs, Horiz. Mount	5VDC 10mA	35gf	P10867S-ND	.78	.59	.51	.40	.33	ESE-11SF1
12	SMD 5mm Vertical Mount	5VDC 10mA	30gf	P10868S-ND	.78	.59	.51	.40	.33	ESE-22MV1
13	PC 5mm Vertical Mount SPDT	5VDC 10mA	35.7gf	P10870S-ND	1.12	.84	.73	.56	.47	ESE-24SV3
14	PC 5mm Horizontal Mount SPDT	5VDC 10mA	35.7gf	P10871S-ND	1.12	.84	.73	.56	.47	ESE-24SH1
15	SMD 5mm Vertical Mount SPDT	5VDC 10mA	35.7gf	P10872S-ND	1.12	.84	.73	.56	.47	ESE-24MV1

(Continued)

Panasonic. Detector Switches *(Cont.)*

Fig. 16

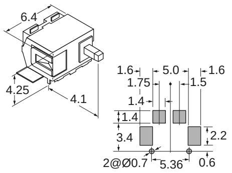


Fig. 17

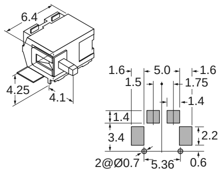


Fig. 18

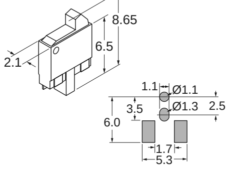


Fig. 19

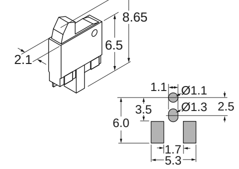


Fig. 20 — Surface Mount

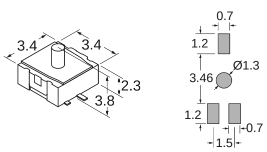


Fig. 21

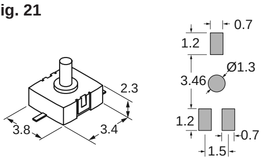


Fig. 22

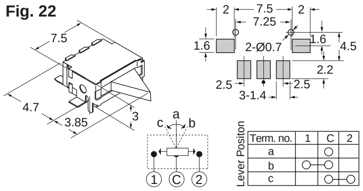


Fig. 23

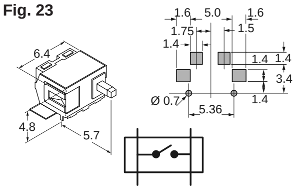


Fig. 24

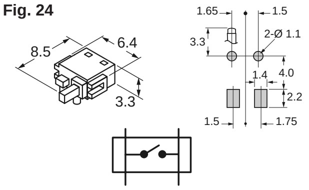


Fig. 25

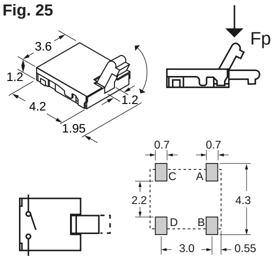


Fig. 26

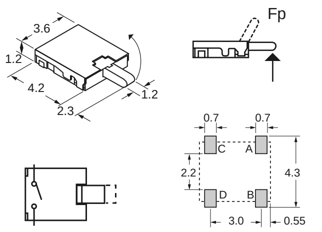


Fig. 27

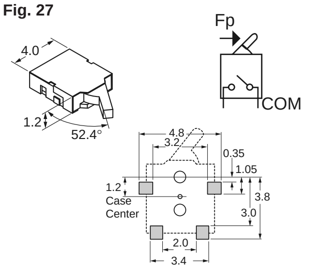


Fig. 28

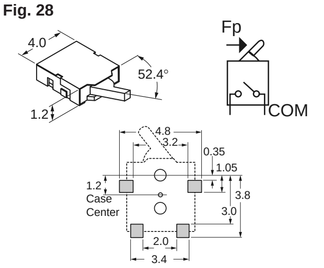


Fig.	Description	Rating	OP Force	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel		Panasonic Part No.
					1	10	100	500		Size	Pricing	
16	SMD 5mm Horiz. Mount	5VDC 10mA	35.7gf	P8097SCT-ND	.82	.62	.54	.41	P8097STR-ND	1,500	308.00/M	ESE-11MH1T
17	SMD 5mm Horiz. Mount	5VDC 10mA	35.7gf	P8098SCT-ND	.82	.62	.54	.41	P8098STR-ND	1,500	308.00/M	ESE-11MH2T
18	SMD 2mm Horiz. Mount	5VDC 10mA	31gf	P8094SCT-ND	.82	.62	.54	.41	P8094STR-ND	4,000	297.00/M	ESE-22MH2
19	SMD 2mm Horiz. Mount	5VDC 10mA	31gf	P8095SCT-ND	.82	.62	.54	.41	P8095STR-ND	4,000	297.00/M	ESE-22MH4
20	SMD 2mm Vert. Mount	5VDC 10mA	31gf	P8096SCT-ND	.82	.62	.54	.41	P8096STR-ND	2,000	308.00/M	ESE-2101BT
21	SMD 5mm Vert. Mount	5VDC 10mA	31gf	P10869SCT-ND	.78	.59	.51	.40	P10869STR-ND	2,000	294.00/M	ESE-2131BT
22	SMD 5mm Horiz. Mount SPDT	5VDC 10mA	35.7gf	P10873SCT-ND	1.12	.84	.73	.56	P10873STR-ND	1,000	405.00	ESE-24MH1T
23	SMD 5mm Horiz. Mount	5VCD 10mA	36gf	P11149SCT-ND	.74	.56	.49	.37	P11149STR-ND	1,500	277.00/M	ESE-11MH5T
24	SMD 5mm Horiz. Mount	5VCD 10mA	36gf	P11150SCT-ND	.74	.56	.49	.37	P11150STR-ND	1,500	277.00/M	ESE-11MH6T
25	SMD 1mm Vert. Mount flip down	5VCD 10mA	30gf	P11151SCT-ND	1.08	.81	.70	.54	P11151STR-ND	3,000	390.00/M	ESE-13V01
26	SMD 1mm Vert. Mount flip up	5VCD 10mA	30gf	P11152SCT-ND	1.08	.81	.70	.54	P11152STR-ND	5,000	390.00/M	ESE-13H01
27	SMD 1mm Horiz. Mount	5VCD 10mA	30gf	P11153SCT-ND	1.01	.76	.66	.51	P11153STR-ND	5,000	365.00/M	ESE-18RJ02
28	SMD 1mm Horiz. Mount	5VCD 10mA	30gf	P11154SCT-ND	1.01	.76	.66	.51	P11154STR-ND	5,000	365.00/M	ESE-18LJ02

Panasonic. Power / Push Switches

* UL, CSA, BEAB, SEMKO, VDE, SEV, FIMKO, NEMKO, DEMKO, APPROVED

Fig. 1

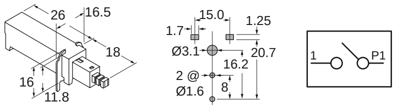


Fig. 2

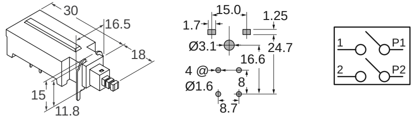


Fig. 3

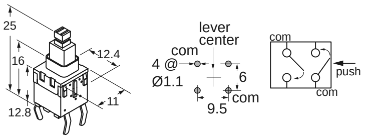


Fig. 4

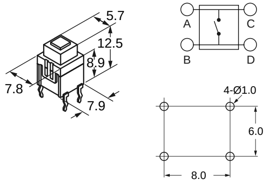


Fig. 5

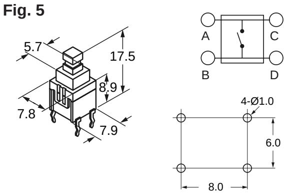


Fig. 6

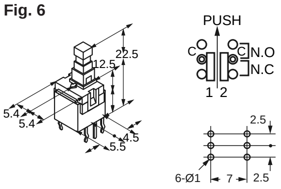


Fig. 7

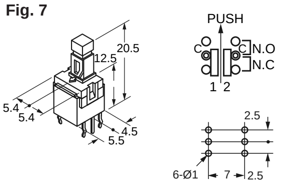
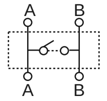


Fig.	Description	Digi-Key Part No.	Price Each					Panasonic Part No.
			1	10	100	500	1,000	
1	Power Switch SPST 5A, 250VAC	P8100S-ND*	2.32	1.75	1.52	1.17	—	ESB-92S21B
2	Power Switch DPST 5A, 250VAC	P8101S-ND*	3.62	2.72	2.36	1.82	—	ESB-92D21B
3	Push Switch DPST 3A, 12VDC	P8102S-ND	3.08	2.31	2.00	1.54	1.16	ESB-32101A
4	Push Switch Momentary SPST, 200mA, 14VDC	P11161S-ND	2.02	1.52	1.32	1.01	—	ESE-20C321
5	Push Switch Momentary SPST, 200mA, 14VDC	P11162S-ND	2.02	1.52	1.32	1.01	—	ESE-20C441
6	Push Switch Soft Sound DPDT, 200mA, 14VDC	P11163S-ND	2.69	2.02	1.75	1.35	—	ESB-30A105
7	Push Switch Soft Sound DPDT, 200mA, 14VDC	P11164S-ND	2.69	2.02	1.75	1.35	—	ESB-30B102

Panasonic Momentary Pushbutton Switches

CIRCUIT DIA. 1



CIRCUIT DIA. 2

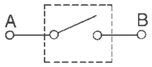


Fig. 1

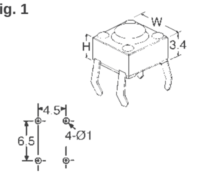


Fig. 2

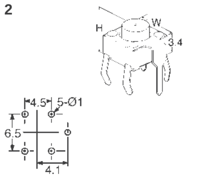


Fig. 3

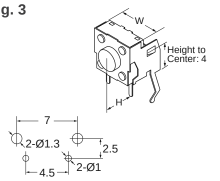


Fig. 4

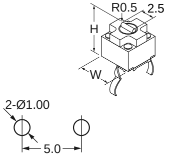


Fig. 5

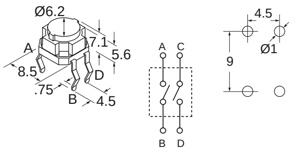


Fig. 6

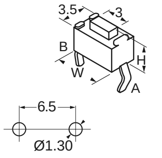


Fig. 7

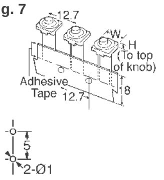


Fig. 8

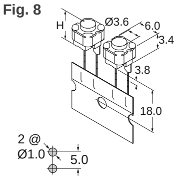


Fig. 9

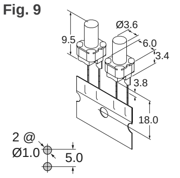


Fig. 10

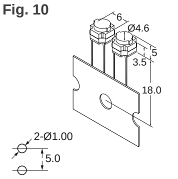


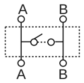
Fig.	Description	Circuit Dia.	Dim. (mm) H	Dim. (mm) W	Operating Force	Volt Rating (VDC)	Current Rating (mA)	Operating Life	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Price Each 1,000	Panasonic Part No.
	6mm Type													
1	Light Touch Switch Standard	1	4.3	6	100gf	15	20	100K	P8006S-ND	.29	.22	.19	.13	EVQ-PAC04M
	Light Touch Switch Standard	1	4.3	6	130gf	15	20	100K	P8007S-ND	.29	.22	.19	.13	EVQ-PAD04M
	Light Touch Switch Standard	1	4.3	6	160gf	15	20	100K	P8008S-ND	.29	.22	.19	.13	EVQ-PAE04M
	Light Touch Switch Standard	1	4.3	6	250gf	15	20	100K	P8009S-ND	.29	.22	.19	.13	EVQ-PAG04M
	Light Touch Switch Standard	1	5	6	100gf	15	20	100K	P8010S-ND	.29	.22	.19	.13	EVQ-PAC05R
	Light Touch Switch Standard	1	5	6	130gf	15	20	100K	P10890S-ND	.42	.32	.28	.18	EVQ-PAD05R
	Light Touch Switch Standard	1	7	6	100gf	15	20	100K	P8011S-ND	.29	.22	.19	.13	EVQ-PAC07K
	Light Touch Switch Standard	1	7	6	130gf	15	20	100K	P10891S-ND	.50	.38	.33	.21	EVQ-PAD07K
	Light Touch Switch Standard (Long Post)	1	9.5	6	100gf	15	20	100K	P8012S-ND	.29	.22	.19	.13	EVQ-PAC09K
	Light Touch Switch Standard (Long Post)	1	9.5	6	130gf	15	20	100K	P10892S-ND	1.42	1.07	.93	.59	EVQ-PAD09K
2	Light Touch Switch Standard w/Ground Terminal	1	4.3	6	100gf	15	20	100K	P8013S-ND	.34	.26	.23	.15	EVQ-PBC04M
	Light Touch Switch Standard w/Ground Terminal	1	5	6	100gf	15	20	100K	P8014S-ND	.34	.26	.23	.15	EVQ-PBC05R
	Light Touch Switch Standard w/Ground Terminal	1	5	6	130gf	15	20	100K	P10893S-ND	.34	.26	.23	.15	EVQ-PBD05R
	Light Touch Switch Standard w/Ground Terminal	1	7	6	100gf	15	20	100K	P8015S-ND	.34	.26	.23	.15	EVQ-PBC07K
	Light Touch Switch Standard w/Ground Terminal	1	7	6	130gf	15	20	100K	P10894S-ND	.40	.30	.26	.17	EVQ-PBD07K
	Light Touch Switch Standard w/Ground Terminal (Long Post)	1	9.5	6	100gf	15	20	100K	P8016S-ND	.34	.26	.23	.15	EVQ-PBC09K
3	Light Touch Switch Right Angle	2	3.15	7.5	100gf	15	20	100K	P10877S-ND	.39	.30	.26	.17	EVQ-PF003M
	Light Touch Switch Right Angle	2	3.15	7.5	130gf	15	20	100K	P10881S-ND	.39	.30	.26	.17	EVQ-PF103M
	Light Touch Switch Right Angle	2	3.85	7.5	100gf	15	20	100K	P10878S-ND	.39	.30	.26	.17	EVQ-PF004R
	Light Touch Switch Right Angle	2	3.85	7.5	130gf	15	20	100K	P10882S-ND	.39	.30	.26	.17	EVQ-PF104R
	Light Touch Switch Right Angle	2	5.85	7.5	100gf	15	20	100K	P10879S-ND	.39	.30	.26	.17	EVQ-PF006K
	Light Touch Switch Right Angle	2	5.85	7.5	130gf	15	20	100K	P10883S-ND	.39	.30	.26	.17	EVQ-PF106K
	Light Touch Switch Right Angle (Long Post)	2	8.35	7.5	100gf	15	20	100K	P10880S-ND	.39	.30	.26	.17	EVQ-PF008K
	Light Touch Switch Right Angle (Long Post)	2	8.35	7.5	130gf	15	20	100K	P10884S-ND	.39	.30	.26	.17	EVQ-PF108K
4	Light Touch Switch With Over Travel	2	7.45	6.2	75gf	30	50	100K	P10843S-ND	.51	.39	.34	.22	EVQ-P0E07K
	Light Touch Switch With Over Travel	2	7.45	6.2	130gf	30	50	100K	P10844S-ND	.58	.44	.38	.25	EVQ-P0D07K
	DPST Bi-Directional Type													
5	Light Touch Switch	—	7.1	8.5	130gf	12	50	500K	P10859S-ND	1.46	1.10	.95	.61	EVQ-PW007K
	6mm x 3.5mm Type													
6	Light Touch Switch	2	4.3	6	100gf	12	20	50K	P8056S-ND	.77	.58	.50	.35	EVQ-PJA04Q
	Light Touch Switch (Long Post)	2	5	6	100gf	12	20	50K	P8057S-ND	.77	.58	.50	.35	EVQ-PJA05Q
	Light Touch Switch	2	4.3	6	160gf	12	20	50K	P8058S-ND	.77	.58	.50	.35	EVQ-PJB04K
	Light Touch Switch (Long Post)	2	5	6	160gf	12	20	50K	P8059S-ND	.77	.58	.50	.35	EVQ-PJB05K
	Light Touch Switch	2	4.3	6	240gf	12	20	50K	P8060S-ND	.79	.60	.52	.36	EVQ-PJC04T
	Light Touch Switch (Long Post)	2	5	6	240gf	12	20	50K	P8061S-ND	.79	.60	.52	.36	EVQ-PJC05T

Fig.	Description	Circuit Dia.	Dim. (mm) H	Dim. (mm) W	Operating Force	Volt Rating (VDC)	Current Rating (mA)	Operating Life	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Cut Tape Price Each 100	Digi-Key Part No.	Tape & Box Pricing 2,500	Panasonic Part No.
	6mm Round Type														
7	L. T. Switch Long Travel-Tape Pkg	2	5	8	80gf	12	15	1000K	P8029SCT-ND	.76	.57	.50	P8029STB-ND*	292.00*	EVQ-QJJ05Q
8	Light Touch Switch	1	4.3	6.0	100gf	15	20	100K	P8070SCT-ND	.38	.29	.25	P8070STB-ND	141.00/M	EVQ-11A04M
	Light Touch Switch	1	4.3	6.0	130gf	15	20	100K	P8074SCT-ND	.38	.29	.25	P8074STB-ND	141.00/M	EVQ-11G04M
	Light Touch Switch	1	4.3	6.0	160gf	15	20	100K	P8078SCT-ND	.38	.29	.25	P8078STB-ND	141.00/M	EVQ-11L04M
	Light Touch Switch	1	4.3	6.0	260gf	15	20	100K	P8082SCT-ND	.38	.29	.25	P8082STB-ND	141.00/M	EVQ-11U04M
	Light Touch Switch	1	5.0	6.0	100gf	15	20	100K	P8071SCT-ND	.38	.29	.25	P8071STB-ND	141.00/M	EVQ-11A05R
	Light Touch Switch	1	5.0	6.0	130gf	15	20	100K	P8075SCT-ND	.38	.29	.25	P8075STB-ND	141.00/M	EVQ-11G05R
	Light Touch Switch	1	5.0	6.0	160gf	15	20	100K	P8079SCT-ND	.38	.29	.25	P8079STB-ND	141.00/M	EVQ-11L05R
	Light Touch Switch	1	5.0	6.0	260gf	15	20	100K	P8083SCT-ND	.38	.29	.25	P8083STB-ND	141.00/M	EVQ-11U05R
	Light Touch Switch	1	7.0	6.0	100gf	15	20	100K	P8072SCT-ND	.38	.29	.25	P8072STB-ND	141.00/M	EVQ-11A07K
	Light Touch Switch	1	7.0	6.0	130gf	15	20	100K	P8076SCT-ND	.38	.29	.25	P8076STB-ND	141.00/M	EVQ-11G07K
	Light Touch Switch	1	7.0	6.0	160gf	15	20	100K	P8080SCT-ND	.38	.29	.25	P8080STB-ND	141.00/M	EVQ-11L07K
	Light Touch Switch	1	7.0	6.0	260gf	15	20	100K	P8084SCT-ND	.38	.29	.25	P8084STB-ND	141.00/M	EVQ-11U07K
9	Light Touch Switch	1	9.5	6.0	100gf	15	20	100K	P8073SCT-ND	.38	.29	.25	P8073STB-ND	141.00/M	EVQ-11A09K
	Light Touch Switch	1	9.5	6.0	130gf	15	20	100K	P8077SCT-ND	.38	.29	.25	P8077STB-ND	141.00/M	EVQ-11G09K
	Light Touch Switch	1	9.5	6.0	160gf	15	20	100K	P8081SCT-ND	.38	.29	.25	P8081STB-ND	141.00/M	EVQ-11L09K
	Light Touch Switch	1	9.5	6.0	260gf	15	20	100K	P8085SCT-ND	.38	.29	.25	P8085STB-ND	141.00/M	EVQ-11U09K
10	Light Touch Switch Long Travel	1	5.0	6.0	200gf	12	50	100K	P10856SCT-ND	1.25	.94	.82	P10856STB-ND	470.00/M	EVQ-PVG05K
	Light Touch Switch Long Travel	1	5.0	6.0	220gf	12	50	100K	P10855SCT-ND	1.25	.94	.82	P10855STB-ND	470.00/M	EVQ-PVA05K
	Light Touch Switch Long Travel	1	5.0	6.0	250gf	12	50	100K	P10858SCT-ND	1.25	.94	.82	P10858STB-ND	470.00/M	EVQ-PVF05K
	Light Touch Switch Long Travel	1	5.0	6.0	350gf	12	50	100K	P10857SCT-ND	1.25	.94	.82	P10857STB-ND	470.00/M	EVQ-PVH05K

* Tape & Box Size: 1,000

Panasonic Surface Mount Momentary Pushbutton Switches

CIRCUIT DIA. 1



CIRCUIT DIA. 2

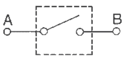
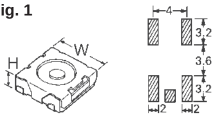
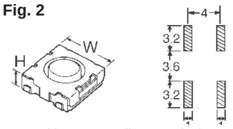


Fig. 1



With or Without Ground Terminal

Fig. 2



Without Grounding Terminal

Fig. 3

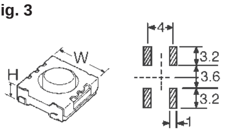


Fig. 4

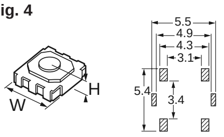


Fig. 5

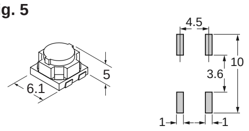


Fig. 6

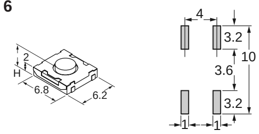
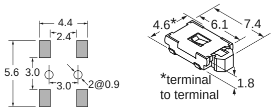


Fig. 7



*terminal to terminal

Fig. 8

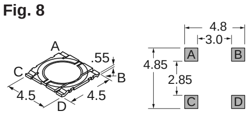
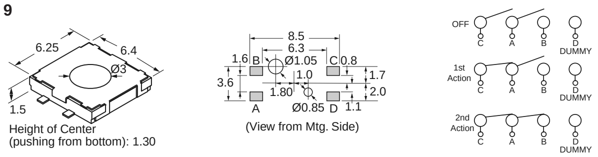


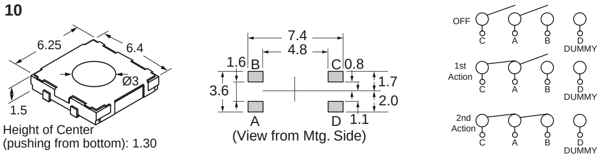
Fig. 9



Height of Center (pushing from bottom): 1.30

(View from Mtg. Side)

Fig. 10



Height of Center (pushing from bottom): 1.30

(View from Mtg. Side)

Fig. 11

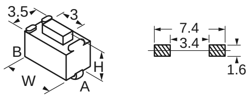


Fig. 12

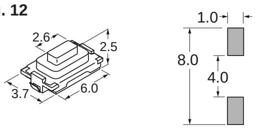


Fig. 13

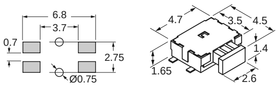


Fig. 14

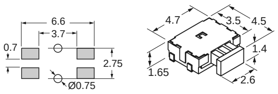


Fig. 15

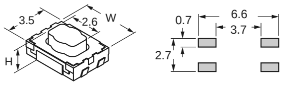


Fig. 16

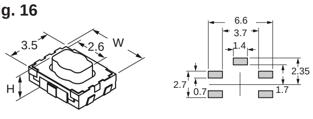


Fig. 17

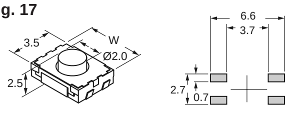


Fig. 18

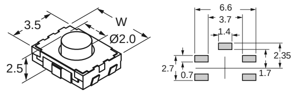


Fig.	Description	Circuit Dia.	Dim. (mm) H	W	Operating Force	Volt. Rating (VDC)	Current Rating (mA)	Oper. Life	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Reel Size	Pricing	Panasonic Part No.
Surface Mount Light Touch Switch																
1	L.T. Switch Standard	1	2	6.3	130gf	15	20	100K	P8000SCT-ND	1.15	.87	.75	P8000STR-ND	1,000	442.00	EVQ-QFA02K
	L.T. Switch Standard w/Ground Terminal	1	2	6.3	130gf	15	20	100K	P8001SCT-ND	1.10	.83	.72	P8001STR-ND	1,000	422.00	EVQ-QFU02K
2	L.T. Switch Std w/Actuator/Solvent Washable	1	3.1	6.4	130gf	15	20	100K	P8002SCT-ND	.83	.63	.54	P8002STR-ND	2,000	318.00/M	EVQ-PHP03T
3	L.T. Switch Standard w/Actuator	1	2.5	6.2	160gf	15	20	100K	P8004SCT-ND	.70	.53	.46	P8004STR-ND	2,000	269.00/M	EVQ-QHV02W
4	L.T. Switch Rugged Design, Low Profile	1	1.5	5	100gf	12	50	500K	P8045SCT-ND	1.03	.78	.67	P8045STR-ND	5,000	367.00/M	EVQ-PLDA15
	L.T. Switch Rugged Design, Low Profile	1	1.5	5	160gf	12	50	500K	P8046SCT-ND	1.03	.78	.67	P8046STR-ND	5,000	367.00/M	EVQ-PLHA15
	L.T. Switch Rugged Design, Low Profile	1	1.5	5	260gf	12	50	500K	P8047SCT-ND	1.24	.93	.81	P8047STR-ND	5,000	441.00/M	EVQ-PLMA15
5	Light Touch Switch Long Travel	1	5	6.1	250gf	12	50	30K	P10888SCT-ND	1.53	1.15	1.00	P10888STR-ND	2,000	588.00/M	EVQ-P1D05M
	Light Touch Switch Long Travel	1	5	6.1	350gf	12	50	30K	P10889SCT-ND	1.53	1.15	1.00	P10889STR-ND	2,000	588.00/M	EVQ-P1B05M
6	LT Switch (Non-Extending Actuator)	1	2	6.2	130gf	15	20	100K	P10885SCT-ND	.76	.57	.50	P10885STR-ND	4,000	270.00/M	EVQ-QWP01W
	Light Touch Switch	1	2.5	6.2	160gf	15	20	100K	P10886SCT-ND	.76	.57	.50	P10886STR-ND	2,000	291.00/M	EVQ-QWS02W
	Light Touch Switch	1	3.1	6.2	260gf	15	20	100K	P10887SCT-ND	.76	.57	.50	P10887STR-ND	2,000	291.00/M	EVQ-QWT03W
7	L. T. Switch, Side Push	1	1.8	4	160gf	12	50	50K	P8088SCT-ND	1.16	.87	.76	P8088STR-ND	4,000	421.00/M	EVQ-PSD02K
	L. T. Switch, Side Push	1	1.8	4	220gf	12	50	50K	P8089SCT-ND	1.16	.87	.76	P8089STR-ND	4,000	421.00/M	EVQ-PSH02K
8	L. T. Switch, Super Small	1	.55	4.5	160gf	15	20	50K	P8090SCT-ND	.68	.51	.45	P8090STR-ND	10,000	221.00/M	EVQ-PQHB55
	L. T. Switch, Super Small	1	.55	4.5	220gf	15	20	50K	P8091SCT-ND	.68	.51	.45	P8091STR-ND	10,000	221.00/M	EVQ-PQMB55
9	L. T. Switch, SPDT Straight Leads w/Mtg. Boss	—	1.5	6.2	100/260gf	15	20	100K	P10845S-ND*	.83	.72	.59	—	—	—	EVQ-PWAA15
10	L. T. Switch, SPDT J Bent Leads	—	1.5	6.2	100/260gf	15	20	100K	P10846SCT-ND	1.16	.88	.76	P10846STR-ND	5,000	416.00/M	EVQ-PWBA15
6mm x 3.5mm Type																
11	Light Touch Switch	2	4.3	6	100gf	12	50	50K	P8048SCT-ND	1.16	.87	.76	P8048STR-ND	2,500	435.00/M	EVQ-PJS04K
	Light Touch Switch (Long Post)	2	5.0	6	100gf	12	50	50K	P8049SCT-ND	1.16	.87	.76	P8049STR-ND	2,000	435.00/M	EVQ-PJS05K
	Light Touch Switch	2	4.3	6	160gf	12	50	50K	P8050SCT-ND	1.16	.87	.76	P8050STR-ND	2,500	435.00/M	EVQ-PJX04M
	Light Touch Switch (Long Post)	2	5.0	6	160gf	12	50	50K	P8051SCT-ND	1.16	.87	.76	P8051STR-ND	2,000	435.00/M	EVQ-PJX05M
	Light Touch Switch	2	4.3	6	240gf	12	50	50K	P8052SCT-ND	1.19	.90	.78	P8052STR-ND	2,500	446.00/M	EVQ-PJU04K
	Light Touch Switch (Long Post)	2	5.0	6	240gf	12	50	50K	P8053SCT-ND	1.19	.90	.78	P8053STR-ND	2,000	446.00/M	EVQ-PJU05K
12	Light Touch Switch	2	2.5	6	160gf	12	50	50K	P8086SCT-ND	1.03	.78	.67	P8086STR-ND	4,000	373.00/M	EVQ-PPBA25
	Light Touch Switch	2	2.5	6	240gf	12	50	50K	P8087SCT-ND	1.03	.78	.67	P8087STR-ND	4,000	373.00/M	EVQ-PPDA25
4.7mm x 3.5mm Type																
13	L. T. Switch Straight Leads, No Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10847SCT-ND	1.13	.85	.74	P10847STR-ND	4,000	410.00/M	EVQ-PUA02K
	L. T. Switch Straight Leads,w/ Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10849SCT-ND	1.13	.85	.74	P10849STR-ND	4,000	410.00/M	EVQ-PUC02K
	L. T. Switch Straight Leads, No Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10851SCT-ND	1.13	.85	.74	P10851STR-ND	4,000	410.00/M	EVQ-PUJ02K
	L. T. Switch Straight Leads, w/ Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10853SCT-ND	1.13	.85	.74	P10853STR-ND	4,000	410.00/M	EVQ-PUL02K
14	L. T. Switch J Bent Leads, No Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10848SCT-ND	1.13	.85	.74	P10848STR-ND	4,000	410.00/M	EVQ-PUB02K
	L. T. Switch J Bent Leads, w/ Mtg. Boss	1	1.65	4.7	220gf	12	50	100K	P10850SCT-ND	1.13	.85	.74	P10850STR-ND	4,000	410.00/M	EVQ-PUD02K
	L. T. Switch J Bent Leads, No Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10852SCT-ND	1.13	.85	.74	P10852STR-ND	4,000	410.00/M	EVQ-PUK02K
	L. T. Switch J Bent Leads, w/ Mtg. Boss	1	1.65	4.7	160gf	12	50	100K	P10854SCT-ND	1.13	.85	.74	P10854STR-ND	4,000	410.00/M	EVQ-PUM02K
15	L. T. Switch J Bent Leads	1	2.1	4.7	240gf	15	20	500K	P11080SCT-ND	1.28	.96	.83	P11080STR-ND	4,000	463.00/M	EVQ-P2402M
	L. T. Switch J Bent.Leads	1	2.5	4.7	240gf	15	20	500K	P11081SCT-ND	1.28	.96	.83	P11081STR-ND	4,000	463.00/M	EVQ-P2402W
16	L. T. Switch J Bent Leads, w/Gnd	1	2.1	4.7	240gf	15	20	500K	P11082SCT-ND	1.41	1.06	.92	P11082STR-ND	4,000	512.00/M	EVQ-P2T02M
	L. T. Switch J Bent Leads, w/Gnd	1	2.5	4.7	240gf	15	20	500K	P11083SCT-ND	1.41	1.06	.92	P11083STR-ND	4,000	512.00/M	EVQ-P2T02W
17	L. T. Switch J Bent Leads	1	2.5	4.7	350gf	15	20	500K	P11084SCT-ND	1.28	.96	.83	P11084STR-ND	4,000	463.00/M	EVQ-P2K02Q
18	L. T. Switch J Bent Leads, w/Gnd	1	2.5	4.7	350gf	15	20	500K	P11085SCT-ND	1.41	1.06	.92	P11085STR-ND	4,000	512.00/M	EVQ-P2D02Q

Note: All switches are non-washable unless otherwise noted. * Bulk

OMRON Momentary Tact Switches

Characteristics:

- **Switching Capacity:** 50 mA 24 VDC (resistive load)
- **Contact Resistance:** 100 mΩ max.
- **Bounce Time:** 5 ms max.
- **Vibration:** Malfunction durability:10 to 55 Hz, 1.5 mm double amplitude
- **Shock:** Mechanical durability: 1,000 m/s^2 (approx. 100G); Malfunction durability: 100 m/s^2 (approx. 10G
- **Ambient Temperature:** Operating: -25°C to 70°C
- **Service Life:**
  - *B3F-1 Series – B3F-3 Series* — Mechanical/electrical: 1 x 10^6 (0.3 x 10^6) operations min.
  - *B3F-4 Series* — Mechanical/electrical: 3 x 10^6 (0.3 x 10^6) operations min.
- *B3S-1 Series* — Mechanical/electrical: General-purpose type: 500,000 operations min. High-load type: 300,000 operations min.
- *B3W-1 Series* — Mechanical/electrical: General-purpose type: 1,000,000 operations min. High-load type: 300,000 operations min.
- *B3W-4 Series* — Mechanical/electrical: General-purpose type: 3,000,000 operations min. High-load type: 1,000,000 operations min.

Fig. 1

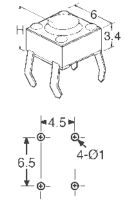
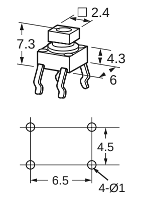


Fig. 2



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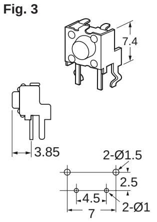

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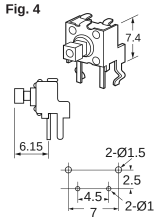

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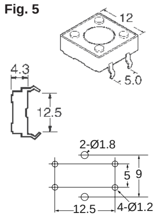

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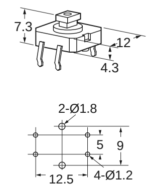
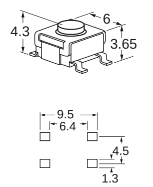


Fig. 7



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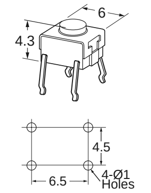

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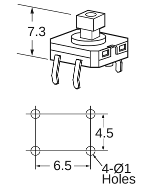

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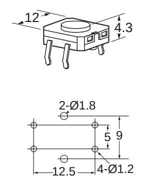

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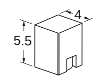

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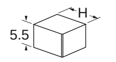


Fig. 13

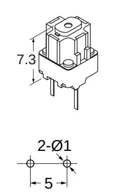


Fig. 14

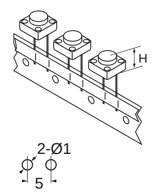


Fig. 15

Sealed

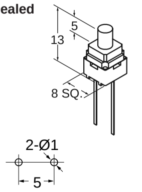
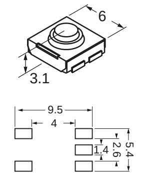
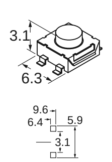


Fig. 16



Note: Eliminate center pad for "without GND Terminal"

Fig. 17



(Top View)
(One-Side PCB
t=1.6)

Fig.	Description	Dim. H (mm)	Digi-Key Part No.	Price Each						Omron Part No.
				1	25	50	100	250	500	
6 MM										
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 100gf	4.3	SW400-ND	.20	.18	.16	.15	.14	.12	B3F-1000
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 150gf	4.3	SW401-ND	.23	.21	.18	.17	.16	.14	B3F-1002
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 100gf	5.0	SW402-ND	.23	.21	.18	.17	.16	.14	B3F-1020
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 150gf	5.0	SW403-ND	.23	.21	.18	.17	.16	.14	B3F-1022
1	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 100gf	9.5	SW406-ND	.25	.23	.20	.18	.17	.15	B3F-1070
2	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 100gf	—	SW404-ND	.23	.21	.18	.17	.16	.14	B3F-1050
2	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 150gf	—	SW405-ND	.23	.21	.18	.17	.16	.14	B3F-1052
3	Tact Switch Rt. Angle, Flat Actuator — 100gf	—	SW407-ND	.30	.27	.24	.22	.21	.18	B3F-3120
3	Tact Switch Rt. Angle, Flat Actuator — 150gf	—	SW408-ND	.30	.27	.24	.22	.21	.18	B3F-3122
4	Tact Switch Rt. Angle, Projected Actuator — 100gf	—	SW409-ND	.30	.27	.24	.22	.21	.18	B3F-3150
4	Tact Switch Rt. Angle, Projected Actuator — 150gf	—	SW410-ND	.30	.27	.24	.22	.21	.18	B3F-3152
12 MM										
5	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 130gf	—	SW411-ND	.30	.27	.24	.22	.21	.18	B3F-4000
5	Tact Switch Standard, Flat Actuator w/o Ground Terminal — 260gf	—	SW412-ND	.30	.27	.24	.22	.21	.18	B3F-4005
6	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 130gf	—	SW413-ND	.30	.27	.24	.22	.21	.18	B3F-4050
6	Tact Switch Standard, Projected Actuator w/o Ground Terminal — 260gf	—	SW414-ND	.30	.27	.24	.22	.21	.18	B3F-4055
6 MM Process Sealed (not water washable)										
7	SMT Flat Actuator w/o Ground Terminal — 160gf	—	SW415-ND	.45	.41	.36	.33	.31	.27	B3S-1000
7	SMT Flat Actuator w/o Ground Terminal — 230gf	—	SW416-ND	.45	.41	.36	.33	.31	.27	B3S-1002
8	Tact Switch Flat Actuator w/o Ground Terminal — 160gf	—	SW417-ND	.35	.32	.28	.26	.24	.21	B3W-1000
8	Tact Switch Flat Actuator w/o Ground Terminal — 230gf	—	SW418-ND	.35	.32	.28	.26	.24	.21	B3W-1002
9	Tact Switch Projected Actuator w/o Ground Terminal — 160gf	—	SW419-ND	.35	.32	.28	.26	.24	.21	B3W-1050
9	Tact Switch Projected Actuator w/o Ground Terminal — 230gf	—	SW420-ND	.35	.32	.28	.26	.24	.21	B3W-1052
12 MM Process Sealed (not water washable)										
10	Tact Switch Flat w/o Ground Terminal — 200gf	—	SW421-ND	.43	.39	.34	.31	.29	.26	B3W-4000
6	Tact Switch Projected w/o Ground Terminal — 200gf	—	SW422-ND	.43	.39	.34	.31	.29	.26	B3W-4050
Key Caps										
11	Key Cap 4 x 4 mm Light Grey, Fits 6mm Projected Actuator Types	—	SW450-ND	.18	.16	.14	.13	.12	.11	B32-1000
11	Key Cap 4 x 4 mm Black, Fits 6mm Projected Actuator Types	—	SW451-ND	.18	.16	.14	.13	.12	.11	B32-1010
11	Key Cap 4 x 4 mm Yellow, Fits 6mm Projected Actuator Types	—	SW249-ND	.18	.16	.14	.13	.12	.11	B32-1030
11	Key Cap 4 x 4 mm Blue, Fits 6mm Projected Actuator Types	—	SW250-ND	.18	.16	.14	.13	.12	.11	B32-1040
11	Key Cap 4 x 4 mm White, Fits 6mm Projected Actuator Types	—	SW251-ND	.18	.16	.14	.13	.12	.11	B32-1060
11	Key Cap 4 x 4 mm Red, Fits 6mm Projected Actuator Types	—	SW252-ND	.18	.16	.14	.13	.12	.11	B32-1080
12	Key Cap 9 x 9 mm Light Grey, Fits 12mm Projected Actuator Types	9	SW452-ND	.18	.16	.14	.13	.12	.11	B32-1200
12	Key Cap 9 x 9 mm Black, Fits 12mm Projected Actuator Types	9	SW453-ND	.18	.16	.14	.13	.12	.11	B32-1210
12	Key Cap 9 x 9 mm Yellow, Fits 12mm Projected Actuator Types	9	SW253-ND	.18	.16	.14	.13	.12	.11	B32-1230
12	Key Cap 9 x 9 mm Blue, Fits 12mm Projected Actuator Types	9	SW254-ND	.18	.16	.14	.13	.12	.11	B32-1240
12	Key Cap 9 x 9 mm White, Fits 12mm Projected Actuator Types	9	SW255-ND	.18	.16	.14	.13	.12	.11	B32-1260
12	Key Cap 9 x 9 mm Red, Fits 12mm Projected Actuator Types	9	SW256-ND	.18	.16	.14	.13	.12	.11	B32-1280
12	Key Cap 12 x 12 mm Light Grey, Fits 12mm Projected Actuator Types	12	SW454-ND	.18	.16	.14	.13	.12	.11	B32-1300
12	Key Cap 12 x 12 mm Black, Fits 12mm Projected Actuator Types	12	SW455-ND	.18	.16	.14	.13	.12	.11	B32-1310
12	Key Cap 12 x 12 mm Yellow, Fits 12mm Projected Actuator Types	12	SW257-ND	.18	.16	.14	.13	.12	.11	B32-1330
12	Key Cap 12 x 12 mm Blue, Fits 12mm Projected Actuator Types	12	SW258-ND	.18	.16	.14	.13	.12	.11	B32-1340
12	Key Cap 12 x 12 mm White, Fits 12mm Projected Actuator Types	12	SW259-ND	.18	.16	.14	.13	.12	.11	B32-1360
12	Key Cap 12 x 12 mm Red, Fits 12mm Projected Actuator Types	12	SW260-ND	.18	.16	.14	.13	.12	.11	B32-1380
6MM Long Stroke Tact Switch										
13	Tact Switch with Long Stroke and Positive Click — 70gf	—	SW426-ND	.63	.57	.50	.45	.43	.38	B3M-6009

Fig.	Description	Dim. H (mm)	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Size	Pricing	Omron Part No.
				1	25	50	100				
6 MM Auto Placement											
14	Tact Switch Auto-Placement 6mm Sq. — 100gf	4.3	SW263CT-ND	.30	.28	.25	.22	SW263TB-ND*****	1,000	125.00	B3F-6000
14	Tact Switch Auto-Placement 6mm Sq. — 150gf	5.0	SW264CT-ND	.32	.29	.27	.24	SW264TB-ND*****	1,000	137.50	B3F-6022
15	Tact Switch Auto-Placement - Water Tight - Dust Sealed	—	SW425CT-ND	.51	.46	.42	.37	SW425TB-ND*****	1,000	212.50	B3WN-6002
6 MM Process Sealed (not water washable)											
16	SMT Flat Actuator w/o Ground Terminal — 160gf	—	SW261CT-ND	.76	.69	.62	.55	SW261TR-ND******	3,000	325.00/M	B3SN-3012P
16	SMT Flat Actuator w/ Ground Terminal — 160gf	—	SW262CT-ND	.76	.69	.62	.55	SW262TR-ND******	3,000	325.00/M	B3SN-3112P
17	SMT Tact Switch 6mm Sq. (snap-action) — 100gf	—	SW423CT-ND	.45	.41	.37	.33	SW423TR-ND******	3,000	187.50/M	B3FS-1000
17	SMT Tact Switch 6mm Sq. (snap-action) — 150gf	—	SW424CT-ND	.45	.41	.37	.33	SW424TR-ND******	3,000	187.50/M	B3FS-1002

***** TB = Tape and Box ****** TR= Tape and Reel

Momentary Tact Switches

9157B-ND E-Switch Data Book **$2.95**

Fig. 1

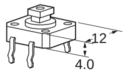


Fig. 2

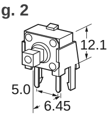


Fig. 3

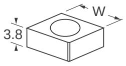


Fig. 4

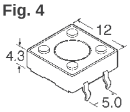


Fig. 5

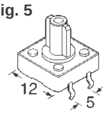


Fig. 6

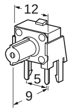


Fig. 7

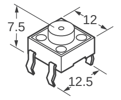


Fig. 8

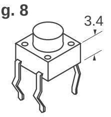
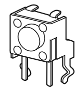


Fig. 9



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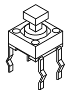


Fig. 11

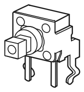


Fig. 12

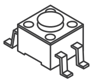


Fig. 13

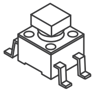


Fig. 14

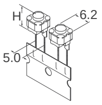


Fig. 15

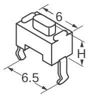
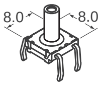
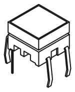


Fig. 16



Process Sealed

Fig. 17



Illuminated

Fig. 18

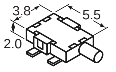


Fig.	Description	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel		E-Switch Part No.
			1	10	100		Size	Pricing	
1	Tact Switch 12mm Square Extended Actuator, Actuator Length = 7.3	EG1821-ND	.47	.38	.34	—	—	—	TL1100F160Q
2	Tact Switch Right Angle 12mm Square Extended Actuator, Actuator Length = 7.3	EG1822-ND	.58	.47	.42	—	—	—	TL1100CF160Q
3	Key Cap, W=12 x 12mm Black, Fits 12mm Extended Actuator Types	EG1080-ND	.22	.18	.17	—	—	—	4J BLACK
	Key Cap, W=12 x 12mm Grey, Fits 12mm Extended Actuator Types	EG1079-ND	.22	.18	.17	—	—	—	4J GREY
	Key Cap, W=12 x 12mm Red, Fits 12mm Extended Actuator Types	EG1078-ND	.22	.18	.17	—	—	—	4J RED
	Key Cap, W=12 x 12mm White, Fits 12mm Extended Actuator Types	EG1077-ND	.22	.18	.17	—	—	—	4J WHITE
	Key Cap, W=8 x 8mm Black Fits, 12mm Extended Actuator Types	EG1885-ND	.18	.16	.14	—	—	—	6J BLK
	Key Cap, W=8 x 8mm Red Fits, 12mm Extended Actuator Types	EG1886-ND	.18	.16	.14	—	—	—	6J RED
	Key Cap, W=8 x 8mm White Fits, 12mm Extended Actuator Types	EG1887-ND	.18	.16	.14	—	—	—	6J WHT
	Key Cap, W=8 x 8mm Grey Fits, 12mm Extended Actuator Types	EG1888-ND	.18	.16	.14	—	—	—	6J GRY
4	Tact Switch 12mm Square Flat Actuator	EG1023-ND	.50	.40	.37	—	—	—	TL1100DF160Q
	Tact Switch SMT 3.44mm Actuator 160gf Gull Wing	EG2530CT-ND	.81	.65	.59	EG2530TR-ND*	1,500	324.00/M	TL3304AF160QG/TR
5	Tact Switch 12mm Square Post Actuator, Actuator Length = 12.0	EG1024-ND	.44	.36	.33	—	—	—	TL1104FF160Q
6	Tact Switch 12mm Square Right Angle Post Actuator, Actuator Length = 9.0	EG1025-ND	.83	.67	.61	—	—	—	TL1100GF160Q
—	Key Cap, Rectangular Black, Fits 12mm Post Actuator Types	EG1076-ND	.45	.36	.33	—	—	—	TAA BLACK
	Key Cap, Rectangular White, Fits 12mm Post Actuator Types	EG1075-ND	.45	.36	.33	—	—	—	TAA WHITE
	Key Cap, Rectangular Grey, Fits 12mm Post Actuator Types	EG1074-ND	.45	.36	.33	—	—	—	TAA GREY
	Key Cap, Rectangular Red, Fits 12mm Post Actuator Types	EG1073-ND	.45	.36	.33	—	—	—	TAA RED
7	Tact Switch 12mm Square Long Flat Actuator	EG1826-ND	.44	.36	.33	—	—	—	TL1100EF160Q
8	Tact Switch 6mm Square 4.3mm Actuator 160gf	EG1827-ND	.30	.25	.22	—	—	—	TL1105F160Q
	Tact Switch 6mm Square 4.3mm Actuator 250gf	EG1828-ND	.30	.25	.22	—	—	—	TL1105F250Q
	Tact Switch 6mm Square 5mm Actuator 160gf	EG1829-ND	.30	.25	.22	—	—	—	TL1105AF160Q
	Tact Switch 6mm Square 5mm Actuator 250gf	EG1830-ND	.30	.25	.22	—	—	—	TL1105AF250Q
	Tact Switch 6mm Square 7mm Actuator 160gf	EG1831-ND	.30	.25	.22	—	—	—	TL1105EF160Q
	Tact Switch 6mm Square 7mm Actuator 250gf	EG1832-ND	.30	.25	.22	—	—	—	TL1105EF250Q
	Tact Switch 6mm Square 9.5mm Actuator 100gf	EG2497-ND	.19	.16	.14	—	—	—	TL1105BF100Q
	Tact Switch 6mm Square 9.5mm Actuator 160gf	EG1833-ND	.30	.25	.22	—	—	—	TL1105BF160Q
	Tact Switch 6mm Square 9.5mm Actuator 250gf	EG1834-ND	.30	.25	.22	—	—	—	TL1105BF250Q
	Tact Switch 6mm Square 13mm Actuator 160gf	EG1865-ND	.30	.25	.22	—	—	—	TL1105DF160Q
	Tact Switch 6mm Square 13mm Actuator 250gf	EG1866-ND	.30	.25	.22	—	—	—	TL1105DF250Q
	Tact Switch 6mm Square 5mm Actuator 100gf	EG2495-ND	.19	.16	.14	—	—	—	TL1105AF100Q
	Tact Switch 6mm Square Gold Plating 5mm Actuator 160gf	EG2493-ND	.99	.80	.72	—	—	—	TL1105AF160R
	Tact Switch 6mm Square 13.0mm Actuator 100gf	EG2498-ND	.19	.16	.14	—	—	—	TL1105DF100Q
	Tact Switch 6mm Square 7.3mm Actuator 100gf	EG2496-ND	.19	.16	.14	—	—	—	TL1105EF100Q
	Tact Switch 6mm Square 4.3mm Actuator 100gf	EG2494-ND	.16	.13	.12	—	—	—	TL1105F100Q
	Tact Switch 6mm Square Gold Plating 4.3mm Actuator 160gf	EG2492-ND	.99	.80	.72	—	—	—	TL1105F160R
	Tact Switch 6mm Square 17mm Actuator 100gf	EG2504-ND	.19	.16	.14	—	—	—	TL1105LF100Q
	Tact Switch 6mm Square 17mm Actuator 160gf	EG2505-ND	.19	.16	.14	—	—	—	TL1105LF160Q
	Tact Switch 6mm Square 17mm Actuator 250gf	EG2506-ND	.19	.16	.14	—	—	—	TL1105LF250Q
	Tact Switch 6mm Square 5.0mm Actuator 160gf w/ESD	EG2491-ND	.29	.24	.21	—	—	—	TLE1105AF160Q
	Tact Switch 6mm Square 4.3mm Actuator 160gf w/ESD	EG2490-ND	.29	.24	.21	—	—	—	TLE1105F160Q
9	Tact Switch 6mm Square Right Angle 3.15mm Actuator 160gf	EG1835-ND	.44	.36	.33	—	—	—	TL1105WF160Q
	Tact Switch 6mm Square Right Angle 3.15mm Actuator 250gf	EG1836-ND	.44	.36	.33	—	—	—	TL1105WF250Q
	Tact Switch 6mm Square Right Angle 6.15mm Actuator 160gf	EG1837-ND	.44	.36	.33	—	—	—	TL1105RF160Q
	Tact Switch 6mm Square Right Angle 6.15mm Actuator 250gf	EG1838-ND	.44	.36	.33	—	—	—	TL1105RF250Q
	Tact Switch 6mm Square Right Angle 8.35mm Actuator 160gf	EG1839-ND	.40	.32	.29	—	—	—	TL1105SF160Q
	Tact Switch 6mm Square Right Angle 8.35mm Actuator 250gf	EG1840-ND	.40	.32	.29	—	—	—	TL1105SF250Q
	Tact Switch 6mm Square 6.15mm Actuator 100gf	EG2500-ND	.36	.29	.26	—	—	—	TL1105RF100Q
	Tact Switch 6mm Square 8.35mm Actuator 100gf	EG2501-ND	.36	.29	.26	—	—	—	TL1105SF100Q
	Tact Switch 6mm Square 2.8mm Extended Actuator 100gf	EG2502-ND	.19	.16	.14	—	—	—	TL1105SPF100Q
	Tact Switch 6mm Square 3.85mm Actuator 100gf	EG2507-ND	.36	.29	.26	—	—	—	TL1105VF100Q
	Tact Switch 6mm Square 3.85mm Actuator 160gf	EG2508-ND	.36	.29	.26	—	—	—	TL1105VF160Q
	Tact Switch 6mm Square 3.85mm Actuator 250gf	EG2509-ND	.36	.29	.26	—	—	—	TL1105VF250Q
	Tact Switch 6mm Square 3.15mm Actuator 100gf	EG2499-ND	.36	.29	.26	—	—	—	TL1105WF100Q
10	Tact Switch 6mm Square 2.8mm Extended Actuator 160gf	EG1861-ND	.36	.29	.26	—	—	—	TL1105SPF160Q
	Tact Switch 6mm Square 2.8mm Extended Actuator 250gf	EG1862-ND	.36	.29	.26	—	—	—	TL1105SPF250Q
11	Tact Switch 6mm Square Right Angle 2.8mm Extended Actuator 100gf	EG2503-ND	.50	.40	.36	—	—	—	TL1105JAF100Q
	Tact Switch 6mm Square Right Angle 2.8mm Extended Actuator 160gf	EG1863-ND	.61	.49	.45	—	—	—	TL1105JAF160Q
	Tact Switch 6mm Square Right Angle 2.8mm Extended Actuator 250gf	EG1864-ND	.61	.49	.45	—	—	—	TL1105JAF250Q
12	Tact Switch 6mm Square SMT 4.3mm Actuator 160gf	EG1867CT-ND	.56	.45	.41	EG1867TR-ND*	1,200	222.30/M	TL3301NF160QG/TR
	Tact Switch 6mm Square SMT 4.3mm Actuator 260gf	EG1868CT-ND	.56	.45	.41	EG1868TR-ND*	1,200	222.30/M	TL3301NF260QG/TR
	Tact Switch 6mm Square SMT 5.0mm Actuator 160gf Gull Wing	EG2526CT-ND	.45	.36	.33	EG2526TR-ND*	1,000	192.00	TL3301AF160QG/TR
	Tact Switch 6mm Square SMT 5.0mm Actuator 260gf Gull Wing	EG2527CT-ND	.45	.36	.33	EG2527TR-ND*	1,200	180.00/M	TL3301AF260QG/TR
13	Tact Switch 6mm Square SMT 2.8mm Extended Actuator 160gf	EG1869-ND	.56	.45	.41	—	—	—	TL3301SPF160QG
	Tact Switch 6mm Square SMT 2.8mm Extended Actuator 260gf	EG1870-ND	.56	.45	.41	—	—	—	TL3301SPF260QG
14	Tact Switch 6.2mm Square, H=5.00mm Actuator 160gf	EG2533CT-ND	.31	.25	.23	EG2533TB-ND†	1,000	133.28	TL59AF160Q
	Tact Switch 6.2mm Square, H=4.3mm Actuator 160gf	EG2532CT-ND	.31	.25	.23	EG2532TB-ND†	1,000	133.28	TL59F160Q
—	Tact Switch SMT 1.5mm Actuator 160gf Gull Wing	EG2531CT-ND	1.08	.87	.78	EG2531TR-ND*	4,000	431.55/M	TL3342F160QG/TR
15	Tact Switch 6 x 3.5mm, H=4.3mm 130gf	EG2510-ND	.36	.29	.26	—	—	—	TL1107AF130W
	Tact Switch 6 x 3.5mm, H=4.3mm 180gf	EG2511-ND	.36	.29	.26	—	—	—	TL1107AF180W
	Tact Switch 6 x 3.5mm, H=5.0mm 130gf	EG2512-ND	.36	.29	.26	—	—	—	TL1107BF130W
	Tact Switch 6 x 3.5mm, H=5.0mm 180gf	EG2513-ND	.36	.29	.26	—	—	—	TL1107BF180W
	Tact Switch SMT 4.3mm Actuator 180gf Gull Wing	EG2528CT-ND	.59	.47	.43	EG2528TR-ND*	1,800	234.00/M	TL3302AF180QG/TR
	Tact Switch SMT 5.0mm Actuator 180gf Gull Wing	EG2529CT-ND	.59	.47	.43	EG2529TR-ND*	1,800	234.00/M	TL3302BF180QG/TR
16	Tact Switch Process Sealed 10mm Actuator 130gf	EG2519-ND	1.02	.82	.74	—	—	—	GS10.00F130QP
	Tact Switch Process Sealed 10mm Actuator 300gf	EG2520-ND	1.02	.82	.74	—	—	—	GS10.00F300QP
	Tact Switch Process Sealed 4.70mm Actuator 130gf	EG2517-ND	1.02	.82	.74	—	—	—	GS4.70F130QP
	Tact Switch Process Sealed 4.70mm Actuator 300gf	EG2518-ND	1.02	.82	.74	—	—	—	GS4.70F300QP
	Tact Switch Process Sealed 6.34mm Right Angle Actuator 130gf	EG2521-ND	1.22	.98	.89	—	—	—	GS6.34F130QR
	Tact Switch Process Sealed 8.54mm Right Angle Actuator 130gf	EG2522-ND	1.22	.98	.89	—	—	—	GS8.54F130QR
	Tact Switch Process Sealed 10mm Actuator 130gf w/ESD Pin	EG2524-ND	1.02	.82	.74	—	—	—	GSE10.00F130QP
	Tact Switch Process Sealed 4.70mm Actuator 130gf w/ESD Pin	EG2523-ND	1.02	.82	.74	—	—	—	GSE4.70F130QP
	Illuminated Tact Switch								
17	Illuminated Tact Switch, 12mm Sq. Momentary, Green	EG2515-ND	7.95	6.36	5.73	—	—	—	720AF300GRNQ
	Illuminated Tact Switch, 12mm Sq. Momentary, Red	EG2514-ND	7.95	6.36	5.73	—	—	—	720AF300REDQ
	Illuminated Tact Switch, 12mm Sq. Momentary, Yellow	EG2516-ND	7.95	6.36	5.73	—	—	—	720AF300YELQ
	900 Series – Subminiature SMT Pushbutton Switches								
18	Tact Switch Subminiature Radial SMT 160gf	EG2525CT-ND	1.10	.89	.80	EG2525TR-ND*	2,000	441.00/M	901AGQF160/TR

* TR = Tape & Reel † TB = Tape & Box

C&K Momentary Tact Switches

(Dimensions in mm)

Fig. 1

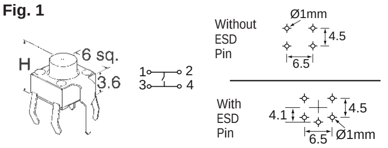


Fig. 2

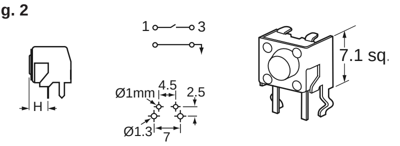


Fig. 3

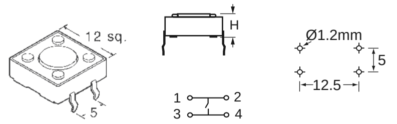


Fig. 4

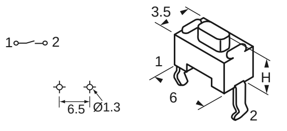


Fig. 5

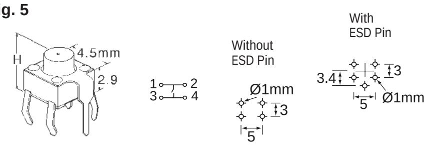


Fig. 6

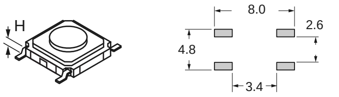


Fig.7

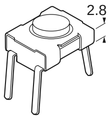


Fig. 8

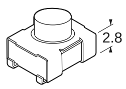


Fig. 9

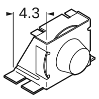


Fig. 10

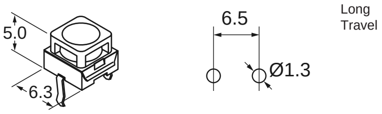


Fig. 11

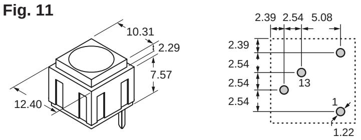
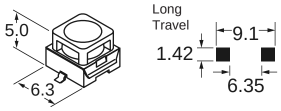


Fig. 12



Contact Materials

G Contacts: Coin silver, with gold plate over nickel plate. Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. or 1 amp @ 120 VAC or 28 VDC.

H Terminals: Brass. Contact Rating: 5mA max. @ 12 VDC. 50µA min. @ 2 VDC. Operating Temperature: -30°C to 80°C

Q Movable Contacts: Beryllium copper, silver plated. 25mA max. @ 50V AC or DC max. Stationary Contacts & All Terminals: Copper alloy, silver plated.

B Contacts: Gold Terminals: Gold Rating 25mA max. @ 50V AC or DC max.

Fig.	Description	Dim H (mm)	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 3,000	C & K Part No.
	PTS Momentary Tact Switches (Non-Washable)								
1	6mm, without ESD pin — 130gF	4.3	CKN9009-ND	.33	.27	.21	—	—	PTS645SL43
1	6mm, without ESD pin — 130gF	5.0	CKN9010-ND	.33	.27	.21	—	—	PTS645SL50
1	6mm, with ESD pin — 130gF	4.3	CKN9011-ND	.33	.27	.21	—	—	PTS645TL43
1	6mm, with ESD pin — 130gF	5.0	CKN9012-ND	.33	.27	.21	—	—	PTS645TL50
2	6mm, Right Angle, — 130gF	3.15	CKN9013-ND	.42	.34	.27	—	—	PTS645VL31
2	6mm, Right Angle, — 130gF	3.85	CKN9014-ND	.42	.34	.27	—	—	PTS645VL39
3	12mm, without ESD pin — 160gF	4.3	CKN9015-ND	.36	.29	.23	—	—	PTS125SM43
4	6 x 3.5 mm, without ESD pin — 130gF	4.3	CKN9016-ND	.45	.36	.29	—	—	PTS635SL43
4	6 x 3.5 mm, without ESD pin — 130gF	5.0	CKN9017-ND	.45	.36	.29	—	—	PTS635SL50
5	4.5mm, without ESD pin — 130gF	3.8	CKN9018-ND	.69	.56	.44	—	—	PTS453SL38
5	4.5mm, with ESD pin — 130gF	3.8	CKN9019-ND	.69	.56	.44	—	—	PTS453TL38
6	5.25mm, Sq. SMT, — 130gF	1.5	CKN9020CT-ND	.78	.63	.50	CKN9020TR-ND	375.00/M	PTS525SM10SM

Fig.	Circuit	Switch Function	Contact Material	Dim. (mm) L x W x D	Cap Color	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
				Momentary Tact Switches (Process Sealed; Washable)						
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 2.84	—	CKN4050-ND	2.16	1.73	1.37	KT11B0CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 3.48	—	CKN4070-ND	2.40	1.92	1.52	KT11B1CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 5.08	—	CKN4071-ND	2.49	2.00	1.58	KT11B2CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 5.21	—	CKN4051-ND	2.28	1.83	1.45	KT11P2CM
7	SPST	Mom (N/O)	G	6.22 x 6.37 x 3.96	—	CKN4052-ND	2.34	1.88	1.49	KT11P3CM
				Ultra Low Profile Momentary Tact Switches (Process Sealed; Non-Washable)						
10	SPST	Mom (N/O)	H	6.3 x 6.6 x 5.0	—	CKN1257-ND	.75	.60	.48	RT11P2BCHD1
10	SPST	Mom (N/O)	H	6.3 x 6.6 x 5.0	—	CKN1258-ND	.75	.60	.48	RT11P2ECHD1
				KS Momentary Tact Switches (Non-Washable)						
11	SPST	Mom (N/O)	G	.488 x .488 x .388	White	CKN4077-ND	2.25	1.80	1.43	KS11R21CBD
11	SPST	Mom (N/O)	Q	.488 x .488 x .388	White	CKN4078-ND	1.35	1.08	.86	KS11R21CQD
11	SPST	Mom (N/O)	G	.488 x .488 x .388	Black	CKN4079-ND	2.25	1.80	1.43	KS11R22CBD
11	SPST	Mom (N/O)	Q	.488 x .488 x .388	Black	CKN4080-ND	1.35	1.08	.86	KS11R22CQD
11	SPST	Mom (N/O)	B	.488 x .488 x .388	Red	CKN4081-ND	2.34	1.88	1.49	KS11R23CBD
11	SPST	Mom (N/O)	Q	.488 x .488 x .388	Red	CKN4082-ND	1.35	1.08	.86	KS11R23CQD

Fig.	Switch Function	Actuator Height (PushForce)	Term.	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing	C & K Part No.
				Surface Mount (Process Sealed; Washable)						
8	Mom (N/O)	Flush	J-Lead	CKN9001CT-ND	2.47	2.13	1.71	CKN9001TR-ND	1504.80/1100	KT11B0JM
8	Mom (N/O)	.088”	J-Lead	CKN4069CT-ND	2.83	2.44	1.96	CKN4069TR-ND	1722.60/1100	KT11B2JM
8	Mom (N/O)	.089”	J-Lead	CKN9002CT-ND	2.60	2.24	1.80	CKN9002TR-ND	1584.00/1100	KT11P2JM
8	Mom (N/O)	.044”	J-Lead	CKN9003CT-ND	2.70	2.33	1.87	CKN9003TR-ND	1643.40/1100	KT11P3JM
8	Mom (N/O)	Flush	Gull Lead	CKN4072CT-ND	2.41	2.08	1.67	CKN4072TR-ND	1465.20/1100	KT11B0SM
8	Mom (N/O)	.025”	Gull Lead	CKN4073CT-ND	2.70	2.33	1.87	CKN4073TR-ND	1643.40/1100	KT11B1SM
8	Mom (N/O)	.088”	Gull Lead	CKN4074CT-ND	2.76	2.38	1.92	CKN4074TR-ND	1683.00/1100	KT11B2SM
8	Mom (N/O)	.093”	Gull Lead	CKN9004CT-ND	2.54	2.19	1.76	CKN9004TR-ND	1544.40/1100	KT11P2SM
8	Mom (N/O)	.044”	Gull Lead	CKN9005CT-ND	2.60	2.24	1.80	CKN9005TR-ND	1584.00/1100	KT11P3SM
9	Mom (N/O)	Flush	Gull Lead	CKN9006CT-ND	2.76	2.38	1.92	CKN9006TR-ND	1224.00/800	KT11B0SAM
9	Mom (N/O)	.025”	Gull Lead	CKN9007CT-ND	3.02	2.61	2.10	CKN9007TR-ND	1339.20/800	KT11B1SAM
9	Mom (N/O)	.088”	Gull Lead	CKN9008CT-ND	3.09	2.66	2.14	CKN9008TR-ND	1368.00/800	KT11B2SAM
				Surface Mount Ultra Low Profile Tact Switches (Process Sealed; Non-Washable)						
12	Mom (N/O)	120gF	Gull Lead	CKN1259-ND	.75	.60	.48	—	—	RT11P2BSHD1
12	Mom (N/O)	300gF	Gull Lead	CKN1260-ND	.75	.60	.48	—	—	RT11P2ESHD1

Cannon

ITT Industries
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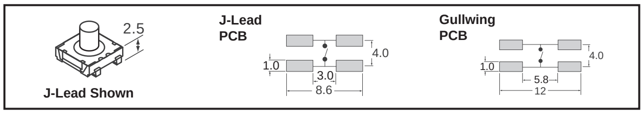
KSC Series Sealed Surface Mount Tact Switches, (Washable)

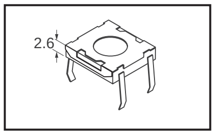
Switching: Voltage Max.: 50VDC Current Max.: Silver: 50mA **Contact Resistance:** 100mΩ **Operating Temperature:** -40°C to 85°C **IP67 Rated** **Contact Material:** Silver Plated



Circuit	Description	Digi-Key Part No.	Price Each			Tape & Reel Pricing*	ITT Ind. Part No.
			1	25	100		
SPST-NO	Tact Switch, 6.2mm sq, w/o ESD Pin - 300gF, No Actuator, Gullwing	401-1071-1-ND	.74	.69	.63	822.96/2,000	KSC141G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 300gF, No Actuator, J-Lead	401-1072-1-ND	.74	.69	.63	822.96/2,000	KSC141J
	Tact Switch, 6.2mm sq, w/o ESD Pin - 5500gF, No Actuator, Gullwing	401-1073-1-ND	.97	.90	.83	1078.92/2,000	KSC151G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 5500gF, No Actuator, J-Lead	401-1074-1-ND	.97	.90	.83	1078.92/2,000	KSC151J
	Tact Switch, 6.2mm sq, w/o ESD Pin - 200gF, w/Short Actuator, Gullwing	401-1075-1-ND	.72	.67	.61	793.80/2,000	KSC221G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 200gF, w/Short Actuator, J-Lead	401-1076-1-ND	.72	.67	.61	793.80/2,000	KSC221J
	Tact Switch, 6.2mm sq, w/o ESD Pin - 350gF, w/Short Actuator, Gullwing	401-1077-1-ND	.74	.69	.63	822.96/2,000	KSC241G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 350gF, w/Short Actuator, J-Lead	401-1078-1-ND	.74	.69	.63	822.96/2,000	KSC241J
	Tact Switch 6.2mm sq w/o ESD Pin - 170gF, w/Long Actuator, Gullwing	401-1079-1-ND	.86	.80	.73	476.28/1000	KSC421G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 170gF, w/Long Actuator, J-Lead	401-1080-1-ND	.86	.80	.73	476.28/1,000	KSC421J
	Tact Switch, 6.2mm sq, w/o ESD Pin - 320gF, w/Long Actuator, Gullwing	401-1081-1-ND	.86	.80	.73	476.28/1,000	KSC441G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 320gF, w/Long Actuator, J-Lead	401-1082-1-ND	.86	.80	.73	476.28/1,000	KSC441J
	Tact Switch, 6.2mm sq, w/o ESD Pin - 160gF, w/Long Actuator, Gullwing	401-1085-1-ND	.80	.74	.68	332.91/750	KSC621G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 160gF, w/Long Actuator, J-Lead	401-1086-1-ND	.80	.74	.68	332.91/750	KSC621J
	Tact Switch, 6.2mm sq, w/o ESD pin - 300gF, w/Long actuator Gullwing	401-1087-1-ND	.80	.74	.68	332.91/750	KSC641G
	Tact Switch 6.2mm sq w/o ESD Pin - 300gF, w/Long Actuator, J-Lead	401-1088-1-ND	.80	.74	.68	332.91/750	KSC641J
	Tact Switch, 6.2mm sq, w/o ESD Pin - 300gF, w/Rocker, Gullwing	401-1083-1-ND	.80	.74	.68	443.88/1,000	KSC541G
	Tact Switch, 6.2mm sq, w/o ESD Pin - 300gF, w/Rocker, J-Lead	401-1084-1-ND	.80	.74	.68	443.88/1,000	KSC541J

*For tape and reel part number, change -1-ND to -2-ND.

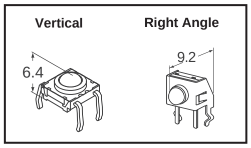
KSF Series Low Profile Tact Switches, (Washable)



Flat Miniature tact switch designed for automatic or manual insertion. Sealed against Immersion. **Switching:** Voltage Max.: 50VAC, Current Max.: 50mA **Contact Resistance:** 50mΩ **Contact Material:** Silver plated **Operating Temperature:** -40°C to 90°C

Circuit	Description	Digi-Key Part No.	Price Each			ITT Industries Part No.
			1	25	100	
SPST-NO	7.4mm sq w/o ESD Pin - 160gF, 500,000 Operations, Manual Insertion	401-1067-ND	.79	.73	.67	KSF0M211
	7.4mm sq w/o ESD Pin - 130gF, 1,000,000 Operations, Manual Insertion	401-1068-ND	.91	.84	.77	KSF0M311
	7.4mm sq w/o ESD Pin - 300gF, 100,000 Operations, Manual Insertion	401-1069-ND	.79	.73	.67	KSF0M411
	7.4mm sq w/o ESD Pin - 500gF, 100,000 Operations, Manual Insertion	401-1070-ND	1.02	.95	.87	KSF0M511

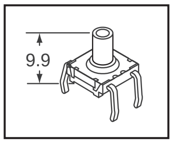
KSJ Series Tact Switches, with Spherical Actuator (Washable)



KSJ long travel is a miniature tact switch using a single pole normally open contact and is equipped with a spherical actuator. This new version is specially designed for applications where the actuation force can be off center about ±30°. With regard to vertical and even be parallel to the PCB .**Switching:** Voltage Max.: 50mA, Current Max.: 50mA **Operating Life**: 10^5 **Operating Force:** 100Grams **Operating Temperature:** -40°C to 90°C **Contact Material**: Silver Plated

Circuit	Description	Digi-Key Part No.	Price Each			ITT Industries Part No.
			1	25	100	
SPST-NO	Vertical, Tact Switch 7.4mm sq, w/o ESD Pin -300gF, w/o Gnd Terminal	401-1089-ND	1.14	1.06	.97	KSJ0M411
	Vertical, Tact Switch 7.4mm sq, w/o ESD Pin -300gF, w/Gnd Terminal	401-1090-ND	1.14	1.06	.97	KSJ1M411
	Right Angle, Tact Switch 7.4mm sq, w/o ESD Pin -300gF, w/o Gnd Terminal	401-1091-ND	1.11	1.03	.95	KSJOV411

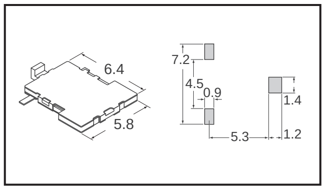
KSL Series Tact Switches (Washable)



MARK II Versions are improved seal versions for immersed cleaning. **Switching:** Voltage Max.: 50VDC, Current Max.: 50mA **Contact Resistance:** 50mΩ **Contact Material:** Silver plated **Operating Temperature:** -40°C to 90°C

Circuit	Description	Digi-Key Part No.	Price Each			ITT Industries Part No.
			1	25	100	
SPST-NO	Vertical, 7.4mm sq, 130gF, Long, Manual Insertion, 500,000 Operations, Mark II Improved	401-1055-ND	.82	.76	.70	KSL0M212
	Vertical, 7.4mm sq, 130gF, Long, Manual Insertion, 1,000,000 Operations, Mark II Improved	401-1056-ND	.94	.87	.80	KSL0M312
	Vertical, 7.4mm sq, 300gF, Long, Manual Insertion, 100,000 Operations, Mark II Improved	401-1057-ND	.82	.76	.70	KSL0M412
	Vertical, 7.4mm sq, 500gF, Long, Manual Insertion, 100,000 Operations, Mark II Improved	401-1058-ND	1.05	.98	.90	KSL0M512
	Rt Angle, 7.4mm sq, 130 gF, 500,000 Operations, Sealed	401-1063-ND	.91	.84	.77	KSL0V211
	Rt Angle, 7.4mm sq, 130 gF, 1,000,000 Operations, Sealed	401-1064-ND	1.14	1.06	.97	KSL0V311
	Rt Angle, 7.4mm sq, 300 g,F 100,000 Operations, Sealed	401-1065-ND	1.14	1.06	.97	KSL0V411
	Rt Angle, 7.4mm sq, 500 gF, 100,000 Operations, Sealed	401-1066-ND	1.37	1.27	1.17	KSL0V511
	Vertical, 7.4mm sq, 130g,F Long, Manual Insertion, 500,000 Operations, Sealed	401-1059-ND	.82	.76	.70	KSL1M211
	Vertical, 7.4mm sq, 130gF, Long, Manual Insertion, 1,000,000 Operations, Sealed	401-1060-ND	.94	.87	.80	KSL1M311
	Vertical, 7.4mm sq, 300gF, Long, Manual Insertion, 100,000 Operations, Sealed	401-1061-ND	.82	.76	.70	KSL1M411
	Vertical, 7.4mm sq, 500gF, Long, Manual Insertion, 100,000 Operations, Sealed	401-1062-ND	1.05	.98	.90	KSL1M511

KSM Series SMT Detector Switches



KSM is a miniature low profile switch, single pole, normally closed contacts. Actuation is made parallel to the PCB. Volume control and push to talk switch for portable phone. Soft tactile feel applications. **Switching:** Voltage Max.: 24VDC, Current Max.: 50mA **Operating Life:** ≥50^4 **Operating Force:** 90 Grams **Operating Temperature:** -40°C to 85°C

Circuit	Description	Digi-Key Part No.	Price Each			Tape & Reel Pricing*	ITT Industries Part No.
			1	25	100		
SPST-NC	Side Actuated, 90gF, Flux Sealed	401-1092-1-ND	1.12	1.04	.95	1237.68/2,000	KSM1131

*For tape and reel part number, change -1-ND to -2-ND.

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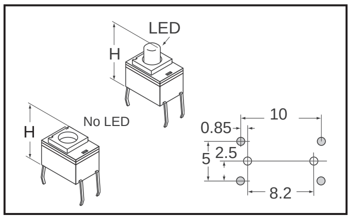
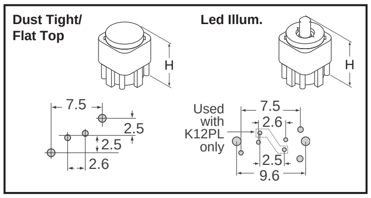
K6 Series Tactile Switches



Follow the trend toward miniaturization. Distinctive tactile feel. High switching reliability. Custom designed button required. **Switching:** Voltage Max.: 30 VDC, Current Max.: 100 mA **Contact Resistance:** 50mΩ **Total Travel:** 1.5mm **Contact Material:** Gold over Nickel **Operating Temperature:** -40°C to 85°C

Circuit	Description	Dim. H (mm)	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
SPST-NO	Momentary Action, 300gF, No LED	8.4	401-1163-ND	1.44	1.16	.92	K6B 1.5 3N
	Momentary Action, 300gF, Green-LED Illumination	12.3	401-1164-ND	2.30	1.84	1.46	K6BL GN 1.5 3N L906
	Momentary Action, 300gF, Orange-LED Illumination	12.3	401-1166-ND	2.30	1.84	1.46	K6BL OG 1.5 3N L405
	Momentary Action, 300gF, Red-LED Illumination	12.3	401-1167-ND	2.30	1.84	1.46	K6BL RD 1.5 3N L352
	Momentary Action, 300gF, Yellow-LED Illumination	12.3	401-1169-ND	2.30	1.84	1.46	K6BL YE 1.5 3N L327
	Momentary Action, 500gF, Red-LED Illumination	12.3	401-1168-ND	2.30	1.84	1.46	K6BL RD 1.5 5N L352
	Momentary Action, 500gF, Green-LED Illumination	12.3	401-1165-ND	2.30	1.84	1.46	K6BL GN 1.5 5N L906
	Momentary Action, 500gF, Yellow-LED Illumination	12.3	401-1170-ND	2.30	1.84	1.46	K6BL YE 1.5 5N L327

K12 Series Tactile Switches

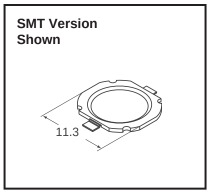


Successful in measurement and control equipment, in industrial electronics, as well as in automotive applications.

Switching: Voltage Max.: 30 VDC, Current Max.: 100mA **Contact Resistance:** 50 mΩ **Contact Material:** Gold over Nickel **Operating Temperature:** -40°C to 85°C

Circuit	Description	Dim. H (mm)	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
SPST-NO	Round, Mom., 500gF, Dust Tight (Process Sealed)	12	401-1159-ND	8.02	6.42	5.09	K12C 1 5N
	Round, Mom., 250gF, Dust Tight, (Process Sealed)	12	401-1158-ND	8.02	6.42	5.09	K12C BK 1 2.5N
	Flat Top, Mom., 250gF, Cap, Black	11	401-1156-ND	2.81	2.25	1.78	K12P BK 1.5 2.5N
	Flat Top, Mom.,500gF, Cap, Black	11	401-1157-ND	2.81	2.25	1.78	K12P BK 1.5 5N
	Mom.,500gF, Green-LED Illumination	14.5	401-1160-ND	4.23	3.39	2.69	K12PL GN 1.5 5N
	Mom.,500gF, Red-LED Illumination	14.5	401-1161-ND	4.23	3.39	2.69	K12PL RD 1.5 5N
	Mom.,500gF, Yellow-LED Illumination	14.5	401-1162-ND	4.23	3.39	2.69	K12PL YE 1.5 5N

ED Series Snap Domes and EDM Series Domes

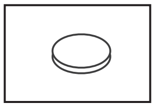


ED Series: Disc contact is a momentary tact switch with short travel and good tactile feedback. The ED series of discs are a snap dome short travel dome contact for mounting directly on a PCB. Designed for low profile applications where end users want to use a customized overlay to go over these domes. PC mount leads or SMT terminals available. **Switching:** Voltage Max.: Silver/Gold 100VAC/DC, Current Max.: (Silver: 100mA), (Gold: 50mA) **Contact Resistance:** (Silver: 10 mΩ), (Gold: 15 mΩ) **Total Travel:** 0.3mm **Operating Temperature:** -25°C to 70°C

EDM Series: The EDM series of discs are higher performance longer travel snap domes specifically designed for applications such as aircraft instrumentation, radio keypads or other demanding applications. PC mount leads or SMT terminals available. **Switching:** Voltage Max.: 100VDC, Current Max.: 50mA **Contact Resistance:** 15mΩ **Total Travel:** 0.4mm **Operating Temperature:** -55°C to 85°C

Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
	ED Series Snap Domes					
SPST-NO	Momentary with PC Pins, 240gF, Flux Sealed, Gold Plating	401-1015-ND	3.75	3.01	2.38	ED G AC 0
	Momentary with PC Pins, 240gF, Fully Sealed, Gold Plating	401-1017-ND	3.75	3.01	2.38	ED G AC 1
	Momentary with PC Pins, 240gF, Flux Sealed, Silver Plating	401-1014-ND	1.35	1.08	.86	ED S AC 0
	Momentary with PC Pins, 240gF, Fully Sealed, Silver Plating	401-1016-ND	1.35	1.08	.86	ED S AC 1
	EDM Series Domes					
SPST-NO	Momentary with PC Pins, 450gF, Gold Plating	401-1019-ND	6.20	4.97	3.93	EDM 450 G AC
	Momentary with SMT Tabs, 450gF, Gold Plating	401-1020-ND	6.20	4.97	3.93	EDM 450 G SC
	Momentary with PC Pins, 450gF, Silver Plating	401-1021-ND	3.55	2.85	2.26	EDM 450 S AC
	Momentary with PC Pins, 650gF, Gold Plating	401-1018-ND	7.19	5.76	4.56	EDM 650 G AC

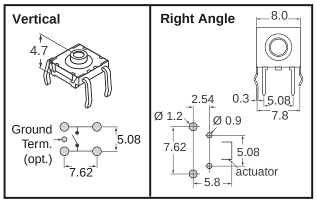
SD Dome Switches



SD domes are designed for PCB applications. Available in stainless steel or gold plating and are intended to short PCB traces on your board. Perfect for flat panel layouts and low porfile mounting. **Switching:** Voltage/Current: MOS, TTL Compatible **Operating Temperature:** -40°C to 85°C.

Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
	SD Dome Switch					
SPST-NO	Momentary Action, Long life, 225gF, Stainless Steel, Dia. 6.86mm	401-1013-ND	.34	.32	.29	SD270225SS
	Momentary Action, Long life, 225gF, Stainless Steel, Dia. 8.89mm	401-1012-ND	.34	.32	.29	SD350225SS

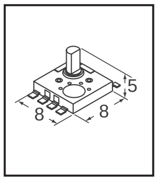
KSA Series Sealed Tact Switches (Washable)



Miniature tact switch is a single pole, single throw, normally open and designed for automatic or manual insertion. **Switching:** Current Max.: 50mA, Voltage Max.: 50VDC **Contact Resistance:** 50mΩ **Total Travel:** .03 – 0.5mm **Operating Life:** 10^5 **Operating Temperature:** -40°C to 90°C

Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
SPST-NO	Vertical, 7.4mm sq, 130gF, w/o Ground Terminal	401-1047-ND	.79	.73	.67	KSA0M211
	Vertical, 7.4mm sq, 130gF, Long Life, w/o Ground Terminal	401-1048-ND	.91	.84	.77	KSA0M311
	Vertical, 7.4mm sq, 300gF, w/o Ground Terminal	401-1049-ND	.79	.73	.67	KSA0M411
	Vertical, 7.4mm sq, 500gF, w/o Ground Terminal	401-1050-ND	1.02	.95	.87	KSA0M511
	Right Angle 7.4mm sq, 130gF, w/o GroundTerminal	401-1051-ND	.88	.81	.75	KSA0V211
	Right Angle 7.4mm sq, 130gF, Long Life w/o Ground Terminal	401-1052-ND	.99	.92	.85	KSA0V311
	Right Angle 7.4mm sq, 300gF, w/o Ground Terminal	401-1053-ND	.88	.81	.75	KSA0V411
	Right Angle 7.4mm sq, 500gF, w/o Ground Terminal	401-1054-ND	1.11	1.03	.95	KSA0V511
	Vertical, 7.4mm sq, 130gF, w/Ground Terminal	401-1043-ND	.79	.73	.67	KSA1M211
	Vertical, 7.4mm sq, 130gF, Long Life w/Ground Terminal	401-1044-ND	.91	.84	.77	KSA1M311
	Vertical, 7.4mm sq, 300gF, w/Ground Terminal	401-1045-ND	.79	.73	.67	KSA1M411
	Vertical, 7.4mm sq, 500gF, w/Ground Terminal	401-1046-ND	1.02	.95	.87	KSA1M511

TPA Series Surface Mount 4-Way Navigation Tact Switches



Actuating the shaft in the up, down, right or left direction individually closes four momentary contacts, which provide the scanning function. **Switching:** Voltage Max.: 24V, Current Max.: Silver: 50mA, Gold: 10mA **Operating Temperature:** Silver: -40°C to 85°C, Gold: -40°C to 110°C

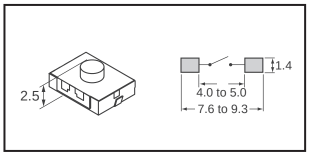
Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	Tape & Reel Pricing*	ITT Ind. Part No.
SP4T-NO	Momentary, 4-directional w/o Selection, 180gF, Gold, Gullwing	401-1129-1-ND	3.95	3.65	3.35	2187.00/1,000	TPA413G
	Momentary, 4-Directional w/Selection, 400gF, Gold, Gullwing	401-1131-1-ND	4.10	3.79	3.47	2269.62/1,000	TPA513G
	Momentary, 4-Directional w/Selection, 400gF, Silver, Gullwing	401-1130-1-ND	3.19	2.95	2.71	1769.04/1,000	TPA511G

*For tape and reel part no., change -1-ND to -2-ND.

(Continued)

KSR Series Low Profile Tact Switches

Is a miniature tact switch, single pole, normally open contact. The extremely small overall dimensions make the KSR fit perfectly in small applications where density of components is a major constraint. **Applications:** cellular phones, recorders, computers, pointers, radios, medical instrumentation and car entry remote. **Switching:** Voltage Max.: 20mV/50V **Current:** 1mA/50mA **Operating Temperature:** -40°C to 85°C **Contact Material:** Silver Plated



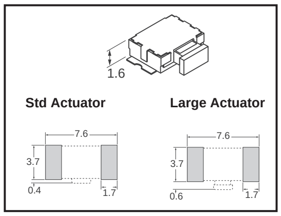
Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	Tape & Reel Pricing*	ITT Industries Part No.
SPST-NO	Miniature Tact Switch, 200gF, J-Lead, SMT	401-1094-1-ND	.75	.70	.64	1044.90/2,500	KSR221J
	Miniature Tact Switch, 300gF, J-Lead, SMT	401-1095-1-ND	.81	.76	.69	1125.90/2,500	KSR231J
	Miniature Tact Switch, 450gF, J-Lead, SMT	401-1096-1-ND	.87	.81	.74	1210.95/2,500	KSR251J

*For tape and reel part number change -1-ND to -2-ND.

KSS Series Miniature Side-Actuated Tact Switches (SMT)

The KSS is a normally open, momentary, single pole-single throw miniature switch. It is mainly dedicated to applications with a high density of components.

Voltage Max.: 50V Min./Max Current: 1mA/50mA **Life Expectancy:** 10^5 operations **Operating Temperature:** -40°C to 85°C

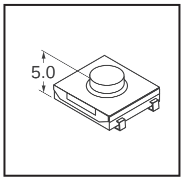


Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	Tape & Reel Pricing*	ITT Ind. Part No.
SPST-NO	Standard Actuator, 200gF, Gullwing	401-1097-1-ND	.65	.61	.56	1083.78/3,000	KSS221G
	Standard Actuator, 250gF, Gullwing	401-1098-1-ND	.65	.61	.56	1083.78/3,000	KSS231G
	Standard Actuator, 400gF, Gullwing	401-1099-1-ND	.65	.61	.56	1083.78/3,000	KSS241G
	Large Actuator, 200gF, Gullwing	401-1100-1-ND	.65	.61	.56	1083.78/3,000	KSS321G
	Large Actuator, 250gF, Gullwing	401-1101-1-ND	.65	.61	.56	1083.78/3,000	KSS331G
	Large Actuator, 400gF, Gullwing	401-1102-1-ND	.65	.61	.56	1083.78/3,000	KSS341G

*For tape and reel part no. change -1-ND to -2-ND

KST Series SMT Rubber Tact Switches

The KST is a miniature tact switch with a rubber actuator used to provide a tactile effect similar to the feeling given by the conductive rubber products and a travel which is more than twice the standard tact switch travel of the KSA or KSC product line. **Switching:** Voltage Max.: 30V, Current Max.: 50mA **Life Expectancy:** 100,000 cycles **Operating Temperature:** -40°C to 85°C

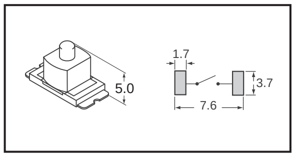


Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	Tape & Reel Pricing*	ITT Ind. Part No.
SPST-NO	Tact Switch - 6.2mm sq - 200gF, Gullwing	401-1103-1-ND	.78	.72	.66	429.30/1,000	KST221G
	Tact Switch - 6.2mm sq - 200gF, J-Type	401-1104-1-ND	.78	.72	.66	429.30/1,000	KST221J
	Tact Switch - 6.2mm sq - 350gF, Gullwing	401-1105-1-ND	.81	.75	.69	447.12/1,000	KST241G
	Tact Switch - 6.2mm sq - 350gF, J-Type	401-1106-1-ND	.81	.75	.69	447.12/1,000	KST241J

*For tape and reel part number change -1-ND to -2-ND

KSU Series Subminiature Detect Switch

The KSU is a top actuated ultraminiature detector switch without tactile feedback and normally open contacts. **Maximum Voltage:** 50V Min/Max Current: 1mA/10mA **Life Expectancy:** 500,000 operations **Operating Force:** 70 Grams **Contacts:** Gold **Operating Temperature:** -40°C to 125°C



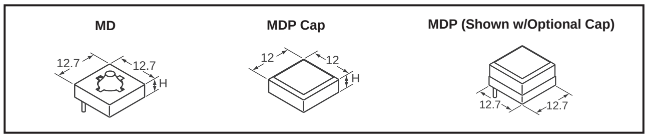
Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	Tape & Reel Pricing*	ITT Industries Part No.
SPST	Detect Switch - 7 x 3.5mm, N/O Standard Actuator, Gullwing	401-1093-1-ND	.90	.84	.77	748.44/1,500	KSU113G

*For tape and reel part number change -1-ND to -2-ND

MD and MDP Series Pushbutton Switches

MD Series: Small momentary key switch including a protective rubber actuator. **Switching:** Voltage Max.: 100VAC/DC Current Max.: (Silver: 100mA AC/DC), (Gold: 50mA AC/DC) **Operating Temperature:** -25°C to 70°C

MDP Series: Small momentary key switch equipped with button, can be PC mounted. **Switching:** Voltage Max.: 100V AC/DC, Current Max.: (Silver: 100mA AC/DC), (Gold: 50mA AC/DC) **Operating Temperature:** -25°C to 70°C

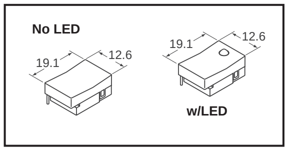


Circuit	Description	Dim. H (mm)	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
MD Series PB							
SPST	Push-Button, Momentary, w/Rubber Actuator, 240gF, Gold Plated	5	401-1172-ND	5.18	4.15	3.29	MD G
	Push-Button, Momentary, w/Rubber Actuator, 260gF, Silver Plated	5	401-1171-ND	2.46	1.97	1.56	MD S
MDP Series PB							
SPST	Push-Button, Momentary, No Cap, 240gF, Gold Plated	4.1	401-1174-ND	4.41	3.53	2.80	MDP G
	Push-Button Momentary, No Cap,260gF, Silver Plated	4.1	401-1173-ND	2.24	1.79	1.42	MDP S

Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
Switch Caps for MDP Series					
White, 12mm sq, Finger Recessed	401-1175-ND	.60	.49	.39	BTN MDP 00
Grey, 12mm sq, Finger Recessed	401-1176-ND	.60	.49	.39	BTN MDP 20
Red, 12mm sq, Finger Recessed	401-1177-ND	.60	.49	.39	BTN MDP 40
Blue, 12mm sq, Finger Recessed	401-1178-ND	.60	.49	.39	BTN MDP 60
Black, 12mm sq, Finger Recessed	401-1179-ND	.60	.49	.39	BTN MDP 90

MDPL Series Momentary Pushbutton Rocker Type Switches

Switching: Power Max.: 6W AC/DC, Voltage Max.: 100V AC/DC, **Current:** 100mA AC/DC **Operating Temperature:** -25°C to 70°C **Contact Material:** Silver Plated

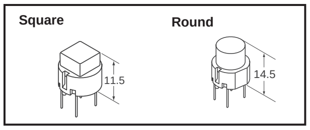


Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
SPST-NO	Rocker Type, 200gF, w/White Cap, No LED	401-1183-ND	3.15	2.53	2.00	MDPL 0 S BTN 00
	Rocker Type, 200gF, w/Lt Grey Cap, No LED	401-1180-ND	3.15	2.53	2.00	MDPL 0 S BTN 20
	Rocker Type, 200gF, w/Red Cap, No LED	401-1181-ND	3.15	2.53	2.00	MDPL 0 S BTN 40
	Rocker Type, 200gF, w/Black Cap, No LED	401-1182-ND	3.15	2.53	2.00	MDPL 0 S BTN 90
	Rocker Type, 200gF, Lt Grey Cap w/Red LED	401-1185-ND	6.30	5.05	4.00	MDPL 1 S 40 BTN 20
	Rocker Type, 200gF, Black Cap w/Red LED	401-1184-ND	5.96	4.77	3.78	MDPL 1 S 40 BTN 90
	Rocker Type, 200gF, Red Cap w/Green LED	401-1187-ND	6.25	5.00	3.96	MDPL 1 S 50 BTN 40
	Rocker Type, 200gF, Black Cap w/Green LED	401-1186-ND	6.25	5.00	3.96	MDPL 1 S 50 BTN 90

(Continued)

D6 Series Pushbutton Switches

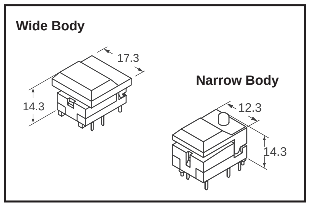
The D6 is an open keyswitch specially designed for digital electronic controls. Comes complete with colored cap already attached. **Switching:** Current Max.: 100mA AC **Dielectric Strength:** 1000VAC **Contact Resistance:** 100mΩ **Switching Travel:** 0.031 **Contact Material:** Silver Plated **Operating Temperature:** -20°C to 85°C



Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
SPST	Square Cap, White, Momentary Action, 130gF	401-1004-ND	1.17	.94	.75	D6 C 00
	Square Cap, Grey, Momentary Action, 130gF	401-1005-ND	1.17	.94	.75	D6 C 10
	Square Cap, Red, Momentary Action, 130gF	401-1002-ND	1.17	.94	.75	D6 C 40
	Square Cap, Blue, Momentary Action, 130gF	401-1006-ND	1.17	.94	.75	D6 C 60
	Square Cap, Black, Momentary Action, 130gF	401-1003-ND	1.17	.94	.75	D6 C 90
	Round Cap, White, Momentary Action, 130gF	401-1009-ND	1.17	.94	.75	D6 R 00
	Round Cap, Grey, Momentary Action, 130gF	401-1010-ND	1.17	.94	.75	D6 R 10
	Round Cap, Red, Momentary Action, 130gF	401-1007-ND	1.17	.94	.75	D6 R 40
	Round Cap, Blue, Momentary Action, 130gF	401-1011-ND	1.17	.94	.75	D6 R 60
	Round Cap, Black, Momentary Action, 130gF	401-1008-ND	1.17	.94	.75	D6 R 90

DIGITAST SE Series Sealed Key Switches

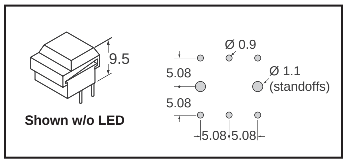
This series is the most versatile electronic switch for printed circuit boards, especially when used with dual in-line packages. Vibration free, short smooth travel through pivoted button tops. Available as momentary button switch as well as push-push action with over-travel release. Micro SPDT system with tactile feeling. Two integral molded "standoff" pins for alignment on PC boards. **Switching:** Voltage Max.: 24V AC Current Max.: 10mA DC **Operating Life:** OA: 5,000,000 operations, EE: 500,000 operations **Switching Travel:** .0591



Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
SPDT	Alternate Action, Black Cap, No LED, Narrow Body	401-1108-ND	5.65	5.03	4.40	SE R BK AU EE
	Alternate Action, Grey Cap, No LED, Narrow Body	401-1110-ND	5.65	5.03	4.40	SE R GY AU EE
	Alternate Action, Black Cap, w/Green-LED, Narrow Body	401-1116-ND	7.39	6.57	5.75	SE R L BK GN AU EE
	Alternate Action, Black Cap, w/Red-LED, Narrow Body	401-1114-ND	7.00	6.23	5.45	SE R L BK RD AU EE
	Alternate Action, Grey Cap, w/Green-LED, Narrow Body	401-1119-ND	7.39	6.57	5.75	SE R L GY GN AU EE
	Alternate Action, Grey Cap, w/Red-LED, Narrow Body	401-1118-ND	7.00	6.23	5.45	SE R L GY RD AU EE
	Alternate Action, Red Cap No LED, Narrow Body	401-1112-ND	5.65	5.03	4.40	SE R RD AU EE
	Alternate Action, Black Cap, w/Red/Green LED, Narrow Body	401-1120-ND	8.59	7.64	6.69	SER2LBKRDGNAUEE
	Alternate Action, Grey Cap, w/Red/Green LED, Narrow Body	401-1121-ND	8.59	7.64	6.69	SER2LGYRDGNAUEE
	Alternate Action, Black Cap, No LED, Wide Body	401-1123-ND	5.65	5.03	4.40	SE T BK AU EE
	Alternate Action, Black Cap, w/Green LED, Wide Body	401-1127-ND	7.39	6.57	5.75	SE T L BK GN AU EE
	Alternate Action, Black Cap, w/Red LED, Wide Body	401-1126-ND	7.00	6.23	5.45	SE T L BK RD AU EE

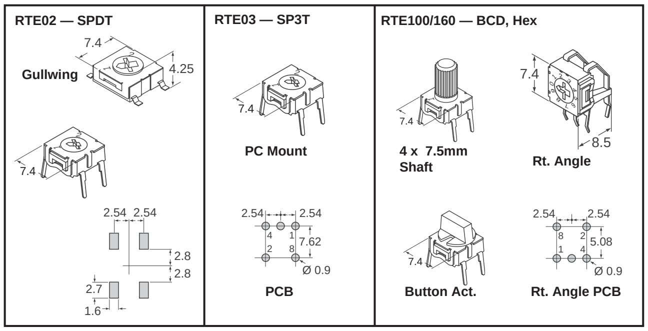
REKN Series Pushbutton Switches

Switching: Voltage Max.: (Gold: 25V DC), (Silver: 60V DC) **Switching Current:** (Gold: 10mA DC), (Silver: 60mA DC) **Operating Life:** 500,000 operations **Contact Resistance:** (Gold: 100mΩ), (Silver: 50mΩ) **Operating Temperature:** -25°C to 70°C



Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
SPST-NO	Momentary Action, 120gF, w/Red LED, Black Cap	401-1190-ND	7.53	6.03	4.78	REK-NL-AG-01-1-1
	Momentary Action, 120gF, w/Green LED, Black Cap	401-1191-ND	8.08	6.47	5.12	REK-NL-AG-01-1-3
	Momentary Action, 120gF, w/Yellow LED, Black Cap	401-1189-ND	8.08	6.47	5.12	REK-NL-AU-01-1-2
	Momentary Action, 120gF, Black Cap	401-1188-ND	3.27	2.62	2.07	REKN BK AU

RTE Series Miniature Rotary Switches



Switching: Voltage Max.: RTE02, RTE03: 50V DC; RTE10, RTE16: 30V DC **Current:** 100mA **Contact Resistance:** RTE02, RTE03: 100mΩ; RTE10, RTE16: 150mΩ **Operating Temperature:** -25°C to 85°C **Storage Temperature:** -40°C to 85°C

Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	Tape & Reel Pricing*	ITT Industries Part No.
SPDT	2 Position Selector, Gullwing, Silver Plating	401-1022-1-ND	1.96	1.82	1.67	1358.78/1,250	RTE0200G01
	2 Position Selector, PC Mount, Silver Plating	401-1023-ND	1.58	1.27	1.00	—	RTE0200N01
	2 Position Selector, 4 x 7.5mm Shaft, Silver Plating	401-1024-ND	1.69	1.36	1.08	—	RTE0201N01
	2 Position Selector, Button Actuator, Silver Plating	401-1025-ND	1.69	1.36	1.08	—	RTE0202N01
SP3T	3 Position Selector, Gullwing, Silver Plating	401-1026-ND	1.81	1.45	1.15	—	RTE0300G01
	3 Position Selector, PCB Mount, Silver Plating	401-1027-ND	1.58	1.27	1.00	—	RTE0300N01
	3 Position Selector, 4 x 7.5mm Shaft, Silver Plating	401-1028-ND	1.69	1.36	1.08	—	RTE0301N01
	3 Position, Button Act., Silver Plating	401-1029-ND	1.69	1.36	1.08	—	RTE0302N01
BCD	Decimal Code, Gullwing, Gold Plated	401-1030-1-ND	2.47	2.28	2.09	1709.10/1,250	RTE1000G13
	Decimal Code, PCB Mount, Gold Plating	401-1031-5-ND	2.04	1.64	1.30	—	RTE1000N13
	Decimal Code, Rt Angle, Gold Plating	401-1033-5-ND	2.04	1.64	1.30	—	RTE1000V13
	Decimal Code, 4 x 7.5mm Shaft, Gold Plating	401-1032-5-ND	2.16	1.73	1.37	—	RTE1001N13
	Decimal Code, Button Act., Gold Plating	401-1034-5-ND	2.16	1.73	1.37	—	RTE1002N13
HEX	Hexadecimal Code, Gullwing, Gold Plating	401-1035-1-ND	2.63	2.43	2.23	1818.45/1,250	RTE1600G43
	Hexadecimal Code, Rt Angle, Gold Plating	401-1036-5-ND	2.19	1.76	1.39	—	RTE1600N43
	Hexadecimal Code, 4 x 7.5mm Shaft, Gold Plating	401-1037-5-ND	2.31	1.85	1.47	—	RTE1601N43
	Hexadecimal Code, Rt Angle, Gold Plating	401-1038-5-ND	2.42	1.94	1.54	—	RTE1601V43
	Hexadecimal Code, Button Act., Gold Plating	401-1039-5-ND	2.31	1.85	1.47	—	RTE1602N43

*For tape and reel part no. change -1-ND to -2-ND

Note: Only N version with Flush Top for automatic insertion.

Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
Optional Switch Caps for RTE Series					
Red, Open Window Style for Button Act. Switch only	401-1040-ND	2.35	1.88	1.49	BTNRTE40
Green, Open Window Style for Button Act. Switch only	401-1041-ND	2.35	1.88	1.49	BTNRTE50
Black, Open Window Style for Button Act. Switch only	401-1042-ND	2.35	1.88	1.49	BTNRTE90

Grayhill Series 96 Keypads

Fig. 1 — 3x4 Rear Panel Mount

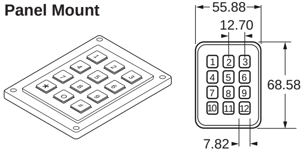
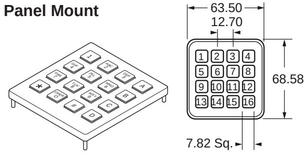


Fig. 2 — 4x4 Front Panel Mount



Grayhill's Series 96 are their most economical 3x4 and 4x4 keypad family. They have such features as conductive rubber contacts with an operational life of 3 million operations and a good tactile feel for positive feedback to the operator. GH5001 thru GH5004 have black legends with white keys and a black ABS housing. GH5008 thru GH5011 have white legends with black keys and a black ABS housing.

SPECIFICATIONS:

Rating Criteria: • **Rating at 12Vdc:** 5 mA for .5 seconds • **Contact Bounce:** <12 milliseconds • **Contact Resistance:** <100Ω (@ stated operating force) • **Operation Life:** 3,000,000 min. cycles per key • **Operating Force:** 175 ±40 grams • **Operating Temperature:** -30°C to +80°C

Material and Finishes: • **Terminal Pin:** Phosphor Bronze, solder plated • **PC Board:** FR-4 glass cloth epoxy • **Keypad:** Silicone rubber • **Housing:** ABS, cycolac "KJW" • **Housing Color:** Black • **Output:** Matrix (Rear SIL Header)

12 Key mating connector use Digi-Key part numbers: A3016-ND (connector, 1 piece) / A3007-ND (contacts, 1 package)

16 Key mating connector use Digi-Key part numbers: A3017-ND (connector, 1 piece) / A3007-ND (contacts, 1 package)

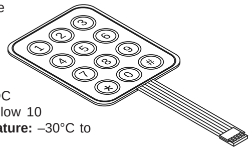
Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Grayhill Part No.
1	12 Key Keypad, Front Mount, White Keys	GH5001-ND	11.56	10.15	8.67	96AB2-102-F
1	12 Key Keypad, Rear Mount, White Keys	GH5002-ND	11.56	10.15	8.67	96AB2-102-R
2	16 Key Keypad, Front Mount, White Keys	GH5003-ND	12.87	11.30	9.66	96BB2-006-F
2	16 Key Keypad, Rear Mount, White Keys	GH5004-ND	12.87	11.30	9.66	96BB2-006-R
1	12 Key Keypad, Front Mount, Black Keys	GH5008-ND	11.56	10.15	8.67	96AB2-152-F
1	12 Key Keypad, Rear Mount, Black Keys	GH5009-ND	11.56	10.15	8.67	96AB2-152-R
2	16 Key Keypad, Front Mount, Black Keys	GH5010-ND	12.87	11.30	9.66	96BB2-056-F
2	16 Key Keypad, Rear Mount, Black Keys	GH5011-ND	12.87	11.30	9.66	96BB2-056-R

Cannon

ITT Industries
Engineered for life

C&K Sealed Membrane Keypads

with Removable Legends



FEATURES: • Adhesive backed for easy mounting • Tactile feedback on all keys • Attached .1" female connector • Legends easily swapped • Allows for custom legends • Rim embossed keys for finger placement • Splash proof, sealed switches • Low profile height (.059 inches)

SPECIFICATIONS: • **Contact Rating:** 0.5 VA, 100 mA, 30 VDC max. • **Actuation Force:** 300 grams • **Contact Bounce:** Below 10 msec. typ. • **Travel:** 0.63 – 0.76mm typ. • **Operating Temperature:** –30°C to +60°C.

MATERIALS: • **Overlay:** Polyester/polycarbonate blend with uniform low gloss fine texture • **Connector:** Single row female connector, tin lead plating

Fig. 1

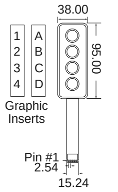


Fig. 2

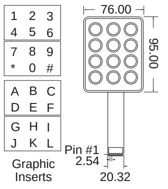


Fig. 3

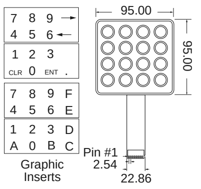
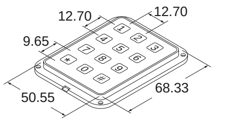


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	C & K Part No.
1	4-Key with 1 legend set - A-D / 1-4	CKN6009-ND	17.34	14.98	12.61	4214A1
2	12-Key with 2 legend sets - A-L / 1-9, *, #	CKN6010-ND	25.37	21.91	18.45	4234A1
3	16-Key with 2 legend sets - A-F, 1-9 / 1-9, *, #, ENT	CKN6011-ND	20.44	17.66	14.87	4244A1

Grayhill Series 88 Sealed Keypads

Versatile keypads that work indoors or outdoors.



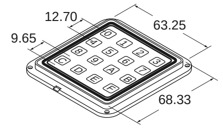


Fig. 1

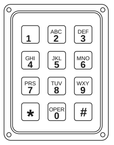


Fig. 2

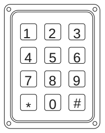


Fig. 3

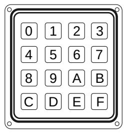
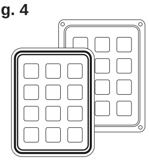


Fig. 4



Grayhill Series 88 keypads are fully sealed keypads for use indoors or outdoors that offer a fully sealed snap-dome contact with an operational life of 3 million operations per key. Various colored graphic overlays are available or you can create your own keypad by using 3 items: (1) a blank keyboard; (2) the clear window overlay; (3) a sheet of legend transfers. Optional panel seal gasket provides a dust and water weather seal between your keypad and your equipment panel.

SPECIFICATIONS:

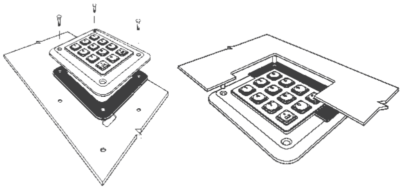
Rating Criteria: • **Rating at 24 Vdc:** 10 milliamps, resistive • **Contact Resistance:** Compatible with MOS, TTL and DTL (10 ohms max.) • **Voltage Breakdown:** 250 Vac between mutually insulated parts • **Life Expectancy:** 3,000,000 operations per button • **Contact Bounce:** Less than 4 milliseconds at make, 10 milliseconds at break • **Operating Temperature:** -40°C to +80°C.

Operating Features: • **Button Travel:** 0.015" (.381mm) nominal total travel • **Typical Operating Force:** 350 grams.

Materials and Finishes: • **Housing:** ABS polycarbonate, black • **Graphic Overlay:** Polyester • **Contact Dome:** Stainless steel, selectively gold plated • **Terminals:** Copper alloy, CDA No. 725, Tin-lead plated.

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Grayhill Part No.
	Series 88 Keypads					
1	12-Key Keypad with Black housing; White keys and Black lettering	GH5012-ND	23.14	20.31	17.36	88AB2-143
2	12-Key Keypad with Black housing; White keys and Blue lettering	GH5013-ND	23.14	20.31	17.36	88AB2-152
2	12-Key Keypad with Black housing; Blue keys and White lettering	GH5014-ND	23.14	20.31	17.36	88AB2-172
3	16-Key Keypad with Black housing, Blue/White keys and Black/Blue lettering	GH5015-ND	26.73	23.46	20.05	88BB2-052
3	16-Key Keypad with Black housing, Blue keys and White lettering	GH5016-ND	26.73	23.46	20.05	88BB2-072
3	16-Key Keypad with Black housing, Red keys and White lettering	GH5017-ND	26.73	23.46	20.05	88BB2-082
	Series 88 Clear Key Keypads — Customize Your Own Keypad Layout					
4	12-Key Keypad with Blank keys for use with Legend sheets below	GH5018-ND	18.36	16.12	11.76	88AB2
4	16-Key Keypad with Blank keys for use with Legend sheets below	GH5019-ND	20.41	17.92	15.31	88BB2
4	20-Key Keypad with Blank keys for use with Legend sheets below	GH5020-ND	27.20	23.87	20.40	88JB2
—	Legend Sheet, Small Print lettering for Blank Keys, dry transfer type	GH5021-ND	3.89	3.57	3.24	87-DT-2096-088
—	Legend Sheet, Medium Print lettering for Blank Keys, dry transfer type	GH5022-ND	3.89	3.57	3.24	87-DT-2096-125
—	Legend Sheet, Large Print lettering for Blank Keys, dry transfer type	GH5023-ND	3.89	3.57	3.24	87-DT-2096-187
—	Legend Sheet, Medium Print lettering for Blank Keys, self-adhesive type	GH5024-ND	5.54	5.08	4.62	87AC2046
4	Clear Protective Overlay for 12-Key Keypad (protects your customized lettering)	GH5025-ND	17.01	15.60	14.18	88-101
4	Clear Protective Overlay for 16-Key Keypad (protects your customized lettering)	GH5026-ND	15.36	14.09	12.81	88-001
4	Clear Protective Overlay for 20-Key Keypad (protects your customized lettering)	GH5027-ND	15.46	14.18	12.89	88-201
	Panel Seal Gaskets for Series 88 Keypads					
—	Optional Panel Gasket Seal for all 12-Key Series 88 Keypads - Subpanel Mount	GH5028-ND	1.36	1.26	1.14	88M2001-2
—	Optional Panel Gasket Seal for all 16-Key Series 88 Keypads - Subpanel Mount	GH5029-ND	1.40	1.28	1.17	88M2009-2
—	Optional Panel Gasket Seal for all 20-Key Series 88 Keypads - Subpanel Mount	GH5030-ND	1.42	1.31	1.19	88M2019-1
—	Optional Panel Gasket Seal for all 12-Key Series 88 Keypads - Top Panel Mount	GH5031-ND	1.67	1.54	1.40	88M2012-1
—	Optional Panel Gasket Seal for all 16-Key Series 88 Keypads - Top Panel Mount	GH5032-ND	1.75	1.61	1.46	88M2015-1
—	Optional Panel Gasket Seal for all 20-Key Series 88 Keypads - Top Panel Mount	GH5033-ND	1.78	1.64	1.49	88M2018-1

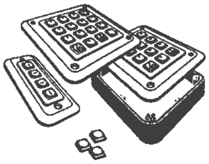
K Range Keypad System Interchangeable for Different Environments/Applications



Storm K Range keypads are 100% interchangeable to suit any application. Each series is identical in size and mounting specifications, allowing for easy price/performance selection for different environments. Each keypad is available in calculator or telephone formats (arrows or F-Keys on the 4-key version) or the end user may customize by using optional blank keys. All keypads are compatible with the Storm Universal Encoder and includes instructions and a gasket seal. Storm K Range Keypads are ideal for access control, pin numbering/banking functions and kiosk application. Storm 1000 and GFX Series keypads are available with illumination for low light applications. **GENERAL SPECIFICATIONS:** • **Contact bounce:** 5ms (max.) • **Contact resistance:** 100 ohms (max.) • **Insulation resistance:** 50 Meg ohms (min.) • **Breakdown Voltage:** 500V AC (60 Secs) • **Operating Voltage:** 24V DC (max.) • **Operating Current:** 50mA (max.) **ACCESSORIES:** • **Rear Casing:** Provides space to house additional components and circuitry (12 Key format only) • **Privacy-Protection Shroud:** Front-mounted shroud conceals sensitive data entry info. i.e. PINS (12 key format only)

Fig. 1 Storm 1000 Series

Public/Outdoor Environments

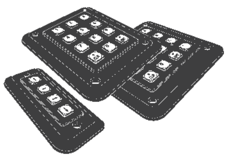


Available with Character Illumination

- Anti-Vandal design ideal for public environment
- Features metal casing and keys
- Fully sealed, to IP67, for use in outdoor environments
- 4, 12 and 16 key formats available
- Available with red/green LED illumination
- Key color: Silver
- Case Color: Silver
- Operational life: 4 Million cycles (min) per key
- Operational temp. range: -40°C to +100°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1" pitch, gold plated, square pin, male

Fig. 2 Storm PLX Series

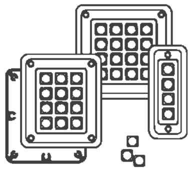
Anti-Vandal, Industrial Sealed Keypad



- Tough metal key keypad with polymer housing
- Ideal for public and industrial environments
- Sealed to IP65 for exposed environments
- 4, 12, and 16 key formats available
- Case Color: Black
- Key Color: Silver
- Operational life: 4 million cycles (min) per key
- Operational temp. range: -40°C to +100°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1" pitch, goldplated, square pin, male

Fig. 3 Storm 2000 Series

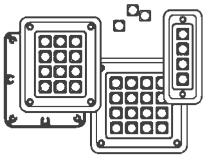
Harsh Industrial/Wet Environments



- Impact resistant industrial keypad
- High impact resistant polymer casing and keys
- Sealed to IP65, allowing pressure hose wash
- 4, 12, and 16 key formats available
- Case Color: Mid Gray
- Key Color: Light Gray
- Operational life: 4 million cycles (min) per key
- Operational temp. range: -25°C to +85°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1" pitch, gold plated, square pin, male

Fig. 4 Storm 3000 Series

General Service/Sheltered Outdoor Use



- Reliable keypad for sheltered environments
- General service polymer casing and keys
- Rain and splash proof to IP54 specifications
- 4, 12, and 16 key formats available
- Case Color: Black
- Key Color: Black
- Operational life: 2 million cycles (min) per key
- Operational temp. range: -10°C to +85°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1" pitch, gold plated, square pin, male

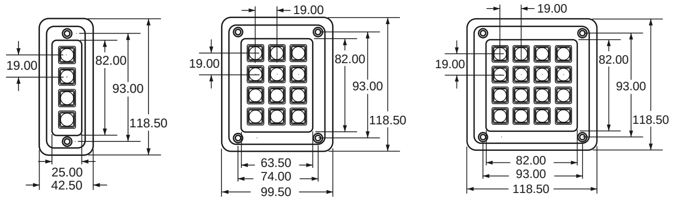


Fig.	Description	Digi-Key Part No.	Price Each	MGR Part No.
	1000 Series (Silver Diecast Housing)			
1	Vandal Resistant 4 Key Keypad, Arrow keys	MGR1512-ND*	45.00	1K041103
	Vandal Resistant 4 Key Keypad, F1-F4 keys	MGR1511-ND*	45.00	1K042103
	Vandal Resistant 12 Key Keypad, Telephone	MGR1513-ND†	65.00	1K12T103
	Vandal Resistant 12 Key Keypad Calculator	MGR1501-ND†	65.00	1K120103
	Vandal Resistant 16 Key Keypad, Telephone	MGR1514-ND‡	75.37	1K16T103
	Vandal Resistant 16 Key Keypad Calculator	MGR1601-ND‡	75.37	1K160103
	Illuminated Vandal Resistant 4 Key Keypad, Arrow keys	MGR1574-ND	56.12	1KL041103
	Illuminated Vandal Resistant 4 Key Keypad, F1-F4 keys	MGR1575-ND	56.12	1KL042103
	Illuminated Vandal Resistant 12 Key Keypad, Calculator	MGR1576-ND	81.06	1KL120103
	Illuminated Vandal Resistant 12 Key Keypad, Telephone	MGR1577-ND	81.06	1KL12T103
	Illuminated Vandal Resistant 16 Key Keypad, Calculator	MGR1578-ND	97.27	1KL160103
	Illuminated Vandal Resistant 16 Key Keypad, Telephone	MGR1579-ND	97.27	1KL16T103
	PLX Series			
2	4-Key Keypad, F1-F4 Keys, Black Case	MGR1541-ND	39.14	PLX042203
	4-Key Keypad, Arrow Keys, Black Case	MGR1542-ND	39.14	PLX041203
	12-Key Keypad, Calculator Format, Black Case	MGR1543-ND	56.55	PLX120203
	12-Key Keypad, Telephone Format, Black Case	MGR1544-ND	56.55	PLX12T203
	16-Key Keypad, Calculator Format, Black Case	MGR1545-ND	69.05	PLX160203
	16-Key Keypad, Telephone Format, Black Case	MGR1546-ND	69.05	PLX16T203
	2000 Series (Mid-Grey Impact Polymer Housing)			
3	Industrial 4 Key Keypad, Arrow keys	MGR1516-ND*	30.93	2K041103
	Industrial 4 Key Keypad, F1-F4 keys	MGR1517-ND*	30.93	2K042103
	Industrial 12 Key Keypad, Calculator Format	MGR1518-ND†	44.89	2K120103
	Industrial 12 Key Keypad, Telephone Format	MGR1519-ND†	44.89	2K12T103
	Industrial 16 Key Keypad, Calculator Format	MGR1520-ND‡	54.87	2K160103
	Industrial 16 Key Keypad, Telephone Format	MGR1521-ND‡	54.87	2K16T103
	3000 Series (Mid-Grey General Service Polymer Housing)			
4	Commercial 4 Key Keypad, Arrow keys	MGR1523-ND*	19.75	3K041103
	Commercial 4 Key Keypad, F1-F4 keys	MGR1524-ND*	19.75	3K042103
	Commercial 12 Key Keypad, Calculator Format	MGR1525-ND†	29.12	3K120103
	Commercial 12 Key Keypad, Telephone Format	MGR1526-ND†	29.12	3K12T103
	Commercial 16 Key Keypad, Calculator Format	MGR1527-ND‡	35.41	3K160103
	Commercial 16 Key Keypad, Telephone Format	MGR1528-ND‡	35.41	3K16T103
	Accessories			
—	Blank Keys for 1000 Series 4 pieces	MGR1515-ND	6.02	1K000003
—	Blank Keys for 2000/3000 Series 4 pieces	MGR1522-ND	2.58	2K000003
—	Rear Casing for 12 Key Keypad	MGR1536-ND	27.50	RC120203
—	Privacy Shroud for 12-Key Keypads	MGR1562-ND	27.05	1KFS0203

• 4 Key Mating Connector use Digi-Key Part Numbers: WM2003-ND (Connector, 1 pkg)/ WM2200-ND (Contacts, 1 pkg)

† 12 Key Mating Connector use Digi-Key Part Numbers: WM2006-ND (Connector, 1 pkg)/ WM2200-ND (Contacts, 1 pkg)

‡ 16 Key Mating Connector use Digi-Key Part Numbers: WM2006-ND (Connector, 1 pkg)/ WM2200-ND (Contacts, 1 pkg)

Universal Encoder

The Universal Keypad Encoder is a compact microprocessor controlled unit designed to interface between Storm Keypads and computers. The encoder converts signals from the keypad to PC XT/AT/PS2 as well as ASCII RS232 and is compatible with Storm 700 Series and K Range Keypads The Universal Encoder can read up to 90 key positions with a single 5V power supply. Complete Instructions included.

MGR1301-ND **$140.56**

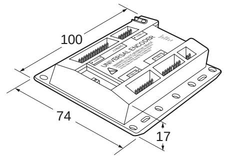
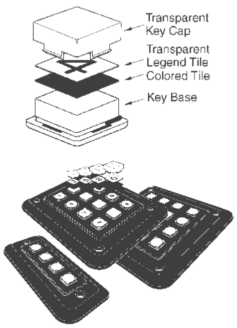


Fig. 5 Storm GFX Series

Customizable Keypad



Available with Full Key Illumination

Graphic Series Keypads feature customizable keytop legends. Keypad layouts are customized by inserting legend tiles into the transparent keycap, then securing the self-locking cap onto the key base. Once pressed into place, the keycap provides a permanent cover, resistant to water, dust, and physical damage.

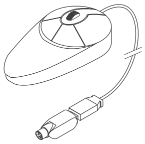
Illuminated Graphic Series Keypads are perfect for dimly lit environments. As well as featuring easily customizable legends, each keytop can illuminated in a wide range of colors using the translucent color tiles. Available with white or red/green LED key illumination.

- Fully customizable impact-resistant keypads
- Ideal for commercial and industrial applications
- Rain and splash proof to IP54 specifications
- 4, 12, and 16 key formats available
- Case Color: Black
- Operational life: 2 million cycles (min) per key
- Operational temp. range -10°C to +85°C
- Gold on nickel plated FR4 contact PCB
- Connector: 0.1" pitch, gold plated, square pin, mail

Fig.	Description	Digi-Key Part No.	Price Each	MGR Part No.
5	4-Key Graphic Keypad and 5 Keycaps, Common Bus	MGR1547-ND	24.80	GS040203
	12-Key Graphic Keypad and 13 Keycaps, Black, Matrix	MGR1548-ND	36.00	GS120203
	16-Key Graphic Keypad and 17 Keycaps, Black, Matrix	MGR1549-ND	44.00	GS160203
	4-Key Illuminated Graphic Keypad (Red/Green LED)	MGR1568-ND	29.67	GSRG040203
	12-Key Illuminated Graphic Keypad (Red/Green LED)	MGR1569-ND	43.09	GSRG120203
	16-Key Illuminated Graphic Keypad (Red/Green LED)	MGR1570-ND	52.67	GSRG160203
	4-Key Illuminated Graphic Keypad (White LED)	MGR1571-ND	34.62	GSLW040203
	12-Key Illuminated Graphic Keypad (White LED)	MGR1572-ND	53.87	GSLW120203
	16-Key Illuminated Graphic Keypad (White LED)	MGR1573-ND	70.23	GSLW160203
	Legend Set A, 0-9, Arithmetic Function, Arrows, 26 Tiles	MGR1550-ND	2.60	GSA0T203
	Legend Set B, Computer Legend, Arrows, 26 Tiles	MGR1551-ND	2.60	GSB0T203
	Legend Set C, Alphabet Legend, 26 Tiles	MGR1552-ND	2.60	GSC0T203
	Legend Set D, F1-F4 Keys, Misc. Keys, 26 Tiles	MGR1553-ND	2.60	GSD0T203
	Legend Set E, Blank Keys Legend, 26 Tiles	MGR1554-ND	2.60	GSE0T203
	Legend Set F, 0-9, Ent., Off, +, -, #, *, 26 Tiles	MGR1555-ND	2.60	GSF0T203
	Gray Colored Legends, 30 Tiles	MGR1556-ND	2.58	GS000203
	Red Colored Legends, 30 Tiles	MGR1557-ND	2.58	GS000303
	Green Colored Legends, 30 Tiles	MGR1558-ND	2.58	GS000403
	Blue Colored Legends, 30 Tiles	MGR1559-ND	2.58	GS000503
	Yellow Colored Legends, 30 Tiles	MGR1560-ND	2.58	GS000603
	Replacement Clear Keycaps, 4 pieces	MGR1561-ND	5.17	GS000003

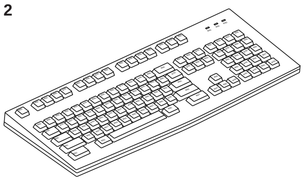
CHERRY Computer Keyboards

Fig. 1



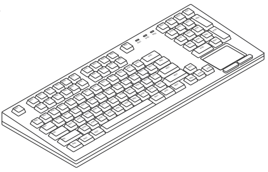
M-2000: Work more effectively thanks to unsurpassed resolution and tracking speed. Assign functions to the additional keys to suit your requirements. Comes complete with Power Wheel Mouse software for easy programming.

Fig. 2



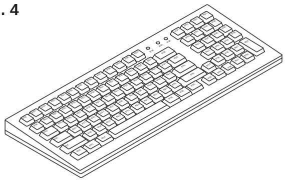
G83-6104: Economical, Windows compatible, 104-key laser printed caps with auto-repeat and full travel keyswitches.

Fig. 3



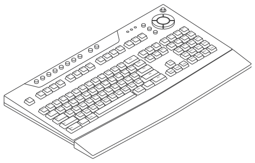
G80-11900: Compact 104-key IBM compatible keyboard with integrated, 2 button touchpad. Perfect for space critical applications.

Fig. 4



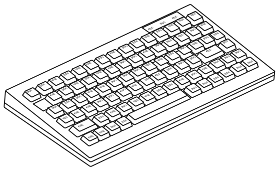
G81-1800: Compact, 104 key, Windows compatible, data entry keyboard, featuring full travel, sealed contact and membrane, AT or PS/2 interface.

Fig. 5



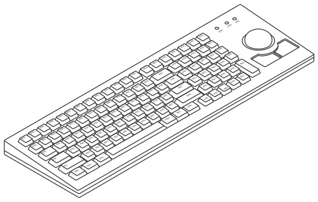
G83-13000: The Blueline which is programmable for fast internet, e-mail and multimedia access at the touch of a single key. 19 programmable Hot keys with detachable wrist rest. Light grey with blue accents.

Fig. 6



G84-4100: Notebook size for applications with space limitations or mobile systems. Windows compatible.

Fig. 7



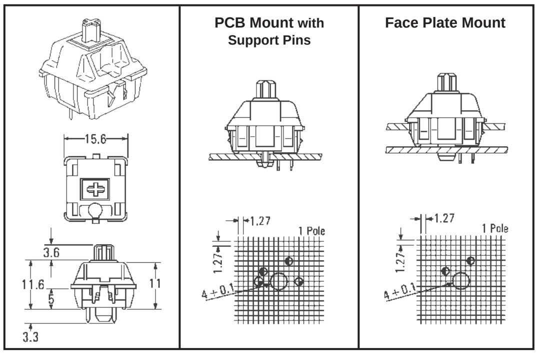
G84-4400: Notebook size with two functions in a single device. Ultra-low profile and an integrated, high quality, PS/2 compatible 16mm trackball, makes this keyboard ideal for applications where space is limited.

Fig.	Description	Digi-Key Part No.	Price Each	Cherry Part No.
	Power Wheel Mouse			
1	Scroll Wheel, 5 Key, Fully Programmable, PS/2 or USB Interface, Light Grey and Blue in Color	CH754-ND	32.00	M-2000
	Full Size - 104 Key Computer Keyboards			
2	Full Size, Microsoft Windows™, Laser-Printed Keycaps, PS/2 Interface, Beige in Color	CH216-ND	28.35	G83-6104LPNUS
	Full Size, Microsoft Windows™, Laser-Printed Keycaps, PS/2 Interface, Light Grey in Color	CH738-ND	25.50	G83-6104LPNUS-0
3	Space Saving Size, IBM Compatible with Touch Pad, PS/2 Interface, for PC Systems, AT and Serial Adapters Included, Black in Color	CH718-ND	192.10	G80-11900HVMUS
	Space Saving Size, IBM Compatible with Touch Pad, PS/2 Interface, for PC Systems, AT and Serial Adapters Included, Beige in Color	CH720-ND	175.10	G80-11900LTMUS
4	Space Saving, Microsoft Windows™, PS/2 Interface, Linear Feel with Laser-Printed Keycaps, Light Grey in Color	CH731-ND	68.00	G81-1800LPMUS-0
5	Internet Keyboard, Full-Size, 19 Hot Keys, USB, PS/2 Interface, Detachable Ergonomic Palm Rest, Light Grey w/Blue Accents	CH736-ND	40.80	G83-13000LCAUS-0
	Notebook Style 83 - Key Computer Keyboards			
6	PS/2 Interface, Tampo-Printed Caps, Beige in Color	CH217-ND	75.60	G84-4100PPAUS
	USB Interface, Tampo-Printed Caps, Light Grey in Color	CH742-ND	76.50	G84-4100PCAUS-0
	PS/2 Interface, Tampo-Printed Caps, Black in Color	CH746-ND	78.20	G84-4100PRAUS
	USB Interface, Tampo-Printed Caps, Black in Color	CH747-ND	86.70	G84-4100PTAUS
7	With Integrated Trackball, PS/2 Interface, Tampo-Printed Caps, Black in Color	CH750-ND	178.50	G84-4400PRBUS
	With Integrated Trackball, USB Interface, Tampo-Printed Caps, Black in Color	CH751-ND	178.50	G84-4400PTBUS
	With Integrated Trackball, USB Interface, Tampo-Printed Caps, Beige in Color	CH752-ND	168.30	G84-4400PUBUS

CHERRY MX Key Switches

Main Advantages: • The MX is a modern full-travel low-profile keyswitch • The keyswitch module is designed to meet all current ergonomic standards demanded for word and data processing applications • Gold wire crossbar contacts ensure long life expectancy • High reliability also during quick actuation • All switches are momentary N/O type

Specifications: • Max. Voltage 12 • Max. Current 10mA • Contact Resistance 200mΩ • Capacity at 1MHz <1pf • Bouncing Time at 0.4 ≤5ms



PCB Mount with Support Pins

Face Plate Mount

Description	Digi-Key Part No.	Price Each 1	10	50	Cherry Part No.
PCB Mount					
Linear Feel	CH160-ND	.86	.77	.64	MX1A-11NW
Click Tactile Feel	CH197-ND	.95	.84	.70	MX1A-EINW
PCB Mount Soft Tactile Feel	CH310-ND	.70	.63	.53	MX1A-C1NW
PCB Mount with Diode	CH311-ND	2.16	1.92	1.60	MX1A-11DW
Face Plate Mount					
Linear Feel	CH162-ND	.86	.77	.64	MX1A-11NN
Click Tactile Feel	CH196-ND	.86	.77	.63	MX1A-EINN
Soft Tactile Feel	CH198-ND	1.16	1.04	.87	MX1A-CINN
Trans. Cover - use w/ CH696-ND	CH695-ND	.84	.75	.59	6287379
Keycap - use with MX Series Switch, Beige	CH696-ND	.84	.75	.59	6287750

Storm data entry technology Environmentally Sealed Keypads

700 Series Sealed Keypads

The 700 Series of sealed keypads intended for use individually, or as modular building blocks to create more complex key-panel layouts. Unlike other sealed keypads, the 700 series have excellent tactile characteristics providing fast and reliable data input. When a keytop is depressed a conductive rubber pill makes contact with a gold on nickel plated PCB. These contact materials provide the highest level of protection against corrosive atmospheres and contact oxidization. Each keypad has interchangeable keytop legend tiles. Keypads come in two colors, gray or black, and feature a matrix style output. Instructions and pinouts are included. Compatible with Storm Universal Encoder part number "MGR1301-ND".

Fig. 1

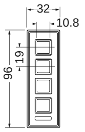


Fig. 2

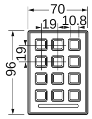


Fig. 3

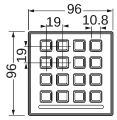


Fig. 4

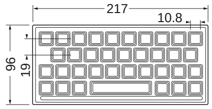


Fig.	Description	Digi-Key Part No.	Price Each
1	4 Key Keypad with Legend Set A, Gray	MGR1101-ND	26.01
	4 Key Keypad with Legend Set A, Black	MGR1111-ND	26.01
2	12 Key Keypad with Legend Set A, Gray	MGR1102-ND	34.68
	12 Key Keypad with Legend Set A, Black	MGR1112-ND	34.68
3	16 Key Keypad with Legend Set A, Gray	MGR1103-ND	44.96
	16 Key Keypad with Legend Set A, Black	MGR1113-ND	44.96
4	36 Key Keypad with Legend Set B & C, Gray	MGR1104-ND	77.16
	36 Key Keypad with Legend Set B & C, Black	MGR1114-ND	77.16
—	Legend Set A 0-9, Arith. Function, Arrows	MGR1201-ND	4.30
	Legend Set B Computer Legend, Arrows	MGR1202-ND	4.30
	Legend Set C Alphabet Legend	MGR1203-ND	4.30
	Legend Set D F1-F12, Misc. Keys	MGR1204-ND	4.30
	Legend Set E Blank Legend	MGR1205-ND	4.30
	Legend Set F 0-9, Ent, Off, +, -, #, *	MGR1206-ND	4.30
	Under Panel Mount Clip (2 pcs.)	MGR1401-ND	3.87

NKK® SWITCHES

Miniature Toggle Switches

M Series: Over 350,000 different configurations possible, with the most popular listed here. Epoxy sealed terminals, high torque bushings, antijamming levers. Available as PCB mount or solder lug terminal for ease of wiring. **Electrical Capacity:** 6A @ 125V AC or 30VDC. **Dielectric strength:** 1,500V AC min. **Mechanical Life:** 100,000 operations min., 50,000 operations min. for flat and locking lever. **Electrical Life:** 25,000 operations min. **Operating Temperature:** -30°C to + 85°C. **Angle of Throw:** 25° **Standard Hardware:** 2 hex nuts, 1 locking ring, 1 lockwasher

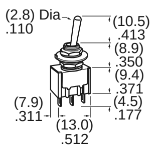
Fig.	Circuit	Switching Function	Options (see diagrams) Act-uator	Bush-ing	Contact Material*	Terminal Option	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
Bat Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	S	S1	W	01	360-1057-ND	4.20	3.36	2.66	M2012SS1W01
	SPDT	On-Off-On	S	S1	W	01	360-1058-ND	4.92	3.94	3.12	M2013SS1W01
	SPDT	On-Mom	S	S1	W	01	360-1059-ND	5.52	4.42	3.50	M2015SS1W01
	SPDT	Mom-Off-Mom	S	S1	W	01	360-1060-ND	5.64	4.52	3.58	M2018SS1W01
	SPDT	On-Off-Mom	S	S1	W	01	360-1061-ND	5.64	4.52	3.58	M2019SS1W01
	SP3T	On-On-On	S	S1	W	01	360-1062-ND†	9.00	7.20	5.70	M2024SS1W01
	SP3T	Mom-On-Mom	S	S1	W	01	360-1063-ND†	9.48	7.59	6.01	M2026SS1W01
	SP3T	On-On-Mom	S	S1	W	01	360-1064-ND†	9.48	7.59	6.01	M2027SS1W01
	DPDT	On-On	S	S1	W	01	360-1065-ND	6.30	5.04	3.99	M2022SS1W01
	DPDT	On-Off-On	S	S1	W	01	360-1066-ND	7.32	5.86	4.64	M2023SS1W01
	DPDT	On-Mom	S	S1	W	01	360-1067-ND	8.40	6.72	5.32	M2025SS1W01
	DPDT	Mom-Off-Mom	S	S1	W	01	360-1068-ND	8.76	7.01	5.55	M2028SS1W01
	DPDT	On-Off-Mom	S	S1	W	01	360-1069-ND	8.76	7.01	5.55	M2029SS1W01
	DP3T	On-On-On	S	S1	W	01	360-1070-ND††	21.00	16.80	13.30	M2044SS1W01
	DP3T	Mom-On-Mom	S	S1	W	01	360-1071-ND††	21.00	16.80	13.30	M2046SS1W01
	DP3T	On-On-Mom	S	S1	W	01	360-1072-ND††	21.00	16.80	13.30	M2047SS1W01
	3PDT	On-On	S	S1	W	01	360-1073-ND	10.50	8.40	6.65	M2032SS1W01
	3PDT	On-Off-On	S	S1	W	01	360-1074-ND	13.20	10.56	8.36	M2033SS1W01
	3PDT	Mom-Off-Mom	S	S1	W	01	360-1075-ND	16.20	12.96	10.26	M2038SS1W01
	4PDT	On-On	S	S1	W	01	360-1076-ND	14.46	11.57	9.16	M2042SS1W01
	4PDT	On-Off-On	S	S1	W	01	360-1077-ND	17.28	13.83	10.95	M2043SS1W01
Bat Lever, Threaded Bushing, PC Terminals											
2	SPDT	On-On	S	S1	W	03	360-1078-ND	4.35	3.48	2.76	M2012SS1W03
	SPDT	On-Off-On	S	S1	W	03	360-1079-ND	5.07	4.06	3.22	M2013SS1W03
	SPDT	On-Mom	S	S1	W	03	360-1080-ND	5.67	4.54	3.60	M2015SS1W03
	SPDT	Mom-Off-Mom	S	S1	W	03	360-1081-ND	5.79	4.64	3.67	M2018SS1W03
	SPDT	On-Off-Mom	S	S1	W	03	360-1082-ND	5.79	4.64	3.67	M2019SS1W03
	SP3T	On-On-On	S	S1	W	03	360-1083-ND†	9.30	7.44	5.89	M2024SS1W03
	DPDT	On-On	S	S1	W	03	360-1084-ND	6.60	5.28	4.18	M2022SS1W03
	DPDT	On-Off-On	S	S1	W	03	360-1085-ND	7.62	6.10	4.83	M2023SS1W03
	3PDT	On-On	S	S1	W	03	360-1086-ND	10.95	8.76	6.94	M2032SS1W03
	4PDT	On-On	S	S1	W	03	360-1087-ND	15.03	12.03	9.52	M2042SS1W03
Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B	B1	W	01	360-1029-ND	6.84	5.48	4.34	M2012BB1W01
	SPDT	On-Off-On	B	B1	W	01	360-1030-ND	7.56	6.05	4.79	M2013BB1W01
	SPDT	On-Mom	B	B1	W	01	360-1031-ND	8.16	6.53	5.17	M2015BB1W01
	SPDT	Mom-Off-Mom	B	B1	W	01	360-1032-ND	8.28	6.63	5.25	M2018BB1W01
	SPDT	On-Off-Mom	B	B1	W	01	360-1033-ND	8.28	6.63	5.25	M2019BB1W01
	DPDT	On-On	B	B1	W	01	360-1034-ND	8.94	7.16	5.67	M2022BB1W01
	DPDT	On-Off-On	B	B1	W	01	360-1035-ND	9.96	7.97	6.31	M2023BB1W01
	3PDT	On-On	B	B1	W	01	360-1036-ND	13.14	10.52	8.33	M2032BB1W01
	4PDT	On-On	B	B1	W	01	360-1037-ND	17.10	13.68	10.83	M2042BB1W01
Flat Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	E	S1	W	01	360-1043-ND	5.40	4.32	3.42	M2012ES1W01
	SPDT	On-Off-On	E	S1	W	01	360-1044-ND	6.12	4.90	3.88	M2013ES1W01
	SPDT	On-Mom	E	S1	W	01	360-1045-ND	6.72	5.38	4.26	M2015ES1W01
	SPDT	Mom-Off-Mom	E	S1	W	01	360-1046-ND	6.84	5.48	4.34	M2018ES1W01
	SPDT	On-Off-Mom	E	S1	W	01	360-1047-ND	6.84	5.48	4.34	M2019ES1W01
	SP3T	On-On-On	E	S1	W	01	360-1048-ND†	10.20	8.16	6.46	M2024ES1W01
	DPDT	On-On	E	S1	W	01	360-1049-ND	7.50	6.00	4.75	M2022ES1W01
	DPDT	On-Off-On	E	S1	W	01	360-1050-ND	8.52	6.82	5.40	M2023ES1W01
	DPDT	On-Mom	E	S1	W	01	360-1051-ND	9.60	7.68	6.08	M2025ES1W01
	DPDT	On-Off-Mom	E	S1	W	01	360-1052-ND	9.96	7.97	6.31	M2029ES1W01
	3PDT	On-On	E	S1	W	01	360-1053-ND	11.70	9.36	7.41	M2032ES1W01
	3PDT	On-Off-On	E	S1	W	01	360-1054-ND	14.40	11.52	9.12	M2033ES1W01
	4PDT	On-On	E	S1	W	01	360-1055-ND	15.66	12.53	9.92	M2042ES1W01
	4PDT	On-Off-On	E	S1	W	01	360-1056-ND	18.48	14.79	11.71	M2043ES1W01
Bat Lever, Threaded Keyway Bushing, Solder Lug											
1	SPDT	On-On	S2	S1	W	01	360-1172-ND	4.20	3.36	2.66	M2012S2S1W01
	SPDT	On-On	S2	A1	W	01	360-1155-ND	4.20	3.36	2.66	M2012S2A1W01
	DPDT	On-On	S2	A1	W	01	360-1156-ND	6.30	5.04	3.99	M2022S2A1W01
Bat Lever, Threaded Keyway Bushing, Straight PC Terminal											
1	SPDT	On-On	S2	A1	W	03	360-1157-ND	4.35	3.48	2.76	M2012S2A1W03
Large Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B2	B1	W	01	360-1038-ND	7.08	5.67	4.49	M2012B2B1W01
	SPDT	On-Off-On	B2	B1	W	01	360-1039-ND	7.80	6.24	4.94	M2013B2B1W01
	SPDT	Mom-Off-Mom	B2	B1	W	01	360-1040-ND	8.52	6.82	5.40	M2018B2B1W01
	DPDT	On-On	B2	B1	W	01	360-1041-ND	9.18	7.35	5.82	M2022B2B1W01
	DPDT	On-Off-On	B2	B1	W	01	360-1042-ND	10.20	8.16	6.46	M2023B2B1W01

*W=Silver rated 6A @ 125V AC and 3A @ 250V AC †=SP3T uses a Dp Body ††=DP3T uses a 4p Body

(Continued)

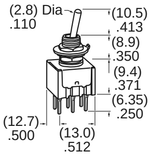
Dim. in (mm) Inch

Fig. 1



(SPDT Shown)

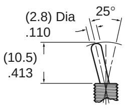
Fig. 2



(DPDT Shown)

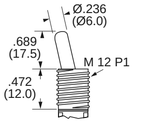
Actuators

S



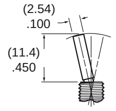
(Standard)

B



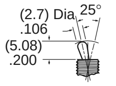
(Large)

E



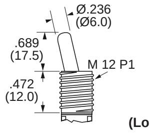
(Flat)

S2



(Mini)

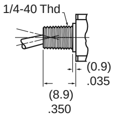
B2



(Long Large)

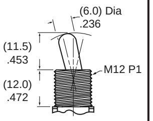
Bushings

S1



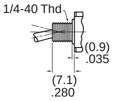
(Standard)

B1



(Large)

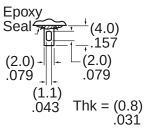
A1



(Short Bushing)

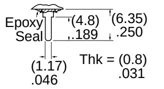
Terminals

01



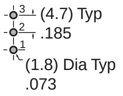
(Solder)

03

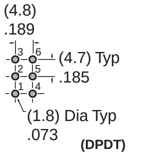


(PCB)

Footprints



(SPDT)



(DPDT)

Miniature Toggle Switches *(Cont.)*

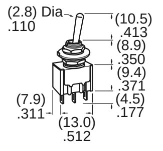
Dim. in (mm) Inch

Fig.	Circuit	Switching Function	Options (see diagrams) Act-uator	Bush-ing	Contact Material*	Terminal Option	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
Bat Lever, Threaded Splashproof Bushing, Solder Lug											
1	SPDT	On-On	S	D3	W	01	360-1088-ND	5.40	4.32	3.42	M2012SD3W01
	SPDT	On-Off-On	S	D3	W	01	360-1089-ND	6.12	4.90	3.88	M2013SD3W01
	SPDT	On-Mom	S	D3	W	01	360-1090-ND	6.72	5.38	4.26	M2015SD3W01
	SPDT	Mom-Off-Mom	S	D3	W	01	360-1091-ND	6.84	5.48	4.34	M2018SD3W01
	SPDT	On-Off-Mom	S	D3	W	01	360-1092-ND	6.84	5.48	4.34	M2019SD3W01
	DPDT	On-On	S	D3	W	01	360-1093-ND	7.50	6.00	4.75	M2022SD3W01
	DPDT	On-Off-On	S	D3	W	01	360-1094-ND	8.52	6.82	5.40	M2023SD3W01
	DPDT	Mom-Off-Mom	S	D3	W	01	360-1095-ND	9.96	7.97	6.31	M2028SD3W01
Bat Lever, Threaded Splashproof Bushing, Solder Lug											
1	SPDT	On-On	S	D3	G	01	360-1140-ND	6.06	4.85	3.84	M2012SD3G01
	SPDT	On-Off-On	S	D3	G	01	360-1141-ND	6.78	5.43	4.30	M2013SD3G01
	SPDT	On-Mom	S	D3	G	01	360-1142-ND	7.38	5.91	4.68	M2015SD3G01
	SPDT	Mom-Off-Mom	S	D3	G	01	360-1143-ND	7.50	6.00	4.75	M2018SD3G01
	DPDT	On-On	S	D3	G	01	360-1144-ND	8.79	7.04	5.57	M2022SD3G01
Bat Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	S	S1	G	01	360-1118-ND	4.86	3.89	3.08	M2012SS1G01
	SPDT	On-Off-On	S	S1	G	01	360-1119-ND	5.58	4.47	3.54	M2013SS1G01
	SPDT	On-Mom	S	S1	G	01	360-1120-ND	6.18	4.95	3.92	M2015SS1G01
	SPDT	Mom-Off-Mom	S	S1	G	01	360-1121-ND	6.30	5.04	3.99	M2018SS1G01
	SPDT	On-Off-Mom	S	S1	G	01	360-1122-ND	6.30	5.04	3.99	M2019SS1G01
	SP3T	On-On-On	S	S1	G	01	360-1123-ND†	10.29	8.24	6.52	M2024SS1G01
	SP3T	Mom-On-Mom	S	S1	G	01	360-1124-ND†	10.77	8.62	6.83	M2026SS1G01
	SP3T	On-On-Mom	S	S1	G	01	360-1125-ND†	10.77	8.62	6.83	M2027SS1G01
	DPDT	On-On	S	S1	G	01	360-1126-ND	7.59	6.08	4.81	M2022SS1G01
	DPDT	On-Off-On	S	S1	G	01	360-1127-ND	8.61	6.89	5.46	M2023SS1G01
	3PDT	On-On	S	S1	G	01	360-1128-ND	12.45	9.96	7.89	M2032SS1G01
	4PDT	On-On	S	S1	G	01	360-1129-ND	17.04	13.64	10.80	M2042SS1G01
Bat Lever, Threaded Bushing, PC Terminal											
2	SPDT	On-On	S	S1	G	03	360-1130-ND	4.98	3.99	3.16	M2012SS1G03
	SPDT	On-Off-On	S	S1	G	03	360-1131-ND	5.70	4.56	3.61	M2013SS1G03
	SPDT	On-Mom	S	S1	G	03	360-1132-ND	6.30	5.04	3.99	M2015SS1G03
	SPDT	Mom-Off-Mom	S	S1	G	03	360-1133-ND	6.42	5.14	4.07	M2018SS1G03
	SPDT	On-Off-Mom	S	S1	G	03	360-1134-ND	6.42	5.14	4.07	M2019SS1G03
	SP3T	On-On-On	S	S1	G	03	360-1135-ND†	10.59	8.48	6.71	M2024SS1G03
	DPDT	On-On	S	S1	G	03	360-1136-ND	7.89	6.32	5.00	M2022SS1G03
	DPDT	On-Off-On	S	S1	G	03	360-1137-ND	8.91	7.13	5.65	M2023SS1G03
	3PDT	On-On	S	S1	G	03	360-1138-ND	12.87	10.30	8.16	M2032SS1G03
	4PDT	On-On	S	S1	G	03	360-1139-ND	17.64	14.12	11.18	M2042SS1G03
Locking Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	L	L1	W	01	360-1096-ND	7.29	5.84	4.62	M2012LL1W01
	SPDT	On-Off-On	L	L1	W	01	360-1097-ND	8.01	6.41	5.08	M2013LL1W01
	SPDT	On-Mom	L	L1	W	01	360-1098-ND	8.61	6.89	5.46	M2015LL1W01
	SPDT	Mom-Off-Mom	L	L1	W	01	360-1099-ND	8.73	6.99	5.53	M2018LL1W01
	SPDT	On-Off-Mom	L	L1	W	01	360-1100-ND	8.73	6.99	5.53	M2019LL1W01
	DPDT	On-On	L	L1	W	01	360-1101-ND	9.39	7.52	5.95	M2022LL1W01
	DPDT	On-Off-On	L	L1	W	01	360-1102-ND	10.41	8.33	6.60	M2023LL1W01
	3PDT	On-On	L	L1	W	01	360-1103-ND	13.59	10.88	8.61	M2032LL1W01
	3PDT	On-Off-On	L	L1	W	01	360-1104-ND	16.29	13.04	10.32	M2033LL1W01
	4PDT	On-On	L	L1	W	01	360-1105-ND	17.55	14.04	11.12	M2042LL1W01
Locking Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	L	L1	G	01	360-1145-ND	7.95	6.36	5.04	M2012LL1G01
	SPDT	On-Off-On	L	L1	G	01	360-1146-ND	8.67	6.94	5.50	M2013LL1G01
	SPDT	On-Mom	L	L1	G	01	360-1147-ND	9.27	7.42	5.88	M2015LL1G01
	SPDT	On-Off-Mom	L	L1	G	01	360-1148-ND	9.39	7.52	5.95	M2019LL1G01
	DPDT	On-On	L	L1	G	01	360-1149-ND	10.68	8.55	6.77	M2022LL1G01
Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B	B1	G	01	360-1106-ND	7.50	6.00	4.75	M2012BB1G01
	SPDT	On-Off-On	B	B1	G	01	360-1107-ND	8.22	6.58	5.21	M2013BB1G01
Large Bat Lever, Large Threaded Bushing, Solder Lug											
1	SPDT	On-On	B2	B1	G	01	360-1108-ND	7.74	6.20	4.91	M2012B2B1G01
	DPDT	On-On	B2	B1	G	01	360-1109-ND	10.50	8.40	6.65	M2022B2B1G01

*W=Silver rated 6A @ 125V AC & 3A @ 250V AC G=Gold rated 0.4VA max. @ 28V AC/DC max. †=SP3T uses a Dp Body.

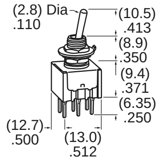
(Continued)

Fig. 1



(SPDT Shown)

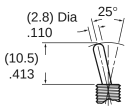
Fig. 2



(DPDT Shown)

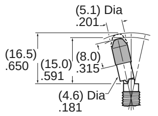
Actuators

S



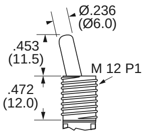
(Standard)

L



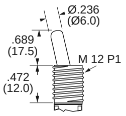
(Locking)

B



(Large)

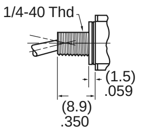
B2



(Long Large)

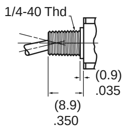
Bushings

D3



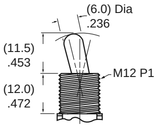
(Splashproof)

S1



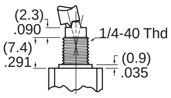
(Standard)

B1



(Large)

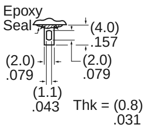
L1



(Locking)

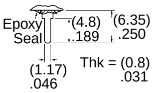
Terminals

01



(Solder)

03



(PCB)

NKK® SWITCHES

Miniature Toggle Switches *(Cont.)*

M2T Series: Interior bushing is sealed with o-ring which surrounds the actuator. Bushing and top of the housing are one molded piece, achieving the exterior seal. Ultrasonic welding is used to seal the bushing unit to the base. Terminals are epoxy sealed for safeguarding the switch at the base

Features: Electrical Capacity: Logic Level (code G): 0.4VA maximum @ 28V AC/DC maximum. **Dielectric Strength:** 1,000V AC minimum between contacts; 1,500V AC minimum between contacts and case. **Mechanical Life:** 100,000 operations minimum. **Electrical Life:** 50,000 operations minimum for gold; 25,000 operations minimum for silver. **Operating Temp Range:** -30°C through +85°C

B Series: Sealed body construction permits switches to be subjected to time- and money-saving automated soldering techniques. Can be safely cleaned of flux without fear of compromising operating characteristics.

Features: Electrical Capacity: Logic Level: 0.4VA maximum @ 28V AC/DC maximum. **Dielectric Strength:** 500V AC minimum. **Mechanical Life:** 100,000 operations min. for On-On and On-Off-On. **Electrical Life:** 50,000 operations min. **Operating Temp Range:** -30°C through +85°C

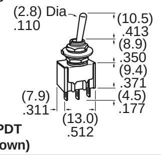
Dim. in (mm) Inch

Fig.	Circuit	Switching Function	Options (see diagrams)				Digi-Key Part No.	Price Each			NKK Part No.
			Act-uator	Bush-ing	Contact Material*	Terminal Option		1	25	100	
Flattened Lever, Threaded Bushing, Solder Lug											
1	SPDT	On-On	E	S1	G	01	360-1110-ND	6.06	4.85	3.84	M2012ES1G01
	SPDT	On-Off-On	E	S1	G	01	360-1111-ND	6.78	5.43	4.30	M2013ES1G01
	SP3T	On-On-On	E	S1	G	01	360-1112-ND†	11.49	9.20	7.28	M2024ES1G01
	DPDT	On-On	E	S1	G	01	360-1113-ND	8.79	7.04	5.57	M2022ES1G01
	DPDT	On-Off-On	E	S1	G	01	360-1114-ND	9.81	7.85	6.22	M2023ES1G01
	3PDT	On-On	E	S1	G	01	360-1115-ND	13.65	10.92	8.65	M2032ES1G01
	4PDT	On-On	E	S1	G	01	360-1116-ND	18.24	14.60	11.56	M2042ES1G01
	4PDT	On-Off-On	E	S1	G	01	360-1117-ND	21.06	16.85	13.34	M2043ES1G01
Flattened Bat Lever, Threaded Bushing, PC Terminal											
1	SPDT	On-On	E	S1	W	03	360-1150-ND	5.55	4.44	3.52	M2012ES1W03
	SPDT	On-Off-On	E	S1	W	03	360-1151-ND	6.27	5.02	3.98	M2013ES1W03
	SPDT	Mom-Off-Mom	E	S1	W	03	360-1152-ND	6.99	5.60	4.43	M2018ES1W03
Bat Lever, Smooth Keyway Bushing, Vertical PC Terminal											
2	SPDT	On-On	S2	A2	G	40	360-1165-ND	5.94	4.76	3.77	M2012S2A2G40
	SPDT	On-Off-On	S2	A2	G	40	360-1166-ND	6.66	5.33	4.22	M2013S2A2G40
	SPDT	On-Off-Mom	S2	A2	G	40	360-1167-ND	7.38	5.91	4.68	M2019S2A2G40
	DPDT	On-On	S2	A2	G	40	360-1168-ND	9.81	7.85	6.22	M2022S2A2G40
Bat Lever, Smooth Keyway Bushing, Straight PC Terminal											
—	SPDT	On-On	S2	A2	W	13	360-1169-ND	4.65	3.72	2.95	M2012S2A2W13
—	SPDT	On-On	S2	A2	G	13	360-1158-ND	5.31	4.25	3.37	M2012S2A2G13
Bat Lever, Smooth Keyway Bushing, Right Angle PC Terminal											
2	SPDT	On-On	S2	A2	G	30	360-1159-ND	5.64	4.52	3.58	M2012S2A2G30
	SPDT	On-Off-On	S2	A2	G	30	360-1160-ND	6.36	5.09	4.03	M2013S2A2G30
	SPDT	Mom-Off-Mom	S2	A2	G	30	360-1161-ND	7.08	5.67	4.49	M2018S2A2G30
	SPDT	On-Off-Mom	S2	A2	G	30	360-1162-ND	7.08	5.67	4.49	M2019S2A2G30
	DPDT	On-On	S2	A2	G	30	360-1163-ND	9.12	7.30	5.78	M2022S2A2G30
	3PDT	On-On	S2	A2	G	30	360-1164-ND	14.82	11.86	9.39	M2032S2A2G30
	SPDT	On-On	S2	A2	W	30	360-1170-ND	4.98	3.99	3.16	M2012S2A2W30
	DPDT	On-On	S2	A2	W	30	360-1171-ND	7.83	6.27	4.96	M2022S2A2W30
	SPDT	On-On	S	A2	G	30	360-1153-ND	5.64	4.52	3.58	M2012SA2G30
	SPDT	On-Off-On	S	A2	G	30	360-1154-ND	6.36	5.09	4.03	M2013SA2G30
Washable Mini Toggle Switches											
3	SPDT	On-On	—	—	G	30	360-1173-ND	5.82	4.66	3.69	M2T12S4A5G30
	SPDT	On-Off-On	—	—	G	30	360-1174-ND	6.36	5.09	4.03	M2T13S4A5G30
	SPDT	Mom-Off-Mom	—	—	G	30	360-1175-ND	7.02	5.62	4.45	M2T18S4A5G30
4	SPDT	On-On	—	—	G	40	360-1176-ND	6.12	4.90	3.88	M2T12S4A5G40
	SPDT	On-Off-On	—	—	G	40	360-1177-ND	6.66	5.33	4.22	M2T13S4A5G40
	SPDT	Mom-Off-Mom	—	—	G	40	360-1178-ND	7.32	5.86	4.64	M2T18S4A5G40
5	DPDT	On-On	—	—	G	40	360-1179-ND	9.99	8.00	6.33	M2T22S4A5G40
	SPDT	On-On	—	—	G	03	360-1180-ND	5.16	4.13	3.27	M2T12SA5G03
	SPDT	On-Off-On	—	—	G	03	360-1181-ND	5.70	4.56	3.61	M2T13SA5G03
	SPDT	Mom-Off-Mom	—	—	G	03	360-1182-ND	6.36	5.09	4.03	M2T18SA5G03
3	DPDT	On-On	—	—	G	03	360-1183-ND	8.07	6.46	5.12	M2T22SA5G03
	SPDT	On-On	—	—	G	30	360-1184-ND	5.82	4.66	3.69	M2T12SA5G30
Washable Sub-Mini Antistatic Toggle Switches											
6	SPDT	On-On	A	—	G	—	360-1012-ND	4.20	3.36	2.66	B12AP
	SPDT	On-Off-On	A	—	G	—	360-1013-ND	4.38	3.51	2.78	B13AP
	SPDT	On-Mom	A	—	G	—	360-1014-ND	4.50	3.60	2.85	B15AP
	DPDT	On-On	A	—	G	—	360-1015-ND	5.46	4.37	3.46	B22AP
	DPDT	On-Off-On	A	—	G	—	360-1016-ND	5.88	4.71	3.73	B23AP
	SPDT	On-On	A	—	G	—	360-1017-ND	4.56	3.65	2.89	B12JB
7	SPDT	On-On	J	—	G	—	360-1018-ND	4.92	3.94	3.12	B12JH
	SPDT	On-Off-On	J	—	G	—	360-1019-ND	5.10	4.08	3.23	B13JH
	SPDT	On-Mom	J	—	G	—	360-1020-ND	5.22	4.18	3.31	B15JH
	DPDT	On-On	J	—	G	—	360-1021-ND	6.54	5.24	4.15	B22JH
	DPDT	On-Off-On	J	—	G	—	360-1022-ND	6.96	5.57	4.41	B23JH
—	SPDT	On-On	J	—	G	—	360-1023-ND	4.92	3.94	3.12	B12JV
Washable Ultra Mini SMT Toggle Switches											
8	SPDT	On-On	A	—	G	—	360-1026-ND	5.70	4.56	3.61	G3T12AP
	SPDT	On-Off-On	A	—	G	—	360-1027-ND	6.12	4.90	3.88	G3T13AP
	DPDT	On-On	A	—	G	—	360-1028-ND	7.62	6.10	4.83	G3T22AP

Fig.	Circuit	Switching Function	Digi-Key Part No.	Price Each			Digi-Key Part No.	T&R Pricing	NKK Part No.
				1	25	100		500	
Washable Ultra-Miniature SMT Toggle Switch									
9	SPDT	On-On	360-1024-1-ND	6.00	4.80	3.80	360-1024-2-ND	1400.00	G3T12AH-R
	SPDT	On-Off-On	360-1025-1-ND	6.42	5.14	4.07	360-1025-2-ND	1498.00	G3T13AH-R

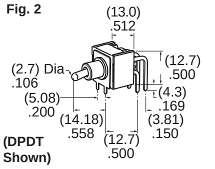
*W=Silver rated 6A @ 125V AC & 3A @ 250V AC G=Gold rated 0.4VA max. @ 28V AC/DC max. †=SP3T uses a Dp Body

Fig. 1



(SPDT Shown)

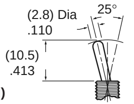
Fig. 2



(DPDT Shown)

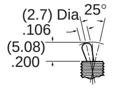
Actuators

S



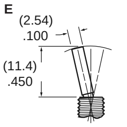
(Standard)

S2



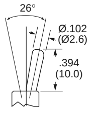
(Mini)

E



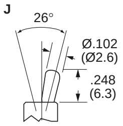
(Flat)

A



(Std. Wash)

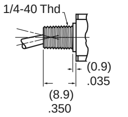
J



(Mini Wash)

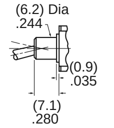
Bushings

S1



(Standard)

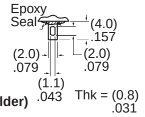
A2



(Unthreaded)

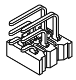
Terminals

01



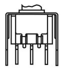
(Solder)

40



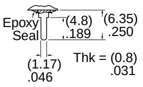
(Vert. Rt. Angle)

13



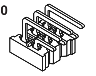
(Vert. Bracket)

03



(PCB)

30



(Rt Angle)

Fig. 3

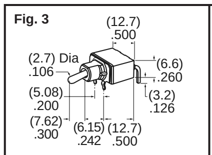


Fig. 4

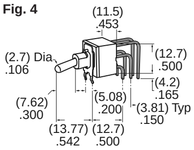
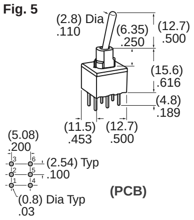
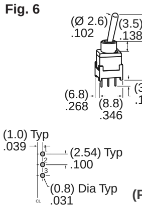


Fig. 5



(PCB)

Fig. 6



(PCB)

Fig. 7

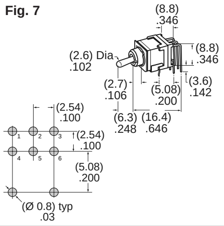


Fig. 8

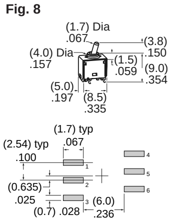
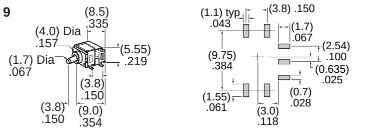
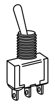


Fig. 9



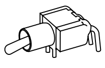
C&K Toggle Switches

Fig. 1



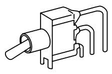
Vertical

Fig. 2



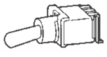
Right Angle

Fig. 3



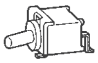
Vertical Rt. Angle

Fig. 4



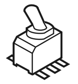
Mini SMT

Fig. 5



Ultra-Mini SMT

Fig. 6



Ultra-Mini SMT

9138B-ND C&K Switch Data Book............... **$2.95**

Contact Material Options

B Contacts and Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max.

Q End Contacts: Coin silver, silver plated. Center Contact & All Terminals: Copper alloy, silver plated. Rating: 7000 Series: 5A @ 120 VAC or 2A @ 250 VAC; E-Series: 7.5A @ 125 VAC or 3A @ 250 VAC; T-Series: 3A @ 120 VAC.

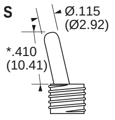
G End Contacts: Coin silver, with gold plate over nickel plate. Center Contact & All Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. or 5 amps @ 120 VAC or 28 VDC; 2 amps @ 250 VAC.

Circuit	Switching Function	Options (see diagrams)			Contact Material	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Price Each			C & K Part No.
		Actuator	Bushing	Termination				1	25	100	
Fig. 1 — Vertical											
SPDT	On-On	S	D9	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1002-ND	5.43	4.35	3.44	7101SD9CQE
	On-On	S	Y	C	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1003-ND	5.43	4.35	3.44	7101SYCBE
	On-On	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1004-ND	5.43	4.35	3.44	7101SYCQE
	On-On	S	H3	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1020-ND	7.02	5.62	4.45	7101SH3ZQE
	On-On	S	Y	Z	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1021-ND	5.28	4.23	3.35	7101SYZBE
SPDT	On-On	S	Y	Z	G	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1022-ND	5.67	4.54	3.60	7101SYZGE
	On-On	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1023-ND	5.28	4.23	3.35	7101SYZQE
	On-On	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1014-ND†	5.43	4.35	3.44	U11SYCQE
	On-On	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1040-ND†	5.28	4.23	3.35	U11SYZQE
	On-Off-On	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1005-ND	5.97	4.78	3.79	7103SYCQE
SPDT	On-Off-On	S	Y	Z	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1025-ND	5.82	4.66	3.69	7103SYZBE
	On-Off-On	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1026-ND	5.82	4.66	3.69	7103SYZQE
	On-Off-Mom	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1008-ND	6.09	4.88	3.86	7107SYCQE
	On-Off-Mom	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1028-ND	5.94	4.76	3.77	7107SYZQE
	Mom-Off-Mom	S	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1007-ND	6.09	4.88	3.86	7105SYCQE
SPDT	Mom-Off-Mom	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1027-ND	5.94	4.76	3.77	7105SYZQE
	On-Mom	S	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1029-ND	5.94	4.76	3.77	7108SYZQE
	On-On	S	Y	W6	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1213-ND	6.72	5.38	4.26	7101SYW6BE
	On-On	S	Y	W	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1379-ND	5.76	4.61	3.65	7101SYWBE
	On-On	S	Y	W	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1381-ND	5.76	4.61	3.65	7101SYWQE
	On-On	S	H	C	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1091-ND	5.49	4.40	3.48	T101SHCQE
	On-On	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1066-ND	5.67	4.54	3.60	T101SHZQE
SPDT	On-Off-On	S	H	C	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1092-ND	6.60	5.28	4.18	T103SHCQE
	On-Off-On	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1087-ND	6.78	5.43	4.30	T103SHZQE
	On-Off-Mom	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1181-ND	7.02	5.62	4.45	T107SHZQE
	Mom-Off-Mom	S	H	Z	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN1088-ND	6.78	5.43	4.30	T105SHZQE
	On-On	M	D	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1000-ND	5.43	4.35	3.44	7101MDCQE
SPDT	On-On	M	D	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1016-ND	5.28	4.23	3.35	7101MDZQE
	On-On	M	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1017-ND	5.28	4.23	3.35	7101MYZQE
	On-On	M	D9	V3	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1042-ND	6.60	5.28	4.18	7101MD9V3BE
	On-On	M	D9	V3	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1175-ND	6.60	5.28	4.18	7101MD9V3QE
	On-0ff-On	M	D9	V3	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1169-ND	7.14	5.72	4.53	7103MD9V3BE
SPDT	On-Off-On	M	D9	V3	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1176-ND	7.14	5.72	4.53	7103MD9V3QE
	On-On	S	D9	V3	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1043-ND	6.60	5.28	4.18	7101SD9V3BE
	On-On	P3	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1001-ND	7.38	5.91	4.68	7101P3YCQE
	On-On	P3	Y	Z	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1018-ND	7.23	5.79	4.58	7101P3YZBE
	On-On	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1019-ND	7.23	5.79	4.58	7101P3YZQE
SPDT	On-Off-On	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1024-ND	7.77	6.22	4.93	7103P3YZQE
	On-Off-Mom	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1142-ND	7.89	6.32	5.00	7107P3YZQE
	On-Mom	P3	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1143-ND	7.89	6.32	5.00	7108P3YZQE
	Mom-Off-Mom	P3	Y	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1006-ND	8.04	6.44	5.10	7105P3YCQE
	On-On	K2	—	C	B	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1215-ND	9.18	7.35	5.82	7101K2CBE
SPDT	On-On	K2	K2	C	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1216-ND	9.18	7.35	5.82	7101K2CQE
	On-On	K2	K2	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1125-ND	9.03	7.23	5.72	7101K2ZQE
	On-On	K2	K2	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1126-ND†	9.03	7.23	5.72	U11K2ZQE
	On-Off-On	K2	K2	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1151-ND	9.57	7.66	6.07	7103K2ZQE
	Mom-Off-Mom	K2	K2	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1152-ND	9.69	7.76	6.14	7105K2ZQE
SPDT	On-On	L1	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1147-ND	5.28	4.23	3.35	7101L1YZQE
	On-Off-On	L1	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1148-ND	5.82	4.66	3.69	7103L1YZQE
	On-On	L41(wht)	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1219-ND	7.53	6.03	4.77	7101L41YZQE1
	On-On	L41(blk)	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1220-ND	7.53	6.03	4.77	7101L41YZQE2
	On-On	L41(red)	Y	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1221-ND	7.53	6.03	4.77	7101L41YZQE3
SPDT	On-On	K12	K12	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1212-ND	9.03	7.23	5.72	7101K12ZQE
	On-Off-On	K12	K12	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1155-ND	9.57	7.66	6.07	7103K12ZQE
	Mom-Off-Mom	K12	K12	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1156-ND	9.69	7.76	6.14	7105K12ZQE
	On-On	T	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1164-ND	8.19	6.56	5.19	7101TZQE
	On-Off-On	T	—	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1165-ND	8.73	6.99	5.53	7103TZQE
SPDT	On-On	S	CW	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1159-ND	6.84	5.48	4.34	7101SCWZQE
	On-Off-On	S	CW	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1160-ND	7.38	5.91	4.68	7103SCWZQE
	Mom-Off-Mom	S	CW	Z	Q	.500 x .270 x .350 (12.70 x 6.86 x 8.89)	CKN1161-ND	7.50	6.00	4.75	7105SCWZQE
DPDT	On-On	S	Y	C	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1010-ND	8.01	6.41	5.08	7201SYCBE
	On-On	S	Y	C	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1011-ND	8.01	6.41	5.08	7201SYCQE
	On-On	S	Y	Z	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1034-ND	7.77	6.22	4.93	7201SYZBE
	On-On	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1035-ND	7.77	6.22	4.93	7201SYZQE
	On-On	S	Y	W	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1380-ND	8.67	6.94	5.50	7201SYWBE
	On-On	S	Y	W	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1382-ND	8.67	6.94	5.50	7201SYWQE
	On-Off-On	S	Y	C	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1012-ND	8.94	7.16	5.67	7203SYCQE
DPDT	On-Off-On	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1036-ND	8.70	6.96	5.51	7203SYZQE
	Mom-Off-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1129-ND	8.70	6.96	5.51	7205SYZQE
	On-Off-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1130-ND	8.94	7.16	5.67	7207SYZQE
	On-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1131-ND	8.94	7.16	5.67	7208SYZQE
	On-On	S	H	Z	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	CKN1089-ND	8.88	7.11	5.63	T201SHZQE
DPDT	On-On	S	H	C	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	CKN1182-ND	8.46	6.77	5.36	T201SHCQE
	On-Off-On	S	H	Z	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	CKN1090-ND	10.05	8.04	6.37	T203SHZQE
	On-On	M	D	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1031-ND	7.77	6.22	4.93	7201MDZQE
	On-On	M	D9	V3	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1170-ND	9.42	7.54	5.97	7201MD9V3BE
	On-Off-On	M	D9	V3	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1171-ND	10.35	8.28	6.56	7203MD9V3BE
DPDT	On-On	P3	Y	Z	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1032-ND	9.72	7.78	6.16	7201P3YZBE
	On-On	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1033-ND	9.72	7.78	6.16	7201P3YZQE
	Mom-Off-Mom	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1144-ND	10.65	8.52	6.75	7205P3YZQE
	On-Off-Mom	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1145-ND	10.89	8.72	6.90	7207P3YZQE
	On-Mom	P3	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1146-ND	10.89	8.72	6.90	7208P3YZQE
DPDT	On-On	K2	K2	C	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1217-ND	11.76	9.41	7.45	7201K2CBE
	On-On	K2	K2	C	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1127-ND	11.76	9.41	7.45	7201K2CQE
	On-On	K2	K2	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1128-ND	11.52	9.22	7.30	7201K2ZQE
	On-Off-On	K2	K2	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1153-ND	12.45	9.96	7.89	7203K2ZQE
	On-On	L1	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1149-ND	7.77	6.22	4.93	7201L1YZQE
DPDT	On-Off-On	L1	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1150-ND	8.70	6.96	5.51	7203L1YZQE
	On-Off-On	K12	K12	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1157-ND	12.45	9.96	7.89	7203K12ZQE
	On-On	T	—	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1166-ND	10.68	8.55	6.77	7201TZQE

(Continued)

Actuator Options

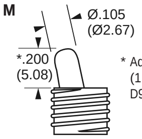
S



* Add .070 (1.78) for D, D9 bushings.

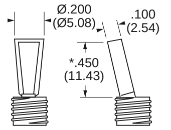
* Subtract .020 (.51) for H3 bushings.

M



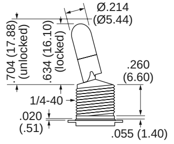
* Add .070 (1.78) for D, D9 bushings.

P3 with Antirotation

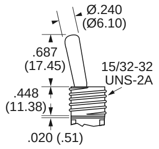


* Add .070 (1.78) for D, D9 bushings.

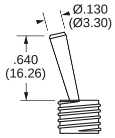
K2 Locking Lever



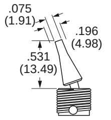
T



L1

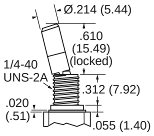


L41

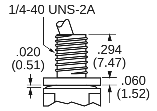


Plastic lever handle antirotation

K12 Locking Lever



CW Splashproof

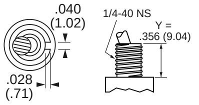


Internal actuator seal and external bushing seal washer standard.

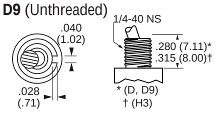
C&K Toggle Switches *(Cont.)*

Bushing Options

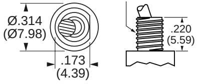
Y



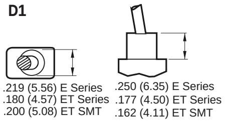
D, H3 (Threaded)
D9 (Unthreaded)



H 10-48 UNS
H9 (Unthreaded)

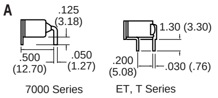


D1

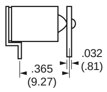


Termination Options

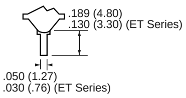
A



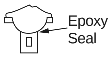
R



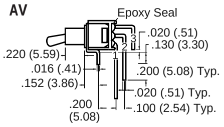
C



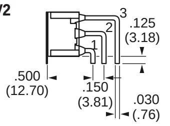
Z
Solder
Eyelet



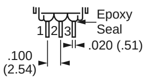
AV



AV2

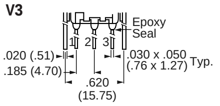


V3

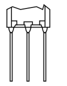


*** ET Series Only**

V3



W, W6



Wire -Wrap Terminal

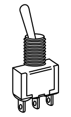
Circuit	Switching Function	Options (see diagrams) Actuator	Bushing	Termi- nation	Contact Material	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
DPDT	On-Off-On	T	—	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1167-ND	11.61	9.29	7.36	7203TZQE
	On-On	S	CW	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1162-ND	9.33	7.47	5.91	7201SCWZQE
	On-Off-On	S	CW	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1163-ND	10.26	8.21	6.50	7203SCWZQE
3PDT	On-On	S	Y	C	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1013-ND	13.59	10.88	8.61	7301SYCQE
	On-On	S	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1037-ND	13.23	10.59	8.38	7301SYZQE
	On-Off-On	S	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1135-ND	13.98	11.19	8.86	7303SYZQE
	Mom-Off-Mom	S	Y	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1136-ND	17.34	13.88	10.99	7305SYZQE
	On-Off-On	K2	K2	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1154-ND	17.73	14.19	11.23	7303K2ZQE
	On-Off-On	K12	K12	Z	Q	.500 x .650 x .415 (12.70 x 16.51 x 10.54)	CKN1158-ND	17.73	14.19	11.23	7303K12ZQE
4PDT	On-On	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1038-ND	18.30	14.64	11.59	7401SYZQE
	On-Off-On	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1137-ND	19.38	15.51	12.28	7403SYZQE
	Mom-Off-Mom	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1138-ND	21.03	16.83	13.32	7405SYZQE
3-Way Toggle Switches											
DPDT	On-On-On	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1132-ND	9.39	7.52	5.95	7211SYZQE
	On-On-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1133-ND	10.08	8.07	6.39	7213SYZQE
	Mom-On-Mom	S	Y	Z	Q	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1134-ND	10.08	8.07	6.39	7215SYZQE
4PDT	On-On-On	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1139-ND	22.23	17.79	14.08	7411SYZQE
	On-On-Mom	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1140-ND	22.23	17.79	14.08	7413SYZQE
	Mom-On-Mom	S	Y	Z	Q	.500 x .850 x .415 (12.70 x 21.59 x 10.54)	CKN1141-ND	22.23	17.79	14.08	7415SYZQE
Fig. 2 — Right Angle											
SPDT	On-On	S	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1049-ND	6.00	4.80	3.80	7101SD9ABE
	On-Off-On	S	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1051-ND	6.54	5.24	4.15	7103SD9ABE
	On-On	M	D	R	B	.365 x .500 x .284 (9.27 x 12.70 x 7.21)	CKN1044-ND	10.74	8.60	6.81	7101MDRBE
	On-On	M	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1045-ND	6.00	4.80	3.80	7101MD9ABE
	On-On	M	D9	A	G	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1046-ND	6.39	5.12	4.05	7101MD9AGE
	On-On	M	D9	A	Q	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1047-ND	6.00	4.80	3.80	7101MD9AQE
SPDT	On-Off-On	M	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1050-ND	6.54	5.24	4.15	7103MD9ABE
	Mom-Off-Mom	M	D9	A	B	.365 x .500 x .284 (9.27 x 12.70 x 7.21)	CKN1172-ND	6.66	5.33	4.22	7105MD9ABE
	On-Off-Mom	M	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1053-ND	6.66	5.33	4.22	7107MD9ABE
	On-On	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1067-ND	6.09	4.88	3.86	T101MH9ABE
	On-Off-On	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1068-ND	7.20	5.76	4.56	T103MH9ABE
	Mom-Off-Mom	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1386-ND	7.20	5.76	4.56	T105MH9ABE
	On-Off-Mom	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1387-ND	7.44	5.96	4.72	T107MH9ABE
	On-Mom	M	H9	A	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1388-ND	7.44	5.96	4.72	T108MH9ABE
	On-On	P3	D9	A	B	.500 x .500 x .270 (12.70 x 12.70 x 6.86)	CKN1048-ND	7.95	6.36	5.04	7101P3D9ABE
DPDT	On-On	M	D9	A	B	.500 x .500 x .450 (12.70 x 12.70 x 11.43)	CKN1055-ND	9.09	7.28	5.76	7201MD9ABE
	On-On	M	D9	A	Q	.500 x .500 x .450 (12.70 x 12.70 x 11.43)	CKN1056-ND	9.09	7.28	5.76	7201MD9AQE
	On-On	M	H9	A	B	.320 x .360 x .352 (8.13 x 9.14 x 8.94)	CKN1069-ND	9.54	7.64	6.05	T201MH9ABE
3PDT	On-On	S	D9	A	B	.500 x .500 x .500 (12.70 x 12.70 x 12.70)	CKN1383-ND	15.21	12.17	9.64	7301MD9ABE
Fig. 3 — Vertical Right Angle											
SPDT	On-On	M	D9	AV2	B	.500 x .270 x .500 (12.70 x 6.86 x 12.70)	CKN1059-ND	6.33	5.07	4.01	7101MD9AV2BE
	On-Off-On	M	D9	AV2	B	.500 x .270 x .500 (12.70 x 6.86 x 12.70)	CKN1173-ND	6.87	5.50	4.36	7103MD9AV2BE
	On-Off-Mom	M	D9	AV2	B	.500 x .270 x .500 (12.70 x 6.86 x 12.70)	CKN1174-ND	6.99	5.60	4.43	7107MD9AV2BE
	On-On	M	H9	AV	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN1070-ND	6.42	5.14	4.07	T101MH9AVBE
DPDT	On-On	M	D9	AV2	B	.500 x .650 x .565 (12.70 x 16.51 x 14.35)	CKN1384-ND	9.72	7.78	6.16	7201MD9AV2BE
Optional Hardware and Accessories											
Dress Nut 10-48, .070" (1.78mm) high, for Series T and TP, nickel plated							CKN1183-ND	.63	.51	.40	465701201
Dress Nut 1/4 x 40, .325" (8.26mm) high, for Series 7000, 8020, 8060, 8500, E, TP and E010							CKN1184-ND	.45	.36	.29	702501201
Dress Nut 1/4 x 40, .118" (3.00mm) high, for Series 7000, 8020, 8060, 8500, E, TP and E010							CKN1201-ND	.30	.24	.19	780701201
Dress Nut 15/32-32, .120" (3.05mm) high, for Series 7000 and 8500, nickel plated							CKN1202-ND	1.20	.96	.76	895101201
Hex Nut 1/4 x 40, for Series 7000, 8020, 8060, 8500, and T, nickel plated							CKN1185-ND	.27	.22	.18	700201201
Vinyl Toggle Cap, White, .383" (9.73mm) long, for color coding option "S" actuators, Series 7000							CKN1203-ND	.78	.63	.50	896801000
Vinyl Toggle Cap, Black, .383" (9.73mm) long, for color coding option "S" actuators, Series 7000							CKN1204-ND	.78	.63	.50	896802000
Vinyl Toggle Cap, Red, .383" (9.73mm) long, for color coding option "S" actuators, Series 7000							CKN1205-ND	.78	.63	.50	896803000

Fig.	Circuit	Switching Function	Options (see diagrams) Actuator	Bushing	Termi- nation	Contact Material	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
Process Sealed Toggle Switches (withstands soldering and cleaning processes)												
1	SPDT	On-On	S	D1	C	B	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN1074-ND	5.52	4.42	3.50	E101SD1CBE
		On-Off-On	S	D1	C	B	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN1075-ND	6.63	5.31	4.20	E103SD1CBE
		Mom-Off-Mom	S	D1	C	B	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN1076-ND	6.63	5.31	4.20	E105SD1CBE
		On-On	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1071-ND†	6.06	4.85	3.84	ET01SD1CBE
		On-Off-On	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1080-ND†	6.84	5.48	4.34	ET03SD1CBE
		On-Mom	S	D1	C	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1081-ND†	6.84	5.48	4.34	ET08SD1CBE
		On-On	M	D1	V3	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1072-ND†	6.63	5.31	4.20	ET01MD1V3BE
1	DPDT	On-On	S	D1	C	B	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN1077-ND	8.46	6.77	5.36	E201SD1CBE
		On-On	S	D1	C	B	.360 x .320 x .350 (9.14 x 8.13 x 8.89)	CKN1082-ND†	9.06	7.25	5.74	ET21SD1CBE
		On-Off-On	S	D1	C	B	.360 x .320 x .350 (9.14 x 8.13 x 8.89)	CKN1083-ND†	10.23	8.19	6.48	ET23SD1CBE
		On-On	M	D1	A	B	.360 x .320 x .350 (9.14 x 8.13 x 8.89)	CKN1086-ND†	10.14	8.12	6.43	ET21MD1ABE
		On-Off-On	M	D1	A	B	.360 x .320 x .350 (9.14 x 8.13 x 8.89)	CKN1177-ND	11.31	9.05	7.17	ET23MD1ABE
2	SPDT	On-On	S	D1	A	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1061-ND†	6.09	4.88	3.86	E101SD1ABE
		On-On	M	D1	A	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1060-ND†	6.09	4.88	3.86	E101MD1ABE
		Mom-Off-Mom	M	D1	A	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1062-ND†	7.20	5.76	4.56	E105MD1ABE
		On-On	M	D1	A	B	.365 x .320 x .249 (9.27 x 8.13 x 6.32)	CKN1073-ND†	6.63	5.31	4.20	ET01MD1ABE
		On-Off-On	M	D1	A	B	.365 x .320 x .249 (9.27 x 8.13 x 6.32)	CKN1084-ND†	7.41	5.93	4.70	ET03MD1ABE
		On-Mom	M	D1	A	B	.365 x .320 x .249 (9.27 x 8.13 x 6.32)	CKN1085-ND†	7.41	5.93	4.70	ET08MD1ABE
3	SPDT	On-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1065-ND†	6.42	5.14	4.07	E101MD1AV2BE
		On-Off-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1078-ND	7.83	6.27	4.96	E103MD1AV2BE
		Mom-Off-Mom	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1079-ND	7.83	6.27	4.96	E105MD1AV2BE
		On-On	M	D1	AV	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN1385-ND	7.17	5.74	4.55	ET01MD1AVBE
		On-Off-Mom	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1178-ND	7.83	6.27	4.96	E107MD1AV2BE
3	DPDT	On-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1179-ND	10.47	8.38	6.64	E201MD1AV2BE
		On-Off-On	M	D1	AV2	B	.500 x .260 x .500 (12.70 x 6.60 x 12.70)	CKN1180-ND	11.64	9.32	7.38	E203MD1AV2BE

Fig.	Circuit	Switching Function	Options (see diagrams) Actuator	Bushing	Cont. Mat'l.	Dimensions Inch (mm) L x W x H	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing	C & K Part No.
Surface Mount (withstands soldering and cleaning processes)													
4	SPDT	On-On	M	D1	B	.462 x .320 x .200 (11.73 x 8.13 x 5.08)	CKN1093CT-ND	8.22	7.09	5.70	CKN1093TR-ND	2732.40/600	ET01MD1SAKE(T&R)
	SPDT	On-Off-On	M	D1	B	.462 x .320 x .200 (11.73 x 8.13 x 5.08)	CKN1094CT-ND	9.07	7.82	6.28	CKN1094TR-ND	3013.20/600	ET03MD1SAKE(T&R)
	SPDT	Mom-Off-Mom	M	D1	B	.462 x .320 x .200 (11.73 x 8.13 x 5.08)	CKN1095CT-ND	9.07	7.82	6.28	CKN1095TR-ND	3013.20/600	ET05MD1SAKE(T&R)
5	SPDT	On-On	M	None	B	.340 x .276 x .215 (8.64 x 7.01 x 5.46)	CKN1096CT-ND	7.25	6.25	5.02	CKN1096TR-ND	2408.40/600	GT11MSAKE(T&R)
	SPST	Off-On	M	None	B	.340 x .276 x .215 (8.64 x 7.01 x 5.46)	CKN1097CT-ND	7.70	6.64	5.34	CKN1097TR-ND	2559.60/600	GT12MSAKE(T&R)
	SPDT	On-Off-On	M	None	B	.340 x .276 x .215 (8.64 x 7.01 x 5.46)	CKN1098CT-ND	8.29	7.14	5.74	CKN1098TR-ND	2754.00/600	GT13MSAKE(T&R)
6	SPDT	On-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1099CT-ND	6.79	5.86	4.71	CKN1099TR-ND	836.00/200	GT11MSCKE(T&R)
	SPST	Off-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1100CT-ND	7.35	6.33	5.09	CKN1100TR-ND	904.00/200	GT12MSCKE(T&R)
	SPDT	On-Off-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1101CT-ND	7.87	6.78	5.45	CKN1101TR-ND	968.00/200	GT13MSCKE(T&R)
	DPDT	On-On	M	None	B	.340 x .215 x .276 (8.64 x 5.46 x 7.01)	CKN1102CT-ND	9.07	7.82	6.28	CKN1102TR-ND	1116.00/200	GT21MSCKE(T&R)

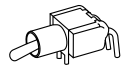
† UL Approved   Note: All threaded bushings include mounting hardware.

Fig. 1



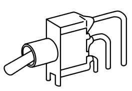
Vertical

Fig. 2



Horizontal Right Angle

Fig. 3



Vertical Right Angle

Specifications:
Contact Resistance: 10 milliohms max., initial at 2-4VDC, 100mA for silver and gold plated contacts **Insulation Resistance:** 1,000 megaohms min. **Dielectric Strength:** 1,000V RMS at sea level **Operating Temperature:** -30°C to -85°C

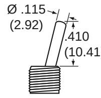
Q **(Silver): Fixed terminal and moving contact:** Silver plated over copper alloy. **Contact Rating:** 5A at 28VAC or VDC; 2A at 250VAC

R **(Gold): Fixed terminal and moving contact:** Copper alloy with gold plate over nickel plate. **Contact Rating:** 0.4VA max. at 20VAC or DC max.

All switches come complete with mounting hardware

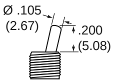
Actuators

T1



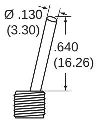
Standard

T2



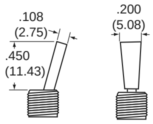
Mini

T4



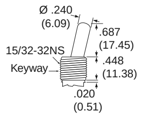
Extended Bat

T6



Flattened

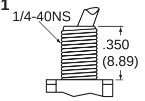
T8



Large Bat

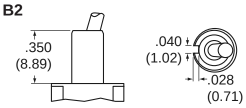
Bushings

B1



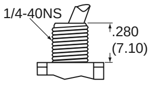
Threaded

B2



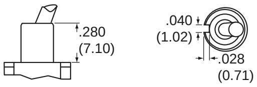
Unthreaded

B3



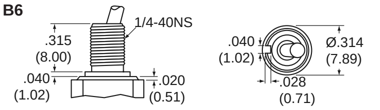
Threaded

B4



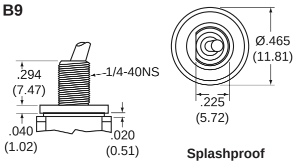
Unthreaded

B6



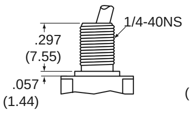
Threaded High Torque

B9



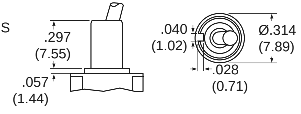
Splashproof

B11



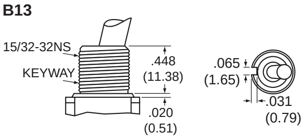
Threaded

B12



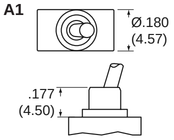
Unthreaded

B13



Large threaded

A1



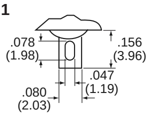
Unthreaded

Fig.	Circuit	Switching Function	Options (see diagrams) Actuator	Bushing	Termination	Contact Material	Dim. Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
							100 Series — Miniature Toggle Switches (Metal Bushing)					
1	SPDT	On-On	T1	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2350-ND	3.26	2.94	2.51	100SP1T1B1M1QE
	SPDT	On-On	T1	B1	M1	R	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2351-ND	3.55	3.20	2.73	100SP1T1B1M1RE
	SPDT	On-On	T1	B1	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2352-ND	3.26	2.94	2.51	100SP1T1B1M2QE
	SPDT	On-On	T1	B1	M2	R	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2353-ND	3.55	3.20	2.73	100SP1T1B1M2RE
	SPDT	On-On	T1	B1	M5	R	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2354-ND	4.24	3.82	3.26	100SP1T1B1M51RE
	SPDT	On-On	T1	B4	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2355-ND	3.26	2.94	2.51	100SP1T1B4M2QE
	SPDT	On-On	T1	B6	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2357-ND	4.46	4.02	3.42	100SP1T1B6M1QE
	SPDT	On-On	T1	B9	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2358-ND	3.90	3.51	2.99	100SP1T1B9M1QE
	SPDT	On-On	T2	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2359-ND	3.26	2.94	2.51	100SP1T2B1M1QE
	SPDT	On-On	T2	B3	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2360-ND	3.26	2.94	2.51	100SP1T2B3M1QE
	SPDT	On-On	T2	B3	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2361-ND	3.26	2.94	2.51	100SP1T2B3M2QE
	SPDT	On-On	T4	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2367-ND	3.43	3.09	2.63	100SP1T4B1M1QE
	SPDT	On-On	T6	B11	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2368-ND	4.46	4.02	3.42	100SP1T6B11M1QE
	SPDT	On-On	T6	B11	M1	R	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2369-ND	4.74	4.27	3.64	100SP1T6B11M1RE
	SPDT	On-On	T6	B11	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2370-ND	4.46	4.02	3.42	100SP1T6B11M2QE
	SPDT	On-On	T8	B13	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2372-ND	4.85	4.37	3.73	100SP1T8B13M1QE
	SPDT	On-Mom	T1	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2373-ND	3.51	3.16	2.70	100SP2T1B1M1QE
	SPDT	On-Mom	T6	B11	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2374-ND	4.70	4.24	3.61	100SP2T6B11M1QE
	SPDT	On-Off-On	T1	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2375-ND	3.67	3.31	2.82	100SP3T1B1M1QE
	SPDT	On-Off-On	T1	B1	M1	R	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2376-ND	3.96	3.57	3.04	100SP3T1B1M1RE
	SPDT	On-Off-On	T1	B1	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2377-ND	3.67	3.31	2.82	100SP3T1B1M2QE
	SPDT	On-Off-On	T1	B9	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2380-ND	4.31	3.88	3.31	100SP3T1B9M1QE
	SPDT	On-Off-On	T4	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2385-ND	3.83	3.46	2.94	100SP3T4B1M1QE
	SPDT	On-Off-On	T6	B11	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2386-ND	4.87	4.38	3.74	100SP3T6B11M1QE
	SPDT	On-Off-On	T8	B13	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2387-ND	5.26	4.74	4.04	100SP3T8B13M1QE
	SPDT	Mom-Off-Mom	T1	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2388-ND	4.16	3.75	3.20	100SP4T1B1M1QE
	SPDT	Mom-Off-Mom	T1	B1	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2389-ND	4.16	3.75	3.20	100SP4T1B1M2QE
	SPDT	Mom-Off-Mom	T1	B9	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2390-ND	4.79	4.32	3.68	100SP4T1B9M1QE
	SPDT	Mom-Off-Mom	T6	B11	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2392-ND	5.36	4.82	4.11	100SP4T6B11M2QE
	SPDT	On-Off-Mom	T1	B1	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2393-ND	4.41	3.97	3.38	100SP5T1B1M1QE
	SPDT	On-Off-On	T1	B1	M2	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2394-ND	4.41	3.97	3.38	100SP5T1B1M2QE
	SPDT	On-Off-On	T6	B11	M1	Q	.500 x .270 x .350 (12.7 x 6.86 x 8.89)	EG2397-ND	5.60	5.05	4.30	100SP5T6B11M1QE
	DPDT	On-On	T1	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2398-ND	4.37	3.93	3.35	100DP1T1B1M1QE
	DPDT	On-On	T1	B1	M1	R	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2399-ND	4.82	4.34	3.70	100DP1T1B1M1RE
	DPDT	On-On	T1	B1	M2	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2400-ND	4.37	3.93	3.35	100DP1T1B1M2QE
	DPDT	On-On	T1	B1	M2	R	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2401-ND	4.82	4.34	3.70	100DP1T1B1M2RE
	DPDT	On-On	T1	B9	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2402-ND	5.00	4.50	3.84	100DP1T1B9M1QE
	DPDT	On-On	T2	B3	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2403-ND	4.37	3.93	3.35	100DP1T2B3M1QE
	DPDT	On-On	T4	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2407-ND	4.53	4.08	3.48	100DP1T4B1M1QE
	DPDT	On-On	T6	B11	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2408-ND	5.56	5.01	4.27	100DP1T6B11M1QE
	DPDT	On-On	T6	B11	M1	R	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2409-ND	6.07	5.47	4.66	100DP1T6B11M1RE
	DPDT	On-On	T8	B13	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2410-ND	5.96	5.37	4.57	100DP1T8B13M1QE
	DPDT	On-Mom	T1	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2411-ND	4.61	4.15	3.54	100DP2T1B1M1QE
	DPDT	On-Mom	T6	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2412-ND	5.81	5.23	4.46	100DP2T6B11M1QE
	DPDT	On-Off-On	T1	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2413-ND	5.10	4.59	3.91	100DP3T1B1M1QE
	DPDT	On-Off-On	T1	B1	M2	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2414-ND	5.10	4.59	3.91	100DP3T1B1M2QE
	DPDT	On-Off-On	T1	B9	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2415-ND	5.73	5.16	4.40	100DP3T1B9M1QE
	DPDT	On-Off-On	T4	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2417-ND	5.26	4.74	4.04	100DP3T4B1M1QE
	DPDT	On-Off-On	T8	B13	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2418-ND	6.69	6.03	5.13	100DP3T8B13M1QE
	DPDT	Mom-Off-Mom	T1	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2419-ND	5.43	4.89	4.17	100DP4T1B1M1QE
	DPDT	Mom-Off-Mom	T6	B11	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2420-ND	6.62	5.96	5.08	100DP4T6B11M1QE
	DPDT	On-Off-Mom	T1	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2421-ND	5.59	5.03	4.29	100DP5T1B1M1QE
	DPDT	On-Off-Mom	T6	B11	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2422-ND	6.78	6.11	5.21	100DP5T6B11M1QE
	DPDT	On-On-On	T6	B1	M1	Q	.500 x .450 x .350 (12.7 x 11.43 x 8.89)	EG2423-ND	6.57	5.92	5.04	100DP6T1B1M1QE
	3PDT	On-On	T1	B1	M1	Q	.500 x .650 x .475 (12.7 x 16.51 x 12.06)	EG2424-ND	8.97	8.07	6.88	1003P1T1B1M1QE
	3PDT	On-On	T1	B1	M2	Q	.500 x .650 x .475 (12.7 x 16.51 x 12.06)	EG2425-ND	8.97	8.07	6.88	1003P1T1B1M2QE
	3PDT	On-Off-On	T1	B1	M1	Q	.500 x .650 x .475 (12.7 x 16.51 x 12.06)	EG2426-ND	9.54	8.59	7.32	1003P3T1B1M1QE
	3PDT	Mom-Off-Mom	T1	B1	M1	Q	.500 x .650 x .475 (12.7 x 16.51 x 12.06)	EG2427-ND	10.43	9.40	8.00	1003P4T1B1M1QE
	4PDT	On-On	T1	B1	M1	Q	.500 x .850 x .475 (12.7 x 16.51 x 12.06)	EG2428-ND	12.72	11.45	9.76	1004P1T1B1M1QE

(Continued)

Termination Options

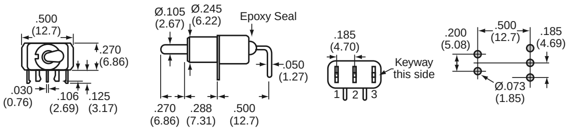
M1



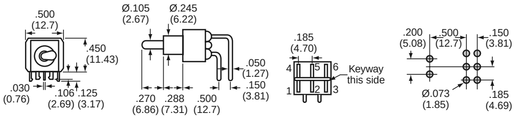
THK .030 (0.76)

Eyelet Terminal

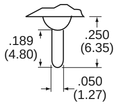
M6 SPDT — Horizontal Right Angle



M6 DPDT — Horizontal Right Angle



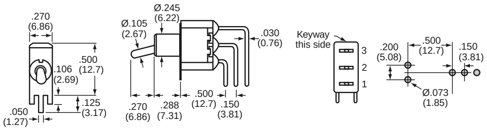
M2



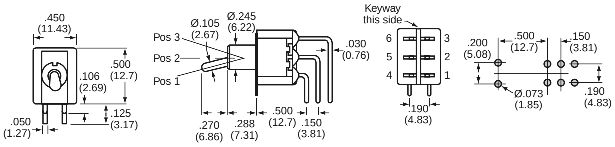
THK .030 (0.76)

PC Mount

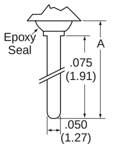
M7 SPDT — Vertical Right Angle



M7 DPDT — Vertical Right Angle

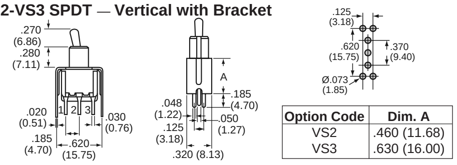


M5



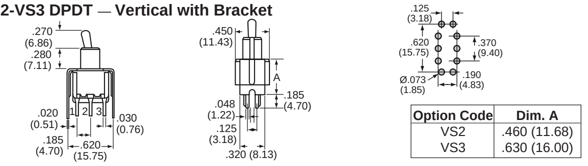
Wirewrap Terminal

VS2-VS3 SPDT — Vertical with Bracket



Option Code	Dim. A
VS2	.460 (11.68)
VS3	.630 (16.00)

VS2-VS3 DPDT — Vertical with Bracket



Option Code	Dim. A
VS2	.460 (11.68)
VS3	.630 (16.00)

Fig.	Circuit	Switching Function	Options (see diagrams) Actuator	Bushing	Termination	Contact Material	Dim. Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	4PDT	On-Off-On	T1	B1	M1	Q	.500 x .850 x .475 (12.7 x 21.59 x 12.06)	EG2429-ND	13.62	12.26	10.44	1004P3T1B1M1QE
	4PDT	On-Off-On	T1	B1	M1	Q	.500 x .850 x .475 (12.7 x 21.59 x 12.06)	EG2430-ND	14.43	12.99	11.07	1004P4T1B1M1QE
	4PDT	On-On-On	T1	B1	M1	Q	.500 x .850 x .475 (12.7 x 21.59 x 12.06)	EG2431-ND	14.43	12.99	11.07	1004P6T1B1M1QE
2	SPDT	On-Off-On	T2	B4	M6	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2391-ND	5.63	5.07	4.32	100SP4T2B4M6RE
	SPDT	On-Off-On	T2	B4	M6	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2395-ND	5.87	5.29	4.51	100SP5T2B4M6RE
2	DPDT	On-On	T2	B4	VS2	R	.500 x .500 x .450 (12.7 x 12.7 x 11.43)	EG2406-ND	6.04	5.44	4.63	100DP1T2B4VS2RE
	DPDT	On-Off-On	T2	B4	VS2	R	.500 x .500 x .450 (12.7 x 12.7 x 11.43)	EG2416-ND	6.77	6.10	5.20	100DP3T2B4VS2RE
	SPDT	On-On	T2	B4	VS2	Q	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2365-ND	4.49	4.04	3.45	100SP1T2B4VS2QE
	SPDT	On-On	T2	B4	VS2	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2366-ND	4.77	4.30	3.66	100SP1T2B4VS2RE
	SPDT	On-Off-On	T2	B4	VS2	Q	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2383-ND	4.90	4.41	3.76	100SP3T2B4VS2QE
	SPDT	On-Off-On	T2	B4	VS2	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2384-ND	5.18	4.67	3.98	100SP3T2B4VS2RE
	SPDT	On-Off-On	T1	B4	VS2	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2379-ND	5.18	4.67	3.98	100SP3T1B4VS2RE
	DPDT	On-On	T2	B4	M6	Q	.500 x .500 x .450 (12.7 x 12.7 x 11.43)	EG2404-ND	5.63	5.07	4.32	100DP1T2B4M6QE
	DPDT	On-On	T2	B4	M6	R	.500 x .500 x .450 (12.7 x 12.7 x 11.43)	EG2405-ND	6.08	5.47	4.66	100DP1T2B4M6RE
	SPDT	On-On	T1	B4	M6	R	.500 x .500 x .450 (12.7 x 12.7 x 11.43)	EG2356-ND	4.73	4.27	3.63	100SP1T1B4M6RE
	SPDT	On-On	T2	B4	M6	Q	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2362-ND	4.45	4.01	3.41	100SP1T2B4M6QE
	SPDT	On-On	T2	B4	M6	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2363-ND	4.73	4.27	3.63	100SP1T2B4M6RE
	SPDT	On-On	T6	B12	M6	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2371-ND	5.93	5.34	4.55	100SP1T6B12M6RE
	SPDT	On-Off-On	T1	B4	M6	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2378-ND	5.14	4.63	3.95	100SP3T1B4M6RE
	SPDT	On-Off-On	T2	B4	M6	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2381-ND	5.14	4.63	3.95	100SP3T2B4M6RE
3	SPDT	On-On	T2	B4	M7	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2364-ND	5.07	4.57	3.89	100SP1T2B4M7RE
	SPDT	On-Off-On	T2	B4	M7	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2382-ND	5.48	4.93	4.20	100SP3T2B4M7RE
	SPDT	On-Off-On	T2	B4	M7	R	.500 x .500 x .270 (12.7 x 12.7 x 6.86)	EG2396-ND	6.21	5.60	4.77	100SP5T2B4M7RE
100A Series — Process-Sealed Miniature Toggle Switches (Plastic Bushing)												
1	SPDT	On-On	T1	B4	M2	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2432-ND	4.37	3.93	3.35	100AWSP1T1B4M2RE
	SPDT	On-On	T2	B4	VS2	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2436-ND	5.64	5.08	4.33	100AWSP1T2B4VS2RE
	SPDT	On-Off-On	T1	B4	M2	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2437-ND	4.77	4.30	3.66	100AWSP3T1B4M2RE
	SPDT	On-Off-On	T1	B4	M2	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2439-ND	5.35	4.82	4.10	100AWSP4T1B4M2RE
	DPDT	On-On	T1	B4	M2	R	.504 x .453 x .453 (12.8 x 6.91 x 11.51)	EG2443-ND	5.06	4.56	3.88	100AWDP1T1B4M2RE
2	SPDT	On-Off-On	T2	B4	M6	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2440-ND	6.81	6.14	5.23	100AWSP4T2B4M6RE
	SPDT	On-On	T1	B4	M6	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2433-ND	5.84	5.26	4.48	100AWSP1T1B4M6RE
	SPDT	On-On	T2	B4	M6	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2434-ND	5.84	5.26	4.48	100AWSP1T2B4M6RE
3	SPDT	On-On	T2	B4	M7	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2435-ND	6.21	5.60	4.77	100AWSP1T2B4M7RE
	SPDT	On-Off-On	T2	B4	M7	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2441-ND	7.19	6.48	5.52	100AWSP4T2B4M7RE
	SPDT	On-Off-On	T2	B4	M7	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2442-ND	7.35	6.62	5.64	100AWSP5T2B4M7RE
	SPDT	On-Off-On	T2	B4	M7	R	.504 x .272 x .453 (12.8 x 6.91 x 11.51)	EG2438-ND	6.62	5.96	5.08	100AWSP3T2B4M7RE
	DPDT	On-On	T2	B4	M7	R	.504 x .453 x .453 (12.8 x 6.91 x 11.51)	EG2444-ND	7.04	6.34	5.40	100AWDP1T2B4M7RE
	DPDT	On-Off-On	T2	B4	M7	R	.504 x .453 x .453 (12.8 x 6.91 x 11.51)	EG2445-ND	7.37	6.63	5.65	100AWDP3T2B4M7RE
Caps for 100 Series												
Vinyl Toggle Cap, White, for T1 Actuators								EG2470-ND	.14	.13	.12	T100-1 WHTTOGGLECAP
Vinyl Toggle Cap, Black, for T1 Actuators								EG2471-ND	.14	.13	.12	T100-2 BLKTOGGLECAP

Fig.	Circuit	Switching Function	Options (see diagrams) Actuator	Bushing	Termination	Contact Material	Dim. Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
200 Series — Subminiature Toggle Switches												
1	SPDT	On-On	T1	B1	M1	Q	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2446-ND	3.31	2.98	2.54	200MSP1T1B1M1QE
	SPDT	On-On	T1	B1	M2	Q	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2447-ND	3.31	2.98	2.54	200MSP1T1B1M2QE
	SPDT	On-Off-On	T1	B1	M1	Q	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2450-ND	4.45	4.01	3.41	200MSP3T1B1M1QE
	SPDT	On-Off-On	T1	B1	M2	Q	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2451-ND	4.45	4.01	3.41	200MSP3T1B1M2QE
	SPDT	On-Off-On	T1	B1	M1	Q	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2453-ND	4.65	4.19	3.57	200MSP4T1B1M1QE
	SPDT	On-Off-On	T1	B1	M1	Q	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2454-ND	4.49	4.04	3.45	200MSP5T1B1M1QE
	DPDT	On-On	T1	B1	M1	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	EG2455-ND	4.65	4.19	3.57	200MDP1T1B1M1QE
	DPDT	On-On	T1	B1	M2	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	EG2456-ND	4.65	4.19	3.57	200MDP1T1B1M2QE
	DPDT	On-Off-On	T1	B1	M1	Q	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	EG2458-ND	5.47	4.92	4.20	200MDP3T1B1M1QE
2	SPDT	On-Off-On	T2	B2	M6	R	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2452-ND	6.04	5.44	4.63	200MSP3T2B2M6RE
	SPDT	On-On	T2	B2	M6	R	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2448-ND	4.79	4.31	3.67	200MSP1T2B2M6RE
	DPDT	On-On	T2	B2	M6	R	.320 x .360 x .340 (8.13 x 9.14 x 8.64)	EG2457-ND	6.38	5.75	4.90	200MDP1T2B2M6RE
3	SPDT	On-On	T2	B2	M7	R	.320 x .240 x .340 (8.13 x 6.10 x 8.64)	EG2449-ND	5.28	4.76	4.06	200MSP1T2B2M7RE
200A Series — Process-Sealed Subminiature Toggle Switches												
1	SPDT	On-On	T1	A1	M2	R	.320 x .200 x .527 (8.13 x 5.08 x 13.39)	EG2459-ND	4.16	3.75	3.20	200AWMSP1T1A1M2RE
	SPDT	On-On	T1	A1	M2	R	.320 x .200 x .527 (8.13 x 5.08 x 13.39)	EG2461-ND	5.30	4.78	4.07	200AWMSP2T1A1M2RE
	SPDT	On-Off-On	T1	A1	M2	R	.320 x .200 x .527 (8.13 x 5.08 x 13.39)	EG2463-ND	4.33	3.90	3.32	200AWMSP3T1A1M2RE
	DPDT	On-On	T1	A1	M2	R	.320 x .360 x .527 (8.13 x 9.14 x 13.39)	EG2465-ND	6.64	5.98	5.09	200AWMDP1T1A1M2RE
	DPDT	On-Off-On	T1	A1	M2	R	.320 x .360 x .527 (8.13 x 9.14 x 13.39)	EG2467-ND	7.75	6.98	5.95	200AWMDP3T1A1M2RE
2	SPDT	On-On	T2	A1	M6	R	.320 x .200 x .527 (8.13 x 5.08 x 13.39)	EG2460-ND	5.23	4.71	4.02	200AWMSP1T2A1M6RE
	SPDT	On-On	T2	A1	M6	R	.320 x .200 x .527 (8.13 x 5.08 x 13.39)	EG2462-ND	6.78	6.11	5.21	200AWMSP2T2A1M6RE
	SPDT	On-Off-On	T2	A1	M6	R	.320 x .200 x .527 (8.13 x 5.08 x 13.39)	EG2464-ND	5.81	5.23	4.46	200AWMSP3T2A1M6RE
	SPDT	On-On	T2	A1	M6	R	.320 x .360 x .527 (8.13 x 9.14 x 13.39)	EG2469-ND	7.18	6.47	5.51	200BWMSP1T2A1SM6RE
	DPDT	On-On	T2	A1	M6	R	.320 x .360 x .527 (8.13 x 9.14 x 13.39)	EG2466-ND	8.20	7.39	6.29	200AWMDP1T2A1M6RE
	DPDT	On-Off-On	T2	A1	M6	R	.320 x .360 x .527 (8.13 x 9.14 x 13.39)	EG2468-ND	9.31	8.39	7.14	200AWMDP3T2A1M6RE

NKK® SWITCHES

Power Toggle and Rocker Switches

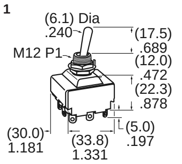
Fig.	Circuit	Function	Switch Current (125VAC)	Digi-Key Part No.	Price Each			NKK Part No.
					1	25	100	
Medium and High Capacity, Solder Lug								
1	SPST	On-Off	15A	360-1185-ND*	5.28	4.23	3.35	S301
	SPDT	On-On	15A	360-1186-ND*	5.28	4.23	3.35	S302
	SPDT	On-Off-On	15A	360-1187-ND*	5.73	4.59	3.63	S303
	SPDT	On-Mom	15A	360-1188-ND*	5.88	4.71	3.73	S305
	SPDT	Mom-Off-Mom	15A	360-1189-ND*	6.00	4.80	3.80	S308
	SPDT	On-Off-Mom	15A	360-1190-ND*	6.21	4.97	3.94	S309
	DPST	On-Off	25A	360-1191-ND*	7.98	6.39	5.06	S331
	DPDT	On-On	25A	360-1192-ND*	7.98	6.39	5.06	S332
	DPDT	On-Off-On	25A	360-1193-ND*	9.39	7.52	5.95	S333
	DPDT	On-Mom	15A	360-1194-ND*	9.45	7.56	5.99	S335
	DPDT	Mom-Off-Mom	15A	360-1195-ND†	10.32	8.26	6.54	S338
	DPDT	On-Off-Mom	15A	360-1196-ND†	10.32	8.26	6.54	S339
	3PST	On-Off	25A	360-1197-ND‡	11.43	9.15	7.24	S31
	3PDT	On-On	25A	360-1198-ND‡	11.76	9.41	7.45	S32
	3PDT	On-Off-On	25A	360-1199-ND‡	12.69	10.16	8.04	S33
	3PDT	On-Mom	15A	360-1200-ND‡	12.69	10.16	8.04	S35
	3PDT	Mom-Off-Mom	15A	360-1201-ND‡	12.69	10.16	8.04	S38
	4PST	On-Off	25A	360-1202-ND‡	13.56	10.85	8.59	S41
	4PDT	On-On	25A	360-1203-ND‡	13.56	10.85	8.59	S42
	4PDT	On-Off-On	25A	360-1204-ND‡	14.64	11.72	9.28	S43
	4PDT	On-Mom	25A	360-1205-ND‡	14.64	11.72	9.28	S45
Medium and High Capacity, .250” Quick Connect								
2	SPST	On-Off	15A	360-1206-ND	4.53	3.63	2.87	S1F
	SPDT	On-On	15A	360-1207-ND	5.34	4.28	3.39	S2F
	SPDT	On-Off-On	15A	360-1208-ND	5.55	4.44	3.52	S3F
	DPST	On-Off	15A	360-1209-ND	6.75	5.40	4.28	S21F
	DPDT	On-On	20A	360-1210-ND	8.31	6.65	5.27	S6F
	DPDT	On-Off-On	20A	360-1211-ND	8.37	6.70	5.31	S7F
	3PST	On-Off	25A	360-1212-ND‡	12.36	9.89	7.83	S31F
	3PDT	On-On	25A	360-1213-ND‡	12.69	10.16	8.04	S32F
	3PDT	On-Off-On	25A	360-1214-ND‡	13.65	10.92	8.65	S33F
	4PST	On-Off	25A	360-1215-ND†	14.37	11.50	9.11	S41F
	4PDT	On-On	25A	360-1216-ND†	14.79	11.84	9.37	S42F
	4PDT	On-Off-On	25A	360-1217-ND†	15.87	12.70	10.06	S43F
Medium and High Capacity, Solder Lug, Locking Lever								
3	SPST	On-Off	15A	360-1218-ND	15.39	12.32	9.75	S1AL
	SPDT	On-On	15A	360-1219-ND	17.04	13.64	10.80	S2AL
	SPDT	On-Off-On	15A	360-1220-ND	17.40	13.92	11.02	S3AL
	DPDT	On-On	20A	360-1221-ND	20.40	16.32	12.92	S6AL
	DPDT	On-Off-On	20A	360-1222-ND	20.55	16.44	13.02	S7AL
Medium Capacity, Screw Lug								
4	SPST	On-Off	15A	360-1223-ND*	5.82	4.66	3.69	S301T
	SPDT	On-On	15A	360-1224-ND*	6.00	4.80	3.80	S302T
	SPDT	On-Off-On	15A	360-1225-ND*	6.36	5.09	4.03	S303T
	SPDT	On-Mom	15A	360-1226-ND‡	6.21	4.97	3.94	S305T
	SPDT	Mom-Off-Mom	15A	360-1227-ND‡	6.90	5.52	4.37	S308T
	SPDT	On-Off-Mom	15A	360-1228-ND‡	6.90	5.52	4.37	S309T
	DPST	On-Off	15A	360-1229-ND†	8.91	7.13	5.65	S331T
	DPDT	On-On	15A	360-1230-ND†	9.39	7.52	5.95	S332T
	DPDT	On-Off-On	15A	360-1231-ND†	10.59	8.48	6.71	S333T
	DPDT	On-Mom	15A	360-1232-ND†	10.86	8.69	6.88	S335T
	DPDT	Mom-Off-Mom	15A	360-1233-ND†	11.40	9.12	7.22	S338T
	DPDT	On-Off-Mom	15A	360-1234-ND†	11.76	9.41	7.45	S339T
High Capacity, Screw Lug								
5	DPST	On-Off	30A	360-1235-ND*	20.90	18.91	16.42	S821
	DPDT	On-On	30A	360-1236-ND*	21.74	19.67	17.08	S822
	DPDT	On-Off-On	30A	360-1237-ND*	21.53	19.48	16.92	S823
	3PST	On-Off	30A	360-1238-ND*	31.25	28.28	24.56	S831
	3PDT	On-On	30A	360-1239-ND*	37.91	34.30	29.79	S832
	3PDT	On-Off-On	30A	360-1240-ND*	37.97	34.36	29.84	S833
	DPDT	On-On	50A	360-1241-ND	51.77	46.84	40.68	S732
Power Toggle Accessories								
6A	On-Off-Plate, 12mm, Nickel, Brass			360-1001-ND	.72	.58	.46	AT201
6B	On-Off-Plate, 12mm, Red/Black			360-1002-ND	2.16	1.73	1.37	AT202
6A	On-Off-Plate, 12mm, Red/Black			360-1003-ND	2.16	1.73	1.37	AT214
Standard Size Rocker Switches								
7	DPDT	On-On	20A	360-1498-ND*	4.91	4.45	3.87	SW3006A
	DPDT	On-Off-On	15A	360-1499-ND‡	5.21	4.72	4.10	SW3007A
	DPDT	Mom-Off-Mom	15A	360-1500-ND	6.34	5.74	4.99	SW3008A
8	DPST	On-Off	30A	360-1501-ND*	20.85	18.87	16.39	SW3821
	DPDT	On-On	30A	360-1502-ND*	21.63	19.57	17.00	SW3822
	DPDT	On-Off-On	30A	360-1503-ND*	22.05	19.95	17.33	SW3823
	3PST	On-Off	30A	360-1504-ND*	31.25	28.28	24.56	SW3831
	3PDT	On-On	30A	360-1505-ND*	37.97	34.36	29.84	SW3832
	3PDT	On-Off-On	30A	360-1506-ND*	37.97	34.36	29.84	SW3833

* UL/CSA † UL ‡ CSA

NKK offers one of the most extensive line of power toggle switches. Standard switching currents of 15, 25 and 30 Amps. Locking lever type is ideal for preventing accidental switching, lever must be pulled out then switched. All toggles come complete with mounting hardware. **Dielectric Strength:** 2000V AV min. **Mechanical Life:** 50,000 operations min. **Operating Temperature:** -10°C through 70°C

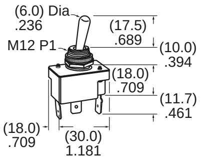
Dim. in (mm) Inch

Fig. 1



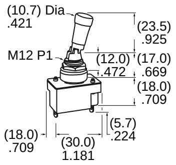
Solder Term.
3 Pole Shown

Fig. 2



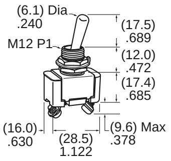
QC Term.
1 Pole Shown

Fig. 3



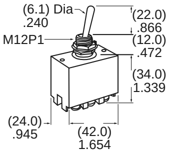
Locking Lever

Fig. 4



Screw Term.

Fig. 5



HD Screw Term.

Panel Cutout for Figs. 1-5

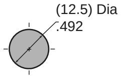
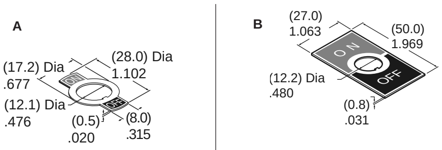
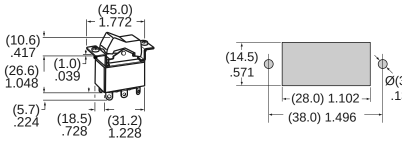


Fig. 6



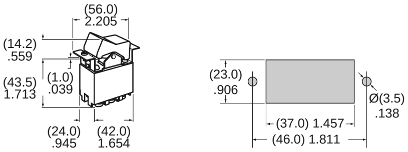
Red/Black Background with “ON” and “OFF” in White Lettering

Fig. 7



All rockers have white actuator. Solder lugs accommodate 12 AWG wire. 30,000 operations min. Operating Temp. -10°C — +70°C

Fig. 8



All rockers have white actuator. M4.5 screw terminals. 30,000 operations min. Operating temp: -10°C — +70°C

NKK® SWITCHES

Environmentally Sealed Switches

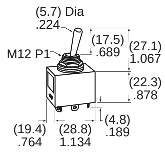
For use in outdoor or harsh applications. Toggles: Single and double pole. Rockers and pushbuttons: Single pole. Silver contacts, epoxy sealed solder lug or screw terminals or 7" wire leads, meets IP67 of IEC529 standards. Solder lug terminals have .094" dia. holes. Solder lug and screw models are dust tight and water protected at front panel, wire lead models also dust tight and water protected behind panel. **Electrical Capacity:** Toggle and pushbuttons: 10A @ 125V AC; Rockers: 15A @ 125V AC. **Dielectric Strength:** Toggles and Pushbuttons: 1,500V AC minimum; Rockers: 3.750V AC minimum between contacts and case. **Mechanical Life:** Toggles: 15,000 operations min.; Rockers: 30,000 operations min.; Pushbuttons: 50,000 operations min. for On-On, 30,000 operations min. for On-Mom. **Electrical Life:** 15,000 operations min. (10,000 for momentary rockers). **Operating Temperature:** -30°C through +70°C (toggles and pushbutton); -25°C – +85°C (rockers). **Angle of Throw:** 24° (toggles & rockers). **Panel Thickness:** .157". **Standard Hardware:** 1 hex nut, 1 locking ring, 1 O-ring (toggles and pushbuttons)

Fig.	Switching Circuit	Function	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
			Sealed Toggles				
1	SPST	On-Off	360-1242-ND	10.50	9.50	8.25	WT11S
2	SPST	On-Off	360-1243-ND	11.24	10.17	8.83	WT11T
3	SPST	On-Off	360-1244-ND	25.20	22.80	19.80	WT11L
1	SPDT	On-On	360-1245-ND	11.13	10.07	8.75	WT12S
2	SPDT	On-On	360-1246-ND	11.87	10.74	9.33	WT12T
3	SPDT	On-On	360-1247-ND	25.83	23.37	20.30	WT12L
1	SPDT	On-Off-On	360-1248-ND	11.72	10.61	9.21	WT13S
2	SPDT	On-Off-On	360-1249-ND	12.45	11.27	9.79	WT13T
3	SPDT	On-Off-On	360-1250-ND	26.42	23.91	20.76	WT13L
1	DPST	On-Off	360-1251-ND	15.39	13.93	12.10	WT21S
2	DPST	On-Off	360-1252-ND	16.86	15.26	13.25	WT21T
3	DPST	On-Off	360-1253-ND	36.39	32.93	28.60	WT21L
1	DPDT	On-On	360-1254-ND	16.02	14.50	12.59	WT22S
2	DPDT	On-On	360-1255-ND	17.49	15.83	13.75	WT22T
3	DPDT	On-On	360-1256-ND	37.02	33.50	29.09	WT22L
1	DPDT	On-Off-On	360-1257-ND	17.43	15.77	13.70	WT23S
2	DPDT	On-Off-On	360-1258-ND	18.90	17.10	14.85	WT23T
3	DPDT	On-Off-On	360-1259-ND	38.43	34.77	30.20	WT23L
			Sealed Rockers				
4	SPST	On-Off	360-1507-ND	12.87	11.65	10.12	WR11AS
5	SPST	On-Off	360-1508-ND	13.55	12.26	10.65	WR11AT
6	SPST	On-Off	360-1509-ND	26.25	23.75	20.63	WR11AL
4	SPST	On-Off	360-1510-ND	12.87	11.65	10.12	WR11BS
5	SPST	On-Off	360-1511-ND	13.55	12.26	10.65	WR11BT
6	SPST	On-Off	360-1512-ND	26.25	23.75	20.63	WR11BL
4	SPDT	On-On	360-1513-ND	13.65	12.35	10.73	WR12AS
5	SPDT	On-On	360-1514-ND	14.34	12.98	11.27	WR12AT
6	SPDT	On-On	360-1515-ND	27.05	24.48	21.26	WR12AL
4	SPDT	On-On	360-1516-ND	13.65	12.35	10.73	WR12BS
5	SPDT	On-On	360-1517-ND	14.34	12.98	11.27	WR12BT
6	SPDT	On-On	360-1518-ND	27.05	24.48	21.26	WR12BL
4	SPDT	On-Off-On	360-1519-ND	14.45	13.08	11.36	WR13AS
5	SPDT	On-Off-On	360-1520-ND	15.12	13.68	11.88	WR13AT
6	SPDT	On-Off-On	360-1521-ND	27.83	25.18	21.87	WR13AL
4	SPDT	On-Off-On	360-1522-ND	14.45	13.08	11.36	WR13BS
5	SPDT	On-Off-On	360-1523-ND	15.12	13.68	11.88	WR13BT
6	SPDT	On-Off-On	360-1524-ND	27.83	25.18	21.87	WR13BL
			Sealed Pushbuttons				
7	SPDT	On-On	360-1421-ND	24.39	19.52	15.45	WB12S
8	SPDT	On-On	360-1422-ND	25.44	20.36	16.12	WB12T
9	SPDT	On-On	360-1423-ND	45.39	36.32	28.75	WB12L
7	SPDT	On-Mom	360-1424-ND	25.44	20.36	16.12	WB15S
8	SPDT	On-Mom	360-1425-ND	26.49	21.20	16.78	WB15T
9	SPDT	On-Mom	360-1426-ND	46.44	37.16	29.42	WB15L

S=Solder Lug: T=Screw Lug: L= 8" Wire Lead

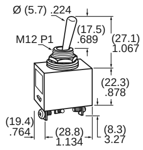
Dim. in (mm) Inch

Fig. 1



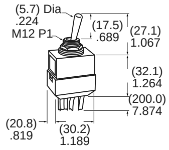
Toggle - Solder Term.

Fig. 2



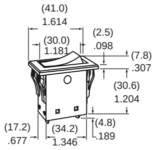
Toggle - Screw Term.

Fig. 3



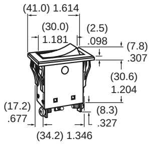
Toggle - 7" Wireleads

Fig. 4



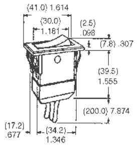
Rocker - Solder Term.

Fig. 5



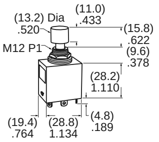
Rocker - Screw Term.

Fig. 6



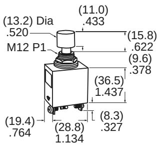
Rocker - 7" Wireleads

Fig. 7



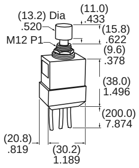
Pushbutton - Solder Term.

Fig. 8



Pushbutton - Screw Term.

Fig. 9



Pushbutton - 7" Wireleads

Internationally Approved Rocker Switches

JW Series: Industry's first molded rockers with TV rating (JWM: TV-5; JWL: TV-8). UL, CSA, VDE, SEMKO and SEV approved. Silver contacts, epoxy sealed solder lug terminals. **Electrical Capacity:** JWM; 10A @ 125/250V AC; JWL: 16A @ 125/250V AC. **Dielectric Strength:** 2,000V AC min. between contacts; 4,000V AC min. between contacts and case. **Electrical Life:** 25,000 operations min. **Operating Temperature:** -25°C – +70°C. **Angle of Throw:** 26° **Terminals:** JWM: Solder lugs, JWL: .187" QC All switches are black body with black actuator.

Fig.	Switching Circuit	Function	Marking	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
				Rocker Switches				
1	SPST	On-Off	None	360-1482-ND	7.05	5.64	4.47	JWM11RAA
	SPST	On-Off	A	360-1483-ND	7.65	6.12	4.85	JWM11RA1A
	SPST	On-Off	B	360-1484-ND	7.65	6.12	4.85	JWM11RA2A
	SPDT	On-On	None	360-1485-ND	8.55	6.84	5.42	JWM12RAA
2	DPST	On-Off	None	360-1486-ND	9.39	7.52	5.95	JWM21RAA
	DPST	On-Off	A	360-1487-ND	9.99	8.00	6.33	JWM21RA1A
	DPST	On-Off	B	360-1488-ND	9.99	8.00	6.33	JWM21RA2A
	DPDT	On-On	None	360-1489-ND	11.19	8.96	7.09	JWM22RAA
1	SPST	On-Off	None	360-1490-ND	9.39	7.52	5.95	JWL11RAA
	SPST	On-Off	A	360-1491-ND	9.99	8.00	6.33	JWL11RA1A
	SPST	On-Off	B	360-1492-ND	9.99	8.00	6.33	JWL11RA2A
	SPDT	On-On	None	360-1493-ND	11.19	8.96	7.09	JWL12RAA
2	DPST	On-Off	None	360-1494-ND	12.99	10.40	8.23	JWL21RAA
	DPST	On-Off	A	360-1495-ND	13.59	10.88	8.61	JWL21RA1A
	DPST	On-Off	B	360-1496-ND	13.59	10.88	8.61	JWL21RA2A
	DPDT	On-On	None	360-1497-ND	16.14	12.92	10.23	JWL22RAA
—	Switch Boot Waterproof JWL Series			360-1011-ND	3.39	2.72	2.15	AT4126

Fig. 1

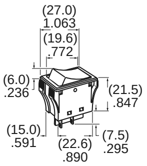
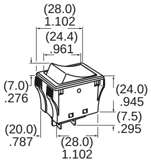
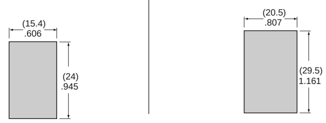


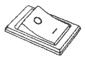
Fig. 2





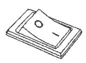
Panel Cutouts

A



Inscription for Horizontal Mounting

B



Inscription for Vertical Mounting

C&K Pushbutton Switches

Fig.	Circuit	Switching Function	Options (see diagrams): Termination	Options: Bushing†	Options: Cont. Mat'l.	Dimensions Inch (mm) L x W x D	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
Tiny Pushbutton Switches											
1	SPST	Mom (N/O)	C	H9	B	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN4000-ND	4.35	3.48	2.76	TP11SH9CBE
1	SPST	Mom (N/O)	Z	H7	Q	.320 x .200 x .340 (8.13 x 5.08 x 8.64)	CKN4001-ND	4.17	3.34	2.65	TP11SHZQE
2	SPST	Mom (N/O)	A	H8	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4002-ND	4.92	3.94	3.12	TP11SH8ABE
2	SPST	Mom (N/O)	A	H9	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4003-ND	4.92	3.94	3.12	TP11SH9ABE
2	SPDT	On-Mom	A	H8	Q	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4004-ND	6.42	5.14	4.07	TP12SH8AQE
3	SPDT	On-Mom	AV	H8	B	.320 x .200 x .352 (8.13 x 5.08 x 8.94)	CKN4005-ND	6.45	5.16	4.09	TP12SH8AVBE
1	SPST	Mom (N/O)	C	D1	B	.320 x .200 x .350 (8.13 x 5.08 x 8.89)	CKN4006-ND	4.68	3.75	2.97	EP11SD1CBE
2	SPST	Mom (N/O)	A	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4007-ND	5.19	4.16	3.29	EP11SD1ABE
3	SPST	Mom (N/O)	AV	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4009-ND	5.43	4.35	3.44	EP11SD1AVBE
2	SPDT	On-Mom	A	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4008-ND	6.60	5.28	4.18	EP12SD1ABE
1	SPDT	On-Mom	C	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4043-ND	6.09	4.88	3.86	EP12SD1CBE
1	DPST	Mom (N/O)	C	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4044-ND	8.91	7.13	5.65	EP21SD1CBE
1	DPST	Mom (N/O)	A	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4045-ND	9.87	7.90	6.26	EP21SD1ABE
3	DPST	Mom (N/O)	AV	D1	B	.320 x .200 x .365 (8.13 x 5.08 x 9.27)	CKN4046-ND	10.23	8.19	6.48	EP21SD1AVBE
1	SPDT	On-Mom	Z	SH	Q	.340 x .360 x .340 (8.64 x 9.14 x 8.64)	CKN4053-ND	5.70	4.56	3.61	TP12SHZQE
1	DPST	Mom (N/O)	Z	SH	Q	.340 x .360 x .340 (8.64 x 9.14 x 8.64)	CKN4054-ND	8.94	7.16	5.67	TP21SHZQE
Snap-Acting Momentary Pushbutton Switches											
1	SPDT	On-Mom	C	H	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4010-ND	8.76	7.01	5.55	8121SHCGE
1	SPDT	On-Mom	Z	H	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4011-ND	8.61	6.89	5.46	8121SHZGE
2	SPDT	On-Mom	A	D9	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4013-ND	9.33	7.47	5.91	8121SD9AGE
2	SPDT	On-Mom	A	D9	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4014-ND	6.39	5.12	4.05	8125SD9ABE
3	SPDT	On-Mom	AV2	D9	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4015-ND	9.51	7.61	6.03	8121SD9AV2GE
1	SPDT	On-Mom	V3	D3	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4012-ND	6.33	5.07	4.01	8125SD3V3BE
1	SPDT	On-Mom	Z	H	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4022-ND	5.67	4.54	3.60	8125SHZBE
1	DPDT	On-Mom	Z	H	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4023-ND	13.29	10.64	8.42	8221SHZGE
1	DPDT	On-Mom	Z	H	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4024-ND	7.98	6.39	5.06	8225SHZBE
5	SPDT	On-Mom	Z	—	G	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4025-ND	9.81	7.85	6.22	8121J81ZGE22
5	SPDT	On-Mom	Z	—	B	.500 x .270 x .410 (12.70 x 6.86 x 10.41)	CKN4026-ND	6.87	5.50	4.36	8125J81ZBE22
5	DPDT	On-Mom	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4027-ND	14.49	11.60	9.18	8221J81ZGE22
5	DPDT	On-Mom	Z	—	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4028-ND	9.18	7.35	5.82	8225J81ZBE22
5	SPDT	On-On	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4033-ND	5.19	4.16	3.29	8161J81ZGE22
5	SPDT	On-Mom	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4034-ND	8.19	6.56	5.19	8168J81ZGE22
5	DPDT	On-On	Z	—	G	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4035-ND	14.22	11.38	9.01	8261J81ZGE22
1	SPDT	On-Mom	C	H	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4029-ND	5.82	4.66	3.69	8125SHCBE
3	SPDT	On-Mom	AV2	D9	B	.500 x .450 x .410 (12.70 x 11.43 x 10.41)	CKN4030-ND	6.57	5.26	4.17	8125SD9AV2BE
1	SPDT	On-Mom	C	D1	G	.500 x .219 x .350 (12.70 x 5.56 x 8.89)	CKN4041-ND	9.24	7.40	5.86	E121SD1CGE
1	DPDT	On-Mom	C	D1	G	.500 x .450 x .350 (12.70 x 11.43 x 8.89)	CKN4042-ND	14.85	11.88	9.41	E221SD1CGE
Alternate-Action & Momentary Pushbutton Switches											
4	SPDT	On-On	Z	H	Q	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4016-ND	6.12	4.90	3.88	8161SHZQE2
4	SPDT	On-Mom	Z	H	Q	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4018-ND	6.12	4.90	3.88	8168LHZQE2
5	SPDT	On-Mom	Z	—	Q	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4017-ND	7.77	6.22	4.93	8168J81ZQE22
4	SPDT	On-Mom	Z	H	G	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4031-ND	6.54	5.24	4.15	8168SHZGE2
4	DPDT	On-On	Z	H	G	.500 x .270 x .450 (12.70 x 6.86 x 11.43)	CKN4032-ND	12.57	10.06	7.97	8261SHZGE2
6	SPST	Mom (N/O)	—	Blk Cap	Q	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1121-ND	5.37	4.30	3.41	8532T1ZQE2
6	SPST	Mom (N/O)	—	Blk Cap	B	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1122-ND	5.37	4.30	3.41	8532T1ZBE2
6	SPST	Mom (N/O)	—	Red Cap	Q	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1123-ND	5.37	4.30	3.41	8532T1ZQE3
6	SPST	Mom (N/O)	—	Red Cap	B	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1124-ND	5.67	4.54	3.60	8532T1ZBE3
6	SPST	Mom (N/O)	—	Wht Cap	Q	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1222-ND	5.37	4.30	3.41	8532T1ZQE1
6	SPST	Mom (N/O)	—	Wht Cap	B	.620 x .469 Dia. (15.75 x 11.91 Dia.)	CKN1223-ND	5.37	4.30	3.41	8532T1ZBE1
Subminiature Pushbutton Switches											
7	SPST	Mom (N/O)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4036-ND	4.62	3.70	2.93	8531MCQE2
7	SPST	Mom (N/C)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4037-ND	5.16	4.13	3.27	8533MCQE2
7	SPST	Mom (N/C)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN1389-ND	4.47	3.58	2.84	8533MZQE2
7	SPST	Mom (N/C)	C	H	B	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN1390-ND	5.01	4.01	3.18	8533MZBE2
7	SPST	Mom (N/O)	—	8-40 uns	Q	.248 x .250 Dia. (6.30 x 6.35 Dia.)	CKN4038-ND	5.46	4.37	3.46	8631ZQD2
7	SPST	Mom (N/O)	—	8-40 uns	B	.248 x .250 Dia. (6.30 x 6.35 Dia.)	CKN4039-ND	5.46	4.37	3.46	8631ZBD2
7	SPST	Mom (N/O)	C	8-40 uns	B	.248 x .250 Dia. (6.30 x 6.35 Dia.)	CKN4040-ND	5.61	4.49	3.56	8631CBD2
7	SPST	Mom (N/O)	C	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4019-ND	4.62	3.70	2.93	8531SCQE2
7	SPST	Mom (N/O)	—	H	Q	.427 x .375 Dia. (10.85 x 9.53 Dia.)	CKN4020-ND	4.47	3.58	2.84	8531MZQE2
7	SPST	Mom (N/O)	—	H	Q	.315 x .375 Dia. (8.00 x 9.53 Dia.)	CKN4021-ND	4.47	3.58	2.84	8532MZQE2
7	SPST	Mom (N/O)	05	H	B	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4057-ND	3.60	2.88	2.28	KM1101RR05B
7	SPST	Mom (N/O)	05	H	Q	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4058-ND	2.61	2.09	1.66	KM1101RR05Q
7	SPST	Mom (N/O)	C	H	B	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4059-ND	3.60	2.88	2.28	KM1101RR02B
7	SPST	Mom (N/O)	C	H	Q	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4060-ND	2.61	2.09	1.66	KM1101RR02Q
8	SPDT	Mom (N/O)	C	—	B	.52 x .54 x .385 (13.21 x 13.72 x 9.78)	CKN4062-ND	5.19	4.16	3.29	KM1202A08BE
8	SPDT	Mom (N/O)	C	—	Q	.52 x .54 x .385 (13.21 x 13.72 x 9.78)	CKN4061-ND	3.90	3.12	2.47	KM1202A08QE
7	SPST	Mom (N/C)	05	H	Q	.68 x .388 Dia. (17.27 x 9.86 Dia.)	CKN4064-ND	2.61	2.09	1.66	KM3301RR05Q
Ultra-miniature Pushbutton Switches (washable)											
—	SPDT	Mom (N/O)	—	D1	G	.260 x .276 x .215 (6.60 x 7.01 x 5.46)	CKN4048-ND	5.58	4.47	3.54	GP11MCKE
—	SPDT	On-Mom	—	D1	G	.260 x .276 x .215 (6.60 x 7.01 x 5.46)	CKN4049-ND	6.27	5.02	3.98	GP11MAKE
Panel Mount Detector Switch											
10	SPST	Mom (N/O)	Wires	—	B	.715 x .500 x .380 (18.16 x 12.70 x 9.65)	CKN4067-ND	4.50	3.60	2.85	KDS1102RSWC12CB
10	SPST	Mom (N/C)	Wires	—	B	.715 x .500 x .380 (18.16 x 12.70 x 9.65)	CKN4068-ND	5.25	4.20	3.33	KDS3302RSWC12CB
Pushbutton Caps for 8X2X, 8X6X, EX1X/X2X											
11	White Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1103-ND	.72	.58	.46	752701000
11	Black Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1104-ND	.45	.36	.29	752702000
11	Red Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1105-ND	.72	.58	.46	752703000
11	Orange Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1106-ND	.54	.44	.35	752704000
11	Yellow Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1107-ND	.54	.44	.35	752705000
11	Green Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1108-ND	.54	.44	.35	752706000
11	Blue Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1109-ND	.54	.44	.35	752707000
11	Brown Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1110-ND	.54	.44	.35	752708000
11	Gray Gloss Cap for .122" (3.10mm) Diameter Plungers, .375" (9.53mm) Diameter						CKN1111-ND	.54	.44	.35	752709000
Pushbutton Caps EP, TP Series											
11	White Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1112-ND	.84	.68	.54	465801000
11	Black Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1113-ND	.48	.39	.31	465802000
11	Red Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1114-ND	.84	.68	.54	465803000
11	Orange Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1115-ND	.81	.65	.52	465804000
11	Yellow Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1116-ND	1.08	.87	.69	465805000
11	Green Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1117-ND	1.08	.87	.69	465806000
11	Blue Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1118-ND	.81	.65	.52	465807000
11	Brown Gloss Cap for .100" (2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1119-ND	.81	.65	.52	465808000
11	Gray Gloss Cap for .100"(2.54mm) Diameter Plungers, .3" (7.62mm) Diameter						CKN1120-ND	.81	.65	.52	465809000
Pushbutton Caps, Snap-Fitting, for Fig. 4 and Other Snap-Fit Plungers											
—	White Gloss Cap for Snap-Fit Plungers, .395" (10.03mm) Diameter						CKN1209-ND	2.61	2.09	1.66	894101000
—	Black Gloss Cap for Snap-Fit Plungers, .395" (10.03mm) Diameter						CKN1210-ND	.96	.77	.61	894102000
—	Red Gloss Cap for Snap-Fit Plungers, .395" (10.03mm) Diameter						CKN1211-ND	2.61	2.09	1.66	894103000

Fig.	Circuit	Switching Function	Actuator Height In. (mm)	Terminals	Digi-Key Part No.	Cut Tape Price Each 1	25	100	Digi-Key Part No.	Tape & Reel Pricing 600	C & K Part No.
Surface Mount (Process Sealed, Washable)											
9	SPST	Mom (N/O)	.215 (5.46)	Gull Lead	CKN4055CT-ND	6.66	5.74	4.62	CKN4055TR-ND	2214.00	EP11SD1SAKE
9	SPDT	Mom (N/O)	.215 (5.46)	Gull Lead	CKN4056CT-ND	8.19	7.06	5.67	CKN4056TR-ND	2721.60	EP12SD1SAKE

† All threaded bushings include hardware

9138B-ND C&K Switch Data Book.....**$2.95**

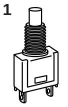
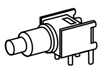
Fig. 1


Fig. 2


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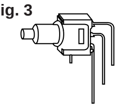
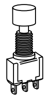


Fig. 4

Comes standard with black cap


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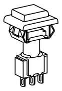

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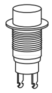

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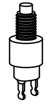

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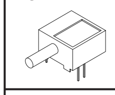


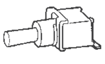
Fig. 9


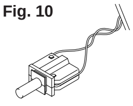
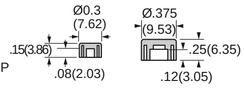
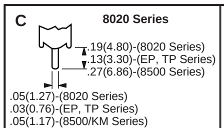
Fig. 10


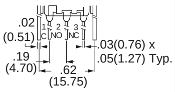
Fig. 11 — Round Caps


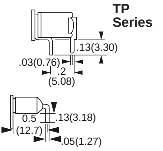
Series EP, TP

Series 8020, 8060, E020

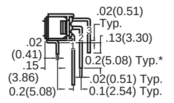
Termination Options

C **8020 Series**

.19(4.80)-(8020 Series)
.13(3.30)-(EP, TP Series)
.27(6.86)-(8500 Series)
.05(1.27)-(8020 Series)
.03(0.76)-(EP, TP Series)
.05(1.17)-(8500/KM Series)

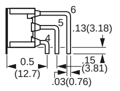
V3


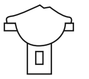
A **TP Series**


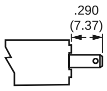
8020 Series

AV **EP Series**


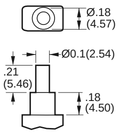
- **Middle terminal missing on CKN4009-ND**

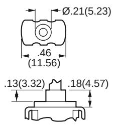
AV2


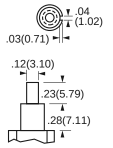
Z

Solder Eyelet

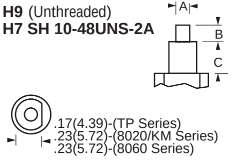
05


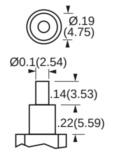
Bushing Options

D1 (Unthreaded)


D3 (Unthreaded)


D9 (Unthreaded)


H 1/4-40 NS
H9 (Unthreaded)
H7 SH 10-48UNS-2A


H8 (Unthreaded)


Bushing Option	C & K Series	Dimensions – In. (mm) A	B	C
H, H9	TP	.100 (2.54)	.139 (3.53)	.220 (5.59)
H	8020	.122 (3.10)	.218 (5.54)	.250 (6.35)
H	8060	.122 (3.10)	.280 (7.11)	.300 (7.62)
SH	TP	.100 (2.54)	.155 (3.94)	.220 (5.59)

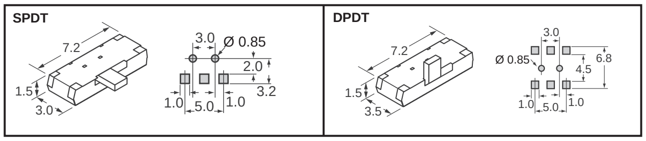
Contact Materials Options

B	Contacts & Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max.
Q	Contacts: Coin silver, silver plated. Terminals: Copper alloy, silver plated. Rating: 1A @ 120 VAC; 8060 Series — 6A @ 120 VAC or 3A @ 250 VAC; 8500 Series — 1A @ 120 VAC.
G	Contacts: Coin silver, with gold plate over nickel plate. Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. or 1 amp @ 120 VAC or 28 VDC.

Switch Products

AYZ Series Slide Switches

Slide switch for surface mount. **Travel:** 1.5 (0.0591) **Switching**: Voltage Max.: 12VDC, Current Max.: 100mA **Contact Resistance:** 80mΩ **Contact Material:** Silver, Non-shorting **Operating Temperature.:** -10°C to 60°C

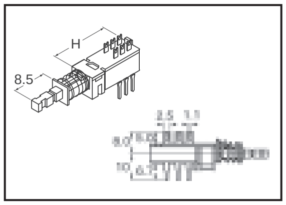


Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	Tape & Reel Pricing*	ITT Industries Part No.
SPDT	Non-Shorting,100mA, Horizontal Actuator, Gullwing-lead	401-1001-1-ND	1.11	1.03	.95	2468.88/4,000	AYZ0102AG
DPDT	Non-Shorting, 100mA, Vertical Actuator, Gullwing-lead	401-1000-1-ND	1.51	1.40	1.28	2502.90/3,000	AYZ0202AG

*For tape and reel part no., change -1-ND to -2-ND.

F Series Pushbutton Switches

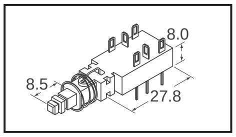
Essential features of the F push-button switch are the bridge contact which is spring loaded, guaranteeing constant pressure on the contacts. **Travel:** 4.7/3.3mm **Operating Force:** 650 grams **Switching:** Voltage Max.: 125VAC/30VDC (silver), 50VAC/30VDC (gold), Current Max.: 0.5A (silver), 0.4VA (gold) **Contact Resistance:** 10 - 20mΩ **Contact Material:** Silver or Gold **Operating Temperature:** -40°C to 70°C



Circuit	Description	Dim. H (mm)	Digi-Key Part No.	Price Each 1	25	100	ITT Ind. Part No.
DPDT	Alt Act., 650gF, .5A, PCB-Mnt, Silver Plating	21	401-1223-ND	2.03	1.63	1.29	F2UEE
	Alt Act., 650gF, .4VA, PCB-Mnt, Gold Plating	21	401-1224-ND	5.10	4.09	3.24	F2UEE AU
	Mom., 650gF, .5A, PCB-Mnt, Silver Plating	21	401-1225-ND	2.03	1.63	1.29	F2UOA
4PDT	Alt Act., 650gF, .5A, PCB-Mnt, Silver Plating	33	401-1226-ND	3.17	2.54	2.01	F4UEE
	Alt Act., 650gF, .4VA, PCB-Mnt, Gold Plating	33	401-1227-ND	9.46	7.57	6.00	F4UEE AU
	Mom., 650gF, .5A, PCB-Mnt, Silver Plating	33	401-1228-ND	3.17	2.54	2.01	F4UOA

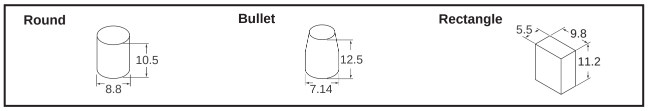
NE18 Series Power Switches

Switching: Voltage Max.: 250VAC/100VDC Current Max.: 6A **Operating Life:** ≥10^4 operations **Total Travel:** 4.7mm **Contact Material:** Silver Cadmium or Silver Nickel **Ambient Temperature:** -20°C to 70°C



Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
DPST	Alternate Action, 950gF, with PC pins only	401-1211-ND	6.76	5.41	4.29	NE18/2AEEP (#41)
DPDT	Alternate Action, 950gF, with PC pins only	401-1209-ND	7.51	6.01	4.76	NE18/2UEEP (#42)
DPST	Alternate Action, 950gF, with Solder Lug and PC pins	401-1210-ND	6.76	5.41	4.29	NE18/2AEEX (#37)
DPDT	Alternate Action, 950gF, with Solder Lug and PC pins	401-1208-ND	7.51	6.01	4.76	NE18/2UEEX (#38)

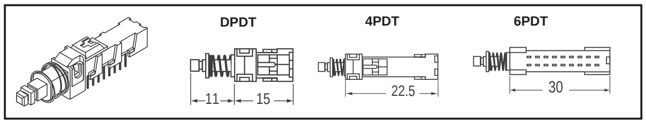
Switch Caps for F and NE18 Series



Description	Digi-Key Part Number	Price Each 1	25	100	ITT Industries Part No.
Switch Caps for F Series and NE18 Series					
Round, Black, 8.8mm Dia.	401-1215-ND	.55	.45	.36	FG/BLK
Round, Grey, 8.8mm Dia.	401-1217-ND	.55	.45	.36	FG/GRY
Round, Red, 8.8mm Dia.	401-1218-ND	.55	.45	.36	FG/RED
Round, White, 8.8mm Dia.	401-1216-ND	.55	.45	.36	FG/WHT
Bullet, Black, 7mm Dia.	401-1212-ND	.55	.45	.36	FMR/BLK
Bullet, Grey, 7mm Dia.	401-1214-ND	.55	.45	.36	FMR/GRY
Bullet, White, 7mm Dia.	401-1213-ND	.55	.45	.36	FMR/WHT
Rectangle, Black, 9.8 x 5.5mm	401-1219-ND	.55	.45	.36	FSC/BLK
Rectangle, Grey, 9.8 x 5.5mm	401-1221-ND	.55	.45	.36	FSC/GRY
Rectangle, Red, 9.8 x 5.5mm	401-1222-ND	.55	.45	.36	FSC/RED
Rectangle, White, 9.8 x 5.5mm	401-1220-ND	.55	.45	.36	FSC/WHT

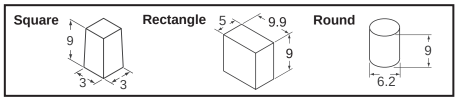
PHA Series Pushbutton Switch

Small dimensions make it the ideal choice for today's demanding switch requirements. Non-shorting contacts.
Switching: Voltage Max.: 30VDC, Current Max.: 100mADC. **Operating Life:** 10^4 operations.
Contact Resistance: 20mΩ. **Operating Temperature:** -10°C to 60°C



Circuit	Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
DPDT	Alternate Action, 170gF	401-1192-ND	1.50	1.21	.96	PHA2UEE
	Momentary Action, 170gF	401-1195-ND	1.50	1.21	.96	PHA2UOA
4PDT	Alternate Action, 170gF	401-1193-ND	2.03	1.63	1.29	PHA4UEE
	Momentary Action, 170gF	401-1196-ND	1.86	1.50	1.18	PHA4UOA
6PDT	Alternate Action, 170gF	401-1194-ND	2.53	2.03	1.61	PHA6UEE
	Momentary Action, 170gF	401-1197-ND	2.45	1.96	1.55	PHA6UOA

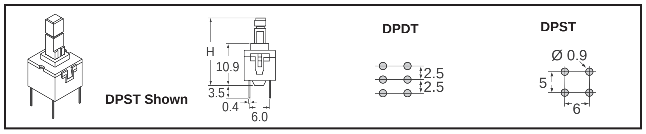
Switch Caps for PHA Series



Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
Switch Caps for PHA Series					
Square, Indexed, Black, 5mm sq. x 9mm(H)	401-1198-ND	.36	.29	.23	G001A(BLACK)
Square, Indexed, Grey, 5mm sq. x 9mm (H)	401-1199-ND	.38	.31	.25	G001G(GREY)
Square, Indexed, Red, 5mm sq. x 9mm (H)	401-1200-ND	.38	.31	.25	G001R(RED)
Rectangle, Black, 5mm(W) x 10mm(L)	401-1201-ND	.38	.31	.25	G002A(BLACK)
Rectangle, Grey, 5mm(W) x 10mm(L)	401-1202-ND	.38	.31	.25	G002G(GREY)
Rectangle, Red, 5mm(W) x 10mm(L)	401-1203-ND	.38	.31	.25	G002R(RED)
Round, Black, 6.2mm Dia.	401-1204-ND	.38	.31	.25	G003A(BLACK)
Round, Blue, 6.2mm Dia.	401-1207-ND	.38	.31	.25	G003B(BLUE)
Round, Grey, 6.2mm Dia.	401-1205-ND	.38	.31	.25	G003G(GREY)
Round, Red, 6.2mm Dia.	401-1206-ND	.38	.31	.25	G003R(RED)

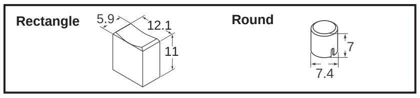
PVA Push Button Switch

Switching: Voltage Max.: 50VDC, Current Max.: 100mADC **Operating Life:** 10^5operations **Contact Resistance:** 150mΩ **Operating Temperature:** -40°C to 85°C (without button)



Circuit	Description	Dim H (mm)	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
DPST-NO	Alternate Action, 120gF	17.5	401-1132-ND	1.49	1.19	.95	PVA1 EE H1
	Alternate Action, 120gF	23	401-1134-ND	1.49	1.19	.95	PVA1 EE H2
	Alternate Action, 120gF	20.5	401-1136-ND	1.49	1.19	.95	PVA1 EE H3
	Alternate Action, 120gF	15	401-1138-ND	1.49	1.19	.95	PVA1 EE H4
	Mom. Action, 120gF	17.5	401-1133-ND	1.49	1.19	.95	PVA1 OA H1
	Mom. Action, 120gF	23	401-1135-ND	1.49	1.19	.95	PVA1 OA H2
	Mom. Action, 120gF	20.5	401-1137-ND	1.49	1.19	.95	PVA1 OA H3
	Mom. Action, 120gF	15	401-1139-ND	1.49	1.19	.95	PVA1 OA H4
DPDT-NO	Alternate Action, 170gF	17.5	401-1140-ND	1.73	1.39	1.10	PVA2 EE H1
	Alternate Action, 170gF	23	401-1142-ND	1.73	1.39	1.10	PVA2 EE H2
	Alternate Action, 170gF	20.5	401-1144-ND	1.73	1.39	1.10	PVA2 EE H3
	Alternate Action, 170gF	15	401-1146-ND	1.73	1.39	1.10	PVA2 EE H4
	Mom. Action, 170gF	17.5	401-1141-ND	1.73	1.39	1.10	PVA2 OA H1
	Mom. Action, 170gF	23	401-1143-ND	1.73	1.39	1.10	PVA2 OA H2
	Mom. Action, 170gF	20.5	401-1145-ND	1.73	1.39	1.10	PVA2 OA H3
	Mom. Action, 170gF	15	401-1147-ND	1.73	1.39	1.10	PVA2 OA H4

Switch Caps for PVA Series



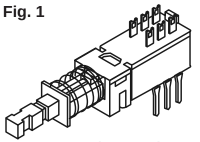
Description	Digi-Key Part No.	Price Each 1	25	100	ITT Industries Part No.
Switch Caps for PVA Push-Button Switches					
Rectangle, Black	401-1152-ND	.48	.38	.31	PE/BLK
Rectangle, Grey	401-1153-ND	.48	.38	.31	PE/GRY
Rectangle, Red	401-1154-ND	.48	.38	.31	PE/RED
Rectangle, White	401-1155-ND	.48	.38	.31	PE/WHT
Round, Black	401-1148-ND	.48	.38	.31	PV/BLK
Round, Grey	401-1149-ND	.48	.38	.31	PV/GRY
Round, Red	401-1150-ND	.48	.38	.31	PV/RED
Round, White	401-1151-ND	.48	.38	.31	PV/WHT

9157B-ND	E-Switch Data Book **$2.95**

Push Button Switches TA SERIES

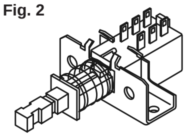
The industry standard used in applications such as audio, instrumentation, telecommunications, and test equipment. Featuring momentary or alternate action switching. P.C. lugs available with or without solder lugs for hand wiring. **Contacts:** Gold or Tin Plated 15µi. **Contact Resistance:** Initial – 5 milliohms max.; Current and Voltage Ratings – 0.5A @ 100VAC, 0.2A @ 250VAC, 1A @ 25VDC. Test – 100,000 cycles min. *Caps sold separately.*

Fig. 1



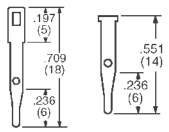
No Mounting Bracket

Fig. 2

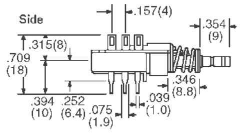


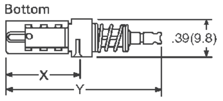
Chassis Mount Version

Terminal Types



Type A **Type B**



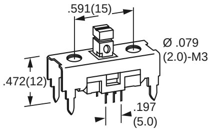


	Y in. (mm)
2PDT	1.66 (42.15)
4PDT	2.13 (54.15)
6PDT	2.60 (66.15)
10PDT	3.55 (90.15)

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	Gold Plating					
1	Alternate Action, DPDT, Terminal A	EG1001-ND	3.99	3.20	2.88	TA2UEEAAU
	Momentary, DPDT, Terminal A	EG1002-ND	3.83	3.07	2.76	TA2UOAAAUPN
	Alternate Action, DPDT, Terminal B	EG1003-ND	3.99	3.20	2.88	TA2UEECAU
	Alternate Action, 4PDT, Terminal A	EG1004-ND	6.35	5.08	4.57	TA4UEEAAUPN
	Momentary Action, 4PDT, Terminal A	EG1005-ND	6.17	4.94	4.45	TA4UDAAAU
	Silver Plating					
1	Alt. Action, DPDT, Terminal A	EG1000-ND	1.80	1.45	1.30	TA2UEEAAGPN
	Momentary, DPDT, Terminal A	EG1006-ND	1.67	1.34	1.21	TA2UOAAAGPN
	Alt. Action, DPDT, Terminal B	EG1007-ND	1.80	1.45	1.30	TA2UEECAGPN
	Alt. Action, 4PDT, Terminal A	EG1008-ND	2.21	1.77	1.60	TA4UEEAAGPN
	Momentary, 4PDT, Terminal A	EG1009-ND	2.28	1.83	1.65	TA4UOAA AGPN
	Alt. Action, 6PDT, Terminal A	EG1543-ND	2.60	2.09	1.88	TA6UEEAAGPN
	Momentary, 6PDT, Terminal A	EG1544-ND	2.48	1.98	1.79	TA6UOAAAGPN
	Alt. Action, 10PDT, Terminal A	EG1545-ND	6.64	5.31	4.78	TA10UEEAAGPN
	Momentary, 10PDT, Terminal A	EG1546-ND	6.60	5.28	4.75	TA10UOAAAGPN
2	Chassis Mt, Alt. Action, DPDT Terminal A	EG1010-ND	2.14	1.93	1.65	1XTA000302/2UEEAAG
	Chassis Mt, Alt. Action, 4PDT Terminal A	EG1011-ND	2.51	2.26	1.93	1XTA000302/4UEEAAG

Push Button Switches

JN SERIES



Stand-up version of the TA Series. **Contacts:** Silver Plated **Contact Resistance:** 50 milliohms Max. **Voltage Ratings:** 30V **DC Rating:** 0.1A. Use the TA Series caps. *Caps sold separately.*

Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
Chassis Mt, Stand Up, Alternate Action DPDT	EG1016-ND	1.60	1.44	1.23	1XJN002UEE
Chassis Mt, Stand Up, Momentary Action DPDT	EG1017-ND	1.60	1.44	1.23	1XJN002U0A

Power Switches P227/P197 SERIES

P227 Series: Rating 125VAC @ 7A/ 250VAC @ 4A. DPDT Alternate Action Panel Mount. Approvals: UL, CSA, Demko, Semko, SEV, Femko, Nemko. **P197 Series:** Rating 5A @ AC250V. Approvals: UL, CSA, VDE, Semko, Nemko, Demko. *Caps sold separately.*

Fig. 1

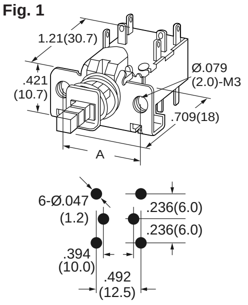


Fig. 2

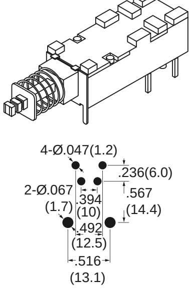


Fig. 3

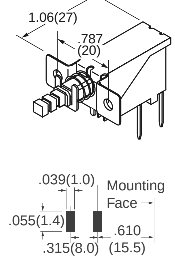


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Push Button, DPDT, Alt. Act., Dim. A = .79" (20mm)	EG1018-ND	3.38	3.05	2.60	P227EEB20
	Push Button, DPDT, Alt. Act., Dim. A = .71" (18mm)	EG1020-ND	3.38	3.05	2.60	P227EEB18
2	Push Button, DPST, Alt. Act., PCB Mnt., 7A	EG1026-ND	3.29	2.97	2.53	P227EE1C
3	Push Button, SPST, Alt. Act., PCB Mnt., 5A	EG1021-ND	2.93	2.65	2.25	P197PBEE
	Push Button, SPST, Alt. Act., Panel Mnt., 5A	EG1022-ND	2.93	2.65	2.25	P197SBEE

Push Button Switches TL SERIES

Rating: DC 30V 0.1A
Circuit: DPDT - 4PDT
Timing: Non-Shorting
Travel Stroke: Full 2.5, Lock 1.5
Operating Force: TL2285 = 180±50gf only. TL4201 = 250 +100/-50gf
Life: 10,000 cycles min.

Caps sold separately.

TL2285 Series: use MTH caps
TL4201 Series: use 4J/6J caps

Fig. 1

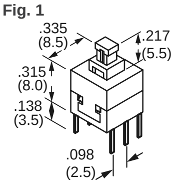


Fig. 2

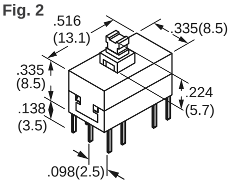


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Momentary Action, DPDT, PCB Mount, Silver Plating	EG1871-ND	1.22	.98	.89	TL2285OA
	Alternate Action, DPDT, PCB Mount, Silver Plating	EG1872-ND	1.22	.98	.89	TL2285EE
2	Momentary Action, 4PDT, PCB Mount, Silver Plating	EG1873-ND	2.57	2.06	1.85	TL4201OAYA
	Alternate Action, 4PDT, PCB Mount, Silver Plating	EG1874-ND	2.57	2.06	1.85	TL4201EEYA

Switch Caps

TA, JN, TL4201, P227, P197 Series

All caps are gloss finish.

Fig. 1

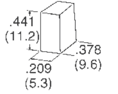


Fig. 2

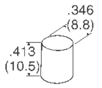


Fig. 3

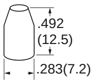


Fig. 4

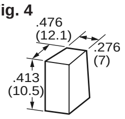


Fig. 5

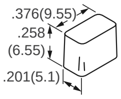


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Rectangle Cap, White	EG1088-ND	.33	.30	.26	TAC WHT
	Rectangle Cap, Black	EG1081-ND	.33	.30	.26	TAC BLK
	Rectangle Cap, Red	EG1085-ND	.33	.30	.26	TAC RED
	Rectangle Cap, Grey	EG1082-ND	.33	.30	.26	TAC GRY
2	Round Cap, White	EG1098-ND	.33	.30	.26	TAG WHT
	Round Cap, Black	EG1091-ND	.33	.30	.26	TAG BLK
	Round Cap, Gray	EG1092-ND	.33	.30	.26	TAG GRY
	Round Cap, Red	EG1095-ND	.33	.30	.26	TAG RED
	Round Cap, Chrome	EG1099-ND	.63	.57	.49	TAG CHROME
3	Bullet Shaped Cap, Black	EG1012-ND	.33	.30	.26	TAM BLK
	Bullet Shaped Cap, White	EG1013-ND	.33	.30	.26	TAM WHT
	Bullet Shaped Cap, Grey	EG1014-ND	.33	.30	.26	TAM GRY
4	Rectangle Cap, Red	EG1019-ND	.33	.30	.26	TAD RED
	Rectangle Cap, Black	EG1877-ND	.33	.30	.26	TAD BLK
	Rectangle Cap, White	EG1878-ND	.33	.30	.26	TAD WHT
	Rectangle Cap, Grey	EG1879-ND	.33	.30	.26	TAD GRY
5	Rectangle Cap, w/Chamfered Edges, Black	EG1875-ND	.44	.40	.35	TAK BLK
	Rectangle Cap, w/Chamfered Edges, Grey	EG1876-ND	.44	.40	.35	TAK GRY

Miniature Push Button Switches

MTH SERIES

Miniature switches that feature an ultra light feel with a short stroke. Ideal for telecommunications and test equipment, and wherever miniaturization is required. **Contact Material:** Silver Plated. **Contact Resistance:** <0.1 ohm. **Voltage Rating:** 30V DC. **Switching Current Max:** 100mA. **Life:** ≥1 x 10^5 cycles. **Moving Contacts:** Phosphor bronze – 1 micron silver. **Force:** 170 ±100g. **Travel To Lock:** .08" (2mm). **Operating Temperature Range:** -10°C to 60°C. *Caps sold separately.*

Fig. 1
No Mounting Bracket

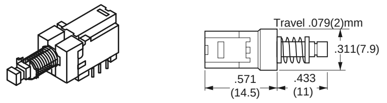


Fig. 2
Chassis Mount Version

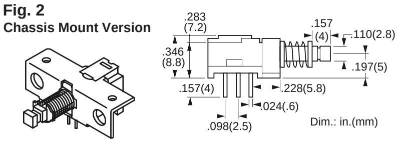


Fig. 3

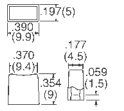


Fig. 4

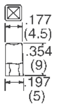


Fig. 5

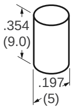


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
1	Right Angle, Momentary, DPDT	EG1101-ND	1.14	1.03	.88	MTH2UOANAGX
	Right Angle, Alternate Action DPDT	EG1102-ND	1.26	1.14	.97	MTH2UEENAGX
	Right Angle, Alternate Action, 4PDT	EG2546-ND	1.31	1.19	1.01	MTH4UEENAGX
	Right Angle, Momentary, 4PDT	EG2547-ND	1.20	1.09	.93	MTH4UOANAGX
2	Chassis Mt, Rt Angle, Alternate Action DPDT	EG1015-ND	1.73	1.56	1.33	1XMTH002UEE
3	Rectangle Cap, Red	EG1185-ND	.25	.23	.19	1C101
	Rectangle Cap, Black	EG1181-ND	.25	.23	.19	1C911
	Rectangle Cap, Light Grey................	EG1182-ND	.25	.23	.19	1C951
4	Long Square Cap, Red	EG1195-ND	.25	.23	.19	1D101
	Long Square Cap, Black..................	EG1191-ND	.25	.23	.19	1D911
	Long Square Cap, Light Grey............	EG1192-ND	.25	.23	.19	1D951
5	Round Cap, Diameter, Red	EG1880-ND	.25	.23	.19	1R RED
	Round Cap, Diameter, White	EG1881-ND	.25	.23	.19	1R WHT
	Round Cap, Diameter, Black.............	EG1882-ND	.25	.23	.19	1R BLK
	Round Cap, Diameter, Light Grey	EG1883-ND	.25	.23	.19	1R LGR
	Round Cap, Diameter, Dark Grey.........	EG1884-ND	.25	.23	.19	1R DGR

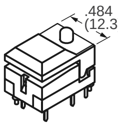
9157B-ND E-Switch Data Book....... **$2.95**

Momentary Push Button Switches

5500 Narrow and 5511 Wide Body Series

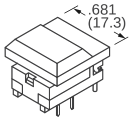
These miniature, momentary switches have a crisp tactile feel and are available in a wide range of colors, available in two widths: the 5500 .47” (12mm) wide and the 5511 .67” (17mm) wide, meet all ESD protection requirements and are available with or without LED. **Operating Travel:** 1.8mm. **Function:** Momentary SPDT. **Contact Bounce:** <5m sec. **Operating Life:** 5 x 10^5 Cycles. **Operating Force:** <200 gf. **Voltage Rating:** 24V. **Current Rating:** 12mA. **Contact Resistance:** <50mΩ.

Fig. 1

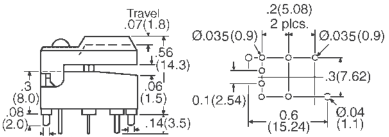


Narrow Body

Fig. 2



Wide Body

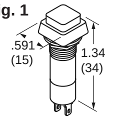


(Above PCB is for Two LED Series)

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
5500 Series - Narrow Body						
1	Momentary, SPDT, Black Cap, no LED	EG1701-ND	4.06	3.66	3.12	5501M1X
	Momentary, SPDT, Grey Cap, no LED	EG1702-ND	4.06	3.66	3.12	5501M2X
	Momentary, SPDT, Red Cap, no LED	EG1704-ND	4.06	3.66	3.12	5501M5X
	Momentary, SPDT, White Cap, no LED	EG1708-ND	4.06	3.66	3.12	5501M8X
	Momentary, SPDT, Black Cap, w/Red LED	EG17151-ND	5.30	4.78	4.07	5501M11
	Momentary, SPDT, Black Cap, w/Green LED	EG17171-ND	5.84	5.26	4.48	5501M12
	Momentary, SPDT, Grey Cap, w/Red LED	EG17152-ND	5.30	4.78	4.07	5501M21
	Momentary, SPDT, Grey Cap, w/Green LED	EG17172-ND	5.84	5.26	4.48	5501M22
	Momentary, SPDT, Red Cap, w/Red LED	EG17155-ND	5.30	4.78	4.07	5501M51
	Momentary, SPDT, Red Cap, w/Green LED	EG17175-ND	5.84	5.26	4.48	5501M52
	Momentary, SPDT, White Cap, Red LED	EG17158-ND	5.30	4.78	4.07	5501M81
	Momentary, SPDT, White Cap, w/Green LED	EG17178-ND	5.84	5.26	4.48	5501M82
	Momentary, SPDT, Black Cap, w/Red and Green LED	EG171571-ND	6.62	5.96	5.08	5501M11/2
	Momentary, SPDT, Grey Cap, w/Red and Green LED	EG171572-ND	6.62	5.96	5.08	5501M21/2
5511 Series - Wide Body						
2	Momentary, SPDT, Black Cap, no LED	EG1709-ND	4.06	3.66	3.12	5511M1X
	Momentary, SPDT, Grey Cap, no LED	EG1710-ND	4.06	3.66	3.12	5511M2X
	Momentary, SPDT, Blue Cap, no LED	EG1711-ND	4.06	3.66	3.12	5511M4X
	Momentary, SPDT, Red Cap, no LED	EG1712-ND	4.06	3.66	3.12	5511M5X
	Momentary, SPDT, White Cap, no LED	EG1714-ND	4.06	3.66	3.12	5511M8X
	Momentary, SPDT, Black Cap, w/Red LED	EG1715-ND	5.30	4.78	4.07	5511M11
	Momentary, SPDT, Black Cap, w/Green LED	EG1719-ND	5.30	4.78	4.07	5511M12
	Momentary, SPDT, Grey Cap, w/Red LED	EG1716-ND	5.30	4.78	4.07	5511M21
	Momentary, SPDT, Grey Cap, w/Green LED	EG1720-ND	5.30	4.78	4.07	5511M22
	Momentary, SPDT, Red Cap, w/Red LED	EG1717-ND	5.30	4.78	4.07	5511M51
	Momentary, SPDT, Red Cap, w/Green LED	EG1721-ND	5.30	4.78	4.07	5511M52
	Momentary, SPDT, White Cap, w/Red LED	EG1718-ND	5.30	4.78	4.07	5511M81
	Momentary, SPDT, White Cap, w/Green LED	EG1722-ND	5.30	4.78	4.07	5511M82
	Momentary, SPDT, Black Cap, w/Red and Green LED	EG1723-ND	5.84	5.26	4.48	5511M11/2
	Momentary, SPDT, Grey Cap, w/Red and Green LED	EG1724-ND	5.84	5.26	4.48	5511M21/2

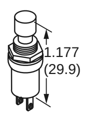
Push Button Switches

Fig. 1



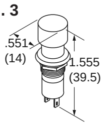
Circuit: SPST (Momentary On) **Rating:** 3A 125V AC **Initial Contact Resistance:** ≤ 50mΩ **Hole Cutout:** .49” (12.4mm) Hardware Included.

Fig. 2



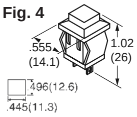
Circuit: SPST (Momentary On) **Rating:** 3A 125V AC **Initial Contact Resistance:** ≤ 50mQ **Hole Cutout:** .28” (7.2mm) Hardware Included.

Fig. 3



Circuit: SPST (Momentary On) **Rating:** 3A 125V AC **Initial Contact Resistance:** ≤ 50mΩ **Hole Cutout:** .49” (12.4mm) Hardware Included.

Fig. 4



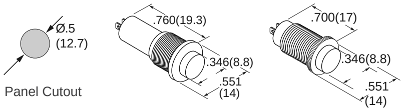
Panel Cutout

Circuit: SPST (Momentary On)

Rating: 1A 125V AC

Initial Contact Resistance: ≤ 20mΩ

Fig. 5



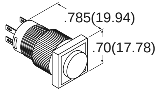
Plastic Bushing

Metal Bushing

Panel Cutout

Circuit: SPST **Rating:** 3A 125V AC / 1.5A 250V AC
Initial Contact Resistance: ≤ 50mΩ **Hole Cutout:** .50” (12.7mm)
Hardware Included.

Fig. 6



Circuit: SPST **Rating:** 3A 125V /1.5A 250 VAC.
Hole Cutout: .62” (15.75mm)
Hardware Included.

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
Momentary Switches						
1	Red, Cap .59” (15mm) Sq., N/O	EG2005-ND	2.32	2.09	1.78	PS1023AT-RED
	Black, Cap .59” (15mm) Sq., N/O	EG2001-ND	2.32	2.09	1.78	PS1023AT-BLK
2	Red, Cap .24” (6mm) Dia., N/O	EG2015-ND	1.24	1.09	1.00	PS1024AT-RED
	Black, Cap .24” (6mm) Dia., N/O	EG2011-ND	1.24	1.09	1.00	PS1024AT-BLK
	Red, Cap .39” (10mm) Dia., N/O	EG2025-ND	1.56	1.40	1.20	PS1024AL-RED
	Black, Cap .39” (10mm) Dia., N/O	EG2021-ND	1.56	1.40	1.20	PS1024AL-BLK
3	Red, Cap .55” (14mm) Dia., N/O	EG2035-ND	2.31	2.09	1.78	PS1040A-RED
	Black, Cap .55” (14mm) Dia.,N/O	EG2031-ND	2.31	2.09	1.78	PS1040A-BLK
4	Red, Cap .55” (14mm) Sq., N/O	EG2045-ND	1.69	1.53	1.30	PS1057A-RED
	Black, Cap .55” (14mm) Sq., N/O	EG2041-ND	1.69	1.53	1.30	PS1057A-BLK
5	Black Cap, Plastic Bushing, N/O	EG1900-ND	2.01	1.82	1.55	RP3502A-BLK
	Black Cap, Plastic Bushing, N/C	EG1929-ND	2.27	2.05	1.75	RP3502B-BLK
	Red Cap, Plastic Bushing, N/O	EG1930-ND	2.01	1.82	1.55	RP3502A-RED
	Red Cap, Plastic Bushing, N/C	EG1931-ND	2.27	2.05	1.75	RP3502B-RED
	Black Cap, Metal Bushing, N/O	EG1932-ND	2.98	2.68	2.29	RP3502MA-BLK
	Black Cap, Metal Bushing, N/C	EG1933-ND	3.33	3.00	2.56	RP3502MB-BLK
	Green Cap, Metal Bushing, N/O	EG1934-ND	2.98	2.68	2.29	RP3502MA-GRN
	Green Cap, Metal Bushing, N/C	EG1935-ND	2.98	2.68	2.29	RP3502MB-GRN
	Yellow Cap, Metal Bushing, N/O	EG1936-ND	2.98	2.68	2.29	RP3502MA-YEL
	Yellow Cap, Metal Bushing, N/C	EG1937-ND	2.98	2.68	2.29	RP3502MB-YEL
	Red Cap, Metal Bushing, N/O	EG1938-ND	2.98	2.68	2.29	RP3502MA-RED
	Red Cap, Metal Bushing, N/C	EG1939-ND	2.98	2.68	2.29	RP3502MB-RED
6	Illuminating Red LED Alt Action	EG2543-ND	6.77	6.10	5.20	RP3508BL-RED
	Illuminating Green LED Alt Action	EG2544-ND	6.77	6.10	5.20	RP3508BL-GRN
	Illuminating Yellow LED Alt Action	EG2545-ND	6.77	6.10	5.20	RP3508BL-YEL

Momentary Push Button Switches

320 and 520 SERIES

320 Series switches are being used in a variety of applications in a great number of industries such as; Instrumentation, Test Equipment, Telecommunications, Audio Visual, and Computers. **Travel:** .028" (.7mm). **Operating Force:** 120 grams. **Type Of Contact:** SPST. **Contact Rating:** 25mA/50V (DC). **Initial Resistance:** 50m ohms. **Life:** 1 X 10^6 switching cycles. • **Snap Time:** Closing: <50µs; Opening: <200µs. **Materials:** Housing: PC-CF; Knob: ABS or equivalent; Contacts (Fixed): CuZn Ag (gold available); Dome Contact: CrNi Au.

520 Series switches designed for digital electronics, offer a smooth, tactile feel. They feature built-in square or round buttons and are available in seven colors. **Travel:** .03” (.8mm). **Operating Force:** 130 grams. **Type of Contact:** SPST n/o. **Contact Rating:** 10mA, 35 V DC; 100mA, 100 V AC. **Initial Contact Resistance:** < 20mΩ. **Life:** 500,000 cycles. **Operating Temp. Range:** 20°C to +85°C. **Materials:** Base: Valox; Button: Polycarbonate; Switch Contact: Laminated silver, self-cleaning.

Fig. 1

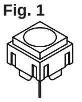


Fig. 2

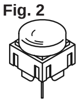


Fig. 3

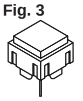


Fig. 4

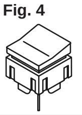


Fig. 5

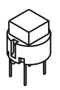


Fig. 6

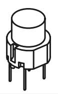


Fig. 7

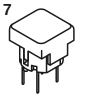


Fig. 8

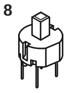


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
320 Series – Momentary Push Button, Sold With Caps						
1	Square, Recessed, Black	EG1301-ND	2.23	2.02	1.72	320E1-1BLK
	Square, Recessed, Grey	EG1303-ND	2.23	2.02	1.72	320E1-1GRY
	Square, Recessed, Red	EG1305-ND	2.23	2.02	1.72	320E1-1RED
	Square, Recessed, White	EG1308-ND	2.23	2.02	1.72	320E1-1WHT
	Square, Recessed, Yellow	EG2549-ND	2.05	1.85	1.58	320E1-1YEL
	Square, Recessed, Blue	EG2550-ND	2.05	1.85	1.58	320E1-1BLU
	Square, Recessed, Green	EG2551-ND	2.05	1.85	1.58	320E1-1GRN
2	Std. Round, Black	EG1311-ND	2.02	1.74	1.50	320.02E1-1.08BLK
	Std. Round, Grey	EG1312-ND	2.02	1.74	1.50	320.02E1-1.08GRY
	Std. Round, Red	EG1315-ND	2.02	1.74	1.50	320.02E1-1.08RED
	Std. Round, White	EG1318-ND	2.02	1.74	1.50	320.02E1-1.08WHT
	Std. Round, Yellow	EG2552-ND	2.57	2.32	1.98	320.02E1-1.08YEL
	Std. Round, Blue	EG2553-ND	2.57	2.32	1.98	320.02E1-1.08BLU
	Std. Round, Green	EG2554-ND	2.57	2.32	1.98	320.02E1-1.08GRN
	Large Round, Black	EG2568-ND	2.66	2.40	2.05	320.02E1-1.09BLK
	Large Round, Grey	EG2569-ND	2.66	2.40	2.05	320.02E1-1.09GRY
	Large Round, Yellow	EG2570-ND	2.66	2.40	2.05	320.02E1-1.09YEL
	Large Round, Blue	EG2571-ND	2.66	2.40	2.05	320.02E1-1.09BLU
	Large Round, Red	EG2572-ND	2.66	2.40	2.05	320.02E1-1.09RED
	Large Round, Green	EG2573-ND	2.66	2.40	2.05	320.02E1-1.09GRN
	Large Round, White	EG2574-ND	2.66	2.40	2.05	320.02E1-1.09WHT

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
3	Flat Square, Black	EG1321-ND	2.23	2.02	1.72	320.01E1-1BLK
	Flat Square, Grey	EG1322-ND	2.23	2.02	1.72	320.01E1-1GRY
	Flat Square, Red	EG1325-ND	2.23	2.02	1.72	320.01E1-1RED
	Flat Square, White	EG1328-ND	2.23	2.02	1.72	320.01E1-1WHT
	Flat Square, Yellow	EG2555-ND	2.05	1.85	1.58	320.01E1-1YEL
	Flat Square, Blue	EG2556-ND	2.05	1.85	1.58	320.01E1-1BLU
	Flat Square, Green	EG2557-ND	2.05	1.85	1.58	320.01E1-1GRN
4	Tilted Square, Black	EG1341-ND	2.23	2.02	1.72	320.22E1-1BLK
	Tilted Square, Grey	EG1342-ND	2.23	2.02	1.72	320.22E1-1GRY
	Tilted Square, Red	EG1345-ND	2.23	2.02	1.72	320.22E1-1RED
	Tilted Square, White	EG1348-ND	2.23	2.02	1.72	320.22E1-1WHT
	Tilted Square, Yellow	EG2558-ND	2.07	1.87	1.59	320.22E1-1YEL
	Tilted Square, Blue	EG2559-ND	2.07	1.87	1.59	320.22E1-1BLU
	Tilted Square, Green	EG2560-ND	2.07	1.87	1.59	320.22E1-1GRN
	Tilted Rectangular, Black	EG2561-ND	2.12	1.91	1.63	320.21E1-1BLK
	Tilted Rectangular, Grey	EG2562-ND	2.12	1.91	1.63	320.21E1-1GRY
	Tilted Rectangular, Yellow	EG2563-ND	2.12	1.91	1.63	320.21E1-1YEL
	Tilted Rectangular, Blue	EG2564-ND	2.12	1.91	1.63	320.21E1-1BLU
	Tilted Rectangular, Red	EG2565-ND	2.12	1.91	1.63	320.21E1-1RED
	Tilted Rectangular, Green	EG2566-ND	2.12	1.91	1.63	320.21E1-1GRN
	Tilted Rectangular, White	EG2567-ND	2.12	1.91	1.63	320.21E1-1WHT
—	12 mm Finger Recessed Cap, Black	EG2575-ND	2.42	2.18	1.86	320.02E1-1.094BLK
	12 mm Finger Recessed Cap, Grey	EG2576-ND	2.42	2.18	1.86	320.02E1-1.094GRY
	Black Stem (Use’s TA/JN Caps)	EG2548-ND	1.95	1.76	1.50	320.02E1-1BLK
520 Series – Momentary Push Button, Sold With Caps						
5	Square, Black	EG1401-ND	.98	.89	.76	520.01-BLK
	Square, Yellow	EG1403-ND	.98	.89	.76	520.01-YEL
	Square, White	EG1408-ND	.98	.89	.76	520.01-WHT
	Square, Blue	EG1404-ND	.98	.89	.76	520.01-BLU
	Square, Red	EG1405-ND	.98	.89	.76	520.01-RED
	Square, Green	EG1407-ND	.98	.89	.76	520.01-GRN
	Square, Grey	EG1402-ND	.98	.89	.76	520.01-DGR
6	Round, Black	EG1411-ND	.98	.89	.76	520.02-BLK
	Round, Yellow	EG1413-ND	.98	.89	.76	520.02-YEL
	Round, White	EG1418-ND	.98	.89	.76	520.02-WHT
	Round, Blue	EG1414-ND	.98	.89	.76	520.02-BLU
	Round, Red	EG1415-ND	.98	.89	.76	520.02-RED
	Round, Green	EG1417-ND	.98	.89	.76	520.02-GRN
	Round, Grey	EG1412-ND	.98	.89	.76	520.02-DGR
7	Square, Black	EG1419-ND	1.31	1.18	1.01	520.03-BLK
	Square, Grey	EG1420-ND	1.31	1.18	1.01	520.03-DGR
	Square, Red	EG1421-ND	1.31	1.18	1.01	520.03-RED
	Square, White	EG1422-ND	1.31	1.18	1.01	520.03-WHT
	Square, Blue	EG1423-ND	1.31	1.18	1.01	520.03-BLU
	Square, Yellow	EG1424-ND	1.31	1.18	1.01	520.03-YEL
	Square, Green	EG1425-ND	1.31	1.18	1.01	520.03-GRN
8	Black Stem (Use’s TA/JN Caps)	EG1426-ND	1.31	1.18	1.01	520.04

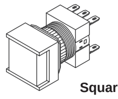
OMRON *NEW!* A16 Series 16mm Switches

Omron's unique A16 series design allows users to make any switch arrangement needed. By changing the rear switch block, users can have a SPDT or a DPDT with LED or incandescent illumination. Changing the rear switch block or lamp is a snap with Omron's exclusive extraction tool. Panel installation is easy, cut your hole and insert the switch into the front of the panel and fix the lock ring and mounting nut from the back of the panel using Omron's fitting wrench to tighten the nut. Switches are sold as a complete assembly with switch block and lamp options available.

Specifications:
Rating Contacts: • 250 VAC: 3A (resistive) • 125 VAC: 5A (resistive) • 30 VDC: 3A (resistive)
LED Indicators: • Rated Voltage: 24 VDC • Rated Current: 10 mA • Operating Voltage: 24VDC±5%
Dielectric Strength: 1000 VAC, 50/60 Hz for 1 min between terminals of same polarity
Life Expectancy: 100,000 operations min. **Operating Temperature:** -10°C to 55°C
Ambient humidity: Operating 35% to 80% **Degree of protection:** IP65

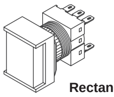
Pushbutton Switches 16mm

Fig. 1



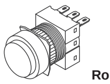
Square

Fig. 2



Rectangular

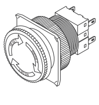
Fig. 3



Round

Fig.	Switch Type	Cont. Blocks Include	Illumin. Voltage	Lens Color	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Non-Illuminated Momentary Switches									
1	Square/Flush Button	DPDT	—	Blue	Z1312-ND	9.53	8.82	8.24	A165-AAM-2
				Black	Z1313-ND	9.53	8.82	8.24	A165-ABM-2
				Green	Z1314-ND	9.53	8.82	8.24	A165-AGM-2
				Red	Z1315-ND	9.53	8.82	8.24	A165-ARM-2
				White	Z1316-ND	9.53	8.82	8.24	A165-AWM-2
				Yellow	Z1317-ND	9.53	8.82	8.24	A165-AYM-2
2	Rectangular/Flush Button	DPDT	—	Black	Z1318-ND	9.53	8.82	8.24	A165-JBM-2
				Green	Z1319-ND	9.53	8.82	8.24	A165-JGM-2
				Red	Z1320-ND	9.53	8.82	8.24	A165-JRM-2
				White	Z1321-ND	9.53	8.82	8.24	A165-JWM-2
				Yellow	Z1322-ND	9.53	8.82	8.24	A165-JYM-2
3	Round/Extended Button	SPDT	—	Blue	Z1323-ND	8.16	7.56	7.06	A165-TAM-1
				Black	Z1324-ND	8.16	7.56	7.06	A165-TBM-1
				Green	Z1325-ND	8.16	7.56	7.06	A165-TGM-1
				Red	Z1326-ND	8.16	7.56	7.06	A165-TRM-1
				White	Z1327-ND	8.16	7.56	7.06	A165-TWM-1
				Yellow	Z1328-ND	8.16	7.56	7.06	A165-TYM-1
Illuminated Momentary Switches									
1	Square/Flush Button	DPDT	24VDC	Green	Z1300-ND	12.70	11.76	10.98	A165L-AGM-24D-2
				Red	Z1301-ND	12.70	11.76	10.98	A165L-ARM-24D-2
				White	Z1302-ND	12.70	11.76	10.98	A165L-AWM-24D-2
				Yellow	Z1303-ND	12.70	11.76	10.98	A165L-AYM-24D-2
2	Rectangular/Flush Button	DPDT	24VDC	Green	Z1304-ND	13.61	12.60	11.76	A165L-JGM-24D-2
				Red	Z1305-ND	13.61	12.60	11.76	A165L-JRM-24D-2
				White	Z1306-ND	13.61	12.60	11.76	A165L-JWM-24D-2
				Yellow	Z1307-ND	13.61	12.60	11.76	A165L-JYM-24D-2
3	Round/Extended Button	DPDT	24VDC	Green	Z1308-ND	12.70	11.76	10.98	A165L-TGM-24D-2
				Red	Z1309-ND	12.70	11.76	10.98	A165L-TRM-24D-2
				White	Z1310-ND	12.70	11.76	10.98	A165L-TWM-24D-2
				Yellow	Z1311-ND	12.70	11.76	10.98	A165L-TYM-24D-2

Emergency Stop Switch



Omrons 16mm Emergency stop switches have positive opening mechanism with minimum contact separation of 3mm in accordance with EN60947-5-1. Includes a safety lock mechanism to prevent malfunction. “Turn to Reset” operation to prevent unintentional resetting. Clearly visible red button with IP65 oil resistant seal. **Contacts:** 5A@110VAC/3A 30VDC

Switch Type	Illumination Voltage	Contact	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
30-dia.Head Push-lock Turn-Reset	—	SPST-NC	Z1427-ND	28.58	26.46	24.70	A165E-S-01
	—	DPST-NC	Z1428-ND	34.47	31.92	29.80	A165E-S-02
	24 VDC	SPDT-NC	Z1425-ND	38.56	35.70	33.32	A165E-LS-24D-01
	24 VDC	DPST-NC	Z1426-ND	44.91	41.58	38.81	A165E-LS-24D-02
Emergency Stop Plate, 45mm dia., Yellow			Z1435-ND	3.18	2.94	2.75	A16Z-5070

16mm Accessories

Fig. 1

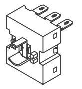


Fig. 2

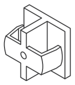


Fig. 3

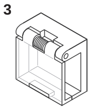


Fig. 4

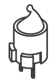


Fig.	Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Repl. Switch Unit - SPDT, Solder Terminal	Z1330-ND	3.63	3.36	3.14	A16-1
	Repl. Switch Unit - DPDT, Solder Terminal	Z1331-ND	4.99	4.62	4.32	A16-2
	Repl. Switch Unit - SPDT, PCB Terminal	Z1332-ND	7.26	6.72	6.28	A16-1P
	Repl. Switch Unit - DPDT, PCB Terminal	Z1333-ND	7.26	6.72	6.28	A16-2P
2	Panel Hole Plug, Square	Z1334-ND	2.72	2.52	2.36	A16ZA-3003
	Panel Hole Plug, Rectangular	Z1335-ND	1.81	1.68	1.57	A16ZJ-3003
	Panel Hole Plug, Round	Z1336-ND	1.81	1.68	1.57	A16ZT-3003
3	Switch Guard, Square & Round, Black	Z1337-ND	4.08	3.78	3.53	A16ZA-5050
	Switch Guard, Rectangular	Z1338-ND	4.08	3.78	3.53	A16ZJ-5050
4	Repl. Neon Lamp, 110V, Red	Z1342-ND	2.72	2.52	2.36	A16-1NRN
	Repl. Neon Lamp, 110V, Green	Z1343-ND	2.72	2.52	2.36	A16-1NGN
—	Fitting Wrench for Tightening Lock Nuts	Z1436-ND	5.44	5.04	4.71	A3B-3004
	Extractor for Lamp and Switch Removal	Z1437-ND	1.81	1.68	1.57	A16Z-5080

M16 Pilot Lights

Indicator light only without the switch for indication of circuit status or warning. Matches switch assembly for uniform panel look.

Fig. 1

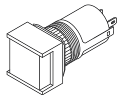


Fig. 2

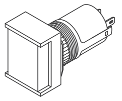


Fig. 3

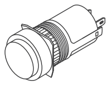


Fig.	Light Type	Illumination Voltage	Lens Color	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Square	24 VDC @ 10 mA	Green	Z1349-ND	8.16	7.56	7.06	M165-AG-24D
			Red	Z1350-ND	8.16	7.56	7.06	M165-AR-24D
			White	Z1351-ND	8.16	7.56	7.06	M165-AW-24D
			Yellow	Z1352-ND	8.16	7.56	7.06	M165-AY-24D
2	Rectangular	24 VDC @ 10mA	Green	Z1354-ND	8.16	7.56	7.06	M165-JG-24D
			Red	Z1355-ND	8.16	7.56	7.06	M165-JR-24D
			White	Z1356-ND	8.16	7.56	7.06	M165-JW-24D
			Yellow	Z1357-ND	8.16	7.56	7.06	M165-JY-24D
3	Round	24 VDC @ 10mA	Green	Z1359-ND	8.16	7.56	7.06	M165-TG-24D
			Red	Z1360-ND	8.16	7.56	7.06	M165-TR-24D
			White	Z1361-ND	8.16	7.56	7.06	M165-TW-24D
			Yellow	Z1362-ND	8.16	7.56	7.06	M165-TY-24D

Key Type Selector Switch

Fig. 1

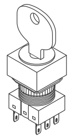


Fig. 2

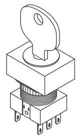


Fig. 3

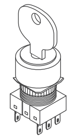


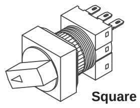
Fig.	Type	Number of Positions	Contact	Key Positions Pos. 1	Pos. 2	Pos. 3	Key Removable Position	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Square	2 Position	DPDT	On	Mom	—	1	Z1399-ND	28.12	26.04	24.31	A165K-A2AL-2
				On	On	—	1, 2, 3	Z1400-ND	28.12	26.04	24.31	A165K-A2M-2
				On	On	—	1	Z1401-ND	28.12	26.04	24.31	A165K-A2ML-2
				On	On	—	3	Z1402-ND	28.12	26.04	24.31	A165K-A2MR-2
		3 Position	DPDT	On	On	On	1, 2, 3	Z1403-ND	28.12	26.04	24.31	A165K-A3M-2
				On	On	On	2	Z1404-ND	28.12	26.04	24.31	A165K-A3MC-2
				On	On	On	1	Z1405-ND	28.12	26.04	24.31	A165K-A3ML-2
				On	On	On	3	Z1406-ND	28.12	26.04	24.31	A165K-A3MR-2
2	Rectangular	2 Position	DPDT	On	Mom	—	1	Z1407-ND	28.12	26.04	24.31	A165K-J2AL-2
				On	On	—	1 & 2	Z1408-ND	28.12	26.04	24.31	A165K-J2M-2
				On	On	—	1	Z1409-ND	28.12	26.04	24.31	A165K-J2ML-2
				On	On	—	2	Z1410-ND	28.12	26.04	24.31	A165K-J2MR-2
		3 Position	DPDT	On	On	On	1, 2, 3	Z1411-ND	28.12	26.04	24.31	A165K-J3M-2
				On	On	On	2	Z1412-ND	28.12	26.04	24.31	A165K-J3MC-2
				On	On	On	1	Z1413-ND	28.12	26.04	24.31	A165K-J3ML-2
				On	On	On	3	Z1414-ND	28.12	26.04	24.31	A165K-J3MR-2
3	Round	2 Position	DPDT	On	Mom	—	1	Z1415-ND	28.12	26.04	24.31	A165K-T2AL-2
				On	On	—	1 & 2	Z1416-ND	28.12	26.04	24.31	A165K-T2M-2
				On	On	—	1	Z1417-ND	28.12	26.04	24.31	A165K-T2ML-2
				On	On	—	2	Z1418-ND	28.12	26.04	24.31	A165K-T2MR-2
		3 Position	DPDT	Mom	On	Mom	2	Z1419-ND	28.12	26.04	24.31	A165K-T3AC-2
				On	On	On	1, 2, 3	Z1420-ND	28.12	26.04	24.31	A165K-T3M-2
				On	On	On	2	Z1421-ND	28.12	26.04	24.31	A165K-T3MC-2
				On	On	On	1	Z1422-ND	28.12	26.04	24.31	A165K-T3ML-2
				On	On	On	3	Z1423-ND	28.12	26.04	24.31	A165K-T3MR-2
Replacement Key for A165K Series								Z1424-ND	3.63	3.36	3.14	A165K-KEY

(Continued)

Knob Type 16mm Selector Switch

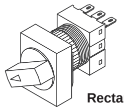
Specifications: Rating Contacts: • 250 VAC: 3A (resistive) • 125 VAC: 5A (resistive) • 30 VDC: 3A (resistive)
LED Indicators: • Rated Voltage: 24 VDC • Rated Current: 10 mA • Operating Voltage: 24VDC+5%
Dielectric Strength: 1000 VAC, 50/60 Hz for 1 min between terminals of same polarity
Life Expectancy: 100,000 operations min. **Operating Temperature:** -10C to 55C
Ambient humidity: Operating 35% to 80% **Degree of protection:** IP65

Fig. 1



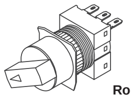
Square

Fig. 2



Rectangular

Fig. 3



Round

Fig.	Switch Type	Position	Switch Function	Contacts	Illumination Voltage	Lens Color	Digi-Key Part No.	Price Each 1	25	50	100	Omron Part No.
Non-Illuminated												
1	Square	2 Position	Maintained (On-Off)	SPDT	—	Black	Z1363-ND	15.42	14.28	13.33	12.38	A165S-A2M-1
		2 Position	Spring Return (Momentary)	SPDT	—	Black	Z1364-ND	15.42	14.28	13.33	12.38	A165S-A2A-1
		3 Position	Maintained (On-Off)	DPDT	—	Black	Z1365-ND	17.24	15.96	14.90	13.84	A165S-A3M-2
2	Rectangular	2 Position	Maintained (On-Off)	SPDT	—	Black	Z1375-ND	15.42	14.28	13.33	12.38	A165S-J2M-1
		2 Position	Spring Return (Momentary)	SPDT	—	Black	Z1376-ND	15.42	14.28	13.33	12.38	A165S-J2A-1
		3 Position	Maintained (On-Off)	DPDT	—	Black	Z1377-ND	17.24	15.96	14.90	13.84	A165S-J3M-2
3	Round	2 Position	Maintained (On-Off)	SPDT	—	Black	Z1387-ND	15.42	14.28	13.33	12.38	A165S-T2M-1
		2 Position	Spring Return (Momentary)	SPDT	—	Black	Z1388-ND	15.42	14.28	13.33	12.38	A165S-T2A-1
		3 Position	Maintained (On-Off)	DPDT	—	Black	Z1389-ND	28.12	26.04	24.31	22.57	A165S-T3M-2
Illuminated												
1	Square	2 Position	Spring Return (Momentary)	SPDT	24VDC	Green Red Yellow	Z1366-ND Z1367-ND Z1368-ND	19.96 19.96 19.96	18.48 18.48 18.48	17.25 17.25 17.25	16.02 16.02 16.02	A165W-A2AG-24D-1 A165W-A2AR-24D-1 A165W-A2AY-24D-1
		2 Position	Maintained (On-Off)	SPDT	24VDC	Green Red Yellow	Z1369-ND Z1370-ND Z1371-ND	19.96 19.96 19.96	18.48 18.48 18.48	17.25 17.25 17.25	16.02 16.02 16.02	A165W-A2MG-24D-1 A165W-A2MR-24D-1 A165W-A2MY-24D-1
		3 Position	Maintained (On-Off)	DPDT	24VDC	Green Red Yellow	Z1372-ND Z1373-ND Z1374-ND	21.77 21.77 21.77	20.16 20.16 20.16	18.82 18.82 18.82	17.48 17.48 17.48	A165W-A3MG-24D-2 A165W-A3MR-24D-2 A165W-A3MY-24D-2
2	Rectangular	2 Position	Spring Return (Momentary)	SPDT	24VDC	Green Red Yellow	Z1378-ND Z1379-ND Z1380-ND	19.96 19.96 19.96	18.48 18.48 18.48	17.25 17.25 17.25	16.02 16.02 16.02	A165W-J2AG-24D-1 A165W-J2AR-24D-1 A165W-J2AY-24D-1
		2 Position	Maintained (On-Off)	SPDT	24VDC	Green Red Yellow	Z1381-ND Z1382-ND Z1383-ND	19.96 19.96 19.96	18.48 18.48 18.48	17.25 17.25 17.25	16.02 16.02 16.02	A165W-J2MG-24D-1 A165W-J2MR-24D-1 A165W-J2MY-24D-1
		3 Position	Maintained (On-Off)	DPDT	24VDC	Green Red Yellow	Z1384-ND Z1385-ND Z1386-ND	21.77 21.77 21.77	20.16 20.16 20.16	18.82 18.82 18.82	17.48 17.48 17.48	A165W-J3MG-24D-2 A165W-J3MR-24D-2 A165W-J3MY-24D-2
3	Round	2 Position	Spring Return (Momentary)	SPDT	24VDC	Green Red Yellow	Z1390-ND Z1391-ND Z1392-ND	19.96 19.96 19.96	18.48 18.48 18.48	17.25 17.25 17.25	16.02 16.02 16.02	A165W-T2AG-24D-1 A165W-T2AR-24D-1 A165W-T2AY-24D-1
		2 Position	Maintained (On-Off)	SPDT	24VDC	Green Red Yellow	Z1393-ND Z1394-ND Z1395-ND	19.96 19.96 19.96	18.48 18.48 18.48	17.25 17.25 17.25	16.02 16.02 16.02	A165W-T2MG-24D-1 A165W-T2MR-24D-1 A165W-T2MY-24D-1
		3 Position	Maintained (On-Off)	DPDT	24VDC	Green Red Yellow	Z1396-ND Z1397-ND Z1398-ND	21.77 21.77 21.77	20.16 20.16 20.16	18.82 18.82 18.82	17.48 17.48 17.48	A165W-T3MG-24D-2 A165W-T3MR-24D-2 A165W-T3MY-24D-2

NEW! A22 Series Switches

Omron's A22 Series of pushbutton switches offer flexible features not found in other competitors switches. Switch blocks are hand snapped into the back of the switch body enabling the end user to replace, add or modify the switching outputs in seconds. Need a DP switch, no problem, simply snap on another switch block to complete your needs? Switch blocks feature screw-recessed (finger safe) terminals to meet both North American and European safety standards. Switches are water, oil and dust sealed to IP65 standards. Switch units come completely assembled and ready for installation. Purchase additional switch blocks for replacement and additions.

Rating Contacts:
• 24 VAC: 10A (inductive), 10A (resistive) • 110 VAC: 5A (inductive), 10A (resistive) • 220 VAC: 3A (inductive), 6A (resistive) **LED Indicators:** • Rated Voltage: 24 VAC/DC • Rated Current: 15 mA • Operating Voltage: 24 VAC/DC+5% **Dielectric Strength:** 2,500 VAC, 50/60 Hz for 1 min between terminals of same polarity **Life Expectancy:** • PB Illum/Non-Illum: 500,000 operations min. • Emergency Stop: 300,000 operations min. • Selector: 500,000 operations min. **Ambient humidity:** Operating 35% to 80% **Degree of protection:** IP65

22mm Accessories

Fig. 1

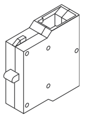


Fig. 2

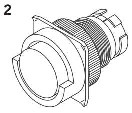


Fig. 3

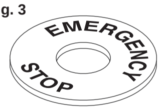
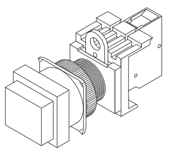


Fig.	Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Replacement Contact Block, SPST-NC, General Purpose	Z1547-ND	5.27	4.88	4.55	A22-01
	Replacement Contact Block, SPST-NC, Microload	Z1548-ND	12.70	11.76	10.98	A22-01S
	Replacement Contact Block, DPST-NC, General Purpose	Z1549-ND	13.61	12.60	11.76	A22-02
	Replacement Contact Block, DPST-NC, Microload	Z1550-ND	19.05	17.64	16.47	A22-02S
	Replacement Contact Block, SPST-NO, General Purpose	Z1551-ND	5.27	4.88	4.55	A22-10
	Replacement Contact Block, SPST-NO, Microload	Z1552-ND	12.70	11.76	10.98	A22-10S
	Replacement Contact Block, DPST-NO, General Purpose	Z1553-ND	13.61	12.60	11.76	A22-20
	Replacement Contact Block, DPST-NO, Microload	Z1554-ND	19.05	17.64	16.47	A22-20S
2	Half Guard Operational Unit White	Z1344-ND	5.44	5.04	4.71	A22-HW
	Half Guard Operational Unit Red	Z1345-ND	5.44	5.04	4.71	A22-HR
	Half Guard Operational Unit Green	Z1346-ND	5.44	5.04	4.71	A22-HG
	Half Guard Operational Unit Black	Z1347-ND	5.44	5.04	4.71	A22-HB
	Half Guard Operational Unit Black	Z1348-ND	5.44	5.04	4.71	A22-HA
3	Emergency Stop Plate, 60mm dia., Yellow with Black Letters	Z1555-ND	4.81	4.46	4.16	A22Z-3466-1
	Emergency Stop Plate, 90mm dia., Yellow with Black Letters	Z1556-ND	4.81	4.46	4.16	A22Z-3476-1
—	Fitting Wrench for Tightening Lock Nuts	Z1557-ND	9.98	9.24	8.63	A22Z-3905
—	Extractor for Lamp and Switch Removal	Z1558-ND	2.72	2.52	2.36	A22Z-3901
—	Lens Remover Tool	Z1559-ND	1.81	1.68	1.57	A3PJ-5080

22M Pilot Light

Indicator light only without the switch for indication of circuit status or warning. Matches switch assembly for uniform panel look.



Light Type	Illumination Voltage	Lens Color	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Square/Extended	24 VAC/DC	Blue	Z1537-ND	24.49	22.68	21.17	M22-CA-24A
		Green	Z1538-ND	19.05	17.64	16.47	M22-CG-24A
		Red	Z1539-ND	19.05	17.64	16.47	M22-CR-24A
		White	Z1540-ND	19.05	17.64	16.47	M22-CW-24A
		Yellow	Z1541-ND	19.05	17.64	16.47	M22-CY-24A
	110 VAC	Blue	Z1542-ND	31.75	29.40	27.44	M22-CA-T1
		Green	Z1543-ND	31.75	29.40	27.44	M22-CG-T1
		Red	Z1544-ND	31.75	29.40	27.44	M22-CR-T1
		White	Z1545-ND	31.75	29.40	27.44	M22-CW-T1
		Yellow	Z1546-ND	31.75	29.40	27.44	M22-CY-T1

(Continued)

Pushbutton Switch 22mm

Fig. 1

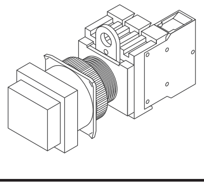


Fig. 2

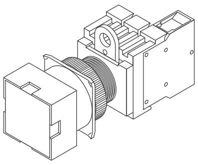


Fig. 3

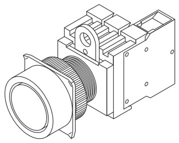


Fig. 4

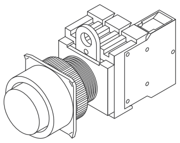


Fig. 5

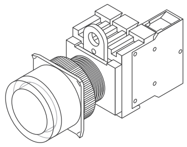


Fig. 6

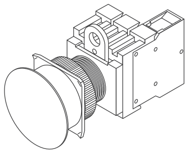


Fig. 7

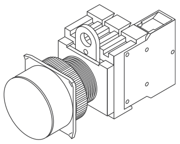


Fig.	Button Type	Contact Blocks Include	Illumination Voltage	Lens Color	Digi-Key Part No.	Price Each				Omron Part No.
						1	25	50	100	
Non-Illuminated Switches (Momentary Operations)										
1	Square/Extended Button	SPST-NC	—	Red	Z1438-ND	14.52	13.44	12.55	11.65	A22-CR-01M
		SPST-NO	—	Blue	Z1561-ND	14.52	13.44	12.55	11.65	A22-CA-10M
			—	Black	Z1562-ND	14.52	13.44	12.55	11.65	A22-CB-10M
			—	Green	Z1563-ND	14.52	13.44	12.55	11.65	A22-CG-10M
			—	White	Z1564-ND	14.52	13.44	12.55	11.65	A22-CW-10M
			—	Yellow	Z1565-ND	14.52	13.44	12.55	11.65	A22-CY-10M
		SPST-NO + SPST-NC	—	Blue	Z1566-ND	19.96	18.48	17.25	16.02	A22-CA-11M
			—	Black	Z1567-ND	19.96	18.48	17.25	16.02	A22-CB-11M
			—	Green	Z1568-ND	19.96	18.48	17.25	16.02	A22-CG-11M
			—	Red	Z1569-ND	19.96	18.48	17.25	16.02	A22-CR-11M
			—	White	Z1570-ND	19.96	18.48	17.25	16.02	A22-CW-11M
			—	Yellow	Z1571-ND	19.96	18.48	17.25	16.02	A22-CY-11M
2	Square/Full Guard Button	SPST-NO	—	Blue	Z1440-ND	14.52	13.44	12.55	11.65	A22-DA-10M
			—	Black	Z1441-ND	14.52	13.44	12.55	11.65	A22-DB-10M
			—	Green	Z1442-ND	14.52	13.44	12.55	11.65	A22-DG-10M
			—	White	Z1443-ND	14.52	13.44	12.55	11.65	A22-DW-10M
			—	Yellow	Z1444-ND	14.52	13.44	12.55	11.65	A22-DY-10M
		SPST-NO + SPST-NC	—	Red	Z1445-ND	19.96	18.48	17.25	16.02	A22-DR-11M
3	Round Flush Button	SPST-NO	—	Blue	Z1446-ND	10.89	10.08	9.41	8.74	A22-FA-10M
			—	Black	Z1447-ND	10.89	10.08	9.41	8.74	A22-FB-10M
			—	Green	Z1448-ND	10.89	10.08	9.41	8.74	A22-FG-10M
			—	Red	Z1449-ND	10.89	10.08	9.41	8.74	A22-FR-10M
			—	White	Z1450-ND	10.89	10.08	9.41	8.74	A22-FW-10M
			—	Yellow	Z1451-ND	10.89	10.08	9.41	8.74	A22-FY-10M
4	Round/Extended Button	SPST-NC	—	Red	Z1452-ND	9.98	9.24	8.63	8.01	A22-TR-01M
		SPST-NO + SPST-NC	—	Red	Z1453-ND	14.52	13.44	12.55	11.65	A22-TR-11M
5	Round Full-Guard Button	SPST-NO	—	Blue	Z1454-ND	10.89	10.08	9.41	8.74	A22-GA-10M
			—	Black	Z1455-ND	10.89	10.08	9.41	8.74	A22-GB-10M
			—	Green	Z1456-ND	10.89	10.08	9.41	8.74	A22-GG-10M
			—	Red	Z1457-ND	10.89	10.08	9.41	8.74	A22-GR-10M
			—	White	Z1458-ND	10.89	10.08	9.41	8.74	A22-GW-10M
			—	Yellow	Z1459-ND	10.89	10.08	9.41	8.74	A22-GY-10M
6	Medium-size Mushroom (40-mm dia head)	SPST-NC	—	Red	Z1460-ND	12.70	11.76	10.98	10.20	A22-MR-01M
		SPST-NO	—	Blue	Z1461-ND	12.70	11.76	10.98	10.20	A22-MA-10M
			—	Black	Z1462-ND	12.70	11.76	10.98	10.20	A22-MB-10M
			—	Green	Z1463-ND	12.70	11.76	10.98	10.20	A22-MG-10M
			—	White	Z1464-ND	12.70	11.76	10.98	10.20	A22-MW-10M
			—	Yellow	Z1465-ND	12.70	11.76	10.98	10.20	A22-MY-10M
7	Small-size Mushroom (30-mm dia. Head)	SPST-NC	—	Red	Z1466-ND	11.79	10.92	10.20	9.47	A22-SR-01M
		SPST-NO	—	Blue	Z1467-ND	11.79	10.92	10.20	9.47	A22-SA-10M
			—	Black	Z1468-ND	11.79	10.92	10.20	9.47	A22-SB-10M
			—	Green	Z1469-ND	11.79	10.92	10.20	9.47	A22-SG-10M
			—	White	Z1470-ND	11.79	10.92	10.20	9.47	A22-SW-10M
			—	Yellow	Z1471-ND	11.79	10.92	10.20	9.47	A22-SY-10M
Non-Illuminated Switches (Latching Operations)										
1	Square/Extended Button	SPST-NC	—	Red	Z1572-ND	20.87	19.32	18.04	16.75	A22-CR-01A
		SPST-NO + SPST-NC	—	Black	Z1573-ND	27.22	25.20	23.52	21.84	A22-CB-11A
Illuminated Switches (Momentary Operations)										
1	Square/Extended Button LED Illuminated	SPST-NC	24 VAC/DC	Red	Z1472-ND	26.31	24.36	22.74	21.12	A22L-CR-24A-01M
		SPST-NC	110 VAC	Red	Z1473-ND	30.84	28.56	26.66	24.76	A22L-CR-T1-01M
2	Square/Full Guard Button LED Illuminated	SPST-NO	24 VAC/DC	Blue	Z1474-ND	42.64	39.48	36.85	34.22	A22L-DA-24A-10M
				Green	Z1475-ND	26.31	24.36	22.74	21.12	A22L-DG-24A-10M
				White	Z1476-ND	26.31	24.36	22.74	21.12	A22L-DW-24A-10M
				Yellow	Z1477-ND	26.31	24.36	22.74	21.12	A22L-DY-24A-10M
		SPST-NO	110 VAC	Blue	Z1478-ND	46.27	42.84	39.99	37.13	A22L-DA-T1-10M
				Green	Z1479-ND	30.84	28.56	26.66	24.76	A22L-DG-T1-10M
				White	Z1480-ND	30.84	28.56	26.66	24.76	A22L-DW-T1-10M
				Yellow	Z1481-ND	30.84	28.56	26.66	24.76	A22L-DY-T1-10M
3	Round/Clear Full Guard Button LED Illuminated	SPST-NC	24 VAC/DC	Red	Z1482-ND	19.96	18.48	17.25	16.02	A22L-GR-24A-01M
		SPST-NO	24 VAC/DC	Blue	Z1483-ND	36.29	33.60	31.36	29.12	A22L-GA-24A-10M
				Green	Z1484-ND	19.96	18.48	17.25	16.02	A22L-GG-24A-10M
				White	Z1485-ND	19.96	18.48	17.25	16.02	A22L-GW-24A-10M
				Yellow	Z1486-ND	19.96	18.48	17.25	16.02	A22L-GY-24A-10M
		SPST-NC	110 VAC	Red	Z1487-ND	24.49	22.68	21.17	19.66	A22L-GR-T1-01M
		SPST-NO	110 VAC	Blue	Z1488-ND	39.92	36.96	34.50	32.04	A22L-GA-T1-10M
				Green	Z1489-ND	24.49	22.68	21.17	19.66	A22L-GG-T1-10M
				White	Z1490-ND	24.49	22.68	21.17	19.66	A22L-GW-T1-10M
				Yellow	Z1491-ND	24.49	22.68	21.17	19.66	A22L-GY-T1-10M
4	Round/Extended Button LED Illuminated	SPST-NC	24 VAC/DC	Red	Z1492-ND	16.33	15.12	14.12	13.11	A22L-TR-24A-01M
		SPST-NO	24 VAC/DC	Blue	Z1493-ND	32.66	30.24	28.23	26.21	A22L-TA-24A-10M
				Green	Z1494-ND	16.33	15.12	14.12	13.11	A22L-TG-24A-10M
				White	Z1495-ND	16.33	15.12	14.12	13.11	A22L-TW-24A-10M
				Yellow	Z1496-ND	16.33	15.12	14.12	13.11	A22L-TY-24A-10M
		SPST-NC	110 VAC	Red	Z1497-ND	20.87	19.32	18.04	16.75	A22L-TR-T1-01M
		SPST-NO	110 VAC	Blue	Z1498-ND	36.29	33.60	31.36	29.12	A22L-TA-T1-10M
				Green	Z1499-ND	20.87	19.32	18.04	16.75	A22L-TG-T1-10M
				White	Z1500-ND	20.87	19.32	18.04	16.75	A22L-TW-T1-10M
				Yellow	Z1501-ND	20.87	19.32	18.04	16.75	A22L-TY-T1-10M

(Continued)

Emergency Stop Pushbutton Switch

Fig. 1

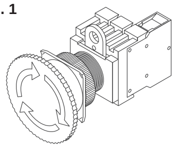


Fig. 2

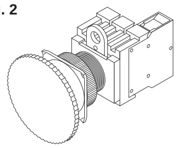


Fig. 3

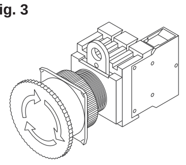


Fig. 4

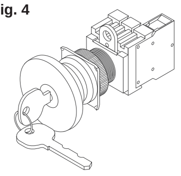


Fig. 5

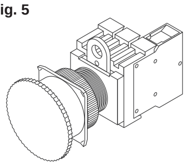


Fig. 6

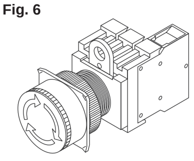


Fig. 7

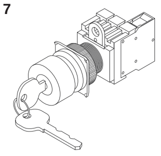
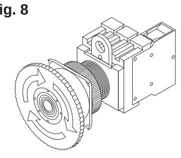


Fig. 8



Omron Emergency stop switches feature a positive opening mechanism with minimal contact separation of 3mm in accordance with EN60947-5-1. Safety lock mechanism prevents misuse or tampering. Innovative two-piece snap together construction reduces installation time and shorter panel depth requirements. Use for Emergency Stop switching on equipment, conveyors and augers, construction equipment and vehicles. Red cap standard. **Contacts**: 10A@110VAC or 24VDC

Fig.	Switch Type	Contact	Digi-Key Part No.	Price Each				Omron Part No.
				1	25	50	100	
Non-Lighted Models								
1	60-dia. Head Push-lock Turn-reset	SPST-NC	Z1502-ND	27.22	25.20	23.52	21.84	A22E-L-01
2	60-dia. Head Push-pull	SPST-NC	Z1503-ND	32.66	30.24	28.23	26.21	A22E-LP-01
3	40-dia. Head Push-lock Turn-reset	SPST-NC	Z1504-ND	24.95	23.10	21.56	20.02	A22E-M-01
4	40-dia. Head Push-lock Key-reset	SPST-NC SPST-NO/SPST-NC	Z1505-ND Z1560-ND	45.81 38.56	42.42 35.70	39.60 33.32	36.77 30.94	A22E-MK-01 A22E-MK-11
5	40-dia. Head Push-pull	SPST-NC SPST-NO/SPST-NC	Z1506-ND Z1507-ND	30.84 37.65	28.56 34.86	26.66 32.54	24.76 30.22	A22E-MP-01 A22E-MP-11
6	30-dia. Head Push-lock Turn-reset	SPST-NC	Z1508-ND	30.84	28.56	26.66	24.76	A22E-S-01
7	30-dia. Head Push-lock Key-reset	SPST-NC	Z1509-ND	38.56	35.70	33.32	30.94	A22E-SK-01

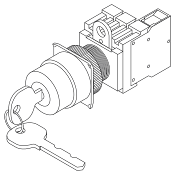
Lighted Models

Fig.	Switch Type	Contact	Illumination Voltage	Digi-Key Part No.	Price Each				Omron Part No.
					1	25	50	100	
8	40-dia. Head Push-lock Turn-reset	SPST-NC	24 VAC/DC (LED)	Z1510-ND	40.37	37.38	34.89	32.40	A22EL-M- 24A-01
	40-dia. Head Push-lock Turn-reset withTrans.	SPST-NC	110 VAC (LED)	Z1511-ND	47.17	43.68	40.77	37.86	A22EL-M-T1-01

Key Type Selector Switch

Key Selector switches for secured switching or resetting. Available in either momentary or Alternate Action. (Ip65 oil and dust tight construction. Comes complete with 2 keys. **Contact**: 10A@VAC or 24VCD

Type	Number of Positions	Contacts	Key Positions			Key Removable Position	Digi-Key Part No.	Price Each				Omron Part No.
			Pos. 1	Pos. 2	Pos. 3			1	25	50	100	
Key Type Selector Switch	2	SPST-NO	On	Mom	—	1	Z1530-ND	19.05	17.64	16.47	15.29	A22K-2AL-10
			On	Off	—	1 & 2	Z1531-ND	19.05	17.64	16.47	15.29	A22K-2M-10
			On	Off	—	1	Z1532-ND	19.05	17.64	16.47	15.29	A22K-2ML-10
	3	SPST-NO + SPST-NC	Mom	Off	Mom	2	Z1533-ND	26.31	24.36	22.74	21.12	A22K-3AC-11
			On	On	Off	1 & 3	Z1534-ND	26.31	24.36	22.74	21.12	A22K-3M-11
			On	On	Off	2	Z1535-ND	26.31	24.36	22.74	21.12	A22K-3MC-11
			On	On	Off	1	Z1536-ND	26.31	24.36	22.74	21.12	A22K-3ML-11

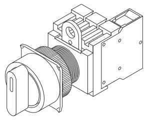


Knob Type Selector Switch

Large easy to switch knob selector switches for On-Off and selection for control of industrial controls. Snap acting type switch feedback ensures confident operator feedback during switching, even while wearing gloves.

Available in either non-illuminated or LED illuminated versions. (IP65 oil and dust tight construction.)

Contacts: 10A@110VAC or 24VDC.



Switch Type	Position	Switch Function	Contacts	Illumination Voltage	Lens Color	Digi-Key Part No.	Price Each				Omron Part No.
							1	25	50	100	
Illuminated											
Knob-type Selector Switch	2 position	Spring Return (Momentary)	SPST-NO	24 VAC/DC	Blue Green Red Yellow	Z1514-ND Z1515-ND Z1516-ND Z1517-ND	38.10 22.68 22.68 22.68	35.28 21.00 21.00 21.00	32.93 19.60 19.60 19.60	30.58 18.20 18.20 18.20	A22W-2AA-24A-10 A22W-2AG-24A-10 A22W-2AR-24A-10 A22W-2AY-24A-10
	2 position	Maintained (On-Off)	SPST-NO	24 VAC/DC	Blue Green Red Yellow	Z1518-ND Z1519-ND Z1520-ND Z1521-ND	38.10 22.68 22.68 22.68	35.28 21.00 21.00 21.00	32.93 19.60 19.60 19.60	30.58 18.20 18.20 18.20	A22W-2MA-24A-10 A22W-2MG-24A-10 A22W-2MR-24A-10 A22W-2MY-24A-10
	3 position	Spring Return (Momentary)	SPST-NO + SPST-NC	24 VAC/DC	Blue Green Red Yellow	Z1522-ND Z1523-ND Z1524-ND Z1525-ND	41.73 26.31 26.31 26.31	38.64 24.36 24.36 24.36	36.07 22.74 22.74 22.74	33.49 21.12 21.12 21.12	A22W-3AA-24A-11 A22W-3AG-24A-11 A22W-3AR-24A-11 A22W-3AY-24A-11
	3 position	Maintained (On-Off)	SPST-NO + SPST-NC	24 VAC/DC	Blue Green Red Yellow	Z1526-ND Z1527-ND Z1528-ND Z1529-ND	41.73 25.40 25.40 25.40	38.64 23.52 23.52 23.52	36.07 21.96 21.96 21.96	33.49 20.39 20.39 20.39	A22W-3MA-24A-11 A22W-3MG-24A-11 A22W-3MR-24A-11 A22W-3MY-24A-11
Non-Illuminated											
Knob-type Selector Switch	2 position	Spring return (Momentary)	SPST-NO	—	Black	Z1512-ND	12.70	11.76	10.98	10.20	A22S-2A-10
	2 position	Maintained (On-Off)	SPST-NO	—	Black	Z1513-ND	12.70	11.76	10.98	10.20	A22S-2M-10
	3 position	Spring return (Momentary)	SPST-NO + SPST-NC	—	Black	Z1574-ND	16.33	15.12	14.12	13.11	A22-3A-11
	3 position	Maintained (On-Off)	SPST-NO + SPST-NC	—	Black	Z1575-ND	16.33	15.12	14.12	13.11	A22-3M-11

BC COMPONENTS

Surface Mount Slide Switches CAS Series

Electrical Characteristics: • **Contact Rating:** Non-switching DC50 V 100mA, Switching DC6V, 100mA DC24 V, 25mA, Minimum DC20mV 1µa, • **Contact Resistance:** 50mΩ maximum (1.5mA, 1kHz, 20mV) • **Insulation resistance:** 1000MΩ (DC 100V) minimum • **Dielectric strength:** AC500 V, 50Hz, 60s

Fig. 1

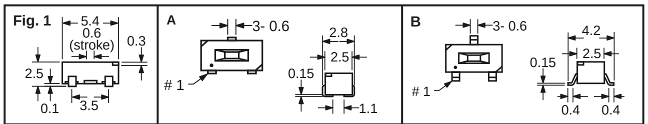


Fig. 2

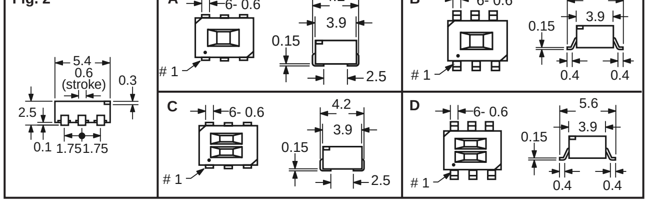


Fig.	No. of Pos.	No. of Poles	Description	Digi-Key Part No.	Cut Tape Price Each 10	100	Tape & Reel Pricing* 1,000	BC Components Part No.
1A	1	1	SPDT, J Hook	CAS120JCT-ND	1.76	1.27	585.00	CAS120TA
1B	1	1	SPDT, Gullwing	CAS120GCT-ND	1.76	1.27	585.00	CAS120TB
2A	1	2	DPDT, J Hook	CAS220JCT-ND	3.38	2.44	1125.00	CAS220TA
2B	1	2	DPDT, Gullwing	CAS220GCT-ND	3.38	2.44	1125.00	CAS220TB
2C	2	1	SPDT 2 pos. J Hook	CASD20JCT-ND	3.38	2.44	1125.00	CASD20TA
2D	2	1	SPDT 2 pos. Gullwing	CASD20GCT-ND	3.38	2.44	1125.00	CASD20TB

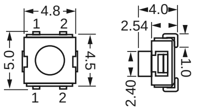
* For Tape & Reel Part No. change CT to TR

BOURNS INC

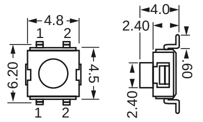
SMD Momentary Key Switches

Electrical Characteristics: • **Contact Rating: Max. Current:** 100mA; **Max. Voltage:** 24V • **Contact Resistance:** 100 milliohms max. • **Insulation Resistance:** 100 megohms min. (DC500V)
General Characteristics: • **Switch Type:** Normally Open • **Operating Temperature Range:** -55°C to +125°C • **Dielectric Strength:** 250 VAC.
Mechanical Characteristics: • **Cycle Life, Loaded:** 10,000 actuations.

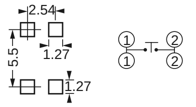
J-Hook



Gull Wing



PCB Layout



Type	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000	5,000
J-Hook	7914J-000ECT-ND	.95	.84	.71	7914J-000ETR-ND	270.00	473.00	405.00/M
Gull Wing	7914G-000ECT-ND	.95	.84	.71	7914G-000ETR-ND	270.00	473.00	405.00/M

Sealed Selector Switches

Electrical Characteristics: • **Contact Rating: Maximum Current:** 100mA **Maximum Voltage:** 24V • **Contact Timing:** Non-Shorting • **Contact Resistance:** 2 ohms max. • **Insulation Resistance:** 100 megohms min. (DC500V) • **Dielectric Strength:** 250 VAC • ***General Characteristics:*** • **Switch Type:** SPDT • **Operating Temperature Range:** -55°C to +125°C

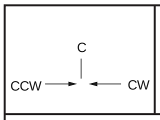
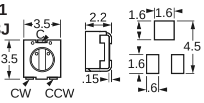


Fig. 1
7813J



• **Mechanical Angle:** 245°C ±15° • **Positions:** 2 • **Adjustment Torque:** 50g. cm max. • **Stop Strength:** 200g. cm min. • **Switching Angle:** 45° ± 5° • **Seal Test:** 85°C Flouriner • **Rotational Life: -051:** 50 cycles; **-023:** 2000 cycles • **Max. Soldering Heat:** 260°C, 5 seconds

Fig. 2
7814G

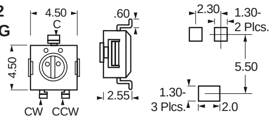
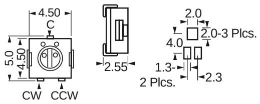


Fig. 3
7814J



• **Mechanical Angle:** 240°C ±15° • **Positions:** 2 • **Adjustment Torque:** 180g. cm max. • **Stop Strength:** 300g. cm min. • **Switching Angle:** 45° ± 5° • **Pushover Strength (S Style):** 2 kilograms min. • **Rotational Life: -051:** 50 cycles **023:** 2000 cycles • **Max Soldering Heat:** 260°C, 10 seconds

Fig.	Size (mm)	Life	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500	1,000
1	3	50	7813J-051ECT-ND	2.10	1.86	1.56	7813J-051ETR-ND	—	1050.00
	3	2000	7813J-023ECT-ND	2.31	2.05	1.72	7813J-023ETR-ND	—	1155.00
2	4	50	7814G-051ECT-ND	2.10	1.86	1.56	7814G-051ETR-ND	600.00	1050.00
	4	2000	7814G-023ECT-ND	2.31	2.05	1.72	7814G-023ETR-ND	660.00	1155.00
3	4	50	7814J-051ECT-ND	2.10	1.86	1.56	7814J-051ETR-ND	600.00	1050.00
	4	2000	7814J-023ECT-ND	2.31	2.05	1.72	7814J-023ETR-ND	660.00	1155.00

NKK® SWITCHES

Illuminated Large Body Pushbutton Switches

Fig. 1

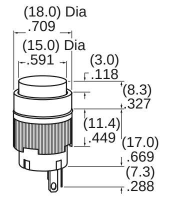
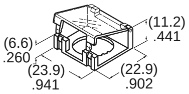


Fig. 2



Dim. in (mm) Inch

YB Series with Panel Seal:

Improved LED illumination offers a bright full face illuminated area for easy identification in both lit and unlit conditions. High density design with less than 1" behind panel depth. Silver contacts with .110" quick connect solder lug terminals. Meets IP65 of IEC529 standards.

Electrical Capacity: 3A @ 125/250V AC or 30V DC.

Dielectric Strength: 1,000V AC min. between contacts; 1,500V AC min. between contacts and case. **Mechanical Life:** 1,000,000 operations min. for momentary: 200,000 operations min. for alternate action. **Electrical Life:** 100,000 operations min.

Total Travel: .118"

Operating Force: 170 grams for single pole: 300 grams for double pole.

Operating Temperature: -25°C through +50°C.

UL recognized and CSA certified.

Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
YB Series with Panel Seal								
1	SPDT	On - Mom	Red	360-1427-ND	23.37	18.70	14.81	YB15WCKW01-5C-JC
	SPDT	On - Mom	Yellow	360-1428-ND	23.37	18.70	14.81	YB15WCKW01-5D-JD
	SPDT	On - Mom	Green	360-1429-ND	23.37	18.70	14.81	YB15WCKW01-5F-JF
	SPDT	On - Mom	Blue	360-1430-ND	29.58	23.67	18.74	YB15WCKW01-6G-JB
	SPDT	On - On	Red	360-1431-ND	25.26	20.21	16.00	YB16WCKW01-5C-JC
1	SPDT	On - On	Yellow	360-1432-ND	25.26	20.21	16.00	YB16WCKW01-5D-JD
	SPDT	On - On	Green	360-1433-ND	25.26	20.21	16.00	YB16WCKW01-5F-JF
	SPDT	On - On	Blue	360-1434-ND	31.47	25.18	19.94	YB16WCKW01-6G-JB
	DPDT	On - Mom	Red	360-1435-ND	26.49	21.20	16.78	YB25WCKW01-5C-JC
	DPDT	On - Mom	Yellow	360-1436-ND	26.49	21.20	16.78	YB25WCKW01-5D-JD
1	DPDT	On - Mom	Green	360-1437-ND	26.49	21.20	16.78	YB25WCKW01-5F-JF
	DPDT	On - Mom	Blue	360-1438-ND	32.70	26.16	20.71	YB25WCKW01-6G-JB
	DPDT	On - On	Red	360-1439-ND	27.75	22.20	17.58	YB26WCKW01-5C-JC
	DPDT	On - On	Yellow	360-1440-ND	27.75	22.20	17.58	YB26WCKW01-5D-JD
	DPDT	On - On	Green	360-1441-ND	27.75	22.20	17.58	YB26WCKW01-5F-JF
1	DPDT	On - On	Blue	360-1442-ND	33.96	27.17	21.51	YB26WCKW01-6G-JB
	SPDT	On - Mom	Red/Green	360-1443-ND	27.15	21.72	17.20	YB15WCKW01-2CF02-JB
	SPDT	On - On	Red/Green	360-1444-ND	29.07	23.26	18.42	YB16WCKW01-2CF02-JB
	DPDT	On - Mom	Red/Green	360-1445-ND	30.30	24.24	19.19	YB25WCKW01-2CF02-JB
	DPDT	On - On	Red/Green	360-1446-ND	31.53	25.23	19.97	YB26WCKW01-2CF02-JB
2	Protective Polycarbonate Guard			360-1008-ND	2.97	2.38	1.89	AT4072

Illuminated Washable Tactile Switches

Fig. 1

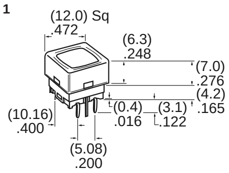
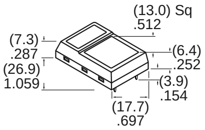


Fig. 2



Dim. in (mm) Inch

JB Series - Illuminated, Low Profile Switches:

Bright full face LED illumination for extremely long life. Completely sealed for extreme operating environments and automated soldering processes. Higher operating force provides more pronounced operating feel. All lenses come standard with diffused colored lens unless noted as clear. Terminal spacing conforming to .100" PCB grid. Straight, molded-in PC terminals. Single pole, single throw, variety of cap colors. Red, yellow or green LEDs. **Electrical Capacity:** 50mA @ 24V DC, max. **Dielectric Strength:** 250V AC min. **Mechanical Life:** 5,000,000 operations min. **Electrical Life:** 5,000,000 operations min. **Operating Temperature:** -25°C through +70°C. **Total Travel:** .010"

JF Series - Illuminated, Ultra-Thin Switches:

JF Series are washable tactile switches with crisp tactile feedback. Terminal spacing conforming to .100" PCB grid. Single pole, single throw, variety of cap colors. Red, yellow or green LEDs. **Electrical Capacity:** 50mA @ 24V DC max. **Dielectric Strength:** 250V AC min. **Mechanical LIfe:** 500,000 operations min. **Electrical Life:** 500,000 operations min. **Operating Temperature:** -25°C through +50°C. **Total Travel:** .016".

Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
JB Series Illuminated Low Profile Switches								
1	SPST	Momentary	Red	360-1260-ND	4.62	3.70	2.93	JB15LPC-JB
	SPST	Momentary	Red Clear	360-1261-ND	4.62	3.70	2.93	JB15LPC-JC
	SPST	Momentary	Yellow	360-1262-ND	4.62	3.70	2.93	JB15LPE-JB
	SPST	Momentary	Yellow Clear	360-1263-ND	4.62	3.70	2.93	JB15LPE-JE
	SPST	Momentary	Green	360-1264-ND	4.62	3.70	2.93	JB15LPF-JB
	SPST	Momentary	Green Clear	360-1265-ND	4.62	3.70	2.93	JB15LPF-JF
JF Series Illuminated Ultra Thin Switches								
2	SPST	Momentary	Red	360-1266-ND	7.68	6.15	4.87	JF15AP1CC
	SPST	Momentary	Yellow	360-1267-ND	9.24	7.40	5.86	JF15AP1EE
	SPST	Momentary	Green	360-1268-ND	8.01	6.41	5.08	JF15AP1FF

NKK® SWITCHES

Illuminated Low Profile Pushbutton Switches

Snap-action contact mechanism. Alternate action models with latchdown for indication of circuit status. Snap-in mount (W01) with solder lug terminals and silver contacts: PCB mount (G03) with straight PC terminals and gold contacts. **Electrical Capacity: Power Level (code W):** 5A @ 125/250V AC or 5A @ 30V DC **Logic Level (code G):** 0.4VA maximum @ 28V AC/DC maximum. **Dielectric Strength:** 1,000V AC min. between contacts. **Mechanical Life:** 1,000,000 operations min. (momentary); 200,000 operations min. (alternate action). **Electrical Life:** 10,000 operations min. (silver); 200,000 operations min. (gold). **Total Travel: .**091”. **Operation Force:** 160 grams for single pole, 260 grams for double pole. **Contact Timing:** Break before make. **Operating Temperature:** -25°C through +50°C.
UB models: **UL recognized and CSA certified;** UB2 models: **UL recognized**. (No UL/CSA mark on switch.)

Dim. in (mm) Inch

Fig. 1

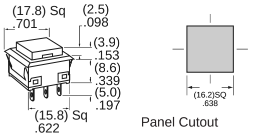


Fig. 2

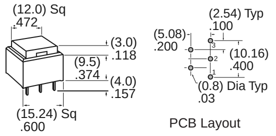


Fig. 3

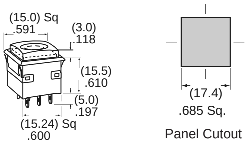


Fig.4

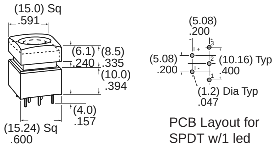


Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No.
Square Snap-in Mount, Single Element LED (UB Series) — 5A								
1	SPDT	On-Mom	Red	360-1525-ND	11.91	9.53	7.55	UB15KKW015C-CC
	SPDT	On-Mom	Yellow	360-1526-ND	11.91	9.53	7.55	UB15KKW015D-DD
	SPDT	On-Mom	Green	360-1527-ND	11.91	9.53	7.55	UB15KKW015F-FF
	SPDT	On-On	Red	360-1528-ND	13.05	10.44	8.27	UB16KKW015C-CC
	SPDT	On-On	Yellow	360-1529-ND	13.05	10.44	8.27	UB16KKW015D-DD
	SPDT	On-On	Green	360-1530-ND	13.05	10.44	8.27	UB16KKW015F-FF
	DPDT	On-Mom	Red	360-1531-ND	15.12	12.10	9.58	UB25KKW015C-CC
	DPDT	On-Mom	Yellow	360-1532-ND	15.12	12.10	9.58	UB25KKW015D-DD
	DPDT	On-Mom	Green	360-1533-ND	15.12	12.10	9.58	UB25KKW015F-FF
	DPDT	On-On	Red	360-1534-ND	15.93	12.75	10.09	UB26KKW015C-CC
	DPDT	On-On	Yellow	360-1535-ND	15.93	12.75	10.09	UB26KKW015D-DD
	DPDT	On-On	Green	360-1536-ND	15.93	12.75	10.09	UB26KKW015F-FF
Square PCB Mount, Single Element LED (UB Series) — .4VA								
2	SPDT	On-Mom	Red	360-1537-ND	11.43	9.15	7.24	UB15SKG035C-CC
	SPDT	On-Mom	Yellow	360-1538-ND	11.43	9.15	7.24	UB15SKG035D-DD
	SPDT	On-Mom	Green	360-1539-ND	11.43	9.15	7.24	UB15SKG035F-FF
	SPDT	On-On	Red	360-1540-ND	12.60	10.08	7.98	UB16SKG035C-CC
	SPDT	On-On	Yellow	360-1541-ND	12.60	10.08	7.98	UB16SKG035D-DD
	SPDT	On-On	Green	360-1542-ND	12.60	10.08	7.98	UB16SKG035F-FF
	DPDT	On-Mom	Red	360-1543-ND	15.30	12.24	9.69	UB25SKG035C-CC
	DPDT	On-Mom	Yellow	360-1544-ND	15.30	12.24	9.69	UB25SKG035D-DD
	DPDT	On-Mom	Green	360-1545-ND	15.30	12.24	9.69	UB25SKG035F-FF
	DPDT	On-On	Red	360-1546-ND	16.14	12.92	10.23	UB26SKG035C-CC
	DPDT	On-On	Yellow	360-1547-ND	16.14	12.92	10.23	UB26SKG035D-DD
	DPDT	On-On	Green	360-1548-ND	16.14	12.92	10.23	UB26SKG035F-FF
Square Snap-in Mount, Multi Element LED (UB2 Series) — 5A								
3	SPDT	On-Mom	Red - White Diff. Lens	360-1549-ND	16.56	13.25	10.49	UB215KKW015C-1JB
	SPDT	On-Mom	Red - Clear Lens	360-1550-ND	16.56	13.25	10.49	UB215KKW015C-1JC
	SPDT	On-Mom	Yellow - White Diff. Lens	360-1551-ND	16.56	13.25	10.49	UB215KKW015D-1JB
	SPDT	On-Mom	Yellow - Clear Lens	360-1552-ND	16.56	13.25	10.49	UB215KKW015D-1JD
	SPDT	On-Mom	Green - White Diff. Lens	360-1553-ND	16.56	13.25	10.49	UB215KKW015F-1JB
	SPDT	On-Mom	Green - Clear Lens	360-1554-ND	16.56	13.25	10.49	UB215KKW015F-1JF
	SPDT	On-Mom	Red/Green - White Diff. Lens	360-1555-ND	22.98	18.39	14.56	UB215KKW01CF-1JB
	SPDT	On-On	Red - Clear Lens	360-1556-ND	17.70	14.16	11.21	UB216KKW015C-1JB
	SPDT	On-On	Red - White Diff. Lens	360-1557-ND	17.70	14.16	11.21	UB216KKW015C-1JC
	SPDT	On-On	Yellow - Clear Lens	360-1558-ND	17.70	14.16	11.21	UB216KKW015D-1JB
	SPDT	On-On	Yellow - White Diff. Lens	360-1559-ND	17.70	14.16	11.21	UB216KKW015D-1JD
	SPDT	On-On	Green - Clear Lens	360-1560-ND	17.70	14.16	11.21	UB216KKW015F-1JB
	SPDT	On-On	Green - White Diff. Lens	360-1561-ND	17.70	14.16	11.21	UB216KKW015F-1JF
	SPDT	On-On	Red/Green - Clear Lens	360-1562-ND	24.15	19.32	15.30	UB216KKW01CF-1JB
	DPDT	On-Mom	Red - White Diff. Lens	360-1563-ND	19.92	15.94	12.62	UB225KKW015C-1JB
	DPDT	On-Mom	Red - Clear Lens	360-1564-ND	19.92	15.94	12.62	UB225KKW015C-1JC
	DPDT	On-Mom	Yellow - White Diff. Lens	360-1565-ND	19.92	15.94	12.62	UB225KKW015D-1JB
	DPDT	On-Mom	Yellow - Clear Lens	360-1566-ND	19.92	15.94	12.62	UB225KKW015D-1JD
	DPDT	On-Mom	Green - White Diff. Lens	360-1567-ND	19.92	15.94	12.62	UB225KKW015F-1JB
	DPDT	On-Mom	Green - Clear Lens	360-1568-ND	19.92	15.94	12.62	UB225KKW015F-1JF
	DPDT	On-Mom	Red/Green - White Diff. Lens	360-1569-ND	26.37	21.10	16.71	UB225KKW01CF-1JB
	DPDT	On-On	Red - Clear Lens	360-1570-ND	21.57	17.26	13.67	UB226KKW015C-1JB
	DPDT	On-On	Red - White Diff. Lens	360-1571-ND	21.57	17.26	13.67	UB226KKW015C-1JC
	DPDT	On-On	Yellow - Clear Lens	360-1572-ND	21.57	17.26	13.67	UB226KKW015D-1JB
	DPDT	On-On	Yellow - White Diff. Lens	360-1573-ND	21.57	17.26	13.67	UB226KKW015D-1JD
	DPDT	On-On	Green - Clear Lens	360-1574-ND	21.57	17.26	13.67	UB226KKW015F-1JB
	DPDT	On-On	Green - White Diff. Lens	360-1575-ND	21.57	17.26	13.67	UB226KKW015F-1JF
	DPDT	On-On	Red/Green - Clear Lens	360-1576-ND	28.02	22.42	17.75	UB226KKW01CF-1JB
Square PCB Mount, Multi Element LED (UB2 Series) — .4VA								
4	SPDT	On-Mom	Red - White Diff. Lens	360-1577-ND	17.22	13.78	10.91	UB215SKG035C-1JB
	SPDT	On-Mom	Red - Clear Lens	360-1578-ND	17.22	13.78	10.91	UB215SKG035C-1JC
	SPDT	On-Mom	Yellow - White Diff. Lens	360-1579-ND	17.22	13.78	10.91	UB215SKG035D-1JB
	SPDT	On-Mom	Yellow - Clear Lens	360-1580-ND	17.22	13.78	10.91	UB215SKG035D-1JD
	SPDT	On-Mom	Green - White Diff. Lens	360-1581-ND	17.22	13.78	10.91	UB215SKG035F-1JB
	SPDT	On-Mom	Green - Clear Lens	360-1582-ND	17.22	13.78	10.91	UB215SKG035F-1JF
	SPDT	On-Mom	Red/Green - White Diff. Lens	360-1583-ND	23.64	18.92	14.98	UB215SKG03CF-1JB
	SPDT	On-On	Red - Clear Lens	360-1584-ND	18.36	14.69	11.63	UB216SKG035C-1JB
	SPDT	On-On	Red - White Diff. Lens	360-1585-ND	18.36	14.69	11.63	UB216SKG035C-1JC
	SPDT	On-On	Yellow - Clear Lens	360-1586-ND	18.36	14.69	11.63	UB216SKG035D-1JB
	SPDT	On-On	Yellow - White Diff. Lens	360-1587-ND	18.36	14.69	11.63	UB216SKG035D-1JD
	SPDT	On-On	Green - Clear Lens	360-1588-ND	18.36	14.69	11.63	UB216SKG035F-1JB
	SPDT	On-On	Green - White Diff. Lens	360-1589-ND	18.36	14.69	11.63	UB216SKG035F-1JF
	SPDT	On-On	Red/Green - Clear Lens	360-1590-ND	24.81	19.85	15.72	UB216SKG03CF-1JB
	DPDT	On-Mom	Red - White Diff. Lens	360-1591-ND	21.24	17.00	13.46	UB225SKG035C-1JB
	DPDT	On-Mom	Red - Clear Lens	360-1592-ND	21.24	17.00	13.46	UB225SKG035C-1JC
	DPDT	On-Mom	Yellow - White Diff. Lens	360-1593-ND	21.24	17.00	13.46	UB225SKG035D-1JB
	DPDT	On-Mom	Yellow - Clear Lens	360-1594-ND	21.24	17.00	13.46	UB225SKG035D-1JD
	DPDT	On-Mom	Green - White Diff. Lens	360-1595-ND	21.24	17.00	13.46	UB225SKG035F-1JB
	DPDT	On-Mom	Green - Clear Lens	360-1596-ND	21.24	17.00	13.46	UB225SKG035F-1JF
	DPDT	On-Mom	Red/Green - White Diff. Lens	360-1597-ND	27.69	22.16	17.54	UB225SKG03CF-1JB
	DPDT	On-On	Red - Clear Lens	360-1598-ND	22.89	18.32	14.50	UB226SKG035C-1JB
	DPDT	On-On	Red - White Diff. Lens	360-1599-ND	22.89	18.32	14.50	UB226SKG035C-1JC
	DPDT	On-On	Yellow - Clear Lens	360-1600-ND	22.89	18.32	14.50	UB226SKG035D-1JB
	DPDT	On-On	Yellow - White Diff. Lens	360-1601-ND	22.89	18.32	14.50	UB226SKG035D-1JD
	DPDT	On-On	Green - Clear Lens	360-1602-ND	22.89	18.32	14.50	UB226SKG035F-1JB
	DPDT	On-On	Green - White Diff. Lens	360-1603-ND	22.89	18.32	14.50	UB226SKG035F-1JF
	DPDT	On-On	Red/Green - Clear Lens	360-1604-ND	29.34	23.48	18.59	UB226SKG03CF-1JB

NKK® SWITCHES

Illuminated Pushbutton Switches

KB Series Miniature Bushing Mount:

The pushbutton is an SPDT snap acting type contact mechanism, providing long electrical life and pronounced sensitivity. Comes complete with nut. 12mm diameter makes this switch ideal for stacking into a panel using minimal room. LED illumination for long service life.

Electrical Capacity: 1A @ 125/250V AC or 30V DC for silver contacts. **Dielectric Strength:** 1,500V AC min. between contacts and case. **Mechanical Life:** 100,000 operations min. **Electrical Life:** 50,000 operations min. (silver). **Total Travel:** .118”. **Operating Temperature:** -25°C through +50°C. **UL recognized & CSA certified** @ 1A rating.

LB Series Standard Size Snap-in Mount:

The pushbutton switch is a standard size illuminated panel mount switch that includes two rubber seal construction that protects the contact mechanism from oil, dust, water and other contaminants. This construction also features LED illumination along with a quick make and break contact design which limits arcing and prolongs electrical life.

Electrical Capacity: 3A @ 125/250V AC or 30V DC for silver contacts. **Dielectric Strength:** 1,500 V AC min. between contacts and case. **Mechanical Life:** 1,000,000 operations min for momentary; 200,000 operations min. for maintained. **Electrical Life:** 100,000 operations min. **Total Travel:** .118” **Operating Temperature:** -25°C through +50°C. **UL recognized and CSA certified** @ 3A rating.

Fig.	Circuit	Switching Function	Color	Digi-Key Part No.	Price Each 1	25	100	NKK Part No
				KB Series Square Bezel Switches				
1	SPDT	On-Mom	Red	360-1269-ND	12.87	10.30	8.16	KB15SKW01-C-JC
	SPDT	On-Mom	Yellow	360-1270-ND	12.87	10.30	8.16	KB15SKW01-D-JD
	SPDT	On-Mom	Green	360-1271-ND	12.87	10.30	8.16	KB15SKW01-F-JF
	SPDT	On-On	Red	360-1272-ND	13.77	11.02	8.73	KB16SKW01-C-JC
	SPDT	On-On	Yellow	360-1273-ND	13.77	11.02	8.73	KB16SKW01-D-JD
	SPDT	On-On	Green	360-1274-ND	13.77	11.02	8.73	KB16SKW01-F-JF
	DPDT	On-Mom	Red	360-1275-ND	15.84	12.68	10.04	KB25SKW01-C-JC
	DPDT	On-Mom	Yellow	360-1276-ND	15.84	12.68	10.04	KB25SKW01-D-JD
	DPDT	On-Mom	Green	360-1277-ND	15.84	12.68	10.04	KB25SKW01-F-JF
	DPDT	On-On	Red	360-1278-ND	16.68	13.35	10.57	KB26SKW01-C-JC
	DPDT	On-On	Yellow	360-1279-ND	16.68	13.35	10.57	KB26SKW01-D-JD
	DPDT	On-On	Green	360-1280-ND	16.68	13.35	10.57	KB26SKW01-F-JF
				KB Series Round Bezel Switches				
2	SPDT	On-Mom	Red	360-1281-ND	12.87	10.30	8.16	KB15CKW01-C-JC
	SPDT	On-Mom	Yellow	360-1282-ND	12.87	10.30	8.16	KB15CKW01-D-JD
	SPDT	On-Mom	Green	360-1283-ND	12.87	10.30	8.16	KB15CKW01-F-JF
	SPDT	On-On	Red	360-1284-ND	13.77	11.02	8.73	KB16CKW01-C-JC
	SPDT	On-On	Yellow	360-1285-ND	13.77	11.02	8.73	KB16CKW01-D-JD
	SPDT	On-On	Green	360-1286-ND	13.77	11.02	8.73	KB16CKW01-F-JF
	DPDT	On-Mom	Red	360-1287-ND	15.84	12.68	10.04	KB25CKW01-C-JC
	DPDT	On-Mom	Yellow	360-1288-ND	15.84	12.68	10.04	KB25CKW01-D-JD
	DPDT	On-Mom	Green	360-1289-ND	15.84	12.68	10.04	KB25CKW01-F-JF
	DPDT	On-On	Red	360-1290-ND	16.68	13.35	10.57	KB26CKW01-C-JC
	DPDT	On-On	Yellow	360-1291-ND	16.68	13.35	10.57	KB26CKW01-D-JD
	DPDT	On-On	Green	360-1292-ND	16.68	13.35	10.57	KB26CKW01-F-JF
				KB Series Rectangular Bezel Switches				
3	SPDT	On-Mom	Red	360-1293-ND	12.87	10.30	8.16	KB15RKW01-C-JC
	SPDT	On-Mom	Yellow	360-1294-ND	12.87	10.30	8.16	KB15RKW01-D-JD
	SPDT	On-Mom	Green	360-1295-ND	12.87	10.30	8.16	KB15RKW01-F-JF
	SPDT	On-On	Red	360-1296-ND	13.77	11.02	8.73	KB16RKW01-C-JC
	SPDT	On-On	Yellow	360-1297-ND	13.77	11.02	8.73	KB16RKW01-D-JD
	SPDT	On-On	Green	360-1298-ND	13.77	11.02	8.73	KB16RKW01-F-JF
	DPDT	On-Mom	Red	360-1299-ND	15.84	12.68	10.04	KB25RKW01-C-JC
	DPDT	On-Mom	Yellow	360-1300-ND	15.84	12.68	10.04	KB25RKW01-D-JD
	DPDT	On-Mom	Green	360-1301-ND	15.84	12.68	10.04	KB25RKW01-F-JF
	DPDT	On-On	Red	360-1302-ND	16.68	13.35	10.57	KB26RKW01-C-JC
	DPDT	On-On	Yellow	360-1303-ND	16.68	13.35	10.57	KB26RKW01-D-JD
	DPDT	On-On	Green	360-1304-ND	16.68	13.35	10.57	KB26RKW01-F-JF
				KB Accessories				
4	Socket Wrench for Panel Mount KB Series			360-1000-ND	2.34	1.88	1.49	AT108
	Protective Guard for Square/Round KB Series			360-1004-ND	1.98	1.59	1.26	AT494
	Protective Guard for Rectangular KB Series			360-1006-ND	2.16	1.73	1.37	AT4024
				LB Series Square Bezel Switches				
5	SPDT	On-Mom	Red	360-1305-ND	18.00	14.40	11.40	LB15SKW01-C-JC
	SPDT	On-Mom	Yellow	360-1306-ND	18.00	14.40	11.40	LB15SKW01-D-JD
	SPDT	On-Mom	Green	360-1307-ND	18.00	14.40	11.40	LB15SKW01-F-JF
	SPDT	On-On	Red	360-1308-ND	19.98	15.99	12.66	LB16SKW01-C-JC
	SPDT	On-On	Yellow	360-1309-ND	19.98	15.99	12.66	LB16SKW01-D-JD
	SPDT	On-On	Green	360-1310-ND	19.98	15.99	12.66	LB16SKW01-F-JF
	DPDT	On-Mom	Red	360-1311-ND	21.30	17.04	13.49	LB25SKW01-C-JC
	DPDT	On-Mom	Yellow	360-1312-ND	21.30	17.04	13.49	LB25SKW01-D-JD
	DPDT	On-Mom	Green	360-1313-ND	21.30	17.04	13.49	LB25SKW01-F-JF
	DPDT	On-On	Red	360-1314-ND	23.28	18.63	14.75	LB26SKW01-C-JC
	DPDT	On-On	Yellow	360-1315-ND	23.28	18.63	14.75	LB26SKW01-D-JD
	DPDT	On-On	Green	360-1316-ND	23.28	18.63	14.75	LB26SKW01-F-JF
				LB Series Round Bezel Switches				
6	SPDT	On-Mom	Red	360-1317-ND	18.00	14.40	11.40	LB15CKW01-C-JC
	SPDT	On-Mom	Yellow	360-1318-ND	18.00	14.40	11.40	LB15CKW01-D-JD
	SPDT	On-Mom	Green	360-1319-ND	18.00	14.40	11.40	LB15CKW01-F-JF
	SPDT	On-On	Red	360-1320-ND	19.98	15.99	12.66	LB16CKW01-C-JC
	SPDT	On-On	Yellow	360-1321-ND	19.98	15.99	12.66	LB16CKW01-D-JD
	SPDT	On-On	Green	360-1322-ND	19.98	15.99	12.66	LB16CKW01-F-JF
	DPDT	On-Mom	Red	360-1323-ND	21.30	17.04	13.49	LB25CKW01-C-JC
	DPDT	On-Mom	Yellow	360-1324-ND	21.30	17.04	13.49	LB25CKW01-D-JD
	DPDT	On-Mom	Green	360-1325-ND	21.30	17.04	13.49	LB25CKW01-F-JF
	DPDT	On-On	Red	360-1326-ND	23.28	18.63	14.75	LB26CKW01-C-JC
	DPDT	On-On	Yellow	360-1327-ND	23.28	18.63	14.75	LB26CKW01-D-JD
	DPDT	On-On	Green	360-1328-ND	23.28	18.63	14.75	LB26CKW01-F-JF
				LB Series Rectangular Bezel Switches				
7	SPDT	On-Mom	Red	360-1329-ND	18.00	14.40	11.40	LB15RKW01-C-JC
	SPDT	On-Mom	Yellow	360-1330-ND	18.00	14.40	11.40	LB15RKW01-D-JD
	SPDT	On-Mom	Green	360-1331-ND	18.00	14.40	11.40	LB15RKW01-F-JF
	SPDT	On-On	Red	360-1332-ND	19.98	15.99	12.66	LB16RKW01-C-JC
	SPDT	On-On	Yellow	360-1333-ND	19.98	15.99	12.66	LB16RKW01-D-JD
	SPDT	On-On	Green	360-1334-ND	19.98	15.99	12.66	LB16RKW01-F-JF
	DPDT	On-Mom	Red	360-1335-ND	21.30	17.04	13.49	LB25RKW01-C-JC
	DPDT	On-Mom	Yellow	360-1336-ND	21.30	17.04	13.49	LB25RKW01-D-JD
	DPDT	On-Mom	Green	360-1337-ND	21.30	17.04	13.49	LB25RKW01-F-JF
	DPDT	On-On	Red	360-1338-ND	23.28	18.63	14.75	LB26RKW01-C-JC
	DPDT	On-On	Yellow	360-1339-ND	23.28	18.63	14.75	LB26RKW01-D-JD
	DPDT	On-On	Green	360-1340-ND	23.28	18.63	14.75	LB26RKW01-F-JF
				LB Accessories				
8	Protective Guard for Square LB Series			360-1005-ND	2.82	2.26	1.79	AT499
	Protective Guard for Rectangular LB Series			360-1007-ND	2.82	2.26	1.79	AT4057

Dim. in (mm) Inch

Fig. 1

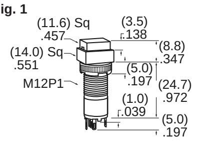


Fig. 2

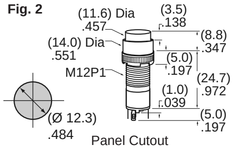


Fig. 3

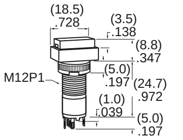
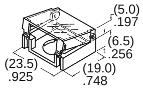


Fig. 4



KB Switch Guard

Fig. 5

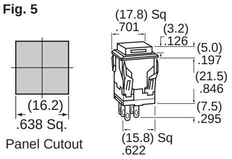


Fig. 6

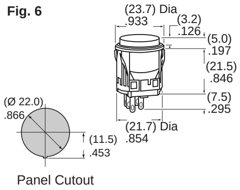


Fig. 7

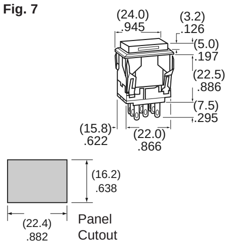
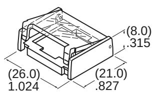
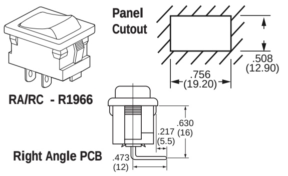


Fig. 8



E-SWITCH® Rocker Switches

RATINGS: RA Series - 125VAC, 10A. RC Series - 125VAC, 12A. R1966 Series - 125VAC, 15A **Contact Resistance:** 100mΩ max. **Electrical Life:** 10,000 Cycle **Terminals:** .187 Faston (QC) or Solder Term. **Approvals:** UL, CSA, VDE, NEMKO, SEMKO, FEMKO, DEMKO



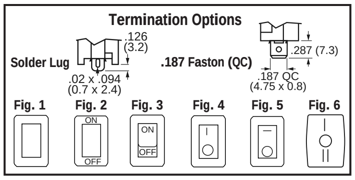


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	RA/RC Series (Black Matte Finish)					
2	SPST, 10A Black Matte W/ Marking	EG1500-ND	1.78	1.61	1.37	RA1066AFC
3	SPST, 10A Black Matte W/ Marking	EG1501-ND	1.78	1.61	1.37	RA1066AFF
4	SPST, 10A Black Matte W/ Marking	EG1502-ND	1.78	1.61	1.37	RA1066AFK
5	SPST, 10A Black Matte W/ Marking	EG1503-ND	1.78	1.61	1.37	RA1066AFH
1	SPST, 10A Black Matte No Marking	EG1504-ND	1.78	1.61	1.37	RA1066AFX
4	DPST, 12A Black Matte W/ Marking	EG1505-ND	2.95	2.66	2.27	RC1073K
5	DPST, 12A Black Matte W/ Marking	EG1506-ND	2.95	2.66	2.27	RC1073H
1	DPST, 12A Black Matte No Marking	EG1507-ND	2.95	2.66	2.27	RC1073X
	R1966 Series (Black Semi-Gloss Finish)					
1	SPST, 15A, Black No Marking .187 QC	EG1508-ND	1.56	1.40	1.20	R1966ABLKBLKEF
1	SPST, 15A, Black No Marking Solder	EG1843-ND	1.94	1.56	1.40	R1966ABLKBLKES
3	SPST, 15A, Black W/ Marking .187 QC Term.	EG1509-ND	1.56	1.40	1.20	R1966ABLKBLKIF
3	SPST, 15A, Black W/ Marking Solder Term.	EG1844-ND	1.94	1.56	1.40	R1966ABLKBLKIS
4	SPST, 15A, Black W/ Marking .187 QC Term.	EG1510-ND	1.56	1.40	1.20	R1966ABLKBLKFF
4	SPST, 15A, Black W/ Marking Solder Term.	EG1845-ND	1.94	1.56	1.40	R1966ABLKBLKFS
5	SPST, 15A, Black W/ Marking .187 QC Term.	EG1511-ND	1.56	1.40	1.20	R1966ABLKBLKGF
5	SPST, 15A, Black W/ Marking Solder Term.	EG1846-ND	1.94	1.56	1.40	R1966ABLKBLKGS
4	SPST, 15A, Lt.Grey W/ Marking .187 QC Term.	EG2580-ND	1.87	1.50	1.35	R1966AGRYGRYFF
5	SPST, 15A,Lt. Grey W/ Marking .187 QC Term.	EG2581-ND	1.87	1.50	1.35	R1966AGRYGRYGF
4	SPST, 15A, White W/ Marking .187 QC Term.	EG2582-ND	1.87	1.50	1.35	R1966AWHTWHTFF
5	SPST, 15A, White W/ Marking .187 QC Term.	EG2583-ND	1.87	1.50	1.35	R1966AWHTWHTGF
6	SPDT, 15A, Black On-Off-On, .187 QC Term.	EG1841-ND	3.21	2.57	2.32	R1966DBLKBLKCF
1	SPST, 15A, Off-Mom .187 QC Term.	EG1512-ND	2.21	2.00	1.70	R1966FBLKBLKEF
1	SPST, 15A, Red LED Illumination, .187 QC	EG1514-ND	2.96	2.67	2.27	R1966ABLKBLKEFRED
1	SPST, 15A, Green LED Illumination .187 QC	EG1515-ND	2.96	2.67	2.27	R1966ABLKBLKEFGRN
1	SPST, 15A, Yellow LED Illumination .187 QC	EG1842-ND	2.96	2.67	2.27	R1966ABLKBLKEFYEL
1	SPST, 15A, Red LED Illum. Solder Term.	EG1858-ND	2.96	2.67	2.27	R1966ABLKBLKESRED
1	SPST, 15A, Green LED Illum. Solder Term.	EG1859-ND	2.96	2.67	2.27	R1966ABLKBLKESGRN
1	SPST, 15A, Yellow LED Illum. Solder Term.	EG1860-ND	2.96	2.67	2.27	R1966ABLKBLKESYEL
	Right Angle PCB Mount					
1	SPST, 15A, Black W/ Led Red, Rt. Angle PCB	EG2577-ND	4.11	3.29	2.96	R1966ABLKBLKERR
4	SPST, 15A, Black W/ Marking, Rt. Angle PCB	EG2579-ND	2.45	1.96	1.77	R1966ABLKBLKFR
5	SPST, 15A, Black W/ Marking, Rt. Angle PCB	EG2578-ND	2.45	1.96	1.77	R1966ABLKBLKGR

Rocker Switches

RATINGS: R5 Series: 10A 250V, 15A 125VAC.
R6 Series: 6A 250VAC (UL/CSA)
Contact Resistance: <20mΩ (initial)
Electrical Life: ≥10,000 Cycle
Approvals: UL, CSA, VDE, NEMKO, SEMKO, FIMKO, DEMKO

Fig. 1

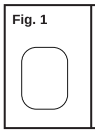


Fig. 2

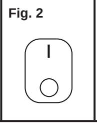


Fig. 3

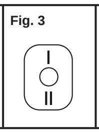
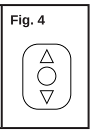
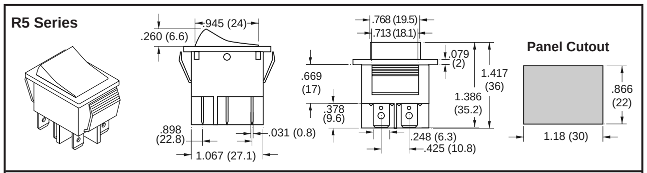


Fig. 4



R5 Series



R6 Series

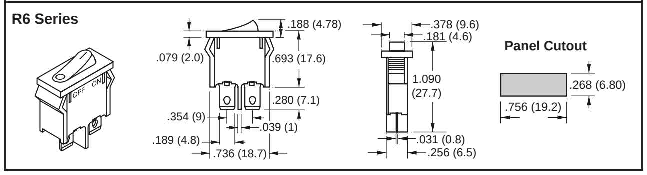


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	R5 Non-Illuminated					
1	DPST, On-Off, 15A Black	EG1527-ND	1.82	1.64	1.40	R5ABLKBLKEF0
1	DPDT, On-On, 15A Black	EG1528-ND	2.27	2.04	1.74	R5CBLKBLKEF0
2	DPST, On-Off, 15A Black	EG1529-ND	1.82	1.64	1.40	R5ABLKBLKFF0
1	DPDT, On-Off-On, 15A Black	EG1539-ND	2.95	2.66	2.26	R5DBLKBLKEF0
3	DPDT, On-Off-On, 15A Black	EG1540-ND	2.95	2.66	2.26	R5DBLKBLKCF0
4	DPDT, On-Off-On, 15A Black	EG1541-ND	2.95	2.66	2.26	R5DBLKBLKHF0
	R5 Illuminated					
1	DPST, 125V Red Illum., 15A Black	EG1530-ND	2.95	2.66	2.26	R5BBLKREDEF1
2	DPST, 125V Red Illum., 15A Black	EG1531-ND	2.95	2.66	2.26	R5BBLKREDFF1
1	DPST, 125V Green Illum., 15A Black	EG1533-ND	2.95	2.66	2.26	R5BBLKGRNEF1
2	DPST, 125V Green Illum., 15A Black	EG1534-ND	2.95	2.66	2.26	R5BBLKGRNFF1
2	DPST, 230V Red Illum., 15A Black	EG1535-ND	2.95	2.66	2.26	R5BBLKREDFF2
2	DPST, 230V Green Illum., 15A Black	EG1536-ND	2.95	2.66	2.26	R5BBLKGRNFF2
2	DPST, 12VDC Red Illum., 15A Black	EG1537-ND	2.95	2.66	2.26	R5BBLKREDFF3
2	DPST, 12VDC Green Illum., 15A Black	EG1538-ND	2.95	2.66	2.26	R5BBLKGRNFF3
	R6 Mini-Rocker					
1	SPST 6A, Black W/out Marking	EG1525-ND	1.67	1.51	1.28	R6ABLKBLKEF
2	SPST 6A, Black With Marking	EG1526-ND	1.67	1.51	1.28	R6ABLKBLKFF

E-SWITCH® Rocker Switches

Rocker Switches and Paddle Switches for mounting in a round hole instead of a rectangular or square punch. Easy to gang together for panels or consoles. Offered in various switching options with white ink stamping or LED illumination. All switches are black in color.

9157B-ND E-Switch Data Book **$2.95**

Fig. 1

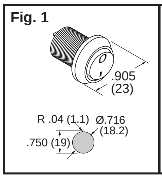


Fig. 2

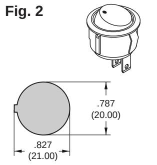


Fig. 3

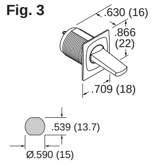


Fig. 4

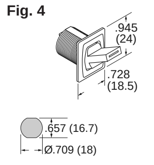


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
	Rocker Switches					
1	SPST (On-Off) 10A with I/O Marking	EG1889-ND	3.15	2.84	2.42	RR3130A
	DPDT (On-On) 10A with I/O Marking	EG1890-ND	4.73	4.26	3.63	RR3130B
	SPDT (On-On) 10A with I/O Marking	EG1891-ND	3.50	3.16	2.69	RR3130C
2	SPST (On-Off) 10A Snap-In	EG1542-ND	1.75	1.58	1.35	RR3112A
	Paddle Switches					
3	Mini, SPST (On-Off) 6A	EG1892-ND	2.80	2.53	2.15	RR3402A
	Mini, SPDT (On-On) 6A	EG1893-ND	3.15	2.84	2.42	RR3402C
	Mini, SPDT (On-Off-On) 6A	EG1894-ND	3.41	3.08	2.62	RR3402D
4	Standard, SPST (On-Off) 10A	EG1895-ND	4.34	3.91	3.33	RR3405A
	Red Illum., SPST (On-Off) 10A	EG1896-ND	5.87	5.28	4.50	RR3405AL-RED
	Green Illum., SPST (On-Off) 10A	EG1897-ND	5.87	5.28	4.50	RR3405AL-GRN
	Red Illum., SPDT (On-On) 10A	EG1898-ND	6.73	6.06	5.17	RR3405CL-RED
	Green Illum., SPDT (On-On) 10A	EG1899-ND	6.73	6.06	5.17	RR3405CL-GRN

JUDCO Manufacturing Inc. Plastic Push Button Switches

(Dimensions: inches)

- 3/8-27 Thread (Nut is included)
- 4 amp @ 14V
- 1 amp @ 110V

Fig. 1

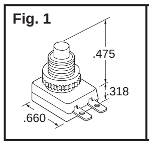


Fig. 2

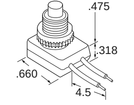


Fig. 3

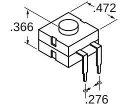


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100
	Black Body with Red Button				
1	Push On-Push Off, Solder Terminal	501PB-ND	.94	.80	.72
1	Normally Open, Solder Terminal	502PB-ND	.94	.80	.72
1	Normally Closed, Solder Terminal	503PB-ND	1.25	1.06	.95
2	Push On-Push Off, 4.5" (114.30mm) Wire Leads	505PB-ND	1.14	.97	.86
2	Normally Open, 4.5" (114.30mm) Wire Leads	506PB-ND	.86	.73	.65
	Black Body with Black Button				
1	Push On-Push Off, Solder Terminal	508PB-ND	.94	.80	.72
1	Normally Open, Solder Terminal	509PB-ND	.94	.80	.72
1	Normally Closed, Solder Terminal	510PB-ND	.94	.80	.72
2	Push On-Push Off, 4.5" (114.30mm) Wire Leads	504PB-ND	.98	.83	.74
2	Normally Open, 4.5" (114.30mm) Wire Leads	507PB-ND	1.07	.91	.81
	UL Approved Push Button with Tactile Feel, Black Body with Black Button				
2	On-Off PB, 4.5" (114.30mm) Wire Leads, UL Approv. at 125VAC at 6A	511PB-ND	1.17	1.00	.89
2	On-Off PB, 4.5" (114.30mm) Wire Leads, UL Approv. at 14VDC at 10A	512PB-ND	1.17	1.00	.89
—	Rubber Waterproof Boot w/molded in nut, Black, for above switches	513PB-ND	.56	.47	.42
	Low Profile PB Switch				
3	On-Off Side Actuated PB, PC Mount Leads, SPST, .3A	518PB-ND	1.59	1.35	1.20
3	On-Off Top Actuated PB, Rt. Angle, PC Mount Leads, SPST, .3A	519PB-ND	1.06	.90	.80

Grayhill INC.

NEW! Miniature Pushbutton Switches

Grayhill's Series 39 switches are compact PCB or panel mounted switches for compact, low-profile, behind-panel pushbutton applications. Series 39 contacts are all plated with either a gold or silver plating for reliable low level switching. Can be used with or without optional cap.

Specifications: Series 39 Operations at rated load: 1,000,000 **Contact rating at 28VDC:** 150mA **Bushing/Housing:** Brass, cadmium plated.

Fig. 1

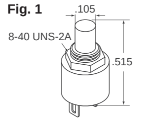


Fig. 2

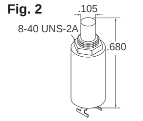


Fig. 3

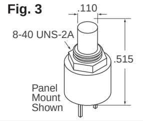


Fig. 4

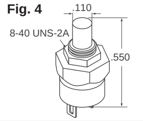


Fig.	Description	Button Color	Digi-Key Part No.	Price Each 1	100	500	Grayhill Part No.
1	PB Mom, SPST-NO, 500mA, Panel Mount	Black	GH1344-ND	3.48	2.62	2.23	39-1
	PB Mom, SPST-NO, 500mA, Panel Mount	Red	GH1345-ND	3.49	2.62	2.24	39-3
2	PB Mom, SPST-NC, 250mA, Panel Mount	Black	GH1346-ND	5.39	4.04	3.45	39-2
3	PB Mom, SPST-NO, 150mA, Panel Mount	Red	GH1350-ND	2.89	2.17	1.86	39-401 Red
	PB Mom, SPST-NO, 150mA, Panel Mount	Black	GH1349-ND	2.89	2.17	1.86	39-401 Black
	PB Mom, SPST-NO, 150mA, Right Angle PCB	Red	GH1351-ND	4.62	3.47	2.96	39-501 Red
	PB Mom, SPST-NO, 150mA, Right Angle PCB	Black	GH1352-ND	4.62	3.47	2.96	39-501 Black
	PB Mom, SPST-NO, 150mA, Right Angle w/Seal	Red	GH1353-ND	4.84	3.63	3.10	39-503 Red
	PB Mom, SPST-NO, 150mA, Right Angle w/Seal	Black	GH1354-ND	4.84	3.63	3.10	39-503 Black
4	PB Mom, SPST-NO, 500mA, Panel Mount	Red	GH1347-ND	6.52	4.89	4.18	39-351 Red
	PB Mom, SPST-NO, 500mA, Panel Mount	Black	GH1348-ND	6.52	4.89	4.18	39-351 Black
	PB Cap, Red, .25" Diameter for all Series 39 Above		GH1355-ND	.62	.40	—	30B1012-5
	PB Cap, Black, .25" Diameter for all Series 39 Above		GH1357-ND	.62	.40	—	30B1012-9
	PB Cap, White, .25" Diameter for all Series 39 Above		GH1356-ND	.70	.45	—	30B1012-8

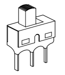
Cannon

ITT Industries
Engineered for life

C&K Slide Switches

9138B-ND C&K Switch Data Book.................................**$2.95**

Fig. 1



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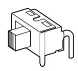

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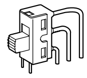
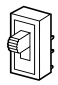


Fig. 4



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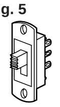

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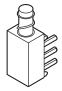


Fig. 7

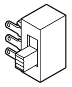
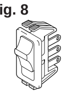


Fig. 8



Snap-In

Fig. 9

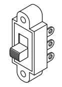


Fig. 10

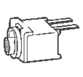
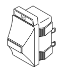


Fig. 11



Snap-In

Fig. 12

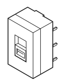


Fig. 13

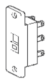
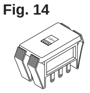


Fig. 14



Snap-In

Fig. 15

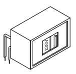
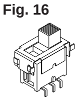
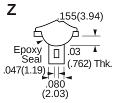


Fig. 16



Termination Options

Z



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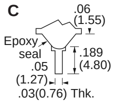

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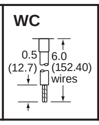

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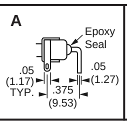
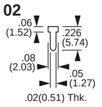
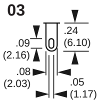


02



03



AV2

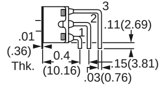


Fig.	Circuit	Switching Function	Options (see diag.) Actu-ator	Options (see diag.) Termi-nation	Options (see diag.) Contact Mat'l	Dimensions Inches (mm) L x W x D	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	C & K Part No.
1	SPDT	On-On	X	C	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5000-ND	3.96	3.17	2.51	1101M2S3CBE2
1	SPDT	On-On	X	C	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5001-ND	3.96	3.17	2.51	1101M2S3CQE2
1	DPDT	On-On	X	C	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5002-ND	7.71	6.17	4.89	1201M2S3CBE2
1	DPDT	On-On	X	C	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5003-ND	7.71	6.17	4.89	1201M2S3CQE2
1	SPDT	On-On	X	Z	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5004-ND	3.84	3.08	2.44	1101M1S3ZQE2
2	SPDT	On-On	X	A	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5005-ND	4.53	3.63	2.87	1101M2S3ABE2
2	SPDT	On-On	X	A	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5006-ND	4.53	3.63	2.87	1101M2S3AQE2
3	SPDT	On-On	X	AV2	B	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5007-ND	4.53	3.63	2.87	1101M2S3AV2BE2
3	SPDT	On-On	X	AV2	Q	.5 x .26 x .25 (12.70 x 6.60 x 6.35)	CKN5008-ND	4.53	3.63	2.87	1101M2S3AV2QE2
4	DPDT	On-Off	X	O2	Q	.76 x .43 x .36 (19.30 x 10.80 x 9.09)	CKC5100-ND	2.16	1.87	1.57	L202011MSO2Q
5	DPST	On-Off	X	O3	Q	.76 x .43 x .36 (19.30 x 10.80 x 9.09)	CKC5101-ND	2.02	1.75	1.48	L201011SSO3Q
5	DPDT	On-On	X	03	Q	1.38 x .53 x .28 (34.93 x 13.46 x 7.11)	CKC5013-ND	2.97	2.38	1.89	S602031SS03Q
6	DPDT	Mom (N/O)	—	02	L	.76 x .42 x .33 (19.30 x 10.79 x 8.38)	CKC5104-ND	4.98	3.99	3.16	L212132MV02Q
7	SPDT	On-On	—	02	L	.76 x .42 x .33 (19.30 x 10.79 x 8.38)	CKC5102-ND	1.83	1.47	1.16	L102021ML04Q
7	DPDT	On-On	—	02	S	.76 x .42 x .33 (19.30 x 10.79 x 8.38)	CKC5103-ND	3.66	2.93	2.32	L202021MA04Q
8	DPDT	On-On	Blk	O3	V	1.24 x .68 x .68 (31.50 x 17.27 x 17.27)	CKC5105-ND	3.15	2.52	2.00	S802C21S207Q
9	DPDT	On-On	X	03	Q	1.42 x .53 x .64 (36.07 x 13.46 x 16.13)	CKC5014-ND	3.30	2.64	2.09	S602031TS03Q
10	SPDT	On-On	—	C	B	.28 x .16 x .28 (7.01 x 4.06 x 7.06)	CKN5009-ND	5.76	4.61	3.65	GS01MCKE
10	SPST	Off-On	—	C	B	.28 x .16 x .28 (7.01 x 4.06 x 7.06)	CKN5010-ND	6.30	5.04	3.99	GS02MCKE
11	SPDT	On-On	Blk	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5015-ND	3.24	2.60	2.06	LP02C21T203DQ
11	DPDT	On-On	Blk	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5016-ND	4.23	3.39	2.68	LP22C21T203DQ
11	SPDT	On-On	Red	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5017-ND	3.42	2.74	2.17	LP02C31T203DQ
11	DPDT	On-On	Red	03	Q	.84 x .62 x .70 (21.34 x 15.75 x 17.68)	CKC5018-ND	4.41	3.53	2.80	LP22C31T203DQ
115V/230V Volt Select											
12	DPDT	On-On	—	C	V	1.03 x .65 x .49 (26.16 x 16.51 x 12.57)	CKC3001-ND	4.53	3.63	2.87	V80212MS02Q
13	DPDT	On-On	—	O3	V	1.61 x .65 x .49 (41.00 x 16.51 x 12.57)	CKC3002-ND	4.53	3.63	2.87	V80212SS05Q
14	DPDT	On-On	—	O3	V	1.3 x .75 x .54 (33.02 x 19.05 x 13.72)	CKC3005-ND *NEW!*	4.89	3.92	3.10	V80212S205Q
15	DPDT	On-On	—	C	V	1.03 x .65 x .63 (26.16 x 16.51 x 16.00)	CKC3004-ND	4.07	3.52	2.96	V802-12MA08Q
Fully Sealed Miniature Slide Switches											
1	SPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1245-ND	5.58	4.47	3.54	ES01MCKE
1	SPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1246-ND	6.15	4.92	3.90	ES02MCKE
1	SP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1247-ND	5.76	4.61	3.65	ES03MCKE
1	DPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1248-ND	7.32	5.86	4.64	ES21MCKE
1	DPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1249-ND	8.04	6.44	5.10	ES22MCKE
1	DP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1250-ND	7.53	6.03	4.77	ES23MCKE
2	SPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1251-ND	6.27	5.02	3.98	ES01MAKE
2	SPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1252-ND	6.81	5.45	4.32	ES02MAKE
2	SP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1253-ND	6.42	5.14	4.07	ES03MAKE
16	SPDT	On-On	X	SMT	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1254-ND	5.67	4.54	3.60	ES01MSAKE
2	DPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1267-ND	7.98	6.39	5.06	ES21MAKE
2	DPST	On-Off	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1268-ND	8.64	6.92	5.48	ES22MAKE
2	DP3T	On-Off-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1269-ND	8.13	6.51	5.15	ES23MAKE
3	SPDT	On-On	X	C	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1270-ND	6.48	5.19	4.11	ES01MAVKE
3	SPST	On-Off	X	C	B	39 x .24 x .36 (10 x 6 x 9.14)	CKN1271-ND	6.81	5.45	4.32	ES02MAVKE
3	SP3T	On-Off-On	X	C	B	39 x .24 x .36 (10 x 6 x 9.14)	CKN1272-ND	6.66	5.33	4.22	ES03MAVKE
16	SPST	On-On	X	SMT	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1255-ND	6.42	5.14	4.07	ES02MSAKE
16	SP3T	On-Off-On	X	SMT	B	.39 x .24 x .36 (10 x 6 x 9.14)	CKN1256-ND	5.85	4.68	3.71	ES03MSAKE

Contact Material Options

B Contacts & Terminals: Copper alloy, with gold plate over nickel plate. Terminals for the ES Series: Copper alloy, with tin-lead alloy over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max. (For 1100, 1200, L200 Series).

Q 1100, 1200: End Contacts: Coin silver, silver plated. Center Contact and All Terminals: Copper alloy, silver plated. Rating: 6 amps @ 120 VAC or 28 VDC; 3 amps @ 250 VAC (UL/CSA). S602 Series: 12 amps @ 125 VAC

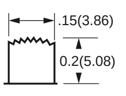
L200, LP Series: Contacts and Terminals: Copper, silver plated. (Std. with all termination options.) Rating: 4 amps @ 125 VAC or 28 VDC; 2 amps @ 250 VAC; 0.5 amp @ 125 VDC (UL/CSA).

L Contact Rating: 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS. Electrical Life: 10,000 make-and-break cycles at full load. Mechanical Life: 100,000 cycles min. Contact Resistance: Below 10 milliohms

S Contact Rating: 15 AMPS @ 125 V AC or 28 V DC. Electrical Life: 10,000 make-and-break cycles at full load. Mechanical Life: 100,000 cycles min. Contact Resistance: Below 10 milliohms

V Contact Rating: 10.1 AMPS @ 125 V AC or 4 amps @ 28 V DC; 5 AMPS @ 250 V AC. Electrical Life: 10,000 make-and-break cycles. Mechanical Life: 100,000 cycles min. Contact Resistance: Below 10 milliohms

X Actuator



Rocker Switches

Fig. 1

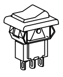


Fig. 2

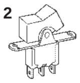


Fig. 3

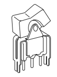


Fig. 4

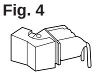
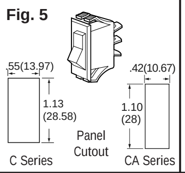


Fig. 5



C Series

CA Series

Fig. 6

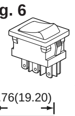
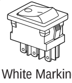
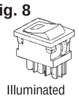


Fig. 7

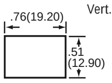


Vert. White Marking

Fig. 8



Illuminated



Panel Cutout

Fig. 9

PC Mount

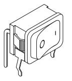


Fig. 10

Paddle Type

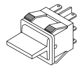
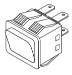
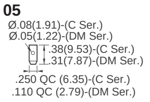


Fig. 11

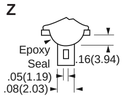


Termination Options

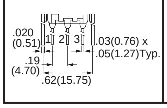
05



Z



V3



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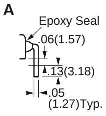


Contact Materials

B Contacts and Terminals: Copper alloy, with gold plate over nickel plate. Rating: 0.4 VA max. @ 20 VAC or DC max.

Q Contacts: Coin silver, silver plated. Center Contact & All Terminals: Copper alloy, silver plated. Rating: 5 amps @ 120 VAC or 28 VDC; 2 amps @ 250 VAC; C Series — 15A @ 125 VAC or 10A @ 250 VAC (UL/CSA); DM Series — 10A @ 125 VAC or 5A @ 250 VAC (UL/CSA).

9138B-ND C&K Switch Data Book **$2.95**

Fig.	Circuit	Actuator Color	Switching Function	Options (see diag.) Termi-nation	Options (see diag.) Contact Material	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 100	C & K Part No.
Rocker Switches										
1	SPDT	Black	On-On	Z	Q	CKN2002-ND	7.41	5.93	4.70	U11J51ZQE22
2	SPDT	Black	On-On	Z	Q	CKN2007-ND	6.51	5.21	4.13	7101J1ZQE2
2	SPDT	Black	On-Off-On	Z	Q	CKN2008-ND	6.99	5.60	4.43	7103J1ZQE2
2	4PDT	Black	On-On	Z	Q	CKN2001-ND	19.47	15.58	12.34	7401J1ZQE2
2	DPDT	Black	On-On	Z	Q	CKN2000-ND	8.94	7.16	5.67	7201J1ZQE2
3	SPDT	Black	On-Off-On	V3	B	CKN2003-ND	8.31	6.65	5.27	7103J1V3BE2
4	DPDT	Black	On-On	A	Q	CKN2006-ND	10.26	8.21	6.50	7201J1AQE2
4	SPDT	Black	On-On	A	B	CKN2004-ND	7.17	5.74	4.55	7101J1ABE2
4	SPDT	Black	On-On	A	Q	CKN2005-ND	7.17	5.74	4.55	7101J1AQE2
—	SPDT	Black	On-On	A	Q	CKC2021-ND	3.75	3.00	2.38	JA01J12AQ
Power Rocker Switches										
5	SPDT	Black	On-On	O5	Q	CKC2008-ND	4.55	2.63	2.21	C121J12S205QF
5	SPDT	Red	On-On	05	Q	CKC2025-ND	4.47	3.58	2.84	C121J13S205QF
5	DPDT	Black	On-On	05	Q	CKC2026-ND†	5.19	4.16	3.29	C221J12S205QF
5	DPDT	Red	On-On	05	Q	CKC2027-ND†	5.52	4.42	3.50	C221J13S205QF
5	SPDT	Black	On-On	05	Q	CKC1238-ND	2.21	1.28	1.08	CA01J12207Q
5	SPDT	Green	On-On	05	Q	CKC1241-ND	2.57	1.49	1.25	CA01J16207Q
5	SPDT	Illum/Red	On-On	05	Q	CKC1242-ND	3.10	1.79	1.51	CA04J137207Q
5	SPDT	Illum/Ylw	On-On	05	Q	CKC1244-ND	3.10	1.79	1.51	CA04J157207Q
6	SPDT	Black	On-Off-On	O5	Q	CKC2012-ND	4.11	3.29	2.61	D503J12S205QA
6	SPDT	Black	On-Mom	O5	Q	CKC2013-ND	4.44	3.56	2.82	D508J12S205QA
6	SPDT	Black	Mom-Off-Mom	O5	Q	CKC2022-ND	6.93	5.55	4.39	D105J12S205QA
6	DPDT	Black	On-On	O5	Q	CKC2009-ND	3.87	3.35	2.82	DM61J12S205Q
7	SPST	Black	On-Off	O5	Q	CKC2011-ND‡	3.60	2.88	2.28	D502J12S215PQF
7	DPDT	Black	On-On	O5	Q	CKC2018-ND‡	5.70	4.56	3.61	DM61J12S205PQ
7	DPST	Black	On-Off	O5	Q	CKC2019-ND‡	5.22	4.18	3.31	DM62J12S205PQ
8	SPST	Black	On-Off	O5	Q	CKC2017-ND	5.13	4.11	3.25	DM54J72S205Q3
8	DPST	Black	On-Off	O5	Q	CKC2020-ND	5.79	4.64	3.67	DM64J72S205Q3
—	DPST	Black	On-Off	O5	Q	CKC2016-ND‡	6.51	5.21	4.13	DF62J12S215PQF
9	SPDT	Black	On-On (Vert.)	A	Q	CKC2010-ND‡	4.95	3.96	3.14	D501J12S2APQF
9	SPDT	Black	On-On (Horz.)	A	Q	CKC2023-ND‡	4.95	3.96	3.14	D501J12S2AHQF
10	DPDT	Black	On-On	05	Q	CKC2024-ND	3.90	3.12	2.47	D201J52S215QA
11	DPDT	Black	On-Mom	O5	Q	CKC2015-ND*	6.54	5.24	4.15	D608J12S205QA
11	DPST	Black	On-Off	O5	Q	CKC2014-ND*‡	5.19	4.16	3.29	D602J12S215PQF
11	DPDT	Black	On-Off-On	05	Q	CKC2028-ND*	5.70	4.56	3.61	D603J12S205QA

† Panel Cutout is 1.00" x 1.125" (25.40mm x 28.58mm)   * Panel Cutout is .756" x .887" (19.20mm x 22.53mm)   ‡ White Vertical Marking

Slide Switches - EG Series

9157B-ND E-Switch Data Book **$2.95**

Specifications:
- **Initial Contact Resistance:** Less than 20 minimum
- **Withstand Voltage:** 500V AC for 1 minute between any terminal and frame
- **Operating Temp.:** -20°C to +70°C
- **Life:** 10,000 cycles minimum
- **Contact:** Silver plated copper alloy
- **Timing:** Non-shorting contacts

Dimensions: inches (mm)

Fig. 1

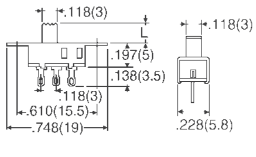


Fig. 2

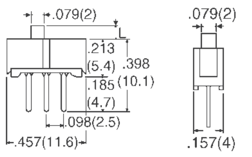


Fig. 3

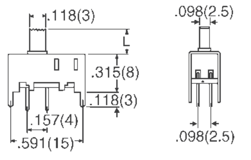


Fig. 4

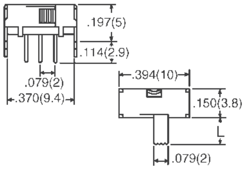


Fig. 5

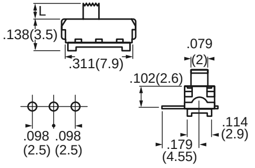
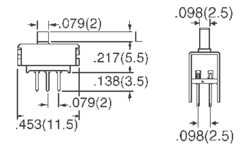


Fig. 6



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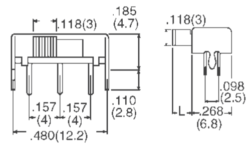


Fig. 8

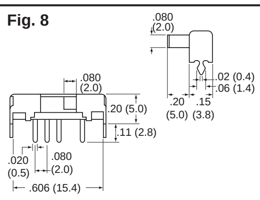


Fig. 9

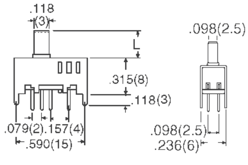


Fig. 10

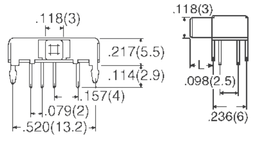
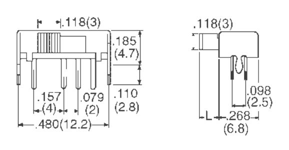


Fig. 11



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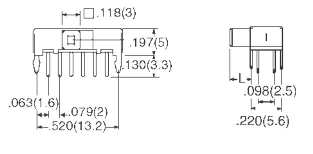

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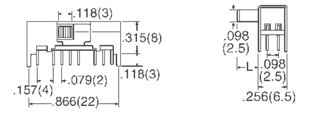


Fig. 14

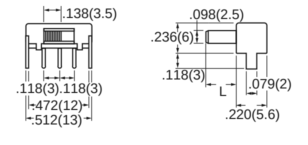


Fig. 15

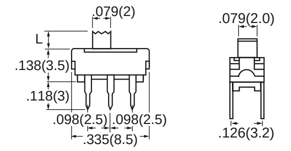


Fig. 16

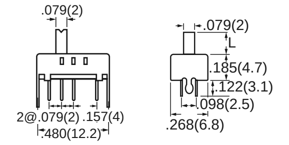
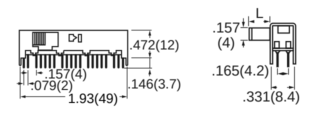


Fig. 17



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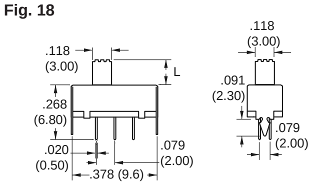


Fig. 19

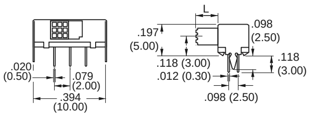


Fig. 20

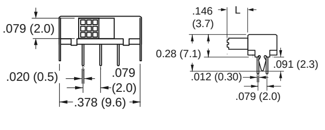


Fig. 21

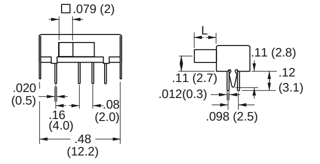


Fig. 22

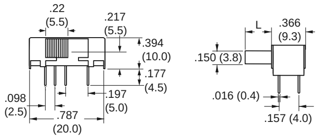


Fig.	Description	Rating	Circuit	"L" Dim. In. (mm)	Switching Function	Terminal	Digi-Key Part No.	Price Each 1	10	100	250	E-Switch Part No.
1	Straight	0.2A @ 30VDC	SPDT	.16 (4)	On-On	Solder Lugs	EG1901-ND	.71	.64	.55	.46	EG1201
1	Straight	0.2A @ 30VDC	SPDT	.22 (5.5)	On-On	Solder Lugs	EG1902-ND	.71	.64	.55	.46	EG1201A
2	Straight	0.2A @ 30VDC	SPDT	.08 (2)	On-On	PC Board	EG1903-ND	.71	.64	.55	.46	EG1218
3	Straight	0.2A @ 30VDC	DPDT	.12 (3)	On-On	PC Board	EG1904-ND	.98	.88	.75	.62	EG2201
3	Straight	0.2A @ 30VDC	DPDT	.24 (6)	On-On	PC Board	EG1905-ND	.98	.88	.75	.62	EG2201A
4	Right Angle	0.2A @ 30VDC	SPDT	.20 (5)	On-On	PC Board	EG1906-ND	.71	.64	.55	.46	EG1213
5	Right Angle	0.2A @ 30VDC	SPDT	.08 (2)	On-On	PC Board	EG1847-ND	1.11	.89	.81	.69	EG1270
6	Straight	0.2A @ 30VDC	DPDT	.08 (2)	On-On	PC Board	EG1907-ND	.98	.88	.75	.62	EG2209
6	Straight	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1908-ND	1.16	1.04	.89	.74	EG2209A
7	Right Angle	0.2A @ 30VDC	DPDT	.14 (3.5)	On-On	PC Board	EG1909-ND	.89	.80	.69	.57	EG2215
8	Right Angle	0.2A @ 30VDC	SP3T	.20 (5)	On-On-On	PC Mount	EG2485-ND	.82	.74	.63	.52	EG1313
9	Straight	0.2A @ 30VDC	DP3T	.12 (3)	On-On-On	PC Board	EG1910-ND	.89	.80	.69	.57	EG2301
9	Straight	0.2A @ 30VDC	DP3T	.24 (6)	On-On-On	PC Board	EG1944-ND	.90	.81	.69	.57	EG2301A
10	Right Angle	0.1A @ 12VDC	DP3T	.16 (4)	On-On-On	PC Board	EG1911-ND	.93	.84	.72	.60	EG2308
10	Right Angle	0.1A @ 30VDC	DP3T	.24 (6)	On-On-On	PC Board	EG1945-ND	.90	.81	.69	.57	EG2308A
11	Right Angle	0.2A @ 30VDC	DP3T	.14 (3.5)	On-On-On	PC Board	EG1913-ND	.98	.88	.75	.62	EG2315
12	Right Angle	0.2A @ 30VDC	4PDT	.24 (6)	On-On	PC Board	EG1949-ND	1.47	1.32	1.13	.93	EG4208A
12	Right Angle	0.2A @ 30VDC	4PDT	.16 (4)	On-On	PC Board	EG1914-ND	1.60	1.45	1.23	1.02	EG4208
13	Right Angle	0.2A @ 30VDC	4P3T	.20 (5)	On-On-On	PC Board	EG1915-ND	1.78	1.61	1.37	1.13	EG4319
14	Right Angle	0.2A @ 30VDC	SPDT	.12 (3)	On-On	PC Board	EG1916-ND	.71	.64	.55	.46	EG1206
14	Right Angle	0.2A @ 30VDC	SPDT	.24 (6)	On-On	PC Board	EG1917-ND	.71	.64	.55	.46	EG1206A
15	Straight	0.3A @ 30VDC	IC-2P	.08 (2)	On-On	PC Board	EG1918-ND	.80	.72	.62	.51	EG1271
15	Straight	0.3A @ 30VDC	IC-2P	.16 (4)	On-On	PC Board	EG1919-ND	.80	.72	.62	.51	EG1271A
16	Straight	0.2A @ 30VDC	DP3T	.16 (4)	On-On-On	PC Board	EG1920-ND	1.07	.96	.82	.68	EG2305
16	Straight	0.2A @ 30VDC	DP3T	.08 (2)	On-On-On	PC Board	EG1921-ND	1.07	.96	.82	.68	EG2305A
17	Right Angle	0.3A @ 30VDC	8P4T	.40 (10)	On-On	PC Board	EG1928-ND	3.49	3.14	2.68	2.21	EG8402
18	Straight	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1940-ND	.82	.74	.63	.52	EG2207
19	Right Angle	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1941-ND	.82	.74	.63	.52	EG2208
19	Right Angle	0.2A @ 30VDC	DPDT	.24 (6)	On-On	PC Board	EG1942-ND	.82	.74	.63	.52	EG2208A
20	Right Angle	0.2A @ 30VDC	DPDT	.16 (4)	On-On	PC Board	EG1943-ND	.82	.74	.63	.52	EG2211
20	Right Angle	0.2A @ 30VDC	DPDT	.08 (2)	On-On	PC Mount	EG2486-ND	.82	.74	.63	.52	EG2211A
21	Right Angle	0.2A @ 30VDC	DP3T	.24 (6)	On-On-On	PC Board	EG1946-ND	.76	.69	.59	.49	EG2310
21	Right Angle	0.2A @ 30VDC	DP3T	.16 (4)	On-On-On	PC Board	EG1947-ND	.86	.77	.66	.55	EG2310A
22	Right Angle	0.2A @ 30VDC	DP3T	.28 (7)	On-On-On	PC Board	EG1948-ND	.90	.81	.69	.57	EG2322

CW INDUSTRIES

Slide Switches

Made in U.S.A.

Fig. 1

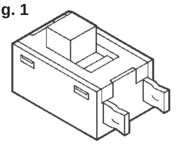


Fig. 2

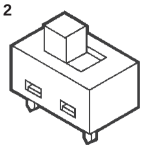


Fig. 3

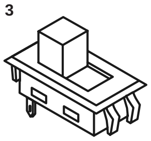


Fig. 4

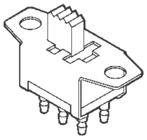


Fig. 5

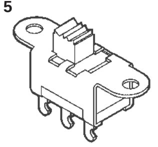


Fig. 6

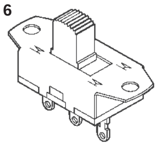


Fig. 7

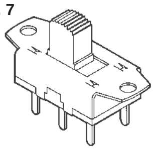


Fig. 8

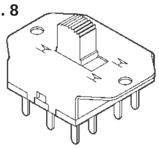


Fig. 9

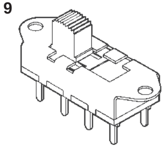


Fig. 10

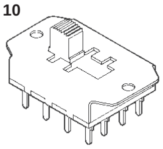
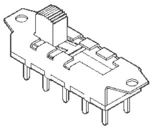


Fig. 11



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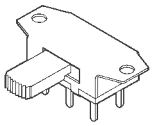


Fig. 13

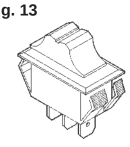


Fig. 14

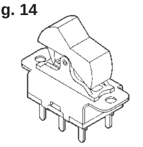


Fig. 15

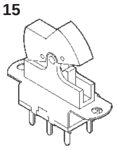


Fig. 16

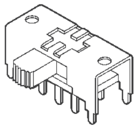


Fig. 17

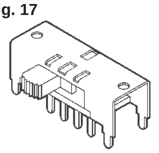


Fig. 18

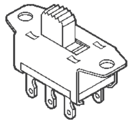


Fig. 19

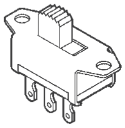


Fig. 20

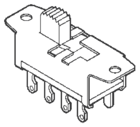


Fig. 21

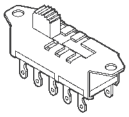


Fig. 22

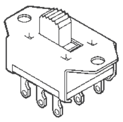


Fig. 23

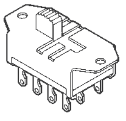


Fig. 24

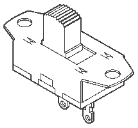


Fig. 25

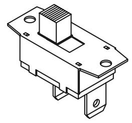
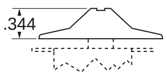


Fig. 26



CW Industries slide switches became popular with the industrial explosion after World War I. Thousands of consumer products have used CW Industries slide switches for applications such as: radios, TVs, appliances, and automotive. Aircraft, telephones, and marine equipment use CW Industries slide switches for both power switching and low level switching. Available in both solder eyelet versions for hand soldering or pc mount terminals for direct mounting. All slide switch actuators and buttons are black nylon 6/6. **MATERIALS: Buttons:** Type 6/6 nylon, black; **Moving Contact:** Copper; **Moving Contact Plating:** Silver; **Terminals:** Copper; **Terminal Plating:** Silver. **High Voltage Breakdown:** Min. of 1000 volts RMS, 60 Hz for one minute between parts of opposite polarity. **Contact Resistance:** Less than 0.01 ohm at 20 milliamperes dc. **LIFE CYCLING (no load):** Switches will be operative after 10,000 (min.) cycles at the rate of 10 cycles per minute. **LIFE CYCLING (load):** Switches will be operative after 6,000 (minimum) cycles at the rate of 10 cycles per minute at rated load. **APPROVAL LISTING:** UL/CSA

Digi-Key® Slide Switches Kit

Assortment of switches denoted. Includes notebook style storage case and bin storage guide.

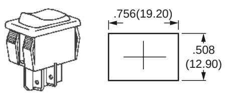
*** SW-KIT-ND** 130 total pieces **$69.95**

Fig.	Circuit	Volts		Curr. Rtg. (A)		Dimensions - In. (mm) L x W x H	Description	Digi-Key Part No.	Price Each				CW Industries Part No.
		DC	AC	DC	AC				1	10	100	500	
1	SPST	125	125	.5	.5	.250 x .320 x .620 (6.35 x 8.13 x 15.75)	Vertical Mount PC Switch	SW100-ND	.76	.70	.61	.52	G105-0513
2	SPDT	125	125	.5	.5	.505 x .305 x .515 (12.83 x 7.75 x 13.08)	Horizontal Mount PC Switch	SW101-ND*	1.23	1.13	.99	.84	G107-0513
3	SPST	125	125	.5	.5	.705 x.385 x .395 (17.91 x 9.78 x 10.03)	Panel Mount Snap-In Switch	SW331-ND	1.64	1.48	1.11	.74	G-107-SI-0005
3	SPDT	125	125	.5	.5	.705 x .385 x .395 (17.91 x 9.78 x 10.03)	Panel Mount Snap-In Switch	SW332-ND	1.84	1.65	1.24	.83	G-107-SI-0511
4	DPDT	125	125	.5	.5	.762 x .312 x .558 (19.35 x 7.92 x 14.17)	Micro-Miniature Switch	SW102-ND*	.83	.77	.67	.57	GS113-0512
5	SPDT	125	125	.5	.5	.750 x .220 x .458 (19.05 x 5.59 x 11.63)	Micro-Miniature Switch	SW103-ND*	.67	.62	.54	.46	GS115-0511
6	SPDT	125	125	.5	6.0	1.360 x .550 x .966 (34.54 x 13.97 x 24.54)	Standard Size Switch Eyelet Terminal	SW104-ND*	.37	.35	.30	.26	GF624-6014
6	SPDT	125	125	.5	6.0	1.360 x .550 x .966 (34.54 x 13.97 x 24.54)	Standard Size Switch (Off-Mom)	SW338-ND	1.81	1.63	1.22	.82	G-1132-0003
7	DPDT	125	125	.5	11	1.360 x .550 x .747 (34.54 x 13.97 x 18.97)	Standard Size Switch PCB Mount	SW105-ND*	.71	.65	.57	.48	GF1126-1110
7	DPDT	125	125	.5	11	1.360 x .550 x .747 (34.54 x 13.97 x 18.97)	Standard Size Switch Eyelet Terminal	SW333-ND	.94	.85	.64	.43	GF-1126-0033
8	4PDT	125	125	.5	6.0	1.360 x 1.000 x .767 (34.54 x 25.40 x 19.48)	Standard Size Switch PCB Mount	SW106-ND*	1.20	1.11	.96	.82	GF642-6010
9	DP-3Pos	125	125	.5	11	1.656 x .550 x .757 (42.06 x 13.97 x 19.23)	Standard Size Switch PCB Mount	SW107-ND*	.86	.79	.69	.59	G1128S-1110
9	DP-3Pos	125	125	.5	11	1.656 x .550 x .664 (42.06 x 13.97 x 16.87)	Standard Size Switch Eyelet Terminal	SW334-ND	1.15	1.03	.77	.52	G1128S-0055
9	SP-3Pos	125	125	.5	11	1.656 x .550 x .664 (42.06 x 13.97 x 16.87)	Standard Size Switch (On-Off-Mom)	SW337-ND	1.48	1.33	1.00	.67	G-633S-0000
10	4P-3Pos	125	125	.5	6.0	1.656 x 1.000 x .767 (42.06 x 25.40 x 19.48)	Standard Size Switch PCB Mount	SW108-ND	1.55	1.43	1.24	1.06	G660S-6010
11	DP-4Pos	125	125	.5	11	1.968 x .560 x .757 (49.99 x 14.22 x 19.23)	Standard Size Switch PCB Mount	SW109-ND	1.03	.95	.83	.70	G1138S-1110
11	DP-4Pos	125	125	.5	11	1.968 x .560 x .757 (49.99 x 14.22 x 19.23)	Standard Size Switch Eyelet Terminal	SW335-ND	1.38	1.24	.93	.62	G1138S-0048
12	DPDT	125	125	.5	3.0	1.360 x .550 x .610 (34.54 x 13.97 x 15.49)	Side Actuated Switch PCB Mount	SW110-ND	.50	.46	.40	.34	GG350-3010
13	SPDT	125	125	.5	13	1.235 x .680 x 1.397 (31.37 x 17.27 x 35.48)	Pop-in Mount Slide Switch	SW111-ND	.73	.68	.59	.50	G2012-1315
14	DPDT	125	125	.5	6.0	1.375 x .550 x 1.167 (34.93 x 13.97 x 29.64)	Rocker Switch PCB Mount	SW112-ND*	1.38	1.28	1.11	.95	GR5-626-6010
15	DPDT	125	125	.5	11	1.562 x .550 x 1.417 (39.67 x 13.97 x 35.99)	Rocker Switch PCB Mount	SW113-ND*	1.63	1.50	1.30	1.11	GR29-1126-1110
16	DPDT	125	125	.5	3.0	1.000 x .404 x .484 (25.40 x 10.26 x 12.29)	Miniature Side Actuated Switch PCB	SW114-ND*	.82	.76	.66	.56	GPI152-3013
17	DP-3Pos	125	125	.5	3.0	1.170 x .404 x .484 (29.72 x 10.26 x 12.29)	Miniature Side Actuated Switch PCB	SW115-ND*	1.00	.92	.80	.68	GPI154-3013
18	DPDT	125	125	.5	3.0	1.000 x .400 x .735 (25.40 x 10.16 x 18.67)	Miniature Slide Switch Eyelet Terminal	SW116-ND	.55	.51	.44	.38	GF126-3011
18	DPDT	125	125	.5	3.0	.628 x .400 x .735 (15.95 x 10.16 x 18.67)	Miniature Slide Switch w/o Mnt. Ears, PC Mnt.	SW342-ND	1.44	1.29	.97	.65	GF-126-0159
19	SPDT	125	125	.5	.5	1.000 x .400 x .735 (25.40 x 10.16 x 18.67)	Spring Return Switch Eyelet Terminal	SW118-ND*	.74	.68	.59	.50	G133-3011
20	DP-3Pos	125	125	.5	3.0	1.190 x .400 x .745 (30.23 x 10.16 x 18.92)	Miniature Slide Switch Eyelet Terminal	SW119-ND*	.69	.64	.56	.47	G128S-3011
21	DP-4Pos	125	125	.5	3.0	1.377 x .400 x .745 (34.98 x 10.16 x 18.92)	Miniature Slide Switch Eyelet Terminal	SW120-ND	1.05	.97	.85	.72	G141S-3011
22	3PDT	125	125	.5	3.0	1.000 x .567 x .745 (25.40 x 14.40 x 18.92)	Miniature Slide Switch Eyelet Terminal	SW121-ND*	.94	.86	.75	.64	GF161-3011
23	3P-3Pos	125	125	.5	3.0	1.190 x .567 x .745 (30.23 x 14.40 x 18.92)	Miniature Slide Switch Eyelet Terminal	SW122-ND	1.17	1.08	.94	.80	G168S-3011
23	3P-3Pos	125	125	.5	3.0	1.656 x .780 x .674 (42.06 x 19.81 x 17.12)	Standard Size Switch Eyelet Terminal	SW336-ND	1.42	1.28	.96	.64	G-368S-0000
24	SPST	125	125	.5	11	1.360 x .550 x .654 (34.54 x 13.97 x 16.61)	Standard Size Switch Eyelet Terminal	SW148-ND	.73	.68	.59	.50	GF-1123-0009
25	SPST	—	125	—	16	1.360 x .550 x .654 (34.54 x 13.97 x 16.61)	Standard Size Switch .250" QC Terminal	SW616-ND	.70	.63	.47	.32	GF-1623-0001
26	Black Topper Button for SW105-ND, SW107-ND, SW110-ND, SW148-ND, SW333-ND, SW337-ND & SW334-ND							SW149-ND	.20	.19	.16	.14	G-02-072

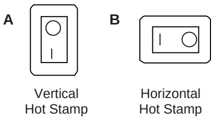
CW INDUSTRIES Panel Mount Rocker Switches

Mini Rocker Switches

CW Rocker switches are single pole or double pole switches capable of currents normally associated with much larger switches. Standard black body with either black or red rocker knob. Designed to satisfy unique styling requirements which can be the key to a products success. Switches with markings are white ink stamped markings on rocker knob. Illuminated "Soft Glow" switches are 110VAC neon bulbs, red diffused lens. Typical applications: Motor-driven devices, instruments, household appliances, auto. access., recreational vehicles, and telecommunication, computer and computer peripheral equipment. All terminals are .187" QC **MATERIALS:** • **Rocker Knob:** Nylon 94V-2. • **Housing:** Nylon 94V-2. • **Terminal/Stationary/Moving Contact:** Copper alloy, and/or copper alloy silver plated. **MOUNTING:** Self locks without hardware when popped into the panel cutout. Acceptable panel thickness range is from .050 to .150 (1.27mm to 3.81mm). **PERFORMANCE STANDARDS: Contact Resistance:** Less than .01Ω at 10mA (initial). **Operating Temp.:** 105°C maximum. ***Caution:*** Burr direction must be away from the direction of insertion.



Switch Markings



Switch Marking	Rocker Color	Circuit	Finish	Switch Function	Electrical Ratings	Listing Agencies	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
—	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW339-ND*	1.22	1.10	.83	.55	GRS-4011-0024
—	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW301-ND	1.16	1.04	.78	.52	GRS-4011-1600
—	Red	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW302-ND	1.16	1.04	.78	.52	GRS-4011-0040
B	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW322-ND	1.33	1.20	.90	.60	GRS-4011-0068
A	Black	SPST	Matte	ON/OFF	16A 125-250VAC	UL, CSA, VDE	SW323-ND	1.33	1.20	.90	.60	GRS-4011-0076
—	Black	SPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW303-ND	1.25	1.13	.85	.57	GRS-4012-1600
—	Red	SPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW304-ND	1.29	1.16	.87	.58	GRS-4012-0026
A	Black	SPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW324-ND	1.43	1.28	.96	.64	GRS-4012-0047
—	Black	DPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW307-ND	1.78	1.60	1.20	.80	GRS-4022-1600
—	Red	DPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW308-ND	1.78	1.60	1.20	.80	GRS-4022-0010
A	Black	DPDT	Matte	ON/ON	16A 125-250VAC	UL, CSA, VDE	SW325-ND	1.96	1.76	1.32	.88	GRS-4022-0013
—	Black	SPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW305-ND	1.59	1.43	1.07	.72	GRS-4013A-1300
—	Red	SPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW306-ND	1.59	1.43	1.07	.72	GRS-4013A-0008
—	Black	SPST	Matte	OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW329-ND	1.34	1.20	.90	.60	GRS-4011B-1300
—	Black	SPDT	Matte	MOM/OFF/MOM	13A 125VAC, 12A 250VAC	UL, CSA	SW340-ND	1.55	1.39	1.05	.70	GRS-4013C-0001
—	Black	DPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW309-ND	2.12	1.90	1.43	.95	GRS-4023A-1300
—	Red	DPDT	Matte	ON/OFF/ON	13A 125VAC, 10A 250VAC	UL, CSA	SW310-ND	2.12	1.90	1.43	.95	GRS-4023A-0009
—	Black	DPST	Matte	OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW330-ND	1.87	1.68	1.26	.84	GRS-4021B-0000
—	Black	DPDT	Matte	MOM/OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW311-ND	2.12	1.90	1.43	.95	GRS-4023C-1300
—	Red	DPDT	Matte	MOM/OFF/MOM	13A 125VAC, 10A 250VAC	UL, CSA	SW312-ND	2.12	1.90	1.43	.95	GRS-4023C-0005
—	Red Illum.	SPST	Matte	ON/OFF	16A 125VAC	UL, CSA	SW300-ND	2.93	2.63	1.97	1.32	GRL-4011-1600

* Note: Eyelet Terminals

Standard Rocker Switches

CW Rocker Switches are designed to solve the switching problems of the user and styled to satisfy the designer…easy to mount, easy to terminate, and easy to actuate. Hot stamped versions are marked for switch position identification illuminated version is 120VAC neon bulb. **OPERATING STANDARDS: Temperature:** 105°C max. **Contact Resistance:** 0.01Ω at 10mA. **MATERIALS: Rocker Knob:** Nylon 94V-4. **Housing:** Nylon 94V-2. **Terminal Board:** Nylon 94V-0. **Terminal/Moving Contact:** Copper and/or copper alloy silver plated. **MOUNTING:** No hardware or tools needed; self locks into proper panel cutout. Acceptable panel thickness range is from .025 to .180 (0.64mm to 4.57mm). All terminals are .250" QC. ***Caution:*** Burr direction must be away from the direction of insertion.

Fig. 1

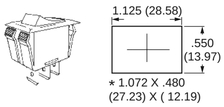
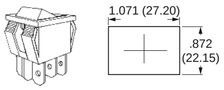


Fig. 2



A Switch Marking

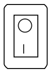


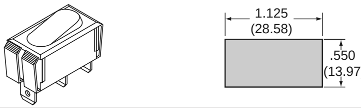
Fig.	Switch Marking	Rocker Color	Finish	Circuit	Switch Function	Electrical Ratings	Listing Agencies	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
1	—	Red Illum.	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW313-ND	2.37	2.12	1.59	1.06	GRL-2011-1600
1	—	Black	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW314-ND	1.06	.96	.72	.48	GRS-2011-2000
1	—	Red	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW315-ND	1.12	1.00	.75	.50	GRS-2011-2019
1	A	Black	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW326-ND	1.23	1.11	.83	.56	GRS-2011-2080
1	—	Black	Matte	SPST-NO	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW316-ND*	1.12	1.00	.75	.50	GRS-2011-3000
1	—	Black	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW319-ND*	1.20	1.08	.81	.54	GRS-2012-3000
1	A	Black	Matte	SPST	ON/OFF	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW341-ND*	1.29	1.16	.87	.58	GRS-2011-3020
1	—	Black	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW317-ND	1.20	1.08	.81	.54	GRS-2012-2000
1	—	Red	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW318-ND	1.20	1.08	.81	.54	GRS-1200-2009
1	A	Black	Matte	SPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW327-ND	1.38	1.24	.93	.62	GRS-2012-2028
1	—	Black	Matte	SPDT	ON/OFF/ON	16A 125VAC, 12A 250VAC	UL, CSA	SW320-ND	1.55	1.40	1.05	.70	GRS-2013A-2000
1	—	Black	Matte	SPST-NO	OFF/MOM	13A 125VAC	UL, CSA	SW613-ND	1.23	1.11	.83	.56	GRS-2011B-2000
1	—	Black	Matte	SPST-NC	ON/MOM	13A 125VAC	UL, CSA	SW614-ND	1.23	1.11	.83	.56	GRS-2011C-2000
2	—	Black	Matte	DPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW321-ND	2.88	2.58	1.94	1.29	GR-2022-1600
2	A	Black	Matte	DPDT	ON/ON	16A 125VAC, 12A 250VAC	UL, CSA, VDE	SW328-ND	3.06	2.74	2.06	1.37	GR-2022-0007

* Dimensions are 1.072" x .480" (27.23mm x 12.19mm)

StyleLine Rocker Switches

CW's GRS-2000 Series StyleLine Rocker Switches, available in SPST, SPDT, AND Center Off versions, are specially designed to meet contemporary product styling and global appearance trends. The contoured design and slim attractive profile of the switch knob and bezel provide superior styling, and are available in both high-gloss and matte finish.

They are ideal for appliances, recreational equipment, medical and scientific devices, testing equipment, security systems, computers and peripherals, and many other products where performance and style are important. All terminals are .250" QC.



Rocker Color	Finish	Circuit	Switch Function	Electrical Ratings	Listing Agencies	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
Black	Matte	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW601-ND	1.33	1.19	.90	.60	GRS-2011-2400
White	Matte	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW602-ND	1.39	1.25	.94	.63	GRS-2011-2401
Black	Hi-Gloss	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW603-ND	1.33	1.19	.90	.60	GRS-2011-2500
White	Hi-Gloss	SPST	ON/OFF	16A-125VAC	UL, CSA, VDE	SW604-ND	1.39	1.25	.94	.63	GRS-2011-2501
Black	Matte	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW605-ND	1.50	1.35	1.02	.68	GRS-2012-2400
White	Matte	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW606-ND	1.57	1.41	1.06	.71	GRS-2012-2401
Black	Hi-Gloss	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW607-ND	1.50	1.35	1.02	.68	GRS-2012-2503
White	Hi-Gloss	SPDT	ON/OFF	16A-125VAC	UL, CSA, VDE	SW608-ND	1.57	1.41	1.06	.71	GRS-2012-2504
Black	Matte	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW609-ND	1.94	1.74	1.31	.87	GRS-2013A-2400
White	Matte	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW610-ND	2.01	1.80	1.35	.90	GRS-2013A-2401
Black	Hi-Gloss	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW611-ND	1.94	1.74	1.31	.87	GRS-2013A-2500
White	Hi-Gloss	SPDT	ON/OFF/ON	16A-125VAC	UL, CSA, VDE	SW612-ND	2.01	1.80	1.35	.90	GRS-2013A-2501

IndicON Rocker Switches

Fig. 1

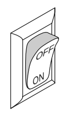
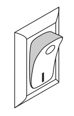
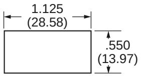
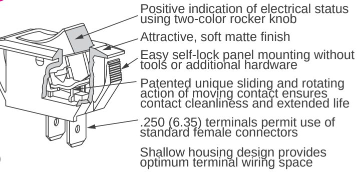


Fig. 2






Positive indication of electrical status using two-color rocker knob
Attractive, soft matte finish
Easy self-lock panel mounting without tools or additional hardware
Patented unique sliding and rotating action of moving contact ensures contact cleanliness and extended life
.250 (6.35) terminals permit use of standard female connectors
Shallow housing design provides optimum terminal wiring space

IndicON rocker switches are the right choice wherever you want performance combined with style. Provides users with a positive indication whether switch is "On" or "Off". Unlike lighted rocker switches which may burn out over time, there's never a safety concern with IndicON switches.

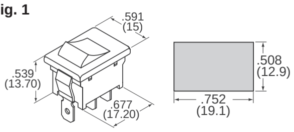
Features: • Economical alternative to lighted switches • Fast and secure mounting - no hardware required • Long life, reliable operation • Two color molding process provides permanent legends • Compatible appearance with other CW switches **Electrical Specifications:** 16A @ 125V AC rating without precious metals **Agency Certifications:** UL, CSA, and VDE

Fig.	Switch Color	Actuator Color	Circuit Funct.	Switch Type	Term. Type In. (mm)	Digi-Key Part No.	Price Each 1	10	100	500	CW Industries Part No.
1	Black	Red	SPST	On-Off	.250QC (6.35)	SW344-ND	1.20	1.08	.81	.54	NAA-111-BI11-00
1	Black	Red	SPDT	On-On	.250QC (6.35)	SW349-ND	1.28	1.15	.87	.58	NBA-111-BI11-00
2	Black	Red	SPST	On-Off	.250QC (6.35)	SW354-ND	1.20	1.08	.81	.54	NAA-111-BI21-00

CHERRY® *NEW!* Rocker Switches

Cherry's new Rocker Switches were designed to be snapped into a panel without the need for additional hardware and are offered in a variety of styles and colors. Perfect for all types of power switching and control.

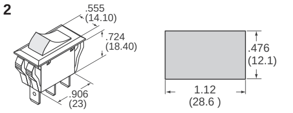
Fig. 1



SR/LR Series: Industry standard miniature switches with 10A switching current.

Switch Current: 10A 125VAC/8A 250VAC
Actuator Base: Nylon 66 94V-2
Contacts: Silver Alloy
Illuminated Versions: 125VAC Neon Lamp
Terminals: .187" QC

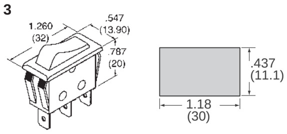
Fig. 2



CR Series: Standard size power rocker switches with two color molded buttons (red shaded) for maximum visibility on selected actuators.

Switch Current: 20A 125VAC/16A 250VAC
Actuator Base: Nylon 66 94V-2
Contacts: Silver Alloy
Illuminated Versions: 125VAC Neon Lamp
Terminals: .250" QC
Note: Panel cut out CH812-ND and CH813-ND 1.12 x .543.

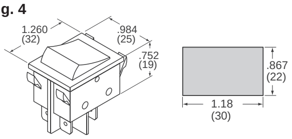
Fig. 3



TR Series: Thin power rocker switches used extensively in appliance and white goods markets.

Switch Current: 16A 125VAC/16A 250VAC
Actuator Base: Nylon 66 94V-2
Contacts: Silver Alloy
Illuminated Versions: 125VAC Neon Lamp
Terminals: .250" QC

Fig. 4



WR Series: Large DP power rocker switches for power switching.

Switch Current: 16A 125VAC/16A 250VAC
Actuator Base: Nylon 66 94V-2
Contacts: Silver Alloy
Illuminated Versions: 125VAC Neon Lamp
Terminals: .250" QC

Legend Marks	A	B	C	D	E	F	G
	O –	IOII	•		OFF ON	OFF ON	

Fig.	Body Color	Actuator Color	Circuit Function	Switch Type	Legend Marking	Digi-Key Part No.	Price Each				Cherry Part No.
							1	10	50	100	
SR Series — 10 Amp Miniature Rocker Switches											
1	Black	Black	On/Off	SPST	A	CH755-ND	.76	.68	.56	.46	SRB22A2FBBNN
		Black	On/On	SPDT	D	CH756-ND	.81	.72	.60	.49	SRB23A2BBBNN
		Black	On/Off/On	SPDT	B	CH757-ND	.95	.84	.70	.57	SRB24A2HBBNN
		Black	On/Off	SPST	D	CH758-ND	.73	.65	.54	.44	SRB22A2BBBNN
		Black	On/Off	SPST	C	CH759-ND	.73	.65	.54	.44	SRB22A2GBBNN
	Black	Black	On/Off	SPST	E	CH760-ND	.73	.65	.54	.44	SRB22A2DBBNN
		Red	On/Off	SPST	A	CH761-ND	.76	.68	.56	.46	SRB22A2FBRNN
		White	On/Off	SPST	D	CH762-ND	.76	.68	.56	.46	SRB22A2BBWNN
LR Series — 10 Amp Multi-pole Rocker Switches											
1	Black	Black	On/Off	SPST	D	CH763-ND	.89	.80	.66	.54	LRA22H2BBBNN
	Black	Black	On/Off	SPST	A	CH764-ND	.89	.80	.66	.54	LRA22H2FBBNN
	Black	Black	On/Off	SPST	E	CH765-ND	.89	.80	.66	.54	LRA22H2DBBNN
	Black	Red	On/Off	SPST	A	CH766-ND	.92	.82	.68	.55	LRA22H2FBRNN
	White	White	On/Off	SPST	A	CH767-ND	.95	.84	.70	.57	LRA22H2FWWNN
	Grey	Grey	On/Off	SPST	A	CH768-ND	.95	.84	.70	.57	LRA22H2FYYNN
	Black	Black	On/Off	DPST	D	CH769-ND	.97	.87	.72	.59	LRA32H2BBBNN
	Black	Black	On/Off	DPST	A	CH770-ND	.97	.87	.72	.59	LRA32H2FBBNN
	Black	Black	On/Off	DPST	E	CH771-ND	.97	.87	.72	.59	LRA32H2DBBNN
	Black	Red-Illuminated	On/Off	SPST	D	CH772-ND	1.11	.99	.82	.67	LRA22H2BBRLN
	Black	Red-Illuminated	On/Off	DPST	D	CH773-ND	1.19	1.06	.88	.72	LRA32H2BBRLN
		Red-IIlluminated	On/Off	SPST	A	CH774-ND	1.11	.99	.82	.67	LRA22H2FBRLN
		Red-Illuminated	On/Off	DPST	A	CH775-ND	1.19	1.06	.88	.72	LRA32H2FBRLN
		Green-Illuminated	On/Off	SPST	D	CH776-ND	1.11	.99	.82	.67	LRA22H2BBGLN
		Green-Illuminated	On/Off	DPST	D	CH777-ND	1.19	1.06	.88	.72	LRA32H2BBGLN
	Black	Green-Illuminated	On/Off	SPST	A	CH778-ND	1.11	.99	.82	.67	LRA22H2FBGLN
		Green-Illuminated	On/Off	DPST	A	CH779-ND	1.19	1.06	.88	.72	LRA32H2FBGLN
		Amber-Illuminated	On/Off	SPST	D	CH780-ND	1.11	.99	.82	.67	LRA22H2BBALN
		Amber-Illuminated	On/Off	DPST	D	CH781-ND	1.19	1.06	.88	.72	LRA32H2BBALN
		Amber-Illuminated	On/Off	SPST	A	CH782-ND	1.11	.99	.82	.67	LRA22H2FBALN
		Amber-Illuminated	On/Off	DPST	A	CH783-ND	1.19	1.06	.88	.72	LRA32H2FBALN
CR Series — 20 Amp Standard Rocker Switches											
2	Black	Black	On/Off	SPST	D	CH798-ND	.92	.82	.68	.55	CRE22F2BBBNE
		Black	On/Off	SPST	A	CH799-ND	.92	.82	.68	.55	CRE22F2FBBNE
		Black/Red Shade	On/Off	SPST	G	CH800-ND	.95	.84	.70	.57	CRE22F4BBBNE
		Black/Red Shade	On/Off	SPST	E/G	CH801-ND	.95	.84	.70	.57	CRE22F4DBBNE
		Black	On/Off	SPST	G	CH802-ND	.92	.82	.68	.55	CRE22F2PBBNE
	Black	Red	On/Off	SPST	A	CH803-ND	.95	.84	.70	.57	CRE22F2FBRNE
	White	White/Red Shade	On/Off	SPST	G	CH804-ND	.97	.87	.72	.59	CRE22F4BWWNE
	Grey	Grey/Red Shade	On/Off	SPST	G	CH805-ND	.97	.87	.72	.59	CRE22F4BYYNE
	Black	Black	On/On	SPDT	D	CH806-ND	1.00	.89	.74	.60	CRE23F2BBBNE
	Black	Black	On/Off/On	SPDT	B	CH807-ND	1.03	.92	.76	.62	CRE24F2HBBNE
	Black	Red	On/Off/On	SPDT	D	CH808-ND	1.03	.92	.76	.62	CRE24F2BBRNE
		Red-Illuminated	On/Off	SPST	D	CH809-ND	1.16	1.04	.86	.70	CRE22F2BBRLE
		Amber-Illuminated	On/Off	SPST	D	CH810-ND	1.16	1.04	.86	.70	CRE22F2BBALE
		Green-Illuminated	On/Off	SPST	D	CH811-ND	1.16	1.04	.86	.70	CRE22F2BBGLE
		Black-Washable	On/Off	SPST	A	CH812-ND	1.35	1.20	.99	.81	CRE22F2FBBNW
		Black/Red Shade-Washable	On/Off	SPST	G	CH813-ND	1.35	1.20	1.00	.82	CRE22F4BBBNW
TR Series — 16 Amp Thin Power Rocker Switches											
3	Black	Black	On/Off	SPST	A	CH792-ND	1.03	.92	.75	.61	TRG22F2FBBNN
		Black	On/Off	SPST	E	CH793-ND	1.03	.92	.76	.62	TRG22F2DBBNN
		Red	On/Off	SPST	A	CH794-ND	1.05	.94	.78	.64	TRG22F2FBRNN
		Red-Illuminated	On/Off	SPST	D	CH795-ND	1.24	1.11	.92	.75	TRG22F2BBRLN
		Green-Illuminated	On/Off	SPST	D	CH796-ND	1.24	1.11	.92	.75	TRG22F2BBGLN
		Red-Illuminated	On/Off	SPST	D	CH797-ND	1.24	1.11	.92	.75	TRG22F5BBRLN
WR Series — 16 Amp Double-Pole Large Rocker Switches											
4	Black	Black	On/Off	DPST	A	CH784-ND	1.35	1.20	1.00	.82	WRG32F2FBBNN
		Black	On/Off	DPST	A	CH785-ND	1.35	1.20	1.00	.82	WRG32F5FBBNN
		Black	On/Off/On	DPST	B	CH786-ND	1.62	1.44	1.20	.98	WRG34F2HBBNN
		Red-Illuminated	On/Off	DPST	D	CH787-ND	1.67	1.49	1.24	1.01	WRG32F2BBRLN
		Red-Illuminated	On/Off	DPST	A	CH788-ND	1.67	1.49	1.24	1.01	WRG32F2FBRLN
	Black	Red-Illuminated	On/Off	DPST	D	CH789-ND	1.67	1.49	1.24	1.01	WRG32F5BBRLN
		Green-Illuminated	On/Off	DPST	D	CH790-ND	1.67	1.49	1.24	1.01	WRG32F2BBGLN
		Green-Illuminated	On/Off	DPST	A	CH791-ND	1.67	1.49	1.24	1.01	WRG32F2FBGLN

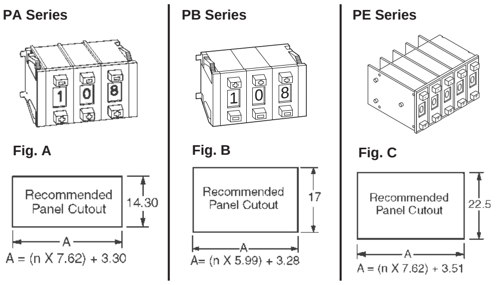
Thumbwheel Switches

Fig.	Output Code	Posi-tions	Read-Out	Features	Digi-Key Part No.	Price Each 1	10	50	100	Cherry Part No.
PA Pushwheel										
1A	BCD	10		Extended Buttons	CH178-ND	16.15	14.36	9.41	8.75	PACA-3000
	BCD Compl.	10	0-9	Extended Buttons	CH179-ND	24.92	22.16	14.52	13.51	PAEA-3000
	BCD	10		Ext. Board for Diodes	CH180-ND	19.68	17.50	11.47	10.67	PACA-4000
	Decimal	10	0 - 9	Extended Buttons	CH682-ND	22.49	20.00	11.91	11.67	PAAA-3000
	Octal	8	0 - 7	Extended Buttons	CH683-ND	18.77	16.68	10.93	10.17	PABA-3000
	Octal	8	0 - 7	Flush Buttons	CH684-ND	8.10	7.20	4.72	4.39	PABA-3114
	BCD	10	0 - 9	Extended Buttons	CH685-ND	8.10	7.20	4.72	4.39	PACA-3100
	BCD	10	0 - 9	Flush Buttons	CH686-ND	8.10	7.20	4.72	4.39	PACA-3114
	Hexadecimal	16	0 - 15	Extended Buttons	CH687-ND	13.99	12.44	8.15	7.58	PAGA-3100
	Hexadecimal	16	0 - 15	Flush Buttons	CH688-ND	13.99	12.44	8.15	7.58	PAGA-3114
	Hexadecimal	16	0 - 15	Flush Buttons	CH689-ND	15.61	13.88	9.09	8.46	PAGE-3114
	Hexadecimal	16	0 - 15	Flush Buttons	CH690-ND	15.61	13.88	9.09	8.46	PAGN-3114
Right End Caps for PA Switches					CH188-ND	.68	.60	.50	.42	0609-0799
Left End Caps for PA Switches					CH189-ND	.68	.60	.50	.42	0609-0801
Housing .300" (7.62mm) PA Blank Black Matte					CH678-ND	1.03	.92	.76	.63	0609-0797
Spacer .100" (2.54mm) PA Blank Black Matte					CH679-ND	1.03	.92	.76	.63	0609-0803
PB Pushwheel — "Dustproof" Front Mount										
1B	BCD	10	0-9	—	CH185-ND	7.86	6.99	4.08	—	PBC1-E015
Right End Caps for PB Switches					CH194-ND	.68	.60	.50	.42	0609-1347
Left End Caps for PB Switches					CH195-ND	.68	.60	.50	.42	0609-1346
Spacer .100" (2.54mm) for PB Series Black					CH680-ND	1.03	.92	.76	.63	0609-1348
PE Pushwheel										
1C	Decimal	10	0-9	Extended Buttons	CH239-ND	18.66	16.59	10.87	10.11	PEAA-3000
	BCD	10	0-9	Extended Buttons	CH181-ND	18.20	16.18	10.61	9.87	PECA-3000
	Hex	16	0-15	Extended Buttons	CH240-ND	25.08	22.30	14.62	13.60	PEGA-3000
	Hex	16	0-9, A-F	Extended Buttons	CH281-ND	24.76	22.01	14.43	13.42	PEHA-3000
	BCD	10	0-9	Ext. Board for Diodes	CH183-ND	23.06	20.50	13.44	12.50	PECA-4000
Right End Caps for PE Switches					CH190-ND	.68	.60	.50	.42	0609-0756
Left End Caps for PE Switches					CH191-ND	.68	.60	.50	.42	0609-0754
Spacer .300" (7.62mm) PE Blank Black Matte					CH677-ND	1.03	.92	.76	.63	0609-0752
T57 Pushwheel — Back Mount										
2	Decimal	10	0-9	Not for new designs	CH242-ND	14.50	12.89	8.45	7.86	0T57-01M0
T20 Thumbwheel — L20 Leverwheel										
3	Decimal	10	0-9	Not recommended for new designs	CH226-ND	12.96	11.52	7.56	7.03	0T20-01A0
	Hex	16	0-9, A-F		CH282-ND	20.84	18.53	12.15	11.30	0T20-13A0
	Decimal	10	0-9		CH233-ND	16.28	14.48	9.49	8.83	0L20-01A0
	Decimal	10	0-9		CH234-ND	16.82	14.96	9.80	9.12	0L20-01M0

NOTE: PAGA: QC terminal **PAGE:** Right angle header **PAGN:** Locking right angle header.

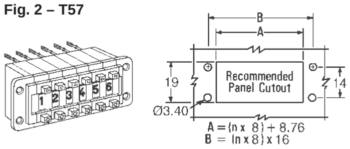
Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Cherry Part No.
Connectors						
4	Connector for PA Series BCD/HEX, PC Mount Terminal	CH271-ND	3.94	3.51	2.44	C2KO-P107
	Connector for PE Series BCD/HEX, PC Mount Terminal	CH274-ND	4.21	3.75	2.61	C2RO-P111
	Connector for PE Series BCD/HEX Solder Eyelet Terminal.	CH681-ND	4.21	3.75	2.61	C2RFN116

Fig. 1 – PA, PB and PE Series



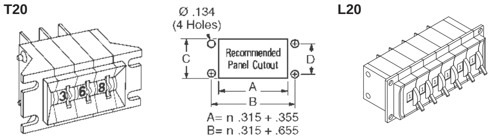
Each digit is a separate module. Combine each module to make a final unit, as shown above.

Fig. 2 – T57



Each digit is a separate module. Combine each module to make a final unit, as shown above.

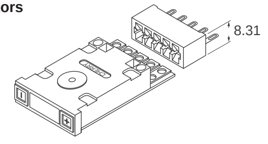
Fig. 3 – T20, L20 (Right and Left End Caps)



Each digit is a separate module. Combine each module to make a final unit, as shown above.

Model	A	B	C	D
T20/L20	(n x 12.70) = 10.29	(n x 12.70) + 15.11	24.89	22.86

Fig. 4 – Connectors



Thumbwheel Switches

A7B Series:

Features: • Dustproof construction ensures highly reliable performance at low voltage and very small current even under adverse environmental conditions • Switch units can be assembled simply by fitting the integral hook coupler of each unit into the mating unit, thus eliminating the need of nuts and bolts for assembly • Switch assembly can be mounted easily by merely pushing the assembly into the mounting panel cutout from front

A7CN Series:

Features: • Designed specially for printed circuit boards • The transparent window plate fitted in the readout section prevents the ingress of dust and also protects dial characters against wear by incorrect handling • Switch units can be assembled simply by fitting the integral hook coupler of each unit, into the mating unit, thus eliminating the need of nuts and bolts for assembly

A7D Series:

Features: • Cost effectiveness and improved reliability achieved through insert-molding and fewer component parts • Plastic spring with minimal fatigue and a mechanical service life of 30,000

Fig. 1

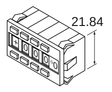


Fig. 2

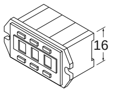
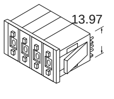


Fig. 3

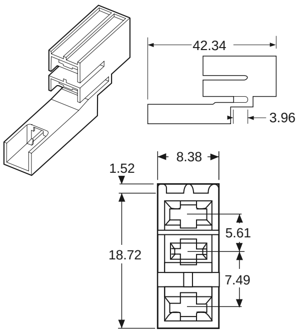


Each digit is a separate module. Combine each module to make a final unit, as shown above.

Fig.	Output	No. of Positions	Color	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	BCD	0-9	Black Gloss	SW266-ND	8.48	7.63	6.78	A7BS-206-1
	BCD	0-9		SW267-ND	8.48	7.63	6.78	A7BS-206-S-1
	BCD with Ext. Brd.	0-9		SW268-ND	9.13	8.22	7.30	A7BS-207-1
	+, - Display Only	+, -		SW269-ND	10.93	9.84	8.74	A7BS-207-PM-1
—	Connector for A7BS Series, Solder Terminal with Mount Ears			SW270-ND	4.98	4.48	3.98	A7B-C
	End Caps for A7BS Series, Left/Right 2 Pcs.			SW271-ND	1.38	1.24	1.10	A7B-M-1
	Spacer for A7BS Series, Black No Marking			SW272-ND	.75	.68	.60	A7B-PA-1
2	BCD (Back Mount)	0-9	Black Gloss	SW273-ND	6.78	6.10	5.42	A7CN-106-1
	BCD (Front Mount)			SW274-ND	6.78	6.10	5.42	A7CN-206-1
—	End Caps for A7CN Series, Back Mount Only			SW275-ND	.83	.75	.66	A7CN-1M-1
	Spacer for A7CN Series, Back Mount Only, Black			SW276-ND	.65	.59	.52	A7CN-1PA-1
	End Caps for A7CN Series, Front Mount Only			SW277-ND	.83	.75	.66	A7CN-2M-1
	Spacer for A7CN Series, Front Mount Only, Black			SW278-ND	.65	.59	.52	A7CN-2PA-1
3	BCD (Back Mount)	0-9	Black Gloss	SW279-ND	5.23	4.71	4.18	A7D-106-1
	BCD (Front Mount)		Black Gloss	SW280-ND	5.23	4.71	4.18	A7D-206-1
	BCD (Back Mount)		Light Gray	SW504-ND	5.23	4.71	4.18	A7D-106
	BCD (Front Mount)		Light Gray	SW505-ND	5.23	4.71	4.18	A7D-206
—	End Caps for A7D Series, Back Mount Only, Black			SW281-ND	.83	.75	.66	A7D-1M-1
	End Caps for A7D Series, Front Mount Only, Black			SW282-ND	.75	.68	.60	A7D-2M-1
	Spacer for A7D Series, Back Mount Only, Black			SW283-ND	.83	.75	.66	A7D-1PA-1
	Spacer for A7D Series, Front Mount Only, Black			SW284-ND	.83	.75	.66	A7D-2PA-1
	End Caps for A7D Series, Back Mount Only, Light Gray			SW506-ND	.83	.75	.66	A7D-1M
	End Caps for A7D Series, Front Mount Only, Light Gray			SW508-ND	.78	.70	.62	A7D-2M
	Spacer for A7D Series, Back Mount Only, Light Gray			SW507-ND	.83	.75	.66	A7D-1PA
	Spacer for A7D Series, Front Mount Only, Light Gray			SW509-ND	.83	.75	.66	A7D-2PA

Switch Connector and Terminal

(To be used with Omron "V" Series Lever Switch)



Switch Connector:
94V-2 Nylon • U.L. Approved • Accepts 14-28 AWG • No. of Circuits: 3 • Max. Current Rating: 10 • Max. Voltage Rating: 250 • Mounting Ears: No • Max. Panel Thickness: N/A • Eng. No.: 2191.

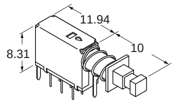
Switch Connector:	Terminal: Without Detent, Loose Form
WM2553-ND	**WM2514-ND**
$.54/1	**$.17**/1
$4.73/10	**$1.36**/10
$31.50/100	**$11.30**/100
$252.00/1000	**$90.40**/1000

Cannon

ITT Industries
Engineered for life

C&K PN Series Pushbutton Switches

Specifications: • **Contact Rating:** 0.2 Amp @ 30 VDC max. • **Electrical Life:** 10,000 Make-and-Break Cycles at Full Load • **Operating/Storage Temp.:** -10°C to 60°C.
Materials: • **Frame:** Tin Plated Steel • **Terminals:** Silver Plated Brass • **Movable Contacts:** Silver Plated (or Clad) Phosphor Bronze • **Terminal Seal:** Epoxy



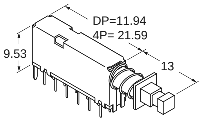


Fig. 1

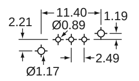


Fig. 2

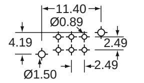


Fig. 3

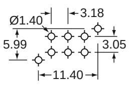
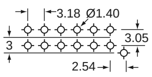


Fig. 4



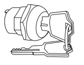
Pushbutton Switches

Fig.	Circuit	Description	Digi-Key Part No.	Price Each 1	100	500	C & K Part No.
1	SPDT	Momentary, 230gf, Nonshorting	CKN1188-ND	.76	.65	.57	PN11SHNA03QE
1	SPDT	Alt. Action, 230 gf, Nonshorting	CKN1189-ND	.83	.71	.62	PN12SHNA03QE
2	DPDT	Momentary, 330gf, Nonshorting	CKN1190-ND	.88	.76	.66	PN21SJNA03QE
2	DPDT	Alt. Action, 330gf, Nonshorting	CKN1191-ND	.93	.81	.70	PN22SJNA03QE
3	DPDT	Momentary, 300gf, Nonshorting	CKN1192-ND	.88	.76	.66	PN21LENA03QE
3	DPDT	Alt. Action, 300gf, Nonshorting	CKN1193-ND	.93	.81	.70	PN22LENA03QE
4	4PDT	Momentary, 300gf, Nonshorting	CKN1194-ND	1.05	.89	.78	PN41LENA02QE
4	4PDT	Alt. Action, 300gf, Nonshorting	CKN1195-ND	1.19	1.01	.89	PN42LENA02QE

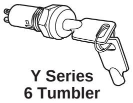
Switch Caps

Size	Color	Description	Digi-Key Part No.	Price Each 1	10	100	C & K Part No.
4.6 mm Sq.	Black	Fits CKN1188 - 1191-ND	CKN1196-ND	.27	.25	.21	979A02000
5.86 mm Dia.	Black	Fits CKN1188 - 1191-ND	CKN1197-ND	.27	.25	.21	981A02000
7.7 mm Sq.	Black	Fits CKN1192 - 1195-ND	CKN1198-ND	.27	.25	.21	980A02000
7.21 mm Dia.	Black	Fits CKN1192 - 1195-ND	CKN1199-ND	.27	.25	.21	982A02000
12.2 mm Rect.	Black	Fits CKN1192 - 1195-ND	CKN1200-ND	.27	.25	.21	983A02000

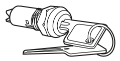
Key Switch — Switchlocks



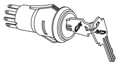
Y Series
4 Tumbler



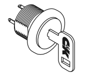
Y Series
6 Tumbler



YM Series
YF Series



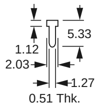
P Series



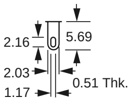
P Series,
Low Profile

Termination Options

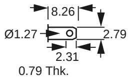
A



B



C



D

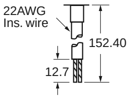


Fig. 1

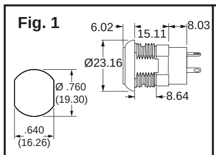


Fig. 2

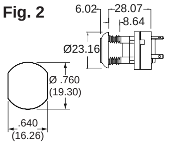


Fig. 3

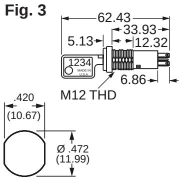
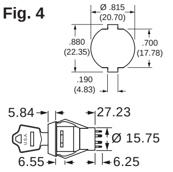
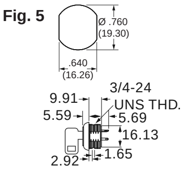


Fig. 4



Plastic housing

Fig. 5



Plastic housing

Fig. 6

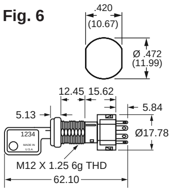


Fig.	No. Poles	Keypull Possible	Switch Type	Amp Rtg. @ 125 VAC	Term-ination	Connected Terminals Pos. 1	Pos. 2	Digi-Key Part No.	Price Each 1	10	100	C & K Part No.
1	SP	1 & 2	On-On	4	B	8-1	1-3	CKC8000-ND	8.89	7.68	6.47	Y1011U2C203NQ
1	DP	1 & 2	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC8001-ND	10.41	8.99	7.57	Y2011U2C203NQ
1	SP	1 & 2	On-On	4	A	8-1	1-3	CKC8002-ND	8.89	7.68	6.47	Y1011U2C202NQ
1	DP	1 & 2	On-On	4	A	8-1, 4-5	1-3, 5-7	CKC8003-ND	10.41	8.99	7.57	Y2011U2C202NQ
1	SP	1 only	On-Mom	4	B	8,1	1-2	CKC1230-ND	11.44	9.88	8.32	Y108122A203NQ
1	DP	1 only	On-Mom	4	B	8-1, 4-5	1-2, 5-6	CKC1231-ND	12.10	10.45	8.80	Y208122A203NQ
1	SP	2 only	On-Off-Mom	4	B	8-1, 1-2, 7-8		CKC1232-ND	12.58	10.87	9.16	Y108822A203NQ
2	SP	1 & 2	On-On	12	C	7-8	8-2	CKC8004-ND	12.10	10.45	8.80	H1011U2F205NQ
2	DP	1 & 2	On-On	12	C	7-8, 3-4	8-2, 4-6	CKC8005-ND	14.12	12.20	10.28	H2011U2F205NQ
1	SP	1 & 2	On-On	4	B	8-1	1-3	CKC8006-ND†	12.34	10.66	8.98	Y1011U2V203NQ
1	DP	1 & 2	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC8007-ND†	13.93	12.03	10.13	Y2011U2V203NQ
3	SP	1 & 2	On-Off	4	C	1-2		CKC8008-ND	10.03	8.67	7.30	YM061U2C205NQ
3	SP	1 & 2	On-Off	4	D	1-2		CKC8009-ND	11.26	9.73	8.20	YM061U2C2WCNQ
3	SP	1 only	On-Off	4	C	1-2		CKC8010-ND	10.03	8.67	7.30	YM06132C205NQ
3	SP	1 only	On-Off	4	D	1-2		CKC8011-ND	11.26	9.73	8.20	YM06132C2WCNQ
4	SP	1 only	On-On	4	B	1-8		CKC8012-ND	11.31	9.77	8.23	P10113TCM03Q22
4	DP	1 only	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8013-ND	13.02	11.25	9.48	P20113TCM03Q22
4	SP	1 & 2	On-On	4	B	1-8		CKC8014-ND	11.31	9.77	8.23	P1011UTCM03Q22
4	DP	1 & 2	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8015-ND	13.02	11.25	9.48	P2011UTCM03Q22
5	SP	1 & 2	On-On	4	B	1-8		CKC8016-ND	4.58	3.96	3.33	P1011U2WM03NQ2
5	DP	1 & 2	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8017-ND	5.06	4.37	3.68	P2011U2WM03NQ2
5	SP	1 only	On-On	4	B	1-8		CKC8018-ND	4.47	3.86	3.25	P101132WM03NQ2
5	DP	1 only	On-On	4	B	1-8, 4-5	1-3, 5-7	CKC8019-ND	5.17	4.47	3.76	P201132WM03NQ2
6	SP	1 only	On-On	4	B	8-1	1-3	CKC1234-ND	9.46	8.17	6.88	YF01132C203NQ
6	DP	1 only	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC1235-ND	10.41	8.99	7.57	YF21132C203NQ
6	SP	1 & 2	On-On	4	B	8-1	1-3	CKC1236-ND	9.46	8.17	6.88	YF011U2C203NQ
6	DP	1 & 2	On-On	4	B	8-1, 4-5	1-3, 5-7	CKC1237-ND	10.41	8.99	7.57	YF211U2C203NQ

† 6 Tumbler Version

NOTE: All switchlocks come with hardware and 2 keys.

Thumbwheel Switches

Fig. 1 — Series 3

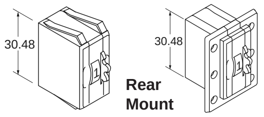


Fig. 2 — Series 3U

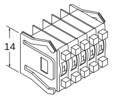


Fig. 3 —Series 3P

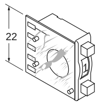
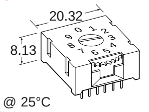


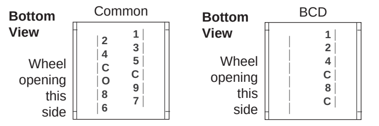
Fig.	Description	No. of Pos.	Color	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
1	Decimal Output Switch, Front Mount	0-9	Blk. Gloss	CKN5013-ND	11.37	9.10	7.21	301109000
1	BCD Output Switch, Front Mount	0-9	Blk. Gloss	CKN5014-ND	11.37	9.10	7.21	302109000
1	Decimal Output Switch, Rear Mount	0-9	Blk. Gloss	CKN1186-ND	11.37	9.10	7.21	301119000
1	BCD Output Switch, Rear Mount	0-9	Blk. Gloss	CKN1187-ND	11.37	9.10	7.21	302119000
—	Front Mounted End Cap for Series 3 (2 required)			CKN5015-ND	1.86	1.49	1.18	413402000
—	Front Mounted Spacer for Series 3 (optional)			CKN5016-ND	2.25	1.80	1.43	413502000
—	Rear Mounted End Cap for Series 3 (2 required)			CKN5017-ND	.54	.44	.35	400402000
—	Rear Mounted Spacer for Series 3 (optional)			CKN5018-ND	1.68	1.35	1.07	400802000
—	Rod Assembly for 1 Module (Series 3)			CKN5019-ND	2.58	2.07	1.64	412707000
—	Rod Assembly for 2-4 Modules (Series 3)			CKN5020-ND	2.70	2.16	1.71	412701000
—	Rod Assembly for 5-7 Modules (Series 3)			CKN5021-ND	2.70	2.16	1.71	412702000
—	Rod Assembly for 8-10 Modules (Series 3)			CKN5022-ND	2.70	2.16	1.71	412703000
—	Fastener Nut for Rod Assemblies (Series 3)			CKN5023-ND	.27	.22	.18	403500000
—	Nut Driver hand tool for CKN5023-ND Fasteners			CKN5024-ND*	9.60	7.68	6.08	406100652
2	BCD Output without Dust Lens	0-9	Blk. Gloss	CKN5025-ND	9.84	7.88	6.24	3U0210000
2	BCD Output with Dust Lens	0-9	Blk. Gloss	CKN5026-ND	10.29	8.24	6.52	3U0210002
—	Left End Cap for 3U Series			CKN5027-ND	.42	.34	.27	113B02000
—	Right End Cap for 3U Series			CKN5028-ND	.42	.34	.27	114B02000
3	BCD type with Straight Board	0-9	Blk. Gloss	CKN5029-ND	10.38	8.31	6.58	3P0210000
3	Decimal type with Right Angle Board	0-9	Blk. Gloss	CKN5030-ND	14.76	11.81	9.35	3P0110L00
—	Left End Cap for 3P Series			CKN5031-ND	.54	.44	.35	623502000
—	Right End Cap for 3P Series			CKN5032-ND	.54	.44	.35	623602000

* Xcelite hand tool

Mini-thumbwheel Switches



SPECIFICATIONS:• Contact Rating: Carry — 1 amp continuous @ 28 V DC. Switch —100mA max. @ 28 VDC • **Electrical Life:** 10^5 detent operations @ 25°C • **Contact Resistance:** Below 100 milliohms typ. initial @ 2-4 VDC, 100mA • **Insulation Resistance:** 10^8 ohms min. (dry) • **Dielectric Strength:** 250 V RMS min. @ sea level • **Operating Temperature:** –10°C to +65°C
MATERIALS:• Cover: Thermoplastic polyester • **Base:** Glass filled nylon • **Thumbwheel:** Nylon • **Rotor Contacts:** Hard gold over nickel over copper on epoxy fiberglass • **Stator Contacts:** Copper alloy with gold over nickel • **Terminals:** Solder clad over copper alloy, insert molded.



Function Code	Digi-Key Part No.	Price Each 1	25	100	C & K Part No.
Decimal	CKN6000-ND•	10.56	8.45	6.69	3M120
BCD	CKN6001-ND★	11.22	8.98	7.11	3M223
BCD Comp	CKN5033-ND★	12.81	10.25	8.12	3M243
Decimal	CKN5034-ND★	11.22	8.98	7.11	3M123

Wheel markings • None ★Horizontal

NKK® SWITCHES

Keylock Switches

12mm, Miniature, Low and Medium Security: SK bushing mount keylock switches are available in single pole, double throw with 12mm diameter bushing, silver contacts, UL recognition. CSA certification, short behind panel dimension and epoxy sealed solder lug terminals. Terminals have .043" x .079" holes. Face and bezel have bushed chrome finish. 2 keys of chromate over zinc alloy provided. **Electrical Capacity:** 3A @ 125V AC. **Dielectric Strength:** 1,500V AC min. between contacts and case. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** 270 grams-cm. **Operating Temperature:** -10°C through +70°C. **Angle of Throw:** 90° for on-none-on models, 45° for on-off-on models. **Panel Thickness:** .315". **Standard Hardware:** 1 hex nut and 1 locking ring

16mm, High Security, Antistatic: CKM bushing mount keylock switches are available in single pole, double throw with 16mm diameter bushing, silver contacts, high insulating material (15kV ESD) and epoxy sealed solder lug terminals. Terminals have .047" x .094" holes. Face and bezel have black matte finish. 1 key with PBT handle provided. **Electrical Capacity:** 3A @ 250V AC. **Dielectric Strength:** 1,500V AC minimum between contacts and case. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** .04 milli-Newton/meter (5.67 ounce-in) for flat key (F code); .08 milli-Newton/meter (11.33 ounce-in) for tubular key (T code). **Operating Temperature:** -10°C through +70°C. **Angle of Throw:** 90° for on-on models, 45° for on-off-on models. **Panel Thickness:** .496". **Standard Hardware:** 1 hex nut.

19mm High Security: CKL keylock switches are available in single pole, double throw with 19mm dia. bushing, silver contacts, and epoxy sealed solder lug terminals. Terminals have .055" x .0217" holes. Face and bezel have a brass with chrome or nickel finish. 1 key of chrome over brass provided. **Electrical Capacity:** 3A @ 250V AC. **Dielectric Strength:** 1,500V AC min. between contacts and case. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** .05 milliNewton/meter (7.08 ounce-in) for flat key (F Code); .07 milliNewton/meter (9.91 ounce-in) for tubular key (T Code). **Operating Temperature:** -25°C through +70°C. **Angle of Throw:** 90° for on-on models and 45° for on-off-on models. **Panel Thickness:** .496" **Standard Hardware:** 1 hex nut.

Antistatic PC SP3T and SPST Low Security: SK PCB mount keylock switches are available in single pole (SK13 models 3 throw, SK15 models 5 throw). Straight PC with bracket. Gold contacts, 2 polyacetal keys supplied. **Electrical Capacity:** 0.4A @ 28V AC/DC. **Dielectric Strength:** 500V AC min. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 20,000 cycles min. **Operating Torque:** 2.039 grams-cm. **Operating Temperature:** -25°C through +70°C. **Angle of Throw:** 90° for 3 Position models, 45° for 5 Position models.

PC Miniature Low Security: SK series PCB mount switches in single and double pole. Straight or right angle PC with bracket. Gold contacts, 2 keys supplied. **Electrical Capacity:** 0.4A @ 28V AC/DC. **Dielectric Strength:** 500V AC min. **Mechanical Life:** 30,000 cycles min. **Electrical Life:** 10,000 cycles min. **Operating Torque:** 270 grams-cm for momentary action models, 210 grams-cm for maintained action models. **Operating Temperature:** -25°C through +70°C. **Angle of Throw:** 90° for 2 Position models, 45° for 3 Position models.

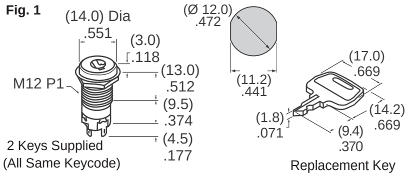
Dim. in (mm) Inch

Fig.	Key Positions			Key Removable Positions	Digi-Key Part No.	Price Each			NKK Part. No.
	Pos. 1	Pos. 2	Pos. 3			1	25	100	
12mm Miniature Low and Medium Security									
1	On	None	On	1 & 3	360-1459-ND	16.95	13.56	10.74	SK12AAW01
	On	None	On	1	360-1460-ND	16.95	13.56	10.74	SK12BAW01
	On	Off	On	1, 2, 3	360-1461-ND	17.85	14.28	11.31	SK13DAW01
	On	Off	On	2	360-1462-ND	17.85	14.28	11.31	SK13EAW01
	On	None	On	1 & 3	360-1463-ND	33.30	26.64	21.09	SK12ADW01
	On	None	On	1	360-1464-ND	33.30	26.64	21.09	SK12BDW01
	On	Off	On	1, 2, 3	360-1465-ND	34.20	27.36	21.66	SK13EDW01
Replacement Key for SK12..AW01 Switches, Chrome/Zinc Alloy					360-1010-ND	2.40	1.92	1.52	AT4081
16mm High Security Antistatic - Flat Key Version									
2	On	None	On	1 & 3	360-1447-ND	16.68	13.35	10.57	CKM12AFW01
	On	None	On	1	360-1448-ND	16.68	13.35	10.57	CKM12BFW01
	On	Off	On	2	360-1449-ND	18.42	14.74	11.67	CKM13EFW01
16mm High Security Antistatic - Tubular Key Version									
2	On	None	On	1 & 3	360-1450-ND	16.68	13.35	10.57	CKM12ATW01
	On	None	On	1	360-1451-ND	16.68	13.35	10.57	CKM12BTW01
	On	Off	On	2	360-1452-ND	18.42	14.74	11.67	CKM13ETW01
19mm High Security - Flat Key Version									
3	On	None	On	1 & 3	360-1453-ND	16.89	13.52	10.70	CKL12AFW01
	On	None	On	1	360-1454-ND	16.89	13.52	10.70	CKL12BFW01
	On	Off	On	2	360-1455-ND	18.63	14.91	11.80	CKL13EFW01
19mm High Security - Tubular Key Version									
3	On	None	On	1 & 3	360-1456-ND	16.89	13.52	10.70	CKL12ATW01
	On	None	On	1	360-1457-ND	16.89	13.52	10.70	CKL12BTW01
	On	Off	On	2	360-1458-ND	18.63	14.91	11.80	CKL13ETW01

Fig.	Key Positions					Key Removable Positions	Digi-Key Part No.	Price Each			NKK Part. No.
	Pos. 1	Pos. 2	Pos. 3	Pos. 4	Pos. 5			1	25	100	
Antistatic PC SP3T and SP5T Low Security											
4	On	On	On	—	—	1, 2, 3	360-1466-ND	16.50	13.20	10.45	SK13AEG13
5	On	On	On	—	—	1, 2, 3	360-1467-ND	17.25	13.80	10.93	SK13AEG30
4	On	On	On	On	On	1, 2, 3, 4, 5	360-1468-ND	17.40	13.92	11.02	SK15AEG13
5	On	On	On	On	On	1, 2, 3, 4, 5	360-1469-ND	18.15	14.52	11.50	SK15AEG30

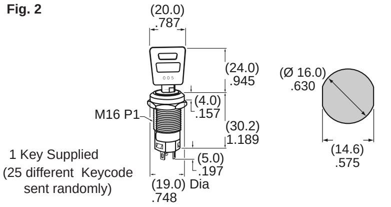
Fig.	Pole	Key Positions			Key Removable Positions	Digi-Key Part No.	Price Each			NKK Part. No.
		Pos. 1	Pos. 2	Pos. 3			1	25	100	
PC Miniature Low Security										
6	SPDT	On	None	On	1 & 3	360-1470-ND	17.25	13.80	10.93	SK12AG13
6	SPDT	On	None	On	1	360-1471-ND	17.25	13.80	10.93	SK12BG13
6	SPDT	On	None	Mom	1	360-1472-ND	18.69	14.96	11.84	SK15BG13
6	SP3T	On	On	On	1, 2, 3	360-1473-ND	18.69	14.96	11.84	SK14DG13
6	SP3T	On	On	On	2	360-1474-ND	18.69	14.96	11.84	SK14EG13
6	DPDT	On	None	On	1 & 3	360-1475-ND	18.60	14.88	11.78	SK22AG13
6	DP3T	On	On	On	1, 2, 3	360-1476-ND	20.49	16.40	12.98	SK24DG13
6	DP3T	On	On	On	2	360-1477-ND	20.49	16.40	12.98	SK24EG13
7	SPDT	On	None	On	1 & 3	360-1478-ND	17.70	14.16	11.21	SK12AG30
7	SPDT	On	None	On	1	360-1479-ND	17.70	14.16	11.21	SK12BG30
7	SPDT	On	None	Mom	1	360-1480-ND	19.14	15.32	12.13	SK15BG30
7	SP3T	On	On	On	1, 2, 3	360-1481-ND	19.14	15.32	12.13	SK14DG30
Replacement Key, Plastic Coated for Above Switches						360-1009-ND	2.16	1.73	1.37	AT4080

Fig. 1



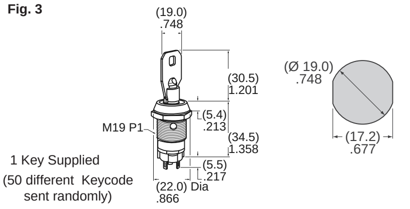
2 Keys Supplied
(All Same Keycode)

Fig. 2



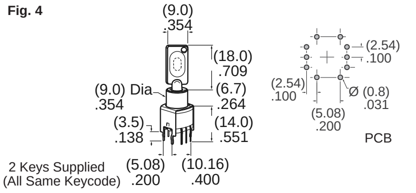
1 Key Supplied
(25 different Keycode
sent randomly)

Fig. 3



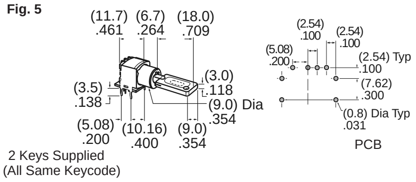
1 Key Supplied
(50 different Keycode
sent randomly)

Fig. 4



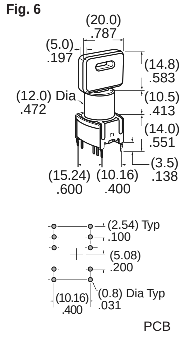
2 Keys Supplied
(All Same Keycode)

Fig. 5



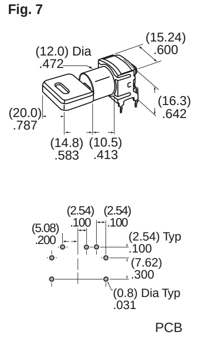
2 Keys Supplied
(All Same Keycode)

Fig. 6



2 Keys Supplied
(All Same Keycode)

Fig. 7

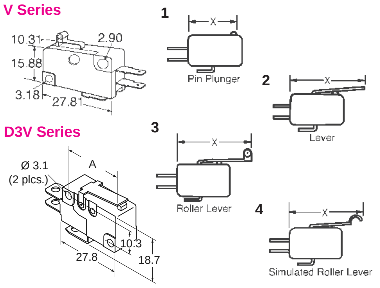


2 Keys Supplied
(All Same Keycode)

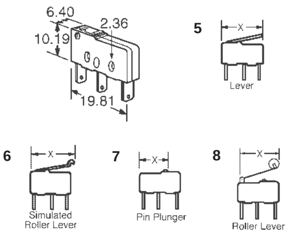
OMRON Basic Type Snap Switches

9247B-ND	Omron Switch Databook	$2.00

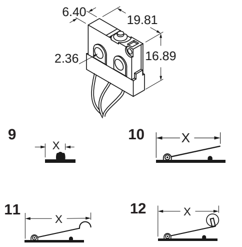
V Series



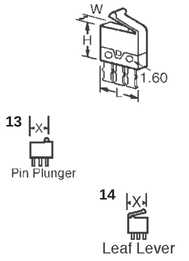
SS Series



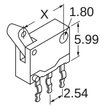
D2SW Series - Watertight



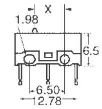
D2MQ Series



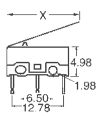
15



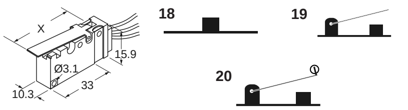
16



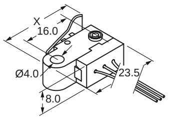
17



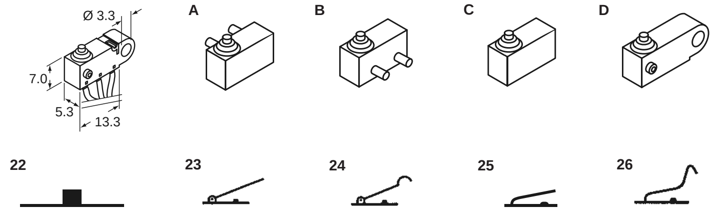
D2VW Series - Watertight



21 Watertight



D2HW Series - Watertight



V Series:

Features: • Operating Frequency: Mechanical: 600 operations per minute; Electrical: 60 operations per minute • Contact Resistance: 15mΩ maximum • Ambient Operating Temperature: -25°C to +80°C • Humidity: 85% RH maximum • Service Life: Mechanical: 50,000,000 operations minimum Electrical: 100,000 operations minimum

D3V Series

Features: • Reliable and safe basic switch • Extended lever • Environment friendly with beryllium free contacts.

SS Series:

Features: • Economical, subminiature basic switch offers long service life (30 million operations minimum) • All models are free from overtravel restrictions, permit easy setting • Wide switching capacity range from microvoltage/current loads (1mA at 5 VDC) to high-capacity loads 10.1A at 250VAC) **Characteristics:** • Operating Frequency: Mechanical: 400 operations per minute Electrical: 60 operations per minute • Ambient Operating Temperature: -25°C to +85°C • Humidity: 85% RH max. • Service Life: Mechanical: 30 million operations minimum (10 million operations minimum for the SS-10 series) Electrical: 200,000 operations minimum

Watertight D2SW Miniature Basic Switch:

Features: • High-quality watertight miniature basic switch—meets IP67 requirements • A wide operating temperature range of -40°C to 85°C is ideal for any operating environment • Ideal for the automobile, agricultural machinery, automatic vending machine, refrigerator, ice-manufacturing, bath equipment, hot-water supply, air conditioner, and factory machine industries **Characteristics:** • Operating Frequency: Mechanical: 300 operations/min; Electrical: 60 operations/minute • Contact Resistance: 50mΩ maximum • Life Expectancy: Mechanical: 5,000,000 operations minimum, Electrical: 200,000 operations minimum • Ambient Operating Humidity: 95% maximum • Enclosure Rating: Reference to IP67

D3C Series:

Features: • Built-in slide mechanism selects shorting or non-shorting switch timing • 3mm long stroke • PCB mount switch with 100 milliamp capacity • Ideal for household appliances, sound equipment, office equipment, communications equipment, etc. • Compact size (8W x 6H x 4.2D mm) **Characteristics:** • Operating Frequency: Mechanical: 200 operations per minute; Electrical: 30 operations per minute • Contact Resistance: 50mΩ max. • Ambient Operating Temperature: -20°C to 80°C • Operating Humidity: 65% max. at 5° to 35°C • Service Life: 50,000 operations minimum at the rated switch frequency

D2F Series:

Features: • Super compact, ideal for PCB mounting • Long life span assured by high-precision dual spring reverse-action mechanism • Flux penetration prevented by using an insert terminal and allowing a height difference at the case bottom • Ideal for a wide variety of applications, from household appliances and office equipment to audio equipment and communications equipment

Watertight D2VW/D2FW Miniature Basic Switch:

Features: • High-quality watertight, high-precision miniature basic switch—meets IP67 requirements • Monoblock construction assures high sealing capability and is ideal for dusty places or where water is sprayed • V-series internal mechanism assures high operating-position accuracy (±0.4mm) and long life (10 million operations) • Wide operating temperature range of -40°C to 90°C is ideal for any operating environment • General-load (5A @ 250VAC) and micro-load (.1A @ 125VAC) available

D2HW Series:

Features: • Smallest sealed snap action switch • Fully sealed construction • Lead free construction • Conforms to IP67 (wire leads) and IP50 (terminal type) • Long stroke, even without levers for reliable On-Off action

Fig.	Contact Style	Contact Rating	Terminal Size Inch (mm)	Dim. "X" (mm)	Actu-ation Force	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
V Series										
1	SPDT	10 amps	.187 QC (4.75)	24.38	100gf	SW126-ND	1.85	1.67	1.48	V-10G-1C24-K
2	SPDT	10 amps	.187 QC (4.75)	38.35	125gf	SW127-ND	1.88	1.69	1.50	V-10G2-1C25-K
3	SPDT	10 amps	.187 QC (4.75)	24.38	240gf	SW128-ND	2.25	2.03	1.80	V-10G5-1C25-K
1	SPDT	15 amps	.187 QC (4.75)	24.38	200gf	SW129-ND	1.85	1.67	1.48	V-15G-1C25-K
1	SPDT	15 amps	.187 QC (4.75)	24.38	400gf	SW130-ND	1.85	1.67	1.48	V-15G-1C26-K
2	SPDT	15 amps	.187 QC (4.75)	38.35	125gf	SW132-ND	1.88	1.69	1.50	V-15G2-1C26-K
2	SPDT	15 amps	.187 QC (4.75)	62.23	70gf	SW133-ND	2.05	1.85	1.64	V-15G3-1C25-K
2	SPDT	15 amps	.187 QC (4.75)	62.23	130gf	SW134-ND	2.05	1.85	1.64	V-15G3-1C26-K
4	SPDT	15 amps	.187 QC (4.75)	38.86	125gf	SW135-ND	1.98	1.78	1.58	V-15G4-1C25-K
3	SPDT	15 amps	.187 QC (4.75)	24.38	480gf	SW136-ND	2.25	2.03	1.80	V-15G5-1C26-K
3	SPDT	15 amps	.187 QC (4.75)	34.04	250gf	SW151-ND	2.25	2.03	1.80	V-15G6-1C26-K
D3V Series										
1	SPDT	11 amps	.187 QC	20.2	200gf	SW707-ND	1.75	1.58	1.40	D3V11G1C25K
2	SPDT	11 amps	.187 QC	35.6	125gf	SW708-ND	2.03	1.83	1.62	D3V11G21C25K
2	SPDT	11 amps	.187 QC	35.6	125gf	SW709-ND	1.98	1.78	1.58	D3V11G2M1C25K
4	SPDT	11 amps	.187 QC	32.6	125gf	SW710-ND	2.03	1.83	1.62	D3V11G41C25K
4	SPDT	11 amps	.187 QC	32.6	125gf	SW711-ND	1.98	1.78	1.58	D3V11G4M1C25K
3	SPDT	11 amps	.187 QC	34.0	125gf	SW712-ND	2.43	2.19	1.94	D3V11G61C25K
3	SPDT	11 amps	.187 QC	34.0	125gf	SW713-ND	2.23	2.01	1.78	D3V11G6M1C25K
1	SPDT	16 amps	.187 QC	20.2	200gf	SW700-ND	1.75	1.58	1.40	D3V16G1C25K
2	SPDT	16 amps	.187 QC	35.6	125gf	SW701-ND	2.03	1.83	1.62	D3V16G21C25K
2	SPDT	16 amps	.187 QC	35.6	125gf	SW702-ND	1.98	1.78	1.58	D3V16G2M1C25K
4	SPDT	16 amps	.187 QC	32.6	125gf	SW703-ND	2.03	1.83	1.62	D3V16G41C25K
4	SPDT	16 amps	.187 QC	32.6	125gf	SW704-ND	1.98	1.78	1.58	D3V16G4M1C25K
3	SPDT	16 amps	.187 QC	34.0	125gf	SW705-ND	2.43	2.19	1.94	D3V16G61C25K
3	SPDT	16 amps	.187 QC	34.0	125gf	SW706-ND	2.23	2.01	1.78	D3V16G6M1C25K

Fig.	Contact Style	Contact Rating	Terminal Size Inch (mm)	Dim. "X" (mm)	Actu-ation Force	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
SS Miniature Series										
7	SPDT Gold	.1 amp	.110 QC (2.79)	13.46	50gf	SW138-ND	2.08	1.87	1.66	SS-01FT
5	SPDT Gold	.1 amp	.110 QC (2.79)	19.69	50gf	SW139-ND	2.30	2.07	1.84	SS-01GLT
7	SPDT Gold	.1 amp	PC Mount	13.46	150gf	SW155-ND	2.03	1.83	1.62	SS-01D
5	SPDT Gold	.1 amp	PC Mount	19.69	50gf	SW239-ND	2.00	1.80	1.60	SS-01GLD
6	SPDT Gold	.1 amp	PC Mount	21.59	50gf	SW240-ND	2.00	1.80	1.60	SS-01GL13D
8	SPDT Gold	.1 amp	PC Mount	19.61	50gf	SW343-ND	2.40	2.16	1.92	SS-01GL2D
7	SPDT	5 amps	.110 QC (2.79)	13.46	150gf	SW141-ND	1.35	1.22	1.08	SS-5T
5	SPDT	5 amps	.110 QC (2.79)	19.69	50gf	SW143-ND	1.23	1.11	.98	SS-5GLT
6	SPDT	5 amps	.110 QC (2.79)	21.59	50gf	SW144-ND	1.18	1.06	.94	SS-5GL13T
7	SPDT	5 amps	.110 QC (2.79)	13.46	50gf	SW142-ND	1.23	1.11	.98	SS-5FT
8	SPDT	5 amps	Solder	19.61	50gf	SW156-ND	1.45	1.31	1.16	SS-5GL2
7	SPDT	5 amps	PC Mount	13.46	150gf	SW241-ND	1.23	1.11	.98	SS-5D
5	SPDT	5 amps	PC Mount	19.69	50gf	SW242-ND	1.48	1.33	1.18	SS-5GLD
6	SPDT	5 amps	PC Mount	21.59	50gf	SW243-ND	1.53	1.38	1.22	SS-5GL13D
8	SPDT	5 amps	PC Mount	19.61	50gf	SW244-ND	1.73	1.56	1.38	SS-5GL2D
7	SPDT	10 amps	.110 QC (2.79)	13.46	150gf	SW245-ND	2.18	1.96	1.74	SS-10T
5	SPDT	10 amps	.110 QC (2.79)	19.69	50gf	SW246-ND	1.98	1.78	1.58	SS-10GLT
6	SPDT	10 amps	.110 QC (2.79)	21.59	50gf	SW247-ND	2.00	1.80	1.60	SS-10GL13T
8	SPDT	10 amps	.110 QC (2.79)	19.61	50gf	SW248-ND	2.23	2.01	1.78	SS-10GL2T
Watertight D2SW Series										
9	SPDT	3 amps	Solder	13.46	180gf	SW228-ND	2.53	2.28	2.02	D2SW-3HS
9	SPDT	3 amps	.110 QC (2.79)	13.46	180gf	SW229-ND	2.53	2.28	2.02	D2SW-3TS
9	SPDT	3 amps	PC Mount	13.46	180gf	SW291-ND	2.53	2.28	2.02	D2SW-3DS
9	SPDT	3 amps	12 Wires (304.8)	13.46	180gf	SW292-ND	4.18	3.76	3.34	D2SW-3MS
10	SPDT	3 amps	Solder	19.69	60gf	SW293-ND	2.68	2.41	2.14	D2SW-3L1HS

(Continued)

OMRON Basic Type Snap Switches *(Cont.)*

Fig.	Contact Style	Contact Rating	Terminal Size Inch (mm)	Dim. "X" (mm)	Actuation Force	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
10	SPDT	3 amps	.110 QC (2.79)	19.69	60gf	SW294-ND	2.68	2.41	2.14	D2SW-3L1TS
10	SPDT	3 amps	12 Wires (304.8)	19.69	60gf	SW295-ND	4.35	3.92	3.48	D2SW-3L1MS
11	SPDT	3 amps	Solder	21.59	60gf	SW296-ND	2.68	2.41	2.14	D2SW-3L3HS
11	SPDT	3 amps	12 Wires (304.8)	21.59	60gf	SW297-ND	4.35	3.92	3.48	D2SW-3L3MS
12	SPDT	3 amps	Solder	19.61	60gf	SW237-ND	3.05	2.75	2.44	D2SW-3L2HS
12	SPDT	3 amps	12 Wires (304.8)	19.61	60gf	SW238-ND	4.60	4.14	3.68	D2SW-3L2MS
D2MQ Switches										
13	SPDT Silver	500mA	.05 (1.27)	6.00	120gf	SW145-ND	2.80	2.52	2.24	D2MQ-1
14	SPDT Silver	500mA	.05 (1.27)	7.70	60gf	SW146-ND	2.88	2.59	2.30	D2MQ-1L
D3C Series Switches										
15	Non-Short	.1 amp	PC Mount	8.69	130gf	SW224-ND	1.13	1.02	.90	D3C-1210
15	Shorting	.1 amp	PC Mount	8.69	130gf	SW226-ND	1.13	1.02	.90	D3C-2210
15	Non-Short	.1 amp	PC Mount	8.69	40gf	SW225-ND	1.13	1.02	.90	D3C-1220
15	Shorting	.1 amp	PC Mount	8.69	40gf	SW227-ND	1.13	1.02	.90	D3C-2220
D2F Series Switches										
16	SPDT	3 amps	PC Mount	5.18	150gf	SW500-ND	1.00	.90	.80	D2F
16	SPDT	.1 amp	PC Mount	5.18	150gf	SW501-ND	1.00	.90	.80	D2F-01
16	SPDT	.1 amp	PC Mount	5.18	75gf	SW502-ND	1.00	.90	.80	D2F-01F
16	SPDT	3 amps	PC Mount	5.18	75gf	SW503-ND	.95	.86	.76	D2F-F
D2F Lever Series										
17	SPDT	3 amps	PC Mount	13.97	80gf	SW152-ND	1.10	.99	.88	D2F-L
17	SPDT	3 amps	PC Mount	13.97	25gf	SW153-ND	1.10	.99	.88	D2F-FL
17	SPDT	.1 amp	PC Mount	13.97	80gf	SW154-ND	1.10	.99	.88	D2F-01L
Watertight D2VW Series Switches										
18	SPDT	.1 amp	.187 QC (4.75)	—	200gf	SW427-ND	3.55	3.20	2.84	D2VW-01-1HS
18	SPDT	.1 amp	12 wires (304.8)	—	200gf	SW428-ND	7.28	6.55	5.82	D2VW-01-1MS
19	SPDT	.1 amp	.187 QC (4.75)	59	120gf	SW429-ND	4.25	3.83	3.40	D2VW-01L1-1HS
19	SPDT	.1 amp	12 wires (304.8)	59	120gf	SW430-ND	7.63	6.87	6.10	D2VW-01L1-1MS
20	SPDT	.1 amp	.187 QC (4.75)	34	120gf	SW431-ND	5.68	5.11	4.54	D2VW-01L2-1HS
20	SPDT	.1 amp	12 wires (304.8)	34	120gf	SW432-ND	7.43	6.69	5.94	D2VW-01L2-1MS
18	SPDT	5 amps	.187 QC (4.75)	—	200gf	SW433-ND	3.40	3.06	2.72	D2VW-5-1HS
18	SPDT	5 amps	12 wires (304.8)	—	200gf	SW434-ND	5.63	5.07	4.50	D2VW-5-1MS
19	SPDT	5 amps	.187 QC (4.75)	59	120gf	SW435-ND	3.55	3.20	2.84	D2VW-5L1-1HS
19	SPDT	5 amps	12 wires (304.8)	59	120gf	SW436-ND	5.48	4.93	4.38	D2VW-5L1-1MS
20	SPDT	5 amps	.187 QC (4.75)	34	120gf	SW437-ND	3.78	3.40	3.02	D2VW-5L2-1HS
20	SPDT	5 amps	12 wires (304.8)	34	120gf	SW438-ND	5.85	5.27	4.68	D2VW-5L2-1MS

Fig.	Contact Style	Contact Rating	Terminal Size Inch (mm)	Dim. "X" (mm)	Actuation Force	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Watertight D2FW Series Switches										
21	SPST-NO	.1 amp	12 wires (304.8)	22.8	250gf	SW511-ND	3.48	3.13	2.78	D2FW-G073M
21	SPST-NO	1 amp	12 wires (304.8)	22.8	250gf	SW512-ND	3.48	3.13	2.78	D2FW-G273M
21	SPST-NO	.1 amp	12 wires (304.8)	19.0	300gf	SW513-ND	3.48	3.13	2.78	D2FW-G083M
21	SPST-NO	1 amp	12 wires (304.8)	19.0	300gf	SW514-ND	3.48	3.13	2.78	D2FW-G283M
D2HW Miniature Sealed Switches										
22A	SPDT	2A	Rt. Ang. PCB	4	76gf	SW714-ND	2.43	2.19	1.94	D2HWBR201DR
22B	SPDT	2A	Rt. Ang. PCB	4	76gf	SW715-ND	2.43	2.19	1.94	D2HWBL201DL
22C	SPDT	2A	Straight PCB	4	76gf	SW716-ND	2.43	2.19	1.94	D2HWA201D
22A	SPDT	2A	Down Wire leads	4	76gf	SW719-ND	4.93	4.44	3.94	D2HWBR201M
22B	SPDT	2A	Down Wire leads	4	76gf	SW720-ND	4.93	4.44	3.94	D2HWBL201M
22D	SPDT	2A	Down Wire leads	4	76gf	SW721-ND	5.43	4.89	4.34	D2HWC201M
23A	SPDT	2A	Rt. Ang. PCB	13	61gf	SW717-ND	2.58	2.32	2.06	D2HWBR211DR
23A	SPDT	2A	Down Wire leads	13	61gf	SW722-ND	5.18	4.66	4.14	D2HWBR211M
23B	SPDT	2A	Down Wire leads	13	61gf	SW723-ND	5.18	4.66	4.14	D2HWBL211M
23D	SPDT	2A	Down Wire leads	13	61gf	SW724-ND	5.60	5.04	4.48	D2HWC211M
23A	SPST-NC	2A	Right Wire leads	13	61gf	SW725-ND	5.18	4.66	4.14	D2HWBR212MR
23B	SPST-NC	2A	Right Wire leads	13	61gf	SW726-ND	5.18	4.66	4.14	D2HWBL212MR
23D	SPST-NC	2A	Right Wire leads	13	61gf	SW727-ND	5.60	5.04	4.48	D2HWC212MR
23A	SPST-NO	2A	Right Wire leads	13	61gf	SW728-ND	5.18	4.66	4.14	D2HWBR213MR
23B	SPST-NO	2A	Right Wire leads	13	61gf	SW729-ND	5.18	4.66	4.14	D2HWBL213MR
23C	SPST-NO	2A	Right Wire leads	13	61gf	SW730-ND	5.60	5.04	4.48	D2HWC213MR
23A	SPST-NC	2A	Left Wire leads	13	61gf	SW731-ND	5.18	4.66	4.14	D2HWBR212ML
23B	SPST-NC	2A	Left Wire leads	13	61gf	SW732-ND	5.18	4.66	4.14	D2HWBL212ML
23A	SPST-NO	2A	Left Wire leads	13	61gf	SW733-ND	5.18	4.66	4.14	D2HWBR213ML
23B	SPST-NO	2A	Left Wire leads	13	61gf	SW734-ND	5.18	4.66	4.14	D2HWBL213ML
24A	SPDT	2A	Down Wire leads	16	61gf	SW737-ND	5.18	4.66	4.14	D2HWBR231M
24B	SPDT	2A	Down Wire leads	16	61gf	SW738-ND	5.18	4.66	4.14	D2HWBL231M
23B	SPDT	2A	Rt. Ang. PCB	20	41gf	SW718-ND	2.58	2.32	2.06	D2HWBL221DL
23A	SPDT	2A	Down Wire leads	20	41gf	SW735-ND	5.18	4.66	4.14	D2HWBR221M
23B	SPDT	2A	Down Wire leads	20	41gf	SW736-ND	5.18	4.66	4.14	D2HWBL221M
25A	SPDT	2A	Down Wire leads	8	183gf	SW739-ND	5.18	4.66	4.14	D2HWBR261M
25B	SPDT	2A	Down Wire leads	8	183gf	SW740-ND	5.18	4.66	4.14	D2HWBL261M
24A	SPDT	2A	Down Wire leads	16	183gf	SW741-ND	5.18	4.66	4.14	D2HWBR271M
24B	SPDT	2A	Down Wire leads	16	183gf	SW742-ND	5.18	4.66	4.14	D2HWBL271M
26A	SPDT	2A	Down Wire leads	20.85	92gf	SW743-ND	5.18	4.66	4.14	D2HWBR281M
26B	SPDT	2A	Down Wire leads	20.85	92gf	SW744-ND	5.18	4.66	4.14	D2HWBL281M

Basic Switch

Omron's "Z" Series switches feature 15A contacts which directly switches such loads as motors, halogen lamps and solenoids. Omron's "A" Series has the same body yet switches 20A loads with large inrush currents. All switches feature screw terminal connections and are UL listed CSA certified. Both series are momentary action, SPDT versions.

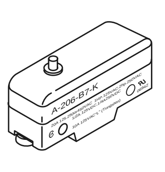


Fig. 1

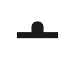


Fig. 2

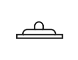


Fig. 3

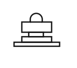


Fig. 4

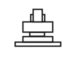


Fig. 5

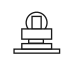


Fig. 6

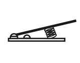


Fig. 7

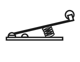


Fig. 8

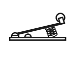


Fig.	Operating Force g max.	Switch Current (A)	Actuator Type	Actuator Length (mm)	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	350	15	Pin Plunger	—	SW190-ND	6.85	6.17	5.48	Z15G-B
2	350	15	Spring Plunger	—	SW191-ND	8.43	7.59	6.74	Z15GD-B
3	350	15	Panel Plunger	—	SW192-ND	11.50	10.35	9.20	Z15GQ-B
4	350	15	Panel Roller	—	SW193-ND	13.58	12.22	10.86	Z15GQ21-B
5	350	15	Panel Roller	—	SW194-ND	13.58	12.22	10.86	Z15GQ22-B
6	70	15	Lever	63.50	SW195-ND	9.20	8.28	7.36	Z15GW-B
7	100	15	Roller Lever	48.49	SW196-ND	9.20	8.28	7.36	Z15GW2-B
8	160	15	Roller Lever	26.59	SW197-ND	8.60	7.74	6.88	Z15GW22-B
6	6	15	Low Force Lever	63.50	SW198-ND	9.50	8.55	7.60	Z15HW24-B7-K
1	625	20	Pin Plunger	—	SW230-ND	9.28	8.35	7.42	A20G-B7-K
6	70	20	Lever	63.50	SW231-ND	9.33	8.40	7.46	A20GV-B7-K
7	90	20	Roller Lever	48.49	SW232-ND	9.33	8.40	7.46	A20GV2-B7-K
3	625	20	Panel Plunger	—	SW233-ND	14.10	12.69	11.28	A20GQ-B7-K
8	160	20	Roller Lever	26.59	SW234-ND	10.03	9.03	8.02	A20GV22-B7-K
Phenolic Terminal Cover for A/Z Series					SW235-ND	.88	.79	.70	AP-B
Terminal Cover with Strain Relief for A/Z Series					SW236-ND	4.53	4.08	3.62	AP-Z

D4C Industrial Sealed Limit Switch

Omron's D4C series limit switches are industrial enclosed limit switches with rugged diecast housing, triple sealed construction and prewired 10' cable. Perfect for harsh environments and indoor/outdoor uses where small size is a consideration.

Fig.	Operating Force g. max.	Switch Current (A)	Actuator Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	1200	5	Pin Plunger	Z1055-ND	50.35	46.62	43.52	D4C-1601
2	1200	5	Roller Plunger	Z1056-ND	50.35	46.62	43.52	D4C-1602
3	580	5	Roller Lever	Z1057-ND	61.24	56.70	52.92	D4C-1620

Fig. 1

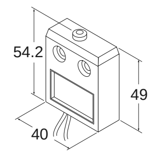


Fig. 2

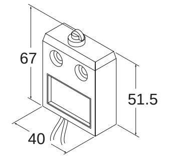
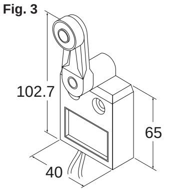


Fig. 3



ZE Industrial Sealed High Capacity Switch

Long service life, rugged die cast housing sealed industrial switches with a high capacity contact (15A). NEMA sealed for extremely long service life (SPDT 15A @ 125VAC).

Fig.	Operating Force g. max.	Switch Current (A)	Actuator Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	640	15	Roller Arm Lever	Z1058-ND	38.10	35.28	32.93	ZE-NA2-2S
2	150	15	Coil Spring	Z1059-ND	39.01	36.12	33.72	ZE-NJ-2S
3	800	15	Plunger	Z1060-ND	29.94	27.72	25.88	ZE-N-2S
4	500	15	Roller Plunger	Z1061-ND	40.82	37.80	35.28	ZE-N22-2S

Fig. 1

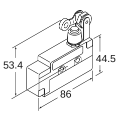


Fig. 2

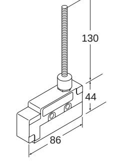


Fig. 3

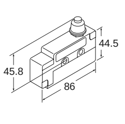
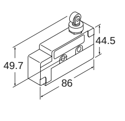
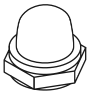


Fig. 4



APM HEXSEAL

Pushbutton Switch Boots



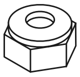
APM's sealing boots are designed to protect your switches and potentiometers from hostile environments without compromising or interfering with the switches basic function. Boots create a full environmental seal even under high-pressure washdowns. Each seal is made from a tough, high tear strength elastomer that is resistant to most chemicals, lubricants, acids and solvents. UL and CSA recognized which facilitate easier agency listings and most Hexseals are QPL approved under MIL-B-5423.

Thread Size	Throat Size (I.D.) Inch (mm)	Plunger Height Inch (mm)	Color	Digi-Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
15/32-32NS-2B	.422 (10.72)	.281 (7.14)	Gray	335-1009-ND	3.18	2.55	2.02	N3030
15/32-32NS-2B		.438 (11.13)	Gray	335-1008-ND	3.18	2.55	2.02	NC3030
15/32-32NS-2B		.438 (11.13)	Clear	335-1010-ND	3.57	2.86	2.27	NC3030(Clear)
7/16-28UNEF-2B		.438 (11.13)	Clear	335-1013-ND	3.66	2.93	2.32	NC303 7/16-28(CLR)

Rotary Shaft Seals

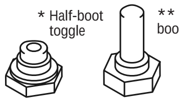
Hexseal's rotary switch and potentiometer seals surround the shaft and form a watertight, and dust tight seal against the shaft and front panel surface. Color: Gray

Thread Size	Max. Shaft Size Inch. (mm)	Hex Nut Flat Inch. (mm)	Digi-Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
3/8-32NEF-2B	.125 (3.18)	.500 (12.70)	335-1015-ND	2.91	2.33	1.85	N9030x1/8
3/8-32NEF-2B	.250 (6.35)	.500 (12.70)	335-1016-ND	2.91	2.33	1.85	N9030x1/4
1/4-28NEF-2B	.125 (3.18)	.375 (9.53)	335-1014-ND	2.91	2.33	1.85	N9042x1/8



Toggle Switch Boots

Hexseal toggle switch boots are molded from a high tear strength, silicon rubber bonded to a built-in mounting nut. Each encloses the base of the protruding switch bushing and forms a water and dust tight seal against the front panel surface.



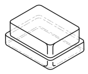
* Half-boot toggle

** Full-boot toggle

Thread Size	Throat (I.D.) Inch (mm)	Height Inch (mm)	Color	Digi-Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
15/32-32NS-2B	.078 (1.98)	.437 (11.10)	Gray	335-1007-ND*	3.18	2.55	2.02	N1030B
1/4-40NS-2B	.047 (1.19)	.250 (6.35)	Gray	335-1006-ND*	3.81	3.05	2.42	N5032B
15/32-32NS-2B	.219 (5.56)	.844 (21.44)	Gray	335-1005-ND**	3.18	2.55	2.02	N1030
1/4-40NS-2B	.062 (1.57)	.390 (9.91)	Gray	335-1000-ND**	3.81	3.05	2.42	N5030R
1/4-40NS-2B	.062 (1.57)	.594 (15.09)	Gray	335-1001-ND**	3.78	3.03	2.40	N5030S
1/4-40NS-2B	.062 (1.57)	.500 (12.70)	Red	335-1002-ND**	4.26	3.41	2.70	N5030L(Red)
1/4-40NS-2B	.062 (1.57)	.500 (12.70)	Black	335-1003-ND**	4.26	3.41	2.70	N5030L(Black)
1/4-40NS-2B	.062 (1.57)	.500 (12.70)	Yellow	335-1004-ND**	4.26	3.41	2.70	N5030L(Yellow)

Transparent Rocker Switch Seals

Seals without compromising switch operation, position status viewing or legend visibility.

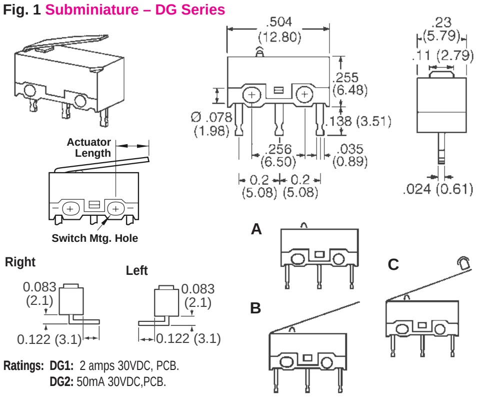


Max. Rocker Actuator Len. Inch (mm)	Max. Rocker Actuator Wid. Inch (mm)	Max. Rocker Above Panel Inch (mm)	Digi-Key Part No.	Price Each 1	25	100	APM Hexseal Part No.
.750 (19.05)	.531 (13.49)	.228 (5.79)	335-1011-ND	1.98	1.59	1.26	C1113/66(Clear)
1.750 (44.45)	.900 (22.86)	.560 (14.22)	335-1012-ND	1.98	1.59	1.26	C1113/80(Clear)

Snap Type Switches

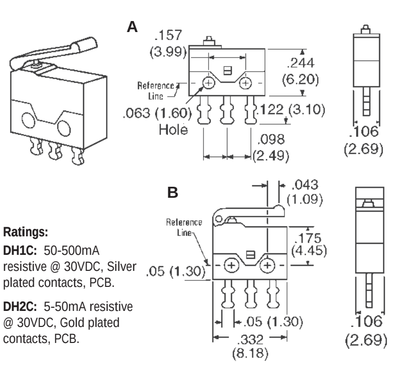
UL Recognized and CSA Certified

Fig. 1 Subminiature – DG Series



Ratings: **DG1:** 2 amps 30VDC, PCB.
DG2: 50mA 30VDC,PCB.

Fig. 2 Ultra-Subminiature – DH Series



Ratings:

DH1C: 50-500mA resistive @ 30VDC, Silver plated contacts, PCB.

DH2C: 5-50mA resistive @ 30VDC, Gold plated contacts, PCB.

Fig. 3 Water and Dust Sealed – DC Series

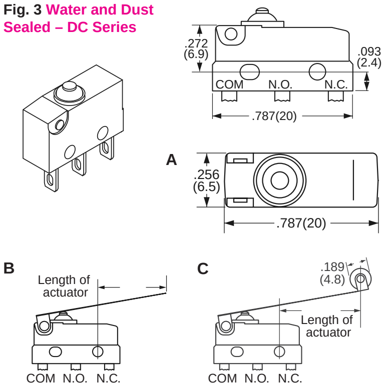


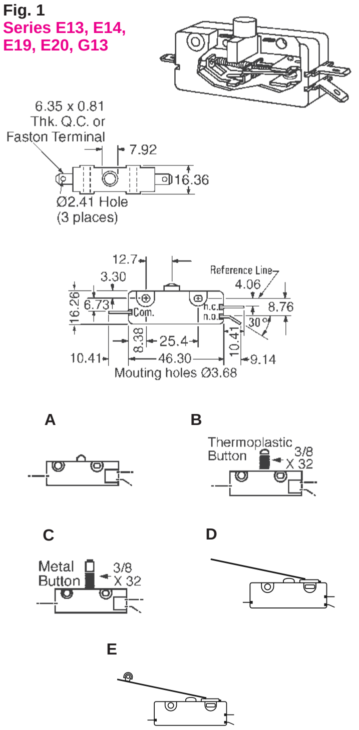
Fig.	Description	Circuitry	Current	Terminal Inch (mm)	Actuator	Actuator Length Inch(mm)	Oper. Force (max gms.)	Digi-Key Part No.	Price Each 1	10	50	100	500	Cherry Part No.
1A	Subminiature DG Series	SPDT	50mA	Vertical PCB	Button	—	140	CH167-ND	3.70	3.29	2.74	2.24	2.06	DG23-B1AA
1A				Right Angle - PCB	Button	—	140	CH620-ND	3.81	3.39	2.82	2.30	2.12	DG23-B2AA
1A				Left Angle - PCB	Button	—	140	CH623-ND	3.81	3.39	2.82	2.30	2.12	DG23-B3AA
1B				Vertical PCB	Lever	.169 (4.29)	45	CH168-ND	3.81	3.39	2.82	2.30	2.12	DG23-B1LA
1B				Right Angle - PCB	Lever	0.169	140	CH621-ND	3.94	3.51	2.92	2.38	2.19	DG23-B2LA
1B				Left Angle - PCB	Lever	0.169	140	CH624-ND	3.94	3.51	2.92	2.38	2.19	DG23-B3LA
1C				Vertical PCB	Roller Lever	.075 (1.91)	45	CH169-ND	3.94	3.51	2.92	2.38	2.19	DG23-B1RA
1C				Right Angle - PCB	Roller Lever	0.075	140	CH622-ND	4.08	3.63	3.02	2.46	2.27	DG23-B2RA
1C				Left Angle - PCB	Roller Lever	0.075	140	CH625-ND	4.08	3.63	3.02	2.46	2.27	DG23-B3RA
1A		SPDT	2A	Vertical PCB	Button	—	140	CH164-ND	3.40	3.03	2.52	2.06	1.89	DG13-B1AA
1B					Lever	.169 (4.29)	45	CH165-ND	3.56	3.17	2.64	2.16	1.98	DG13-B1LA
1C					Roller Lever	.075 (1.91)	45	CH166-ND	3.70	3.29	2.74	2.24	2.06	DG13-B1RA
1A		SPDT	3A	Right Angle - PCB	Button	—	140	CH617-ND	3.56	3.17	2.64	2.15	1.98	DG13-B2AA
1B				Right Angle - PCB	Lever	0.169		CH618-ND	3.70	3.29	2.74	2.23	2.06	DG13-B2LA
1C				Left Angle - PCB	Roller Lever	0.075		CH619-ND	3.81	3.39	2.82	2.30	2.12	DG13-B3RA
2A	Ultra-Subminiature DH Series	SPDT	50mA	Vertical PCB	Button	—	90	CH172-ND	4.97	4.42	3.68	3.00	2.76	DH2C-B1AA
2B				Vertical PCB	Lever	—	50	CH173-ND	5.13	4.56	3.80	3.10	2.85	DH2C-B1PA
2B				Right Angle Solder	Lever	.043 (1.09)	50	CH295-ND	5.24	4.66	3.88	3.17	2.91	DH2C-B2PA
2B				Left Angle Solder	Lever	.043 (1.09)	50	CH296-ND	5.24	4.66	3.88	3.17	2.91	DH2C-B3PA
2B		SPDT	500mA	Right Angle Solder	Lever	.043 (1.09)	50	CH294-ND	4.97	4.42	3.68	3.00	2.76	DH1C-B2PA
3A	Sealed DC Series Water & Dust	SPDT	0.1A	Solder Eyelet	Button	—	347	CH293-ND	5.99	5.33	4.44	3.62	3.33	DC3C-A1AA
3A				Wire 18AWG Leads	Button	—	204	CH614-ND	17.90	15.92	13.25	10.80	9.94	DC3C-D5AA
3A				Vertical PCB	Button	—	204	CH615-ND	3.73	3.32	2.75	2.24	2.06	DC3C-K7AA
3A				Wire 20AWG Leads	Button	—	204	CH616-ND	17.90	15.92	13.25	10.80	9.94	DC3C-M3AA
3B				Solder Eyelet	Lever	0.189	204	CH613-ND	7.37	6.56	5.46	4.45	4.10	DC3C-A1LB
3A		SPDT	5A	Solder Eyelet	Button	—	204	CH290-ND	4.08	3.63	3.03	2.47	2.27	DC1C-A1AA
3A				Wire 18AWG Leads	Button	—		CH607-ND	12.85	11.43	9.51	7.75	7.13	DC1C-D5AA
3A				Vertical PCB	Button	—		CH608-ND	3.62	3.22	2.69	2.19	2.02	DC1C-K6AA
3B				Solder Eyelet	Lever	.189 (4.80)		CH291-ND	4.54	4.04	3.36	2.74	2.52	DC1C-A1LB
3B				.110 (2.79) QC	Lever	0.276		CH609-ND	4.40	3.92	3.26	2.65	2.44	DC1C-L1LC
3C				Solder Eyelet	Roller Lever	0.098		CH606-ND	8.72	7.76	6.47	5.27	4.85	DC1C-A1RB
3A		SPDT	10A	Solder Eyelet	Button	—	347	CH292-ND	4.51	4.01	3.34	2.73	2.51	DC2C-A1AA
3B				Solder Eyelet	Lever	0.189		CH610-ND	5.32	4.73	3.95	3.22	2.96	DC2C-A1LB
3A				Wire 16AWG Leads	Button	—		CH611-ND	15.04	13.37	11.13	9.07	8.35	DC2C-E5AA
3B				Wire 16AWG Leads	Lever	0.189		CH612-ND	15.61	13.88	11.55	9.41	8.66	DC2C-E5LB
—	Replacement Actuator	Standard Lever for 1LB/1MB Suffix						CH657-ND	.16	.15	.12	.11	.10	0014-5576
		Simulated Roller Lever for 1SB/1UB Suffix						CH658-ND	.16	.15	.12	.11	.10	0014-5594
		Standard Lever for DC Series, LB Suffix						CH667-ND	.16	.15	.12	.11	.10	0614-1232
		Standard Lever for DC Series, LC Suffix						CH668-ND	.16	.15	.12	.11	.10	0614-1233
		Extra Long Roller Lever, LD Suffix						CH669-ND	.41	.36	.30	.26	.24	0614-1234
		Roller Lever for DC Series, RB Suffix						CH673-ND	.68	.60	.50	.44	.40	0714-0260
		Roller Lever for DC Series, RC Suffix						CH674-ND	.68	.60	.50	.44	.40	0714-0261
		Roller Lever for DC Series, RD Suffix						CH675-ND	.70	.63	.52	.45	.42	0714-0262

CHERRY Snap and Lever Type Switches

Fig.	Circuitry	Current	Terminal Inch (mm)	Actuator	Actuator Length Inch (mm)	Oper. Force (Max. gms.)	Digi-Key Part No.	Price Each			Cherry Part No.
								1	10	50	
General Purpose — E13, E14, E19, E20 and G13 Power Series											
1B	SPDT	0.1A	.250 QC (6.35)	Threaded Bushing	—	425	CH573-ND	5.56	4.95	4.12	G13-00J
1C				Threaded Bushing	—	425	CH574-ND	6.40	5.69	4.74	G13-00M
1D				Long Lever	1.5 (38.10)	100	CH572-ND	5.97	5.31	4.43	G13-00H
1D				Long Lever	1.75 (44.45)	65	CH575-ND	5.97	5.31	4.43	G13-50H
1A	SPDT	15A	.250 QC (6.35)	Plastic Button	—	425	CH102-ND	2.78	2.48	2.06	E13-00E
1B				THD Bushing/Plastic Button	—	425	CH100-ND	3.11	2.76	2.31	E13-00J
1C				THD Bushing/Metal Button	—	425	CH101-ND	3.92	3.48	2.91	E13-00M
1D				Long Lever	1.5 (38.10)	100	CH312-ND	3.81	3.39	2.83	E13-00H
				Long Lever	1.75 (44.45)	65	CH314-ND	3.81	3.39	2.83	E13-50H
1E				Long Roller	1.391 (35.33)	100	CH313-ND	4.59	4.08	3.40	E13-00K
				Roller	1.645 (41.78)	65	CH502-ND	4.59	4.08	3.40	E13-50K
1D	SPDT	20A	.250 QC (6.35)	Long Lever	.821 (20.85)	425	CH505-ND	9.59	8.52	7.11	E20-00H
				Long Lever	1.071 (27.20)	285	CH506-ND	9.59	8.52	7.11	E20-50H
1E				Button	—	1280	CH327-ND	8.75	7.78	6.49	E20-00A
1A	SPDT	25A	.250 QC (6.35)	Plastic Button	—	850	CH315-ND	3.48	3.10	2.58	E14-00A
1C				THD Bushing/Metal Button	—	850	CH318-ND	4.67	4.16	3.47	E14-00M
1D				Short Lever	.821 (20.85)	285	CH316-ND	4.73	4.20	3.51	E14-00H
				Long Lever	1.071 (27.20)	170	CH319-ND	4.64	4.13	3.45	E14-50H
1E				Short Roller	.652 (16.56)	285	CH317-ND	5.29	4.71	3.92	E14-00K
				Roller	.902 (22.9)	170	CH503-ND	5.29	4.71	3.91	E14-50K
1A	DPDT	15A	.250 QC (6.35)	Plastic Button	—	850	CH320-ND	5.83	5.19	4.33	E19-00A
1B				THD Bushing/Plastic Button	—	850	CH322-ND	6.26	5.57	4.64	E19-00J
1C				THD Bushing/Metal Button	—	850	CH324-ND	6.62	5.88	4.91	E19-00M
1D				Long Lever	1.5 (38.10)	205	CH321-ND	6.97	6.20	5.15	E19-00H
				Long Lever	1.75 (44.45)	130	CH325-ND	6.40	5.69	4.74	E19-50H
1E				Long Roller	1.391 (35.33)	212	CH323-ND	7.99	7.11	5.92	E19-00K
				Long Roller	1.645 (41.78)	150	CH326-ND	8.07	7.18	5.98	E19-50K
1C	DPDT	20A	.250 QC (6.35)	THD Bushing/Metal Button	—	850	CH329-ND	9.75	8.67	7.21	E20-00M
1E				Short Roller	.652 (16.56)	425	CH328-ND	10.29	9.15	7.63	E20-00K
				Long Roller	1.391 (35.33)	212	CH330-ND	10.85	9.65	8.04	E20-50K
1A	SPST-N/O	15A	.250 QC (6.35)	Button	—	425	CH500-ND	2.78	2.48	2.06	E13-01E
1D				Long Lever	1.5 (38.10)	100	CH501-ND	3.81	3.39	2.82	E13-01H
Brass Mounting Nut for Threaded Bushing							CH284-ND	.14	.12	.10	0012-0023
Knurled Dress Nut Brass for J/M E13/19/G13							CH651-ND	1.43	1.28	1.06	0012-0025
Hex Nut Nickel Plated for J/M E13/19/G13							CH652-ND	.16	.15	.12	0012-0028
Lock Washer for J/M E13/E19/G13							CH653-ND	.22	.20	.16	0012-0073
Low Torque — E51 and E53 Series											
2A	SPDT	.1A	Right Angle .205 QC (5.21)	CW Lever	—	4	CH150-ND	11.18	9.94	8.27	E53-00B
			.187 QC (4.75)	CW Lever	—	4	CH152-ND	12.26	10.90	9.08	E53-00R
2B			.187 QC (4.75)	CCW Lever	—	4	CH153-ND	12.26	10.90	9.08	E53-00T
2A	SPDT	6A	.187 QC (4.75)	CW Lever	—	4	CH364-ND	9.37	8.33	6.93	E51-50R
			.187 QC (4.75)	CW Lever	—	4	CH148-ND	9.37	8.33	6.93	E51-00R
			Vert. Straight .187 QC (4.75)	CW Lever	—	4	CH540-ND	7.67	6.82	5.67	E51-60R
			Vert. Twist .205 QC (5.21)	CW Lever	—	4	CH536-ND	9.37	8.33	6.93	E51-50B
			Vert. Straight .205 QC (5.21)	CW Lever	—	4	CH538-ND	7.67	6.82	5.67	E51-60B
			.205 QC (5.21)	CW Lever	—	4	CH146-ND	9.37	8.33	6.93	E51-00B
2B			.187 QC (4.75)	CCW Lever	—	4	CH149-ND	9.37	8.33	6.93	E51-00T
			.187 QC (4.75)	CCW Lever	—	4	CH365-ND	9.37	8.33	6.93	E51-50T
			.205 QC (5.21)	CCW Lever	—	4	CH147-ND	9.37	8.33	6.93	E51-00E
			Vert. Twist .205 QC (5.21)	CCW Lever	—	4	CH537-ND	9.37	8.33	6.93	E51-50E
			Vert. Straight .205 QC (5.21)	CCW Lever	—	4	CH539-ND	9.07	8.07	6.72	E51-60E
Actuator Wire Form for E51/E53							CH655-ND	.16	.15	.12	0014-0645
Subminiature — E61, E62, E63 Series											
3A	SPDT	.1A	.093 QC (2.36)	Plunger Only	—	90	CH380-ND	6.94	6.17	5.14	E63-00A
			.110 QC (2.36)	Plunger Only	—	90	CH554-ND	6.35	5.64	4.71	E63-30A
			Solder Eyelet	Plunger Only	—	90	CH383-ND	5.94	5.28	4.40	E63-10A
3B			.093 QC (2.79)	Lever Std. Ratio	.271 (6.88)	27	CH381-ND	7.56	6.72	5.61	E63-00H
			PC Mount	Lever Std. Ratio	.396 (10.06)	9	CH384-ND	7.56	6.72	5.61	E63-50H
			Solder Eyelet	Long Lever	.271 (6.88)	27	CH551-ND	7.56	6.72	5.61	E63-10H
			Solder Eyelet	Long Lever	.396 (10.06)	9	CH557-ND	7.56	6.72	5.61	E63-60H
3C			Solder Eyelet	Roller Lever	.201 (5.11)	30	CH552-ND	8.10	7.20	5.99	E63-10K
			.093 QC (2.36)	Roller Lever	.201 (5.11)	30	CH382-ND	8.10	7.20	6.00	E63-00K
			.110 QC (2.79)	Roller Lever	.201 (5.11)	30	CH555-ND	8.10	7.20	5.99	E63-30K
			.110 QC (2.79)	Roller Lever	.326 (8.28)	10	CH558-ND	8.10	7.20	5.99	E63-80K
3D			.093 QC (2.36)	Sim. Roller Lever	.197 (5.0)	30	CH550-ND	7.80	6.94	5.78	E63-00R
			Solder Eyelet	Sim. Roller Lever	.197 (5.0)	30	CH553-ND	7.80	6.94	5.78	E63-10R
3A	SPDT	5A	.093 QC (2.36)	Plunger Only	—	90	CH103-ND	3.32	2.96	2.47	E61-00A
			.110 QC (2.79)	Plunger Only	—	90	CH370-ND	3.32	2.96	2.47	E61-30A
			Solder Eyelet	Plunger Only	—	90	CH104-ND	3.32	2.96	2.47	E61-10A
3B			.093 QC (2.36)	Lever Std. Ratio	.271 (6.88)	27	CH105-ND	4.78	4.25	3.54	E61-00H
			.110 QC (2.79)	Lever Std. Ratio	.271 (6.88)	27	CH371-ND	4.78	4.25	3.54	E61-30H
			Solder Eyelet	Lever Std. Ratio	.271 (6.88)	27	CH106-ND	4.78	4.25	3.54	E61-10H
			PC Mount	Lever Std. Ratio	.396 (10.06)	9	CH373-ND	4.78	4.25	3.54	E61-50H
			Solder Eyelet	Long Lever	.396 (10.06)	9	CH542-ND	4.78	4.25	3.53	E61-60H

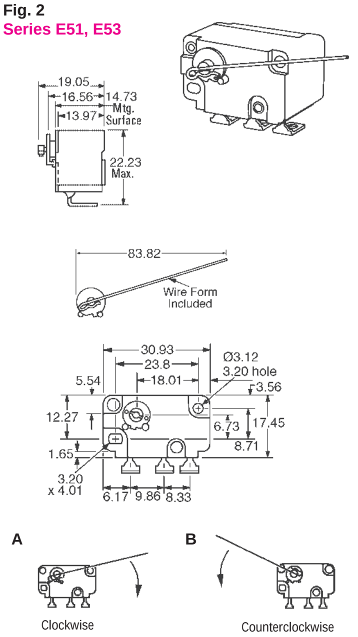
(Continued)

Fig. 1
Series E13, E14, E19, E20, G13



Ratings:
E13: 15A – 125/250VAC, 3/4 HP – 125VAC, 1-1/2 HP – 250VAC
E14: 25A – 125/250VAC, 1 HP – 125VAC, 2 HP – 250VAC
E19: 15A – 125/250VAC, 3/4 HP – 125VAC
E20: 20A – 125/250VAC, 1 HP – 125 VAC
G13: 0.1A – 125VAC. Gold crosspoint contacts.

Fig. 2
Series E51, E53



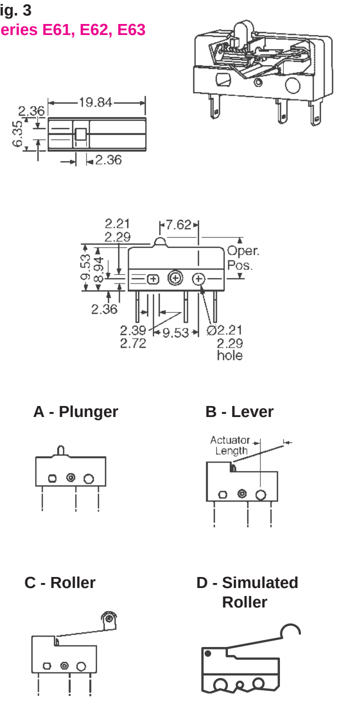
Ratings:
E51: 6 amps 250VAC
E53: 0.1 amps 125VAC. Gold crosspoint contacts. Operating Torque: Standard force – 4.0 inch grams. Overtravel: 15° min. Movement differential: 3° min.

CHERRY Snap and Lever Type Switches *(Cont.)*

Fig.	Circuitry	Current	Terminal Inch (mm)	Actuator	Actuator Length Inch (mm)	Oper. Force (Max. gms.)	Digi-Key Part No.	Price Each			Cherry Part No.
								1	10	50	
Subminiature — E61, E62, E63 Series (cont.)											
3C	SPDT	5A	.093 QC (2.36)	Roller Std. Ratio	.201 (5.11)	30	CH107-ND	5.08	4.52	3.77	E61-00K
			Solder Eyelet	Roller Std. Ratio	.201 (5.11)	30	CH108-ND	5.08	4.52	3.77	E61-10K
			.110 QC (2.79)	Roller Lever	.201 (5.11)	30	CH372-ND	5.08	4.52	3.77	E61-30K
			.110 QC (2.79)	Roller Lever	.326 (8.28)	10	CH544-ND	5.08	4.52	3.77	E61-80K
			PC Mount	Roller Lever	.326 (8.28)	10	CH374-ND	5.08	4.52	3.77	E61-50K
			Solder Eyelet	Roller Lever	.326 (8.28)	10	CH543-ND	5.08	4.52	3.77	E61-60K
3A	SPDT	10A	.093 QC (2.36)	Plunger Only	—	212	CH109-ND	3.75	3.34	2.79	E62-00A
			.110 QC (2.79)	Plunger Only	—	212	CH377-ND	3.75	3.34	2.79	E62-30A
			Solder Eyelet	Plunger Only	—	212	CH110-ND	3.75	3.34	2.79	E62-10A
3B			.093 QC (2.36)	Lever Std. Ratio	.271 (6.88)	56	CH111-ND	4.78	4.25	3.54	E62-00H
			Solder Eyelet	Lever Std. Ratio	.271 (6.88)	56	CH112-ND	4.78	4.25	3.54	E62-10H
3C			.093 QC (2.36)	Roller Std. Ratio	.201 (5.11)	65	CH113-ND	5.48	4.88	4.07	E62-00K
			Solder Eyelet	Roller Std. Ratio	.201 (5.11)	65	CH114-ND	5.48	4.88	4.07	E62-10K
			.110 QC (2.79)	Roller Lever	.201 (5.11)	65	CH378-ND	5.48	4.88	4.07	E62-30K
			PC Mount	Roller Lever	.326 (8.28)	33	CH379-ND	5.48	4.88	4.07	E62-50K
3A	SPDT	10A	PC Mount	Plunger Only	—	212	CH545-ND	3.75	3.34	2.78	E62-50A
3B			PC Mount	Long Lever	.396 (10.06)	20	CH546-ND	4.78	4.25	3.53	E62-50H
			Solder Eyelet	Long Lever	.396 (10.06)	20	CH547-ND	4.78	4.25	3.53	E62-60H
3C			Solder Eyelet	Roller Lever	.326 (8.28)	33	CH548-ND	5.48	4.88	4.07	E62-60K
			.110 QC (2.79)	Long Lever	.396 (10.06)	20	CH549-ND	4.78	4.25	3.53	E62-80H
Replacement Actuator Lever, 2.163" (54.94mm) Long							CH654-ND	.24	.22	.18	0014-0134
Ultra Subminiature Snap Switches— DA3 Series											
4A	SPDT	.1A	.110 QC (2.79)	Plunger Only	—	90	CH285-ND	3.73	3.32	2.76	DA3C-B1AA
			.093 QC (2.36)	Plunger Only	—	90	CH140-ND	3.65	3.24	2.70	DA3C-F1AA
			Solder Eyelet	Plunger Only	—	90	CH141-ND	2.97	2.64	2.20	DA3C-D1AA
			PC Mount	Plunger Only	—	90	CH287-ND	4.48	3.99	3.32	DA3C-H1AA
4B			.093 QC (2.36)	Lever Std. Ratio	.271 (6.88)	27	CH142-ND	5.51	4.90	4.08	DA3C-F1LB
			Solder Eyelet	Lever Std. Ratio	.271 (6.88)	27	CH143-ND	5.75	5.12	4.26	DA3C-D1LB
			.110 QC (2.79)	Lever - Standard Ratio	.271 (6.88)	27	CH599-ND	5.75	5.12	4.26	DA3C-B1LB
			Solder Eyelet	Lever - High Ratio	.396 (10.06)	9	CH602-ND	5.75	5.12	4.26	DA3C-D1MB
4C			.093 QC (2.36)	Roller Std. Ratio	.201 (5.11)	30	CH144-ND	5.94	5.28	4.40	DA3C-F1RB
			Solder Eyelet	Roller Std. Ratio	.201 (5.11)	30	CH145-ND	5.94	5.28	4.40	DA3C-D1RB
			.110 QC (2.79)	Roller - Standard Ratio	.201(5.11)	30	CH600-ND	6.21	5.52	4.60	DA3C-B1RB
4D			.110 QC (2.79)	Simulated Roller	.197 (5.00)	30	CH286-ND	5.99	5.33	4.44	DA3C-B1SB
			Solder Eyelet	Sim. Roller - Standard Ratio	.197 (5.00)	30	CH603-ND	5.75	5.12	4.26	DA3C-D1SB
			.093 QC (2.36)	Sim. Roller - High Ratio	.235 (5.97)	10	CH604-ND	5.94	5.28	4.40	DA3C-F1UA
Replacement Actuator Lever, 3.066" (77.88mm) Extra Long............							CH656-ND	.27	.24	.20	0014-5519
Panel Mount Pushbutton — E68, E69, E78, E79 and F79 Series											
5A	SPDT	.1A	.187 QC (4.75)	Momentary	.845 (21.46)	425	CH386-ND	5.24	4.66	3.89	E68-00A
5B				Momentary Cheat Interlock	.730 (18.54)	385	CH387-ND	5.54	4.92	4.10	E68-30A
5C				Short Button Mom.	.420 (10.67)	425	CH388-ND	5.67	5.04	4.20	E68-40A
5D				Auxiliary Push Button	.4 (10.16)	425	CH560-ND	5.81	5.16	4.31	E68-50A
5A	SPDT	10A	.187 QC (4.75)	Momentary	.875 (22.23)	425	CH154-ND	3.70	3.29	2.73	E69-00A
				Momentary	.825 (20.96)	425	CH561-ND	5.10	4.54	3.78	E69-00AA
5B				Push-Pull (Reset)	.9 (22.86)	285	CH562-ND	3.70	3.29	2.73	E69-20A
				Momentary Cheat Interlock	.980 (24.89)	425/285	CH155-ND	4.40	3.92	3.26	E69-30A
5C				Short Button Momentary	.450 (11.43)	425	CH156-ND	3.70	3.29	2.73	E69-40A
				Short Button Momentary	.4 (10.16)	425	CH563-ND	5.24	4.66	3.89	E69-40AA
5D				Auxiliary Push Button	.4 (10.16)	425	CH564-ND	4.67	4.16	3.47	E69-50A
5A	DPDT	.1A	.187 QC (4.75)	Momentary	.825 (20.96)	680	CH567-ND	10.50	9.34	7.77	E78-00A
5B				Push-Pull (Reset)	.9 (22.86)	510	CH568-ND	10.50	9.34	7.77	E78-20A
				Momentary Cheat Interlock	.71 (18.03)	757	CH569-ND	12.34	10.97	9.14	E78-30A
5C				Short Button Momentary	.4 (10.16)	567	CH570-ND	10.34	9.20	7.67	E78-40A
5A	DPDT	10A	.187 QC (4.75)	Momentary	.875 (22.23)	680	CH157-ND	6.37	5.67	4.73	E79-00A
5B				Momentary Cheat Interlock	.71 (18.03)	757	CH571-ND	6.97	6.20	5.17	F79-30A
				Push-Pull (Reset)	.920 (23.37)	510	CH392-ND	6.37	5.67	4.73	E79-20A
				Momentary Cheat Interlock	.980 (24.89)	757/567	CH158-ND	8.51	7.56	6.30	E79-30A
5C				Short Button Momentary	.450 (11.43)	680	CH159-ND	6.37	5.67	4.73	E79-40A
Water and Dust Sealed - E72 and E73 Series											
6B	SPDT	0.1A	10" Wires (25.4cm)	Roller	.858 (21.79)	25	CH566-ND	17.15	15.24	12.71	E73-40KT
6C				Lever	.858 (21.79)	67	CH565-ND	15.31	13.61	11.34	E73-40HT
6A	SPDT	10A	10" Wires (25.4cm)	Plunger Only	.230 (5.84)	300	CH389-ND	10.91	9.70	8.09	E72-40AT
6B				Roller Lever	.858 (21.79)	25	CH390-ND	13.18	11.72	9.77	E72-40KT
6C				Lever	.858 (21.79)	67	CH391-ND	11.64	10.35	8.61	E72-40HT
Internationally Approved Ultra Subminiature — DB1 Series											
7	SPDT	5A	Solder	Plunger Only	—	150	CH288-ND	4.27	3.80	3.15	DB1C-A1AA
			PCB Pin	Plunger Only	—	150	CH289-ND	4.27	3.80	3.15	DB1C-C1AA
Replacement Actuator Simulated Roller Lever, SB Suffix							CH670-ND	.19	.17	.14	0614-1237
Replacement Actuator Simulated Roller Lever, SC Suffix							CH671-ND	.19	.17	.14	0614-1238
Replacement Actuator Simulated Roller Lever, SD Suffix							CH672-ND	.35	.32	.26	0614-1239
Line Interrupt Switches — F8											
8	SPST	.1A	.250 QC (6.35)	Barrier	—	866	CH309-ND	16.58	14.74	12.29	F83A-B120
		10A	.187 QC (4.75)	Plunger Only	—	866	CH303-ND	10.91	9.70	8.09	F81A-A110
			.250 QC (6.35)	Plunger Only	—	866	CH304-ND	10.91	9.70	8.09	F81A-A120
			.187 QC (4.75)	Barrier	—	866	CH305-ND	11.21	9.96	8.30	F81A-B110
			.250 QC (6.35)	Barrier	—	866	CH306-ND	11.21	9.96	8.30	F81A-B120
	SPST/SPDT	10A	.250 QC (6.35)	Push Button	.238 (6.05)	866	CH626-ND	12.04	10.71	8.93	F81J-A120
	SPST	16A	.250 QC (6.35)	Plunger Only	—	866	CH307-ND	12.45	11.07	9.22	F82A-A120
				Barrier	—	866	CH308-ND	12.64	11.24	9.37	F82A-B120

(Continued)

Fig. 3
Series E61, E62, E63

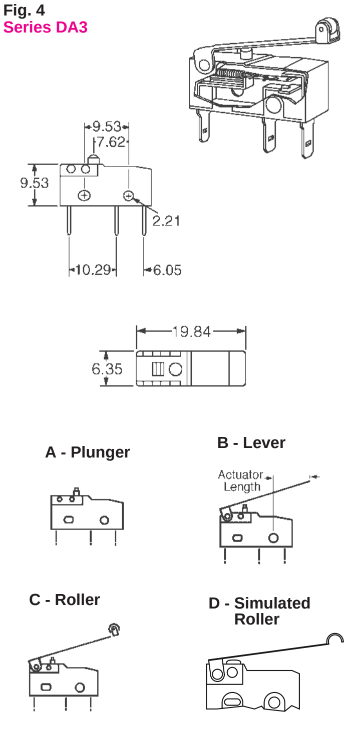


A - Plunger **B - Lever**

C - Roller **D - Simulated Roller**

Ratings:
E61: 5 amps – 125/250VAC
E62: 10.1 amps – 125/250VAC, 1/4 HP – 125VAC
E63: .1 amp – 125VAC, .25 amp – 30VDC

Fig. 4
Series DA3



A - Plunger **B - Lever**

C - Roller **D - Simulated Roller**

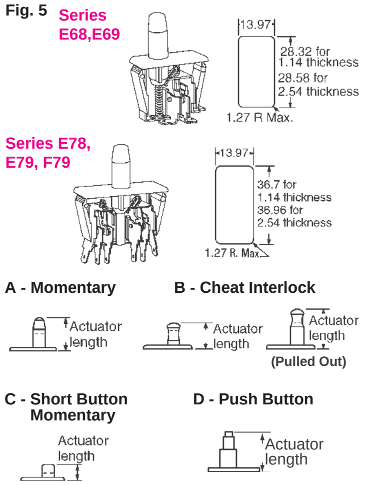
Ratings:
DA3: 0.1 amps 125VAC.

CHERRY Snap and Lever Type Switches *(Cont.)*

Fig.	Circuitry	Current	Terminal Inch (mm)	Actuator	Actuator Length Inch (mm)	Oper. Force (Max. gms.)	Digi-Key Part No.	Price Each			Cherry Part No.
								1	10	50	
Light Force and Standard Force Switches - E Series											
9A	SPDT	.1 A	.187 QC (4.75)	Plunger Only	—	75	CH331-ND	4.10	3.65	3.05	E21-00A
9B				Long Lever	1.400 (35.56)	35	CH333-ND	5.67	5.04	4.20	E21-50H
				Light Force - Long Lever	1.58 (40.13)	5	CH510-ND	6.37	5.67	4.73	E21-75HX
				Light Force - Long Lever	2.932 (74.47)	2	CH512-ND	6.16	5.48	4.56	E21-85HX
9C				Light Force - Roller	1.34 (34.04)	8	CH507-ND	6.67	5.93	4.94	E21-50KX
				Light Force - Roller	1.516 (38.50)	5	CH511-ND	6.10	5.43	4.52	E21-75KX
				Long Roller	1.340 (34.04)	35	CH334-ND	6.53	5.81	4.83	E21-50K
9D				Short Roller	.810 (20.57)	75	CH332-ND	6.16	5.48	4.56	E21-00K
9E				Light Force - Plastic Lever	1.34 (34.04)	8	CH508-ND	6.08	5.40	4.49	E21-50NX
9C	SPST-NO	.1 A	.187 QC (4.75)	Light Force - Roller	1.34 (34.04)	8	CH509-ND	6.35	5.64	4.70	E21-51KX
9A	SPDT	3A	.187 QC (4.75)	Light Force - Button	—	15	CH513-ND	3.05	2.72	2.27	E22-00A
				Plunger Only	—	15	CH335-ND	3.35	2.98	2.48	E22-00AX
9B				Light Force - Short Lever	.865 (21.97)	15	CH514-ND	3.97	3.53	2.94	E22-00HX
				Light Force - Long Lever	1.58 (40.13)	5	CH517-ND	3.75	3.34	2.77	E22-75HX
				Light Force - Roller	1.516 (38.50)	5	CH518-ND	4.27	3.80	3.15	E22-75KX
				Long Lever	1.400 (35.56)	8	CH337-ND	3.75	3.34	2.78	E22-50HX
				Long Lever	1.400 (35.56)	35	CH338-ND	3.48	3.10	2.59	E22-50H
				Long Lever	2.757 (70.03)	4	CH340-ND	3.75	3.34	2.78	E22-55HX
				Long Lever	2.932 (74.47)	2	CH341-ND	3.92	3.48	2.90	E22-85HX
9C				Std. Force - Roller	1.516 (38.50)	25	CH516-ND	4.10	3.65	3.05	E22-50KL
				Long Roller	1.340 (34.04)	35	CH339-ND	4.10	3.65	3.05	E22-50K
9D				Roller	.865 (21.97)	15	CH515-ND	4.64	4.13	3.44	E22-00KX
				Short Roller	.810 (20.57)	75	CH336-ND	4.10	3.65	3.05	E22-00K
9A	SPDT	5A	.187 QC (4.75)	Plunger Only	—	45	CH342-ND	3.05	2.72	2.27	E23-00AX
				Plunger Only	—	170	CH343-ND	2.84	2.52	2.10	E23-00A
9B				Std. Force - Long Lever	1.40 (35.56)	86	CH519-ND	3.54	3.15	2.63	E23-50H
				Long Lever	1.400 (35.56)	22	CH345-ND	4.02	3.58	2.63	E23-50HX
				Long Lever	2.757 (70.03)	10	CH347-ND	3.86	3.44	2.86	E23-55HX
				Long Lever	2.932 (74.47)	6	CH348-ND	3.86	3.44	2.86	E23-85HX
9C				Light Force - Roller	1.516 (38.50)	14	CH523-ND	4.67	4.16	3.47	E23-75KX
				Long Roller	1.340 (34.04)	86	CH346-ND	4.19	3.72	3.11	E23-50K
				Light Force - Roller	1.34 (34.04)	22	CH520-ND	4.37	3.89	3.23	E23-50KX
9B				Light Force - Long Lever	1.58 (40.13)	14	CH522-ND	3.86	3.44	2.86	E23-75HX
9D				Short Roller	.810 (20.57)	170	CH344-ND	4.19	3.72	3.11	E23-00K
9E				Std. Force - Plastic Lever	1.382 (35.10)	86	CH521-ND	3.48	3.10	2.58	E23-50N
9F				Plastic Sim. Roller	1.289 (32.74)	22	CH524-ND	3.40	3.03	2.52	E23-90N
9A	SPDT	10A	.187 QC (4.75)	Light Force - Button	—	75	CH525-ND	3.13	2.79	2.31	E33-00AX
				Plunger Only	—	285	CH349-ND	2.73	2.43	2.02	E33-00A
			Screw Term.	Light Force - Button	—	75	CH526-ND	6.59	5.86	4.87	E33-10A
			Solder Term.		—	75	CH527-ND	2.97	2.64	2.21	E33-20A
9B			.187 QC (4.75)	Std. Force - Long Lever	1.58 (40.13)	86	CH528-ND	3.40	3.03	2.52	E33-50HL
				Long Lever	1.400 (35.56)	144	CH351-ND	3.13	2.79	2.31	E33-50H
				Long Lever	2.757 (70.03)	17	CH353-ND	3.35	2.98	2.48	E33-55HX
				Long Lever	2.932 (74.47)	10	CH355-ND	3.83	3.41	2.84	E33-85HX
9C				Std. Force - Roller	1.516 (38.50)	86	CH529-ND	3.97	3.53	2.94	E33-50KL
				Light Force - Roller	1.34 (34.04)	37	CH530-ND	4.27	3.80	3.15	E33-50KX
				Long Roller	1.340 (34.04)	144	CH352-ND	3.62	3.22	2.69	E33-50K
				Long Lever	1.580 (40.13)	22	CH354-ND	3.35	2.98	2.48	E33-75HX
9D				Short Roller	.810 (20.57)	285	CH350-ND	3.51	3.12	2.61	E33-00K
9F				Plastic Sim. Roll	1.289 (32.74)	22	CH532-ND	3.32	2.96	2.46	E33-90N
9A	SPDT	15A	.187 QC (4.75)	Plunger Only	—	400	CH356-ND	3.13	2.79	2.31	E34-00A
			Solder Term	Std. Force - Button	—	400	CH534-ND	2.84	2.52	2.10	E34-20A
9B			.187 QC (4.75)	Std. Force - Lever	1.58 (40.13)	120	CH535-ND	3.70	3.29	2.73	E34-50HL
				Long Lever	1.400 (35.56)	50	CH358-ND	3.46	3.08	2.57	E34-50HX
				Long Lever	1.400 (35.56)	200	CH359-ND	3.46	3.08	2.57	E34-50H
				Long Lever	2.757 (70.03)	22	CH362-ND	3.51	3.12	2.61	E34-55HX
				Long Lever	2.932 (74.47)	13	CH363-ND	3.70	3.29	2.73	E34-85HX
9C				Long Roller	1.340 (34.04)	200	CH360-ND	3.97	3.53	2.94	E34-50K
9D				Light Force - Roller	.865 (21.97)	100	CH533-ND	4.10	3.65	3.05	E34-00KX
				Short Roller	.810 (20.57)	400	CH357-ND	4.02	3.58	2.99	E34-00K
9E				Plastic Lever	1.382 (35.10)	200	CH361-ND	3.32	2.96	2.46	E34-50N
Standard Size Insulator for E34 Series							CH663-ND	.27	.24	.20	0015-0051
Small Size Insulator for E62 Series							CH664-ND	.41	.36	.30	0015-0052
Large Black Plastic Insulator for E34 Series							CH665-ND	.27	.24	.20	0015-0054
Miniature International — D4 Series											
10A	SPDT	.1A	.187 QC (4.75)	Button	—	75	CH115-ND	4.54	4.04	3.36	D41C-R1AA
				Button	—	15	CH119-ND	4.78	4.25	3.55	D41L-R1AA
10B				Lever Std. Ratio	1.400 (35.56)	35	CH297-ND	4.97	4.42	3.68	D41C-R1LD
				Lever High Ratio	2.93 (74.47)	2	CH118-ND	4.97	4.42	3.68	D41L-R1XL
10C				Roller Std. Ratio	.810 (20.57)	75	CH117-ND	5.18	4.61	3.85	D41C-R1RA
				Roller Std. Ratio	1.340 (34.04)	35	CH298-ND	5.18	4.61	3.85	D41C-R1RD
10A	SPDT	3A	.187 QC (4.75)	Button	—	75	CH120-ND	2.48	2.21	1.85	D42C-R1AA
				Button	—	15	CH124-ND	2.92	2.60	2.17	D42L-R1AA
10B				Lever High Ratio	2.93 (74.47)	2	CH123-ND	4.40	3.92	3.26	D42L-R1XL
10C				Roller Std. Ratio	.810 (20.57)	75	CH122-ND	3.43	3.05	2.55	D42C-R1RA
10A	SPDT	5A	.187 QC (4.75)	Button	—	170	CH125-ND	2.46	2.19	1.83	D43C-R1AA
				Button	—	45	CH129-ND	2.78	2.48	2.06	D43L-R1AA
10B				Lever High Ratio	2.93 (74.47)	6	CH128-ND	3.46	3.08	2.57	D43L-R1ML
10C				Roller Std. Ratio	.810 (20.57)	170	CH127-ND	3.56	3.17	2.65	D43C-R1RA

(Continued)

Fig. 5



Ratings:
E69: 10 amps 125/250VAC, 1/3 H.P., 125/250 VAC
E68/E78: 0.1 amps 125VAC
E79/F79: 10 amps 125/250VAC, 1/3 H.P., 125/250VAC

Fig. 6
Series E72, E73

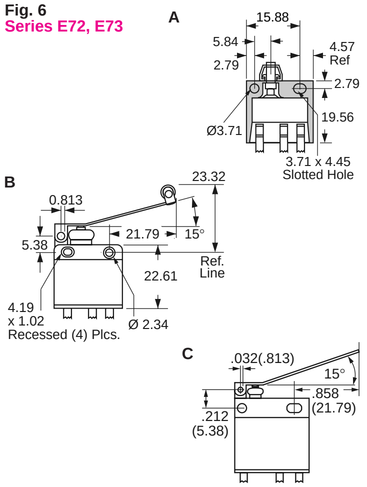


Fig. 7
Series DB

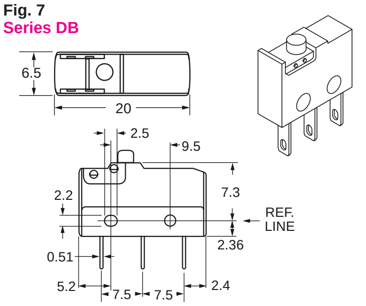
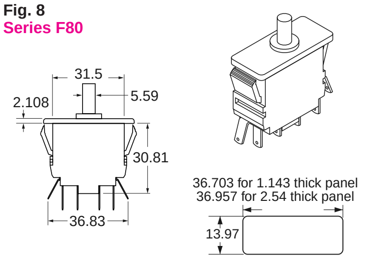


Fig. 8
Series F80

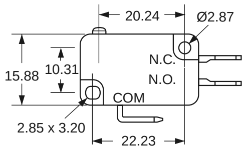


Snap and Lever Type Switches *(Cont.)*

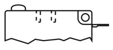
Fig.	Circuitry	Current	Terminal Inch (mm)	Actuator	Actuator Length Inch (mm)	Oper. Force (Max. gms.)	Digi-Key Part No.	Price Each			Cherry Part No.
								1	10	50	
Miniature International — D4 Series (cont.)											
10A	SPDT	10A	.187 QC (4.75)	Button	—	285	CH130-ND	2.48	2.21	1.85	D44C-R1AA
				Button	—	75	CH134-ND	2.73	2.43	2.02	D44L-R1AA
10B				Lever Std. Ratio	.865 (21.97)	285	CH131-ND	2.97	2.64	2.21	D44C-R1LA
				Lever Std. Ratio	1.400 (35.56)	35	CH299-ND	3.00	2.67	2.23	D44L-R1LD
				Lever High Ratio	2.93 (74.47)	10	CH133-ND	3.24	2.88	2.40	D44L-R1ML
10C				Roller Std. Ratio	.810 (20.57)	285	CH132-ND	3.27	2.91	2.42	D44C-R1RA
				Roller Std. Ratio	—	75	CH301-ND	3.62	3.22	2.69	D44L-R1RA
10A	SPDT	15A	.187 QC (4.75)	Button	—	400	CH135-ND	2.97	2.64	2.21	D45C-R1AA
				Button	—	100	CH139-ND	2.97	2.64	2.21	D45L-R1AA
10B				Lever Std. Ratio	.865 (21.97)	400	CH136-ND	3.27	2.91	2.42	D45C-R1LA
				Lever High Ratio	2.93 (74.47)	13	CH138-ND	3.13	2.79	2.31	D45L-R1ML
				Lever Std. Ratio	2.93 (74.47)	17	CH302-ND	2.97	2.64	2.21	D45L-R1LL
10C				Roller Std. Ratio	.810 (20.57)	400	CH137-ND	3.54	3.15	2.63	D45C-R1RA
Miniature International - D4 Series - U.S. Version											
10B	SPDT	.1A	.187 QC (4.75)	Alum. Lever-Standard Ratio	1.4 (35.56)	8	CH578-ND	4.97	4.42	3.68	D41L-R1YD
10C				Roller - Standard Ratio	.810 (20.57)	15	CH576-ND	5.70	5.07	4.22	D41L-R1RA
				Roller - Standard Ratio	1.340 (34.04)	8	CH577-ND	5.70	5.07	4.22	D41L-R1RD
10B	SPDT	3A	.187 QC (4.75)	Lever - Standard Ratio	1.4 (35.56)	35	CH579-ND	2.86	2.55	2.12	D42C-R1LD
				Alum. Lever-Standard Ratio	1.4 (35.56)	8	CH581-ND	4.40	3.92	3.26	D42L-R1YD
				Alum. Lever-Standard Ratio	2.757 (70.03)	3.5	CH582-ND	4.51	4.01	3.34	D42L-R1YL
10C				Roller - Standard Ratio	1.340 (34.04)	75	CH580-ND	3.56	3.17	2.65	D42C-R1RD
10B	SPDT	5A	.187 QC (4.75)	Lever - High Ratio	1.580 (40.13)	51	CH583-ND	3.13	2.79	2.31	D43C-R1MD
				Lever - Standard Ratio	1.4 (35.56)	35	CH586-ND	4.43	3.94	3.28	D43L-R1LD
				Lever - High Ratio	1.580 (40.13)	20	CH587-ND	3.35	2.98	2.48	D43L-R1MD
10C				Roller - Standard Ratio	1.340 (34.04)	86	CH584-ND	3.56	3.17	2.65	D43C-R1RD
				Roller - High Ratio	1.516 (38.51)	51	CH585-ND	3.56	3.17	2.65	D43C-R1TD
				Roller - Standard Ratio	.810 (20.57)	45	CH588-ND	3.83	3.41	2.84	D43L-R1RA
10B	SPDT	10A	.187 QC (4.75)	Lever - Standard Ratio	1.4 (35.56)	144	CH589-ND	2.97	2.64	2.21	D44C-R1LD
				Lever - Standard Ratio	.865 (21.97)	75	CH591-ND	3.05	2.72	2.27	D44L-R1LA
				Lever - High Ratio	1.580 (40.13)	20	CH592-ND	3.05	2.72	2.27	D44L-R1MD
10C				Roller - Standard Ratio	1.340 (34.04)	144	CH590-ND	3.27	2.91	2.42	D44C-R1RD
				Roller - Standard Ratio	1.340 (34.04)	37	CH593-ND	3.59	3.20	2.67	D44L-R1RD
10A	SPDT	15A	.250 QC (6.35)	Button	—	400	CH594-ND	2.92	2.60	2.17	D45C-V1AA
10B			.187 QC (4.75)	Lever - Standard Ratio	.865 (21.97)	100	CH595-ND	3.13	2.79	2.31	D45L-R1LA
				Lever - Standard Ratio	1.4 (35.56)	35	CH596-ND	3.46	3.08	2.56	D45L-R1LD
				Lever - High Ratio	1.580 (40.13)	20	CH597-ND	3.13	2.79	2.31	D45L-R1MD
10C				Roller - Standard Ratio	1.340 (34.04)	50	CH598-ND	4.10	3.65	3.05	D45L-R1RD

Fig.	Circuitry	Cur-rent	Terminal Inch (mm)	Actuator	Oper. Force (Max. gms.)	Digi-Key Part No.	Price Each			Cherry Part No.
							1	10	50	
High Performance Miniature Snap Switches - K Series										
11	SPDT	50mA	.187 (4.75) QC Straight	Button - Standard Temp.	25	CH627-ND	3.92	3.48	2.90	KWAA-QACA
				Button- High Temp.	25	CH628-ND	4.75	4.23	3.53	KWAB-QACA
				Button - Standard Temp.	75	CH629-ND	3.92	3.48	2.90	KWBA-QACA
				Button- High Temp.	75	CH630-ND	4.67	4.16	3.47	KWBB-QACA
		3A	.187 (4.75) QC Straight	Button - Standard Temp.	25	CH631-ND	2.94	2.62	2.18	KWEA-QACA
				Button- High Temp.	25	CH632-ND	3.48	3.10	2.58	KWEB-QACA
				Button - Standard Temp.	75	CH633-ND	2.94	2.62	2.18	KWFA-QACA
				Button- High Temp.	75	CH634-ND	3.48	3.10	2.58	KWFB-QACA
		5A	.187 (4.75) QC Straight	Button - Standard Temp.	50	CH635-ND	2.75	2.45	2.04	KWGA-QACA
				Button- High Temp.	50	CH636-ND	3.21	2.86	2.37	KWGB-QACA
				Button - Standard Temp.	150	CH637-ND	2.46	2.19	1.83	KWHA-QACA
				Button- High Temp.	150	CH638-ND	3.21	2.86	2.37	KWHB-QACA
		10A	.187 (4.75) QC Straight	Button - Standard Temp.	75	CH639-ND	2.70	2.40	2.00	KWJA-QACA
				Button- High Temp.	75	CH640-ND	3.16	2.81	2.33	KWJB-QACA
				Button - Standard Temp.	150	CH641-ND	2.46	2.19	1.83	KWKA-QACA
				Button- High Temp.	150	CH642-ND	3.21	2.86	2.37	KWKB-QACA
		15A	.187 (4.75) QC Straight	Button - Standard Temp.	150	CH643-ND	2.67	2.38	1.97	KWMA-QACA
				Button- High Temp.	150	CH645-ND	3.27	2.91	2.42	KWMB-QACA
			.250 (6.35) QC Straight	Button - Standard Temp.	150	CH644-ND	2.81	2.50	2.08	KWMA-VACA
				Button- High Temp.	150	CH646-ND	3.27	2.91	2.42	KWMB-VACA
		25A	.250 (6.35)QC Straight	Button - Standard Temp.	225	CH647-ND	3.46	3.08	2.56	KWSA-VACA
Optional Short Lever Actuator for K Series						CH659-ND	.22	.20	.16	0014-6976
Optional Long Lever Actuator for K Series						CH660-ND	.24	.22	.18	0014-6978
Optional Extra Long Lever Actuator for K Series						CH661-ND	.35	.32	.26	0014-6980
Optional Simulated Roller Lever Actuator for K Series						CH662-ND	.24	.22	.18	0014-6982

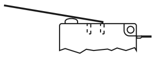
Fig. 9
Series E



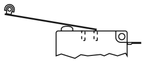
A - Plunger



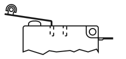
B - Lever



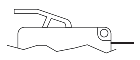
C - Long Roller



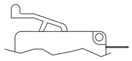
D - Short Roller



E - Thermoplastic Lever



F - Simulated Thermo-plastic Roller



Ratings:

E21: .1 amp 125VAC, Gold contacts

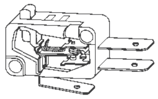
E22: 3 amps 250VAC

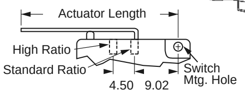
E23: 5 amps 250VAC

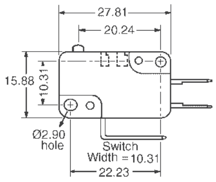
E33: 10 amps 250VAC

E34: 15 amps 250VAC, UL94HB

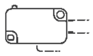
Fig. 10
Series D4



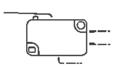




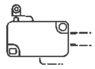
A - Plunger



B - Lever



C - Roller



Ratings: 187 QC terminals.

D41: .1 amps 125VAC, Gold crosspoint contacts

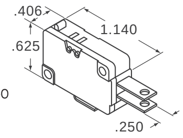
D42: 3 amps 125/250VAC

D43: 5 amps, 1/4 H.P., 125/250VAC

D44: 10 amps, 1.2 H.P., 125/250VAC

D45: 15 amps. 1/2 H.P., 125/250VAC.

Fig. 11 Series K



Features: Centrally located common terminal, wiping contact action, standard temperature ratings up to 150° C

Flammability Ratings: UL94V-O

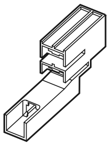
Electrical Life: 100,000 cycles

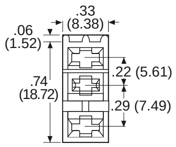
Temperature Ratings:
Standard Temperature:-40° to +85°C
High Temperature:-40° to +150°C

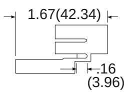
UL and CUL Ratings: KWA/KWB: 50mA, 28 VDC **KWE/KWF:** 3 amp, 125/250 VAC, 1/10 HP **KWG/KWH:** 5 amps, 1/4 HP, 125/250VAC **KWJ:** 10 amps, 1/2 HP, 125/250VAC **KWM:** 15.1 amps, 1/2 HP, 125/250VAC **KWS:** 25 amp, 250 VAC

Switch Connector and Terminal

(TO BE USED WITH D4 and E SERIES)







Switch Connector: • 94V-2 Nylon • U.L. Approved • Accepts 14-28 AWG • No. of Circuits: 3 • Maximum Current Rating: 10 • Maximum Voltage Rating: 250 • Mounting Ears: No • Maximum Panel Thickness: N/A • Eng. No.: 2191

WM2553-ND Connector .... **$.54**/1; **$4.73**/10; **$31.50**/100

Terminal: Without Detent, Loose Form

WM2514-ND Terminal .... **$.17**/1; **$1.36**/10; **$11.30**/100

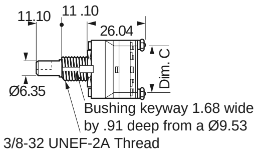
Adjustable Stop Rotary Switches

Series 42, 44, 56 & 71

9154B-ND **Grayhill Engineering Catalog** **$4.95**

Fig. 1

42 and 44 Series: **Adjustable Stop:** Two removable stop washers allow you to limit the number of switch positions as needed. A knurled nut is supplied to secure the washers if desired. **Electrical Ratings:** Nonshorting 1 amp, carry 10 amps continuously. **Contact Resistance:** After 25,000 cycles of operation 20 milliohms max. **Insulation Resistance:** 50,000 megohms min. (initially). **Voltage Breakdown:** 1,000VAC initially (500VAC or better after most environmental tests). **Materials & Finishes: Terminals:** Brass, lead-tin plated & fused. **Common Plate, Including Solder Lug:** Brass, silver plated .0003" min.



Series 42			Series 44		
A	B	C	A	B	C
14.27	25.40	21.08	16.31	29.51	25.40

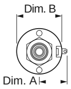
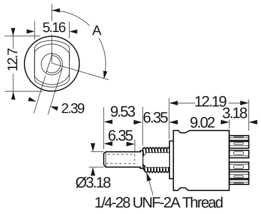


Fig. 2

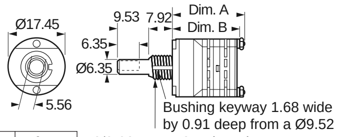
56 Series: **Electrical Ratings:** Nonshorting 200mA, carry 6 amps continuously. **Contact Resistance:** 100 milliohms max. (15 milliohms initially). **Insulation Resistance & Voltage Breakdown:** 10,000 megohms min. **Materials & Finishes: Terminals:** Brass, gold over silver over nickel plated.



Angle Of Throw	
30°	36°
Angle "A"	
105°	108°

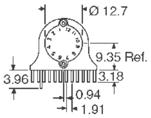
71 Series: **Electrical Ratings:** Nonshorting 1/4 amp, carry 4 amps continuously. **Contact Resistance:** 50 milliohms max. (20 milliohms initially). **Insulation Resistance:** 10,000 megohms min. between mutually insulated parts (50,000 megohms initially). **Materials & Finishes: Base Contacts, Common Plate & Terminals:** Brass, gold plate 5 microinches min. over silver plate 50 microinches min. over nickel 20 microinches min.

Fig. 3



Dim. A	Dim. B
1 Deck	
19.33	.79
2 Decks	
24.87	.79

Fig. 4



PC Mount —
Rear view

56 & 71 Series

Adjustable Stop: Allows you to change number of positions per pole.

Simply remove and relocate stop pins in the holes in front of switch.

Pins are held in place by a self-adhesive sticker which fits over the front plate.

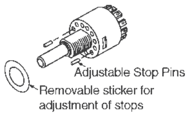


Fig.	Angle Of Throw	Terminals	No. of Poles	Pos. per Pole	No. of Decks	Current Rating Amps	Digi-Key Part No.	Pricing* 1	25	100	Grayhill Part No.
1	36	Solder Lug	SP	10	1	1	GH4201-ND	34.70	694.00	2081.99	42D36-01-1-AJN
	36	Solder Lug	DP	5	1	1	GH4202-ND	36.18	723.58	2170.71	42D36-01-2-AJN
	30	Solder Lug	SP	12	1	1	GH4401-ND	35.61	712.12	2136.40	44D30-01-1-AJN
	30	Solder Lug	DP	6	1	1	GH4402-ND	37.11	742.15	2226.49	44D30-01-2-AJN
2	30	Solder Lug	SP	12	1	200mA	GH5601-ND	10.20	203.97	611.90	56D30-01-1-AJN
	30	Solder Lug	DP	6	1	200mA	GH5602-ND	11.31	226.15	678.40	56D30-01-2-AJN
	36	Solder Lug	SP	10	1	200mA	GH5603-ND	9.87	197.38	592.10	56D36-01-1-AJN
	36	Solder Lug	DP	5	1	200mA	GH5604-ND	10.98	219.68	659.00	56D36-01-2-AJN
3	30	Solder Lug	SP	12	1	250mA	GH7101-ND	14.37	287.39	862.17	71BD30-01-1-AJN
	30	Solder Lug	DP	6	1	250mA	GH7102-ND	14.93	298.55	895.60	71BD30-01-2-AJN
	30	Solder Lug	SP	12	2	250mA	GH7103-ND	18.61	372.17	1116.50	71BD30-02-1-AJN
	30	Solder Lug	DP	6	2	250mA	GH7104-ND	19.77	395.35	1186.10	71BD30-02-2-AJN
4	30	PC	SP	12	1	250mA	GH7105-ND	22.33	468.94	1335.90	71BDF30-01-1-AJN
	30	PC	DP	6	1	250mA	GH7106-ND	23.16	486.36	1385.54	71BDF30-01-2-AJN
	30	PC	SP	12	2	250mA	GH7107-ND	30.62	643.19	1832.30	71BDF30-02-1-AJN
	30	PC	DP	6	2	250mA	GH7108-ND	32.23	677.01	1928.66	71BDF30-02-2-AJN

* Call for pricing of larger quantities

Cannon

ITT Industries
Engineered for life

C&K Adjustable Stop Rotary Switches

Specifications: • **Contact Rating:** Switch-2.5 AMPS @ 125 V AC or 28 V DC; 150 mA @ 250 V AC or DC. Carry - 5 AMPS • **Electrical Life:** 15,000 make-and-break cycles • **Contact Resistance:** 20 milliohms typ. • **Operating Temperature:** -30°C to 85°C ***Materials:*** • **Housing:** Glass filled nylon, red • **Movable Contact:** coin silver, silver plated • **Stationary Contacts & Terminals:** Brass, silver plated • **Hardware:** Nut, Lockwasher, Stop Ring Included

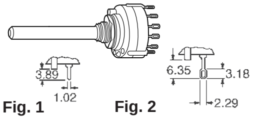


Fig. 1 **Fig. 2**

Fig.	Poles	No. of Pos.	Digi-Key Part No.	Pricing 1	25	100	250	C&K Part No.
1	SP	12	CKC7001-ND	5.58	111.60	353.40	697.50	A11215RNCQ
2	SP	12	CKC7002-ND	5.58	111.60	353.40	697.50	A11215RNZQ
1	DP	6	CKC7003-ND	5.91	118.20	374.30	738.75	A20615RNCQ
2	DP	6	CKC7004-ND	5.91	118.20	374.30	738.75	A20615RNZQ
1	3P	4	CKC7005-ND	5.82	116.40	368.60	727.50	A30415RNCQ
2	3P	4	CKC7006-ND	5.82	116.40	368.60	727.50	A30415RNZQ
1	4P	3	CKC7007-ND	6.39	127.80	404.70	798.75	A40315RNCQ
2	4P	3	CKC7008-ND	6.39	127.80	404.70	798.75	A40315RNZQ

CTS Adjustable Stop Rotary Switches

SPECIFICATIONS: • Adjustable stop allows you to limit the number of switch positions as needed • **Rotor Contact:** Standard with Silver plated Brass • **Rotor:** Standard with Nylon maximum temperature requirements of 125°C • **Voltage and Current ratings:** UL ratings are 3/4 amp at 125 volts AC; 1/4 amp at 250 volts DC; 1/2 amp at 125 volts DC (non-shorting contacts) • **Contact Resistance:** .008 to .010 ohms • **Contact Life:** Silver plated brass, solid silver rotor contacts, and silver plated brass stator contacts provide a minimum reliable life of over 1,100,000 operations or of 50,000 cycles through twelve positions and return without appreciable rise in contact resistance.

Fig. 1

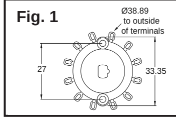
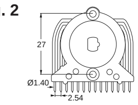


Fig. 2



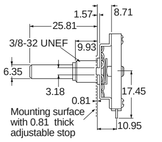
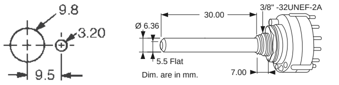


Fig.	Angle of Throw	Type	Terminals	No. Poles	No. Pos.	No. Decks	Current Rating Amps	Digi-Key Part No.	Pricing 1	10	50
1	30°	Non-Short	Solder Lug	SP	12	1	3/4A-125VAC	CT2121-ND	7.59	70.60	292.99
	30°	Shorting	Solder Lug	SP	11	1	3/4A-125VAC	CT2122-ND	7.59	70.60	292.99
2	30°	Non-Short	Printed Circuit	SP	12	1	3/4A-125VAC	CT2123-ND	8.28	77.00	319.55
	30°	Shorting	Printed Circuit	SP	11	1	3/4A-125VAC	CT2124-ND	8.23	76.60	317.89

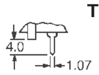
E-SWITCH® Adjustable Stop Rotary Switches KC Series

With applications ranging for test & measurement equipment to telephone base stations to hospital controls. These rotary switches have performed exceptionally well.

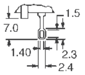
Contacts (Non-Shorting). Available with solder lugs or printed circuit boards pins with adjustable stops to select any number of positions. **Operating Force:** 570 Grams. **Indexing:** 30° Index. **Contact Rating (Switching):** 150mA 250V AC/DC; 350mA 110V AC/DC. **Contact Rating (Non-Switching):** 5 Amps. **Initial Contact Resistance:** Silver = 50 milliohms max. **Operating Temperature:** –30°C to +85°C. **Moving and Fixed Contact:** Silver plated brass.



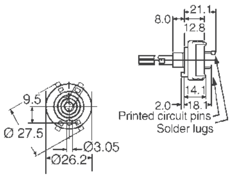
Terminations



PC Mount



Solder Eyelet



No. of Pole	No. of Pos.	Termination	Digi-Key Part No.	Pricing 1	10	100	250	E-Switch Part No.
SP	12	PC Mount	EG1951-ND	5.07	45.66	388.93	803.23	KC-52-A-01-N-P-S
SP	12	Solder Eyelet	EG1952-ND	5.07	45.66	388.93	803.23	KC-52-A-01-N-L-S
DP	6	PC Mount	EG1953-ND	5.07	45.66	388.93	803.23	KC-26-A-01-N-P-S
DP	6	Solder Eyelet	EG1954-ND	5.07	45.66	388.93	803.23	KC-26-A-01-N-L-S
3P	4	PC Mount	EG1955-ND	5.07	45.66	388.93	803.23	KC-34-A-01-N-P-S
3P	4	Solder Eyelet	EG1956-ND	5.07	45.66	388.93	803.23	KC-34-A-01-N-L-S
4P	3	PC Mount	EG1957-ND	5.07	45.66	388.93	803.23	KC-43-A-01-N-P-S
4P	3	Solder Eyelet	EG1958-ND	5.07	45.66	388.93	803.23	KC-43-A-01-N-L-S

E-SWITCH® Slide Switches

Fig. 1

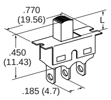
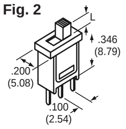


Fig. 2



• With mounting ears

Fig.	Circuit	Rating	Dim. L In. (mm)	Switch Function	Terminal	Digi-Key Part No.	Price Each 1	10	100	E-Switch Part No.
					500 Series					
1	SPDT	5A @ 120VAC	.152 (3.86)	On-On	Solder Lug	EG2473-ND	3.59	3.24	2.76	500SSP1S1M1QEA
	SPDT	5A @ 28VDC	.152 (3.86)	On-On	Solder Lug	EG2476-ND•	3.88	3.49	2.98	500SSP1S1M1QEB
	SPDT	0.4 VA @ 20VDC	.152 (3.86)	On-On	P.C. Mount	EG2472-ND	3.88	3.49	2.98	500SSP1S1M2REA
	SPDT	5A @ 28VDC	.152 (3.86)	On-On	Right Angle	EG2478-ND	4.21	3.80	3.23	500SSP1S1M6QE
	SPDT	0.4 VA @ 20VDC	.152 (3.86)	On-On	Solder Lug	EG2477-ND	4.50	4.05	3.45	500SSP1S1M6RE
	SPDT	5A @ 28VDC	.152 (3.86)	On-On	Right Angle	EG2480-ND	4.43	3.99	3.40	500SSP1S1M7QEA
	SPDT	0.4 VA @ 20VDC	.152 (3.86)	On-On	Right Angle	EG2479-ND	4.71	4.24	3.62	500SSP1S1M7RE
	DPDT	5A @ 28VDC	.152 (3.86)	On-On	P.C. Mount	EG2475-ND	5.26	4.74	4.04	500SDP1S1M2QEA
	DPDT	0.4 VA @ 20VDC	.152 (3.86)	On-On	P.C. Mount	EG2474-ND	5.71	5.15	4.38	500SDP1S1M2REA
2	SPDT	5A @ 28VDC	.122 (3.10)	On-On	P.C. Mount	EG2481-ND	5.42	4.88	4.16	500ASSP1M2QE
	SPDT	0.4 VA @ 20VDC	.122 (3.10)	On-On	P.C. Mount	EG2482-ND	5.75	5.18	4.42	500ASSP1M2RE
	SPDT	5A @ 28VDC	.122 (3.10)	On-On	Right Angle	EG2483-ND	5.93	5.34	4.55	500ASSP1M6QE
	SPDT	0.4 VA @ 20VDC	.122 (3.10)	On-On	Right Angle	EG2484-ND	6.26	5.64	4.81	500ASSP1M6RE

CTS DIP Switches

Electrical Specifications:

Initial Contact Resistance: 25 milliohms (209, 219 Series); 50 milliohms (193, 194, 204, and 206 Series); 100 milliohms (195, 208, and 218 Series).

Max. Contact Resistance: 100 milliohms after 10,000 cycles switching 50mA @ 24VDC (206 Series); 100 milliohms after 7,000 cycles switching 50mA @ 24VDC (193 and 194 Series); 500 milliohms after 2,000 cycles switching 50mA @ 24VDC (195 Series); 500 milliohms after 2,000 cycles switching 50mA @ 15VDC or 100mΩ after 1,000 cycles switching 25mA @ 24VDC (208 Series); 50 milliohms max. at end of life (209 and 219 Series).

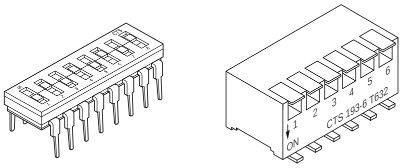
Gold finish refers to internal contact area of the switch, terminals are solder coated.

Max. Non-Switching Rating: 100mA or 50VDC.

Insulation Resistance: Across open switch and between adjacent closed switches - 1 x 10^9 ohms (218 Series: 100mΩ min.).

Dielectric Breakdown: 500VDC max. for 1 min. (218 Series – 300VDC max.).

Switch Capacitance: Between adjacent switches max. - 5.0pF (218 Series: 10pF).



Shock: Per MIL-STD-202F, method 213B, condition A with no contact inconsistencies greater than 1µsec (206, 208, 209 and 219 Series); no mechanical damage or changes of switch settings with 25G applied (193, 194, 195, 204 and 218 Series).

Vibration: Per MIL-STD-202F, method 204D, condition B (.06" or 15G's between 10Hz to 2KHz) with no contact inconsistencies greater than 1µsec (204, 206, 208, 209, 218, and 219 Series). No mechanical damage or changes of switch settings during or after testing when tested in three mutually perpendicular planes at 10-50Hz sweep or at 60Hz constant vibration (193, 194 and 195 Series).

Fig.	No. of Pos.	Dim. A (mm)	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	CTS Part No.
206 Series — SPST, Gold Finish, Lt. Blue Body							
1	2	7.26	CT2062-ND	1.28	11.73	106.65	206-2
	3	9.80	CT2063-ND	1.01	9.28	84.38	206-3
	4	12.34	CT2064-ND	.93	8.56	77.85	206-4
	5	14.88	CT2065-ND	1.12	10.30	93.60	206-5
	6	17.42	CT2066-ND	1.09	9.97	90.68	206-6
	7	19.96	CT2067-ND	1.10	10.05	91.35	206-7
	8	22.50	CT2068-ND	1.01	9.23	83.93	206-8
	9	25.04	CT2069-ND	1.06	9.73	88.43	206-9
	10	27.58	CT20610-ND	1.08	9.90	90.00	206-10
	12	32.66	CT20612-ND	1.24	11.39	103.50	206-12
206-ST Series — SPST, Gold Finish, Sealed, Lt. Blue Body							
1	2	7.26	CT2062ST-ND	1.36	12.47	113.40	206-2ST
	3	9.80	CT2063ST-ND	1.09	9.95	90.45	206-3ST
	4	12.34	CT2064ST-ND	1.03	9.45	85.95	206-4ST
	5	14.88	CT2065ST-ND	1.30	11.93	108.45	206-5ST
	6	17.42	CT2066ST-ND	1.25	11.48	104.40	206-6ST
	7	19.96	CT2067ST-ND	1.27	11.61	105.53	206-7ST
	8	22.50	CT2068ST-ND	1.10	10.07	91.58	206-8ST
	9	25.04	CT2069ST-ND	1.21	11.09	100.80	206-9ST
	10	27.58	CT20610ST-ND	1.25	11.43	103.95	206-10ST
	12	32.66	CT20612ST-ND	1.45	13.27	120.60	206-12ST
208 Series — SPST, Tin Finish, Black Body							
1	2	7.26	CT2082-ND	1.05	9.65	87.75	208-2
	3	9.80	CT2083-ND	.97	8.91	81.00	208-3
	4	12.34	CT2084-ND	.76	6.93	63.00	208-4
	5	14.88	CT2085-ND	.78	7.18	65.25	208-5
	6	17.42	CT2086-ND	.81	7.43	67.50	208-6
	7	19.96	CT2087-ND	.86	7.92	72.00	208-7
	8	22.50	CT2088-ND	.89	8.17	74.25	208-8
	9	25.04	CT2089-ND	.92	8.42	76.50	208-9
	10	27.58	CT20810-ND	1.00	9.16	83.25	208-10
	12	32.66	CT20812-ND	1.11	10.15	92.25	208-12
206-124 — SPDT, Gold Finish, Lt. Blue Body							
1	4	22.50	CT206124-ND	2.08	19.03	173.03	206-124
206-214 — DPST, Gold Finish, Lt. Blue Body							
1	4	22.50	CT206214-ND	1.62	14.87	135.23	206-214
194-MST Series — SPST, Gold Finish, Sealed, Lt. Blue Body							
2	2	7.26	CT1942MST-ND	1.40	12.87	117.00	194-2MST
	3	9.80	CT1943MST-ND	1.46	13.37	121.50	194-3MST
	4	12.34	CT1944MST-ND	1.19	10.89	99.00	194-4MST
	5	14.88	CT1945MST-ND	1.46	13.37	121.50	194-5MST
	6	17.42	CT1946MST-ND	1.35	12.38	112.50	194-6MST
	7	19.96	CT1947MST-ND	1.59	14.60	132.75	194-7MST
	8	22.50	CT1948MST-ND	1.43	13.12	119.25	194-8MST
	9	25.04	CT1949MST-ND	1.70	15.59	141.75	194-9MST
	10	27.58	CT19410MST-ND	1.54	14.11	128.25	194-10MST
	12	32.66	CT19412MST-ND	1.89	17.33	157.50	194-12MST
195-MST Series — SPST, Tin Finish, Sealed, Black Body							
2	2	7.26	CT1952MST-ND	1.32	12.13	110.25	195-2MST
	3	9.80	CT1953MST-ND	1.38	12.62	114.75	195-3MST
	4	12.34	CT1954MST-ND	1.05	9.65	87.75	195-4MST
	5	14.88	CT1955MST-ND	1.30	11.88	108.00	195-5MST
	6	17.42	CT1956MST-ND	1.16	10.64	96.75	195-6MST
	7	19.96	CT1957MST-ND	1.40	12.87	117.00	195-7MST
	8	22.50	CT1958MST-ND	1.22	11.14	101.25	195-8MST
	9	25.04	CT1959MST-ND	1.51	13.86	126.00	195-9MST
	10	27.58	CT19510MST-ND	1.32	12.13	110.25	195-10MST
	12	32.66	CT19512MST-ND	1.59	14.60	132.75	195-12MST
CT206-RAST Series — SPST, Gold Finish, Sealed, Lt. Blue Body							
3	2	7.26	CT2062RAST-ND	1.82	16.66	151.43	206-2RAST
	3	9.80	CT2063RAST-ND	1.43	13.12	119.25	206-3RAST
	4	12.34	CT2064RAST-ND	1.37	12.60	114.53	206-4RAST
	5	14.88	CT2065RAST-ND	1.55	14.18	128.93	206-5RAST
	6	17.42	CT2066RAST-ND	1.50	13.74	124.88	206-6RAST
	7	19.96	CT2067RAST-ND	1.52	13.91	126.45	206-7RAST
	8	22.50	CT2068RAST-ND	1.62	14.83	134.78	206-8RAST
	9	25.04	CT2069RAST-ND	1.67	15.30	139.05	206-9RAST
	10	27.58	CT20610RAST-ND	1.93	17.65	160.43	206-10RAST
	12	32.66	CT20612RAST-ND	1.92	17.62	160.20	206-12RAST
209-LPST Series — SPST, Gold Finish, Flush, Sealed, Black Body							
4	2	6.55	CT2092LPST-ND	.68	6.19	56.25	209-2LPST
	3	9.09	CT2093LPST-ND	.73	6.68	60.75	209-3LPST
	4	11.63	CT2094LPST-ND	.81	7.43	67.50	209-4LPST
	5	14.17	CT2095LPST-ND	.92	8.42	76.50	209-5LPST
	6	16.71	CT2096LPST-ND	1.00	9.16	83.25	209-6LPST
4	7	19.25	CT2097LPST-ND	1.08	9.90	90.00	209-7LSTPT
	8	21.79	CT2098LPST-ND	1.16	10.64	96.75	209-8LPST
	9	24.33	CT2099LPST-ND	1.27	11.63	105.75	209-9LPST
	10	26.87	CT20910LPST-ND	1.35	12.38	112.50	209-10LPST
	12	31.95	CT20912LPST-ND	1.51	13.86	126.00	209-12LPST
209-MS Series — SPST, Gold Finish, Extended, Sealed, Black Body							
4	2	6.55	CT2092MS-ND	.65	5.94	54.00	209-2MS
	3	9.09	CT2093MS-ND	.70	6.44	58.50	209-3MS
	4	11.63	CT2094MS-ND	.78	7.18	65.25	209-4MS
	5	14.17	CT2095MS-ND	.89	8.17	74.25	209-5MS
	6	16.71	CT2096MS-ND	.97	8.91	81.00	209-6MS
	7	19.25	CT2097MS-ND	1.05	9.65	87.75	209-7MS
	8	21.79	CT2098MS-ND	1.13	10.40	94.50	209-8MS
	9	24.33	CT2099MS-ND	1.24	11.39	103.50	209-9MS
	10	26.87	CT20910MS-ND	1.32	12.13	110.25	209-10MS
	12	31.95	CT20912MS-ND	1.49	13.61	123.75	209-12MS
219-LPST Series — SPST, Gold Finish, Flush, Sealed, Brown Body							
5	2	6.55	CT2192LPST-ND	.73	6.68	60.75	219-2LPST
	3	9.09	CT2193LPST-ND	.78	7.18	65.25	219-3LPST
	4	11.63	CT2194LPST-ND	.86	7.92	72.00	219-4LPST
	5	14.17	CT2195LPST-ND	.95	8.66	78.75	219-5LPST
	6	16.71	CT2196LPST-ND	1.03	9.41	85.50	219-6LPST
	7	19.25	CT2197LPST-ND	1.13	10.40	94.50	219-7LPST
	8	21.79	CT2198LPST-ND	1.19	10.89	99.00	219-8LPST
	9	24.33	CT2199LPST-ND	1.30	11.88	108.00	219-9LPST
	10	26.87	CT21910LPST-ND	1.35	12.38	112.50	219-10LPST
	12	31.95	CT21912LPST-ND	1.54	14.11	128.25	219-12LPST
219-MST Series — SPST, Gold Finish, Extended, Sealed, Brown Body							
5	2	6.55	CT2192MST-ND	.73	6.68	60.75	219-2MST
	3	9.09	CT2193MST-ND	.78	7.18	65.25	219-3MST
	4	11.63	CT2194MST-ND	.86	7.92	72.00	219-4MST
	5	14.17	CT2195MST-ND	.95	8.66	78.75	219-5MST
	6	16.71	CT2196MST-ND	1.03	9.41	85.50	219-6MST
	7	19.25	CT2197MST-ND	1.13	10.40	94.50	219-7MST
	8	21.79	CT2198MST-ND	1.19	10.89	99.00	219-8MST
	9	24.33	CT2199MST-ND	1.30	11.88	108.00	219-9MST
	10	26.87	CT21910MST-ND	1.35	12.38	112.50	219-10MST
	12	31.95	CT21912MST-ND	1.54	14.11	128.25	219-12MST
193 Series — SPST, Gold Finish, Brown Body							
6	2	7.26	CT1932MS-ND	1.95	15.57	137.61	193-2MS
	3	9.80	CT1933MS-ND	2.02	16.18	143.06	193-3MS
	4	12.34	CT1934MS-ND	1.78	14.25	130.63	193-4MS
	5	14.88	CT1935MS-ND	2.06	16.50	151.25	193-5MS
	6	17.42	CT1936MS-ND	2.09	16.74	148.01	193-6MS
	7	19.96	CT1937MS-ND	2.28	18.20	160.88	193-7MS
	8	22.50	CT1938MS-ND	1.97	15.79	139.59	193-8MS
204 Series — SPST, Tape Sealed, Gold Finish, Brown Body							
7	2	7.26	CT2042ST-ND	2.10	18.00	165.00	204-2ST
	3	9.80	CT2043ST-ND	1.79	14.28	126.23	204-3ST
	4	12.34	CT2044ST-ND	1.51	12.90	118.25	204-4ST
	5	14.88	CT2045ST-ND	1.58	13.50	123.75	204-5ST
	6	17.42	CT2046ST-ND	1.61	13.80	126.50	204-6ST
	7	19.96	CT2047ST-ND	1.68	14.40	132.00	204-7ST
	8	22.50	CT2048ST-ND	1.72	14.70	134.75	204-8ST
	9	25.04	CT2049ST-ND	1.79	15.30	140.25	204-9ST
	10	27.58	CT20410ST-ND	1.89	16.20	148.50	204-10ST
	12	32.66	CT20412ST-ND	2.07	17.70	162.25	204-12ST
204 Series — SPDT, Tape Sealed, Gold Finish, Brown Body							
7	1	7.26	CT204121ST-ND	2.03	17.40	159.50	204-121ST
	1	7.26	CT204121LPST-ND	2.17	18.60	170.50	204-121LPST
204 Series — DPST, Tape Sealed, Gold Finish, Brown Body							
7	1	7.26	CT204211ST-ND	1.54	12.32	108.90	204-211ST
	2	12.34	CT204212ST-ND	1.89	15.12	133.65	204-212ST
	3	17.42	CT204213ST-ND	2.03	17.40	159.50	204-213ST
	4	22.50	CT204214ST-ND	2.17	17.36	153.45	204-214ST
	5	27.58	CT204215ST-ND	2.20	18.30	167.75	204-215ST
	6	32.66	CT204216ST-ND	2.42	22.43	207.00	204-216ST
204 Series — DPDT, Tape Sealed, Gold Finish, Brown Body							
7	1	12.34	CT204221ST-ND	2.99	25.65	235.13	204-221ST
	2	22.50	CT204222ST-ND	1.89	15.12	133.65	204-222ST
	3	32.66	CT204223ST-ND	2.17	17.36	153.45	204-223ST
218 Series — SPST, Tape Sealed, Gold Finish, Brown Body							
8	2	3.71	CT2182LPST-ND	1.90	15.18	134.15	218-2LPST
	4	6.25	CT2184LPST-ND	2.30	18.37	162.36	218-4LPST
	6	8.79	CT2186LPST-ND	2.80	22.37	197.75	218-6LPST
	8	11.33	CT2188LPST-ND	3.25	25.98	229.68	218-8LPST
	10	13.87	CT21810LPST-ND	3.77	30.13	266.31	218-10LPST

Fig. 1 - Top Actuated Slide

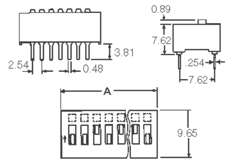


Fig. 2 - Side Actuated

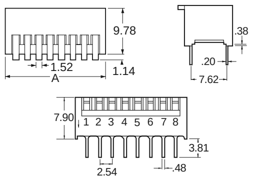


Fig. 3 - Right Angle Slide

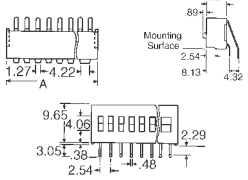


Fig. 4 - Top Actuated - Auto Dip

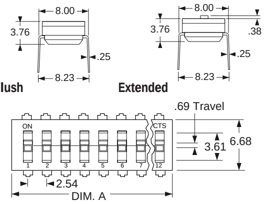


Fig. 5 - Surface Mount

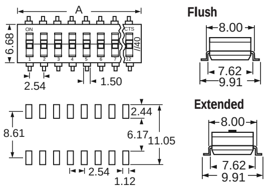


Fig. 6 - SMT Side Actuated

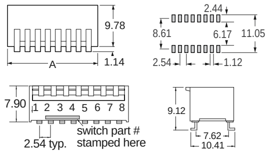
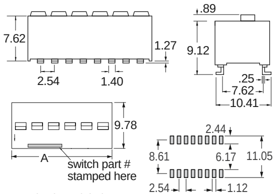
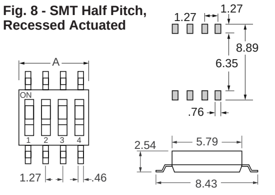


Fig. 7 - SMT Top Slide, Extended Act.



Standard model shown.
Low Profile also available (CT204121LPST-ND)

Fig. 8 - SMT Half Pitch, Recessed Actuated



C&K Dip Switches

Specifications: • **Contact Rating:** 25mA @ 24VDC or 100mA @ 5VDC • **Operating Temperature:** -20°C to +85°C • **Operating Force:** 800 grams max.
Materials: • **Housing:** PPA color: Red (UL94V-0) • **Actuator:** Nylon (UL 94V-0) • **Contacts:** Gold-plated BeCu • **Terminals:** SnPb-plated brass.

Dim. in mm

Fig. 1

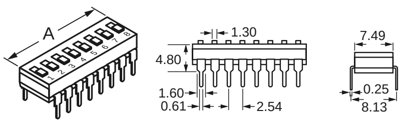


Fig. 2

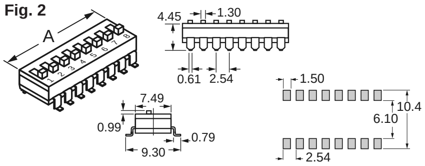


Fig. 3

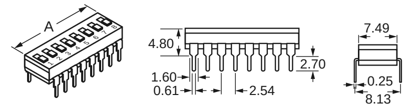


Fig. 4

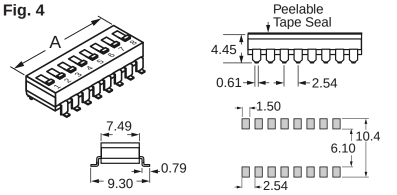


Fig. 5

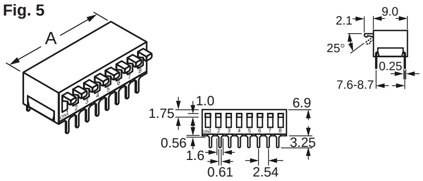


Fig. 6

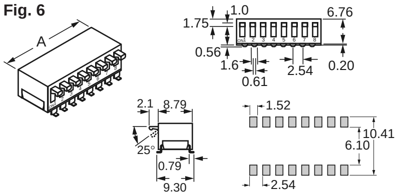
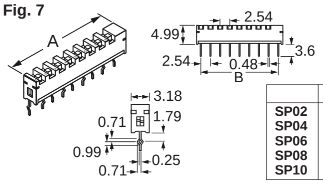
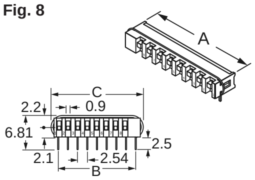


Fig. 7



	Dim. B (mm)
SP02	2.54
SP04	7.62
SP06	12.70
SP08	17.78
SP10	22.86

Fig. 8



	Dim. (mm) B	C
SP02A	2.54	8.58
SP04A	7.62	13.66
SP06A	12.70	18.74
SP08A	17.78	23.82
SP10A	22.86	28.90

Fig. 9 – PC Mount

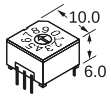


Fig. 10 – Right Angle

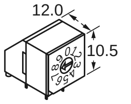


Fig. 11 – SMT

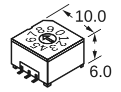


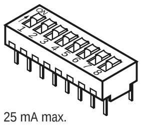
Fig.	No. of Pos.	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	25	100	250	C&K Part No.
			Dip Top Slide with Extended Actuator — Unsealed					
1	2	.278 (7.06)	CKN1276-ND	1.05	.84	.67	.53	SDA02H1KD
	3	.378 (9.60)	CKN1277-ND	1.11	.89	.71	.56	SDA03H1KD
	4	.476 (12.10)	CKN1278-ND	1.17	.94	.75	.59	SDA04H1KD
	6	.676 (17.18)	CKN1280-ND	1.26	1.01	.80	.63	SDA06H1KD
	7	.778 (19.76)	CKN1281-ND	1.35	1.08	.86	.68	SDA07H1KD
	8	.876 (22.26)	CKN1282-ND	1.50	1.20	.95	.75	SDA08H1KD
	9	.978 (24.84)	CKN1283-ND	1.65	1.32	1.05	.83	SDA09H1KD
	10	1.076 (27.34)	CKN1284-ND	1.77	1.42	1.13	.89	SDA10H1KD
	12	1.279 (32.50)	CKN1285-ND	1.95	1.56	1.24	.98	SDA12H1KD
			SMT Top Slide with Extended Actuator — Unsealed					
2	2	.278 (7.06)	CKN1286-ND	1.53	1.23	.97	.77	SDA02H1SKD
	3	.378 (9.60)	CKN1287-ND	1.62	1.30	1.03	.81	SDA03H1SKD
	4	.476 (12.10)	CKN1288-ND	1.71	1.37	1.09	.86	SDA04H1SKD
	5	.578 (14.68)	CKN1289-ND	1.86	1.49	1.18	.93	SDA05H1SKD
	6	.676 (17.18)	CKN1290-ND	1.98	1.59	1.26	.99	SDA06H1SKD
	7	.778 (19.76)	CKN1291-ND	1.98	1.59	1.26	.99	SDA07H1SKD
	8	.876 (22.26)	CKN1292-ND	2.16	1.73	1.37	1.08	SDA08H1SKD
	9	.978 (24.84)	CKN1293-ND	2.40	1.92	1.52	1.20	SDA09H1SKD
	10	1.076 (27.34)	CKN1294-ND	2.55	2.04	1.62	1.28	SDA10H1SKD
	12	1.279 (32.50)	CKN1295-ND	2.82	2.26	1.79	1.41	SDA12H1SKD
			Dip Top Slide with Flush Actuator — Unsealed					
3	2	.278 (7.06)	CKN1296-ND	1.05	.84	.67	.53	SDA02H0KD
	3	.378 (9.60)	CKN1297-ND	1.11	.89	.71	.56	SDA03H0KD
	4	.476 (12.10)	CKN1298-ND	1.17	.94	.75	.59	SDA04H0KD
	5	.578 (14.68)	CKN1299-ND	1.23	.99	.78	.62	SDA05H0KD
	6	.676 (17.18)	CKN1300-ND	1.26	1.01	.80	.63	SDA06H0KD
	7	.778 (19.76)	CKN1301-ND	1.35	1.08	.86	.68	SDA07H0KD
	8	.876 (22.26)	CKN1302-ND	1.50	1.20	.95	.75	SDA08H0KD
	9	.978 (24.84)	CKN1303-ND	1.65	1.32	1.05	.83	SDA09H0KD
	10	1.076 (27.34)	CKN1304-ND	1.77	1.42	1.13	.89	SDA10H0KD
	12	1.279 (32.50)	CKN1305-ND	1.95	1.56	1.24	.98	SDA12H0KD
			Dip Top Slide with Flush Actuator — Tape Sealed					
3	2	.278 (7.06)	CKN1306-ND	1.20	.96	.76	.60	SDA02H0K
	3	.378 (9.60)	CKN1307-ND	1.23	.99	.78	.62	SDA03H0K
	4	.476 (12.10)	CKN1308-ND	1.29	1.04	.82	.65	SDA04H0K
	5	.578 (14.68)	CKN1309-ND	1.35	1.08	.86	.68	SDA05H0K
	6	.676 (17.18)	CKN1310-ND	1.41	1.13	.90	.71	SDA06H0K
	7	.778 (19.76)	CKN1311-ND	1.50	1.20	.95	.75	SDA07H0K
	8	.876 (22.26)	CKN1312-ND	1.65	1.32	1.05	.83	SDA08H0K
	9	.978 (24.84)	CKN1313-ND	1.77	1.42	1.13	.89	SDA09H0K
	10	1.076 (27.34)	CKN1314-ND	1.92	1.54	1.22	.96	SDA10H0K
	12	1.279 (32.50)	CKN1315-ND	2.07	1.66	1.32	1.04	SDA12H0K
			SMT Top Slide with Flush Actuator — Unsealed					
4	2	.278 (7.06)	CKN1316-ND	1.53	1.23	.97	.77	SDA02H0SKD
	3	.378 (9.60)	CKN1317-ND	1.62	1.30	1.03	.81	SDA03H0SKD
	4	.476 (12.10)	CKN1318-ND	1.71	1.37	1.09	.86	SDA04H0SKD
	5	.578 (14.68)	CKN1319-ND	1.77	1.42	1.13	.89	SDA05H0SKD
	6	.676 (17.18)	CKN1320-ND	1.86	1.49	1.18	.93	SDA06H0SKD
	7	.778 (19.76)	CKN1321-ND	1.98	1.59	1.26	.99	SDA07H0SKD
	8	.876 (22.26)	CKN1322-ND	2.16	1.73	1.37	1.08	SDA08H0SKD
	9	.978 (24.84)	CKN1323-ND	2.40	1.92	1.52	1.20	SDA09H0SKD
	10	1.076 (27.34)	CKN1324-ND	2.55	2.04	1.62	1.28	SDA10H0SKD
	12	1.279 (32.50)	CKN1325-ND	2.82	2.26	1.79	1.41	SDA12H0SKD
			SMT Top Slide with Flush Actuator — Tape Sealed					
4	2	.278 (7.06)	CKN1326-ND	1.68	1.35	1.07	.84	SDA02H0SK
	3	.378 (9.60)	CKN1327-ND	1.77	1.42	1.13	.89	SDA03H0SK
	4	.476 (12.10)	CKN1328-ND	1.83	1.47	1.16	.92	SDA04H0SK
	5	.578 (14.68)	CKN1329-ND	1.92	1.54	1.22	.96	SDA05H0SK
	6	.676 (17.18)	CKN1330-ND	2.01	1.61	1.28	1.01	SDA06H0SK
	7	.778 (19.76)	CKN1331-ND	2.10	1.68	1.33	1.05	SDA07H0SK
	8	.876 (22.26)	CKN1332-ND	2.31	1.85	1.47	1.16	SDA08H0SK
	9	.978 (24.84)	CKN1333-ND	2.55	2.04	1.62	1.28	SDA09H0SK
	10	1.076 (27.34)	CKN1334-ND	2.67	2.14	1.70	1.34	SDA10H0SK
	12	1.279 (32.50)	CKN1335-ND	2.94	2.36	1.87	1.47	SDA12H0SK
			Side Actuated Dip — Unsealed					
5	2	.280 (7.11)	CKN1336-ND	1.29	1.04	.82	.65	BPA02K
	4	.480 (12.19)	CKN1337-ND	1.47	1.18	.94	.74	BPA04K
	5	.578 (14.68)	CKN1338-ND	1.56	1.25	.99	.78	BPA05K
	6	.680 (17.30)	CKN1339-ND	1.74	1.40	1.11	.87	BPA06K
	7	.778 (19.76)	CKN1340-ND	1.80	1.44	1.14	.90	BPA07K
	8	.878 (22.30)	CKN1341-ND	1.80	1.44	1.14	.90	BPA08K
	9	.978 (24.84)	CKN1342-ND	1.95	1.56	1.24	.98	BPA09K
	10	1.078 (27.43)	CKN1343-ND	2.04	1.64	1.30	1.02	BPA10K
			SMT Side Actuated Dip — Unsealed					
6	2	.280 (7.11)	CKN1344-ND	1.41	1.13	.90	.71	BPA02SK
	4	.480 (12.19)	CKN1345-ND	1.62	1.30	1.03	.81	BPA04SK
	5	.578 (14.68)	CKN1346-ND	1.71	1.37	1.09	.86	BPA05SK
	6	.680 (17.30)	CKN1347-ND	1.92	1.54	1.22	.96	BPA06SK
	7	.778 (19.76)	CKN1348-ND	1.98	1.59	1.26	.99	BPA07SK
	8	.878 (22.30)	CKN1349-ND	1.98	1.59	1.26	.99	BPA08SK
	9	.978 (24.84)	CKN1350-ND	2.16	1.73	1.37	1.08	BPA09SK
	10	1.078 (27.43)	CKN1351-ND	2.25	1.80	1.43	1.13	BPA10SK
			Top Slide Single In-Line Sip — Unsealed					
7	2	.298 (7.58)	CKN1352-ND	2.25	1.80	1.43	1.13	SP02
	4	.498 (12.66)	CKN1353-ND	2.55	2.04	1.62	1.28	SP04
	6	.698 (17.74)	CKN1354-ND	2.97	2.38	1.89	1.49	SP06
	8	.898 (22.82)	CKN1355-ND	3.45	2.76	2.19	1.73	SP08
	10	1.098 (27.9)	CKN1356-ND	4.35	3.48	2.76	2.18	SP10
			Rt. Angle Single In-Line Sip — Unsealed					
8	2	.298 (7.58)	CKN1357-ND	3.15	2.52	2.00	1.58	SP02A
	4	.498 (12.66)	CKN1358-ND	3.36	2.69	2.13	1.68	SP04A
	6	.698 (17.74)	CKN1359-ND	4.05	3.24	2.57	2.03	SP06A
	8	.898 (22.82)	CKN1360-ND	4.44	3.56	2.82	2.22	SP08A
	10	1.098 (27.9)	CKN1361-ND	4.80	3.84	3.04	2.40	SP10A

Fig.	Type	Actuator	Digi-Key Part No.	Price Each 1	25	100	250	C&K Part No.
			10mm Rotary Dip - PC Mount - Process Sealed					
9	BCD	Flush	CKN1367-ND	4.26	3.94	3.28	2.46	CRD10RM0CK
	BCD Comp	Flush	CKN1368-ND	4.26	3.94	3.28	2.46	CRD10CM0CK
	HEX	Flush	CKN1369-ND	4.68	4.32	3.60	2.70	CRD16RM0CK
	HEX Comp	Flush	CKN1370-ND	4.68	4.32	3.60	2.70	CRD16CM0CK
			10mm Rotary Dip - Right Angle Mount - Process Sealed					
10	BCD	Flush	CKN1371-ND	5.04	4.66	3.88	2.91	CRD10RM0AK
	BCD Comp	Flush	CKN1372-ND	5.04	4.66	3.88	2.91	CRD10CM0AK
	HEX	Flush	CKN1373-ND	5.54	5.12	4.26	3.20	CRD16RM0AK
	HEX Comp	Flush	CKN1374-ND	5.54	5.12	4.26	3.20	CRD16CM0AK
			10mm Rotary Dip - Surface Mount - Process Sealed					
11	BCD	Flush	CKN1375-ND	4.81	4.44	3.70	2.78	CRD10RM0SK
	BCD Comp	Flush	CKN1376-ND	4.81	4.44	3.70	2.78	CRD10CM0SK
	HEX	Flush	CKN1377-ND	5.28	4.88	4.06	3.05	CRD16RM0SK
	HEX Comp	Flush	CKN1378-ND	5.28	4.88	4.06	3.05	CRD16CM0SK

Cannon

ITT Industries
Engineered for life

C&K DIP Switches



SPECIFICATIONS: • **Switch Function:** SPST • **Contact Rating:** Switch: 100mA max @ 5VDC or 25 mA max. at 25 VDC • **Mechanical & Electrical Life:** 2,000 make-and-break cycles at full load, each circuit • **Contact Resistance:** Below 50 milliohms typ. • **Dielectric Strength:** 500V RMS • **Operating Temp.:** -40°C to 85°C

MATERIALS: • **Case & Cover:** Glass filled polyester (UL 94V-0), Flame retardant, Red in color • **Actuator:** Glass filled nylon 6/6, flame retardant (UL 94V-0) • **Contacts:** Copper alloy, with gold plate over nickel plate • **Terminals:** Copper alloy, with tin-lead alloy over nickel plate • **Terminal Seal:** Epoxy • **Tape Seal:** Polyimide • Proven washable design — open base design allows cleaners to flush through • High temperature materials (UL 94V-0) withstands soldering and cleaning temperatures and processes • Slide actuators with positive detent — prevent accidental actuation • Reliable wiping contact mechanism • Tin-lead alloy coats all sides of terminals for joint integrity

Fig. 1

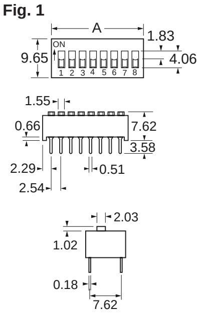


Fig. 2

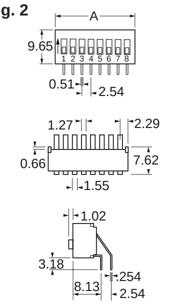


Fig. 3

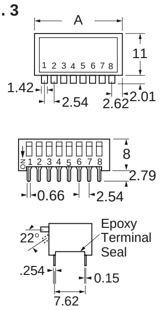


Fig. 4

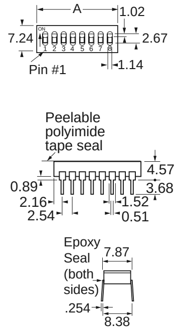
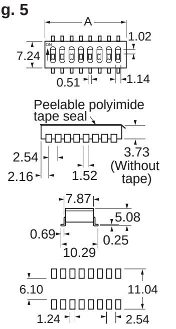


Fig. 5



PCB Land Pattern

Fig. 6

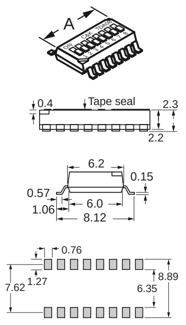


Fig.	No. of Pos.	Dim. A In. (mm)	Digi-Key Part No.	Price Each 1	25	100	250	C&K Part No.
Top Slide, Extended Actuator — Unsealed								
1	2	.280 (7.11)	CKN3001-ND	1.59	1.28	1.01	.80	BD02
	3	.380 (9.65)	CKN3002-ND	1.59	1.28	1.01	.80	BD03
	4	.480 (12.19)	CKN3003-ND	1.74	1.40	1.11	.87	BD04
	5	.580 (14.73)	CKN3004-ND	1.77	1.42	1.13	.89	BD05
	6	.680 (17.27)	CKN3005-ND	1.83	1.47	1.16	.92	BD06
	7	.780 (19.81)	CKN3006-ND	1.92	1.54	1.22	.96	BD07
	8	.880 (22.35)	CKN3007-ND	1.98	1.59	1.26	.99	BD08
	9	.980 (24.89)	CKN3008-ND	2.07	1.66	1.32	1.04	BD09
	10	1.080 (27.43)	CKN3009-ND	2.13	1.71	1.35	1.07	BD10
	12	1.280 (32.51)	CKN3010-ND	2.28	1.83	1.45	1.14	BD12
Right Angle Slide, Extended Actuator — Unsealed								
2	2	.280 (7.11)	CKN3011-ND	2.70	2.16	1.71	1.35	BD02AV
	3	.380 (9.65)	CKN3012-ND	2.70	2.16	1.71	1.35	BD03AV
	4	.480 (12.19)	CKN3013-ND	2.85	2.28	1.81	1.43	BD04AV
	5	.580 (14.73)	CKN3014-ND	2.88	2.31	1.83	1.44	BD05AV
	6	.680 (17.27)	CKN3015-ND	2.97	2.38	1.89	1.49	BD06AV
	7	.780 (19.81)	CKN3016-ND	3.03	2.43	1.92	1.52	BD07AV
	8	.880 (22.35)	CKN3017-ND	3.09	2.48	1.96	1.55	BD08AV
	9	.980 (24.89)	CKN3018-ND	3.18	2.55	2.02	1.59	BD09AV
	10	1.080 (27.43)	CKN3019-ND	3.24	2.60	2.06	1.62	BD10AV
	12	1.280 (32.51)	CKN3020-ND	3.39	2.72	2.15	1.70	BD12AV
Side Actuated — Tape Sealed								
3	2	.315 (8.00)	CKN3021-ND	1.47	1.18	.94	.74	BP02YT
	3	.413 (10.49)	CKN3022-ND	1.62	1.30	1.03	.81	BP03YT
	4	.512 (13.00)	CKN3023-ND	1.65	1.32	1.05	.83	BP04YT
	5	.610 (15.49)	CKN3024-ND	1.74	1.40	1.11	.87	BP05YT
	6	.709 (18.01)	CKN3025-ND	1.92	1.54	1.22	.96	BP06YT
	7	.807 (20.50)	CKN3026-ND	1.98	1.59	1.26	.99	BP07YT
	8	.906 (23.01)	CKN3027-ND	1.98	1.59	1.26	.99	BP08YT
	10	1.102 (27.99)	CKN3028-ND	2.22	1.78	1.41	1.11	BP10YT
	12	1.299 (32.99)	CKN3029-ND	2.49	2.00	1.58	1.25	BP12YT
Low Profile — SD Series — Tape Sealed								
4	2	.258 (6.55)	CKN3064-ND	1.32	1.06	.84	.66	SD02H0K
	3	.358 (9.09)	CKN3065-ND	1.38	1.11	.88	.69	SD03H0K
	4	.458 (11.63)	CKN3066-ND	1.44	1.16	.92	.72	SD04H0K
	5	.558 (14.17)	CKN3067-ND	1.50	1.20	.95	.75	SD05H0K
	6	.658 (16.71)	CKN3068-ND	1.56	1.25	.99	.78	SD06H0K
	7	.758 (19.25)	CKN3069-ND	1.65	1.32	1.05	.83	SD07H0K
	8	.858 (21.79)	CKN3070-ND	1.83	1.47	1.16	.92	SD08H0K
	9	.958 (24.33)	CKN3071-ND	1.98	1.59	1.26	.99	SD09H0K
	10	1.058 (26.87)	CKN3072-ND	2.13	1.71	1.35	1.07	SD10H0K
	12	1.258 (31.95)	CKN3073-ND	2.31	1.85	1.47	1.16	SD12H0K
Low Profile Surface Mount — SD Series — Tape Sealed								
5	2	.258 (6.55)	CKN3054-ND	1.86	1.49	1.18	.93	SD02H0SK
	3	.358 (9.09)	CKN3055-ND	1.95	1.56	1.24	.98	SD03H0SK
	4	.458 (11.63)	CKN3056-ND	2.04	1.64	1.30	1.02	SD04H0SK
	5	.558 (14.17)	CKN3057-ND	2.13	1.71	1.35	1.07	SD05H0SK
	6	.658 (16.71)	CKN3058-ND	2.22	1.78	1.41	1.11	SD06H0SK
	7	.758 (19.25)	CKN3059-ND	1.44	1.16	.92	.72	SD07H0SK
	8	.858 (21.79)	CKN3060-ND	2.55	2.04	1.62	1.28	SD08H0SK
	9	.958 (24.33)	CKN3061-ND	2.82	2.26	1.79	1.41	SD09H0SK
	10	1.058 (26.87)	CKN3062-ND	2.97	2.38	1.89	1.49	SD10H0SK
	12	1.258 (31.95)	CKN3063-ND	3.27	2.62	2.08	1.64	SD12H0SK
Half Pitch Surface Mount — TDA Series — Tape Sealed								
6	2	.144 (3.67)	CKN1362-ND	2.10	1.68	1.33	1.05	TDA02H0SK1
	4	.244 (6.21)	CKN1363-ND	2.22	1.78	1.41	1.11	TDA04H0SK1
	6	.344 (8.75)	CKN1364-ND	2.64	2.12	1.68	1.32	TDA06H0SK1
	8	.444 (11.29)	CKN1365-ND	3.03	2.43	1.92	1.52	TDA08H0SK1
	10	.544 (13.83)	CKN1366-ND	4.47	3.58	2.84	2.24	TDA10H0SK1

G

Cannon

ITT Industries
Engineered for life

C&K 8mm DIP Coded Rotary Switches

Specifications: • **Contact Ratings:** 0.4 VA max. @ 20 V AC or V DC max. • **Mechanical & Electrical Life:** 20,000 position changes • **Contact Resistance:** 50 milliohms max. initial • **Operating Temperature:** –25°C to 85°C. **Materials:** • **Cover & Base:** Glass filled nylon, flame retardant, heat stabilized (UL 94V-0) • **Actuator:** LCP (UL 94V-0), internal o-ring seal standard with all actuators • **Movable Contacts:** Copper alloy, with gold plate over nickel plate • **Terminals:** Copper alloy, with tin-lead alloy over nickel plate. All terminals are insert molded.

Fig. 1 – Vertical

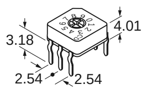


Fig. 2 – Right Angle

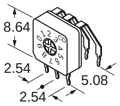
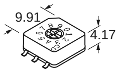
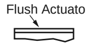


Fig. 3 – SMT



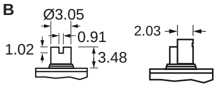
Actuator Options

A



*Designed for #0 phillips screwdriver.

B



C

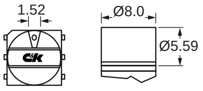


Fig.	Type	Actuator	Digi-Key Part No.	Price Each 1	25	100	250	C&K Part No.
1	BCD	A	CKN3044-ND	4.73	4.37	3.64	2.73	CD10RM0CK
1	BCD	B	CKN3045-ND	5.43	5.02	4.18	3.14	CD10RL1CK
1	BCD	C	CKN1224-ND	6.34	5.86	4.88	3.66	CD10RK1CK
2	BCD	A	CKN3046-ND	5.59	5.16	4.30	3.23	CD10RM0AK
2	BCD	B	CKN3047-ND	6.27	5.79	4.82	3.62	CD10RL1AK
2	BCD	C	CKN1226-ND	7.18	6.63	5.52	4.14	CD10RK1AK
3	BCD	A	CKN3048-ND	5.33	4.92	4.10	3.08	CD10RM0SK
3	BCD	C	CKN1228-ND	6.99	6.46	5.38	4.04	CD10RK1SK
1	Hex.	A	CKN3049-ND	5.20	4.80	4.00	3.00	CD16RM0CK
1	Hex.	B	CKN3050-ND	5.95	5.50	4.58	3.44	CD16RL1CK
1	Hex.	C	CKN1225-ND	6.86	6.34	5.28	3.96	CD16RK1CK
2	Hex.	A	CKN3051-ND	6.16	5.69	4.74	3.56	CD16RM0AK
2	Hex.	B	CKN3052-ND	6.84	6.32	5.26	3.95	CD16RL1AK
2	Hex.	C	CKN1227-ND	7.75	7.16	5.96	4.47	CD16RK1AK
3	Hex.	A	CKN3053-ND	5.88	5.43	4.52	3.39	CD16RM0SK
3	Hex.	C	CKN1229-ND	7.54	6.96	5.80	4.35	CD16RK1SK

OMRON

Rotary DIP Switches

LIFE EXPECTANCY: • **Mechanical** – 10,000 operations min. • **Electrical** – 2,000 operations min. • **Contact Resistance** – 200mΩ.

BCD Output Codes

BCD Type

Position	Terminal No. 1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

Note: "●" in the tables show the output terminal No. that can be connected to the common terminal.

Hexadecimal Type

Position	Terminal No. 1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

Fig. 1

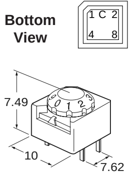


Fig. 2

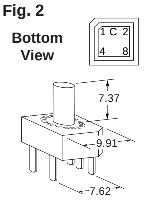


Fig. 3

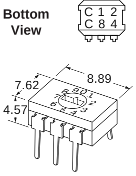


Fig. 4

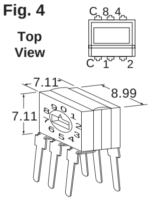
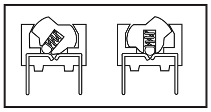


Fig.	No. of Pos.	Output Code Type	Switching Capacity mA	VDC	Operating Temp.	Digi-Key Part No.	Price Each 1	25	50	100	250	Omron Part No.
1	10	BCD	100	28	-10° to 70°C	SW220-ND	3.75	3.38	3.00	2.70	2.55	A6A-10R
1	16	Hexdec.	100	28	-10° to 70°C	SW221-ND	3.88	3.49	3.10	2.79	2.64	A6A-16R
2	10	BCD	100	28	-10° to 70°C	SW214-ND	4.13	3.72	3.30	2.97	2.81	A6A-10RS
2	16	Hexdec.	100	28	-10° to 70°C	SW215-ND	4.38	3.94	3.50	3.15	2.98	A6A-16RS
2	10	BCD	100	28	-10° to 70°C	SW222-ND	4.50	4.05	3.60	3.24	3.06	A6A-10RW
2	16	Hexdec.	100	28	-10° to 70°C	SW223-ND	4.63	4.17	3.70	3.33	3.15	A6A-16RW
3	10	BCD	100	30	-20° to 70°C	SW216-ND	2.88	2.59	2.30	2.07	1.96	A6C-10R(N)
3	16	Hexdec.	100	30	-20° to70°C	SW217-ND	3.00	2.70	2.40	2.16	2.04	A6C-16R(N)
4	10	BCD	100	30	-20° to 70°C	SW218-ND	3.88	3.49	3.10	2.79	2.64	A6CV-10R
4	16	Hexdec.	100	30	-20° to 70°C	SW219-ND	4.13	3.72	3.30	2.97	2.81	A6CV-16R

Grayhill DIP Switches



Grayhill's unique spring and ball contact design offers unparalleled reliability compared to conventional wiping contact designs. When actuated the ball rests between two contacts allowing multiple points of contact while the spring compression is at maximum pressure. Temperature, humidity and vibration have minimal affect on this design.

Specifications: • **Mechanical Life per switch position:** 76/78 – 20,000; 90B – 5,000 • **Contact Resistance:** Initially ≤ 30 mΩ • **Insulation Resistance:** 5,000 • **Dielectric Strength:** 750V • **Current Carry:** 3A • **Switch Capacitance:** 2pF • **Operating Temperature:** -40°C to +85°C • **SMT Processing Temperature (90HBW, 90HBJ):** 260°C Max.

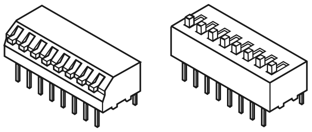


Fig. 1 – Series 76 Rocker and Recessed Rocker

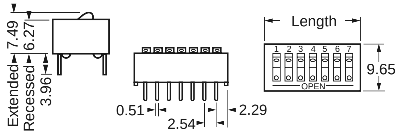


Fig. 3 – Series 78

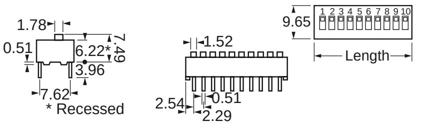


Fig. 5 – Series 90HBW, 90HBJ

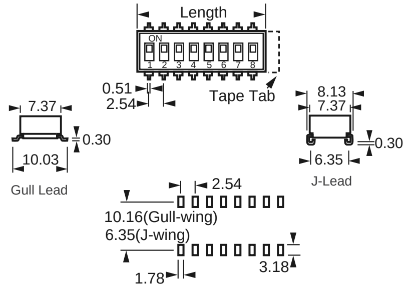


Fig. 2 – Series 76 Piano DIP

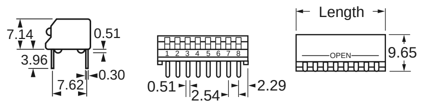


Fig. 4 – Series 90

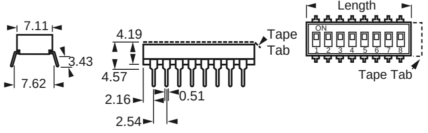


Fig. 6 – Series 76HP SMT Piano DIP *NEW!*

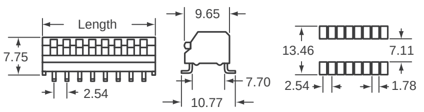


Fig. 7 – Series 97C Half Pitch *NEW!*

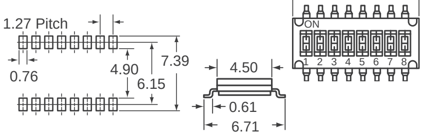


Fig. 8 – Series 97R Half Pitch *NEW!*

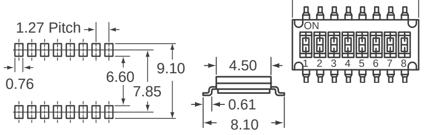


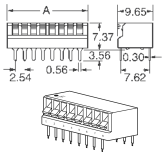
Fig.	No. of Pos.	Length (mm)	Digi-Key Part No.	Price Each			Grayhill Part No.
				1	10	100	
Raise Rocker Unsealed							
1	2	7.11	GH1102-ND	.92	.85	.77	76SB02
	3	9.65	GH1103-ND	.92	.85	.77	76SB03
	4	12.19	GH1104-ND	.92	.85	.77	76SB04
	5	14.73	GH1105-ND	1.38	1.27	1.15	76SB05
	6	17.27	GH1106-ND	1.35	1.24	1.13	76SB06
	7	19.81	GH1107-ND	1.43	1.32	1.20	76SB07
	8	22.35	GH1109-ND	1.43	1.32	1.20	76SB08
	9	24.89	GH1110-ND	1.43	1.32	1.20	76SB09
	10	27.43	GH1112-ND	1.51	1.39	1.26	76SB10
	12	32.51	GH1202-ND	1.62	1.49	1.35	76SB12
Raise Rocker Sealed							
1	2	7.11	GH1002-ND	1.05	.97	.88	76SB02S
	3	9.65	GH1003-ND	1.05	.97	.88	76SB03S
	4	12.19	GH1004-ND	1.05	.97	.88	76SB04S
	5	14.73	GH1005-ND	1.46	1.34	1.22	76SB05S
	6	17.27	GH1006-ND	1.49	1.37	1.24	76SB06S
	7	19.81	GH1007-ND	1.51	1.39	1.26	76SB07S
	8	22.35	GH1008-ND	1.46	1.34	1.22	76SB08S
	9	24.89	GH1009-ND	1.59	1.46	1.33	76SB09S
	10	27.43	GH1010-ND	1.62	1.49	1.35	76SB10S
	12	32.51	GH1012-ND	1.70	1.56	1.42	76SB12S
Recessed Rocker Unsealed							
1	2	7.11	GH1272-ND	1.24	1.14	1.04	76RSB02
	3	9.65	GH1273-ND	1.30	1.19	1.08	76RSB03
	4	12.19	GH1274-ND	1.35	1.24	1.13	76RSB04
	5	14.73	GH1275-ND	1.43	1.32	1.20	76RSB05
	6	17.27	GH1276-ND	1.46	1.34	1.22	76RSB06
	7	19.81	GH1277-ND	1.46	1.34	1.22	76RSB07
	8	22.35	GH1278-ND	1.49	1.37	1.24	76RSB08
	9	24.89	GH1279-ND	1.57	1.44	1.31	76RSB09
	10	27.43	GH1280-ND	1.57	1.44	1.31	76RSB10
	12	32.51	GH1281-ND	1.62	1.49	1.35	76RSB12
Recessed Rocker Sealed							
1	2	7.11	GH1262-ND	1.27	1.17	1.06	76RSB02S
	3	9.65	GH1263-ND	1.32	1.22	1.11	76RSB03S
	4	12.19	GH1264-ND	1.38	1.27	1.15	76RSB04S
	5	14.73	GH1265-ND	1.46	1.34	1.22	76RSB05S
	6	17.27	GH1266-ND	1.49	1.37	1.24	76RSB06S
	7	19.81	GH1267-ND	1.49	1.37	1.24	76RSB07S
	8	22.35	GH1268-ND	1.51	1.39	1.26	76RSB08S
	9	24.89	GH1269-ND	1.59	1.46	1.33	76RSB09S
	10	27.43	GH1270-ND	1.59	1.46	1.33	76RSB10S
	12	32.51	GH1271-ND	1.65	1.51	1.38	76RSB12S
PIANO DIP® Unsealed							
2	2	7.11	GH1213-ND	1.30	1.19	1.08	76PSB02
	3	9.65	GH1214-ND	1.32	1.22	1.11	76PSB03
	4	12.19	GH1215-ND	1.08	.99	.90	76PSB04
	5	14.73	GH1216-ND	1.38	1.27	1.15	76PSB05
	6	17.27	GH1217-ND	1.22	1.12	1.02	76PSB06
	7	19.81	GH1218-ND	1.38	1.27	1.15	76PSB07
	8	22.35	GH1219-ND	1.27	1.17	1.06	76PSB08
	9	24.89	GH1220-ND	1.54	1.42	1.29	76PSB09
	10	27.43	GH1221-ND	1.30	1.19	1.08	76PSB10
	12	32.51	GH1222-ND	1.89	1.74	1.58	76PSB12

Fig.	No. of Pos.	Length (mm)	Digi-Key Part No.	Price Each			Grayhill Part No.
				1	10	100	
PIANO DIP® Sealed							
2	2	7.11	GH1203-ND	1.40	1.29	1.17	76PSB02S
	3	9.65	GH1204-ND	1.43	1.32	1.20	76PSB03S
	4	12.19	GH1205-ND	1.16	1.07	.97	76PSB04S
	5	14.73	GH1206-ND	1.46	1.34	1.22	76PSB05S
	6	17.27	GH1207-ND	1.32	1.22	1.11	76PSB06S
	7	19.81	GH1208-ND	1.59	1.46	1.33	76PSB07S
	8	22.35	GH1209-ND	1.40	1.29	1.17	76PSB08S
	9	24.89	GH1210-ND	1.70	1.56	1.42	76PSB09S
	10	27.43	GH1211-ND	1.49	1.37	1.24	76PSB10S
	12	32.51	GH1212-ND	1.97	1.81	1.65	76PSB12S
Raised Slide Switch, Unsealed							
3	2	7.11	GH1233-ND	1.05	.97	.88	78B02
	3	9.65	GH1234-ND	1.05	.97	.88	78B03
	4	12.19	GH1235-ND	.89	.82	.75	78B04
	5	14.73	GH1236-ND	1.08	.99	.90	78B05
	6	17.27	GH1237-ND	1.08	.99	.90	78B06
	7	19.81	GH1238-ND	1.08	.99	.90	78B07
	8	22.35	GH1239-ND	1.00	.92	.84	78B08
	9	24.89	GH1240-ND	1.03	.95	.86	78B09
	10	27.43	GH1241-ND	1.05	.97	.88	78B10
	12	32.51	GH1242-ND	1.24	1.14	1.04	78B12
Raised Slide Switch, Sealed							
3	2	7.11	GH1223-ND	1.05	.97	.88	78B02S
	3	9.65	GH1224-ND	1.05	.97	.88	78B03S
	4	12.19	GH1225-ND	.95	.87	.79	78B04S
	5	14.73	GH1226-ND	1.30	1.19	1.08	78B05S
	6	17.27	GH1227-ND	1.24	1.14	1.04	78B06S
	7	19.81	GH1228-ND	1.27	1.17	1.06	78B07S
	8	22.35	GH1229-ND	1.05	.97	.88	78B08S
	9	24.89	GH1230-ND	1.13	1.04	.95	78B09S
	10	27.43	GH1231-ND	1.24	1.14	1.04	78B10S
	12	32.51	GH1232-ND	1.46	1.34	1.22	78B12S
Recessed Slide Switch, Unsealed							
3	2	7.11	GH1252-ND	1.05	.97	.88	78RB02
	3	9.65	GH1253-ND	1.05	.97	.88	78RB03
	4	12.19	GH1254-ND	.89	.82	.75	78RB04
	5	14.73	GH1255-ND	1.08	.99	.90	78RB05
	6	17.27	GH1256-ND	1.08	.99	.90	78RB06
	7	19.81	GH1257-ND	1.08	.99	.90	78RB07
	8	22.35	GH1258-ND	1.00	.92	.84	78RB08
	9	24.89	GH1259-ND	1.03	.95	.86	78RB09
	10	27.43	GH1260-ND	1.05	.97	.88	78RB10
	12	32.51	GH1261-ND	1.24	1.14	1.04	78RB12
Recessed Slide Switch, Sealed							
3	2	7.11	GH1243-ND	1.05	.97	.88	78RB02S
	3	9.65	GH1244-ND	1.05	.97	.88	78RB03S
	4	12.19	GH1245-ND	.95	.87	.79	78RB04S
	5	14.73	GH1246-ND	1.30	1.19	1.08	78RB05S
	6	17.27	GH1247-ND	1.24	1.14	1.04	78RB06S
	7	19.81	GH1248-ND	1.27	1.17	1.06	78RB07S
	8	22.35	GH1249-ND	1.05	.97	.88	78RB08S
	9	24.89	GH1250-ND	1.13	1.04	.95	78RB09S
	10	27.43	GH1251-ND	1.24	1.14	1.04	78RB10S

Fig.	No. of Pos.	Length (mm)	Digi-Key Part No.	Price Each			Grayhill Part No.
				1	10	100	
Auto-Insertable Auto DIP Sealed							
4	2	6.86	GH1282-ND	.76	.70	.63	90B02S
	3	9.40	GH1283-ND	.84	.77	.70	90B03S
	4	11.94	GH1284-ND	.95	.87	.79	90B04S
	5	14.48	GH1285-ND	1.00	.92	.84	90B05S
	6	17.02	GH1286-ND	1.19	1.09	.99	90B06S
	7	19.56	GH1287-ND	1.24	1.14	1.04	90B07S
	8	22.10	GH1288-ND	1.16	1.07	.97	90B08S
	9	24.64	GH1289-ND	1.46	1.34	1.22	90B09S
	10	27.18	GH1290-ND	1.57	1.44	1.31	90B10S
SMT Gull Lead Sealed							
5	2	6.86	GH1291-ND	.86	.80	.72	90HBW02P
	3	9.40	GH1292-ND	.89	.82	.75	90HBW03P
	4	11.94	GH1293-ND	1.00	.92	.84	90HBW04P
	5	14.48	GH1294-ND	1.11	1.02	.93	90HBW05P
	6	17.02	GH1295-ND	1.16	1.07	.97	90HBW06P
	7	19.56	GH1296-ND	1.27	1.17	1.06	90HBW07P
	8	22.10	GH1297-ND	1.19	1.09	.99	90HBW08P
	9	24.64	GH1298-ND	1.49	1.37	1.24	90HBW09P
	10	27.18	GH1299-ND	1.51	1.39	1.26	90HBW10P
SMT J-Lead Sealed							
5	2	6.86	GH1300-ND	1.59	1.46	1.33	90HBJ02P
	3	9.40	GH1301-ND	1.65	1.51	1.38	90HBJ03P
	4	11.94	GH1302-ND	1.40	1.29	1.17	90HBJ04P
	5	14.48	GH1303-ND	1.59	1.46	1.33	90HBJ05P
	6	17.02	GH1304-ND	1.65	1.51	1.38	90HBJ06P
	7	19.56	GH1305-ND	1.67	1.54	1.40	90HBJ07P
	8	22.10	GH1306-ND	1.38	1.27	1.15	90HBJ08P
	9	24.64	GH1307-ND	1.73	1.59	1.44	90HBJ09P
	10	27.18	GH1308-ND	1.86	1.71	1.56	90HBJ10P
NEW! Series 76HP PIANO DIP® NEW!							
6	2	7.1	GH1325CT-ND	3.94	2.76	1.82	76HPSB02GWR
	2	7.1	GH1325TR-ND	792.75/500			76HPSB02GWR
	4	12.2	GH1326CT-ND	4.06	2.85	1.87	76HPSB04GWR
	4	12.2	GH1326TR-ND	817.25/500			76HPSB04GWR
	6	17.3	GH1327CT-ND	4.29	3.01	1.98	76HPSB06GWR
	6	17.3	GH1327TR-ND	863.63/500			76HPSB06GWR
	8	22.4	GH1328CT-ND	4.59	3.22	2.12	76HPSB08GWR
	8	22.4	GH1328TR-ND	924.00/500			76HPSB08GWR
	10	27.4	GH1329CT-ND	5.00	3.50	2.30	76HPSB10GWR
	10	27.4	GH1329TR-ND	1006.25/500			76HPSB10GWR
NEW! Series 97 Half Pitch NEW!							
7	2	3.76	GH1330-ND	4.29	3.84	3.44	97C02S
	4	6.30	GH1331-ND	4.41	3.96	3.53	97C04S
	8	11.38	GH1332-ND	4.65	4.15	3.72	97C08S
	10	13.92	GH1333-ND	5.00	4.46	4.00	97C10S
8	2	3.76	GH1334-ND	4.29	3.84	3.44	97R02S
	4	6.30	GH1335-ND	4.41	3.96	3.53	97R04S
	8	11.38	GH1336-ND	4.65	4.15	3.72	97R08S
NEW! Hand Tool NEW!							
Hand Tool for Dip Switch			GH1343-ND	1.00	—	.46	90-DIPSTICK

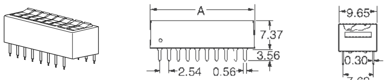
DIP Switches

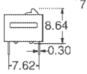
Fig. 1 – Side Actuated



Max. Cycle Life: up to 7,000 cycles per pole. SPST. **Contacts:** Beryllium copper with 30µ gold over 50µ nickel plating in contact area. **Materials: Housing:** Glass-filled polyester, 94V-0 rated, black. **Rocker:** Thermoplastic, 94V-0 rated, white. **Current Rating:** Nonswitching —1.5 amp max. at 50 VDC.

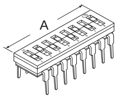
Fig. 2 – Top Actuated





Max. Cycle Life: up to 2,000 cycles per pole. SPST. **Contacts:** Copper alloy 30µ gold over 50µ nickel plating in contact area. **Current Rating:** Nonswitching—1.0 amp max. at 40 VDC. **Materials:** Same as 7000 Series

Fig. 3 – Dip Shunts



Materials: Housing: Glass-filled thermoplastic, 94V-0 rated. **Current Rating:** Standard pressure - 2 amp. **Resistance to Soldering Heat:** Cut straps can be reconnected by soldering bridging.

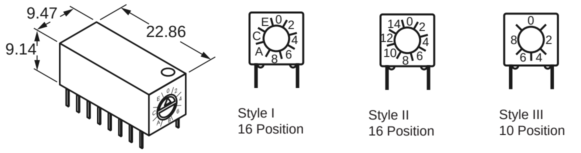
Fig.	No. of Cir.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
7000 Series – SPST, Side Actuated, Unsealed						
1	2	7.11	A5002-ND	3.96	3.63	1-435802-0
	3	9.65	A5003-ND	3.84	3.52	435802-2
	4	12.19	A5004-ND	1.35	1.24	435802-3
	5	14.73	A5005-ND	1.35	1.24	435802-4
	6	17.27	A5006-ND	1.89	1.74	435802-5
	7	19.81	A5007-ND	1.59	1.46	435802-6
	8	22.35	A5008-ND	1.92	1.86	435802-1
	9	24.89	A5009-ND	1.86	1.71	435802-7
	10	27.43	A5010-ND	2.01	1.85	435802-8
7000 Series – SPST, Side Actuated, Plastisol Sealed						
1	4	12.19	A5104-ND	1.62	1.49	1-435802-5
	5	14.73	A5105-ND	1.53	1.41	1-435802-6
	6	17.27	A5106-ND	1.86	1.71	1-435802-7
	7	19.81	A5107-ND	1.92	1.76	1-435802-8
	8	22.35	A5108-ND	1.74	1.60	435802-9
	9	24.89	A5109-ND	2.22	2.04	1-435802-9
	10	27.43	A5110-ND	2.07	1.90	2-435802-0
	12	32.51	A5112-ND	2.31	2.12	2-435802-2
7000 Series – SPST, Side Actuated, UV Sealed						
1	2	7.11	A5602-ND	4.44	4.07	1-435802-3
	5	14.73	A5605-ND	1.59	1.46	1-382394-6
	6	17.27	A5606-ND	1.65	1.52	1-382394-7
	8	22.35	A5608-ND	1.86	1.71	382394-9

Fig.	No. of Cir.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
7100 Series – SPST, Standard Profile, Unsealed						
2	2	7.11	A5202-ND	3.69	3.39	2-435640-9
	3	9.65	A5203-ND	3.78	3.47	3-435640-0
	4	12.19	A5204-ND	.93	.91	435640-2
	5	14.73	A5205-ND	1.08	.99	435640-3
	6	17.27	A5206-ND	1.14	1.05	435640-4
	7	19.81	A5207-ND	2.28	2.09	435640-1
	8	22.35	A5208-ND	1.32	1.21	435640-5
	9	24.89	A5209-ND	1.50	1.38	435640-6
	10	27.43	A5210-ND	2.58	2.37	435640-7
	12	32.51	A5212-ND	1.80	1.65	3-435640-2
7100 Series – SPST, Standard Profile, Plastisol Sealed						
2	4	12.19	A5304-ND	1.23	1.13	3-435640-5
	5	14.73	A5305-ND	1.77	1.63	3-435640-6
	6	17.27	A5306-ND	1.80	1.65	3-435640-7
	7	19.81	A5307-ND	2.64	2.42	3-435640-8
	8	22.35	A5308-ND	1.74	1.69	3-435640-9
	9	24.89	A5309-ND	2.73	2.51	4-435640-0
	10	27.43	A5310-ND	1.92	1.76	4-435640-1
7100 Series – SPST, Standard Profile, UV Sealed						
2	2	7.11	A5702-ND	4.29	3.94	3-435640-3
	3	9.65	A5703-ND	4.38	4.02	3-435640-4

Fig.	No. of Cir.	Dim. A (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
7100 Series – SPST, Low Profile, Unsealed						
2	4	12.19	A5404-ND	1.77	1.63	435668-3
	5	14.73	A5405-ND	1.44	1.32	435668-4
	6	17.27	A5406-ND	1.47	1.35	435668-5
	8	22.35	A5408-ND	1.74	1.60	435668-7
	10	27.43	A5410-ND	2.10	1.93	435668-9
7100 Series – SPST, Low Profile, Tape Sealed						
2	4	12.19	A5504-ND	1.38	1.27	3-435668-4
	5	14.73	A5505-ND	1.59	1.46	3-435668-5
	6	17.27	A5506-ND	1.62	1.49	2-435668-5
	7	19.81	A5507-ND	1.83	1.68	2-435668-7
	8	22.35	A5508-ND	2.40	2.20	2-435668-8
	9	24.89	A5509-ND	2.10	1.93	2-435668-9
	10	27.43	A5510-ND	2.31	2.12	3-435668-0
7600 Series – Dip Shunt, Std Pressure						
3	4	10.16	A26235-ND	.57	.53	435704-4
	6	15.24	A26236-ND	.84	.77	435704-6
	7	17.78	A26237-ND	.87	.80	435704-7
	8	20.32	A26238-ND	.81	.75	435704-8
	10	25.40	A26239-ND	.99	.91	1-435704-0
	12	30.48	A26240-ND	1.05	.97	1-435704-2
Prog. Hand Tool			A5800-ND	64.65	—	435862-1

Dip Switches — Preprogrammed

Material:
Glass-filled polyester, 94V-0 rated, black. **Contact:** Copper alloy with gold over nickel plating. **Voltage Rating:** 120V ms max. **Current Rating:** 1 amp max. **Contact Resistance:** 750 milliohms max. at 50mV open circuit. **Life Expectancy:** 500 revolutions **Actuator:** Screwdriver slot.



Style I
16 Position

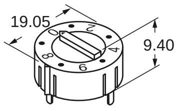
Style II
16 Position

Style III
10 Position

Switch Type	Tape Seal	Stamping Legend	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
Hexadecimal w/Complement	No	Style I	A26219-ND	12.33	11.31	53137-5
Hexadecimal w/Complement	Yes	Style I	A26221-ND	18.84	17.27	54792-1
Hexadecimal w/Complement	No	Style II	A26220-ND	12.33	11.31	53137-6
Hexadecimal w/Complement	Yes	Style II	A26222-ND	18.84	17.27	54792-2
BCD w/Complement	No	Style III	A26223-ND	12.33	11.31	53919-2
BCD w/Complement	Yes	Style III	A26224-ND	12.84	11.77	54778-1

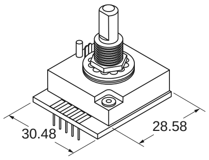
Rotary Switches

Fig. 1



Materials: Contacts: phosphor bronze, gold over nickel plated. **Dielectric Breakdown Volt:** 500 VDC min. **Insulation Res:** $1x10^8$ ohms. **Initial Contact Res.:** 25 milliohms. **Circuit Cap.:** 5 picofarads (at 100 KHz). **Durability:** 1000 cycles

Fig. 2



Material:
Housing:
Polyester, black.
Detent Ball and Spring: Stainless steel. **Printed Circuit Board:** Flame retardant, glass epoxy laminate, copper clad. **Contacts:** Phosphor bronze, gold over nickel. **Current Rating:** Nonswitching—2.0 amp at 115 VAC max. **Contact Life Expectancy:** 25,000 rotations.

Fig.	Description	No. of Pos.	Output Code Type	Digi-Key Part No.	Price Each 1	Price Each 10	AMP Part No.
6000 Series Rotary Switch							
1	Screwdriver/ Coin Actuated	10	Single Pole	A26200-ND	21.87	20.05	1-435097-1
	Bar-Type Knob	10	BCD	A26201-ND	24.84	22.77	435123-1
	Bar-Type Knob	16	Hexadecimal	A26202-ND	24.87	22.80	1-435167-1
3100 Series Rotary Switch							
2	Right Angle	10	36 deg Throw BCD	A26203-ND	75.00	68.75	435984-7

Grayhill Rotary DIP Switches

Specifications:

- **Mechanical Life:** 10,000 cycles
- **Make and Break Current Rating:** 30 mA at 30 Vdc for 10,000 cycles of operation
- **Carrying Current Rating:** 100mA at 50 Vdc
- **Contact Resistance:** 50 milliohms maximum
- **Operating Temperature Range:** -25°C to +85°C

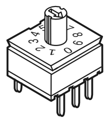
Materials and Finishes:

- **Rotor and Switch Body:** Plastic, rated at UL 94V-0
- **Contact Material:** Copper alloy gold over 30 microinches nickel
- **Terminals:** Copper alloy plated 150 microinches tin lead solder over nickel
- **Internal O-ring:** Silicon rubber

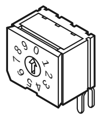
Flux Cleaning:

- Acceptable cleaning solutions include 1-1-1 Trichlorethane, Freon (TF, TE, or TMS), Isopropyl Alcohol, and detergent (140°F (60°C) maximum). Solutions which are not recommended include Acetone, Methylene Chloride, and Freon TMC.

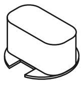
*All Grayhill Dip Switches are shipped in tubes.



Perp./Extended

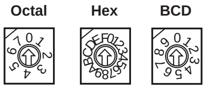


Rt. Angle/Flush



Knob for Extended Actuators

Switch Markings



Code & Positions	Type of Mounting	Type of Actuator	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Grayhill Part No.
Rotary Switches							
Octal	SMT	Flush	GH1309-ND	3.02	2.78	2.52	94HAB08W
Octal	Perp.	Flush	GH1310-ND	3.02	2.78	2.52	94HAB08
Octal	Perp.	Extended	GH1311-ND	3.02	2.78	2.52	94HBB08
Octal	Rt. Ang.	Flush	GH1312-ND	3.38	3.10	2.82	94HAB08RA
Octal	Rt. Ang.	Extended	GH1313-ND	3.38	3.10	2.82	94HBB08RA
BCD	SMT	Flush	GH1314-ND	3.02	2.78	2.52	94HAB10W
BCD	Perp.	Flush	GH1315-ND	3.02	2.78	2.52	94HAB10
BCD	Perp.	Extended	GH1316-ND	3.02	2.78	2.52	94HBB10
BCD	Rt. Ang.	Flush	GH1317-ND	3.38	3.10	2.82	94HAB10RA
BCD	Rt. Ang.	Extended	GH1318-ND	3.38	3.10	2.82	94HBB10RA
HEX	SMT	Flush	GH1319-ND	3.02	2.78	2.52	94HAB16W
HEX	Perp.	Flush	GH1320-ND	3.02	2.78	2.52	94HAB16
HEX	Perp.	Extended	GH1321-ND	3.02	2.78	2.52	94HBB16
HEX	Rt. Ang.	Flush	GH1322-ND	3.38	3.10	2.82	94HAB16RA
HEX	Rt. Ang.	Extended	GH1323-ND	3.38	3.10	2.82	94HBB16RA
Knobs for Extended Actuators Only							
Black Knob, open window type			GH5005-ND	.76	—	.64	947705-001
Gray Knob, open window type			GH5006-ND	.76	—	.64	947705-012
Gray Knob, black arrowhead			GH5007-ND	.76	—	.64	947705-017

Grayhill Optical Rotary Encoders

Series 61C

Features: • Competitively priced to similar electromechanical switches • Optically coupled for more than a million trouble-free operations • Has data entry pushbutton switch activated by switch shaft • Compatible with CMOS, TTL and HCMOS Logic • Operationally used to move display icon and input data • Used to set radio frequency, drill depth, RPM, etc. Plastic shaft and bushing.

Dimensions: • **Shaft:** .250” (6.35mm) dia., .375” (9.52mm) long • **Pin Spacing:** .1” x .025” (2.54mm x .64mm) diameter • **Thread:** 3/8 – 32 • **Overall Diameter:** .750” (19.05mm)

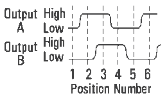
Encoder Ratings: • **Operating Voltage:** 5 ±.25 VDC • **Supply Current:** 30ma max. at 5VDC • **Life:** 1 million cycles of operation, 1 cycle is rotation through all positions and a full return • **Rotational Torque:** 1.5 inch-ounces ± 30% • **Load Current:** 5mA max. per channel • **Turn-On Time:** ≤30 mSec at 16.6 RPM • **Turn-Off Time:** ≤30 mSec at 16.6 RPM

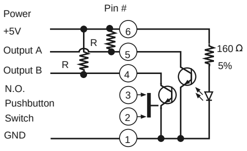
Pushbutton Switch Ratings: • **Rating:** at 5VDC, 10 mA, resistive • **Contact Resistance:** <10Ω • **Life Expectancy:** 3 million operations • **Contact Bounce:** <4 mSec at make <10 mSec at break • **Operating Temperature Range:** -40°C to +70°C.

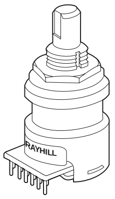
Clockwise Rotation

Position	Output A	Output B
1	❍	❍
2	●	❍
3	●	●
4	❍	●

● indicates logic high.
❍ indicates logic low.
Code repeats every 4 positions







Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
16-Position	GH6101-ND	20.54	16.44	12.33	10.28	61C22-01-04-02
32-Position	GH6102-ND	20.54	16.44	12.33	10.28	61C11-01-08-02

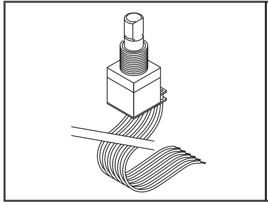
Optical Rotary Encoders

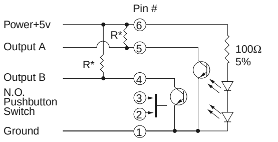
Series 62A

These low cost encoders offer long life (over 1 million operations) with small size and optional integrated pushbutton. These encoders are ideal for radio frequency setting, drill depth setting and other applications where detents are desired for operator feedback. Rugged metal shaft and bushing for long life.

Electrical Ratings:

- **Operating Voltage:** 5 ±.25 Vdc
- **Supply Current:** 30mA max. at 5 Vdc.
- **Operating Torque:** 1.5 in-oz ±50in-oz initially
- **Rotational Life:** >1 million cycles of operation (cycle is rotation through all positions and return)





*External pull-up resistors required for operation.
8.2kΩ is suggested for TTL; 3.3kΩ is suggested for CMOS.

Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
32-Position, 2” Cable	GH3046-ND	33.20	26.56	19.92	16.60	62A11-01-020S
32-Position w/Switch 2”	GH3047-ND	36.29	29.03	21.78	18.15	62A11-02-020S
32-Position, 5” Cable	GH3048-ND	33.89	28.48	20.28	16.94	62A11-01-050S
32 Position w/Switch 5”	GH3049-ND	36.99	22.20	17.02	15.91	62A11-02-050S

Industrial Optical Rotary Encoders

Series 61K, 61R, 63R

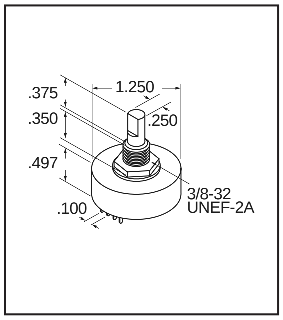
These rugged encoders are designed for continuous operations with high resolution. Made with stainless steel shaft and bushing for exceedingly long life (10 million life cycles). No detents.

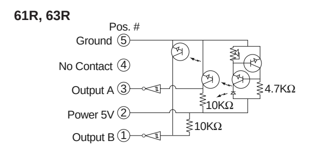
Features:

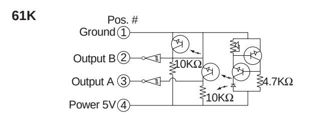
• High resolution • Rugged construction • Cable or pinned version • 10 million life cycles • 300 RPM shaft rotation • 61K is a 4 pin output • 61R is a 5 pin output • 63R is a 5 pin output with 500 million life cycles

Specifications:

• **Operating Voltage:** 5 ± .25 Vdc • **Supply Current:** 30 mA maximum at 5 Vdc • **Logic Output Characteristics:** Output Type: Open collector with integrated Schmitt Trigger and 10KΩ pull-up resistor. Maximum Sink Current: 16mA at .40 Volts. • **Power Consumption:** 150 mW maximum • **Optical Rise Time:** 500 ns • **Optical Fall Time:** 16 ns • **Mechanical Life:** 10 million revolutions • **Time Life:** Guaranteed for 10 years of continuous operation (calculated from emitter degradation data) • **Operating Temperature Range:** -40°C to 85°C







Description	Pulse Per Revolution	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
4 Pin PC Mount	64	GH3064-ND	44.62	35.70	31.24	27.67	61K64
4 Pin PC Mount	128	GH3065-ND	44.62	35.70	31.24	27.67	61K128
5” Cable	128	GH3066-ND	48.52	38.82	33.97	30.09	61K128-050
5 Pin PC Mount	64	GH3067-ND	44.62	35.70	31.24	27.67	61R64
5 Pin PC Mount	128	GH3068-ND	44.62	35.70	31.24	27.67	61R128
5 Pin PC Mount	128	GH3069-ND	49.54	39.64	34.68	30.72	63R128
5 Pin PC Mount	256	GH3070-ND	51.29	41.04	35.91	31.81	63R256

Mechanical Rotary Encoders

Series 25L

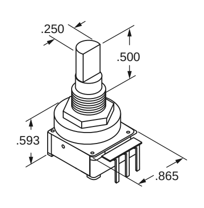
The 25L series of encoders are inexpensive single deck mechanical encoders designed for human interface terminals. Has detents.

Features:

- Quality construction and contact materials
- 100,000 life cycles

Specifications:

- **Switching Loads:** 1.5mA @ 115Vac, resistive; 150mA @ 14Vdc , resistive
- **Life Expectancy:** 100,000 cycles of operation @ rated loads; one cycle of operation is a rotation through all of the active positions and a return to the starting position
- **Operating Temperature:** -65°C to +85°C



Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
36 Position, 2 Bit - 3 Pin PC Mount	GH3071-ND	4.70	3.77	2.83	2.35	25LB10-Q
24 Position, 2 Bit - 3 Pin PC Mount	GH3072-ND	4.70	3.77	2.83	2.35	25LB15-Q
16 Position, 2 Bit - 3 Pin PC Mount	GH3073-ND	4.70	3.77	2.83	2.35	25LB22-Q
16 Position, Hex - 5 Pin PC Mount	GH3074-ND	4.70	3.77	2.83	2.35	25LB22-H

Mechanical Rotary Encoders

Series 26

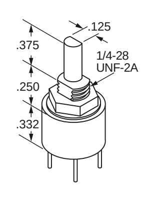
The series 26 rotary encoders are pc mounted mechanical encoders that come complete with a threaded shaft (mounting hardware included) and internal detents for user feedback.

User selectable for either continues rotation or present stops (two supplied).

Fully sealed with panel and shaft seal for use in the harshest environments.

Specifications:

- **Electrical Rating:**
25,000 cycles with logic compatible loads.
Make and break 200mA.
- **Detent Balls:**
Carbon steel, nickel plated
- **Terminals:**
Brass, gold plated nickel plate; Contacts: Copper alloy, gold plated over nickel plate



Description	Digi-Key Part No.	Price Each 1	25	100	250	Grayhill Part No.
8 Position, BCD - 5 Pin PC Mount	GH3075-ND	13.87	11.10	8.32	6.83	26ASD45-01-1-AJS
16 Position, BCD - 5 Pin PC Mount	GH3076-ND	13.87	11.10	8.32	6.83	26ASD22-01-1-AJS
16 Position, Grey Code - 5 Pin PC Mount	GH3077-ND	21.26	17.00	12.75	10.63	26GS22-01-1-16S-C

Code And Truth Table

Switch Position	Code Position	BCD Output* 1	2	4	8	Gray Output* 1	2	4	8
1	0								
2	1	●				●			
3	2		●			●	●		
4	3	●	●				●		
5	4			●			●	●	
6	5	●		●		●	●	●	
7	6		●	●		●		●	
8	7	●	●	●				●	
9	8				●			●	●
10	9	●			●	●		●	●
11	10		●		●	●	●	●	●
12	11	●	●		●		●	●	●
13	12			●	●		●		●
14	13	●		●	●	●	●		●
15	14		●	●	●	●			●
16	15	●	●	●	●				●

*Dot indicates terminal tied to common.

IWATSU CUI INC

Optical Encoders

• Long life • High resolution • Metal shaft • Digital output

Fig. 1 **Vertical**

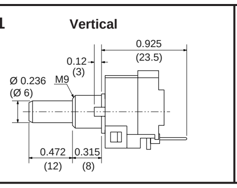
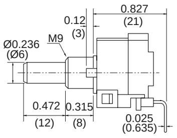


Fig. 2 **Right Angle**



Power: 5VDC @ 50mA **Life:** 2.5 million cycles min.
Cycles/Rev.: 50/75/100/128/200 **Output:** TTL compatible

All models are quadrature (dual channel), rugged and may be panel or pc board mounted.

Maximum 300 RPM for integral applications; 1kHz max frequency response.

Shaft turning clockwise viewed from front

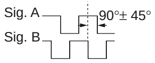


Fig.	CPR	Digi-Key Part No.	Price Each 1	10	Iwatsu Part No.
1	50	102-1001-ND	39.85	27.90	EC202A050A-2TD
2	50	102-1002-ND	39.85	27.90	EC202A050A-2SD
1	75	102-1003-ND	39.85	27.90	EC202A075A-2TD
2	75	102-1004-ND	39.85	27.90	EC202A075A-2SD
1	100	102-1005-ND	39.85	27.90	EC202A100A-2TD
2	100	102-1006-ND	39.85	27.90	EC202A100A-2SD
1	128	102-1007-ND	39.85	27.90	EC202A128A-2TD
2	128	102-1008-ND	39.85	27.90	EC202A128A-2SD
1	200	102-1009-ND	59.85	49.95	EC202C200A-2TD
2	200	102-1010-ND	59.85	49.95	EC202C200A-2SD

Tosoku CUI INC

Optical Encoders

• Smallest in the world
• Lowest current draw
• Extremely economical

Fig. 1

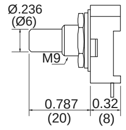


Fig. 2

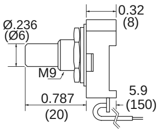


Fig. 3

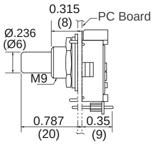


Fig. 4

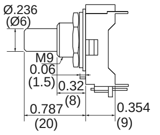


Fig. 5

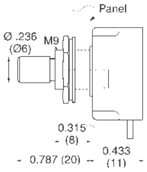


Fig. 6

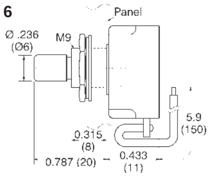
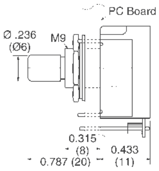


Fig. 7



Power: 5VDC @ 8mA **Life:** 1.0 million cycles min. **Cycles/Rev.:** 25 **Output:** TTL compatible
Body Size: .709"x.965" (18.01mmx24.51mm)

Fig.	CPR	Detent	Digi-Key Part No.	Price Each 1	10	Tosoku Part No.
1	25	N	102-1015-ND	30.00	21.00	RE20NS2520RA
1	25	Y	102-1016-ND	30.00	21.00	RE20NS25C20RA
2	25	N	102-1011-ND	34.15	23.90	RE20NC2520RA
2	25	Y	102-1012-ND	34.15	23.90	RE20NC25C20RA
3	25	N	102-1013-ND	30.00	21.00	RE20NF2520RA
3	25	Y	102-1014-ND	30.00	21.00	RE20NF25C20RA
4	25	N	102-1017-ND	30.00	21.00	RE20NV2520RA
4	25	Y	102-1018-ND	30.00	21.00	RE20NV25C20RA
5	25	Y	102-1021-ND	42.30	38.55	RE21NS25C20R
6	25	Y	102-1019-ND	48.10	43.80	RE21NC25C20R
7	25	Y	102-1020-ND	42.30	38.55	RE21NF25C20R

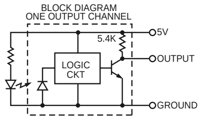
CLAROSTAT

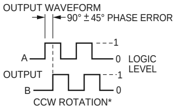
Optical Rotary Encoders

Series: 600, 601H, 601V

Electrical Specifications: Description: The Series 600 and 601 controls are manually operated, rotary, optical encoders that output two square waves in quadrature at a rate of 128 pulses per channel per revolution as a standard with other resolutions down to 60 pulses available. The outputs are TTL compatible. The variation by series is the terminal configuration, with the Model 600 having (4) cable leads, and the Model 601 having (4) pin leads and internal resistors. **Input Power:** 4 volts DC ±5% @ 30 MA maximum plus external requirements. **Output Rate:** 128 pulses/revolution per channel-standard. **Channels:** Two separate output channels in quadrature. 90° ±45°. **Output Voltage:** High level voltage: 2.4 volts min. with 10KΩ load to ground. Low level voltage: .4 volt maximum

Environmental Characteristics: Operating Temp.: -20°C to 65°C. **Mechanical Characteristics: Shaft Rotation:** Continuous in either direction, 300 RPM max. **Terminals: P/C Type:** .025" (.64mm) by 0.12" (3.05mm) thick brass, gold plated to facilitate soldering. **Cable Type:** Four lead ribbon cable, color-coded, with .050" (1.27mm) spacing. 28 AWG stranded copper wire, .039" (.99mm) diameter. **Strength:** Terminals withstand 2 lb. push and pull and a 90° bend.

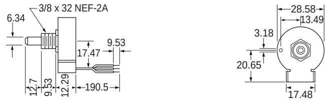




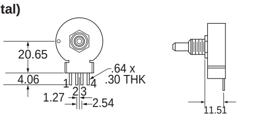
CABLE CODE

Term#	Color	Function
1	Red	5VDC ±5% @ 30 MA max.
2	Yellow	A Out
3	Green	Ground
4	Orange	B Out

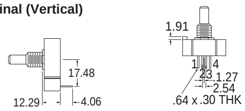
Model 600 -
Cable Style



Model 601 - PC Terminal
(Horizontal)



Model 601 - PC
Terminal (Vertical)



Description	Digi-Key Part No.	Price Each	Clarostat Part No.
Cable Version	600CS-ND	46.14	600EN-128-CBL
Horizontal Version	601HCS-ND	45.51	600EN-128-B66
Vertical PC Version	601VCS-ND	45.09	600EN-128-C24

CTS

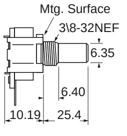
Mechanical Rotary Encoders

Series 288

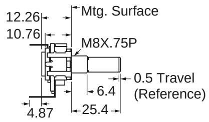
Features: Miniature 16mm style. Low cost. Metal shaft. **Specifications:** • **Power Rating:** .1W • **Operating Temp.:** -25°C to 100°C • **Rotational Life:** 10K cycles • **Contact Resistance:** 5000Ω static closed circuit maximum and 1 MΩ open circuit maximum • Continuous rotation

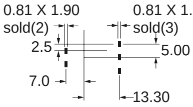
Fig. 1 - Binary Switching Codes

1A

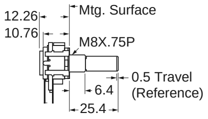


1B – Vertical Mount with Switch





1C – Horizontal Mount with Switch



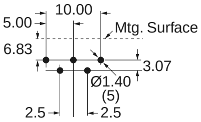


Fig. 2 -
Gray Switching Code

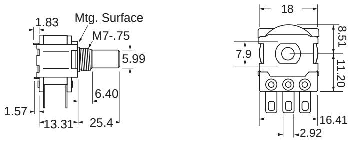


Fig.	Description	Digi-Key Part No.	Price Each 1	10	50	100	CTS Part No.
1A	2 Bit Non-Detented 16 Position	CT3001-ND	2.58	2.40	2.00	1.80	288T232R161A1
1A	2 Bit Detented 16 Position	CT3002-ND	2.58	2.40	2.00	1.80	288T232R161A2
1B	2 Bit Binary w/Switch, Vertical, 16 Pos.	CT2999-ND	5.42	5.04	4.19	3.78	288V232R161B2
1C	2 Bit Binary w/Switch, Horizontal, 16 Pos.	CT3000-ND	5.42	5.04	4.19	3.78	288X232R161B2
2	4 Bit Non-Detented 16 Position	CT3003-ND	3.50	3.26	2.71	2.45	288T232R162A1

Panasonic® Mechanical Rotary Encoders

EVQ-VEM Series:

Specifications: Mechanical:

• Rotation Angle: 360° (endless) • Detent Points: 24 (each detent angle: 15 ±3°) **Electrical:** • Output Signal: A, B 2 signal. 24 Pulse/360° (phase difference) • Switch Rating: DC 10V - 1mA (each bit) • ON Resistance Between Terminal: 1Ω max. • Insulation Resistance: at DC 50V, 10MΩ min. (between terminals at detent position) • Chattering: 5ms max. Rotation Speed: 60 r/min. Measurement circuit: See diagram • Detent Position: Output Signal "A" OFF and Output SIgnal "B" Off or On. **Physical, Environment Life:** • Temperature Range: -10°C to 70°C • Soldering Temperature: 300°C 3 sec~max. • Rotation Life: 50,000

EVEG/J/L/H Series:

Specifications: Mechanical:

• Rotation Angle: 360° (endless) • Shaft Inclination: 0.7 x H/30 mm p-p max. • Detent Points: 24 • Rotation Torque: standard type, 3mN-m to 20mN-m **Electrical:** • Output Signals: Phase A and B • Resolution: 24 pulses/360° • Rating: DC 5V 1mA • Contact Resistance: 1Ω max. • Insulation Resistance: DC 50V 10MΩ min. • Dielectric Withstanding Voltage: 1 minute at 50 VAC • Bouncing: 3 ms max. **Physical, Environment Life:** • Operating Life: standard life, 30,000 cycles min. • Operating Temperature: -10°C to +70°C • Storage Temperature: -40°C to +85°C

Fig.	Description	Dim. C	Dim. D	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	14 MM	12.5	7	P80685-ND	3.53	2.95	2.48	EVQ-VEMF0124B
	14 MM	17.5	12	P80695-ND	3.53	2.95	2.48	EVQ-VEMF0224B
	14 MM	22.5	12	P80705-ND	3.53	2.95	2.48	EVQ-VEMF0324B
2	12 MM	17.5	—	P10859-ND	1.52	1.35	.97	EVE-GA1F1724B
	12 MM	20	—	P10860-ND	1.52	1.35	.97	EVE-GA1F2024B

Fig. 1— EVQ-VEM Series

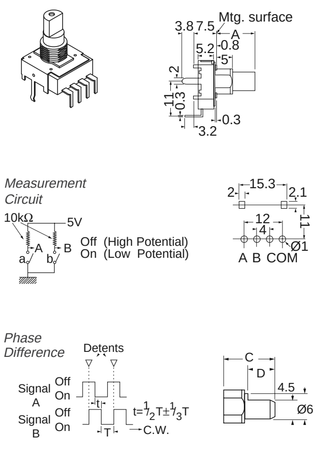
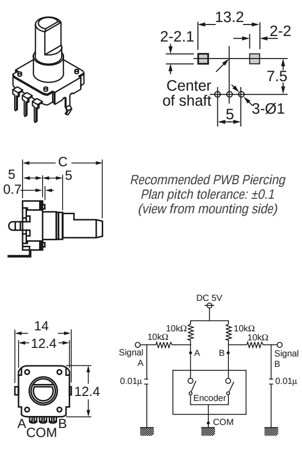


Fig. 2 — EVEG/J/L/H Series



9mm Square/Sealed Encoders

Electrical Characteristics:

• **Output:** 2-bit gray code, Channel A leads Channel by 90° electrically turning clockwise (CW): 6 pulses per resolution • **Closed Circuit Resistance:** 2 ohms maximum • **Open Circuit Resistance:** 100K ohms minimum • **Contact Rating:** 10 milliamp @ 10 VDC or 0.1 watt maximum • **Insulation Resistance (500 VDC):** 1,000 megohms minimum • **Dielectric Withstanding Voltage: (Sea Level)** 900 VAC minimum; **(Electrical Travel)** Continuous • **Contact Bounce (15 RPM):** 5 milliseconds maximum • **RPM (Operating):** 120 maximum

Environmental Characteristics:

- **Temperature Range:** -55°C to +125°C
- **Rotational LIfe:** 100,000 cycles

Mechanical Characteristics:

- **Mechanical Angle:** Continuous
- **Torque:** 5 oz-in. maximum

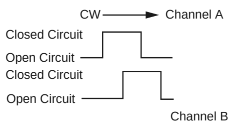


Fig. 1

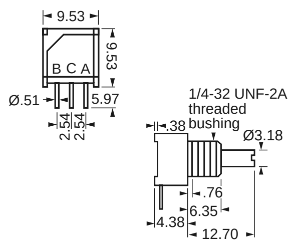


Fig. 2

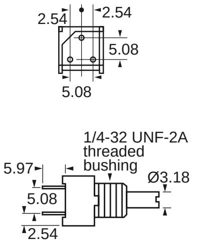


Fig.	Description	Digi-Key Part No.	Price Each 1	10	50	100
1	9mm Square Right Angle Encoder	3315C-1-006-ND	2.70	2.39	2.01	1.72
2	9mm Square Vertical Encoder	3315Y-1-006-ND	2.70	2.39	2.01	1.72

Rotary Optical Encoders

Fig. 1

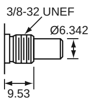


Fig. 2

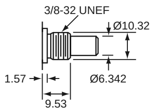
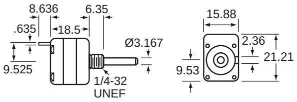


Fig. 3



Electrical Characteristics:

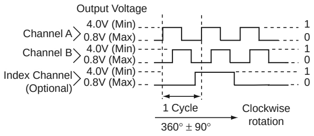
• **Output:** 2-bit gray code, Channel A leads Channel B by 90° electrically turning clockwise • **Supply Voltage:** 5.0 VDC ±0.25 VDC • **Supply Current:** 26 mA maximum • **Output Voltage:** 0.8V maximum for low output & 4V minimum for high output • **Output Current (Low Output):** 25 mA minimum • **Insulation Resistance (500 VDC):** 1,000 megohms • **Rise/Fall Time:** 200ns (typical) • **Shaft RPM (Ball Bearing):** 3,000 rpm maximum • **Power Consumption:** 136 mW maximum • **Pulse Width (Electrical Degrees, Each Channel):** 180° ±45° TYP. • **Pulse Width (Index Channel):** 360° ±90° • **Phase (Electrical Degrees, Channel A to Channel B):** 90° ±45° TYP. • **Index Channel Centered on 1-1 State Combination of A and B Channels:** 0° ±45°

Environmental Characteristics:

• **Operating Temp. Range (Standard):** -40°C to +85°C

Mechanical Characteristics:

• **Mechanical Rotation:** Continuous • **Torque (Starting and Running):** A & C Bushings (Spring Loaded for Optimum Feel); 1.5 oz-in. maximum and W,S & T Bushings (Ball Bearing Shaft Support): 0.1 oz-in maximum



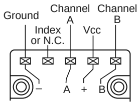
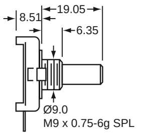
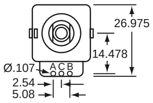


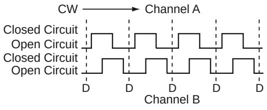
Fig.	Cycles/ Revolution	Digi-Key Part No.	Price Each 1	25	50
1	64	ENA1JB28L00064-ND	51.37	40.00	32.67
	100	ENA1JB28L00100-ND	51.37	40.00	32.67
	128	ENA1JB28L00128-ND	51.37	40.00	32.67
2	128	ENC1JD28L00128-ND	51.37	40.00	32.67
3	256	ENS1JB28L00256-ND	82.74	64.43	52.62

Digital Contacting Encoders

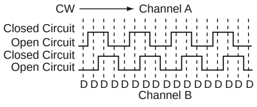




Full Cycle Per Detent
(Normally Open in Detent Shown)



1/4 Cycle Per Detent



Electrical Characteristics: • **Output:** 2-bit gray code, Channel A leads Channel B by 90° electrically turning clockwise (CW) • **Closed Circuit Resistance:** 5 ohms maximum • **Open Circuit Resistance:** 100K ohms minimum • **Contact Rating:** 10 milliamp @ 10 VDC or 0.1 watt maximum • **Insulation Resistance (500 VDC):** 1,000 megohms minimum • **Dielectric Withstanding Voltage:** MIL-STD-202 Method 301 (Sea Level; 1,000 VAC minimum) • **Electrical Travel:** Continuous • **Contact Bounce (15 RPM):** 5 milliseconds maximum • **RPM (Operating):** 120 maximum

Environmental Characteristics: • **Operating Temperature Range:** +1°C to +125°C

Mechanical Characteristics: • **Mechanical Angle:** Continuous • **Torque (Detented):** 0.75 to 2.25 oz-in.

Anti-Rotation Lug Position	Cycles Per Revolution	Digi-Key Part No.	Price Each 1	25	50
None	24	ECW1DB24BC0024-ND	4.86	3.78	3.09
9:00	24	ECW1JB24BC0024-ND	4.86	3.78	3.09

HAMLIN Magnetic Reed Switches

The basic reed switch consists of two ferromagnetic reeds, hermetically sealed in a gas filled capsule. When these reeds are introduced to a magnetic field, they assume opposite polarities and attract toward each other closing the contacts. When the magnetic field is reduced beyond the spring force of the reeds the contacts again spring open. Hamlin's reed switches are ideal in auto, marine and moist environment applications and operating environments can be almost anywhere from air, submerged in water or fuels, to dust-laden atmospheres.

Fig. 1

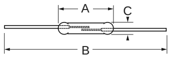


Fig. 2

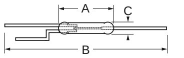
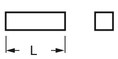
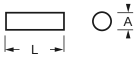


Fig.	Circuit	Ampere Turns	Max. DC Contact Rating Watts	Max. DC Contact Rating Volts	Switching Current (Amp)	Carry Current (Amp)	Operate/ Release (ms)	Dimensions (mm) A	B	C	Digi-Key Part No.	Pricing 1	10	50	Hamlin Part No.
1	SPST	10-20	10	200	0.5	0.8	.6/.2	12.70	40.39	1.83	HE500-ND	1.04	8.80	36.80	MDSR-7 10-20
1	SPST	17-28	10	300	0.5	1.5	.6/.2	15.24	40.39	2.29	HE501-ND	1.17	9.90	41.40	MDRR-6 17-28
1	SPST	12-23	10	200	0.5	1.2	.6/.2	15.24	40.39	2.29	HE502-ND	1.27	10.73	44.85	MDSR-4 12-23
1	SPST	12-33	10	200	0.5	1.8	.6/.25	15.24	40.39	2.29	HE503-ND	.94	7.98	33.35	MDCG-4 12-33
1	SPST	22-33	10	1000	0.5	1.5	.75/.2	20.32	56.64	2.67	HE504-ND	2.50	21.18	88.55	MARR-5 22-33
1	SPST	22-38	50	250	1.5	2.5	.75/.5	20.32	56.64	2.84	HE505-ND	1.56	13.20	55.20	MRPR-8 22-38
2	SPDT	15-25	5	175	0.25	1.5	.7/1	14.73	52.32	2.67	HE506-ND	3.22	27.23	113.85	MDRR-DT 15-25
2	SPDT	50-65	50	500	1.5	2.0	5.5/8	39.62	85.85	5.54	HE508-ND	8.19	68.54	289.80	DRT-DTH 50-65
1	SPST	47-68	100	400	3.0	6.0	4.5/2.5	50.80	82.55	5.26	HE509-ND	3.61	30.53	127.65	DRR-129 47-68

HAMLIN Magnets





A permanent magnet is the most common source for operating the magnetic reed switch. The method used to position the magnet depends upon the switching requirement but can be used in one of four basic techniques; perpendicular or parallel motion (up and down, side to side) rotation (revolving magnet or switch), shielding (passing a ferromagnetic material between the switch and magnet) or biasing which is using one magnet of opposite polarity to cancel another magnet's lines of force.

Dim. (mm) A x L	Use w/ A.T. Range	Gauss at Pole	Digi-Key Part No.	Pricing 1	10	50	Hamlin Part No.
1.57 Sq. x 12.70	10-38	700	HE510-ND	1.20	10.18	42.55	H-31
4.83 Sq. x 25.40	10-38	1400	HE511-ND	3.02	25.58	106.95	H-32
3.05 Sq. x 19.05	10-38	1200	HE512-ND	1.66	14.03	58.65	H-33
6.10 Sq. x 24.89	10-68	1300	HE513-ND	3.41	28.88	120.75	H-34
3.81 Dia. x 19.81	10-38	1150	HE514-ND	1.59	13.48	56.35	420
5.84 Dia. x 24.89	10-68	1500	HE515-ND	4.55	38.50	161.00	625

SRC DEVICES Magnetic Reed Switches

Reed switches have been used in thousands of applications from non-contact switches to sensing direction, speed and position.

Reed switches are a reliable, low cost, low current switch that are hermetically sealed for operation in the most demanding environments.

Fig. 1

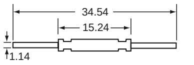
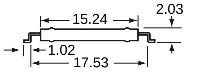


Fig. 2 — SMT



Circuit	Operate AT• (min.-max.)	Release AT• (min.-max.)	Switching Volt. (max.)	Switching Current	Carry Current	Digi-Key Part No.	Pricing 1	10	50	100	SRC Devices Part No.
Fig. 1 — Magnetic Reed Switches											
SPST	10-15	5-15	200VDC/VAC	0.5A	1.5A	CLA122-ND	.91	7.70	32.20	52.50	FR2S1015-051500
SPST	10-20	5-20	200VDC/VAC	0.5A	1.5A	CLA123-ND	.85	7.15	29.90	48.75	FR2S1020-052000
SPST	15-20	5-20	200VDC/VAC	0.5A	1.5A	CLA124-ND	.91	7.70	32.20	52.50	FR2S1520-052000
SPST	15-25	5-20	200VDC/VAC	0.5A	1.5A	CLA125-ND	.85	7.15	29.90	48.75	FR2S1525-0525
SPST	20-25	5-25	200VDC/VAC	0.5A	1.5A	CLA126-ND	.91	7.70	32.20	52.50	FR2S2025-052500
SPST	20-30	5-30	200VDC/VAC	0.5A	1.5A	CLA127-ND	1.14	9.63	40.25	65.63	FR2S2030-053000

Circuit	Operate AT• (min.-max.)	Release AT• (min.-max.)	Switching Volt. (max.)	Switching Current	Carry Current	Digi-Key Part No.	Cut Tape Pricing 1	10	50	T & R Pricing* 3,000	6,000	SRC Devices Part No.
Fig. 2 — SMT Reed Switches on Tape												
SPST	15-25	5-22	200VDC/VAC	0.5A	1.5A	CLA128CT-ND	1.27	11.31	45.83	507.00/M	477.75/M	FR2249
SPST	10-20	5-18	200VDC/VAC	0.5A	1.5A	CLA129CT-ND	1.27	11.31	45.83	507.00/M	477.75/M	FR2259

• Operate and Release values are given in Ampere-Turns.

* For Tape & Reel part number, change CT to TR.

HAMLIN Magnetic Position Sensors

Specifications:

- Switching Voltage: SPST-N/O- 200VDC,
  SPST- HV- 300VDC,
  SPDT- 175VDC.
- Initial Contact Resistance: 0.200Ω.
- Typical Operate Time: 1.00 ms.
- Shock w/o False Operation: 100 G's, 11 ms, 1/2 sine wave.
- Operate & Storage Temp: -40°C to +105°C.

Fig. 1

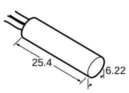


Fig. 2

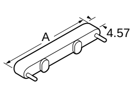
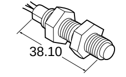


Fig. 3



3A = 5/16 - 24 Thread
3B = M8 x 1.25 Thread

Fig. 4

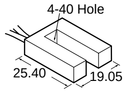


Fig. 5

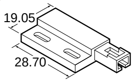


Fig. 6

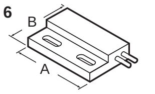


Fig. 7

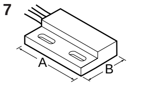


Fig. 5 mates with Digi-Key part number WM2900 (connector), WM2510 (contact)

Fig.	Dim. (mm) A	B	Must Operate/Release Distance (mm)	Termination or Wiring	Digi-Key Part No.	Pricing 1	10	50	Matching Actuator Part No.	Pricing 1	10	50
SPST-N/0												
1	—	—	3.81/28.32	304.8mm PVC Leads	59025-010-ND•	4.58	38.78	162.15	57025-000-ND•	3.93	33.28	139.15
2	17.78	—	1.90/13.97	PCB Pins	59045-010-ND	2.96	25.03	104.65	57045-000-ND	4.75	40.15	167.90
2	22.86	—	3.81/19.05	PCB pins	59050-010-ND•	2.44	20.63	86.25	57050-000-ND•	5.20	44.00	184.00
3A	—	—	3.81/28.32	304.8mm PVC Leads	59065-010-ND•	5.82	49.23	205.85	57065-000-ND•	4.94	41.80	174.80
3B	—	—	3.81/28.32	304.8mm PVC Leads	59070-010-ND	5.82	49.23	205.85	57070-000-ND	4.94	41.80	174.80
4	—	—	2.54/6.35	304.8mm PVC Leads	59085-010-ND	12.71	107.53	449.65	VANE	—	—	—
5	—	—	3.81/28.32	Connector	59105-010-ND	6.01	50.88	212.75	57105-000-ND	4.16	35.20	147.20
6	28.70	19.05	3.81/28.32	Pins	59125-010-ND•	5.17	43.73	182.85	57125-000-ND•	4.16	35.20	147.20
7	28.58	19.05	8.89/29.21	304.8mm Teflon Leads	59135-010-ND	9.82	83.05	347.30	57135-000-ND	5.56	47.03	196.65
6	23.01	14.00	4.44/20.32	304.8mm PVC Leads	59140-010-ND	5.23	44.28	185.15	57140-000-ND•	4.88	41.25	172.50
6	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59145-010-ND•	5.23	44.28	185.15	57145-000-ND•	4.16	35.20	147.20
7	28.85	19.05	5.71/20.32	304.8mm PVC Leads	59150-010-ND•	5.17	43.73	182.85	57150-000-ND•	4.16	35.20	147.20
SPST-HV-N/0												
1	—	—	3.81/28.32	304.8mm PVC Leads	59025-020-ND†	5.23	44.28	185.15	57025-000-ND†	3.93	33.28	139.15
2	—	—	3.81/19.05	PCB Pins	59050-020-ND†	3.28	27.78	116.15	57050-000-ND†	5.20	44.00	184.00
3A	—	—	3.81/28.32	304.8mm PVC Leads	59065-020-ND†	6.47	54.73	228.85	57065-000-ND†	4.94	41.80	174.80
3B	—	—	3.81/28.32	304.8mm PVC Leads	59070-020-ND†	6.47	54.73	228.85	57070-000-ND†	4.94	41.80	174.80
5	—	—	3.81/28.32	Connector	59105-020-ND†	6.66	56.38	235.75	57105-000-ND†	4.16	35.20	147.20
6	28.70	19.05	3.81/28.32	Pins	59125-020-ND†	5.82	49.23	205.85	57125-000-ND†	4.16	35.20	147.20
7	28.58	19.05	8.89/29.21	304.8mm Teflon Leads	59135-020-ND	10.47	88.55	370.30	57135-000-ND	5.56	47.03	196.65
6	23.01	14.00	4.44/20.32	304.8mm PVC Leads	59140-020-ND†	5.88	49.78	208.15	57140-000-ND†	4.88	41.25	172.50
6	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59145-020-ND†	5.88	49.78	208.15	57145-000-ND†	4.16	35.20	147.20
7	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59150-020-ND†	5.82	49.23	205.85	57150-000-ND†	4.16	35.20	147.20
SPDT-N/C-N/0												
1	—	—	3.81/28.32	304.8mm PVC Leads	59025-030-ND•	7.54	63.80	266.80	57025-000-ND	3.93	33.28	139.15
3A	—	—	3.81/28.32	304.8mm PVC Leads	59065-030-ND•	8.78	74.25	310.50	57065-000-ND	4.94	41.80	174.80
3B	—	—	3.81/28.32	304.8mm PVC Leads	59070-030-ND	8.81	74.53	311.65	57070-000-ND	4.94	41.80	174.80
4	—	—	2.54/6.35	304.8mm PVC Leads	59085-030-ND	13.62	115.23	481.85	VANE	—	—	—
7	28.58	19.05	8.89/29.21	304.8mm Teflon Leads	59135-030-ND	12.77	108.08	451.95	57135-000-ND	5.56	47.03	196.65
6	23.01	14.00	4.44/20.32	304.8mm PVC Leads	59140-030-ND•	8.19	69.30	289.80	57140-000-ND	4.88	41.25	172.50
6	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59145-030-ND•	8.19	69.30	289.80	57145-000-ND	4.16	35.20	147.20
7	28.58	19.05	5.71/20.32	304.8mm PVC Leads	59150-030-ND•	8.65	73.15	305.90	57150-000-ND	4.16	35.20	147.20

• HE1-KIT-ND ***Digi-Key® Magnetic Switches Kit*** Assortment of switches denoted. (22 total pieces) Includes notebook style standard case........**$69.95**

† HE2-KIT-ND ***Digi-Key® Magnetic Switches Kit*** One each of switches denoted. (18 total pieces) Includes notebook style standard case.........**$49.95**

Cannon

ITT Industries
Engineered for life

C&K Magnetic Sensors

Fig. 1

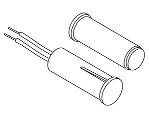


Fig. 2

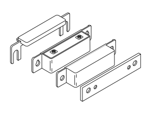


Fig. 3

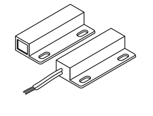


Fig. 4

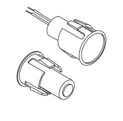


Fig. 5

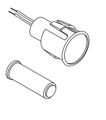


Fig. 6

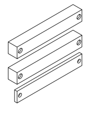
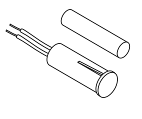


Fig. 7



C&K's MPS Series Magnetic Proximity Sensors operate when a magnetic field approaches two magnetic reed blades. The magnetic field overcomes the spring tension of the blades and brings the contacts together. When the magnetic actuator is removed, the reeds separate by their own spring tension. Comes complete with reed switch and matching actuator.

FEATURES: • Long Life Expectancy — 10 million operations • Housing made of rugged impact resistant ABS plastic that meets or exceeds UL requirements for fire retardation • Sealed Contacts allowing the reed to operate in damp and dusty environments • Wide gap performance makes magnet and switch alignment less critical.

SPECIFICATIONS: • **Contact Ratings:** 100 VDC or 100 VAC max. @ 0.3 Amp Max.; 1.0 Amp Max. Carry Current • **Operating Temperature:** -40°C to 100°C • **Mechanical & Electrical Life:** 10 Million Operations

MATERIALS: • **Housing/Spacer/Cover:** ABS Plastic (UL94V-0), white • **Wire Leads:** UL1061, 22 AWG: stranded, made of copper or aluminum; Length: 12" (30.48cm) with ends stripped; Color: white • **Magnets:** Alnico V and Ceramic Ferrite 8 (MPS80WG model only).

NOTE: Wide gap contacts are polarity sensitive. Use alignment dots for proper installation of surface mount contacts.

Fig.	Make Gap (mm)	Release Gap (mm)	Digi-Key Part No.	Pricing 1	10	100	250	C & K Part No.
1	31.75	40.64	CKN6002-ND	5.61	48.45	408.00	924.38	MPS9WGW
2	31.75	31.75	CKN6003-ND	6.93	59.85	504.00	1141.88	MPS20WGW
3	25.40	33.02	CKN6004-ND	5.94	51.30	432.00	978.75	MPS45WGW
4	31.75	40.64	CKN6005-ND	6.60	57.00	480.00	1087.50	MPS70WGW
5	31.75	40.64	CKN6006-ND	6.60	57.00	480.00	1087.50	MPS73WGW
6	50.80	50.80	CKN6007-ND	6.60	57.00	480.00	1087.50	MPS80WGW
7	31.75	40.64	CKN6008-ND	5.61	48.45	408.00	924.38	MPS95WGW

EAC Electronic Applications Company Reed Relays

Fig. 1 Dip Reed Relays, Epoxy Molded

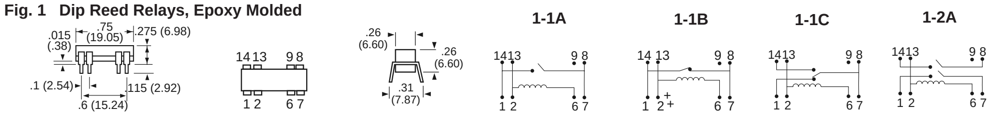


Fig. Form	Coil Volt. (VDC)	Coil Res. (Ω)	Pickup/ Dropout (VDC)	Max. Volt. (VDC)	Cur. Rtg. (A)	Cont. Res. (Ω)	Oper./ Release / Bounce Time (msec.)	Power Rtg. (W)	Ins. Res. (Ω)	Digi-Key Part No.	Price Each 1	10	50	100	EAC Part No.
Dip Reed Relays, Epoxy Molded															
1-1A	5	500	4.0/0.5	100	.50	.20	.5/.5/.5	10	10^{10}	Z660-ND	3.87	3.28	2.74	2.24	D1A05A
	12	1000	9.6/1.2	100	.50	.20	.5/.5/.5	10	10^{10}	Z661-ND	3.87	3.28	2.74	2.24	D1A12A
	24	2200	19.2/2.4	100	.50	.20	.5/.5/.5	10	10^{10}	Z612-ND	3.90	3.30	2.76	2.25	D1A24A
1-2A	5	150	4.0/0.5	100	.50	.20	.5/.5/.5	10	10^{10}	Z662-ND	5.69	4.82	4.03	3.29	D2A05A
	12	500	9.6/1.2	100	.50	.20	.5/.5/.5	10	10^{10}	Z614-ND	5.69	4.82	4.03	3.29	D2A12A
	24	1750	19.2/2.4	100	.50	.20	.5/.5/.5	10	10^{10}	Z615-ND	5.85	4.95	4.14	3.38	D2A24A
1-1B	5	450	4.0/0.5	100	.50	.20	.35/.5/.5	10	10^{10}	Z616-ND	5.69	4.82	4.03	3.29	D1B05A
	12	450	9.6/1.2	100	.50	.20	.35/.5/.5	10	10^{10}	Z617-ND	5.69	4.82	4.03	3.29	D1B12A
	24	1750	19.2/2.4	100	.50	.20	.35/.5/.5	10	10^{10}	Z618-ND	5.69	4.82	4.03	3.29	D1B24A
1-1C	5	200	4.0/0.5	28	.25	.20	.5/.5/NO = .5, NC = 1.5	3	10^{9}	Z663-ND	6.92	5.86	4.90	4.00	D1C05C
	12	500	4.0/0.5	28	.25	.20	.5/.5/NO = .5, NC = 1.5	3	10^{9}	Z664-ND	6.92	5.86	4.90	4.00	D1C12C
	24	1750	19.2/2.4	28	.25	.20	.5/.5/NO = .5, NC = 1.5	3	10^{9}	Z621-ND	7.15	6.05	5.06	4.13	D1C24C
Series 10 Reed Relays															
2-1A	3	250	2.25/0.3	200	.5	.10	.5/.25/—	5	10^{10}	Z622-ND	4.13	3.50	2.93	2.39	R1A3AHH
	5	700	3.75/0.5	200	.5	.10	.5/.25/—	5	10^{10}	Z623-ND	4.13	3.50	2.93	2.39	R1A5AHH
	12	2000	9.0/1.2	200	.5	.10	.5/.25/—	5	10^{10}	Z624-ND	4.13	3.50	2.93	2.39	R1A12AHH
	24	4000	18.0/2.4	200	.5	.10	.5/.25/—	5	10^{10}	Z625-ND	5.17	4.38	3.66	2.99	R1A24AHH
	3	30	2.25/0.3	300	2	.10	.5/.25/—	50	10^{10}	Z626-ND	4.13	3.50	2.93	2.39	P1A3A
	5	100	3.75/0.5	300	2	.10	.5/.25/—	50	10^{10}	Z627-ND	4.13	3.50	2.93	2.39	P1A5A
	12	500	9.0/1.2	300	2	.10	.5/.25/—	50	10^{10}	Z628-ND	4.13	3.50	2.93	2.39	P1A12A
	24	1000	18.0/2.4	300	2	.10	.5/.25/—	50	10^{10}	Z629-ND	5.17	4.38	3.66	2.99	P1A24A
Series 30 Reed Relays															
3-1A	5	500	3.8/0.5	200	.5	.20	0.4/0.1/0.3	10	10^{9}	Z530-ND	3.87	3.28	2.74	2.24	SD1A05A
	12	500	8.0/1.0	200	.5	.20	0.4/0.1/0.3	10	10^{9}	Z531-ND	3.87	3.28	2.74	2.24	SD1A12A
	24	2000	16.0/2.0	200	.5	.20	0.4/0.1/0.3	10	10^{9}	Z532-ND	4.13	3.50	2.93	2.39	SD1A24A
	5	500	3.8/0.5	250	1	.20	0.5/0.3/0.3	50	10^{9}	Z533-ND	4.42	3.74	3.13	2.55	SD1A05D
	12	500	8.0/1.0	250	1	.20	0.5/0.3/0.3	50	10^{9}	Z534-ND	4.19	3.55	2.97	2.42	SD1A12D
	24	2000	16.0/2.0	250	1	.20	0.5/0.3/0.3	50	10^{9}	Z535-ND	4.13	3.50	2.93	2.39	SD1A24D
Open-Line Reed Relays															
4-1A	5	500	3.8/0.5	250	1	.10	0.4/0.2/0.25	20	10^{10}	Z638-ND	6.21	5.26	4.40	3.59	20-1051-10
	12	500	8.0/1.0	250	1	.10	0.4/0.2/0.25	20	10^{10}	Z639-ND	6.21	5.26	4.40	3.59	20-1121-10
	24	2000	16.0/2.0	250	1	.10	0.4/0.2/0.25	20	10^{10}	Z640-ND	6.99	5.92	4.95	4.04	20-1241-10
4-2A	5	200	3.8/0.5	250	1	.10	0.5/0.2/0.25	20	10^{10}	Z641-ND	7.90	6.69	5.59	4.56	20-2051-10
	12	440	8.0/1.0	250	1	.10	0.5/0.2/0.25	20	10^{10}	Z642-ND	7.96	6.74	5.64	4.60	20-2121-10
	24	1750	16.0/2.0	250	1	.10	0.5/0.2/0.25	20	10^{10}	Z643-ND	8.35	7.07	5.92	4.82	20-2241-10
4-1B	5	500	3.8/0.5	200	.5	.10	0.5/0.4/1.5	10	10^{10}	Z644-ND	7.41	6.42	5.51	4.71	20-1051-30
	12	500	8.0/1.0	200	.5	.10	0.5/0.4/1.5	10	10^{10}	Z645-ND	7.41	6.42	5.51	4.71	20-1121-30
	24	2000	16.0/2.0	200	.5	.10	0.5/0.4/1.5	10	10^{10}	Z646-ND	7.85	6.80	5.83	4.99	20-1241-30
4-2B	5	200	3.8/0.5	200	.5	.10	0.6/0.4/1.5	10	10^{10}	Z647-ND	10.97	9.50	8.15	6.97	20-2051-30
	12	310	8.0/1.0	200	.5	.10	0.6/0.4/1.5	10	10^{10}	Z648-ND	11.00	9.52	8.17	6.98	20-2121-30
	24	1250	16.0/2.0	200	.5	.10	0.6/0.4/1.5	10	10^{10}	Z649-ND	11.23	9.72	8.34	7.13	20-2241-30

Fig. 2 Series 10 Reed Relays

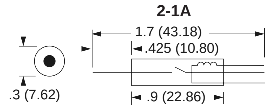


Fig. 3 Series 30 Reed Relays

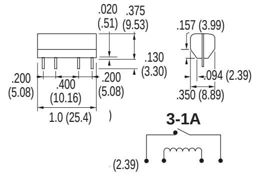
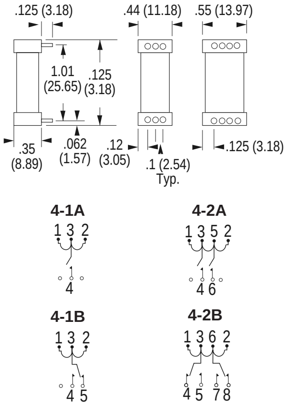


Fig. 4 Open-Line Reed Relays



Surface Mount Reed Relays

Fig. 1

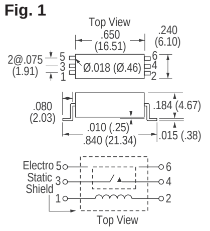


Fig. 2

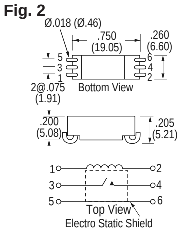


Fig. 3

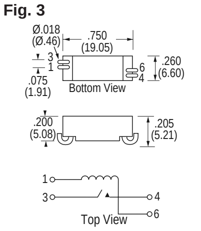


Fig. 4

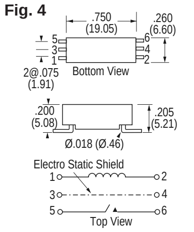


Fig. 5

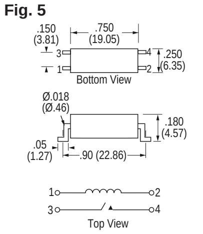


Fig. 6

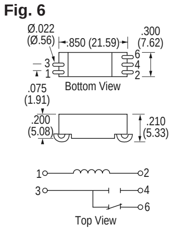


Fig.	Coil Voltage (VDC)	Coil Resistance (Ω)	Pickup/ Dropout (VDC)	Maximum Voltage (VDC)	Current Rating mA	Cont. Resistance (Ω)	Operate Time (msec.)	Ins. Resistance (Ω)	Digi-Key Part No.	Price Each 1	10	50	EAC Part No.
1	4.5	150	3.5/0.5	250	500	.1	.35	7×10^{12}	Z650-ND	9.52	8.24	7.07	SMRR1-5-150C
2	5	150	3.75/0.4	200	500	.150	.35	7×10^{12}	Z651-ND	9.52	8.24	7.07	SMRR2-5-150C
3	5	150	3.75/0.4	200	500	.150	.35	7×10^{12}	Z652-ND	8.65	7.32	6.12	SMRR2-5-150E
4	5	150	3.8/0.5	250	500	.150	.35	7×10^{12}	Z653-ND	9.72	8.42	7.22	SMRR2-5-150F
5	5	250	3.75/0.4	200	500	.150	.35	7×10^{12}	Z654-ND	8.81	7.46	6.24	SMRR2-5-250
6	5	150	3.8/0.5	28	250	.2	.5	7×10^{12}	Z655-ND	10.56	9.14	7.84	SMRR3-5-150

CHERRY

Magnetic Position Sensors

Features:

- **Operating Temperature:** -40° to 105°C • **Leads:** 24 AWG PVC, Pre-tinned, 12" long

Fig. 1

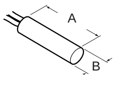


Fig. 2

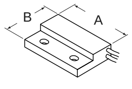


Fig. 3

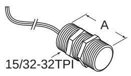


Fig. 4

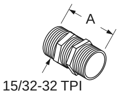


Fig.	Description	Dim. - Inch A	B	Digi-Key Part No.	Price Each 1	10	50	Cherry Part No.
1	Magnetic Position Sensor, 10W, SPST-NO, .5A	1.00	ø.243	CH402-ND	3.16	2.81	2.34	MP201701
	Magnetic Position Sensor, 3W, SPST-NC, .2A	1.00	ø.243	CH403-ND	4.75	4.23	3.52	MP201702
	Magnetic Position Sensor, 3W, SPDT-CO, .2A	1.00	ø.243	CH404-ND	5.21	4.64	3.86	MP201703
—	Smooth Barrel Actuator	—	—	CH411-ND	2.97	2.64	2.20	AS201701
2	Mini Flange Mount Proximity Sensors,10W, SPST-NO, .5A	.906	.550	CH405-ND	3.46	3.08	2.56	MP201801
	Mini Flange Mount Proximity Sensors, 3W, SPST-NC, .2A	.906	.550	CH406-ND	5.21	4.64	3.86	MP201802
—	Mini Flange Mount Actuator	—	—	CH412-ND	3.11	2.76	2.30	AS201801
2	Flange Mount Proximity Sensors, 10W, SPST-NO, .5A	1.125	.750	CH407-ND*	3.59	3.20	2.66	MP201901
	Flange Mount Proximity Sensors, 3W, SPST-NC, .2A	1.125	.750	CH408-ND*	5.37	4.78	3.98	MP201902
	Flange Mount Proximity Sensors, 3W, SPST-CO, .2A	1.125	.750	CH409-ND*	5.89	5.24	4.36	MP201903
—	Flange Mount Actuator	—	—	CH413-ND	3.38	3.00	2.50	AS201901
3	Magnetic Position Sensor Aluminum 10W, SPST-NO, .5A	1.00	—	CH410-ND	10.13	9.00	7.50	MP200701
	Magnetic Position Sensor Aluminum 3W, SPST-NC .2A	1.00	—	CH709-ND	12.56	11.16	9.30	MP200702
	Magnetic Position Sensor Aluminum 3W, SPDT-CO .2A	1.00	—	CH710-ND	13.10	11.64	9.70	MP200703
4	Threaded Actuator, South pole magnet	1.00	—	CH397-ND	14.01	12.46	9.76	HE61-0400

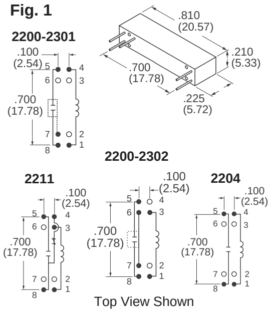
*Wire leads extend from opposite side of switch

Reed Relays

SPECIFICATIONS: • **Life Expectancy:** Varies with each series from a minimum of 100 x 10^6 operations to 1000 x 10^6 operations • **Insulation Resistance:** $10^{12}\Omega$ • **Storage Temperature:** -35°C to +100°C • **Operating Temperature:** -20°C to +85°C • **Vibration:** 20 G's to 2000 Hz; Shock: 50 G's

Dimensions: inches (mm)

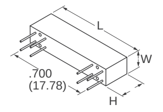
Fig. 1

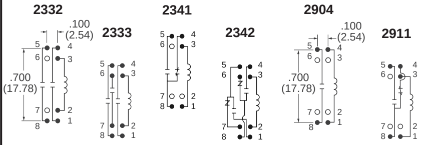


Top View Shown

Fig. 2

Series	Dimensions - Inches (mm) L	W	H
2332/2333 **2341/2342**	.810 (20.57)	.210 (5.33)	.370 (9.40)
2904/2911	.820 (20.83)	.250 (6.35)	.280 (7.11)





Top View Shown

Fig. 3

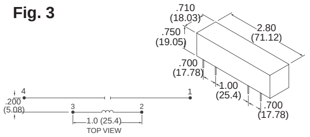
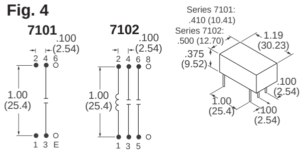


Fig. 4



Bottom View Shown

Fig. 5

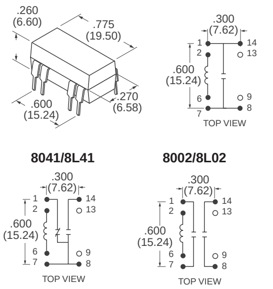
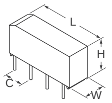
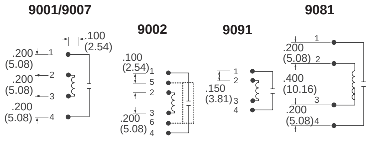


Fig. 6

Series	Dimensions-inches (mm) L	W	H	C
9001/ 9007	.760 (19.30)	.200 (5.08)	.300 (7.62)	.200 (5.08)
9002	.760 (19.30)	.200 (5.08)	.300 (7.62)	.100 (2.54)
9091	.600 (15.24)	.150 (3.81)	.275 (6.98)	.150 (3.81)
9081	.890 (22.61)	.275 (6.99)	.315 (8.0)	.200 (5.08)





Top View Shown

Fig. 7

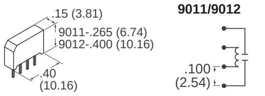


Fig. 8

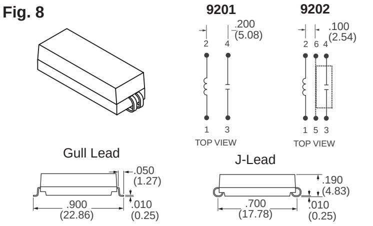


Fig. 9

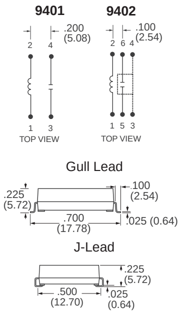


Fig. 10

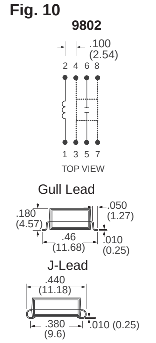


Fig. 11

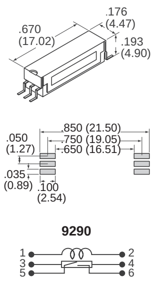


Fig.	Circuit	Coil Voltage (DC)	Coil Current (mA)	Switching Current (A)	Carry Current (A)	Additional Features	Digi-Key Part No.	Price Each 1	10	50	100	Coto Part No.
1	SPST	5	33.3	0.5	1	With Electrostatic Shield	306-1001-ND	8.19	7.09	6.07	5.20	2200-2301
	SPST	5	33.3	0.5	1	With Coaxial Shield	306-1002-ND	8.40	7.27	6.22	5.33	2200-2302
	SPST	5	13.5	0.5	1	—	306-1003-ND	7.44	6.44	5.51	4.72	2204-05-401
	SPST	5	13.5	0.5	1	With Electrostatic Shield	306-1004-ND	7.64	6.62	5.66	4.86	2204-05-411
	SPST	12	8	0.5	1	—	306-1105-ND	7.38	6.39	5.47	4.69	2204-12-301
	SPST	12	8	0.5	1	With Electrostatic Shield	306-1005-ND	7.77	6.73	5.76	4.94	2204-12-311
	SPDT	5	21.8	0.25	0.5	—	306-1006-ND	12.84	11.12	9.51	8.16	2211-05-301
	SPDT	12	8	0.25	0.5	—	306-1007-ND	10.58	9.33	8.19	7.44	2211-12-301
2	DPST	5	28.5	0.5	1.5	—	306-1106-ND	7.28	6.30	5.39	4.62	2332-05-000
	DPST	12	12	0.5	1.5	—	306-1008-ND	7.64	6.62	5.66	4.86	2332-12-000
	SPDT	5	28.5	0.5	1.5	—	306-1107-ND	10.14	8.78	7.51	6.44	2341-05-000
	SPDT	12	12	0.5	1.5	—	306-1108-ND	10.14	8.78	7.51	6.44	2341-12-000
	3PST	5	28.5	0.5	1.5	—	306-1109-ND	9.05	7.83	6.70	5.75	2333-05-000
	3PST	12	12	0.5	1.5	—	306-1110-ND	9.05	7.83	6.70	5.75	2333-12-000
	DPDT	5	28.5	0.25	0.5	—	306-1111-ND	14.09	12.20	10.44	8.95	2342-05-000
	DPDT	12	12	0.25	0.5	—	306-1112-ND	11.38	10.03	8.81	8.00	2342-12-000
	SPDT	5	13.5	0.25	1	With Coaxial Shield	306-1113-ND	9.83	8.66	7.61	6.91	2911-05-321
	SPDT	12	8	0.25	1	With Coaxial Shield	306-1114-ND	12.17	10.53	9.01	7.73	2911-12-321
	SPST	12	8	0.5	1.5	—	306-1009-ND	7.93	6.87	5.88	5.04	2904-12-301
3	SPST	12	68.6	3.0	5	High Voltage - 7500V	306-1010-ND	19.09	17.25	16.39	15.53	5501-12-1
	SPST	24	41.7	3.0	5	High Voltage - 7500V	306-1011-ND	19.44	17.57	16.69	15.81	5501-24-1
4	SPST	12	16.7	0.5	2	High Reliability w/E. S.	306-1012-ND	3.77	3.19	2.67	2.18	7101-12-1010
	SPST	12	16.7	0.5	2	High Reliability w/E. S. & Diode	306-1013-ND	3.93	3.33	2.79	2.27	7101-12-1011
	DPST	12	16.7	0.5	2	High Reliability w/E.S.	306-1014-ND	5.56	4.71	3.94	3.21	7102-12-1010
	DPST	12	16.7	0.5	2	High Reliability w/E. S. & Diode	306-1015-ND	5.72	4.84	4.05	3.30	7102-12-1011
5	SPST	5	10	0.5	1	Extended Lifetime	306-1016-ND	3.77	3.19	2.67	2.18	8001-05-001
	DPST	5	10	0.5	1	Extended Lifetime w/E.S.	306-1017-ND	5.23	4.43	3.71	3.02	8002-05-10
	SPDT	5	10	0.25	0.5	Extended Lifetime	306-1018-ND	6.44	5.45	4.56	3.72	8041-05-001
	SPST	5	10	0.5	1	Economy	306-1019-ND	2.05	1.74	1.45	1.19	8L01-05-001
	SPST	5	10	0.5	1	Economy w/Diode	306-1020-ND	2.21	1.87	1.57	1.28	8L01-05-011
	SPST	5	10	0.5	1	Economy w/E. S.	306-1021-ND	2.21	1.87	1.57	1.28	8L01-05-101
	SPST	5	10	0.5	1	Economy w/E. S. & Diode	306-1022-ND	2.41	2.04	1.71	1.39	8L01-05-111
	SPST	12	24	0.5	1	Economy	306-1023-ND	2.05	1.74	1.45	1.19	8L01-12-001
	SPST	12	24	0.5	1	Economy w/Diode	306-1024-ND	2.21	1.87	1.57	1.28	8L01-12-011
	SPST	12	24	0.5	1	Economy w/E. S.	306-1025-ND	2.21	1.87	1.57	1.28	8L01-12-101
	SPST	12	24	0.5	1	Economy w/E. S. & Diode	306-1026-ND	2.41	2.04	1.71	1.39	8L01-12-111
	SPST	24	11.1	0.5	1	Economy	306-1027-ND	2.21	1.87	1.57	1.28	8L01-24-001
	SPST	24	11.1	0.5	1	Economy w/Diode	306-1028-ND	2.41	2.04	1.71	1.39	8L01-24-011
	SPST	24	11.1	0.5	1	Economy w/E. S.	306-1029-ND	2.41	2.04	1.71	1.39	8L01-24-101
	SPST	24	11.1	0.5	1	Economy w/E. S. & Diode	306-1030-ND	2.57	2.18	1.82	1.49	8L01-24-111
	DPST	5	10	0.5	1	Economy	306-1031-ND	3.09	2.62	2.19	1.79	8L02-05-00
	DPST	5	10	0.5	1	Economy w/Diode	306-1032-ND	3.25	2.75	2.30	1.88	8L02-05-01
	DPST	5	10	0.5	1	Economy w/E. S.	306-1033-ND	3.25	2.75	2.30	1.88	8L02-05-10
	DPST	5	10	0.5	1	Economy w/E. S. & Diode	306-1034-ND	3.41	2.89	2.42	1.97	8L02-05-11
	DPST	12	24	0.5	1	Economy	306-1035-ND	3.09	2.62	2.19	1.79	8L02-12-00
	DPST	12	24	0.5	1	Economy w/Diode	306-1036-ND	3.25	2.75	2.30	1.88	8L02-12-01
	DPST	12	24	0.5	1	Economy w/E. S.	306-1037-ND	3.25	2.75	2.30	1.88	8L02-12-10
	DPST	12	24	0.5	1	Economy w/E. S. & Diode	306-1038-ND	3.41	2.89	2.42	1.97	8L02-12-11
	DPST	24	11.1	0.5	1	Economy	306-1039-ND	3.25	2.75	2.30	1.88	8L02-24-00
	DPST	24	11.1	0.5	1	Economy w/Diode	306-1040-ND	3.41	2.89	2.42	1.97	8L02-24-01
	DPST	24	11.1	0.5	1	Economy w/E. S.	306-1041-ND	3.41	2.89	2.42	1.97	8L02-24-10
	DPST	24	11.1	0.5	1	Economy w/E. S. & Diode	306-1042-ND	3.58	3.03	2.53	2.07	8L02-24-11
	SPDT	5	10	0.25	0.5	Economy	306-1043-ND	4.45	3.77	3.16	2.57	8L41-05-001
	SPDT	5	10	0.25	0.5	Economy w/Diode	306-1044-ND	4.62	3.91	3.27	2.67	8L41-05-011
	SPDT	5	10	0.25	0.5	Economy w/E. S.	306-1045-ND	4.62	3.91	3.27	2.67	8L41-05-101
	SPDT	5	10	0.25	0.5	Economy w/E. S. & Diode	306-1046-ND	4.78	4.05	3.39	2.76	8L41-05-111

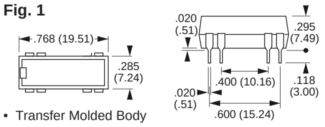
(Continued)

COTO Technology Reed Relays *(Cont.)*

Fig.	Circuit	Coil Voltage (DC)	Coil Current (mA)	Switching Current (A)	Carry Current (A)	Additional Features	Digi-Key Part No.	Price Each				Coto Part No.
								1	10	50	100	
5	SPDT	12	24	0.25	0.5	Economy	306-1047-ND	4.45	3.77	3.16	2.57	8L41-12-001
	SPDT	12	24	0.25	0.5	Economy w/Diode	306-1048-ND	4.62	3.91	3.27	2.67	8L41-12-011
	SPDT	12	24	0.25	0.5	Economy w/E. S.	306-1050-ND	4.62	3.91	3.27	2.67	8L41-12-101
	SPDT	12	24	0.25	0.5	Economy w/E. S. & Diode	306-1051-ND	4.78	4.05	3.39	2.76	8L41-12-111
	SPDT	24	11.1	0.25	0.5	Economy	306-1052-ND	4.62	3.91	3.27	2.67	8L41-24-001
	SPDT	24	11.1	0.25	0.5	Economy w/E. S.	306-1053-ND	4.78	4.05	3.39	2.76	8L41-24-101
	SPDT	24	11.1	0.25	0.5	Economy w/E. S. & Diode	306-1054-ND	4.94	4.18	3.50	2.85	8L41-24-111
6	SPST	5	10	0.5	1.5	Extended Lifetime	306-1055-ND	3.41	2.89	2.42	1.97	9001-05-00
	SPST	5	10	0.5	1.5	Extended Lifetime w/Diode	306-1056-ND	3.58	3.03	2.53	2.07	9001-05-01
	SPST	12	12	0.5	1.5	Extended Lifetime	306-1057-ND	3.41	2.89	2.42	1.97	9001-12-00
	SPST	12	12	0.5	1.5	Extended Lifetime w/Diode	306-1058-ND	3.58	3.03	2.53	2.07	9001-12-01
	SPST	5	10	0.5	1.5	50Ω Coaxial Shield	306-1059-ND	4.45	3.77	3.16	2.57	9002-05-00
	SPST	5	10	0.5	1.5	50Ω Coaxial Shield w/Diode	306-1060-ND	4.62	3.91	3.27	2.67	9002-05-01
	SPST	12	16	0.5	1.5	50Ω Coaxial Shield	306-1118-ND	4.38	3.71	3.11	2.53	9002-12-00
	SPST	12	12	0.5	1.5	50Ω Coaxial Shield w/Diode	306-1061-ND	4.62	3.91	3.27	2.67	9002-12-01
	SPST	5	10	0.5	1	Economy	306-1062-ND	1.37	1.16	.97	.79	9007-05-00
	SPST	5	10	0.5	1	Economy w/Diode	306-1063-ND	1.46	1.24	1.04	.85	9007-05-01
	SPST	12	12	0.5	1	Economy	306-1064-ND	1.37	1.16	.97	.79	9007-12-00
	SPST	5	10	0.5	1	Economy	306-1115-ND	1.17	1.02	.87	.75	9081-05-00
	SPST	12	12	0.5	1	Economy	306-1116-ND	1.46	1.24	1.04	.85	9081-12-00
	SPST	24	12	0.5	1	Economy	306-1117-ND	1.63	1.38	1.15	.94	9081-24-00
	SPST	5	10	0.5	1.0	With EMI Shield	306-1138-ND	1.63	1.38	1.15	.94	9081-05-10
	SPST	12	16	0.5	1.0	With EMI Shield	306-1139-ND	1.72	1.46	1.22	1.00	9081-12-10
	SPST	24	12	0.5	1.0	With EMI Shield	306-1140-ND	1.79	1.52	1.27	1.04	9081-24-10
	SPST	5	10	0.25	1	Miniature Sip	306-1065-ND	4.26	3.61	3.02	2.46	9091-05-00
	SPST	5	10	0.25	1	Miniature Sip w/Diode	306-1066-ND	4.45	3.77	3.16	2.57	9091-05-01
	SPST	12	12	0.25	1	Miniature Sip w/Diode	306-1067-ND	4.45	3.77	3.16	2.57	9091-12-01
7	SPST	5	10	0.25	0.5	With EMI Shield	306-1130-ND	6.76	5.72	4.79	3.90	9011-05-10
	SPST	5	10	0.25	0.5	With EMI Shield and Diode	306-1131-ND	6.99	5.92	4.95	4.04	9011-05-11
	SPST	12	16	0.25	0.5	With EMI Shield	306-1132-ND	7.05	5.97	5.00	4.07	9011-12-10
	SPST	12	16	0.25	0.5	With EMI Shield and Diode	306-1133-ND	7.28	6.16	5.16	4.20	9011-12-11
	SPST	5	10	0.5	1.5	With EMI Shield	306-1134-ND	5.49	4.65	3.89	3.17	9012-05-10
	SPST	5	10	0.5	1.5	With EMI Shield and Diode	306-1135-ND	5.72	4.84	4.05	3.30	9012-05-11
	SPST	12	16	0.5	1.5	With EMI Shield	306-1136-ND	5.79	4.90	4.10	3.34	9012-12-10
	SPST	12	16	0.5	1.5	With EMI Shield and Diode	306-1137-ND	6.01	5.09	4.26	3.47	9012-12-11
Surface Mount												
8	SPST	5	20	0.5	1.5	SMT- J-Lead	306-1068-ND	5.98	5.06	4.24	3.45	9201-05-20
	SPST	5	20	0.5	1.5	50Ω Coaxial Shield, Gull Lead	306-1069-ND	6.18	5.23	4.37	3.57	9202-05-00
	SPST	5	20	0.5	1.5	50Ω Coaxial Shield, J-Lead	306-1070-ND	6.18	5.23	4.37	3.57	9202-05-20
9	SPST	5	20	0.5	1	SMT - Gull Lead	306-1071-ND	6.83	5.78	4.83	3.94	9401-05-00
	SPST	12	14.5	0.5	1	SMT - Gull Lead	306-1072-ND	6.83	5.78	4.83	3.94	9401-12-00
	SPST	5	25	0.5	1	50Ω Coaxial Shield - Gull Lead	306-1119-ND	7.35	6.22	5.20	4.24	9402-05-00
	SPST	5	20	0.5	1	50Ω Coaxial Shield, J-Lead	306-1073-ND	7.35	6.22	5.20	4.24	9402-05-20
	SPST	12	14.5	0.5	1	50Ω Coaxial Shield, Gull Lead	306-1074-ND	7.35	6.22	5.20	4.24	9402-12-00
	SPST	12	14.5	0.5	1	50Ω Coaxial Shield, J-Lead	306-1120-ND	7.35	6.22	5.20	4.24	9402-12-20
10	SPST	5	33.3	0.25	0.5	50Ω Coaxial Shield, Gull Lead	306-1075-ND	8.48	7.34	6.28	5.38	9802-05-00
	SPST	5	33.3	0.25	0.5	50Ω Coaxial Shield, J-Lead	306-1076-ND	8.48	7.34	6.28	5.38	9802-05-20
11	SPST	5	31	0.5	1.5	50Ω EMI Shield, Low Profile	306-1141-ND	5.95	5.04	4.21	3.44	9290-05-00
	SPST	12	20	0.5	1.5	50Ω EMI Shield, Low Profile	306-1142-ND	5.95	5.04	4.21	3.44	9290-12-00

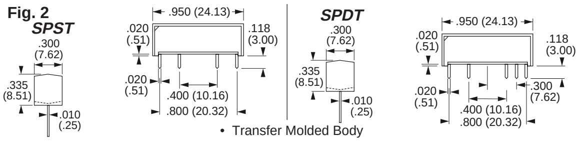
HAMLIN Reed Relays

Fig. 1



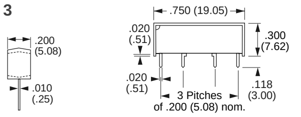
- Transfer Molded Body

Fig. 2

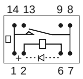
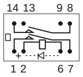
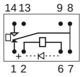
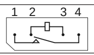
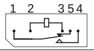
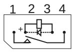


- Transfer Molded Body

Fig. 3



- Transfer Molded Body
- Maximum Space Utilization

Top View	Coil Volt. (VDC)	Coil Res. (Ω)	Pickup/ Dropout (VDC@ 25°C)	Switch. Volt. (VDC)	Switch Current (Amps)	Carry Current (Amps)	Cont. Res. (Ω)	Oper./ Rel. Time (msec)	Ins. Res. (Ω)	Digi-Key Part No.	Pricing				Hamlin Part No.
											1	10	50	100	
Fig. 1 — 700 Series DIP Reed Relays															
1A SPST-NO † With Diode Suppressor 	5	500	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE100-ND	2.44	20.63	86.25	140.63	HE721A0500
	5	500	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE101-ND†	2.70	22.83	95.45	155.63	HE721A0510
	12	1000	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE102-ND	2.70	22.83	95.45	155.63	HE721A1200
	12	1000	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE103-ND†	2.96	25.03	104.65	170.63	HE721A1210
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE104-ND	3.35	28.33	118.45	193.13	HE721A2400
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE105-ND†	3.61	30.53	127.65	208.13	HE721A2410
2A DPST-NO † With Diode Suppressor 	5	150	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE106-ND	4.06	34.38	143.75	234.38	HE722A0600
	5	150	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE107-ND†	4.32	36.58	152.95	249.38	HE722A0610
	12	500	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE108-ND	4.32	36.58	152.95	249.38	HE722A1200
	12	500	8.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE109-ND†	4.58	38.78	162.15	264.38	HE722A1210
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE110-ND	5.36	45.38	189.75	309.38	HE722A2400
	24	2150	16.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE111-ND†	5.62	47.58	198.95	324.38	HE722A2410
1C SPDT-CO † With Diode Suppressor 	5	200	3.75/0.5	175	0.25	1	0.200	3.0/3.0	10^{9}	HE112-ND	5.56	47.03	196.65	320.63	HE721C0500
	5	200	3.75/0.5	175	0.25	1	0.200	3.0/3.0	10^{9}	HE113-ND†	5.82	49.23	205.85	335.63	HE721C0510
	12	500	8.0/1.0	175	0.25	1	0.200	3.0/3.0	10^{9}	HE114-ND	5.82	49.23	205.85	335.63	HE721C1200
	12	500	8.0/1.0	175	0.25	1	0.200	3.0/3.0	10^{9}	HE115-ND†	6.11	51.70	216.20	352.50	HE721C1210
	24	2000	16.0/2.0	175	0.25	1	0.200	3.0/3.0	10^{9}	HE116-ND	6.66	56.38	235.75	384.38	HE721C2400
	24	2000	16.0/2.0	175	0.25	1	0.200	3.0/3.0	10^{9}	HE117-ND†	6.96	58.85	246.10	401.25	HE721C2410
Fig. 2 — 3300 Series SIP Reed Relays															
1A SPST-NO 	5	500	3.75/0.5	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE200-ND	2.37	20.08	83.95	136.88	HE3321A0400
	12	500	9.0/1.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE201-ND	2.37	20.08	83.95	136.88	HE3321A1200
	24	2000	18.0/2.0	200	0.5	1.2	0.200	1.0/0.5	10^{10}	HE202-ND	2.99	25.30	105.80	172.50	HE3321A2400
1C SPDT-CO 	5	125	3.75/0.5	175	0.25	1	0.200	3.0/3.0	10^{9}	HE203-ND	4.81	40.70	170.20	277.50	HE3321C0500
	12	500	9.0/1.0	175	0.25	1	0.200	3.0/3.0	10^{9}	HE204-ND	5.07	42.90	179.40	292.50	HE3321C1200
	24	2000	18.0/2.0	175	0.25	1	0.200	3.0/3.0	10^{9}	HE205-ND	5.53	46.75	195.50	318.75	HE3321C2400
Fig. 3 — 3600 Series Ultra Miniature Reed Relays															
1A SPST-NO † With Diode Suppressor 	5	500	3.75/0.5	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE206-ND	2.15	18.15	75.90	123.75	HE3621A0500
	5	500	3.75/0.5	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE207-ND†	2.41	20.35	85.10	138.75	HE3621A0510
	12	1000	8.0/1.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE208-ND	2.44	20.63	86.25	140.63	HE3621A1200
	12	1000	8.0/1.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE209-ND†	2.73	23.10	96.60	157.50	HE3621A1210
	24	2150	16.0/2.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE210-ND	3.06	25.85	108.10	176.25	HE3621A2400
	24	2150	16.0/2.0	200	0.5	1.25	0.200	1.0/0.5	10^{10}	HE211-ND†	3.32	28.05	117.30	191.25	HE3621A2410

CROSS REFERENCE CHART

HAMLIN Part No.	ELEC-TROL Part No.
HE721A0500	RA30451051
HE721A0510	RA30461051
HE721A1200	RA30451121
HE721A1210	RA30461121
HE721A2400	RA30451241
HE721A2410	RA30461241
HE722A0600	—
HE722A0610	—
HE722A1200	RA30981121
HE722A1210	RA31231121
HE722A2400	RA30981241
HE722A2410	RA31231241
HE721C0500	RA30421051
HE721C0510	RA30441051
HE721C1200	RA30421121
HE721C1210	RA30441121
HE721C2400	RA30421241
HE721C2410	RA30441241
HE3321A0400	BBS1A05A10
HE3321A1200	BBS1A12A10
HE3321A2400	BBS1A24A10
HE3321C0500	BBS1C05A10
HE3321A1200	BBS1C12A10
HE3321C2400	BBS1C24A10
HE3621A0500	RA32041051
HE3621A0510	RA32051051
HE3621A1200	RA32041121
HE3621A1210	RA32051121
HE3621A2400	RA32041241
HE3621A2410	RA32051241

Magnetic Reed Switches

Fig. 1

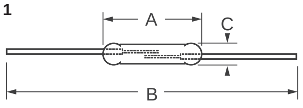


Fig. 2

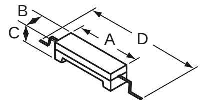


Fig.	Circuit	Ampere Turns	Max. DC Contact Rating Watts	Max. DC Contact Rating Volts	Switching Current (Amp)	Carry Current (Amp)	Operate/ Release (ms)	Dimensions - Inches (mm) A	Dimensions - Inches (mm) B	Dimensions - Inches (mm) C	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Coto Part No.
1	SPST	18-32	10	200	0.5	1	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1087-ND	.94	.80	.67	RI-23A
	SPST	14-23	10	200	0.5	1.5	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1086-ND	.91	.77	.65	RI-23AA
	SPST	8-16	10	200	0.5	1	.10/70	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1085-ND	.88	.75	.63	RI-23AAA
	SPST	28-52	10	200	0.5	2.5	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1088-ND	.98	.83	.69	RI-23B
	SPST	46-70	10	200	0.5	2.75	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1089-ND	1.01	.86	.72	RI-23C
	SPST	18-32	15	200	1	2.5	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1092-ND	1.01	.86	.72	RI-25A
	SPST	14-23	15	200	1	1.75	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1091-ND	.98	.83	.69	RI-25AA
	SPST	8-16	10	200	0.75	1.5	.25/70	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1090-ND	.94	.80	.67	RI-25AAA
	SPST	28-52	25	200	1	2.75	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1093-ND	1.04	.88	.74	RI-25B
	SPST	46-70	25	200	1	3	.25/30	.591 (15.00)	1.811 (46.00)	.100 (2.54)	306-1094-ND	1.07	.91	.76	RI-25C
	SPST	20-34	10	200	0.5	1.75	.25/30	.531 (13.50)	1.811 (46.00)	.071 (1.80)	306-1082-ND	1.04	.88	.74	RI-27A
	SPST	16-25	10	200	0.5	1.75	.25/30	.531 (13.50)	1.811 (46.00)	.071 (1.80)	306-1081-ND	1.04	.88	.74	RI-27AA
	SPST	10-19	10	180	0.5	1.5	.25/30	.531 (13.50)	1.811 (46.00)	.071 (1.80)	306-1080-ND	1.04	.88	.74	RI-27AAA
	SPST	20-34	20	200	1	1.25	.25/30	.531 (13.50)	1.811 (46.00)	.071 (1.80)	306-1084-ND	1.04	.88	.74	RI-29A
	SPST	16-25	15	200	1	1.25	.25/30	.531 (13.50)	1.811 (46.00)	.071 (1.80)	306-1083-ND	1.04	.88	.74	RI-29AA
	SPST	15-28	30	200	1	2.5	.35/30	.807 (20.50)	2.157 (54.80)	.106 (2.70)	306-1099-ND	1.07	.91	.76	RI-46A
	SPST	10-19	30	200	0.75	2	.35/30	.807 (20.50)	2.157 (54.80)	.106 (2.70)	306-1098-ND	.88	.75	.63	RI-46AA
	SPST	24-51	40	200	1	3	.35/30	.807 (20.50)	2.157 (54.80)	.106 (2.70)	306-1100-ND	1.11	.94	.79	RI-46B
	SPST	46-70	40	200	1	3	.35/30	.807 (20.50)	2.157 (54.80)	.106 (2.70)	306-1101-ND	1.14	.97	.81	RI-46C
	SPST	15-28	70	200	1	1.75	.35/30	.807 (20.50)	2.157 (54.80)	.106 (2.70)	306-1102-ND	1.11	.94	.79	RI-48A
	SPST	24-51	70	200	1	2.25	.35/30	.807 (20.50)	2.157 (54.80)	.106 (2.70)	306-1103-ND	1.14	.97	.81	RI-48B
	SPST	46-70	70	200	1	2.25	.35/30	.807 (20.50)	2.157 (54.80)	.106 (2.70)	306-1104-ND	1.17	.99	.83	RI-48C
	SPST	10-15	10	200	0.5	0.5	.15/20	.394 (10.00)	1.811 (46.00)	.071 (1.80)	306-1121-ND	.88	.75	.63	RI60GP1015
	SPST	15-20	10	200	0.5	0.5	.15/20	.394 (10.00)	1.811 (46.00)	.071 (1.80)	306-1122-ND	.88	.75	.63	RI60GP1520
	SPST	7-15	10	200	0.5	2.5	.25/30	.276 (7.00)	1.811 (46.00)	.071 (1.80)	306-1077-ND	1.63	1.38	1.15	RI-70CTA
	SPST	8-16	10	170	0.5	0.5	.15/20	.276 (7.00)	1.811 (46.00)	.071 (1.80)	306-1123-ND	1.30	1.10	.92	RI70GP0715

Fig.	Circuit	Ampere Turns	Max. DC Contact Rating Watts	Max. DC Contact Rating Volts	Switching Current (Amps)	Carry Current (Amps)	Operate/ Release (ms)	Dimensions - Inches (mm) A	Dimensions - Inches (mm) B	Dimensions - Inches (mm) C	Dimensions - Inches (mm) D	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Cut Tape Price Each 50	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Price	Coto Part No.
2	SPST	15-30	10	200	0.5	0.5	—	.458 (11.63)	.095 (2.41)	.115 (2.92)	.635/.645 (16.13/16.38)	306-1125-1-ND	1.04	.88	.74	306-1125-2-ND	2,000	416.00/M	CT10-1530-G1
	SPST	15-40	10	200	0.5	0.5	—	.458 (11.63)	.095 (2.41)	.115 (2.92)	.635/.645 (16.13/16.38)	306-1124-1-ND	1.04	.88	.74	306-1124-2-ND	2,000	416.00/M	CT10-1540-G1
	SPST	25-40	10	200	0.5	0.5	—	.458 (11.63)	.095 (2.41)	.115 (2.92)	.635/.645 (16.13/16.38)	306-1126-1-ND	1.04	.88	.74	306-1126-2-ND	2,000	416.00/M	CT10-2540-G1

Magnetic Reed Sensors

Meder Magnetic Sensors are magnetically operated proximity switches for either surface mounting, PCB mounting or panel mounting. Use for telephone hook switch detection, door and window sensing, limit switches for garage doors and hoists and conveyers. Switches are completely sealed for indoor/outdoor operation and are available in various magnetic sensitivities, perfect for auto-insert equipment and automated processes. All sensors will actuate when a magnetic field is introduced to them and will remain actuated until the magnetic field is removed. **Operating Temp:** -20° to +85°C, -20°C to 130°C for Fig. 3, 4, and 5.

Fig. 1

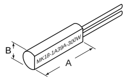


Fig. 2

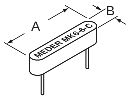


Fig. 3

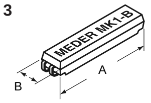


Fig. 4

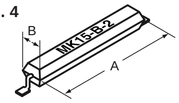


Fig. 5

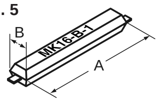


Fig. 6

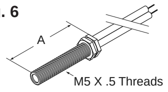


Fig. 7

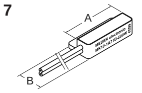


Fig.	Circuit	Dimensions (mm) A	Dimensions (mm) B	Switching Voltage	Switching Current	Termination or Wiring	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Cut Tape Price Each 50	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Meder Part No.
1	SPST-NO	17.00	5.00	200	0.5	100 mm PVC Leads	374-1023-ND	5.46	4.88	3.95	—	—	—	MK18-B-100W
	SPST-NO	17.00	5.00	200	0.5	100 mm PVC Leads	374-1024-ND	5.46	4.88	3.95	—	—	—	MK18-C-100W
	SPST-NO	25.50	5.75	180	0.5	500 mm PVC Leads	374-1027-ND	4.68	4.18	3.39	—	—	—	MK3-1A71B-500W
	SPST-NO	25.50	5.75	180	0.5	500 mm PVC Leads	374-1028-ND	4.68	4.18	3.39	—	—	—	MK3-1A71C-500W
	SPST-NC	25.50	5.75	175	0.25	500 mm PVC Leads	374-1029-ND	7.44	6.65	5.39	—	—	—	MK3-1B90C-500W
	SPST-NO-NC	25.50	5.75	175	0.25	500 mm PVC Leads	374-1030-ND	7.83	6.99	5.67	—	—	—	MK3-1C90C-500W
2	SPST-NO	12.06	3.30	170	0.5	PCB Pins	374-1031-ND	3.32	2.96	2.40	—	—	—	MK6-4-B
	SPST-NO	14.30	2.80	200	0.5	PCB Pins	374-1032-ND	2.11	1.89	1.53	—	—	—	MK6-5-B
	SPST-NO	14.30	2.80	200	0.5	PCB Pins	374-1033-ND	2.11	1.89	1.53	—	—	—	MK6-5-C
	SPST-NO	17.24	3.30	180	0.5	PCB Pins	374-1034-ND	1.92	1.72	1.39	—	—	—	MK6-6-B
	SPST-NO	17.24	3.30	180	0.5	PCB Pins	374-1035-ND	2.05	1.83	1.49	—	—	—	MK6-6-C
	SPST-NO	19.78	3.30	180	0.5	PCB Pins	374-1036-ND	1.89	1.69	1.37	—	—	—	MK6-7-B
	SPST-NO	22.32	3.30	180	0.5	PCB Pins	374-1037-ND	1.79	1.60	1.30	—	—	—	MK6-8-B
	SPST-NO-NC	22.32	3.30	175	0.25	PCB Pins	374-1038-ND	6.47	5.78	4.68	—	—	—	MK6-8-H
3	SPST-NO	18.80	3.70	180	0.5	SMT	374-1004-1-ND	1.72	1.54	1.25	374-1004-2-ND	2,000	689.00/M	MK1-B
	SPST-NO	18.80	3.70	180	0.5	SMT	374-1005-1-ND	1.72	1.54	1.25	374-1005-2-ND	2,000	689.00/M	MK1-C
4	SPST-NO	16.00	2.50	200	0.5	SMT 10-15 A/T	374-1013-1-ND	1.20	1.08	.87	374-1013-2-ND	2,500	481.00/M	MK15-B-2
	SPST-NO	16.00	2.50	200	0.5	SMT 15-20 A/T	374-1015-1-ND	1.20	1.08	.87	374-1015-2-ND	2,500	481.00/M	MK15-C-2
	SPST-NO	11.50	2.30	200	0.5	SMT 10-15 A/T	374-1017-1-ND	1.43	1.28	1.04	374-1017-2-ND	2,500	572.00/M	MK16-B-2
	SPST-NO	11.50	2.30	200	0.5	SMT 15-20 A/T	374-1019-1-ND	1.43	1.28	1.04	374-1019-2-ND	2,500	572.00/M	MK16-C-2
	SPST-NO	8.50	2.10	170	0.5	SMT 10-15 A/T	374-1021-1-ND	2.76	2.47	2.00	374-1021-2-ND	2,500	1105.00/M	MK17-B-2
5	SPST-NO	16.00	2.50	200	0.5	SMT 10-15 A/T	374-1012-1-ND	1.20	1.08	.87	374-1012-2-ND	2,500	481.00/M	MK15-B-1
	SPST-NO	16.00	2.50	200	0.5	SMT 15-20 A/T	374-1014-1-ND	1.20	1.08	.87	374-1014-2-ND	2,500	481.00/M	MK15-C-1
	SPST-NO	11.50	2.30	200	0.5	SMT 10-15 A/T	374-1016-1-ND	1.43	1.28	1.04	374-1016-2-ND	2,500	572.00/M	MK16-B-1
	SPST-NO	11.50	2.30	200	0.5	SMT 15-20 A/T	374-1018-1-ND	1.43	1.28	1.04	374-1018-2-ND	2,500	572.00/M	MK16-C-1
	SPST-NO	8.50	2.10	170	0.5	SMT 10-15 A/T	374-1020-1-ND	2.15	1.92	1.56	374-1020-2-ND	2,500	858.00/M	MK17-B-1
	SPST-NO	8.50	2.10	170	0.5	SMT 15-20 A/T	374-1022-1-ND	2.76	2.47	2.00	374-1022-2-ND	2,500	1105.00/M	MK17-C-1
6	SPST-NO	24.90	—	180	0.5	500 mm PVC Leads	374-1006-ND	8.00	7.14	5.79	—	—	—	MK11-1A71B-500W
	SPST-NO	24.90	—	180	0.5	500 mm PVC Leads	374-1007-ND	8.00	7.14	5.79	—	—	—	MK11-1A71C-500W
7	SPST-NO	32.00	14.90	180	0.5	500 mm PVC Leads	374-1008-ND	5.23	4.67	3.79	—	—	—	MK12-1A71B-500W
	SPST-NO	32.00	14.90	180	0.5	500 mm PVC Leads	374-1009-ND	5.23	4.67	3.79	—	—	—	MK12-1A71C-500W
	SPST-NO	23.00	13.90	180	0.5	500 mm PVC Leads	374-1010-ND	5.23	4.67	3.79	—	—	—	MK13-1A71B-500W
	SPST-NO	23.00	13.90	180	0.5	500 mm PVC Leads	374-1011-ND	5.23	4.67	3.79	—	—	—	MK13-1A71C-500W
	SPST-NO	28.60	19.00	180	0.5	500 mm Teflon Leads	374-1025-ND	5.88	5.25	4.26	—	—	—	MK21-1A71B-500W
	SPST-NO	28.60	19.00	180	0.5	500 mm Teflon Leads	374-1026-ND	5.88	5.25	4.26	—	—	—	MK21-1A71C-500W
	—	23.00	13.90	Magnet	Magnet	—	374-1003-ND	1.89	1.69	1.37	—	—	—	M13 MAGNETS

Level Sensors with Magnetic Float

Fig. 1

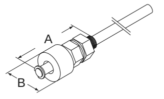


Fig. 2

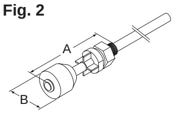
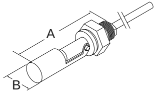


Fig. 3



Compact sensors for detection of liquid levels such as oils, petroleum and fluids. LS01 and 02 series are for vertical tank mounting and LS03 is for horizontal mounting. Perfect for tank monitoring in household, automotive and control-test, measurement industries. Sensors are made of strong Polyimide material and include seals and mounting nut. **Switching Current:** .5A, **Switching Voltage:** 200V, stripped and tinned leads.

Fig.	Dimensions (mm) A	Dimensions (mm) B	Bushing	Operating Temp.	Termination or Wiring	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Meder Part No.
1	42.5	24	M8x1.25	0 to 70°C	500mm PVC Leads	374-1000-ND	9.82	8.76	7.10	LS01-1A71-PA-500W
2	72.5	23.5	M10x1.0	-20 to 100°C	500mm PVC Leads	374-1001-ND	9.82	8.76	7.10	LS02-1A71-PA-500W
3	80	17.2	M16x1.5	-20 to 100°C	500mm PVC Leads	374-1002-ND	12.09	10.79	8.75	LS03-1A71-PA-500W

OMRON Power PCB Relays

Fig.	Contact Form	Coil Volt. (VDC)	Coil Res. (Ω)	Contact Rtg's. Resistive (A) 24 VDC	Contact Rtg's. Resistive (A) 115 VAC	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Dim. (mm) H x L x W	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50	Price Each 100	Omron Part No.
	PC Mount Power Relays with Quick-Connect Terminals													
1	SPST-NO	12	160	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z952-ND	5.78	5.20	4.62	4.16	G4A-1A-E-DC12
	SPST-NO	24	640	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z953-ND	5.78	5.20	4.62	4.16	G4A-1A-E-DC24
2	SPDT	12	135	15	15	80/10/110	20/20	29 x 50 x 29	Z956-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-DC12
	SPDT	24	480	15	15	80/10/110	20/20	29 x 50 x 29	Z957-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-DC24
	SPDT	24VAC	260	15	15	80/30/110	20/20	29 x 50 x 29	Z958-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-AC24
	SPDT	120VAC	6500	15	15	80/30/110	20/20	29 x 50 x 29	Z959-ND	9.33	8.40	7.46	6.72	G4B-112T1CUS-AC120
2	SPST-NO	12	135	15	15	80/10/110	20/20	29 x 50 x 29	Z196-ND	8.75	7.88	7.00	6.30	G4B-112TUS-DC12
	SPST-NO	24	480	15	15	80/10/110	20/20	29 x 50 x 29	Z197-ND	8.75	7.88	7.00	6.30	G4B-112TUS-DC24
	SPST-NO	120VAC	6500	15	15	80/30/110	20/20	29 x 50 x 29	Z198-ND	8.75	7.88	7.00	6.30	G4B-112TUS-AC120
—	SPDT	5	47	10	10	70/15/110	15/5	29 x 29 x 13	Z850-ND	4.83	4.35	3.86	3.48	G2R-1S-DC5
	SPDT	12	275	10	10	70/15/110	15/5	29 x 29 x 13	Z851-ND	4.83	4.35	3.86	3.48	G2R-1S-DC12
	SPDT	24	1100	10	10	70/15/110	15/5	29 x 29 x 13	Z852-ND	4.83	4.35	3.86	3.48	G2R-1S-DC24
	SPDT	24VAC	260	10	10	80/30/110	15/10	29 x 29 x 13	Z853-ND	6.43	5.79	5.14	4.63	G2R-1S-AC24
	SPDT	120VAC	6500	10	10	80/30/110	15/10	29 x 29 x 13	Z854-ND	7.03	6.33	5.62	5.06	G2R-1S-AC120
—	DPDT	5	47	5	5	70/15/110	15/5	29 x 29 x 13	Z199-ND	5.65	5.09	4.52	4.07	G2R-2S-DC5
	DPDT	12	275	5	5	70/15/110	15/5	29 x 29 x 13	Z200-ND	5.50	4.95	4.40	3.96	G2R-2S-DC12
	DPDT	24	1100	5	5	70/15/110	15/5	29 x 29 x 13	Z201-ND	5.50	4.95	4.40	3.96	G2R-2S-DC24
	DPDT	48	4170	5	5	70/15/110	15/5	29 x 29 x 13	Z202-ND	5.65	5.09	4.52	4.07	G2R-2S-DC48
	DPDT	24VAC	260	5	5	80/30/110	15/10	29 x 29 x 13	Z203-ND	7.15	6.44	5.72	5.15	G2R-2S-AC24
	DPDT	120VAC	6500	5	5	80/30/110	15/10	29 x 29 x 13	Z204-ND	7.70	6.93	6.16	5.55	G2R-2S-AC120
	DPDT	220VAC	22000	5	5	80/30/110	15/5	29 x 29 x 13	Z205-ND	12.75	11.48	10.20	9.18	G2R-2S-AC220
—	Track Mounted Socket for G2R-1S Series							59 x 85 x 15	Z855-ND	3.65	3.29	2.92	2.63	P2RF-05-E
—	Track Mounted Socket for G2R-2S Series							59 x 85 x 15	Z207-ND	6.03	5.43	4.82	4.34	P2RF-08-E
—	PC Mount Relay Socket for G2R-1S Series							35.5 x 14.47 x 7.11	Z995-ND	2.05	1.85	1.64	1.48	P2R-05P
	PC Mount Power Relays													
3	SPST-NO	5	62.5	12	12	70/10/130	7/2	29 x 16 x 13	Z139-ND	2.70	2.43	2.16	1.95	G2RL-1A-DC5
	SPST-NO	12	360	12	12	70/10/130	7/2	29 x 16 x 13	Z140-ND	2.70	2.43	2.16	1.95	G2RL-1A-DC12
	SPST-NO	24	1440	12	12	70/10/130	7/2	29 x 16 x 13	Z141-ND	2.70	2.43	2.16	1.95	G2RL-1A-DC24
3	SPDT	5	62.5	12	12	70/10/130	7/2	29 x 16 x 13	Z142-ND	3.40	3.06	2.72	2.45	G2RL-14-DC5
	SPDT	12	360	12	12	70/10/130	7/2	29 x 16 x 13	Z143-ND	3.40	3.06	2.72	2.45	G2RL-14-DC12
	SPDT	24	1440	12	12	70/10/130	7/2	29 x 16 x 13	Z144-ND	3.40	3.06	2.72	2.45	G2RL-14-DC24
	SPDT	48	5358	12	12	70/10/130	7/2	29 x 16 x 13	Z145-ND	3.78	3.40	3.02	2.72	G2RL-14-DC48
4	DPDT	5	62.5	8	8	70/10/130	7/2	29 x 16 x 13	Z146-ND	4.03	3.63	3.22	2.90	G2RL-24-DC5
	DPDT	12	360	8	8	70/10/130	7/2	29 x 16 x 13	Z147-ND	4.03	3.63	3.22	2.90	G2RL-24-DC12
	DPDT	24	1440	8	8	70/10/130	7/2	29 x 16 x 13	Z148-ND	4.03	3.63	3.22	2.90	G2RL-24-DC24
	DPDT	48	5358	8	8	70/10/130	7/2	29 x 16 x 13	Z149-ND	4.38	3.94	3.50	3.15	G2RL-24-DC48
3	SPDT†	5	47	10	10	70/15/110	15/5	25.5 x 29 x 13	Z743-ND	3.40	3.06	2.72	2.45	G2R-14-DC5
	SPDT†	12	275	10	10	70/15/110	15/5	25.5 x 29 x 13	Z744-ND	3.38	3.04	2.70	2.43	G2R-14-DC12
	SPDT†	24	1100	10	10	70/15/110	15/5	25.5 x 29 x 13	Z745-ND	3.38	3.04	2.70	2.43	G2R-14-DC24
	SPDT†	24VAC	260	10	10	80/30/110	15/10	25.5 x 29 x 13	Z843-ND	5.73	5.16	4.58	4.13	G2R-14-AC24
	SPDT†	120VAC	6500	10	10	80/30/110	15/10	25.5 x 29 x 13	Z844-ND	6.30	5.67	5.04	4.54	G2R-14-AC120
4	DPDT†	5	47	5	5	70/15/110	15/5	25.5 x 29 x 13	Z746-ND	3.93	3.54	3.14	2.83	G2R-24-DC5
	DPDT†	12	275	5	5	70/15/110	15/5	25.5 x 29 x 13	Z747-ND	3.93	3.54	3.14	2.83	G2R-24-DC12BYKUM
	DPDT†	24	1100	5	5	70/15/110	15/5	25.5 x 29 x 13	Z748-ND	3.93	3.54	3.14	2.83	G2R-24-DC24BYKUM
	DPDT	24VAC	260	5	5	80/30/110	15/10	25.5 x 29 x 13	Z845-ND	6.55	5.90	5.24	4.72	G2R-24-AC24
	DPDT	120VAC	6500	5	5	80/30/110	15/10	25.5 x 29 x 13	Z846-ND	7.15	6.44	5.72	5.15	G2R-24-AC120
5	SPDT	5	47	16	16	70/15/110	15/5	25.5 x 29 x 13	Z847-ND	3.48	3.13	2.78	2.51	G2R-1-E-DC5
	SPDT	12	275	16	16	70/15/110	15/5	25.5 x 29 x 13	Z848-ND	3.48	3.13	2.78	2.51	G2R-1-E-DC12
	SPDT	24	1100	16	16	70/15/110	15/5	25.5 x 29 x 13	Z849-ND	3.48	3.13	2.78	2.51	G2R-1-E-DC24
6	SPST-NO	12	160	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z954-ND	6.18	5.56	4.94	4.45	G4A-1A-P-E-DC12
	SPST-NO	24	640	20	20	70/10/110	20/10	23.5 x 30.5 x 16	Z955-ND	6.18	5.56	4.94	4.45	G4A-1A-P-E-DC24
7	SPST-NO†	12	180	15	15	80/10/110	20/5	30.5 x 30.5 x 19.5	Z961-ND	5.43	4.89	4.34	3.91	G4W1114PUSTV8HPDC12
	SPST-NO†	24	720	15	15	80/10/110	20/5	30.5 x 30.5 x 19.5	Z962-ND	5.43	4.89	4.34	3.91	G4W1114PUSTV8HPDC24
8	DPST-NO†	12	180	10	10	80/10/110	20/5	30.5 x 30.5 x 19.5	Z963-ND	6.45	5.81	5.16	4.65	G4W-2214PUSHP-DC12
	DPST-NO†	24	720	10	10	80/10/110	20/5	30.5 x 30.5 x 19.5	Z964-ND	6.45	5.81	5.16	4.65	G4W-2214PUSHP-DC24
9	SPDT†*	5	63	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1011-ND	1.88	1.69	1.50	1.35	G5LE-14-DC5
	SPDT†*	12	360	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1012-ND	1.88	1.69	1.50	1.35	G5LE-14-DC12
	SPDT†*	24	1440	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1013-ND	1.88	1.69	1.50	1.35	G5LE-14-DC24
9	SPDT	5	63	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1014-ND	1.70	1.53	1.36	1.23	G5LE-1-DC5
	SPDT	12	360	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1015-ND	1.70	1.53	1.36	1.23	G5LE-1-DC12
	SPDT	24	1440	10	10	75/10/130	10/5	19.0 x 22.5 x 16.5	Z1016-ND	1.70	1.53	1.36	1.23	G5LE-1-DC24
10	SPDT†	5	114	5	8	70/10/110	15/5	15 x 28.5 x 10	Z987-ND	2.35	2.12	1.88	1.70	G6RN-1-DC5
	SPDT†	12	665	5	8	70/10/110	15/5	15 x 28.5 x 10	Z988-ND	2.35	2.12	1.88	1.70	G6RN-1-DC12
	SPDT†	24	2620	5	8	70/10/110	15/5	15 x 28.5 x 10	Z990-ND	2.35	2.12	1.88	1.70	G6RN-1-DC24
11	SPST	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z219-ND	2.15	1.94	1.72	1.55	G5Q-1A-DC12
	SPST	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z220-ND	2.15	1.94	1.72	1.55	G5Q-1A-DC24
	SPDT	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z221-ND	2.25	2.03	1.80	1.62	G5Q-1-DC12
	SPDT	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z222-ND	2.25	2.03	1.80	1.62	G5Q-1-DC24
	SPST†	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z223-ND	2.30	2.07	1.84	1.66	G5Q-1A4-DC12
	SPST†	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z224-ND	2.30	2.07	1.84	1.66	G5Q-1A4-DC24
	SPDT†	12	720	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z225-ND	2.40	2.16	1.92	1.73	G5Q-14-DC12
	SPDT†	24	2880	10	10	75/5/190	10/5	15.8 x 20.3 x 10.3	Z226-ND	2.40	2.16	1.92	1.73	G5Q-14-DC24

† Sealed case   * Meets FCC Part 68 standards.   All Relays UL/CSA approved

9135B-ND	Omron Relay Data Book $2.95

Mtg. Hole Pattern & Connection Diagram
“Bottom view unless otherwise noted”

Fig. 1

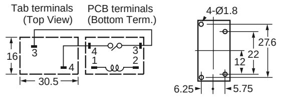


Fig. 2

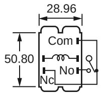
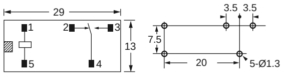


Fig. 3



Pin 2 missing on G4X Series

Fig. 4

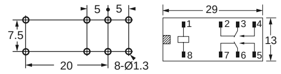


Fig. 5

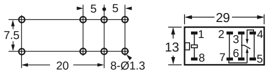


Fig. 6

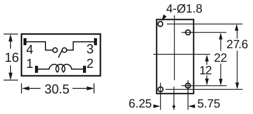


Fig. 7

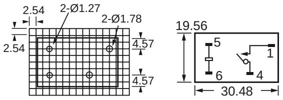


Fig. 8

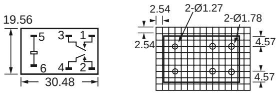


Fig. 9

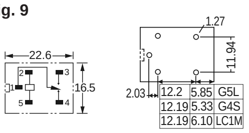


Fig. 10

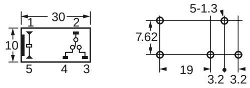
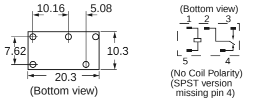
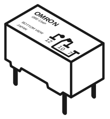


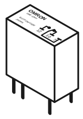
Fig. 11

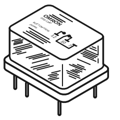


G

OMRON® Low Signal • Power PCB Relays







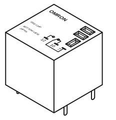


Fig.	Contact Form	Coil Volt. (VDC)	Coil Res. (Ω)	Contact Rtg's. Resistive (A) 24 VDC	Contact Rtg's. Resistive (A) 115 VAC	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Dim. (mm) H x L x W	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50	Price Each 100	Omron Part No.
PC Mount Low — Signal Relays														
1	DPDT†⋆	5	50	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z767-ND	2.88	2.59	2.30	2.07	G5V-2-DC5
	DPDT†⋆	12	288	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z768-ND	2.88	2.59	2.30	2.07	G5V-2-DC12
	DPDT†⋆	24	1152	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z769-ND	2.88	2.59	2.30	2.07	G5V-2-DC24
1	DPDT†⋆	5	70	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z770-ND	3.08	2.77	2.46	2.22	G5V-2-H-DC5
	DPDT†⋆	12	400	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z771-ND	3.08	2.77	2.46	2.22	G5V-2-H-DC12
	DPDT†⋆	24	1600	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z772-ND	3.08	2.77	2.46	2.22	G5V-2-H-DC24
1	DPDT	5	166.7	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z108-ND	3.18	2.86	2.54	2.29	G5V-2-H1-DC5
	DPDT	12	960	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z109-ND	3.18	2.86	2.54	2.29	G5V-2-H1-DC12
	DPDT	24	2880	2	0.5	75/5/120	7/3	11.5 x 20.5 x 10.1	Z110-ND	3.18	2.86	2.54	2.29	G5V-2-H1-DC24
2	SPDT†	5	167	1	0.5	80/10/200	5/5	10 x 12.5 x 7.5	Z773-ND	2.33	2.10	1.86	1.68	G5V-1-DC5
	SPDT†	12	960	1	0.5	80/10/200	5/5	10 x 12.5 x 7.5	Z774-ND	2.33	2.10	1.86	1.68	G5V-1-DC12
	SPDT†	24	3840	1	0.5	80/10/200	5/5	10 x 12.5 x 7.5	Z775-ND	2.33	2.10	1.86	1.68	G5V-1-DC24
1	DPDT†⋆	5	125	1	0.6	70/10/150	5/5	8.4 x 20.3 x 10.1	Z105-ND	4.68	4.21	3.74	3.37	G6A-234P-ST-US-DC5
	DPDT†⋆	12	720	1	0.6	70/10/150	5/5	8.4 x 20.3 x 10.1	Z106-ND	4.68	4.21	3.74	3.37	G6A-234P-ST-US-DC12
	DPDT†⋆	24	2880	1	0.6	70/10/150	5/5	8.4 x 20.3 x 10.1	Z107-ND	4.68	4.21	3.74	3.37	G6A-234P-ST-US-DC24
1	DPDT†⋆	3	45	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z122-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC3
	DPDT†⋆	5	125	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z123-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC5
	DPDT†⋆	12	720	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z124-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC12
	DPDT†⋆	24	2880	2	0.5	70/10/150	5/3	8.4 x 20.3 x 10.1	Z125-ND	4.58	4.12	3.66	3.30	G6A-274P-ST-US-DC24
3	DPDT	5	125	1	0.5	70/10/150	5/5	7.9 x 16.0 x 9.9	Z706-ND	4.00	3.60	3.20	2.88	G5A-237P-DC5
	DPDT	12	720	1	0.5	70/10/150	5/5	7.9 x 16.0 x 9.9	Z707-ND	4.00	3.60	3.20	2.88	G5A-237P-DC12
	DPDT	24	2880	1	0.5	70/10/150	5/5	7.9 x 16.0 x 9.9	Z708-ND	4.13	3.72	3.30	2.97	G5A-237P-DC24
3	DPDT	5	125	1	0.5	70/10/150	5/5	8.0 x 16.0 x 9.9	Z942-ND	4.33	3.90	3.46	3.12	G5A-234P-DC5
	DPDT	12	720	1	0.5	70/10/150	5/5	8.0 x 16.0 x 9.9	Z943-ND	4.33	3.90	3.46	3.12	G5A-234P-DC12
	DPDT	24	2880	1	0.5	70/10/150	5/5	8.0 x 16.0 x 9.9	Z944-ND	4.33	3.90	3.46	3.12	G5A-234P-DC24
4	SPDT	5	63	2	0.4	70/10/190	5/5	8.0 x 16.0 x 9.9	Z761-ND	3.85	3.47	3.08	2.78	G6E-134P-L-ST-US-DC5
	SPDT	12	360	2	0.4	70/10/190	5/5	8.0 x 16.0 x 9.9	Z762-ND	3.85	3.47	3.08	2.78	G6E-134P-L-ST-US-DC12
	SPDT	24	1440	2	0.4	70/10/190	5/5	8.0 x 16.0 x 9.9	Z763-ND	3.85	3.47	3.08	2.78	G6E-134P-L-ST-US-DC24
4	SPDT†⋆	5	125	2	0.4	70/10/190	5/5	7.9 x 16.0 x 9.9	Z830-ND	4.03	3.63	3.22	2.90	G6E-134P-ST-US-DC5
	SPDT†⋆	12	720	2	0.4	70/10/190	5/5	7.9 x 16.0 x 9.9	Z831-ND	4.03	3.63	3.22	2.90	G6E-134P-ST-US-DC12
	SPDT†⋆	24	2880	2	0.4	70/10/190	5/5	7.9 x 16.0 x 9.9	Z832-ND	4.03	3.63	3.22	2.90	G6E-134P-ST-US-DC24
5	4PDT†⋆	5	69	1	0.3	70/10/150	7/5	8.4 x 35.4 x 10.1	Z940-ND	10.10	9.09	8.08	7.28	G6A-434P-STUS-DC5
	4PDT†⋆	12	400	1	0.3	70/10/150	7/5	8.4 x 35.4 x 10.1	Z206-ND	10.10	9.09	8.08	7.28	G6A-434P-ST-US-DC12
	4PDT†⋆	24	1600	1	0.3	70/10/150	7/5	8.4 x 35.4 x 10.1	Z941-ND	10.10	9.09	8.08	7.28	G6A-434P-STUS-DC24
PC Mount Low-Signal Relays — Latching Type														
6	DPDT⋆	5	139	1	0.3	70/70/200	5/5	8.4 x 20.2 x 10.1	Z749-ND	5.85	5.27	4.68	4.22	G6AK-234P-ST-US-DC5
	DPDT⋆	12	800	1	0.3	70/70/200	5/5	8.4 x 20.2 x 10.1	Z750-ND	4.68	4.21	3.74	3.37	G6AK-234P-ST-US-DC12
	DPDT⋆	24	3200	1	0.3	70/70/200	5/5	8.4 x 20.2 x 10.1	Z751-ND	5.85	5.27	4.68	4.22	G6AK-234P-ST-US-DC24
—	SPDT†⋆	5	125	1	0.3	70/70/190	5/5	7.9 x 16.0 x 9.9	Z833-ND	5.20	4.68	4.16	3.75	G6EK-134P-ST-US-DC5
	SPDT†⋆	12	720	1	0.3	70/70/190	5/5	7.9 x 16.0 x 9.9	Z834-ND	5.20	4.68	4.16	3.75	G6EK-134P-ST-US-DC12
	SPDT†⋆	24	2880	1	0.3	70/70/190	5/5	7.9 x 16.0 x 9.9	Z835-ND	5.40	4.86	4.32	3.89	G6EK-134P-ST-US-DC24
7	DPDT†	5	125	1	0.5	75/75/190	3/2	5.0 x 14.0 x 9	Z965-ND	4.85	4.37	3.88	3.50	G6HK-2-DC5
	DPDT†	12	720	1	0.5	75/75/190	3/2	5.0 x 14.0 x 9	Z966-ND	4.85	4.37	3.88	3.50	G6HK-2-DC12
	DPDT†	24	1920	1	0.5	75/75/190	3/2	5.0 x 14.0 x 9	Z967-ND	5.23	4.71	4.18	3.77	G6HK-2-DC24
High Efficiency Power Relays (Low Power Consumption with High Coil Resistance)														
8	SPST-NO†	5	125	8	8	70/10/130	10/10	12.44 x 20.0 x 9.9	Z712-ND	4.95	4.46	3.96	3.57	G6B-1174P-US-DC5
	SPST-NO†	12	720	8	8	70/10/130	10/10	12.44 x 20.0 x 9.9	Z713-ND	4.95	4.46	3.96	3.57	G6B-1174P-US-DC12
	SPST-NO†	24	2880	8	8	70/10/130	10/10	12.44 x 20.0 x 9.9	Z714-ND	5.13	4.62	4.10	3.69	G6B-1174P-US-DC24
9	SPST-NO†	5	125	10	10	70/10/130	10/10	10.2 x 20.0 x 15.0	Z715-ND	4.98	4.48	3.98	3.59	G6C-1114P-US-DC5
	SPST-NO†	12	720	10	10	70/10/130	10/10	10.2 x 20.0 x 15.0	Z716-ND	4.98	4.48	3.98	3.59	G6C-1114P-US-DC12
	SPST-NO†	24	2880	10	10	70/10/130	10/10	10.2 x 20.0 x 15.0	Z948-ND	5.13	4.62	4.10	3.69	G6C-1114P-US-DC24
10	SPST-NO/NC	5	125	8	8	70/10/130	10/10	9.9 x 20.0 x 15.0	Z949-ND	5.73	5.16	4.58	4.13	G6C-2114P-US-DC5
	SPST-NO/NC	12	720	8	8	70/10/130	10/10	9.9 x 20.0 x 15.0	Z950-ND	5.73	5.16	4.58	4.13	G6C-2114P-US-DC12
	SPST-NO/NC	24	2880	8	8	70/10/130	10/10	9.9 x 20.0 x 15.0	Z951-ND	5.90	5.31	4.72	4.25	G6C-2114P-US-DC24
—	PC Mount Relay Socket for G6C Series							15 x 23 x 10.79	Z126-ND	1.90	1.71	1.52	1.37	P6C-06P
11	SPST-NO⋆	5	125	10	15	75/10/110	10/10	11 x 22 x 16	Z960-ND	3.43	3.09	2.74	2.47	G5CE-1-DC5
	SPST-NO⋆	12	720	10	15	75/10/110	10/10	11 x 22 x 16	Z779-ND	3.43	3.09	2.74	2.47	G5CE-1-DC12
	SPST-NO⋆	24	2880	10	15	75/10/110	10/10	11 x 22 x 16	Z780-ND	3.55	3.20	2.84	2.56	G5CE-1-DC24
	SPST-NO†	5	125	10	10	75/10/130	10/10	11 x 22 x 16	Z1048-ND	3.98	3.58	3.18	2.87	G5C-14-DC5
	SPST-NO†	12	720	10	10	75/10/130	10/10	11 x 22 x 16	Z1049-ND	3.98	3.58	3.18	2.87	G5C-14-DC12
	SPST-NO†	24	2880	10	10	75/10/130	10/10	11 x 22 x 16	Z1050-ND	3.98	3.58	3.18	2.87	G5C-14-DC24
12	SPST-NO†⋆	5	125	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z945-ND	4.13	3.72	3.30	2.97	G6B-1114P-US-DC5
	SPST-NO†⋆	6	180	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z752-ND	4.13	3.72	3.30	2.97	G6B-1114P-US-DC6
	SPST-NO†⋆	12	720	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z753-ND	4.13	3.72	3.30	2.97	G6B-1114P-US-DC12
	SPST-NO†⋆	24	2880	5	5	70/10/130	10/10	9.9 x 20.1 x 9.9	Z754-ND	4.25	3.83	3.40	3.06	G6B-1114P-US-DC24
13	SPST-NO, SPST-NC†⋆	5	83	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z946-ND	5.05	4.55	4.04	3.64	G6B-2114P-US-DC5
		6	120	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z755-ND	5.05	4.55	4.04	3.64	G6B-2114P-US-DC6
		12	480	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z756-ND	5.05	4.55	4.04	3.64	G6B-2114P-US-DC12
		24	1920	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z757-ND	5.28	4.75	4.22	3.80	G6B-2114P-US-DC24
13	DPST-NO	5	83	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z947-ND	5.05	4.55	4.04	3.64	G6B-2214P-US-DC5
		6	120	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z758-ND	5.05	4.55	4.04	3.64	G6B-2214P-US-DC6
		12	480	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z759-ND	5.05	4.55	4.04	3.64	G6B-2214P-US-DC12
		24	1920	5	5	80/10/110	10/10	9.9 x 20.1 x 9.9	Z760-ND	5.28	4.75	4.22	3.80	G6B-2214P-US-DC24
—	PC Mount Relay Socket for G6B Series SPST							23 x 9.9 x 10.16	Z993-ND	1.50	1.35	1.20	1.08	P6B-04P
—	PC Mount Relay Socket for G6B Series DPST							23 x 9.9 x 10.16	Z994-ND	1.93	1.74	1.54	1.39	P6B-26P

† Sealed case. ⋆ Meets FCC Part 68 standards.

(Continued)

All Relays UL/CSA approved

9135B-ND Omron Relay Data Book $2.95

Mounting Hole Pattern & Connection Diagram
"Bottom view unless otherwise noted"

Fig. 1 Pin #1 is Positive

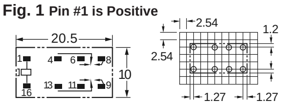


Fig. 2

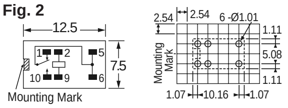


Fig. 3

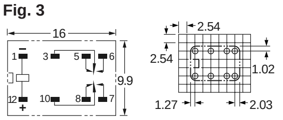
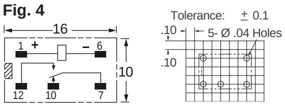


Fig. 4



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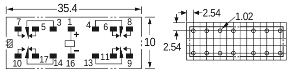


Fig. 6

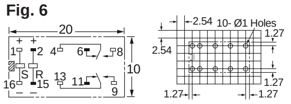


Fig. 7

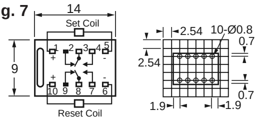


Fig. 8

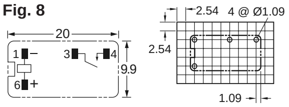


Fig. 9

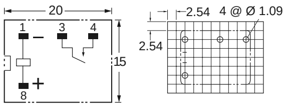


Fig. 10

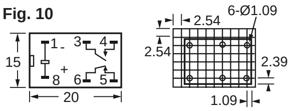


Fig. 11

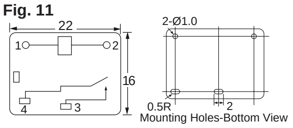


Fig. 12

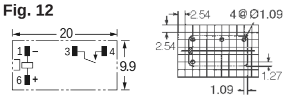
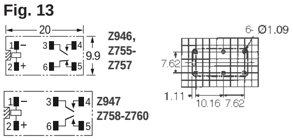


Fig. 13



Mounting Hole Pattern & Connection Diagram
“Bottom view unless otherwise noted”

Fig.	Contact Form	Coil Volt. (VDC)	Coil Res. (Ω)	Contact Rtg's. Resistive (A) 24 VDC	115 VAC	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Dim. (mm) H x L x W	Digi-Key Part No.	Price Each 1	25	50	100	Omron Part No.
—	SPST-NO†	5	125	5	5	70/10/130	10/5	12.5 x 17.5 x 6.5	Z856-ND	4.40	3.96	3.52	3.17	G6D-1A-DC5
	SPST-NO†	12	720	5	5	70/10/130	10/5	12.5 x 17.5 x 6.5	Z857-ND	4.40	3.96	3.52	3.17	G6D-1A-DC12
	SPST-NO†	24	2880	5	5	70/10/130	10/5	12.5 x 17.5 x 6.5	Z858-ND	4.73	4.26	3.78	3.41	G6D-1A-DC24
14	SPDT	12	360	5	5	75/5/110	10/5	15.5 x 20 x 10	Z991-ND	1.40	1.26	1.12	1.01	G5S-1-DC12
	SPDT	24	1440	5	5	75/5/110	10/5	15.5 x 20 x 10	Z992-ND	1.55	1.40	1.24	1.12	G5S-1-DC24
Ultracompact — TELECOM (SMT)														
16	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z111-ND	3.80	3.42	3.04	2.74	G6K-2F-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z112-ND	3.80	3.42	3.04	2.74	G6K-2F-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z113-ND	3.80	3.42	3.04	2.74	G6K-2F-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z114-ND	4.30	3.87	3.44	3.10	G6K-2F-DC24
16	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z127-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z128-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z129-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z130-ND	3.70	3.33	2.96	2.67	G6K-2F-Y-DC24
16	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z135-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z136-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z137-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z138-ND	3.70	3.33	2.96	2.67	G6K-2G-Y-DC24
15	DPDT	4.5	140.4	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1207-ND	4.10	3.69	3.28	2.96	G6J-2FL-DC4.5
	DPDT	5	171.1	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1208-ND	4.10	3.69	3.28	2.96	G6J-2FL-DC5
	DPDT	12	979.8	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1209-ND	4.10	3.69	3.28	2.96	G6J-2FL-DC12
	DPDT	24	2620	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1210-ND	4.10	3.69	3.28	2.96	G6J-2FL-DC24
15	DPDT	4.5	140.4	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1215-ND	4.10	3.69	3.28	2.96	G6J-2FS-DC4.5
	DPDT	5	171.1	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1216-ND	4.10	3.69	3.28	2.96	G6J-2FS-DC5
	DPDT	12	979.8	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1217-ND	4.10	3.69	3.28	2.96	G6J-2FS-DC12
	DPDT	24	2620	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1218-ND	4.10	3.69	3.28	2.96	G6J-2FS-DC24
—	SPDT	3	62.5	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1230-ND	1.75	1.58	1.40	1.26	G6L-1F-DC3
	SPDT	4.5	140.4	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1231-ND	1.75	1.58	1.40	1.26	G6L-1F-DC4.5
	SPDT	5	171.1	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1232-ND	1.75	1.58	1.40	1.26	G6L-1F-DC5
	SPDT	12	979.8	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1233-ND	1.75	1.58	1.40	1.26	G6L-1F-DC12
Ultracompact — TELECOM Latching														
15	DPDT	4.5	207.4	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1211-ND	4.20	3.78	3.36	3.03	G6JU-2FL-DC4.5
	DPDT	5	245.3	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1212-ND	4.20	3.78	3.36	3.03	G6JU-2FL-DC5
	DPDT	12	1309	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1213-ND	4.20	3.78	3.36	3.03	G6JU-2FL-DC12
	DPDT	24	4430	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1214-ND	4.20	3.78	3.36	3.03	G6JU-2FL-DC24
15	DPDT	4.5	207.4	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1219-ND	4.20	3.78	3.36	3.03	G6JU-2FS-DC4.5
	DPDT	5	245.3	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1220-ND	4.20	3.78	3.36	3.03	G6JU-2FS-DC5
	DPDT	12	1309	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1221-ND	4.20	3.78	3.36	3.03	G6JU-2FS-DC12
	DPDT	24	4430	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1222-ND	4.20	3.78	3.36	3.03	G6JU-2FS-DC24
15	DPDT	4.5	207.4	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1203-ND	4.20	3.78	3.36	3.03	G6JU-2P-DC4.5
	DPDT	5	245.3	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1204-ND	4.20	3.78	3.36	3.03	G6JU-2P-DC5
	DPDT	12	1309	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1205-ND	4.20	3.78	3.36	3.03	G6JU-2P-DC12
	DPDT	24	4430	1	0.3	75/75/150	3/3	4.8 x 10.3 x 9	Z1206-ND	4.20	3.78	3.36	3.03	G6JU-2P-DC24
Ultracompact — TELECOM (Thru-hole)														
16	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z115-ND	4.30	3.87	3.44	3.10	G6K-2P-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z116-ND	3.80	3.42	3.04	2.74	G6K-2P-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z117-ND	3.80	3.42	3.04	2.74	G6K-2P-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z118-ND	4.30	3.87	3.44	3.10	G6K-2P-DC24
16	DPDT	4.5	194	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z131-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC4.5
	DPDT	5	237	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z132-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC5
	DPDT	12	1407	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z133-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC12
	DPDT	24	5220	1	0.3	75/5/200	3/3	5 x 10 x 6.5	Z134-ND	3.70	3.33	2.96	2.67	G6K-2P-Y-DC24
15	DPDT	4.5	140.4	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1199-ND	4.10	3.69	3.28	2.96	G6J-2P-DC4.5
	DPDT	5	171.1	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1200-ND	4.10	3.69	3.28	2.96	G6J-2P-DC5
	DPDT	12	979.8	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1201-ND	4.10	3.69	3.28	2.96	G6J-2P-DC12
	DPDT	24	2620	1	0.3	75/10/150	3/3	4.8 x 10.3 x 9	Z1202-ND	4.10	3.69	3.28	2.96	G6J-2P-DC24
—	SPDT	3	62.5	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1226-ND	1.75	1.58	1.40	1.26	G6L-1P-DC3
	SPDT	4.5	140.4	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1227-ND	1.75	1.58	1.40	1.26	G6L-1P-DC4.5
	SPDT	5	171.1	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1228-ND	1.75	1.58	1.40	1.26	G6L-1P-DC5
	SPDT	12	979.8	1	0.3	75/10/150	5/5	4.0 x 10.6 x 7	Z1229-ND	1.75	1.58	1.40	1.26	G6L-1P-DC12
Ultracompact, Ultrasensitive DPDT Relays (Low Power Consumption with High Coil Resistance)														
17	DPDT⋆	5	178	1	0.5	75/10/170	2/1	5.0 x 14.0 x 9.0	Z740-ND	4.00	3.60	3.20	2.88	G6H-2-DC5
	DPDT⋆	12	1028	1	0.5	75/10/170	2/1	5.0 x 14.0 x 9.0	Z741-ND	4.00	3.60	3.20	2.88	G6H-2-DC12
	DPDT⋆	24	2880	1	0.5	75/10/170	2/1	5.0 x 14.0 x 9.0	Z742-ND	5.03	4.53	4.02	3.62	G6H-2-DC24
Surface Mountable (IR, Vapor Phase and DWS Solderable) L-Style Leads														
18	DPDT†⋆	5	125	1	0.2	75/10/130	5/3	8.0 x 16.0 x 10.0	Z709-ND‡	4.44	4.19	3.95	3.70	G6G-234FL-DC5
19	DPDT	5	178	0.5A@125VAC		75/10/120	3/2	5.2 x 14.0 x 9.0	Z827-ND	5.93	5.34	4.74	4.27	G6H-2F-DC5
	DPDT	12	1028	& 1A@30VDC		75/10/120	3/2	5.2 x 14.0 x 9.0	Z828-ND	5.93	5.34	4.74	4.27	G6H-2F-DC12
	DPDT	24	2880			75/10/120	3/2	5.2 x 14.0 x 9.0	Z829-ND	6.73	6.06	5.38	4.85	G6H-2F-DC24
20	DPDT	5	178	0.5A@125VAC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z888-ND	4.48	4.03	3.58	3.23	G6S-2F-DC5
	DPDT	12	1028			75/10/200	4/4	7.3 x 14.8 x 9.2	Z889-ND	4.48	4.03	3.58	3.23	G6S-2F-DC12
	DPDT	24	2880	2A@30VDC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z890-ND	5.10	4.59	4.08	3.68	G6S-2F-DC24
20	DPDT	5	178	0.5A@125VAC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z891-ND	4.48	4.03	3.58	3.23	G6S-2G-DC5
	DPDT	12	1028			75/10/200	4/4	7.3 x 14.8 x 9.2	Z892-ND	4.48	4.03	3.58	3.23	G6S-2G-DC12
	DPDT	24	2880	2A@30VDC		75/10/200	4/4	7.3 x 14.8 x 9.2	Z893-ND	5.10	4.59	4.08	3.68	G6S-2G-DC24
High Frequency — Isolation of 68dB (typ.), Insertion Loss of .20dB (typ.) VSWR of 1.30 (typ.) @ 900MHz														
21	SPDT†⋆	5	83	0.1@30AC/DC		75/10/130	10/5	10.0 x 20.5 x 11.5	Z723-ND	6.14	5.67	5.32	4.71	G5Y-1-DC5
	SPDT†⋆	12	480	0.1@30AC/DC		75/10/130	10/5	9.0 x 20.5 x 11.5	Z724-ND	6.14	5.67	5.32	4.71	G5Y-1-DC12
	SPDT†⋆	24	1920	0.1@30AC/DC		75/10/130	10/5	9.0 x 20.5 x 11.5	Z725-ND	6.14	5.67	5.32	4.71	G5Y-1-DC24
High Frequency — Isolation of 65dB, Insertion Loss of 0.2dB, VSWR of 1.5 max. @ 900MHz														
22	SPDT	5	125	.01	.01	75/10/150	10/5	20 x 11.7 x 9.2	Z119-ND	4.20	3.78	3.36	3.03	G6Y-1-DC5
	SPDT	12	720	.01	.01	75/10/150	10/5	20 x 11.7 x 9.2	Z120-ND	4.20	3.78	3.36	3.03	G6Y-1-DC12
	SPDT	24	2880	.01	.01	75/10/150	10/5	20 x 11.7 x 9.2	Z121-ND	4.20	3.78	3.36	3.03	G6Y-1-DC24

† Sealed case. ⋆ Meets FCC. Part 68 standards. ‡ Not Recommended for New Design

All Relays UL/CSA approved

9135B-ND Omron Relay Data Book $2.95

Fig. 14

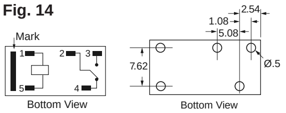


Fig. 15 G6J-2P

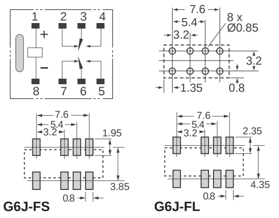


Fig. 16 G6K-2F Top View

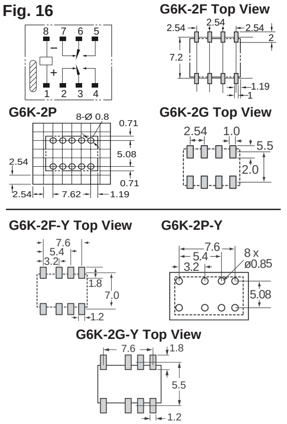


Fig. 17

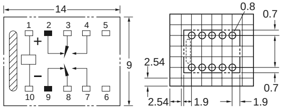


Fig. 18
Surface Mount

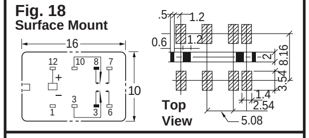


Fig. 19
Surface Mount

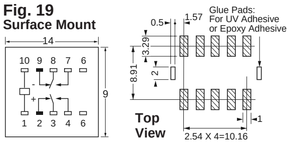


Fig. 20 **Surface Mount**

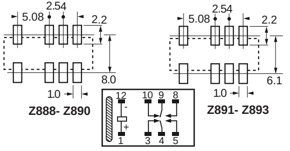


Fig. 21

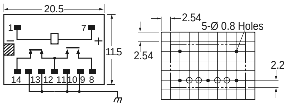
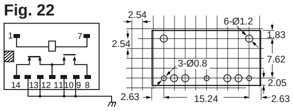
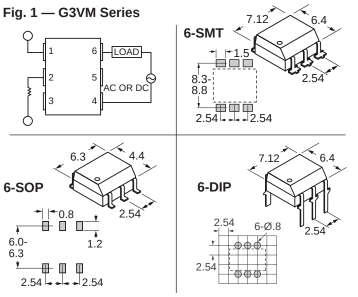


Fig. 22



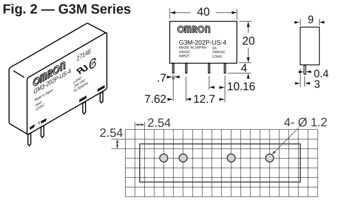
OMRON Solid State Relays

Fig. 1 — G3VM Series



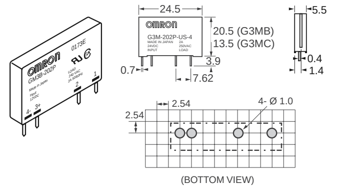
MOS FET relays boast performance with long life, low input drive, and high-speed response to handle minute analog signals with minimum current leakage. The standard G3VM MOS FET relays have dielectric strength of 2,500 VAC between I/O terminals (except SOP relays).

Fig. 2 — G3M Series



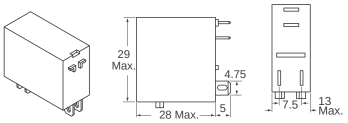
Features: • Zero-cross type or random turn-on • Thin design for high-density PCB applications • DC input — AC output for 2A load • Footprint compatible with industry standard I/O modules • Low cost **Characteristic Data:** • Operate time: 1ms max. • Output ON voltage drop: 1.6V (RMS) max. • Leakage Current: 2mA max. (at 100VAC); 5mA max. (at 200VAC) • Operating Temperature: -30° to 80°C

Fig. 3 — G3MB/MC Series



Features: • Low-cost, subminiature, PCB-mounting, solid-state relay switching 2A • DC input: AC output for 2A load at 25°C • Mono-block lead frame facilitates heat dissipation without use of heat sink **Characteristic Data:** • Leakage Current: 1.5mA max. • Operating Temperature: -30° to 80°C

Fig. 4 — G3R Series



Features: • Input / Output Modules that have the same footprint as the G2R • Incorporating an easy-to-see monitoring indicator **Characteristic Data:** • Leakage Current: 5µA max. • Operating Temperature: -30°C to 80°C
• For socket use Z855-ND

Fig. 5 — G3NE Series

Features: • Ideal for panel mounted applications • Compact aluminum PCB and power elements used • Quick-connect #110 input terminals and #250 output connections

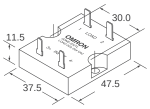


Fig. 6 — G3NA Series

Features: • Built-in varistor effectively absorbs external surges • Protective cover for greater safety is standard • Operation indicator (red LED) is standard • Zero-cross or phase control functions **Characteristic Data:** • Leakage Current: 5mA max. (at 100VAC), 10mA max. (at 200VAC) • Operating Temperature: -30° to 80°C

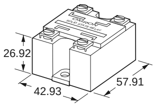
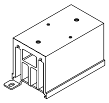


Fig. 7 — Accessories

Omron heat sinks are designed to dissipate heat buildup during normal operation. Pretapped holes allow exact placement. Heatsink grease or a similar product should be used at the time of placement.



Omron's G3VM Relays are PCB mounted solid state switches available in a variety of packages and configurations. Extremely low input current and small package make these ideal for microprocessor and logic switching relays. G3M and G3MB relays are larger current relays but offered in a SIP package to reduce board space. Perfect for controlling pumps, alarms, solenoids, etc. G3NE series are larger current relays with QC terminals (.110" QC [2.79] Input, .250" QC [6.35] output) for easy connection. Built in varistor effectively absorbs external surges. G3NA are large power relays with screw terminals and a visible LED (operation indicator). Built-in MOV absorbs external surges. Comes with protective cover for safety. Phase controlled outputs are ideal for use in light dimming, motor-speed control, and other power control applications. Approved by UL and CSA

Fig.	Contact Arrange.	Input Voltage	Input Current (mA)	Output Volt. (Peak)	Output Current	Package	Digi-Key Part No.	Price Each			Omron Part No.
								1	25	50	
MOS FET-Solid State Relays											
1	SPST-NO	1.15V	5-25	350V	120mA	4-Dip	Z150-ND	3.10	2.79	2.48	G3VM-2-S
	SPST-NO	1.15V	5-25	350V	120mA	4-SMT	Z151-ND	3.10	2.79	2.48	G3VM-2F-S
	SPST-NO	1.15V	5-25	350V	120mA	6-Dip	Z152-ND	3.10	2.79	2.48	G3VM-3-S
	SPST-NO	1.15V	5-25	350V	120mA	6-SMT	Z153-ND	3.10	2.79	2.48	G3VM-3F-S
	DPST-NO	1.15V	5-25	350V	100mA	8-Dip	Z154-ND	6.28	5.65	5.02	G3VM-W-S
	DPST-NO	1.15V	5-25	350V	100mA	8-SMT	Z155-ND	6.28	5.65	5.02	G3VM-WF-S
1	SPST-NO	1.15V	7.5-25	60V	300mA	6-Dip	Z156-ND	3.10	2.79	2.48	G3VM-V-S
	SPST-NO	1.15V	7.5-25	60V	300mA	6-SMT	Z157-ND	3.10	2.79	2.48	G3VM-VF-S
	SPST-NO	1.15V	7.5-25	60V	300mA	6-Dip	Z227-ND	9.03	8.13	7.22	G3VM-XN-S
	SPST-NO	1.15V	7.5-25	60V	300mA	6-SMT	Z228-ND	9.03	8.13	7.22	G3VM-XNF-S
	SPST-NO	1.15V	7.5-25	400V	150mA	6-Dip	Z229-ND	9.03	8.13	7.22	G3VM-4N-S
	SPST-NO	1.15V	7.5-25	400V	150mA	6-SMT	Z230-ND	9.03	8.13	7.22	G3VM-4NF-S
1	SPST-NO	1.15V	5-25	60	300mA	4-SOP	Z1039-ND	4.43	3.99	3.54	G3VM-S1
	SPST-NO	1.15V	5-25	600	100mA	6-Dip	Z1040-ND	8.60	7.74	6.88	G3VM-601BY
	SPST-NO	1.15V	5-25	600	100mA	6-SMT	Z1041-ND	8.60	7.74	6.88	G3VM-601EY
	DPST-NO	1.15V	5-25	200	150mA	8-Dip	Z1042-ND	17.70	15.93	14.16	G3VM-354C
	DPST-NO	1.15V	5-25	200	150mA	8-SMT	Z1043-ND	17.70	15.93	14.16	G3VM-354F
	SPST-NO	1.15V	5-25	400	150mA	4-Dip	Z1044-ND	9.45	8.51	7.56	G3VM-353A
	SPST-NO	1.15V	5-25	400	150mA	6-Dip	Z1045-ND	9.45	8.51	7.56	G3VM-353B
1	SPST-NO	1.15V	5-25	400V	150mA	6-Dip	Z158-ND	5.68	5.11	4.54	G3VM-6-S
	SPST-NO	1.15V	5-25	400V	150mA	6-SMT	Z159-ND	5.68	5.11	4.54	G3VM-6F-S
	SPST-NO	1.15V	5-25	350V	120mA	4-SOP	Z160-ND	3.58	3.22	2.86	G3VM-S2-S
	SPST-NO	1.15V	5-25	350V	120mA	6-SOP	Z161-ND	6.00	5.40	4.80	G3VM-S3-S
	SPST-NO	1.15V	5-25	200V	150mA	4-SOP	Z162-ND	3.58	3.22	2.86	G3VM-S5-S
	SPST-NO	1.15V	5-25	400	150mA	4-SMT	Z1046-ND	9.45	8.51	7.56	G3VM-353D
1	SPST-NO	1.15V	5-25	400	150mA	6-SMT	Z1047-ND	9.45	8.51	7.56	G3VM-353E
	DPST-NO	1.15V	5-25	350V	120mA	8-SOP	Z163-ND	7.95	7.16	6.36	G3VM-SW-S
	DPST-NO	1.15V	5-25	60V	200mA	8-SOP	Z164-ND	7.95	7.16	6.36	G3VM-SY-S
Zero-Cross Output											
2	SPST-NO	4-6VDC	—	75 to 264VAC	.1 to 2A	Std. Sip	Z900-ND	9.00	8.10	7.20	G3M-202P-US-4-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 264VAC	.1 to 2A	Std. Sip	Z901-ND	9.00	8.10	7.20	G3M-202P-US-4-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 264VAC	.1 to 2A	Std. Sip	Z902-ND	9.90	8.91	7.92	G3M-202P-US-4-DC24
Phase Controlled Output											
2	SPST-NO	4-6VDC	—	75 to 132VAC	.1 to 2A	Std. Sip	Z903-ND	7.38	6.64	5.90	G3M-102PL-US-4-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 132VAC	.1 to 2A	Std. Sip	Z904-ND	7.38	6.64	5.90	G3M-102PL-US-4-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 132VAC	.1 to 2A	Std. Sip	Z905-ND	7.38	6.64	5.90	G3M-102PL-US-4-DC24
	SPST-NO	4-6VDC	—	75 to 264VAC	.1 to 2A	Std. Sip	Z906-ND	8.82	7.94	7.06	G3M-202PL-US-4-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 264VAC	.1 to 2A	Std. Sip	Z907-ND	9.08	8.17	7.26	G3M-202PL-US-4-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 264VAC	.1 to 2A	Std. Sip	Z908-ND	9.08	8.17	7.26	G3M-202PL-US-4-DC24
Zero-Cross Output											
3	SPST-NO	4-6VDC	—	75 to 264VAC	.1 to 2A	Mini Sip	Z909-ND	4.33	3.90	3.46	G3MB-202P-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 264VAC	.1 to 2A	Mini Sip	Z910-ND	4.33	3.90	3.46	G3MB-202P-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 264VAC	.1 to 2A	Mini Sip	Z911-ND	4.33	3.90	3.46	G3MB-202P-DC24
3	SPST-NO	4-6VDC	—	75 to 132VAC	.1 to 1A	Micro Sip	Z1195-ND	3.73	3.36	2.98	G3MC-101P-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 132VAC	.1 to 1A	Micro Sip	Z1236-ND	3.73	3.36	2.98	G3MC-101P-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 132VAC	.1 to 1A	Micro Sip	Z1237-ND	3.73	3.36	2.98	G3MC-101P-DC24
Random Turn-On Output											
3	SPST-NO	4-6VDC	—	75 to 132VAC	.1 to 1A	Micro Sip	Z1196-ND	3.40	3.06	2.72	G3MC-101PL-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 132VAC	.1 to 1A	Micro Sip	Z1197-ND	3.40	3.06	2.72	G3MC-101PL-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 132VAC	.1 to 1A	Micro Sip	Z1198-ND	3.40	3.06	2.72	G3MC-101PL-DC24
3	SPST-NO	4-6VDC	—	75 to 132VAC	.1 to 2A	Mini Sip	Z912-ND	3.53	3.18	2.82	G3MB-102PL-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 132VAC	.1 to 2A	Mini Sip	Z913-ND	3.53	3.18	2.82	G3MB-102PL-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 132VAC	.1 to 2A	Mini Sip	Z914-ND	3.53	3.18	2.82	G3MB-102PL-DC24
	SPST-NO	4-6VDC	—	75 to 264VAC	.1 to 2A	Mini Sip	Z915-ND	3.93	3.54	3.14	G3MB-202PL-DC5
	SPST-NO	9.6-14.4VDC	—	75 to 264VAC	.1 to 2A	Mini Sip	Z916-ND	3.93	3.54	3.14	G3MB-202PL-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 264VAC	.1 to 2A	Mini Sip	Z917-ND	3.93	3.54	3.14	G3MB-202PL-DC24
Zero Cross Output											
4	SPST-NO	5-24VDC	8	4 to 60VDC	.01 to 2A	QC Style	Z1193-ND	20.28	18.25	16.22	G3R-ODX02SN-DC5-24
	SPST-NO	5-24VDC	8	40 to 200VDC	.01 to 1.5A	QC Style	Z1194-ND	23.33	21.00	18.66	G3R-OD201SN-DC5-24
	SPST-NO	5-24VDC	15	75 to 264VAC	.05 to 2A	QC Style	Z1192-ND	21.45	19.31	17.16	G3R-OA202SZN-DC5-24
	SPST-NO	5-24VDC	15	75 to 264VAC	.05 to 2A	QC Style	Z1235-ND	30.10	27.09	24.08	G3R-OA202SLN-DC5-24
Random Turn-on Output											
4	SPST-NO	4-6VDC	8	4 to 32VDC	.1	QC Style	Z1190-ND	18.18	16.36	14.54	G3R-IDZR1SN-DC5
	SPST-NO	12-24VDC	8	4 to 32VDC	.1	QC Style	Z1191-ND	18.18	16.36	14.54	G3R-IDZR1SN-DC12-24
	SPST-NO	100-240VAC	15	4 to 32VDC	.1	QC Style	Z1234-ND	22.88	20.59	18.30	G3R-IAZR1SN-AC100/240
Zero-Cross Output											
5	SPST-NO	4-6VDC	—	75 to 264VAC	.1 to 10A	QC Style	Z175-ND	16.58	14.92	13.26	G3NE-210T-US-DC5
	SPST-NO	9.6-14.1VDC	—	75 to 264VAC	.1 to 10A	QC Style	Z176-ND	16.58	14.92	13.26	G3NE-210T-US-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 264VAC	.1 to 10A	QC Style	Z177-ND	16.58	14.92	13.26	G3NE-210T-US-DC24
5	SPST-NO	4-6VDC	—	75 to 264VAC	.1 to 20A	QC Style	Z178-ND	19.43	17.49	15.54	G3NE-220T-US-DC5
	SPST-NO	9.6-14.1VDC	—	75 to 264VAC	.1 to 20A	QC Style	Z179-ND	19.43	17.49	15.54	G3NE-220T-US-DC12
	SPST-NO	19.2-28.8VDC	—	75 to 264VAC	.1 to 20A	QC Style	Z180-ND	19.43	17.49	15.54	G3NE-220T-US-DC24
Zero-Cross Output											
6	SPST-NO	5-24VDC	—	19 to 264VAC	.1 to 5A	Screw Style	Z165-ND	18.38	16.54	14.70	G3NA-205B-DC5-24
	SPST-NO	100-120VAC	—	19 to 264VAC	.1 to 5A	Screw Style	Z166-ND	23.13	20.82	18.50	G3NA-205B-AC100-120
	SPST-NO	200-240VAC	—	19 to 264VAC	.1 to 5A	Screw Style	Z167-ND	23.13	20.82	18.50	G3NA-205B-AC200-240
6	SPST-NO	4-32VDC	—	19 to 264VAC	.1 to 10A	Screw Style	Z918-ND	18.80	16.92	15.04	G3NA-210B-DC5-24
	SPST-NO	75-132VAC	—	19 to 264VAC	.1 to 10A	Screw Style	Z919-ND	25.93	23.34	20.74	G3NA-210B-AC100-120
	SPST-NO	150-264VAC	—	19 to 264VAC	.1 to 10A	Screw Style	Z920-ND	25.93	23.34	20.74	G3NA-210B-AC200-240
	SPST-NO	4-32VDC	—	19 to 264VAC	.1 to 25A	Screw Style	Z921-ND	24.45	22.01	19.56	G3NA-225B-DC5-24
	SPST-NO	75-132VAC	—	19 to 264VAC	.1 to 25A	Screw Style	Z922-ND	29.45	26.51	23.56	G3NA-225B-AC100-120
	SPST-NO	150-264VAC	—	19 to 264VAC	.1 to 25A	Screw Style	Z923-ND	32.33	29.10	25.86	G3NA-225B-AC200-240
6	SPST-NO	5-24VDC	—	180 to 528VAC	.1 to 25A	Screw Style	Z170-ND	52.88	47.59	42.30	G3NA-425B-DC5-24
	SPST-NO	100-120VAC	—	180 to 528VAC	.1 to 25A	Screw Style	Z171-ND	55.23	49.71	44.18	G3NA-425B-AC100-120
6	SPST-NO	5-24VDC	—	19 to 264VAC	.1 to 40A	Screw Style	Z172-ND	38.08	34.27	30.46	G3NA-240B-DC5-24
	SPST-NO	100-120VAC	—	19 to 264VAC	.1 to 40A	Screw Style	Z173-ND	42.43	38.19	33.94	G3NA-240B-AC100-240
	SPST-NO	200-240VAC	—	19 to 264VAC	.1 to 40A	Screw Style	Z174-ND	42.43	38.19	33.94	G3NA-240B-AC200-240
DC Output Voltage											
6	SPST-NO	5-24VDC	—	4 to 220VDC	.1 to 10A	Screw Style	Z168-ND	33.45	30.11	26.76	G3NA-D210B-DC5-24
	SPST-NO	100-120VAC	—	4 to 220VDC	.1 to 10A	Screw Style	Z169-ND	34.83	31.35	27.86	G3NA-D210B-AC100-240
Accessories											
7	Track Mount Heat Sink for 10A Relays (77 x 44mm)						Z924-ND	13.98	12.58	11.18	Y92B-N50
	Track Mount Heat Sink for 10A/25A Relays (88.90 x 77mm)						Z925-ND	22.60	20.34	18.08	Y92B-N100
	Track Mount Heat Sink for 25A Relays (100 x 104mm)						Z926-ND	30.85	27.77	24.68	Y92B-N150
	Chassis Mount Heat Sink for 10A (100 x 100mm)						Z927-ND	15.15	13.64	12.12	Y92B-A100
	Chassis Mount Heat Sink for 25A (150 x 100.5mm)						Z928-ND	20.60	18.54	16.48	Y92B-A150N

OMRON General Purpose Relays

Fig.	Contact Form	Coil Volt.	Coil Res. (Ω)	Contact Ratings Resistive (A)	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Digi-Key Part No.	Price Each				Omron Part No.
								1	25	50	100	
Power Relays — Plug-In Terminals												
1	SPDT	120VAC	4430	15A @ 110VAC 15A @ 24VDC	80/30/110	25/25	Z781-ND	6.75	6.08	5.40	4.86	LY1-AC110/120
		24VAC	180		80/30/110	25/25	Z783-ND	6.75	6.08	5.40	4.86	LY1-AC24
		24VDC	650		80/10/110	25/25	Z784-ND	6.45	5.81	5.16	4.65	LY1-DC24
		12VDC	160		80/10/110	25/25	Z785-ND	6.45	5.81	5.16	4.65	LY1-DC12
1	DPDT	120VAC	4430	10A @ 110VAC 10A @ 24VDC	80/30/110	25/25	Z786-ND	7.58	6.82	6.06	5.46	LY2-AC110/120
		24VAC	180		80/30/110	25/25	Z788-ND	7.58	6.82	6.06	5.46	LY2-AC24
		24VDC	650		80/10/110	25/25	Z789-ND	7.58	6.82	6.06	5.46	LY2-DC24
		12VDC	160		80/10/110	25/25	Z790-ND	7.58	6.82	6.06	5.46	LY2-DC12
1	SPDT	12VDC	160	15A @ 110VAC 15A @ 24VDC	80/10/110	25/25	Z193-ND	6.85	6.17	5.48	4.94	LY1F-DC12
		24VDC	650		80/10/110	25/25	Z194-ND	6.85	6.17	5.48	4.94	LY1F-DC24
		24VAC	180		80/30/110	25/25	Z195-ND	6.85	6.17	5.48	4.94	LY1F-AC24
		120VAC	4430		80/30/110	25/25	Z782-ND	6.85	6.17	5.48	4.94	LY1F-AC110/120
1	DPDT	12VDC	160	10A @ 110VAC 10A @ 24VDC	80/10/110	25/25	Z190-ND	7.73	6.96	6.18	5.57	LY2F-DC12
		24VDC	650		80/10/110	25/25	Z191-ND	7.73	6.96	6.18	5.57	LY2F-DC24
		24VAC	180		80/30/110	25/25	Z192-ND	7.73	6.96	6.18	5.57	LY2F-AC24
		120VAC	4430		80/30/110	25/25	Z787-ND	7.73	6.96	6.18	5.57	LY2F-AC110/120
Power Relays — PC Mount												
1	SPDT	12VDC	160	15A @ 110VAC 15A @ 24VDC	80/10/110	25/25	Z974-ND	6.75	6.08	5.40	4.86	LY1-0-DC12
		24VDC	650		80/10/110	25/25	Z973-ND	6.75	6.08	5.40	4.86	LY1-0-DC24
		24VAC	180		80/30/110	25/25	Z972-ND	6.75	6.08	5.40	4.86	LY1-0-AC24
		120VAC	4430		80/30/110	25/25	Z971-ND	6.75	6.08	5.40	4.86	LY1-0-AC110/120
1	DPDT	12VDC	160	10A @ 110VAC 10A @ 24VDC	80/10/110	25/25	Z978-ND	7.58	6.82	6.06	5.46	LY2-0-DC12
		24VDC	650		80/10/110	25/25	Z977-ND	7.58	6.82	6.06	5.46	LY2-0-DC24
		100VDC	6900		80/10/110	25/25	Z979-ND	7.90	7.11	6.32	5.69	LY2-0-DC100/110
		24VAC	180		80/30/110	25/25	Z976-ND	7.58	6.82	6.06	5.46	LY2-0-AC24
		120VAC	4430		80/30/110	25/25	Z975-ND	7.58	6.82	6.06	5.46	LY2-0-AC110/120
Power Relays — Plug-In Terminals												
2	DPDT	12VDC	95	10A @ 220VAC 10A @ 28VDC	80/10/110	30/20	Z800-ND	10.68	9.61	8.54	7.69	MK2P-S-DC12
		24VDC	430		80/10/110	30/20	Z799-ND	10.68	9.61	8.54	7.69	MK2P-S-DC24
		24VAC	88		80/30/110	20/20	Z798-ND	10.68	9.61	8.54	7.69	MK2P-S-AC24
		120VAC	2300		80/30/110	20/20	Z797-ND	11.60	10.44	9.28	8.36	MK2P-S-AC120
2	3PDT	12VDC	95	10A @ 220VAC 10A @ 28VDC	80/10/110	30/20	Z804-ND	12.20	10.98	9.76	8.79	MK3P5-S-DC12
		24VDC	430		80/10/110	30/20	Z803-ND	12.20	10.98	9.76	8.79	MK3P5-S-DC24
		24VAC	88		80/30/110	20/20	Z802-ND	12.20	10.98	9.76	8.79	MK3P5-S-AC24
		120VAC	2300		80/30/110	20/20	Z801-ND	13.05	11.75	10.44	9.40	MK3P5-S-AC120
3	DPDT	12VDC	160	5A @ 220VAC 5A @ 24VDC	80/10/110	20/20	Z181-ND	5.38	4.84	4.30	3.87	MY2-DC12(S)
		24VDC	636		80/10/110	20/20	Z182-ND	5.38	4.84	4.30	3.87	MY2-DC24(S)
		48VDC	2560		80/10/110	20/20	Z183-ND	5.60	5.04	4.48	4.04	MY2-DC48(S)
		24VAC	180		80/30/110	20/20	Z184-ND	5.38	4.84	4.30	3.87	MY2-AC24(S)
		120VAC	4430		80/30/110	20/20	Z185-ND	5.60	5.04	4.48	4.04	MY2-AC110/120(S)
3	4PDT	12VDC	160	3A @ 220VAC 3A @ 24VDC	80/30/110	20/20	Z186-ND	6.48	5.83	5.18	4.67	MY4-DC12(S)
		24VDC	636		80/30/110	20/20	Z187-ND	6.48	5.83	5.18	4.67	MY4-DC24(S)
		24VAC	180		80/30/110	20/20	Z188-ND	6.48	5.83	5.18	4.67	MY4-AC24(S)
		120VAC	4430		80/30/110	20/20	Z189-ND	6.63	5.97	5.30	4.77	MY4-AC110/120(S)
4	SPST	24VDC	303	30A @ 220VAC	75/15/110	30/30	Z817-ND	10.53	9.48	8.42	7.58	G7L-1A-TUB-J-CB-DC24
		24VAC	270		75/15/110	30/30	Z815-ND	11.30	10.17	9.04	8.14	G7L-1A-TUB-J-CB-AC24
		120VAC	5260		65/15/110	30/30	Z814-ND	11.30	10.17	9.04	8.14	G7L-1A-TUB-J-CB-AC100/120
		220VAC	21000		70/20/120	30/30	Z816-ND	11.93	10.74	9.54	8.59	G7L-1A-TUB-J-CB-AC200/240
4	SPST	12VDC	75	30A @ 220VAC	75/15/110	30/30	Z1051-ND	15.75	14.18	12.60	11.34	G7L-1A-BUBJ-CB-DC12
		24VDC	303		75/15/110	30/30	Z1052-ND	15.75	14.18	12.60	11.34	G7L-1A-BUBJ-CB-DC24
		24VAC	303		75/15/110	30/30	Z1053-ND	15.15	13.64	12.12	10.91	G7L-1A-BUBJ-CB-AC24
		120VAC	5260		75/18/132	30/30	Z1054-ND	16.68	15.01	13.34	12.01	G7L-1A-BUBJ-CB-AC100/120
4	DPST	24VDC	303	25A @ 220VAC	75/15/110	30/30	Z821-ND	10.95	9.86	8.76	7.89	G7L-2A-TUB-J-CB-DC24
		24VAC	270		75/15/110	30/30	Z820-ND	11.70	10.53	9.36	8.43	G7L-2A-TUB-J-CB-AC24
		120VAC	5260		65/15/110	30/30	Z818-ND	11.70	10.53	9.36	8.43	G7L-2A-TUB-J-CB-AC100/120
		220VAC	21000		70/20/120	30/30	Z819-ND	12.28	11.05	9.82	8.84	G7L-2A-TUB-J-CB-AC200/240
5	DPST-NO/NC	120VAC	—	25A @ 220VAC	75/18/132	50/50	Z1030-ND	44.85	40.37	35.88	32.30	G7J-2A2-B-B-W1-AC100/120
		240VAC	—		150/36/264	50/50	Z1031-ND	46.28	41.65	37.02	33.32	G7J-2A2-B-B-W1-AC200/240
		24VDC	288		75/10/110	50/50	Z1032-ND	40.83	36.75	32.66	29.40	G7J-2A2-B-B-W1-DC24
5	3PST/ SPST	120VAC	—	25A @ 220VAC	75/18/132	50/50	Z1033-ND	44.85	40.37	35.88	32.30	G7J-3A1-B-B-W1-AC100/120
		240VAC	—		150/36/264	50/50	Z1034-ND	46.28	41.65	37.02	33.32	G7J-3A1-B-B-W1-AC200/240
		24VDC	288		75/10/110	50/50	Z1035-ND	40.83	36.75	32.66	29.40	G7J-3A1-B-B-W1-DC24
5	4PST	120VAC	—	25A @ 220VAC	75/18/132	50/50	Z1036-ND	44.85	40.37	35.88	32.30	G7J-4A-B-W1-AC100/120
		240VAC	—		150/36/264	50/50	Z1037-ND	46.28	41.65	37.02	33.32	G7J-4A-B-W1-AC200/240
		24VDC	288		75/10/110	50/50	Z1038-ND	40.83	36.75	32.66	29.40	G7J-4A-B-W1-DC24
Power Relays — Hermetically Sealed Case												
3	4PDT	12DC	160	3A	80/10/110	20/20	Z1223-ND	44.18	39.76	35.34	31.81	MY4H-DC12
		24DC	650		80/10/110	20/20	Z1224-ND	44.18	39.76	35.34	31.81	MY4H-DC24
		120AC	4430		80/30/110	20/20	Z1225-ND	44.18	39.76	35.34	31.81	MY4H-AC110/120

All Relays UL/CSA approved

Relay Sockets and Accessories

Fig.	Use With Series	Description	Digi-Key Part No.	Price Each				Omron Part No.
				1	25	50	100	
6	LY	Track Mounted Relay Sockets	Z791-ND	4.95	4.46	3.96	3.57	PTF08A-E
—	LY	Back Connecting Socket - PCB Mount	Z792-ND	1.80	1.62	1.44	1.30	PT08-0
—	LY	Back Connecting Socket - Solder Ear	Z793-ND	1.80	1.62	1.44	1.30	PT08
—	LY/MY	Socket Mounting Plate for Back Connect Sockets	Z794-ND	.30	.27	.24	.22	PYP-1
—	LY/MY	Relay Hold-Down Clip for Track Mounted Sockets	Z795-ND	.28	.25	.22	.20	PYC-A1
—	LY/MY	Relay Hold-Down Clip for Back Connecting Sockets	Z796-ND	.28	.25	.22	.20	PYC-P
—	MY	DPDT Track Mounted Relay Sockets	Z882-ND	5.20	4.68	4.16	3.75	PYF08A-E
—	MY	4PDT Track Mounted Relay Sockets	Z811-ND	7.55	6.80	6.04	5.44	PYF14A-E
—	MY	4PDT Back Connecting Socket - Panel Mount	Z812-ND	1.80	1.62	1.44	1.30	PY14
—	MY	4PDT Back Connecting Socket - PCB Mount	Z813-ND	1.80	1.62	1.44	1.30	PY14-02
—	MK	DPDT Track Mounted Relay Sockets	Z805-ND	4.65	4.19	3.72	3.35	PF083A-E
—	MK	DPDT Connecting Socket - Panel Mount	Z836-ND	1.75	1.58	1.40	1.26	PL08
—	MK	DPDT Connecting Socket - PCB Mount	Z837-ND	2.90	2.61	2.32	2.09	PLE08-0
—	MK	3PDT Track Mounted Relay Sockets	Z806-ND	6.65	5.99	5.32	4.79	PF113A-E
—	MK	3PDT Connecting Socket - Panel Mount	Z838-ND	2.05	1.85	1.64	1.48	PL11
—	MK	3PDT Connecting Socket - PCB Mount	Z839-ND	2.90	2.61	2.32	2.09	PLE11-0
7	MY/LY/MK	40" (101.60cm) DIN Rail Socket Mounting Track	Z840-ND	6.43	5.79	5.14	4.63	PFP100N
7	MY/LY/MK	20" (50.80cm) DIN Rail Socket Mounting Track	Z841-ND	5.23	4.71	4.18	3.77	PFP50N
—	—	End Stop Plate for Din Track Rail	Z887-ND	.70	.63	.56	.51	PFP-M
—	—	W-Bracket for Omron Relay	Z1238-ND	1.36	1.23	1.09	.99	R9904FORG5F

9135B-ND	Omron Relay Data Book	$2.95

Max. Operating Voltage:
LY SERIES: 250VAC/125VDC, MK SERIES: 500VAC/250VDC,
MY SERIES: 250VAC/125VDC, G7L SERIES: 250VAC,
G8P SERIES: 250VAC/28VDC

Fig. 1

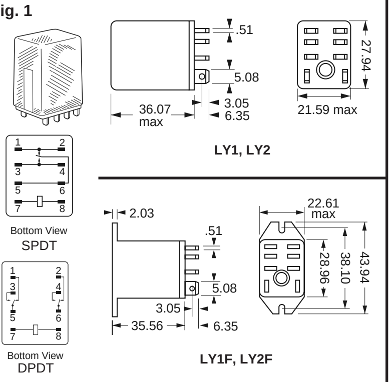


Fig. 2

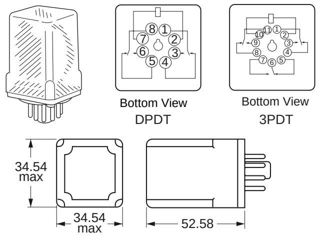


Fig. 3

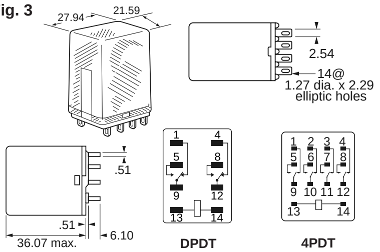


Fig. 4

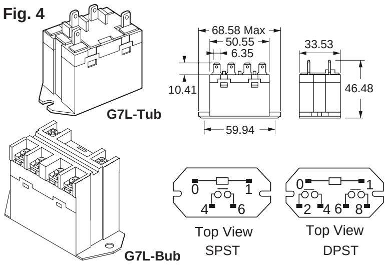
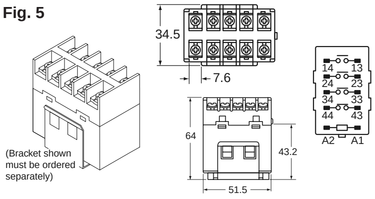


Fig. 5



(Bracket shown must be ordered separately)

Fig. 6

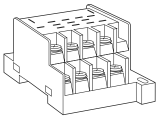
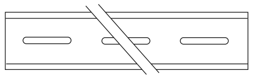


Fig. 7



OMRON General Purpose Relays

Fig.	Contact Form	Coil Volt.	Coil Res. (Ω)	Contact Ratings Resistive (A)	Oper. Volt. (% of Rated) Pull/Drop/Max. On/Out/Cont.	Oper./Rel. Time/Time (msec.)	Digi-Key Part No.	Price Each 1	25	50	100	Omron Part No.
G8P Relay – PC Mount and QC Style												
1	SPST	5DC	27	30A@250VAC 20A@28VDC	75/10/120	15/10	Z1002-ND	3.36	3.03	2.69	2.42	G8P-1AP-DC5
	SPST	12DC	155		75/10/120	15/10	Z1003-ND	3.76	3.38	3.01	2.71	G8P-1AP-DC12
	SPST	24DC	660		75/10/120	15/10	Z1004-ND	3.36	3.03	2.69	2.42	G8P-1AP-DC24
Dust Cover for Open Frame G8P Series Above							Z1005-ND	.13	.12	.10	.09	R99-C02-G8PN
2	SPST-NO	5DC	27	30A@250VAC	75/10/120	15/10	Z211-ND	5.16	4.76	4.47	3.95	G8P-1114P-US-DC5
	SPST-NO	5DC	27	30A@250VAC	75/10/120	15/10	Z1006-ND	3.43	3.16	2.97	2.63	G8P-1A4P-DC5
	SPST-NO	12DC	155	20A@28VDC	75/10/120	15/10	Z1007-ND	3.14	2.90	2.72	2.40	G8P-1A4P-DC12
2	SPST-NO	24DC	660	1hp@125VAC & 2hp@250VAC	75/10/120	15/10	Z1008-ND	3.14	2.90	2.72	2.40	G8P-1A4P-DC24
	SPDT	12DC	155	10A @ 250VAC	75/10/120	15/10	Z1009-ND	3.43	3.16	2.97	2.63	G8P-1C4P-DC12
3	SPST	12VDC	155	30	75/10/120	15/10	Z208-ND	3.70	3.33	2.96	2.67	G8P-1A4TP-DC12
	SPST	24VDC	155	30	75/10/120	15/10	Z209-ND	3.70	3.33	2.96	2.67	G8P-1A4TP-DC24
	SPDT	12VDC	155	20	75/10/120	15/10	Z210-ND	3.80	3.42	3.04	2.74	G8P-1C4TP-DC12
	SPDT	24VDC	155	20	75/10/120	15/10	Z214-ND	3.80	3.42	3.04	2.74	G8P-1C4TP-DC24
4	SPST	12VDC	155	30	75/10/120	15/10	Z215-ND	4.00	3.60	3.20	2.88	G8P-1A2T-F-DC12
	SPST	24VDC	155	30	75/10/120	15/10	Z216-ND	4.00	3.60	3.20	2.88	G8P-1A2T-F-DC24
	SPDT	12VDC	155	20	75/10/120	15/10	Z217-ND	4.10	3.69	3.28	2.96	G8P-1C2T-F-DC12
	SPDT	24VDC	155	20	75/10/120	15/10	Z218-ND	4.10	3.69	3.28	2.96	G8P-1C2T-F-DC24
G8JN-ISO Footprint Automotive Relay												
5	SPST-NO	12DC	78	30	75/10/120	5/4	Z980-ND*	4.90	4.41	3.92	3.53	G8JN-1A7P-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z981-ND	5.20	4.68	4.16	3.75	G8JN-1C7T-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z982-ND†	5.10	4.59	4.08	3.68	G8JN-1C7T-MF-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z983-ND‡	5.23	4.71	4.18	3.77	G8JN-1C6T-DC12
	SPDT	12DC	78	35NO/20NC	75/10/120	5/4	Z984-ND§	6.45	5.81	5.16	4.65	G8JN-1C6T-F-DC12
MJN Relay – Plug-In Style												
6	DPDT	12VDC	120	10	85/10/120	15/6	Z237-ND	11.70	10.53	9.36	8.43	MJN2C-DC12
	DPDT	24VDC	470	10	85/10/120	15/6	Z236-ND	11.70	10.53	9.36	8.43	MJN2C-DC24
	DPDT	24VAC	75	10	85/10/120	15/6	Z235-ND	12.45	11.21	9.96	8.97	MJN2C-AC24
	DPDT	120VAC	2250	10	85/10/120	15/6	Z238-ND	12.25	11.03	9.80	8.82	MJN2C-AC120
	3PDT	12VDC	120	10	85/10/120	15/6	Z233-ND	12.10	10.89	9.68	8.72	MJN3C-DC12
	3PDT	24VDC	470	10	85/10/120	15/6	Z232-ND	12.10	10.89	9.68	8.72	MJN3C-DC24
	3PDT	24VAC	72	10	85/10/120	15/6	Z231-ND	12.95	11.66	10.36	9.33	MJN3C-AC24
	3PDT	120VAC	1700	10	85/10/120	15/6	Z234-ND	13.63	12.27	10.90	9.81	MJN3C-AC120
MJN Relay with mounting flange												
6	DPDT	12VDC	120	10	85/10/120	15/6	Z244-ND	11.38	10.24	9.10	8.19	MJN2CF-DC12
	DPDT	24VDC	470	10	85/10/120	15/6	Z245-ND	11.25	10.13	9.00	8.10	MJN2CF-DC24
	DPDT	24VAC	75	10	85/10/120	15/6	Z243-ND	12.08	10.87	9.66	8.70	MJN2CF-AC24
	DPDT	120VAC	2250	10	85/10/120	15/6	Z246-ND	12.08	10.87	9.66	8.70	MJN2CF-AC120
	DPDT	12VDC	120	10	85/10/120	15/6	Z241-ND	12.40	11.16	9.92	8.93	MJN3CF-DC12
	DPDT	24VDC	470	10	85/10/120	15/6	Z240-ND	13.03	11.73	10.42	9.38	MJN3CF-DC24
	DPDT	24VAC	72	10	85/10/120	15/6	Z239-ND	13.78	12.40	11.02	9.92	MJN3CF-AC24
	DPDT	120VAC	1700	10	85/10/120	15/6	Z242-ND	14.03	12.63	11.22	10.10	MJN3CF-AC120
	DPDT	12VDC	120	20	85/10/120	15/6	Z249-ND	15.00	13.50	12.00	10.80	MJN2CE-DC12
	DPDT	24VDC	470	20	85/10/120	15/6	Z250-ND	15.00	13.50	12.00	10.80	MJN2CE-DC24
	DPDT	24VAC	75	20	85/10/120	15/6	Z248-ND	15.38	13.84	12.30	11.07	MJN2CE-AC24
	DPDT	120VAC	2250	20	85/10/120	15/6	Z247-ND	15.80	14.22	12.64	11.38	MJN2CE-AC120
MGN Relay – Heavy Duty Power Type												
7	SPDT	12VDC	72	30	75/10/100	30/30	Z257-ND	23.50	21.15	18.80	16.92	MGN1C-DC12
	SPDT	24VDC	290	30	75/10/100	30/30	Z258-ND	21.05	18.95	16.84	15.16	MGN1C-DC 24
	SPDT	24VAC	11.5	30	85/10/100	30/30	Z255-ND	23.38	21.04	18.70	16.83	MGN1C-AC24
	SPDT	120VAC	295	30	75/10/100	30/30	Z256-ND	23.38	21.04	18.70	16.83	MGN1C-AC120
	SPST	12VDC	72	30	75/10/100	30/30	Z261-ND	20.15	18.14	16.12	14.51	MGN1X-DC12
	SPST	24VDC	290	30	75/10/100	30/30	Z262-ND	21.15	19.04	16.92	15.23	MGN1X-DC24
	SPST	24VAC	11.5	30	85/10/100	30/30	Z260-ND	18.93	17.04	15.14	13.63	MGN1X-AC24
	SPST	120VAC	295	30	85/10/100	30/30	Z259-ND	18.95	17.06	15.16	13.65	MGN1X-AC120
	DPST	12VDC	72	30	75/10/100	30/30	Z265-ND	24.05	21.65	19.24	17.32	MGN2A-DC12
	DPST	24VDC	290	30	75/10/100	30/30	Z266-ND	22.78	20.50	18.22	16.40	MGN2A-DC24
	DPST	24VAC	11.5	30	85/10/100	30/30	Z264-ND	25.75	23.18	20.60	18.54	MGN2A-AC24
	DPST	120VAC	295	30	85/10/100	30/30	Z263-ND	27.93	25.14	22.34	20.11	MGN2A-AC120
	DPDT	12VDC	72	30	75/10/100	30/30	Z269-ND	34.25	30.83	27.40	24.66	MGN2C-DC12
	DPDT	24VDC	290	30	75/10/100	30/30	Z270-ND	33.15	29.84	26.52	23.87	MGN2C-DC24
	DPDT	24VAC	11.5	30	85/10/100	30/30	Z268-ND	34.65	31.19	27.72	24.95	MGN2C-AC24
	DPDT	120VAC	295	30	85/10/100	30/30	Z267-ND	29.70	26.73	23.76	21.39	MGN2C-AC120

All Relays UL/CSA approved   * PC Mount   † Molded Bracket   ‡ Weatherproof Shroud   § Weatherproof Shroud w/Metal Bracket

Relay Sockets and Accessories

Fig.	Use With Series	Description	Digi-Key Part No.	Price Each 1	25	50	100	Omron Part No.
8	MJN	Din rail socket w/screw terminals	Z251-ND	8.03	7.23	6.42	5.78	PTF11PC
9	MJN	Chassis mount w/QC terminals	Z252-ND	1.70	1.53	1.36	1.23	PTF11QDC
8	MJN	Chassis mount w/screw terminals	Z253-ND	7.80	7.02	6.24	5.62	PTF21PC
9	MJN	Chassis mount w/PCB terminals	Z254-ND	1.58	1.42	1.26	1.14	PTFPCB

Fig. 1

Open Frame

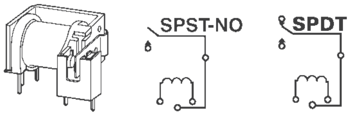


Fig. 2

Sealed Case

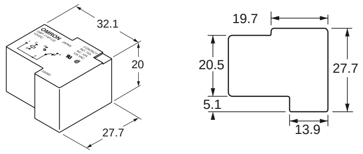
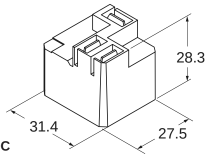
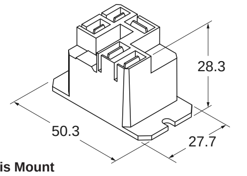


Fig. 3



PCB & QC

Fig. 4



Chassis Mount

Fig. 5

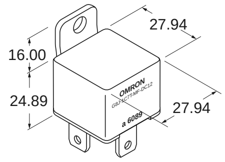
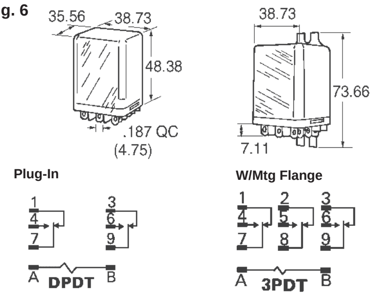


Fig. 6



Plug-In

W/Mtg Flange

Fig. 7

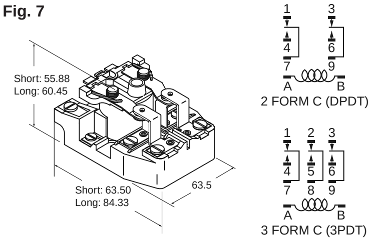


Fig. 8

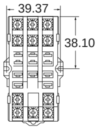
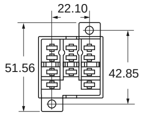


Fig. 9



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PC Mount Relays

** All relays are UL, CSA approved*

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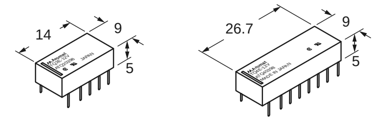
Aromat's T-Series is a family of compact, high sensitivity relays that combine all the relay technologies accumulated over the past 20 years.

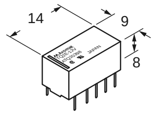
T-Series relays are widely used in communications, instrumentation and control interface equipment.

The proven quality of our T-Series relays will be maintained because of our commitment to cutting edge technology and a willingness to listen to our customer needs.

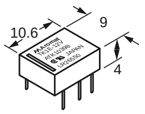
TQ Series



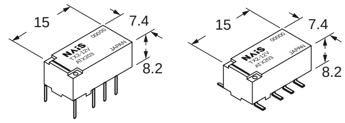
TF Series



TK Series



TX Series



AGN Series

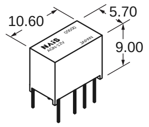


Fig.	Cont. Arrange.	Coil Volt	Coil Res.	Coil Curr. (mA)	Contact Ratings (A) 30 VDC	Contact Ratings (A) 125 VAC	Pickup/Dropout/ Max. Voltage	Digi-Key Part No.	Price Each 1	25	50	100	Aromat Part No.
							TQ Series Telcom Relays						
1	DPDT	3VDC	64.3	46.7	1	.5	2.25/0.3/4.5	255-1225-ND	2.65	2.43	2.16	1.84	TQ2-3V
	DPDT	4.5VDC	144	31.1	1	.5	3.38/.45/6.7	255-1226-ND	2.65	2.43	2.16	1.84	TQ2-4.5V
	DPDT	5VDC	178	28.1	1	.5	3.75/0.5/7.5	255-1001-ND	2.65	2.43	2.16	1.84	TQ2-5V
	DPDT	12VDC	1,028	11.7	1	.5	9/1.2/18	255-1002-ND	2.65	2.43	2.16	1.84	TQ2-12V
	DPDT	24VDC	2,880	8.3	1	.5	18/2.4/36	255-1003-ND	3.16	2.91	2.58	2.20	TQ2-24V
2	4PDT	5VDC	89	56.2	1	.5	3.75/0.5/7.5	255-1013-ND	17.64	16.20	14.40	12.24	TQ4-5V
	4PDT	12VDC	514	23.3	1	.5	12/9/18	255-1014-ND	17.64	16.20	14.40	12.24	TQ4-12V
	4PDT	24VDC	2,056	11.7	1	.5	24/18/36	255-1015-ND	19.11	17.55	15.60	13.26	TQ4-24V
							TQ Series Telcom Single Coil Latching Relays						
3	DPDT	5VDC	250	20	1	.5	3.75/3.75/7.5	255-1004-ND	3.16	2.91	2.58	2.20	TQ2-L-5V
	DPDT	12VDC	1,440	8.3	1	.5	9/9/18	255-1005-ND	3.16	2.91	2.58	2.20	TQ2-L-12V
	DPDT	24VDC	1,920	12.5	1	.5	18/18/28.8	255-1006-ND	3.58	3.29	2.92	2.49	TQ2-L-24V
							TQ Series Telcom Dual Coil Latching Relays						
4	DPDT	5VDC	125	40	1	.5	3.75/3.75/7.5	255-1007-ND	3.31	3.04	2.70	2.30	TQ2-L2-5V
	DPDT	9VDC	405	22.2	1	.5	6.75/.9/9	255-1355-ND	3.31	3.04	2.70	2.30	TQ2-L2-9V
	DPDT	12VDC	720	16.2	1	.5	9/9/18	255-1008-ND	3.31	3.04	2.70	2.30	TQ2-L2-12V
	DPDT	24VDC	1,920	12.5	1	.5	18/18/28.8	255-1009-ND	3.75	3.45	3.06	2.61	TQ2-L2-24V
							TQ Series Telcom Relays SMT						
5	DPDT	1.5VDC	16	93.8	2	.5	1.13/.15/2.2	255-1224-ND	3.01	2.77	2.46	2.10	TQ2SA-1.5V
	DPDT	3VDC	64.3	46.7	2	.5	2.25/.30/4.5	255-1228-ND	3.01	2.77	2.46	2.10	TQ2SA-3V
	DPDT	4.5VDC	145	31	2	.5	3.38/.45/6.7	255-1229-ND	3.01	2.77	2.46	2.10	TQ2SA-4.5V
	DPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1010-ND	3.01	2.77	2.46	2.10	TQ2SA-5V
	DPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1011-ND	3.01	2.77	2.46	2.10	TQ2SA-12V
	DPDT	24VDC	2,880	8.3	2	.5	18/2.4/36	255-1012-ND	3.58	3.29	2.92	2.49	TQ2SA-24V
							TF Series Telcom Relays						
6	DPDT	5VDC	312.5	16	1	.5	3.75/0.5/7.5	255-1016-ND	5.41	4.98	4.42	3.76	TF2-5V
	DPDT	12VDC	1,800	6.7	1	.5	9/1.2/18	255-1017-ND	5.41	4.98	4.42	3.76	TF2-12V
	DPDT	24VDC	4,100	5.8	1	.5	18/2.4/36	255-1018-ND	6.32	5.81	5.16	4.39	TF2-24V
							TF Series Telcom Dual Coil Latching Relays						
7	DPDT	5VDC	227.3	22	1	.5	3.75/3.75/7.5	255-1019-ND	7.03	6.46	5.74	4.88	TF2-L2-5V
	DPDT	12VDC	1,309	9.2	1	.5	9/9/18	255-1020-ND	7.03	6.46	5.74	4.88	TF2-L2-12V
	DPDT	24VDC	2,880	8.3	1	.5	18/18/36	255-1021-ND	7.15	6.57	5.84	4.97	TF2-L2-24V
							TN Series Telcom Relays						
8	DPDT	5VDC	178	28.1	1	.5	3.75/0.5/7.5	255-1022-ND	3.90	3.58	3.18	2.71	TN2-5V
	DPDT	12VDC	1,028	11.7	1	.5	9/1.2/18	255-1023-ND	3.90	3.58	3.18	2.71	TN2-12V
	DPDT	24VDC	2,880	8.3	1	.5	18/2.4/36	255-1024-ND	4.63	4.26	3.78	3.22	TN2-24V
							TN Series Telcom Dual Coil Latching Relays						
9	DPDT	5VDC	125	40	1	.5	3.75/3.75/7.5	255-1025-ND	4.85	4.46	3.96	3.37	TN2-L2-5V
	DPDT	12VDC	720	16.7	1	.5	9/9/18	255-1026-ND	4.85	4.46	3.96	3.37	TN2-L2-12V
	DPDT	24VDC	1,920	12.5	1	.5	18/18/36	255-1027-ND	5.49	5.04	4.48	3.81	TN2-L2-24V
							TK Series Telcom Relays						
10	SPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1028-ND	4.43	4.08	3.62	3.08	TK1-5V
	SPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1029-ND	4.43	4.08	3.62	3.08	TK1-12V
	SPDT	24VDC	2,133	11.3	2	.5	18/2.4/28.8	255-1030-ND	5.10	4.68	4.16	3.54	TK1-24V
							TX Series Telcom Relays						
11	DPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1031-ND	2.92	2.68	2.38	2.03	TX2-5V
	DPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1032-ND	2.92	2.68	2.38	2.03	TX2-12V
	DPDT	24VDC	2,133	11.3	2	.5	18/2.4/28.8	255-1033-ND	3.45	3.18	2.82	2.40	TX2-24V
							TX Series Telcom Relays SMT						
12	DPDT	5VDC	178	28.1	2	.5	3.75/0.5/7.5	255-1034-ND	3.01	2.77	2.46	2.10	TX2SA-5V
	DPDT	12VDC	1,028	11.7	2	.5	9/1.2/18	255-1035-ND	3.01	2.77	2.46	2.10	TX2SA-12V
	DPDT	24VDC	2,133	11.3	2	.5	18/2.4/28.8	255-1036-ND	3.55	3.27	2.90	2.47	TX2SA-24V
							AGN Series Compact Telcom Relays						
13	DPDT	4.5VDC	145	31	1	.3	3.38/.45/6.75	255-1230-ND	3.38	3.11	2.76	2.35	AGN2004H
	DPDT	12VDC	1,028	11.7	1	.3	9/1.2/18	255-1231-ND	3.38	3.11	2.76	2.35	AGN20012
	DPDT	24VDC	2,504	9.6	1	.3	18/2.4/28.8	255-1232-ND	3.97	3.65	3.24	2.76	AGN20024
							AGN Series Compact Telcom Relays SMT						
14	DPDT	4.5VDC	145	31	1	.3	3.38/.45/6.75	255-1233-ND	3.50	3.22	2.86	2.44	AGN200A4H
	DPDT	12VDC	1,028	11.7	1	.3	9/1.2/18	255-1234-ND	3.50	3.22	2.86	2.44	AGN200A12
	DPDT	24VDC	2,504	9.6	1	.3	18/2.4/28.8	255-1235-ND	4.12	3.78	3.36	2.86	AGN200A24
							HX Series Compact Telcom Relays						
15	DPDT	5VDC	78.1	64	1	.3	3.75/.5/5.5	255-1236-ND	3.43	3.15	2.80	2.38	HX2-5V
	DPDT	12VDC	450	26.7	1	.3	9/1.2/13.2	255-1237-ND	3.43	3.15	2.80	2.38	HX2-12V
	DPDT	24VDC	1,800	13.4	1	.3	18/2.4/26.4	255-1238-ND	3.55	3.27	2.90	2.47	HX2-24V

Fig. 1 *TQ Series*

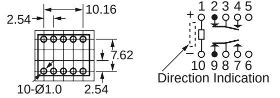


Fig. 2

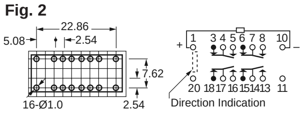
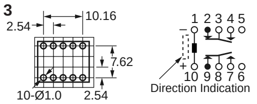


Fig. 3



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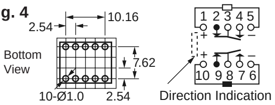
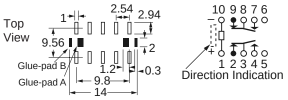


Fig. 5 *TQ Series SMT*



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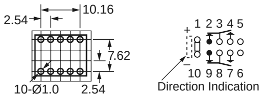


Fig. 7

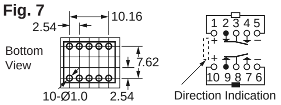


Fig. 8 *TN Series*

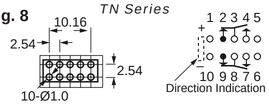


Fig. 9

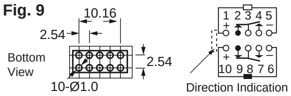


Fig. 10 *TK Series*

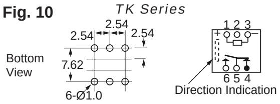


Fig. 11 *TX Series*

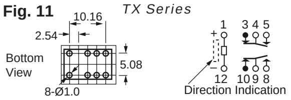


Fig. 12 *TX Series SMT*

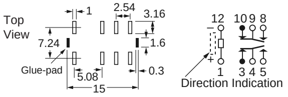


Fig. 13 *AGN Series*

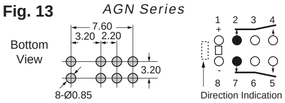


Fig. 14 *AGN Series SMT*

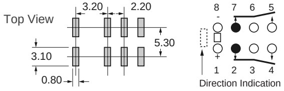
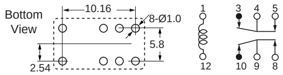


Fig. 15 *HX Series*



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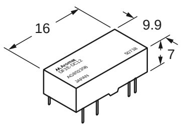
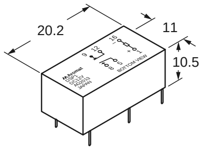
**** All relays are UL, CSA approved***

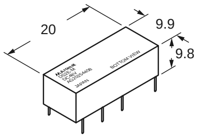
DF Series



DSP Series



DS2E Series



DS2Y Series

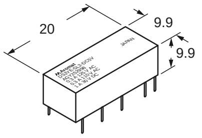


Fig.	Cont. Arrange.	Coil Volt	Coil Res.	Coil Curr. (mA)	Contact Ratings (A) 30 VDC	Contact Ratings (A) 125 VAC	Pickup/ Dropout Max. Voltage	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50	Price Each 100	Aromat Part No.
DF Series General Purpose Relays													
1	DPDT	5VDC	125	40	1	.3	3.5/0.5/6	255-1037-ND	4.85	4.46	3.96	3.37	DF2E-DC5V
	DPDT	12VDC	720	16.7	1	.3	8.4/1.2/14.4	255-1038-ND	4.85	4.46	3.96	3.37	DF2E-DC12V
	DPDT	24VDC	2,880	8.3	1	.3	16.8/2.4/28.8	255-1039-ND	4.85	4.46	3.96	3.37	DF2E-DC24V
DF Series Dual Coil Latching Relays													
2	DPDT	3VDC	45	66.7	1	.3	2.1/2.1/3.6	255-1040-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC3V
	DPDT	5VDC	125	40	1	.3	4/4/6	255-1041-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC5V
	DPDT	6VDC	180	33.3	1	.3	4.2/4.2/7.2	255-1042-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC6V
	DPDT	9VDC	405	22.2	1	.3	6.3/6.3/10.8	255-1043-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC9V
	DPDT	12VDC	720	16.7	1	.3	9.6/9.6/18	255-1044-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC12V
	DPDT	24VDC	2,880	8.3	1	.3	19.2/19.2/28.8	255-1045-ND	5.86	5.38	4.78	4.07	DF2E-L2-DC24V
DSP Series General Purpose Relays													
3	DPST-NO/NC	5VDC	83	60	5	5	4/0.5/6.5	255-1046-ND	6.98	6.42	5.70	4.85	DSP1-DC5V
	DPST-NO/NC	12VDC	480	25	5	5	9.6/1.2/15.6	255-1047-ND	6.98	6.42	5.70	4.85	DSP1-DC12V
	DPST-NO/NC	24VDC	1,920	12.5	5	5	19.2/2.4/31.2	255-1048-ND	6.98	6.42	5.70	4.85	DSP1-DC24V
4	SPST-NO	5VDC	83	60	8	8	4/0.5/6.5	255-1049-ND	6.20	5.70	5.06	4.31	DSP1A-DC5V
	SPST-NO	12VDC	480	25	8	8	9.6/1.2/15.6	255-1050-ND	6.20	5.70	5.06	4.31	DSP1A-DC12V
	SPST-NO	24VDC	1,920	12.5	8	8	19.2/2.4/31.2	255-1051-ND	6.20	5.70	5.06	4.31	DSP1A-DC24V
5	DPST-NO	5VDC	83	60	5	5	4/0.5/6.5	255-1052-ND	6.86	6.30	5.60	4.76	DSP2A-DC5V
	DPST-NO	12VDC	480	25	5	5	9.6/1.2/15.6	255-1053-ND	6.86	6.30	5.60	4.76	DSP2A-DC12V
	DPST-NO	24VDC	1,920	12.5	5	5	19.2/2.4/31.2	255-1054-ND	6.86	6.30	5.60	4.76	DSP2A-DC24V
DSP Series Dual Latching General Purpose Relays													
6	DPST	5VDC	83	60	5	5	4/4/6.5	255-1055-ND	7.37	6.78	6.02	5.12	DSP1-L2-DC5V
	DPST	12VDC	480	25	5	5	9.6/9.6/15.6	255-1056-ND	7.37	6.78	6.02	5.12	DSP1-L2-DC12V
	DPST	24VDC	1,920	12.5	5	5	19.2/19.2/31.2	255-1057-ND	7.37	6.78	6.02	5.12	DSP1-L2-DC24V
DSP Relay Sockets													
—	PCB Mount Relay Socket for DSP1A Relays							255-1058-ND	2.57	2.37	2.10	1.79	DSP1A-PS
	PCB Mount Relay Socket for DSP1A-L2 Relays							255-1059-ND	3.01	2.77	2.46	2.10	DSP1A-PSL2
	PCB Mount Relay Socket for DSP2A & DSP1 Relays							255-1060-ND	3.53	3.24	2.88	2.45	DSP2A-PS
	PCB Mount Relay Socket for DSP2A-L2 & DSP1-L2 Relays							255-1061-ND	3.77	3.47	3.08	2.62	DSP2A-PSL2
DS2E Series Telcom Relays (High Sensitivity and Standard Coils)													
7	DPDT	5VDC	125	40	2	.6	4/3.5/7.5	255-1062-ND	4.04	3.72	3.30	2.81	DS2E-S-DC5V
	DPDT	12VDC	720	16.6	2	.6	8.4/1.2/18	255-1063-ND	4.04	3.72	3.30	2.81	DS2E-S-DC12V
	DPDT	24VDC	2,880	8.3	2	.6	16.8/2.4/36	255-1064-ND	4.04	3.72	3.30	2.81	DS2E-S-DC24V
	DPDT	48VDC	11,520	4.1	2	.6	33.6/4.8/76.8	255-1065-ND	5.49	5.04	4.48	3.81	DS2E-S-DC48V
7	DPDT	5VDC	62.5	80	2	.6	3.5/0.5/7.5	255-1070-ND	3.26	3.00	2.66	2.27	DS2E-M-DC5V
	DPDT	12VDC	360	33.2	2	.6	8.4/1.2/18	255-1071-ND	3.26	3.00	2.66	2.27	DS2E-M-DC12V
	DPDT	24VDC	1,440	16.6	2	.6	16.8/2.4/36	255-1072-ND	3.26	3.00	2.66	2.27	DS2E-M-DC24V
	DPDT	48VDC	5,760	8.3	2	.6	33.6/4.8/76.8	255-1073-ND	4.07	3.74	3.32	2.83	DS2E-M-DC48V
DS2E Series Telcom Dual Coil Latching Relays (High Sensitivity and Standard Coils)													
8	DPDT	5VDC	125	35.9	2	.6	3.5/3.5/10	255-1066-ND	4.78	4.39	3.90	3.32	DS2E-SL2-DC5V
	DPDT	12VDC	720	15	2	.6	8.4/8.4/24	255-1067-ND	4.78	4.39	3.90	3.32	DS2E-SL2-DC12V
	DPDT	24VDC	2,880	7.5	2	.6	16.8/16.8/48	255-1068-ND	4.78	4.39	3.90	3.32	DS2E-SL2-DC24V
	DPDT	48VDC	11,520	3.25	2	.6	33.6/33.6/96	255-1069-ND	5.71	5.25	4.66	3.97	DS2E-SL2-DC48V
8	DPDT	5VDC	62.5	72	2	.6	3.5/3.5/7.5	255-1074-ND	3.87	3.56	3.16	2.69	DS2E-ML2-DC5V
	DPDT	12VDC	360	30	2	.6	8.4/8.4/18	255-1075-ND	3.87	3.56	3.16	2.69	DS2E-ML2-DC12V
	DPDT	24VDC	1440	15	2	.6	16.8/16.8/36	255-1076-ND	3.87	3.56	3.16	2.69	DS2E-ML2-DC24V
	DPDT	48VDC	5,760	7.5	2	.6	33.6/33.6/72	255-1077-ND	5.17	4.75	4.22	3.59	DS2E-ML2-DC48V
DS2Y Series Telcom Relays													
9	DPDT	5VDC	125	40	2	.3	3.5/0.5/10	255-1078-ND	2.65	2.43	2.16	1.84	DS2Y-S-DC5V
	DPDT	12VDC	720	16.7	2	.3	8.4/1.2/24	255-1079-ND	2.65	2.43	2.16	1.84	DS2Y-S-DC12V
	DPDT	24VDC	2,880	8.3	2	.3	16.8/2.4/48	255-1080-ND	2.74	2.52	2.24	1.91	DS2Y-S-DC24V
	DPDT	48VDC	7,680	6.3	2	.3	33.6/4.8/86	255-1081-ND	3.68	3.38	3.00	2.55	DS2Y-S-DC48V
DS2Y Series Telcom Dual Coil Latching Relays													
10	DPDT	5VDC	139	36	2	.3	3.5/3.5/10	255-1082-ND	3.04	2.79	2.48	2.11	DS2Y-SL2-DC5V
	DPDT	12VDC	800	15	2	.3	8.4/8.4/24	255-1083-ND	3.04	2.79	2.48	2.11	DS2Y-SL2-DC12V
	DPDT	24VDC	3,200	7.5	2	.3	16.8/16.8/48	255-1084-ND	3.04	2.79	2.48	2.11	DS2Y-SL2-DC24V
LK Series Slim High Inrush Power Relays													
11	SPST-NO	12VDC	272	44.2	5	5	8.4/1.2/15.6	255-1266-ND	1.59	1.47	1.30	1.11	LK1AF-12V
	SPST-NO	24VDC	1,087	22.1	5	5	16.8/2.4/31.2	255-1267-ND	1.69	1.56	1.38	1.18	LK1AF-24V
LKS Series High Sensitivity Power Relays													
11	SPST-NO	5VDC	100	50	5	5	3.5/0.5/6.5	255-1268-ND	1.37	1.26	1.12	.96	LKS1AF-5V
	SPST-NO	12VDC	576	20.8	5	5	8.4/1.2/15.6	255-1269-ND	1.37	1.26	1.12	.96	LKS1AF-12V
	SPST-NO	24VDC	2,304	10.4	5	5	16.8/2.4/31.2	255-1270-ND	1.45	1.33	1.18	1.01	LKS1AF-24V
LKP Series Slim Power Relays													
11	SPST	12VDC	400	30	10	5	8.4/1.2/15.6	255-1271-ND	1.62	1.49	1.32	1.13	LKP1AF-12V
	SPST	24VDC	1,600	15	10	5	16.8/2.4/31.2	255-1272-ND	1.64	1.51	1.34	1.14	LKP1AF-24V
LA Series Slim Power Relays													
12	DPST	5VDC	100	50	3	3	3.5/0.5/6.5	255-1273-ND	1.52	1.40	1.24	1.06	ALA2F05
	DPST	12VDC	272	44.2	3	3	9.0/0.6/15.6	255-1274-ND	1.52	1.40	1.24	1.06	ALA2F12
	DPST	24VDC	1,087	22.1	3	3	18/1.2/31.2	255-1275-ND	1.54	1.42	1.26	1.08	ALA2F24
ST Series IC Drivable Power Relays													
13	DPST-O/C	5VDC	105	47	8	8	4.0/0.5/7.5	255-1288-ND	11.96	10.98	9.76	8.30	ST1-DC5V
	DPST-O/C	12VDC	600	20	8	8	9.6/1.2/18	255-1289-ND	11.96	10.98	9.76	8.30	ST1-DC12V
	DPST-O/C	24VDC	2,400	10	8	8	19.2/2.4/36	255-1290-ND	11.96	10.98	9.76	8.30	ST1-DC24V
	DPST-NO	5VDC	105	47	8	8	4.0/0.5/7.5	255-1291-ND	12.62	11.59	10.30	8.76	ST2-DC5V
	DPST-NO	12VDC	600	20	8	8	9.6/1.2/18	255-1292-ND	12.62	11.59	10.30	8.76	ST2-DC12V
	DPST-NO	24VDC	2,400	10	8	8	19.2/2.4/36	255-1293-ND	12.62	11.59	10.30	8.76	ST2-DC24V
—	PCB Mount Relay Socket for ST Series Relays							255-1294-ND	2.45	2.25	2.00	1.70	ST-PS

Fig. 1 *DF Series*

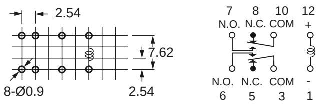


Fig. 2

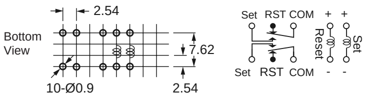


Fig. 3 *DSP Series*

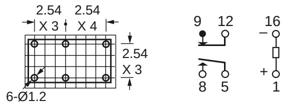


Fig. 4

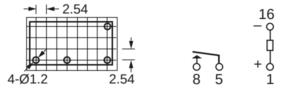


Fig. 5

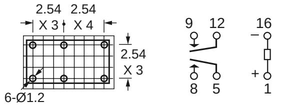


Fig. 6

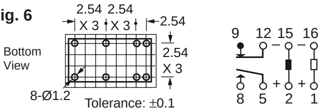


Fig. 7 *DS2E Series*

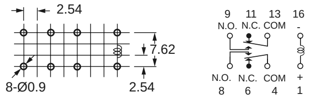


Fig. 8

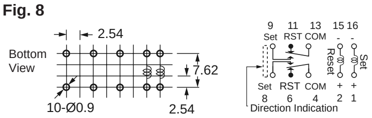


Fig. 9 *DS2Y Series*

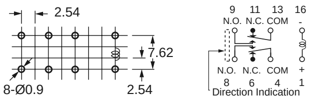


Fig. 10

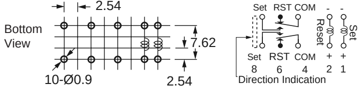


Fig. 11 *LK Series*

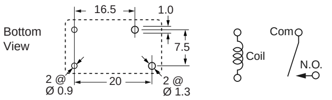


Fig. 12 *LA Series*

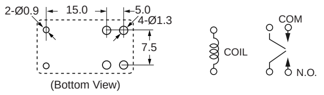
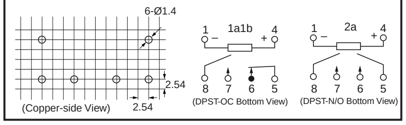


Fig. 13 *ST Series*

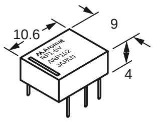


Aromat Corporation
NAiS *Your Partner for the 21st Century*

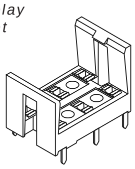
High Frequency and Power Relays

**** All relays are UL, CSA approved***

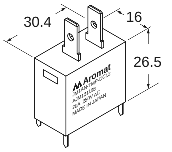
RP Series



DK Relay Socket



JM Relay



JA Relay

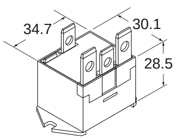


Fig.	Cont. Arrange.	Coil Volt	Coil Res.	Coil Curr. (mA)	Contact Ratings (A) 30 VDC	Contact Ratings (A) 125 VAC	Pickup/Dropout Max. Voltage	Digi-Key Part No.	Price Each 1	Price Each 25	Price Each 50	Price Each 100	Aromat Part No.
	RK Series High Frequency Relays												
1	SPDT	5VDC	125	40	.01	—	3.75/0.5/5.5	255-1085-ND	9.26	8.51	7.56	6.43	RK1-5V
	SPDT	6VDC	180	34	.01	—	4.5/0.6/6.6	255-1086-ND	9.26	8.51	7.56	6.43	RK1-6V
	SPDT	12VDC	720	17	.01	—	9/1.2/13.2	255-1087-ND	9.26	8.51	7.56	6.43	RK1-12V
	SPDT	24VDC	2,880	9	.01	—	18/2.4/26.4	255-1088-ND	9.53	8.76	7.78	6.62	RK1-24V
	RP Series High Frequency Low Profile Relays												
2	SPDT	5VDC	178	28	.1	—	3.75/0.5/7.5	255-1089-ND	21.78	20.01	17.78	15.12	RP1-5V
	SPDT	12VDC	1,028	11.7	.1	—	9/1.2/18	255-1090-ND	21.78	20.01	17.78	15.12	RP1-12V
	SPDT	24VDC	2,133	11.3	.1	—	18/2.4/28.8	255-1091-ND	22.39	20.57	18.28	15.54	RP1-24V
	HY Series General Purpose Relays												
3	SPDT	5VDC	166	30.1	1	—	3.75/0.5/6.5	255-1092-ND	3.16	2.91	2.58	2.20	HY1-5V
	SPDT	12VDC	960	12.5	1	—	9/1.2/15.6	255-1093-ND	3.16	2.91	2.58	2.20	HY1-12V
	SPDT	24VDC	3,840	6.25	1	—	18/2.4/31.2	255-1094-ND	3.97	3.65	3.24	2.76	HY1-24V
	DK Series General Purpose Relays												
4	SPST	5VDC	125	40	10	10	3.5/0.5/6.5	255-1095-ND	7.37	6.78	6.02	5.12	DK1A-5V
	SPST	12VDC	720	16.6	10	10	8.4/8.4/15.6	255-1096-ND	7.37	6.78	6.02	5.12	DK1A-12V
	SPST	24VDC	2,880	8.3	10	10	16.8/2.4/31.2	255-1097-ND	7.37	6.78	6.02	5.12	DK1A-24V
5	DPST	5VDC	125	40	8	8	3.5/0.5/6.5	255-1098-ND	10.83	9.95	8.84	7.52	DK1A1B-5V
	DPST	12VDC	720	16.6	8	8	8.4/1.2/15.6	255-1099-ND	10.83	9.95	8.84	7.52	DK1A1B-12V
	DPST	24VDC	2,880	8.3	8	8	16.8/2.4/31.2	255-1100-ND	10.83	9.95	8.84	7.52	DK1A1B-24V
—	PCB Mount Relay Socket for DK1A Relays							255-1101-ND	4.02	3.69	3.28	2.79	DK1A-PS
	PCB Mount Relay Socket for DK1A1B Relays							255-1102-ND	3.99	3.67	3.26	2.78	DK2A-PS
	JQ Series High Noise Immunity Power Relays												
6	SPDT	5VDC	62.5	80	5	5	3.75/.25/7.5	255-1263-ND	3.28	3.02	2.68	2.28	JQ1-5V
	SPDT	12VDC	360	33	5	5	9.6/1.2/20	255-1264-ND	3.28	3.02	2.68	2.28	JQ1-12V
	SPDT	24VDC	1,440	16.7	5	5	19.2/2.4/36	255-1265-ND	3.28	3.02	2.68	2.28	JQ1-24V
	JS Series Power Relays												
7	SPDT	5VDC	69.4	72	5	10	3.5/0.5/6.5	255-1103-ND	1.20	1.11	.98	.84	JS1-5V
	SPDT	12VDC	400	30	5	10	8.4/1.2/15.6	255-1104-ND	1.20	1.11	.98	.84	JS1-12V
	SPDT	24VDC	1,600	15	5	10	16.8/2.4/36	255-1105-ND	1.30	1.20	1.06	.91	JS1-24V
8	SPST-NO	5VDC	69.4	72	5	10	3.5/0.5/7.5	255-1106-ND	1.15	1.06	.94	.80	JS1A-5V
	SPST-NO	12VDC	400	30	5	10	8.4/1.2/18	255-1107-ND	1.15	1.06	.94	.80	JS1A-12V
	SPST-NO	24VDC	1,600	15	5	10	16.8/2.4/36	255-1108-ND	1.18	1.08	.96	.82	JS1A-24V
	JSM Series Automotive Power Relays												
9	SPDT	12VDC	225	53.3	10	—	6.3/.9/16	255-1239-ND	1.30	1.20	1.06	.91	JSM1-12V-4
	SPDT	12VDC	225	53.3	15	—	6.3/.9/16	255-1240-ND	1.42	1.31	1.16	.99	JSM1-12V-5
	JR Series Power Relays												
10	SPST-NO	6VDC	68	88	16	16	4.8/0.6/6.6	255-1109-ND	3.92	3.60	3.20	2.72	JR1AF-DC6V
	SPST-NO	12VDC	270	44	16	16	9.6/1.2/13.2	255-1110-ND	3.92	3.60	3.20	2.72	JR1AF-DC12V
	SPST-NO	24VDC	1,100	22.1	16	16	19.2/2.4/26.4	255-1111-ND	3.92	3.60	3.20	2.72	JR1AF-DC24V
	SPST-NO	48VDC	4,350	11	16	.16	38.4/4.8/52.8	255-1112-ND	3.92	3.60	3.20	2.72	JR1AF-DC48V
	JW Series Power Relays												
11	SPDT	5VDC	47	106	10	10	3.5/0.5/6.5	255-1113-ND	2.06	1.89	1.68	1.43	JW1FSN-DC5V
	SPDT	12VDC	270	44	10	10	8.4/1.2/15.6	255-1114-ND	2.06	1.89	1.68	1.43	JW1FSN-DC12V
	SPDT	24VDC	1,100	16.8	10	10	16.8/2.4/31.2	255-1115-ND	2.16	1.98	1.76	1.50	JW1FSN-DC24V
12	DPDT	5VDC	47	106	5	5	3.5/0.5/6.5	255-1116-ND	2.33	2.14	1.90	1.62	JW2SN-DC5V
	DPDT	12VDC	270	44	5	5	8.4/1.2/15.6	255-1117-ND	2.33	2.14	1.90	1.62	JW2SN-DC12V
	DPDT	24VDC	1,100	16.8	5	5	16.8/2.4/31.2	255-1118-ND	2.47	2.28	2.02	1.72	JW2SN-DC24V
	DPDT	48VDC	4,400	11	5	5	33.6/4.8/62.4	255-1119-ND	2.55	2.34	2.08	1.77	JW2SN-DC48V
13	SPST-NO	12VDC	270	44	10	10	8.4/1.2/15.6	255-1120-ND	1.94	1.78	1.58	1.35	JW1AFSN-DC12V
	SPST-NO	24VDC	1,100	16.8	10	10	16.8/2.4/31.2	255-1121-ND	2.01	1.85	1.64	1.40	JW1AFSN-DC24V
	JM Series Power Relays												
14	SPST-NO	5VDC	27.8	180	20	20	3.5/0.5/5.5	255-1122-ND	8.94	8.22	7.30	6.21	JM1AN-TMP-DC5V
	SPST-NO	12VDC	160	75	20	20	8.4/1.2/13.2	255-1123-ND	8.94	8.22	7.30	6.21	JM1AN-TMP-DC12V
	SPST-NO	24VDC	640	37.5	20	20	16.8/2.4/26.4	255-1124-ND	8.94	8.22	7.30	6.21	JM1AN-TMP-DC24V
	JC Series Power Relays												
15	SPST-NO	6VDC	40	150	15	15	4.8/0.6/6.6	255-1125-ND	5.61	5.16	4.58	3.90	JC1AF-DC6V
	SPST-NO	12VDC	160	75	15	15	9.6/1.2/13.2	255-1126-ND	5.61	5.16	4.58	3.90	JC1AF-DC12V
	SPST-NO	24VDC	640	37.5	15	15	19.2/2.4/26.4	255-1127-ND	5.61	5.16	4.58	3.90	JC1AF-DC24V
—	PCB Mount Relay Socket for JC1AF Relay							255-1128-ND	1.52	1.40	1.24	1.06	JC1-PS
	JA Series Power Relays (15A Steady State Inductive, 55A Inrush)												
16	SPDT	12VDC	120	100	15	15	9.6/1.2/13.2	255-1129-ND	9.43	8.67	7.70	6.55	JA1C-TM-DC12V
	SPDT	24VDC	480	50	15	15	19.2/2.4/26.4	255-1130-ND	9.43	8.67	7.70	6.55	JA1C-TM-DC24V
	SPDT	12VAC	—	108	15	15	9.6/3.6/13.2	255-1131-ND	9.43	8.67	7.70	6.55	JA1C-TM-AC12V
	SPDT	24VAC	—	54	15	15	19.2/7.2/26.4	255-1132-ND	9.43	8.67	7.70	6.55	JA1C-TM-AC24V
	SPDT	115VAC	—	11	15	15	92/34.5/126.5	255-1133-ND	10.41	9.57	8.50	7.23	JA1C-TM-AC115V
	SPDT	240VAC	—	13	15	15	192/72/264	255-1134-ND	11.66	10.71	9.52	8.10	JA1C-TM-AC240V
	SPDT	12VDC	120	100	25	25	9.6/1.2/13.2	255-1135-ND	9.85	9.05	8.04	6.84	JA1C-TM-DC12V-P
	SPDT	115VAC	—	11	25	25	92/34.5/126.5	255-1136-ND	11.05	10.15	9.02	7.67	JA1C-TM-AC115V-P
	SPDT	240VAC	—	13	25	25	192/72/264	255-1137-ND	12.30	11.30	10.04	8.54	JA1C-TM-AC240V-P
16	SPST-NO	6VDC	30	200	15	15	4.8/0.6/6.6	255-1138-ND	8.62	7.92	7.04	5.99	JA1A-TM-DC6V
	SPST-NO	12VDC	120	100	15	15	9.6/1.2/13.2	255-1139-ND	8.62	7.92	7.04	5.99	JA1A-TM-DC12V
	SPST-NO	24VDC	480	50	15	15	19.2/2.4/26.4	255-1140-ND	8.62	7.92	7.04	5.99	JA1A-TM-DC24V
	SPST-NO	24VAC	—	54	15	15	19.2/7.2/26.4	255-1141-ND	8.62	7.92	7.04	5.99	JA1A-TM-AC24V
	SPST-NO	115VAC	—	11	15	15	92/34.5/126.5	255-1142-ND	9.70	8.91	7.92	6.74	JA1A-TM-AC115V

Fig. 1 *RK Series*

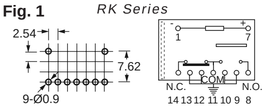


Fig. 2 *RP Series*

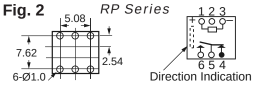


Fig. 3 *HY Series*

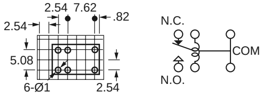


Fig. 4 *DK Series*

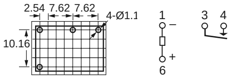


Fig. 5

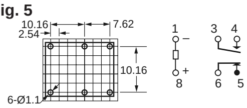


Fig. 6 *JQ Series*

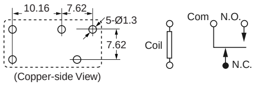


Fig. 7 *JS Series*

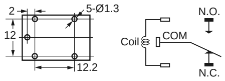


Fig. 8

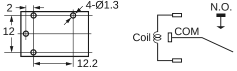


Fig. 9 *JSM Series*

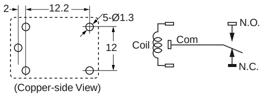


Fig. 10 *JR Series*

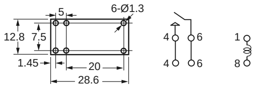


Fig. 11 *JW Series*

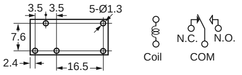


Fig. 12

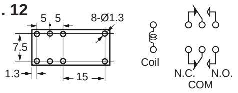


Fig. 13

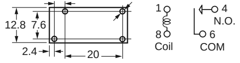


Fig. 14 *JM Series*

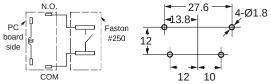


Fig. 15 *JC Series*

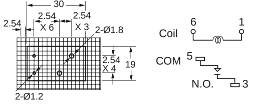
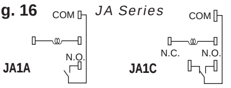


Fig. 16 *JA Series*



General Purpose PC Mount Relays

***All relays are UL, CSA approved**

Mounting hole connection diagrams are all bottom view unless otherwise noted

Fig. 1 — T7C Series

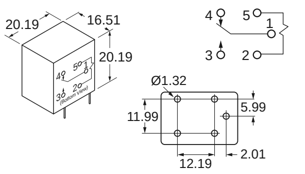


Fig. 2 — T7N Series

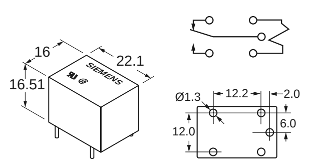


Fig. 3 — T73 Series

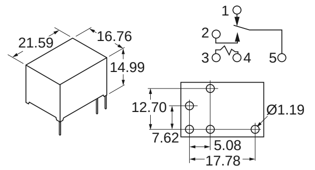


Fig. 4 — T75 Series

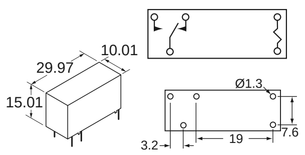


Fig. 5 — T77 Series

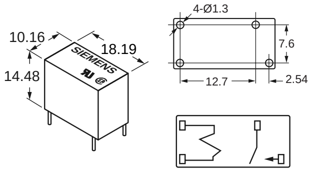


Fig. 6 — T81 Series

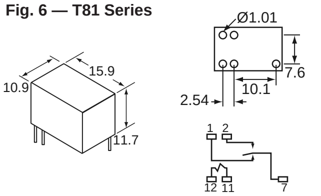


Fig. 7— V23079 Series

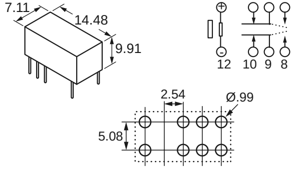


Fig. 8 — V23105 Series

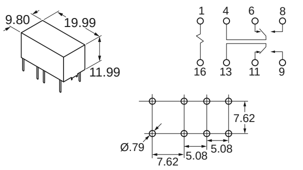


Fig. 9 — V23026 Series (Through Hole)

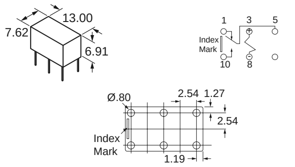


Fig. 10 — V23026 Series (Surface Mount)

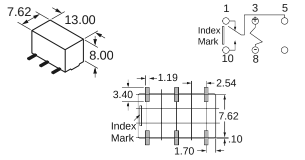
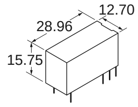
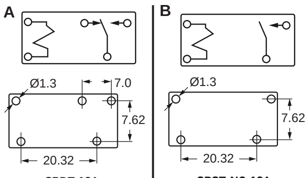


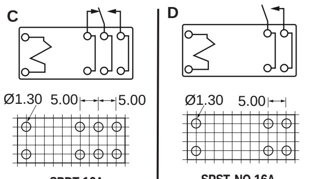
Fig. 11 — RT Series





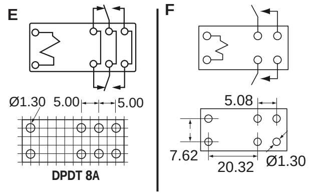
SPDT 12A

SPST-NO 12A



SPDT 16A

SPST-NO 16A



DPDT 8A

Fig.	Contact Arrange-ment	Coil Voltage	Coil Current (mA)	Coil Power (mW)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Turn-on Turn-off (mSec)	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
T7C Series — Economical (Ideal for Appliance and Automotive Applications)												
1	SPDT	5 VDC	71.4	360	12	3.5/0.5/5.5 VDC	10 / 5	PB335-ND	1.49	1.31	1.18	T7CS5D-05
	SPDT	6 VDC	60	360	12	4.5/0.3/6.6 VDC	10 / 5	PB336-ND	1.49	1.31	1.18	T7CS5D-06
	SPDT	12 VDC	30	360	12	9/0.6/13.2 VDC	10 / 5	PB337-ND	1.49	1.31	1.18	T7CS5D-12
	SPDT	24 VDC	15	360	12	18/1.2/26.4 VDC	10 / 5	PB338-ND	1.49	1.31	1.18	T7CS5D-24
	SPDT	12VDC	30	360	12	9/0.6/13.2VDC	10 / 5	PB441-ND•	1.46	1.29	1.16	T7CV5D-12
T7N Series Power Relay												
2	SPDT	5 VDC	71.5	360	10	3.5/.25/5	10 / 5	PB379-ND	1.30	1.14	1.03	T7NS5D1-05
	SPDT	12 VDC	30	360	10	8.4/.60/12	10 / 5	PB380-ND	1.30	1.14	1.03	T7NS5D1-12
	SPDT	24 VDC	15	360	10	16.8/1.2/24	10 / 5	PB381-ND	1.30	1.14	1.03	T7NS5D1-24
	SPDT	48 VDC	7.5	360	10	33.6/2.4/48	10 / 5	PB382-ND	1.97	1.73	1.56	T7NS5D1-48
T73 Series — Low Profile Relay - Meets 3,500 Volt Surge												
3	SPDT	5 VDC	89	450	10	3.25/.25/5 VDC	10 / 5	PB364-ND	2.23	1.96	1.77	T73S5D15-05
	SPDT	12 VDC	37.5	450	10	7.8/.6/12 VDC	10 / 5	PB365-ND	2.23	1.96	1.77	T73S5D15-12
	SPDT	24 VDC	20.9	450	10	15.6/1.2/24 VDC	10 / 5	PB366-ND	2.23	1.96	1.77	T73S5D15-24
T75 Series — Miniature Relay												
4	SPDT	5VDC	42.4	230	14	3.6/0.5/5VDC	6 / 2.5	PB442-ND	2.95	2.59	2.34	T75S5D112-05
	SPDT	12VDC	18.5	230	14	8.64/1.2/12VDC	6 / 2.5	PB443-ND	4.90	4.29	3.88	T75S5D112-12
	SPDT	24VDC	10.6	230	14	17.28/2.4/24VDC	6 / 2.5	PB444-ND	3.91	3.43	3.10	T75S5D112-24
T77 Series Power Relay — Sealed and Semi-sealed												
5	SPST-NO	5 VDC	90	450	10	3.75/.25/5	10 / 4	PB367-ND	1.63	1.43	1.30	T77S1D10-05
	SPST-NO	12 VDC	37.5	450	10	9.0/.6/12	10 / 4	PB368-ND	1.63	1.43	1.30	T77S1D10-12
	SPST-NO	24 VDC	18.75	450	10	18/1.2/24	10 / 4	PB369-ND	1.63	1.43	1.30	T77S1D10-24
	SPST-NO	24VDC	18.75	450	10	18/1.2/24VDC	10 / 4	PB445-ND•	1.63	1.43	1.30	T77V1D10-24
	SPST-NO	5 VDC	40	200	3	3.75/.25/5	10 / 4	PB370-ND	1.63	1.43	1.30	T77S1D3-05
	SPST-NO	12 VDC	16.7	200	3	9.0/.6/12	10 / 4	PB371-ND	1.63	1.43	1.30	T77S1D3-12
	SPST-NO	24 VDC	8.3	200	3	18/1.2/24	10 / 4	PB372-ND	1.63	1.43	1.30	T77S1D3-24
T81 Series — High Density Telcom Relay												
6	SPDT	5VDC	89.5	450	0.5	3.5/.25/5VDC	5 / 2	PB446-ND	2.62	2.29	2.08	T81H5D312-05
	SPDT	12VDC	37.5	450	0.5	8.4/0.6/12VDC	5 / 2	PB447-ND	3.19	2.80	2.53	T81N5D312-12
	SPDT	24VDC	18.75	450	0.5	16.8/1.2/24VDC	5 / 2	PB448-ND	2.52	2.21	2.00	T81N5D312-24
V23079 Series — FCC Part 68, High Dielectric Relay												
7	DPDT	5 VDC	28	140	2	3.75/0.5/10.9 VDC	2 / 2	PB288-ND	2.14	1.87	1.70	V23079A1001B301
	DPDT	12 VDC	11.6	140	2	8.4/1.2/26.1 VDC	2 / 2	PB289-ND	2.14	1.87	1.70	V23079A1003B301
V23105 Series — Nonpolarized Dip Package Relay												
8	DPDT	5 VDC	30	150	2	3.5/.25/5	4.5 / 1.5	PB383-ND	1.68	1.47	1.33	V23105A5001A201
	DPDT	12 VDC	12.5	150	2	8.4/.60/12	4.5 / 1.5	PB384-ND	1.68	1.47	1.33	V23105A5003A201
	DPDT	24 VDC	6.25	150	2	16.8/1.2/24	4.5 / 1.5	PB385-ND	1.78	1.56	1.41	V23105A5005A201
	DPDT	5 VDC	40	200	2	3.5/.25/5	4.5 / 1.5	PB386-ND	1.68	1.47	1.33	V23105A5301A201
	DPDT	12 VDC	16.7	200	2	8.4/.60/12	4.5 / 1.5	PB387-ND	1.68	1.47	1.33	V23105A5303A201
	DPDT	24 VDC	8.33	200	2	16.8/1.2/24	4.5 / 1.5	PB388-ND	1.78	1.56	1.41	V23105A5305A201
	DPDT	48 VDC	4.16	200	2	33.6/2.4/48	4.5 / 1.5	PB389-ND	2.50	2.19	1.98	V23105A5307A201
	DPDT	24VDC	10.8	260	2	16.8/1.2/24	4.5 / 1.5	PB344-ND	3.00	2.63	2.38	V23105A3005B201
V23026 Series — Miniature Sealed Relay (Up to 1 Billion Operations!)												
9	SPDT	5 VDC	13.5	68	1	3.75/0.5/14.5 VDC	1 / 1	PB282-ND	2.54	2.23	2.02	V23026A1001B201
	SPDT	12 VDC	5.3	68	1	8.4/1.2/12 VDC	1 / 1	PB283-ND	2.54	2.23	2.02	V23026A1002B201
	SPDT	24 VDC	5.3	68	1	16.8/2.4/50 VDC	1 / 1	PB284-ND	2.86	2.50	2.27	V23026A1004B201
10	SPDT	5 VDC	16	80	1	3.75/0.5/13.3 VDC	1 / 1	PB285-ND	2.81	2.46	2.23	V23026D1021B201
	SPDT	12 VDC	6.6	80	1	8.4/1.2/32 VDC	1 / 1	PB286-ND	2.81	2.46	2.23	V23026D1022B201
	SPDT	24 VDC	5.3	80	1	16.8/2.4/50 VDC	1 / 1	PB287-ND	3.02	2.65	2.40	V23026D1024B201
RT Series — Low Profile Power PCB Relay												
11-A	SPDT	5 VDC	80	400	12	3.5/0.5/5 VDC	7 / 3	PB359-ND	2.35	2.06	1.87	RTB14005F
	SPDT	12 VDC	33.3	400	12	8.4/1.2/12 VDC	7 / 3	PB360-ND	1.70	1.50	1.35	RTB14012F
	SPDT	12VDC	33.3	400	12	8.4/1.2/12VDC	7 / 3	PB449-ND•	4.22	3.70	3.35	RT114012F
	SPDT	24 VDC	16.7	400	12	16.8/1.2/24 VDC	7 / 3	PB361-ND	1.70	1.50	1.35	RTB14024F
11-B	SPST-NO	12 VDC	33.3	400	12	8.4/1.2/12 VDC	7 / 3	PB362-ND	4.22	3.70	3.35	RTB34012F
	SPST-NO	24 VDC	16.7	400	12	16.8/1.2/24 VDC	7 / 3	PB363-ND	3.86	3.39	3.06	RTB34024F
11-C	SPDT	5 VDC	80	400	16	3.5/0.5/5 VDC	7 / 3	PB291-ND	2.81	2.46	2.23	RTD14005F
	SPDT	12 VDC	33.3	400	16	8.4/1.2/12 VDC	7 / 3	PB292-ND	3.62	3.18	2.87	RTD14012F
11-D	SPST-NO	12 VDC	33.3	400	16	8.4/1.2/12 VDC	7 / 3	PB293-ND	4.22	3.70	3.35	RTD34012F
	SPST-NO	24 VDC	16.7	400	16	16.8/2.4/24 VDC	7 / 3	PB294-ND	4.22	3.70	3.35	RTD34024F
11-E	DPDT	5 VDC	80	400	8	3.5/0.5/5 VDC	7 / 3	PB295-ND	2.86	2.50	2.27	RTE24005F
	DPDT	12 VDC	33.3	400	8	8.4/1.2/12 VDC	7 / 3	PB296-ND	3.67	3.22	2.91	RTE24012F
	DPDT	24 VDC	16.7	400	8	16.8/1.2/24 VDC	7 / 3	PB297-ND	2.81	2.46	2.23	RTE24024F
11-F	DPST-NO	12VDC	33.3	400	8	8.4/1.2/12VDC	7 / 3	PB450-ND	2.09	1.83	1.66	RTE44012F

• Flux-Tight Version

PC Mount and General Purpose Relays

*** All relays are UL, CSA approved***

Mounting hole connection diagrams are all bottom view unless otherwise noted

Fig. 1 — PE Series

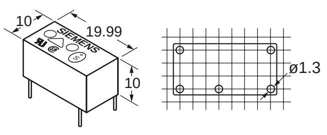


Fig. 2 — RE Series

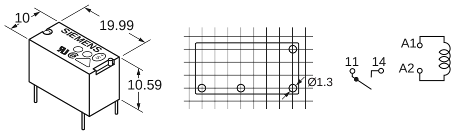


Fig. 3 — K10 Series

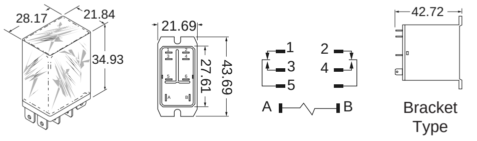


Fig. 4 — R10 Series

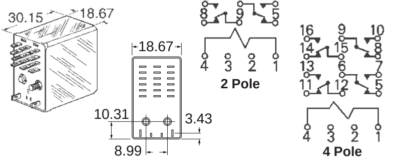


Fig. 5 — KHA/KHS Series

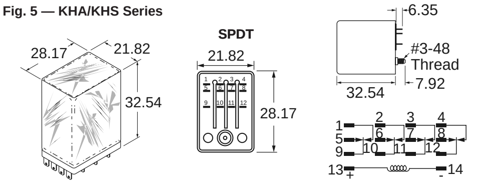


Fig. 6 — KUP Series

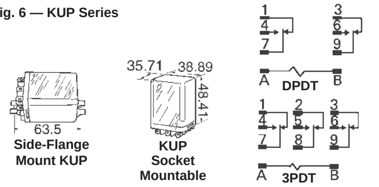


Fig.	Contact Arrange-ment	Coil Voltage	Coil Current (mA)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Terminal Type Inch (mm)	Additional Features	Digi-Key Part No.	Price Each				Potter & Brumfield Part No.
									1	25	50	100	
PE Series Miniature Cadmium Free Contacts Relay													
1	SPDT	5 VDC	40	5	3.75/3.75/5 VDC	PC Mount	—	PB353-ND	3.91	3.43	3.10	2.45	PE014005
		12 VDC	16.7	5	9/1.25/12 VDC	PC Mount	—	PB354-ND	3.91	3.43	3.10	2.45	PE014012
		24 VDC	8.3	5	18/2.45/24 VDC	PC Mount	—	PB355-ND	3.91	3.43	3.10	2.45	PE014024
RE Series Lower Profile Power Relay													
2	SPST-NO	5 VDC	40	6	3.75/3.75/5 VDC	PC Mount	—	PB356-ND	5.11	4.48	4.05	3.20	RE030005
		12 VDC	16.7	6	9/1.25/12 VDC	PC Mount	—	PB357-ND	5.11	4.48	4.05	3.20	RE030012
		24 VDC	8.3	6	18/2.45/24 VDC	PC Mount	—	PB358-ND	5.11	4.48	4.05	3.20	RE030024
K10 Series - General Purpose Miniature Power Relay													
3	DPDT	12 VAC	100	15	10.2/2.4/12 VAC	.187 (4.75) QC	—	PB319-ND	9.46	8.28	7.49	5.91	K10P-11A15-12
		24 VAC	52	15	20.4/4.8/24 VAC	.187 (4.75) QC	—	PB320-ND	9.46	8.28	7.49	5.91	K10P-11A15-24
		120 VAC	11	15	102/24/120 VAC	.187 (4.75) QC	—	PB321-ND	9.46	8.28	7.49	5.91	K10P-11A15-120
		6 VDC	150	15	4.5/0.6/6 VDC	.187 (4.75) QC	—	PB323-ND	8.86	7.75	7.02	5.54	K10P-11D15-6
		12 VDC	75	15	9/1.2/12 VDC	.187 (4.75) QC	—	PB324-ND	8.86	7.75	7.02	5.54	K10P-11D15-12
		24 VDC	37	15	18/2.4/24 VDC	.187 (4.75) QC	—	PB325-ND	8.86	7.75	7.02	5.54	K10P-11D15-24
		110 VDC	10	15	82.5/11/110 VDC	.187 (4.75) QC	—	PB326-ND	10.18	8.91	8.06	6.36	K10P-11D15-110
		12 VDC	75	15	9/1.2/12 VDC	PC Mount	—	PB327-ND	8.86	7.75	7.02	5.54	K10P-11D55-12
		24 VDC	37	15	18/2.4/24 VDC	PC Mount	—	PB328-ND	8.86	7.75	7.02	5.54	K10P-11D55-24
		110 VDC	10	15	82.5/11/110VDC	PC Mount	—	PB451-ND	5.35	4.69	4.24	3.35	K10P-11D55-110
		12 VDC	75	15	9/1.2/12 VDC	.187 (4.75) QC	With Bracket	PB329-ND	8.86	7.75	7.02	5.54	K10P-11DT5-12
		24 VDC	37	15	18/2.4/24 VDC	.187 (4.75) QC	With Bracket	PB330-ND	8.86	7.75	7.02	5.54	K10P-11DT5-24
		120 VAC	11	15	102/24/120 VAC	.187 (4.75) QC	With Bracket	PB322-ND	9.46	8.28	7.49	5.91	K10P-11AT5-120
R10 Series — General Purpose Power Relay													
4	DPDT	6 VDC	115	3	4.5/0.5/6.6 VDC	Plug-In	—	PB116-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V52
		12 VDC	64	3	9/1.2/13.2 VDC	Plug-In	—	PB117-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V185
		24 VDC	34	3	18/2.4/26.4 VDC	Plug-In	—	PB118-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V700
		48 VDC	19	3	36/4.8/52.8 VDC	Plug-In	—	PB119-ND	13.66	11.95	10.82	8.54	R10-E1Y2-V2.5K
	4PDT	6 VDC	115	3	4.5/0.5/6.6 VDC	Plug-In	—	PB120-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V52
		12 VDC	64	3	9/1.2/13.2 VDC	Plug-In	—	PB121-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V185
		24 VDC	34	3	18/2.4/26.4 VDC	Plug-In	—	PB122-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V700
		48 VDC	19	3	36/4.8/52.8 VDC	Plug-In	—	PB123-ND	14.64	12.81	11.59	9.15	R10-E1Y4-V2.5K
	DPDT	6 VDC	115	5	4.5/0.5/6.6 VDC	Plug-In	—	PB124-ND	13.37	11.70	10.59	8.36	R10-E1X2-V52
		12 VDC	64	5	9/1.2/13.2 VDC	Plug-In	—	PB125-ND	13.37	11.70	10.59	8.36	R10-E1X2-V185
		24 VDC	34	5	18/2.4/26.4 VDC	Plug-In	—	PB126-ND	13.37	11.70	10.59	8.36	R10-E1X2-V700
		48 VDC	19	5	36/4.8/52.8 VDC	Plug-In	—	PB127-ND	13.37	11.70	10.59	8.36	R10-E1X2-V2.5K
		24 VDC	34	7.5	18/2.4/26.4VDC	Plug-In	—	PB454-ND	14.42	12.63	11.42	9.02	R10-E1W2-V700
	4PDT	24 VDC	34	5	18/2.4/26.4VDC	Plug-In	—	PB452-ND	13.37	11.70	10.59	8.36	R10-E2X2-V700
		12 VDC	64	5	9/1.2/13.2 VDC	Plug-In	—	PB129-ND	15.62	13.68	12.37	9.77	R10-E1X4-V185
		24 VDC	34	5	18/2.4/26.4 VDC	Plug-In	—	PB130-ND	15.62	13.68	12.37	9.77	R10-E1X4-V700
		48 VDC	19	5	36/4.8/52.8 VDC	Plug-In	—	PB131-ND	15.62	13.68	12.37	9.77	R10-E1X4-V2.5K
		24 VDC	34	5	18/2.4/26.4VDC	Plug-In	—	PB453-ND	22.49	19.68	17.81	14.06	R10-E1M4-V700
KHA/KHS Series — General Purpose Low Cost Power Relay													
5	DPDT	12 VDC	75	5	9/1.2/12VDC	Plug-In	—	PB455-ND	7.13	6.24	5.65	4.46	KHAU-11D12-12
	4PDT	24 VAC	—	3	20.4/2.4/24 VAC	Plug-In	—	PB139-ND	8.11	7.10	6.43	5.07	KHAU-17A11-24
		120 VAC	—	3	102/22/120 VAC	Plug-In	—	PB140-ND	8.52	7.46	6.75	5.33	KHAU-17A11-120
		120 VAC	—	3	102/22/120 VAC	Plug-In	With Indicator Light	PB141-ND	11.88	10.40	9.41	7.43	KHAU-17A11N-120
		120 VAC	—	5	102/12/120VAC	Plug-In	—	PB456-ND	8.52	7.46	6.75	5.33	KHAU-17A12-120
		24 VAC	—	1	20.4/2.4/24VAC	Plug-In	—	PB457-ND	9.29	8.13	7.36	5.81	KHAU-17A16-24
		12 VDC	75	3	9/2.4/12 VDC	Plug-In	—	PB142-ND	7.39	6.47	5.86	4.62	KHAU-17D11-12
		24 VDC	37	3	18/2.4/24 VDC	Plug-In	—	PB143-ND	7.39	6.47	5.86	4.62	KHAU-17D11-24
		24 VDC	37	5	18/2.4/24VDC	Plug-In	—	PB458-ND	7.39	6.47	5.86	4.62	KHAU-17D12-24
		24 VDC	37	3	18/2.4/24VDC	Solder	Hermetically Sealed	PB459-ND	46.06	40.30	36.47	28.79	KHS-17D11-24
		120 VAC	—	3	102/12/120VAC	Solder	Hermetically Sealed	PB460-ND	50.23	43.96	39.77	31.40	KHS-17A11-120
		24 VDC	37	5	18/2.4/24VDC	Solder	Hermetically Sealed	PB461-ND	46.06	40.30	36.47	28.79	KHS-17D12-24
		120 VAC	—	5	102/12/120VAC	Solder	Hermetically Sealed	PB462-ND	50.23	43.96	39.77	31.40	KHS-17A12-120
KUP Series — Enclosed Relays													
6	DPDT	24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	—	PB151-ND	13.99	12.25	11.08	8.75	KUP-11A15-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	—	PB152-ND	13.82	12.10	10.95	8.64	KUP-11A15-120
		12 VDC	100	10	9/1.2/12 VDC	.187 (4.75) QC	—	PB153-ND	12.38	10.84	9.81	7.74	KUP-11D15-12
		24 VDC	51	10	18/2.4/24 VDC	.187 (4.75) QC	—	PB154-ND	12.38	10.84	9.81	7.74	KUP-11D15-24
		12 VDC	100	10	9/1.2/12 VDC	.187 (4.75) QC	Side Flange	PB155-ND	12.05	10.55	9.54	7.53	KUP-11D55-12
		24 VDC	51	10	18/2.4/24 VDC	.187 (4.75) QC	Side Flange	PB156-ND	12.05	10.55	9.54	7.53	KUP-11D55-24
		24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	Side Flange	PB222-ND	13.39	11.72	10.61	8.37	KUP-11A55-24
		120 VAC	—	10	102/12/120VAC	.187 (4.75) QC	Side Flange	PB463-ND	13.39	11.72	10.61	8.37	KUP-11A55-120
	DPST	24 VDC	75	10	18/2.4/24 VDC	.187 (4.75) QC	Side Flange	PB223-ND	14.52	12.71	11.50	9.08	KUGP-7D55-24
	3PDT	24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	—	PB157-ND	14.42	12.63	11.42	9.02	KUP-14A15-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	—	PB158-ND	14.42	12.63	11.42	9.02	KUP-14A15-120
		12 VDC	100	10	9/1.2/12 VDC	.187 (4.75) QC	—	PB159-ND	14.69	12.86	11.63	9.18	KUP-14D15-12
		24 VDC	51	10	18/2.4/24 VDC	.187 (4.75) QC	—	PB160-ND	14.69	12.86	11.63	9.18	KUP-14D15-24
		24 VAC	—	10	18/2.4/24VAC	.187 (4.75) QC	With Indicator Light	PB464-ND	16.08	14.07	12.73	10.05	KUP-14A35-24
		24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	With Indicator Light	PB465-ND	17.02	14.89	13.48	10.64	KUP-14D35-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	With Indicator Light	PB161-ND	16.08	14.07	12.73	10.05	KUP-14A35-120
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	With Test Button	PB162-ND	18.91	16.55	14.98	11.82	KUP-14A45-120
		24 VAC	—	10	20.4/2.4/24 VAC	.187 (4.75) QC	Side Flange	PB163-ND	15.00	13.13	11.88	9.38	KUP-14A55-24
		120 VAC	—	10	102/12/120 VAC	.187 (4.75) QC	Side Flange	PB164-ND	15.00	13.13	11.88	9.38	KUP-14A55-120

(Continued)

Fig. 7 — KRP/KRPA/KR Series

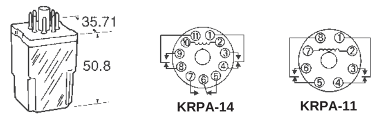


Fig. 8 — T90 Series

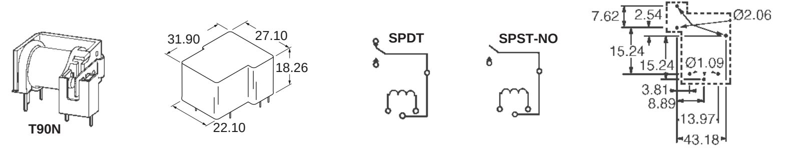


Fig. 9 — T9A Series

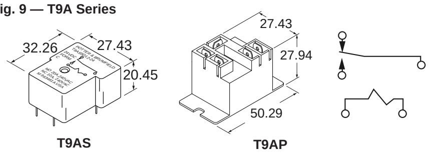


Fig. 10 — T92 Series

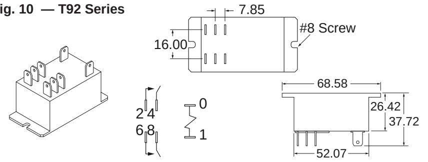


Fig. 11 — PRD Series

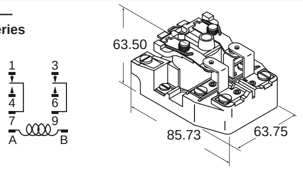


Fig.	Contact Arrange-ment	Coil Voltage	Coil Current (mA)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Terminal Type Inch (mm)	Additional Features	Digi-Key Part No.	Price Each 1	25	50	100	Potter & Brumfield Part No.
6	SPST-NO	24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	—	PB466-ND	14.78	12.94	11.71	9.24	KUEP-3D15-24
	DPDT	24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	—	PB467-ND	16.75	14.66	13.27	10.47	KUEP-11D15-24
	3PDT	24 VDC	51	15	18/2.4/24VDC	.187 (4.75) QC	—	PB468-ND	16.18	14.16	12.81	10.11	KUMP-14D18-24
	DPDT	120 VAC	—	10	102/12/120VAC	.187 (4.75) QC	Top Flange	PB469-ND	17.11	14.98	13.55	10.70	KUIP-11AT5-120
		24 VAC	—	20	18/2.4/24VAC	.250 (6.35) QC	Side Flange	PB470-ND	15.02	13.15	11.90	9.39	KUHP-11A51-24
		24 VDC	51	10	18/2.4/24VDC	.187 (4.75) QC	Latching Relay	PB471-ND	43.94	38.46	34.79	27.47	KUL-11D15D-24
		120 VAC	—	10	102/12/120VAC	.187 (4.75) QC	Latching Relay	PB472-ND	33.82	29.59	26.78	21.14	KUL-11A15S-120
KRP/KRPA/KR Series — Octal Plug Termination General Purpose Relay													
7	DPDT	110 VDC	11.5	10	82.5/11/110VDC	8 Pin Octal	—	PB473-ND	48.55	42.49	38.44	30.35	KRP-11DG-110
		120 VAC	—	10	102/12/120VAC	8 Pin Octal	—	PB474-ND	46.99	41.12	37.21	29.37	KRP-11AG-120
		24 VAC	—	10	20.4/2.4/24 VAC	8 Pin Octal	—	PB167-ND	19.49	17.06	15.43	12.18	KRPA-11AG-24
		120 VAC	—	10	102/12/120 VAC	8 Pin Octal	—	PB168-ND	19.49	17.06	15.43	12.18	KRPA-11AG-120
		12 VDC	100	10	9/1.2/12 VDC	8 Pin Octal	—	PB169-ND	19.49	17.06	15.43	12.18	KRPA-11DG-12
		24 VDC	51	10	18/2.4/24 VDC	8 Pin Octal	—	PB170-ND	19.49	17.06	15.43	12.18	KRPA-11DG-24
		24 VDC	51	10	18/2.4/24VDC	8 Pin Octal	With Indicator Light	PB475-ND	22.42	19.62	17.75	14.01	KRPA-11DN-24
		110 VDC	11.5	10	82.5/11/110VDC	8 Pin Octal	—	PB476-ND	21.48	18.80	17.01	13.43	KRPA-11DG-110
	3PDT	24 VAC	—	10	20.4/2.4/24 VAC	11 Pin Octal	—	PB171-ND	24.36	21.32	19.29	15.23	KRPA-14AG-24
		120 VAC	—	10	102/12/120 VAC	11 Pin Octal	—	PB172-ND	24.36	21.32	19.29	15.23	KRPA-14AG-120
		12 VDC	100	10	9/1.2/12 VDC	11 Pin Octal	—	PB173-ND	24.19	21.17	19.16	15.12	KRPA-14DG-12
		24 VDC	51	10	18/2.4/24 VDC	11 Pin Octal	—	PB174-ND	24.19	21.17	19.16	15.12	KRPA-14DG-24
	DPDT	120 VAC	—	10	102/12/120 VAC	8 Pin Octal	With Indicator Light	PB175-ND	21.48	18.80	17.01	13.43	KRPA-11AN-120
	3PDT	120 VAC	—	10	102/12/120 VAC	11 Pin Octal	With Indicator Light	PB176-ND	27.48	24.05	21.76	17.18	KRPA-14AN-120
	DPDT	12 VDC	100	20	9/1.2/12VDC	8 Pin Octal	—	PB477-ND	91.15	79.76	72.17	56.97	KR-11DGE-12
		24 VDC	51	20	18/2.4/24VDC	8 Pin Octal	—	PB478-ND	91.15	79.76	72.17	56.97	KR-11DGE-24
	3PDT	24 VDC	51	20	18/2.4/24VDC	11Pin Octal	—	PB479-ND	127.44	111.51	100.89	79.65	KR-14DGE-24
		120 VAC	—	20	102/12/120VAC	11 Pin Octal	—	PB480-ND	124.15	108.64	98.29	77.60	KR-14AGE-120
T90 Series — Low Cost PC Mount Power Relay													
8	SPST-NO	12 VDC	77	30	9/1.2/12 VDC	PC Mount	—	PB104-ND	2.16	1.89	1.71	1.35	T90N1D12-12
		24 VDC	36	30	18/2.4/24 VDC	PC Mount	—	PB105-ND	2.21	1.94	1.75	1.38	T90N1D12-24
	SPDT	12 VDC	77	20	9/1.2/12 VDC	PC Mount	—	PB107-ND	2.30	2.02	1.83	1.44	T90N5D12-12
		24 VDC	36	20	18/2.4/24 VDC	PC Mount	—	PB108-ND	2.38	2.08	1.89	1.49	T90N5D12-24
Dust Cover for Open-Style T90 Series (Snaps onto Relay)								PB216-ND	.67	.59	.54	.42	35C620A
8	SPST-NO	5 VDC	185	30	3.5/0.5/5 VDC	PC Mount	—	PB109-ND	2.62	2.29	2.08	1.64	T90S1D12-5
		12 VDC	77	30	8.4/1.2/12 VDC	PC Mount	—	PB110-ND	2.69	2.36	2.13	1.68	T90S1D12-12
		24 VDC	36	30	16.8/2.4/24 VDC	PC Mount	—	PB111-ND	2.69	2.36	2.13	1.68	T90S1D12-24
	SPDT	5 VDC	185	20	3.5/0.5/5 VDC	PC Mount	—	PB113-ND	2.62	2.29	2.08	1.64	T90S5D12-5
		12 VDC	77	20	8.4/1.2/12 VDC	PC Mount	—	PB114-ND	2.69	2.36	2.13	1.68	T90S5D12-12
		24 VDC	36	20	16.8/2.4/24 VDC	PC Mount	—	PB115-ND	2.71	2.38	2.15	1.70	T90S5D12-24
T9A Series — Low Cost Industrial Relays													
9	SPST-NO	12 VDC	83	30	9/1.2/12 VDC	PC Mount	—	PB302-ND	2.88	2.52	2.28	1.80	T9AS1D12-12
		24 VDC	42	30	18/2.4/24 VDC	PC Mount	—	PB303-ND	2.88	2.52	2.28	1.80	T9AS1D12-24
		12 VDC	83	30	9/1.2/12 VDC	PC Mount	With .250" QC Term.	PB304-ND	3.19	2.80	2.53	2.00	T9AS1D22-12
		24 VDC	42	30	18/2.4/24 VDC	PC Mount	With .250" QC Term.	PB305-ND	3.19	2.80	2.53	2.00	T9AS1D22-24
	SPDT	12 VDC	83	15	9/1.2/12 VDC	PC Mount	—	PB306-ND	2.26	1.98	1.79	1.41	T9AS5D12-12
		24 VDC	42	15	18/2.4/24 VDC	PC Mount	—	PB307-ND	2.95	2.59	2.34	1.85	T9AS5D12-24
		12 VDC	83	15	9/1.2/12 VDC	PC Mount	With .250" QC Term.	PB308-ND	3.19	2.80	2.53	2.00	T9AS5D22-12
		24 VDC	42	15	18/2.4/24 VDC	PC Mount	With .250" QC Term.	PB309-ND	3.19	2.80	2.53	2.00	T9AS5D22-24
		12 VDC	83	15	9/1.2/12 VDC	.250 (6.35) QC	Chassis Mount	PB310-ND	3.67	3.22	2.91	2.30	T9AP5D52-12
		24 VDC	42	15	18/2.4/24 VDC	.250 (6.35) QC	Chassis Mount	PB311-ND	3.67	3.22	2.91	2.30	T9AP5D52-24
T92 Series — Power Relays with Quick Connect Terminals, Sealed and Unsealed													
10	DPST-NO	12 VDC	139	30	9/1.2/12VDC	PC Mount	Sealed Case	PB481-ND	9.22	8.07	7.30	5.76	T92S7D12-12
		24 VDC	68	30	18/2.4/24VDC	PC Mount	Sealed Case	PB482-ND	9.22	8.07	7.30	5.76	T92S7D12-24
		240 VAC	—	30	192/24/240VAC	PC Mount	Sealed Case	PB483-ND	12.19	10.67	9.66	7.62	T92S7A12-240
		12 VDC	139	30	9/1.2/12VDC	PC Mount	Unsealed Case	PB484-ND	8.33	7.29	6.60	5.21	T92P7D12-12
		24 VDC	68	30	18/2.4/24VDC	PC Mount	Unsealed Case	PB485-ND	8.33	7.29	6.60	5.21	T92P7D12-24
		12 VDC	139	30	9/1.2/12 VDC	.250 (6.35) QC	Sealed Case	PB298-ND	9.22	8.07	7.30	5.76	T92S7D22-12
		12 VDC	139	30	9/1.2/12VDC	.250 (6.35) QC	Unsealed Case	PB486-ND	8.33	7.29	6.60	5.21	T92P7D22-12
		24 VDC	68	30	18/2.4/24 VDC	.250 (6.35) QC	Sealed Case	PB299-ND	9.22	8.07	7.30	5.76	T92S7D22-24
		24 VAC	—	30	19.2/2.4/24VAC	.250 (6.35) QC	Unsealed Case	PB487-ND	9.55	8.36	7.57	5.97	T92P7A22-24
		24 VAC	—	30	19.2/2.4/24VAC	.250 (6.35) QC	Sealed Case	PB488-ND	10.61	9.29	8.40	6.63	T92S7A22-24
		120 VAC	—	30	96/12/120 VAC	.250 (6.35) QC	Sealed Case	PB301-ND	10.61	9.29	8.40	6.63	T92S7A22-120
		120 VAC	—	30	96/12/120VAC	.250 (6.35) QC	Unsealed Case	PB489-ND	9.55	8.36	7.57	5.97	T92P7A22-120
	DPDT	12 VDC	139	30	9/1.2/12 VDC	PC Mount	Sealed Case	PB351-ND	10.15	8.89	8.04	6.35	T92S11D12-12
		24 VDC	68	30	18/2.4/24 VDC	PC Mount	Sealed Case	PB352-ND	10.15	8.89	8.04	6.35	T92S11D12-24
		12 VDC	139	30	9/1.2/12 VDC	.250 (6.35) QC	Unsealed Case	PB349-ND	9.17	8.03	7.26	5.73	T92P11D22-12
		12 VDC	139	30	9/1.2/12VDC	.250 (6.35) QC	Sealed Case	PB490-ND	10.15	8.89	8.04	6.35	T92S11D22-12
		24 VDC	68	30	18/2.4/24 VDC	.250 (6.35) QC	Unsealed Case	PB350-ND	9.17	8.03	7.26	5.73	T92P11D22-24
		24 VAC	—	30	19.2/2.4/24 VAC	.250 (6.35) QC	Sealed Case	PB300-ND	11.69	10.23	9.26	7.31	T92S11A22-24
		24 VDC	68	30	18/2.4/24VDC	.250 (6.35) QC	Sealed Case	PB491-ND	10.15	8.89	8.04	6.35	T92S11D22-24
		120 VAC	—	30	96/12/120VAC	.250 (6.35) QC	Unsealed Case	PB492-ND	10.56	9.24	8.36	6.60	T92P11A22-120
		240 VAC	—	30	192/24/240 VAC	.250 (6.35) QC	Unsealed Case	PB348-ND	12.19	10.67	9.66	7.62	T92P11A22-240
PRD Series — Heavy Duty Power Relay													
11	SPDT	12 VAC	—	25	10.2/1.2/12VAC	Screw	—	PB493-ND	22.08	19.32	17.48	13.80	PRD-5DY0-12
		24 VAC	—	25	20.4/2.4/24VAC	Screw	—	PB494-ND	22.78	19.93	18.04	14.24	PRD-5AY0-24
		120 VAC	—	25	102/12/120VAC	Screw	—	PB495-ND	22.78	19.93	18.04	14.24	PRD-5AY0-120

(Continued)

General Purpose Relays *(Cont.)*

Fig. 12 — PM Series

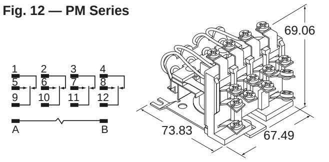


Fig. 13 — S86R, S87R Series

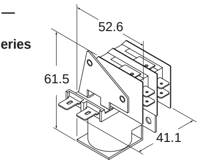


Fig. 14 — S89 Series

Potter & Brumfield S89 Series relay features a simple pulse latch/unlatch function (impulse) without the need to reverse polarity or continuously energize the coil.

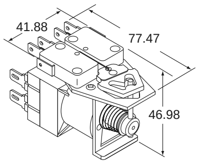


Fig. 15 — P25, P30, P40 Series

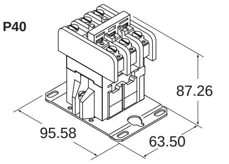
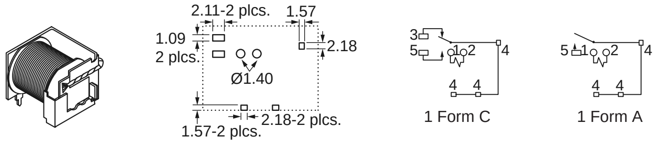


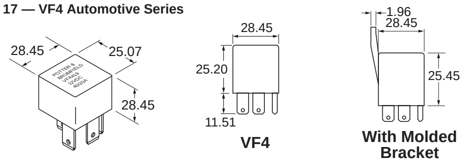
Fig. 16 — VKP Automotive Series



1 Form C

1 Form A

Fig. 17 — VF4 Automotive Series



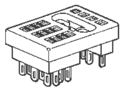
VF4

With Molded Bracket

Fig.	Contact Arrange-ment	Coil Voltage	Coil Current (mA)	Contact Rating (A)	Operate Volt Release Volt pull/drop/max	Terminal Type Inch (mm)	Additional Features	Digi-Key Part No.	Price Each				Potter & Brumfield Part No.
									1	25	50	100	
11	DPST-NO	120 VAC	—	25	102/12/120VAC	Screw	—	PB496-ND	24.65	21.57	19.52	15.41	PRD-7AY0-120
		24 VDC	84	25	18/2.4/24VDC	Screw	—	PB497-ND	23.88	20.90	18.91	14.93	PRD-7DY0-24
	DPDT	12 VDC	169	25	9/1.2/12VDC	Screw	—	PB498-ND	29.90	26.17	23.68	18.69	PRD-11DY0-12
		24 VDC	84	25	18/2.4/24VDC	Screw	—	PB499-ND	29.90	26.17	23.68	18.69	PRD-11DY0-24
		24 VDC	84	20	18/2.4/24VDC	Screw	With Magnetic Blow Out	PB500-ND	33.29	29.13	26.36	20.81	PRD-11DH0-24
		24 VDC	84	30	18/2.4/24VDC	Screw	—	PB501-ND	29.86	26.13	23.64	18.66	PRD-11DG0-24
		110 VDC	18.2	20	82.5/11/110VDC	Screw	With Magnetic Blow Out	PB502-ND	36.31	31.78	28.75	22.70	PRD-11DH0-110
		120 VAC	—	30	102/12/120VAC	Screw	—	PB503-ND	30.48	26.67	24.13	19.05	PRD-11AG0-120
		120 VAC	—	20	102/12/120VAC	Screw	With Magnetic Blow Out	PB504-ND	34.10	29.85	27.00	21.32	PRD-11AH0-120
		120 VAC	—	25	102/12/120VAC	Screw	—	PB505-ND	30.60	26.78	24.23	19.13	PRD-11AY0-120
		240 VAC	—	25	204/24/240VAC	Screw	—	PB506-ND	31.13	27.24	24.65	19.46	PRD-11AY0-240
PM Series — Heavy Duty Multicontact Power Relay													
12	4PDT	12 VDC	364	25	9/1.2/12VDC	Screw	—	PB507-ND	79.32	69.41	62.80	49.58	PM-17DY-12
		24 VDC	182	25	18/2.4/24VDC	Screw	—	PB508-ND	79.32	69.41	62.80	49.58	PM-17DY-24
		110 VDC	40	25	82.5/11/110VDC	Screw	—	PB509-ND	84.10	73.59	66.58	52.56	PM-17DY-110
S86R, S87R, S89R Series Industrial Relays													
13	DPDT	120 VAC	—	20	102/12/120VAC	.250 (6.35) QC	—	PB510-ND	27.91	24.43	22.10	17.45	S86R11A1B1D1120
		120 VAC	—	20	102/12/120VAC	.250 (6.35) QC	—	PB511-ND	26.47	23.17	20.96	16.55	S87R11A2B1D1120
14	SPDT	24 VAC	—	15	20.4/2.4/24VAC	.250 (6.35) QC	Impulse	PB512-ND	30.00	26.25	23.75	18.75	S89R5ABD1-24
	DPDT	12 VDC	533	15	9/1.2/12VDC	.187 (4.75) QC	Impulse	PB513-ND	34.44	30.14	27.27	21.53	S89R11DAC1-12
		12 VDC	533	15	9/1.2/12VDC	.250 (6.35) QC	Impulse	PB514-ND	34.44	30.14	27.27	21.53	S89R11DBD1-12
		120 VAC	—	15	102/12/120VAC	8 Pin Octal	Impulse	PB515-ND	41.42	36.25	32.80	25.89	S89R11APP1-120
P25, P30, P40 Series — Heavy Duty Contactor													
15	3PST-NO	24 VDC	180	25	18/2.4/24VDC	.250 (6.35) QC	—	PB516-ND	59.95	52.46	47.47	37.47	P25P42D22P1-24
		24 VDC	286	30	18/2.4/24VDC	.250 (6.35) QC	—	PB517-ND	70.68	61.85	55.96	44.18	P30P42D12P1-24
		24 VDC	286	40	18/2.4/24VDC	.250 (6.35) QC	—	PB518-ND	74.35	65.06	58.87	46.47	P40P42D12P1-24
		120 VAC	—	40	102/12/120VAC	.250 (6.35) QC	—	PB519-ND	95.23	83.33	75.40	59.52	P40C42A12D1-120
VKP Series — Open Frame Automotive Relay													
16	SPST-NO	12 VDC	133	40	6.8/1.2/12 VDC	PC Mount	—	PB312-ND	2.21	1.94	1.75	1.38	VKP-11F42
	SPDT	12 VDC	133	40	6.8/1.2/12 VDC	PC Mount	—	PB313-ND	2.33	2.04	1.85	1.46	VKP-15F42
VF4 Series — Enclosed Automotive Relay													
17	SPST-NO	12 VDC	133	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	With Molded Bracket	PB149-ND *NEW!*	3.82	3.34	3.03	2.39	VF4A-41F11
	SPST-NO	12 VDC	133	40	7.2/1.2/20.2 VDC	PC Mount	—	PB229-ND	4.27	3.74	3.39	2.67	VF4-11F13
	SPDT	12 VDC	133	40	7.2/1.2/20.2 VDC	PC Mount	—	PB230-ND	4.49	3.93	3.56	2.81	VF4-15F13
	SPDT	24 VDC	66.6	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	—	PB215-ND *NEW!*	3.26	2.86	2.59	2.04	VF4A-15H11
	SPDT	12 VDC	133	40	7.2/1.2/20.2 VDC	.250 (6.35) QC	With Metal Bracket	PB527-ND	3.91	3.43	3.10	2.45	VF4A-45F11

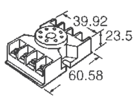
Relay Sockets and Accessories

Fig. 1



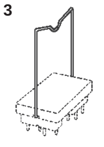
Solder Terminal Socket

Fig. 2



Panel Mount Socket (KRPA shown)

Fig. 3



Wire Hold Down Spring

Fig.	Description	Use With Series	Digi-Key Part No.	Price Each				Potter & Brumfield Part No.
				1	25	50	100	
1	Solder Terminal Socket, DPDT	K10	PB331-ND	2.28	2.00	1.81	1.43	27E488
2	DIN Rail Screw Mount Socket, DPDT	K10	PB332-ND	7.99	7.00	6.33	5.00	27E895
3	Wire Hold Down Spring, DPDT for DIN Rail Socket	K10	PB333-ND	.50	.45	.40	.32	20C297
1	PCB Mount Socket, DPDT	K10	PB334-ND	2.38	2.08	1.89	1.49	27E489
1	Solder Terminal Socket, DPDT	R10	PB132-ND	1.51	1.33	1.20	.95	27E125
1	Solder Terminal Socket, 4PDT	R10	PB133-ND	1.90	1.66	1.51	1.19	27E126
1	PCB Mount Socket, DPDT	R10	PB134-ND	1.51	1.33	1.20	.95	27E128
1	PCB Mount Socket, 4PDT	R10	PB135-ND	1.90	1.66	1.51	1.19	27E129
3	Wire Hold Down Spring, DPDT	R10	PB136-ND	.26	.24	.21	.17	20C249
3	Wire Hold Down Spring, 4PDT	R10	PB137-ND	.26	.24	.21	.17	20C250
3	Wire Hold Down Strap (for P.C. Socket Only), all poles	R10	PB138-ND	.26	.24	.21	.17	20C259
1	Solder Terminal Socket, 4PDT	KHA	PB144-ND	1.85	1.62	1.47	1.16	27E006
1	PCB Mount Socket, 4PDT	KHA	PB145-ND	1.73	1.52	1.37	1.08	27E007
3	Wire Hold Down Spring, KHA-4PDT/K10-DPDT	KHA/K10	PB146-ND	.50	.45	.40	.32	20C217
—	Chassis Mount Screw Mount Socket, 4PDT	KHA	PB147-ND	12.96	11.34	10.26	8.10	27E166
2	DIN Rail Mount Screw Term Socket, 4PDT	KHA	PB148-ND	15.72	13.76	12.45	9.83	27E894
1	PCB Terminal Socket, 4PDT	KH	PB523-ND	1.49	1.31	1.18	.93	27E023
—	Chassis Mount Screw Term Socket, all poles	KUP	PB165-ND	8.47	7.42	6.71	5.30	27E121
2	DIN Rail Mount Screw Term Socket, all poles	KUP	PB166-ND	10.32	9.03	8.17	6.45	27E893
—	PCB Terminal Socket with Mounting Ears, DP, 3P	KU	PB522-ND	2.71	2.38	2.15	1.70	27E046
2	8-Pin Octal Screw Term Socket, all poles	KRPA	PB177-ND	5.52	4.83	4.37	3.45	27E122
2	11-Pin Octal Screw Term Socket, all poles	KRPA	PB178-ND	8.04	7.04	6.37	5.03	27E123
—	Spacer for KRPA Series Relay	KRPA	PB179-ND	.74	.66	.59	.47	21B212
2	DIN Rail Mount Socket, DPDT	KRPA	PB520-ND	6.48	5.67	5.13	4.05	27E891
2	DIN Rail Mount Socket, 3PDT	KRPA	PB521-ND	9.77	8.55	7.74	6.11	27E892
2	DIN Rail Terminal Socket (for all RT Series)	RT	PB524-ND	5.69	4.98	4.51	3.56	RT78624
2	PCB Mount Socket (for all RT Series)	RT	PB525-ND	2.16	1.89	1.71	1.35	RP78602
—	DIN Rail Track, 36" (91.44cm) for DIN Rail Sockets, Aluminum	ALL	PB345-ND	10.37	9.08	8.21	6.48	24A110
—	Hold Down Clip, for use with DIN Rail	ALL	PB346-ND	.60	.53	.48	.38	24A071
—	Plastic Spacer for DIN Rail Sockets	ALL	PB347-ND	.70	.61	.56	.44	40G432
—	Plastic Dust Cover, Snap On for PM Series HD Relay	PM	PB526-ND	4.80	4.20	3.80	3.00	35D203
—	VF4 Relay Socket, PCB Mount	VF4	PB232-ND	1.46	1.29	1.16	.92	VCF4-1000
—	VF4 Relay Socket (Wire Harness Style)	VF4	PB316-ND	.55	.49	.44	.35	VCF4-1001
—	VF4 Crimp Term 12-16 AWG for PB316-ND	VF4	PB317-ND	—	.17	.16	.12	26A1349A
—	VF4 Crimp Term 14-18 AWG for PB316-ND	VF4	PB318-ND	—	.13	.12	.09	26A1349B

PhotoMos Relays and SSRs

PhotoMos relays combine the advantages of standard electromechanical relays with that of solid state products. This combination allows very fast response times with very low leakage and exceedingly long lifetimes. Reliability and lower input currents are also improved over conventional relays.

AQV210, 212 and 214 Series are SPST solid state switches for applications such as high speed inspection machines, telecom and data communication equipment, instrumentation and security. Capable of switching both AC and DC voltages.

AQW214 and 414 Series are independently triggered dual switches available in either Dip, SMT or SOP package.

AQV221 Series are solid state switches designed for switching high frequencies (RF) such as audio/visual signals as well as CD, VCR, and scanners, etc.

AQ2 SIP SSRs are designed as suitable drivers for AC motors, solenoids, valves, etc. These offer excellent noise resistance with an integrated snubber circuit and ultra thin body (only 9mm) for maintenance-free, long life switching.

Zero-Cross is a low noise switching output whereas Phase Controlled are ideal for phase controlled applications such as motor speed control and light dimming.

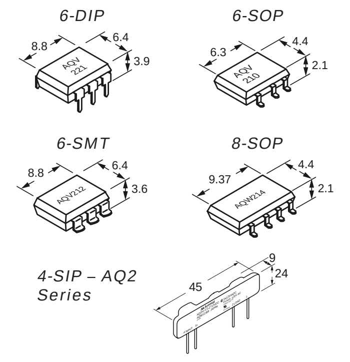


Fig. 1

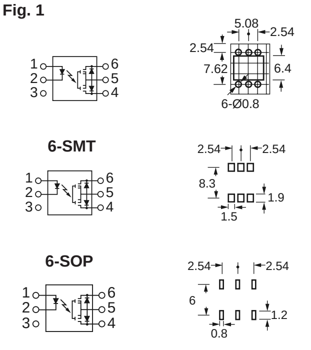


Fig. 2

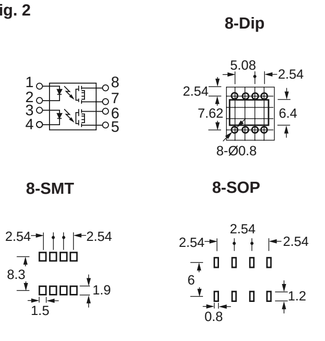


Fig. 3 *AQ2 SIP Series*

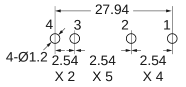


Fig.	Cont. Arrange.	Load Current (max.)	Load Volt (max.)	Isola-tion Volt	On Resistance (min./max.)	Input Current (mA)	T-On/T-Off Time (mSec)	Package	Digi-Key Part No.	Price Each				Aromat Part No.
										1	25	50	100	
AQV210 Series Solid State Relays														
1	SPST-NO	130mA	350V	1,500	23/35	5-50	2/1	6-Dip	255-1143-ND	2.43	2.23	1.98	1.69	AQV210E
	SPST-NO	130mA	350V	1,500	23/35	5-50	2/1	6-SMT	255-1144-ND	2.45	2.25	2.00	1.70	AQV210EA
	SPST-NO	130mA	350V	5,000	23/35	5-50	2/1	6-Dip	255-1145-ND	2.62	2.41	2.14	1.82	AQV210EH
	SPST-NO	130mA	350V	5,000	23/35	5-50	2/1	6-SMT	255-1146-ND	2.67	2.46	2.18	1.86	AQV210EHA
	SPST-NO	120mA	350V	1,500	23/35	5-50	2/1	6-SOP	255-1147-ND	4.09	3.76	3.34	2.84	AQV210S
AQV212 Series Solid State Relays														
1	SPST-NO	400mA	60V	1,500	.83/2.5	5-50	2/0.2	6-Dip	255-1148-ND	3.87	3.56	3.16	2.69	AQV212
	SPST-NO	400mA	60V	1,500	.83/2.5	5-50	2/0.2	6-SMT	255-1149-ND	3.87	3.56	3.16	2.69	AQV212A
	SPST-NO	350mA	60V	1,500	.83/2.5	5-50	2/0.2	6-SOP	255-1150-ND	4.09	3.76	3.34	2.84	AQV212S
AQV214 Series Solid State Relays														
1	SPST-NO	120mA	400V	1,500	30/50	5-50	.5/0.2	6-Dip	255-1151-ND	3.87	3.56	3.16	2.69	AQV214
	SPST-NO	120mA	400V	5,000	30/50	5-50	.5/0.2	6-Dip	255-1152-ND	4.14	3.81	3.38	2.88	AQV214H
	SPST-NO	120mA	400V	1,500	30/50	5-50	.5/0.2	6-Dip	255-1153-ND	2.43	2.23	1.98	1.69	AQV214E
	SPST-NO	120mA	400V	5,000	30/50	5-50	.5/0.2	6-Dip	255-1154-ND	2.62	2.41	2.14	1.82	AQV214EH
	SPST-NO	120mA	400V	1,500	30/50	5-50	.5/0.2	6-SMT	255-1155-ND	3.87	3.56	3.16	2.69	AQV214A
	SPST-NO	100mA	400V	1,500	30/50	5-50	.5/0.2	6-SOP	255-1156-ND	4.09	3.76	3.34	2.84	AQV214S
	SPST-NO	500mA	40V	1,500	.6/1	5-50	1.7/.07	6-Dip	255-1352-ND	4.90	4.50	4.00	3.40	AQV251
	SPST-NO	400mA	60V	1,500	.74/1.4	5-50	1.4/.07	6-Dip	255-1353-ND	4.90	4.50	4.00	3.40	AQV252
	SPST-NO	250mA	200V	1,500	2.6/4	5-50	1.5/.1	6-Dip	255-1354-ND	4.90	4.50	4.00	3.40	AQV257
	SPST-NC	120mA	400V	1,500	26/50	5-50	1/1	6-Dip	255-1157-ND	4.29	3.94	3.50	2.98	AQV414
	SPST-NC	120mA	400V	5,000	26/50	5-50	.47/.28	6-Dip	255-1348-ND	4.14	3.81	3.38	2.88	AQV414EH
AQW210 and AQW214 Series Solid State Relays														
2	DPST-NO	120mA	350V	5,000	23/35	5-50	.25/.05	8-Dip	255-1349-ND	5.29	4.86	4.32	3.68	AQW210EH
	DPST-NO	100mA	400V	1,500	30/50	5-50	.31/0.5	8-Dip	255-1158-ND	6.47	5.94	5.28	4.49	AQW214
	DPST-NO	100mA	400V	1,500	30/50	5-50	.31/0.5	8-SMT	255-1159-ND	6.47	5.94	5.28	4.49	AQW214A
	DPST-NO	80mA	400V	1,500	30/50	5-50	.31/0.5	8-SOP	255-1160-ND	6.91	6.35	5.64	4.80	AQW214S
AQW414 Series Solid State Relays														
2	DPST-NC	100mA	400V	1,500	26/50	5-50	1/1	8-Dip	255-1161-ND	8.09	7.43	6.60	5.61	AQW414
	DPST-NC	100mA	400V	5,000	26/50	5-50	.46/.40	8-Dip	255-1350-ND	6.98	6.42	5.70	4.85	AQW414EH
	DPST-O/C	100mA	400V	5,000	27/50	5-50	.28/.04	8-Dip	255-1351-ND	5.76	5.29	4.70	4.00	AQW614EH
	DPST-NC	100mA	400V	1,500	26/50	5-50	1/1	8-SMT	255-1162-ND	8.09	7.43	6.60	5.61	AQW414A
AQV221 Series Radio Frequency Solid State Relays														
1	SPST-NO	80mA	40V	1,500	22/35	5-50	.3/0.1	6-Dip	255-1163-ND	4.34	3.99	3.54	3.01	AQV221
	SPST-NO	80mA	40V	1,500	22/35	5-50	.3/0.1	6-SMT	255-1164-ND	4.34	3.99	3.54	3.01	AQV221A

Fig.	Cont. Arrange.	Input Voltage (min-max.)	Dropout Voltage (min.)	Output Current (min-max.)	Output Voltage (min./max.)	Type	Digi-Key Part No.	Price Each				Aromat Part No.
								1	25	50	100	
AQ2 Sip Series Conformal Coated SSR												
3	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-125VAC	Zero-Cross	255-1166-ND	12.17	11.23	9.98	8.52	AQ2A1-C1-ZT12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-125VAC	Zero-Cross	255-1167-ND	12.17	11.23	9.98	8.52	AQ2A1-C1-ZT24VDC
	SPST-NO	4-6VDC	.5V	.025-2A	75-250VAC	Zero-Cross	255-1168-ND	13.43	12.33	10.96	9.32	AQ2A2-C1-ZT5VDC
	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-250VAC	Zero-Cross	255-1169-ND	13.43	12.33	10.96	9.32	AQ2A2-C1-ZT12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-250VAC	Zero-Cross	255-1170-ND	13.43	12.33	10.96	9.32	AQ2A2-C1-ZT24VDC
	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-125VAC	Phase Controlled	255-1172-ND	9.45	8.71	7.74	6.62	AQ2A1-C1-T12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-125VAC	Phase Controlled	255-1173-ND	9.45	8.71	7.74	6.62	AQ2A1-C1-T24VDC
	SPST-NO	4-6VDC	.5V	.025-2A	75-250VAC	Phase Controlled	255-1174-ND	10.56	9.70	8.62	7.33	AQ2A2-C1-T5VDC
	SPST-NO	9.6-14.4VDC	1.2V	.025-2A	75-250VAC	Phase Controlled	255-1175-ND	10.56	9.70	8.62	7.33	AQ2A2-C1-T12VDC
	SPST-NO	21.6-26.4VDC	2.4V	.025-2A	75-250VAC	Phase Controlled	255-1176-ND	10.56	9.70	8.62	7.33	AQ2A2-C1-T24VDC

CLARE

OptoMOS Solid State Switches

Figure 1 through 4:

Single and dual output solid state switches housed in a 6 or 8 pin dip package. Highly reliable bounce-free, arc-free switching with over 15 billion operations possible. UL, CSA approved and FCC compatible.

"TS" Series Telecom Switches (Fig. 5):

Incorporates an isolated solid state relay for hookswitch and dial pulse or loop start switching with a bi-directional Opto-coupler for ring detection and on-hook/off-hook detection. Eliminates up to eight discrete components.

Clare's "LDA" Series Current Sensors (Fig. 6, 7):

Provides optical isolation between control and switching circuits. Available in a single transistor output (33hfe min) or darlington output (300 hfe min.). Applications include Telecom, Industrial Control and Instrumentation.

Industrial Control and Instrumentation:

Figure 8: Dual linear optocouplers with a wide bandwidth and high gain (55 - 142%), available in either Dip, SMT, OR Flat package.

Clare's PLCA110 (Figure 9):

Features a 1-Form-A Solid State Relay integrated with a Solid State Surge Arrester. The Solid State Surge Arrester is designed for secondary telecom line protection, meets FCC Part 68 and provides breakover voltage and repetitive surges with no degradation. The relay portion offers reliable bounce free switching. Ideal for handling hook switch/dial pulse functions.

Specifications:

Operating temperature: -40 to 85° C. Isolation voltage input to output; 2500 vrms. Input power dissipation at 25°C; 150mW. Reverse voltage; 5V max.

Fig. 1

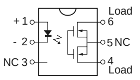


Fig. 2

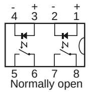


Fig. 3

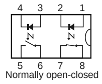


Fig. 4

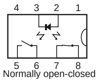


Fig. 5

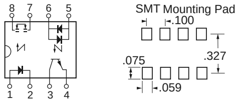


Fig. 6

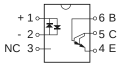


Fig. 7

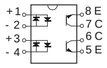


Fig. 8

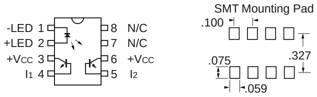


Fig. 9

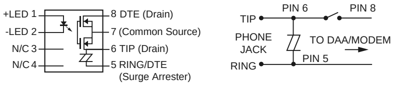


Fig. 10

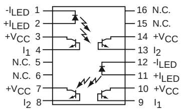


Fig. 11

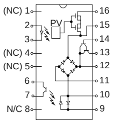


Fig.	Circuit	Pkg.	Input* Current Min/Max	Output Current Max.	Load Voltage	Turn On/ Turn Off (mS)	Digi-Key Part No.	Cut Tape Price Each 1	25	50	T&R† Pricing 1,000	Clare Part No.
1	SPST-NO	6 Dip	2/100	200mA	350	5/3	CLA101-ND	2.99	2.53	2.07	—	LCA110
1	SPST-NO	SMT-6	2/100	200mA	350	5/3	CLA102CT-ND‡	3.51	2.97	2.43	1128.00	LCA110STR
1	SPST-NC	6 Dip	5/100	200mA	350	3/3	CLA105-ND	3.38	2.86	2.34	—	LCB110
1	SPST-NO	6 Dip	5/100	150mA	400	1/.25	CLA107-ND	4.36	3.69	3.02	—	PLA110
2	DPST-NO	8 Dip	5/100	120mA	350	3/3	CLA103-ND	5.43	4.60	3.76	—	LAA110
3	DPST-NC/NO	8 Dip	5/100	120mA	350	3/3	CLA104-ND	5.92	5.01	4.10	—	LBA110
4	DPST-NC/NO	8 Dip	8/100	120mA	350	4/4	CLA106-ND	5.33	4.51	3.69	—	LCC110
5	TELCOM	8 Dip	2/6	120mA	350	3/3	CLA108-ND	3.54	3.00	2.46	—	TS117
5	TELCOM	SMT-8	2/6	120mA	350	3/3	CLA110CT-ND‡	6.79	5.75	4.71	1320.00	TS117STR
6	DARLINGTON	6 Dip	2/6	100mA	100	3/3	CLA111-ND	1.01	.86	.70	—	LDA110
7	DUAL TRANS	8 Dip	2/6	100mA	100	3/3	CLA112-ND	1.92	1.63	1.33	—	LDA200
8	DUAL TRANS	8 Dip	1/2	120mA	350	5/2	CLA113-ND	3.67	3.11	2.55	—	LOC110
8	DUAL TRANS	SMT-8	1/2	120mA	350	5/2	CLA114CT-ND‡	4.88	4.13	3.38	1495.00	LOC110STR
8	DUAL TRANS	8 Dip	2/50	120mA	350	5/2	CLA116-ND	4.13	3.50	2.86	—	LOC111
8	DUAL TRANS	Flat Pk.	2/50	120mA	350	5/2	CLA118CT-ND‡	5.27	4.46	3.65	1651.00	LOC111PTR
9	TELCOM	8 Dip	2/50	120mA	350	5/2	CLA119-ND	6.96	5.89	4.82	—	PLCA110
9	TELCOM	SMT-8	2/50	120mA	350	5/2	CLA120CT-ND‡	7.28	6.16	5.04	2912.00	PLCA110STR
10	QUAD TRANS	Flat Pk.	1/35	120mA	100	5/2	CLA130-ND	10.01	8.47	6.93	—	LOC211P
11	TELCOM	Flat Pk.	2/6	120mA	350	1/3	CLA131-ND	5.30	4.49	3.67	—	ITC117P

* Input Voltage - 1.2V Typical, 1.4V Max. † Replace CT with TR in part number for Tape & Reel part number. ‡ CT- Cut Tape package

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International
IOR Rectifier

Microelectronic Power IC Relays

Fig. 1

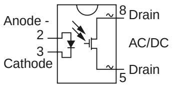


Fig. 2

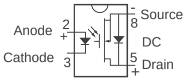


Fig. 3

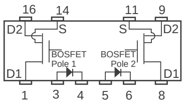


Fig. 4

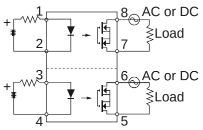


Fig. 5

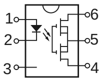


Fig. 6

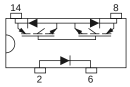


Fig. 7

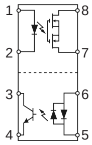


Fig.	Input Circuit Vf (led)	Imin (mA)	Imax	Vrange	Output Circuit Imax (mA)	Ton/ Toff	Package	Digi-Key Part No.	Price Each 1	10	100
1	1.0	5	25	0-60V AC/DC	1000	2ms/0.5ms	8-SMT	PVAZ172NS-ND	9.14	7.31	5.49
	1.2	10	25	0-60V AC/DC	1000	2ms/0.5ms	8-Dip	PVAZ172N-ND	10.00	8.00	7.00
	7.0	2	25	0 to ±100V AC/DC	375	150µs/70µs	8-Dip	PVA1352N-ND	6.00	4.80	3.60
	7.0	2	25	0 to ±100V AC/DC	375	150µs/70µs	8-SMT	PVA1352NS-ND *NEW!*	6.08	4.17	3.65
	7.0	2	25	0 to ±100V AC/DC	375	150µs/70µs	8-Dip	PVA1354N-ND	6.50	5.20	3.90
	7.0	2	25	0 to ±100V AC/DC	375	150µs/70µs	8-SMT	PVA1354NS-ND *NEW!*	6.58	4.51	3.95
	7.0	2	25	0 to ±200V AC/DC	150	100µs/70µs	8-Dip	PVA2352N-ND	5.38	4.30	3.23
	7.0	—	25	0 to ±200V AC/DC	150	100µs/70µs	8-SMT	PVA2352NS-ND *NEW!*	5.45	3.74	3.27
	7.0	2	25	0 to ±300V AC/DC	50	60µs/60µs	8-Dip	PVA3054N-ND	6.50	5.20	3.90
	7.0	2	25	0 to ±300V AC/DC	50	60µs/60µs	8-SMT	PVA3054NS-ND *NEW!*	6.58	4.51	3.95
	7.0	2	25	0 to ±300V AC/DC	50	60µs/60µs	8-Dip	PVA3055N-ND	7.50	6.00	4.50
	7.0	2	25	0 to ±300V AC/DC	50	60µs/60µs	8-SMT	PVA3055NS-ND *NEW!*	7.58	5.20	4.55
	7.0	2	25	0 to ±300V AC/DC	150	100µs/70µs	8-Dip	PVA3324N-ND	7.50	6.00	4.50
	7.0	1	25	0 to ±300V AC/DC	150	100µs/70µs	8-SMT	PVA3324NS-ND *NEW!*	7.58	5.20	4.55
	7.0	2	25	0 to ±300V AC/DC	150	100µs/70µs	8-Dip	PVA3354N-ND	6.50	5.20	3.69
	7.0	—	25	0 to ±300V AC/DC	150	100µs/70µs	8-SMT	PVA3354NS-ND *NEW!*	6.58	4.51	3.95
	7.0	2	25	0 to ±100V AC/DC	160	25µs/15µs	8-Dip	PVD1352N-ND	6.38	5.10	3.83
	7.0	2	25	0 to ±100V AC/DC	550	25µs/15µs	8-Dip	PVD1354N-ND	6.88	5.50	4.13
2	1.2	20	25	0-60V DC	1500	2ms/0.5ms	8-Dip	PVDZ172N-ND	8.50	6.80	5.95
	1.25	5	25	0-60V DC	1500	2ms/0.5ms	8-SMT	PVDZ172NS-ND	8.65	6.92	6.05
	7.0	2	25	0-100V DC	550	150µs/70µs	8-SMT	PVD1352NS-ND *NEW!*	6.45	4.43	3.87
	7.0	2	25	0-100V DC	550	150µs/70µs	8-SMT	PVD1354NS-ND *NEW!*	6.95	4.77	4.17
	7.0	2	25	0-200VDC	240	100µs/70µs	8-Dip	PVD2352N-ND	5.75	4.60	3.45
	7.0	2	25	0-300VDC	240	100µs/70µs	8-SMT	PVD2352NS-ND *NEW!*	5.83	4.00	3.50
	7.0	2	25	0-300VDC	240	100µs/70µs	8-Dip	PVD3354N-ND	6.50	5.20	4.13
	7.0	2	25	0-300VDC	240	100µs/70µs	8-SMT	PVD3354NS-ND *NEW!*	6.95	4.77	4.17
3	7.0	2	25	0 to ±100V AC/DC	360	150µs/70µs	16-Dip	PVR1300N-ND	13.13	10.50	7.88
	7.0	2	25	0 to ±100V AC/DC	360	150µs/70µs	16-Dip	PVR1301N-ND	14.00	11.20	8.40
	7.0	2	25	0 to ±200V AC/DC	165	100µs/70µs	16-Dip	PVR2300N-ND	11.88	9.50	7.13
	7.0	2	25	0 to ±300V AC/DC	165	100µs/70µs	16-Dip	PVR3300N-ND	13.13	10.50	7.88
	7.0	2	25	0 to ±300V AC/DC	165	100µs/70µs	16-Dip	PVR3301N-ND	14.00	11.20	8.40
4	1.25	2	25	0-250V AC/DC	170	3ms/0.5ms	8-Dip	PVT322-ND	5.35	4.28	3.75
	1.25	2	25	0-250V AC/DC	170	3.0ms/0.5ms	8-SMT	PVT322S-ND	5.38	4.30	3.76
	1.25	2	25	0 to ±250V AC/DC	170	3.0ms/0.5ms	8-SMT	PVT322AS-TTR-ND *NEW!*	3956.25/750		
	1.2	2	25	0-400V AC/DC	120	2ms/2ms	8-Dip	PVT422-ND	5.20	4.16	3.64
	1.25	2	25	0-400V AC/DC	120	2ms/2ms	SMT Thin-Pak	PVT422P-ND	5.68	4.54	3.98
5	1.2	5	25	0-60V AC/DC	1000	2ms/0.5ms	6-Dip	PVG612-ND	5.96	4.30	3.52
	1.25	5	25	0 to ± 60V AC/DC	1000	2.0ms/0.5ms	6-SMT	PVG612S-ND	6.00	4.80	4.20
	7.0	5	25	0 to ± 60V AC/DC	1.0	2.0ms/0.5ms	6-DiP	PVG613-ND *NEW!*	9.48	6.50	5.69
	7.0	5	25	0 to ± 60V AC/DC	1.0	2.0ms/0.5ms	6-SMT	PVG613S-ND *NEW!*	9.58	6.57	5.75
	1.2	3	25	0-20V AC/DC	2500	5ms/0.5ms	6-Dip	PVN012-ND	5.85	4.68	4.10
	1.25	3	25	0 to ±20V AC/DC	2500	5.0ms/0.5ms	6-SMT	PVN012S-ND	6.00	4.80	4.20
	7.0	3	25	0 to ±20V AC/DC	2.5	5.0ms/0.5ms	6-Dip	PVN013-ND *NEW!*	9.48	6.50	5.69
	7.0	3	25	0 to ±20V AC/DC	2.5	5.0ms/0.5ms	6-SMT	PVN013S-ND *NEW!*	9.58	6.57	5.75
	1.2	2	25	0-250V AC/DC	190	3ms/0.5ms	6-Dip	PVT312-ND	2.55	2.04	1.79
	1.2	2	25	0-250V AC/DC	170	3ms/0.5ms	6-Dip	PVT312L-ND†	2.60	2.08	1.82
	1.2	5	25	0-400V AC/DC	140	2ms/0.5ms	6-Dip	PVT412-ND	2.55	2.04	1.79
	1.2	5	25	0-400V AC/DC	120	2ms/0.5ms	6-Dip	PVT412L-ND	2.60	2.08	1.82
	1.25	3	25	0 to ±400V AC/DC	140	2.0ms/0.5ms	6-SMT	PVT412LS-ND	2.65	2.12	1.85
	1.25	3	25	0 to ±400V AC/DC	140	2.0ms/0.5ms	6-SMT	PVT412S-ND	2.58	2.06	1.81
	1.2	5	25	0-400V AC/DC	140	500µs/200µs	6-Dip	PVU414-ND	5.45	4.36	3.82
6	1.25	5	25	0-280V(AC) RMS 0-400V (DC)	1000	7ms/1ms	14-Dip	PVX6012-ND	10.88	8.70	6.69
7	1.25	3	25	0-400V AC/DC	120	2.0ms/0.5ms	Thin-Pak	PVO402P-ND	5.55	4.44	3.89
	0.4	5	25	0 to ±400V AC/DC	150	1.0ms/0.5ms	SMT Thin-Pak	PVO402AP-ND	5.36	4.29	3.22

† Employs current limiting circuitry to withstand current transients.

NEW! **SHARP MICROELECTRONICS OF THE AMERICAS**

Solid State Relays

Fig.	Input			Output			Package Type	Digi-Key Part No.	Tube Price Each			Sharp Part No.
	Voltage Typ.	Current Min. (mA)	Current Max. (mA)	Voltage VRMS Max.	Current IT (RMS) (A)	Holding Current (mA) Max.			1	10	25	
1	1.2	5	50	280	1.5	25	16-Dip	425-1182-5-ND	2.55	2.13	1.81	PR21HD22NSZ
		10	50	280	1.5	25	16-Dip	425-1207-5-ND	2.52	2.10	1.79	S101DH2
		5	50	420	1.5	25	16-Dip	425-1193-5-ND	2.73	2.28	1.94	PR31HD22NSZ
2	1.2	5	50	280	0.6	25	8-SMD	425-1380-1-ND‡	1.60	—	1.20	PR26MF11NIP
								425-1380-2-NDΔ#		520.00/1,000		PR26MF11NIP
		5	50	280	0.6	25	8-Dip	425-1184-5-ND	1.30	1.10	1.00	PR26MF12NSZ
		5	50	280	0.9	25	8-Dip	425-1187-5-ND	1.56	1.32	1.20	PR29MF12NSZ
		10	50	280	0.6	25	8-Dip	425-1183-5-ND	1.27	1.08	.98	PR26MF11NSZ
		10	50	280	0.9	25	8-Dip	425-1186-5-ND	1.53	1.30	1.18	PR29MF11NSZ
		5	50	420	0.6	25	8-Dip	425-1197-5-ND	1.63	1.38	1.25	PR36MF12NSZ
		5	50	420	0.9	25	8-Dip	425-1202-5-ND	1.68	1.40	1.19	PR39MF12NSZ
		10	50	420	0.6	25	8-Dip	425-1196-5-ND	1.50	1.27	1.15	PR36MF11NSZ
		10	50	420	0.9	25	8-Dip	425-1201-5-ND	1.59	1.33	1.13	PR39MF11NSZ
		10	50	420	1.2	25	8-Dip	425-1205-5-ND	1.63	1.38	1.25	PR3BMF11NSZ
3	1.2	10	50	280	0.6	25	8-Dip	425-1185-5-ND	1.40	1.19	1.08	PR26MF21NSZ
		10	50	280	0.9	25	8-Dip	425-1188-5-ND	1.56	1.30	1.11	PR29MF21NSZ
		5	50	420	0.3	25	8-Dip	425-1195-5-ND	1.74	1.45	1.24	PR33MD22NSZ
		5	50	420	0.6	25	8-Dip	425-1199-5-ND	1.35	1.13	.96	PR36MF22NSZ
		5	50	420	0.9	25	8-Dip	425-1200-5-ND	2.19	1.83	1.56	PR39MD22NSZ
		5	50	420	0.9	25	8-Dip	425-1204-5-ND	1.83	1.53	1.30	PR39MF22NSZ
		10	50	420	0.6	25	8-Dip	425-1198-5-ND	1.63	1.38	1.25	PR36MF21NSZ
		10	50	420	0.9	25	8-Dip	425-1203-5-ND	1.74	1.45	1.24	PR39MF21NSZ
4	1.2	10	50	420	.06	3.5	6-Dip	425-1194-5-ND	1.11	.94	.85	PR31MA11NTZ
5	1.2	10	50	280	1.5	25	16-Dip	425-1206-5-ND	2.22	1.85	1.58	S101DH1
		10	50	420	1.5	25	16-Dip	425-1240-5-ND	2.43	2.03	1.73	S201DH1
6	1.2	8	50	280	8.0	50	4-Sip	425-1217-5-ND	8.15	7.34	6.52	S102S11
		15	50	280	3.0	50	4-Sip	425-1212-5-ND	4.68	4.21	3.74	S101S15V
		8	50	420	8.0	50	4-Sip	425-1248-5-ND	8.70	7.83	6.96	S202S11
		10	50	420	8	50	4-Sip	425-1189-5-ND	5.98	5.38	4.78	PR308S31ESU
7	1.2	8	50	280	8.0	50	4-Sip	425-1218-5-ND	8.98	8.08	7.18	S102S12
		15	50	280	3.0	50	4-Sip	425-1213-5-ND	5.40	4.86	4.32	S101S16V
		8	50	420	8.0	50	4-Sip	425-1249-5-ND	9.40	8.46	7.52	S202S12
		8	50	420	16	25	4-Sip	425-1254-5-ND	7.00	6.30	5.60	S202TA1
		10	50	420	8	50	4-Sip	425-1190-5-ND	6.13	5.52	4.90	PR308S41ESU
8	1.2	8	50	280	2	25	4-Sip	425-1219-5-ND	2.80	2.52	2.24	S102T01
		8	50	280	5	50	4-Sip	425-1221-5-ND	3.80	3.42	3.04	S105T01
		8	50	280	8	50	4-Sip	425-1223-5-ND	4.13	3.72	3.30	S108T01
		8	50	420	2	25	4-Sip	425-1252-5-ND	3.08	2.77	2.46	S202T01
		8	50	420	2	25	4-Sip	425-1255-5-ND*	3.73	3.36	2.98	S202TY1
		8	50	420	5	50	4-Sip	425-1257-5-ND	4.13	3.72	3.30	S205T01
		8	50	420	5	50	4-Sip	425-1259-5-ND*	3.88	3.49	3.10	S205TY1
		8	50	420	8	50	4-Sip	425-1261-5-ND	4.45	4.01	3.56	S208T01
		8	50	420	8	50	4-Sip	425-1263-5-ND*	4.23	3.81	3.38	S208TY1
		10	50	420	8	50	4-Sip	425-1191-5-ND	4.78	4.30	3.82	PR308T11ESZ
9	1.2	8	50	280	2	25	4-Sip	425-1220-5-ND	3.20	2.88	2.56	S102T02
		8	50	280	5	50	4-Sip	425-1222-5-ND	4.28	3.85	3.42	S105T02
		8	50	280	8	50	4-Sip	425-1224-5-ND	4.35	3.92	3.48	S108T02
		8	50	420	2	25	4-Sip	425-1253-5-ND	3.05	2.75	2.44	S202T02
		8	50	420	2	25	4-Sip	425-1256-5-ND*	3.80	3.42	3.04	S202TY2
		8	50	420	5	50	4-Sip	425-1258-5-ND	4.60	4.14	3.68	S205T02
		8	50	420	5	50	4-Sip	425-1260-5-ND*	3.90	3.51	3.12	S205TY2
		8	50	420	8	50	4-Sip	425-1262-5-ND	4.80	4.32	3.84	S208T02
		8	50	420	8	50	4-Sip	425-1264-5-ND*	4.25	3.83	3.40	S208TY2
		10	50	420	8	50	4-Sip	425-1192-5-ND	4.93	4.44	3.94	PR308T21ESZ
10	5	—	—	120	1.6	10	4-Sip	425-1208-5-ND	4.78	4.30	3.82	S101N11
		—	—	240	1.6	20	4-Sip	425-1241-5-ND	5.08	4.57	4.06	S201N11
11	5	—	—	120	1.6	10	4-Sip	425-1209-5-ND	4.93	4.44	3.94	S101N12
		—	—	240	1.6	20	4-Sip	425-1242-5-ND	5.25	4.73	4.20	S201N12
12	1.2	5	50	280	8.0	50	4-Sip	425-1216-5-ND	5.20	4.68	4.16	S102S03
		8	50	280	8.0	50	4-Sip	425-1214-5-ND	4.13	3.72	3.30	S102S01
		8	50	280	12	50	4-Sip	425-1225-5-ND	5.00	4.50	4.00	S112S01
		8	50	280	16	50	4-Sip	425-1227-5-ND	5.55	5.00	4.44	S116S01
		15	50	280	3.0	50	4-Sip	425-1210-5-ND	3.98	3.58	3.18	S101S05V
		5	50	420	8	50	4-Sip	425-1247-5-ND	5.23	4.71	4.18	S202S03
		8	50	420	8.0	50	4-Sip	425-1245-5-ND	4.28	3.85	3.42	S202S01
		8	50	420	8.0	50	4-Sip	425-1250-5-ND	4.73	4.26	3.78	S202SE1
		8	50	420	12	50	4-Sip	425-1265-5-ND	5.20	4.68	4.16	S212S01
		8	50	420	16	50	4-Sip	425-1266-5-ND	5.50	4.95	4.40	S216S01
		8	50	420	16	50	4-Sip	425-1268-5-ND	6.08	5.47	4.86	S216SE1
		15	50	420	3.0	50	4-Sip	425-1243-5-ND	4.13	3.72	3.30	S201S05V
13	1.2	8	50	280	8.0	50	4-Sip	425-1215-5-ND	4.33	3.90	3.46	S102S02
		8	50	280	12	50	4-Sip	425-1226-5-ND	5.55	5.00	4.44	S112S02
		8	50	280	16	50	4-Sip	425-1228-5-ND	6.05	5.45	4.84	S116S02
		15	50	280	3.0	50	4-Sip	425-1211-5-ND	4.28	3.85	3.42	S101S06V
		8	50	420	8.0	50	4-Sip	425-1246-5-ND	5.25	4.73	4.20	S202S02
		8	50	420	8.0	50	4-Sip	425-1251-5-ND	5.25	4.73	4.20	S202SE2
		8	50	420	16	50	4-Sip	425-1267-5-ND	5.83	5.25	4.66	S216S02
		8	50	420	16	50	4-Sip	425-1269-5-ND	6.23	5.61	4.98	S216SE2
		15	50	420	3.0	50	4-Sip	425-1244-5-ND	4.60	4.14	3.68	S201S06V

* Approved by TUV, No. R9750791 and DIN-VDE 0884　　# Pending UL and CSA approval　　‡ Cut Tape product　　Δ Tape & Reel product

Fig. 1

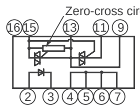


Fig. 2

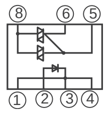


Fig. 3

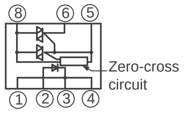


Fig. 4

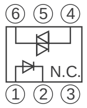


Fig. 5

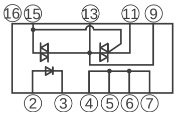


Fig. 6

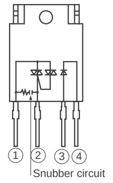


Fig. 7

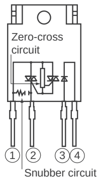


Fig. 8

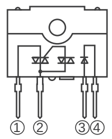


Fig. 9

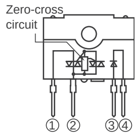


Fig. 10

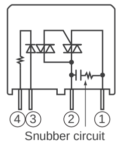


Fig. 11

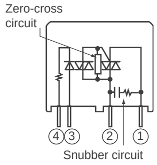


Fig. 12

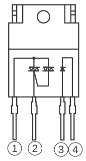
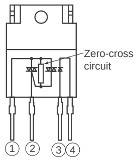


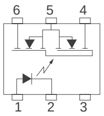
Fig. 13



NEC

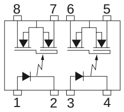
OCMOS FET Solid State Relays

Fig. 1



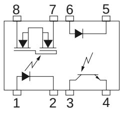
1 LED Anode
2 LED Cathode
3 NC
4 MOSFET Drain
5 MOSFET Source
6 MOSFET Drain

Fig. 2



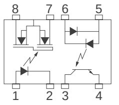
1 LED Anode
2 LED Cathode
3 LED Anode
4 LED Cathode
5 MOSFET
6 MOSFET
7 MOSFET
8 MOSFET

Fig. 3



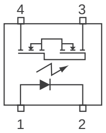
1 LED Anode
2 LED Cathode
3 Tr Collector
4 Tr Emitter
5 LED Anode
6 LED Cathode
7 MOSFET
8 MOSFET

Fig. 4



1 LED Anode
2 LED Cathode
3 Tr Collector
4 Tr Collector
5 LED Anode/Cathode
6 LED Anode/Cathode
7 MOSFET
8 MOSFET

Fig. 5 *NEW!*



1. LED Anode
2. LED Cathode
3. MOS FET
4. MOS FET

Fig.	V load V	I load mA	PD mW	Ron Ohms	t_{on} ms	t_{off} ms	Output Type	Digi-Key Part No.	Price Each 1	10	100
1	60	1800	560	0.2	3.0	1.0	1ch NO	PS710A-1A-ND *NEW!*	6.50	5.85	4.99
1	60	1800	560	0.2	3.0	1.0	1ch NO	PS710AL-1A-ND* *NEW!*	6.53	5.88	5.01
2	100	100	375	6	0.4	0.2	2ch NO	PS7111-2A-ND	5.88	5.29	4.51
2	100	100	375	6	0.4	0.2	2ch NO	PS7111L-2A-ND*	5.40	4.86	4.14
1	100	200	560	6	0.4	0.2	1ch NO	PS7112-1A-ND	3.25	2.93	2.50
1	100	200	560	6	0.4	0.2	1ch NO	PS7112L-1A-ND*	3.28	2.95	2.52
1	100	350	560	2.5	3	0.2	1ch NO	PS7113-1A-ND	3.00	2.70	2.30
1	100	350	560	2.5	3	0.2	1ch NO	PS7113L-1A-ND*	3.00	2.70	2.30
2	100	350	375	2.5	3	0.2	2ch NO	PS7113-2A-ND	5.80	5.22	4.45
2	100	350	375	2.5	3	0.2	2ch NO	PS7113L-2A-ND*	5.80	5.22	4.45
1	200	200	560	5	2	0.2	1ch NO	PS7122-1A-ND	3.25	2.93	2.50
1	200	200	560	5	2	0.2	1ch NO	PS7122L-1A-ND*	3.25	2.93	2.50
2	200	200	375	5	2	0.2	2ch NO	PS7122-2A-ND	6.50	5.85	4.99
2	200	200	375	5	2	0.2	2ch NO	PS7122L-2A-ND*	6.50	5.85	4.99
1	400	150	560	30	1	0.2	1ch NO	PS7141-1A-ND	2.50	2.25	1.92
1	400	150	560	30	1	0.2	1ch NO	PS7141L-1A-ND*	2.50	2.25	1.92
1	400	150	560	24	0.02	0.2	1ch NC	PS7141-1B-ND	2.75	2.48	2.11
1	400	150	560	24	0.02	0.2	1ch NC	PS7141L-1B-ND*	2.75	2.48	2.11
2	400	150	375	24	0.02	0.2	1A & 1B	PS7141-1C-ND	5.00	4.50	3.84
2	400	150	375	30	1	0.2	2ch NO	PS7141-2A-ND	5.25	4.73	4.03
2	400	150	375	24	0.02	0.2	2ch NC	PS7141-2B-ND	5.75	5.18	4.41
2	400	150	375	24	0.02	0.2	2ch NC	PS7141L-2B-ND*	5.00	4.50	3.84
1	400	200	560	10	5	0.2	1ch NO	PS7142-1A-ND	2.50	2.25	1.92
1	400	200	560	10	5	0.2	1ch NO	PS7142L-1A-ND*	3.55	3.20	2.73
1	600	90	560	50	1.5	0.2	1ch NO	PS7160-1A-ND	3.00	2.70	2.30
1	600	90	560	50	1.5	0.2	1ch NO	PS7160L-1A-ND*	3.00	2.70	2.30
2	600	90	375	50	1.5	0.2	2ch NO	PS7160-2A-ND	5.98	5.38	4.59
2	600	90	375	50	1.5	0.2	2ch NO	PS7160L-2A-ND*	5.98	5.38	4.59
5	60	600	300	0.8	2.0	0.5	1ch NO	PS7206-1A-ND† *NEW!*	4.25	3.83	3.26
2	100	100	150	6	2	0.2	2ch NO	PS7211-2A-ND†	5.98	5.38	4.59
5	100	400	300	1.2	2.0	1.0	1ch NO	PS7214-1A-ND† *NEW!*	4.13	3.72	3.17
4	400	120	430	30	1	0.2	1A & PS2701	PS7241-AT1-ND†	2.88	2.59	2.21
3	400	120	430	30	1	0.2	1A & PS2705	PS7241-AT5-ND†	3.13	2.82	2.40
5	400	120	300	30	2.0	0.2	1ch NO	PS7241-1A-ND† *NEW!*	2.42	2.02	1.70
5	400	120	300	30	0.2	2.0	1ch NC	PS7241-1B-ND† *NEW!*	3.45	3.11	2.65
5	40	100	100	12	0.5	0.2	1ch NO	PS7200A-1A-ND† *NEW!*	4.50	4.05	3.45
5	40	250	100	1.5	1.0	0.2	1ch NO	PS7200B-1A-ND† *NEW!*	4.88	4.39	3.74
5	40	160	100	3.5	0.5	1.0	1ch NO	PS7200H-1A-ND† *NEW!*	5.88	5.29	4.51
5	40	200	100	2.0	1.0	1.0	1ch NO	PS7200K-1A-ND† *NEW!*	5.88	5.29	4.51
5	40	120	100	14	0.5	1.0	1ch NO	PS7200R-1A-ND† *NEW!*	5.88	5.29	4.51
1	400	150	560	10	2	0.2	1ch NO	PS7341-1A-ND	2.50	2.25	1.92
1	400	150	560	10	2	0.2	1ch NO	PS7341L-1A-ND*	2.50	2.25	1.92
1	400	200	560	5	5	0.2	1ch NO	PS7342-1A-ND	4.40	3.96	3.38
1	600	90	560	50	2	0.2	1ch NO	PS7360-1A-ND	3.25	2.93	2.50
1	600	90	560	50	2	0.2	1ch NO	PS7360L-1A-ND*	3.25	2.93	2.50
1	200	200	560	5	12	6.5	1ch NO	PS7522-1A-ND	4.10	3.69	3.15
2	200	200	375	5	12	6.5	2ch NO	PS7522-2A-ND	6.00	5.40	4.60

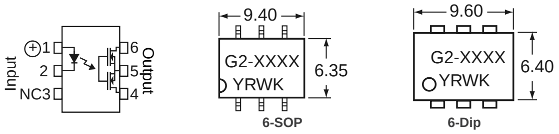
* Lead-Bent † SOP

CRYDOM COMPANY

Solid State Relays

9213B-ND Solid State Relay Design Guide **$19.95**

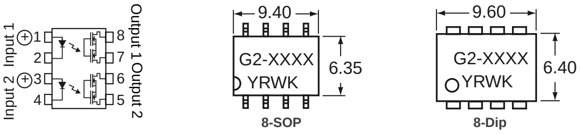
Fig. 1



6-SOP

6-Dip

Fig. 2



8-SOP

8-Dip

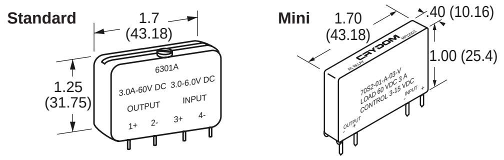
Crydom's G2 series of SSR's feature extremely low RDSon, low leakage and long lifetimes. Crydom's SSR's typically comprise an optical coupler, the output of which either drives the line directly or is used to switch a high-power device, such as a silicon-controlled rectifier (SCR) or thyristor. Whatever the drive component, it's the optical-isolation and no-moving-part aspects of the device that grant its many performance features. These features include high I/O isolation (though leakage current is a problem), long life (measured in millions of cycles), low acoustic noise, no contact bounce/arcing, mechanical ruggedness, and low drive-current requirements. They are available in tube packaging for small quantities and prototype work. Tape and reel packaging for automated insertion equipment.

Fig.	Contact	Input Volt.	Input I (mA)	Switch Volt.	Switch I (mA)	Package	Digi-Key Part No.	Tube Price Each			Crydom Part No.	Digi-Key Part No.	T&R Pricing 2,000	Crydom Part No.
								1	10	25				
G2 Series Solid State Mosfet														
1	SPST	1.4V	10-30	400V	150	6-Dip	CC1300-ND	2.48	2.25	1.80	G2-1A02-TT	—	—	—
	SPST	1.4V	10-30	400V	150	6-SOP	CC1301-ND	2.48	2.25	1.80	G2-1A02-ST	CC1301TR-ND	1255.50/M	G2-1A02-SR
	SPST	1.4V	10-30	400V	150	6-Dip	CC1302-ND	2.48	2.25	1.80	G2-1A03-TT	—	—	—
	SPST	1.4V	10-30	400V	150	6-SOP	CC1303-ND	2.48	2.25	1.80	G2-1A03-ST	CC1303TR-ND	1255.50/M	G2-1A03-SR
	SPST	1.4V	10-30	400V	120	6-Dip	CC1304-ND	2.26	2.05	1.64	G2-1A05-TT	—	—	—
	SPST	1.4V	10-30	400V	120	6-SOP	CC1305-ND	2.26	2.05	1.64	G2-1A05-ST	CC1305TR-ND	1147.50/M	G2-1A05-SR
	SPST	1.4V	10-30	250V	150	6-Dip	CC1306-ND	2.48	2.25	1.80	G2-1A06-TT	—	—	—
	SPST	1.4V	10-30	250V	150	6-SOP	CC1307-ND	2.48	2.25	1.80	G2-1A06-ST	CC1307TR-ND	1255.50/M	G2-1A06-SR
	SPST	1.4V	10-30	150V	450	6-Dip	CC1308-ND	3.03	2.75	2.20	G2-1A07-TT	—	—	—
	SPST	1.4V	10-30	150V	450	6-SOP	CC1309-ND	3.03	2.75	2.20	G2-1A07-ST	CC1309TR-ND	1525.50/M	G2-1A07-SR
	SPST	1.4V	10-30	350V	330	6-Dip	CC1310-ND	3.03	2.75	2.20	G2-1B01-TT	—	—	—
	SPST	1.4V	10-30	350V	330	6-SOP	CC1311-ND	3.03	2.75	2.20	G2-1B01-ST	CC1311TR-ND	1525.50/M	G2-1B01-SR
	SPST	1.4V	10-30	250V	400	6-Dip	CC1312-ND	3.03	2.75	2.20	G2-1B02-TT	—	—	—
	SPST	1.4V	10-30	250V	400	6-SOP	CC1313-ND	3.03	2.75	2.20	G2-1B02-ST	CC1313TR-ND	1525.50/M	G2-1B02-SR
G2 Series Multi-output Solid State														
2	DPST	1.4V	15-40	15V	150	8-Dip	CC1314-ND	6.19	5.63	4.50	G2-2A03-TT	—	—	—
	DPST	1.4V	15-40	15V	150	8-SOP	CC1315-ND	6.19	5.63	4.50	G2-2A03-ST	CC1315TR-ND	3078.00/M	G2-2A03-SR
	DPDT	1.4V	10-30	400V	110	8-Dip	CC1316-ND	5.23	4.75	3.80	G2-AB01-TT	—	—	—
	DPDT	1.4V	10-30	400V	110	8-SOP	CC1317-ND	5.23	4.75	3.80	G2-AB01-ST	CC1317TR-ND	2605.50/M	G2-AB01-SR
	DPDT	1.4V	10-30	250V	150	8-Dip	CC1318-ND	5.23	4.75	3.80	G2-AB02-TT	—	—	—
	DPDT	1.4V	10-30	250V	150	8-SOP	CC1319-ND	5.23	4.75	3.80	G2-AB02-ST	CC1319TR-ND	2605.50/M	G2-AB02-SR
	DPST	1.4V	10-30	400V	110	8-Dip	CC1320-ND	4.95	4.50	3.60	G2-DA01-TT	—	—	—
	DPST	1.4V	10-30	400V	110	8-SOP	CC1321-ND	4.95	4.50	3.60	G2-DA01-ST	CC1321TR-ND	2470.50/M	G2-DA01-SR
	DPST	1.4V	10-30	400V	70	8-Dip	CC1322-ND	4.73	4.30	3.44	G2-DA02-TT	—	—	—
	DPST	1.4V	10-30	400V	70	8-SOP	CC1323-ND	4.73	4.30	3.44	G2-DA02-ST	CC1323TR-ND	2362.50/M	G2-DA02-SR
	DPST	1.4V	10-30	400V	125	8-Dip	CC1324-ND	4.95	4.50	3.60	G2-DA03-TT	—	—	—
	DPST	1.4V	10-30	400V	125	8-SOP	CC1325-ND	4.95	4.50	3.60	G2-DA03-ST	CC1325TR-ND	2470.50/M	G2-DA03-SR
	DPST	1.4V	10-30	250V	125	8-Dip	CC1326-ND	4.95	4.50	3.60	G2-DA06-TT	—	—	—
	DPST	1.4V	10-30	250V	125	8-SOP	CC1327-ND	4.95	4.50	3.60	G2-DA06-ST	CC1327TR-ND	2470.50/M	G2-DA06-SR
	DPST	1.4V	10-30	350V	120	8-Dip	CC1328-ND	5.36	4.88	3.90	G2-DB01-TT	—	—	—
	DPST	1.4V	10-30	350V	120	8-SOP	CC1329-ND	5.36	4.88	3.90	G2-DB01-ST	CC1329TR-ND	2673.00/M	G2-DB01-SR
	DPST	1.4V	10-30	250V	140	8-Dip	CC1330-ND	5.36	4.88	3.90	G2-DB02-TT	—	—	—
	DPST	1.4V	10-30	250V	140	8-SOP	CC1331-ND	5.36	4.88	3.90	G2-DB02-ST	CC1331TR-ND	2673.00/M	G2-DB02-SR

(Continued)

CRYDOM COMPANY Solid State Relays *(Cont.)*

Fig. 3



Series IAC, IDC, OAC, ODC

• Opto-Isolated • Solid state I/O switching modules deliver an electrically clean, photo-isolated, noise free "output" interface from logic level control systems to external loads such as motors, valves, solenoids, etc. DMP versions are epoxy conformal coated for fast heat transfer.

Series 6

Series 6 buffered output modules contain additional internal amplification to reduce drive requirements to a level suitable for the Mos devices used in many microprocessor systems. Models are available with either inverting or no-inverting inputs, for 5 and 15 volt logic.

Fig.	Input Volt.	Input I (mA)	Output Current @	Output Voltage	Turn On Time	Turn Off Time	Digi-Key Part No.	Price Each			Crydom Part No.
								1	10	25	
I/O Modules — 5VDC System Voltage											
3	90-140VAC	7	.1-100 mA	.4-30VDC	20ms	20ms	CC1200-ND	7.33	6.88	6.65	IAC-5
	180-280VAC	5	.1-100 mA	.4-30VDC	20ms	20ms	CC1201-ND	8.28	7.77	7.51	IAC-5A
	10-36VDC	8	.1-100 mA	.4-30VDC	5ms	5ms	CC1202-ND	7.33	6.88	6.65	IDC-5
	3-6VDC	19	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1203-ND	7.33	6.88	6.65	OAC-5
	3-6VDC	19	.02-3A	24-280VAC	.5 cycle	.5 cycle	CC1204-ND	8.28	7.77	7.51	OAC-5A
	3-6VDC	14	.02-3A	5-60VDC	.3 ms	.3 ms	CC1205-ND	7.33	6.88	6.65	ODC-5
	3-32VDC	13	.1-100mA	.4-30VDC	1ms	1ms	CC1244-ND	16.92	15.77	14.67	IDC-5B
	10-36VDC	4	.1-100mA	.4-30VDC	5ms	5ms	CC1234-ND	11.51	10.68	9.94	DMP6101A
	90-140VDC	6	.1-100mA	.4-30VDC	20ms	20ms	CC1235-ND	11.70	10.86	10.10	DMP6201A
	180-280VDC	4	.1-100mA	.4-30VDC	20ms	20ms	CC1236-ND	12.64	11.73	10.91	DMP6202A
	3-6VDC	3	.02-3A	5-60VDC	.5ms	.5ms	CC1237-ND	11.82	10.97	10.21	DMP6301A
	3-6VDC	4	.02-3A	24-280VAC	.5 cycle	.5 cycle	CC1238-ND	12.64	11.73	10.91	DMP6402A
I/O Modules — 15VDC System Voltage											
3	90-140VAC	7	.1-100mA	.4-30VDC	20ms	20ms	CC1210-ND	10.70	9.97	9.28	IAC-15
	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1211-ND	11.67	10.88	10.12	IDC-15
	9-18VDC	20	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1212-ND	11.67	10.88	10.12	OAC-15
	9-18VDC	14	.02-3A	5-60VDC	.3ms	.3ms	CC1213-ND	10.70	9.97	9.28	ODC-15
I/O Modules — 24VDC System Voltage											
3	90-140VAC	7	.1-100mA	4-30VDC	20ms	20ms	CC1214-ND	9.73	9.06	8.43	IAC-24
	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1215-ND	10.70	9.97	9.28	IDC-24
	18-28VDC	10	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1216-ND	10.70	9.97	9.28	OAC-24
	18-28VDC	10	.02-3A	5-60VDC	.3ms	.3ms	CC1217-ND	10.21	9.52	8.86	ODC-24

Fig.	Input Volt.	Input I (mA)	Output Current @	Output Voltage	Turn On Time	Turn Off Time	Digi-Key Part No.	Price Each			Crydom Part No.
								1	10	25	
Series 6 — AC & DC Buffered Modules											
3	0-.8VDC	100µA	.02-3A	3-60VDC	100µS	100µS	CC1239-ND	19.17	17.78	16.54	6311
	2.4-6VDC	250µA	.02-3.5A	3-60VDC	100µS	100µS	CC1240-ND	19.60	18.18	16.92	6321
	0-.8VDC	100µA	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1241-ND	17.72	16.44	15.30	6411
	0-.8VDC	100µA	.02-3.5A	24-280VAC	.5 cycle	.5 cycle	CC1242-ND	19.70	18.27	17.00	6412
	2.4-6VDC	250µA	.02-3.5A	12-140VAC	.5 cycle	.5 cycle	CC1243-ND	17.51	16.24	15.11	6421
Mounting Board for 4-pos. Std. I/O Modules (Screw Term.)							CC1206-ND	26.86	25.56	24.94	PB-4
Mounting Board for 4-pos. Std. I/O Modules (Screw Term.)							CC1218-ND	29.32	27.91	27.22	PB-4R
Mounting Board for 8-pos. Std. I/O Modules (Card Edge Conn.)							CC1219-ND	52.46	49.93	48.70	PB-8
Mounting Board for 16-pos. Std. I/O Modules (Screw Term.)							CC1220-ND	121.61	115.75	112.90	PB-16T
Mounting Board for 16-pos. Std. I/O Modules (Card Edge Conn.)							CC1221-ND	95.92	91.30	89.05	PB-16A
Mini I/O Module — 5VDC System Voltage											
3	90-140VAC	7	.1-100mA	.4-30VDC	20ms	20ms	CC1222-ND	8.99	8.34	7.76	MIAC-5
	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1223-ND	8.99	8.34	7.76	MIDC-5
	3-6VDC	19	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1224-ND	8.99	8.34	7.76	MOAC-5
	3-6VDC	19	.02-3A	24-280VAC	.5 cycle	.5 cycle	CC1225-ND	10.16	9.43	8.77	MOAC-5A
	3-6VDC	14	.02-3A	5-60VDC	.3ms	.3ms	CC1226-ND	8.99	8.34	7.76	MODC-5
Mini I/O Module — 24VDC System Voltage											
3	10-36VDC	8	.1-100mA	.4-30VDC	5ms	5ms	CC1227-ND	10.16	9.43	8.77	MIDC-24
	18-28VDC	15	.02-3A	12-140VAC	.5 cycle	.5 cycle	CC1228-ND	10.75	9.97	9.28	MOAC-24
	18-28VDC	10	.02-3A	5-60VDC	.3ms	.3ms	CC1229-ND	10.16	9.43	8.77	MODC-24
Mounting Board for 4-pos. Mini I/O Modules (Screw Term.)							CC1230-ND	26.86	25.56	24.94	MS-4
Mounting Board for 8-pos. Mini I/O Modules (Card Edge Conn.)							CC1231-ND	52.46	49.93	48.70	MS-8H
Mounting Board for 16-pos. Mini I/O Modules (Card Edge Conn.)							CC1232-ND	95.92	91.30	89.05	MS-16H
Mounting Board for 24-pos. Mini I/O Modules (Card Edge Conn.)							CC1233-ND	162.25	154.42	150.62	MS-24H

Grayhill INC. Input/Output Modules and Racks

9154B-ND Grayhill Engineering Catalog................**$4.95**

Fig. 1 — Standard

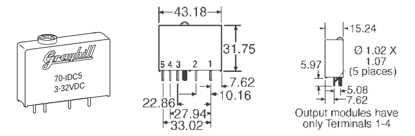


Fig. 2 — Mini

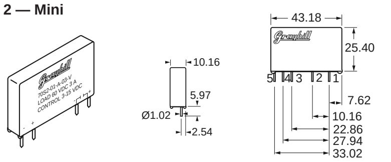


Fig. 3 — Mounting Board
(4 Pos. Board Shown)

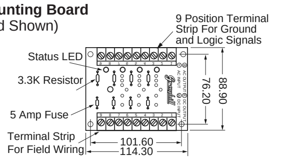

9 Position Terminal Strip For Ground and Logic Signals
Status LED
3.3K Resistor
5 Amp Fuse
Terminal Strip For Field Wiring
76.20
88.90
101.60
114.30

Fig. 4 — G5 Full Size

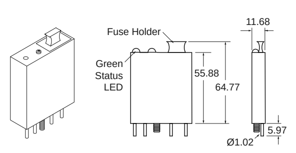


Fig. 5

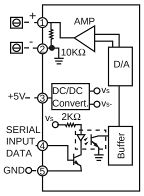


Fig. 6

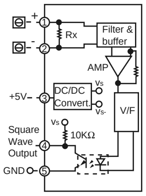
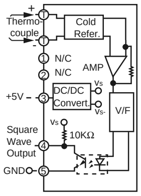


Fig. 7



Our line of pluggable input and output modules provide a low cost, versatile method for interconnecting real world analog and digital signals to data acquisition, monitoring, or control systems. All modules provide an optically isolated barrier between sensitive microprocessor or digital logic circuits and field power devices.

The case color of these modules identify their function: Digital AC Output Module = Black Case; Digital DC Output Module = Red Case; Digital AC Input Module = Yellow Case; Digital DC Input Module = White Case; Analog Output Module = Orange Case; Analog Input Module = Blue Case.

Features: • Transient protection meets the requirements of IEEE472 "Surge Withstanding Capability Test". • 4000 Vac optical isolation.

General Characteristics: • **Operating Temperature Range:** -40°C to +100°C • **UL File No.:** E58632 **CSA File No.:** L38763

General Specifications: • **Operating Temperature:** 0°C to 60°C • **Short Circuit Protection:** Output signal can be shorted to ground without damaging the module

Voltage Output Modules: • **Supply Voltage (Vcc) Range:** 4.5 - 5.5 Vdc • **Supply Current at 5 Vdc:** 140 mA max. • **Output Current (Sourcing):** 73G-OV5: -20mA max. at 5 Vdc, 73G-OV10: -10mA max. at 10Vdc, 73G-OV10B: -10mA max. at 10 Vdc

Current Output Modules: • **Supply Voltage:** 4.5 - 5.5 Vdc • **Supply Current at 5 VDC:** 240 mA max. • **Output Current (Sourcing):** 20mA max.

Voltage Input Modules: • **Supply Voltage:** 4.5 - 5.5 Vdc • **Supply Current at 5 Vdc:** 150 mA max. • **Output Frequency:** 14.4 to 72.0 KHz squarewave • **Squarewave Duty Cycle:** 40% to 60% • **Accuracy:** ±0.1% (DC Version), ±0.3% (AC Versions)

Thermocouple Input Modules: • **Supply Voltage:** 4.5 - 5.5 Vdc • **Supply Current at 5 Vdc:** 150 mA max. • **Output Frequency:** 14.4 to 72.0 KHz squarewave • **Squarewave Duty Cycle:** 40% to 60% • **Accuracy, Across Range at 25°C:** ±3.0°C

Fig.	Input Circuit		Output Circuit			T on Time	T off Time	Digi-Key Part No.	Price Each			Grayhill Part No.
	Vdc. Nom.	Range	Volt. Nom.	Range	Load Cur. (Rms)				1	10	100	
Digital I/O Modules — Standard Size												
1	5 VDC	2.5-10	120 VAC	24-140	.030-3.5A	8.3ms	8.3ms	GH7018-ND	9.13	8.22	7.77	70-OAC5
	5 VDC	2.5-10	60 VDC	3-60	.020-3.5A	20µs	50µs	GH7019-ND	9.13	8.22	7.77	70-ODC5
	120 VAC	90-140	5 VDC	3-60	1-50mA	20ms	20ms	GH7020-ND	9.13	8.22	7.77	70-IAC5
	5 VDC	3-32 VDC	5 VDC	3-60	1-50mA	250µs	400µs	GH7021-ND	9.13	8.22	7.77	70-IDC5

(Continued)

Fig.	Input Circuit Vdc. Nom.	Range	Output Circuit Volt. Nom.	Range	Load Cur. (Rms)	T on Time	T off Time	Digi-Key Part No.	Price Each 1	10	100	Grayhill Part No.
	Digital I/O Modules — Miniature Size											
2	5 VDC	2.5-10	120 VAC	24-140	.030-3A	8.3ms	8.3ms	GH7022-ND	9.13	8.22	7.77	70M-OAC5
	5 VDC	2.5-10	240 VAC	24-140	.030-3A	8.3ms	8.3ms	GH7023-ND	10.10	9.09	8.59	70M-OAC5A
	5 VDC	2.5-10	60 VDC	3-60	.020-3A	20µs	50µs	GH7024-ND	9.13	8.22	7.77	70M-ODC5
	15 VDC	10-18	60 VDC	3-60	.020-3A	20µs	50µs	GH7025-ND	9.13	8.22	7.77	70M-ODC15
	120 VAC	90-140	5 VDC	3-60	1-50mA	20ms	20ms	GH7026-ND	9.13	8.22	7.77	70M-IAC5
	5 VDC	3-32 VDC	5 VDC	3-60	1-50mA	250µs	400µs	GH7027-ND	9.13	8.22	7.77	70M-IDC5
	Mounting Boards for Digital Modules											
3	Mounting Board for 4 Standard I/O Modules - Negative Logic Only							GH7028-ND	19.26	18.30	—	70RCK4
	Mounting Board for 4 Standard I/O Modules - Negative or Positive Logic							GH3035-ND	20.27	19.26	—	70RCK4R
	Mounting Board for 8 Standard I/O Modules - Card Edge Connector Only							GH7029-ND	38.18	36.28	—	70RCK8
	Mounting Board for 8 Standard I/O Modules - Long Latch Socket Connector							GH3044-ND	41.89	39.80	—	70RCK8-HL
	Mounting Board for 8 Mini I/O Modules - Card Edge Connector Only							GH7030-ND	41.55	39.48	—	70MRCK8-EC
	Mounting Board for 16 Standard I/O Modules - Card Edge Connector Only							GH7031-ND	61.82	58.73	—	70RCK16
	Mounting Board for 16 Standard I/O Modules - Long Latch Socket Connector							GH3045-ND	65.54	62.27	—	70RCK16-HL
	Mounting Board for 24 Standard I/O Modules - Card Edge Connector Only							GH3007-ND	102.70	97.57	—	70RCK24
	Mounting Board for 24 Mini I/O Modules - Card Edge Connector Only							GH3008-ND	111.82	106.23	—	70MRCK24-EC
	Digital I/O Modules — G5 Full Size with Status LED											
4	5 VDC	2.5-10	120 VAC	24-140	.030-3.5A	8.3ms	8.3ms	GH3037-ND	10.58	9.53	9.00	70G-OAC5
	5 VDC	2.5-10	240 VAC	24-280	.030-3.5A	8.3ms	8.3ms	GH3038-ND	11.50	10.35	9.78	70G-OAC5A
	15 VDC	8-20	120 VAC	24-140	.030-3.5A	8.3ms	8.3ms	GH3039-ND	10.58	9.53	9.00	70G-OAC15
	5 VDC	2.5-10	60 VDC	3-60	.030-3.5A	20µs	50µs	GH3040-ND	10.58	9.53	9.00	70G-ODC5
	15 VDC	10-18	60 VDC	3-60	.030-3.5A	20µs	20µs	GH3041-ND	10.58	9.53	9.00	70G-ODC15
	120 VAC	90-140	5 VDC	3-60	1-50mA	20µs	20µs	GH3042-ND	9.62	8.66	8.18	70G-IAC5
	5 VDC	2.5-10	5 VDC	3-6	1-50mA	250µs	400µs	GH3043-ND	9.62	8.66	8.18	70G-IDC5

Fig.	Output Type	Output Range	Output Resolution	Input Type	Digi-Key Part No.	Price Each 1	5	50	Grayhill Part No.
	Analog Output Modules								
5	Voltage	0-5Vdc	1.22mV	12 Bit Serial	GH3009-ND	90.01	79.21	74.71	73G-OV5
	Voltage	0-10Vdc	2.44mV	12 Bit Serial	GH3010-ND	90.01	79.21	74.71	73G-OV10
	Voltage	-10 to 10Vdc	4.88mV	12 Bit Serial	GH3011-ND	90.01	79.21	74.71	73G-OV10B
	Current	4-20mA	3.9µA	12 Bit Serial	GH3012-ND	112.51	99.01	93.39	73G-OI420
	Current	0-20mA	4.9µA	12 Bit Serial	GH3013-ND	112.51	99.01	93.39	73G-OI020

Fig.	Input Type	Input Range	Input Resolution	Output Type	Digi-Key Part No.	Price Each 1	5	50	Grayhill Part No.
	Analog Input Modules								
6	Voltage	0-50mV	12.2µV	12 Bit Serial	GH3014-ND	90.01	79.21	74.71	73G-IV50M
	Voltage	0-100mV	24.4µV	12 Bit Serial	GH3015-ND	90.01	79.21	74.71	73G-IV100M
	Voltage	0-1Vdc	244.1µV	12 Bit Serial	GH3016-ND	90.01	79.21	74.71	73G-IV1
	Voltage	0-5Vdc	1.22mV	12 Bit Serial	GH3017-ND	90.01	79.21	74.71	73G-IV5
	Voltage	0-10Vdc	2.44mV	12 Bit Serial	GH3018-ND	90.01	79.21	74.71	73G-IV10
	Voltage	-5 to 5Vdc	2.44mV	12 Bit Serial	GH3019-ND	90.01	79.21	74.71	73G-IV5B
	Voltage	-10 to 10Vdc	4.88mV	12 Bit Serial	GH3020-ND	90.01	79.21	74.71	73G-IV10B
	Voltage	28-140Vac	27.34mV	12 Bit Serial	GH3021-ND	100.00	88.01	83.01	73G-IVAC120
	Voltage	28-280Vac	65.52mV	12 Bit Serial	GH3022-ND	100.00	88.01	83.01	73G-IVAC240
	Current	4-20mA	3.91µA	12 Bit Serial	GH3023-ND	90.01	79.21	74.71	73G-II420
	Current	0-5A	1.22mA	12 Bit Serial	GH3024-ND	112.51	99.01	93.39	73G-II5000
	Thermocouple Input Modules								
7	J Type	0-700C	.18C	12 Bit Serial	GH3025-ND	112.51	99.01	93.39	73G-ITCJ
	K Type	-100 to 924C	.25C	12 Bit Serial	GH3026-ND	112.51	99.01	93.39	73G-ITCK
	R Type	0-960C	.23C	12 Bit Serial	GH3027-ND	112.51	99.01	93.39	73G-ITCR
	T Type	-200 to 224C	.10C	12 Bit Serial	GH3028-ND	112.51	99.01	93.39	73G-ITCT
	AD590	-188 to 150C	.08C	12 Bit Serial	GH3029-ND	90.01	79.21	74.71	73G-ITP590
	Plt. RTD	-50 to 350C	.10C	12 Bit Serial	GH3030-ND	137.50	121.00	114.13	73G-ITR100
	Mounting Boards for Analog and 70G Series I/O Modules								
3	Mounting Board for 4 Analog I/O Modules Negative or Positive Logic				GH3031-ND	20.27	—	18.25	70GRCK4R
	Mounting Board for 8 Analog I/O Modules Short Latch Socket Connector				GH3032-ND	43.92	—	39.53	70GRCK8-HS
	Mounting Board for 24 Analog I/O Modules Short Latch Socket Connector				GH3033-ND	110.81	—	99.73	70GRCQ24-HS
	Mounting Board for 32 Analog I/O Modules Long Latch Socket Connector				GH3034-ND	148.65	—	133.79	70GRCP32-HL

OpenLine Dual Package I/O Modules

OpenLine modules are dual density and shrink the space required for traditional racks by 50%. The OpenLine racks accept OpenLine modules which snap into place. Each dual module is controlled independently with filtered inputs and optical isolation.

Fig. 1

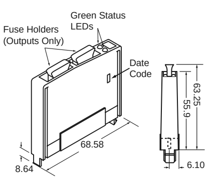


Fig. 2

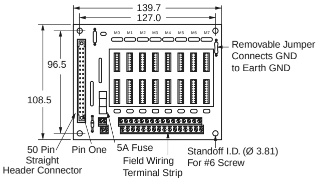

139.7
127.0
M0 M1 M2 M3 M4 M5 M6 M7
96.5
108.5
Removable Jumper Connects GND to Earth GND
50 Pin Straight Header Connector
Pin One
5A Fuse
Field Wiring Terminal Strip
Standoff I.D. (Ø 3.81) For #6 Screw

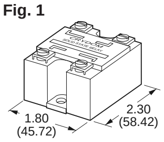
Fig.	Input Voltage	mA	Output Nom.	Range	Load Current	Digi-Key Part No.	Price Each 1	10	100	Grayhill Part No.
	OpenLine Dual Package I/O Modules									
1	4.5-28VDC	7	120	24-140VAC	.03-2.0A/CH	GH3053-ND	20.00	18.00	17.00	70L-OAC
	4.5-28VDC	7	240	24-280VAC	.03-2.0A/CH	GH3054-ND	20.00	18.00	17.00	70L-OACA
	4.5-28VDC	7	60	3-60VDC	.03-2.0A/CH	GH3055-ND	20.00	18.00	17.00	70L-ODC
	4.5-28VDC	7	200	4-200VDC	.03-2.0A/CH	GH3056-ND	26.00	23.40	22.11	70L-ODCA
	4.5-28VDC	7	60	3-60VDC	.03-2.0A/CH	GH3057-ND†	20.00	18.00	17.00	70L-ODCB
	0-140VAC	8	5VDC	4.5-28VDC	6mA/CH	GH3058-ND	16.00	14.40	13.60	70L-IAC
	0-280VAC	6	5VDC	4.5-28VDC	6mA/CH	GH3059-ND	16.00	14.40	13.60	70L-IACA
	35-60VDC	6	5VDC	4.5-28VDC	6mA/CH	GH3060-ND	16.00	14.40	13.60	70L-IDCG
	10-32VDC	25	5VDC	4.5-28VDC	6mA/CH	GH3061-ND	16.00	14.40	13.60	70L-IDCNP
	0-32VDC	18	5VDC	4.5-28VDC	6mA/CH	GH3062-ND	16.00	14.40	13.60	70L-IDC
	0-32VDC	18	5VDC	4.5-28VDC	6mA/CH	GH3063-ND†	16.00	14.40	13.60	70L-IDCB
	Mounting Boards for 70L OpenLine I/O Modules									
2	Mtg. Bd. for 8 OpenLine I/O Modules, Long Latch Conn.					GH3050-ND	42.00	39.90	—	70LRCK8-HL
	Mtg. Bd. for 16 OpenLine I/O Modules, Long Latch Conn.					GH3051-ND	63.00	59.85	—	70LRCK16-HL
	Mtg. Bd. for 24 OpenLine I/O Modules, Long Latch Conn.					GH3052-ND	100.00	95.00	—	70LRCK24-HL

† Low Leakage Outputs

Solid State Relays

9213B-ND Solid State Relay Design Guide **$19.95**

Fig. 1



Series 1, HD, HA: • These SPST-NO relays deliver proven reliability in the most demanding applications. Output consists of an SCR AC switch, available in either zero voltage turn-on or random turn-on, phase controlled models. (-10 versions are phase controlled. Crydom part numbers ending in "B" are normally closed versions.)

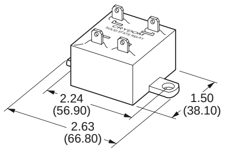
Series T: • Industry Standard Package • Snubbers are included for high DV/DT applications and inductive loads, together with zero-voltage switching to reduce inrush currents and electrical noise.

Series H12: • High voltage relays use IC driven circuits for switching loads up to 660 VAC with 1200 Volts blocking standard.

Series 1-DC: • Low On-State Resistance • Paralleling Capability for Higher Currents • DC output relays feature MOSFET technology for low on-state resistance, assuring easy paralleling and switching capabilities to 40 amps at 100 VDC.

Series CS: • Low Leakage • SCR AC switch output models feature low off-state leakage (snubberless), zero-voltage switching and have a broadened operating range at both 120V/240VAC line voltages.

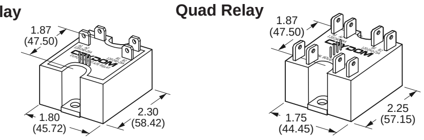
Fig. 2



Series EZ: • Low Leakage • Quick Connect Terminals • Offers a low profile package with the convenience of quick connect terminals • 4000 Vrms opto-isolation and low off-state leakage are standard.

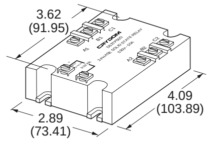
Fig. 3

Dual Relay **Quad Relay**



Two (Dual) or four (Quad) totally independent AC output relays come in a single standard panel-mount package. Utilizing an AC switch output with internal snubber, relays provide greater protection against false triggering.

Fig. 4



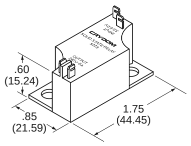
• SCR Output • AC or DC Control • LED Status IndicatorThree-phase solid state relays switch up to 530 Vrms directly to loads such as motors, transformers, heating elements, etc. Models are available with either AC or DC input (coil). For heatsink use part number CC1114-ND.

Fig.	Input Volt.	Operate Volt.	Release Volt.	Output Volt.	Load Current (Arms)	Digi-Key Part No.	Price Each			Crydom Part No.
							1	10	25	
	Series 1 — DC Input, AC Output — SCR Type									
1	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-2.5	CC1000-ND	18.24	17.98	16.33	D1202
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-10	CC1001-ND	26.89	24.99	24.30	D1210
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-25	CC1002-ND	27.32	25.36	23.77	D1225
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.04-40	CC1003-ND	34.01	30.61	29.34	D1240
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-2.5	CC1004-ND	20.32	18.47	17.57	D2402
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-10	CC1005-ND	30.50	27.60	26.27	D2410
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-25	CC1006-ND	30.88	27.91	26.69	D2425
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-40	CC1071-ND	31.54	31.08	28.24	D2440
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-50	CC1007-ND	35.02	32.25	30.02	D2450
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-75	CC1008-ND	57.45	52.02	48.28	D2475
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-90	CC1067-ND	63.17	57.33	54.57	D2490
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-110	CC1142-ND	56.10	55.27	50.22	D24110
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-125	CC1143-ND	65.87	64.90	58.96	D24125
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-25	CC1072-ND	34.63	34.12	31.00	D4825
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-40	CC1073-ND	39.48	38.90	35.34	D4840
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1074-ND	38.46	37.89	34.43	D4850
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-75	CC1075-ND	56.24	55.41	50.34	D4875
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-90	CC1076-ND	62.13	61.22	55.62	D4890
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-10	CC1088-ND	29.44	29.01	26.36	D2410B
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-25	CC1089-ND	30.53	30.09	27.34	D2425B
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-40	CC1090-ND	34.19	33.69	30.61	D2440B
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.04-75	CC1091-ND	54.67	53.87	48.94	D2475B
	3.5-26VDC	3.5VDC	1.0VDC	24-140VAC	.04-10	CC1077-ND	29.67	29.24	26.56	D1210-10
	3.5-26VDC	3.5VDC	1.0VDC	24-140VAC	.04-40	CC1078-ND	32.48	32.00	29.07	D1240-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-10	CC1079-ND	30.32	29.88	27.15	D2410-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-25	CC1080-ND	30.61	30.16	27.40	D2425-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-40	CC1081-ND	34.26	33.76	30.67	D2440-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-50	CC1082-ND	35.28	34.76	31.58	D2450-10
	3.5-26VDC	3.5VDC	1.0VDC	48-280VAC	.04-90	CC1083-ND	59.99	59.11	53.71	D2490-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-25	CC1084-ND	37.27	36.73	33.37	D4825-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-40	CC1085-ND	39.51	38.94	35.37	D4840-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-75	CC1086-ND	58.88	58.02	52.71	D4875-10
	3.5-26VDC	3.5VDC	1.0VDC	80-530VAC	.04-90	CC1087-ND	64.77	63.82	57.99	D4890-10
	Series 1 — AC Input, AC Output — SCR Type									
1	90-280VAC	90VAC	10VAC	24-140VAC	.04-25	CC1011-ND	31.86	28.72	27.90	A1225
	90-280VAC	90VAC	10VAC	24-140VAC	.04-40	CC1012-ND	36.02	32.47	31.08	A1240
	90-280VAC	90VAC	10VAC	48-280VAC	.04-10	CC1013-ND	32.52	29.28	28.12	A2410
	90-280VAC	90VAC	10VAC	48-280VAC	.04-25	CC1014-ND	33.10	29.81	28.60	A2425
	90-280VAC	90VAC	10VAC	48-280VAC	.04-50	CC1015-ND	37.57	33.79	32.42	A2450
	18-36VAC	18VAC	2VAC	48-280VAC	.04-50	CC1068-ND	37.57	33.79	32.42	A2450-E
	90-280VAC	90VAC	10VAC	48-280VAC	.04-75	CC1016-ND	60.43	54.38	52.22	A2475
	90-280VAC	90VAC	10VAC	48-280VAC	.04-110	CC1144-ND	65.55	64.59	58.68	A24110
	90-280VAC	90VAC	10VAC	48-280VAC	.04-125	CC1145-ND	68.41	67.40	61.24	A24125
	90-280VAC	90VAC	10VAC	80-530VAC	.04-25	CC1092-ND	39.48	38.90	35.34	A4825
	90-280VAC	90VAC	10VAC	80-530VAC	.04-40	CC1093-ND	43.41	42.78	38.86	A4840
	90-280VAC	90VAC	10VAC	80-530VAC	.04-50	CC1094-ND	45.11	44.45	40.38	A4850
	90-280VAC	90VAC	10VAC	80-530VAC	.04-90	CC1095-ND	65.13	64.17	58.30	A4890
	Series HD — DC Input, AC Output — SCR Type									
1	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-12	CC1017-ND	37.34	33.57	32.30	HD4812
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-25	CC1018-ND	39.63	35.65	34.28	HD4825
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1019-ND	44.02	39.57	38.03	HD4850
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1096-ND	42.12	41.51	37.71	HD4850-10
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-75	CC1020-ND	70.18	63.07	60.57	HD4875
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-90	CC1021-ND	71.18	64.04	61.46	HD4890
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-110	CC1146-ND	69.47	68.45	62.19	HD48110
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-125	CC1147-ND	73.54	72.46	65.83	HD48125
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-25	CC1097-ND	36.97	36.43	33.10	HD6025
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-50	CC1098-ND	41.17	40.57	36.86	HD6050
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-90	CC1099-ND	54.28	53.48	48.59	HD6090
	3-32VDC	3.0VDC	1.0VDC	80-530VAC	.04-125	CC1100-ND	76.49	75.36	68.47	HD60125
	Series HA — AC Input, AC Output — SCR Type									
1	90-280VAC	90VAC	10VAC	80-530VAC	.04-25	CC1022-ND	45.46	40.75	39.09	HA4825
	90-280VAC	90VAC	10VAC	80-530VAC	.04-50	CC1023-ND	52.88	46.42	44.63	HA4850
	90-280VAC	90VAC	10VAC	80-530VAC	.04-75	CC1024-ND	71.47	64.20	61.65	HA4875
1	90-280VAC	90VAC	10VAC	80-530VAC	.04-90	CC1025-ND	74.90	67.15	64.46	HA4890
	90-280VAC	90VAC	10VAC	80-530VAC	.04-110	CC1148-ND	72.91	71.84	65.26	HA48110
	90-280VAC	90VAC	10VAC	80-530VAC	.04-125	CC1149-ND	77.02	75.89	68.94	HA48125
	90-280VAC	90VAC	10VAC	48-660VAC	.04-25	CC1101-ND	38.56	38.00	34.52	HA6025
	90-280VAC	90VAC	10VAC	48-660VAC	.04-50	CC1102-ND	42.76	42.13	38.28	HA6050
	90-280VAC	90VAC	10VAC	48-660VAC	.04-90	CC1103-ND	58.51	57.65	52.38	HA6090
	90-280VAC	90VAC	10VAC	48-660VAC	.04-125	CC1104-ND	78.07	76.93	69.89	HA60125
	Series H12 — DC Input, AC Output — SCR Type									
1	4-32VDC	4.0VDC	1.0VDC	48-660VAC	.04-50	CC1032-ND	53.64	41.18	39.57	H12WD4850
	4-32VDC	4.0VDC	1.0VDC	48-660VAC	.04-90	CC1033-ND	71.42	54.34	52.10	H12WD4890
	4-32VDC	4.0VDC	1.0VDC	48-530VAC	.04-50	CC1105-ND	51.84	51.08	46.41	H12D4850
	4-32VDC	4.0VDC	1.0VDC	48-530VAC	.04-90	CC1106-ND	73.74	72.65	66.01	H12D4890
	Series H12 — AC Input, AC Output — SCR Type									
1	90-140VAC	90VAC	10VAC	48-660VAC	.04-50	CC1034-ND	54.67	41.96	40.42	H12CA4850
	90-140VAC	90VAC	10VAC	48-660VAC	.04-90	CC1035-ND	72.83	55.37	53.11	H12CA4890
	Series T — DC Input, AC Output — Triac Type									
1	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.05-10	CC1026-ND	35.92	34.03	31.96	TD1210
	3-32VDC	3.0VDC	1.0VDC	24-140VAC	.05-25	CC1027-ND	39.86	38.36	37.78	TD1225
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.05-10	CC1028-ND	28.51	27.77	27.02	TD2410
	3-32VDC	3.0VDC	1.0VDC	48-280VAC	.05-25	CC1029-ND	33.15	32.29	31.40	TD2425
	Series T — AC Input, AC Output — Triac Type									
1	90-280VAC	90VAC	10VAC	24-140VAC	.05-10	CC1107-ND	27.80	27.40	24.89	TA1210
	90-280VAC	90VAC	10VAC	24-140VAC	.05-25	CC1030-ND	32.59	31.21	30.74	TA1225
	90-280VAC	90VAC	10VAC	48-280VAC	.05-10	CC1108-ND	29.19	28.77	26.14	TA2410
	90-280VAC	90VAC	10VAC	48-280VAC	.05-25	CC1031-ND	28.83	28.08	27.32	TA2425
	Series 1 DC — DC Input, DC Output — MOSFET Type									
1	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-7	CC1036-ND	44.34	39.89	38.36	D1D07
	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-12	CC1037-ND	49.01	44.12	42.32	D1D12
	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-20	CC1038-ND	53.26	47.96	45.99	D1D20
	3.5-32VDC	3.5VDC	1.0VDC	0-100VDC	0-40	CC1039-ND	66.74	60.05	57.60	D1D40
	3.5-32VDC	3.5VDC	1.0VDC	0-200VDC	0-7	CC1040-ND	51.23	46.15	44.30	D2D07
	3.5-32VDC	3.5VDC	1.0VDC	0-200VDC	0-12	CC1041-ND	59.11	53.22	51.05	D2D12
	3.5-32VDC	3.5VDC	1.0VDC	0-400VDC	0-7	CC1042-ND	59.08	53.20	51.02	D4D07
	3.5-32VDC	3.5VDC	1.0VDC	0-400VDC	0-12	CC1109-ND	72.89	71.82	65.25	D4D12
	Series CS — DC Input, AC Output — SCR Type									
1	3.5-15VDC	3.5VDC	1.0VDC	24-280VAC	.1-10	CC1043-ND	23.20	21.60	20.17	CSD2410
	3.5-15VDC	3.5VDC	1.0VDC	24-280VAC	.1-25	CC1044-ND	29.56	27.49	25.69	CSD2425
	3.5-15VDC	3.5VDC	1.0VDC	24-280VAC	.1-50	CC1045-ND	33.95	31.73	30.40	CSD2450
	15-32VDC	15VDC	1.0VDC	24-280VAC	.1-10	CC1110-ND	22.19	21.87	19.87	CSE2410
	15-32VDC	15VDC	1.0VDC	24-280VAC	.1-25	CC1111-ND	27.15	26.75	24.31	CSE2425
	15-32VDC	15VDC	1.0VDC	24-280VAC	.1-50	CC1112-ND	31.91	31.44	28.57	CSE2450
	Series DC60 — DC or AC Input, DC Output — Bipolar Type									
1	3-32VDC	3.0VDC	1.0VDC	3-60VDC	.02-3	CC1126-ND	11.98	11.81	10.73	DC60S3
	3-32VDC	3.0VDC	1.0VDC	3-60VDC	.02-5	CC1127-ND	18.80	18.53	16.84	DC60S5
	3-32VDC	3.0VDC	1.0VDC	3-60VDC	.02-7	CC1128-ND	23.48	23.14	21.02	DC60S7
	90-280VAC	90VAC	10VAC	3-60VDC	.02-3A	CC1150-ND	13.85	13.65	12.40	DC60SA3
	90-280VAC	90VAC	10VAC	3-60VDC	.02-5A	CC1151-ND	20.67	20.37	18.51	DC60SA5
	90-280VAC	90VAC	10VAC	3-60VDC	.02-7A	CC1152-ND	25.35	24.98	22.70	DC60SA7
	Series EZ — DC Input, AC Output — SCR Type									
2	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.06-12	CC1047-ND	13.58	13.32	13.00	EZ240D12
	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.06-18	CC1048-ND	17.50	17.03	16.61	EZ240D18
	Dual-Quad — DC Input, AC Output — SCR Type									
3	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.05-25	CC1121-ND	50.15	49.42	44.90	D2425D
	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.05-40	CC1122-ND	56.80	55.97	50.85	D2440D
	4-15VDC	4.0VDC	1.0VDC	24-280VAC	.05-20	CC1123-ND	79.17	78.01	70.87	TD2420Q
	Series 53TP — DC or AC Input — SCR Type (for 3 Phase applications)									
4	3-32VDC	3.0VDC	1.0VDC	48-530VAC	.05-25	CC1135-ND	109.02	107.41	97.59	D53TP25D
	3-32VDC	3.0VDC	1.0VDC	48-530VAC	.05-50	CC1136-ND	119.30	117.55	106.79	D53TP50D
	90-280VAC	90VAC	10VAC	48-530VAC	.05-25	CC1137-ND	113.69	112.02	101.77	A53TP25D
	90-280VAC	90VAC	10VAC	48-530VAC	.05-50	CC1138-ND	123.97	122.15	110.98	A53PT50D

(Continued)

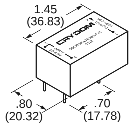
9213B-ND Solid State Relay Design Guide **$19.95**

Fig. 5



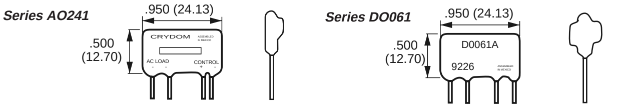
Relays combine small size and high ratings in a package designed for easy heat sink or panel mounting. Standard .187 push-on terminals assure quick connection and are arranged to provide maximum isolation between signal and power circuits. Model S228C is a snubberless design for applications that require low off-state leakage.

Fig. 6



These solid state relays combine small size and high ratings in a PC-board-mounted SPST-NO design. Available with (S30 types) or without snubber network (S3 types), Series 3 is an ideal replacement for power reed relays in microprocessor or computer-based logic level systems. Designed for long, reliable service in demanding industrial environments.

Fig. 7



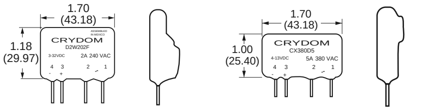
Series AO241

- SPST-NO miniature SIP solid state relays • Designed for switching highly inductive, low current loads such as solenoids. Also suitable for all loads up to 1.5A. R suffix are random turn-on versions.

Series DO061

- SPST-NO DC bipolar transistor output relays in epoxy-coated packages utilize the popular .10” grid lead spacing. DMO063 is mosfet output rated at 3A/60VDC.

Fig. 8



Series D2W *Series CX - CMX*

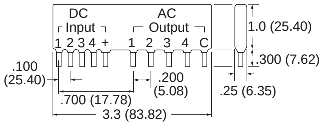
Series D2W

- Printed Circuit Board Mounting • Features an epoxy-coated package for exceptional environmental protection. Pinouts are compatible with OAC type I/O modules.

Series CX - CMX

- Ultra High Surge • Printed Circuit Board Mounting • SPST-NO relays achieve the highest power switching capability in a PC-mounted air-cooled package. Advanced features include exceptional steady state current, plus ultra-high surge ratings. New DC output SPST-NO solid state relays use MOSFET output for high switching capabilities in a PC-mount air-cooled package. Pinouts are compatible with Series 6 and ODC type I/O modules.

Fig. 9

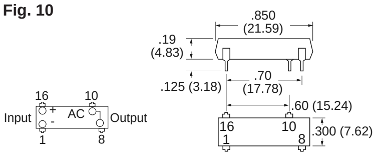


Series CTX - 4 Relay’s in one Sip Pkg. — Triac Output

CTX240D3Q offers four independently controlled SSR’s in one compact PCB mount package. The CTX exhibits exceptional steady-state ratings utilizing highly efficient thermal management for increased cycle life. CTX240D3Q is a zero-cross type and the CTX240D3QR is a random turn-on:

1 section on: .1 - 6.0A 2 sections on : .1 - 4.0A
3 sections on: .1 - 3.0A 4 sections on: .1 - 2.5A

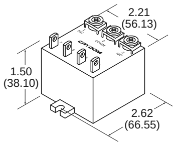
Fig. 10



Series DPA/SDV/SDI Dip Relays — SCR Output

The series DPA is offered in your choice of voltage or current operated versions and are rated at 1A. The series SDV/SDI’s are rated at 1.5A at ambient temperatures of 40°C. Available in either zero-cross or random turn-on (R) versions and current or voltage operated (controlled) versions. SDV series are voltage controlled and SDI series are current controlled.

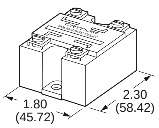
Fig. 11



Form C SPDT True Break Before Make (BBM) - SCR Type

The Form C Solid State Relays combine a precision timing control system and two solid state relays in one package. Internal logic, switches off one load before switching on the other load. Available in either AC output or DC output up to 40 amps. Dry closure inputs require a switch or electromechanical relay contact to trigger inputs.

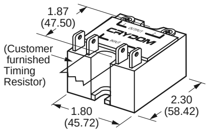
Fig. 12



Series PCV Analog Power Controller

The Series PCV Analog Input Power Controllers are 0-100% variable power controllers for 120 or 240 VAC loads which vary with an analog input of 2 to 10 Volts DC. The input and output are proportional by integrating a complete phase fired logic system and a solid state relay in the same package. Applications include heaters and lighting, motors and feeders, etc.

Fig. 13



Typical Turn-On Delay For Various Timing Resistances		
Resistor	Time (DSD)	Time (DLD)
0 (Short)	0.10 sec.	1.6 sec.
10KΩ	0.19 sec.	3.1 sec.
100KΩ	0.94 sec.	15 sec.
470KΩ	4.0 sec.	64 sec.
1.0MΩ	8.3 sec.	133 sec.

Series DSD, DLD Time Delay Relay

These Delay-On time delay relays offer customers to externally adjust their delay time by selecting the value of the external customer supplied resistor. DSD are short time delays and DLD are longer time delay durations. Timing resistors should be 1/4 watt or higher.

Fig. 14

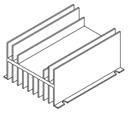
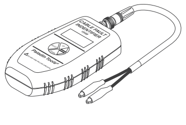


Fig.	Input Volt.	Operate Volt.	Release Volt.	Output Volt.	Load Current (Arms)	Digi-Key Part No.	Price Each 1	10	25	Crydom Part No.
Series 2 — DC Input, AC Output										
5	3.5-8VDC	3.5VDC	1.0VDC	20-140VAC	.02-8	CC1129-ND	26.76	26.37	23.96	S218
	3.5-8VDC	3.5VDC	1.0VDC	40-280VAC	.02-8	CC1130-ND	28.17	27.76	25.22	S228
	3.5-8VDC	3.5VDC	1.0VDC	40-280VAC	.02-8	CC1131-ND	23.67	23.33	21.19	S228C
Series 3 — DC Input, AC Output										
6	3.5-8VDC	3.5VDC	1.0VDC	20-140VAC	.02-3	CC1132-ND	22.17	21.85	19.85	S312
	3.5-8VDC	3.5VDC	1.0VDC	20-140VAC	.02-3	CC1133-ND	21.15	20.84	18.94	S3012A
	3.5-8VDC	3.5VDC	1.0VDC	40-280VAC	.02-3	CC1134-ND	23.02	22.69	20.61	S3022A
Series AO241 — DC Input, AC Output — SCR Type Mini-SIP										
7	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.02-1.0	CC1049-ND	7.45	7.05	6.87	AO241
	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.02-1.0	CC1115-ND	7.87	7.76	7.05	AO241R
	4-10VDC	4.0VDC	1.0VDC	12-280VAC	.01-1.5	CC1050-ND	7.43	7.01	6.86	ASO241
	4-10VDC	4.0VDC	1.0VDC	12-280VAC	.01-1.5	CC1116-ND	7.87	7.76	7.05	AS0241R
Series DO061 — DC Input, DC Output — Bipolar Type Mini-SIP										
7	3-9VDC	3.0VDC	1.0VDC	3-60VDC	.02-1.0	CC1060-ND	7.96	7.16	6.90	DO061A
	1.7-9VDC	1.7VDC	0.8VDC	3-60VDC	.02-1.0	CC1061-ND	7.96	7.16	6.90	DO061B
	3-10VDC	3.0VDC	1.0VDC	0-60VDC	0-3A	CC1139-ND	13.85	13.65	12.40	DMO063
Series D2W — DC Input, AC Output — Triac Type SIP										
8	3-32VDC	3.0VDC	1.0VDC	24-280VAC	.06-2.0	CC1069-ND	6.68	6.47	6.26	D2W202F
	3-32VDC	3.0VDC	1.0VDC	24-280VAC	.06-3.0	CC1118-ND	8.13	8.02	7.28	D2W203F
	3-32VDC	3.0VDC	1.0VDC	24-280VAC	.06-3.5	CC1062-ND	7.48	7.27	7.06	D2W203F-11
Series CX — DC Input, DC or AC Output — SCR Type SIP										
8	3-15VDC	3.0VDC	1.0VDC	12-280VAC	.06-5.0	CC1063-ND	9.02	8.60	8.33	CX240D5
	15-32VDC	15VDC	1.0VDC	12-280VAC	.06-5.0	CC1064-ND	9.02	8.60	8.33	CXE240D5
	3-15VDC	3.0VDC	1.0VDC	12-280VAC	.06-5.0	CC1119-ND	11.82	11.65	10.58	CX240D5R
	4-13VDC	4.0VDC	1.0VDC	48-530VAC	.06-5.0	CC1120-ND	12.17	12.00	10.90	CX380D5
	3-10VDC	3.0VDC	1.0VDC	0-100VDC	0-6.0A	CC1124-ND	26.20	25.81	23.45	CMX100D6
	3-10VDC	3.0VDC	1.0VDC	0-60VDC	0-10A	CC1125-ND	26.20	25.81	23.45	CMX60D10
	4-13VDC	4.0VDC	1.0VDC	48-660VAC	.06-5.0	CC1065-ND	12.61	12.03	11.66	CX480D5
	15-32VDC	15VDC	1.0VDC	48-660VAC	.06-5.0	CC1066-ND	12.61	12.03	11.66	CXE480D5
Series CTX - 4 Relays In One Sip Pkg. — Triac Output										
9	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.1-6.0A	CC1140-ND	35.16	34.64	31.47	CTX240D3Q
	4-10VDC	4.0VDC	1.0VDC	24-280VAC	.1-6.0A	CC1141-ND	38.07	37.51	34.08	CTX240D3QR

Fig.	Input Volt.	Operate Volt.	Release Volt.	Output Volt.	Load Current (Arms)	Digi-Key Part No.	Price Each 1	10	25	Crydom Part No.
Series DPA/SDV/SDI Dip Relays — SCR Output										
10	10-50mA	10mA	1.0mA	20-140VAC	.01-1.0A	CC1153-ND	4.52	4.45	4.05	DPA4111
	3.5-10VDC	3.5VDC	1.0VDC	20-140VAC	.01-1.0A	CC1154-ND	5.57	5.50	4.99	DPA4119
	10-50mA	10mA	1.0mA	20-280VAC	.01-1.0A	CC1155-ND	5.57	5.50	4.99	DPA6111
	3.5-10VDC	3.5VDC	1.0VDC	20-280VAC	.01-1.0A	CC1156-ND	6.62	6.52	5.93	DPA6119
	3.5-10VDC	3.5VDC	1.0VDC	12-280VAC	.01-1.5A	CC1157-ND	7.71	7.60	6.91	SDV2415
	3.5-10VDC	3.5VDC	1.0VDC	12-280VAC	.01-1.5A	CC1158-ND	7.71	7.60	6.91	SDV2415R
	10-50mA	10mA	1.0mA	12-280VAC	.01-1.5A	CC1159-ND	6.77	6.68	6.07	SDI2415
	10-50mA	10mA	1.0mA	12-280VAC	.01-1.5A	CC1160-ND	6.77	6.68	6.07	SDI2415R
Form C SPDT True Break Before Make (BBM) - SCR Type										
11	Dry Closure	—	—	90-300VAC	.2-40A	CC1167-ND	117.59	115.86	105.26	A2440-C
Series PCV Analog Power Controller										
12	2-10VDC	2.0VDC	1.0VDC	100-240VAC	.15-15A	CC1161-ND	68.80	67.79	61.59	10PCV2415
	2-10VDC	2.0VDC	1.0VDC	100-240VAC	.15-25A	CC1162-ND	76.20	75.09	68.22	10PCV2425
	2-10VDC	2.0VDC	1.0VDC	100-240VAC	.15-40A	CC1163-ND	89.96	88.64	80.53	10PCV2440
Series DSD, DLD Time Delay Relay										
13	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-10A	CC1174-ND	34.91	34.40	31.25	DSD2410
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-25A	CC1175-ND	36.02	35.49	32.25	DSD2425
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-50A	CC1176-ND	38.00	37.44	34.02	DSD2450
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-10A	CC1177-ND	34.91	34.40	31.25	DLD2410
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-25A	CC1178-ND	36.02	35.49	32.25	DLD2425
	3.5-15VDC	3.5VDC	1.0VDC	48-280VAC	.04-50A	CC1179-ND	38.00	37.44	34.02	DLD2450
Solid State Relay Accessories										
14	Heatsink for Relays up to 10A (3.3 ”x 2.06”) (8.38cm x 5.23cm)					CC1113-ND	16.69	15.50	14.42	HS-1
	Heatsink for Relays up to 25A (3.3” x 4.1”) (8.38cm x 10.41cm)					CC1207-ND	17.94	16.67	15.50	HS-2
	Heatsink for Relays up to 75A (5.5” x 4.8”) (13.97cm x 12.19cm)					CC1208-ND	26.32	24.52	22.82	HE-54
	Heatsink for Relays up to 90A (6.0” x 6.0”) (15.24cm x 15.24cm)					CC1114-ND	74.31	68.91	64.12	HE-90
—	Protective Cover for Series 1 Relays					CC1070-ND	2.35	2.23	2.15	KS-100
	Protective Cover for 53TP Series Relays					CC1171-ND	4.00	3.95	3.59	KS-300
	EMI Filters for 1 Phase Relay to Reduce Gen. Noise					CC1172-ND	8.47	8.35	7.58	1F25
	EMI Filters for 3 Phase Relay to Reduce Gen. Noise					CC1173-ND	13.23	13.04	11.85	3F20

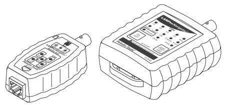
Paladin Tools® Cable Tester



Tester displays length of cable, cable remaining on spool, distance to short, distance to open, and injects tone into cable. The most accurate true TDR technology with ±1.5% accuracy. Measures to 3200'. Built-in tone generator with warble tone. Scroll through pre-programmed NVP values for common cable types. Fast 1 second tests. Detects live voltage. Easy-to-read large display. Push-button controls. BNC-to-Alligator clips adapter make testing fast. Requires only one 9V battery, included.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Cable Fault Identifier TDR Tester	PAL1549.1-ND	319.00	1549

LAN ProNavigator™ Tester and Remote



LAN ProNavigator™: Two-piece tester includes main unit and remote with test results at both ends. One-button, simple testing (PASS/FAIL or fault find). Detects opens, shorts, crossed wires and split pairs. Cable types, RG58, RG59, RG6, RG6 Quad, Belden 8281, RG8, RG11, CAT-5, CAT-5e or CAT-6 (UTP/STP).

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
LAN ProNavigator Test Set (Main and Remote), 2 RJ45 Patch Cords, 2 Belt Clips	PAL1543.1-ND	124.99	1543

Cable Stripping Tools

Fig. 1

Coaxial stripping tool producing 2 and 3 level strips in cables from .100" to .315" (2.54 to 8mm) dia.
Replacement blades and easy adjustment, make this tool the perfect choice.

Cassette Type	Dim. (mm) A	B
Green Cassette	7.09	5.11
Brown Cassette	7.49	3.48

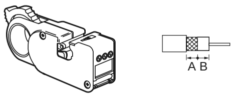


Fig. 2

AM12 Multi-level adjustable cable stripper.

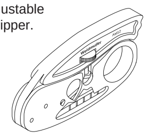
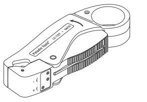


Fig.	Description	Digi-Key Part No.	Price Each	Mfg. Part No.
3 Level Coaxial Cable Stripper				
1	Adjustable with Green Cassette	PA1240-ND	69.64	1240
1	Adjustable with Brown Cassette	PA1243-ND	69.64	1243
—	Replacement Blade for PA1240	PA2240-ND	27.96	2240
—	Replacement Blade for PA1243	PA2243-ND	27.96	2243
Cutter and Stripper for UTP and STP Cables				
2	Cable Stripper	PAL1112-ND	20.71	1112

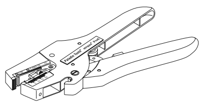
LC CST Strippers



Coaxial stripping tool producing 2 and 3 level stripping of outer jacket, shield braid and inner dielectric. Hex key makes it easy to adjust the blades to set the cutting depth. Self-regulating tensions. Pre-set strip lengths for most common lengths.

Preset Strip Lengths	Strip Types	Cable Usage	Digi-Key Part No.	Price Each	Mfg. Part No.
0.315" Outer Jacket 0.157" Inner Dielectric	2 & 3 Level Adjustable	RG58, RG59, RG62, AU & RG6	PAL1255.1-ND	16.99	1255.1
0.236" Outer Jacket	2-Level	RG59, RG6 & RG6 QUAD CATV "F"	PAL1257.1-ND	16.99	1257.1

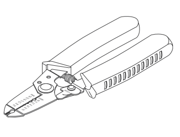
Universal Strippers and Cutters



The new Stripax® performs powerful stripping and cutting of standard and industrial insulations including PVC, THHN, THHW, silicone and polyethylene. The PAL1113.1-ND stripping blades are composed of 68 individual spring-compression blades to adjust precisely to the insulation. Not for Teflon or Kapton hard insulations.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Stripax® Pro 6 (AWG 28-10)	PAL1113.1-ND	75.48	1113.1
Mini-Stripax Plus (AWG 28-18)	PAL1115-ND	82.94	1115.1
SureStrip™ 4.0 (AWG 20-12)	PA904893-ND	56.99	904893

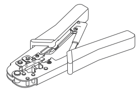
P-Strippers 10 and 20



Cuts and strips a wire range of AWG 30-10. Works well for round voice and data cable, electrical wiring, hook-up wire, multi-conductor cables and coaxial cable. These strippers cover the most common range of insulated wire with precise, reliable action and durable steel craftsmanship. Strip standard insulations including PVC, rubber, polyurethane, polyethylene and silicone. Includes built-in safety lock, nose clamp, steel screw cutter and wire loop. PAL1105 is for use on Romex household wiring cable. Not for steel or armored wire and cable.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
P-Stripper 10 Cutter/Stripper (AWG 22-10)	PAL1105.1-ND	10.99	1105.1
P-Stripper 20 Cutter/Stripper (AWG 30-20)	PAL1106.1-ND	10.99	1106.1

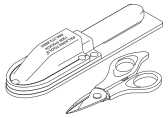
All-in-One Telephone Tool



Ratcheted design. 6 position, (RJ11/RJ12). 8-position, (RJ45) modular telephone plugs. Cuts, strips, and crimps 28-24 AWG telephone and data cables.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
All-in-One Telephone Tool	PAL1545.1-ND	39.71	1545.1

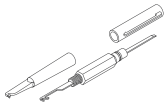
Datacomm Scissors and Knife Kit



The cable-splicing ProSnips Kit in a leather pouch is designed for cutting cable, telephone wire and stripping insulation. Fiskars® datacomm scissors feature an ergonomic design for the professional user. Leather pouch slotted to fit 2" belts. Scissor is fastened with a solid steel rivet and have stainless steel blades to cut copper or fiber optic cables. Utility knife has a full-size, no-slip textured handle.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Knife and Scissors in Leather Pouch	PAL1912.1-ND	35.95	1912.1

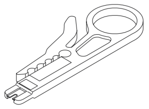
Probe Pick



Probe pick for pulling wire, slicing, stripping cable and cleaning debris off terminal panels. Small and light weight pen-sized with clip for carrying in pocket. Spludger tip, wire hook, wire stripper, slitter tooth, and a non-conductive scraping tip.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Pocket Probe Pick	PAL1915.1-ND	5.95	1915.1

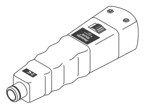
Punchdown Stripper



Strips twisted-pair UTP/STP data cables and wires and terminates wires into 110 blocks. Use on UTP/STP data cable, multi-pair cable, hook-up wire and more. Comes in bright Paladin Tool orange. Length: 4" (102mm)

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Punchdown Stripper	PAL1913.1-ND	3.99	1913.1

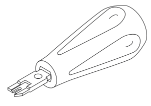
Surepunch™ Tools



Terminates and cuts telephone wire and data cable into a variety of termination panels including 66, 88, 108, 109, 110, BIX™ and Krone® LSA for insulation displacement type bifurcated terminals. Adjustable spring-compression HI/LO impact tool. For 28-22 AWG, solid or stranded wire. Latch cover blade storage area in end of handle.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
SurePunch PDT Handle (no blade)	PAL3570.1-ND	37.99	3507.1
SurePunch 110 Reversible Blade	PAL4572.1-ND	15.87	4572.1
SurePunch 66 Reversible Blade	PAL4573.1-ND	15.87	4573.1

Non-Impact Punchdown Tools with Fixed Blades



Terminates and cuts telephone and data wire into various types of terminating panels including the 66, 88, 108, 109, 110. For insulation displacement type bifurcated terminals. 28-22 AWG. Performs both cut and punch functions. Perfect for small jobs. Length: 4"

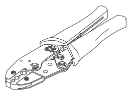
Description	Digi-Key Part No.	Price Each	Mfg. Part No.
110 Punchdown Tool 66 Punchdown Tool	PAL3580.1-ND PAL3581.1-ND	10.95 10.95	3580.1 3581.1

DataShark Network Termination Kit

Modular plug crimper for RJ45 and RJ11/12 connectors. Universal stripper for twisted pair and flat cable. Non-impact punchdown tool with 110 blade, 10 pieces of RJ45 modular plug connectors. Detailed instructions for cable assembly.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Network Tool Kit	PAL70007.1-ND	41.99	70007.1

Coaxial Crimper



Fully ratcheted crimp tool for RG58, RG59, and RG6/6QS CATV "F" terminations. With safety release.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
CATV "F" Coaxial Crimper	PAL70006.1-ND	27.99	70006.1

General Cable Hook-Up Wire

Conductor: • Fully annealed tinned copper per ASTM B-33. Insulation: • Premium grade color coded PVC • Temperature range: -40°C to +80°C • Voltage Rating: 300 volts • 0.016 (0.41mm) Nom. Insulation Thickness. Industry Approvals: • **UL Style 1007** • **CSA TR-64** • Passes UL VW-1 Vertical Flame Test • OSHA acceptable.

Cond. Size (AWG)	Cond. Strand	Ins. O.D. (mm)	Digi-Key* Part No. for 100 ft.	Price 100 ft.†	Mfg. Part No.
Solid Conductors					
24	Solid	1.32	C2003☐ -100-ND	12.10	C2003
22	Solid	1.45	C2004☐ -100-ND	12.45	C2004
20	Solid	1.63	C2028☐ -100-ND	13.30	C2028
18	Solid	1.83	C2052☐ -100-ND	14.26	C2052
16	Solid	2.11	C2053☐ -100-ND	15.84	C2053
Stranded Conductors					
24	7/32	1.42	C2015☐ -100-ND	12.78	C2015
22	7/30	1.57	C2016☐ -100-ND	13.15	C2016
20	10/30	1.78	C2040☐ -100-ND	13.88	C2040
18	16/30	2.03	C2064☐ -100-ND	15.11	C2064
16	26/30	2.34	C2065☐ -100-ND	16.77	C2065

Cond. Size (AWG)	Cond. Strand	Ins. O.D. (mm)	Digi-Key* Part No. for 100 ft.	Price 1000 ft.†	Mfg. Part No.
Solid Conductors					
24	Solid	1.32	C2003☐ -1000-ND	35.37	C2003
22	Solid	1.45	C2004☐ -1000-ND	38.87	C2004
20	Solid	1.63	C2028☐ -1000-ND	47.31	C2028
18	Solid	1.83	C2052☐ -1000-ND	56.96	C2052
16	Solid	2.11	C2053☐ -1000-ND	72.69	C2053
Stranded Conductors					
24	7/32	1.42	C2015☐ -1000-ND	42.08	C2015
22	7/30	1.57	C2016☐ -1000-ND	45.85	C2016
20	10/30	1.78	C2040☐ -1000-ND	53.17	C2040
18	16/30	2.03	C2064☐ -1000-ND	65.40	C2064
16	26/30	2.34	C2065☐ -1000-ND	82.64	C2065

Hookup Wire, Stranded, PVC Insulation UL Style 1015, TEW, PVC, 600V 105°C, VW-1

Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insu-lation Thick.	Digi-Key* Part No. for 100 ft.	Price 100 ft.†	Mfg. Part No.
24	7/32	2.24	0.81	C2100☐ -100-ND	13.18	C2100
22	7/30	2.39	0.81	C2101☐ -100-ND	13.82	C2101
20	10/30	2.59	0.81	C2102☐ -100-ND	14.85	C2102
18	16/30	2.84	0.81	C2103☐ -100-ND	15.98	C2103
16	26/30	3.15	0.81	C2104☐ -100-ND	18.35	C2104
14	41/30	3.58	0.81	C2105☐ -100-ND	23.46	C2105
10	105/30	4.67	0.81	C2107☐ -100-ND	36.32	C2107

Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insu-lation Thick.	Digi-Key* Part No. for 100 ft.	Price 1000 ft.†	Mfg. Part No.
24	7/32	2.24	0.81	C2100☐ -1000-ND	46.75	C2100
22	7/30	2.39	0.81	C2101☐ -1000-ND	53.16	C2101
20	10/30	2.59	0.81	C2102☐ -1000-ND	63.39	C2102
18	16/30	2.84	0.81	C2103☐ -1000-ND	74.74	C2103
16	26/30	3.15	0.81	C2104☐ -1000-ND	98.39	C2104
14	41/30	3.58	0.81	C2105☐ -1000-ND	134.86	C2105
10	105/30	4.67	0.81	C2107☐ -1000-ND	263.50	C2107

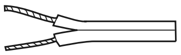
Hookup Wire, Solid, PVC Insulation UL Style 1015, TEW, PVC, 600V 105°C, VW-1

Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insu-lation Thick.	Digi-Key* Part No. for 100 ft.	Price 100 ft.†	Mfg. Part No.
22	1	2.26	0.81	C2117☐ -100-ND	13.30	C2117
20	1	2.44	0.81	C2118☐ -100-ND	14.12	C2118
18	1	2.64	0.81	C2119☐ -100-ND	15.20	C2119

Conductor Size (AWG)	Strand	Nom. O.D. (mm)	Insu-lation Thick.	Digi-Key* Part No. for 100 ft.	Price 1000 ft.†	Mfg. Part No.
22	1	2.26	0.81	C2117☐ -1000-ND	47.31	C2117
20	1	2.44	0.81	C2118☐ -1000-ND	55.50	C2118
18	1	2.64	0.81	C2119☐ -1000-ND	66.88	C2119

* For ☐ in Digi-Key Part No. choose letter which represents color of your choice: **B**=Black; **W**=White; **R**=Red; **G**=Green; **A**=Orange; **Y**=Yellow; **L**=Blue; **N**=Brown; **S**=Slate Gray; **V**=Violet.
† Length tolerance is ±1% • Wire is ordered per EIA-359-A color specification which allows for some variation in shade.

General Cable PVC Coated Speaker Cable

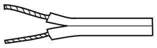


- **Conductor:** Fully annealed 1 bare, 1 tin stranded copper per ASTM B-174; Fully annealed stranded bare copper per ASTM B- 33 (C1364 style only)**
- **Insulation:** Clear; Premium grade PVC Premium grade Superflex PVC (C1364 style only)**
- **Jacket:** PVC Clear
- **Temperature Range**: -20°C to +60°C
- **Voltage Rating:** 90 Volts (UL)*, 300 Volts SPT-1
- **Industry Approvals:** UL wires misc. 90 volts* (except C1364 series); UL recognized 300 volts SPT-1 (except C1364 series); OSHA acceptable (except C1364 series)

No. of Cond.	Cond. Size (AWG)	Strand	Nom. Insulation Thickness (mm)	Nominal O.D. (mm)	Suggested Working Voltage	Digi-Key Part No.	(X = No. of Ft. Per Roll)# Price Per Roll 500 ft.	1,000 ft.	Mfg. Part No.
2	24	7/32	0.41	1.40 x 2.79	250	C1356-X-ND	11.61	21.65	C1356
2	22	7/30	0.51	1.78 x 3.68	300	C1362-X-ND	16.23	30.71	C1362*
2	20	10/30	0.51	2.16 x 4.06	300	C1360-X-ND	21.89	41.85	C1360*
2	18	16/30	0.64	2.54 x 4.75	300	C1357-X-ND	25.31	49.01	C1357*
2	16	26/30	0.64	2.84 x 5.33	300	C1358-X-ND	35.01	66.84	C1358
2	14	41/30	0.64	3.05 x 5.84	300	C1361-X-ND	52.76	103.59	C1361
2	12	65/30	0.76	4.06 x 8.51	300	C1363-X-ND	85.86	166.61	C1363
2	12	7 x 37/36	1.52	5.84 x 11.94	300	C1364-X-ND	164.79	319.38	C1364**

# Length tolerance is ±10%

DABURN PVC Coated Speaker Cable



- Conductors are parallel, stranded copper
- Suited for Hi-Fi speaker cable
- Clear insulation
- **Temp. Rating:** -20°C to +60°C
- **Operating Voltage:** 300V

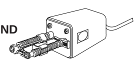
Cond.	Size	Strand	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.	1,000 ft.	Daburn Part No.
2*	22	7/30	W200-X-ND	6.34	49.62	2753
2*	18	16/30	W201-X-ND	10.97	90.61	2759
2*	16	26/30	W202-X-ND	14.79	135.92	2760

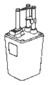
* 1 Conductor Tinned Copper; 1 Conductor Bare Copper

PATCO SERVICE INC. Thermal Wire Strippers

- Nichrome, heating element: 450°F (232°C) in less than 5 seconds.
- Teflon stripper 1700°F (927°C) in less than 5 seconds.
- Eliminates nicks and broken strands of conductors.
- Handles solid, stranded and shielded wires.
- Does not burn skin.
- AC line power or rechargeable battery power versions.
- Complete with cleaning brush and operating instructions.

PTS-30-ND





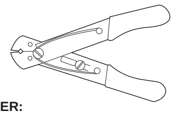
PTS-10-ND
PTS-20-ND
PTS-50-ND

Description	Digi-Key Part No.	Price Each
Thermal Wire Stripper, Battery Powered with Cleaning Brush	PTS-20-ND*	97.41
Replacement Blade for PTS-20	PTS-201-ND	5.04
Thermal Wire Stripper with Cleaning Brush	PTS-10-ND*	59.41
Replacement Blade for PTS-10-ND	PTS-101-ND	5.19
Teflon Wire Stripper for 16-30 AWG	PTS-30-ND	90.31
Replacement Blade for PTS-30-ND	PTS-302-ND	5.32
Thermal Coax Stripper for RG 58, RG 59, RG 62	PTS-50-ND*	94.43
Replacement Blade for PTS-50-ND	PTS-501-ND	6.23

* Will not strip Teflon wire.

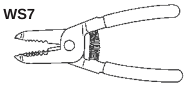
Claus Wire Strippers

WS4



WS4 STRIPPER:
Handy, lightweight, universal stripping tool cuts and strips common wire sizes. Hardened blades. Vinyl grips. Spring action to speed work. Full length: 4"/102mm.

WS5, WS6, WS7



WS5, WS6, WS7 WIRE STRIPPER:
Strip and cut commonly used wire, single or stranded, AWG or metric. Each tool will strip several different wire sizes. Plier nose is an extra feature along with cushion grips and spring release. Hardened pivot joint for longer life. A perfect tool for solder benches or assembly areas.

Description	Digi-Key Part No.	Price Each
AWG 10 - 22	WS4-ND	8.25
AWG 10 - 20 (Yellow)	WS5-ND	13.40
AWG 16 - 26 (Red)	WS6-ND	13.40
AWG 22 - 30 (Blue)	WS7-ND	14.65

AMP tyco Electronics Authorized Distributor Cable Stripper

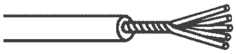
Description	Digi-Key Part No.	Price Each
Cable Stripping Tool for RG/58, 59 (AMP Part No. 603995-1)	A1110-ND	131.14

DABURN Plastic Kinkless Test Lead Wire

Soft formulation vinyl maximum flexibility. Temperature stability from -80°C to +105°C. Exceed requirements for MIL-I-3930A Type JP(PVC). Suitable for text leads, etc. Resistant to gasoline and oil. Excellent abrasion resistance. **Description:** One conductor tinned copper stranded, special formulation vinyl insulation - smooth surface. **Operating Temperature:** –80°C to +105°C, 5000V rating.

Ft.	Size	Strand	Ins. (mm)	O.D. Nom.	Digi-Key Part Number Red	Black	Yellow	Green	Price Per Roll
100	22	26/36	.81	2.54	W2722R-100-ND	W2722B-100-ND	W2722Y-100-ND	W2722G-100-ND	14.25
1000	22	26/36	.81	2.54	W2722R-1000-ND	W2722B-1000-ND	W2722Y-1000-ND	W2722G-1000-ND	94.17
100	18	65/36	.81	2.84	W2718R-100-ND	W2718B-100-ND	W2718Y-100-ND	W2718G-100-ND	24.05
1000	18	65/36	.81	2.84	W2718R-1000-ND	W2718B-1000-ND	W2718Y-1000-ND	W2718G-1000-ND	164.65

Rubber Kinkless Test Lead Wire



Suitable as Test Lead Wire in analyzers, instruments, oscillators, meters, etc. Wherever extra flexibility and limpness are necessary. Single conductor, extra flexible stranded soft tinned copper, color-coded rubber, smooth wax finish. **Operating Temperature:** -20°C to +60°C.

Ft.	Size	Nom. Strand	Breakdown Insul. Wall	Voltage	Nom. Voltage	O.D. Nom.	Digi-Key Part Number Red	Black	Price Per Roll
100	20	41/36	1.19mm	12,000V	3,000	3.48mm	W2715R-100-ND	W2715B-100-ND	41.16
1000	20	41/36	1.19mm	12,000V	3,000	3.48mm	W2715R-1000-ND	W2715B-1000-ND	271.95

General Cable Multi-Conductor Cable

LL46351 E26174

UL Style 2464
80° 300/V.

COLOR CODE CHART NO. 1

No.	Color	No.	Color	No.	Color
1	Black	11	Pink	21	White/Brown
2	White	12	Tan	22	White/Orange
3	Red	13	Red/Green	23	White/Gray
4	Green	14	Red/Yellow	24	White/Violet
5	Brown	15	Red/Black	25	Wht/Blk/Red
6	Blue	16	White/Black	26	Wht/Blk/Grn
7	Orange	17	White/Red	27	Wht/Blk/Yel
8	Yellow	18	White/Green	28	Wht/Blk/Blu
9	Violet	19	White/Yellow	29	Wht/Blk/Brn
10	Gray	20	White/Blue	30	Wht/Blk/Org

COLOR CODE CHART NO. 2

No.	Color	No.	Color	No.	Color
1	Black	11	Blue/Black	21	Orange/Green
2	White	12	Black/White	22	Blk/Wht/Red
3	Red	13	Red/White	23	Wht/Blk/Red
4	Green	14	Green/White	24	Red/Blk/Wht
5	Orange	15	Blue/White	25	Grn/Blk/Wht
6	Blue	16	Black/Red	26	Org/Blk/Wht
7	White/Black	17	White/Red	27	Blu/Blk/Wht
8	Red/Black	18	Orange/Red	28	Blk/Red/Grn
9	Green/Black	19	Blue/Red	29	Wht/Red/Grn
10	Orange/Black	20	Red/Green	30	Red/Blk/Grn

COLOR CODE CHART NO. 3

No.	Color	No.	Color
1	Black	3	Red
2	Natural	4	Green

COLOR CODE CHART NO. 4

No.	Color	No.	Color
1	Black	3	White
2	Red	4	Green

Notes:

1. UL-2092 (UL: 60°C, 300V)
2. UL-2093 (UL: 60°C, 300V)
3. UL-2106 (UL: 60°C, 600V)
4. NEC Article 725 Type CL2 (UL: 75°C)
5. UL Style 2464 (UL: 80°C, 300V)
6. NEC Article 800 Type CM (UL: 75°C)
7. CSA PCC (60°C)
8. Passes UL 70,000 BTU Vertical Tray Flame Test
9. Passes CSA FT1 Flame Test
10. OSHA acceptable
11. NEC Article 725 (UL: 60°C)
12. California State Fire Marshal
13. Passes CSA FT6 Flame Test
14. NEC Article 725 Type CL3 (UL: 75°C)
15. NEC Article 800 (UL: 60°C)
16. CM-CSA PCC FT4, non UL2464
17. NEC Article 725 Power-Limited Tray Cable (UL: 105°C, 300V)
19. NEC Type CL3P only
20. Passes CSA FT4 Flame Test

A. Capacitance between conductors
B. Cap. between 1 conductor & other conductors connected to shield

Non-Plenum

General Specifications: • Temperature Range: -20°C to +80°C (UL +80°C) • Voltage Rating: 150V (UL) • Each conductor stranded tinned copper • Color coded PVC insulation • Nominal Ins. Thickness: .010" (.25mm) • Gray PVC jacket • Conductors: 22AWG 7 x 30 Tinned Copper; 24 AWG 7 x 32 Tinned Copper • Insulation: SR PVC • Construction: Conductors cabled with Foil Shield 22/24 AWG stranded tin drain wire • Jacket: Chrome Vinyl 80°C • Application: For use with computers & instrumentation. 80°C, 300 V, CSA, SR-PC. Also for use in Class 2 and 3 circuits as described in Art of NEDC

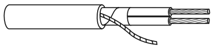
Series C2514, C2534: • Conductor: fully annealed solid or stranded tinned copper per ASTM B-33 • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out; Stranded tinned copper drain wire • Jacket: Gray PVC; Temperature Range: -20°C to +75°C

Series C0454: • Conductor: 22-12AWG fully annealed stranded tinned copper per ASTM B-33 • Insulation: Premium grade color coded PVC • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out; Stranded tinned copper drain wire • Jacket: Gray PVC; Temperature Range: -20°C to +105°C

Series C2543: • Conductor: 18 AWG fully annealed stranded tinned copper per ASTM B-33 • Insulation: Premium grade color coded S-R PVC • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out; Stranded tinned copper drain wire • Jacket: Gray PVC; Temperature Range: -20°C to +80°C

Series C2830/C2404/C2412: • Conductor: 18 AWG fully annealed stranded tinned copper per ASTM B-33 • Insulation: Premium grade color coded PVC per UL 1007 • Jacket: Gray PVC; Temperature Range: -20°C to +80°C

Plenum



Series C2534 / C2535 / C2536: • Conductor: Fully annealed stranded tinned copper per ASTM B-33 • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out, stranded tinned copper drain wire • Insulation: Premium grade color coded polyethylene • Jacket: Gray PVC • Temperature Range: -20°C to +75°C

Series C0755: • Conductor: Fully annealed stranded tinned copper per ASTM B-33 • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out, stranded tinned copper drain wire • Insulation: Premium grade color coded semi-rigid PVC per UL 1061 • Jacket: Gray PVC • Temperature Range: -20°C to +80°C

Series C3062 / C3159 / C3063 / C3068 / C3068: • Conductor: Fully annealed stranded tinned copper per ASTM B-3, B8, or B33 • Insulation: Premium grade color coded Flexguard • Shield: 100% Flexfoil aluminum/polyester foil, 25% overlap, stranded tinned copper drain wire • Jacket: Flexguard, Natural • Temperature Range: 0°C to +60°C • Sequential footage marked to facilitate installations • Includes ripcord

Series C3162: • Conductor: Fully annealed stranded tinned copper per ASTM B-3, B8 or B33 • Insulation: Premium grade color coded Flexguard • Shield: 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out, stranded tinned copper drain wire • Jacket: Natural Fluoropolymer • Temperature Range: -20°C to +60°C

Series C2428: • Conductor: Fully annealed stranded tinned copper per ASTM B-33 • Insulation: Premium grade color coded PVC • Jacket: Gray PVC • Temperature Range: -20°C to +80°C

Series C3112/C3113/C3120/C3121/C3122/C2127/C3128: • Conductor: Fully annealed stranded tinned copper or bare copper to ASTM B3, B8 or B33 • Insulation: Premium grade color coded Flexguard • Jacket: Flexguard, Natural • Temperature Range: 0°C to +60°C • Sequential footage marked to facilitate installation • Includes ripcord

No. of Cond	Color Chart	Cond. Size (AWG)	Cond. Strand	Size of Drain Wire	Nominal Insulation Thickness Inches (mm)	Nominal Jacket Thickness Inches (mm)	Suggested Working Voltage	Nominal O.D. Inches (mm)	Nominal Cap. pF/FT (See Notes A /B)		Nominal Ohms/M @ 20°C Conductor/Shield		Notes	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†	500 ft. #	1,000 ft. #	Mfg. Part No.
NON-PLENUM																		
Unshielded — 22AWG-7/30 Stranded																		
2	Red/Blk	22	7/30	—	0.010 (0.25)	0.025 (0.64)	300V	0.150 (3.81)	25.5	—	—		9	W120-X-ND	19.61	34.65	69.28	C6348-X-10
3	Blk/Rd/Gn	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.176 (4.47)	25.5	—	—		5, 6, 7, 8, 9, 10	W121-X-ND	23.67	57.74	102.44	C4062-X-10
4	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.189 (4.80)	25.5	—	—		5, 6, 7, 8, 9, 10	W122-X-ND	27.15	72.97	130.95	C4063-X-10
5	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.203 (5.16)	25.5	—	—		5, 6, 7, 8, 9, 10	W123-X-ND	28.81	77.51	144.47	C4064-X-10
6	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.218 (5.54)	25.5	—	—		5, 6, 7, 8, 9, 10	W124-X-ND	31.72	80.14	149.60	C4066-X-10
7	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.218 (5.54)	25.5	—	—		5, 6, 7, 8, 9, 10	W125-X-ND	35.02	95.44	173.62	C4088-X-10
8	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.234 (5.94)	25.5	—	—		5, 6, 7, 8, 9, 10	W126-X-ND	37.63	100.90	192.62	C4065-X-10
9	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.249 (6.32)	25.5	—	—		5, 6, 7, 8, 9, 10	W127-X-ND	42.59	135.50	257.22	C4070-X-10
10	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.268 (6.81)	25.5	—	—		5, 6, 7, 8, 9, 10	W128-X-ND	46.10	132.12	254.20	C4071-X-10
12	1	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.276 (7.01)	25.5	—	—		5, 6, 7, 8, 9, 10	W129-X-ND	50.48	143.48	281.72	C4067-X-10
15	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.303 (7.70)	25.5	—	—		5, 6, 7, 8, 9, 10	W130-X-ND	73.75	233.12	450.96	C4073-X-10
20	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.334 (8.48)	25.5	—	—		5, 6, 7, 8, 9, 10	W131-X-ND	97.71	322.78	625.24	C4075-X-10
25	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.368 (9.35)	25.5	—	—		5, 6, 7, 8, 9, 10	W132-X-ND	115.79	391.90	756.70	C4076-X-10
30	2	22	7/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.389 (9.88)	25.5	—	—		5, 6, 7, 8, 9, 10	W133-X-ND	141.37	494.32	942.76	C4077-X-10
Overall Foil Shielded (100% Aluminum Mylar Foil) — 22AWG-7/30 Stranded																		
4	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.190 (4.83)	36.0	65.0	15.0	12.0	5, 6, 7, 8, 9, 10	W504-X-ND	30.67	79.85	159.71	C0762-X-10
6	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.219 (5.56)	34.0	61.0	15.0	12.0	5, 6, 7, 8, 9, 10	W506-X-ND	36.31	91.50	183.00	C0763-X-10
8	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.235 (5.97)	34.0	61.0	15.0	10.7	5, 6, 7, 8, 9, 10	W508-X-ND	45.14	128.52	247.22	C0764-X-10
10	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.269 (6.83)	34.0	61.0	15.0	10.7	5, 6, 7, 8, 9, 10	W510-X-ND	54.12	163.68	312.50	C0765-X-10
15	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.304 (7.72)	34.0	61.0	15.0	10.7	5, 6, 7, 8, 9, 10	W515-X-ND	77.83	246.02	480.66	C0766-X-10
20	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.335 (8.51)	34.0	61.0	15.0	9.1	5, 6, 7, 8, 9, 10	W520-X-ND	98.85	330.52	633.54	C0767-X-10
25	2	22	7/30	22	0.010 (0.25)	0.032 (0.81)	300V	0.369 (9.37)	34.0	61.0	15.0	9.1	5, 6, 7, 8, 9, 10	W525-X-ND	118.58	402.48	777.02	C0768-X-10
Overall Foil Shielded (100% Aluminum Mylar Foil) — 24AWG-7/32 Stranded																		
4	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.175 (4.45)	33.0	59.4	26.0	18.0	5, 6, 7, 8, 9, 10	W404-X-ND	27.27	73.82	131.94	C0742-X-10
6	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.201 (5.11)	33.0	59.4	26.0	16.0	5, 6, 7, 8, 9, 10	W406-X-ND	31.75	90.90	168.55	C0743-X-10
8	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.215 (5.46)	33.0	59.4	26.0	16.0	5, 6, 7, 8, 9, 10	W408-X-ND	36.82	98.28	186.72	C0744-X-10
10	1	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.245 (6.22)	30.0	59.4	26.0	14.0	5, 6, 7, 8, 9, 10	W410-X-ND	41.63	110.84	221.66	C0745-X-10
15	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.276 (7.01)	30.0	59.4	26.0	14.0	5, 6, 7, 8, 9, 10	W415-X-ND	65.65	207.68	346.82	C0746-X-10
20	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.303 (7.70)	30.0	59.4	26.0	14.0	5, 6, 7, 8, 9, 10	W420-X-ND	86.13	281.82	545.30	C0747-X-10
25	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.333 (8.46)	30.0	59.4	26.0	12.0	5, 6, 7, 8, 9, 10	W425-X-ND	103.00	347.24	663.68	C0748-X-10
30	2	24	7/32	24	0.010 (0.25)	0.032 (0.81)	300V	0.351 (8.92)	30.0	59.4	26.0	12.0	5, 6, 7, 8, 9, 10	W430-X-ND	126.30	431.20	833.14	C0749-X-10
Multi-Conductor Foil Shield																		
2	3	22	7/30	—	0.016 (0.41)	0.026 (0.66)	300V	0.179 (4.55)	26.0	47.0	—		1,2,3,4,5,6,7,8,9,10	C2514-1000-ND	—	—	76.32	C2514
2	Blk/Red	18	16/30	—	0.013 (0.33)	0.037 (0.94)	300V	0.227 (5.77)	50.0	90.0	—		8, 17	C0454-1000-ND	—	—	129.39	C0454
2	3	18	16/30	20.00	0.018 (0.46)	0.030 (0.76)	300V	0.229 (5.82)	24.0	43.0	—		1	C2534-X-ND	31.48	83.66	166.32	C2534
3	3	18	16/30	20.00	0.018 (0.46)	0.030 (0.76)	300V	0.247 (6.27)	22.0	40.0	—		2	C2535-X-ND	37.15	—	207.86	C2535
4	4	18	19/30	—	0.010 (0.25)	0.032 (0.81)	300V	0.238 (6.05)	50.0	90.0	—		5, 6, 7, 8, 19	C2543-1000-ND	—	—	195.57	C2543
2	3	16	19/.0117	18.00	0.032 (0.81)	0.032 (0.81)	600V	0.314 (7.98)	27.0	49.0	—		3, 4	C2536-X-ND	41.20	—	241.02	C2536
9	1	24	7/32	—	0.010 (0.25)	0.032 (0.81)	300V	0.228 (5.79)	30.0	59.4	26.0	16.0	5, 6, 7, 8, 9, 10	C0755-X-ND	39.49	—	201.78	C0755
Multi-Conductor Unshielded																		
2	Blk/Red	18	16/30	—	0.016 (0.41)	0.025 (0.64)	300V	0.210 (5.33)	28.0	—	—		5, 6, 7, 8, 16, 19	C2830-1000-ND	—	—	87.30	C2830
4	2	18	16/30	—	0.016 (0.41)	0.032 (0.81)	300V	0.258 (6.55)	28.0	—	—		5, 6, 7, 8, 19	C2404-1000-ND	—	—	153.63	C2404
12	2	18	16/30	—	0.016 (0.41)	0.032 (0.81)	300V	0.401 (10.19)	28.0	—	—		5, 6, 7, 8, 19	C2412-1000-ND	—	—	444.20	C2412
15	2	16	19/.0117	—	0.021 (0.53)	0.032 (0.81)	300V	0.534 (13.56)	28.0	—	—		5, 6, 7, 8, 9, 10, 14	C2428-X-ND	—	—	1300.16	C2428
PLENUM																		
Multi-Conductor Foil Shield — Plenum																		
4	1	22	7/30 TC	—	0.008 (0.20)	0.015 (0.38)	150V	0.146 (3.71)	44.0	79.2	—		11, 15	C3159-1000-ND	—	—	117.05	C3159
2	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.164 (4.17)	61.0	109.8	—		11, 15	C3062-1000-ND	—	—	156.87	C3062
2	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.147 (3.73)	53.0	95.4	—		6, 11, 12, 13	C3162-X-ND	41.29	—	241.79	C3162

† Length tolerance is ±1%. Spools are not UL/CSA marked # Length tolerance is ±10%

(Continued)

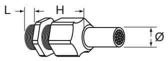
General Cable Multi-Conductor Cable *(Cont.)*

No. of Cond	Color Chart	Cond. Size (AWG)	Cond. Strand	Size of Drain Wire	Nominal Insulation Thickness Inches (mm)	Nominal Jacket Thickness Inches (mm)	Suggested Working Voltage	Nominal O.D. Inches (mm)	Nominal Cap. pF/FT (See Notes A /B)	Nominal Ohms/M @ 20°C Conductor/Shield	Notes	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†	500 ft. #	1,000 ft. #	Mfg. Part No.
4	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.186 (4.72)	54.0 97.2	—	11, 15	C3063-1000-ND	—	—	159.75	C3063
6	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.223 (5.66)	54.0 97.2	—	11, 15	C3065-1000-ND	—	—	225.80	C3065
2	1	16	19/0117 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.187 (4.75)	70.0 126.0	—	11, 15	C3068-1000-ND	—	—	148.88	C3068
Multi-Conductor Unshielded — Plenum																
2	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.130 (3.30)	35.0 —	—	11, 12, 15	C3112-1000-ND	—	—	128.57	C3112
3	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.166 (4.22)	35.0 —	—	11, 15	C3120-1000-ND	—	—	116.58	C3120
4	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.178 (4.52)	35.0 —	—	11, 12, 15	C3113-1000-ND	—	—	204.12	C3113
6	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.219 (5.56)	35.0 —	—	11, 15	C3121-1000-ND	—	—	203.88	C3121
8	1	18	7/26 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.239 (6.07)	35.0 —	—	11, 15	C3122-1000-ND	—	—	259.70	C3122
2	1	16	19/.0117 BC	—	0.008 (0.20)	0.015 (0.38)	150V	0.147 (3.73)	39.0 —	—	11, 15	C3127-1000-ND	—	—	115.62	C3127
2	1	14	19/.0117 BC	—	0.010 (0.25)	0.015 (0.38)	150V	0.182 (4.62)	39.0 —	—	11, 15, 18	C3128-1000-ND	—	—	162.15	C3128

† Length tolerance is ±1%. Spools are not UL/CSA marked # Length tolerance is ±10%

American Electrical Inc. Tight Seal IP68 Nylon Cable Grips (Glands) with Lock Nuts

MFG. for AMERICAN ELECTRICAL INC. by AGRO



Application: The use of synthetic cable grips is almost unlimited within the electrical and electronics industry. Installations where cables must be led safely through a wall of an enclosure will be specified with cable grips. Synthetic cable grips are specified to: • Secure the cable to the enclosure's wall to provide excellent pull-out resistance. • Seal and protect the inside of the enclosure from the unwanted affects of the environment. These contaminants may be water, gas, chemical vapors, or fumes. • Reduce material cost due to use of lighter, less expensive materials, as well as, eliminating the need for running conduit.

Technical Data:
- **Material:** Polyamide PA 6, Self-Extinguishing, Halogen-free
- **Seal:** Neoprene, Oil, and Petroleum Resistant
- **Operating Temperature:** Static (-40°C to 100°C), Dynamic (-30°C to 80°C)
- **Safety Class:** IP68, Waterproof (5 Bar)
- **VDE Test Report:** 12 796-9000-4001/A 2 J

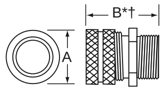
Color	Thread Type	Cable Dia. (mm)	Dim. (mm) H	L	Digi-Key Part No.	Price Each 1	10	100	American Electrical Part No.
Black	7-PG	2.5-6.5	21	8	288-1164-ND	1.18	1.06	.83	1545.07.06
	9-PG	3.0-8.0	23	8	288-1165-ND	1.40	1.26	.98	1545.09.08
	11-PG	4.0-10.0	22	8	288-1166-ND	1.50	1.35	1.05	1545.11.10
	11-PG	2.0-7.0	22	8	288-1167-ND	1.73	1.56	1.21	1545.11.07
	13-PG	5.5-12.0	26	9	288-1168-ND	1.80	1.62	1.26	1545.13.12
	13-PG	3.0-7.0	26	9	288-1169-ND	2.00	1.80	1.40	1545.13.07
	16-PG	8.5-14.0	30	10	288-1170-ND	1.95	1.76	1.37	1545.16.14
	16-PG	5.0-11.0	30	10	288-1171-ND	2.23	2.01	1.56	1545.16.11
	21-PG	11.0-18.0	35	11	288-1172-ND	3.20	2.88	2.24	1545.21.18
	21-PG	6.5-14.0	35	11	288-1173-ND	3.50	3.15	2.45	1545.21.14
	29-PG	17.0-25.0	36	11	288-1174-ND	4.25	3.83	2.98	1545.29.25
	36-PG	22.0-33.0	48	15	288-1175-ND	15.93	14.34	11.15	1545.36.33
	42-PG	28.0-38.0	48	15	288-1176-ND	26.63	23.97	18.64	1545.42.38
	48-PG	32.0-44.0	48	15	288-1177-ND	31.18	28.06	21.83	1545.48.44
	3/8-NPT	3.0-8.0	23	8	288-1178-ND	1.20	1.08	.84	1545.N0375.08
	1/2-NPT	5.5-12.0	26	9	288-1179-ND	1.65	1.49	1.16	1545.N0500.12
	1/2-NPT	3.0-7.0	26	9	288-1180-ND	1.80	1.62	1.26	1545.N0500.07
	3/4-NPT	11.0-18.0	35	11	288-1181-ND	2.63	2.37	1.84	1545.N0750.18
	3/4-NPT	6.5-14.0	35	11	288-1182-ND	2.85	2.57	2.00	1545.N0750.14
	1-NPT	17.0-22.0	36	15	288-1183-ND	4.03	3.63	2.82	1545.N1000.22

Color	Thread Type	Cable Dia. (mm)	Dim. (mm) H	L	Digi-Key Part No.	Price Each 1	10	100	American Electrical Part No.
Gray	7-PG	2.5-6.5	21	8	288-1184-ND	1.18	1.06	.83	1555.07.06
	9-PG	3.0-8.0	23	8	288-1185-ND	1.40	1.26	.98	1555.09.08
	11-PG	4.0-10.0	22	8	288-1186-ND	1.50	1.35	1.05	1555.11.10
	11-PG	2.0-7.0	22	8	288-1187-ND	1.73	1.56	1.21	1555.11.07
	13-PG	5.5-12.0	26	9	288-1188-ND	1.80	1.62	1.26	1555.13.12
	13-PG	3.0-7.0	26	9	288-1189-ND	2.00	1.80	1.40	1555.13.07
	16-PG	8.5-14.0	30	10	288-1190-ND	1.95	1.76	1.37	1555.16.14
	16-PG	5.0-11.0	30	10	288-1191-ND	2.23	2.01	1.56	1555.16.11
	21-PG	11.0-18.0	35	11	288-1192-ND	3.20	2.88	2.24	1555.21.18
	21-PG	6.5-14.0	35	11	288-1193-ND	3.50	3.15	2.45	1555.21.14
	29-PG	17.0-25.0	36	11	288-1194-ND	4.25	3.83	2.98	1555.29.25
	36-PG	22.0-33.0	48	15	288-1195-ND	15.93	14.34	11.15	1555.36.33
	42-PG	28.0-38.0	48	15	288-1196-ND	26.63	23.97	18.64	1555.42.38
	48-PG	32.0-44.0	48	15	288-1197-ND	31.18	28.06	21.83	1555.48.44
	3/8-NPT	3.0-8.0	23	8	288-1198-ND	1.20	1.08	.84	1555.N0375.08
	1/2-NPT	5.5-12.0	26	9	288-1199-ND	1.65	1.49	1.16	1555.N0500.12
	1/2-NPT	3.0-7.0	26	9	288-1200-ND	1.80	1.62	1.26	1555.N0500.07
	3/4-NPT	11.0-18.0	35	11	288-1201-ND	2.63	2.37	1.84	1555.N0750.18
	3/4-NPT	6.5-14.0	35	11	288-1202-ND	2.85	2.57	2.00	1555.N0750.14
	1-NPT	17.0-22.0	36	15	288-1203-ND	4.03	3.63	2.82	1555.N1000.22

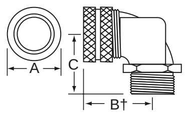
Amphenol® Cord Grips

Aluminum Body and Compression Nut with Washer and Single Hole Oil-Resistant Grommet
This small body connector is ideal for internal uses, as well as conduit hub and panelboard mounting into threaded bodies or with locknuts. Complete units listed require no other parts except cable. Suitable for use in hazardous locations per National Electric Code Class 1, Div.2; Class II, Div. 1 & 2; Class III, Div. 1 & 2. UL listed File No. E53509 and Certified File No. LR-64107.

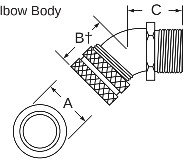
Straight Body



90° Elbow Body



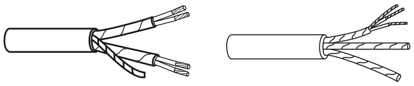
45° Elbow Body



Conduit Hub Size - Inch	Panel Hole Size - Inch	Cord Dia. Range	Dimensions - Inches A	B	C	Digi-Key Part No.	Price Each 1	10	50	Amphenol Part No.
Small Straight Body, Male Thread										
3/8	11/16 NPT	.187-.250	0.88	1.53†	—	DB-414-ND	8.21	4.66	3.43	DB-414
3/8	11/16 NPT	.375-.437	0.88	1.53†	—	DB-4 -ND	8.21	4.66	3.43	DB-4
1/2	7/8 NPT	.187-.250	0.88	1.53†	—	DB-314-ND	8.11	4.60	3.39	DB-314
1/2	7/8 NPT	.250-.312	0.88	1.53†	—	DB-3516-ND	8.11	4.60	3.39	DB-3516
1/2	7/8 NPT	.312-.375	0.88	1.53†	—	DB-338-ND	8.11	4.60	3.39	DB-338
1/2	7/8 NPT	.375-.437	0.88	1.53†	—	DB-3-ND	8.11	4.60	3.39	DB-3
1/2	7/8 NPT	.125-.250	1.13	1.84†	—	DB-7-ND	8.97	5.39	4.19	DB-7
1/2	7/8 NPT	.250-.375	1.13	1.84†	—	DB-8-ND	8.97	5.39	4.19	DB-8
1/2	7/8 NPT	.312-.437	1.13	1.84†	—	DB-9716-ND	9.03	5.42	4.22	DB-9716
1/2	7/8 NPT	.375-.500	1.13	1.84†	—	DB-9-ND	8.97	5.39	4.19	DB-9
1/2	7/8 NPT	.500-.625*	1.13	1.84†	—	DB-10-ND	8.97	5.39	4.19	DB-10
1/2	7/8 NPT	.687-.750*	1.25	2.06†	—	DB-934-ND	14.08	9.86	7.32	DB-934
3/4	1 1/8 NPT	.500-.625	1.13	1.84†	—	DB-6-ND	9.39	5.64	4.39	DB-6
1	1 3/8 NPT	.875-1.00*	1.63	2.69†	—	DB-14-ND	16.03	11.22	8.34	DB-14
90° Elbow Body, Male Thread										
1/2	7/8 NPT	.125-.250	1.13	1.88†	1.44	DB-790-ND	13.23	9.26	6.88	DB-790
1/2	7/8 NPT	.250-.375	1.13	1.88†	1.44	DB-890-ND	13.28	9.30	6.91	DB-890
1/2	7/8 NPT	.375-.500	1.13	1.88†	1.44	DB-990-ND	13.23	9.26	6.88	DB-990
1/2	7/8 NPT	.500-.625*	1.13	1.88†	1.44	DB-1090-ND	13.23	9.26	6.88	DB-1090
45° Elbow Body, Male Thread										
1/2	7/8 NPT	.375-.500	1.13	1.31†	1.31	DB-945-ND	17.29	11.29	9.47	DB-945
1/2	7/8 NPT	.500-.625	1.13	1.31†	1.31	DB-1045-ND	17.29	11.29	9.47	DB-1045

* Maximum cord size will not pass through body without removing outer jacket.
† With nut snug, grommet not compressed.

General Cable



Instrumentation Control Cable

COLOR CODE CHART NO. 1

No.	Color	No.	Color
1	Black	3	White
2	Red	4	Green

COLOR CODE CHART NO. 2

No.	Color	No.	Color
1	Black, Red	2	Green, White

COLOR CODE CHART NO. 3

No.	Color	No.	Color
1	Black, Red	4	Black, Blue
2	Black, White	5	Black, Yellow
3	Black, Green	6	Black, Brown

COLOR CODE CHART NO. 4

No.	Color	No.	Color
1	Black	3	Brown
2	Red	4	Blue

Notes:

1. UL Style 2464 (UL: 60°C, 600V)
2. CSA PCC (CSA: 60°C)
3. Passes UL 70,000 BTU Vertical Tray Flame Test
4. Passes CSA FT4 Flame Test
5. California State Fire Marshal
6. Passes CSA FT6 Flame Test
7. NEC Article 725 Power-Limited Tray Cable (UL: 105°C, 300V)
8. NEC Article 800 Type CM
9. UL Style 2835 (UL:60°C, 30V)
10. NEC Article 800 Type CM
11. UL Style 2919 (UL: 80°C, 30V)
12. Passes CSA FT1 Flame Test
13. UL Type FPLR (UL: 60°C, 300V)
14. NEC Article 760
15. Passes UL 1666 Flame Test
16. NEC Article 725 Type CL3R (UL: 75°C, 150V)
17. NEC Article 800 Type CMR (UL: 75°C, 300V)
18. NEC Type CL3R
19. NEC Article 725 Type CL3P (UL: 60°C, 150V)
20. NEC Article 800 Type CMP (UL: 60°C, 300V)
21. UL Style 2464 (UL:80°C, 300V)
22. UL Type FPLP (UL: 60°C, 300V)
23. NEC CL3R
A. Capacitance between conductors
B. Cap. between 1 conductor & other conductors connected to shield

Communications and Control Cable C0561

Conductor:
- Fully annealed stranded tinned copper per ASTM B-33
- Twisted Pairs

Insulation:
- Premium grade color-coded PVC
- Color code: each pair black and red numbered at one inch intervals

Shield:
- 100% Flexfoil aluminum/polyester, 25% overlap, foil facing out
- Stranded tinned copper drain wire

Jacket:
- PVC, gray
- Temperature Range: -20°C to +105°C

Computer Cable

C6047, C6048

Conductor:
- Fully annealed stranded tinned copper per ASTM B-33
- Twisted Pairs

Insulation:
- Premium grade color-coded polyethylene

Shield:
- Individually shielded pairs
- 100% Flexfoil aluminum/polyester, 25% overlap, foil facing in
- Stranded tinned copper drain wire each pair

Jacket:
- PVC, gray
- Temperature Range: -20°C to +80°C

Fire Alarm Cable

Conductor:
- Fully annealed solid bare copper per ASTM B-33

Insulation:
- Premium grade color-coded S-R PVC

Shield:
- Overall polyester supported aluminum foil, plus a stranded tinned copper drain wire to facilitate grounding

Jacket:
- Premium grade, Red PVC
- Suitable for use from -20°C to +60°C
- Round constructions have sequential footabe markings to facilitate installation
- Includes ripcord on round constructions

Sound and Security Cable

Conductor:
- Stranded bare copper to ASTM B-3, B-8 and B-286

Insulation:
- Premium grade color-coded S-R PVC (E2202S Series: Premium grade color-coded Flexguard)

Shield:
- Overall polyester supported aluminum foil, plus a stranded tinned copper drain wire to facilitate grounding

Jacket:
- Premium grade, Gray PVC (E2202S: Premium grade Natural Flexguard)
- Sequential footage markings to facilitate installation
- Suitable for use from -20°C to +75°C (E2202S: 0°C to +60°C)
- Includes ripcord

No. of Pairs	Color Chart	Cond. Size (AWG)	Cond. Strand	Nominal Insulation Thickness Inch (mm)	Nominal Jacket Thickness Inch (mm)	Suggested Working Voltage	Nominal O.D. Inch (mm)	Nominal Cap. pF/FT (See Notes A /B)		Notes	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.	500 ft.	1,000 ft.	Mfg. Part No.
NON-PLENUM															
Shielded - Communication and Control Cable															
2	2	22	7/30	0.008 (0.20)	0.020 (0.51)	300V	0.165 (4.19)	35.0	63.0	2,3,4,8,9	C1352-X-ND	29.76	82.80	152.33	C1352
3	3	22	7/30	0.011 (0.28)	0.032 (0.81)	30V	0.292 (7.42)	24.4	43.9	2,3,10,11,12	C6040-X-ND	50.30	170.75	320.38	C6040
3	Black/Red	18	16/30	0.015 (0.38)	0.053 (1.35)	300V	0.403 (10.24)	33.5	60.3	2,3,4,7,21	C0561-1000-ND	—	—	294.83	C0561
3	3	18	16/30	0.016 (0.41)	0.032 (0.81)	30V	0.395 (9.75)	25.7	46.2	2,3,8,11,12	C6047-1000-ND	—	—	317.10	C6047
6	3	18	16/30	0.016 (0.41)	0.048 (1.19)	30V	0.556 (14.07)	25.7	46.2	2,3,8,11,12	C6048-1000-ND	—	—	665.48	C6048

No. of Cond.	Color Chart	Cond. Size (AWG)	Cond. Strand	Nominal Insulation Thickness Inch (mm)	Nominal Jacket Thickness Inch (mm)	Suggested Working Voltage	Nominal O.D. Inch (mm)	Nominal Cap. pF/FT	Notes	Digi-Key Part No.	Price Per Roll 1,000 ft.	Mfg. Part No.
NON-PLENUM												
Unshielded - Fire Alarm Cable												
2	4	14	Solid	0.013 (0.33)	—	300V	0.210 (5.33)	Standard	5,13,14,15	E1522S-1000-ND	106.19	E1522S
4	4	14	Solid	0.013 (0.33)	—	300V	0.248 (6.30)	Standard	5,13,14,15	E1524S-1000-ND	188.16	E1524S
Unshielded - Riser Sound and Security Cable												
2	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.156 (3.96)	—	16,17	E1032S-1000-ND	56.97	E1032S
4	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.187 (4.75)	—	16,17	E1034S-1000-ND	101.39	E1034S
2	1	16	19/.0117	0.010 (0.25)	0.015 (0.38)	300V	0.178 (4.52)	—	16,17	E1042S-1000-ND	82.91	E1042S
4	1	16	19/.0117	0.010 (0.25	0.015 (0.38)	300V	0.209 (5.31)	—	16,17	E1044S-1000-ND	148.89	E1044S
2	1	14	19/.0147	0.013 (0.33)	0.015 (0.38)	300V	0.223 (5.66)	—	16,17,23	E1052S-1000-ND	113.03	E1052S
2	1	12	19/.0185	0.009 (0.23)	0.015 (0.38)	300V	0.260 (6.60)	—	16,17,23	E1062S-1000-ND	165.03	E1062S
Shielded - Fire Alarm Cable												
2	4	14	Solid	0.013 (0.33)	0.015 (0.38)	300V	0.218 (5.54)	Standard	5,13,14,15	E2532S-1000-ND	129.95	E2532S
Shielded - Riser Sound and Security Cable												
2	1	22	7/30	0.008 (0.20)	0.015 (0.38)	300V	0.127 (3.23)	—	16,17	E2002S-1000-ND	51.86	E2002S
4	1	22	7/30	0.008 (0.20)	0.015 (0.38)	300V	0.146 (3.71)	—	16,17	E2004S-1000-ND	74.52	E2004S
2	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.164 (4.17)	—	16,17	E2032S-1000-ND	75.77	E2032S
3	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.173 (4.39)	—	16,17	E2033S-1000-ND	95.48	E2033S
4	1	18	7/26	0.009 (0.23)	0.015 (0.38)	300V	0.191 (4.85)	—	16,17	E2034S-1000-ND	120.02	E2034S
2	1	16	19/.0117	0.010 (0.25)	0.015 (0.38)	300V	0.189 (4.80)	—	16,17	E2042S-1000-ND	104.49	E2042S
2	1	14	19/.0147	0.013 (0.33)	0.015 (0.38)	300V	0.245 (6.22)	—	16,17	E2052S-1000-ND	135.69	E2052S
PLENUM												
Shielded - Fire Alarm Cable												
2	4	14	Solid	0.012 (0.30)	0.015 (0.38)	300V	0.218 (5.54)	Standard	5,14,22	E3622S-1000-ND	158.97	E3622S
Shielded - Riser Sound and Security Cable												
2	2	18	7/26	0.008 (0.20)	0.015 (0.38)	300V	0.164 (4.17)	—	19,20	E2202S-1000-ND	98.43	E2202S

Category 2 - Compatible Cross-Connect Wire

Intended for cross-connecting between terminals of a distribution frame or other premis equipment; suitable for Data/Voice Transmission up to 4 Mbps.

UL Listed Communications Cable

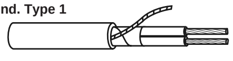
- **Conductors:** 24 AWG solid bare annealed copper • **Insulation:** Semi-rigid, flame retardant PVC
- **Color coding:** BL/W-W/BL • Pairing: Two twists per foot (min) • **Packaging:** 1000 ft spool

No. of Pairs	Cond. Size (AWG)	O.D. In. (mm)	DC Resistance (max) Ohms/1000 ft @ 20C	Characteristics Impedance Ohms @ 1MHz (nom)	Digi Key Part No.	Price Per Roll# 1,000 ft.	Mfg. Part No.
1	24	.06 (1.52)	28.6	100	C7023708-1000-ND	29.54	7023708

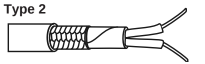
# Length tolerance is ±10%

General Cable Shielded Microphone Cable

Cond. Type 1



Cond. Type 2



CONDUCTOR:

Type 1: Fully annealed stranded tinned copper/ ASTM B-33.
Type 2: Fully annealed stranded bare copper per ASTM B-33.

INSULATION:

Type 1: Premium grade color coded polypropylene.
Type 2: Premium grade color coded rubber.

COLOR CODES: See chart.

SHIELD:

Type 1: Conductive tape applied over the core; 100% Flexfoil aluminum/polyester 25% overlap, foil facing in; stranded tinned copper drain wire.
Type 2: 80% tinned copper braid.

JACKET:

Type 1: PVC, Black -20°C to +75°C, 200 voltage rating
Type 2: Black Rubber -20°C to +60°C, 300 voltage rating
Type 3: Carolprene, Black -20°C to +60°C, 300 voltage rating

FEATURES:

Note 1: Excellent shielding to reduce noise
Note 2: Precision engineered to transmit clear, noise-free signals
Note 3: Eliminates hum pick-up
Note 4: Resistant to oil, acid, sunlight, abrasion, and aging
Note 5: Extreme noise reflection
Note 6: Provides extra limpness
Note 7: Low impedance
Note 8: High impedance

COLOR CODE CHART NO. 1			
Conductor	**Color**	**Conductor**	**Color**
1	Black	2	Red

COLOR CODE CHART NO. 2			
Conductor	**Color**	**Conductor**	**Color**
1	White	2	Black

Cond. Type	Cond. Size (AWG.)	Cond. Strand	Insul. Type	Color Chart #	Shield Type	Jacket Type	Features Note No.	No. of Cond.	Nom. Jacket Thickness Inch (mm)	Nom. Insulation Thickness Inch (mm)	Nominal O.D. In. (mm)	Nom. Cap. pF/ft. A/B	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†	500 ft.#	1,000 ft.#	Mfg. Part No.
1	24	19/36	1	1	1	1	1	2	0.020 (.51)	0.008 (.20)	0.135 (3.43)	30/58	C1228-X-ND	33.23	60.39	120.47	C1228
2	20	26/34	2	2	2	2	2, 3, 6, 8	1	0.035 (.89)	0.040 (1.02)	0.230 (5.84)	B = 42	C1300-X-ND	47.85	—	200.19	C1300
2	20	26/34	2	2	2	2	2, 3, 6, 7	2	0.035 (.89)	0.020 (.51)	0.270 (6.86)	B = 50	C1302-X-ND*	68.47	156.83	312.68	C1302
2	18	41/34	2	2	2	3	2, 3, 4, 5, 8	1	0.035 (.89)	0.040 (1.02)	0.240 (6.10)	B = 46	C1201-X-ND*	48.71	105.15	204.90	C1201
2	18	41/34	2	2	2	3	2, 3, 4, 5, 7	2	0.035 (.89)	0.020 (.51)	0.295 (7.49)	B = 61	C1202-X-ND*	71.53	168.14	329.37	C1202
2	16	65/34	2	2	2	3	2, 3, 4, 5, 7	2	0.035 (.89)	0.025 (.64)	0.335 (8.51)	B = 55	C1602-X-ND*	77.11	—	356.55	C1602

† Length tolerance is ±1%   # Length tolerance is ±10%   * High and low impedance cable.   A = conductor to conductor.   B = One conductor and other conductor connected to shield.

General Cable

Coaxial Cable

- For CATV, MATV, CB and HAM applications.
- All jackets are made of black PVC.

(X = No. of Feet Per Roll)

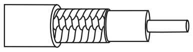
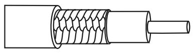
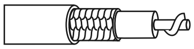
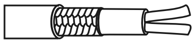
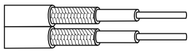
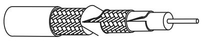
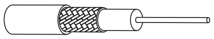
Digi-Key Part No.	(X = No. of Ft. per Roll) Price Per Roll 100 ft.†	500 ft.#	1,000 ft.#	Mfg. Part No.
W300-X-ND	31.19	85.66	164.03	C1166
W301-X-ND	32.44	88.22	174.24	C1104
W302-X-ND	29.68	103.30	205.63	C1164
W303-X-ND	47.79	173.06	339.40	C8000
C8005-X-ND	—	229.12	444.38	C8005
C5785-1000-ND	—	—	142.77	C5785
C5025-1000-ND	—	—	279.38	C5025

# Length tolerance is ±10%
† Length tolerance is ±1%

See "How to Order" for note concerning shipping charges on prepaid orders.

* Percent signal remaining   ** Loss per 100 ft.

db	1	2	3	4-1/2	6	8	10-1/2	14	20
%	90	80	70	60	50	40	30	20	10

Digi-Key Part No.	RG Type	Cond. Size (AWG)	Dielec. O.D. Inch (mm)	Shield	Nom. O.D. In. (mm)	Nom. Imp.	Vel. Prop.	Nom. Cap./ Ft. (M)	Nom. MHz*	Atten. dB**
W300-X-ND 	58/U	20 AWG Solid BC	Poly .116 (2.95)	1 TC Braid 95%	.195 (4.95)	50	66%	28.5 (8.7)	50 100 200 400 900	3.0 4.5 6.2 9.5 14.5
W301-X-ND 	59/U	22 AWG Solid BC Clad Steel	Poly .144 (3.66)	1 Mil. C17 BC Braid 95%	.242 (6.15)	73	66%	21.0 (6.4)	50 100 200 400 900	2.4 3.4 4.8 7.1 10.9
W302-X-ND 	62A/U	22 AWG Solid BC Clad Steel	Semi Poly .146 (3.71)	1 BC Braid 95%	.242 (6.15)	93	84%	13.5 (4.1)	50 100 200 400 900	1.9 2.7 3.8 5.4 8.3
W303-X-ND  IBM Eqv: #7362211	Twin Coaxial	20 AWG 7 x 28 Solid 1 BC 1TC	Poly .240 (6.10)	1 TC Braid 95%	.320 (8.13) .320 (8.13)	100	66%	15.5 (4.7)	— —	— —
C8005-X-ND 	59/U Dual	.023 AWG Solid Bare Copper-weld	Poly .144 (3.66)	100% Flexfoil over Dielectric & TC 85%	.242 (6.15) .478 (12.14)	73	66%	20.5 (6.2)	100 200 400 700 900 1000	3.5 5.1 7.5 11.4 12.0 12.7
C5785-X-ND 	6/U NEC CL2 CATV	18 AWG Solid Copper Clad Steel 31.0Ω/M	Cellular Polyethylene 0.18 (4.57)	(2) 100% Flexfoil (2) 55% Aluminum Braid	0.308 (6.86) Black PVC	75	78%	17.30 (5.27)	1 10 50 100 200 500 1000	0.22 0.77 1.56 2.12 3.00 4.80 6.84
C5025-X-ND 	11/U	14 AWG Solid Bare Copper 2.6Ω/M	Cellular Polyethylene 0.285 (7.24)	95% Bare Copper Braid 1.24Ω/M	0.405 (10.29) Black Polyethylene	75	78%	17.30 (5.27)	1 10 50 100 200 500 1000	0.20 0.50 1.00 1.50 2.20 3.70 5.30

General Cable Coaxial Cable

Fig. 1

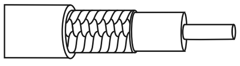
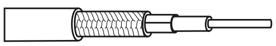


Fig. 2



Nominal Attenuation MHz (dB)

Series	Length in Feet (Meters) 10 (3.0)	50 (15.2)	100 (30.5)	200 (61.0)	400 (121.9)
C3500	0.97	2.21	3.18	4.60	6.72
C3520	0.85	1.90	2.70	3.80	5.30
C3521	0.70	1.57	2.17	3.10	4.68

Series	Length in Feet (Meters) 50 (15)	100 (30)	200 (61)	300 (91)	400 (122)	500 (152)	900 (274)
C1112	2.2	3.0	4.2	5.6	6.9	—	—
C5770	2.3	3.3	4.7	—	—	7.0	10.0
C5775	1.5	2.1	3.1	—	—	5.0	6.9

Fig.	Size	Conductor Size (AWG)	Jacket Color/ Type	Core O.D. Inch (mm)	Shield Type	Nom. O.D. Inch (mm)	Impedance Ohms	V.P. %	Capacitance pF/FT (pF/M)	Digi-Key Part No.	(X = No. of Ft. Per Roll) Price Per Roll 100 ft.†•	500 ft.#	1,000 ft.#	Mfg. Part No.
High Speed Data/LAN FLEXGUARD Jacketed Type MPP/CMP Plenum														
1	RG59/U	20 (Solid BCCS)	Flexguard/Natural	0.138 (3.5)	95% BC braid	0.195 (4.95)	75	82	16.0 (52.5)	C3500-X-ND	59.91	—	503.01	C3500
1	RG62/U	22 (Solid BCCS)	Flexguard/Natural	0.140 (3.56)	95% BC braid	0.195 (4.95)	93	84	13.5 (44.3)	C3520-X-ND	64.77	—	551.68	C3520
1	RG6/U	18 (Solid BCCS)	Flexguard/Natural	0.178 (4.52)	100% Flexfoil plus 95% TC braid	0.235 (5.97)	75	82	16.0 (52.5)	C3521-X-ND	85.17	—	755.62	C3521
High Speed Data/LAN Type MPR/CMR														
1	RG59/U	22 (Solid Bare Copperweld 55 Ω/M)	Black PVC	0.114 (3.65)	70% Bare Copper Braid 4.5 Ω/M	0.242 (6.15)	80	78	16.3	C1112-X-ND	28.22	67.41	—	C1112
2	RG59/U§	22 (Solid Bare Copperweld 55 Ω/M)	Black PVC	0.144 (3.66)	100% Flexfoil plus 40% Alum. braid 55.8 Ω/M	0.238 (6.05)	80*	78*	16.5*	C5770-X-ND	25.33	55.60	—	C5770
2	RG6/U‡	18 (Solid Bare Copper 75Ω/M)	Black PVC	0.180 (4.57)	100% Flexfoil plus 55% Alum. braid	0.270 (6.85)	75*+	78*+	17.3*+	C5775-X-ND	24.06	72.27	—	C5775

† Length tolerance is ±1%   # Length tolerance is ±10%   § NEC Type CL2-CATV UL Style 1354   ‡ NEC Type CL2-CATV
* 100% Sweep Tested @ Frequency Band: 0-400MHz   + Recommended for CATV applications   • 100 ft. spools are not UL marked

General Cable Category 3 - UTP High Speed Data/LAN Type

Suitable for High Speed Data/LAN Transmission up to 16 Mbps. *10BASE-T *4Mbps Token Ring

UL Listed Type MPR/CMR (2133017), UL Listed Type MPP/CMP (2131245), IBM Type 3, EIA/TIA 568 and TSB-36

IEEE 802.3 (10BASE-T), IEEE 802.5 (Token Ring), NEMA (Standard Cable)

- **Conductor:** 24 AWG solid bare annealed copper
- **Insulation:** Flame Retardant PVC
- **Jacket:** Tough, flame retardant PVC (2133017), Tough FLEXGUARD Compound (2131245)
- **Packaging:** 1000 ft PULL-PAC Carton

- **Color Code:** PR#1 = Blue/White - White/Blue,
  PR#2 = Orange/White - White/Orange,
  PR#3 = Green/White - White/Green,
  PR#4 = Brown/White - White/Brown
- **Pairing:** Two twists per foot (min)

No. of Pairs	Cond. Size (AWG)	Jacket Color	O.D. In. (mm)	DC Resistance (max) Ohms/1000 ft @ 20C	Mutual Capacitance (nom) pF/ft @ 1kHz	Characteristics Impedance Ohms @ 772kHz (min-max)	Characteristics Impedance Ohms @ 1-16MHz (min-max)	Attenuation dB/1000ft (max) @ 772kHz	Near-End Crosstalk dB(min) @ 772kHz	Attenuation db/1000ft (max) @16MHz	Near-End Crosstalk dB(min) @ 16MHz	Digi-Key Part No.	Price Per Roll# 1,000 ft.	Mfg. Part No.
High Speed Data/LAN Type MPR/CMR														
4	24	Gray	.16 (4.06)	28.4	18	87-117	85-115	6.8	43.0	40.0	23.0	C2133017-1000-ND	72.86	2133017
High Speed Data/LAN FLEXGUARD Jacketed Type MPP/CMP Plenum														
4	24	White	.15 (3.81)	28.4	18	87-117	85-115	6.8	43.0	40.0	23.0	C2131245-1000-ND	110.70	2131245

# Length tolerance is ±10%

Plenum and Riser Rated Category 5 - UTP High Speed Data/LAN Type

4 Pair, 24 AWG

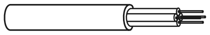
Excellent attenuation and crosstalk characteristics for extended distance runs in 4/16 Mbps LAN's; varying short pair lay reduces the effect of EMI *10BASE-T *4/16 Mbps Token Ring *100 Mbps TPDDI

- **Conductor:** 24 AWG solid bare annealed copper
- **Pairing:** Varying short pair lay
- **DC Resistance (max) Ω/1000ft @1kHz:** 27.0
- **Mutual Capacitance (nom) pF/ft @1kHz:** 14
- **Characteristics Impedance Ω @772kHz (min-max):** 87-117
- **Characteristics Impedance Ω @1-100MHz (min-max):** 85-115
- **Attenuation dB/1000ft (max) @772kHz:** 5.5
- **Near-End Crosstalk dB (min) @ 772kHz:** 64
- **Attenuation dB/1000ft (max) @16MHz:** 67
- **Near-End Crosstalk dB (min) @ 100MHz:** 32
- **Approvals:**
  EIA/TIA TSB-36 (Category 5), IEEE 802.3 (Token Ring), NEMA (Extended Frequency), Proposed ANSIX3T9.5 TP-PMD
- **Color Code:** PR#1 = Blue/White - White/Blue,
  PR#2 = Orange/White - White/Orange,
  PR#3 = Green/White - White/Green,
  PR#4 = Brown/White - White/Brown

Jacket Color	O.D. Inch (mm)	Insulation	UL Listed Type	Type	Packaging	Digi-Key Part No.	Price Per Roll# 1,000 ft.	Mfg. Part No.
Gray PVC	0.20 (5.08)	Polyolefin	MPR/CMR	Riser	PULL-PAC	C5133200E-1000-ND	102.31	5133200E
Gray PVC	0.20 (5.08)	Polyolefin	MPR/CMR	Riser	SPOOL-PAC	C5133329E-1000-ND	102.31	5133329E
Blue Flexguard	0.16 (4.06)	FEP	MPP/CMP	Plenum	PULL-PAC	C5131431E-1000-ND	304.34	5131431E
Blue Flexguard	0.16 (4.06)	FEP	MPP/CMP	Plenum	SPOOL-PAC	C5131278-1000-ND	240.75	5131278

# Length tolerance is ±10%

Telephone and Datacom Category Cables



- **Conductor:** Solid, bare, copper conductors to ASTM B-3 • **Insulation:** Premium grade, color coded PVC • **Jacket:** Premium grade PVC, Suit-able for use from -20°C to +60°C, Suggested voltage rating of 300 volts • **Compliance:** UL Listed Type CMR/CMX-Indoor/Outdoor. NEC Article 800 Type CMR (UL: 60°C, 300V) • **Packaging:** 500 ft. Spool, 1000 ft. EZ OUT Carton

No. of Cond.	Cond. Size (AWG)	Jacket Color	Cond. Strand	Nominal Insulation Thickness Inch (mm)	Nominal Jacket Thickness Inch (mm)	Nominal O.D. In. (mm)	Digi-Key Part No.	Pricing 100 ft.†	Mfg. Series No.
4	22	Beige	Solid	.006 (.15)	.015 (.38)	.129 (3.28)	C4412-100-ND	19.27	C4412

† Length tolerance is ±1%

Plenum Cable Unshielded

Power limited remote control signal cable.

Features: Installation in air plenums without the use of conduit. Outstanding oil and moisture resistance.

Industry Approvals: UL listed for low smoke and fire characteristics per NEC Code Article 725-2 (b). UL Subject 13 and 910, CL2P.

No. of Cond.	Cond. Size (AWG)	Cond. Strand.	Nominal Jacket Thickness	Nominal O.D. Inch (mm)	Digi-Key Part No.	Pricing 1,000 ft.#	Mfg. Series No.
2	22	7 / 30	.008" (.20mm)	.085 (2.16)	C3105-1000-ND	127.60	C3105
4	22	7 / 30	.008" (.20mm)	.117 (2.97)	C3106-1000-ND	175.34	C3106
2	18	7 / 26	.008" (.20mm)	.120 (3.05)	C3102-1000-ND	189.72	C3102
4	18	7 / 26	.008" (.20mm)	.166 (4.22)	C3103-1000-ND	278.73	C3103
2	18	7 / 26	.008" (.20mm)	.120 (3.05)	C9522-1000-ND	257.40	C9522

# Length tolerance is ±10%

Plenum Cable Shielded

Fig. 1

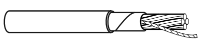


Fig. 2

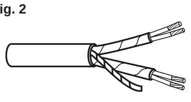
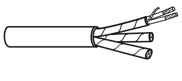


Fig. 3



Color Code Chart for C3156-1000-ND and C3157-1000-ND

No. of Pairs	Color
1	Black & Red
2	Black & White
3	Black & Green

Applications:

- Power limited circuits
- Communication and signal applications
- Cash registers
- Computer systems interfaces
- Intercom systems
- Burglar alarms
- Remote controls
- Low voltage applications.

Features: Installation in air plenums without the use of conduit.

Industry Approvals: UL listed for low smoke and fire characteristics per NEC Code Article 725-2 (b) CL2P.

Fig.	No. of Cond.	No. of Pairs	Cond. Size (AWG)	Cond. Strand.	Nom. Jacket Thickness Inch (mm)	Nom. O.D. In. (mm)	Nom. Cap. Ft. (M)	Digi-Key Part No.	Pricing 1,000 ft.#	Mfg. Series No.
Multi-Conductor, Foil Shielded										
1	4	—	22	7 / 30	.008 (.20)	.125 (3.18)	35 (10.7)	C3155-1000-ND	198.86	C3155
1	4	—	18	7 / 26	.008 (.20)	.176 (4.47)	43 (13.1)	C3163-1000-ND	335.09	C3163
1	2	—	16	7 / .0192	.008 (.20)	.177 (4.50)	35 (10.7)	C3169-1000-ND	279.68	C3169
Multi-Paired, Individually Shielded										
2	—	2	22	7 / 30	.008 (.20)	.145 (3.68)	31 (9.4)	C3156-1000-ND	379.22	C3156
3	—	3	22	7 / 30	.008 (.20)	.160 (4.06)	31 (9.4)	C3157-1000-ND	536.33	C3157

# Length tolerance is ±10%

alpha Multiconductor Cable

Multiconductor Unshielded

Description: 22 AWG (0.35mm²), 7/30 (7 x 0.25mm), Insulation thickness: 0.010" (0.25mm)

Characteristics: • Temp. Range: -20°C to +80°C (AWM), 75°C (CL2) • Voltage Rating: 150 Volt (AWM, CL2) • Conductor: Stranded tinned copper • Insulation: Color coded PVC • Tape: Clear polyester wrap • Jacket: Gray PVC

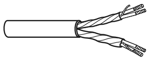
Specifications: • Flammability: Passes UL Subject 13 vertical tray flame test

Color Code Chart

Cond. No.	Color	Cond. No.	Color	Cond. No.	Color
1	Black	6	Blue	11	Pink
2	Red	7	Brown	12	Tan
3	White	8	Yellow	13	Red/Green
4	Green	9	Violet	14	Red/Yellow
5	Orange	10	Gray	15	Red/Black

No. of Cond.	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Multiconductor Unshielded Cable							
2	.032 (.81)	.16 (4.06)	A120-X-ND	17.86	58.07	96.86	1172C-X
3	.032 (.81)	.17 (4.32)	A121-X-ND	23.25	78.10	129.94	1173C-X
4	.032 (.81)	.19 (4.83)	A122-X-ND	25.68	88.81	163.01	1174C-X
5	.032 (.81)	.20 (5.08)	A123-X-ND	31.26	113.33	205.54	1175C-X
6	.032 (.81)	.21 (5.33)	A124-X-ND	33.33	130.10	246.88	1176C-X
7	.032 (.81)	.21 (5.33)	A125-X-ND	36.78	137.80	281.14	1177C-X
8	.032 (.81)	.22 (5.59)	A126-X-ND	40.61	158.29	318.94	1178C-X
9	.032 (.81)	.25 (6.35)	A127-X-ND	43.38	170.10	328.39	1179C-X
10	.032 (.81)	.26 (6.60)	A128-X-ND	46.87	193.35	385.09	1180C-X
12	.032 (.81)	.28 (7.11)	A129-X-ND	53.79	266.06	507.94	1181C-X
15	.032 (.81)	.30 (7.62)	A130-X-ND	82.43	386.43	609.53	1181/15C-X

Multipair Individually Shielded



Description: • CL2 rated, 75°C, 150V • 22 AWG (0.36 mm²), 7/30 (7 x 0.25mm), Insulation thickness: 0.008" (0.20mm)

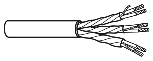
Characteristics: • Temperature Range: -20°C to +105°C • Voltage Rating: 400 Volt • Conductor: Stranded tinned copper • Insulation: Polyproylene (PP) • Shield: Aluminum/polyester tape • Drain Wire: Stranded tinned copper No. 24 • Gray PVC jacket

Color Code

Pair No.	Color
1	Red/Black
2	Green/White

No. of Pair	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Multipair Individually Shielded Cable							
2	.019 (.48)	.16 (4.06)	A131-X-ND	24.50	96.32	144.46	2466C-X

Individually Foil Shielded Multi Pair



Description: 22 AWG (0.35mm²), 7/30 (7 x 0.25mm), Insulation thickness 0.010" (0.25mm)

Characteristics: • Temperature Range: -20°C to +60°C (AWM, CL2) • Voltage Rating: 300 Volts (150 Volts - CL2) • Conductor: Stranded tinned copper • Insulation: Color-coded polypropylene (PP) • Shield: (Individual pairs) Aluminum/polyester tape, foil facing inward • Drain Wire: 22 AWG stranded tinned copper • Jacket: PVC, gray

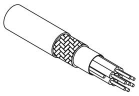
Specifications: • Flammability: Passes UL Subject 13 vertical tray flame test

Color Code Chart

Pair No.	Color	Pair No.	Color	Pair No.	Color
1	Black/Red	10	Red/Blue	19	White/Blue
2	Black/White	11	Red/Yellow	20	White/Brown
3	Black/Green	12	Red/Brown	21	White/Orange
4	Black/Blue	13	Red/Orange	22	White/Yellow
5	Black/Brown	14	Green/Blue	23	Blue/Brown
6	Black/Yellow	15	Green/White	24	Blue/Orange
7	Black/Orange	16	Green/Brown	25	Blue/Yellow
8	Red/Green	17	Green/Orange	26	Brown/Orange
9	Red/White	18	Green/Yellow	27	Brown/Yellow

No. of Pair	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Individually Foil Shielded Multipair Cable							
3	.045 (1.14)	.31 (7.87)	A132-X-ND	37.73	152.06	273.42	6010C-X
6	.045 (1.14)	.39 (9.91)	A133-X-ND	64.78	267.55	511.57	6012C-X
9	.045 (1.14)	.46 (11.68)	A134-X-ND	129.54	597.58	982.54	6014C-X
11	.045 (1.14)	.48 (12.19)	A135-X-ND	144.46	665.47	1049.58	6016C-X
12	.045 (1.14)	.48 (12.19)	A136-X-ND	194.69	830.85	1305.36	6017C-X
15	.060 (1.52)	.56 (14.22)	A137-X-ND	185.30	910.51	1555.86	6018C-X
17	.060 (1.52)	.61 (15.49)	A138-X-ND	308.70	1443.04	2302.02	6019C-X
19	.060 (1.52)	.63 (16.00)	A139-X-ND	252.51	1156.59	1931.58	6020C-X
27	.060 (1.52)	.68 (17.27)	A140-X-ND	465.14	1974.90	3058.78	6022C-X

Multiconductor Foil / Braid Shielded



Description: 28 AWG (0.089mm²), 7/36 (7 x 0.13mm), Insulation thickness: 0.010" (0.25mm)

Characteristics: • Operating Temperature Range: -20°C to +80°C (AWM), +75°C (CL2) • Voltage Rating: 300 volts (AWM), 150 volts (CL2) • Conductor: Stranded tinned copper • Insulation: Color-coded semi-rigid PVC • Shield: Aluminum/polyester/aluminum plus overall braid of tinned copper • Drain Wire: 28 AWG 7/36 tinned copper • Jacket: PVC, chrome gray

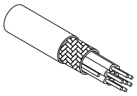
Specifications: • UL Type CL2, AWM 2464 • CSA PCC FT4 • Flammability: Passes UL vertical tray flame test

Color Code Chart

Cond. No.	Color	Cond. No.	Color	Cond. No.	Color
1	Black	10	Gray	19	White/Yellow
2	Red	11	Pink	20	White/Blue
3	White	12	Tan	21	White/Brown
4	Green	13	Red/Green	22	White/Orange
5	Orange	14	Red/Yellow	23	White/Gray
6	Blue	15	Red/Black	24	White/Violet
7	Brown	16	White/Black	25	White/Black/Red
8	Yellow	17	White/Red		
9	Violet	18	White/Green		

No. of Cond.	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	1,000 ft.	Alpha Part No.
Multiconductor Foil/Braid Shielded Cable						
6	.035 (.89)	.19 (5.0)	A3466C-X-ND	101.81	526.74	3466C-X
7	.035 (.89)	.19 (5.0)	A3467C-X-ND	111.76	578.14	3467C-X
15	.035 (.89)	.26 (6.6)	A3470/15C-X-ND	196.65	1017.23	3470/15C-X
25	.035 (.89)	.30 (7.7)	A3470/25C-X-ND	364.57	929.81	3470/25C-X

Multiconductor Braid Shielded



Description: 28 AWG (0.09mm²), 7/36 (7 x 0.13mm), Insulation thickness: 0.010" (0.25mm) PVC - Type B

Characteristics: • Operating Temp. Range: -55°C to +105°C • Voltage Rating: 600 Volt • Conductor: Stranded tinned copper • Shield: Braided tinned copper (90% coverage) • Insulation: Color-coded PVC • Jacket: PVC, gray

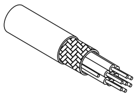
Specifications: • MIL-W-16878D Type B

Color Code

Cond. No.	Color	Cond. No.	Color	Cond. No.	Color
1	Black	6	Blue	11	Blue/Black
2	White	7	White/Black	12	Black/White
3	Red	8	Red/Black	13	Red/White
4	Green	9	Green/Black	14	Green/White
5	Orange	10	Orange/Black	15	Blue/White

No. of Cond.	Jacket Thickness In. (mm)	Diameter Thickness In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	1,000 ft.	Alpha Part No.
Multiconductor Braid Shielded Cable						
2	.012 (.30)	.12 (3.1)	A3302-X-ND	145.37	751.47	3302-X
3	.012 (.30)	.13 (3.3)	A3303-X-ND	221.22	1003.71	3303-X
4	.012 (.30)	.14 (3.5)	A3304-X-ND	269.89	1224.22	3304-X
6	.015 (.38)	.17 (4.3)	A3306-X-ND	345.06	1566.43	3306-X
8	.015 (.38)	.17 (4.4)	A3308-X-ND	392.76	1783.41	3308-X
15	.020 (.50)	.23 (5.8)	A3315-X-ND	622.64	3115.23	3315-X

Multiconductor Braid Shielded



Description: Insulation thickness: 0.010" (0.25mm) PVC, 0.003" (0.08mm) Nylon-Type B/N

Characteristics: • Operating Temperature Range: -55°C to +105°C • Voltage Rating: 600 volts • Conductor: Stranded tinned copper • Shield: Braided tinned copper (90% coverage) • Insulation: Color-coded PVC • Jacket: PVC, gray

Specifications: • MIL-W-16878D Type B/N

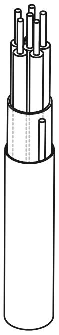
Color Code

Cond. No.	Color
1	White
2	Black
3	Red
4	Green

No. of Cond.	Jacket Conductor AWG	Strand	Thickness In. (mm)	Diameter In. (mm)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price Per Roll 100 ft.	1,000 ft.	Alpha Part No.
Multiconductor Braid Shielded Cable								
3	24	19/36	.016 (0.41)	.16 (4.0)	A3212-X-ND	106.56	462.48	3212-X
4	24	19/36	.017 (0.43)	.18 (4.6)	A3213-X-ND	127.40	535.12	3213-X
2	22	19/34	.016 (0.41)	.18 (4.6)	A3221-X-ND	68.74	291.06	3221-X
3	22	19.34	.017 (0.43)	.18 (4.6)	A3222-X-ND	81.77	363.39	3222-X
4	22	19/34	.019 (0.48)	.20 (5.1)	A3223-X-ND	92.12	419.84	3223-X
2	20	19/32	.019 (0.48)	.19 (4.8)	A3231-X-ND	78.44	345.74	3231-X
3	20	19/32	.019 (0.48)	.21 (5.3)	A3232-X-ND	92.77	419.84	3232-X
4	20	19/32	.021 (0.53)	.23 (5.9)	A3233-X-ND	110.63	515.09	3233-X

Multiconductor Cable — XTRA-Guard® 1

Operating Temperature: • -20°C to 80°C - AWM; -20°C to 75°C - CM
Voltage Rating: 300 Volt
Jacket Color: Gray
Description: • Conductor: Stranded tinned copper • Insulation: Color-coded premium PVC • **SUPRA**SHIELD: Aluminum/Polyester/Aluminum Foil with stranded tinned copper drain wire equal in size to insulated conductors of cable plus 70% overall braid of tinned copper • Nylon rip cord for ease of jacket stripping • Jacket: Premium PVC • Insulation Thickness: 22 AWG: 0.010: (0.25mm); 20AWG, 18AWG and 16 AWG: 0.017" (0.43mm)
Specifications: • UL Type CM, AWM Style 2464 • CSA PCC FT4 • Passes UL VW-1 Flame Test • Passes CSA FT4 Flame Test



Color Code Chart A

Cond. No.	Base Color	1st Stripe	2nd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe
1	Black	—	—	21	White	Brown	—	41	White	Green	Red
2	Red	—	—	22	White	Orange	—	42	White	Green	Green
3	White	—	—	23	White	Gray	—	43	White	Green	Blue
4	Green	—	—	24	White	Violet	—	44	White	Green	Brown
5	Orange	—	—	25	White	Black	Red	45	White	Green	Violet
6	Blue	—	—	26	White	Black	Green	46	White	Blue	Black
7	Brown	—	—	27	White	Black	Yellow	47	White	Blue	Red
8	Yellow	—	—	28	White	Black	Blue	48	White	Blue	Green
9	Violet	—	—	29	White	Black	Brown	49	White	Blue	Blue
10	Gray	—	—	30	White	Black	Orange	50	White	Blue	Brown
11	Pink	—	—	31	White	Black	Gray	51	White	Blue	Violet
12	Tan	—	—	32	White	Black	Violet	52	White	Brown	Black
13	Red	Green	—	33	White	Black	Black	53	White	Brown	Red
14	Red	Yellow	—	34	White	Red	Black	54	White	Brown	Green
15	Red	Black	—	35	White	Red	Red	55	White	Brown	Blue
16	White	Black	—	36	White	Red	Green	56	White	Brown	Brown
17	White	Red	—	37	White	Red	Blue	57	White	Brown	Violet
18	White	Green	—	38	White	Red	Brown	58	White	Violet	Red
19	White	Yellow	—	39	White	Red	Violet	59	White	Violet	Green
20	White	Blue	—	40	White	Green	Black	60	White	Violet	Blue

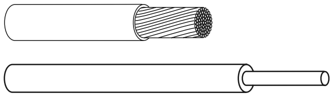
Color Code Chart B

Cond. No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	Cond. No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe
1	Black	—	—	—	25	White	Black	Blue	—	49	White	Yellow	Gray	—
2	Brown	—	—	—	26	White	Black	Violet	—	50	White	Green	Blue	—
3	Red	—	—	—	27	White	Black	Gray	—	51	White	Green	Violet	—
4	Orange	—	—	—	28	White	Brown	Red	—	52	White	Green	Gray	—
5	Yellow	—	—	—	29	White	Brown	Orange	—	53	White	Blue	Violet	—
6	Green	—	—	—	30	White	Brown	Yellow	—	54	White	Blue	Gray	—
7	Blue	—	—	—	31	White	Brown	Green	—	55	White	Violet	Gray	—
8	Violet	—	—	—	32	White	Brown	Blue	—	56	White	Black	Brown	Red
9	Gray	—	—	—	33	White	Brown	Violet	—	57	White	Black	Brown	Orange
10	White	—	—	—	34	White	Brown	Gray	—	58	White	Black	Brown	Yellow
11	White	Black	—	—	35	White	Red	Orange	—	59	White	Black	Brown	Green
12	White	Brown	—	—	36	White	Red	Yellow	—	60	White	Black	Brown	Blue
13	White	Red	—	—	37	White	Red	Green	—	61	White	Black	Brown	Violet
14	White	Orange	—	—	38	White	Red	Blue	—	62	White	Black	Brown	Gray
15	White	Yellow	—	—	39	White	Red	Violet	—	63	White	Black	Red	Yellow
16	White	Green	—	—	40	White	Red	Gray	—	64	White	Black	Red	Green
17	White	Blue	—	—	41	White	Orange	Yellow	—	65	White	Black	Red	Blue
18	White	Violet	—	—	42	White	Orange	Green	—	66	White	Black	Red	Violet
19	White	Gray	—	—	43	White	Orange	Blue	—	67	White	Black	Red	Gray
20	White	Black	Brown	—	44	White	Orange	Violet	—	68	White	Black	Orange	Yellow
21	White	Black	Red	—	45	White	Orange	Gray	—	69	White	Black	Orange	Green
22	White	Black	Orange	—	46	White	Yellow	Green	—	70	White	Black	Orange	Blue
23	White	Black	Yellow	—	47	White	Yellow	Blue	—					
24	White	Black	Green	—	48	White	Yellow	Violet	—					

Color Chart	No. of Cond.	Jacket Thickness Inch (mm)	Diameter Thickness Inch (mm)	Digi-Key Part No.	Price Per Roll (Roll Size = 100 ft.) 1 Roll	5 Rolls	Alpha Part No.
Multiconductor, Unshielded							
16 AWG (1.23mm²) 19/0.0117 (19 x 0.29mm)							
A	2	.032 (.81)	.26 (6.5)	A5072C-100-ND	182.32	162.06	5072C SL005
	2	.032 (.81)	.26 (6.5)	A5072/1C-100-ND	182.32	162.06	5072/1C SL005
	3	.032 (.81)	.29 (7.4)	A5073C-100-ND	242.24	215.32	5073C SL005
	3	.032 (.81)	.29 (7.4)	A5073/1C-100-ND	242.24	215.32	5073/1C SL005
	4	.032 (.81)	.32 (8.1)	A5074C-100-ND	302.13	268.56	5074C SL005
	6	.032 (.81)	.37 (9.3)	A5076C-100-ND	401.11	356.54	5076C SL005
	8	.032 (.81)	.41 (10.4)	A5078C-100-ND	539.17	479.26	5078C SL005
	10	.032 (.81)	.44 (11.3)	A5080C-100-ND	742.32	659.84	5080C SL005
	15	.032 (.81)	.52 (13.2)	A5080/15C-100-ND	922.05	819.60	5080/15C SL005
	20	.053 (1.35)	.63 (15.9)	A5080/20C-100-ND	1307.54	1162.26	5080/20C SL005
	25	.053 (1.35)	.68 (17.3)	A5080/25C-100-ND	1622.70	1442.40	5080/25C SL005
	30	.053 (1.35)	.73 (18.6)	A5080/30C-100-ND	1924.83	1710.96	5080/30C SL005
	40	.083 (2.11)	.88 (22.5)	A5080/40C-100-ND	2760.93	2454.16	5080/40C SL005
	50	.083 (2.11)	.96 (24.5)	A5080/50C-100-ND	3419.91	3039.92	5080/50C SL005
18 AWG (0.81mm²) 16/30 (16 x 0.25mm)							
A	2	.032 (.81)	.23 (5.8)	A5062C-100-ND	143.26	127.34	5062C SL005
	2	.032 (.81)	.23 (5.8)	A5062/1C-100-ND	143.26	127.34	5062/1C SL005
	3	.032 (.81)	.24 (6.1)	A5063C-100-ND	182.34	162.08	5063C SL005
	3	.032 (.81)	.24 (6.1)	A5063/1C-100-ND	182.32	162.06	5063/1C SL005
	4	.032 (.81)	.26 (6.6)	A5064C-100-ND	216.18	192.16	5064C SL005
	6	.032 (.81)	.31 (7.9)	A5066C-100-ND	312.57	277.84	5066C SL005
	8	.032 (.81).	33 (8.4)	A5068C-100-ND	375.08	333.40	5068C SL005
	10	.032 (.81)	.39 (9.8)	A5070C-100-ND	440.19	391.28	5070C SL005
	15	.032 (.81)	.45 (11.5)	A5070/15C-100-ND	669.40	595.02	5070/15C SL005
	20	.032 (.81)	.51(12.9)	A5070/20C-100-ND	841.30	747.82	5070/20C SL005
	25	.032 (.81)	.56 (14.1)	A5070/25C-100-ND	1101.76	979.34	5070/25C SL005
	30	.053(1.35)	.64 (16.3)	A5070/30C-100-ND	1343.99	1194.66	5070/30C SL005
	40	.053 (1.35)	.72 (18.2)	A5070/40C-100-ND	1844.10	1639.20	5070/40C SL005
	50	.053 (1.35)	.79 (20.0)	A5070/50C-100-ND	2284.29	2030.48	5070/50C SL005
	60	.083 (2.11)	.91 (23.1)	A5070/60C-100-ND	2823.46	2509.74	5070/60C SL005
20 AWG (0.56mm²) 7/28 (7 x 0.32mm)							
A	2	.032 (.81)	.21 (5.3)	A5052C-100-ND	119.81	106.50	5052C SL005
	3	.032 (.81)	.23 (5.9)	A5053C-100-ND	151.07	134.28	5053C SL005
	4	.032(.81)	.25 (6.5)	A5054C-100-ND	179.73	159.76	5054C SL005
	6	.032 (.81)	.29(7.4)	A5056C-100-ND	239.63	213.00	5056C SL005
	8	.032(.81)	.32(8.2)	A5058C-100-ND	281.30	250.04	5058C SL005
	10	.032 (.81)	.35 (8.8)	A5060C-100-ND	325.58	289.40	5060C SL005
	15	.032 (.81)	.40 (10.3)	A5060/15C-100-ND	502.70	446.84	5060/15C SL005
	20	.032 (.81)	.45 (11.5)	A5060/20C-100-ND	645.95	574.18	5060/20C SL005
	25	.032(.81)	.49 (12.6)	A5060/25C-100-ND	770.99	685.32	5060/25C SL005
	30	.032 (.81)	.53 (13.5)	A5060/30C-100-ND	953.30	847.38	5060/30C SL005
	40	.053 (1.35)	.64 (16.3)	A5060/40C-100-ND	1364.85	1213.20	5060/40C SL005
	50	.053 (1.35)	.70 (17.8)	A5060/50C-100-ND	1680.01	1493.34	5060/50C SL005
22 AWG (0.35mm²) 7/30 (7 x 0.25mm)							
B	2	.032 (.81)	.17 (4.3)	A5002C-100-ND	106.79	94.92	5002C SL005
	3	.032 (.81)	.19 (4.8)	A5003C-100-ND	127.62	113.44	5003C SL005
	4	.032 (.81)	.20 (5.2)	A5004C-100-ND	158.87	141.22	5004C SL005
	6	.032 (.81)	.23 (5.8)	A5006C-100-ND	179.73	159.76	5006C SL005
	8	.032 (.81)	.25 (6.4)	A5008C-100-ND	234.43	208.38	5008C SL005
	10	.032 (.81)	.27 (6.9)	A5010C-100-ND	257.85	229.20	5010C SL005
	15	.032 (.81)	.31 (7.9)	A5010/15C-100-ND	385.49	342.66	5010/15C SL005
	20	.032 (.81)	.35 (8.8)	A5010/20C-100-ND	513.11	456.10	5010/20C SL005
	25	.032 (.81)	.38 (9.6)	A5010/25C-100-ND	599.06	532.50	5010/25C SL005
	30	.032 (.81)	.41 (10.3)	A5010/30C-100-ND	742.32	659.84	5010/30C SL005
	40	.032 (.81)	.46 (11.6)	A5010/40C-100-ND	1015.81	902.94	5010/40C SL005
	50	.032 (.81)	.50 (12.7)	A5010/50C-100-ND	1263.26	1122.90	5010/50C SL005
	60	.032 (.81)	.55 (13.7)	A5010/60C-100-ND	1502.89	1335.90	5010/60C SL005

Color Chart	No. of Cond.	Jacket Thickness Inch (mm)	Diameter Thickness Inch (mm)	Digi-Key Part No.	Price Per Roll (Roll Size = 100 ft.) 1 Roll	5 Rolls	Alpha Part No.
Multiconductor, SUPRASHIELD							
16 AWG (1.23mm²) 19/0.0117 (19 x 0.29mm)							
A	2	.032 (.81)	.28 (7.2)	A5172C-100-ND	299.54	266.26	5172C SL005
	2	.032 (.81)	.28 (7.2)	A5172/1C-100-ND	299.54	266.26	5172/1C SL005
	3	.032 (.81)	.32 (8.0)	A5173C-100-ND	385.49	342.66	5173C SL005
	3	.032 (.81)	.32 (8.0)	A5173/1C-100-ND	385.49	342.66	5173/1C SL005
	4	.032 (.81)	.34 (8.8)	A5174C-100-ND	424.55	377.38	5174C SL005
	6	.032 (.81)	.39 (10.0)	A5176C-100-ND	570.42	507.04	5176C SL005
	8	.032 (.81)	.43 (11.0)	A5178C-100-ND	757.96	673.74	5178C SL005
	10	.032 (.81)	.47 (11.9)	A5180C-100-ND	924.66	821.92	5180C SL005
	15	.032 (.81)	.55 (13.9)	A5180/15C-100-ND	1294.52	1150.68	5180/15C SL005
	20	.053 (1.35)	.65 (16.6)	A5180/20C-100-ND	1706.04	1516.48	5180/20C SL005
	25	.053 (1.35)	.71 (18.0)	A5180/25C-100-ND	2052.47	1824.42	5180/25C SL005
18 AWG (0.81mm²) 16/30 (16 x 0.25mm)							
A	2	.032 (.81)	.25 (6.5)	A5162C-100-ND	260.46	231.52	5162C SL005
	2	.032 (.81)	.25 (6.5)	A5162/1C-100-ND	260.46	231.52	5162/1C SL005
	3	.032 (.81)	.28 (7.2)	A5163C-100-ND	304.74	270.88	5163C SL005
	3	.032 (.81)	.28 (7.2)	A5163/1C-100-ND	304.74	270.88	5163/1C SL005
	4	.032 (.81)	.31 (7.8)	A5164C-100-ND	341.21	303.30	5164C SL005
	6	.032 (.81)	.35 (8.9)	A5166C-100-ND	450.61	400.54	5166C SL005
	8	.032 (.81)	.38 (9.7)	A5168C-100-ND	549.59	488.52	5168C SL005
	10	.032 (.81)	.41 (10.5)	A5170C-100-ND	653.76	581.12	5170C SL005
	15	.032 (.81)	.48 (12.1)	A5170/15C-100-ND	940.28	835.80	5170/15C SL005
	20	.032 (.81)	.53 (13.5)	A5170/20C-100-ND	1190.32	1058.06	5170/20C SL005
	25	.053 (1.35)	.62 (15.8)	A5170/25C-100-ND	1487.25	1322.00	5170/25C SL005
	30	.053 (1.35)	.67 (16.9)	A5170/30C-100-ND	1724.29	1532.70	5170/30C SL005
	40	.053 (1.35)	.74 (18.9)	A5170/40C-100-ND	2138.42	1900.82	5170/40C SL005
20 AWG (0.56mm²) 7/28 (7 x 0.32mm)							
A	2	.032 (.81)	.23 (5.9)	A5152C-100-ND	164.85	154.55	5152C SL005
	3	.032 (.81)	.26 (6.6)	A5153C-100-ND	188.93	177.12	5153C SL005
	4	.032 (.81)	.28 (7.1)	A5154C-100-ND	205.60	192.75	5154C SL005
	6	.032(.81)	.32 (8.0)	A5156C-100-ND	268.58	251.79	5156C SL005
	8	.032 (.81)	.35 (8.8)	A5158C-100-ND	294.50	276.09	5158C SL005
	10	.032 (.81)	.37 (9.5)	A5160C-100-ND	366.74	343.82	5160C SL005
	15	.032 (.81)	.43 (10.9)	A5160/15C-100-ND	518.62	486.21	5160/15C SL005
	20	.032 (.81)	.48 (12.1)	A5160/20C-100-ND	648.27	607.76	5160/20C SL005
	25	.032 (.81)	.52 (13.2)	A5160/25C-100-ND	798.30	748.41	5160/25C SL005
	30	.032 (.81)	.56 (14.2)	A5160/30C-100-ND	924.24	866.48	5160/30C SL005
	40	.053 (1.35)	.67 (17.0)	A5160/40C-100-ND	1268.75	1189.46	5160/40C SL005
	50	.053 (1.35)	.73 (18.5)	A5160/50C-100-ND	1520.66	1425.62	5160/50C SL005
	60	.053 (1.35)	.78 (19.8)	A5160/60C-100-ND	1789.23	1677.41	5160/60C SL005
22 AWG (0.35mm²) 7/30 (7 x 0.25mm)							
B	2	.032 (.81)	.20 (5.0)	A5102C-100-ND	142.62	133.71	5102C SL005
	3	.032 (.81)	.21 (5.4)	A5103C-100-ND	159.30	149.34	5103C SL005
	4	.032 (.81)	.22 (5.6)	A5104C-100-ND	168.54	158.01	5104C SL005
	6	.032 (.81)	.25 (6.4)	A5106C-100-ND	205.60	192.75	5106C SL005
	8	.032 (.81)	.27 (6.9)	A5108C-100-ND	238.93	224.00	5108C SL005
	10	.032 (.81)	.30 (7.6)	A5110C-100-ND	279.68	262.20	5110C SL005
	15	.032 (.81)	.33 (8.4)	A5110/15C-100-ND	394.51	369.86	5110/15C SL005
	20	.032 (.81)	.36 (9.2)	A5110/20C-100-ND	483.42	453.21	5110/20C SL005
	25	.032 (.81)	.39 (9.8)	A5110/25C-100-ND	598.26	560.87	5110/25C SL005
	30	.032 (.81)	.42 (10.9)	A5110/30C-100-ND	694.58	651.17	5110/30C SL005
	40	.032 (.81)	.47 (11.8)	A5110/40C-100-ND	918.69	861.27	5110/40C SL005
	50	.032 (.81)	.51 (12.9)	A5110/50C-100-ND	1118.74	1048.82	5110/50C SL005
	60	.053 (1.35)	.60 (15.4)	A5110/60C-100-ND	1228.00	1151.25	5110/60C SL005
	70	.053 (1.35)	.63 (16.0)	A5110/70C-100-ND	1541.02	1444.71	5110/70C SL005

Hook-Up Wire



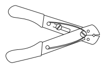
Description:

- Stranded or solid tinned copper conductor
- Color coded PVC insulation
- Flammability: Passes UL VW-1 flame test
- Wire is ordered per EIA-359-A color specifications which allows for some variation in shade

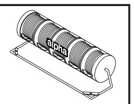
Operating Temperature:

300 Volt: -40°C to +90°C (CSA TR-64), -40°C to +80° (UL AWM 1007)
600 Volt: -20°C to +105°C (UL1015, CSA TEW-105), -55°C to +105°C (MIL-W-16878E Type B) also (MIL-W-76B Type LW)

1800 Series available in White, Black, or Red only.



‡ HU-KIT-20-ND
Five 100-ft. spools, 22AWG, 300V stranded wire (black, white, red, green and blue) **$105.06**



§ HU-KIT-40-ND
Five 100-ft. spools, 24AWG, 300V stranded wire (black, white, red, green and blue) **$105.06**

Each kit comes in convenient wall dispenser and includes wire cutter.

Conductor Size (AWG)	Conductor Strand	Insulation Thickness Inch (mm)	Diameter Inch (mm)	Digi-Key Part No. for 100 ft.*	Price Per 100 ft.	Alpha Part No.**	Digi-Key Part No. for 1,000 ft.*	Price Per 1,000 ft.	Alpha Part No.**
				Stranded — 300 Volt Rating					
30	7/38	.016 (.41)	.043 (1.09)	A3047☐-100-ND•	14.47	3047 ☐ ☐005	A3047☐-1000-ND•	72.86	3047 ☐☐001
28	7/36	.016 (.41)	.047 (1.19)	A3048☐-100-ND•	13.03	3048 ☐ ☐005	A3048☐-1000-ND•	66.20	3048 ☐☐001
26	7/34	.016 (.41)	.051 (1.30)	A3049☐-100-ND•	13.95	3049 ☐ ☐005	A3049☐-1000-ND•	68.51	3049 ☐☐001
24	7/32	.016 (.41)	.057 (1.45)	A2015☐-100-ND§	14.38	3050 ☐ ☐005	A2015☐-1000-ND	69.35	3050 ☐☐001
22	7/30	.016 (.41)	.065 (1.65)	A2016☐-100-ND‡	16.20	3051 ☐ ☐005	A2016☐-1000-ND	76.46	3051 ☐☐001
20	10/30	.016 (.41)	.071 (1.80)	A2040☐-100-ND	19.85	3053 ☐ ☐005	A2040☐-1000-ND	97.00	3053 ☐☐001
18	16/30	.016 (.41)	.080 (2.03)	A2064☐-100-ND	21.06	3055 ☐ ☐005	A2064☐-1000-ND	103.55	3055 ☐☐001
16	26/30	.016 (.41)	.095 (2.41)	A2065☐-100-ND	30.50	3057 ☐ ☐005	A2065☐-1000-ND	147.75	3057 ☐☐001
				Solid — 300 Volt Rating					
24	Solid	.016 (.41)	.057 (1.45)	A3050☐-100-ND•	10.44	3050/1 ☐ ☐005	—	—	—
22	Solid	.016 (.41)	.065 (1.65)	A3051☐-100-ND•	11.80	3051/1 ☐ ☐005	—	—	—
20	Solid	.016 (.41)	.071 (1.80)	A3053☐-100-ND•	14.38	3053/1 ☐ ☐005	—	—	—
16	Solid	.016 (.41)	.095 (2.41)	A3057☐-100-ND•	21.64	3057/1 ☐ ☐005	—	—	—
				Stranded — 600 Volt Rating (-20°C to +105°C)					
24	7/32	.032 (.81)	.088 (2.24)	A3070☐-100-ND	14.56	3070 ☐ ☐005	—	—	—
22	7/30	.032 (.81)	.094 (2.39)	A2101☐-100-ND	17.42	3071 ☐ ☐005	A2101☐-1000-ND	91.91	3071 ☐☐001
20	10/30	.032 (.81)	.100 (2.54)	A2102☐-100-ND	19.38	3073 ☐ ☐005	A2102☐-1000-ND	103.14	3073 ☐☐001
18	16/30	.032 (.81)	.112 (2.84)	A2103☐-100-ND	23.96	3075 ☐ ☐005	A2103☐-1000-ND	123.20	3075 ☐☐001
16	26/30	.032 (.81)	.124 (3.15)	A2104☐-100-ND	28.96	3077 ☐ ☐005	A2104☐-1000-ND	177.78	3077 ☐☐001
14	41/30	.032 (.81)	.134 (3.61)	A3079☐-100-ND•	41.32	3079 ☐ ☐005	—	—	—
12	65/30	.032 (.81)	.162 (3.93)	A3080☐-100-ND	67.32	3080 ☐ ☐005	—	—	—
10	105/30	.032 (.81)	.180 (4.83)	A3081☐-100-ND	96.96	3081 ☐ ☐005	—	—	—
				Stranded — 600 Volt Rating (-55°C to +105°C)					
28	7/36	.010 (.25)	.034 (.86)	A1852☐-100-ND	15.91	1852 ☐☐005	—	—	—
26	7/34	.010 (.25)	.038 (.96)	A1853☐-100-ND	15.91	1853 ☐☐005	—	—	—
24	7/32	.010 (.25)	.043 (1.09)	A1854☐-100-ND	16.20	1854 ☐☐005	—	—	—
24	19/36	.010 (.25)	.043 (1.09)	A185419☐-100-ND	26.06	1854/19 ☐☐005	—	—	—
22	7/30	.010 (.25)	.050 (1.27)	A1855☐-100-ND	17.42	1855 ☐☐005	—	—	—
22	19/34	.010 (.25)	.050 (1.27)	A185519☐-100-ND	34.38	1855/19 ☐☐005	—	—	—
20	7/28	.010 (.25)	.058 (1.47)	A1856☐-100-ND	21.80	1856 ☐☐005	—	—	—
20	19/32	.010 (.25)	.058 (1.47)	A185619☐-100-ND	33.86	1856/19 ☐☐005	—	—	—
18	19/30	.010 (.25)	.068 (1.73)	A185719☐-100-ND	45.32	1857/19 ☐☐005	—	—	—
16	19/29	.010 (.25)	.077 (1.96)	A185819☐-100-ND	29.84	1858/19 ☐☐005	—	—	—
14	19/27	.010 (.25)	.091 (2.31)	A185919☐-100-ND	60.68	1859/19 ☐☐005	—	—	—

* For ☐ in Digi-Key Part No. choose letter which represents color of your choice:

A = Orange	**B** = Black	**G** = Green	**L** = Blue	**N** = Brown
R = Red	**S** = Gray	**V** = Violet	**W** = White	**Y** = Yellow

E = Green/Yellow (Stranded wire only)

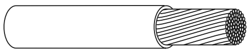
** For ☐☐ in Alpha Part No. choose letters which represents color of your choice:

OR = Orange	**BK** = Black	**GR** = Green	**BL** = Blue	**BR** = Brown
RD = Red	**SL** = Gray	**VI** = Violet	**WH** = White	**YL** = Yellow

GY = Green/Yellow (Stranded wire only)

• Not available in green/yellow

Teflon Hook-Up Wire



Description:

- Stranded Silver-Plated Copper
- Color coded Extruded TFE Teflon® Insulation
- Flammability: Passes UL VW-1 Flame Test
- Not degraded by chemicals, ideal for harsh environments

Operating Temperature:

600 Volt: -60°C to 200°C (UL 105°C), (MIL-W-16878E Type E, UL AWM Style 1213)

Conductor Size (AWG)	Conductor Strand	Insulation Thickness Inch (mm)	Diameter Inch (mm)	Digi-Key Part No. for 100 ft. *	Price Per 100 ft.	Alpha Part No. **
			Stranded 600 Volt Rating			
30	7/38	.010 (.25)	.032 (.81)	A5851☐-100-ND	16.85	5851 ☐☐005
28	7/36	.010 (.25)	.036 (.91)	A5852☐-100-ND	17.10	5852 ☐☐005
26	7/34	.010 (.25)	.040 (1.02)	A5853☐-100-ND	18.38	5853 ☐☐005
24	19/36	.010 (.25)	.045 (1.14)	A5854☐-100-ND	24.37	5854 ☐☐005
24	7/32	.010 (.25)	.044 (1.12)	A58547☐-100-ND	19.82	5854/7 ☐☐005
22	19/34	.010 (.25)	.051 (1.30)	A5855☐-100-ND	24.82	5855 ☐☐005
22	7/30	.010 (.25)	.055 (1.27)	A58557☐-100-ND	29.09	5855/7 ☐☐005
20	19/32	.010 (.25)	.059 (1.50)	A5856☐-100-ND	35.37	5856 ☐☐005
18	19/30	.010 (.25)	.070 (1.78)	A5857☐-100-ND	45.65	5857 ☐☐005
16	19/29	.010 (.25)	.077 (1.96)	A5858☐-100-ND	55.64	5858 ☐☐005
14	19/27	.012 (.30)	.094 (2.39)	A5859☐-100-ND†	80.57	5859 ☐☐005

* For ☐ in Digi-Key Part No. choose letter which represents color of your choice:
B = Black **R** = Red **W** = White

** For ☐☐ in Alpha Part No. choose letters which represents color of your choice:
BK = Black **RD** = Red **WH** = White

† Not UL AWM Style 1213

Local Area Network Unshielded Twisted Pair (UTP)

Category 5

4 Pair, 24 AWG, 300V / 75º C
• **Application:** TIA/EIA 568-A, Category 5 ICEA 661, Category 5 NEMA WC-63.1, Category 5, UL Listed • **Nominal Impedance:** 100±15%Ω @ 1.0-100MHz • **DC Resistance (max.) Ω / 1000':** 28.4Ω (98.2Ω/Km) • **Maximum Attenuation @ 100MHz:** 6.7dB/100' (22.0dB/100m) • **Conductor:** 24 AWG Solid Bare Copper • **Maximum Capacitance @ 1KHz and 1MHz:** 17pF/FT (55.8pF/m)

Category 5e (Enhanced)

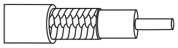
4 Pair, 24 AWG, 300V / 60º C
• **Application:** ANSI/TIA/EIA-568-A-5 Category 5e ISO/IEC 11801 Category 5 NEMA WC-63.1 Category 5e • **Nominal Impedance:** 100±25%Ω @ 100.1-200.0MHz • **DC Resistance (max.) Ω / 1000':** 28.4Ω/1000' (98.2Ω/Km) • **Maximum Attenuation @ 200MHz:** 9.88dB/100' (32.4dB/100m) • **Conductor:** 24 AWG Solid Bare Copper • **Maximum Capacitance @ 1KHz:** 15pF/FT (49.2pF/m)

Color Code:

PR#1 = Blue/White-White/Blue
PR#2 = Orange/White-White/Orange
PR#3 = Green/White-White/Green
PR#4 = Brown/White-White/Brown

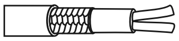
Conductor No. of Pairs	Jacket Color & Material	Nominal O.D. Inches (mm)	Rating	Type Code	Insulation Material Thickness Diameter Inches (mm)	Digi-Key Part No.	Pricing 1,000ft./Roll	Alpha Part No.
					Category 5			
4	Slate Gray PVC	0.20 (5.08)	Non-Plenum	CM CMG FT4	Flame Retardant Polyethylene 0.038 (0.970)	A9504CSL-1000-ND	87.75	9504C SL021
4	Slate Gray Plenum-PVC	0.17 (4.31)	Plenum	CMP CMP FT6	Fluorinated Ethylene Propylene Teflon® 0.034 (0.860)	A9504FSL-1000-ND	258.75	9504F SL021
					Category 5e			
4	Slate Gray PVC	0.21 (5.33)	Non-Plenum	CMG/CMG FT4	Polyolefin 0.037 (0.94)	A9504CESL-1000-ND	95.63	9504CE SL021
4	Slate Gray Plenum	0.20 (5.08)	Plenum	CMP/CMP FT6	Fluorinated Ethylene Propylene Teflon® 0.034 (0.860)	A9504FESL-1000-ND	292.50	9504FE SL021

Coaxial, Ethernet, Thinnet, Twinaxial Cable



**Coaxial Cables,
Non-Plenum Coaxial and
Data Systems**

**Thinnet —
Plenum and Non-Plenum
Ethernet Cables**



**Non-Plenum
Twinaxial Cable**

Cond. RG Type	Inner Size (AWG)	Inner Cond. Strand.	Dielec. Cond. Mat'l†	Dia. Inch (mm)	Shield Dielec. Material†	Nom. Coverage	Jacket Shield Material†	Dia. Inch (mm)	Jacket Material†	Impe-dance (Ω)	Cap-tance pF/ft	Temperature Rate (°C)	Volt Rate	NEC/UL (See Below)	Digi-Key Part No.	Note: X in Part No. = Ft. Per Roll Price per roll 100 ft.	500 ft.	1,000 ft.	Alpha Part No.
Coaxial Cable																			
58 A/U	20	19/0.0071"	TC	.116 (2.95)	PE	95%	TC Braid	.195 (4.95)	V Black	50	30.5	60	150	1	A305-X-ND	35.76	125.22	227.02	9058AC-X
58 C/U	20	19/0.0071"	TC	.116 (2.95)	PE	95%	TC Braid	.195 (4.95)	NCV Black	50	30.5	60	—	—	A306-X-ND	68.08	165.16	313.80	9058C-X
59/U	22	Solid	CW	.146 (3.71)	PE	95%	BC Braid	.242 (6.15)	V Black	75	21.4	60	150/CL2, 30/AWM	1, 7	A301-X-ND	36.38	—	209.20	9059C-X
62 A/U	22	Solid	CW	.146 (3.71)	SSP	95%	BC Braid	.242 (6.15)	V Black	93	13.2	60	150/CL2, 30/AWM	1, 8	A302-X-ND	33.62	133.40	183.72	9062A-X
174/U	26	7/34	CW	.060 (1.52)	PE	88%	TC Braid	.100 (2.54)	V Black	50	31.1	—	—	9	A307-X-ND	33.40	116.84	206.98	9174-X
178 B/U	30	7/38	SC/CW	.034 (.86)	TFE	96%	SC Braid	.071 (1.80)	FEP Natural	50	28.4	—	—	—	A316-X-ND	142.26	545.80	567.52	9178B-X
179 B/U	30	7/38	SC/CW	.063 (1.60)	TFE	93%	SC Braid	.100 (2.54)	Tint FEP Brown	75	19.6	—	—	—	A317-X-ND	148.26	495.08	671.38	9179B-X
214/U	13	7/0.0296"	SC	.285 (7.24)	PE	99%	SC Braid Dbl	.425 (10.79)	NCV Black	50	30.8	—	—	—	A308-X-ND•	696.32	2653.20	4780.58	9214-X
223/U	19	Solid	SC	.116 (2.95)	PE	99%	SC Braid Dbl	.212 (5.38)	NCV Black	50	31.5	—	—	—	A309-X-ND•	231.22	941.24	1811.64	9223-X
316/U	26	7/0.0067"	SCCS	.060 (1.52)	TFE	93%	SC	.098 (2.49)	FEP	50	30.0	—	—	—	A315-X-ND	117.54	587.68	904.18	9316-X
8/U	13	7/21	BC	.285 (7.24)	PE	96%	BC Braid	.405 (10.29)	V Black	52	29.5	—	—	—	A318-X-ND	91.32	371.28	694.38	9008-X
Ethernet Cable																			
Thinnet**	20	19/0.0075"	TC	.112 (2.84)	FEP Teflon	95%	A/M/A + TC Braid	.182 (4.62)	F Gray	50	30.5	125	300	3, 4, 6	A311-X-ND*	—	482.79	877.80	9871F-X
Thinnet ‡	20	19/32	TC	.102 (2.59)	FPE	95%	A/M/A + TC Braid	.180 (4.57)	V Black	50	25.5	60	300	2, 4, 5	A312-1000-ND	—	—	330.50	9881C-1000
Twinaxial Cable																			
Twinax #	20	7/28	BC/TC	.236 (5.99)	PE	95%	TC Braid	.330 (8.38)	V Black	100	15.5	75/CL2, 80/AWM	150/CL2, 30/AWM	1, 10	A303-X-ND	—	294.38	558.62	9818C-X
Twinax	16	Solid	BC	.150 (3.81)	FPE	90%	A/M/A + TC Braid	.440 (11.18)	V Black	124	10.9	60	150/CL2, 30/AWM	1, 11	A314-X-ND	—	—	1290.85	9820C-X

† Code Description:

A/M/A — Aluminum/Polyester/Aluminum Tape
BC — Bare Copper
CW — Copper Coated Steel
F — Fluoropolymer
FEP — Fluorinated Ethylene-Propylene
FPE — Cellular (foam) Polyethylene
NCV — Non-contaminating Polyvinylchloride,Type II
PE — Solid Polyethylene
SC — Silver Coated Copper
SCCS — Silverz-Coated Copper Clad Steel
SSP — Semi-solid Polyethylene
TC — Tinned Copper
TFE — Tetrafluoroethylene
V — Polyvinylchloride - Type I

* Plenum

**ETHERNET IEEE 802.3 10base2 10Mbps

‡ THIN-NET 10Mbps

# IBM SYSTEM (34/36/38/AS 400)

• MIL-C-170D Type

NEC Rating —

1. CL2 **2.** CM **3.** CMP
4. CXC **5.** FT4 **6.** FT6

UL Style —

7. UL AWM 1354 **8.** UL AWM 1478 **9.** UL 1354
10. UL AWM 2498 **11.** UL AWM 2704

Tinned Copper Flat Braid

Description:
• Ground/Shielding Terminations • Used as a ground strap, provides excellent, low-resistant ground path • Ideal shielding material for short-run cables providing easy radial termination • Values shown for Current Carrying Capacity are for bare cable in free air at 30°C (86°F) and intended as a reference guide only. Actual values will depend on permissible temperature rise, permissible voltage drop and other conditions of service.

Specifications:
• QQ-W-343E, ASTM-B-33

Nom. Flat Width Inch (mm)	Nom. Thickness Inch (mm)	Braid Construction AWG of Individual Ends	Carriers	Total No. of Individual Ends	Approx. AWG Equivalent	Approx. Current Carrying Capacity (Amps)	Digi-Key Part No.	Price Per 100ft.	Alpha Part No.
.188 (4.76)	.020 (.50)	36	24	120	15	25	A1230SV-100-ND*	38.12	1230 SV005
.250 (6.35)	.030 (.76)	36	24	168	14	32	A1231SV-100-ND*	51.73	1231 SV005
.375 (9.53)	.030 (.76)	36	48	288	12	46	A1232SV-100-ND	82.82	1232 SV005

* Meets QQ-B-575B

Non-Fraying Expandable Braid Sleeving

Description:

- Protection of Wire, Cable and Hoses
- Wire bundling and Harnessing, Wire splicing
- Frayless cuts without a hot knife
- Use with automatic cutting machines
- Not affected by most chemical environments and common solvents
- Fungus Resistance: No growth
- Withstands short-term exposure to 230°C

Operating Temperature:

- -70°C to 125°C (MIL-I-631D) (GRP-120NF passes UL VW-1 Flame Test)

Color Description:

- GRP-110NF: Black
- GRP-120NF: Black with White Tracer

Nominal Wall Thickness, Inches (mm):

- .027 (.69)

Size O.D. Inch (mm)	Minimum Supplied I.D. Inch (mm)	Maximum Expanded I.D. Inch (mm)	Digi-Key Part No. (General Purpose)	Price Per 100ft.	Alpha Part No. (General Purpose)	Digi-Key Part No. (Flame Retardant)	Price Per 100ft.	Alpha Part No. (Flame Retardant)
.125 (3.18)	.093 (2.36)	.250 (6.35)	AG110NF18B-100-ND	56.70	G110NF1/8 BK005	AG120NF18B-100-ND	82.69	G120NF1/8 BK005
.250 (6.35)	.125 (3.18)	.440 (11.09)	AG110NF14B-100-ND	77.96	G110NF1/4 BK005	AG120NF14B-100-ND	118.13	G120NF1/4 BK005
.500 (12.70)	.250 (6.35)	.750 (19.05)	AG110NF12B-100-ND	155.93	G110NF1/2 BK005	AG120NF12B-100-ND	210.26	G120NF1/2 BK005
.750 (19.05)	.500 (12.70)	1.250 (31.75)	AG110NF34B-100-ND	233.89	G110NF3/4 BK005	AG120NF34B-100-ND	314.21	G120NF3/4 BK005

FIT® Shrinkable Tubing FIT® 221B

- Economical bulk packaging
- Flexibility
- Excellent flame retardancy
- Military, UL/CSA requirements

Characteristics:

- Operating Temperature: -55°C to +135°C
- Shrinkage Ratio: Approximately 2 to 1 at 121°C
- Color: Black, Clear

Physical Properties:

- Tensile Strength: 1800 psi, (127 kg/cm²)
- Ultimate Elongation: 400%
- Longitudinal Shrinkage: 5%
- Specific Gravity: 1.35
- Secant Modulus: 2.5 x 10^4 max.
- Flammability: Self-extinguishing

Electrical Properties:

- Dielectric Strength: 500V/mil (197 kV/cm)
- Volume Resistivity: 10^{14} ohm-cm

Chemical Properties:

- Corrosive Effect: Passes copper stability test
- Fungus Resistance: No growth

Specifications:

- MIL-I-23053/5B
- UL Standard 224 (black only)
- CSA Standard 198 (black only)

CONTENTS for FIT-221 Variety Pack

Tubing Size	Number of Cut Pieces					
	Black	White	Red	Blue	Yellow	Green
1/8"	4	3	2	2	2	1
3/16"	4	3	2	2	2	1
1/4"	4	3	2	2	2	1
3/8"	3	2	1	1	1	1
1/2"	3	2	1	1	1	1

Color	Minimum Supplied I.D. Inch (mm)	Maximum Rec. I.D. Inch (mm)	Nom. Rec. Wall Thickness Inch (mm)	Digi-Key Part No.	Pricing Sold in 4' Lengths 4' (1 pc.)	Pricing Sold in 4' Lengths 20' (5 pcs.)	Digi-Key Part No.	Spool Size (Feet)	Price Per Spool	Alpha Part No.
FIT® 221B — Irradiated Polyolefin										
Black Clear	0.046 (1.17)	0.023 (0.58)	0.016 (0.41)	A364B-4-ND A364C-4-ND	.57 .57	2.55 2.55	A364B-1000-ND A364C-1000-ND	1000 1000	143.33 143.33	FIT-221B-3/64 BKXXX FIT-221B-3/64 CLXXX
Black Clear	0.063 (1.60)	0.031 (0.78)	0.017 (0.43)	A116B-4-ND A116C-4-ND	.58 .58	2.60 2.60	A116B-1000-ND A116C-1000-ND	1000 1000	146.03 146.03	FIT-221B-1/16 BKXXX FIT-221B-1/16 CLXXX
Black Clear	0.093 (2.36)	0.046 (1.17)	0.020 (0.50)	A332B-4-ND A332C-4-ND	.62 .62	2.75 2.75	A332B-500-ND A332C-500-ND	500 500	77.29 77.29	FIT-221B-3/32 BKXXX FIT-221B-3/32 CLXXX
Black Clear	0.125 (3.18)	0.062 (1.58)	0.020 (0.50)	A018B-4-ND A018C-4-ND	.67 .67	2.96 2.96	A018B-500-ND A018C-500-ND	500 500	83.36 83.36	FIT-221B-1/8 BKXXX FIT-221B-1/8 CLXXX
Black Clear	0.187 (4.75)	0.093 (2.36)	0.020 (0.50)	A316B-4-ND A316C-4-ND	.81 .81	3.60 3.60	A316B-500-ND A316C-500-ND	500 500	101.36 101.36	FIT-221B-3/16 BKXXX FIT-221B-3/16 CLXXX
Black Clear	0.250 (6.35)	0.125 (3.18)	0.025 (0.63)	A014B-4-ND A014C-4-ND	1.01 1.01	4.50 4.50	A014B-250-ND A014C-250-ND	250 250	63.23 63.23	FIT-221B-1/4 BKXXX FIT-221B-1/4 CLXXX
Black Clear	0.375 (9.53)	0.187 (4.75)	0.025 (0.63)	A038B-4-ND A038C-4-ND	1.13 1.13	5.03 5.03	A038B-200-ND A038C-200-ND	200 200	56.57 56.57	FIT-221B-3/8 BKXXX FIT-221B-3/8 CLXXX
Black Clear	0.500 (12.70)	0.250 (6.35)	0.025 (0.63)	A012B-4-ND A012C-4-ND	1.28 1.28	5.67 5.67	A012B-150-ND A012C-150-ND	150 150	47.76 47.82	FIT-221B-1/2 BKXXX FIT-221B-1/2 CLXXX
Black Clear	0.750 (19.10)	0.375 (9.53)	0.030 (0.76)	A034B-4-ND A034C-4-ND	1.70 1.70	7.56 7.56	A034B-250-ND A034C-250-ND	250 250	106.27 106.27	FIT-221B-3/4 BKXXX FIT-221B-3/4 CLXXX
Black Clear	1.000 (25.40)	0.500 (12.70)	0.035 (0.88)	A100B-4-ND A100C-4-ND	2.54 2.54	11.30 11.30	A100B-250-ND A100C-250-ND	250 250	158.85 158.85	F221B1IN BKXXX F221B1IN CLXXX
FIT MGKIT 1 (Heat Gun plus FIT-221 Variety Pack)							FITMGKIT1-ND	93.69 each		FITMGKIT1 NC032
FIT-221 Variety Pack (60, 6 inch cut pieces, see chart to the right for contents)							FIT221R-ND	31.52 each		FIT-221-R MC213

Heat Shrink Fabric

Characteristics:

- Operating Temp. -40°C to 125°C
- Shrink Ratio: approx. 2 to 1 or 3 to 1 at 135°C depending on size
- Color Description: All standard packages: black

Physical Properties:

- Longitudinal Shrinkage: up to 20%@ 2:1 shrink ratio, up to 25%@ 3:1 shrink ratio
- Flammability: Meets MVSS 302 horizontal burn test

Chemical Properties:

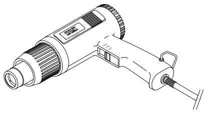
- Corrosive Effect: non-corrosive
- Fungus Resistance: no growth
- Chemical Resistance: antifreeze (50% ethylene glycol), engine oil, mineral hydraulic fluid, detergent (1% teepol), brake fluid (DOT 4), unleaded gasoline, diesel fuel, battery acid

Color	Minimum Supplied I.D. Inch (mm)	Maximum Recovered I.D. Inch (mm)	Nom. Recovered Wall Thickness Inch (mm)	Digi-Key Part No.	Spool Size (Feet)	Price Per Spool	Alpha Part No.
Black	0.47 (12.0)	0.24 (6.0)	0.039 (0.99)	A0471B-50-ND	50	99.88	FITFAB-1 BK007
Black	0.47 (12.0)	0.24 (6.0)	0.039 (0.99)	A0471B-200-ND	200	285.95	FITFAB-1 BK004
Black	0.79 (20.0)	0.39 (10.0)	0.039 (0.99)	A0792B-50-ND	50	119.34	FITFAB-2 BK007
Black	0.79 (20.0)	0.39 (10.0)	0.039 (0.99)	A0792B-200-ND	200	339.48	FITFAB-2 BK004
Black	1.18 (30.0)	0.59 (15.0)	0.039 (0.99)	A1183B-50-ND	50	145.58	FITFAB-3 BK007
Black	1.18 (30.0)	0.59 (15.0)	0.039 (0.99)	A1183B-200-ND	200	413.71	FITFAB-3 BK004
Black	1.57 (40.0)	0.79 (20.0)	0.039 (0.99)	A1574B-50-ND	50	175.50	FITFAB-4 BK007
Black	1.57 (40.0)	0.79 (20.0)	0.039 (0.99)	A1574B-200-ND	200	498.89	FITFAB-4 BK004
Black	1.97 (50.0)	0.98 (25.0)	0.039 (0.99)	A1975B-25-ND	25	107.73	FITFAB-5 BK008
Black	1.97 (50.0)	0.98 (25.0)	0.039 (0.99)	A1975B-100-ND	100	306.32	FITFAB-5 BK005
Black	2.36 (60.0)	1.18 (30.0)	0.039 (0.99)	A2366B-25-ND	25	117.16	FITFAB-6 BK008
Black	2.36 (60.0)	1.18 (30.0)	0.039 (0.99)	A2366B-100-ND	100	333.70	FITFAB-6 BK005
Black	2.76 (70.0)	1.38 (35.0)	0.039 (0.99)	A2767B-25-ND	25	160.25	FITFAB-7 BK008
Black	2.76 (70.0)	1.38 (35.0)	0.039 (0.99)	A2767B-100-ND	100	455.38	FITFAB-7 BK005
Black	0.71 (18.0)	0.24 (6.0)	0.039 (0.99)	A0718B-50-ND	50	140.40	FITFAB-8 BK007
Black	0.71 (18.0)	0.24 (6.0)	0.039 (0.99)	A0718B-200-ND	200	400.32	FITFAB-8 BK004
Black	1.18 (30.0)	0.39 (10.0)	0.039 (0.99)	A1189B-50-ND	50	168.03	FITFAB-9 BK007
Black	1.18 (30.0)	0.39 (10.0)	0.039 (0.99)	A1189B-200-ND	200	478.19	FITFAB-9 BK004
Black	2.36 (60.0)	0.79 (20.0)	0.039 (0.99)	A11810B-25-ND	25	124.18	FITFAB-10 BK008
Black	2.36 (60.0)	0.79 (20.0)	0.039 (0.99)	A23610B-100-ND	100	353.18	FITFAB-10 BK005

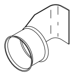
FIT® Multi-Functional Heat Gun

The economical and multi-functional FIT GUN-3 is a two-temperature heat gun that is lightweight in design. The low setting is at 400°C (750°F) while the high temperature is rated at 585°C (1090°F).

It features a durable plastic housing with a built-in ring stand and hanger, concentrator nozzle and hook reflector nozzle attachments.



Concentrator Nozzle

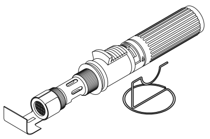


Reflector Nozzle

FITGUN3-ND Heat Gun **$68.84**

FIT® Powerful Flameless Butane Torch

Lightweight and easy to use with a wide nozzle, the FIT TORCH-1 is a convenient repair solution for electrical and electronics technicians. With a temperature range of up to 750ºC (1400ºF), it can be used to shrink most heat shrinkable tubing products. The FIT TORCH-1 is ideal for general heating and drying applications and the heat testing of electronic components. Cordless and refillable, only 7.5 inches long, it can be used continuously up to 120 minutes before recharging with 100% butane fuel. Comes complete with one additional electronic ignition catalytic converter, one deflector attachment, and one tool stand. Butane fuel not included.

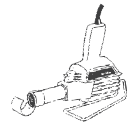


FITTORCH-1-ND Butane Torch **$68.64**

MASTER® APPLIANCE MASTERMITE®

Heat Gun

Quiet running. Comes standard with bench stand, heat shrink attachment, and interchangeable heating element. High impact plastic housing, lightweight, draws only 4.0 amps max., continuous duty brushless motor, temperature: 650°F (343°C), 120V, 60Hz, 4.0A.



Certified

MA1006-ND Heat Gun **$78.36**
MA1007-ND Replacement Heat Element **$23.18**

STEINEL® Heat Guns

Fig. 1

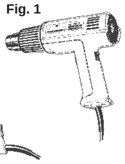
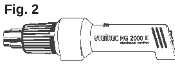


Fig. 2



Certified

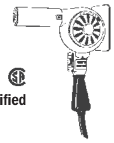
Fig.	Description	Digi-Key Part No.	Price Each
1	3 Speed Fixed Temp Heat Gun	SDL1100-ND	89.95
—	Heat Shrink Attachment for SDL1100-ND	SDL1300-ND	10.95
1	Variable Temp Indust. Heat Gun	SDL1200-ND	159.95
1	Variable, LCD Readout Heat Gun	SDL1350-ND	189.95
2	Variable Ergonomic Heat Gun	SDL1250-ND	159.95
—	Heat Gun Stand Benchtop	SDL1400-ND	24.95
—	Reducer-Reflector Nozzle 3/8" (9mm)	SDL1303-ND	15.95
—	Reducer Nozzle Attachment 3/8" (9mm)	SDL1301-ND	10.95
—	Reducer Nozzle Attachment 5/8" (14mm)	SDL1302-ND	10.95
—	Reflector Nozzle 3" (75mm)	SDL1304-ND	14.95
—	Refl. Nozzle 5/8" (14mm) (does not fit SDL1100)	SDL1305-ND	12.95

HL1502S (SDL1100-ND): Three temperature levels can be selected conveniently with one hand during use. **Specifications:** • Volt.: 120V AC • Output: 1400W • Temp.: • Step 1: 120°F (49°C) • Step 2: 800°F (427°C) • Step 3: 1050°F (566°C) • Air Flow: min. 8.8cfm, max. 17.6cfm. **HL1802E (SDL1200-ND), HG3002LCD (SDL1350-ND), HG2000E (SDL1250-ND):** Continuously adjustable, electronically controlled hot air. The electronic temp. regulator allows ideal temp. setting. Model HG3002LCD has a LCD continuous temp. display. **Specifications:** • Volt.: 120VAC • Output: 1500W • Temp.: 120°– 1100°F (49°– 593°C) • Air Flow: min. 8.8, max. 17.6cfm (HL1802E), min. 7, max. 17.6cfm (HG3002LCD) & min. 11.3, max. 17.6cfm (HG2000E).

MASTER® APPLIANCE Heat Gun

Features universal motor, high air velocity, volume and temperatures. Rugged die cast aluminum housing with externally replaceable carbon brushes, 3 wire oil resistant cord set, and reinforced ceramic heating element, temperature: 500-750°F (260-399°C), 120V, 14A.

Certified



Description	Digi-Key Part No.	Price Each
Heat Gun	MA1001-ND	105.55
Heat Shrink Attachment - Shrink Tubing from 3/4" to 2" (19-51mm) O.D.	MA1002-ND	16.49
Shrink Wrap Attachment - 8" (203mm) Wide	MA1003-ND	43.91
Heat Reducer Attachment - 3/4" (19mm)	MA1004-ND	8.56
Replacement Heat Element	MA1005-ND	19.64

3M Heat Shrinkable Tubing

KYNAR®, EPS-300, SFTW202 GYS, SFTW203, 8420, 8440, & SSC-100x Series

KYNAR® Series-Modified Polyvinylidene Fluoride: Shrink Temperature: 175°C (347°F). **Color:** Clear. **Shrink Ratio:** 2:1. Cross-linked, thin-walled tubing offers a high degree of mechanical strength and high temperature resistance. This has outstanding abrasion resistance and cut-through properties in combination with high dielectric strength. It is inherently flame retardant, semi-rigid and highly resistant to most industrial fuels, chemicals and solvents. Kynar® is a registered trademark of Elf Atochem North America, Inc.

EPS-300 Series-Adhesive-Lined Flexible Polyolefin: Shrink Temperature: 121°C (250°F). **Color:** Black. **Shrink Ratio:** 3:1. Rapidly shrinks to a skintight fit, forcing the melted adhesive to flow and cover the substrate. The adhesive forms a flexible bond with a wide variety of rubbers, plastics and metals. Upon cooling, the adhesive solidifies forming a permanent, non-drying, flexible and waterproof barrier.

SFTW202 GYS Series-Very Flexible Polyolefin: Shrink Temperature: 100°C (212°F). **Color:** Green and yellow striped. **Shrink Ratio:** 2:1. Meets performance requirements of MIL-I-23053/5 Class 1, and is UL Recognized (File No. E48398) for flame retardance. Can be easily surface painted.

SFTW203 Series-Very Flexible Polyolefin: Shrink Temperature: 100°C (212°F). **Color:** Black. **Shrink Ratio:** 3:1. Meets performance requirements of MIL-I-23053/5 Class 1, and is UL Recognized (File No. E48398) for flame retardance. Can be easily surface painted.

8420 Series-EPDM and 8440 Series-Silicone Rubber Tubes: Color: Black (8420 Series) and Gray (8440 Series). **Cold Shrink™ Insulators-**Open-ended, tubular rubber sleeves that are factory expanded and assembled onto a removable plastic core. Provides a reliable seal without the use of heat, a torch or adhesive - simply position and unwind the core allowing the tube to shrink and form a water-resistant seal.

SSC-100x Series-Solder Splice Connector: Shrink Temperature: 175°C (347°F). **Color:** Identified by tint color of tubing. **Shrink Ratio:** 2:1. Simple, one-piece design. The outer layer is a tube of tinted, translucent, polyolefin heat-shrinkable tubing lined with hot melt sealant, which provides both insulation and a moisture seal, and allows easy inspection of the solder connection. Inside the tubing is a wire locking metal (tin-plated cartridge brass) barrel that holds a fluxed solder disk.

Tubing Size Dia.* In. (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nominal Recov. Wall Thick (mm)	Digi-Key Part No.	Sold in 4’ Lengths Only				
					4’ (1pc.)	8’ (2pc.)	20’ (5pc.)	48’ (12pc.)	100’ (25pc.)
KYNAR® Series - Modified Polyvinylidene Fluoride									
3/64 (1.19)	1.17	0.58	0.25	KY364C-ND	5.09	8.83	19.52	40.73	66.93
1/16 (1.60)	1.60	0.79	0.25	KY116C-ND	5.22	9.06	20.03	41.80	68.65
3/32 (2.38)	2.36	1.17	0.25	KY332C-ND	5.59	9.69	21.42	44.71	73.43
1/8 (3.18)	3.18	1.57	0.25	KY018C-ND	6.04	10.48	23.17	48.36	79.45
3/16 (4.78)	4.75	2.36	0.25	KY316C-ND	8.52	15.07	32.76	62.01	—
1/4 (6.35)	6.35	3.18	0.30	KY014C-ND	10.51	18.59	40.42	76.50	—
3/8 (9.52)	9.53	4.75	0.30	KY038C-ND	12.65	22.39	48.67	92.10	—
1/2 (12.70)	12.70	6.35	0.30	KY012C-ND	16.79	29.20	57.57	—	—

Tubing Size Dia.* In. (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nominal Recov. Wall Thick (mm)	Meltable Recov. Wall Thick (mm)	Digi-Key Part No.	Sold in 4’ Lengths Only				
						4’ (1pc.)	8’ (2pc.)	20’ (5pc.)	48’ (12pc.)	100’ (25pc.)
EPS-300 Series - Adhesive-lined, Flexible, Polyolefin										
1/8 (3.18)	3.18	1.02	1.02	0.51	EPS3018K-ND	9.25	16.03	35.46	74.00	110.24
3/16 (4.78)	4.75	1.57	1.02	0.51	EPS3316K-ND	8.79	15.55	33.80	62.77	—
1/4 (6.35)	6.35	2.03	1.02	0.51	EPS3014K-ND	10.88	19.25	41.84	77.70	—
3/8 (9.52)	9.53	3.05	1.40	0.62	EPS3038K-ND	12.31	21.78	47.34	87.93	—
1/2 (12.70)	12.70	4.06	1.78	0.76	EPS3012K-ND	14.38	25.45	55.32	102.74	—

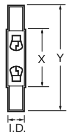
Tubing Size Dia* In. (mm)	Expanded I.D. (Min.) (mm)	Recovered I.D (Max.) (mm)	Nominal Recovered Wall Thick. (mm)	(NOTE: “X” in Part No. Represents Number of Feet)					
				Digi-Key Part No.	Price Per Length 5’	25’	50’	Reel Size	Price Per Full Reel
SFTW202 GYS Series - Very Flexible Polyolefin									
1/8 (3.18)	3.18	1.5	0.51	SFTW2018E-X-ND	7.10	28.40	40.71	500	293.97
3/16 (4.78)	4.76	2.5	0.55	SFTW2316E-X-ND	9.85	39.39	56.46	250	203.84
1/4 (6.35)	6.35	3.0	0.65	SFTW2014E-X-ND	10.87	43.49	62.33	200	180.03
3/8 (9.52)	9.53	4.5	0.76	SFTW2038E-X-ND	12.07	48.29	69.22	200	199.93
1/2 (12.70)	12.70	6.0	0.76	SFTW2012E-X-ND	13.56	54.23	77.73	200	224.52
SFTW203 Series - Very Flexible Polyolefin									
1/16 (1.59)	1.5	0.5	0.45	SFTW2116K-X-ND	2.44	9.77	14.01	1,000	202.29
1/8 (3.18)	3.0	1.0	0.55	SFTW2018K-X-ND	2.79	11.15	15.99	500	115.43
1/4 (6.35)	6.0	2.0	0.65	SFTW2014K-X-ND	4.24	16.94	24.28	200	70.14
3/8 (9.52)	9.0	3.0	0.75	SFTW2038K-X-ND	4.73	18.92	27.12	200	78.34
1/2 (12.70)	12.0	4.0	0.75	SFTW2012K-X-ND	5.34	21.35	30.59	200	88.37

* Indicates size BEFORE shrinking occurs.

Diameter Range In. (mm)	Relaxed Tube Length In. (mm)	Digi-Key Part No.	Pricing 1	10
8420 - EPDM Cold Shrink Tubes				
0.31 - 0.56 (7.87 - 14.22)	6.0 (152.40)	8423-6-ND	10.60	96.78
0.10 - 0.82 (2.54 - 20.83)	8.0 (203.20)	8424-8-ND	13.62	124.35
0.40 - 0.82 (10.16 - 20.83)	8.0 (203.20)	8425-8-ND	11.92	108.83
0.55 - 1.18 (13.97 - 29.97)	9.0 (228.60)	8426-9-ND	14.22	129.83
0.55 - 1.18 (13.97 - 29.97)	11.0 (279.40)	8426-11-ND	17.04	155.58
0.67 - 1.38 (17.02 - 35.05)	6.0 (152.40)	8427-6-ND	10.72	97.87
0.67 - 1.38 (17.02 - 35.05)	12.0 (304.80)	8427-12-ND	21.26	194.10
0.67 - 1.38 (17.02 - 35.05)	16.0 (406.40)	8427-16-ND	28.36	258.93
0.95 - 1.94 (24.13 - 49.28)	6.0 (152.40)	8428-6-ND	15.14	138.23
0.95 - 1.94 (24.13 - 49.28)	12.0 (304.80)	8428-12-ND	30.24	276.09
0.95 - 1.94 (24.13 - 49.28)	18.0 (457.20)	8428-18-ND	45.46	415.05
1.27 - 2.67 (32.26 - 67.82)	6.0 (152.40)	8429-6-ND	16.56	151.19
1.27 - 2.67 (32.26 - 67.82)	9.0 (228.60)	8429-9-ND	24.82	226.61
1.27 - 2.67 (32.26 - 67.82)	12.0 (304.80)	8429-12-ND	34.02	310.60
1.27 - 2.67 (32.26 - 67.82)	18.0 (457.20)	8429-18-ND	49.68	453.58
1.68 - 3.69 (42.67 - 93.73)	9.0 (228.60)	8430-9-ND	34.30	313.16
1.68 - 3.69 (42.67 - 93.73)	18.0 (457.20)	8430-18-ND	54.22	495.03
8440 - Silicone Cold Shrink Tubes				
.27 - .56 (6.86 - 14.22)	2.0 (50.80)	8443-2-ND	6.48	59.16
.27 - .56 (6.86 - 14.22)	6.5 (165.10)	8443-6.5-ND	8.96	81.80
.35 - .72 (8.89 - 18.29)	2.5 (63.50)	8445-2.5-ND	6.70	61.17
.35 - .72 (8.89 - 18.29)	7.5 (190.50)	8445-7.5-ND	9.82	89.66
.48 - .95 (12.19 - 24.13)	3.2 (81.28)	8447-3.2-ND	8.26	75.41
.48 - .95 (12.19 - 24.13)	8.0 (203.20)	8447-8-ND	11.84	108.10

Wire Size (AWG)	Color	Nominal Dimensions-mm X	Y	ID	Digi-Key Part No.	Pricing 1	10	25
SSC 100x Series - Solder Splice Connector								
22-10	Blue	25.40	42.67	6.60	SSC1002-ND	.79	6.32	14.42

SSC 100x Series



SR-350 EPS-200, CP-221,& VFP-876, Series

SR-350 Series-Semi-Rigid Polyolefin: Shrink Temperature: 135°C, **Color:** Black, **Shrink Ratio:** 2:1. Ideally suited for strain-relief applications, wire marking, protective covering and packaging of delicate components.

EPS-200 Series: Shrink Temperature: 121°C, **Color:** Black, **Shrink Ratio:** 2:1 Rapidly shrinks to a skintight fit, forcing the melted adhesive lining to flow and cover the substrate. The adhesive forms a flexible bond with a wide variety of rubbers, plastics and metals. Upon cooling, the adhesive solidifies forming a permanent, non-drying, flexible and waterproof barrier. Rated for operation at -55°C (-67°F) to 110°C (230°F).

CP-221 Series-Commercial Grade Polyolefin: Shrink Temperature: 121°C, **Color:** Black, **Shrink Ratio:** 2:1. Recommended as a general purpose heat shrinkable tubing for new commercial applications where other types of tubing are now used.

VFP-876 Series-Very Flexible Polyolefin: Shrink Temperature: 100°C, **Color:** Black, **Shrink Ratio:** 2:1. Most flexible of the heat shrinkable, polyolefin tubings. Ideal for jacketing and insulation of flexible wire bundles and sensitive components.

Tubing Size Dia.* Inch (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nom. Recov. Wall Thick (mm)	Digi-Key Part No.	Sold in 4’ Lengths Only					
					4’ (1pc.)	8’ (2pc.)	20’ (5pc.)	48’ (12pc.)	100’ (25pc.)	200’ (50pc.)
SR-350 Series - Semi-rigid Polyolefin										
3/64 (1.19)	1.17	.58	.51	SR364-ND	1.52	2.63	5.81	12.12	22.10	39.21
1/16 (1.59)	1.60	.79	.51	SR116-ND	1.57	2.72	6.01	12.54	22.86	40.55
3/32 (2.38)	2.36	1.17	.51	SR332-ND	1.66	2.88	6.37	13.29	24.22	42.97
1/8 (3.18)	3.18	1.57	.51	SR018-ND	1.77	3.07	6.80	14.19	25.87	45.89
3/16 (4.76)	4.75	2.36	.64	SR316-ND	2.18	3.77	8.34	17.41	31.75	56.32
1/4 (6.35)	6.35	3.18	.64	SR014-ND	2.70	4.67	10.34	21.57	34.89	—
3/8 (9.53)	9.52	4.75	.76	SR038-ND	2.53	4.38	9.68	20.21	32.68	—
1/2 (12.70)	12.70	6.35	.76	SR012-ND	3.93	6.82	15.08	31.48	50.91	—
EPS-200 Series - Adhesive-lined, Flexible, Polyolefin										
1/8 (3.18)	3.18	1.60	.69	EPS2018-ND	5.19	8.99	19.88	41.48	66.88	—
3/16 (4.76)	4.75	2.36	.69	EPS2316-ND	4.89	8.66	18.83	34.96	—	—
1/4 (6.35)	6.35	3.18	.76	EPS2014-ND	6.12	10.83	23.55	43.74	—	—
3/8 (9.53)	9.52	4.75	.79	EPS2038-ND	6.89	12.19	26.50	49.23	—	—
1/2 (12.70)	12.70	6.35	.81	EPS2012-ND	7.92	14.01	30.47	56.59	—	—
3/4 (19.05)	19.05	9.52	.94	EPS2034-ND	9.58	16.66	32.25	—	—	—
1 (25.40)	25.40	12.70	1.17	EPS2100-ND	14.09	24.50	47.41	—	—	—
1-1/2 (38.10)	38.10	19.05	1.24	EPS2112-ND	24.65	42.86	82.92	—	—	—
2 (50.80)	50.80	25.40	1.52	EPS2200-ND	34.29	53.06	—	—	—	—

Tubing Size Dia.* Inch (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nom. Recov. Wall Thick (mm)	Digi-Key Part No.	(NOTE: “X” in Part No. Represents Number of Feet) Price Per Length				
					5’	25’	50’	100’	200’
CP-221 Series - Commercial Grade Polyolefin									
3/64 (1.19)	1.17	.58	.41	CP364-X-ND	1.79	8.01	13.26	25.84	—
1/16 (1.59)	1.60	.79	.43	CP116-X-ND	1.83	8.19	14.67	26.41	—
3/32 (2.38)	2.36	1.17	.51	CP332-X-ND	1.94	8.66	13.96	22.23	—
1/8 (3.18)	3.18	1.57	.51	CP018-X-ND	2.07	9.25	14.92	23.76	—
3/16 (4.76)	4.75	2.36	.51	CP316-X-ND	2.47	9.89	14.18	25.06	—
1/4 (6.35)	6.35	3.18	.64	CP014-X-ND	3.11	12.46	17.86	31.56	51.57
3/8 (9.53)	9.52	4.75	.64	CP038-X-ND	3.54	14.17	20.31	35.89	58.65
1/2 (12.70)	12.70	6.35	.64	CP012-X-ND	4.24	16.94	24.28	42.92	70.14
3/4 (19.05)	19.05	9.52	.76	CP034-X-ND	5.72	22.86	32.77	57.91	94.64
1 (25.40)	25.40	12.70	.89	CP100-X-ND	8.59	34.37	49.27	71.15	—
1-1/2 (38.10)	38.10	19.05	1.02	CP112-X-ND	14.97	59.87	85.81	123.92	—
2 (50.80)	50.80	25.40	1.14	CP200-X-ND	20.48	81.92	117.42	169.58	—
VFP-876 Series - Very Flexible Polyolefin, Self-extinguishing									
3/64 (1.19)	1.17	.58	.41	VFP364-X-ND	1.45	6.49	11.63	20.93	—
1/16 (1.59)	1.60	.79	.43	VFP116-X-ND	1.48	6.61	11.84	21.30	—
3/32 (2.38)	2.36	1.17	.51	VFP332-X-ND	1.56	6.98	11.26	17.93	—
1/8 (3.18)	3.18	1.57	.51	VFP018-X-ND	1.69	7.54	12.15	19.35	—
3/16 (4.76)	4.75	2.36	.51	VFP316-X-ND	2.06	8.22	11.78	20.82	—
1/4 (6.35)	6.35	3.18	.64	VFP014-X-ND	2.57	10.26	14.71	25.99	42.48
3/8 (9.53)	9.52	4.75	.64	VFP038-X-ND	2.86	11.45	16.42	29.01	47.41
1/2 (12.70)	12.70	6.35	.64	VFP012-X-ND	3.23	12.92	18.52	32.74	53.50
3/4 (19.05)	19.05	9.52	.76	VFP034-X-ND	4.31	17.24	24.70	43.66	71.35
1 (25.40)	25.40	12.70	.89	VFP100-X-ND	6.44	25.76	36.93	53.33	—
1-1/2 (38.10)	38.10	19.05	1.02	VFP112-X-ND	12.00	48.02	68.82	99.39	—
2 (50.80)	50.80	25.40	1.14	VFP200-X-ND	16.59	66.35	95.11	137.35	—

* Indicates size BEFORE shrinking occurs.

3M Colored Heat Shrinkable Tubing (FP-301 Series)

Available in 7 Colors: (K = Black, C = Clear, B = Blue, G = Green, R = Red, W = White, Y = Yellow)

Shrink Temperature: 121°C. **Shrink Ratio:** 2:1. Tubing is split resistant, mechanically tough, easily marked and resist cold flow, for UL, CSA and Mil-I-23053/5 applications at 600V @ 125°C.

Tubing Size Dia. * Inch (mm)	Expand. I.D. (Min.) (mm)	Recov. I.D. (Max.) (mm)	Nom. Recov. WallThick (mm)	Digi-Key Part No.	(NOTE: "X" in Part No. Represents Number of Feet) Price Per Length 5'	25'	50'	100'	200'	250'
FP-301 Series - Flexible Polyolefin, Self-extinguishing, Flame Retardant, Color										
3/64 (1.19)	1.17	.58	.41	FP364☐-X-ND†	1.68	7.50	13.44	24.20	—	48.17
1/16 (1.59)	1.60	.79	.43	FP116☐-X-ND	1.68	7.50	13.43	24.17	—	48.10
3/32 (2.38)	2.36	1.17	.51	FP332☐-X-ND	1.77	7.92	12.77	20.34	—	44.93
1/8 (3.18)	3.18	1.57	.51	FP018☐-X-ND	1.87	8.38	13.50	21.50	—	47.50
3/16 (4.76)	4.75	2.36	.51	FP316☐-X-ND	2.18	8.75	12.54	22.15	—	45.26
1/4 (6.35)	6.35	3.18	.64	FP014☐-X-ND	2.72	10.92	15.64	27.64	45.17	—
3/8 (9.53)	9.52	4.75	.64	FP038☐-X-ND	3.05	12.18	17.47	30.88	50.46	—
1/2 (12.70)	12.70	6.35	.64	FP012☐-X-ND	3.67	14.65	20.99	37.10	60.64	—
3/4 (19.05)	19.05	9.52	.76	FP034☐-X-ND	4.88	19.52	27.97	49.43	80.80	—
1 (25.40)	25.40	12.70	.89	FP100☐-X-ND	7.26	29.04	41.61	60.10	—	—
1-1/2 (38.10)	38.10	19.05	1.02	FP112☐-X-ND†	13.73	54.95	78.75	113.74	—	—
2 (50.80)	50.80	25.40	1.14	FP200☐-X-ND†	18.98	75.93	108.83	157.18	—	—

Note: For complete number, substitute ☐ with appropriate color (K = Black, C = Clear, B = Blue, G = Green, R = Red, W = White, Y = Yellow) and substitute "X" with length choice.

* Indicates size BEFORE shrinking occurs. † Not available in green.

FPC-KIT-ND ***Digi-Key® FP-301 Series Kit*** One 5 foot tubing of each color in the following series: FP364, FP116, FP332, FP018, FP316, FP014, FP038 and FP012 (55 pieces total of 8 sizes)....................................... **$59.95**

3M Heat Shrink Precut Lengths and Kits

CP-221 Series-Commercial Grade Polyolefin:

Shrink Temp.: 121°C, Color: Black, Shrink Ratio: 2:1, recommended as a general purpose heat shrinkable tubing for new commercial applications where other types of tubing are now used.

FP-301 Series-Flexible Polyolefin:

Shrink Temp.: 121°C, Color: Black, Shrink Ratio: 2:1, Tubing is split resistant, mechanically tough, easily marked and resist cold flow, for UL, CSA and Mil-I-23053/5 applications at 600V @ 125°C.

VFP-876 Series-Very Flexible Polyolefin:

Shrink Temp.: 100°C, Color: Black, Shrink Ratio: 2:1, Most flexible of the heat shrinkable, polyolefin tubings, Ideal for jacketing and insulation of flexible wire bundles and sensitive components.

Tubing Size Dia.* x Length Inch (mm)	Expanded I.D. (Min.) (mm)	Recovered I.D. (Max.) (mm)	Nom. Recovered Wall Thick. (mm)	Digi-Key Part No.	Pricing (50 pcs./ bag) 1 Bag	5 Bags
CP-221 Series						
3/64 x 1/2 (1.19 x 12.70)	1.19	0.58	0.41	CP364-R50-ND	1.08	4.31
1/16 x 1/2 (1.59 x 12.70)	1.60	0.79	0.43	CP116-R50-ND**	1.10	4.40
3/32 x 1/2 (2.38 x 12.70)	2.38	1.19	0.51	CP332-R50-ND**	1.16	4.65
1/8 x 3/4 (3.18 x 19.05)	3.18	1.57	0.51	CP018-R75-ND**	1.66	6.63
3/16 x 3/4 (4.76 x 19.05)	4.76	2.38	0.51	CP316-R75-ND**	1.98	7.91
1/4 x 1 (6.35 x 25.40)	6.35	3.18	0.64	CP014-1R0-ND**	3.11	12.46
1/4 x 1-1/2 (6.35 x 38.10)	6.35	3.18	0.64	CP014-1R5-ND**	4.36	17.44
3/8 x 1-1/2 (9.53 x 38.10)	9.53	4.76	0.64	CP038-1R5-ND	4.96	19.83
1/2 x 1-1/2 (12.70 x 38.10)	12.70	6.35	0.64	CP012-1R5-ND	5.93	23.72
FP-301 Series — Self-extinguishing						
3/64 x 1/2 (1.19 x 12.70)	1.19)	0.58	0.41	FP364K-R50-ND	1.01	4.03
1/16 x 1/2 (1.59 x 12.70)	1.60	0.79	0.43	FP116K-R50-ND‡	1.01	4.03
3/32 x 1/2 (2.38 x 12.70)	2.38	1.19	0.51	FP332K-R50-ND‡	1.06	4.26
1/8 x 3/4 (3.18 x 19.05)	3.18	1.57	0.51	FP018K-R75-ND‡	1.50	6.00
3/16 x 3/4 (4.76 x 19.05)	4.76	2.38	0.51	FP316K-R75-ND‡	1.75	7.00
1/4 x 1 (6.35 x 25.40)	6.35	3.18	0.64	FP014K-1R0-ND‡	2.73	10.91
1/4 x 1-1/2 (6.35 x 38.10)	6.35	3.18	0.64	FP014K-1R5-ND‡	3.82	15.28
3/8 x 1-1/2 (9.53 x 38.10)	9.53	4.76	0.64	FP038K-1R5-ND	4.27	17.06
1/2 x 1-1/2 (12.70 x 38.10)	12.70	6.35	0.64	FP012K-1R5-ND	5.13	20.51
VFP-876 Series — Self-extinguishing						
3/64 x 1/2 (1.19 x 12.70)	1.19	0.58	0.41	VFP364-R50-ND	.87	3.49
1/16 x 1/2 (1.59 x 12.70)	1.60	0.79	0.41	VFP116-R50-ND†	.89	3.55
3/32 x 1/2 (2.38 x 12.70)	2.38	1.19	0.51	VFP332-R50-ND†	.94	3.75
1/8 x 3/4 (3.18 x 19.05)	3.18	1.57	0.51	VFP018-R75-ND†	1.35	5.40
3/16 x 3/4 (4.76 x 19.05)	4.76	2.38	0.58	VFP316-R75-ND†	1.64	6.58
1/4 x 1 (6.35 x 25.40)	6.35	3.18	0.71	VFP014-1R0-ND†	2.57	10.26
1/4 x 1-1/2 (6.35 x 38.10)	6.35	3.18	0.71	VFP014-1R5-ND†	3.59	14.36
3/8 x 1-1/2 (9.53 x 38.10)	9.53	4.76	0.71	VFP038-1R5-ND	4.01	16.03
1/2 x 1-1/2 (12.70 x 38.10)	12.70	6.35	0.71	VFP012-1R5-ND	4.52	18.09

* Indicates size BEFORE shrinking occurs.

** **CP-KIT-ND** ***Digi-Key® CP-221 Series Kit*** 50 each of pieces denoted (Exception: CP116-R50-ND has 100 pieces), 350 total pieces Plastic box and label card included **$15.95**

‡ **FP-KIT-ND** ***Digi-Key® FP-301 Series Kit*** 50 each of pieces denoted (Exception: FP116-R50-ND has 100 pieces), 350 total pieces. Black. Plastic box and label card included.. **$14.95**

† **VFP-KIT-ND** ***Digi-Key® VFP-876 Series Kit*** 50 each of pieces denoted (Exception: VFP116-R50-ND has 100 pieces), 350 total pieces. Plastic box and label card included.. **$13.95**

DABURN Shrinkable Tubing, Polyolefin: Black

The most widely used, general purpose heat shrinkable tubing. An irradiated flexible, flame-retardant polyolefin tubing with a wide scope of applications. These include: harnessing, wire bundling, strain reliefs, or any application where components or cables must be insulated or packaged. • UL E-38155 • CSA LR-31929 • MIL-I-23053/5A • MSFC-276B • AMS 3636B

Operating Temperature: –55°C to +135°C. **Shrinkage Ratio:** To 50% of supplied diameter at 121°C. **Electrical Properties:** Dielectric Strength: 1300 V/mil (512 kV/cm). Volume Resistivity: 10^{15} ohm-cm. **Physical Properties:** Tensile Strength: 2500 PSI, nominal (176 kg/cm^2). Ultimate Elongation: 400% nominal.

DABURN Shrink Tubing

Digi-Key®
Assortment Kit
Contains the following:
5 ft./W181-ND 5 ft./W184-ND
5 ft./W182-ND 5 ft./W185-ND
5 ft./W183-ND 5 ft./W186-ND
STA-KIT-ND....... **$10.95**

Min. Supp I.D. In. (mm)	Maximum Recov. I.D. In. (mm)	Nom. Recov. Wall Thick. In. (mm)	Digi-Key Part No.	(NOTE: "X" in Digi-Key Part No. Represents No. of Feet) Price Per Length 5'	25'	50'	100'	200'	500'	1,000'
.06 (1.60)	.03 (.78)	.017 (.43)	W181-X-ND	2.25	10.05	18.00	32.40	51.60	114.00	198.37
.09 (2.36)	.05 (1.17)	.020 (.50)	W182-X-ND	2.48	11.06	19.80	35.64	56.76	125.40	209.16
.13 (3.18)	.06 (1.58)	.020 (.50)	W183-X-ND	2.65	11.85	21.23	38.21	76.06	134.43	223.27
.19 (4.75)	.09 (2.36)	.020 (.50)	W184-X-ND	3.14	14.03	25.13	45.23	72.03	159.13	265.60
.25 (6.35)	.13 (3.18)	.025 (.63)	W185-X-ND	3.94	17.59	31.50	56.70	90.30	199.50	—
.38 (9.53)	.19 (4.75)	.025 (.63)	W186-X-ND	4.35	19.43	34.80	62.64	95.03	—	—
.50 (12.7)	.25 (6.35)	.025 (.63)	W187-X-ND	4.99	22.28	39.90	71.82	108.36	—	—
.75 (19.1)	.38 (9.53)	.030 (.76)	W188-X-ND	6.86	30.65	54.90	98.82	146.20	—	—
1.00 (25.4)	.50 (12.70)	.035 (.88)	W189-X-ND	9.80	43.76	78.38	130.50	—	—	—
3.00 (76.2)	1.50 (38.10)	.050 (1.27)	W192-X-ND	41.30	185.85	321.75	—	—	—	—
4.0 (101.6)	2.00 (50.80)	.055 (1.40)	W193-X-ND	51.00	229.50	420.17	—	—	—	—

DABURN Irradiated Polyolefin Heat Shrink

DAFLEX SH277 shrinkable irradiated polyolefin tubing is flame retardant and will withstand up to 300°C (572°F) for short durations and can be hot stamped.

Specifications: • **Shrink Ratio**: 4:1 • **Longitudinal Shrinkage**: 10% maximum • **Shrink Temperature**: 120°C (250°F) • **Continuous Operation Temperature**: -55°C to +135°C • Meets or exceeds MIL-I-23053/5 Class 1 and 3.

Descrip.	Minimum Supplied I.D. Inch (mm)	Maximum Recovery I.D. Inch (mm)	Nom. Recov. Wall Thickness Inch (mm)	Digi-Key Part No.	Sold in 4' Lengths Only 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)
BLK 1" x 4'	1.0 (25.4)	.26 (6.5)	.060 (1.5)	W203-ND	59.28	79.04	177.84	355.68	642.20
BLK 2" x 4'	2.0 (50.8)	.50 (12.7)	.060 (1.5)	W204-ND	87.00	116.00	261.00	522.00	942.50

DABURN Polyolefin Heat Shrink

DAFLEX SM278 is a flexible, large ratio, heat shrinkable tubing with a meltable adhesive liner. As the outer wall shrinks, the inner adhesive liner melts and flows. When cooled, it offers protection for a variety of electrical applications as well as "sealed-in" protection from chemicals and oils.

Specifications: • **Shrink Ratio**: 4:1 • **Longitudinal Shrinkage**: 10% maximum • **Shrink Temperature**: 120°C (250°F) • **Continuous Operation Temperature**: -55°C to +135°C • Meets or exceeds MIL-I-23053/4 Class 3 • UL VW-1, CSA OFT (outer wall only)

Description	Min. Supp. I.D. In. (mm)	Max. Recov. I.D. In. (mm)	Nom. Recov'd Wall Thick. In. (mm)	Digi-Key Part No.	(NOTE: "X" in Digi-Key Part No. Represents No. of Feet) Price Per Length 5'	25'	50'	100'	200'
Dual Wall 3/16" BLK	.16 (4.0)	.04 (1.0)	.035 (.9)	W207-X-ND	9.25	39.54	67.30	114.41	212.56
Dual Wall 5/16" BLK	2.0 (50.8)	.50 (12.7)	.035 (.9)	W208-X-ND	15.53	66.36	112.95	178.35	—

Description	Min. Supplied I.D. Inch (mm)	Max. Recovery I.D. Inch (mm)	Nom. Recov. Wall Thickness Inch (mm)	Digi-Key Part No.	Sold in 4' Lengths Only 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)
Dual Wall 1/2" BLK	.47 (12.0)	.12 (3.0)	.051 (1.3)	W206-ND	11.74	22.30	52.81	119.71	231.60
Dual Wall 3/4" BLK	.63 (16.0)	.16 (4.0)	.062 (1.6)	W209-ND	13.96	26.52	62.82	142.39	275.55
Dual Wall 1" BLK	.94 (24.0)	.24 (6.0)	.082 (2.1)	W205-ND	22.46	42.68	101.09	229.13	443.40
Dual Wall 1 1/4" BLK	1.26 (32.0)	.31 (8.0)	.091 (2.3)	W210-ND	27.88	52.97	125.46	284.38	550.25

DABURN Butyl Rubber Shrink Tape

DAFLEX ST250 cold shrinking Stretch-N-Seal tape requires no heat to provide a secure covering where the size and/or shape of an object does not permit the use of shrinkable tubing. Simply remove 2" to 3" of tape from the roll, remove the liner, stretch tape to 50% of the supplied width and wrap it spirally around the object, with 50% overlap. In minutes the tape will react with itself to form a mass which will provide protection from moisture, most chemicals, over 1KV per mil. **DAFLEX ST250** can be removed easily without leaving any residue since the tape does not use a mastic or adhesive liner. Shelf life is over 5 years. It is helpful for covering, sealing, splicing, holding bundles, joining and repair applications.

Specifications: • **Operating Temperature:** -40°C to +130°C • UL Approved for 80°C

Description	Nominal Width Inch (mm)	Nominal Thickness Inch (mm)	Roll Length Feet	Digi-Key Part No.	Price Per Roll 1	5	10
Black 1"	1.0 (25.4)	.015 (0.38)	15	W211-ND	8.50	38.25	71.29
White 1"	1.0 (25.4)	.015 (0.38)	15	W212-ND	8.50	38.25	71.29
Black 1"	1.0 (25.4)	.015 (0.38)	8	W213-ND	6.50	29.25	53.80
Black .75"	.75 (19.05)	.015 (0.38)	30	W214-ND	16.20	72.90	142.88

Qualtek ELECTRONICS CORP. AC Line Cords

- **Temperature Rating:** 60°C
- **Volt Rating:** 125 V/AC.
- **Small Appliance Line Cord:** NEMA 1-15 P Polarized Plug
- **Male Plug Power Cord:** NEMA 5-15 P Plug
- **Detachable Power Cord:** NEMA 5-15 P Plug, IEC 320 Connector

SPT-1: All thermoplastic, parallel-jacketed, with or without third conductor for grounding purposes only. Light duty cord for pendant or portable use in damp locations. 300V.

SVT: Two or three-conductor, all plastic construction with or without third conductor for grounding purposes only. 300V, 60° C.

SJT: Junior hard service thermoplastic or rubber-insulated conductors with overall thermoplastic jacket. 300V, 60°C to 105°C

Fig. 1

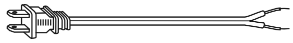


Fig. 2

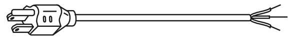


Fig. 3

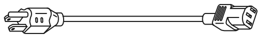


Fig. 4

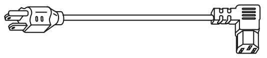


Fig. 5

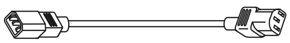


Fig. 6

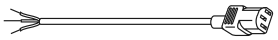


Fig. 7

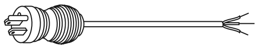


Fig. 8

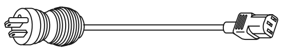


Fig. 9

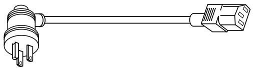


Fig. 10

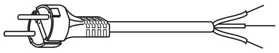


Fig. 11

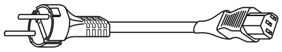


Fig. 12

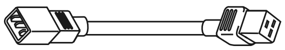


Fig. 13

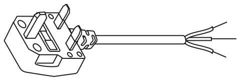
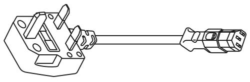


Fig. 14



Description	Fig.	Length Feet (Meter)	Cord/Plug Color	AWG	Rating Amps @ 125V	Cord Type	Digi-Key Part No.	Price Each				Qualtek Part No.
								1	10	100	250	
Small Appliance Line Cord UL Listed	1	6'0" (1.83)	Brown/Brown	18/2	10	SPT-1	Q100-ND	1.58	1.43	1.15	.97	221001-03
		6'0" (1.83)	White/White	18/2	10	SPT-1	Q101-ND	2.29	2.08	1.67	1.41	221001-08
		6'0" (1.83)	Black/Black	18/2	10	SPT-1	Q114-ND	1.61	1.46	1.17	.99	221001-01
		9'0" (2.74)	Black/Black	18/2	10	SPT-1	Q121-ND	1.77	1.60	1.29	1.09	221002-01
Male Plug Power Cord UL Listed CSA Certified CEE Color Code	2	6'7" (2.01)	Black/Black	18/3	10	SVT	Q106-ND	3.78	3.42	2.75	2.32	311007-01
		9'10" (3.00)	Black/Black	18/3	10	SVT	Q107-ND	4.62	4.18	3.36	2.84	311010-01
		6'7" (2.01)	Black/Black	18/3	10	SJT	Q108-ND	4.22	3.81	3.06	2.59	311013-01
		9'10" (3.00)	Black/Black	18/3	10	SJT	Q109-ND	5.52	4.99	4.01	3.39	311016-01
		6'7" (2.01)	Black/Black	16/3	13	SJT	Q110-ND	5.05	4.57	3.67	3.10	311019-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q111-ND	6.60	5.97	4.80	4.05	311022-01
		6'7" (2.01)	Black/Black	14/3	15	SJT	Q112-ND	5.58	5.04	4.05	3.42	311024-01
		9'10" (3.00)	Black/Black	14/3	15	SJT	Q113-ND	7.56	6.84	5.49	4.64	311027-01
N. Amer. Color Code	2	8'0" (2.44)	Gray/Gray	18/3	10	SVT	Q122-ND	4.06	3.67	2.95	2.49	211012-06
		8'0" (2.44)	Gray/Gray	18/3	10	SJT	Q123-ND	4.31	3.90	3.13	2.65	211018-06
Detachable Power Cord UL Listed CSA Certified CEE Color Code	3	6'7" (2.01)	Black/Black	18/3	10	SJT	Q102-ND	5.02	4.54	3.65	3.08	312007-01
		9'10" (3.00)	Black/Black	18/3	10	SJT	Q103-ND	7.04	6.36	5.11	4.32	312010-01
		6'7" (2.01)	Black/Black	16/3	13	SJT	Q115-ND	6.11	5.52	4.44	3.75	312011-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q116-ND	7.32	6.61	5.31	4.49	312014-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q120-ND†	10.11	9.13	7.34	6.20	312040-01
		7'6" (2.29)	Black/Black	16/3	13	SJT	Q124-ND	6.14	5.55	4.46	3.77	212013-01
		7'6" (2.29)	Black/Black	18/3	10	SVT	Q125-ND	5.02	4.54	3.65	3.08	312003-01
		7'6" (2.29)	Black/Black	18/3	10	SVT	Q126-ND*	5.92	5.35	4.30	3.63	312021-01
	4	6'7" (2.01)	Black/Black	18/3	10	SJT	Q104-ND	5.95	5.38	4.32	3.65	313006-01
		6'7" (2.01)	Black/Black	16/3	13	SJT	Q117-ND	6.39	5.77	4.64	3.92	313010-01
		9'10" (3.00)	Black/Black	18/3	10	SJT	Q105-ND	6.85	6.19	4.98	4.20	313009-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q118-ND	7.66	6.92	5.56	4.70	313014-01
		9'10" (3.00)	Black/Black	16/3	13	SJT	Q119-ND†	10.14	9.16	7.36	6.22	313026-01
	5	3'3" (.99)	Black/Black	18/3	10	SVT	Q127-ND	5.36	4.85	3.90	3.29	318002-01
		3'3" (.99)	Black/Black	18/3	10	SJT	Q128-ND	4.84	4.37	3.51	2.97	318005-01
	12	9'10" (3.00)	Black/Black	14/3	15	SJT	Q268-ND	15.05	13.60	10.93	9.23	331010-01
	6	9'10" (3.00)	Black/Black	18/3	10	SJT	Q129-ND	5.80	5.24	4.21	3.56	315008-01
Hospital Grade UL Listed CSA Certified N. Amer. Color Code	7	10'0" (3.05)	Gray/Clear	18/3	10	SJT	Q130-ND	10.70	9.66	7.77	6.56	232003-06
		10'0" (3.05)	Gray/Gray	18/3	10	SJT	Q131-ND	10.70	9.66	7.77	6.56	232011-06
	8	10'0" (3.05)	Gray/Clear	18/3	10	SJT	Q132-ND	11.50	10.39	8.35	7.05	233003-06
		10'0" (3.05)	Gray/Gray	18/3	10	SJT	Q133-ND	11.50	10.39	8.35	7.05	233009-06
	9	10'0" (3.05)	Gray/Clear	18/3	10	SJT	Q263-ND	13.51	12.20	9.81	8.28	243003-06

† Shielded with Mylar Foil

* Temperature Rating: 105° C VW-1

Description	Fig.	Length Feet (Meter)	Color	Cordage	Conductors (MM2)	Rating Amps @ 250V	Digi-Key Part No.	Price Each				Qualtek Part No.
								1	10	100	250	
							International Power Cords					
Continental Europe	10	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q134-ND	5.36	4.85	3.90	3.29	363012-D01
	11	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q135-ND	6.29	5.69	4.57	3.86	364002-D01
	5	8'2" (2.5)	Black	H05VV-F/SJT	3 X 1.00	10	Q136-ND	5.36	4.85	3.90	3.29	319004-T01
United Kingdom	13	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q137-ND	11.04	9.97	8.01	6.77	369003-E01
	14	8'2" (2.5)	Black	H05VV-F	3 X 1.00	10	Q138-ND	13.67	12.35	9.93	8.38	370001-E01

Qualtek ELECTRONICS CORP.

AC Receptacles

Approvals: 701W-15/XX and 716W-15/XX: IEC 320. **736W-B-101, -102:** UL, CSA, VDE, FIMKO, DEMKO, NEMKO, SEMKO. **738W-CX2-01:** UL, CSA. **743W-00/0X:** UL, CSA, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO, CB. **744W-00/0X and 745W-XX/YY:** UL, CSA, VDE, SEV, SEMKO, DEMKO, FIMKO, NEMKO **770W-X2/03, /04, /05:** UL, CSA, VDE, SEV, SETI, DEMKO, NEMKO, SEMKO, ÖVE, CB. **770W-X2/09, /11, /12:** UL, CSA, VDE, SEV, FIMKO, DEMKO, NEMKO, SEMKO, ÖVE. **770W-X2/10:** UL, CSA, VDE, NEMKO. **771W-X2/01, /02:** ULR, CSA, VDE, SEV, DEMKO, NEMKO, SEMKO. **761-18/xxx and 762-18/xxx:** UL, CSA, VDE. **763-00/xxx and 763-00/xxx:** UL, CSA, VDE. **770W-00-01:** UL, CSA, VDE, SEMKO, DEMKO, NEMKO, SETI. **771W-xxx/01:** UL, CSA, VDE, NEMKO.

Fig. 1

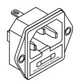


Fig. 2

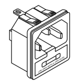
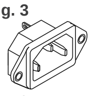


Fig. 3



Front/Rear Mount

Fig. 4

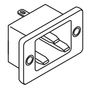


Fig. 5

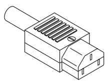


Fig. 6

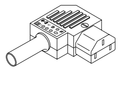


Fig. 7

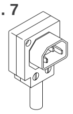


Fig. 8

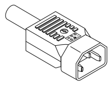


Fig. 9

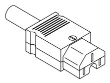
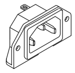
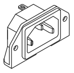


Fig. 10



7mm Terminal Pitch

Fig. 11



9mm Terminal Pitch

Fig. 12

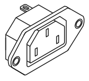


Fig. 13

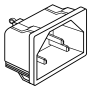


Fig. 14

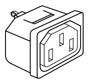


Fig. 15

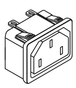


Fig. 16

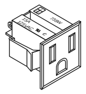


Fig. 17

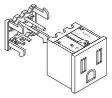


Fig. 18

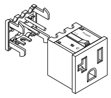


Fig. 19

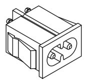


Fig. 20

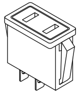


Fig. 21

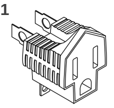


Fig. 22

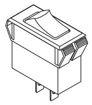


Fig. 23

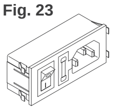


Fig. 24

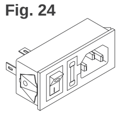


Fig. 25

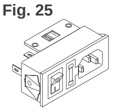


Fig. 26

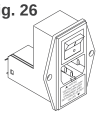


Fig. 27

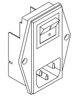


Fig. 28

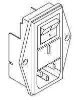


Fig. 29

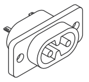


Fig. 30

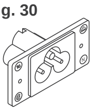


Fig. 31

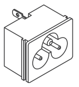


Fig. 32

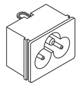


Fig. 33

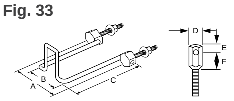


Fig.	Description	Mount Type	Panel Cutout H x W(mm)	Contact Type	Digi-Key Part No.	Price Each			Qualtek Part No.
						1	10	100	
	Power Inlets with Single 5x20mm Fuseholder								
1	AC Receptacle, Straight, Male	Screw	31.4 x 27.0	Solder Tab	Q201-ND	2.50	2.26	1.82	719W-00/02
	AC Receptacle, Straight, Male	Screw	31.4 x 27.0	.187” (4.75mm) Fast-On	Q202-ND	2.50	2.26	1.82	719W-00/03
	AC Receptacle, Straight, Male	Screw	31.4 x 27.0	.248” (6.35mm) Fast-On	Q203-ND	2.50	2.26	1.82	719W-00/04
2	AC Receptacle, Straight, Male, .031” (0.8mm)	Snap-In	27.0 x 31.4	Solder Tab	Q204-ND	2.50	2.26	1.82	723W-X2/02
	AC Receptacle, Straight, Male, .031” (0.8mm)	Snap-In	27.0 x 31.4	.187” (4.75mm) Fast-On	Q205-ND	2.50	2.26	1.82	723W-X2/03
	AC Receptacle, Straight, Male, .031” (0.8mm)	Snap-In	27.0 x 31.4	.248” (6.35mm) Fast-On	Q206-ND	2.50	2.26	1.82	723W-X2/04
	AC Power Inlets								
3	AC Receptacle, Straight, Male	Screw	—	Solder Tab	Q210-ND	.89	.81	.65	703W-00/02
	AC Receptacle, Straight, Male	Screw	—	.187” (4.75mm) Fast-On	Q211-ND	.89	.81	.65	703W-00/03
	AC Receptacle, Straight, Male	Screw	—	.248” (6.35mm) Fast-On	Q212-ND	.97	.88	.71	703W-00/04
4	Power Receptacle	Screw	24.5 x 32.5	.248” (6.3mm) Quick Connect	Q235-ND	2.55	2.31	1.86	744W-00/04
	AC Power Plug Assemblies								
5	In-Line Plug, Straight, Female	Cord	—	Screw Terminals	Q213-ND	3.93	3.55	2.86	704-00/00
6	In-Line Plug, Right Angle, Female	Cord	—	Screw Terminals	Q214-ND	5.08	4.59	3.69	705-00/00
7	In-Line Plug, Right Angle, Male	Cord	—	Screw Terminals	Q215-ND	6.53	5.90	4.75	711-00/00
8	In-Line Plug, Straight, Male	Cord	—	Screw Terminals	Q216-ND	6.53	5.90	4.75	712-00/00
9	In-Line Plug, Straight, Female	Cord	—	Screw Terminals	Q217-ND	4.45	4.03	3.24	709-00/00
	Angled Inlet PCB Mount								
10	AC Receptacle, Right Angle, Male	Screw	22.8 x 30.8	Round PC Terminals	Q218-ND	1.28	1.16	.93	703W-00/52
	AC Receptacle, Right Angle, Male	Screw	22.8 x 30.8	Flat PC Terminals	Q219-ND	1.33	1.20	.97	703W-00/53
11	AC Receptacle, Right Angle, Male	Screw	22.8 x 30.8	Flat PC Terminals	Q220-ND	1.33	1.20	.97	703W-00/54
	AC Power Inlets IEC 320								
12	AC Receptacle, Straight, Female	Screw	24.2 x 32.4	Solder Tab	Q221-ND	.89	.81	.65	710W-00/01
	AC Receptacle, Straight, Female	Screw	24.2 x 32.4	.187” (4.75mm) Fast-On	Q222-ND	.89	.81	.65	710W-00/02
	AC Receptacle, Straight, Female	Screw	24.2 x 32.4	.248” (6.35mm) Fast-On	Q223-ND	.97	.88	.71	710W-00/03
13	AC Receptacle, Straight, Male, .031” (0.8mm)	Snap-In	27 x 20.5	Solder Tab	Q207-ND	.89	.81	.65	701W-X2/02
	AC Receptacle, Straight, Male, .031” (0.8mm)	Snap-In	27 x 20.5	.187” (4.75mm) Fast-On	Q208-ND	.89	.81	.65	701W-X2/03
	AC Receptacle, Straight, Male, .031” (0.8mm)	Snap-In	27 x 20.5	.248” (6.35mm) Fast-On	Q209-ND	.97	.88	.71	701W-X2/04
13	Power Receptacle, .059” (1.5mm), Male	Snap-In	27.2 x 19.7	Solder Tab	Q256-ND	1.00	.90	.73	701W-15/21
	Power Receptacle, .059” (1.5mm), Male	Snap-In	27.2 x 19.7	.187” (4.7mm) Fast-On/Solder Tab	Q257-ND	1.00	.90	.73	701W-15/26
	Power Receptacle, .059” (1.5mm), Male	Snap-In	27.2 x 19.7	.250” (6.35mm) Fast-On	Q258-ND	1.07	.97	.78	701W-15/31
14	Power Outlet, .059” (1.5mm), Female	Snap-In	25.2 x 32.8	Solder Tab	Q259-ND	1.00	.90	.73	716W-15/05
	Power Outlet, .059” (1.5mm), Female	Snap-In	25.2 x 32.8	.187” (4.7mm) Fast-On/Solder Tab	Q260-ND	1.00	.90	.73	716W-15/10
	Power Outlet, .059” (1.5mm), Female	Snap-In	25.2 x 32.8	.250” (6.35mm) Fast-On	Q261-ND	1.07	.97	.78	716W-15/15
15	AC Recept., Straight, Female, .031” (0.8mm)	Snap-In	25.2 x 32.8	Solder Tab	Q224-ND	.89	.81	.65	716W-X2/01
	AC Recept. Straight, Female, .031” (0.8mm)	Snap-In	25.2 x 32.8	.187” (4.75mm) Fast-On	Q225-ND	.89	.81	.65	716W-X2/02
	AC Recept., Straight, Female, .031” (0.8mm)	Snap-In	25.2 x 32.8	.248” (6.35mm) Fast-On	Q226-ND	.97	.88	.71	716W-X2/03
	NEMA 5-15R Power Outlets								
16	AC Recept., Straight, Female, .031” (0.8mm)	Snap-In	22.3 x 24.6	.187” (4.75mm) Fast-On	Q227-ND	.95	.86	.69	738W-X2/03
17	AC Recept., Straight, Female, .031” (0.8mm)	Snap-In	24.6 x 24.6	IDC Crimp Terminals	Q228-ND	.95	.86	.69	739W-X2/03
	NEMA 5-20P Power Outlets								
18	AC Recept., Straight, Female, .031” (0.8mm)	Snap-In	24.5 x 24.5	IDC Crimp Terminals	Q282-ND	1.23	1.12	.90	739W-X2/20
	Power Receptacles								
19	Power Receptacle	Screw	12.4 x 21.0	Solder Tab	Q269-ND	.59	.54	.43	770W-X2/03
	Power Receptacle	Panel	12.4 x 21.0	Right Angle, PCB Pins	Q273-ND	.51	.47	.38	770W-X2/10
	Power Receptacle	Snap-In	12.5 x 24.5	PCB Pins	Q277-ND	1.28	1.16	.93	771W-X2/02
20	Power Receptacle, 2 Con.	Snap-In	12.4 x 22.1	4.8mm Tab	Q281-ND	.51	.47	.38	738W-CX2-01
	AC Adapter								
21	AC Adapter 3 Prong/2 Prong	—	—	Wall Plug	Q280-ND	.77	.70	.56	738W-E-01
	Circuit Breaker Switch								
22	Illuminated, Black Body w/Red Actuator, 15 Amp	Panel	14.0 x 28.5	Solder Tab	Q278-ND	2.15	1.94	1.56	736W-B-101
22	Non-illuminated, Black Body w/Red Actuator, 15 Amp	Panel	14.0 x 28.5	Solder Tab	Q279-ND	1.89	1.72	1.38	736W-B-102
	Multi-Function Modules								
23	Male, Plastic Housing, SPST, Sgl. Fuse 5x20	Snap-In	66.04 x 27.0	Solder Tab	Q300-ND	7.85	5.61	4.66	761-18/003
	Male, Plastic Housing, DPST, Sgl. Fuse 5x20	Snap-In	66.04 x 26.92	Solder Tab	Q301-ND	10.83	7.74	6.43	761-18/004
24	Male, Metal Housing, SPST, Single Fuse 5x20	Snap-In	66.04 x 27.0	.250 Q.D.	Q302-ND	10.45	7.47	6.20	762-18/002
	Male, Metal Housing, DPST, Single Fuse 5x20	Snap-In	66.04 x 27.0	.250 Q.D.	Q303-ND	16.34	11.67	9.69	762-18/003
25	Male, Metal Housing, SPST, Single Fuse 5x20	Snap-In	66.04 x 27.0	.250 Q.D.	Q304-ND	16.34	11.67	9.69	762-18/004
	Male, Metal Housing, DPST, Single Fuse 5x20	Snap-In	66.04 x 27.0	.250 Q.D.	Q305-ND	20.69	14.78	12.27	762-18/005
26	Male, Plastic Housing, DPST, Double + Fuse	Screw	58.93 x 27.51	Solder Tab	Q306-ND	8.49	6.07	5.04	763-00/001
27	Male, Plastic Housing, DPST, Double 5x20	Screw	72.39 x 27.94	Solder Tab	Q307-ND	9.77	6.98	5.80	764-00/002
28	Male, Plastic Housing, DPST, Double 5x20	Screw	72.39 x 27.94	Solder Tab	Q308-ND	11.26	8.05	6.68	764-00/003
	Low Power Inlets								
29	Male, Thermoplastic Housing	Screw	21 x 12.4	Solder Tab	Q309-ND	.74	.67	.54	770W-00-01
30	Male, Thermoplastic Housing	Screw	24.5 x 12.5	Solder Tab	Q310-ND	1.23	1.12	.90	771W-AX2/01
31	Male, Thermoplastic Housing	Panel	24.5 x 12.5	Solder Tab	Q311-ND	1.23	1.12	.90	771W-BX2/01
32	Male, Thermoplastic Housing	Panel	24.5 x 12.5	Solder Tab	Q312-ND	1.23	1.12	.90	771W-CX2/01

* **Note:** Fig. 3 - Front mount 19.8 x 27.4 and rear mount 22.8 x 30.0.

Fig.	Dimensions - Inch (mm)						Digi-Key Part No.	Price Each				Qualtek Part No.
	A	B	C	D	E	F		1	25	50	100	
	Power Plug Retainer Clips											
33	1.80 (45.72)	1.11 (28.19)	1.40 (35.56)	.250 (6.35)	.125 (3.18)	.196 (4.98)	Q264-ND	2.02	1.65	1.47	1.40	730B-00/00
	1.80 (45.72)	1.11 (28.19)	1.40 (35.56)	.218 (5.54)	.125 (3.18)	.196 (4.98)	Q265-ND	2.56	2.09	1.86	1.77	732B-00/00
	1.80 (45.72)	1.11 (28.19)	1.32 (33.53)	.250 (6.35)	.125 (3.18)	.196 (4.98)	Q266-ND	2.02	1.65	1.47	1.40	730-00/05
	1.80 (45.72)	1.11 (28.19)	1.40 (35.56)	.250 (6.35)	.125 (3.18)	.352 (8.94)	Q267-ND	2.19	1.79	1.60	1.51	731B-00/00

NEW! EMKAY High Performance Audio Products

Omni-Directional Electret Microphones

CA Series: • Integral FET amplifier • Withstands severe environmental conditions • High resistance to mechanical shock • Sintered steel sound port treated with water repellent • 3-Wire configuration

EA Series: • Integral FET amplifier • Electret condenser microphone • Rugged construction to withstand severe environmental conditions • High resistance to mechanical shock • 3-Wire configuration

EK Series: • Integral FET amplifier • High electroacoustical sensitivity • Low vibration sensitivity • Low noise • 3-Wire configuration

FG Series: • Integral FET amplifier • Wide, flat frequency response • Low noise performance • High electroacoustic sensitivity • 3-Wire configuration

WP Series: • Integral FET amplifier • High electroacoustical sensitivity • Low noise • Low vibration sensitivity • Flat response down to very low frequency • Survives submersion in water • 3-Wire configuration

Fig. 1

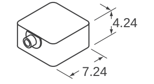


Fig. 2

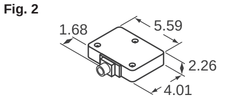


Fig. 3

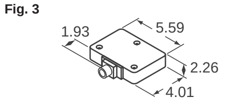


Fig. 4

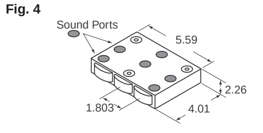


Fig. 5

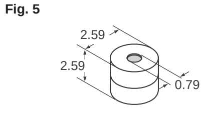


Fig. 6

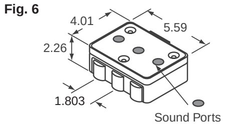


Fig.	Sensitivity @ 1KHz (dB re 1V/Pa)	(dB re 1V/0.1 Pa)	DC Supply Voltage	Max. Amplifier Current Drain (uA)	Max. "A" Weighted Noise (1KHz Equivalent SPL)	Output Impedance (Ohms)	Digi-Key Part No.	Price Each 1	10	100	Emkay Part No.
1	-40 ± 3	-60 ± 3	1.0 - 20	100	31.0 dB	2500	423-1013-ND	19.25	17.33	13.65	CA-2856
2	-39 ± 4	-59 ± 4	1.0 - 10	50	28.5 dB	3500	423-1005-ND	14.71	13.24	12.51	EA-1842
2	-33 ± 3	-53 ± 3	1.0 - 10	50	26.0 dB	4400	423-1006-ND	14.20	12.78	10.05	EK-3024
2	-33 ± 3	-53 ± 3	1.0 - 10	50	26.0 dB	4400	423-1007-ND	15.40	13.86	10.87	EK-3027
3	-33 ± 3	-53 ± 3	1.0 - 10	50	26.0 dB	4400	423-1009-ND	15.60	14.04	10.04	EK-3133
4	-33 ± 3	-53 ± 3	1.0 - 10	50	26.0 dB	4400	423-1008-ND	16.37	14.73	11.59	EK-3132
5	-33 ± 3	-53 ± 3	1.0 - 1.6	50	30.0 dB	4400	423-1000-ND	22.88	20.59	16.25	FG-3329
Water Resistant Microphone											
6	-34 ± 3	-54 ± 3	1.0 - 10	50	28.0 dB	4400	423-1012-ND	20.00	18.00	15.90	WP-3502

Piezo Ceramic, Accelerometer, Magnetic Balanced Armature

BL Series: • High sensitivity • Wide frequency range and flat response • Integral FET amplifier • High resistance to mechanical shock • BL-1785 typically used for instrumentation applications • 3-Wire configuration

BU Series: • Ceramic vibration transducer • High vibration sensitivity and small size • Wide frequency range • Internal FET preamplifier • 2 or 3-Wire configuration

BJ Series: • Balanced armature technology • High efficiency, stability and reliability • Self-shielded against external magnetic fields • Small size • Omni-directional • 2-Wire configuration

Fig. 1

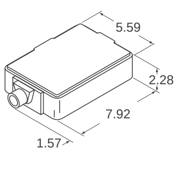


Fig. 2

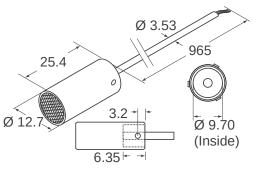


Fig. 3

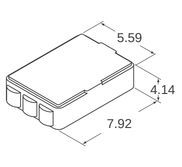


Fig. 4

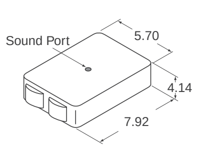


Fig.	Sensitivity @ 1KHz (dB re 1V/Pa)	(dB re 1V/0.1 Pa)	(dB re 1V/g)	DC Supply Voltage	Nominal DC Res. (Ohms)	Max. Amplifier Current Drain (uA)	Max. "A" Weighted Noise (1KHz Equivalent SPL)	Output Imp. @ 1KHz (Ohms)	Digi-Key Part No.	Price Each 1	10	100	Emkay Part No.
Piezo Ceramic Microphones													
1	-49 ± 3	-69 ± 3	—	3.0	—	160	34.0 dB	4000	423-1003-ND	53.10	47.79	37.83	BL-1785
2	-49 ± 3	-69 ± 3	—	3.0	—	160	34.0 dB	4000	423-1002-ND	94.84	85.19	67.64	BL-1994
Accelerometer (Vibration-Sensing Transducer)													
3	—	—	-45.0 ± 4.5	1.5 - 10	—	50	—	5200	423-1004-ND	42.56	38.30	30.30	BU-1771
Magnetic Balanced Armature													
4	-55.5 ± 3	-75.5 ± 3	—	—	900	—	—	3900	423-1001-ND	21.21	19.09	16.05	BJ-1590

Waterproof Acoustical Transducers

MR Series:

- Highly waterproof, no loss of performance after immersion in 15 m water • Corrosion resistant • Withstands explosive decompression • Excellent environmental performance • High resistance to mechanical shock • Wire leads attached

Fig. 1

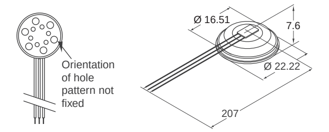


Fig. 2

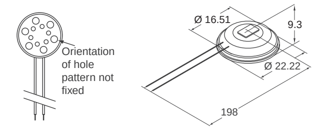


Fig.	Sensitivity @ 1 KHz (dB re 1V/Pa)	(dB re 1V/0.1 Pa)	DC Supply Voltage	Max. Amplifier Current Drain (uA)	DCR @ 20 dC ±10% (Ohms)	Max. "A" Weighted Noise (1KHz Equivalent SPL)	Load Condition (Ohms)	Output Imp. @ 1KHz (Ohms)	Digi-Key Part No.	Price Each 1	10	100	Emkay Part No.
Electret Microphone													
1	-41 ± 4	-61 ± 4	1.0 - 20	50	—	30	10K	3.5K	423-1016-ND	46.68	42.01	33.24	MR-8406
Magnetic Microphone													
2	-67.5 ± 3	-87.5 ± 3	—	—	75.5	—	300	300	423-1015-ND	42.00	37.80	34.90	MR-3151

Noise-Canceling Close Talking Microphones

NR Series: • Integral FET amplifier • Diaphragm responds to pressure differential giving high rejection of background noise • Small size • High electroacoustical sensitivity • Low vibration sensitivity

CF Series: • Integral FET amplifier • Diaphragm responds to pressure differential giving high rejection of background noise • Withstands severe environmental conditions • Sound ports protected by woven mesh treated with water repellent • High resistance to mechanical shock

WP Series: • Integral FET amplifier • Survives submersion in 1m water • Corrosion resistant • Withstands explosive decompression • High resistance to mechanical shock • Small size

Fig. 1

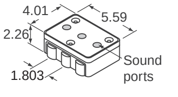


Fig. 2

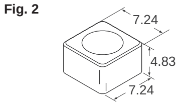


Fig.	Sensitivity @ 1KHz (dB re 1V/Pa)	(dB re 1V/0.1 Pa)	Microphone Configuration	DC Supply (V)	Max. Amplifier Current Drain (uA)	Nominal Output Imp. (Ohms)	Digi-Key Part No.	Price Each 1	10	100	Emkay Part No.
1	-32 ± 3	-52 ± 3	2-Wire	1.0 - 10	200	2500	423-1010-ND	18.00	16.20	13.60	NR-3160
2	-42 ± 3	-62 ± 3	3-Wire	1.0 - 10	50	3500	423-1014-ND	12.50	11.25	8.44	CF-2949
Waterproof Microphone											
1	-34 ± 3	-54 ± 3	2-Wire	1.0 - 10	300	2500	423-1011-ND	21.00	18.90	16.90	WP-3501

(Continued)

Specialty Speakers

CB Series:

- Balanced-armature, magnetic technology to give high efficiency, stability and reliability • Excellent sound quality • High speech intelligibility • Suitable for PCB mounting • Can function as a microphone or beeper • Stainless steel enclosure • 3 Position male header attached

CM Series:

- Balanced-armature, magnetic technology to give high efficiency, stability and reliability • High acoustic efficiency enables sufficient sound output even when limited power is available • In-built static protection • Lightweight, matt-black, plastic housing • Ergonomically designed with rounded edge to fit the concha • High-quality sound output • Tailored bandwidth for superb speech intelligibility • Rugged construction • 2 Position flexi-circuit attached

MR Series:

- Highly waterproof no loss of performance after immersion in 15m water • Corrosion resistant • Withstands explosive decompression • Excellent environmental performance • High resistance to mechanical shock • 3 Wire leads attached

Fig. 1

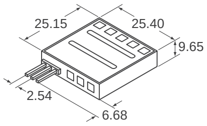


Fig. 2

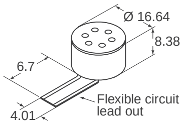


Fig. 3

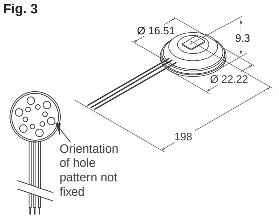


Fig.	Nominal DC Resistance (Ohms)	Impedance @ 1KHz (Ohms)	Sound Port Location	Nominal Output @ 1K Hz, Distance= 30cm (dB SPL)	Nominal Output @ 1K Hz, Sealed to IEC 318 Coupler (dB SPL)	Distortion Max %	@ Hz	Digi-Key Part No.	Price Each 1	10	100	Emkay Part No.
Handset Tranceiver												
1	4.2	12	Top Edge	73	—	15	500	423-1030-ND	20.00	17.00	15.40	CB-2844
	4.2	12	Face	73	—	15	500	423-1033-ND	20.00	17.00	15.40	CB-2846
	11.5	24	Face	73	—	15	500	423-1034-ND	20.00	17.00	15.40	CB-2847
	21.5	48	Face	73	—	15	500	423-1035-ND	20.00	17.00	15.40	CB-2848
	11.5	24	Top Edge	73	—	15	500	423-1031-ND	20.00	17.00	15.40	CB-2849
	21.5	48	Top Edge	73	—	15	500	423-1032-ND	20.00	17.00	15.40	CB-2850
Headset Speaker — Flexi-Circuit												
2	65	150	—	—	103	2	300	423-1036-ND	15.00	12.75	11.00	CM-3152
	8.5	30	—	—	103	2	300	423-1037-ND	15.00	12.75	11.00	CM-8431
Headset Speaker — Wire Lead Out												
3	10	21	—	—	100	5	300	423-1038-ND	48.00	40.80	33.24	MR-3243

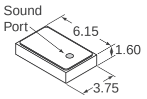
SiSonic™ Silicon Microphone

Features:

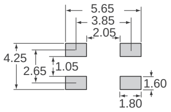
- Surface mount microphone • Compatible with standard surface mount soldering process • Automated pick 'n' place using standard equipment • No off-line soldering or insertion • Highly shock resistant • Low vibration sensitivity • Operation at high and low temperature • Ability to integrate additional electronics into package • Omni-directional

Applications:

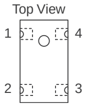
- Cellular phones • Corded and cordless telephones • PCs, PC tablets, laptops • PDAs, MP3 players • Automotive and automotive accessories • General electronics



Land Layout

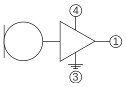


Pin Output



1. Output
2. No Connection
3. Ground
4. Power

Block Diagram



Note: No board washing after solder re-flow

Sensitivity @ 1KHz (dB re 1V/Pa)	Freq. Range (Hz)	Voltage DC	Current Consumption	S/N Ratio	Typ. Operating Temp.	Built-in Capacitor	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape and Reel Pricing 1,500	Emkay Part No.
-42 ± 4	100 to 10K	2.0	<0.250mA @2VDC	55dB	-40° to 100°C	33pF, 10pF	423-1028-1-ND	7.50	6.60	5.50	423-1028-2-ND	4500.00/M	SP0101NC1-2
-42 ± 4	100 to 10K	3-5	<0.500mA @5VDC	55dB	-40° to 100°C	33pF, 10pF	423-1029-1-ND	7.50	6.60	5.50	423-1029-2-ND	4500.00/M	SP0101NC2-2

Electret Condenser Microphones

Applications: • Headsets • Corded and cordless telephones • PCs, PC tablets, laptops • PDAs, MP3 players • Automotive and automotive accessories • General electronics

Fig. 1

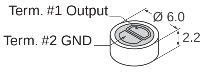


Fig. 2

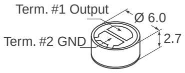


Fig. 3

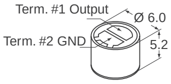


Fig. 4

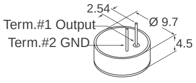


Fig. 5

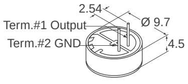


Fig. 6

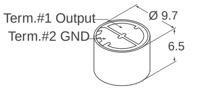


Fig. 7

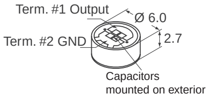


Fig. 8

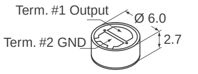


Fig. 9

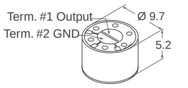


Fig. 10

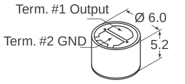


Fig. 11

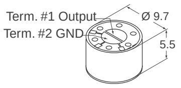


Fig.	Physical Size (mm)	Sensitivity @ 1KHz (dB re 1V/Pa)	Freq. Range (Hz)	Standard Operating Voltage	Max. Operating Voltage	Max. Current Consumption (mA)	Sensitivity Reduction	S/N Ratio	Built-in Capacitor	Digi-Key Part No.	Price Each 1	10	100	Emkay Part No.
Omni-Directional														
1	ø6.0 x 2.2	-42 ± 3	100-10K	2.0	10	0.500	within -3dB @ 1.5V	52dB	33pF, 10pF	423-1017-ND	4.54	4.05	3.24	MD6022ASC-0
2	ø6.0 x 2.7	-38 ± 4	100-10K	3.0	10	0.500	within -3dB @ 2.5V	55dB	None	423-1018-ND	3.93	3.51	2.81	MD6030ASZ-1
3	ø6.0 x 5.2	-44 ± 3	100-10K	2.0	10	0.500	within -3dB @ 1.5V	55dB	None	423-1021-ND	2.13	1.90	1.52	MD6052ASZ-2
4	ø9.7 x 4.5	-41 ± 3	100-10K	2.0	10	0.500	within -3dB @ 1.5V	55dB	10pF	423-1024-ND	.97	.87	.69	MD9745APA-1
5	ø9.7 x 4.5	-44 ± 2	100-10K	2.0	10	0.500	within -3dB @ 1.5V	55dB	None	423-1023-ND	.77	.69	.55	MD9745APZ-F
6	ø9.7 x 6.5	-42 ± 4	100-10K	3.0	10	0.500	within -3dB @ 2.5V	55dB	None	423-1026-ND	1.19	1.06	.85	MD9765ASZ-0
Noise Canceling														
7	ø6.0 x 2.7	-37 ± 4	300-6K	3.0	10	0.500	within -3dB @ 2.5V	55dB	33pF, 10pF	423-1020-ND	4.04	3.61	2.89	MD6030NSC-0
8	ø6.0 x 2.7	-39 ± 4	300-6K	3.0	10	0.500	within -3db @ 2.5V	55dB	None	423-1019-ND	3.93	3.51	2.81	MD6030NSZ-0
9	ø9.7 x 5.2	-38 ± 3	300-6K	3.0	10	0.500	within -3dB @ 2.5V	55dB	None	423-1027-ND	2.76	2.46	1.97	MD9752NSZ-0
Unidirectional														
10	ø6.0 x 5.2	-42 ± 3	100-10K	2.0	10	0.500	within -3dB @ 1.5V	55dB	None	423-1022-ND	3.21	2.87	2.30	MD6052USZ-1
11	ø9.7 x 5.5	-44 ± 2	100-10K	1.5	10	0.500	within -3dB @ 1.2V	55dB	None	423-1025-ND	2.86	2.55	2.04	MD9755USZ-1

Panasonic® Micro Speakers

Features: • Thin and lightweight design • High efficiency and high fidelity sound • High reliability
Recommended Applications: • Compact AV equipment • Electronic office equipment • Information and communication equipment

Fig. 1

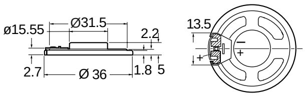


Fig. 2

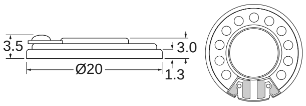


Fig. 3

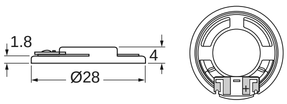


Fig. 4

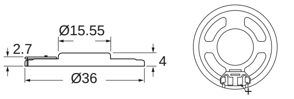


Fig.	Outer Dims. (mm.)	Input (W) Rated	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	36	0.20	8	325~3500	74	8	P9604-ND	6.88	6.19	5.50	EAS-3P128A
2	20	0.2	7	Full Range	77	2.5	P10173-ND	4.29	3.82	3.17	EAS-2P113D
3	28	0.3	8	Full Range	81	5	P10174-ND	6.01	5.34	4.44	EAS-2P104H
4	36	0.5	8	Full Range	84	8	P10175-ND	5.38	4.79	3.97	EAS-3P127A

Oval Magnetic Shielded Speakers

Features: • Low magnetic leakage flux • High tone quality **Recommended Applications:** • AV equipment

Fig. 1

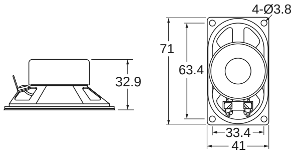


Fig. 2

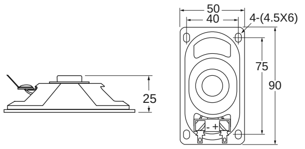


Fig. 3

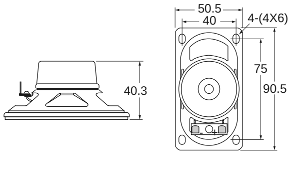


Fig. 4

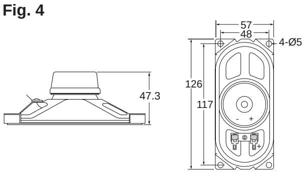
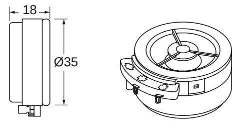


Fig.	Outer Dims. (mm.)	Input (W) Rated	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	70 x 40	1.5	16	Full Range	90	107	P10184-ND	3.63	3.23	2.68	EAS-G7D504A2
2	90 x 50	1.5	16	Full Range	87	45	P10185-ND	3.23	2.87	2.38	EAS-G9D550B2
3	90 x 50	3	8	Full Range	88.5	135	P10186-ND	4.54	4.04	3.35	EAS-G9D541A2
4	120 x 60	3	8	Full Range	93.5	180	P10187-ND	6.05	5.38	4.47	EAS-G12D531E2

Balanced Dome Tweeter

Features:
- High efficiency • High quality sound • Compact and lightweight

Recommended Applications:
- Audio components • TV • Car speaker system



Outer Dims. (mm.)	Input (W) Rated (Max)	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
35	30	6	8khz~20khz	80	83	P10183-ND	19.91	17.70	14.69	EAS-13KH11HB4-A

Hi-Fi Micro Speakers

Features:
- Discrete edge surround, wide range reproduction • Slim design • Low magnetic leakage flux design

Recommended Applications:
- Multimedia equipment

Fig. 1

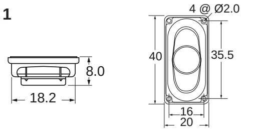


Fig. 2

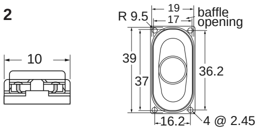


Fig. 3

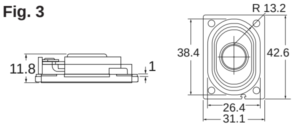


Fig.	Outer Dims. (mm.)	Input (W) Rated	Imped-ance (Ω)	Frequency Range (Hz)	Sound Press. Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	40 x 20	0.5	8	Full Range	78	8	P9611-ND	8.69	7.73	6.42	EAS-4D06C
2	40 x 20	1	8	Full Range	76	7	P9612-ND	10.03	8.92	7.40	EAS-4D05A0
3	40 x 30	1	16	Full Range	73	12	P9613-ND	7.21	6.41	5.32	EAS-4D02C0

Small Size General Purpose Speakers

Features:
- Wide frequency range • Apply to wide variety of needs
- Wide range of product selection

Recommended Applications:
- CD-radio-cassette recorders • Information and communication equipment

Fig. 1

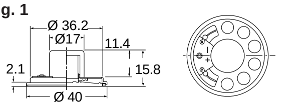


Fig. 2

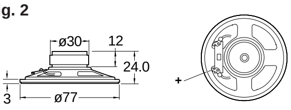


Fig. 3

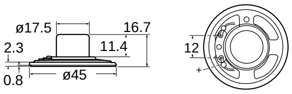


Fig. 4

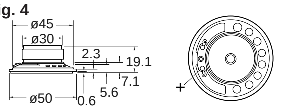


Fig. 5

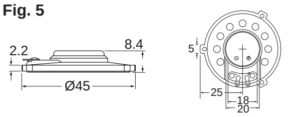


Fig. 6

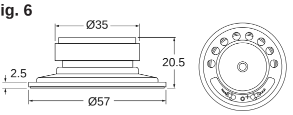


Fig. 7

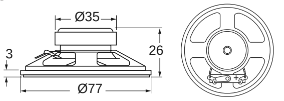
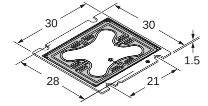


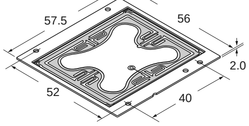
Fig.	Outer Dims. (mm.)	Input (W) Rated	Input (W) Max.	Imped-ance (Ω)	Frequency Range (Hz)	Sound Pressure Level	Net Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	40	0.10	—	8	530~3000	92	25	P9605-ND	5.61	5.05	4.49	EAS-4P15SA
2	80	0.63	—	8	185~4000	93	68	P9607-ND	4.44	4.00	3.56	EAS-8P29SG
3	45	0.10	—	8	390~3000	93	24	P9608-ND	4.50	4.05	3.60	EAS-45P30S
4	50	0.16	—	8	350~3000	93	57	P9610-ND	3.76	3.39	3.01	EAS-5P13S
5	45	0.25	—	8	Full Range	77	13	P10176-ND	8.58	7.63	6.34	EAS-45P104S
6	57	0.5	—	8	Full Range	92	75	P10177-ND	7.21	6.41	5.32	EAS-6P22S
7	77	0.63	—	25	Full Range	95	83	P10178-ND	6.87	6.11	5.07	EAS-8P36S

Card Type Speakers

WM-R30B



WM-R57A



Ultra-thin and ultra-light, these new card type speakers deliver a wide frequency range of high-quality sound. These amazing new Card Type Speakers from Panasonic are only 1/5th the thickness of dynamic speakers (comparing the WM-R57A with dynamic speakers which have the same dimensions). Based on newly developed, original technology, they deliver top-quality, low-distortion reproduction across a wide frequency sound. So small and light, they are ideal for applications that range from notebook PCs, PDAs, and other mobile communications to AV equipment and home electronics.

Key Features: • Ultra-thin, ultra-light design using a piezo ceramic diaphragm. • Outstanding broad-spectrum audio reproduction made possible by the two-way mechanical structure of the divided diaphragm, combining one large speaker for low-frequency sounds with four small speakers for high-frequency sounds. • Newly developed double construction damper and high polymer material minimize distortion, ensuring superior reproduction. • Because no coil or magnet is used, there is no leakage of electromagnetic radiation to interfere with magnetic media. • The vibrating membrane is covered completely with a high polymer coating, to protect against dampness, dust, and corrosion.

Specifications: • **Storage Temperature:** -40°C to 70°C • **Operating Temperature:** -30°C to 60°C

Dimensions (H x W) (mm)	Depth (mm)	Frequency Response (Hz)	S.P.L at 3V RMS†	Distance of Mic & Speaker	Max. Input (V RMS)	Wgt. (g)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
30.0 x 30.0	1.5	400Hz~100kHz	70dB	0.3 m	7	1.0	P11123-ND	6.32	5.62	4.67	WM-R30B
57.5 x 56.0	2.0	150Hz~100kHz	70dB	0.5 m	7	5.0	P11124-ND	8.57	7.62	6.33	WM-R57A

† ± 5dB average at .4 kHz, .8 kHz, 1.5 kHz, 3 kHz.

CUI INC

Ferrite Magnet Speakers

These low cost ferrite speakers are ideal for general applications such as information and communications equipment, portable audio equipment, and industrial use. Mylar cone versions offer additional protection in moist environments or conditions requiring enhanced weather resistance.

H

Fig. 1 — Paper Cone or Mylar Cone

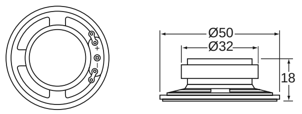


Fig. 2 — Paper Cone

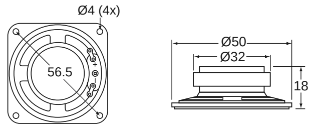


Fig. 3 — Paper Cone or Mylar Cone

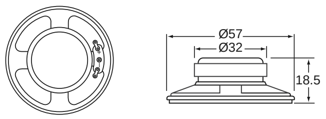


Fig. 4 — Paper Cone

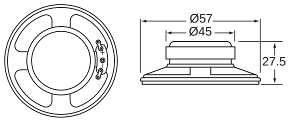


Fig. 5 — Paper Cone or Mylar Cone

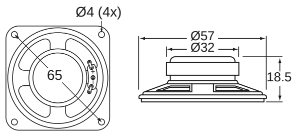


Fig. 6 — Paper Cone or Mylar Cone

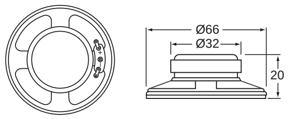


Fig. 7 — Paper Cone

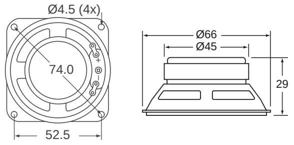


Fig. 8 — Paper Cone

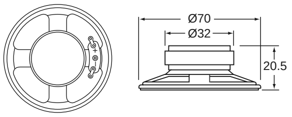


Fig. 9 — Paper Cone or Mylar Cone

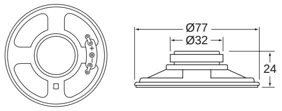


Fig. 10 — Paper Cone

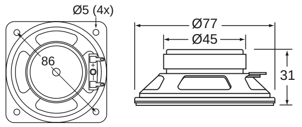


Fig. 11 — Paper Cone

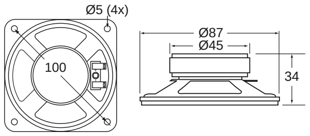


Fig. 12 — Paper Cone

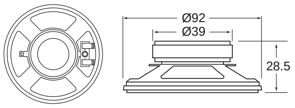


Fig. 13 — Paper Cone

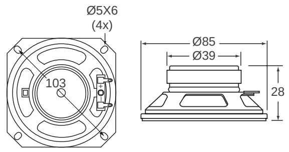


Fig. 14 — Paper Cone or Mylar Cone

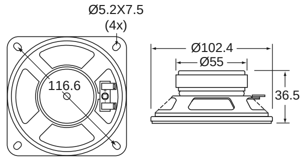


Fig. 15 — Paper Cone

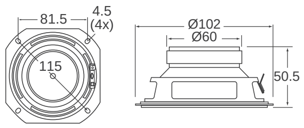


Fig. 16 — Mylar Cone

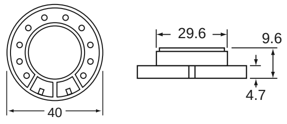


Fig. 17 — Mylar Cone

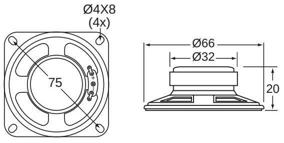


Fig. 18 — Mylar Cone

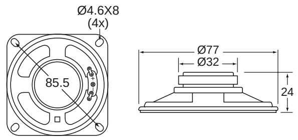


Fig. 19 — Mylar Cone

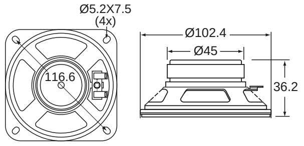


Fig.	Diameter (mm)	Depth (mm)	Speaker Shape	Frame Shape	Impedance (Ω)	Frequency Range		Input (W) Norm/Max.		Magnet Weight (oz.)	S.P.L. (dB)	Digi-Key Part No.	Price Each 1	10	50	100	CUI Inc. Part No.
Paper Cone Type																	
1	50	17.5	Round	Round	8	450	4K	0.25	0.5	0.58	87	GF0501-ND	2.45	1.96	1.72	1.63	GF0501
2	50	17.5	Round	Square	8	480	4K	0.25	0.5	0.58	80	GF0506-ND	2.48	1.98	1.73	1.65	GF0506
3	57	18.5	Round	Round	8	380	4K	0.25	0.5	0.58	86	GF0571-ND	2.45	1.96	1.72	1.63	GF0571
4	57	27.2	Round	Round	8	450	12K	3.00	5.0	1.70	92	GF0573-ND	3.35	2.68	2.35	2.23	GF0573
5	57	18.5	Round	Square	8	380	4K	0.25	0.5	0.58	86	GF0576-ND	2.48	1.98	1.73	1.65	GF0576
6	66	19.5	Round	Round	8	300	4K	0.30	0.5	0.58	86	GF0661-ND	2.80	2.24	1.96	1.87	GF0661
7	66	29	Round	Square	8	300	16K	3.00	5.0	1.70	90	GF0668-ND	3.67	2.93	2.57	2.44	GF0668
8	70	21.5	Round	Round	8	310	4K	0.50	1.0	0.58	91	GF0701-ND	2.88	2.31	2.02	1.92	GF0701
9	77	24	Round	Round	8	240	10K	1.00	2.0	0.58	90	GF0771-ND	2.88	2.30	2.01	1.92	GF0771
10	77	31	Round	Square	8	250	23K	3.00	5.0	1.70	95	GF0778-ND	3.86	3.09	2.70	2.57	GF0778
11	87	32.5	Round	Square	8	290	16K	2.00	4.0	1.70	99	GF0876-ND	4.06	3.25	2.84	2.70	GF0876
12	92	32	Round	Round	8	300	5K	2.00	3.0	1.00	93	GF0922-ND	3.74	2.99	2.62	2.49	GF0922
13	92	32	Round	Square	8	300	5K	2.00	3.0	1.00	93	GF0927-ND	3.67	2.93	2.57	2.44	GF0927
14	102	36.5	Round	Square	8	145	17K	6.00	10.0	2.60	93	GF1004-ND	5.15	4.12	3.61	3.43	GF1004
15	102	50.5	Round	Square	8	100	15K	20.00	40.0	3.00	90	GF1004H-ND	8.36	6.69	5.85	5.57	GF1004H
Mylar Cone Type (Weather Resistant)																	
16	40	9.6	Round	Round	8	150	3K	0.1	0.2	—	113	GF0401M-ND	2.49	1.99	1.74	1.66	GF0401M
1	50	18.2	Round	Round	8	470	5K	0.25	0.5	0.58	84	GF0501M-ND	2.96	2.37	2.07	1.97	GF0501M
3	57	18.5	Round	Round	8	420	9K	0.25	0.5	0.58	92	GF0571M-ND	2.96	2.37	2.07	1.97	GF0571M
6	66	22	Round	Round	8	430	9K	0.5	1	0.58	88	GF0661M-ND	3.16	2.53	2.21	2.10	GF0661M
17	66	22	Round	Square	8	330	9K	0.5	1	0.58	83	GF0666M-ND	3.20	2.56	2.24	2.13	GF0666M
9	77	24	Round	Round	8	280	11K	1	2	0.58	90	GF0771M-ND	3.35	2.68	2.35	2.23	GF0771M
18	77	24	Round	Square	8	360	11K	1	2	0.58	91	GF0776M-ND	3.35	2.68	2.35	2.23	GF0776M
19	100	36	Round	Square	8	250	13K	3	5	1.70	93	GF1003M-ND	4.57	3.65	3.20	3.04	GF1003M
14	100	37	Round	Square	8	230	15K	6	10	3.00	93	GF1004M-ND	5.62	4.50	3.94	3.75	GF1004M

CUI INC

Notebook Speakers

Features: • Low profile rectangular design • Light weight rugged resin frame • Wide frequency range • Low resonant frequency
Recommended Applications: • Notebook Computers • Portable communication equipment • Multimedia equipment.

Fig. 1

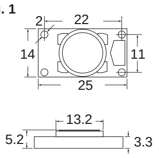


Fig. 2

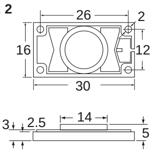


Fig. 3

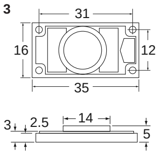


Fig. 4

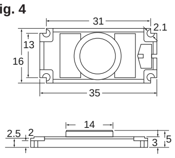
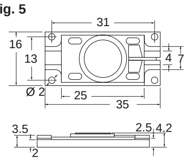


Fig. 5



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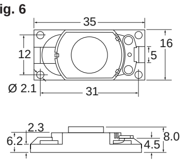


Fig. 7

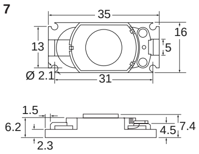


Fig. 8

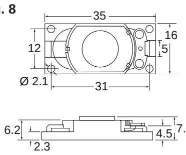


Fig. 9

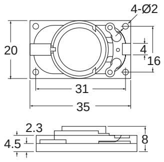


Fig. 10

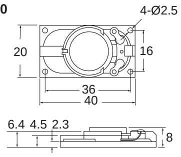


Fig. 11

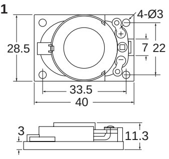


Fig.	Size (mm)	Depth (mm)	Frame Style	Resonant Freq. HZ +/-20%	Freq. Range (HZ)	Impedance Ohms	Power (W) Input NOM	Power (W) Input MAX	Magnet Size (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 50	Price Each 100	CUI Inc. Part No.
1	14 x 25	5.2	Plastic	750	fo ~ 3.5K	8	1.0	1.5	7.9 x 1.3	GC0251K-ND	3.95	3.16	2.77	2.63	GC0251K
2	16 x 30	5.0	Plastic	500	fo ~ 4K	8	0.5	1.0	7.9 x 1.3	GC0301K-ND	4.05	3.24	2.84	2.70	GC0301K
3	16 x 35	5.0	Plastic	650	fo ~ 20K	8	0.5	1.0	7.9 x 1.3	GC0351M-ND	3.30	2.64	2.31	2.20	GC0351M
4	16 x 35	5.0	Plastic	650	fo ~ 20K	8	0.5	1.0	7.9 x 1.3	GC0351M-3-ND	3.30	2.64	2.31	2.20	GC0351M-3
5	16 x 35	4.2	Plastic	650	fo ~ 4K	8	1.0	1.5	7.9 x 1.0	GC0351N-ND	4.23	3.38	2.96	2.82	GC0351N
6	16 x 35	8.0	Plastic	500	fo ~ 12K	8	1.0	2.0	8.0 x 2.0	GC0351P-ND	4.33	3.46	3.03	2.88	GC0351P
7	16 x 35	7.4	Plastic	630	fo ~ 13K	4	1.0	2.0	8.1 x 1.4	GC0351P-1-ND	4.33	3.46	3.03	2.88	GC0351P-1
8	16 x 35	7.4	Plastic	630	fo ~ 13K	4	1.0	2.0	8.1 x 1.4	GC0351P-3-ND	4.33	3.46	3.03	2.88	GC0351P-3
9	20 x 35	8.0	Plastic	550	fo ~ 11K	8	1.0	1.5	11.0 x 1.5	GC0351K-ND	4.33	3.46	3.03	2.88	GC0351K
10	20 x 40	8.0	Plastic	550	fo ~ 12K	8	1.0	1.5	11.0 x 1.5	GC0401S-ND	4.43	3.54	3.10	2.95	GC0401S
11	28.5 x 40	11.3	Plastic	390	fo ~ 20K	8	1.0	2.0	12.5 x 1.8	GC0401K-ND	4.43	3.54	3.10	2.95	GC0401K

CTS

Speakers

Fig. 1

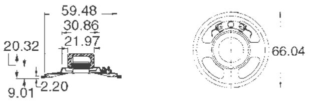
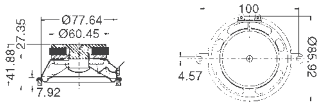


Fig. 2



H

Fig. 3

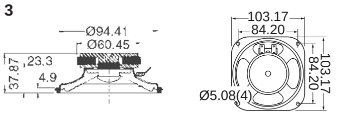


Fig. 4

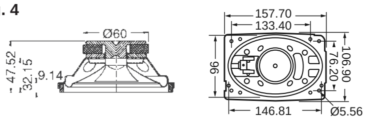


Fig. 5

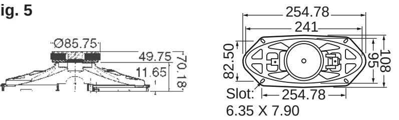


Fig.	Description	Nominal Impedance Ohm ± 15%	Power Rating Watt	Resonance Frequency Hz	Response Range Hz	Nominal Sensitivity* dB ± 2.0 avg	Voice Coil Diameter (mm)	Magnet Size (mm)	Weight (Oz)	Digi-Key Part No	Pricing 1	Pricing 25	Pricing 50	CTS Part No.
1	2.5" Round	8	0.5	390 ± 20%	390 ~ 3,000	82.0	12.70	12.96 X 9.98	0.34	10339-ND	16.51	373.06	682.63	400-212-08
2	3.5" Round	10	15	135 ± 15%	135 ~ 22,000	84.0	19.05	60.45 X 25.4 X 7.11	2.94	10340-ND	16.90	381.88	698.75	400-312-10
3	4" Round	4	15	245 ± 10%	245 ~ 6,000	93.5	19.05	60.45 X 25.4 X 7.11	2.94	10341-ND	20.80	470.00	860.00	400-400-04
4	4 X 6" Oval	4	15	110 ± 15 Hz	110 ~ 18,000	88.5	19.05	60.45 X 25.4 X 7.11	2.94	10346-ND	17.42	393.63	720.25	401-406-04
5	4 X 10" Oval	4	25	70 ± 15 Hz	70 ~ 15,000	92.5	25.40	87.75 X 32.51 X 10.8	9.40	10347-ND	27.95	631.56	1155.63	401-410-04

***** @ 300, 400, 500, & 600 Hz.

Panasonic®

Miniature Audio Transducer For General Application

For use in:

- burglar alarms
- paging systems
- smoke detectors
- gas detectors
- light and radiation detectors
- data entry terminals
- cash registers
- alarm clocks
- fish finders
- metal detectors
- medical equipment
- test instruments
- telephones
- movie cameras
- automotive warning systems
- production machinery
- various electronic equipment

NOT WASHABLE UNLESS NOTED!

Fig. 1

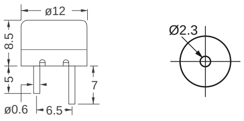
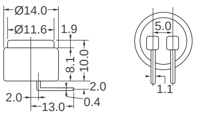


Fig. 2



Continuous Tone

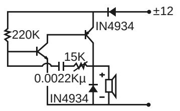


Fig. 3

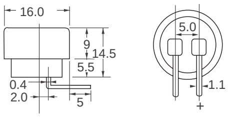
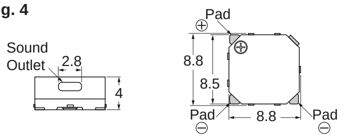


Fig. 4



Intermittent Tone

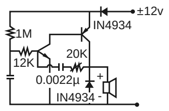


Fig.	Rated Input (mW)	D.C. Resistance (Ohms)	Impedance (Ohms)	S. P. L. (dB/1 W/1 m)	Frequency (Hz)	Physical Size (mm)	Terminal	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Pricing 500	Tape & Reel Pricing 1,000	Panasonic Part No.
1	50	12	35	86	3.8K~4.3K	12 x 8.5	Straight Pin	P9965-ND	4.44	39.37	318.20	1121.21	—	EAF-12RF04C
2	50	15	45	93	2.5K~3K	14 x 10	Lead Wire	P9977-ND	4.50	39.90	322.50	1136.36	—	EAF-14R06B
3	50	15	45	93	2.5K~3K	16 x 14.5	Bent Pin	P9980-ND	5.86	50.80	420.11	1480.30	—	EAF-16R02B
4	10	20	—	92	2.5K~2.7K	8.5 x 8.5	Surface Mount	P9902CT-ND‡	4.76	43.03	384.55	1611.46	2435.00	EAF-8RM08EF

‡ For Tape and Reel Part No. change "CT-ND" (cut-tape) to "TR-ND".

Panasonic® Piezoelectric Ceramic Buzzer Units

Applications:

Smoke detectors, alarms, detectors, home appliances, radio beepers, electronic games, keyboard signalers, cameras, and telephone ringers.

P9948 and P9928 Features:

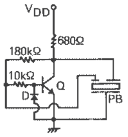
- Drive oscillator circuitry — will run directly from commonly used voltage source such as dry batteries. • High sound level and low input voltage. • Low power consumption. Wide operating range of supply voltage: 3 to 20VDC.

Features For All Others:

- Low power consumption. • Long life and no noise due to non-contact. • Thin thickness buzzer element. • External drive type. • Covering wide frequency range. • No magnetic field is generated. • High sound pressure level.

Example Driving Circuit
(For Self Drive Type)

P9912	**P9920**
P9913	**P9921**
P9914	**P9923**
P9915	



Q: ZTX451 or equivalent
D: 1N4148 or equivalent

Fig. 1

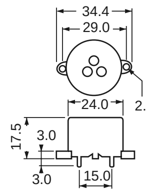


Fig. 2

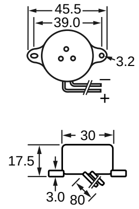


Fig. 3

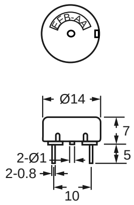


Fig. 4

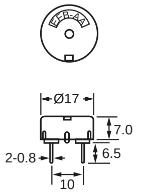


Fig. 5

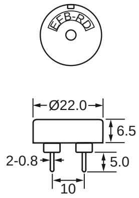


Fig. 6

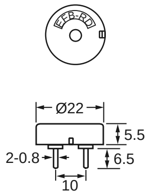


Fig. 7

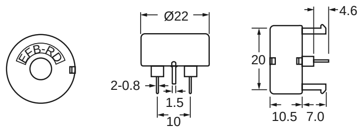


Fig. 8

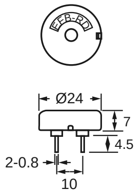


Fig. 9

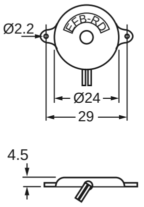


Fig. 10

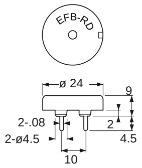


Fig. 11

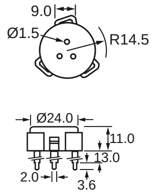


Fig. 12

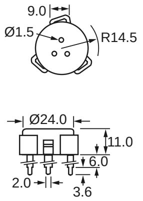


Fig. 13

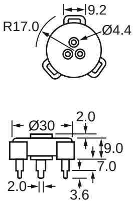


Fig. 14

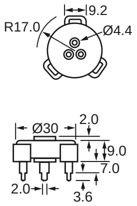


Fig. 15

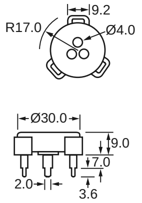


Fig. 16

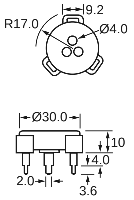


Fig. 17

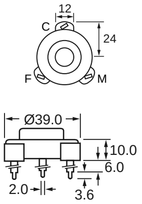


Fig.	Sound Pressure Level	Oscillating Freq.	Cap. (@1 KHz)	Current (12 VDC)	Input Voltage	Digi-Key Part No.	Pricing 1	10	100	500	1,000	5,000	Panasonic Part No.
1	80dB min. @ 12VDC	3.7KHz	—	15mA	3 ~ 20VDC	P9948-ND	8.34	70.53	551.43	1943.00	3664.00	3420.00/M	EFB-CB37C11
2	90dB min. @ 12VDC	2.8KHz	—	15mA	3 ~ 20VDC	P9928-ND	8.32	70.41	550.47	1939.50	3658.00	3414.00/M	EFB-CC28C15
3	74dB min. @ (15V p-p, 4KHz Sq. Wave)	—	8500pF	—	25V p-p	P9900-ND	3.19	27.01	211.18	744.00	1403.00	1310.00/M	EFB-AA14D001
4	86dB min. @ (15V p-p, 4KHz Sq. Wave)	—	7000pF	—	25V p-p	P9957-ND	2.13	17.99	140.63	495.50	934.00	872.00/M	EFB-AA40D102
5	85dB min. @ (15V p-p, 4KHz Sq. Wave)	—	15000pF	—	30V p-p	P9929-ND	2.18	18.48	144.48	509.00	960.00	896.00/M	EFB-RD22C41
6	80dB min. @ (15V p-p, 4KHz Sq. Wave)	—	15000pF	—	30V p-p	P9951-ND	2.14	18.14	141.83	500.00	942.00	880.00/M	EFB-RD22C413
7	98dB min. @ (15V p-p, 4KHz Sq. Wave)	—	15000pF	—	30V p-p	P9909-ND	2.26	19.10	149.30	526.00	992.00	926.00/M	EFB-RD22C415
8	85dB min. @ (15V p-p, 4KHz Sq. Wave)	—	10000pF	—	30V p-p	P9910-ND	2.80	23.72	185.42	653.50	1232.00	1150.00/M	EFB-RD24C41B
9	80dB min. @ (15V p-p, 4KHz Sq. Wave)	—	12000pF	—	30V p-p	P9911-ND	2.18	18.48	144.48	509.00	960.00	896.00/M	EFB-RC24C41
10	85dB min. @ (15V p-p, 4KHz Sq. Wave)	—	10000pF	—	30V p-p	P9924-ND	1.80	15.25	119.20	420.00	792.00	739.00/M	EFB-RD24C411
11	96dB min. @ 10VDC	3.5KHz	—	—	3 ~ 20VDC	P9912-ND*	3.41	28.86	225.63	795.00	1499.00	1399.00/M	EFB-RM38C13
12	93dB min. @ 10VDC	3.5KHz	—	—	3 ~ 20VDC	P9913-ND*	3.41	28.86	225.63	795.00	1499.00	1399.00/M	EFB-RM38C123
13	85dB min. @ 12VDC	2.0KHz	—	—	3 ~ 20VDC	P9914-ND*	2.98	25.19	196.97	694.00	1309.00	1222.00/M	EFB-RL20C102
14	104dB min. @ 12VDC	2.8KHz	—	—	3 ~ 20VDC	P9915-ND*	2.92	24.67	192.88	679.50	1282.00	1196.00/M	EFB-RL28C11
15	106dB min. @ 12VDC	3.7KHz	—	—	3 ~ 20VDC	P9920-ND*	3.17	26.83	209.74	739.00	1394.00	1301.00/M	EFB-RL37C20
16	106dB min. @ 12VDC	3.7KHz	—	—	3 ~ 20VDC	P9921-ND*	3.17	26.83	209.74	739.00	1394.00	1301.00/M	EFB-RL37C22
17	106dB min. @ 12VDC	3.2KHz	—	—	3 ~ 20VDC	P9923-ND*	6.08	51.41	401.90	1416.00	2670.00	2492.00/M	EFB-BD32B21

* Driving circuit required.   ***NOTE**:* All buzzers and microphones are non-washable.

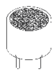
Ultrasonic Ceramic Sensor/Transducer

Ultrasonic Ceramic Sensor consisting of a disc/bimorph type piezoelectric ceramic vibrator that is used as a sensor for transmitting and receiving ultrasonics in the air. Since the ultrasonic sensor has a resonance type vibrator, it is high in sensitivity and has outstanding sound pressure level.

It has wide applications for burglar alarm systems, automatic door openers, flow rate detectors, and remote-control systems in TV, home appliance and toys, etc.

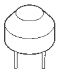
Sensors are not washable.

Type U Standard Type *
Type S Temperature Stable Type **



***** Temp. Range: -20°C to 60°C
****** Temp. Range: -40°C to 100°C

Type Q
Enclosed Type *



Type	Class	Ctr Freq. 51.0 (KHz)	Sensitivity (dB/V/mbar)	Sensitivity (0dB = 1V/Pa)	Min. Band-Width (KHz)	Sound Pressure Level (dB)	Max. Input Volt. (Vrms)	Dimensions (mm) Physical Size Dia.	Ht.	Leads Length	Space	Digi-Key Part No.	Pricing 1	10	100	500	1,000	Panasonic Part No.
Q	Receiver	40.0	-75	-55	1.0	—	—	18.0	12.0	12.5	7.5	P9892-ND	21.63	194.64	1730.18	6488.16	12111.23	EFR-RQB40K5
Q	Transmitter	40.0	—	—	1.0	105	20	18.0	12.0	12.5	7.5	P9893-ND	21.63	194.64	1730.18	6488.16	12111.23	EFR-RTQB40KS
S	Receiver	40.0	-70	-50	4.0	—	—	16.0	12.0	10.0	10.0	P9894-ND	9.20	82.76	735.62	2758.56	5149.31	EFR-RSB40K5
S	Transmitter	40.0	—	—	4.0	105	20	16.0	12.0	10.0	10.0	P9895-ND	9.20	82.76	735.62	2758.56	5149.31	EFR-TSB40KS
U	Transmitter	40.0	—	—	4.0	110	20	16.0	12.0	10.0	10.0	P9851-ND	5.60	50.40	448.00	1680.00	3136.00	EFR-OUB40K22

Fig. 1

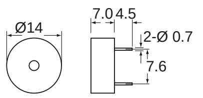


Fig. 2

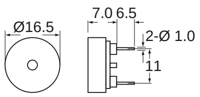
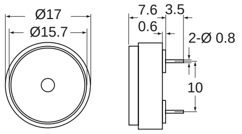


Fig. 3



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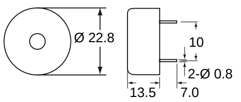


Fig. 5

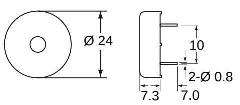


Fig. 6

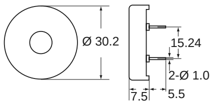


Fig. 7

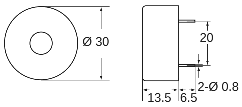


Fig. 8

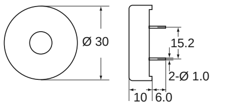


Fig. 9

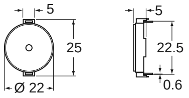


Fig. 10

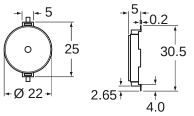


Fig. 11

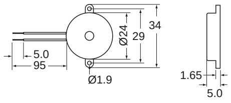


Fig. 12

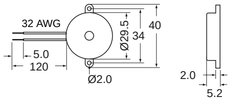


Fig. 13

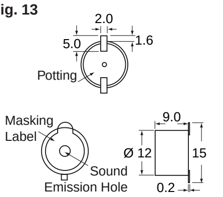


Fig. 14

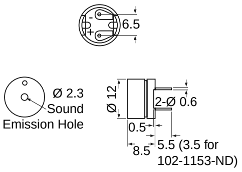


Fig. 15

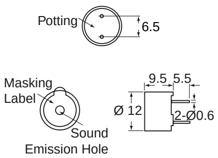


Fig. 16

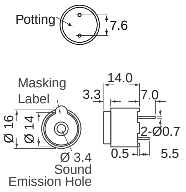


Fig. 17 *NEW!*

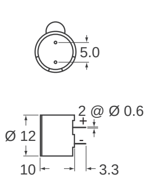


Fig. 18

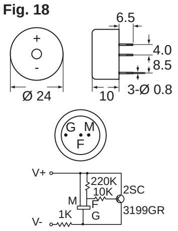


Fig. 19

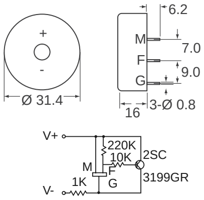


Fig. 20

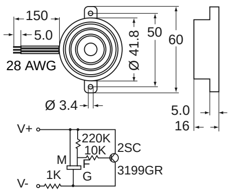
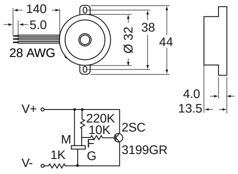


Fig. 21



H

Piezo Ceramic Audio Transducers — External Drive Type

Fig.	Resonant Frequency (KHz)	Operating Voltage	Sound Pressure Level	Current Consumption (Max.)	Capacitance	Operating Temp. (°C)	Terminal	Digi-Key Part No.	Price Each 1	10	100	500	1,000	CUI Inc. Part No.
1	4.0	20V p-p	76dB min. @ 4.0KHz	10mA	17,000pF	-20 ~ +60	PCB Pin	102-1133-ND	2.34	2.13	1.70	1.42	1.24	CEP-1160
1	4.0	20V p-p	80dB min. @ 4.0KHz	7mA	14,000pF	-20 ~ +85	PCB Pin	102-1134-ND	2.50	2.28	1.82	1.52	1.32	CEP-1162
2	5.0	20V p-p	82dB min. @ 5.0KHz	11mA	7,500pF	-30 ~ +80	PCB Pin	102-1135-ND	1.40	1.28	1.02	.85	.74	CEP-1152
3	4.0	20V p-p	82dB min. @ 4.0KHz	7mA	13,000pF	-30 ~ +85	PCB Pin	102-1136-ND	1.54	1.40	1.12	.93	.82	CEP-1153
4	2.4	30V p-p	88dB min. @ 2.4KHz	18mA	80,000pF	-30 ~ +85	PCB Pin	102-1137-ND	2.89	2.63	2.10	1.75	1.53	CEP-1106
5	4.0	30V p-p	92dB min. @ 4.0KHz	11mA	21,000pF	-30 ~ +80	PCB Pin	102-1138-ND	1.38	1.25	1.00	.83	.73	CEP-1112
6	3.0	30V p-p	90dB min. @ 2.8KHz	10mA	18,000pF	-30 ~ +80	PCB Pin	102-1139-ND	1.90	1.73	1.38	1.15	1.01	CEP-1130
7	2.0	30V p-p	93dB min. @ 2.0KHz	11mA	45,000pF	-30 ~ +80	PCB Pin	102-1140-ND	2.26	2.05	1.64	1.37	1.19	CEP-1114
8	2.0	30V p-p	90dB min. @ 2.0KHz	8mA	28,000pF	-30 ~ +85	PCB Pin	102-1141-ND	2.04	1.85	1.48	1.23	1.08	CEP-1116
9	2.5	50V p-p	80dB min. @ 2.5KHz	7mA	18,000pF	-30 ~ +85	PCB Pin	102-1142-ND	1.57	1.43	1.14	.95	.83	CEP-1108
10	2.5	50V p-p	80dB min. @ 2.5KHz	7mA	18,000pF	-30 ~ +85	SMD	102-1143-ND	1.73	1.58	1.26	1.05	.92	CEP-1109
11	4.1	30V p-p	90dB min. @ 4.1KHz	12mA	21,000pF	-30 ~ +85	Lead Wire	102-1144-ND	1.40	1.28	1.02	.85	.74	CEP-1110
12	2.8	30V p-p	92dB min. @ 2.8KHz	10mA	18,000pF	-30 ~ +80	Lead Wire	102-1145-ND	1.79	1.63	1.30	1.08	.95	CEP-1126

Magnetic Audio Transducers — External Drive Type

Fig.	Resonant Frequency (KHz)	Operating Voltage	Sound Pressure Level	Current Consumption (Max.)	Operating Temp. (°C)	Terminal	Digi-Key Part No.	Price Each 1	10	100	500	1,000	CUI Inc. Part No.
13	2.4	4~8V	85dB min. @ 2.4KHz	40mA	-40 ~ +85	SMD	102-1150-ND	2.15	1.95	1.56	1.30	1.14	CD-1206
14	2.048	1~2V	85dB min. @ 2.048KHz	20mA	-20 ~ +60	PCB Pin	102-1151-ND	.63	.58	.46	.39	.34	CEM-1201(42)
14	2.048	1~2V	80dB min. @ 2.048KHz	20mA	-20 ~ +60	PCB Pin	102-1152-ND	.63	.58	.46	.39	.34	CEM-1201(50)
14	2.048	3~5V	85dB min. @ 2.048KHz	20mA	-20 ~ +60	PCB Pin	102-1153-ND	.72	.65	.52	.44	.38	CEM-1203(42)
15	2.4	1~3V	80dB min. @ 2.4KHz	40mA	-20 ~ +60	PCB Pin	102-1154-ND	.85	.78	.62	.52	.45	CEM-1201S
15	2.4	3~8V	85dB min. @ 2.4KHz	45mA	-20 ~ +60	PCB Pin	102-1155-ND	.85	.78	.62	.52	.45	CEM-1206S
15	2.4	6~16V	85dB min. @ 2.4KHz	40mA	-20 ~ +60	PCB Pin	102-1156-ND	.85	.78	.62	.52	.45	CEM-1212S
16	2.048	1~3V	80dB min. @ 2.048KHz	20mA	-20 ~ +60	PCB Pin	102-1112-ND	1.32	1.20	.96	.80	.70	CEM-1601
16	2.048	3~12V	85dB min. @ 2.048KHz	50mA	-20 ~ +60	PCB Pin	102-1113-ND	1.32	1.20	.96	.80	.70	CEM-1606
16	2.048	6~18V	85dB min. @ 2.048KHz	40mA	-20 ~ +60	PCB Pin	102-1114-ND	1.32	1.20	.96	.80	.70	CEM-1612
17	2.8	1.0~1.7V	85dB min. @ 2.8KHz	40mA	-30 ~ +70	PCB Pin	102-1169-ND *NEW!*	1.46	1.33	1.06	.88	.77	CEM-14R06CT

Piezo Ceramic Audio Transducers — Self Drive Type

Fig.	Resonant Frequency (KHz)	Operating Voltage	Sound Pressure Level	Current Consumption (Max.)	Operating Temp. (°C)	Terminal	Digi-Key Part No.	Price Each 1	10	100	500	1,000	CUI Inc. Part No.
18	3.2	3~28VDC	74dB min. @ 12VDC	7mA	-30 ~ +85	PCB Pin	102-1146-ND*	1.65	1.50	1.20	1.00	.87	CEP-1123
19	3.3	3~28VDC	81dB min. @ 12VDC	7mA	-30 ~ +80	PCB Pin	102-1147-ND*	2.15	1.95	1.56	1.30	1.14	CEP-1172
20	2.8	3~28VDC	85dB min. @ 12VDC	7mA	-30 ~ +85	Lead Wire	102-1148-ND*	2.39	2.18	1.74	1.45	1.27	CEP-1136
21	3.3	3~28VDC	82dB min. @ 12VDC	7mA	-30 ~ +80	Lead Wire	102-1149-ND*	2.04	1.85	1.48	1.23	1.08	CEP-1173

* Driving circuit required

Piezo Buzzers

Fig. 1

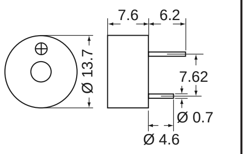


Fig. 2

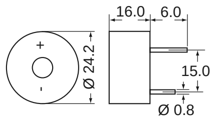


Fig. 3

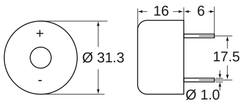


Fig. 4

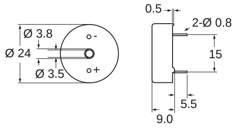


Fig. 5

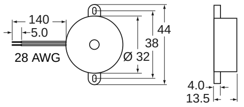


Fig. 6

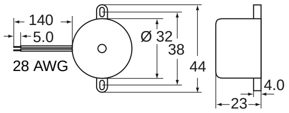


Fig. 7

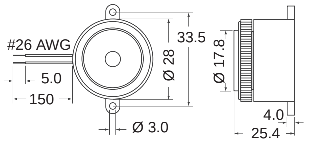


Fig. 8

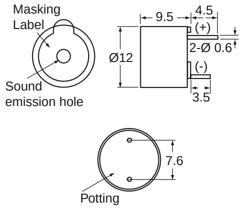
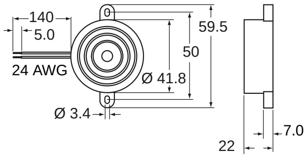


Fig. 9



Piezo Audio Indicators

Fig.	Sound Pressure Level	Resonant Frequency (KHz)	Current	Input Voltage	Digi-Key Part No.	Price Each 1	10	100	500	1,000	CUI Inc. Part No.
Buzzers With Drive Circuits											
1	70dB min. @ 12VDC	4.1	7mA @ 12VDC	3~16VDC	102-1115-ND*	2.72	2.48	1.98	1.65	1.44	CEP-2242
2	85dB min. @ 12VDC	3.0	11mA @12VDC	3~20VDC	102-1116-ND	3.52	3.20	2.56	2.13	1.86	CEP-2202A
2	85dB min. @ 12VDC	3.0	11mA @12VDC	3~20VDC	102-1117-ND*	3.85	3.50	2.80	2.33	2.03	CEP-2202AS
3	93dB min. @ 12VDC	3.5	10mA @ 12VDC	3~20VDC	102-1118-ND	3.60	3.28	2.62	2.18	1.90	CEP-2272A
4	78dB min. @ 12VDC	3.4	15mA @ 12VDC	3~20VDC	102-1119-ND	2.59	2.35	1.88	1.57	1.37	CEP-2224
5	93dB min. @ 12VDC	3.5	10mA @ 12VDC	3~20VDC	102-1120-ND	3.36	3.05	2.44	2.03	1.77	CEP-2260A
6	88dB min @ 12VDC	2.5 - 3.8	17mA @ 12VDC	6~18VDC	102-1121-ND	6.24	5.68	4.54	3.77	3.30	CEP-2280
7	85dB min. @ 12VDC	3.5	6mA @ 12VDC	3~28VDC	102-1122-ND	4.40	4.00	3.20	2.66	2.32	CEP-2250
8	85dB min. @ 12VDC	2.3	35mA @ 12VDC	8~16VDC	102-1123-ND	2.37	2.15	1.72	1.43	1.25	CEM-1212C
8	85dB min. @ 5VDC	2.3	35mA @ 5VDC	4~7VDC	102-1124-ND	2.37	2.15	1.72	1.43	1.25	CEM-1205C
9	88dB min. @ 110VAC	2.8	7mA @ 110VAC	30~120VAC/DC	102-1125-ND	5.78	5.25	4.20	3.49	3.05	CEP-4411AC

***** Wave Solderable and Washable

Piezoelectric Ceramic Buzzer Elements

Fig. 1

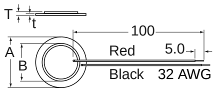
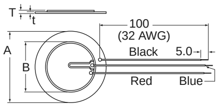
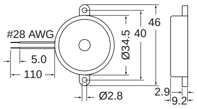


Fig. 2



Dimensions (mm) A	B	T	t	Resonant Frequency (KHz)	Resonant Impedance (Max. Ohm)	Electrostatic Capacity (@ 1KHz)	Input Voltage	Digi-Key Part No.	Price Each 1	10	100	500	1,000	CUI Inc. Part No.
Standard Type — Fig. 1														
20.00	14.60	0.43	0.20	6.5	350	13,000pF	30V p-p	102-1126-ND	1.05	.95	.76	.64	.56	CEB-20D64
27.00	19.80	0.53	0.25	4.6	250	16,000pF	20V p-p	102-1127-ND	1.10	1.00	.80	.67	.58	CEB-27D44
35.00	25.00	0.53	0.25	2.6	300	30,000pF	30V p-p	102-1128-ND	1.43	1.30	1.04	.87	.76	CEB-35D26
44.00	25.00	0.23	0.1	0.6	1,000	70,000pF	20V p-p	102-1170-ND *NEW!*	1.62	1.48	1.18	.98	.86	CEB-44D06
Feed Back Type — Fig. 2														
20.00	15.00	0.43	0.20	6.4	400	10,000pF	30V p-p	102-1129-ND	1.18	1.08	.86	.72	.63	CEB-20FD64
27.00	20.00	0.51	0.25	4.5	500	16,000pF	30V p-p	102-1130-ND	1.21	1.10	.88	.74	.64	CEB-27FD44
35.00	25.00	0.53	0.25	2.9	500	25,000pF	30V p-p	102-1131-ND	1.57	1.43	1.14	.95	.83	CEB-35FD29

Piezo Telephone Ringer



Sound Pressure Level	Electrostatic Capacitance (@ 1KHz)	Input Voltage	Digi-Key Part No.	Price Each 1	10	100	500	1,000	CUI Inc. Part No.
81dB @ 1.1KHz	43,000pF	30V p-p	102-1132-ND	1.76	1.60	1.28	1.07	.93	CEP-1141

ITC Ultrasonic Transducers

The ITC piezoelectric transducers are designed using quarter wavelength matching technology for optimal performance in air. The narrow beam with no side lobes makes it a good choice for demanding proximity, position, and level sensor applications. It can be used as a transmitter, receiver, or both as needed.

FEATURES:
- Aluminum housing
- Coaxial Cable (RG174/U)
- H/S Tubing Black Polyolefin

Fig. 1

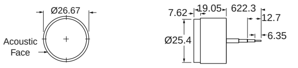


Fig. 2

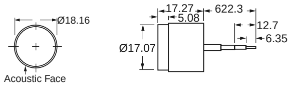
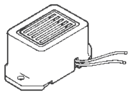


Fig.	Frequency at Receiving	Transmit Bandwidth	Transmit Sensitivity (dB vs. 1 µbar/ 1 Vrms @ 1 ft.)	Receive Sensitivity (dB vs. 1 Vrms/µbar)	Drive Voltage (10% duty cycle)	Nominal Impedance	Beam Angle (-3dB) Conical	Operating Temperature	Humidity	Weight (grams)	Digi Key Part No.	Pricing 1	10	25	ITC Part No.
1	92 kHz	12 kHz	+17	-63	100Vp-p	1000 Ω	10°	0-70°C	0-90%	26	270-1000-ND	65.19	521.49	1199.50	ITC-9071
2	150 kHz	20 kHz	+23	-68	50Vp-p	1000 Ω	10°	0-70°C	0-90%	14	270-1001-ND	60.84	486.72	1119.53	ITC-9072

All specifications typical at 22°C and subject to change without notice.

CUI INC

9-15VDC Buzzer



Operates from 9-15VDC. Case size: 23mm(L) x 15mm(W) x 13.5mm(H) with mounting hole centers at 27mm.

140CU-ND **$2.88/1**
..... **$26.40/10**

Panasonic

Electret Condenser Microphone Cartridge

Consists of a high voltage internal electret membrane, metal electrode and a Field Effect Transistor (FET). Doesn't need a high-voltage bias from the outside like ordinary condenser microphones.

Features: Highly efficient electrical specification, pressure type operating principle, low impedance (2.2kΩ), omnidirectional back directivity, and a high degree of reliability under adverse shock, vibration and environmental tests.

Applications: Telephone and telephone answering devices, tape recorders, intercoms, computer modems, completed microphones for recording, testing and monitoring, hearing aids, sonic controlled toys and sensors, and others. All buzzers and microphones are non-washable.

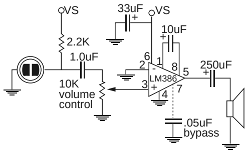


Fig. 1

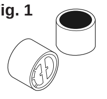


Fig. 2

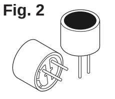


Fig. 3

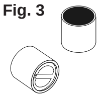


Fig. 4

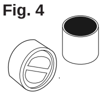


Fig. 5

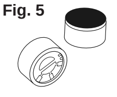


Fig. 6

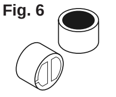


Fig. 7

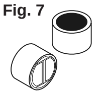


Fig. 8

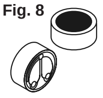


Fig.	Type	Physical Size (mm)	Sensitivity (0dB = 1V/Pa)	Frequency Range (Hz)	Operating Voltage Max./Std.	Current Consumption Max.	Sensitivity Reduction	S/N Ratio	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
7	Omnidirectional	ø6.0 X 2.2	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9955-ND†	2.05	1.82	1.48	WM-64C
7	Omnidirectional	ø6.0 X 2.2	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9958-ND†	2.03	1.81	1.46	WM-64K
4	Omnidirectional	ø6.0 X 2.7	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9933-ND	1.69	1.50	1.22	WM-62A
7	Omnidirectional	ø6.0 X 2.7	-45dB ±4dB	20-16k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9926-ND†	2.04	1.81	1.47	WM-62CC
6	Omnidirectional	ø6.0 X 3.4	-35dB ±4dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>62dB	P9925-ND	1.83	1.63	1.31	WM-61A
3	Omnidirectional	ø6.0 X 5.0	-42dB ±3dB	20-20k	10V/2V	0.5mA	within -3dB @ 1.5V	>58dB	P9959-ND	2.64	2.35	1.90	WM-60AY
2	Omnidirectional	ø9.7 X 4.5	-44dB ±2dB	20-16k	10V/1.5V	0.3mA	within -3dB @ 1.1V	>60dB	P9970-ND	1.06	.95	.77	WM-52BM
2	Omnidirectional	ø9.7 X 4.5	-44dB ±3dB	20-16k	10V/2.5V	0.6mA	within -3dB @ 2V	>60dB	P9949-ND	.82	.73	.59	WM-54BT
1	Omnidirectional	ø9.7 X 6.7	-42dB ±3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9956-ND	1.09	.97	.79	WM-034CY
2	Omnidirectional	ø9.7 X 6.7	-42dB ±3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9931-ND	1.26	1.12	.91	WM-034BY
2	Omnidirectional	ø9.7 X 6.7	-42dB ±3dB	20-16k	10V/4.5V	0.8mA	within -3dB @ 3V	>60dB	P9962-ND*	2.77	2.46	1.99	WM-034CY195M
3	Unidirectional	ø6.0 X 5.0	-50dB ±4dB	100-12k	10V/2V	0.5mA	within -3dB @ 1.5V	>55dB	P9964-ND	2.07	1.84	1.49	WM-65A103
5	Unidirectional	ø9.7 X 5.0	-47dB ±4dB	100-16k	10V/1.5V	0.5mA	within -3dB @ 1V	>60dB	P9961-ND	2.58	2.30	1.86	WM-55A103
5	Unidirectional	ø9.7 X 5.0	-50dB ±4dB	100-16k	10V/1.5V	0.5mA	within -3dB @ 1V	>58dB	P9963-ND	1.86	1.66	1.34	WM-56A103
8	Noise Canceling	ø6.0 X 2.2	-51dB ±4dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9973-ND	2.19	1.95	1.58	WM-67D103
8	Noise Canceling	ø6.0 X 2.7	-45dB ±4dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9968-ND†	2.48	2.20	1.78	WM-66DC103
4	Noise Canceling	ø6.0 X 2.7	-51dB ±4.5dB	100-10k	10V/2V	0.5mA	within -3dB @ 1.5V	>50dB	P9896-ND	1.95	1.74	1.40	WM-66D103
5	Noise Canceling	ø9.7 X 5.0	-54dB ±4dB	100-10k	10V/1.5V	0.5mA	within -3dB @ 1V	>58dB	P9897-ND	2.66	2.37	1.91	WM-55D103

***** Has 18mm long leads. † With built-in cap.

Microphone Holders

Fig. 1

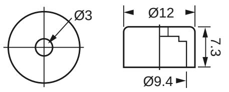


Fig. 2

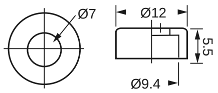


Fig. 3

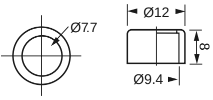


Fig. 4

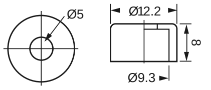


Fig. 5

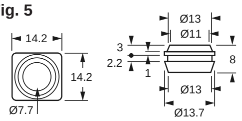


Fig. 6

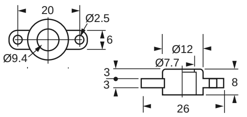


Fig. 7

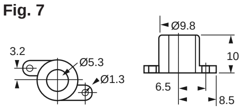


Fig.	Digi-Key Part No.	Price Each 1	10	100	500	Panasonic Part No.	Use With Panasonic Part No.
1	P9950-ND	.59	.50	.39	.28	M3CA0208A4	WM-52BM, WM-54BT, WM-55A103, WM-55D103, WM-56A103
2	P9952-ND	.59	.50	.39	.28	M3CA0207A4	WM-52BM, WM-54BT, WM-55A103, WM-55D103, WM-56A103
3	P9974-ND	.59	.50	.39	.28	YPM-CH022AA4	WM-034 Series
4	P9953-ND	.59	.50	.39	.28	M3CA0082A4	WM-034 Series
5	P9698-ND	.51	.44	.34	.24	YPMCH008	WM-034 Series
6	P9899-ND	.59	.50	.39	.28	YPM-CH009AA4	WM-034 Series
7	P9898-ND	.59	.50	.39	.28	YPM-CH021AA4	WM-063T, WM60AT, WM60AY, WM65A103

H

HORN
INDUSTRIAL

Electret Condenser Microphone

Electret condenser microphones consist of a high voltage internal electret membrane, a metal electrode, and a field effect transistor (FET). Horn Industrial microphones are manufactured in a quality controlled facility in China. All microphones are produced with Japanese made FETs to ensure high quality and reliability. This along with 100% testing ensure a zero defect rate. Horn's commitment to quality has earned them approval from a famous global manufacturer of mobile phones. Horn's ECMs utilize a highly efficient, low impedance design, available in omni directional, unidirectional, and noise canceling versions. Typical applications are telephone and telephone answering equipment, tape recorders, intercoms, hearing aids, and sonically controlled games and toys. All microphones are non-washable.

Fig. 1

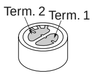


Fig. 2

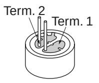


Fig. 3

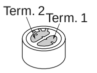


Fig. 4

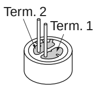


Fig. 5

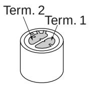


Fig. 6

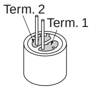


Fig. 7

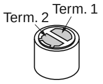


Fig. 8

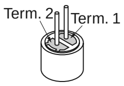


Fig. 9

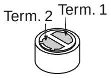


Fig. 10

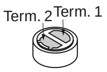


Fig. 11

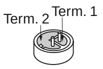


Fig. 12

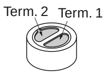


Fig. 13

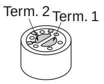


Fig. 14

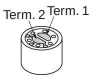


Fig. 15

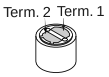


Fig. 16

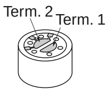


Fig. 17

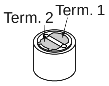
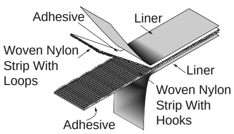


Fig.	Type	Physical Size (mm)	Sensitivity (0dB = 1V/Pa)	Frequency Range (Hz)	Operating Voltage Std.	Current Consumption Max.	Sensitivity Reduction	S/N Ratio	Digi-Key Part No.	Price Each 1	10	100	Horn Part No.
1	Omnidirectional	ø9.7 x 6.5	-42dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1001-ND	.86	.65	.43	EM9765-422
2	Omnidirectional	ø9.7 x 6.5	-42dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1002-ND	.94	.71	.47	EM9765P-422
3	Omnidirectional	ø9.7 x 4.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1006-ND	.97	.73	.49	EM9745-442
4	Omnidirectional	ø9.7 x 4.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1007-ND	1.05	.79	.53	EM9745P-442
5	Omnidirectional	ø9.4 x 6.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1008-ND	1.02	.77	.51	EM9465-442
6	Omnidirectional	ø9.4 x 6.5	-44dB ±2dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1009-ND	1.09	.82	.55	EM9465P-442
7	Omnidirectional	ø6.0 x 5.0	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1011-ND	1.09	.82	.55	EM6050-423
7	Omnidirectional	ø6.0 x 5.0	-44dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1012-ND	1.09	.82	.55	EM6050-443
8	Omnidirectional	ø6.0 x 5.0	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1013-ND	1.17	.88	.59	EM6050P-423
8	Omnidirectional	ø6.0 x 5.0	-44dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1014-ND	1.17	.88	.59	EM6050P-443
9	Omnidirectional	ø6.0 x 3.5	-38dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1017-ND	2.65	1.99	1.33	EM6035-383
9	Omnidirectional	ø6.0 x 3.5	-40dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1018-ND	2.65	1.99	1.33	EM6035-403
10	Omnidirectional	ø6.0 x 2.7	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1019-ND	2.65	1.99	1.33	EM6027-423
11	Omnidirectional	ø6.0 x 2.7	-42dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1020-ND	2.96	2.22	1.48	EM6027PA-423
12	Omnidirectional	ø4.5 x 3.0	-44dB ±3dB	20-20k	4.5V	0.5mA	within -3dB @ 1.5V	>60dB	359-1021-ND	3.12	2.34	1.56	EM4530-443
13	Unidirectional	ø9.7 x 5.2	-47dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>58dB	359-1003-ND	2.96	2.22	1.48	EM9752U-474
13	Unidirectional	ø9.7 x 5.2	-51dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>58dB	359-1004-ND	2.96	2.22	1.48	EM9752U-514
14	Unidirectional	ø8.0 x 5.0	-51dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>60dB	359-1010-ND	2.96	2.22	1.48	EM8050U-514
15	Unidirectional	ø6.0 x 5.0	-51dB ±4dB	20-20k	2.0V	0.5mA	within -3dB @ 1.5V	>58dB	359-1016-ND	2.81	2.11	1.41	EM6050U-514
16	Noise Cancelling	ø9.7 x 5.2	-51dB ±4dB	20-20k	1.5V	0.5mA	within -3dB @ 1V	>60dB	359-1005-ND	2.88	2.17	1.45	EM9752N-514
17	Noise Cancelling	ø6.0 x 5.0	-51dB ±4dB	20-20k	2.0V	0.5mA	within -3dB @ 1.5V	>58dB	359-1015-ND	2.81	2.11	1.41	EM6050N-514

3M Fastening Systems

Scotchmate™ Hook and Loop Fastening Systems



When the two sides of a Scotch-mate Hook and Loop Fastener are pressed together, hundreds of tiny, stiff hooks mesh with a surface of pliable loops. Simply press together to fasten and pull apart to open. And do it thousands of times during the life of your product. Depending on the application, select either plain-backed or adhesive-backed versions. Plain-backed versions are easily sewn or stapled in place. Adhesive-backed fasteners are available for bonding to bare or painted metal, many plastics including plasticized vinyl, plus wood, glass and more.

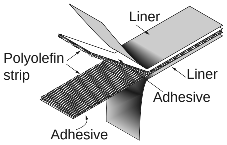
Plain, standard sew on: Wash or dry clean • Operating Temperature: Up to 250°F (121°C) continuous • Features: Tailored appearance for garments

Pressure sensitive rubber adhesive: • Features: General purpose adhesion to most smooth surfaces • **Operating Temp.:** -20°F to 120°F (-29°C to 49°C)

Note: Roll length is 50 yards (45.72 meters)

Description	Digi-Key Part No.	Price Each
Hook & Loop Fastening Systems - 50 yds. (45.72meters)		
Loop, plain back sew on, 5/8" (15.88mm), black	SJ340158-0-ND	11.88
Hook, plain back sew on, 5/8" (15.88mm), black	SJ340258-0-ND	11.88
Loop, plain back sew on, 5/8" (15.88mm), white	SJ340158-9-ND	11.88
Hook, plain back sew on, 5/8" (15.88mm), white	SJ340258-9-ND	11.88
Loop, plain back sew on, 1" (25.40mm), black	SJ340110-0-ND	16.95
Hook, plain back sew on, 1" (25.40mm), black	SJ340210-0-ND	16.95
Loop, plain back sew on, 1" (25.40mm), white	SJ340110-9-ND	16.95
Hook, plain back sew on, 1" (25.40mm), white	SJ340210-9-ND	16.95
Hook, adhesive back, 5/8" (15.88mm), black	SJ352658-0-ND	56.22
Loop, adhesive back, 5/8" (15.88mm), black	SJ352758-0-ND	56.22
Hook, adhesive back, 1" (25.40mm), black	SJ352610-0-ND	70.32
Loop, adhesive back, 1" (25.40mm), black	SJ352710-0-ND	70.32

Dual Lock™ Reclosable Fastening Systems



When Dual Lock brand Reclosable Fasteners are pressed together, hundreds of mushroom-shaped stems interlock with one another. An audible snap announces that the fastener is locked. Compared to hook and loop fasteners, you get improved tensile strength with five times more holding power. Open and close hundreds of times during the life of your product. Depending on the applications, you can select either plain-backed or adhesive-backed versions. Plain-backed versions can be easily sewn, stapled or ultrasonically bonded in place. Adhesive-backed versions are available for bonding to bare or painted metal, many plastics including plasticized vinyl, plus wood, glass and more. Mating Type 400 and Type 170 stems provides the most universal Dual Lock fastener combination. As an alternative when the closure involves two flexible surfaces, Type 400 can be mated with itself. For even greater strength closures with limited openings and closing, Type 170 can be mated with Scotchmate Loop Products. **Plain-backed:** Sew on or staple. Wash or dry clean. • Operating Temperature: -20°F to 200°F (-29°C to 93°C) **Pressure sensitive rubber adhesive:** General purpose. Bonds to most surfaces. • Operating Temperature: -20°F to 120°F (-29°C to 49°C) continuous. **Pressure sensitive very high bond Scotch™ VHB™ acrylic adhesive:** High performance for aircraft, automotive, business equipment, electronics. Resists harsh wet/dry, hot/cold cycles. • Operating Temperature: -20°F to 158°F (-29°C to 70°C) continuous

Note: Roll length is 50 yards (45.72 meters)

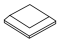
Description	Digi-Key Part No.	Price Each
Dual-Lock Fastening Systems		
Loop, plain back sew on, .5" (12.70mm), black	SJ344112-ND†	62.32
Hook, plain back sew on, .5" (12.70mm), black	SJ344212-ND•	62.48
Loop, plain back sew on, 1" (25.40mm), black	SJ344110-ND†	104.15
Hook, plain back sew on, 1" (25.40mm), black	SJ344210-ND•	104.15
Loop, pressure sensitive adhesive back, .5" (12.70mm), black	SJ354112-ND†	80.49
Hook, pressure sensitive adhesive back, .5" (12.70mm), black	SJ354212-ND•	80.47
Loop, pressure sensitive adhesive back, 1" (25.40mm), black	SJ354110-ND†	134.14
Hook, pressure sensitive adhesive back, 1" (25.40mm), black	SJ354210-ND•	134.14
Dual-Lock High Bond Fastening Systems		
Loop, pressure sensitive adhesive back, .5" (12.70mm), black	SJ355112-ND†	113.40
Hook, pressure sensitive adhesive back, .5" (12.70mm), black	SJ355212-ND•	113.40
Loop, pressure sensitive adhesive back, 1" (25.40mm), black	SJ355110-ND†	181.23
Hook, pressure sensitive adhesive back, 1" (25.40mm), black	SJ355210-ND•	181.23
Hook, plain back sew on, .5" (12.70mm), clear	SJ346012-ND	72.55
Loop, pressure sensitive very hi bond back, .5" (12.70mm), clear	SJ356012-ND	129.44
Hook, plain back sew on, 1" (25.40mm), clear	SJ346010-ND	120.92
Loop, pressure sensitive very hi bond back, 1" (25.40mm), clear	SJ356010-ND	206.87

† Mating Type 400 • Mating Type 170

3M Bumpons® Protective Products

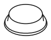
Available in: White, Gray, Brown, Black. Dimensions in inches (mm).

Fig. 1



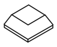
W: .50 (12.70)
H: .12 (3.05)

Fig. 2



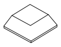
W: .50 (12.70)
Ht: .14 (3.56)

Fig. 3



W: .50 (12.70)
Ht: .23 (5.84)

Fig. 4



W: .81 (20.57)
Ht: .30 (7.62)

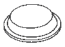
Fig. 5

W: .63 (16.00)
Ht: .31 (7.87)

Fig. 6

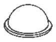
W: .44 (11.18)
Ht: .20 (5.08)

Fig. 7



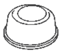
W: .50 (12.70)
Ht: .14 (3.56)

Fig. 8



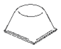
W: .44 (11.18)
Ht: .20 (5.08)

Fig. 9



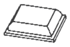
W: .88 (22.35)
Ht: .40 (10.16)

Fig. 10



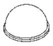
W: .81 (20.57)
Ht: .52 (13.21)

Fig. 11



W: .40 (10.16)
Ht: .10 (2.54)

Fig. 12



W: .75 (19.05)
Ht: .38 (9.65)

Fig.	Digi-Key Part No.*	Pricing			
1	SJ5508-☐-ND	**64** 4.95	**640** 42.39	**1,024** 55.20/M	**3,072** 38.09/M
2	SJ5012-☐-ND	**56** 4.62	**560** 39.60	**1,008** 58.93/M	**3,024** 40.66/M
3	SJ5518-☐-ND	**64** 8.55	**640** 73.25	**1,024** 95.38/M	**3,072** 65.81/M
4	SJ5523-☐-ND	**4** .81	**36** 6.25	**504** 72.90	**1,008** 99.82/M
5	SJ5027-☐-ND	**40** 8.30	**520** 92.48	**1,040** 102.26/M	**5,200** 96.54/M
6†	SJ5303-7-ND	**56** 5.09	**560** 43.61	**1,008** 64.91/M	**3,024** 44.79/M
7†	SJ5312-7-ND	**56** 5.11	**560** 43.78	**1,008** 65.15/M	**3,024** 44.96/M
8	SJ5003-☐-ND	**56** 4.29	**560** 36.76	**1,008** 54.71/M	**3,024** 37.75/M
9	SJ5009-☐-ND	**24** 8.32	**72** 21.38	**504** 124.73	**1,008** 170.76/M
10	SJ5514-☐-ND	**4** 1.89	**36** 14.61	**504** 170.45	**1,008** 233.36/M
11	SJ5007-0-ND	**54** 3.88	**540** 33.23	**1,080** 51.28/M	**3,024** 35.39/M
12	SJ5017-☐-ND	**40** 10.63	**520** 118.47	**1,040** 131.00/M	**5,200** 124.43/M

* *To designate color, use the following numbers:*
9–white, **8**–gray, **1**–brown, **0**–black, in the ☐ of each part #. † Transparent.

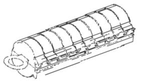
3M Tape

Foil Shielding Tape

Scotch® EMI/RFI Copper Foil Shielding Tapes provide an easy-to-apply, time saving, cost-effective way to shield against EMI/RFI radiation. Foil tapes are conductive through the adhesive, and offer mechanical, electrical and thermal values to meet your shielding effectiveness/frequency requirements.

Description	Digi-Key Part No.	Price Each 1	5
1/4" x 18 yds. (6.35mm x 16.46 meters)	3M1181A-ND	10.50	9.00
1/2" x 18 yds. (12.70mm x 16.46 meters)	3M1181B-ND	20.98	17.99
1" x 18 yds.(25.40mm x 16.46 meters)	3M1181C-ND	44.07	37.77

Scotchcode Wire Marker Tape Dispenser



BK = Black
BL = Blue
BN = Brown
GN = Green
GY = Gray
OR = Orange
RD = Red
VL = Violet
WH = White
YL = Yellow

Description	Digi-Key Part No.	Price Each
Dispenser Only	STD-ND	10.86
Dispenser with 0-9 Marker Tape	STD-0-9-ND	33.04
Dispenser with Colored Marker Tape	STD-C-ND	33.04
Refill, 1 roll, number - ☐ = 0 thru 9	SDR-☐-ND*****	2.42
Refill, 1 roll, colors - ☐☐ = Color Designation	SDR-☐☐-ND*****	2.42

***** Refill Rolls 8 Feet (2.44 Meters) in Length

Scotch™ Adhesive Transfer Tapes 9703

Scotch Adhesive Transfer Tapes aren't really "tapes" at all. They're actually thin strips of pressure sensitive adhesive pre-applied on special release liners. This allows you to quickly and easily apply a neat, precise strip of clean, dry adhesive exactly where you want it. **Mounts flat, flexible circuits:** Features electrical conductivity only through the adhesive thickness. Completely eliminates the need for soldering, solvents, messy cleanup. • Thickness: 0.002" (.05mm) • Adhesive: Acrylic A-40 **Applications:** • Attach EMI/RFI shields • Connect flat flexible circuits • Attach electronic components

Description	Digi-Key Part No.	Price Each
Width, 0.75 (19.05)	3M970334-ND	86.48
Width, 0.5 (12.70)	3M970312-ND	63.59

Scotch™ 130C-mil Linerless Rubber Splicing Tape

3M's premier rubber-based, high-voltage insulating tape. Its thermally conductive design eliminates hot spots in splicing and terminating 600V to 69k V. Meets requirements of HH-I-553C, Grade A and B, and ASTM D-4388, Type III.

Description	Digi-Key Part No.	Price Each
3/4" x 30 ft. (19.05mm x 9.1m)	3M130C-ND	11.38

Scotch™ 35 7-mil Vinyl Electrical Color Coding Tape

Agile and versatile performer that stretches to conform to virtually any shape that requires color-coded insulation. Its excellent elongation, flexibility and strength make it easy to handle. The eight fade-resistant colors are easily distinguished for fast identification of electrical phases, leads, piping and safety areas. Meets requirements of UL 510 & CSA 22.2 **Features:** • Aggressive pressure-sensitive, rubber-based adhesive • Excellent electrical insulating properties • Resists weather, abrasion, corrosion, alkalies and acids • Flame retardant

Description	Digi-Key Part No.	Price Each
3/4 inch x 66 feet (19mm x 20.1m) Color Designation ☐☐	3M35-☐☐-ND	4.64

BL = Blue
GN = Green
GY = Gray
OR = Orange
RD = Red
VL = Violet
WH = White
YL = Yellow

Scotch™ 70 Self- Fusing Silicone Rubber Electrical Tape

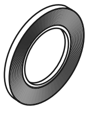
High-temperature, arc- and track-resistant self-fusing tape. It's composed of long-lasting silicone rubber with an easy-tear, easy-strip liner. Scotch 70 Tape is well-suited to protect high-voltage cable terminations against arcing and tracking. Operating Temperature: 180°C.

Description	Digi-Key Part No.	Price Each 1	10
1" x 30 ft. (25.4mm x 9.1 meters)	3M70-ND	36.42	31.87

Electrical Tape

Description	Digi-Key Part No.	Price Each
Super 33` Vinyl Plastic Electrical Tape, 3/4 " x 66 ft. (19.05mm x 20.12m)	3M33+A-ND	5.00/Roll
Super 88 Vinyl Plastic Electrical Tape, 3/4" x 66 ft. (19.05mm x 20.12m)	3M88A-ND	5.64/Roll
Highland Vinyl Plastic Tape, 3/4 " x 60 ft. (19.05mm x 18.2m)	3M1700-ND	.94/Roll
Vinyl Mastic Pad, 3-1/4 " x 4-1/2 " (82.55mm x 114.30mm)	3M11008-ND	2.90/Roll

Scotch-Mount™ No. 4008 & 4026 Double Coated Foam Tapes



The foam carrier makes them flexible and conformable, great for filling space and ideal for joining rough and irregular surfaces. • Adhesive: Acrylic A-20 **Applications:** • Bond mirrors to walls or furniture • Bond acoustic panels to walls

Description	Digi-Key Part No.	Price Each
Thickness, 0.125 (3.18)	3M4008-ND	46.69
Thickness, 0.062 (1.57)	3M4026-ND	27.01

Scotch-Mount™ Double-Coated Foam Tape

Urethane Foam: Soft, conformable, and high in internal strength which makes it ideal for general purpose mounting and joining. The excellent cold temperature properties make it suited for application on snowmobiles, freezers, etc. Vinyl Foam: Designed for general purpose mounting and joining, they offer one-piece removal. Their high degree of conformability makes them well suited for joining rough, miss-matched surfaces and the closed-cell foam makes excellent water and air seal in certain applications.

Description	Digi-Key Part No.	Price Each
Urethane 1/16" Thick, 1" x 36 yards, white (1.59mm x 25.40mm x 32.92meters)	3M40161-ND	31.43
Vinyl 1/8" Thick, 1" x 36 yards (3.18mm x 25.40mm x 32.92meters)	3M44081-ND	64.86
Vinyl 1/16" Thick, 1" x 36 yards, black (1.59mm x 25.40mm x 32.92meters)	3M44161B-ND	49.74
Vinyl 1/16" Thick, 1" x 36 yards, white (1.59mm x 25.40mm x 32.92meters)	3M44161W-ND	49.74

6969 Duct Tape

3M Highland 6969 is a 10.8-mil (0.27mm) commercial grade polyethylene coated cloth tape with rubber adhesive for moisture proofing plumbing, duct sealing, protecting, holding and other general purpose uses. It is silver colored, high tack, conformable, strong and easily torn. 6969 resists backing distortion at temperatures up to 150°F (65°C) for one hour.

Description	Digi-Key Part No.	Price Each
2" x 60 yd roll (50.8mm x 54.8m), Black	3M69692B-ND	9.42
2" x 60 yd roll (50.8mm x 54.8m), Silver	3M69692S-ND	9.42

SERPAC
Electronic Enclosures

Plastic Electronic Enclosures

Models available with or without 9-volt battery compartments. All models come with vertical card guides and are bossed for mounting horizontal circuit boards. All enclosures are made from ABS GSM UL Rated 94 HB plastic.

Fig. 1 — "A" Series

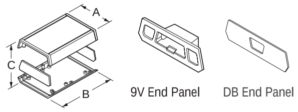


Fig. 2 — Standard/ Standard with Insert

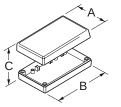


Fig. 3 — Standard Enclosure Copper Clad Board

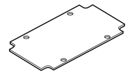


Fig. 4 — Gasket

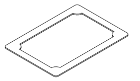


Fig. 5 — 9V Standard/ 9V Standard with Insert

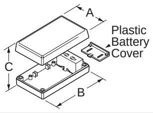


Fig. 6 — Slanted

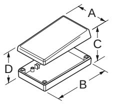


Fig. 7 — 9V Slanted

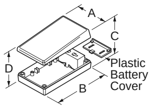


Fig. 8 — "C" Series

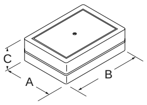


Fig. 9 — "M4", "M6", "M8" Series

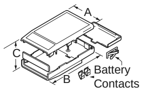


Fig. 10 — "H" Series

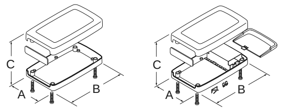
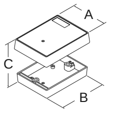

9V "H" Series

Fig. 11 — "G10A" Series



Accessories

Description	Digi-Key Part No.	Price Each 1	25	50	Serpac Model No.
H-65 Series Optional End Panel, Clear	SRH65-FPC-ND	2.11	1.68	1.45	2105CL
H-65 Series Optional End Panel, Infrared	SRH65-FPI-ND	3.94	3.13	2.69	2105IR
Rubber Feet 1xx, 2xx	SR50-ND	.19	.15	.13	SR50
Rubber Feet, Bumpon, Black	SR51-ND	.28	.23	.20	51
Rubber Feet For A Series	SR52-ND	.28	.23	.20	52
100 pc. Standoff Screws	SR60KIT-ND	61.93	49.15	42.27	60 KIT
100 pc. Standoff Posts	SR61KIT-ND	60.48	48.00	41.28	61 KIT
Standoff with Hole	SR60-ND	.38	.30	.26	60
Standoff with Post	SR61-ND	.32	.25	.22	61
Glue for SR60 and SR61	SR65-ND	11.69	9.28	7.98	65
Battery Clip; dbl. contact for M-6, M-8, H65-9V, H65-AA H67-9V, and H67-AA	SR71-ND	.61	.49	.42	71
Battery Clip; single contact for M-6, M-8, H65-9V, H65-AA, H67-9V, and H67-AA boxes	SR72-ND	.61	.49	.42	72
Battery Clip; battery contacts for M-4 boxes	SR74-ND	.61	.49	.42	74
Battery Clip; battery contacts for M-4 boxes	SR75-ND	.61	.49	.42	75
Screw #0 x 9/16 Flat; fits M-4	SR6001-ND	.20	.17	.14	6001
Screw #2 x 1/2 Flat; fits M-6, M-8, C-4, CH-4 and H Series	SR6003-ND	.20	.17	.14	6003
Screw #4 x 1/4 H/L Pan; fits 110-I, 05-S, 9V, 15-S, 9V Standoff Holes and All Bosses	SR6004-ND	.20	.17	.14	6004
Screw #4 x 3/8 H/L Pan; fits All S and SL Series	SR6005-ND	.20	.17	.14	6005
Screw #4 x 1/2 Flat; fits A Series and Wall-Mount Plates	SR6006-ND	.20	.17	.14	6006
Screw #2 x 3/4 Flat; fits M-6, IND M-8, IND C-8, CH-8	SR6007-ND	.20	.17	.14	6007
Screw #2 x 5/8 Flat; fits C-6 and CH-6	SR6008-ND	.20	.17	.14	6008

Dimensions — Inch (mm)				Digi-Key Part No.	Price Each			Serpac Series No.
A	B	C	D		1	25	50	
Fig. 1 — "A" Series								
2.60 (66.04)	4.25 (107.95)	.88 (22.35)	—	SRA20□-ND	6.14	4.88	4.20	A-20
2.60 (66.04)	4.25 (107.95)	1.12 (28.45)	—	SRA21□-ND	6.33	5.03	4.33	A-21
3.35 (85.09)	5.30 (134.62)	1.50 (38.10)	—	SRA27□-ND	9.23	7.33	6.30	A-27
5.10 (129.54)	5.30 (134.62)	1.71 (43.43)	—	SRA31□-ND	11.72	9.30	8.00	A-31
5.00 (127.00)	7.10 (180.34)	1.30 (33.02)	—	SRA41□-ND	13.10	10.40	8.95	A-41
5.00 (127.00)	7.10 (180.34)	1.62 (41.15)	—	SRA42□-ND	14.14	11.23	9.66	A-42
Fig. 1 — "A" Series - 9-Volt								
2.60 (66.04)	4.30 (109.22)	1.10 (27.94)	—	SRA21-9V□-ND	7.94	6.30	5.42	A-219V
3.35 (85.09)	5.30 (134.62)	1.50 (38.10)	—	SRA27-9V□-ND	12.41	9.85	8.48	A-279V
5.10 (129.54)	5.30 (134.62)	1.80 (45.72)	—	SRA31-9V□-ND	15.37	12.20	10.50	A-319V
5.00 (127.00)	7.10 (180.34)	1.30 (33.02)	—	SRA41-9V□-ND	15.31	12.15	10.45	A-419V
5.00 (127.00)	7.10 (180.34)	1.60 (40.64)	—	SRA42-9V□-ND	16.35	12.98	11.16	A-429V
Fig. 1 — "A" Series Optional End Panels								
A20 Series End Panel				SRA20-□□-ND	2.27	1.80	1.55	2003
A20 Series End Panel with DB9				SR2003-DB9B-ND	4.76	3.78	3.25	2003 DB9 BK
A20 Series End Panel with DB25				SR2003-DB25B-ND	4.76	3.78	3.25	2003 DB25 BK
A21 Series End Panel				SRA21-□□-ND	2.27	1.80	1.55	2005
A21 9V Series Black End Panel				SRA21-9VBK-ND	4.63	3.68	3.17	2006 BK
A21 Series End Panel with DB9				SR2005-DB9B-ND	4.76	3.78	3.25	2005 DB9 BK
A21 Series End Panel with DB25				SR2005-DB25B-ND	4.76	3.78	3.25	2005 DB25 BK
A27 Series End Panel				SRA27-□□-ND	2.43	1.93	1.66	2010
A27 9V Series Black End Panel				SRA27-9VBK-ND	4.82	3.83	3.29	2011 BK
A27 Series End Panel with DB9				SR2010-DB9B-ND	4.85	3.85	3.32	2010 DB9 BK
A27 Series End Panel with DB25				SR2010-DB25B-ND	4.85	3.85	3.32	2010 DB25 BK
A31 Series End Panel				SRA31-□□-ND	3.56	2.83	2.43	2015
A31 9V Series Black End Panel				SRA31-9VBK-ND	4.82	3.83	3.29	2016 BK
A31 Series End Panel with DB9				SR2015-DB9B-ND	5.76	4.58	3.94	2015 DB9 BK
A31 Series End Panel with DB25				SR2015-DB25B-ND	5.76	4.58	3.94	2015 DB25 BK
A41 Series End Panel				SRA41-□□-ND	3.12	2.48	2.13	2020
A41 9V Series Black End Panel				SRA41-9VBK-ND	5.07	4.03	3.47	2021 BK
A41 Series End Panel with DB9				SR2020-DB9B-ND	5.45	4.33	3.72	2020 DB9 BK
A41 Series End Panel with DB25				SR2020-DB25B-ND	5.45	4.33	3.72	2020 DB25 BK
A42 Series End Panel				SRA42-□□-ND	3.56	2.83	2.43	2024
A42 9V Series Black End Panel				SRA42-9VBK-ND	5.29	4.20	3.62	2025 BK
A42 Series End Panel with DB9				SR2024-DB9B-ND	5.76	4.58	3.94	2024 DB9 BK
A42 Series End Panel with DB25				SR2024-DB25B-ND	5.76	4.58	3.94	2024 DB25 BK
Fig. 2 — Standard								
2.25 (57.15)	3.60 (91.44)	1.50 (38.10)	—	SR111□-ND	4.47	3.55	3.06	111
2.27 (57.67)	3.63 (92.20)	2.01 (51.05)	—	SR112□-ND	4.79	3.80	3.27	112
2.27 (57.67)	3.63 (92.20)	2.51 (63.75)	—	SR113□-ND	4.98	3.95	3.40	113
2.60 (66.04)	4.10 (104.14)	0.91 (23.11)	—	SR021□-ND	4.32	3.43	2.95	021
3.25 (82.55)	4.38 (111.25)	0.90 (22.86)	—	SR031□-ND	5.20	4.13	3.55	031
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR131□-ND	5.70	4.53	3.90	131
3.25 (82.55)	4.38 (111.25)	1.41 (35.81)	—	SR032□-ND	5.70	4.53	3.90	032
3.25 (82.55)	4.38 (111.25)	2.01 (51.05)	—	SR132□-ND	6.08	4.83	4.15	132
3.25 (82.55)	4.38 (111.25)	1.90 (48.26)	—	SR033□-ND	6.08	4.83	4.15	033
3.25 (82.55)	4.38 (111.25)	2.50 (63.50)	—	SR133□-ND	6.43	5.10	4.39	133
3.25 (82.55)	5.63 (143.00)	1.50 (38.10)	—	SR151□-ND	6.71	5.33	4.58	151
3.25 (82.55)	5.63 (143.00)	1.40 (35.56)	—	SR052□-ND	6.52	5.18	4.46	052
3.25 (82.55)	5.63 (143.00)	2.00 (50.80)	—	SR152□-ND	7.02	5.58	4.80	152
3.25 (82.55)	5.63 (143.00)	1.90 (48.26)	—	SR053□-ND	7.02	5.58	4.80	053
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153□-ND	7.62	6.05	5.21	153
3.26 (82.80)	5.63 (143.00)	0.91 (23.11)	—	SR051□-ND	6.14	4.88	4.20	051
4.88 (123.95)	6.88 (174.75)	0.90 (22.86)	—	SR071□-ND	8.88	7.05	6.07	071
4.88 (123.95)	6.88 (174.75)	1.50 (38.10)	—	SR171□-ND	9.73	7.73	6.65	171
4.88 (123.95)	6.88 (174.75)	1.41 (35.81)	—	SR072□-ND	10.40	8.25	7.10	072
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR172□-ND	10.68	8.48	7.29	172
4.88 (123.95)	6.88 (174.75)	1.91 (48.51)	—	SR073□-ND	10.55	8.38	7.21	073
4.88 (123.95)	6.88 (174.75)	2.50 (63.50)	—	SR173□-ND	11.21	8.90	7.66	173
5.93 (150.62)	13.96 (354.58)	2.01 (51.05)	—	SR182□-ND	16.44	13.05	11.23	182
Fig. 2 — Standard								
6.34 (161.04)	9.50 (241.30)	1.50 (38.10)	—	SR191□-ND	14.62	11.60	9.98	191
6.34 (161.04)	9.50 (241.30)	2.50 (63.50)	—	SR193□-ND	15.28	12.13	10.43	193
6.35 (161.29)	9.50 (241.30)	0.91 (23.11)	—	SR091□-ND	13.61	10.80	9.29	091
6.35 (161.29)	9.50 (241.30)	1.90 (48.26)	—	SR093□-ND	14.36	11.40	9.81	093
Fig. 2 — Standard with Insert (Non-Textured Top)								
2.25 (57.15)	3.60 (91.44)	1.00 (25.40)	—	SR110-I□-ND	3.87	3.08	2.65	110-I
2.25 (57.15)	3.60 (91.44)	1.50 (38.10)	—	SR111-I□-ND	4.47	3.55	3.06	111-I
2.60 (66.04)	4.10 (104.14)	0.91 (23.11)	—	SR021-I□-ND	4.32	3.43	2.95	021-I
3.25 (82.55)	4.38 (111.25)	0.90 (22.86)	—	SR031-I□-ND	5.20	4.13	3.55	031-I
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR131-I□-ND	5.70	4.53	3.90	131-I
3.25 (82.55)	4.38 (111.25)	1.91 (48.51)	—	SR033-I□-ND	6.08	4.83	4.15	033-I
3.25 (82.55)	4.38 (111.25)	2.50 (63.50)	—	SR133-I□-ND	6.43	5.10	4.39	133-I
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR151-I□-ND	6.71	5.33	4.58	151-I
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153-I□-ND	7.62	6.05	5.21	153-I
3.26 (82.80)	5.63 (143.00)	0.91 (22.86)	—	SR051-I□-ND	6.14	4.88	4.20	051-I
3.26 (82.80)	5.63 (143.00)	1.91 (48.51)	—	SR053-I□-ND	7.02	5.58	4.80	053-I
4.88 (123.95)	6.88 (174.75)	0.90 (22.86)	—	SR071-I□-ND	8.88	7.05	6.07	071-I
4.88 (123.95)	6.88 (174.75)	1.50 (38.10)	—	SR171I□-ND	9.73	7.73	6.65	171I
4.88 (123.95)	6.88 (174.75)	1.41 (35.81)	—	SR072-I□-ND	10.40	8.25	7.10	072-I
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR172-I□-ND	10.68	8.48	7.29	172-I
4.88 (123.95)	6.88 (174.75)	1.91 (48.51)	—	SR073-I□-ND	10.55	8.38	7.21	073-I
4.88 (123.95)	6.88 (174.75)	2.50 (63.50)	—	SR173-I□-ND	11.21	8.90	7.66	173-I
4.88 (123.95)	14.21 (360.93)	2.01 (51.05)	—	SR182I□-ND	16.44	13.05	11.23	182I
6.34 (161.04)	9.50 (241.30)	1.50 (38.10)	—	SR191I□-ND	14.62	11.60	9.98	191-I
6.34 (161.04)	9.50 (241.30)	2.50 (63.50)	—	SR193I□-ND	15.28	12.13	10.43	193I
6.35 (161.29)	9.50 (241.30)	0.91 (23.11)	—	SR091-I□-ND	13.61	10.80	9.29	091-I
6.35 (161.29)	9.50 (241.30)	1.90 (48.26)	—	SR093I□-ND	14.36	11.40	9.81	093I
Fig. 2 — Standard Wall Mount								
3.25 (82.55)	4.38 (111.25)	0.91 (23.11)	—	SR031-W□-ND	6.49	5.15	4.43	031-W
3.25 (82.55)	4.38 (111.25)	1.41 (35.81)	—	SR032-W□-ND	6.96	5.53	4.76	032-W
3.25 (82.55)	4.38 (111.25)	1.91 (48.51)	—	SR033-W□-ND	7.34	5.83	5.01	033-W
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR151-W□-ND	8.91	7.08	6.09	151-W
3.25 (82.55)	5.63 (143.00)	2.01 (51.05)	—	SR152-W□-ND	9.61	7.63	6.56	152-W
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153-W□-ND	10.08	8.00	6.88	153-W
3.26 (82.80)	5.63 (143.00)	0.91 (23.11)	—	SR051-W□-ND	8.91	7.08	6.09	051-W
3.26 (82.80)	5.63 (143.00)	1.41 (35.81)	—	SR052-W□-ND	9.61	7.63	6.56	052-W
3.26 (82.80)	5.63 (143.00)	1.91 (48.51)	—	SR053-W□-ND	9.86	7.83	6.73	053-W
Fig. 2 — Standard Wall Mount with Insert								
3.25 (82.55)	4.38 (111.25)	0.91 (23.11)	—	SR031-WI□-ND	6.49	5.15	4.43	031-WI
3.25 (82.55)	4.38 (111.25)	1.91 (48.51)	—	SR033-WI□-ND	7.34	5.83	5.01	033-WI
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR151-WI□-ND	8.91	7.08	6.09	151-WI
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR153-WI□-ND	10.08	8.00	6.88	153-WI
3.26 (82.80)	5.63 (143.00)	0.91 (23.11)	—	SR051-WI□-ND	8.91	7.08	6.09	051-WI
3.26 (82.80)	5.63 (143.00)	1.91 (48.51)	—	SR053-WI□-ND	9.86	7.83	6.73	053-WI
Fig. 3 — Standard Enclosure Prototyping Boards — .1" (2.54mm) Grid Perfboard								
For Box #'s "SRx1x"				SR310-ND	9.83	7.80	6.71	310SR
For Box #'s "SRx3x"				SR330-ND	19.12	15.18	13.06	330SR
For Box #'s "SRx5x"				SR350-ND	22.21	17.63	15.16	350SR
For Box #'s "SRx7x"				SR370-ND	28.38	22.53	19.38	370SR
Fig. 3 — Standard Enclosure Prototyping Boards — Copper Clad Board (1 Side)								
For Box #'s "SRx1x"				SR410-ND	9.83	7.80	6.71	410SR
For Box #'s "SRx3x"				SR430-ND	10.74	8.53	7.34	430SR
For Box #'s "SRx5x"				SR450-ND	11.69	9.28	7.98	450SR
For Box #'s "SRx7x"				SR470-ND	14.74	11.70	10.07	470SR
Fig. 4 — Gaskets								
Gasket, 3.63" x 2.27" (92.20mm x 57.66mm); fits 111, 111-1, 112, and 113				SRPS-11-ND	3.75	2.98	2.56	PS-11
Gasket, 4.38" x 3.25" (111.25mm x 82.55mm); fits 131, 131-1, 132, 132-1; 133, and 133-1				SRPS-13-ND	4.16	3.30	2.84	PS-13
Gasket, 5.63" x 3.25" (143.00mm x 82.55mm); fits 151, 151-1, 152, 153, and 153-1				SRPS-15-ND	4.88	3.88	3.34	PS-15
Fig. 5 — 9-Volt Standard								
2.60 (66.04)	4.10 (104.14)	1.51 (38.10)	—	SR211□-ND	5.45	4.33	3.72	211
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231□-ND	6.71	5.33	4.58	231
3.25 (82.55)	4.38 (111.25)	2.00 (50.80)	—	SR232□-ND	7.09	5.63	4.84	232
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233□-ND	7.40	5.88	5.06	233
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251□-ND	8.19	6.50	5.59	251
3.25 (82.55)	5.63 (143.00)	2.00 (50.80)	—	SR252□-ND	8.73	6.93	5.96	252
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253□-ND	9.14	7.25	6.24	253
4.88 (123.95)	6.88 (174.75)	1.51 (38.35)	—	SR271□-ND	10.87	8.63	7.42	271
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR272□-ND	11.66	9.25	7.96	272
4.88 (123.95)	6.88 (174.75)	2.51 (63.75)	—	SR273□-ND	11.84	9.40	8.09	273
Fig. 5 — 9-Volt Standard with Insert (Non-Textured Top)								
2.60 (66.04)	4.10 (104.14)	1.51 (38.35)	—	SR221-I□-ND	5.45	4.33	3.72	211-I
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231-I□-ND	6.71	5.33	4.58	231-I
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233-I□-ND	7.40	5.88	5.06	233-I
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251-I□-ND	8.19	6.50	5.59	251-I
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253-I□-ND	9.14	7.25	6.24	253-I
4.88 (123.95)	6.88 (174.75)	1.51 (38.35)	—	SR271-I□-ND	10.87	8.63	7.42	271-I
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR272-I□-ND	11.66	9.25	7.96	272-I
4.88 (123.95)	6.88 (174.75)	2.51 (63.75)	—	SR273-I□-ND	11.84	9.40	8.09	273-I
Fig. 5 — 9-Volt Standard Wall Mount								
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231-W□-ND	7.37	5.85	5.04	231-W
3.25 (82.55)	4.38 (111.25)	2.01 (51.05)	—	SR232-W□-ND	7.84	6.23	5.36	232-W
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233-W□-ND	8.19	6.50	5.59	233-W
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251-W□-ND	9.80	7.78	6.69	251-W
3.25 (82.55)	5.63 (143.00)	2.01 (51.05)	—	SR252-W□-ND	10.49	8.33	7.16	252-W
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253-W□-ND	10.65	8.45	7.27	253-W

Note: **Box color** □: **B** = Black, **G** = Gray, **A** = Almond **Lens color** □□ **IR** = Infrared, **CL** = Clear, **BK** = Black

(Continued)

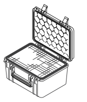
SERPAC Electronic Enclosures Plastic Electronic Enclosures *(Cont.)*

Dimensions — Inch (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	25	50	Serpac Series No.
Fig. 5 — 9-Volt Standard Wall Mount with Insert (Non-Textured Top)								
3.25 (82.55)	4.38 (111.25)	1.51 (38.35)	—	SR231-WI☐-ND	7.37	5.85	5.04	231-WI
3.25 (82.55)	4.38 (111.25)	2.51 (63.75)	—	SR233-WI☐-ND	8.19	6.50	5.59	233-WI
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	—	SR251-WI☐-ND	9.80	7.78	6.69	251-WI
3.25 (82.55)	5.63 (143.00)	2.51 (63.75)	—	SR253-WI☐-ND	10.65	8.45	7.27	253-WI
Fig. 6 — Standard Slant								
3.25 (82.55)	5.63 (143.00)	0.90 (22.86)	0.39 (9.91)	SR05S☐-ND	6.14	4.88	4.20	05S
3.25 (82.55)	5.63 (143.00)	1.50 (38.10)	0.97 (24.64)	SR15-S☐-ND	6.71	5.33	4.58	15-S
6.88 (174.75)	4.88 (123.95)	1.88 (47.75)	0.90 (22.86)	SR07S☐-ND	8.88	7.05	6.07	07-S
6.88 (174.75)	4.88 (123.95)	2.48 (62.99)	1.50 (38.10)	SR17S☐-ND	9.73	7.73	6.65	17-S
Fig. 6 — Standard Slant Wall Mount								
3.25 (82.55)	5.63 (143.00)	0.90 (22.86)	0.39 (9.91)	SR05SW☐-ND	6.49	5.15	4.43	05-SW
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	1.0 (25.4)	SR15SW☐-ND	7.34	5.83	5.01	15-SW
Fig. 6 — 9-Volt Standard Slant Wall Mount								
3.25 (82.55)	5.63 (143.00)	1.51 (38.35)	1.0 (25.4)	SR25SW☐-ND	8.82	7.00	6.02	25-SW
Fig. 7 — 9-Volt Slanted								
3.25 (82.55)	5.63 (143.00)	1.50 (38.10)	0.97 (24.64)	SR25-S☐-ND	8.19	6.50	5.59	25-S
6.88 (174.75)	4.88 (123.95)	2.48 (62.99)	1.50 (38.10)	SR27S☐-ND	10.87	8.63	7.42	27-S
Fig. 8 — "C" Series								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4☐-ND	3.24	2.58	2.22	C-4
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6☐-ND	3.24	2.58	2.22	C-6
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8☐-ND	3.24	2.58	2.22	C-8
1.85 (46.99)	5.00 (127.00)	1.00 (25.40)	—	SCR28☐-ND	4.22	3.35	2.89	C-28
2.30 (58.42)	3.25 (82.55)	0.80 (20.32)	—	SCR10☐-ND	3.53	2.80	2.41	C-10
2.40 (60.96)	3.75 (95.25)	1.00 (25.40)	—	SCR12☐-ND	4.10	3.25	2.80	C-12
Fig 8 — "C" Series Translucent								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4T☐-ND*	5.36	4.25	3.66	C-4 TR
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6T☐-ND*	5.36	4.25	3.66	C-6 TR
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8T☐-ND*	5.36	4.25	3.66	C-8 TR
2.30 (58.42)	3.25 (82.55)	0.80 (20.32)	—	SCR10T☐-ND*	6.27	4.98	4.28	C-10 TR
Fig 8 — "C" Series with Key Holder								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4KH☐-ND	4.60	3.65	3.14	C-4 KH
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6KH☐-ND	4.60	3.65	3.14	C-6 KH
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8KH☐-ND	4.60	3.65	3.14	C-8 KH
Fig 8 — "C" Series with Pocket Clip								
1.38 (35.05)	2.13 (54.10)	0.58 (14.73)	—	SCR4PC☐-ND	6.02	4.78	4.11	C-4 PC
1.61 (40.89)	2.26 (57.40)	0.75 (19.05)	—	SCR6PC☐-ND	6.02	4.78	4.11	C-6 PC
1.85 (46.99)	2.40 (60.96)	0.93 (23.62)	—	SCR8PC☐-ND	6.02	4.78	4.11	C-8 PC
1.85 (46.99)	5.00 (127.00)	1.00 (25.40)	—	SCR28PC☐-ND	6.99	5.55	4.78	C-28 PC
2.30 (58.42)	3.25 (82.55)	0.80 (20.32)	—	SCR10PC☐-ND	6.52	5.18	4.46	C-10 PC
2.40 (60.96)	3.75 (95.25)	1.00 (25.40)	—	SCR12PC☐-ND	6.87	5.45	4.69	C-12 PC
Fig. 8 — "CH" Series								
2.265 (67.31)	1.515 (38.48)	0.585 (14.86)	—	SRCH-4☐-ND	3.24	2.58	2.22	CH-4
2.39 (60.71)	1.74 (44.20)	0.755 (19.18)	—	SRCH-6☐-ND	3.24	2.58	2.22	CH-6
2.40 (60.96)	1.85 (46.99)	0.925 (23.50)	—	SRCH-8☐-ND	3.24	2.58	2.22	CH-8
Fig. 8 — "CH" Series with Key Holder								
2.265 (67.31)	1.515 (38.48)	0.585 (14.86)	—	SRCH-4KH☐-ND	4.60	3.65	3.14	CH-4 KH
2.39 (60.71)	1.74 (44.20)	0.755 (19.18)	—	SRCH-6KH☐-ND	4.60	3.65	3.14	CH-6 KH
2.40 (60.96)	1.85 (46.99)	0.925 (23.50)	—	SRCH-8KH☐-ND	4.60	3.65	3.14	CH-8 KH
Fig. 8 — "CH" Series with Pocket Clip								
2.265 (67.31)	1.515 (38.48)	0.585 (14.86)	—	SRCH-4PC☐-ND	6.02	4.78	4.11	CH-4 PC
2.39 (60.71)	1.74 (44.20)	0.755 (19.18)	—	SRCH-6PC☐-ND	6.02	4.78	4.11	CH-6 PC
2.40 (60.96)	1.85 (46.99)	0.925 (23.50)	—	SRCH-8PC☐-ND	6.02	4.78	4.11	CH-8 PC
Fig. 9 — "M" Series								
2.20 (55.88)	2.80 (71.12)	0.71 (18.03)	—	SRM4☐-ND	5.83	4.63	3.98	M-4
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6☐-ND	7.21	5.73	4.93	M-6
2.40 (60.96)	6.97 (177.04)	0.86 (21.84)	—	SRM8☐-ND	8.54	6.78	5.83	M-8

Dimensions — Inch (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	25	50	Serpac Series No.
Fig. 9 — "M" Series Translucent								
2.20 (55.88)	2.80 (71.12)	0.71 (18.03)	—	SRM4T☐-ND*	10.02	7.95	6.84	M-4 TR
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6T☐-ND*	12.51	9.93	8.54	M-6 TR
Fig. 9 — "M" Series with Pocket Clip								
2.20 (55.88)	2.80 (71.12)	0.71 (18.03)	—	SRM4PC☐-ND	8.10	6.43	5.53	M-4 PC
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6PC☐-ND	9.80	7.78	6.69	M-6 PC
2.40 (60.96)	6.97 (177.04)	0.85 (21.59)	—	SRM8PC☐-ND	11.66	9.25	7.96	M-8 PC
Fig. 9 — "M" Series with External Screws								
2.40 (60.96)	4.15 (105.41)	0.85 (21.59)	—	SRM6IND☐-ND	8.28	6.58	5.66	M-6 IND
2.40 (60.96)	6.97 (177.04)	0.85 (21.59)	—	SRM8IND☐-ND	9.61	7.63	6.56	M-8 IND
Fig. 11 — "G10" Series — No Insert or Access Hole								
4.38 (111.25)	3.25 (82.55)	0.885 (22.48)	—	SRG10☐-ND	6.71	5.33	4.58	G10
Fig. 11 — "G10A" Series with Insert and Access Hole								
4.38 (111.25)	3.25 (82.55)	0.885 (22.48)	—	SRG10A☐-ND	6.71	5.33	4.58	G10A
"M" Series Lenses								
M4 Series Clear				SRM4-FPC-ND	3.65	2.90	2.50	4004CL
M4 Series Infrared				SRM4-FPI-ND	3.94	3.13	2.69	4004IR
M6/8 Series Clear				SRM6/8-FPC-ND	3.65	2.90	2.50	4008CL
M6/8 Series Infrared				SRM6/8-FPI-ND	3.94	3.13	2.69	4008IR
Fig. 10 — "H" Series (Standard, AC, 9V, or AA)								
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65☐-ND	6.77	5.38	4.63	H-65
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AA☐-ND	7.65	6.08	5.23	H-65 AA
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AC☐-ND	6.77	5.38	4.63	H-65 AC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-9V☐-ND	7.43	5.90	5.08	H-65 9V
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67☐-ND	6.93	5.50	4.73	H-67
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-AA☐-ND	7.84	6.23	5.36	H-67 AA
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-AC☐-ND	6.93	5.50	4.73	H-67 AC
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-9V☐-ND	7.62	6.05	5.21	H-67 9V
3.65 (92.71)	7.20 (182.88)	1.26 (32.00)	—	SRH75☐-ND	8.63	6.85	5.90	H-75
3.65 (92.71)	7.20 (182.88)	1.26 (32.00)	—	SRH75-9V☐-ND	9.58	7.60	6.54	H-75 9V
3.65 (92.71)	7.20 (182.88)	1.26 (32.00)	—	SRH75-4AA☐-ND	11.59	9.20	7.92	H-75 4AA
Fig. 10 — "H" Series Translucent								
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65T☐-ND*	11.72	9.30	8.00	H-65 TR
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AAT☐-ND*	13.29	10.55	9.08	H-65 AA TR
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-9VT☐-ND*	12.95	10.28	8.84	H-65 9V TR
Fig. 10 — "H" Series with Pocket Clip								
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-PC☐-ND	9.54	7.58	6.52	H-65 PC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-AAPC☐-ND	10.43	8.28	7.12	H-65 AA-PC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-ACPC☐-ND	9.54	7.58	6.52	H-65 AC-PC
2.75 (69.85)	4.94 (125.48)	0.94 (23.88)	—	SRH65-9VPC☐-ND	10.21	8.10	6.97	H-65 9V-PC
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-AAPC☐-ND	10.62	8.43	7.25	H-67 AA-PC
2.75 (69.85)	4.94 (125.48)	0.28 (7.11)	—	SRH67-ACPC☐-ND	9.70	7.70	6.63	H-67 AC-PC
2.75 (69.85)	4.94 (125.48)	0.28 (7.11)	—	SRH67-PC☐-ND	9.70	7.70	6.63	H-67 PC
2.75 (69.85)	4.94 (125.48)	1.28 (32.51)	—	SRH67-9VPC☐-ND	10.40	8.25	7.10	H-67 9V-PC
EMI Enclosures (No Battery Clips)								
Fig. 1 — "A" Series - EMI - 9-Volt								
3.35 (85.09)	5.30 (134.62)	1.50 (38.10)	—	SRA27E-B-ND	17.96	14.25	12.26	A-219V
Fig. 2 — Standard								
2.25 (57.15)	3.60 (91.44)	1.50 (38.10)	—	SR111E-B-ND	4.50	3.58	3.08	111-EMI-BLACK
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR131E-B-ND	8.10	6.43	5.53	131-EMI-BLACK
3.25 (82.55)	5.62 (142.75)	1.50 (38.10)	—	SR151E-B-ND	9.61	7.63	6.56	151-EMI-BLACK
4.88 (123.95)	6.88 (174.75)	2.00 (50.80)	—	SR172E-B-ND	15.44	12.25	10.54	172-EMI-BLACK
6.34 (161.04)	9.50 (241.30)	1.50 (38.10)	—	SR191E-B-ND	21.23	16.85	14.50	191-EMI-BLACK
Fig. 5 — 9-Volt Standard								
2.60 (66.04)	4.10 (104.14)	1.50 (38.10)	—	SR211E-B-ND	7.75	6.15	5.29	211-EMI-BLACK
Fig. 5 — 9-Volt with Insert (Non-Textured Top)								
3.25 (82.55)	4.38 (111.25)	1.50 (38.10)	—	SR231E-B-ND	9.61	7.63	6.56	231-I-EMI-BLACK
Fig. 6 — Standard Slant								
3.25 (82.55)	5.62 (142.75)	1.50 (38.10)	.968 (24.59)	SR015E-B-ND	9.61	7.63	6.56	15-S-EMI-BLACK
Fig. 9 — Remote "M" Series								
2.40 (60.96)	4.15 (105.41)	.85 (21.59)	—	SRM6E-9VB-ND	10.33	8.20	7.06	M-6-EMI-BLACK

Note: **Box color** ☐: **B** = Black, **G** = Gray, **A** = Almond ***Translucent Box color** ☐: **L** = Translucent Blue, **G** = Translucent Green, **S** = Translucent Gray, **R** = Translucent Red

SERPAC Electronic Enclosures R-Series Enclosures



Features: • Unbreakable light-weight structural resin • O-Ring watertight/airtight seal • Pressure purge valve under latch • Ergonomic handle • Corrosion proof • Material: SR-R Polypropylene, SR-RX PVC

Dimensions — L x W x H (Inch) Internal	External	Digi-Key Part No.	Price Each 1	10	Serpac Model No.
R-Series Case					
Without Foam Insert					
7.3 x 5.00 x 3.23	8.70 x 7.45 x 3.89	SR-R120-☐-ND	17.48	14.57	R-120
9.59 x 7.42 x 3.98	10.80 x 9.85 x 4.87	SR-R300-☐-ND	26.84	22.37	R-300
13.49 x 9.78 x 6.00	14.85 x 12.15 x 6.85	SR-R520-☐-ND	51.76	43.14	R-520
18.29 x 13.19 x 6.62	19.75 x 15.53 x 7.48	SR-R720-☐-ND	84.56	70.47	R-720
With Plastic Lock Without Foam Insert					
7.3 x 5.00 x 3.23	8.70 x 7.45 x 3.89	SR-R120-PLL☐-ND	30.48	25.41	R-120 PLL
9.59 x 7.42 x 3.98	10.80 x 9.85 x 4.87	SR-R300-PLL☐-ND	39.84	33.21	R-300 PLL
13.49 x 9.78 x 6.00	14.85 x 12.15 x 6.85	SR-R520-PLL☐-ND	64.76	53.97	R-520 PLL
18.29 x 13.19 x 6.62	19.75 x 15.53 x 7.48	SR-R720-PLL☐-ND	97.56	81.31	R-720 PLL
With Metal Lock Without Foam Insert					
7.3 x 5.00 x 3.23	8.70 x 7.45 x 3.89	SR-R120-MLL☐-ND	33.48	27.91	R-120 MLL
9.59 x 7.42 x 3.98	10.80 x 9.85 x 4.87	SR-R300-MLL☐-ND	42.84	35.71	R-300 MLL
13.49 x 9.78 x 6.00	14.85 x 12.15 x 6.85	SR-R520-MLL☐-ND	67.76	56.47	R-520 MLL
18.29 x 13.19 x 6.62	19.75 x 15.53 x 7.48	SR-R720-MLL☐-ND	100.56	83.81	R-720 MLL
With Foam Insert					
7.3 x 5.00 x 3.23	8.70 x 7.45 x 3.89	SR-R120-F☐-ND	19.54	16.29	R-120 FOAM
9.59 x 7.42 x 3.98	10.80 x 9.85 x 4.87	SR-R300-F☐-ND	31.56	26.31	R-300 FOAM
13.49 x 9.78 x 6.00	14.85 x 12.15 x 6.85	SR-R520-F☐-ND	59.12	49.27	R-520 FOAM
18.29 x 13.19 x 6.62	19.75 x 15.53 x 7.48	SR-R720-F☐-ND	97.88	81.57	R-720 FOAM
With Plastic Lock With Foam Insert					
7.3 x 5.00 x 3.23	8.70 x 7.45 x 3.89	SR-R120-PLLF☐-ND	32.54	27.12	R-120 PLL FOAM
9.59 x 7.42 x 3.98	10.80 x 9.85 x 4.87	SR-R300-PLLF☐-ND	44.56	37.14	R-300 PLL FOAM
13.49 x 9.78 x 6.00	14.85 x 12.15 x 6.85	SR-R520-PLLF☐-ND	72.12	60.11	R-520 PLL FOAM
18.29 x 13.19 x 6.62	19.75 x 15.53 x 7.48	SR-R720-PLLF☐-ND	110.88	92.41	R-720 PLL FOAM
With Metal Lock With Foam Insert					
7.3 x 5.00 x 3.23	8.70 x 7.45 x 3.89	SR-R120-MLLF☐-ND	35.54	29.62	R-120 MLL FOAM
9.59 x 7.42 x 3.98	10.80 x 9.85 x 4.87	SR-R300-MLLF☐-ND	47.56	39.64	R-300 MLL FOAM
13.49 x 9.78 x 6.00	14.85 x 12.15 x 6.85	SR-R520-MLLF☐-ND	75.12	62.61	R-520 MLL FOAM
18.29 x 13.19 x 6.62	19.75 x 15.53 x 7.48	SR-R720-MLLF☐-ND	113.88	94.91	R-720 MLL FOAM

Note: ☐ = Case Color: **B** = Black; **G** = Gray; **Y** = Yellow; **O** = Orange

Dimensions — L x W x H (Inch) Internal	External	Digi-Key Part No.	Price Each 1	10	Serpac Model No.
RX-Series Black Case					
Without Foam Insert					
7.73 x 5.1 x 3.3	8.88 x 7.59 x 3.97	SR-RX120-B-ND	28.96	24.14	RX-120 BLACK
9.61 x 7.42 x 4.15	10.90 x 9.9 x 4.92	SR-RX300-B-ND	44.58	37.16	RX-300 BLACK
13.72 x 10.07 x 6.14	15.11 x 12.40 x 6.94	SR-RX520-B-ND	82.62	68.86	RX-520 BLACK
18.56 x 13.39 x 6.72	20.04 x 15.76 x 7.59	SR-RX720-B-ND	135.06	112.56	RX-720 BLACK
With Plastic Lock Without Foam Insert					
7.73 x 5.1 x 3.3	8.88 x 7.59 x 3.97	SR-RX120-PLLB-ND	41.96	34.97	RX-120 PLL BLACK
9.61 x 7.42 x 4.15	10.90 x 9.9 x 4.92	SR-RX300-PLLB-ND	57.58	47.99	RX-300 PLL BLACK
13.72 x 10.07 x 6.14	15.11 x 12.40 x 6.94	SR-RX520-PLLB-ND	95.62	79.69	RX-520 PLL BLACK
18.56 x 13.39 x 6.72	20.04 x 15.76 x 7.59	SR-RX720-PLLB-ND	148.06	123.39	RX-720 PLL BLACK
With Metal Lock Without Foam Insert					
7.73 x 5.1 x 3.3	8.88 x 7.59 x 3.97	SR-RX120-MLLB-ND	44.96	37.47	RX-120 MLL BLACK
9.61 x 7.42 x 4.15	10.90 x 9.9 x 4.92	SR-RX300-MLLB-ND	60.58	50.49	RX-300 MLL BLACK
13.72 x 10.07 x 6.14	15.11 x 12.40 x 6.94	SR-RX520-MLLB-ND	98.62	82.19	RX-520 MLL BLACK
18.56 x 13.39 x 6.72	20.04 x 15.76 x 7.59	SR-RX720-MLLB-ND	151.06	125.89	RX-720 MLL BLACK
With Foam Insert					
7.73 x 5.1 x 3.3	8.88 x 7.59 x 3.97	SR-RX120-FB-ND	32.40	27.01	RX-120 BLACK FOAM
9.61 x 7.42 x 4.15	10.90 x 9.9 x 4.92	SR-RX300-FB-ND	52.46	43.72	RX-300 BLACK FOAM
13.72 x 10.07 x 6.14	15.11 x 12.40 x 6.94	SR-RX520-FB-ND	94.40	78.67	RX-520 BLACK FOAM
18.56 x 13.39 x 6.72	20.04 x 15.76 x 7.59	SR-RX720-FB-ND	195.36	162.81	RX-720 BLACK FOAM
With Plastic Lock With Foam Insert					
7.73 x 5.1 x 3.3	8.88 x 7.59 x 3.97	SR-RX120-PLLFB-ND	45.40	37.84	RX-120 PLL BLACK FOAM
9.61 x 7.42 x 4.15	10.90 x 9.9 x 4.92	SR-RX300-PLLFB-ND	65.46	54.56	RX-300 PLL BLACK FOAM
13.72 x 10.07 x 6.14	15.11 x 12.40 x 6.94	SR-RX520-PLLFB-ND	107.40	89.51	RX-520 PLL BLACK FOAM
18.56 x 13.39 x 6.72	20.04 x 15.76 x 7.59	SR-RX720-PLLFB-ND	208.36	173.64	RX-720 PLL BLACK FOAM
With Metal Lock With Foam Insert					
7.73 x 5.1 x 3.3	8.88 x 7.59 x 3.97	SR-RX120-MLLFB-ND	48.40	40.34	RX-120 MLL BLACK FOAM
9.61 x 7.42 x 4.15	10.90 x 9.9 x 4.92	SR-RX300-MLLFB-ND	68.46	57.06	RX-300 MLL BLACK FOAM
13.72 x 10.07 x 6.14	15.11 x 12.40 x 6.94	SR-RX520-MLLFB-ND	110.40	92.01	RX-520 MLL BLACK FOAM
18.56 x 13.39 x 6.72	20.04 x 15.76 x 7.59	SR-RX720-MLLFB-ND	211.36	176.14	RX-720 MLL BLACK FOAM
"R" Series Case Accessories					
Top plate for SR-R120-X-ND 8.0 x 5.5 x .06		SR7150T-ND	18.28	—	7150T
Waterproof bottom plate for SR-R120-X-ND 8.31 x 5.75 x .06 with perimeter seal o-ring		SR7150B-ND	21.00	—	7150B

Note: SR-RX = Flame Retardant, UV protected, Chemical resistant

LMB HEEGER

Aluminum Enclosures

Fig. 1 - Aluminum Boxes: • .040” (1.02mm) Plain aluminum • Screw fastening, punched and tapped

Fig. 2 - Snap Together Aluminum Boxes: • .040” (1.02mm) Plain aluminum • An ideal box for construction where screws cannot be used and where access to the box must be quick and often. the catches hold the box together tightly

Fig. 2 - Crown Royal Series Chassis: • Versatile and rugged construction • Constructed of .050” (1.27mm) aluminum, Type 3003-H14 • Plain aluminum • Screws included

Fig. 3 - Aluminum Consoles: • Plain aluminum • The length of the Flat Top of the MDC Series is 1/2 the total depth

Figs. 3 and 4 - Uni-Cab Universal Cabinet System: • Bases are .090 (2.29mm) aluminum. Covers are .063” (1.60mm) aluminum, Type 3003-H14 metal • Pem nuts used throughout for longer life and ease of assembly and disassembly • All parts are primed to protect the metal against the elements and to serve as a paint base. Bases are finished in textured blue, covers are finished in semi-gloss white • The base is approximately 1/4” (6.35mm) larger than the cover dimensions

Fig. 5 - Small Cabinets: • Finished in Grey • By removing four screws in bottom, cover slides off for easy access to interior of enclosure • A housing for small instruments, amplifiers, intercoms, public address systems, and for any small or medium sized item that is being prepared for the market and where price and appearance is a major factor

Fig. 6 - Die Cast Enclosures: Easily machined units useful as instrument and meter cases • Close-fitted flange lids fasten to bosses in the body with counter sunk screws • Aluminum alloy (380) offers excellent screening properties. • Lid adds .156” (3.96mm) to height of enclosure.

Fig. 7 - LMB Perforated Box Chassis: • LMB perforated boxes are adaptable wherever heat dissipation is required, as well as utmost shielding • Plain aluminum

Fig. 8 - UNI-PAC Universal Packaging System: A quality cabinet, engineered for versatility and value, at an affordable price. The Uni-Pac is constructed with .063” (1.60mm) aluminum, with .125” (3.18mm) aluminum sides and four adhesive rubber feet. The top, bottom, and sides are finished in textured blue, the front and rear panels are finished in semi-gloss white • Interchangeable front, back, top and bottom panels

Fig. 9 - Cap Cover Chassis: • Cap cover construction enables the builder to use either the top or the bottom of the chassis for construction • Chassis can also be mounted on its side and construction can be on both top and bottom at the same time • Built from Aircraft quality .040” (1.02mm) aluminum, Type 3003-H14 • Plain aluminum

Fig. 10 - Drawn Miniature Box: • Cold rolled steel, with mounting ears • Made of steel only • Covers are soldered-in when used in assembly • Not fabricated (holes punched in the box) • Plain steel

Fig. 1

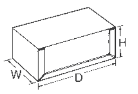
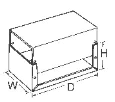


Fig. 2



Snap Together Box Shown

Fig. 3

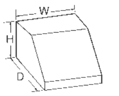


Fig. 4

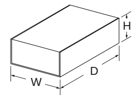


Fig. 5

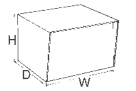


Fig. 6

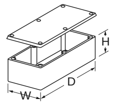


Fig. 7

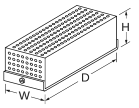


Fig. 8

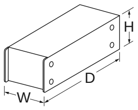


Fig. 9

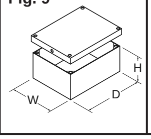
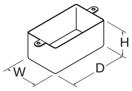


Fig. 10

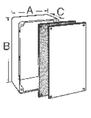


Dimensions – Inches (mm) D x W x H	Digi-Key Part No.	Pricing 1	10	100
Fig. 1 - Aluminum Boxes				
2.75 x 2.13 x 2.75 (69.85 x 53.98 x 69.85)	L100-ND	4.84	40.17	363.00
3.50 x 2.13 x 1.63 (88.90 x 53.98 x 41.28)	L101-ND	4.60	38.18	345.00
4.00 x 2.25 x 2.25 (101.60 x 57.15 x 57.15)	L102-ND	5.82	48.31	436.50
5.00 x 2.25 x 2.25 (127.00 x 57.15 x 57.15)	L103-ND	6.26	51.96	469.50
5.00 x 4.00 x 3.00 (127.00 x 101.60 x 76.20)	L104-ND	8.72	72.38	654.00
6.00 x 5.00 x 4.00 (152.40 x 127.00 x 101.60)	L105-ND	12.20	101.26	915.00
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L106-ND	12.34	102.42	925.50
8.00 x 6.00 x 3.50 (203.20 x 152.40 x 88.90)	L107-ND	15.02	124.67	1126.50
10.00 x 6.00 x 3.50 (254.00 x 152.40 x 88.90)	L108-ND	17.78	147.57	1333.50
12.00 x 7.00 x 4.00 (304.80 x 177.80 x 101.60)	L109-ND	24.68	204.84	1851.00
17.00 x 5.00 x 4.00 (431.80 x 127.00 x 101.60)	L110-ND	27.10	224.93	2032.50
Fig. 2 - Aluminum Boxes (Snap Together)				
2.75 x 2.13 x 1.63 (69.85 x 53.98 x 41.28)	L111-ND	4.28	35.52	321.00
2.75 x 2.13 x 2.75 (69.85 x 53.98 x 69.85)	L112-ND	4.84	40.17	363.00
3.25 x 2.13 x 1.13 (82.55 x 53.98 x 28.58)	L113-ND	4.28	35.52	321.00
4.00 x 2.13 x 1.63 (101.60 x 53.98 x 41.28)	L114-ND	4.84	40.17	363.00
4.00 x 2.00 x 2.75 (101.60 x 50.80 x 69.85)	L115-ND	5.84	48.47	438.00
5.00 x 2.25 x 2.25 (127.00 x 57.15 x 57.15)	L116-ND	6.26	51.96	469.50
5.00 x 4.00 x 3.00 (127.00 x 101.60 x 76.20)	L117-ND	8.72	72.38	654.00
6.00 x 5.00 x 4.00 (152.40 x 127.00 x 101.60)	L118-ND	12.20	101.26	915.00
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L119-ND	12.34	102.42	925.50
8.00 x 6.00 x 3.50 (203.20 x 152.40 x 88.90)	L120-ND	15.02	124.67	1126.50
10.00 x 6.00 x 3.50 (254.00 x 152.40 x 88.90)	L121-ND	17.78	147.57	1333.50
Fig. 2 - Crown Royal Series Aluminum Boxes				
2.25 x 1.50 x 1.38 (57.15 x 38.10 x 35.05)	L198-ND	5.12	42.50	384.00
4.25 x 2.25 x 1.25 (107.95 x 57.15 x 31.75)	L199-ND	6.98	57.93	523.50
5.50 x 3.00 x 1.25 (139.70 x 76.20 x 31.75)	L200-ND	9.64	80.01	723.00
5.25 x 3.00 x 2.13 (133.35 x 76.20 x 53.98)	L201-ND	10.10	83.83	757.50
6.25 x 3.50 x 2.13 (158.75 x 88.90 x 53.98)	L202-ND	12.70	105.41	952.50
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L203-ND	19.16	159.03	1437.00
8.00 x 6.00 x 4.50 (203.20 x 152.40 x 114.30)	L204-ND	25.84	214.47	1938.00
Fig. 3 - Aluminum Consoles				
4.00 x 3.00 x 2.00 (101.60 x 76.20 x 50.80)	L122-ND	7.94	65.90	595.50
5.00 x 3.00 x 2.00 (127.00 x 76.20 x 50.80)	L123-ND	9.16	76.03	687.00
6.00 x 4.00 x 2.25 (152.40 x 101.60 x 57.15)	L124-ND	10.94	90.80	820.50
7.00 x 5.00 x 2.50 (177.80 x 127.00 x 63.50)	L125-ND	12.62	104.75	946.50
8.00 x 6.00 x 2.75 (203.20 x 152.40 x 69.85)	L126-ND	16.58	137.61	1243.50
9.00 x 7.00 x 3.00 (228.60 x 177.80 x 76.20)	L127-ND	18.24	151.39	1368.00
10.00 x 4.50 x 2.50 (254.00 x 114.30 x 63.50)	L128-ND	16.36	135.79	1227.00
11.00 x 8.00 x 3.50 (279.40 x 203.20 x 88.90)	L129-ND	27.28	226.42	2046.00
13.00 x 10.00 x 4.00 (330.20 x 254.00 x 101.60)	L130-ND	37.04	307.43	2778.00
15.00 x 15.00 x 4.50 (381.00 x 381.00 x 114.30)	L131-ND	60.40	501.29	4529.70
Fig. 3 - Uni-Cab Universal Cabinet System				
5.00 x 5.00 x 1.75 (127.00 x 127.00 x 44.45)	L155-ND	27.18	225.59	2038.50
6.00 x 6.00 x 2.75 (152.40 x 152.40 x 69.85)	L156-ND	31.60	262.28	2370.00
7.00 x 6.00 x 3.50 (177.80 x 152.40 x 88.90)	L157-ND	33.68	279.54	2526.00
5.00 x 7.00 x 3.00 (127.00 x 177.80 x 76.20)	L158-ND	31.24	259.29	2343.00
6.00 x 6.00 x 5.00 (152.40 x 152.40 x 127.00)	L159-ND	36.16	300.13	2712.00
10.00 x 10.00 x 3.00 (254.00 x 254.00 x 76.20)	L161-ND	49.86	413.84	3739.50
10.00 x 12.00 x 4.00 (254.00 x 304.80 x 101.60)	L162-ND	61.78	512.77	4633.50
Fig. 4 - Uni-Cab Universal Cabinet System				
6.00 x 4.00 x 2.00 (152.40 x 101.60 x 50.80)	L154-ND	28.22	234.23	2116.50
10.00 x 6.00 x 4.00 (254.00 x 152.40 x 101.60)	L160-ND	39.90	331.17	2992.50
Fig. 5 - Small Cabinets				
5.00 x 6.00 x 4.00 (127.00 x 152.40 x 101.60)	L147-ND	24.80	205.84	1860.00
6.00 x 8.00 x 5.00 (152.40 x 203.20 x 127.00)	L148-ND	36.40	302.12	2730.00

Dimensions – Inches (mm) D x W x H	Digi-Key Part No.	Pricing 1	10	100
Fig. 6 - Die Cast Enclosures				
3.63 x 1.50 x 1.06 (92.20 x 38.10 x 26.99)	L149-ND	7.50	62.25	562.50
4.38 x 2.38 x 1.06 (111.13 x 60.33 x 26.99)	L150-ND	8.48	70.38	636.00
4.69 x 3.69 x 2.06 (119.08 x 93.65 x 52.40)	L151-ND	13.54	112.38	1015.50
7.39 x 4.70 x 2.06 (187.73 x 119.46 x 52.40)	L152-ND	21.54	178.78	1615.50
7.39 x 4.70 x 3.06 (187.73 x 119.46 x 77.80)	L153-ND	23.24	192.89	1743.00
Fig. 7 - LMB Perforated Box Chassis				
2.75 x 2.13 x 2.63 (69.85 x 53.98 x 66.68)	L163-ND	7.60	63.08	570.00
4.25 x 2.25 x 1.25 (107.95 x 57.15 x 31.75)	L164-ND	7.16	59.43	537.00
4.00 x 2.00 x 2.75 (101.60 x 50.80 x 69.85)	L165-ND	9.28	77.02	696.00
2.75 x 2.13 x 2.13 (69.85 x 53.98 x 53.98)	L166-ND	9.76	81.01	732.00
4.00 x 2.25 x 2.25 (101.60 x 57.15 x 57.15)	L167-ND	8.70	72.21	652.50
5.00 x 2.25 x 2.25 (127.00 x 57.15 x 57.15)	L168-ND	10.12	84.00	759.00
3.75 x 3.00 x 2.13 (95.25 x 76.20 x 53.98)	L169-ND	9.94	82.50	745.50
5.25 x 3.00 x 2.13 (133.35 x 76.20 x 53.98)	L170-ND	11.26	93.46	844.50
8.00 x 3.00 x 2.75 (203.20 x 76.20 x 69.85)	L171-ND	16.48	136.78	1236.00
6.25 x 3.50 x 2.13 (158.75 x 88.90 x 53.98)	L172-ND	14.20	117.86	1065.00
5.50 x 3.00 x 1.25 (139.70 x 76.20 x 31.75)	L173-ND	10.88	90.30	816.00
3.00 x 4.00 x 5.00 (76.20 x 101.60 x 127.00)	L174-ND	14.56	120.85	1092.00
6.00 x 4.00 x 3.00 (152.40 x 101.60 x 76.20)	L175-ND	16.92	140.44	1269.00
6.00 x 4.00 x 5.00 (152.40 x 101.60 x 127.00)	L176-ND	20.56	170.65	1542.00
4.00 x 4.00 x 2.00 (101.60 x 101.60 x 50.80)	L177-ND	11.02	91.47	826.50
10.00 x 4.00 x 2.50 (254.00 x 101.60 x 63.50)	L178-ND	21.32	176.96	1599.00
7.00 x 5.00 x 3.00 (177.80 x 127.00 x 76.20)	L179-ND	21.14	175.46	1585.50
8.00 x 6.00 x 4.50 (203.20 x 152.40 x 114.30)	L180-ND	29.64	246.01	2223.00
Fig. 8 - UNI-PAC Universal Packaging System				
7.00 x 12.00 x 1.75 (177.80 x 304.80 x 44.45)	L181-ND	67.26	558.26	5044.50
9.00 x 12.00 x 3.50 (228.60 x 304.80 x 88.90)	L182-ND	82.54	685.08	6190.50
9.00 x 17.00 x 3.50 (228.60 x 431.80 x 88.90)	L183-ND	96.22	798.63	7216.50
12.00 x 17.00 x 3.50 (304.80 x 431.80 x 88.90)	L184-ND	112.46	933.42	8434.50
7.00 x 14.00 x 5.25 (177.80 x 355.60 x 133.35)	L185-ND	88.74	736.54	6655.50
9.00 x 17.00 x 5.25 (228.60 x 431.80 x 133.35)	L186-ND	107.12	889.10	8034.00
12.00 x 17.00 x 5.25 (304.80 x 431.80 x 133.35)	L187-ND	126.28	1048.12	9471.00
12.00 x 17.00 x 7.00 (304.80 x 431.80 x 177.80)	L188-ND	141.32	1172.96	10599.00
14.00 x 17.00 x 7.00 (355.60 x 431.80 x 177.80)	L189-ND	154.28	1280.52	11571.00
Fig. 9 - Cap Cover Chassis				
5.00 x 7.00 x 2.00 (127.00 x 177.80 x 50.80)	L190-ND	18.02	149.57	1351.50
5.00 x 7.00 x 3.00 (127.00 x 177.80 x 76.20)	L191-ND	19.42	161.19	1456.50
6.00 x 4.00 x 3.00 (152.40 x 101.60 x 76.20)	L192-ND	17.30	143.59	1297.50
7.00 x 10.00 x 3.00 (177.80 x 254.00 x 76.20)	L193-ND	27.76	230.41	2082.00
8.00 x 10.00 x 2.00 (203.20 x 254.00 x 50.80)	L194-ND	25.36	210.49	1902.00
8.00 x 10.00 x 3.00 (203.20 x 254.00 x 76.20)	L195-ND	29.00	240.70	2175.00
8.00 x 10.00 x 4.00 (203.20 x 254.00 x 101.60)	L196-ND	31.30	259.79	2347.50
8.00 x 12.00 x 3.00 (203.20 x 304.80 x 76.20)	L197-ND	32.18	267.09	2413.50
Fig. 10 - Drawn Miniature Box with Ears (Lids Sold Separately)				
1.75 x 1.25 x .88 (44.45 x 31.75 x 22.23)	L206-ND	1.60	13.28	120.00
2.00 x 1.75 x .75 (50.80 x 44.45 x 19.05)	L208-ND	1.60	13.28	120.00
2.00 x 1.75 x 1.00 (50.80 x 44.45 x 25.40)	L210-ND	1.60	13.28	120.00
2.00 x 2.00 x 1.25 (50.80 x 50.80 x 31.75)	L212-ND	1.60	13.28	120.00
Optional Lids for Drawn Miniature Boxes				
Lid for L206-ND Box	L205-ND	1.10	9.13	82.50
Lid for L208-ND Box	L207-ND	1.10	9.13	82.50
Lid for L210-ND Box	L209-ND	1.10	9.13	82.50
Lid for L212-ND Box	L211-ND	1.10	9.13	82.50

KEYSTONE ELECTRONICS CORP.

Instrument Boxes



• **Panels:** Mount flush inside of case, holes drilled in panel positioned for the inserts • **Phenolic Panel:** ≤ 3/32” (2.38mm) thick glossy black MIL-P-3115C • **Aluminum Panel:** .055” (1.40mm) thick, #5052-H34 per QQ 318 C • **Boxes:** Precision molded with rounded outside corners, and ≤ 3/16” x 3/16” (4.76mm x 4.76mm) deep threaded brass inserts in base.

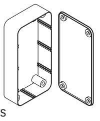
Note 1: 703 & 704 have 4-40 tapped hole in each corner - no inserts

Note 2: 705 mounting holes untapped - Use #4 self tapping screw.

Dimensions Inches (mm)			Case Only		Black Phenolic Panel Only		Aluminum Panel Only	
A	B	C	Digi-Key Part No.	Price Each	Digi-Key Part No.	Price Each	Digi-Key Part No.	Price Each
2.88 (73.15)	3.94 (100.08)	1.44 (36.58)	703K-ND	2.16	2042K-ND	.84	2044K-ND	1.34
2.88 (73.15)	3.94 (100.08)	1.44 (36.58)	705K-ND	1.98	2042K-ND	.84	2044K-ND	1.34
3.06 (77.72)	5.88 (149.35)	2.25 (57.15)	704K-ND	5.06	2043K-ND	1.39	2045K-ND	2.18
3.75 (95.25)	6.25 (158.75)	2.00 (50.80)	700K-ND	4.93	2037K-ND	2.11	2046K-ND	1.99
5.25 (133.35)	6.75 (171.45)	2.31 (58.67)	701K-ND	9.02	2038K-ND	3.17	2047K-ND	2.95
7.38 (187.45)	8.38 (212.85)	3.00 (76.20)	702K-ND	15.73	2039K-ND	6.91	2048K-ND	6.62

Instrument Boxes

Economical cases molded of high impact material. Mating cover has interlocking flange on lid, countersunk holes for flush mounting. Internal grooved guides to hold PC boards and circuit cards from .062 to .093 thick. Ideal for prototype or production usage.
• Low cost • Choice of 7 sizes • Sturdy construction



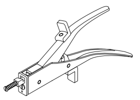
Cases supplied with cover and mounting screws

Dimensions Inches (mm)			Color/Material	Digi-Key Part No.	Price Each 1	10	100
A	B	C					
2.00 (50.80)	4.00 (101.60)	.812 (20.62)	Blue Styrene	760KE-ND	3.45	3.18	1.88
2.44 (61.90)	4.38 (111.13)	1.06 (26.97)	Blue Styrene	761KE-ND	4.16	3.84	2.26
2.50 (63.50)	4.75 (120.65)	1.40 (35.56)	Blue Styrene	762K-ND	4.49	4.14	2.44
2.88 (73.03)	4.00 (101.60)	1.56 (39.67)	Black ABS	706K-ND	6.60	6.09	3.79
3.15 (80.01)	6.00 (152.40)	1.84 (46.74)	Blue Styrene	763K-ND	6.99	6.45	3.81
3.75 (95.25)	6.25 (158.75)	2.00 (50.80)	Black ABS	707K-ND	10.37	9.57	5.96
4.33 (109.98)	7.50 (190.50)	2.22 (56.39)	Blue Styrene	764K-ND	8.84	8.16	4.83

GC ELECTRONICS™

Nibbler Tool

For Panels, Boxes



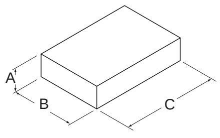
Spring loaded nibbling tool for cutting plastic and metal. Cut from the side or from a single .375” (9.52mm) hole. Will cut up to 18 AWG steel or .062” (1.57mm) copper, brass, aluminum or plastics.

GC395-ND Nibbler Tool....**$13.94**

Bud Industries, Inc.

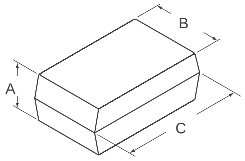
Enclosures

Fig. 1



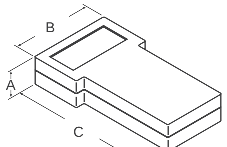
Welded at stress points for assured, maximum strength and rigidity. Sides folded in at bottom for additional support. Bottom plate easily attached. Natural finish.

Fig. 2



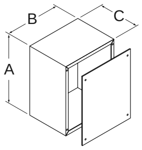
ABS plastic, UL94-HB flammability rating, suggested service temperature -40°C to +60°C.

Fig. 3



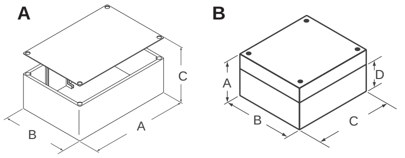
ABS plastic in a light gray finish, with UL94V-0 flammability rating.

Fig. 4



Available in 20 gauge steel or .04” aluminum. Sturdy, all-welded body. “CU” prefix: Steel with Metallic Gray, “AU” prefix; Aluminum alloy in Natural.

Fig. 5

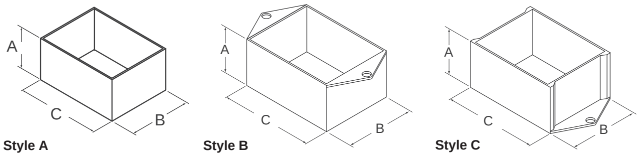


Style 1: Light gray polycarbonate body and cover. UV stabilized, UL94V-2 flammability rating, suggested service temperature -40°C to +120°C.

Style 2: Light gray polycarbonate body and clear polycarbonate cover. UV stabilized, UL94V-2 flammability rating, suggested service temperature 40°C to +120°C.

Style 3: Dark gray ABS body and cover. UL94-HB flammability rating, suggested service temperature -40°C to +80°C.

Fig. 6



Style A **Style B** **Style C**

ABS thermoplastic. Flammability rating: UL94V-0. Service temperature -20°C to +70°C. Optional close-fitting covers are available in all sizes.

Desc.	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	50	Bud Ind. Part No.
Fig. 1 — Chassis								
Alum./ Natural	1.50 (38.1)	4.00 (100.4)	6.00 (152.4)	377-1000-ND	8.90	7.45	6.70	AC-1405
	2.00 (50.8)	6.00 (152.4)	8.00 (203.2)	377-1001-ND	11.30	9.40	8.45	AC-1413
	2.50 (63.5)	8.00 (203.2)	10.00 (254)	377-1002-ND	18.30	15.30	13.75	AC-1418
	2.50 (63.5)	8.00 (203.2)	12.00 (304.8)	377-1003-ND	22.70	18.90	17.00	AC-1419
	5.00 (127)	10.00 (254)	17.00 (431.8)	377-1004-ND	52.10	43.50	39.15	AC-1422
	5.00 (127)	13.00 (330.2)	17.00 (431.8)	377-1005-ND	60.00	50.10	45.10	AC-1426
	3.00 (76.2)	14.00 (355.6)	17.00 (431.8)	377-1006-ND	43.70	36.45	32.80	AC-1427
	4.00 (101.6)	15.00 (381)	17.00 (431.8)	377-1007-ND	59.30	49.50	44.55	AC-1428
	6.00 (152.4)	15.00 (381)	17.00 (431.8)	377-1008-ND	84.00	70.15	63.15	AC-1429
	3.00 (76.2)	17.00 (431.8)	17.00 (431.8)	377-1009-ND	50.90	42.50	38.25	AC-1430
	4.00 (101.6)	17.00 (431.8)	17.00 (431.8)	377-1010-ND	59.60	49.75	44.81	AC-1431
	2.00 (50.8)	5.00 (127)	7.00 (177.8)	377-1011-ND	9.90	8.20	7.40	AC-402
	2.00 (50.8)	5.00 (127)	9.50 (241.3)	377-1012-ND	12.00	9.95	8.95	AC-403
	3.00 (76.2)	5.00 (127)	10.00 (254)	377-1013-ND	15.20	12.65	11.40	AC-404
	2.00 (50.8)	7.00 (177.8)	7.00 (177.8)	377-1014-ND	10.40	8.60	7.75	AC-405
	2.00 (50.8)	7.00 (177.8)	9.00 (228.6)	377-1015-ND	12.50	10.40	9.35	AC-406
	2.00 (50.8)	7.00 (177.8)	11.00 (279.4)	377-1016-ND	14.50	12.05	10.85	AC-407
	3.00 (76.2)	7.00 (177.8)	12.00 (304.8)	377-1017-ND	19.20	16.05	14.45	AC-408
	2.00 (50.8)	7.00 (177.8)	13.00 (330.2)	377-1018-ND	15.80	13.25	11.95	AC-409
	3.00 (76.2)	7.00 (177.8)	15.00 (381)	377-1019-ND	25.00	20.85	18.75	AC-411
	3.00 (76.2)	8.00 (203.2)	17.00 (431.8)	377-1020-ND	26.00	21.80	19.60	AC-412
	3.00 (76.2)	10.00 (254)	12.00 (304.8)	377-1021-ND	29.20	24.45	22.00	AC-413
	3.00 (76.2)	10.00 (254)	14.00 (355.6)	377-1022-ND	29.70	24.90	22.40	AC-414
	2.00 (50.8)	10.00 (254)	17.00 (431.8)	377-1023-ND	26.50	22.15	19.95	AC-415
	3.00 (76.2)	10.00 (254)	17.00 (431.8)	377-1024-ND	31.00	25.85	23.25	AC-416
	3.00 (76.2)	12.00 (304.8)	17.00 (431.8)	377-1025-ND	32.80	27.35	24.60	AC-418
	2.00 (50.8)	13.00 (330.2)	17.00 (431.8)	377-1026-ND	33.50	27.90	25.10	AC-419
	3.00 (76.2)	13.00 (330.2)	17.00 (431.8)	377-1027-ND	38.70	32.35	29.10	AC-420
	3.00 (76.2)	5.00 (127)	9.50 (241.3)	377-1028-ND	15.10	12.60	11.35	AC-421
	3.00 (76.2)	8.00 (203.2)	12.00 (304.8)	377-1029-ND	23.00	19.20	17.30	AC-424
	4.00 (101.6)	10.00 (254)	17.00 (431.8)	377-1030-ND	44.70	37.35	33.60	AC-427
	4.00 (101.6)	13.00 (330.2)	17.00 (431.8)	377-1031-ND	47.00	39.20	35.30	AC-428
	3.00 (76.2)	5.00 (127)	7.00 (177.8)	377-1032-ND	12.70	10.60	9.55	AC-429
	3.00 (76.2)	4.00 (101.6)	6.00 (152.4)	377-1033-ND	11.20	9.30	8.35	AC-430
	2.00 (50.8)	4.00 (101.6)	6.00 (152.4)	377-1034-ND	9.10	7.60	6.85	AC-431

Chassis Bottom Plates

Desc.	Dimensions - Inch (mm) Fits Width	Chassis Length	Digi-Key Part No.	Price Each 1	10	100	Bud Ind. Part No.
Alum./ Natural	4.00 (101.6)	6.00 (152.4)	377-1035-ND	4.60	3.85	3.45	BPA-1505
	6.00 (152.4)	8.00 (203.2)	377-1036-ND	6.50	5.35	4.80	BPA-1513
	8.00 (203.2)	10.00 (254)	377-1037-ND	8.00	6.65	6.00	BPA-1518
	8.00 (203.2)	12.00 (304.8)	377-1038-ND	9.70	8.10	7.30	BPA-1519
	8.00 (203.2)	17.00 (431.8)	377-1039-ND	10.00	8.40	7.55	BPA-1520
	10.00 (254)	12.00 (304.8)	377-1040-ND	9.70	8.10	7.30	BPA-1523
	10.00 (254)	14.00 (355.6)	377-1041-ND	9.70	8.10	7.30	BPA-1524
	12.00 (304.8)	17.00 (431.8)	377-1042-ND	13.90	11.65	10.50	BPA-1528
	14.00 (355.6)	17.00 (431.8)	377-1043-ND	14.70	12.30	11.05	BPA-1529
	15.00 (381)	17.00 (431.8)	377-1044-ND	18.40	15.35	13.80	BPA-1530
	17.00 (431.8)	17.00 (431.8)	377-1045-ND	20.40	17.05	15.35	BPA-1531
	5.00 (127)	7.00 (177.8)	377-1046-ND	4.50	3.75	3.40	BPA-1589
	5.00 (127)	9.50 (241.3)	377-1047-ND	4.60	3.85	3.45	BPA-1590
	5.00 (127)	10.00 (254)	377-1048-ND	4.50	3.75	3.40	BPA-1591
	7.00 (177.8)	7.00 (177.8)	377-1049-ND	4.50	3.75	3.40	BPA-1592
	7.00 (177.8)	9.00 (228.6)	377-1050-ND	5.50	4.60	4.15	BPA-1593
	7.00 (177.8)	11.00 (279.4)	377-1051-ND	5.70	4.75	4.30	BPA-1594
	7.00 (177.8)	12.00 (304.8)	377-1052-ND	6.30	5.25	4.75	BPA-1595
	10.00 (254)	17.00 (431.8)	377-1053-ND	10.30	8.65	7.80	BPA-1597
	13.00 (330.2)	17.00 (431.8)	377-1054-ND	14.30	11.90	10.70	BPA-1598

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Fig. 2 — Plasticase							
Gray	1.50 (38.1)	2.25 (57.15)	3.62 (91.95)	377-1161-ND	5.40	4.50	PT-11308-G
	1.50 (38.1)	3.25 (82.55)	5.62 (142.75)	377-1157-ND	10.30	8.60	PBS-11327-G
	2.48 (62.99)	3.25 (82.55)	5.62 (142.75)	377-1162-ND	9.80	8.20	PT-11388-G
	1.52 (38.61)	3.25 (82.55)	4.37 (110.99)	377-1158-ND	4.80	4.00	PBS-11532-G

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Gray	1.52 (38.61)	3.25 (82.55)	5.62 (142.75)	377-1159-ND	5.50	4.60	PS-11543-G
	1.52 (38.61)	4.87 (123.70)	6.87 (174.50)	377-1160-ND	6.80	5.65	PS-11553-G
	2.52 (64.01)	4.87 (123.70)	6.87 (174.50)	377-1163-ND	7.20	6.00	PT-11557-G
Fig. 3 — Grabbers							
Gray	1.71 (43.43)	5.16 (131.06)	9.33 (236.98)	377-1170-ND	19.00	15.85	HH-3420
Accessories for Grabbers							
Tilt Stand for HH-3420				377-1171-ND	.90	.75	HH-3440-TS
Gasket for HH-3420				377-1172-ND	1.00	.85	HH-3441-G
Fig. 4 — Utility Cabinets							
Alum./Natural	5.00 (127)	6.00 (152.4)	4.00 (101.6)	377-1056-ND	14.10	11.75	AU-1029
	6.00 (152.4)	6.00 (152.4)	6.00 (152.4)	377-1057-ND	20.60	17.20	AU-1039
	9.00 (228.6)	6.00 (152.4)	5.00 (127)	377-1058-ND	22.40	18.70	AU-1040
Steel/Natural	6.00 (152.4)	6.00 (152.4)	6.00 (152.4)	377-1059-ND	25.40	21.15	CU-1098
	9.00 (228.6)	6.00 (152.4)	5.00 (127)	377-1060-ND	27.50	22.95	CU-1099
	12.00 (304.8)	7.00 (177.8)	6.00 (152.4)	377-1061-ND	41.40	34.60	CU-1124
	4.00 (101.6)	5.00 (127)	3.00 (76.2)	377-1062-ND	12.40	10.45	CU-728
	5.00 (127)	6.00 (152.4)	4.00 (101.6)	377-1063-ND	15.80	13.15	CU-729
	10.00 (254)	8.00 (203.2)	7.00 (177.8)	377-1064-ND	41.60	34.75	CU-879
	15.00 (381)	9.00 (228.6)	7.00 (177.8)	377-1065-ND	59.10	49.40	CU-882
Fig. 5A — Utilibox ABS Plastic							
Black	8.66 (219.96)	5.32 (135.13)	2.95 (74.93)	377-1164-ND*	21.70	18.10	CU-1495
Black	5.30 (134.62)	2.94 (74.68)	1.95 (49.53)	377-1165-ND	2.70	2.25	CU-1874-B
Gray	5.30 (134.62)	2.94 (74.68)	1.95 (49.53)	377-1166-ND	2.70	2.25	CU-1874-G
Black	4.10 (104.14)	2.23 (57.40)	2.00 (50.8)	377-1167-ND	4.10	3.40	CU-793
	5.59 (141.99)	4.34 (110.27)	1.84 (46.77)	377-1168-ND	7.20	6.00	CU-387
	4.31 (109.47)	3.06 (77.72)	1.46 (37.08)	377-1169-ND	5.80	4.85	CU-388
Black	4.6 (116.84)	3.1 (78.74)	1.87 (47.50)	377-1216-ND	7.20	6.00	CU-3281
	4.6 (116.84)	4.6 (116.84)	2.37 (60.20)	377-1217-ND	7.60	6.35	CU-3282
	6.1 (154.94)	4.6 (116.84)	2.37 (60.20)	377-1218-ND	9.20	7.70	CU-3283
	7.6 (193.04)	4.6 (116.84)	2.37 (60.20)	377-1219-ND	10.60	8.85	CU-3284
	5.07 (128.78)	3.57 (90.68)	1.59 (40.39)	377-1220-ND	6.70	5.60	CU-389
Fig. 5B — NEMA 4 Sealed Die-Cast Enclosures (Aluminum Alloy #ADC-10, Gasket-EPDM)							
Alum./ Natural	1.38 (35.05)	2.28 (57.91)	2.52 (64.01)	377-1100-ND	6.00	5.00	AN-1301
	1.18 (29.98)	2.56 (65.02)	4.53 (115.06)	377-1101-ND	8.70	7.25	AN-1302
	2.17 (55.19)	2.56 (65.02)	4.53 (115.06)	377-1102-ND	10.60	8.85	AN-1303
	2.17 (55.19)	3.54 (89.92)	4.53 (115.06)	377-1103-ND	12.40	10.35	AN-1304
	2.17 (55.19)	5.75 (146.05)	8.75 (222.25)	377-1106-ND	23.80	19.85	AN-1307
	1.18 (29.98)	1.42 (36.07)	3.54 (89.92)	377-1099-ND§	5.80	4.85	AN-1300
	2.95 (74.93)	4.25 (107.95)	5.83 (148.08)	377-1104-ND§	22.20	18.50	AN-1305
	2.17 (55.19)	4.76 (120.90)	6.73 (170.94)	377-1105-ND§	22.60	18.85	AN-1306
Gray	1.18 (29.97)	2.56 (65.02)	4.53 (115.06)	377-1190-ND	14.10	11.75	AN-1302-G
	2.17 (55.12)	2.56 (65.02)	4.53 (115.06)	377-1191-ND	16.50	13.75	AN-1303-G
	2.17 (55.12)	3.54 (89.92)	4.53 (115.06)	377-1192-ND	19.80	16.50	AN-1304-G
	2.95 (74.93)	4.25 (107.95)	5.83 (148.08)	377-1193-ND	31.80	26.50	AN-1305-G
	2.17 (55.12)	4.76 (120.90)	6.73 (170.94)	377-1194-ND	32.20	26.85	AN-1306-G
	2.17 (55.12)	5.75 (146.05)	8.75 (222.25)	377-1195-ND	34.60	28.85	AN-1307-G
Fig. 5B — Econobox Enclosure (Aluminum Alloy #ADC-10)							
Alum./ Natural	1.21 (30.73)	1.50 (38.1)	3.62 (91.95)	377-1107-ND	6.90	5.75	CU-123
	1.21 (30.73)	2.37 (60.198)	4.37 (177.8)	377-1108-ND	7.20	6.05	CU-124
	2.21 (56.13)	3.68 (93.47)	4.68 (118.87)	377-1109-ND	11.60	9.65	CU-234
	2.21 (56.13)	4.70 (119.38)	7.39 (187.71)	377-1110-ND	19.60	16.35	CU-247
	3.21 (81.53)	4.70 (119.38)	7.39 (187.71)	377-1111-ND	23.00	19.20	CU-347

*Cover panel .05 inch aluminum § No wallmounting holes

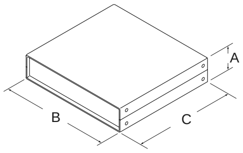
NEMA 4X Sealed Polycarbonate and ABS Enclosures

Dimensions - Inch (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	100	Bud Ind. Part No.
Fig. 5B — Style 1								
1.38 (35.05)	2.56 (65.02)	2.28 (57.91)	0.99 (25.146)	377-1112-ND	7.40	6.15	5.55	PN-1320
1.57 (39.88)	4.53 (115.06)	2.56 (65.02)	0.99 (25.146)	377-1114-ND	10.30	8.60	7.75	PN-1321
2.17 (55.19)	4.53 (115.06)	2.56 (65.02)	1.58 (40.13)	377-1116-ND	11.10	9.25	8.35	PN-1322

(Continued)

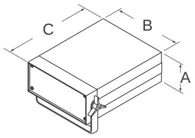
Enclosures *(Cont.)*

Fig. 7



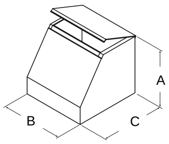
Cover .05" aluminum, panels 12" "Surface Shield" Aluminum. Sides vented for cooling.

Fig. 8



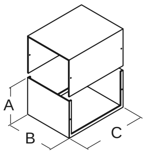
Top and bottom, .05" aluminum; front panel, .09" aluminum. Extruded aluminum frame. Corner gussets for added support. Carrying handle may be used as tilting bail. Front panel, self-adhesive rubber feet and handle/bail included. Royal blue texture body with white frame and bail.

Fig. 9



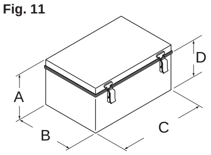
Removable front panel. Hinged top opens completely for access to components mounted on chassis.

Fig. 10



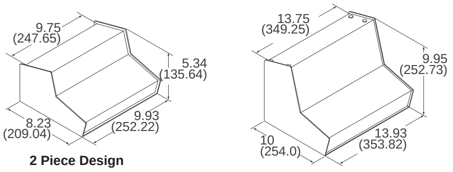
04" aluminum alloy. Two sections slip together and may be joined by either built-in snap lock or sheet metal screws (included).

Fig. 11



Indoor Version: ABS/PC blended plastic with UL94-5VB flammability rating. Suggested service temperature range -40°C to +70°C. Clear doors are polycarbonate with UL94V-0 flammability rating.

Fig. 12

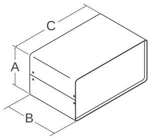


2 Piece Design

3 Piece Design

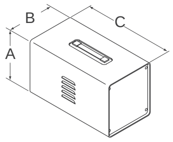
Dual-slope keyboard styling. Base and side .09", back panel and cover .05" aluminum. Rubber feet furnished.

Fig. 13



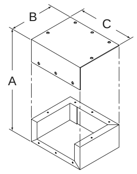
No screws on front or rear panel. Ventilation slots in bottom and rear panel. Black top and bottom, white front and rear. .05" aluminum. Four adhesive rubber feet furnished.

Fig. 14



Designed for bench or portable use. Louvered sides .05" aluminum. Metallic gray. Handle capacity 25 lbs. Four plastic feet furnished.

Fig. 15



Welded base and two-sided cover .05" aluminum. Natural finish.

Dimensions - Inch (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	10	100	Bud Ind. Part No.
Fig. 5B — Style 1								
2.17 (55.19)	4.53 (115.06)	3.54 (89.92)	1.58 (40.13)	377-1119-ND	12.80	10.65	9.60	PN-1323
2.17 (55.19)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1122-ND	17.90	14.90	13.40	PN-1324
2.17 (55.19)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1125-ND	23.70	19.75	17.80	PN-1325
3.15 (80.01)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1127-ND	19.40	16.15	14.55	PN-1327
3.15 (80.01)	4.53 (115.06)	3.54 (89.92)	2.56 (65.02)	377-1129-ND	14.90	12.40	11.15	PN-1328
2.95 (74.93)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1131-ND	26.00	21.65	19.50	PN-1329
3.35 (85.09)	6.30 (160.02)	3.15 (80.01)	2.76 (70.10)	377-1134-ND	16.50	13.75	12.40	PN-1333
2.95 (74.93)	7.87 (199.90)	4.72 (119.89)	2.37 (60.199)	377-1136-ND	23.40	19.50	17.55	PN-1334
3.74 (94.99)	10.43 (264.93)	7.28 (184.91)	2.95 (74.93)	377-1258-ND	38.40	32.15	26.90	PN-1335
Fig. 5B — Style 2								
2.17 (55.19)	4.53 (115.06)	2.56 (65.02)	1.58 (40.13)	377-1117-ND	11.40	9.50	8.55	PN-1322-C
2.17 (55.19)	4.53 (115.06)	3.54 (89.92)	1.58 (40.13)	377-1120-ND	13.20	11.00	9.90	PN-1323-C
2.17 (55.19)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1123-ND	18.50	15.40	13.85	PN-1324-C
2.17 (55.19)	6.30 (160.02)	3.15 (80.01)	1.58 (40.13)	377-1133-ND	15.70	13.10	11.80	PN-1332-C
1.57 (39.88)	4.53(115.06)	2.56 (65.02)	0.99 (25.15)	377-1255-ND	10.60	8.85	7.95	PN-1321-C
2.95 (74.93)	8.74(221.99)	5.75 (146.05)	1.58 (40.13)	377-1256-ND	26.00	21.65	19.50	PN-1329-C
2.95 (74.93)	7.87(199.90)	4.72 (119.89)	2.37 (60.20)	377-1257-ND	23.70	19.75	17.80	PN-1334-C
Fig. 5B — Style 3								
1.38 (35.05)	2.56 (65.02)	2.28 (57.91)	0.99 (25.146)	377-1113-ND	5.90	4.90	4.40	PN-1320-DG
1.57 (39.88)	4.53 (115.06)	2.56 (65.02)	0.99 (25.146)	377-1115-ND	7.20	6.00	5.40	PN-1321-DG
2.17 (55.19)	4.53 (115.06)	2.56 (65.02)	1.58 (40.13)	377-1118-ND	8.10	6.75	6.10	PN-1322-DG
2.17 (55.19)	4.53 (115.06)	3.54 (89.92)	1.58 (40.13)	377-1121-ND	9.80	8.15	7.35	PN-1323-DG
2.17 (55.19)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1124-ND	14.20	11.85	10.65	PN-1324-DG
2.17 (55.19)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1126-ND	19.20	16.00	14.40	PN-1325-DG
3.15 (80.01)	6.73 (170.94)	4.76 (120.90)	1.58 (40.13)	377-1128-ND	13.40	11.15	10.05	PN-1327-DG
3.15 (80.01)	4.53 (115.06)	3.54 (89.92)	2.56 (65.02)	377-1130-ND	10.10	8.40	7.55	PN-1328-DG
2.95 (74.93)	8.74 (221.99)	5.75 (146.05)	1.58 (40.13)	377-1132-ND	16.40	13.65	12.30	PN-1329-DG
3.35 (85.09)	6.30 (160.02)	3.15 (80.01)	2.76 (70.10)	377-1135-ND	13.00	10.85	9.75	PN-1333-DG
2.95 (74.93)	7.87 (199.90)	4.72 (119.89)	2.37 (60.199)	377-1137-ND	17.30	14.40	12.95	PN-1334-DG
3.74 (94.99)	10.43 (264.93)	7.28 (184.91)	2.95 (74.93)	377-1259-ND	29.10	24.35	20.36	PN-1335-DG

Style	Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Fig. 6 — Potting Boxes								
A	Black	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	377-1173-ND	1.16	.97	PB-1558
	Black	1.50 (38.1)	3.00 (76.2)	2.00 (50.8)	377-1176-ND	1.69	1.41	PB-1559
	Black	.75 (19.05)	1.00 (25.4)	1.00 (25.4)	377-1180-ND	.68	.57	PB-1577
B	Black	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	377-1175-ND	1.27	1.06	PB-1558-TF
	Black	1.50 (38.1)	3.00 (76.2)	2.00 (50.8)	377-1178-ND	1.82	1.52	PB-1559-TF
	Black	1.50 (38.1)	3.00 (76.2)	3.00 (76.2)	377-1179-ND	1.83	1.53	PB-1576-TF
C	Black	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	377-1174-ND	1.27	1.06	PB-1558-BF
	Black	1.50 (38.1)	3.00 (76.2)	2.00 (50.8)	377-1177-ND	1.82	1.52	PB-1559-BF
Optional Close-Fitting Covers								
Cover for PB-1558-BF					377-1181-ND	.67	.56	PBC-1558-C
Cover for PB-1558/1558-TF					377-1182-ND	.67	.56	PBC-1558-CN
Cover for PB-1559-BF					377-1183-ND	.78	.65	PBC-1559-C
Cover for PB-1559/1559-TF					377-1184-ND	.76	.64	PBC-1575-C
Cover for PB-1576-TF					377-1185-ND	.99	.83	PBC-1576-C
Cover for PB-1577					377-1186-ND	.40	.34	PBC-1577-C

Small Cabinets

Desc.	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	5	10	Bud Ind. Part No.
Fig. 7 — SLIMCAB™ Desktop Cabinets								
Alum. Sand Text	1.75 (44.45)	8.50 (215.9)	8.0 (203.2)	377-1187-ND	63.40	—	52.90	CS-11221-S
Fig. 8 — TR Series								
Alum. Blue/Wht.	7.00 (177.8)	11.06 (280.9)	13.25 (336.55)	377-1055-ND	253.60	211.75	—	TR-6102
Blue/White	3.50 (88.9)	8.31 (211.07)	10.75 (273.05)	377-1312-ND	206.90	172.80	—	TR-6100
	5.25 (133.35)	8.31 (211.07)	13.25 (336.55)	377-1313-ND	221.50	184.95	—	TR-6101

Desc.	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Fig. 9 — Sloping Panel Cabinets							
Alum. Metallic Gray	6.50 (165.1)	7.06 (179.3)	7.31 (185.7)	377-1066-ND	44.10	36.90	C-1584
	6.50 (165.1)	9.06 (230.1)	7.31 (185.7)	377-1067-ND	42.50	35.45	C-1585
	6.50 (165.1)	11.06 (280.9)	7.31 (185.7)	377-1068-ND	47.60	39.70	C-1586

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Alum. Metallic Gray	8.00 (203.2)	10.06 (255.5)	8.00 (203.2)	377-1069-ND	53.40	44.60	C-1588
	8.00 (203.2)	13.06 (331.7)	8.50 (215.9)	377-1070-ND	61.80	51.65	C-1892
	10.00 (254)	18.06 (458.37)	10.50 (266.7)	377-1071-ND	91.20	76.10	C-1893
	8.00 (203.2)	14.06 (357.1)	8.00 (203.2)	377-1072-ND	56.30	47.00	C-1894
	9.00 (228.6)	18.06 (458.7)	8.18 (207.78)	377-1073-ND	78.40	65.50	C-1896

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	5	Bud Ind. Part No.
Slope Enclosures (.09" Base, .05" Cover with Rubber Feet)							
Black/White	4.25 (107.95)	4.93 (125.22)	5.00 (127)	377-1074-ND*	37.30	31.15	SC-12100
	3.25 (82.55)	11.93 (303.02)	10.00 (254)	377-1075-ND	67.00	55.95	SC-12101

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	Bud Ind. Part No.
Fig. 10 — Miniboxes							
Alum./ Gray	1.62 (41.15)	2.12 (53.85)	2.75 (69.85)	377-1076-ND	4.60	3.80	CU-2100-B
	1.62 (41.15)	2.12 (53.85)	3.25 (82.55)	377-1077-ND	4.75	3.90	CU-2101-B
	1.62 (41.15)	2.12 (53.85)	4.00 (101.6)	377-1078-ND	4.95	4.05	CU-2102-B
	2.25 (57.15)	2.25 (57.15)	4.00 (101.6)	377-1079-ND	5.00	4.15	CU-2103-B
	3.00 (76.2)	4.00 (101.6)	5.00 (127)	377-1080-ND	7.40	6.15	CU-2105-B
	2.12 (53.85)	3.00 (76.2)	5.25 (133.35)	377-1081-ND	6.00	4.95	CU-2106-B
	4.00 (101.6)	5.00 (127)	6.00 (152.4)	377-1082-ND	10.40	8.75	CU-2107-B
	3.00 (76.2)	5.00 (127)	7.00 (177.8)	377-1083-ND	10.10	8.45	CU-2108-B
	3.50 (88.9)	6.00 (152.4)	8.00 (203.2)	377-1084-ND	20.30	17.00	CU-2109-B
	3.50 (88.9)	6.00 (152.4)	10.00 (254)	377-1085-ND	21.50	17.95	CU-2110-B
	4.00 (101.6)	7.00 (177.8)	12.00 (304.8)	377-1086-ND	28.40	23.75	CU-2111-B
Alum./ Natural	1.62 (41.15)	2.12 (53.85)	2.75 (69.85)	377-1087-ND	3.00	2.50	CU-3000-A
	1.62 (41.15)	2.12 (53.85)	3.25 (82.55)	377-1088-ND	3.40	2.85	CU-3001-A
	1.62 (41.15)	2.12 (53.85)	4.00 (101.6)	377-1089-ND	3.70	3.10	CU-3002-A
	2.25 (57.15)	2.25 (57.15)	4.00 (101.6)	377-1090-ND	4.00	3.30	CU-3003-A
	2.25 (57.15)	2.25 (57.15)	5.00 (127)	377-1091-ND	4.80	4.00	CU-3004-A
	3.00 (76.2)	4.00 (101.6)	5.00 (127)	377-1092-ND	6.10	5.10	CU-3005-A
	2.12 (53.85)	3.00 (76.2)	5.25 (133.35)	377-1093-ND	4.95	4.05	CU-3006-A
	4.00 (101.6)	5.00 (127)	6.00 (152.4)	377-1094-ND	8.70	7.30	CU-3007-A
	3.00 (76.2)	5.00 (127)	7.00 (177.8)	377-1095-ND	7.80	6.50	CU-3008-A
	3.50 (88.9)	6.00 (152.4)	8.00 (203.2)	377-1096-ND	12.30	10.25	CU-3009-A
	3.50 (88.9)	6.00 (152.4)	10.00 (254)	377-1097-ND	15.50	12.90	CU-3010-A
	4.00 (101.6)	7.00 (177.8)	12.00 (304.8)	377-1098-ND	19.60	16.35	CU-3011-A

* Single knockout only — centered

UL/NEMA/IEC Gasketed Enclosures

Dimensions - Inch (mm) A	B	C	D	Digi-Key Part No.	Price Each 1	5	15	Bud Ind. Part No.
Fig. 11 — NBA Series - Stainless Steel Hinges								
7.09 (180.09)	11.80 (299.72)	7.85 (199.39)	5.90 (149.86)	377-1138-ND†	55.50	46.25	41.65	NBA-10144
7.09 (180.09)	15.75 (400.05)	11.80 (299.72)	5.90 (149.86)	377-1139-ND†	81.80	68.15	61.35	NBA-10148
5.97 (151.64)	11.80 (299.72)	7.85 (199.39)	4.80 (121.92)	377-1140-ND§	52.80	44.00	39.60	NBA-10162
Fig. 11 — NBB Series - Plastic Hinges								
3.57 (90.68)	5.90 (149.86)	5.90 (149.86)	2.75 (69.85)	377-1141-ND†	17.50	14.60	13.15	NBB-10240
5.50 (141.35)	11.28 (286.512)	7.47 (189.79)	4.33 (109.98)	377-1142-ND†	36.30	30.25	27.25	NBB-10243
7.04 (178.82)	13.00 (330.2)	13.00 (330.2)	5.86 (148.84)	377-1143-ND†	50.10	41.75	37.60	NBB-10245
6.30 (160.02)	15.68 (398.27)	11.73 (297.94)	5.11 (129.79)	377-1144-ND†	50.60	42.15	37.95	NBB-10247
3.57 (90.68)	5.90 (149.86)	5.90 (149.86)	2.75 (69.85)	377-1245-ND§	19.10	15.90	14.30	NBB-10260
3.57 (90.68)	5.90 (149.86)	5.90 (149.86)	2.75 (69.85)	377-1246-ND†	19.30	16.10	14.50	NBB-15240
Fig. 11 — NBD Series - Non-Metallic Phillips Drive Fasteners								
5.03 (127.76)	7.48 (189.99)	11.02 (279.91)	3.85 (97.79)	377-1145-ND†	36.90	30.75	27.70	NBD-10442
Fig. 11 — NBE Series - Plastic Hinges/Aluminum Swing-out Panel								
5.50 (141.35)	7.47 (189.79)	11.28 (286.512)	4.33 (109.98)	377-1146-ND§	68.20	56.95	51.25	NBE-10563
6.30 (160.02)	11.73 (297.94)	15.68 (398.27)	5.11 (129.79)	377-1147-ND§	89.20	74.50	67.05	NBE-10567
7.85 (199.39)	14.64 (371.86)	19.17 (486.92)	6.67 (169.42)	377-1148-ND§	135.10	112.80	101.50	NBE-10573

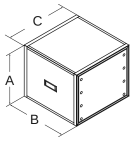
† Solid doors § Clear doors

Small Cabinets

Description	Digi-Key Part No.	Price Each 1	5	15	Bud Ind. Part No.
Fig 12 – Small Metal Enclosures – Compucab Series					
2 pc. Design	377-1296-ND	72.20	60.30	54.25	SC-13100
3 pc. Design	377-1297-ND	140.50	117.30	105.55	SC-13101

(*Continued*)

Fig. 16



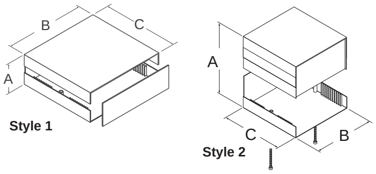
.05" aluminum. Frame, 6063-T5 extrusion. Accommodate 19" panels. Mounting rails have 10-32 tapped holes. Use 377-1403-ND screws. Cabinet 500 lbs. load, handles 100 lbs. load capacity. Door sold separately.

Fig. 17

PC-11402 – PC-11416: Impact resistant polystyrene. UL94-HB flammability rating. Molded-in card guides and mounting bosses. Double-textured PC Bone Gray.

PC-11432: Black ABS covers. UL94-HB flammability rating. Clear anodized aluminum front and rear panels. Internal steel channels provide extra strength and ease of assembly. Formed guide tabs accept vertical or horizontal circuit boards.

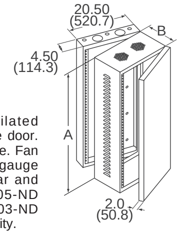
PC-11482-A: Dark gray ABS covers with natural finish aluminum end panels. UL94V-0 flammability rating, suggested service temp -40°C to +80°C.



Style 1

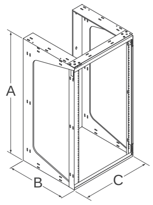
Style 2

Fig. 18



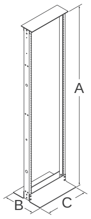
Three section ventilated swing frame. Lockable door. Left or right hand hinge. Fan mounting option. 16-gauge steel. 19" rails in rear and center. Use 377-1405-ND cagenut and 377-1403-ND screws. 150 lbs. capacity.

Fig. 19



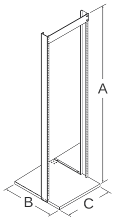
Left or right hand hinge. Velcro cable straps included. 75 lbs. load capacity. Use 377-1404-ND screws. Black texture.

Fig. 20



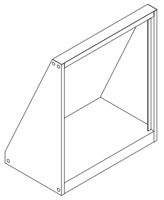
Aluminum rack. Panel holes #12-24 tapped. Use 377-1404-ND. 1,000 lbs. load capacity.

Fig. 21



Steel construction. Rails tapped #10-32, use 377-1403-ND screws. Heavy duty steel rack. Panel holes are #12-24, use 377-1404-ND screws.

Fig. 22



Chassis-type base holds heavy components for table mounting. Panel holes tapped #10-32, use 377-1403-ND Screws. Base 20.37" (517.4)mm x 12.00" (304.8)mm. Shipped knocked down.

Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
	A	B	C	Part No	1	10	Part No.
Fig. 13 – Champion Series Cabinets							
Black	6.00 (152.4)	12.00 (304.8)	10.00 (254)	377-1210-ND	77.30	64.50	CS-11212-BT
	8.00 (203.2)	9.00 (228.6)	8.00 (203.2)	377-1211-ND	75.40	62.90	CS-11214-BT
	8.00 (203.2)	12.00 (304.8)	10.00 (254)	377-1212-ND	84.60	70.60	CS-11216-BT

Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
	A	B	C	Part No	1	5	Part No.
Fig. 14 – Portacab Cabinets							
Gray	8.00 (203.2)	6.12 (155.45)	8.00 (203.2)	377-1315-ND	71.00	59.25	WA-1540

Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
	A	B	C	Part No	1	5	Part No.
Gray	9.00 (228.6)	8.12 (206.25)	12.00 (304.8)	377-1316-ND	97.90	81.75	WA-1541
	8.00 (203.2)	10.12 (257.05)	8.00 (203.2)	377-1317-ND	83.30	69.60	WA-1542
	11.00 (279.4)	11.12 (282.45)	18.00 (457.2)	377-1318-ND	133.60	111.55	WA-1543

Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
	A	B	C	Part No	1	10	Part No.
Fig. 15 – Converta Boxes							
Alum./ Natural	2.00 (50.8)	8.00 (203.2)	4.00 (101.6)	377-1221-ND	14.40	12.00	CU-482-A
	2.50 (63.5)	9.50 (241.3)	5.00 (127)	377-1222-ND	15.80	13.20	CU-592-A
	2.50 (63.5)	12.00 (304.8)	6.00 (152.4)	377-1223-ND	20.80	17.34	CU-622-A

Color	Dimensions - Inch (mm)		Weight	Digi-Key	Price Each		Bud Ind.
	Height	Panel Space	Lbs.	Part No.	1	3	Part No.
*Fig. 16 – Classic II Portable Cabinets**							
Gray	22.81 (579.37)	21.00 (533.4)	40	377-1335-ND	477.45	445.55	AGC-9276-GT
Blue	22.81 (579.37)	21.00 (533.4)	40	377-1336-ND	477.45	445.55	AGC-9276-RB
White	—	—	6.25	377-1398-ND†	100.60	90.55	AGD-376-WH
Gray	24.56 (623.82)	22.75 (577.85)	41	377-1337-ND	494.55	461.60	AGC-9277-GT
Blue	24.56 (623.82)	22.75 (577.85)	41	377-1338-ND	494.55	461.60	AGC-9277-RB
White	—	—	6.75	377-1399-ND†	105.15	94.65	AGD-377-WH
Gray	26.31 (668.27)	24.50 (622.3)	42	377-1339-ND	508.75	474.80	AGC-9278-GT
Blue	26.31 (668.27)	24.50(622.3)	42	377-1340-ND	508.75	474.80	AGC-9278-RB
White	—	—	7.25	377-1400-ND†	112.55	101.30	AGD-378-WH
Gray	28.06 (712.72)	26.25 (666.75)	43	377-1341-ND	527.45	492.25	AGC-9279-GT
Blue	28.06 (712.72)	26.25 (666.75)	43	377-1342-ND	527.45	492.25	AGC-9279-RB
White	—	—	7.50	377-1401-ND†	115.70	104.15	AGD-379-WH
Gray	29.81 (757.17)	28.00 (711.2)	45	377-1343-ND	531.10	495.75	AGC-9280-GT
Blue	29.81 (757.17)	28.00 (711.2)	45	377-1344-ND	531.10	495.75	AGC-9280-RB
White	—	—	8.00	377-1402-ND†	122.20	110.00	AGD-380-WH

*Due to weight and size, product will be drop shipped from Bud Industries direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

† These are the doors that go with the cabinets.

Style	Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
		A	B	C	Part No.	1	10	Part No.
Fig. 17 - Plasticase								
1	Gray	1.53 (38.86)	5.08 (129.03)	5.30 (134.62)	377-1149-ND	13.30	11.10	PC-11402
	Gray	2.52 (64.01)	8.10 (205.74)	6.32 (160.53)	377-1150-ND	20.40	17.00	PC-11408
2	Gray	3.30 (83.82)	6.12 (155.49)	6.32 (160.53)	377-1151-ND	21.00	17.50	PC-11410
	Gray	3.30 (83.82)	8.10 (205.74)	6.32 (160.53)	377-1152-ND	24.30	20.30	PC-11412
	Gray	4.04 (102.62)	6.12 (155.49)	6.32 (160.53)	377-1153-ND	22.10	18.45	PC-11414
	Gray	4.04 (102.62)	8.10 (205.74)	6.32 (160.53)	377-1154-ND	25.80	21.55	PC-11416
1	Black	4.02 (102.11)	9.72 (246.89)	8.66 (219.96)	377-1155-ND	52.90	44.15	PC-11438
	Gray	2.56 (65.02)	10.24 (260.10)	7.09 (180.09)	377-1156-ND	32.80	27.35	PC-11482-A

Cabinets

Color	Dimensions - Inch (mm)			Weight	Digi-Key	Price Each		Bud Ind.
	Height	Depth	Panel Space	Lbs.	Part No.	1	3	Part No.
Steel Door								
*Fig. 18 — Wall Mount Cabinets**								
Black	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	46	377-1319-ND	385.75	360.00	WM-5412-BRT
Off-White	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	46	377-1320-ND	385.75	360.00	WM-5412-WRT
Black	48.50 (1231.9)	11.00 (279.4)	45.00 (1143)	96	377-1321-ND	522.65	487.75	WM-5414-BRT
Off-White	48.50 (1231.9)	11.00 (279.4)	45.00 (1143)	96	377-1322-ND	522.65	487.75	WM-5414-WRT
Black	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	66	377-1323-ND	423.10	394.85	WM-5422-BRT
Off-White	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	66	377-1324-ND	423.10	394.85	WM-5422-WRT
Black	48.50 (1231.9)	16.00 (406.4)	45.00 (1143)	107	377-1325-ND	550.40	513.65	WM-5424-BRT
Off-White	48.50 (1231.9)	16.00 (406.4)	45.00 (1143)	107	377-1326-ND	550.40	513.65	WM-5424-WRT

Color	Dimensions - Inch (mm)			Weight	Digi-Key	Price Each		Bud Ind.
	Height (A)	Depth (B)	Panel Space	Lbs.	Part No.	1	3	Part No.
Plexiglass Door								
*Fig. 18 — Wall Mount Cabinets**								
Black	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	46	377-1327-ND	432.25	403.40	WM-5442-BRT
Off-White	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	46	377-1328-ND	432.25	403.40	WM-5442-WRT
Black	48.50 (1231.9)	11.00 (279.4)	45.00 (1143)	96	377-1329-ND	602.10	561.90	WM-5444-BRT
Off-White	48.50 (1231.9)	11.00 (279.4)	45.00 (1143)	96	377-1330-ND	602.10	561.90	WM-5444-WRT
Black	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	66	377-1331-ND	438.40	409.15	WM-5452-BRT
Off-White	24.00 (609.6)	11.00 (279.4)	21.00 (533.4)	66	377-1332-ND	438.40	409.15	WM-5452-WRT
Black	48.50 (1231.9)	16.00 (406.4)	45.00 (1143)	107	377-1333-ND	614.75	573.70	WM-5454-BRT
Off-White	48.50 (1231.9)	16.00 (406.4)	45.00 (1143)	107	377-1334-ND	614.75	573.70	WM-5454-WRT

*Due to weight and size, product will be drop shipped from Bud Industries direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

Open Racks

Color	Dimensions - Inch (mm)			Digi-Key	Price Each		Bud Ind.
	A	B	C	Part No	1	5	Part No.
Fig. 19 – Open Rack Swing Frame – Knockdown Assembly							
Black	24.00 (609.6)	21.25 (539.75)	18.00 (457.2)	377-1298-ND	154.60	115.95	SF-2184
	38.00 (965.2)	21.25 (539.75)	18.00 (457.2)	377-1299-ND	174.10	130.60	SF-2194

Color	Dimensions - Inch (mm)		Digi-Key	Price Each		Bud Ind.
	Height	Panel Space	Part No.	1	5	Part No.
Fig. 20 – Aluminum Racks						
Black	84.00 (2133.6)	77.00 x 19.00 (1955.8 x 482.6)	377-1196-ND	168.00	140.30	ARR-1272-BT
Natural	84.00 (2133.6)	77.00 x 19.00 (1955.8 x 482.6)	377-1197-ND	158.00	131.95	ARR-1272-NF
Natural	50.00 (1270)	42.00 x 19.00 (1066.8 x 482.6)	377-1198-ND	150.00	125.26	ARR-1276-NF

Color	Dimensions - Inch (mm)		Weight	Digi-Key	Price Each		Bud Ind.
	Height	Panel Space	Lbs.	Part No.	1	5	Part No.
*Fig. 21 – Open Racks – RR1263 Series**							
Black	35.62 (904.75)	31.50 x 19.00 (800.1 x 482.6)	36	377-1274-ND	175.20	146.30	RR-1263-BT
Gray	35.62 (904.75)	31.50 x 19.00 (800.1 x 482.6)	36	377-1408-ND	175.20	146.30	RR-1263-MG
Black	70.62 (1793.75)	66.50 x 19.00 (1689.1 x 482.6)	46	377-1407-ND	210.50	175.80	RR-1264-BT
Gray	70.62 (1793.75)	66.50 x 19.00 (1689.1 x 482.6)	46	377-1275-ND	210.50	175.80	RR-1264-MG
Black	40.87 (1038.10)	36.75 x 19.00 (933.45 x 482.6)	37	377-1279-ND	186.50	155.75	RR-1363-BT
Gray	40.87 (1038.10)	36.75 x 19.00 (933.45 x 482.6)	37	377-1280-ND	186.50	155.75	RR-1363-MG
Black	75.62 (1920.75)	71.75 x 19.00 (1822.45 x 482.6)	46	377-1281-ND	215.20	179.70	RR-1364-BT
Gray	75.62 (1920.75)	71.75 x 19.00 (1822.45 x 482.6)	46	377-1282-ND	215.20	179.70	RR-1364-MG
Black	81.12 (2060.45)	77.00 x 19.00 (1955.8 x 482.6)	49	377-1283-ND	219.90	183.60	RR-1366-BT
Gray	81.12 (2060.45)	77.00 x 19.00 (1955.8 x 482.6)	49	377-1284-ND	219.90	183.60	RR-1366-MG
Fig. 21 – Open Racks – RR1367 Series							
Black	73.37 (1863.60)	70.00 x 19.00 (1778 x 482.6)	77	377-1285-ND	407.80	340.50	RR-1368-BT
Gray	73.37 (1863.60)	70.00 x 19.00 (1778 x 482.6)	77	377-1286-ND	407.80	340.50	RR-1368-MG
Black	80.37 (2041.40)	77.00 x 19.00 (1955.8 x 482.6)	81	377-1287-ND	421.40	351.80	RR-1369-BT
Gray	80.37 (2041.40)	77.00 x 19.00 (1955.8 x 482.6)	81	377-1288-ND	421.40	351.80	RR-1369-MG
Fig. 21 – Heavy Duty Steel Rack							
Black	82.75 (2101.85)	77.00 x 19.00 (1955.8 x 482.6)	73	377-1276-ND	270.60	225.95	RR-1269
	107.25 (2724.15)	101.50 x 19.00 (2578.1 x 482.6)	85	377-1277-ND	298.20	249.00	RR-1270
	82.75 (2101.85)	77.00 x 23.00 (1955.8 x 584.2)	79	377-1278-ND	289.60	241.80	RR-1291

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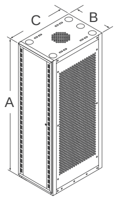
Color	Dimensions - Inch (mm)		Digi-Key	Price Each		Bud Ind.
	Height	Panel Space	Part No.	1	5	Part No.
Fig. 22 – Table Top Racks						
Black	24.00 (609.6)	21.00 (533.4)	377-1270-ND	114.20	95.35	RR-1248-BT
Gray	24.00 (609.6)	21.00 (533.4)	377-1271-ND	114.20	95.35	RR-1248-MG
Black	31.00 (5.6)	28.00 (711.2)	377-1272-ND	124.80	104.25	RR-1249-BT
Gray	31.00 (5.6)	28.00 (711.2)	377-1273-ND	124.80	104.25	RR-1249-MG

(*Continued*)

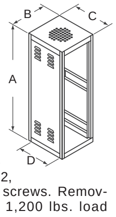
Enclosures *(Cont.)*

Fig. 23



Ventilated sides, rear door, Econoglas front door, right or left hand operation. Multiple cable access ports. Panel rails have provisions for vertical cable management.

Fig. 24



Welded frame. Panel mounting rails fully adjustable, tapped #10-32, use 377-1403-ND screws. Removable side panels. 1,200 lbs. load capacity.

Fig. 25

Welded Steel. Louvered side panels and rear door. Econoglas locking front door. Full height panel mounting rails, use 377-1403-ND screws. 1,200 lbs. load capacity.

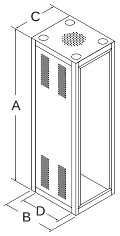
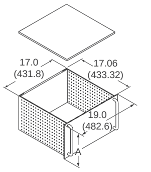
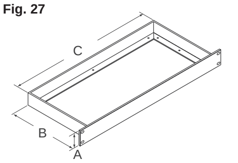


Fig. 26



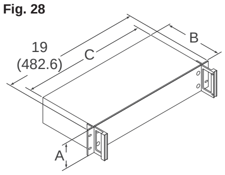
Front panel -.12” thick mill finish aluminum with “Surface Shield” protection. Side panels are punched on a .87” grid. Handles and covers sold separately.

Fig. 27



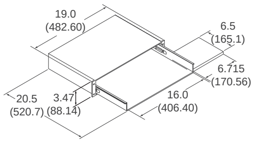
Small rack mount chassis. Panels are .10” thick. Chassis are .05” thick aluminum.

Fig. 28



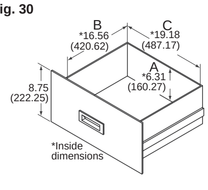
Side and front panel .09” aluminum: base, rear and top .05” aluminum. Rack mounting brackets and rubber feet included. 25 lbs. load capacity.

Fig. 29



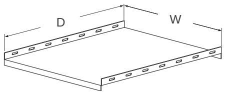
Fits 19” panel. Mouse pad slides underneath right or left. Takes up 2-U of panel space.

Fig. 30



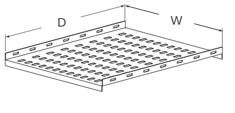
Fits 19” panel. Supports heavy loads even when fully extended.

Fig. 31



Fits 19” wide panel spaces. Supports up to 200 lbs. Requires two pair of panel mounting rails per cabinet.

Fig. 32



Fits 19” wide panel spaces. Supports up to 200 lbs. Requires two pair of panel mounting rails per cabinet. Ventilated.

CABINET RACKS

Dimensions - Inch (mm) H x W x D	Dimensions - Inch (mm) Panel Space	Weight Lbs.	Digi-Key Part No.	Price Each 1	Price Each 3	Bud Ind. Part No.
*Fig. 23 — Large Server Cabinets**						
84.06 x 24 x 35.43 (2135.12 x 609.6 x 899.92)	78.75 x 19 (2000.25 x 482.6)	247	377-1351-ND	1406.25	1312.50	DC-8105
84.06 x 24 x 43.31 (2135.12 x 609.6 x 1100.07)	78.75 x 19 (2000.25 x 482.6)	270	377-1352-ND	1461.70	1364.00	DC-8110

*Due to weight and size, product will be drop shipped from Bud Industries direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

Color	Dimensions - Inch (mm) A	B	C	Weight Lbs.	Digi-Key Part No	Price Each 1	Price Each 3	Bud Ind. Part No.
*Fig. 24 — Economizer Upright Cabinet Racks – Ventilated**								
Black	47.31 (1201.67)	22.00 (558.8)	18.50 (469.9)	110	377-1360-ND	634.40	592.00	ER-16602-BT
Blue	47.31 (1201.67)	22.00 (558.8)	18.50 (469.9)	110	377-1361-ND	634.40	592.00	ER-16602-RB
Black	57.81 (1468.37)	22.00 (558.8)	18.50 (469.9)	124	377-1362-ND	653.75	610.05	ER-16603-BT
Blue	57.81 (1468.37)	22.00 (558.8)	18.50 (469.9)	124	377-1363-ND	653.75	610.05	ER-16603-RB
Black	66.56 (1690.62)	22.00 (558.8)	18.50 (469.9)	139	377-1364-ND	703.70	656.65	ER-16604-BT
Blue	66.56 (1690.62)	22.00 (558.8)	18.50 (469.9)	139	377-1365-ND	703.70	656.65	ER-16604-RB
Black	75.31 (49.91)	22.00 (558.8)	18.50 (469.9)	151	377-1366-ND	742.35	692.70	ER-16605-BT
Blue	75.31 (49.91)	22.00 (558.8)	18.50 (469.9)	151	377-1367-ND	742.35	692.70	ER-16605-RB
Black	84.06 (2135.12)	22.00 (558.8)	18.50 (469.9)	163	377-1368-ND	768.30	716.95	ER-16606-BT
Blue	84.06 (2135.12)	22.00 (558.8)	18.50 (469.9)	163	377-1369-ND	768.30	716.95	ER-16606-RB
Black	47.31 (1201.67)	22.00 (558.8)	25.50 (647.7)	128	377-1370-ND	676.90	631.70	ER-16612-BT
Blue	47.31 (1201.67)	22.00 (558.8)	25.50 (647.7)	128	377-1371-ND	676.90	631.70	ER-16612-RB
Black	57.81 (1468.37)	22.00 (558.8)	25.50 (647.7)	145	377-1372-ND	704.05	657.00	ER-16613-BT
Blue	57.81 (1468.37)	22.00 (558.8)	25.50 (647.7)	145	377-1373-ND	704.05	657.00	ER-16613-RB
Black	66.56 (1690.62)	22.00 (558.8)	25.50 (647.7)	162	377-1374-ND	765.20	714.05	ER-16614-BT
Blue	66.56 (1690.62)	22.00 (558.8)	25.50 (647.7)	162	377-1375-ND	765.20	714.05	ER-16614-RB
Black	75.31 (49.91)	22.00 (558.8)	25.50 (647.7)	175	377-1376-ND	796.65	743.40	ER-16615-BT
Blue	75.31 (49.91)	22.00 (558.8)	25.50 (647.7)	175	377-1377-ND	796.65	743.40	ER-16615-RB
Black	84.06 (2135.12)	22.00 (558.8)	25.50 (647.7)	189	377-1378-ND	840.05	783.96	ER-16616-BT
Blue	84.06 (2135.12)	22.00 (558.8)	25.50 (647.7)	189	377-1379-ND	840.05	783.96	ER-16616-RB
Black	47.31 (1201.67)	22.00 (558.8)	30.75 (781.05)	143	377-1380-ND	716.95	669.05	ER-16622-BT
Blue	47.31 (1201.67)	22.00 (558.8)	30.75 (781.05)	143	377-1381-ND	716.95	669.05	ER-16622-RB
Black	57.81 (1468.37)	22.00 (558.8)	30.75 (781.05)	160	377-1382-ND	747.75	697.75	ER-16623-BT
Blue	57.81 (1468.37)	22.00 (558.8)	30.75 (781.05)	160	377-1383-ND	747.75	697.75	ER-16623-RB
Black	66.56 (1690.62)	22.00 (558.8)	30.75 (781.05)	180	377-1384-ND	828.45	773.11	ER-16624-BT
Blue	66.56 (1690.62)	22.00 (558.8)	30.75 (781.05)	180	377-1385-ND	828.45	773.11	ER-16624-RB
Black	75.31 (49.91)	22.00 (558.8)	30.75 (781.05)	194	377-1386-ND	847.85	791.20	ER-16625-BT
Blue	75.31 (49.91)	22.00 (558.8)	30.75 (781.05)	194	377-1387-ND	847.85	791.20	ER-16625-RB
Black	84.06 (2135.12)	22.00 (558.8)	30.75 (781.05)	209	377-1388-ND	921.55	859.95	ER-16626-BT
Blue	84.06 (2135.12)	22.00 (558.8)	30.75 (781.05)	209	377-1389-ND	921.55	859.95	ER-16626-RB
*Economizer Upright Cabinet Racks – Non-Ventilated**								
Blue	47.31 (1201.67)	22.00 (558.8)	25.50 (647.7)	128	377-1353-ND	635.60	593.10	ER-16512-RB
Blue	57.81 (1468.37)	22.00 (558.8)	25.50 (647.7)	145	377-1354-ND	663.35	619.00	ER-16513-RB
Blue	66.56 (1690.62)	22.00 (558.8)	25.50 (647.7)	162	377-1355-ND	725.60	677.10	ER-16514-RB
Black	75.31 (49.91)	22.00 (558.8)	25.50 (647.7)	175	377-1356-ND	757.65	707.00	ER-16515-BT
Blue	75.31 (49.91)	22.00 (558.8)	25.50 (647.7)	175	377-1357-ND	757.65	707.00	ER-16515-RB
Black	84.06 (2135.12)	22.00 (558.8)	25.50 (647.7)	189	377-1358-ND	801.80	748.25	ER-16516-BT
Blue	84.06 (2135.12)	22.00 (558.8)	25.50 (647.7)	189	377-1359-ND	801.80	748.25	ER-16516-RB

*Due to weight and size, product will be drop shipped from Bud Industries direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

Color	Dimensions - Inch (mm) A	B	C	Weight Lbs.	Digi-Key Part No	Price Each 1	Price Each 3	Bud Ind. Part No.
*Fig. 25 — Turn-Key Cabinet Assembly**								
Black	75.31 (1912.87)	22.00 (558.8)	25.50 (647.7)	208	377-1345-ND†	1081.45	1009.40	DC-8002-BT
Blue	75.31 (1912.87)	22.00 (558.8)	25.50 (647.7)	208	377-1346-ND†	1081.45	1009.40	DC-8002-RB
Sand	75.31 (1912.87)	22.00 (558.8)	25.50 (647.7)	208	377-1347-ND†	1081.45	1009.40	DC-8002-S
Black	75.31 (1912.87)	22.00 (558.8)	25.50 (647.7)	208	377-1348-ND§	1030.45	961.60	DC-8075-BT
Black	84.06 (2135.12)	22.00 (558.8)	25.50 (647.7)	215	377-1349-ND§	1107.40	1033.41	DC-8076-BT
Black	84.06 (2135.12)	22.00 (558.8)	30.75 (781.05)	229	377-1350-ND§	1149.35	1072.55	DC-8078-BT

*Due to weight and size, product will be drop shipped from Bud Industries direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

† Includes two SH-2385 ventilated shelves   § Includes leveler kits

RACK MOUNT CHASSIS

Height (A) Inch (mm)	Handles	Digi-Key Part No.	Price Each 1	Price Each 5	Price Each 10	Bud Ind. Part No.
Fig. 26 — Rack Mount Chassis						
5.25 (133.35)	H-9160-B	377-1268-ND	64.80	54.10	48.70	RM-14212
7.00 (177.8)	H-9111-B	377-1269-ND	74.20	61.95	55.75	RM-14213
5.25 (133.35)	H-9160-B	377-1392-ND	73.00	60.95	54.85	RM14222
7.00 (177.8)	H-9111-B	377-1393-ND	85.60	71.50	64.35	RM14223
8.75 (222.25)	H-9112-B	377-1394-ND	104.30	87.10	78.40	RM14224
10.50 (266.7)	H-9113-B	377-1395-ND	124.30	103.80	93.40	RM14225

Description	Fits Chassis	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Bud Ind. Part No.
Rack Mount Chassis Covers						
Solid Top or Bottom Cover	RM-14212-13	377-1310-ND	29.60	24.75	22.30	TBC-14252
Ventilated Top or Bottom Cover		377-1311-ND	33.10	27.65	24.90	TBC-14262
Solid Top or Bottom Cover	RM-14222-25	377-1396-ND	33.60	28.10	25.30	TBC14253
Ventilated Top or Bottom Cover		377-1397-ND	35.50	29.70	26.75	TBC14263

H x W x D Inch (mm)	Fits Rack Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Bud Ind. Part No.
Fig. 27 — Small Rack Mount Chassis					
1.75 x 17.00 x 4.00 (44.45 x 431.8 x 101.6)	19.00 (482.6)	377-1205-ND	24.30	20.30	CH-14400
1.75 x 17.00 x 8.00 (44.45 x 431.8 x 203.2)	19.00 (482.6)	377-1206-ND	41.60	34.75	CH-14401
1.75 x 17.00 x 16.00 (44.45 x 431.8 x 406.4)	19.00 (482.6)	377-1207-ND	60.00	50.15	CH-14402
3.50 x 17.00 x 8.00 (88.9 x 431.8 x 203.2)	19.00 (482.6)	377-1208-ND	61.40	51.25	CH-14403
3.50 x 17.00 x 16.00 (88.9 x 431.8 x 203.2)	19.00 (482.6)	377-1209-ND	78.80	65.80	CH-14404

H x W x D Inch (mm)	Fits Rack Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 5	Bud Ind. Part No.
Fig. 28 — ValuLine Series Cabinets (with handles)					
3.50x17.00 x 8.00 (88.9 x 431.8 x 203.2)	19.00 (482.6)	377-1238-ND	97.00	81.00	HC-14099
3.50 x 17.00 x 13.00 (88.9 x 431.8 x 330.2)	19.00 (482.6)	377-1239-ND	188.90	157.70	HC-14101
5.25 x 17.00 x 13.00 (133.35 x 431.8 x 330.2)	19.00 (482.6)	377-1240-ND	194.70	162.60	HC-14103
7.00 x 17.00 x 13.00 (177.8 x 431.8 x 330.2)	19.00 (482.6)	377-1241-ND	204.40	170.70	HC-14104
8.75 x 17.00 x 13.00 (222.25 x 431.8 x 330.2)	19.00 (482.6)	377-1242-ND	214.20	178.85	HC-14105
10.50 x 17.00 x 15.00 (266.7 x 431.8 x 381)	19.00 (482.6)	377-1243-ND	239.60	200.05	HC-14107

ACCESSORIES

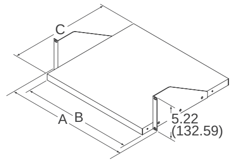
Color	Max. Panel Keyboard Width – Inch (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Bud Ind. Part No.
Fig. 29 — Keyboard/Mouse Shelves					
Black	19.0x16.5 (482.6 x 419.1)	377-1244-ND	147.50	123.15	KS-1785-BT

Color	Dimensions - Inch(mm) A	B	C	Digi-Key Part No.	Price Each 1	Price Each 5	Bud Ind. Part No.
Fig. 30 — Sliding Drawers (inside dimensions)							
Black	6.31 (160.27)	16.56 (420.62)	19.18 (487.17)	377-1224-ND	220.00	183.70	D-1723-BT

Color	Dimensions - Inch(mm) Width	Depth	Digi-Key Part No.	Price Each 1	Price Each 3	Price Each 5	Bud Ind. Part No.
Fig. 31 — Stationary Shelves-Non Ventilated							
Black	17.90 (454.66)	26.50 (673.1)	377-1306-ND	73.20	54.85	51.25	SH-2382
	17.90 (454.66)	19.25 (488.95)	377-1188-ND	65.10	52.08	48.80	60-2380
	17.90 (454.66)	22.75 (577.85)	377-1189-ND	68.30	54.64	51.20	60-2381
Fig. 32 — Stationary Shelves-Ventilated							
Black	17.90 (454.66)	17.75 (450.85)	377-1307-ND	68.20	51.10	47.75	SH-2384
	17.90 (454.66)	21.25 (539.75)	377-1308-ND	70.70	53.00	49.50	SH-2385
	17.90 (454.66)	26.50 (673.1)	377-1309-ND	76.60	57.40	53.60	SH-2386

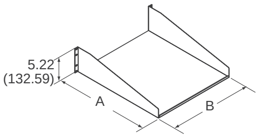
(*Continued*)

Fig. 33



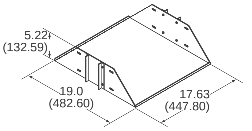
Fits 19" panel spaces. Adjustable for depth within rack. Supports 150 lbs.

Fig. 34



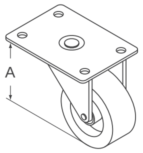
Fits 19" panel spaces. One piece construction. Supports 150 lbs.

Fig. 35



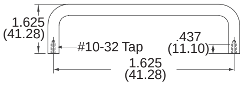
Fits 19" panel spaces. Supports 200 lbs.

Fig. 36



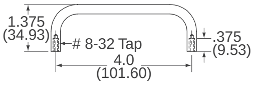
Heavy duty, ball Bearing, swivel type. Hard tread rubber.

Fig. 37



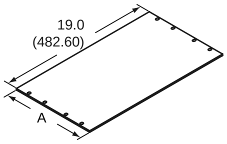
High Quality, designed for long wear.

Fig. 38



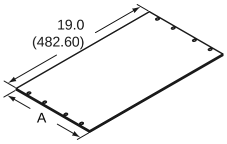
High Quality designed for long wear.

Fig. 39



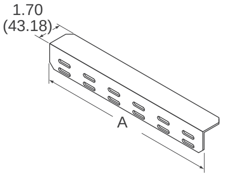
Mill finish aluminum panels. Pressure-sensitive paper on one side to protect and provides a surface for layouts.

Fig. 40



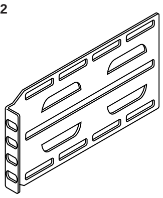
Hard aluminum 6061-T6.

Fig. 41



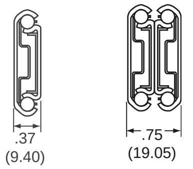
Attaches to panel mounting rail accessory flange. Sold in pairs.

Fig. 42



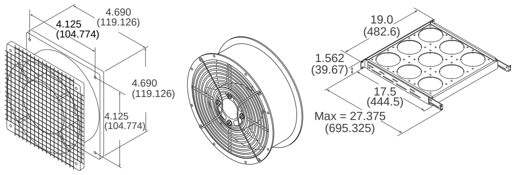
Designed for mounting two and three piece slides. Sold in pairs.

Fig. 43



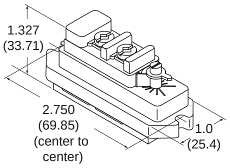
Telescoping slides are zinc plated, alloy steel, with ball bearings.

Fig. 44-46



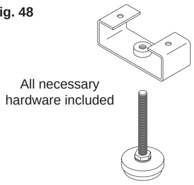
FN-1280 mounts in FT-1170 fan tray or can be used for individual applications. Supplied with finger guard. UL approved, 105 CFM. FN-1282 mounts in the top of ventilated Economizer racks. Supplied with finger guard. UL/CSA rated, 535 CFM.

Fig. 47



Prevent shut-downs caused by overheating. Contacts open when there is a 10° +5°F drop in temperature.

Fig. 48



Nickel-plated steel cap and stem. Kit consists of two levelers and mounting brackets. Used on Economizer and Classic II.

Color	Dimensions - Inch (mm) Width	Depth	Digi-Key Part No.	Price Each 1	10	50	Bud Ind. Part No.
Fig. 33 — Adjustable Shelf-Open Rack							
Black	17.62 (447.55) 17.62 (447.55)	16.00 (406.4) 20.00 (508)	377-1289-ND 377-1290-ND	82.80 89.20	69.10 74.45	62.21 67.00	SA-1278-BT SA-1279-BT
Fig. 34 — Equipment Shelf-Open Rack-Non Ventilated							
Black	17.62 (447.55) 17.62 (447.55)	15.00 (381) 20.00 (508)	377-1291-ND 377-1293-ND	60.30 72.10	50.35 60.20	45.30 54.20	SA-1750-BT SA-1752-BT
Fig. 34 — Equipment Shelf-Open Rack-Ventilated							
Black	17.62 (447.55) 17.62 (447.55)	15.00 (381) 20.00 (508)	377-1292-ND 377-1294-ND	65.90 78.20	55.05 65.30	49.55 58.75	SA-1751-BT SA-1753-BT
Fig. 35 — Open Rack Shelf-Non Ventilated							
Black	17.62 (447.55)	19.00 (482.6)	377-1295-ND	76.00	63.45	57.10	SA-1765-BT

Wheel Description	Height Inch (mm)	Load Rating	Digi-Key Part No.	Price Each 1	10	50	Bud Ind. Part No.
Fig. 36 — Casters							
Composition	3.25 (82.55)	200 lb.	377-1264-ND	28.60	23.85	21.45	RC-7758-PR
Rubber w/Brake	4.00 (101.6)	240 lb.	377-1265-ND	67.45	56.15	50.55	RC-7761-PR
Rubber	4.00 (101.6)	240 lb.	377-1266-ND	58.30	48.60	43.75	RC-7762-PR

Dimensions - Inch (mm) Hand Clearance	Mounting Center	Diameter	Digi-Key Part No.	Price Each 1	10	100	Bud Ind. Part No.
Fig. 37 — Chrome Plated Handles							
1.25 (31.75)	6.00 (152.4)	.37 (9.398)	377-1228-ND*	8.30	6.95	6.25	H-9110-B
.93 (23.62)	4.00 (101.6)	.37 (9.398)	377-1229-ND*	6.40	5.30	4.75	H-9111-B
.93 (23.62)	6.00 (152.4)	.37 (9.398)	377-1230-ND*	7.80	6.50	5.85	H-9112-B
.93 (23.62)	8.00 (203.2)	.37 (9.398)	377-1231-ND	10.60	8.85	7.95	H-9113-B
1.50 (38.1)	8.00 (203.2)	.50 (12.7)	377-1232-ND†	16.50	13.80	12.40	H-9114-B
1.68 (3.36)	3.50 (88.9)	.37 (9.398)	377-1233-ND†	12.40	10.35	9.30	H-9160-B
1.68 (3.36)	5.25 (133.35)	.37 (9.398)	377-1234-ND†	10.60	8.90	8.00	H-9161-B
1.00 (25.4)	1.90 (48.26)	.25 (6.35)	377-1235-ND§	6.00	5.00	4.50	H-9166-B
1.00 (25.4)	3.00 (76.2)	.25 (6.35)	377-1236-ND§	5.70	4.70	4.25	H-9168-B

* Includes 2 - #10-32 x .37" screws.
† Includes 2 - #6-32 x .50" screws.
§ Includes 2 - 1/4"-28 Hex nuts.

Dimensions - Inch (mm) Hand Clearance	Mounting Center	Digi-Key Part No.	Price Each 1	10	100	Bud Ind. Part No.
Fig. 38 — Clear Anodized Aluminum Handles						
1.09 (27.69)	4.00 (101.6)	377-1237-ND*	10.85	9.05	8.15	H-9174-B

* Includes 2-8.32 x .37" screws

Height Inch (mm)	Digi-Key Part No.	Price Each 1	10	50	Bud Ind. Part No.
Fig. 39 — 19" Aluminum Surface Shield Panels - .12" Thick					
1.75 (44.45)	377-1300-ND	9.50	7.95	7.15	SFA-1831
3.50 (88.9)	377-1301-ND	13.90	11.55	10.40	SFA-1832
5.25 (133.35)	377-1302-ND	17.80	14.90	13.40	SFA-1833
7.00 (177.8)	377-1303-ND	22.80	19.05	17.15	SFA-1834
8.75 (222.25)	377-1304-ND	25.00	20.85	18.75	SFA-1835
10.50 (266.7)	377-1305-ND	32.40	27.00	24.30	SFA-1836

Height Inch (mm)	Digi-Key Part No.	Price Each 1	10	50	Bud Ind. Part No.
Fig. 40 — 19" Aluminum Panels – .12" Thick (Gray)					
1.75 (44.45)	377-1247-ND	10.35	8.65	7.80	PA-1101-MG
3.50 (88.9)	377-1248-ND	14.40	12.00	10.80	PA-1102-MG
5.25 (133.35)	377-1249-ND	19.70	16.40	14.75	PA-1103-MG
7.00 (177.8)	377-1250-ND	24.50	20.50	18.45	PA-1104-MG
8.75 (222.25)	377-1251-ND	29.70	24.80	22.30	PA-1105-MG
10.50 (266.7)	377-1252-ND	37.70	31.50	28.35	PA-1106-MG
12.25 (311.15)	377-1253-ND	41.40	34.50	31.05	PA-1107-MG
14.00 (355.6)	377-1254-ND	46.10	38.45	34.60	PA-1108-MG

Length Inch (mm)	Digi-Key Part No.	Price Each 1	10	50	Bud Ind. Part No.
Fig. 41 — Chassis Support Brackets (Sold in Pairs)					
13.00 (330.2)	377-1213-ND	26.80	22.35	20.10	CSB-1352
16.00 (406.4)	377-1214-ND	29.00	24.20	21.80	CSB-1353
23.00 (584.2)	377-1215-ND	31.40	26.20	23.60	CSB-1354

Description	Digi-Key Part No.	Price Each 1	3	5	Bud Ind. Part No.
Fig. 42 — Slide Mounting Brackets (Sold in Pairs)					
Universal Kit	377-1204-ND	30.20	25.05	22.55	BAS-5106

Dimensions - Inch (mm) Slide Length	Travel	Load Rating (per pair)	Digi-Key Part No.	Price Each 1	3	5	Bud Ind. Part No.
Fig. 43 — Sliding Mechanisms - 2 Piece Slide							
12 (304.8)	8 (203.2)	140lbs.	377-1199-ND	30.50	25.45	22.90	AS-5000-A
16 (406.4)	12 (304.8)	120lbs.	377-1200-ND	40.10	33.50	30.15	AS-5001-A
20 (508)	15 (381)	92lbs.	377-1201-ND	42.00	35.10	31.60	AS-5002-A
26 (660.4)	19 (482.6)	70lbs.	377-1202-ND	46.40	38.75	34.90	AS-5004-A
20 (508)	20.875 (530.23)	91lbs.	377-1203-ND*	91.00	76.00	68.40	AS-5042-A

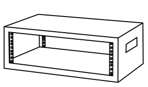
* 3 Piece slide full extension

Description	Digi-Key Part No.	Price Each 1	5	10	Bud Ind. Part No.
Fig. 44-46 — Fans					
Tubeaxial, 110 Volt .21 Amps	377-1225-ND	46.88	37.50	28.15	FN-1280
Exhaust, 10 inch 115 VAC	377-1226-ND	158.90	119.20	111.25	FN-1282
Fan Tray Assembly	377-1227-ND*	208.40	156.30	145.90	FT-1170-MG
Fig. 47 — Tem-Stat Temperature Control					
Normally Open; Closes on Temperature Rise	377-1314-ND	23.70	—	17.80	TS-15
Fig. 48 — Stem Levelers Kit					
Kit (Two Levelers and Mounting Brackets)	377-1267-ND	47.90	—	40.00	RL-7770
Mounting Hardware					
10-32X.62" Phillips Screw Truss Head	377-1403-ND		4.00/25		7346
12-24X.5" Phillips Screw Truss Head	377-1404-ND		5.00/25		9260
10-32 Cage Nut, Zinc Plated	377-1405-ND		21.25/25		295
6-32x.5" Phillips Screw Flat Head	377-1406-ND		6.00/25		3313

* Order fans seperately. Part Number: 377-1225-ND.

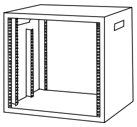
Racks and Accessories

Fig. 1



Desk Top Rack (Light-Duty)- RCBS Series - 18-gauge steel economy 19" table top rack. Rails are fixed at both front and rear. Includes rubber feet, 2 lifting handles and 10-32 clip nuts. Overall width 20", overall height 1" over panel space. Finish textured; black or gray/beige (Ral7032) powder paint.

Fig. 2



Desk Top Rack (Heavy-Duty) - RCHS Series- 18 gauge steel 19" table top rack. Rails are fixed at both front and rear. Includes 2 pair of fixed accessory rails (for rear support of heavier equipment), rubber feet, 2 lifting handles and 10-32 clip nuts. Overall height: 2" larger than panel height. Finish textured; black, gray/beige (RAL7032) or gulf blue powder paint.

Fig. 3

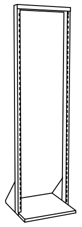
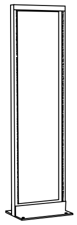


Fig. 4



Open Relay Rack DNRR Series- welded 19" racks (20" wide overall) are available in both light (12-gauge steel) and heavy duty (10-gauge steel) versions. No assembly required. Front flange is drilled and tapped (10-32) EIA .5-1.25" spacing. For use as a single, free standing unit for sturdy support of standard 19" rack mount devices. Finished in textured black powder paint.

Fig. 5

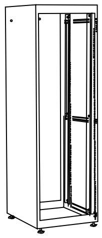


Fig. 6

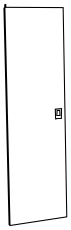
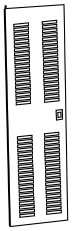


Fig. 7



Knockdown Racks REFK Series - offer a standard 19" panel width (22" overall), 24" usable depth (24.5" overall). Unit is shipped complete with 4 infinitely adjustable (front to back) combination rack mount rails, drilled and tapped 10-32 (full EIA spacing) and 4 leveling feet. Shipped in a flat pack container for damage-free receipt. Simple assembly using one bolt in each corner to lock the sides to the top and bottom Heavy duty 16-gauge steel tip, bottom and sides. Rails are made of 10-gauge steel finished in black powder paint. Rack is finished in a textured black or gray/beige (RAL7032) powder paint. Order doors separately below.

Color	Dimensions–Inch (mm) Panel H	Panel W	Panel D	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
Fig. 1 RCBS Desk Top Racks (Light Duty)								
Black	3.50 (89)	19.00 (483)	13.00 (330)	HM624-ND	88.12	81.34	70.50	RCBS1900313BK1
	5.25 (133)	19.00 (483)	13.00 (330)	HM625-ND	94.82	87.53	75.86	RCBS1900513BK1
	7.00 (178)	19.00 (483)	13.00 (330)	HM626-ND	102.54	94.65	82.03	RCBS1900713BK1
	8.75 (222)	19.00 (483)	13.00 (330)	HM627-ND	116.17	107.24	92.94	RCBS1900813BK1
	10.50 (267)	19.00 (483)	13.00 (330)	HM628-ND	121.51	112.18	97.22	RCBS1901013BK1
	12.25 (311)	19.00 (483)	13.00 (330)	HM629-ND	132.18	122.02	105.75	RCBS1901213BK1
	14.00 (356)	19.00 (483)	13.00 (330)	HM630-ND	165.57	152.83	132.46	RCBS1901413BK1
	5.25 (133)	19.00 (483)	17.50 (445)	HM631-ND	113.50	104.78	90.81	RCBS1900517BK1
	7.00 (178)	19.00 (483)	17.50 (445)	HM632-ND	132.18	122.02	105.75	RCBS1900717BK1
	8.75 (222)	19.00 (483)	17.50 (445)	HM633-ND	157.55	145.43	126.04	RCBS1900817BK1
	10.50 (267)	19.00 (483)	17.50 (445)	HM634-ND	166.90	154.07	133.53	RCBS1901017BK1
	12.25 (311)	19.00 (483)	17.50 (445)	HM635-ND	182.94	168.86	146.35	RCBS1901217BK1
	14.00 (356)	19.00 (483)	17.50 (445)	HM636-ND	186.91	172.54	149.54	RCBS1901417BK1
Gray	3.50 (89)	19.00 (483)	13.00 (330)	HM637-ND	88.12	81.34	70.50	RCBS1900313CG1
	5.25 (133)	19.00 (483)	13.00 (330)	HM638-ND	94.82	87.53	75.86	RCBS1900513CG1
	7.00 (178)	19.00 (483)	13.00 (330)	HM639-ND	102.54	94.65	82.03	RCBS1900713CG1
	8.75 (222)	19.00 (483)	13.00 (330)	HM640-ND	116.17	107.24	92.94	RCBS1900813CG1
	10.50 (267)	19.00 (483)	13.00 (330)	HM641-ND	121.51	112.18	97.22	RCBS1901013CG1
	12.25 (311)	19.00 (483)	13.00 (330)	HM642-ND	132.18	122.02	105.75	RCBS1901213CG1
	14.00 (356)	19.00 (483)	13.00 (330)	HM643-ND	165.57	152.83	132.46	RCBS1901413CG1
	5.25 (133)	19.00 (483)	17.50 (445)	HM644-ND	113.50	104.78	90.81	RCBS1900517CG1
	7.00 (178)	19.00 (483)	17.50 (445)	HM645-ND	132.18	122.02	105.75	RCBS1900717CG1
	8.75 (222)	19.00 (483)	17.50 (445)	HM646-ND	157.55	145.43	126.04	RCBS1900817CG1
	10.50 (267)	19.00 (483)	17.50 (445)	HM647-ND	166.90	154.07	133.53	RCBS1901017CG1
	12.25 (311)	19.00 (483)	17.50 (445)	HM648-ND	182.94	168.86	146.35	RCBS1901217CG1
	14.00 (356)	19.00 (483)	17.50 (445)	HM649-ND	186.91	172.54	149.54	RCBS1901417CG1
Fig. 2 RCHS Desk Top (Heavy Duty)								
Black	8.75 (222)	19.00 (483)	17.50 (445)	HM650-ND	170.83	157.70	136.67	RCHS1900817BK1
	10.50 (267)	19.00 (483)	17.50 (445)	HM651-ND	197.57	182.37	158.06	RCHS1901017BK1
	14.00 (356)	19.00 (483)	17.50 (445)	HM652-ND	202.26	186.71	161.82	RCHS1901417BK1
	17.50 (445)	19.00 (483)	17.50 (445)	HM653-ND	210.04	193.88	168.03	RCHS1901717BK1
	22.75 (578)	19.00 (483)	17.50 (445)	HM654-ND	228.70	211.11	182.96	RCHS1902217BK1
	28.00 (711)	19.00 (483)	17.50 (445)	HM655-ND	268.81	248.14	215.06	RCHS1902817BK1
	10.50 (267)	19.00 (483)	24.50 (622)	HM656-ND	266.04	245.57	212.83	RCHS1901024BK1
	14.00 (356)	19.00 (483)	24.50 (622)	HM657-ND	280.01	258.48	224.02	RCHS1901424BK1
	17.50 (445)	19.00 (483)	24.50 (622)	HM658-ND	289.37	267.11	231.50	RCHS1901724BK1
	22.75 (578)	19.00 (483)	24.50 (622)	HM659-ND	298.70	275.73	238.96	RCHS1902224BK1
	28.00 (711)	19.00 (483)	24.50 (622)	HM660-ND	311.11	287.19	248.90	RCHS1902824BK1
Gray	8.75 (222)	19.00 (483)	17.50 (445)	HM661-ND	170.83	157.70	136.67	RCHS1900817CG1
	10.50 (267)	19.00 (483)	17.50 (445)	HM662-ND	197.57	182.37	158.06	RCHS1901017CG1
	14.00 (356)	19.00 (483)	17.50 (445)	HM663-ND	202.26	186.71	161.82	RCHS1901417CG1
	17.50 (445)	19.00 (483)	17.50 (445)	HM664-ND	210.04	193.88	168.03	RCHS1901717CG1
	22.75 (578)	19.00 (483)	17.50 (445)	HM665-ND	228.70	211.11	182.96	RCHS1902217CG1
	28.00 (711)	19.00 (483)	17.50 (445)	HM666-ND	268.81	248.14	215.06	RCHS1902817CG1
	10.50 (267)	19.00 (483)	24.50 (622)	HM667-ND	266.04	245.57	212.83	RCHS1901024CG1
	14.00 (356)	19.00 (483)	24.50 (622)	HM668-ND	280.01	258.48	224.02	RCHS1901424CG1
	17.50 (445)	19.00 (483)	24.00 (622)	HM669-ND	289.37	267.11	231.50	RCHS1901724CG1
	22.75 (578)	19.00 (483)	24.50 (622)	HM670-ND	298.70	275.73	238.96	RCHS1902224CG1
	28.00 (711)	19.00 (483)	24.50 (622)	HM671-ND	311.11	287.19	248.90	RCHS1902824CG1
Blue	8.75 (222)	19.00 (483)	17.50 (445)	HM672-ND	170.83	157.70	136.67	RCHS1900817GF1
	10.50 (267)	19.00 (483)	17.50 (445)	HM673-ND	197.57	182.37	158.06	RCHS1901017GF1
	14.00 (356)	19.00 (483)	17.50 (445)	HM674-ND	202.26	186.71	161.82	RCHS1901417GF1
	17.50 (445)	19.00 (483)	17.50 (445)	HM675-ND	210.04	193.88	168.03	RCHS1901717GF1
	22.75 (578)	19.00 (483)	17.50 (445)	HM676-ND	228.70	211.11	182.96	RCHS1902217GF1
	28.00 (711)	19.00 (483)	17.50 (445)	HM677-ND	268.81	248.14	215.06	RCHS1902817GF1
	10.50 (267)	19.00 (483)	24.50 (622)	HM678-ND	266.04	245.57	212.83	RCHS1901024GF1
	14.00 (356)	19.00 (483)	24.50 (622)	HM679-ND	280.01	258.48	224.02	RCHS1901424GF1
	17.50 (445)	19.00 (483)	24.50 (622)	HM680-ND	289.37	267.11	231.50	RCHS1901724GF1
	22.75 (578)	19.00 (483)	24.50 (622)	HM681-ND	298.70	275.73	238.96	RCHS1902224GF1
	28.00 (711)	19.00 (483)	24.50 (622)	HM682-ND	311.11	287.19	248.90	RCHS1902824GF1

Dimensions–Inch (mm) Panel H	Panel W	Panel Units	Overall Height	Wt. (Lbs.)	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
*Fig. 3 DNRR Open Welded (Light-Duty) Relay Rack**									
42 (1067)	19 (483)	24	48.13 (1223)	38	HM683-ND	169.60	156.56	135.69	DNRR42LDW
63 (1600)	19 (483)	36	69.13 (1756)	41	HM684-ND	188.65	174.14	150.92	DNRR63LDW
70 (1778)	19 (483)	40	76.13 (1934)	42	HM685-ND	191.15	176.45	152.92	DNRR70LDW
77 (1956)	19 (483)	44	83.13 (2112)	45	HM686-ND	199.55	184.20	159.65	DNRR77LDW
84 (2134)	19 (483)	48	90.13 (2289)	47	HM687-ND	203.58	187.92	162.87	DNRR84LDW
*Fig. 4 DNRR Open Welded (Heavy-Duty) Relay Rack**									
42 (1067)	19 (483)	24	48.13 (1223)	65	HM688-ND	205.36	189.57	164.30	DNRR42HDW
63 (1600)	19 (483)	36	69.13 (1756)	77	HM689-ND	229.52	211.86	183.61	DNRR63HDW
70 (1778)	19 (483)	40	76.13 (1934)	80	HM690-ND	233.06	215.15	186.46	DNRR70HDW
77 (1956)	19 (483)	44	83.13 (2112)	82	HM691-ND	241.60	233.02	193.29	DNRR77HDW
84 (2134)	19 (483)	48	90.13 (2289)	87	HM692-ND	244.98	226.15	195.99	DNRR84HDW

* Due to weight and size, product will be drop shipped from Hammond direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

Color	Dim.–In. (mm) Panel H	Panel Units	Overall Height	Wt. (Lbs.)	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
*Fig. 5 REFK Knockdown Rack**									
Black	35 (889)	20	40.19 (1021)	103	HM693-ND	370.17	341.69	296.13	REFK1903524BK1
	42 (1067)	24	47.19 (1199)	111	HM694-ND	398.09	367.47	318.47	REFK1904224BK1
	49 (1245)	28	54.19 (1376)	126	HM696-ND	453.98	419.05	363.19	REFK1904924BK1
	56 (1422)	32	61.19 (1554)	136	HM697-ND	481.90	458.17	385.52	REFK1905624BK1
	63 (1600)	36	68.19 (1732)	145	HM698-ND	502.87	464.18	402.29	REFK1906324BK1
	70 (1778)	40	75.19 (1910)	160	HM699-ND	558.75	515.77	447.00	REFK1907024BK1
	77 (1956)	44	82.19 (2088)	185	HM700-ND	583.88	538.97	467.11	REFK1907724BK1
Lt. Gray	35 (889)	20	40.19 (1021)	103	HM701-ND	370.17	341.69	296.13	REFK1903524CG1
	42 (1067)	24	47.19 (1199)	111	HM702-ND	398.09	367.47	318.47	REFK1904224CG1
	49 (1245)	28	54.19 (1376)	126	HM703-ND	453.98	419.05	363.19	REFK1904924CG1
	56 (1422)	32	61.19 (1554)	136	HM704-ND	481.90	458.17	385.52	REFK1905624CG1
	63 (1600)	36	68.19 (1732)	145	HM705-ND	502.87	464.18	402.29	REFK1906324CG1
	70 (1778)	40	75.19 (1910)	160	HM706-ND	558.75	515.77	447.00	REFK1907024CG1
	77 (1956)	44	82.19 (2088)	185	HM707-ND	583.88	538.97	467.11	REFK1907724CG1

* Due to weight and size, product will be drop shipped from Hammond direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

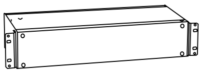
Color	Dim.–Inch (mm) Panel H	Panel Units	Wt. (Lbs.)	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
*Fig. 6 - RSDF Solid Door**								
Black	35 (889)	20	13	HM708-ND	97.79	90.26	78.23	RSDF19035BK1
	42 (1067)	24	18	HM709-ND	115.26	106.41	92.22	RSDF19042BK1
	49 (1245)	28	26	HM710-ND	127.80	117.97	102.25	RSDF19049BK1
	56 (1422)	32	30	HM711-ND	139.68	128.94	111.75	RSDF19056BK1
	63 (1600)	36	33	HM712-ND	148.09	136.70	118.47	RSDF19063BK1
	70 (1778)	40	37	HM713-ND	156.45	144.42	125.17	RSDF19070BK1
	77 (1956)	44	41	HM714-ND	169.03	156.04	135.23	RSDF19077BK1
Lt. Gray	35 (889)	20	13	HM715-ND	97.79	90.26	78.23	RSDF19035CG1
	42 (1067)	24	18	HM716-ND	115.26	106.41	92.22	RSDF19042CG1
	49 (1245)	28	26	HM717-ND	127.80	117.97	102.25	RSDF19049CG1
	56 (1422)	32	30	HM718-ND	139.68	128.94	111.75	RSDF19056CG1
	63 (1600)	36	33	HM719-ND	148.09	136.70	118.47	RSDF19063CG1
	70 (1778)	40	37	HM720-ND	156.45	144.42	125.17	RSDF19070CG1
	77 (1956)	44	41	HM721-ND	169.03	156.04	135.23	RDSF19077CG1
*Fig. 7 - RSDL Louvered Door**								
Black	35 (889)	20	13	HM722-ND	110.86	102.34	88.70	RSDL19035BK1
	42 (1067)	24	18	HM723-ND	126.68	116.94	101.35	RSDL19042BK1
	49 (1245)	28	26	HM724-ND	142.56	131.61	114.06	RSDL19049BK1
	56 (1422)	32	30	HM725-ND	156.14	144.13	124.91	RSDL19056BK1
	63 (1600)	36	33	HM726-ND	169.70	156.65	135.76	RSDL19063BK1
	70 (1778)	40	37	HM727-ND	181.02	167.10	144.82	RSDL19070BK1
	77 (1956)	44	41	HM728-ND	192.35	177.56	153.88	RSDL19077BK1
Lt. Gray	35 (889)	20	13	HM729-ND	110.86	102.34	88.70	RSDL19035CG1
	42 (1067)	24	18	HM730-ND	126.68	116.94	101.35	RSDL19042CG1
	49 (1245)	28	26	HM731-ND	142.56	131.61	114.06	RSDL19049CG1
	56 (1422)	32	30	HM732-ND	156.14	144.13	124.91	RSDL19056CG1
	63 (1600)	36	33	HM733-ND	169.70	156.65	135.76	RSDL19063CG1
	70 (1778)	40	37	HM734-ND	181.02	167.10	144.82	RSDL19070CG1
	77 (1956)	44	41	HM735-ND	192.35	177.56	153.88	RSDL19077CG1

* Due to weight and size, product will be drop shipped from Hammond direct to our customers. Contact Digi-Key Specialty Sales at 1-888-671-1741.

(Continued)

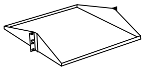
Racks and Accessories *(Cont.)*

Fig. 8



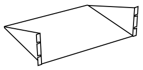
Rack Mount/Desk Top Enclosure RMCS & RMCV Series- mounts in standard 19” rack space or can be used table top. Aluminum panels can be removed from any of all 6 sides with only 4 screws. Shipped knocked down and includes all hardware, rack mount ears and rubber feet. Finished in textured black powder paint.

Fig. 9



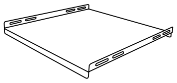
Dual Modem Shelf DNDMS Series- permits front and rear access to modems on 19” relay racks.Formed 16-gauge steel construction. Overall 19.5” deep. Finished in textured black powder paint finish.

Fig. 10



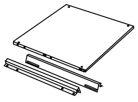
Rack Mount Shelf RASU & RASV Series- 14 gauge steel, 19” relay rack mount shelf available either solid or ventilated. Finished in textured black powder paint.

Fig. 11



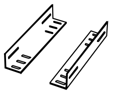
Rail Mount Shelf RFUS & RFVS Series - 14 gauge steel, 19” rack mount shelf available either solid or ventilated. Side slotted for easy front to back adjustment. Finished in textured black powder paint.

Fig. 12



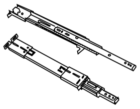
Fixed / Pull-Out Shelf RASC Series - 18 gauge steel with 14 gauge brackets. Mounts to internal rails. 19” relay rack mount shelf available either solid or ventilated. Brackets are side slotted for easy front to back adjustment. Shelf is finished in smooth white.

Fig. 13



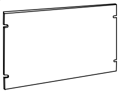
Rail Mount Support Angles RASA Series- 14 gauge steel, 1.75” x 1.75” to support heavy equipment and reduce load on front panel. Slots allow up/down or front back adjustment. Finished in textured black powder paint.

Fig. 14



Equipment slides RSLIDE Series - 19” rack panel mount (to front and back panel rails). Occupies only 1U(1.75”) of panel height. Heavy duty, ball bearing mechanism. Also converts RASC slides to a pull out shelf. Sold in packages of 2.

Fig. 15



19” Aluminum Rack Panels PBPA - .125” thick, 19” rack mount panels. Finished in smooth black or gray/beige (RAL7032) powder paint and paper covered (one side) natural finish.

Type	Dimensions–Inch (mm)			Digi-Key	Price Each			Hammond
	Panel H	Depth	Panel Units	Part No.	1	3	5	Part No.
Fig. 8 RMCS & RMCV Rack Mount/Desk Top								
Solid	1.75 (45)	8 (203)	1	HM736-ND	58.37	53.88	46.69	RMCS19018BK1
	1.75 (45)	13 (330)	1	HM737-ND	68.67	63.38	54.93	RMCS190113BK1
	3.50 (89)	8 (203)	2	HM738-ND	65.23	60.22	52.19	RMCS19038BK1
	3.50 (89)	13 (330)	2	HM739-ND	82.40	76.06	65.92	RMCS190313BK1
	5.25 (133)	13 (330)	3	HM740-ND	94.42	87.15	75.53	RMCS190513BK1
	7.00 (178)	13 (330)	4	HM741-ND	108.15	99.83	86.52	RMCS190713BK1
	8.75 (222)	13 (330)	5	HM742-ND	130.47	120.43	104.37	RMCS190813BK1
	10.50 (267)	13 (330)	6	HM743-ND	144.20	133.11	115.36	RMCS191013BK1
	10.50 (267)	15 (381)	6	HM744-ND	142.48	131.52	113.99	RMCS191015BK1
Vented	1.75 (45)	8 (203)	1	HM745-ND	64.20	59.26	51.36	RMCV19018BK1
	1.75 (45)	13 (330)	1	HM746-ND	75.53	69.72	60.43	RMCV190113BK1
	3.50 (89)	8 (203)	2	HM747-ND	71.75	66.24	57.41	RMCV19038BK1
	3.50 (89)	13 (330)	2	HM748-ND	90.63	83.67	72.51	RMCV190313BK1
	5.25 (133)	13 (330)	3	HM749-ND	103.87	95.88	83.10	RMCV190513BK1
	7.00 (178)	13 (330)	4	HM750-ND	118.97	109.82	95.18	RMCV190713BK1
	8.75 (222)	13 (330)	5	HM751-ND	143.51	132.48	114.82	RMCV190813BK1
	10.50 (267)	13 (330)	6	HM752-ND	158.62	146.42	126.90	RMCV191013BK1
	10.50 (267)	15 (381)	6	HM753-ND	156.73	144.68	125.40	RMCV19015BK1

Dimensions - Inch (mm)	Digi-Key	Price Each			Hammond
Depth	Part No.	1	3	5	Part No.
Fig. 9 DNDMS Dual Modem Shelf					
19.5 (495)	HM754-ND	56.40	52.06	45.12	DNDMS19BK1

Type	Dimensions–Inch (mm)			Digi-Key	Price Each			Hammond
	Panel H	Shelf Depth	Panel Units	Part No.	1	3	5	Part No.
Fig. 10 RASU & RASV Panel Mount Shelf								
Solid	5.25 (133)	15 (381)	3	HM755-ND	60.60	55.94	48.49	RASU190515BK1
Vented	5.25 (133)	15 (381)	3	HM756-ND	68.44	63.17	54.75	RASV190515BK1

Type	Dimensions - Inch (mm)		Digi-Key	Price Each			Hammond
	Panel W	Shelf Depth	Part No.	1	3	5	Part No.
Fig. 11 RFUS & RFVS Rail Shelf							
Solid	19 (483)	19 (483)	HM757-ND	35.84	33.08	28.67	RFUS1918BK1
	19 (483)	21 (533)	HM758-ND	37.98	35.07	30.39	RFUS1921BK1
	19 (483)	26 (660)	HM759-ND	40.68	37.56	32.55	RFUS1926BK1
Vented	19 (483)	19 (483)	HM760-ND	35.84	33.08	28.67	RFVS1918BK1
	19 (483)	21 (533)	HM761-ND	37.98	35.07	30.39	RFVS1921BK1
	19 (483)	26 (660)	HM762-ND	40.68	37.56	32.55	RFVS1926BK1

Dimensions - Inch (mm)			Digi-Key	Price Each			Hammond
Panel W	Shell Depth	Bracket Depth	Part No.	1	3	5	Part No.
Fig. 12 RASC Fixed/Pull Out Shelf							
19 (483)	11.9 (302)	13.2 (335)	HM763-ND	57.75	53.31	46.21	RASC1912WH2
19 (483)	15.9 (404)	14.9 (378)	HM764-ND	64.86	59.88	51.90	RASC1916WH2
19 (483)	21.9 (556)	20.9 (531)	HM765-ND	73.97	68.28	59.17	RASC1922WH2

Dimensions - Inch (mm)	Digi-Key	Price Each			Hammond
Depth	Part No.	1	3	5	Part No.
Fig. 13 RASA Rack Support Angles					
9.97 (253)	HM766-ND	21.70	20.04	17.37	RASA12BK3
14.95 (380)	HM767-ND	23.67	21.85	18.94	RASA16BK3
20.95 (532)	HM768-ND	26.70	24.65	21.36	RASA22BK3

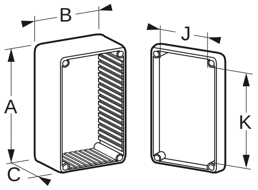
Dimensions - Inch (mm)		Digi-Key	Price Each			Hammond
Side Length	Capacity (Pair)	Part No.	1	3	5	Part No.
Fig. 14 RSLIDE Chassis Slide						
12 (305)	120 lbs.	HM769-ND	54.33	50.15	43.47	RSLIDE12
16 (406)	130 lbs.	HM770-ND	56.63	52.28	45.31	RSLIDE16
22 (559)	120 lbs.	HM771-ND	60.07	55.45	48.05	RSLIDE22

Color	Dimensions - Inch (mm)		Digi-Key	Price Each			Hammond
	Panel H	Panel Units	Part No.	1	3	5	Part No.
Fig. 15 PBPA Aluminum 19” Rack Panels							
Black	1.75 (45)	1	HM772-ND	8.67	8.00	6.94	PBPA19001BK2
	3.50 (89)	2	HM773-ND	12.76	11.79	10.22	PBPA19003BK2
	5.25 (133)	3	HM774-ND	18.21	16.82	14.58	PBPA19005BK2
	7.00 (178)	4	HM775-ND	22.76	21.02	18.22	PBPA19007BK2
	8.75 (222)	5	HM776-ND	26.95	24.88	21.57	PBPA19008BK2
	10.50 (267)	6	HM777-ND	30.37	28.03	24.29	PBPA19010BK2
	12.25 (311)	7	HM778-ND	36.41	33.62	29.14	PBPA19012BK2
	14.00 (356)	8	HM779-ND	40.98	37.84	32.79	PBPA19014BK2
	15.75 (400)	9	HM780-ND	44.03	40.65	35.23	PBPA19015BK2
	17.50 (445)	10	HM781-ND	50.14	46.28	40.11	PBPA19017BK2
	19.25 (489)	11	HM782-ND	58.08	53.62	46.47	PBPA19019BK2
	21.00 (533)	12	HM783-ND	62.25	57.47	49.80	PBPA19021BK2
	22.75 (578)	13	HM784-ND	66.05	60.98	52.85	PBPA19022BK2
	24.50 (622)	14	HM785-ND	72.14	66.59	57.71	PBPA19024BK2
	26.25 (667)	15	HM786-ND	77.45	71.49	61.96	PBPA19026BK2
	28.00 (711)	16	HM787-ND	82.75	76.38	66.20	PBPA19028BK2
	29.75 (756)	17	HM788-ND	86.55	79.89	69.24	PBPA19029BK2
	31.00 (787)	18	HM789-ND	88.85	82.02	71.09	PBPA19031BK2
Lt. Gray	1.75 (45)	1	HM790-ND	8.67	8.00	6.94	PBPA19001CG2
	3.50 (89)	2	HM791-ND	12.76	11.79	10.22	PBPA19003CG2
	5.25 (133)	3	HM792-ND	18.21	16.82	14.58	PBPA19005CG2
	7.00 (178)	4	HM793-ND	22.76	21.02	18.22	PBPA19007CG2
	8.75 (222)	5	HM794-ND	26.95	24.88	21.57	PBPA19008CG2
	10.50 (267)	6	HM795-ND	30.37	28.03	24.29	PBPA19010CG2
	12.25 (311)	7	HM796-ND	36.41	33.62	29.14	PBPA19012CG2
	14.00 (356)	8	HM797-ND	40.98	37.84	32.79	PBPA19014CG2
	15.75 (400)	9	HM798-ND	44.03	40.65	35.23	PBPA19015CG2
	17.50 (445)	10	HM799-ND	50.14	46.28	40.11	PBPA19017CG2
	19.25 (489)	11	HM800-ND	58.08	53.62	46.47	PBPA19019CG2
	21.00 (533)	12	HM801-ND	62.25	57.47	49.80	PBPA19021CG2
	22.75 (578)	13	HM802-ND	66.05	60.98	52.85	PBPA19022CG2
	24.50 (622)	14	HM803-ND	72.14	66.59	57.71	PBPA19024CG2
	26.25 (667)	15	HM804-ND	77.45	71.49	61.96	PBPA19026CG2
	28.00 (711)	16	HM805-ND	82.75	76.38	66.20	PBPA19028CG2
	29.75 (756)	17	HM806-ND	86.55	79.89	69.24	PBPA19029CG2
	31.50 (787)	18	HM807-ND	88.85	82.02	71.09	PBPA19031CG2
Unfin-ished	1.75 (45)	1	HM808-ND	8.67	8.00	6.94	PBPA19001UNF
	3.50 (89)	2	HM809-ND	12.76	11.79	10.22	PBPA19003UNF
	5.25 (133)	3	HM810-ND	18.21	16.82	14.58	PBPA19005UNF
	7.00 (178)	4	HM811-ND	22.76	21.02	18.22	PBPA19007UNF
	8.75 (222)	5	HM812-ND	26.95	24.88	21.57	PBPA19008UNF
	10.50 (267)	6	HM813-ND	30.37	28.03	24.29	PBPA19010UNF
	12.25 (311)	7	HM814-ND	36.41	33.62	29.14	PBPA19012UNF
	14.00 (356)	8	HM815-ND	40.98	37.84	32.79	PBPA19014UNF
	15.75 (400)	9	HM816-ND	44.03	40.65	35.23	PBPA19015UNF
	17.50 (445)	10	HM817-ND	50.14	46.28	40.11	PBPA19017UNF
	19.25 (489)	11	HM818-ND	58.08	53.62	46.47	PBPA19019UNF
	21.00 (533)	12	HM819-ND	62.25	57.47	49.80	PBPA19021UNF
	22.75 (578)	13	HM820-ND	66.05	60.98	52.85	PBPA19022UNF
	24.50 (622)	14	HM821-ND	72.14	66.59	57.71	PBPA19024UNF
	26.25 (667)	15	HM822-ND	77.45	71.49	61.96	PBPA19026UNF
	28.00 (711)	16	HM823-ND	82.75	76.38	66.20	PBPA19028UNF
	29.75 (756)	17	HM824-ND	86.55	79.89	69.24	PBPA19029UNF
	31.50 (787)	18	HM825-ND	88.85	82.02	71.09	PBPA19031UNF

Description	Qty. Per Pack	Digi-Key Part No.	Price Each 1	3	5	Hammond Part No.
19” Rack Mount Hardware						
10-32 x 0.75” Phillips oval head screw/plastic washer	4	HM826-ND	2.46	2.28	1.98	1421A
Nickel plated 10-32 x 0.625” countersunk Phillips head	100	HM827-ND	14.28	13.19	11.43	1421A100B
Black plastic cup washer for countersunk 10-32 screws	100	HM828-ND	25.97	23.97	20.78	1421A100W
Nickel plated cup washer for countersunk 10-32 screws	100	HM829-ND	10.53	9.73	8.43	1421E100W
10-32 clip nuts for all panel rails	25	HM830-ND	11.32	10.45	9.06	1421N25

Plastic and Aluminum Enclosures

Fig. 1 – Plastic Instrument Enclosures - 1591 Series

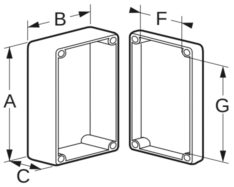


Lid adds 4mm to height of box. For dimensions A, B and C, see charts below.

	Dim. Inch (mm)	
Part No.	**J**	**K**
1591L	1.4 (36)	2.5 (64)
1591A	1.1 (28)	3.1 (79)
1591B	1.6 (41)	3.5 (89)
1591C	1.7 (43)	3.9 (99)
1591D	2.3 (58)	5.0 (127)
1591E	3.5 (89)	6.6 (168)
1591G	2.8 (71)	3.9 (99)
1591H	1.9 (48)	5.6 (142)
1591M	1.3 (33)	2.5 (64)
1591S	2.4 (61)	3.5 (89)
1591T	2.3 (58)	3.9 (99)
1591U	3.9 (99)	3.9 (99)
1591V	3.9 (99)	3.9 (99)

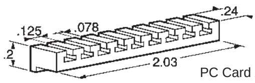
Available in both High Impact Polystyrene (black) and in Flame Retardant ABS (black, blue, translucent blue, or light grey). Economical styrene versions come with four self-tapping #4 x 1/2" (12.7mm) flat head screws countersunk into the lid. ABS versions carry a UL flammability rating of 94V-0 at 1.47mm thickness and a continuous use temperature rating of 60°C. ABS versions come with M3 x .5 x 10mm Phillips head screws, countersunk lid, and integral tapped brass bushings. Both versions have interlocking flanged lid and integral card guides to accept .062" (1.57mm) PC cards.

Fig. 2 – Diecast Aluminum Enclosures



Lid adds 4mm to height of box (except for 1500Z series). For dimensions A, B, and C, see charts below.

Lid Height for 1590 Heavy Duty Watertight Diecast Aluminum Alloy Enclosure	
Part No.	**Dim. Inch (mm)**
1590Z100	0.5 (13)
1590Z110	0.5 (13)
1590Z120	0.6 (15)
1590Z130	0.5 (13)
1590Z135	0.8 (20)
1590Z150	0.8 (20)
1590Z160	0.8 (20)



PC Card Adapter

	Dim. - Inch (mm)	
Part No.	**F**	**G**
1590A	0.9 (23)	3.0 (76)
1590B	1.7 (43)	3.8 (97)
1590BB	3.1 (77)	4.0 (102)
1590C	3.1 (77)	4.1 (104)
1590D	4.1 (104)	6.8 (173)
1590DD	4.1 (104)	6.8 (173)
1590E	4.1 (104)	6.8 (173)
1590F	6.8 (173)	6.8 (173)
1590H	0.9 (23)	1.4 (36)
1590J	3.1 (79)	5.1 (130)
1590K	4.3 (109)	4.3 (109)
1590LB	1.4 (36)	1.4 (36)
1590P1	2.9 (74)	5.4 (137)
1590S	2.6 (66)	3.7 (94)
1590T	2.5 (64)	4.1 (104)
1590U	4.1 (104)	4.1 (104)
1590V	4.1 (104)	4.1 (104)
1590G	1.3 (33)	3.3 (84)
1590N1	1.9 (48)	4.1(104)
1590R1	4.0 (102)	6.9 (175)

1590 Series: Drilled and tapped with lid and 6-32 x 1/2" (12.7mm) countersunk Phillips screws. Choice of standard, flanged or watertight lid. Interlocking flanged lid provides complete RF shielding. Watertight lid has a clear bead of rubberlike silicon around the perimeter to provide protection against dust and water. Designed to meet IP54.

1590Z Series: Watertight, heavy duty - thick wall. Two piece "tongue and groove" construction with a neoprene gasket provides protection against dust and water. Four recessed stainless steel machine screws and individual neoprene "O" rings secure lid. Optional M4x6mm copper grounding screws with designated enclosures. Designed to meet IP65.

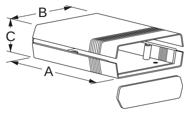
	Dimensions - Inch (mm)			Digi-Key	Price Each			Hammond
Color	**A**	**B**	**C**	**Part No.**	**1**	**10**	**100**	**Part No.**
Fig. 1 - 1591 Economy Styrene Plastic Enclosures								
Black	3.3 (85)	2.2 (56)	1.4 (35)	HM100-ND	3.42	2.85	2.64	1591LSBK
	3.3 (85)	2.2 (56)	0.8 (21)	HM361-ND	2.88	2.40	2.22	1591MSBK
	3.9 (100)	2.0 (50)	0.8 (21)	HM102-ND	3.18	2.65	2.45	1591ASBK
	4.3 (110)	3.2 (82)	1.6 (41)	HM109-ND	4.63	3.87	3.58	1591SSBK
	4.4 (112)	2.4 (62)	1.1 (27)	HM103-ND	3.44	2.87	2.65	1591BSBK
	4.7 (120)	2.6 (65)	1.4 (36)	HM104-ND	3.64	3.04	2.80	1591CSBK
	4.7 (120)	3.2 (80)	2.2 (56)	HM110-ND	5.10	4.26	3.93	1591TSBK
	4.7 (120)	4.7 (120)	2.2 (56)	HM111-ND	5.48	4.57	4.23	1591USBK
	4.7 (120)	4.7 (120)	3.5 (90)	HM112-ND	6.56	5.47	5.05	1591VSBK
	4.8 (121)	3.7 (94)	1.2 (30)	HM107-ND	4.32	3.61	3.33	1591GSBK
	5.9 (150)	3.2 (80)	1.8 (46)	HM105-ND	5.42	4.52	4.18	1591DSBK
	6.5 (165)	2.8 (71)	1.0 (25)	HM108-ND	4.30	3.59	3.31	1591HSBK
	7.5 (191)	4.3 (110)	2.2 (56)	HM106-ND	6.48	5.41	4.99	1591ESBK
Fig. 1 - 1591 ABS Flame Retardant Plastic Enclosures								
Black	3.3 (85)	2.2 (56)	1.4 (35)	HM113-ND	5.46	4.56	4.21	1591LBK
	3.3 (85)	2.2 (56)	0.8 (21)	HM362-ND	4.32	3.61	3.33	1591MBK
	3.3 (85)	2.2 (56)	1.4 (35)	HM847-ND	5.74	4.79	4.42	1591LFLBK
	3.3 (85)	2.2 (56)	0.8 (21)	HM848-ND	4.54	3.79	3.49	1591MFLBK
	3.9 (100)	2.0 (50)	0.8 (21)	HM114-ND	5.08	4.24	3.91	1591ABK
	3.9 (100)	2.0 (50)	0.8 (21)	HM858-ND	5.34	4.45	4.11	1591AFLBK
	4.3 (110)	3.2 (82)	1.6 (41)	HM849-ND	7.76	6.47	5.97	1591SFLBK
	4.3 (110)	3.2 (82)	1.6 (41)	HM121-ND	7.40	6.17	5.70	1591SBK
	4.4 (112)	2.4 (62)	1.1 (27)	HM850-ND	5.78	4.82	4.45	1591BFLBK
	4.4 (112)	2.4 (62)	1.1 (27)	HM115-ND	5.50	4.58	4.23	1591BBK
	4.7 (120)	4.7 (120)	3.5 (90)	HM854-ND	11.00	9.17	8.47	1591VFLBK
	4.7 (120)	4.7 (120)	2.2 (56)	HM853-ND	9.20	7.67	7.08	1591UFLBK
	4.7 (120)	2.6 (65)	1.4 (36)	HM851-ND	6.14	5.12	4.73	1591CFLBK
	4.7 (120)	3.2 (80)	2.2 (56)	HM852-ND	8.58	7.16	6.61	1591TFLBK
	4.8 (121)	3.7 (94)	1.2 (30)	HM855-ND	7.26	6.06	5.59	1591GFLBK
	4.7 (120)	2.6 (65)	1.4 (36)	HM116-ND	5.86	4.89	4.51	1591CBK
	4.7 (120)	3.2 (80)	2.2 (56)	HM122-ND	8.18	6.83	6.30	1591TBK
	4.7 (120)	4.7 (120)	2.2 (56)	HM123-ND	8.76	7.31	6.74	1591UBK
	4.7 (120)	4.7 (120)	3.5 (90)	HM124-ND	10.48	8.74	8.07	1591VBK
	4.8 (121)	3.7 (94)	1.2 (30)	HM119-ND	6.92	5.77	5.32	1591GBK
	5.9 (150)	3.2 (80)	1.8 (46)	HM856-ND	9.08	7.57	6.99	1591DFLBK
	5.9 (150)	3.2 (80)	1.8 (46)	HM117-ND	8.66	7.22	6.67	1591DBK
	6.5 (165)	2.8 (71)	1.0 (25)	HM120-ND	6.88	5.73	5.29	1591HBK
	6.5 (165)	2.8 (71)	1.0 (25)	HM859-ND	7.22	6.02	5.56	1591HFLBK
	7.5 (191)	4.3 (110)	2.2 (56)	HM857-ND	10.90	9.08	8.39	1591EFLBK
	7.5 (191)	4.3 (110)	2.2 (56)	HM118-ND	10.38	8.65	7.99	1591EBK
Blue	3.3 (85)	2.2 (56)	1.4 (35)	HM125-ND	5.46	4.56	4.21	1591LBU
	3.3 (85)	2.2 (56)	0.8 (21)	HM363-ND	4.32	3.61	3.33	1591MBU
	3.9 (100)	2.0 (50)	0.8 (21)	HM126-ND	5.08	4.24	3.91	1591ABU
	4.3 (110)	3.2 (82)	1.6 (41)	HM134-ND	7.40	6.17	5.70	1591SBU
	4.4 (112)	2.4 (62)	1.1 (27)	HM127-ND	5.50	4.58	4.23	1591BBU
	4.7 (120)	2.6 (65)	1.4 (36)	HM128-ND	5.86	4.89	4.51	1591CBU
	4.7 (120)	3.2 (80)	2.2 (56)	HM135-ND	8.18	6.83	6.30	1591TBU
	4.7 (120)	4.7 (120)	2.2 (56)	HM136-ND	8.76	7.31	6.74	1591UBU
	4.7 (120)	4.7 (120)	3.5 (90)	HM137-ND	10.48	8.74	8.07	1591VBU
	4.8 (121)	3.7 (94)	1.2 (30)	HM132-ND	6.92	5.77	5.32	1591GBU
	5.9 (150)	3.2 (80)	1.8 (46)	HM129-ND	8.66	7.22	6.67	1591DBU
	6.5 (165)	2.8 (71)	1.0 (25)	HM133-ND	6.88	5.73	5.29	1591HBU
	7.5 (191)	4.3 (110)	2.2 (56)	HM131-ND	10.38	8.65	7.99	1591EBU
Lt. Grey	3.3 (85)	2.2 (56)	1.4 (35)	HM138-ND	5.46	4.56	4.21	1591LGY
	3.3 (85)	2.2 (56)	0.8 (21)	HM364-ND	4.32	3.61	3.33	1591MGY
	3.9 (100)	2.0 (50)	0.8 (21)	HM139-ND	5.08	4.24	3.91	1591AGY
	4.3 (110)	3.2 (82)	1.6 (41)	HM146-ND	7.40	6.17	5.70	1591SGY
	4.4 (112)	2.4 (62)	1.1 (27)	HM140-ND	5.50	4.58	4.23	1591BGY
	4.7 (120)	2.6 (65)	1.4 (36)	HM141-ND	5.86	4.89	4.51	1591CGY
	4.7 (120)	3.2 (80)	2.2 (56)	HM147-ND	8.18	6.83	6.30	1591TGY
	4.7 (120)	4.7 (120)	2.2 (56)	HM148-ND	8.76	7.31	6.74	1591UGY
	4.7 (120)	4.7 (120)	3.5 (90)	HM149-ND	10.48	8.74	8.07	1591VGY
	4.8 (121)	3.7 (94)	1.2 (30)	HM144-ND	6.92	5.77	5.32	1591GGY
	5.9 (150)	3.2 (80)	1.8 (46)	HM142-ND	8.66	7.22	6.67	1591DGY
	6.5 (165)	2.8 (71)	1.0 (25)	HM145-ND	6.88	5.73	5.29	1591HGY
	7.5 (191)	4.3 (110)	2.2 (56)	HM143-ND	10.38	8.65	7.99	1591EGY

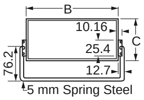
	Dimensions - Inch (mm)			Digi-Key	Price Each			Hammond
Color	**A**	**B**	**C**	**Part No.**	**1**	**10**	**100**	**Part No.**
Fig. 1 - 1591 Translucent Polycarbonate Enclosures								
Ice Blue	3.9 (100)	2.0 (50)	0.8 (21)	HM878-ND	5.08	4.24	3.91	1591ATBU
	4.4 (112)	2.4 (62)	1.1 (27)	HM876-ND	5.50	4.58	4.23	1591BTBU
	4.7 (120)	2.6 (65)	1.4 (36)	HM877-ND	5.86	4.89	4.51	1591CTBU
Fig. 2 - PC Card Adapter								
PC Card Adapter for 1591 Boxes				HM204-ND	2.26	1.91	1.78	1591Z6
Fig. 2 - 1590 Diecast Aluminum Alloy Enclosures								
Un-painted	2.0 (51)	2.0 (51)	1.1 (28)	HM157-ND	7.44	6.21	5.73	1590LB
	2.1 (53)	1.5 (38)	1.1 (28)	HM365-ND	6.40	5.34	4.93	1590H
	3.6 (91)	1.5 (38)	1.1 (28)	HM150-ND	7.22	6.02	5.56	1590A
	3.9 (99)	2.0 (51)	0.8 (20)	HM841-ND	7.72	6.44	5.94	1590G
	4.4 (112)	3.2 (81)	1.6 (41)	HM158-ND	10.88	9.07	8.38	1590S
	4.4 (112)	2.3 (58)	1.1 (28)	HM151-ND	8.24	6.87	6.34	1590B
	4.7 (119)	3.7 (94)	1.2 (30)	HM152-ND	10.72	8.94	8.25	1590BB
	4.7 (119)	4.7 (119)	2.2 (56)	HM160-ND	16.48	13.73	12.68	1590U
	4.7 (119)	4.7 (119)	3.5 (89)	HM161-ND	22.66	18.88	17.43	1590V
	4.7 (119)	3.7 (94)	2.1 (53)	HM153-ND	12.06	10.05	9.28	1590C
	4.7 (119)	3.1 (79)	2.2 (56)	HM159-ND	11.22	9.36	8.64	1590T
	4.8 (122)	2.6 (66)	1.4 (36)	HM842-ND	11.24	9.37	8.65	1590N1
	4.9 (124)	4.9 (124)	3.0 (76)	HM367-ND	20.60	17.17	15.85	1590K
	5.7 (145)	3.7 (94)	1.8 (45)	HM366-ND	12.66	10.56	9.75	1590J
	6.0 (152)	3.2 (81)	1.8 (45)	HM348-ND	14.72	12.27	11.33	1590P1
	7.4 (188)	4.7 (119)	2.1 (53)	HM154-ND	19.74	16.46	15.19	1590D
	7.4 (188)	4.7 (119)	3.1 (79)	HM155-ND	21.12	17.61	16.25	1590E
	7.4 (188)	7.4 (188)	2.5 (64)	HM156-ND	28.38	23.66	21.84	1590F
	7.4 (188)	4.7 (119)	1.3 (33)	HM347-ND	17.36	14.47	13.36	1590DD
	7.6 (193)	4.4 (112)	2.2 (56)	HM843-ND	23.62	19.69	18.18	1590R1
Fig. 2 - 1590 Flanged Lid Diecast Aluminum Alloy Enclosures								
Un-painted	2.0 (51)	2.0 (51)	1.1 (28)	HM570-ND	8.18	6.82	6.29	1590LBFL
	3.7 (94)	1.5 (38)	1.1 (28)	HM571-ND	7.94	6.62	6.11	1590AFL
	3.9 (99)	2.0 (51)	0.8 (20)	HM879-ND	8.50	7.09	6.54	1590GFL
	4.4 (112)	3.2 (81)	1.6 (41)	HM575-ND	11.96	9.97	9.20	1590SFL
	4.4 (112)	2.3 (58)	1.1 (28)	HM572-ND	9.06	7.55	6.97	1590BFL
	4.7 (119)	3.7 (94)	1.2 (30)	HM573-ND	11.78	9.82	9.06	1590BBFL
	4.7 (119)	4.7 (119)	2.2 (56)	HM580-ND	18.12	15.11	13.94	1590UFL
	4.7 (119)	4.7 (119)	3.5 (89)	HM583-ND	24.92	20.77	19.17	1590VFL
	4.7 (119)	3.7 (94)	2.1 (53)	HM578-ND	13.26	11.06	10.21	1590CFL
	4.7 (119)	3.1 (79)	2.2 (56)	HM579-ND	12.34	10.29	9.50	1590TFL
	4.8 (122)	2.6 (66)	1.4 (36)	HM881-ND	11.44	9.54	8.80	1590N1FL
	6.0 (152)	3.2 (81)	1.8 (45)	HM576-ND	16.20	13.50	12.46	1590P1FL
	7.4 (188)	4.7 (119)	2.1 (53)	HM577-ND	21.70	18.09	16.70	1590DFL
	7.4 (188)	7.4 (188)	2.5 (64)	HM581-ND	31.22	26.02	24.02	1590FFL
	7.4 (188)	4.7 (119)	3.1 (79)	HM582-ND	23.22	19.36	17.87	1590EFL
	7.4 (188)	4.7 (119)	1.3 (33)	HM574-ND	19.10	15.92	14.70	1590DDFL
	7.6 (193)	4.4 (112)	2.2 (56)	HM880-ND	26.00	21.67	20.01	1590R1FL
Fig. 2 - 1590 Watertight Diecast Aluminum Alloy Enclosures								
Un-painted	2.0 (51)	2.0 (51)	1.1 (28)	HM584-ND	8.14	6.79	6.27	1590WLB
	2.1 (53)	1.5 (38)	1.1 (28)	HM835-ND	7.14	5.96	5.50	1590WH
	3.6 (91)	1.5 (38)	1.1 (28)	HM585-ND	8.32	6.94	6.40	1590WA
	3.9 (99)	2.0 (51)	0.8 (20)	HM837-ND	7.72	6.44	5.94	1590WG
	4.4 (112)	3.2 (81)	1.6 (41)	HM589-ND	12.04	10.04	9.26	1590WS
	4.4 (112)	2.3 (58)	1.1 (28)	HM586-ND	9.44	7.87	7.27	1590WB
	4.7 (119)	3.7 (94)	1.2 (30)	HM587-ND	11.94	9.96	9.19	1590WBB
	4.7 (119)	4.7 (119)	2.2 (56)	HM594-ND	17.92	14.93	13.79	1590WU
	4.7 (119)	4.7 (119)	3.5 (89)	HM597-ND	24.08	20.07	18.52	1590WV
	4.7 (119)	3.7 (94)	2.1 (53)	HM592-ND	13.20	11.00	10.16	1590WC
	4.7 (119)	3.1 (79)	2.2 (56)	HM593-ND	12.38	10.32	9.52	1590WT
	4.8 (122)	2.6 (66)	1.4 (36)	HM840-ND	13.28	11.07	10.22	1590WN1
	4.9 (124)	4.9 (124)	3.0 (76)	HM838-ND	22.06	18.39	16.97	1590WK
	5.7 (145)	3.7 (94)	1.8 (45)	HM839-ND	13.86	11.55	10.66	1590WJ
	6.0 (152)	3.2 (81)	1.8 (45)	HM590-ND	16.22	13.52	12.48	1590WP1
	7.4 (188)	4.7 (119)	2.1 (53)	HM591-ND	21.36	17.80	16.43	1590WD
	7.4 (188)	7.4 (188)	2.5 (64)	HM595-ND	30.58	25.49	23.53	1590WF
	7.4 (188)	4.7 (119)	3.1 (79)	HM596-ND	22.74	18.95	17.49	1590WE
	7.4 (188)	4.7 (119)	1.3 (33)	HM588-ND	19.02	15.85	14.64	1590WDD
	7.6 (193)	4.4 (112)	2.2 (56)	HM833-ND	26.00	21.67	20.01	1590WR1

(Continued)

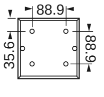
Plastic and Aluminum Enclosures *(Cont.)*

Fig. 3 – Plastic Instrument Cases - 1598 Series





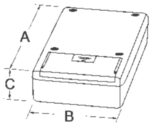
Example of case with optional tilt handle.



Example of Digi-Key Part #1598E mounting bosses.

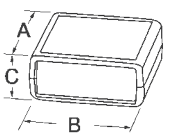
Available in both Flame Retardant ABS (black or light grey) and High Impact Polystyrene (light grey). Both versions have a matte textured finish, .064" (1.63mm) thick brushed aluminum front and rear panels, integral horizontal PC board mounts on Eurocard centers, front and rear vertical PC board slots. Both versions accept optional tilt handles. ABS versions carry a UL flammability rating of 94V-0 and are secured with M3 x .5 x 10mm Phillips head screws into integral brass bushings. Styrene versions are secured with #4 x 1/2" (12.7mm) self-tapping screws.

Fig. 4 – Plastic Hand Held Cases - 1599 Series

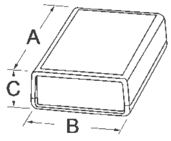


Available in both High Impact Polystyrene (light grey) and Flame Retardant ABS (black or light grey). Both versions have these features: attractively styled and ergonomically designed for use as a hand held enclosure; ends sized for infra-red applications; extra deep top and ultra shallow base; two piece lap joint construction; recessed top area ideal for membrane display; internal universal battery compartment; user friendly 10mm x 10mm reference grid is molded into the top interior; six PC board mounting bosses molded into both the top and the base; vertical mounting slots molded into the top for PC boards or optional dividers. ABS versions carry UL flammability rating of 94V-0 and are secured with integral tapped brass bushings. Styrene versions are secured with self-tapping screws.

Fig. 5 – Plastic Hand Held Instrument Boxes -1593 Series



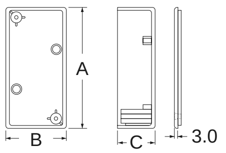
1593K



1593Q

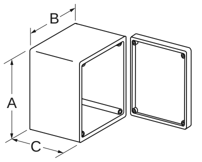
Electronic instrument enclosures. Two-piece lap joint construction. ABS plastic. Unit is secured with self-tapping screws.

Fig. 6 – Miniature General Purpose Enclosures - 1551 Series



Two piece lap joint construction. Choice of black or grey ABS plastic. Designed to meet IP54.

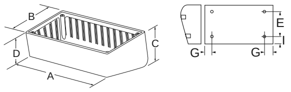
Fig. 7 – Plastic Instrument Boxes - 1594 Series



Cover adds 12mm to height

Available in both High Impact Polystyrene (light grey) and Flame Retardant ABS (black or light grey). Both versions feature lap joint construction, interlocking flange on lid, and a rugged and robust design.

Fig. 8 – Plastic Instrument Consoles - 1595 Series



Part No.	Dimensions			
	D	E	G	I
1595C	39.6	62.2	21.8	10.2
1595E	51.6	85.1	21.8	10.2

Aluminum lid and rubber feet included.

For dimensions A, B and C, see charts below.

Available in Flame Retardant ABS (black or light grey) which meets UL 94V-0 flammability tests. Unique sloped front design comes with 0.04" (1.02mm) thick brushed aluminum front panel, four self-adhesive rubber feet, and four M3 x .5 x 10mm machine screws threaded into integral brass bushings. Integral card guides accept .062" (1.57mm) PC boards. Base has four internal 0.20" (5.08mm) stand-off bosses.

Color	Dimensions - Inch (mm)			Digi-Key	Price Each			Hammond
	A	B	C	Part No.	1	10	100	Part No.
Fig. 2 - 1590 Heavy Duty Watertight Diecast Aluminum Alloy Enclosures								
Un-painted	2.0 (50)	1.8 (46)	1.0 (25)	HM834-ND	8.44	7.14	6.63	1590Z060
	2.5 (64)	2.3 (58)	1.0 (25)	HM836-ND	11.41	9.67	8.98	1590Z061
	3.0 (76)	3.1 (79)	1.6 (41)†	HM598-ND⁎	16.68	14.11	13.11	1590Z100
	2.9 (75)	3.1 (80)	1.6 (41)†	HM599-ND	16.68	14.11	13.11	1590Z110
	3.9 (99)	2.5 (64)	1.0 (25)	HM831-ND	13.49	11.42	10.60	1590Z062
	4.8 (121)	4.7 (120)	2.4 (62)	HM845-ND	36.71	31.07	28.85	1590Z119
	4.9 (124)	3.2 (81)	1.7 (43)†	HM600-ND⁎	20.22	17.11	15.89	1590Z120
	5.9 (150)	2.5 (64)	1.0 (25)	HM832-ND	19.67	16.65	15.46	1590Z063
	6.3 (160)	6.3 (160)	2.8 (71)†	HM604-ND⁎‡	48.69	41.20	38.27	1590Z160
	6.9 (175)	3.2 (81)	1.6 (41)†	HM601-ND	23.96	20.28	18.83	1590Z130
	6.9 (175)	3.2 (81)	1.6 (41)†	HM602-ND‡	24.35	20.60	19.13	1590Z135
	8.7 (221)	4.8 (120)	2.4 (61)†	HM603-ND⁎	44.02	37.25	34.59	1590Z150
	7.9 (201)	9.1 (231)	3.6 (91)	HM846-ND	106.75	90.32	83.88	1590Z231
	10.2 (259)	6.3 (160)	2.8 (71)	HM844-ND	66.11	55.95	51.95	1590Z162
Fig. 3 - 1598 ABS Flame Retardant 2-Piece Plastic Instrument Case								
Black	5.3 (135)	5.3 (135)	2.0 (50)	HM163-ND	11.00	9.17	8.46	1598BBK
	6.2 (157)	3.7 (94)	1.4 (36)	HM162-ND	10.02	8.36	7.71	1598ABK
	6.3 (160)	6.3 (160)	3.4 (86)	HM166-ND	16.52	13.77	12.71	1598EBK
	7.1 (180)	6.1 (155)	1.4 (36)	HM368-ND	11.16	9.31	8.59	1598BBBK
	7.1 (180)	6.1 (155)	2.0 (50)	HM164-ND	13.76	11.47	10.59	1598CBK
	7.1 (180)	8.1 (206)	2.5 (64)	HM165-ND	16.80	14.01	12.93	1598DBK
	9.8 (249)	6.3 (160)	1.6 (41)	HM167-ND	17.64	14.70	13.57	1598FBK
	9.8 (249)	6.3 (160)	3.0 (76)	HM168-ND	20.68	17.24	15.91	1598GBK
	11.0 (279)	7.9 (201)	1.6 (41)	HM169-ND	21.70	18.09	16.70	1598HBK
	11.0 (279)	7.9 (201)	3.0 (76)	HM170-ND	26.90	22.43	20.70	1598JBK
Lt. Grey	5.3 (135)	5.3 (135)	2.0 (50)	HM172-ND	11.00	9.17	8.46	1598BGY
	6.2 (157)	3.7 (94)	1.4 (36)	HM171-ND	10.02	8.36	7.71	1598AGY
	7.1 (180)	6.1 (155)	1.4 (36)	HM369-ND	11.16	9.31	8.59	1598BBGY
	7.1 (180)	6.1 (155)	2.0 (50)	HM173-ND	13.76	11.47	10.59	1598CGY
	7.1 (180)	8.1 (206)	2.5 (64)	HM174-ND	16.80	14.01	12.93	1598DGY
	6.3 (160)	6.3 (160)	3.4 (86)	HM175-ND	16.52	13.77	12.71	1598EGY
	9.8 (249)	6.3 (160)	1.6 (41)	HM176-ND	17.64	14.70	13.57	1598FGY
	9.8 (249)	6.3 (160)	3.0 (76)	HM177-ND	20.68	17.24	15.91	1598GGY
	11.0 (279)	7.9 (201)	1.6 (41)	HM178-ND	21.70	18.09	16.70	1598HGY
	11.0 (279)	7.9 (201)	3.0 (76)	HM179-ND	26.90	22.43	20.70	1598JGY
Fig. 3 - 1598 Styrene 2-Piece Plastic Instrument Cases								
Lt. Grey	5.3 (135)	5.3 (135)	2.0 (50)	HM246-ND	8.24	6.87	6.34	1598BSGY
	6.2 (157)	3.7 (94)	1.4 (36)	HM245-ND	7.36	6.14	5.67	1598ASGY
	6.3 (160)	6.3 (160)	3.4 (86)	HM249-ND	11.52	9.60	8.87	1598ESGY
	7.1 (180)	6.1 (155)	1.4 (36)	HM370-ND	8.90	7.43	6.86	1598BBSGY
	7.1 (180)	6.1 (155)	2.0 (50)	HM247-ND	9.66	8.06	7.44	1598CSGY
	7.1 (180)	8.1 (206)	2.5 (64)	HM248-ND	11.58	9.65	8.91	1598DSGY
	9.8 (249)	6.3 (160)	1.6 (41)	HM250-ND	11.28	9.41	8.69	1598FSGY
	9.8 (249)	6.3 (160)	3.0 (76)	HM251-ND	13.22	11.02	10.17	1598GSGY
	11.0 (279)	7.9 (201)	1.6 (41)	HM252-ND	13.20	11.01	10.16	1598HSGY
	11.0 (279)	7.9 (201)	3.0 (76)	HM253-ND	15.38	12.82	11.84	1598JSGY
Chrome Plated Tilt Handles for Instrument Cases								
Handle for 1598C, E, F, G Series				HM255-ND	11.48	9.58	8.84	1598TH1
Handle for 1598D, H, J Series				HM256-ND	11.48	9.58	8.84	1598TH2
Fig. 4 - 1599 Styrene Hand Held Cases								
Grey	5.1 (130)	2.6 (66)	1.0 (25)	HM209-ND	5.40	4.50	4.16	1599BSGY
	6.7 (170)	3.4 (86)	1.3 (33)	HM210-ND	6.08	5.07	4.68	1599ESGY
	8.7 (221)	4.3 (109)	1.7 (43)	HM211-ND	6.98	5.82	5.37	1599HSGY
	8.7 (221)	5.5 (140)	1.2 (30)	HM873-ND	9.48	7.91	7.30	1599KSGY
Fig. 4 - 1599 ABS Hand Held Cases								
Black	5.1 (130)	2.6 (66)	1.0 (25)	HM212-ND	7.10	5.92	5.47	1599BBK
	6.7 (170)	3.4 (86)	1.3 (33)	HM213-ND	8.64	7.21	6.65	1599EBK
	8.7 (221)	4.3 (109)	1.7 (43)	HM214-ND	10.58	8.82	8.14	1599HBK
Lt. Grey	5.1 (130)	2.6 (66)	1.0 (25)	HM215-ND	7.10	5.92	5.47	1599BGY
	6.7 (170)	3.4 (86)	1.3 (33)	HM216-ND	8.64	7.21	6.65	1599EGY
	8.7 (221)	4.3 (109)	1.7 (43)	HM217-ND	10.58	8.82	8.14	1599HGY
Black	8.7 (221)	5.5 (140)	1.6 (41)	HM865-ND	11.34	9.45	8.73	1599KBK
Grey	8.7 (221)	5.5 (140)	1.6 (41)	HM866-ND	11.34	9.45	8.73	1599KGY

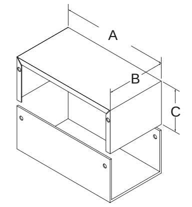
Color	Dimensions - Inch (mm)			Digi-Key	Price Each			Hammond
	A	B	C	Part No.	1	10	100	Part No.
Fig. 4 - 1599 ABS Hand Held Case with Battery Box								
Black	5.1 (130)	2.6 (66)	1.0 (25)	HM351-ND	8.96	7.47	6.89	1599BBKBAT
	6.7 (170)	3.4 (86)	1.3 (33)	HM353-ND	10.66	8.88	8.20	1599EBKBAT
	8.7 (221)	4.3 (109)	1.7 (43)	HM863-ND	14.42	12.02	11.09	1599HBKBAT
	8.7 (221)	5.5 (140)	1.6 (41)	HM864-ND	15.66	13.06	12.05	1599KBKBAT
Grey	5.1 (130)	2.6 (66)	1.0 (25)	HM352-ND	8.96	7.47	6.89	1599BGYBAT
	6.7 (170)	3.4 (86)	1.3 (33)	HM354-ND	10.66	8.88	8.20	1599EGYBAT
	8.7 (221)	4.3 (109)	1.7 (43)	HM871-ND	14.42	12.02	11.09	1599HGYBAT
	8.7 (221)	5.5 (140)	1.6 (41)	HM872-ND	15.66	13.06	12.05	1599KGYBAT
Fig. 4 - 1599 Styrene Plastic Case with Battery Box								
Grey	5.1 (130)	2.6 (66)	1.0 (25)	HM349-ND	6.84	5.70	5.26	1599BSGYBAT
	6.7 (170)	3.4 (86)	1.3 (34)	HM350-ND	7.92	6.60	6.09	1599ESGYBAT
	8.7 (221)	4.3 (109)	1.7 (43)	HM875-ND	11.94	9.96	9.19	1599HSGYBAT
	8.7 (221)	5.5 (140)	1.6 (41)	HM874-ND	12.89	10.74	9.91	1599KSGYBAT
Fig. 5 - 1593 ABS Plastic Hand Held Boxes								
Black	2.6 (66)	2.6 (66)	1.1 (28)	HM355-ND	2.16	1.80	1.66	1593KBK
	2.6 (66)	2.6 (66)	1.1 (28)	HM860-ND	2.16	1.80	1.66	1593JBK
	3.6 (92)	2.6 (66)	1.1 (28)	HM357-ND	3.10	2.59	2.39	1593PBK
	3.6 (92)	2.6 (66)	0.8 (20)	HM371-ND	2.88	2.40	2.22	1593SBK
	4.4 (112)	2.6 (66)	1.1 (28)	HM359-ND	3.48	2.91	2.68	1593QBK
	4.4 (112)	2.6 (66)	0.8 (20)	HM372-ND	3.28	2.74	2.53	1593TBK
	4.5 (114)	1.4 (36)	1.0 (25)	HM861-ND	3.22	2.68	2.48	1593DBK
	5.5 (140)	2.6 (66)	1.1 (28)	HM862-ND	4.02	3.36	3.10	1593YBK
Grey	2.6 (66)	2.6 (66)	1.1 (28)	HM356-ND	2.16	1.80	1.66	1593KGY
	2.6 (66)	2.6 (66)	1.1 (28)	HM867-ND	2.16	1.80	1.66	1593JGY
	3.6 (92)	2.6 (66)	1.1 (28)	HM358-ND	3.10	2.59	2.39	1593PGY
	3.6 (92)	2.6 (66)	0.8 (20)	HM373-ND	2.88	2.40	2.22	1593SGY
	4.4 (112)	2.6 (66)	1.1 (28)	HM360-ND	3.48	2.91	2.68	1593QGY
	4.4 (112)	2.6 (66)	0.8 (20)	HM374-ND	3.28	2.74	2.53	1593TGY
	4.5 (114)	1.4 (36)	1.0 (25)	HM868-ND	3.22	2.68	2.48	1593DGY
	5.5 (140)	2.6 (66)	1.1 (28)	HM870-ND	4.02	3.36	3.10	1593XGY
	5.5 (140)	2.6 (66)	1.1 (28)	HM869-ND	4.02	3.36	3.10	1593YGY
Infrared Replacement Panels for 1593 Series								
Replacement Panel for 1593D Series				HM887-ND	.40	.34	.31	1593DIR10
Replacement Panel for 1593J, K, P, Q, Y, X Series				HM888-ND	.46	.39	.36	1593PIR10
Replacement Panel for 1593S, T Series				HM889-ND	.28	.24	.22	1593SIR10
Fig. 6 - 1551 ABS Plastic General Purpose Boxes								
Black	2.0 (50)	1.4 (35)	0.7 (18)	HM375-ND	1.04	.87	.80	1551GBK
	2.4 (60)	1.4 (35)	0.7 (18)	HM376-ND	1.18	.99	.91	1551HBK
	3.2 (80)	1.6 (40)	0.7 (18)	HM377-ND	1.24	1.04	.96	1551KBK
Lt. Grey	2.0 (50)	1.4 (35)	0.7 (18)	HM378-ND	1.04	.87	.80	1551GGY
	2.4 (60)	1.4 (35)	0.7 (18)	HM379-ND	1.18	.99	.91	1551HGY
	3.2 (80)	1.6 (40)	0.7 (18)	HM380-ND	1.24	1.04	.96	1551KGY
Fig. 7 - 1594 Styrene Plastic Instrument Boxes								
Lt. Grey	2.2 (56)	2.2 (56)	1.1 (28)	HM221-ND	3.72	3.10	2.86	1594ASGY
	3.2 (81)	2.2 (56)	1.1 (28)	HM222-ND	3.92	3.27	3.02	1594BSGY
	4.1 (105)	2.6 (66)	1.3 (33)	HM223-ND	4.28	3.57	3.30	1594CSGY
	5.2 (131)	2.6 (66)	1.7 (43)	HM224-ND	4.58	3.82	3.53	1594DSGY
	6.6 (167)	4.2 (107)	2.1 (53)	HM225-ND	5.96	4.97	4.59	1594ESGY
Fig. 7 - 1594 ABS Plastic Instrument Boxes								
Black	2.2 (56)	2.2 (56)	1.1 (28)	HM226-ND	6.48	5.41	4.99	1594ABK
	3.2 (81)	2.2 (56)	1.1 (28)	HM227-ND	6.78	5.65	5.22	1594BBK
	4.1 (105)	2.6 (66)	1.3 (33)	HM228-ND	8.34	6.95	6.42	1594CBK
	5.2 (131)	2.6 (66)	1.7 (43)	HM229-ND	9.92	8.28	7.64	1594DBK
Lt. Grey	2.2 (56)	2.2 (56)	1.1 (28)	HM231-ND	6.48	5.41	4.99	1594AGY
	3.2 (81)	2.2 (56)	1.1 (28)	HM232-ND	6.78	5.65	5.22	1594BGY
	4.1 (105)	2.6 (66)	1.3 (33)	HM233-ND	8.34	6.95	6.42	1594CGY
	5.2 (131)	2.6 (66)	1.7 (43)	HM234-ND	9.92	8.28	7.64	1594DGY
	6.6 (167)	4.2 (107)	2.1 (53)	HM230-ND	12.22	10.18	9.40	1594EBK
	6.6 (167)	4.2 (107)	2.1 (53)	HM235-ND	12.22	10.18	9.40	1594EGY

⁎ With mounting shelf ‡ With lid ground screw † Dimension "C" does not include lid height

(Continued)

Plastic and Aluminum Enclosures *(Cont.)*

Fig. 9 – Aluminum Utility Cases - 1411 Series

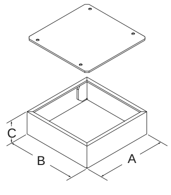


.040" (1.02mm) thick aluminum. Four self-tapping screws included. Choice of unpainted or ASA 61 grey baked enamel finish (outside only).

Fig. 10 – Heavy Duty Chassis Case and Cover Plates - 1444 Series

Cover No.	Use with Digi-Key #	Use with Hammond #
HM275-ND	HM257-ND	1444-6
HM276-ND	HM258-ND	1444-8
HM277-ND	HM259-ND	1444-9
	HM260-ND	1444-10
HM278-ND	HM261-ND	1444-12
HM279-ND	HM262-ND	1444-14
HM280-ND	HM263-ND	1444-15
	HM264-ND	1444-16
HM281-ND	HM265-ND	1444-18

Cover No.	Use with Digi-Key #	Use with Hammond #
HM282-ND	HM266-ND	1444-20
HM283-ND	HM267-ND	1444-22
	HM268-ND	1444-24
HM284-ND	HM269-ND	1444-26
	HM270-ND	1444-28
HM285-ND	HM271-ND	1444-29
HM286-ND	HM272-ND	1444-30
	HM273-ND	1444-32
	HM274-ND	1444-33



Cover sold separately.

Spot welded heavy duty construction chassis. Cover holes are punched with 4 holes (hardware not provided). Unpainted finish.

Fig. 11 – Metal Utility Cases - 1415 Series

Sizes A to E are 20 gauge 0.036" (.91mm) thick steel. Sizes F to J are 18 gauge 0.048" (1.22mm) thick steel. Self-tapping screws included. ASA 61 grey baked enamel finish (outside only). Models A to D have 4 mounting holes. Models E to J have 6 mounting holes

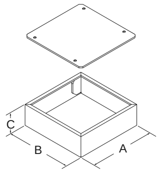
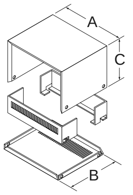


Fig. 12 – Ventilated Low Profile Instrument Cases -1426 Series



20 gauge steel enclosure finished in satin off-white. 0.064" (1.63mm) thick aluminum panels front and rear. Front panel is satin black, rear panel matches case color.

Fig. 13 – Low Profile Instrument Cases - 1458 Series

20 gauge steel case with black satin finish. 0.064" (1.63mm) thick aluminum panels (one satin black and one satin white for each case). Symmetrical design so either end can be front. 6-32 Phillips nickel plated screws and self-adhesive rubber feet included.

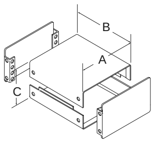
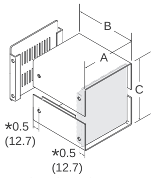


Fig. 14 – Ventilated High Profile Instrument Cases - 1401 Series

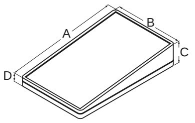
20 gauge steel case finished in satin off-white. 0.064" (1.63mm) thick aluminum panels, front finished in satin black; vented back finished in satin off-white. Rear panel is vented top and bottom 6-32 Phillips nickel plated screws and self-adhesive rubber feet included.



*Both end panels are recessed

Fig. 15 – Plastic Sloping Consoles - 1599 "T" Series

Available in High Impact Polystyrene (light grey) which is non-Flame Retardant and Flame Retardant ABS (light grey or black) which meets UL94V-O flammability tests. Flame Retardant ABS plastic versions include integral threaded brass inserts and machine screws providing extra strength for repeated assembly and disassembly of lid.



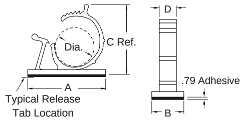
Dimensions - Inch (mm)	
Part No.	**D**
1599ETSBK	.72 (18)
1599HTSBK	.75 (19)
1599KTSBK	.67 (17)
1599KTLBK	.71 (18)
1599KTLBKBAT	.71 (18)

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Hammond Part No.
Fig. 8 - 1595 ABS Plastic Instrument Consoles								
Lt. Grey	6.3 (160)	3.8 (97)	2.3 (58)	HM241-ND	10.36	8.64	7.74	1595CGY
	8.5 (216)	5.1 (130)	3.0 (76)	HM242-ND	12.82	10.69	9.57	1595EGY
Black	6.3 (160)	3.8 (97)	2.3 (58)	HM243-ND	10.36	8.64	7.74	1595CBK
	8.5 (216)	5.1 (130)	3.0 (76)	HM244-ND	12.82	10.69	9.57	1595EBK
Fig. 9 - 1411 Aluminum Utility Cases								
Lt. Grey	2.7 (69)	2.2 (56)	1.6 (41)	HM315-ND	5.00	4.16	3.84	1411B
	3.2 (81)	2.2 (56)	1.1 (28)	HM316-ND	5.07	4.23	3.90	1411C
	3.2 (81)	2.2 (56)	1.6 (41)	HM317-ND	5.10	4.25	3.92	1411D
	4.0 (102)	2.2 (56)	3.0 (76)	HM318-ND	5.60	4.66	4.30	1411F
	4.0 (102)	2.2 (56)	1.6 (41)	HM319-ND	5.30	4.41	4.07	1411G
	4.0 (102)	2.2 (56)	2.2 (56)	HM320-ND	5.39	4.49	4.14	1411H
	5.0 (127)	2.2 (56)	2.2 (56)	HM321-ND	6.18	5.15	4.75	1411K
	5.0 (127)	4.0 (102)	3.0 (76)	HM322-ND	8.04	6.70	6.18	1411L
	5.0 (127)	3.0 (76)	2.2 (56)	HM324-ND	6.57	5.48	5.05	1411N
	6.0 (152)	3.0 (76)	3.0 (76)	HM323-ND	9.00	7.50	6.92	1411M
Fig. 9 - 1411 Aluminum Utility Cases								
Lt. Grey	6.0 (152)	5.0 (127)	4.0 (102)	HM325-ND	11.27	9.39	8.67	1411P
	7.0 (178)	5.0 (127)	3.0 (76)	HM326-ND	10.98	9.15	8.45	1411Q
	8.0 (203)	6.0 (152)	3.5 (89)	HM327-ND	18.00	15.00	13.85	1411R
	8.0 (203)	4.0 (102)	3.0 (76)	HM328-ND	16.50	13.75	12.69	1411S
	10.0 (254)	2.2 (56)	1.6 (41)	HM329-ND	18.08	15.06	13.90	1411T
	10.0 (254)	6.0 (152)	3.5 (89)	HM330-ND	21.92	18.26	16.86	1411U
	12.0 (305)	3.0 (76)	2.2 (56)	HM331-ND	21.00	17.50	16.16	1411W
	12.0 (305)	7.0 (178)	4.0 (102)	HM332-ND	26.25	21.88	20.19	1411X
	17.0 (432)	5.0 (127)	4.0 (102)	HM333-ND	28.50	23.75	21.93	1411Z
Un-painted	2.7 (69)	2.2 (56)	1.6 (41)	HM605-ND	3.24	2.70	2.49	1411BU
	3.2 (81)	2.2 (56)	1.1 (28)	HM606-ND	3.45	2.88	2.65	1411CU
	3.2 (81)	2.2 (56)	1.6 (41)	HM607-ND	3.72	3.10	2.86	1411DU
	4.0 (102)	2.2 (56)	3.0 (76)	HM608-ND	4.17	3.48	3.21	1411FU
	4.0 (102)	2.2 (56)	1.6 (41)	HM609-ND	4.02	3.35	3.09	1411GU
	4.0 (102)	2.2 (56)	2.2 (56)	HM610-ND	4.32	3.60	3.32	1411HU
	5.0 (127)	2.2 (56)	2.2 (56)	HM611-ND	5.36	4.46	4.12	1411KU
	5.0 (127)	4.0 (102)	3.0 (76)	HM612-ND	6.66	5.55	5.12	1411LU
	5.0 (127)	3.0 (76)	2.2 (56)	HM614-ND	5.29	4.41	4.07	1411NU
	6.0 (152)	3.0 (76)	3.0 (76)	HM613-ND	7.50	6.25	5.77	1411MU
	6.0 (152)	5.0 (127)	4 .0 (102)	HM615-ND	9.52	7.93	7.33	1411PU
	7.0 (178)	5.0 (127)	3.0 (76)	HM616-ND	6.39	5.33	4.92	1411QU
	8.0 (203)	6.0 (152)	3.5 (89)	HM617-ND	13.43	11.19	10.33	1411RU
	8.0 (203)	4.0 (102)	3.0 (76)	HM618-ND	12.00	10.00	9.23	1411SU
	10.0 (254)	2.2 (56)	1.6 (41)	HM619-ND	13.50	11.25	10.38	1411TU
	10.0 (254)	6.0 (152)	3.5 (89)	HM620-ND	16.86	14.05	12.97	1411UU
	12.0 (305)	3.0 (76)	2.2 (56)	HM621-ND	16.50	13.75	12.69	1411WU
	12.0 (305)	7.0 (178)	4.0 (102)	HM622-ND	21.36	17.80	16.43	1411XU
	17.0 (432)	5.0 (127)	4.0 (102)	HM623-ND	24.00	20.00	18.46	1411ZU
Fig. 10 - 1444 Heavy Duty Chassis Cases								
Un-painted	4.0 (102)	4.0 (102)	2.0 (51)	HM257-ND	7.91	6.69	6.21	1444-6
	6.0 (152)	4.0 (102)	2.0 (51)	HM258-ND	8.11	6.87	6.38	1444-8
	7.0 (178)	5.0 (127)	2.0 (51)	HM261-ND	8.86	7.50	6.96	1444-12
	8.0 (203)	4.0 (102)	1.0 (25)	HM259-ND	8.45	7.15	6.64	1444-9
	8.0 (203)	4.0 (102)	2.0 (51)	HM260-ND	8.66	7.33	6.80	1444-10
	9.0 (229)	5.0 (127)	2.0 (51)	HM262-ND	10.69	9.05	8.40	1444-14
	10.0 (254)	6.0 (152)	1.0 (25)	HM263-ND	9.33	7.89	7.33	1444-15
	10.0 (254)	6.0 (152)	2.0 (51)	HM264-ND	11.59	9.81	9.11	1444-16
Un-painted	12.0 (305)	8.0 (203)	2.0 (51)	HM267-ND	20.22	17.11	15.89	1444-22
	12.0 (305)	8.0 (203)	3.0 (76)	HM268-ND	20.45	17.31	16.07	1444-24
	12.0 (305)	10.0 (254)	2.0 (51)	HM271-ND	20.35	17.22	15.99	1444-29
	13.5 (343)	5.0 (127)	2.0 (51)	HM265-ND	12.27	10.38	9.64	1444-18
	16.0 (406)	8.0 (203)	2.0 (51)	HM269-ND	20.39	17.25	16.02	1444-26
	16.0 (406)	8.0 (203)	3.0 (76)	HM270-ND	24.27	20.54	19.07	1444-28
	17.0 (432)	4.0 (102)	3.0 (76)	HM266-ND	20.32	17.19	15.96	1444-20
	17.0 (432)	10.0 (254)	2.0 (51)	HM272-ND	23.59	19.96	18.54	1444-30
Fig. 10 - 1444 Heavy Duty Chassis Cases								
Un-painted	17.0 (432)	10.0 (254)	3.0 (76)	HM273-ND	27.61	23.37	21.70	1444-32
	17.0 (432)	10.0 (254)	4.0 (102)	HM274-ND	39.82	33.69	31.29	1444-33

Color	Dimensions - Inch (mm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Hammond Part No.
Fig. 10 - Cover Plates (See Fig. 9 Dia.)								
Un-painted	4.0 (102)	4.0 (102)	Panel Thickness	HM275-ND	3.82	3.23	3.00	1434-6
	6.0 (152)	4.0 (102)		HM276-ND	4.09	3.46	3.21	1434-8
	7.0 (178)	5.0 (127)		HM278-ND	4.01	3.39	3.15	1434-12
	8.0 (203)	4.0 (102)		HM277-ND	3.89	3.29	3.05	1434-10
	9.0 (229)	5.0 (127)		HM279-ND	4.09	3.46	3.21	1434-14
	10.0 (254)	6.0 (152)		HM280-ND	6.14	5.19	4.82	1434-16
	12.0 (305)	8.0 (203)		HM283-ND	8.66	7.33	6.80	1434-22
	12.0 (305)	10.0 (254)		HM285-ND	8.66	7.33	6.80	1434-29
	13.5 (343)	5.0 (127)		HM281-ND	6.55	5.54	5.14	1434-18
	16.0 (406)	8.0 (203)		HM284-ND	8.66	7.33	6.80	1434-26
	17.0 (432)	4.0 (102)		HM282-ND	6.61	5.60	5.20	1434-20
	17.0 (432)	10.0 (254)		HM286-ND	9.18	7.77	7.21	1434-30
Fig. 11 - 1415 Metal Utility Cases								
Grey	4.0 (102)	2.0 (51)	4.0 (102)	HM305-ND	10.87	9.20	8.54	1415A
	4.0 (102)	3.0 (76)	5.0 (127)	HM306-ND	11.05	9.35	8.68	1415B
	6.0 (152)	4.0 (102)	5.0 (127)	HM307-ND	14.05	11.88	11.04	1415C
	6.0 (152)	6.0 (152)	6.0 (152)	HM308-ND	21.55	18.23	16.93	1415D
	9.0 (229)	5.0 (127)	6.0 (152)	HM309-ND	23.33	19.74	18.33	1415E
	10.0 (254)	7.0 (178)	8.0 (203)	HM310-ND	35.29	29.86	27.73	1415F
	10.0 (254)	8.0 (203)	10.0 (254)	HM312-ND	45.44	38.45	35.70	1415H
	12.0 (305)	6.0 (152)	7.0 (178)	HM311-ND	35.10	29.70	27.58	1415G
	12.0 (305)	8.0 (203)	11.0 (279)	HM313-ND	51.22	43.34	40.24	1415I
	15.0 (383)	7.0 (179)	9.0 (230)	HM314-ND	50.15	42.44	39.42	1415J
Fig. 12 - 1426 Ventilated Low Profile Cases								
Off-White	6.0 (152)	5.0 (127)	4.0 (102)	HM297-ND	34.36	29.08	27.00	1426K
	8.0 (203)	6.0 (152)	4.0 (102)	HM298-ND	35.80	30.29	28.13	1426M
	10.0 (254)	7.0 (178)	4.0 (102)	HM299-ND	40.09	33.92	31.50	1426O
	11.0 (279)	11.7 (297)	5.5 (140)	HM300-ND	40.09	33.92	31.50	1426Q
	12.0 (305)	6.0 (152)	4.0 (102)	HM301-ND	42.95	36.35	33.75	1426S
	12.0 (305)	8.0 (203)	4.0 (102)	HM302-ND	42.95	36.35	33.75	1426V
	12.0 (305)	10.0 (254)	4.0 (102)	HM303-ND	45.82	38.77	36.00	1426W
	12.0 (305)	6.0 (152)	5.5 (140)	HM304-ND	42.95	36.35	33.75	1426Y
Fig. 13 - 1458 Low Profile Instrument Cases								
Black	4.0 (102)	4.0 (102)	3.0 (76)	HM334-ND	28.64	24.23	22.50	1458A3
	6.0 (152)	4.0 (102)	4.0 (102)	HM335-ND	31.75	26.86	24.95	1458B4
	6.0 (152)	6.0 (152)	3.0 (76)	HM336-ND	28.64	24.23	22.50	1458C3
	6.0 (152)	6.0 (152)	4.0 (102)	HM337-ND	29.60	25.05	23.26	1458C4
	8.0 (203)	8.0 (203)	3.0 (76)	HM338-ND	34.62	29.29	27.20	1458D3
	8.0 (203)	8.0 (203)	4.0 (102)	HM339-ND	36.52	30.90	28.70	1458D4
	8.0 (203)	8.0 (203)	5.0 (127)	HM340-ND	39.38	33.33	30.95	1458D5
	8.0 (203)	10.0 (254)	3.0 (76)	HM341-ND	37.47	31.71	29.44	1458E3
	8.0 (203)	10.0 (254)	4.0 (102)	HM342-ND	39.61	33.52	31.13	1458E4
	8.0 (203)	10.0 (254)	5.0 (127)	HM343-ND	41.77	35.34	32.82	1458E5
	10.0 (254)	8.0 (203)	3.0 (76)	HM344-ND	39.61	33.52	31.13	1458G3
	10.0 (254)	8.0 (203)	4.0 (102)	HM345-ND	42.95	36.35	33.75	1458G4
	10.0 (254)	8.0 (203)	5.0 (127)	HM346-ND	40.57	34.33	31.88	1458G5
Fig. 14 - 1401 Ventilated High Profile Cases								
Off-White	4.0 (102)	6.0 (152)	4.0 (102)	HM287-ND	39.09	33.08	30.71	1401AAA
	6.0 (152)	6.0 (152)	5.0 (127)	HM288-ND	42.10	35.62	33.08	1401AA
	6.0 (152)	10.0 (254)	5.0 (127)	HM289-ND	45.11	38.17	35.44	1401A
	8.0 (203)	10.0 (254)	9.0 (229)	HM290-ND	52.62	44.53	41.35	1401C
	8.0 (203)	8.0 (203)	8.0 (203)	HM291-ND	49.62	41.99	38.99	1401E
	10.0 (254)	12.0 (305)	9.0 (229)	HM292-ND	66.15	55.97	51.98	1401G
	10.0 (254)	14.0 (356)	6.5 (165)	HM293-ND	67.65	57.24	53.15	1401K
	12.0 (305)	8.0 (203)	9.0 (229)	HM294-ND	70.67	59.80	55.53	1401M
	14.0 (356)	8.0 (203)	9.0 (229)	HM295-ND	72.16	61.06	56.70	1401N
	14.0 (356)	10.0 (254)	5.0 (127)	HM296-ND	64.65	54.70	50.80	1401P
Fig. 15 - 1599 "T" Series Flame Retardant Styrene ABS Plastic Short Slope Console								
Black	3.4 (86)	6.7 (170)	1.3 (33)	HM882-ND	12.36	10.30	9.51	1599ETSBK
	4.3 (109)	8.7 (221)	1.8 (46))	HM883-ND	16.06	13.39	12.36	1599HTSBK
	5.5 (140)	8.7 (221)	1.6 (41)	HM884-ND	14.84	12.37	11.42	1599KTSBK
Fig. 15 - 1599 "T" Series Flame Retardant ABS Plastic Long Slope Console								
Black	8.7 (221)	5.5 (140)	1.6 (41)	HM885-ND	14.84	12.37	11.42	1599KTLBK
Fig. 15 - 1599 "T" Series Flame Retardant ABS Plastic Long Slope Console w/Battery Box								
Black	8.7 (221)	5.5 (140)	1.6 (41)	HM886-ND	18.54	15.45	14.26	1599KTLBKBAT

Richco Adjustable Kwik Klip

- 4 sizes adjust to any holding diameter from 5/16" to 1" (7.9-25.4mm)
- Locks securely, easily reopened for routing changes. Adhesive back
- Material: Nylon 6/6
- Color: Natural



Dia. Range (mm)	Dimensions (mm) A	B	C	D	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
7.87-10.16	25.40	19.05	22.10	10.16	RP309-ND	7.79	64.93	259.70	AKKL-3140A-RT
11.68-14.22	31.75	19.05	27.69	10.16	RP310-ND	9.74	81.17	324.68	AKKL-4756A-RT
14.48-19.05	38.10	19.05	31.75	12.70	RP311-ND	13.43	111.91	447.64	AKKL-5775A-RT
22.10-25.40	50.80	25.40	44.45	12.70	RP312-ND	15.20	126.66	506.62	AKKL-8710A-RT

Tie Holders

Fig. 1

- Multi-directional
- Material: Nylon 6/6, UV Stabilized Nylon 6/6

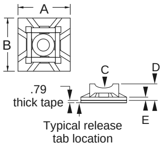
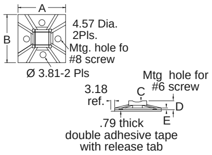


Fig. 2

- Ramp feature allows ties to pass through easily
- 4-way entry
- Material: Nylon 6/6, Adhesive, UV Stabilized Nylon 6/6



Digi-Key Part No.	Digi-Key Part No.	Description (mm) A	B	C	D	E	Tensile Force (kg)
RP301-ND	RP305-ND	19.05	19.05	6.35	6.10	1.52	6.72/11.20
RP302-ND	RP306-ND	25.40	25.40	11.68	7.11	1.78	18.66/22.39
RP303-ND	RP307-ND	38.10	38.10	10.92	7.62	2.03	44.79
RP304-ND	RP308-ND	50.80	50.80	10.92	7.62	2.03	44.79

Fig.	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
Nylon					
1	RP301-ND	4.19	34.95	139.78	FTH-5A-RT
1	RP302-ND	5.25	43.79	175.16	FTH-7A-RT
2	RP303-ND	12.70	105.81	423.22	FTH-8A-RT
2	RP304-ND	16.93	141.08	564.32	FTH-10A-RT
Ultra Violet – Exterior or Outdoor Use (Black)					
1	RP305-ND	4.61	38.44	153.76	FTH-5A-RT-UVB
1	RP306-ND	5.78	48.17	192.68	FTH-7A-RT-UVB
2	RP307-ND	13.97	116.39	465.54	FTH-8A-RT-UVB
2	RP308-ND	18.62	155.19	620.76	FTH-10A-RT-UVB

LED Spacers

- Spaces LED from surface of board
- Easily installed by hand
- Insulates and spaces leads
- Slots and holes for choice of mount
- Material for LEDS1E and LEDS2E: Nylon 6/6
- Color: Natural

Fig. 1

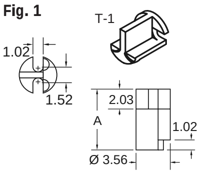


Fig. 2

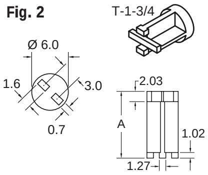
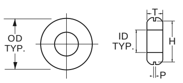


Fig.	Dim. A (mm)	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
1	4.57	RP500-ND	3.47	28.93	115.72	LEDS1E-3-01
	6.35	RP501-ND	3.67	30.57	122.28	LEDS1E-4-01
	12.70	RP502-ND	4.05	33.79	135.16	LEDS1E-8-01
	15.75	RP503-ND	4.15	34.62	138.46	LEDS1E-10-01
	19.05	RP504-ND	4.23	35.23	140.90	LEDS1E-12-01
2	4.57	RP505-ND	4.39	36.61	146.42	LEDS2E-3-01
	6.35	RP506-ND	4.59	38.24	152.94	LEDS2E-4-01
	12.70	RP507-ND	4.97	41.44	165.76	LEDS2E-8-01
	15.75	RP508-ND	5.06	42.13	168.50	LEDS2E-10-01
	19.05	RP509-ND	5.13	42.75	170.98	LEDS2E-12-01

Hole Grommet

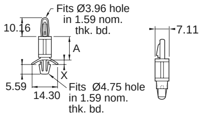
- Installs instantly
- Material: Flexible vinyl
- Color: Black



Inside Dia. ID (mm)	Hole Size H (mm)	Panel Thick. P (mm)	Outside Dia. OD (mm)	Grommet Thick. T (mm)	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
3.05	4.57	1.52	7.87	6.35	RP450-ND	1.53	12.73	50.90	HG-2
3.81	6.35	1.52	9.40	6.35	RP451-ND	1.57	13.11	52.44	HG-2.5
4.57	7.87	.76	10.92	4.57	RP452-ND	1.73	14.40	57.58	HG-3
5.33	7.87	1.52	10.92	5.33	RP453-ND	1.93	16.05	64.20	HG-3.5
6.35	9.40	2.29	14.22	7.11	RP454-ND	2.12	17.68	70.72	HG-4
9.40	12.70	1.52	17.27	7.11	RP455-ND	3.53	29.46	117.82	HG-6
14.22	17.27	1.52	22.10	4.57	RP456-ND	4.48	37.32	149.28	HG-9
17.27	19.05	1.52	23.62	4.57	RP457-ND	4.95	41.23	164.92	HG-11

Locking Circuit Board Supports

- Both ends lock by hand; no tools required
- Strong, dependable grip
- Material: Nylon 6/6
- Color: Natural

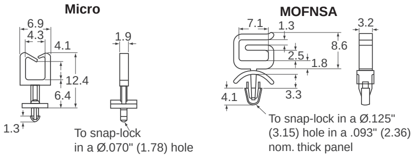


Dim. A (mm)	Digi-Key Part No.	Pricing 10	100	500	1,000	Richco Part No.
4.57	RP425-ND	2.24	18.67	74.68	112.02	LCBS-3
6.35	RP426-ND	2.38	19.87	79.48	119.22	LCBS-4
9.40	RP428-ND	2.50	20.87	83.48	125.22	LCBS-6
10.92	RP429-ND	2.60	21.71	86.82	130.23	LCBS-7
12.70	RP430-ND	2.69	22.45	89.78	134.67	LCBS-8
15.75	RP431-ND	2.88	24.01	96.02	144.03	LCBS-10
19.05	RP432-ND	3.07	25.59	102.36	153.54	LCBS-12
25.40	RP434-ND	3.45	28.77	115.08	172.62	LCBS-16

Wire Saddle

Wire Saddles are ideal for routing wires or optical fiber. Wires can be easily inserted into the top side of the saddle to protect them from abrasion. The "micro" is ideal for low profile applications and takes up very little real estate.

The MOFNSA is designed to snap into a .125" diameter hole in a .093" thick panel for applications that require a thicker board than the standard 1/16" board.

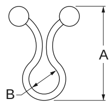

Micro

MOFNSA

Hole Dim In. (mm)	Panel Thick. In. (mm)	Digi-Key Part No.	Pricing 10	100	500	Richco Part No.
Standoff Micro Wire Saddle						
.070 (1.75)	.062 (1.57)	RP738-ND	3.19	26.62	106.46	SMWS-1-01
.070 (1.75)	.093 (2.36)	RP739-ND	3.19	26.62	106.46	SMWS1-1-01
Mini Optical Fiber Network Saddle						
.125 (3.18)	.093 (2.36)	RP737-ND	2.55	21.26	85.02	MOFNSA-2-01

Twist-Lok (TL Series)

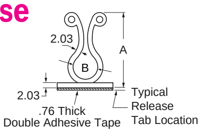
- Twist to secure wire bundles
- Material: Nylon 6/6, RMS-01
- Color: Natural



"A" Overall Hgt. (mm)	"B" Wire Bundle Dia. (mm)	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
22.86	5.08-7.62	RP600-ND	2.81	9.64	57.82	TL-250
26.16	7.62-10.16	RP601-ND	3.01	10.31	61.85	TL-350
30.48	10.16-12.70	RP602-ND	3.24	11.11	66.67	TL-450
33.78	13.97-16.51	RP603-ND	3.38	11.60	69.62	TL-600
39.37	17.78-20.32	RP604-ND	3.93	13.47	80.82	TL-750
43.18	Max. 25.40	RP605-ND	4.04	13.86	83.16	TL-950
55.63	Max. 30.23	RP606-ND	5.47	18.77	112.61	TL-1125
68.07	Max. 36.58	RP607-ND	6.51	22.33	133.99	TL-1375
74.42	Max. 39.62	RP608-ND	8.08	27.71	166.28	TL-1500
87.63	Max. 45.97	RP609-ND	8.57	29.39	176.33	TL-1750

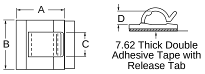
Kurly-Lok On Base
(KLB Series)

- Adhesive backing, RMS-15
- Material: Nylon 6/6, RMS-01
- Color: Natural



"A" Overall Height (mm)	"B" Wire Bundle (mm)	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
27.18	7.62-10.16	RP610-ND	12.57	43.08	258.48	KLB-350A-RT
31.24	10.16-12.70	RP611-ND	13.89	47.63	285.77	KLB-450A-RT
40.13	17.78-20.32	RP612-ND	14.60	50.04	300.24	KLB-750A-RT

Wire Cord Klip
(WCK Series)

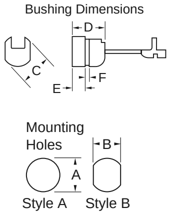


- Adhesive backing for quick mounting
- Material: Nylon 6/6, RMS-01
- Color: Natural

Hole Dia.	Dimensions (mm) A	B	C	D
4.57	16.00	15.75	7.87	4.06
11.43	25.15	25.15	11.94	7.11
18.29	25.40	25.40	12.70	13.46

Description	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
4.57mm. Dia., w/Tape	RP617-ND	13.90	47.66	285.95	WCK-180-01A-RT
11.43mm. Dia., w/Tape	RP618-ND	24.40	83.64	501.84	WCK-460-01A-RT
18.29mm. Dia., w/Tape	RP619-ND	30.33	103.99	623.92	WCK-720-01A-RT
4.57mm. Dia., w/oTape	RP620-ND	4.69	15.10	130.18	WCK-180-01
11.43mm. Dia., w/oTape	RP621-ND	9.45	30.45	262.50	WCK-460-01
18.29mm. Dia., w/oTape	RP622-ND	11.68	37.64	324.50	WCK-720-01

Strain Relief Bushings
(SRB-D/F/R Series)



- Bushing eliminates strain and wear on wires and cords
- Withstands temperatures to 150°F (65°C)
- Material: Nylon 6/6, RMS-40
- Color: Black
- UL #E40234, CSA #LR52044

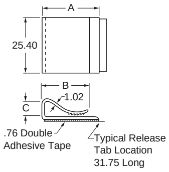
Digi-Key Part No.	Approx. Wire Size (mm)	Mntg. Hole (mm) Style A	Style B	Dimensions (mm) C	D	E	F*
RP460-ND	3.05 x .5.59	11.10	10.03	11.68	10.41	4.06	1.57
RP461-ND	2.79 x 5.33 2.29 x 4.57	9.52	8.76	10.79	10.41	3.94	1.57
RP462-ND	4.09 x 7.62 3.81 x 7.11	13.08 12.70	11.81	14.48	12.70	4.34	2.54
RP463-ND	4.06 x 9.40 3.81 x 8.64 5.08 x 9.40 4.57 x 8.89	14.27	13.46	15.49	15.24	6.10	3.30
RP464-ND	4.83 x 7.62 3.81 x 7.11 4.06 x 7.62	12.70	11.58	13.84	10.19	3.61	1.80
RP465-ND	6.35 6.73 7.37 6.86	12.70 13.08 13.08 12.70	11.81	14.22	10.92	4.19	2.54
RP466-ND	8.25 7.62 9.02 8.38	16.66 17.45	14.48	18.45	17.27	6.98	3.18

* Maximum Panel Thickness

Digi-Key Part No.	Pricing 25	100	1,000	5,000	Richco Part No.
RP460-ND	3.25	11.15	66.92	53.92/M	SRB-D-3
RP461-ND	9.74	33.40	200.41	161.45/M	SRB-F-2
RP462-ND	4.14	14.20	85.21	68.65/M	SRB-F-4
RP463-ND	13.15	45.07	270.43	217.85/M	SRB-F-5
RP464-ND	3.37	11.57	69.41	55.92/M	SRB-F-7
RP465-ND	3.59	12.30	73.80	59.45/M	SRB-R-5
RP466-ND	7.97	27.31	163.87	132.01/M	SRB-R-6
RPSRPL-ND	SRB Pincher Tool .... $88.26 each				SRPL-2

C-Type Flat Cable Clamps
(CFCC Series)

- Designed for routing flat ribbon cable
- Serrated grip to prevent slippage
- Adhesive backing for quick mount in any direction
- Material: Noryl-White, RMS-05; PVC-Gray RMS-04

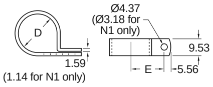


Digi-Key Part No.	Dimensions (mm) A	B	C	Material
RP391-ND	14.27	12.45	4.57	Noryl (White)
RP392-ND	14.27	10.16	6.35	Noryl (White)
RP393-ND	26.97	22.35	6.35	Noryl (White)
RP394-ND	26.97	22.35	6.35	Rigid PVC (Gray)

Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
RP391-ND	11.95	40.97	245.84	CFCC-3-05A-RT
RP392-ND	15.17	52.00	311.98	CFCC-4-05A-RT
RP393-ND	18.93	64.89	389.34	CFCC-8-05A-RT
RP394-ND	14.60	50.05	300.28	CFCC-8-04A-RT

Cable Clamps
(N Series)

- Material: Nylon 6/6, RMS-01
- Colors: Natural and Black



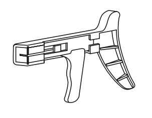
Description	Dim. (mm) D	E	Digi-Key Part No.	Pricing 25	100	1,000	Richco Part No.
Black, RMS-49	1.60	6.86	RP322-ND	1.74	5.95	35.71	N-1-BK
Black, RMS-49	3.18	8.33	RP323-ND	1.77	6.07	36.40	N-2-BK
Black, RMS-49	4.78	9.91	RP324-ND	2.03	6.97	41.83	N-3-BK
Black, RMS-49	6.35	10.69	RP325-ND	2.11	7.24	43.42	N-4-BK
Black, RMS-49	7.95	11.51	RP326-ND	2.14	7.32	43.92	N-5-BK
Black, RMS-49	9.52	12.29	RP327-ND	2.32	7.94	47.63	N-6-BK
Black, RMS-49	11.13	11.99	RP328-ND	2.40	8.23	49.39	N-7-BK
Black, RMS-49	12.70	14.27	RP329-ND	2.43	8.33	49.97	N-8-BK
Natural, RMS-01	1.60	6.86	RP314-ND	1.93	6.62	39.71	N-1
Natural, RMS-01	3.18	8.33	RP315-ND	1.97	6.74	40.43	N-2
Natural, RMS-01	4.78	9.91	RP316-ND	2.26	7.75	46.48	N-3
Natural, RMS-01	6.35	10.69	RP317-ND	2.35	8.04	48.24	N-4
Natural, RMS-01	7.95	11.51	RP318-ND	2.37	8.14	48.82	N-5
Natural, RMS-01	9.52	12.29	RP319-ND	2.57	8.82	52.92	N-6.173
Natural, RMS-01	11.13	11.99	RP320-ND	2.67	9.15	54.90	N-7
Natural, RMS-01	12.70	14.27	RP321-ND	2.70	9.25	55.51	N-8

Richco

Wrap-It-Ties

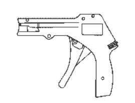
• Easy to use permanent lock • Strong, one-piece construction • Serviceable to 185°F (85°C) • UL recognized #E71558

Wire Tie Gun



RPWTA-ND $12.09

Economy Installation Tool



RPWTG-ND $52.80

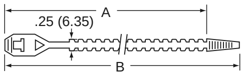
Replace □ with "C" for package of 100, "M" for package of 1,000.

Max. Bundle Dia. (in.)	Approx. Length (in.)	Tensile Strength (Lbs.)	Approx. Width (in.)	Color	Digi-Key Part No.	Package Size		Richco Part No.
						Price Per Pkg. C = 100	Price Per Pkg. M = 1000	
Nylon 6/6								
0.6	3.25	18	.10	Natural	RP101□-ND	3.29	16.70	WIT-18SF
0.6	3.25	18	.10	Blue	RP101BL□-ND	4.42	16.88	WIT-18SF-BL
0.6	3.25	18	.10	Green	RP101GN□-ND	4.42	16.88	WIT-18SF-GN
0.6	3.25	18	.10	Red	RP101RD□-ND	4.42	16.88	WIT-18SF-RD
0.6	3.25	18	.10	Yellow	RP101YL□-ND	4.42	16.88	WIT-18SF-YL
0.7	4.5	18	.10	Natural	RP102□-ND	3.59	18.22	WIT-18R
0.7	4.5	18	.10	Blue	RP102BL□-ND	3.88	18.36	WIT-18R-BL
0.7	4.5	18	.10	Green	RP102GN□-ND	3.88	18.40	WIT-18R-GN
0.7	4.5	18	.10	Red	RP102RD□-ND	3.88	18.40	WIT-18R-RD
0.7	4.5	18	.10	Yellow	RP102YL□-ND	3.88	18.40	WIT-18R-YL
1.3	5.75	18	.10	Natural	RP213□-ND	4.19	21.60	WIT-18L
2.1	8.0	18	.10	Natural	RP103□-ND	6.83	34.74	WIT-18V
2.1	8.0	18	.10	Blue	RP103BL□-ND	9.06	34.63	WIT-18V-BL
2.1	8.0	18	.10	Green	RP103GN□-ND	9.06	—	WIT-18V-GN
2.1	8.0	18	.10	Red	RP103RD□-ND	9.06	34.63	WIT-18V-RD
2.1	8.0	18	.10	Yellow	RP103YL□-ND	9.06	34.63	WIT-18V-YL
1.2	5.75	30	.14	Natural	RP104□-ND	6.64	33.77	WIT-30R
1.2	5.75	30	.14	Blue	RP104BL□-ND	6.97	34.56	WIT-30R-BL
1.2	5.75	30	.14	Green	RP104GN□-ND	6.97	34.56	WIT-30R-GN
1.2	5.75	30	.14	Red	RP104RD□-ND	6.97	34.56	WIT-30R-RD
1.2	5.75	30	.14	Yellow	RP104YL□-ND	6.97	34.56	WIT-30R-YL
1.8	7.3	30	.14	Natural	RP105□-ND	7.16	36.32	WIT-30L
1.8	7.3	30	.14	Blue	RP105BL□-ND	9.62	36.76	WIT-30L-BL
1.8	7.3	30	.14	Green	RP105GN□-ND	9.62	36.76	WIT-30L-GN
1.8	7.3	30	.14	Red	RP105RD□-ND	9.62	36.76	WIT-30L-RD
1.8	7.3	30	.14	Yellow	RP105YL□-ND	9.62	36.76	WIT-30L-YL
0.7	4.5	40	.14	Natural	RP214□-ND	5.86	32.76	WIT-40S
1.2	5.75	40	.14	Natural	RP106□-ND	7.70	39.10	WIT-40R
1.2	5.75	40	.14	Blue	RP106BL□-ND	10.51	40.14	WIT-40R-BL
1.2	5.75	40	.14	Green	RP106GN□-ND	10.51	40.14	WIT-40R-GN
1.2	5.75	40	.14	Red	RP106RD□-ND	10.51	40.14	WIT-40R-RD
1.2	5.75	40	.14	Yellow	RP106YL□-ND	10.51	40.14	WIT-40R-YL
1.8	7.3	40	.14	Natural	RP107□-ND	9.59	48.71	WIT-40L
1.8	7.3	40	.14	Blue	RP107BL□-ND	12.81	50.00	WIT-40L-BL
1.8	7.3	40	.14	Green	RP107GN□-ND	12.81	50.00	WIT-40L-GN
1.8	7.3	40	.14	Red	RP107RD□-ND	12.81	50.00	WIT-40L-RD
1.8	7.3	40	.14	Yellow	RP107YL□-ND	12.81	50.00	WIT-40L-YL
3.1	11.1	40	.15	Natural	RP215□-ND	19.19	107.60	WIT-40VL
1.5	6.0	50	.19	Natural	RP108□-ND	7.84	39.82	WIT-50S
1.5	6.0	50	.19	Blue	RP108BL□-ND	—	40.86	WIT-50S-BL
1.5	6.0	50	.19	Green	RP108GN□-ND	10.69	40.86	WIT-50S-GN
1.5	6.0	50	.19	Red	RP108RD□-ND	10.69	—	WIT-50S-RD
1.5	6.0	50	.19	Yellow	RP108YL□-ND	10.69	40.86	WIT-50S-YL
2.0	8.0	50	.19	Natural	RP109□-ND	9.23	46.87	WIT-50R
2.0	8.0	50	.19	Blue	RP109BL□-ND	9.97	47.27	WIT-50R-BL
2.0	8.0	50	.19	Green	RP109GN□-ND	9.97	47.27	WIT-50R-GN
2.0	8.0	50	.19	Red	RP109RD□-ND	9.97	47.27	WIT-50R-RD
2.0	8.0	50	.19	Yellow	RP109YL□-ND	9.97	47.27	WIT-50R-YL
4.5	15.3	50	.18	Natural	RP110□-ND	15.95	80.93	WIT-50L
4.5	15.3	50	.18	Blue	RP110BL□-ND	21.74	83.09	WIT-50L-BL
4.5	15.3	50	.18	Green	RP110GN□-ND	21.74	83.09	WIT-50L-GN
4.5	15.3	50	.18	Red	RP110RD□-ND	21.74	83.09	WIT-50L-RD
4.5	15.3	50	.18	Yellow	RP110YL□-ND	21.74	83.09	WIT-50L-YL
2.7	10.7	60	.18	Natural	RP216□-ND	13.74	69.84	WIT-60R
4.2	15.06	120	.30	Natural	RP111C-ND	37.18	—	WIT-120R
UV Stabilized Nylon 6/6 – Exterior or Outdoor Use								
0.6	3.25	18	.10	Black	RP201□-ND	3.61	18.36	WIT-18SF-UVB
0.7	4.5	18	.10	Black	RP202□-ND	3.95	20.02	WIT-18R-UVB
2.1	8.0	18	.10	Black	RP203□-ND	7.51	38.20	WIT-18V-UVB
1.2	5.75	30	.14	Black	RP204□-ND	7.31	37.15	WIT-30R-UVB
1.8	7.3	30	.14	Black	RP205□-ND	7.88	40.00	WIT-30L-UVB
1.2	5.75	40	.14	Black	RP206□-ND	8.47	43.02	WIT-40R-UVB
1.8	7.3	40	.14	Black	RP207□-ND	10.55	53.57	WIT-40L-UVB
1.5	6.0	50	.19	Black	RP208□-ND	8.62	43.78	WIT-50S-UVB
2.0	8.0	50	.19	Black	RP209□-ND	10.15	51.55	WIT-50R-UVB
4.5	15.3	50	.18	Black	RP210□-ND	17.55	89.06	WIT-50L-UVB
4.2	15.06	120	.30	Black	RP211C-ND	40.89	—	WIT-120R-UVB
Nylon 6/6, Size 10 / Screw Mount								
1.5	6.75	50	.19	Natural	RP224□-ND	18.11	91.94	WITSH-10-50MS
2	8.69	50	.19	Natural	RP225□-ND	20.47	103.90	WITSH-10-50MRL
3	11.25	50	.19	Natural	RP226□-ND	21.69	110.12	WITSH-10-50MR
Nylon 6/6 Release Tab								
1.25	5.5	40	.21	Natural	RP217□-ND	16.84	85.43	WIT-RT-0550
2	8.0	40	.21	Natural	RP218□-ND	18.55	94.18	WIT-RT-0800
2.5	10.5	40	.21	Natural	RP219□-ND	28.05	142.31	WIT-RT-1050

Max. Bundle Dia. (In.)	Approx. Length (In.)	Tensile Strength (Lbs.)	Approx. Width (In.)	Color	Digi-Key Part No.	Pricing		Richco Part No.
						25	100	
Nylon 6/6 Release Tab (Large Size)								
4	15.25	250	.52	Natural	RP221-ND	37.37	128.12	WIT-RT-1525
6	21.5	250	.52	Natural	RP222-ND	44.84	153.74	WIT-RT-2150
8	27.75	250	.52	Natural	RP223-ND	51.21	175.57	WIT-RT-2775

Hanking Ties

- Wrap electrical cords for shipping and packaging
- Material: Polyethylene
- Color: Natural



Max. Bundle Dia. Inch (mm)	Dimension Inch (mm)		Digi-Key Part No.	Price Per Package		Richco Part No.
	A	B		100	1,000	
.9 (22.86)	3.2 (81.28)	3.9 (99.06)	RP701-ND	23.22	139.32	HT-3.9
1.1 (27.94)	4.2 (106.68)	4.9 (124.46)	RP702-ND	25.57	153.43	HT-4.9
1.4 (35.56)	5.2 (132.08)	5.9 (149.86)	RP703-ND	26.09	156.56	HT-5.9

Beaded Ties

• Easy to install and release • Material: Nylon 6/6 • Color: Natural

Fig. 1

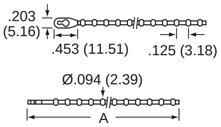


Fig. 2

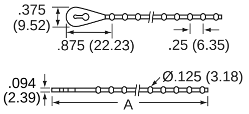
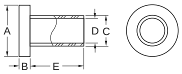


Fig.	Dim "A" (approx.) Inch (mm)	Digi-Key Part No.	Price Per Package		Richco Part No.
			100	1,000	
1	4.0 (101.60)	RP731-ND	8.95	53.68	BT-4-01-NT
	5.0 (127.00)	RP732-ND	9.89	59.33	BT-5-01-NT
	6.0 (152.40)	RP733-ND	14.62	87.70	BT-6-01-NT
2	8.75 (222.25)	RP734-ND	21.68	130.10	BT-8-01-NT
	10.75 (273.05)	RP735-ND	27.06	162.36	BT-10-01-NT
	12.75 (323.85)	RP736-ND	30.86	185.18	BT-12-01-NT

Molded Nylon Insulators

(MNI Series)

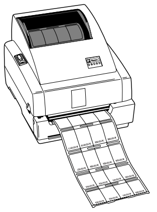
• Use as screw insulators and in many bushing applications • Lightweight • High dielectric strength • Resistant to corrosion and abrasion • Material: Nylon 6/6, RMS-48 • Color: Natural



Screw Size	Approx. Met. Equiv.	Dimensions (Inch)					Digi-Key Part No.	Pricing			Richco Part No.
		A	B	C	D	E		25	100	1,000	
#2	M2.2	.181	.047	.120	.090	.031	RP330-ND	5.92	20.30	121.79	MNI #2-2
		.181	.047	.120	.090	.063	RP331-ND	5.92	20.30	121.79	MNI #2-4
		.181	.047	.120	.090	.093	RP332-ND	5.92	20.30	121.79	MNI #2-6
		.181	.047	.120	.090	.125	RP333-ND	5.92	20.30	121.79	MNI #2-8
		.181	.047	.120	.090	.187	RP334-ND	5.92	20.30	121.79	MNI #2-12
		.181	.047	.120	.090	.250	RP335-ND	5.92	20.30	121.79	MNI #2-16
		.181	.047	.120	.090	.375	RP336-ND	5.92	20.30	121.79	MNI #2-24
#4	M3	.235	.047	.145	.115	.031	RP337-ND	5.29	18.15	108.90	MNI #4-2
		.252	.047	.140	.115	.046	RP338-ND	5.92	20.30	121.79	MNI #4-3
		.235	.047	.145	.115	.063	RP339-ND	5.92	20.30	121.79	MNI #4-4
		.252	.047	.140	.115	.084	RP340-ND	5.92	20.30	121.79	MNI #4-5
		.252	.047	.140	.115	.093	RP341-ND	5.92	20.30	121.79	MNI #4-6
		.235	.047	.145	.115	.125	RP342-ND	5.92	20.30	121.79	MNI #4-8
		.252	.047	.140	.115	.156	RP343-ND	5.92	20.30	121.79	MNI #4-10
		.235	.047	.145	.115	.187	RP344-ND	5.92	20.30	121.79	MNI #4-12
		.252	.047	.140	.115	.250	RP345-ND	5.92	20.30	121.79	MNI #4-16
		.235	.047	.145	.115	.375	RP346-ND	5.92	20.30	121.79	MNI #4-24
#5	M3	.370	.050	.236	.126	.050	RP347-ND	7.10	24.34	146.05	MNI #5.3
#6	M3.5	.290	.047	.170	.140	.031	RP348-ND	5.93	20.32	121.90	MNI #6-2
		.290	.047	.170	.140	.063	RP349-ND	5.93	20.32	121.90	MNI #6-4
		.290	.047	.170	.140	.093	RP350-ND	5.93	20.32	121.90	MNI #6-6
		.290	.047	.170	.140	.125	RP351-ND	5.93	20.32	121.90	MNI #6-8
		.290	.047	.170	.140	.187	RP352-ND	5.93	20.32	121.90	MNI #6-12
		.300	.047	.170	.138	.250	RP353-ND	5.93	20.32	121.90	MNI #6-16
		.290	.047	.170	.140	.375	RP354-ND	5.93	20.32	121.90	MNI #6-24
		.290	.047	.170	.140	.500	RP355-ND	5.93	20.32	121.90	MNI #6-32
#8	M4	.344	.063	.205	.173	.031	RP356-ND	6.22	21.32	127.94	MNI #8-2
		.344	.063	.205	.173	.063	RP357-ND	6.22	21.32	127.94	MNI #8-4
		.344	.063	.205	.173	.093	RP358-ND	6.22	21.32	127.94	MNI #8-6
		.344	.063	.205	.173	.125	RP359-ND	6.22	21.32	127.94	MNI #8-8
		.344	.063	.205	.173	.187	RP360-ND	6.22	21.32	127.94	MNI #8-12
		.344	.063	.205	.173	.250	RP361-ND	6.22	21.32	127.94	MNI #8-16
		.344	.063	.205	.173	.375	RP362-ND	6.22	21.32	127.94	MNI #8-24
		.344	.063	.205	.173	.500	RP363-ND	6.22	21.32	127.94	MNI #8-32
#10	M5	.399	.063	.260	.200	.031	RP364-ND	6.47	22.19	133.13	MNI #10-2
		.399	.063	.260	.200	.063	RP365-ND	6.47	22.19	133.13	MNI #10-4
		.399	.063	.260	.200	.093	RP366-ND	6.47	22.19	133.13	MNI #10-6
		.399	.063	.260	.200	.125	RP367-ND	6.47	22.19	133.13	MNI #10-8
		.399	.063	.260	.200	.187	RP368-ND	6.47	22.19	133.13	MNI #10-12
		.399	.063	.260	.200	.250	RP369-ND	6.47	22.19	133.13	MNI #10-16
		.399	.063	.260	.200	.375	RP370-ND	6.47	22.19	133.13	MNI #10-24
		.399	.063	.260	.200	.500	RP371-ND	6.47	22.19	133.13	MNI #10-32
1/4	M6	.513	.065	.312	.260	.031	RP376-ND	7.31	25.05	150.30	MNI 1/4-2
		.513	.065	.312	.260	.063	RP377-ND	7.31	25.05	150.30	MNI 1/4-4
		.513	.065	.312	.260	.093	RP378-ND	7.31	25.05	150.30	MNI 1/4-6
		.513	.065	.312	.260	.125	RP379-ND	7.31	25.05	150.30	MNI 1/4-8
		.513	.065	.312	.260	.187	RP380-ND	7.31	25.05	150.30	MNI 1/4-12
		.513	.065	.312	.260	.250	RP381-ND	7.31	25.05	150.30	MNI 1/4-16
		.535	.065	.315	.260	.375	RP382-ND	7.31	25.05	150.30	MNI 1/4-24
		.513	.065	.312	.260	.500	RP383-ND	7.31	25.05	150.30	MNI 1/4-32
5/16	M8	.620	.063	.360	.320	.031	RP384-ND	7.64	26.18	157.10	MNI 5/16-2
		.620	.063	.360	.320	.063	RP385-ND	7.64	26.18	157.10	MNI 5/16-4
		.620	.063	.360	.320	.093	RP386-ND	7.64	26.18	157.10	MNI 5/16-6
		.620	.063	.360	.320	.125	RP387-ND	7.64	26.18	157.10	MNI 5/16-8
		.620	.063	.360	.320	.187	RP388-ND	7.64	26.18	157.10	MNI 5/16-12
		.620	.063	.360	.320	.250	RP389-ND	7.64	26.18	157.10	MNI 5/16-16
		.620	.063	.360	.320	.375	RP390-ND	7.64	26.18	157.10	MNI 5/16-24

Thermal Transfer Printer and Labels

Desktop Thermal Transfer Printer – PTR2E



Specifications:
• 203 dpi resolution • 2” per second maximum print speed • 4.6” maximum roll width • 1.0” core diameter
Thermal Transfer Labels
Variety of materials available for labeling in harsh environments. Labels can be used with the PTR2E Printer or other desktop thermal transfer printers.

Fig. 1

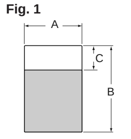


Fig. 2

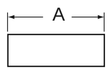
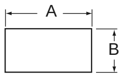


Fig. 3



Description	Digi-Key Part No.	Price/ Pkg.	Panduit Part No.
PTR2E Printer and Accessories			
Printer, 120 VAC Power Cord, Operator’s Manual	298-1263-ND	1058.68	PTR2E
External Label Roll Stand for use with TTC Labels	298-1179-ND	55.98	PTR2-RS
Wax Ribbon, Black, 4.33” x 262’, For use with Self-Laminating and Heat Shrink Markers Listed Below	298-1213-ND	41.10	TTRW-BL
Resin Ribbon, Black, 4.33” x 280’, For use with Component Labels Listed Below	298-1212-ND	40.32	TTR-BL

Thermal Transfer Labels for Desktop

Fig.	Label Size A x B x C (In.)	Cable O.D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Pkg. Size	Price/ Pkg.	Panduit Part No.
Self-Laminating Wire Markers-White Vinyl (Roll)							
1	0.50 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1214-ND	5,000	135.37	TTSL-1
	1.00 x 0.94 x 0.38	0.12–0.19	12-10 AWG	298-1216-ND	2,500	99.22	TTSL-251
	1.00 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1266-ND	2,500	134.72	TTSL-2
	1.00 x 2.44 x 1.00	0.32–0.46	4-1 AWG	298-1267-ND	1,500	129.61	TTSL-4
	1.00 x 3.94 x 1.00	0.32–0.93	4 AWG-400 MCM	298-1223-ND	1,000	162.86	TTSL-6
	2.00 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1217-ND	1,000	94.22	TTSL-3
	2.00 x 2.44 x 1.00	0.32–0.46	4-1 AWG	298-1218-ND	500	101.61	TTSL-5
	2.00 x 3.94 x 1.00	0.32–0.93	4 AWG-400 MCM	298-1224-ND	500	151.40	TTSL-7
Self-Laminating Wire Markers-White Tedlar (Roll)*							
1	0.50 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1219-ND	5,000	165.91	TTSL-53
	1.00 x 0.94 x 0.38	0.12–0.19	12-10 AWG	298-1215-ND	2,500	260.22	TTSL-250
	1.00 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1220-ND	2,500	139.07	TTSL-54
	1.00 x 2.44 x 1.00	0.32–0.46	4-1 AWG	298-1221-ND	1,500	229.29	TTSL-56
	1.00 x 3.94 x 1.00	0.32–0.93	4 AWG-400 MCM	298-1222-ND	1,000	246.84	TTSL-58

Fig.	Marker Width A (In.)	Cable O.D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Roll Size	Price/ Roll	Panduit Part No.
Heat Shrink Wire Markers - 3:1 Flattened White Polyolefin (Roll)							
2	0.50	0.04–0.13	18-12 AWG	298-1153-ND	2,000	229.28	LHS12W4
	1.00	0.04–0.13	18-12 AWG	298-1152-ND	1,000	229.28	LHS12W2
	2.00	0.04–0.13	18-12 AWG	298-1151-ND	500	218.37	LHS12W1
	0.50	0.06–0.18	18-10 AWG	298-1156-ND	2,000	296.13	LHS18W4
	1.00	0.06–0.18	18-10 AWG	298-1155-ND	1,000	296.13	LHS18W2
	2.00	0.06–0.18	18-10 AWG	298-1154-ND	500	282.05	LHS18W1
	0.50	0.08–0.25	18-8 AWG	298-1159-ND	2,000	363.03	LHS25W4
	1.00	0.08–0.25	18-8 AWG	298-1158-ND	1,000	363.03	LHS25W2
	2.00	0.08–0.25	18-8 AWG	298-1157-ND	500	345.76	LHS25W1
	1.00	0.17–0.50	8-1 AWG	298-1161-ND	1,000	601.94	LHS50W2
	2.00	0.17–0.50	8-1 AWG	298-1160-ND	500	573.27	LHS50W1
	1.00	0.33–1.00	3 AWG-500 MCM	298-1150-ND	1,000	723.49	LHS100W2
	2.00	0.33–1.00	3 AWG-500 MCM	298-1149-ND	500	689.01	LHS100W1

Fig.	Label Size A x B (In.)	Material	Color	Digi-Key Part No.	Pkg. Size	Price/ Pkg.	Panduit Part No.
Component Labels (Roll)†							
3	0.50 x 0.44	Polyester	Silver	298-1197-ND	10,000	119.02	TTC3YS-10
	0.50 x 0.44	Polyester	White	298-1196-ND	10,000	73.78	TTC3Y-10
	0.50 x 0.44	Polyimide	White	298-1195-ND	10,000	589.51	TTC3KW-10
	0.50 x 0.44	Polyimide	Tan	298-1194-ND	10,000	589.51	TTC3K-10
	0.90 x 0.25	Polyester	White	298-1203-ND	10,000	73.60	TTC6Y-10
	0.90 x 0.25	Tedlar*	White	298-1202-ND	10,000	174.87	TTC6T-10
	1.00 x 0.38	Polyester	Silver	298-1265-ND	10,000	198.36	TTC7YS-10
	1.00 x 0.38	Polyester	White	298-1206-ND	10,000	81.61	TTC7Y-10
	1.00 x 0.38	Polyimide	Tan	298-1204-ND	10,000	766.82	TTC7K-10
	1.00 x 0.38	Polyimide	White	298-1205-ND	10,000	766.82	TTC7KW-10
	1.00 x 0.50	Polyester	Silver	298-1211-ND	10,000	264.65	TTC8YS-10
	1.00 x 0.50	Polyester	White	298-1210-ND	10,000	123.02	TTC8Y-10
	1.00 x 0.50	Polyimide	Tan	298-1207-ND	10,000	1022.08	TTC8K-10
	1.00 x 0.50	Polyimide	White	298-1208-ND	10,000	1022.08	TTC8KW-10
	1.00 x 0.50	Tedlar*	White	298-1209-ND	10,000	282.58	TTC8T-10
	2.00 x 0.25	Polyester	White	298-1185-ND	2,500	35.63	TTC18Y-2.5
	2.00 x 0.25	Polyimide	Tan	298-1183-ND	2,500	320.29	TTC18K-2.5
	2.00 x 0.25	Polyimide	White	298-1184-ND	2,500	320.29	TTC18KW-2.5
	1.50 x 0.25	Polyimide	Tan	298-1180-ND	10,000	912.98	TTC11K-10
	1.50 x 0.25	Polyimide	White	298-1181-ND	10,000	912.98	TTC11KW-10
	1.50 x 0.25	Polyester	White	298-1182-ND	10,000	85.09	TTC11Y-10
	0.25 x 0.25	Polyimide	Tan	298-1186-ND	10,000	338.60	TTC1K-10
	0.25 x 0.25	Polyimide	White	298-1187-ND	10,000	338.60	TTC1KW-10
	0.25 x 0.25	Polyester	White	298-1188-ND	10,000	24.71	TTC1Y-10
	3.00 x 0.25	Polyimide	Tan	298-1189-ND	2,500	469.02	TTC23K-2.5
	3.00 x 0.20	Polyimide	White	298-1190-ND	2,500	469.02	TTC23KW-2.5
	3.00 x 0.25	Polyester	White	298-1191-ND	2,500	47.85	TTC23Y-2.5
	0.375 x 0.375	Polyimide	Tan	298-1192-ND	10,000	314.94	TTC2K-10
	0.375 x 0.375	Polyimide	White	298-1193-ND	10,000	314.94	TTC2KW-10
	0.38 x 0.38	Polyester	White	298-1264-ND	10,000	51.33	TTC2Y-10
	0.50 x 0.125	Polyimide	Tan	298-1198-ND	20,000	723.14	TTC47K-20
	0.50 x 0.125	Polyimide	White	298-1199-ND	20,000	677.21	TTC47KW-20
	0.70 x 0.375	Polyimide	Tan	298-1200-ND	10,000	468.76	TTC48K-10
	0.70 x 0.375	Polyimide	White	298-1201-ND	10,000	468.76	TTC48KW-10

*Tedlar is the registered trademark of E.I. Dupont Co. †TTC Component labels are supplied on 3” cores and must be rear fed from the PTR2E External Roll stand shown above when used with the PTR2E Printer

Handheld Thermal Transfer Printer – LS6

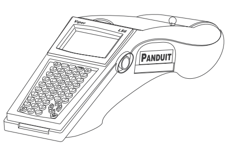


Fig. 1

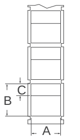


Fig. 2

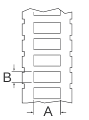


Fig. 3

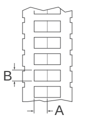
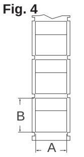


Fig. 4



Description	Digi-Key Part No.	Roll Size	Price/ Pkg.	Panduit Part No.
VIPER™ LS6 Printer and Accessories				
Includes Printer, LS6-RWBLK Ribbon, Battery Pack, AC Adapter/Battery Charger, Hardside Case, Operator’s Manual	298-1228-ND	1	798.00	LS6-KIT
Wax Ribbon, Black, 2”x100’, for use with Self-Laminating and Heat Shrink Markers Listed Below	298-1230-ND	1	21.11	LS6-RWBLK
Resin Ribbon, Black 2”x100’, for use with Component Labels Listed Below	298-1229-ND	1	21.11	LS6-RRBLK
Thermal Transfer Hybrid Ribbon, Black, 4.33” x 299’, for use with all Panduit Thermal Transfer Materials	298-4001-ND *NEW!*	1	40.32	TTRH-BL
Replacement Battery Pack	298-1227-ND	1	95.10	LS6-BP
Replacement AC Adapter/Battery Charger	298-1226-ND	1	93.37	LS6-ACS
Pan-Mark for Windows Labeling Software on CD-ROM	298-4000-ND *NEW!*	1	319.56	PROG-WIN2CD
Includes ViperLink Software (CD) and 9 Pin Serial Cable for Connecting LS6 to PC	298-4002-ND *NEW!*	1	44.61	LS6-PCKIT
LS6 Cleaning Kit	298-4003-ND *NEW!*	1	12.97	LS6-CLN

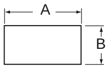
Thermal Transfer Labels

Fig.	Label Size AxBxC (In.)	Cable O.D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Roll Size	Price/ Pkg.	Panduit Part No.
Self-Laminating Wire Markers – Vinyl							
1	0.50 x 0.75 x 0.38	0.12	12 AWG	298-1261-ND	500	27.04	TWS-6V
	0.50 x 1.00 x 0.38	0.12–0.20	12-10 AWG	298-1259-ND	400	28.84	TWS-4V
	0.50 x 1.25 x 0.50	0.16–0.24	8 AWG	298-1255-ND	350	35.31	TWS-1V
	1.00 x 0.75 x 0.38	0.12	12 AWG	298-1262-ND	250	23.67	TWS-7V
	1.00 x 1.00 x 0.38	0.12–0.20	12-10 AWG	298-1260-ND	250	26.00	TWS-5V
	1.00 x 1.25 x 0.50	0.16–0.24	8 AWG	298-1256-ND	250	33.37	TWS-2V
	1.00 x 2.50 x 0.75	0.24–0.56	6 AWG 2/0	298-1252-ND	100	19.93	TWS-10V
	1.50 x 1.25 x 0.50	0.16–0.24	8 AWG	298-1257-ND	250	34.28	TWS-3V
	1.50 x 2.50 x 0.75	0.24–0.56	6 AWG 2/0	298-1253-ND	100	25.90	TWS-11V
	2.00 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1258-ND	250	44.57	TWS-40V
	1.50 x 4.00 x 1.00	0.32–0.96	4 AWG	298-4005-ND *NEW!*	100	30.94	TWS-13V

Fig.	Label Size A x B (In.)	Cable O. D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Roll Size	Price/ Pkg.	Panduit Part No.
Heat Shrink Wire Markers – 3:1 Flattened White Polyolefin							
2	1.00 x 0.25	0.04–0.13	18-12 AWG	298-1246-ND	100	35.19	THSW-2
	1.00 x 0.34	0.06–0.18	18-10 AWG	298-1251-ND	100	39.19	THSW-7
	1.00 x 0.44	0.08–0.25	18-8 AWG	298-1248-ND	100	47.48	THSW-4
	1.00 x 0.84	0.17–0.50	8-1 AWG	298-1249-ND	100	80.97	THSW-5
3	0.50 x 0.25	0.04–0.13	18-12 AWG	298-1245-ND	200	35.19	THSW-1
	0.50 x 0.34	0.06–0.18	18-10 AWG	298-1250-ND	200	39.19	THSW-6
	0.50 x 0.44	0.08–0.25	18-8 AWG	298-1247-ND	200	47.48	THSW-3

Fig.	Label Size A x B	Material	Color	Digi-Key Part No.	Roll Size	Price/ Pkg.	Panduit Part No.
Component Labels							
4	0.65 x 0.20	Polyester	White	298-1243-ND	750	35.57	TC-19Y
	1.00 x 0.38	Polyester	White	298-1240-ND	500	30.66	TC-17Y
	1.00 x 0.50	Polyester	Silver	298-1232-ND	500	37.82	TC-10YS
	1.50 x 0.50	Polyester	White	298-1233-ND	500	34.16	TC-11Y
	2.00 x 0.25	Polyester	White	298-1237-ND	250	32.99	TC-16Y
	1.00 x 0.50	Vinyl Cloth	White	298-1231-ND	500	41.13	TC-10C
	1.00 x 0.75	Vinyl Cloth	White	298-4004-ND *NEW!*	250	25.96	TC-4C

Laser Printable Labels (Functions with most Desktop Laser Printers)



Label Size A x B (In.)	Cable O.D. Range (In.)	For THHN Cable Size	Digi-Key Part No.	Pkg. Size	Price/ Pkg.	Panduit Part No.
Laser Self Laminated Wire Markers-White Polyester (Box)						
1.00 x 1.00 x 0.34	0.11–0.21	12-10 AWG	298-1162-ND	2,500	155.56	LJSL4-Y3-2.5
1.00 x 1.33 x 0.50	0.16–0.26	8-6 AWG	298-1163-ND	2,500	185.35	LJSL5-Y3-2.5
1.00 x 3.17 x 0.97	0.31–0.70	4-4/0 AWG	298-1164-ND	1,000	152.22	LJSL6-Y3-1
2.00 x 3.17 x 1.00	0.32–0.69	4-4/0 AWG	298-1169-ND	1,000	192.20	LJSL8-Y3-1
0.50 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1174-ND	5,000	185.31	LJSL2-Y3-5
2.00 x 1.50 x 0.50	0.16–0.32	8-6 AWG	298-1175-ND	1,000	203.01	LJSL7-Y3-1

Label Size A x B (In.)	Material	Color	Digi-Key Part No.	Pkg. Size	Price/ Pkg.	Panduit Part No.
Laser Component Labels-Polyester (Box)						
1.50 x 0.25	Polyester	White	298-1165-ND	10,000	208.63	PLL-14-Y2-10
1.88 x 0.25	Polyester	White	298-1166-ND	10,000	280.31	PLL-15-Y2-10
3.00 x 0.38	Polyester	White	298-1167-ND	1,000	87.45	PLL-19-Y2-1
0.80 x 0.20	Polyester	White	298-1168-ND	10,000	162.69	PLL-20-Y2-10
0.38 x 0.38	Polyester	White	298-1170-ND	10,000	121.97	PLL-2-Y2-10
0.25 x 0.25	Polyester	White	298-1171-ND	10,000	153.64	PLL-30-Y2-10
0.50 x 0.44	Polyester	White	298-1172-ND	10,000	206.89	PLL-31-Y2-10
0.65 x 0.20	Polyester	White	298-1173-ND	10,000	137.98	PLL-32-Y2-10
0.80 x 0.25	Polyester	White	298-1176-ND	10,000	162.69	PLL-5-Y2-10
1.00 x 0.38	Polyester	White	298-1177-ND	10,000	220.46	PLL-8-Y2-10
1.00 x 0.50	Polyester	White	298-1178-ND	10,000	286.23	PLL-9-Y2-10

Wire Ties and Accessories

Fig. 1

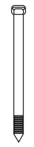


Fig. 2

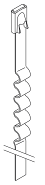


Fig. 3

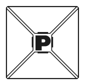


Fig. 4

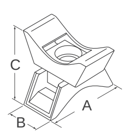


Fig. 5

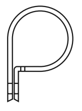


Fig. 6

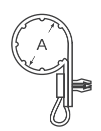


Fig. 7

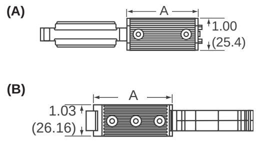


Fig. 8

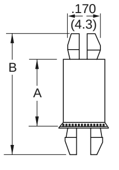


Fig. 9

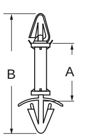


Fig. 10

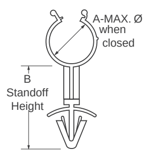


Fig. 11

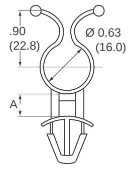


Fig. 12

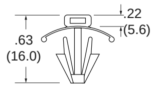


Fig. 13

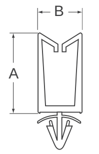


Fig. 14

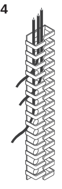


Fig. 15

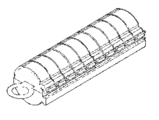


Fig. 16

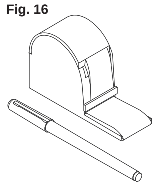


Fig.	Min. #'s Loop Tensile Strength	Length Inch (mm)	Width Inch (mm)	Max. Bundle Diameter Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
PAN-TY® Clamp Tie With Mounting Hole — Nylon								
1	18	4.3 (109.2)	0.100 (2.5)	0.75 (19.1)	298-1000-ND	100	28.56	PLC1M-S4-C
	40	6.1 (154.9)	0.135 (3.4)	1.25 (31.8)	298-1001-ND		28.99	PLC1.5I-S8-C
	50	7.9 (200.7)	0.190 (4.8)	1.84 (46.7)	298-1002-ND		30.66	PLC2S-S10-C
	50	12.0 (304.8)	0.190 (4.8)	3.00 (76.2)	298-1003-ND		70.82	PLC3S-S10-C
	50	15.0 (381.0)	0.190 (4.8)	4.00 (101.6)	298-1004-ND		79.28	PLC4S-S10-C
PAN-TY® Clamp Tie With Mounting Hole — Weather Resistant — Black								
1	18	4.3 (109.2)	0.100 (2.5)	0.75 (19.1)	298-1005-ND	100	50.38	PLC1M-S4-C0
	40	6.1 (154.9)	0.135 (3.4)	1.25 (31.8)	298-1006-ND		36.28	PLC1.5I-S8-C0
	50	7.9 (200.7)	0.190 (4.8)	1.84 (46.7)	298-1007-ND		38.52	PLC2S-S10-C0
	50	12.0 (304.8)	0.190 (4.8)	3.00 (76.2)	298-1008-ND		82.08	PLC3S-S10-C0
	50	15.0 (381.0)	0.190 (4.8)	4.00 (101.6)	298-1009-ND		91.70	PLC4S-S10-C0
PAN-TY® Cable Tie — Nylon								
1	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1016-ND	100	12.02	PLT.6SM-C
	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1017-ND	1,000	24.99	PLT.6SM-M
	18	3.1 (78.7)	0.090 (2.3)	0.68 (17.3)	298-1018-ND	100	12.57	PLT.7M-C
	18	3.1 (78.7)	0.090 (2.3)	0.68 (17.3)	298-1019-ND	1,000	23.78	PLT.7M-M
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1020-ND	100	13.51	PLT1M-C
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1021-ND	1,000	27.15	PLT1M-M
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1022-ND	100	15.64	PLT1.5I-C
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1023-ND	1,000	41.51	PLT1.5I-M
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1024-ND	100	16.73	PLT1.5M-C
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1025-ND	1,000	39.80	PLT1.5M-M
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1026-ND	100	23.37	PLT2I-C
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1027-ND	1,000	52.89	PLT2I-M
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1028-ND	100	18.83	PLT2M-C
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1029-ND	1,000	40.41	PLT2M-M
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1030-ND	100	19.78	PLT2S-C
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1031-ND	1,000	56.16	PLT2S-M
	40	11.4 (289.6)	0.145 (3.7)	3.00 (76.2)	298-1032-ND	100	29.08	PLT3I-C
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1033-ND	100	39.92	PLT3S-C
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1034-ND	1,000	147.71	PLT3S-M
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1035-ND	100	45.44	PLT4S-C
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1036-ND	1,000	166.64	PLT4S-M
PAN-TY® Cable Tie — Weather Resistant — Black								
1	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1037-ND	100	16.54	PLT.6SM-C0
	12	2.8 (71.1)	0.070 (1.8)	0.60 (15.2)	298-1038-ND	1,000	35.66	PLT.6SM-M0
	18	3.1 (78.7)	0.090 (2.3)	0.68 (17.3)	298-1039-ND	1,000	32.88	PLT.7M-M0
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1040-ND	100	17.56	PLT1M-C0
	18	3.9 (99.1)	0.098 (2.5)	0.87 (22.1)	298-1041-ND	1,000	42.12	PLT1M-M0
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1042-ND	100	19.25	PLT1.5I-C0
	40	5.6 (142.2)	0.142 (3.6)	1.38 (35.1)	298-1043-ND	1,000	56.63	PLT1.5I-M0
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1044-ND	100	19.47	PLT1.5M-C0
	18	5.6 (142.2)	0.098 (2.5)	1.25 (31.8)	298-1045-ND	1,000	57.20	PLT1.5M-M0
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1046-ND	100	28.10	PLT2I-C0
	40	8.0 (203.2)	0.142 (3.6)	2.00 (50.8)	298-1047-ND	1,000	72.51	PLT2I-M0
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1048-ND	100	25.03	PLT2M-C0
	18	8.0 (203.2)	0.098 (2.5)	2.00 (50.8)	298-1049-ND	1,000	59.58	PLT2M-M0
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1050-ND	100	21.11	PLT2S-C0
	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1051-ND	1,000	62.72	PLT2S-M0
	40	11.4 (289.6)	0.145 (3.7)	3.00 (76.2)	298-1052-ND	100	39.60	PLT3I-C0
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1053-ND	100	42.79	PLT3S-C0
	50	11.5 (292.1)	0.190 (4.8)	3.00 (76.2)	298-1054-ND	1,000	172.20	PLT3S-M0
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1055-ND	100	47.65	PLT4S-C0
	50	14.5 (368.3)	0.190 (4.8)	4.00 (101.6)	298-1056-ND	1,000	188.28	PLT4S-M0
BARB-TY® Cable Tie — Nylon Tie With Metal Clip								
1	18	4.0 (101.6)	0.095 (2.4)	0.90 (22.9)	298-1063-ND	100	13.51	BT1M-C
	40	6.1 (154.9)	0.141 (3.6)	1.50 (38.1)	298-1064-ND	100	15.64	BT1.5I-C
	40	8.0 (203.2)	0.141 (3.6)	2.00 (50.8)	298-1065-ND	100	23.37	BT2I-C
	40	11.1 (281.9)	0.141 (3.6)	3.00 (76.2)	298-1066-ND	100	29.08	BT3I-C
	40	14.3 (363.2)	0.141 (3.6)	4.00 (101.6)	298-1067-ND	100	40.62	BT4I-C
	50	8.0 (203.2)	0.185 (4.7)	2.00 (50.8)	298-1068-ND	100	19.78	BT2S-C
	50	11.2 (284.5)	0.185 (4.7)	3.00 (76.2)	298-1069-ND	100	39.92	BT3S-C
	50	14.4 (365.8)	0.185 (4.7)	4.00 (101.6)	298-1070-ND	100	45.44	BT4S-C
	18	6.1 (154.9)	0.095 (2.4)	1.50 (38.1)	298-1071-ND	100	16.93	BT1.5M-C
	18	7.7 (195.6)	0.095 (2.4)	2.00 (50.8)	298-1072-ND	100	18.83	BT2M-C
	18	10.9 (276.9)	0.095 (2.4)	3.00 (76.2)	298-1073-ND	100	20.74	BT3M-C
	18	14.0 (355.6)	0.095 (2.4)	4.00 (101.6)	298-1074-ND	100	27.44	BT4M-C
	120	18.1 (459.7)	0.275 (7.0)	5.00 (127.0)	298-1075-ND	50	39.24	BT5LH-L
	120	21.2 (538.5)	0.275 (7.0)	6.00 (152.4)	298-1076-ND	50	51.17	BT6LH-L
	120	24.4 (619.8)	0.275 (7.0)	7.00 (177.8)	298-1077-ND	50	55.19	BT7LH-L
	120	27.5 (698.5)	0.275 (7.0)	8.00 (203.2)	298-1078-ND	50	68.12	BT8LH-L
	120	30.7 (799.8)	0.275 (7.0)	9.00 (228.6)	298-1079-ND	50	70.58	BT9LH-L
BARB-TY® Cable Tie — Weather Resistant Tie With Metal Clip — Black								
1	18	4.0 (101.6)	0.095 (2.4)	0.90 (22.9)	298-1080-ND	100	17.56	BT1M-C0
	40	6.1 (154.9)	0.141 (3.6)	1.50 (38.1)	298-1081-ND		19.25	BT1.5I-C0
	40	8.0 (203.2)	0.141 (3.6)	2.00 (50.8)	298-1082-ND		28.08	BT2I-C0
	40	11.1 (281.9)	0.141 (3.6)	3.00 (76.2)	298-1083-ND		38.85	BT3I-C0
	40	14.3 (363.2)	0.141 (3.6)	4.00 (101.6)	298-1084-ND		49.69	BT4I-C0
	50	8.0 (203.2)	0.185 (4.7)	2.00 (50.8)	298-1085-ND		21.11	BT2S-C0
	50	11.2 (284.5)	0.185 (4.7)	3.00 (76.2)	298-1086-ND		42.79	BT3S-C0
	50	14.4 (365.8)	0.185 (4.7)	4.00 (101.6)	298-1087-ND		48.77	BT4S-C0
1	18	6.1 (154.9)	0.095 (2.4)	1.50 (38.1)	298-1088-ND	100	19.47	BT1.5M-C0
	18	7.7 (195.6)	0.095 (2.4)	2.00 (50.8)	298-1089-ND	100	23.94	BT2M-C0
	18	10.9 (276.9)	0.095 (2.4)	3.00 (76.2)	298-1090-ND	100	26.94	BT3M-C0
	18	14.0 (355.6)	0.095 (2.4)	4.00 (101.6)	298-1091-ND	100	34.36	BT4M-C0
	120	18.1 (459.7)	0.275 (7.0)	5.00 (127.0)	298-1092-ND	50	45.04	BT5LH-L0
	120	21.2 (538.5)	0.275 (7.0)	6.00 (152.4)	298-1093-ND	50	58.78	BT6LH-L0
	120	24.4 (619.8)	0.275 (7.0)	7.00 (177.8)	298-1094-ND	50	63.90	BT7LH-L0
	120	27.5 (698.5)	0.275 (7.0)	8.00 (203.2)	298-1095-ND	50	79.12	BT8LH-L0
	120	30.7 (779.8)	0.275 (7.0)	9.00 (228.6)	298-1096-ND	50	87.32	BT9LH-L0
PAN-TY® Releasable Tie — Nylon								
1	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1057-ND	100	35.29	PRT2S-C
		11.5 (292.1)		3.00 (76.2)	298-1058-ND		62.68	PRT3S-C
		14.5 (368.3)		4.00 (101.6)	298-1059-ND		72.66	PRT4S-C
PAN-TY® Releasable Tie — Weather Resistant — Black								
1	50	7.4 (188.0)	0.190 (4.8)	1.88 (47.8)	298-1060-ND	100	38.08	PRT2S-C0
		11.5 (292.1)		3.00 (76.2)	298-1061-ND		70.10	PRT3S-C0
		14.5 (368.3)		4.00 (101.6)	298-1062-ND		81.31	PRT4S-C0
PAN-TY® Marker Tie With Write On Area — Nylon								
1	18	4.3 (109.2)	0.098 (2.5)	0.87 (22.1)	298-1010-ND	100	30.05	PLF1M-C
	18	3.9 (99.1)		0.75 (19.1)	298-1011-ND		31.21	PLM1M-C
	50	7.4 (188.0)		2.00 (50.8)	298-1012-ND		59.02	PLM2S-C
PAN-TY® Marker Tie With Write On Area — Weather Resistant — Black								
1	18	4.3 (109.2)	0.098 (2.5)	0.87 (22.1)	298-1013-ND	100	41.40	PLF1M-C0
	18	3.9 (99.1)		0.75 (19.1)	298-1014-ND		40.60	PLM1M-C0
	50	7.4 (188.0)		2.00 (50.8)	298-1015-ND		71.88	PLM2S-C0
Cushion Sleeve For Use With Metal Locking Tie — Black								
—	—	100ft. (30.48m)	0.330 (8.0)	—	298-1103-ND	1 reel	172.76	PCSS-B-CR
	—		0.470 (12.0)	—	298-1104-ND		212.09	PCSH-B-CR
TAK TY® (VELCRO®) Easy Release And Reuse Brand Cable Tie — Black*								
1	50	12.0 (304.8)	0.75 (19.1)	3.00 (76.2)	298-1108-ND	10	16.67	HLC3S-X0
	50	18.0 (457.2)	0.75 (19.1)	5.00 (127.0)	298-1109-ND	10	20.43	HLC5S-X0
	50	6.0 (152.4)	0.75 (19.1)	1.50 (38.1)	298-1110-ND	10	9.85	HLS1.5S-X0
	50	12.0 (304.8)	0.75 (19.1)	3.00 (76.2)	298-1111-ND	10	16.12	HLS3S-X0
	50	18.0 (457.2)	0.75 (19.1)	5.00 (127.0)	298-1112-ND	10	23.49	HLS5S-X0
	40	8.0 (203.2)	0.50 (12.7)	1.90 (48.3)	298-1113-ND	10	11.14	HLT2I-X0
	40	12.0 (304.8)	0.50 (12.7)	3.20 (81.3)	298-1114-ND	10	14.47	HLT3I-X0
	50	15ft. (4.572m)	0.75 (19.1)	Various	298-1115-ND	1 reel	15.45	HLS-15R0

* VELCRO is a registered trademark of the Velcro Companies

Fig.	Max. Bundle Diameter Inch (mm)	Length Inch (mm)	Thickness & Width In. (mm)	Loop Tensile Strength Lbs.	Recommend Installation Tools	Digi-Key Part No	Pkg. Size	Price/ Pkg.	Panduit Part No.
Metal Locking Tie — Stainless Steel									
1	1.00 (25.4)	5.0 (127.0)	.010 x .18 (.25 x 4.4)	100	GS4MT, ST2MT or HTMT	298-1100-ND	100	70.96	MLT1S-CP
	2.00 (50.8)	7.9 (200.7)				298-1101-ND		72.59	MLT1S-CP
	4.00 (101.6)	14.2 (360.7)				298-1102-ND		85.19	MLT1S-CP
WAVE-TY™ Superior Grip Stainless Steel Ties									
2	2.70 (70)	10.2 (259)	.010 x.31 (.25 x 7.9)	200 Min.	GS4MT ST2MT or HTMT	298-1330-ND	50	56.97	MLT2.7WH-LP
	4.00 (102)	14.2 (361)				298-1331-ND		61.33	MLT4WH-LP
	6.00 (152)	20.5 (521)				298-1332-ND		91.85	MLT6WH-LP
	8.00 (203)	26.8 (631)				298-1333-ND		118.47	MLT8WH-LP
	10.00 (254)	33.0 (838)				298-1334-ND		145.23	MLT10WH-LP

Fig.	Length Inch (mm)	Width Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Tie Holder With Adhesive — Nylon						
3	0.75 (19.1)	0.75 (19.1)	298-1116-ND	100	73.15	ABMM-A-C
	1.00 (25.4)	1.00 (25.4)	298-1118-ND	100	98.53	ABM100-A-C
	1.12 (28.6)	1.12 (28.6)	298-1268-ND	100	109.61	ABM112-A-C
	1.13 (28.7)	1.13 (28.7)	298-1117-ND	100	100.46	ABMS-A-C
	1.50 (38.1)	1.50 (38.1)	298-1119-ND	50	78.65	ABM3H-A-L

Fig.	Dimensions - Inch (mm) A	B	C	Pull Apart Force	Digi-Key Part No.	Price Each 1	50	100	Panduit Part No.
Swivel Cable Tie Mounts — Weather Resistant Black Nylon									
4	1.64 (41.66)	0.73 (18.54)	1.23 (31.24)	>250 lbs.	298-1307-ND	3.04	2.36	—	TMEH-X2-L0
	0.87 (22.10)	0.62 (15.75)	0.75 (19.05)	>120 lbs.	298-1308-ND	2.54	—	1.97	TM3-X2-C0

Fig.	Width Inch (mm)	Max. Bundle Dia. Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Cable Clamp — Nylon						
5	0.4 (9.5)	0.13 (3.2)	298-1120-ND	100	11.64	CCS12-S8-C
		0.25 (6.4)	298-1121-ND		12.09	CCS25-S8-C
		0.38 (9.7)	298-1122-ND		13.07	CCS38-S8-C
		0.50 (12.7)	298-1123-ND		13.89	CCS50-S8-C

(Continued)

PANDUIT QUALITY

Wire Ties and Accessories *(Cont.)*

Fig.	Dimension A Inch	Digi-Key Part No.	Price Each 1	100	500	Panduit Part No.
PAN-CLAMP™ Heavy Duty Fixed Diameter Clamps						
6	3/8	298-1299-ND	.74	.59	.47	PC038-H25D-C0
	1/2	298-1300-ND	.81	.64	.51	PC050-H25D-C0
	5/8	298-1301-ND	.88	.69	.56	PC062-H25D-C0
	3/4	298-1302-ND	.95	.74	.60	PC075-H25D-C0
	7/8	298-1303-ND	1.02	.80	.64	PC087-H25D-C0
	1	298-1304-ND	1.08	.85	.68	PC100-H25D-C0
	1 1/8	298-1305-ND	1.15	.90	.72	PC112-H25D-C0
	1 1/4	298-1306-ND	1.22	.96	.77	PC125-H25D-C0

Fig.	Max. Cable Width Inch (mm)	Mounting Method	Dimension A Inch (mm)	Digi-Key Part No.	Price Each 1	50	100	Panduit Part No.
Type FCM Adhesive Mount For Stack Height up to .17" (4.3mm) - Nylon, Gray								
7A	1.0 (25.4)	Adh. Foam Tape	1.21 (30.7)	298-1309-ND	1.16	—	.91	FCM1-A-C14
	1.0 (25.4)	#6 Screw	1.21 (30.7)	298-1314-ND	1.11	—	.87	FCM1-S6-C14
	1.2 (30.5)	Adh. Foam Tape	1.37 (34.8)	298-1310-ND	1.44	—	1.13	FCM1.2-A-C14
	1.2 (30.5)	#6 Screw	1.37 (34.8)	298-1315-ND	1.19	—	.93	FCM1.2-S6-C14
	2.0 (50.8)	Adh. Foam Tape	2.22 (56.3)	298-1311-ND	1.29	—	1.01	FCM2-A-C14
	2.0 (50.8)	#6 Screw	2.22 (56.3)	298-1316-ND	1.23	—	.97	FCM2-S6-C14
	3.25 (82.6)	Adh. Foam Tape	3.38 (85.9)	298-1312-ND	1.95	1.53	—	FCM3.25-A-L14
	3.25 (82.6)	#6 Screw	3.38 (85.9)	298-1317-ND	1.68	1.32	—	FCM3.25-S6-L14
Type FCH Adhesive Mount For Stack Height up to .25" (6.3mm) - Nylon, TELCO Gray								
7B	2.00 (50.8)	Adh. Foam Tape	2.5 (63.5)	298-1313-ND	2.01	—	1.56	FCH2-A-C14
		#6 Screw		298-1318-ND	1.81	—	1.41	FCH2-S6-C14

Fig.	Dimension A Inch (mm)	Diameter Inch (mm)	Dimension B Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Circuit Board Post — Nylon							
8	0.125 (3.2)	0.19 (4.7)	0.4 (10.3)	298-1128-ND	100	21.77	CBP12-C
	0.250 (6.4)		0.5 (13.5)	298-1129-ND		22.30	CBP25-C
	0.375 (9.5)		0.7 (16.6)	298-1130-ND		22.71	CBP37-C
	0.500 (12.7)		0.8 (19.8)	298-1131-ND		23.11	CBP50-C
	0.750 (19.1)		1.0 (26.2)	298-1132-ND		24.83	CBP75-C
	1.000 (25.4)		1.3 (32.5)	298-1133-ND		26.70	CBP100-C
Lock Circuit Board Support .156" / .187" (3.96 / 4.750mm) Diameter — Nylon							
9	0.25 (6.4)	0.156 / 0.187 (3.960 /4.750)	0.980 (24.900)	298-1134-ND	100	20.60	CBLS25-C
	0.50 (12.7)		1.230 (31.200)	298-1135-ND		23.18	CBLS50-C
	0.75 (19.1)		1.480 (37.500)	298-1136-ND		26.34	CBLS75-C

Fig.	Dim. A - Length Inch (mm)	Dim. B - Dia. Inch (mm)	Hole Diameter Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Wire Standoff — Nylon							
10	0.25 (6.4)	0.25 (6.4)	0.187 - 0.192 (4.7 to 4.9)	298-1124-ND	100	31.93	WS25-25-C
	0.50 (12.7)	0.25 (6.4)		298-1125-ND		33.48	WS25-50-C
	0.25 (6.4)	0.48 (12.2)		298-1126-ND		37.16	WS50-25-C
	0.48 (12.2)	0.48 (12.2)		298-1127-ND		39.08	WS50-50-C

Fig.	Dim. A Inch (mm)	Material/ Color	Mounting Method	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Twister Push Mounts							
11	—	Nylon, Natural	For Circuit Boards or Chassis: .025" - .105" (0.64 - 2.67) thick in a .187" (4.7) dia. mtg. hole	298-1323-ND	100	18.94	TPM-16-C
	0.20 (5.0)			298-1324-ND		20.62	TPM5-16-C
	0.39 (10.0)			298-1325-ND		21.93	TPM10-16-C
	0.59 (15.0)			298-1326-ND		23.68	TPM15-16-C
	0.79 (20.0)			298-1327-ND		24.38	TPM20-16-C
	0.98 (25.0)			298-1328-ND		24.93	TPM25-16-C
	1.18 (30.0)			298-1329-ND		25.45	TPM30-16-C

Fig.	Min. #'s Loop Tensile Strength	Length Inch (mm)	Diameter Inch (mm)	Hole Dia. Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Push Cable Tie Mount, STD — Natural								
12	18-50	0.6 (16.0)	0.230 (5.8)	0.25 (6.4)	298-1143-ND	100	39.51	PWMS-H25-C

Fig.	Max. Bundle Dia. - Inch (mm)	Dimensions A	B	Mat'l/ Color	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Push Mount Wire Saddle (Vertical)								
13	.42 x .18 (11 x 5)	.58 (14.7)	.60 (15.2)	Nylon Natural	298-1319-ND	100	9.62	VWS4218-C
	.42 x .40 (11 x 10)	.78 (19.8)			298-1320-ND		9.95	VWS4238-C
	.42 x .74 (11 x 19)	1.14 (29)			298-1321-ND		14.54	VWS4274-C
	.42 x 1.05 (11 x 27)	1.45 (36.8)			298-1322-ND		15.74	VWS42105-C

Fig.	Min. #'s Loop Tensile Strength	Tie Length Inch (mm)	Base Width Inch (mm)	Base Length Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Mount/Tie Combination — Natural								
1 & 3	50	7.3 (185.0)	0.190 (4.8)	1.85 (47.0)	298-1144-ND	25	37.73	PLA2S-A-Q

Length Feet (meters)	Diameter Inch (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Spiral Wrap — Natural					
100 (30.48)	0.125 (3.2)	298-1137-ND	1 reel	37.02	T12F-C
	0.250 (6.4)	298-1138-ND		49.97	T25F-C
	0.500 (12.7)	298-1139-ND		136.20	T50F-C
	0.750 (19.1)	298-1140-ND		165.90	T75F-C
Corrugated Loom Tubing — Black					
100 (30.48)	0.250 (6.4)	298-1141-ND	1 reel	32.36	CLT25F-C20
	0.500 (12.7)	298-1142-ND		40.49	CLT50F-C20

Length Feet (meters)	Width Inch (mm)	Height Inch (mm)	Panel Thickness Inches (mm)	Digi-Key Part No.	Pkg. Size	Price/ Pkg	Panduit Part No.
Grommet Edging -— Natural							
100 (30.48)	0.106 (2.7)	0.12 (3.0)	.026 (.7) - .036 (.9)	298-1145-ND	1 reel	29.55	GEE36F-C
	0.131 (3.3)	0.16 (4.1)	.036 (.9) - .062 (1.6)	298-1146-ND		31.46	GEE62F-C
	0.131 (3.3)	0.16 (4.1)	.036 (.9) - .062 (1.6)	298-1147-ND		42.46	GEE62FR-C
	0.169 (4.3)	0.19 (4.7)	.62 (1.6) - .099 (2.5)	298-1148-ND		54.02	GEE99FR-C

Fig.	Duct External Dim.- B x H Dim. B x H - Inch (mm)	Std. Length Inch (mm)	Tape Width Inch (mm)	Digi-Key Part No.	Price Each 1	10	50	Panduit Part No.
PANDUCT® Type FL - Flexible Wiring Duct w/Adhesive Tape Halogen-Free Polypropoylene Material - UL94-O Flammablity Rating								
14	0.49 x 0.49 (12.5 x 12.5)	19.7 (500)	.24 (25)	298-1335-ND	5.72	4.59	4.07	FL12X12GR-A
	0.98 x 0.98 (25 x 25)		.58 (14.7)	298-1336-ND	8.24	7.41	6.57	FL25X25GR-A
	1.97 x 1.97 (50 x 50)		.58 (14.7)x2	298-1337-ND	16.90	13.54	12.00	FL50X50GR-A

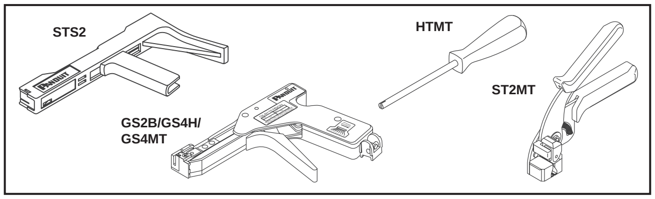
Standard Package	Legend	No. of Each Legend	Digi-Key Part No.	Price Each 1	10	50	Panduit Part No.
Wire Marker Books							
1 (10 pages)	0-9	45	298-1269-ND	17.69	15.90	14.09	PCMB-1
	A-Z, 0-15, +, -, /	10	298-1270-ND	17.69	15.90	14.09	PCMB-2
	1-45	10	298-1271-ND	17.69	15.90	14.09	PCMB-3
	1, 2, 3	150	298-1272-ND	17.69	15.90	14.09	PCMB-4
	1-15 16-90 A-Z, +, -, /, 0	6 4 2	298-1273-ND	17.69	15.90	14.09	PCMB-8
	1, 2, 3, A, B, C L1, L2, L3, T1, T2, T3	45 30	298-1274-ND	17.69	15.90	14.09	PCMB-9
	1-30	15	298-1275-ND	17.69	15.90	14.09	PCMB-11
	A-Z +, - Blank	15 8, 7 21	298-1276-ND	17.69	15.90	14.09	PCMB-12
	46-90	10	298-1277-ND	17.69	15.90	14.09	PCMB-14
1 (12 pages)	0-9 L1, L2, L3, T1, T2, T3	45 15	298-1278-ND	17.69	15.90	14.09	PCMB-25

Std. Pkg.	Write-on Area Dim. W x L - Inch (mm)	No. of Markers	Overall Size Inch (mm)	Digi-Key Part No.	Price Each 1	10	50	Panduit Part No.
Cable Marker Book for Self Laminating Wire Markers								
1 (10 pgs.)	1.00 x 0.75 (25.4x19.1)	60	1.00 x 3.00 (25.4x76.2)	298-1279-ND	22.26	20.00	17.73	PSCB-3
	1.00 x 1.00 (25.4x25.4)	30	1.00 x 5.00 (25.4x127)	298-1280-ND	21.85	19.63	17.40	PSCB-5
	0.50 x 0.63 (12.7x15.9)	180	0.50 x 1.50 (12.7x38.1)	298-1281-ND	22.26	20.00	17.73	PSCB-12
	1.50 x 0.75 (38.1x19.1)	40	1.50 x 3.00 (38.1x76.2)	298-1282-ND	21.85	19.63	17.40	PSCB-13

Fig.	Description	Digi-Key Part No.	Price Each 1	10	25	Panduit Part No.
Wire Marker Tape Dispensers						
15	0 - 9 Legends in Dispenser, 8" Black	298-1283-ND	35.17	31.73	28.91	PMD-0-9
	Empty Dispenser	298-1294-ND	13.83	12.49	11.37	PMD

Legend	Description	Digi-Key Part No.	Price Each 1	10	100	Panduit Part No.
Refill Wire Marker Tape- 8 Ft. Length						
0	Fits PMD Dispenser 298-1294-ND (sold above)	298-1284-ND	2.56	2.01	1.81	PMDR-0
1		298-1285-ND	2.56	2.01	1.81	PMDR-1
2		298-1286-ND	2.56	2.01	1.81	PMDR-2
3		298-1287-ND	2.56	2.01	1.81	PMDR-3
4		298-1288-ND	2.56	2.01	1.81	PMDR-4
5		298-1289-ND	2.56	2.01	1.81	PMDR-5
6		298-1290-ND	2.56	2.01	1.81	PMDR-6
7		298-1291-ND	2.56	2.01	1.81	PMDR-7
8		298-1292-ND	2.56	2.01	1.81	PMDR-8
9		298-1293-ND	2.56	2.01	1.81	PMDR-9

Fig.	Description	Std. Pkg.	Digi-Key Part No.	Price Each 1	5	25	Panduit Part No.
Dispenser Kit and Tape							
16	With PLDR-1 Tape, Write-on Area 1" x 1.5" (25.4 x 38.1)	1	298-1295-ND	25.04	22.49	19.94	PLD-1
	With PLDR-2 Tape, Write-on Area 1" x 3" (25.4 x 76.2)		298-1296-ND	25.04	22.49	19.94	PLD-2
Refill Blank Tape — Self-Laminated							
—	Write-on Area 1.00 x 0.38 (25.4 x 9.5) Overall-1.00 x 1.50 (25.4 x 38.1)	200/ roll	298-1297-ND	17.43	15.66	13.88	PLDR-1
—	Write-on Area 1.00 x 0.75 (25.4 x 19.1) Overall-1.00 x 3.00 (25.4 x 76.2)	100/ roll	298-1298-ND	17.43	15.66	13.88	PLDR-2



Description	Digi-Key Part No.	Price Each	Panduit Part No.
Tools			
Gun Cable Tie Tool - Black Handle, Tensile Strength: ≤ 50 lbs.	298-1097-ND	23.23	STS2
Gun Cable Tie Tool - Black Plastic & Metal Body, Tensile Strength: ≤ 50 lbs.	298-1098-ND	174.62	GS2B
Gun Cable Tie Tool - Red Handle & Metal Body, Tensile Strength: ≤ 50 lbs.	298-1099-ND	299.25	GS4H
Stainless Stl. Locking Tie Tool - Screwdriver Type, For Tension/Coil Tail of Tie	298-1105-ND	17.69	HTMT
Stainless Steel Locking Tie Tool - Ratchet Type, To Control Tension & Cutoff	298-1106-ND	296.28	ST2MT
Stainless Steel Locking Tie Tool - Gun Type	298-1107-ND	709.08	GS4MT

KEYSTONE
ELECTRONICS CORP.

Terminals

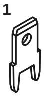
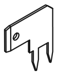
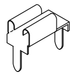
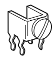
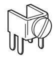
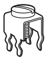
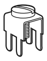
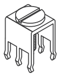
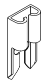
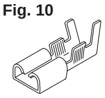
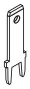
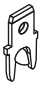
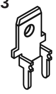
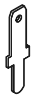
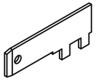
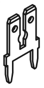
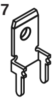
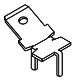
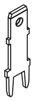
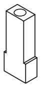
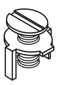
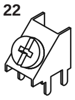
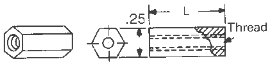
Fig. 1 	**Fig. 2** 	**Fig. 3** 	**Fig. 4** 	**Fig. 5** 
Fig. 6 	**Fig. 7** 	**Fig. 8** 	**Fig. 9** 	**Fig. 10** 
Fig. 11 	**Fig. 12** 	**Fig. 13** 	**Fig. 14** 	
Fig. 15 	**Fig. 16** 	**Fig. 17** 	**Fig. 18** 	
Fig. 19 	**Fig. 20** 	**Fig. 21** 	**Fig. 22** 	

Fig.	Description	Digi-Key Part No.	Pricing 10	Pricing 100
	PC Quick-Fit Tab Terminal			
3	.110” Female, Horizontal	3545K-ND	3.18	25.03
3	.110” Female, Horizontal	3549K-ND	3.18	25.03
3	.205” Female, Horizontal	3546K-ND	3.31	26.16
3	.205” Female, Horizontal	3550K-ND	3.31	26.16
3	.250” Female, Horizontal	3547K-ND	3.48	27.40
9	.110” Female, Vertical	3534K-ND	1.51	9.17
9	.110” Female, Vertical	3544K-ND	1.51	9.17
9	.205” Female, Vertical	3525K-ND	1.51	9.17
9	.250” Female, Vertical	3528K-ND	1.51	9.17
9	.187” Female, Vertical	3548K-ND	2.81	23.38
9	.187” Female, Vertical	3551K-ND	2.81	23.38
9	.205” Quick-Fit Vert Terminal	3522K-ND	1.51	9.22
10	.110” Female, 18-22 Gage	1252K-ND	1.16	9.06
10	.187” Female, 16-22 Gage	1264K-ND	2.78	21.83
10	.205” Female, 16-20 Gage	4469K-ND	3.82	30.17
10	.250” Female, 16-20 Gage	4470K-ND	2.11	16.68
1	.205” Male, .020 Brass, Tin Plate, .046 Diameter	1286K-ND	.65	5.15
1	.205” Male, .032 Brass, Tin Plate, .052 Diameter	1213K-ND	.70	6.08
12	.205” Male, .020 Brass, Tin Plate, .046 Diameter	1286-STK-ND	.65	3.56
12	.205” Male, .032 Brass, Tin Plate, .052 Diameter	1213-STK-ND	.70	3.83
13	.187” Male, .020 Brass, Tin Plate, .043 Diameter	4900K-ND	1.06	8.35
1	.187” Male, .020 Brass, Tin Plate, .046 Diameter	1285K-ND	.62	4.94
1	.187” Male, .032 Brass, Tin Plate, .052 Diameter	1212K-ND	.67	5.97
12	.187” Male, .020 Brass, Tin Plate, .046 Diameter	1285-STK-ND	.62	4.94
12	.187” Male, .032 Brass, Tin Plate, .052 Diameter	1212-STK-ND	.67	5.97
14	.110” Male, .020 Brass, Tin Plate, .046 Diameter	1267K-ND	.80	6.38
14	.110” Male, .032 Brass, Tin Plate, .052 Diameter	1211K-ND	.84	7.01
2	.110” Male, .020 Brass, Tin Plate, .046 Diameter	4903K-ND	1.66	13.09
2	.110” Male, .032 Brass, Tin Plate, .052 Diameter	4906K-ND	1.70	13.18
2	.187” Male, .020 Brass, Tin Plate, .046 Diameter	4904K-ND	1.59	12.56
2	.187” Male, .032 Brass, Tin Plate, .052 Diameter	4907K-ND	1.63	12.67
2	.250” Male, .032 Brass, Tin Plate, .056 Diameter	4966K-ND	1.16	7.00
2	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1266K-ND	1.19	7.21
15	.250” Male, .032 Brass, Tin Plate, .106 Diameter	1265K-ND	1.61	9.17
1	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1287K-ND	.76	6.08
12	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1287-STK-ND	.76	6.08
16	.110”/.250” Male, .032 Brass, Tin Plate, .052 Diameter	1282K-ND	.76	6.08
13	.250” Male, .032 Brass, Tin Plate, .067 Diameter	4901K-ND	1.06	8.35
17	.250” Male, .032 Brass, Tin Plate, .067 Diameter	4902K-ND	1.06	8.35
18	.250” Male, .032 Brass, Tin Plate, .052 Diameter	4908K-ND	2.25	17.81
11	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1289K-ND	1.18	6.18
11	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1289-STK-ND	1.65	9.01
19	.250” Male, .032 Brass, Tin Plate, .052 Diameter	1281K-ND	1.87	9.68
20	.250” Quick-Fit Vinyl Boot, Clear	4471K-ND	.85	6.80
20	.250” Quick-Fit Vinyl Boot, Red	4472K-ND	.85	6.80
20	.250” Quick-Fit Vinyl Boot, Blue	4473K-ND	.85	6.80
20	.250” Quick-Fit Vinyl Boot, Yellow	4474K-ND	.85	6.80
—	Terminal Hand Insertion Tool	1288K-ND	14.91 each	
	MT Screw Terminal			
4	Snap-In PC Horizontal	7690K-ND	—	21.11
4	Snap-In PC Horizontal, Captivated	7692K-ND*	—	25.02
5	PC Horizontal	8190K-ND	—	19.67
5	PC Horizontal, Captivated	7700K-ND*	—	21.73
6	Snap-In PC Vertical	7691K-ND	—	20.70
6	Snap-In PC Vertical, Captivated	7693K-ND*	—	23.79
7	PC Vertical	8191K-ND	—	19.36
7	PC Vertical, Captivated	7701K-ND*	—	22.35
8	Terminal PC Vertical Heavy Duty	8196K-ND	—	60.15
21	Terminal Insert 10/32 Thread Captivated	1202K-ND	7.54	59.25
21	Screw Terminal Insert 10/32	1299K-ND	7.54	59.25
22	Screw Supplied Unassembled	8189K-ND	3.31	21.22
22	Screw Installed and Captivated	7702K-ND	3.74	23.27

* Screw Installed and Captivated

Nylon Spacers

Economical for terminal or printed circuit board supports.



Hex Threaded Standoffs

Material: Nylon 6/6

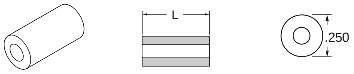
“L” Length (Inch)	4-40 Thread Part No.	6-32 Thread Part No.	8-32 Thread Part No.	Pricing 10	Pricing 100
.250	1902AK-ND	1903AK-ND	1904AK-ND	4.91	25.23
.375	1902BK-ND	1903BK-ND	1904BK-ND	5.03	25.85
.500	1902CK-ND	1903CK-ND	1904CK-ND	5.24	26.98
.625	1902FK-ND	1903FK-ND	1904FK-ND	4.56	31.92
.750	1902DK-ND	1903DK-ND	1904DK-ND	6.73	34.61
.875	1902GK-ND	1903GK-ND	1904GK-ND	5.14	36.05
1.000	1902EK-ND	1903EK-ND	1904EK-ND	6.77	34.71

Hex Threaded Standoffs - Flame Retardant

Material: Monsanto 340 FR UL 94V-0 rating

“L” Length (Inch)	4-40 Thread Part No.	6-32 Thread Part No.	8-32 Thread Part No.	Pricing 10	Pricing 100
.250	8440AK-ND	8441AK-ND	8442AK-ND	5.44	38.00
.375	8440BK-ND	8441BK-ND	8442BK-ND	5.55	38.88
.500	8440CK-ND	8441CK-ND	8442CK-ND	5.78	40.37
.625	8440DK-ND	8441DK-ND	8442DK-ND	6.89	47.48
.750	8440EK-ND	8441EK-ND	8442EK-ND	6.91	48.31
.875	8440FK-ND	8441FK-ND	8442FK-ND	7.14	50.06
1.000	8440GK-ND	8441GK-ND	8442GK-ND	7.48	52.32

Round Thru-Hole Spacers



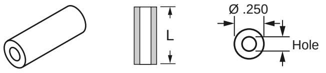
Material: Nylon 6/6

“L” Length (Inch)	#4 Screw .120 Hole Part No.	#6 Screw .140 Hole Part No.	#8 Screw .171 Hole Part No.	Pricing 10	Pricing 100
.125	875K-ND	883K-ND	891K-ND	.91	8.34
.250	876K-ND	884K-ND	892K-ND	.99	9.17
.375	877K-ND	885K-ND	893K-ND	1.29	11.33
.500	878K-ND	886K-ND	894K-ND	1.37	12.57
.625	879K-ND	887K-ND	895K-ND	1.48	13.07
.750	880K-ND	888K-ND	896K-ND	1.50	14.11
.875	881K-ND	889K-ND	897K-ND	1.63	15.55
1.000	882K-ND	890K-ND	898K-ND	1.73	17.00

Round Clear Spacers (Non Threaded)

Materials: **Brass:** Nickel Plate (QQ-N-290)
• **Aluminum:** Iridite Finish (MIL-C-5541)

Clearance Hole: • .120” for #4 Screw • .140 for #6 Screw • .171 for #8 Screw



Screw (Hole)	“L” Length (Inch)	Brass Spacers Part No.	Pricing 10	Pricing 100	Aluminum Spacers Part No.	Pricing 10	Pricing 100
#4 (.120)	.125	1909K-ND	1.90	16.27	2036K-ND	1.38	10.20
	.250	1454AK-ND	2.16	18.54	3457K-ND	1.61	10.40
	.375	1454BK-ND	2.30	19.77	3458K-ND	1.91	12.36
	.500	1454CK-ND	2.76	23.48	3459K-ND	2.09	14.00
	.625	1919K-ND	3.08	26.47	2314K-ND	.88	5.92
	.750	1454DK-ND	3.12	26.88	3460K-ND	2.59	16.68
	.875	1920K-ND	4.83	41.60	3402K-ND	2.91	20.91
	1.000	1454EK-ND	4.97	42.80	3461K-ND	3.16	21.74
	1.500	1924K-ND	10.69	67.36	3462K-ND	7.03	44.50
	2.000	1925K-ND	14.16	89.30	3463K-ND	9.33	58.81
#6 (.140)	.125	1934K-ND	1.90	16.27	3403K-ND	1.38	10.20
	.250	1457AK-ND	2.16	18.54	3464K-ND	1.61	10.40
	.375	1457BK-ND	2.30	19.77	3465K-ND	1.91	12.36
	.500	1457CK-ND	2.76	23.48	3466K-ND	2.09	14.00
	.625	1935K-ND	3.08	26.47	3429K-ND	2.31	15.45
	.750	1457DK-ND	3.12	26.88	3467K-ND	2.59	16.68
	.875	1936K-ND	4.83	41.60	3438K-ND	2.91	20.91
	1.000	1457EK-ND	4.97	42.80	3468K-ND	3.16	21.74
	1.500	1937K-ND	10.69	67.36	3469K-ND	7.03	44.50
	2.000	1938K-ND	14.08	89.19	3470K-ND	9.33	58.81
#8 (.171)	.125	1942K-ND	1.90	16.27	4258K-ND	1.38	10.20
	.250	1480K-ND	2.16	18.54	3471K-ND	1.61	10.40
	.375	1481K-ND	2.30	19.77	3472K-ND	1.91	12.36
	.500	1482K-ND	2.76	23.48	3473K-ND	2.09	14.00
	.625	2032K-ND	3.08	26.47	4259K-ND	2.31	15.45
	.750	1483K-ND	3.12	26.88	3474K-ND	2.59	16.68
	.875	2033K-ND	4.83	41.60	4260K-ND	2.91	20.91
	1.000	1484K-ND	4.97	42.64	3475K-ND	3.16	21.74
	1.500	2034K-ND	10.69	67.36	3476K-ND	7.03	44.50
	2.000	2035K-ND	14.08	89.19	3477K-ND	9.33	58.81

Round Spacer Kits

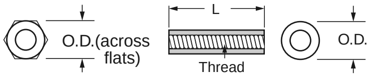
Brass Nickel Plated - Assortment of 1500 pieces in 1/4”, 3/8”, 1/2”, 3/4” and 1” lengths with clearance holes for #4, #6, and #8. 100 pieces of each size complete with cabinet.
SPR-13KIT-ND **$244.08**

Aluminum Iridite - Assortment of 1500 pieces in 1/4”, 3/8”, 1/2”, 3/4” and 1” lengths with clearance holes for #4, #6, and #8. 100 pieces of each size complete with cabinet.
SPR-34KIT-ND **$229.74**

KEYSTONE ELECTRONICS CORP.

Threaded Standoffs

- **Brass:** ASTM-B16
- **Plating:** Zinc (ASTM B633)
- **Aluminum:** QQ-A-225/3, Alloy 2011-T3
- **Plating:** Clear Iridite (Mil-C-5541)



Thread	O.D.	"L" Length (Inch)	Hex Thread Part No.	Pricing 10	100	Round Thread Part No.	Pricing 10	100
Aluminum Iridite Finish								
2-56	.156	.187	1797AK-ND	3.79	35.32	1801AK-ND	3.85	33.17
		.250	1797BK-ND	4.07	37.90	1801BK-ND	3.81	32.96
		.312	1797CK-ND	4.23	39.45	1801CK-ND	4.13	35.64
		.375	1797DK-ND	3.21	29.97	1801DK-ND	4.77	41.09
4-40	.187	.250	1891K-ND	2.17	15.86	2025K-ND	2.16	15.45
		.375	1892K-ND	2.55	18.44	2026K-ND	2.49	18.22
		.500	1893K-ND	2.81	21.52	2027K-ND	2.74	19.88
		.625	1894K-ND	3.30	23.38	2028K-ND	3.24	21.73
		.750	1895K-ND	3.66	26.27	2029K-ND	3.61	25.24
		.875	1896K-ND	4.03	29.04	2030K-ND	3.96	27.19
		1.000	1897K-ND	4.42	38.00	2031K-ND	4.42	38.00
4-40	.250	.250	2201K-ND	2.10	15.56	3478K-ND	1.91	13.39
		.375	2202K-ND	2.35	17.10	3479K-ND	2.11	15.55
		.500	2203K-ND	2.60	18.96	3480K-ND	2.37	16.78
		.625	1808K-ND	2.81	20.80	1839K-ND	2.57	24.72
		.750	2204K-ND	3.17	22.66	3481K-ND	2.89	20.81
		.875	1809K-ND	3.91	31.32	1846K-ND	3.56	30.59
		1.000	2205K-ND	4.03	34.86	3482K-ND	3.93	33.88
		1.500	2206K-ND	6.87	59.02	3483K-ND	6.64	57.16
		2.000	2207K-ND	7.92	68.29	3484K-ND	7.69	66.23
6-32	.250	.250	2208K-ND	2.10	15.56	3485K-ND	1.91	13.39
		.375	2209K-ND	2.35	17.10	3486K-ND	2.11	15.55
		.500	2210K-ND	2.60	18.96	3487K-ND	2.37	16.78
		.625	1813K-ND	2.97	21.22	1847K-ND	2.82	24.30
		.750	2211K-ND	3.17	22.66	3488K-ND	2.89	20.81
		.875	1816K-ND	3.38	23.99	1848K-ND	3.18	22.76
		1.000	2212K-ND	4.03	34.86	3489K-ND	3.93	33.88
		1.250	1818K-ND	6.08	52.32	1853K-ND	5.96	51.30
		1.500	2213K-ND	6.87	59.02	3490K-ND	6.64	57.16
		1.750	1819K-ND	7.17	61.79	1855K-ND	7.05	60.77
		2.000	2214K-ND	7.92	68.29	3491K-ND	7.69	66.23
		2.250	1820K-ND	8.79	75.71	1856K-ND	8.56	73.69
		2.500	1825K-ND	9.62	82.91	1857K-ND	9.38	80.85
8-32	.250	.250	2215K-ND	2.10	15.56	3492K-ND	1.91	13.39
		.375	2216K-ND	2.35	17.10	3493K-ND	2.11	15.55
		.500	2217K-ND	2.60	18.96	3494K-ND	2.37	16.78
		.625	1827K-ND	2.87	24.71	1858K-ND	2.57	19.16
		.750	2218K-ND	3.10	26.57	3495K-ND	2.89	20.81
		.875	1828K-ND	3.85	33.06	1859K-ND	3.18	22.76
		1.000	2219K-ND	4.03	34.86	3496K-ND	3.93	33.88
		1.500	2220K-ND	6.87	59.02	3497K-ND	6.64	57.16
		2.000	2221K-ND	7.92	68.29	3498K-ND	7.69	66.23
8-32	.375	.375	1926AK-ND	3.56	30.68	2315AK-ND	5.25	47.89
		.500	1926BK-ND	3.71	31.92	2315BK-ND	5.89	50.68
		.625	1926CK-ND	4.86	41.82	2315CK-ND	6.35	54.59
		.750	1926DK-ND	5.65	48.61	2315DK-ND	6.81	58.61
		1.000	1926EK-ND	6.86	58.92	2315EK-ND	8.12	70.03
Brass Zinc Plate								
2-56	.156	.187	1798AK-ND	4.45	41.45	1802AK-ND	3.81	32.96
		.250	1798BK-ND	3.73	34.81	1802BK-ND	4.10	35.32
		.312	1798CK-ND	5.76	53.77	1802CK-ND	4.25	36.67
		.375	1798DK-ND	5.35	49.96	1802DK-ND	4.25	36.67
4-40	.187	.250	1450K-ND	2.25	16.79	1547K-ND	2.45	15.45
		.375	1803K-ND	2.86	19.26	1864K-ND	2.82	23.37
		.500	1656K-ND	3.09	22.81	1657K-ND	3.06	22.35
		.625	1804K-ND	4.07	30.69	1865K-ND	4.06	26.37
		.750	1656AK-ND	4.25	29.14	1657AK-ND	4.14	28.42
		.875	1805K-ND	5.65	37.70	1866K-ND	5.64	36.36
		1.000	1656BK-ND	5.48	37.69	1657BK-ND	5.43	36.15
4-40	.250	.250	1450AK-ND	2.10	15.56	1547AK-ND	2.62	22.56
		.375	1450BK-ND	2.63	18.02	1547BK-ND	3.07	26.37
		.500	1450CK-ND	3.04	22.66	1547CK-ND	3.74	32.13
		.625	1829K-ND	4.45	30.59	1867K-ND	4.23	36.36
		.750	1450DK-ND	4.70	35.74	1547DK-ND	4.73	40.79
		.875	1830K-ND	5.42	37.18	1876K-ND	5.34	45.94
		1.000	1450EK-ND	5.29	36.16	1547EK-ND	5.94	51.18
		1.500	1831K-ND	10.86	93.52	1877K-ND	10.53	90.64
		2.000	1832K-ND	11.14	96.03	1878K-ND	10.76	92.70
6-32	.250	.250	1451AK-ND	2.10	15.56	1548AK-ND	2.10	14.32
		.375	1451BK-ND	2.63	18.02	1548BK-ND	2.30	16.78
		.500	1451CK-ND	3.04	22.66	1548CK-ND	3.06	21.73
		.625	1451DK-ND	4.11	30.59	1548DK-ND	3.34	29.15
		.750	1451EK-ND	4.70	35.74	1548EK-ND	4.25	34.91
		.875	1833K-ND	5.42	37.18	1879K-ND	5.08	36.26
		1.000	1635K-ND	5.29	36.16	1548FK-ND	4.87	35.54
		1.250	1636K-ND	6.89	64.33	1881K-ND	7.33	63.13
		1.500	1637K-ND	7.97	74.27	1882K-ND	10.53	90.64
		1.750	1638K-ND	10.15	94.66	1883K-ND	10.67	91.87
		2.000	1639K-ND	10.27	95.89	1884K-ND	10.76	92.70
		2.250	1642K-ND	10.48	97.79	1885K-ND	11.04	94.97
		2.500	1643K-ND	10.78	100.47	1886K-ND	11.35	97.79
8-32	.250	.250	1474AK-ND	2.10	17.36	1692AK-ND	2.90	26.98
		.375	1474BK-ND	2.63	18.02	1692BK-ND	3.04	28.43
		.500	1474CK-ND	3.04	22.66	1692CK-ND	3.87	36.10
		.625	1834K-ND	4.45	30.59	1887K-ND	4.79	41.20
		.750	1474DK-ND	4.70	35.74	1692DK-ND	5.24	48.83
		.875	1836K-ND	5.42	37.18	1888K-ND	5.43	46.91
		1.000	1474EK-ND	5.29	36.16	1692EK-ND	5.40	50.37
		1.500	1837K-ND	10.86	93.52	1889K-ND	10.53	90.64
		2.000	1838K-ND	11.13	95.89	1899K-ND	11.32	97.54
8-32	.375	.375	1452AK-ND	4.57	39.35	1549AK-ND	5.69	53.14
		.500	1452BK-ND	5.88	50.57	1549BK-ND	6.14	57.26
		.625	1452CK-ND	7.60	65.40	1549CK-ND	6.76	63.14
		.750	1452DK-ND	8.19	70.56	1549DK-ND	7.43	69.32
		1.000	1452EK-ND	10.58	90.94	1549EK-ND	9.12	85.08

Hex Threaded Standoff Kit

Brass - Assortment of 1500 in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.

STH-14KIT-ND..**$394.88**

Aluminum - Assortment of 1500 pieces in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.

STH-22KIT-ND..**$285.62**

Round Threaded Standoff Kit

Brass - Assortment of 1500 pieces in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.

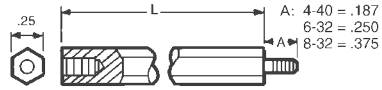
STR-15KIT-ND..**$358.96**

Aluminum - Assortment of 1500 pieces in 1/4", 3/8", 1/2", 3/4" and 1" lengths with thread sizes of 4-40, 6-32 and 8-32. 100 pieces of each size complete with cabinet.

STR-35KIT-ND..**$280.01**

Male/Female .250" Hex Threaded Standoffs

- **Brass:** ASTM-B16
- **Plating:** Nickel (QQ-N-290)
- **Aluminum:** QQ-Q-225/3
- **Plating:** Clear Iridite (Mil-C-5541)



"L" Length (Inch)	4-40 Thread Part No.	Pricing 10	100	6-32 Thread Part No.	Pricing 10	100	8-32 Thread Part No.	Pricing 10	100
Aluminum (Iridite MIL-C-5441)									
.250	8714K-ND*	2.44	20.71	8717K-ND*	2.50	14.53	—	—	—
.375	8400K-ND†	2.77	23.49	8413K-ND†	2.86	24.41	8426K-ND†	3.50	32.14
.500	8401K-ND	3.86	32.86	8414K-ND	2.90	24.62	8427K-ND	3.56	32.86
.625	8402K-ND	4.15	35.22	8415K-ND	3.66	31.11	8428K-ND	3.83	35.22
.750	8403K-ND	4.22	35.85	8416K-ND	3.69	31.41	8429K-ND	4.08	37.54
.875	8404K-ND	4.58	38.93	8417K-ND	4.02	34.20	8430K-ND	4.53	41.71
1.000	8405K-ND	4.85	41.20	8418K-ND	4.22	35.85	8431K-ND	4.81	44.23
1.125	8406K-ND	5.93	50.36	8419K-ND	4.35	36.98	8432K-ND	6.45	60.25
1.250	8407K-ND	6.00	50.98	8420K-ND	4.65	39.44	8433K-ND	6.68	62.32
1.375	8408K-ND	7.03	60.56	8421K-ND	5.27	44.80	8434K-ND	7.21	67.26
1.500	8409K-ND	7.19	61.90	8422K-ND	6.03	51.29	8435K-ND	7.29	67.97
1.625	8410K-ND	7.40	63.75	8423K-ND	6.13	52.02	8436K-ND	7.36	68.60
1.750	8411K-ND	7.57	65.10	8424K-ND	6.43	54.59	8437K-ND	7.44	69.42
2.000	8412K-ND	7.81	67.26	8425K-ND	6.56	55.82	8438K-ND	7.52	70.14
Brass									
.250	8713K-ND*	2.62	24.10	8716K-ND*	2.56	23.49	—	—	—
.375	7200K-ND†	2.89	26.57	7210K-ND†	2.98	27.50	7220K-ND†	3.47	31.82
.500	1944K-ND	4.09	34.76	1952K-ND	3.53	29.97	1957K-ND	3.79	32.14
.625	1945K-ND	4.15	35.22	1953K-ND	4.48	38.00	1958K-ND	5.27	44.80
.750	1946K-ND	4.94	42.03	1954K-ND	4.71	40.06	1959K-ND	5.54	47.17
.875	7201K-ND	4.63	42.54	7211K-ND	4.99	45.94	7221K-ND	5.60	51.50
1.000	1947K-ND	5.54	47.17	1644K-ND	5.14	47.38	1960K-ND	6.36	54.07
1.125	7202K-ND	5.54	50.98	7212K-ND	5.48	50.36	7222K-ND	6.30	58.71
1.250	1948K-ND	8.51	73.33	1955K-ND	7.02	59.64	1961K-ND	8.51	73.33
1.375	1949K-ND	8.72	75.03	1956K-ND	7.61	64.68	1962K-ND	8.72	75.03
1.500	1950K-ND	9.12	78.58	1645K-ND	7.12	65.50	1963K-ND	9.12	78.58
1.625	7203K-ND	8.50	79.31	7214K-ND	8.50	79.31	7224K-ND	8.50	79.31
1.750	7205K-ND	9.49	88.58	7215K-ND	9.49	88.58	7225K-ND	9.49	88.58
2.000	1951K-ND	10.36	89.20	1646K-ND	9.56	89.20	1964K-ND	10.36	89.20
Nylon 6/6									
.250	4800K-ND	3.06	24.51	4814K-ND*	3.06	24.51	4828K-ND*	3.50	24.51
.375	4801K-ND	3.13	25.03	4815K-ND	3.13	25.03	4829K-ND†	3.57	25.03
.500	4802K-ND	3.25	25.95	4816K-ND	3.25	25.95	4830K-ND	3.72	25.95
.625	4803K-ND	3.32	26.47	4817K-ND	3.32	26.47	4831K-ND	3.79	26.47
.750	4804K-ND	3.38	26.98	4818K-ND	3.38	26.98	4832K-ND	3.86	26.98
.875	4805K-ND	3.44	27.50	4819K-ND	3.44	27.50	4833K-ND	3.93	27.50
1.000	4806K-ND	3.50	28.01	4820K-ND	3.50	28.01	4834K-ND	4.00	28.01
1.125	4807K-ND	3.54	28.33	4821K-ND	3.54	28.33	4835K-ND	4.05	28.33
1.250	4808K-ND	3.57	28.53	4822K-ND	3.57	28.53	4836K-ND	4.08	28.53
1.375	4809K-ND	3.63	29.04	4823K-ND	3.63	29.04	4837K-ND	4.15	29.04
1.500	4810K-ND	3.69	29.45	4824K-ND	3.69	29.45	4838K-ND	4.22	29.45
1.625	4811K-ND	3.76	30.07	4825K-ND	3.76	30.07	4839K-ND	4.29	30.07
1.750	4812K-ND	3.82	30.60	4826K-ND	3.82	30.60	4840K-ND	4.37	30.60
2.000	4813K-ND	3.88	31.11	4827K-ND	3.88	31.11	4841K-ND	4.44	31.11

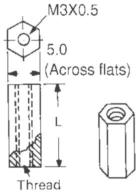
* Internal Thread .130/.150 deep. † Internal Thread .250 deep.

Hex Brass Standoff Kit

Assortment of 750 in 1/2", 3/4", 1", 1-1/4", and 1-1/2" lengths with thread sizes of 4-40, 6-32 and 8-32. 50 pieces of each size complete with cabinet.

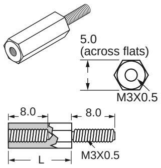
STH-19KIT-ND..**$358.96**

Metric 5mm Hex Threaded Standoffs



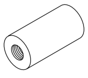
"L" Length (mm)	Digi-Key Part No.	Pricing 10	Pricing 100
5	4390K-ND	2.89	26.99
10	4391K-ND	3.42	31.92
15	4392K-ND	3.81	35.43
20	4393K-ND	4.49	41.82
25	4394K-ND	4.92	45.93

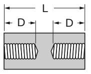
Metric Male/Female 5mm Hex Threaded Standoffs

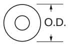


"L" Length (mm)	Digi-Key Part No.	Pricing 10	Pricing 100
10	4313K-ND	4.40	40.99
12	4314K-ND	4.51	42.03
15	4315K-ND	4.71	43.87
18	4316K-ND	5.08	47.49
20	4317K-ND	5.23	48.81
25	4318K-ND	5.77	53.77

Ceramic Standoffs

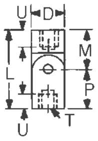




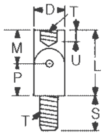


Thread	O.D.	"L" Length (Inch)	D (2) Depth	Digi-Key Part No.	Pricing 10	Pricing 100
6-32	.250	.250	thru	7710K-ND	18.42	126.20
	.250	.500	.156	7711K-ND	20.93	141.05
	.375	.375	.156	7712K-ND	17.43	118.67
	.375	.500	.187	7713K-ND	17.93	122.49
	.500	.500	.140	7714K-ND	19.44	133.62
	.500	.750	.250	7715K-ND	20.43	141.04
	.500	1.000	.375	7716K-ND	21.90	148.37
	.500	1.500	.562	7717K-ND	25.89	178.06
	.500	2.500	.500	7718K-ND	33.38	226.36
1/4-20	.750	2.500	.750	7719K-ND	46.50	322.72
	.750	4.000	.750	7720K-ND	56.15	389.54

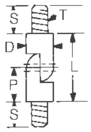
Hinged Standoffs



Female/Female



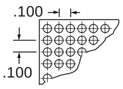
Male/Female



Male/Male

T Thread	D Dia. (In.)	L	S	U	M	P	Digi-Key Part No.	Pricing 10	Pricing 100
Female/Female Hinge									
4-40	.187	.750	—	.172	.375	.375	351K-ND	6.87	56.14
4-40	.187	1.000	—	.250	.375	.625	352K-ND	7.33	59.85
6-32	.250	.750	—	.172	.375	.375	353K-ND	9.80	79.93
6-32	.250	1.000	—	.250	.375	.625	354K-ND	10.01	81.78
8-32	.250	.750	—	.172	.375	.375	355K-ND	8.86	72.51
8-32	.250	1.000	—	.250	.375	.625	356K-ND	9.32	76.22
Male/Female Hinge									
4-40	.187	.625	.250	.172	.375	.250	333K-ND	8.06	65.81
4-40	.187	.875	.250	.250	.625	.250	334K-ND	8.51	69.42
6-32	.250	.625	.312	.172	.375	.250	335K-ND	9.69	79.21
6-32	.250	.875	.312	.250	.625	.250	336K-ND	9.90	80.95
Male/Male Hinge									
4-40	.187	.500	.250	—	—	.250	357K-ND	9.24	75.60
6-32	.250	.500	.312	—	—	.250	358K-ND	9.59	78.28
8-32	.250	.500	.312	—	—	.250	359K-ND	10.77	87.86

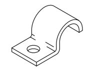
Prepunched Insulating Boards



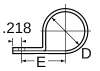
Dim. – Inch Width	Dim. – Inch Length	Digi-Key Part No.	Pricing 1	Pricing 10	Mfg. Part No.
Perfboard — Holes .042" (1.07mm) Dia., Glass Epoxy					
2.00	4.50	3405K-ND	2.72	22.58	3405
2.00	6.00	3406K-ND	3.50	29.05	3406
2.75	17.00	3407K-ND	10.52	87.32	3407
3.00	4.50	3408K-ND	3.66	30.38	3408
4.50	6.00	3409K-ND	5.14	42.66	3409
4.50	6.50	3410K-ND	5.94	49.30	3410
4.50	8.50	3411K-ND	6.50	53.95	3411
4.50	17.00	3412K-ND	14.46	120.02	3412
6.00	17.00	3413K-ND	19.46	161.52	3413

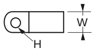
Metal Cable Clamps

Half Clamp



Clamp

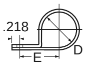


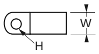


D	E	W	H	Digi-Key Part No.	Pricing 10	Pricing 100
Steel Half Clamps						
.125	.250	.500	.218	8140K-ND	1.14	9.17
.187	.250	.500	.218	8141K-ND	1.20	9.89
.250	.250	.500	.218	8142K-ND	1.29	10.29
.312	.250	.500	.218	8143K-ND	1.38	11.12
.375	.312	.625	.218	8144K-ND	1.62	12.88
.437	.312	.625	.218	8145K-ND	1.70	13.59
.500	.312	.625	.218	8146K-ND	2.13	16.99
.562	.312	.625	.218	8147K-ND	2.18	17.45
.625	.312	.625	.218	8148K-ND	2.28	18.33
.687	.312	.625	.218	8149K-ND	2.34	18.75
.750	.312	.625	.218	8150K-ND	2.43	19.46
.812	.312	.625	.218	8151K-ND	2.53	20.29
.875	.375	.750	.281	8152K-ND	2.76	22.04
.937	.437	.750	.281	8153K-ND	2.86	22.97
1.000	.437	.750	.281	8154K-ND	2.97	23.68
Insulated Steel Half Clamps						
.187	.250	.500	.218	8160K-ND	3.09	24.40
.250	.250	.500	.218	8161K-ND	3.50	27.60
.312	.312	.625	.218	8162K-ND	3.96	31.21
.375	.312	.625	.218	8163K-ND	4.14	32.65
.437	.312	.625	.218	8164K-ND	4.67	36.78
.500	.312	.625	.218	8165K-ND	3.43	27.09
.562	.312	.625	.218	8166K-ND	3.55	28.01
.625	.312	.625	.218	8167K-ND	3.64	28.85
.687	.312	.625	.218	8168K-ND	3.77	29.77
.750	.312	.625	.218	8169K-ND	4.11	32.44
.812	.375	.750	.281	8170K-ND	5.18	40.79
.875	.437	.750	.281	8171K-ND	5.37	42.33
.937	.437	.750	.281	8172K-ND	6.33	49.85
1.000	.437	.750	.281	8173K-ND	5.96	47.07
Steel Clamps						
.187	.218	.500	.203	8100K-ND	1.36	10.77
.250	.218	.500	.203	8101K-ND	1.41	11.32
.312	.218	.500	.203	8102K-ND	1.47	11.74
.375	.218	.500	.203	8103K-ND	1.48	11.90
.437	.218	.500	.203	8104K-ND	1.54	12.40
.500	.218	.500	.203	8105K-ND	1.67	13.34
.562	.218	.500	.203	8106K-ND	1.76	14.11
.625	.218	.500	.203	8107K-ND	1.81	14.52
.687	.218	.500	.203	8108K-ND	1.87	15.04
.750	.218	.500	.203	8109K-ND	1.93	15.45
.812	.218	.500	.203	8110K-ND	1.99	15.86
.875	.218	.500	.203	8111K-ND	2.06	16.48
.937	.218	.500	.203	8112KS-ND	2.13	17.09
1.000	.218	.500	.203	8113K-ND	2.18	17.50
Insulated Steel Clamps						
.125	.218	.500	.203	8120K-ND	2.53	20.39
.187	.218	.500	.203	8121K-ND	2.64	21.12
.250	.218	.500	.203	8122K-ND	2.72	21.83
.312	.218	.500	.203	8123K-ND	2.83	22.81
.375	.218	.500	.203	8124KS-ND	2.84	22.70
.437	.218	.500	.203	8125K-ND	3.04	24.51
.500	.218	.500	.203	8126K-ND	3.15	25.23
.562	.218	.500	.203	8127K-ND	3.27	26.26
.625	.218	.500	.203	8128K-ND	3.37	26.88
.687	.218	.500	.203	8129K-ND	3.46	27.70
.750	.218	.500	.203	8130K-ND	3.57	28.63
.812	.218	.500	.203	8131K-ND	3.66	29.25
.875	.218	.500	.203	8132K-ND	3.77	30.18
.937	.218	.500	.203	8133K-ND	3.87	30.79
1.000	.218	.500	.203	8134K-ND	3.97	31.83

Nylon Cable Clamps

Ideal for securing, insulating and routing cable wiring, piping, tubing, components and fibre optics. Made of .050" thick nylon 6/6, white.





D	E	W	H	Digi-Key Part No.	Pricing 100	Pricing 500	Pricing 1,000
.125	.325	.375	.140	7620K-ND	4.11	18.00	20.67
.125	.325	.375	.203	7621K-ND	4.11	18.00	20.67
.187	.380	.375	.140	7622K-ND	4.21	18.50	20.97
.187	.380	.375	.203	7623K-ND	4.21	18.50	20.97
.250	.410	.375	.140	7624K-ND	4.33	18.55	21.75
.250	.410	.375	.203	7625K-ND	4.33	18.55	21.75
.312	.445	.375	.140	7626K-ND	4.32	19.04	22.24
.312	.445	.375	.203	7627K-ND	4.32	19.04	22.24
.375	.475	.375	.140	7628K-ND	4.64	19.84	23.91
.375	.475	.375	.203	7629K-ND	4.64	19.84	23.91
.437	.525	.375	.140	7630K-ND	4.94	21.10	24.81
.437	.525	.375	.203	7631K-ND	4.94	21.10	24.81
.500	.550	.375	.140	7632K-ND	4.94	21.60	25.41
.500	.550	.375	.203	7633K-ND	4.94	21.60	25.41
.562	.625	.500	.203	7634K-ND	7.72	33.22	39.04
.625	.660	.500	.203	7635K-ND	8.24	34.52	41.01
.750	.785	.500	.203	7636K-ND	9.16	39.12	47.05
.875	.845	.500	.203	7637K-ND	9.98	42.20	50.12
1.000	.910	.500	.203	7638K-ND	10.29	43.75	52.40
1.125	.970	.500	.203	7639K-ND	14.73	62.30	73.84
1.125	1.060	.500	.203	7640K-ND	15.76	67.22	80.25

Recessed Bumpers

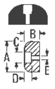


Fig. 1

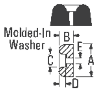


Fig. 2

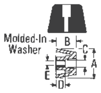


Fig. 3

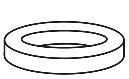
Provides excellent traction and shock absorbing qualities. Materials: Rubber, BUNA S, (fig. 1 & 2) Vinyl, (fig. 3).

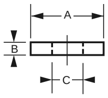
Fig.	A	B	C	D	E	Screw Size	Digi-Key Part No.	Pricing 10	Pricing 100
1	.500	.250	.250	.125	.125	#4	720K-ND	1.53	12.25
1	.625	.312	.250	.187	.125	#4	721K-ND	2.43	19.46
1	.718	.437	.250	.218	.125	#4	722K-ND	4.88	39.03
2	.937	.375	.375	.187	.187	#8	723K-ND	4.68	37.55
3	.687	.250	.343	.125	.155	#6	724K-ND*	3.60	28.84
3	.875	.312	.406	.187	.187	#8	725K-ND*	6.64	53.14
3	1.062	.437	.468	.234	.200	#10	726K-ND*	8.27	66.13
3	.562	.375	.218	.187	.115	#4	727K-ND	4.35	34.81
3	.750	.437	.265	.250	.148	#6	728K-ND	4.91	39.25
3	.937	.625	.359	.297	.174	#8	729K-ND	7.25	57.99

* Gray — all others black.

Flat Washers

Fibre: Commercial per MIL-F-1148A, Grade CH Nylon: Grade 6/6 per ASTM D4066

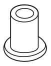


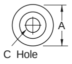


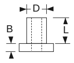
A O.D.	B Thick	C I.D.	Digi-Key Part No.	Pricing 100	Pricing 500	Pricing 1,000
Fibre Material — #4 Screw Size						
.250	.032	.120	3116K-ND	2.73	11.83	—
.312	.032	.120	348K-ND	2.72	11.82	—
.375	.032	.120	3117K-ND	2.78	11.86	—
.250	.047	.120	3154K-ND	2.72	11.81	—
.312	.047	.120	3155K-ND	2.73	11.85	11.95
.375	.047	.120	3156K-ND	2.98	12.84	13.56
.250	.062	.120	3368K-ND	2.73	11.85	12.00
.312	.062	.120	3196K-ND	2.73	11.84	14.82
.375	.062	.120	3197K-ND	2.79	11.86	14.13
Nylon Material — #4 Screw Size						
.250	.032	.120	3348K-ND	2.63	11.34	—
.312	.032	.120	3359K-ND	3.10	13.41	15.89
.375	.032	.120	3118K-ND	3.30	14.42	17.00
.250	.047	.120	345K-ND	3.09	13.13	—
.312	.047	.120	3157K-ND	2.67	11.31	15.32
.375	.047	.120	3158K-ND	2.68	11.33	16.89
.250	.062	.120	3358K-ND	2.67	11.32	15.33
.312	.062	.120	3198K-ND	3.09	13.37	20.26
.375	.062	.120	3200K-ND	3.09	13.13	19.16
Fibre Material — #6 Screw Size						
.250	.032	.140	3119K-ND	2.73	11.83	—
.312	.032	.140	3120K-ND	2.72	11.82	—
.375	.032	.140	3121K-ND	2.78	11.86	—
.250	.047	.140	3159K-ND	2.72	11.81	—
.312	.047	.140	3160K-ND	2.73	11.85	11.95
.375	.047	.140	3161K-ND	2.98	12.84	13.56
.250	.062	.140	3369K-ND	2.73	11.85	12.00
.312	.062	.140	3370K-ND	2.72	11.82	12.95
.375	.062	.140	3201K-ND	2.79	11.86	14.13
Nylon Material — #6 Screw Size						
.250	.032	.140	3122K-ND	2.63	11.34	—
.312	.032	.140	3349K-ND	2.62	11.32	12.65
.375	.032	.140	3123K-ND	3.30	14.42	17.00
.250	.047	.140	3162K-ND	2.63	11.33	12.25
.312	.047	.140	346K-ND	3.29	13.88	15.32
.375	.047	.140	3163K-ND	2.68	11.33	16.89
.250	.062	.140	3360K-ND	2.62	11.32	15.33
.312	.062	.140	3361K-ND	3.09	13.37	20.26
.375	.062	.140	3202K-ND	3.09	13.13	19.16

Nylon Shoulder Washers/Bushings

Material:
Nylon, Grades 6/6 per
ASTM D4066

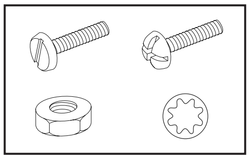


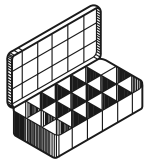




L	A	B	C	D	Digi-Key Part No.	Pricing 100	Pricing 500
#4 Screw Size							
.031	.218	.040	.115	.135	3049K-ND	3.81	15.95
.047	.250	.032	.115	.185	7681K-ND	4.94	21.60
.093	.235	.047	.115	.145	3053K-ND	7.21	30.37
.125	.235	.047	.115	.145	3102K-ND	7.21	30.37
.18	.235	.047	.115	.145	3103K-ND	7.21	30.37
.250	.235	.047	.115	.145	340K-ND	3.80	16.22
#6 Screw Size							
.032	.385	.062	.145	.240	7682K-ND	5.66	23.14
.032	.250	.062	.140	.187	7683K-ND	4.74	20.09
.032	.312	.062	.140	.187	7684K-ND	5.26	22.16
.125	.290	.047	.140	.170	3054K-ND	7.22	30.41
.187	.290	.047	.140	.170	3104K-ND	7.52	32.46
.250	.290	.047	.140	.170	341K-ND	8.08	34.49
.500	.290	.047	.140	.170	3055K-ND	8.25	35.05

BUILDING FASTENERS





Digi-Key® Electronic Hardware Kits come complete with a divided plastic box for easy storage.

Zinc Plated Nuts and Washers

Description	Digi-Key Part No.	Pricing 100	1,000
Hex Nuts			
No. 2 - 56	H212-ND†★	1.31	10.51
No. 4 - 40	H216-ND†★	.93	7.44
No. 6 - 32	H220-ND♦†★§	1.28	10.27
No. 8 - 32	H224-ND♦†★§	1.57	12.58
No. 10 - 32	H228-ND♦§	1.76	14.11
Internal Tooth Lock Washers			
No. 2	H232-ND†★	3.65	29.23
No. 4	H236-ND†★	1.07	8.59
No. 6	H240-ND♦†★§	1.13	9.07
No. 8	H244-ND♦†★§	1.20	9.60
No. 10	H248-ND♦§	1.47	11.76
Flat Washers			
No. 2	H776-ND	1.62	12.96
No. 4	H777-ND	2.81	22.46
No. 6	H778-ND	.97	7.78
No. 8	H779-ND	1.19	9.50
No. 10	H780-ND	1.62	12.96

Phillips Panhead Sheet Metal Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
4 x 3/8	H800-ND	1.37	10.99
4 x 1/2	H801-ND	2.40	19.20
4 x 3/4	H802-ND	2.55	20.40
6 x 3/8	H803-ND	1.68	13.44
6 x 1/2	H804-ND	2.46	19.68
6 x 3/4	H805-ND	2.60	20.83
8 x 3/8	H806-ND	2.10	16.80
8 x1/2	H807-ND	2.76	22.08
8 x 3/4	H808-ND	4.41	35.28

Hex Head Sheet Metal Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
4 x 3/8	H809-ND	9.72	77.76
4 x 1/2	H810-ND	10.73	85.87
4 x 3/4	H811-ND	13.38	107.04
6 x 3/8	H812-ND	5.58	44.64
6 x 1/2	H813-ND	7.60	60.82
6 x 3/4	H814-ND	9.54	76.32
8 x 3/8	H815-ND	7.84	62.74
8 x1/2	H816-ND	8.16	65.28
8 x 3/4	H817-ND	9.95	79.63

Phillips Panhead Machine Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H330-ND†	4.12	32.93
2-56 x 1/2	H334-ND†	4.64	37.15
2-56 x 3/4	H338-ND	5.57	44.54
4-40 x 1/4	H342-ND†	1.11	8.88
4-40 x 5/16	H343-ND	1.21	9.70
4-40 x 3/8	H781-ND	1.62	12.96
4-40 x 1/2	H346-ND†	1.37	10.99
4-40 x 5/8	H348-ND	1.52	12.14
4-40 x 3/4)	H350-ND	1.68	13.44
6-32 x 1/4	H354-ND†	1.48	11.81
6-32 x 5/16	H355-ND	1.54	12.34
6-32 x 3/8	H356-ND♦	1.59	12.72
6-32 x 7/16	H357-ND	4.74	37.92
6-32 x 1/2	H360-ND†	1.69	13.54
6-32 x 5/8	H364-ND♦	1.84	14.69
6-32 x 3/4	H368-ND♦	1.95	15.60
6-32 x 1	H372-ND♦	2.29	18.34
8-32 x 1/4	H376-ND	2.01	16.08
8-32 x 3/8	H380-ND†	2.15	17.23
8-32 x 1/2	H384-ND♦	2.27	18.19
8-32 x 5/8	H388-ND†	2.50	19.97
8-32 x 3/4	H392-ND♦	2.71	21.70
8-32 x 1	H396-ND♦	3.23	25.87
10-32 x 1/2	H400-ND♦	3.30	26.40
10-32 x 3/4	H404-ND♦	4.06	32.45
10-32 x 1	H408-ND♦	5.48	43.87

Slotted Panhead Machine Screws

Steel, Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H130-ND★	4.12	32.93
2-56 x 1/2	H134-ND★	4.64	37.15
2-56 x 3/4	H138-ND	5.55	44.40
4-36 x 1/2	H140-ND	2.40	19.20
4-40 x 1/4	H142-ND★	1.11	8.88
4-40 x 5/16	H143-ND	1.21	9.70
4-40 x 1/2	H146-ND★	1.37	10.99
4-40 x 5/8	H148-ND	1.52	12.14
4-40 x 3/4	H150-ND	1.68	13.44
6-32 x 1/4	H154-ND★	1.48	11.81
6-32 x 5/16	H155-ND	1.54	12.34
6-32 x 3/8	H156-ND§	1.59	12.72
6-32 x 7/16	H157-ND	1.65	13.20
6-32 x 1/2	H160-ND★	1.69	13.54
6-32 x 5/8	H164-ND§	1.84	14.69
6-32 x 3/4	H168-ND§	1.95	15.60
6-32 x 1	H172-ND§	2.29	18.34
8-32 x 1/4	H176-ND	2.01	16.08
8-32 x 3/8	H180-ND★	2.15	17.23
8-32 x 1/2	H184-ND§	2.27	18.19
8-32 x 5/8	H188-ND★	2.50	19.97
8-32 x 3/4	H192-ND§	2.71	21.70
8-32 x 1	H196-ND§	3.23	25.87
10-32 x 1/2	H200-ND§	3.30	26.40
10-32 x 3/4	H204-ND§	4.06	32.45
10-32 x 1	H208-ND§	5.48	43.87

Digi-Key® Zinc Plated Hardware Kits

Sizes #2, #4, #6, and #8.
1600 pieces total.
100 pieces each of the following:

★**1600-KIT-ND** (Slotted) . . . **$17.95**
†**1602-KIT-ND** (Phillips) . . . **$17.95**

Sizes #6, #8, and #10.
1600 pieces total.
100 pieces each of the following:

§**1601-KIT-ND** (Slotted) **$27.95**
♦**1603-KIT-ND** (Phillips) **$27.78**

Phillips Nylon Machine Screws

Nylon 66 - Melting Point is 500°F (260°C)

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H530-ND	8.86	70.90
2-56 x 1/2	H534-ND♦	9.10	72.82
2-56 x 3/4	H538-ND	9.26	74.11
4-40 x 1/4	H542-ND♦	8.86	70.90
4-40 x 3/8	H544-ND♦	9.00	72.00
4-40 x 1/2	H546-ND♦	9.10	72.82
4-40 x 5/8	H548-ND	9.19	73.54
4-40 x 3/4	H550-ND♦	9.26	74.11
6-32 x 1/4	H554-ND♦	9.26	74.11
6-32 x 3/8	H556-ND	9.43	75.46
6-32 x 1/2	H560-ND♦	9.51	76.08
6-32 x 5/8	H564-ND	9.57	76.56
6-32 x 3/4	H568-ND	9.59	76.75
6-32 x 1	H572-ND	9.66	77.28
8-32 x 1/4	H576-ND♦	9.17	73.34
8-32 x 3/8	H580-ND	9.24	73.92
8-32 x 1/2	H584-ND	9.04	72.34
8-32 x 5/8	H588-ND	9.46	75.70
8-32 x 3/4	H592-ND	9.42	75.36
8-32 x 1	H596-ND♦	9.46	75.65
10-32 x 1/2	H600-ND	10.19	81.55
10-32 x 3/4	H604-ND	10.20	81.60
10-32 x 1	H608-ND♦	10.38	83.04

Description	Digi-Key Part No.	Pricing 100	1,000
Nylon Hex Nuts			
2-56	H612-ND♦	10.55	84.38
4-40	H616-ND♦	10.50	84.00
6-32	H620-ND♦	10.80	86.40
8-32	H624-ND♦	11.06	88.46
10-32	H628-ND♦	11.30	90.43

Digi-Key® Nylon Hardware Kits

Sizes #2, #4, #6, #8 and #10.
1500 pieces total.
100 pieces each
of the following:

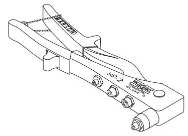
♦**1604-KIT-ND** (Phillips) **$53.94**

Rivets

Description	Digi-Key Part No.	Pricing 100	1,000
Aluminum Rivets			
3/32 x .250	H251-ND	7.56	60.48
3/32 x .375	H252-ND	7.60	60.80
1/8 x .212	H253-ND	6.15	49.20
1/8 x .275	H254-ND	4.65	37.20
1/8 x .337	H255-ND	5.03	40.20
1/8 x .400	H256-ND	5.18	41.40
1/8 x .462	H257-ND	8.40	67.20
1/8 x .650	H258-ND	10.28	82.20
Aluminum Large Flange Rivets			
1/8 x .275	H260-ND	8.65	69.20
1/8 x .400	H261-ND	9.00	72.00
1/8 x .525	H262-ND	11.00	88.00
Steel Rivets			
3/32 x .250	H263-ND	8.73	69.80
3/32 x .375	H264-ND	9.00	72.00
1/8 x .212	H265-ND	4.14	33.08
1/8 x .275	H266-ND	4.64	37.12
1/8 x .337	H267-ND	5.22	41.76
1/8 x .400	H268-ND	5.30	42.36
1/8 x .526	H269-ND	7.98	63.80
Steel Large Flange Rivets			
1/8 x .275	H270-ND	8.93	71.40
1/8 x .400	H271-ND	9.21	73.68
1/8 x .525	H272-ND	11.25	90.00

Hand Rivet Tools

HP-2®/39000



The HP-2 is the largest selling hand rivet tool in the industry. Its square shoulder fulcrum pin of cold-formed heat-treated steel prevents pin rotation that can elongate the engaging holes and cause premature tool failure in imitation tools. The HP-2 hand rivet tool sets up to 3/16” steel rivets and comes with four mounted nosepieces (3/32”. 1/8”. 5/32” and 3/16”) and a service wrench.

H1001-ND. **$37.70**

200 Kit™/39001

The deluxe hand riveter kit includes the HP-2 and 200 assorted Klik-Fast rivets in popular sizes.

H1002-ND. **$68.12**

Metric Phillips, Panhead Machine Screws

Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
M2 x 5mm	H738-ND§	5.38	43.06
M2 x 8mm	H739-ND§	5.76	46.08
M2 x 12mm	H740-ND§	5.90	47.23
M3 x 5mm	H742-ND§	5.94	47.52
M3 x 8mm	H743-ND§	6.60	52.80
M3 x 12mm	H744-ND§	6.90	55.20
M3 x 20mm	H745-ND§	8.40	67.20
M3 x 25mm	H746-ND§	8.70	69.60
M4 x 5mm	H747-ND★	7.20	57.60
M4 x 8mm	H748-ND★	7.56	60.48
M4 x 12mm	H749-ND★	8.76	70.08
M4 x 20mm	H750-ND★	11.55	92.40
M4 x 25mm	H751-ND★	12.60	100.80
M5 x 6mm	H752-ND	10.56	84.48
M5 x 8mm	H753-ND	10.80	86.40
M5 x 12mm	H754-ND	12.60	100.80
M5 x 20mm	H755-ND	17.70	141.60
M5 x 25mm	H756-ND	18.60	148.80
M6 x 8mm	H757-ND★	20.40	163.20
M6 x 12mm	H758-ND★	21.60	172.80
M6 x 20mm	H759-ND★	25.80	206.40
M6 x 25mm	H760-ND★	27.60	220.80

Metric Nuts and Washers

Zinc Plated

Description	Digi-Key Part No.	Pricing 100	1,000
Hex Nuts			
M2 Metric Hex Nut	H761-ND§	3.60	28.80
M3 Metric Hex Nut	H762-ND§	3.84	30.72
M4 Metric Hex Nut	H763-ND★	4.20	33.60
M5 Metric Hex Nut	H764-ND	4.80	38.40
M6 Metric Hex Nut	H765-ND★	5.34	42.72
Split Lock Washers			
M2 Lock Washers	H771-ND§	5.40	43.20
M3 Lock Washers	H772-ND§	4.26	34.08
M4 Lock Washers	H773-ND★	4.74	37.92
M5 Lock Washers	H774-ND	5.34	42.72
M6 Lock Washers	H775-ND★	6.30	50.40
Flat Washers			
M2 Flat Washers	H766-ND	3.30	26.40
M3 Flat Washers	H767-ND	3.60	28.80
M4 Flat Washers	H768-ND★§	3.66	29.28
M5 Flat Washers	H769-ND	3.75	30.00
M6 Flat Washers	H770-ND★§	4.80	38.40

Digi-Key® Metric Hardware Kits

Sizes M2 and M3. Zinc Plated.
1400 pieces total.
100 pieces each of the following:

§**1605-KIT-ND** (Phillips). **$59.95**

Sizes M4 and M6. Zinc Plated.
1500 pieces total.
100 pieces each of the following:

★**1606-KIT-ND** (Phillips) **$99.95**

Phillips, Panhead Machine Screws

Stainless Steel

Description	Digi-Key Part No.	Pricing 100	1,000
2-56 x 1/4	H700-ND★	2.64	21.12
2-56 x 1/2	H701-ND★	3.84	30.72
2-56 x 3/4	H702-ND★	4.98	39.84
4-40 x 1/4	H703-ND★	2.88	23.04
4-40 x 5/16	H704-ND★	3.34	26.74
4-40 x 1/2	H705-ND★	3.79	30.34
4-40 x 3/8	H782-ND	3.60	28.80
4-40 x 5/8	H706-ND★	4.16	33.31
4-40 x 3/4	H707-ND★	6.36	50.88
6-32 x 1/4	H708-ND†	4.08	32.64
6-32 x 5/16	H709-ND	4.39	35.09
6-32 x 3/8	H710-ND	4.51	36.10
6-32 x 1/2	H711-ND†	4.56	36.48
6-32 x 5/8	H712-ND	5.52	44.16
6-32 x 3/4	H713-ND†	5.38	43.01
6-32 x 1	H714-ND	6.64	53.09
8-32 x 3/8	H715-ND†	6.16	49.25
8-32 x 1/2	H716-ND†	6.70	53.62
8-32 x 5/8	H717-ND	7.33	58.66
8-32 x 3/4	H718-ND†	8.54	68.35
8-32 x 1	H719-ND	9.94	79.49
10-32 x 1/2	H720-ND†	9.31	74.50
10-32 x 3/4	H721-ND†	11.68	93.46
10-32 x 1	H722-ND†	14.74	117.89

Stainless Steel Nuts and Washers

Description	Digi-Key Part No.	Pricing 100	1,000
Hex Nuts			
No. 2 - 56 Hex Nut	H723-ND★	4.99	39.94
No. 4 - 40 Hex Nut	H724-ND★	4.13	33.02
No. 6 - 32 Hex Nut	H725-ND†	5.57	44.54
No. 8 - 32 Hex Nut	H726-ND†	5.95	47.62
No. 10 - 32 Hex Nut	H727-ND†	6.05	48.38
Internal Tooth Lock Washers			
No. 2 Lock Washer	H728-ND★	3.55	28.42
No. 4 Lock Washer	H729-ND★	2.50	19.97
No. 6 Lock Washer	H730-ND†	2.30	18.43
No. 8 Lock Washer	H731-ND†	2.88	23.04
No. 10 Lock Washer	H732-ND†	3.07	24.58
Flat Washers			
No. 2 Flat Washer	H733-ND★	2.30	18.43
No. 4 Flat Washer	H734-ND★	3.36	26.88
No. 6 Flat Washer	H735-ND	3.66	29.28
No. 8 Flat Washer	H736-ND	3.90	31.20
No. 10 Flat Washer	H737-ND	4.74	37.92

Digi-Key® Stainless Steel Hardware Kits

Sizes #2 and #4.
1400 pieces total.
100 pieces each of the following:

★**1607-KIT-ND** (Phillips) **$39.95**

Sizes #6, #8, and #10.
1500 pieces total.
100 pieces each of the following:

†**1608-KIT-ND** (Phillips) **$79.95**

KEYSTONE ELECTRONICS CORP. PC Test Points

Features: • Color keyed for visibility and quick identification • Economical choice for PC test point terminations • Snap-fit mounting provides positive retention for wave soldering • Wire form loop for safe, non-slip testing • Space saving, ultra low and low profile designs • High profile for difficult to reach applications • Suitable for high density packaging on .062" (1.57mm) & .093" (2.36mm) PC boards • Practical replacement for wire-wrap posts and turrets • Secure grip for J hooks, EZ hooks, grabbers, alligator clips, tips or probes • Plastic base strengthens terminal for positive holding power • Ideal for reliable production testing and field service troubleshooting

Fig. 1 Miniature

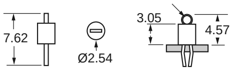


Fig. 2 Compact

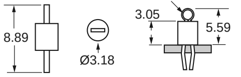


Fig. 3 Multipurpose

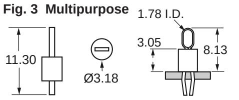


Fig. 4

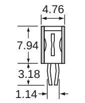


Fig.	Base Color	Digi-Key Part No.	Price Each 10	100	500	Keystone Part No.
1	Red	5000K-ND	.23	.17	.16	5000
	Black	5001K-ND	.23	.17	.16	5001
	White	5002K-ND	.23	.17	.16	5002
	Orange	5003K-ND	.23	.17	.16	5003
	Yellow	5004K-ND	.23	.17	.16	5004
2	Red	5005K-ND	.23	.18	.16	5005
	Black	5006K-ND	.23	.18	.16	5006
	White	5007K-ND	.23	.18	.16	5007
	Orange	5008K-ND	.23	.18	.16	5008
	Yellow	5009K-ND	.23	.18	.16	5009
3	Red	5010K-ND	.23	.18	.16	5010
	Black	5011K-ND	.23	.18	.16	5011
	White	5012K-ND	.23	.18	.16	5012
	Orange	5013K-ND	.23	.18	.16	5013
	Yellow	5014K-ND	.23	.18	.16	5014
4	Red	6043K-ND	1.27	1.00	.91	6043
	Black	6044K-ND	1.27	1.00	.91	6044

KEYSTONE ELECTRONICS CORP. SMT Test Points

Miniature • Ultra low profile ideally suited for advanced surface mount printed circuit board applications • Designed for long life and durability • Manufactured using flat wire to provide a large mounting surface area • Ideal for use with miniature probes, clips, and hooks • Efficient, safe, board level testing.
Compact • Unique design provides exceptional strength and durability • Simplifies testing on dense SMT circuit boards • Ideal for use with most standard probes, clips and hooks • Efficient, safe, board level testing

Fig. 1 Miniature

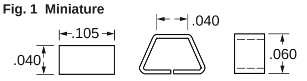


Fig. 2 Compact

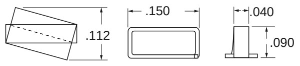


Fig.	Description	Digi-Key Part No.	Cut Tape Price Each 50	250	500	Digi-Key Part No.	Tape & Reel Pricing 1,000	Keystone Part No.
1	Miniature	5015KCT-ND	.25	.22	.18	5015KTR-ND	108.55	5015
2	Compact	5016KCT-ND	.23	.20	.17	5016KTR-ND	100.93	5016

KEYSTONE ELECTRONICS CORP. Binding Post

Fig. 1

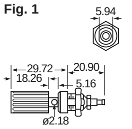


Fig. 2

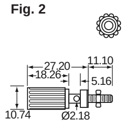


Fig. 3

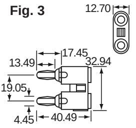
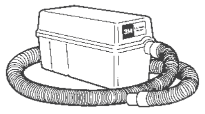


Fig.	Description	Base Color	Digi-Key Part No.	Price Each 10	100	Keystone Part No.
1	Standard	Red	7004K-ND	3.68	2.89	7004
1	Standard	Black	7005K-ND	3.68	2.89	7005
2	Economy	Red	7006K-ND	4.10	3.22	7006
2	Economy	Black	7007K-ND	4.10	3.22	7007
3	Dual Banana Plugs	Red	6088K-ND	11.38	8.95	6088K
3	Dual Banana Plugs	Black	6089K-ND	11.38	8.95	6089K

3M Electronics Vacuum and Accessories

Electronic Vacuum



Complete with hose, 32" - 10 ft. (81.28cm - 3.05 meters), wand, crevice tool, crevice tool brush, dusting brush, needle nozzle, 3-year warranty.

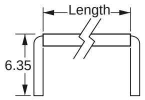
OPTIONS: Shoulder strap with shoulder pad.

SPECIFICATIONS: Electrical: 115 VAC, 50/60Hz, 5.0 amps. **Dimensions:** Length: 17.80" (45.21cm). Width: 7.75" (19.69cm). Height: 9.25" (23.50cm). Weight: 9 lbs. 14 oz. (4.48kg). **Motor:** 1HP, continuous duty, thermally protected with automatic reset. Conducted RFI filtered (reduces EMI to be below FCC requirements).

Filter: Type 1, Small Particle: For trapping extremely fine particles. Typical applications color laser printers, color copiers and highly sensitive equipment. **Type 2, Medium Particle:** Designed to trap unwanted toner from copiers and laser printers, cleaning typewriters and data processing equipment.

Description	Digi-Key Part No.	Price Each 1	10	3M Part No.
Electronic Vacuum Cleaner 115 Vac	SCP148-ND	220.88	206.15	SV-497AJM
Carrying Strap with Shoulder Pad	SCP149-ND	9.98	9.31	SV-CS1
Type 1 Filter, Small Particle	SCP150-ND	22.79	21.27	SV-SPF1
Type 2 Filter, Medium Particle	SCP151-ND	12.81	11.96	SV-MPF2
Replacement Hose for Electronic and Tool Case Vacuum Cleaners				
30" Hose, Stretches to Approx. 10'	SCP230-ND	33.00	—	SV-SH32
50" Hose, Stretches to Approx. 16'	SCP231-ND	60.00	—	SV-SH50

3M Breadboard Jumper Wire Kit



• 350 wires • 14 different lengths • Wire is stripped • Leads bent 907 • Length is classified by color coding • Wire is solid tinned 22 gauge • PVC insulation.

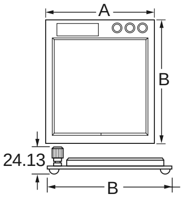
Kit contains 25 each of 14 different lengths.

923351-ND $27.24

Replacement Wire

Length In. (mm)	Qty./ Pkg.	Color	Digi-Key Part No.	Price/ Pkg.
0.1 (2.54)	200	(No Insulation)	923345-01-ND	$9.78 per Pkg.
0.2 (5.08)	200	Red	923345-02-ND	
0.3 (7.62)	200	Orange	923345-03-ND	
0.4 (10.16)	200	Yellow	923345-04-ND	
0.5 (12.70)	200	Green	923345-05-ND	
0.6 (15.24)	150	Blue	923345-06-ND	
0.7 (17.78)	150	Violet	923345-07-ND	
0.8 (20.32)	150	Gray	923345-08-ND	
0.9 (22.86)	150	White	923345-09-ND	
1.0 (25.40)	100	Brown	923345-10-ND	
2.0 (50.80)	100	Red	923345-20-ND	
3.0 (76.20)	75	Orange	923345-30-ND	
4.0 (101.60)	75	Yellow	923345-40-ND	
5.0 (127.00)	75	Green	923345-50-ND	

3M A•C•E Board™ Solderless Breadboards



FEATURES:

• 0.1" x 0.1" (2.54mm) solderless tie point matrix accepts all DIP sizes and a wide variety of discrete components with lead diameters up to .032" (.81mm) • Capacities range from 610 to 5424 tie points

• Accommodate from 6 to 54, 14 pin DIPs • Separate distribution bases for power, ground and signal lines • Molded alphanumeric grid for faster, easier tie point identification • Circuit elements are easily connected with #22 AWG solid wire • Strip bodies are constructed of durable Acetal Copolymer with Alloy 688 terminals • Durable baseplates keep boards stationary during use and help to minimize noise and voltage spikes in today's high speed circuits.

AxCxE Model	DIP Capacity (Size)	Base Dim. Inch (cm) A	B	Total Tie Points	Total 5-Tie Point Term.	Binding Posts	Digi-Key Part No.	Price Each
354	54(14-Pin)	14.69 (37.31)	9.75 (24.77)	5424	768	4	922354-ND	111.56
345	45(14-Pin)	12.44 (31.60)	9.75 (24.77)	4520	640	4	922345-ND	91.07
336	36 (14-Pin)	10.25 (26.04)	9.25 (23.50)	3648	512	4	922336-ND	72.65
327	27 (14-Pin)	8.0 (20.32)	9.25 (23.50)	2712	384	4	922327-ND	55.88
318	18 (14-Pin)	7.75 (19.69)	6.25 (15.88)	1824	256	3	922318-ND	43.71
309	9 (14-Pin)	7.0 (17.78)	4.0 (10.16)	840	128	3	922309-ND	21.89
306	6 (14-Pin)	5.4 (13.72)	4.0 (10.16)	610	94	2	922306-ND	22.19

3M Super Strips and Circuit Strips

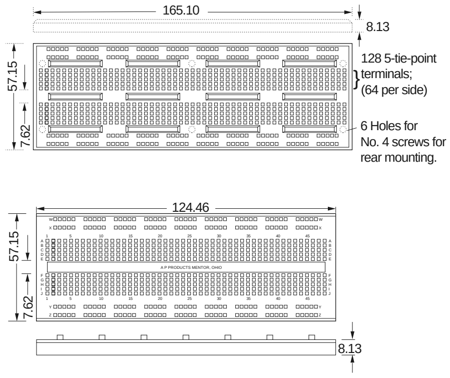
Universal Breadboarding Elements with Solderless Plug-In Tie Points

As with all solderless breadboarding units from 3M, components simply plug-in and are interconnected with ordinary solid hook-up wire; #22 AWG is recommended.

All sizes of DIPs and discrete components with lead diameters up to .032" (.82mm) can be accommodated.

These handy strips may be permanently mounted with the integral non-shorting instant-mounting backing, or for quick removal, they may be mounted with screws on panels up to 1/8" (3.18mm) thick.

Hardware and mounting templates are provided with every strip.


165.10
8.13
57.15
7.62
128 5-tie-point terminals; (64 per side)
6 Holes for No. 4 screws for rear mounting.
124.46
57.15
7.62
A P PRODUCTS MENTOR, OHIO
8.13

SPECIFICATIONS

	SUPER-STRIP	CIRCUIT-STRIP
Size:	2.25" x 6.50" x .32" (57.15mm x 165.10mm x 8.13mm)	2.25" x 4.90" x .32" (57.15mm x 124.46mm x 8.13mm)
Plug-In Tie-Points:	840	610
Materials: Body	Acetal Copolymer	Acetal Copolymer

SUPER-STRIP Terminals	Part No.	Price Each	CIRCUIT-STRIP Terminals	Part No.	Price Each
Alloy 770	923252-ND	21.89	Alloy	923253-ND	15.44
Gold (10m)	923748-ND	69.21	Gold (10m)	923749-ND	57.89

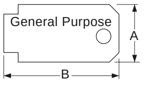
VECTOR ELECTRONIC COMPANY Prototype Boards

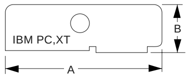
Vector Prototyping Boards with punched holes are convenient economical tools for assembling circuit components and cost effective alternatives to custom designs. Use general purpose Plugboards and Bus specific for edgeboard connection prototyping, while Circbords are ideal for cutting down to smaller board sizes.
• Holes on 0.1" (2.54mm) grid .042" (1.07mm) dia. (.043" [1.09mm] on V1018 and V1029) • Ejector Hole • Plating: Gold/Nickel • Board Material: Epoxy Glass Composite.

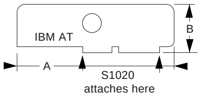
IBM PC, XT and AT Expansion Units. • Marked edge contact identification • Gold plated edge contacts on 0.1" centers • Power & ground buses terminate to connectors • Pads on board & bracket accepts DB9-, 15-, 25- or 37-Pin I/O connector • Accepts Vector's press-terminals for wiring & soldering • Holes are .042" (1.07mm) dia. or 0.1" (2.54mm) grid • 1/16" (1.59mm) thick epoxy glass material, gold/nickel contacts • Universal mounting bracket and card guide incl. • Layout planning sheets & instructions incl. • Plugs into any IBM AT slot with dual connectors (AT unit only) • Pads for mounting dual, row 0.1" (2.54mm) spaced header (AT unit only).

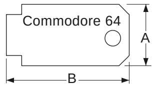
Circbords™ • .042" (1.07mm) dia. holes on 0.1" (2.54mm) grid • 1/16" (1.59mm) thick, epoxy glass composite boards • Flame retardant • Etched copper patterns are solder plated.

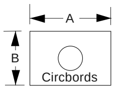
EISA • Accepts DIPs, PGAs, PLCC, most component geometries • Multilayer design ensures signal handling integrity • Mounting area for D-sub and ribbon header connectors • On-board I/O break out field at connector for circuit analysis • Solder coated

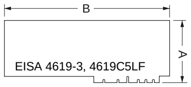


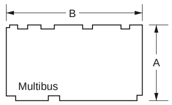




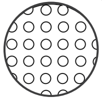






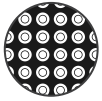


A



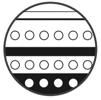
Bare Board

B1/B2



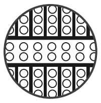
Pad per Hole

C



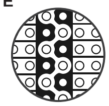
Buses only

D



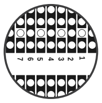
3 Hole Solder Pad

E



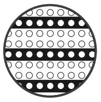
3 Hole w/Zig Zag

F



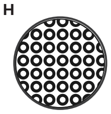
Voltage/Gnd. Planes

G



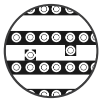
Interleaved Buses

H



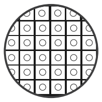
Ground Plane

I



Volt/Gnd. Planes

J



Square Pad per Hole

PC BOARD PATTERNS

A.	Edgeboard Contacts Only
B1.	Pad Per Hole W/ Buses
B2.	Pad Per Hole Only
C.	Buses Only Around Bare Board
D.	3-Hole Solder Pad W/Buses
E.	3-Hole Solder Pad, Zig-Zag Buses & Ground Plane
F.	Voltage/Gnd. Planes
G.	Interleaved Buses
H.	Clearance-Hole Ground Plane
I.	Voltage/Ground Planes
J.	Pad-Per-Hole Only

PCB Pattern	Edge Contacts No.	Edge Contacts Spacing In. (mm)	Dimensions Inch (cm) A	Dimensions Inch (cm) B	16-Pin Dip Cap.	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Accessories Connectors Solder Tail	Accessories Connectors Wire Wrap	Accessories Card Extender	Accessories Card Racks	Vector Part No.
General Purpose Plugboards														
A	44	.156" (3.96)	4.50 (11.43)	4.50 (11.43)	40	V1017-ND	18.71	16.45	14.60	V1062	V1196	V1024	V1050-52	3662-5
A			4.50 (11.43)	6.50 (16.51)	50	V1016-ND	22.26	19.57	17.37	V1062	V1196	V1024	V1050-52	3662
A			4.50 (11.43)	9.60 (24.38)	90	V1129-ND	27.85	24.48	21.73	V1062	V1196	V1024	V1050	3662-2
B1/B1			4.50 (11.43)	6.50 (16.51)	45	V1018-ND	43.41	38.16	33.87	V1062	V1196	V1024	V1050-52	3662-9
G			4.50 (11.43)	6.50 (16.51)	24	V1023-ND	28.70	25.24	22.40	V1062	V1196	V1024	V1050-52	3682-2
D			4.50 (11.43)	6.50 (16.51)	12	V1020-ND	25.46	22.39	19.87	V1062	V1196	V1024	V1050-52	3677-2
E			4.50 (11.43)	9.60 (24.38)	40	V1128-ND	41.02	36.07	32.01	V1062	V1196	V1024	V1050	4112
E			4.50 (11.43)	6.50 (16.51)	25	V1031-ND	32.67	28.72	25.49	V1062	V1196	V1024	V1050-52	4112-4
E			4.50 (11.43)	4.50 (11.43)	8	V1032-ND	30.30	26.64	23.65	V1062	V1196	—	—	4112-5
D			4.50 (11.43)	9.60 (24.38)	21	V1019-ND	28.70	25.24	22.40	V1062	V1196	V1080	V1053	3677
—			4.50 (11.43)	6.50 (16.51)	24	V1130-ND	39.82	35.01	31.07	V1062	V1196	V1024	V1050	3682-4
H			4.50 (11.43)	6.50 (16.51)	90	V1131-ND	36.13	31.76	28.19	V1062	V1196	V1024	V1050	3662A6
A	72	.100 (2.54)	4.50 (11.43)	6.50 (16.51)	50	V1027-ND	25.73	22.63	20.08	S1364	V1061	V1079	V1050-52	3719-1
B1			4.50 (11.43)	6.50 (16.51)	40	V1029-ND	47.34	41.62	36.94	S1364	V1061	V1079	V1050-52	3719-6
—			4.50 (11.43)	6.50 (16.51)	34	V1132-ND	31.69	27.86	24.73	S1364	V1061	V1024	V1050	4066-4
A			4.50 (11.43)	9.60 (24.38)	90	V1028-ND	28.70	25.24	22.40	S1364	V1061	V1079	V1053	3719-4
STD Bus														
D	56	.125	4.50 (11.43)	6.50 (16.51)	20	V1111-ND	36.13	31.76	28.19	S2284	—	V1115	V1050-52	4610V
A			4.50 (11.43)	6.50 (16.51)	59	V1112-ND	37.93	33.35	29.60	S2284	—	V1115	V1050-52	4610-1
B1/B2			4.50 (11.43)	6.50 (16.51)	52	V1114-ND	53.47	47.01	41.72	S2284	—	V1115	V1050-52	4610-3
IBM AT/ISA Expansion Units*														
C	(XT)	(2.54)	13.23 (33.60)	4.20 (10.67)	84	V1036-ND	56.17	49.38	43.83	S1314	—	V1025	—	4613-1
B1			13.23 (33.60)	4.20 (10.67)	91	V1038-ND	56.75	49.89	44.28	S1314	—	V1025	—	4613-3
D	62/36 (AT)	.100 (2.54)	13.25 (33.66)	4.80 (12.19)	—	V1039-ND	72.25	63.52	56.38	—	—	V1026	—	4617
C			13.25 (33.66)	4.80 (12.19)	108	V1040-ND	58.97	51.84	46.01	—	—	V1026	—	4617-1
B1			13.25 (33.66)	4.80 (12.19)	—	V1041-ND	72.25	63.52	56.38	—	—	V1026	—	4617-3
H	98	.100 (2.54)	13.25 (33.66)	4.80 (12.19)	140	V1137-ND	72.25	63.52	56.38	S1499-967	—	—	—	4617-4
—			13.25 (33.66)	4.80 (12.19)	140	V1138-ND	82.70	72.71	64.53	S1499-967	—	—	—	4617-5
—	49/98	.1 (2.54)	—	—	—	S1020-ND	3.12	24.75	—	PCB Expansion Port Edge Card				
CIRCBORDS (Plugboard Patterns Without The Expense Of Edgeboard Connectors)														
D	—	—	4.50 (11.43)	6.50 (16.51)	20	V1044-ND	24.77	21.78	19.33	—	—	—	—	8001
G	—	—	4.50 (11.43)	6.50 (16.51)	35	V1045-ND	27.48	24.16	21.45	—	—	—	—	8002
J	—	—	4.50 (11.43)	6.50 (16.51)	60	V1046-ND	23.59	20.74	18.41	—	—	—	—	8003
H	—	—	4.50 (11.43)	6.50 (16.51)	50	V1047-ND	25.99	22.85	20.28	—	—	—	—	8004
B2/B2	—	—	5.00 (12.70)	13.25 (33.66)	154	V1048-ND	45.57	40.07	35.56	—	—	—	—	8006
B2/I	—	—	4.50 (11.43)	6.50 (16.51)	60	V1049-ND	26.41	23.22	20.61	—	—	—	—	8007
D	—	—	4.50 (11.43)	8.08 (20.52)	21	V1021-ND	19.09	16.79	14.90	—	—	—	—	3677-6
J/J	—	—	4.50 (11.43)	8.08 (20.52)	80	V1034-ND	28.81	25.33	22.48	—	—	—	—	45P80-1
B2/B2	—	—	10.60 (26.92)	10.60 (26.92)	275	V1001-ND	71.07	62.48	55.46	—	—	—	—	106P106-1
—	—	—	18.00 (45.72)	10.69 (27.15)	—	V1116-ND†	146.91	129.16	114.63	—	—	—	—	106P180-4
B2/B2	—	—	12.86 (32.66)	4.00 (10.16)	124	V1117-ND	80.01	70.34	62.43	—	—	—	—	8010
B2/B2	—	—	11.00 (27.94)	9.20 (23.37)	283	V1118-ND	68.34	60.08	53.33	—	—	—	—	8012
CIRCBORDS 2mm and Combo 2mm x .1" Board														
B2	—	—	6.3 (16.0)	3.94 (10.0)	—	V2013-ND•	15.93	14.00	12.43	—	—	—	—	8017
B2	—	—	6.3 (16.0)	3.94 (10.0)	—	V2014-ND‡	15.91	13.99	12.42	—	—	—	—	8018
Low Cost Prototype CIRCBORDS														
B2/B2	—	—	4.00 (10.16)	6.00 (15.24)	40	V2009-ND	10.47	9.20	8.17	—	—	—	—	8015
B2	—	—	4.00 (10.16)	4.00 (10.16)	40	V2010-ND	6.66	5.86	5.20	—	—	—	—	8015-1
B2/B2	—	—	6.00 (15.24)	9.00 (22.86)	60	V2011-ND	15.38	13.52	12.00	—	—	—	—	8016
B2	—	—	6.00 (15.24)	6.00 (15.24)	60	V2012-ND	9.63	8.47	7.52	—	—	—	—	8016-1
EISA Prototyping Boards														
B1	188	.050 (1.27)	4.50 (11.43)	13.25 (33.66)	—	V1107-ND	269.41	236.85	210.21	—	—	V1108	—	4619-3
—			13.25 (33.66)	4.50 (11.43)	140	V1139-ND	295.22	259.54	230.34	—	—	—	—	4619-5
S-100 Prototyping Boards														
B2	50/100	.125 (3.18)	10.00 (25.40)	5.30 (13.46)	80	V1134-ND	63.75	56.05	49.75	—	—	—	—	8801-6
A	50/100		10.00 (25.40)	5.30 (13.46)	110	V1135-ND	52.45	46.12	40.93	—	—	—	—	8801-1
F/F	50/100		10.00 (25.40)	5.30 (13.46)	—	V1136-ND	63.61	55.92	49.63	—	—	—	—	8804

* IBM is a registered trademark of International Business Machines. Apple II and IIe are trademarks of Apple Computer, Inc
† V1116-ND has pad per hole with PTH, GND plane both sides.
• 2mm board only. ‡ 2mm x .1" combo board.

VECTOR ELECTRONIC COMPANY PCI Development Boards

For fast development of adapter card to PCI bus.

P/N V1163-ND Features:

- Multilayer board contains pad per hole patterns.
- Power and ground accessible throughout the board.
- For use in 5 Volt or 3.3 Volt applications.
- For use with Vector prototype accessories.

Description	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Vector Part No.
PCI BUS, PCMCIA Prototype Kits					
PCI Plugboard +5V or 3.3V, Pad Per Hole, PTH	V1163-ND	238.02	209.25	185.71	4624-3
PCI Extender Test Card 5V for 32 or 64 Bit	V1166-ND	367.28	322.88	286.56	3690-34-5V
PCI Extender Test Card 3.3V for 32 or 64 Bit	V1167-ND	367.28	322.88	286.56	3690-34-3V
PCMCIA Adapter Board Assembly	V1168-ND	123.40	108.48	96.28	4625-1
PCMCIA Proto Board Kit 4.5" x 6.00" (11.43cm x 15.24cm) Pad Per Hole	V1169-ND	192.83	169.52	150.45	4625-3
PCMCIA Extender Test Card for Type II or III Slots	V1170-ND	180.49	158.68	140.83	3690-35

VECTOR
ELECTRONIC COMPANY

Circuit Board Accessories

Contacts slip on .025” (.64mm) squared wrap or pins. Contacts are tin plated, and offered in a reel of contacts wired together, “daisy-chain” style, to 28 gauge blue insulated wire. Each contact is spaced 5” (127mm) apart. Sold in reels of 50.

Fig. 1

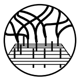


Fig. 2

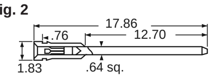


Fig. 3

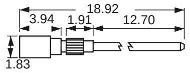


Fig. 4

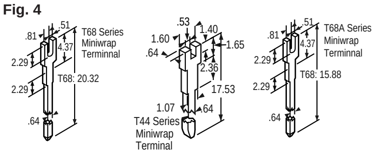


Fig. 5A

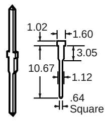


Fig. 5B

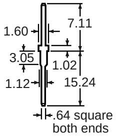


Fig. 6

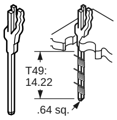
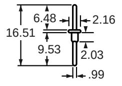


Fig. 7



Material: Phosphor bronze

Fig. 8

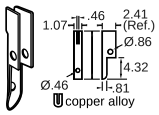


Fig. 9

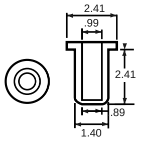


Fig. 10

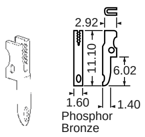
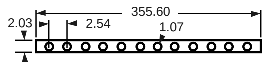
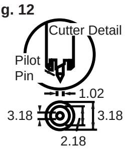


Fig. 11



Install on circuit boards as an alternative to etched bus lines.

Fig. 12



Makes insulating rings around pre-punched holes to insulate terminal points.

Fig. 13

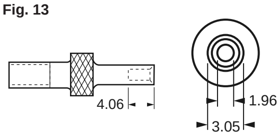


Fig. 14

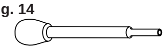


Fig. 15

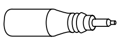


Fig. 16

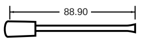


Fig. 17

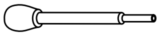


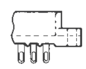
Fig. 18

Fig.	Description	Pkg. Qty.	Digi-Key Part No.	Price Each 1	Price Each 10	Vector Part No.
1	Slip-On contacts For Tab-To-Wire Connection	50	V1065-ND	150.73	132.52	T120-1/50
2	Lo-Profile IC Socket Pins for .055” (1.40mm) Dia. Holes, Wrap Post	100	V1058-ND	27.01	23.75	R31/C
3	Lo-Profile IC Socket Pins for .042” (1.07mm) Dia. Holes, Wrap Post	100	V1059-ND	32.32	28.42	R32/C
3	Lo-Profile IC Socket Pins for .042” (1.07mm) Dia. Holes, Wrap Post	1000	V1060-ND	236.58	207.99	R32/M
4	T44 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	100	V1071-ND	9.50	8.36	T44/C
4	T44 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	1000	V1072-ND	54.67	48.07	T44/M
4	T68 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	100	V1077-ND	8.81	7.75	T68/C
4	T68 Series Bifurcated Miniwrap Term. with .025” (.64mm) Sq. Posts	1000	V1078-ND	51.91	45.64	T68/M
4	T68A Series Miniwrap Terminal	1000	V1110-ND	96.95	85.24	T68A/M
5A	Press-In Terminals with .025” (.64mm) Sq. Posts	1000	V1073-ND	85.89	75.51	T46-4-9/M
5B	Press-In Terminals with .025” (.64mm) Sq. Posts	100	V1074-ND	12.85	11.30	T46-5-9/C
6	Trifurcated Klipwrap Terminals with .025” (.64mm) Sq. Posts	100	V1075-ND	13.21	11.62	T49/C
6	Trifurcated Klipwrap Terminals with .025” (.64mm) Sq. Posts	1000	V1076-ND	116.73	102.63	T49/M
7	Inboard Pins for 1/16” (1.60mm) Boards with .042” (1.07mm) Dia. Holes, Gold	1000	V1054-ND	101.50	89.24	K24A/M
7	Inboard Pins for 1/16” (1.60mm) Boards with .042” (1.07mm) Dia. Holes, Tin	1000	V1055-ND	56.22	49.43	K24C/M
8	Micro-Klip Term. for 1/16” (1.60mm) Boards, .042” (1.07mm) Dia. Holes, Tin	100	V1069-ND	8.77	7.72	T42-1/C
8	Micro-Klip Term. for 1/16” (1.60mm) Boards, .042” (1.07mm) Dia. Holes, Tin	1000	V1070-ND	42.11	37.03	T42-1/M
9	Rolled Flange Eyelet	500	V1066-ND	30.05	26.42	T123/500
10	Mini-Klip Term. for 1/16” (1.60mm) Boards with .062” (1.574mm) Dia. Holes, Tin	100	V1067-ND	9.01	7.92	28/C
10	Mini-Klip Term. for 1/16” (1.60mm) Boards with .062” (1.574mm) Dia. Holes, Tin	1000	V1068-ND	48.12	42.31	T28/M
11	Bus Strips With Round Punched Holes	10	V1064-ND	8.95	7.88	T107/10
12	Pad Cutter Tool with Handle, .040” (1.02mm) Holes For Copper Clad Boards	1	V1056-ND	50.83	44.69	P138A
12	Pad Cutter Tool Shank only, .040” (1.02mm) Holes For Copper Clad Boards	1	V1057-ND	61.12	53.73	P138C
14	Hand Insertion Tool for T44		V1098-ND	22.13	19.46	A13
14	Hand Insertion Tool for T68		V1099-ND	23.53	20.69	A13-1
15	Hand Insertion Tool for T49		V1100-ND	21.55	18.95	P156V
16	Hand Insertion Tool for T42-1		V1101-ND	29.54	25.97	P149V
17	Hand Insertion Tool for K24A, T46		V1103-ND	61.90	54.42	P133A
18	Hand Insertion Tool for R31, R32		V1104-ND	104.61	91.97	P158V
13	Die for R32 Socket Pins		V1106-ND	57.77	50.79	D9
—	Die for R31 Socket Pins		V1173-ND	22.84	20.08	D10

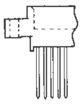
Edgeboard Connectors

**For 1/16" (1.60mm)
Thick P.C. Boards**

Solder Eyelet Type Insulator Material: Phenolic, UL-94V-0 or Glass filled diallyl; Phthalate UL-94V-1 or Ryton R10. **Wrap Tail Type Insulator Material:** Phenolic, UL-94V-0 or Glass filled diallyl; Phthalate UL-94V-1 or Polyester (VALOX) UL-94V-0. **Contact Material:** Phosphor bronze QQ-B-750 or Beryllium copper. **Contact Plating:** .000010” gold over .000050” nickel. **Test Voltage:** 650 VAC. **Rated Current:** 3 Amps. **Contact Res. Drop: 30 Mv Max** @ rated current. **Insulation Resistance:** 5000 megohms, mon. @ 500 VDC.



Solder-Eye



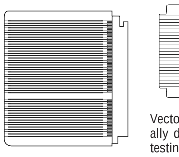
Wire-Wrap

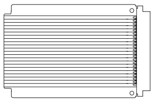
Ctrs. In. (mm)	No. Of Contacts	Termination Type	Mounting Ears	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Vector Part No.
.100 (2.54)	72	Wrap Tail	Center	V1061-ND†*	18.04	15.86	14.08	R636-1
.156 (3.96)	44	Solder Eye	Flush	V1062-ND††	11.90	10.47	9.29	R644
.156 (3.96)	44	Wire Wrap	Flush	V1195-ND	10.57	9.30	8.26	R644-3F
.156 (3.96)	44	Wire Wrap	Center	V1196-ND	10.57	9.30	8.26	R644-3C

† Supplied with between-contact polarizing key. * Wrap Tail: 3-level, .025” (.64mm) Sq.
†† Supplied with between-contact polarizing key and in-contact polarizing key.

Card Extenders

Current rating: 5A @ 108°F temp. rise; Voltage rating: 200 RMS or 300 VDC. Circuit contacts are gold/nickel plated .000010” gold over .000050” nickel. Connector contacts: Gold inlay .000030” thick, on CA725 copper/nickel alloy base. Board: epoxy glass composite - 2 oz. copperclad or FR4 per MIL-P-13949.



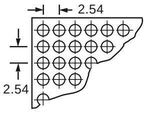


Vector Card Extenders are specifically designed to provide in-system testing of functioning circuit boards.

Contacts Total	Contacts Each Side	Contacts Ctrs. In. (mm)	Dimensions Width x Height Inch (cm)	Bus System Application	Digi-Key Part No.	Price Each 1	Price Each 10	Vector Part No.
44	22	.156 (3.96)	4.5 x 6.5 (11.43 x 16.51)	—	V1024-ND	39.66	34.87	3690
36/62	18/31	.100 (2.54)	6.7 x 5.6 (17.02 x 14.22)	IBM AT	V1026-ND	75.42	66.31	3690-26
62	31	.100 (2.54)	3.18 x 5.7 (8.08 x 14.48)	IBM PC	V1025-ND	73.58	64.69	3690-22
72	36	.100 (2.54)	4.5 x 11.5 (11.43 x 29.21)	—	V1143-ND	68.49	60.21	3690-2
60/86	30/43	.1/.156 (2.54/3.96)	12 x 7.65 (30.48 x 19.43)	Multibus I	V1095-ND	112.77	99.14	3690-18
188	94	.050 (1.27)	6.7 x 5.6 (17.02 x 14.22)	EISA	V1108-ND	279.08	245.59	3690-32
56	28	.125 (3.18)	4.5 x 6.5 (11.43 x 16.51)	SDTI	V1115-ND	49.10	43.17	3690-16
100	50	—	Hgt. 7.5 (19.05)	S-100	V1144-ND	75.42	66.31	3690-12

Prepunched Insulating Boards

- Epoxy glass, except as noted
- .062” (1.57mm) thick except
‡ V1122-ND .047” (1.19mm) thick
‡ V1123-ND .031” (.79mm) thick



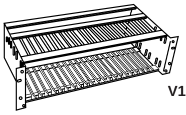
Dimensions - Inch (mm) Width x Length	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Vector Part No.
Micro-Vectorboards — Holes .042” (1.07mm) Diameter; .100” (2.54mm) Grid					
4.5 x 17 (114.30 x 431.80)	V1005-ND#	11.88	10.45	9.28	169P44XXXP
4.5 x 6.5 (114.30 x 165.10)	V1043-ND#	6.44	5.67	5.03	64P44XXXP
4.5 x 17 (114.30 x 431.80)	V1004-ND	17.07	15.01	13.32	169P44WE
8 x 17 (203.20 x 431.80)	V1007-ND	26.43	23.24	20.62	169P79WE
8.5 x 17 (215.90 x 431.80)	V1011-ND	24.17	21.25	18.86	169P84WE
8.5 x 17 (215.90 x 431.80)	V1012-ND*	28.70	25.24	22.40	169P84WEC1
4.5 x 6.5 (114.30 x 165.10)	V1042-ND	6.41	5.64	5.00	64P44WE
4.5 x 17 (114.30 x 431.80)	V1002-ND†	11.12	9.78	8.68	169P44
4.5 x 17 (114.30 x 431.80)	V1003-ND*†	20.73	18.23	16.18	169P44C1
8 x 17 (203.20 x 431.80)	V1006-ND†	29.10	25.59	22.71	169P79
8.5 x 17 (215.90 x 431.80)	V1008-ND†	29.10	25.59	22.71	169P84
8.5 x 17 (215.90 x 431.80)	V1009-ND*†	33.74	29.67	26.33	169P84C1
10 x 17 (254 x 431.80)	V1013-ND†	35.65	31.35	27.82	169P99
6.5 x 4.5 (165.10 x 114.30)	V1119-ND†	6.41	5.64	5.00	64P44
4.5 x 8.5 (114.30 x 215.90)	V1120-ND	10.10	8.88	7.89	84P44WE
6 x 17 (152.40 x 431.80)	V1122-ND‡	16.67	14.66	13.01	169P59-047
6 x 17 (152.40 x 431.80)	V1123-ND‡	17.05	15.00	13.31	169P59-032
6 x 17 (152.40 x 431.80)	V1124-ND#	13.21	11.62	10.31	169P59XXXP
4.5 x 17 (114.30 x 431.80)	V1126-ND*	16.67	14.66	13.01	169P44WEC1
4.5 x 17 (114.30 x 431.80)	V1127-ND**	17.45	15.35	13.62	169P44C2
Vectorboard® — Holes .062” (1.57mm) Diameter; .100” (2.54mm) Grid					
4.8 x 17 (121.92 x 431.80)	V1014-ND	25.26	22.21	19.71	170H48WE
8.51 x 17 (216.15 x 431.80)	V1015-ND	38.77	34.08	30.25	170H85WE
8.5 x 8.5 (215.90 x 215.90)	V1121-ND	26.19	23.03	20.44	85H85WE
4.8 x 8.5 (121.92 x 215.90)	V1125-ND	13.47	11.84	10.51	85H48WE
Vectorboard® — Holes .025” (.64mm) Diameter; .050” (1.27mm) Grid					
4 x 6.5 (101.60 x 165.10)	V1140-ND	49.36	43.40	38.52	126M76-032
4 x 17 (101.60 x 431.80)	V1141-ND	64.79	56.96	50.56	336M76-032
4 x 17 (101.60 x 431.80)	V1142-ND*	52.98	46.58	41.34	336M76-032C1
Vectorboard® — Holes .025” (.64mm) Diameter; .079” (2mm) Grid					
3.94 x 6.3 (100 x 160)	V2015-ND	12.65	11.12	9.87	47Q78WE

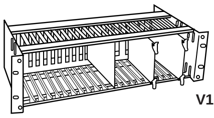
# Material: Phenolic. * Copper clad, 1 side. ** Copper clad, 2 side. WE = Epoxy Glass. † Epoxy Glass Composite

VECTOR
ELECTRONIC COMPANY

Card Racks

Designed in accordance with EIA standard, these 19" (48.26cm) subracks are compatible with Vector prototyping boards. All racks are adjustable in both height and depth and can be used with snap-in, plastic or metal card guides. Available in kit form (CCK) or fully assembled (CCA) all models feature brushed aluminum construction with a full line of prototyping boards, extenders and backplanes available. Card racks include nylon snap-in card guides.


V1050-51-53


V1052

Card Size Range Inch (cm) Width x Height	Size Inch (cm) Width x Depth	Hgt*	Guide Method	Mtg. Mat.	Digi-Key Part No.	Price Each 1	10	Vector Part No.
3.00-5.00 x 4.5 (7.62-12.70 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1145-ND	119.03	104.64	CCK12S/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1052-ND	119.03	104.64	CCK13S/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1051-ND	149.33	131.28	CCA13S/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Riveted	Zinc	V1050-ND	179.07	157.43	CCA13M/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1146-ND	99.44	87.43	CCK13S-H/90
5.50-7.00 x 4.5 (13.97-17.78 x 11.43)	19.00 x 9.00 (48.26 x 22.86)	3U	Snap-In	Nylon	V1147-ND	479.15	421.24	CCK13S-16/90
8.60-10.1 x 4.5 (21.84-25.65 x 11.43)	19.00 x 12.00 (48.26 x 30.48)	3U	Snap-In	Nylon	V1053-ND	155.86	137.03	CCA14S/90
8.60-10.1 x 8 (21.84-25.65 x 20.32)	19.00 x 12.00 (48.26 x 30.48)	5U	Snap-In	Nylon	V1148-ND	187.88	165.17	CCA17S/90
4.0-8.50 x 10.0 (10.16-21.59 x 25.40)	19.00 x 9.00 (48.26 x 22.86)	7U	Snap-In	Nylon	V1149-ND	151.26	132.98	CCK100S/90
4.5 X 6.5 (11.43 x 16.51)	19.00 X 9.00 (48.26 x 22.86)	3U	Guide Plate	Alum.	V2001-ND	161.29	141.80	CCA13C/90

* 3U = 5.25" (13.34cm); 5U = 8.75U (22.23cm); 7U= 12.25" (31.12cm)

EIA Backplanes

Description	Width x Length Inch (cm)	Plug-board Series	Digi-Key Part No.	Price Each 1	10	Vector Part No.
8 Slot CCK13 Series Backplane	4.35 x 7.00 (11.05 x 17.78)	4610	V1096-ND	216.25	190.12	4610-8-1A
16 Slot CCK13 Series Backplane	4.35 x 13.00 (11.05 x 33.02)	4610	V1097-ND	289.33	254.36	4610-16-1A

Card Rack Accessories

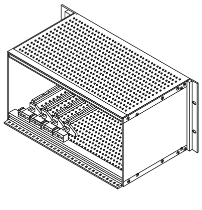
Accessories for card rack enclosures for customizing your application. Card guides are tapered slides for PCB cards to slide along. Snap-In versions provide easy installation without the need for tools. Screw mount versions (comes with hardware) allow card placement anywhere within .25" (6.35mm) spacing.

Description	Length Inch (cm)	Digi-Key Part No.	Price Each 1	10	Vector Part No.
Optional Assemblies					
Grab Handle with Hardware for Card Racks 5.25" (13.34cm) and 8.75" (22.23cm) height	—	V1161-ND	13.32	11.72	HA12
Ejector Handle with Hardware for Cards (4 pcs. bag)	—	V1162-ND	8.72	7.67	HA9/4
T-Strut 1" wide for Customizing Card Rack	16.85 (42.80)	V2002-ND	8.03	7.06	TS169
T-Strut 1" wide for Customizing Card Rack	20.85 (52.96)	V2005-ND	8.88	7.81	TS209
Hardware Kit for Backplane Connector (42 pcs. Total)	—	V2006-ND	10.68	9.40	HD34
Nut 4-40 Square Head for T-Strut (25 pcs. bag)	—	V2007-ND	5.66	4.98	NT4-7PA
Flat Head Screw 4-40 THD for T-Struts (25 pcs. bag)	.25 (.64)	V2004-ND	5.10	4.48	SC4-27/25
Bracket Kit for T-Struts (6 pcs. part)	—	V2000-ND	8.92	7.84	BR16A
Card Guides — Plastic Screw Mount					
Plastic Screw Mount (Pkg.. of 12)*	2.89 (7.34)	V1151-ND	21.57	18.96	CG2-45P
Plastic Screw Mount (Pkg.. of 12)*	5.42 (13.77)	V1153-ND	20.26	17.81	CG2-65P
Plastic Screw Mount (Pkg.. of 12)*	6.93 (17.60)	V1156-ND	28.74	25.27	CG2-80P
Plastic Screw Mount (Pkg.. of 12)*	8.14 (20.68)	V1160-ND	22.33	19.64	CG2-95P
Card Guides — Nylon Snap-In Mount					
Nylon Snap-In Mount (Pkg.. of 12)*	3.17 (8.05)	V1150-ND	13.09	11.51	CG2-45S
Nylon Snap-In Mount (Pkg.. of 12)*	5.42 (13.77)	V1152-ND	11.54	10.15	CG2-65S
Nylon Snap-In Mount (Pkg.. of 12)*	6.93 (17.60)	V1155-ND	16.96	14.92	CG2-80S
Nylon Snap-In Mount (Pkg.. of 12)*	8.43 (21.41)	V1158-ND	14.71	12.93	CG2-95S
Card Guides — Metal Screw Mount					
Metal Screw Mount (Pkg.. of 12)*	5.42 (13.77)	V1154-ND	26.14	22.98	CG2-65M
Metal Screw Mount (Pkg.. of 12)*	6.93 (17.60)	V1157-ND	32.92	28.95	CG2-80M

* Note: 1 pkg. = 12 pieces.

VECTOR
ELECTRONIC COMPANY

CompactPCI® Card Racks

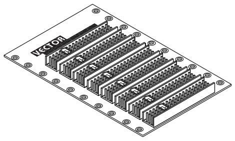


The newest specification for PCI-based computers is CompactPCI. It is electrically a superset of desktop PCI with a different physical form factor. CompactPCI utilizes the Eurocard form factor popularized by the VME bus. Card racks for CompactPCI Bus come completely assembled with card guides. Plug-in power supply and backplane are ordered separately. Standard 3U and 6U heights available with 4 or 8 slot card configurations. • **Vented top and bottoms are not included.**

Description	Dim. – Inch (cm) Width	Depth	Hgt	Digi-Key Part No.	Price Each 1	10	25	Vector Part No.
Card Rack cPCI	7.4 (18.80)	8.5 (21.59)	3U	V1176-ND	204.06	—	—	CCA26-36
Card Rack cPCI	9.0 (22.86)	8.5 (21.59)	3U	V1177-ND	218.00	—	—	CCA26-44
Card Rack cPCI	7.4 (18.80)	12 (30.48)	3U	V1174-ND	234.11	—	—	CCA27-36
Card Rack cPCI	9.0 (22.86)	12 (30.48)	3U	V1175-ND	258.95	227.65	202.04	CCA27-44
Card Rack cPCI	19 (48.26)	10 (25.40)	6U	V1178-ND	270.89	238.15	211.36	CCA28-84-00
Optional Hardware Kit for Above Racks, 24 pcs.. Total				V2003-ND	8.12	7.14	6.34	HD91
Card Guides Snap -In Style for Above Racks				V2008-ND	2.73	2.40	2.13	3250-0001-01

VECTOR
ELECTRONIC COMPANY

CompactPCI® Backplane

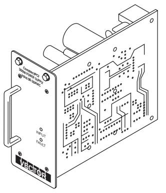


Features: • Backplane design is compliant with the CompactPCI specification 1.0 • CPU slot is on the right • A Drive connector for Peripheral Power is provided • A 4-pin Connector is provided for 12 VDC fan connection

Description	Digi-Key Part No.	Price Each	Vector Part No.
Backplane for CompactPCI, 8 Slot, 3U	V1185-ND	486.67	CPCIBPS18-3-32
Backplane for CompactPCI, 8 Slot, 6U	V1184-ND	657.93	CPCIBP8-6-64

VECTOR
ELECTRONIC COMPANY

CompactPCI® Power Supply



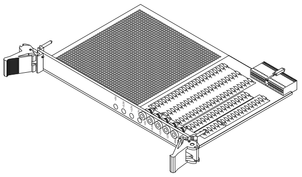
Available in 5 wattage outputs and 4 voltage outputs (5V, 3.3V, +12V, and –12V), this cPCI power supplies plug directly into the CompactPCI card rack and connect to the backplane to supply system voltages to all slots on backplane connectors.

Supplies are hot swappable and redundant sharing with Overvoltage/Overtemperature/Short circuit protection on all outputs and inputs. Input voltage is 90-264VAC (47Hz to 440Hz)

Description	Part No.	Price Each	Vector Part No.
75 Watt cPCI, Closed Frame	V1186-ND	282.10	2600-075
300 Watt cPCI, Open Frame 300 Watt cPCI, Closed Frame	V1180-ND V1190-ND	754.85 859.95	2600-300 2650-300
350 Watt cPCI, Closed Frame	V1191-ND	819.00	2600-350
Adapter Board for Aux. Power Supply	V1181-ND	294.44	4626

VECTOR
ELECTRONIC COMPANY

CompactPCI®
Test Load Boards



For enclosure and backplane monitoring without separate probes. Gives test loading for power supply for remote voltage calibration. Mount-in card slot and is fully assembled and tested.

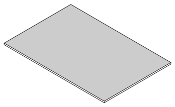
Description	Digi-Key Part No.	Price Each 1	10	25	Vector Part No.
Resistive Load Board for 3U Systems	V1182-ND	286.65	252.00	223.65	CPCI-3U-25-L
Resistive Load Board for 6U Systems	V1183-ND	317.39	279.03	247.64	CPCI-6U-25-L

Injectorall Electronics

Positive Coated Sensitized Copper Clad Boards

Make your own professional looking prototype boards with trace widths as narrow as .005" (.13mm). All boards are FR4 material and come packaged individually in a black bag with blue header. *CAUTION: Do not open in direct sunlight, open in darkroom environment only.*

Developer and etchant solution available from Injectorall.

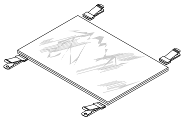


Coated Copper Clad PC Board

Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
Single Sided			
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC17P-ND	4.95	PC17P
4 x 6 (10.16 x 15.24)	PC18P-ND	7.93	PC18P
4.5 x 7 (11.43 x 17.78)	PC18P-C-ND	9.08	PC18P-C
6 x 6 (15.24 x 15.24)	PC18P-S-ND	10.36	PC18P-S
6 x 9 (15.24 x 22.86)	PC19P-ND	15.53	PC19P
12 x 12 (30.48 x 30.48)	PC19P-T-ND	35.05	PC19P-T
12 x 18 (30.48 x 45.72)	PC19AP-ND	52.55	PC19AP
18 x 18 (45.72 x 45.72)	PC19AP-E-ND	70.94	PC19AP-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC9P-ND	5.71	PC9P
4 x 6 (10.16 x 15.24)	PC10P-ND	9.70	PC10P
4.5 x 7 (11.43 x 17.78)	PC10P-C-ND	11.70	PC10P-C
6 x 6 (15.24 x 15.24)	PC10P-S-ND	13.36	PC10P-S
6 x 9 (15.24 x 22.86)	PC11P-ND	20.04	PC11P
12 x 12 (30.48 x 30.48)	PC11P-T-ND	41.30	PC11P-T
12 x 18 (30.48 x 45.72)	PC12P-ND	61.94	PC12P
18 x 18 (45.72 x 45.72)	PC12P-E-ND	83.65	PC12P-E
Double Sided			
1/16" (.159cm) Thick, 1/2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC74P-ND	7.06	PC74P
4 x 6 (10.16 x 15.24)	PC75P-ND	11.61	PC75P
4.5 x 7 (11.43 x 17.78)	PC75P-C-ND	14.39	PC75P-C
6 x 6 (15.24 x 15.24)	PC75P-S-ND	16.46	PC75P-S
6 x 9 (15.24 x 22.86)	PC76P-ND	24.69	PC76P
12 x 12 (30.48 x 30.48)	PC76P-T-ND	57.74	PC76P-T
12 x 18 (30.48 x 45.72)	PC77P-ND	86.62	PC77P
18 x 18 (45.72 x 45.72)	PC77P-E-ND	116.92	PC77P-E
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC40P-ND	7.06	PC40P
4 x 6 (10.16 x 15.24)	PC41P-ND	11.61	PC41P
4.5 x 7 (11.43 x 17.78)	PC41P-C-ND	14.39	PC41P-C
6 x 6 (15.24 x 15.24)	PC41P-S-ND	16.46	PC41P-S
6 x 9 (15.24 x 22.86)	PC42P-ND	24.69	PC42P
12 x 12 (30.48 x 30.48)	PC42P-T-ND	57.74	PC42P-T
12 x 18 (30.48 x 45.72)	PC43P-ND	86.62	PC43P
18 x 18 (45.72 x 45.72)	PC43P-E-ND	116.92	PC43P-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC51P-ND	7.36	PC51P
4 x 6 (10.16 x 15.24)	PC52P-ND	12.16	PC52P
4.5 x 7 (11.43 x 17.78)	PC52P-C-ND	15.09	PC52P-C
6 x 6 (15.24 x 15.24)	PC52P-S-ND	17.26	PC52P-S
6 x 9 (15.24 x 22.86)	PC53P-ND	25.87	PC53P
12 x 12 (30.48 x 30.48)	PC53P-T-ND	60.89	PC53P-T
12 x 18 (30.48 x 45.72)	PC54P-ND	91.33	PC54P
18 x 18 (45.72 x 45.72)	PC54P-E-ND	123.32	PC54P-E
1/16" (.159cm) Thick, 4 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC79P-ND	10.13	PC79P
4 x 6 (10.16 x 15.24)	PC80P-ND	16.37	PC80P
4.5 x 7 (11.43 x 17.78)	PC80P-C-ND	19.54	PC80P-C
6 x 6 (15.24 x 15.24)	PC80P-S-ND	22.36	PC80P-S
6 x 9 (15.24 x 22.86)	PC81P-ND	30.47	PC81P
12 x 12 (30.48 x 30.48)	PC81P-T-ND	73.86	PC81P-T
12 x 18 (30.48 x 45.72)	PC82P-ND	100.75	PC82P
18 x 18 (45.72 x 45.72)	PC82P-E-ND	137.38	PC82P-E
Single Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC55P-ND	4.26	PC55P
4 x 6 (10.16 x 15.24)	PC56P-ND	7.16	PC56P
4.5 x 7 (11.43 x 17.78)	PC56P-C-ND	8.51	PC56P-C
6 x 6 (15.24 x 15.24)	PC56P-S-ND	9.75	PC56P-S
6 x 9 (15.24 x 22.86)	PC57P-ND	14.61	PC57P
12 x 12 (30.48 x 30.48)	PC57P-T-ND	30.72	PC57P-T
12 x 18 (30.48 x 45.72)	PC58P-ND	46.05	PC58P
18 x 18 (45.72 x 45.72)	PC58P-E-ND	62.19	PC58P-E
Double Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC44P-ND	5.90	PC44P
4 x 6 (10.16 x 15.24)	PC45P-ND	9.81	PC45P
4.5 x 7 (11.43 x 17.78)	PC45P-C-ND	11.66	PC45P-C
6 x 6 (15.24 x 15.24)	PC45P-S-ND	13.33	PC45P-S
6 x 9 (15.24 x 22.86)	PC46P-ND	19.98	PC46P
12 x 12 (30.48 x 30.48)	PC46P-T-ND	42.32	PC46P-T
12 x 18 (30.48 x 45.72)	PC47P-ND	63.47	PC47P
18 x 18 (45.72 x 45.72)	PC47P-E-ND	85.72	PC47P-E
1/32" (.079cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC64P-ND	7.36	PC64P
4 x 6 (10.16 x 15.24)	PC65P-ND	12.15	PC65P
4.5 x 7 (11.43 x 17.78)	PC65P-C-ND	15.09	PC65P-C
6 x 6 (15.24 x 15.24)	PC65P-S-ND	17.26	PC65P-S
6 x 9 (15.24 x 22.86)	PC66P-ND	25.87	PC66P
12 x 12 (30.48 x 30.48)	PC66P-T-ND	60.89	PC66P-T
12 x 18 (30.48 x 45.72)	PC67P-ND	91.33	PC67P
18 x 18 (45.72 x 45.72)	PC67P-E-ND	123.32	PC67P-E
Single Sided			
.014" (.036cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC94P-ND	4.26	PC94P
4 x 6 (10.16 x 15.24)	PC95P-ND	7.16	PC95P
4.5 x 7 (11.43 x 17.78)	PC95P-C-ND	8.51	PC95P-C
6 x 6 (15.24 x 15.24)	PC95P-S-ND	9.75	PC95P-S
6 x 9 (15.24 x 22.86)	PC96P-ND	14.61	PC96P
12 x 12 (30.48 x 30.48)	PC96P-T-ND	30.72	PC96P-T
12 x 18 (30.48 x 45.72)	PC97P-ND	46.05	PC97P
18 x 18 (45.72 x 45.72)	PC97P-E-ND	62.19	PC97P-E
Double Sided			
.010" (.025cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC60P-ND	5.90	PC60P
4 x 6 (10.16 x 15.24)	PC61P-ND	9.81	PC61P
4.5 x 7 (11.43 x 17.78)	PC61P-C-ND	11.66	PC61P-C
6 x 6 (15.24 x 15.24)	PC61P-S-ND	13.33	PC61P-S
6 x 9 (15.24 x 22.86)	PC62P-ND	19.98	PC62P
12 x 12 (30.48 x 30.48)	PC62P-T-ND	42.32	PC62P-T
12 x 18 (30.48 x 45.72)	PC63P-ND	63.47	PC63P
18 x 18 (45.72 x 45.72)	PC63P-E-ND	85.36	PC63P-E
.005" (.013cm) Thick, .5 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC90P-ND	5.90	PC90P
4 x 6 (10.16 x 15.24)	PC91P-ND	9.81	PC91P
4.5 x 7 (11.43 x 17.78)	PC91P-C-ND	11.66	PC91P-C
6 x 6 (15.24 x 15.24)	PC91P-S-ND	13.33	PC91P-S
6 x 9 (15.24 x 22.86)	PC92P-ND	19.98	PC92P
12 x 12 (30.48 x 30.48)	PC92P-T-ND	42.32	PC92P-T
12 x 18 (30.48 x 45.72)	PC93P-ND	63.47	PC93P
18 x 18 (45.72 x 45.72)	PC93P-E-ND	85.72	PC93P-E

Positive PC Board Accessories

Use re-useable exposure guide for determining your exposure time to the distance of the exposure lamp for your application. The UV exposure lamp is a 15W lamp for exposing the presensitized board. Intended to be used with your fluorescent 18" bi-pin fixture. Glass exposure kit consists of two pieces of properly sized glass with spring clips. Used to position and hold mylar positive and board during the exposure process.

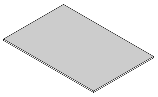


Description	Digi-Key Part No.	Price Each	Injectorall Part No.
Reusable Exposure Guide Kit	PC50A-ND	2.78	PC50A
18" Fluorescent Exposure Lamp, Bi-Pin	PC557F-ND	20.74	PC557F
Glass Exposure Kit for 4x6" (10.16x15.24cm) and smaller, 6 Pcs.	PC-GL46-ND	4.78	PC-GL46
Glass Exposure Kit for 6x9" (15.24x22.86cm) and smaller, 6 Pcs.	PC-GL69-ND	7.78	PC-GL69
Glass Exposure Kit for 14x18" (35.56x45.72cm) and smaller, 8 Pcs.	PC-GL1218-ND	20.91	PC-GL1218
Clear Mylar Film, 4x6" (10.16x15.24cm) 2 Sheet Pack	PC36-ND	2.00	PC36
Clear Mylar Film, 6x9" (15.24x22.86cm) 2 Sheet Pack	PC37-ND	2.85	PC37
Clear Mylar Film, 12x18" (30.48x45.72cm) 2 Sheet Pack	PC38-ND	5.00	PC38

Injectorall Electronics

Uncoated Copper Clad Boards

All boards are made from FR4 material. 1/2 oz. copper is ideal for shorter etching times and very fine trace lines. Use 2 oz. and thicker for higher current applications and heatsinking. 1/16 inch thick boards are standard with thinner boards offering board flexibility and reduced weight.

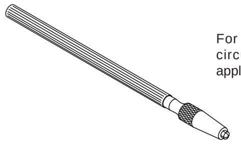


Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
Single Sided			
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC5-ND	3.10	PC5
4 x 6 (10.16 x 15.24)	PC6-ND	4.85	PC6
4.5 x 7 (11.43 x 17.78)	PC6-C-ND	5.43	PC6-C
6 x 6 (15.24 x 15.24)	PC6-S-ND	6.20	PC6-S
6 x 9 (15.24 x 22.86)	PC7-ND	9.30	PC7
12 x 12 (30.48 x 30.48)	PC7-T-ND	19.58	PC7-T
12 x 18 (30.48 x 45.72)	PC8-ND	29.32	PC8
18 x 18 (45.72 x 45.72)	PC8-E-ND	37.85	PC8-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC9-ND	3.13	PC9
4 x 6 (10.16 x 15.24)	PC10-ND	4.98	PC10
4.5 x 7 (11.43 x 17.78)	PC10-C-ND	5.81	PC10-C
6 x 6 (15.24 x 15.24)	PC10-S-ND	6.65	PC10-S
6 x 9 (15.24 x 22.86)	PC11-ND	9.95	PC11
12 x 12 (30.48 x 30.48)	PC11-T-ND	22.12	PC11-T
12 x 18 (30.48 x 45.72)	PC12-ND	33.17	PC12
18 x 18 (45.72 x 45.72)	PC12-E-ND	42.13	PC12-E
Double Sided			
1/16" (.159cm) Thick, 1/2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC74-ND	4.26	PC74
4 x 6 (10.16 x 15.24)	PC75-ND	6.73	PC75
4.5 x 7 (11.43 x 17.78)	PC75-C-ND	7.93	PC75-C
6 x 6 (15.24 x 15.24)	PC75-S-ND	9.03	PC75-S
6 x 9 (15.24 x 22.86)	PC76-ND	14.31	PC76
12 x 12 (30.48 x 30.48)	PC76-T-ND	24.34	PC76-T
12 x 18 (30.48 x 45.72)	PC77-ND	36.50	PC77
18 x 18 (45.72 x 45.72)	PC77-E-ND	45.68	PC77-E
1/16" (.159cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC40-ND	4.26	PC40
4 x 6 (10.16 x 15.24)	PC41-ND	6.73	PC41
4.5 x 7 (11.43 x 17.78)	PC41-C-ND	7.93	PC41-C
6 x 6 (15.24 x 15.24)	PC41-S-ND	9.06	PC41-S
6 x 9 (15.24 x 22.86)	PC42-ND	14.31	PC42
12 x 12 (30.48 x 30.48)	PC42-T-ND	24.34	PC42-T
12 x 18 (30.48 x 45.72)	PC43-ND	36.50	PC43
18 x 18 (45.72 x 45.72)	PC43-E-ND	45.68	PC43-E
1/16" (.159cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC51-ND	4.66	PC51
4 x 6 (10.16 x 15.24)	PC52-ND	7.45	PC52
4.5 x 7 (11.43 x 17.78)	PC52-C-ND	8.81	PC52-C
6 x 6 (15.24 x 15.24)	PC52-S-ND	10.08	PC52-S
6 x 9 (15.24 x 22.86)	PC53-ND	15.11	PC53
12 x 12 (30.48 x 30.48)	PC53-T-ND	28.46	PC53-T
12 x 18 (30.48 x 45.72)	PC54-ND	42.67	PC54
18 x 18 (45.72 x 45.72)	PC54-E-ND	54.64	PC54-E
1/16" (.159cm) Thick, 4 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC79-ND	4.56	PC79
4 x 6 (10.16 x 15.24)	PC80-ND	7.36	PC80
4.5 x 7 (11.43 x 17.78)	PC80-C-ND	9.66	PC80-C
6 x 6 (15.24 x 15.24)	PC80-S-ND	10.08	PC80-S
6 x 9 (15.24 x 22.86)	PC81-ND	15.11	PC81
12 x 12 (30.48 x 30.48)	PC81-T-ND	36.64	PC81-T
12 x 18 (30.48 x 45.72)	PC82-ND	54.96	PC82
18 x 18 (45.72 x 45.72)	PC82-E-ND	82.45	PC82-E
Single Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC55-ND	3.33	PC55
4 x 6 (10.16 x 15.24)	PC56-ND	4.35	PC56
4.5 x 7 (11.43 x 17.78)	PC56-C-ND	4.53	PC56-C
6 x 6 (15.24 x 15.24)	PC56-S-ND	5.18	PC56-S
6 x 9 (15.24 x 22.86)	PC57-ND	7.78	PC57
12 x 12 (30.48 x 30.48)	PC57-T-ND	15.59	PC57-T
12 x 18 (30.48 x 45.72)	PC58-ND	23.37	PC58
18 x 18 (45.72 x 45.72)	PC58-E-ND	29.34	PC58-E
Double Sided			
1/32" (.079cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC44-ND	3.23	PC44
4 x 6 (10.16 x 15.24)	PC45-ND	5.10	PC45
4.5 x 7 (11.43 x 17.78)	PC45-C-ND	6.06	PC45-C
6 x 6 (15.24 x 15.24)	PC45-S-ND	6.93	PC45-S
6 x 9 (15.24 x 22.86)	PC46-ND	10.36	PC46
12 x 12 (30.48 x 30.48)	PC46-T-ND	17.31	PC46-T
12 x 18 (30.48 x 45.72)	PC47-ND	25.97	PC47
18 x 18 (45.72 x 45.72)	PC47-E-ND	32.47	PC47-E
1/32" (.079cm) Thick, 2 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC64-ND	4.66	PC64
4 x 6 (10.16 x 15.24)	PC65-ND	7.45	PC65
4.5 x 7 (11.43 x 17.78)	PC65-C-ND	8.81	PC65-C
6 x 6 (15.24 x 15.24)	PC65-S-ND	10.08	PC65-S
6 x 9 (15.24 x 22.86)	PC66-ND	14.11	PC66
12 x 12 (30.48 x 30.48)	PC66-T-ND	28.46	PC66-T
12 x 18 (30.48 x 45.72)	PC67-ND	42.67	PC67
18 x 18 (45.72 x 45.72)	PC67-E-ND	54.64	PC67-E
Single Sided			
.014" (.036cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC94-ND	2.33	PC94
4 x 6 (10.16 x 15.24)	PC95-ND	4.35	PC95
4.5 x 7 (11.43 x 17.78)	PC95-C-ND	4.53	PC95-C
6 x 6 (15.24 x 15.24)	PC95-S-ND	5.18	PC95-S
6 x 9 (15.24 x 22.86)	PC96-ND	7.78	PC96
12 x 12 (30.48 x 30.48)	PC96-T-ND	15.59	PC96-T
12 x 18 (30.48 x 45.72)	PC97-ND	23.37	PC97
18 x 18 (45.72 x 45.72)	PC97-E-ND	29.34	PC97-E
Double Sided			
.010" (.025cm) Thick, 1 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC60-ND	3.23	PC60
4 x 6 (10.16 x 15.24)	PC61-ND	5.10	PC61
4.5 x 7 (11.43 x 17.78)	PC61-C-ND	6.06	PC61-C
6 x 6 (15.24 x 15.24)	PC61-S-ND	6.93	PC61-S
6 x 9 (15.24 x 22.86)	PC62-ND	10.36	PC62
12 x 12 (30.48 x 30.48)	PC62-T-ND	17.31	PC62-T
12 x 18 (30.48 x 45.72)	PC63-ND	25.97	PC63
18 x 18 (45.72 x 45.72)	PC63-E-ND	32.47	PC63-E
.005" (.013cm) Thick, .5 oz Copper			
3 x 4.5 (7.62 x 11.43)	PC90-ND	3.23	PC90
4 x 6 (10.16 x 15.24)	PC91-ND	5.10	PC91
4.5 x 7 (11.43 x 17.78)	PC91-C-ND	6.06	PC91-C
6 x 6 (15.24 x 15.24)	PC91-S-ND	6.93	PC91-S
6 x 9 (15.24 x 22.86)	PC92-ND	10.36	PC92
12 x 12 (30.48 x 30.48)	PC92-T-ND	17.31	PC92-T
12 x 18 (30.48 x 45.72)	PC93-ND	25.97	PC93
18 x 18 (45.72 x 45.72)	PC93-E-ND	32.47	PC93-E

I

EREM®

Bit Holder



For cleaning holes in a circuit board or rework applications.

Description	Digi-Key Part No.	Price Each	Erem Part No.
Pin Vise Bit Holder up to .025" Shank or Bit	227B-ND	7.51	227B

Injectorall Electronics

Drill Bits

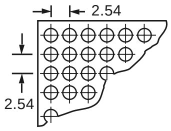
Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	10	Injectorall Part No.
High Speed Steel				
.062" (1.57)	PC300-52-ND	1.77	1.29	PC300-52
.052" (1.32)	PC300-55-ND	1.96	1.43	PC300-55
.040" (1.02)	PC300-60-ND	1.96	1.43	PC300-60
.033" (.84)	PC300-66-ND	2.23	1.63	PC300-66
.029" (.74)	PC300-69-ND	2.51	1.83	PC300-69
.021" (.53)	PC300-75-ND	2.51	1.83	PC300-75
.0135" (.34)	PC300-80-ND	2.51	1.83	PC300-80
Carbide – All carbide bits have 1/8" (3.18mm) shank				
.062" (1.57)	PC300C-52-ND	9.26	8.11	PC300C-52
.052" (1.32)	PC300C-55-ND	7.55	6.61	PC300C-55
.040" (1.02)	PC300C-60-ND	7.55	6.61	PC300C-60
.033" (.84)	PC300C-66-ND	7.55	6.61	PC300C-66
.031" (.79)	PC300C-68-ND	7.55	6.61	PC300C-68
.029" (.74)	PC300C-69-ND	7.55	6.61	PC300C-69
.021" (.53)	PC300C-75-ND	12.01	10.51	PC300C-75
.0135" (.34)	PC300C-80-ND	12.01	10.51	PC300C-80

Unclad PC Boards

Unclad (no copper) pc boards made of FR4 fiberglass material. Ideal for isolation of point-to-point wiring and wire wrapping applications. 1/16" thick board.

Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
1/16" (.159cm) Thick, Unclad			
3 x 4.5 (7.62 x 11.43)	PC5-UNCLAD-ND	3.00	PC5-UNCLAD
4 x 6 (10.16 x 15.24)	PC6-UNCLAD-ND	4.66	PC6-UNCLAD
6 x 9 (15.24 x 22.86)	PC7-UNCLAD-ND	9.00	PC7-UNCLAD
12 x 18 (30.48 x 45.72)	PC8-UNCLAD-ND	23.99	PC8-UNCLAD

Drilled Copper Clad Breadboards



Double sided copper clad boards with drilled holes on .1" centers. Hole diameter of .042" fits most components. Perfect for use with pad cutting tool to customize your circuits. 1/16" thick board.

Dimensions Inch (cm)	Digi-Key Part No.	Price Each	Injectorall Part No.
3 x 4.5 (7.62 x 11.43)	B3426D-ND	9.05	B3426D
4 x 6 (10.16 x 15.24)	B3427D-ND	13.42	B3427D
5.75 x 8.5 (14.60 x 21.59)	B3428D-ND	22.80	B3428D
5.75 x 17 (14.60 x 43.18)	B3429D-ND	38.00	B3429D
11.5 x 17 (29.21 x 43.18)	B3429AD-ND	70.00	B3429AD

3M Terminal and Distribution Strips

Fig. 1

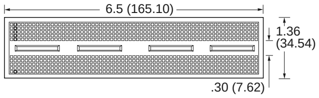


Fig. 2

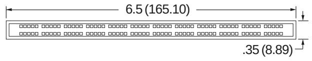


Fig. 3

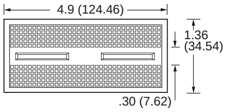


Fig. 4

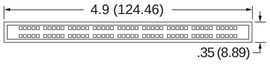


Fig. 5

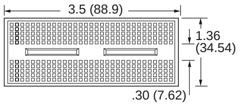


Fig. 6

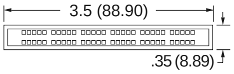


Fig. 7

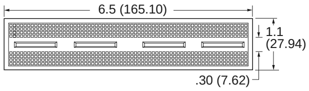


Fig. 8

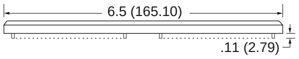


Fig. 9

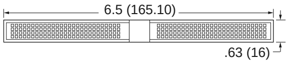


Fig. 10

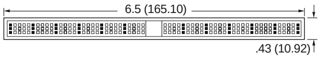
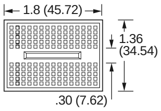
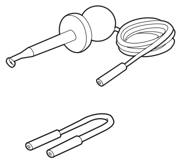


Fig.	Description	Digi-Key Part No.	Price Each
1	Terminal Strip, 128 five-tie-point terminals	923261-ND	16.92
2	Distribution Strip, 24 four-tie-point terminals	923277-ND	6.87
3	Terminal Strip, 96 five-tie-point terminals	923265-ND	13.99
4	Distribution Strip, 18 four-tie-point terminals	923281-ND	6.57
5	Terminal Strip, 68 five-tie-point terminals	923269-ND	10.97
6	Distribution Strip, 24 four-tie-point terminals	923285-ND	6.22
7	Terminal Strip, 128 four-tie-point terminals	923289-ND	15.72
8	Terminal Strip, 54 four-tie-point terminals w/solder tails, vinyl backed, mounting screws provided	923292-ND	12.80
9	Terminal Strip, 54 four-tie-point terminals	923291-ND	10.10
10	Distribution Strip, 36 four-tie point terminals	923293-ND	9.05
11	Terminal Strip, 34 five-tie-point terminals	923273-ND	7.37

Fig. 11



3M Patch Cords and Accessories



Compatible with 3M breadboards, terminal strips, super-strips, distribution strips, test clips, miniature 8-pin connectors and .025" (.64mm) square wrap posts.

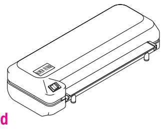
• Ideal for breadboarding and troubleshooting • Incorporate #26 AWG stranded wire with PVC insulation • Rugged, integral strain relief • Choices of two pin sizes — .019" and .030" (.48mm and .76mm), and two socket sizes — .019"-.028" and .028"-.028" (.48mm–.71mm and .71mm–.89mm) and E-Z Hook terminations

ASSORTMENT A (20 Pieces) — 9 pieces 2" (50.80mm) long yellow, 6 pieces 4" (101.60mm) long blue, 3 pieces 6" (152.40mm) long red, 2 pieces 9" (228.60mm) long black.

ASSORTMENT B (10 Pieces) — 5 pieces 15" (381mm) long red, 5 pieces 15" (381mm) long black.

Pin/Socket – Size Inch	mm	Color/Length Assortment	Pieces/ Pak	Recommended Applications	Digi-Key Part No.	Price Per Pak
Pin Plug to Pin Plug						
.019	.48	Assortment A	20	IC Sockets	924961-ND	48.48
.030	.76	Assortment A	20	A P Hardware	924962-ND	48.48
Socket to Socket						
.019/.028	.48 / .71	Assortment A	20	Extension for .019" (.48mm) Pin Plug	924963-ND	91.42
.028/.035	.71 / .89	Assortment A	20	TC to TC, TC to .025" (.64mm) Square Post	924964-ND	106.00
Pin Plug to Socket						
.019 (.019/.028)	48(.48 / .71)	Assortment A	20	IC Socket to .019" (.48m)m Pin Plug	924965-ND	71.08
.030 (.028/.035)	.76 (.71 / .89)	Assortment A	20	A P Hardware to TC, .025" (.64mm) Sq. Post	924966-ND	71.84
Pin Plug to E-Z Hook						
.019	.48	Assortment B	10	IC Socket to TC, .025" (.64mm) Sq. Post, etc.	924967-ND	45.18
.030	.76	Assortment B	10	A P Hardware to TC, .025" (.64mm) Post, etc.	924968-ND	45.84
Socket to E-Z Hook						
.019/.028	.48 / .71	Assortment B	10	.019" Pin Plug to TC, .025" (.64mm) Sq. Post, etc.	924969-ND	49.74
.028/.035	.71 / .89	Assortment B	10	TC, .025" Post to TC, .025" (.64mm) Post, etc.	924970-ND	51.90

DynaArt Designs



Superfuser

Transferring the Image to the PCB Board

Transfers an image via an iron, (e.g. too much pressure, not enough pressure ect.). The three elements, Time, Pressure and Temperature are paramount to attaining a perfect transfer.
Because you can use any type of toner in printing the image to the TTS paper, there is one adjustment that controls the high-end temperature setting, making it universally usable for a wide range of different toners.
Includes a 5-sheet pack of TTS paper, a sheet of prepared "sample" test images, and a sample of our 1/4oz blank circuit board.

182-1002-ND **$303.00**

TONER TRANSFER SYSTEM

by DynaArt Designs

Make instant circuit boards using any laser printer or photocopier!

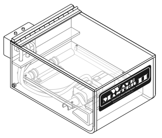
NO DARKROOM!
NO NEGATIVES!
NO CHEMICALS!
NO LOST TIME!

Simple 3-Step Process : *1. Print circuit layout directly to TTS paper; 2. Iron the image to copper-clad board; 3. Soak in water to remove paper;* ***now ready to etch!***

• Detailed instructions included for making single & double sided pcb's • Also shows how to make custom full color decals for any application • Available in 5 and 10 sheet packs — sheet size: 8-1/2" x 11" (21.59cm x 27.94cm)

182-1004-ND (5 sheet pack) **$14.95**
182-1003-ND (10 sheet pack) **$27.95**

Wavemaster



A revolutionary new etching tank design! Boards to be etched are placed horizontally into the tank. This allows you to watch the board being etched. A continuous flow of etchant bathes the board in a circular replenishment fashion providing a very clean etch pattern. New see through tank design allows for complete viewing during the etching process. Use only sodium persulfate etchant.

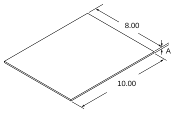
182-1005-ND **$303.00**

Plated Thru-Hole Kit

Registers double-sided artwork and for making plated thru-holes. Once the two images are attached to the board, it is run through the SuperFuser. Also it can be used for installing the eyelets after the PCB. The eyelets are so small they have to be inserted via a pin! Kit comes complete with bag of 250 eyelets, special forming tool, 10 carbide drill bits, mounting pins, scrubbing pad with full instructions.

182-1001-ND **$70.00**

Printed Circuit Boards



Copper Clad Boards 1/4oz. Copper

182-1006-ND	Single Sided 8"x10", .064" thick, 4 Panels	**$40.00**
182-1007-ND	Double Sided 8"x10", .064" thick, 4 Panels	**$45.00**
182-1008-ND	Single Sided 8"x10", .032" thick, 4 Panels	**$40.00**
182-1009-ND	Double Sided "8x10", .032" thick, 4 Panels	**$45.00**

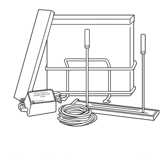
- Note: Must remove 1oz. Copper carrier before using, peel completely off and discard.

Silverlining Kit

This kit provides you with everything that you need to plate your PCB'S in minutes. You simply dampen a corner of a soft cloth, dip it into the powder and rub over the copper surface. Within a minute, the copper traces are coated with silver plating that will protect the copper from oxidation and provide a highly conductive pad for soldering.

182-1010-ND **$30.00**

GC ELECTRONICS



Professional PC Board Power Etching System

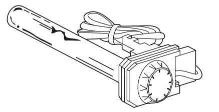
A semi-automatic etching device for use in labs, schools, prototype shops and for limited PC board production. Air pump agitates etching solution for fast, very even etches. Handles up to two 8" x 10" (20.32cm x 25.40cm) PC boards at a time, either single or double sided.

Kit contains: • 1 Etching Tank (1.25 Gallon capacity; 4.73 Liters) and Reservoir Lid, 12"H x 2 1/2"W x 10 1/2"L (30.48cm x 6.35cm x 26.67cm), (Molded Polyethylene — ABS PC Board Holder), Capacity • 1 Etch-O-Matic Power Agitating Pump, 120V AC Operation • 1 Permanent or Portable Tip-Free Base • 1 PC Board Holder and Handle • 4 Feet (1.22 Meters) of Supply Hose

GC394-ND **$96.03**

GC ELECTRONICS

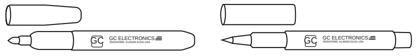
Etching Solution Heater



Fits in tank and heats solution up to 38°C (100°F). Used to further reduce etching time. Built-in adjustable thermostat controls temperature continuously to 100°F (38°C). 120V AC/100 W Max.

GC392-ND **$20.47**

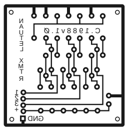
Etch Resist Ink Pens



Black felt tip pen for making resist circuits directly on PC boards. Dries instantly for neat, easy application.

GC220-ND Standard Size - draws lines approx. 1/32" (.79mm) wide ... **$4.19**
GC222-ND Fine Line - draws lines as thin as 1/64" (.40mm) wide...... **$4.46**

PCBoards



Board Layout Software

An Effective and Low-Cost Software Tool for Creating Printed Circuit Artwork

PCBoards printed circuit layout software is ideal for creating high quality PCB artwork for your electronic projects. Its low cost and ease-of-use make it perfect for professional and hobbyist applications.

FEATURES: • Supports EGA, VGA, and Super VGA • Copper flooding for building ground planes • Gerber and Exellon output • Mirror imaging for laser and deskjet printers • Positive and negative artwork printouts • Single or double-sided boards up to 6" x 13" (15.24cm x 33.02cm) or 8" x 16" (20.32cm x 40.64cm) for Windows version • 0.05" (1.27mm) Grid/Snap; 0.001" to 0.05" (.03mm to 1.27mm) for Windows version • 1X Laser output - ideal for use with Toner Transfer System • Menu driven • Help screens • Silk screen layer • Parts library • Point A-B routing in Windows version

System Requirements: DOS

• IBM PC or Compatible • DOS 3.0 or later • 640K minimum RAM.
Windows: • Windows version 3.0 or later • 1Meg Memory

PCBL-ND (3.5" disk; supports only orthogonal traces) **$49.95**
PCWN-ND (3.5" disk) **$198.00**

SuperTools and SuperTools Plus for Windows™ 32-Bit Version

System Requirements: Windows™ 95, 98, or NT • **Graphics:** EGA, VGA, SVGA • **Printers:** Any printer supported with Windows™ driver • **Memory: 4M or greater** • Mouse: Windows™ compatible. required Microsoft and Windows are trademarks of Microsoft Corporation

SuperTools for Windows™

FEATURES: • **Schematic Capture:** SuperCad schematic program and autorouter included • **Visually Cued Command Entry:** Pull-down menus, dialog boxes, toolbar buttons • **On-Line Help Manual:** Pull-down HELP menu, corresponding help topic selection • **Draw-to-Fit and Zoom Operations:** Display entire layout, zoom any portion to normal size • **Object Entry Commands:** Entry of traces, pads, rectangles, ellipses, text • **Graphics Edit Commands:** Copy, move, rotate, stretch, erase, single and group edits • **Advanced Editing Features:** Rubberbanding, snap modes, auto-increment text • **Routing:** Point to point and incremental • **Board Layers:** Single and double sided boards with solder mask and silk screen • **Board Size/Resolution:** 8" x 16" (20.32cm x 40.64cm) boards, specify dimensions/traces down to 1 mil • **Flexible Artwork Output:** Dot-matrix, laser, postscript, plotter, Gerber file format output • **Library Support:** Dip, PGA, surface mount, discretes, format library parts from drawings • **Library:** 1500 schematic/component library parts with parts editor/build utility

PCBD3-ND SuperTools for Windows™ **$399.00**

SuperTools Plus for Windows™

Includes all the features of the PCBoards SuperTools with the following additions:

• **SuperCad Schematic Plus:** Schematic layout/capture, netlist conversion, autowire and autoplacement utilities • **Built-In Auto-router:** Point to point, incremental, batch routing (1-16 layers) • **Large Boards/High Resolution:** 32" x 32" (81.28cm x 81.28cm) boards, specify dimensions/traces to 1 mil • **Multiple Circuit Layers:** Up to 16 layers plus silk screen and solder mask layers • **Library:** 5000 schematic/component library parts with parts editor/build utility

PCBD4-ND SuperTools Plus for Windows™ **$699.00**

MentalMAX Plus 32-Bit Version

Contains:

- **SuperTools Plus,** 32-bit version.
- **SuperSIM**, a digital simulation program which works directly with SuperTools Plus. Includes a library of TTL and CMOS part models. Up to 500 signal capacity.
- **MentalSPICE**, an analog simulator program which works directly with SuperTools Plus. 350 discrete part models, 500 op amp-comparator models, and 30 mixed mode digital models. 30 ready-to-use examples.

System Requirements: Windows™ 95, 98, or NT

PCBD5-ND **$1099.00**

CAPITAL ADVANCED TECHNOLOGIES INC.™

UNI-SIP™
UNIVERSAL SINGLE-IN-LINE PACKAGE

Single-In-Line Universal Boards for Thru-Hole Components

Miniature Breadboard Modules feature pins on .1" (2.54mm) Centers

• Often useful hole patterns and pad designs • Greatly increase packaging density • Compatible with standard breadboards, sockets, and solderless breadboards using .1" (2.54mm) centerlines

From simple networks and component arrays to IC circuits using up to .600 wide Dips, UNI-SIP breadboards offer the perfect packaging solution for building both prototype and production thru-hole circuit modules. Use a solderless breadboard to test your idea, use a UNI-SIP breadboard to "KEEP IT." **Specifications:** • **Board Material:** G-10 FR-4 Glass Epoxy • **Thickness:** .032" (.81mm) • **Foils:** Solder coated 1 oz. copper 1-side • **Holes:** .036" (.91mm) Diameter • **Pins:** .1" (2.54mm) centers • **Pin Length:** .130" (3.30mm). Pins are soldered in position • **Board Tolerances:** ±.015" (.38mm) Typ. Overall

Fig. 1 – Series 1000
For basic networks and component arrays
Available in 6, 7, 8, 9, and 10 pin models. Excellent for prototype or production circuits.

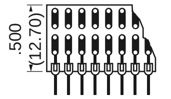


Fig. 2 – Series 2000
Accepts components on .1" (2.54mm), .2" (5.08mm), .3" (7.62mm), or .4" (10.16mm) centers
Available in 6, 7, 8, 10, and 12 pin models. Foil modifications expand layout options.

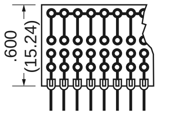


Fig. 3 – Series 3000
For Higher Density General Purpose Applications
Available in 8, 10, 12, and 14 pin models. For general use applications where compatibility with a large number of device sizes is desirable. Features 2 holes per pad on a .100" (2.54mm) matrix.

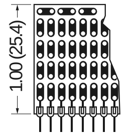


Fig. 4 – Series 4000
Accepts Dips on Standard .300" (7.62mm) Centerline
Available in 7, 8, 10, 12, 14, and 16 pin models. Make selection based on signal connections required. Example: 8 pin model can support 1-16 pin Dip, with 8 signal lines (pins).

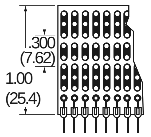


Fig. 5 – Series 5000
Accepts Standard .300" (7.62mm) or .600" (15.24mm) Centerline Dips
Available in 8, 10, 12, 14, 16, and 20 pin models. 20 pin model can hold 1-40 pin Dip with 20 signal lines to input/output pins.

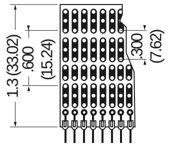


Fig.	No. of Pins	Board Width Inch (mm)	Digi-Key Part No.	Pricing 1	10	Mfg. Part No.
			1000 Series			
1	6	.6 (15.24)	1006CA-ND	.92	7.02	US-1006
	7	.7 (17.78)	1007CA-ND	1.03	7.92	US-1007
	8	.8 (20.32)	1008CA-ND	1.15	8.82	US-1008
	9	.9 (22.86)	1009CA-ND	1.27	9.72	US-1009
	10	1.0 (25.40)	1010CA-ND	1.39	10.62	US-1010
			2000 Series			
2	6	.6 (15.24)	2006CA-ND	1.03	7.92	US-2006
	7	.7 (17.78)	2007CA-ND	1.15	8.82	US-2007
	8	.8 (20.32)	2008CA-ND	1.27	9.72	US-2008
	10	1.0 (25.40)	2010CA-ND	1.62	12.42	US-2010
	12	1.2 (30.48)	2012CA-ND	1.86	14.22	US-2012
			3000 Series			
3	8	.8 (20.32)	3008CA-ND	1.74	13.32	US-3008
	10	1.0 (25.40)	3010CA-ND	2.09	16.02	US-3010
	12	1.2 (30.48)	3012CA-ND	2.44	18.72	US-3012
	14	1.4 (35.56)	3014CA-ND	2.80	21.42	US-3014
			4000 Series			
4	7	.7 (17.78)	4007CA-ND	1.50	11.52	US-4007
	8	.8 (20.32)	4008CA-ND	1.74	13.32	US-4008
	10	1.0 (25.40)	4010CA-ND	2.09	16.02	US-4010
	12	1.2 (30.48)	4012CA-ND	2.44	18.72	US-4012
	14	1.4 (35.56)	4014CA-ND	2.80	21.42	US-4014
	16	1.6 (40.64)	4016CA-ND	3.15	24.12	US-4016
			5000 Series			
5	8	.8 (20.32)	5008CA-ND	1.97	15.12	US-5008
	10	1.0 (25.40)	5010CA-ND	2.33	17.82	US-5010
	12	1.2 (30.48)	5012CA-ND	2.80	21.42	US-5012
	14	1.4 (35.56)	5014CA-ND	3.15	24.12	US-5014
	16	1.6 (40.64)	5016CA-ND	3.50	26.82	US-5016
	20	2.0 (50.80)	5020CA-ND	4.32	33.12	US-5020

Master Assortment Kit for UNI-SIP: The MK260CA Assortment contains 2 each of all 26 types in the UNI-SIP Series, packaged in reclosable bags grouped by series number.

MK260CA-ND **$79.00**

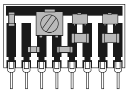
SURFBOARDS® by CAPITAL ADVANCED TECHNOLOGIES INC™ The Breadboarding Medium for Surface Mount

The Surfboard Concept: The concept behind SURFBOARDS is elegantly simple. Many models incorporate foil patterns that are designed to accommodate a wide variety of component mounting footprints. SURFBOARD® models for SOICs and PLCCs provide standard mounting footprints for the IC and depending on the model chosen, will include a prototyping area for additional components or provide a direct pin-out. Most SURFBOARD® models feature SIP (single in line) pins that make prototyping and interfacing with other circuits easy.

Specifications: • Material: G-10 FR-4 Fiberglass laminate, 1oz. Cu. .032" (.81mm). Thickness ±.005" (±.13mm) • Finish: Level 60/40 Solder alloy • S.I.P. Pins: On applicable models. Soldered on .100" (2.54mm) centers. SURFBOARDS® can be hand soldered and are compatible with most industrial soldering processes. (Suggested soldering and assembly guidelines included).

The universal circuit patterns allow for the mounting of 0603, 0805, 1206 and mini-melf packages as well as a wide variety of 3 terminal devices.

6000 Series for Discrete Devices — .1" (2.54mm) Pin Spacing



For building:

- Resistor Networks
- Capacitor Networks
- R-C Networks
- Diode Arrays
- Transistor Arrays
- SMD Sub-Assemblies

Fig. 1

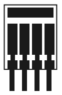


Fig. 2

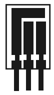


Fig. 3

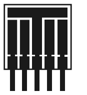


Fig. 4

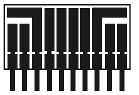


Fig. 5

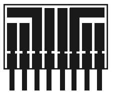


Fig. 6

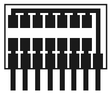
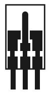


Fig. 7



All 6000 Series boards are .5" (12.7mm) high with .1" (2.54mm) pin spacing. SURFBOARDS® with a greater pin count repeat the same basic pattern as shown.

Fig.	No.of Pins	Digi-Key Part No.	Pricing 1	Pricing 10
SURFBOARDS® for Discrete Components				
1	4	6004CA-ND	1.72	13.14
	6	6006CA-ND	2.04	15.66
	7	6007CA-ND	2.28	17.46
	8	6008CA-ND	2.51	19.26
	10	6010CA-ND	3.08	23.58
	12	6012CA-ND	3.67	28.08
2	3	6103CA-ND	1.48	11.34
	6	6106CA-ND	2.04	15.66
	9	6109CA-ND	2.63	20.16
	12	6112CA-ND	3.67	28.08
	15	6115CA-ND	4.23	32.40

Fig.	No.of Pins	Digi-Key Part No.	Pricing 1	Pricing 10
3	5	6405CA-ND	1.93	14.76
	10	6410CA-ND	3.08	23.58
	15	6415CA-ND	4.23	32.40
4	10	6510CA-ND	3.08	23.58
	20	6520CA-ND	5.17	39.60
5	8	6808CA-ND	2.51	19.26
	16	6816CA-ND	4.11	31.50
6	8	6908CA-ND	2.51	19.26
	16	6916CA-ND	4.11	31.50
SURFBOARDS® for SOT-89				
7	3	6303CA-ND	1.48	11.34
	6	6306CA-ND	2.04	15.66
	9	6309CA-ND	2.63	20.16

Master Assortment Kit for Discretes: The MK-6000 assortment contains 2 each of all 23 models in the 6000 series of SURFBOARDS® for discrete components.

MK-6000CA-ND..**$99.00**

9000 Series for ICs

Build • prototype circuits • Evaluate ICs easily • Build circuit upgrades • Adapt SMD to thru-hole

Fig. 1 – Model 9081

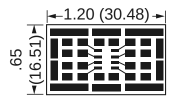


Fig. 2 – Model 9082

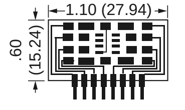


Fig. 3 – Model 9161

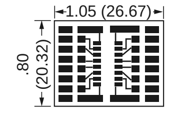


Fig. 4 – Model 9162

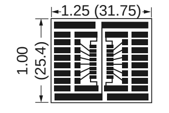


Fig. 5 – Model 9163

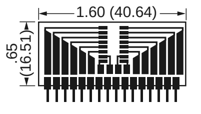


Fig. 6 – Model 9164

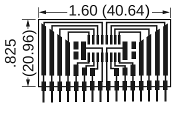


Fig. 7 – Model 9165

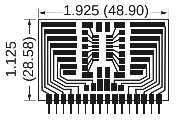


Fig. 8 – Model 9210

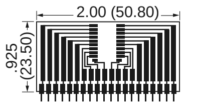


Fig. 9 – Model 9301

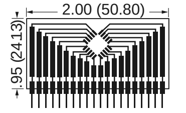


Fig. 10 – Model 9302

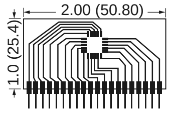


Fig.	Digi-Key Part No.	Pricing 1	Pricing 10
8 Pin SOIC			
1	9081CA-ND	1.60	12.24
2	9082CA-ND	4.11	31.50
16 Pin SOIC			
3	9161CA-ND	2.04	15.66
4	9162CA-ND	2.16	16.56
5	9163CA-ND	6.32	48.42
6	9164CA-ND	6.53	50.04
7	9165CA-ND	6.89	52.74
20 Pin, .3" (7.62mm) WIde			
8	9210CA-ND	7.47	57.24
20 Pin PLCC			
9	9301CA-ND	7.47	57.24
10	9302CA-ND	7.47	57.24

Master Asst. Kit for ICs:
32 pcs total (5 each of 9081, 9082, 9161, 9162, and 2 each of 9163, 9164, 9165, 9210, 9301, 9302)
MK-9000CA-ND............**$99.00**

SURFBOARDS® by CAPITAL ADVANCED TECHNOLOGIES INC™

Application-Specific Adapters

• Accept Wide Range of Surface Mount Discrete Semiconductors and ICs
• Provide Convenient Medium for Prototyping, Test, and Development

The 33000 Series of Surfboards® are application-specific adapters that convert surface mount component footprints to Single-In-Line (SIP) format. The boards feature pre-installed pins on .100" (2.54mm) centers making them compatible with conventional breadboards, solderless breadboards, and sockets. The SIP format provides ease of signal probing as well as higher densities when prototyping. Models are available to accept a wide range of surface mount semiconductors and integrated circuits.

Models 33113 and 33623 feature two SIP pins for each pad for higher current applications. Model 33213 features large soldering pads as connection points and SIP pins for measuring purposes. Boards are .031" ± .005" (.79mm ±.13mm) thick FR-4 and feature solder-coated 1-oz. Circuit Foils that can be hand-soldered or soldered by most conventional processes.

SIP pins are soldered in place on .100" (2.54mm) centers. All boards feature solder mask to limit flow of solder to pad area and aid assembly. Just add parts and plug in.

Fig.	Dimensions — Inch (mm) A	B	C	D	E	SIP Pins	Accepts These Devices	Digi-Key Part No.	Pricing 1	Pricing 10
1	.400 (10.16)	.300 (7.62)	.100 (2.54)	.080 (2.03)	.0512 (1.30)	3	SC-70-3, SOT-323, *NEC* Pkg-30	33003CA-ND	1.01	7.74
2	.400 (10.16)	.600 (15.24)	.100 (2.54)	.090 (2.28)	.0256 (.650)	6	SC-70-6, SOT-363	33006CA-ND	2.07	15.84
3	.400 (10.16)	.800 (20.32)	.100 (2.54)	.180 (4.57)	.0375 (.9530)	8	SuperSOT-8™ *(Fairchild)*	33008CA-ND	2.80	21.42
4	.400 (10.16)	1.0 (25.4)	.100 (2.54)	.200 (5.08)	.0197 (.500)	10	Micromax-10 *(Maxim)*	33010CA-ND	3.22	24.66
5	.400 (10.16)	.500 (12.7)	.100 (2.54)	.165 (4.19)	.060 (1.50)	5	SOT-89-5	33105CA-ND	1.81	13.86
6	.400 (10.16)	.800 (20.32)	.100 (2.54)	.200 (5.08)	.0256 (.650)	8	MSOP-8, TSSOP-8, Micromax-8 *(Maxim)*, Micro-8 *(Int'l Rect.)*, Mini SO-8 *(Burr-Brown)*	33108CA-ND	2.80	21.42
7	.800 (20.32)	.600 (15.24)	.100 (2.54)	.625 (15.87)	.100 (2.54)	6	TO-263AB, 3-Lead D-Pkg	33113CA-ND•	2.84	21.78
8	.800 (20.32)	.500 (12.70)	.100 (2.54)	.625 (15.87)	.067 (1.70)	5	5-Lead DD Pkg., Surface Mount Device	33115CA-ND	2.37	18.18
9	.800 (20.32)	.700 (17.78)	.100 (2.54)	.625 (15.87)	.050 (1.27)	7	7-Lead DD Pkg., Surface Mount Device	33117CA-ND	3.22	24.66
10	.400 (10.16)	.400 (10.16)	.100 (2.54)	.100 (2.54)	.078 (1.99)	4	SOT-143, Surface Mount Device	33143CA-ND	1.53	11.70
11	.400 (10.16)	.500 (12.7)	.100 (2.54)	.110 (2.79)	.0375 (.953)	5	SOT-23-5, SC59-5, *Burr-Brown* Pkg. 331, Tinylogic™ *(Fairchild)*, Microgate *(Texas Inst.)*	33205CA-ND	1.86	14.22
12	.400 (10.16)	.600 (15.24)	.100 (2.54)	.110 (2.79)	.0375 (.953)	6	SOT-23-6, SOT-23-L, SC59-6, TSOP-6‡, SuperSot-6™ *(Fairchild)*, Micro-6™ *(Int'l Rect.)*	33206CA-ND	2.07	15.84
13	.400 (10.16)	.800 (20.32)	.100 (2.54)	.300 (7.62)	.025 (.650)	8	SSOP-8	33208CA-ND	2.80	21.42
14	1.125 (28.57)	.850 (21.59)	.100 (2.54)	.625 (15.87)	.100 (2.54)	3	TO-263AB, 3-Lead D-Pkg	33213CA-ND•	3.45	26.46
15	.500 (12.70)	.300 (7.62)	.100 (2.54)	.275 (6.98)	.090 (2.28)	3	SOT-223, Surface Mount Device	33223CA-ND	1.27	9.72
16	.400 (10.16)	.400 (10.16)	.100 (2.54)	.080 (2.03)	.051 (1.3)	4	SOT-343	33343CA-ND	1.53	11.70
17	.500 (12.70)	.600 (15.24)	.100 (2.54)	.275 (6.98)	.090 (2.28)	6	SOT-223	33623CA-ND•	2.30	17.64

• Higher Current Applications ‡ Not exact device/pad match

Fig. 1 – Model 33003

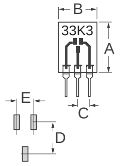


Fig. 2 – Model 33006

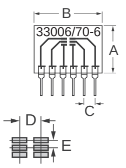


Fig. 3 – Model 33008

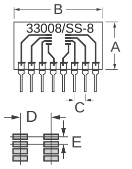


Fig. 4 – Model 33010

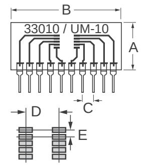


Fig. 5 – Model 33105

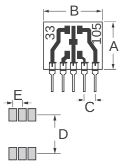


Fig. 6 – Model 33108

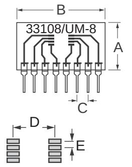


Fig. 7 – Model 33113

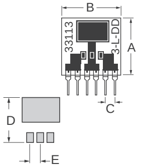


Fig. 8 – Model 33115

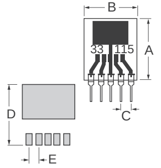


Fig. 9 – Model 33117

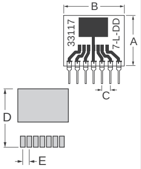


Fig. 10 – Model 33143

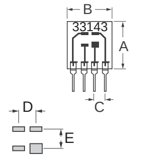


Fig. 11 – Model 33205

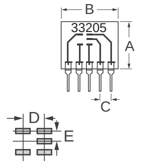


Fig. 12 – Model 33206

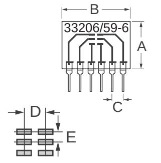


Fig. 13 – Model 33208

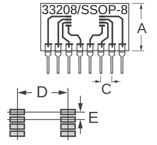


Fig. 14 – Model 33213

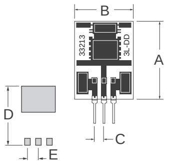


Fig. 15 – Model 33223

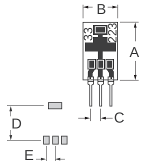


Fig. 16 – Model 33343

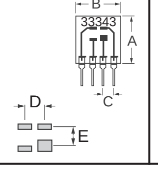
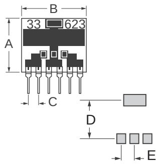
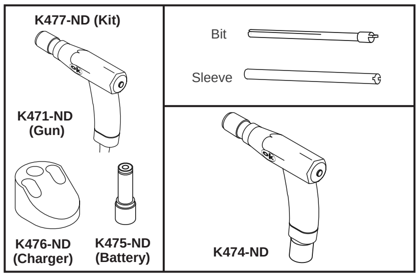


Fig. 17 – Model 33623



Division of OK International

Wire Wrap Gun and Bits

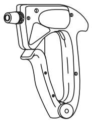


The PTX Series Wire Wrapping Tools for OK Industries bring revolutionary new benefits to installers, telcom technicians and other users. With worker safety in mind, OK Industries created an ergonomic tool which includes a lightweight, well-balanced construction, dual finger short throw trigger, and a long handle to mitigate pressure on the palm. These features help to prevent repetitive stresses and result in an industry leading design from a comfort and safety standpoint.

Choose either 115V powered wire wrap/unwrap gun or the portable battery powered wrap/unwrap tool. PTX wire wrapping kit includes the ergonomic battery wrap/unwrap tool, battery charger and 2 batteries for continuous wire wrapping jobs.

Description	Digi-Key Part No.	Price Each
Tools / Guns		
Wire Wrap/Unwrap Gun 115V	K471-ND	235.00
Wire Wrap/Unwrap Gun w/ Backforce 115V	K472-ND	245.00
Cordura Tool Pouch for Battery Powered Tool	K473-ND	59.00
Battery Powered Wrap/Unwrap Gun	K474-ND	195.00
Kit		
Complete PTX Wire Wrap Kit, Gun, Charger, 2 Batteries	K477-ND	325.00
Replacement Battery / Charger		
Replacement Battery for PTX Wire Wrap Gun	K475-ND	45.00
Battery Charger for PTX Wire Wrap Gun	K476-ND	57.50
Sleeves and Bits		
Sleeve, 22 AWG Insulated	K479-ND	21.00
Sleeve, 24-26 AWG Insulated	K480-ND	21.00
Sleeve, 26 AWG WW Gun, .046” Max. Insul.	K481-ND	29.00
Bit, 26 AWG for .025" sq. Post	K483-ND	43.54
Sleeve, 28 AWG WW	K482-ND	29.00
Bit, 28 AWG for .025" sq. Post	K321-ND	41.12
Sleeve for 26 AWG Bit	K324-ND	24.50
Bit, 26 AWG for .025" sq. Post, .031” Max. Insul.	K323-ND	41.12
Sleeve for 28 and 30 AWG Bit	K322-ND	29.00
Bit, 28 AWG for .025" sq. Post	K484-ND	43.54
Bit, 30-32 AWG for .025" sq. Post	K485-ND	41.12
Bit, 30 AWG for .025" sq. Post	K320-ND	39.75
Power Unwrap Bit / Sleeve		
Power Unwrap Bit/Sleeve for 20-26 AWG	K384-ND	45.00
Power Unwrap Bit/Sleeve for 26-32 AWG	K385-ND	45.00
Wire Wrap Wire		
26 AWG, Blue, 100’ (30.48m)	K327-ND	11.83
26 AWG, Black, 100’ (30.48m)	K386-ND	11.83
26 AWG, Red, 100’ (30.48m)	K387-ND	11.83
26 AWG, Yellow, 100’ (30.48m)	K388-ND	11.83
26 AWG, White, 100’ (30.48m)	K389-ND	11.83
28 AWG, Blue, 100’ (30.48m)	K326-ND	10.35
28 AWG, Black, 100’ (30.48m)	K390-ND	10.35
28 AWG, Red, 100’ (30.48m)	K391-ND	10.35
28 AWG, Yellow, 100’ (30.48m)	K392-ND	10.35
28 AWG, White, 100’ (30.48m)	K393-ND	10.35
30 AWG, Blue, 100’ (30.48m)	K325-ND	9.17
30 AWG, Black, 100’ (30.48m)	K394-ND	9.17
30 AWG, Red, 100’ (30.48m)	K395-ND	9.17
30 AWG, Yellow, 100’ (30.48m)	K396-ND	9.17
30 AWG, White, 100’ (30.48m)	K397-ND	9.17
Kynar, Blue 30 AWG 100’	K329-ND	11.83
Kynar, White 30 AWG	K443-ND	11.83
Kynar, Red 30 AWG	K444-ND	11.83
Kynar, Black 30 AWG	K445-ND	11.83

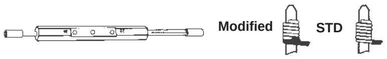
Manual Wire Wrap Tools



K398-ND
K399-ND

Description	Digi-Key Part No.	Price Each
Manual Wrap Tool Lexan for use w/ bits and sleeves above	K398-ND	93.50
Manual Wrap Tool Aluminum for use w/ bits and sleeves above	K399-ND	129.00
Manual Wrap Tool Insulated Version	K478-ND	149.00

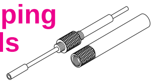
Hobby Wrap Hand Tools



Wire-wrapping, stripping, unwrapping tool for AWG 30 on .025˝ (0.63mm) Square Post

K104-ND	Regular Wrap	**$21.00**
K105-ND	Modified Wrap	**$22.00**

Precision Hand Wrapping and Unwrapping Tools



K463-ND	Combination Hand Wrap-Unwrap Tool, 30AWG	**$84.50**
K464-ND	Combination Hand Wrap-Unwrap Tool, 22-24AWG	**$72.25**
K465-ND	Hand Unwrap Tool, 20-26AWG	**$27.00**
K330-ND	Universal Wire Unwrap Hand Tool, 24-32 AWG	**$17.00**

Single Wire Dispenser

- With 50 ft. (15.24 meter) roll of AWG 30 KYNAR wire-wrapping wire
- Built-in Plunger cuts wire to desired length
- Built-In Stripper strips 1" (2.54cm) of insulation
- Refillable (for refills, see below)

Description	Digi-Key Part No.	Price Each
Blue Wire	K223-ND	15.00
Yellow Wire	K224-ND	15.00
White Wire	K225-ND	15.00
Red Wire	K226-ND	15.00
Dispenser Replacement Rolls		
30-AWG Blue 50 Ft. (15.24 meter) Roll	K229-ND	7.50
30-AWG Yellow 50 Ft. (15.24 meter) Roll	K230-ND	7.50

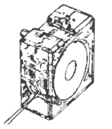
Wire Wrap Wire

30-AWG. Pre-Cut/Pre-Stripped — 50 Wires/Pkg.

1˝ (2.54cm) Stripped Ends

Description	Digi-Key Part No.	Price Each
Blue Wire, 3˝ (7.62cm) Overall Length	B3-ND	4.50
Yellow Wire, 3˝ (7.62cm) Overall Length	Y3-ND	4.50
White Wire, 3˝ (7.62cm) Overall Length	W3-ND	4.50
Red Wire, 3˝ (7.62cm) Overall Length	R3-ND	4.50
Blue Wire, 4˝ (10.16cm) Overall Length	B4-ND	6.00
Yellow Wire, 4˝ (10.16cm) Overall Length	Y4-ND	6.00
Blue Wire, 5˝ (12.70cm) Overall Length	B5-ND	6.50
Yellow Wire, 5˝ (12.70cm) Overall Length	Y5-ND	6.50
White Wire, 5˝ (12.70cm) Overall Length	W5-ND	6.50
Red Wire, 5˝ (12.70cm) Overall Length	R5-ND	6.50
Blue Wire, 7˝ (17.78cm) Overall Length	B7-ND	7.00
Yellow Wire, 7˝ (17.78cm) Overall Length	Y7-ND	7.00
White Wire, 7˝ (17.78cm) Overall Length	W7-ND	7.00
Red Wire, 7˝ (17.78cm) Overall Length	R7-ND	7.00

Tri-Color Dispenser



- 3 Rolls of wire in one dispenser
- 3 Colors: blue, white, red; 50 feet (15.24 meters) of each color
- AWG 30 (0.25 mm) KYNAR insulated wire
- Built-in plunger cuts wire to desired length
- Built-In stripper strips 1" (25.40mm) of insulation
- Refillable (for refills, see below)

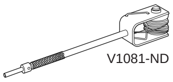
Description	Digi-Key Part No.	Price Each
Tri-Color Dispenser	K227-ND	25.00
Replacement Rolls	K228-ND	14.95

VECTOR
ELECTRONIC COMPANY

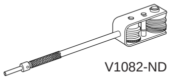
Slit-N-Wrap Tools and Wire

No Pre-cutting or Pre-stripping. Fast, reliable, spool fed wire.

Slits and opens insulation exposing bare wire before wire is wrapped on post, forming actual wire wrapped gas tight joint as tool is rotated.



V1081-ND

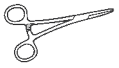


V1082-ND

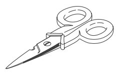
Description	Digi-Key Part No.	Price Each
Manual Slit-N-Wrap Tool (#28), Includes Bit, 50’ (15.24m) Roll of Green Wire	V1081-ND	183.57
Replacement Wirewrap Bit #28	V1083-ND	59.95
Manual Slit-N-Wrap Tool (#30), Includes Bit, 200’ (60.96m) Roll of Blue Wire	V1082-ND	188.52
Replacement Wirewrap Bit #30	V1084-ND	57.62
150’ (45.72m) 28 AWG Tefzel Wire Green	V1085-ND	20.33
150’ (45.72m) 28 AWG Tefzel Wire Red	V1086-ND	19.64
150’ (45.72m) 28 AWG Tefzel Wire Blue	V1087-ND	19.64
150’ (45.72m) 28 AWG Tefzel Wire White	V1088-ND	19.64
150’ (45.72m) 28 AWG Tefzel Wire Yellow	V1089-ND	19.64
200’ (60.96m) 30 AWG Tefzel Wire White	V1090-ND	23.12
200’ (60.96m) 30 AWG Tefzel Wire Blue	V1091-ND	22.46
200’ (60.96m) 30 AWG Tefzel Wire Orange	V1092-ND	22.54

BRAND 77 TOOLS

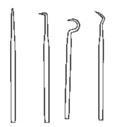
ATM02-ND



NEW! **ATM05-ND**



ATM03-ND



NEW! **ATM04-ND**

5$^{1}/_{2}$” (13.97cm) Straight-Tip Hemoclamp/Hemostat

Professional grade hemo made of 410 A.I.S.I. stainless steel. Hand finished and polished. Hand serrated for extra gripping power. Has 3 locking positions.

ATM01-ND **$4.95**

Curved-Tip Hemoclamp/Hemostat

Professional grade hemo made of 410 A.I.S.I. stainless steel. Hand finished and polished. Hand serrated for extra gripping power. Has 3 locking positions.

ATM02-ND **$4.95**

Compact Electrician’s Scissors

Stainless steel double notched blade with file on back. Notches are for stripping wire. Can be used for many telephone installation and electrical service applications. 5 1/2” overall length, cut length is 1 7/8”. PVC comfort coated handles.

NEW! **ATM05-ND** **$8.08**

4-Piece Probe Set

Forged from 420 A.I.S.I. stainless steel. Set includes four probes and a plastic (vinyl) pouch.

ATM03-ND **$7.88**

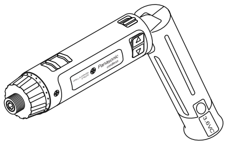
7-Piece Probe Set

Hardened, tempered stainless steel. Set includes seven probes and a plastic (vinyl) pouch.

NEW! **ATM04-ND** **$15.70**

Panasonic

Power Screwdriver



Accurate,
High Speed, Powerful!

FEATURES: • “Auto Shut-Off Clutch” extends battery and clutch life by immediately stopping rotation once torque setting is reached • 22-stage clutch offers you more precise torque setting • Clutch torque accuracy is ±5% • Maximum 600 rpm for high speed screw driving • Maximum 39 in.-lbs. torque (in low gear) even with compact size • 1/4” hex quick connect chuck • 15-minute charging system • Easily converts from straight to pistol form

TECHNICAL DATA: • **Motor Voltage:** 3.6V DC • **Rotating Speed:** Low: 200 rpm; High: 600 rpm • **Max. Torque:** Low: 39 in.-lb.; High: 13 in.-lbs. • **Clutch Torque/Auto Shut-Off Clutch:** 21 stage/2.6 to 26 in.-lb. • **Size in Straight Position:** 11-21/32” x 1-17/32” • **Weight (includes battery):** 1.15 lbs. • **Battery Capacity:** 1.2Ah • **Charging Time:** 15 minutes • **Working Capacity:** Screw (Ø5/32 x 3/8): 600 screws

INCLUDES:

Battery Pack, Battery Charger, #1 Phillips Bit, #2 Phillips Bit

P10861-ND	Screwdriver (EY6225CQ)	**$159.00**
P10862-ND	Extra Battery Pack (EY9025B)	**$39.00**

Wiss

Utility and Snap Knives

Fig. 1 — Heavy Duty Utility Knife

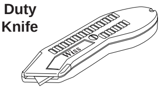


Fig. 2 — Retractable Utility Knife

Fig. 3 — 2-piece Snap Knife Set

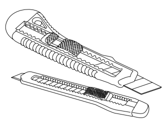


Fig.	Description	Digi-Key Part No.	Price Each
1	Heavy Duty Utility Knife w/3 Blades	WK5V-ND	5.82
2	Retractable Utility Knife w/3 Blades	WK8V-ND	4.36
3	Economy Snap Knife 2-Piece Combination Set	WSK34VCDP-ND	2.14

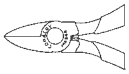
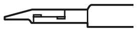
Xcelite®

Electronic Pliers

All pliers are furnished with coil spring and ESD safe cushioned grip handles.

Each plier is manufactured from extreme toughness and rigidity. Cutting edges are electronically hardened. Machining is to close tolerances, with individual finishing and testing for exact fit of jaws. All have polished heads with gun metal handles.

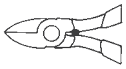
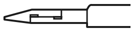
Full Flushed Relieved Tapered Cutter

Diagonal flush cutter, ground down on back side for reaching into confined places. Size: 4” (102.00mm).

MS54-3-ND **$14.54**

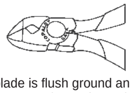
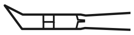
Semi-Flush Diagonal Cutter

Diagonal cutter with flush ground cutting edges. Size: 4”. (102.00mm).

MS54-ND **$12.77**

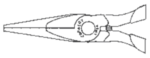
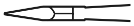
Angled Flush Cutter

Cutting blade is flush ground and angled at 29°. Cutting plier is designed to give long wear for cutting soft wire. Size: 4” (102.00mm).

GA54-ND.. **$22.83**

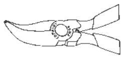
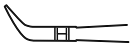
Long Nose Pliers

Miniature very fine point for delicate work in very confined areas. Has scored jaws. Size: 4” (102.00mm).

L4-ND... **$12.72**

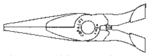
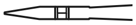
Curved Long Nose Pliers

For reaching into confined places. Nose bent approximately 60°. Smooth jaws. Size: 5” (127.00mm).

CN54-ND **$15.69**

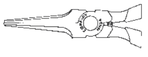
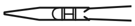
Long Nose Pliers

Has finely scored jaws. Size: 5” (127.00mm).

COO-LN54-ND.. **$13.98**

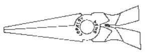
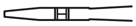
Needle Nose Pliers

Has scoring on jaws. Size: 5” (127.00mm).

NN54-2-ND **$16.55**

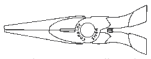
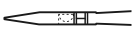
Duck Bill Pliers

Flat nose duck bill pliers with smooth jaws. Size: 5” (127.00mm).

DN54-G-ND.. **$12.77**

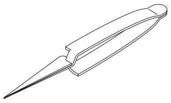
Long Nose Side Cutter

Similar to long nose pliers but with 7/32” (5.56mm) cutter near joint. Size: 5” (127.00mm).

SN54-ND... **$15.69**

Reverse Action Tweezers

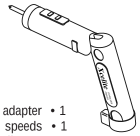


XHT412 4 1/2" (115mm). Self closing, smooth, sharp points for holding work.

XHT412-ND **$4.83**

Xcelite®

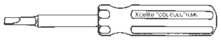
Cordless Rechargeable Screwdriver Kit



Kit contains: • Driver • Battery • Charger • 99PA adapter • 1 slotted, 2 Phillips bits **Features:** • 3.6V power • 2 speeds • 1 hour full recharge • 8 stage torque adjustable • Easily converts from in-line to pistol form • Replaceable battery pack • 99PA adapter enables use with all Xcelite Series 99 blades

XP1-ND.. **$108.00**
XP1B-ND Replacement Battery **$24.23**

4-in-1 Screwdriver



4 bits in one compact tool. Changes in seconds: pull out, reverse, snap back, 2 Phillips bits and 2 slotted bits are always ready. Alloy steel, heat treated for maximum strength, precision ground and polished. Large, 6-spline. easy-to-grip red Tenite handle.

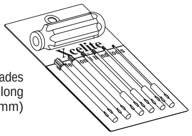
FSD-1V-ND **$9.45**

Screwdrivers

5 Piece Phillips Set Includes: Point #0, 1, 2, 3 and Short #2, Packed in Pouch
5 Piece Slotted Set Includes: 1/8”, 5/32”, 3/16”, 1/4” and 5/16” Packed in Pouch
6 Piece Set Includes: 4 Round Blade for Slotted Screws & 2 Phillips Types, Slotted: 1/8”, 3/16”, 1/4” and 5/16”, Phillips: 1 & 2 Pt. Size, Packed In Pouch
7 Piece PRO-SERIES Ergonomic Set Includes: 5 Slotted Screws & 2 Phillips Types, Slotted: 1/8”, 5/32”, 3/16”, 1/4” and 5/16” Phillips: 1 & 2 Pt. Size, Packed In Box

Description	Digi-Key Part No.	Price Each	Xcelite Part No.
5 Piece Phillips Screwdriver Set	SDX-22-ND	22.67	SDX-22
5 Piece Slotted Screwdriver Set	SDR-11-ND	20.84	SDR-11
6 Piece Screwdriver Set	SRX-33-ND	28.26	SRX-33
7 Piece PRO-SERIES Ergonomic Set	XPE700-ND	32.90	XPE700

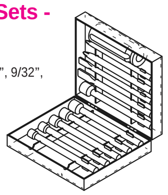
99-XTD7 Torx® Screwdriver Blade Kit



- Interchangeable blades
- Contains 6 blades (#10, 15, 20, 25, 27, 30), 4” (102.00mm) long and regular 99-1 handle
- 4” (102.00mm) approximate working length

99-XTD7-ND **26.70**

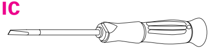
Screwdriver & Nutdriver Sets - Inch Sizes



See-through stand-up plastic cases.
99PS-50 Regular Nutdrivers: 3/16”, 7/32”, 1/4”, 9/32”, 5/16”, 11/32”, 3/8”.
Slotted Screwdriver: 3/16”, 1/4”.
Phillips Screwdriver: No. 1, No. 2. **Extension. Regular Handle.**
PS-120 Color-coded handles. Comes with black “piggyback” torque amplifier handle.
Regular Nutdrivers: 3/32”, 1/8”, 5/32”, 3/16”, 7/32”, 1/4”, 9/32”, 5/16”, 11/32”, 3/8”.

Description	Digi-Key Part No.	Price Each	Xcelite Part No.
Screwdriver and Nutdriver Set, 13 pcs.........................	99PS50-ND	48.44	99PS-50
Nutdriver Set, 11 pcs...........	PS120-ND	31.13	PS120

Precision Electronic Screwdriver Set

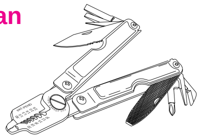


- Chrome-molybdenum vanadium steel blades.
- Fast-turning swivel caps with cavity for precise centering.
- Precision tolerance black tips.
- No-roll handle design.

XP600-ND Includes: 1.5mm x 60mm Slotted Screwdriver, 2.0mm x 60mm Slotted Screwdriver, 2.5mm x 60mm Slotted Screwdriver, 3.0mm x 60mm Slotted Screwdriver, #00 Point Size Phillips Screwdriver, #0 Point Size Phillips Screwdriver
XPTX600-ND Includes: #5pt. Standard Torx Screwdriver, #6pt. Standard Torx Screwdriver, #7pt. Tamper-proof Torx Screwdriver, #8pt. Tamper-proof Torx Screwdriver, #10pt. Tamper-proof Torx Screwdriver, #15pt. Tamper-proof Torx Screwdriver

Description	Digi-Key Part No.	Price Each	Xcelite Part No.
6 Piece Screwdriver Set	XP600-ND	21.03	XP600
6 Piece Torx Screwdriver Set	XPTX600-ND	24.74	XPTX600

ToolZall® Technician Multipurpose Tool



Tools included in the ToolZall Technician:
- Wire Stripper (20 to 10 AWG)
- Small, Medium, and Large Flat Head Screwdrivers
- Needle-Nose Pliers
- Phillips Screwdriver
- English and Metric Rulers
- Can and Bottle Openers
- Serrated Drop Point Knife
- Metal and Wood Files
- Wire Cutter
- Wire Bender
- Awl

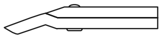
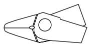
Additional Features: • Comfort grip handles • Stainless steel construction

XTZ1V-ND **$48.45**

Xcelite®

Micro Series Shearcutters

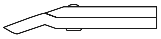
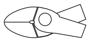
General Purpose

- Low profile
- Superior blade by-pass shear cutting action
- Better cuts with half the effort
- Greatly reduced mechanical shock delivered to the work
- 170M, 175M feature light blue grips
- 170D, 175D feature static-dissipative black grips
- 175M, 175D feature safety clips
- 170D, 175D especially hardened and plated

170M-ND... **$4.94**
170DCI-ND.. **$5.46**
175M-ND... **$6.05**
175DCI-ND.. **$6.65**

Heavy Duty

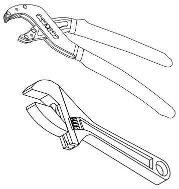



- Heavy-duty for IC pins, cables and harnesses
- Maximum durability
- Maximum operator safety
- 1178M features light blue grips
- 1178D features static-dissipative black grips
- 1178D especially hardened and plated

1178M-ND **$8.88**
1178D-ND **$10.71**

Crescent®

Pliers, Wrenches



DURA-PLYERS™

- Laminated and riveted “ply” construction
- Box-joint design
- Textured air-cushioned grips
- Multiple positions

Wrenches
- Adjustable
- Chrome finish

Description	Digi-Key Part No.	Price Each	Crescent Part No.
8” Dura-Plyers™.........	LB8-ND	8.14	LB8
10” Dura-Plyers™	LB10-ND	9.16	LB10
6” Crescent Wrench	AC16V-ND	19.96	AC16V
8” Crescent Wrench	AC18V-ND	20.72	AC18V
10” Crescent Wrench....	AC110V-ND	26.40	AC110V

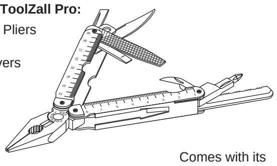
Ratcheting Screwdriver Set

SDMBRV-ND Includes: **6 Screwdriver Bits:** #1 Phillips®, #2 Phillips®, 3/16" Slotted, 1/4" Slotted, #1 Square Recess, #2 Square Recess

SDMBR2-ND Includes: **7 Fractional Power Nutdrivers:** 3/16", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16". **7 Metric Power Nutdrivers:** 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm. **18 Screwdriver Bits:** #1, #2, #3. Phillips®, 1/4", 5/32", 3/16". **Slotted:** #1, #2, #3 Square Recess. **Stainless Steel Bit Holder w/ 1/4" Hex Drive:** TX6, TX8, TX10, TX15, TX20, TX25. **Torx®:** 1/4", 5/32", 3/16" Hex.

Description	Digi-Key Part No.	Price Each	Crescent Part No.
7 PC	SDMBRV-ND	10.47	SDMBRV
34 PC	SDMBR2-ND	23.82	SDMBR2

ToolZall® Pro Multi-Purpose Tool

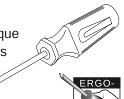


Tools included in the ToolZall Pro:
- Needle-Nose/Regular Pliers
- Wire Cutter
- 2 Flat Head Screwdrivers
- Metal/Wood File
- Phillips Screwdriver
- Drop Point Blade
- Serrated Sheepfoot Blade
- Ballistic Sheath
- Metric/English Ruler (measures up to 8”/20cm)
- Lanyard Ring
- Can/Bottle Opener

Comes with its own carrying sheath.

TZ2V-ND.. **$70.80**

4 Piece Screwdriver Set



ERGO-
HANDLE

- No-slip grip handle stops slippage for higher torque
- Extra long, rounded tri-oval shape reduces pressure points to improve comfort
- Enlarged handle middle optimizes grip strength and turning efficiency to reduce fatigue
- Plated tool steel shafts specially hardened for strength and durability: Includes: #1 and #2 Phillips, 1/4” x 4” Slotted, 3/16” x 3” Slotted

SDD4-ND **$10.98**

Swanstrom Tools USA

Cutters and Pliers

Standard or Ergonomic Handles

Fig. 1

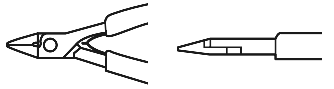


Fig. 2

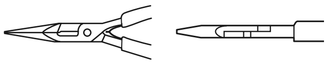


Fig. 3

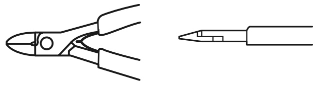


Fig. 4

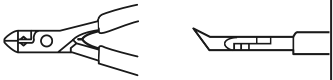
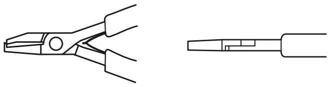
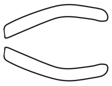


Fig. 5



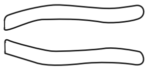
Spartan Standard:



• High carbon, alloy forged American steel—for long tool life. • Alloy steel rivets—for smooth action. • Machined and lapped joints. • Polished finish—for cleanliness and rust prevention. • Double stainless steel leaf spring. • Soft touch static dissipative foam grips—to minimize ESD & CTS.

Fig. No.	Description	Digi-Key Part No.	Price Each	Mfg. Part No.
	Cutter Tapered			
1	Flush Standard. Size: 4” (101.60mm)	232-1010-ND	25.00	415
	Flush Standard. Size: 5” (127.00mm)	232-1016-ND	27.00	515
	Long Nose Serrated Shear Cut			
2	Standard. Size: 6” (152.40mm)	232-1012-ND	30.00	351
	Long Slim Nose Smooth Jaw			
2	Standard. Size: 5” (127.00mm)	232-1017-ND	22.00	324
	Long Slim Nose Serrated Jaw			
2	Standard. Size: 5” (127.00mm)	232-1013-ND	22.00	325
	Standard. HD. Size: 6” (152.40mm)	232-1019-ND	24.00	631
	Cutter Oval			
3	Flush Standard. Size: 4” (101.60mm)	232-1009-ND	25.00	411
	Flush Standard. Size: 5” (127.00mm)	232-1015-ND	27.00	511
	Flush Standard. Size: 6” (152.40mm)	232-1018-ND	28.00	611
	Angle End Nipper			
4	Standard. Size: 4” (101.60mm) Flush	232-1011-ND	35.00	491

Super Ergonomic:

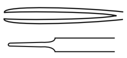


• Swedish American high chromium, alloy forged steel—for maximum tool life. • Electronic induction hardening—for maximum cutter life. • Hard alloy self-lubricating bearings—for perfect jaw alignment. • Precision machined and lapped joints. • Double stainless steel leaf springs. • Soft touch static dissipative foam grips—to minimize ESD and CTS.

Fig. No.	Description	Digi-Key Part No.	Price Each	Mfg. Part No.
	Cutter Tapered			
1	Flush Ergonomic Size: 4” (101.60mm)	232-1001-ND	54.00	S415E
	Flush Ergonomic Size: 5” (127.00mm)	232-1007-ND	54.00	S515E
	Long Slim Nose Serrated Jaw			
2	Micro. Needle Nose. Size: 4” (101.60mm)	232-1021-ND	26.00	S109
	Ergonomic Size: 5” (127.00mm)	232-1008-ND	32.00	S325E
	Cutter Oval			
3	Flush Ergonomic Size: 4” (101.60mm)	232-1000-ND	54.00	S411E
	Flush Ergonomic Size: 5” (127.00mm)	232-1006-ND	54.00	S511E
	Angle End Nipper			
4	Flush Ergonomic Size: 4” (101.60mm)	232-1002-ND	60.00	S491E
	Crimp & Bend Cutter			
5	Anti-Shock Shear Cut. .040” (1.02mm)	232-1022-ND	55.00	S205B.040

EREM® Tweezers

Straight Tapered Tip Tweezers



EROP 4.5” (114.30mm). Straight, round, tapered tip tweezers. Provide larger, flat gripping surface for handling a variety of small components.

EROP2A-SA-ND $3.00

Straight Precision Tip Tweezers

EROP 4.25” (107.95mm). Straight Point Tweezers. For general use.

EROP3C-SA-ND $3.00

Curved Precision Tip Tweezers

EROP 4.5” (114.30mm). Curved precision tip tweezers improve visibility when used under magnification.

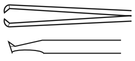
EROP7-SA-ND.......................$3.00

Straight Fine Tip Tweezers

EROP 5” (127.00mm). General use straight point tweezers with hardened tips.

EROPAA-SA-ND $3.00

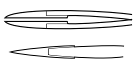
Angled Cutting Tip Tweezers



EREM 4.5” (114.30mm). Angled cutting tweezers. Tempered carbon steel, hard but low rust resistance.

15AGS-ND $26.46

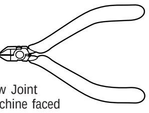
Straight Soft Carbon Tip Tweezers



EREM 5” (127.00mm). 304/305 stainless steel. Soft carbon tipped handling tweezers. Soft tips minimize scratching or nicking of fragile wires and parts. Temp. range is 250° to 300°F (121° to 149°C). Nonmagnetic and non-corrosive. Resistant to hydrochloric and nitric acids.

249-SA-ND $40.82

Diagonal Cutters



N Series - Magic Springs: • Superior to Leaf Springs • Invisible, internal EREM-Magic springs provide uniform, constant tension and ultimate performance • Linear closing and opening force • High Precision Inter-Lock Screw Joint System: Surfaces between the two halves are machine faced to provide smooth, wobble-free operation with no blade overlap

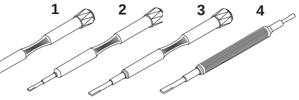
I Series: • ESD Safe foam grips • Forged stainless steel inhibits oxidation • Precision box joint for perfect jaw alignment • Dual leaf springs give you smooth, fast action

Description	Digi-Key Part No.	Price Each	EREM Part No.
“N” Series			
4” (101.6mm), Oval, Semi-Flush	612N-ND	48.09	612N
4” (101.6mm), Oval, Full-Flush	622N-ND	49.86	622N
4.75” (120.7mm), Large Oval, Semi-Flush	812N-ND	56.04	812N
4.75” (120.7mm), Large Oval, Full-Flush	822N-ND	56.85	822N
5” (127.0mm), Oval, Semi-Flush	512N-ND	50.84	512N
5” (127.0mm), Oval, Full-Flush	522N-ND	53.12	522N
“I” Series			
4.50” (114.3mm), Needle Nose Plier, Serr.	11DI-ND	21.00	11DI
4.25” (108.0mm), Hd. Flat-Flush	92EI-ND	27.00	92EI

AVEN

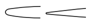
Ceramic Tuning Tools, Tweezers, Knives & Blades

Ceramic blade alignment tools for zero electro-magnetic induction



Plastic static dissipative tweezers

5



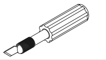
6

7

8

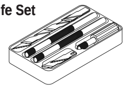
Knife

9



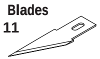
Knife Set

10



Blades

11



12

13

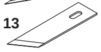


Fig.	Description	Digi-Key Part No.	Price Each
1	1.7 mm Phillips Blade	243-1011-ND	8.70
2	1.3 mm Flat Blade	243-1012-ND	8.70
3	2.6 mm Flat Blade	243-1013-ND	8.70
4	4-in-1 Reversible, (#0 & #1 Phillips, .9 mm & 1.8 mm Flat Blade)	243-1014-ND	18.70
5	Straight, Flat, Rounded Tips	243-1001-ND	1.50
6	Curved, Rounded Tips	243-1002-ND	1.50
7	Very Fine, Straight Tips	243-1003-ND	1.50
8	Very Fine, Curved Tips	243-1004-ND	1.50
—	Utility Knife with Rubber Grip	243-1005-ND	3.40
9	Heavy Duty Utility Knife	243-1006-ND	3.10
10	3-Piece Knife Set (Light, Med. & Hvy. Duty, 10 Asst. Blades)	243-1010-ND	13.80
11	No. 2 Med. to Heavy Blade, 5 Pc.	243-1007-ND	1.60
12	No. 11 Precision Blade, Stainless Steel, 5 Pc.	243-1015-ND	1.65
13	No. 24 Deburring Blade, 5 Pc.	243-1009-ND	1.50

PANAVISE®

Fig. 1

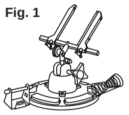


Fig. 2

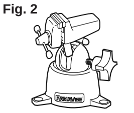


Fig. 3

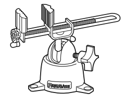


Fig. 4

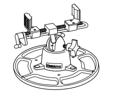


Fig. 5

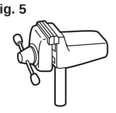


Fig. 6

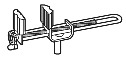


Fig. 7

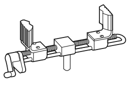


Fig. 8

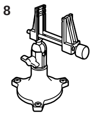


Fig. 9

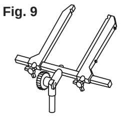


Fig. 10

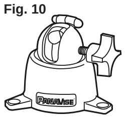


Fig. 11

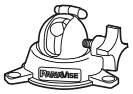


Fig. 12

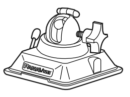


Fig. 13

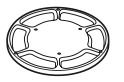


Fig. 14

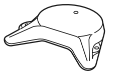


Fig. 15

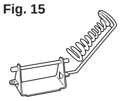


Fig. 16

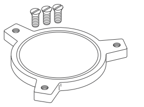


Fig. 17

Must be used with Fig. 6 or Fig. 7 (sold separately).

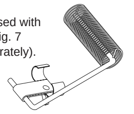


Fig.	Description	Digi-Key Part No.	Price Each
1	Deluxe Electronic Work Center - Solder wire & soldering station not included	324PV-ND	81.99
2	Standard Station (303 head/300 base)	301PV-ND	44.99
3	Wide Opening Station (366 head/300 base)	396PV-ND	53.99
4	Wide Opening-Self Centering Work Station (376 head/300 base/312 tray base mount)	350PV-ND	83.99
5	Standard Head - 2 1/2” (63.50mm) wide,) opens to 2 1/4” (57.15mm)	303PV-ND	24.99
6	Wide Opening Head - 1 3/4” (44.45mm) wide, opens to 6” (152.40mm)	366PV-ND	33.99
7	Wide Opening-Self Centering Head - 1 3/4” (44.45mm) wide, opens to 9” (228.6mm)	376PV-ND	45.99
8	Junior Universal Vise	201PV-ND	23.99
9	Circuit-Board Holder - 6” (152.40mm) arms, extends to 12” (304.80mm) wide	315PV-ND	32.99
10	Standard Base 3 3/4” (95.25mm) high	300PV-ND	20.99
11	Low-Profile Base - Only 2 1/2” (63.50mm) high	305PV-ND	20.99
12	Vacuum Base	380PV-ND	33.99
13	Tray Base Mount - 8 1/2” (215.90mm) diameter, base mount only	312PV-ND	19.99
14	Weighted Base Mount	308PV-ND	29.99
15	Solder Station - Solder iron holder, wire holder & 2 slit sponges, can be used for left or right hand use	371PV-ND	11.99
16	Magnetic Base - Adapts to 201, 300 & 305 bases	335PV-ND	18.99
17	Universal Wire Holder for 366 & 376 jaws	358PV-ND	21.99

Fig. 1 –
502 Precision PanaPress

A 501 Standard Pana-Press with four nylon gibs for precision directional control of the vertical ram.

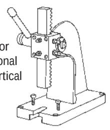


Fig. 2 – 506 Retrofit Kit

Converts a 502 Precision PanaPress into the 505 IDC Bench Assembly Press. The kit includes the assembly base, standard platen, modified ram, guide arm, and an allen wrench.

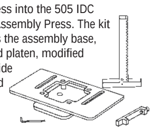


Fig. 3

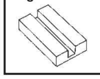


Fig. 4

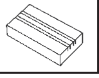


Fig. 5

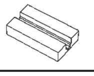


Fig. 6

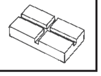


Fig.	Description	Digi-Key Part No.	Price Each
1	Hand Press Bench Mount	502PV-ND	119.99
2	Hand Press IDC Conversion Kit	506PV-ND	59.99
3	Standard IDC Card Edge Connector Base Plate	511PV-ND	29.99
4	Standard IDC Dip Plugs Base Plate	512PV-ND	29.99
5	Standard IDC D-Sub Connector Base Plate	513PV-ND*	29.99
6	Standard Female IDC Socket Base Plate	510PV-ND	29.99

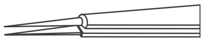
* Do not use with CW Industries all plastic D-sub connectors.

NEW! Wiha® Quality Tools

ESD Safe Tweezers

Conductive ESD coating is also hypo-allergenic. Resistance is 10^4 to 10^6 ohm. All tweezers are made from premium stainless steel and are anti-magnetic and acid resistant.

Style AA SA IND

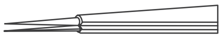


130mm long

Universal fine point tweezers with non-glare finish.

431-1020-ND (44501).......... **$12.88**

Style SS SA IND

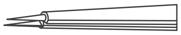


135mm long

Long narrow body, low force with non-glare finish.

431-1021-ND (44503) **$16.38**

Style 3 SA IND

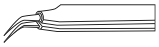


120mm long

Fine tip, round body assembly style with non-glare finish.

431-1022-ND (44506).......... **$16.38**

Style 7a SA IND

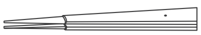


120mm long

Curved with extra fine round tip and non-glare finish.

431-1023-ND (44510).......... **$21.20**

Style 22 SA IND

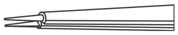


150mm long

Narrow rounded tip and guide pin, serrated and non-glare finish.

431-1024-ND (44518).......... **$17.02**

Style PSF SA IND

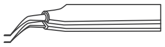


125mm long

Long rounded to 1mm blunt tip, serrated and non-glare finish.

431-1025-ND (44523).......... **$15.84**

Style 7abb SA IND

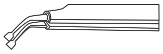


120mm long

Curved, extra fine with 3mm extended tip, non-glare finish.

431-1026-ND (44525).......... **$25.34**

Style 8b SA IND

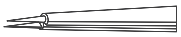


120mm long

Micro tip 30º bend, 0.5mm slot, 1mm flat, non-glare finish.

431-1027-ND (44529).......... **$22.48**

Style 1 SA IND

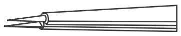


120mm long

General purpose fine point with non-glare finish.

431-1028-ND (44531).......... **$16.94**

Style 00 SA IND



120mm long

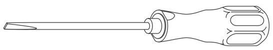
Universal fine point tweezers with non-glare finish.

431-1029-ND (44532).......... **$21.56**

6 Piece Ergonomic Grip Driver Set with Two Components

SLOTTED:
3.0, 4.5,
5.5, 6.5

PHILLIPS:
#1, #2



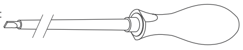
Comfort grip handles. Hardened tool steel blades.

431-1019-ND (46094).......... **$23.30**

Safety Insulated Screwdrivers

SLOTTED:
3.5 x 100,
4.5 x 125,
6.5 x 150

PHILLIPS:
#1 x 80,
#2 x 100,
#3 x 150

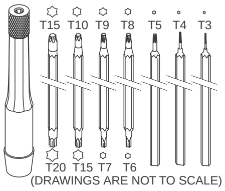


6 pc. insulated screwdriver set. Tools certified to 1000 volts. Meets VDE 0680-2, IEC 900 and ASTM -F1505. Specifications for insulated tools. Blades of CVM hardened tool steel. Ergonomic molded on soft grips.

431-1018-ND (32092).......... **$38.70**

ESD Safe Interchangeable Precision Screwdriver Sets

- Adjustable Blade Lengths – .75” to 3.75”
- Anti-Static Conductive Handle



(DRAWINGS ARE NOT TO SCALE)

Slotted and Phillips Interchangeable Blade Precision Technicians Set

Blades; CVM hardened tool steel, satin chrome finish with molded indexed storage box. Includes: Slotted - 1.5, 2.0, 3.0, 3.5mm; Phillips: #000, #00, #0, #1.

431-1003-ND (26996).......... **$32.00**

Slotted, Phillips and TORX Interchangeable Blade Precision Technicians Set

Includes: Slotted - 1.5, 2.0, 2.5, 3.0, 3.5, 4.0mm; Phillips: #000, #00, #0, #1, TORX: T6, 7, 8, 9, 10, T15.

431-1004-ND (26997).......... **$53.40**

TORX Interchangeable Blade Precision Technicians Set

Blades CVM hardened tool steel. Storage box. Includes TORX Sizes: - T3, T4, T5, T6 + 8, T7 + 9, T10 + 15, T15 + 20.

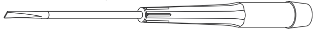
431-1005-ND (26987) **$38.00**

ESD Safe Fixed Handle Precision Screwdriver Sets

- With finger tip control cap

SLOTTED:
1.5, 2.5,
2.0, 3.5

PHILLIPS:
00, 0, 1



Slotted and Phillips Precision Technicians Set

Blades are CVM hardened tool steel, satin chrome finish.

431-1000-ND (27390) **$27.00**

TORX Precision Technicians Set

Blades are CVM hardened tool steel, satin chrome finish. Includes Torx sizes: T4, T5, T6, T7, T8, T9, T10.

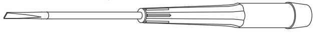
431-1001-ND (27890) **$33.60**

Standard Precision Technicians Tool Sets

- Finger tip control cap
- Narrow tapered handle

SLOTTED:
1.5,2.5,
2.0,3.0

PHILLIPS:
00, 0, 1



7 pc. Slotted and Phillips Standard Precision Technicians Set

Blades of CVM hardened tool steel, satin chrome finish. Molded on handles proportioned to blade size.

431-1006-ND (26190) **$29.98**

7 pc. Slotted and Phillips Precision Extra Long Blade Set

Slotted - 2.5 x 50, 2.5 x 100mm, 3.0 x 100, 3.0 x 150mm, 4.0 x 100, 4.0 x 150mm. Phillips: #0 x 75mm.

431-1007-ND (26092).......... **$33.00**

8 pc. Precision Inch Size Hex Driver Set

Tip sizes: .028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8”.

431-1008-ND (26391) **$33.20**

7 pc. Precision Metric Size Hex Driver Set

Tip sizes: .7, .9, 1.3, 1.5, 2.0, 2.5, 3.0mm.

431-1009-ND (26390) **$29.70**

8 pc. Precision Inch Size Nut Driver Set

Sizes: 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4”.

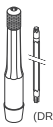
431-1011-ND (26591).......... **$46.90**

8 pc. Precision Metric Size Nut Driver Set

Sizes: 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0mm.

431-1010-ND (26590) **$47.30**

ESD Safe Field Service Kit

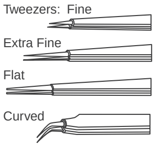


Torx: T5, T6, T7, T8,
T9, T10, T15

Slotted: 2.0, 3.0, 4.0

Phillips: 00, 0, 1

(DRAWINGS ARE NOT TO SCALE)



ESD Slotted, Phillips and TORX interchangeable blades with ESD safe tweezers. Packed in rugged canvas storage pouch.

431-1002-ND (44590).......... **$99.88**

Security Bit Set

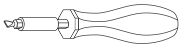
Tamper Resistant Torx: TR8, TR10, TR15, TR20,TR25, TR27, TR30, TR40

Tamper Resistant Hex: 5/64, 3/32, 7/64,1/8, 9/64, 5/32

Slotted: 6.8, 8.0

Phillips: 1, 2

Pozidriv: 0, 1, 2, 3



Spanner: 4, 6, 8, 10

Triwing: 1, 2, 3, 4

Square: 1, 2, 3

Torq: 6, 8, 10

39 pc. set in molded storage box with hard-to-find security bit sizes. Includes: handle, 1/4” magnetic power tool adapter, and 1/4 socket bit holder.

431-1013-ND (71990).......... **$66.98**

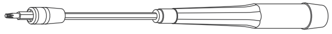
MicroBit Set with ESD Handle

TORX:
T3, T4, T5,
T6, T7, T8,
T9, T10, T15

SLOTTED:
1.5, 2.0,
3.0, 4.0

PHILLIPS:
000, 00,
0, 1

HEX:
.050, 1/16, 5/64,
3/32, 7/64, 1/8,
9/64, 5/32



27 pc. set with molded storage box extension, ESD handle and assorted MicroBits.

431-1012-ND (75992) **$49.98**

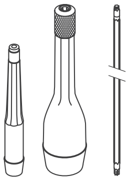
Interchangeable Blade Field Service Kits – ESD Safe

- System 6
- Palm control cap
- Tapered long reach design
- Fast slide and lock design
- ESD safe anti-static material

TORX SYSTEM 4
T5, T6, T7, T8, T9, T10, T15

TORX SYSTEM 6
T20, T25, T30

(431-1015-ND IS SHOWN)



9 pc. Interchangeable TORX Set

Rugged pouch. Blades of CVM hardened tool steel, corrosion protected. Molded ESD safe ergo handles with collet lock blade holder.

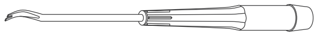
431-1015-ND (10791) **$37.55**

8 pc. Combination Set

Rugged canvas pouch. Blades of CVM hardened tool steel, corrosion protected. Molded ESD safe ergo handle with collet lock blade holder. Blades extend 4" out of handle. O.A.L 9.25". Slotted blades: 3, 4, 6, 8mm; Phillips blades: #0, #1, #2.

431-1014-ND (10191) **$34.45**

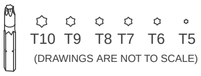
ESD Safe Chip-Lifter



Split tip is perfect for reaching around pins and lifting chips and other components from sockets or from desoldered boards. Handle is conductive anti-static.

431-1016-ND (27920).......... **$5.90**

TORX Insert Bit Set



(DRAWINGS ARE NOT TO SCALE)

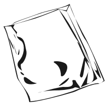
6 pc. Small Torx insert bit set. Bits of CVM hardened tool steel. Smallest hard-to-find sizes on standard 1/4" Hex Drive. 25mm (1") length.

431-1017-ND (71570).......... **$9.98**

DESCO

Static Control Products

EMI Shielding Bags - Moisture Vapor Barrier



This bag combines the properties of MOISTURE-VAPOR-BARRIER with EMI-RFI-ESD shielding. Manufactured from a Type 1 Class N652-260M film which is qualified to MIL-B-81705- Rev C Type I.

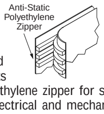
Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	Mfg. Part No.
6 x 10 (15.24 x 25.40)	16-1016-ND	.31	.17	13808
10 x 12 (25.40 x 30.48)	16-1018-ND	.56	.30	13816
12 x 16 (30.48 x 40.64)	16-1019-ND	.88	.46	13824
18 x 24 (45.72 x 60.96)	16-1020-ND	1.84	.97	13832

Static Shielding Bags – Metal In

ESD shielding bags for safely storing and transporting sensitive electronic components and assemblies. Meets the electrical and mechanical requirements of MIL-B-81705C. Superior durability at a low cost.

Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	Mfg. Part No.
3 x 5 (7.62 x 12.70)	16-1027-ND	.08	.05	13405
4 x 6 (10.16 x 15.24)	16-1028-ND	.09	.06	13415
5 x 8 (12.70 x 20.32)	16-1029-ND	.14	.09	13430
6 x 10 (15.24 x 25.40)	16-1030-ND	.17	.11	13445
8 x 10 (20.32 x 25.40)	16-1031-ND	.23	.16	13460

Zipper-Style Static Shielding Bags – Metal In



ESD shielding bags for safely storing and transporting sensitive electronic components and assemblies. Features a reclosable polyethylene zipper for safe and easy opening and reclosing of bag. Meets the electrical and mechanical requirements of MIL-B-81705C.

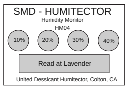
Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	Mfg. Part No.
3 x 5 (7.62 x 12.70)	16-1032-ND	.12	.08	13605
4 x 6 (10.16 x 15.24)	16-1033-ND	.16	.11	13615
5 x 8 (12.70 x 20.32)	16-1034-ND	.23	.16	13630
6 x 10 (15.24 x 25.40)	16-1035-ND	.28	.18	13645
8 x 10 (20.32 x 25.40)	16-1036-ND	.39	.26	13660

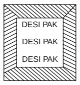
Static Label for Packaging

Static Attention labels used for sealing Shielding Bags and marking ESD Containers. Color: Yellow/Black.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
2” x 2” (50.8mm x 50.8mm), 500 pcs	16-1001-ND	14.80	06722

Humidity Card and Desiccant Pack

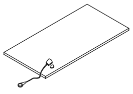




Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Humidity Card ESD 2” x 3” (50.80mm x 76.20mm)100 pcs/pk	16-1048-ND	19.85	13870
Desiccant Pack 3” x 3.5” (76.20mm x 88.90mm) 550 pcs/pk....	16-1049-ND	74.55	13850

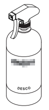
Statfree ESD Table Mat - Type B

These tabletop kits are perfect for individual workstation ESD control. Smooth finish on one side and a non glare finish on the other, .100" (2.54mm). Complete common point ground kit is included with table mat kits.



Dimensions Ft. (Meters)	Color	Kit Includes	Digi-Key Part No.	Price Each	Mfg. Part No.
2 x 3 (.61 x .91)	Beige	Bench	16-1042-ND	41.00	16201
	Blue	Ground	16-1044-ND	41.00	16213
	Brown	Kit	16-1046-ND	41.00	16224
2 x 4 (.61 x 1.22)	Beige	Bench	16-1043-ND	49.25	16202
	Blue	Ground	16-1045-ND	49.25	16214
	Brown	Kit	16-1047-ND	49.25	16226

Reztore Antistatic Cleaner



Cleans and restores ESD mats and will not degrade surface's ability to drain charges. Does not contain silicon or alcohol. Ideal for cleaning mats, electronic instrumentation, medical equipment and computer monitors keyboards and equipment.

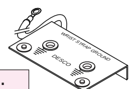
Description	Digi-Key Part No.	Price Each 1	 12	Mfg. Part No.
Cleaner, (one quart)	16-1054-ND	9.48	5.95	10435

Statfree ESD Bench Top Mat - Type B+

ESD Grounding Mats for use along benchtops and shelving. These 24” wide by 40’ long bench mats are reversible single layer vinyl and can be easily cut to dimension — .100” thick. Their durability and general purpose construction make them ideal for benchtops, shelving and floor mats.

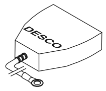
Description	Digi-Key Part No.	Price Each	Mfg. Part No.
24” x 40’ (60.96cm x 12.2 M) ESD Bench Mat			
Blue, Lightly Textured............	16-1009-ND	347.15	16350
Grey, Lightly Textured	16-1010-ND	347.15	16352
Universal Snap Kit for Mats, 6 pc. (connects wrist strap to mat) ...	16-1012-ND	2.10	09864
Push and Clinch Snaps			
Pronged 10mm Stud Snap........	16-1052-ND	1.70	09861
Pronged 10mm Socket Snap	16-1053-ND	1.70	09863

Dual ESD Ground Point Bench Mount



Description	Digi-Key Part No.	Price Each	Mfg. Part No.
With 10’ (3.05M) Cord	16-1055-ND	13.55	09740

Ground Point for Bench Mat and Two Wrist Straps Without Resistor



Description	Digi-Key Part No.	Price Each	Mfg. Part No.
10mm Socket, 10' (3.05M) Cord	16-1050-ND	12.70	09820
10mm Stud, 15' (4.57M) Cord	16-1051-ND	12.70	09825

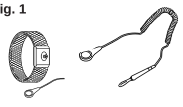
ESD Awareness Guide - Booklet

An introduction to ESD. This booklet uses easy-to-understand language and drawings to describe the causes of static electricity and the importance of an ESD program. Ideal for training personnel who handle static sensitive components.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
ESD Awareness Guide - English	16-1013-ND	3.00	06821

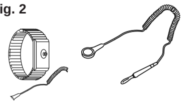
Adjustable Wrist Straps

Fig. 1



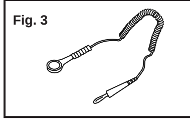
Elastic wrist straps have silver impregnated nylon knitted inside with a soft lightweight fabric, allowing softness, comfort and flexibility. May be fitted to any size.

Fig. 2



Speidel wrist straps are Twist-O-Flex metal wrist straps made of nonallergenic stainless steel for reducing reactions and providing long service life.

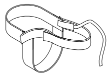
Fig. 3



Use for wrist straps, smocks and gloves. 4mm stainless steel contact snap to connect directly to wrist straps. Molded in one meg ohm series resistor at snap end to protect operator from line voltage.

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Fig. 1 — Elastic Band Wrist Strap			
With 6’ (1.8M) Coiled Cord (blue)....	16-1003-ND	20.22	14810
With 10’ (3.0M) Coiled Cord (blue)...	16-1004-ND	21.18	14830
Strap Only (no cord)	16-1005-ND	7.94	14840
Fig. 2 — Speidel Metal Band Wrist Strap			
With 6’ (1.8M) Coiled Cord (black)...	16-1006-ND	25.40	09085
Strap Only (extra large, no cord).....	16-1008-ND	18.50	09042
Economy Adjustable Wrist Strap with 6’ (1.8M) Coiled Cord..........	16-1021-ND	8.30	09039
Fig. 3 — Replacement Coiled Cords			
6’ (1.8M) Economy Coiled Cord Only, Blk, 4mm Snap	16-1022-ND	10.78	09480
12’ (3.66M) Economy Coiled Cord Only, Blk, 4mm Snap	16-1023-ND	13.82	09680

Foot / Heel Grounders

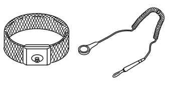


- Exceptionally tear resistant dual layer rubber with inner scrim
- Hook and loop fastening assembly
- 8 strand nylon polyester grounding tab
- Will not mar shoes

Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Adjustable Hook and Loop Heel Strap w/1 Meg Res.	16-1024-ND	7.63	17200
D-Ring Adjustable Heel Strap w/1 Meg Res.	16-1025-ND	10.80	07590

Jewel Premium Wrist Straps

Desco-Charleswaters new Jewel series of adjustable wristbands are a patented lifetime warranty cord and wrist strap. Reliable path to ground construction that are available in a variety of matching colors. Elastic Adjustable Wrist Straps and Coil Cords



Description	Digi-Key Part No.	Price Each	Mfg. Part No.
Wrist Strap 6' Cord (Sapphire)	16-1037-ND	22.64	09100
Wrist Strap 6' Cord (Ruby)	16-1038-ND	22.64	09102
Wrist Strap 6' Cord (Topaz)	16-1039-ND	22.64	09103
Wrist Strap 6' Cord (Emerald)	16-1040-ND	22.64	09104
Wrist Strap 6' Cord (Amethyst)	16-1041-ND	22.64	09110

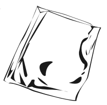
Chemtronics® ESD Hand Lotion

Non-contaminating hand lotion for electronics. Contains no silicon. Non-greasy formula with a fresh natural fragrance in an 8 oz. (.24 liter) pump. Minimizes potential for static damage and build-up. Won’t affect the solderability of components or PCBs.

Digi-Key Part No.	Price Each 1	 25	 100	 500	Chemtronics Part No.
C805-ND	6.04	5.46	5.10	4.65	C805

3M Static Control Products

Reusable Transparent Static-Shielding Bags



(2100 Series Metal-Out): 3M 2100R bags are produced with a proprietary “metal-out” construction in which the shielding layer is very near the exterior surface. A thin abrasion-resistant coating protects this metal surface from scratches, but still permits measurement of electrical continuity with common volt-ohmmeters for easy verification of shielding performance prior to reuse.

Economy Static-Shielding Bags

(1900 Series Metal-In): Use these more economical Static Shielding Bags for less demanding applications where reuse and high durability are not a prime consideration. The metal-in aluminum vapor coating is on a thinner 0.48 mil polyester as opposed to the 0.92 mil polyester in the 2100 series.

Economy ZipBag Static-Shielding Bags

(1910 Series Metal-In): The 1910 features a dual track closure for easy opening and closing.

Size Inch (cm)	Digi-Key Part No.	Price Each 25	 100	3M Part No.
2100R Series Metal-Out Transparent Shielding Bags, 3 mil				
3 x 5 (7.62 x 12.70)	SCP193-ND	.20	.18	2100R 3x5
4 x 6 (10.16 x 15.24)	SCP194-ND	.26	.23	2100R 4x6
5 x 8 (12.70 x 20.32)	SCP195-ND	.43	.38	2100R 5x8
6 x 10 (15.24 x 25.40)	SCP196-ND	.49	.44	2100R 6x10
7 x 15 (17.78 x 38.10)	SCP200-ND	.68	.61	2100R 7x15
8 x 10 (20.32 x 25.40)	SCP201-ND	.54	.49	2100R 8x10
1900 Series Metal-In Transparent Shielding Bags, 3.1 mil				
3 x 5 (7.62 x 12.70)	SCP153-ND	.10	.09	1900 3x5
4 x 6 (10.16 x 15.24)	SCP154-ND	.11	.10	1900 4x6
4 x 24 (10.16 x 60.96)	SCP155-ND	.29	.26	1900 4x24
4 x 30 (10.16 x 76.20)	SCP156-ND	.36	.33	1900 4x30
5 x 8 (12.70 x 20.32)	SCP157-ND	.16	.14	1900 5x8
6 x 10 (15.24 x 25.40)	SCP158-ND	.20	.18	1900 6x10
8 x 10 (20.32 x 25.40)	SCP159-ND	.25	.22	1900 8x10
8 x 12 (20.32 x 30.48)	SCP160-ND	.27	.24	1900 8x12
10 x 14 (25.40 x 35.56)	SCP161-ND	.38	.35	1900 10x14
12 x 16 (30.48 x 40.64)	SCP162-ND	.52	.47	1900 12x16
1910 Series Metal-In Shielding ZipBags, 3.1 mil				
3 x 5 (7.62 x 12.70)	SCP165-ND	.13	.12	1910 3x5
4 x 6 (10.16 x 15.24)	SCP166-ND	.15	.14	1910 4x6
5 x 8 (12.70 x 20.32)	SCP167-ND	.21	.19	1910 5x8
6 x 10 (15.24 x 25.40)	SCP168-ND	.27	.25	1910 6x10
8 x 10 (20.32 x 25.40)	SCP169-ND	.34	.30	1910 8x10
10 x 12 (25.40 x 30.48)	SCP170-ND	.45	.41	1910 10x12
12 x 16 (30.48 x 40.64)	SCP171-ND	.70	.63	1910 12x16

Labels

Fig.	Digi-Key Part No.	Size Inch (mm)
1	SCP129-ND	1.75 x 2.5 (44.45 x 63.5)
1	SCP128-ND	1.75 x 2.5 (44.45 x 63.5)
2	SCP127-ND	2 x 2 (50.80 x 50.80)
2	SCP126-ND	2 x 2 (50.80 x 50.80)
2	SCP130-ND	4 x 4 (101.60 x 101.60)

Fig. 1

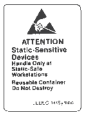
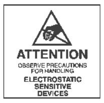


Fig. 2

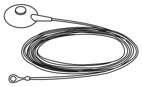


Description	Quantities (per roll)	Digi-Key Part No.	Price Each	3M Part No.
(JEDEC-14) Orange†•	500	SCP129-ND	31.14	7101
(JEDEC-14) Yellow†*	500	SCP128-ND	34.62	7102
(Mil. Std. 129J) Yellow†•	500	SCP127-ND	39.38	7201
(Mil. Std. 129J) Yellow†*	500	SCP126-ND	39.38	7202
(Mil. Std. 129J) Yellow†•	250	SCP130-ND	63.78	7203

† With Black type • Reusable * Destructible

3M Static Control Products

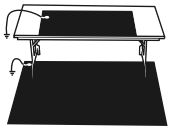
Grounding Cord



15 ft. (4.6 meter) Pre-installed male snap fastener with integral one megohm resistor on one end, solderless terminal on other end.

Description	Digi-Key Part No.	Price Each	3M Part No.
Grounding Cord	SCP114-ND	11.71	3040

Workstation Grounding Kits



Grounding Kits provide the basic items needed to create a static-safe work environment They include a floor mat, table mat, adjustable wrist strap with grounding cord and accessories to properly connect all of the kit components.

Kit includes: • Table Mat, 2 ft. x 4 ft. (.6m x 1.2m) • Floor Mat, 4 ft. x 6 ft. (1.2m x 1.8m) • 3M 3040 Ground Cord, 15 ft. (4.6m) • 3M 3048 Grounding System for Wrist Strap/Table Mat • 3M 2214 Adjustable Wrist Strap.

8011 Workstation Grounding Kit: A complete static control solution for the work environment that requires more rigid surfaces with higher conductivity. Both table (1872) and floor (1864) mats are made from black Velostat conductive material for static protection.

8020 Series Workstation Grounding Kit: The 3M 8020 Workstation Grounding Kits provide the complete static protection offered by all the 3M kits. Both the floor and table (8200) mats are made from soft three layer static dissipative material.

8030 Series Workstation Grounding Kit: These kits contain two different types of static control mats. The table mat is made of the soft three-layered, static dissipative 8200 material, while the floor (1864) mat is of the more rigid, conductive Velostat material.

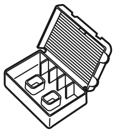
Description	Digi-Key Part No.	Price Each	3M Part No.
Matching Table and Floor Mats			
Black, Velostat	SCP120-ND	215.78	8011
Brown, 3 Layer Construction	SCP121-ND	392.00	8021
Beige, 3 Layer Construction	SCP122-ND	392.00	8022
Gray, 3 Layer Construction	SCP123-ND	392.00	8023
Blue, 3 Layer Construction	SCP211-ND	392.00	8024
Granite, 3 Layer Construction	SCP178-ND	392.00	8025
Colored Table Mat With Black Velostat Floor Mat			
Gold, 3 Layer Table Mat	SCP212-ND	369.23	8030
Brown, 3 Layer Table Mat	SCP179-ND	369.23	8031
Gray, 3 Layer Table Mat	SCP180-ND	369.23	8033
Blue, 3 Layer Table Mat	SCP213-ND	369.23	8034
Granite, 3 Layer Table Mat	SCP181-ND	369.23	8035

Velostat™ Pin Insertion Grade Foam

Velostat™ 28 x 3 is approx. 3 lb. density and is primarily a cushioning foam, but can be used for pin insertion application with sturdier device leads.

Thickness In.	Size Feet	Digi-Key Part No.	Price Each	3M Part No.
1/8“	1’ x 1’	SCP146-ND	7.10	—
1/4”	1’ x 1’	SCP147-ND	12.41	—
1/8”	2’ x 3’	SCP118-ND	25.87	2803(1/8”)
1/4”	2’ x 3’	SCP119-ND	45.29	2803(1/4”)
1/8”	2’ x 50‘	SCP112-ND	383.69	2823(1/8”)
1/4”	2’ x 50’	SCP113-ND	767.34	2823(1/4”)

Velostat™ Single Device Carrier



The rugged Velostat Single Device Carrier provides cost-effective physical and static protection for DIPS.

Dimensions (L x W x D): 1.55 in. x 1.01 in. x 0.46 in. (39.37mm x 25.65mm x 11.68mm)

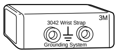
SCP131-ND 5701SP..................$5.25/10

Single Card Carrier

Single card carriers protect individual PCB's from static and physical damage during storage and transport. Interiors are lined with dissipative foam cushioning. The lid of each carrier can be modified for identification labels or company logos. The 12 compartment tray is a molded ESD safe tray for transporting components within the plant or for storing components during PCB assembly.

Description	Digi-Key Part No.	Price Each	3M Part No.
12 compartment ESD safe molded tray for components	SCP236-ND	42.84	4063
Card carrier 10”x 8”x 1.25” w/hinged lid	SCP237-ND	23.27	8520
Card carrier 12”x 9”x 1.25” w/hinged lid	SCP238-ND	28.92	8521
Card carrier 18”x 17”x 2” w/hinged lid	SCP239-ND	58.99	8522
Card carrier 10”x 8”x 2” w/hinged lid	SCP190-ND	27.00	8523

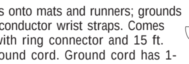
Wrist Strap Grounding System



Wrist Strap Grounding System with two banana jacks and one 10 ft. (3.0m) grounding cord.

SCP115-ND...$20.60 each

Grounding System for Wrist Strap/Table Mat



Easily snaps onto mats and runners; grounds two single conductor wrist straps. Comes complete with ring connector and 15 ft. (4.6 m) ground cord. Ground cord has 1-megohm resistor for mat connection only.

SCP206-ND...$16.29 each

Wrist Strap Workstation Monitor

The 3M 724 Wrist Strap Workstation Monitor continuously verifies the resistance of the operator and work surface ground connections. The monitor uses a reliable resistance method that actually includes the operator's skin resistance to determine if the system is operating properly. If the operator's resistance exceeds 10 megohms or 35 megohms, or the wiring connections exceed 3.7 megohms, audible and visible alarms are triggered. The unit will also warn of potentially dangerous low-resistance situations.

The monitor uses the light and compact dual conductor wrist strap. Dual conductors provide the resistance circuit that is monitored as well as provide grounding redundancy. If one conductor fails, the other will still function to prevent sensitive components from being exposed to static.

Comes complete with a quick connect/disconnect 732 Remote Jack and mounting hardware. 6.5 in. x 3.25 in. x 1.5 in. (162mm x 82mm x 38mm)

Description	Digi-Key Part No.	Price Each	3M Part No.
Workstation monitor kit w/HDWR	SCP226-ND	145.14	724
Dual Conductor Fabric Wrist Strap Adjust...	SCP232-ND	8.12	2368
Dual Conductor Coiled Cord 5’..............	SCP233-ND	16.36	2360
Dual Conductor Coiled Cord 10’	SCP234-ND	18.99	2370

SCP226-ND...$145.14 each

Dissipative Mats

8200 Series: Vinyl mats are soft table and floor mats with a unique three-layer construction. The top layer is durable static dissipative vinyl, which has sufficiently low resistance to discharge static-laden conductors, yet will prevent the shorting of pins on the backs of printed circuit boards laid on the mat.

8200 Series Floor Mats include one 15 ft (4.6m) 3040 Ground Cord and two 3050 Snap Fasteners (installed).

8210 Series Table Mats include two 3M 3050 Snap Fasteners (installed) and one 3M 3048 Wrist Strap Grounding System. Wrist Straps must be ordered separately.

8800 Series: Rubber mats consist of a top layer of static dissipative rubber laminated to a bottom layer of conductive rubber. Both layers are made from vulcanized synthetic rubber, which offers excellent resistance to oil, grease and most common solvents. They offer superior resistance to heat and hot solder as compared to vinyl or olefinic materials.

8810 Series Table Mats includes two 3034 Snap Fasteners (installed) and one 3048 Wrist Strap Grounding System.

Description	Digi-Key Part No.	Price Each	3M Part No.
Floor Mats			
Vinyl, Brown, 4 x 6 ft. Floor Mat	SCP214-ND	138.62	8201
Vinyl, Gray, 4 x 6 ft. Floor Mat	SCP215-ND	138.62	8203 FLOOR MAT
Vinyl, Blue, 4 x 6 ft. Floor Mat	SCP216-ND	138.62	8204 FLOOR MAT
Vinyl, Granite, 4 x 6 ft. Floor Mat	SCP217-ND	198.59	8205
Table Mats			
Vinyl, Gold, 2 x 4 ft.Table Mat	SCP218-ND	84.11	8210 TABLE MAT
Vinyl, Brown, 2 x 4 ft. Table Mat	SCP219-ND	55.17	8211 TABLE MAT
Vinyl, Beige, 2 x 4 ft. Table Mat	SCP220-ND	84.11	8212
Vinyl, Gray, 2 x 4 ft. Table Mat	SCP221-ND	55.17	8213
Vinyl, Blue, 2 x 4 ft. Table Mat	SCP222-ND	55.17	8214
Vinyl, Granite, 2 x 4 ft. Table Mat	SCP223-ND	84.11	8215
Rubber, Gray, 2 x 4 ft. Table Mat	SCP224-ND	63.39	8810
Rubber, Blue, 2 x 4 ft. Table Mat	SCP225-ND	63.39	8811

Conductive Mats and Runners

1864 Floor Mat is a semi-flexible conductive floor mat that contains a rubber filler for resilience. It also has a textured surface for better traction. It includes two 3034 Snap Fasteners (installed) and one 15 ft. (3.0m) Ground cord with a 1 megohm resistor.

1864R Floor Runner is a 50 ft. (15.24m) long runner of the 1864 mat material. It includes two 15 ft. (3.0m) 3040 Ground Cords with 1 megohm resistor, five 3034 Snap Fasteners and one Snap Fastener Installation Tool.

Description	Digi-Key Part No.	Price Each	3M Part No.
Floor Mat, Black, 0.125 in. (3mm) 4 x 6 ft. (1.2 x 1.8m)	SCP209-ND	245.39	1864 (1/8x4x6)
Floor Runner, Black, 0.125 in. (3mm) 2 x 50 ft. (0.6 x 15m)	SCP210-ND	920.79	1864R

Static Control Shoe Grounding Assemblies (Heel Straps)

Long lasting Static Control heel straps provide static protection while retaining worker mobility • Increase personnel mobility • One size fits most shoe • Extra long contact ribbon accommodates most boots.

Note: The Grounding Assemblies are not to be used in areas where the individual may come in contact with electrical circuitry exceeding 250 volts.

Description	Digi-Key Part No.	Price Each	3M Part No.
With 1meg ohm resistor	SCP163-ND	7.86	2051
With 240K ohm resistor	SCP164-ND	7.86	2052

Velostat™ Table Mat

Velostat Table Mat. Conductive 1/15 in. (1.5mm) thick, 2 ft. x 4 ft. (0.6mm x 1.2 mm), with two female snap connectors installed, and one Table Mat Grounding System.

SCP102-ND...$73.31 each

Field Service Kit

Static-Dissipative Portable Field Service Kit: • Static-dissipative work mat with two pockets, .024 in. x 2 ft. x 2 ft. (0.6mm x 61cm x 61cm) • Grounding cord assembly with alligator clip • Charge-Guard™ Series adjustable wrist strap.

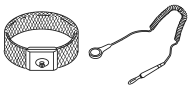
Lightweight Field Service Kit

The small lightweight kit offers the same level of static control as the full-sized 3M 8501 Field Service Kit, yet is small enough to fit in a shirt pocket.

Kit Includes: • Static-Dissipative Work Surface with Pocket 0.015 in. x 15 in. x 20 in. (.38mm x 38.10cm x 50.80cm) • 2204 Adjustable Wrist Band • Lightweight Heavy-Duty Coiled Ground Cords: 2240 Wrist strap ground cord, 5 ft. (1.52m); 2243 Extension ground cord, 5 ft. (1.52m); 3063 Work surface ground cord 5 ft. (1.52m) • 3038 Alligator Clip

Description	Digi-Key Part No.	Price Each	3M Part No.
Field Service Kit	SCP124-ND	59.89	8501
Lightweight Field Service Kit	SCP182-ND	87.69	8505

Charge-Guard™ Adjustable Wrist Strap

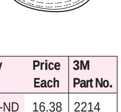


Flex life 1,000,000. Wrist straps are the front line of defense in all static control processes. Ensure a comfortable fit with the Charge-Guard™ Series Adjustable Wrist Strap. One size adjusts to any size wrist to provide reliable, 360 degree protection.

Charge-Guard™ Disposable Wrist Strap

The Charge-Guard™ Disposable Wrist Strap provides cost-effective and reliable static protection. The wrist strap is suited for shipping valuable products to ensure protection at the receiving end.

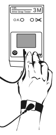
Highland Model™ 2272 Adjustable Static Control Wrist Strap



Flex life 350,000. **Conductive comfort band** — Silver-plated, continuous monofilament threads establish a 360° contact zone and a reliable path to ground. The banding gently contacts the skin and allows it to breathe for extreme comfort. The stainless steel backplate secures the end of the band in the clasp and ensures reliable electrical bond.

Description	Digi-Key Part No.	Price Each	3M Part No.
Wrist Strap with Coiled Cord, 5 ft.	SCP141-ND	16.38	2214
Wrist Strap with Coiled Cord, 10 ft............	SCP142-ND	22.75	2224
Wrist Strap with Heavy-Duty, Coiled, 5 ft.	SCP143-ND	19.96	2244
Replacement Wrist Bands	SCP144-ND	6.53	2204
Disposable Wrist Strap	SCP145-ND	1.14	2209
Adjustable Wrist Strap, with 5 ft. Coiled Grounding Cord and Alligator Clip	SCP172-ND	7.10	2272
Adjustable Wrist Strap	SCP173-ND	3.09	2271
5 ft. Coiled Grounding Cord and Alligator Clip...	SCP174-ND	4.60	2270
Adjustable Lay-in Wrist Strap.................	SCP176-ND	4.10	2216

Charge-Guard™ 746 Wrist Strap Tester



The 746 wrist strap tester is a compact unit much like the 745 but it operates on either battery or AC power. Can be used in production facilities to field service locations. Unit comes complete with an AC adapter, lithium battery and wall mounting kit.

SCP235-ND $195.21

Wall Mount Wrist Strap Tester

The 3M 740 Wrist Strap Tester is an AC-powered unit designed to be wall-mounted in a production facility for daily testing of employees' static control wrist straps. Simple to operate, with red and green LEDs giving a clear "go" or "no go" indication. Comes with the base unit, output connector, wall-mounting system and template, cover for the wrist strap plug-in jack and the AC/DC transformer. 5.43 x 7.48 x 2.09 in. (13.8 x 19.0 x 5.3cm).

SCP204-ND $414.12

Ionized Air Blowers

The 963 neutralizes static charge on nonconductive materials and helps prevent static from damaging sensitive electronic components.

SCP207-ND 120V, 6x6x2.5 in. (963) ....$387.19 each

ACL **Staticide**®

Static Control Products

General Purpose Staticide

(For Non-Porous Surfaces)

Solves static related problems such as:

- The attraction of dirt, dust and bacteria to all environmental surfaces, products and product packaging.
- Charge generation on surfaces of tote boxes and carriers used to process and store electronic components.
- Damage or destruction of sensitive electronic components and subassemblies during their manufacture, shipping or receiving.
- Data processing "glitches" ... memory loss, data errors, paper jams.

ST1002-ND (quart) $9.16

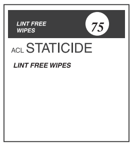
Heavy Duty Staticide

(For Porous Surfaces)

- Ideal for eliminating costly static problems on carpeting.
- Ideal for eliminating jamming or slipping of materials during printing, packaging or converting.
- Ideal for eliminating ignition of combustible vapors, dust or solvents causing fire or explosion.

ST1003-ND (quart) $15.17

Industrial Size Wipes



These strong, highly absorbent lint free cloths are for use on any surface. Ideal for computer screens and computer screen filters.

ST1031-ND (Bundle of 75)..................$10.04

Twice the size of a conventional wipe 11 x 8. The extra big wipe with muscle.

- Ideal for use in industrial, commercial and technical environments.

ST1006-ND (Box of 50) $28.19

Notebook/Laptop Cleaning Wipes

Designed exclusively for all notebook computer screens for use to remove fingerprints, ink, nicotine and other contaminants.

60 presaturated wipes in a handy dispenser.

ST1020-ND..$11.54

Anti-Glare Screen Cleaner

Perfect for monitors and screens, won't streak or stain.

4oz. bottle with pump.

ST1025-ND $4.57

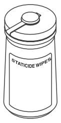
CD-ROM Scratch Repair Kit

Fix those damaged CD's.

Repairs scratches and cleans fingerprints, dust and dirt. Staticide's new solution combines safe and effective cleaners with special polymers that actually molecularly bond to the disc surface repairing the toughest scratches. Use on both old and new discs, regularly to actually make them more durable.

ST1019-ND..$14.69

Premoistened Wipes



Meets or exceeds military electrostatic decay criteria. This long lasting wipe prevents dust attraction, is biodegradable, and is safe and easy to use. For use on all materials that are not adversely affected by water or alcohol.

Wipes supplied in reclosable container.

ST1027-ND Premoistened Staticide Wipes..............$12.11

An effective way to clean and disinfect hard non-porous surfaces. Cleans and disinfects telephones, earphones, and other telecommunications equipment.

Wipes supplied in reclosable container.

ST1028-ND Staticide Telephone Cleaning Wipes........$12.11

These pre-moistened wipes contain a unique solution that cleans better and keeps lenses cleaner longer. Ideal for cleaning most types of glass and plastic lenses including goggles, cameras, binoculars, microscopes, camcorders and magnifiers. It also fights fog build-up.

Wipes supplied in reclosable container.

ST1029-ND Staticide Clean & Clear Optical Wipes $12.11

ESD Hand Sanitizer

This product provides excellent sanitization without the use of water or towels; contains 60% ethyl alcohol to prevent bacterial transfer. Use in place of bacterial soap where static conditioning of the hands are not affected.

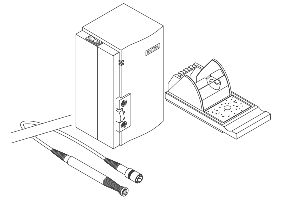
ST1030-ND..$10.53

METCAL
DIVISION OF OK INTERNATIONAL

MX Series Rework Soldering Systems and Replacement Parts

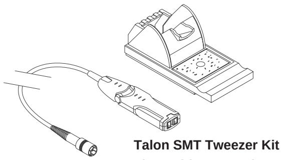
Features: SmartHeat® Technology. Metcal's tip cartridges sense the load and instantly adjust power to quickly deliver the right amount of heat precisely where it is needed. Metcal systems uses SmartHeat® technology that is incapable of overshoot and can deliver high throughput at lower temperatures. Because the interchangeable SmartHeat® cartridges contain a heater and temperature self-regulating alloy, Smart-Heat® systems require no calibration. SmartHeat® technology systems need no dials or readouts, tip cartridges specify the temperature by series, providing continuous temperature for fast, easy, and safe soldering. Metcal's Talon® easy-squeeze design makes removing SMD components a snap. Talon® was designed with ergonomics, style, and superior performance in mind. Beveled edge tips allows rework of several different components without changing tip cartridges.

Description	Digi-Key Part No.	Price Each	Metcal Part No.
Rework System with Dual Expansion Port,100/120VAC	389-1000-ND	670.00	MX-500S-11
Replacement Rework handpiece with cord, ESD Safe, for MX Systems	389-1001-ND	87.55	MX-RM3E
Optional Talon® SMT Tweezer kit, includes handpiece with cord, workstand, sponge, and cartridge removal pad	389-1002-ND	330.00	MX-TALON-01



Includes: Two port systems, workstation, sponge and cartridge removal pad.

Tips sold separately.

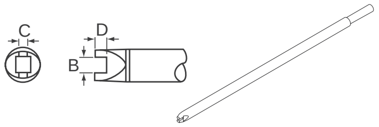


Talon SMT Tweezer Kit

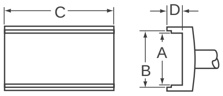
Tips sold separately.

Tip Dimensions Inches (mm)	Description	Digi-Key Part No.	Price Each	Metcal Part No.
500°F Tip Cartridges For MX Series Rework Systems				
.203 (5.156)	XL Chisel	389-1003-ND	22.60	STTC-517
.016 (0.406)	Conical Sharp	389-1004-ND	22.60	STTC-522
.031 (0.787)	Chisel	389-1005-ND	22.60	STTC-525
.094 (2.388)	Chisel	389-1006-ND	22.60	STTC-536
.047 (1.194)	Chisel	389-1007-ND	22.60	STTC-538
.008 (0.203)	Bevel	389-1008-ND	22.60	STTC-545
600°F Tip Cartridges For MX Series Rework Systems				
.203 (5.156)	XL Chisel	389-1009-ND	22.60	STTC-017
.016 (0.406)	Conical Sharp	389-1010-ND	22.60	STTC-022
.094 (2.388)	Chisel	389-1011-ND	22.60	STTC-036
.063 (1.600)	Chisel	389-1012-ND	22.60	STTC-037
.047 (1.194)	Chisel	389-1013-ND	22.60	STTC-038
.008 (0.203)	Bevel	389-1014-ND	22.60	STTC-045

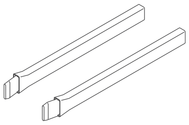
SMT Solder - Desolder Tips



Slot Tip



Tunnel Tip - SOIC



Talon Tips

Tip Dimensions Inches (mm) A	B	C	D	SMD Component	Digi-Key Part No.	Price Each	Metcal Part No.
500°F SMD Slot Tip Cartridges For MX Series Rework Systems							
—	.090(2.286)	.050(1.270)	.070(1.778)	Chip 0805	389-1015-ND	36.50	SMTC-501
—	.140(3.556)	.060(1.524)	.070(1.778)	Chip 1206, 1210	389-1016-ND	36.50	SMTC-502
—	.068(1.727)	.100(2.540)	.050(1.270)	SOT-23	389-1017-ND	36.50	SMTC-505
—	.110(2.794)	.250(6.350)	.080(2.032)	SOT-89	389-1018-ND	36.50	SMTC-508
—	.070(1.778)	.040(1.016)	.035(0.889)	Chip 0402, 0603	389-1019-ND	36.50	SMTC-596
600°F SMD Tunnel Tip Cartridges For MX Series Rework Systems							
.200(5.080)	.200(5.080)	.170(4.318)	.090(2.286)	SOIC-8	389-1020-ND	41.75	SMTC-004
.200(5.080)	.200(5.080)	.400(10.160)	.090(2.286)	SOIC-14, SOIC-16	389-1021-ND	41.75	SMTC-006
.375(9.525)	.375(9.525)	.720(18.288)	.125(3.175)	SOIC-28, SOL-34	389-1022-ND	41.75	SMTC-007
.375(9.525)	.375(9.525)	.620(15.748)	.125(3.175)	SOIC-24	389-1023-ND	41.75	SMTC-009
.375(9.525)	.375(9.525)	.520(13.208)	.125(3.175)	SOIC-20	389-1024-ND	41.75	SMTC-010

Tip Dimensions Inches (mm)	Description	Digi-Key Part No.	Price Each	Metcal Part No.
500°F Tip Cartridges For Talon® Series Tweezer Handpiece				
0.250 (6.350)	Beveled Blades	389-1025-ND	103.00	TATC-502
0.620 (15.748)	Beveled Blades	389-1026-ND	103.00	TATC-503
0.810 (20.574)	Beveled Blades	389-1027-ND	103.00	TATC-504
600°F Tip Cartridges For Talon® Series Tweezer Handpiece				
0.250 (6.350)	Beveled Blades	389-1028-ND	103.00	TATC-602
0.620 (15.748)	Beveled Blades	389-1029-ND	103.00	TATC-603
0.810 (20.574)	Beveled Blades	389-1030-ND	103.00	TATC-604

Note: TATC tip cartridges are for use with Talon only.

SP200 Soldering System

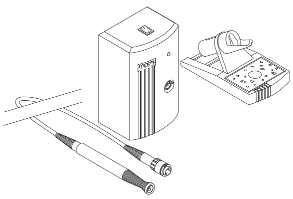
Features:

The SP200 is an ideal choice for thru-hole soldering and surface mount touchup. As with all Metcal SmartHeat systems, there is no calibration required.

Replacement Handle Includes: handle, cord and cartridge removal pad.

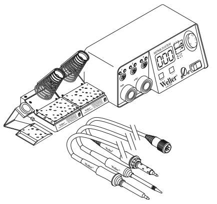
Tips are sold separately.

Description	Digi-Key Part No.	Price Each	Metcal Part No.
Soldering system, 115VAC	389-1031-ND	310.00	SP200-11
Replacement Solder handpiece for SP200	389-1032-ND	61.80	SP-HC1



Tip Dimensions Inches (mm)	Description	Digi-Key Part No.	Price Each	Metcal Part No.
500°F Soldering Tip Cartridges for SP200 Series				
.031 (0.787)	Conical Sharp	389-1033-ND	15.50	SSC-501A
.016 (0.406)	Conical Sharp	389-1034-ND	15.50	SSC-522A
.125 (3.175)	Multi-lead Hoof	389-1035-ND	25.28	SSC-539A
.016 (0.406)	Conical Sharp	389-1036-ND	15.50	SSC-545A
.050 (1.270)	Mini Hoof	389-1037-ND	25.28	SSC-567A
600°F Soldering Tip Cartridges for SP200 Series				
.016 (0.406)	Conical Sharp	389-1038-ND	15.50	SSC-622A
.031 (0.787)	Chisel	389-1039-ND	15.50	SSC-625A
.094 (2.388)	Chisel	389-1040-ND	15.50	SSC-636A
.063 (1.600)	Chisel	389-1041-ND	15.50	SSC-637A
.047 (1.194)	Chisel	389-1042-ND	15.50	SSC-638A
.016 (0.406)	Conical Sharp	389-1043-ND	15.50	SSC-645A

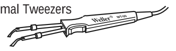
WRS3000S Soldering Station
(Through Hole and SMT Repair or Rework)



The WRS3000S combines all of the tools needed to cover most through hole and SMT repair or rework applications. The soldering tool is the powerful EC1204, featuring 54 watts of power to cover even the most difficult multi-layered applications. The desoldering tool is the DS58. This tool features an inline design and 60 watts of power. Finally, the HAP1 Hot Air tool features a static free air stream that is heated by 100 watts of power. A full complement of nozzles are available for fine solder reflow or removing PLCC packages. The system is completely ESD safe, U.L. Approved and meets the Mil-Specs.

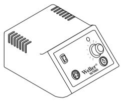
Features: • Self-contained • Closed loop controlled hand pieces • Digital display • Microprocessor control for the ultimate in accuracy • Lock-out equipped • Temperature setback • Separate control of air flow rate, time and temperature • Three independently controlled channels • Burn resistant cords • F/C degree selector • ESD safe • Meets U.L. requirements • Full range of tips for rework and repair available • Hot air and desoldering applications can be run without any separate switching • Temperature Range: 350°F to 850°F (177°C to 454°C)
Note: *Tweezers will also work with EC series units.*

Thermal Tweezers

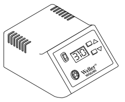


Description	Digi-Key Part No.	Price Each	Weller Part No.
Rework Station w/Hot Air & Irons	WRS3000S-ND	1581.00	WRS3000S
SMT Thermal Tweezers w/Stand	0053313399-ND	316.19	WTA50SET
Tip, 1 mm Thermal Tweezers, 2 pc.	0054414199-ND	21.84	WT1
Tip, 3 mm Thermal Tweezers, 2 pc	0054414699-ND	21.84	WTA2
Tip, 6 mm Thermal Tweezers, 2 pc.	0054414799-ND	21.84	WTA3
Tip, 12.5 mm Thermal Tweezers, 2 pc.	0054414399-ND	51.66	WT4
Tip, 18.5 mm Thermal Tweezers, 2 pc.	0054414499-ND	51.66	WT5

WS "Silver Series" Soldering Station



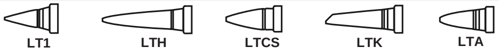
WS80 Features: • Analog control electronics • Temperature dial control from 300°F to 850°F (149°C to 454°C) • Temperature locking via key-operated switch • Accuracy ±2% of final value • Visual control with LED



WSD80 Features: • Digital control electronics • Temperature control from 100°F to 850°F (38°C to 454°C) adjustable via buttons • Calibration box may be connected for time (setback), locking functions (lock-out), and calibration • 3-position digital display for PRE-SET and READ VALUE • Accuracy ±2% from input

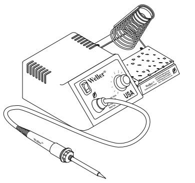
The WS80 (80 Watt analog dial station) and WSD80 (80 Watt digital dial station) irons heat up in one-third to one-fourth the time of regular irons. The patented Weller low-mass tip has a faster recovery time and very little temperature loss when compared to other conventional irons and tips. Perfect for the production line and any area where continuous soldering takes place. **Features:** • Pencil • Holder • Antistatic housing • Automatic tool recognition • All Weller accessories up to 80W may be connected • Solder tool holder • Dimensions (L x W x H): 165.10mm x 114.30mm x 101.60mm

Replacement Tips



Description	Digi-Key Part No.	Price Each	Weller Part No.
Solder Station, 80 Watt w/Iron	WS80-ND	262.56	WS80
DIG Solder Station, 80 Watt w/Iron	WSD80-ND	353.72	WSD80
Replacement Solder Pencil, 80 Watt	WSP80-ND	111.00	WSP80
Solder Pencil Stand	WPH80-ND	19.08	WPH
Replacement Tip, 0.25mm for WS	LT1-ND	5.39	LT1
Replacement Tip, 0.8mm for WS	LTH-ND	5.39	LTH
Replacement Tip, 3.2mm for WS	LTCS-ND	5.39	LTCS
Replacement Tip, 1.2mm for WS	LTK-ND	5.39	LTK
Replacement Tip, 1.6mm for WS	LTA-ND	5.39	LTA

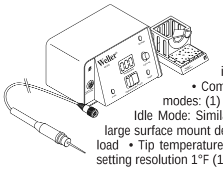
WES50 Soldering Station



Features and Benefits: • Cordless temperature lockout to prevent operators from raising the temperatures to levels higher than specified for the board or component. Gives you control over the process • Cordless Tip Temperature Calibration, which provides the user with the capability of resetting station temperature readings to variations in tip sizes and styles • Quick heat-up and temperature recovery — allows continuous production soldering • Slim, comfortable hand piece — reduces operator fatigue • Accuracy within 9°F (5°C) • Temperature range: 350°F to 850°F (177°C to 454°C) • ESD Safe to protect sensitive components • Uses ET Series Tips

WES50-ND	50 Watt Soldering Station	**$117.74**
PES50-ND	Replacement Iron	**$34.85**

MT1500 Soldering Station (Microtouch)

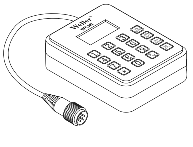


• Immediate, accurate tip temperature for faster soldering (MT202-3 seconds) • Quick tip change system, no tools required • Expanded tip selection: .010 point to PLCC68 (over 50 available) • Touch feature for extended tip life reduces operating cost • Excellent thermal capacity improves performance in all applications • Immediate response to thermal loads improves productivity • Complete control with adjustable temperature and digital display • Three basic modes: (1) Touch Mode: Intended for soldering very small components with microtips; (2) Idle Mode: Similar to Touch Mode, but uses large tips; (3) Continuous Mode: Suited for very large surface mount device tips • Average tip temperature is calibrated to ±9°F (±5°C) at idle with no load • Tip temperature range 400°F to 800°F (204°C to 427°C) • Stability ±10°F (±6°C) • Control setting resolution 1°F (1°C) • Unit not provided with tip: tips to be purchased separately

Description	Digi-Key Part No.	Price Each	Weller Part No.
Microtouch Soldering Station	MT1500-ND *	628.58	MT1500
Tip, Screwdriver, 1.19mm W x 5.08mm	MT301-ND	45.32	MT301
Tip, Conical, .38 dia. x 5.08mm	MT302-ND	45.32	MT302
Tip, Screwdriver, 1.78mm	MT601-ND	45.32	MT601
Tip, Bevel, .51mm	MT607-ND	45.32	MT607
Tip, SMT Blade, 10.41mm Long	MT617-ND	95.88	MT617
Tip, SMT Blade, 20.83mm Long	MT1205-ND	95.88	MT1205
Tip, PLCC68, 25.53mm Sq.	MT1208F-ND	153.20	MT1208

* 5 year unconditional warranty for "MT1500-ND".

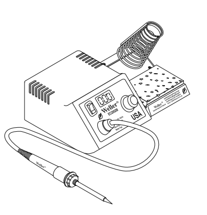
WS System Calibration Unit



• Designed to work with WS series soldering stations • Allows user to calibrate tip temperature of soldering iron to outside temperature reference • Enables timer setback mode (allows station to set back to 350°F (177°C) after period of inactivity) • Insert fixed temperature into station and turning off front panel control knob • Switching station display between °F or °C • Resetting station electronics to original factory calibration • Unit uses four "AA" alkaline batteries for power (included) • 3 month normal life expectancy of batteries • 16 button keypad • Three digit LED display • Connectors to attach to soldering station and iron

WCB1-ND	Calibration Unit	**$224.73**

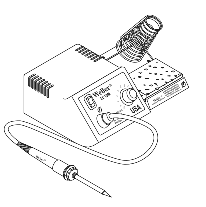
EC2002M Digital Soldering Station



• LED readout displays temperature settings and tip temperature with a resolution of 1°F (1°C) and stability of ±10°F (±6°C) • Display shows "Read" mode by default which displays current temperature of the tip • To switch to "Set" mode, turn knob slightly, display will show current set temperature • Handles delicate applications • Electrostatic discharge safe (ESD safe) • Water reservoir will keep the sponge moist • Externally fused • UL listed and FCC approved.

Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station with EC1201A Iron & Stand	EC2002M-1-ND	343.11	EC2002M-1
Complete Station with EC1302A Iron & Stand	EC2002M-2-ND	343.11	EC2002M-2

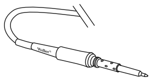
EC1002 Variable Soldering Station



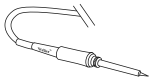
• Dial calibrated in 10°F (6°C) increments • Power control with zero cross switching for tips free of high voltage spikes • Electrostatic discharge safe (ESD safe) • Available with 40, 20, 42 watt iron • Iron stand, with tip storage, position left, right or remote from main unit • Spec. Compliance: DOD-STD-2000, Mil-STD-2000, Mil-S-45743, W-S-6536, W-S-570 AND DOD-STD-1686 • Externally fused • UL Listed

Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station with EC1201A Iron & Stand	EC1002-1-ND	250.62	EC1002-1
Complete Station with EC1302A Iron & Stand	EC1002-2-ND	250.62	EC1002-2

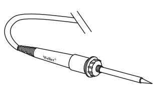
Soldering Irons



EC1503B
• Tool designed for difficult applications such as multilayer boards, large heat output from small tool. • Large tip iron for high wattage application



EC1302B
• Micro-soldering tool • Stainless steel heater element construction • Fine tip iron for light duty applications



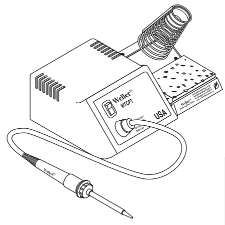
EC1201A
• General purpose soldering tool • Stainless steel plug-in heater element construction • General purpose iron for mid-range applications

- Specifically designed for use at electro static free work stations
- Non-burnable silicon rubber cord
- Lightweight, high impact plastic handle
- Blue plastic meets requirements for ESD, Electrostatic Dissipative Materials
- Uses Weller EM series tips made of copper with heavy iron, nickel and chromium plating for long life
- UL listed

NOTE: EC1503B, EC1302B and EC1201A work with DEC1001 and EC1002.

Description	Digi-Key Part No.	Price Each	Weller Part No.
42w Soldering Iron w/EMA Tip	EC1503B-ND	113.21	EC1503A
20w Iron w/EPH 101 Tip	EC1302B-ND	97.35	EC1302A
40w Soldering Iron w/ETA Tip	EC1201A-ND	97.35	EC1201A
Replacement Sponge	TC205-ND	1.62	TC205

Controlled-Output Soldering Station WTCPT Weller's Work Horse



• Transformer powered soldering station complete with macro style, low voltage, temperature controlled soldering iron • Special "closed loop" method of controlling maximum tip temperature … to protect temperature sensitive components • Power unit housing features impact resistant plastic for durability • Quick disconnect plug for soldering iron and lighted on/off switch • Separate conductor grounds iron tip and terminates at third pin of power cord • PT series soldering tips come in a variety of shapes and sizes in three standard temperature ranges: 600°F (316°C), 700°F (371°C), and 800°F (427°C) • Uses PT series tips

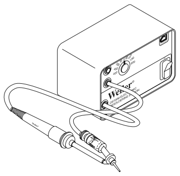
Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station-24V Output	WTCPT-ND	131.40	WTCPT
Replacement Soldering Iron	TC201T-ND	69.02	TC201T

Weller®

Replacement Tips for Irons

Tip Dim. (Inch)	Description	Digi-Key Part No.	Price Each	Weller Part No.
EM Series Tips for EC1503A Iron				
.062	Chisel Tip	EMA-ND	12.80	EMA
.125	Chisel Tip, Long Reach	EMM-ND	12.80	EMM
.015	Conical Tip	EMD-ND	12.80	EMD
PT Series Tips For TC201T Iron				
.062	Screwdriver, 700°F (371°C)	PTA7-ND	5.72	PTA7
.062	Screwdriver, 800°F (427°C)	PTA8-ND	5.72	PTA8
.125	Screwdriver, 700°F (371°C)	PTC7-ND	5.72	PTC7
.125	Screwdriver, 800°F (427°C)	PTC8-ND	5.72	PTC8
.031	Conical Flat, 700°F (371°C)	PTF7-ND	5.72	PTF7
.031	Conical Flat, 800°F (427°C)	PTF8-ND	5.72	PTF8
.015	Long Conical, 700°F (371°C)	PTS7-ND	5.72	PTS7
.015	Long Conical, 800°F (427°C)	PTS8-ND	5.72	PTS8
EPH Series Tips for EC1302A Iron				
.015	Micropoint Tip	EPH101-ND	5.66	EPH101
.031	Bent Conical Tip	EPH102-ND	5.66	EPH102
.062	Screwdriver Tip	EPH106-ND	5.66	EPH106
Replacement Barrel Nut Assortment for EPH Tip		EC231-ND	7.52	EC231
ET Series Tips For EC1201A				
.062	Screwdriver Tip	ETA-ND	5.39	ETA
.093	Screwdriver Tip	ETB-ND	5.39	ETB
.031	Screwdriver Tip	ETH-ND	5.39	ETH
.031	Conical Tip	ETP-ND	5.39	ETP
.015	Single Flat Tip	ETU-ND	5.39	ETU
.031	Long Conical Tip	ETO-ND	5.39	ETO
Tips For Professional Soldering Irons *ST Series Tips For WP25, WP30, WP35 Irons*				
.062	Screwdriver Tip	ST1-ND	5.06	ST1
.183	Screwdriver Tip	ST4-ND	5.06	ST4
.031	Single Flat Tip	ST5-ND	5.06	ST5
.031	Screwdriver Tip	ST6-ND	5.06	ST6

WRS80 Electronically Controlled Desoldering Station

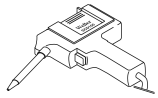


Features:
• Vacuum is generated with a self-contained pump • 80 watts of power for faster heat up and better performance • A wide range of DS series desoldering tiplets available • WRS80 comes with DS80 desoldering pencil with external solder collection chamber • Station also supports Silver Series soldering pencil WSP80 to give you added flexibility

Description	Digi-Key Part No.	Price Each	Weller Part No.
Complete Station 120V Output	WRS80-ND	750.00	0053300270
Replacement Tip, .79mm	DS112-ND	12.72	DS112
Replacement Tip, 1.85mm	DS114-ND	12.72	DS114
Glass Tube	0051360599-ND	6.59	0051360599
Kapton Strap	0051361699-ND	8.12	0051361699
Mineral Filters	0051360499-ND	2.19	0051360499

SCD100 Desoldering Gun

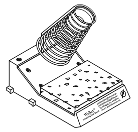
Description	Digi-Key Part No.	Price Each	Weller Part No.
Desoldering Gun, Self-contained	SCD100-ND	206.55	SCD100
Replacement DisposableTube	SCD201-ND	9.17	SCD201
Replacement Tip, 0.9mm for SCD100	SCD112-ND	17.06	SCD112
Replacement Tip, 1.2mm for SCD100	SCD113-ND	17.06	SCD113
Replacement Tip, 1.8mm for SCD100	SCD114-ND	17.06	SCD114

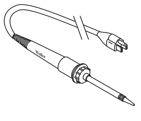


Self-contained desoldering gun draws solder into the disposable collector tube.

Professional Soldering Irons

WP25, WP30, WP35 Series Irons



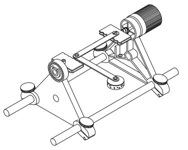


• Fixed temperature units • Ideal for a wide variety of electronic tasks. • Interchangeable heater elements - Single handle plus three different heating elements gives the user a trio of irons for different jobs. • Quick change knurled collar makes changing heater simple. • Lightweight handle with cushioned grip. • For additional safety, all irons come with 3-wire power cord. • Irons use ST series iron plated tips for long life and greater soldering efficiency. • Important: Use only Weller tips. • ST series tips. • UL Listed.

Description	Digi-Key Part No.	Price Each	Weller Part No.
Soldering Iron w/ST3 Tip, 25 watt*	WP25-ND	33.27	WP25
Soldering Iron w/ST3 Tip, 30 watt*	WP30-ND	35.96	WP30
Soldering Iron w/ST3 Tip, 35 watt*	WP35-ND	41.88	WP35
Soldering Iron Stand For WP Series*	PH60-ND	20.58	PH60
Knurled Tip Retaining Nut	KN60-ND	2.70	KN60

* Note that iron stand is sold separately.

0051502699 Circuit Board Vise

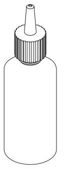


• Complete work center for placing, soldering and desoldering printed circuit boards. • Spring clamps will hold workpiece in place securely. • Rotates through 360°, allowing work performance at any convenient angle. • Adjustable features allow handling of variety of circuit board sizes. • Maximum surface: 6-1/4"/160 mm x 9-1/8"/235 mm. • 0051502699 is ESD SAFE.

Description	Digi-Key Part No.	Price Each	Weller Part No.
Circuit Board Vise	0051502699-ND	90.95	0051502699

Weller®

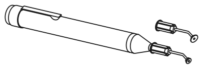
Flux and Scrub-It® Solvent Dispensers



Flux Dispensers: • Both static safe and standard hold 2 ounces • Avoid spills and waste and place flux precisely where needed • Squeeze bottles dispense one drop of liquid resin, flux, oil solvent through stainless steel needles • Static dissipative models protect static-sensitive components.
Scrub-It® Solvent Dispensers: • Squeeze dispenser to distribute solvent through brush • For cleaning printed circuit boards and other connections • No mess, no waste • Available with nylon bristles or horsehair for static-safe applications • Dispenser holds 2 ounces

Description	Digi-Key Part No.	Price Each	Weller Part No.
Flux Dispenser, 0.020" (508mm) Needle	FD2-ND	2.48	FD2
Flux Dispenser, 0.008" (203mm) Needle	FD21-ND	2.48	FD21
Flux Dispenser, 0.050" (1.27mm) Needle	FD22-ND	2.48	FD22
Scrub-It Bottle, Nylon Bristle	SD74-ND	8.43	SD74
Scrub-It Bottle, Horse Hair	SD74H-ND	8.43	SD74H

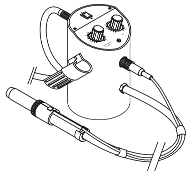
Vacuum Pickup Tool



Digi-Key Part No.	Price Each	Weller Part No.
WLSK200-ND	53.71	WLSK200

• Vacuum pick up tool allows for easy and safe handling of components

Hot Air Rework Station and Nozzles



Features: • Self-contained low cost hot air station with 700 watts of heating power to handle most bench top rework jobs • Extremely compact size uses less space on your rework bench • Temperature and air flow are controlled on the front panel - allows you to make settings quickly and easily • Air flow can be activated by either a finger switch on the hand piece or via an optional foot switch • Built-in hand piece holder saves bench space.

Description	Digi-Key Part No.	Price Each	Weller Part No.
Self-Contained Hot Air Station, 120V	WHA300-ND	698.24	WHA300
Hot Air Nozzle, 44 PIN PLCC	0058736814-ND	57.23	0058736814
Hot Air Nozzle, 84 PIN PLCC	0058736833-ND	71.75	0058736833
Hot Air Nozzle, 20 PIN PLCC	0058736839-ND	57.23	0058736839
Hot Air Nozzle, 68 PIN PLCC	0058736804-ND	57.23	0058736804
Hot Air Nozzle, 14 PIN SOIC-SO8	0058736843-ND	57.23	0058736843
Hot Air Nozzle, 20 PIN SOIC	0058736842-ND	57.23	0058736842
Hot Air Nozzle, SOT23	0058736870-ND	57.23	0058736870

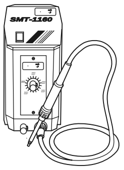
Division of OK International

Replacement Parts for Irons

Tip Dim. In. (mm)	Description	Digi-Key Part No.	Price Each	OK Int'l. Part No.
Micro Iron Replacement Tips				
.047 (1.19)	Double Flat	K303-ND	9.00	S4-305L
.047 (1.19)	Chisel	K305-ND	9.50	S4-105S
.047 (1.19)	Double Flat	K341-ND	9.00	S4-305S
.015 (.38)	Conical	K342-ND	9.00	S4-201L
.020 (.51)	Angled	K343-ND	9.00	S4-202B
.047 (1.19)	Dbl. Flat Long Life	K450-ND	15.00	S4-305SX
Macro Iron Replacement Tips				
.039 (.99)	Conical	K307-ND	9.00	S9-204L
.047 (1.19)	Double Flat	K344-ND	9.00	S9-305S
.015 (.38)	Conical	K345-ND	9.00	S9-201L
.047 (1.19)	Dbl. Flat Long Life	K449-ND	20.00	S9-305SX

Description	Digi-Key Part No.	Price Each	OK Int'l Part No.
Iron - Replacement Parts			
Repl. Heat Assembly for K295-ND	K420-ND	40.14	15589
Repl. Collar, Nut and Sleeve for K295-ND	K421-ND	13.84	15920
Repl. Heat Assembly for K296-ND	K422-ND	52.00	16226
Repl. Collar, Nut and Sleeve for K296-ND	K423-ND	14.79	16492

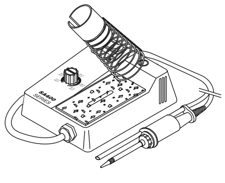
Surface Mount Hot Air Soldering System



The SMT-1161-V is a non-contact hot air soldering system for most SMD's utilizing forced air convection. The SMT-1161-V is designed for low thermal-stress reflow. Primarily a soldering device, the SMT-1161-V can be utilized for SMT component removal also. **System includes:** • Base with pump • Variable temperature module • Handpiece • Hand-piece holder • 3-piece nozzle kit • Instruction manual. **Specifications:** • **Input:** 115VAC/60Hz • **Temperature Range:** 600° to 800°F (316° to 427°C) • **Airflow:** 1 to 6 liters/min. • **Dimensions:** 5.7" x 4.3" x 8.5" (14.48cm x 10.92cm x 21.59cm) • **Weight:** 8.8 lbs. (3.99kg)

Description	Digi-Key Part No.	Price Each	OK Int'l Part No.
SMT Hot Air Soldering System	K353-ND	825.00	SMT-1161-V

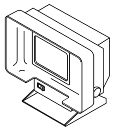
Fume Extract Solder Stations



OK International's SA-400 soldering station fitted with a fixed fume extraction adapter for clean, fume free soldering. Must be used with an external fume extraction unit. Comes complete with variable station, handpiece with integral fume extraction tube, sponge and tray. 115VAC.

Description	Digi-Key Part No.	Price Each
Micro Iron Solder Station w/ Fume Extraction, 40W	K454-ND	189.00
Macro Iron Solder Station w/ Fume Extraction, 90W	K455-ND	189.00

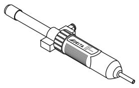
Benchtop Fume Absorber



Aerodynamic hood design effectively draws solder fumes away from the work area. Carbon filters traps up to 80% of the flux fumes. Compact size and adjustable for convenient placement near work area. Optional articulating arm with bench mount clamp converts benchtop fume absorber to suspended fume absorber for positioning directly over the work area. An inexpensive alternative to individual fume extraction.

Description	Digi-Key Part No.	Price Each
Benchtop Fume Absorber 115V w/3 Filters	K416-ND	105.00
Benchtop ESD Safe Fume Absorber 115V w/3 Filters	K417-ND	135.00
Articulating Arm Assembly Kit w/Bench Clamp	K418-ND	165.00
Replacement Carbon Filter Set, 3 Pcs.	K419-ND	18.81

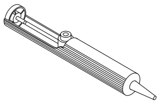
High Vacuum Desolder Pumps



Features durable corrosion resistant plastic construction and corrosion treated springs with uniform reset pressure and cushioned shock reduction. Fitted with replaceable teflon tips.

Description	Digi-Key Part No.	Price Each
High-Vac Desoldering Pump with Tip	K412-ND	18.95
Repl. Teflon Tip for K412-ND	K413-ND	2.95
ESD Safe Desoldering Pump with Tip	K414-ND	23.95
Repl. ESD Safe Teflon Tip for K414-ND	K415-ND	4.95

Desoldering Pump

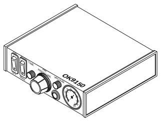


Desoldering tool removes solder with simple push-button operation. A conductive tool for anti-static operation. Replaceable tips available.

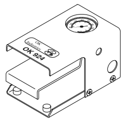
PAL1700-ND	Desoldering Pump	**$16.99**
PAL2712-ND	Replacement Tip	**$5.43**

Fluid Dispensing Systems

K424



K425



OK International fluid dispensing equipment is well suited for all types of liquids and fluids, from water thin solvents to thick pastes to sticky syrups. Both dispensers require external air source.

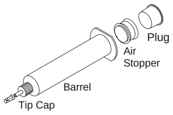
K424-ND Analog dispenser has a vacuum control of all viscosities of fluids. The solid state timer provides accurate and repeatable dispensing cycles. This unit offers an adjustable vacuum feature for controlling drip of fluid or paste between dispense cycles. Three dispense time ranges are included to offer controlled time shots from .01 to 30 seconds with one-touch or interruptible actuation. **Features:** • Solid state digital integrated circuitry timer • 0.18 CV factor constant flow solenoid • Lighted function switches • Adjustable vacuum up to 15 inches Hg • Micro action foot switch

K425-ND foot valve dispenser is the ideal dispensing unit for most general applications of adhesives, sealants and compounds. **Features:** • Rugged and easy to use • Built-in pressure regulator • Connects to any OK syringe adapter • Fluid will flow as long as foot pedal is depressed

K426-ND dispense kit consists of 3 syringe assemblies complete with barrels; air stoppers, tip caps and barrel adapters. The kit also includes 50 tips (assorted sizes) and an in-line filter, shop air filter and syringe stand.

K424-ND	Analog Precision Fluid Dispenser 1-100PSI Solid State Timer 115 VAC	**$589.00**
K425-ND	Foot Valve Fluid Dispenser 20-100PSI with built-in pressure regulator	**$215.00**
K426-ND	Dispenser Kit for K424-ND & K425-ND (65 pieces total)	**$120.00**

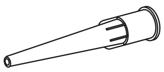
Air Powered Syringe Assemblies



Available in 3 popular sizes (6cc, 10cc, and 35cc). Air powered assemblies include syringe barrel and tip caps, air stoppers and end plugs for safety when transporting filled syringes.

K427-ND	5cc-6cc (pkg. of 20 assemblies)	**$11.30**
K428-ND	10cc-12cc (pkg. of 15 assemblies)	**$10.58**
K429-ND	30cc-35cc (pkg. of 10 assemblies)	**$11.30**

Dispensing Tips



These tips are molded in high density polyethylene with color coding indicating tip inside diameter.

K435-ND	.063" (1.60mm) ID Tan Color (pkg. of 50)	**$18.00**
K436-ND	.047" (1.19mm) ID Grey Color (pkg. of 50)	**$18.00**
K437-ND	.033" (.84mm) ID Green Color (pkg. of 50)	**$18.00**
K438-ND	.024" (.61mm) ID Pink Color (pkg. of 50)	**$18.00**
K439-ND	.016" (.41mm) ID Blue Color (pkg. of 50)	**$18.00**

Low Cost Fixed-Temp Soldering Irons and Holders

Fig. 1

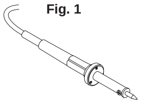
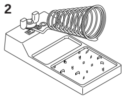


Fig. 2



Compact, lightweight fixed-temperature solder irons designed for the occasional user and hobbyist.

Super quick heat up with replaceable tip and stainless steel heating core.

Description	Digi-Key Part No.	Price Each	Easy Braid Part No.
Fixed Temp Iron, Fig. 1			
Deluxe, 30W, 115VAC, Insulated Handle	EB1068-ND	23.95	DJY-10730S
Micro, 30W, 115VAC	EB1069-ND	11.81	DJY-10330
High Power, 40W, 115VAC	EB1070-ND	13.48	DJY-10340
High Power Macro, 60W, 115VAC	EB1139-ND	16.77	DJY-10360
Solder Iron Holder, Fig. 2			
Small, with Sponge	EB1071-ND	15.52	DST58
Large, with Sponge	EB1072-ND	28.87	DST68
Replacement Tip (1 pc.)			
Conical for EB1068-ND (30W)	EB1073-ND	4.85	SIT-R30W
Conical for EB1069-ND (30W)	EB1074-ND	3.09	SIT-B30W
Conical for EB1070-ND (40W)	EB1075-ND	3.09	SIT-B40W

Scotch™ No. 1285 Plating Tapes

3M's family of Scotch™ brand Plating Tapes is the answer to your PWB industry needs. Scotch™ brand Plating Tapes each have a specially designed adhesive formulation for specific plating tape requirements • All plating tapes have a 1 mil polyester backing that resists plating and etching solutions to help you reduce your board reject rate Scotch™ brand 1285 are silicone-free plating tapes designed to eliminate the clean-up associated with silicone adhesive residue. 1285 is recommended for all types of PWBs • Color: Blue • Adhesive Type: Rubber • Adhesive Thickness: 3 mils (.08mm) • Adhesive Strength: 25 oz./in. width (27N/100mm)

3M12851-ND	Plating Tape, 1.0" (25.40mm) wide	**$27.85**

Scotch™ No. 854 Polyester Tape

An opaque, cream-colored polyester tape with excellent chemical resistance in precious metal plating, especially gold **General Information:** • Polyester film backing imparts excellent chemical and thermal stability • Remains flexible at -60°F (-50°C) and retains dimensional stability up to 300°F (149°C) • **Construction:** • Backing: Polyester • Adhesive: Rubber • Color: Cream • Standard Roll Length: 72 yds. (66m) • Elongation at Break: 123% • Backing Thickness: 1 mil (.02mm) • Total Tape Thickness: 2.7 mils (.065mm) • Water Vapor Transmission Rate: 1.6 gms H_20/100sq. in./24 hrs. (24.8 g/m^2/24hrs) • Resists many solvents found in photographic, electroplating and chemical milling processes. Hot caustics will weaken the backing after prolonged immersion **Application Ideas:** • Excellent chemical resistance in precious metal plating, especially gold • Excellent results in sodium hydroxide etching of aluminum • Chemical milling • General splicing

3M85402-ND	Polyester Tape, 2" (50.8mm) wide	**$30.25**
3M85401-ND	Polyester Tape, 1" (25.4mm) wide	**$15.11**

Scotch™ No. 5414 Water Soluble Tape

Get reliable protection for your circuit boards during wave soldering with this water soluble tape • Saves time and clean-up costs by completely dissolving during in-line, aqueous cleaning operations • Biodegradable, non-toxic tape has a neutral pH and leaves no residue • Eliminates static and labor usually associated with tape removal • Packaged in a moisture impervious bag which ensures long term storage stability under extreme humidity **Construction:** • Backing: PVA film • Adhesive: Water soluble synthetic adhesive • Liner: Kraft paper • Color: Hazy, transparent • Standard Roll Length: 36 yds. (33m) • Tensile Strength: 6.2 lbs./in. width (115.6 N/100mm) • Total Thickness: 2.5 mils (.06mm) • Dissolution Time: 40 seconds at 140° with agitation

3M541434-ND	0.75" (19.05mm) wide	**$34.32**
3M541412-ND	0.5" (12.70mm) wide	**$22.86**

Scotch™ No. 5413 Polyimide Film Tape

Increase your productivity with this superior performing Kapton™ polyimide film tape • Chemical and radiation resistant polyimide film is dimensionally stable at high temperatures, and flame retardant • Strong, heat resistant silicone adhesive resists adhesive transfer at elevated temperatures, providing higher productivity • Rated for continuous use at 500°F and intermittent use at 700°F, Scotch™ brand No. 5413 provides an excellent mask for high temperature powder coating • Color: Amber • Roll Length: 36 yds. (33m) • Total Tape Thickness: 2.7 mils (.07mm) • Temperature Use Range: -100°F to 500°F (-73°C to 270°C)

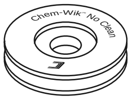
3M541334-ND	0.75" (19.05mm) wide	**$34.38**
3M541312-ND	0.5" (12.70mm) wide	**$22.92**

Scotch™ No. 5419 Low Static Polyimide Film Tape

A translucent, polyimide film-backed silicone adhesive tape with unique and extremely low electrostatic discharge properties. For gold tab protection during wave soldering of printed circuit boards. **General Information:** • 5419 tape employs a proprietary technology that results in extremely low electrostatic discharge at unwind and removal from the PWB • Polyimide film does not soften at elevated temperatures, thus, the film provides an excellent release surface at elevated temperatures. **Construction:** • Backing: Polyimide • Adhesive: Silicone • Color: Gold • Standard Roll Length: 36 yds. (33m) • Tensile Strength: 33 lbs./in. width (578N/100mm) • Total Tape Thickness: 2.7 mils (.07mm) • Temperature Use Range: -100°F to +500°F (-73°C to +260°C) • Insulation Resistance: $>1*10^6$ ohms **Applications:** Mask for printed circuit boards during wave solder or solder dip process; used as release surface in fabrication of parts cured at elevated temperatures

3M591934-ND	0.75" (19.05mm) wide	**$34.76**
3M591912-ND	0.5" (12.70mm) wide	**$23.21**

Chemtronics Desoldering Braid



Pure copper braid construction coated with high purity rosin, quickly and thoroughly removes solder. Use Chem-Wik or Soder-Wick to remove components, SMDs, ICs, blobs and clean up poor solder connections. **Meets or Exceeds these Requirements:** • Mil-F-14256F Type R • NASA NHB 5300.4(3A) Reliability and Quality Assurance publication • NASA SP-5002 Soldering Electrical Connections • NASA NPC200-4 Quality publication • DOD Standard 1686B and DOD Handbook 263 • Mil-B-81705C Static Decay Rate Provision • Mil-Std-2000A

Width Inch (mm)	Length Feet (Meter)	Label Color	Digi-Key Part No.	Price Each 1	25	100	Chemtronics Part No.
Chem-Wik® Desoldering Braid							
.035 (.89)	5 (1.52)	White	CW2-5-ND	2.38	2.15	1.73	2-5SD
.050 (1.27)	5 (1.52)	Yellow	CW5-5-ND	2.38	2.15	1.73	5-5SD
.025 (.64)	25 (7.62)	White	CW2-25-ND	10.40	9.36	7.54	2-25L
.050 (1.27)	25 (7.62)	Yellow	CW5-25-ND	10.40	9.36	7.54	5-25L
.075 (1.91)	25 (7.62)	Green	CW7-25-ND	10.82	9.74	7.85	7-25L
.100 (2.54)	25 (7.62)	Blue	CW10-25-ND	11.54	10.39	8.37	10-25L
.030 (.76)	100 (30.48)	Gray	2-100L-ND	41.62	37.46	30.18	2-100L
.050 (1.27)	100 (30.48)	Yellow	5-100L-ND	41.62	37.46	30.18	5-100L
.075 (1.91)	100 (30.48)	Green	7-100L-ND	43.18	38.87	31.31	7-100L
.100 (2.54)	100 (30.48)	Blue	10-100L-ND	46.30	41.67	33.57	10-100L
Soder-Wick® Desoldering Braid							
.030 (.76)	5 (1.52)	White	80-1-5-ND	2.50	2.25	1.82	80-1-5
.060 (1.52)	5 (1.52)	Yellow	80-2-5-ND	2.50	2.25	1.82	80-2-5
.080 (2.03)	5 (1.52)	Green	80-3-5-ND	2.60	2.34	1.89	80-3-5
.110 (2.79)	5 (1.52)	Blue	80-4-5-ND	2.92	2.63	2.12	80-4-5
.145 (3.68)	5 (1.52)	Brown	80-5-5-ND	3.26	2.94	2.37	80-5-5
.210 (5.33)	5 (1.52)	Red	80-6-5-ND	3.56	3.21	2.59	80-6-5
.030 (.76)	25 (7.62)	White	50-1-25-ND	11.90	10.71	8.63	50-1-25
.060 (1.52)	25 (7.62)	Yellow	50-2-25-ND	11.90	10.71	8.63	50-2-25
.080 (2.03)	25 (7.62)	Green	50-3-25-ND	12.22	11.00	8.86	50-3-25
.110 (2.79)	25 (7.62)	Blue	50-4-25-ND	13.52	12.17	9.81	50-4-25
.145 (3.68)	25 (7.62)	Brown	50-5-25-ND	15.14	13.63	10.98	50-5-25
.210 (5.33)	25 (7.62)	Red	50-6-25-ND	16.10	14.49	11.68	50-6-25
.060 (1.52)	100 (30.48)	Yellow	50-2-100-ND	46.18	41.57	33.49	50-2-100
.080 (2.03)	100 (30.48)	Green	50-3-100-ND	48.12	43.31	34.89	50-3-100
.110 (2.79)	100 (30.48)	Blue	50-4-100-ND	53.10	47.79	38.50	50-4-100
No-Clean Soder-Wick® Desoldering Braid							
.030 (.76)	5 (1.52)	White	60-1-5-ND	2.92	2.63	2.12	60-1-5
.060 (1.52)	5 (1.52)	Yellow	60-2-5-ND	2.92	2.63	2.12	60-2-5
.080 (2.03)	5 (1.52)	Green	60-3-5-ND	3.02	2.72	2.19	60-3-5
.110 (2.79)	5 (1.52)	Blue	60-4-5-ND	3.46	3.12	2.51	60-4-5
.145 (3.68)	5 (1.52)	Brown	60-5-5-ND	3.80	3.42	2.76	60-5-5
.210 (5.33)	5 (1.52)	Red	60-6-5-ND	4.12	3.71	2.99	60-6-5
.030 (.76)	10 (3.04)	White	60-1-10-ND	5.30	4.77	3.85	60-1-10
.060 (1.52)	10 (3.04)	Yellow	60-2-10-ND	5.30	4.77	3.85	60-2-10
.080 (2.03)	10 (3.04)	Green	60-3-10-ND	5.62	5.06	4.08	60-3-10
.110 (2.79)	10 (3.04)	Blue	60-4-10-ND	6.28	5.66	4.56	60-4-10
.145 (3.68)	10 (3.04)	Brown	60-5-10-ND	6.92	6.23	5.02	60-5-10

Ball Grid Array (BGA) Desoldering Braid

60-BGA-5-ND	Soder-Wick BGA, No-Clean, 5 Feet (1.52 Meter)	**$3.87**
80-BGA-5-ND	Soder-Wick BGA, Rosin, 5 Feet (1.52 Meter)	**$3.50**

Prototyping & Rework Dispensing Pens

Description	Digi-Key Part No.	Price Each 1	25	Chemtronics Part No.
Conformal Coating Removal Pen for PCB's (.32 Oz.)	CW3500-ND	9.61	8.69	CW3500
Flux Remover Pen for No-Clean Fluxes (.32 Oz.)	CW9100-ND	7.45	6.74	CW9100
Flux Remover Pen for Rosin Based Fluxes (.32 Oz.)	CW9200-ND	7.14	6.45	CW9200
Conductive Trace Pen, Std. Tip for Repairing PCB's	CW2200STP-ND	15.26	13.79	CW2200STP
Conductive Trace Pen, Micro Tip for Repairing PCB's	CW2200MTP-ND	15.26	13.79	CW2200MTP
Conductive Trace Pen for Flexible Circuit Traces	CW2900-ND	20.20	18.26	CW2900
Overcoat Pen for Protecting Conductive Trace on PCB	CW3300G-ND	12.33	11.15	CW3300G
Conductive Silver Grease for Relays and Connectors	CW7100-ND	15.72	14.21	CW7100
Conductive Rubber Keypad Repair Kit	CW2605-ND	10.81	9.77	CW2605

Presaturated Wipes

Description	Digi-Key Part No.	Price Each 1	25	Chemtronics Part No.
Optic Prep High Quality Optical Cleaning and Polishing Pads (50 Pcs.)	CP410-ND	16.80	15.18	CP410
Chempad General Purpose, Lint-free, Nonabrasive Cleaning Pads (50 Pcs.)	CP400-ND	18.49	16.71	CP400
Screen-Prep Wet-and-Dry Wipes for Monitor Screens (25 Twin Packs)	CSP20-ND	19.82	17.91	CSP20
Gold Guard Pads for Cleaning Gold, Tin and Silver Contacts (50 Pcs.)	CP420E-ND	32.42	29.30	CP420E

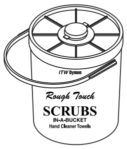
Clean Room Products

Unsaturated Wipes

Description	Digi-Key Part No.	Price Each 1	25	Chemtronics Part No.
Lightweight Polyester Wipes, 9" x 9" (150 Pcs.)	6209-ND	44.79	40.47	6209
Polyester/Cellulose Blend, Nonwoven Wipes, 4" x 4" (1200 Pcs.)	6704CH-ND	23.41	21.15	6704
Polyester/Cellulose Blend, Nonwoven Wipes, 9" x 9" (300 Pcs.)	6709CH-ND	24.55	22.19	6709
Sealed Edge Microfiber Chamois™ Wipes, 8" x 8" (50 Pcs.)	7348LE-ND	94.95	85.80	7348LE

Hand Cleaner Towels-In-a-Bucket

Whether you are in the shop, on the assembly line, or out in the field, these premoistened towels are ready to use for your hard working hands. The citrus based formula combined with an absorbent, non-scratching towel will loosen, dissolve, and absorb soils from your hands. Towels will not re-transfer soils back onto your skin, and will leave your hands conditioned and protected while you clean. Residue free.



Quickly Removes:
• Adhesives • Caulk • Dirt • Epoxy • Grease • Grime • Lubricants • Ink & Dye • Sealants • Tar • Urethane • Wax • Asphalt • Polyurethane • Paint • Oils

For More Than Just Hands:
• Tools • Plastics • Vinyl • Painted Surfaces • Metal • Work Surfaces • Equipment • Composites • Workbenches

42272-ND	72 Towels (10.5" x 12.25")	**$14.92**

Swabs and Applicators

For general purpose cleaning of magnetic heads, video heads and optical pickups.

Fig. 1 **Chamois Tip, ABS Handle**

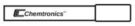


Fig. 2 **Cotton Tip, Wood Handle**

Fig. 3 **Cotton Tip, Double Ended**

Fig.	Qty. (Pcs.)	Length Inch (mm)	Digi-Key Part No.	Price Each 1	25	100	Chemtronics Part No.
1	15	3.25 (82.55)	CC15-ND	9.79	8.85	8.26	CC15
	50	3.25 (82.55)	CC50-ND	28.72	25.95	24.22	CC50
2	100	6.00 (152.40)	CT100-ND	2.84	2.57	2.40	CT100
3	100	6.00 (152.40)	CT200-ND	3.04	2.75	2.57	CT200
	1000	6.00 (152.40)	CT2000-ND	25.08	22.67	21.16	CT2000
—	25	—	CS25-ND	23.19	20.96	19.56	CS25

Chemtronics Clean Room Products

Swabs and Applicators

Fig. 1

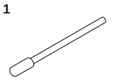


Fig. 2

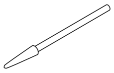


Fig. 3

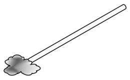


Fig. 4

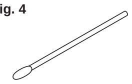
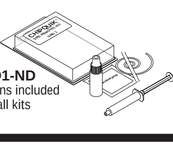


Fig.	Qty. (Pcs)	Length Inch (mm)	Shaft Description	Tip Description	Digi-Key Part No.	Price Each 1	25	100	Chemtronics Part No.
1	500	2.80 (71.10)	.10" (2.54mm) Width ESD Shaft	.12" (3.05mm) Diameter, Knit Polyester Tip	31040ESD-ND	77.57	70.10	65.43	31040ESD
	500	2.80 (71.10)	.10" (2.54mm) Width Polypropylene Shaft	.13" (3.30mm) Diameter, Foam Polyurethane Tip	41050-ND	35.31	31.91	29.78	41050
	500	2.80 (71.10)	.10" (2.54mm) Width ESD Shaft	.13" (3.30mm) Diameter, Foam Polyurethane Tip	41050ESD-ND	71.80	64.88	60.55	41050ESD
2	500	3.20 (81.28)	.10" (2.54mm) Width Polypropylene Shaft	.11" (2.79mm) Diameter, Foam Polyurethane Tip	44070-ND	38.60	34.88	32.55	44070
	500	3.20 (81.28)	.10" (2.54mm) Width ESD Shaft	.11" (2.79mm) Diameter, Foam Polyurethane Tip	44070ESD-ND	71.80	64.88	60.55	44070ESD
	50	6.70 (170.18)	Polypropylene Shaft	Tapered Applicator Porous Polyvinylidene Fluoride Tip	CM502-ND	24.98	22.58	21.07	CM502
3	500	6.00 (152.40)	.09" (2.29mm) Width Wood Shaft	.47" (11.94mm) Diameter, Polyurethane Foam over Cotton Tip	23110-ND	100.33	90.66	84.62	23110
4	25	6.30 (160.02)	.12" (3.05mm) Width Glass Filled Nylon Shaft	.26" (6.60mm) Diameter, Knit Polyester Tip	52121-ND	11.17	10.10	9.43	52121

CHIP QUIK® SMD Removal Kits

CHIP QUIK SMD rework products are designed as a low cost way to rework SMD components including QFP and PLCC packages, with very low temp. (300°F). It virtually eliminates damaged pads and circuitry or lost boards due to heat damage. SMD1 contains everything needed for removing SMD components with either convection (hot air) or conduction (solder iron). Use SMD16, SMD32, and SMD291 for larger jobs which require more CHIP QUIK material and flux. SMD2000 kit is a complete Solder/Desolder rework kit for safely removing SMD components, cleaning the pads, placing component and reapplying solder safely with low operating temps. Approved by many top industry PC board manufacturers for reworking faulty components, without the need for specialized solder equipment.

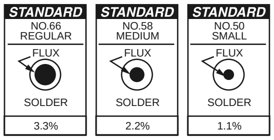
SMD2000 Contents (In durable plastic case): • CHIP QUIK Removal Alloy SMD 4.5 with instructions • **Solder Paste**: No clean 63/37 rework solder paste with flux in 1cc syringe with nozzle and cap (trial size) • **Solder**: 3 feet 63/27 2% silver .031 in. • **CHIP QUIK Paste Flux**: No clean flux in 1cc syringe with nozzle and cap used for solder/desolder • **Liquid Flux Remover/Cleaner**: 5cc container with applicator (non-flammable) • **Probe Kit**: 4 stainless steel dental picks for SMD removal and placement • **Solder Wick**: No clean, 5 feet • **Handi Vac**: SMD pick and place tool with tips • **Acid Brush**: Qty. 2 • **Precision Tweezers**: For SMD removal and placement • **Cleaning Wipes**: Tight weave / low lint 4" x 4", qty. 6 (for cleaning PC board) • **Swabs**: Double ended, qty. 10 (for cleaning PC board) • **Alcohol Pads**: Qty. 6 (for cleaning PC board) • CHIP QUIK SMD removal and clean up instructions.


CHIP QUIK SMD REMOVAL KIT SMD 1

SMD1-ND
*Instructions included with all kits

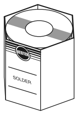
Description	Digi-Key Part No.	Price Each	CHIP QUIK Part No.
SMD Removal Kit for 8-10 SMDs	SMD1-ND	15.00	SMD1
Industrial Pack Replacement Low Temp. Solder 16'	SMD16-ND	82.50	SMD16
Industrial Pack Replacement Low Temp. Solder 32'	SMD32-ND	150.00	SMD32
No Clean Paste Flux for Rework, 10cc Syringe	SMD291-ND	14.63	SMD291
SMD Removal Kit, Complete Rework Kit, Contents Listed (Not Illustrated)	SMD2000-ND	105.00	SMD2000

Flux-Core Solders



Alloy	Melting Range (°F)	Recommended Use
Tin-Lead		
Sn63Pb37	361	Most common, tin-lead eutectic used in PCB assembly applications
Sn60Pb40	361-374	Used in single-sided board soldering and solder dipping operations
Lead-Free		
SAF-A-LLOY	426-454	Special alloy developed for general use where lead free solder is mandated
Other Alloys		
Sn62Pb36Ag02	354-372	Used on silver coated ceramics and PdAg substrates, prevents silver leeching
Sn43Pb43Bi14	291-325	Used in low temperature electronic assembly applications

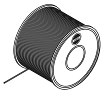
"44" RA Solders



Kester "44" has virtually dominated the field of activated rosin core solders for well over four decades. An outstanding performance feature of this flux is the "instant wetting" action. The high mobility and fast spreading action of this flux results in more reliable production line soldering. Available in 1 Lb. and 1/2 Lb. spools. Gold Label.

Description	Digi-Key Part No.	Price Each 1	5	10
RA Solder "44", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1100-ND	11.43	10.29	9.14
18 Gauge Solder, 3.3% Flux, .050" (1.27mm) dia.	KE1108-ND	14.50	13.05	11.60
19 Gauge Solder, 3.3% Flux, .040" (1.02mm) dia.	KE1101-ND	12.10	10.89	9.68
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1102-ND	12.63	11.37	10.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1109-ND	18.50	16.65	14.80
25 Gauge Solder, 3.3% Flux, .020" (.51mm) dia.	KE1103-ND	17.65	15.89	14.12
28 Gauge Solder, 3.3% Flux, .015" (.38mm) dia.	KE1110-ND	31.75	28.58	25.40
RA Solder "44", 63/37, 1/2 Lb. (.23 kg) Spool				
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1111-ND	9.75	8.78	7.80
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1112-ND	10.63	9.57	8.50
28 Gauge Solder, 3.3% Flux, .015" (.38mm) dia.	KE1113-ND	18.05	16.25	14.44
RA Solder "44", 60/40, 1 Lb. (.45 kg) Spool				
13 Gauge Solder, 3.3% Flux, .093" (2.36mm) dia.	KE1114-ND	13.38	12.04	10.70
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1104-ND	11.43	10.29	9.14
18 Gauge Solder, 3.3% Flux, .050" (1.27mm) dia.	KE1115-ND	14.25	12.83	11.40
19 Gauge Solder, 3.3% Flux, .040" (1.02mm) dia.	KE1105-ND	12.10	10.89	9.68
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1106-ND	12.63	11.37	10.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1116-ND	18.25	16.43	14.60
25 Gauge Solder, 3.3% Flux, .020" (.51mm) dia.	KE1107-ND	17.65	15.89	14.12
RA Solder "44", 60/40, 1/2 Lb. (.23 kg) Spool				
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1117-ND	8.88	7.99	7.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1118-ND	9.38	8.44	7.50
RA Solder "44", 62/36/2 1 Lb. (.45 kg) Spool				
18 Gauge Solder, 3.3% Flux, .050" (1.27mm) dia.	KE1119-ND	31.33	28.20	25.06
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1120-ND	33.50	30.15	26.80

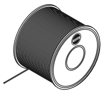
"285" RMA Solders



Kester "285" has been developed for the use in the electronics industry where difficult assemblies are to be soldered, but process requirements stipulate use of a mildly activated rosin flux. Kester "285" mildly activated rosin flux is classified as Type ROL1 flux under IPC ANSI/J-STD-004 Standards. Green Label.

Description	Digi-Key Part No.	Price Each 1	5	10
RMA Solder "285", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 2.2% Flux, .062" (1.57mm) dia.	KE1199-ND	12.38	11.14	9.90
21 Gauge Solder, 2.2% Flux, .031" (.79mm) dia.	KE1200-ND	12.62	11.36	10.10
23 Gauge Solder, 2.2% Flux, .025" (.63mm) dia.	KE1202-ND	18.50	16.65	14.80
25 Gauge Solder, 2.2% Flux, .020" (.51mm) dia.	KE1201-ND	17.66	15.90	14.13
28 Gauge Solder, 2.2% Flux, .015" (.38mm) dia.	KE1203-ND	31.75	28.58	25.40

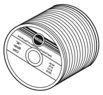
"245" No-Clean Solders



Kester "245" Low Residue Solder was developed to complement the newer generations of Low Residue Fluxes being used in the electronics industry. The use of "245" Low Residue Flux results in visually acceptable assemblies without the need for cleaning. Soldering quality and efficiency is comparable to that of a RMA flux. 1.1% flux standard, 2.2% and 3.3% for faster wetting action. Cream label.

Description	Digi-Key Part No.	Price Each 1	5	10
No Clean Solder "245", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 1.1% Flux, .062" (1.57mm) dia.	KE1399-ND	12.38	11.14	9.90
18 Gauge Solder, 1.1% Flux, .050" (1.27mm) dia.	KE1402-ND	14.50	13.05	11.60
19 Gauge Solder, 1.1% Flux, .040" (1.02mm) dia.	KE1403-ND	15.50	13.95	12.40
21 Gauge Solder, 1.1% Flux, .031" (.79mm) dia.	KE1400-ND	12.62	11.36	10.10
23 Gauge Solder, 1.1% Flux, .025" (.63mm) dia.	KE1404-ND	18.50	16.65	14.80
25 Gauge Solder, 1.1% Flux, .020" (.51mm) dia.	KE1401-ND	17.66	15.90	14.13
28 Gauge Solder, 1.1% Flux, .015" (.38mm) dia.	KE1405-ND	31.75	28.58	25.40
No-Clean Solder "245", 63/37 1/2 Lb. (.23 kg) Spool				
25 Gauge Solder, 1.1% Flux, .020" (.51mm) dia.	KE1406-ND	16.38	14.74	13.10
28 Gauge Solder, 1.1% Flux, .015" (.38mm) dia.	KE1407-ND	18.08	16.27	14.46
No-Clean Solder "245", 63/37 1 Lb. (.45 kg) Spool				
21 Gauge Solder, 2.2% Flux, .031" (.79mm) dia.	KE1408-ND	16.75	15.08	13.40
25 Gauge Solder, 2.2% Flux, .020" (.51mm) dia.	KE1409-ND	24.75	22.28	19.80
No-Clean Solder "245", 63/37 1 Lb. (.45 kg) Spool				
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1410-ND	16.75	15.08	13.40

"331" Organic Water Soluble Flux



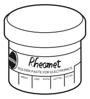
Kester "331" Organic Flux is a water soluble formula for use in flux-cored solder wire. Kester "331" flux is more effective than rosin fluxes in soldering difficult metals and allows a simple water wash for flux cleanup. The flux is more heat stable than most organic fluxes, resulting in minimal smoke and odor. The residue can be completely removed with a simple water rinse. Kester "331" is classified as type ORH1 per IPC ANSI/J-STD-004. Red Label.

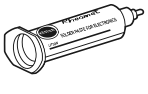
Description	Digi-Key Part No.	Price Each 1	5	10
Water Soluble Solder "331", 63/37, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1299-ND	12.38	11.14	9.90
21 Gauge Solder, 3.3% Flux, .031" (.79mm) dia.	KE1300-ND	12.62	11.36	10.10
23 Gauge Solder, 3.3% Flux, .025" (.63mm) dia.	KE1302-ND	18.50	16.65	14.80
25 Gauge Solder, 3.3% Flux, .020" (.51mm) dia.	KE1301-ND	17.66	15.90	14.13
28 Gauge Solder, 3.3% Flux, .015" (.38mm) dia.	KE1303-ND	31.75	28.58	25.40
Water Soluble Solder "331", 60/40, 1 Lb. (.45 kg) Spool				
16 Gauge Solder, 3.3% Flux, .062" (1.57mm) dia.	KE1304-ND	13.88	12.49	11.10
21 Gauge Solder, 3.3% Flux, .031 (.79mm) dia.	KE1305-ND	14.38	12.94	11.50

Specialty Solders and Accessories

Description	Digi-Key Part No.	Price Each 1	5	10
Solid Wire Solder (No Flux), 1 Lb. (.45 kg) Spool				
16 Gauge Solder 63/37, .062" (1.57mm) dia.	KE1603-ND	12.38	11.14	9.90
21 Gauge Solder 63/37, .031" (.79mm) dia.	KE1606-ND	12.63	11.37	10.10
21 Gauge Solder 60/40, .031" (.79mm) dia.	KE1604-ND	12.63	11.37	10.10
25 Gauge Solder 60/40, .020" (.51mm) dia.	KE1605-ND	17.65	15.89	14.12
Specialty Solders, 1 Lb. (.45 kg) Spool				
21 AWG Silver Solder, 62/36/2, RA Flux	KE1350-ND	17.25	15.53	13.80
21 AWG Low Temp Solder, 43/43/14, No-Clean	KE1353-ND	19.63	17.67	15.70
Specialty Solders, Lead-Free SAF-A-LLOY Solders, 1 Lb. (.45 kg) Spool				
21 AWG Lead-Free Solder, 97/.2/.8/2, RA Flux	KE1351-ND	19.88	17.89	15.90
21 AWG Lead Free Solder, 97/.2/.8/2, No-Clean.	KE1352-ND	19.88	17.89	15.90
Bar Solder				
Oxide Free Solder (E-Bar), 63/37, 1 Lb. (.45 kg).	KE1600-ND	7.44	6.70	5.95
Oxide Free Solder (E-Bar), 60/40, 1 Lb. (.45 kg)	KE1601-ND	7.45	6.71	5.96
Premium Oxide Free Solder (Ultrapure), 63/37, 1.6 Lbs. (.73 kg)	KE1602-ND	13.67	12.30	10.94
Boxed Solder				
Pocket Pak Solder, No-Clean 21 Gauge 60/40	KE1801-ND	1.70	1.53	1.36
Elec. Silver Solder, RA Flux, 24 Gauge .35oz. (9.92g) Tube	KE1802-ND	.67	.61	.54

Solder Paste





Kester solder paste was developed for applications of surface mount PCB's and components. All pastes are SN63/PB37 with a mesh size of -325 to +500 (25 to 40 microns) and come in 35gm syringes for hand dispensing, 100gm syringe for hand or automated dispensing, 500gm jars for screen and stencil printing or 600gm cartridge that is Panasonic Panasert compatible. R276 No-Clean formulation provides optimal performance in all types of dispensing applications. Designed for reflow practices that don't require cleaning of the PCB. EP256 (Easy Profile) is an enhanced No-Clean solder paste designed for maximum robustness in reflow profiling and printing. It contains the widest possible reflow-processing window. R500 Water Soluble solder paste is aggressive enough to remove tenacious oxide layers and offers excellent wetting characteristics. R560 series Water Soluble solder is designed to reduce voiding in BGA solder connections and has an extremely stable stencil and tack life. **Pastes should be refrigerated to preserve their usable life.**

Note: To ensure customer satisfaction and product integrity, pastes must be shipped overnight or 2nd Day Air only.

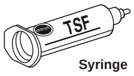
Description	Digi-Key Part No.	Price Each 1	5	10
Plunger for 35gm Syringe	KE1505-ND	1.10	.99	.88
No-Clean Paste, 35gm Syringe (R276)	KE1507-ND	42.38	38.14	33.90
Water Soluble Paste, 35gm Syringe (R500)	KE1512-ND	42.38	38.14	33.90

Paste Flux and Liquid Flux Pens

Flux - Pen

Rosin Paste

Kester flux pens use a spring-loaded tip to dispense just the right amount of flux while preventing the flux inside from drying out. Tacky Solder Flux is a No-Clean paste flux that maintains its characteristics for up to 8 hours after dispensing and can be used in a wide range of temperature and humidity conditions. Can reflow in both air and nitrogen environments. SP244 is a mildly activated rosin paste flux designed to be used as a No-Clean formula for rework applications.



Syringe

Description	Digi-Key Part No.	Price Each 1	5	10
SP44 Activated Rosin Paste Flux, 2 oz (56.70g) Can	KE1700-ND	1.28	1.15	1.02
SP44 Activated Rosin Paste Flux, 1 Lb. (.45 kg) Can	KE1701-ND	6.72	6.05	5.38
Flux Pen - Formula 186 RMA	KE1803-ND	3.70	3.33	2.96
Flux Pen - Formula 951 No-Clean	KE1804-ND	3.69	3.32	2.95
Flux Pen 2331-ZX Water-Soluble	KE1808-ND	3.70	3.33	2.96
Tacky Solder Flux No-Clean, 10gm Syringe	KE1806-ND	18.50	16.65	14.80
Tacky Solder Flux No-Clean, 30gm Syringe	KE1807-ND	55.50	49.95	44.40

EASY BRAID CO. Desoldering Braid

25% cleaner than most major brands (leaving less residue on the desoldered connection). Meets the requirements of Mil-F-14256F Type R, Mil STD. 2000 and in compliance with DOD Standard 1686A. Also meets the requirements of Bellcore spec. TR-T5Y-000078 and Ipc Test Method III. Easy Braid numbers ending in AS are antistatic bobbins.

Width Inch (mm)	Length Ft. (Meter)	Label Color	Digi-Key Part No.	Price Each 1	25	Easy Braid Part No.
Quick Braid						
.025 (.64)	5 (1.52)	Silver	EB1020-ND	1.96	1.68	Q-A-5
.050 (1.27)	5 (1.52)	Gold	EB1022-ND	1.96	1.68	Q-B-5
.075 (1.91)	5 (1.52)	Green	EB1024-ND	2.03	1.73	Q-C-5
.100 (2.54)	5 (1.52)	Blue	EB1026-ND	2.25	1.92	Q-D-5
.125 (3.18)	5 (1.52)	Brown	EB1028-ND	2.39	2.04	Q-E-5
.025 (.64)	5 (1.52)	Silver	EB1084-ND	2.17	1.85	Q-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1087-ND	2.17	1.85	Q-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1090-ND	2.21	1.89	Q-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1093-ND	2.41	2.06	Q-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1096-ND	2.61	2.23	Q-E-5AS
.025 (.64)	10 (3.04)	Silver	EB1085-ND	3.37	2.87	Q-A-10
.050 (1.27)	10 (3.04)	Gold	EB1088-ND	3.37	2.87	Q-B-10
.075 (1.91)	10 (3.04)	Green	EB1091-ND	3.46	2.95	Q-C-10
.100 (2.54)	10 (3.04)	Blue	EB1094-ND	3.82	3.25	Q-D-10
.125 (3.18)	10 (3.04)	Brown	EB1097-ND	4.06	3.46	Q-E-10
.025 (.64)	25 (7.62)	Silver	EB1021-ND	8.75	7.45	Q-A-25
.050 (1.27)	25 (7.62)	Gold	EB1023-ND	8.75	7.45	Q-B-25
.075 (1.91)	25 (7.62)	Green	EB1025-ND	9.00	7.66	Q-C-25
.100 (2.54)	25 (7.62)	Blue	EB1027-ND	10.65	9.07	Q-D-25
.125 (3.18)	25 (7.62)	Brown	EB1029-ND	10.87	9.26	Q-E-25
.025 (.64)	100 (30.48)	Silver	EB1086-ND	31.14	26.51	Q-A-100
.050 (1.27)	100 (30.48)	Gold	EB1089-ND	31.14	26.51	Q-B-100
.075 (1.91)	100 (30.48)	Green	EB1092-ND	32.13	27.35	Q-C-100
.100 (2.54)	100 (30.48)	Blue	EB1095-ND	35.63	30.33	Q-D-100
.125 (3.18)	100 (30.48)	Brown	EB1098-ND	40.14	34.17	Q-E-100
One Step (RMA No-Clean)						
.025 (.64)	5 (1.52)	Silver	EB1050-ND	2.21	1.89	OS-A-5
.050 (1.27)	5 (1.52)	Gold	EB1052-ND	2.21	1.89	OS-B-5
.075 (1.91)	5 (1.52)	Green	EB1054-ND	2.28	1.94	OS-D-5
.100 (2.54)	5 (1.52)	Blue	EB1056-ND	2.63	2.25	OS-D-5
.125 (3.18)	5 (1.52)	Brown	EB1058-ND	3.04	2.59	OS-E-5
.025 (.64)	5 (1.52)	Silver	EB1099-ND	2.37	2.02	OS-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1102-ND	2.37	2.02	OS-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1105-ND	2.48	2.11	OS-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1108-ND	2.79	2.38	OS-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1111-ND	3.26	2.78	OS-E-5AS
.025 (.64)	25 (7.62)	Silver	EB1051-ND	10.09	8.59	OS-A-25
.050 (1.27)	25 (7.62)	Gold	EB1053-ND	10.09	8.59	OS-B-25
.075 (1.91)	25 (7.62)	Green	EB1055-ND	10.40	8.86	OS-C-25
.100 (2.54)	25 (7.62)	Blue	EB1057-ND	11.65	9.92	OS-D-25
.125 (7.62)	25 (7.62)	Brown	EB1059-ND	13.35	11.37	OS-E-25
.025 (.64)	10 (3.04)	Silver	EB1100-ND	3.64	3.10	OS-A-10
.050 (1.27)	10 (3.04)	Gold	EB1103-ND	3.64	3.10	OS-B-10
.075 (1.91)	10 (3.04)	Green	EB1106-ND	3.75	3.20	OS-C-10
.100 (2.54)	10 (3.04)	Blue	EB1109-ND	4.20	3.58	OS-D-10
.125 (3.18)	10 (3.04)	Brown	EB1112-ND	4.64	3.96	OS-E-10
Step (RMA No-Clean)						
.025 (.64)	100 (30.48)	Silver	EB1101-ND	38.35	32.65	OS-A-100
.050 (1.27)	100 (30.48)	Gold	EB1104-ND	38.35	32.65	OS-B-100
.075 (1.91)	100 (30.48)	Green	EB1107-ND	39.58	33.69	OS-C-100
.100 (2.54)	100 (30.48)	Blue	EB1110-ND	44.27	37.68	OS-D-100
.125 (3.18)	100 (30.48)	Brown	EB1113-ND	51.03	43.44	OS-E-100
One Step 2 (Low Residue Synthetic Rosin No-Clean)						
.025 (.64)	5 (1.52)	Silver	EB1114-ND	3.15	2.68	OS2-A-5
.025 (.64)	5 (1.52)	Silver	EB1115-ND	3.39	2.89	0S2-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1119-ND	3.15	2.68	OS2-B-5
.050 (1.27)	5 (1.52)	Gold	EB1120-ND	3.39	2.89	OS2-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1124-ND	3.26	2.78	OS2-C-5
.075 (1.91)	5 (1.52)	Green	EB1125-ND	3.53	3.01	OS2-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1129-ND	3.75	3.20	OS2-D-5
.100 (2.54)	5 (1.52)	Blue	EB1130-ND	4.00	3.41	OS2-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1134-ND	4.33	3.69	OS2-E-5
.125 (3.18)	5 (1.52)	Brown	EB1135-ND	4.67	3.98	OS2-E-5AS
.025 (.64)	10 (3.04)	Silver	EB1116-ND	5.20	4.43	OS2-A-10
.050 (1.27)	10 (3.04)	Gold	EB1121-ND	5.20	4.43	OS2-B-10
.075 (1.91)	10 (3.04)	Green	EB1126-ND	5.38	4.58	OS2-C-10
.100 (2.54)	10 (3.04)	Blue	EB1131-ND	6.01	5.12	OS2-D-10
.125 (3.18)	10 (3.04)	Brown	EB1136-ND	6.65	5.67	OS2-E-10
.025 (.64)	25 (7.62)	Silver	EB1117-ND	14.40	12.26	OS2-A-25
.050 (1.27)	25 (7.62)	Gold	EB1122-ND	14.40	12.26	OS2-B-25
.075 (1.91)	25 (7.62)	Green	EB1127-ND	14.87	12.66	OS2-C-25
.100 (2.54)	25 (7.62)	Blue	EB1132-ND	16.65	14.18	OS2-D-25
.125 (3.18)	25 (7.62)	Brown	EB1137-ND	19.07	16.23	OS2-E-25
.025 (.64)	100 (30.48)	Silver	EB1118-ND	54.79	46.63	OS2-A-100
.050 (1.27)	100 (30.48)	Gold	EB1123-ND	54.79	46.63	OS2-B-100
.075 (1.91)	100 (30.48)	Green	EB1128-ND	56.55	48.13	OS2-C-100
.100 (2.54)	100 (30.48)	Blue	EB1133-ND	63.25	53.83	OS2-D-100
.125 (3.18)	100 (30.48)	Brown	EB1138-ND	72.91	62.06	OS2-E-100
SEA BRAID (unfluxed)						
.025 (.64)	5 (1.52)	Silver	EB1170-ND	2.17	1.85	S-A-5AS
.050 (1.27)	5 (1.52)	Gold	EB1173-ND	2.17	1.85	S-B-5AS
.075 (1.91)	5 (1.52)	Green	EB1176-ND	2.21	1.89	S-C-5AS
.100 (2.54)	5 (1.52)	Blue	EB1179-ND	2.41	2.06	S-D-5AS
.125 (3.18)	5 (1.52)	Brown	EB1182-ND	2.61	2.23	S-E-5AS
.025 (.64)	10 (3.04)	Silver	EB1171-ND	3.37	2.87	S-A-10
.050 (1.27)	10 (3.04)	Gold	EB1174-ND	3.37	2.87	S-B-10
.075 (1.91)	10 (3.04)	Green	EB1177-ND	3.46	2.95	S-C-10
.100 (2.54)	10 (3.04)	Blue	EB1180-ND	3.82	3.25	S-D-10
.125 (3.18)	10 (3.04)	Brown	EB1183-ND	4.06	3.46	S-E-10
.025 (.64)	100 (30.48)	Silver	EB1172-ND	31.14	26.51	S-A-100
.050 (1.27)	100 (30.48)	Gold	EB1175-ND	31.14	26.51	S-B-100
.075 (1.91)	100 (30.48)	Green	EB1178-ND	32.13	27.35	S-C-100
.100 (2.54)	100 (30.48)	Blue	EB1181-ND	35.63	30.33	S-D-100
.125 (3.18)	100 (30.48)	Brown	EB1184-ND	40.14	34.17	S-E-100

63/37 Eutectic Solder

EasyBraid's No-Clean solder has excellent wetting action and is intended for applications where residue removal is not required or recommended. Available in .020" (.51mm) and .031" (.79mm) diameters and meets Bellcore Issue 3 TR-NWT-000078, IPC-SF-818 Type LR 3CN and IPC-SF-818 Type H3C specifications. Sea Step solder is water washable solder where flux residue becomes soluble in water. Available in regular bobbin or anti-static type bobbin.

Diameter Inch (mm)	Length Feet (Meter)	Digi-Key Part No.	Price Each 1	25	50	EasyBraid Part No.
No-Clean Solder - 2.2% Flux						
.020 (.51)	25 (7.62)	EB1060-ND	1.96	1.68	1.51	OS-S020
.020 (.51)	25 (7.62) antistatic	EB1061-ND	2.23	1.90	1.71	OS-S020AS
.031 (.79)	20 (6.10)	EB1062-ND	1.96	1.68	1.51	OS-S031
.031 (.79)	20 (6.10) antistatic	EB1063-ND	2.23	1.90	1.71	OS-S031AS
Sea Step Solder - 2.2% Flux						
.020 (.51)	25 (7.62)	EB1064-ND	1.96	1.68	1.51	SS-S020
.020 (.51)	25 (7.62) antistatic	EB1065-ND	2.23	1.90	1.71	SS-S020AS
.031 (.79)	20 (6.10)	EB1066-ND	1.96	1.68	1.51	SS-S031
.031 (.79)	20 (6.10) antistatic	EB1067-ND	2.23	1.90	1.71	SS-S031AS

Solder Sponges

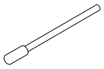
Digi-Key Part No.	Size Inch (mm)
EB1001-ND	1.2 x 2.7 (30.48 x 68.58)
EB1002-ND	1.55 x 2.55 (39.37 x 64.77)
EB1003-ND	2 x 2.6 (50.80 x 66.04)
EB1004-ND	2.2 x 3.5 (55.88 x 88.90)
EB1005-ND	2.6 x 2.6 (66.04 x 66.04)
EB1006-ND	3.2 x 1.9 (81.28 x 48.26)
EB1007-ND	3.4 x 4.4 (86.36 x 111.76)
EB1008-ND	4 x 1.7 (101.60 x 43.18)
EB1009-ND	8.5 x 17 (215.90 x 431.80)
EB1010-ND	2.4 x 3.2 (60.96 x 81.28)

Replacements	Digi-Key Part No.	Price Each 1	25	50
OK Ind. 45803S	EB1001-ND	.71	.61	.55
Ungar 9901	EB1002-ND	.73	.63	.57
Weller MP	EB1003-ND	.81	.69	.62
Weller DS-100; EC-1000; EC-2000	EB1004-ND	.98	.84	.75
Weller WTCP; EC-3000; EC-4000; TC205	EB1005-ND	1.00	.85	.77
Metcal; Plato CS-46	EB1006-ND	.90	.77	.70
Hexacon 810; 812; 890; 891; 892	EB1007-ND	1.58	1.35	1.21
Hakko 926; Plato CS-43	EB1008-ND	.92	.79	.71
Sponge Sheet	EB1009-ND	16.66	14.18	12.77
EDSYN Models	EB1010-ND	.98	.84	.75

Swabs

Easybraid's swabs are designed for the electronics industry and are constructed for low contamination and lint levels. Plastic shaft models are made of high strength polypropylene while anti-static versions are made of static free polyolefin. Can be utilized with most electronic cleaning solvents.

Fig.	Package Amount	Shaft Description	Tip Description	Digi-Key Part No.	Price Each 1	25	50	Easy Braid Part No.
1	10 Pieces 100 Pieces	2" Solid Shaft	Tip 3/16" Diameter x 19/32" Length Foam Tip	EB1140-ND EB1155-ND	4.51 32.21	3.84 27.42	3.46 24.68	SW2PF-10 SW2PF-100
2	10 Pieces 100 Pieces	3" Solid Shaft	Tip 3/16" Diameter x 11/16" Length Foam Tip	EB1141-ND EB1156-ND	2.63 18.80	2.25 16.00	2.02 14.40	SW3PF-10 SW3PF-100
3	10 Pieces 100 Pieces	3" Wood Shaft	Tip 3/16" Diameter x 11/16" Length Foam Tip	EB1142-ND EB1157-ND	2.63 18.80	2.25 16.00	2.02 14.40	SW3WF-10 SW3WF-100
4	10 Pieces 100 Pieces	5" Solid Shaft	9/16" Diameter x 15/16" Length Rectangular Foam Tip	EB1143-ND EB1158-ND	5.11 36.59	4.36 31.15	3.92 28.03	SW5PF-10 SW5PF-100
5	10 Pieces 100 Pieces	5" Self-Saturating Foam Swab	91% Isoprophyl Alcohol 9% Water Foam Tip	EB1144-ND EB1159-ND	7.66 54.74	6.52 46.59	5.87 41.93	SW5PFA-10 SW5PFA-100
6	10 Pieces 100 Pieces	5" Static Dissipative Solid Shaft	Tip 3/16" Diameter x 11/16" Length Static Dissipative Foam Tip	EB1145-ND EB1160-ND	6.85 49.03	5.84 41.73	5.25 37.56	SW5PFAS-10 SW5PFAS-100
7	10 Pieces 100 Pieces	5" Solid Shaft	29/32" Width x 1 1/8" Length Round Foam Tip	EB1146-ND EB1161-ND	5.11 36.59	4.36 31.15	3.92 28.03	SW5PFR-10 SW5PFR-100
8	10 Pieces 100 Pieces	6" Blue Solid Shaft	3/8" Diameter x 1" Length Foam Tip	EB1147-ND EB1162-ND	5.36 38.29	4.56 32.59	4.11 29.33	SW6BPF-10 SW6BPF-100
9	10 Pieces 100 Pieces	6" Solid Shaft	3/16" Diameter x 15/16" Length Foam Over Cotton Tip	EB1148-ND EB1163-ND	3.39 24.18	2.89 20.58	2.60 18.52	SW6PF-10 SW6PF-100
10	10 Pieces 100 Pieces	6" Static Dissipative Solid Shaft	3/16" Diameter x 11/16 Length Static Dissipative Foam Tip	EB1149-ND EB1164-ND	6.76 48.33	5.76 41.14	5.19 37.03	SW6PFAS-10 SW6PFAS-100
11	10 Pieces 100 Pieces	6" Solid Shaft	3/8" Diameter x 1" Length Large Foam Tip	EB1150-ND EB1165-ND	3.62 25.85	3.08 22.01	2.78 19.81	SW6PFG-10 SW6PFG-100
12	10 Pieces 100 Pieces	6" Wood Shaft	3/16" Diameter x 5/8" Length Cotton Tip	EB1151-ND EB1166-ND	.54 5.40	.46 4.60	.42 4.14	SW6WC-10 SW6WC-100
13	10 Pieces 100 Pieces	6" Wood Shaft	3/8" Diameter x 13/16" Length Foam Tip	EB1152-ND EB1167-ND	3.39 24.18	2.89 20.58	2.60 18.52	SW6WF-10 SW6WF-100
14	10 Pieces 100 Pieces	6" Static Dissipative Wood Shaft	3/16" Diameter x 11/16" Length Static Dissipative Foam Tip	EB1153-ND EB1168-ND	4.60 32.91	3.92 28.01	3.53 25.21	SW6WFAS-10 SW6WFAS-100
15	10 Pieces 100 Pieces	6" Static Dissipative Wood Shaft	3/8" Diameter x 13/16" Length Static Dissipative Foam Over Cotton Tip	EB1154-ND EB1169-ND	4.60 32.91	3.92 28.01	3.53 25.21	SW6WFCAS-10 SW6WFCAS-100

Fig. 1


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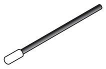

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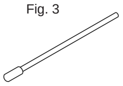

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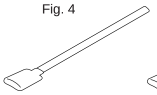

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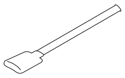

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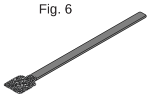

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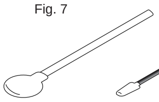

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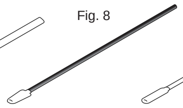

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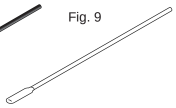

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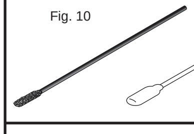

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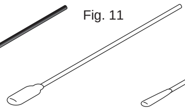

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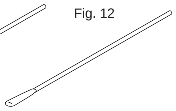

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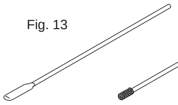

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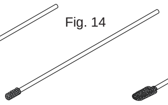

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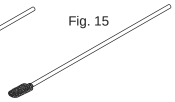
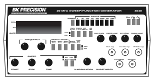


BK PRECISION®
SETTING NEW STANDARDS IN PERFORMANCE & VALUE

Function Generators



FEATURES AND SPECIFICATIONS: Waveforms: Sine, Square, Triangle, ±Pulse, ±Ramp. Variable DC Offset and Duty Cycle. **Sweep LIN & LOG:** 100:1. **Frequency Counter Accuracy:** Time Base ±1 count. ***General:* Power:** 120-230VAC +10% 50/60Hz Internal jumper selectable. ***Accessories:*** BNC to Alligator Cable, Instruction Manuel. **2 Year Warranty.**

Model BK4001: 6 Ranges from 0.5Hz to 3MHz Range. Coarse and Fine Tuning. **Dimensions:** 10.83 x 3.54 x 11.81".

Model BK4010A: 7 Ranges from 0.2Hz to 2MHz Range. Coarse Tuning. **Dimensions:** 10.51 x 4.49 x 12.24".

Model BK4011A: Function Generator. 4 Digit LED Digital Display (4 digit Display Resolution). 7 Ranges from 0.5Hz to 5MHz Range. Variable Duty Cycle and DC Offset. Coarse and Fine Tuning. **Dimensions:** 10.51 x 4.49 x 12.24".

Model BK4017A: 5 Digit LED Digital Display (5 digit Display Resolution). 8 Ranges from 0.1Hz to 10MHz Range. Coarse and Fine Tuning. Extended Sweep/Modulation Input: 0-10V. **Dimensions:** 4.49 x 11.73 x 10.39".

Model BK4040A: Sweep/Function Generator with Frequency Counter. 5 Digit LED Display (5 digit Display Resolution). 8 Ranges from 0.2Hz to 20MHz Range. AM and FM Modulation. Burst Operation. 30MHz External Frequency Counter. Selectable Linear or Log Sweep. Extended Sweep/Modulation Input: 0-10V. Coarse and Fine Tuning. **Dimensions:** 10.51 x 4.49 x 12.24".

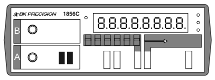
BK4001-ND	3MHz Function Generator	**$199.00**
BK4010A-ND	2MHz Function Generator	**$250.00**
BK4011A-ND	5MHz Function Generator with Digital Display	**$315.00**
BK4017A-ND	10MHz Sweep/Function Generator with Digital Display	**$399.00**
BK4040A-ND	20MHz Sweep/Function Generator with Frequency Counter and Digital Display	**$559.00**
LC-40B-ND	Carrying Case (1 Year Warranty) (For all models except BK4001)	**$84.00**

Function and Arbitrary Waveform Generator

Model BK4070A: Function and Arbitrary Waveform Generator. ***Operating Modes:* Basic Sinewave (CW) Mode:** 0Hz to 21.5MHz, .01Hz steps. **Frequency Modulation (FM) Mode and Phase Modulation (PM) Mode:** Internal modulation frequency: 0Hz to 10kHz. External modulation frequency: DC to 35kHz. **Voltage Controlled Oscillator Mode (VCO):** Endpoint frequency: 0Hz to 21.5MHz, .01Hz steps. **Burst Mode:** Continuous or Triggered via Front Panes, RS232, or Ext. TTL. **Dual Tone Multi Frequency (DTMF) Generate Mode:** Dialing digits generated: 0 to 9, #, *, A, B, C, D. **Dual Tone Generation Mode:** Tone 1, Tone 2 Frequency: DC to 10kHz, 1Hz steps. **Sweep Mode:** Start/Stop frequency: 0Hz to 21.5MHz. **Function Generator Mode:** Waveforms: Positive/Negative Ramp, Triangle, Exponentials, Noise, Sine Repetition rate: 0Hz to 2MHz in 1Hz steps. **Binary Phase Shift Keying (BPSK) Mode. Amplitude Modulation (AM) Mode. Single Sideband (SSB) Mode. Frequency Shift Keying (FSK) Mode. Data Modulation Mode. Power and Voltage Measurement Mode. Dual Tone Multi Frequency (DTMF) Detect Mode. Arbitrary Waveform Generation Mode:** Vertical Resolution: 12 bits, Sample update rate: DC-40 MHz in .01Hz steps. Sample buffer depth: 32,768 points. **Pulse Generator Mode:** Frequency: 0Hz to 2MHz in 1Hz steps. Duty cycle: 0% to 100% in 1% steps. **Main Output:** Frequency: DC to 21.5MHz, .01Hz steps. Level: 4mVp-p to 10Vp-p. **External Modulation Input. RS232 port. Sync Output. Ext. Trigger/Gating/FSK/BPSK input.** ***General:* Power:** 100-240 VAC, 47-63Hz, 30W. **Display:** 2 line x 40 Character, LCD backlit. **Weight:** Approximately 3.5 lbs (1.6kg). **Dimensions:** 5.5 x 11.75 x 10.38" **Operating Temperature:** 32°F to 104°F (0°C to 40°C) ambient.

BK4070A-ND	Waveform Generator	**$1435.13**

Frequency Counters



Model BK1856C

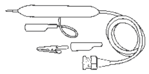
Model 1875: 2.5GHz Frequency Counter, handheld, portable **Frequency:** 10Hz to 2.5GHz ±4ppm +1 dgt **Period Characteristics: Range:** 10Hz to 10MHz **Input Characteristics: Sensitivity:** ≤50mV, 10Hz-10MHz; ≤10MHz – 35MHz; ≤100mV, 35MHz-2.5GHz **Impedance:** 1MΩ **Time Base Characteristics: Standard Type:** Crystal oscillator **Frequency:** 4.19MHz **Stability:** ±4ppm +1 dgt **Temperature Stability:** ±0.1ppm/°C. 8-Digit LCD display .5 inch high **Dimensions:** 6.8 x 3.1 x 1.4" **Power:** 4 x 1.5V AA batteries **Accessories Included:** Instruction Manual.

Model 1856C: 2.4GHz Multifunction Counter (Frequency, Period, Totalize), Benchtop with .56 inch high 8-Digit LED Display **Frequency:** 5Hz to 2.4GHz ±Time base accuracy +1 count **Period Characteristics: Range:** 0.285µs to 200,000µs **Input Characteristics: Sensitivity:** 20mVrms, 5Hz-30MHz; 50mVrms above 100MHz **Impedance:** 1MΩ (<40pF) **Sensitivity:** 10mVrms, 20MHz, 50MHz to 600MHz, 25mVrms, 600MHz to 1.3GHz, 50mV 1.3GHz to 2.4GHz **Totalize Start/Stop Input: Logic Levels:** Standard TTL levels **Time Base Characteristics: Standard Type:** TXCO **Frequency:** 10MHz **Stability:** ±0.1ppm ±1Hz **Temperature Stability:** ±0.1ppm (from 0°C to 28°C) 0°C to 50°C ambient, ±0.5ppm from 18°C to 28°C. **Dimensions:** 4.5 x 11.7 x 10.38" **Power:** 120/220/240VAC ±10%, 50/60Hz **Accessories Included:** Instruction Manual.

BK1875-ND	2.5GHz Portable Handheld Counter	**$249.00**
BK1856C-ND	2.4GHz Benchtop Multifunction Counter	**$529.00**
BKADNB-24-ND	Adapter N/BNC Coax For BK1856C	**$15.00**

Oscilloscopes

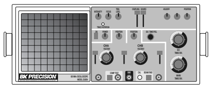
Demodulator Probe for Oscilloscopes



All purpose demodulator/detector probe with BNC Connector, usable with most oscilloscopes. Features include lightweight design and 1.2m coaxial cable. Probe bodies are constructed of rugged plastic and shielded. Ergonomically designed handle. **Input Voltage:** 200V Max. **HF Voltage:** 50Veff. Max. **Band Width:** 100kHz to 950MHz. **Input Impedance:** 5pF.

PR-32A-ND	**$59.00**

30, 60, 100 MHz Dual Trace Oscilloscope



***General Specifications:* Power Source:** 115/230VAC ±10%, 50/60Hz **Accessories Supplied:** Two 10:1 Probes, Power Cord, Instruction Manual.

Model BK2120B: 30MHz Dual-Trace operation. 1 mV/div. sensitivity. AUTO-NORM triggered sweep operation with AC, TVH, TVV, line coupling and DC. Calibrated 23 step timebase with x10 magnifier. Approx. 40W. **Dimensions:** 14.5 x 7 x 17.3". **2 Year Warranty.**

Model BK2160A: 60MHz Dual-Trace 1 mV/div sensitivity. Sweep to 5 nS/div. **Main Time Base:** 23 calibrated ranges. **Delayed Time Base:** 19 calibrated ranges. Signal delay line. V-mode displays two signals unrelated in frequency. Component tester. Z-axis input. Single sweep. Beam finder. **Dimensions:** 5.3 x 13 x 16". **3 Year Warranty.**

Model BK2190B: 100MHz Dual-Trace Dual Time Base Oscilloscope. 1mV/div sensitivity. Sweeps to 5nS/division. **Main Time Base:** 22 calibrated ranges. **Delayed Time Base:** 19 calibrated ranges. Calibrated delay time multiplier. **Signal Delay Line:** 15kV accelerating voltage. **Channel 1 output:** Output Voltage: Approx. 100mV/division open circuit. Approx. 50mV/division into 50Ω. Output Impedance: Approximately 50Ω. Approx. 60W. **Dimensions:** 5.5 x 12.6 x 16.9". **3 Year Warranty.**

BK2120B-ND	30MHz	**$549.00**
BK2160A-ND	60MHz	**$1099.00**
BK2190B-ND	100MHz	**$1599.00**
LC-210A-ND	Carrying Case (1 Year Warranty) (For models BK2120B and BK2190B only)	**$92.00**

Oscilloscope Probes

Model BKPR33A: Bandwidth: 90MHz (15MHz) **Division Ratio:** x10 (x1). **Input R:** 10MΩ (1MΩ). **Input C:** 15pF (45pF). **Compensation:** 15 - 35pF. **Max Voltage:** 600V (200V). **Length:** 1.32 meters approx. **Connector:** BNC. **Three month warranty.**

Model BKPR-37AR: Bandwidth: 150MHz (6MHz). **Division Ratio:** x10 (x1). **Input R:** 10MΩ (1MΩ). **Input C:** 15pF (100pF). **Compensation:** 15 - 35pF. **Max Voltage:** 600V. **Length:** 1.32 meters approx. **Connector:** BNC. **Six month warranty.**

Model BKPR100A: Bandwidth: 250MHz. **Division Ratio:** x100. **Input R:** 100MΩ. **Input C:** 6.5pF. **Compensation:** 10 - 35pF. **Max Voltage:** 1200V. **Length:** 1.37 meters approx. **Connector:** BNC. **Six month warranty.**

NOTE: Specifications in ( ) refer to x1 position.

BKPR-33A-ND	**$33.00**
BKPR-37AR-ND	**$46.00**
BKPR-100A-ND	**$62.00**

DC Power Supplies

Regulated 28A DC Power Supply

Models BK1689, BK1690: Overload protection, High RFI stability, Multiple DC output terminals. ***Features:* Output Voltage:** DC 1-15V Variable. **Output Current:** 28A (at 13.8V). **Ripple and Noise:** 5mV (peak to peak). **Line Regulation:** 5mV (± 2% Load). **Load Regulation:** 50mV (0-100% Load).

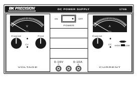
BK1689-ND	Precision Analog	**$275.00**
BK1690-ND	Digital LED	**$349.00**

High Current Linear Power Supply

Model BK1791: Current, limiting, reverse polarity, overvoltage, short circuit ***Features:* Output Voltage:** 0-64V. **Output Current:** 10A. **Metering:** LED.

BK1791-ND	**$1350.00**

DC Power Supplies to 240W Output



Short circuit protection, overload protection, reverse polarity protection, thermal protection, and current limiting. CV and CC operation, 0.02% +2mV line and 0.04%+2mV load regulation (zero to full load), adjustable current limits (five to 100%), low ripple (≤1mVrms), fast recovery time (≤100µS), and operate from 120VAC ±10%, 60Hz. **Dimensions:** 5.7 x 10.5 x 15". Test Lead Set TL-5A and TL-30 sold separately. **2 Year Warranty.**

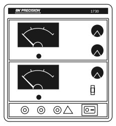
Model BK1746: Single 0-16V, 0-10A output. Two analog meters. **Voltmeter:** 0-16V ±2.5%. **Ammeter:** High Range = 0-11A, Low Range = 0-2.2A, Accuracy = ±2.5%. **Power Consumption:** 380W.

Model BK1740: Single 0-60V, 0-4A output. Two analog meters. **Voltmeter:** 64V ±2.5%. **Ammeter:** High Range = 0-4.4A, Low Range = 0-1.1A, Accuracy = ±2.5%. **Power Consumption:** 450W.

Model BK1743: Single 0-35V, 0-6A output. Two 3-digit LED meters. **Voltmeter:** 0-99.9V (green) ± (0.5% rdg + 2 digits). **Ammeter:** High Range = 0-99.9A (red), Accuracy = ±(0.5% rdg + 2 digits). **Power Consumption:** 420W.

BK1746-ND	**$515.00**
BK1740-ND	**$515.00**
BK1743-ND	**$515.00**

Single Output Power Supply



Short circuit protection, overload protection, reverse polarity protection, thermal protection, and current limiting. CV and CC operation, 0.01% +3mV line and load regulation (zero to full load), adjustable current limits (5 to 100%), low ripple (≤1mVrms), fast recovery time (≤100µS), and operate from 120 VAC ±10%, 60Hz. **Dimensions:** 6.2 x 5.5 x 12.5". Test Lead Set TL-5A and TL-30 sold separately. **2 Year Warranty.**

Model BK1710: Single 0-30V, 0-1A output. Two analog meters. **Voltmeter:** 0-32 ±2.5%. **Ammeter:** High Range = 0-1.04A, Low range = 0-0.26A, Accuracy = ±2.5%. **Power Consumption:** 70W.

Model BK1711: Single 0-60V, 0-2A output. Two analog meters. **Voltmeter:** 0-64 ±2.5%. **Ammeter:** High Range = 0-2.2A, Low range = 0-0.55A, Accuracy = ±2.5%. **Power Consumption:** 210W.

Model BK1715: Single 0-60V, 0-2A output. Two 3-digit LED meters. **Voltmeter:** 0-99.9V (green) ± (0.5% rdg + 2 digits). **Ammeter:** Range = 0-9.99A (red), Accuracy = (0.5% rdg + 2 digits). **Power Consumption:** 210W.

Model BK1730: Single 0-30V, 0-3A output. Two analog meters. **Voltmeter:** 0-32 ±2.5%. **Ammeter:** High Range = 0-3.2A, Low range = 0-0.53A, Accuracy = ±2.5%. **Power Consumption:** 180W.

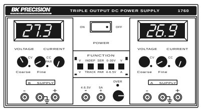
Model BK1735: Single 0-30V, 0-3A output. Two 3-digit LED meters. **Voltmeter:** 0-99.9V ±0.5%. **Ammeter:** Range = 0-9.99A, Accuracy = ±0.5%. **Power Consumption:** 180W.

BK1710-ND	**$235.00**
BK1711-ND	**$315.00**
BK1715-ND	**$389.00**
BK1730-ND	**$319.00**
BK1735-ND	**$389.00**

Power Supply Hook-up Cables

TL-5A-ND	5A Power Supply Leads	**$8.97**
BKTL-30-ND	30A Power Supply Leads	**$12.50**

Triple Output Power Supply



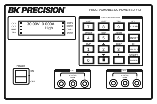
Two Main sections capable of independent or tracking operation (Master & Slave). One fixed section. Switchable series/parallel operation and adjustable current limit controls for Main sections. Two displays: one reads volts or amps of "slave" supply; one reads volts or amps of "master" supply or fixed supply. Constant current and voltage indicators for Main sections. **Power Source:** 120VAC, +10% 60Hz. **Accessories Supplied**: Spare fuse, Instruction Manual, Power Cord. Test Lead Set TL-5A is sold separately.

Model BK1760: Two 0-30VDC, 2A sections; One 4-6.5VDC 5A section. Switchable series/parallel operation for 24V sections. Two 3-Digit LED Displays. **Dimensions:** 5.7 x 10.5 x 15". **2 Year Warranty.**

Model BK1651A: Two 0-24VDC 500mA sections; One 5VDC 4A section. Switchable series/parallel operation for 24V sections. Two Analog Displays. **Accessories Included:** Test leads (3 Pairs). **Dimensions:** 5.5 x 11.75 x 10.975". **1 Year Warranty**.

BK1760-ND	**$650.00**
BK1651A-ND	**$435.00**

Programmable Power Supplies



Model BK1770

Models BK1780, BK1775, BK1770

Standard GPIB Interface: Greater flexibility interfacing with a number of third party GPIB cards, computers and controllers. **Load Effect:** 0.001% +1mV; 1mA current. **Parallel and Series Operation:** (1775 & 1780) Increases useable voltage and current capabilities for a wider variety of applications. One power supply satisfies a greater number of applications. **Front Panel Keypad:** Easy entry to set voltage, current, overvoltage and over-current. **Remote Sensing:** Maintains set voltage regardless of lead loss. **Backlit LCD Display:** Vital output information, voltage, current and operating mode. **True RMS Reading Metering:** Reliable means of comparing dissimilar waveforms. **50k MTBF:** High reliability with no downtime.

***General Specifications:* Programming Accuracy:** Voltage: 0.05% +2LSB; Current: 0.15% +5LSB. **PARD:** Voltage: 01mVrms/10m Vp-p; Current: 1mArms. **AC Input:** 115/220 VAC. **Operating Temp. Ratings:** 0°C to 50°C. **Storage Temperature Ratings:** -40°C to 70°C. **GPIB Interface Capability:** SH1, AH1, T6, TED, L4, LED, AL1 SRD, DC1, DTD, C0, E1. **Weight:** 1780 & 1770: 18 lbs. (8.1kg); 1775: 20 lbs (9 kg). **Dimensions:** 8.4 x 5.2 x 15.7". **3 Year Warranty.**

Model BK1780: 0-18V, 0-4A DC output • Programming Resolution: 5mV, 1.5mA, 100mV DVP.

Model BK1775: 0-35V, 0-2A DC output • Programming Resolution: 10mV, 0.6mA, 200mV DVP.

Model BK1770: 0-17.5V; 0-35V, 0-6A; 0-3A DC output • Programming Resolution: 10mV, 2mA, 200mV DVP.

BK1780-ND	**$1350.00**
BK1775-ND	**$1295.00**
BK1770-ND	**$950.00**

Models BK1786A

Ripple and Noise (RMS): 1mV. **Line Regulation:** 0.02% +5mV. **Load Regulation:** 0.02% +5mV. **PC Interface (included):** Computer serial interface. **Operating Voltage:** 120 VAC, 60Hz. **Dimensions:** 8.6 x 4.5 x 10.6". **Accessories Supplied:** User manual, serial cable, Windows™ and DOS software. **Weight:** Approximately 11 lbs. (5 kgs). **Display:** 3 Digit LED voltmeter and ampmeter.

BK1786A-ND	0-30V, 3A DC Output *NEW!*	**$375.00**

BK PRECISION
SETTING NEW STANDARDS IN PERFORMANCE & VALUE

Multimeters

Pen Style DMM With Current Clamp and Temperature Adapter

DMM is a 3200 count multimeter that measures VDC, VAC resistance and checks continuity and diodes. The current clamp head attaches to the top of the DMM and reads out in VAC up to 300A. The temperature adapter also attaches to the top of the DMM and reads temperature out in millivolts.

Specifications: **VAC:** 3.2V to 600V, 1.7% accuracy. **VDC:** 320mV to 600V, 0.7% accuracy. **Resistance:** 320Ω to 30MΩ, 1.0% accuracy. **AC Current:** 0.1A to 300A (CH-100), 1.9% accuracy. **Temperature:** -58°F to 1834°F (-50°C to 1001°C), 0.5% accuracy.

BK2720-ND		**$165.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

Clamp-on Multimeters

General Specifications: **Power Requirements:** One 9V battery. **Jaw Opening:** 2.24" (56.9mm) for Models 312A, 330B, 350B, and 369B; 1.75" (44.45mm) for Model 367. **Accessories Included:** Battery, test leads, instruction manual, carrying case.

Model BK312A:

AC Current: 400A (10mA). **AC Voltage:** 600V (100mV). **DC Voltage:** 600V (100mV). **Resistance:** 400Ω (0.1Ω). **Count Resolution:** 2000. ***Features:*** • Continuity • Data Hold

Model BK330B:

AC Current: 200A to 1000A, 2 ranges, ±(1.5% rdg + 5D) accuracy, 1200A overload protection. **AC Voltage:** 750V, ±(1.2% rdg +5D) accuracy, 1000V DC/750V RMS overload protection, 4.5MΩ input impedance. **DC Voltage:** 1000V, ±(0.5% rdg + 1D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **Resistance:** 200Ω to 2000MΩ, 14 ranges. **Dimensions:** 10.8 x 3.6 x 1.7". **Weight:** 17 oz. (481.9gm). ***Features:*** • Continuity • Diode • 2000 count resolution • Data hold • Max. hold • UL Listed

Model BK350B:

AC Current: 32A to 1000A, 3 ranges, ±(1.5% rdg + 5D) accuracy, 1200A overload protection. **AC Voltage:** 320mV to 1000V, 5 ranges, ±(1.5% rdg + 4D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ overload protection. **DC Voltage:** 320mV to 1000V, 5 ranges, ±(0.5% rdg + 1D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **Resistance:** 320Ω to 2000MΩ, 14 ranges. **Frequency:** 320Hz to 32kHz, 3 ranges, ±(1% rdg + 2D) accuracy, 500V DC/AC RMS. **Dimensions:** 10.8 x 3.6 x 1.7". **Weight:** 17 oz. (481.9gm). ***Features:*** • Continuity • Diode • 3200 count resolution • Bargraph • Data hold • Peak hold • Range hold • UL Listed

Model BK367A:

AC and DC Current: 400A to 2000A, 2 ranges, ± (1.5% rdg + 4D) accuracy, 1000A overload protection. **AC Voltage:** 750V, ± (0.5% rdg + 4D) accuracy, 1000V overload protection, 10MΩ input impedance. **DC Voltage:** 200V, ± (1% rfg + 2D) accuracy. 500V overload protection. 10MΩ input impedance. **Resistance:** 40MΩ **Dimensions:** 10.8" x 3.6" x 1.7" (275mm x 90mm x 43mm) **Weight:** 18.3oz. (519g). **Features:** • Diode • 4000 count resolution • Data hold • Peak hold **Capacitance Range:** 40µF

Model BK369B:

AC and DC Current: 400A to 1000A, 2 ranges, ±(1.5% rdg + 5D) accuracy, 1200A overload protection. **AC Voltage:** 400mV to 1000V, 5 ranges, ±(1.5% rdg + 4D) accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **DC Voltage:** 400mV to 1000V, 5 ranges, 0.5% accuracy, 1000V DC/750V RMS overload protection, 10MΩ input impedance. **Resistance:** 400Ω to 40MΩ. **Frequency:** 100Hz to 400kHz, 5 ranges. **Capacitance:** 4nF to 40µF. **Dimensions:** 10.8 x 3.6 x 1.7". **Weight:** 18.3 oz. (518.8gm). ***Features:*** • True RMS • Continuity • Diode • 4000 count resolution • Bargraph • Data hold • Peak hold • Range hold • Max/Min • Relative • UL Listed

BK312A-ND	10mA/400A	**$79.00**
BK330B-ND	200/1000A	**$95.00**
BK350B-ND	32/320/1000A	**$155.00**
BK367A-ND	400A/2000A	**$209.00**
BK369B-ND	400/1000A	**$189.00**
LC-33-ND	Carrying Case (1 Year Warranty)	**$24.00**

High Performance Dual-Display Multimeters

General Specifications: • 4,000/40,000 selectable display counts • 6/750V AC • 6/1000V DC • ±(0.06% +3) basic DCV accuracy • 6/10A AC and DC current • 6Ω to 40MΩ resistance • Auto or manual ranging • Voltage range frequency of 5/200KHz on dual display • dB measurement • 7/9,999µF capacitance • Bargraph • Min./Max., Data and Refresh hold • Relative zero • RS232 output • Diode and continuity test • Auto-off

Model BK2880A: DMM with AC Coupled RMS.

Model BK2890: DMM with frequency counter to 10MHz. **True RMS**: AC + (AC + DC) Coupled. **Operating Temperature:** to 2502°F (1372°C). **Square Wave Output:** 16 / 4.8KHz @ 0 to +3V. **Timer + Signal Output:** Max. Timer 99Ksec. @ 0 to +3V. **Backlight**

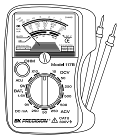
BK2880A-ND	**$199.00**
BK2890-ND	**$299.00**

Bench DMM True RMS

Model BK2831C: **DC Volt Ranges:** 200mV, 2V, 20V, 200V, 1200V. **AC Volt Ranges:** 200mV, 2V, 20V, 1000V True RMS. **DC/AC Basic Accuracy:** 0.1% +1 digit. **AC/DC Input Impedance:** 10MΩ (AC <100pF) **AC/DC Resolution:** 0.1mV, 1mV, 10mV 100mV, 1V. **AC/DC Basic Accuracy:** 0.1% rdg +1 dig. **AC/DC Current Ranges:** 200µA, 2mA, 20mA, 200mA, 2A, 20A. **AC/DC Resolution:** 100nA, 1µA, 10µA, 100µA, 1mA, 10mA. **DC Basic Accuracy:** 0.2% +1 digit. **AC Basic Accuracy:** 1.0% rdg +4 digits. **AC/DC Overload Protection:** 2A/250V fuse and 4A/500V fuse, 20A unfused. **Resistance Range:** 200Ω, 2kΩ, 20kΩ, 200kΩ, 2000kΩ, 20MΩ. **Resolution:** 0.1Ω, 1Ω, 10Ω, 100Ω, 1kΩ, 10kΩ. **Basic Accuracy:** 0.2% rdg +1 digit. **Diode Test:** Tested on 2kΩ range, 1mA test current. **Continuity Check:** Audio tone for resistance under 10Ω. **General Display:** 3-1/2 digit LCD, 0.5 inch LED. **Power:** 120/240 VAC, 50/60Hz (5W). **Operating Temperature:** 0ºC to 40ºC, 70%RH. **Dimensions:** 4.5 x 11.75 x 10.375".

BK2831C-ND		**$299.00**
LC-40B-ND	Carrying Case (1 Year Warranty)	**$84.00**

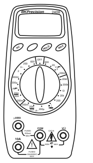
Pocket Size Multimeter



Measures DC & AC Voltage: 50/250/500VAC, 10/50/250/500VDC scales with ±5% accuracy (full scale). 2000Ω/V. **Measures DC current:** 25/250mA with ±5% accuracy (full scale). **Measures resistance:** 0-10k/1MΩ, ±5% degree arc of scale length. **Measures decibel:** +4dB to +56dB on AC voltage ranges. **Battery Test Range:** 1.5V/9V. **Power Supply:** One 1.5V, AA battery. **Dimensions:** 3.1 x 4.7 x 1.2". **Accessories Supplied:** Battery, test leads, and instruction manual.

BK117B-ND	**$19.95**

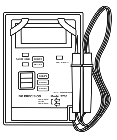
Mini-pro Multimeter



Specifications: **Digits:** 2000. **Ranging:** Manual. **VDC:** 100mV-600V. **VAC:** 100mV-600V. **DC Current:** 0.1 mA-10A. **AC Current:** 0.1 mA-10A. **Resistance:** 200Ω - 20MΩ. ***Features:*** • Diode test • Continuity test • Non-contact voltage indicator • Data hold • MAX hold

BK2408-ND		**$45.00**
LC-24-ND	Carrying Case (1 Year Warranty)	**$14.00**

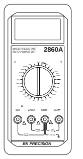
Pocket DMM



Pocket DMM. Analog bar graph with 32 segments. 3200 count LCD display. Auto power off. Low battery indicator. Range hold. Data hold. Integral test leads. **Power:** Two 1.5V button type batteries. **Dimensions:** 4.4 x 2.2 x .4". **Accessories Supplied:** Batteries, instruction manual, case.

BK2700-ND	**$35.00**

3$^{1}/_{2}$ Digit Ruggedized DMM

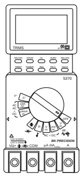


The Survivor™. High Energy Fused Ruggedized DMM. 3-1/2 digit 20.32mm high contrast LCD display. **Audible Continuity:** 20 Amp range. **Sampling:** 2.5 times/sec. (nominal). Heavy Duty 1500VDC, 1000VAC rating. Water resistant case. **Power Requirements:** Single 9V battery. **Auto Power Off:** approx. 30 min. **Dimensions:** 6.9 x 3.5 x 1.5". **Accessories Supplied:** Battery, test leads, instruction manual, rubber boot. **5 Year Warranty.**

BK2860A-ND		**$99.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

Premium DMM

"Certificate of Traceability Supplied"



All Models: • 50,000 count • True RMS, AC or AC + DC • Capacitance to 50,000 µF • Splashproof sealed case • IEC1010, class 2 safety compliance • **3 Year Warranty**

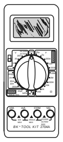
Model BK-5390: • 0.025% DCV • 0.07%Ω • 100KHz AC response • Autoranging, bargraph with zoom • Frequency: Duty cycle, pulse width • dB Across: 1Ω to 10kΩ • Power Across: 1Ω to 10kΩ • Disturbance indicator • Min./Max./Avg.

Model BK-5370: • 0.05% DCV • 0.07%Ω • 100 KHz AC response • Autoranging, bargraph with zoom • Frequency: duty cycle • Temperature: ±0.5°C • dB Across: 1Ω to 10kΩ • Disturbance indicator • Min./Max./Avg.

Model BK-5360: • 0.01% DCV • 0.1%Ω • 30KHz AC response • Autoranging, bargraph • Frequency: duty cycle

BK5390-ND	**$325.00**
BK5370-ND	**$289.00**
BK5360-ND	**$229.00**

"Tool Kit" Multimeters



Display: 3-1/2 digit, high-contrast 0.7" (17.78mm) LCD, 1999 counts. **Sampling:** 3 times/sec. (nominal). 0.5%DCV accuracy. **Operating Temp:** 0°C to +50°C, 0% to 70% RH. **Power Requirements:** 9V battery. **Accessories Supplied:** Battery, drop resistant case, test leads, and instruction manual. **1 Year Warranty.**

Model BK2708: **DC Volts:** 1000V Max. **AC Volts:** 750V Max. **DC Current:** 10A Max. **AC Current:** 10A Max. **Resistance:** 0.1Ω-43MΩ ***Features:*** • Auto Ranging • Logic probe

Model BK2707A: DMM, component tester, frequency counter, and logic probe. **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC frequency counter. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 200MΩ. **Capacitance:** to 20µF. **Frequency:** 2kHz to 5MHz. **Logic Probe Function:** (TTL). **Transistor Gain Measure:** (hFE). **Dimensions:** 5.9 x 3.1 x 1.3".

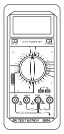
Model BK2706A: DMM, component tester, and temperature meter. **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 20MΩ. **Capacitance:** to 20µF. **Frequency:** 10Hz to 15MHz. **Transistor Gain Measure:** (hFE). **Temperature:** 0°C to 750°C. Thermocouple probe included. **Dimensions:** 5.9 x 3.1 x 1.3".

Model BK2704B: DMM, component tester. **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 20MΩ. **Capacitance:** to 20µF. **Transistor Gain Measure:** (hFE). **Dimensions:** 5.9 x 3.1 x 1.3".

Model BK2703B: DMM, **Voltage Range:** 200mV to 1000VDC; 200mV to 750VAC. **Current Range:** 200µA to 10A. **Resistance:** 0.1Ω to 20MΩ. **Frequency:** 10Hz to 15MHz. **Dimensions:** 5.9 x 3.1 x 1.3".

BK2708-ND		**$99.00**
BK2707A-ND		**$89.00**
BK2706A-ND		**$79.00**
BK2704B-ND		**$59.00**
BK2703B-ND		**$39.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

"Test Bench" Multimeters



High quality, ruggedized, multi-function DMMs in a drop resistant case. Resistance and frequency measurement. Diode check. Auto power off. All current ranges fused. **Power Requirements:** Single 9V battery. **Dimensions:** 7.8 x 3.5 x 1.5". **Accessories Supplied:** 9 Volt battery, test leads, instruction manual, rubber boot. **3 Year Warranty.**

Model BK388B-ND: 3-3/4 Digit LCD Display (4000 count). **DC Volts:** 400mV to 1000V. **AC Volts:** 400mV to 750V. **DC/AC Current:** 400µA to 10A. **Resistance:** 400Ω to 40MΩ. **Diode Test:** at 1mA, 3.2VDC max. typ. **Capacitance:** 4nF to 40µF. **Frequency:** 4kHz to 4MHz. Logic level measure (TTL) Transistor gain (hFE) and peak hold.

Model BK390A-ND: 3-3/4 Digit LCD Display (4000 count). **Analog Bar Graph:** 41 Segments. **DC Volts:** 400mV to 1000V. **AC Volts:** 400mV to 750V. **DC/AC Current:** 400µA to 10A. **Resistance:** 400Ω to 40MΩ. **Diode Test:** at 1.2mA, 3.0VDC max. typ. **Capacitance:** 4nF to 40mF. **Frequency:** 4kHz to 40MHz. **Temperature Range:** -50°C to +1300°C (1°C resolution). Auto/manual ranging. Relative mode. Min/Max hold. Data hold. Memory. RS-232. Audible continuity. Thermocouple Probe included.

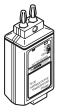
Model BK389A-ND: 3-3/4 Digit LCD Display (4000 count). **Analog Bar Graph:** 41 Segments. **DC Volts:** 400mV to 1000V. **AC Volts:** 400mV to 750V. **DC/AC Current:** 400µA to 10A. **Resistance:** 400Ω to 40MΩ. **Diode Test:** at 1.2mA, 3.0VDC max. typ. **Capacitance:** 4nF to 40mF. **Frequency:** 4kHz to 40MHz. Auto/manual ranging. Relative mode. Min/max hold. Data hold. Memory. Audible continuity.

Model BK391A-ND: 4-1/2 Digit LCD Display (20,000 count). **DC Volts:** 200mV to 1000V. **AC Volts:** 200mV to 750V. **DC/AC Current:** 400µA to 10A True RMS reading. **Resistance:** 200Ω to 20MΩ. **Diode Test:** at 1mA, 3.2VDC max. typ. **Frequency:** 2kHz to 200kHz. **Duty Cycle**: .0 to 90% (0.1% resolution). Data hold. Logic level measure (TTL).

BK388B-ND		**$127.00**
BK390A-ND		**$167.00**
BK389A-ND		**$145.00**
BK391A-ND		**$187.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

Accessories

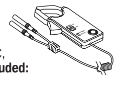
Temperature Adapter



Type K thermocouple. Measures from -50°C to +1000°C. 1mV per degree. Measures temperature of any surface, liquid or gas. Converts any voltmeter to measure temperature. Open probe warning. **Power:** Standard 9V battery. **Dimensions:** 4.8 x 1.8 x 1.2". **Cable Length:** .914 meters. **Accessories Supplied:** TP-29.

TP-30B-ND	**$68.97**

DC/AC Current Clamp Adapter



Measures current without disconnecting circuit under test. Measures to 400A DC or AC. Outputs 1 mV per Amp., operates on 2V range of any DMM. **Power Requirements:** 9V battery. **Operating Temp.:** 0° to 50°C, <70% RH. **Dimensions:** 7 x 2.8 x 1.3". **Accessories Included:** Battery, instruction manual.

BKCP-3-ND	**$86.00**

Probes and Test Lead Sets

TP-29-ND	Type K Bead Thermocouple Probe	**$9.00**
BKTL-4-ND	Universal Test Lead Set	**$7.94**
TL-2A-ND	Test Lead Set, Fully Shrouded SILIC, IEC61010-2-031 1,000V CATIII	**$20.00**
TL-1-ND	Test Lead Set, Fully Shrouded	**$7.94**
TL-3-ND	Test Lead Accessory Set for BKTL-4	**$16.00**

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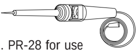
High-Voltage Probes



Model PR-28: Accessory for DMM's Multiplies instrument ranges by 1000 (40V becomes 40,000V). PR-28 for use with any high impedance (10MΩ or greater) voltmeter. **Voltage Range:** 40kVDC and 20kVAC (60Hz). **Freq. Range:** DC-8Hz 20kVAC max. 60Hz. **Impedance:** 600MΩ accuracy: ±3% plus instrument accuracy. **Calibration:** Internal; factory calibrated at 25kV. **Size:** 14" long; 2.25" dia. (max.); 30" cord. **Connector:** Dual banana.

Model PR-28A: DMM Probe. Measures to 40,000VDC top-polarity. Measures to 28,000VAC 50/60Hz. 1000MΩ Input impedance. 1000:1 voltage divider. Compatible with most 10MΩ digital multimeters. DMM accessory.

Model HV-44A: Built in meter for stand-alone operation (No DMM required). Measures voltages up to 40,000VDC. Factory calibrated at 25kV (±2% accuracy); full scale ±3% accuracy. Conventional round needle type tip and flat spring type tip for easy access to CRT anode. **Size:** 16.5 x 2.1 x 2". **Color:** Black & Red. **Positive Polarity Only –** *Not for microwave ovens.*

PR-28A-ND		**$58.93**
HV-44A-ND		**$109.00**
LC-32A-ND	Carrying Case (1 Year Warranty)	**$32.00**

Logic Probes

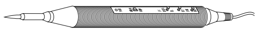
20MHz and 50MHz Logic Probes

Model DP-21: **(20MHz Logic Probe):** Tests TTL, DTL, RTL, HTL, CMOS and MOS. Displays pulse presence and logic states. Memory mode "freezes" pulse display. Catches pulses to 30ns or pulses trains to 20MHz. 1MΩ input impedance. **Operating Supply Voltage Range:** TTL–5V, CMOS 5-15V. **Dimensions:** .7 x .7 x 8.2".

Model BKDP52: **(50 MHz Logic Probe):** Tests TTL and CMOS. Displays DC to 50MHz. Detects 10ns pulse width. Overload protected. 120kΩ input impedance. **Operating Supply Volt. Range:** 4-18VDC. **Dimensions:** .7 x .7 x 8.2".

DP-21-ND	**$35.00**
BKDP52-ND	**$45.00**

Pulser Probe

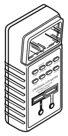


For TTL and CMOS. Produces 10µS pulse signal at 100mA. External square wave terminal. **Output Current:** Pulser mode-100mA sink/source square wave mode-5mA sink/source. **Operating Supply Voltage Range:** 5-15VDC. **Sync Input Impedance:** 1MΩ. **Dimensions:** .7 x .7 x 8.2".

DP-31A-ND........**$35.00**

Component Testers

Dual-Display LCR Bridge



Measures inductance, resistance, capacitance, DF & Q. Auto ranging. 4-digit LCD display. Auto calibrate. Tests at 120Hz or 1kHz. Relative mode. Tolerance mode. Basic accuracy 0.7%. **Dimensions:** 1.5 x 3.5 x 7.6". **Accessories Included:** Test leads, AC adapter, instruction manual.

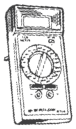
BK878-ND		**$275.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

LCR/ESR Meter

- Measurement parameters: Z, L, C, DCR, ESR, D, Q, and 0
- Test conditions: 100Hz, 120Hz, 1kHz, 10kHz, 1vrms, 0.25Vrms, 0.05Vrms
- 0.5% basic accuracy
- Dual LCD display
- SMD surface mount tweezer probe included
- Fully auto/manual selection
- DC resistance measurement
- Rechargeable battery/AC powered

BK885-ND		**$549.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

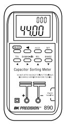
LCR Meter



Model 875B: Measures capacitance (200pF-20mF ±1%), resistance (2-20MΩ ±1%), and inductance (200µH-200mH ±1%). 3-1/2 digit LCD display. Low battery and overload indicator. **Power:** Single standard 9V battery. **Dimensions:** 1.4 x 3.5 x 7.5". **Accessories Included:** Test leads, battery, instruction manual.

BK875B-ND		**$189.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

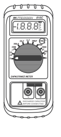
Auto Ranging Capacitance Meter



Nine ranges 0.1pF to 50mF. 0.1pF resolution. 4 digit LCD display. Dual display. RS-232 Output to PC. Data hold. Auto power off. Display zeroing. Audible alert mode (for sorting). High/Low limit sorting capability. **Power Source:** One 9V battery. **Dimensions:** 1.5 x 3.5 x 7.6". **Accessories Included:** Protective holster, alligator clips, 9V battery, instruction manual.

BK890-ND		**$129.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

Capacitance Meter



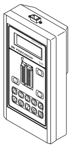
3-1/2 digit LCD display. Nine ranges from 200pF to 20mF. Low battery and over-range indicator. **Power Source:** One 9V battery. **Dimensions:** 5.7 x 3 x 1.6". **Accessories Included:** Test leads, battery, and manual.

BK810C-ND	*NEW!*	**$79.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

IC Testers

Identify, test and verify unknown ICs, quickly and reliably. Batteries and operation manual included.

Model 570 — Linear IC Tester



- Tests all common analog ICs
- Auto identification of unmarked/house-coded devices lists possible replacements
- Conditional/unconditional loop testing modes
- Functional test emulates passive circuitry to implement a comprehensive test in a variety of configurations
- Displays diagnostic information down to individual component pins
- Rugged, handheld, ergonomically designed case incorporates built-in membrane keypad, 2 x 16 dot matrix alpha-numeric, LCD and high quality 16-pin ZIF socket
- Battery operated (2 x 9V) with low power design.

Model 575 — Digital IC Tester

- 40-pin wide-entry ZIF sockets test a broad range of TTL, CMOS, Memory, LSI, Interface and other devices (NAND gates to CPUs)
- Identifies unmarked and house-coded devices
- Detects intermittent and temperature related faults
- Displays diagnostic information for individual pins
- Battery operated (4 x 1.5AA batteries)

Model 898A — SIMM and DIMM Tester

Key Features: SIMM 72-pin, 32/36 bits (socket included). **Error Detection and Identification:** • Single data bits • Power and noise related failures • Solder opens and shorts • Timing related failures • Data retention errors • Intermittent failures. **User Configuration Test Modes:** Walking bits 0s • Walking bit 1s • Marching up • Checkerboard • Inversed checkerboard. ***Basic Technical Specifications:*** **Power Consumption:** • 898A 12VAC, 1.5A • Wall AC/AC adapter • Input: 120VAC @ 60Hz, 40W (USA) • Output: 12VAC, 2.0A, • Dimensions: 7 x 6 x 2.5". **Environmental:** • Operating temperature: 10°C to 50°C • Relative humidity: 20% to 80% noncondensing

BK570-ND	Linear IC Tester	**$995.00**
BK575-ND	Digital IC Tester	**$795.00**
BK898A-ND	SIMM and DIMM Tester	**$1295.00**

Cable/Harness Tester

A compact, stand-alone unit that can be used for any type of wired assembly. Opens, shorts and miswires are detected immediately. A universal adapter card offers outstanding flexibility and convenience, ready to accept any of industry's most popular 22 connector styles. A crisp, easy-to-read LCD instantly indicates good or faulty connections and simplifies troubleshooting. **Connect Test Threshold:** Resistance: Shorts <130Ω ±10%; Opens 130Ω ±10%; Capacitance: Shorts >0.6µf ±10%; Opens <0.6µf ±10%. **Test Conditions:** 5 volts at 6mA. **Max. Multiple Connection Display:** Up to 16 test points. **Test Cycle Time:** <0.5 sec. **Test Point Capacity:** Max. 128 points (64 connections). **Program Storage:** Lithium battery backs up memory for 50 cables. **Probe:** Single wire test probe with standard .175" (4.45mm) banana jack. **Display:** 2 line x 16 character LCD; 2 LEDs (green/red) for "PASS" or "FAIL" conditions. **Printer Port:** Standard Centronics type parallel interface. **Power:** DC 12V-14V, 500mA AC adapter. **Dimensions:** 2.1 x 13.8 x 9". **Weight:** 6 lbs. (2.72kg).

Accepts These Connectors

Interface Qty. (Ea.)	Spacing/ Style	Connector Type	Max. Pins
8	0.1" (2.54mm)	Dual-Row	64
2	"D" Submini	Dual-Row	37
2	Delta	Centronics	80
2	0.6" (15.24mm)	DIP	40
2	RJ11	Phone Plug	6
2	RJ45	Phone Plug	8
2	0.156" (3.96mm) Header	Single-Row	20
2	0.1" (2.54mm) Header	Single-Row	32

BK205-ND........**$895.00**

Network and PC Cable Testers

Model 231A: • Tests 10 BaseT, 100 Base2, RJ45, RJ11,356A, TIA-568A, TIA-568B, and token ring cables • Detects open, short, cross, and continuity • Tests Point-to-Point, rather than Pair-to-Pair • Tests cables on wall plate or patch panel up to 1000 ft. away with the remote kit • Easy to read LED display

Model 235: • Detects open, short, reversed, crossed and split • Clear LED display for the fault status • Test cable length: Minimum - 4ft. (1.2m) Maximum - 492ft. (150m) • Identify up to 4 different cables at one end by provided remote identifiers • Tests: 10BaseT, 100BaseTx, 10Base2 (coax), RJ45, 356A,TIA-568A, TIA-568B, and token ring ect.

BK231A-ND	*NEW!* DLX Multi-network Cable Tester	**$79.00**
BK235-ND	Remote Network Cable Tester	**$225.00**

EPROM Eraser

Model BK850: • Timer setting: 15 minutes • Supply voltage: 12VDC/500mA (AC/DC adapter included) • UV light source: 4 watt bulb • UV bulb life: > 4000 hours • Dimensions: 6.2 x 2.72 x 1.45"

BK850-ND........**$95.00**

Deluxe EPROM Eraser

Model BK851: Heavy duty EPROM eraser simultaneously erases up to 40 twenty-four pin EPROMs. Features a 60 minute timer.

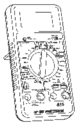
BK851-ND........**$169.00**

Power Supply Leakage Tester

Model 1655A: • Variable isolated output—0-150VAC • 3 amp continuous, 4 amp intermittent output • Built-in soldering iron temperature control • Expanded leakage scale • Circuit breaker overload protection • Displays volts, amps, VA, leakage

BK1655A-ND........**$529.00**

$3^1/_2$ Digit Hand-Held Parts Tester

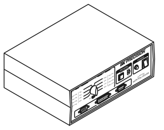


26 user ranges for versatile test selection. Tests capacitance from 0.1pF—20mF. Tests resistance from 0.1Ω—20MΩ. Tests transistors, SCRs, diodes and LEDs. Tests batteries under actual loaded conditions.

Power: One 9V transistor battery. **Dimensions:** 6.9 x 3.6 x 1.3". **Accessories Included:** Test leads, spare fuse, battery, instruction manual.

BK815-ND		**$99.00**
LC-29B-ND	Carrying Case (1 Year Warranty)	**$17.00**

Video Monitor Testers



Model 1280A: Fully featured bench-top design to test both Mac and PC monitors. All patterns can be manually selected or placed in Auto for automatic cycling of each available pattern. Designed to test (burn-in) one to four monitors, the 1280A can also be used as a display generator. Full color, green, blue, red, black and white. **Features:** • PC and Mac patterns • 16 monitor types/resolution selections • Color bar, cross hatch, dot, raster, Windows™ selection • VGA, SVGA, RGB, HV, V and Four DB-15 (rear panel) for multiple monitor burn-in • AC adapter included • Available patterns: PC — 1280 x 1024, 1024 x 768, 8514A, SVGA, VGA, EGA, CGA, MDA; Mac — 1280 x 1024, 1152 x 870, 1024 x 768, 832 x 624, 640 x 480 (3 types), 512 x 384

Model 1275: Handheld unit to test PC and Mac monitors. Generates crosshatch, dots, color bars and raster patterns in green, blue, red, black and white. **Features:** • CGA, VGA, SVGA • Standard DB9, DB-15 and DB-15 Hi-res mini connectors • 9VDC battery • Available Patterns: PC — 1280 x 1024, 1024 x 768, 8514A, SVGA, VGA, EGA, CGA; Mac — 640 x 480

BK1280A-ND	Bench-top Video Generator	**$299.00**
BK1275-ND	Handheld Video Monitor Tester	**$189.00**

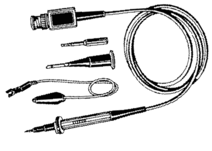
NTSC Generator

Model BK1257: This portable, handheld NTSC Pattern Generator with S-Video, composite video and audio outputs is powered by a 9-volt battery or AC adapter. It provides NTSC color bars, crosshatch, dot, staircase, circle, center cross, windows, and a full range of color raster patterns. The outputs available are composite video and audio via two RCA connectors or an S-Video mini-DIN output. Signals can be produced as an interlaced or progressive scanning mode. No modulated RF signal is provided.

BK1257-ND	NTSC Generator	**$199.00**

tpi

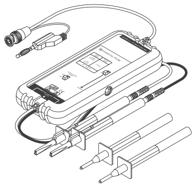
Oscilloscope Probe Line



Specifications	Replaces Stack	Digi-Key Part No.	Price Each	TPI Part No.
20MHz, x 1	—	290-1000-ND	29.95	1P20B
100MHz, x 10	CP-901, CP-223, CP-801	290-1001-ND	34.95	P100B
100MHz, x 10*	CP-902, CP-240, CP-802	290-1050-ND	39.95	P100BR
200MHz, x 10	—	290-1002-ND	39.95	P200B
250MHz, x 100	—	290-1051-ND	44.95	P250
250MHz, x 100*	—	290-1052-ND	49.95	P250R
250MHz, x 10	CP-241	290-1053-ND	44.95	P250B
250MHz, x 10*	CP-243	290-1054-ND	49.95	P250BR
60MHz, x 10	CP-210	290-1003-ND	34.95	SP60B
100MHz, x 1 x 10	CP-209	290-1004-ND	39.95	SP100B
150MHz, x 1 x 10	—	290-1005-ND	44.95	SP150B
200MHz, x 1 x 10	—	290-1006-ND	49.95	SP200B
250MHz, x 1 x 10	—	290-1007-ND	54.95	SP250B
300MHz, x 1 x 10	CP-261	290-1008-ND	59.95	SP300B
60MHz, x 1 x 10	CP-325	290-1055-ND	49.95	IP060
100MHz, x 1 x 10	—	290-1056-ND	59.95	IP100
250MHz, x 1 x 10	—	290-1057-ND	69.95	IP250

* With Readout

NEW! Differential Probes



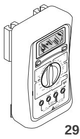
These high voltage differential probes allow conventional grounded oscilloscopes to be used for display and measurement of multiple floating signals with high common mode voltages. All sets are IEC 1010 approved for safety. Wide bandwidth DC of 25 MHz.

Input Impedance: 4M/10pf each side to ground 8M/5pF between inputs **Input Voltage:** ±140V DC Inc.Pk AC@ **Max. Differential:** 20:1 or 100V rms ±1400VDC Inc. Pk AC 200:1 or 1.000V rms **Common Mode:** ±1400VDC Inc. Pk AC or 1000V rms **Power Supply:** 4 AA cell or 6V main adapters: DC/600mA or DC/800mA

290-1076-ND........**$272.95**

Multimeters

Pocket Size Digital Multi-Meters


290-1133

CE and cULus3111 • Continuity Buzzer • Data Hold • Test lead set and rubber boot included • Three Year Limited Warranty.

290-1120-ND (TPI 120): Manual Ranging. **Specifications: Ranges:** 600 VDC; 600VAC; 2KΩ **Accuracy:** 0.5% DC, **Display:** 3 Digit LCD.

290-1126-ND (TPI 126): Auto Range. Min/Max/Rec. Auto Power Off. **Specifications: Ranges:** 600VDC; 600VAC; 400mAAC; 400mADC; 40MΩ **Accuracy:** 0.3% DC. **Display:** 4 Digit LCD **Dimensions:** 6" x 3" x 2"

Digital Multi-Meters

Diode Test • Continuity Buzzer • Data Hold • Test lead set and rubber boot included. **Dimensions:** 7.75" x 3.75" x 2.25" • Three Year Limited Warranty

290-1133-ND (TPI 133): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 200mV-1000V and 200µA-10A. **Range AC:** 200mV-750V and 200µA-10A. **Resistance Range:** 200-20MΩ.

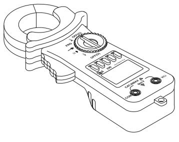
290-1153-ND (TPI 153): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 400mV-1000V and 400µA-10A. **Range AC:** 4V-750V and 400µA-10A. **Resistance Range:** 400-40MΩ. Auto or manual range, 4 Digit LCD. Min/Max/Ave and Record. Auto power off.

290-1163-ND (TPI 163): Meets UL, cUL, CE and IEC 1010 safety standards. **Specifications: Range DC:** 400mV-1000V and 400µA-10A. **Range AC:** 4V-750V and 400µA-10A. **Resistance Range:** 400-40MΩ. Auto or manual range, 4 Digit LCD. Min/Max/Ave and Record. Auto power off.

290-1283-ND (TPI 183): Meets CE and IEC 1010 safety standards. **Specifications: Range DC:** 400mV-1000V and 400µA-10A. **Range AC:** 4V-1000V and 400µA-10A. **Resistance Range:** 400-40MΩ. **Capacitance Range:** 10uf-10,000uf. **Frequency Range:** 200Hz-200KHz. Backlighted triple display (4 Digit +2/41 Segment) with two-hold system. Record, compare and relative percentage modes. Auto or manual range. True RMS. Sleep mode. Transfer data directly to a PC with RS232 output.

Description	Digi-Key Part No.	Price Each	TPI Part No.
Multi-Meters			
DMM Pocket 3 Digit,.	290-1120-ND	28.31	TPI 120
DMM Pocket Auto Range	290-1126-ND	59.95	TPI 126
DMM 3.5 Digit	290-1133-ND	51.71	TPI 133
DMM 4 Digit	290-1153-ND	70.83	TPI 153
DMM 4 Digit	290-1163-ND	109.95	TPI 163
DMM 4 Digit	290-1283-ND	159.95	TPI 183
Accessories			
DMM Boot Hook for Std. size	290-1103-ND	8.70	TPI A103
Temp. Adapter for DMM with probe, -40°F to 500°F	290-1124-ND	44.95	A301

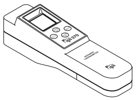
Digital Clamp Meters


290-1296

Meets UL, cUL, CE and IEC 1010 safety standards • Diode Test • Continuity Buzzer • True RMS • Trim Mode • Peak Hold • Min/-Max/Ave • Data Hold • Measures Frequency of the current being measured while the bar graph display simultaneously indicates the current level. Sleep mode. 4 Digit LCD plus Bar Graph. **Dimensions:** 1.22" x 3.5" x 7.44" • Three Year Limited Warranty **Specifications: Range DC:** 40V-750V. **Range AC:** 40V-750V and 40A-700A. **Resistance Range:** 400-40KΩ. **Frequency Range: 290-1293-ND (TPI 293):** 1KHz-10KHz. Auto range. **290-1296-ND (TPI 296):** -1KHz-10KHz. HDR mode at line voltage and 60Hz. Auto or manual range, Min/Max/Ave.

Description	Digi-Key Part No.	Price Each	TPI Part No.
DMM Clamp 4 Digit	290-1293-ND	127.53	TPI 293
DMM Clamp 4 Digit	290-1296-ND	179.51	TPI 296

Infrared Thermometers


290-1370

- Laser Sighting
- Large LCD
- Display Hold

Specifications:

Accuracy: @ 23° C and 0.95 emissivity: ±2% of reading or ±3.5°F (which is greater).

Response Time: 1 second.

Spectral Response: 7 – 14µm.

Resolution: 0.1.

Distance to Spot Ratio: 8:1

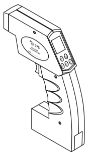
- Three Year Limited Warranty.

Description	Digi-Key Part No.	Price Each	TPI Part No.
Thermometer 14°F to 500°F (without Laser)	290-1370-ND	89.95	TPI 370
Thermometer 14°F to 500°F.	290-1371-ND	119.95	TPI 371
Thermometer Laser Sight -58°F to 500°F	290-1372-ND	129.95	TPI 372
Thermometer 14°F to 950°F	290-1373-ND	124.95	TPI 373

Test Leads Kits

Description	Digi-Key Part No.	Price Each	TPI Part No.
Deluxe Test Lead Kit IEC1010	290-1041-ND	35.00	TLS2000B
R/A Deluxe Test Lead Kit IEC1010	290-1042-ND	29.78	TLS2000RB
Economy Test Lead Kit IEC1010	290-1043-ND	17.50	TL1000B
R/A Economy Test Lead Kit IEC1010	290-1044-ND	17.50	TL1000RB
Test Lead Set STD	290-1125-ND	6.95	A040
Test Lead Set STD with clips	290-1127-ND	9.95	A050
Test Lead Sprung Hook Red	290-1128-ND	5.75	123502R
Test Lead Sprung Hook Black	290-1129-ND	5.75	123502B
Lead 10 Ft. Red	290-1130-ND	10.00	123501R/10'
Lead 10 Ft. Black	290-1131-ND	10.00	123501B/10'
Lead 5 Ft. Red	290-1132-ND	9.00	123501R/5'
Lead 5 Ft. Black	290-1134-ND	9.00	123501B/5'

Gun Style Digital Thermometers


290-1375

Non-contact and K-Thermocouple input

- Laser Pointer
- 8:1 Distance to Spot Ratio
- Record Function
- Back Light
- Trigger Switch
- Carrying Holster
- °C and °F Selectable
- Display Data Hold

Specifications: Response Time: 500mSec.

Spectral Response: 7~14um.

Emissivity: 0.3 to 0.99 Adjustable

Ambient Operating Range: 32° to 120°F • 9V Battery and soft pouch included • 3 Year Limited Warranty.

Description	Digi-Key Part No.	Price Each	TPI Part No.
Thermometer Gun Laser Sight 0°F to 950°F	290-1375-ND	189.95	TPI 375
Thermometer Gun Laser Sight -58°F to 950°F	290-1376-ND	199.95	TPI 376
Thermometer Gun Laser Sight 0°F to 1832°F	290-1377-ND	189.95	TPI 377

Pocket Digital Thermometers

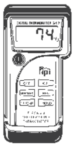
290-1312

- Data hold
- Auto Power Off
- Compliance with EN 50 081 1:1992, EN 50 082-1:1992, IEC 801 2:1984, IEC 801 3:1984, IEC 801-4:1988.

Specifications: -58° to 300°F.
Resolution: 0.1°F.
Accuracy: ±2°F.
Sampling Time: 1.5 Seconds
- 1.5V Button battery included.

Description	Digi-Key Part No.	Price Each	TPI Part No.
Temp. Meter Digital Pkt. with Reverse LCD Head to fit viewing style	290-1310-ND	12.95	TPI 310
Temperature Meter Digital Pocket Water Resistant.	290-1312-ND	15.95	TPI 312

Handheld Digital Thermometer


290-1342

Water Resistant. Includes Rubber Boot, Probe(s), 9V Battery, Soft Pouch.

290-1340-ND (340/C1):

Specifications: Range: -40° to 1200°F.

Basic Accuracy: ±1%+4 digits. Single K-Type Probe included.

Dimensions: 1.6" x 5.98" x 3"

290-1342-ND (342/C1):
- Auto Off
- C°/F° Selectable
- Selectable Res.
- Min/Max/Rec.

Specifications Range: -328° to 2462°F.

Basic Accuracy: ±0.3%. • Two K-Type Probes included.

Description	Digi-Key Part No.	Price Each	TPI Part No.
Temp. Meter Digital Single K Type	290-1340-ND	74.95	340/C1
Temp. Meter Digital Dual K Type	290-1342-ND	99.95	342/C1

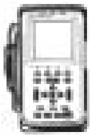
Handheld Oscilloscope

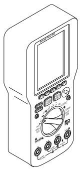
290-1460-ND (TPI 460 Dual Scope with RMS DMM)

Handheld oscilloscope. 20MHz Bandwidth. 25 megasamples/sec. Real time display. Auto range. Dual Input. True RMS DMM to 4000 count measures AC/DC volts to 600. Frequency to 20MHz, resistance to 20MegOhm, diode test and continuity buzzer. Bright LCD Backlight. Opto-isolated RS232 Output.

Included: Scope, Test Leads, Power AC Cord, 0-60 MHz Probe.

Dimensions: 5.50" x 9.5"


290-1460

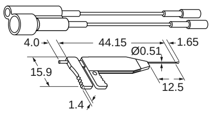

290-1440

290-1440-ND (TPI 440): Six instruments in one:
- Hand-held oscilloscope
- 1MHz DC Bandwidth
- 25 Megasamples per second
- Auto range True RMS DMM to 4000 count
- Continuous autoset
- Real Time display
- Cursor measurements
- Flexible triggering including glitch capture
- Roll mode
- Frequency counter to 10MHz
- Basic DC accuracy to 0.3%
- Opto-Isolated RS-232C Port
- Designed to meet IEC 1010-1 600V Cat III Rating

Accessories included: Test leads

Description	Digi-Key Part No.	Price Each	TPI Part No.
Handheld Oscilloscope 460	290-1460-ND	895.95	460
Carry Case for 460	290-1905-ND	47.55	A905
Software and RS232 Cable for 460	290-1404-ND	80.80	A404
TPI 440 Hand-held Oscilloscope 440	290-1440-ND	350.93	TPI 440
Software for TPI 440	290-1075-ND	59.95	A402
Battery Charger for TPI 440	290-1441-ND	17.52	TPI A401
Carrying Case for TPI 440	290-1900-ND	19.95	TPI A900
Rubber Boot for TPI 440	290-1123-ND	19.95	A403

Nano-Clip and Micro-Clip



NANO-CLIP SPECIFICATIONS: Accessible Lead Pitch: 0.3mm min. **Clip Retention:** 50g min. **Stroke:** 1.65mm **Operating Force:** 300g max. **Contact Resistance:** 30 Meg ohm **Conductor Resistance:** 300 Meg. ohm **NANO-CLIP FEATURES:** • Stacks side by side • Gold-plated hook and contact • Fluorine coated barrel extension **MICRO-CLIP SPECIFICATIONS: Accessible Lead Pitch:** 1.27mm min. **Clip Retention:** 200g min. **Stroke:** 3.0mm **Operating Force:** 1.0kg max. **Contact Resistance:** 30 Meg ohm **Conductor Resistance:** 200 Meg. ohm

Description	Package Includes	Digi-Key Part No.	Price Each	TPI Part No.
Nano-Clip (.3mm, 1/4 Pitch)				
Black, Red	2 Clips, 2 Leads and Ground Lead	290-1096-ND	29.95	NC2BR
Black, Red	6 Clips, 3 Lead Sets, Ground Lead & Hold Bar	290-1097-ND	99.95	NC6BR
Red	6 Clips, 3 Lead Sets, Ground Lead & Hold Bar	290-1098-ND	99.95	NC6R
Black	6 Clips, 3 Lead Sets, Ground Lead & Hold Bar	290-1099-ND	99.95	NC6B
Yellow	6 Clips, 3 Lead Sets, Ground Lead & Hold Bar	290-1100-ND	99.95	NC6Y
Blue	6 Clips, 3 Lead Sets, Ground Lead & Hold Bar	290-1101-ND	99.95	NC6CBLUE
Green	6 Clips, 3 Lead Sets, Ground Lead & Hold Bar	290-1102-ND	99.95	NC6G
Gray	6 Clips, 3 Lead Sets, Ground Lead & Hold Bar	290-1104-ND	99.95	NC6GY
Assorted	12 Clips, 6 Lead Sets, Ground Lead & Hold Bar	290-1105-ND	175.95	NC12
Black	Nano-Clip Only	290-1106-ND	7.95	NC1B
Gray	Nano-Clip Only	290-1107-ND	7.95	NC1GY
Red	Nano-Clip Only	290-1108-ND	7.95	NC1R
Yellow	Nano-Clip Only	290-1109-ND	7.95	NC1Y
Green	Nano-Clip Only	290-1110-ND	7.95	NC1G
Blue	Nano-Clip Only	290-1111-ND	7.95	NC1BLUE
Ground Lead	1 Lead	290-1112-ND	4.25	NCGROUND
Hot Lead	1 Lead	290-1113-ND	3.50	NCHOT
Dual Lead	1 Lead	290-1114-ND	6.38	NCDUAL
Lead Out Contact	Use with 24-28 AWG Wire (Solder-Type)	290-1115-ND	2.97	LC85
Lead Out Contact	Needs Crimp Tool for Nano-Clip & Micro-Clip	290-1116-ND	2.40	LC65
Micro-Clip (1.27mm Pitch)				
Black	1 Clip	290-1118-ND	6.38	MC1B
Gray	1 Clip	290-1119-ND	6.38	MC1GY
Red	1 Clip	290-1121-ND	6.38	MC1R
Assorted	6 Clips, 3 Lead Sets and Ground Lead	290-1117-ND	29.99	MC6

Test Leads and Accessories

Right angle end for Figures 1-5

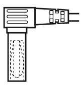
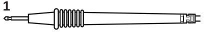


Fig. 1


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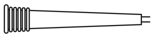

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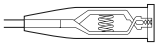

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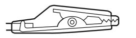

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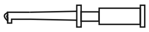

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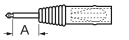
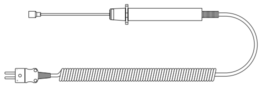


Fig.	Description	Digi-Key Part No.	Price Each 1	Price Each 10
1	Test Lead Set Standard 46” (1168.40mm)	290-1059-ND	8.75	7.40
2	Test Lead Set Deluxe Extended	290-1060-ND	15.73	13.29
3	Test Lead Set Lg Clip 9” (228.60mm) Pigtail	290-1061-ND	6.05	5.12
4	Test Lead Set Sm Clip 9” (228.60mm) Pigtail	290-1062-ND	4.48	3.79
5	Probe Tip Red 5 Mini Clip With 9” (228.60mm) Pigtail	290-1065-ND	6.73	5.69
5	Probe Tip Black 5 Mini Clip With 9” (228.60mm) Pigtail	290-1066-ND	6.73	5.69
6	Probe Tip Set Short; Dimension A = 12.7mm	290-1063-ND	6.50	5.50
6	Probe Tip Set Long; Dimension A = 62mm	290-1064-ND	7.85	6.64
—	Kit Test Lead Set 7 Pair	290-1058-ND	29.95	—

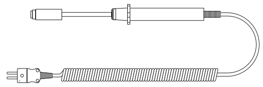
Thermocouple Temperature Probes



Model CK11M:

- K-Type surface probe
- Ribbon sensor to contact uneven surfaces
- 4 inch stem, 4 inch handle for easy control and safe clearances
- 3 foot coiled lead for durability and long reach
- Exposed junction for fast response

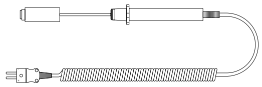
290-1906-ND $39.95



Model CK13M:

- Heavy duty K-Type surface probe
- Spring sensor to maintain pressure on surface being measured
- Ceramic insert to help hold heat near sensor for accurate measurements
- 4 inch stem, 4 inch handle for easy control and safe clearances
- 3 foot coiled lead for durability and long reach
- Exposed junction for fast response

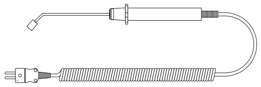
290-1907-ND **$42.95**



Model CK16M:

- Heavy duty K-Type surface probe
- Spring sensor to maintain pressure on surface being measured
- Ceramic insert to help hold heat near sensor for accurate measurements
- 8 inch stem and 4 inch handle for measurements where longer reaches are required
- 3 foot coiled lead for durability and long reach
- Exposed junction for fast response

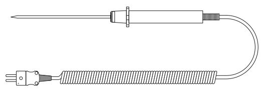
290-1908-ND **$29.95**



Model CK17M:

- K-Type surface probe
- Ribbon sensor to contact uneven surfaces
- 45 degree angle stem to measure hard to reach surfaces
- 3 foot coiled lead for durability and long reach
- Exposed junction for fast response

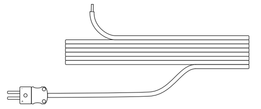
290-1909-ND **$39.95**



Model FK14M:

- K-Type general purpose probe
- 8 inch sealed stem for immersion into liquids, gels, and semi-solids
- 3 foot coiled lead for durability and long reach
- Stem sealed to protect sensing area

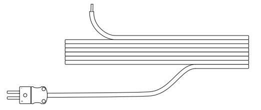
290-1910-ND **$29.95**



Model GK11M:

- Standard K-Type thermocouple probe
- 4 foot fiberglass covered lead
- Exposed junction for fast response

290-1911-ND **$14.95**



Model GJ11M:

- Standard J-Type thermocouple probe
- 4 foot fiberglass insulated lead
- Exposed junction for fast response

290-1912-ND.. **$16.95**

Alligator Clips

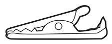
Fig. 1


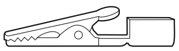
Fig. 2


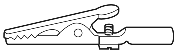
Fig. 3
Large with Screw Connector


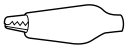
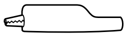
Fig. 4
Small with Solder Connector


Fig. 5
X-Large Barrel Type with Solder Conn.


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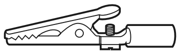
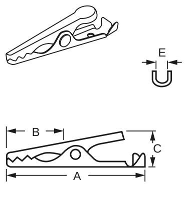


Fig.	Description	Color	Size	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100
1	Without Cover	—	27mm	CP-2400-ND	.36	.30	.23
1	Without Cover	—	35mm	CP-2401-ND	.36	.30	.23
1	Without Cover	—	44mm	CP-2402-ND	.36	.30	.23
2	Without Cover	—	50mm	CP-2403-ND	.40	.33	.25
3	With Wire Terminals	—	50mm	CP-2404-ND	.44	.36	.28
1	With Screw	—	44mm	CP-2405-ND	.44	.36	.28
4	With Cover	Black	27mm	CP-2406-ND	.44	.36	.28
4	With Cover	Red	27mm	CP-2407-ND	.44	.36	.28
5	With Cover	Black	35mm	CP-2408-ND	.44	.36	.28
	With Cover	Red	35mm	CP-2409-ND	.44	.36	.28
	With Cover	Black	44mm	CP-2410-ND	.52	.43	.33
	With Cover	Red	44mm	CP-2411-ND	.52	.43	.33
	With Screw & Cover	Black	44mm	CP-2412-ND	.60	.49	.38
	With Screw & Cover	Red	44mm	CP-2413-ND	.60	.49	.38
6	With Handle	Black	50mm	CP-2414-ND	.52	.43	.33
		Red		CP-2415-ND	.52	.43	.33

Test Equipment

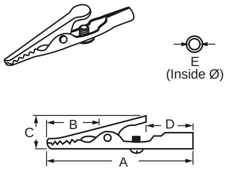
Clips

Fig. 1



Model BU-30/BU-30C shown

Fig. 2



Model BU-60S/BU-60CS shown

Fig. 3

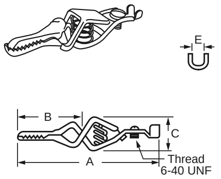
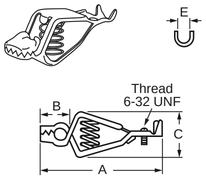


Fig. 4



Model BU-48/BU-48C shown

Fig. 5

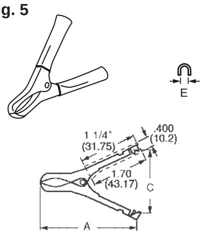


Fig	Description	Dimensions – Inch (mm)					Jaw Opening Inch (mm)	Current Rating	Material	Connection Type	Digi-Key Part No.	Price Each	Mueller Part No.
		A	B	C	D	E							
1	Mini Alligator Clip	1-3/32 (27.78)	7/16 (11.11)	5/16 (7.94)	—	3/32 (2.38)	3/16 (4.8)	5A	Steel	Solder/Crimp	314-1010-ND	.31	BU-30
	Mini Alligator Clip	1-3/32 (27.78)	7/16 (11.11)	5/16 (7.94)	—	3/32 (2.38)	3/16 (4.8)	5A	Copper	Solder/Crimp	314-1012-ND	.39	BU-30C
	Micro Alligator Clip	1-3/32 (27.78)	3/8 (9.52)	5/16 (7.94)	—	3/32 (2.38)	7/32 (5.6)	5A	Steel	Solder/Crimp	314-1017-ND	.59	BU-34
	Micro Alligator Clip	1-3/32 (27.78)	3/8 (9.52)	5/16 (7.94)	—	3/32 (2.38)	7/32 (5.6)	5A	Copper	Solder/Crimp	314-1018-ND	.61	BU-34C
2	Mini Alligator Clip with Barrel	1-1/4" (31.75)	7/16 (11.11)	5/16 (7.94)	1/4 (6.35)	1/8 (3.17)	3/16 (4.8)	5A	Steel	Solder/Crimp	314-1011-ND	.31	BU-30BL
	Alligator Clip with Barrel	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Steel	Solder/Crimp	314-1033-ND	.40	BU-60
	Alligator Clip with Barrel and Screw	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Copper	6/40Screw	314-1034-ND	.79	BU-60CS
	Alligator Clip with Barrel and Screw	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Steel	6/40Screw	314-1035-ND	.48	BU-60S
	Alligator Clip with Barrel	1-31/32 (50.00)	5/8 (15.88)	7/16 (11.11)	3/4 (19.05)	.16 (4.06)	5/16 (7.9)	10A	Stainless Steel	Solder/Crimp	314-1036-ND	1.16	BU-60X
3	Crocodile Clip	2-1/8 (53.97)	15/16 (23.81)	1/2 (12.7)	—	9/64 (3.57)	5/16 (7.9)	5A	Steel	Crimp/6-40 Screw	314-1039-ND	.58	BU-85
	Crocodile Clip	2-1/8 (53.97)	15/16 (23.81)	1/2 (12.7)	—	9/64 (3.57)	5/16 (7.9)	10A	Copper	Crimp/6-40 Screw	314-1040-ND	1.06	BU-85C
4	Heavy Duty Clip	2-27/32 (72.23)	7/16 (11.11)	1-1/8 (28.57)	—	1/4 (6.35)	3/4 (19)	25	Steel	Crimp/8-32 Screw	314-1001-ND	.92	BU-24APN
	Automotive Clip	3 (76.2)	21/32 (16.67)	15/16 (23.81)	—	9/32 (7.15)	3/4 (19)	40	Steel	Crimp/8-32 Screw	314-1002-ND	1.13	BU-25
	Automotive Clip	3 (76.2)	21/32 (16.67)	15/16 (23.81)	—	9/32 (7.15)	3/4 (19)	75	Copper	Crimp/8-32 Screw	314-1003-ND	2.03	BU-25C
	General Purpose Clip	2-7/16 (61.91)	17/32 (13.49)	11/16 (17.46)	—	3/16 (4.76)	5/8 (16)	20	Steel	Crimp/6-32 Screw	314-1006-ND	.84	BU-27
	General Purpose Clip	2-7/16 (61.91)	17/32 (13.49)	11/16 (17.46)	—	3/16 (4.76)	5/8 (16)	40	Copper	Crimp/6-32 Screw	314-1007-ND	1.16	BU-27C
	Pee-Wee Clip	1-17/32 (38.89)	1/4 (6.35)	15/32 (11.91)	—	9/64 (3.57)	5/16 (7.9)	5	Steel	Crimp/6-40 Screw	314-1021-ND	.57	BU-45
	Pee-Wee Clip	1-17/32 (38.89)	1/4 (6.35)	15/32 (11.91)	—	9/64 (3.57)	5/16 (7.9)	10	Copper	Crimp/6-40 Screw	314-1022-ND	.82	BU-45C
	Automotive Analyzer Clip	2 (50.80)	3/8 (9.52)	5/8 (15.88)	—	3/16 (4.76)	1/2 (12.7)	10	Steel	Crimp/6-32 Screw	314-1029-ND	.73	BU-48B
	Automotive Analyzer Clip	2 (50.80)	3/8 (9.52)	5/8 (15.88)	—	3/16 (4.76)	1/2 (12.7)	20	Copper	Crimp/6-32 Screw	314-1030-ND	.90	BU-48C
5	Miniature Plier-Type Clip, Black	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	50	Steel	Crimp/Solder	314-1023-ND	1.14	BU-46A-0
	Miniature Plier-Type Clip, Red	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	50	Steel	Crimp/Solder	314-1024-ND	1.14	BU-46A-2
	Miniature Plier-Type Clip, Black	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	75	Copper	Crimp/Solder	314-1025-ND	1.83	BU-46C-0
	Miniature Plier-Type Clip, Red	2-7/8 (98.42)	—	2 (50.80)	—	9/32 (7.15)	1-1/8 (28.6)	75	Copper	Crimp/Solder	314-1026-ND	1.83	BU-46C-2

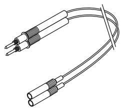
Insulators

Description	Color	Use with Series	Digi-Key Part No.	Price Each	Mueller Part No.
Protective Vinyl Insulator	Black Red	BU-24APN/ 25/25C	314-1004-ND 314-1005-ND	1.06 1.06	BU-26-0 BU-26-2
Flexible Vinyl Insulator	Black Red	BU-27/27C	314-1008-ND 314-1009-ND	.68 .68	BU-29-0 BU-29-2
Tough, Flexible Vinyl Insulator	Black Red	BU-30BL	314-1013-ND 314-1014-ND	.23 .23	BU-31-0 BU-31-2
Skin-tight, Flexible Vinyl Insulator	Black Red	BU-30/30C	314-1015-ND 314-1016-ND	.20 .20	BU-32-0 BU-32-2

Description	Color	Use with Series	Digi-Key Part No.	Price Each	Mueller Part No.
Skin-tight, Flexible Vinyl Insulator	Black Red	BU-34/34C	314-1019-ND 314-1020-ND	.20 .20	BU-36-0 BU-36-2
Durable, Flexible Vinyl Insulator	Black Red	BU-45/45C	314-1027-ND 314-1028-ND	.31 .31	BU-47-0 BU-47-2
Durable, Flexible Vinyl Insulator	Black Red	BU-48B/48C	314-1031-ND 314-1032-ND	.61 .61	BU-49-0 BU-49-2
Tough, Flexible Vinyl Insulator	Black Red	BU-60/60CS/ 60/S/60X	314-1037-ND 314-1038-ND	.23 .23	BU-62-0 BU-62-2
Tough, Flexible Vinyl Insulator	Black Red	BU-85/85C	314-1041-ND 314-1042-ND	.39 .39	BU-87-0 BU-87-2

Test Lead and Prod Kits

All kits feature Mueller's IEC 1010 Compliant test leads and accessories.



Kit 400001 - General Purpose Kit and
Kit 400005 - METERMATE™ XL General Purpose Kit

Kit includes: • Insulated test lead prod-to-banana, 1 red, 1 black (1000V) • Insulated plunger-hook, 1 red, 1 black (1000V) • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)* • Mueller's most popular threaded alligator clip with insulators, 1 red, 1 black*

Kit 400004 - METERMATE™ XL Automotive Kit

Kit includes: • Flexible silicone test lead banana-to-banana, 1 red, 1 black (1000V) • Shrouded double banana plug, 60" (1.52M), twisted pair cable* • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)* • Insulated right angle plunger clamp clip with flexible shaft, 1 red, 1 black (1000V) • Insulated plug-on test prod with cage spring banana tip, 1 red, 1 black (1000V)* • Insulated banana coupler, 1 red, 1 black (1000V) • Insulated plug-on shrouded alligator, 1 red, 1 black (1000V) Large durable briefcase

Kit 400002 - Electrical Kit and Kit 400006 - METERMATE™ XL Electrical Kit

Kit includes: • Flexible silicone test lead 60" (1.52 meter) long, 1 red, 1 black (1000V) • Insulated plug-on shrouded alligator, 1 red, 1 black (1000V) • Insulated right angle plunger jaw clip, 1 red, 1 black (1000V) • Insulated spade lug, 1 red, 1 black* • Insulated plug-on test prod with cage spring banana tip, 1 red, 1 black (1000V)* • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)*

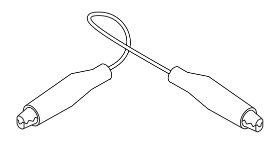
Kit 400003 - Electronic Kit and Kit 400007 - METERMATE™ XL Electronic Kit

Kit includes: • Oscilloscope probe (600V) Manufactured in compliance with MIL-1-45208A* • Scope accessory Kit: 6" ground lead with Mueller clip and insulator, scope probe plunger clip, BNC male-to-probe tip, female adapter, spare probe tip, adjustment screwdriver* • Flexible silicone test lead, 1 red, 1 black (1000V) • Variable length test prod lead 48" (1.22M) to shrouded banana, 1 red, 1 black (1000V) • Insulated plug-on test prod, 1 red, 1 black (1000V)* • Insulated right angle plunger jaw clip, 1 red, 1 black (1000V) • Insulated right angle plunger hook clip, 1 red, 1 black (1000V) • Female BNC-to-double banana plug adapter* • Insulated banana jack to standard banana plug, 1 red, 1 black (1000V)* • Insulated spade lug, 1 red, 1 black *

Description	Digi-Key Part No.	Price Each	Mueller Part No.
Test Leads Kits			
General Purpose Kit with heavy-duty clear vinyl pouch	314-1043-ND	19.12	400001
Metermate XL General Purpose Kit with large durable briefcase	314-1047-ND	86.18	400005
Metermate XL Automotive Kit with large durable briefcase	314-1046-ND	162.16	400004
Deluxe Electrical Kit with tri-fold pouch	314-1044-ND	73.52	400002
Metermate XL Electrical Kit with large durable briefcase	314-1048-ND	73.31	400006
Electronics Kit with heavy-duty clear vinyl pouch	314-1045-ND	100.00	400003
Metermate XL Electronic Kit with large durable briefcase	314-1049-ND	171.33	400007
Test Prod Pairs and Kits			
Unshrouded Right Angle Banana Plug Kit	314-1050-ND	10.08	110003
Shrouded Right Angle Banana Plug Pair of Leads	314-1055-ND	7.84	110009
Shrouded Right Angle Banana Plug Kit	314-1051-ND	10.08	110004
Unshrouded Banana Plug Pair of Leads	314-1056-ND	7.20	110011
Unshrouded Banana Plug Kit	314-1052-ND	10.08	110005
Shrouded Banana Plug Pair of Leads	314-1054-ND	7.36	110007
Shrouded Banana Plug Kit	314-1053-ND	10.08	110006
Unshrouded Banana Plug Pair of Leads	314-1057-ND	7.84	110012

* IEC 1010 standard and Ⓤ does not apply

Jumper Wire Test Leads

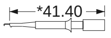


Handy test leads with insulated alligator clips attached to each end. Each package contains black, red, white, green and yellow jumpers.

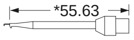
Description	Digi-Key Part No.	Price
Standard Test Leads, 2 Each, 15” (38.10cm) long 27 AWG wires (10 Pkg.)	GC396-ND	6.61
Heavy Duty Test Leads, 1 Each, 22” (55.88cm) long 21 AWG wires (5 Pkg.)	GC397-ND	5.80

Electronic Specialty Products

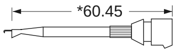
Probe-It



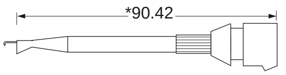
MICRO



MINI



STANDARD



MAXI

Specifications:

Contact: Phosphor bronze.

Body: Nylon.

3M new series of Probe-It™ plunger-actuated clips make test connections to individual component leads faster and easier. Simply press cap to extend the hook contact, place on component lead or wire under test, and release for hands-free troubleshooting and circuit testing.

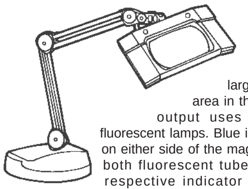
When removed from the lead the hook contact retracts into the plastic tip to minimize the possibility of shorting components.

Description	Color	Digi-Key Part No.	Price / Pkg.
Micro Probe-It*	Red	923830-RD-ND	8.04
	Black	923830-BK-ND	
	Blue	923830-BU-ND	
	Green	923830-GN-ND	
	Yellow	923830-YL-ND	
	White	923830-WT-ND	
Mini Probe-It*	Red	923835-RD-ND	7.76
	Black	923835-BK-ND	
	Blue	923835-BU-ND	
	Green	923835-GN-ND	
	Yellow	923835-YL-ND	
	White	923835-WT-ND	
Standard Probe-It	Red	923840-RD-ND	10.76
	Black	923840-BK-ND	
Maxi Probe-It*	Red	923845-RD-ND	9.30
	Black	923845-BK-ND	
Micro Probe-It Assort. †	1 of each	923848-ND	10.95
Mini Probe-It Assort. †	1 of each	923850-ND	11.39

* 2 per package † 6 per package

LAMPS & ACCESSORIES

Wave + Plus Series Magnifiers



3.5-DIOPTER LENS

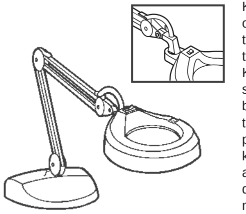
The Luxo Wide Angle Viewing Enlargement system with stadium shaped lens offers the largest distortion-free viewing area in the industry. Improved light output uses two 13-watt compact fluorescent lamps. Blue indicator lights are located on either side of the magnifier head. When one or both fluorescent tubes are in operation, the respective indicator light(s) is illuminated. Magnification 3/4X: Focal length: 13” (33.02cm); viewing area: 6 3/4” (17.15cm). ABS molded housing. Independently switched, energy-efficient, long-life compact fluorescent lamps offer both shadow-free dual light two-dimensional and single light three-dimensional viewing. UL listed (13W PL Compact Bulb)

Arm Inch (cm)	Mount	Digi-Key Part No.	Price Each	Luxo Part No.
45 (114.30) K	Clamp Bracket	L845LG-ND	428.31	17845LG
30 (76.20) K	Weighted Base	L847LG-ND	505.31	17847LG
45 (114.30)K	Clamp Bracket	L841LG-ND	620.81	17841LG
30 (76.20)K	Clamp Bracket	L842LG-ND	620.81	17842LG
30 (76.20)K	Weighted Base	L843LG-ND	697.81	17843LG
45 (114.30)K	Clamp Bracket	L900BK-ND	659.31	17900BK
30 (76.20)K	Clamp Bracket	L902BK-ND	659.31	17902BK
30 (76.20)K	Weighted Base	L904BK-ND	731.50	17904BK

Replacement Bulbs

Description	Digi-Key Part No.	Price Each	Luxo Part No.
22 Watt T-9 Bulb for KFM/LC/FM Series	L540-ND	16.36	31640
15 Watt T-8 Bulb for FL Series	L541-ND	13.48	31641
13 Watt Fluorescent Bulb	L5205-ND	16.36	36205
5 Watt Halogen Lamp	L577-ND	14.44	34977
1.5" 10-Diopter Lense	L50206-ND	115.50	50206

KFM Series Magnifiers



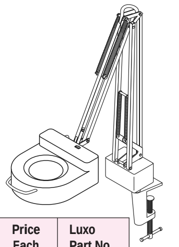
KFM's multi-lens capability offers a wider range of distortion-free magnification than any other magnifier. KFM's patented internal spring arm offers perfect balance and full adjustability to an infinite number of positions. There are no knobs to tighten, nothing to adjust. The 5” (12.7cm) diameter lenses are mounted in die-cast aluminum housing. Comes with a 22W energy-efficient fluorescent bulb which provides cool, shadow-free illumination. (22W T-9 Bulb)

Lens Type	“K” Arm Inch (cm)	Color	Digi-Key Part No.	Price Each	Luxo Part No.
Clamp Bracket					
5d	45 (114.30)	Black	L230B-ND	282.01	17115BK
5d	45 (114.30)	Lt. Gray	L230LG-ND	282.01	17115LG
Weighted Base					
3d	30 (76.20)	Black	L235B-ND	356.13	17253BK
3d	30 (76.20)	Lt. Gray	L235LG-ND	356.13	17253LG

Additional Lenses

Diameter Inches	Description	Digi-Key Part No.	Price Each	Luxo Part No.
4"	4-Diopter	L50201-ND	52.94	50201
3 1/8"	8-Diopter	L50202-ND	57.75	50202

60 Watt Incandescent Lamp - Less Bulb

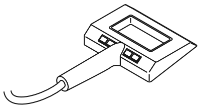


33” reach clamp-on magnifier light, 3-diopter lens.

(Bulb not included).

Mount	Digi-Key Part No.	Price Each	Luxo Part No.
Clamp Bracket,Black	L296BK-ND	49.09	L296BK

Hand Held UV Magnifier

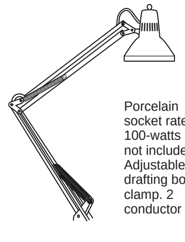


Provides both ultra-violet and standard white fluorescent lighting

Description	Digi-Key Part No.	Price Each	Luxo Part No.
4" x 2" Viewing Area, 5d (2.25x lens)	L16401-ND	303.19	16401

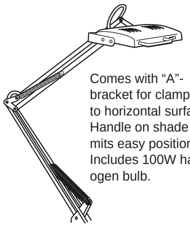
Ledu Task Master Series

UN12D Series



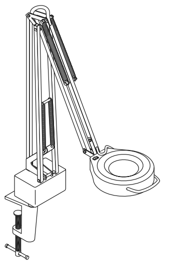
Porcelain socket rated for 100-watts (bulb not included). Adjustable drafting board clamp. 2 conductor cord.

L554 Series Halogen Worklight



Comes with “A”-bracket for clamping to horizontal surfaces. Handle on shade permits easy positioning. Includes 100W halogen bulb.

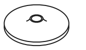
IM12D Series



Clamp-on 22-watt circline fluorescent lamp, 3-conductor cord set. The L712 is a 3 diopter lens and the L7125 is a 5 diopter lens.

“L” Arm Inch (cm)	Color	Digi-Key Part No.	Price Each	Luxo Part No.	Luxo Series
Clamp Bracket					
42 (106.68)	Black	L112MB-ND	93.45	L112MB	UN12D
42 (106.68)	Black	L123BK-ND	153.30	L554BK	L554
42 (106.68)	White	L712WT-ND	168.44	L712WT	IM12D
42 (106.68)	White	L7125WT-ND	182.88	L7125WT	IM12D

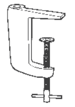
Weighted Base



Description	Digi-Key Part No.	Price Each	Luxo Part No.
Weighted Base for L712 Series	L60008WT-ND	51.98	60008WT

Clamp Bracket

For edgemounting on horizontal surfaces.



L501BK-ND Black
L501LG-ND Lt. Gray
$13.48 each

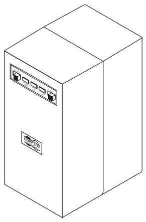
Wall Bracket

For permanent mounting on vertical surface.

L503BK-ND Black
L503LG-ND Lt. Gray
$13.48 each

TRIPP·LITE
POWER PROTECTION

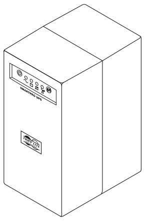
Standby UPS Systems



Tripp Lite's BC Personal provide excellent basic battery backup for home and small office personal computers. BC PRO units are ideal for network workstations and hubs. Battery backup maintains your Internet or network connection, allowing you to work online through short blackouts or safely shut down during longer ones. System provides excellent battery backup for home and small office personal computers and network workstations. 1050 VA of battery backup allows you to work through short blackouts or safely shut down during longer ones, diagnostic LEDs and a built in serial port that works with PowerAlert Software to provide automatic unattended shutdown. Internet Office UPS System provides complete power protection for your entire computer set-up, even power hungry peripherals. Built-in RJ11 jacks prevent surges from damaging your modem/fax equipment. A 6 ft. telephone cord is also included. $25,000/$50,000 Ultimate Lifetime Insurance (model dependent) protects both backup and equipment plugged into it. No warranty cards required for coverage! • All UPS's are UL Approved • 2 year warranty • 115VAC

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
BC Personal Standby Backup			
300VA, 175W, 2 Outlets	TL196-ND	82.00	BC PERS 300
450VA, 265W, 3 Outlets	TL197-ND	112.00	BC PERS 450
BC PRO Standby Backup			
600VA, 345W, 4 Outlets	TL198-ND	163.00	BC PRO 600
850VA, 570W, 4 Outlets	TL127-ND	399.00	BC PRO 850
1050VA, 705W, 6 Outlets	TL128-ND	449.00	BC PRO 1050
1400VA, 940W, 6 Outlets	TL129-ND	569.00	BC PRO 1400
Internet Office Standby Backup			
BC, 300VA, 175W, 2 Outlets	TL200-ND	109.00	BC INTERNET 300
500VA, 280W, 6 Outlets	TL201-ND	121.00	INTERNET OFFICE 500
700VA, 425W, 4 Outlets	TL202-ND	171.00	INTERNET OFFICE 703
350VA, 180W, 6 Outlets, 6' Cord	TL235-ND	85.00	INTERNET350
Low Profile 525VA, 300W, 6 Outlets	TL236-ND	109.00	INTERNETOFFICE525

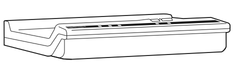
Smart Pro USB



The new SmartPro 500 USB and Smart Pro 700 USB UPS Systems offer all the features you could ask for into one purchase: USB connectivity, automatic voltage regulation, reliable battery backup, premium surge suppression and unattended shut-down software. Built in RJ11 jacks for modem/fax line protection. A unique split-outlet design offers 6 outlets, 3 with battery backup and surge protection and 3 with surge-only protection. This intelligent design allows users to connect not only a CPU, monitor and modem, but also heavy draw peripherals such as printers and scanners. All models include $50,000 Ultimate Lifetime Insurance for connected equipment.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Smart Pro USB Backup			
500VA, 300W, 6 Outlets	TL223-ND	154.00	SMART 500 USB
700VA, 425W, 6 Outlets	TL224-ND	190.00	SMART 700 USB

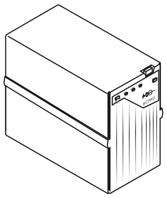
Command Console
Under Monitor Protection



• Superior ISOBAR® surge and RFI/EMI noise filtration • 15 amp circuit breaker with reset • CCC4 features a slimline plastic housing and diagnostic LEDs

TL084-ND Compact Command Console, 4 Outlet, 5 yr. Warranty (Mfg. No. CCC4)....................**$19.95**

SMART Pro Net Intelligent Standby UPS Systems

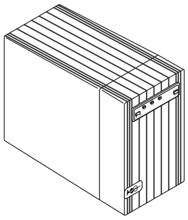


Tripp Lite's Smart Pro Net UPS system provides intelligent, line-interactive battery backup for networks and servers. Smart PRO Net systems allows you to work through short blackouts or safely shut down during longer ones and a built-in serial port that works with PowerAlert Software to provide automatic unattended shut-down. Tripp Lite's PowerAlert Software is the only UPS soft-ware capable of managing every type and brand of UPS on your network, from every manufacturer, and it is Year 2000 compliant. $50,000 Ultimate Lifetime Insurance. No warranty cards required for coverage! • 115VAC

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Smart Pro Net Rack Mount			
700VA, 450W, 8 Outlets	TL161-ND	459.00	SMART700RM
1050VA, 705W, 8 Outlets	TL162-ND	599.00	SMART1050RM
1400VA, 940W, 6 Outlets	TL140-ND	799.00	SMART1400RM
Smart Pro Net Backup			
450VA, 280W, 4 Outlets	TL157-ND	239.00	SMART450NET
700VA, 425W, 4 Outlets	TL158-ND	339.00	SMART700
1050VA, 705W, 6 Outlets	TL159-ND	539.00	SMART1050
1400VA, 940W, 6 Outlets	TL160-ND	699.00	SMART1400
1400VA, 940W, 8 Outlets	TL237-ND	929.00	SMART1400RM2U
2.2KVA, 1600W, 8 Outlets	TL238-ND	1170.00	SMART2200RM2U
3KVA, 2250W, 9 Outlets	TL239-ND	1409.99	SMART3000RM2U

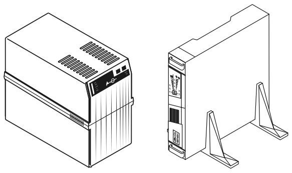
OmniSmart PnP Interactive Standby UPS Systems

Includes all the features of the Smart Pro series plus adds the capability of detailed self test to all major functions of UPS and offers automatic inverter shut-down 20 seconds after your file server has performed an un-attended shutdown, the Omni-Smart will also power itself down to save battery power. Network managers can view power conditions about any fileserver to include input voltage, load capacity, battery conditions, operating temperatures and output voltage and frequency data in easy to read pull down menus. • 115VAC



Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Omni Smart Standby Backup			
300VA, 180W, 3 Outlets	TL204-ND	147.00	OMNISMART300
500VA, 300W, 6 Outlets	TL175-ND	189.00	OMNISMART500
700VA, 425W, 6 Outlets	TL174-ND	279.00	OMNISMART700
850VA, 570W, 4 Outlets	TL169-ND	479.00	OMNISMART850
1050VA, 705W, 6 Outlets	TL170-ND	539.00	OMNISMART1050
1400VA, 940W, 6 Outlets	TL171-ND	649.00	OMNISMART1400

True On-Line UPS Systems With Zero Transfer Time

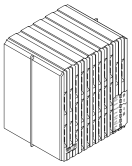


Tripp Lite gives you the benefits of zero transfer time UPS protection at an affordable price. These units provide full brownout-blackout protection and a fully regulated output, as each unit continuously conditions all power to your equipment. Full spike and surge protection as well as noise filtering provided by Tripp Lite's double conversion on-line power.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
On-Line UPS 1000VA, 800W, 120V, 6 Outlets	TL216-ND	659.00	SU1000RT2U
On-Line UPS 2200VA, 1600W, 120V, 6 Outlets	TL217-ND	1499.00	SU2200RT2U
On-line UPS 2400W, 120V, 9 Outlets	TL240-ND⁎	1698.99	SU3000RT3U

⁎ UPS can be either Rack Mount or Tower Configured

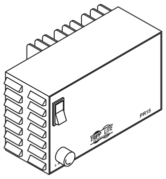
Line Conditioners



Line Conditioners let you work through brownouts for unlimited time periods, without using emergency power such as UPS systems. Line conditioners automatically adjust under and over voltages to provide safe computer grade AC power meeting ANSI C84.1 specifications. Full surge protection and noise filtering to eliminate erratic voltages coming into your equipment. Lifetime surge protection warranty (lightning strikes) and a full 2-year product warranty on all line conditioners.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
600W, 4 Outlets	TL039-ND	135.00	LS604
1200W, 4 Outlets	TL013-ND	172.00	LC1200
1800W, 6 Outlets	TL014-ND	255.00	LC1800
2400W, 6 Outlets	TL044-ND	385.00	LC2400
Rack Mount, 2400W, 14 Outlets	TL028-ND	499.00	LCR2400

Precision - Regulated DC Power Supplies



Ideal for commercial/land-mobile 2-way and ham radios, 12 volt point of sale displays, test bench, tape players, amplifiers and more.

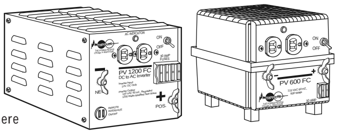
Features: • Current-limiting electronic foldback: for automatic overcurrent protection in case of overload; time controlled on 7 amp and larger models • Regulated output voltage maintains up to 95% of no load value • High quality filtering provides for very low ripple/low noise operation • Large heat sinks and vented cabinet provide cool operation for continuous use and long life of the unit

Digi Key Part No.	General Applications
TL185-ND	Home use CBs, Quality Car Tape Players
TL186-ND	Home use Single Sideband CB's, High Power Car Stereos
TL187-ND	30 Watt Transmitters, VHF-UHF, 2-way Radios/Amps
TL188-ND	40 Watt Transmitters, VHF-UHF, 2-way Radios/Amps
TL189-ND	50 Watt Transmitters, VHF-UHF, Commercial Radios
TL190-ND	75-100 Watt Ham-UHF-VHF, Commercial Radios
TL191-ND	150-200 Watt Ham-UHF-VHF, Commercial Radios
TL192-ND	250-300 Watt Ham-UHF-VHF, Commercial Radios

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Power Supply, 13.8VDC, 3A	TL185-ND	33.50	PR3
Power Supply, 13.8VDC, 3A	TL173-ND‡	46.00	PR3UL
Power Supply, 13.8VDC, 4.5A	TL195-ND	39.00	PR4.5
Power Supply, 13.8VDC, 7A	TL186-ND	55.00	PR7
Power Supply, 13.8VDC, 10A	TL187-ND	79.00	PR10
Power Supply, 13.8VDC, 12A	TL188-ND	85.00	PR12
Power Supply, 13.8VDC, 15A	TL189-ND	118.50	PR15
Power Supply, 13.8VDC, 25A	TL190-ND	165.00	PR25
Power Supply, 13.8VDC, 40A	TL191-ND	211.00	PR40
Power Supply, 13.8VDC, 50A	TL192-ND	262.00	PR50

‡ UL Approved Model

DC to AC Power Inverters



Solid-state electronic power inverters change ordinary 12VDC to 115VAC. Simply plug in your computer, stereo, or household appliances for convenient portable AC power. Use on boats, campers, cars and anywhere 12VDC is available.

Automotive Inverters are housed in a sturdy portable metal case with 12V cigarette lighter plug built-in. Ideal for laptops, test equipment and TV-VCR units.

General Purpose Inverters are low cost power inverters for equipment that doesn't require frequency controlled outputs or high inrush-startup currents. Ideal for most electronic test equipment.

Peak Power models are able to handle up to twice their normal wattage for short periods of time delivering high start-up current, frequency controlled AC, making them ideal for motors, refrigerators, power tools and microwaves.

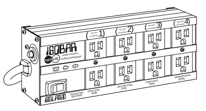
APS Inverters feature modified sine wave, frequency controlled, fully regulated output. These units automatically sense and switch AC between line power and battery power. A built-in recharge circuit will recharge the battery when line voltage becomes available. Perfect for sump pumps, emergency lighting, and more.

Description (H x W x D)	Digi-Key Part No.	Price Each	Tripp Lite Part No.
Automotive Inverters			
140W, 1 Outlet with Cigarette Plug, 1.75" x 3" x 6"	TL193-ND	42.00	PV140
300W, 2 Outlet with Cigarette Plug, 1.75" x 4.5" x 6"	TL194-ND	65.00	PV300
500W, 3 Outlet, 2.5" x 5" x 8" (Cables are Included)	TL172-ND	119.00	PV500
Peak Power Inverters (Frequency Controlled)			
500W, 2 Outlet, 7" x 7" x 10"	TL146-ND	255.00	PV500FC
1000W, 2 Outlet, 7" x 7" x 10"	TL147-ND	318.00	PV1000FC
2000W, 2 Outlet, 7.2" x 8.5" x 16.5"	TL148-ND	529.00	PV2000FC
2400W, 24VDC In 2 Outlet, 7.2" x 8.5" x 16.5"	TL149-ND	717.00	PV2400FC
Ultra Compact Inverters			
1000W, 3 Outlet, 3.9" x 6" x 12"	TL225-ND	285.00	PV1000HF
1800W, 3 Outlet, 3.9" x 10" x 9.75"	TL226-ND	395.00	PV1800HF
APS Premium Inverters with Charger			
500W, 2 Outlet, 7" x 7" x 10"	TL218-ND	417.00	APS512
1000W, 2 Outlet, 7.2" x 8.25" x 16.5"	TL220-ND	369.53	APS1024
2000W, 2 Outlet, 7.2" x 8.5" x 16.5"	TL221-ND	939.00	APS2012
2400W, 2 Outlet, 7.2" x 8.5" x 16.5"	TL222-ND	1155.00	APS2424

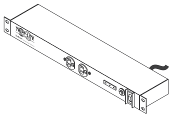
ISOBAR® Premium Surge Suppressors

ISOBAR® is the most electronically advanced surge suppressor available today. Includes isolation — preventing connected equipment from interfering with each other. The only surge suppressor with 3 UL listings. **Only ISOBAR® Provides:** • Superior RFI/EMI noise suppression • "Cascade Circuitry" to increase protection for more sensitive devices • Surge Suppression up to 13,000 amp spikes • Rack Mount model (IBAR-12) for industrial and sound applications • Up to 24 active filtering components • Multiple filtering components to safeguard against equipment interaction • Meets IEEE 587 A and B Specifications • Less than 5 nanosecond transient response time.

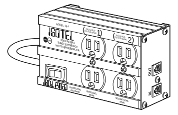
ISOBAR®



Rack Mount



Isotel



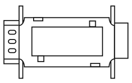
Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
ISOBAR®, 2 Outlet, Direct Plug-in	TL002-ND*	48.00	ISOBLOK2-0
ISOBAR®, 2 Outlet, 6' Cord	TL003-ND*	59.95	IBAR2-6
ISOBAR®, 4 Outlet, 6' Cord, with Diag. LED	TL076-ND†	89.95	ISOBAR4ULTRA
ISOBAR®, 6 Outlet, 6' Cord, with Diag. LED	TL077-ND†	104.95	ISOBAR6ULTRA
ISOBAR®, 8 Outlet, 12' Cord, with Diag. LED	TL078-ND†	116.95	ISOBAR8ULTRA
ISOBAR®, 8 Outlet, 12' Cord, with Remote Power Switch	TL050-ND*	129.50	ISOBAR8RM
Isobar 12 Rack Mount Surge Suppressor			
Rack Mount, 12 Outlet, 12' Cord	TL027-ND*	169.00	IBAR12
Rack Mount, with Diag., 12 Outlet, 12' Cord	TL227-ND	159.00	IBAR12ULTRA
Isobar with Telephone			
Isotel, 4 Outlet with 2 RJ11 Jacks for Telephone Line Protection	TL009-ND*	99.95	ISOTEL
Isotel, 6 Outlet, 6' Cord with Fax Protection	TL081-ND†	119.95	ISOTEL6ULTRA
Isotel, 8 Outlet, 12' Cord with Fax Protection	TL082-ND†	134.95	ISOTEL8ULTRA
Isofax, 2 Outlet, Direct Plug-in, with 1 RJ11 Jack for One Data Line Circuit	TL080-ND*	69.95	ISOBARULTRAFAX

* ULTIMATE® LIFETIME WARRANTY covers both the ISOBAR® and the connected equipment from surge related damage, including direct lightning strikes, up to $10,000 . . . for life! († coverage up to $25,000)

Line Surge Suppressors

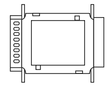
Tripp Lite's dataline surge suppressors safely divert damaging surges before they reach your critical network equipment. Protects I/O and Serial ports, modem-fax cards, network interface cards and motherboards • 6000V Clamping at <1 picosecond response time

Fig. 1



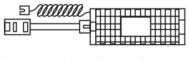
Protects RS-232 DB9 serial ports of data terminal and data communication equipment including PCs, printers, fax/modems, etc. User configurable for either male or female captive ports.

Fig. 2



Protects any RS-232 serial or parallel DB25 regardless of cable configuration. User configurable for either male or female captive ports.

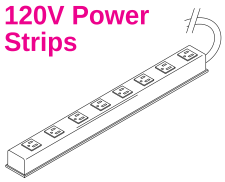
Fig. 3



Protects both single and two line telephone equipment including internal and external modems, fax machines, answering machines, etc.

Fig.	Lines Protected	Interface Type	Digi-Key Part No.	Price Each	Tripp Lite Part No.
1	1-9 and Chassis	DB9	TL151-ND	24.50	DB9
2	1-8, 20, and Chassis 1-25 and Chassis	DB25 DB25	TL152-ND TL153-ND	25.95 35.75	DB25 DB25-ALL
3	4, 5 and 3, 6	RJ11/RJ45	TL154-ND	32.50	DTEL2

120V Power Strips

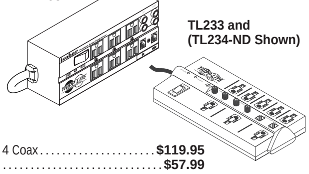


Tripp Lite power strips are a convenient solution for applications in which multiple AC outlets are needed without surge or line noise protection. Power strips are ideal for mounting inside rack en-closures or on walls, workbenches and more. Sturdy metal housing stands up to demanding network, lab or factory environments. Comes with a 15' Cord.

Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
24" Power Outlet Strip, 8 Outlet	TL206-ND	64.99	PS2408
36" Power Outlet Strip, 12 Outlet	TL207-ND	74.99	PS3612
48" Power Outlet Strip, 16 Outlet	TL208-ND	75.99	PS4816
19" Rack Mt. Outlet Strip, 12 Outlet	TL213-ND	57.50	RS-1215

DSS Surge Suppressor

Telephone protection combined with coaxial connectors and AC Surge protection. Designed to protect all highend video and audio equipment, such as large-screen TVs, satellite equipment, DSS systems, VCRs, CD changers and stereo receivers. ULTIMATE® LIFETIME WARRANTY covers both the ISOBAR® and the connected equipment from surge related damage, including direct lightning strikes.



TL205-ND

TL233 and (TL234-ND Shown)

TL205-ND 6 Outlet ISOBAR® Protector with 2 RJ11 Jacks and 4 Coax....................**$119.95**
TL233-ND 8 Outlet Protector with 2 RJ11 Jacks and 4 Coax..............................**$57.99**
TL234-ND 8 Outlet Protector w/2 RJ11 and 2 RJ45 (Ethernet) Jacks and 2 Coax. **$63.50**

Economy Surge Suppressors

For a more economical approach to power protection, Tripp Lite offers six units for your specialized needs.

Fig. 1 - Super 8

Performance in a low cost spike and line noise suppressor. Suppresses up to 54,500 amps. UL 1449 approved. Lifetime warranty.

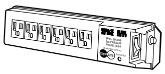


Fig. 2 - Spike BLOK

Performance in a low cost spike and line noise suppressor. Suppresses up to 27,000 amps. UL 1449 approved. 2 year warranty.

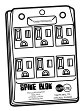


Fig. 3 - Spike Stik

Effective spike suppressor. Suppresses spikes up to 27,000 amps. Lifetime warranty.

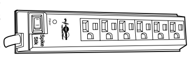


Fig. 4 - Striker

Protects equipment from damaging AC surges, spikes, and line noise. Suppresses spikes up to 36,000 amps. Lifetime warranty.

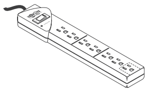


Fig.	Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
1	Super 8, 8 Outlet, 8' Cord	TL011-ND	44.95	SK6-6
2	Spike BLOK, 6 Outlet, Direct Plug-in	TL010-ND	18.00	SK6-0
3	Spike Stik, 6 Outlet, 6' Cord	TL026-ND	24.95	STIK
4	Striker, 7 Outlet, 6' Cord	TL083-ND	11.99	STRIKER
—	Super 7, 7 Outlet, 7' Cord with LEDs	TL085-ND	27.99	SUPER7
—	Low Cost, AC Protection, 6 Outlet, 2' Cord	TL229-ND	7.99	TLP602

Modem/Fax Protectors

Protects modems, phone lines and faxes from damaging spikes and harmful line noise.

Fig. 1 — Super 8

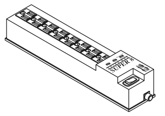


Fig. 2 — Super 7 Audio Video

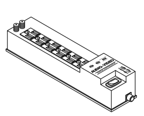


Fig. 3 — SMPGS Traveler

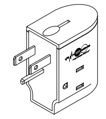


Fig. 4 — TSB

Fig. 5 — TLP Series

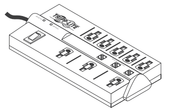
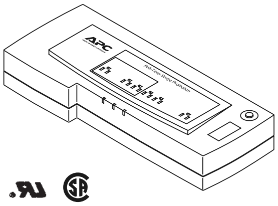


Fig.	Description	Digi-Key Part No.	Price Each	Tripp Lite Part No.
1	Super 8 w/Fax Protection, 7 Outlet, 8' Cord	TL181-ND	36.74	S8+TEL
2	Super 7 Audio Video with "F" Connector, 6 Outlet	TL182-ND	39.95	SUPER7COAX
3	Direct Plug-in 1 AC Outlet, RJ11 Fax Supp. Circuit	TL008-ND*	25.95	TRAVELER
4	Premium 3-Stage Data Line Protection, 2 Year Warranty	TL015-ND	59.95	TSB
5	Low Cost, AC and Telephone Protection, 6 Outlet, 4' Cord	TL230-ND	11.99	TLP604TEL
5	Low Cost, Dual Phone and AC Protection, 8 Outlet, 8' Cord	TL232-ND	43.50	TLP808TEL
—	Economical Data Line Protection, 2 Year Warranty	TL007-ND	19.95	MP
—	Super 7, 6 Outlet, 7' Cord, with Fax Protection	TL105-ND	35.99	S7+TEL
—	Protects Modem/Fax/Phone, 7 Outlet, 6' Cord	TL231-ND	22.99	SUPER6TEL

* ULTIMATE® LIFETIME WARRANTY (on select models) covers your product and the connected equipment from surge related damage, including direct lightning strikes, up to $10,000 . . . for life! Coverage up to $5,000

APC
AMERICAN POWER CONVERSION

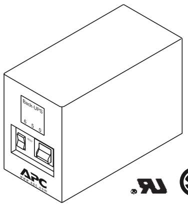
Back-UPS Low Profile Home and Office



These Low Profile Back-UPS were created for home small business use and allow convenient access to the outlets whether you position the Back-UPS on your desktop, mount it on a wall or place it on the floor under your desk. 6 Outlets total with 3 dedicated to backup and surge and the other 3 are surge only. Also includes Internet ready phone/fax/DSL dataline protection.
2 year Warranty. $25,000 lifetime equipment protection policy.

Output (W)	Outlets	Applications	Modem/ Fax Protection	Dimensions (H x W x D)	Digi-Key Part No.	Price Each	APC Part No.
225	3 UPS/ 3 Surge Only	Home/Office PC, Desktop, Wall, Floor	Yes	2.7" x 17.0" x '7.0"	388-1000-ND	85.12	BF350
325	3 UPS/ 3 Surge Only	Home/Office PC, Desktop, Wall, Floor	Yes	2.7" x 17.0" x '7.0"	388-1001-ND	109.06	BF500

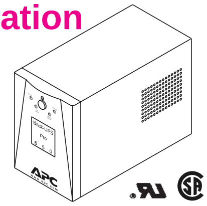
Back-UPS Home and Office Series



The Back-UPS series offer plenty of runtime to ride through momentary outages or shutdown your system in the event of extended outages. Back-UPS 500 and 650 also include multipath protection, enough outlets to safeguard your entire system plus fax/modem protection. Perfect for home or office use.
2 year Warranty. $25,000 lifetime equipment protection policy.

Output (W)	Outlets	Applications	Modem/ Fax Protection	Dimensions (H x W x D)	Digi-Key Part No.	Price Each	APC Part No.
210	2 UPS, 1 Surge Only	Home PC, Desktop Workstation	Yes	6.0" x 3.4" x 13.1"	388-1002-ND	91.77	BK350
330	2 UPS, 1 Surge Only	Tower PC, Desktop Workstation	Yes	6.6" x 4.7" x 14.2"	388-1003-ND	133.00	BK500
400	3 UPS, 3 Surge Only	Tower PC, Desktop Workstation	Yes	6.6" x 4.7" x 14.2"	388-1004-ND	172.90	BK650MC

Back-UPS Pro Series and Back-UPS Multiple Workstation



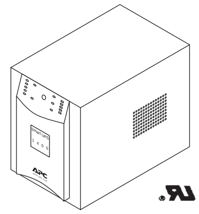
Back-UPS Pro are high performance battery backup power with smart power management. Perfect for Network management of PC Workstations. Includes Internet ready phone/fax/DSL dataline protection. Automatic voltage regulation (AVR) consistently adjusts incoming voltage irregularities to save battery runtime. Battery replacement is user replaceable and hot swappable.
2 year Warranty. $25,000 lifetime equipment protection policy.

Output (W)	Outlets	Applications	Modem/ Fax Protection	Dimensions (H x W x D)	Digi-Key Part No.	Price Each	APC Part No.
Back-UPS Pro Series							
180	2 UPS, 1 Surge Only	Home PC, Desktop Workstation	Yes	5.9" x 3.4" x 13.3"	388-1005-ND	133.00	BP280S
260	3 UPS, 3 Surge Only	Tower PC, Loaded Workstation	Yes	6.6" x 4.7" x 14.5"	388-1006-ND	212.80	BP420S
410	3 UPS, 3 Surge Only	Tower PC, Loaded Workstation	Yes	6.6" x 4.7" x 14.5"	388-1007-ND	285.95	BP650S

Output (W)	Outlets	Applications	Modem/ Fax Protection	Dimensions (H x W x D)	Digi-Key Part No.	Price Each	APC Part No.
Back-UPS Pro Multiple Workstation							
670	6	Multiple PC's/ Workstations	Yes	8.5" x 6.7" x 17.3"	388-1008-ND*	402.99	BP1000
950	6	Multiple PC's/ Workstations	Yes	8.5" x 6.7" x 17.3"	388-1009-ND*	518.70	BP1400

* Auto-shutdown software not included with these systems

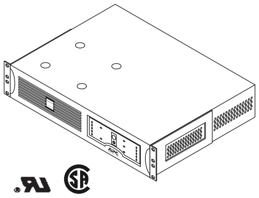
Smart-UPS Tower



Smart-UPS systems include all of the features of Back-UPS Pro but are designed for high powered multi-server applications. These tower systems are perfect for backup and protection of telcom systems, multiple servers, UNIX, and data storage systems. File saving auto shutdown software for Windows 95/98 and NT, Windows 2000 and Windows Me.
2 year Warranty $150,000 lifetime equipment protection policy.

Output (W)	Out-lets	Input Line	Applications	Comm. Port	Dimensions (H x W x D)	Digi-Key Part No.	Price Each	APC Part No.
260	4	NEMA 5-15P	Network File Server	DB-9	6.6" x 4.7" x 14.5"	388-1045-ND	234.08	SU420NET
390	4	NEMA 5-15P	Network File Server	DB-9	6.6" x 4.7" x 14.5"	388-1046-ND	307.23	SU620NET
450	4	NEMA 5-15P	Network File Server	DB-9	6.2" x 5.4" x 14.1"	388-1047-ND	371.07	SU700NET
670	8	NEMA 5-15P	Network File Server	DB-9 SmartSlot USB	8.5" x 6.7" x 17.3"	388-1060-ND *NEW!*	537.32	SUA1000
980	8	NEMA 5-15P	Multiple File Server	DB-9 SmartSlot USB	8.5" x 6.7" x 17.3"	388-1059-ND *NEW!*	698.25	SUA1500
1600	8	NEMA 5-20P	Multiple File Server, Phone System	DB-9	17.0" x 7.7" x 21.5"	388-1050-ND	1000.16	SU2200NET

UPS Rackmount Series

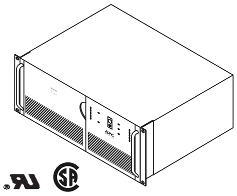


Rack Mounted UPS systems provide sensitive rack mount equipment with backup safety and surge protection. All rack mount systems are compatible with all popular rack systems, including the Compaq server rack. Using only 2 or 3 vertical rack spaces, APC's rack mount series allow more room to rack mount other critical equipment. 2 year Warranty. $25,000 lifetime equipment protection policy.

Output (W)	Out-lets	Applications	Comm. Port	Unit Hgt. (U)	Dimensions (H x W x D)	Digi-Key Part No.	Price Each	APC Part No.
450	6	Network File Server	DB-9	2U	3.5" x 19.0" x 18.0"	388-1051-ND	469.49	SU700RM2U
670	6	Network File Server	DB-9	2U	3.5" x 19.0" x 18.0"	388-1052-ND	607.81	SU1000RM2U
950	6	Multiple File Server	DB-9	2U	3.5" x 19.0" x 18.0"	388-1053-ND	783.37	SU1400RM2U
1600	8	Multiple File Server ,Phone System*	DB-9	3U	5.25" x 19.0" x 25.0"	388-1054-ND	1089.27	SU2200RM3U
2250	8	Multiple File Server, Phone System*	DB-9	5U	8.75" x 19.0" x 17.75"	388-1055-ND	1629.25	SU3000RMNET

* Internet working

UPS Extended Run Rack Mount Series



- Expandable, extended run power by adding battery packs
- Automatic Voltage Regulation (AVR) corrects under and overvoltages
- File-saving, auto-shutdown software Windows 95/98, Windows NT, Windows 2000, and Windows Me
- Built in accessory card slot
- User-replaceable, hot-swappable batteries
- 2 year product warranty
- $25,000 lifetime equipment protection policy

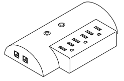
Output (W)	Outlets	Input Line	Applications	Comm. Port	Dimensions (H x W x D)	Digi-Key Part No.	Price Each	APC Part No.
950	6	NEMA 5-15P	Multiple File Server, Phone System	DB-9	5.12" x 17.0" x 15.5"	388-1056-ND	903.07	SU1400RMXL3U
1600	8	NEMA L5-30P	Multiple File Server, Phone System	DB-9	8.8" x 19.0" x 17.8"	388-1057-ND	1594.67	SU2200RMXLNET
1600	2	NEMA L6-20P	Multiple File Server, Phone System	DB-9	8.8" x 19.0" x 17.8"	388-1058-ND	1594.67	SU2200RMXLTNET

AMERICAN POWER CONVERSION

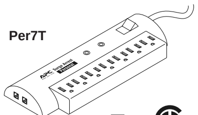
Basic Personal Surge Protection

• Built-in single line (2 wire) protection for telephones, modems, fax and answering machines (Per3T, Per7T) • Protection working indicator to alert you that the suppressor has been damaged • Building/Site wiring fault indicator to detect dangerous wiring problems • Lifetime Product Warranty

Per3T



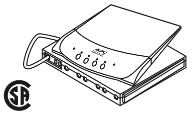
Per7T



Modem/Fax Protection	Outlets	Cord Length	Let-Through Voltage	Digi-Key Part No.	Price Each	APC Part No.
No	6	6'	<330 V	388-1010-ND	10.40	P6
No	3	—	<300 V	388-1011-ND	18.40	Per3
Yes	3	—	<300 V	388-1013-ND	27.20	Per3T
No	7	6'	<300 V	388-1014-ND	20.00	Per7
Yes	7	6'	<300 V	388-1015-ND	26.80	Per7T

Surge Protection with Cord Management

PowerManager is surge protector with built-in cord management. It is the only power center that features cord management capabilities by using an internal cord bay to eliminate power cord clutter by coiling excess power cord lengths inside PowerManager. Your computer and peripherals can be controlled individually or as an entire system at the touch of a button. PowerManager fits neatly under your monitor.



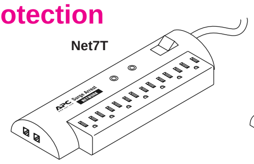
Front and back of unit shown

Modem/Fax Protection	Outlets	Cord Length	Let-Through Voltage	Lifetime Equipment Protection Policy	Digi-Key Part No.	Price Each	APC Part No.
No	6	6'	<40 V	$25,000	388-1042-ND	83.20	POW6-WHT
Yes	6	6'	<40 V	$25,000	388-1043-ND	94.40	POW6T-WHT

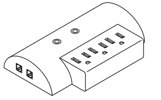
Network Surge Protection

The Network Surge Arrest series provides maximum protection for network and business computer equipment including workstations and network modems. Intended for the most challenging corporate environments and equipment such as Network Nodes, Token Ring, and 10base-T/100base-T connections. Net3T and Net7T include phone line protection. Lifetime Product Warranty.

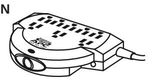
Net7T



Net3T



Net8N

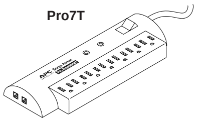


Modem/Fax Protection	Outlets	Cord Length	Let-Through Voltage	Lifetime Equipment Protection Policy	Digi-Key Part No.	Price Each	APC Part No.
No	3	--	<40 V	$25,000	388-1022-ND	25.60	Net3
Yes	3	--	<40 V	$25,000	388-1023-ND	44.80	Net3T
No	7	6'	<40 V	$25,000	388-1024-ND	38.40	Net7
Yes	7	6'	<40 V	$25,000	388-1025-ND	51.20	Net7T
No	8	6'	<40 V	$25,000	388-1026-ND	43.20	Net8
Ethernet/ Token Ring	8	6'	<40 V	$25,000	388-1027-ND	59.20	Net8N

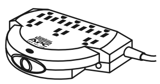
Home Office/Small Business Surge Protection

The professional surge arrest series offers a great value for high-end home equipment and business applications. Small office and home equipment and high performance stereo equipment, laser printers and modems. 2 "always-on" outlets and wide spaced design allows for wall transformer blocks. Built-in modem protection included also. Pro8TV is intended for DSS systems for protection of 120V line, telephone/modem and Coax protection.

Pro7T



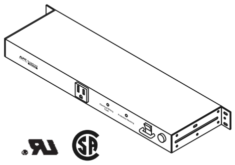
Pro8



Modem/Fax Protection	Outlets	Cord Length	Let-Through Voltage	Digi-Key Part No.	Price Each	APC Part No.
No	7	6'	<85 V	388-1016-ND	34.00	Pro7
Yes	7	6'	<85 V	388-1017-ND	43.20	Pro7T
No	8	6'	<85 V	388-1018-ND	38.40	Pro8
Yes	8	6'	<85 V	388-1019-ND	48.00	Pro8T2
Yes - Coax	8	6'	<85 V	388-1020-ND	48.00	Pro8T2C
Yes - Coax	8	6'	<85 V	388-1021-ND	51.20	Pro8TV

Network 19" Rackmount Surge Suppressor

- 9 outlets with surge protection including one "always on" for devices that require constant power
- Multi-positional mounting bracket provides real installation flexibility
- Guarded master on/off switch to prevent accidental turn-off
- Cord Management to organize power cords
- "Plug pull protection" to prevent accidental plug removal
- Protection working indicator to alert the user that the suppressor has been damaged
- Building/Site wiring fault indicator to detect dangerous wiring problems
- $25,000 lifetime equipment protection policy and Lifetime Product Warranty

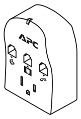


Modem/Fax Protection	Outlets	Cord Length	Let-Through Voltage	Lifetime Equipment Protection Policy	Digi-Key Part No.	Price Each	APC Part No.
No	9	15'	<40 V	$25,000	388-1028-ND	120.00	Net9RM

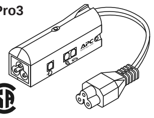
Notebook Surge Suppressors

- Surge Protected phone jacks for fax/telephone, answering machines, portable electronics
- Protection working indicator to alert you that the suppressor has been damaged
- PNotePro and PNotePro3 are compact and lightweight for a truly portable surge protector with an innovative multi-voltage (100-240Vac) electrical design that allows the device to operate in any country
- Excess current detection warns against potential modem damage caused by excess current on many phone lines. These models (PNotePro(3)) also have a Velcro strap for convenient attachment to the AC adapter or for gathering power cords together.
- Lifetime Product Warranty

PNote1



PNotePro3



Modem/Fax Protection	Outlets	Cord Length	Let-Through Voltage	Lifetime Equipment Protection Policy	Digi-Key Part No.	Price Each	APC Part No.
Yes	1	—	<400 V	3yr / $3,500	388-1037-ND	17.60	PNote1
Yes	—	6'	<330 V	5yr / $5,000	388-1038-ND	38.40	PNotePro
Yes	—	6'	<330 V	5yr / $5,000	388-1039-ND	38.40	PNotePro3

Dataline, Port and Cable Protection

Fig. 1

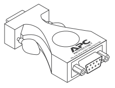


Fig. 2

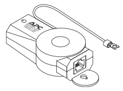


Fig. 3

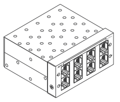


Fig. 4

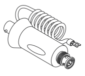


Fig. 5

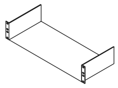


Fig.	Model Name	Application Description	Lines Protected	Includes	Digi-Key Part No.	Price Each	APC Part No.
1	9-Pin serial port (female to male)	Protects serial DB-9 port of data terminal equipment and personal computers	1-9	Thumb screws	388-1030-ND	20.80	PS9-DTE
1	9-Pin serial port (male to female)	Protects serial DB-9 port of data communications equipment like printers, plotters and modems	1-9	Thumb screws	388-1029-ND	20.80	PS9-DCE
1	RS-232 serial/ parallel port (male to female/ female to male)	Protects DB-25 serial and parallel ports of computers and peripheral equipment	1-25	Thumb screws	388-1031-ND	25.60	PSP25
2	2-line telephone (RJ11 or RJ45 Type)	Protects telephone equipment such as fax machines, modems, and answering machines	1, 2, 3, and 4 on RJ11 connector and 3,4,5, and 6 on RJ45 conn	6ft. extension cable, mounting fasteners	388-1033-ND	24.00	PTEL2
3	4 outlet, 1-line telephone surge protector (RJ11/RJ45)	Protects four input lines for telephone equipment such as fax machines, modems, and answering machines	2 and 3 on RJ11 connector 4 and 5 on RJ45 connector	Ground cable, brackets for mounting	388-1032-ND	72.00	PTEL1-4
2	Digital telephone line surge protector	Protects ISDN, T1, DLL 56K, and other digital telecomm. equipment	1-8 on RJ45 connector	Patch cable, mounting fasteners	388-1034-ND	25.60	PDigiTel
2	Ethernet, 100Base-T/10Base-T/ Token Ring network surge protector(RJ45)	Protects 100Base-T, 10Base-T, and Token Ring network interface cards, hubs or LAN equipment	1-8 on RJ45 connector	Patch cable, mounting fasteners	388-1035-ND	25.60	PNet1
3	4 outlet Ethernet 100Base-T/ 10Base-T and Token Ring surge protector (RJ45)	Protects four input lines for 100Base-T, 10Base-T, and Token Ring network interface cards, hubs or LAN equipment	1-8 on RJ45 connector	Ground cable, patch cable, brackets for wall mount	388-1036-ND	80.00	PNET4
3	4 outlet RS232 serial port surge protector (RJ45)	Protects four RS232 input lines for POS machines, serial printer spoolers or multiplexers	1-8 on RJ45 connector	Ground cable, patch cables, brackets for wall mount	388-1041-ND	80.00	P232-4
4	Thinnet 10Base-2 Network surge	Protects Thinnet 10Base-2 network interface cards, hubs or LAN equipment	center and shield conductors on BNC	—	388-1040-ND	24.00	P10B2
5	4 outlet modules rackshelf kit	19" rackshelf kit (20 lines 5 modules front access, 40 lines total)	N/A	—	388-1044-ND	24.00	PRM

Panasonic® Nickel-Metal Hydride Batteries and Tabbed Versions

Features: • **Superior Energy Density:** Nickel-metal hydride batteries have approximately double the capacity compared with Panasonic's standard Ni-Cad batteries
• **High Cycle Life:** Like Ni-Cad batteries, nickel-metal hydride batteries can be repeatedly charged and discharged up to approx. 500 cycles (under ideal conditions). **Because a specially designed charger will be necessary,** please consult the Panasonic Technical Handbook (P001-ND) regarding the charge system • **Flat trickle charge cannot be used** • **Excellent Discharge Characteristics:** Since the internal resistance of nickel-metal hydride batteries is low, continuous high-rate discharge up to 3C (10C for 4/5SC, SC) is possible in the same way as for Ni-Cad batteries.
• **Excellent Reliability:** Self-discharge performance is the same or better than that of nickel-cadmium batteries. In addition, charging batteries after extended storage restores original battery capacity. Battery safety has also been improved and verified through testing under a wide range of conditions of use.

Applications: • Communication • Office Automation • Audio Visual Equipment • Other High-Tech Products.

Caution for Safety: Improper usage may cause battery liquid leakage, heat generation or explosion, resulting in equipment failure or injury • Do not disassemble or rework the battery • Do not solder the battery directly • Do not use new batteries together with old batteries, or different type batteries mixed together • Follow the specified charge conditions.

Note: Battery Packs made with NIMH Cells include a thermostat from Texas Instrument.

Note: Nickel-metal hydride batteries are not a drop-in replacement for Ni-Cad batteries.

It is the responsibility of each user to ensure that each battery application system is adequately designed safe and compatible with all conditions encountered during use, and in conformance with existing standards and requirements.

Panasonic®

5-Hour Nickel-Metal Hydride Fast Charger with Batteries.

Features: This charger comes with 4 rechargeable Ni-MH 1600mAh AA Batteries. This versatile charger can charge both Ni-MH and Ni-Cd (nickel cadmium) batteries in AA and AAA sizes. These New Ni-MH batteries are the most powerful rechargeable batteries designed by Panasonic to date. They have no memory effect whatsoever and can be charged multiple times. Can use P060-ND (AA) or P051-ND (AAA) as additional batteries if needed. Not for use with flat top batteries.

P119-ND (Charger with 4 AA batteries)................................**39.43**

P001-ND NIMH Technical Handbook **$2.95**

Size	(V)	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 16hrs (mA)	(Control Req.) Quick Charge (mA)	(hrs.)	Digi-Key Part No.	(Regular Version) Pricing 1	10	Carton	Digi-Key Part No.	(Solder Tabbed Version) Pricing 1	10	Carton	Panasonic Part No.
AAA	1.2	550	.41 x 1.75 (10.5 x 44.5)	0.42 (12)	55	550	1.2	P011-ND†	2.76	24.82	2056.13/1380	P011T-ND	3.06	27.52	2304.53/1380	HHR-55AAA
AAA	1.2	650	.41 x 1.75 (10.5 x 44.5)	0.42 (12)	65	450	1.7	P051-ND	2.81	25.27	2325.23/1380	P051T-ND	3.11	27.97	2573.63/1380	HHR-70AAA
L-AAA	1.2	650	.41 x 1.97 (10.5 x 50.0)	0.49 (14)	65	650	1.2	P012-ND†	3.58	32.26	2154.70/1404	P012T-ND	3.88	34.96	2378.78/1404	HHR-65TA
4/5 AA	1.2	1150	.57 x 1.69 (14.5 x 43.0)	0.81 (23)	115	1150	1.2	P013-ND†	2.84	25.58	1364.27/800	P013T-ND	3.14	28.28	1508.28/800	HHR-120AA
AA	1.2	1300	.57 x 1.97 (14.5 x 50.0)	0.92 (26)	130	1300	1.2	P014-ND†	3.24	29.20	1557.35/800	P014T-ND	3.54	31.90	1701.36/800	HHR-130AA
AA	1.2	1500	.57 x 1.97 (14.5 x 50.0)	0.92 (26)	150	1500	1.2	P015-ND†	3.27	29.45	1502.08/765	P015T-ND	3.57	32.15	1639.78/765	HHR-150AA
AA	1.2	1550	.57 x 1.97 (14.5 x 50.0)	0.95 (27)	155	1500	1.2	P060-ND	2.95	26.53	1414.80/800	P060T-ND	3.25	29.23	1558.80/800	HHR-160AA
4/5 A	1.2	1700	.67 x 1.69 (17.0 x 43.0)	1.09 (31)	170	1700	1.2	P016-ND†	4.63	41.63	1998.00/720	—	—	—	—	HHR-170A
4/5 A	1.2	2000	.67 x 1.71 (17.0 x 43.5)	1.20 (34)	200	2000	1.2	P010-ND†	4.66	41.90	1508.22/540	P010T-ND	4.96	44.60	1605.42/540	HHR-200A
A	1.2	2100	.67 x 1.97 (17.0 x 50.0)	1.34 (38)	210	2100	1.2	P017-ND†	4.98	44.83	2152.00/720	P017T-ND	5.28	47.53	2281.61/720	HHR-210A
4/3 A	1.2	3700	.67 x 2.64 (17.0 x 67.0)	1.87 (53)	370	2000	2.2	P018-ND†	7.43	66.87	2407.47/540	P018T-ND	7.73	69.57	2504.68/540	HHR-380A
4/5 SC	1.2	2000	.91 x 1.34 (23.0 x 34.0)	1.48 (42)	200	2000	1.2	P020-ND†	6.78	61.02	1952.63/480	P020T-ND	7.08	63.72	2039.04/480	HHR-200SCP
SC	1.2	3000	.91 x 1.69 (23.0 x 43.0)	1.94 (55)	300	3000	1.2	P021-ND†	7.80	70.16	2244.96/480	P021T-ND	8.10	72.86	2331.36/480	HHR-30SCP
D	1.2	6500	1.30 x 2.39 (33.0 x 60.8)	6.00 (170)	650	6500	1.2	P019-ND†	18.22	164.00	1457.79/100	P019T-ND	18.52	166.70	1481.80/100	HHR-650D

† Non-extending positive terminals. * See "How To Order" for note on shipping charges on prepaid orders.

Panasonic® Nickel Cadmium Batteries

The Panasonic nickel-cadmium battery is a rechargeable sealed nickel-cadmium alkaline cell.

Features: • Long life • Excellent discharge characteristics • Long shelf life • High-rate charging • Wide temperature range • Reliable, self-resealing vent • Sealed, strong, leakproof construction

Applications: ***For Cyclic Use:*** • Consumer applications • Office equipment • Tools • Photography • Toys & Hobby. ***For Trickle or Float Charge Use:*** • Emergency devices • Memory back-up

Special Purpose Batteries: Rapid-charge "R" Type: The "R" type cell has a specially improved negative plate with increased gas absorption characteristics. It can be subjected to controlled charging at the 1C rate and rapid-charge in 1 to 1.5 hours is possible. High-temperature "H" Type: By using a polypropylene separator, the "H" type cell can withstand a temp. of 65°C (149°F) during use. When charging is conducted at a low charging current of C/20 to C/30 in a high-temp. ambient, the "H" type cell has a sharply improved capacity compared to a standard cell, due to special electrolyte. High-capacity "E" Type: The extra capacity cells combine a high-capacity density positive plate with a high-density paste negative plate. These cells have 20~30% more capacity than equivalent standard cells. Super High Capacity & Rapid Charge "S" Type: Super high capacity and rapid charge "S" type batteries are ideal for today's high capacity needs. They feature increased capacity & rapid charging within approx. 1 hr. The high-density positive base material of foam nickel is combined with the pasted negative plate to produce a capacity approximately 40% greater than that of the rapid-charge "R" type battery of the same size. High Rate Discharge & Rapid Charge "R/P" Type: This rapid charge, high rate discharge type has been developed through the integration of all Panasonic battery technology. It employs unique plates featuring unsurpassed gas absorption characteristics & a current-collecting system to provide charging in just 1 to 1.5 hours. The internal resistance is also greatly reduced for improved voltage characteristics during high rate discharge at approximately 10CmA.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

CROSS REFERENCE ABBREVIATIONS: SF = SAFT USA (France); VA = VARTA Germany; ER = Ever-Ready; SA = SANYO Japan; TO = Toshiba; DY = Dynacharge

Panasonic®

6-Hour Nickel Cadmium Battery Charger

Features: • True full charge in just 6 hours (9V in 15 hours) • Quickly resupplies up to 4 rechargeable nickel-cadmium batteries to 100% power! • UL approved. With anti-reversal polarity protection system • Simultaneous charging of any pair of nickel-cadmium batteries: D, C, AA, AAA, or single 9V. No special adapter needed for AAA! • Not for use with flat top batteries indicated by /FT.

P292-ND (4 batteries or one 9 volt) ...**$18.73**

P293-ND Same charger as above except this one handles 8 batteries! **$34.55**

Size	(V)	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 16hrs (mA)	Quick Charge (mA)	(hrs.)	Digi-Key Part No.	Pricing 1	10	Pkg.	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference (see above for manufacture abbreviations)
Standard Type														
N	1.2	150	0.45 x 1.16 (11.5 x 29.5)	0.28 (8.0)	15	38	6.0	P110-ND	2.39	21.47	333.90/200	1373.76/1200	P-15N	ER: CH150; SA: N-150N; DY: NN150
N	1.2	180	0.47 x 1.18 (12.0 x 30.0)	0.28 (8.0)	18	45	6.0	P112-ND	2.26	20.34	316.40/200	1301.76/1200	P-18N/A14	—
AAA	1.2	250	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	25	75	5.0	P254-ND	2.49	22.39	348.25/200	1890.00/1800	P-25AAA	—
2/3C	1.2	1000	1.02 x 1.22 (25.8 x 31.0)	1.59 (45)	100	333	4.5	P238-ND	6.21	55.91	217.44/50	969.15/300	P-100C	—
C	1.2	2200	1.00 x 1.94 (25.3 x 49.3)	2.65 (75)	220	730	4.5	P163-ND	6.34	57.08	88.80/20	791.54/240	P-220C	SA: KR-2000C; TO: T-180C; DY: NC1800
C	1.2	2400	1.02 x 1.97 (25.8 x 50.0)	2.65 (75)	240	1500	2.4	P108-ND†	7.47	67.21	104.55/20	931.94/240	P-240C/FT	—
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P124-ND	10.78	75.48	75.48/10	560.69/100	P-400D	SF: 4.0SC (VR4); VA: RSH4; ER: NCC350, CH4; SA: N-4000D; TO: T-400D; DY: ND4000
9 Volt	8.4	120	1.043 x 1.949 x 0.689 (26.5x49.5x17.5)	1.54 (43.7)	12	—	—	P148-ND	10.63	—	114.75/12	114.75/12	P-9SPA/1B	—
High Temperature "H" Type														
1/3AA	1.2	110	0.57 x 0.69 (14.5 x 17.5)	0.23 (6.5)	11	—	—	P109-ND†	1.96	17.64	164.64/120	2257.92/2400	P-11AAH/FT	ER: NCC24
AA	1.2	500	0.57 x 1.97 (14.5 x 50.0)	0.74 (21)	50	—	—	P161-ND	2.28	20.52	63.84/40	948.48/800	P-50AAH	SA: KR-A4H
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	120	—	—	P091-ND†	3.76	33.86	263.38/100	782.60/400	P-120SCH/FT	—
C	1.2	1800	1.02 x 1.97 (25.8 x 50.0)	2.55 (73)	180	—	—	P122-ND†	6.84	61.58	95.80/20	853.94/240	P-180CH/FT	SA: KR-CH
C	1.2	2300	1.02 x 1.97 (25.8 x 50.0)	2.75 (78)	230	—	—	P090-ND†	7.84	70.58	109.80/20	978.74/240	P-230CH/FT	—
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P258-ND	10.78	75.48	75.48/10	560.69/100	P-400DH	—
High Capacity "E" Type														
SC	1.2	1500	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	150	500	4.5	P156-ND†	4.19	37.69	293.13/100	871.00/400	P-150SCE/FT	—
D	1.2	4400	1.30 x 2.40 (33.0 x 61.0)	4.93 (140)	440	—	—	P158-ND	10.91	76.35	76.35/10	567.19/100	P-440DE	ER: NCC400
High Rate Discharge and Rapid Charge "P" Type														
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	120	1200	1.5	P240-ND†	3.64	32.74	254.63/100	756.60/400	P-120SCP/FT	—
Rapid Charge "R" Type														
2/3AA	1.2	300	0.57 x 1.11 (14.5 x 28.2)	0.42 (12)	30	300	1.5	P234-ND†	2.19	19.71	306.60/200	2006.40/2000	P-30AAR/FT	—
AA	1.2	600	0.57 x 1.97 (14.5 x 50.0)	0.78 (22)	60	600	1.5	P272-ND	2.48	22.32	69.44/40	1031.68/800	P-60AAR	—
AA	1.2	600	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	60	600	1.5	P229-ND†	2.12	19.08	59.36/40	881.92/800	P-60AAR/FT	—
AA	1.2	700	0.57 x 1.97 (14.5 x 50.0)	0.78 (22)	70	700	1.5	P251-ND	2.13	19.17	59.64/40	886.08/800	P-70AAR	—
AA	1.2	700	0.57 x 1.90 (14.5 x 48.3)	0.78 (22)	70	700	1.5	P253-ND†	1.91	17.15	53.34/40	792.48/800	P-70AARC/FT	—
4/5SC	1.2	1200	0.91 x 1.30 (23.0 x 33.0)	1.38 (38)	120	1000	1.6	P232-ND†	3.64	32.74	254.63/100	1134.90/600	P-120SCJ/FT	—
SC	1.2	1300	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	130	1300	1.5	P159-ND†	2.56	23.06	215.25/120	639.60/480	P-130SCR/FT	ER:CH1.2;SA:N-1200SC;DY:NSC1200
SC	1.2	1400	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	140	1400	1.5	P233-ND†	2.81	25.31	196.88/100	585.00/400	P-140SCR/FT	—
SC	1.2	1800	0.91 x 1.69 (23.0 x 43.0)	1.73 (49)	180	1800	1.5	P089-ND†	4.69	42.19	328.13/100	975.00/400	P-180SCR/FT	—
C	1.2	2800	1.02 x 1.97 (26.0 x 50.0)	2.79 (79)	280	2800	1.5	P190-ND†	7.84	70.58	109.80/20	978.74/240	P-280CR/FT	—
D	1.2	5000	1.30 x 2.40 (33.0 x 61.0)	5.10 (145)	500	5000	1.5	P257-ND†	12.93	—	90.53/10	672.49/100	P-500DR/FT	—
Super High Capacity and Rapid Charge "S" Type														
AA	1.2	800	0.57 x 1.90 (14.5 x 48.3)	0.71 (20)	80	800	1.5	P097-ND†	2.21	19.85	61.74/40	917.28/800	P-80AAS/FT	—
AA	1.2	1000	0.57 x 1.97 (14.5 x 50.0)	0.81 (23)	100	1000	1.5	P252-ND	2.78	25.02	77.84/40	1156.48/800	P-100AASJ	—
AA	1.2	1000	0.57 x 1.97 (14.5 x 50.0)	0.81 (23)	100	1000	1.5	P092-ND†	3.16	28.40	88.34/40	1312.48/800	P-100AASJ/FT	—
5/4AA	1.2	1200	0.57 x 2.56 (14.5 x 65.0)	1.09 (31)	120	1200	1.5	P093-ND†	4.42	39.74	154.53/50	1377.48/600	P-120AAS/FT	—
2/3A	1.2	600	0.67 x 1.12 (17.0 x 28.5)	0.63 (18)	60	600	1.5	P235-ND†	2.78	25.02	97.30/50	1040.83/720	P-60AS/FT	—
4/5A	1.2	1500	0.67 x 1.69 (17.0 x 43.0)	0.95 (27)	140	1400	1.5	P255-ND†	4.16	37.44	524.16/180	1557.50/720	P-150AS/FT	—
A	1.2	1400	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	140	1400	1.5	P095-ND†	3.67	33.01	462.11/180	1373.11/720	P-140AS/FT	—
A	1.2	1600	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	160	1600	1.5	P256-ND†	4.22	37.96	531.41/180	1579.03/720	P-160AS/FT	—
5/4SC	1.2	2300	0.91 x 1.97 (23.0 x 50.0)	2.24 (57)	230	2000	1.6	P096-ND†	7.93	71.37	666.12/120	1484.50/360	P-230SCS/FT	—

† Non-extending positive terminals. * See "How To Order" for note on shipping charges on prepaid orders.

(Continued)

Panasonic® Nickel Cadmium Batteries Solder Tabbed Version *(Cont.)*

Size	(V)	Capacity C/5 (mAh)	Dimensions Inch (mm) Dia. x Height	Weight* Oz. (gram)	Std. Chg @ 16hrs (mA)	Quick Charge		Digi-Key Part No.	Pricing			
						(mA)	(hrs.)		1	10	Pkg.	Carton
Standard Type (Solder Tabbed)												
N	1.2	150	0.45 x 1.16 (11.5 x 29.5)	0.28 (8.0)	15	38	6.0	P110T-ND	2.69	24.17	429.60/200	1714.10/1200
N	1.2	180	0.47 x 1.18 (12.0 x 30.0)	0.28 (8.0)	18	45	6.0	P112T-ND	2.56	23.04	358.40/200	1474.56/1200
AAA	1.2	250	0.41 x 1.75 (10.5 x 44.5)	0.35 (10)	25	75	5.0	P254T-ND	2.79	25.09	446.00/200	2382.03/1800
2/3C	1.2	1000	1.02 x 1.22 (25.8 x 31.0)	1.59 (45)	100	333	4.5	P238T-ND	6.51	58.61	260.50/50	1172.25/300
C	1.2	2200	1.00 x 1.94 (25.3 x 49.3)	2.65 (75)	220	730	4.5	P163T-ND	6.64	59.78	106.28/20	956.52/240
C	1.2	2400	1.02 x 1.97 (25.8 x 50.0)	2.65 (75)	240	1500	2.4	P108T-ND	7.77	69.91	124.28/20	1118.52/240
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P124T-ND	11.08	88.66	88.66/10	664.95/100
High Temperature "H" Type (Solder Tabbed)												
1/3AA	1.2	110	0.57 x 0.69 (14.5 x 17.5)	0.23 (6.5)	11	—	—	P109T-ND	2.26	20.34	216.96/120	2885.57/2400
AA	1.2	500	0.57 x 1.97 (14.5 x 50.0)	0.74 (21)	50	—	—	P161T-ND	2.58	23.22	82.56/40	1238.40/800
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	120	—	—	P091T-ND	4.06	36.56	325.00/100	975.00/400
C	1.2	1800	1.02 x 1.97 (25.8 x 50.0)	2.55 (73)	180	—	—	P122T-ND	7.14	64.28	114.28/20	1028.52/240
C	1.2	2300	1.02 x 1.97 (25.8 x 50.0)	2.75 (78)	230	—	—	P090T-ND	8.14	73.28	130.28/20	1172.52/240
D	1.2	4000	1.30 x 2.40 (33.0 x 61.0)	4.90 (139)	400	—	—	P258T-ND	11.08	88.66	88.66/10	664.95/100
High Capacity "E" Type (Solder Tabbed)												
SC	1.2	1500	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	150	500	4.5	P156T-ND	4.49	40.39	430.80/120	1292.40/480
D	1.2	4400	1.30 x 2.40 (33.0 x 61.0)	4.93 (140)	440	—	—	P158T-ND	11.21	89.66	89.66/10	672.45/100
High Rate Discharge and Rapid Charge "P" Type (Solder Tabbed)												
SC	1.2	1200	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	120	1200	1.5	P240T-ND	3.94	35.44	315.00/100	945.00/400
Rapid Charge "R" Type (Solder Tabbed)												
2/3AA	1.2	300	0.57 x 1.11 (14.5 x 28.2)	0.42 (12)	30	300	1.5	P234T-ND	2.49	22.41	398.40/200	2542.96/2000
AA	1.2	600	0.57 x 1.90 (14.5 x 48.3)	0.74 (21)	60	600	1.5	P229T-ND	2.42	21.78	77.44/40	1161.60/800
AA	1.2	700	0.57 x 1.90 (14.5 x 48.3)	0.78 (22)	70	700	1.5	P253T-ND	2.21	19.85	70.56/40	1058.40/800
4/5SC	1.2	1200	0.91 x 1.30 (23.0 x 33.0)	1.38 (38)	120	1000	1.6	P232T-ND	3.94	35.44	315.00/100	1417.50/600
SC	1.2	1300	0.91 x 1.69 (23.0 x 43.0)	1.66 (47)	130	1300	1.5	P159T-ND	2.86	25.76	274.80/120	824.40/480
SC	1.2	1400	0.91 x 1.69 (23.0 x 43.0)	1.69 (48)	140	1400	1.5	P233T-ND	3.11	28.01	249.00/100	896.40/480
SC	1.2	1800	0.91 x 1.69 (23.0 x 43.0)	1.73 (49)	180	1800	1.5	P089T-ND	4.99	44.89	399.00/100	1197.00/400
C	1.2	2800	1.02 x 1.97 (26.0 x 50.0)	2.79 (79)	280	2800	1.5	P190T-ND	8.14	73.28	130.28/20	1172.52/240
D	1.2	5000	1.30 x 2.40 (33.0 x 61.0)	5.10 (145)	500	5000	1.5	P257T-ND	13.23	—	105.86/10	793.95/100
Super High Capacity and Rapid Charge "S" Type (Solder Tabbed)												
AA	1.2	800	0.57 x 1.90 (14.5 x 48.3)	0.71 (20)	80	800	1.5	P097T-ND	2.51	22.55	80.16/40	1202.40/800
AA	1.2	1000	0.57 x 1.97 (14.5 x 50.0)	0.81 (23)	100	1000	1.5	P092T-ND	3.46	31.10	110.56/40	1658.40/800
5/4AA	1.2	1200	0.57 x 2.56 (14.5 x 65.0)	1.09 (31)	120	1200	1.5	P093T-ND	4.72	42.44	188.60/50	1697.40/600
2/3A	1.2	600	0.67 x 1.12 (17.0 x 28.5)	0.63 (18)	60	600	1.5	P235T-ND	3.08	27.72	123.20/50	1330.56/720
4/5A	1.2	1500	0.67 x 1.69 (17.0 x 43.0)	0.95 (27)	140	1400	1.5	P255T-ND	4.46	40.14	642.24/180	1926.72/720
A	1.2	1400	0.67 x 1.97 (17.0 x 50.0)	1.16 (32)	140	1400	1.5	P095T-ND	3.97	35.71	571.32/180	1713.96/720
A	1.2	1600	0.67 x 1.97 (17.0 x 50.0)	1.16 (33)	160	1600	1.5	P256T-ND	4.52	40.66	650.52/180	1951.56/720
5/4SC	1.2	2300	0.91 x 1.97 (23.0 x 50.0)	2.24 (57)	230	2000	1.6	P096T-ND	8.23	74.07	790.08/120	1777.68/360

* See "How To Order" for note on shipping charges on prepaid orders.

Battery Packs with Panasonic® Batteries

For Memory Backup, Power Tools, Radio Controlled and Other Endless Applications

All battery packs are made using our high quality Panasonic cells. Shown are standard configurations. If you have a special need or a configuration that you do not see, give us a call for further information. Packs are available in nearly all sizes of Nickel-Cadmium, NIMH, Lithium, and Alkaline cylinder batteries.

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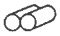
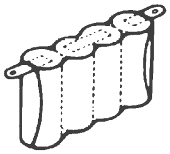
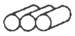
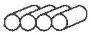
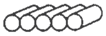
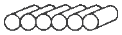
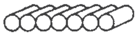
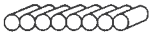
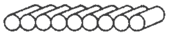
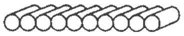
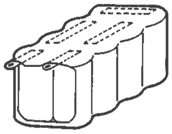
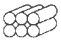
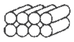
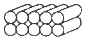
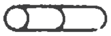
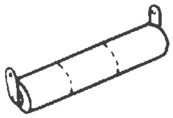
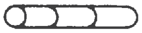
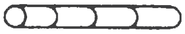
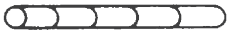
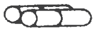
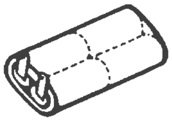
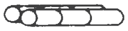
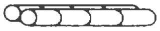
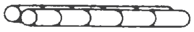
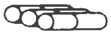
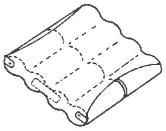
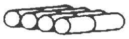
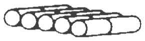
Style	Volts	Cells	Configurations	Diagram
F021	2.4	2		
F031	3.6	3		
F041	4.8	4		
F051	6.0	5		
F061	7.2	6		
F071	8.4	7		
F081	9.6	8		
F091	10.8	9		
F101	12.0	10		
F022	4.8	4		
F023	7.2	6		
F024	9.6	8		
F025	12.0	10		

Style	Volts	Cells	Configurations	Diagram
L021*	2.4	2		 * Styles L021, L031, L041 and L051 are not available in nickel-metal hydride batteries.
L031*	3.6	3		
L041*	4.8	4		
L051*	6.0	5		
L022	4.8	4		
L032	7.2	6		
L042	9.6	8		
L052	12.0	10		
L023	7.2	6		
L024	9.6	8		
L025	12.0	10		

HOW TO ORDER:

P ☐ ☐ ☐ – ☐ ☐ ☐ ☐ – ND

Call for pricing on any standard or custom battery pack

Select Digi-Key Part No. of any Cylinder Type Battery

Select Style of Battery Pack From Chart

Panasonic Lithium Batteries

The main features of lithium batteries are as follows:

- **High Voltage:** Nominal voltage is 3V, which is nearly double that of other batteries which use the aqueous electrolyte system, such as manganese dry batteries, and silver-oxide batteries.
- **High Energy Density:** Overwhelmingly high energy density, as compared with conventional batteries and other lithium batteries. The energy density is 5 to 10 times higher than that of manganese dry batteries.
- **Long Service and Shelf Life:** Since Panasonic lithium batteries are composed of chemically and thermally stable material, self-discharge is extremely small. Deterioration when stored at room temperatures is ca. 0.5% annually – worry about deterioration is unnecessary.
- **Stable Flat Discharge Voltage:** Since conductive carbon is continuously formed during discharge, internal impedance does not increase until the end of discharge, thus stabilizing discharge voltage.
- **Excellent Temperature Characteristics:** Organic solvent ensures a low electrolyte freezing point so that the batteries can be used in a wide temperature range, -40°C to 85°C is standard (-40°C to 125°C for the High Temperature Coin Type; -40°C to 70°C for Camera Type; -30° to 60°C for CR2004/P9A).
- **BR Types versus CR Types:** BR, or (CF) n/Li, batteries provide a more stable voltage particularly during the last half of discharge, while CR, or Mn02/Li, batteries provide a higher voltage during the first half. CR batteries also can provide a higher current capability than BR batteries. In storage, BR batteries perform better at high temperatures. These characteristics must be taken into consideration when selecting a battery for a particular application.
- **UL Approval:** Panasonic Lithium batteries are UL recognized. UL File No. MH12210.
- **DOT Exemption:** Panasonic lithium cells and multiple cell batteries are authorized for transportation, in commerce, by U.S. shipping exemption DOT-E7052.
- **Disposal Information:** Panasonic lithium cells are not an EPA listed hazardous waste, but may be considered a "characteristic" hazardous waste. Lithium metal, the anode component of the cells, is considered by the U.S. EPA to be hazardous when disposed because it is reactive with water. However, a cell which contains a small quantity of lithium metal is not necessarily a hazardous waste. Disposal regulations and policies are different in each State and are subject to frequent changes. Contact your local jurisdiction for specific advice on disposal.

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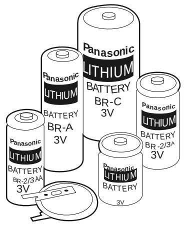


PCB Terminal Type

Fig. 1

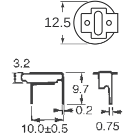


Fig. 2

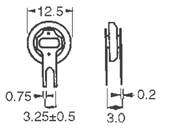


Fig. 3 *NEW!*

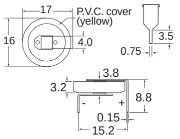


Fig. 4

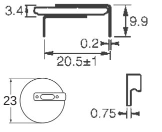


Fig. 5

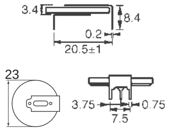


Fig. 6 (with PVC Cover)

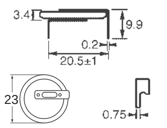


Fig. 7

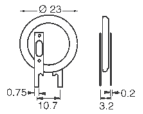


Fig. 8

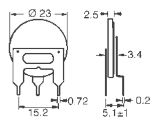


Fig. 9

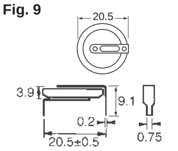


Fig. 10

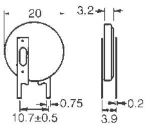


Fig. 11

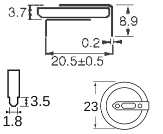


Fig. 12

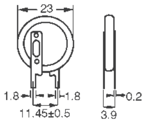


Fig. 13

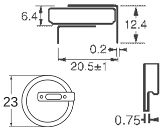


Fig. 14

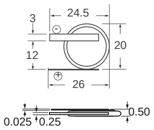


Fig. 15

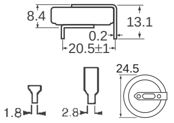


Fig. 16 *NEW!*

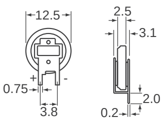


Fig. 17

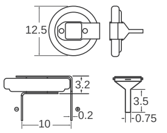


Fig. 18

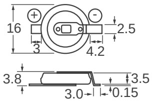


Fig. 19 *NEW!*

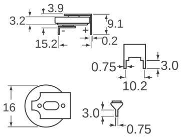


Fig. 20

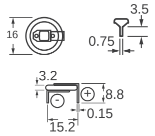


Fig. 21

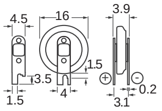


Fig. 22

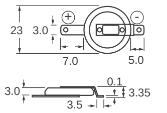


Fig. 23

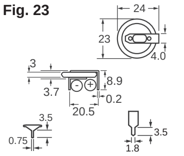


Fig. 24

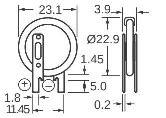


Fig. 25

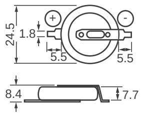


Fig. 26

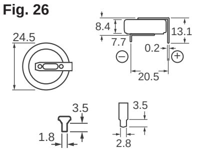


Fig. 27

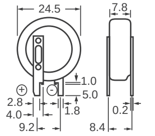


Fig.	Type	(V)	Cap. (mAh)	Dim. (mm) Dia. x Height	Wt.* (g)	Drain Pulse (mA)	Drain Std. (mA)	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing Pkg.	Pricing Carton	Panasonic Part No.
PCB Terminal – Coin Type													
1	Coin	3	48	See Figure Above	0.8	8	0.03	P191-ND	1.75	15.75	168.00/120	1117.20/1,200	BR1225-1HC
2		3	48		0.8	8	0.03	P192-ND	1.75	15.75	280.00/200	630.00/600	BR1225-1VC
3		3	120		1.6	8	0.03	P299-ND *NEW!*	1.88	16.88	225.00/150	2394.00/2,400	BR1632-1HF
4		3	165		3.2	10	0.03	P142-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1HB
5		3	165		3.2	10	0.03	P193-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1HG
6		3	165		3.2	10	0.03	P202-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1HC
7		3	165		3.2	10	0.03	P194-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1VC
8		3	165		3.2	10	0.03	P195-ND	1.75	15.75	84.00/60	630.00/600	BR2325-1VG
9		3	190		2.5	10	0.03	P196-ND	2.00	18.00	96.00/60	720.00/600	BR2032-1HE
10		3	190		2.5	10	0.03	P197-ND	1.75	15.75	84.00/60	630.00/600	BR2032-1VB
11		3	255		3.2	10	0.03	P198-ND	2.30	20.70	184.00/100	1117.20/1,000	BR2330-1HE
12		3	255		3.2	10	0.03	P199-ND	2.10	18.90	168.00/100	1117.20/1,000	BR2330-1VC
13		6	165		6.4	10	0.03	P143-ND	3.63	32.63	116.00/40	870.00/400	BR2325-2HC
14		3	12		0.5	—	0.03	P130-ND	5.63	50.63	900.00/200	11475.00/4,000	CR2004-P9A
15		3	1000		10.5	10	0.2	P126-ND	4.38	39.38	350.00/100	2327.50/1,000	CR2477-1HF
PCB Terminal - High Temperature Coin Type (-40°C to 125°C)													
16	Coin	3	48	See Figure Above	0.8	—	0.03	P290-ND *NEW!*	1.93	17.33	770.00/500	4908.75/5,000	BR1225A/FA
17		3	48		1.0	—	0.03	P061-ND	1.93	17.33	184.80/120	1228.92/1,200	BR1225A/HB
18		3	120		1.5	—	0.03	P022-ND	2.08	18.68	398.40/240	5079.60/4,800	BR1632A/FA
19		3	120		1.5	—	0.03	P291-ND *NEW!*	2.08	18.68	249.00/150	2649.36/2,400	BR1632A/GA
20		3	120		1.5	—	0.03	P023-ND	2.08	18.68	664.00/400	2649.36/2,400	BR1632A/HA
21		3	120		1.5	—	0.03	P024-ND	2.08	18.68	664.00/400	4233.00/4,000	BR1632A/VA
22		3	255		3.2	—	0.03	P025-ND	2.35	21.15	376.00/200	2500.40/2,000	BR2330A/FA
23		3	255		3.2	—	0.03	P026-ND	2.35	21.15	376.00/200	2500.40/2,000	BR2330A/HD
24		3	255		3.2	—	0.03	P027-ND	2.35	21.15	376.00/200	2500.40/2,000	BR2330A/VA
25		3	1000		8.0	—	0.03	P028-ND	3.83	34.43	306.00/100	2034.90/1,000	BR2477A/FB
26		3	1000		8.0	—	0.03	P029-ND	3.83	34.43	306.00/100	2034.90/1,000	BR2477A/HB
27		3	1000		8.0	—	0.03	P030-ND	3.83	34.43	306.00/100	2034.90/1,000	BR2477A/VA
Pin Type													
–	Pin	3	25	4.2 x 25.9	0.55	4	0.5	P140-ND	3.75	33.75	900.00/300	5737.50/3,000	BR425
–	Pin	3	50	4.2 x 35.9	0.85	6	1.0	P139-ND	3.75	33.75	900.00/300	5737.50/3,000	BR435

* See "How To Order" for note on shipping charges on prepaid orders. ‡ Has internal 6.8K ohm resistor in series. # Retail Card package. § Bulk package.

(Continued)

Computer, Camera, Standard and Standard Coin Types

					Drain				Pricing			
Type	**(V)**	**Cap. (mAh)**	**Dim. (mm) Dia. x Height**	**Wt.* (g)**	**Pulse (mA)**	**Std. (mA)**	**Digi-Key Part No.**	**1**	**10**	**Pkg.**	**Carton**	**Panasonic Part No.**
Computer Type												
Replacement Pack	6	1200	19.5 x 33.9 x 36.0	31.0	250	2.5	P204-ND	12.63	113.63	1454.40/144	2181.60/288	BR-P2PE
Pack with Leads		1200	22.0 x 39.0 x 41.0	45.0	—	—	P203-ND‡	15.48	139.28	619.00/50	928.50/100	BR-E3C3BCA
Camera Type												
Replacement Cyl.	3	750	15.6 x 27.0	11.0	—	20	P157-ND§	4.50	40.50	360.00/100	2872.80/1,200	CR-2PA/B
Replacement Cyl.	3	750	15.6 x 27.0	11.0	—	20	P155-ND#	7.00	63.00	67.20/12	4468.80/1,200	CR-2PA/1B
Replacement Cyl.	3	1400	17.0 x 34.5	17.0	—	20	P151-ND§	3.88	34.88	310.00/100	2061.50/1,000	CR-123APA/B
Replacement Cyl.	3	1400	17.0 x 34.5	17.0	—	20	P154-ND#	7.25	65.25	69.60/12	4628.40/1,200	CR-123APA/1B
Replacement Pack	3	3000	29.0 x 14.5 x 52.0	39.0	—	200	P212-ND#	12.99	—	138.96/12	2501.28/288	CR-V3A/1B
Replacement Pack	6	1400	17.0 x 34.0 x 45.0	38.0	—	20	P073-ND#	12.95	116.55	124.32/12	2237.76/288	2CR-5MPA/1B
Replacement Pack	6	1400	19.5 x 35.0 x 36.0	37.0	—	20	P205-ND#	12.95	—	139.86/12	2983.68/288	CR-P2PA/1B
Standard Type												
C	3	5000	26.0 x 50.0	42.0	300	5.0	P167-ND	13.70	123.30	1096.00/100	1644.00/200	BR-CSSP
C with Tabs		5000	26.0 x 50.0	42.0	300	5.0	P144-ND	14.88	133.88	1190.00/100	1785.00/200	BR-CT2SP
A		2200	17.0 x 45.5	13.5	250	2.5	P362-ND *NEW!*	10.38	93.38	166.00/20	3112.50/500	BR-AG
A with Tabs		2200	17.0 x 45.5	13.5	250	2.5	P362T-ND *NEW!*	10.68	96.08	170.80/20	3202.50/500	BR-AG-T
A		1800	17.0 x 45.5	18.0	250	2.5	P267-ND	9.38	84.38	750.00/100	4987.50/1,000	BR-A
A with Tabs		1800	17.0 x 45.5	18.0	250	2.5	P267T-ND	9.68	87.08	774.00/100	5147.10/1,000	BR-A-T
2/3 A		1450	17.0 x 33.5	13.5	250	2.5	P361-ND *NEW!*	5.00	45.00	1600.00/400	4256.00/1,600	BR-2/3AG
2/3 A with Tabs		1450	17.0 x 33.5	13.5	250	2.5	P361T-ND *NEW!*	5.30	47.70	1696.00/400	4511.36/1,600	BR-2/3AG-T
2/3 A		1200	17.0 x 33.5	13.5	250	2.5	P133-ND	4.40	39.60	70.40/20	2112.00/800	BR-2/3A
2/3 A with Tabs		1200	17.0 x 33.5	13.5	250	2.5	P201-ND	5.25	47.25	420.00/100	2793.00/1,000	BR-2/3AT-2SP
2/3 A w/2 PCB Pins		1200	17.0 x 33.5	13.5	250	2.5	P226-ND	5.25	47.25	420.00/100	2793.00/1,000	BR-2/3AE5SP
2/3 A w/3 PCB Pins		1200	17.0 x 33.5	13.5	250	2.5	P270-ND	5.25	47.25	420.00/100	2793.00/1,000	BR-2/3AE2SP
Standard Coin Type												
Coin	3	25	12.5 x 1.6	0.6	5	0.03	P182-ND	1.38	12.38	440.00/400	2805.00/4,000	BR1216
		35	12.5 x 2.0	0.7	5	0.03	P342-ND *NEW!*	1.38	12.38	220.00/200	2805.00/4,000	BR-1220
		48	12.5 x 2.5	0.8	5	0.03	P183-ND	1.43	12.83	456.00/400	2907.00/4,000	BR1225
		48	16.0 x 1.6	1.0	8	0.03	P184-ND	1.40	12.60	224.00/200	1489.60/2,000	BR1616
		75	20.0 x 1.6	1.5	10	0.03	P137-ND	1.25	11.25	200.00/200	1330.00/2,000	BR2016
		100	20.0 x 2.0	2.0	10	0.03	P185-ND	1.38	12.38	220.00/200	1463.00/2,000	BR2020
		110	23.0 x 2.0	2.5	10	0.03	P136-ND	1.50	13.50	240.00/200	1596.00/2,000	BR2320
		165	23.0 x 2.5	3.2	10	0.03	P135-ND	1.50	13.20	240.00/200	1596.00/2,000	BR2325
		190	20.0 x 3.2	2.5	10	0.03	P186-ND	1.38	12.38	220.00/200	1463.00/2,000	BR2032
		255	23.0 x 3.0	3.2	10	0.03	P187-ND	2.03	18.23	324.00/200	2154.60/2,000	BR2330
		500	30.0 x 3.2	5.5	10	0.03	P341-ND *NEW!*	2.75	24.75	440.00/200	2926.00/2,000	BR-3032
		30	10.0 x 2.5	0.7	5	0.1	P031-ND	1.13	10.13	360.00/400	2295.00/4,000	CR1025
		25	12.5 x 1.6	0.7	5	0.1	P032-ND	1.13	10.13	360.00/400	2295.00/4,000	CR1216
		35	12.5 x 2.0	1.2	5	0.1	P033-ND	1.08	9.68	344.00/400	2040.00/4,000	CR1220
		40	16.0 x1.2	0.8	5	0.1	P041-ND	2.70	24.30	432.00/200	1296.00/800	CR1612
		55	16.0 x 1.6	1.2	8	0.1	P034-ND	1.00	9.00	160.00/200	1064.00/2,000	CR1616
		75	16.0 x 2.0	1.3	8	0.1	P035-ND	.98	8.78	312.00/400	1989.00/4,000	CR1620
		125	16.0 x 3.2	1.8	8	0.1	P036-ND	1.13	10.13	360.00/400	2295.00/4,000	CR1632
		55	20.0 x 1.2	1.4	10	0.1	P037-ND	1.25	11.25	400.00/400	2550.00/4,000	CR2012
		90	20.0 x 1.6	1.7	10	0.1	P138-ND	.45	4.05	72.00/200	287.28/1,200	CR2016
		165	20.0 x 2.5	2.5	15	0.2	P188-ND	.50	4.50	80.00/200	1020.00/4,000	CR2025
		220	20.0 x 3.2	3.1	15	0.2	P189-ND	.45	4.05	72.00/200	918.00/4,000	CR2032
		130	23.0 x 2.0	3.0	15	0.2	P038-ND	1.25	11.25	200.00/200	1330.00/2,000	CR2320
		265	23.0 x 3.0	4.0	15	0.2	P111-ND	1.60	14.40	256.00/200	1702.40/2,000	CR2330
		560	23.0 x 5.4	5.9	15	0.2	P117-ND	1.98	17.78	158.00/100	1050.70/1,000	CR2354
		100	24.5 x 1.2	2.0	10	0.2	P042-ND	3.25	29.25	520.00/200	1560.00/800	CR2412
		620	24.5 x 5.0	6.3	10	0.2	P340-ND *NEW!*	1.38	12.38	110.00/100	825.00/1,000	CR-2450
		1000	24.5 x 7.7	10.5	10	0.2	P120-ND	3.00	27.00	240.00/100	1596.00/1,000	CR2477
		500	30.0 x 3.2	7.1	15	0.2	P121-ND	2.58	23.18	412.00/200	2739.80/2,000	CR3032

* See "How To Order" for note on shipping charges on prepaid orders. ‡ Has internal 6.8K ohm resistor in series. # Retail Card package. § Bulk package.

Vanadium Pentoxide Lithium Rechargeable Batteries

Features:

- One high-voltage battery to serve your back up needs. This single, compactly designed, cost-effective 3V battery does the work of three 1.2V Ni-Cd or two capacitors. • Months of continuous use as a backup. The VL3032 has a nominal electrical capacity of 100mAh which translates into 10,000 hours with a microprocessor load of 10 µA.

Applications:

- **Memory Backup:** Facsimiles, ECRs, telephones, typewriters, sequencers, VTRs, video cameras, personal computers, memory cards, tuners.

Fig. 1

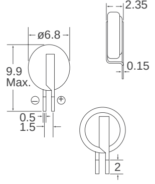


Fig. 2

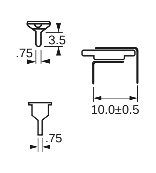


Fig. 3

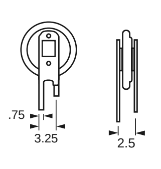


Fig. 4

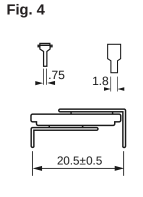


Fig. 5

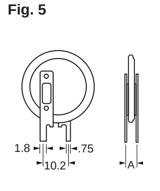


Fig. 6

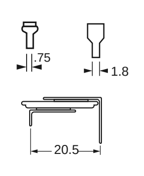


Fig. 7

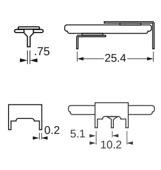
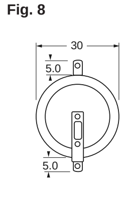


Fig. 8



				Dimensions (mm)								Pricing			
Fig.	**Type**	**(V)**	**Capacity (mAh)**	**Dia.**	**Height**	**A**	**Weight (g)**	**Drain Max. (mA)**	**Charge Current***	**Digi-Key Part No.**	**1**	**10**	**Pkg.**	**Carton**	**Panasonic Part No.**
1	Coin	3	1.5	6.8	2.05	—	0.3	0.01	<0.2 mA	P048-ND	4.43	39.83	1416.00/400	9027.00/4,000	VL621-F9D
2			7	12.5	2.0	—	0.8	0.03	<0.5 mA	P079-ND	4.45	40.05	213.60/60	2840.88/1,200	VL1220-1HF
3			7	12.5	2.0	—	0.8	0.03	<0.5 mA	P080-ND	4.45	40.05	178.00/50	2840.88/1,200	VL1220-1VC
4			20	20.0	2.0	—	2.2	0.07	<1.5 mA	P081-ND	4.75	42.75	456.00/120	1710.00/600	VL2020-1HF
5			20	20.0	2.0	2.7	2.2	0.07	<1.5 mA	P082-ND	4.75	42.75	456.00/120	1710.00/600	VL2020-1VC
6			30	23.0	2.0	—	2.8	0.10	<2.0 mA	P083-ND	5.85	52.65	280.80/60	2106.00/600	VL2320-1HF
5	Coin	3	30	23.0	2.0	2.7	2.8	0.10	<2.0 mA	P084-ND	5.85	52.65	280.80/60	2106.00/600	VL2320-1VC
6			50	23.0	3.0	—	3.7	0.10	<2.0 mA	P085-ND	7.38	66.38	354.00/60	2655.00/600	VL2330-1HF
5			50	23.0	3.0	3.7	3.7	0.10	<2.0 mA	P086-ND	7.38	66.38	354.00/60	2655.00/600	VL2330-1VC
7			100	30.0	3.2	—	6.3	0.20	<4.0 mA	P087-ND	9.28	83.48	445.20/60	3339.00/600	VL3032-1GUF
8			100	30.0	3.2	—	6.3	0.20	<4.0 mA	P088-ND	9.28	83.48	742.00/100	3339.00/600	VL3032-1F2

* Charge Voltage = 3.4 ± 0.15V

Panasonic. Manganese Lithium Rechargeable Batteries (ML Series)

Features:

- **Charging at voltage levels even under 3V**. In order to support the current trend in ICs toward lower voltages, these batteries can be charged at a 3 ±0.2 voltage level, and this makes it easier to set the charging circuits for the circuits which employ 3V ICs.
- **Large capacity for hour-after-hour back-up.**
- **Excellent withstand voltage characteristics.** These batteries can withstand the application of a continuous 3.2V voltage at a high temperature of 60°C (140°F).

Applications:

- Power source for backing up memory data in mobile telephones, personal handyphone systems, memory cards, pagers, data terminals and office automation equipment.

Fig. 1 *NEW!*

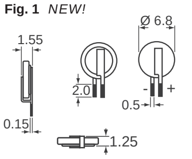


Fig. 2 *NEW!*

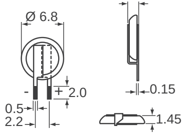


Fig. 3

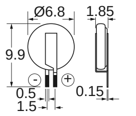


Fig. 4

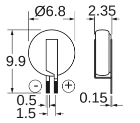


Fig. 5 *NEW!*

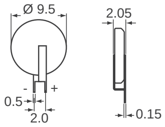


Fig. 6 *NEW!*

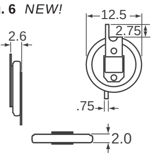


Fig. 7 *NEW!*

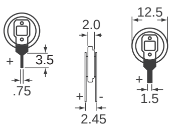


Fig. 8

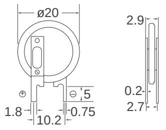


Fig. 9

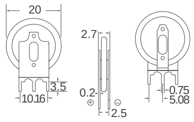


Fig. 10

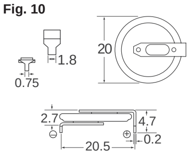
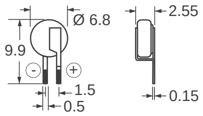


Fig.	Type	(V)	Capacity (mAh)	Dim. (mm) Dia.	Dim. (mm) Height	Weight (g)	Drain Std. (mA)	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing Pkg.	Pricing Carton	Panasonic Part No.
1	Coin	3	2.6	6.8	1.25	0.15	0.01	P298-ND *NEW!*	2.13	19.13	850.00/500	5418.75/5,000	ML612S/F9D
2			3.4	6.8	1.45	0.17	0.01	P297-ND *NEW!*	2.13	19.13	850.00/500	5418.75/5,000	ML614S/F9F
3			2.9	6.8	1.55	0.20	0.01	P043-ND	2.13	19.13	850.00/500	5418.75/5,000	ML616S/F9D
4			5.0	6.8	2.05	0.30	0.01	P044-ND	2.13	19.13	680.00/400	4335.00/4,000	ML621S/F9D
5			11.0	9.5	2.05	0.50	0.03	P296-ND *NEW!*	2.75	24.75	880.00/400	5610.00/4,000	ML920S/F9D
6			17.0	12.5	2.0	0.80	0.03	P295-ND *NEW!*	2.75	24.75	550.00/250	7012.50/5,000	ML1220/F1A
7			17.0	12.5	2.0	0.80	0.03	P294-ND *NEW!*	2.75	24.75	550.00/250	7012.50/5,000	ML1220/V1A
8			45.0	20	2.0	2.20	0.10	P045-ND	3.63	32.63	580.00/200	7395.00/4,000	ML2020/V1A
9			45.0	20	2.0	2.20	0.10	P046-ND	3.63	32.63	580.00/200	7395.00/4,000	ML2020/G1A
10			45.0	20	2.0	2.20	0.10	P047-ND	3.63	—	195.75/60	8874.00/4,800	ML2020/H1C

Niobium Titanium Lithium Rechargeable Battery



Features:

Designed for very low voltage ICs. Nominal voltage is 2.0V. These can be charged and discharged at temperatures as high as 60°C (140°F). Charging voltage is 2.5 volts.

Applications:

Power source for backing up memory data in cellular phones, PDAs (personal digital assistants), portable communication devices, and other handheld applications.

Type	Voltage (V)	Capacity (mAh)	Dim. (mm) Dia.	Dim. (mm) Height	Weight (g)	Drain Std. (mA)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 400	Panasonic Part No.
Coin	2.0	4.0	6.8	2.55	0.25	0.01	P009-ND	3.75	3.38	3.00	NBL621/F9D

Flashlights and Light Scopes

TASKMASTER™ Flashlights

These Heavy-Duty Lights are durable enough for even the most demanding jobs.

Features:

• Performance tested by independent testing laboratory • Durable scratch-resistant high-tech plastic withstands drop tests from 7 feet onto concrete pavement • Powerful Krypton bulb for brighter and whiter light • Heavy-Duty switch tested to operate over 10,000 cycles • Lifetime warranty on flashlight and switch (on manufacturer defects only).

Specifications:

BF-310PA/K-A: (Fig.1)
• **Weight:** 8.53 oz. • **Batteries:** 2 Heavy-Duty "AA" size • **Brightness:** Light output of over 50 candles at 5 feet (1.52 meters)

BF-110PA/K-A: (Fig.2)
• **Weight:** 1.16 lbs. • **Batteries:** 2 Heavy-Duty "D" size • **Brightness:** Light output of over 100 candles at 5 feet (1.52 meters)

TASKMASTER™ Head Light (Fig.3)

Features: • Powerful hands-free operation • Designed for comfort with wide, adjustable elastic headband and padded headrest • Heavy-duty rugged, impact resistant plastic housing and durable switch • Pivoting lamp has high intensity bulb with hands-free operation for any job indoors or out • Lightweight 5.7 oz. (161.59 grams) • Operates on two "AA" batteries (P107-ND sold separately) • Spare bulb included.

TASKMASTER™ Light Scope (Fig.4)

Features: • Built-in blue filter optimizes focal clarity • Sturdy rack and pinion focusing mechanism built into the barrel • Comes with removable base stand/mount clip for viewing slides, printed pieces, etc.

Specifications: • **Magnification**: 100x • **Power Source:** Two "AA" batteries (P107-ND sold separately) • **Body Material:** ABS plastic (black) • **Dimensions:** 5.5" x 2.0" x 0.9" (139.7mm x 50.8mm x 22.86mm) • **Weight:** Approx. 2.4 oz. (68.04 grams)

Applications: Research labs, environmental field work, circuit board exam, hobbyists, collectors, students, manufacturing, and more.

Fig. 1

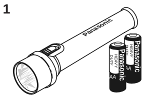


Fig. 2

Fig. 3

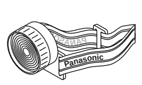
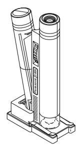


Fig. 4

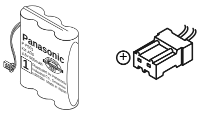


(Shown with base)

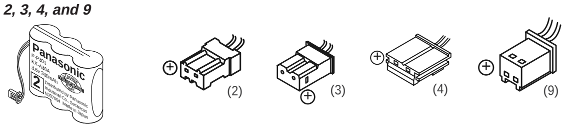
Fig.	Description	Digi-Key Part No.	Price Each	Panasonic Part No.
1	Flashlight	P056-ND	6.99	BF-310PA/KA
2	Flashlight	P057-ND	8.49	BF-110PA/KA
3	Head Light	P059-ND	12.99	BF-178PA/1B
4	100X Light Scope	P055-ND	59.99	FF-394PA

Replacement Telephone Packs

Type 1



Type 2, 3, 4, and 9



Type 43 and 92

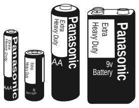
Pan. Type	(V)	Cap. C/5 (mAh)	Dimensions — H x L x T Inch (mm)	Weight Oz. (g)	Digi-Key Part No.	Price Each	Panasonic Part No.
1	3.6	600	1.88 x 1.65 x 0.55 (47.8 x 41.9 x 14.0)	2.37 (67.2)	P072-ND	6.86	P-P501
2	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P071-ND	6.86	P-P301
3	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P070-ND	6.86	P-P302
4	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P069-ND	6.86	P-P303
9	3.6	300	1.09 x 1.65 x 0.55 (27.7 x 41.9 x 14.0)	1.47 (41.7)	P066-ND	6.86	P-P304
43	3.6	600	2.16 x 1.77 x 0.66 (54.9 x 45.0 x 16.8)	2.69 (72.6)	P065-ND	22.39	P-P543
92	3.6	600	2.08 x 1.68 x 0.58 (52.8 x 42.7 x 14.7)	2.52 (71.4)	P064-ND	16.92	P-P592

Replacement Packs available for the following telephone brands.

AT&T / Lucent
Bell Phone
Bell South
Cobra
Code-A-Phone
Conair
General Electric
Goldstar
GTE
Northwestern Bell
Pacific Bell
Pactel
Panasonic
Phone Mate
Radio Shack
Sanyo
Sears
Sharp
Sony
Southwestern Bell Freedom Phone
Tele-Phone
Toshiba
Uniden

To obtain the correct Panasonic cross reference number, please call our technical staff at 1-800-344-4539 with the model number of your phone.

Panasonic. Extra Heavy Duty Carbon Zinc Batteries



FEATURES:

- **Unsurpassed Leakage Resistance for a Longer Service Life**
- **Discharge Characteristics Suited for All Applications**
- **Excellent Storage Life**

Panasonic Extra Heavy Duty battery is composed of: manganese dioxide for the positive-activating substance, zinc for the negative-activating substance, and an aqueous solution of neutral salts such as zinc chloride and ammonium chloride for the electrolyte.

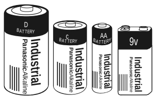
APPLICATIONS: • Transistor radios, tape recorders, portable TVs, interphones, transceivers, electronic calculators, clocks and watches, communications equipment, measuring instruments and various other electronic products • Flashlights, pen lights and various other lighting devices • 8mm cameras and other photographic products • Gas and oil equipment, toys, etc. Also available in tabbed version of D, C, and AA cell batteries; denoted by "T" suffix in Digi-Key part number. *Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.*

Size	(V)	Dimensions – In. (mm)		Weight✱	Capacity (to 0.9V/Cell)	Digi-Key	Pricing			Panasonic
		Dia.	Height	Oz. (grams)		Part No.	Each	Pkg.	Carton	Part No.
AA	1.5	0.571 (14.5)	1.988 (50.5)	0.67 (19)	110 hrs. (100Ω cont.)	P103-ND	.51	20.40/60	132.60/600	UM-3NX
AAA	1.5	0.413 (10.5)	1.752 (44.5)	0.34 (9.7)	39 hrs. (100Ω cont.)	P265-ND	.27	9.00/50	162.00/1500	R03NPA/BK
N	1.5	0.472 (12.0)	1.189 (30.2)	0.23 (6.55)	30 hrs. (100Ω cont.)	P266-ND	.36	12.00/50	288.00/2000	UM-5NX
9V	9	1.91 x 1.04 x 0.69 (48.5 x 26.5 x 17.5)		1.34 (38)	2.5 hrs. (100Ω cont. to 5.4V)	P104-ND	1.77	14.16/12	220.90/288	006PNX
Lantern ‡	6	2-11/16" x 2-11/16" x 4-1/16" (68.26 x 68.26 x 103.19)		20.0 (567)	Heavy duty type battery	P206-ND	4.15	44.82/12	44.82/12	W4FDPA
AA	Tabbed Version					P103T-ND	.87	34.80/60	261.00/600	UM-3NX

✱ See "How To Order" for note on shipping charges on prepaid orders. ‡ Spring top type.

Panasonic. Industrial Alkaline Batteries

MADE IN U.S.A.



FEATURES:

- **Large Current and Large Capacity for an Excellent Performance**
- **Stable Voltage and Current**
- **Unsurpassed Resistance to Leakage**
- **Excellent Storage Life**

The cylindrical alkaline battery is composed of: manganese dioxide for the positive-activating substance, zinc powder for the negative-activating substance, and caustic alkali for the electrolyte.

APPLICATIONS: 99% *MERCURY FREE* • Headphone stereo, radio-cassette recorders, strobes, cameras, electronic calculators, 8 mm cameras, electric shavers, tape recorders, high-power flashlights, toys and other cordless products. Also available in tabbed version of D, C, and AA cell batteries; denoted by "T" suffix in Digi-Key part number. *Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.*

Size	(V)	Dimensions – In. (mm)		Weight*	Capacity	Rated	Digi-Key	Pricing			Panasonic
		Dia.	Height	Oz. (grams)	(to 0.9V/Cell)	Drain (mA)	Part No.	Each	Pkg	Carton	Part No.
D	1.5	1.346 (34.2)	2.421 (61.5)	4.76 (135)	1200 hrs. (100Ω cont.)	320	P105-ND	1.74	13.92/12	146.16/144	AM-1PIX
C	1.5	1.031 (26.2)	1.969 (50.0)	2.29 (65)	380 hrs. (100Ω cont.)	300	P106-ND	1.29	20.64/24	160.99/288	AM-2PIX
AA	1.5	0.571 (14.5)	1.988 (50.5)	0.85 (24)	170 hrs. (100Ω cont.)	130	P107-ND	.57	15.20/40	148.20/600	AM-3PIX/2S
AAA	1.5	0.413 (10.5)	1.752 (44.5)	0.42 (12)	65 hrs. (100Ω cont.)	25	P146-ND	.57	19.00/50	123.50/500	AM-4PIX/2S
N	1.5	0.472 (12.0)	1.189 (30.2)	0.32 (9)	48 hrs. (100Ω cont.)	25	P147-ND†	1.08	17.28/24	280.80/600	AM5X
9V	9	1.93 x 1.04 x 0.69 (49.0 x 26.0 x 17.5)		1.66 (47)	6 hrs. (100Ω cont. to 5.4V)		P145-ND	2.22	17.76/12	277.06/288	6AM-6PIX/1S
D	Tabbed Version						P105T-ND	2.10	16.80/12	186.48/144	AM-1PIX
C	Tabbed Version						P106T-ND	1.65	26.40/24	237.60/288	AM-2PIX
AA	Tabbed Version						P107T-ND	.93	24.80/40	279.00/600	AM-3PIX/2S

* See "How To Order" for note on shipping charges on prepaid orders. † Made in Japan.

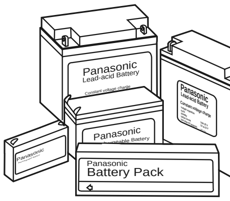
ACL Staticide®

PowerPen

A battery contact cleaner that inhibits and removes oxidation on all types of batteries and terminals of battery powered products. This means you will spend less money on batteries because PowerPen will maximize your batteries performance. In addition, using PowerPen as directed will protect all terminals from corrosion, therefore extending the products' life.

ST1026-ND..........**$6.17**

Panasonic. Sealed Lead-Acid Batteries (Valve Regulated)



GENERAL FEATURES: *"DO NOT LEAK!!"*

• **High Quality & High Reliability:** The LCR battery has stable and reliable capacity. 100% tested on line for voltage, capacity, and seals. And all vents are 100% visually inspected during the final assembly process.

• **High Power Density:** These batteries save installation space, while providing full and reliable power for the equipment, and many have been designed for rapid recharge, or for high power output.

• **Leak-resistant Structure:** The LCR battery uses an absorbed electrolyte system. The LCR batteries have exceptional leak resistance, **and can be used in any position.**

• **Long Service Life; Flat or Cyclic:** The LCR battery has long life in float or cyclic service.

• **Easy Maintenance:** There is no need to check the specific gravity of the electrolyte or to add water during the service life. Totally sealed, and needs only charging for maintenance.

• **No Corrosive Gas Generation:** There is no corrosive gas generation during normal use.

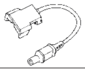
• **Exceptional Deep Discharge Recovery:** LCR batteries have exceptional deep discharge recovery and charge acceptance, even after deep or prolonged discharge.

• **DOT & IATA Approval:** Transportation; The SLA batteries should be handled as common cargoes for both air and boat shipping.

• **U.L. Component Recognition:** U.L. Component Recognition under UL924, Section 38, for Emergency Lights and Power Supplier (not UPS), requires that the battery safely vent when overcharged, and tested under mineral oil. It further requires that the equipment and battery be submitted together for formal UL approval. **(UL Component Recognition does NOT remove this requirement for complete package testing).** The manufacturer suggests peak charging all sealed lead acid batteries before use and intermittently during storage.

Digi-Key is not approved by any state or federal agency as an authorized supplier of product for medical, life support or life sustaining devices or systems.

CROSS REFERENCE ABBREVIATIONS:
EP = Eagle-Picher; YU = Yuasa; PS = Power Sonic; PA = Panasonic

(V)	Cap. 20h Rate (Ah)	Dimensions – In. (mm) L x W x H	Term. Type (In.)	Weight* lbs. (kg)	Digi-Key Part No.	Pricing 1	10	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference (see above for mfg. abbreviations)
6	1.3	3.82 x 0.94 x 1.97 (97 x 24 x 50)	.187 spade	0.66 (.30)	P128-ND	8.34	74.16	259.55/40	LC-R061R3PU	YU: NP1.2-6; PS: PS-612, PA: LCR-6V1.3P
6	3.4	5.28 x 1.34 x 2.36 (134 x 34 x 60)	.187 spade	1.37 (.62)	P166-ND	15.80	140.41	294.86/24	LC-R063R4P	EP: CF6V2.6; YU: NP3-6; PS: PS-626
6	4.2	2.76 x 1.89 x 4.02 (70 x 48 x 102)	.187 spade	1.72 (.78)	P164-ND	8.44	75.00	157.50/24	LC-R064R2P	—
6	7.2	5.95 x 1.34 x 3.70 (151 x 34 x 94)	.187 spade	2.78 (1.26)	P074-ND	13.39	—	124.95/12	LC-R067R2P	YU: NP7-6: PA: LCR-6V7.2P
6	12.0	5.95 x 1.97 x 3.70 (151 x 50 x 94)	.187 spade	4.30 (1.95)	P075-ND	16.09	—	150.15/12	LC-R0612P	PA: LCR-6V12P
6	12.0	5.95 x 1.97 x 3.70 (151 x 50 x 94)	.250 spade	4.30 (1.95)	P165-ND	16.09	—	150.15/12	LC-R0612P1	PA: LCR-6V12P1
12	1.3	3.82 x 1.87 x 1.97 (97 x 47.5 x 50)	.187 spade	1.30 (.59)	P264-ND	17.47	155.31	271.80/20	LC-R121R3PU	PS: PS-1212, PA: LCR-12V1.3P
12	2.2	6.97 x 1.34 x 2.36 (177 x 34 x 60)	.187 spade	1.76 (.80)	P171-ND	20.31	180.53	379.11/24	LC-R122R2P	EP: CF12V1.5; YU: NP1.9-12; PS: PS-1219
12	3.4	5.28 x 2.64 x 2.36 (134 x 67 x 60)	.187 spade	2.65 (1.20)	P172-ND	25.65	—	239.40/12	LC-R123R4P	EP: CF12V2.6S1; YU: NP2.6-12; PS: PS-1230
12	7.2	5.95 x 2.54 x 3.70 (151 x 64.5 x 94)	.187 spade	5.45 (2.47)	P078-ND	20.14	—	156.63/10	LC-R127R2P	YU: NP7-12; PA: LCR-12V6.5P
12	7.2	5.95 x 2.54 x 3.70 (151 x 64.5 x 94)	.250 spade	5.45 (2.47)	P218-ND	22.95	—	178.50/10	LC-R127R2P1	PA: LCR-12V6.5P1
12	12	5.95 x 3.86 x 3.70 (151 x 98 x 94)	.250 spade	8.41 (3.8)	P230-ND	33.19	—	265.50/12	LC-RA1212P1	—
12	17	7.13 x 2.99 x 6.58 (181 x 76 x 167)	nut/bolt	14.3 (6.5)	P174-ND	36.23	—	124.20/4	LC-RD1217P	EP: CFM12V18; YU: NP15-12; PS: PS-12150
12	20	7.13 x 2.99 x 6.58 (181 x 76 x 167)	nut/bolt	14.6 (6.6)	P231-ND	41.13	—	141.00/4	LC-X1220P	—
12	28	6.50 x 4.92 x 7.07 (165 x 125 x 179.5)	nut/bolt	24.3 (11)	P049-ND	50.75	435.00	—	LC-XB1228P	PA: LC-X1228P
12	33	7.70 x 5.12 x 7.09 (195.6 x 130 x 180)	nut/bolt	26.5 (12)	P259-ND	57.09	489.30	—	LC-LA1233P	PS: PS-12330, PA: LCR-12V33P
12	42	7.76 x 6.50 x 7.09 (197 x 165 x 180)	nut/bolt	35.3 (16)	P153-ND	80.94	693.75	—	LC-X1242P	—
12	65	13.80 x 6.54 x 6.89 (350 x 166 x 175)	nut/bolt	52.9 (24)	P209-ND	123.38	1057.50	—	LC-X1265P	PA: LCR-12V65P
VCR/Camcorder Batteries										
12	2.3	7.17 x 0.94 x 2.43 (182 x 24 x 62)	pressure	1.40 (.64)	P179-ND	22.56	—	210.58/12	LC-SA122R3EU	PA: LCS-2012AP, LCS-2012AVBNC, PV-BP80, LCS-2312NC, AG-BP212 LCS-2312AVBNC, PV-BP88
12	2.0	5.65 x .93 x 2.55 (143.5 x 24 x 65)	pressure	1.30 (.59)	P263-ND	25.93	—	242.00/12	LC-SD122EU	PA: AG-BP20P; LCS-2012DVBNC, PV-BP50
Trickle Charge Series (for communications, micro UPS, emergency lights, etc.)										
12	2.0	7.17 x 0.94 x 2.43 (182 x 24 x 62)	pressure	1.40 (.64)	P052-ND	22.33	—	347.34/20	LC-TA122PU	**P260** 
Terminal Clip for P178, P179, P263, P050, and P052						P260-ND	4.73	42.00	1365.00/500	VJA0180	

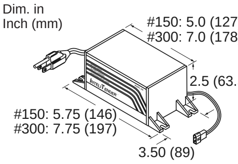
(V)	Cap. @ 10 Minute Rate (watt/cell)	Dimensions — Inch (mm) L x W x H	Term. Type (In.)	Weight Lbs. (kg)	Digi-Key Part No.	Pricing 1	Carton	Panasonic Part No.	Panasonic Replacement Battery Cross Reference
Watt-Rated Series (Designed for UPS Back-up Systems)									
12	20W	5.51 x 1.52 x 3.70 (140 x 38.5 x 94)	.250 spade	2.98 (1.35)	P210-ND	20.81	194.25/12	UP-RW1220P1	PA; LC-R129CH1
	45 W	5.95 x 2.54 x 3.70 (151 x 64.5 x 94)	.250 spade	5.62 (2.55)	P225-ND	22.95	178.50/10	UP-RW1245P1	PA; LC-R129P1

* See "How To Order" for note on shipping charges on prepaid orders.

PATCO

Battery Charger/ Maintainer

INTELITENDER MODELS 150 & 300



The InteliTender brings the battery to full optimum charge. Then, under the control of its computer, monitors the batteries voltage, supplying only what is needed to maintain the ideal charge.

Model 300 charges 2 batteries.

Volt	Amp	Model	Digi-Key Part No.	Price Each
Battery Chargers				
6	.75	150	PATC-02-ND*	69.93
6	1.5	150	PATC-01-ND†	69.93
12	.75	150	PATC-04-ND*	69.93
12	1.5	150	PATC-03-ND†	69.93
12 x 2	1.5 x 2	300	PATC-08-ND†	124.88
Cable (Must Order Separately)				
Battery Hook-up, Spring Clamp			PATC-07-ND	7.49
Motorcycle Hook-up, Ring Lugs			PATC-06-ND	5.00
Marine Hook-up, Ring Lugs			PATC-05-ND	5.00

* Recommended for 2.0 to 3.4 Ah batteries.
† Recommended for 4.0 Ah & above batteries.

KEYSTONE ELECTRONICS CORP.

Battery Holders

Fig. 1

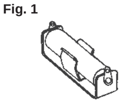


Fig. 2

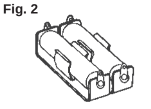


Fig. 3

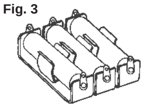


Fig. 4

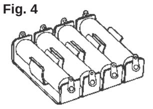


Fig. 5

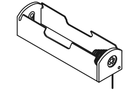


Fig. 6

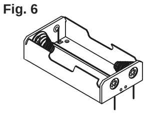


Fig. 7

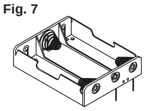


Fig. 8

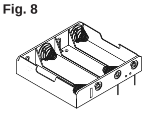


Fig. 9

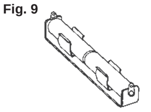


Fig. 10

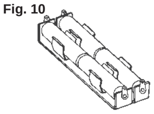


Fig. 11

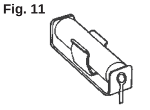


Fig. 12

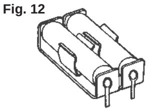


Fig. 13

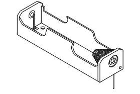


Fig. 14

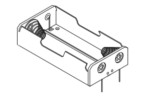


Fig. 15

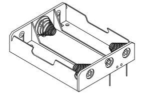


Fig. 16

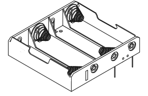


Fig. 17

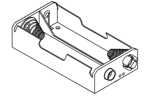


Fig. 18

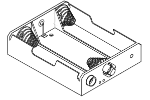


Fig. 19

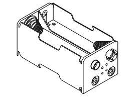


Fig. 20

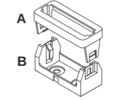


Fig. 21

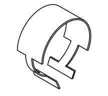


Fig. 22

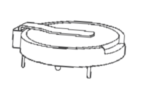


Fig. 23

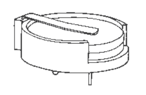


Fig. 24

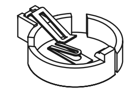
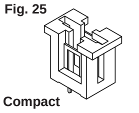
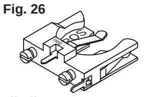


Fig. 25



Compact

Fig. 26



Slimline

Fig. 27

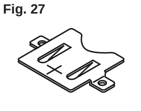


Fig. 28

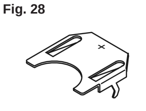


Fig. 29

Uses CR2032 Coin Cell Lithium Batteries

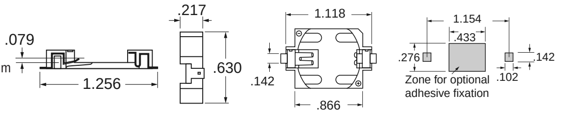


Fig. 30

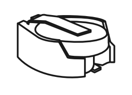


Fig. 31

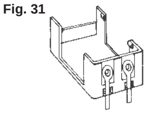


Fig. 32

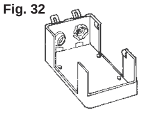


Fig. 33

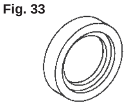


Fig. 34

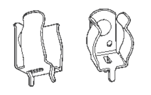


Fig. 35

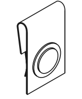


Fig. 36

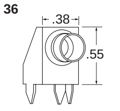


Fig. 37

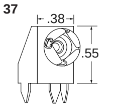


Fig. 38

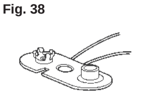


Fig. 39

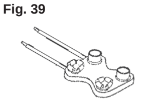


Fig. 40

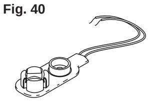


Fig. 41

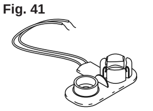


Fig. 42

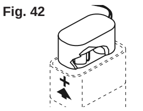


Fig. 43

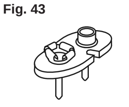


Fig. 44

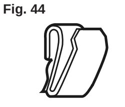


Fig. 45

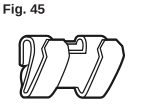
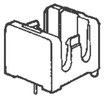


Fig.	Desc.	Digi-Key Part No.	Price Each		
			1	10	100
“N” Cell Holders*					
1	1 Cell	154K-ND	1.43	1.08	.88
2	2 Cell	155K-ND	2.95	2.22	1.81
3	3 Cell	156K-ND	6.12	4.59	3.58
“AAA” Cell Holders*					
1	1 Cell	137K-ND	1.74	1.31	1.07
2	2 Cell	138K-ND	3.09	2.32	1.96
3	3 Cell	169K-ND	4.52	3.39	2.66
4	4 Cell	170K-ND	6.18	4.64	3.65
“AAA” Cell Holders - PC Mount††					
5	1 Cell	2466K-ND	.72	.67	.61
6	2 Cell	2468K-ND	.75	.69	.64
7	3 Cell	2479K-ND	1.00	.93	.85
8	4 Cell	2481K-ND	1.10	1.02	.94
“AAA” Cell Holders - 6” Wire Leads††					
5	1 Cell	2467K-ND	.72	.67	.61
6	2 Cell	2469K-ND	.75	.69	.64
7	3 Cell	2480K-ND	1.00	.93	.85
8	4 Cell	2482K-ND	1.10	1.02	.94
“AA” Cell Holders*					
1	1 Cell	139K-ND	1.13	.85	.70
2	2 Cell	140K-ND	2.28	1.71	1.40
3	3 Cell	171K-ND	3.62	2.72	2.13
4	4 Cell	182K-ND	5.14	3.86	3.17
9	2 Cell	189K-ND	1.92	1.44	1.18
10	4 Cell	192K-ND	3.49	2.62	2.03
11	1 Cell	2222K-ND	1.42	1.07	.93
12	2 Cell	2223K-ND	2.42	1.82	1.56
“AA” Cell Holders - PC Mount††					
13	1 Cell	2460K-ND	.72	.67	.61
14	2 Cell	2462K-ND	.75	.69	.64
15	3 Cell	2464K-ND	1.00	.93	.85
16	4 Cell	2477K-ND	1.10	1.02	.94
“AA” Cell Holders - 6” Wire Leads††					
13	1 Cell	2461K-ND	.72	.67	.61
14	2 Cell	2463K-ND	.75	.69	.64
15	3 Cell	2465K-ND	1.00	.93	.85
16	4 Cell	2478K-ND	1.10	1.02	.94
“AA” Cell Holders - with Snap-On Connector††					
17	2 Cell	2474K-ND	.75	.69	.64
18	3 Cell	2475K-ND	1.00	.93	.85
19	4 Cell	2476K-ND	1.10	1.02	.94
Cell Lithium Holders - PC Mount††					
20B	1/2 AA	108KK-ND	1.15	1.06	.62
20B	AA	1028K-ND	1.18	1.10	.64
20B	2/3 A	1029K-ND	1.18	1.09	.64
Cell Lithium Retaining Cover††					
20A	1/2 AA	108CK-ND	.38	.36	.35
20A	AA	1028CK-ND	.46	.43	.40
21	2/3 A	1029CK-ND	.44	.41	.38
“C” Cell Holders*†					
1	1 Cell	173K-ND	1.39	1.05	.86
2	2 Cell	174K-ND*	2.42	1.82	1.48
3	3 Cell	187K-ND	5.46	4.10	3.21
9	2 Cell	185K-ND	2.12	1.60	1.31
10	4 Cell	196K-ND	4.05	3.04	2.40
11	1 Cell	2224K-ND	1.45	1.09	.89
12	2 Cell	2225K-ND*	2.59	1.95	1.59
“D” Cell Holders*†					
1	1 Cell	175K-ND	1.61	1.21	.96
2	2 Cell	176K-ND	2.82	2.12	1.73
3	3 Cell	190K-ND	6.21	4.66	3.66
9	2 Cell	186K-ND	2.42	1.82	1.48
10	4 Cell	200K-ND	4.89	3.67	2.57
11	1 Cell	2226K-ND	2.01	1.51	1.22
12	2 Cell	2227K-ND*	3.17	2.39	1.95
24mm Coin Cell Lithium “PC” Holders					
22	1 Cell	105K-ND	1.12	.84	.75
23	2 Cell	1025K-ND	.98	.87	.82
20mm Coin Cell Lithium “PC” Holders					
22	1 Cell	106K-ND	1.12	.84	.75
22	1 Cell	103K-ND	1.21	1.12	.75
23	2 Cell	1026K-ND	.98	.87	.82
23mm Coin Cell Lithium “PC” Holders					
22	1 Cell	107K-ND	1.12	.84	.75
23	2 Cell	1027K-ND	.98	.87	.82
12mm Coin Cell Lithium “PC” Holders					
22	1 Cell	500K-ND	1.72	1.40	1.21
16mm Coin Cell Lithium “PC” Holders					
22	1 Cell	502KE-ND	1.49	1.22	1.05
20mm Coin Cell Holder					
24	1 Cell	1066K-ND	1.21	1.12	.75
Vertical 20mm Coin Cell Holder					
25	1 Cell	1067K-ND	1.08	.96	.90
26	1 Cell	1065K-ND	1.08	.96	.90
Surface Mount Coin Cell Retainer Contacts					
27	12mm	3000K-ND	.34	.26	.23
27	20mm	3002K-ND	.35	.26	.23
27	23mm	3004K-ND	.35	.27	.24
27	24mm	3006K-ND	.36	.28	.25
Thru Hole Mount Coin Cell Retainer Contacts					
28	12mm	3001K-ND	.34	.26	.23
28	20mm	3003K-ND	.35	.26	.23
28	23mm	3005K-ND	.35	.27	.24
28	24mm	3007K-ND	.36	.28	.25
Surface Mount Coin Cell Holder - Bulk					
29	1 Cell, 20mm	1060K-ND	1.21	1.12	.75
Surface Mount Coin Cell Holder - Tape & Reel					
29	1 Cell, 20mm	1060KTR-ND	388.82/500		
Surface Mount Coin Cell Holder - Bulk					
30	1 Cell, 20mm	1061K-ND	1.63	1.51	1.00
30	2 Cell, 20mm	1062K-ND	1.63	1.51	1.00
30	1 Cell, 23mm	1071K-ND	1.63	1.51	1.00
Surface Mount Coin Cell Holder - Tape & Reel					
30	1 Cell, 20mm	1061KTR-ND	221.03/200		
30	2 Cell, 20mm	1062KTR-ND	221.03/200		
30	1 Cell, 23mm	1071KTR-ND	221.03/200		
9 Volt Holders					
31	1 Cell	1294K-ND	1.28	.96	.80
32	1 Cell	1295K-ND	1.23	.93	.76
Insulated Polarizing Washers					
33	Red	59K-ND	—	.08	.07
33	Black	60K-ND	—	.08	.07
“AA” “PC” Battery Clip					
34	1 Cell	92K-ND•	.50/2	.19	.13
“AAA” Snap-In Battery Clips					
34	—	82K-ND•	.38/2	.16	.13
“AAA”, “AAAA”, “N” Snap-IN Battery Clips					
35	—	238K-ND•	.23/2	.10	.10
9 Volt “PC” Battery Clips (on board battery mount)					
36	Male	593K-ND	.27	.21	.20
37	Female	594K-ND	.33	.25	.24
9 Volt Battery Straps					
38	Single	72K-ND	.81	.73	.55
39	Dual	227K-ND	2.10	1.58	1.29
Premium 9 Volt Battery Straps (I-Style)					
40	Single, 4”	2238K-ND	.46	.43	.37
40	Single, 6”	2239K-ND	.48	.45	.38
40	Single, 8”	2240K-ND	.49	.46	.39
Premium 9 Volt Battery Straps (T-Style)					
41	Single, 4”	2241K-ND	.49	.46	.39
41	Single, 6”	2242K-ND	.50	.47	.40
41	Single, 8”	2243K-ND	.52	.49	.41
Economy 9 Volt Battery Straps (I-Style)					
40	Single, 4”	232K-ND	.28	.27	.24
40	Single, 6”	233K-ND	.29	.27	.25
40	Single, 8”	234K-ND	.30	.28	.26
Economy 9 Volt Battery Straps (T-Style)					
41	Single, 4”	235K-ND	.31	.29	.27
41	Single, 6”	236K-ND	.31	.29	.27
41	Single, 8”	237K-ND	.32	.30	.28
Shielded 9 Volt Battery Straps (I-Style)					
42	Single, 4”	84-4K-ND	.33	.31	.29
42	Single, 6”	84-6K-ND	.34	.32	.30
42	Single, 8”	84-8K-ND	.35	.33	.30
Shielded 9 Volt Battery Straps (T-Style)					
42	Single, 4”	81-4K-ND	.33	.31	.29
42	Single, 6”	81-6K-ND	.34	.32	.30
42	Single, 8”	81-8K-ND	.35	.33	.30
Vertical “9V” PC Connector					
43	—	968K-ND	.84	.77	.56
Single “AA” Cell Clip					
44	—	209K-ND•	.39/2	.16	.14
Dual “AA” Cell Clip					
45	—	210K-ND•	.59/2	.24	.21
“AAA” Snap-On Contacts					
44	—	204K-ND•	.39/2	.16	.14
45	—	202K-ND•	.59/2	.24	.21

* Cell Holders are Aluminum. †† Cell Holders are Plastic.
† “C” and “D” cell holders are dual clips only.
● Figs. 34, 35, 44 & 45 sold by the pair.

Memory Protection Devices

Fig. 1

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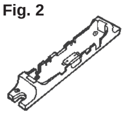
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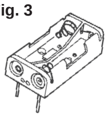
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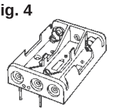
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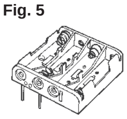
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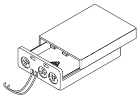
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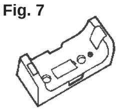
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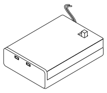
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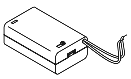
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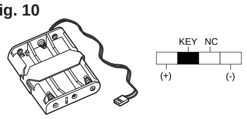

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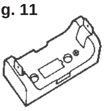
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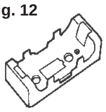
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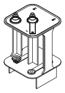
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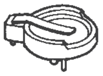
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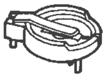
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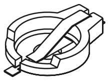
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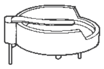
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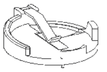
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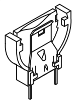
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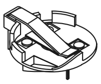
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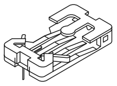
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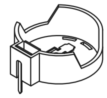
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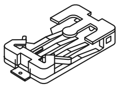
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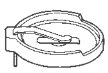
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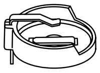
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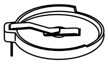
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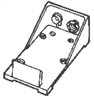
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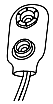
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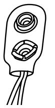
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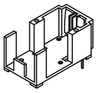
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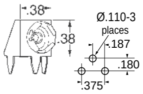

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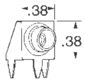

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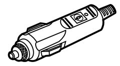
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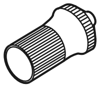
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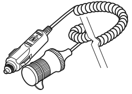
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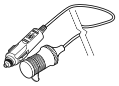
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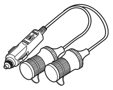
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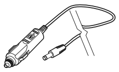
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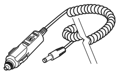
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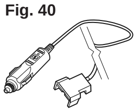
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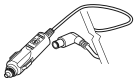
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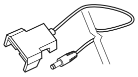
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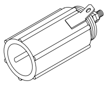
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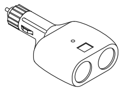


Battery Holders

Fig.	No. of Cells	Description	Digi-Key Part No.	Price Each		
				1	10	100
		“1/3N” Cell Holders				
1	1	PC Mount, Solder Legs	BC1/3N-ND	.86	.78	.66
		“N” Cell Holders				
2	2	PC Mount, Solder Legs	BH2N-ND	1.94	1.75	1.60
		“AAA” Cell Holders				
3	2	PC Mount, Solder Legs	BH2AAA-PC-ND	1.35	1.22	1.01
4	3	PC Mount, Solder Legs	BH3AAA-PC-ND	2.24	2.02	1.68
3	2	6” (152.40mm) Wire Leads, Stripped-Tinned .187” (4.76mm)	BH2AAA-W-ND	1.35	1.22	1.01
4	3	6” (152.40mm) Wire Leads, Stripped-Tinned .187” (4.76mm)	BH3AAA-W-ND	2.24	2.02	1.68
5	4	6” (152.40mm) Wire Leads, Stripped-Tinned .187” (4.76mm)	BH4AAA-W-ND	2.49	2.25	1.88
6	3	6” (152.40mm) Wire Leads, Stripped-Tinned .161” (5mm) with Cover	SBH-431A-ND	.83	.75	.63
		“AA” Cell Holders				
7	1	PC Mount, Solder Legs	BHAA-ND	1.84	1.66	1.39
3	2	PC Mount, Solder Legs	BH2AA-PC-ND	1.42	1.28	1.07
4	3	PC Mount, Solder Legs	BH3AA-PC-ND	2.39	2.16	1.80
5	4	PC Mount, Solder Legs	BH4AA-PC-ND	2.59	2.34	1.95
8	3	Battery Case for 3 AA Cells with 6” Wire Leads and Switch with Belt Clip	SBC331AS-GRN-ND	1.99	1.80	1.66
9	2	Battery Case for 2 AA Cells with 6” Wire Leads and Switch	SBH-321AS-ND	.72	.65	.60
9	3	Battery Case for 3 AA Cells with 6” Wire Leads and Switch	SBH-331AS-ND	1.03	.93	.86
9	4	Battery Case for 4 AA Cells with 6” Wire Leads and Switch	SBH-341AS-ND	1.08	.98	.90
3	2	6” (152.40mm) Wire Leads, Stripped-Tinned .187” (4.76mm)	BH2AA-W-ND	1.42	1.28	1.07
4	3	6” (152.40mm) Wire Leads, Stripped-Tinned .187” (4.76mm)	BH3AA-W-ND	2.39	2.16	1.80
5	4	6” (152.40mm) Wire Leads, Stripped-Tinned .187” (4.76mm)	BH4AA-W-ND	2.59	2.34	1.95
		Computer Clock Battery Replacement / “AA” Cell Holder				
10	3	9” Wire Leads w/ conn., velcro pads included	BH3AA-211-ND	3.19	2.88	2.84
		“1/2AA” Cell Holders				
7	1	PC Mount, Solder Legs	BH1/2AA-ND	1.48	1.34	1.12
		“2/3A” Cell Holders				
7	1	PC Mount, Solder Legs	BH2/3A-ND	1.65	1.57	1.50
—		Cover for PC Mount Holder	BH2/3AC-ND	.44	.40	.34
11		Fast-On Tabs	BH2/3A-T-ND	1.66	1.50	1.43
		“C” Cell Holders				
12	1	PC Mount, Solder Legs	BHC-ND	2.02	1.82	1.76
		Lantern Battery Replacement — “D” Cell Holders				
13	4	Uses Four UM-1 or D Cells	BA4D-S-ND	3.00	2.70	2.61
		Coin Cell Holders — 12mm Cell Diameter				
14	1	PC Mount, Solder Legs, 2-2.5mm Cell Height	BH500-ND	.97	.88	.74
		Coin Cell Holders — 16mm Cell Diameter				
15	1	PC Mount, Solder Legs, 1.6-3.2mm Cell Height	BH600-ND	.92	.83	.70
16		SMT, Temp. Range -40°C to +245°C	BH600SM-ND	1.13	1.02	.85
		Coin Cell Holders — 20mm Cell Diameter				
17	2	PC Mount, Solder Legs 2.5-3.2mm Cell Height	BH800S-ND	.60	.55	.54
18	1	PC Mount, Solder Legs	BH32T-C-ND	1.14	.87	.73
19	1	Vertical, for BR, CR2032 Battery	BS-5-ND	.95	.86	.72
20	1	Horizontal, for BR,CR2032 Battery	BS-3-ND	.77	.70	.58
22	1	Horizontal, for 3V Lithium Battery, CR2032 or BR2032	BS-7-ND	.77	.70	.58
21	1	PC Mount, Press-to-Eject Feature, CR2032 Battery	BA2032-ND	.72	.59	.54
23		SMT, Press-to-Eject Feature, CR2032 Battery	BA2032SM-ND	.72	.59	.54
		Coin Cell Holders — 23mm Cell Diameter				
17	2	PC Mount, Solder Legs, 2.5mm Cell Height	BH906S-ND	1.01	.92	.77
18	1	PC Mount, Solder Legs, 2-3.2mm Cell Height	BH908T-C-ND	1.14	.87	.73
16	1	SMT, Temp. Range -60°C to +282°C	BH2330SM-ND	1.16	1.05	.90
		Coin Cell Holders — 24-25mm Cell Diameter				
24	1	PC Mount, Solder Legs, 2-3mm Cell Height	BH1000-ND	.98	.89	.74
25		PC Mount, Solder Legs, 7.7mm Cell Height	BH1000-G-ND	1.22	1.13	.95
		Coin Cell Holders — 30mm Cell Diameter				
26	1	PC Mount, Solder Legs, 3.2mm Cell Height	BH3000-ND	1.22	1.13	.95
		9-Volt Cell Holders				
27	1	PC Mount, Solder Legs	BH9V-PC-ND	1.17	1.06	.90
27		6” (152.40mm) Lead Wires	BH9V-W-ND	.88	.80	.79
28		6” (152.40mm) Battery Snap Cable	BS6I-ND	.30	.27	.25
28		12” (304.8mm) Battery Snap Cable	BS12I-ND	.31	.28	.26
29		6” (152.40mm) Heavy Duty Battery Snap Cable	BS6I-HD-ND	.33	.31	.28
29		12” (304.8mm) Heavy Duty Battery Snap Cable	BS12I-HD-ND	.35	.32	.30
30		PC Mount, Printed Circuit Board Type w/ Contacts	BC9VPC-ND	1.41	1.13	1.02
		Printed Circuit Snap-Ons (off board battery mount)				
31	—	9-Volt Female Snap-on	BSPCF-ND	.22	.20	.14
32	—	9-Volt Male Snap-on	BSPCM-ND	.19	.18	.12

Cigarette Lighter Sockets

- 21 mm (Inside Diameter)
- Auto Plugs: (Fuse 3AG Style)
- The length of the cord shown in each item is measured from the welding point.

Fig.	Description	Digi-Key Part No.	Price Each		
			1	10	100
	Auto Power Plug				
33	ABS fused auto plug with LED, Black	APP-001-ND	2.25	2.03	2.00
	ABS fused auto plug with LED, Gray	APP-002-ND	2.25	2.03	2.00
	ABS fused auto plug with no LED, Black	APP-003-ND	2.07	1.86	1.84
	Cigarette Assemblies				
34	Cigarette Inline Socket, Plastic	ZA2010-ND	1.13	1.02	1.00
—	Red Rubber Cap for Sockets	ZA2081-ND	.56	.51	.50
35	12’ (3.66 meters) Coil Cord Assembly with 5A Fused Plug	ZA5070-ND	5.26	4.74	4.67
36	12’ (3.66 meters) 18AWG Cord Assembly, w/10A Fused Plug	ZA5071-ND	6.48	5.84	5.76
37	8” (203.2mm) 18AWG Cord Assembly, w/10A Fused Plug	ZA5072-ND	6.20	5.58	5.51
38	6’ (1.83 meters) 18AWG Cord, 2.1mm x 5.5mm DC Plug with 5A Fused Plug	ZA5073-ND	3.85	3.47	3.42
39	12’ (3.66 meters) Cord, 2.1mm x 5.5mm DC Plug, with 5A Fused Plug	ZA5074-ND	6.11	5.50	5.42
40	1’ (0.30 meters) UL2468 Cord, Lead Acid Clip, with 2A Fused Plug	ZA5076-ND	4.32	3.89	3.84
41	6’ (1.83 meters) Cord, 2.1mm x 5.5mm Rt. Angle DC Plug with 3A Fused Plug	ZA5077-ND	3.85	3.47	3.42
42	8” (203.2mm), UL2468 Cord, Lead Acid Clip, 2.1mm x 5.5mm DC Plug	ZA5350-ND	2.91	2.63	2.59
42	8” (203.2mm), UL2468 Cord, Lead Acid Clip, No Connector	ZA5350-B-ND	2.54	2.29	2.25
43	Panel Mount, Power Socket, Insert Lock	ZA2070-ND	3.36	3.00	2.71
43	Panel Mount, Power Socket, Screw Lock	ZA2060-ND	2.60	2.32	2.10
44	Power Plug Splitter, One Male Plug-Two Receptacle Sockets	ZA5018-ND	6.08	5.50	5.40

Memory Protection Devices “Budget Balancers” Battery Holders

Fig. 1

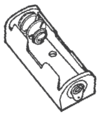
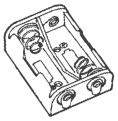


Fig. 2



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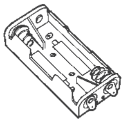

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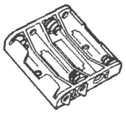

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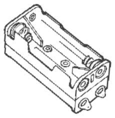

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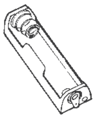

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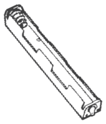


Fig. 8

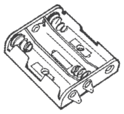
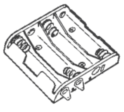


Fig. 9



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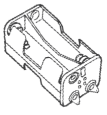


Fig. 11

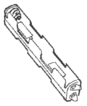


Fig. 12

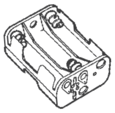


Fig. 13

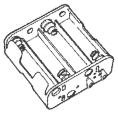


Fig. 14

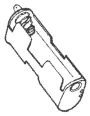


Fig. 15

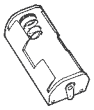


Fig. 16

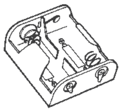


Fig. 17

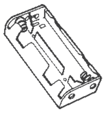


Fig. 18

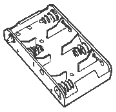


Fig. 19

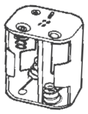


Fig. 20

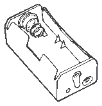


Fig. 21

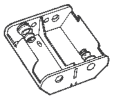


Fig. 22

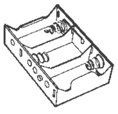


Fig. 23

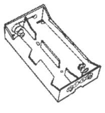


Fig. 24

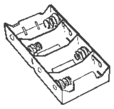


Fig.	No. of Cells	Description	Digi-Key Part No.	Price Each 1	10	100
		“N” Cell Holders				
1	1	Solder Tabs	BHNL-ND	.58	.52	.48
2	2	Solder Tabs	BH2NL-ND	.62	.56	.52
		“AAA” Cell Holders				
3	2	Solder Tabs	BC2AAAL-ND	.62	.56	.52
4	4	Solder Tabs	BC4AAAL-ND	1.46	1.32	1.22
5	4	Solder Tabs	BH24AAAL-ND	.99	.89	.82
3	2	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BC2AAAW-ND	.69	.63	.58
4	4	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BC4AAAW-ND	1.49	1.35	1.24
5	4	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BH24AAAW-ND	1.00	.91	.84
		“AA” Cell Holders				
6	1	Solder Tabs	BCAAL-ND	.54	.49	.46
7	2	Solder Tabs	BC12AAL-ND	.60	.54	.50
14	2	Solder Tabs	BC22AAL-ND	.58	.52	.48
8	3	Solder Tabs	BC3AAL-ND	.93	.84	.78
9	4	Solder Tabs	BC4AAL-ND	.96	.87	.80
10	4	Solder Tabs	BH24AAL-ND	.85	.77	.71
11	4	Solder Tabs	BH14AAL-ND	.71	.65	.60
12	6	Solder Tabs	BH26AAL-ND	1.20	1.08	1.00
13	8	Solder Tabs	BH48AAL-ND	1.46	1.32	1.22
14	2	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BC22AAW-ND	.59	.54	.50
8	3	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BC3AAW-ND	.96	.87	.80
9	4	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BC4AAW-ND	1.00	.91	.84
10	4	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BH24AAW-ND	.93	.84	.78
11	4	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BH14AAW-ND	.77	.70	.64
12	6	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BH26AAW-ND	1.26	1.14	1.06
13	8	6” Wire Leads, Stripped-Tinned 3/16” (4.78mm)	BH48AAW-ND	1.49	1.35	1.24
		“C” Cell Holders				
15	1	Solder Tabs	BHCL-ND	.65	.59	.54
16	2	Solder Tabs	BH2CL-ND	1.24	1.12	1.03
17	4	Solder Tabs	BH24CL-ND	1.37	1.24	1.15
18	4	Solder Tabs	BH4CL-ND	1.63	1.47	1.36
19	4	Solder Tabs	BH22CL-ND	1.75	1.58	1.46
		“D” Cell Holders				
20	1	Solder Tabs	BHDL-ND	.71	.65	.60
21	2	Solder Tabs	BH2DL-ND	1.37	1.24	1.15
22	3	Solder Tabs	BH3DL-ND	1.71	1.54	1.42
23	4	Solder Tabs	BH24DL-ND	1.71	1.54	1.42
24	4	Solder Tabs	BH4DL-ND	2.12	1.91	1.77

Panasonic® Magnetic Card Readers

Fig. 1

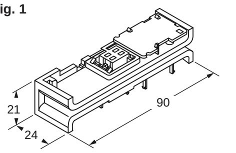
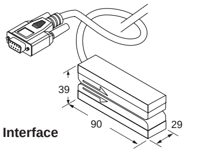


Fig. 2



Built-in RS-232 Interface

Fig. 3

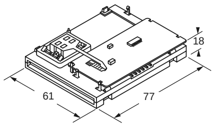
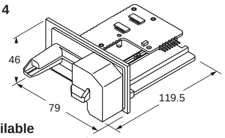
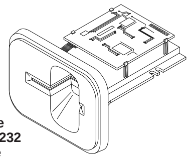


Fig. 4



Available with RS-232 Interface

Fig. 5



Available with RS-232 Interface

Manual Swipe Card Readers • Compact and lightweight designs • New high performance head mechanism. **Applications:** • Credit authorization terminals • Credit card telephones • POS terminals • Time and attendance terminals • Banking terminals (ATM/CD). **Specifications:** • **Power Supply Voltage: +**5 VDC • **Operating Temperature/Humidity:** -20°C to 60°C/10 to 90%RH • **Head Life:** PCR 100 - 300K passes, PCR102 - 500K passes

Manual Swipe Card Reader with Built-In RS-232 Interface and Decoder • Fully enclosed self (port) powered card reader featuring two track capability with long life heads. Shipped with attached 9-Pin D-Sub cable. **Specifications:** • **Power Supply Voltage:** +5 VDC • **Operating Temperature/Humidity:** -10°C to 50°C/10 to 90%RH • **Weight:** Approx. 90g

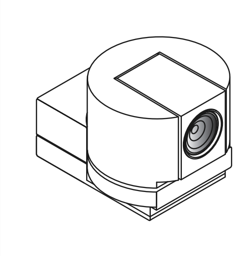
Manual Insertion Card Readers: • High precision, high reliability. **Applications:** • Credit card telephones • Cost control for facsimiles and copiers • Security control systems • Time and attendance terminals. **Specifications:** • **Power Supply Voltage:** +5 VDC • **Operating Temperature/ Humidity:** -20°C to 60°C / 10 to 90%RH • **Head Life:** PCR105/109/111 - 300K Passes, PCR106/PCR107 - 500K passes

Manual Insertion Card Reader with Built-in RS-232 Interface and Decoder • For indoor applications • Shipped with 9 Pin D-Sub cable. **Specifications:** • **Power Supply Voltage:** +6 ~ +12 VDC • **Operating Temperature/Humidity:** -10°C to 50°C/10 to 90%RH

Fig.	Card Standard	Current	Card Feed Speed	Card Reading Direction	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	IS02	3mA	8 ~ 150 cm/sec.	Swipe	PCR100-ND	28.22	22.58	18.35	ZU-M1121S1
1	IS01/IS02	6mA	10 ~ 150 cm/sec.	Swipe	PCR102-ND	43.56	34.85	28.32	ZU-M1242S1
2	IS01/IS02	14mA	10 ~ 150 cm/sec.	RS-232 Swipe	PCR108-ND	117.66	94.13	76.48	ZU-M1242L4DK
3	IS02	10mA	10 ~ 120 cm/sec.	Insertion	PCR105-ND	44.60	35.68	28.99	ZU-M2121S11
4	IS02	15mA	10 ~ 120 cm/sec.	Ejection	PCR106-ND	55.86	44.69	36.31	ZU-1852MAL5
4	IS01/IS02	15mA	10 ~ 100 cm/sec.	Ejection	PCR107-ND	63.12	50.50	41.03	ZU-1870MA5T5
4	IS01/IS02	15mA	10 ~ 150 cm/sec.	Ejection	PCR109-ND	61.86	49.49	40.21	ZU-1870MA4T4
4	IS01/IS02	15mA	10 ~ 150 cm/sec.	RS-232 Eject	PCR110-ND	110.00	88.00	71.50	ZU-1870MA101
5	IS01/IS02	15mA	10 ~ 150 cm/sec.	Ejection	PCR111-ND	67.50	54.00	43.88	ZU-1890M
5	IS01/IS02	15mA	10 ~ 150 cm/sec.	RS-232 Eject	PCR112-ND	115.00	92.00	74.75	ZU-1890M101
Cable for Single Track Swipe Reader 200mm (Use with PCR100)					PCR101-ND	7.50	—	—	ZUHM106A200
Cable for Double Track Swipe Reader 200mm (Use with PCR102)					PCR103-ND	7.50	—	—	ZUHM109A200
Cover for Single/Double Manual Swipe Reader (Use with PCR100, PCR102)					PCR104-ND	5.26	—	—	U1101M041

Panasonic

PTZ Color Camera with Optical Zoom



SPECIFICATIONS:

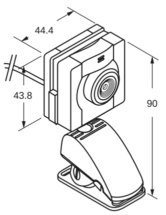
CCD Type • Image Size - 1/4 inch • Effective pixels - 752 x 582 **Lens** • Focal Length - 3.8 - 79.8mm • Zoom Range - 21:1 (Distance to object: infinity) • Max. horizontal field of view - 51° • Focus Control - Auto/Manual/Hold • Lens Distortion - >2% • Iris Control - Auto/Direct/Hold **Picture Setting** • White Balance - Auto/Direct/Hold • Shutter Speed - Adjustable (*1) • Back Light - Adjustable **Video output** • Composite 1.0Vp-p (Based on PAL) • S-Video (Y/C) • (Typ. :1.0Vpp 75 Ω, Based on PAL) **S/N Ration** • >49dB **Horizontal Resolution** • 450 TV lines **Vertical Resolution** • 420 TV lines **Min. illumination** • 5 lux **Dimension** • 141(W) x 114 (H) x 180 (D)mm [5 9/16" (W) x 4 1/2" (H) x 7 3/32" (D)] **Mass [Weight] (Camera unit)** • 1.2kg **Pan/Tilt** • Tilting angle - +15° to -87° • Panning angle - ± 100° • Preset Position - 11 pos. (including document position) (*2) **Control Method** • RS-232C port **DC Operation Voltage** • 12V± 10% DC **Power consumption** • 12W AC **Adapter Operating Voltage** • AC 100-240V, 50Hz **Safety and EMI Specification** • EN60950, EN55022, EN55024 (*1) Serial interface control only. (*2) 6 positions in case of remote controller

	Operating	Non-Operating
Temp.	0 to 40° C (32 to 104° F)	-10 to 60° C (-14 to 140° F)
Humidity	30 to 80% No condensation	30 to 90% No condensation

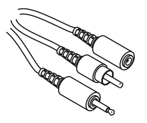
Description	Digi-Key Part No.	Price Each	Matsushita Part No.
Cameral Color PTZ 21x Zoom	P9514-ND	799.00	KX-DP702
IR Remote for KX-DP702 Camera	P9515-ND	39.00	KX-DP602R

Matsushita Communication Industrial Co., Ltd.

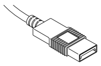
Color CCD Cameras



P9506



P9513



Model GP-KR521P • Enclosed color CCD camera with microphone • Designed for video conferencing or video telephone use • Features the GP-CX161P camera board with audio • Innovative mounting bracket allows mounting in virtually any position • 360° Pan, 110° Tilt (manual) • Includes AC adapter and non-detachable cables • Color: black • RCA Plug for video out, standard 3.5mm microphone plug for audio out

Model GP-KR651US • USB version of above camera. No external AC adapter required. Microphone not included. Non-detachable USB cable. VGA @ 12.5 frames per second. Driver software included. • Color: Beige

Lux	Digi-Key Part No.	Price Each	Matsushita Part No.
10~10,000	P9506-ND	125.00	GP-KR521P
10~10,000	P9513-ND	125.00	GP-KR651US

Panasonic

NTSC Color Board Cameras

Fig. 1

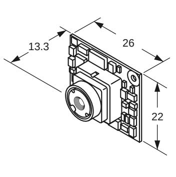


Fig. 2

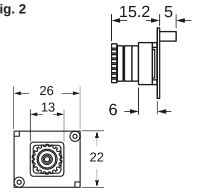


Fig. 3

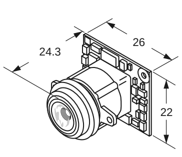


Fig. 4

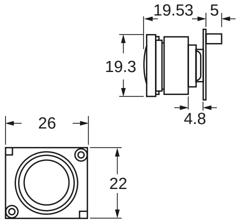
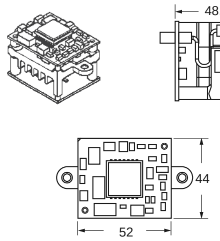


Fig. 5



Model GP-CX161-45P • 45 Degree Pinhole Plastic Lens F2.8 • 10~10,000 lux, 22mm x 26mm
Model GP-CX161-51P • 51.2 Degree Glass/Plastic lens F2.0 5-10,000 lux
Model GP-CX161-53P • 53 Degree Dual Element Glass Lens F2.0 • 5~10,000 lux, 22mm x 26mm
Model GP- CX161-15P • 115 Degree Plastic lens F2.8 10-10,000 lux
Model GP-CX161P • CCD Board Camera w/filter - No lens 5 lux min. @ F2.0
Model GP- CX161CSP • CCD Camera Board , CS mount, no lens, 2.5 lux @ F1.4
Model GP-CX171P • CCD Camera, High resolution with filter, no lens, 9 lux @ F2.0/18 lux @ F2.8

Panasonic's self-contained board cameras are designed for indoor applications. All feature small size and low power consumption with a built in one chip DSP for digital signal processing and the latest bare-chip manufacturing technology.

Specifications: • **Image Device:** 1/4" CCD • **Resolution:** 330 lines (480 for GP-CX171P) • **Video Out:** VBS 1Vp-p/75Ω • **Sync:** Internal • **Power Consumption:** 160mA • **Power Supply:** 4.8~5.5VDC (161 series) 12V (171 series) • **Focus:** Manual • **Operating Temperature:** 5°C to 35°C (161 series)

Fig.	Description	Digi-Key Part No.	Price Each	Panasonic Part No.
1	Color Camera Module 45°	P9504-ND	92.95	GP-CX161-45P
2	Color Camera Module 51.2°	P9509-ND	99.00	GP-CX161-51P
3	Color Camera Module 53°	P9505-ND	105.00	GP-CX161-53P
4	Color Camera Module 115°	P9510-ND	118.33	GP-CX161-15P
—	Color Camera No Lens or Mount	P9508-ND	81.67	GP-CX161P
—	Color Camera Module CS Mount No Lens	P9511-ND	138.33	GP-CX161CSP
5	Color Camera High Res. No Lens or Mount	P9512-ND	216.67	GP-CX171P
—	Cable Assembly for All except P9502	P9507-ND	3.00	Z-E498-01

NOTE: All 161/171 Series require cable assembly P9507-ND.

LUMEX We Tame Photons To Work For You

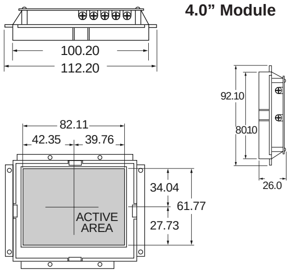
Color LCD TFT Modules

4.0" and 6.4" Modules Take Standard NTSC Composite Video Signals

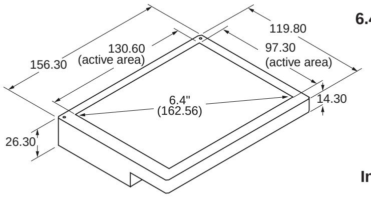
These high quality, low profile, 4.0" and 6.4" color LCD TFT modules can be used to view any NTSC composite video source such as the output from a VCR or one of our small Panasonic CCD cameras.

Operating Conditions
- **Operating Voltage (Vop)**: 10-30VDC, 12VDC typ.
- **Operating Temp. (Top):** 0°C to 60°C
- **Storage Temp. (Tst):**
  - **4.0" Module:** -20°C to +80°C
  - **6.4" Module:** -25°C to +80°C
- **Operating Humidity (Ho):** 85%RH
- **Storage Humidity (Hs):** 85% RH
- **Input Signal/NTSC Sync Negative** (Composite Video Signal: 1Vp-p/75Ω):
  - **Vi:** 1Vp-p
  - **fH:** 15.75KHz
  - **fV:** 60Hz
  - **fc:** 3.58MHz
- **Power Consumption (Pc):**
  - **4.0" Module:** 5W
  - **6.4" Module:** 7W

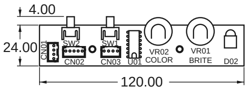
4.0" Module



6.4" Module



Interface Board



Display Size (inch)	Resolution (No. of lines)		Active Area (mm)		Dot Pitch (mm)		Weight (gm.)	Backlight*	Viewing Angle				Digi-Key Part No.	Price Each	Lumex Part No.
	Width	Height	Width	Height	Width	Height			Right	Left	Up	Down			
4.0	480	234	82.10	61.70	0.106	0.161	166 ±5	CCFT	45°	45°	10°	30°	67-1547-ND	299.00	LCM-480234GF-40CG
6.4	960	234	130.6	97.3	0.136	0.416	340 ±5	CCFT	50°	50°	10°	30°	67-1511-ND	497.53	LCM-960234GR-64FC

* 10,000 hour min. at Tamb=25°C

PolySwitch Resettable Devices

PolySwitch resettable devices protect electrical and electronic circuits against excessive current, voltage, and temperature. After switching, the PolySwitch device is latched into its high-resistance, protective state by the small, sustained self-heating current. The device will reset only after it has cooled and the fault condition has been corrected, thus avoiding continuous cycling that could cause circuit damage. The device requires no manual resetting or replacement.

Definitions: Maximum Voltage: The highest voltage the device can withstand (in its tripped state) without damage. Hold Current: The maximum continuous current that will not cause the device to trip at 20°C. Trip Current: The minimum continuous current that will cause the device to trip at 20°C. Maximum Current: The largest fault current, at rated voltage, the device can interrupt without being damaged. Maximum R: Maximum non-tripped resistance of the device.

H55440-ND Raychem PolySwitch® Resettable Devices Data Book **$7.95**

Fig. 1 — RGE and RHE Series

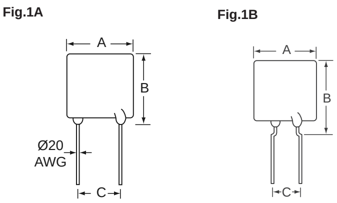


Fig.1A **Fig.1B**

This product series can be used in a wide variety of automotive, computer and general electronics applications. The RGE devices feature high current carrying capability (up to 13 amps) in a small package with fast trip times.

Fig. 2 — RXE Series

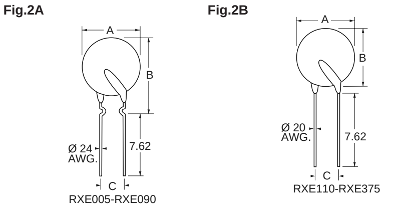


Fig.2A **Fig.2B**

These products function as the general purpose line of circuit protection devices and are well suited for power supplies, alarm systems, speakers, motors and many other applications. The RXE series range in hold currents from .05 to 3.75 amps and complement the RUE devices by providing a higher voltage rating.

Fig. 3 — RUE Series

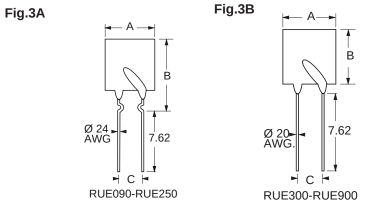


Fig.3A **Fig.3B**

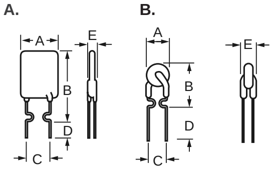
These devices are also designed to be used in a wide variety of general electronics applications. They complement the RXE series by providing a smaller form factor with lower resistance and higher hold current capability (up to 9 amps).

		Rated Current (20°C) (amps)			Initial Resistance			Dimensions Inches (mm)				Price Each			
Fig.	Max Volt.	Hold	Trip	Max Current	RMin. (Ω)	RMax. (Ω)	Recognized By	A	B	C	Digi-Key Part No.	1	10	100	Raychem Part No.
RGE Series															
1A	16	3.00	5.10	100	0.038	0.0645	UL, TUV, CSA	0.28 (7.1)	0.43 (11.0)	0.23 (5.8)	RGE300-ND	.61	.56	.51	RGE300
1A	16	4.00	6.80	100	0.021	0.0385	UL, TUV, CSA	0.35 (8.9)	0.50 (12.8)	0.23 (5.8)	RGE400-ND	.62	.58	.52	RGE400
1A	16	5.00	8.50	100	0.015	0.0230	UL, TUV, CSA	0.41 (10.4)	0.56 (14.3)	0.23 (5.8)	RGE500-ND	.64	.59	.54	RGE500
1A	16	6.00	10.20	100	0.010	0.0185	UL, TUV, CSA	0.42 (10.7)	0.67 (17.1)	0.23 (5.8)	RGE600-ND	.68	.63	.57	RGE600
1A	16	7.00	11.90	100	0.0077	0.0130	UL, TUV, CSA	0.44 (11.2)	0.78 (19.7)	0.23 (5.8)	RGE700-ND	.72	.66	.60	RGE700
1A	16	8.00	13.60	100	0.0056	0.0110	UL, TUV, CSA	0.50 (12.7)	0.82 (20.9)	0.23 (5.8)	RGE800-ND	.77	.71	.65	RGE800
1A	16	9.00	15.30	100	0.0047	0.0092	UL, TUV, CSA	0.55 (14.0)	0.85 (21.7)	0.23 (5.8)	RGE900-ND	.85	.78	.71	RGE900
1A	16	10.00	17.00	100	0.0040	0.0710	UL, TUV, CSA	0.65 (16.5)	0.99 (25.2)	0.23 (5.8)	RGE1000-ND *NEW!*	.95	.88	.80	RGE1000
1A	16	11.00	18.70	100	0.0037	0.0062	UL, TUV, CSA	0.69 (17.5)	1.02 (26.0)	0.23 (5.8)	RGE1100-ND	1.04	.96	.87	RGE1100
1A	16	12.00	20.40	100	0.0033	0.00595	UL, TUV, CSA	0.69 (17.5)	1.10 (27.94)	0.43 (10.9)	RGE1200-ND	1.12	1.03	.94	RGE1200
1A	16	14.00	23.80	100	0.0026	0.00445	UL, TUV, CSA	0.925 (23.5)	1.10 (27.94)	0.43 (10.9)	RGE1400-ND	1.21	1.11	1.01	RGE1400
RHE Series															
1B	16	0.7	1.4	40	0.300	0.54	UL, TUV, CSA	0.27 (6.86)	0.425 (10.8)	0.23 (5.8)	RHE070-ND *NEW!*	.55	.51	.46	RHE070
1B	16	4.0	7.0	100	0.018	0.029	UL, TUV, CSA	0.45 (11.4)	0.71 (18.0)	0.23 (5.8)	RHE400-ND *NEW!*	.70	.65	.59	RHE400
1B	16	4.5	7.8	100	0.022	0.0355	UL, TUV, CSA	0.41 (10.4)	0.61 (15.6)	0.23 (5.8)	RHE450-ND	.70	.65	.59	RHE450
1B	16	6.0	10.8	100	0.013	0.0215	UL, TUV, CSA	0.44 (11.2)	0.83 (21.0)	0.23 (5.8)	RHE600-ND	.76	.70	.64	RHE600
1B	16	6.5	12.0	100	0.011	0.0175	UL, TUV, CSA	0.50 (12.7)	0.88 (22.2)	0.23 (5.8)	RHE650-ND *NEW!*	.80	.74	.67	RHE650
1B	16	7.5	13.1	100	0.0094	0.015	UL, TUV, CSA	0.55 (14.0)	0.93 (23.5)	0.23 (5.8)	RHE750-ND	.88	.81	.74	RHE750
1B	16	10.0	18.5	100	0.0062	0.0103	UL, TUV, CSA	0.69 (17.5)	1.04 (26.5)	0.43 (10.9)	RHE1000-ND	1.10	1.01	.92	RHE1000
1B	16	13.0	24.0	100	0.0041	0.0068	UL, TUV, CSA	0.925 (23.5)	1.13 (28.7)	0.43 (10.9)	RHE1300-ND	1.30	1.20	1.09	RHE1300
1B	16	15.0	28.0	100	0.0032	0.0061	UL, TUV, CSA	0.925 (23.5)	1.13 (28.7)	0.43 (10.9)	RHE1500-ND *NEW!*	1.39	1.28	1.16	RHE1500

		Rated Current (20°C) (amps)			Initial Resistance			Dimensions Inches (mm)				Price Each			
Fig.	Max Volt.	Hold	Trip	Max Current	RMin (Ω)	RMax (Ω)	Recognized By	A	B	C	Digi-Key Part No.	1	10	100	Raychem Part No.
RXE Series															
2A	60	0.05	0.10	40	7.3	11.1	UL, TUV, CSA	0.32 (8.0)	0.33 (8.3)	0.23 (5.8)	RXE005-ND	.44	.41	.37	RXE005
2A	60	0.10	0.20	40	2.5	4.50	UL, TUV, CSA	0.29 (7.4)	0.46 (11.6)	0.23 (5.8)	RXE010-ND	.45	.41	.38	RXE010
2A	60	0.17	0.34	40	3.3	5.21	UL, TUV, CSA	0.29 (7.4)	0.50 (12.7)	0.23 (5.8)	RXE017-ND	.45	.42	.38	RXE017
2A	72	0.20	0.40	40	1.83	2.75	UL, TUV, CSA	0.29 (7.4)	0.46 (11.6)	0.23 (5.8)	RXE020-ND	.46	.43	.39	RXE020
2A	72	0.25	0.50	40	1.25	1.95	UL, TUV, CSA	0.29 (7.4)	0.50 (12.7)	0.23 (5.8)	RXE025-ND	.47	.43	.39	RXE025
2A	72	0.30	0.60	40	0.88	1.33	UL, TUV, CSA	0.29 (7.4)	0.50 (12.7)	0.23 (5.8)	RXE030-ND	.47	.44	.40	RXE030
2A	72	0.40	0.80	40	0.55	0.86	UL, TUV, CSA	0.30 (7.6)	0.53 (13.5)	0.23 (5.8)	RXE040-ND	.48	.44	.40	RXE040
2A	72	0.50	1.00	40	0.5	0.77	UL, TUV, CSA	0.31 (7.9)	0.54 (13.7)	0.23 (5.8)	RXE050-ND	.48	.45	.41	RXE050
2A	72	0.65	1.30	40	0.31	0.48	UL, TUV, CSA	0.37 (9.40)	0.57 (14.5)	0.23 (5.8)	RXE065-ND	.49	.46	.41	RXE065
2A	72	0.75	1.50	40	0.25	0.40	UL, TUV, CSA	0.40 (10.2)	0.60 (15.2)	0.23 (5.8)	RXE075-ND	.50	.47	.42	RXE075
2A	72	0.90	1.80	40	0.20	0.31	UL, TUV, CSA	0.44 (11.2)	0.62 (15.8)	0.23 (5.8)	RXE090-ND	.53	.49	.44	RXE090
2B	72	1.10	2.20	40	0.15	0.25	UL, TUV, CSA	0.50 (12.8)	0.69 (17.5)	0.23 (5.8)	RXE110-ND	.58	.54	.49	RXE110
2B	72	1.35	2.70	40	0.12	0.19	UL, TUV, CSA	0.57 (14.5)	0.75 (19.1)	0.23 (5.8)	RXE135-ND	.62	.57	.52	RXE135
2B	72	1.60	3.20	40	0.09	0.14	UL, TUV, CSA	0.64 (16.3)	0.82 (20.8)	0.23 (5.8)	RXE160-ND	.66	.61	.56	RXE160
2B	72	1.85	3.70	40	0.08	0.12	UL, TUV, CSA	0.69 (17.5)	0.88 (22.4)	0.23 (5.8)	RXE185-ND	.69	.64	.58	RXE185
2B	72	2.50	5.00	40	0.05	0.08	UL, TUV, CSA	0.82 (20.8)	1.00 (25.4)	0.43 (10.9)	RXE250-ND	.90	.83	.75	RXE250
2B	72	3.00	6.00	40	0.04	0.06	UL, TUV, CSA	0.94 (23.9)	1.13 (28.6)	0.43 (10.9)	RXE300-ND	.80	.74	.67	RXE300
2B	72	3.75	7.50	40	0.03	0.05	UL, TUV, CSA	1.07 (27.2)	1.25 (31.8)	0.43 (10.9)	RXE375-ND	.83	.77	.70	RXE375
RUE Series															
3A	30	0.90	1.80	40	0.12	0.070	UL, TUV, CSA	0.29 (7.4)	0.48 (12.2)	0.20 (5.1)	RUE090-ND	.48	.45	.41	RUE090
3A	30	1.10	2.20	40	0.10	0.050	UL, TUV, CSA	0.29 (7.4)	0.56 (14.2)	0.20 (5.1)	RUE110-ND	.49	.46	.41	RUE110
3A	30	1.35	2.70	40	0.08	0.040	UL, TUV, CSA	0.35 (8.9)	0.53 (13.5)	0.20 (5.1)	RUE135-ND	.50	.47	.42	RUE135
3A	30	1.60	3.20	40	0.07	0.030	UL, TUV, CSA	0.35 (8.9)	0.60 (15.2)	0.20 (5.1)	RUE160-ND	.53	.49	.44	RUE160
3A	30	1.85	3.70	40	0.06	0.030	UL, TUV, CSA	0.40 (10.2)	0.62 (15.7)	0.20 (5.1)	RUE185-ND	.56	.52	.47	RUE185
3A	30	2.50	5.00	40	0.04	0.020	UL, TUV, CSA	0.45 (11.4)	0.72 (18.3)	0.20 (5.1)	RUE250-ND	.61	.57	.51	RUE250
3B	30	3.00	6.00	40	0.05	0.020	UL, TUV, CSA	0.45 (11.4)	0.68 (17.3)	0.20 (5.1)	RUE300-ND	.67	.62	.56	RUE300
3B	30	4.00	8.00	40	0.03	0.010	UL, TUV, CSA	0.55 (14.0)	0.79 (20.1)	0.20 (5.1)	RUE400-ND	.73	.67	.61	RUE400
3B	30	5.00	10.00	40	0.03	0.010	UL, TUV, CSA	0.55 (14.0)	0.98 (24.9)	0.40 (10.2)	RUE500-ND	.79	.73	.66	RUE500
3B	30	6.00	12.00	40	0.02	0.005	UL, TUV, CSA	0.65 (16.5)	0.98 (24.9)	0.40 (10.2)	RUE600-ND	.86	.80	.72	RUE600
3B	30	7.00	14.00	40	0.02	0.005	UL, TUV, CSA	0.75 (19.1)	1.05 (26.7)	0.40 (10.2)	RUE700-ND	.94	.87	.79	RUE700
3B	30	8.00	16.00	40	0.013	0.005	UL, TUV, CSA	0.85 (21.6)	1.15 (29.2)	0.40 (10.2)	RUE800-ND	1.02	.94	.85	RUE800
3B	30	9.00	18.00	40	0.01	0.005	UL, TUV, CSA	0.95 (24.1)	1.17 (29.7)	0.40 (10.2)	RUE900-ND	1.08	.99	.90	RUE900

(Continued)

Fig. 4 — RUSB Series

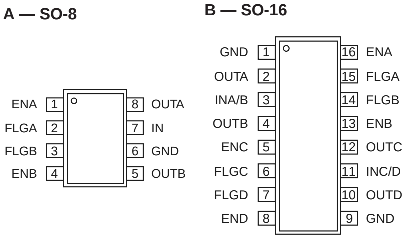


New PolySwitch RUSB devices are designed to meet USB and safety agency requirements.The RUSB family of leaded resettable devices offers overcurrent protection for USB applications.

Fig. 5 — RYC Series Power Distribution Switches

This series is designed for USB self-powered hub applications such as notebook PCs, self/bus-powered stand-alone USB hubs, USB bus-powered hubs in keyboards and USB peripherals such as CCD cameras. They help provide efficient and reliable power switching and in-rush current limiting capabilities.

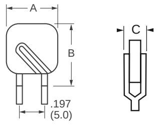
These USB power distribution switches enable power to USB ports upon USB controller commands. The switches signal the controller when faults such as overcurrent, over-temperature, under-voltage lock-out (UVLO) or over-voltage lock-out (OVLO) are detected.


A — SO-8

B — SO-16

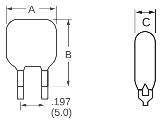
SO-8 Pin No.	SO-16 Pin No.	Pin Function
1 and 4	5, 8, 13, 16	Enable (Input): Logic-compatible enable input. High input > 2.1V typical. Low input <1.9V typical
2 and 3	6, 7, 14, 15	Fault Flat (Output): Active-low open-drain output. Indicates overcurrent, UVLO, OVLO and thermal shutdown
6	1, 9	Ground: Supply return
7	3, 11	Supply Input: Output MOSFET drain. Also supplies ICs internal circuitry. Connect to positive supply
5 and 8	2, 4, 10, 12	Switch Output: Output MOSFET source. Typically connect to switched side of load

Fig. 6 — TR Series



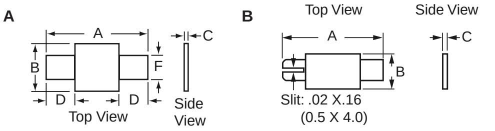
These product families help provide protection against power cross and power induction surge as defined in ITU, Telcordia, and UL.

Fig. 7 — Encapsulated TR Series



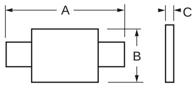
These product families help provide protection against power cross and power induction surge as defined in ITU, Telcordia, and UL.

Fig. 8 — LTP Series



Similar to the SRP family of PolySwitch strap products, LTP devices help provide reliable, noncycling protection for rechargeable batteries and have a slim, low-profile design that makes them easy to install. LTP devices also offer additional protection at elevated temperatures.

Fig. 9 — SRP Series



These products help provide reliable, non-cycling protection for rechargeable batteries. Weldable nickel leads and a narrow, low-profile design make these devices extremely easy to install on the edges of battery packs.

Fig.	Max Volt.	Rated Current (20°C) (amps) Hold	Rated Current (20°C) (amps) Trip	Initial Resistance Rmin. (Ω)	Initial Resistance Rmax. (Ω)	Dimensions Inches (mm) A max.	Dimensions Inches (mm) B max.	Dimensions Inches (mm) C max.	Dimensions Inches (mm) D min.	Dimensions Inches (mm) E max.	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Raychem Part No.
								RUSB							
4B	6	0.75	1.3	0.11	0.175	.27 (6.9)	.45 (11.4)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB075-ND	.47	.43	.39	RUSB075
4A	16	0.90	1.8	0.07	0.120	.29 (7.4)	.48 (12.2)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB090-ND	.47	.44	.40	RUSB090
4A	16	1.10	2.2	0.05	0.095	.29 (7.4)	.56 (14.2)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB110-ND	.48	.45	.41	RUSB110
4B	6	1.20	2.0	0.65	0.0975	.27 (6.9)	.46 (11.7)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB120-ND	.49	.45	.41	RUSB120
4A	16	1.35	2.7	0.04	0.074	.35 (8.9)	.53 (13.5)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB135-ND	.50	.46	.42	RUSB135
4A	16	1.60	3.2	0.03	0.061	.35 (8.9)	.60 (15.2)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB160-ND	.52	.48	.44	RUSB160
4A	16	1.85	3.7	0.03	0.051	.40 (10.2)	.62 (15.7)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB185-ND	.56	.51	.47	RUSB185
4A	16	2.50	5.0	0.02	0.036	.45 (11.4)	.72 (18.3)	.23 (5.9)	.30 (7.6)	.12 (3.1)	RUSB250-ND	.60	.55	.50	RUSB250

Fig.	Max. Supply Voltage	Fault Flag Voltage	Fault Flag Current	Output Voltage	Output Current	Control Input	Storage Temp.	Max. Lead Temp. during Soldering (5 sec.)	Supply Voltage	Ambient Operating Temp.	Pkg.	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Cut Tape Price Each 100	Tape & Reel Pricing† 2,500	Raychem Part No.
								RYC Series									
5A	+8 V	+8 V	50mA	+8 V	Internally Limited	-0.3 to +12.0V	-65°C to +150°C	260°C	+3 to +5.5 V	-40°C to +85°C	SO-8	RYC8220-2MCT-ND	1.94	1.67	1.53	932.00/M	RYC8220-2M
5A	+8 V	+8 V	50mA	+8 V				260°C			SO-8	RYC8220-4MCT-ND	1.94	1.67	1.53	932.00/M	RYC8220-4M
5B	+8 V	+8 V	50mA	+8 V				260°C			SO-16	RYC8240-2WMCT-ND	3.47	2.97	2.73	2350.00/M	RYC8240-2WM
5B	+8 V	+8 V	50mA	+8 V				260°C			SO-16	RYC8240-4WMCT-ND	3.47	2.97	2.73	2350.00/M	RYC8240-4WM

† For Tape & Reel Part No., change CT-ND to TR-ND

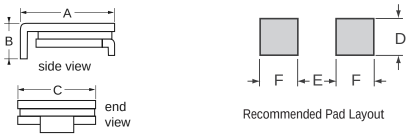
Fig.	Max Volt.	Oper. Vdc	Rated Current (20°C) (amps) Hold	Rated Current (20°C) (amps) Trip	Max Current	RMax Initial (Ohms)	Recognized By	Dimensions Inches (mm) A	Dimensions Inches (mm) B	Dimensions Inches (mm) C	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Raychem Part No.
								TR Series							
6	250	60	0.080	0.16	3	20.0	UL, TUV, CSA	0.189 (4.80)	0.366 (9.30)	0.150 (3.81)	TR080U-ND*	.66	.61	.55	TR250-080U
6	250	60	0.120	0.24	3	10.0	UL, TUV, CSA	0.236 (6.00)	0.394 (10.00)	0.150 (3.81)	TR120U-ND*	.66	.61	.55	TR250-120U
6	250	60	0.145	0.29	3	6.5	UL, TUV, CSA	0.236 (6.00)	0.394 (10.00)	0.150 (3.81)	TR145U-ND*	.66	.61	.55	TR250-145U
6	250	60	0.180	0.50	10	2.0	UL, TUV, CSA	0.410 (10.40)	0.496 (12.60)	0.140 (3.60)	TR180U-ND*	.83	.76	.69	TR250-180U
7	250	60	0.120	0.24	3	8.0	UL, TUV, CSA	0.256 (6.50)	0.433 (11.00)	0.180 (4.60)	TR120-ND*	.73	.68	.61	TR250-120
7	250	60	0.145	0.29	3	6.0	UL, TUV, CSA	0.256 (6.50)	0.433 (11.00)	0.180 (4.60)	TR145-ND*	.73	.68	.61	TR250-145
7	600	60	0.150	0.30	3	12.0	UL, CSA	0.531 (13.50)	0.496 (12.60)	0.236 (6.00)	TR150-ND*	1.15	1.06	.96	TR600-150
7	600	60	0.150	0.30	3	10.0	UL, CSA	0.531 (13.50)	0.496 (12.60)	0.236 (6.00)	TR150RA-ND*	1.24	1.14	1.04	TR600-150-RA-B-0.5

* Warning: TR devices are not intended for continuous utility line voltage such as 120/220V or 240Vdc.

Fig.	Max Volt.	Rated Current (20°C) (amps) Hold	Rated Current (20°C) (amps) Trip	Max Current	RMax Initial (Ohms)	Recognized By	Dimensions Inches (mm) A	Dimensions Inches (mm) B	Dimensions Inches (mm) C	Dimensions Inches (mm) D	Dimensions Inches (mm) F	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Raychem Part No.
									LTP Series							
8A	15	.70	1.45	100	0.200	UL, TUV, CSA	0.87 (22.1)	0.20 (5.2)	0.05 (1.2)	0.30 (7.5)	0.16 (4.1)	LTP070-ND	.74	.68	.62	LTP070
8B	15	.70	1.45	100	0.200	UL, TUV, CSA	0.87 (22.1)	0.20 (5.2)	0.05 (1.2)	0.30 (7.5)	0.16 (4.1)	LTP070S-ND	.74	.68	.62	LTP070S
8A	24	1.00	2.5	100	0.130	UL, TUV, CSA	0.91 (23.1)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP100-ND	.74	.68	.62	LTP100
8B	24	1.00	2.5	100	0.130	UL, TUV, CSA	0.91 (23.1)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP100S-ND	.74	.68	.62	LTP100S
8A	24	1.80	3.8	100	0.068	UL, TUV, CSA	1.02 (26.0)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP180-ND	.74	.68	.62	LTP180
8B	24	1.8	3.8	100	0.068	UL, TUV, CSA	1.02 (26.0)	0.20 (5.2)	0.04 (1.0)	0.22 (5.5)	0.16 (4.1)	LTP180S-ND	.74	.68	.62	LTP180S
8A	24	1.90	4.2	100	0.057	UL, TUV, CSA	0.92 (23.4)	0.43 (11.0)	0.04 (1.1)	0.30 (7.6)	0.21 (5.4)	LTP190-ND	.71	.66	.60	LTP190
8A	24	2.60	5.2	100	0.042	UL, TUV, CSA	1.02 (26.0)	0.47 (11.9)	0.04 (1.0)	0.28 (7.0)	0.24 (6.1)	LTP260-ND	.93	.86	.78	LTP260
8A	24	3.0	6.3	100	0.031	UL, TUV, CSA	1.25 (31.8)	0.53 (13.5)	0.043 (1.1)	0.35 (8.9)	0.26 (6.6)	LTP300-ND	.93	.86	.78	LTP300
8A	24	3.1	6.0	100	0.030	UL, TUV, CSA	1.02 (26.0)	0.62 (15.9)	0.04 (1.0)	0.28 (7.0)	0.24 (6.1)	LTP310-ND	.93	.86	.78	LTP310
8A	24	3.4	6.8	100	0.027	UL, TUV, CSA	1.02 (26.0)	0.62 (15.9)	0.04 (1.0)	0.20 (5.0)	0.24 (6.1)	LTP340-ND	.93	.86	.78	LTP340
									SRP							
9	15	1.20	2.70	100	0.16	UL, TUV, CSA	0.87 (22.1)	0.20 (5.2)	0.04 (1.0)	—	—	SRP120-ND	.65	.60	.54	SRP120
9	15	1.75	3.80	100	0.09	UL, TUV, CSA	0.91 (23.1)	0.20 (5.2)	0.04 (1.0)	—	—	SRP175-ND	.65	.60	.54	SRP175
9	30	2.00	4.40	100	0.06	UL, TUV, CSA	0.92 (23.4)	0.43 (11.0)	0.04 (1.1)	—	—	SRP200-ND	.62	.57	.52	SRP200
9	30	3.50	6.30	100	0.03	UL, TUV, CSA	1.25 (31.8)	0.53 (13.5)	0.04 (1.1)	—	—	SRP350-ND	.69	.64	.58	SRP350
9	30	4.20	7.60	100	0.024	UL, TUV, CSA	1.28 (32.4)	0.54 (13.6)	0.04 (1.1)	—	—	SRP420-ND	.69	.64	.58	SRP420

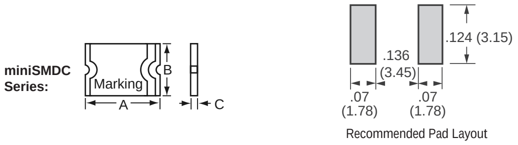
(Continued)

Fig. 10 — SMD



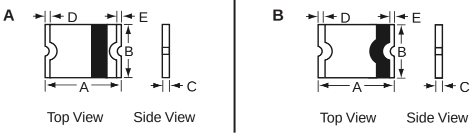
This product series is specifically designed for surface mount applications. The products range in hold currents from 0.3 amps to 3.0 amps and voltages from 6 volts to 60 volts. These devices are ideally suited for high density board applications in computer and computer peripheral products, telecommunications and general electronics applications. They are designed to be reflowed onto a PCB using standard surface mount processes. Packaged per EIA-481 standard.

Fig. 11 — miniSMD



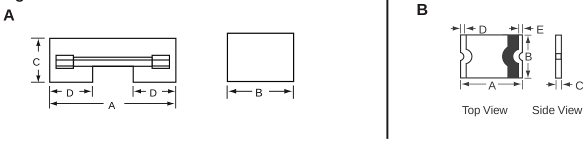
The miniSMD resettable devices extremely small size makes them excellent choices for keyboard and mouse ports, SCSI devices, battery packs, PC cards and sockets, cellular modems and phones, and portable electronic equipment. SMT packaging for automated assembly compared to SMD the miniSMD offers: 40% reduction in size, 300% faster time to trip, 50% reduction in DC resistance, 66% reduction in profile, 80% reduction in mass and drop in replacement for the NANO 2 device in many applications.

Fig. 12— microSMD



This product series is designed for surface-mount applications. Its smaller component size enables installation on crowded printed circuit boards and in small end-user devices such as digital cameras, personal digital assistants (PDAs) and palm-top computers. The new low hold current devices are ideal for protecting industrial sensors and data acquisition systems.

Fig. 13 — nanoSMD



The nanoSMD series reduces the component size to a 1206 footprint, nearly half the size of the microSMD series and one-quarter the size of the popular miniSMD series. The industries fastest time to trip. Smaller size saves board space and cost. Compatible with high volume electronics assembly.

Fig.	Max Volt.	Rated Current (20°C) (amps) Hold	Trip	Max Current	RMax Initial (Ohms)	Recognized By	Dimensions – Inches (mm) A	B	C	D	E	F	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel† Size	Pricing	Raychem Part No.
										SMD									
10	60	0.30	0.60	10	4.8	UL, TUV, CSA	.314 (7.98)	.125 (3.18)	.214 (5.44)	.12 (3.1)	.200 (5.1)	.09 (2.3)	SMD030CT-ND	.86	.74	.68	2,000	412.00/M	SMD030-2
10	60	0.50	1.00	10	1.4	UL, TUV, CSA	.314 (7.98)	.125 (3.18)	.214 (5.44)	.12 (3.1)	.200 (5.1)	.09 (2.3)	SMD050CT-ND	.86	.74	.68	2,000	412.00/M	SMD050-2
10	30	0.75	1.50	40	1.0	UL, TUV, CSA	.314 (7.98)	.125 (3.18)	.214 (5.44)	.12 (3.1)	.200 (5.1)	.09 (2.3)	SMD075CT-ND	.86	.74	.68	2,000	412.00/M	SMD075-2
10	30	1.10	2.20	40	.48	UL, TUV, CSA	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.200 (5.1)	.09 (2.3)	SMD100CT-ND	.82	.70	.65	2,000	391.00/M	SMD100-2
10	15	1.25	2.50	40	.25	UL, TUV, CSA	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.200 (5.1)	.09 (2.3)	SMD125CT-ND	.82	.70	.65	2,000	391.00/M	SMD125-2
10	15	1.50	3.00	40	.25	UL, TUV, CSA	.370 (9.40)	.118 (3.00)	.264 (6.71)	.18 (4.6)	.240 (6.1)	.09 (2.3)	SMD150CT-ND	.86	.74	.68	1,500	412.00/M	SMD150-2
10	15	2.00	4.00	40	0.125	UL, TUV, CSA	.370 (9.40)	.118 (3.00)	.264 (6.71)	.18 (4.6)	.240 (6.1)	.09 (2.3)	SMD200CT-ND	.86	.74	.68	1,500	412.00/M	SMD200-2
10	15	2.50	5.00	40	.085	UL, TUV, CSA	.370 (9.40)	.118 (3.00)	.264 (6.71)	.18 (4.6)	.240 (6.1)	.09 (2.3)	SMD250CT-ND	.86	.74	.68	1,500	412.00/M	SMD250-2
10	6	2.60	5.20	40	.075	UL, TUV, CSA	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.200 (5.1)	.09 (2.3)	SMD260CT-ND	.86	.74	.68	2,000	391.00/M	SMD260-2
10	6	3.00	6.00	40	.048	UL, TUV, CSA	.314 (7.98)	.118 (3.00)	.214 (5.44)	.12 (3.1)	.200 (5.1)	.09 (2.3)	SMD300CT-ND	.82	.70	.65	2,000	391.00/M	SMD300-2
										miniSMD									
11	60	0.14	0.34	10	6.0	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.035 (.89)	—	—	—	MINISMDC014CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC014-2
11	15	0.50	1.00	40	1.0*	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMDC050CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC050-2
11	13.2	0.75	1.50	40	.45*	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMDC075CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC075-2
11	6	1.1	2.2	40	.18*	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMDC110CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC110-2
11	6	1.5	3.0	40	.11	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.019 (.48)	—	—	—	MINISMDC150CT-ND	.63	.55	.50	2,000	304.00/M	MINISMDC150-2
11	6	2.0	4.0	40	.07	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.048 (1.22)	—	—	—	MINISMDC200CT-ND	.79	.68	.63	2,000	380.00/M	MINISMDC200-2
11	15	0.50	1.00	40	1.0	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMD050CT-ND	.63	.55	.50	1,500	—	MINISMD050-2
11	13.2	0.75	1.50	40	.45	UL, TUV, CSA	.186 (4.73)	.134 (3.41)	.025 (.62)	—	—	—	MINISMD075CT-ND	.63	.55	.50	1,500	366.00/M	MINISMD075-2
										microSMD									
12A	30	0.05	0.15	10	50	UL, TUV, CSA	.135 (3.43)	.110 (2.80)	.034 (.85)	.008 (.20)	.010 (.25)	—	MICROSMD005CT-ND	.63	.55	.50	4,000	350.45/M	MICROSMD005-2
12B	30	0.10	0.25	10	15	UL, TUV, CSA	.135 (3.43)	.110 (2.80)	.034 (.85)	.008 (.20)	.010 (.25)	—	MICROSMD010CT-ND	.72	.64	.55	4,000	441.00/M	MICROSMD010-2
12B	6	0.35	0.75	40	1.3	UL, TUV, CSA	.135 (3.43)	.110 (2.80)	.025 (.62)	.012 (.30)	.010 (.25)	—	MICROSMD035CT-ND	.72	.64	.55	4,000	441.00/M	MICROSMD035-2
12B	13.2	0.50	1.0	40	.90	UL, TUV, CSA	.135 (3.43)	.110 (2.80)	.025 (.62)	.012 (.30)	.010 (.25)	—	MICROSMD050CT-ND	.63	.55	.50	4,000	305.00/M	MICROSMD050-2
12B	6	0.75	1.5	40	.40	UL, TUV, CSA	.135 (3.43)	.110 (2.80)	.025 (.62)	.012 (.30)	.010 (.25)	—	MICROSMD075CT-ND	.63	.55	.50	4,000	305.00/M	MICROSMD075-2
12B	6	1.10	2.2	40	.21	UL, TUV, CSA	.135 (3.43)	.110 (2.80)	.019 (.48)	.012 (.30)	.010 (.25)	—	MICROSMD110CT-ND	.63	.55	.50	4,000	305.00/M	MICROSMD110-2
12B	6	1.50	3.0	40	.11	UL, TUV, CSA	.135 (3.43)	.110 (2.80)	.048 (1.22)	.012 (.30)	.010 (.25)	—	MICROSMD150CT-ND	.70	.60	.55	4,000	335.00/M	MICROSMD150-2
										nanoSMD									
13A	6	0.50	1.00	40	0.7	UL, TUV, CSA	.134 (3.40)	.071 (1.80)	.047 (1.20)	.030 (0.75)	—	—	NANOSMDM050CT-ND	.66	.57	.52	3,000	318.00/M	NANOSMDM050-02
13A	6	.75	1.50	40	0.29	UL, TUV, CSA	.134 (3.40)	.071 (1.80)	.047 (1.20)	.030 (0.75)	—	—	NANOSMDM075CT-ND	.66	.57	.52	3,000	318.00/M	NANOSMDM075-02
13A	6	1.00	1.80	40	0.21	UL, TUV, CSA	.134 (3.40)	.071 (1.80)	.047 (1.20)	.030 (0.75)	—	—	NANOSMDM100CT-ND	.66	.57	.52	3,000	318.00/M	NANOSMDM100-02
13B	6	1.50	3.00	40	0.11	UL, TUV, CSA	.134 (3.40)	.075 (1.90)	.055 (1.40)	.010 (0.25)	—	—	NANOSMDC150CT-ND	.66	.57	.52	3,000	318.00/M	NANOSMDC150-02

† For Tape and Reel Part Number change CT-ND to TR-ND. * R min Initial (Ohms)

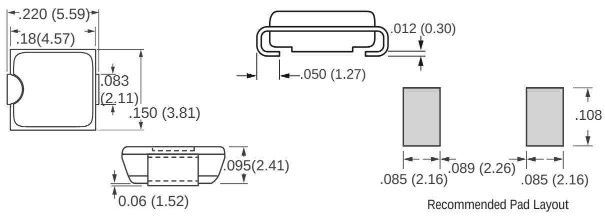
SiBar Thyristor Surge Protectors

SiBar thyristor surge protectors are designed specifically for telecommunications and computer telephony applications, including: • Modems • Fax machines • PBX Systems • Phones • POS Systems • Analog and digital linecards • Other customer premise and network equipment requiring protection.

Features: • Bidirectional transient voltage protection • High off-state impedance • Low on-state voltage • High surge capability • Short-circuit failure mode • Surface-mount technology • UL 497B recognized, file #E179610

SiBar thyristor surge protectors are bidirectional silicon devices that foldback in the presence of transient overvoltage faults. When the breakover voltage of a SiBar device is exceeded, the device switches from high to low impedance to protect sensitive downstream equipment from harmful voltage surges. The device remains latched in a low-impedance state until the current decreases below the hold current, at which point the device returns to its high-impedance state.

SiBar devices may be used in conjunction with PolySwitch resettable devices in telecommunications applications, including network equipment and customer premise equipment. Proper selection of both devices can provide reliable, self-resetting overvoltage and overcurrent protection, allowing designers to meet worldwide telecommunications standards and to lower equipment-service and warranty cost.



V_{DM} max. (V)	V_{BO} max. (V)	I_H min. (mA)	V_T max. (V)	C_1 typ. (pF)	I_{TSM} min. (A)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,500	Raychem Part No.
215	325	200	5.0	20	22	TVB280CT-ND	1.07	.92	.85	TVB280TR-ND	514.00/M	TVB280-050
165	265	200	5.0	20	22	TVB330CT-ND	1.07	.92	.85	—	—	TVB330-050
270	370	175	5.0	50	60	TVB270SCCT-ND	1.50	1.29	1.18	TVB270SCTR-ND	719.00/M	TVB270SC
200	320	175	5.0	50	60	TVB200SCCT-ND	1.50	1.29	1.18	TVB200SCTR-ND	719.00/M	TVB200SC
170	265	175	5.0	50	60	TVB170SCCT-ND	1.50	1.29	1.18	TVB170SCTR-ND	719.00/M	TVB170SC
270	370	175	5.0	20	22	TVB270SACT-ND	.99	.85	.78	TVB270SATR-ND	473.00/M	TVB270SA
200	320	175	5.0	20	22	TVB200SACT-ND	.99	.85	.78	TVB200SATR-ND	473.00/M	TVB200SA
170	265	175	5.0	20	22	TVB170SACT-ND	.99	.85	.78	TVB170SATR-ND	473.00/M	TVB170SA

BOURNS Multifuse Resettable Overcurrent Protectors

Bourns' Multifuse products provide overcurrent protection against circuit faults and safeguard against potential overcurrent damage of critical circuitry and loads in a vast amount of applications. This series is made of highly conductive, carbon black loaded polymer material. When a short circuit occurs, the devices start to heat rapidly until they reach a critical temperature of approximately 120°C. At this point the densely packed crystalline polymer matrix changes to an amorphous structure as it undergoes a phase transformation. Resistance increases by many orders of magnitude. The material will stay in this high-resistance state as long as the power is applied. The device will remain latched, providing continuous protection until the fault is cleared and the power is removed. With the fault removed the resistance quickly returns to its original value and the device is ready to operate again. **Agency Approvals:** The MF-R & MF-RX product families have UL, CSA, and TUV recognition to 30 volts. UL #E17454S, CSA #CA110338, and TUV #E9772255.01

MF-SM SERIES: This series is a SMT PTC Resettable Fuse designed for applications anywhere there is a low voltage power supply and a load to be protected including computers and peripherals, general electronics and automotive applications. They are fully compatible with current industry standards. Packaged per EIA 481-2 standards. **Agency Approvals:** UL #E17454S, CSA #CA110338, and TUV #E9772255.01

Fig. 1

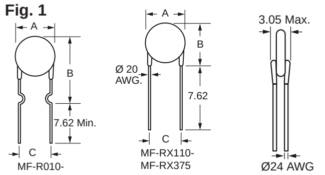


Fig. 2

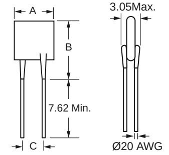


Fig. 3

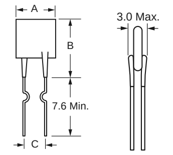


Fig. 4

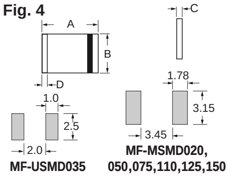


Fig. 5

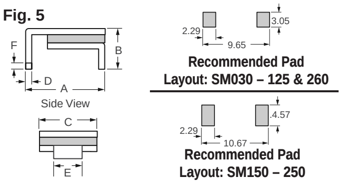


Fig.	Max Volt.	I max. Amps	Rated Current (amps @ 23°C) Hold	Trip	Initial Resist. Ohms @ 23°C Min.	Max.	Post-Trip Resist.	Dimensions (mm) A (max.)	B (max.)	C (nom.)	Digi-Key Part No.	Price Each 1	10	100	500	1,000	Bourns Part No.
1	60	40	0.10	0.20	2.50	4.50	7.50	7.39	12.70	5.08	MF-R010-ND	.48	.44	.40	.32	.26	MF-R010
	60	40	0.17	0.34	2.0	3.2	8.00	7.39	12.70	5.08	MF-R017-ND	.48	.44	.40	.32	.28	MF-R017
	60	40	0.20	0.40	1.50	2.84	4.40	7.39	12.70	5.08	MF-R020-ND	.51	.47	.43	.34	.29	MF-R020
	60	40	0.25	0.50	1.00	1.95	3.00	7.39	12.70	5.08	MF-R025-ND	.51	.47	.43	.34	.29	MF-R025
	60	40	0.30	0.60	0.76	1.36	2.10	7.39	13.39	5.08	MF-R030-ND	.51	.47	.43	.34	.29	MF-R030
	60	40	0.40	0.80	0.52	0.86	1.29	7.39	13.69	5.08	MF-R040-ND	.51	.47	.43	.34	.29	MF-R040
	60	40	0.50	1.00	0.41	0.77	1.17	7.90	13.69	5.08	MF-R050-ND	.54	.50	.45	.35	.31	MF-R050
	60	40	0.65	1.30	0.27	0.48	0.72	9.70	15.19	5.08	MF-R065-ND	.54	.50	.45	.36	.31	MF-R065
	60	40	0.75	1.50	0.18	0.40	0.60	10.39	16.00	5.08	MF-R075-ND	.54	.50	.45	.36	.31	MF-R075
	60	40	0.90	1.80	0.14	0.31	0.47	11.71	16.69	5.08	MF-R090-ND	.54	.50	.45	.37	.32	MF-R090
	60	40	1.10	2.20	0.15	0.25	0.38	13.00	18.01	5.08	MF-RX110-ND	.54	.50	.45	.36	.32	MF-RX110
	60	40	1.35	2.70	0.12	0.19	0.30	14.50	19.61	5.08	MF-RX135-ND	.57	.53	.48	.38	.34	MF-RX135
	60	40	1.60	3.20	0.09	0.14	0.22	16.31	21.29	5.08	MF-RX160-ND	.60	.55	.50	.40	.35	MF-RX160
	60	40	1.85	3.70	0.08	0.12	0.19	17.81	22.89	5.08	MF-RX185-ND	.60	.55	.50	.40	.35	MF-RX185
	60	40	2.50	5.00	0.05	0.08	0.13	21.31	26.42	10.16	MF-RX250-ND	.66	.61	.55	.43	.37	MF-RX250
	60	40	3.00	6.00	0.04	0.06	0.10	24.89	29.97	10.16	MF-RX300-ND	.69	.64	.58	.46	.40	MF-RX300
	60	40	3.75	7.50	0.03	0.05	0.08	28.45	33.53	10.16	MF-RX375-ND	.72	.66	.60	.48	.42	MF-RX375
	30	40	1.10	2.20	0.10	0.18	0.27	8.89	14.00	5.08	MF-R110-ND	.57	.53	.48	.38	.33	MF-R110
	30	40	1.35	2.70	0.065	0.115	0.17	8.89	18.90	5.08	MF-R135-ND	.57	.53	.48	.38	.33	MF-R135
	30	40	1.60	3.20	0.055	0.105	0.15	10.19	16.79	5.08	MF-R160-ND	.60	.55	.50	.41	.36	MF-R160
	30	40	1.85	3.70	0.04	0.07	0.11	11.99	18.39	5.08	MF-R185-ND	.60	.55	.50	.40	.35	MF-R185
2	30	40	0.90	1.80	0.07	0.12	0.22	7.39	12.19	5.08	MF-R090-0-009-ND	.57	.53	.48	.38	.33	MF-R090-0-009
3	30	40	2.50	5.00	0.025	0.048	0.07	11.99	18.29	5.08	MF-R250-0-010-ND	.66	.61	.55	.44	.38	MF-R250-0-010
2	30	40	3.00	6.00	0.02	0.05	0.08	11.99	18.29	5.08	MF-R300-ND	.69	.64	.58	.45	.39	MF-R300
	30	40	4.00	8.00	0.01	0.03	0.05	14.40	24.79	5.08	MF-R400-ND	.72	.66	.60	.48	.42	MF-R400
	30	40	5.00	10.00	0.01	0.03	0.05	17.40	24.89	10.16	MF-R500-ND	.78	.72	.65	.52	.45	MF-R500
	30	40	6.00	12.00	0.005	0.02	0.04	19.30	31.90	10.16	MF-R600-ND	.81	.75	.68	.53	.46	MF-R600
	30	40	7.00	14.00	0.005	0.02	0.03	22.10	29.79	10.16	MF-R700-ND	.84	.77	.70	.56	.48	MF-R700
	30	40	8.00	16.00	0.005	0.02	0.03	24.21	32.89	10.16	MF-R800-ND	.87	.80	.73	.58	.51	MF-R800
	30	40	9.00	18.00	0.005	0.01	0.02	24.21	32.89	10.16	MF-R900-ND	.93	.86	.78	.61	.53	MF-R900

Fig.	Max Volt.	I max. Amps	Rated Current (amps @ 23°C) Hold	Trip	Initial Resist. Ohms @ 23°C Min.	Max.	Post-Trip Resist.	Dimensions (mm) A (max.)	B (max.)	C (max.)	D (max.)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Size	Pricing	Bourns Part No.
4	60.0	10	0.14	0.34	1.50	6.50	6.50	4.73	3.17	0.89	0.30	MF-MSMD014CT-ND	.63	.54	.50	2,000	360.00/M	MF-MSMD014-02
	30.0	10	0.20	0.40	0.40	5.00	5.00	4.73	3.41	0.81	0.30	MF-MSMD020CT-ND	.56	.48	.44	2,000	320.00/M	MF-MSMD020-02
	6.0	40	0.35	0.70	0.32	1.30	1.30	3.43	2.80	0.62	0.35	MF-USMD035CT-ND	.63	.54	.50	3,000	360.00/M	MF-USMD035-02
	15.0	40	0.50	1.00	0.15	1.00	1.00	4.73	3.41	0.62	0.30	MF-MSMD050CT-ND	.56	.48	.44	2,000	320.00/M	MF-MSMD050-02
	13.2	40	0.75	1.50	0.11	0.45	0.45	4.73	3.41	0.62	0.30	MF-MSMD075CT-ND	.56	.48	.44	2,000	320.00/M	MF-MSMD075-02
	6.0	40	1.10	2.20	0.04	0.21	0.21	4.73	3.41	0.62	0.30	MF-MSMD110CT-ND	.56	.48	.44	2,000	320.00/M	MF-MSMD110-02
	6.0	40	1.25	2.50	0.05	0.18	0.18	4.73	3.41	0.48	0.25	MF-MSMD125CT-ND	.56	.48	.44	2,000	320.00/M	MF-MSMD125-02
	6.0	40	1.50	3.00	0.03	0.15	0.15	4.73	3.41	0.48	0.25	MF-MSMD150CT-ND	.56	.48	.44	2,000	320.00/M	MF-MSMD150-02

Fig.	Max Volt.	I max. Amps	Rated Current (amps @ 23°C) Hold	Trip	Initial Resist. Ohms @ 23°C Min.	Max.	Post-Trip Resist.	Dimensions (mm) A (max.)	B (max.)	C (max.)	D (max.)	E (max.)	F (max.)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel* Size	Pricing	Bourns Part No.
5	60	10	0.30	0.60	1.20	2.40	4.80	7.98	3.18	5.44	.71	2.41	.43	MF-SM030CT-ND	.74	.63	.58	2,000	420.00/M	MF-SM030-02
	30	10	0.50	1.00	0.35	0.70	1.40	7.98	3.18	5.44	.71	2.41	.43	MF-SM050CT-ND	.74	.63	.58	2,000	420.00/M	MF-SM050-02
	30	40	0.75	1.50	0.35	0.70	1.00	7.98	3.18	5.44	.71	2.41	.43	MF-SM075CT-ND	.74	.63	.58	2,000	420.00/M	MF-SM075-02
	15	40	1.00	2.20	0.12	0.24	0.48	7.98	3.00	5.44	.71	2.41	.43	MF-SM100CT-ND	.74	.63	.58	2,000	413.00/M	MF-SM100-02
	15	40	1.25	2.50	0.07	0.14	0.25	7.98	3.00	5.44	.71	2.41	.43	MF-SM125CT-ND	.74	.63	.58	2,000	413.00/M	MF-SM125-02
	15	40	1.50	3.00	0.06	0.12	0.25	9.50	3.00	6.71	.71	3.94	.43	MF-SM150CT-ND	.77	.66	.61	1,500	440.00/M	MF-SM150-02
	15	40	2.00	4.00	0.05	0.10	0.125	9.50	3.00	6.71	.71	3.94	.43	MF-SM200CT-ND	.77	.66	.61	1,500	440.00/M	MF-SM200-02
	15	40	2.50	5.00	0.035	0.08	0.085	9.50	3.00	6.71	.71	3.94	.43	MF-SM250CT-ND	.77	.66	.61	1,500	440.00/M	MF-SM250-02
	6	40	2.60	5.20	0.025	0.075	0.075	7.98	3.00	5.44	.71	2.41	.43	MF-SM260CT-ND	.77	.66	.61	2,000	440.00/M	MF-SM260-02

* For Tape and Reel part number, change "CT" to "TR".

Panasonic®

Circuit Protect Element Series Surface Mount Package

Shuts off the circuit current in a quick and stable manner. Our Circuit protector element series protect semiconductors and their circuits with excellent shut-off characteristics. Suitable for protection of interface circuit in PC and OA equipment.

Features: • Shut-off characteristics are extremely stable • Low internal resistance and voltage drop • Molded in flame retardant package • The package is molded with a high dimensional accuracy • Small sized surface-mount type package, enabling high-density mounting • UL Certified • Operating ambient and storage temperature: -55 to +125°C.

Precautions in use: Applying continuously a current exceeding the rated current causes heating of the package and can be dangerous. Please use these elements to circuits in the secondary side only. Applying excessive power causes bursting of the package and can be dangerous. Since these elements do not correspond to current fuses, etc., according to legal regulations, avoid using symbols for these elements in circuit diagrams that may cause confusion with tubular fuses.

Fig. 1 — Small New Mini-Power Package (2-pin)

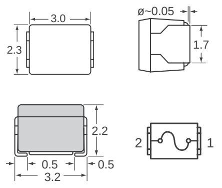


Fig. 2 — S-Mini Type Package (2-pin)

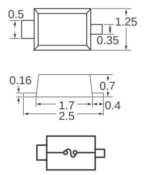


Fig.	Rated Current (A)	Break-down Current (A) +20%	Internal Resistance (mΩ)	Rated Voltage (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
Small New Mini-Power Package (2-Pin) UNHS200 Series											
1	0.5	1.0	130	50	UNHS200CT-ND	.57	.46	.35	UNHS200TR-ND	1,500	171.36/M
	0.7	1.4	95	50	UNHS201CT-ND	.57	.46	.35	UNHS201TR-ND	1,500	171.36/M
	1.0	2.0	58	50	UNHS202CT-ND	.57	.46	.35	UNHS202TR-ND	1,500	171.36/M
	1.2	2.4	45	50	UNHS203CT-ND	.57	.46	.35	UNHS203TR-ND	1,500	171.36/M
	1.5	3.0	38	50	UNHS204CT-ND	.57	.46	.35	UNHS204TR-ND	1,500	171.36/M
	1.8	3.6	30	50	UNHS205CT-ND	.57	.46	.35	UNHS205TR-ND	1,500	171.36/M
	2.3	4.6	22	50	UNHS206CT-ND	.57	.46	.35	UNHS206TR-ND	1,500	171.36/M
S-Mini Type Package (2-Pin) UNHZ200 Series											
2	0.7	1.4	93	50	UNHZ201CT-ND	.54	.43	.33	UNHZ201TR-ND	3,000	150.53/M
	1.0	2.0	59	50	UNHZ202CT-ND	.54	.43	.33	UNHZ202TR-ND	3,000	150.53/M
	1.2	2.4	46	50	UNHZ203CT-ND	.54	.43	.33	UNHZ203TR-ND	3,000	150.53/M
	1.5	3.0	35	50	UNHZ204CT-ND	.54	.43	.33	UNHZ204TR-ND	3,000	150.53/M

Littelfuse®

ESD and Over-Voltage Protection Arrays

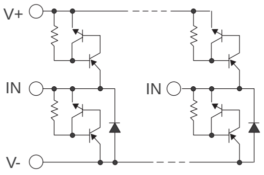
This is an array of SCR/Diode bipolar structures for ESD and over-voltage protection. The SCR Structures are designed for fast triggering, if a transient pulse is detected with a voltage level greater than one V_{BE}, negative or positive pulse, the device will be activated.

Some of the applications where this device works very well is for Microprocessor/Logic Input Protection, Data Buss Protection, Analog Device Input Protection, or a Voltage Clamp.

Features:

- Fast Switching Times
- Low Input Leakage
- Low Input Capacitance
- Operating Temperature Range: -40°C to 105°C

Functional Block Diagram



ESD Human Body Model (HBM) Capability for SP720 – SP721				
HBM Standard	**Mode**	**R**	**C**	**ESD(V)**
IEC 1000-4-2	Air Direct Direct, Dual Pins	330Ω 330Ω 330Ω	150pF 150pF 150pF	>15kV >4kV >8kV
MIL-STD-3015.7	Direct, In-Circuit	1.5kΩ	100pF	>15kV

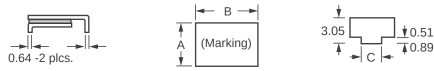
ESD Human Body Model (HBM) Capability for SP723 – SP724				
HBM Standard	**Mode**	**RD Discharge Resistor**	**CD Discharge Cap.**	**±VD Discharge Voltage**
IEC 1000-4-2 (Level 4)	HBM, Air Discharge HBM, Direct Discharge	330Ω 330Ω	150pF 150pF	15kV 8kV
MIL-STD-3015.7	Modified HBM Standard HBM	1.5kΩ 1.5kΩ	100pF 100pF	8kV 2kV
EIAJ IC121	Machine Model	0kΩ	200pF	400V

Package	No. of Input Arrays per Package	Operating Voltage (V supply)	Input Leakage Current (nA)	Quiescent Supply Current (nA)	Equivalent SCR ON Threshold (V)	Equivalent SCR ON Resistance (Ohms)	Input Capacitance (pF)	Input Switch Speed (nSec)	Digi-Key Part No.	Price Each 1	10	100	Littelfuse Part No.
16-SOIC	14	2-30	5	50	1.1	1	3	2	F2163-ND	3.06	2.82	2.12	SP720AB
16-Dip	14	2-30	5	50	1.1	1	3	2	F2164-ND	3.06	2.82	2.12	SP720AP
8-SOIC	6	2-30	5	50	1.1	1	3	2	F2165-ND	2.11	1.95	1.47	SP721AB
8-Dip	6	2-30	5	50	1.1	1	3	2	F2166-ND	2.11	1.95	1.47	SP721AP
8-SOIC	6	2-30	5	50	1.1	0.5	5	2	F2167-ND	2.80	2.58	1.94	SP723AB
8-Dip	6	2-30	5	50	1.1	0.5	5	2	F2168-ND	2.86	2.64	1.98	SP723AP
SOT-23 (6 pin)	4	1-20	1	100 (Max.)	1.1	1	3	—	F2169CT-ND*	1.93	1.79	1.35	SP724AHT

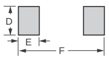
* For Tape and Reel pricing, change CT-ND to TR-ND and call Digi-Key for pricing. ***NOTE:*** The SP724 is covered by Littelfuse patent 4567500

PTC Resettable Devices Surface Mount

3425L Series

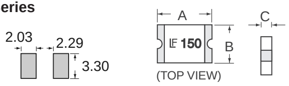


Recommended Pad Layout



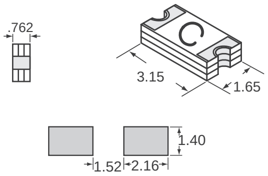
Series	Dimensions (mm) A (max.)	B (max.)	C	D	E	F
3425L	6.71	9.50	3.68	4.57	2.29	10.67

1812L Series



Series	Dimensions (mm) A (max.)	B (max.)	C
1812L 050-150	4.62	3.30	0.69
1812L 200-260	4.62	3.30	1.45

1206L Series



PTC Resettable devices utilize a unique polymer-based, Positive Temperature Coefficient (PTC) material to protect electrical circuits against overcurrent conditions.

PTC Resettable Operation: In normal operation, the Littelfuse PTC has many conductive paths and a very low resistance. In an overcurrent condition, the temperature of the polymer material rises. This dramatically reduces the conductive paths resulting in an immediate rise in resistance. In this condition the device provides circuit protection by significantly limiting the flow of current. However, once the cause of the initial overcurrent condition is eliminated, the Littelfuse PTC cools down and resets to a low resistance value permitting the normal current flow to resume.

Agency Approvals: • UL: Recognized under Components Program of Underwriters Laboratories • CSA: Recognized under Component Acceptance Program of the Canadian Standards Association • TUV approved

ELECTRICAL DEFINITIONS: • **Ihold**: Hold Current: maximum current device will sustain for 4 hours without switching at 20°C • **Itrip**: Trip Current: minimum current that will switch the device into a high resistance state at 20°C • **Isc**: Maximum short circuit current device can withstand at rated voltage • **Ril**: Minimum initial resistance of device at 20°C, prior to tripping • **Rat**: Maximum measured resistance in the nontripped state 1 hour post reflow with reflow conditions of 245°C for 20 seconds.

NOTE: *Devices are not intended to be used for continual, repeated tripping.*

CAUTION: *Operation beyond the specified ratings may result in damage and possible arcing and flame.*

I_{hold} (A)	I_{trip} (A)	Volt. Rating (V)	Isc (A)	Max. Time to Trip Current (A)	Time (Sec)	Resistance (Ω) R_{il}	R_{at}	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing	Littelfuse Part No.
3425L Series															
1.5	3.0	15.0	40	8.0	5.0	0.060	0.250	F2105CT-ND	.73	.63	.57	F2105TR-ND	1,500	311.00/M	3425L150DR
2.0	4.0	15.0	40	8.0	12.0	0.050	0.150	F2106CT-ND	.73	.63	.57	F2106TR-ND	1,500	311.00/M	3425L200DR
2.5	5.0	15.0	40	8.0	25.0	0.035	0.100	F2107CT-ND	.73	.63	.57	F2107TR-ND	1,500	311.00/M	3425L250DR
3.0	6.0	15.0	40	8.0	32.0	0.020	0.060	F2108CT-ND	.73	.63	.57	F2108TR-ND	1,500	311.00/M	3425L300DR
1812L Series															
0.50	1.00	15.0	40	8.0	0.15	0.100	1.000	F2156CT-ND	.61	.57	.43	F2156TR-ND	2,000	236.25/M	1812L050PRT
0.75	1.50	13.2	40	8.0	0.30	0.075	.420	F2157CT-ND	.61	.57	.43	F2157TR-ND	2,000	236.25/M	1812L075PRT
1.10	2.20	6.0	40	8.0	0.30	0.040	.226	F2158CT-ND	.61	.57	.43	F2158TR-ND	2,000	236.25/M	1812L110PRT
1.25	2.50	6.0	40	8.0	0.25	0.045	.184	F2159CT-ND	.61	.57	.43	F2159TR-ND	2,000	236.25/M	1812L125PRT
1.50	3.00	6.0	40	8.0	0.30	0.040	.137	F2160CT-ND	.61	.57	.43	F2160TR-ND	2,000	236.25/M	1812L150PRT
2.00	4.00	6.0	40	8.0	2.50	0.018	.070	F2161CT-ND	.84	.78	.59	F2161TR-ND	1,000	348.00	1812L200MR
NEW! 1206L Series NEW!															
0.20	0.40	15.0	40	8.0	0.05	0.600	2.50	F2109CT-ND	.66	.62	.47	F2109TR-ND	4,000	255.15/M	1206L020YRT
0.25	0.50	15.0	40	8.0	0.08	0.550	2.30	F2110CT-ND	.66	.62	.47	F2110TR-ND	4,000	255.15/M	1206L025YRT
0.35	0.70	6.0	40	8.0	0.10	0.250	.800	F2111CT-ND	.66	.62	.47	F2111TR-ND	4,000	255.15/M	1206L035YRT
0.50	1.00	6.0	40	8.0	0.10	0.090	0.60	F2112CT-ND	.66	.62	.47	F2112TR-ND	3,000	255.15/M	1206L050WRT
0.75	1.50	6.0	40	8.0	0.20	0.070	0.30	F2113CT-ND	.66	.62	.47	F2113TR-ND	3,000	255.15/M	1206L075WRT
1.10	2.20	6.0	40	8.0	0.30	0.040	0.18	F2114CT-ND	.66	.62	.47	F2114TR-ND	3,000	255.15/M	1206L110WRT
1.50	3.00	6.0	40	8.0	0.40	0.030	0.12	F2115CT-ND	.66	.62	.47	F2115TR-ND	3,000	255.15/M	1206L150WRT

Panasonic®

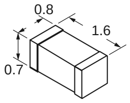
Micro Chip Fuse Surface Mount "0603" (1608) Size

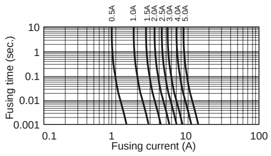
Features: • Small size 0603 (1608) • Sharp fusing characteristics (Very fast acting) • Pb free

Applications: • Computer and peripheral equipment, mobile phone and other digital devices

Approved Safety Standards: • UL 248-14: File No. E194052 • C-UL(CSA)C22.2 No. 248-14: File No. E194052

Specifications: • Operating Temperature Range: -40°C to +125°C • Fusing Current/Fusing Time (at 25°C): 100% rated current/4 hours, Min., 200% rated current/1 sec., Max., 300% rated current/0.2 sec., Max.





Rated Current (A)	Rated Voltage (VDC)	Marking Code	Internal R. (mohm) Max. @ 25°C	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000	Panasonic Part No.
ERB-FE Series										
0.5	32	F	330	P11353CT-ND	.42	.39	.30	P11353TR-ND	161.79/M	ERB-FE0R50U
1.0	32	H	120	P11354CT-ND	.42	.39	.30	P11354TR-ND	161.79/M	ERB-FE1R00U
1.5	32	K	70	P11355CT-ND	.42	.39	.30	P11355TR-ND	161.79/M	ERB-FE1R50U
2.0	32	N	50	P11356CT-ND	.42	.39	.30	P11356TR-ND	161.79/M	ERB-FE2R00U
2.5	32	O	38	P11357CT-ND	.42	.39	.30	P11357TR-ND	161.79/M	ERB-FE2R50U
3.0	32	P	31	P11358CT-ND	.42	.39	.30	P11358TR-ND	161.79/M	ERB-FE3R00U
4.0	24	S	22	P11359CT-ND	.42	.39	.30	P11359TR-ND	161.79/M	ERB-FE4R00U
5.0	24	T	17	P11360CT-ND	.42	.39	.30	P11360TR-ND	161.79/M	ERB-FE5R00U

PulseGuard® SMT ESD Suppressor

Fig. 1 0603

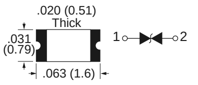


Fig. 2 SOT-23

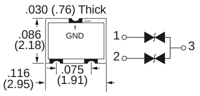
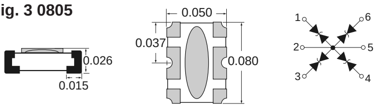


Fig. 3 0805

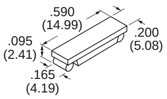


PulseGuard ESD suppressors provide protection for electronic devices against the threat of electrostatic discharge (ESD). Employing a voltage variable material to switch between high resistance and low resistance states, shunting ESD transients away from sensitive circuitry. PulseGuard suppressors comply with ESD specifications (IEC 61000-4-2, MIL-STD-883E, USB and IEEE1394). **Electrical Specifications: • Trigger Voltage[1]:** 1,000V, typical **• Clamping Voltage[1]:** 150V, typical **• Rated Voltage:** 24VDC, max **• Capacitance[2]:** 0.055pF **• Response Time[1]:** <1 ns **• Leakage Current[3]:** <1nA **• ESD Pulse Withstand[1]:** 1,000 pulses, minimum

Fig.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing
1	F1320CT-ND	.70	.65	.49	F1320TR-ND	290.00/1000
2	F1321CT-ND	1.23	1.14	.86	—	—
3	F2162CT-ND	2.07	1.92	1.45	F2162TR-ND	855.50/1000

Notes: 1. 8kV direct discharge method, per IEC61000-4-2 **2.** Measured at 1 MHz **3.** Measured at 6 VDC. Testing at fast ESD pulse rated (1-20 Hz) may cause a change in leakage current performance (6µA, max)

*SMT*elecom™ Fuse



• Surface mount overcurrent protection from lightning and power cross • Ideal for use in telecommunication equipment including modems, fax machines, desk top phones, answering machines and line cards.

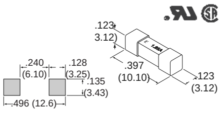
% Amp. Rating	Opening Time (Min./Max.)
100% 200%	4 hours, min. 5 sec. / 30 sec.

Electrical Specifications: • Short Circuit Capabilities: UL1459 / UL 1950 3rd. Edt.: 40 amperes @ 600 VAC; 7 amperes @ 600 VAC; 2.2 amperes @ 600 VAC **• Interrupting Ratings:** 10,000 amperes @ 125V; 100 amperes @ 250V **• Operating Temperature Range:** -55°C to +125°C **• Voltage Rating:** 250V. **Specifications: • Construction Materials:** Body: Melamine substrate; Terminations: Copper/nickel/tin-lead (95/5) **• Soldering Parameters:** Reflow Solder: 250°C, 10 sec. max.; Wave Solder: Not recommended **• Packaging Specifications:** 24mm Tape and Reel per EIA-RS481, (Equivalent to IEC 286, part 3.) **• Performance Characteristics:** Complies with FCC 47 Part 68 Longitudinal Surge and Metallic Surge; Bellcore GR-1089-CORE

Amp Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000
0436 Series						
.750	F1280CT-ND	1.40	1.30	.98	—	—
1.25	F1282CT-ND	1.40	1.30	.98	F1282TR-ND	539.00/M
1.50	F1283CT-ND	1.40	1.30	.98	F1283TR-ND	539.00/M

Telecom NANO2® Fuse "0461" Series

% of Amp. Rating	Opening Time (Min./Max.)
100% 250%	4 hours, min. 1 sec, min; 120 max.

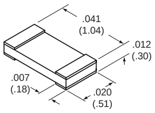


Surface mount overcurrent protection from power cross and allows compliance with lightning surges. Meets UL 1950 3rd Edition (formely UL 1459) power cross requirements stand alone. Designed to allow compliance with Bellcore/Telcordia GR-1089-CORE and FCC 47 part 68 Surge Specifications. **• Interrupting Ratings:** 50 A @ 250 VAC **• Operating Temperature Range:** -55° C to 125°C **• Materials:** Body: Ceramic; Terminations: Silver Plated Brass Caps **• Soldering Parameters:** Reflow Solder - 230°C, 30 seconds maximum. Wave solder -260°C, 3 seconds maximum **• Packaging Specifications:** 24mm Tape and Reel per EIA-RS481. (IEC 268 part 3); 2500 fuses per reel **• Interrupting Ratings:** 50 A @ 250 VAC

Amp Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape& Reel Pricing 2,500
.5	F1449CT-ND	1.47	1.37	1.03	F1449TR-ND	567.00/M
1.25	F1550CT-ND	1.47	1.37	1.03	F1550TR-ND	567.00/M
2.00	F1551CT-ND	1.47	1.37	1.03	F1551TR-ND	567.00/M

Slimline "0402" (1005) Very Fast Acting Thin-Film 0435 Series

% of Amp. Rating	Opening Time (Min./Max.)
100% 200% 300%	4 hours, min. 5 Sec., max 0.2 Sec.,max

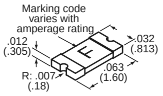


• Operating Temperature: -55°C to 90°C **• Voltage Rating:** 24V **• Materials:** Body: Epoxy Substrate; Terminations: Copper/Nickel/Tin-Lead Cover Coat: Conformal Coating **• Soldering Parameter:** Reflow Solder-260° C, 30 seconds maximum **• Packaging Specification:** 8mm Paper Tape amd Reel per EIA-RS481-1 (IEC 286, part 3) ; 10,000 per reel. **• Interrupting Ratings:** 35 A @ 24 V AC/DC

Amp Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape& Reel Pricing 10,000
.250	F1440CT-ND	1.02	.95	.72	F1440TR-ND	392.00/M
.375	F1441CT-ND	1.02	.95	.72	F1441TR-ND	392.00/M
.500	F1442CT-ND	1.02	.95	.72	F1442TR-ND	392.00/M
.750	F1443CT-ND	1.02	.95	.72	F1443TR-ND	392.00/M
1.00	F1444CT-ND	1.02	.95	.72	F1444TR-ND	392.00/M
1.25	F1445CT-ND	1.02	.95	.72	F1445TR-ND	392.00/M
1.50	F1446CT-ND	1.02	.95	.72	F1446TR-ND	392.00/M
1.75	F1447CT-ND	1.02	.95	.72	F1447TR-ND	392.00/M
2.00	F1448CT-ND	1.02	.95	.72	F1448TR-ND	392.00/M

"0603" (1608) Slim Very Fast Acting Thin-Film Fuse

% Amp Rating	Opening Time at 25°C
100% 200% 300%	4 hours, min. 5 sec., max. 0.2 sec., max.

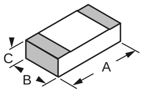


Slimline 0603 is identical to the popular (431 Series) mounting pad and electrical specifications but has a lower profile and enhanced soldering capabilities. **Specifications: • Construction Material:** Body: Epoxy substrate; Terminations: Copper/nickel/tin-lead (95/5); Cover Coat: Conformal Coating **• Interrupting Ratings:** 50 Amps at 32V AC/DC (.25-1A) or 35 Amps at 32V AC/DC (1.25-5A) **• Operating Temperature:** -50°C to +90°C **• Voltage Rating:** 32V **• Tape and Reel Specification:** 8mm wide reels that are in compliance with EIA-RS481

Amp Rate	Marking Code	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
0434 Series							
.250	D	F1360CT-ND	.89	.83	.63	F1360TR-ND	342.90/M
.375	E	F1361CT-ND	.89	.83	.63	F1361TR-ND	342.90/M
.500	F	F1362CT-ND	.89	.83	.63	F1362TR-ND	342.90/M
.750	G	F1363CT-ND	.89	.83	.63	F1363TR-ND	342.90/M
1.00	H	F1364CT-ND	.89	.83	.63	F1364TR-ND	342.90/M
1.25	J	F1365CT-ND	.89	.83	.63	F1365TR-ND	342.90/M
1.50	K	F1366CT-ND	.89	.83	.63	F1366TR-ND	342.90/M
1.75	L	F1367CT-ND	.89	.83	.63	F1367TR-ND	342.90/M
2.00	N	F1368CT-ND	.89	.83	.63	F1368TR-ND	342.90/M
2.50	O	F1369CT-ND	.89	.83	.63	F1369TR-ND	342.90/M
3.00	P	F1370CT-ND	.89	.83	.63	F1370TR-ND	342.90/M
4.00	S	F1371CT-ND	.89	.83	.63	F1371TR-ND	342.90/M
5.00	T	F1372CT-ND	.89	.83	.63	F1372TR-ND	342.90/M

"1206" (3216) SMF Very Fast Acting and Slo-Blo® Thin-Film Fuse

	Dimensions - In. (mm) A	B	C
Very Fast Acting	.122 (3.10)	.063 (1.60)	.047 (1.19)
Slo-Blo®	.124 (3.15)	.060 (1.52)	.045 (1.14)



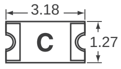
Amp. Rating	Opening Time at 25°C Very Fast Acting	Slo-Blo®
100%	4 hours min.	—
200%	5 sec., max.	1 sec. min., 120 sec. max.
300%	0.2 sec., max.	0.1 sec. min., 3 sec. max.
800%	—	0.002 sec. min., .05 sec. max.

Specifications: • Construction Materials: Body: Epoxy Substrate, Terminations: Copper/Nickel/Tin-Lead (95/5). Cover Coat: Conformal Coating **• Operating Temperature Range:** -55°C to +125°C **• Solderability:** Withstands 60 seconds above 200°C up to 260°C max. **• Tape and Reel Specifications:** Supplied on 8mm wide reels that are in compliance with EIA-RS481-2 (equivalent to IEC 286 part 3). Packaged 3,000 fuses per reel. **• Voltage Ratings:** .125-.375A (125V) .500-2.00A (63V) 2.5-3.0A (32V) 4.0-7.0A (24V)

Amp Rate	Marking Code	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 3,000
0429 Series — Very Fast-Acting							
.125	FB	F1270CT-ND	.86	.80	.61	F1270TR-ND	330.75/M
.200	FC	F1271CT-ND	.70	.66	.50	F1271TR-ND	271.35/M
.250	FD	F1230CT-ND	.70	.66	.50	F1230TR-ND	271.00/M
0429 Series — Very Fast-Acting (Cont.)							
.375	FE	F1231CT-ND	.70	.66	.50	F1231TR-ND	271.00/M
.500	FF	F1232CT-ND	.70	.66	.50	F1232TR-ND	271.00/M
.750	FG	F1233CT-ND	.70	.66	.50	F1233TR-ND	271.00/M
1.00	FH	F1234CT-ND	.70	.66	.50	F1234TR-ND	271.00/M
1.25	FJ	F1235CT-ND	.70	.66	.50	F1235TR-ND	271.00/M
1.50	FK	F1236CT-ND	.70	.66	.50	F1236TR-ND	271.00/M
1.75	FL	F1237CT-ND	.70	.66	.50	F1237TR-ND	271.00/M
2.00	FN	F1238CT-ND	.70	.66	.50	F1238TR-ND	271.00/M
2.50	FO	F1272CT-ND	.70	.66	.50	F1272TR-ND	271.35/M
3.00	FP	F1273CT-ND	.70	.66	.50	F1273TR-ND	271.35/M
4.00	FS	F1274CT-ND	.70	.66	.50	F1274TR-ND	271.35/M
5.00	FT	F1275CT-ND	.86	.80	.61	F1275TR-ND	330.75/M
7.00	FU	F1276CT-ND	.86	.80	.61	F1276TR-ND	330.75/M
0430 Series — Slo-Blo®							
.500	TF	F1260CT-ND	1.02	.95	.72	F1260TR-ND	392.00/M
1.00	TH	F1261CT-ND	1.02	.95	.72	F1261TR-ND	392.00/M
1.50	TK	F1262CT-ND	1.02	.95	.72	F1262TR-ND	392.00/M
2.00	TN	F1263CT-ND	1.02	.95	.72	F1263TR-ND	392.00/M

NEW! Slimline "1206" (3216) Very Fast Acting Thin-Film 0433 Series

% of Amp. Rating	Opening Time (Min./Max.)
100% 200% 300%	4 hours, min. 5 Sec., max 0.2 Sec.,max

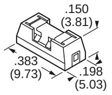


Thickness .58

Mounting pad and electrical specification are identical to the popular (429) Series specifications. **Specifications: • Construction Materials:** Body: Epoxy Substrate; Terminations: Copper/Nickel/Tin-Lead (95/5); Cover Coat: Conformal Coating **• Operating Temperature:** -55°C to 90°C **• Interrupting Ratings:** 0.125 - .375A (50A@125V AC/DC), 0.5 - 2A (50A@63V AC/DC), 2.5 - 3A (50A@32V AC/DC) **• Tape and Reel Specification:** Supplied on 8mm wide reels that are in compliance with EIA-RS481-2 (IEC 286, part 3) **• Voltage Ratings:** .125-.375A (125V) .500-2.00A (63V) 2.5-3.0A (32V)

Amp Rate	Marking Code	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 5,000
0433 Series — Very Fast-Acting							
.125	B	F1373CT-ND	.68	.63	.48	F1373TR-ND	260.55/M
.200	C	F1374CT-ND	.68	.63	.48	F1374TR-ND	260.55/M
.250	D	F1375CT-ND	.68	.63	.48	F1375TR-ND	260.55/M
.375	E	F1376CT-ND	.68	.63	.48	F1376TR-ND	260.55/M
.50	F	F1377CT-ND	.68	.63	.48	F1377TR-ND	260.55/M
.60	.6	F1378CT-ND	.68	.63	.48	F1378TR-ND	260.55/M
.75	G	F1379CT-ND	.68	.63	.48	F1379TR-ND	260.55/M
.80	.8	F1380CT-ND	.68	.63	.48	F1380TR-ND	260.55/M
1.0	H	F1381CT-ND	.68	.63	.48	F1381TR-ND	260.55/M
1.25	J	F1382CT-ND	.68	.63	.48	F1382TR-ND	260.55/M
1.4	1.4	F1383CT-ND	.68	.63	.48	F1383TR-ND	260.55/M
1.5	K	F1384CT-ND	.68	.63	.48	F1384TR-ND	260.55/M
1.75	L	F1385CT-ND	.68	.63	.48	F1385TR-ND	260.55/M
2.0	N	F1386CT-ND	.68	.63	.48	F1386TR-ND	260.55/M
2.5	O	F1387CT-ND	.68	.63	.48	F1387TR-ND	260.55/M
3.0	P	F1388CT-ND	.68	.63	.48	F1388TR-ND	260.55/M

SMF Omni-Blok® Fuse Block with Nano^{2}® Very Fast Acting and Slo-Blo® Fuses



The SMF Omni-Blok® Fuseholder permits quick and easy replacement of Nano^{2}® SMF surface mount fuses. The fuse block and pre-installed fuse combination can be placed on the PC board in one efficient manufacturing operation.

Specifications: • Electrical: 7A, 125V **• Molded Parts:** Thermoplastic (94V0) **• Ambient Temp.:** -55°C to +125°C **• Soldering Parameters:** Infrared: 445°F (230°C), 30 sec. **• Packaging:** 16mm wide Tape and Reel per EIA Standard 481. Installed fuses have silver plated end caps, installed to accommodate solder reflow process.

Use 451 Series Fast Acting Fuse with tin/lead alloy plated end caps for replacement purposes of the 154 Series product. Use 452 Series Slo-Blo® Fuse with tin/lead alloy plated end caps for replacement purposes of the 154xxxT Series.

Amp. Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500
154 Series – Very Fast Acting						
.250	F1219CT-ND	2.39	2.23	1.68	F1219TR-ND	923.00/M
.500	F1220CT-ND	2.39	2.23	1.68	F1220TR-ND	923.00/M
.750	F1221CT-ND	2.03	1.89	1.43	F1221TR-ND	784.00/M
1.00	F1222CT-ND	2.03	1.89	1.43	F1222TR-ND	784.00/M
1.50	F1223CT-ND	2.03	1.89	1.43	F1223TR-ND	784.00/M
2.00	F1224CT-ND	2.03	1.89	1.43	F1224TR-ND	784.00/M
2.50	F1225CT-ND	2.03	1.89	1.43	F1225TR-ND	784.00/M
3.00	F1226CT-ND	2.03	1.89	1.43	F1226TR-ND	784.00/M
4.00	F1227CT-ND	2.03	1.89	1.43	F1227TR-ND	784.00/M
5.00	F1228CT-ND	2.03	1.89	1.43	F1228TR-ND	784.00/M

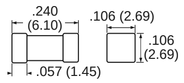
(Continued)

Littelfuse® SMF Omni-Blok® Fuse Block with Nano^{2}® Very Fast Acting and Slo-Blo® Fuses *(Cont.)*

Amp. Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500
154xxxT Series – Slo-Blo®						
.375	F1300CT-ND	2.99	2.78	2.10	F1300TR-ND	1153.00/M
.500	F1301CT-ND	2.99	2.78	2.10	F1301TR-ND	1153.00/M
.750	F1302CT-ND	2.63	2.45	1.85	F1302TR-ND	1015.00/M
1.00	F1303CT-ND	2.63	2.45	1.85	F1303TR-ND	1015.00/M
1.50	F1304CT-ND	2.63	2.45	1.85	F1304TR-ND	1015.00/M
2.00	F1305CT-ND	2.63	2.45	1.85	F1305TR-ND	1015.00/M
2.50	F1306CT-ND	2.63	2.45	1.85	F1306TR-ND	1015.00/M
3.00	F1307CT-ND	2.63	2.45	1.85	F1307TR-ND	1015.00/M
3.50	F1308CT-ND	2.63	2.45	1.85	F1308TR-ND	1015.00/M
4.00	F1309CT-ND	2.63	2.45	1.85	F1309TR-ND	1015.00/M
5.00	F1310CT-ND	2.63	2.45	1.85	F1310TR-ND	1015.00/M

Nano^{2}® SMF Very Fast-Acting and Slo-Blo® Fuses

1-5 Amp



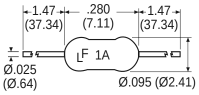
Nano^{2}® Surface Mount Fuses incorporate proven Picofuse performance and dependability in a flat top design which permits efficient pick and place assembly. • **Recommended Soldering Parameters:** *Infrared Reflow* for 30 sec. is 500°F (260°C) for Very Fast-Acting; 445°F (230°C) for Slo-Blo®. *Wave Solder* is 500°F (260°C) for 10 seconds for Very Fast-Acting; 500°F (260°C) for 3 seconds maximum for Slo-Blo®. • **Construction Materials:** Body is ceramic, Caps are tin-lead alloy plated brass. • **Operating Temperature Range:** -55°C to 125°C. • **Voltage Rating:** 125V, 65V: F1155 and F1151

Fast Acting			Slo-Blo®	
Rating	Amps	Blow Time	Rating	Blow Time (Min. / Max.)
100% 200% 200%	1/16-15 1/16-10 12-15	4 hours min. 5 sec., max. 20 sec., max.	100% 200% 300% 800%	4 hrs. min. 1 sec. / 60 sec. 0.2 / 3 sec. 0.02 / 0.1 sec.

Amp. Rate	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,000
R451 Series - Very Fast Acting						
.250	F1140CT-ND•	.93	.87	.65	F1140TR-ND•	384.00
.375	F1152CT-ND	.93	.87	.65	F1152TR-ND	384.25
.500	F1141CT-ND•	.93	.87	.65	F1141TR-ND•	384.00
.750	F1142CT-ND•	.93	.87	.65	F1142TR-ND•	384.00
1.000	F1143CT-ND•	.93	.87	.65	F1143TR-ND•	384.00
1.500	F1144CT-ND•	.93	.87	.65	F1144TR-ND•	384.00
2.000	F1145CT-ND•	.93	.87	.65	F1145TR-ND•	384.00
2.500	F1146CT-ND•	.93	.87	.65	F1146TR-ND•	384.00
3.000	F1147CT-ND•	.93	.87	.65	F1147TR-ND•	384.00
3.500	F1153CT-ND	.93	.87	.65	F1153TR-ND	384.25
4.000	F1148CT-ND•	.93	.87	.65	F1148TR-ND•	384.00
5.000	F1149CT-ND•	.93	.87	.65	F1149TR-ND•	384.00
7.000	F1154CT-ND	.93	.87	.65	F1154TR-ND	384.25
10.000	F1150CT-ND•	1.47	1.37	1.04	F1150TR-ND•	610.00
12.000	F1155CT-ND	1.47	1.37	1.04	F1155TR-ND	610.45
15.000	F1151CT-ND	1.47	1.37	1.04	F1151TR-ND	610.00
R452 Series – Slo-Blo®						
0.375	F1340CT-ND	1.23	1.14	.86	F1340TR-ND	508.00
0.500	F1341CT-ND	1.23	1.14	.86	F1341TR-ND	508.00
0.750	F1342CT-ND	1.23	1.14	.86	F1342TR-ND	508.00
1.000	F1343CT-ND	1.23	1.14	.86	F1343TR-ND	508.00
1.500	F1344CT-ND	1.23	1.14	.86	F1344TR-ND	508.00
2.000	F1345CT-ND	1.23	1.14	.86	F1345TR-ND	508.00
2.500	F1346CT-ND	1.23	1.14	.86	F1346TR-ND	508.00
3.000	F1347CT-ND	1.23	1.14	.86	F1347TR-ND	508.00
3.500	F1348CT-ND	1.23	1.14	.86	F1348TR-ND	508.00
4.000	F1349CT-ND	1.23	1.14	.86	F1349TR-ND	508.00
5.000	F1350CT-ND	1.23	1.14	.86	F1350TR-ND	508.00

- **SMF-KIT-ND *Digi-Key® Nano^{2}® SMF/Pico SMD Fuse Kit***
  5 each of ***Nano^{2}® SMF Fuses*** parts indicated and 5 each of
  Pico SMD Very Fast-Acting and Slo-Blo® Fuses **$99.95**

PICO II™ 125 Volt Very Fast-Acting Pico Fuses



Approvals:
Recognized under the Components Program of Underwriters Laboratories through 10 amperes. Certified by CSA through 7 amperes.

Patents:
U.S. Patent #2,385,281

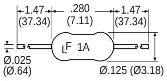
Construction Materials:
Body: UL94V0 epoxy coating, green.

Electrical Characteristics:

Rating	Amperage	Blow Time
100% 200% 200%	1/16 – 15 1/16 – 10 12 – 15	4 hours, min. 5 seconds, max. 10 seconds, max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
251 Series — Non Color-Coded Type					
.0625	125	F820-ND	1.19	.89	.79
.125	125	F821-ND	.88	.66	.58
.500	125	F824-ND	.88	.66	.58
.750	125	F825-ND	.73	.55	.49
1.000	125	F826-ND	.73	.55	.49
1.500	125	F827-ND	.73	.55	.49
2.000	125	F828-ND	.73	.55	.49
2.500	125	F829-ND	.73	.55	.49
3.000	125	F830-ND	.73	.55	.49
3.500	125	F831-ND	.73	.55	.49
4.000	125	F832-ND	.73	.55	.49
5.000	125	F833-ND	.73	.55	.49
7.000	125	F834-ND	.73	.55	.49
10.000	125	F835-ND	.73	.55	.49
12.000	32	F836-ND	1.55	1.16	1.03
15.000	32	F837-ND	1.55	1.16	1.03

PICO II™ 125 Volt Slo-Blo® Pico Fuses



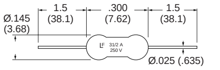
Construction Materials: Body-UL94V0 epoxy coating, gold. Leads-solder coated copper wire. **Operating Temperature Range:** -55°C to 125°C.

Electrical Characteristics:

Rating	Blow Time	Rating	Blow Time
100% 300%	4 hrs., min. 3 sec., max.	200% 800%	60 sec., max. 0.1 sec., max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 5	100	Digi-Key Part No.	Tape & Reel Pricing 4,000
473 Series - Non-Color Coded Type					
.500	F1200CT-ND	1.56	1.27	F1200TR-ND	698.00/M
.750	F1201CT-ND	1.56	1.27	F1201TR-ND	698.00/M
1.000	F1202CT-ND	1.56	1.27	F1202TR-ND	698.00/M
1.500	F1203CT-ND	1.56	1.27	F1203TR-ND	698.00/M
2.000	F1204CT-ND	1.56	1.27	F1204TR-ND	698.00/M
2.500	F1205CT-ND	1.56	1.27	F1205TR-ND	698.00/M
3.000	F1206CT-ND	1.56	1.27	F1206TR-ND	698.00/M
3.500	F1207CT-ND	1.56	1.27	F1207TR-ND	698.00/M
4.000	F1208CT-ND	1.56	1.27	F1208TR-ND	698.00/M
5.000	F1209CT-ND	1.56	1.27	F1209TR-ND	698.00/M

PICO II™ 250 Volt Very Fast-Acting Pico Fuses



Interrupting Rating: 50 amperes at 250 VAC

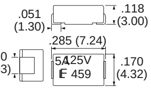
Construction Materials: Encapsulated, epoxy-coated body; solder coated copper leads; green in color

Electrical Characteristics:

% Amp. Rating	Opening Time (Min./Max.)
100% 200% 300%	4 hours, min. 1 sec. max. 0.1 sec. max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 1	10	100
263 Series					
.062	250	F880-ND	2.28	2.12	1.60
.125	250	F881-ND	1.82	1.69	1.28
.250	250	F882-ND	1.82	1.69	1.28
.375	250	F883-ND	1.82	1.69	1.28
.500	250	F884-ND	1.82	1.69	1.28
.750	250	F885-ND	1.50	1.40	1.06
1.00	250	F886-ND	1.50	1.40	1.06
1.50	250	F887-ND	1.50	1.40	1.06
2.00	250	F888-ND	1.50	1.40	1.06
2.50	250	F889-ND	1.50	1.40	1.06
3.00	250	F890-ND	1.50	1.40	1.06
3.50	250	F891-ND	1.50	1.40	1.06
4.00	250	F892-ND	1.50	1.40	1.06
5.00	250	F893-ND	1.50	1.40	1.06

Pico SMD Very Fast-Acting and Slo-Blo® SMT Fuses



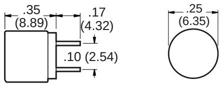
EIA Case Code 7343 Laser etched for ease of identification.
• **Operating Temperature:** -55°C to +125°C • **Soldering Methods:** *Infrared Reflow* is 500°F (260°C) maximum temperature for Very Fast-Acting; 446°F (230°C) maximum temperature for Slo-Blo®. *Thru the wave soldering* is 500°F (260°C),10 seconds maximum.
• **Voltage Rating:** 125

Rating	Fast-Acting Blow Time	Slo-Blo® Blow Time
100% 200% 300% 800%	4 hrs. min. 1 sec. max. — —	4 hrs., min. 60 sec., max. 3 sec., max. 0.1 sec. max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 500
R459 Series – Very Fast-Acting						
.125	F1160CT-ND	.88	.82	.62	F1160TR-ND	200.00
.250	F1161CT-ND	.88	.82	.62	F1161TR-ND	200.00
.375	F1162CT-ND•	.88	.82	.62	F1162TR-ND•	200.00
.500	F1163CT-ND•	.88	.82	.62	F1163TR-ND•	200.00
.750	F1164CT-ND•	.88	.82	.62	F1164TR-ND•	200.00
1.000	F1165CT-ND•	.88	.82	.62	F1165TR-ND•	200.00
1.500	F1166CT-ND•	.88	.82	.62	F1166TR-ND•	200.00
2.000	F1167CT-ND•	.88	.82	.62	F1167TR-ND•	200.00
2.500	F1168CT-ND•	.88	.82	.62	F1168TR-ND•	200.00
3.000	F1169CT-ND•	.88	.82	.62	F1169TR-ND•	200.00
3.500	F1170CT-ND•	.88	.82	.62	F1170TR-ND•	200.00
4.000	F1171CT-ND•	.88	.82	.62	F1171TR-ND•	200.00
5.000	F1172CT-ND•	.88	.82	.62	F1172TR-ND•	200.00
R460 Series – Slo-Blo®						
.375	F1180CT-ND•	1.86	1.73	1.30	F1180TR-ND•	424.00
.500	F1181CT-ND•	1.86	1.73	1.30	F1181TR-ND•	424.00
.750	F1182CT-ND	1.86	1.73	1.30	F1182TR-ND	424.00
1.000	F1183CT-ND•	1.86	1.73	1.30	F1183TR-ND•	424.00
1.500	F1184CT-ND•	1.86	1.73	1.30	F1184TR-ND•	424.00
2.000	F1185CT-ND•	1.86	1.73	1.30	F1185TR-ND•	424.00
2.500	F1186CT-ND	1.86	1.73	1.30	F1186TR-ND	424.00
3.000	F1187CT-ND•	1.86	1.73	1.30	F1187TR-ND•	424.00
3.500	F1188CT-ND	1.86	1.73	1.30	F1188TR-ND	424.00
4.000	F1189CT-ND•	1.86	1.73	1.30	F1189TR-ND•	424.00
5.000	F1190CT-ND•	1.86	1.73	1.30	F1190TR-ND•	424.00

- **SMF-KIT-ND *Digi-Key® Pico SMD/Nano^{2}® SMF Fuse Kit***
  5 each of ***Pico SMD Fuses*** parts indicated and 5 each of ***Nano^{2}® SMF***
  Very Fast-Acting and SloBlo® Fuses **$99.95**

Microfuse Very Fast-Acting Type



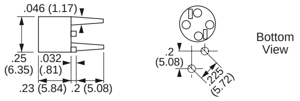
Approvals: Recognized under the Components Program of Underwriters Laboratories and Certified by CSA
Operating Temperature Range: 55°C to 85C

Electrical Characteristics:

Rating	Amperage	Opening Time
100% 200% 200%	1/500 — 5 1/500 — 3/10 4/10 — 5	4 hrs., min. 5 sec., max. 2 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 1	100	250
273 Series — Fast-Acting Type					
.031	125	F854-ND	19.61	12.72	11.30
.050	125	F855-ND	5.29	3.13	2.79
.100	125	F857-ND	5.29	3.13	2.79
.125	125	F858-ND	5.29	3.13	2.79
.200	125	F859-ND	8.10	4.80	4.27
.250	125	F860-ND	5.29	3.13	2.79
.300	125	F861-ND	5.29	3.13	2.79
.400	125	F862-ND	5.29	3.13	2.79
.500	125	F863-ND	5.29	3.13	2.79
.600	125	F864-ND	8.10	4.80	4.27
.700	125	F865-ND	8.10	4.80	4.27
.750	125	F866-ND	5.29	3.13	2.79
1.000	125	F868-ND	5.29	3.13	2.79
1.500	125	F869-ND	5.29	3.13	2.79
2.000	125	F870-ND	4.48	2.66	2.36
3.000	125	F871-ND	5.29	3.13	2.79
4.000	125	F872-ND	5.29	3.13	2.79
5.000	125	F873-ND	5.29	3.13	2.79

Microfuse Fuseholder



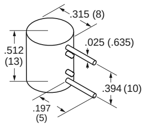
Fuseholder will accept Littelfuse Microfuses and PICO II™ fuses (rated to 5 amperes) with .025” (.64mm) diameter leads.

Electrical: Rated at 5 amperes for any voltage up to 125 volts. **Molded Parts:** White thermoplastic. **Terminals:** Copper alloy. **Ambient Temperature:** -40°C to +100°C. Silver terminal plating

Mounting	Digi-Key Part No.	Price Each 1	100	250
Vertical	F060-ND	1.77	1.29	1.15
Horizontal	F061-ND	1.77	1.29	1.15

Littelfuse®

Safe-T-Plus Fuses



• Designed to allow equipment to meet "Intrinsically Safe" certification for applications in gas plants, petrochemical and processing industries where there is a danger of gas explosion from faulty circuits. • Hermetically sealed. **Voltage Rating:** 125V. **Interrupting Ratings:** 50 amperes at 125 VAC; 300 amperes at 125 VDC

Agency Approvals:

Meets CENELEC EN50, 014 to 39 and BASEEFA BS 5501, part 7.

Electrical Characteristics:

% Amp. Rating	Opening Time
100%	4 hours, min.
200%	5 seconds, max.

Amp. Rating	Volt. Drop	Digi-Key Part No.	Price Each 1	100	250
259 Series					
.062	2.1	F1311-ND	4.56	2.70	2.40
.125	1.3	F1312-ND	4.56	2.70	2.40
.250	0.83	F1313-ND	4.56	2.70	2.40
.375	0.81	F1314-ND	4.56	2.70	2.40
.500	0.78	F1315-ND	4.56	2.70	2.40
.750	0.23	F1316-ND	4.56	2.70	2.40
1.000	0.24	F1317-ND	4.56	2.70	2.40

Schedule of Limitations:

1. The fuse must be so mounted that creepage and clearance distances meet the requirements of Table 2 of EN50020 :1977 or Table 4 of EN500020: 1994 (equivalent to IEC 60079-11 4th Edition 1999).
2. When used in intrinsically safe apparatus it will be necessary to determine a surface temperature classification for the fuse.

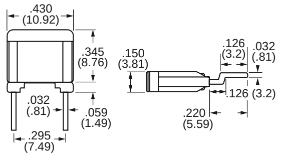
350 Volt SMT Fuses

Fast-Acting EBF Series

1-5 Amp

• Ideal for use in electronic lighting ballast, power supply and power inverter applications • Rated for use in 125, 250, 277 and 350 VAC circuits.

Agency Approvals: UL recognized, CSA certified, MITI approved for 5 amperes **Interrupting Ratings:** 100 amperes at 350 VAC **Operating Temperature:** -40°C to +125°C **Physical Specifications:** Materials: Nylon Body; Silver Plated Zinc Terminations **Packaging Specifications:** 24mm Tape and Reel per EIA-RS481 (equivalent to IEC 286, part 3); 800 fuses per reel

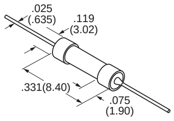


Electrical Characteristics:

% Amp. Rating	Opening Time
100%	4 hours, min.
200%	0.15 sec. min., 5 sec. max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 800
446 Series						
2	F1000CT-ND	.89	.83	.62	F1000TR-ND	323.84
3	F1001CT-ND	.89	.83	.62	F1001TR-ND	323.84
4	F1002CT-ND	.89	.83	.62	F1002TR-ND	323.84
5	F1003CT-ND	.89	.83	.62	F1003TR-ND	323.84
7.5	F1004CT-ND	.89	.83	.62	F1004TR-ND	323.84
10	F1005CT-ND	.89	.83	.62	F1005TR-ND	323.84

Barrier Network Fuses



• Meets Barrier Network Standards for hazardous applications • High interrupting rating

Voltage Rating: 4000

Interrupting Ratings: 4000 amperes at 250 VAC/VDC

Part No.	Color Coding
F1290	Red
F1291	Green
F1292	Blue
F1293	Violet
F1294	Brown
F1295	Black

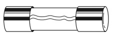
Electrical Characteristics:

% Amp. Rating	Opening Time
110%	4 hours, min.
300%	10 seconds, max.
1000%	0.002 seconds, max.

Amp. Rating	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Box Pricing 500
242 Series						
.050	F1290CT-ND	4.20	3.90	2.94	F1290TB-ND	960.00
.080	F1291CT-ND	4.20	3.90	2.94	F1291TB-ND	960.00
.100	F1292CT-ND	4.20	3.90	2.94	F1292TB-ND	960.00
.160	F1293CT-ND	4.20	3.90	2.94	F1293TB-ND	960.00
.200	F1294CT-ND	4.20	3.90	2.94	F1294TB-ND	960.00
.250	F1295CT-ND	4.20	3.90	2.94	F1295TB-ND	960.00

Metric (5x20mm) Fuses

Fast-Acting High-Interrupting 216 Series
Fast-Acting 217 Series
Slo-Blo® 218 Series



Electrical Characteristics:

Amp. (%)	216 Series .05-3.15A	216 Series 4-10A	217 Series .032-.100A	217 Series .125-10A	218 Series .032-.100A	218 Series .125-10A
150	60 min. min.	60 min. min.	60 min. min.	60 min. min.	60 min. min.	60 min. min.
210	30 min. max.	30 min. max.	30 min. max.	30 min. max.	2 min. max.	2 min. max.
275	0.01-2 sec.	0.01-3 sec.	0.01-0.5 sec.	0.05-2 sec.	0.2-10 sec.	0.6-10 sec.
400	0.003-0.3 sec.	0.003-0.3 sec.	0.003-0.1 sec.	0.01-0.3 sec.	0.04-3 sec.	0.15-3 sec.
1000	0.02 sec. max.	0.02 sec. max.	0.02 sec. max.	0.02 sec max.	0.01-0.3 sec.	0.02-0.3 sec.

Approvals: 216 Series: SEMKO approved thru 6.3 amps; UL and CSA recognized.

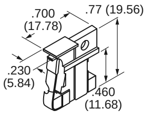
217 Series: SEMKO approved thru 6.3 amps; BSI approved .4-5 amps; UL and CSA recognized.

218 Series: SEMKO approved thru 6.3 amps; BSI and VDE approved .05-6.3 amps; UL and CSA recognized.

Interrupting Capacity: 216 Series: 1500 Amperes **217 Series:** 35 Amperes or 10 x rated current, whichever is greater **218 Series:** 35 Amperes or 10 x rated current, whichever is greater.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
216 Series – Fast-Acting Interrupting Type; Ceramic Body					
.050	250	F900-ND	1.40	1.05	.94
.080	250	F902-ND	1.40	1.05	.94
.100	250	F903-ND	1.12	.84	.75
.125	250	F904-ND	1.12	.84	.75
.160	250	F905-ND	1.12	.84	.75
.200	250	F906-ND	1.12	.84	.75
.250	250	F907-ND	1.12	.84	.75
.315	250	F908-ND	1.12	.84	.75
.400	250	F909-ND	1.12	.84	.75
.500	250	F910-ND	1.12	.84	.75
.630	250	F911-ND	1.12	.84	.75
.800	250	F912-ND	1.12	.84	.75
1.000	250	F913-ND	1.12	.84	.75
1.250	250	F914-ND	1.12	.84	.75
1.600	250	F915-ND	1.12	.84	.75
2.000	250	F916-ND	1.12	.84	.75
2.500	250	F917-ND	1.12	.84	.75
3.150	250	F918-ND	1.12	.84	.75
4.000	250	F919-ND	1.12	.84	.75
5.000	250	F920-ND	1.12	.84	.75
6.300	250	F921-ND	1.12	.84	.75
8.000	250	F922-ND	1.40	1.05	.94
10.000	250	F923-ND	1.40	1.05	.94
217 Series— Fast-Acting Type					
.032	250	F930-ND	1.32	.99	.88
.040	250	F931-ND	1.32	.99	.88
.050	250	F932-ND	1.32	.99	.88
.063	250	F933-ND	1.32	.99	.88
.080	250	F934-ND	1.32	.99	.88
.100	250	F935-ND	1.32	.99	.88
.125	250	F936-ND	1.32	.99	.88
.160	250	F937-ND	.78	.58	.52
.200	250	F938-ND	.78	.58	.52
.250	250	F939-ND	.78	.58	.52
.315	250	F940-ND	.78	.58	.52
.400	250	F941-ND	.78	.58	.52
.500	250	F942-ND	.24	.18	.16
.630	250	F943-ND	.24	.18	.16
.800	250	F944-ND	.24	.18	.16
1.000	250	F945-ND	.24	.18	.16
1.250	250	F946-ND	.24	.18	.16
1.600	250	F947-ND	.24	.18	.16
2.000	250	F948-ND	.24	.18	.16
2.500	250	F949-ND	.24	.18	.16
3.150	250	F950-ND	.24	.18	.16
4.000	250	F951-ND	.24	.18	.16
5.000	250	F952-ND	.24	.18	.16
6.300	250	F953-ND	.24	.18	.16
8.000	250	F954-ND	.89	.67	.59
10.000	250	F955-ND	.89	.67	.59
218 Series — Slo-Blo® Type					
.032	250	F960-ND	1.74	1.31	1.16
.040	250	F961-ND	1.74	1.31	1.16
.050	250	F962-ND	1.74	1.31	1.16
.063	250	F963-ND	1.74	1.31	1.16
.080	250	F964-ND	1.74	1.31	1.16
.100	250	F965-ND	1.02	.77	.68
.125	250	F966-ND	1.02	.77	.68
.160	250	F967-ND	1.02	.77	.68
.200	250	F968-ND	1.02	.77	.68
.250	250	F969-ND	1.02	.77	.68
.315	250	F970-ND	1.02	.77	.68
.400	250	F971-ND	1.02	.77	.68
.500	250	F972-ND	.70	.52	.47
.630	250	F973-ND	.70	.52	.47
.800	250	F974-ND	.70	.52	.47
1.000	250	F975-ND	.70	.52	.47
1.250	250	F976-ND	.70	.52	.47
1.600	250	F977-ND	.70	.52	.47
2.000	250	F978-ND	.70	.52	.47
2.500	250	F979-ND	.70	.52	.47
3.150	250	F980-ND	.70	.52	.47
4.000	250	F981-ND	.70	.52	.47
5.000	250	F982-ND	.70	.52	.47
6.300	250	F983-ND	.70	.52	.47
8.000	250	F984-ND	1.09	.82	.73
10.000	250	F985-ND	1.09	.82	.73

Alarm Indicating Fuses



Electrical Characteristics:

% of Amp. Rating	Opening Time
100%	10 minutes, min.
150%	5 minutes, max.

Alarm Indicating Fuses are ideal for telecom and control panel circuits. Color coded flag conforms to telecom color standards to easily identify amperage ratings. This series has enhancements with an expanded amperage range and higher interrupting ratings, making this a viable replacement for competitive lines such as Bussmann: GMT and San-O: AX-1 series product.

Agency Approval File Numbers: UL E71611, CSA LR29862.

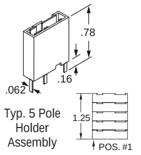
Construction Materials: Body – Polyphenylene Sulfide (UL 94V0). Terminations – Beryllium Copper, Tin Plated. **Voltage Rating:** 125 VAC or 60 VDC. **Interrupting Rating:** 450 Amps at 60 VDC; 300 Amps at 125 VAC/VDC. **Operating Temp. Range:** -55°C to +125°C.

Amp. Rating	Color Code	Digi-Key Part No.	Price Each 1	10	100
0481 Series — Alarm Indicating Type					
.180	Yellow	F712-ND	1.74	1.60	1.20
.250	Violet	F713-ND	1.74	1.60	1.20
.500	Red	F714-ND	1.74	1.60	1.20
.750	Brown	F715-ND	1.74	1.60	1.20
1.000	Gray	F716-ND	1.74	1.60	1.20
1.333	White	F717-ND	1.74	1.60	1.20
1.500	Ylw/Wht	F718-ND	1.74	1.60	1.20
2.000	Orange	F719-ND	1.74	1.60	1.20
3.000	Blue	F720-ND	1.74	1.60	1.20
3.500	Blue/Wht	F721-ND	1.74	1.60	1.20
4.000	Brn/Wht	F722-ND	1.74	1.60	1.20
5.000	Green	F723-ND	1.74	1.60	1.20
7.500	Blk/Wht	F724-ND	1.74	1.60	1.20
10.000	Red/Wht	F725-ND	1.74	1.60	1.20
12.000	Grn/Ylw	F726-ND	1.74	1.60	1.20
15.000	Red/Blue	F727-ND	1.74	1.60	1.20

Gangable Alarm Indicating Fuseholder

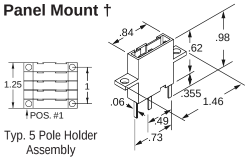
Dim. in inches

PCB Mount



Typ. 5 Pole Holder Assembly

Panel Mount †



Typ. 5 Pole Holder Assembly

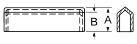
Specifications: • **Electrical:** Rated at 15 amperes for any voltage up to 125 VAC, 125VDC • **Molded Bodies:** Thermoplastic (UL 94VO) • **Terminals:** Alarm Terminal – Brass, tin-plated, wire-wrap type; Fuse Terminal – Beryllium copper, tin-plated

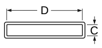
No. of Poles	Digi-Key Part No. PCB Mt.	Digi-Key Part No. Panel Mt.	Price Each 1	10	100
1	F1400-ND	F1420-ND	1.54	1.42	1.07
2	F1401-ND	F1421-ND	3.07	2.84	2.13
3	F1402-ND	F1422-ND	4.61	4.26	3.20
4	F1403-ND	F1423-ND	6.15	5.68	4.26
5	F1404-ND	F1424-ND	7.69	7.10	5.33
6	F1405-ND	F1425-ND	9.22	8.52	6.39
7	F1406-ND	F1426-ND	10.76	9.94	7.45
8	F1407-ND	F1427-ND	12.30	11.36	8.52
9	F1408-ND	F1428-ND	13.84	12.78	9.58
10	F1409-ND	F1429-ND	15.37	14.19	10.65
11	F1410-ND	F1430-ND	16.91	15.61	11.71
12	F1411-ND	F1431-ND	18.45	17.03	12.78
13	F1412-ND	F1432-ND	19.98	18.45	13.84
14	F1413-ND	F1433-ND	21.52	19.87	14.90
15	F1414-ND	F1434-ND	23.06	21.29	15.97
16	F1415-ND	F1435-ND	24.60	22.71	17.03
17	F1416-ND	F1436-ND	26.13	24.13	18.10
18	F1417-ND	F1437-ND	27.67	25.55	19.16
19	F1418-ND	F1438-ND	29.21	26.97	20.23
20	F1419-ND	F1439-ND	30.75	28.38	21.29

† On Panel Mount, first & last position have mounting holes only.

Richco

'Quick Fit' Fuse Covers





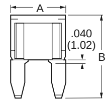
• For use on fuse terminal blocks or PCB-mounted fuse clips • UL recognized E81260, rating 105°C, 600V • Material: Flexible PVC, RMS-55 • Color: Transparent blue

Dim.	Digi-Key Part No. RP613-ND	RP614-ND	RP615-ND	RP616-ND
A	.50 (12.70)	.50 (12.70)	.63 (16.00)	.50 (12.70)
B	.39 (9.91)	.39 (9.91)	.58 (14.73)	.39 (9.91)
C	.24 (6.10)	.28 (7.11)	.32 (8.13)	.32 (8.13)
D	.79 (20.07)	1.18 (29.97)	1.26 (32.00)	1.42 (36.07)

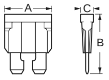
Fuse Type	Digi-Key Part No.	Price Each 25	100	Richco Part No.
Metric	RP613-ND	.58	.50	840620
Metric	RP614-ND	.94	.81	840730
Metric	RP615-ND	.99	.85	840832
Standard	RP616-ND	1.26	1.08	840836

Littelfuse®

ATO Fuse: Mini, ATO and Maxi



Mini Autofuse Series



Standard and Maxi

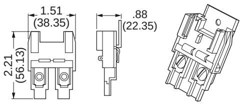
Designed and originated by Littelfuse for the automotive industry, the ATO fuse has become the original equipment circuit protection standard for foreign and domestic automobiles and trucks. This fuse can also be specified for a variety of low voltage electronic applications. **Design Standards:** UL Standard for Automotive Blade Type Fuses. SAE (Society of Automotive Engineers) J1284. **Color-Coding:** Autofuse fuses are color-coded for easy amperage identification. **Voltage Rating:** 32V. **Approvals:** 297 Series: UL listed, 257 series: UL listed 3-40 amps; CSA certified 3-30 amps. 299 Series: UL recognized 20-60 amps. **Body Material:** 297 Series: Nylon, 257 & 299 Series: Plastic.

Fuse Type	Dimensions - Inch (mm) A	B	C
Mini-Fuse	.43 (10.92)	.63 (16.00)	.15 (3.81)
ATO Fuse	.75 (19.05)	.73 (18.54)	.20 (5.08)
Maxi-Fuse	1.15 (29.21)	1.35 (34.29)	.35 (8.89)

Amp. Rtg.	Color Code	Digi-Key Part No.	Price Each		
			5	100	250
297 Series — Mini Fuses					
2	Grey	F986-ND	.39	.36	.32
3	Violet	F987-ND	.39	.36	.32
4	Pink	F988-ND	.39	.36	.32
5	Tan	F989-ND	.39	.36	.32
7.5	Brown	F990-ND	.39	.36	.32
10	Red	F991-ND	.39	.36	.32
15	Blue	F992-ND	.39	.36	.32
20	Yellow	F993-ND	.39	.36	.32
25	Natural	F994-ND	.39	.36	.32
30	Green	F995-ND	.39	.36	.32
257 Series — Fuses					
3	Violet	F996-ND	.34	.31	.28
4	Pink	F997-ND	.34	.31	.28
5	Tan	F998-ND	.34	.31	.28
7.5	Brown	F999-ND	.34	.31	.28
10	Red	F1015-ND	.51	.31	.28
15	Blue	F1016-ND	.51	.31	.28
20	Yellow	F1017-ND	.51	.31	.28
25	Natural	F1018-ND	.51	.31	.28
30	Green	F1019-ND	.51	.31	.28
40	Amber	F1220-ND	.51	.31	.28
299 Series — Maxi Fuses					
20	Yellow	F1035-ND	1.06	.98	.87
30	Green	F1036-ND	1.06	.98	.87
40	Amber	F1037-ND	1.06	.98	.87
50	Red	F1038-ND	1.06	.98	.87
60	Blue	F1039-ND	1.06	.98	.87

MAXIFUSE BLOCK:

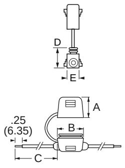
- Rated to 60 amperes at 32 volts
- Interlocking block feature
- Built-in mounting bracket



Description	Digi-Key Part No.	Price Each 1	100	250
Maxi Fuse Block	F1085-ND	16.18	13.24	11.77

IN-LINE FUSEHOLDERS:

- Rated at 32 volts
- Protective cover included

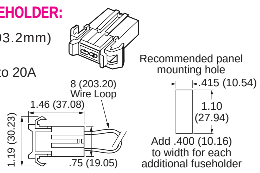


Dim.	Fuse Type - Inch (mm) MINI	ATO	MAXI
A	.52 (13.21)	.97 (24.64)	1.35 (34.29)
B	.97 (24.64)	1.00 (25.40)	3.36 (85.34)
C	4.0 (101.60)	4.0 (101.60)	6.0 (152.40)
D	.60 (15.24)	.67 (17.02)	1.39 (35.31)
E	.41 (10.41)	.43 (10.92)	1.12 (28.45)

Description	AWG Wire	Amp Rtg. (max.)	Digi-Key Part No.	Price Each 1	100	250
In-line Mini Holder	14	20	F1057-ND	2.53	1.71	1.52
In-line Mini Holder	12	30	F1058-ND	2.30	1.56	1.38
In-line Maxi Holder	6	60	F1059-ND	11.32	7.65	6.80
In-line ATO Holder	16	20	F1086-ND	2.53	1.71	1.52
In-line ATO Holder	12	30	F1087-ND	1.99	1.35	1.20

PANEL MOUNT ATO FUSEHOLDER:

- Assembled with 8” (203.2mm) wire loop, no fuse
- #14 wire/terminals rated to 20A
- #10 wire/terminals rated to 30
- Snap mounting to panel
- Fuseholders interlock for multiple mounting.


Recommended panel mounting hole
8 (203.20)
Wire Loop
.415 (10.54)
1.46 (37.08)
1.10
(27.94)
1.19 (30.23)
.75 (19.05)
Add .400 (10.16) to width for each additional fuseholder

Description	AWG Wire	Amp Rtg. (max.)	Digi-Key Part No.	Price Each 1	100	250
Panel Mount Holder	14	20	F1088-ND	1.41	.96	.85
Panel Mount Holder	10	30	F1089-ND	2.05	1.39	1.23

ATO Fuseholders

Fig. 1- Horizontal Mount

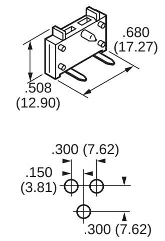
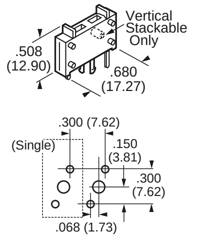


Fig. 2 - Vertical Mount

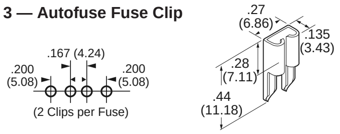


P.C.B. Footprint (Stacked)

Mini Fuse PC Board Fuseholder Specifications:

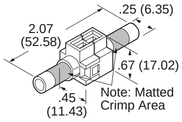
- **Terminals:** Copper alloy, tin-plated • **Body:** Black thermoplastic (UL 94V0) **Electrical:** Recognized under the Components Program of Underwriters Laboratory for 15 amperes and Certified by CSA for 10 amperes. Three fuseholders can be mounted side by side (stacked) and operated at rated current. Contact factory for applications where more than three fuseholders will be stacked.
- **Voltage:** 32 Volts DC • **Temperature Range:** -40°C to +85°C • **PC Board Compatibility:** Designed for use with standard .062” (1.57mm) circuit board.

Fig. 3 — Autofuse Fuse Clip



(2 Clips per Fuse)

Fig. 4 — Mini Fuse Easy-Crimp Fuseholder



Materials:

- **Body:** Black thermoplastic
- **Terminals:** Tin plated copper alloy
- **Operating Temperature:** -40°C to 105°C

Fig.	Description	Digi-Key Part No.	Price Each 1	10	100
1	Horizontal Mini Holder	F064-ND	1.56	1.47	.88
2	Single or End Cap Mini Holder	F065-ND	1.56	1.47	.88
2	Stackable Mini Holder	F066-ND	1.56	1.47	.88
3	ATO Fuse Clip	F067-ND	.28	.27	.16
4	In-line Mini Holder	F068-ND*	1.40	1.31	.79
4	In-line Mini Holder	F069-ND†	1.40	1.31	.79
—	Removal/Replacement Tool	F070-ND‡	.50	.42	.38

* 20A max. rating terminals accept #16-22AWG
† 30A max. rating, terminals accept #10-14AWG
‡ Mini & ATO Removal/Replacement Tool

2AG Subminiature Fast-Acting Fuses

Pigtail Material:
Tinned copper wire

Approvals: Listed by U.L. and Certified by CSA. Patented.

Dimensions:

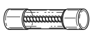
- **Cartridge:** .177” (4.50mm) diameter; .57” (14.48mm) length • **Pigtail:** .19” (4.83mm) diameter; .6” (15.24mm) length • **Leads:** .025” (.64mm) diameter; 1.50” (38.10mm) length typ.

Electrical Characteristics:

Rating	Blow Time
110%	4 hr., min.
135%	1 hr., max.
200%	1 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each		
			5	100	250
225 Series — Cartridge Type					
.125	250	F640-ND	.63	.47	.42
.250	250	F641-ND	.63	.47	.42
.375	250	F642-ND	.63	.47	.42
.500	250	F643-ND	.44	.33	.29
.750	250	F644-ND	.44	.33	.29
1.000	250	F645-ND	.44	.33	.29
1.500	250	F646-ND	.44	.33	.29
2.000	250	F647-ND	.44	.33	.29
2.500	250	F648-ND	.44	.33	.29
3.000	250	F649-ND	.44	.33	.29
3.500	250	F650-ND	.44	.33	.29
4.000	125	F651-ND	.44	.33	.29
5.000	125	F652-ND	.44	.33	.29
7.000	125	F653-ND	.44	.33	.29
224 Series — Pigtail Type					
.125	250	F620-ND	.82	.62	.55
.250	250	F621-ND	.82	.62	.55
.375	250	F622-ND	.82	.62	.55
.500	250	F623-ND	.63	.48	.42
.750	250	F624-ND	.63	.48	.42
1.000	250	F625-ND	.63	.48	.42
1.500	250	F626-ND	.63	.48	.42
2.000	250	F627-ND	.63	.48	.42
2.500	250	F628-ND	.63	.48	.42
3.000	250	F629-ND	.63	.48	.42
3.500	250	F630-ND	.63	.48	.42
4.000	125	F631-ND	.63	.48	.42
5.000	125	F632-ND	.63	.48	.42
7.000	125	F633-ND	.63	.48	.42

2AG Subminiature Slo-Blo® Fuses



Pigtail Material:
Tinned copper wire

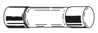
Approvals: Listed by U.L. and Certified by CSA through 3.5 amperes. Recognized under the Components Program of U.L. from 4 through 7 amperes. **Patents:** U.S. Patents #4,409,729 and #4,445,106.
Dimensions: • **Cartridge:** .177” (4.50mm) diameter; .57” (14.48mm) length • **Pigtail:** .19” (4.83mm) diameter; .60” (15.24mm) length • **Leads:** .025” (.64mm) diameter; 1.50” (38.10mm) length type

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	3 sec., min./ 20 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each		
			5	100	250
229 Series — Cartridge Type					
.250	250	F660-ND	.52	.39	.35
.375	250	F661-ND	.52	.39	.35
.500	250	F662-ND	.52	.39	.35
.750	250	F663-ND	.52	.39	.35
1.000	250	F664-ND	.52	.39	.35
1.500	250	F665-ND	.52	.39	.35
2.000	250	F666-ND	.52	.39	.35
2.500	250	F667-ND	.52	.39	.35
3.000	250	F668-ND	.52	.39	.35
3.500	250	F669-ND	.52	.39	.35
4.000	125	F670-ND	.52	.39	.35
5.000	125	F671-ND	.52	.39	.35
7.000	125	F672-ND	.52	.39	.35
230 Series — Pigtail Type					
.250	250	F680-ND	.72	.54	.48
.375	250	F681-ND	.72	.54	.48
.500	250	F682-ND	.72	.54	.48
.750	250	F683-ND	.72	.54	.48
1.000	250	F684-ND	.72	.54	.48
1.500	250	F685-ND	.72	.54	.48
2.000	250	F686-ND	.72	.54	.48
2.500	250	F687-ND	.72	.54	.48
3.000	250	F688-ND	.72	.54	.48
3.500	250	F689-ND	.72	.54	.48
4.000	125	F690-ND	.72	.54	.48
5.000	125	F691-ND	.72	.54	.48
7.000	125	F692-ND	.72	.54	.48

3AB Ceramic Body Fast-Acting Fuses



Dimensions: Diameter: 1/4” (6.35mm); Length: 1-1/4” (31.75mm). **Approvals:** Listed by UL and Certified by CSA through 15 amperes. Recognized under the Components Program of U.L. from 20 through 30 amperes.

Electrical Characteristics:

Rating	Amperage	Blow Time
110%	1/8 — 30	4 hrs., min.
135%	1/8 — 30	1 hr., max.
200%	1/8 — 12	15 sec., max.
200%	15 — 30	360 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each		
			5	100	250
314 Series — Cartridge Type					
.125	250	F150-ND	1.07	.81	.72
.250	250	F151-ND	.75	.56	.50
.500	250	F153-ND	.75	.56	.50
1.000	250	F155-ND	.70	.52	.47
2.000	250	F156-ND	.70	.52	.47
3.000	250	F157-ND	.70	.52	.47
4.000	250	F158-ND	.70	.52	.47
5.000	250	F159-ND	.66	.50	.44
6.000	250	F160-ND	.66	.50	.44
7.000	250	F161-ND	.66	.50	.44
8.000	250	F162-ND	.66	.50	.44
10.000	250	F163-ND	.66	.50	.44
12.000	250	F164-ND	.66	.50	.44
15.000	250	F165-ND	.66	.50	.44
20.000	250	F166-ND	.98	.74	.66
25.000	125	F167-ND	.98	.74	.66
30.000	125	F168-ND	.98	.74	.66

3AB Ceramic Body Slo-Blo® Fuses

Dimensions: Diameter: 1/4” (6.35mm); Length: 1-1/4” (31.75mm) **Patents:** U.S. Patents #4,409,729 and #4,445,106 **Approvals:** Listed by UL Certified by CSA from 1/4 through 10 amperes.

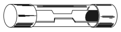
Elect. Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	5 sec., min.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each		
			5	100	250
326 Series — Cartridge Type					
.0312	250	F451-ND	2.57	1.93	1.71
.100	250	F453-ND	1.75	1.31	1.17
.125	250	F454-ND	1.75	1.31	1.17
.250	250	F459-ND	1.67	1.25	1.11
.375	250	F461-ND	1.67	1.25	1.11
.500	250	F463-ND	1.67	1.25	1.11
.750	250	F466-ND	1.67	1.25	1.11
1.000	250	F468-ND	1.67	1.25	1.11
1.500	250	F471-ND	1.67	1.25	1.11
2.000	250	F473-ND	1.67	1.25	1.11
2.500	250	F474-ND	1.17	.88	.78
3.000	250	F476-ND	1.17	.88	.78
4.000	250	F478-ND	1.17	.88	.78
5.000	250	F479-ND	1.17	.88	.78
6.250	250	F480-ND	1.17	.88	.78
7.000	250	F481-ND	1.17	.88	.78
8.000	250	F482-ND	1.17	.88	.78
10.000	250	F483-ND	1.17	.88	.78
12.000	250	F484-ND	1.17	.88	.78
15.000	250	F485-ND	1.17	.88	.78
20.000	250	F486-ND	1.17	.88	.78
25.000	125	F487-ND	1.17	.88	.78
30.000	125	F488-ND	1.17	.88	.78

Littelfuse®

3AG Low Voltage Normal-Blow Fuses



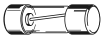
Dimensions: Dia.: 1/4" (6.35mm); Length: 1-1/4" (31.75mm)
Approvals: Listed by UL and Certified by CSA through 30 amperes
Design Standards: UL Standard 275.

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	10 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
311 Series — Normal-Blow Type					
12.000	32	F140-ND	.28	.21	.18
15.000	32	F141-ND	.28	.21	.18
25.000	32	F142-ND	.28	.21	.18
30.000	32	F143-ND	.28	.21	.18
35.000	32	F144-ND	.28	.21	.18

3AG Glass Body Fast-Acting Fuses



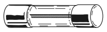
Approvals: Listed by UL and Certified by CSA.
Dimensions: **312 Series:** Diameter: 1/4" (6.35mm); Length: 1-1/4" (31.75mm). **318 Series:** Diameter: .275" (6.99mm); Length: 1.275" (32.39mm); Pigtail Diameter: .032" (.81mm); Pigtail Length: 1.50" (38.10mm); Pigtail Material: Solder-coated copper.

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	5 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
312 Series — Cartridge Type					
.010	250	F100-ND	6.61	4.96	4.41
.031	250	F101-ND	6.61	4.96	4.41
.062	250	F102-ND	.97	.73	.65
.100	250	F103-ND	.97	.73	.65
.125	250	F104-ND	.97	.73	.65
.150	250	F105-ND	.97	.73	.65
.175	250	F106-ND	.97	.73	.65
.200	250	F108-ND	.97	.73	.65
.250	250	F109-ND	.60	.45	.40
.300	250	F110-ND	.60	.45	.40
.375	250	F111-ND	.60	.45	.40
.500	250	F112-ND	.42	.32	.28
.600	250	F113-ND	.42	.32	.28
.750	250	F114-ND	.42	.32	.28
1.000	250	F115-ND	.26	.20	.18
1.250	250	F116-ND	.26	.20	.18
1.500	250	F117-ND	.26	.20	.18
1.600	250	F118-ND	.26	.20	.18
2.000	250	F119-ND	.26	.20	.18
2.500	250	F120-ND	.26	.20	.18
3.000	250	F121-ND	.26	.20	.18
4.000	250	F122-ND	.41	.31	.28
5.000	250	F123-ND	.41	.31	.28
6.000	250	F124-ND	.41	.31	.28
7.000	250	F125-ND	.41	.31	.28
8.000	250	F126-ND	.56	.42	.37
10.000	250	F127-ND	.56	.42	.37
318 Series — Pigtail Type					
.125	250	F208-ND	1.34	1.00	.89
.250	250	F209-ND	.82	.62	.55
.500	250	F212-ND	.82	.62	.55
1.000	250	F215-ND	.59	.45	.40
1.500	250	F217-ND	.59	.45	.40
2.000	250	F219-ND	.59	.45	.40
3.000	250	F221-ND	.59	.45	.40
4.000	250	F222-ND	.64	.47	.42
5.000	250	F223-ND	.64	.47	.42
6.000	250	F224-ND	.64	.47	.42
8.000	250	F226-ND	.64	.47	.42

3AG Glass Body Slo-Blo® Fuses



Patents: U.S. Patents #4,409,729 and #4,445,106.
Approvals: Listed by Underwriters Laboratories and Certified by CSA through 8 amperes. Recognized under the Components Program of UL from 9 through 30 amperes.
Dimensions: **313 Series:** Dia.: 1/4" (6.35mm), Length: 1-1/4" (31.75mm). **315 Series:** Dia.: .275" (6.99mm), Length: 1.275" (32.39mm); Pigtail Dia.: .032" (.81mm), 1/100A–15A; .040" (1.02mm), 20A–30A; Pigtail Length: 1.50" (38.10mm); Pigtail Material: Solder-coated copper.

Electrical Characteristics:

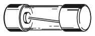
Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	5 sec., min.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
313 Series — Cartridge Type					
.010	250	F300-ND	2.14	1.61	1.43
.031	250	F301-ND	2.14	1.61	1.43
.040	250	F302-ND	2.14	1.61	1.43
.062	250	F303-ND	1.55	1.16	1.03
.100	250	F304-ND	1.55	1.16	1.03
.125	250	F305-ND	1.55	1.16	1.03
.150	250	F306-ND	1.55	1.16	1.03
.175	250	F307-ND	1.55	1.16	1.03
.187	250	F308-ND	1.55	1.16	1.03
.200	250	F309-ND	1.55	1.16	1.03
.250	250	F310-ND	.94	.70	.63
.300	250	F311-ND	.94	.70	.63
.375	250	F312-ND	.94	.70	.63
.400	250	F313-ND	.94	.70	.63
.500	250	F314-ND	.90	.67	.60
.600	250	F315-ND	.90	.67	.60
.700	250	F316-ND	.90	.67	.60
.750	250	F317-ND	.90	.67	.60
.800	250	F318-ND	.90	.67	.60
1.000	250	F319-ND	.90	.67	.60
1.200	250	F320-ND	.68	.51	.46
1.250	250	F321-ND	.68	.51	.46
1.500	250	F322-ND	.68	.51	.46
1.600	250	F323-ND	.68	.51	.46
2.000	250	F325-ND	.68	.51	.46
2.250	250	F326-ND	.68	.51	.46
2.500	250	F327-ND	.68	.51	.46
2.800	250	F328-ND	.68	.51	.46
3.000	250	F329-ND	.68	.51	.46
3.200	250	F330-ND	.68	.51	.46
4.000	250	F331-ND	.68	.51	.46
5.000	250	F332-ND	.68	.51	.46
6.250	250	F333-ND	.68	.51	.46
7.000	250	F334-ND	.68	.51	.46
8.000	250	F335-ND	.68	.51	.46
10.000	32	F336-ND	1.00	.75	.67
12.000	32	F337-ND	1.00	.75	.67
15.000	32	F338-ND	1.00	.75	.67
20.000	32	F339-ND	1.00	.75	.67
25.000	32	F340-ND	1.00	.75	.67
30.000	32	F341-ND	1.00	.75	.67
315 Series — Pigtail Type					
1.000	250	F419-ND	1.16	.87	.78
1.500	250	F422-ND	1.16	.87	.78
2.000	250	F425-ND	1.16	.87	.78
3.000	250	F429-ND	1.16	.87	.78
4.000	250	F431-ND	1.16	.87	.78
5.000	250	F432-ND	1.16	.87	.78
7.000	250	F434-ND	1.16	.87	.78

8AG Fast-Acting Instrument Fuses

Electrical Characteristics:

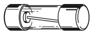
Rating	Blow Time
100%	4 hrs., min.
200%	5 sec., max.



0.25 x 1.00
(6.35 x 25.4)

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
361 Series — Fast-Acting Type					
.062	250	F504-ND	1.64	1.23	1.10
.125	250	F505-ND	1.17	.88	.78
.250	250	F506-ND	.72	.54	.48
.375	250	F507-ND	.72	.54	.48
.500	250	F508-ND	.72	.54	.48
.750	250	F509-ND	.72	.54	.48
1.000	250	F510-ND	.43	.32	.29
2.000	250	F512-ND	.43	.32	.29
3.000	125	F513-ND	.44	.33	.29
4.000	125	F514-ND	.44	.33	.29

8AG Normal-Blow Fuses



0.25 x 1.00
(6.35 x 25.4)

Approvals:

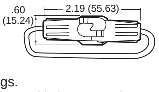
Listed by UL through 5 amperes. Certified by CSA from 0.25 through 5 amperes. Sold in multiples of 5.

Electrical Characteristics:

Rating	Blow Time
110%	4 hrs., min.
135%	1 hr., max.
200%	10 sec., max.

Amp. Rating	Volt. Rating	Digi-Key Part No.	Price Each 5	100	250
362 Series — Normal-Blow Type					
.125	250	F600-ND	1.06	.80	.71
.250	250	F601-ND	.66	.49	.44
.500	250	F602-ND	.66	.49	.44
1.000	250	F603-ND	.42	.31	.28
1.500	250	F604-ND	.42	.31	.28
2.000	250	F605-ND	.42	.31	.28
2.500	125	F606-ND	.42	.31	.28
3.000	125	F607-ND	.42	.31	.28
5.000	125	F608-ND	.28	.21	.19
6.000	125	F609-ND	.28	.21	.19
8.000	32	F610-ND	.28	.21	.19
10.000	32	F611-ND	.28	.21	.19
15.000	32	F612-ND	.28	.21	.19
20.000	32	F613-ND	.28	.21	.19

Universal In-Line Fuseholder



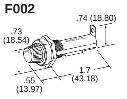
Supplied with 8" (20.32cm) loop of #14 AWG red vinyl insulated wire and two springs. **Electrical:** Intended for use at 32 volts or less with fuses rated up to 20 amperes when the proper spring is installed for fuse size. **Molded Parts:** Black thermoplastic (UL 94V2). Body halves have a .14" (3.56mm) diameter hole for insulated wire. **Ambient Temperature:** -40° to +75°C.

F062-ND (Littelfuse #155100) **$1.95/1; $17.33/10; $141.75/100**

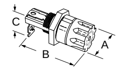
3AG and 5x20mm Panel Fuseholders

UL Recognized and Certified by CSA

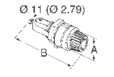
F002



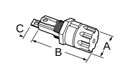
***F003, *F004, †F007, *F012**



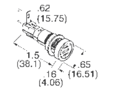
†F005, *F006



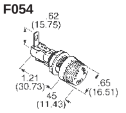
***F009, *F013, †F015**



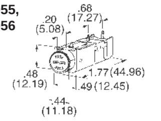
F053



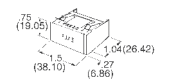
F054



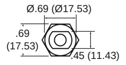
F055, F056



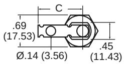
F059



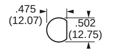
* Fluted Knob † Knurled Knob



End View Straight Terminals



End View Right Angle Terminals



Mounting Hole for Straight & Right Angle

Digi-Key Part No.	Dimensions - Inch (mm) A	B	C
F003-ND	.69 (17.53)	1.70 (43.18)	.63 (16.00)
F004-ND	.69 (17.53)	1.70 (43.18)	.63 (16.00)
F005-ND	.69 (17.53)	2.09 (53.09)	—
F006-ND	.69 (17.53)	2.01 (51.05)	—
F007-ND	.69 (17.53)	1.78 (45.21)	.63 (16.00)
F009-ND	.69 (17.53)	1.70 (43.18)	.30 (7.62)
F012-ND	.69 (17.53)	1.70 (43.18)	.59 (14.99)
F013-ND	.69 (17.53)	1.70 (43.18)	.40 (10.16)
F015-ND	.69 (17.53)	1.78 (45.21)	.40 (10.16)

Description	Digi-Key Part No.	Price Each	Littelfuse Part No.
3AG, Panel Mounting, Finger Grip	F002-ND	3.08	342001
3AG, Drip Prf. Right Angle, Solder	F003-ND	2.78	342004PL
3AG, Rt. Angle Term., Solder	F004-ND	2.63	342004L
3AG, Straight Term., Solder	F005-ND	2.45	342012
3AG, Straight Term., Solder	F006-ND	2.45	342014
3AG, Rt. Angle Term., Solder	F007-ND	2.57	342022
3AG, 3/16" (4.76mm) Q-Conn. Straight Term	F009-ND	2.75	342038
3AG, 1/4" (6.35mm) Q-Conn. Rt. Angle Term	F012-ND	2.88	342828
3AG, 1/4" (6.35mm) Q-Conn. Straight Term	F013-ND	3.02	342838
3AG, 1/4" (6.35mm) Q-Conn. Straight Term	F015-ND	3.02	342858
5x20mm Low-Profile Front Mount Holder	F053-ND	3.82	345621
5x20mm High-Profile Front Mount Holder	F054-ND	3.82	345623
1/4" x 1-1/4" (6.35mm x 31.75mm) P.C. Board Type Holder	F055-ND	2.65	345101
5x20mm P.C. Board Type Holder	F056-ND	3.43	345121
3AG Flip-Top, Shock Safe Panel Mt. Holder	F059-ND	3.56	346877

3AG Fuse Clips

Fig. 1

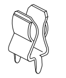


Fig. 2

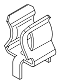


Fig. 3

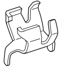


Fig. 4

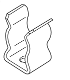


Fig. 5 – 5x20 & 2AG Fuse Clip

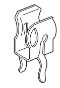


Fig. 6 – 5x20 Fuse Clip

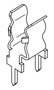
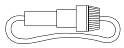


Fig.	Digi-Key Part No.	Price Each 10	100	250	Mfg. Part No.
4	F038-ND†	.16	.12	.11	101002
1	F040-ND	.12	.09	.08	102071
1	F041-ND†	.18	.13	.12	102074
2	F042-ND†	.22	.16	.15	102078
1	F046-ND*	.48	.36	.32	122083
3	F048-ND*	.44	.33	.29	122090
2	F052-ND	.22	.16	.15	102079
5	F058-ND	.18	.13	.12	111501
6	F063-ND	.22	.14	.12	100056

* Beryllium Copper 30 amp rating (all others are spring brass 15 amp rating).
† Fuse clip without fuse stops.

In-Line Fuseholder



Supplied with a 15-inch (38.10cm) loop of 14-gauge vinyl covered wire and three springs in different lengths to adapt the holder to SFE 7-1⁄2, 9, 14, 20 amp & 3AG fuses.

F049-ND (Littelfuse #150145) **$2.74/1; $25.32/10; $189.90/100**

COOPER Bussmann

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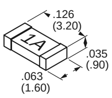
SMT Chip Fuse - 3216FF (1206)



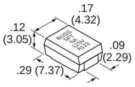
Characteristics: • Fast acting **TIme Current:** • Will carry 100% of rated current for a min. of 4 hours, and will open within 5 seconds at 250% of rated current (250mA-3A). • The 4-5A fuses will open within 1 second at 350% of rated current. **Construction Material:** • Body: Ceramic substrate encapsulated with glass • Leads: Over-plated with nickel and tin-lead **Agency Approvals:** UL Recognized (All Ratings), CSA Certified (1.5-3A), and CSA Component Acceptance (250-750mA, 1A, 4-5A)

Cur-rent Rating	Rated Volt. AC/DC	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T & R* Pricing 3,000
.250	32/63	283-2440-1-ND	.95	.89	.67	365.85/M
.500	32/63	283-2442-1-ND	.95	.89	.67	365.85/M
.750	32/63	283-2443-1-ND	.95	.89	.67	365.85/M
1	32/63	283-2444-1-ND	.95	.89	.67	365.85/M
1.25	32/63	283-2445-1-ND	.95	.89	.67	365.85/M
1.5	32/63	283-2446-1-ND	.95	.89	.67	365.85/M
2	32/63	283-2447-1-ND	.95	.89	.67	365.85/M
2.5	32/63	283-2448-1-ND	.95	.89	.67	365.85/M
3	32/63	283-2449-1-ND	.95	.89	.67	365.85/M
4	32/32	283-2450-1-ND	.95	.89	.67	365.85/M
4.5	32/32	283-2451-1-ND	.95	.89	.67	365.85/M
5	32/32	283-2452-1-ND	.95	.89	.67	365.85/M

* For Tape & Reel part number change "1-ND" to "2-ND".

**** BIF document: #3001***

SMD TRON® Surface Mount Fuses - SFT



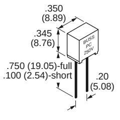
Characteristics: • Fast-Acting • Current-Limiting. **TIme Current:** Rated current values 0-10 amps carry 100% of rating for 4 hrs. min.; open at 250% of rating in 5 seconds max. **Construction Material:** Solid Matrix • Body: Thermoplastic, with a rating of 94V-O • Leads: Base-Copper, Barrier-Nickel (50-100 micro inches), Finish: Electroplated tin (400-500 micro inches with a 2-10% lead content). **Agency Approvals:** UL Recognized (250mA-10A), and CSA Component Acceptance (250mA-10A).

Cur-rent Rating	Rated Volt. AC/DC	Digi-Key Part No.	Cut Tape Price Each 1	10	100	T & R* Pricing 500
250mA	125/125	283-2426-1-ND	1.53	1.42	1.08	349.60
500mA	125/125	283-2428-1-ND	1.53	1.42	1.08	349.60
1	125/125	283-2430-1-ND	1.53	1.42	1.08	349.60
1.5	125/125	283-2431-1-ND	1.53	1.42	1.08	349.60
2	125/125	283-2432-1-ND	1.53	1.42	1.08	349.60
2.5	125/125	283-2433-1-ND	1.53	1.42	1.08	349.60
3	125/125	283-2434-1-ND	1.53	1.42	1.08	349.60
4	125/125	283-2436-1-ND	1.53	1.42	1.08	349.60
5	125/125	283-2437-1-ND	1.53	1.42	1.08	349.60
7	60/90	283-2438-1-ND	1.53	1.42	1.08	349.60
10A	60/90	283-2439-1-ND	1.53	1.42	1.08	349.60

* For Tape & Reel part number change "1-ND" to "2-ND".

**** BIF document: #2005***

PC-TRON® Subminiature Fuses

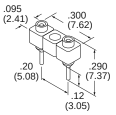


Characteristics: Offers short-circuit performance which until now could only be found in much larger size glass tube fuses. At 250 VAC, the 1/2 to 3 amp PC-Tron can safely interrupt 50 amperes; at 125 VAC the 1/2 to 5 amp versions can interrupt 10,000 amperes. This makes the PC-Tron subminiature fuse ideal for line-side protection of power supplies. **Time Current:** • Carry 100% of rating for 4 hrs. min.; open at 200% of rating in 10 sec. max. **Construction Material:** • Body: High temperature plastic • Leads: Tin-plated copper **Agency Approvals:** UL Recognized and CSA Certified

Current Rating	Rated Voltage AC/DC	Digi-Key Part No.	Price Each 1	10	100
PCB Series - Full Lead Length					
1/2A	250/450	283-2111-ND	1.67	1.40	1.26
3/4A	250/450	283-2112-ND	1.67	1.40	1.26
1A	250/450	283-2113-ND	1.67	1.40	1.26
1-1/2A	250/450	283-2114-ND	1.67	1.40	1.26
2A	250/450	283-2115-ND	1.67	1.40	1.26
2-1/2A	250/450	283-2116-ND	1.67	1.40	1.26
3A	250/350	283-2117-ND	1.67	1.40	1.26
PCC Series - Short Lead Length					
1/2A	250/450	283-2118-ND	1.67	1.40	1.26
3/4A	250/450	283-2119-ND	1.67	1.40	1.26
1A	250/450	283-2120-ND	1.67	1.40	1.26
1-1/2A	250/450	283-2121-ND	1.67	1.40	1.26
2A	250/450	283-2122-ND	1.67	1.40	1.26
2-1/2A	250/450	283-2123-ND	1.67	1.40	1.26
3A	250/350	283-2124-ND	1.67	1.40	1.26
PCE Series - Short Lead Length					
5A	125/250	283-2126-ND	1.67	1.40	1.26

**** BIF document: #2034***

PC-Tron® PCB Mount Fuseholder

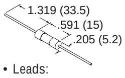


Digi-Key Part No.	Price Each 1	10	100
283-2356-ND	.63	.53	.48

**** BIF document: #2034***

Fast-Acting and Time-Delay Glass Fuses – C518, C515 Series

.205" x .591" (5mm x 15mm)



Construction Material:
• Endcaps: Silver-plated brass • Leads: Tin-plated copper • Tube: Glass.

Agency Approvals:

C518: UL Listed (125mA-4A), CSA Component Acceptance (125mA-4A)

C520: UL Listed (125mA-5A), CSA Component Acceptance (125mA-5A)

C515 and C519: UL Listed (250mA-3A), CSA Certification (250mA-3A), UL Recognized (3.5A-7A), Telecommunication Capabilities: UL1459 and UL497.

Limits for Pre-arcing Time/UL Listed Fuses.

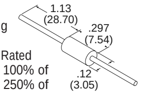
Amp Rating	135% Max.	110% Min.	200% Min.	200% Max.
C518 and C520 Series				
125mA - 7A	1 hr.	4 hr.	—	2 sec.
C515 and C519 Series				
250mA - 7A	60 min.	—	3 sec.	2 min.

Current Rating	Rated Voltage (AC)	Digi-Key Part No.	Price Each 5	100	250
C518 Series (Axial)					
125mA	250	283-2360-ND	.98	.73	.65
250mA	250	283-2361-ND	.98	.73	.65
375mA	250	283-2362-ND	.98	.73	.65
500mA	250	283-2363-ND	.98	.73	.65
750mA	250	283-2364-ND	.98	.73	.65
2A	250	283-2365-ND	.75	.56	.50
2.5A	250	283-2366-ND	.75	.56	.50
3A	250	283-2367-ND	.75	.56	.50
3.5A	250	283-2368-ND	.75	.56	.50
4A	250	283-2369-ND	.75	.56	.50
5A	250	283-2370-ND	.75	.56	.50
C520 Series (No Leads)					
125mA	250	283-2371-ND	.74	.56	.50
250mA	250	283-2372-ND	.74	.56	.50
500mA	250	283-2374-ND	.51	.39	.34
750mA	250	283-2375-ND	.51	.39	.34
2.5A	250	283-2377-ND	.51	.39	.34
3A	250	283-2378-ND	.51	.39	.34
3.5A	250	283-2379-ND	.51	.39	.34
4A	250	283-2380-ND	.51	.39	.34
5A	250	283-2381-ND	.51	.39	.34
C515 Series (Axial)					
250mA	250	283-2239-ND	.78	.58	.52
375mA	250	283-2240-ND	.78	.58	.52
500mA	250	283-2241-ND	.78	.58	.52
750mA	250	283-2242-ND	.78	.58	.52
1A	250	283-2243-ND	.78	.58	.52
3.5A	125	283-2244-ND	.78	.58	.52
4A	125	283-2245-ND	.78	.58	.52
7A	125	283-2246-ND	.78	.58	.52
C519 Series (No Leads)					
250mA	250	283-2247-ND	.56	.42	.38
500mA	250	283-2249-ND	.56	.42	.38
750mA	250	283-2250-ND	.56	.42	.38
1A	250	283-2251-ND	.56	.42	.38
1.5A	250	283-2252-ND	.56	.42	.38
2A	250	283-2253-ND	.56	.42	.38
3A	250	283-2254-ND	.56	.42	.38
4A	125	283-2256-ND	.56	.42	.38
5A	125	283-2257-ND	.56	.42	.38
7A	125	283-2258-ND	.56	.42	.38

**** BIF document: #2026 (C519 Series),***
#2027 (C520 Series),
#2006 (C515 Series),
#2007 (C519 Series)

MCR Microtron® Fuses

(Printed Circuit Board)



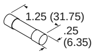
Characteristics: • Fast-Acting • Current-Limiting.
Time Current Characteristics: Rated current values 0-10 amps carry 100% of rating for 4 hours min.; open at 250% of rating in 5 seconds maximum.
Construction Material: • Body: High temperature thermoplastic, flammability rating UL 94V-O • Element: Solid Matrix, gold or silver element encapsulated in ceramic • Leads: Tin-plated copper, .64mm (.025") diameter.
Agency Approvals: UL Recognized (1/16-10A), CSA Component Acceptance (1/16-10A) and Japanese Industrial Standard (1-5A).

Cur-rent Rating	Rated Voltage (AC)	Digi-Key Part No.	Price Each 5	100	250
1/16	125/125	283-2068-ND	1.20	.90	.80
1/8	125/125	283-2069-ND	1.08	.81	.72
1/4	125/125	283-2070-ND	1.08	.81	.72
1/2	125/125	283-2072-ND	1.08	.81	.72
3/4	125/125	283-2073-ND	.84	.63	.56
1	125/125	283-2074-ND	.84	.63	.56
1-1/2	125/125	283-2075-ND	.84	.63	.56
2	125/125	283-2076-ND	.84	.63	.56
3	125/125	283-2078-ND	.84	.63	.56
4	125/125	283-2080-ND	.84	.63	.56
5	125/125	283-2081-ND	.84	.63	.56
7	60/90	283-2082-ND	.84	.63	.56
10	60/90	283-2083-ND	.84	.63	.56

**** BIF document: #2003***

AGC Fast-Acting and MDL Time-Delay Glass Fuses

1/4" x 1-1/4" (6.35mm x 31.75mm)



Time Current Characteristics: Rated current values 0-30 amps carry 110% of rating for 4 hrs. min.; open at 135% of rating in 60 min. max. or 200% of rating in 120 sec. max.

Construction Material: • Tube: Glass • Endcaps: Albaloy plated brass

Agency Approvals:

AGC Fast-Acting: UL Recognized (15-30A), UL Listed (1/4-10A) and CSA Component Acceptance (1/4-30A)

MDL Time-Delay: UL Listed (1/4-8A), UL Recognized (9-30A), and CSA Component Acceptance (1/4-8A)

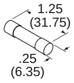
Current Rating	Rated Voltage AC/DC†	Digi-Key Part No.	Price Each 5	100	250
AGC Fast-Acting					
1/4	250/250	283-2009-ND	.64	.48	.43
3/10	250/250	283-2010-ND	.64	.48	.43
3/8	250/250	283-2011-ND	.64	.48	.43
1/2	250/250	283-2012-ND	.45	.34	.30
3/4	250/250	283-2014-ND	.45	.34	.30
1	250/250	283-2015-ND	.28	.21	.19
1-1 /4	250/250	283-2016-ND	.28	.21	.19
1-1/2	250/250	283-2017-ND	.28	.21	.19
2	250/250	283-2020-ND	.28	.21	.19
2-1/2	250/250	283-2021-ND	.28	.21	.19
3	250/250	283-2022-ND	.28	.21	.19
4	250/250	283-2023-ND	.44	.33	.29
5	250/250	283-2024-ND	.44	.33	.29
6	250/250	283-2025-ND	.44	.33	.29
7	250/250	283-2026-ND	.44	.33	.29
8	250/250	283-2027-ND	.44	.33	.29
10	250/250	283-2028-ND	.44	.33	.29
15	32/—	283-2029-ND	.31	.23	.21
20	32/—	283-2030-ND	.31	.23	.21
30	32/—	283-2031-ND	.31	.23	.21
MDL Time-Delay					
1/4	250/250	283-2167-ND	.99	.75	.66
3/10	250/250	283-2168-ND	.99	.75	.66
3/8	250/250	283-2169-ND	.99	.75	.66
1/2	250/250	283-2171-ND	.95	.71	.63
3/4	250/250	283-2174-ND	.95	.71	.63
1	250/250	283-2176-ND	.95	.71	.63
1-1/4	250/250	283-2178-ND	.72	.54	.48
1-1/2	250/250	283-2179-ND	.72	.54	.48
2	250/250	283-2182-ND	.72	.54	.48
2-1/2	250/250	283-2184-ND	.72	.54	.48
3	250/250	283-2186-ND	.72	.54	.48
3-1/2	250/250	283-2188-ND	.72	.54	.48
4	250/32	283-2189-ND	.72	.54	.48
5	250/32	283-2190-ND	.72	.54	.48
6-1/4	250/32	283-2191-ND	.72	.54	.48
7	250/32	283-2192-ND	.72	.54	.48
8	250/250	283-2193-ND	.72	.54	.48
10	32/32	283-2194-ND	1.06	.80	.71
12	32/32	283-2195-ND	1.06	.80	.71
15	32/32	283-2196-ND	1.06	.80	.71
20	32/32	283-2197-ND	1.06	.80	.71
25	32/32	283-2198-ND	1.06	.80	.71
30	32/32	283-2199-ND	1.06	.80	.71

† 1-10A, UL Rec. for 125 VDC and 500 A/C. Other DC ratings are self-certified.

**** BIF document: #2001* (AGC eries),*#2004* (MDL Series)**

ABC Fast-Acting and MDA Time-Delay Ceramic Fuses

1/4" x 1-1/4" (6.35mm x 31.75mm)



TIme Current Characteristics: Rated current values 0-30 amps carry 110% of rating for 4 hrs. min.; open at 135% of rating in 60 min. max. or 200% of rating in 120 sec. max. **Construction Material:** Ceramic • Endcaps: Albaloy plated brass

Agency Approvals:

ABC Fast-Acting: UL Listed (1/2-15A), UL Recognized (20A), and CSA Certification (1/2-15A)

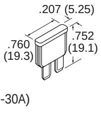
MDL Time-Delay: UL Listed (1/12-20A), CSA Certified (1/2-15A)

Current Rating	Rated Voltage AC/DC†	Digi-Key Part No.	Price Each 5	100	250
ABC Fast-Acting					
1/2	250/250	283-2095-ND	1.74	1.30	1.16
3/4	250/250	283-2096-ND	.79	.59	.52
1	250/250	283-2097-ND	.74	.56	.49
2	250/—	283-2098-ND	.74	.56	.49
3	250/—	283-2099-ND	.74	.56	.49
4	250/250	283-2100-ND	.74	.56	.49
5	250/250	283-2101-ND	.70	.53	.47
6	250/—	283-2102-ND	.70	.53	.47
8	250/—	283-2104-ND	.70	.53	.47
10	250/250	283-2105-ND	.70	.53	.47
12	250/—	283-2106-ND	.70	.53	.47
15	250/250	283-2107-ND	.70	.53	.47
20	250/—	283-2108-ND	1.05	.79	.70
30	125/—	283-2110-ND	1.05	.79	.70
MDA Time Delay					
1/2	250/250	283-2289-ND	1.78	1.33	1.18
1	250/250	283-2293-ND	1.78	1.33	1.18
2	250/—	283-2297-ND	1.78	1.33	1.18
3	250/250	283-2300-ND	1.24	.93	.83
4	250/—	283-2302-ND	1.24	.93	.83
5	250/—	283-2303-ND	1.24	.93	.83
6	250/—	283-2304-ND	1.24	.93	.83
8	250/—	283-2307-ND	1.24	.93	.83
10	250/250	283-2308-ND	1.24	.93	.83
12	250/—	283-2309-ND	1.24	.93	.83
15	250/250	283-2310-ND	1.24	.93	.83
20	250/—	283-2311-ND	1.24	.93	.83
30	250/—	283-2313-ND	1.24	.93	.83

† DC ratings are self-certified.

**** BIF document: #2000* (ABC Fast-Acting Series),**
***#2002* (MDA Time-Delay Series)**

ATC® Blade-Type Automotive Fuses



Rated Voltage: 32 VDC
Characteristics: Fast-Acting
Agency Approvals: UL Recognized (3-30A)

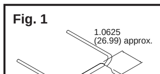
Current Rating	Color Code	Digi-Key Part No.	Price Each 5	100	250
3	Violet	283-2314-ND	.40	.36	.32
4	Pink	283-2315-ND	.40	.36	.32
5	Tan	283-2316-ND	.40	.36	.32
7-1/2	Brown	283-2317-ND	.40	.36	.32
10	Red	283-2318-ND	.40	.36	.32
15	Blue	283-2319-ND	.40	.36	.32
20	Yellow	283-2320-ND	.40	.36	.32
25	Clear	283-2321-ND	.40	.36	.32
30	Green	283-2322-ND	.40	.36	.32

**** BIF document: #2009***

ATC® Blade Type Holders

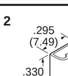
Rated Current: 3-20 Amps.
Rated Voltage: 32V DC, 16AWG wire 4" (101.60mm) length

Fig. 1



Bussman #HHC

Fig. 2



Bussman #1A5600

Fig. No.	Description	Digi-Key Part No.	Price Each 1	10	100
1	In-Line for ATC	283-2357-ND	2.64	2.34	1.79
2	Fuse Clip ATC Brass with Tin Plate	283-2336-ND	.45	.39	.29

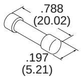
**** BIF document: #2107* (for 283-2357-ND),**
***#2131* (for 283-2336-ND).**

COOPER Bussmann

Metric Ferrule Fuses

5mm x 20mm (.205” x .787”)

GDA (S501†) - Fast Acting, High Breaking Capacity
GDB (S500§) - Fast Acting, Low Breaking Capacity
GDC (S506‡) - Time-Delay, Low Breaking Capacity



Construction Material: • Tube: Ceramic (GDA Series), Glass (GDB and GDC Series) • End Caps: Nickel or silver-plated brass. **Agency Approvals: GDA Series:** VDE (4 & 6.3A), Semko (400mA-6.3A), IMQ (2-6.3A) and UL Recognized (400mA-6.3A). **GDB and GDC Series:** BSI (100mA-6.3A), VDE (100mA-6.3A), Semko (100mA-400mA, 800mA-6.3A), IMQ (100mA-6.3A) and UL Recognized (100mA-6.3A)

Limits for Pre-arcing Time/UL Listed Fuses.

Amp Rating	150% Min.	210% Max.	275% Min–Max.	400% Min–Max.	1000% Max.
*GDA Series**					
100mA - 3.15A	60 min.	30 min.	10ms.- 2 sec.	3 ms.- 300 ms.	20 ms.
4A - 6.3A	60 min.	30 min.	10ms.- 3sec.	3 ms.- 300 ms.	20 ms.
*GDB Series**					
100mA	60 min.	30 min.	10ms.- 500ms.	3ms.- 100ms.	20 ms.
125mA - 6.3A	60 min.	30 min.	50ms.- 2sec.	10ms.- 300ms.	20 ms.
8A - 10A	60 min.	30 min.	—	—	40 ms.
*GDC Series**					
100mA	60 min.	2 min.	200ms.- 10sec.	40ms.- 3sec.	10ms.- 300ms.
125mA - 6.3A	60 min.	2 min.	600ms.- 10sec.	150ms.- 3sec.	20ms.- 300ms.

Current Rating	Rated Voltage (AC)	Digi-Key Part No.	Price Each 5	100	250
GDA (S501†) - Fast-Acting, High Breaking					
100mA	250	283-2384-ND	1.35	1.02	.90
160mA	250	283-2386-ND	1.35	1.02	.90
400mA	250	283-2388-ND	1.35	1.02	.90
630mA	250	283-2390-ND	1.12	.84	.75
800mA	250	283-2391-ND	1.12	.84	.75
1A	250	283-2392-ND	1.12	.84	.75
1.6A	250	283-2394-ND	1.12	.84	.75
2A	250	283-2395-ND	1.12	.84	.75
2.5A	250	283-2396-ND	1.12	.84	.75
3.15A	250	283-2397-ND	1.12	.84	.75
4A	250	283-2398-ND	1.12	.84	.75
5A	250	283-2399-ND	1.12	.84	.75
6.3A	250	283-2400-ND	1.12	.84	.75
GDB (S500§) - Fast-Acting, Low Breaking					
100mA	250	283-2405-ND	1.35	1.02	.90
125mA	250	283-2406-ND	1.35	1.02	.90
160mA	250	283-2407-ND	.77	.58	.51
250mA	250	283-2409-ND	.77	.58	.51
315mA	250	283-2410-ND	.77	.58	.51
500mA	250	283-2412-ND	.24	.18	.16
630mA	250	283-2413-ND	.24	.18	.16
800mA	250	283-2414-ND	.24	.18	.16
1A	250	283-2415-ND	.24	.18	.16
1.25A	250	283-2416-ND	.24	.18	.16
1.6A	250	283-2417-ND	.24	.18	.16
2A	250	283-2418-ND	.24	.18	.16
2.5A	250	283-2419-ND	.24	.18	.16
3.15A	250	283-2420-ND	.24	.18	.16
4A	250	283-2421-ND	.24	.18	.16
5A	250	283-2422-ND	.24	.18	.16
6.3A	250	283-2423-ND	.24	.18	.16
8A◊	250	283-2424-ND	.88	.66	.59
10A◊	250	283-2425-ND	.88	.66	.59
GDC (S506‡) - Time-Delay, Low Breaking					
100mA	250	283-2263-ND	.98	.73	.65
125mA	250	283-2264-ND	.98	.73	.65
160mA	250	283-2265-ND	.98	.73	.65
250mA	250	283-2267-ND	.98	.73	.65
315mA	250	283-2268-ND	.98	.73	.65
400mA	250	283-2269-ND	.98	.73	.65
500mA	250	283-2270-ND	.71	.53	.47
630mA	250	283-2271-ND	.71	.53	.47
800mA	250	283-2272-ND	.71	.53	.47
1A	250	283-2273-ND	.71	.53	.47
1.25A	250	283-2274-ND	.71	.53	.47
1.6A	250	283-2275-ND	.71	.53	.47
2A	250	283-2276-ND	.71	.53	.47
2.5A	250	283-2277-ND	.71	.53	.47
3.15A	250	283-2278-ND	.71	.53	.47
4A	250	283-2279-ND	.71	.53	.47
5A	250	283-2280-ND	.71	.53	.47
6.3A	250	283-2281-ND	.71	.53	.47

† S501 is a European designation. In North America use GDA respectively when referencing product.

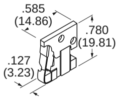
§ S500 is a European designation. In North America use GDB respectively when referencing product.

‡ S506 is a European designation. In North America use GDC respectively when referencing product.

◊ IEC Standard 127 Sheet II does not include ratings above 6.3 amps.

BIF document: #2014 **(GDA Series),**
#2015 **(GDB Series),**
#2016 **(GDC Series)**

GMT Indicating Fuse



Rated Voltage: 125VAC, 60VDC.

Characteristics: • Fast Acting.

TIme Current Characteristics: Rated current values 1/4-15 amps carry 100% of rating for 10 minutes min.; open at 150% of rating in 5 minutes max.

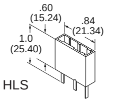
Construction Material: • Body: Thermoplastic, U.L. 94VO flammability rating • Terminals: Tin plated Beryllium Copper

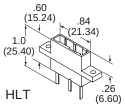
Agency Approvals: UL Recognized

Current Rating	Color Code	Digi-Key Part No.	Price Each 1	10	100
1/4	Violet	283-2051-ND	2.21	2.04	1.53
1/2	Red	283-2053-ND	2.21	2.04	1.53
3/4	Brown	283-2055-ND	2.21	2.04	1.53
1	Gray	283-2056-ND	2.21	2.04	1.53
1-1/3	White	283-2057-ND	2.21	2.04	1.53
1-1/2	White/Ylw.	283-2058-ND	2.21	2.04	1.53
2	Orange	283-2059-ND	2.21	2.04	1.53
3	Blue	283-2060-ND	2.21	2.04	1.53
4	White/Brn.	283-2062-ND	2.21	2.04	1.53
5	Green	283-2063-ND	2.21	2.04	1.53
7-1/2	Blk./White	283-2064-ND	2.21	2.04	1.53
10	Red/White	283-2065-ND	2.21	2.04	1.53
15	Red/Blue	283-2067-ND	2.21	2.04	1.53

BIF document: #5008

Fuseholders for GMT Type Indicating Fuse


HLS


HLT

PC Mount.

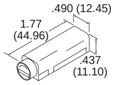
Electrical Rating: 15A (60V DC). **Construction Material:** • Body: Thermoplastic, UL-94V0 flammability rating • Terminals: Tin-plated bifurcated copper. **Agency Approval:** UL Recognized

Description	Digi-Key Part No.	Price Each 1	10	100
No Flange - HLS	283-2358-ND	2.06	1.89	1.55
With Flange - HLT	283-2359-ND	1.86	1.71	1.40

BIF document: #5010

HBH-I and HBH-M Fuseholders

for 1/4” x 1-1/4” (6.35mm x 31.75mm) & .205” x .591” (5mm x 20mm) fuses



Horizontal PCB Mount

Electrical Ratings: UL-16A @ 250V and CSA - 12A @ 250V

Agency Approvals: UL Recognized, CSA Certified, VDE, and SEMKO

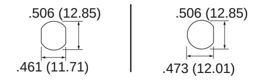
Description	Digi-Key Part No.	Price Each 1	10	Mfg. Part No.
For 1/4 x 1-1/4 (6.35 x 31.75) fuses	283-2351-ND	2.96	2.73	HBH-I
For .205 x .591 (5 x 20) fuses	283-2352-ND	3.84	3.54	HBH-M

BIF document: #2118

HTB Panel Mount Fuseholders

for 1/4” x 1-1/4” (6.35mm x 31.75mm) & .205” x .591” (5mm x 20mm) fuses

Common Mounting Hole — HTB 2, 3, 4, & 5

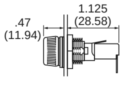


Construction Material: • Terminals: Tin-plated brass • Molded Components: Thermoplastic; UL Component Recognized; 94V0; mounting nut, spacer-black polycarbonate.

Agency Approvals: UL Recognized: 20A (3/16” quick-connect 15A) @ 250V, CSA: 16A @ 250V; Screwdriver slot carrier only, VDE: 10A @ 250V and SEMKO: 10A @ 250V.

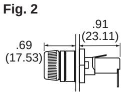
Common Dimensional Data: • Length (Knob Type) — 1.69” (42.9mm) Plus In-Line Terminal (Screwdriver Slotted) 1.75” (44.5mm). Note: Plus In-LIne Terminal

Fig. 1



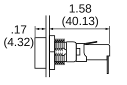
HTB-2: Low Profile Rear Hex Nut

Fig. 2



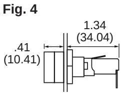
HTB-4: High Profile Rear Hex Nut

Fig. 3



HTB-3: Low Profile Rear Hex Nut

Fig. 4

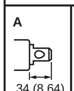


HTB-5: High Profile Rear Hex Nut

TERMINAL OPTIONS

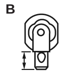
Solder - 3/16” (4.76mm) Quick-Connect

A


.34 (8.64)

In-Line

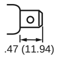
B


.33 (8.38)

Right Angle

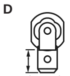
1/4” (6.35mm) Quick-Connect

C


.47 (11.94)

In-Line

D


.45 (11.43)

Right Angle

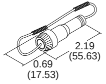
Fig. No.	Term. Opt.	Fuse Accept. In.(mm)	Panel Thick. In.(mm)	Digi-Key Part No.	Price Each 1	10
1	B	1/4x1-1/4 (6.35x31.75)	.30 (7.62)	283-2345-ND	2.62	2.42
1	B	.205x.591 (5x20)	.30 (7.62)	283-2354-ND	2.80	2.58
2	A	1/4x1-1/4 (6.35x31.75)	.125 (3.18)	283-2348-ND	2.91	2.69
2	B			283-2346-ND	3.06	2.82
2	B			283-2347-ND†	2.92	2.70
2	C			283-2349-ND	3.28	3.03
2	D			283-2350-ND	3.28	3.03
3	B	.205x.591 (5x20)	.30 (7.62)	283-2353-ND	2.80	2.58
4	B	1/4x1-1/4 (6.35x31.75)	.125 (3.18)	283-2344-ND	2.62	2.42

† Splash Proof Seal

BIF document: #2119

HRK Universal In-Line Fuseholder

for 1/4” x 7/8” to 1-1/4” (6.35mm x 22.23mm x 31.75mm) Fuses



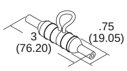
Specifications: • Three springs furnished with fuseholder afford acceptance of 1/4” (6.35mm) fuses of different lengths • Wire leads are staked and soldered to the contacts of the fuseholder • Leads are 8” (20.3mm) long • Wire size - #14

Amps	Volts AC	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
15	32	283-2343-ND	3.28	3.03	2.28	HRK

BIF document: #2111

HFB Waterproof In-Line Fuseholder

for 1/4” x 1-1/4” (6.35mm x 31.75mm) Fuses



Construction Material: • Body: Thermoplastic rubber • Contacts: Albaloy plated copper

Amps	Volts AC	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
30	32	283-2355-ND	6.55	5.95	5.36	HFB-10

BIF document: #2102

KEYSTONE
ELECTRONICS CORP.

Fuseholder Boards

For 1/4" (6.35mm)

Assembled with .125” (3.18mm) thick black phenolic

Fig.	Digi-Key Part No.	Price Each 1	10	100
1	3536K-ND	.87	.79	.58
2	3537K-ND	1.57	1.43	1.05
3	3538K-ND	2.36	2.14	1.57
4	3539K-ND	3.10	2.81	2.06
5	3522-2K-ND	.61	.44	.35
6	3522-3K-ND	.81	.59	.47
7	4527K-ND	—	.36	.31
—	4527CK-ND	1.50/10	12.70/100	58.00/500
8	3527K-ND	.76	.69	.55

Fig. 1 - (3AG)

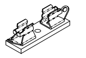


Fig. 2 - (3AG)

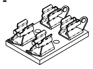


Fig. 3 - (3AG)

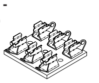
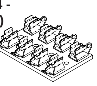


Fig. 4 - (3AG)



Auto Fuse Holders

Fig. 5

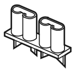


Fig. 6

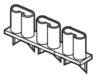


Fig. 7
PC 5mm Fuse Holder
Order cover separately:
4527CK-ND

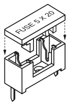
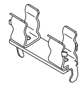


Fig. 8



COOPER Bussmann

Printed Circuit Board Fuseclips

Fig. 1

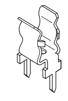


Fig. 2

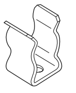


Fig. 3

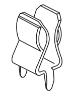


Fig. 4

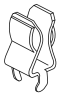


Fig. 5

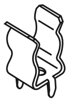
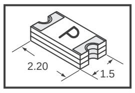


Fig.	Accepts Fuse (Dia.) In. (mm)	End Stop	Lead Type	Clip Material†	Finish	Digi-Key Part No.	Price Each 10	100	250	Cooper/ Bussmann Part No.
1	.20 (5)	yes	Straight	Spring Bronze	Bright Tin	283-2335-ND	.19	.14	.13	1A5018-10
2	1/4 (6.35)	no	None	Spring Bronze	Bright Tin	283-2337-ND	.19	.14	.13	5681-15
3	1/4 (6.35)	yes	Straight	Spring Bronze	Bright Tin	283-2338-ND	.15	.11	.10	1A1907-06
3	1/4 (6.35)	no	Straight	Spring Bronze	Bright Tin	283-2339-ND	.20	.15	.13	1A3398-07
4	1/4 (6.35)	yes	Angled-In	Spring Bronze	Bright Tin	283-2341-ND	.26	.20	.17	1A1119-10
3	1/4 (6.35)	yes	Straight	Beryllium Copper	Silver	283-2342-ND	.52	.39	.35	1A1907-05
5	1/4 (6.35)	no	Angled-In	Spring Bronze	Bright Tin	283-2340-ND	.26	.20	.17	1A1120-09

† Beryllium copper recommended for currents higher than 15 amps (1/4” or 6.35mm clips).

BIF document: #2131 (#2132 for Digi-Key Part No.283-2337-ND)

WICKMANN *NEW!* Polyfuse® Resettable Fuses (0805)



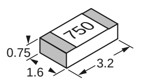
Approvals: cULus Recognized: File Number E201431 TUV: File Number R9956421 **Features:** • Low voltage overcurrent protection • Compliance with UL 1950 standard • For high density PCB applications, including cellular phones, computers and peripherals **Materials:** Terminals: Solder-plated copper; Plating: 63/37 SnPb **Operating/Storage Temperature:** -40° to +85°C **Electrical Definitions:** • **Ihold:** Hold current: maximum current device will pass without tripping in 20°C still air • **Itrip:** Trip current: minimum current at which the device will trip in 20°C still air • **Isc:** Maximum fault current device can withstand without damage at rated voltage • **Ril:** Minimum resistance of device in initial (unsoldered) state • **Rat:** Maximum resistance of device at 20°C measured one hour after tripping

Caution: *Operation beyond the specified rating may result in damage and possible arcing and flame.*

Ihold (mA)	Itrip (A)	Volt. Rating (V)	Isc (A)	Max time to Trip Current (A)	Max time to Trip Time (sec)	Resis. (Ω) Ril	Resis. (Ω) Rat	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	Tape & Reel Size	Tape & Reel Pricing*
100	.30	15	40	.50	1.5	1.00	6.00	WK1069CT-ND	1.15	1.07	4,000	477.00/M
200	.50	9	40	8.0	.02	.650	3.50	WK1070CT-ND	1.15	1.07	4,000	477.00/M
350	.75	6	40	8.0	0.1	.250	1.20	WK1071CT-ND	1.15	1.07	4,000	477.00/M
500	1.0	6	40	8.0	0.1	.150	.850	WK1072CT-ND	1.23	1.15	3,000	509.00/M

* For Tape and Reel part number, change CT-ND to TR-ND.

Surface Mount Chip Fuse Fast-Acting 3216 (1206) — UL 248-14



Approvals: cULus Recognized
Soldering Conditions: 235°C, 2 sec. (wave); 215°C, 3 sec. (reflow)
Material: Housing: Ceramic substrate, Glass encapsulated. Terminals: Tinned, metallized

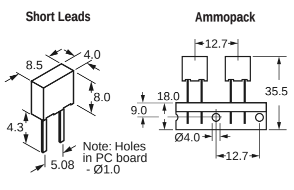
Electrical Characteristics:

Rated Current	Pre-arcing Rating 100%	Pre-arcing Rating 250%
750mA - 2.00A	4 hr. min.	5 sec. max.

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	T & R Pricing* 3,000
Fast-Acting 443 Series					
.750	63	WK4660CT-ND	.79	.74	360.00/M
1.00	63	WK4661CT-ND	.79	.74	360.00/M
1.50	63	WK4662CT-ND	.79	.74	360.00/M
2.00	63	WK4663CT-ND	.79	.74	360.00/M

* For Tape and Reel part number, change CT-ND to TR-ND.

TIP Telecom Duty Fuses (Telecom Interface Protector)



Approvals: cULus Recognized, File No. E67006. Complies to FCC 47 Part 68; Bellcore GR-1089.

Features: • For UL1950 3rd Edition applications • Highly defined cutoff times • Flame resistant encapsulated casing • Low internal resistance • Irreversible physical separation • Stable characteristics under varying temperatures.

Max. Fault Currents: ≤50A at 125 VAC; ≤35A at 125 VDC.

Material: Base and Cap: Brown thermoplastic (polyamide PA 6.6), UL 94-V0; Round Pins: Copper alloy, tin-plated

Electrical Characteristics:

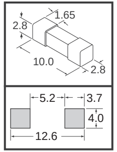
Rated Current	Pre-arcing Rating 100%	Pre-arcing Rating 300%
350mA - 1.50A	2 hr. min.	300ms...5s

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	Bulk Price Each 10	Tape & Ammo-Pk. Pricing* 1,250
TIP 385 Series					
.350	125	WK4560BK-ND	.59	.55	216.00/M
1.00	125	WK4563BK-ND	.52	.48	209.00/M†
1.25	125	WK4564BK-ND	.50	.46	200.00/M†
1.50	125	WK4565BK-ND	.52	.48	189.00/M

* For Tape and Ammo Pack #, change BK-ND to TB-ND.
† Package size is 1,400.

NEW! Telecom Protectors

Transient Tolerant



Applicable Standards: • UL 1950/60950 3rd Edition • Telcordia (Bellcore) GR-1089 • FCC 47 CFR Part 68 **Approvals:** cULus Recognized **Features:** • Surge proof for telecom line applications • No need for series resistors (1.25A & 2.00A) • **Materials:** Housing: Ceramic tube; Element: Wire; Terminals: Copper, nickel & silver plated

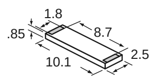
Electrical Characteristics:

Rated Current	Pre-arcing Rating 100%	Pre-arcing Rating 250%
1.25, 2.00A	>4hr.	1-120 sec.

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	T & R Pricing* 500
457 Series					
1.25	250	WK1067CT-ND	1.26	1.18	632.00/M
2.00	250	WK1068CT-ND	1.26	1.18	632.00/M

* For Tape and Reel part number, change CT-ND to TR-ND.

SMD Telecom Chip Protector - Transient Tolerant (T)



Approvals: UL 1950 3rd Edition FCC 47 Part 68, cULus Recognized **Material:** Housing: Ceramic substrate. Element: Metal film. Terminals: Tinned, metallized **Features:** • Surge proof for telecom line applications • Irreversible physical separation under fault • Highly defined cut-off times • Low internal resistance

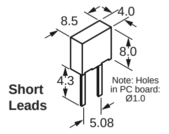
Electrical Characteristics:

Rated Current	Pre-arcing Rating 100%	Pre-arcing Rating 300%
500mA - 2.00A	>4 hr. min.	<2 min.

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Cut Tape Price Each 1	Cut Tape Price Each 10	T & R Pricing* 3,000
456 Series					
.500	125	WK6204CT-ND	1.64	1.53	748.80/M
1.50	125	WK6205CT-ND	1.64	1.53	748.80/M
2.00	125	WK6206CT-ND	1.64	1.53	748.80/M

* For Tape and Reel part number, change CT-ND to TR-ND.

TE5 Sub-Miniature Fuses – UL 248-14



Approvals (395 and 396 Series): cUL Listed, UL Listed for .050A-6.30A. MITI approved for 1.00A-5.00A. **Features:** • Fast-acting and time-lag • Material: Brown thermoplastic UL 94-V0. Round Pins: Copper alloy, tin-plated • Soldering Heat Resistance: 260°C, 10s (IEC 60068-2-20) • Plug-in holders available.

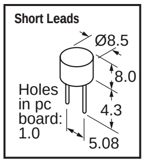
Electrical Characteristics:

Series	Rated Current	Pre-arcing Rating 100%	Pre-arcing Rating 200%
395	**50mA-6.3A**	> 4 hr.	< 5 sec.
396	**50mA-6.3A**	> 4 hr.	< 60 sec.

Breaking Capacity: 100A at 125VAC

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	Bulk Price Each 10	Bulk Price Each 100
Fast-Acting 395 Series					
.050	125	WK4322BK-ND	2.12	1.94	1.41
.063	125	WK4325BK-ND	1.71	1.57	1.14
.080	125	WK4326BK-ND	1.67	1.54	1.12
.100	125	WK4327BK-ND	1.64	1.50	1.09
.125	125	WK4328BK-ND	.56	.52	.38
.160	125	WK4330BK-ND	.56	.52	.38
.200	125	WK4334BK-ND	.56	.52	.38
.250	125	WK4335BK-ND	.56	.52	.38
.315	125	WK4337BK-ND	.56	.52	.38
.400	125	WK4340BK-ND	.56	.52	.38
.500	125	WK4341BK-ND	.56	.52	.38
.630	125	WK4343BK-ND	.56	.52	.38
.800	125	WK4346BK-ND	.56	.52	.38
1.00	125	WK4348BK-ND	.56	.52	.38
1.25	125	WK4350BK-ND	.56	.52	.38
1.60	125	WK4353BK-ND	.56	.52	.38
2.00	125	WK4357BK-ND	.56	.52	.38
2.50	125	WK4358BK-ND	.56	.52	.38
3.15	125	WK4324BK-ND	.56	.52	.38
4.00	125	WK4362BK-ND	.56	.52	.38
5.00	125	WK4363BK-ND	.56	.52	.38
6.30	125	WK4366BK-ND	.56	.52	.38
Time-Lag 396 Series					
.050	125	WK4422BK-ND	1.08	1.00	.73
.063	125	WK4425BK-ND	1.17	1.08	.79
.080	125	WK4426BK-ND	.94	.87	.63
.100	125	WK4427BK-ND	.81	.75	.55
.125	125	WK4428BK-ND	.79	.73	.53
.160	125	WK4430BK-ND	.72	.66	.48
.200	125	WK4434BK-ND	.72	.66	.48
.250	125	WK4435BK-ND	.68	.63	.46
.315	125	WK4437BK-ND	.68	.63	.46
.400	125	WK4440BK-ND	.68	.63	.46
.500	125	WK4441BK-ND	.65	.60	.44
.630	125	WK4443BK-ND	.62	.57	.41
.800	125	WK4446BK-ND	.62	.57	.41
1.00	125	WK4448BK-ND	.62	.57	.41
1.25	125	WK4450BK-ND	.62	.57	.41
1.60	125	WK4453BK-ND	.62	.57	.41
2.00	125	WK4457BK-ND	.62	.57	.41
2.50	125	WK4458BK-ND	.62	.57	.41
3.15	125	WK4424BK-ND	.62	.57	.41
4.00	125	WK4462BK-ND	.62	.57	.41
5.00	125	WK4463BK-ND	.62	.57	.41
6.30	125	WK4466BK-ND	.62	.57	.41

TR5 Sub-Miniature Fuses – IEC 60127-3



Approvals:
370 Series: Semko Approved, VDE Approved, cULus Recognized, (0.050A-4.00A). **372 Series:** Semko Approved, cULus Recognized, (0.050A-5.00A), VDE Approved (0.050A-4.00A). **382 Series:** VDE, SEMKO (1.00-4.00A) ,cULus Recognized, MITI(1.00-5.00A)

Material:

Base and Cap: Brown thermoplastic UL94-V0, insulated. Round Pins: Copper alloy, tin-plated.

Features:

• Fast-acting and Time-lag • Soldering Heat Resistance: 260°C, 10s (IEC 60068-2-20) • Plug-in holders available

Electrical Characteristics:

Pre-arcing Rating 150%	210%	275%	400%	1000%
Series 370 — 50mA-4.0A				
>1 hr.	<30 min.	10ms -3sec.	3-300ms	<20ms
Series 372 — 50mA-5.00A				
>1 hr.	<2 min.	400ms-10sec.	150ms-3sec.	20-150ms
Series 382 — 1.00A-5.00A				
>1 hr.	<2 min.	400ms-10sec.	150ms-3sec.	20-150ms

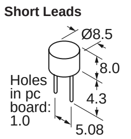
BREAKING CAPACITY:

370 and 372 Series: 35A at 250VAC for (.050-3.15A), 40A for (4.00A), 50A for (5.00A)

382 Series: 100A at 250VAC (1.00-5.00A)

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	Bulk Price Each 10	Bulk Price Each 100
Fast-Acting 370 Series					
.050	250	WK4922BK-ND	1.20	1.11	.81
.063	250	WK4925BK-ND	1.17	1.08	.78
.080	250	WK4926BK-ND	1.17	1.08	.78
.100	250	WK4927BK-ND	1.17	1.08	.78
.125	250	WK4928BK-ND	1.17	1.08	.78
.160	250	WK4930BK-ND	.45	.42	.30
.200	250	WK4934BK-ND	.45	.42	.30
.250	250	WK4935BK-ND	.45	.42	.30
.315	250	WK4937BK-ND	.45	.42	.30
.400	250	WK4940BK-ND	.45	.42	.30
.500	250	WK4941BK-ND	.45	.42	.30
.630	250	WK4943BK-ND	.45	.42	.30
.800	250	WK4946BK-ND	.45	.42	.30
1.00	250	WK4948BK-ND	.45	.42	.30
1.25	250	WK4950BK-ND	.45	.42	.30
1.60	250	WK4953BK-ND	.45	.42	.30
2.00	250	WK4957BK-ND	.45	.42	.30
2.50	250	WK4958BK-ND	.45	.42	.30
3.15	250	WK4924BK-ND	.45	.42	.30
4.00	250	WK4962BK-ND	.45	.42	.30
Time-Lag 372 Series					
.050	250	WK4222BK-ND	.68	.63	.46
.063	250	WK4225BK-ND	.65	.60	.44
.080	250	WK4226BK-ND	.59	.54	.39
.100	250	WK4227BK-ND	.59	.54	.39
.125	250	WK4228BK-ND	.53	.49	.36
.160	250	WK4230BK-ND	.53	.49	.36
.200	250	WK4234BK-ND	.51	.47	.34
.250	250	WK4235BK-ND	.51	.47	.34
.315	250	WK4237BK-ND	.51	.47	.34
.400	250	WK4240BK-ND	.51	.47	.34
.500	250	WK4241BK-ND	.51	.47	.34
.630	250	WK4243BK-ND	.51	.47	.34
.800	250	WK4246BK-ND	.51	.47	.34
1.00	250	WK4248BK-ND	.51	.47	.34
1.25	250	WK4250BK-ND	.51	.47	.34
1.60	250	WK4253BK-ND	.51	.47	.34
2.00	250	WK4257BK-ND	.51	.47	.34
2.50	250	WK4258BK-ND	.51	.47	.34
3.15	250	WK4224BK-ND	.51	.47	.34
4.00	250	WK4262BK-ND	.54	.50	.37
5.00	250	WK4263BK-ND	.54	.50	.37
Time-Lag High Breaking 382 Series (IEC 60127-3/IV)					
1.00	250	WK6207BK-ND	.51	.47	.34
2.00	250	WK6208BK-ND	.51	.47	.34
2.50	250	WK6209BK-ND	.51	.47	.34
3.15	250	WK6210BK-ND	.51	.47	.34
4.00	250	WK6211BK-ND	.51	.47	.34
5.00	250	WK6212BK-ND	.51	.47	.34

TR5 Sub-Miniature Fuses – UL 248-14



Approvals: 373 and 374 Series: UL Listed, CSA Certified Approved (.050A-10A) **Material:** Base and cap: Brown thermoplastic UL 94-V0, insulated. Round Pins: Copper alloy, tin-plated **Features:** • Fast-acting and Time-lag • Soldering Heat Resistance: acc. to IEC 68, part 2-20, 260°C, 10sec • Plug-in holders available

Electrical Characteristics:

Series	Rated Current	Pre-arcing Rating 100%	Pre-arcing Rating 200%
373	**50mA-10.A**	4 hr. min.	5 sec. max.
374	**50mA-10.00A**	4 hr. min.	60 sec.max.

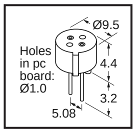
Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Bulk Price Each 1	Bulk Price Each 10	Bulk Price Each 100
Fast-Acting 373 Series					
.050	250	WK3022BK-ND	2.24	2.05	1.49
.063	250	WK3025BK-ND	1.70	1.57	1.14
.080	250	WK3026BK-ND	1.67	1.53	1.11
.100	250	WK3027BK-ND	1.64	1.50	1.09
.125	250	WK3028BK-ND	.55	.51	.37
.160	250	WK3030BK-ND	1.42	1.31	.95
.200	250	WK3034BK-ND	1.42	1.31	.95
.250	250	WK3035BK-ND	.55	.51	.37
.315	250	WK3037BK-ND	.55	.51	.37
.400	250	WK3040BK-ND	.55	.51	.37
.500	250	WK3041BK-ND	.55	.51	.37
.630	250	WK3043BK-ND	.55	.51	.37
.800	250	WK3046BK-ND	.55	.51	.37
1.00	250	WK3048BK-ND	.55	.51	.37
1.25	250	WK3050BK-ND	.55	.51	.37
1.60	250	WK3053BK-ND	.55	.51	.37
2.00	250	WK3057BK-ND	.55	.51	.37
2.50	250	WK3058BK-ND	.55	.51	.37
3.15	250	WK3024BK-ND	.55	.51	.37
4.00	250	WK3062BK-ND	.55	.51	.37
5.00	250	WK3063BK-ND	.55	.51	.37
6.30	250	WK3066BK-ND	.55	.51	.37
10.00	250	WK3071BK-ND	.57	.52	.38
Time-Lag 374 Series					
.050	250	WK4022BK-ND	1.13	1.04	.76
.063	250	WK4025BK-ND	1.20	1.10	.80
.080	250	WK4026BK-ND	.96	.89	.65
.100	250	WK4027BK-ND	.84	.77	.56
.125	250	WK4028BK-ND	.82	.76	.55
.160	250	WK4030BK-ND	.73	.67	.49
.200	250	WK4034BK-ND	.73	.67	.49
.250	250	WK4035BK-ND	.68	.62	.45
.315	250	WK4037BK-ND	.68	.62	.45
.400	250	WK4040BK-ND	.68	.62	.45
.500	250	WK4041BK-ND	.62	.57	.41
.630	250	WK4043BK-ND	.62	.57	.41
.800	250	WK4046BK-ND	.62	.57	.41
1.00	250	WK4048BK-ND	.62	.57	.41
1.25	250	WK4050BK-ND	.62	.57	.41
1.60	250	WK4053BK-ND	.62	.57	.41
2.00	250	WK4057BK-ND	.62	.57	.41
2.50	250	WK4058BK-ND	.62	.57	.41
3.15	250	WK4024BK-ND	.62	.57	.41
4.00	250	WK4062BK-ND	.62	.57	.41
5.00	250	WK4063BK-ND	.62	.57	.41
6.30	250	WK4066BK-ND	.63	.58	.42
10.00	250	WK4071BK-ND	.67	.62	.45

WICKMANN

TR5 Fuseholder

Material:
Black Thermoplastic, UL 94-V0. Terminals; brass, tin-plated

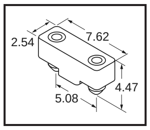
Rated Values:
250V; 6.3A



WK0001-ND............**$.56/1; $5.09/10; $37.00/100**

TR5 / TE5 SMT Fuseholder

Material:
Black thermoplastic UL 94-V0. Terminals; Brass, tin-plated.
- UL Recognized



Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Cut Tape Price Each 1	10	T & R Pricing* 1,500
6.3	250	WK0010CT-ND	.47	.43	195.00/M

***** For Tape and Reel part #, change CT-ND to TR-ND.

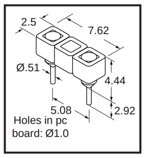
TE5 Fuseholder

Material:

Black thermoplastic UL 94-V0. Terminals – Brass, tin-plated for soldering

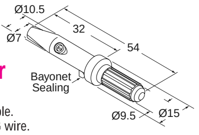
Rated Values:

250V; 6.3A; UL Recognized



WK0009-ND..............**$.41/1 $3.71/10 $27.00/100**

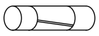
5x20mm In-Line Fuseholder



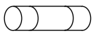
Terminals:
Solderable/screwable.
Accepts 14-20AWG wire.
Ratings:
63V, 6.3A

WK0012-ND **$1.14/1; $10.48/10; $76.20/100**

IEC 60127-2 Metric (5x20mm) Fuses



193 & 195 Series – Glass



181 & 194 Series – Ceramic

Approvals:

193 Series: SEMKO Approved, VDE Approved (.050A-6.30A), cULus Recognized (0.050A-6.30A)

194 Series: SEMKO Approved, VDE Approved (0.200A-6.30A), cULus Recognized (0.315A-10A)

181 Series: SEMKO Approved, BSI Approved, VDE Approved, IMQ Approved, cULus Recognized (1.0–10A), SEV Approved, MITI (1-5A), CCEE (1.25-6.3A)

195 Series: SEMKO Approved, VDE Approved, BSI Approved, IMQ Approved (0.032A–6.30A), cULus Recognized (0.032A-12.50A)

Electrical Characteristics:

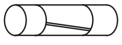
Series	Rated Current	Pre-arcing Rating 150%	210%	275%	400%	1000%
193	0.050 .100A	> 1 hr.	< 30 min.	10-500ms	3-100 ms	<20 ms
	.125 6.3A	> 1 hr.	< 30 min.	50ms-2 sec.	10-300ms	<20 ms
194	0.200 3.15A	> 1 hr.	< 30 min.	10ms-2 sec.	3-300 ms	<20 ms
	4.0-6.3A	> 30 min.	< 30 min.	10ms-3 sec.	3-300 ms	<20 ms
	8.0 10.0A	> 30 min.	> 1 hr.	10ms-3 sec.	3-300 ms	<20 ms
181	1.00-3.15A	> 1 hr.	< 30 min.	1-80 sec.	95ms-5sec.	10-100ms
	4.00-6.3A	> 1 hr.	< 30 min.	1-80 sec.	150ms-5sec.	20-100ms
	8.00-10.0A	> 1 hr.	< 30 min.	—	60ms-5sec.	10-100ms
195	0.032 .100A	> 1 hr.	< 2 min.	200ms-10 sec.	40ms-3 sec.	10-300 ms
	.125-6.3A	> 1 hr.	< 2 min.	600ms-10 sec.	150 ms-3 sec.	20-300 ms
	8.0 16.0A	> 30 min.	< 10 min.	—	—	20-300 ms

BREAKING CAPACITY:

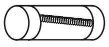
193 Series: 35A at 250VAC for (.050-3.15A), 40A for (4.0A), 50A for (5A), 63A for (6.3A)
194 Series: 1500A at 250VAC
181 Series: 1500A at 250VAC (≤ 6.30A), 1000A at 250VAC (8-10A)
195 Series: 35A at 250VAC for (.032-3.15A), 40A for (4.0A), 50A for (5.0A), 63A for (6.3-16A)

Amp Rtg.	Volt. Rtg.	Digi-Key Part No.	Price Each 1	10	100
Fast-Acting 193 Series					
.050	250	WK1022-ND	1.18	1.09	.79
.063	250	WK1025-ND	1.18	1.09	.79
.080	250	WK1026-ND	.65	.60	.44
.100	250	WK1027-ND	.26	.24	.18
.125	250	WK1028-ND	.26	.24	.18
.160	250	WK1030-ND	.26	.24	.18
.200	250	WK1034-ND	.26	.24	.18
.250	250	WK1035-ND	.26	.24	.18
.315	250	WK1037-ND	.26	.24	.18
.400	250	WK1040-ND	.26	.24	.18
.500	250	WK1041-ND	.26	.24	.18
.630	250	WK1043-ND	.26	.24	.18
.800	250	WK1046-ND	.26	.24	.18
1.00	250	WK1048-ND	.26	.24	.18
1.25	250	WK1050-ND	.26	.24	.18
1.60	250	WK1053-ND	.26	.24	.18
2.00	250	WK1057-ND	.26	.24	.18
2.50	250	WK1058-ND	.26	.24	.18
3.15	250	WK1124-ND	.27	.25	.18
4.00	250	WK1062-ND	.27	.25	.18
5.00	250	WK1063-ND	.27	.25	.18
6.30	250	WK1066-ND	.27	.25	.18
Fast Acting, High Breaking Capacity 194 Series					
.200	250	WK2034-ND	1.04	.95	.69
.250	250	WK2035-ND	1.04	.95	.69
.315	250	WK2037-ND	1.04	.95	.69
.400	250	WK2040-ND	.50	.46	.34
.500	250	WK2041-ND	.50	.46	.34
.630	250	WK2043-ND	.50	.46	.34
.800	250	WK2046-ND	.50	.46	.34
1.00	250	WK2048-ND	.50	.46	.34
1.25	250	WK2050-ND	.50	.46	.34
1.60	250	WK2053-ND	.50	.46	.34
2.00	250	WK2057-ND	.50	.46	.34
2.50	250	WK2058-ND	.50	.46	.34
3.15	250	WK2124-ND	.53	.49	.35
4.00	250	WK2062-ND	.53	.49	.35
5.00	250	WK2063-ND	.53	.49	.35
6.30	250	WK2066-ND	.53	.49	.35
8.00	250	WK2069-ND	.56	.51	.37
10.00	250	WK2071-ND	.56	.51	.37
Time Lag High Breaking Capacity 181 Series (IEC 60127-2/SS5V)					
1.00	250	WK2248-ND	.53	.49	.35
1.25	250	WK2250-ND	.35	.32	.24
1.60	250	WK2253-ND	.35	.32	.24
2.00	250	WK2257-ND	.35	.32	.24
2.50	250	WK2258-ND	.35	.32	.24
3.15	250	WK2224-ND	.35	.32	.24
4.00	250	WK2262-ND	.35	.32	.24
5.00	250	WK2263-ND	.35	.32	.24
6.30	250	WK2266-ND	.35	.32	.24
8.00	250	WK6202-ND	.26	.24	.18
10.00	250	WK6203-ND	.30	.28	.20
Time-Lag 195 Series					
.032	250	WK5019-ND	1.35	1.24	.90
.040	250	WK5021-ND	.92	.85	.62
.050	250	WK5022-ND	.92	.85	.62
.063	250	WK5025-ND	.76	.70	.51
.080	250	WK5026-ND	.78	.72	.52
.100	250	WK5027-ND	.66	.61	.44
.125	250	WK5028-ND	.61	.56	.41
.160	250	WK5030-ND	.61	.56	.41
.200	250	WK5034-ND	.50	.46	.34
.250	250	WK5035-ND	.45	.41	.30
.315	250	WK5037-ND	.43	.40	.29
.400	250	WK5040-ND	.39	.36	.27
.500	250	WK5041-ND	.39	.36	.27
.630	250	WK5043-ND	.39	.36	.27
.800	250	WK5046-ND	.38	.35	.26
1.00	250	WK5048-ND	.38	.35	.26
1.25	250	WK5050-ND	.38	.35	.26
1.60	250	WK5053-ND	.38	.35	.26
2.00	250	WK5057-ND	.29	.27	.20
2.50	250	WK5058-ND	.29	.27	.20
3.15	250	WK5124-ND	.29	.27	.20
4.00	250	WK5062-ND	.31	.29	.21
5.00	250	WK5063-ND	.31	.29	.21
6.30	250	WK5066-ND	.31	.29	.21
8.00	250	WK5069-ND	.31	.29	.21
10.00	250	WK5071-ND	.36	.33	.24
12.50	250	WK5126-ND	.36	.33	.24
16.00	250	WK5074-ND	.43	.40	.29

UL / CSA Fuses Metric (5x20mm) — UL 248-14



191 and 197 Series – Glass



198 Series – Glass

Equivalent to:

Wickmann	Littelfuse	Bussmann
191 Series	235	GMA
197 Series	233	GMC
198 Series	239	GMD

Approvals:

191 Series:
UL, cUL listed, .250A-7.00A

197 Series:
UL, cUL listed, 1.00A - 7.00A.

198 Series:
UL listed, CSA certified, .250A-3.50A

Electrical Characteristics:

Series	Rated Current	Pre-arcing Rating 135%	200%
191	**.250A - 7.00A**	**< 1 hr.**	**< 5 sec.**
197	**1.00A - 7.00A**	**< 1 hr.**	**< 120 sec.**
198	**.250A - 3.00A** **3.50A**	**< 1 hr** **< 1 hr**	**5-120 sec.** **12-120 sec.**

Breaking Capacity

191 Series:
35A at 250VAC (.250A-1.00A); 100A at 250VAC (1.25A-3.50A); 10,000A at 125VAC (.250A-7.00A)

197 Series:
35A at 250VAC (.250A-1.00A); 100A at 250VAC (1.25A - 3.50A); 10,000A at 125VAC (.250A - 7.00A)

198 Series:
35A at 250VAC (.250A -1.00A); 100A at 250VAC (1.25A - 3.50A); 10,000A at 125VAC (.250A - 3.50A)

Amp Rating	Volt. Rtg.	Digi-Key Part No.	Price Each 1	10	100
Fast-Acting 191 Series					
.250	250	WK4701-ND	—	.25	.18
.300	250	WK4702-ND	—	.20	.14
.350	250	WK4703-ND	—	.20	.14
.400	250	WK4704-ND	—	.20	.14
.500	250	WK4705-ND	—	.17	.12
.600	250	WK4706-ND	—	.17	.12
.700	250	WK4707-ND	—	.17	.12
.800	250	WK4708-ND	—	.14	.10
1.00	250	WK4709-ND	—	.14	.10
1.25	250	WK4710-ND	—	.14	.10
1.60	250	WK4711-ND	—	.14	.10
2.00	250	WK4712-ND	—	.14	.10
2.50	250	WK4713-ND	—	.17	.12
3.00	250	WK4714-ND	—	.20	.14
3.50	250	WK4715-ND	—	.14	.10
4.00	125	WK4716-ND	—	.20	.14
5.00	125	WK4717-ND	—	.14	.10
6.00	125	WK4718-ND	—	.20	.14
7.00	125	WK4719-ND	—	.14	.10
Medium Time-Lag 197 Series					
1.00	250	WK4748-ND	.27	.25	.18
1.25	250	WK4750-ND	.27	.25	.18
1.60	250	WK4753-ND	.27	.25	.18
2.00	250	WK4757-ND	.27	.25	.18
2.50	250	WK4758-ND	.27	.25	.18
3.00	250	WK4760-ND	.27	.25	.18
3.50	250	WK4723-ND	.27	.25	.18
4.00	125	WK4762-ND	.27	.25	.18
5.00	125	WK4763-ND	.27	.25	.18
6.00	125	WK4764-ND	.27	.25	.18
7.00	125	WK4767-ND	.27	.25	.18
Time-Lag 198 Series					
.250	250	WK4835-ND	.64	.59	.43
.300	250	WK4836-ND	.60	.55	.40
.400	250	WK4840-ND	.57	.53	.39
.500	250	WK4841-ND	.77	.71	.52
.600	250	WK4842-ND	.68	.63	.46
.700	250	WK4844-ND	.68	.63	.46
.800	250	WK4846-ND	.72	.66	.48
1.00	250	WK4848-ND	.69	.64	.46
1.25	250	WK4850-ND	.69	.64	.46
1.60	250	WK4853-ND	.69	.64	.46
2.00	250	WK4857-ND	.69	.64	.46
2.50	250	WK4858-ND	.69	.64	.46
3.00	250	WK4860-ND	.74	.68	.50
3.50	250	WK4823-ND	1.02	.94	.68

Shock-Safe Fuseholders

Shock-Safe fuseholders for 1/4 x 1-1/4" (3AG) or 5 x 20mm fuses built according to UL 512 and IEC EN 60127-6 and CSA C22.2 No. 39. Rated for use up to 250 Volts. (VDE, SEMKO); Fig. 1, 2, 3, 4, 6 at 6.3 Amps; Fig 5 at 10 Amps. Casing made of black thermoplastic with UL-94V0 ratings. Injection-molded terminals prevent intermittent connections.

PC Mount versions include additional pin(s) for added stability from torsional forces seen during fuse removal.

Panel Mount versions have combination 3/16" quick-connect/solderable tabs.

- Order number includes holder and carrier.

PC Board Mount (Fig. 7): No approvals. Body Material: White thermoplastic, UL 94-V1 rated; Rated Current: 6.3A

Vertical PC Mount

Fig. 1 – (3AG)

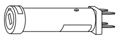
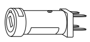
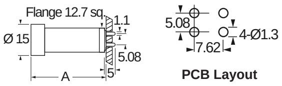


Fig. 2 – (5mm x 20mm)





Horizontal PC Mount

Fig. 3 – (3AG)

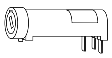
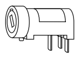
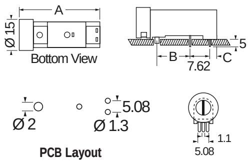


Fig. 4 – (5mm x 20mm)





Panel Mount

Fig. 5 – (3AG)

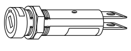
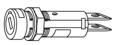
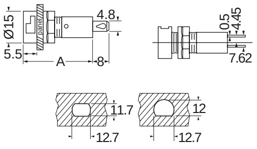


Fig. 6 – (5mm x 20mm)





Panel Cutout (Alternatives)

PC Mount

Fig. 7 – (5mm x 20mm)

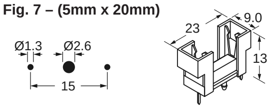
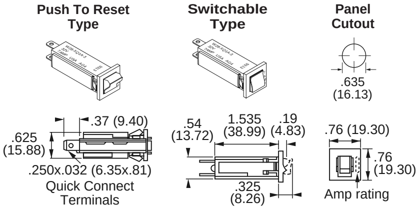


Fig.	Dimension A	B	C	Digi-Key Part No.	Price Each 1	10	100
Vertical PC Mount							
1	46.3	—	—	WK0004-ND	2.40	2.20	1.60
2	32.6	—	—	WK0007-ND	2.04	1.87	1.36
Horizontal PC Mount							
3	45.7	27.94	1.9	WK0003-ND	2.40	2.20	1.60
4	32	12.7	1.8	WK0006-ND	2.04	1.87	1.36
Panel Mount							
5	45.7	—	—	WK0002-ND	2.40	2.20	1.60
6	32	—	—	WK0005-ND	2.04	1.87	1.36
PC Board Mount (5x20mm)							
7	—	—	—	WK0011-ND	.32	.29	.21

P&B tyco Electronics
Authorized Distributor

Thermal Circuit Breakers

W28 Series



Replaces slow blow cartridge type fuses. Labor saving snap-in mounting. Switchable version combines on-off switch and circuit protection in a single unit. Button extends for visual trip indication on the push to reset versions and rocker on switchable models moves to "overload" position upon trip. All breakers are black body with white rate marking. Panel thickness of .032" to .062" (.81mm to 1.57mm) except where noted. Optional push-on lockwasher for panel thickness greater than .105" (2.67mm).

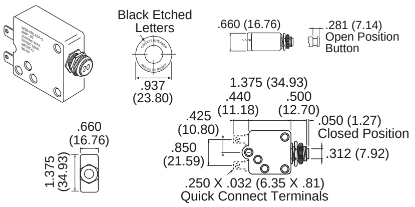
Specifications:
- Maximum operating voltage: 32VDC; 250VAC • Will continuously carry 100% of rated current
- **.25-2 Amp Model** may trip between 101% and 174% of rating within 1 hour, must trip at 175% of rating within 1 hour at 25°C
- **3-20 Amp Model** may trip between 101% and 134% of rating within 1 hour, must trip at 135% of rating within 1 hour at 25°C

Current	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Push To Reset Type					
0.25	PB180-ND	5.11	4.48	4.05	W28-XQ1A-0.25
0.50	PB181-ND	5.11	4.48	4.05	W28-XQ1A-0.50
1	PB182-ND	5.11	4.48	4.05	W28-XQ1A-1
2	PB183-ND	5.11	4.48	4.05	W28-XQ1A-2
3	PB184-ND	2.64	2.31	2.09	W28-XQ1A-3
4	PB185-ND	2.64	2.31	2.09	W28-XQ1A-4
5	PB186-ND	2.64	2.31	2.09	W28-XQ1A-5
6	PB187-ND	2.64	2.31	2.09	W28-XQ1A-6
7	PB188-ND	2.64	2.31	2.09	W28-XQ1A-7
8	PB189-ND	2.64	2.31	2.09	W28-XQ1A-8
10	PB190-ND	2.64	2.31	2.09	W28-XQ1A-10
12	PB191-ND	2.64	2.31	2.09	W28-XQ1A-12
15	PB192-ND	2.64	2.31	2.09	W28-XQ1A-15
10	PB239-ND†	2.64	2.31	2.09	W28-XT1A-10
12	PB240-ND†	2.64	2.31	2.09	W28-XT1A-12
20	PB425-ND	2.64	2.31	2.09	W28-XQ1A-20
Switchable Type					
3	PB233-ND	3.60	3.15	2.85	W28-SQ11A-3
5	PB234-ND	3.60	3.15	2.85	W28-SQ11A-5
10	PB236-ND	3.60	3.15	2.85	W28-SQ11A-10
15	PB238-ND	3.60	3.15	2.85	W28-SQ11A-15
Internal Lock Washer — W28 Series					
—	PB241-ND*	.24	.21	.19	55-025B

† Will mount in .075" to .105" (1.91mm to 2.67mm) thick panel, all others have std. panel thickness of .032" to .062" (.81mm to 1.57mm)

* Optional Push-On Lock Washer for panels greater than .105" (2.67mm) thickness.

W58 Series



Button extends for visual trip indication (red trip band). .250" (6.35mm) quick connect terminals or 6/32 screw terminals. Comes complete with knurled nut and hex nut assembled on bushing.

Specifications: • Breaker will continuously carry 100% of rated load. It may trip between 101% and 144% of rated load, but must trip at 145% at 25°C. • Maximum operating voltage: 50VDC, 250VAC.

Current	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Push to Reset Breaker — .250 (6.35) QC Terminal					
1	PB193-ND ‡	7.39	6.47	5.86	W58-XB1A4A-1
2	PB194-ND ‡	7.39	6.47	5.86	W58-XB1A4A-2
3	PB195-ND ‡	7.39	6.47	5.86	W5B-XB1A4A-3
4	PB196-ND ‡	7.39	6.47	5.86	W58-XB1A4A-4
5	PB197-ND ‡	5.23	4.58	4.15	W58-XB1A4A-5
6	PB198-ND ‡	5.23	4.58	4.15	W58-XB1A4A-6
7	PB199-ND ‡	5.23	4.58	4.15	W58-XB1A4A-7
8	PB200-ND ‡	5.23	4.58	4.15	W58-XB1A4A-8
10	PB201-ND ‡	5.23	4.58	4.15	W58-XB1A4A-10
12	PB202-ND ‡	5.23	4.58	4.15	W58-XB1A4A-12
15	PB203-ND ‡	5.23	4.58	4.15	W58-XB1A4A-15
20	PB204-ND ‡	5.23	4.58	4.15	W58-XB1A4A-20
25	PB205-ND ‡	5.23	4.58	4.15	W58-XB1A4A-25
30	PB206-ND ‡	5.23	4.58	4.15	W58-XB1A4A-30
Push to Reset Breaker — 6-32 Screw Terminal					
1	PB242-ND †	8.38	7.33	6.64	W58-XC4C12A-1
2	PB243-ND †	8.38	7.33	6.64	W58-XC4C12A-2
3	PB244-ND †	8.38	7.33	6.64	W58-XC4C12A-3
5	PB245-ND †	7.51	6.58	5.95	W58-XC4C12A-5
7	PB246-ND †	7.51	6.58	5.95	W58-XC4C12A-7
10	PB247-ND †	7.51	6.58	5.95	W58-XC4C12A-10
15	PB248-ND †	7.51	6.58	5.95	W58-XC4C12A-15
20	PB249-ND †	7.51	6.58	5.95	W58-XC4C12A-20
25	PB250-ND †	7.51	6.58	5.95	W58-XC4C12A-25
30	PB251-ND †	7.51	6.58	5.95	W58-XC4C12A-30

‡ White button, Red Marking/Red Trip Band
† White button, Black Marking, Red Trip Band

Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
"Push to Reset" disk for panel, use with 6-32 Screw Terminal Types				
PB253-ND	.36	.32	.29	33-012A
"Push to Reset" disk for panel, use with .250 (6.35) QC Terminal Types				
PB254-ND	.41	.36	.33	33-012C
Knurled Nut, Silver Plated, use with .250 (6.35) QC Terminal Types				
PB255-ND	.55	.49	.44	55-010A
Knurled Nut, Black, use with 6-32 Screw Terminal Types				
PB256-ND	.86	.76	.69	55-010E

W23 and W31 Series

Fig. 1 — W23 Series

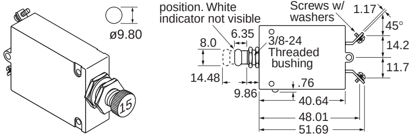
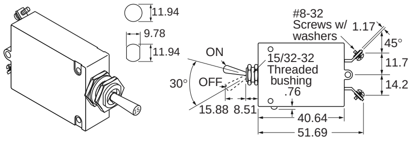


Fig. 2 — W31 Series



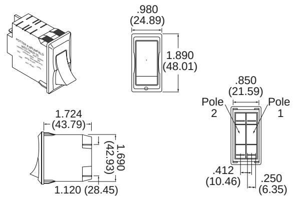
Two series of thermal circuit breakers with your choice of push/pull actuation or toggle actuation. W23 series (push/pull) has a visual trip indicator to quickly determine circuit breaker status. W31 series (toggle) offers an On/Off switch combined with circuit protection. Both series have amperage marking on the end of the actuator and 8-32 screw terminals. Single Pole only.

Features: • **Calibration:** Will continuously carry 100% of rating, may trip between 101% and 134% of rating at 25°C. Must trip at 135% in one hour. • **Maximum Operating Voltages:** 50VDC or 250VAC (to 400Hz). • **Dielectric Strength:** Over 1,500 volts RMS. • **Endurance Cycling:** More than 6,000 cycles at 100% of rating, or 10,000 mechanical cycles. • **Termination:** Two #8-32 screw terminals.

Agency Approvals: W23 and W31 are UL 1077 Recognized as Supplementary Protectors. File E69543, and CSA Certified as Appliance Component Protectors, File LR15734

Current Rating (Amps)	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Fig. 1 — Push/Pull Type					
1	PB399-ND	27.91	24.43	22.10	W23-X1A1G-1
2	PB400-ND	27.91	24.43	22.10	W23-X1A1G-2
3	PB401-ND	27.91	24.43	22.10	W23-X1A1G-3
5	PB402-ND	18.19	15.92	14.41	W23-X1A1G-5
10	PB404-ND	18.19	15.92	14.41	W23-X1A1G-10
15	PB405-ND	18.19	15.92	14.41	W23-X1A1G-15
20	PB406-ND	18.19	15.92	14.41	W23-X1A1G-20
25	PB407-ND	18.19	15.92	14.41	W23-X1A1G-25
30	PB408-ND	18.19	15.92	14.41	W23-X1A1G-30
35	PB409-ND	18.19	15.92	14.41	W23-X1A1G-35
40	PB410-ND	18.19	15.92	14.41	W23-X1A1G-40
50	PB411-ND	18.19	15.92	14.41	W23-X1A1G-50
Fig. 2 — Toggle Type					
1	PB412-ND	32.74	28.65	25.92	W31-X2M1G-1
2	PB413-ND	32.74	28.65	25.92	W31-X2M1G-2
3	PB414-ND	32.74	28.65	25.92	W31-X2M1G-3
5	PB415-ND	22.63	19.81	17.92	W31-X2M1G-5
7.5	PB416-ND	23.11	20.23	18.30	W31-X2M1G-7.5
10	PB417-ND	22.63	19.81	17.92	W31-X2M1G-10
15	PB418-ND	22.63	19.81	17.92	W31-X2M1G-15
20	PB419-ND	22.63	19.81	17.92	W31-X2M1G-20
25	PB420-ND	22.63	19.81	17.92	W31-X2M1G-25
30	PB421-ND	22.63	19.81	17.92	W31-X2M1G-30
35	PB422-ND	22.63	19.81	17.92	W31-X2M1G-35
40	PB423-ND	22.63	19.81	17.92	W31-X2M1G-40
50	PB424-ND	22.63	19.81	17.92	W31-X2M1G-50

W33 Series



Combination switch and separate circuit breaker in one package. 5-20 Amp versions available in either one circuit breaker with separate switch or 2 circuit breaker option available. Lighted or non-lighted actuator with convenient snap-in mounting. Available in three colors: black, white or amber. Illuminated versions are 120VAC neon lamps. Two breaker models will trip both sides when only 1 side is overdriven. Reset is accomplished with rocker actuator at front of device.

Specifications:
• Breaker will continuously carry 100% of the rated load. It may trip between 101% and 135% of rated load, but must trip at 135% within 1 hour at 25°C • Maximum Operating Voltage: 50VCD, 250VAC

Current (A)	Actuator Color	Pole 1/ Pole 2 Type	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
5	Black	Switch/Breaker	PB257-ND	13.06	11.43	10.34	W33-S1N1Q-5
15	Black	Switch/Breaker	PB259-ND	13.06	11.43	10.34	W33-S1N1Q-15
20	Black	Switch/Breaker	PB260-ND	13.06	11.43	10.34	W33-S1N1Q-20
10	Amber	Switch/Breaker Illuminated	PB261-ND	15.82	13.84	12.53	W33-S4B1Q-10
15	Amber	Switch/Breaker Illuminated	PB262-ND	15.82	13.84	12.53	W33-S4B1Q-15
20	White	2 Breakers	PB263-ND	18.43	16.13	14.60	W33-T2N1Q-20
5	Amber	2 Breakers Illuminated	PB264-ND	20.69	18.11	16.38	W33-T4B1Q-5
10	Amber	2 Breakers Illuminated	PB265-ND	20.69	18.11	16.38	W33-T4B1Q-10
15	Amber	2 Breakers Illuminated	PB266-ND	20.69	18.11	16.38	W33-T4B1Q-15

Magnetic Hydraulic Circuit Breaker

W67, W68, W69, W91, W92, W93 Series

Fig. 1

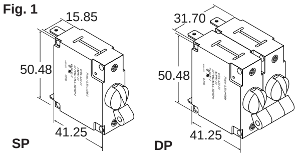
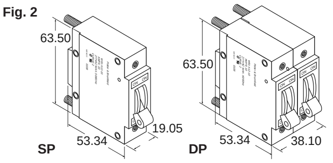


Fig. 2



The W6/W9 series are designed for the international market. Magnetic hydraulic breakers are a proven design where the hydraulic delay provides tripping that is highly tolerant to changes in ambient temperatures. W9 units have ON/OFF molded into the area at the base of the toggle.

• **Calibration:** Breakers will hold 100% of rated current. Breakers may trip between 101% and 124% of rated load. Breakers must trip at 125% of rated load and above.

• **Operating Temperature:** -40°C to +85°C.

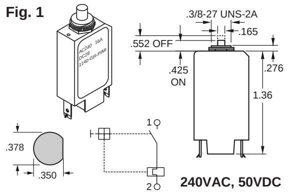
Current (A)	Description	Digi-Key Part No.	Price Each 1	25	50	Potter & Brumfield Part No.
Fig. 1 — White Toggle Actuator						
5	Toggle Type, SP, Instantaneous	PB426-ND	20.18	17.67	15.98	W67-X2Q10-5
10	Toggle Type, SP, Std Delay	PB427-ND	20.18	17.67	15.98	W67-X2Q52-10
15	Toggle Type, SP, Std Delay	PB428-ND	20.18	17.67	15.98	W67-X2Q12-15
10	Toggle Type, DP, Std Delay	PB429-ND	49.68	43.47	39.33	W68-X2Q12-10
15	Toggle Type, DP, Std Delay	PB430-ND	49.68	43.47	39.33	W68-X2Q12-15
20	Toggle Type, DP, Std Delay	PB431-ND	49.68	43.47	39.33	W68-X2Q12-20
10	Toggle Type, 3P, Std Delay	PB432-ND	69.38	60.72	54.93	W69-X2Q12-10
Fig. 2 — Black Toggle Actuator						
10	Toggle Type, SP, Std Delay	PB433-ND	22.94	20.08	18.17	W91-X112-10
20	Toggle Type, SP, Std Delay	PB434-ND	22.94	20.08	18.17	W91-X112-20
1	Toggle Type, DP, Std Delay	PB435-ND	56.38	49.33	44.64	W92-X112-1
15	Toggle Type, DP, Std Delay	PB436-ND	56.38	49.33	44.64	W92-X112-15
20	Toggle Type, DP, Std Delay	PB437-ND	56.38	49.33	44.64	W92-X112-20
30	Toggle Type, DP, Std Delay	PB438-ND	56.38	49.33	44.64	W92-X112-30
50	Toggle Type, DP, Std Delay	PB439-ND	56.38	49.33	44.64	W92-X112-50
50	Toggle Type, 3P, Std Delay	PB440-ND	91.46	80.04	72.41	W93-X112-50

E-T-A®

Thermal Circuit Breakers

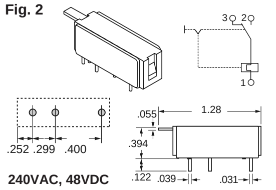
ETA Circuit Breakers for equipment are designed as safety critical items for protection during equipment failure. These circuit breakers may be required to operate just occasionally or very often during the life of the equipment and can confidently be reset by inexperienced personnel. Applications range from motors and transformers to appliances and automotive. Thermal breakers respond in a similar manner as a slow blow fuse. All thermal breakers carry 100% rated current continuously and trip within one hour at 140% rating. Selection should be based on 125% of your maximum current required. Magnetic breakers are fast-acting devices which are highly tolerant to changes in ambient temperatures and sensitive to small overloads. All panel mount breakers come with dress nut and hex nut.

Fig. 1



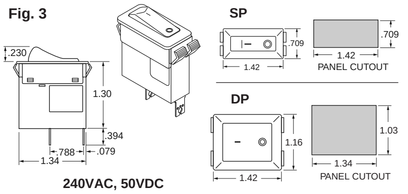
240VAC, 50VDC

Fig. 2



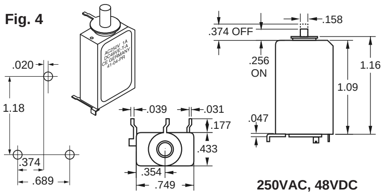
240VAC, 48VDC

Fig. 3



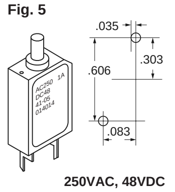
240VAC, 50VDC

Fig. 4



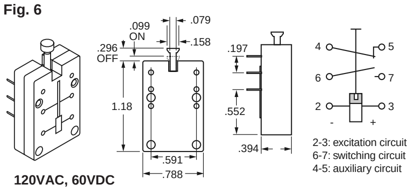
250VAC, 48VDC

Fig. 5



250VAC, 48VDC

Fig. 6



120VAC, 60VDC

Fig.	Current (Amps)	Description*	Digi-Key Part No.	Price Each 1	10	25	50	ETA Part No.
Thermal Breaker - Miniature Panel Mount								
1	0.1A	SP Med. Delay, Black	302-1000-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.1A
	0.2A	SP Med. Delay, Black	302-1001-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.2A
	0.3A	SP Med. Delay, Black	302-1002-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.3A
	0.4A	SP Med. Delay, Black	302-1003-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.4A
	0.5A	SP Med. Delay, Black	302-1004-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.5A
	0.6A	SP Med. Delay, Black	302-1005-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.6A
	0.8A	SP Med. Delay, Black	302-1006-ND	10.49	9.98	9.66	8.93	106-M2-P10-0.8A
	1A	SP Med. Delay, Black	302-1007-ND	10.49	9.98	9.66	8.93	106-M2-P10-1A
	1.2A	SP Med. Delay, Black	302-1008-ND	10.49	9.98	9.66	8.93	106-M2-P10-1.2A
	1.5A	SP Med. Delay, Black	302-1009-ND	10.49	9.98	9.66	8.93	106-M2-P10-1.5A
	1.8A	SP Med. Delay, Black	302-1010-ND	10.49	9.98	9.66	8.93	106-M2-P10-1.8A
	2A	SP Med. Delay, Black	302-1011-ND	10.49	9.98	9.66	8.93	106-M2-P10-2A
	2.5A	SP Med. Delay, Black	302-1012-ND	10.49	9.98	9.66	8.93	106-M2-P10-2.5A
	3A	SP Med. Delay, Black	302-1013-ND	10.49	9.98	9.66	8.93	106-M2-P10-3A
	4A	SP Med. Delay, Black	302-1015-ND	11.48	10.91	10.56	9.76	41-06-P10-3.5A
	5A	SP Med. Delay, Black	302-1016-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-5A
	7A	SP Med. Delay, Black	302-1018-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-7A
	8A	SP Med. Delay, Black	302-1019-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-8A
	10A	SP Med. Delay, Black	302-1020-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-10A
	12A	SP Med. Delay, Black	302-1021-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-12A
	15A	SP Med. Delay, Black	302-1023-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-15A
	16A	SP Med. Delay, Black	302-1024-ND	11.48	10.91	10.56	9.76	1140-G111-P1M1-16A
Thermal Breaker - Horizontal PC Mount								
2	0.63A	SP Fast Switching	302-1025-ND	7.88	7.49	7.25	6.70	1410L210L2F1S020.63A
	0.80A	SP Fast Switching	302-1026-ND	7.88	7.49	7.25	6.70	1410L210L2F1S020.80A
	1A	SP Fast Switching	302-1027-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021A
	1.25A	SP Fast Switching	302-1028-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021.25A
	1.5A	SP Fast Switching	302-1029-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021.5A
	1.8A	SP Fast Switching	302-1030-ND	7.88	7.49	7.25	6.70	1410L210L2F1S021.8A
	2A	SP Fast Switching	302-1032-ND	7.88	7.49	7.25	6.70	1410L210L2F1S022A
	2.5A	SP Fast Switching	302-1033-ND	7.88	7.49	7.25	6.70	1410L210L2F1S022.5A
	3.15A	SP Fast Switching	302-1034-ND	7.88	7.49	7.25	6.70	1410L210L2F1S023.15A
	4A	SP Fast Switching	302-1035-ND	7.88	7.49	7.25	6.70	1410L210L2F1S024A
	4.5A	SP Fast Switching	302-1036-ND	7.88	7.49	7.25	6.70	1410L210L2F1S024.5A
	5A	SP Fast Switching	302-1037-ND	7.88	7.49	7.25	6.70	1410L210L2F1S025A
	6.3A	SP Fast Switching	302-1038-ND	7.88	7.49	7.25	6.70	1410L210L2F1S026.3A
	8A	SP Fast Switching	302-1039-ND	7.88	7.49	7.25	6.70	1410L210L2F1S028A
	10A	SP Fast Switching	302-1031-ND	7.88	7.49	7.25	6.70	1410L210L2F1S0210A
Thermal Breaker with On/Off Switch - Rocker Style								
3	0.1A	SP Black w/White Act.	302-1040-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.1A
	0.2A	SP Black w/White Act.	302-1041-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.2A
	0.3A	SP Black w/White Act.	302-1042-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.3A
	0.4A	SP Black w/White Act.	302-1043-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.4A
	0.5A	SP Black w/White Act.	302-1044-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.5A
	0.8A	SP Black w/White Act.	302-1045-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q0.8A
	1A	SP Black w/White Act.	302-1046-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q1A
	1.2A	SP Black w/White Act.	302-1047-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q1.2A
	1.5A	SP Black w/White Act.	302-1048-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q1.5A
	2A	SP Black w/White Act.	302-1049-ND	16.02	15.23	14.75	13.62	3130F110P7T1W02Q2A
	2.5A	SP Black w/White Act.	302-1050-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q2.5A
	3A	SP Black w/White Act.	302-1051-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q3A
	4A	SP Black w/White Act.	302-1053-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q4A
	5A	SP Black w/White Act.	302-1054-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q5A
	6A	SP Black w/White Act.	302-1055-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q6A
	7A	SP Black w/White Act.	302-1056-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q7A
	8A	SP Black w/White Act.	302-1057-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q8A
	10A	SP Black w/White Act.	302-1058-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q10A
	12A	SP Black w/White Act.	302-1059-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q12A
	14A	SP Black w/White Act.	302-1060-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q14A
	16A	SP Black w/White Act.	302-1061-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q16A
	20A	SP Black w/White Act.	302-1062-ND	13.92	13.23	12.81	11.84	3130F110P7T1W02Q20A
	0.1A	DP Black w/White Act.	302-1063-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.1A
	0.2A	DP Black w/White Act.	302-1064-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.2A
	0.3A	DP Black w/White Act.	302-1065-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.3A
	0.4A	DP Black w/White Act.	302-1066-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.4A
	0.5A	DP Black w/White Act.	302-1067-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.5A
	0.8A	DP Black w/White Act.	302-1068-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q0.8A
	1A	DP Black w/White Act.	302-1069-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q1A
	1.2A	DP Black w/White Act.	302-1070-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q1.2A
	1.5A	DP Black w/White Act.	302-1071-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q1.5A
	2A	DP Black w/White Act.	302-1072-ND	32.50	30.89	29.91	27.63	3130F120P7T1W02Q2A
	2.5A	DP Black w/White Act.	302-1073-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q2.5A
	3A	DP Black w/White Act.	302-1074-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q3A
	3.5A	DP Black w/White Act.	302-1075-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q3.5A
	4A	DP Black w/White Act.	302-1076-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q4A
3	5A	DP Black w/White Act.	302-1077-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q5A
	6A	DP Black w/White Act.	302-1078-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q6A
	7A	DP Black w/White Act.	302-1079-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q7A
	8A	DP Black w/White Act.	302-1080-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q8A
	10A	DP Black w/White Act.	302-1081-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q10A
	12A	DP Black w/White Act.	302-1082-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q12A
	14A	DP Black w/White Act.	302-1083-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q14A
	16A	DP Black w/White Act.	302-1084-ND	28.59	27.16	26.30	24.31	3130F120P7T1W02Q16A
Thermal Breaker - Horizontal PC Mount								
4	0.1A	SP Med. Delay, Black	302-1088-ND	11.48	10.91	10.56	9.76	104-PR-0.1A
	0.2A	SP Med. Delay, Black	302-1089-ND	11.48	10.91	10.56	9.76	104-PR-0.2A
	0.3A	SP Med. Delay, Black	302-1090-ND	11.48	10.91	10.56	9.76	104-PR-0.3A
	0.4A	SP Med. Delay, Black	302-1091-ND	11.48	10.91	10.56	9.76	104-PR-0.4A
	0.5A	SP Med. Delay, Black	302-1092-ND	11.48	10.91	10.56	9.76	104-PR-0.5A
	0.6A	SP Med. Delay, Black	302-1093-ND	11.48	10.91	10.56	9.76	104-PR-0.6A
	0.8A	SP Med. Delay, Black	302-1094-ND	11.48	10.91	10.56	9.76	104-PR-0.8A
	1A	SP Med. Delay, Black	302-1095-ND	11.48	10.91	10.56	9.76	104-PR-1A
	1.2A	SP Med. Delay, Black	302-1096-ND	11.48	10.91	10.56	9.76	104-PR-1.2A
	1.5A	SP Med. Delay, Black	302-1097-ND	11.48	10.91	10.56	9.76	104-PR-1.5A
	1.8A	SP Med. Delay, Black	302-1098-ND	11.48	10.91	10.56	9.76	104-PR-1.8A
	2A	SP Med. Delay, Black	302-1099-ND	11.48	10.91	10.56	9.76	104-PR-2A
	2.5A	SP Med. Delay, Black	302-1100-ND	11.48	10.91	10.56	9.76	104-PR-2.5A
	3A	SP Med. Delay, Black	302-1101-ND	11.48	10.91	10.56	9.76	104-PR-3A
	5A	SP Med. Delay, Black	302-1105-ND	11.48	10.91	10.56	9.76	104-PR-5A
	6A	SP Med. Delay, Black	302-1106-ND	11.48	10.91	10.56	9.76	104-PR-6A
	7A	SP Med. Delay, Black	302-1107-ND	11.48	10.91	10.56	9.76	104-PR-7A
	8A	SP Med. Delay, Black	302-1108-ND	11.48	10.91	10.56	9.76	104-PR-8A
	10A	SP Med. Delay, Black	302-1109-ND	11.48	10.91	10.56	9.76	104-PR-10A
Thermal Breaker - Vertical PC Mount								
5	0.1A	SP Med. Delay, Black	302-1112-ND	11.48	10.91	10.56	9.76	104-PR3-0.1A
	0.2A	SP Med. Delay, Black	302-1113-ND	11.48	10.91	10.56	9.76	104-PR3-0.2A
	0.3A	SP Med. Delay, Black	302-1114-ND	11.48	10.91	10.56	9.76	104-PR3-0.3A
	0.4A	SP Med. Delay, Black	302-1115-ND	11.48	10.91	10.56	9.76	104-PR3-0.4A
	0.5A	SP Med. Delay, Black	302-1116-ND	11.48	10.91	10.56	9.76	104-PR3-0.5A
	0.6A	SP Med. Delay, Black	302-1117-ND	11.48	10.91	10.56	9.76	104-PR3-0.6A
	0.7A	SP Med. Delay, Black	302-1118-ND	11.48	10.91	10.56	9.76	104-PR3-0.7A
	0.8A	SP Med. Delay, Black	302-1119-ND	11.48	10.91	10.56	9.76	104-PR3-0.8A
	1A	SP Med. Delay, Black	302-1120-ND	11.48	10.91	10.56	9.76	104-PR3-1A
	1.2A	SP Med. Delay, Black	302-1121-ND	11.48	10.91	10.56	9.76	104-PR3-1.2A
	1.5A	SP Med. Delay, Black	302-1122-ND	11.48	10.91	10.56	9.76	104-PR3-1.5A
	1.8A	SP Med. Delay, Black	302-1123-ND	11.48	10.91	10.56	9.76	104-PR3-1.8A
	2A	SP Med. Delay, Black	302-1125-ND	11.48	10.91	10.56	9.76	104-PR3-2A
	2.5A	SP Med. Delay, Black	302-1124-ND	11.48	10.91	10.56	9.76	104-PR3-2.5A
	3A	SP Med. Delay, Black	302-1126-ND	11.48	10.91	10.56	9.76	104-PR3-3A
	5A	SP Med. Delay, Black	302-1130-ND	11.48	10.91	10.56	9.76	104-PR3-5A
	6A	SP Med. Delay, Black	302-1131-ND	11.48	10.91	10.56	9.76	104-PR3-6A
	7A	SP Med. Delay, Black	302-1132-ND	11.48	10.91	10.56	9.76	104-PR3-7A
	8A	SP Med. Delay, Black	302-1133-ND	11.48	10.91	10.56	9.76	104-PR3-8A
	10A	SP Med. Delay, Black	302-1134-ND	11.48	10.91	10.56	9.76	104-PR3-10A
Magnetic Breaker - Horizontal PC Mount								
6	0.01A	SP Fast Switching Type	302-1137-ND	24.93	23.68	22.94	18.70	808-H-0.01A
	0.02A	SP Fast Switching Type	302-1138-ND	24.93	23.68	22.94	18.70	808-H-0.02A
	0.03A	SP Fast Switching Type	302-1139-ND	24.93	23.68	22.94	18.70	808-H-0.03A
	0.04A	SP Fast Switching Type	302-1140-ND	24.93	23.68	22.94	18.70	808-H-0.04A
	0.05A	SP Fast Switching Type	302-1141-ND	24.93	23.68	22.94	18.70	808-H-0.05A
	0.08A	SP Fast Switching Type	302-1143-ND	24.93	23.68	22.94	18.70	808-H-0.08A
	0.1A	SP Fast Switching Type	302-1144-ND	21.59	20.51	19.86	16.19	808-H-0.1A
	0.2A	SP Fast Switching Type	302-1145-ND	21.59	20.51	19.86	16.19	808-H-0.2A
	0.3A	SP Fast Switching Type	302-1146-ND	21.59	20.51	19.86	16.19	808-H-0.3A
	0.4A	SP Fast Switching Type	302-1147-ND	21.59	20.51	19.86	16.19	808-H-0.4A
	0.5A	SP Fast Switching Type	302-1148-ND	21.59	20.51	19.86	16.19	808-H-0.5A
	0.6A	SP Fast Switching Type	302-1149-ND	21.59	20.51	19.86	16.19	808-H-0.6A
	0.7A	SP Fast Switching Type	302-1150-ND	21.59	20.51	19.86	16.19	808-H-0.7A
	0.8A	SP Fast Switching Type	302-1151-ND	21.59	20.51	19.86	16.19	808-H-0.8A
	0.9A	SP Fast Switching Type	302-1152-ND	21.59	20.51	19.86	16.19	808-H-0.9A
	1A	SP Fast Switching Type	302-1153-ND	21.59	20.51	19.86	16.19	808-H-1A
	1.2A	SP Fast Switching Type	302-1154-ND	21.59	20.51	19.86	16.19	808-H-1.2A
	1.5A	SP Fast Switching Type	302-1155-ND	21.59	20.51	19.86	16.19	808-H-1.5A
	2A	SP Fast Switching Type	302-1157-ND	21.59	20.51	19.86	16.19	808-H-2A
	2.5A	SP Fast Switching Type	302-1158-ND	21.59	20.51	19.86	16.19	808-H-2.5A
	3A	SP Fast Switching Type	302-1159-ND	21.59	20.51	19.86	16.19	808-H-3A
	3.25A	SP Fast Switching Type	302-1160-ND	21.59	20.51	19.86	16.19	808-H-3.25A
	4A	SP Fast Switching Type	302-1161-ND	21.59	20.51	19.86	16.19	808-H-4A
	4.5A	SP Fast Switching Type	302-1162-ND	21.59	20.51	19.86	16.19	808-H-4.5A
	5A	SP Fast Switching Type	302-1163-ND	21.59	20.51	19.86	16.19	808-H-5A

* **SP** (single pole) and **DP** (double pole).

Panasonic® Thermal Cutoffs (TCO) / Thermal-Links — EYP Type

Features: • **Small and Insulation Type:** TCO is compact and insulated, featuring quick temperature response, and mountable in a small space without insulation or protection • **High Reliability:** TCO opens reliably when the equipment becomes abnormal, and is not resettable • **Solid Structure:** Unique formed lead provides reliable TCO connection and provides easy assembly handling. (Axial lead type only) • **Non-Cadmium Alloy:** TCO uses specially selected non-cadmium alloy • **Thin Type:** Thickness is less than 1mm. Available for spot welding.

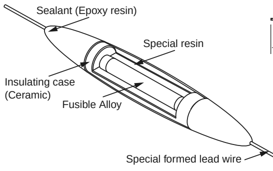
Recommended Applications: Transformers, solenoids, ventilation fan, electric fans, small electric motors, dryers, gas home appliances, fluorescent lights, electric shavers, adaptors, heating devices, ICs, batteries, etc. The TCO can be used for overheating protection.

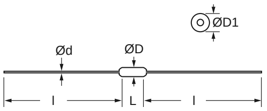
Approved Safety Standards:

▽ (Japan): 33-xxx (see chart)
UL (USA): E60271
CSA (Canada): LR67163

VDE (Germany): N Series: 4811.6-1171-0001; F Series: 4811.6-4510-1026; E Series: 4811.6-4510-1030
BEAB (U.K.): N Series: C0736; F Series: C0738; E Series: C0739

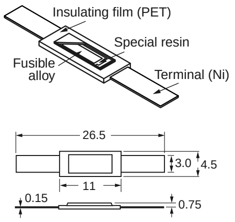
Series N, F and E Axial Lead Type





Dimensions (mm)	L	øD	øD1	l	ød
N Series	9.0	2.5	3.0	38	0.60
F Series	6.0	1.85	2.2	38	0.53
E Series	5.0	1.5	1.8	38	0.53

Series MT — Thin Type



Type No. of Approved Standards	Rated Functioning Temp.*1 (°C)	Functioning Temp.*2 (°C)	Maximum Operating Temp.*3 (°C)	Holding Temp.*4 (°C)	Maximum Temp. (°C)*5		Electrical Rating			Approved Safety Standards					Digi-Key Part No.	Price Each			Panasonic Part No.
					UL, VDE, BEAB	CSA	AC/ DC	Amp (A)	Volt (V)	▽	UL	CSA	VDE	BEAB		1	10	100	
N Series																			
N082	86	82±2	52 60 45	56 60 50	200	150	AC AC DC	3.0 2.0 4.0	125 250 50	33-627	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10917-ND	.45	.41	.38	EYP-2BN082
N088	92	88±2	56 62 47	60 65 52	200		AC AC DC	3.0 2.0 4.0	125 250 50	33-627	○ ○ ○	— — —	— — —	— — —	P10918-ND	.45	.41	.38	EYP-2BN088
N098	102	98±2	65 75 55	70 76 60	200	150	AC AC DC	3.0 2.0 4.0	125 250 50	33-632	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10919-ND	.45	.41	.38	EYP-2BN098
N109	114	110±3	76 80 65	86 90 74	200	150	AC AC DC	3.0 2.0 5.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10920-ND	.45	.41	.38	EYP-2BN109
N110	115	110^{+3}_{-2}	76 80 65	86 90 74	200		AC AC DC	3.0 2.0 5.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— — —	P10921-ND	.45	.41	.38	EYP-2BN110
N124	130	126±2	90 94 80	105 105 94	200	180	AC AC DC	3.0 2.0 5.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10922-ND	.45	.41	.38	EYP-2BN124
N126	133	128±2	92 96 82	108 108 96	200	180	AC AC DC	3.0 2.0 5.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10923-ND	.45	.41	.38	EYP-2BN126
N135	140	136±2	99 103 80	115 115 90	200	180	AC AC DC	3.0 2.0 6.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10924-ND	.45	.41	.38	EYP-2BN135
N143	145	141±2	105 110 80	115 120 90	200	180	AC AC DC	3.0 2.0 6.0	125 250 50	33-621	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10925-ND	.45	.41	.38	EYP-2BN143
N163	168	163^{+4}_{-2}	120 120 90	130 135 100	200		AC AC DC	3.0 2.0 6.0	125 250 50	33-623	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10926-ND	.45	.41	.38	EYP-2BN163
N183	188	183^{+4}_{-2}	120 120 120	140 140 130	200		AC AC DC	3.0 2.0 6.0	125 250 50	33-625	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10927-ND	.45	.41	.38	EYP-2BN183
F Series																			
F102	102	98±2	70 75 55	74 76 60	200	150	AC AC DC	2.0 1.0 3.5	125 250 50	33-632	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10911-ND	.45	.41	.38	EYP-1BF102
F115	115	110^{+3}_{-2}	76 80 70	90 90 80	200	150	AC AC DC	2.0 1.0 4.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10912-ND	.45	.41	.38	EYP-1BF115
F130	130	126±2	90 94 74	105 105 90	200	180	AC AC DC	2.0 1.0 4.5	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10913-ND	.45	.41	.38	EYP-1BF130
F133	133	128±2	92 96 76	108 108 92	200	180	AC AC DC	2.0 1.0 4.5	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10914-ND	.45	.41	.38	EYP-1BF133
F139	139	135±3	99 103 80	115 115 95	200	180	AC AC DC	2.0 1.0 5.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10915-ND	.45	.41	.38	EYP-1BF139
F168	168	163^{+4}_{-2}	120 120 95	135 142 110	200		AC AC DC	2.0 1.0 5.0	125 250 50	33-623	○ ○ ○	○ ○ ○	○ ○ ○	— — —	P10916-ND	.45	.41	.38	EYP-1BF168
E Series																			
E102	102	98±2	70 75 65	78 80 70	200	150	AC AC DC	1.5 0.5 3.0	125 250 50	33-632	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10906-ND	.45	.41	.38	EYP-05BE102
E115	115	110±2	76 80 70	93 95 84	200	150	AC AC DC	1.5 0.5 3.0	125 250 50	33-634	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10907-ND	.45	.41	.38	EYP-05BE115
E130	130	126±2	90 94 83	112 112 102	200	180	AC AC DC	1.5 0.5 3.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10908-ND‡	.45	.41	.38	EYP-05BE130
E133	133	128±2	92 96 85	115 115 105	200	180	AC AC DC	1.5 0.5 3.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10909-ND	.45	.41	.38	EYP-05BE133
E139	139	135±3	99 103 92	120 120 110	200	180	AC AC DC	1.5 0.5 3.0	125 250 50	33-619	○ ○ ○	○ ○ ○	○ ○ ○	— ○ —	P10910-ND‡	.45	.41	.38	EYP-05BE139
MT Series †																			
MT092 MT092A MT092B	92	89±2	55	60	150		DC	2.0	50	—	○	—	—	—	P10928-ND P10929-ND P10930-ND	.89 .89 .89	.82 .82 .82	.75 .75 .75	EYP-2MT92 EYP-2MT92A EYP-2MT92B
MT098 MT098A MT098B	98	94±2	60	65	150		DC	2.0	50	—	○	—	—	—	P10931-ND P10932-ND P10933-ND	.89 .89 .89	.82 .82 .82	.75 .75 .75	EYP-2MT98 EYP-2MT98A EYP-2MT98B
MT102 MT102A MT102B	102	98±2	65	70	150		DC	2.0	50	—	○	—	—	—	P10934-ND P10935-ND P10936-ND	.89 .89 .89	.82 .82 .82	.75 .75 .75	EYP-2MT102 EYP-2MT102A EYP-2MT102B

NOTES:

1. **Rated Functioning Temperature** (UL: TF, CSA, VDE, BEAB: Tf). The temperature at which a TCO changes its state of conductivity to open circuit with loading detection current only. Tolerance: ▽ : ±7°C; UL, CSA, VDE, BEAB: 0 / -10°C
2. **Functioning Temperature** (Fusing-off temperature): The functioning temperature at which a TCO changes its state of conductivity to open circuit in the ambient air oven which increases temperature by 1°C per minute and with loading the detective current 0.1A or less.
3. **Maximum Operating Temperature:** The maximum temperature at which a TCO can be maintained while conducting rated current for 3000 h.
4. **Holding Temperature** (UL: TH, CSA: Th, VDE, BEAB: Tc). The maximum temperature at which a TCO can be maintained while conducting rated current for 168h which will not cause a change in state of conductivity to open circuit.
5. **Maximum Temperature Limit** (UL: TM, CSA, VDE, BEAB: Tm) The maximum temperature at which a TCO can maintain its mechanical and electrical properties without closing again for 10 minutes after a TCO has changed its state of conductivity.

‡ P10908-ND and P10910-ND are additionally approved for UL, on DC50V 5A.
† Std. DC Resistance is <15mΩ, A = <16mΩ, B = <17mΩ.

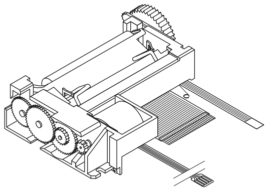
Panasonic Thermal Printers

THERMAL PRINTERS:
Use a non-impact method for printing. This is accomplished by using chemically treated thermal paper. Chemicals suspended in the paper react to heat generated by the print head to form dots that make up the characters or image. Panasonic offers a thermal serial printer and a thermal line printer. The serial printer uses a moving head that prints one character at a time, it is most suited for character printing, although the high speed model does support graphics. Its main benefit is low cost. Line printers have a fixed print head, printing one line at a time. It is suited for both high speed character and graphic printing. Its main benefits are higher definition graphic printing along with fewer moving parts.

INTERFACE BOARDS:
Acts as an interface between user's system and the thermal printer. Monitors temperature and paper status. Controls motor(s) and thermal head energy for optimal printing. Generates built in test pattern. Accepts both simplified Centronics or RS-232C (TTL only) interface.

NOTE: Not recommended for new design. Discontinued by manufacture.

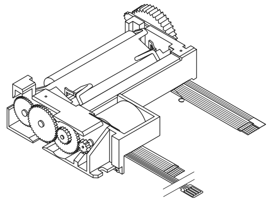
Fig. 1 – Line Printer



EPL1600 Series
- Compact size, light weight
- High resolution (8 dots/mm), high printing speed
- Operatable by batteries (4.2 to 8.5 volts)
- Low current consumption
- Semi-auto paper loading function

Note: Available in 58, 80, and 112mm paper widths

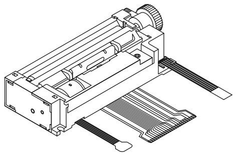
Fig. 2 – Line Printer



EPL1700 Series
- Compact size, light weight
- High resolution (8 dots/mm), high printing speed
- Semi-auto paper loading function
- Thick (label paper) paper printing possible

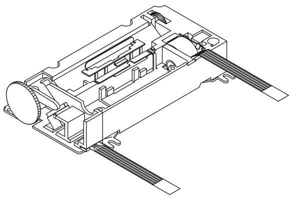
Note: Available in 60, 80, and 112mm paper widths

Fig. 3 – Miniature Line Printer



EPL1802S2 Series
- High speed printing
- Very small size
- Very light weight (40g)
- Low power consumption

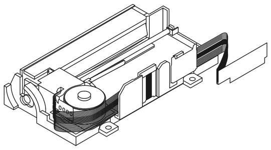
Fig. 4 – Compact Line Printer



EPL1900 Series
- Compact size
- Low weight (55g)
- High reliability
- Easy maintenance

Note: Available with paper cutter (PT1034-ND)

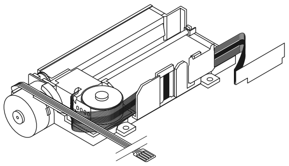
Fig. 5 – Serial Printer



EPT2000L Series
- High speed printing
- Uni-directional character printing (L to R)
- 8 vertical dots per line
- Low noise, less than 55dB
- Compact size, lightweight
- SIngle 5 volt power source (battery operation)
- Low cost

Note: Available in 58, 80, and 112mm paper widths

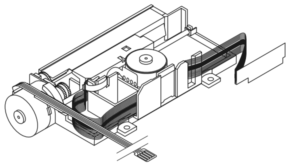
Fig. 6 – Serial Printer



EPT2000H Series
- High speed printing
- Suitable for graphic printing
- Bi-directional character printing
- 8 vertical dots per line
- Uni-directional graphic printing (L to R)
- Low noise, less than 55dB
- Compact size, lightweight
- Single 5 volt power source (battery operation)
- Low cost

Note: Available in 58, 80, and 112mm paper widths

Fig. 7 – High Speed Serial Printer



EPT2214S2H Series
- Character printing only
- 8 vertical dots per line
- High speed printing 140 cps
- High reliability 2 million lines
- Compact size lightweight
- Single 5 volt power source (battery operation)

Fig.	Print Method	Paper Width	Head Volt	Logic Volt	Print Speed (max)	Char. / line	Head life	Size (mm)	Digi-Key Part No.	Price Each 1	10	100	250	Panasonic Part No.
1	Line	58mm	5V	5V	450 dots-line/s max	24/48	5x10^7 pulse/50 km	79x51x20	PT1000-ND	107.72	99.33	92.24	86.43	EPL1601S2
1	Line	80mm	5V	5V	400 dots-line/s max	36/72	5x10^7 pulse/50 km	101x52x20	PT1001-ND	127.76	117.81	109.40	102.51	EPL1602S3
1	Line	112mm	5V	5V	360 dots-line/s max	52/104	5x10^7 pulse/50 km	147x54x20	PT1002-ND	147.80	136.29	126.56	118.59	EPL1603S4
2	Line	80mm	24V	5V	576 dots-line/s max	36/72	5x10^7 pulse/50 km	101x52x20	PT1004-ND	99.37	91.63	85.09	79.73	EPL1702S3
2	Line	112mm	24V	5V	864 dots-line/s max	54/108	5x10^7 pulse/50 km	147x54x20	PT1005-ND	119.41	110.11	102.25	95.81	EPL1703S4
3	Line	58mm	5V	5V	450 dots-line/s max	24/48	1x10^8 pulse/50km	72x32x15	PT1032-ND	120.24	110.88	102.96	96.48	EPL1802S2
4	Line	58mm	5V	5V	300 dots-line/s max	24/36	5x10^7 pulse/30km	82x41x15.8	PT1033-ND	78.49	72.38	67.21	62.98	EPL1902S2C
4	Line	58mm	5V	5V	300 dots-line/s max	24/36	5x10^7 pulse/30km	82x41x25	PT1034-ND	75.15	69.30	64.35	60.30	EPL1904S2C
5	Serial	58mm	5V	5V	70cps	24	5x10^5 pulse/50 MCTF	87x43x24	PT1006-ND	61.79	56.98	52.91	49.58	EPT2014S2L
5	Serial	80mm	5V	5V	70cps	32	5x10^5 pulse/50 MCTF	111x43x24	PT1007-ND	65.13	60.06	55.77	52.26	EPT2019S3L
5	Serial	112mm	5V	5V	70cps	53	5x10^5 pulse/50 MCTF	143x43x24	PT1008-ND	50.38	46.47	43.15	40.43	EPT2025S4L
6	Serial	80mm	5V	5V	70cps	32	5x10^5 pulse/50 MCTF	124x43x24	PT1010-ND	56.23	51.86	48.15	45.12	EPT2019S3H
6	Serial	112mm	5V	5V	70cps	53	5x10^5 pulse/50 MCTF	156x43x24	PT1011-ND	58.17	53.64	49.81	46.68	EPT2025S4H
7	Serial	58mm	5V	5V	140cps	24	2x10^6 pulse/50 MCTF	100x43x24	PT1012-ND	55.76	51.43	47.75	44.75	EPT2214S2H

Interface Boards

EPLR1601/EPLR1701 Series
- Supports EPLR1600/EPLR1700 series
- 364 built in character fonts
- ASCII JIS C6220 character codes
- Automatic loading
- Marker detection
- Bar code printing (UPC, JAN, EAN, CODE39, ITF, NW7)
- Operates on 5 volts EPLR1601, 24 volts for EPLR1701

EPTR2002/EPTR2102 Series
- Supports EPT2000 series (not EPT2214S2H)
- 353 built in character fonts
- ASCII JIS C6220 character codes
- Operates on 5 volts

Description	Digi-Key Part No.	Price Each 1	10	100	250	Panasonic Part No.
Interface Board for EPL1600 Series	PT1013-ND	161.57	149.00	138.36	129.65	EPLR1601
Interface Board for EPL1700 Series	PT1014-ND	161.57	149.00	138.36	129.65	EPLR1701
Interface Board for EPL1900 Series	PT1035-ND	208.75	192.50	178.75	167.50	EPLZR1901E
Interface Board for EPT2000L Series	PT1015-ND	120.24	110.88	102.96	96.48	EPTR2002
Interface Board for EPT2000H Series	PT1016-ND	144.27	133.05	123.54	115.77	EPTR2102
Power Cable for EPLR1601/1701 Interface Boards	PT1017-ND	8.02	7.40	6.87	6.44	EPLSRDSP303
Centronics Cable for EPLR1601/1701 Interface Boards	PT1018-ND	7.52	6.93	6.44	6.03	EPLSRDSP304
RS232 Cable for EPLR1601/1701 Interface Boards	PT1019-ND	5.85	5.39	5.01	4.69	EPLSRDSP305
Power Cable for EPTR2000L/H Interface Boards	PT1020-ND	2.35	2.18	2.02	1.89	EPTSRDSP279
Centronics Cable for EPTR2000L/H Interface Boards	PT1021-ND	5.90	5.44	5.05	4.74	EPLSRDSP276
RS232 Cable for EPT2000L/H Interface Boards	PT1022-ND	3.52	3.25	3.02	2.83	EPLSRDSP277
EPLR1601 CPU Replacement Chip for User Designed Interfaces	PT1023-ND	24.80	22.87	21.24	19.90	EPLSAR1601
EPLR1701 CPU Replacement Chip for User Designed Interfaces	PT1024-ND	24.80	22.87	21.24	19.90	EPLSAR1701
EPLR1601/1701 Gate-array for User Designed Interfaces	PT1025-ND	10.44	9.63	8.94	8.38	EPLASR1101

NAKAGAWA MFG. (USA), INC. Thermal Paper

Quality thermal paper available in 58, 60, 80 and 112mm paper widths.

SPECIFICATIONS:

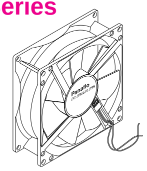
Paper core: 12mm
Paper length: 30M
Outer diameter: 55mm
End mark: red, 50cm from end of roll.

Paper weight: 65um
Print life: greater than 5 years when stored in a dark location, 25°C or less, 65% R.H. max.

Description	Digi-Key Part No.	Price Each 1	10	100	250	Nakagawa Part No.
58mm Thermal Printer Paper	PT1028-ND	2.08	1.66	1.46	1.39	EPT-58
60mm Thermal Printer Paper	PT1029-ND	2.43	1.94	1.70	1.62	EPL-60
80mm Thermal Printer Paper	PT1030-ND	2.73	2.18	1.91	1.83	EPT-80
112mm Thermal Printer Paper	PT1031-ND	2.93	2.34	2.05	1.96	EPL-112

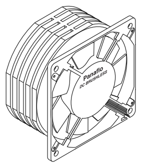
Panasonic® DC Fans FBA & FBL Series

FBA Series



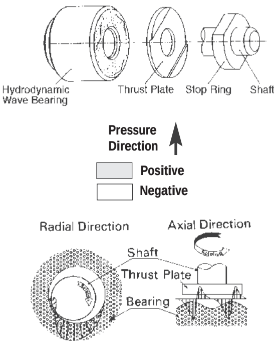
FBA fans force air out in a "funnel" type pattern, and are ideal when cooling a specific area that is surrounded by numerous components with minimum ventilation available.

FBL Series



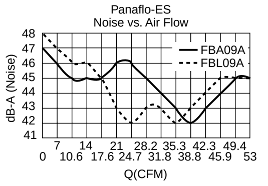
Louvered design increases air flow and decreases turbulent noise at standard rating conditions.

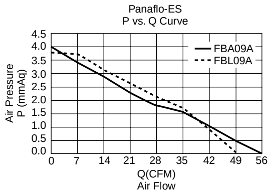
Hydro-Wave Bearing Technology Fans



Bearing Structure and Pressure Distribution

Panaflo's unique hydro-wave bearing (HWB) technology addresses the traditional weakness of sleeve bearings...axial friction. By utilizing our unique HWB system, the thrust plate "floats" on a circulating film of oil greatly reducing the axial friction and the bearings deterioration. The HWB pattern on the bearing virtually eliminates contact with the thrust plate which is depicted above.





Operating Voltage (VDC)		Dim. (mm) Sq.xThk.	Input Power (W)	Max. Air Flow (CFM)	Max. Air Pressure (mmH_2O)	Max. Noise (dB-A)	Digi-Key Part No.	Price Each					Panasonic Part No.	Finger Guards	Price Each
Nom.	Range							1	5	10	50	100			
FBA Series Hydro-Wave Bearing (HWB) Fans															
12	7-13.8	60 x 15	1.04	12.0	2.77	23.5	P9724-ND	12.50	10.75	8.33	7.70	7.15	FBA06T12L	CR221-ND	.71
12	7-13.8	60 x 15	1.78	16.6	4.75	32.0	P9725-ND	12.50	10.75	8.33	7.70	7.15	FBA06T12H	CR221-ND	.71
24	14-27.6	60 x 15	1.34	12.0	2.77	23.5	P9726-ND	12.50	10.75	8.33	7.70	7.15	FBA06T24L	CR221-ND	.71
24	14-27.6	60 x 15	1.99	16.6	4.75	32.0	P9727-ND	12.50	10.75	8.33	7.70	7.15	FBA06T24H	CR221-ND	.71
12	7-13.5	60 x 25.5	1.32	12.0	3.1	24.0	P9728-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12L1A	CR221-ND	.71
12	7-13.5	60 x 25.5	1.32	12.0	3.1	24.0	P11034-ND	10.13	8.71	6.75	6.24	5.79	FBA06A12L1BX	CR221-ND	.71
12	7-13.5	60 x 25.5	1.56	16.6	—	28.0	P9767-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12M1A	CR221-ND	.71
12	7-13.5	60 x 25.5	2.04	16.6	5.21	32.0	P9729-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12H1A	CR221-ND	.71
12	7-13.5	60 x 25.5	2.04	16.6	5.21	32.0	P11033-ND	10.13	8.71	6.75	6.24	5.79	FBA06A12H1BX	CR221-ND	.71
12	7-13.8	60 x 25	3.24	19.7	4.7	42.0	P9758-ND	11.88	10.22	7.92	7.31	6.79	FBA06A12U1A	CR221-ND	.71
24	14-27.6	60 x 25.5	1.68	12.0	3.1	24.0	P9730-ND	11.88	10.22	7.92	7.31	6.79	FBA06A24L1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.16	16.6	—	28.0	P9768-ND	11.88	10.22	7.92	7.31	6.79	FBA06A24M1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.52	16.6	5.21	32.0	P9731-ND	11.88	10.22	7.92	7.31	6.79	FBA06A24H1A	CR221-ND	.71
12	7-13.8	80 x 15	0.94	21.9	1.55	21.5	P9732-ND	12.50	10.75	8.33	7.70	7.15	FBA08T12L	CR180-ND	.85
12	7-13.8	80 x 15	2.40	33.6	3.2	33.5	P9733-ND	12.50	10.75	8.33	7.70	7.15	FBA08T12H	CR180-ND	.85
24	14-27.6	80 x 15	1.13	21.9	1.55	21.5	P9734-ND	12.50	10.75	8.33	7.70	7.15	FBA08T24L	CR180-ND	.85
24	14-27.6	80 x 15	2.64	33.6	3.2	33.5	P9735-ND	12.50	10.75	8.33	7.70	7.15	FBA08T24H	CR180-ND	.85
12	7-13.5	80 x 25.5	0.84	24.0	1.57	21.0	P9736-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12L1A	CR180-ND	.85
12	7-13.5	80 x 25.5	0.84	24.0	1.57	21.0	P11037-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12L1AZ	CR180-ND	.85
12	7-13.5	80 x 25.5	1.50	32.1	2.51	28.0	P9737-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12M1A	CR180-ND	.85
12	7-13.5	80 x 25.5	1.50	32.1	2.51	28.0	P11038-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12M1BS	CR180-ND	.85
12	7-13.5	80 x 25.5	1.50	32.1	2.51	28.0	P11039-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12M1BX	CR180-ND	.85
12	7-13.5	80 x 25.5	2.10	39.6	3.78	32.0	P9738-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12H1A	CR180-ND	.85
12	7-13.8	80 x 25	4.32	46.9	3.8	44.0	P9759-ND	11.88	10.22	7.92	7.31	6.79	FBA08A12U1A	CR180-ND	.85
24	14-27.6	80 x 25.5	1.32	24.0	1.57	21.0	P9739-ND	11.88	10.22	7.92	7.31	6.79	FBA08A24L1A	CR180-ND	.85
24	14-27.6	80 x 25.5	1.80	32.1	2.51	28.0	P9740-ND	11.88	10.22	7.92	7.31	6.79	FBA08A24M1A	CR180-ND	.85
24	14-27.6	80 x 25.5	2.52	39.6	3.78	32.0	P9741-ND	11.88	10.22	7.92	7.31	6.79	FBA08A24H1A	CR180-ND	.85
12	7-13.5	80 x 25.5	2.10	39.6	3.78	32.0	P11035-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12H1AZ	CR180-ND	.85
12	7-13.5	80 x 25.5	2.10	39.6	3.78	32.0	P11036-ND	10.13	8.71	6.75	6.24	5.79	FBA08A12H1BS	CR180-ND	.85
12	7-13.5	92 x 25.5	1.32	42.7	2.3	27.0	P9742-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12L1A	CR220-ND	.92
12	7-13.5	92 x 25.5	1.32	42.7	2.3	27.0	P11043-ND	10.13	8.71	6.75	6.24	5.79	FBA09A12L1BX	CR220-ND	.92
12	7-13.5	92 x 25.5	1.80	48.0	3.0	30.0	P9743-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12M1A	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P9744-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12H1A	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P11040-ND	10.13	8.71	6.75	6.24	5.79	FBA09A12H1AZ	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P11041-ND	10.75	9.25	7.17	6.62	6.15	FBA09A12H1BO	CR220-ND	.92
12	7-13.5	92 x 25.5	2.70	56.9	3.98	35.0	P11042-ND	10.13	8.71	6.75	6.24	5.79	FBA09A12H1BX	CR220-ND	.92
12	7-13.5	92 x 25.5	5.16	68.8	5.0	43.0	P11044-ND	10.75	9.25	7.17	6.62	6.15	FBA09A12U1BO	CR220-ND	.92
12	7-13.8	92 x 25	6.60	65.6	4.6	47.0	P9760-ND	11.88	10.22	7.92	7.31	6.79	FBA09A12U1A	CR220-ND	.92
24	14-27.6	92 x 25.5	1.92	42.7	2.3	27.0	P9745-ND	11.88	10.22	7.92	7.31	6.79	FBA09A24L1A	CR220-ND	.92
24	14-27.6	92 x 25.5	2.64	48.0	3.0	30.0	P9746-ND	11.88	10.22	7.92	7.31	6.79	FBA09A24M1A	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P9747-ND	11.88	10.22	7.92	7.31	6.79	FBA09A24H1A	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P11045-ND	10.13	8.71	6.75	6.24	5.79	FBA09A24H1AZ	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P11046-ND	10.13	8.71	6.75	6.24	5.79	FBA09A24H1BS	CR220-ND	.92
24	14-27.6	92 x 25.5	3.36	56.9	3.98	35.0	P11047-ND	10.13	8.71	6.75	6.24	5.79	FBA09A24H1BX	CR220-ND	.92
12	7-13.8	120 x 38	2.16	68.9	3.3	30.0	P9748-ND	21.13	18.17	14.08	13.00	12.08	FBA12G12L1A	CR210-ND	1.79
12	7-13.8	120 x 38	4.08	86.5	4.8	35.5	P9749-ND	21.13	18.17	14.08	13.00	12.08	FBA12G12M1A	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P9750-ND	21.13	18.17	14.08	13.00	12.08	FBA12G12H1A	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P11048-ND	18.50	15.91	12.33	11.39	10.58	FBA12G12H1AZ	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P11049-ND	18.50	15.91	12.33	11.39	10.58	FBA12G12H1BS	CR210-ND	1.79
12	7-13.5	120 x 38	5.52	103.8	6.8	41.5	P11050-ND	18.50	15.91	12.33	11.39	10.58	FBA12G12H1BX	CR210-ND	1.79
12	7-13.8	120 x 38	7.8	114.7	6.2	50.0	P9761-ND	24.45	21.03	16.30	15.05	13.98	FBA12G12U1A	CR210-ND	1.79
24	14-27.6	120 x 38	2.64	68.9	3.3	30.0	P9751-ND	21.13	18.17	14.08	13.00	12.08	FBA12G24L1A	CR210-ND	1.79
24	14-27.6	120 x 38	3.84	86.5	4.8	35.5	P9752-ND	21.13	18.17	14.08	13.00	12.08	FBA12G24M1A	CR210-ND	1.79
24	14-27.6	120 x 38	5.52	103.8	6.8	41.5	P9753-ND	21.13	18.17	14.08	13.00	12.08	FBA12G24H1A	CR210-ND	1.79
24	14-27.6	120 x 38	5.52	103.8	6.8	41.5	P11080-ND	18.50	15.91	12.33	11.39	10.58	FBA12G24H1BX	CR210-ND	1.79
FBL Series Hydro-Wave Bearing (HWB) Fans															
12	7-13.8	60 x 25.5	1.68	14.83	2.1	29.0	P10890-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12L1A	CR221-ND	.71
12	7-13.8	60 x 25.5	2.04	13.06	3.0	32.0	P10891-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12M1A	CR221-ND	.71
12	7-13.8	60 x 25.5	2.64	14.83	4.1	36.0	P10892-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12H1A	CR221-ND	.71
12	7-13.5	60 x 25.5	3.24	15.89	4.7	42.0	P10893-ND	12.50	10.75	8.33	7.70	7.15	FBL06A12U1A	CR221-ND	.71
24	14-27.6	60 x 25.5	1.68	14.83	2.1	29.0	P11014-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24L1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.04	13.06	3.0	32.0	P11015-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24M1A	CR221-ND	.71
24	14-27.6	60 x 25.5	2.64	14.83	4.1	36.0	P11016-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24H1A	CR221-ND	.71
24	14-27.6	60 x 25.5	3.24	15.89	4.7	42.0	P11017-ND	12.50	10.75	8.33	7.70	7.15	FBL06A24U1A	CR221-ND	.71
12	7-13.8	80 x 25.5	1.20	17.30	1.1	26.0	P10894-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12L1A	CR180-ND	.85
12	7-13.8	80 x 25.5	2.04	24.71	2.0	33.0	P10895-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12M1A	CR180-ND	.85
12	7-13.8	80 x 25.5	3.00	30.01	2.9	39.0	P10896-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12H1A	CR180-ND	.85
12	7-13.8	80 x 25.5	4.32	35.31	4.0	42.0	P10897-ND	12.50	10.75	8.33	7.70	7.15	FBL08A12U1A	CR180-ND	.85
12	7-13.5	80 x 25.5	4.32	35.31	4.7	42.0	P11082-ND	13.13	11.29	8.75	8.08	7.50	FBL08A12U1BX	CR180-ND	.85
24	14-27.6	80 x 25.5	1.20	17.30	1.1	26.0	P11018-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24L1A	CR180-ND	.85
24	14-27.6	80 x 25.5	2.04	24.71	2.0	33.0	P11019-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24M1A	CR180-ND	.85
24	14-27.6	80 x 25.5	3.00	30.00	2.9	39.0	P11020-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24H1A	CR180-ND	.85
24	14-27.6	80 x 25.5	4.32	35.30	4.0	42.0	P11021-ND	12.50	10.75	8.33	7.70	7.15	FBL08A24U1A	CR180-ND	.85
12	7-13.8	92 x 25.5	1.80	31.77	1.9	33.0	P10898-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12L1A	CR220-ND	.92
12	7-13.8	92 x 25.5	2.40	35.30	2.3	36.0	P10899-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12M1A	CR220-ND	.92
12	7-13.5	92 x 25.5	3.48	45.89	3.3	40.0	P10900-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12H1A	CR220-ND	.92
12	7-13.5	92 x 25.5	3.48	45.9	3.3	40.0	P11083-ND	13.13	11.29	8.75	8.08	7.50	FBL09A12H1BX	CR220-ND	.92
12	7-13.8	92 x 25.5	6.60	54.72	4.4	47.0	P10901-ND	12.50	10.75	8.33	7.70	7.15	FBL09A12U1A	CR220-ND	.92
24	14-27.6	92 x 25.5	1.80	31.77	1.9	33.0	P11022-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24L1A	CR220-ND	.92
24	14-27.6	92 x 25.5	2.40	35.30	2.3	36.0	P11023-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24M1A	CR220-ND	.92
24	14-27.6	92 x 25.5	3.48	45.89	3.3	40.0	P11024-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24H1A	CR220-ND	.92
24	14-27.6	92 x 25.5	6.60	54.70	4.4	47.0	P11025-ND	12.50	10.75	8.33	7.70	7.15	FBL09A24U1A	CR220-ND	.92
12	7-13.8	120 x 38	2.88	52.95	2.3	35.0	P10902-ND	28.25	24.30	18.83	17.39	16.15	FBL12G12L1A	CR210-ND	1.79
12	7-13.8	120 x 38	5.40	67.07	3.6	41.0	P10903-ND	28.25	24.30	18.83	17.39	16.15	FBL12G12M1A	CR210-ND	1.79
12	7-13.8	120 x 38	7.20	81.19	5.2	46.0	P10904-ND	28.25	24.30	18.83	17.39	16.15	FBL12G12H1A	CR210-ND	1.79
12	7-13.8	120 x 38	7.80	86.49	5.5	48.0	P10905-ND	29.38	25.27	19.58	18.08	16.79	FBL12G12U1A	CR210-ND	1.79
24	14-27.6	120 x 38	2.88	52.95	2.3	35.0	P11026-ND	28.25	24.30	18.83	17.39	16.15	FBL12G24L1A	CR210-ND	1.79
24	14-27.6	120 x 38	5.40	67.07	3.6	41.0	P11027-ND	28.25	24.30	18.83	17.39	16.15	FBL12G24M1A	CR210-ND	1.79
24	14-27.6	120 x 38	7.20	81.19	5.2	46.0	P11028-ND	28.25	24.30	18.83	17.39	16.15	FBL12G24H1A	CR210-ND	1.79
24	14-27.6	120 x 38	7.80	86.49	5.5	48.0	P11029-ND	29.38	25.27	19.58	18.08	16.79	FBL12G24U1A	CR210-ND	1.79

Manufacturer Part Number Ending Code:
AZ - Solid Corner Housing **BS** - Locked Rotor Alarm Sensor **BX** - 2 PPR Speed Sensor (TAC Output) **BO** - Locked Rotor Alarm Sensor & Solid Corner Housing

P11030-ND	Lead Wire Assembly, 3 Conductors	**$.63/1; $13.13/25**
P11031-ND	Lead Wire Assembly, 2 Conductors	**$.63/1; $13.13/25**
A1950-ND	Crimp Contacts, 22-26 AWG	**$.65/10; $3.92/100**
A1948-ND	Connector Housing For Hydro-Wave Fans	**$.28/1; $1.84/10; $9.21/100**

Please Note: Custom Fan Cable Assemblies available upon request.

Panasonic

DC Fans

UDQ Series

- **Operating Temperature:** 0°C to 70°C
- **Operating Humidity:** <85 Rh%

Fig. 1 – Flat Unidirectional

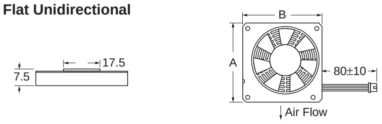


Fig. 2 – Vertical

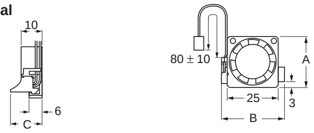
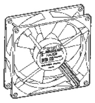


Fig.	Dim. (mm) A B C	Operating Voltage (VDC) Nom.	Range	@ 60° C Current (mA)	Speed (r/min)	Max Air Flow @ 60° C (m3/min.)	(CFM)	Max Air Pressure @ 60° C (Pa)	(in H2O)	Life Expectancy (HRS@ 60°C)	Noise @ 1M dBA	Digi-Key Part No.	Price Each 1	5	10	50	100	Panasonic Part No.
1	34.5 x 34.5 x 7.5	3.1	5.5	145	8,000	0.013	0.46	34	0.14	30,000	40	P9696-ND*	28.13	24.19	18.75	17.31	16.08	UDQFC3E07-P1
	34.5 x 34.5 x 7.5	3.1	5.5	145	8,000	0.013	0.46	34	0.14	30,000	40	P9697-ND†	28.13	24.19	18.75	17.31	16.08	UDQFC3E08-PI
	35 x 35 x 6	5	3.1-5.5	125	8,000	0.012	0.43	32	0.13	30,000	25	P11086-ND§	30.50	26.23	20.33	18.77	17.43	UDQFMKH01-P1
	35 x 35 x 6	5	3.1-5.5	125	8,000	0.012	0.43	32	0.13	30,000	25	P11087-ND§†	30.50	26.23	20.33	18.77	17.43	UDQFMKH01F-P1
	35 x 35 x 7	5	3.1-5.5	175	7,000	0.027	0.96	52	0.21	30,000	28	P11088-ND§	26.25	22.58	17.50	16.16	15.00	UDQFNLH21-P1
	44.5 x 44.5 x 7.5	5	4.5-6	150	4,800	0.022	0.78	24.5	0.10	30,000	26	P9770-ND*	28.13	24.19	18.75	17.31	16.08	UDQFC4E07-PI
	45 x 45 x 7	5	3.1-5.5	225	7,500	0.039	1.4	65	0.26	30,000	33	P11089-ND§	28.13	24.19	18.75	17.31	16.08	UDQFUMH01-P1
	45 x 45 x 10	5	3.1-5.5	200	5,500	0.07	2.5	65	0.26	30,000	33	P11090-ND§	26.75	23.01	17.83	16.47	15.29	UDQFSEH01-P1
2	25 x 25 x 10	5	3.1-5.5	130	13,000	0.1	2	60	0.24	30,000	29	P11084-ND‡	33.88	29.14	22.58	20.85	19.36	UDQFBDB01-P1
	25 x 30 x 15	5	4.5-6	65	6,700	0.023	0.81	9.8	0.04	10,000	21	P9771-ND	28.13	24.19	18.75	17.31	16.08	UDQFB2E02-PI
	30 x 30 x 10	5	3.1-5.5	90	8,500	0.1	3.6	35	0.14	30,000	26	P11085-ND‡	33.88	29.14	22.58	20.85	19.36	UDQFHBB01-P1
	30 x 30 x 14	5	4.5-6	85	5,600	0.062	2.19	13	0.06	30,000	21	P9779-ND	28.13	24.19	18.75	17.31	16.08	UDQFB3E5-1-PI

* Thermal Sensor 10K@ 25°C † TAC Output (2PPR) § Hydrodynamic Bearings ‡ Ball Bearings

DC Fans FBK Series

- Brushless DC Motor
- Low RF and Audible Sound
- Adjustable Speed
- High Efficiency
- Long Life



GENERAL SPECIFICATIONS:

Operating Temperature: -10°C to +70°C. **Bearing System:** Ball bearing. **Insulation Resistance:** 10MΩmin. DC 250V between frame and 1 lead wire. **Dielectric Strength:** AC 500V 1 minute less than 5mA between frame and + lead wire.

- Plastic housing and blade material are PET, UL 94V-0 rating.
- Noise is measured at rated voltage in free air in Semi-Anechoic Chamber of Background Noise 18 dB max.
- Panasonic will guarantee the life time as 40,000 hours with 100% confidence at 25°C continuous operation.

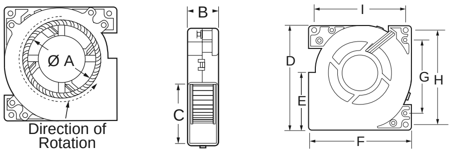
Operating Voltage (VDC) Nom.	Range	Dim. (mm) Sq.xThk.	Input Power (W)	Max Air Flow (CFM)	Max Air Pressure (mmH2O)	Max Noise (dB-A)	Digi-Key Part No.	Price Each 1	5	10	50	100	Panasonic Part No.	Finger Guards	Price Each
5	4.5-6	40 x 20	0.65	3.9	2.5	24.0	P9700-ND	17.50	15.05	11.67	10.77	10.00	FBK04F05L	CR285-ND	.43
5	4.5-6	40 x 20	1.50	6.7	6.6	33.0	P9701-ND	17.50	15.05	11.67	10.77	10.00	FBK04F05H	CR285-ND	.43
12	7-13.8	40 x 20	0.96	3.9	2.5	23.0	P9702-ND	17.50	15.05	11.67	10.77	10.00	FBK04F12L	CR285-ND	.43
12	7-13.8	40 x 20	2.40	6.7	6.6	32.0	P9703-ND	17.50	15.05	11.67	10.77	10.00	FBK04F12H	CR285-ND	.43
12	7-13.8	40 x 20	2.06	9.2	11.5	43.0	P9723-ND	17.50	15.05	11.67	10.77	10.00	FBK04F12U	CR285-ND	.43
24	14-27.6	40 x 20	2.20	6.7	6.6	33.0	P9704-ND	17.50	15.05	11.67	10.77	10.00	FBK04F24H	CR285-ND	.43
24	14-27.6	40 x 20	3.84	9.7	7.5	23.5	P9762-ND	17.50	15.05	11.67	10.77	10.00	FBK04F24U	CR285-ND	.43
12	7-13.5	40 x 20	2.40	6.7	6.6	32.0	P11081-ND*	15.25	13.12	10.17	9.39	8.72	FBK04F12HS	CR285-ND	.43

* Locked rotor alarm sensor

DC Blowers Scirocco Blowers

Blowers With Hydro-Wave Bearing Technology

- **Operating Temp:** -10°C to 60°C.
- **Storage Temp:** -40°C to 75°C.
- **Bearing System:** HWB



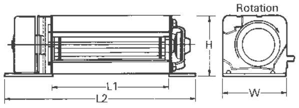
Model Type	Dimensions(mm) A	B	C	D	E	F	G	H	I
FAL-6F	65.8	28.1	55.7	111.4	60.7	107.1	76	99	97
FAL-5F	50	28	37	76	41	76	47	68	68
FAL-3F	33.2	20	26.8	50	26.8	50	29.6	43	43

Operating Voltage (VDC) Nom.	Range	Input Current (mA)	Air Power (W)	Static Flow (m3/min/CFM)	Pressure (mmQa/InchAq)	Acoustic Noise	Digi-Key Part No.	Price Each 1	5	10	50	100	Panasonic Part No.
12	7-13.8	500	6.00	0.65/22.97	18/0.71	45	P9754-ND	32.75	28.17	21.83	20.16	18.72	FAL6F12LH
12	7-13.8	280	3.36	0.53/18.73	11.2/0.44	40	P9755-ND	32.75	28.17	21.83	20.16	18.72	FAL6F12LL
24	14-27.6	295	7.08	0.67/23.7	19.7/0.78	45	P9763-ND	32.75	28.17	21.83	20.16	18.72	FAL6F24LH
24	14-27.6	155	3.72	0.53/18.7	11.5/0.45	40	P9764-ND	32.75	28.17	21.83	20.16	18.72	FAL6F24LL
12	7-13.8	210	2.52	0.3/10.60	10.5/0.41	35	P9756-ND	30.13	25.91	20.08	18.54	17.22	FAL5F12LH
12	7-13.8	145	1.74	0.25/8.83	6.1/0.24	29	P9757-ND	30.13	25.91	20.08	18.54	17.22	FAL5F12LL
24	14-27.6	150	3.5	0.26/9.18	7.2/0.28	40	P9765-ND	30.13	25.91	20.08	18.54	17.22	FAL5F24LH
24	14-27.6	100	2.4	0.20/7.06	4.1/0.16	37.5	P9766-ND	30.13	25.91	20.08	18.54	17.22	FAL5F24LL
5	4.5-6	320	1.6	.09	6.0	34	P9772-ND	24.63	21.18	16.41	15.16	14.08	FAL3F05LL
5	4.5-6	570	2.85	.12	10.0	40	P9773-ND	24.63	21.18	16.41	15.16	14.08	FAL3F05LH
12	7-13.8	170	2.04	.09	6.0	34	P9774-ND	24.63	21.18	16.41	15.16	14.08	FAL3F12LL
12	7-13.8	270	3.24	.12	10.0	40	P9775-ND	24.63	21.18	16.41	15.16	14.08	FAL3F12LH
24	14-27.6	150	3.6	.12	10.0	40	P9776-ND	24.63	21.18	16.41	15.16	14.08	FAL3F24LH
12	7-13.5	500	6.00	0.65/22.97	18/0.71	45	P11032-ND	33.38	28.71	22.25	20.54	19.08	FAL6F12LHXA*

* 2 PPR speed sensor (TAC Output)

Cross Flow Fans

DESIGN: • **Motor:** DC Brushless 2 phase half wave drive • **Bearing:** Sleeve with Molded monobody housing • **Blade:** Molded, 1.30" (33mm) dia., 1.57" (39.9mm) long multiple blades • **Mounting:** L-Shaped Molded Bracket • **Lead Wires:** UL 1007, AWG 26



Model Type	Dimensions (mm) L_1	L_2	H	W
FCB-34AA□□	77.98	134.11	44.96	50.04
FCB-34AB□□	117.09	173.48	44.96	50.04
FCB-34AC□□	155.96	212.09	44.96	50.04
FCB-34AD□□	195.07	250.95	44.96	50.04
FCB-34AE□□	233.93	290.07	44.96	50.04
FCB-34AF□□	273.05	328.93	44.96	50.04

Operating Voltage (VDC) Nominal	Range	Input Power (W)	Air Flow (CFM)	Air Pressure (mmH_2O)	Noise (dB-A)	Digi-Key Part No.	Price Each 1	5	10	50	Panasonic Part No.
12	10.2-13.8	1.95	10.6	1.3	37.0	P9711-ND	26.50	22.79	17.66	16.31	FCB34AA12
24	20.4-27.6	2.60	10.6	1.5	38.2	P9712-ND	26.50	22.79	17.66	16.31	FCB34AA24
12	10.2-13.8	4.08	21.6	3.0	42.0	P9721-ND	27.25	23.44	18.16	16.77	FCB34AB12
24	20.4-27.6	3.94	22.7	2.4	42.0	P9722-ND	27.25	23.44	18.16	16.77	FCB34AB24
12	10.2-13.8	4.50	28.3	2.0	43.0	P9713-ND	28.05	24.13	18.70	17.27	FCB34AC12
24	20.4-27.6	4.70	28.3	1.9	42.0	P9714-ND	28.05	24.13	18.70	17.27	FCB34AC24
12	10.2-13.8	4.50	35.3	2.1	42.0	P9715-ND	28.75	24.73	19.16	17.70	FCB34AD12
24	20.4-27.6	5.00	35.3	2.1	41.2	P9716-ND	28.75	24.73	19.16	17.70	FCB34AD24
12	10.2-13.8	4.50	38.9	2.2	42.0	P9717-ND	29.50	25.37	19.66	18.16	FCB34AE12
24	20.4-27.6	5.50	38.9	2.2	41.3	P9718-ND	29.50	25.37	19.66	18.16	FCB34AE24
12	10.2-13.8	5.00	42.4	2.2	43.0	P9719-ND	30.25	26.02	20.16	18.62	FCB34AF12
24	20.4-27.6	6.00	42.4	2.2	41.8	P9720-ND	30.25	26.02	20.16	18.62	FCB34AF24

Please Note: Custom Fan Cable Assemblies available upon request.

ebm
INDUSTRIES, INC.

Fans

UL yellow card E38324, CSA file 27697, VDE file 3041

Fig. 1

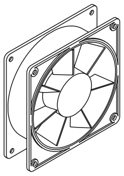


Fig. 2

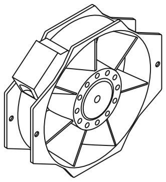


Fig. 3

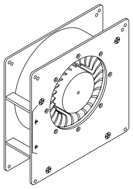


Fig.4

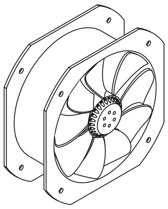


Fig. 5

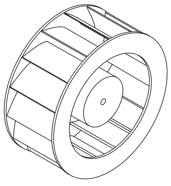


Fig.	Size (mm)	Voltage (DC)	Voltage Range (DC)	Bearing	Watts	CFM @ O”	dBA	Leads	Digi-Key Part No.	Price Each				EBM Ind. Part No.
										1	25	50	100	
Brushless DC Fans														
1	40 x 10	12	10.2-13.8	Sleeve	0.8	6	28	28 AWG 12.2" Leads	381-1081-ND	19.15	14.76	12.25	11.50	412FH
	40 x 10	24	20.4-27.6	Sleeve	0.7	5	26	28 AWG 12.2" Leads	381-1082-ND	18.20	14.04	11.65	10.95	414F
	40 x 20	12	10.2-13.8	Sleeve	0.9	6	26	28 AWG 12.2" Leads	381-1069-ND	19.15	14.76	12.25	11.50	412
	40 x 20	24	20.4-27.6	Sleeve	0.9	6	26	28 AWG 12.2" Leads	381-1070-ND	19.15	14.76	12.25	11.50	414
1	60 x 25	12	6-15	Ball	2.4	24	40	22 AWG 12.2" Leads	381-1071-ND	26.00	22.50	20.60	17.55	612
	60 x 25	24	12-27	Ball	3.4	27	44	22 AWG 12.2" Leads	381-1097-ND	27.25	23.58	21.65	18.40	614H
	60 x 25	24	12-30	Ball	2.7	24	40	22 AWG 12.2" Leads	381-1072-ND	26.00	22.50	20.60	17.55	614
	60 x 25	12	6-15	Ball	1.3	18	33	22 AWG 12.2" Leads	381-1000-ND	26.00	22.50	20.60	17.55	612M
	60 x 25	24	6-15	Ball	0.8	12	26	22 AWG 12.2" Leads	381-1039-ND	26.00	22.50	20.60	17.55	614L
	60 x 25	24	6-15	Ball	1.4	18	33	22 AWG 12.2" Leads	381-1040-ND	26.00	22.50	20.60	17.55	614M
1	80 x 25	12	7-15	Ball	0.8	21	21	24 AWG 12.2" Leads	381-1101-ND	19.00	16.47	15.05	12.80	8412L
	80 x 25	12	7-15	Ball	2.4	33	35	24 AWG 12.2" Leads	381-1010-ND	19.00	16.47	15.05	12.80	8412
	80 x 25	24	12-28	Ball	2.4	33	35	24 AWG 12.2" Leads	381-1011-ND	19.00	16.47	15.05	12.80	8414
	80 x 25	12	7-15	Ball	1.4	27	29	24 AWG 12.2" Leads	381-1049-ND	19.00	16.47	15.05	12.80	8412M
	80 x 25	24	12-28	Ball	1.4	27	29	24 AWG 12.2" Leads	381-1050-ND	19.00	16.47	15.05	12.80	8414M
1	80 x 32	48	6-15	Ball	2.2	32	36	24 AWG 12.2" Leads	381-1077-ND	36.35	31.41	28.85	24.56	8318
	80 x 32	12	6-15	Ball	2.2	32	36	22 AWG 12.2" Leads	381-1008-ND	25.65	22.23	20.35	17.35	8312
	80 x 32	12	6-15	Ball	1.8	28	34	22 AWG 12.2" Leads	381-1048-ND	25.65	22.23	20.35	17.35	8312M
	80 x 32	24	12-28	Ball	2.5	32	36	22 AWG 12.2" Leads	381-1009-ND	25.65	22.23	20.35	17.35	8314
1	80 x 38	12	8-16	Sleeve	3	35	38	22 AWG 12.2" Leads	381-1099-ND	48.55	41.94	38.55	32.81	8112G
	80 x 38	12	8-16	Ball	3	35	39	22 AWG 12.2" Leads	381-1100-ND	52.60	45.45	41.81	35.50	8112K
	80 x 38	24	18-30	Ball	3	35	39	22 AWG 12.2" Leads	381-1047-ND	52.60	45.45	41.81	35.50	8124K
1	92 x 25	12	7-15	Ball	1.3	36	27	24 AWG 12.2" Leads	381-1080-ND	26.05	17.19	15.80	13.45	3412L
	92 x 25	12	7-15	Ball	1.8	42	32	24 AWG 12.2" Leads	381-1012-ND	26.05	17.19	15.80	13.45	3412M
	92 x 25	24	12-28	Ball	2.6	49	36	24 AWG 12.2" Leads	381-1001-ND	19.90	17.19	15.80	13.45	3414
	92 x 25	24	12-28	Ball	1.8	42	32	24 AWG 12.2" Leads	381-1013-ND	19.90	17.19	15.80	13.45	3414M
1	92 x 32	12	6-15	Ball	2.4	47	37	22 AWG 12.2" Leads	381-1073-ND	26.05	22.50	20.70	17.60	3312
	92 x 32	24	12-28	Ball	2.4	47	37	22 AWG 12.2" Leads	381-1074-ND	26.05	22.50	20.70	17.60	3314
1	119 x 25	12	7-13	Ball	3	82	38	24 AWG 12.2" Leads	381-1024-ND	30.50	26.37	24.25	20.60	4412FM
	119 x 25	24	12-28	Ball	3	82	38	24 AWG 12.2" Leads	381-1025-ND	30.50	26.37	24.25	20.60	4414FM
1	119 x 32	12	6-15	Ball	5	100	45	Leads, Hall Effect	381-1088-ND	30.90	26.73	24.55	20.90	4312S
	119 x 32	12	6-15	Ball	5	100	45	22 AWG 12.2" Leads	381-1002-ND	29.10	25.20	23.15	19.65	4312
	119 x 32	12	6-15	Ball	1.2	56	30	22 AWG 12.2" Leads	381-1020-ND	29.10	25.20	23.15	19.65	4312L
	119 x 32	12	6-15	Ball	2.6	82	39	22 AWG 12.2" Leads	381-1021-ND	29.10	25.20	23.15	19.65	4312M
1	119 x 32	24	12-28	Ball	5	100	45	22 AWG 12.2" Leads	381-1003-ND	29.10	25.20	23.15	19.65	4314
	119 x 32	24	12-28	Ball	1.2	56	30	22 AWG 12.2" Leads	381-1022-ND	29.10	25.20	23.15	19.65	4314L
	119 x 32	24	12-28	Ball	2.6	82	39	22 AWG 12.2" Leads	381-1023-ND	29.10	25.20	23.15	19.65	4314M
	119 x 32	48	36-53	Ball	5	100	45	22 AWG 12.2" Leads	381-1004-ND	31.85	27.54	25.30	21.50	4318
1	119 x 38	12	7-14.5	Ball	5.3	108	49	22 AWG 12.2" Leads	381-1084-ND	35.30	30.51	28.05	23.80	4212H
	119 x 38	24	12-28	Ball	5.3	108	49	.110 x .02" Terminals	381-1086-ND	37.75	32.67	30.00	25.50	4294H
	119 x 38	24	12-28	Ball	5.3	108	49	22 AWG 12.2" Leads	381-1085-ND	35.30	30.51	28.05	23.80	4214H
	119 x 38	48	36-56	Ball	5.3	108	49	.110 x .02" Terminals	381-1087-ND	42.15	36.45	33.45	28.45	4298H
	119 x 38	12	7-14.5	Ball	1.2	51	29	22 AWG 12.2" Leads	381-1016-ND	32.90	28.44	26.15	22.20	4212L
1	119 x 38	12	7-14.5	Ball	2.2	75	38	22 AWG 12.2" Leads	381-1017-ND	32.90	28.44	26.15	22.20	4212M
	119 x 38	24	12-28	Ball	1.2	75	29	22 AWG 12.2" Leads	381-1018-ND	32.90	28.44	26.15	22.20	4214L
	119 x 38	12	7-15	Ball	4.5	106	49	.110" x .02" Terminals	381-1014-ND	46.50	40.14	36.90	31.40	4182NX
	119 x 38	24	12-29	Ball	4.5	106	49	.110" x .02" Terminals	381-1015-ND	46.50	40.14	36.90	31.40	4184NX
	119 x 38	24	12-30	Sleeve	3.5	94	44	.110" x .02" Terminals	381-1083-ND	41.45	35.82	32.90	28.01	4184NGX
1	127 x 38	12	8-16	Ball	4.5	118	44	.110" x .02" Terminals	381-1115-ND	60.15	46.35	38.40	36.05	W2G115-AD15-13
	127 x 38	12	8-16	Ball	5.9	130	48	.110" x .02" Terminals	381-1117-ND	60.15	46.35	38.40	36.05	W2G115-AE53-13
	127 x 38	24	18-30	Ball	5.7	130	48	22 AWG 10.5" Leads	381-1116-ND	60.15	46.35	38.40	36.05	W2G115-AE31-01
	127 x 38	24	16-28	Ball	12	160	52	.118" x .02" Terminals	381-1068-ND	67.20	51.84	42.90	40.31	W2G115-AG71-12
2	60 x 25	12	6-15	Ball	0.7	12	26	22 AWG 12.2" Leads	381-1038-ND	26.00	22.50	20.60	17.55	612L
2	172 x 51	24	12-32	Ball	12	206	50	.118" x .02" Terminals	381-1098-ND	88.35	76.32	70.15	59.65	6224NM
	172 x 51	12	8-15	Ball	12	206	50	.118" x .02" Terminals	381-1041-ND	113.50	98.10	90.10	76.60	6212NM
	172 x 51	24	12-28	Ball	18	241	55	.118" x .02" Terminals	381-1042-ND	88.35	76.32	70.15	59.65	6224N
	172 x 51	24	12-28	Ball	26	283	61	.118" x .02" Terminals	381-1043-ND	93.05	71.82	59.40	55.85	6224NH
2	172 x 51	48	28-60	Ball	17	241	55	.118" x .02" Terminals	381-1045-ND	88.35	76.32	70.15	59.65	6248N
	172 x 51	24	12-28	Ball	18	241	57	.118" x .02" Terminals	381-1005-ND	88.35	76.32	70.15	59.65	6424
	172 x 51	24	12-28	Ball	26	283	61	.118" x .02" Terminals	381-1046-ND	92.73	80.10	73.63	62.61	6424H
	172 x 51	48	28-60	Ball	17	241	57	.118" x .02" Terminals	381-1006-ND	88.35	76.32	70.15	59.65	6448
DC Flatpaks														
3	120 x 40	12	7-15	Ball	6	32	55	22 AWG 13.4" Leads	381-1059-ND	57.05	49.23	45.30	38.50	RL90-18/12N
	120 x 40	24	12-28	Ball	5	32	55	22 AWG 13.4" Leads	381-1060-ND	57.05	49.23	45.30	38.50	RL90-18/14N

Please Note: Custom Fan Cable Assemblies available upon request.

(Continued)

Fig.	Size (mm)	Voltage (DC)	Voltage Range (DC)	CFM @ O”	dBA	Watts	Impeller Material	Digi-Key Part No.	Price Each 1	25	50	100	EBM Ind. Part No.
Brushless DC Backward Curved Impellers													
5	175 x 69	48	36-56	300	68	38	Plastic	381-1108-ND	168.20	154.08	143.20	134.61	R1G175-AB41-52
	133 x 91	12	8-14	174	60	19	Plastic	381-1111-ND	207.70	189.92	176.71	166.11	R2G133-AB15-10

Fig.	Size (mm)	Voltage (AC)	Input Watts	CFM @ O”	dBA	Impeller Dimensions Inches (mm)	Capacitor	Impeller Material	Digi-Key Part No.	Price Each 1	25	50	100	EBM Ind. Part No.
AC Backward Curved Motorized Impellers														
5	220 x 71	115	100	530	70	8.66” (220) x 2.8” (71)	10	Plastic	381-1110-ND	76.45	72.72	67.30	63.45	R2E220-AA44-23
	220 x 71	230	100	530	70	8.66” (220) x 2.8” (71)	2	Plastic	381-1109-ND	80.80	73.84	68.76	64.60	R2E220-AA40-23

Fig.	Size (mm)	Bearing	Voltage (AC)	Input Watts	CFM @ O"	dBA	Leads	Digi-Key Part No.	Price Each 1	25	50	100	EBM Ind. Part No.
AC Tubeaxial Fans													
1	80 x 38	Sleeve	115	8	21	21	18 AWG 17.3" Leads	381-1057-ND	27.55	23.76	21.85	18.56	8830N
	80 x 38	Sleeve	115	11	28	28	18 AWG 17.3" Leads	381-1106-ND	27.55	23.76	21.85	18.55	8800N
	80 x 38	Sleeve	115	11	36	34	18 AWG 12.2" Leads	381-1103-ND	24.35	21.06	19.35	16.45	8500N
	80 x 38	Sleeve	115	11	36	34	18 AWG 12.2" Leads	381-1102-ND	32.00	27.63	25.40	21.61	8500DP
	80 x 38	Sleeve	230	11	36	34	18 AWG 12.2" Leads	381-1105-ND	26.45	22.86	21.00	17.85	8550N
1	80 x 38	Ball	115	11	36	35	22 AWG 12.2" Leads	381-1104-ND	38.65	33.39	30.70	26.10	8506N
	80 x 38	Sleeve	115	8	20	29	.110"x.02"Terminals	381-1056-ND	30.50	26.37	24.25	20.60	8830A
	80 x 38	Sleeve	115	11	34	41	.110"x.02"Terminals	381-1051-ND	24.41	23.58	21.70	18.45	8500A
	80 x 38	Sleeve	230	11	34	41	.110"x.02"Terminals	381-1054-ND	29.45	25.47	23.35	19.85	8550A
	80 x 38	Sleeve	115	11	36	34	22 AWG 12.2" Leads	381-1052-ND	24.35	21.06	19.35	16.45	8500VW
	80 x 38	Ball	115	11	36	34	22 AWG 12.2" Leads	381-1053-ND	38.65	33.39	30.70	26.10	8506VW
	80 x 38	Ball	230	11	36	34	22 AWG 12.2" Leads	381-1055-ND	40.75	35.28	32.35	27.55	8556VW
1	92 x 25	Ball	115	9	41	40	.110"x.02"Terminals	381-1076-ND	36.80	31.86	29.25	24.85	3906
1	92 x 38	Ball	115	11	53	42	18 AWG 12.2" Leads	381-1075-ND	51.90	40.05	33.10	31.15	3606
1	119 x 25	Ball	115	8	59	35	.110"x.02"Terminals	381-1107-ND	38.00	32.85	30.15	25.60	9906L
	119 x 25	Ball	115	12	79	42	.110"x.02"Terminals	381-1078-ND	35.45	30.60	28.15	23.90	9906
	119 x 25	Ball	230	12	79	42	.110"x.02"Terminals	381-1079-ND	37.40	32.31	29.70	25.26	9956
1	119 x 38	Sleeve	115	18	106	50	.118"x.02"Terminals	381-1089-ND	23.55	20.34	18.70	15.90	4600N
	119 x 38	Sleeve	115	18	106	50	.118"x.02"Terminals	381-1090-ND	23.55	20.34	18.70	15.90	4600X
	119 x 38	Sleeve	230	18	106	50	.118"x.02"Terminals	381-1093-ND	27.00	23.40	21.45	18.26	4650N
	119 x 38	Sleeve	230	18	106	50	.118"x.02"Terminals	381-1094-ND	27.00	23.40	21.45	18.26	4650X
	119 x 38	Ball	115	18	106	51	.118"x.02"Terminals	381-1091-ND	37.45	32.40	29.75	25.31	4606N
1	119 x 38	Ball	230	18	106	51	.118"x.02"Terminals	381-1095-ND	40.90	35.37	32.45	27.65	4656X
	119 x 38	Ball	115	18	106	45	.110"x.02"Terminals	381-1030-ND	37.45	32.40	29.75	25.31	4606VX
	119 x 38	Ball	230	18	106	45	.110"x.02"Terminals	381-1034-ND	45.92	35.37	32.45	27.65	4656VX
	119 x 38	Sleeve	115	10	56	28	.110"x.02"Terminals	381-1036-ND	28.95	25.11	23.00	19.55	4800Z
	119 x 38	Sleeve	230	10	56	28	.110"x.02"Terminals	381-1037-ND	32.40	28.08	25.70	21.91	4850Z
1	119 x 38	Sleeve	115	12	71	33	.110"x.02"Terminals	381-1026-ND	28.45	24.57	22.60	19.25	4530Z
	119 x 38	Sleeve	230	12	71	33	.110"x.02"Terminals	381-1027-ND	31.90	27.54	25.30	21.56	4580Z
	119 x 38	Sleeve	115	18	106	45	.110"x.02"Terminals	381-1029-ND	23.55	20.34	18.70	15.90	4600Z
	119 x 38	Sleeve	230	18	106	45	.110"x.02"Terminals	381-1033-ND	27.00	23.40	21.45	18.26	4650Z
	119 x 38	Ball	115	18	106	45	.110"x.02"Terminals	381-1031-ND	37.45	32.40	29.75	25.31	4606Z
1	119 x 38	Ball	115	18	106	45	22 AWG 12.2" Leads	381-1092-ND	37.45	32.40	29.75	25.31	4606ZW
	119 x 38	Ball	230	18	106	45	.110"x.02"Terminals	381-1035-ND	40.90	35.37	32.45	27.65	4656Z
1	120 x 38	Sleeve	230	18	106	50	.110"x.02"Terminals	381-1032-ND	27.00	23.40	21.45	18.26	4650A
1	127 x 38	Ball	115	17	121	47	.118"x.02"Terminals	381-1119-ND	56.35	43.56	35.95	33.85	W2K121-AA15-13
	127 x 38	Sleeve	115	17	121	47	.118"x.02"Terminals	381-1120-ND	39.30	30.33	25.10	23.60	W2K121-AA15-39
	127 x 38	Ball	115	17	121	47	22 AWG 12.2" Leads	381-1118-ND	56.35	43.56	35.95	33.85	W2K121-AA15-01
1	135 x 38	Ball	230	26	159	50	.110"x.02"Terminals	381-1096-ND	65.95	56.97	52.35	44.50	5656S
2	150 x 55	Ball	115	38	225	52	20 AWG 13.3" Leads	381-1121-ND	65.30	50.40	41.71	39.15	W2S130-AA25-01
	150 x 55	Ball	115	38	225	52	.110"x.02"Terminals	381-1122-ND	65.30	50.40	41.71	39.15	W2S130-AA25-44
	150 x 55	Ball	115	46	263	60	20 AWG 13.3" Leads	381-1124-ND	65.30	50.40	41.71	39.15	W2S130-BM15-01
	150 x 55	Ball	230	46	263	60	20 AWG 13.3" Leads	381-1123-ND	65.30	50.40	41.71	39.15	W2S130-BM03-01
2	172 x 51	Ball	230	26	260	58	PSC 0.11" Terminals	381-1064-ND	93.65	72.27	59.80	56.20	W2E143-AA09-01
	172 x 51	Ball	115	26	260	58	PSC 0.11" Terminals	381-1065-ND	93.65	72.27	59.80	56.20	W2E143-AA15-01
	172 x 51	Ball	230	29	295	58	PSC 0.11" Terminals	381-1066-ND	93.65	72.27	59.80	56.20	W2E143-AB09-01
	172 x 51	Ball	115	29	295	58	PSC 0.11" Terminals	381-1067-ND	93.65	72.27	59.80	56.20	W2E143-AB15-01
4	172 x 150 x 38	Ball	230	24	230	57	0.11" 'Terminals	381-1062-ND	89.55	69.12	57.20	53.75	W2E142-BB01-01
	172 x 150 x 38	Ball	115	24	230	57	0.11" 'Terminals	381-1063-ND	89.55	69.12	57.20	53.75	W2E142-BB05-01
4	225 x 80	Ball	115	80	607	61	Terminal Block	381-1114-ND	135.80	104.76	86.70	81.50	W2E200-HH86-01
	225 x 80	Ball	230	80	607	61	Terminal Block	381-1113-ND	135.80	104.76	86.70	81.50	W2E200-HH38-01
AC Flatpaks													
3	180 x 40	Ball	115	19	55	60	22 AWG 12.2" Leads	381-1112-ND	55.45	47.88	44.01	37.41	RG125-19/06
	120 x 40	Sleeve	115	20	25	60	18 AWG 12.2" Leads	381-1058-ND	53.80	46.53	42.70	36.35	RL90-18/00
	120 x 40	Sleeve	230	20	25	60	18 AWG 12.2" Leads	381-1061-ND	56.15	48.51	44.55	37.95	RL90-18/50

Please Note: Custom Fan Cable Assemblies available upon request.

COMAIR ROTRON

DC Brushless and Tachometer

Fig. 1

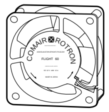


Fig. 2

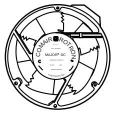


Fig. 3

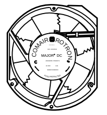
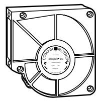


Fig. 4



DC Fans - Motor:

Brushless electronic commutation provided by dependable solid-state circuitry. 100% dielectric tested at 600 VAC/1 sec./500 microamps max. leakage. Electronic locked rotor protection. Polarity protected.

DC and Tachometer Output DC Fans

Model	Venturi	Propeller	EMI (See Right)
Flight LT Series	PPS Plastic, black glass-filled, meets UL94V-0	PBT Plastic, black reinforced glass, meets UL94V-0	A
Flight II Series	PBT with glass, black, meets UL94V-0	PBT, black, meets UL94V-0	B
Sprint	Glass-filled nylon, black, meets UL94V-0	Injection molded polypropylene, black, meets UL94V-0	B
Sprite	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	C
Muffin	Glass-filled nylon, black, meets UL94V-0	Injection molded polypropylene, black, meets UL94V-0	—
Muffin XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	C
Whisper XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	C
Muffin XP	Plastic, Black, UL94V-0	Plastic, Black, UL94V-0	—
Diplomat	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	B
Galaxy	One-piece die-cast zinc alloy, black	Polycarbonate, black, meets UL94V-0	C
Patriot Quiet	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	B
Major Quiet	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	C
Falcon	One-piece die-cast aluminum	Polycarbonate, black, meets UL94V-0	B
Maltese	One-piece die-cast aluminum	Polycarbonate, black, meets UL94V-0	B
Tarzan	Plastic, black, meets UL94V-0	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	B
Caravel	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	B
Whiffet Blower	Glass-filled polyester, black, meets UL94V-0	Polyester, black, meets UL94V-0	B
Biscuit Blower	Mineral-filled nylon, black, meets UL94V-0	Polypropylene, black, meets UL94V-0	—
Viking Blower	Glass-filled polyester, black, meets UL94V-0	Polypropylene, black, meets UL94V-0	—
Spinnaker	One-piece die-cast zinc alloy, black	Flame retardant polycarbonate, black, meets UL94V-0	B

EMI

A Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions.

B Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions. Meets EMI standards per VDE specification 0871/6.78 for category A and B requirements.

C Per MIL STD 461, Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions. Meets EMI standards per VDE specification 0871/6.78 for category A and B requirements.

APPROVALS

1. UL yellow card recognized, file No. E31293.
2. CSA certified, file No. L52898.
3. CSA certified, file No. LR52898.
4. CSA certified, file No. UL E31293.
5. CSA certified, file No. LR701980.
6. CSA certified, file No. LR70190.
7. TUV certified, file No. EN60950.
8. TUV approved to IEC 950, VDE 0730; License R97229.
9. TUV approved to IEC 950, VDE 0730; License R97152 and R97188.
10. Complies with FCC Part 15 Class B of EN55022 - 1994 Class B Conducted Emissions.
11. Complies with FCC Part 15 Class B of EN55022 - 1995 Class B Radiated Emissions.
12. Environmental Protection Type 2

Fig.	Model	Connection Type	Bearing	Voltage		Power (Watts)	Running Current	RPM	CFM	Dimensions (mm)	Life(F) Expectancy	Approvals (See Above)	Digi-Key Part No.	Price Each		Comair Model No.	Finger Guards	Price Each
				Nom.	Range									1	25			
Brushless DC Fans																		
1	Flight LT 25,40,52	Lead Wires	Ball	12	6/14	0.8	70mA	10000	1.40	25x10	50,000 hrs. @ 25°C	1, 5	CR011-ND	24.07	20.75	CR0212LB-G70	—	—
		Lead Wires	Ball	12	6/14	1.2	100mA	6000	6.80	40x10	50,000 hrs. @ 25°C	1, 5	CR015-ND	18.79	16.20	CR0412HB-G70	CR230-ND	.64
		Lead Wires	Ball	12	6/14	1.4	130mA	8500	10.80	40x20	50,000 hrs. @ 25°C	1, 5	CR016-ND	16.68	14.38	CR0412HB-C50	CR230-ND	.64
		Lead Wires	Ball	24	24/56	1.8	75mA	8500	10.8	40x20	50,000 hrs. @ 25°C	1, 5	CR360-ND	10.87	9.37	CR0424HB-C50	CR230-ND	.64
		Lead Wires	Ball	12	6/14	1.0	80mA	3800	9.80	52x10	50,000 hrs. @ 25°C	1, 5	CR018-ND	18.07	15.58	CR0512HB-G90	—	—
		Lead Wires	Ball	12	6/14	1.2	100mA	4600	12.00	52x15	50,000 hrs. @ 25°C	1, 5	CR022-ND	18.68	16.10	CR0512HB-D71	—	—
1	Flight II 60	Lead Wires	Ball	12	6/14	1.7	142mA	5000	18	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR001-ND	31.61	25.07	FS12B3	CR221-ND	.71
		Lead Wires	Ball	24	12/28	1.9	80mA	5000	18	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR002-ND	31.61	25.07	FS24B3	CR221-ND	.71
		Lead Wires	Ball	12	6/14	1.0	84mA	3500	12	60x25	60,000 hrs. @ 40°C	1, 2, 7	CR003-ND	31.61	25.07	FS12H3	CR221-ND	.71
		Lead Wires	Ball	24	12/28	1.1	46mA	3500	12	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR004-ND	31.61	25.07	FS24H3	CR221-ND	.71
		Lead Wires	Ball	5	4.5/5.5	2.0	400mA	5000	18	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR346-ND	19.62	16.90	FS05B3	CR221-ND	.71
		Lead Wires	Ball	5	4.5/5.5	1.0	190mA	3500	12	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR347-ND	19.62	16.90	FS05H3	CR221-ND	.71
		Lead Wires	Ball	48	24/56	4.0	80mA	5930	23	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR348-ND	19.62	16.90	FS48K3	CR221-ND	.71
		Lead Wires	Ball	12	6/14	3.1	260mA	6200	23	60x25	60,000 hrs. @ 25°C	1, 2, 7	CR358-ND	19.62	16.90	FS12K3	CR221-ND	.71
1	Flight LT 60	Lead Wires	Ball	12	6/14	1.6	130mA	4500	16.60	60x15	50,000 hrs. @ 25°C	1, 6	CR023-ND	16.15	13.93	CR0612HB-D71GL	CR221-ND	.71
		Lead Wires	Ball	12	6/14	2.8	230mA	4500	23.20	60x25	50,000 hrs. @ 25°C	1, 6	CR024-ND	14.27	12.30	CR0612HB-A70GL	CR221-ND	.71
		Lead Wires	Ball	24	12/28	3.6	150mA	4500	23.20	60x25	50,000 hrs. @ 25°C	1, 6	CR026-ND	14.27	12.30	CR0624HB-A70GL	CR221-ND	.71
1	Flight II 80	Lead Wires	Ball	12	6/14	2.0	165mA	3600	37	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR005-ND	32.19	25.53	FE12B3	CR180-ND	.85
		Lead Wires	Ball	24	12/28	2.0	87mA	3600	37	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR006-ND	32.19	25.53	FE24B3	CR180-ND	.85
		Lead Wires	Ball	12	6/14	1.0	89mA	2700	27	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR007-ND	32.19	25.53	FE12H3	CR180-ND	.85
		Lead Wires	Ball	24	12/28	1.2	48mA	2700	27	80x25	60,000 hrs. @ 25°C	1, 2, 7	CR008-ND	32.19	25.53	FE24H3	CR180-ND	.85
1	Flight LT 80	Lead Wires	Ball	12	6/14	3.0	250mA	3010	38.60	80x25	50,000 hrs. @ 25°C	1, 6	CR030-ND	13.08	11.28	CR0812HB-A70GL	CR180-ND	.85
		Lead Wires	Ball	12	6/14	1.8	150mA	2440	31.40	80x25	50,000 hrs. @ 25°C	1, 6	CR031-ND	13.08	11.28	CR0812MB-A70GL	CR180-ND	.85
		Lead Wires	Ball	24	12/28	3.8	160mA	3010	38.60	80x25	50,000 hrs. @ 25°C	1, 6	CR032-ND	13.08	11.28	CR0824HB-A70GL	CR180-ND	.85
1	Sprint	Lead Wires	Sleeve	12	6/14	3.4	280mA	3400	33	80x32	55,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR009-ND	16.20	13.95	ST12A3	CR180-ND	.85
		Lead Wires	Sleeve	24	12/28	3.3	140mA	3400	33	80x32	55,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR012-ND	16.20	13.95	ST24A3	CR180-ND	.85
		Lead Wires	Ball	12	6/14	3.4	280mA	3400	33	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR014-ND	18.45	15.89	ST12B3	CR180-ND	.85
		Lead Wires	Ball	24	12/28	3.3	140mA	3400	33	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR017-ND	18.45	15.89	ST24B3	CR180-ND	.85
		Lead Wires	Ball	5	4.5/5.5	2.3	460mA	3400	33	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR353-ND	25.20	21.70	ST05B3	CR180-ND	.85
		Lead Wires	Ball	12	6/14	6.2	520mA	4700	45	80x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR354-ND	19.93	17.16	ST12Z3	CR180-ND	.85
1	Sprite	Lead Wires	Ball	12	6/14	3.0	250mA	3500	35	80x42	80,000 hrs. @ 40°C	1, 3, 7	CR019-ND	24.76	21.58	SD12B1	CR180-ND	.85
		Terminal	Ball	12	6/14	3.0	250mA	3500	35	80x42	80,000 hrs. @ 40°C	1, 3, 7	CR027-ND	26.43	23.03	SD12B2	CR180-ND	.85
		Lead Wires	Ball	24	12/28	3.0	130mA	3500	35	80x42	83,000 hrs. @ 40°C	1, 3, 7	CR020-ND	24.76	21.58	SD24B1	CR180-ND	.85
		Lead Wires	Ball	48	24/56	3.0	60mA	3500	35	80x42	83,000 hrs. @ 40°C	1, 3, 7	CR021-ND	24.76	21.58	SD48B1	CR180-ND	.85
		Terminal	Ball	48	24/56	3.0	60mA	3500	35	80x42	83,000 hrs. @ 40°C	1, 3, 7	CR236-ND	29.40	24.26	SD48B2	CR180-ND	.85
1	Flight II 90	Lead Wires	Ball	12	6/14	2.4	202mA	2800	45	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR034-ND	34.23	27.14	FN12B3	CR220-ND	.92
		Lead Wires	Ball	12	6/14	1.5	124mA	2350	37	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR036-ND	34.23	27.14	FN12C3	CR220-ND	.92
		Lead Wires	Ball	24	12/28	2.4	100mA	2800	45	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR237-ND	23.60	19.52	FN24B3	CR220-ND	.92
		Lead Wires	Ball	24	12/28	1.5	62mA	2350	37	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR238-ND	23.60	19.47	FN24C3	CR220-ND	.92
		Lead Wires	Ball	12	4.5/5.5	5.1	423mA	3850	60	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR349-ND	23.04	19.84	FN12K3	CR220-ND	.92
		Lead Wires	Ball	24	12/28	5.5	230mA	3800	60	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR359-ND	23.04	19.84	FN24K3	CR220-ND	.92
		Lead Wires	Ball	48	24/56	2.9	65mA	2800	45	92x25	60,000 hrs. @ 25°C	1, 2, 7, 10, 11	CR350-ND	21.24	18.29	FN48B3	CR220-ND	.92
1	Flight LT 90	Lead Wires	Ball	12	6/14	4.3	360mA	3000	48.40	92x25	50,000 hrs. @ 25°C	1, 5	CR035-ND	15.98	13.78	CR0912HB-A70GL	CR220-ND	.92
		Lead Wires	Ball	24	12/28	4.8	200mA	3000	48.40	92x25	50,000 hrs. @ 25°C	1, 5	CR037-ND	15.98	13.78	CR0924HB-A70GL	CR220-ND	.92
1	Flight II 120	Lead Wires	Ball	12	6/14	4.3	360mA	2950	86	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR038-ND	35.10	27.83	FT12B3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	4.3	180mA	2950	86	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR039-ND	35.10	27.83	FT24B3	CR210-ND	1.79
		Lead Wires	Ball	12	6/14	1.6	130mA	2000	61	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR040-ND	35.09	27.83	FT12M3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	1.9	80mA	2000	61	120x25	60,000 hrs. @ 25°C	1, 2, 7	CR041-ND	35.10	27.83	FT24M3	CR210-ND	1.79
1	Muffin	Lead Wires	Sleeve	12	6/14	7.9	660mA	3700	102	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR042-ND	17.82	15.35	MC12A3	CR210-ND	1.79
		Lead Wires	Sleeve	24	12/28	6.7	280mA	3700	102	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR046-ND	17.82	15.35	MC24A3	CR210-ND	1.79
		Lead Wires	Sleeve	12	6/14	2.2	180mA	2150	58	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR043-ND	17.82	15.35	MC12E3	CR210-ND	1.79
		Lead Wires	Sleeve	24	12/28	2.1	85mA	2150	58	120x32	50,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR047-ND	20.25	17.44	MC24E3	CR210-ND	1.79
1	Muffin	Lead Wires	Ball	12	6/14	7.9	660mA	3700	102	120x32	75,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR051-ND	20.25	17.44	MC12B3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	6.7	280mA	3700	102	120x32	75,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR055-ND	20.25	17.44	MC24B3	CR210-ND	1.79
		Lead Wires	Ball	48	22/56	9.6	200mA	3700	102	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR240-ND	22.50	18.57	MC48B3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	4.0	170mA	2850	80	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR241-ND	22.50	18.57	MC24H3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	10.6	440mA	4200	118	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR351-ND	22.05	18.99	MC24K3	CR210-ND	1.79
		Lead Wires	Ball	48	24/56	10.6	220mA	4100	118	120x32	78,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR352-ND	22.05	18.99	MC48K3	CR210-ND	1.79

Please Note: Custom Fan Cable Assemblies available upon request.

(Continued)

COMAIR ROTRON DC Brushless and Tachometer *(Cont.)*

Fig.	Model	Connection Type	Bearing	Voltage		Power (Watts)	Running Current	RPM	CFM	Dimensions (mm)	Life(F) Expectancy	Approvals (See Above)	Digi-Key Part No.	Price Each		Comair Model No.	Finger Guards	Price Each
				Nom.	Range									1	25			
1	Muffin XL	Lead Wires	Ball	24	12/28	6.0	250mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR070-ND†	41.43	37.61	MD24B1	CR210-ND	1.79
		Terminal	Ball	12	6/14	6.0	500mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR072-ND†	41.43	37.61	MD12B2	CR210-ND	1.79
		Terminal	Ball	24	12/28	6.0	250mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR073-ND†	41.43	37.61	MD24B2	CR210-ND	1.79
		Terminal	Ball	48	24/56	6.0	125mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR074-ND†	41.43	37.61	MD48B2	CR210-ND	1.79
		Lead Wires	Ball	12	6/14	6.0	500mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR069-ND†	41.42	37.61	MD12B1	CR210-ND	1.79
		Lead Wires	Ball	48	24/56	6.0	125mA	3100	110	119x39	83,000 hrs. @ 40°C	1, 3, 7, 10, 11	CR071-ND†	43.60	35.97	MD48B1	CR210-ND	1.79
1	Whisper XL	Lead Wires	Ball	12	6/14	2.4	200mA	2230	75	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR262-ND†	43.30	35.73	WD12C3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	2.4	100mA	2230	75	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR263-ND†	43.30	35.73	WD24C3	CR210-ND	1.79
		Lead WIres	Ball	12	6/14	1.2	100mA	1635	55	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR264-ND†	43.30	35.73	WD12M3	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	1.2	52mA	1635	55	119x39	83,000 hrs. @ 40°C	1, 3, 7	CR265-ND†	43.28	35.71	WD24M3	CR210-ND	1.79
1	Muffin XP	Lead WIres	Sleeve	12	6/14	7.0	580mA	3000	110	120x38	78,000 hrs. @ 40°C	10, 11	CR341-ND	22.25	19.16	MS12B3	CR210-ND	1.79
		Lead WIres	Sleeve	24	12/28	7.0	290mA	3000	110	120x38	78,000 hrs. @ 40°C	10, 11	CR342-ND	22.23	19.15	MS24B3	CR210-ND	1.79
		Lead WIres	Sleeve	48	24/56	7.4	150mA	3000	110	120x38	78,000 hrs. @ 40°C	10, 11	CR343-ND	22.23	19.15	MS48B3	CR210-ND	1.79
2	Diplomat	Lead Wires	Ball	12	6/14	30.0	2.5A	3400	170	133x91	35,000 hrs. @ 50°C	1, 2, 7	CR288-ND	83.43	71.85	DDF12B1	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	26.0	1.1A	3400	170	133x91	35,000 hrs. @ 50°C	1, 2, 7	CR289-ND	83.43	71.85	DDF24B1	CR210-ND	1.79
		Lead Wires	Ball	48	24/56	24.0	.51A	3400	170	133x91	35,000 hrs. @ 50°C	1, 2, 7	CR290-ND	83.43	71.85	DDF48B1	CR210-ND	1.79
1	Galaxy	Terminal	Ball	12	6/14	15.0	1250mA	3250	150	127x38	82,500 hrs. @ 50°C	1, 3, 7	CR266-ND†	51.00	42.08	GL12B4	CR200-ND	2.03
		Terminal	Ball	24	12/28	15.0	625mA	3250	150	127x38	82,500 hrs. @ 50°C	1, 3, 7	CR267-ND†	51.00	42.08	GL24B4	CR200-ND	2.03
		Terminal	Ball	48	24/56	15.0	310mA	3250	150	127x38	82,000 hrs. @ 50°C	1, 3, 7	CR268-ND†	51.00	42.08	GL48B4	CR200-ND	2.03
2	Patriot	Terminal	Ball	24	12/28	20.3	850mA	3500	235	172x51	62,000 hrs. @ 50°C	1, 3, 7	CR242-ND†	66.60	54.95	PQ24B4	CR206-ND	2.72
		Terminal	Ball	48	24/56	20.1	420mA	3500	235	172x51	62,000 hrs. @ 50°C	1, 3, 7	CR243-ND†	66.60	54.95	PQ48B4	CR206-ND	2.72
3	Major Quiet	Terminal	Ball	24	12/28	20.3	850mA	3500	235	172x150x51	62,000 hrs. @ 50°C	1, 3, 7	CR291-ND†	64.89	55.88	JQ24B4	CR196-ND	3.06
		Terminal	Ball	48	24/56	20.1	420mA	3500	235	172x150x51	62,000 hrs. @ 50°C	1, 3, 7	CR292-ND†	64.89	55.88	JQ48B4	CR196-ND	3.06
		Terminal	Ball	12	6/14	14.6	1215mA	3000	200	172x150x51	62,000 hrs. @ 50°C	1, 3, 7	CR293-ND†	64.89	55.88	JQ12C4	CR196-ND	3.06
2	Falcon	Lead Wires	Ball	24	12/28	41.0	1.48A	3400	300	172x55	62,000 hrs. @ 50°C	1, 2, 7	CR295-ND†	88.67	76.36	FD24B3	CR196-ND	3.06
3	Maltese	Lead Wires	Ball	12	6/14	39.6	3A	3400	300	172x150x55	62,000 hrs. @ 50°C	1, 2, 7	CR297-ND†	88.65	76.34	MT12B3	CR196-ND	3.06
		Lead Wires	Ball	24	12/28	41.0	1.48A	3400	300	172x150x55	62,000 hrs. @ 50°C	1, 2, 7	CR298-ND†	88.65	76.34	MT24B3	CR196-ND	3.06
		Lead Wires	Ball	48	24/56	34.5	.72A	3400	300	172x150x55	62,000 hrs. @ 50°C	1, 2, 7	CR299-ND†	88.65	76.34	MT48B3	CR196-ND	3.06
2	Caravel	Lead Wires	Ball	24	12/28	29.0	1.2A	1650	550	254x89	60,000 hrs. @ 50°C	1, 2, 7	CR302-ND†	82.80	71.30	CD24B3	CR182-ND	1.89
		Lead Wires	Ball	48	24/56	30.2	.63A	1650	550	254x89	60,000 hrs. @ 50°C	1, 2, 7	CR303-ND†	82.80	71.30	CD48B3	CR182-ND	1.89
4	Whiffet Blower	Lead Wires	Ball	12	6/14	5.1	420mA	4050	15	80x32	80,000 hrs. @ 25°C	1, 4, 7	CR304-ND	32.40	27.90	WT12B3	—	—
		Lead Wires	Ball	24	12/28	5.1	200mA	4050	15	80x32	80,000 hrs. @ 25°C	1, 4, 7	CR305-ND	32.40	27.90	WT24B3	—	—
4	Biscuit Blower	Lead Wires	Sleeve	12	9/14	11.0	900mA	3050	25	121x31	50,000 hrs. @ 40°C	1, 3, 7	CR085-ND	31.18	26.96	BD12A3	—	—
		Lead Wires	Sleeve	24	18/28	11.0	480mA	3050	25	121x31	50,000 hrs. @ 40°C	1, 3, 7	CR086-ND	31.18	26.96	BD24A3	—	—
		Lead Wires	Ball	12	6/14	11.0	900mA	3050	25	121x31	78,000 hrs. @ 40°C	1, 3, 7	CR247-ND	38.00	31.35	BD12B3	—	—
		Lead Wires	Ball	24	12/28	11.0	480mA	3050	25	121x31	78,000 hrs. @ 40°C	1, 3, 7	CR248-ND	38.00	31.35	BD24B3	—	—
4	Viking	Lead Wires	Ball	12	6/14	20.0	1670mA	4000	33	127x41	83,000 hrs. @ 40°C	—	CR306-ND	31.91	27.49	VK12B3	—	—
		Lead Wires	Ball	24	12/28	20.0	830mA	4000	33	127x41	83,000 hrs. @ 40°C	—	CR307-ND	31.95	27.52	VK24B3	—	—
4	Spinnaker	Lead Wires	Ball	24	12/28	30.0	1300mA	2500	60	162x41	62,000 hrs. @ 50°C	1, 3, 7	CR249-ND	70.20	57.92	SPD24B1	—	—
Tachometer Output DC Fans																		
1	Muffin	Lead Wires	Ball	12	6/14	7.9	660mA	3700	102	120x32	78,000 hrs. @ 40°C	10, 11	CR339-ND	23.22	20.00	MC12B7	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	5.5	230mA	3700	102	120x32	78,000 hrs. @ 40°C	10, 11	CR340-ND	23.22	20.00	MC24B7	CR210-ND	1.79
1	Muffin XL	Lead Wires	Ball	12	6/14	6.0	500mA	3100	110	119x39	83,000 hrs. @ 40°C	10, 11	CR344-ND†	36.18	31.16	MD12B5	CR210-ND	1.79
		Lead Wires	Ball	24	12/28	6.0	250mA	3100	110	119x39	83,000 hrs. @ 40°C	10, 11	CR345-ND†	36.18	31.16	MD24B5	CR210-ND	1.79

† Feathered Edge for lower noise.

Please Note: Custom Fan Cable Assemblies available upon request.

COMAIR ROTRON ThermaPro-V (TPV) DC Fans

Thermal Speed Control: This option uses a thermistor to monitor the temperature and regulate the speed accordingly. The fan will automatically adjust its speed to optimize the airflow to the surrounding temperature. For conditions where power inputs are at a minimum, the fan operates at half speed, providing a minimal amount of CFM to those components still in need of cooling. This reduction in speed results in a significant reduction in noise and power consumption. As the power requirements increase, so does the internal temperature. The fan senses this increase and compensates for it. The fan will continue to increase in speed until it reaches full speed for maximum cooling. The temperature range is 25°C to 45°C. Any temperature below 25°C the fan will operate at half speed. Between 25°C and 45°C, the fan RPM changes linearly with temperature. Over 45°C, the fan will maintain full speed operation.

Fans equipped with this option use a thermistor. The thermistor can be located on a zip cord and placed on hot spots such as processors, heatsinks, transformers, etc., or can be placed in the hub of the fan to monitor the air traveling through the fan.

Model	Venturi	Propeller	EMI (See Right)
Muffin TPV	Flame retardant, black, phenolic	Flame retardant polypropylene, black	—
Sprint TPV	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	A
Patriot TPV	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—

EMI

A Meets EMI standards per FCC part 15, subpart J of Docket 20780, Class A or B radiated and conducted emissions. Meets EMI standards per VDE specification 0871/6.78 for category A and B requirements.

APPROVALS

1. UL yellow card recognized, file No. E31293.
2. CSA certified, file No. L52898.
3. TUV approved to IEC 950, VDE 0730; License R97229.
4. TUV approved to IEC 950, VDE 0730; License R97152 and R97188.

Fig. 1

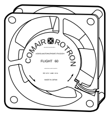


Fig. 2

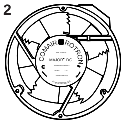
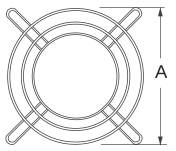


Fig.	Model	Connection Type	Bearing	Voltage		Power (Watts)	Running Current	RPM	CFM	Dimensions (mm)	Life(F) Expectancy	Approvals (See Above)	Digi-Key Part No.	Price Each		Comair Model No.	Finger Guards	Price Each
				Nom.	Range									1	25			
1	Muffin TPV	Lead Wires	Sleeve	12	6/14	2.8	230mA	1700	47	120x32	83,000 hrs. @ 40°C	1, 2, 3	CR269-ND	33.80	27.89	MC12T3H	CR210-ND	1.79
1	Sprint TPV	Lead Wires	Sleeve	48	24/56	2.9	60mA	2100	20	80x32	55,000 hrs. @ 40°C	1, 2, 3	CR274-ND	30.40	25.08	ST48T3H	CR180-ND	.85
2	Patriot TPV	Terminal	Ball	12	6/14	11.0	900mA	1700	113	171.5x51	62,000 hrs. @ 50°C	1, 2, 4	CR275-ND	75.62	62.39	PD12T2H	CR206-ND	2.72
		Terminal	Ball	24	12/28	9.0	390mA	1700	113	127x51	62,000 hrs. @ 50°C	1, 2, 4	CR276-ND	74.34	61.34	PD24T2H	CR206-ND	2.72
		Terminal	Ball	48	24/56	10.0	210mA	1700	113	127x51	62,000 hrs. @ 50°C	1, 2, 4	CR277-ND	74.34	61.34	PD48T2H	CR206-ND	2.72

COMAIR ROTRON Fan Accessories



Dim. (mm)		Fits Fan Size (mm)	Center Dim. (mm)	No. of Rings	Material	Digi-Key Part No.	Price Each		
A	Thick						1	25	50
Finger Guards									
222.00	17.78	176 Sq.	99 open	3	Metal	CR179-ND	6.56	5.65	5.19

Description	Fits Fan Size (mm)	Digi-Key Part No.	Price Each		
			1	25	50
Filters and Filter Accessories					
Filter Mounting Clips	Whisper and Muffin	CR163-ND	.92	.80	.74
Filter Assembly	119 and 120 Square	CR209-ND	16.59	12.64	11.46
Grilles					
Grille (Spiral)	119 and 120 Square	CR177-ND	4.43	3.82	3.51
Clips					
#6-32 Flush Mounting Clip	Major, Major DC, Whisper	CR187-ND	.17	.15	.14
#6-32 Mounting Clip	All XL Models	CR192-ND	.15	.12	.11

COMAIR⊡ROTRON

AC Fans

AC Fans - Motor:
Two-pole shaded pole induction motor.
All 50/60Hz, impedance or thermally protected.
100% dielectric tested at 1800 VAC/1 sec./500 microamps max. leakage.

Fig. 1

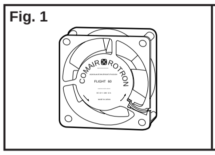


Fig. 2

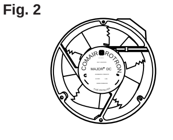


Fig. 3

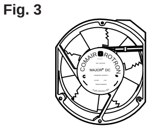
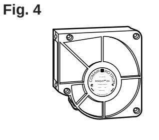


Fig. 4



Model	Venturi	Propeller	EMI (See Right)
Sprite	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	A
Whisper	Flame retardant, black, phenolic	Flame retardant polypropylene, black	—
Whisper XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	—
Muffin	Flame retardant, black, phenolic	Flame retardant polypropylene, black	—
Muffin XL	One-piece die-cast zinc alloy, black	Flame retardant polypropylene, black, meets UL94V-0	—
Diplomat	One-piece die-cast aluminum, black	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	—
Falcon	One-piece die-cast aluminum, black	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	—
Maltese	One-piece die-cast aluminum, black	Injection molded of flame retardant polycarbonate, black, meets UL94V-0	—
Major	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—
Patriot	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—
Tarzan	Flame retardant, black, phenolic	Flame retardant polycarbonate, black	—
Caravel	One-piece die-cast aluminum, black	Polycarbonate, black, meets UL94V-0	—
Biscuit Blower	Black, meets UL94V-0	Polypropylene, black, meets UL94V-2	—

EMI

A Meets EMI standards per FCC part 15, subpart J of Docket 20780,Class A or B radiated and conducted emissions. Meets EMI standards per VDE specification 0871/6.78 for category A and B requirements.

APPROVALS

1. UL yellow card recognized, file No. E31293.
2. CSA certified, file No. LR52898.
3. TUV certified, file No. EN60950.
4. TUV approval pending.
5. VDE Marks license No. 1126.
6. VDE Marks license No. 1354.
7. TUV approved, file No. R97229.

Fig.	Model	Connection Type	Bearing	Voltage Nom.	Voltage Range	Power (Watts)	Running Current	RPM	CFM	Dimensions (mm)	Life(F) Expectancy	Approvals (See Above)	Digi-Key Part No.	Price Each 1	Price Each 25	Comair Model No.	Finger Guards	Price Each
										AC Fans								
1	Sprite	Lead Wires	Sleeve	115	—	7/6	.08/.07A	2200/2600	23/27	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR093-ND	26.20	21.62	SU2E1	CR180-ND	.85
		Terminal	Sleeve	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR097-ND	25.90	21.37	SU2A5	CR180-ND	.85
		Lead Wires	Sleeve	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR091-ND	24.80	20.46	SU2A1	CR180-ND	.85
		Lead Wires	Ball	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	73,000 hrs. @ 40°C	1, 2, 5	CR103-ND	29.00	23.93	SU2B1	CR180-ND	.85
		Terminal	Ball	115	—	13/11	.19/.15A	2750/3250	28/34	80x42	73,000 hrs. @ 40°C	1, 2, 5	CR105-ND	29.00	23.93	SU2B5	CR180-ND	.85
		Lead Wires	Sleeve	115	—	7/6	.07/.06A	1700/1950	15/18	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR108-ND⋆	26.80	22.11	SU2C7	CR180-ND	.85
		Lead Wires	Sleeve	—	220/230	14/13	.09/.08A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR250-ND⋆	25.40	20.96	SU3A1	CR180-ND	.85
		Lead Wires	Sleeve	115	—	7/6	.07/.06A	1750/1900	17/20	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR251-ND⋆	25.40	20.96	SU2C1	CR180-ND	.85
		Terminal	Sleeve	—	220/230	14/13	.09/.08A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR252-ND⋆	26.40	21.78	SU3A5	CR180-ND	.85
		Terminal	Sleeve	115	—	7/6	.07/.06A	1750/1900	17/20	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR253-ND⋆	26.70	22.03	SU2C5	CR180-ND	.85
		Lead Wires	Ball	—	220/230	14/13	.09/.08A	2750/3250	28/34	80x42	55,000 hrs. @ 40°C	1, 2, 5	CR255-ND⋆	37.92	31.29	SU3B1	CR180-ND	.85
1	Whisper	Terminal	Sleeve	115	—	7/7	.07/.06A	1640/1660	55/57	120x38	55,000 hrs. @ 40°C	1, 2	CR113-ND	27.00	22.28	WR2A1	CR210-ND	1.79
		Terminal	Sleeve	115	—	11/10	.12/.11A	2100/2400	70/80	120x38	55,000 hrs. @ 40°C	1, 2	CR114-ND	27.00	22.28	WR2H1	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	12/12	.07/.07A	1590/2000	53/62	120x38	55,000 hrs. @ 40°C	1, 2	CR116-ND	27.50	22.69	WR3A1	CR210-ND	1.79
1	Whisper XL	Terminal	Sleeve	115	—	6/6	.07/.06A	1450/1500	48/50	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR117-ND†	27.40	22.61	WX2A1	CR210-ND	1.79
		Terminal	Sleeve	115	—	10/9	.11/.10A	1900/2000	65/70	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR119-ND†	27.40	22.61	WX2M1	CR210-ND	1.79
		Terminal	Sleeve	115	—	15/13	.19/.15A	2200/2500	70/83	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR118-ND†	27.40	22.61	WX2H1	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	14/13	.10/.09A	2200/2500	70/83	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR256-ND†	27.40	22.61	WX3H1	CR210-ND	1.79
1	Muffin	Terminal	Sleeve	115	—	15/14	.19/.16A	2650/3100	88/105	120x38	55,000 hrs. @ 40°C	1, 2	CR122-ND	24.30	20.05	MU2A1	CR210-ND	1.79
		Terminal	Ball	115	—	15/14	.19/.16A	2650/3100	88/105	120x38	85,000 hrs. @ 40°C	1, 2	CR124-ND	35.90	29.62	MU2B1	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	15/14	.10/.09A	2650/3100	88/105	120x38	55,000 hrs. @ 40°C	1, 2	CR123-ND	24.30	20.05	MU3A1	CR210-ND	1.79
		Terminal	Ball	—	220/230	15/14	.10/.09A	2650/3100	88/105	120x38	85,000 hrs. @ 40°C	1, 2	CR125-ND	35.90	29.62	MU3B1	CR210-ND	1.79
1	Muffin XL	Terminal	Sleeve	115	—	17/15	.20/.18A	2700/3100	92/108	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR128-ND†⋆	25.60	21.12	MX2A1	CR210-ND	1.79
		Terminal	Ball	115	—	17/15	.20/.18A	2700/3100	92/108	119x39	83,000 hrs. @ 40°C	1, 2, 5	CR132-ND†⋆	37.80	31.19	MX2B1	CR210-ND	1.79
		Terminal	Sleeve	115	—	17/15	.20/.18A	2700/3100	98/115	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR126-ND†	25.60	21.12	MX2A3	CR210-ND	1.79
		Terminal	Ball	115	—	17/15	.20/.18A	2700/3100	98/115	119x39	83,000 hrs. @ 40°C	1, 2, 5	CR130-ND†	37.80	31.19	MX2B3	CR210-ND	1.79
		Terminal	Sleeve	—	220/230	17/16	.10/.09A	2700/3100	98/115	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR257-ND†	25.70	21.21	MX3A3	CR210-ND	1.79
		Terminal	Ball	—	220/230	17/16	.10/.09A	2700/3100	98/115	119x39	55,000 hrs. @ 40°C	1, 2, 5	CR258-ND†	37.80	31.19	MX3B3	CR210-ND	1.79
2	Diplomat	Terminal	Ball	—	220/230	26/30	.13/.20A	2850/3350	150/170	133x91	50,000 hrs. @ 40°C	1, 2, 3	CR314-ND	64.89	55.88	DAF77B2	—	—
2	Falcon	Terminal	Ball	115	—	41.4	.36A	3400	300	172x55	40,000 hrs. @ 50°C	1, 2, 3	CR309-ND†	72.90	62.78	FA2B3	CR196-ND	3.06
		Terminal	Ball	—	220/230	41.4	.18A	3400	300	172x55	40,000 hrs. @ 50°C	1, 2, 3	CR310-ND†	72.88	62.76	FA77B3	CR196-ND	3.06
3	Maltese	Terminal	Ball	115	—	41.4	.36A	3400	300	172x150x55	40,000 hrs. @ 50°C	1, 2, 7	CR311-ND†	72.90	62.78	MA2B3	CR196-ND	3.06
		Terminal	Ball	—	220/230	41.4	.18A	3400	300	172x150x55	40,000 hrs. @ 50°C	1, 2, 7	CR312-ND†	72.90	62.78	MA77B3	CR196-ND	3.06
3	Major	Terminal	Ball	115	—	30/31	.27/.26A	2850/3350	200/235	172x150x51	5 yrs. @ 25°C	1, 2, 6	CR134-ND†	57.86	46.44	MR2B3	CR196-ND	3.06
		Terminal	Ball	—	220/230	26/30	.13/.14A	2850/3350	200/235	172x150x51	5 yrs. @ 25°C	1, 2, 6	CR135-ND†	58.15	46.67	MR77B3	CR196-ND	3.06
2	Patriot	Terminal	Ball	115	—	30/31	.27/.26A	2850/3350	200/235	172x51	5 yrs. @ 25°C	1, 2, 6	CR136-ND†	57.86	46.44	PT2B3	CR206-ND	2.72
		Terminal	Ball	—	220/230	26/30	.13/.14A	2850/3350	200/235	172x51	53,000 hrs. @ 40°C	1, 2, 6	CR137-ND†	61.20	50.49	PT77B3	CR206-ND	2.72
1	Tarzan	Terminal	Ball	115	—	90/85	1.4/1.2A	2820/3350	280/340	176x112	25,000 hrs. @ 40°C	1, 2, 4	CR140-ND	78.05	65.79	TNE2A	CR179-ND	6.56
		Terminal	Ball	—	220/230	82/85	.65/.60A	2820/3350	280/340	176x112	25,000 hrs. @ 40°C	1, 2, 4	CR141-ND	78.05	65.79	TNE3A	CR179-ND	6.56
		Leadwire	Ball	115	—	90/85	1.4/1.2A	2820/3350	280/340	176x112	25,000 hrs. @ 40°C	1, 2, 4	CR259-ND	88.20	72.77	TNE2C	CR179-ND	6.56
2	Caravel	Lead Wires	Ball	115	—	65	.48/.50A	1400/1650	455/550	254x89	54,000 hrs. @ 40°C	1, 2, 3	CR144-ND†	57.75	47.03	CLE2L2	CR182-ND	1.89
		Terminal	Ball	115	—	65	.48/.50A	1400/1650	455/550	254x89	54,000 hrs. @ 40°C	1, 2, 3	CR145-ND†	59.50	48.45	CLE2T2	CR182-ND	1.89
		Terminal	Ball	—	220/230	55	.24/.25A	1400/1650	455/550	254x89	54,000 hrs. @ 40°C	1, 2, 3	CR147-ND†	59.50	48.45	CLE3T2	CR182-ND	1.89
4	Biscuit Blower	Terminal	Sleeve	115	—	17/16	.19/.17A	2500/2700	20/22	120x40	55,000 hrs. @ 40°C	1, 2	CR148-ND	34.00	27.63	BT2A1	—	—
		Terminal	Sleeve	—	220/230	15/14	.09/.08A	2500/2700	20/22	120x40	55,000 hrs. @ 40°C	1, 2	CR149-ND	34.00	27.63	BT3A1	—	—

† Feathered Edge for lower noise ⋆ Reverse Flow

SUNON AC Axial Fans

Fig. 1

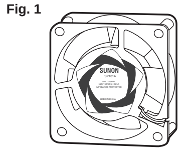


Fig. 2

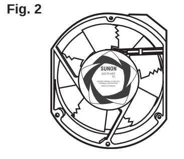
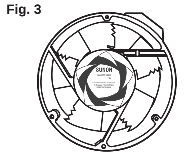


Fig. 3



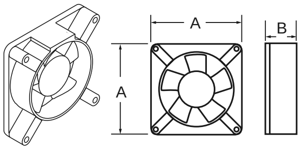
The Best Choice For Industrial Equipment and Home Appliance. SUNON Axial AC Fans are equipped with a shaded-pole motor, die-cast aluminum frame, and UL 94V-0 rated injection molded non-flammable thermoplastic impeller, and is the most reliable AC Fan in the field. SUNON AC Fans are available in both life-lubricated ball bearing systems and oil-impregnated sintered sleeve bearing systems to meet the diverse needs of the market. **Features:** • Frame: Die cast aluminum • Insulation: Class B integral ground system rated @ 120°C • Insulation Resistance: 500 Megohms, minimum at 500VDC • Operating Temperature: -10° to + 70°C **Applications:** Game Machines, Copy Machines, Medical Equipment, Vending Machines, Packing Equipment, Air Conditioners, Heaters, Manufacturing Equipment & Electric Products.

Fig.	Connection Type	Bearing	Voltage Nom. Range	Power (Watts)	Current Amp	RPM	CFM	Dimensions (mm)	Wt.(g)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Sunon Part No.
1	Terminal	Ball	115	22/20	0.26/0.24	2850/3150	97/117	120x38mm	550	259-1093-ND	14.15	11.82	11.07	SP100A-1123XBT
	Terminal	Ball	115	20/18	0.21/0.18	2750/3050	87/107	120x38mm	550	259-1094-ND	14.15	11.82	11.07	SP101A-1123HBT
	Terminal	Ball	115	11/11	0.13/0.11	2150/2300	72/78	120x38mm	550	259-1095-ND	14.15	11.82	11.07	SP103A-1123LBT
	Terminal	Sleeve	115	22/20	0.26/0.24	2700/3100	95/115	120x38mm	550	259-1096-ND	11.16	9.32	8.73	SP100A-1123XST
	Terminal	Sleeve	115	20/18	0.21/0.18	2550/2900	85/105	120x38mm	550	259-1097-ND	11.16	9.32	8.73	SP101A-1123HST
	Terminal	Sleeve	115	11/11	0.13/0.11	2000/2200	70/76	120x38mm	550	259-1098-ND	11.16	9.32	8.73	SP103A-1123LST
	Lead Wires	Ball	115	14/12	0.15/0.13	2400/2850	24/31	80x38mm	340	259-1099-ND	14.69	12.27	11.49	SF11580A-1083HBL
	Lead Wires	Sleeve	115	14/12	0.15/0.13	2300/2750	23/30	80x38mm	340	259-1100-ND	11.91	9.95	9.32	SF11580A-1083HSL
	Lead Wires	Ball	220/240	14/13.5	0.07/0.06	2400/2850	24/31	80x38mm	340	259-1101-ND	14.69	12.27	11.49	SF23080A-2083HBL
	Lead Wires	Sleeve	220/240	14/13.5	0.07/0.06	2300/2750	23/30	80x38mm	340	259-1102-ND	11.91	9.95	9.32	SF23080A-2083HSL
	Lead Wires	Ball	115	13/12	0.12/0.11	2350/2850	30/37	92x25mm	280	259-1103-ND	14.69	12.27	11.49	SF11592A-1092HBL
	Lead Wires	Sleeve	115	13/12	0.12/0.11	2250/2750	29/36	92x25mm	280	259-1104-ND	11.82	9.87	9.25	SF11592A-1092HSL
2	Terminal	Ball	115	27/29	0.24/0.26	2800/3200	202/239	172x150x51mm	908	259-1105-ND	60.66	35.01	32.78	A1175-HBT-TC
	Lead Wires	Ball	115	27/29	0.24/0.26	2800/3200	202/239	172x150x51mm	908	259-1106-ND	60.66	35.01	32.78	A1175-HBL-TC
	Lead Wires	Ball	220/240	26/31	0.12/0.15	2800/3200	202/239	172x150x51mm	908	259-1107-ND	60.66	35.01	32.78	A2175-HBL-TC
	Terminal	Ball	220/240	26/31	0.12/0.15	2800/3200	202/239	172x150x51mm	908	259-1108-ND	60.66	35.01	32.78	A2175-HBT-TC
3	Lead Wires	Ball	115	25/28	0.25/0.25	1400/1600	600/665	254x90mm	2000	259-1109-ND	103.22	79.43	74.38	A1259-MBL-TC
	Terminal	Ball	115	25/28	0.25/0.25	1400/1600	600/665	254x90mm	2000	259-1110-ND	103.22	79.43	74.38	A1259-MBT-TC
	Lead Wires	Ball	220/240	30/30	0.15/0.13	1400/1650	600/665	254x90mm	2000	259-1111-ND	103.22	79.43	74.38	A2259-MBL-TC
	Terminal	Ball	220/240	30/30	0.15/0.13	1400/1650	600/665	254x90mm	2000	259-1112-ND	103.22	79.43	74.38	A2259-MBT-TC

Please Note: Custom Fan Cable Assemblies available upon request.

SUNON

Thin Cooling Fans and Blowers



General

Motor: Patented brushless DC motor design

Fan Housing: Injection molded non-flammable black thermoplastic UL 94V-O rating

Blower Housing: See Below

Impeller: Injection molded non-flammable black thermoplastic UL 94V-O rating

Bearing: Precision, life-lubricated ball bearing system; Precision, oil-impregnated sintered sleeve bearing system.

Insulation: Class E integral ground system rated @ 100°C

Insulation Resistance: More than 500M ohm between internal stator and lead wire (+) measured by DC 500V

Dielectric Strength: 500VAC for one minute

Safety Protection: Electronic locked rotor protected

Operating Temperature: -10°C to +70°C for sleeve bearing version; -20°C to +80°C for ball bearing version (fans); 0°C to +70°C (blowers)

Storage Temperature: -40°C to +70°C (fans); -20°C to +70°C (blowers)

Operating Voltage: Rated voltage ±15%

Life Expectancy: 30,000 hours

Blower Features

- Exceptional cooling performance, radiating blower with one directional exhaust
- Low noise via highly efficient fan blade design
- Low power consumption and high motor efficiency through radial gap type motor design

Dim. (mm) A x B	Voltage (VDC)	Operating Voltage (VDC)	Bearing Type	Motor No. of Poles	Current (A)	Input (W)	Speed (RPM)	Air Flow (CFM)	Static Pressure (@ 1" or 25.4mm – H20)	Noise Pressure (dBA)	Digi-Key Part No.	Price Each				Sunon Part No.
												1	10	25	50	
Plastic Ultra-Thin Brushless DC Fans																
17 x 8	5	4-6	Ball	8	0.09	0.60	12000	0.80	0.12	25	259-1116-ND	15.39	11.62	10.88	10.23	KDE0517PDB2-8(2)(V)
20 x 8	5	4-6	Ball	8	0.11	0.55	15000	1.90	0.18	29	259-1081-ND	15.69	11.62	10.88	10.23	KDE0501PDB1-8(2)(V)
					0.09	0.60	12000	1.00	0.15	26.5	259-1117-ND	15.39	11.62	10.88	10.23	KDE0501PDB2-8(2)(V)
25 x 6	5	3-6	Ball	8	0.16	0.8	13000	3.0	0.22	31	259-1189-ND *NEW!*	12.80	9.48	8.88	8.35	KDE0502PEB1-8(MS.N)
					0.11	0.6	11500	2.7	0.18	26	259-1187-ND *NEW!*	12.75	9.48	8.88	8.35	KDE0502PEB2-8(MS.N)
					0.08	0.4	7000	1.4	0.07	16	259-1115-ND	13.70	10.15	9.51	8.94	KDE0502PEB3-8(MS.N)
30 x 6	5	4-6	Ball	8	0.11	0.90	9500	4.90	0.15	25	259-1119-ND	12.56	9.50	8.88	8.36	KDE0503PEB1-8(MS.N)
		3-6			0.15	0.75	7500	4.3	0.08	24.5	259-1190-ND *NEW!*	12.56	9.50	8.88	8.36	KDE0503PEB2-8(MS.N)
		3.5-6			0.07	0.35	5500	2.4	0.06	16.5	259-1191-ND *NEW!*	12.56	9.50	8.88	8.36	KDE0503PEB3-8(MS.N)
40 x 6	5	3-6	Ball	8	0.21	1.0	7000	5.9	0.10	32	259-1192-ND *NEW!*	12.41	9.51	8.89	8.36	KDE0504PEB1-8(MS)
					0.11	0.55	6000	5.3	0.07	28	259-1184-ND *NEW!*	12.41	9.51	8.89	8.36	KDE0504PEB2-8(MS)
					0.09	0.45	5000	4.5	0.06	23	259-1186-ND *NEW!*	12.41	9.51	8.89	8.36	KDE0504PEB3-8(MS)
Plastic Thin Brushless DC Fans																
20 x 10	5	4-6	Ball	8	0.12	0.6	10000	1.45	0.15	22	259-1125-ND	11.88	8.76	8.19	7.70	KDE0501PFB2-8.N(2)(V)
25 x 10	5	4-6	Ball	8	0.12	0.9	10000	2.4	0.16	24	259-1012-ND	12.80	9.51	8.89	8.36	KDE0502PFB1-8V
					0.12	0.6	10000	2.0	0.16	24	259-1062-ND	12.80	9.51	8.89	8.36	KDE0502PFB2-8V
					0.06	0.3	7000	1.3	0.09	23	259-1013-ND	12.80	9.51	8.89	8.36	KDE0502PFB3-8V
	12	10.2-13.8	Ball	8	0.10	1.7	10000	2.4	0.16	24	259-1014-ND	12.80	9.51	8.89	8.36	KDE1202PFB1-8V
					0.10	.72	10000	2.0	0.16	24	259-1063-ND	12.80	9.51	8.89	8.36	KDE1202PFB2-8V
					0.08	0.9	7000	1.3	0.09	23	259-1015-ND	12.80	9.51	8.89	8.36	KDE1202PFB3-8V
30 x 10	5	4-6	Ball	8	0.18	0.9	9500	3.5	0.14	22.5	259-1016-ND	12.80	9.51	8.89	8.36	KDE0503PFB1-8V
					0.12	0.6	8000	3.0	0.11	20.5	259-1064-ND	12.80	9.51	8.89	8.36	KDE0503PFB2-8V
					0.06	0.3	5500	2.3	0.07	18.5	259-1017-ND	12.80	9.94	9.30	8.74	KDE0503PFB3-8V
	12	10.2-13.8	Ball	8	0.13	.96	9500	3.5	0.14	22.5	259-1018-ND	12.80	9.51	8.89	8.36	KDE1203PFB1-8V
					0.12	.84	8000	3.0	0.11	20.5	259-1065-ND	12.80	9.51	8.89	8.36	KDE1203PFB2-8V
					0.08	0.9	5500	2.3	0.07	18	259-1019-ND	12.80	9.94	9.30	8.74	KDE1203PFB3-8V
	5	3.5-6	Ball	8	0.20	1.0	7500	6.5	0.12	25.5	259-1185-ND *NEW!*	13.81	10.81	10.11	9.50	KDE0535PFB1-8(MS)OC
					0.14	0.7	6000	5.2	0.08	21	259-1188-ND *NEW!*	13.81	10.81	10.11	9.50	KDE0535PFB2-8(MS)OC
					0.07	0.35	4500	3.8	0.05	18	259-1182-ND *NEW!*	13.81	10.81	10.11	9.50	KDE0535PFB3-8(MS)OC
35 x 10	12	5-13.8	Ball	8	0.08	1.0	7500	6.5	0.12	25.5	259-1183-ND *NEW!*	13.81	10.81	10.11	9.50	KDE1235PFB1-8(MS)
					0.06	0.7	6000	5.2	0.08	19.5	259-1181-ND *NEW!*	13.81	10.81	10.11	9.50	KDE1235PFB2-8(MS)
					0.06	0.7	4500	3.8	0.05	18	259-1180-ND *NEW!*	13.81	10.81	10.11	9.50	KDE1235PFB3-8(MS)
40 x 10	5	4-6	Sleeve	8	0.15	0.7	7000	6.6	0.17	25	259-1132-ND	6.26	4.42	4.22	3.87	KDE0504PFS1-8
					0.11	0.6	6000	5.6	0.13	24	259-1133-ND	6.26	4.42	4.22	3.87	KDE0504PFS2-8
					0.08	0.4	4500	4.5	0.09	22.8	259-1134-ND	6.26	4.42	4.22	3.87	KDE0504PFS3-8
	5	3-6	Ball	8	0.07	0.35	6100	5.1	0.12	30.3	259-1260-ND *NEW!*	7.47	5.35	5.09	4.74	KDE0504PFB2-8A(MS)
	12	5-13.8	Sleeve	4	0.12	1.4	7400	7.3	0.17	30.3	259-1199-ND *NEW!*	6.26	4.42	4.22	3.87	KD1204PFS1 H
		5-13.8	Ball		0.12	1.4	8400	8.3	0.19	34.4	259-1193-ND *NEW!*	7.47	5.35	5.09	4.74	KD1204PFB1 H
		5-13.8	Ball		0.09	1.1	6600	6.5	0.15	27	259-1205-ND *NEW!*	7.47	5.35	5.09	4.74	KD1204PFB2 H
		6-13.8	Sleeve		0.09	1.1	5500	4.9	0.11	25	259-1208-ND *NEW!*	6.26	4.42	4.22	3.87	KD1204PFS2 H
		5-13.8	Ball		0.05	0.6	5200	4.7	0.10	24	259-1198-ND *NEW!*	7.47	5.35	5.09	4.74	KD1204PFB3 H
		6-13.8	Sleeve		0.06	0.7	4200	4.2	0.08	22	259-1200-ND *NEW!*	6.26	4.42	4.22	3.87	KD1204PFS3 H
45 X 10	5	4-6	Sleeve	8	0.12	0.6	5200	7	0.11	27	259-1144-ND	6.38	4.50	4.21	3.96	KDE0545PFS2-8
	5	4-6	Ball	8	0.16	0.8	6300	9	0.155	29	259-1145-ND	7.67	5.50	5.23	4.87	KDE0545PFB1-8
					0.12	0.6	5500	7.5	0.12	28	259-1146-ND	7.83	5.61	5.34	4.97	KDE0545PFB2-8
	12	5-13.8	Ball	4	0.12	1.4	7100	9.5	0.16	33.8	259-1197-ND *NEW!*	7.83	5.61	5.34	4.97	KD1245PFB1 H
		5-13.8	Ball		0.06	0.7	4400	6.1	0.10	23	259-1199-ND *NEW!*	6.26	4.42	4.22	3.87	KD1204PFS1 H
		6-13.8	Sleeve		0.10	1.2	5300	7.1	0.12	25.2	259-1202-ND *NEW!*	6.38	4.50	4.21	3.96	KD1245PFS2 H
		5-13.8	Ball		0.09	1.1	5900	8	0.13	29	259-1207-ND *NEW!*	7.83	5.61	5.34	4.97	KD1245PFB2 H
		5-13.8	Ball		0.09	1.1	5900	8.0	0.13	29	259-1196-ND *NEW!*	7.83	5.61	5.34	4.97	KD1245PFB3 H
50 x 10	5	4-6	Ball	8	0.17	0.9	5400	10.25	0.11	31.5	259-1154-ND	8.54	6.13	5.83	5.42	KDE0505PFB1-8(MS)
					0.13	0.6	4700	9.2	0.10	30	259-1155-ND	7.98	5.72	5.44	5.07	KDE0505PFB2-8(MS)
					0.09	0.4	3800	7.2	0.07	22	259-1156-ND	8.54	6.13	5.83	5.42	KDE0505PFB3-8(MS)
	5	4-6	Ball	4	0.38	1.9	5300	12.7	0.16	27.8	259-1161-ND	8.55	6.31	6.00	5.59	KDE0505PHB2
	5	4-6	Sleeve	8	0.17	0.9	5100	9.6	0.105	30.5	259-1258-ND *NEW!*	6.76	4.77	4.47	4.20	KDE0505PFS1-8
					0.13	0.6	4300	8	0.09	29	259-1259-ND *NEW!*	6.76	4.77	4.47	4.20	KDE0505PFS2-8
	12	5-13.8	Ball	4	0.13	1.6	6000	11.4	0.12	34.7	259-1195-ND *NEW!*	7.98	5.72	5.44	5.07	KD1205PFB1 H
		5-13.8	Ball		0.10	1.2	5000	9.5	0.10	28.9	259-1201-ND *NEW!*	7.98	5.72	5.44	5.07	KD1205PFB2 H
		6-13.8	Sleeve		0.09	1.1	4500	8.5	0.09	26	259-1206-ND *NEW!*	6.76	4.77	4.47	4.20	KD1205PFS2 H
		5-13.8	Ball		0.07	0.8	4200	8.0	0.08	24.3	259-1194-ND *NEW!*	7.57	5.41	5.15	4.80	KD1205PFB3 H
50 x 15	12	5-13.8	Sleeve	4	0.08	1.0	4700	13	0.17	29	259-1203-ND *NEW!*	7.01	5.06	4.83	4.43	KD1205PHS2 H
		8-13.8	Ball		0.06	0.7	3700	10.2	0.12	22.5	259-1204-ND *NEW!*	8.55	6.31	6.00	5.59	KD1205PHB3 H
Thin Miniature Brushless DC Blowers																
25 x 10	5	4-6	Ball	8	0.125	0.60	10000	0.7	0.23	24	259-1165-ND*	12.65	9.51	8.89	8.36	B0502PFB2-8(MS)
					0.2	0.9	7000	0.90	0.37	25	259-1166-ND†	12.85	9.63	9.15	8.53	B0502AFB1-8(MS)
					0.125	0.60	10000	0.7	0.23	24	259-1167-ND*	12.85	9.63	9.15	8.53	B0502AFB2-8(MS)
30 x 10	5	4-6	Ball	8	0.125	0.65	8000	1.00	0.27	20.5	259-1168-ND*	12.65	9.51	8.89	8.36	B0503PFB2-8(MS)
					0.22	0.95	7000	1.20	0.38	22.5	259-1169-ND†	12.85	9.63	9.15	8.53	B0503AFB1-8(MS)
					0.125	0.65	8000	1.00	0.27	20.5	259-1170-ND*	12.85	9.63	9.15	8.53	B0503AFB2-8(MS)
Ultra-Thin Miniature Brushless DC Blowers																
35 x 4.8	5	4-6	Ball	8	0.16	0.8	9500	1.2	0.33	30	259-1087-ND†	17.47	14.23	13.33	12.53	GB0535ACB1-8 OC
					0.07	0.35	7500	0.95	0.22	24	259-1088-ND†	17.47	14.23	13.33	12.53	GB0535ACB2-8 OC
35 x 6	5	4-6	Ball	8	0.12	0.6	8500	1.4	0.32	31	259-1089-ND†	17.47	14.23	13.33	12.53	GB0535AEB1-8 OC
					0.08	0.4	7000	1.15	0.22	25	259-1190-ND†	12.56	9.50	8.88	8.36	GB0535AEB2-8 OC
35 x 7	5	4-6	Ball	8	0.12	0.6	8000	1.6	0.31	33	259-1091-ND†	17.47	14.23	13.54	12.53	GB0535ADB1-8 OC
					0.08	0.4	6500	1.3	0.22	25	259-1092-ND†	17.47	14.23	13.33	12.53	GB0535ADB2-8 OC
					0.09	0.45	7000	0.7	0.135	23	259-1176-ND†	12.85	9.63	9.15	8.53	B0535ADB2-8(MS)

* Plastic Housing (Fan Blades - PBT 94V-O)   † Aluminum Housing (Fan Blades - PBT 94V-O)

Please Note: Custom Fan Cable Assemblies available upon request.

Fan Accessories

Fig. 1

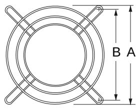


Fig. 2

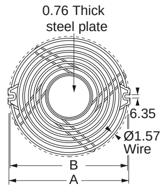


Fig. 3

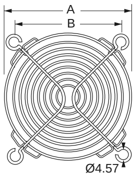


Fig. 4

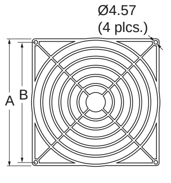


Fig. 5

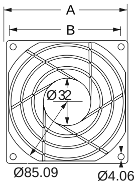


Fig. 6

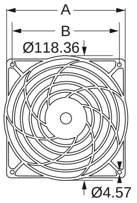


Fig. 7

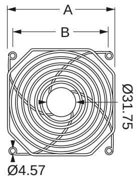


Fig. 8

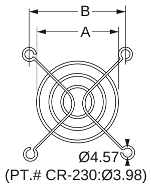


Fig. 9

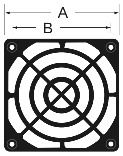


Fig. 10

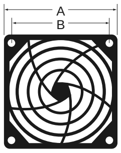


Fig. 11

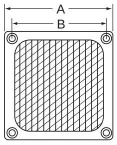


Fig. 12

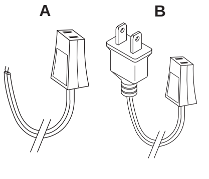


Fig. 13

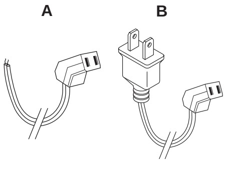


Fig. 14

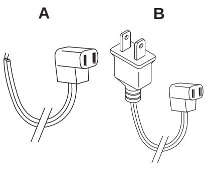


Fig. 15

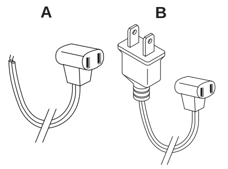


Fig.	Dim. (mm)			Fits Fan Size (mm)	Center Dim. (mm)	No. of Rings	Material	Digi-Key Part No.	Price Each			Qualtek Part No.
	A	B	Thick						1	25	50	
Finger Guards												
1	109.47	104.78	4.83	120 Sq.	57 open	3	Metal	CR178-ND	1.00	.84	.76	08146
	76.96	71.37	3.89	80 Sq.	50 open	3	Metal	CR180-ND	.85	.71	.65	08153
	209.55	173.99	8.38	254 Dia.	102 open	5	Metal	CR182-ND	1.89	1.71	1.53	08154
2	158.75	161.92	6.10	150 Dia.	74 solid	6	Metal	CR206-ND	2.72	2.29	2.07	08152
	158.75	161.92	6.10	171.5 Dia.	74 solid	5 3/4	Metal	CR196-ND	3.06	2.58	2.33	08151
3	124.46	113.28	5.92	127 Dia.	14 open	9	Metal	CR200-ND	2.03	1.71	1.55	08150
4	115.06	104.65	6.60	120 Sq.	25.4 solid	6	Plastic	CR280-ND	.89	.75	.68	09120-G
5	115.06	104.65	2.54	120 Sq.	32 solid	5	Plastic	CR315-ND	1.40	1.18	1.07	09122-G
6	115.06	104.65	6.60	120 Sq.	45 solid	5	Plastic	CR281-ND	1.28	1.08	.98	09121-G
7	117.35	104.78	5.21	120 Sq.	33 solid	7	Metal	CR210-ND	1.79	1.51	1.36	08141
8	89.41	82.42	4.95	92 Sq.	14 open	6	Metal	CR220-ND	.92	.78	.70	08174
	53.10	50.04	4.95	60 Sq.	14 open	4	Metal	CR221-ND	.71	.60	.54	08147
	222.25	173.99	6.35	254 Dia.	76.2 solid	9	Metal	CR223-ND	3.67	3.32	2.97	08127
	115.6	104.8	5.66	120 Dia.	17.5 open	8	Metal	CR224-ND	1.11	.93	.84	08170
	76.20	71.37	4.95	80 Dia.	17.4 open	5	Metal	CR229-ND	.81	.69	.62	08172
	29.21	32.00	4.80	40 Dia.	15.875 open	2	Metal	CR230-ND	.64	.54	.49	08149
9	39.88	32.00	4.83	40 Sq.	12 open	3	Plastic	CR285-ND	.43	.37	.33	09150-G
	59.94	50.04	6.35	60 Sq.	5 solid	3	Plastic	CR225-ND	.47	.40	.36	09250-G
10	80.01	71.37	6.35	80 Sq.	15 solid	3	Plastic	CR226-ND	.72	.61	.55	09325-G
	79.76	71.37	3.05	80 Sq.	32 solid	5	Plastic	CR282-ND	.58	.49	.44	09080-G
	91.95	82.55	6.35	92 Sq.	31.5 solid	4	Plastic	CR227-ND	.80	.67	.61	09362-G
	118.11	104.65	7.11	120 Sq.	25 solid	6	Plastic	CR228-ND	.98	.83	.75	09450-G

Fig.	Description	Fits Fan Size (mm)	Digi-Key Part No.	Price Each			Qualtek Part No.
				1	25	50	
Filters and Filter Accessories							
9	Finger Guard Assembly (30 PPI)	40 Square	CR286-ND	1.00	.84	.76	09150-F/30
9	Finger Guard Assembly (45 PPI)	40 Square	CR287-ND	1.00	.84	.76	09150-F/45
—	Replacement Filter Element (30 PPI) - Pkg. of 5	40 Square	CR324-ND	2.15	1.81	1.64	09150-M/30
—	Replacement Filter Element (45 PPI) - Pkg. of 5	40 Square	CR325-ND	2.15	1.81	1.64	09150-M/45
9	Finger Guard Assembly (30 PPI)	60 Square	CR283-ND	1.24	1.05	.95	09250-F/30
9	Finger Guard Assembly (45 PPI)	60 Square	CR284-ND	1.24	1.05	.95	09250-F/45
—	Replacement Filter Element (30 PPI) - Pkg. of 5	60 Square	CR326-ND	2.23	1.87	1.70	09250-M/30
—	Replacement Filter Element (45 PPI) - Pkg. of 5	60 Square	CR327-ND	2.23	1.87	1.70	09250-M/45
10	Filter Guard Assembly (30 PPI)	80 Square	CR212-ND	1.43	1.21	1.09	09325-F/30
10	Filter Guard Assembly (45 PPI)	80 Square	CR214-ND	1.43	1.21	1.09	09325-F/45
—	Replacement Filter Element (30 PPI) - Pkg. of 5	80 Square	CR213-ND	1.61	1.36	1.23	09325-M/30
—	Replacement Filter Element (45 PPI) - Pkg. of 5	80 Square	CR215-ND	1.61	1.36	1.23	09325-M/45
10	Filter Guard Assembly (30 PPI)	92 Square	CR328-ND	3.19	2.89	2.59	09362-F/30
10	Filter Guard Assembly (45 PPI)	92 Square	CR329-ND	3.19	2.89	2.59	09362-F/45
—	Replacement Filter Element (30 PPI) - Pkg. of 5	92 Square	CR330-ND	2.58	2.17	1.96	09362-M/30
—	Replacement Filter Element (45 PPI) - Pkg. of 5	92 Square	CR331-ND	2.58	2.17	1.96	09362-M/45
10	Filter Guard Assembly (30 PPI)	119 & 120 Square	CR216-ND	2.19	1.84	1.67	09450-F/30
10	Filter Guard Assembly (45 PPI)		CR218-ND	2.19	1.84	1.67	09450-F/45
—	Replacement Filter Element (30 PPI) - Pkg. of 5		CR217-ND	2.08	1.75	1.58	09450-M/30
—	Replacement Filter Element (45 PPI) - Pkg. of 5		CR219-ND	2.08	1.75	1.58	09450-M/45
11	Filter/Screen, Stainless Steel (Washable) Dim.:A: 64.26, B: 51.82	60 Square	CR373-ND	5.38	4.87	4.36	06250-SS
	Filter/Screen, Aluminum (Washable) Dim.: A: 83.82, B: 71.37	80 Square	CR233-ND	3.35	3.03	2.71	06325-M
	Filter/Screen, Stainless Steel (Washable) Dim.:A: 83.82, B: 71.37	80 Square	CR374-ND	5.52	5.00	4.48	06325-SS
	Filter/Screen, Aluminum (Washable) Dim.: A: 91.95, B: 82.42	92 Square	CR234-ND	3.74	3.39	3.03	06362-M
	Filter/Screen, Stainless Steel (Washable) Dim.: A: 91.95, B: 82.42	92 Square	CR375-ND	5.69	5.15	4.61	06362-SS
	Filter/Screen, Aluminum (Washable) Dim.: A: 118.87, B: 104.77	120 Square	CR235-ND	4.15	3.76	3.36	06450-M
	Filter/Screen, Stainless Steel (Washable) Dim.: A: 118.87, B: 104.77	120 Square	CR376-ND	8.53	7.72	6.91	06450-SS
Plug Cord Sets – SPT-1 (18/2)							
12A	Straight On Plug and Cord – 24" (60.96cm)	Fits all Diplomat, Falcon, Maltese, Major, Patriot, Tarzan, Caravel,and Biscuitmodel fans with Terminal Connections	CR197-ND	.92	.78	.70	07100-24
	Straight On Plug and Cord – 36" (91.44cm)		CR198-ND	1.04	.88	.80	07100-36
	Straight On Plug and Cord – 50" (127.00cm)		CR199-ND	1.19	1.00	.91	07100-50
12B	Straight On Plug and Cord – 24" (60.96cm)		CR361-ND	1.63	1.37	1.24	07100-SP024
	Straight On Plug and Cord – 36" (91.44cm)		CR362-ND	1.80	1.52	1.37	07100-SP036
	Straight On Plug and Cord – 72" (182.88cm)		CR363-ND	2.38	2.00	1.81	07100-SP072
13A	45° Angle Plug and Cord – 24" (60.96cm)	Fits all AC Fans with Terminal Connection Type	CR318-ND	1.65	1.39	1.26	07145-24
	45° Angle Plug and Cord – 36" (91.44cm)		CR319-ND	1.80	1.52	1.37	07145-36
13B	45° Angle Plug and Cord – 36" (91.44cm)		CR365-ND	1.80	1.52	1.37	07145-SP036
	45° Angle Plug and Cord – 72" (182.88cm)		CR366-ND	2.38	2.00	1.81	07145-SP072
14A	90° Angle Plug and Cord – 12" (30.48cm)	Fits all AC Fans with Terminal Connection Type	CR320-ND	1.58	1.33	1.20	07190-12
	90° Angle Plug and Cord – 24" (60.96cm)		CR321-ND	1.65	1.39	1.26	07190-24
	90° Angle Plug and Cord – 36" (91.44cm)		CR322-ND	1.80	1.52	1.37	07190-36
14B	90° Angle Plug and Cord – 24" (60.96cm)		CR367-ND	1.63	1.37	1.24	07190-SP024
	90° Angle Plug and Cord – 36" (91.44cm)		CR368-ND	1.80	1.52	1.37	07190-SP036
	90° Angle Plug and Cord – 72" (182.88cm)		CR369-ND	2.38	2.00	1.81	07190-SP072
15A	90° Angle T-Style Plug and Cord – 12" (30.48cm)	Fits all AC Fans with Terminal Connection Type	CR323-ND	1.58	1.33	1.20	07199-12
	90° Angle T-Style Plug and Cord – 24" (60.96cm)		CR170-ND	.92	.78	.70	07199-24
	90° Angle T-Style Plug and Cord – 36" (91.44cm)		CR175-ND	1.04	.88	.80	07199-36
	90° Angle T-Style Plug and Cord – 72" (182.88cm)		CR337-ND	1.61	1.36	1.23	07199-72
	90° Angle T-Style Plug and Cord – 96" (243.84cm)		CR338-ND	1.91	1.61	1.46	07199-96
15B	90° Angle T-Style Plug and Cord – 36" (91.44cm)		CR371-ND	1.80	1.52	1.37	07199-SP036
	90° Angle T-Style Plug and Cord – 72" (182.88cm)		CR372-ND	2.38	2.00	1.81	07199-SP072

Digi-Key® Potentiometer Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
Panasonic 6mm Carbon Trimmer, Laydown and Standup Version		
10 each of 14 popular values (140 pieces)	DXA-KIT-ND	29.95
Panasonic 6mm Cermet Dust-Proof		
Both Sides Adjust - 10 each of 13 popular values (130 total pieces)	31G-KIT-ND	52.95
Vertical Both Sides Adjust - 10 each of 13 popular values (130 total pieces)	36G-KIT-ND	52.95
Panasonic SMT Trimmer		
P1S Series - 10 each of 12 values (120 total pieces)	P1S-KIT-ND	43.95
P1D Series - 10 each of 13 values (130 total pieces)	P1D-KIT-ND	43.95
P1E Series - 10 each of 13 values (130 total pieces)	P1E-KIT-ND	43.95
P7J Series - 10 each of 15 values (150 total pieces)	P7J-KIT-ND	59.95
Bourns 3/4" (19.05mm) Rectangular 15-Turn		
10 each of 15 popular values (150 total pieces)	3006P-KIT-ND	159.00
Bourns 3/8" (9.52mm) Square 25-Turn		
3296P Series - 5 each of values denoted (75 total pieces)	3296P-KIT-ND	139.00
3296W Series - 5 each of values denoted (75 total pieces)	3296W-KIT-ND	139.00
3296X Series - 5 each of values denoted (75 total pieces)	3296X-KIT-ND	139.00
3296Y Series - 5 each of values denoted (75 total pieces)	3296Y-KIT-ND	139.00
3296Z Series - 5 each of values denoted (75 total pieces)	3296Z-KIT-ND	139.00
Bourns 3/8" (9.52mm) Square Single-Turn		
3386C Series - 5 each of values denoted (75 total pieces)	3386C-KIT-ND	65.95
3386F Series - 5 each of values denoted (75 total pieces)	3386F-KIT-ND	65.95
3386P Series - 5 each of values denoted (75 total pieces)	3386P-KIT-ND	65.95
3386R Series - 5 each of values denoted (75 total pieces)	3386R-KIT-ND	65.95
3386X Series - 5 each of values denoted (75 total pieces)	3386X-KIT-ND	65.95
Bourns 1/2" (12.70mm) Square 25-Turn		
5 each of 18 popular values (90 total pieces)	3252-KIT-ND	599.00
Bourns 1/4" (6.35mm) Square Cermet 12-Turn		
3266W Series - 5 each of values denoted (85 total pieces)	3266W-KIT-ND	199.00
3266X Series - 5 each of values denoted (85 total pieces)	3266X-KIT-ND	199.00
Bourns 1/4" (6.35mm) Square Cermet Single-Turn		
3362H Series - 10 each of 14 popular values (140 total pieces)	3362H-KIT-ND	89.95
3362M Series - 10 each of 14 popular values (140 total pieces)	3362M-KIT-ND	89.95
3362R Series - 10 each of 14 popular values (140 total pieces)	3362R-KIT-ND	89.95
3362U Series - 10 each of 14 popular values (140 total pieces)	3362U-KIT-ND	89.95
3362X Series - 10 each of 14 popular values (140 total pieces)	3362X-KIT-ND	89.95
Bourns 9mm Round Cermet Single-Turn		
10 each of values denoted (180 total pieces)	3309-KIT-ND	69.95
Bourns 1/4" (6.35mm) Round Cermet Single-Turn		
3329H Series - 5 each of 14 popular values (70 total pieces)	3329H-KIT-ND	129.95
3329P Series - 5 each of 14 popular values (70 total pieces)	3329P-KIT-ND	129.95
3329S Series - 5 each of 14 popular values (70 total pieces)	3329S-KIT-ND	129.95
3329W Series - 5 each of 14 popular values (70 total pieces)	3329W-KIT-ND	129.95
3329X Series - 5 each of 14 popular values (70 total pieces)	3329X-KIT-ND	129.95
Bourns 5/16" (7.95mm) Round Cermet 4-Turn		
3339P Series - 5 each of 14 popular values (70 total pieces)	3339P-KIT-ND	269.00
3339W Series - 5 each of 14 popular values (70 total pieces)	3339W-KIT-ND	269.00
Bourns 3/8" (9.52mm) Round Cermet Single-Turn		
3352E Series - 5 each of 15 popular values (75 total pieces)	3352E-KIT-ND	49.95
3352H Series - 5 each of 15 popular values (75 total pieces)	3352H-KIT-ND	49.95
3352P Series - 5 each of 15 popular values (75 total pieces)	3352P-KIT-ND	49.95
3352T Series - 5 each of 15 popular values (75 total pieces)	3352T-KIT-ND	49.95
3352W Series - 5 each of 15 popular values (75 total pieces)	3352W-KIT-ND	49.95
Bourns 1/2" (12.70mm) Round Wirewound Single-Turn		
5 each of 9 popular values (45 total pieces)	3345P-KIT-ND	199.95
Bourns SMD 4mm Square. Cermet Single-Turn Open Frame		
5 each of 11 popular values (55 total pieces)	3364W-KIT-ND	35.95
CTS 1/4 Watt Carbon Linear Taper		
270 Series, With Switch - 5 each of 8 values (40 total pieces)	270-A-KIT-ND	109.95
270 Series, Without Switch - 5 each of 8 values (40 total pieces)	270-B-KIT-ND	89.95
CTS 1/4 Watt Carbon Logarithmic Taper		
270 Series, With Switch - 5 each of 8 values (40 total pieces)	270-C-KIT-ND	109.95
270 Series, Without Switch - 5 each of 8 values (40 total pieces)	270-D-KIT-ND	89.95
CTS 1/8 Watt Carbon		
296 Series, Top Adjust - 5 each of 11 values (55 total pieces)	296U-KIT-ND	59.95
296 Series, Side Adjust - 5 each of 11 values (55 total pieces)	296X-KIT-ND	59.95
CTS 5 Watt Wirewound		
026 Series - 5 each of 7 values (35 total pieces)	26-KIT-ND	99.95
CTS 1/4 Watt Trimmer		
201 Series, Top Adjust - 5 each of 13 values (65 total pieces)	201U-KIT-ND	29.95
201 Series, Side Adjust - 5 each of 13 values (65 total pieces)	201X-KIT-ND	29.95
CTS .15 Watt Trimmer		
262 Series, Top Adjust - 5 each of 11 values (55 total pieces)	U262-KIT-ND	27.95
262 Series, Side Adjust - 5 each of 11 values (55 total pieces)	X262-KIT-ND	27.95

Digi-Key® Thermistor Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
Keystone Thermistors		
PTC - 2 each of 10 popular thermistors (20 total pieces)	KCPTC1-KIT-ND	37.95
NTC - 2 each of 15 popular thermistors (30 total pieces)	KCNTC-KIT-ND	39.95

Digi-Key® Resistor Kits

Conveniently packaged
into bags per value.

Description	Digi-Key Part No.	Price Each
Yageo 5% Carbon Film, 1/8 Watt		
5 ea. of values 1.0, 1.2, 1.5, 1.8, 2.2, etc. thru 1.0 megohm (365 total pieces)	RS112-ND	16.96
5 ea. of values 1.1, 1.3, 1.6, 2.0, 2.4, etc. thru 910 kilohm (360 total pieces)	RS212-ND	16.99
200 ea. of all 161 standard values 1.0 - 4.7 megohms (32,200 total pieces)	RSE200-ND	409.00
Yageo 5% Carbon Film, 1/4 Watt		
5 ea. of values 1.0, 1.2, 1.5, 1.8, 2.2, etc. thru 1.0 megohm (365 total pieces)	RS125-ND	14.95
5 ea. of values 1.1, 1.3, 1.6, 2.0, 2.4, etc. thru 910 kilohm (360 total pieces)	RS225-ND	14.95
200 ea. of all 161 standard values 1.0 - 4.7 megohms (32,200 total pieces)	RSQ200-ND	239.00
Yageo 5% Carbon Film, 1/2 Watt		
5 ea. of values 1.0, 1.2, 1.5, 1.8, 2.2, etc. thru 1.0 megohm (365 total pieces)	RS150-ND	16.95
5 ea. of values 1.1, 1.3, 1.6, 2.0, 2.4, etc. thru 910 kilohm (360 total pieces)	RS250-ND	16.95
200 ea. of all 161 standard values 1.0 - 4.7 megohms (32,200 total pieces)	RSH200-ND	335.00
Yageo 1% Metal Film, 1/4 Watt		
5 each of values 10 ohm to 97.6 ohm (480 total pieces)	RS1X-ND	29.95
5 each of values 100 ohm to 976 ohm (480 total pieces)	RS2X-ND	29.95
5 each of values 1.00K to 9.76K (480 total pieces)	RS3X-ND	29.95
5 each of values 10.0K to 97.6K (480 total pieces)	RS4X-ND	29.95
5 each of values 100K to 1.00M (480 total pieces)	RS5X-ND	29.95
Yageo 5% Metal Oxide, 1 Watt		
5 each of values 0.47 ohm to 56 ohm (255 total pieces)	RS101-ND	26.95
5 each of values 62 ohm to 7.5K (255 total pieces)	RS201-ND	26.95
5 each of values 8.2K to 1.0M (255 total pieces)	RS301-ND	26.95
Yageo 5% Metal Oxide, 2 Watt		
5 each of values 0.47 ohm to 56 ohm (255 total pieces)	RS102-ND	29.95
5 each of values 62 ohm to 7.5K (255 total pieces)	RS202-ND	29.95
5 each of values 8.2K to 1.0M (255 total pieces)	RS302-ND	29.95
Yageo 5% Wirewound Rectangular, 5 Watt		
5 each of values 0.30 ohm - 0.91 ohm (60 pieces)	RS105-ND	23.95
4 each of values 1.0 ohm - 9.1 ohm (96 pieces)	RS205-ND	32.95
4 each of values 10 ohm - 91 ohm (96 pieces)	RS305-ND	32.95
3 each of values 100 ohm - 2.0K (96 pieces)	RS405-ND	32.95
Yageo 5% Wirewound Rectangular, 10 Watt		
2 each of all 10 watt resistors values listed (168 total pieces)	RS110-ND	72.95
Yageo America 0402 1% Thick Film Chip Resistor Assortments, 1/16 Watt		
50 each of values 1.00 ohm to 75.0 ohm (850 total pieces)	PHL1-KIT-ND	39.95
50 each of values 100 ohm to 910 ohm (1,100 pieces)	PHL2-KIT-ND	49.95
50 each of values 1.00K ohm to 9.53K ohm (1,650 pieces)	PHL3-KIT-ND	74.95
50 each of values 10.0K ohm to 97.6K ohm (2,800 pieces)	PHL4-KIT-ND	119.95
50 each of values 100K ohm to 1.0K ohm (1,600 pieces)	PHL5-KIT-ND	74.95
Yageo America 0603 1% Thick Film Chip Resistor Assortments, 1/16 Watt		
50 each of values 1.00 ohm to 7.50 ohm (1,150 total pieces)	PHH1-KIT-ND	49.95
50 each of values 10.0 ohm to 97.6 ohm (5,700 total pieces)	PHH2-KIT-ND	199.00
50 each of values 100 ohm to 976 ohm (5,750 total pieces)	PHH3-KIT-ND	199.00
50 each of values 1.00K ohm to 9.76K ohm (5,700 total pieces)	PHH4-KIT-ND	199.00
50 each of values 10.0K ohm to 97.6K ohm (5,700 total pieces)	PHH5-KIT-ND	199.00
50 each of values 100K ohm to 1.00M ohm (6,000 total pieces)	PHH6-KIT-ND	199.00
Yageo America 0805 1% Thick Film Chip Resistor Assortments, 1/10 Watt		
50 each of values 1.00 ohm to 9.76 ohm (5,200 total pieces)	PHC1A-KIT-ND	199.00
200 each of values 1.00 ohm to 9.76 ohm (20,800 total pieces)	PHC1-KIT-ND	399.00
50 each of values 10.0 ohm to 97.6 ohm (5,700 total pieces)	PHC2A-KIT-ND	199.00
200 each of values 10.0 ohm to 97.6 ohm (22,800 total pieces)	PHC2-KIT-ND	399.00
50 each of values 100 ohm to 976 ohm (5,700 total pieces)	PHC3A-KIT-ND	199.00
200 each of values 100 ohm to 976 ohm (22,800 total pieces)	PHC3-KIT-ND	399.00
50 each of values 1.00K ohm to 9.76K ohm (5,750 total pieces)	PHC4A-KIT-ND	199.00
200 each of values 1.00K ohm to 9.76K ohm (23,000 total pieces)	PHC4-KIT-ND	399.00
50 each of values 10.0K ohm to 97.6K ohm (5,650 total pieces)	PHC5A-KIT-ND	199.00
200 each of values 10.0K ohm to 97.6K ohm (22,600 total pieces)	PHC5-KIT-ND	399.00
50 each of values 100K ohm to 1.00M ohm (5,750 total pieces)	PHC6A-KIT-ND	199.00
200 each of values 100K ohm to 1.00M ohm (23,000 total pieces)	PHC6-KIT-ND	399.00
Yageo America 1206 1% Thick Film Chip Resistor Assortments, 1/8 Watt		
50 each of values 1.00 ohm to 9.76 ohm (5,700 total pieces)	PHF1A-KIT-ND	249.00
200 each of values 1.00 ohm to 9.76 ohm (22,800 total pieces)	PHF1-KIT-ND	499.00
50 each of values 10.0 ohm to 97.6 ohm (5,700 total pieces)	PHF2A-KIT-ND	249.00
200 each of values 10.0 ohm to 97.6 ohm (22,800 total pieces)	PHF2-KIT-ND	499.00
50 each of values 100 ohm to 976 ohm (5,850 total pieces)	PHF3A-KIT-ND	249.00
200 each of values 100 ohm to 976 ohm (23,400 total pieces)	PHF3-KIT-ND	499.00
50 each of values 1.00K ohm to 9.76K ohm (5,700 total pieces)	PHF4A-KIT-ND	249.00
200 each of values 1.00K ohm to 9.76K ohm (22,800 total pieces)	PHF4-KIT-ND	499.00
50 each of values 10.0K ohm to 97.6K ohm (5,750 total pieces)	PHF5A-KIT-ND	249.00
200 each of values 10.0K ohm to 97.6K ohm (23,000 total pieces)	PHF5-KIT-ND	499.00
50 each of values 100K ohm to 1.00M ohm (5,800 total pieces)	PHF6A-KIT-ND	249.00
200 each of values 100K ohm to 1.00M ohm (23,200 total pieces)	PHF6-KIT-ND	499.00

(Continued)

DIGI-KEY® PARTS KITS *(Cont.)*

Description	Digi-Key Part No.	Price Each
Yageo America 0402 5% Thick Film Chip Resistor Assortments, 1/16 Watt		
50 each of values 1.0, 2.0, 3.0, 3.9 ohm etc. to 1.0M ohm (2,600 total pieces)	PHJ1A-KIT-ND	89.95
200 each of values 1.0, 2.0, 3.0, 3.9 ohm etc. to 1.0M ohm (10,400 total pieces)	PHJ1-KIT-ND	199.00
Yageo America 0402 5% Thick Film Chip Resistor Assortments, 1/16 Watt		
50 each of values 1.1, 2.2, 3.3, 4.3 ohm etc. to 680K ohm (2,550 total pieces)	PHJ2A-KIT-ND	89.95
200 each of values 1.1, 2.2, 3.3, 4.3 ohm etc. to 680K ohm (10,200 pieces)	PHJ2-KIT-ND	199.00
Yageo America 0603 5% Thick Film Chip Resistor Assortments, 1/16 Watt		
50 each of values 1.0, 1.2, 1.5, 1.8 ohm etc. to 910K ohm (3,600 total pieces)	PHG1A-KIT-ND	99.95
200 each of values 1.0, 1.2, 1.5, 1.8 ohm etc. to 910K ohm (14,400 total pieces)	PHG1-KIT-ND	199.00
50 each of values 1.1, 1.3, 1.6, 2.2 ohm etc. to 1.0M ohm (3,600 total pieces)	PHG2A-KIT-ND	99.95
200 each of values 1.1, 1.3, 1.6, 2.2 ohm etc. to 1.0M ohm (14,400 pieces).	PHG2-KIT-ND	199.00
Yageo America 0805 5% Thick Film Chip Resistor Assortments, 1/10 Watt		
50 each of values 1.0, 1.2, 1.5, 1.8 ohm etc. to 910K ohm (3,650 total pieces)	PHA1A-KIT-ND	119.00
200 each of values 1.0, 1.2, 1.5, 1.8 ohm etc. to 910K ohm (14,600 total pieces)	PHA1-KIT-ND	199.00
50 each of values 1.1, 1.3, 1.6, 2.0 ohm etc. to 1.0M ohm (3,650 total pieces)	PHA2A-KIT-ND	119.00
200 each of values 1.1, 1.3, 1.6, 2.0 ohm etc. to 1.0M ohm (14,400 pieces).	PHA2-KIT-ND	199.00
Yageo America 1206 5% Thick Film Chip Resistor Assortments, 1/8 Watt		
50 each of values 1.0, 1.2, 1.5, 1.8 ohm etc. to 910K ohm (3,600 total pieces)	PHE1A-KIT-ND	119.00
200 each of values 1.0, 1.2, 1.5, 1.8 ohm etc. to 910K ohm (14,400 total pieces)	PHE1-KIT-ND	249.00
50 each of values 1.1, 1.3, 1.6, 2.0 ohm etc. to 1.0M ohm (3,600 total pieces)	PHE2A-KIT-ND	119.00
200 each of values 1.1, 1.3, 1.6, 2.0 ohm etc. to 1.0M ohm (14,400 pieces).	PHE2-KIT-ND	249.00
Panasonic 0402 1% Chip Resistor Assortments, 1/16 Watt		
50 each of values 10 ohm to 97.6 ohm (4,800 pieces)	RSM1L-ND	189.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2L-ND	189.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3L-ND	189.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4L-ND	189.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5L-ND	189.00
Panasonic 0402 5% Chip Resistor Assortments, 1/16 Watt		
50 each of every other value from 10, 12, 15, etc 1.0M (3,050 pieces)	CR7A-KIT-ND	99.95
200 each of every other value from 10, 12, 15, etc 1.0M (12,200 pieces)	CR7-KIT-ND	399.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR8A-KIT-ND	99.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR8-KIT-ND	399.00
Panasonic 0603 1% Chip Resistor Assortments, 1/16 Watt		
50 each of values 10 ohm to 97.6 ohm (4,800 pieces)	RSM1H-ND	129.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2H-ND	129.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3H-ND	129.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4H-ND	129.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5H-ND	129.00
Panasonic 0603 5% Chip Resistor Assortments, 1/16 Watt		
50 each of every other value from 10, 12, 15, etc 1.0M (3,050 pieces)	CR5A-KIT-ND	94.95
200 each of every other value from 10, 12, 15, etc 1.0M (12,200 pieces)	CR5-KIT-ND	379.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR6A-KIT-ND	94.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR6-KIT-ND	379.00
Panasonic 0805 1% Chip Resistor Assortments, 1/10 Watt		
50 each of values 10 ohm to 97.6 ohm (4,800 pieces)	RSM1CA-ND	129.95
200 each of values 10 ohm to 97.6 ohm (19,200 pieces)	RSM1C-ND	495.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2CA-ND	129.95
200 each of values 100 ohm to 976 ohm (19,200 pieces)	RSM2C-ND	495.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3CA-ND	129.95
200 each of values 1.00K to 9.76K (19,200 pieces)	RSM3C-ND	495.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4CA-ND	129.95
200 each of values 10.0K to 97.6K (19,200 pieces)	RSM4C-ND	495.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5CA-ND	129.95
200 each of values 100K to 1.00M (19,400 pieces)	RSM5C-ND	495.00
Panasonic 0805 5% Chip Resistor Assortments, 1/10 Watt		
50 each of every other value from 10, 12, 15, etc. 1.0M (3,050 pieces)	CR3A-KIT-ND	89.95
200 each of every other value from 10, 12, 15, etc. 1.0M (12,200 pieces)	CR3-KIT-ND	349.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR4A-KIT-ND	89.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR4-KIT-ND	349.00
Panasonic 1206 1% Chip Resistor Assortments, 1/8 Watt		
50 each of values 10.0 ohm to 97.6 ohm (4,800 pieces)	RSM1FA-ND	129.95
200 each of values 10.0 ohm to 97.6 ohm (19,200 pieces)	RSM1F-ND	495.00
50 each of values 100 ohm to 976 ohm (4,800 pieces)	RSM2FA-ND	129.95
200 each of values 100 ohm to 976 ohm (19,200 pieces)	RSM2F-ND	495.00
50 each of values 1.00K to 9.76K (4,800 pieces)	RSM3FA-ND	129.95
200 each of values 1.00K to 9.76K (19,200 pieces)	RSM3F-ND	495.00
50 each of values 10.0K to 97.6K (4,800 pieces)	RSM4FA-ND	129.95
200 each of values 10.0K to 97.6K (19,200 pieces)	RSM4F-ND	495.00
50 each of values 100K to 1.00M (4,850 pieces)	RSM5FA-ND	129.95
200 each of values 100K to 1.00M (19,400 pieces)	RSM5F-ND	495.00
Panasonic 1206 5% Chip Resistor Assortments, 1/8 Watt		
50 each of every other value from 10, 12, 15, etc. 1.0M (3,050 pieces)	CR1A-KIT-ND	89.95
200 each of every other value from 10, 12, 15, etc. 1.0M (12,200 pieces)	CR1-KIT-ND	329.00
50 each of every other value from 11, 13, 16, etc. 910K (3,000 pieces)	CR2A-KIT-ND	89.95
200 each of every other value from 11, 13, 16, etc. 910K (12,000 pieces)	CR2-KIT-ND	329.00
BC Component 1% Metal Film, .40 Watt, 5043ED Series		
5 each of values 10.0 ohm to 97.6 ohm (495 total pieces)	BCY1-KIT-ND	34.95
5 each of values 100 ohm to 976 ohm (490 total pieces).	BCY2-KIT-ND	34.95
5 each of values 1.00K ohm to 9.76K ohm (485 total pieces)	BCY3-KIT-ND	34.95
5 each of values 10.0K ohm to 97.6K ohm (490 total pieces)	BCY4-KIT-ND	34.95
5 each of values 100K ohm to 2.00M ohm (655 total pieces)	BCY5-KIT-ND	46.95
BC Component 1% Metal Film, .40 Watt, 5063JD "Spacemiser" Series		
5 each of values 10.0 ohm to 97.6 ohm (480 total pieces)	BCX1-KIT-ND	69.95
5 each of values 100 ohm to 976 ohm (485 total pieces)	BCX2-KIT-ND	69.94
5 each of values 1.00K ohm to 9.76K ohm (485 total pieces)	BCX3-KIT-ND	69.94
5 each of values 10.0K ohm to 97.6K ohm (485 total pieces)	BCX4-KIT-ND	69.94
5 each of values 100K ohm to 2.00M ohm (655 total pieces)	BCX5-KIT-ND	94.96

Description	Digi-Key Part No.	Price Each
BC Component 1% Metal Film, .60 Watt, B0207C-F Series		
5 each of values 10.0 ohm to 97.6 ohm (480 total pieces)	BCZ1-KIT-ND	57.95
5 each of values 100 ohm to 976 ohm (480 total pieces)	BCZ2-KIT-ND	57.95
5 each of values 1.00K ohm to 9.76K ohm (480 total pieces)	BCZ3-KIT-ND	57.95
5 each of values 10.0K ohm to 97.6K ohm (475 total pieces)	BCZ4-KIT-ND	57.94
5 each of values 100K ohm to 2.20M ohm (520 total pieces)	BCZ5-KIT-ND	59.95
BC Component 5% Metal Film, 1 Watt, 5073NW Series		
5 each of values 1.0 ohm to 91 ohm (240 total pieces)	BCAW1-KIT-ND	29.95
5 each of values 100 ohm to 9.1K ohm (240 total pieces)	BCBW1-KIT-ND	29.95
5 each of values 10K ohm to 1.0M ohm (245 total pieces)	BCCW1-KIT-ND	29.96
BC Component 5% Metal Film, 2 Watt, 5083NW Series		
5 each of values 1.0 ohm to 91 ohm (240 total pieces)	BCAW2-KIT-ND	39.95
5 each of values 100 ohm to 9.1K ohm (240 total pieces)	BCBW2-KIT-ND	39.95
5 each of values 10K ohm to 1.0M ohm (245 total pieces)	BCCW2-KIT-ND	39.95
BC Component 5% Metal Film, 3 Watt, 5093NW Series		
NEW! 5 each of values 10 ohm to 430K ohm (200 total pieces)	BCAW3J-KIT-ND	59.95
NEW! 5 each of values 470 ohm to 20K ohm (200 total pieces)	BCBW3J-KIT-ND	59.95
NEW! 5 each of values 22K ohm to 1.0M ohm (205 total pieces)	BCCW3J-KIT-ND	59.95

Digi-Key®
Resistor Network Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
CTS 766 Series		
Bussed Circuits		
5 each of 62 values in the series (310 total pieces) *Kit does not include value 330K ohm	766-141-KIT-ND	249.00
5 each of 63 values in the series (315 total pieces)	766-161-KIT-ND	249.00
Isolated Circuits		
5 each of 63 values in the series (315 total pieces)	766-143-KIT-ND	249.00
5 each of 61 values in the series (305 total pieces) *Kit does not include values 820, and 1.2K ohm.	766-163-KIT-ND	249.00
Dual Terminator Circuits		
5 each of 8 values in the series (40 total pieces)	766-DUAL-KIT-ND	46.95
CTS 767 Series		
Bussed Circuits		
5 each of 62 values in the series (310 total pieces) *Kit does not include value 3.9K ohm.	767-141-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	767-161-KIT-ND	159.95
Isolated Circuits		
5 each of 62 values in the series (310 total pieces) *Kit does not include value 27 ohm	767-143-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	767-163-KIT-ND	159.95
Dual Terminator Circuits		
5 each of 8 values in the series (40 total pieces)	767-DUAL-KIT-ND	34.95
CTS 768 Series		
Bussed Circuits		
5 each of 62 values in the series (310 total pieces) *Kit does not include value 3.9K ohm.	768-141-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	768-161-KIT-ND	159.95
Isolated Circuits		
5 each of 62 values in the series (310 total pieces) *Kit does not include value 27 ohm	768-143-KIT-ND	159.95
5 each of 63 values in the series (315 total pieces)	768-163-KIT-ND	159.95
Dual Terminator Circuits		
5 each of 8 values in the series (40 total pieces)	768-DUAL-KIT-ND	34.95

Digi-Key® Capacitor Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
Panasonic Miniature Aluminum Electrolytic		
KG Series - 10 each of 18 popular values denoted (180 total pieces)	P900-KIT-ND	34.95
Panasonic Miniature Radial Lead Electrolytic		
M-Series - 10 each of 17 popular values denoted (170 total pieces)	M-KIT-ND	69.95
NHG-Series - 10 each of 18 popular values denoted (180 total pieces)	NHG-KIT-ND	69.95
Panasonic Miniature Radial Lead Electrolytic		
KA-Series - 10 each of 16 popular values denoted (160 total pieces)	P835-KIT-ND	29.95
Panasonic Tantalum		
EF-Series - Assortment of 15 popular values denoted (180 total pieces)	F-KIT-ND	39.95
Panasonic Stacked Metal Film		
V-Series, 50 Volt - 10 each of 18 popular values denoted (180 total pieces)	P4542-KIT-ND	49.95
V-Series, 100 Volt - 10 each of 18 popular values denoted (180 total pieces)	P4700-KIT-ND	49.95
Panasonic Metal Film (Interference Suppressors)		
X-Y Series - 10 each of 10 popular values denoted (100 total pieces)	P4650-KIT-ND	59.95
Panasonic Metallized Polyester		
E-Series - 10 each of 14 popular values denoted (except #E2104 has 30 total pieces) (170 total pieces)	E-KIT-ND	59.95

(Continued)

Description	Digi-Key Part No.	Price Each
Panasonic Polyester		
B-Series - Various quantities of 12 popular values denoted (300 total pieces)	P4550-KIT-ND	29.95
Panasonic Polyester Foil		
M-Series, **200 Volt** - 10 each of 15 popular values denoted (150 total pieces)	M200-KIT-ND	29.95
M-Series, **400 Volt** - 10 each of 15 popular values denoted (150 total pieces)	M400-KIT-ND	29.95
Panasonic Polypropylene		
P-Series - 10 each of 15 popular values denoted (150 total pieces)	P3100-KIT-ND	69.95
Panasonic SMT Film		
ECH-U Series - 10 each of 18 popular values denoted (180 total pieces)	PCF1-KIT-ND	59.95
Panasonic SMT Specialty Polymer Aluminum Electrolytic Chip		
CD/UD/UE Series - 30 each of 12 popular values denoted (360 total pieces)	SP1-KIT-ND	59.00
Panasonic 0402 Chip Ceramic		
NPO Series - 10 each of 28 popular values denoted (280 total pieces)	PCC13-KIT-ND	59.95
X7R Series - 10 each of 30 popular values denoted (300 total pieces)	PCC14-KIT-ND	54.95
Panasonic 0603 Chip Ceramic		
NPO Series -10 each of 30 popular values denoted (300 total pieces)	PCC9-KIT-ND	29.95
X7R and X5R Series - 10 each of 30 popular values denoted (300 total pieces)	PCC15-KIT-ND	31.95
Panasonic 0805 Chip Ceramic		
NPO Series - 10 each of 30 popular values denoted (300 total pieces)	PCC7-KIT-ND	29.95
X7R Series - 10 each of 30 popular values denoted (300 total pieces)	PCC16-KIT-ND	31.95
Panasonic 1206 Chip Ceramic		
NPO Series - 10 each of 14 popular values denoted (140 total pieces)	PCC17-KIT-ND	99.95

Digi-Key® Inductor Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

Description	Digi-Key Part No.	Price Each
API Delevan Surface Mount Inductors		
Series 1008 - 5 ea. of 54 values (270 pcs.), 0.0018-47.0µH (Mfg. # 1008KIT)	1008KIT-ND	95.95
Series S1008 - 5 ea. of 36 values (180 pcs.), 0.1-47.0µH (Mfg. # S1008KIT)	S1008KIT-ND	95.95
Series 1210 - 5 ea. of 58 values (290 pcs.), 0.0018-100.0µH (Mfg. # 1210KIT)	1210KIT-ND	95.95
Series S1210 - 5 ea. of 37 values (185 pcs.), 0.10-100.0µH (Mfg. # S1210KIT)	S1210KIT-ND	95.95
Series 1812 - 5 ea. of 61 values (305 pcs.), 0.010-1000.0µH (Mfg. # 1812KIT)	1812KIT-ND	95.95
Series S1812 - 5 ea. of 49 values (245 pcs.), 0.10-1000.0µH (Mfg. # S1812KIT)	S1812KIT-ND	95.95
API Delevan Air Core Inductors		
Series 4426 - 5 ea. of 10 values (50 pcs.), 2.5nH-43nH (Mfg. # 4426KIT)	4426KIT-ND	25.50
Parallax Power Components E-Core Inductors		
CME375 Series - 1 each of 9 popular inductors (9 total pieces)	237-1219-ND	55.56
Parallax Power Components Common Mode Encapsulated		
Toroidal Inductors - 1 each of 8 popular inductors (8 total pieces)	237-1238-ND	33.33
Parallax Power Components Toroidal Inductors		
1 each of 30 popular inductors (30 total pieces)	237-1209-ND	83.33
Parallax Power Components High Current Rod Core Inductors		
1 each of 6 popular inductors (6 total pieces)	237-1164-ND	11.11
Parallax Power Components Rod Core Inductors		
1 each of 11 popular inductors (11 total pieces)	237-1177-ND	27.78
Panasonic SMT Inductors		
RE Type (2% Tolerance) - 10 each of 23 inductors (230 total pieces)	PCD4-KIT-ND	79.95
RE Type (5% Tolerance) - 10 each of 23 inductors (230 total pieces)	PCD1-KIT-ND	69.95
ND Type - 10 ea. of 25 inductors (***PCD1185CT-ND not included***) (250 total pieces)	PCD2-KIT-ND	99.95
RF Type - 10 each of 20 inductors (200 total pieces)	PCD3-KIT-ND	69.95
NEW! **Steward Common Mode Chokes**		
Common Mode Chokes - 1 each of 14 values and **SMT Common Mode Choke Arrays** - 1 each of 4 values (18 total pieces)	240-2111-ND	59.95
NEW! **Steward SMT EMI Suppression Ferrite Chips**		
10 each of size codes 0402 - 3312 and 5 each of 240-1001-1-ND and 240-1002-1-ND (550 total pieces)	240-2110-ND	59.95
Toko Chip Inductors - LL Series		
1005 - 10 each of 25 values (250 pcs.), 1.0nH-100nH (SPK-LL1005FH-5%)	TK10-KIT-ND	40.50
Toko Standard Coil Kit		
5mm - 2 each of 43 popular coils denoted (86 total pieces)	TK4-KIT-ND	63.00
7mm - (Assortment of various 7mm coils) (122 total pieces)	TK1-KIT-ND	56.70
Toko Chip Inductors - PTL Series		
2012 - 10 each of 20 values (200 pcs.), 1.0nH-39nH (Toko # SPK-PTL2012F-98)	TK14-KIT-ND	49.00
Toko Surface Mount Fixed Inductors		
D52FU Series, 3 ea. of 22 values (66 pcs.), 100µH-6800µH (Toko # SPK-D52FU-1998)	TK15-KIT-ND	49.00
33CS/36CS Series, 10 ea. of 9 values (90 pcs.), 6.8nH-49.8nH (Toko # SPK-3336CS-1993)	TK11-KIT-ND	49.00
D62CB Series, 3 each of 18 values (54 pieces), 1.0µH-82.0µH (Toko # SPK-D62CB-1999)	TK18-KIT-ND	58.80
D32FU Series, 3 each of 14 values (42 pieces), 0.33mH-3.3mH (Toko # SPK-D32FU-1999)	TK19-KIT-ND	52.27
D124C Series, 3 each of 13 values (39 pieces), 3.3µH-100.0µH (Toko # SPK-D124C-1999)	TK17-KIT-ND	66.97

Digi-Key® Miscellaneous Kits

Conveniently packaged in a plastic box with bin guide
for easy storage and quick access.

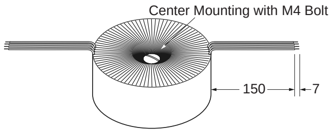
Description	Digi-Key Part No.	Price Each
ECS, Inc. Crystals		
3 each of 27 popular crystals denoted (81 total pieces)	XC-KIT-ND	169.00
Epson Surface Mount Crystals		
MA-505 Series - 3 each of 17 popular crystals (51 total pieces)	SE1-KIT-ND	89.00
MA-506 Series - 3 each of 17 popular crystals (51 total pieces)	SE2-KIT-ND	89.00
SG-615P Series - 2 each of 16 popular crystals (32 total pieces)	SE3-KIT-ND	109.00
LittelFuse Pico SMD and Nano^2 SMF Fuses		
5 each of 30 fuses denoted (150 total pieces)	SMF-KIT-ND	99.95
Panasonic LEDs		
10 each of 18 popular LEDs (180 total pieces)	LED-KIT-ND	33.98
Capital Advanced Technologies Inc. - Master Assortment Kit for Discretes, 2 each of all 23 models in the 6000 series of surfboards for discrete components (46 total pieces)	MK-6000CA-ND	99.00
Capital Advanced Technologies Inc. - Master Assortment Kit for ICs, 5 each of models 9081, 9082, 9161, 9162 and 2 each of models 9163, 9164, 9165, 9210, 9301 and 9302 (32 total pieces)	MK-9000CA-ND	99.00
Capital Advanced Technologies Inc. - Master Assortment Kit for UNI-SIP, 2 each of all 26 types in the UNI-SIP Series, packaged in reclosable bags grouped by series number (52 total pieces)	MK260CA-ND	79.00
Johnson Plugs and Jacks		
10 each of 15 popular plugs and jacks denoted (150 total pieces)	J100-KIT-ND	76.95
Hardware - 100 each of machine screws, hex nuts and lock washers in each of the following kits:		
Slotted - (1,600 total pieces)	1600-KIT-ND	17.95
Slotted - (1,600 total pieces)	1601-KIT-ND	27.95
Phillips - (1,600 total pieces)	1602-KIT-ND	17.95
Phillips - (1,600 total pieces)	1603-KIT-ND	27.78
Nylon - (1,500 total pieces)	1604-KIT-ND	53.94
Phillips, Stainless Steel - (1,400 total pieces)	1607-KIT-ND	39.95
Phillips, Stainless Steel - (1,500 total pieces)	1608-KIT-ND	79.95
Keystone Electronics .250" Round Clear Spacers		
Brass Nickel Plated Assortment with Cabinet - (1,500 total pieces)	SPR-13KIT-ND	244.08
Aluminum Iridite Plated Assortment with Cabinet - (1,500 total pieces)	SPR-34KIT-ND	229.74
Keystone Electronics .250" Hex Female Threaded Standoffs		
Brass Assortment with Cabinet - (1,500 total pieces)	STH-14KIT-ND	394.88
Aluminum Assortment with Cabinet - (1,500 total pieces)	STH-22KIT-ND	285.62
Keystone Electronics .250" Round Threaded Standoffs		
Brass Assortment with Cabinet - (1,500 total pieces)	STR-15KIT-ND	358.96
Aluminum Assortment with Cabinet - (1,500 total pieces)	STR-35KIT-ND	280.01
Keystone Electronics .250" Hex Male/Female Standoffs		
Brass Assortment with Cabinet - (750 total pieces)	STH-19KIT-ND	358.96
Hardware (Metric) - 100 each of machine screws, hex nuts, lock washers and flat washers in each of the following kits:		
Metric Phillips, Zinc Plated - (1,500 total pieces)	1605-KIT-ND	59.95
Metric Phillips, Zinc Plated - (1,500 total pieces)	1606-KIT-ND	99.95
3M Insulated Terminals		
650 assorted terminals (14 sizes), 200 cable ties, wire marker dispenser, crimp tool, metal box	923000-I-ND	108.08
Parallax Power Components Current Sense Transformers		
CST206 Series - 1 each of 6 popular transformers (6 total pieces)	237-1102-ND	33.30
CST306 Series - 1 each of 6 popular transformers (6 total pieces)	237-1110-ND	22.22
Parallax Power Components Gate Drive Transformers		
1 each of 6 popular transformers (6 total pieces)	237-1117-ND	88.89
3M Heatshrink Precut Lengths		
CP-221 Series - 50 each of 5 sizes/100 of 1 size (350 total pieces)	CP-KIT-ND	15.95
FP-301 Series - 50 each of 5 sizes/100 of 1 size (350 total pieces)	FP-KIT-ND	14.95
VFP-876 Series - 50 each of 5 sizes/100 of 1 size (350 total pieces)	VFP-KIT-ND	13.95
3M Colored Heatshrinkable Tubing		
FP-301 Ser. - 1-5 ft. tubing of each color in 8 denoted series (55 total pieces)	FPC-KIT-ND	59.95
Daburn Shrinkable Tubing, Polyolefin: Black		
5 feet of 6 popular sizes (30 total feet of tubing)	STA-KIT-ND	10.95
CW Industries Switches		
Various quantities of 14 switches denoted (130 total pieces)	SW-KIT-ND	69.95
Hamlin Magnetic Switches		
Various quantities of 18 switches denoted (22 total pieces)	HE1-KIT-ND	69.95
1 each of 18 switches denoted (18 total pieces)	HE2-KIT-ND	49.95
Zetex SOT-23 SMD Zener Diode Kit		
10 each of 18 popular diodes denoted (180 total pieces)	BZX1-KIT-ND	49.95
Diode SOT-23 SMD Zener Diode Kit		
10 each of 18 popular diodes denoted (180 total pieces)	BZX2-KIT-ND	23.79
Alpha Hook-Up Wire		
3050 Series - 5-100 foot spools (Black, White, Red, Green and Blue) with dispenser and wire cutter (Alpha # HUKIT40 NC032)	HU-KIT-40-ND	105.06
3051 Series - 5-100 foot spools (Black, White, Red, Green and Blue) with dispenser and wire cutter (Alpha # HUKIT20 NC032)	HU-KIT-20-ND	105.06

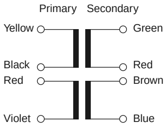
"Mini" Toroidal Transformer

Wire Leaded 115/230VAC, 50/60 Hz Dual Primary

UL File #E145880

Lower strayfield, higher efficiency, reduced "standby" current and reduced weight. Primary-secondary test voltage 4.0kV. Ambient operating temperature: +60°C maximum. Insulation system recognized for Class A (105°C) and meets all requirements of Class E (125°C).





Power VA	Dimensions OD x ID x H mm	Weight Total gr	Reg. ΔV/Sec %	Δt °C	Eff. %	No Load mA	230V Fuse* mA
25.0	58.0 x 13.8 x 34.5	388	19	28	84	5.0	160
35.0	72.0 x 17.0 x 33.5	453	17.7	31	85	7.0	200
50.0	78.0 x 22.5 x 35.0	670	15.5	30	86	8.0	315

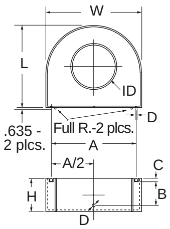
* Recommend Slo-Blo. Double the fuse current for 120 volt operation.

Power VA	Parallel VAC @ A	Series VCT @ A	Digi-Key Part No.	Price Each 1	10	25	50
25.0	7 @ 3.570	14 @ 1.785	TE62060-ND	16.25	14.44	12.64	11.56
	9 @ 2.754	18 @ 1.377	TE62061-ND	16.25	14.44	12.64	11.56
	12 @ 2.082	24 @ 1.041	TE62062-ND	16.25	14.44	12.64	11.56
	15 @ 1.664	30 @ .832	TE62063-ND	16.25	14.44	12.64	11.56
	18 @ 1.388	36 @ .694	TE62064-ND	16.25	14.44	12.64	11.56
	22 @ 1.136	44 @ .568	TE62065-ND	16.25	14.44	12.64	11.56
35.0	7 @ 5.000	14 @ 2.500	TE62070-ND	16.83	14.96	13.09	11.97
	9 @ 3.888	18 @ 1.944	TE62071-ND	16.83	14.96	13.09	11.97
	12 @ 2.916	24 @ 1.458	TE62072-ND	16.83	14.96	13.09	11.97
	15 @ 2.332	30 @ 1.166	TE62073-ND	16.83	14.96	13.09	11.97
	18 @ 1.944	36 @ .972	TE62074-ND	16.83	14.96	13.09	11.97
	22 @ 1.590	44 @ .795	TE62075-ND	16.83	14.96	13.09	11.97
50.0	7 @ 7.142	14 @ 3.571	TE62080-ND	18.83	16.74	14.65	13.40
	9 @ 5.554	18 @ 2.777	TE62081-ND	18.83	16.74	14.65	13.40
	12 @ 4.166	24 @ 2.083	TE62082-ND	18.83	16.74	14.65	13.40
	15 @ 3.332	30 @ 1.666	TE62083-ND	18.83	16.74	14.65	13.40
	18 @ 2.776	36 @ 1.388	TE62084-ND	18.83	16.74	14.65	13.40
	22 @ 2.272	44 @ 1.136	TE62085-ND	18.83	16.74	14.65	13.40

Note: *To obtain output voltage, load current must be met.*

Current Transformer

Standard Accuracy Low-Cost 50/60 Hz



Applications:

- Sensing current overload
- Ground fault detection
- Metering

Notes:

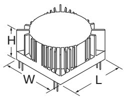
- RCF: Ratio Correction Factor. Multiple current readings by this factor to compensate for transformer losses.
- Data is deemed reliable at the time of publication, but may be subject to change without notice

Size Code	Dimensions – mm W	L	H	A	B	C	D (Dia.)	ID
A	23.83	23.83	11.13	15.24	7.62	1.75	0.81	9.53
B	30.18	30.18	14.30	20.32	10.16	2.08	1.02	11.43
C	34.93	34.93	14.30	25.40	10.16	2.08	1.02	14.61
D	38.10	38.10	15.88	30.48	10.16	2.84	1.02	14.61
E	44.45	44.45	14.30	35.56	10.16	2.08	1.02	19.05
F	55.58	55.58	20.65	45.72	12.70	3.96	1.02	23.88

Size Code	Rated Ip Amps	Turns Ratio	Nominal DCR	RCF @ 10% (1)	Volts/Amp @ rated Ip, for various loads (Ohms) 100	500	2K	5K	Digi-Key Part No.	Price Each 1	10	25
A	5.0	1000:1	39	1.040	0.10	0.45	1.35	1.8	TE1005-ND	7.80	6.50	5.20
A	10.0	1000:1	39	1.035	0.10	0.45	1.00	1.3	TE1010-ND	7.80	6.50	5.20
A	15.0	1000:1	39	1.030	0.10	0.43	0.80	1.0	TE1015-ND	7.80	6.50	5.20
A	20.0	1000:1	39	1.030	0.10	0.42	0.70	0.8	TE1020-ND	7.80	6.50	5.20
B	25.0	1000:1	46	1.020	0.10	0.40	1.00	1.2	TE1025-ND	9.21	7.68	6.14
B	30.0	1000:1	46	1.020	0.10	0.40	0.85	1.1	TE1030-ND	9.21	7.68	6.14
C	40.0	1000:1	46	1.020	0.10	0.45	0.75	1.0	TE1040-ND	10.74	8.95	7.16
C	50.0	1000:1	46	1.020	0.10	0.44	0.70	0.8	TE1050-ND	10.74	8.95	7.16
D	60.0	1000:1	23	1.020	0.10	0.36	0.60	0.7	TE1060-ND	11.76	9.80	7.84
D	75.0	1000:1	23	1.015	0.10	0.35	0.50	0.6	TE1075-ND	11.76	9.80	7.84
E	100	1000:1	20	1.015	0.10	0.35	0.50	0.6	TE1100-ND	11.76	9.80	7.84
F	150	1000:1	10	1.010	0.10	0.32	0.55	0.6	TE1150-ND	15.99	13.33	10.66
F	200	1000:1	10	1.010	0.10	0.30	0.45	0.6	TE1200-ND	15.99	13.33	10.66

Toroidal Transformer

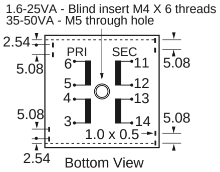
PC Mount, Low Profile 115/230V, 50/60 Hz Dual Primary



Low Magnetic strayfield emissions, higher efficiency, reduced "standby" current, reduced weight, fully encapsulated durable body formation.

Primary-secondary test voltage 4.0 kV (IEC742, VDE055 and EN60742). Primaries and secondaries for parallel or series connection. Ambient operating temperature +60°C maximum.

Recognized for Class A (105°C) and meets all requirements of Class E (125°C).


1.6-25VA - Blind insert M4 X 6 threads
35-50VA - M5 through hole
2.54
5.08
PRI
SEC
6
5
4
3
11
12
13
14
5.08
5.08
5.08
1.0 x 0.5
2.54
Bottom View

Power VA	Dimensions (Pin Length 5mm) L x W x H mm	Pin Pattern XY mm	Weight Total gr	Reg. ΔV/Sec %	Δt °C	Eff. %	Excitation Current mA	230V Fuse* mA	Max. Secondary Range VA	ΔV/ Sec %	Δt °C	Eff. %	220V Fuse* mA
1.6	39.6 x 39.6 x 18.5	35.56	82	29	10	77	1.0	32	2.0	60	30	60	32
3.2	44.7 x 44.7 x 19.5	40.64	110	43	20	70	1.5	32	3.7	80	40	50	50
5.0	49.7 x 49.7 x 19.5	45.72	144	40	29	68	2.0	50	5.5	80	40	50	63
7.0	49.7 x 49.7 x 23.1	45.72	174	34	25	74	3.0	63	7.5	70	40	60	80
10.0	55.0 x 55.0 x 26.0	50.80	252	20	24	82	3.0	80	12.0	60	45	60	100
15.0	60.0 x 60.0 x 26.3	55.88	304	23	27	80	4.0	100	16.0	60	40	65	125
25.0	60.0 x 60.0 x 37.5	55.88	435	19	28	83	5.0	160	—	—	—	—	—
35.0	72.0 x 72.0 x 37.5	66.04	525	17.7	31	81	7.0	200	—	—	—	—	—
50.0	82.4 x 82.4 x 37.5	76.02	685	15.5	30	86	8.0	315	—	—	—	—	—

* Recommend Slo-Blo. Double the fuse current for 120 volt operation.

Power VA	Parallel VAC @ A	Series VCT @ A	Digi-Key Part No.	Price Each 1	10	25	50
1.6	7 @ .228	14 @ .114	TE70000-ND	9.34	8.30	7.27	6.64
	9 @ .178	18 @ .089	TE70001-ND	9.34	8.30	7.27	6.64
	12 @ .134	24 @ .067	TE70002-ND	9.34	8.30	7.27	6.64
	15 @ .106	30 @ .053	TE70003-ND	9.34	8.30	7.27	6.64
	18 @ .088	36 @ .044	TE70004-ND	9.34	8.30	7.27	6.64
	22 @ .072	44 @ .036	TE70005-ND	9.34	8.30	7.27	6.64
3.2	7 @ .458	14 @ .229	TE70010-ND	10.76	9.56	8.37	7.65
	9 @ .356	18 @ .178	TE70011-ND	10.76	9.56	8.37	7.65
	12 @ .266	24 @ .133	TE70012-ND	10.76	9.56	8.37	7.65
	15 @ .214	30 @ .107	TE70013-ND	10.76	9.56	8.37	7.65
	18 @ .178	36 @ .089	TE70014-ND	10.76	9.56	8.37	7.65
	22 @ .146	44 @ .073	TE70015-ND	10.76	9.56	8.37	7.65
5	7 @ .714	14 @ .357	TE70020-ND	11.41	10.14	8.88	8.12
	9 @ .556	18 @ .278	TE70021-ND	11.41	10.14	8.88	8.12
	12 @ .416	24 @ .208	TE70022-ND	11.41	10.14	8.88	8.12
	15 @ .334	30 @ .167	TE70023-ND	11.41	10.14	8.88	8.12
	18 @ .278	36 @ .139	TE70024-ND	11.41	10.14	8.88	8.12
	22 @ .228	44 @ .114	TE70025-ND	11.41	10.14	8.88	8.12
7	7 @ 1.0	14 @ .500	TE70030-ND	12.87	11.44	10.01	9.16
	9 @ .778	18 @ .389	TE70031-ND	12.87	11.44	10.01	9.16
	12 @ .584	24 @ .292	TE70032-ND	12.87	11.44	10.01	9.16
	15 @ .466	30 @ .233	TE70033-ND	12.87	11.44	10.01	9.16
	18 @ .388	36 @ .194	TE70034-ND	12.87	11.44	10.01	9.16
	22 @ .318	44 @ .159	TE70035-ND	12.87	11.44	10.01	9.16
10	7 @ 1.428	14 @ .714	TE70040-ND	14.45	12.84	11.24	10.28
	9 @ 1.112	18 @ .556	TE70041-ND	14.45	12.84	11.24	10.28
	12 @ .834	24 @ .417	TE70042-ND	14.45	12.84	11.24	10.28
	15 @ .666	30 @ .333	TE70043-ND	14.45	12.84	11.24	10.28
	18 @ .556	36 @ .278	TE70044-ND	14.45	12.84	11.24	10.28
	22 @ .454	44 @ .227	TE70045-ND	14.45	12.84	11.24	10.28
15	7 @ 2.142	14 @ 1.071	TE70050-ND	16.22	14.42	12.62	11.54
	9 @ 1.666	18 @ .833	TE70051-ND	16.22	14.42	12.62	11.54
	12 @ 1.250	24 @ .625	TE70052-ND	16.22	14.42	12.62	11.54
	15 @ 1.000	30 @ .500	TE70053-ND	16.22	14.42	12.62	11.54
	18 @ .834	36 @ .417	TE70054-ND	16.22	14.42	12.62	11.54
	22 @ .682	44 @ .341	TE70055-ND	16.22	14.42	12.62	11.54
25	7 @ 3.570	14 @ 1.785	TE70060-ND	18.23	16.20	14.18	12.96
	9 @ 2.754	18 @ 1.377	TE70061-ND	18.23	16.20	14.18	12.96
	12 @ 2.082	24 @ 1.041	TE70062-ND	18.23	16.20	14.18	12.96
	15 @ 1.664	30 @ .832	TE70063-ND	18.23	16.20	14.18	12.96
	18 @ 1.388	36 @ .694	TE70064-ND	18.23	16.20	14.18	12.96
	22 @ 1.136	44 @ .568	TE70065-ND	18.23	16.20	14.18	12.96
35	7 @ 5.000	14 @ 2.500	TE70070-ND	22.34	19.86	17.38	15.89
	9 @ 3.888	18 @ 1.944	TE70071-ND	22.34	19.86	17.38	15.89
	12 @ 2.916	24 @ 1.458	TE70072-ND	22.34	19.86	17.38	15.89
	15 @ 2.332	30 @ 1.166	TE70073-ND	22.34	19.86	17.38	15.89
	18 @ 1.944	36 @ .972	TE70074-ND	22.34	19.86	17.38	15.89
	22 @ 1.590	44 @ .795	TE70075-ND	22.34	19.86	17.38	15.89
50	7 @ 7.142	14 @ 3.571	TE70080-ND	27.65	24.58	21.51	19.67
	9 @ 5.554	18 @ 2.777	TE70081-ND	27.65	24.58	21.51	19.67
	12 @ 4.166	24 @ 2.083	TE70082-ND	27.65	24.58	21.51	19.67
	15 @ 3.332	30 @ 1.666	TE70083-ND	27.65	24.58	21.51	19.67
	18 @ 2.776	36 @ 1.388	TE70084-ND	27.65	24.58	21.51	19.67
	22 @ 2.272	44 @ 1.136	TE70085-ND	27.65	24.58	21.51	19.67

Note: *To obtain output voltage, load current must be met.*

T1/E1 Transformers

Fig. 1

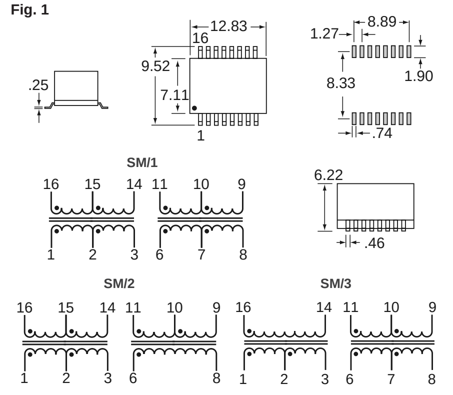


Fig. 2

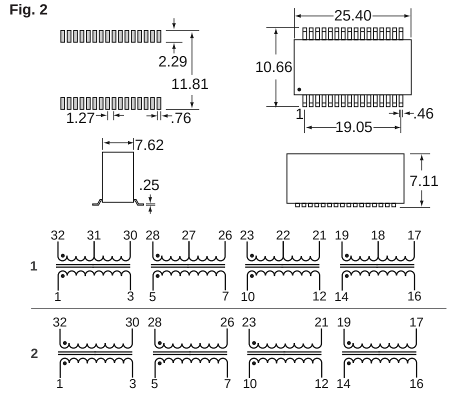


Fig. 3

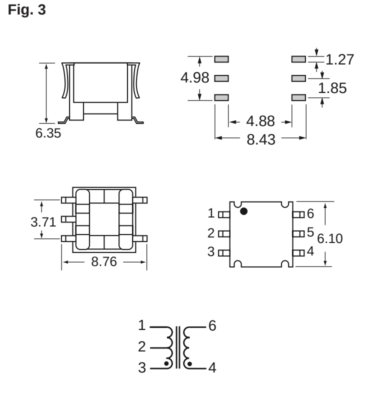


Fig. 4

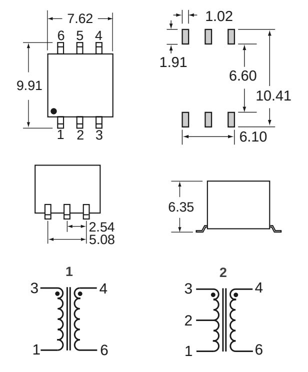


Fig. 5

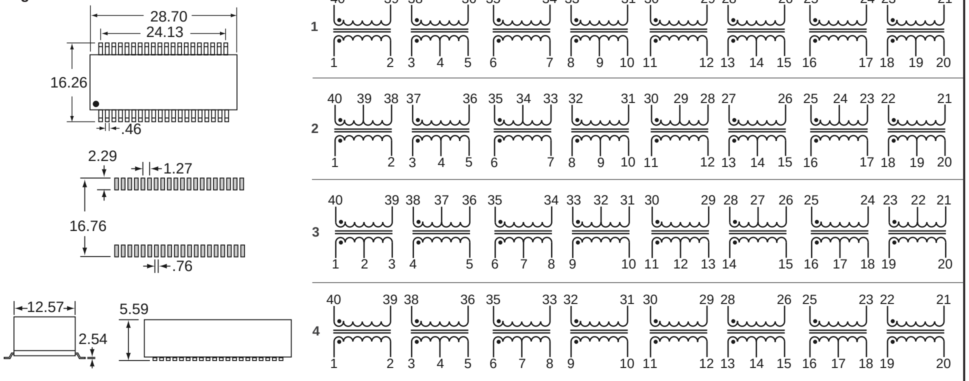


Fig.	Turns Ratio Primary: Secondary (±5%)	Pri. OCL mH (min.)	DCR Pri. Ohms (max.)	DCR Sec. Ohms (max.)	Pkg. Schem.	Primary Pins	Digi-Key Part No. *	Cut Tape Price Each 1	10	25	50	100	Schott Part No.
Dual Transformers													
1	1CT:2CT & 1CT:2CT	1.20 & 1.20	.70 & .70	1.40 & 1.40	SM/1	16-14, 6-8	257-1110-1-ND	8.47	7.05	6.13	5.33	4.64	32136
	1CT:2CT & 1:1.36CT	1.20 & 1.20	.70 & .70	1.00 & 0.80	SM/2	16-14, 6-8	257-1111-1-ND	8.55	7.12	6.19	5.39	4.68	32372
	1:1.15CT & 1CT:2CT	1.20 & 1.20	.70 & .70	0.70 & 1.00	SM/3	16-14, 6-8	257-1112-1-ND	9.08	7.56	6.58	5.72	4.97	32373
	1:1:1.266 & 1CT:2CT	1.20 & 1.20	.70 & .70	0.80 & 1.00	SM/3	16-14, 6-8	257-1113-1-ND	9.08	7.56	6.58	5.72	4.97	32374
	1CT:1.15CT & 1CT:1.15CT	1.20 & 1.20	.70 & .70	0.75 & 0.75	SM/1	1-3, 6-8	257-1114-1-ND	7.66	6.38	5.55	4.83	4.20	32375
	1CT:1CT & 1CT:2CT	1.20 & 1.20	.70 & .70	0.70 & 1.00	SM/1	16-14, 6-8	257-1115-1-ND	8.10	6.75	5.87	5.11	4.44	32376
	1CT:1.41CT & 1CT:1.41CT	1.00 & 1.00	.70 & .70	0.90 & 0.90	SM/1	16-14, 11-9	257-1116-1-ND	7.86	6.55	5.69	4.95	4.30	32377
Quad Transformers													
2	1:2CT	1.20	.60	1.0	1	1-3, 5-7, 10-12, 14-16	257-1127-1-ND	20.06	16.72	14.54	12.64	11.00	37531
	1:1.36CT	1.20	.60	0.8	1	1-3, 5-7, 10-12, 14-16	257-1128-1-ND	20.06	16.72	14.54	12.64	11.00	37532
	1:1.36 & 1:2	1.20	.60	1.0	2	1-3, 10-12, 19-17, 28-26	257-1129-1-ND	20.06	16.72	14.54	12.64	11.00	37533
	1:1.15CT	1.20	.60	1.0	1	1-3, 5-7, 10-12, 14-16	257-1130-1-ND	20.06	16.72	14.54	12.64	11.00	37534
	1:2/1.15	1.20	.60	1.0	1	1-3, 5-7, 10-12, 14-16	257-1131-1-ND	20.06	16.72	14.54	12.64	11.00	37535
	1:1.36/1	1.20	.60	1.0	1	1-3, 5-7, 10-12, 14-16	257-1132-1-ND	20.06	16.72	14.54	12.64	11.00	37536
EE5 Transformers													
3	1.26CT:1	2.0	2.60	2.10	—	—	257-1140-1-ND	6.20	4.96	3.97	3.17	—	36540
	1.35CT:1	2.0	2.70	1.90	—	—	257-1141-1-ND	6.20	4.96	3.97	3.17	—	36605
	1.14CT:1	2.2	2.80	2.50	—	—	257-1142-1-ND	6.20	4.96	3.97	3.17	—	36606
	1CT:1	2.0	2.70	2.60	—	—	257-1143-1-ND	6.20	4.96	3.97	3.17	—	36607
	1.41CT:1	2.0	2.40	1.70	—	—	257-1144-1-ND	6.20	4.96	3.97	3.17	—	37047
	1.66CT:1	2.0	2.10	1.30	—	—	257-1145-1-ND	6.20	4.96	3.97	3.17	—	37048
	2CT:1	2.1	2.30	1.20	—	—	257-1146-1-ND	6.20	4.96	3.97	3.17	—	37049
	2.32CT:1	2.3	2.30	1.00	—	—	257-1147-1-ND	6.20	4.96	3.97	3.17	—	37050
	2.42CT:1	2.3	2.10	0.90	—	—	257-1148-1-ND	6.20	4.96	3.97	3.17	—	37051
T3/DS3/E3/STS-1 Transformers													
4	1:1	—	—	—	1	1-3	257-1149-1-ND	7.03	5.86	4.88	4.06	3.39	36976
	1:2CT	—	—	—	2	4-6	257-1150-1-ND	7.38	6.16	5.13	4.28	3.57	36977

Fig.	Transmitter Turns Ratio Pri: Sec ±3%	Receiver Turns Ratio Pri: Sec ±3%	Pin Out	Transmitter Primary Pins	Receiver Primary Pins	Digi-Key Part No. *	Cut Tape Price Each 1	10	25	50	100	Schott Part No.
Octal Transformers												
5	1:2CT	1:2CT	3	4-5, 9-10, 14-15,19-20	24-25, 29-30, 34-35, 39-40	257-1133-1-ND	20.40	17.00	14.79	12.86	11.19	37538
	1:2	1:2CT	4	1-2, 9-10, 11-12, 19-20	23-25, 26-28, 33-35, 36-38	257-1134-1-ND	20.40	17.00	14.79	12.86	11.19	37539
	1:1.36CT	1:2CT	3	24-25, 29-30, 34-35, 39-40	4-5, 9-10, 14-15, 19-20	257-1135-1-ND	20.40	17.00	14.79	12.86	11.19	37540
	1:2CT	1:1CT	2	1-2, 6-7, 11-12, 16-17	21-22, 26-27, 31-32, 36-37	257-1136-1-ND	20.40	17.00	14.79	12.86	11.19	37541
	1:1.15	1:2CT	1	1-2, 6-7, 11-12, 16-17	21-23, 26-28, 31-33, 36-38	257-1137-1-ND	20.40	17.00	14.79	12.86	11.19	37542
	1:1/1.26	1:2CT	2	1-2, 6-7, 11-12, 16-17	21-22, 26-27, 31-32, 36-37	257-1138-1-ND	20.40	17.00	14.79	12.86	11.19	37543
	1:2CT	1CT:2	3	4-5, 9-10, 14-15, 19-20	1-3, 6-8, 11-13, 16-18	257-1139-1-ND	20.40	17.00	14.79	12.86	11.19	37544

* For Tape and Reel Part Number, change 1-ND to 2-ND and call for pricing.

SCHOTT
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Transformers and Inductors

Certified ISO 9001 Certified

Fig. 1

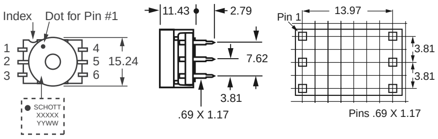


Fig. 2

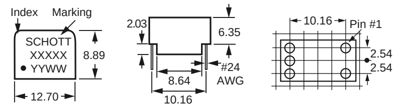


Fig. 3

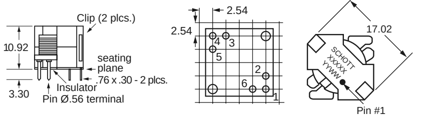


Fig. 4

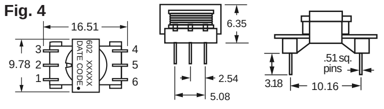


Fig. 5

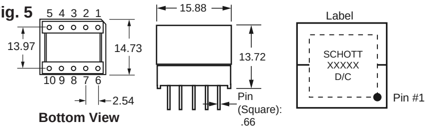


Fig. 6

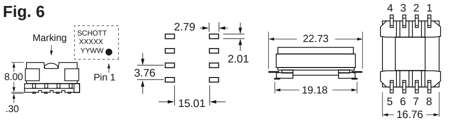
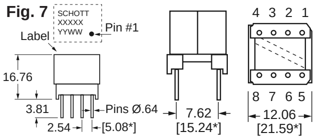


Fig. 7



* Dimensions shown in [ ] are for part numbers 257-1062-ND and 257-1065-ND

Fig. 8

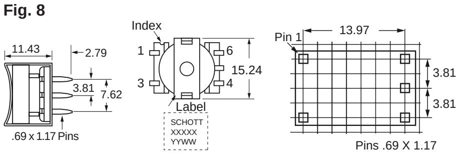
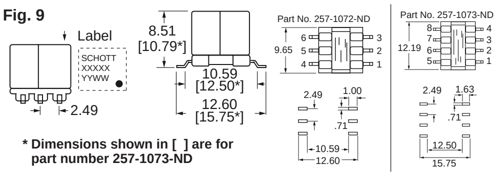


Fig. 9



* Dimensions shown in [ ] are for part number 257-1073-ND

Fig. 10

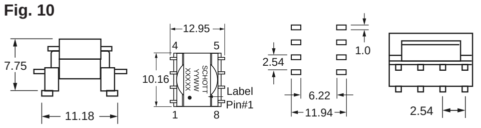


Fig. 11

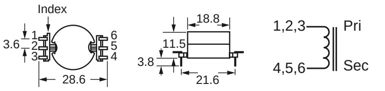


Fig. 12

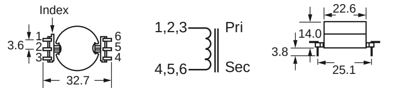


Fig. 13

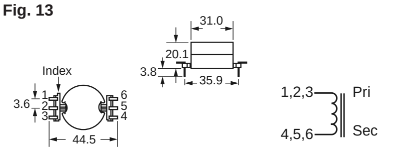


Fig. 14

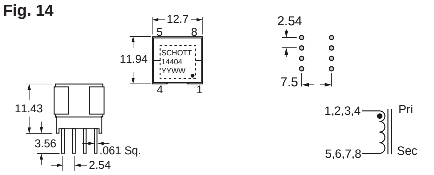
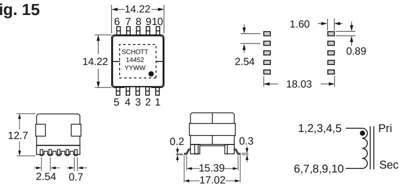


Fig. 15



			Schematic Information												
			Primary			Secondary				Price Each					
Fig.	Description (applications and notes)	Inductance	Start	CTap	Finish	Start	CTap	Finish	Digi-Key Part No.	1	10	50	100	500	Schott Part No.
1	Transformer for Maxim 250/251; 5V to 5V @ 50ma	2.5mH	1	—	3	4	—	6	257-1006-ND	9.29	7.14	5.19	4.16	2.89	67114760
2	Transformer for T1 Transmit: Dallas 2151	500µH	1	—	5	2	4	6	257-1007-ND	10.55	8.12	5.19	4.15	2.89	67112020
	Transformer for T1; Crystal 6154, 6158, 61535	700µH	1	—	2	3	—	4	257-1008-ND	12.57	8.44	6.15	4.59	3.78	67115100
	Transformer for Maxim 250/251; For RS232 Isolation	2mH	1	2	3	4	5	6	257-1009-ND	9.71	6.55	4.80	3.61	2.99	67117970
	Transformer for T1 Receive; Dallas 2151	700µH	1	3	5	2	—	6	257-1010-ND	9.97	6.70	4.88	3.65	3.00	67124650
	Line Interface Transformer T1 Transmit	700µH	1	—	5	2	4	6	257-1011-ND	8.93	6.87	4.40	3.52	2.25	67124670
	Isolation for Digital Audio; Crystal CS8401/2/11/12	225µH	1	—	2	3	—	4	257-1015-ND	9.61	6.45	4.70	3.51	2.89	67125450
3	Transformer for EXAR T1 Receive	8.44mH	6	1	2	3	4	5	257-1016-ND	11.44	7.68	4.39	3.84	3.48	67109510
	T1 Transmit Transformer for Level One 310	3mH	6	1	2	3	4	5	257-1017-ND	10.08	7.75	4.96	3.96	2.76	67125350
4	Transmit & Receive Transformer; Level One 300/301/305	700µH	1	—	2	6	—	5	257-1018-ND	8.61	5.78	3.47	2.89	2.46	67127370
	Isolation for Digital Audio: Crystal CS8401/1/11/12	225µH	1	—	3	4	—	6	257-1020-ND	8.61	5.78	3.47	2.89	2.46	67128990
	Transformer for Maxim 250/251; RS232 Isolation	2mH	3	2	1	6	5	4	257-1021-ND	20.59	13.82	8.29	7.36	6.54	67129080
	Isolation for Digital Audio, Shielded, Crystal CS8401/2/11/12	225µH	1	—	3	4	—	6	257-1025-ND	8.61	5.78	3.47	2.89	2.46	67129600
	Transmit Transformer for Rockwell 8069	1.2mH	1	2	3	6	5	4	257-1028-ND	11.24	8.64	5.53	4.43	—	67130850
	Interface Transformer for Dallas 2187	60µH	1	2	3	4	5	6	257-1029-ND	7.72	5.94	3.80	3.04	2.21	67131050
	Digital Audio, Shielded, 70-110 ohm, Crystal 8401, 8402, 8411 and 8412	225µH	1	—	3	4	—	6	257-1031-ND	8.61	5.78	3.47	2.89	2.46	67137640
5	Inductor for LM259x as L29, 1.5 Amps	100µH	1-5	—	6-10	—	—	—	257-1044-ND	14.95	11.08	6.31	4.86	3.12	67144130
	Inductor, 3.6A	33µH	1-5	—	6-10	—	—	—	257-1045-ND	14.95	11.08	6.31	4.86	3.12	67144220
6	Inductor DCR 0.09 ohms SMD, 1.77 Amps	100µH	1-4	—	5-8	—	—	—	257-1053-ND	11.00	8.46	5.42	4.33	3.01	24518
	Inductor DCR 0.26 ohms SMD, 1.18 Amps	220µH	1-4	—	5-8	—	—	—	257-1054-ND	12.04	9.27	5.93	4.74	3.30	24520
7	Inductor DCR 0.15 ohms, 0.63A	150µH	1-4	—	5-8	—	—	—	257-1057-ND	10.44	8.03	5.14	4.11	2.86	67144050
	Inductor DCR 0.04 ohms, 3.7A	47µH	1-4	—	5-8	—	—	—	257-1062-ND	15.01	11.12	6.34	4.88	3.12	67144210
8	Transformer DDS Level I LXT 400	200mH	3	—	1	6	5	4	257-1066-ND	10.84	8.33	5.33	4.26	2.97	67127340
9	Inductor DCR 0.300 ohms SMD, 0.45A	150µH	1	—	6	—	—	—	257-1072-ND	14.42	10.69	6.09	4.69	3.00	67144340
	Inductor DCR 0.150 ohms SMD, 0.63A	150µH	1-4	—	5-8	—	—	—	257-1073-ND	14.96	11.09	6.32	4.86	3.11	34591
10	Digital Audio, SMD;Transformer	225µH	1	—	4	5	—	8	257-1126-ND	15.37	10.39	6.19	5.35	4.92	37211
11	3A Inductor, Buck for LM257x	47µH	1	—	3	4	—	6	257-1094-ND	11.78	9.06	5.80	4.64	3.37	67126980
	1.3A Inductor, Buck for LM257x	220µH	1	—	3	4	—	6	257-1036-ND	11.77	9.06	5.80	4.64	3.37	67127020
	1A Inductor, Buck for LM257x	330µH	1	—	3	4	—	6	257-1096-ND	11.78	9.06	5.80	4.64	3.37	67127030
	0.95A Inductor, Buck for LM257x	470µH	1	—	3	4	—	6	257-1097-ND	11.78	9.06	5.80	4.64	3.37	67127040
12	3A Inductor, Buck for LM257x	100µH	1	—	3	4	—	6	257-1101-ND	11.89	9.15	5.86	4.68	3.41	67127000
	2A Inductor, Buck for LM257x	150µH	1	—	3	4	—	6	257-1102-ND	11.89	9.15	5.86	4.68	3.41	67127010
	3A Inductor, Buck for LM257x	150µH	1	—	3	4	—	6	257-1038-ND	11.89	9.15	5.86	4.68	3.41	67127060
	0.9A Inductor, Buck for LM257x	1000µH	1	—	3	4	—	6	257-1105-ND	11.89	9.15	5.86	4.68	3.41	67127110
13	3A Inductor, Buck for LM257x	220µH	1	—	3	4	—	6	257-1039-ND	12.16	9.35	5.99	4.79	3.48	67127070
	3A Inductor, Buck for LM257x	330µH	1	—	3	4	—	6	257-1108-ND	12.16	9.35	5.99	4.79	3.48	67127080
	1.9A Inductor, Buck for LM257x	470µH	1	—	3	4	—	6	257-1109-ND	12.16	9.35	5.99	4.79	3.48	67127090
14	.51A Inductor for LM259x	220µH	1	—	4	5	—	8	257-1118-ND	9.01	6.93	4.44	3.55	2.58	67144040
	.42A Inductor for LM259x	330µH	1	—	4	5	—	8	257-1119-ND	9.01	6.93	4.44	3.55	2.58	67144030
15	1.85A Inductor, SMT for LM259x	68µH	1	—	5	6	—	10	257-1121-ND	9.27	7.13	4.57	3.66	2.66	67144520
	3.60A Inductor, SMT for LM259x	33µH	1	—	5	6	—	10	257-1123-ND	9.27	7.13	4.57	3.66	2.66	67148290
	3.70A Inductor, SMT for LM259x	22µH	1	—	5	6	—	10	257-1124-ND	9.27	7.13	4.57	3.66	2.66	67148300

SCHOTT CORPORATION

ADSL / HDSL / G.SHDSL / HWT Transformers

Certified ISO 9001 Certified

Fig. 1

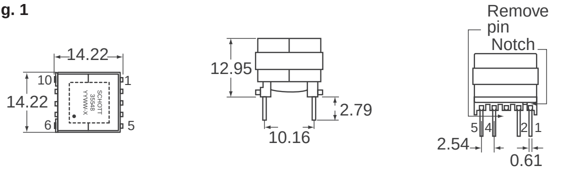


Fig. 2

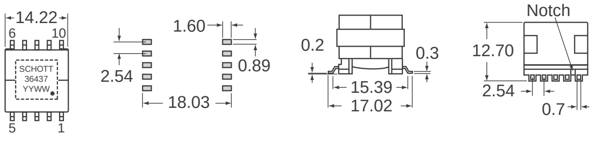


Fig. 3

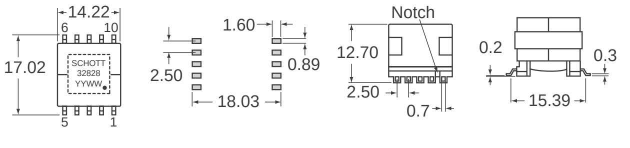


Fig. 4

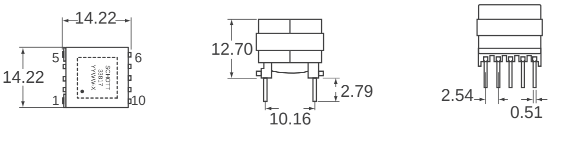


Fig. 5

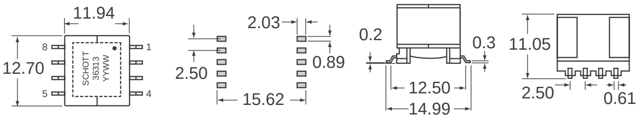


Fig. 6

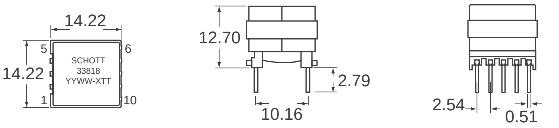


Fig. 7

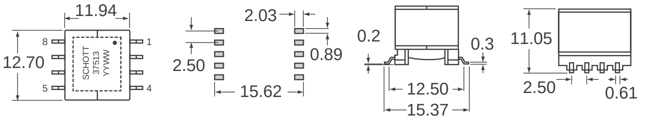


Fig. 8

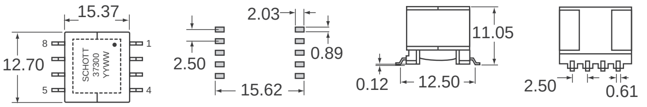


Fig. 9

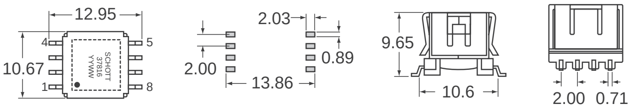


Fig. 10

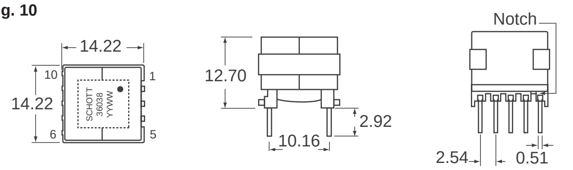


Fig. 11

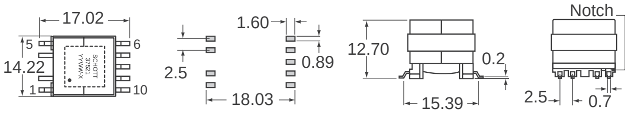


Fig. 12

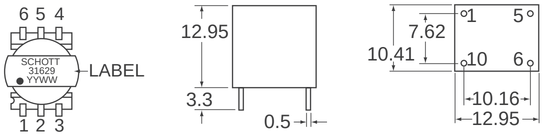


Fig. 13

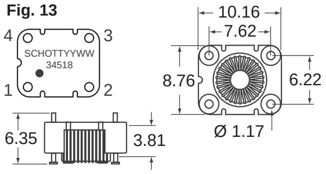


Fig. 14

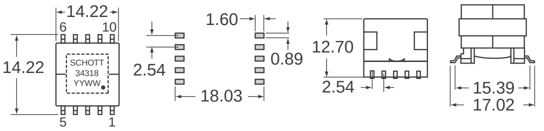
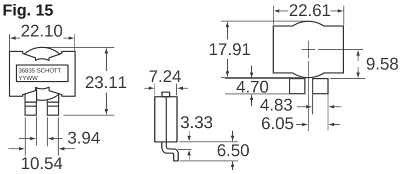


Fig. 15



			Schematic Information													
			Primary			Secondary				Price Each							
Fig.	Description (applications and notes)	Inductance	Start	CTap	Finish	Start	CTap	Finish	Digi-Key Part No.	1	10	50	100	500	Digi-Key Part No.	Tape & Reel Pricing	Schott Part No.
1	Transformer HDSL for Mindspeed EP13 Thd.	2mH	1, 2	—	4, 5	9	—	7	257-1151-ND†	4.02	3.35	2.54	2.21	1.67	—	—	35548
2	Transformer HDSL for Mindspeed EP13 SMD	2mH	1, 2	—	4, 5	9	—	7	257-1152-1-ND*	4.36	3.63	2.75	—	—	257-1152-2-ND	357.00/150	36437TR
3	Transformer ADSL for TI 3000 EP13 SMD	1.5mH	10	—	7	1	—	4	257-1153-1-ND*	4.55	3.79	2.87	—	—	257-1153-2-ND	435.75/175	32828TR
4	Transformer ADSL for TI 3000 EP13 Thd.	1.5mH	10	—	7	1	—	4	257-1154-ND†	4.39	3.65	2.76	2.40	1.82	—	—	33817
5	Transformer ADSL for TI 4000 EP10 SMD	375µH	1, 2	—	3, 4	8, 7	—	6, 5	257-1155-1-ND*	3.58	2.98	2.26	—	—	257-1155-2-ND	343.00/175	36313TR
6	Transformer ADSL for TI 5000 EP13 Thd.	1.5mH	10	—	7	1	—	4	257-1156-ND†	4.39	3.65	2.76	2.40	1.82	—	—	33818
7	Transformer ADSL for TI AC5 EP10 SMD	400µH	1, 2	—	3, 4	8, 7	—	6, 5	257-1157-1-ND*	4.39	3.65	2.76	—	—	257-1157-2-ND	420.00/175	37513TR
8	Transformer ADSL Over POTS EP10 SMD	474µH	1, 2	—	3, 4	8, 7	—	6, 5	257-1158-1-ND*	4.39	3.65	2.76	—	—	257-1158-2-ND	420.00/175	37300TR
9	Transformer ADSL Over POTS EP7 SMD	474µH	1, 2	—	3, 4	8, 7	—	6, 5	257-1159-1-ND*	3.53	2.94	2.22	—	—	257-1159-2-ND	504.00/300	37816TR
10	Transformer ADSL for Globespan EP13 Thd.	474µH	6, 7	—	8, 9	5, 4	—	3, 2	257-1160-ND†	4.39	3.65	2.76	2.40	1.82	—	—	36038
11	Transformer for Globespan G.SHDSL EP13 SMD	2mH	1, 2	—	4, 5	9	—	7	257-1161-1-ND*	4.19	3.49	2.64	—	—	257-1161-2-ND	402.50/175	37521TR
12	Inductor ADSL POTS Common Mode	9mH	1	—	10	5	—	6	257-1162-ND§	3.00	2.50	1.89	1.64	1.24	—	—	31630
13	Inductor ADSL Common Mode	4.5mH	1	—	2	4	—	3	257-1163-1-ND*	3.36	2.80	2.12	—	—	257-1163-2-ND	695.00/500	34518TR
14	Transformer ADSL for Alcatel Dynamite	440µH	10, 9	—	8, 7	1, 2	—	3, 4	257-1164-1-ND*	4.55	3.79	2.87	—	—	257-1164-2-ND	435.75/175	34318TR
15	Inductor HWT Power for Linear Low Profile SMD	5µH	1	—	2	—	—	—	257-1165-ND†	6.58	5.48	4.15	3.60	2.73	—	—	36835

* Cut down † Tray § Tube

HAMMOND MANUFACTURING

Filament and Low Voltage Rectifier Use Transformers

Schematic Drawing for "Open" and "High Current-Open Frame" styles.

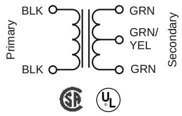


Fig. 1 Open Style

- Primary 115 VAC, 60 Hz
- Open style, channel bracket, two hole chassis mount
- Minimum 6" (15.24cm) leads
- Dual bobbin design - no electrostatic shield required
- Class A insulation (105°C)
- Hi-Pot test of 2,000V RMS
- CSA certified (#LR3902) and UL listed (#E50394)

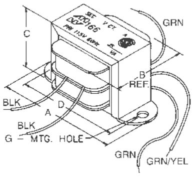


Fig. 2 – High Currrent - Open Frame

- Primary 115 VAC, 60 Hz
- Open style, 4 hole frame chassis mount
- Minimum 6" (15.24cm) leads
- Dual bobbin design - no electrostatic shield required
- Class A insulation (105°C)
- Hi-Pot test of 2,000V RMS
- CSA certified (#LR3902) & UL listed (#E50394)

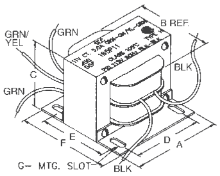


Fig.	Volts† AC	Amps	Dimensions - Inch (mm)							Digi-Key Part No.	Price Each				Hammond Part No.
			A	B	C	D	E	F	G		1	5	10	25	
1	6.3	0.6	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM505-ND	14.97	13.71	12.67	11.86	166G6
1	6.3	4.0	3.25 (82.55)	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM508-ND	17.22	15.78	14.57	13.65	166N6
1	8.5	2.0	3.25 (82.55)	1.63 (41.40)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM510-ND	16.72	15.32	14.15	13.25	166L8
1	9.0	0.5	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM511-ND	16.65	15.25	14.09	13.19	166G9
1	10.0	1.0	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM513-ND	16.28	14.92	13.78	12.90	166J10
1	10.0	2.0	3.25 (82.55)	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM514-ND	16.88	15.47	14.28	13.38	166L10
1	10.0	3.0	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM515-ND	17.43	15.97	14.75	13.81	166M10
1	12.6	0.3	2.38 (60.45)	1.38 (35.05)	1.38 (35.05)	2.00 (50.80)	—	—	0.187 (4.75)	HM517-ND	16.71	15.30	14.14	13.24	166F12
1	12.6	0.5	2.81 (71.37)	1.50 (38.10)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM518-ND	15.94	14.60	13.49	12.63	166G12
1	12.6	1.0	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM519-ND	16.51	15.12	13.97	13.08	166J12
1	12.6	2.5	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM520-ND	18.31	16.78	15.50	14.52	166L12
1	12.6	4.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM521-ND	21.19	19.41	17.93	16.79	166N12
1	12.6	6.0	4.03 (102.36)	2.25 (57.15)	2.63 (66.60)	3.56 (90.42)	—	—	0.187 (4.75)	HM522-ND	26.50	24.28	22.42	21.00	166Q12
1	12.6	8.0	4.50 (114.30)	2.50 (63.50)	2.88 (73.15)	4.00 (101.60)	—	—	0.203 (5.16)	HM523-ND	29.39	26.92	24.87	23.28	166R12
2	12.6	20.0	3.75 (95.25)	3.63 (92.20)	3.13 (79.50)	3.13 (79.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM525-ND	57.15	52.34	48.36	45.27	165V12
1	14.0	2.0	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM529-ND	17.29	15.84	14.63	13.70	166L14
1	16.0	2.2	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM533-ND	17.77	16.28	15.03	14.08	166L16
1	16.0	3.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM534-ND	21.13	19.39	17.91	16.77	166M16
1	18.0	1.5	3.25 (82.50)	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM535-ND	17.33	15.88	14.67	13.73	166K18
1	18.0	3.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM536-ND	24.34	22.30	20.60	19.28	166M18
1	18.0	5.0	4.03 (102.36)	2.50 (63.50)	2.63 (66.80)	3.56 (90.42)	—	—	0.187 (4.75)	HM537-ND	28.28	25.90	23.93	22.40	166P18
1	20.0	2.0	3.69 (93.73)	1.88 (47.75)	2.31 (56.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM543-ND	23.03	21.09	19.49	18.24	166L20
2	22.0	12.0	4.50 (114.30)	3.88 (98.55)	3.75 (95.25)	3.75 (95.25)	2.75 (69.85)	3.50 (88.90)	.28 x .56 (7.11 x 14.22)	HM544-ND	58.12	53.23	49.18	46.04	165T22
1	24.0	.085	2.06 (52.32)	1.38 (35.05)	1.19 (30.23)	1.75 (44.45)	—	—	0.187 (4.75)	HM546-ND	17.25	15.80	14.60	13.67	166C24
1	24.0	2.0	3.69 (93.73)	2.13 (54.10)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM547-ND	20.58	18.86	17.41	16.31	166L24
1	24.0	4.0	4.50 (114.30)	2.50 (63.50)	2.88 (73.15)	4.00 (101.60)	—	—	0.203 (5.16)	HM548-ND	28.66	26.26	24.25	22.71	166N24
1	25.0	0.5	2.81 (71.37)	1.63 (41.40)	1.69 (42.93)	2.38 (60.45)	—	—	0.187 (4.75)	HM552-ND	16.25	14.90	13.75	12.88	166G25
1	25.0	1.0	3.25 (82.55	1.75 (44.45)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM553-ND	17.25	15.80	14.60	13.67	166J25
1	25.0	1.5	3.69 (93.73)	1.88 (47.75)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM554-ND	20.15	18.47	17.05	15.97	166K25
1	25.0	3.0	4.03 (102.36)	2.25 (57.15)	2.63 (66.80)	3.56 (90.42)	—	—	0.187 (4.75)	HM556-ND	25.76	23.59	21.80	20.40	166M25
2	25.0	10.0	3.75 (95.25)	3.63 (92.20)	3.13 (79.50)	3.13 (79.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM558-ND	54.82	50.19	46.38	43.41	165S25
1	28.0	1.0	3.25 (82.55)	2.00 (50.80)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM560-ND	17.26	15.82	14.61	13.68	166J28
2	30.0	5.0	3.00 (76.20)	3.25 (82.55)	2.56 (65.02)	2.50 (63.50)	3.25 (82.55)	4.00 (101.60)	.22 x .56 (5.59 x 14.22)	HM561-ND	44.22	40.50	37.42	35.03	165P30
2	30.0	10.0	4.50 (114.30)	3.88 (98.55)	3.75 (95.25)	3.75 (95.25)	2.75 (69.85)	3.50 (88.90)	.28 x .56 (7.11 x 14.22)	HM562-ND	59.88	54.84	50.67	47.43	165S30
1	36.0	0.5	3.25 (82.55)	1.63 (41.40)	2.00 (50.80)	2.81 (71.37)	—	—	0.187 (4.75)	HM566-ND	16.55	15.16	14.01	13.11	166G36
1	36.0	1.0	3.69 (93.73)	1.88 (47.75)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM567-ND	20.18	18.49	17.08	15.99	166J36
1	44.0	1.0	3.69 (93.73)	2.00 (50.80)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM568-ND	21.03	19.26	17.79	16.66	166J44
1	80.0	0.5	3.69 (93.73)	1.88 (47.75)	2.31 (58.67)	3.13 (79.50)	—	—	0.187 (4.75)	HM569-ND	20.58	18.86	17.41	16.31	166G80

† Center tap voltage is half the voltage shown. All voltage ratings are based on full load current rating shown.

TAMURA MICROTRAN®

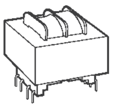
SPLITFORM® Power Transformers

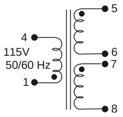
For PC Board Solid-State Power, Control, and Instrumentation Applications

File #'s LR73078, LR69808

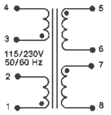
UL 1585 Class 2 &3 - File #'s E96720, 95844
UL 506 - File #'s E79781, E91239
130B - File #92957

- 115V Single or 115/230V 50/60Hz dual primary
- Split Bobbin Construction: – Center flange insulation barrier – High isolation for low leakage applications – Low capacitive coupling minimizes line noise and false triggering
- 2,500V RMS hi-pot
- Precision spaced terminals
- 130°C insulation system
- Terminal numbers are molded on bobbin

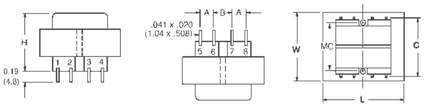




115V Single Primary



115V/250V Dual Primary



(Pins 2 and 3 omitted on 115V Single Primary)

3F(X) Series	VA Size	Dimensions – Inch (mm)							Weight Lbs. (kg)
		L	W	H	MC	A	B	C	
2	1.1	1.44 (36.58)	1.23 (31.24)	1.00 (25.40)	—	.250 (6.35)	.250 (6.35)	1.200 (30.48)	0.17 (.077)
3	2.4	1.44 (36.58)	1.23 (31.24)	1.26 (32.00)	—	.250 (6.35)	.250 (6.35)	1.200 (30.48)	0.25 (.113)
4	6	1.69 (42.93)	1.39 (35.31)	1.36 (34.54)	1.063 (27.00)	.250 (6.35)	.350 (8.89)	1.280 (32.51)	0.44 (.200)
5	12	1.97 (50.04)	1.63 (41.40)	1.50 (38.10)	1.250 (31.75)	.300 (7.62)	.400 (10.16)	1.410 (35.81)	0.70 (.318)

VA (Size)	Secondary RMS Rating		Digi-Key Part No.	Price Each					Tamura Part No.
	Parallel VAC @ A	Series VCT @ A		1	10	25	50	100	
			115V Single Primary						
1.1	5.0 @ 0.220	10.0 @ 0.110	MT2201-ND	7.08	6.10	5.13	4.40	3.66	3FS-210
2.4	5.0 @ 0.500	10.0 @ 0.250	MT2202-ND	7.37	6.35	5.34	4.58	3.81	3FS-310
6	5.0 @ 1.200	10.0 @ 0.600	MT2203-ND	8.21	7.08	5.95	5.10	4.25	3FS-410
12	5.0 @ 2.400	10.0 @ 1.200	MT2204-ND	9.34	8.05	6.77	5.80	4.83	3FS-510
1.1	6.3 @ 0.180	12.6 @ 0.090	MT2205-ND	7.08	6.10	5.13	4.40	3.66	3FS-212
2.4	6.3 @ 0.400	12.6 @ 0.200	MT2206-ND	7.37	6.35	5.34	4.58	3.81	3FS-312
6	6.3 @ 1.000	12.6 @ 0.500	MT2207-ND	8.21	7.08	5.95	5.10	4.25	3FS-412
12	6.3 @ 2.000	12.6 @ 1.000	MT2208-ND	9.34	8.05	6.77	5.80	4.83	3FS-512
1.1	8.0 @ 0.140	16.0 @ 0.070	MT2209-ND	7.08	6.10	5.13	4.40	3.66	3FS-216
2.4	8.0 @ 0.300	16.0 @ 0.150	MT2210-ND	7.37	6.35	5.34	4.58	3.81	3FS-316
6	8.0 @ 0.800	16.0 @ 0.400	MT2211-ND	8.21	7.08	5.95	5.10	4.25	3FS-416
12	8.0 @ 1.600	16.0 @ 0.800	MT2212-ND	9.34	8.05	6.77	5.80	4.83	3FS-516
1.1	10.0 @ 0.110	20.0 @ 0.055	MT2213-ND	7.08	6.10	5.13	4.40	3.66	3FS-220
2.4	10.0 @ 0.240	20.0 @ 0.120	MT2214-ND	7.37	6.35	5.34	4.58	3.81	3FS-320
6	10.0 @ 0.600	20.0 @ 0.300	MT2215-ND	8.21	7.08	5.95	5.10	4.25	3FS-420
12	10.0 @ 1.200	20.0 @ 0.600	MT2216-ND	9.34	8.05	6.77	5.80	4.83	3FS-520
1.1	12.0 @ 0.900	24.0 @ 0.045	MT2217-ND	7.08	6.10	5.13	4.40	3.66	3FS-224
2.4	12.0 @ 0.200	24.0 @ 0.100	MT2218-ND	7.37	6.35	5.34	4.58	3.81	3FS-324
6	12.0 @ 0.500	24.0 @ 0.250	MT2219-ND	8.21	7.08	5.95	5.10	4.25	3FS-424
12	12.0 @ 1.000	24.0 @ 0.500	MT2220-ND	9.34	8.05	6.77	5.80	4.83	3FS-524
1.1	14.0 @ 0.080	28.0 @ 0.040	MT2221-ND	7.08	6.10	5.13	4.40	3.66	3FS-228
2.4	14.0 @ 0.170	28.0 @ 0.085	MT2222-ND	7.37	6.35	5.34	4.58	3.81	3FS-328
6	14.0 @ 0.400	28.0 @ 0.200	MT2223-ND	8.21	7.08	5.95	5.10	4.25	3FS-428
12	14.0 @ 0.840	28.0 @ 0.420	MT2224-ND	9.34	8.05	6.77	5.80	4.83	3FS-528
1.1	18.0 @ 0.060	36.0 @ 0.030	MT2225-ND	7.08	6.10	5.13	4.40	3.66	3FS-236
2.4	18.0 @ 0.130	36.0 @ 0.065	MT2226-ND	7.37	6.35	5.34	4.58	3.81	3FS-336
6	18.0 @ 0.340	36.0 @ 0.170	MT2227-ND	8.21	7.08	5.95	5.10	4.25	3FS-436
12	18.0 @ 0.700	36.0 @ 0.350	MT2228-ND	9.34	8.05	6.77	5.80	4.83	3FS-536
1.1	24.0 @ 0.046	48.0 @ 0.023	MT2229-ND	7.08	6.10	5.13	4.40	3.66	3FS-248
2.4	24.0 @ 0.100	48.0 @ 0.050	MT2230-ND	7.37	6.35	5.34	4.58	3.81	3FS-348
6	24.0 @ 0.250	48.0 @ 0.125	MT2231-ND	8.21	7.08	5.95	5.10	4.25	3FS-448
12	24.0 @ 0.500	48.0 @ 0.250	MT2232-ND	9.34	8.05	6.77	5.80	4.83	3FS-548
1.1	28.0 @ 0.040	56.0 @ 0.020	MT2233-ND	7.08	6.10	5.13	4.40	3.66	3FS-256
2.4	28.0 @ 0.090	56.0 @ 0.045	MT2234-ND	7.37	6.35	5.34	4.58	3.81	3FS-356
6	28.0 @ 0.220	56.0 @ 0.110	MT2235-ND	8.21	7.08	5.95	5.10	4.25	3FS-456
12	28.0 @ 0.440	56.0 @ 0.220	MT2236-ND	9.34	8.05	6.77	5.80	4.83	3FS-556

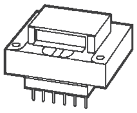
VA (Size)	Secondary RMS Rating		Digi-Key Part No.	Price Each					Tamura Part No.
	Parallel VAC @ A	Series VCT @ A		1	10	25	50	100	
			115V/230V Dual Primary						
1.1	5.0 @ 0.220	10.0 @ 0.110	MT2096-ND	8.21	7.08	5.95	5.10	4.25	3FD-210
2.4	5.0 @ 0.500	10.0 @ 0.250	MT2097-ND	8.50	7.33	6.16	5.28	4.40	3FD-310
6	5.0 @ 1.200	10.0 @ 0.600	MT2098-ND	9.34	8.05	6.77	5.80	4.83	3FD-410
12	5.0 @ 2.400	10.0 @ 1.200	MT2099-ND	10.76	9.28	7.80	6.68	5.57	3FD-510
1.1	6.3 @ 0.180	12.6 @ 0.090	MT2101-ND	7.65	6.80	5.78	5.10	4.42	3FD-212
2.4	6.3 @ 0.400	12.6 @ 0.200	MT2102-ND	7.74	6.88	5.85	5.16	4.48	3FD-312
6.0	6.3 @ 1.000	12.6 @ 0.500	MT2103-ND	8.37	7.44	6.33	5.58	4.84	3FD-412
12	6.3 @ 2.000	12.6 @ 1.000	MT2104-ND	9.63	8.56	7.28	6.42	5.57	3FD-512
1.1	8.0 @ 0.140	16.0 @ 0.070	MT2105-ND	7.65	6.80	5.78	5.10	4.42	3FD-216
2.4	8.0 @ 0.300	16.0 @ 0.150	MT2106-ND	7.74	6.88	5.85	5.16	4.48	3FD-316
6.0	8.0 @ 0.800	16.0 @ 0.400	MT2107-ND	8.37	7.44	6.33	5.58	4.84	3FD-416
12	8.0 @ 1.600	16.0 @ 0.800	MT2108-ND	9.63	8.56	7.28	6.42	5.57	3FD-516
1.1	10.0 @ 0.110	20.0 @ 0.055	MT2109-ND	7.65	6.80	5.78	5.10	4.42	3FD-220
2.4	10.0 @ 0.240	20.0 @ 0.120	MT2110-ND	7.74	6.88	5.85	5.16	4.48	3FD-320
6.0	10.0 @ 0.600	20.0 @ 0.300	MT2111-ND	8.37	7.44	6.33	5.58	4.84	3FD-420
12	10.0 @ 1.200	20.0 @ 0.600	MT2112-ND	9.63	8.56	7.28	6.42	5.57	3FD-520
1.1	12.0 @ 0.090	24.0 @ 0.045	MT2113-ND	7.65	6.80	5.78	5.10	4.42	3FD-224
2.4	12.0 @ 0.200	24.0 @ 0.100	MT2114-ND	7.74	6.88	5.85	5.16	4.48	3FD-324
6.0	12.0 @ 0.500	24.0 @ 0.250	MT2115-ND	8.37	7.44	6.33	5.58	4.84	3FD-424
12	12.0 @ 1.000	24.0 @ 0.500	MT2116-ND	9.63	8.56	7.28	6.42	5.57	3FD-524
1.1	14.0 @ 0.080	28.0 @ 0.040	MT2117-ND	7.65	6.80	5.78	5.10	4.42	3FD-228
2.4	14.0 @ 0.170	28.0 @ 0.085	MT2118-ND	7.74	6.88	5.85	5.16	4.48	3FD-328
6.0	14.0 @ 0.400	28.0 @ 0.200	MT2119-ND	8.37	7.44	6.33	5.58	4.84	3FD-428
12	14.0 @ 0.840	28.0 @ 0.420	MT2120-ND	9.63	8.56	7.28	6.42	5.57	3FD-528
1.1	18.0 @ 0.060	36.0 @ 0.030	MT2121-ND	7.65	6.80	5.78	5.10	4.42	3FD-236
2.4	18.0 @ 0.130	36.0 @ 0.065	MT2122-ND	7.74	6.88	5.85	5.16	4.48	3FD-336
6.0	18.0 @ 0.340	36.0 @ 0.170	MT2123-ND	8.37	7.44	6.33	5.58	4.84	3FD-436
12	18.0 @ 0.700	36.0 @ 0.350	MT2124-ND	9.63	8.56	7.28	6.42	5.57	3FD-536
1.1	24.0 @ 0.046	48.0 @ 0.023	MT2125-ND	8.21	7.08	5.95	5.10	4.25	3FD-248
2.4	24.0 @ 0.100	48.0 @ 0.050	MT2126-ND	8.50	7.33	6.16	5.28	4.40	3FD-348
6	24.0 @ 0.250	48.0 @ 0.125	MT2127-ND	9.34	8.05	6.77	5.80	4.83	3FD-448
12	24.0 @ 0.500	48.0 @ 0.250	MT2128-ND	10.76	9.28	7.80	6.68	5.57	3FD-548
1.1	28.0 @ 0.040	56.0 @ 0.020	MT2129-ND	8.21	7.08	5.95	5.10	4.25	3FD-256
2.4	28.0 @ 0.090	56.0 @ 0.045	MT2130-ND	8.50	7.33	6.16	5.28	4.40	3FD-356
6	28.0 @ 0.220	56.0 @ 0.110	MT2131-ND	9.34	8.05	6.77	5.80	4.83	3FD-456
12	28.0 @ 0.440	56.0 @ 0.220	MT2132-ND	10.76	9.28	7.80	6.68	5.57	3FD-556

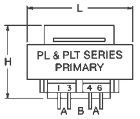
Note: To obtain output voltage, load current must be met, ratings are based on 120V nominal input.

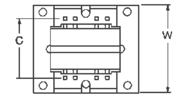
Worldtrans® Power Transformers
For PC Board Solid-State Power, Control, and Instrumentation Applications

- Meets U.S. and International Safety Standards — UL, VDE, IEC, CSA.
- 4,000V RMS hipot test —

  Dual non-concentric bobbins and insulating shroud provide high isolation and reduced capacitance.
- 115/230V 50/60Hz primary.
- 130°C insulation system — Insulating materials meet UL 94V-0 flammability requirements.



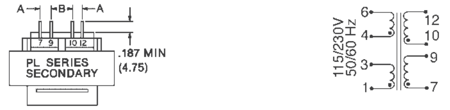




File #LR69222; File #LR69223

File 810/89, 811/89; VCD 0551,0806

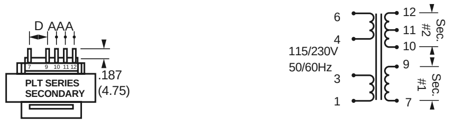
Fig. 1



TUV File 810/89, 811/89; IEC 380 EN60950

File #E79781; UL506
E138028; Ul1411

Fig. 2



TUV File 810/89, 811/89; IEC 380 EN60950

File #E79781; UL506
E138028; Ul1411

VA Size	Dimensions – Inch (mm)							Mtg. Screw	Pin Square In. (mm)	Wt. Lbs. (kg)
	L	W	H	A†	B	C	D			
2.5	1.625 (41.28)	1.313 (33.35)	1.125 (28.58)	.200 (5.08)	.250 (6.35)	1.000 (25.40)	—	2x #4	.025 (.64)	.25 (.11)
5.0	1.625 (41.28)	1.313 (33.35)	1.375 (34.93)	.200 (5.08)	.400 (10.16)	1.000 (25.40)	—	2x #4	.025 (.64)	.37 (.17)
10.0	1.875 (47.63)	1.563 (39.70)	1.375 (34.93)	.200 (5.08)	.400 (10.16)	1.140 (28.96)	—	2x #4	.036 (.91)	.53 (.24)
20.0	2.250 (57.15)	1.875 (47.63)	1.625 (41.28)	.400 (10.16)	.400 (10.16)	1.460 (37.08)	.40 (10.16)	2x #4	.036 (.91)	.90 (.41)
30.0	2.625 (66.68)	2.188 (55.58)	1.563 (39.70)	.550 (13.97)	.275 (6.98)	1.680 (42.67)	.55 (13.97)	4x #6	.045 (1.14)	1.15 (.52)
56.0	3.000 (76.20)	2.500 (63.50)	1.813 (46.05)	.600 (15.24)	.300 (7.62)	1.900 (48.26)	.60 (15.24)	4x #6	.045 (1.14)	1.70 (.77)

† For PLT series secondary only, dimension A is 1/2 of value shown.

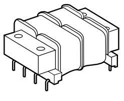
Fig.	VA (Size)	Secondary RMS Rating		Digi-Key Part No.	Price Each*			Tamura Part No.
		Parallel VAC @ A	Series VCT @ A		1	10	25	
PL Series — Dual Output Low Profile								
1	2.5	5 @ 0.5	10 @ 0.25	MT3101-ND	7.97	7.08	6.02	PL2.5-10
	5.0	5 @ 1.0	10 @ 0.5	MT3102-ND	8.60	7.64	6.50	PL5.0-10
	10.0	5 @ 2.0	10 @ 1.0	MT3103-ND	9.47	8.42	7.16	PL10-10
	20.0	5 @ 4.0	10 @ 2.0	MT3104-ND	11.41	10.14	8.62	PL20-10
	30.0	5 @ 6.0	10 @ 3.0	MT3105-ND	13.52	12.02	10.22	PL30-10
	56.0	5 @ 11.2	10 @ 5.6	MT3106-ND	18.14	16.12	13.71	PL56-10
1	2.5	6.3 @ 0.4	12.6 @ 0.2	MT3107-ND	7.97	7.08	6.02	PL2.5-12
	5.0	6.3 @ 0.8	12.6 @ 0.4	MT3108-ND	8.60	7.64	6.50	PL5.0-12
	10.0	6.3 @ 1.6	12.6 @ 0.8	MT3109-ND	9.47	8.42	7.16	PL10-12
	20.0	6.3 @ 3.2	12.6 @ 1.6	MT3110-ND	11.41	10.14	8.62	PL20-12
	30.0	6.3 @ 4.8	12.6 @ 2.4	MT3111-ND	13.52	12.02	10.22	PL30-12
	56.0	6.3 @ 8.8	12.6 @ 4.4	MT3112-ND	18.14	16.12	13.71	PL56-12
1	2.5	8 @ 0.3	16 @ 0.15	MT3113-ND	7.97	7.08	6.02	PL2.5-16
	5.0	8 @ 0.62	16 @ 0.31	MT3114-ND	8.60	7.64	6.50	PL5.0-16
	10.0	8 @ 1.25	16 @ 0.62	MT3115-ND	9.47	8.42	7.16	PL10-16
	20.0	8 @ 2.5	16 @ 1.25	MT3116-ND	11.41	10.14	8.62	PL20-16
	30.0	8 @ 3.8	16 @ 1.9	MT3117-ND	13.52	12.02	10.22	PL30-16
	56.0	8 @ 7.0	16 @ 3.5	MT3118-ND	18.14	16.12	13.71	PL56-16
1	2.5	10 @ 0.24	20 @ 0.12	MT3119-ND	7.97	7.08	6.02	PL2.5-20
	5.0	10 @ 0.5	20 @ 0.25	MT3120-ND	8.60	7.64	6.50	PL5.0-20
	10.0	10 @ 1.0	20 @ 0.5	MT3121-ND	9.47	8.42	7.16	PL10-20
	20.0	10 @ 2.0	20 @ 1.0	MT3122-ND	11.41	10.14	8.62	PL20-20
	30.0	10 @ 3.0	20 @ 1.5	MT3123-ND	13.52	12.02	10.22	PL30-20
	56.0	10 @ 5.6	20 @ 2.8	MT3124-ND	18.14	16.12	13.71	PL56-20
1	2.5	12 @ 0.2	24 @ 0.1	MT3125-ND	7.97	7.08	6.02	PL2.5-24
	5.0	12 @ 0.42	24 @ 0.21	MT3126-ND	8.60	7.64	6.50	PL5.0-24
	10.0	12 @ 0.84	24 @ 0.42	MT3127-ND	9.47	8.42	7.16	PL10-24
	20.0	12 @ 1.66	24 @ 0.83	MT3128-ND	11.41	10.14	8.62	PL20-24
	30.0	12 @ 2.5	24 @ 1.25	MT3129-ND	13.52	12.02	10.22	PL30-24
	56.0	12 @ 4.66	24 @ 2.33	MT3130-ND	18.14	16.12	13.71	PL56-24
1	2.5	14 @ 0.18	28 @ 0.09	MT3131-ND	7.97	7.08	6.02	PL2.5-28
	5.0	14 @ 0.36	28 @ 0.18	MT3132-ND	8.60	7.64	6.50	PL5.0-28
	10.0	14 @ 0.72	28 @ 0.36	MT3133-ND	9.47	8.42	7.16	PL10-28
	20.0	14 @ 1.44	28 @ 0.72	MT3134-ND	11.41	10.14	8.62	PL20-28
	30.0	14 @ 2.12	28 @ 1.06	MT3135-ND	13.52	12.02	10.22	PL30-28
	56.0	14 @ 4.0	28 @ 2.0	MT3136-ND	18.14	16.12	13.71	PL56-28
1	2.5	18 @ 0.14	36 @ 0.07	MT3137-ND	7.97	7.08	6.02	PL2.5-36
	5.0	18 @ 0.28	36 @ 0.14	MT3138-ND	8.60	7.64	6.50	PL5.0-36
	10.0	18 @ 0.56	36 @ 0.28	MT3139-ND	9.47	8.42	7.16	PL10-36
	20.0	18 @ 1.12	36 @ 0.56	MT3140-ND	11.41	10.14	8.62	PL20-36
	30.0	18 @ 1.64	36 @ 0.82	MT3141-ND	13.52	12.02	10.22	PL30-36
	56.0	18 @ 3.12	36 @ 1.56	MT3142-ND	18.14	16.12	13.71	PL56-36
Fig.	**VA (Size)**	**Sec. #1 VAC @ A**	**Sec. #2 VCT @ A**	**Digi-Key Part No.**	**Price Each* 1**	**10**	**25**	**Tamura Part No.**
PLT Series — Triple Output								
2	20.0	9.3 @1.5	27.5 @ .22	MT3143-ND†	13.61	12.10	10.29	PLT20-32
	30.0	9.3 @ 2.2	27.5 @ .34	MT3144-ND†	15.77	14.02	11.92	PLT30-32
	56.0	9.3 @4.0	27.5 @ .68	MT3145-ND†	20.52	18.24	15.51	PLT56-32

Note: *To obtain output voltage, load current must be met, ratings based on 120V nominal input.*

† Intended for use as a regulated power supply transformer, 5VDC and ±12VDC.

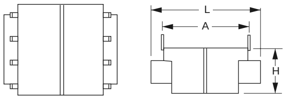
* Call for price on quantities of 50 or more.

FLAT STACK® Low Profile Power Transformers
For low height PC Board Solid-State Power, Control, and Instrumentation



Split Bobbin:

- Primaries and secondaries wound side by side
- High isolation for low leakage applications 1500V hi-pot
- Low capacity coupling minimizes line noise and false triggering.
- Hum-bucking semi-toroidal construction
- Precision spaced terminals
- Dual primaries: 115/230V, 50/60Hz
- No load to Full Regulation: 30%; 12VA, 20%



Pin dimensions: 0.091” x 0.2” (2.31mm x .51mm)

UL 506 File #E145619, E79781
130°C Insulation System

CSA22,2 No. 66
File # LR81383-7

130B*
File No. E92957

* 130B for 3FL series only, up to 12VA size

Fig. 1

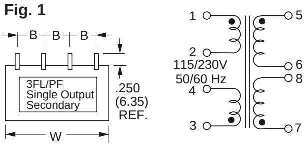
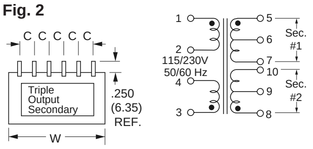


Fig. 2



VA (Size)	Dimensions – Inch (mm)						Weight Oz. (Gram)
	L	W	H	A	B	C	
2.5	1.87 (47.50)	1.56 (39.62)	0.65 (16.51)	1.6 (40.64)	.375 (9.52)	.187 (4.75)	5 (141.75)
6	1.875 (47.63)	1.56 (39.70)	0.85 (21.59)	1.6 (40.64)	.375 (9.52)	.187 (4.75)	7 (198.44)
12	2.5 (63.50)	2.0 (50.80)	1.065 (27.05)	2.0 (50.80)	.500 (12.70)	.250 (6.35)	11 (311.84)
24	2.87 (72.90)	2.25 (57.15)	1.25 (31.75)	1.9 (48.26)	.530 (13.46)	.300 (7.62)	15 (425.24)

Fig.	VA (Size)	Secondary RMS Rating		Digi-Key Part No.	Price Each*			Tamura Part No.
		Parallel VAC @ A	Series VCT @ A		1	10	25	
1	2.5	5.0 @ 0.5	10 @ 0.25	MT1101-ND	8.78	7.80	6.63	3FL10-250
	6.0	5.0 @ 1.2	10 @ 0.6	MT1102-ND	9.63	8.56	7.28	3FL10-600
	12.0	5.0 @ 2.4	10 @ 1.2	MT1103-ND	12.38	11.00	9.35	3FL10-1200
	24.0	5.0 @ 4.8	10 @ 2.4	MT1104-ND	13.73	12.20	10.37	PF24-10
1	2.5	6.3 @ 0.4	12.6 @ 0.2	MT1105-ND	8.78	7.80	6.63	3FL12-200
	6.0	6.3 @ 0.9	12.6 @ 0.45	MT1106-ND	9.63	8.56	7.28	3FL12-475
	12.0	6.3 @ 1.9	12.6 @ 0.95	MT1107-ND	12.38	11.00	9.35	3FL12-950
	24.0	6.3 @ 3.8	12.6 @ 1.9	MT1108-ND	13.73	12.20	10.37	PF24-12
1	2.5	8 @ 0.3	16 @ 0.15	MT1109-ND	8.78	7.80	6.63	3FL16-150
	6.0	8 @ 0.7	16 @ 0.35	MT1110-ND	9.63	8.56	7.28	3FL16-350
	12.0	8 @ 1.5	16 @ 0.75	MT1111-ND	12.38	11.00	9.35	3FL16-700
	24.0	8 @ 3.0	16 @ 1.5	MT1112-ND	13.73	12.20	10.37	PF24-16
1	2.5	10 @ 0.25	20 @ 0.125	MT1113-ND	8.78	7.80	6.63	3FL20-125
	6.0	10 @ 0.6	20 @ 0.3	MT1114-ND	9.63	8.56	7.28	3FL20-300
	12.0	10 @ 1.2	20 @ 0.6	MT1115-ND	12.38	11.00	9.35	3FL20-600
	24.0	10 @ 2.4	20 @ 1.2	MT1116-ND	13.73	12.20	10.37	PF24-20
1	2.5	12 @ 0.2	24 @ 0.1	MT1117-ND	8.78	7.80	6.63	3FL24-100
	6.0	12 @ 0.5	24 @ 0.25	MT1118-ND	9.63	8.56	7.28	3FL24-250
	12.0	12 @ 1.0	24 @ 0.5	MT1119-ND	12.38	11.00	9.35	3FL24-500
	24.0	12 @ 2.0	24 @ 1.0	MT1120-ND	13.73	12.20	10.37	PF24-24
1	2.5	15 @ 0.17	30 @ 0.085	MT1121-ND	8.78	7.80	6.63	3FL30-85
	6.0	15 @ 0.4	30 @ 0.2	MT1122-ND	9.63	8.56	7.28	3FL30-200
	12.0	15 @ 0.8	30 @ 0.4	MT1123-ND	12.38	11.00	9.35	3FL30-400
	24.0	15 @ 1.6	30 @ 0.8	MT1124-ND	13.73	12.20	10.37	PF24-30
1	2.5	17 @ 0.15	34 @ .075	MT1125-ND	8.78	7.80	6.63	3FL34-75
	6.0	17 @ 0.34	34 @ 0.17	MT1126-ND	9.63	8.56	7.28	3FL34-170
	12.0	17 @ 0.7	34 @ 0.35	MT1127-ND	12.38	11.00	9.35	3FL34-340
	24.0	17 @ 1.4	34 @ 0.7	MT1128-ND	13.73	12.20	10.37	PF24-34
Fig.	**VA (Size)**	**Sec. #1 VCT @ A**	**Sec. #2 VCT @ A**	**Digi-Key Part No.**	**Price Each* 1**	**10**	**25**	**Tamura Part No.**
PFT Series — Triple Output								
2	6.0	17.5 @ .155	31.5@ .065	MT1129-ND†	7.67	6.82	5.80	PFT6-32
	6.0	17.5 @ .155	37.5 @ .060	MT1130-ND†	7.67	6.82	5.80	PFT6-38
	12.0	16 @ .36	28 @ .187	MT1132-ND†	8.87	7.88	6.70	PFT12-28
	12.0	16 @ .36	35 @ .150	MT1131-ND†	8.87	7.88	6.70	PFT12-35
	24.0	16 @ .72	28 @ .375	MT1134-ND†	10.46	9.30	7.91	PFT24-28
	24.0	16 @ .72	35 @ .300	MT1133-ND†	10.46	9.30	7.91	PFT24-35

Note: *To obtain output voltage, load current must be met, ratings based on 120V nominal input.*

† Intended for use as a regulated power supply transformer, 5VDC, and ± 12VDC or ± 15VDC.

* Call for price on quantities of 50 or more.

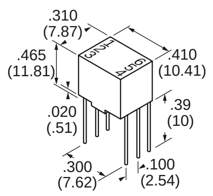
TAMURA MICROTRAN®

Encapsulated Transformers — MIL-T-27 Type

Telecom, Input, Interface, Isolation and Output Impedance Matching

Features:

- FCC Part 68 Models available ‡
- Dielectric Strength: 1kVrms
- Operating Temperature: ≤105°C
- Frequency Response: ±2dB, .3≈100kHz.



Physical pin locations vary, see chart.

Matching Impedance Primary : Secondary	PRI § maDC	PRI • (MW)	Pin Location Primary	Pin Location Secondary	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Tamura Part No.
200kCT : 1kCT	0.00	10	1 - 2CT - 3	4 - 5CT - 6	MT4143-ND	18.00	16.00	13.60	MET-01
25kCT : 1kCT	0.50	30	1 - 2CT - 3	4 - 5CT - 6	MT4144-ND	17.55	15.60	13.26	MET-05
10kCT : 10kCT	1.00	40	1 - 2CT - 3	4 - 5CT - 6	MT4145-ND	17.55	15.60	13.26	MET-09
10kCT : 2kCT	1.00	40	1 - 2CT - 3	4 - 5CT - 6	MT4146-ND	17.55	15.60	13.26	MET-11
10kCT : 500CT	1.00	40	1 - 2CT - 3	4 - 5CT - 6	MT4147-ND	17.55	15.60	13.26	MET-17
1.6kCT : 3.2	2.50	50	1 - 2CT - 3	4 - 6	MT4148-ND	14.33	12.74	10.83	MET-23
1k : 50	3.00	50	1 - 3	4 - 6	MT4149-ND	14.33	12.74	10.83	MET-28
900CT : 600	3.00	50	1 - 2CT - 3	4 - 6	MT4150-ND‡	15.66	13.92	11.84	MET-29
600CT : 600CT	3.00	50	1 - 2CT - 3	4 - 5CT - 6	MT4111-ND‡	25.83	22.96	19.52	MET-31
600 : 600CT†	3.00	50	1 - 2	3 - 4 / 5 - 6	MT4151-ND	15.21	13.52	11.50	MET-32
600CT : 8	4.50	50	1 - 2CT - 3	4 - 6	MT4153-ND	13.91	12.36	10.51	MET-35
500 : 500CT†	3.00	50	1 - 2	3 - 4 / 5 - 6	MT4154-ND	15.66	13.92	11.84	MET-38
500 : 50	3.00	50	1 - 3	4 - 6	MT4155-ND	13.91	12.36	10.51	MET-39
150 : 12	10.00	50	1 - 3	4 - 6	MT4156-ND	13.91	12.36	10.51	MET-42
600 : 600	3.00	50	1 - 3	4 - 6	MT4110-ND‡	24.50	21.78	18.52	MET-46
600 : 600CT	3.00	50	1 - 2	3 - 4 / 5 - 6	MT4152-NDΔ	15.21	13.52	11.50	MET-59
MU Metal Shield, MET Series, Slip-On Can					MT4157-ND	2.50	2.22	1.89	METC-99

† CT-Winding can be connected as a center tapped winding or as two isolated windings.
§ PRI maDC-Primary maximum rated unbalanced current in milli-amps, DC.
Δ Has special pinout

• PWR (mW)-Maximum power level in milli-watts @ 300Hz
‡ Meets FCC part 68 (hi-pot 1.5kV or 1.0kV).

Telephone Coupling Transformers

For Interconnecting Data/Voice Telephone Lines per FCC part 68.
Frequency Response: 300-3500Hz±0.5dB. **Hi-pot:** 1500V RMS. **Impedance Matching:** ±10%.
UL 1459, File #138028.
Drawings show maximum number of pins. Actual parts may have fewer pins.

Fig. 1

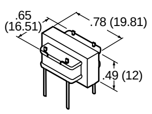


Fig. 2

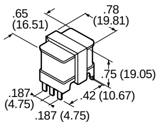


Fig. 3

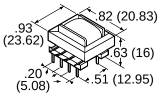


Fig. 4

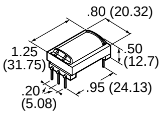


Fig. 5

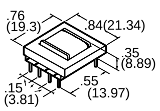


Fig. 6

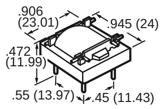


Fig. 7 - Surface Mt.

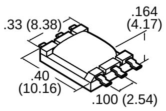


Fig. 8 - Surface Mt.

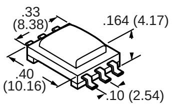


Fig. 9

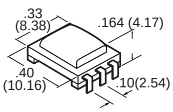


Fig. 10 - Surface Mt.

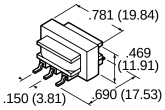
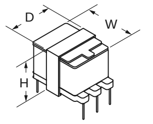


Fig. 11



	Dimensions Inch (mm): W		
	W	D	H
MT4139-ND (TTC-167)	.69 (17.5)	.61 (15.5)	.55 (14.0)
MT4140-ND (TTC-170)	.51 (13.0)	53 (13.4)	.42 (10.7)

Fig. 12

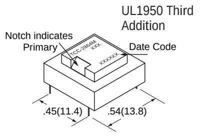
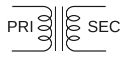
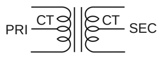


Fig.	Impedance Primary	Impedance Secondary	IDC (mA)	Insertion Loss (dB) ◊	Schematic	Pinout Primary	Pinout Secondary	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Tamura Part No.
1	600	600	0	1.0	A	1 - 3	4 - 6	MT4112-ND	4.73	4.20	3.57	T1104
1	600	600	0	1.2	A	1 - 3	4 - 6	MT4133-ND	3.51	3.12	2.66	TTC-02
2‡	600	600	0	1.0	A	1 - 3	4 - 6	MT4113-ND	9.83	8.74	7.43	TTC-110
2	600CT	600CT	0	1.0	B	1 - 2CT - 3	4 - 5CT - 6	MT4114-ND	11.34	10.08	8.57	TTC-09
2	600	600/600	0	1.0	D	1 - 6	2 - 5 / 3 - 4	MT4115-ND*	13.34	11.86	10.09	TTC-10
2‡	600	600	90	2.0	A	1 - 3	4 - 6	MT4134-ND	2.95	2.62	2.23	TTC-105
2	600	600CT	90	2.0	C	1 - 3	4 - 5CT - 6	MT4135-ND	3.04	2.70	2.30	TTC-105-1
2	600CT	600CT	0	1.2	B	1 - 2CT - 3	4 - 5CT - 6	MT4136-ND	2.95	2.62	2.23	TTC-108
2‡	4K	600	0	0.9	A	1 - 3	4 - 6	MT4137-ND	3.87	3.44	2.93	TTC-13
3	600	600	90	2.0	A	2 - 3	5 - 8	MT4116-ND	8.33	7.40	6.29	TTC-109N
3	600	600CT	90	2.0	C	2 - 3	5 - 6CT - 8	MT4117-ND	8.33	7.40	6.29	TTC-109N1
4‡	600	600	90	1.8	A	1 - 3	4 - 6	MT4118-ND	9.61	8.54	7.26	TTC-142
4	600	600 Split	90	1.8	D	1 - 6	2 - 5 Split / 3 - 4	MT4119-ND	9.92	8.82	7.50	TTC-142-2
4‡	600	600	90	1.6	A	1 - 3	4 - 6	MT4138-ND	5.09	4.52	3.85	TTC-143
4	600	600/600	50	1.0§	D	1 - 6	2 - 5 / 3 - 4	MT4141-ND	5.36	4.76	4.05	TTC-174
5	600	600	50	1.8	A	1 - 4	5 - 8	MT4120-ND	10.13	9.00	7.65	TTC-218
6	600	470	100	2.5	A	1 - 2	3 - 4	MT4123-ND	6.05	5.38	4.58	TTC-264
7	600	346	0	2.75	A	1 - 3	4 - 6	MT4121-ND†	13.48	11.98	10.19	TTC-103SL
8	600	346	0	2.75	A	1 - 3	4 - 6	MT4122-ND	13.48	11.98	10.19	TTC-203SL
9	600	346	0	2.7	A	1 - 3	4 - 6	MT4124-ND	13.48	11.98	10.19	TTC-303SL
10	600	600	0	1.0	A	1 - 3	4 - 6	MT4130-ND	11.54	10.26	8.73	TS1104
10	600	600/600	0	.7	D	1 - 6	3 - 4 / 2 - 5	MT4132-ND	14.00	12.44	10.58	TS1220
11	10K	10K	0	1.4	A	1 - 3	4 - 6	MT4139-ND	3.69	3.28	2.79	TTC-167
11	600	600	0	1.7	A	1 - 3	4 - 6	MT4140-ND	3.33	2.96	2.52	TTC-170
12	600	470	100	2.5	A	1 - 2	3 - 4	MT4142-ND	4.52	4.02	3.42	TTC-264M

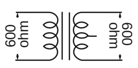
Schematic A



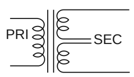
Schematic B



Schematic C



Schematic D

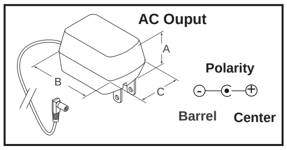


◊ Typical insertion loss (IL) in dB @ rated unbalanced maDC, 0dBm and 1kHz.
§ Add 3dB fo IL for single hybrid use with balancing network on 2-wire side.
‡ Has a 4-pin configuration

† TSL103SL must be mounted through a circuit board cutout .4" (10.16mm) x .33" (8.38mm)
* Two required for conventional hybrid operation, the insertion loss does not include 3dB in hybrid balance network.

TAMURA MICROTRAN®

Wall Mount Transformers 2.1mm I.D. x 5mm O.D. Female/Right Angle Connector



Specifications: • **Cord Length:** 1830 +150/-0.0mm(6ft) Min. • **Output Receptacle:** 2.1mm I.D. x 5mm O.D. x 12.50mm Barrel length, Right Angle (molded) Female Barrel Connector/Nickel Plated • **Load Regulation:** None • **Electrical Specifications:** Input-AC 120V ±10%, 60Hz ±0.5Hz • **Operating Temperature:** -10°C to +40°C • **Storage Temperature:** -20°C to +85°C • **Humidity:** 0 to 95% without condensation • **Withstand Voltage:** 1000Vrms 1 minute @input to output • **Safety Agencies:** UL and cUL File No. E218172

Size Code	Dimensions mm (Inch)			Tamura Series
	A	B	C	
1	35.50±1.0 (1.398±0.039)	63.50±1.0 (2.50±0.039)	40.00±1.0 (1.575±0.039)	212AS
2	43.00±1.0 (1.69±0.039)	70.00±1.0 (2.756±0.039)	46.00±1.0 (1.811±0.039)	318AS
3	46.50±1.0 (1.83±0.039)	72.00±1.0 (2.835±0.039)	52.00±1.0 (2.047±0.039)	420AS
4	52.50±1.0 (2.067±0.039)	91.00±1.0 (3.58±0.039)	58.00±1.0 (2.28±0.039)	830AS
5	62.00 (2.441)NOM	103.00 (4.055)	62.00 (2.441)	835AS

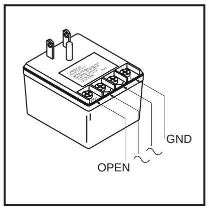
Size Code	Ratings Volt.	mA	Digi-Key Part No.	Price Each 1	10	25	100	Tamura Part No.
AC Output								
1	12VAC	125	MT7117-ND	5.14	4.38	3.58	3.34	212AS12012
2		375	MT7118-ND	5.97	5.04	4.12	3.88	318AS12037
3		750	MT7119-ND	6.10	5.97	4.89	3.96	420AS12075
4		1A	MT7166-ND *NEW!*	9.74	8.28	7.31	6.33	830AS12100
5		1.5A	MT7120-ND	12.34	11.33	9.27	8.02	835AS12150
1	16VAC	100	MT7121-ND	5.41	4.38	3.58	3.52	212AS16010
2		300	MT7122-ND	5.45	5.04	4.12	3.54	318AS16030
3		560	MT7123-ND	6.51	5.97	4.89	3.54	420AS16056
4		900	MT7168-ND *NEW!*	9.70	8.24	7.27	6.30	830AS16090
5		1.125A	MT7124-ND	12.36	11.33	9.27	7.28	835AS16112
1	20VAC	75	MT7125-ND	4.77	4.38	3.58	3.10	212AS20007
2		225	MT7126-ND	5.46	5.04	4.12	3.55	318AS20022
3		450	MT7127-ND	6.51	5.97	4.89	3.55	420AS20045
4		800	MT7170-ND *NEW!*	9.80	8.33	7.35	6.37	830AS20080
5		900	MT7128-ND	12.36	11.33	9.27	7.31	835AS20090
1	24VAC	60	MT7129-ND	4.76	4.38	3.58	3.10	212AS24006
2		200	MT7130-ND	5.47	5.04	4.12	3.55	318AS24020
3		375	MT7131-ND	8.07	5.97	4.89	4.34	420AS24037
4		700	MT7172-ND *NEW!*	9.74	8.28	7.30	6.33	830AS24070
5		750	MT7132-ND	12.36	11.33	9.27	7.31	835AS24075

Size Code	Ratings Volt.	mA	Digi-Key Part No.	Price Each 1	10	25	100	Tamura Part No.
DC Output								
1	3VDC	320	MT7133-ND	5.34	4.90	4.01	3.47	212AS03032
2		1A	MT7134-ND	7.70	7.07	5.79	5.00	318AS03100
4		1.75A	MT7161-ND *NEW!*	12.30	10.45	9.22	7.99	830AS03175
1	4.5VDC	250	MT7135-ND	5.17	4.73	3.87	3.36	212AS04025
2		700	MT7136-ND	6.31	5.78	4.73	4.10	318AS04070
3		1A	MT7137-ND	8.35	7.68	6.28	5.43	420AS04100
4		1.5A	MT7162-ND *NEW!*	13.06	11.10	9.80	8.49	830AS04150
1	6VDC	200	MT7138-ND	5.19	4.76	3.90	3.38	212AS06020
2		500	MT7139-ND	6.09	5.59	4.57	3.96	318AS06050
3		900	MT7140-ND	8.07	7.40	6.06	5.24	420AS06090
4		1.25A	MT7163-ND *NEW!*	12.82	10.90	9.61	8.33	830AS06125
1	9VDC	125	MT7141-ND	5.07	4.65	3.81	3.29	212AS09012
2		350	MT7142-ND	6.14	5.64	4.62	3.99	318AS09035
3		600	MT7143-ND	7.15	6.58	5.38	4.65	420AS09060
4		1A	MT7164-ND *NEW!*	11.16	9.48	8.37	7.25	830AS09100
5		1.4A	MT7144-ND	15.16	13.92	11.39	9.86	835AS09140
1	12VDC	100	MT7145-ND	5.14	4.73	3.87	3.34	212AS12010
2		300	MT7146-ND	5.99	5.50	4.50	3.89	318AS12030
3		500	MT7147-ND	7.37	6.77	5.54	4.79	420AS12050
4		800	MT7165-ND *NEW!*	11.22	9.53	8.41	7.29	830AS12080
5		1A	MT7148-ND	13.33	12.24	10.02	8.67	835AS12100
1	15VDC	75	MT7149-ND	5.21	4.73	3.87	3.39	212AS15007
2		250	MT7150-ND	6.19	5.48	4.48	4.02	318AS15025
3		400	MT7151-ND	7.44	6.82	5.58	4.72	420AS15040
4		700	MT7167-ND *NEW!*	10.79	9.17	8.09	7.02	830AS15070
5		800	MT7152-ND	13.26	12.16	9.95	8.62	835AS15080
1	18VDC	60	MT7153-ND	5.22	4.79	3.92	3.10	212AS18006
2		200	MT7154-ND	6.19	5.70	4.66	4.02	318AS18020
3		350	MT7155-ND	7.86	7.21	5.90	4.46	420AS18035
4		600	MT7169-ND *NEW!*	10.96	9.31	8.22	7.12	830AS18060
5		700	MT7156-ND	13.38	12.27	10.04	8.70	835AS18070
1	24VDC	50	MT7157-ND	5.43	4.98	4.08	3.10	212AS24005
2		150	MT7158-ND	6.10	5.59	4.57	3.96	318AS24015
3		250	MT7159-ND	8.35	6.66	5.45	5.43	420AS24025
4		450	MT7171-ND *NEW!*	10.30	8.76	7.73	6.70	830AS24045
5		500	MT7160-ND	12.57	11.53	9.43	8.17	835AS24050

Note: Output voltage shown is at full load current.

AC-AC Wall Plug-In Transformers

Screw Terminal Type - 120VAC, 60Hz



Features:

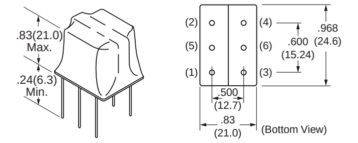
- UL Class II Xfmrs-UL 1310 Listed • Thermal overload protection
- Material: Black ABS resin/UL 94-V0 • Screw terminal, 4 each, #6-32

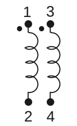
Rated Output Volts AC	mA AC	Digi-Key Part No.	Price Each 1	10	25	Tamura Part No.
10.0	1200	MT7101-ND	11.77	10.46	8.90	820A0060-03
10.0	2000	MT7109-ND	13.75	12.22	10.39	830A0060-03
12.0	1000	MT7102-ND	11.77	10.46	8.90	820A0061-03
12.0	1600	MT7110-ND	13.75	12.22	10.39	820A0061-03
14.0	850	MT7103-ND	11.77	10.46	8.90	820A0062-03
14.0	1430	MT7111-ND	13.75	12.22	10.39	830A0062-03
16.0	750	MT7104-ND	11.77	10.46	8.90	820A0063-03
16.0	1250	MT7112-ND	13.05	11.60	9.86	830A0063-03
18.0	650	MT7105-ND	11.77	10.46	8.90	820A0064-03
18.0	1110	MT7113-ND	13.05	11.60	9.86	830A0064-03
20.0	600	MT7106-ND	11.77	10.46	8.90	820A0065-03
20.0	1000	MT7114-ND	13.05	11.60	9.86	830A0065-03
22.0	550	MT7107-ND	11.77	10.46	8.90	820A0066-03
22.0	900	MT7115-ND	13.05	11.60	9.86	830A0066-03
24.0	500	MT7108-ND	11.77	10.46	8.90	820A0067-03
24.0	830	MT7116-ND	13.05	11.60	9.86	830A0067-03

Note: Output voltage shown is at full load current.

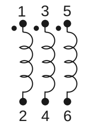
Encapsulated SCR and Triac Trigger Transformers

Designed for isolation in half and full wave SCR or TRIAC control circuits. Pass 2600V rms dielectric breakdown testing.





Schematic 1



Schematic 2

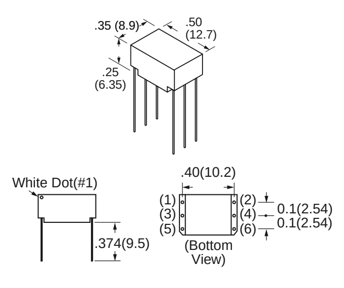
Schematic No.	Turns Ratio (±5%)	Primary mH (min.)	E.T. V µSec (min.)	Digi-Key Part No.	Price Each 1	10	25	Tamura Part No.
1	1 : 1	1.0	90	MT4301-ND	13.70	12.18	10.36	STT-101
1	1 : 1	5.0	200	MT4302-ND	13.70	12.18	10.36	STT-102
1	1 : 1	10.0	280	MT4303-ND	13.70	12.18	10.36	STT-103
2	1 : 1 : 1	1.0	90	MT4304-ND	15.28	13.58	11.55	STT-104
2	1 : 1 : 1	5.0	200	MT4305-ND	15.28	13.58	11.55	STT-105
2	1 : 1 : 1	10.0	280	MT4306-ND	15.28	13.58	11.55	STT-106
1	2 : 1	1.0	90	MT4307-ND	13.70	12.18	10.36	STT-107
1	2 : 1	5.0	200	MT4308-ND	13.70	12.18	10.36	STT-108
1	2 : 1	10.0	280	MT4309-ND	13.70	12.18	10.36	STT-109
2	2 : 1 : 1	1.0	90	MT4310-ND	15.28	13.58	11.55	STT-110
2	2 : 1 : 1	5.0	200	MT4311-ND	15.28	13.58	11.55	STT-111
2	2 : 1 : 1	10.0	280	MT4312-ND	15.28	13.58	11.55	STT-112

Encapsulated Pulse Transformers Isolation and Data Interface

Specifications: • **Average Power Rating (40°C Rise):** 500mW • **Dissipation Rating:** 150mW • **Peak Pulse Voltage:** 100V • **Dielectric Strength:** DC500V 1 minute • **Insulation Resistance:** DC500V 10000MΩ min.

Primary Inductance mH (min.)⁎	Primary ET Product V µS (min.)	Rise Time ns (max.)	Pin Out Primary	Secondary	Tertiary	Turns Ratio (±5%) Pri : Sec : Ter	Digi-Key Part No.	Price Each 1	10	25	Tamura Part No.
5.00	25.0	10.5	1, 2	3, 4	5, 6	1 : 1 : 1	MT4201-ND	3.60	3.20	2.72	G500
2.00	16.0	8.2	1, 2	3, 4	5, 6	1 : 1 : 1	MT4202-ND	3.24	2.88	2.45	G501
0.50	8.5	5.3	1, 2	3, 4	5, 6	1 : 1 : 1	MT4203-ND	2.88	2.56	2.18	G502
0.20	5.0	4.2	1, 2	3, 4	5, 6	1 : 1 : 1	MT4204-ND	2.70	2.40	2.04	G503
0.05	5.2	5.6	1, 2	3, 4	5, 6	1 : 1 : 1	MT4205-ND	2.70	2.40	2.04	G504
5.00	25.0	16.0	1, 2	3, 4	5, 6	2 : 1 : 1	MT4210-ND	4.14	3.68	3.13	G505
2.00	16.0	11.0	1, 2	3, 4	5, 6	2 : 1 : 1	MT4211-ND	3.60	3.20	2.72	G506
0.50	8.5	5.6	1, 2	3, 4	5, 6	2 : 1 : 1	MT4212-ND	3.06	2.72	2.32	G507
2.00	16.0	8.2	1, 3ct, 5	2, 4ct, 6	—	1ct : 1ct	MT4207-ND	3.24	2.88	2.45	G508
0.50	8.5	5.3	1, 3ct, 5	2, 4ct, 6	—	1ct : 1ct	MT4208-ND	2.88	2.56	2.18	G509
2.00	16.0	11.0	1, 3ct, 5	2, 4ct, 6	—	2ct : 1ct	MT4213-ND	3.24	2.88	2.45	G512
1.20	10.0	5.3	1, 2	3, 4	5, 6	1 : 1 : 1	MT4206-ND	3.24	2.88	2.45	G513
0.20	5.0	3.2	1, 3ct, 5	2, 4ct, 6	—	2ct : 1ct	MT4214-ND	2.70	2.40	2.04	G515
0.50	8.5	5.6	1, 2	3, 4	—	1 : 1.3	MT4209-ND	2.70	2.40	2.04	G516

⁎ Primary Inductance is typical primary open circuit inductance.



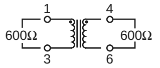
PARALLAX POWER COMPONENTS L.L.C.
(Formerly Magnetek)

Audio Transformers

Data/Voice Coupling Transformers

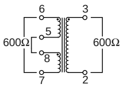
SPECIFICATIONS: Designed to meet FCC Part 68.
Longitudinal Balance: (FCC68.310): 60dB min. 200-1000 HZ, 45 dB mn. 1000-4000 HZ.
Dielectric Strength: (FCC 68.304): 1500V.
Freq. Range: Data/Voice = 300 - 3500 HZ, Data = 800 - 3500 HZ

Schematic A

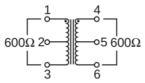


TY-305P	PRI 2, 3; SEC 6, 7
TY-307P, TY-310P TY-311P, TY-400P TY-301P, TY-303P TY-402P	PRI 1, 3; SEC 4, 6

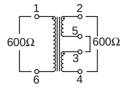
Schematic B



Schematic C



Schematic D



Schematic E

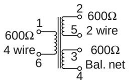


Fig. 1

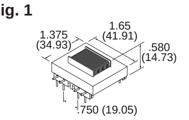


Fig. 2

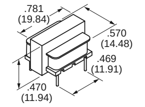


Fig. 3

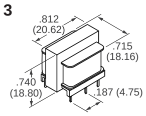


Fig. 4

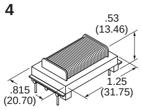


Fig. 5

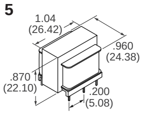


Fig. 6

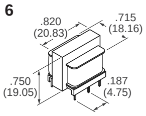


Fig.	Sche-matic	Impedance Pri.	Impedance Sec.	IDC Max (mA)	Insertion Loss (dB)	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
Data/Voice Coupling Transformers										
1	A	600	600	100	1.5	237-1128-ND	10.94	7.14	6.06	TY-305P
1	B	600 Split	600	75	1.5	237-1129-ND	10.94	7.14	6.06	TY-306P
2	A	600	600	0	1.0	237-1130-ND	6.41	4.18	3.55	TY-307P
3‡	A	600	600	0	1.0	237-1132-ND	5.56	3.63	3.08	TY-311P
3	C	600CT*	600CT*	0	1.0	237-1127-ND	5.56	3.63	3.08	TY-304P
3	A	600	900	0	1.0	237-1124-ND	5.56	3.63	3.08	TY-301P
3	A	4000	600	0	1.0	237-1126-ND	5.56	3.63	3.08	TY-303P
6‡	A	600	600	90	1.75	237-1133-ND	8.34	5.44	4.62	TY-400P
6	C	600CT*	600CT*	90	1.75	237-1134-ND	8.34	5.44	4.62	TY-401P
4‡	A	600	600	90	1.75	237-1135-ND	6.89	4.50	3.82	TY-402P
4	D	600	600 Split	90	1.75	237-1136-ND	6.89	4.50	3.82	TY-403P
Data/Voice Dual Transformer Hybrids										
3	E	600 (4W)	600/600	0	.80	237-1123-ND†	5.56	3.63	3.08	TY-300P
5	E	600 (4W)	600/600	0	.65	237-1125-ND†	8.33	5.44	4.62	TY-302P

*CT = Center Tap ‡ Four-pin configuration
†Two required for conventional hybrid operation, the insertion loss does not include 3dB in hybrid balance network.

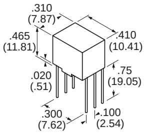
MIL-T-27E Audio Transformers

DESCRIPTION: The line of Red Spec audio transformers is designed and constructed to meet the rigid requirements of MIL-T-27E.

SPECIFICATIONS: Freq. Response Ranges: 300 Hz to 150 kHz

TECHNICAL NOTES: • HI-Pot Test: 1,000 VRMS • Working Voltage: 150 VDC

Pin-Out #	Pinout Primary	Secondary
1	1,2	3,4
2	1, 2CT, 3	4, 5
3	1, 2CT, 3	4, 5CT, 6
4	1, 2	3, 4,§, 5, 6



Power Level in mW	Matching Impedance Pri.	Sec.	DC Unbal. in Pri. Max(mA)	Pin-Out #	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
10	200,000 CT*	1,000 CT*	0.0	3	237-1137-ND	21.29	13.90	11.79	SP-4
50	10,000 CT*	2,000 CT*	1.0	3	237-1141-ND	21.21	13.85	11.75	SP-21
	1,000	50	3.0	1	237-1144-ND	17.25	11.26	9.55	SP-33
	150 CT*	12	10.0	2	237-1145-ND	15.51	10.13	8.59	SP-42
	7,500 CT*	12	1.0	2	237-1146-ND	18.39	12.00	10.18	SP-48
	900 CT*	600	4.0	2	237-1149-ND	19.12	12.47	10.58	SP-51
	10,000 CT*	10,000 CT*	1.0	3	237-1151-ND	16.93	11.05	9.38	SP-66
	600 CT*	600 CT*	3.0	3	237-1152-ND	18.64	12.17	10.32	SP-67
	600	600 CT/150§	3.0	4	237-1154-ND	18.56	12.11	10.28	SP-69
	600	600	3.0	1	237-1155-ND	17.48	11.42	9.69	SP-70
—	—	Shield Only	—	—	237-1157-ND	2.76	1.80	1.53	SP-310

*CT = Center Tap § Split Secondary

Audio PC Mount Transformers

DESCRIPTION:

Audio transformers are used in line matching, telephone coupling, pulse trigger and driver applications.

SPECIFICATIONS:

Freq. Response Ranges: 200 - 15,000Hz

Fig. 1

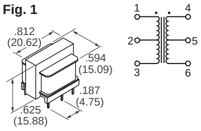


Fig. 2

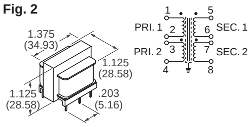


Fig.	Matching Impedance Pri.	Sec.	DC Unbal. in Pri. Max (mA)	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
1	10,000 CT*	10,000 CT*	4 Ma	237-1118-ND	3.89	2.54	2.16	TY-141P
1	10,000 CT*	2,000 CT*	4 Ma	237-1119-ND	3.89	2.54	2.16	TY-142P
1	15,000 CT*	15,000 CT*	4 Ma	237-1120-ND	3.89	2.54	2.16	TY-144P
1	600 CT*	600 CT*	15 Ma	237-1121-ND	3.89	2.54	2.16	TY-145P
2	600 CT/150§	600 CT/150§	—	237-1122-ND	7.22	4.72	4.00	TY-146P

*CT = Center Tap § Split Winding

PARALLAX POWER COMPONENTS L.L.C.
(Formerly Magnetek)

Switchmode Transformers

High Frequency Current Sense

DESCRIPTION: TRIAD current sense transformers are used to detect the current passing through a conductor. They are constructed of UL rated 130°C materials.
Freq. Range: 20 kHz- 200 kHz

Fig. 1

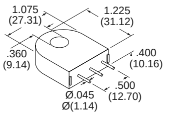


Fig. 2

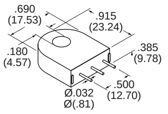


Fig.	Min. Ind. mH	ET VµSEC Ref 20 kHz	Pri. Amps	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
1	14.0	2000	110.0 RMS	237-1096-ND	6.11	3.99	3.39	CST206-1A
	56.0	4000	80.0 RMS	237-1098-ND	6.11	3.99	3.39	CST206-2A
	130.0	6000	70.0 RMS	237-1100-ND	6.11	3.99	3.39	CST206-3A
	14.0	2000	110.0 RMS	237-1097-ND	6.67	4.35	3.69	CST306-1A
	56.0	4000	80.0 RMS	237-1099-ND	6.67	4.35	3.69	CST306-2A
	130.0	6000	70.0 RMS	237-1101-ND	6.67	4.35	3.69	CST306-3A
2	3.5	500	35.0 RMS	237-1104-ND	4.11	2.69	2.28	CST206-1T*
	14.0	1000	25.0 RMS	237-1106-ND	4.11	2.69	2.28	CST206-2T*
	55.0	2000	25.0 RMS	237-1108-ND	4.11	2.69	2.28	CST206-3T*
	3.5	500	35.0 RMS	237-1105-ND	4.67	3.05	2.59	CST306-1T*
	14.0	1000	25.0 RMS	237-1107-ND	4.67	3.05	2.59	CST306-2T*
	55.0	2000	25.0 RMS	237-1109-ND	4.67	3.05	2.59	CST306-3T*

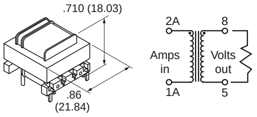
*T Suffix = Center Tapped 3-pin version

237-1102-ND (CST206-KIT) - 6 piece kit (one of each in series CST206). **$33.30**
237-1110-ND (CST306-KIT) - 6 piece kit (one of each in series CST306). **$22.22**

Low Frequency Current Sense

DESCRIPTION: Designed to monitor current in low freq. applications. Frequencies from 50 Hz to 400 Hz, current from .1 to 30 amperes.

TECHNICAL NOTES: • Turns ratio: Primary to sense 1:500. • Suggested burden resistor: 60 ohms. Hi-Pot: 2,500 volts.

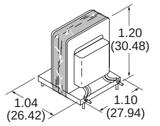


Primary DCR Max. µOhms	Sense DCR Max. Ohms	Typ. Output	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
250	21	110 mV/Amp	237-1103-ND	2.89	1.89	1.60	CSE187-L

High Frequency Gate Drive

DESCRIPTION: TRIAD gate drive transformers are used to isolate the control circuitry from the line-connected switches such as with power supplies. The windings are interleaved for the lowest possible practical leakage inductance. Maximum leakage Inductance: 2.5 µH. Features operating frequencies up to 200 kHz.

TECHNICAL NOTES: • Hi-Pot tested: 3,750 VRMS. • Pin-out: Drive = Pins 1, 2. Gate = Pins 3, 6 and Dual Gate = Pins 3, 4; 5, 6.



Max. DCR Gate	Max. ET Product	Turns Ratio	Min. Inductance	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
.350 Ohms	540 VµSec	1:1	.680 mH	237-1111-ND	15.56	10.15	8.61	GDE25-1
.650 Ohms	540 VµSec	1:1:1	.680 mH	237-1112-ND*	15.56	10.15	8.61	GDE25-2
.350 Ohms	840 VµSec	1.5:1	1.50 mH	237-1113-ND	15.56	10.15	8.61	GDE25-3
.650 Ohms	840 VµSec	1.5:1:1	1.50 mH	237-1114-ND*	15.56	10.15	8.61	GDE25-4
.875 Ohms	540 VµSec	1:1.5	.680 mH	237-1115-ND	15.56	10.15	8.61	GDE25-5
1.75 Ohms	540 VµSec	1:1.5:1.5	.680 mH	237-1116-ND*	15.56	10.15	8.61	GDE25-6

* Dual Secondary Gate

237-1117-ND (GDE25-KIT) - 6-piece kit (one of each). **$88.89**

PARALLAX POWER COMPONENTS L.L.C.
(Formerly Magnetek)

Switchmode / High Frequency Inductors

Common Mode Inductors

DESCRIPTION: • TRIAD common mode EMI suppression inductors are used to eliminate noise common to all lines. • Meeting VDE, IEC, UL and CSA requirements. • Constructed with UL rated 130°C materials. • Hi-Pot Tested: 2,500 VRMS.

Fig. 1

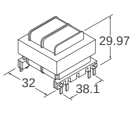


Fig. 2

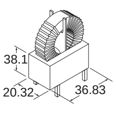


Fig. 3

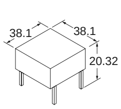


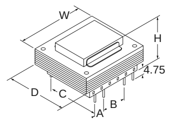
Fig.	Induct. mH min.	Amps. R.M.S	Max DC Resist. (Ohms)	Min. Leakage	Pin-Out Winding I	Pin-Out Winding II	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
E-Core Inductors											
1	4.40	5.500	.049	45.0µH	1 & 6	7 & 12	237-1210-ND	6.78	4.43	3.76	CME375-1
	6.90	4.400	.077	70.0µH			237-1211-ND	6.78	4.43	3.76	CME375-2
	10.9	3.500	.122	125.0µH			237-1212-ND	6.78	4.43	3.76	CME375-3
	17.8	2.700	.196	180.0µH			237-1213-ND	6.78	4.43	3.76	CME375-4
	28.6	2.200	.316	300.0µH			237-1214-ND	6.78	4.43	3.76	CME375-5
	43.6	1.750	.489	440.0µH			237-1215-ND	6.78	4.43	3.76	CME375-6
	70.3	1.380	.785	720.0µH			237-1216-ND	6.78	4.43	3.76	CME375-7
	111.6	1.100	1.240	1.1mH			237-1217-ND	6.78	4.43	3.76	CME375-8
	176.1	0.870	1.980	1.8mH			237-1218-ND	6.78	4.43	3.76	CME375-9
Encapsulated Toroidal Inductors											
2	2.00	7.50	.020	25.0µH	1 & 2	3 & 4	237-1230-ND	4.78	3.12	2.65	CMT908-V1
	4.00	5.20	.040	45.0µH			237-1231-ND	4.78	3.12	2.65	CMT908-V2
	8.00	3.20	.120	90.0µH			237-1232-ND	4.78	3.12	2.65	CMT908-V3
	16.00	2.60	.160	180.0µH			237-1233-ND	4.78	3.12	2.65	CMT908-V4
3	2.00	7.50	.020	25.0µH	1 & 2	3 & 4	237-1234-ND	4.78	3.12	2.65	CMT908-H1
	4.00	5.20	.040	45.0µH			237-1235-ND	4.78	3.12	2.65	CMT908-H2
	8.00	3.20	.120	90.0µH			237-1236-ND	4.78	3.12	2.65	CMT908-H3
	16.00	2.60	.160	180.0µH			237-1237-ND	4.78	3.12	2.65	CMT908-H4

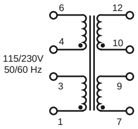
237-1219-ND (CME375-KIT) 9 piece kit - one of each E-Core Inductor Series CME375. . . . .**$55.56**
237-1238-ND (CMT908-KIT) 8 piece kit - one of each Encapsulated Toroidal Ind. Series CMT908 . . . .**$33.33**

PARALLAX
POWER
COMPONENTS L.L.C.
(Formerly Magnetek)

PC Mount - World Series™ Power Transformers

- World Series dual bobbin construction transformers meet U.S. & international standards including CSA, IEC, VDE & UL requirements. • Hi-Pot Test: 4,000 VRMS • Primary: 115/230V, 50/60 Hz



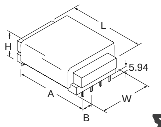


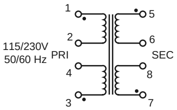
VA Size	Dimensions – Inch (mm) H	W	D	A	B	C	Pin Dim.	Wt. Kg
2.5	1.125 (28.58)	1.625 (41.28)	1.3125 (33.34)	.200 (5.08)	.250 (6.35)	1.000 (25.40)	.025 (.64)	.25 (.11)
5.0	1.375 (34.93)	1.625 (41.28)	1.3125 (33.34)	.200 (5.08)	.400 (10.16)	1.000 (25.40)	.025 (.64)	.37 (.17)
10.0	1.375 (34.93)	1.875 (47.63)	1.5625 (39.69)	.200 (5.08)	.400 (10.16)	1.140 (28.96)	.031 (.79)	.53 (.24)
20.0	1.625 (41.28)	2.25 (57.15)	1.875 (47.63)	.400 (10.16)	.400 (10.16)	1.460 (37.08)	.031 (.79)	.90 (.41)
30.0	1.5625 (39.69)	2.625 (66.68)	2.1875 (55.56)	.550 (13.97)	.275 (6.98)	1.680 (42.67)	.045 (1.14)	1.15 (.52)
56.0	1.8125 (46.04)	3.000 (76.20)	2.500 (63.50)	.600 (15.24)	.300 (7.62)	1.900 (48.26)	.045 (1.14)	1.70 (.77)

VA (Size)	Parallel VAC @ A	Series VCT* @ A	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
2.5	5 @ 0.5	10 @ 0.25	237-1060-ND	9.62	6.51	5.70	VPP10-250
5.0	5 @ 1.0	10 @ 0.5	237-1081-ND	10.36	7.04	6.16	VPP10-500
10.0	5 @ 2.0	10 @ 1.0	237-1053-ND	11.60	7.76	6.78	VPP10-1000
20.0	5 @ 4.0	10 @ 2.0	237-1067-ND	14.11	9.35	8.18	VPP10-2000
30.0	5 @ 6.0	10 @ 3.0	237-1074-ND	16.22	11.08	9.69	VPP10-3000
56.0	5 @ 11.2	10 @ 5.6	237-1088-ND	19.84	12.30	10.44	VPP10-5600
2.5	6.3 @ 0.4	12.6 @ 0.2	237-1061-ND	9.62	6.51	5.70	VPP12-200
5.0	6.3 @ 0.8	12.6 @ 0.4	237-1082-ND	10.36	7.04	6.16	VPP12-400
10.0	6.3 @ 1.6	12.6 @ 0.8	237-1054-ND	11.60	7.76	6.78	VPP12-800
20.0	6.3 @ 3.2	12.6 @ 1.6	237-1068-ND	14.11	9.35	8.18	VPP12-1600
30.0	6.3 @ 4.8	12.6 @ 2.4	237-1075-ND	16.22	11.08	9.69	VPP12-2400
56.0	6.3 @ 8.8	12.6 @ 4.4	237-1089-ND	19.84	12.30	10.44	VPP12-4400
2.5	8 @ 0.3	16 @ 0.15	237-1062-ND	9.62	6.51	5.70	VPP16-150
5.0	8 @ 0.62	16 @ 0.31	237-1083-ND	10.36	7.04	6.16	VPP16-310
10.0	8 @ 1.25	16 @ 0.62	237-1055-ND	11.60	7.76	6.78	VPP16-620
20.0	8 @ 2.5	16 @ 1.25	237-1069-ND	14.11	9.35	8.18	VPP16-1250
30.0	8 @ 3.8	16 @ 1.9	237-1076-ND	16.22	11.08	9.69	VPP16-1900
56.0	8 @ 7.0	16 @ 3.5	237-1090-ND	19.84	12.30	10.44	VPP16-3500
2.5	10 @ 0.24	20 @ 0.12	237-1063-ND	9.62	6.51	5.70	VPP20-120
5.0	10 @ 0.5	20 @ 0.25	237-1084-ND	10.36	7.04	6.16	VPP20-250
10.0	10 @ 1.0	20 @ 0.5	237-1056-ND	11.60	7.76	6.78	VPP20-500
20.0	10 @ 2.0	20 @ 1.0	237-1070-ND	14.11	9.35	8.18	VPP20-1000
30.0	10 @ 3.0	20 @ 1.5	237-1077-ND	16.22	11.08	9.69	VPP20-1500
56.0	10 @ 5.6	20 @ 2.8	237-1091-ND	19.84	12.30	10.44	VPP20-2800
2.5	12 @ 0.2	24 @ 0.1	237-1064-ND	9.62	6.51	5.70	VPP24-100
5.0	12 @ 0.42	24 @ 0.21	237-1085-ND	10.36	7.04	6.16	VPP24-210
10.0	12 @ 0.84	24 @ 0.42	237-1057-ND	11.60	7.76	6.78	VPP24-420
20.0	12 @ 1.66	24 @ 0.83	237-1071-ND	14.11	9.35	8.18	VPP24-830
30.0	12 @ 2.50	24 @ 1.25	237-1078-ND	16.22	11.08	9.69	VPP24-1250
56.0	12 @ 4.66	24 @ 2.33	237-1092-ND	19.84	12.30	10.44	VPP24-2330
2.5	14 @ 0.18	28 @ 0.09	237-1065-ND	9.62	6.51	5.70	VPP28-090
5.0	14 @ 0.36	28 @ 0.18	237-1086-ND	10.36	7.04	6.16	VPP28-180
10.0	14 @ 0.72	28 @ 0.36	237-1058-ND	11.60	7.76	6.78	VPP28-360
20.0	14 @ 1.44	28 @ 0.72	237-1072-ND	14.11	9.35	8.18	VPP28-720
30.0	14 @ 2.12	28 @ 1.06	237-1079-ND	16.22	11.08	9.69	VPP28-1060
56.0	14 @ 4.0	28 @ 2.0	237-1094-ND	19.84	12.30	10.44	VPP28-2000
2.5	18 @ 0.14	36 @ 0.07	237-1066-ND	9.62	6.51	5.70	VPP36-070
5.0	18 @ 0.28	36 @ 0.14	237-1087-ND	10.36	7.04	6.16	VPP36-140
10.0	18 @ 0.56	36 @ 0.28	237-1059-ND	11.60	7.76	6.78	VPP36-280
20.0	18 @ 1.12	36 @ 0.56	237-1073-ND	14.11	9.35	8.18	VPP36-560
30.0	18 @ 1.64	36 @ 0.82	237-1080-ND	16.22	11.08	9.69	VPP36-820
56.0	18 @ 3.12	36 @ 1.56	237-1095-ND	19.84	12.30	10.44	VPP36-1560

*CT = Center Tap

PC Mount - Pack Power Transformers





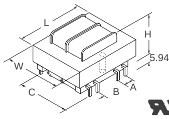
- Designed to meet the needs of low clearance PC board and solid state power designs. • Hi-Pot Test: 2,000 VRMS • Primary: 115/230V, 50/60 Hz
- Class B UL Recognized, UL File E53148

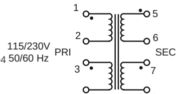
VA Size	Dimensions – Inch (mm) H	W	L	A	B	Wt. Oz. (Gram)
2.5	0.650 (16.51)	1.562 (39.67)	1.875 (47.63)	1.600 (40.64)	0.375 (9.52)	5 (141.75)
6.0	0.875 (22.23)	1.562 (39.67)	1.875 (47.63)	1.600 (40.64)	0.375 (9.52)	7 (198.44)
12.0	1.062 (26.97)	2.000 (50.80)	2.500 (63.50)	2.000 (50.80)	0.500 (12.70)	11 (311.84)

VA (Size)	Parallel VAC @ A	Series VCT* @ A	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
2.5	5 @ 0.5	10 @ 0.25	237-1008-ND	10.76	7.13	6.23	FP10-250
	6.3@ 0.4	12.6 @ 0.2	237-1009-ND	10.76	7.13	6.23	FP12-200
	8 @ 0.3	16 @ 0.15	237-1010-ND	10.76	7.13	6.23	FP16-150
	10 @ 0.25	20 @ 0.125	237-1011-ND	10.76	7.13	6.23	FP20-125
	12 @ 0.2	24 @ 0.1	237-1012-ND	10.76	7.13	6.23	FP24-100
	15 @ 0.16	30@ 0.08	237-1013-ND	10.76	7.13	6.23	FP30-85
	17 @ 0.15	34 @ 0.075	237-1014-ND	10.76	7.13	6.23	FP34-75
	28 @ 0.09	56 @ 0.045	237-1015-ND	10.76	7.13	6.23	FP56-45
6.0	5 @ 1.2	10 @ 0.6	237-1016-ND	12.00	8.18	7.21	FP10-600
	6.3@ 0.95	12.6 @ 0.475	237-1017-ND	12.00	8.18	7.21	FP12-475
	8 @ 0.75	16 @ 0.375	237-1018-ND	12.00	8.18	7.21	FP16-375
	10 @ 0.6	20 @ 0.3	237-1019-ND	12.00	8.18	7.21	FP20-300
	12 @ 0.5	24 @ 0.25	237-1020-ND	12.00	8.18	7.21	FP24-250
	15 @ 0.4	30@ 0.2	237-1021-ND	12.00	8.18	7.21	FP30-200
	17 @ 0.34	34 @ 0.17	237-1022-ND	12.00	8.18	7.21	FP34-170
	28 @ 0.2	56 @ 0.1	237-1023-ND	12.00	8.18	7.21	FP56-100
12.0	5 @ 2.4	10 @ 1.2	237-1000-ND	14.00	8.75	7.51	FP10-1200
	6.3@ 1.9	12.6 @ 0.95	237-1001-ND	14.00	8.75	7.51	FP12-950
	8 @ 1.5	16 @ 0.75	237-1002-ND	14.00	8.75	7.51	FP16-750
	10 @ 1.2	20 @ 0.6	237-1003-ND	14.00	8.75	7.51	FP20-600
	12 @ 1.0	24 @ 0.5	237-1004-ND	14.00	8.75	7.51	FP24-500
	15 @ 0.8	30@ 0.4	237-1005-ND	14.00	8.75	7.51	FP30-400
	17 @ 0.68	34 @ 0.34	237-1006-ND	14.00	8.75	7.51	FP34-340
	28 @ 0.4	56 @ 0.2	237-1007-ND	14.00	8.75	7.51	FP56-200

*CT = Center Tap

PC Mount - Split Pack™ Power Transformers





8 PIN

- Split Pack split bobbin transformer for PC board applications. • Hi-Pot Test: 2,500 VRMS • Primary: 115/230V, 50/60 Hz • Class B UL Recognized, UL File E53148

VA Size	Dimensions – Inch (mm) H	W	L	A	B	C	Wt. Lbs. (Kg)
1.1	.9375 (23.81)	1.125 (28.58)	1.375 (34.93)	.250 (6.35)	.250 (6.35)	1.20 (30.48)	.17 (.08)
2.5	1.1875 (30.16)	1.125 (28.58)	1.375 (34.93)	.250 (6.35)	.250 (6.35)	1.20 (30.48)	.25 (.11)
6.0	1.3125 (33.34)	1.3125 (33.34)	1.625 (41.28)	.250 (6.35)	.350 (8.80)	1.280 (32.51)	.44 (.20)
12.0	1.4375 (36.51)	1.5625 (39.69)	1.875 (47.63)	.30 (7.62)	.40 (10.16)	1.410 (35.81)	.70 (.32)

VA (Size)	Parallel VAC @ A	Series VCT* @ A	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
1.1	6.3 @ 0.18	12.6 @ 0.09	237-1024-ND	8.71	5.51	4.73	FS12-090
	8 @ 0.14	16 @ 0.07	237-1025-ND	8.71	5.51	4.73	FS16-070
	10 @ 0.11	20 @ 0.055	237-1026-ND	8.71	5.51	4.73	FS20-055
	12 @ 0.09	24 @ 0.045	237-1028-ND	8.71	5.51	4.73	FS24-045
	14 @ 0.08	28 @ 0.04	237-1029-ND	8.71	5.51	4.73	FS28-040
	18 @ 0.06	36 @ 0.03	237-1030-ND	8.71	5.51	4.73	FS36-030
2.5	5 @ 0.5	10 @ 0.25	237-1031-ND	9.00	5.63	4.83	FS10-250
	6.3@ 0.4	12.6 @ 0.2	237-1032-ND	9.00	5.63	4.83	FS12-200
	8 @ 0.3	16 @ 0.15	237-1033-ND	9.00	5.63	4.83	FS16-150
	10 @ 0.24	20 @ 0.12	237-1034-ND	9.00	5.63	4.83	FS20-120
	12 @ 0.2	24 @ 0.1	237-1035-ND	9.00	5.63	4.83	FS24-100
	14 @ 0.17	28@ 0.085	237-1036-ND	9.00	5.63	4.83	FS28-85
	18 @ 0.13	36 @ 0.065	237-1037-ND	9.00	5.63	4.83	FS36-65
6.0	5 @ 1.2	10 @ 0.6	237-1038-ND	9.60	6.08	5.22	FS10-600
	6.3@ 1.0	12.6 @ 0.5	237-1039-ND	9.60	6.08	5.22	FS12-500
	8 @ 0.8	16 @ 0.4	237-1040-ND	9.60	6.08	5.22	FS16-400
	10 @ 0.6	20 @ 0.3	237-1041-ND	9.60	6.08	5.22	FS20-300
	12 @ 0.5	24 @ 0.25	237-1042-ND	9.60	6.08	5.22	FS24-250
	14 @ 0.4	28 @ 0.2	237-1043-ND	9.60	6.08	5.22	FS28-200
	18 @ 0.34	36 @ 0.17	237-1044-ND	9.60	6.08	5.22	FS36-170
12.0	5 @ 2.4	10 @ 1.2	237-1045-ND	11.00	6.93	5.95	FS10-1200
	6.3 @ 2.0	12.6 @ 1.0	237-1046-ND	11.00	6.93	5.95	FS12-1000
	8.0 @ 1.6	16 @ 0.8	237-1047-ND	11.00	6.93	5.95	FS16-800
	10 @ 1.2	20 @ 0.6	237-1048-ND	11.00	6.93	5.95	FS20-600
	12 @ 1.0	24 @ 0.5	237-1050-ND	11.00	6.93	5.95	FS24-500
	14 @ 0.84	28 @ 0.42	237-1051-ND	11.00	6.93	5.95	FS28-420
	18 @ 0.7	36 @ 0.35	237-1052-ND	11.00	6.93	5.95	FS36-350

*CT = Center Tap

Switchmode / High Frequency Inductors

Rod Core Inductors

DESCRIPTION:
TRIAD high current rod core inductors from MagneTek provide cost effective energy storage. By conditioning the output signal, the inductor smoothes out the current waveform to provide a more stable current. These low cost inductors are designed to be compatible with automated P.C.B. installation.

Fig. 1

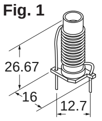


Fig. 2

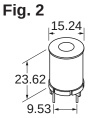
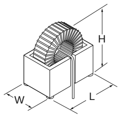


Fig.	± 15% Induct. µH	DC Rated Current	Max. DC Resist. (mOhms)	Lead Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
High Current Rod Core Inductors									
1	2.54	11.60A	5.50	.050 (1.27)	237-1158-ND	2.44	1.60	1.36	FIRCH-1
	3.05	9.70A	7.30	.045 (1.14)	237-1159-ND	2.44	1.60	1.36	FIRCH-2
	3.60	8.10A	9.95	.040 (1.02)	237-1160-ND	2.44	1.60	1.36	FIRCH-3
	5.00	6.80A	14.10	.036 (.91)	237-1161-ND	2.44	1.60	1.36	FIRCH-4
	5.90	5.70A	18.50	.032 (.81)	237-1162-ND	2.44	1.60	1.36	FIRCH-5
	7.22	4.80A	26.10	.028 (.71)	237-1163-ND	2.44	1.60	1.36	FIRCH-6

Fig.	10% Induct.	DC Rated Current	± 15% DC Resist. (Ohms)	Lead Diameter Inch (mm)	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
Rod Core Inductors									
2	5.6mH	.250A	6.100	.032 (.81)	237-1165-ND	2.71	1.77	1.51	RC-1
	3.9mH	.320A	3.900		237-1166-ND	2.71	1.77	1.51	RC-2
	2.5mH	.400A	2.450		237-1167-ND	2.71	1.77	1.51	RC-3
	1.5mH	.500A	1.530		237-1168-ND	2.71	1.77	1.51	RC-4
	915.0µH	.625A	1.000		237-1169-ND	2.71	1.77	1.51	RC-5
	560.0µH	.800A	.600		237-1170-ND	2.71	1.77	1.51	RC-6
	450.0µH	1.000A	.420		237-1171-ND	2.71	1.77	1.51	RC-7
	250.0µH	1.250A	.210		237-1172-ND	2.71	1.77	1.51	RC-8
	200.0µH	1.600A	.180		237-1173-ND	2.71	1.77	1.51	RC-9
	100.0µH	2.000A	.098		237-1175-ND	2.71	1.77	1.51	RC-10
	75.0µH	2.500A	.070		237-1176-ND	2.71	1.77	1.51	RC-11

237-1164-ND (FIRCH-KIT) 6 piece kit - one of each High Current Rod Core Inductors **$11.11**
237-1177-ND (RC-KIT) 11 piece kit - one of each Rod Core Inductor **$27.78**

Toroidal Inductors



DESCRIPTION: TRIAD toroidal inductors condition the output signal by leveling out the current waveform providing a more stable current supply. **TECHNICAL NOTES:** • Nominal inductance values are typically 10% higher than minimum rating. • Biased inductance measured at rated DC amps.

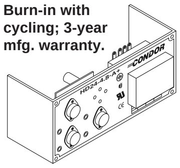
Min. Induct. (µH) No Bias	At Bias	Rated DC Amps	Max. DCR (mOhm)	Dims. - Inch (mm) L x W x H	Digi-Key Part No.	Price Each 1	50	100	PPC Part No.
18.85	12.72	2.8	44.8	.625 x .350 x .700 (15.88 x 8.89 x 17.78)	237-1178-ND	1.96	1.28	1.09	FIT44-1
14.75	9.82	3.4	30.7		237-1179-ND	1.96	1.28	1.09	FIT44-2
12.30	7.75	4.0	23.4		237-1180-ND	1.96	1.28	1.09	FIT44-3
8.06	5.22	4.8	15.9		237-1181-ND	1.96	1.28	1.09	FIT44-4
47.40	29.00	2.8	78.9	.700 x .475 x .750 (17.78 x 12.06 x 19.05)	237-1182-ND	2.31	1.51	1.28	FIT50-1
35.48	23.77	3.4	57.8		237-1183-ND	2.31	1.51	1.28	FIT50-2
27.16	16.13	4.0	40.1		237-1184-ND	2.31	1.51	1.28	FIT50-3
21.65	12.27	4.8	29.2		237-1185-ND	2.31	1.51	1.28	FIT50-4
16.76	9.50	5.7	20.0		237-1186-ND	2.31	1.51	1.28	FIT50-5
12.50	6.75	6.8	14.0		237-1187-ND	2.31	1.51	1.28	FIT50-6
8.86	4.80	8.1	11.0		237-1188-ND	2.31	1.51	1.28	FIT50-7
89.50	57.99	2.8	108.0	.875 x .475 x .950 (22.23 x 12.06 x 24.13)	237-1189-ND	2.80	1.83	1.55	FIT68-1
71.10	41.59	3.4	86.1		237-1190-ND	2.80	1.83	1.55	FIT68-2
54.81	33.05	4.0	59.9		237-1191-ND	2.80	1.83	1.55	FIT68-3
43.30	26.63	4.8	42.4		237-1192-ND	2.80	1.83	1.55	FIT68-4
33.15	18.79	5.7	28.8		237-1193-ND	2.80	1.83	1.55	FIT68-5
24.31	13.56	6.8	20.2		237-1194-ND	2.80	1.83	1.55	FIT68-6
18.64	10.23	8.1	14.8		237-1195-ND	2.80	1.83	1.55	FIT68-7
128.00	74.04	4.0	95.2	.975 x .625 x 1.100 (24.77 x 15.88 x 27.94)	237-1196-ND	3.47	2.27	1.92	FIT80-1
107.50	58.05	4.8	67.9		237-1197-ND	3.47	2.27	1.92	FIT80-2
80.75	42.00	5.7	44.8		237-1198-ND	3.47	2.27	1.92	FIT80-3
65.04	31.60	6.8	32.8		237-1199-ND	3.47	2.27	1.92	FIT80-4
47.70	22.79	8.1	22.5		237-1200-ND	3.47	2.27	1.92	FIT80-5
38.07	18.11	9.7	17.0		237-1201-ND	3.47	2.27	1.92	FIT80-6
253.00	153.00	4.0	139.0	1.300 x .725 x 1.400 (33.02 x 18.42 x 35.56)	237-1202-ND	4.31	2.82	2.39	FIT106-1
197.00	113.00	4.8	106.0		237-1203-ND	4.31	2.82	2.39	FIT106-2
154.00	84.00	5.7	74.0		237-1205-ND	4.31	2.82	2.39	FIT106-3
116.00	61.90	6.8	48.5		237-1206-ND	4.31	2.82	2.39	FIT106-4
93.00	48.00	8.1	39.1		237-1207-ND	4.31	2.82	2.39	FIT106-5
70.05	35.30	9.7	24.0		237-1208-ND	4.31	2.82	2.39	FIT106-6

237-1209-ND (FIT-KIT) 30 piece kit - one of each Toroidal Inductor **$83.33**

CONDOR Linear Power Supplies

9288B-ND	Power Engineering Manual	$2.95

Burn-in with cycling; 3-year mfg. warranty.



FEATURES:

• Worldwide AC input ranges and safety standards • Industry standard packages • UL/CSA TUV/IEC approved - 68 models to UL1950; CSA C22.2 No. 234 L3; TUV certified to IEC950 • Capacitors have highest CV & ripple current ratings • MTBF 200,000+ hours per Mil Handbk 217D (most units) • All electrolytic caps rated at 105°C • Transformer insulation meets Class F (155°C) • Exceed FCC and CISPR22 Class B conducted emissions • CE marked to LVD

GENERAL SPECIFICATIONS:

• **AC Input:** 100/120/240 VAC: +10%, -13%; 215VAC: +12%, -11%; 47 to 63Hz. Tolerance for 230VAC operation is +15%, -10%. Derate output current 10% for 50Hz operation • **DC Output:** Adjustment range ±5% minimum except HA series • **Line Regulation:** ±0.05% for a 10% change • **Load Regulation:** ±0.05% for a 50% load change • **Output Ripple**: 3mV +0.05% of output voltage, peak to peak maximum. All "3-terminal regulator" outputs: 3mV +0.2% peak to peak maximum • **Transient Response:** <50 microseconds for 50% load change • **Short Circuit Protection:** Automatic current limit/foldback • **Overvoltage Protection:** Built-in on all 5V models, set at 6.2V ±0.4V. Other models use optional over voltage protection • **Remote Sensing:** Provided on all models; open sense lead protection built-in (except HA series) • **Stability**: ±0.05% for 24 hours after warmup • **Temperature Rating**: 0°C to 50°C full rated, derated linearly to 40% at 70°C • **Temperature Coefficient:** ±0.01%/°C maximum • **Logic Inhibit and Current-Share:** F Models

International+ Series Single Output

Output	Dimensions Inch (mm)	Weight lbs. (kilograms)	Digi-Key Part No.	Price Each 1	10	25	50	100	Condor Part No.
5V@1.5A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2007-ND	34.72	31.71	31.11	29.57	28.05	HA5-1.5-OV-A+
5V@3A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2019-ND	37.03	35.91	35.24	33.44	30.59	HB5-3-OV-A+
5V@6A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2029-ND	59.97	58.21	55.97	53.03	50.08	HC5-6-OV-A+
5V@9A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2052-ND	81.81	79.38	76.72	72.69	68.64	HN5-9-OV-A+
5V@12A	9. 00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2039-ND	92.73	89.98	88.14	82.51	77.93	HD5-12-OV-A+
5V@18A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2047-ND*	135.65	131.77	129.15	121.67	109.95	HE5-18-OV-A+
12V@1.7A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2014-ND	35.98	34.91	34.19	32.39	30.59	HB12-1.7-A+
12V@3.4A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2025-ND	54.51	52.88	50.78	48.12	45.44	HC12-3.4-A+
12V@5.1A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2048-ND	76.35	74.09	71.53	67.77	64.00	HN12-5.1-A+
12V@6.8A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2034-ND	87.27	84.69	81.90	78.65	73.28	HD12-6.8-A+
12V@10.2A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2043-ND*	119.48	115.93	113.56	107.64	100.67	HE12-10.2-A+
15V@0.9A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2005-ND	32.83	31.71	31.11	29.57	28.05	HA15-0.9-A+
15V@3A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2026-ND	54.51	52.88	50.78	48.12	45.44	HC15-3-A+
15V@4.5A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2049-ND	76.35	74.09	71.53	67.77	64.00	HN15-4.5-A+
15V@6A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2035-ND	87.27	84.69	81.90	78.65	73.28	HD15-6-A+
15V@9A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2044-ND*	119.48	115.93	113.56	107.64	100.67	HE15-9-A+
15V@15A	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 (8.62)	271-2054-ND*	184.96	179.89	168.10	160.70	148.03	F15-15-A+
24V@0.5A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2006-ND	34.72	31.71	31.11	29.57	28.05	HA24-0.5-A+
24V@1.2A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2016-ND	39.13	38.01	35.24	33.44	30.59	HB24-1.2-A+
24V@2.4A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2027-ND	54.51	52.88	50.78	48.12	45.44	HC24-2.4-A+
24V@3.6A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2050-ND	76.35	74.09	71.53	67.77	64.00	HN24-3.6-A+
24V@4.8A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2036-ND	87.27	84.69	81.90	78.65	73.28	HD24-4.8-A+
24V@7.2A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2045-ND*	119.48	115.93	113.56	107.64	100.67	HE24-7.2-A+
24V@12A	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 (8.62)	271-2055-ND*	184.96	179.89	168.10	160.70	148.03	F24-12-A+
28V@1A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2017-ND	37.03	35.91	35.24	33.44	30.59	HB28-1-A+
28V@2A	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 (1.93)	271-2028-ND	54.81	52.61	50.78	48.12	45.44	HC28-2-A+
28V@3A	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 (2.72)	271-2051-ND	76.35	74.09	71.53	67.77	64.00	HN28-3-A+
28V@4A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2037-ND	87.27	84.69	81.90	78.65	73.28	HD28-4-A+
48V@0.5A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2018-ND	42.37	40.32	38.36	36.46	32.45	HB48-0.5-A+
48V@3A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2038-ND*	91.68	88.93	87.09	82.51	77.93	HD48-3-A+
48V@4A	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2046-ND*	130.40	126.52	123.94	117.47	109.95	HE48-4-A+
48V@6A	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 (8.62)	271-2056-ND*	200.07	194.10	190.44	178.50	169.16	F48-6-A+

International+ Series Dual Output

Output 1	Output 2	Dimensions Inch (mm)	Weight lbs. (kilograms)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
5V@1.5A	5V@1.5A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2010-ND	54.81	51.85	50.78	48.12	HAA5-1.5-OV-A+
5V@3A	5V@3A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2022-ND	75.09	72.99	70.54	68.11	HBB5-3-OV-A+
5V@2A	+9V to +15V@0.5A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2011-ND	54.51	52.90	50.78	48.12	HAA512-A+
5V@3A	+9V to +15V@1.2A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2023-ND	65.47	63.51	62.20	58.93	HBB512-A+
5V@6A	+9V to +15V@2.5A	9.38 x 4.87 x 3.28 (238.25 x 123.70 x 83.31)	7 (3.18)	271-2033-ND*	103.65	100.57	97.47	92.34	HCC512-A+
5V@3A	+18V to +24V@0.8A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2024-ND	66.47	64.53	61.16	57.94	HBB524-A+
+12V@0.4A	-12V@0.4A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2012-ND	40.53	39.59	37.82	35.83	HAD12-0.4-A+
+15V@0.4A	-15V@0.4A	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 (1)	271-2013-ND	40.53	39.59	37.82	35.83	HAD15-0.4-A+
+12V to +15V@1A/0.8A	-12V to -15V@1A/0.8A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2008-ND	46.90	45.50	44.57	42.21	HAA15-0.8-A+
+12V to +15V@1.7A/1.5A	-12V to -15V@1.7A/1.5A	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 (2)	271-2021-ND	60.01	58.22	57.01	54.02	HBB15-1.5-A+
+12V to +15V@3.4A/3A	-12V to -15V@3.4A/3A	9.38 x 4.87 x 3.28 (238.25 x 123.70 x 83.31)	7 (3.18)	271-2032-ND	96.00	93.14	91.26	85.46	HCC15-3-A+
+12V to +15V@5A	-12V to -15V@5	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 (4.54)	271-2042-ND*	141.32	137.11	134.41	127.30	HDD15-5-A+
+18V to +24V@0.4A/0.6A	-18V to -24V@0.4A/0.6A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2009-ND	45.81	44.44	43.53	41.24	HAA24-0.6-A+

International+ Series Triple Output

Output 1	Output 2	Output 3	Dimensions Inch (mm)	Weight lbs. (kilograms)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
5V@2A	+12V to +15V@0.4/0.4A	-12V to -15V@0.4/0.4A	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 (1.13)	271-2053-ND†	59.97	58.21	55.97	53.03	HTAA-16W-A+
5V@3A	+12V to +15V@1/0.8A	-12V to -15V@1/0.8A	10.25 x 4.00 x 2.95 (260.35 x 101.60 x 74.93)	5 (2.27)	271-2020-ND†	82.90	80.45	77.76	73.67	HBAA40W-A+
5V@6A	+12V to +15V@1/0.8A	-12V to -15V@1/0.8A	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 (3.40)	271-2030-ND†	98.19	95.27	93.33	87.43	HCAA60W-A+
5V@6A	+12V to +15V@1.7/1.5A	-12V to -15V@1.7/1.5A	11.00 x 4.87 x 3.28 (279.40 x 123.70 x 83.31)	8 (3.63)	271-2031-ND†	113.31	110.07	102.65	97.26	HCBB75W-A+
5V@9A	+12V to +15V@1.7/1.5A	-12V to -15V@1.7/1.5A	11.00 x 4.88 x 2.75 (279.40 x 123.95 x 69.85)	12 (5.44)	271-2001-ND†	130.95	127.05	124.45	116.91	CP131-A+
5V@12A	+12V to +15V@1.7/1.5A	-12V to -15V@1.7/1.5A	14.25 x 4.87 x 3.38 (361.95 x 123.70 x 85.85)	11 (4.99)	271-2040-ND†*	147.33	142.94	138.96	131.65	HDBB105W-A+
5V@12A	+12V to +15V@3.4/3A	-12V to -15V@3.4/3A	15.00 x 4.88 x 4.55 (381.00 x 123.95 x 115.57)	12 (5.44)	271-2041-ND†*	169.17	164.22	159.71	151.31	HDCC150W-A+
+5V@6A	+24V@3.5/6A	-5V or -12V@1.2A	11.00 x 4.88 x 2.75 (279.40 x 123.95 x 69.85)	12 (5.44)	271-2003-ND	140.27	136.06	133.26	126.25	CP379-A+
+5V@6A	+12V@10A	-12V@0.5A	11.00 x 4.88 x 2.75 (279.40 x 123.95 x 69.85)	12 (5.44)	271-2004-ND	140.27	136.06	133.26	126.25	CP498-A+

* Requires fan cooling. † No. 3 output usable at -5V, rate at 1/2 of 15V current rating.

Linear Medical Power Supplies

World Class Medical Linears

FEATURES: • 19 Models (single, dual and triple output) • Approved to UL 544, IEC 601 and CSA 234 L3 • 3 power levels (5 to 92 watts) • Medical leakage current does not exceed 10µA • 8-Hour burn-in with cycling • Full 3-year warranty

World Wide AC Input Ranges: • AC Input: 110/120/220/240 VAC, 47-63 Hz • OVP on all 5V outputs • Meets EMI per FCC/VDE B

Industry Standard Packaging: • Hermetically sealed power transistors and ICs • MTFB 200,000+ hours per mil handbook 217D

Single Output

Output	Dimensions Inch (mm)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
5V@1.0A	4.25 x 3.25 x 1.80 (107.95 x 82.55 x 45.72)	271-1018-ND	42.59	41.31	40.46	38.33	ML5-1-OV-A
5V@3.0A	4.88 x 4.00 x 2.25 (123.95 x 101.60 x 57.15)	271-1006-ND	51.32	49.78	48.77	46.19	MB5-3-OV-A
5V@6.0A	5.63 x 4.86 x 2.95 (143.00 x 123.44 x 74.93)	271-1012-ND	65.52	63.56	62.25	58.97	MC5-6-OV-A
12V@1.7A	4.88 x 4.00 x 2.25 (123.95 x 101.60 x 57.15)	271-1002-ND	51.32	49.78	48.77	46.19	MB12-1.7-A
12V@3.4A	5.63 x 4.86 x 2.95 (143.00 x 123.44 x 74.93)	271-1009-ND	65.52	63.56	62.25	58.97	MC12-3.4-A
15V@0.4A	4.25 x 3.25 x 1.80 (107.95 x 82.55 x 45.72)	271-1017-ND	42.59	41.31	40.46	38.33	ML15-O.4-A
15V@1.5A	4.86 x 4.00 x 2.25 (123.44 x 101.60 x 57.15)	271-1003-ND	51.32	49.78	48.77	46.19	MB15-1.5-A
24V@1.2A	4.86 x 4.00 x 2.25 (123.44 x 101.60 x 57.15)	271-1004-ND	51.32	49.78	48.77	46.19	MB24-1.2-A
24V@2.4A	5.63 x 4.86 x 2.95 (143.00 x 123.44 x 74.93)	271-1011-ND	65.52	63.56	62.25	58.97	MC24-2.4-A
24V@4.8A	9.00 x 4.86 x 3.30 (228.60 x 123.44 x 83.82)	271-1015-ND	101.56	98.52	96.48	91.41	MD24-4.8-A
28V@1.0A	4.86 x 4.00 x 2.25 (123.44 x 101.60 x 57.15)	271-1005-ND	51.32	49.78	48.77	46.19	MB28-1-A

Multiple Output

Output 1	Output 2	Output 3	Dimensions Inch (mm)	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
Dual Output									
+12/15V@1.0/0.8A	–12/15V@1.0/0.8A	—	6.50 x 4.00 x 2.25 (165.10 x 101.60 x 57.15)	271-1000-ND	57.88	56.15	54.98	52.10	MAA15-0.8-A
+12/15V@1.7/1.5A	–12/15V@1.7/1.5A	—	7.00 x 4.88 x 2.95 (177.80 x 123.95 x 74.93)	271-1008-ND	74.26	72.03	70.54	66.84	MBB15-1.5-A
+12/15V@3.4/3.0A	–12/15V@3.4/3.0A	—	9.38 x 4.88 x 3.30 (238.25 x 123.95 x 83.82)	271-1014-ND	111.38	108.05	105.82	100.25	MCC15-3-A
Triple Output									
+5V@3.0A	+12/15V@1.0/0.8A	–12/15V@1.0/0.8A	10.25 x 4.00 x 2.95 (260.35 x 101.60 x 74.93)	271-1007-ND	96.10	93.21	91.29	86.49	MBAA40W-A

CONDOR Medical Global Switchers

9288B-ND Power Engineering Manual **$2.95**

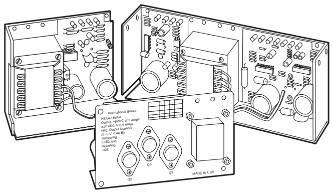
Global Performance switching power supplies with the agency approvals you need.

FEATURES:

• Wide range input (85-264V) • Approval to IEC601-1, UL2601 and CSA 601.1 • Conducted Emissions to FCC and VDC Class B • 2-Year Warranty • Models from 28-225W **Input Protection:** Internal AC fuse provided on all units. This fuse only blows if a catastrophic failure occurs in the unit — it does not blow on overload or short circuit. AC input protected against line transients by metal oxide varistors on all medical units. **Output Noise and Ripple:** 0.5% RMS, 1% Pk-Pk maximum on all outputs (20MHz bandwidth on GSM7 & GSM28 series. **Temperature Coefficient:** 0.03%/°C typical for all outputs.

GENERAL SPECIFICATIONS:

• **AC Input:** 85-264 VAC, 47-63 Hz single phase • **Safety Specifications:** All medical models are approved to UL544/UL2601, IEC601-1, CSA234L3, VDE0750 and CE9LVD • **Overload Protection:** Fully protected against short circuit and output overload. Short circuit protection is cycling type on Outputs #1 and#2; foldback type on Outputs #3 and #4. Recovery after fault is automatic. • **Temperature Rating:** 0°C to 50°C full rated load. • **Minimum Load:** Single output units require no minimum load except for GSM28 (GSM28 = ±5%). Multiple output units: GPM40 = 0.4A, GPM55 = 0.7A, GPM80 = 1A, GPM130 = 3A, GSL50 = 0.8A. • **EMI Compliance:** All models include EMI filtering to meet or exceed conducted emissions of CISPR 11 Class B, VDE0871 Class B (FCC Class B, CISPR 11 Class B and EN5522 Class B for GSM7 & GSM28 Series). • **Voltage Adjustment:** Outputs adjustable ±5% minimum via built-in potentiometer (Factory set for GSM7 & GSM28 Series). • **Remote Sense:** Provided as a standard feature on the +5V output of the GPM130 and on all single output units, GLD150, GLM65, GPFM250 single and primary output GPM130. • **Reverse Voltage Protection:** All outputs protected against inadvertent application of reverse voltage up to 1 times the rated current of the reversed output.



Single Output Medical

Total Power Watts	Output 1	Min. Load	Dimensions Inch (mm) L x W x H	Mating Connectors					Digi-Key Part No.	Price Each				Condor Part No.
				Housing Input	Housing Output	Contacts	Signal Housing	Signal Contacts		1	10	25	50	
GSM Series														
7	5.0V @ 1.4A	—	2.00 x 2.28 x .50 (50.80 x 57.91 x 12.70)	—	—	—	—	—	271-1100-ND	30.68	29.15	27.62	26.09	GSM7-5
	12V @ .58A	—							271-1101-ND	30.68	29.15	27.62	26.09	GSM7-12
	15V @ .47A	—							271-1102-ND	30.68	29.15	27.62	26.09	GSM7-15
	24V @ .29A	—							271-1103-ND	30.68	29.15	27.62	26.09	GSM7-24
	28V @ .25A	—							271-1104-ND	30.68	29.15	27.62	26.09	GSM7-28
Connector Kit for GSM7 Series									271-1135-ND	8.74	—	—	—	18-30234-1003
28	5.1V @ 5.5A	±5%	2.59 x 4.00 x .92 (65.79 x 101.60 x 23.37)	WM2125	WM2124	WM17403	—	—	271-1121-ND	54.60	51.87	49.14	46.41	GSM28-5
	12V @ 2.3A	±5%							271-1122-ND	54.60	51.87	49.14	46.41	GSM28-12
	24V @ 1.2A	±5%							271-1123-ND	54.60	51.87	49.14	46.41	GSM28-24
Chassis and Cover for GSM28 Series, 4.31" x 3.10" x 1.53" (109.47mm x 78.74mm x 38.86mm)............									271-1128-ND	13.10	—	—	—	08-30466-0028
GPM Series														
40	12V @ 3.3A	—	3.00 x 5.00 x 1.28 (76.20 x 127.00 x 32.51)	WM2123	WM2104	WM17403	—	—	271-1019-ND	78.62	74.69	70.76	66.83	GPM40-12
	15V @ 2.7A	—							271-1020-ND	78.62	74.69	70.76	66.83	GPM40-15
	24V @ 1.7A (2.1pk)	—							271-1021-ND	78.62	74.69	70.76	66.83	GPM40-24
	28V @ 1.4A (2.1pk)	—							271-1022-ND	78.62	74.69	70.76	66.83	GPM40-28
	+5V @ 8.0A	—							271-1023-ND	78.62	74.69	70.76	66.83	GPM40-5
80/110*	12V @ 6.7A	—	7.00 x 4.25 x 1.86 (177.80 x 107.95 x 47.24)	WM2103	WM2105	WM17403	—	—	271-1027-ND	144.14	136.94	129.73	122.52	GPM80-12
	24V @ 3.4A	—							271-1029-ND	144.14	136.94	129.73	122.52	GPM80-24
GLM Series														
50	3.3V @ 8A	—	4.25 x 2.50 x 1.25 (107.95 x 63.50 x 31.75)	A19951	A19954	A19990	—	—	271-2196-ND	64.61	63.10	60.80	57.37	GLM50-3.3
	5.1V @ 8A	—							271-2198-ND	64.61	63.10	60.80	57.37	GLM50-5
	12V @ 4.2A	—							271-2192-ND	64.61	63.10	60.80	57.37	GLM50-12
	15V @ 3.3A	—							271-2193-ND	64.61	63.10	60.80	57.37	GLM50-15
	24V @ 2.1A	—							271-2194-ND	64.61	63.10	60.80	57.37	GLM50-24
	28V @ 1.8A	—							271-2195-ND	64.61	63.10	60.80	57.37	GLM50-28
65	5.1V @ 11A	—	5.00 x 3.00 x 1.00 (127.00 x 76.20 x 25.40)	A19951	A19954	A19990	—	—	271-2165-ND	77.70	73.82	69.93	66.05	GLM65-5
	12V @ 5.5A	—							271-2159-ND	77.70	73.82	69.93	65.52	GLM65-12
	15V @ 4.3A	—							271-2160-ND	77.70	73.82	69.93	66.05	GLM65-15
	24V @ 2.7A	—							271-2161-ND	77.70	73.82	69.93	65.52	GLM65-24
	28V @ 2.3A	—							271-2162-ND	77.70	73.82	69.93	65.52	GLM65-28
	48V @ 1.35A	—							271-2164-ND	77.70	73.82	69.93	66.05	GLM65-48
GPFM Series														
115	5.1V @ 12A	—	5.25 x 3.30 x 1.50 (133.35 x 83.82 x 38.10)	A19953	A19956	A19990	A19492	A19520	271-2158-ND	115.61	109.82	104.06	87.60	GPFM115-5
	12V @ 6.7A	—							271-2153-ND	115.61	109.82	104.06	87.60	GPFM115-12
	15V @ 5.3A	—							271-2154-ND	115.61	109.82	104.06	87.60	GPFM115-15
	24V @ 3.3A	—							271-2155-ND	115.61	109.82	104.06	87.60	GPFM115-24
	28V @ 2.9A	—							271-2156-ND	115.61	109.82	104.06	87.60	GPFM115-28
	48V @ 1.7A	—							271-2157-ND	115.61	109.82	104.06	87.60	GPFM115-48
250	5.1V @ 45A	—	8.00 x 5.00 x 1.75 (203.20 x 127.00 x 44.45)	A19953	A19956	A19990	—	—	271-2152-ND	285.66	271.39	257.11	242.82	GPFM250-5
	12V @ 21A	—							271-2147-ND	285.66	271.39	257.11	242.82	GPFM250-12
	15V @ 17A	—							271-2148-ND	285.66	271.39	257.11	242.82	GPFM250-15
	24V @ 11A	—							271-2149-ND	285.66	271.39	257.11	242.82	GPFM250-24
	28V @ 9.5A	—							271-2150-ND	285.66	271.39	257.11	242.82	GPFM250-28
	48V @ 5.2/6.1A†	—							271-2151-ND	285.66	271.39	257.11	242.82	GPFM250-48
Cover with Fan for GPFM250 Series, 8.00" x 5.00" x 1.81" (203.20mm x 127.00m x 45.97mm)									271-1138-ND	18.46	—	—	—	09-250CF
GLD Series														
150	12V @ 10.8A	—	7.00 x 4.50 x 1.70 (177.80 x 114.30 x 43.18)	WM18436	WM3703	WM2500	A19494	A19490	271-2172-ND	221.49	210.41	199.35	188.27	GLD150-12
	15V @ 8.7A	—							271-2173-ND	221.49	210.41	199.35	188.27	GLD150-15
	24V @ 5.7A	—							271-2174-ND	221.49	210.41	199.35	188.27	GLD150-24

Triple Output Medical

Total Power Watts	Output 1	Output 2	Output 3	Dimensions Inch (mm) L x W x H	Mating Connectors			Digi-Key Part No.	Price Each				Condor Part No.
					Housing Input	Housing Output	Contacts		1	10	25	50	
GPM Series													
40	+5V @ 4.0A	+12V @ 2.0A (3pk)	-12V @ 0.4A	3.00 x 5.00 x 1.28 (76.20 x 127.00 x 32.51)	WM2123	WM2104	WM17403	271-1039-ND	78.62	74.69	70.76	66.83	GPM40A
	+5V @ 4.0A	+15V @ 2.0A (3pk)	-15V @ 0.4A					271-1040-ND	78.62	74.69	70.76	66.83	GPM40B
GLM50 Series													
50	+5.05V @ 4A	+12V @ 2.5A	-12V @ 0.2A	4.25 x 2.50 x 1.25 (107.95 x 63.50 x 31.75)	A19951	A19954	A19990	271-2199-ND	64.61	63.10	60.80	57.37	GLM50A
	+5.1V @ 4A	+15V @ 2.5A	-15V @ 0.2A					271-2200-ND	64.61	63.10	60.80	57.37	GLM50B
	+5.1V @ 4A	+24V @ 1.5A	-12V @ 0.2A					271-2201-ND	64.61	63.10	60.80	57.37	GLM50D
	+3.3V @ 4A	+12V @ 2.5A	-12V @ 0.2A					271-2202-ND	64.61	63.10	60.80	57.37	GLM50G

Quad Output Medical

Total Power Watts	Output 1	Output 2	Output 3	Output 4	Dimensions Inch (mm) L x W x H	Mating Connectors			Digi-Key Part No.	Price Each				Condor Part No.
						Housing Input	Housing Output	Contacts		1	10	25	50	
GPM Series														
55	+5V @ 6.0A	+12V @ 3.0A (5pk)	+12V @ 1.0A	-12V @ 1.0A	6.30 x 3.94 x 1.68 (160.02 x 100.08 x 42.67)	WM17401	WM17402	WM17403	271-1041-ND	104.83	99.59	94.35	89.11	GPM55A
55	+5V @ 6.0A	+12V @ 3.0A (5pk)	-12V @ 1.0A	-5V @ 1.0A					271-1042-ND	104.83	99.59	94.35	89.11	GPM55B
55	+5V @ 6.0A	+15V @ 3.0A (5pk)	-15V @ 1.0A	-5V @ 1.0A					271-1043-ND	104.83	99.59	94.35	89.11	GPM55C
55	+5V @ 6.0A	+24V @ 1.5A (2pk)	+12V @ 1.0A	-12V @ 1.0A					271-1044-ND	104.83	99.59	94.35	89.11	GPM55D
55	+5V @ 6.0A	+24V @ 1.5A (2pk)	+15V @ 1.0A	-15V @ 1.0A					271-1045-ND	104.83	99.59	94.35	89.11	GPM55E
80/110*	+5V @ 12.0A	+12V @ 3.0A (5pk)	-12V @ 1.0A	+12V @ 1.0A	7.00 x 4.25 x 1.86 (177.80 x 107.95 x 47.24)	WM2103	WM1910	WM17403	271-1046-ND	144.14	136.94	129.73	122.52	GPM80A
80/110*	+5V @ 12.0A	+12V @ 3.0A (5pk)	-15V @ 1.0A	+15V @ 1.0A					271-1048-ND	144.14	136.94	129.73	122.52	GPM80C
80/110*	+5V @ 12.0A	+24V @ 2.0A (4pk)	-15V @ 1.0A	+15V @ 1.0A					271-1050-ND	144.14	136.94	129.73	122.52	GPM80E
80/110*	+5V @ 12.0A	+24V @ 3.5A (4.5pk)	-12V @ 1.0A	+12V @ 2.0A					271-1051-ND	144.14	136.94	129.73	122.52	GPM80P

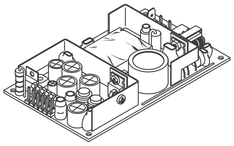
* 26cfm moving air required. † Convection/Air Flow

CONDOR

Switch Mode DC Power Supplies

The standard version power supply for data processing, control, etc., applications.

General Features: • Cost Effective Power Source • 2 -Year Warranty - 100% burn-in, test and inspection.
Safety Specifications: • Conform with the applicable requirements of EN60950 following the provisions of the Low Voltage Directive 73/23/EEC. Approved to UL1950, CSA22.2 No. 234 Level 3, IEC950, EN60950, VDE 0805 and CSA950
General Specifications: • **AC Input:** 90-264 VAC, 47-63 Hz single phase (GPC41, GPFC110 and GPFC160 Series: 85-264 VAC, 47-63 Hz single phase) • **Overload Protection:** Fully protected against short circuit and output overload • **Temperature Rating:** 0°C to 50°C full rated output power • **EMI Compliance:** All models include EMI filtering to meet or exceed conducted emissions of CISPR 11 Class B, VDE0871 Class B and EN55022 Class B (GPFC110 in compliance to CISPR22, FCC Class B) • **Remote Sense:** GPFC110 and GPFC160 Series only • **Reverse Voltage Protection:** All outputs protected against inadvertent application of reverse voltage up to 1 times the rated current of the reverse output



Watt-age	Volt-age	Min. Load	Current (A)	Current (B)	I Peak	Dimensions L x W x H Inch (mm)	Mating Connectors					Digi-Key Part No.	Price Each				Condor Part No.
							Housing Input	Housing Output	Contacts	Signal Housing	Signal Contact		1	10	25	50	
GSC 20 Series — Commercial Switcher																	
20	+12	0	1.7A	—	—	2.00" x 3.50" x 0.68" (50.80 x 88.90 x 17.27)	WM17405	WM17405	WM17406	—	—	271-1030-ND	50.40	47.88	45.36	42.84	GSC20-12
20	+15	0	1.4A	—	—		WM17405	WM17405	WM17406	—	—	271-1031-ND	50.40	47.88	45.36	42.84	GSC20-15
20	+24	0	0.85A	—	—		WM17405	WM17405	WM17406	—	—	271-1032-ND	50.40	47.88	45.36	42.84	GSC20-24
20	+28	0	0.7A	—	—		WM17405	WM17405	WM17406	—	—	271-1033-ND	50.40	47.88	45.36	42.84	GSC20-28
20	+5	0	3.8A	—	—		WM17405	WM17405	WM17406	—	—	271-1034-ND	50.40	47.88	45.36	42.84	GSC20-5
Chassis and Cover for GSC20 Series, 3.80" x 2.36" x 1.06" (96.52mm x 59.94mm x 26.92mm)												271-1131-ND	13.10	—	—	—	08-30466-020W
Triple Output - GSC25 Series																	
25	+5.1V +12V -12	0.25A 0 0	2.5A 1.5A 0.2A	—	—	4.25" x 2.5" x .86" (107.95 x 63.50 x 21.84)	WM2123	WM2104	WM17403	—	—	271-1105-ND	53.55	50.88	48.20	45.52	GSC25A
25	+5.1V +24V -12	0.25A 0 0	2.5A 1.0A 0.2A	—	—	4.25" x 2.5" x .86" (107.95 x 63.50 x 21.84)	WM2123	WM2104	WM17403	—	—	271-1106-ND	53.55	50.88	48.20	45.52	GSC25D
Chassis and Cover for GSC25 Series, 5.00" x 2.90" x 1.50" (127.00mm x 73.66mm x 38.10mm)												271-1127-ND	13.10	—	—	—	08-30466-0025
SIngle Output - GPC41 Series																	
30	5.1V	0.15	6.0A	—	—	4.00" x 2.00" x 1.5" (101.60 x 50.80 x 38.10)	A19950	A19952	A19990	—	—	271-1124-ND	52.50	49.88	47.25	44.63	GPC41-5
40	12V	0.03	3.3A	—	—		A19950	A19952	A19990	—	—	271-1125-ND	52.50	49.88	47.25	44.63	GPC41-12
40	24V	0.01	1.7A	—	—		A19950	A19952	A19990	—	—	271-1126-ND	52.50	49.88	47.25	44.63	GPC41-24
Cover for GPC41 Series, 3.32" x 1.98" x 1.66" (84.33mm x 50.29mm x 42.16mm)												271-1129-ND	13.10	—	—	—	08-30466-1041
Single Output - GLC50 Series																	
50	3.3V	0	8A	—	—	4.25" x 2.5" x 1.10" (107.95 x 63.50 x 27.94)	WM2123	WM2126	WM17403	—	—	271-1109-ND	56.17	54.87	52.87	49.88	GLC50-3.3
50	5.1V	0	8A	—	—		WM2123	WM2126	WM17403	—	—	271-1110-ND	56.17	54.87	52.87	49.88	GLC50-5
50	12V	0	4.2A	—	—		WM2123	WM2126	WM17403	—	—	271-1111-ND	56.17	54.87	52.87	49.88	GLC50-12
50	24V	0	2.1A	—	—		WM2123	WM2126	WM17403	—	—	271-1112-ND	56.17	54.87	52.87	49.88	GLC50-24
Triple Output - GLC50 Series																	
50	+5.1V +12V -12V	0.8A	4A 2.5A 0.2A	—	—	4.25" x 2.5" x 1.10" (107.95 x 63.50 x 27.94)	WM2123	WM2126	WM17403	—	—	271-1107-ND	56.17	54.87	52.87	49.88	GLC50A
50	+5.1V +24V -12V	0.8A	4A 1.5A 0.2A	—	—	4.25" x 2.5" x 1.10" (107.95 x 63.50 x 27.94)	WM2123	WM2126	WM17403	—	—	271-1108-ND	56.17	54.87	52.87	49.88	GLC50D
Chassis and Cover for GLC50 Series, 5.00" x 2.90" x 1.50" (127.00mm x 73.66mm x 38.1mm)												271-1130-ND	13.10	—	—	—	08-30466-0050
GLC65 Series																	
65	+5.1V	0	11A	—	—	5.00" x 3.00" x 1.00" (127.00 x 76.20 x 25.40)	A19951	A19954	A19990	—	—	271-2171-ND	73.76	70.08	66.40	62.70	GLC65-5
65	+12V	0	5.5A	—	—		A19951	A19954	A19990	—	—	271-2166-ND	73.76	70.08	66.40	62.70	GLC65-12
65	+15V	0	4.3A	—	—		A19951	A19954	A19990	—	—	271-2167-ND	73.76	70.08	66.40	62.70	GLC65-15
65	+24V	0	2.7A	—	—		A19951	A19954	A19990	—	—	271-2168-ND	73.76	70.08	66.40	62.70	GLC65-24
65	+28V	0	2.3A	—	—		A19951	A19954	A19990	—	—	271-2169-ND	73.76	70.08	66.40	62.70	GLC65-28
65	+48V	0	1.35A	—	—		A19951	A19954	A19990	—	—	271-2170-ND	73.76	70.08	66.40	62.70	GLC65-48
65	+5.0V +12V -12V	—	7A 3A 2.5A	—	—	5.00" x 3.00" x 1.25" (127.00 x 76.20 x 31.75)	WM2101	WM2104	WM2313	—	—	271-2210-ND	72.07	68.47	65.04	62.48	GLC65A
65	+5.0V +24V -12V	—	7A 1.5A 2.5A	—	—	5.00" x 3.00" x 1.25" (127.00 x 76.20 x 31.75)	WM2101	WM2104	WM2313	—	—	271-2211-ND	72.07	68.47	65.04	62.48	GLC65D
65	+5.0V +24V +12V	—	7A 1.5A 2.5A	—	—	5.00" x 3.00" x 1.25" (127.00 x 76.20 x 31.75)	WM2101	WM2104	WM2313	—	—	271-2212-ND	72.07	68.47	65.04	62.48	GLC65E
65	+5.0V +3.3V 12V	—	5A 4A 2.5A	—	—	5.00" x 3.00" x 1.25" (127.00 x 76.20 x 31.75)	WM2101	WM2104	WM2313	—	—	271-2213-ND	72.07	68.47	65.04	62.48	GLC65G
65	+3.3V +5.0V +12V	—	5A 4A 2.5A	—	—	5.00" x 3.00" x 1.25" (127.00 x 76.20 x 31.75)	WM2101	WM2104	WM2313	—	—	271-2214-ND	72.07	68.47	65.04	62.48	GLC65H
Single Output - GLC75 Series (See Amperage Rating Notes Below)																	
75	5.1V	0	14.7A	18A	18A	5.75" x 3.40" x 1.56" (146.05 x 86.36 x 39.70)	WM2125	WM2129	WM17403	—	—	271-1113-ND	72.26	68.65	65.04	61.82	GLC75-5
75	12V	0	6.3A	9.1A	9.1A		WM2125	WM2129	WM17403	—	—	271-1114-ND	72.26	68.65	65.04	61.82	GLC75-12
75	24V	0	3.1A	4.6A	4.6A		WM2125	WM2129	WM17403	—	—	271-1115-ND	72.26	68.65	65.04	61.82	GLC75-24
Chassis and Cover for GLC75 Single Output Series, 5.90" x 3.75" x 1.98" (149.86mm x 95.25mm x 50.29mm)												271-1132-ND	13.31	—	—	—	08-30466-2075
Quad Output - GLC75 Series (See Amperage Rating Notes Below)																	
75	+5.1V +12V -12V 12V*	1A 0.5A — —	8A 2.5A 1A 2.5A	10A 3A 1A 3A	12A 4A 1.2A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	WM2125	WM17404	WM17403	—	—	271-1116-ND	73.96	70.27	66.57	62.87	GLC75A
75	+5.1V +24V -12V 12V*	1A 0.5A — —	8A 2.5A 1A 2.5A	10A 3A 1A 3A	12A 4A 1.2A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	WM2125	WM17404	WM17403	—	—	271-1117-ND	73.96	70.27	66.57	62.87	GLC75D
Single Output - GLC110 Series (See Amperage Rating Notes Below)																	
110	+12V	0	6.3A	9.1A	9.5A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2203-ND	73.63	69.94	66.27	62.58	GLC110-12
110	+15V	0	5A	7.3A	7.7A		A19953	A28761	A19990	—	—	271-2204-ND	73.63	69.94	66.27	62.58	GLC110-15
110	+24V	0	3.2A	4.6A	5A		A19953	A28761	A19990	—	—	271-2207-ND	73.63	69.94	66.27	62.58	GLC110-24
Double Output - GLC110 Series (See Amperage Rating Notes Below)																	
110	+12V -12V	0 0	6.3A 2.5A	9.1A 3A	9.5A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2205-ND	79.17	75.22	71.26	67.30	GLC110-212
110	+15V -15V	1A 0	6.3A 2.5A	7.3A 3A	7.7A 4A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2206-ND	79.17	75.22	71.26	67.30	GLC110-215
110	+24V +5V	1A 0	3.2A 1.5A	4.6A 2A	5A 2.5A	7.00" x 4.25" x 1.30" (177.80 x 107.95 x 33.02)	A19953	A28761	A19990	—	—	271-2208-ND	79.17	75.22	71.26	67.30	GLC110-524
Chassis and Cover for GLC75 and GLC110 Multiple Output Series, 7.30" x 4.50" x 2.10" (185.42mm x 114.30mm x 53.34mm)												271-1137-ND	13.31	—	—	—	08-30466-2175

*Floating fourth output can be referenced as either positive or negative. **Amperage Rating Notes for GLC75 and GLC110 Series:** • **Current A**: Rating with unrestricted convection cooling. Total power not to exceed 75W. • **Current B:** Rating with 26cfm forced air cooling. Total power not to exceed 110W. • **I Peak:** During peak load conditions output regulation may exceed specified limits.

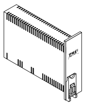
(Continued)

CONDOR Switch Mode DC Power Supplies *(Cont.)*

Watt-age	Volt-age	Min. Load	Current (A)	Current (B)	I Peak	Dimensions L x W x H Inch (mm)	Mating Connectors Housing Input	Housing Output	Contacts	Signal Housing	Signal Contact	Digi-Key Part No.	Price Each 1	10	25	50	Condor Part No.
Single Output - GPFC110 Series																	
110	+5.1V	—	12A	—	20A	6.3" x 3.75" x 1.62" (160.02 x 95.25 x 41.15)	A19953	A19957	A19990	—	—	271-2180-ND	100.53	95.50	90.48	76.17	GPFC110-5
110	+12V	—	6.7A	—	10A		A19953	A19957	A19990	—	—	271-2175-ND	100.53	95.50	90.48	76.17	GPFC110-12
110	+15V	—	5.3A	—	8A		A19953	A19957	A19990	—	—	271-2176-ND	100.53	95.50	90.48	76.17	GPFC110-15
110	+24V	—	3.4A	—	5A		A19953	A19957	A19990	—	—	271-2177-ND	100.53	95.50	90.48	76.17	GPFC110-24
110	+28V	—	2.9A	—	4.3A		A19953	A19957	A19990	—	—	271-2178-ND	100.53	95.50	90.48	76.17	GPFC110-28
110	+48V	—	1.7A	—	2.5A		A19953	A19957	A19990	—	—	271-2179-ND	100.53	95.50	90.48	76.17	GPFC110-48
Cover for GPFC110 Series, 6.30" x 3.75" x 1.75" (160.02mm x 95.25mm x 44.45mm)												271-1133-ND	13.31	—	—	—	08-30466-2110
GPFC125 Series ‡																	
125	+5V +12V 12V† -12V	2A+V4 Current	9A 4A 2.5A 0.3A	16A 7A 4A 1A	—	6.00" x 3.50" x 1.50" (152.40 x 88.90 x 38.10)	09-50-8051	90-50-3131	08-50-0189	—	—	271-2215-ND	177.58	168.70	159.83	150.94	GPFC125A
125	+5V +12V 12V† -5V	2A+V4 Current	9A 4A 2.5A 0.3A	16A 7A 4A 1A	—	6.00" x 3.50" x 1.50" (152.40 x 88.90 x 38.10)	09-50-8051	90-50-3131	08-50-0189	—	—	271-2216-ND	177.58	168.70	159.83	150.94	GPFC125B
125	+5V +24V 12V† -12V	2A+V4 Current	9A 3A 2.5A 0.3A	16A 4.5A 4A 1A	—	6.00" x 3.50" x 1.50" (152.40 x 88.90 x 38.10)	09-50-8051	90-50-3131	08-50-0189	—	—	271-2217-ND	177.58	168.70	159.83	150.94	GPFC125D
125	+5V +3.3V 12V† -12V	2A+V4 Current	9A 7A 2.5A 0.3A	16A 10A 4A 1A	—	6.00" x 3.50" x 1.50" (152.40 x 88.90 x 38.10)	09-50-8051	90-50-3131	08-50-0189	—	—	271-2218-ND	177.58	168.70	159.83	150.94	GPFC125G
125	+3.3V +5V 12V† -12V	2A+V4 Current	9A 4A 2.5A 0.3A	16A 7A 4A 1A	—	6.00" x 3.50" x 1.50" (152.40 x 88.90 x 38.10)	09-50-8051	90-50-3131	08-50-0189	—	—	271-2219-ND	177.58	168.70	159.83	150.94	GPFC125H
Cover for GPFC125												271-2220-ND	13.31	—	—	—	08-30466-2125
Single Output - GPFC160 Series																	
160	5.1V	—	26A	—	—	7.00" x 4.50" x 1.69" (177.80 x 114.30 x 42.93)	WM2125	WM17400	WM17403	WM2013	WM2200	271-1118-ND	181.95	172.86	163.76	154.67	GPFC160-5
160	12V	—	11.7A	—	—		WM2125	WM17400	WM17403	WM2013	WM2200	271-1119-ND	181.95	172.86	163.76	154.67	GPFC160-12
160	24V	—	5.8A	—	—		WM2125	WM17400	WM17403	WM2013	WM2200	271-1120-ND	181.95	172.86	163.76	154.67	GPFC160-24
Cover with Fan for GPFC160 Series, 7.00" x 4.50" x 1.75" (177.80mm x 114.30mm x 44.45mm)												271-1134-ND	18.46	—	—	—	09-160CF

† Output 3 is isolated. Can be connected as + or - output. ‡ Peak rating or continuous rating with 150 LFM air cooling.

CONDOR TODD POWER SUPPLIES Compact PCI Power Supplies



Features: • Fully compliant with PICMG® CompactPCI® specifications • Forced current sharing and internal OR-ing diodes for N+1 redundancy • High current 5V and 3.3V outputs • 150W in 3U x 8HP (350W in 6U x 8HP) CompactPCI® package requiring only 15cfm of external air

Watt-age	Input	Output #1	Output #2	Output #3	Output #4	Min. Load on V1†	Max.Output from V1 & V2	Dimensions - Inches (mm) L x W x H	Digi-Key Part No.	Price Each	Condor/Todd Part No.
200	264VAC	+5V@25A	+3.3V@30A	+12V@5.5A	-12V@0.5A	3.0A	35A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2116-ND	346.00	CPCI-204-1203
200	47-	+5V@25A	+3.3V@25A	+12V@5.5A	-12V@0.5A	2.5A	35A	3.93 x 1.59 x 6.62 (99.82 x 40.39 x 168.15)	271-2117-ND	363.00	CPCI-204-1203M
200	63Hz	+5V@25A	+3.3V@30A	+12V@5.5A	-12V@0.5A	3.0A	35A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2118-ND‡	367.00	CPCI-204L-1203
150	DC 36-	+5V@25A	+3.3V@20A	+12V@5.5A	-12V@0.5A	2.5A	2.5A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2102-ND	346.00	DPCI-154-1203
200	72VDC	+5V@25A	+3.3V@30A	+12V@5.5A	-12V@0.5A	3.0A	35A	3.93 x 1.59 x 6.34 (99.8 x 40.39 x 161.0)	271-2120-ND	346.00	DPCI-204-1203

† For full output current capability on V2, V3, V4. ‡ "L" Option: Leakage current less than 0.5mA per unit. Will require additional filtering for compliance to EMI specifications.

ARTESYN TECHNOLOGIES Universal Input Switch Mode Power Supplies

NLP65 Series—Single, Dual, and Triple Outputs 65 to 75 Watt AC/DC

Specifications: • **Dimensions L x W x H:** 5" x 3" x 1.26" (127.00 x 76.20 x 32.00) • **Mating Connectors:** Housing Input: 09-50-3031 Housing Output: 09-50-3061 Contacts: 08-50-0106 • **Input Voltage:** 85 to 264VAC

Output		Output		Output				
Voltage 1	Current Min./Max.	Voltage 2	Current Min./Max.	Voltage 3	Current Min./Max.	Digi-Key Part No.	Price Each	Artesyn Part No.
+5V	0.2A/10.0A	—	—	—	—	393-1027-ND	67.98	NLP65-7605
+12V	0.1A/5.4A	—	—	—	—	393-1028-ND	67.98	NLP65-7612
+24V	0.1A/2.7A	—	—	—	—	393-1029-ND	67.98	NLP65-7624
+5V	0.2A/7.5A	+12V	0A/2.5A	-12V	0A/0.65A	393-1030-ND	67.98	NLP65-7608
+5V	0.2A/7.5A	+15V	0A/2.2A	-15V	0A/0.65A	393-1031-ND	67.98	NLP65-7610
+5V	0.2A/7.0A	+12V	0A/2.5A	—	—	393-1032-ND	67.98	NLP65-7629

NLP110 Series—Single and Triple Outputs 75-110 Watt AC/DC

Specifications: • **Dimensions L x W x H:** 6.5" x 3.0" x 1.26" (165.10 x 76.20 x 32.00) • **Mating Connectors:** Housing Input: 09-50-3031 Housing Output: 08-52-0113 Contacts: 08-50-0106 • **Input Voltage:** 90 to 264VAC • Harmonic Corrected

Output		Output		Output				
Voltage 1	Current Min./Max.	Voltage 2	Current Min./Max.	Voltage 3	Current Min./Max.	Digi-Key Part No.	Price Each	Artesyn Part No.
+5V	0.5A/15A	—	—	—	—	393-1033-ND	113.30	NLP110-9605
+12V	0.3A/6.4A	—	—	—	—	393-1034-ND	113.30	NLP110-9612
+48V	0A/1.6A	—	—	—	—	393-1035-ND	113.30	NLP110-9617
+24V	0.2A/3.2A	—	—	—	—	393-1036-ND	113.50	NLP110-9624
+5V	0.5A/13A	+3.3V	0.2A/13A	+12V	0A/0.65A	393-1037-ND	113.30	NLP110-9693
+3.3V	0.5A/13A	+2.5V	0.1A/13A	+12V	0A/0.65A	393-1038-ND	113.30	NLP110-9694
+12V	0.2A/6.5A	+3.3V	0.5A/13A	12V	0A/0.65A	393-1039-ND	113.30	NLP110-9695
+12V	0.2A/6.5A	+5V	0.2A/13A	12V	0A/0.65A	393-1040-ND	113.30	NLP110-9608

NLP150L Series—Single and Triple Outputs 110-150 Watt AC/DC

Specifications: • **Dimensions L x W x H:** 6.8" x 3.8" x 1.26" (172.72 x 96.52 x 32.00) • **Mating Connectors:** Housing Input: 09-50-3031 Housing Output: 09-50-3021 Contacts: 08-58-0122 • **Input Voltage:** 90 to 264VAC • Harmonic Corrected

Output		Output		Output				
Voltage 1	Current Min./Max.	Voltage 2	Current Min./Max.	Voltage 3	Current Min./Max.	Digi-Key Part No.	Price Each	Artesyn Part No.
3.3V	1.5A/22A	—	—	—	—	393-1042-ND	123.00	NLP150L-96S3
5.1	1.5A/22A	—	—	—	—	393-1043-ND	123.00	NLP150L-96S5
12V	0.6A/9.2A	+5.1V	0.5A/6A	+24V	0A/2.0A	393-1044-ND	123.00	NLP150L-96T658

NLP150L Series—Quad Output 110-150 Watt AC/DC

Specifications: • **Dimensions L x W x H:** 7.8" x 3.8" x 1.26" (198.12 x 96.52 x 32.00) • **Mating Connectors:** Housing Input: 09-50-3031 Housing Output: 08-52-0072 Contacts: A27431 • **Input Voltage:** 90 to 264VAC • Harmonic Corrected

Output		Output		Output		Output				
Volt. 1	Current Min./Max.	Volt. 2	Current Min./Max.	Volt. 3	Current Min./Max.	Volt. 4	Current Min./Max.	Digi-Key Part No.	Price Each	Artesyn Part No.
5.1V	1.5A/20A	+3.3V	0.5A/10A	+12V	0A/0.65A	12V iso	0A/2.0A	393-1041-ND	123.00	NLP150L-96Q5366

ARTESYN TECHNOLOGIES

DC-DC Converters

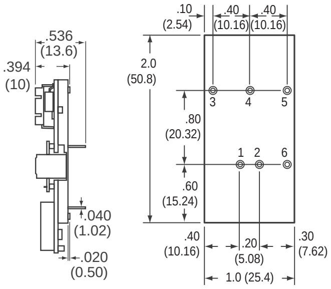
CXA10 Series— Single and Dual Output

10 Watt

Delivers single and dual output voltages covering 3.3V, 5V, 12V, ±5V, and ±12V.

Features:

- Fully compliant with ETS 300 386-1
- Approved to EN60950, UL1950, CSA C22.2 No. 950
- High demonstrated reliability with conservative component deratings

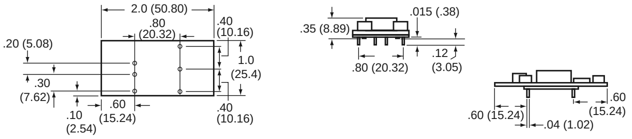


Input Voltage	Output Voltage	Output Current (Max.)	Digi-Key Part No.	Price Each	Artesyn Part No.
18-75VDC	3.3V	2.0A	393-1018-ND	43.60	CXA10-48S3V3
18-75VDC	5.0V	2.0A	393-1019-ND	43.60	CXA10-48S05
18-75VDC	12V	0.83A	393-1020-ND	43.60	CXA10-48S12
18-75VDC	±5V	1.0A	393-1021-ND	47.96	CXA10-48D05
18-75VDC	±12V	0.41A	393-1022-ND	47.96	CXA10-48D12

CXE15 Series—Single Output 10.8-15 Watt High Efficiency

A new high efficiency open frame isolated 15 Watt converter in an industry standard footprint.

Features: • No minimum load required • Remote on/off control • Overvoltage protection • 90% to 110% output trim



Input Voltage	Output Voltage	Output Current (Max.)	Digi-Key Part No.	Price Each	Artesyn Part No.
33-75VDC	1.8V	6A	393-1023-ND	47.20	CXE15-48S1V8
33-75VDC	2.5V	6A	393-1024-ND	47.20	CXE15-48S2V5
33-75VDC	3.3V	4.5A	393-1025-ND	47.20	CXE15-48S3V3
33-75VDC	5.0V	3A	393-1026-ND	47.20	CXE15-48S05

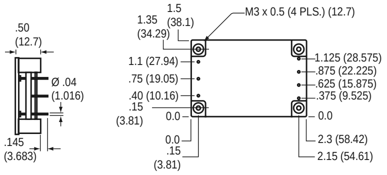
EXQ60D Series—Dual Positive Output

60 Watt High Efficiency

A new high efficiency open frame isolated 60 Watt converter series.

Features:

- Two positive outputs
- Operating baseplate temperature of -40°C to +100°C
- No minimum load
- Complies with ETS 300 019-1-3/2-3



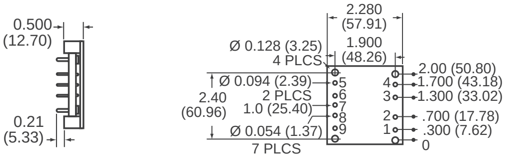
Input Voltage	Output Voltage	Output Current	Digi-Key Part No.	Price Each	Artesyn Part No.
33-75VDC	5V/3.3V	12.0A/15.0A	393-1045-ND	142.00	EXQ60-48D05-3V3
33-75VDC	3.3V/2.5V	12.0A/16.0A	393-1046-ND	142.00	EXQ60-48D3V3-2V5

EXB250 Series—Single Output

108 to 165 Watt High Efficiency

A new high efficiency open frame isolated 165 Watt converter in an industry standard half-brick footprint.

Features: • No minimum load required • Remote on/off control • Overvoltage protection • 90% to 110% output trim



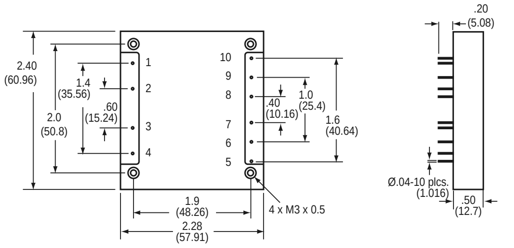
Input Voltage	Output Voltage	Output Current (Max.)	Digi-Key Part No.	Price Each	Artesyn Part No.
33-75VDC	1.8V	60A	393-1047-ND	196.00	EXB250-48S1V8
33-75VDC	2.5V	60A	393-1048-ND	196.00	EXB250-48S2V5
33-75VDC	3.3V	50A	393-1049-ND	196.00	EXB250-48S3V3

BXB75 Series—Dual Output 60-75 Watt Wide Input

Industry standard footprint (2.40 x 2.28 x 0.50 inches).

Features:

• Adjustable output voltage • Undervoltage lockout (UVLO) • Flexible dual output unit • UL, VDE and CSA safety approvals



Input Voltage	Output Voltage	Output Current Min. Max	Digi-Key Part No.	Price Each	Artesyn Part No.
36-75VDC	5V/3.3V	1A/15A	393-1006-ND	174.40	BXB75-48D05-3V3FL
36-75VDC	3.3V/2.5V	1A/15A	393-1007-ND	174.40	BXB75-48D3V3-2V5FL

BXB75 Series—Single Output 50-75 Watt Wide Input Efficiency

Industry standard footprint (2.40 x 2.28 x 0.50 inches.)

Features: • Adjustable output voltage • Separate case ground pin • No minimum load required • UL, VDE and CSA safety approvals

BXB100 Series—Single Output 66-100 Watt Wide Input

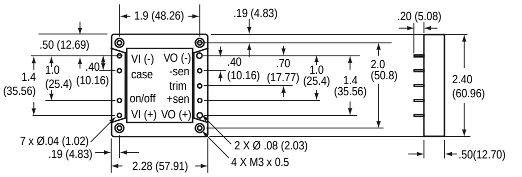
Industry standard footprint (2.40 x 2.28 x 0.50 inches.)

Features: • Adjustable output voltage • Separate case ground pin • No minimum load required • UL, VDE and CSA safety approvals

BXB150 Series—Single Output 100-150 Watt Wide Input

Industry standard footprint (2.40 x 2.28 x 0.50 inches.)

Features: • Adjustable output voltage • Separate case ground pin • No minimum load required • UL, VDE and CSA safety approvals



Input Voltage	Output Voltage	Current (Max.)	Digi-Key Part No.	Price Each	Artesyn Part No.
36-75VDC	5V	15A	393-1000-ND	152.60	BXB75-48S05FLT
36-75VDC	3.3V	15A	393-1001-ND	152.60	BXB75-48S3V3FLT
36-75VDC	12V	6.25A	393-1002-ND	152.60	BXB75-48S12FLT
18-36VDC	3.3V	15A	393-1003-ND	163.52	BXB75-24S3V3FLT
18-36VDC	5V	15A	393-1004-ND	163.52	BXB75-24S05FLT
18-36VDC	12V	6.25A	393-1005-ND	163.52	BXB75-24S12FLT
18-36VDC	3.3V	20A	393-1008-ND	163.52	BXB100-24S3V3FLT
18-36VDC	5V	20A	393-1009-ND	163.50	BXB100-24S05FLT
18-36VDC	12V	8.33A	393-1010-ND	163.50	BXB100-24S12FLT
36-75VDC	3.3V	20A	393-1011-ND	163.50	BXB100-48S3V3FLT
36-75VDC	5V	20A	393-1012-ND	163.50	BXB100-48S05FLT
36-75VDC	12V	8.33A	393-1013-ND	163.50	BXB100-48S12FLT
18-36VDC	3.3V	30A	393-1014-ND	174.40	BXB150-24S3V3FLT
36-75VDC	3.3V	30A	393-1015-ND	174.40	BXB150-48S3V3FLT
36-75VDC	5V	30A	393-1016-ND	174.40	BXB150-48S05FLT
36-75VDC	12V	12.5A	393-1017-ND	174.40	BXB150-48S12FLT

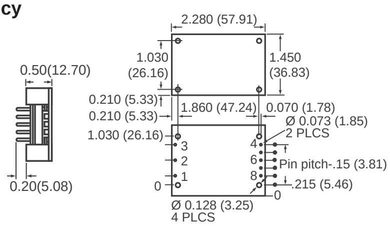
Series—Single Output

54 to 82.5 Watt High Efficiency

A new ultra-high efficiency, open frame, isolated converter series in an industry standard quarter-brick footprint that provides up to 82.5 watts of output power.

Features:

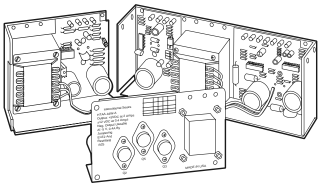
- No minimum load required
- Remote on/off control
- Overvoltage protection
- 90% to 110% output trim



Input Voltage	Output Voltage	Output Current (Max.)	Digi-Key Part No.	Price Each	Artesyn Part No.
33-75VDC	1.8V	30A	393-1050-ND	128.40	EXQ125-48S1V8
33-75VDC	2.5V	30A	393-1051-ND	128.40	EXQ125-48S2V5
33-75VDC	3.3V	25A	393-1052-ND	128.40	EXQ125-48S3V3

Linear Power Supplies

9222B-ND Power One Reference Guide **$4.15**



Features: • Worldwide AC input Capabilities • Meets domestic and foreign safety standards: UL, CSA, IEC, VDE, BPO, ECMA, CE • Low output ripple • 2 hour burn-in • Made in U.S.A.

Overvoltage Protection Options: Optional overvoltage protection modules are offered, each is user adjustable from 6.4V to 34V. Note: Outputs with factory built-in OVP are indicated in the Voltage/Current Rating Chart for each model.

General Specifications: • AC Input: 100/120/220/240 VAC +10%, -13%. 47-63 Hz. Tolerance for 230 VAC operation is +15%, -10%. Factory wired for 120V operation • DC Output: Adjustment range ±5% minimum. Voltage non-adjustable on “3 terminal regulator” outputs • Line Regulation: ±.05% for a 10% line change. Exceptions: ±.01% for F, G case models, ±0.5% for all other outputs using “3 terminal regulators” • Load Regulation: ±.05% for a 50% load change. Exceptions: ±.02% for F, G case models, ±0.5% for all other outputs using “3 terminal regulators” • Output Ripple: 5V through 15V models: 5.0 mV PK-PK maximum. (3.0 mV PK-PK maximum for F, G case models). 24V through 250V models: 3.0 mV PK-PK plus .02% of output voltage, maximum. All “3 terminal regulator” outputs: 0.2% PK-PK maximum • Overvoltage Protection: Provided on 5V outputs where indicated. Set at 6.2V ±0.4%. Other outputs use optional overvoltage protectors OVP12 and OVP24. • Operating Temperature: 0°C to 50°C full rated, derated linearly to 40% at 70°C. • Efficiency: 5V outputs — 45%, 12V and 15V outputs — 55%, 24V through 250V outputs — 60% • Master/Slave Operation: Provided on F, G models only. For parallel operation of up to 6 units.

Safety Specifications: All models exceed the following safety standards — Leakage Current Line to Ground (max.): 0.05 mA • Dielectric Withstand Voltage (min.): Input to Ground — 3750VRMS, Input to Outputs — 3750VRMS, Outputs to Ground — 500VDC • 2 year warranty

Overvoltage Protection

Voltage Adjustment Range: 6.4 - 33VDC		
Maximum Current Rating		
Model	Intermittent	Continuous
OVP-12	12.0A	8.0A
OVP-24	30.0A	20.0A

Dimensions – In. (mm) Height x Width x Thickness	Digi-Key Part No.	Price Each 1	10	25	Power-One Part No.
1.50 x 1.55 x 0.56 (38.10 x 39.37 x 14.22)	179-2057-ND	10.22	9.92	9.71	OVP-12
2.00 x 2.75 x 0.77 (50.80 x 69.85 x 19.56)	179-2058-ND	17.01	16.50	16.16	OVP-24

OVP SELECTION GUIDE		
Model	**Case Size**	**OVP Modules Required**
Single Output	B, C, N, D	(1) OVP-12
	E, F	(1) OVP-24
Dual Output	AA, B, BB, CC	(1) OVP-12 protects both outputs
	E	(1) OVP-24 protects both outputs
Triple Output	AA, BAA, D, CBB 131, DBB, DCC	(1) OVP-12 protects both 12V through 15V outputs
Peak Current Models	PW9935-ND	(1) OVP-12 protects any output not provided with built-in OVP

International Series Single Output

Voltage/ Current	Case Size	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
5V @ 1.5A*	B	179-2061-ND	36.39	35.31	34.57	32.75	HA5-1.5/OVP-A
5V @ 3A†*	B	179-2035-ND	38.39	37.24	36.47	34.54	HB5-3/OVP-A
5V @ 6A†*	C	179-2040-ND	60.29	58.49	57.61	54.27	HC5-6/OVP-A
5V @ 9A†*	N	179-2056-ND	82.24	79.77	78.12	74.02	HN5-9/OVP-A
5V @ 12A†*	D	179-2046-ND	93.21	90.42	88.55	83.89	HD5-12/OVP-A
5V @ 18A†*	E	179-2051-ND	137.55	133.43	130.68	123.79	HE5-18/OVP-A
5V @ 25A†*	F	179-2026-ND	193.74	187.92	184.05	174.37	F5-25/OVP-A
12V @ 0.9A**	B	179-2027-ND	33.74	32.72	32.04	30.35	HA15-0.9-A
12V @ 1.7A†	B	179-2029-ND	36.15	35.07	34.35	32.53	HB12-1.7-A
12V @ 3.4A†	C	179-2036-ND	54.81	53.17	52.07	49.32	HC12-3.4-A
12V @ 5.1A†	N	179-2052-ND	76.76	74.45	72.92	69.07	HN12-5.1-A
12V @ 6.8A†	D	179-2041-ND	87.73	85.10	83.34	78.95	HD12-6.8-A
12V @ 10.2A†	E	179-2047-ND	120.65	117.03	114.61	108.57	HE12-10.2-A
12V @ 16A†**	F	179-2024-ND	193.74	187.92	184.05	174.37	F15-15-A
15V @ 1.5A†	B	179-2030-ND	37.42	36.31	35.56	33.68	HB15-1.5-A
15V @ 3A†	C	179-2037-ND	54.81	53.17	52.07	49.32	HC15-3-A
15V @ 4.5A†	N	179-2053-ND	76.76	74.45	72.92	69.07	HN15-4.5-A
15V @ 6A†	D	179-2042-ND	87.73	85.10	83.34	78.95	HD15-6-A
15V @ 9A†	E	179-2048-ND	120.65	117.03	114.61	108.57	HE15-9-A
24V @ 0.5A**	B	179-2028-ND	36.39	35.31	34.57	32.75	HA24-0.5-A
24V @ 1.2A†	B	179-2032-ND	38.17	37.03	36.26	34.34	HB24-1.2-A
24V @ 2.4A†	C	179-2038-ND	54.81	53.17	52.07	49.32	HC24-2.4-A
24V @ 3.6A†	N	179-2054-ND	76.76	74.45	72.92	69.07	HN24-3.6-A
24V @ 4.8A†	D	179-2043-ND	87.73	85.10	83.34	78.95	HD24-4.8-A
24V @ 7.2A†	E	179-2049-ND	120.65	117.03	114.61	108.57	HE24-7.2-A
24V @ 12A†**	F	179-2025-ND	193.74	187.92	184.05	174.37	F24-12-A
28V @ 1A†	B	179-2033-ND	38.17	37.03	36.26	34.34	HB28-1-A
28V @ 2A†	C	179-2039-ND	54.81	53.17	52.07	49.32	HC28-2-A
28V @ 3A†	N	179-2055-ND	76.76	74.45	72.92	69.07	HN28-3-A
28V @ 4A†	D	179-2044-ND	87.73	85.10	83.34	78.95	HD28-4-A
48V @ 0.5A	B	179-2034-ND	43.92	42.61	41.72	39.54	HB48-0.5-A
48V @ 3A†	D	179-2045-ND	93.21	90.42	88.55	83.89	HD48-3-A
48V @ 4A†	E	179-2050-ND	131.62	127.67	125.04	118.46	HE48-4-A
175-210V @ 0.12A	B	179-2031-ND	52.47	50.98	48.95	47.56	HB200-0.12-A

* Overvoltage protection provided. Set at 6.2V ±0.4V. ** Adjustable outputs: F15-15-A: 12-15V, F24-12-A: 24-28V, HA24-0.5-A: 24-28V † Remote sense provided

Case Size

Case	Overall Size – In. (mm)	Weight
CBB	11.00 x 4.87 x 3.28 (279.40 x 123.70 x 83.31)	8 Lbs
D	9.00 x 4.87 x 3.28 (228.60 x 123.70 x 83.31)	7.5 Lbs
DBB	14.25 x 4.87 x 3.38 (361.95 x 123.70 x 85.85)	11 Lbs
DCC	15.00 x 4.88 x 4.55 (381.00 x 123.95 x 115.57)	12 Lbs
E	14.00 x 4.87 x 3.53 (355.60 x 123.70 x 89.66)	10 Lbs
F	16.75 x 4.88 x 5.00 (425.45 x 123.95 x 127.00)	19 Lbs
AA	6.50 x 4.00 x 2.10 (165.10 x 101.60 x 53.34)	2.5 Lbs
B	4.87 x 4.00 x 2.10 (123.70 x 101.60 x 53.34)	2.2 Lbs

Case	Overall Size – In. (mm)	Weight
BB	7.00 x 4.87 x 2.95 (177.80 x 123.70 x 74.93)	4.4 Lbs
BAA	10.25 x 4.00 x 2.95 (260.35 x 101.60 x 74.93)	5 Lbs
C	5.62 x 4.87 x 2.95 (142.75 x 123.70 x 74.93)	4.25 Lbs
CC	9.38 x 4.87 x 3.28 (238.25 x 123.70 x 83.31)	7 Lbs
N	7.00 x 4.87 x 3.20 (177.80 x 123.70 x 81.28)	6 Lbs
CP131	11.00 x 4.87 x 3.20 (279.40 x 123.70 x 81.28)	9 Lbs
NRG275	9.00 x 5.00 x 2.50 (228.60 x 127.00 x 63.50)	3 Lbs

International Series Dual Output

Output #1	Output #2	Case Size	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
+12V @ 0.4A§	-12V @ 0.4A§	B	179-2065-ND	40.54	39.34	38.52	36.49	HAD12-0.4-A
+15 @ 0.4A§	-15V @ 0.4A§	B	179-2066-ND	40.54	39.34	38.52	36.49	HAD15-0.4-A
+12V @ 1A or +15V @ 0.8A†	-12V @ 1A or -15V @ 0.8A or -5V @ 0.4A†	AA	179-2062-ND	47.12	45.71	44.78	42.41	HAA15-0.8-A
+12V @ 1.7A or +15V @ 1.5A†	-12V @1.7A or -15V @ 1.5A or -5V @ 0.7A†	BB	179-2068-ND	60.29	58.49	57.61	54.27	HBB15-1.5-A
+12V @ 3.4A or +15V @ 3A†	-12V @ 3.4A or -15V @ 3A†	CC	179-2073-ND	96.51	93.61	92.01	86.85	HCC15-3-A
+12V or 15V @ 5A†	(-)12V or 15V @ 5A†	E	179-2078-ND	142.59	138.31	135.47	128.33	HDD15-5-A
+18-20V @ 0.4A or +24V @ 0.6A	(-)18-20V @ 0.4A or -24V @ 0.6A	AA	179-2063-ND	50.88	49.35	48.35	45.80	HAA24-0.6-A
+18-20V @ 0.9A or +24V @ 1.2A	(-)18-20V @ 0.9A or -24V @ 1.2A	BB	179-2069-ND	60.29	58.49	57.61	54.27	HBB24-1.2-A
+18-20V @ 1.8A or +24V @ 2.4A†	(-)18-20V @ 1.8A or -24V @ 2.4A†	CC	179-2074-ND	96.51	93.61	92.01	86.85	HCC24-2.4-A
5V @ 2A*x	9-15V @ 0.5A	AA	179-2064-ND	54.81	53.17	52.07	49.32	HAA512-A
5V @ 3A*x†	12-15V @ 1.25A†	BB	179-2070-ND	65.78	63.81	62.49	59.20	HBB512-A
5V @ 6A*x†	12-15V @ 2.5A†	CC	179-2075-ND	104.18	101.06	98.98	93.77	HCC512-A
+5V @ 2A*	+12V @ 4A	N	179-2060-ND	96.51	93.60	91.68	88.37	CP323-A

* Overvoltage protection provided. Set at 6.2V ±0.4%. † Remote sense provided. x Isolated outputs, can be referenced as + or -. § Non-adjustable 3 terminal regulator.

International Series Triple Output

Output #1	Output #2	Output #3	Case Size	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
5V @ 2A*x	+12 to 15V @ 0.4A	(-)12 to 15V @ 0.4A or -5V @ 0.4A	AA	179-2079-ND	60.29	58.49	57.28	54.27	HTAA-16W-A
5V @ 3A*†x	+12V @ 1A or +15V @ 0.8A†	(-)12 @ 1A or -15V @ 0.8A or -5V @ 0.4A†	BAA	179-2067-ND	83.34	80.84	79.18	75.01	HBAA-40W-A
+5V @ 6A*†	+12 to 15V @1.0A	(-)12 to 15V @ 1A or -5V @ 0.4A	D	179-2071-ND	98.70	95.74	93.77	88.77	HCAA-60W-A
5V @ 6A*†x	+12V @ 1.7A or +15V @ 1.5A†	-12V @ 1.7A or -15V @ 1.5A or -5V @ 0.7A†	CBB	179-2072-ND	115.15	111.70	109.37	103.64	HCBB-75W-A
5V @ 8A*†x	+12V @ 1.7A or +15V @ 1.5A†	-12V @ 1.7A or -15V @ 1.5A or -5V @ 0.7A†	131	179-2059-ND	131.62	127.67	125.04	118.46	CP131-A
5V @ 12A*†x	+12V @ 1.7A or +15V @ 1.5A†	-12V @ 1.7A or -15V @ 1.5A or -5V @ 0.7A†	DBB	179-2076-ND	148.07	143.63	140.67	133.27	HDBB-105W-A
5V @ 12A*†x	+12V @ 3.4A or +15V @ 3A†	-12V @ 3.4A or -15V @ 3A†	DCC	179-2077-ND	170.02	164.92	161.52	153.02	HDCC-150W-A

* Overvoltage protection provided. Set at 6.2V ±0.4%. † Remote sense provided. x Isolated outputs, can be referenced as + or -

Input Filter Modules - FC100 Series

Fig. 1— FC100V5A

1. +V In
2. Ground
3. –V In
4. +V Out
5. –V Out

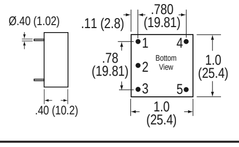


Fig. 2—FC100V10A

1. +V In
2. –V In
3. Ground
4. +V Out
5. –V Out

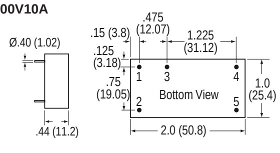
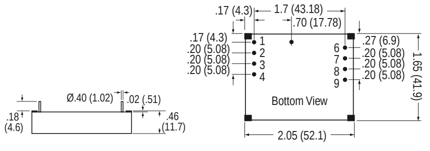


Fig. 3—FC100V20A

1. –V In
2. –V In
3. +V In
4. +V In
5. Ground
6. –V Out
7. –V Out
8. +V Out
9. +V Out



FC100 industry standard series of input filter modules provide up to 30dB of common mode and differential mode filtering at 500KHz. The FC100 series are available in 5A, 10A, and 20A versions and are optimized for operation with IPD’s converters. The filters can be operated with up to 100VDC source and have 1000VDC of insolation. **Features:** • Meet class B conducted limits • PCB mountable • CM and DM filtering • Industry standard pinout • -40°C to 100°C case operation • Input frequency 100 Hz

Fig.	Oper. Curr. (Amps)	Insertion Loss Differential Mode (dB)	Insertion Loss Common Mode (dB)	Typical Resistance (mOhms)	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
1	5 A	28	30	27	179-2178-ND	14.70	14.16	13.61	13.13	FC100V5A
2	10A	31	28	17	179-2179-ND	18.38	17.64	16.91	16.28	FC100V10A
3	20 A	26	32	6.6	179-2180-ND	31.50	29.40	27.30	25.20	FC100V20A

power-one®

DC-DC Converters

Single, Dual and Triple Output

9274B-ND Power One DC-DC Reference Guide...........**$2.05**

Fig. 1

DSP1N5S Series: • Up to 1 watt unregulated output power • Single in-line package • Four terminal operation • Efficiencies to 75% • 350KHz fixed frequency operation • 700V isolation • -25°C to +85°C operation

Output filtering is required for operation 10µf min.

1. +Input
2. –Input
3. -Out
4. +Out

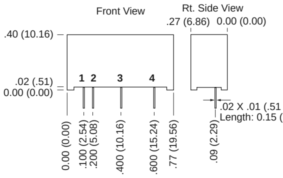


Fig. 2

DFA6UxxS Series: • Up to 6 watts of output power • Overcurrent protection • Efficiencies to 83% • Low input to output capacitance • 700V Isolation, input to output • Ultra-wide input range (3:1)

1. +Input
2. – Input
3. +Out
4. –Out

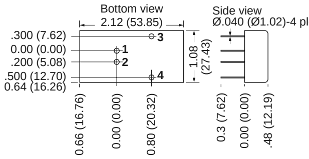


Fig. 3

DFC6U5S Series: • Ultra-wide 3.5-16 volt input range • Input filtered • 6 watts of output power • Efficiencies to 77% • 700V Isolation • Low input to output capacitance and Ultra-wide input range (4:1)

1. +Input
2. –Input
3. +Out
4. –Out

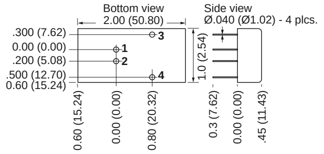


Fig. 4

DFC10E Series: • High power density, up to 11 watts per cubic inch (0.67 watts per cm^3) • Efficiencies to 83% (lower for 3.3V) • Low input to output capacitance • 700V Isolation (1544V for 48V converters) • Continuous overcurrent protection • Five-sided shielded copper case • Extended input range (2:1) **DFC10U Series:** • High power density, up to 11 watts per cubic inch • Efficiencies to 79% • Fully isolated, fully filtered design • Greater than 700V Isolation • Overcurrent protection • Five-sided shielded copper case • Ultra-wide range input (4:1)

DFC10E Series
1. +Input
2. –Input
3. +Out
4. No Pin
5. –Out

DFC10U Series
1. +Input
2. –Input
3. +Out
4. Common
5. –Out

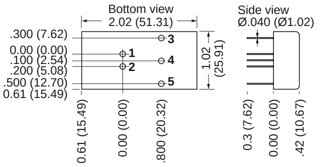


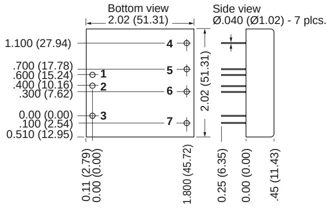
Fig. 5

DFA20ExxS Series: • Remote On/Off and Trim • Overcurrent protection and thermal shutdown • Efficiencies to 83% • 700V Isolation up to 1544V on 48V converters • Power density up to 11 watts per cubic inch • Five-sided shielded case • Extended range input (2:1)

DFA20ExxD Series: • Remote On/Off and Trim • Water washable case • Overcurrent protection and thermal shutdown • Efficiencies to 85% • Low input to output capacitance • 700V to 1544V isolation • 5-sided shielded case • Extended range input (2:1)

DGP12U5S Series: • Up to 12 watts output power • Five-sided shielded isolated copper case • Ultra-wide 3.5 to 16 volt input range • Efficiencies to 82% • Fully isolated and filtered • 700V isolation • Remote On/Off and Trim

DGP12U5D Series: • Remote On/Off and Trim • Five-sided shielded copper case • Typical efficiencies up to 78% • Fully isolated and filtered • 700V isolation • Ultra-wide range input (4:1)



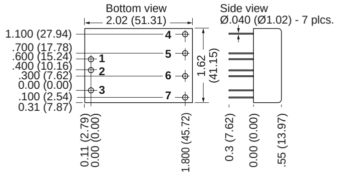
DFA20ExxS and DGP12U5S Series
1. +Input 3. On/Off 5. +Output 7. Trim
2. –Input 4. No Pin 6. –Output

DFA20ExxD and DGP12U5D Series
1. +Input 3. On/Off 5. Common 7. Trim
2. –Input 4. +Output 6. –Output

Fig. 6

DFC15U48S Series: • High power density, up to 11 watts per cubic inch (0.67 watts per cm^3) • Efficiencies to 83% (lower for 3.3V) • Low input to output capacitance • 700V Isolation (1544V for 48V converters) • Continuous overcurrent protection • 3.3 Volt output available • Five-sided shielded copper case • Extended input range (2:1)

DFC15U48D Series: • Remote On/Off and Trim • Overcurrent and overtemperature protected • Water washable case • Efficiencies to 82% • 1544V Isolation • Ultra-wide range input (>3:1)



DFC15U48S Series
1. +Input 5. +Output
2. –Input 6. –Output
3. On/Off 7. Trim
4. No Pin

DFC15U48D Series
1. +Input 5. Common
2. –Input 6. –Output
3. On/Off 7. Trim
4. +Output

Fig. 7

LES Series - 15W Single Output: Up to 1500 VDC isolation • Short circuit and over temp. protection • Six-sided shielding • Available with optional enable and voltage trim pins • Water washable • Remote shutdown • 24V and 48V inputs • Industry standard pkg. • ±10% minimum amperage output current • ±10% voltage trim range

1. +V In
2. –V In
3. No Pin
4. +V Out
5. No Pin
6. –V Out

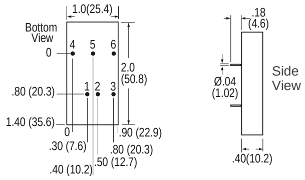


Fig. 8

IES Series - 13-20W Single Output: Ultra high efficiency • 1500V isolation • Output voltages of 5V and below and up to 20W output power • Remote shutdown • On board functions include over volt. protection (OVP) and under voltage lockout (UVLO) • 24V and 48V input • Output current 10% min. • Open frame pkg or 6-sided case • Water washable

1. +V In
2. –V In
3. No Pin
4. Shutdown
5. +V Out
6. –V Out
7. Trim
8. No Pin
9. No Pin

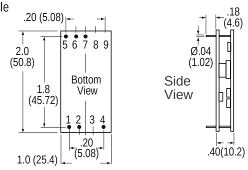


Fig. 9

HAS Series - 20-30W Single Output: • Up to 30W of output power • ±10% output volt. trim range • Remote shutdown • Advanced open frame technology • Water washable • UL 1950, CSA22.2-950, EN60950 safety (consult factory for conditions) case temp., operating range -40 to 100°C

1. –V In
2. Case
3. On/Off
4. +V In
5. –V Out
6. –Sense
7. Trim
8. + Sense
9. +V Out

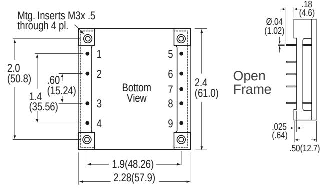


Fig. 10

HBS Series - 33W-150W Single Output: • High efficiency • Open frame design • Water washable • Remote shutdown • ±10% output voltage trim range • ±10% minimum output current • Case temperature, operating range -40°C to +100°C • UL1950, CSA 22.2-950, EN60950 safety (consult factory for conditions) • Current can be drawn from any single output to its maximum rated value, or from both to a combined total of 15A

1. –V In
2. Case
3. On/Off
4. +V In
5. –V Out
6. –Sense
7. Trim
8. +Sense
9. +V Out

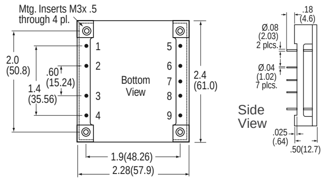
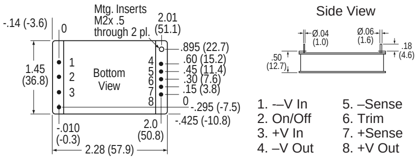


Fig.	V Out	I Out	V In Range	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
				Single Output					
1	5	0.15 A	4.5-5.5	179-1068-ND	15.75	15.23	14.70	13.65	DSP1N5S5
	7	0.14 A	4.5-5.5	179-1069-ND	15.75	15.23	14.70	13.65	DSP1N5S7
	12	0.08 A	4.5-5.5	179-1070-ND	15.75	15.23	14.70	13.65	DSP1N5S12
	14	0.07 A	4.5-5.5	179-1071-ND	15.75	15.23	14.70	13.65	DSP1N5S14
	15	0.065 A	4.5-5.5	179-1072-ND	15.75	15.23	14.70	13.65	DSP1N5S15
	17	0.06 A	4.5-5.5	179-1073-ND	15.75	15.23	14.70	13.65	DSP1N5S17
2	5	1 A	9-27	179-1005-ND	64.05	61.43	58.80	56.70	DFA6U12S5
	12	0.5 A	9-27	179-1006-ND	64.05	61.43	58.80	56.70	DFA6U12S12
	15	0.4 A	9-27	179-1007-ND	64.05	61.43	58.80	56.70	DFA6U12S15
	5	1 A	20-60	179-1008-ND	64.05	61.43	58.80	56.70	DFA6U48S5
	12	0.5 A	20-60	179-1009-ND	64.05	61.43	58.80	56.70	DFA6U48S12
3	5	1.2 A	3.5-16	179-1001-ND	64.05	61.43	58.80	56.70	DFC6U5S5
	5.2	1.2 A	3.5-16	179-1002-ND	64.05	61.43	58.80	56.70	DFC6U5S5.2
	12	0.5 A	3.5-16	179-1003-ND	64.05	61.43	58.80	56.70	DFC6U5S12
	15	0.4 A	3.5-16	179-1004-ND	64.05	61.43	58.80	56.70	DFC6U5S15
4	5	2 A	9-18	179-1011-ND	71.40	69.83	68.25	66.68	DFC10E12S5
	12	0.9 A	9-18	179-1014-ND	71.40	69.83	68.25	66.68	DFC10E12S12
	15	0.7 A	9-18	179-1015-ND	71.40	69.83	68.25	66.68	DFC10E12S15
	5	2 A	18-36	179-1012-ND	71.40	69.83	68.25	66.68	DFC10E24S5
	12	0.9 A	18-36	179-1016-ND	71.40	69.83	68.25	66.68	DFC10E24S12
	15	0.7 A	18-36	179-1017-ND	71.40	69.83	68.25	66.68	DFC10E24S15
	5	2 A	36-72	179-1013-ND	71.40	69.83	68.25	66.68	DFC10E48S5
5	5	4 A	9-18	179-1033-ND	105.53	101.33	96.08	90.83	DFA20E12S5
	12	1.7 A	9-18	179-1034-ND	105.53	101.33	96.08	90.83	DFA20E12S12
	15	1.4 A	9-18	179-1035-ND	105.53	101.33	96.08	90.83	DFA20E12S15
	5	4 A	18-36	179-1037-ND	105.53	101.33	96.08	90.83	DFA20E24S5
	15	1.4 A	18-36	179-1039-ND	105.53	101.33	96.08	90.83	DFA20E24S15
	5	2 A	3-16	179-1053-ND	85.58	81.90	78.75	75.60	DGP12U5S5
	12	1 A	3-16	179-1054-ND	85.58	81.90	78.75	75.60	DGP12U5S12
6	5	3 A	20-60	179-1027-ND	97.65	93.45	89.78	86.10	DFC15U48S5
7	2.5	3 A	18-36	179-2120-ND	63.00	59.85	56.70	53.55	LES008YD
	3.3	3 A	18-36	179-2122-ND	63.00	59.85	56.70	53.55	LES010YE
	5	3 A	18-36	179-2124-ND	63.00	59.85	56.70	53.55	LES015YG
	12	1.25 A	18-36	179-2126-ND	63.00	59.85	56.70	53.55	LES015YH
	15	1 A	18-36	179-2128-ND	63.00	59.85	56.70	53.55	LES015YJ
	5	3 A	36-75	179-2130-ND	63.00	59.85	56.70	53.55	LES015ZG-3
	5	3 A	36-75	179-2131-ND	63.00	59.85	56.70	53.55	LES015ZG-3N
	12	1.25 A	36-75	179-2132-ND	63.00	59.85	56.70	53.55	LES015ZH-3
8	5	4 A	18-36	179-2134-ND	63.00	59.85	56.70	53.55	IES020YG-A
	3.3	4 A	36-72	179-2135-ND	63.00	59.85	56.70	53.55	IES013ZE-A
	5	4 A	36-72	179-2136-ND	63.00	59.85	56.70	53.55	IES020ZG-A
9	5	6 A	18-36	179-2137-ND	75.60	73.50	71.40	68.25	HAS030YG-AN
	12	2.5 A	18-36	179-2138-ND	75.60	73.50	71.40	68.25	HAS030YH-AN
	5	10 A	18-36	179-2139-ND	91.35	88.73	86.11	80.85	HAS050YG-AN
	12	4.2	18-36	179-2140-ND	91.35	88.73	86.11	80.85	HAS050YH-AN
10	15	3.3 A	18-36	179-2141-ND	107.10	103.95	100.80	98.70	HBS050YJ-AN
	3.3	15 A	34-75	179-2143-ND	107.10	103.95	100.80	98.70	HBS050ZE-ANT
	5	10 A	34-75	179-2144-ND	107.10	103.95	100.80	98.70	HBS050ZG-ANT
	5	15 A	18-36	179-2145-ND	117.60	114.45	111.30	109.73	HBS075YG-AN
	12	6.25 A	18-36	179-2146-ND	117.60	114.45	111.30	109.73	HBS075YH-AN
	5	15 A	34-75	179-2149-ND	117.60	114.45	111.30	109.73	HBS075ZG-ANT
	5	20 A	18-36	179-2150-ND	121.80	119.70	117.61	115.51	HBS100YG-ANT
	12	8.30 A	18-36	179-2151-ND	121.80	119.70	117.61	115.51	HBS100YH-AN
	3.3	30 A	34-75	179-2153-ND	121.80	119.70	117.61	115.51	HBS100ZE-ANT
	5	20 A	34-75	179-2154-ND	121.80	119.70	117.61	115.51	HBS100ZG-ANT
	12	8.30 A	34-75	179-2155-ND	121.80	119.70	117.61	115.51	HBS100ZH-ANT
	5	30 A	18-36	179-2156-ND	145.95	143.33	140.70	136.50	HBS150YG-AN
	12	12.50 A	18-36	179-2157-ND	145.95	143.33	140.70	136.50	HBS150YH-AN

(Continued)

Fig. 11

QES Series - 66W Single Output: • Industry standard, quarter-brick package • Optional trim and enable • Case temp. operating range -40 to +100°C • Wide range input voltage • Open-frame packaging with planar magnetics and high efficiency topology • Units are water-washable and compatible with commercial spray or immersion • 1500V isolation



1. –V In
2. On/Off
3. +V In
4. –V Out
5. –Sense
6. Trim
7. +Sense
8. +V Out

Fig. 12

QBS Series - 120W Single Output: • Quarter-brick footprint • High power density up to 120W • Open-frame packaging • 100°C baseplate operation • Outputs from 2.5V to 15V • 1500V isolation • Water washable • Positive or negative enable logic • Voltage trim range ±10 • Switching frequency at 400kHz • UL, CUL, TUV safety

1. –V In
2. On/Off
3. +V In
4. –V Out
5. –Sense
6. Trim
7. +Sense
8. +V Out

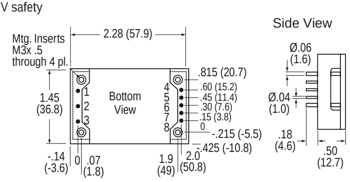


Fig. 13

SIP302/305 Series - 15W-20W Single Output: • Non-isolated step-up • High efficiency • Excellent transient response • Perfect tool to augment 3.3V circuit boards with 5V • Open-frame construction • Vertical mounting • Water washable

SIP302	SIP305
1. +V Out	1. +V Out
2. +V Out	2. +V Out
3. No Pin	3. +V Out
4. + V Out	4. –V Out
5. Ground	5. –V Out
6. Ground	6. –V In
7. +V In	7. –V In
8. +V In	8. +V In
9. No Pin	9. +V In
10. Trim	10. +V In
11. Remote	11. +V In

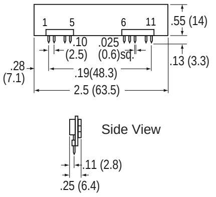
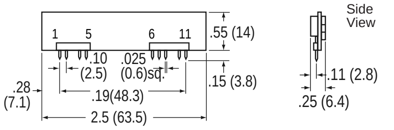


Fig. 14

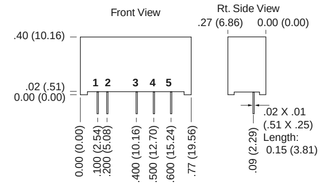
SIP/SIE 500 Series - Single Output: • Non-isolated • High efficiency topology • Excellent transient response • Voltage range input 5 VDC nominal • Sense and power OK • Surface mount construction • Voltage trim • Water washable • Vertical mounting • Negative logic remote shutdown



1. +V Out
2. +V Out
3. Sense
4. +V Out
5. Ground
6. Ground
7. +V In
8. +V In
9. Power OK
10. Trim
11. Enable

Fig. 15

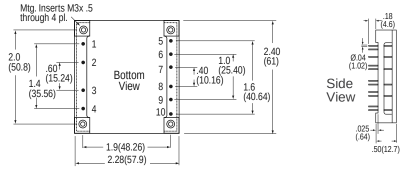
DSP1N5D Series: • Up to 1 watt unregulated output power • Single in-line package • Four terminal operation • Efficiencies to 70% • Output voltages: 5V, 7V, 12V, 14V, 15V, 17V • 500V isolation • -25°C to +85°C operation



1. +Input
2. –Input
3. –Out
4. Common
5. +Out

Fig. 16

HBD Series - 40-60W Dual Output: • High efficiency • High density • Independent +5 and +3.3 outputs • Remote shutdown • 10% min. output current • Case temp., operating range -40°C to +100°C • UL1950, CSA22.2-950, EN60950 safety (consult factory for conditions) • Water washable • Open frame technology



1. –V In
2. Case
3. On/Off
4. +V In
5. –V Out 2 (3.3V)
6. –V Out 2 (3.3V)
7. Trim 2
8. +V Out 1 (5V)
9. –V Out 1 (-5V)
10. Trim 1

Fig. 17

TQD Series - 100W Dual Output: • Independent dual outputs • Flexible load sharing • Open frame design • Independent trims for each output • 1500VDC isolation • Baseplate operation 100°C • Input reverse voltage protection, shunt diode • Positive logic remote shutdown • Switching freq. is 250KHz • UL, CSA, EN60950 safety

1. –V In
2. Enable
3. Case
4. +V In
5. +V Out 1
6. +Sense 1
7. Trim 1
8. –Sense 1
9. –V Out 1
10. –V Out 2
11. –Sense 2
12. Trim 2
13. +Sense 2
14. +V Out 2

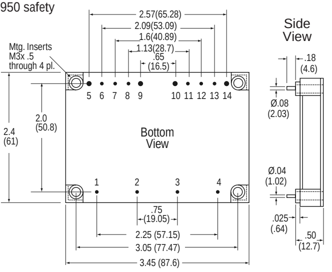
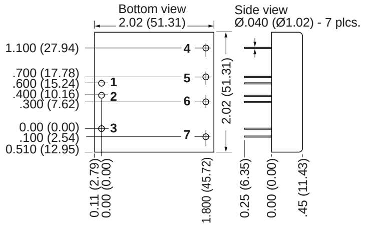


Fig. 18

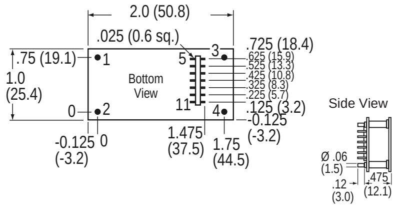
DGP20ExxT Series - Triple Outputs • Five-sided shielded case • Remote On/Off • Efficiencies to 84% • -40°C to +85°C operation • 700V isolation • Extended range input (2:1)



1. +Input
2. –Input
3. On/Off
4. +12/15V Out
5. +5V Output
6. Common
7. –12/15V Out

Fig. 19

UPM-EA Series - 45W Programmable, Non-Isolated: This DC/DC converter is a high efficiency, step-down converter • Excellent transient response • Power good signal • Surface-mount construction • Short circuit protection • Low profile • Water washable • Open-frame design



1. –V In
2. +V In
3. –V Out
4. +V Out
5. P4
6. P3
7. P2
8. P1
9. P0
10. Ground
11. Power Ground

Fig.	V Out	I Out	V In Range	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
11	3.3	15 A	18-36	179-2162-ND	135.45	128.10	118.65	111.31	QES050YE-A
	3.3	15 A	36-75	179-2163-ND	135.45	128.10	118.65	111.31	QES050ZE-A
	3.3	15 A	36-75	179-2164-ND	135.45	128.10	118.65	111.31	QES050ZE-ANT
	3.3	20 A	36-75	179-2165-ND	154.35	131.25	119.71	111.30	QES066ZE-A
	3.3	20 A	36-75	179-2166-ND	154.35	131.25	119.71	111.30	QES066ZE-ANT
12	2.5	15 A	18-36	179-2167-ND	117.60	112.35	105.00	94.50	QBS038YD-A
	2.5	15 A	36-75	179-2168-ND	117.60	112.35	105.00	94.50	QBS038ZD-ANT
	3.3	15 A	18-36	179-2169-ND	119.70	114.45	107.10	96.61	QBS050YE-A
	3.3	15 A	36-75	179-2170-ND	119.70	114.45	107.10	96.61	QBS050ZE-ANT
	5	15 A	18-36	179-2171-ND	129.67	123.90	116.55	108.16	QBS075YG-A
	12	8.33 A	18-36	179-2172-ND	133.35	124.95	115.51	106.06	QBS100YH-A
	5	20 A	36-75	179-2173-ND	133.35	124.95	115.51	106.06	QBS100ZG-ANT
13	2.5	6.2 A	3.0-3.6	179-2181-ND	47.77	45.68	43.58	40.43	SIP302.5LT
14	2.1	6	4.5-5.5	179-2182-ND	47.78	45.68	43.58	40.43	SIP502.1LT
14	2.5	6	4.5-5.5	179-2183-ND	47.78	45.68	43.58	40.43	SIP502.5LT
14	3.3	6	4.5-5.5	179-2184-ND	47.78	45.68	43.58	40.43	SIP503.3LT
13	5	4 A	3.0-4.0	179-2185-ND	46.20	44.10	42.00	38.85	SIP305
				Double Output					
4	±5	±0.85 A	9-36	179-1021-ND	71.40	69.83	68.25	66.68	DFC10U24D5
	±12	±0.4 A	9-36	179-1022-ND	71.40	69.83	68.25	66.68	DFC10U24D12
	±15	±0.32 A	9-36	179-1023-ND	71.40	69.83	68.25	66.68	DFC10U24D15
	±5	±0.8 A	18-72	179-1024-ND	71.40	69.83	68.25	66.68	DFC10U48D5
	±12	±0.415 A	18-72	179-1025-ND	71.40	69.83	68.25	66.68	DFC10U48D12
	±15	±0.33 A	18-72	179-1026-ND	71.40	69.83	68.25	66.68	DFC10U48D15
5	±5	±1.7 A	9-18	179-1044-ND	105.53	101.33	96.08	90.83	DFA20E12D5
	±12	±0.85 A	9-18	179-1045-ND	105.53	101.33	96.08	90.83	DFA20E12D12
	±15	±0.7 A	9-18	179-1046-ND	105.53	101.33	96.08	90.83	DFA20E12D15
	±5	±1.7 A	18-36	179-1047-ND	105.53	101.33	96.08	90.83	DFA20E24D5
	±12	±0.85 A	18-36	179-1048-ND	105.53	101.33	96.08	90.83	DFA20E24D12
	±15	±0.7 A	18-36	179-1049-ND	105.53	101.33	96.08	90.83	DFA20E24D15
	±5	±1.0 A	3.5-16	179-1056-ND	85.58	81.90	78.75	75.60	DGP12U5D5
	±12	±0.5 A	3.5-16	179-1057-ND	85.58	81.90	78.75	75.60	DGP12U5D12
	±15	±0.4 A	3.5-16	179-1058-ND	85.58	81.90	78.75	75.60	DGP12U5D15
6	±15	±0.5 A	20-72	179-1031-ND	97.65	93.45	89.78	86.10	DFC15U48D15
15	±5	±0.075 A	4.5-5.5	179-1074-ND	15.75	15.23	14.70	13.65	DSP1N5D5
	±7	±0.07 A	4.5-5.5	179-1075-ND	15.75	15.23	14.70	13.65	DSP1N5D7
	±12	±0.04 A	4.5-5.5	179-1076-ND	15.75	15.23	14.70	13.65	DSP1N5D12
	±14	±0.035 A	4.5-5.5	179-1077-ND	15.75	15.23	14.70	13.65	DSP1N5D14
	±15	±0.033 A	4.5-5.5	179-1078-ND	15.75	15.23	14.70	13.65	DSP1N5D15
	±17	±0.030 A	4.5-5.5	179-1079-ND	15.75	15.23	14.70	13.65	DSP1N5D17
16	+5.0/+3.3	8/12 A	18-36	179-2158-ND	137.55	119.70	108.15	101.85	HBD040YGE-A
	+5.0/+3.3	8/12 A	34-75	179-2159-ND	137.55	119.70	108.15	101.85	HBD040ZGE-A
	+5.0/+3.3	12/15 A	18-36	179-2160-ND	142.80	126.00	116.55	109.21	HBD060YGE-A
	+5.0/+3.3	12/15 A	34-75	179-2161-ND	142.80	126.00	116.55	109.21	HBD060ZGE-A
17	+3.3/+2.5	25/25 A	36-72	179-2174-ND	155.40	141.75	131.26	126.00	TQD085ZED-A
	+3.3/+2.5	25/25 A	36-72	179-2175-ND	155.40	141.75	131.26	126.00	TQD085ZED-AN
	+5.0/+3.3	20/25 A	36-72	179-2176-ND	161.70	158.55	151.20	143.85	TQD100ZGE-A
	+5.0/+3.3	20/25 A	36-72	179-2177-ND	161.70	158.55	151.20	143.85	TQD100ZGE-AN
				Triple Output					
18	5 ±12	2.5 A ±0.310 A	9-18	179-1059-ND*	107.10	102.90	98.70	93.45	DGP20E12T5/12
	5 ±15	2.5 A ±0.250 A	9-18	179-1060-ND†	107.10	102.90	98.70	93.45	DGP20E12T5/15
	5 ±12	2.5 A ±0.310 A	18-36	179-1061-ND‡	107.10	102.90	98.70	93.45	DGP20E24T5/12
	5 ±15	2.5 A ±0.250 A	18-36	179-1062-ND*	107.10	102.90	98.70	93.45	DGP20E24T5/15

*600 mA, † 75 mA, ‡60 mA = Minimum Current Load
Note: "N" in suffix of part number denotes Negative Logic;
"3" in suffix of part number denotes Trim and Enable

Programmable DC-DC Converter

This programmable DC/DC converter is a high efficiency, step-down converter. It incorporates a 5-bit DAC output voltage control which is compliant with standard VRM VID protocol. It provides up to 45 watts of output at 13A output current, and at output voltages from 1.30 to 3.50V.

Fig.	V Out	I Out	V In Range	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
19	1.3-3.5	13A	3.0-3.6	179-2186-ND	81.90	78.75	75.60	70.35	UPM-EA

M

POWER-ONE® Switching Power Supplies

GENERAL FEATURES: Power-One's proprietary Universal Terminal Block Connectors and Mounting System assure product integration. Safety agency approved: UL recognized, CSA certified, and TUV Essen certified. • Power Fail Warning Signal. 100% test, inspection and burn-in. • Overload Protection • Overvoltage Protection • Overtemperature Protection **AC Input:** Automatic selecting: 90-264 VAC, 47-63 Hz single phase. **Temperature Rating:** 0°C to +50°C • Two Year Warranty

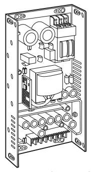
MPU150 - 150 Watts with PFC

The MPU150 is the first product in this power range incorporating PFC in a low profile package that meets 1U height constraints. All models feature remote sense on V1 and V2 to provide independent compensation of power cable losses.

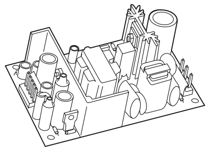
Power-Ones' unique dual-converter architecture combines high reliability, achieved through reduced component stresses, with exceptional regulation. Other standard features include CE Marking, current sharing on V1 and V2, thermal shutdown, and remote inhibit. Additionally,only 300 Linear Feet per Minute (LFM) airflow is required. **FEATURES:** • Active power factor correction meets EN61000-3-2 • Low profile height fits 1U height constraints • Dual main outputs provide 3.3V and 5V for mixed logic applications • CE Marked to the LVD • Autoranging AC input, 85-264VAC • Isolated V3 and V4 can be used as plus or minus outputs

MPB80 - 80 Watts with PFC

FEATURES: • 65 Watts convection cooled, 80 Watts with 300 LFM forced air • Power factor correction meets EN61000-3-2 • High 3.3V and 5V current capabilities available • CE Marked to the LVD • Autoranging AC input, 85-264VAC • Overvoltage protection on the main output • Isolated V3 can be used as a plus or minus output.



U-Channel



Board Only

9222B-ND Power One Reference Guide . . . **$4.15**

MAP SERIES *Single Output*

Nominal Output Voltage	Power (Watts) Continuous	Peak	Current Maximum	Peak	Initial Setting Tolerance	Line Reg.	Load Reg.	Output Adj. Range	Configuration	Digi-Key Part No.	Price Each 1	10	25	Power-One Part No.
5V	40	—	8A/11A	—	—	.2%	1%	4.75V-5.5V	6.00” x 3.27” x 1.60” (152.40mm x 83.06mm x 40.64mm) *	179-2020-ND	107.37	92.96	83.81	MAP40-1005
5V	40	—	8A/11A	—	4.9 to 5.1V	.2%	1%	4.7V-5.8V	5.00” x 3.00” x 1.25” (127.00mm x 76.20mm x 31.75mm) ‡	179-2001-ND	64.89	59.49	54.08	MAP42-1005
12V-15V	40	—	3.4A/2.2 A	4.6A/3.0A	11.9 to 12.1V	.2%	1%	11V-18V	5.00” x 3.00” x 1.25” (127.00mm x 76.20mm x 31.75mm) ‡	179-2002-ND	64.89	59.49	54.08	MAP42-1012
24V-28V	40	—	1.4A/1.7A	2.3A/1.9A	23.8 to 24.2V	.2%	1%	23V-29V	5.00” x 3.00” x 1.25” (127.00mm x 76.20mm x 31.75mm) ‡	179-2003-ND	64.89	59.49	54.08	MAP42-1024
12V-15V†	55	65	5.0A/4.0A	5.8A/4.7A	12.0 to 12.2V	.2%	1%	11.4V-15.75V	6.00” x 3.27” x 1.60” (152.40mm x 83.06mm x 40.64mm) *	179-2081-ND	107.37	92.96	83.81	MAP55-1012
24V-28V†	55	65	2.5A/2.2A	2.9A/2.5A	23.8 to 24.2V	.2%	1%	23.5V-28.5V	6.00” x 3.27” x 1.60” (152.40mm x 83.06mm x 40.64mm) *	179-2082-ND	107.37	92.96	83.81	MAP55-1024
5.1V	110††	110	16A	22A	5.09 to 5.11V	.2%	1%	4.95V-5.50V	7.00” x 4.25” x 1.80” (177.80mm x 107.95mm x 45.72mm) ‡	179-2006-ND	162.23	151.41	140.60	MAP110-1005
12V-15V†	130	165	12A/10A	13.8A/11A	12 to 12.2V	.2%	1%	11.4V-15.75V	8.50” x 4.50” x 2.00” (215.90mm x 114.30mm x 50.80mm) *	179-2080-ND	234.38	208.58	187.99	MAP130-1012
12V-15V†	140††	—	9.2A 7.3A	12.5A 10A	11.97 to 12.03V	.1%	.5%	11.0V-16.0V	7.00” x 4.25” x 1.80” (177.80mm x 107.95mm x 45.72mm)‡	179-2009-ND	194.67	183.86	173.05	MAP140-1012
24V-28V†	140††	—	4.6A 4A	6.3A 5.4A	23.95 to 24.5V	.1%	.5%	22.8V-29.2V	7.00” x 4.25” x 1.80” (177.80mm x 107.95mm x 45.72mm) ‡	179-2010-ND	194.67	183.86	173.05	MAP140-1024
48V	140††	—	2.3A	3.1A	47.9 to 48.1V	.1%	.5%	45.6V-54V	7.00” x 4.25” x 1.80” (177.80mm x 107.95mm x 45.72mm) ‡	179-2011-ND	194.67	183.86	173.05	MAP140-1048

* U-Channel Configuration † Models with adjustable outputs have current ratings expressed as current at lowest nominal voltage followed by current at highest nominal voltage.
†† 200LFM force-air cooling ‡ Board Only Configuration.

Triple Output

Nom. Output Voltage	Power (Watts) Continuous	Peak	Current	Initial Setting Tolerance	Line Reg.	Load Reg.	Configuration	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
+5V +24V -12V	40	50	3A 1A .3A	4.9 to 5.1V 23.0 to 25V -11.5 to -12.5V	.2% 1% 1%	2% 3.5% 2%	*Board Only* 5.00” x 3.00” x 1.25” (127.00mm x 76.20mm x 31.75mm)	179-2004-ND	77.80	70.41	63.73	57.70	MAP40-3101
+5V +12V -5V	40	50	3A 2A .5A	4.9 to 5.1V 11.5 to 12.5V -4.75 to 5.25V	.2% 1% 1%	2% 3.5% 2%	*Board Only* 5.00” x 3.00” x 1.25” (127.00mm x 76.20mm x 31.75mm)	179-2005-ND	77.80	70.41	63.73	57.70	MAP40-3105
+5V +12V -12V	40	50	3A 2A .3A	4.9 to 5.1V 11.5 to 12.5V -11.5 to -12.6V†	.2% 1% 1%	2% 3.5% 2%	*Board Only* 5.00” x 3.00” x 1.25” (127.00mm x 76.20mm x 31.75mm)	179-2095-ND*	64.84	58.68	53.10	48.07	MAP40-3000
+5V +12V -12V	80	140	20A 4A 1A	5.09 to 5.11V 11.97 to 12.03AV -11.4 to -12.6V	.2% .1% .1%	1% 2% 2%	*Board Only* 7.00” x 4.25” x 1.80” (177.80mm x 107.95mm x 45.72mm)	179-2012-ND	210.89	200.08	186.02	170.88	MAP140-3000P

* Requires Connectors WM 2123-ND, WM2126-ND, & WM2300-ND which are sold separately. † MAP40-3000 V3 regulation requires a minimum load of 0.5A on V1 or 0.3A on V2.

Quad Output

Nom. Output Voltage	Power(Watts) Continuous	Peak	Current	Initial Setting Tolerance	Line Reg.	Load Reg.	Configuration	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
+5V +12V -5V -12V	55	65	6A 3A .5A* .5A*	5.0 to 5.2V 11.6 to 12.4V -4.8 to -5.2V -11.6 to -12.4V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00” x 3.27” x 1.60” (152.40mm x 83.06mm x 40.64mm)	179-2096-ND	118.66	102.79	92.68	90.14	MAP55-4000
+5V +24V +12V -12V	55	65	6A 1.5A .5A* .5A*	5.0 to 5.2V 23.0 to 24.9V 11.6 to 12.4V -11.6 to -12.4V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00” x 3.27” x 1.60” (152.40mm x 83.06mm x 40.64mm)	179-2097-ND	118.66	102.79	92.68	90.14	MAP55-4001
+5V +12V +12V -12V	55	65	6A 3A .5A* .5A*	5.0 to 5.2V 11.6 to 12.4V 11.6 to 12.4V -11.6 to -12.4V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00” x 3.27” x 1.60” (152.40mm x 83.06mm x 40.64mm)	179-2098-ND	118.66	102.79	92.68	90.14	MAP55-4002
+5V +15 -5V -15V	55	65	6A 2.5A .5A* .5A*	5.0 to 5.2V 14.6 to 15.4V -4.8 to -5.2V -14.4 to -15.6V	.2% .2% .5% .5%	2% 2% 2% 2%	*U-Channel* 6.00” x 3.27” x 1.60” (152.40mm x 83.06mm x 40.64mm)	179-2099-ND	123.48	109.18	96.41	93.52	MAP55-4003
+5V +12V -12V -5V	80	90	14A 4A 1A 1A	5.1 to 5.2V 11.9 to 12.1V -11.5 to -12.5V -4.8 to -5.4V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20” x 4.20” x 1.80” (182.88mm x 106.68mm x 45.72mm)	179-2100-ND	186.76	176.10	160.09	154.75	MAP80-4000
+5V +24V +12V -12V	80	90	14A 2A 1A 1A	5.1 to 5.2V 24.0 to 24.1V 11.5 to 12.5V -11.5 to -12.5V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20” x 4.20” x 1.80” (182.88mm x 106.68mm x 45.72mm)	179-2101-ND	186.76	176.10	160.09	154.75	MAP80-4001
+5V +12V +12V -12V	80	90	14A 4A 1A 1A	5.1 to 5.2V 12.0 to 12.1V 11.6 to 12.4V -11.6 to -12.4V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20” x 4.20” x 1.80” (182.88mm x 106.68mm x 45.72mm)	179-2102-ND	186.76	176.10	160.09	154.75	MAP80-4002
+5V +15V -5V -15V	80	90	14A 3.5A 1A 1A	5.1 to 5.2V 14.6 to 15.1V -4.8 to -5.4V -14.4 to -15.5V	.2% .2% .5% .5%	1% 1% 2% 2%	*U-Channel* 7.20” x 4.20” x 1.80” (182.88mm x 106.68mm x 45.72mm)	179-2103-ND	190.76	186.77	170.76	160.09	MAP80-4003
+5V +12V -12V +24V	80	110	12A 5A 1A 1A	5.09 to 5.11V 11.97 to 12.03V -11.4 to -12.6V 23.2 to 24.8V	.2% .1% .1% .1%	.5% 1% 1% 1%	*Board Only* 7.00” x 4.25” x 1.80” (177.80mm x 107.95mm x 45.72mm)	179-2007-ND	162.23	151.41	140.60	130.87	MAP110-4011
+3.3V +5V -12V +12V	80	110	12A 5A 1A 1A	3.29 to 3.31V 4.98 to 5.02V -11.4 to -12.6V 11.4 to 12.6V	.3% .2% .1% .1%	.7% 1% 1% 1%	*Board Only* 7.00” x 4.25” x 1.80” (177.80mm x 107.95mm x 45.72mm)	179-2008-ND	167.63	156.82	146.01	135.19	MAP110-4300
+5V +12V -12V -5V	130	165	20A 5A 1A 1A	5.1 to 5.2V 11.75 to 12V -11.6 to -12.4V -48 to -5.2V	.2% .5% .5% .5%	1% 2% 2% 2%	*U-Channel* 8.50” x 4.50” x 2.00” (215.90mm x 114.30mm x 50.80mm)	179-2093-ND	234.37	208.58	187.99	182.83	MAP130-4000
+5V +24V -12V +12V	130	165	20A 3.5A 1A 1A	5.1 to 5.2V 23.9 to 24.1V -11.6 to -12.4V 11.6 to 12.4V	.2% .5% .5% .5%	1% 2% 2% 2%	*U-Channel* 8.50” x 4.50” x 2.00” (215.90mm x 114.30mm x 50.80mm)	179-2019-ND	234.37	208.58	187.99	182.83	MAP130-4001
+5V +12V +12V -12V	130	165	20A 5A 1A 1A	5.1 to 5.2V 11.9 to 12.1V 11.6 to 12.4V -11.6 to -12.4V	.2% .5% .5% .5%	1% 2% 2% 2%	*U-Channel* 8.50” x 4.50” x 2.00” (215.90mm x 114.30mm x 50.80mm)	179-2094-ND	234.37	208.58	187.99	182.83	MAP130-4002
Cover for MAP55 and MAP40-1005 Series								179-2021-ND	10.50	—	—	—	412-59584
Cover for MAP80 Series								179-2022-ND	12.70	—	—	—	412-59585
Cover for MAP130 Series								179-2023-ND	10.50	—	—	—	412-59586

* Max load on V3 or V4 can be 1 amp if either V3 or V4 is unloaded.

(Continued)

POWER-ONE® Switching Power Supplies *(Cont.)*

MPB 80 Series

Configuration: 179-2013-ND: Board Only 5.00" x 3.00" x 1.30" (127.00mm x 76.20mm x 33.02mm)
179-2014-ND and 179-2015-ND: Board Only 5.00" x 3.00" x 1.40" (127.00mm x 76.20mm x 35.56mm)

Nom. Output Voltage	Current	Adjustable Range	Line Regulator	Load Regulator	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
*80 - Power (Watts)**										
+5V +12V	11A .5A	4.9 to 5.1V 11.5 to 12.5V	.8% .5%	-4% to +2% ±5%	179-2013-ND	103.64	92.61	86.00	77.18	MPB80-2000
+5V +12V 12V	7A 2.5A 0.3A	4.9 to 5.1V 11.5 to 12.5 -11.5 to -12.5	.5% 1.5% .5%	-4% to +6% -7% to +13% ±4%	179-2014-ND	103.64	92.61	86.00	77.18	MPB80-3000
+3.3V +5V 12V	7A 3A 0.4A	3.27 to 3.33V 4.95 to 5.05V 10.2 to 14.0V	.7% .5% 1.5%	±2% ±2% -15% to +17%	179-2015-ND	110.25	101.43	93.72	83.79	MPB80-3300

***** 80 Watt with 300LFM force-air cooling.

MPU 150 Series

Configuration: 179-2016-ND, 179-2017-ND and 179-2018-ND: U-Channel 7.40" x 4.20" 1.50" (187.96mm x 106.68mm x 38.10mm)

Nom. Output Voltage	Current	Adjustable Range	Line Regulator	Load Regulator	Digi-Key Part No.	Price Each 1	10	25	50	Power-One Part No.
*150 - Power (Watts)**										
+3.3V +5V +12V	35A 20A 2A	3.15 to 3.8V 5.0 to 5.5V 10.8 to 13.2V	.6% .4% .4%	1.5% 3% 3%	179-2016-ND	253.58	231.53	220.51	203.97	MPU150-3300
+5.1V +12V 5V 12V	30A 8A 3A 2A	5.0 to 5.5V 10.8 to 13.2V 5.0 to 5.5V 10.8 to 13.2V	.4% .4% .4% .4%	1% 1% 1% 1%	179-2017-ND	275.63	253.58	237.04	214.99	MPU150-4000
+5.1V +3.3V 12V 12V	30A 15A 3A† 3A†	5.0 to 5.5V 3.15 to 3.6V 10.8 to 13.2V 10.8 to 13.2V	.4% .6% .4% .4%	1% 1.5% 7% 7%	179-2018-ND	275.63	253.58	237.04	214.99	MPU150-4530

***** 150 Watt with 300LFM force-air cooling. † Total not to exceed 5A.

Panasonic

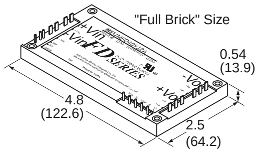
DC-DC Power Modules

FD-Series

The FD Series are DC-DC converters especially designed for Telecommunication equipment (i.e., Base Station RF Power Amplifier, Private Branch Exchange (PBX). FD Series involves newly developed "Partial Resonant Zero Voltage Switching Converter", "High Thermal Conductive Composite Board" and "Low Profile Inductors" to achieve high density, high efficiency and low EMI noise

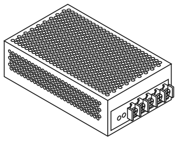
Applications:
- RF Power Amplifier for Base Station
- Private Branch Exchange (PBX)

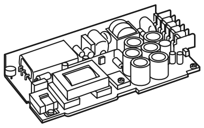
Features:
- Parallel operation with forced load sharing
- Remote ON/OFF (primary side referenced)
- Adjustable output voltage
- Power Good Signal (POK)
- Thermal protection
- Over voltage and over current protection
- Case ground (Base Plate) pin
- Remote sense
- UL Recognized, CSA Certified, and EN60950
- CE mark meets 73/73/EEC and 93/68/EEC directives
- Mounting Inserts: M3 X 0.5



VDC Input Min.	Typ.	Max.	V Out	I Out	V in Range	Output Noise (mV)	Load Reg. (%)	Line Reg. (%)	% Typ. Efficiency	Temperature Range	Digi-Key Part No.	Price Each	Panasonic Part No.
Output Power – 400 Watts													
19	24	36	28	16A	19-36	100	±0.7	±0.5	87.0	-40°C to +85°C @ 448W -40°C to +100°C @ 384W	P11405-ND	660.74	EUMFD40V28A
Output Power – 500 Watts													
36	48	72	12	40A	36-72	80	±0.5	±0.5	85.5	-40°C to +85°C @ 528W -40°C to +100°C @ 500W	P11406-ND	660.74	EUMFD40Y12A
36	48	72	28	16A	36-72	100	±0.75	±0.5	89.5	-40°C to +85°C @ 504W 40°C to +100°C @ 448W	P11407-ND	660.74	EUMFD40Y28A

TOKO Power Supplies SW Series





FEATURES:
- Very low profile and small size
- Wide Variation: 7 type 94 part number
- Worldwide Input Voltage: all type 85VAC ~ 264VAC (cont.)
- High Dialectic Strength: 2000VAC between input and output
- Safety Standards: Designed to meet UL1950(D3).

GENERAL SPECIFICATIONS:
- **Frequency Range:** 47-63 Hz
- **Inrush Current:** 5V~15V = 30/60A; 30V~100V = 45/90A
- **Ripple Voltage (max.):** 5V-12V: 120mVpp; 15V: 150mVpp; 24V: 200mVpp; 48V: 400mVpp:
- **Overall Output Req.:** 3%
- **Overload Protection:** +105% of rated current, automatic recovery
- **Dielectric Strength:** 2.0KVAC for 1 minute applied between input/output
- **Insulation Resistance:** 100mΩ between output/frame and input/output, measured with a 500 VDC tester
- **Operating Temp.:** 0°C to +60°C
- **Operating Humidity:** 30% to 85% RH
- **Weight:** SW30: 250g; SW50: 400g; SW100: 600g

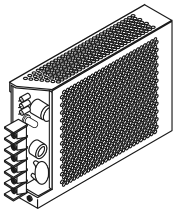
Input Volt. (Vac)	Output Volt.(s)	Output Current	Dim. (mm) H x D x W	Digi-Key Part No.	Price Each 1	50	Toko Part No.
Output Power — 30 Watts — Open Frame							
85-264	24V	1.33A	97x114x25.4	TS9996-ND	67.65	65.06	SW30-24F
Output Power — 100 Watts — Enclosed Frame							
85-264	5V	20.0A	97 x 194 x 35	TS9864-ND	158.18	—	SW100-05C

OMRON® Switching Power Supplies

Enclosed Case—Single and Multiple Output

S8E Economical Enclosed Switching Supply

Compact and economical power supplies with vented cover for industrial applications. Screw terminal connections for ease of connecting to supply.



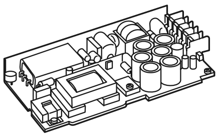
SPECIFICATIONS:

- Input Voltage: 85 to 132V
- Overvoltage Protection: Yes (5-V output models only)
- Efficiency: 73% to 83%
- Ambient Humidity: Operating: 25% to 85%
- Leakage Current (with rated I/O): 0.5mA max.
- Operating Temperature: 0°C to 40°C; Open-framed 0°C to 50°C
- Output Indicator: Green LED
- Noise Filter: Yes
- Electromagnetic Interference: Conforms to FCC class A standards and 1st group of VCCI
- Voltage Adjustment Range: ±5%
- Life Expectancy: 8 yrs. min.

Input Voltage	Watts	Output Volt. (VDC)	Output Current (A)	Dimensions Inch (mm) HxWxD	Features	Digi-Key Part No.	Price Each				Omron Part No.
							1	25	50	100	
85-132	10	5V	2.0A	1.10 x 2.72 x 3.35 (28 x 69 x 85)	Enclosed	Z1151-ND	39.46	36.54	34.11	31.67	S8E1-01005D
	10	24V	0.5A	1.10 x 2.72 x 3.35 (28 x 69 x 85)	Enclosed	Z1152-ND	39.46	36.54	34.11	31.67	S8E1-01024D
	15	5V	3.0A	1.34 x 2.72 x 3.70 (34 x 69 x 94)	Enclosed	Z1153-ND	46.98	43.50	40.60	37.70	S8E1-01505D
	15	24V	0.7A	1.34 x 2.72 x 3.70 (34 x 69 x 94)	Enclosed	Z1154-ND	46.98	43.50	40.60	37.70	S8E1-01524D
	25	5V	5.0A	1.38 x 2.72 x 4.84 (35 x 69 x 123)	Enclosed	Z1155-ND	59.19	54.81	51.16	47.51	S8E1-02505D
	25	24V	1.1A	1.38 x 2.72 x 4.84 (35 x 69 x 123)	Enclosed	Z1156-ND	59.19	54.81	51.16	47.51	S8E1-02524D
	50	5V	10.0A	1.46 x 2.72 x 6.34 (37 x 69 x 161)	Enclosed	Z1157-ND	142.56	132.00	123.20	114.40	S8E1-05005D
	50	24V	2.2A	1.46 x 2.72 x 6.34 (37 x 69 x 161)	Enclosed	Z1158-ND	82.68	76.56	71.46	66.36	S8E1-05024D
85-132	30	5V 12V -12V	5V/3A 12V/1.2A -12V/0.3A	1.3 x 2.71 x 6.77 (33 x 69 x 172)	Open-framed	Z1159-ND	79.87	73.95	69.02	64.09	S8E3-03031A
85-132	50	5V 12V -12V	5V/5A 12V/1.5A -12V/0.5A	1.3 x 2.71 x 7.62 (33 x 69 x 193.5)	Open-framed	Z1160-ND	97.72	90.48	84.45	78.42	S8E3-05031A
85-132	30	5V 12V -12V	5V/3A 12V/1.2A -12V/0.3A	1.3 x 2.71 x 6.77 (33 x 69 x 172)	Enclosed	Z1161-ND	85.50	79.17	73.90	68.62	S8E3-03031D
85-132	50	5V 12V -12V	5V/5A 12V/1.5A -12V/0.5A	1.3 x 2.71 x 7.62 (33 x 69 x 193.5)	Enclosed	Z1162-ND	103.36	95.70	89.32	82.94	S8E3-05031D

S82J Open Switching Power Supply

Open frame switching power supply with wide input voltages for industrial applications. Screw terminal connections for ease of connecting to supply.



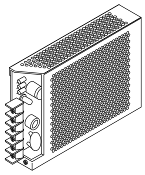
SPECIFICATIONS:

- Efficiency: (typical) 78% to 85%
- Voltage Adjustment Range: ±10%
- Operating Temperature: 0°C to 50°C
- Overload Protection: 105% min. of rated load current
- Frequency: 47 to 450Hz
- Life Expectancy: 8 yrs. Min.
- Leakage Current: 0.5mA max.
- Ambient Humidity: Operating: 25% to 85%
- Noise Filter: Yes
- Electromagnetic Interference: Conforms to FCC class A, EN55011 Gr1 class A: EN50081-2

Input Voltage	Watts	Output Volt. (VDC)	Output Current (A)	Dimensions Inch (mm) HxWxD	Features	Digi-Key Part No.	Price Each				Omron Part No.
							1	25	50	100	
85-132	10	5V	2A	1.38 x 3.82 x 3.54 (35 x 97 x 90)	Open-framed	Z1163-ND	39.46	36.54	34.11	31.67	S82J-01005A
	10	24V	0.5A	1.38 x 3.82 x 3.54 (35 x 97 x 90)	Open-framed	Z1164-ND	39.46	36.54	34.11	31.67	S82J-01024A
	25	5V	5A	1.57 x 3.82 x 4.88 (40 x 97 x 124)	Open-framed	Z1165-ND	59.19	54.81	51.16	47.51	S82J-02005A
	25	24V	1.1A	1.57 x 3.82 x 4.88 (40 x 97 x 124)	Open-framed	Z1166-ND	59.19	54.81	51.16	47.51	S82J-02024A
	50	5V	10A	1.57 x 3.82 x 6.34 (40 x 97 x 161)	Open-framed	Z1167-ND	82.68	76.56	71.46	66.36	S82J-05005A
85-264	50	24V	2.1A	3.8 x 1.6 x 6.34 (97 x 40 x 161)	Open-framed	Z1168-ND	77.99	72.21	67.40	62.59	S82J-05024A

S8PS Series Enclosed Din Rail Mount Supply

Enclosed Din rail mount power supplies with PFC on all models. Screw terminal connections make interfacing to supply convenient.
For mounting track, use Z840-ND or Z841-ND



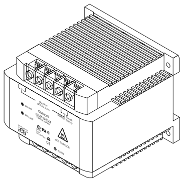
SPECIFICATIONS:

- Input Frequency: 47 to 63Hz
- Overvoltage Protection: Yes
- Efficiency: (typical) 74% to 80%
- Operating Temperature: 0°C to 50°C
- Life Expectancy: 10 yrs. min.
- Output indicator: Yes (green)
- Electromagnetic Interference: Conforms to FCC Class B, EN50081-1
- Leakage Current: 0.5 or 1.0mA max.
- Voltage Adjustment Range: -5% to 10%
- Mean Time Between Failure (MTBF): 135,000 hrs min.

Input Voltage	Watts	Output Volt. (VDC)	Output Current (A)	Dimensions Inch (mm) HxWxD	Features	Digi-Key Part No.	Price Each				Omron Part No.
							1	25	50	100	
85-264	50	5V	10A	1.57 x 3.35 x 5 (40 x 85 x 127)	Open-framed	Z1169-ND	119.33	110.49	103.13	95.76	S8PS-05005D
	50	12V	4.2A	1.57 x 3.35 x 5 (40 x 85 x 127)	Open-framed	Z1170-ND	119.33	110.49	103.13	95.76	S8PS-05012D
	50	24V	2.1A	1.57 x 3.35 x 5 (40 x 85 x 127)	Open-framed	Z1171-ND	119.33	110.49	103.13	95.76	S8PS-05024D
	100	24V	4.5A	1.97 x 3.62 x 5.71 (50 x 92 x 145)	Open-framed	Z1172-ND	183.22	169.65	158.34	147.03	S8PS-10024D
	50	5V	10A	1.57 x 3.35 x 5 (40 x 85 x 127)	Enclosed	Z1173-ND	124.03	114.84	107.19	99.53	S8PS-05005CD
	50	12V	4.2A	1.57 x 3.35 x 5 (40 x 85 x 127)	Enclosed	Z1174-ND	124.03	114.84	107.19	99.53	S8PS-05012CD
	50	24V	2.1A	1.57 x 3.35 x 5 (40 x 85 x 127)	Enclosed	Z1175-ND	124.03	114.84	107.19	99.53	S8PS-05024CD
	100	24V	4.5A	1.97x 3.62 x 5.71 (50 x 92 x 145)	Enclosed	Z1176-ND	185.10	171.39	159.97	148.54	S8PS-10024CD

S82K Din Rail/Chassis Mount Switching Supply

Din Rail or chassis mounted power supply for industrial applications. Screw terminals for both input and output connections and enclosed circuit board make this supply extremely safe for open access areas. For mounting track, use Z840-ND or Z841-ND



SPECIFICATIONS:

- Input Frequency: 47 to 450Hz
- Leakage Current: 100V input 0.5mA max.
- Efficiency: (typical) 60% to 80%
- Overload Protection: 105% to 160% of rated load current (typical)
- Life Expectancy: 8 years. min.
- Operating Temperature: 0°C to 40°C
- Input Voltage: 120VAC (85 to 132VAC) or 240VAC (170 to 264VAC) selectable
- Ambient Humidity: Operating 25% to 85%
- Noise Filter: Yes
- Electromagnetic Interference: Conforms to FCC class B
- Output Voltage Adjustment Range: ±10%

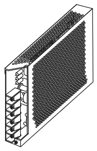
Input Voltage	Watts	Output Volt. (VDC)	Output Current (A)	Dimensions Inch (mm) HxWxD	Features	Digi-Key Part No.	Price Each				Omron Part No.
							1	25	50	100	
85-264	3	5V	0.6A	2.95 x 1.48 x 2.56 (75 x 37.5 x 65)	DIN-Rail	Z1177-ND	49.80	46.11	43.04	39.97	S82K-00305
	3	12V	0.25A	2.95 x 1.48 x 2.56 (75 x 37.5 x 65)	DIN-Rail	Z1178-ND	49.80	46.11	43.04	39.97	S82K-00312
	3	24V	0.13A	2.95 x 1.48 x 2.56 (75 x 37.5 x 65)	DIN-Rail	Z1179-ND	49.80	46.11	43.04	39.97	S82K-00324
	7.5	5V	1.5A	2.95 x 1.48 x 2.56 (75 x 37.5 x 65)	DIN-Rail	Z1180-ND	56.38	52.20	48.72	45.24	S82K-00705
	7.5	12V	0.6A	2.95 x 1.48 x 2.56 (75 x 37.5 x 65)	DIN-Rail	Z1181-ND	56.38	52.20	48.72	45.24	S82K-00712
	7.5	24V	0.3A	2.95 x 1.48 x 2.56 (75 x 37.5 x 65)	DIN-Rail	Z1182-ND	56.38	52.20	48.72	45.24	S82K-00724
	15	24V	0.6A	2.95 x 1.77 x 3.58 (75 x 45 x 91)	DIN-Rail	Z1183-ND	77.99	72.21	67.40	62.59	S82K-01524
	30	24V	1.3A	2.95 x 3.54 x 3.58 (75 x 90 x 91)	DIN-Rail	Z1184-ND	117.45	108.75	101.50	94.25	S82K-03024
	50	24V	2.1A	2.95 x 3.54 x 3.58 (75 x 90 x 91)	DIN-Rail	Z1185-ND	126.85	117.45	109.62	101.79	S82K-05024

Enclosed Switching Power Supplies

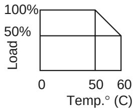
SXU SERIES - Models: 15W, 30W, 50W, 100W & 150W

Features: • AC (AC85-132V) • Safety Approvals: UL, CSA • EMI: FCC Class “B”, CISPR-B, VCCI-2 • Built-in Overvoltage/Overcurrent Protection • Operating Temperature: 0°C to 50°C • Metal Chassis with Cover • Compact, Low-Profile Packages • Three Year Factory Warranty.

General Specifications: • **Input Frequency:** 50/60Hz (47~63 Hz) • **Output Adjust Range:** ±10% • **Over Voltage Protection:** Zener Limiter (Output Shutdown: for 50, 100 and 150 Models). • **Over Current Protection:** Over 105% (Automatic Recovery). • **Temperature Coefficient:** 0.02% / °C • **Rise Time:** 100 mS max. (at 25°C nominal input/output) & 300 mS max. for 100 &150 Models • **Hold-Up Time:** 20mS (typical) • **Storage Temperature:** Temperature: -20°C to 85°C. • Humidity: 20-85% RH (Non Condensing) • **Dielectric Withstanding Voltage:** Models 15W, 30W & 50W: Primary - Secondary: AC 2000V / 1 min., Primary Case: AC 2000V / 1 min., Secondary Case: AC 500V / 1 min. Models 100W & 150W: Primary - Secondary: AC 2000V / 1 min., Primary Case: AC 1500V / 1 min., Secondary Case: AC 500V / 1 min. • **Leakage Current:** 0.5 mA max. • **Isolation Resistance**: Input-Output-Case 100 M-ohms min. • **Shock Test Procedures:** .020” (0.5mm) width, 10-55 Hz / 1 min. cycle, 3 directions each 30 min. 20G (3 directions each 3 times).



Derating Temperature:

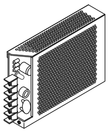


Input Voltage	Input Current A(typ)	Inrush Current A(typ)	Output Voltage (VDC)	Output Current (A)	Efficiency	Line Reg. (mV)	Load Reg. (mV)	RIpple Noise (mVp-p)	Dimensions Inch (mm) HxWxD	Digi-Key Part No.	Price Each 1	10	25	50	Volgen Part No.
SX15U															
85 - 132	0.3	10	5	3.0	73%	20	40	100	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1001-ND	54.83	50.13	41.99	40.65	SX15U-05S
85 - 132	0.3	10	12	1.3	76%	40	60	150	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1002-ND	54.83	50.13	41.99	40.65	SX15U-12S
85 - 132	0.3	10	15	1.0	76%	40	60	150	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1003-ND	54.83	50.13	41.99	40.65	SX15U-15S
85 -132	0.3	10	24	0.7	78%	60	150	200	1.34 x 2.72 x 3.31 (34 x 69 x 84)	62-1004-ND	54.83	50.13	41.99	40.65	SX15U-24S
SX30U															
85 - 132	0.7	20	5	6.0	72%	20	40	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1005-ND	63.21	57.80	48.45	46.90	SX30U-05S
85 - 132	0.7	20	12	2.6	76%	30	60	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1006-ND	63.21	57.80	48.45	46.90	SX30U-12S
85 - 132	0.7	20	15	2.1	77%	30	60	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1007-ND	63.21	57.80	48.45	46.90	SX30U-15S
85 - 132	0.7	20	24	1.4	79%	30	60	150	1.34 x 2.72 x 4.09 (34 x 69 x 104)	62-1008-ND	63.21	57.80	48.45	46.90	SX30U-24S
SX50U															
85 - 132	1.1	28	5	9.5	72%	25	60	100	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1009-ND	87.29	79.81	67.06	64.90	SX50U-05S
85 - 132	1.1	28	12	4.2	78%	40	120	150	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1010-ND	87.29	79.81	67.06	64.90	SX50U-12S
85 - 132	1.1	28	15	3.4	78%	40	120	150	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1011-ND	87.29	79.81	67.06	64.90	SX50U-15S
85 - 132	1.1	28	24	2.2	80%	60	160	200	1.46 x 3.35 x 4.69 (37 x 85 x 119)	62-1012-ND	87.29	79.81	67.06	64.90	SX50U-24S
SX100U															
85 - 132	2.3	14	5	20.0	82%	10	20	100	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1013-ND	129.48	118.39	99.63	96.41	SX100U-05S
85 -132	2.3	14	12	8.6	85%	10	20	170	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1014-ND	129.48	118.39	99.63	96.41	SX100U-12S
85 -132	2.3	14	15	7.0	86%	10	20	170	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1015-ND	129.48	118.39	99.63	96.41	SX100U-15S
85 -132	2.3	14	24	4.4	87%	20	30	200	1.54 x 3.66 x 6.30 (39 x 93 x 160)	62-1016-ND	129.48	118.39	99.63	96.41	SX100U-24S
SX150U															
85 - 132	3.5	15	5	30.0	82%	10	30	100	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1017-ND	169.14	154.64	130.26	126.05	SX150U-05S
85 -132	3.5	15	12	12.5	85%	15	45	170	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1018-ND	169.14	154.64	130.26	126.05	SX150U-12S
85 -132	3.5	15	15	10.0	86%	15	45	170	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1019-ND	169.14	154.64	130.26	126.05	SX150U-15S
85 -132	3.5	15	24	6.5	87%	20	60	200	1.89 x 3.66 x 6.89 (48 x 93 x 175)	62-1020-ND	169.14	154.64	130.26	126.05	SX150U-24S

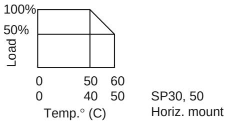
SPU SERIES Universal Input - Models: 15W, 30W & 50W

Features: • Universal Input (AC85-264V) • International Safety Approvals including: IEC801-2, -3, -4 & EMI: FCC Class “B”, EN55022-B, VCCI-II, CE • Built-in Overvoltage/Overcurrent Protection • Operating Temperature: 0°C to 60°C • Lightweight Construction • Metal Chassis with Cover • 3 Year Factory Warranty.

General Specifications: • **Input Frequency:** 50/60Hz (47-63 Hz) • **Output Adjust Range:** ±10% • **Output Ripple (100/230VAC, Full load):** 150mV / 75mVp-p max. DC-100MHz • **Over Voltage Protection:** Zener Limiter • **Over Current Protection:** Over 105% (Auto. Recovery) • **Temperature Coefficient:** 0.02%/ °C maximum • **Rise Time:** 100 mS maximum • **Storage Temperature and Humidity:** Temperature: -20°C to 85°C. Humidity: 20-85% RH (Non Condensing) • **Dielectric Withstanding Voltage:** Primary - Secondary: AC 3000V / 1 min., Primary Case: AC 1500V / 1 minute, Secondary Case: AC 500V / 1 min. • **Leakage Current** (100 / 230 VAC): 0.5 / 0.75 mA max. • **Isolation Resistance**: Input-Output-Case 100 M-ohms min. • **Shock Test Procedures:** Vibration: .020” (0.5mm) width, 10-55 Hz / 1 minute cycle, 3 directions each 30 minutes. Shock: 20G (3 directions each 3 times).



Derating Temperature:

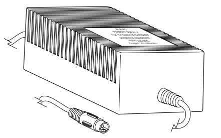


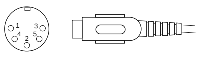
Input Voltage	Input Current A(typ)	Hold-Up Time mS(typ)	Inrush Current A(typ)	Output Volt. (VDC)	Output Current (A) @100V	@230V	Efficiency	Line Reg. (mV)	Load Reg. (mV)	Dimensions Inch (mm) HxWxD	Digi-Key Part No.	Price Each 1	10	25	50	Volgen Part No.
SP15U																
85-264	0.28-0.17	20-100	12-24	3.3	3.0	3.6	70%	20	40	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1021-ND	74.20	67.84	56.94	55.12	SP15U-03S
85-264	0.36-0.24	15-70	12-24	5	3.0	3.6	73%	20	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1022-ND	74.20	67.84	56.94	55.12	SP15U-05S
85-264	0.36-0.24	15-70	12-24	12	1.3	1.5	77%	30	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1023-ND	74.20	67.84	56.94	55.12	SP15U-12S
85-264	0.36-0.24	15-70	12-24	15	1.0	1.2	77%	30	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1024-ND	74.20	67.84	56.94	55.12	SP15U-15S
85-264	0.36-0.24	15-70	12-24	24	0.7	0.8	78%	30	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1025-ND	74.20	67.84	56.94	55.12	SP15U-24S
85-264	0.36-0.24	15-70	12-24	48	0.35	0.4	79%	50	50	1.30 x 2.95 x 4.21 (33 x 75 x 107)	62-1026-ND	74.20	67.84	56.94	55.12	SP15U-48S
SP30U																
85-264	0.5-0.33	30-180	12-28	3.3	6.0	7.0	70%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1027-ND	93.94	85.89	72.18	69.87	SP30U-03S
85-264	0.7-0.46	20-120	12-28	5	6.0	7.0	72%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1028-ND	93.94	85.89	72.18	69.87	SP30U-05S
85-264	0.7-0.46	20-120	12-28	12	2.6	3.0	77%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1029-ND	93.94	85.89	72.18	69.87	SP30U-12S
85-264	0.7-0.46	20-120	12-28	15	2.1	2.5	77%	20	40	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1030-ND	93.94	85.89	72.18	69.87	SP30U-15S
85-264	0.7-0.46	20-120	12-28	24	1.4	1.5	77%	30	80	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1031-ND	93.94	85.89	72.18	69.87	SP30U-24S
85-264	0.7-0.46	20-120	12-28	48	0.7	0.80	79%	50	120	1.30 x 3.11 x 4.88 (33 x 79 x 124)	62-1032-ND	93.94	85.89	72.18	69.87	SP30U-48S
SP50U																
85-264	0.8-0.52	35-210	18-45	3.3	10.0	12.0	70%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1033-ND	117.84	106.80	99.17	95.97	SP50U-03S
85-264	1.2-0.75	20-120	18-45	5	10.0	12.0	72%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1034-ND	117.84	106.80	99.17	95.97	SP50U-05S
85-264	1.2-0.75	20-120	18-45	12	4.6	5.5	77%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1035-ND	117.84	106.80	99.17	95.97	SP50U-12S
85-264	1.2-0.75	20-120	18-45	15	3.7	4.4	77%	20	60	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1036-ND	117.84	106.80	99.17	95.97	SP50U-15S
85-264	1.2-0.75	20-120	18-45	24	2.3	2.7	77%	30	120	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1037-ND	117.84	106.80	99.17	95.97	SP50U-24S
85-264	1.2-0.75	20-120	18-45	48	1.2	1.4	79%	50	180	1.30 x 3.50 x 6.46 (33 x 89 x 164)	62-1038-ND	117.84	106.80	99.17	95.97	SP50U-48S
SPN75																
85-264	0.55-1.0	40-50	16-39	5	15.0	—	78%	10	40	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1040-ND	74.97	70.89	67.32	63.75	SPN75-05S
85-264	0.55-1.0	40-50	16-39	12	6.5	—	82%	10	20	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1041-ND	74.97	70.89	67.32	63.75	SPN75-12S
85-264	0.55-1.0	40-50	16-39	24	3.2	—	83%	20	40	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1042-ND	74.97	70.89	67.32	63.75	SPN75-24S
85-264	0.55-1.0	40-50	16-39	48	1.6	—	83%	20	40	1.52 x 3.47 x 7.00 (39 x 88 x 178)	62-1043-ND	74.97	70.89	67.32	63.75	SPN75-48S
SPN100																
85-264	0.66-1.3	50	15-25	5	20.0	—	79%	10	20	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1044-ND	102.17	96.61	91.74	86.88	SPN100-05S
85-264	0.66-1.3	50	15-25	12	8.6	—	83%	10	20	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1045-ND	102.17	96.61	91.74	86.88	SPN100-12S
85-264	0.66-1.3	50	15-25	15	7.0	—	83%	10	20	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1046-ND	102.17	96.61	91.74	86.88	SPN100-15S
85-264	0.66-1.3	50	15-25	24	4.4	—	83%	20	40	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1047-ND	102.17	96.61	91.74	86.88	SPN100-24S
85-264	0.66-1.3	50	15-25	48	2.2	—	84%	20	40	1.54 x 3.66 x 8.15 (39 x 93 x 207)	62-1048-ND	102.17	96.61	91.74	86.88	SPN100-48S
SPN150																
85-264	1.00-1.3	50	13-31	5	30.0	—	78%	10	20	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1049-ND	122.16	115.51	109.70	103.88	SPN150-05S
85-264	1.00-1.3	50	13-31	12	13.0	—	82%	10	20	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1050-ND	122.16	115.51	109.70	103.88	SPN150-12S
85-264	1.00-1.3	50	13-31	24	6.5	—	83%	20	40	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1051-ND	122.16	115.51	109.70	103.88	SPN150-24S
85-264	1.00-1.3	50	13-31	48	3.3	—	83%	20	40	1.77 x 4.21 x 8.5 (45 x 107 x 216)	62-1052-ND	122.16	115.51	109.70	103.88	SPN150-48S

ELPAC POWER SYSTEMS

External Power Supplies

Wide Range Input Series- Switching Regulated Tabletops





TUV FCC IEC

Outside ring on all units is an EMI earth ground (Not to be used as a safety ground).

Features: • IEC input connector • One year warranty.

General Specifications: • Storage Temperature: -55°C to +85°C • Operating Temperature: 0°C to +40°C

Output Specifications: • Line Regulation: ±0.2% max. • Load Regulation: ±5% from 60% load nominal except output #2 • Cross Regulation: ±2%. Cross regulation specifies the max. voltage change on auxiliary outputs when the +5V output load current is varied from 75% of full rated to either 50% or 100% of full rated • Set Point: ±2% at 60% load on main input • Ripple & Noise: ±1% max. • Overload Protection: All outputs protected against overloads and short circuit. Automatic recovery upon removal of overload conditions • Overvoltage Protection: Provided on main output only and set at 115-135% • Output Overshoot: No overshoot on turn-on or turn-off • Transient Response: For all outputs, recovery to within 1% of nominal output occurs within 2 milliseconds for a 50% to 100% load step. Maximum excursion is 6% from initial voltage setpoint • Hold-Up Time: 25msec min. at full rated load and nominal AC input voltage • Min. Load: Third quarter down to zero load.

Approved by all major regulatory agencies

OUTPUT PIN CONFIGURATION-5 PIN DIN

Single Output Model

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WRI3012	COM	COM	12V	COM	12V
WRI4212	COM	COM	12V	COM	12V
WRI4214	COM	COM	24V	COM	24V
WRI5215	COM	COM	30V	COM	30V

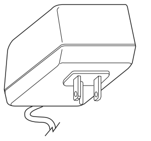
Dual Output Model

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WRI3021	COM	COM	5V	COM	12V
WRI4221	COM	COM	5V	COM	12V

Triple Output Model

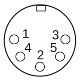
MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WRI2731	COM	COM	5V	-12V	12V
WRI3031	COM	COM	5V	-12V	12V
WRI4231	COM	COM	5V	-12V	12V
WRI4232	COM	COM	5V	-12V	12V

Regulated Wallmounts



DIN PINOUT MATRIX

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WM053	COM	N/C	5V	-5V	12V
WM063	COM	N/C	5V	-12V	12V
WM075	COM	N/C	5V	COM	5V
WM093	COM	N/C	5V	-5V	12V
WM112	COM	N/C	5V	COM	12V
WM113	COM	N/C	5V	-12V	12V
WM144	COM	N/C	12V	COM	12V



Features: • UL 1310 & UL 1950 listed, CSA Approved • One year warranty

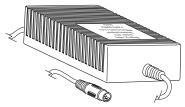
Specifications: • Output Ripple: 20 millivolts (p-p) • Operating Temperature: 0-40°C • Combined Regulation: ±5% • Fusing: Internal & non-replaceable

Options: • Shielded output cable - S Option: Shielded cable with EMI ground tied to outer ring of DIN connector (Not to be used as safety ground)

Connector Type: Din, except for WM025 which is Switchcraft Plug 760.

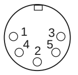
UL and CSA Approved

Regulated Tabletops



DIN PINOUT MATRIX

MODEL	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
WM100★	-5V	N/C	5V	COM	COM
WM113TT	COM	N/C	5V	-12V	12V
WM220-1	COM	N/C	5V	-12V	12V



Features: • UL 1310 listed, CSA Approved • One year warranty

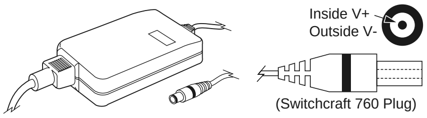
Specifications: • Output Ripple: 20 millivolts (p-p) • Operating Temp.: 0°C to 40°C • Combined Regulation: ±5% • Fusing: Internal & non-replaceable

Options: • ***Shielded output cable - S Option***: Shielded cable with EMI ground tied to outer ring of DIN connector (Not to be used as safety ground) • Connector Type: Din.

UL and CSA Approved
★ CSA Approved Only

Switching MIADA Series

(Notebook Style)



(Switchcraft 760 Plug)

Input Specifications: • A/C Input: 95-250VAC, 47/63Hz via IEC input connector • Input Protection: Input line fuse provided • Inrush Current: Internally limited by thermistor. Cold start, peak current at 250VAC, 25 amps max.

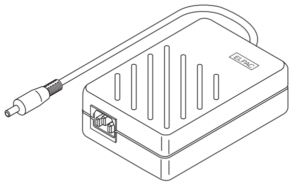
Output Specifications: • Line Regulation: ±.2% over 90-132 or 180-250 • Load Regulation: ±5% for ±40% load variation (60% nominal) • Min. load: 0 watts • Ripple & Noise: ±1% PK-PK max. • Overload Protection: Automatic Recovery • Overvoltage Protection: 115-140%

General Specifications: • Storage Temp.: -55°C to +85°C • Operating Temp.: 0°C to 40°C • EMI: FCC B/VDE B • Input Connector: IEC 320 Series.

UL, CSA & TUV Approved

TUV

MW40 Series - Medical Adapters



Features: • 3-pin IEC 320 inlet • Output connector: barrel type (5.5mm x 2.5mm x 9.5mm) • Wide range AC input • Level B EMI filter • Fully regulated output

Input Specifications: • 100-240VAC • Frequency: 50/60 Hz

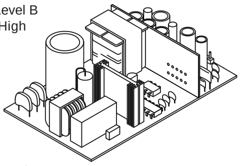
Output Specifications: • Line Regulation: 0.2% max. • Load Regulation: 5% max. • Short circuit protected • Ripple & Noise (VP-P): ±0.5%

Safety Approvals: • UL2601 • CSA 601 • IEC 601-1

AC Input	DC Outputs Single	Double	Triple	Max. Watts	Dimensions - In. (mm) L x W x H	Digi-Key Part No.	Price Each 1	5	10	Elpac Part No.
Wide Range Input Series-Regulated Tabletops										
90-250VAC, 47-440Hz	12V, 2.5A	—	—	30†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS107-ND	110.00	99.00	91.30	WRI3012-D5
90-250VAC, 47-440Hz	12V, 3.5A	—	—	42†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS112-ND	107.00	96.30	88.81	WRI4212-D5
90-250VAC, 47-440Hz	24V, 1.75A	—	—	42†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS113-ND	114.00	102.60	94.62	WRI4214-D5
90-250VAC, 47-440Hz	30V, 1.75A	—	—	52†	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS117-ND	136.00	122.40	112.88	WRI5215-D5
90-250VAC, 47-440Hz	5V, 2.0A	12V, 1.5/2.5A*	—	30	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS109-ND	118.00	106.20	97.94	WRI3021-D5
90-250VAC, 47-440Hz	5V, 3.0A	12V, 2.5/4.0A*	—	42	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS114-ND	118.00	106.20	97.94	WRI4221-D5
90-250VAC, 47-440Hz	5V, 3.0A	12V, 0.5A	-12V, 0.5A	27††	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS106-ND	128.00	115.20	106.24	WRI2731-D5
90-250VAC, 47-440Hz	5V, 2.0A	12V, 1.5/2.5A*	-12V, 0.5A	30	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS111-ND	124.00	111.60	102.92	WRI3031-D5
90-250VAC, 47-440Hz	5V, 3.0A	12V, 2.5/4.0A*	-12V, 0.5A	42	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS115-ND	124.00	111.60	102.92	WRI4231-D5
90-250VAC, 47-440Hz	5V, 4.8A	12V, 1.5/2.5A*	-12V, 0.5A	42	6.3 x 3.82 x 2.66 (160.02 x 97.03 x 67.56)	EPS116-ND	124.00	111.60	102.92	WRI4232-D5
Regulated Wallmounts										
115VAC, 60Hz	5V, 500mA	—	—	2.5	2.20 x 2.75 x 3.50 (55.88 x 69.85 x 88.90)	EPS129-ND•	30.00	27.00	24.90	WM025-760
115VAC, 60Hz	5V, 380mA	-5V, 180mA	12V, 180mA	5.3	2.20 x 2.75 x 3.50 (55.88 x 69.85 x 88.90)	EPS118-ND	43.00	38.70	35.69	WM053-D5
115VAC, 60Hz	5V, 600mA	+12V, 180mA	-12V, 160mA	6.8	1.80 x 2.60 x 4.50 (45.72 x 66.04 x 114.30)	EPS142-ND	41.00	36.90	34.03	WM063-1950-D5
115VAC, 60Hz	5V, 1.5A	—	—	7.5	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS143-ND	40.00	36.00	33.20	WM075-1950-D5
115VAC, 60Hz	5V, 860mA	-5V, 300mA	12V, 300mA	9.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS124-ND	56.00	50.40	46.48	WM093-S
115VAC, 60Hz	5V, 800mA	12V, 700mA	—	12.4	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS125-ND	53.00	47.70	43.99	WM112-D5
115VAC, 60Hz	5V, 860mA	-12V, 300mA	12V, 300mA	11.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS126-ND	41.00	36.90	34.03	WM113-D5
115VAC, 60Hz	5V, 860mA	-12V, 300mA	12V, 300mA	11.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS127-ND	45.00	40.50	37.35	WM113-S
115VAC, 60Hz	12V, 1.2A	—	—	14.4	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS145-ND	44.00	39.60	36.52	WM144-1950-S
Regulated Tabletops										
115VAC, 60Hz	5V, 1.0A	-5V, 1.0A	—	10	2.66 x 3.82 x 6.30 (67.56 x 97.03 x 160.02)	EPS130-ND	52.00	46.80	43.16	WM100-S
115VAC, 60Hz	5V, 860mA	+12V, 300mA	12V, 300mA	11.3	2.28 x 3.10 x 4.36 (57.91 x 78.74 x 110.74)	EPS131-ND	52.00	46.80	43.16	WM113TT
115VAC, 60Hz	5V, 2.0A	-12V, 500mA	12V, 500mA	22	2.28 x 3.10 x 5.025(57.91 x 78.74 x 127.64)	EPS134-ND	86.00	77.40	71.38	WM220-1
Miada Series										
95-250VAC, 47/63Hz	12V, 2.17A	—	—	26	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS101-ND	90.00	81.00	74.70	MI2612-760
95-250VAC, 47/63Hz	15V, 1.9A	—	—	28	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS102-ND	90.00	81.00	74.70	MI2815-760
95-250VAC, 47/63Hz	18V, 1.56A	—	—	28	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS103-ND	90.00	81.00	74.70	MI2818-760
95-250VAC, 47/63Hz	24V, 1.17A	—	—	28	3.0 x 5.0 x 1.31 (76.20 x 127.00 x 33.27)	EPS104-ND	90.00	81.00	74.70	MI2824-760
Medical Adapters (requires power cord Q132 or Q133)										
100-240VAC, 50/60Hz	12V, 3.3A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS180-ND	110.00	99.00	91.30	MW4012-760-NC
100-240VAC, 50/60Hz	15V, 2.6A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS181-ND	110.00	99.00	91.30	MW4015-760-NC
100-240VAC, 50/60Hz	18V, 2.2A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS182-ND	110.00	99.00	91.30	MW4018-760-NC
100-240VAC, 50/60Hz	24V, 1.67A	—	—	40	5.0 x 3.0 x 1.3 (127.00 x 76.20 x 33.02)	EPS183-ND	110.00	99.00	91.30	MW4024-760-NC

† Min. load on models=8 Watts †† Min. load on models=2 Watts * Max. Peak • Has a Switchcraft Plug 760

Open Frame Power Supplies OS40 Series



FEATURES: • Wide range AC input • Level B EMI filter • Fully regulated output • High efficiency
SPECIFICATIONS: Input: • Voltage: 90-254 VAC • Current: 1.5A maximum • Frequency: 47-63 Hz **Requires 20% load on primary output.**
Environmental: • Operating Temperature: 0°C to 50°C • Storage Temperature: -20°C to +80°C
EMI: • Meets FCC class B, CISPR 22 class B
Mechanical: • Size: 5.01" x 2.99" x 1.27" (127.25mm x 75.95mm x 32.26mm) **Safety:** • UL1950 • CSA 22.2 No. 950 • EN60950 • IEC950
MATES WITH: • **Connectors** – WM2101-ND and WM2104-ND • **Contacts** – WM2300-ND

DC Outputs			Maximum Power	Digi-Key Part No.	Price Each			Elpac Part No.
Single	Double	Triple			1	5	10	
Single Output								
5V @ 8A	—	—	40W	EPS185-ND	36.44	32.80	30.25	OS40-105
12V @ 3.5A	—	—	40W	EPS186-ND	36.44	32.80	30.25	OS40-112
15V @ 2.7A	—	—	40W	EPS187-ND	36.44	32.80	30.25	OS40-115
24V @ 1.7A	—	—	40W	EPS188-ND	36.44	32.80	30.25	OS40-124
Dual Output								
5V @ 5A	12V @ 1A	—	40W	EPS189-ND	37.58	33.83	31.20	OS40-201
5V @ 5A	24V @ 0.5A	—	40W	EPS190-ND	37.58	33.83	31.20	OS40-202
5V @ 8A	12V @ 0.6A	—	47W	EPS191-ND	37.58	33.83	31.20	OS40-203
Triple Output								
5V @ 3A	12V @ 2A	-5V @ 0.3A	40W	EPS192-ND	38.72	34.85	32.14	OS40-301
5V @ 3A	12V @ 2A	-12V @ 0.3A	40W	EPS193-ND	38.72	34.85	32.14	OS40-302
5V @ 5A	12V @ 1A	-12V @ 0.3A	40W	EPS194-ND	38.72	34.85	32.14	OS40-303

AC Adapters

Fig. 1

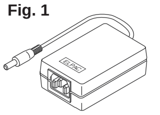


Fig. 2

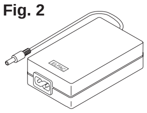
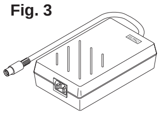


Fig. 3



DIN PINOUT MATRIX					
POLARITY	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
W4221	COM	COM	+5V	COM	+12V
W4231	COM	COM	+5V	-12V	+12V
W4232	COM	COM	+5V	-12V	+12V

Fig. 4

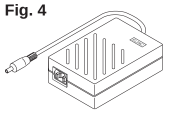


Fig. 5

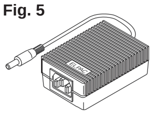
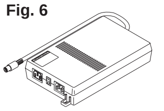


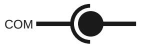
Fig. 6



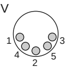
International

Features:
• 95-250 VAC (W08 & W14 Series: 100-240VAC; W24 Series: 90-265VAC); 47-63Hz Input • IEC 320 Input connector for worldwide use • Input protected VIA internal line fuse • Ripple & Noise: ±1% PK-PK max. • Overload Protection: All outputs protected-auto recovery • Operating Temperature Range: 0°C to 40°C • Output Cable - 6 foot - 760 standard (ID=2.5mm /OD=5.5mm/Barrel length 10mm/inside positive) or 5-pin DIN as shown • Two-year warranty

Agency Approvals:
• UL1012 Listed • CSA Certified to 22.2 No. 223 • TUV Licensed, IEC 950 • CE Certified • FCC/VDE Class B Emissions **(W08 Series:** UL listed to UL1950, cUL listed to CSA950, CE-Marked, TUV licensed to EN 60950. **W14 Series:** IEC950, UL1950/EN60950, CE-Marked)



760 Plug



5-pin DIN

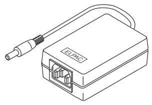
Fig.	DC Outputs			Max. Power	Dimensions - Inch (mm) L x W x H	Digi-Key Part No.	Price Each			Elpac Part No.
	Single	Double	Triple				1	5	10	
Desk Mount - International Power Supply										
1	5V @ 1.6A 12V @ 0.67A	— —	— —	8W 8W	3.35 x 1.97 x 1.30 (85.09 x 50.04 x 33.02) 3.35 x 1.97 x 1.30 (85.09 x 50.04 x 33.02)	EPS200-ND EPS201-ND	34.24 34.24	30.82 30.82	28.42 28.42	W0805-760 W0812-760
1	5V @ 2.5A 12V @ 1.25A 24V @ 0.63	— — —	— — —	13W 15W 15W	3.30 x 2.00 x 1.30 (83.82 x 50.80 x 33.02) 3.30 x 2.00 x 1.30 (83.82 x 50.80 x 33.02) 3.30 x 2.00 x 1.30 (83.82 x 50.80 x 33.02)	EPS165-ND EPS166-ND EPS167-ND	42.80 42.80 42.80	38.52 38.52 38.52	35.53 35.53 35.53	W1505-760 W1512-760 W1524-760
1	5V @ 4A 12V @ 2A	— —	— —	20W 24W	4.33 x 2.26 x 1.26 (109.98 x 57.40 x 32.00) 4.33 x 2.26 x 1.26 (109.98 x 57.40 x 32.00)	EPS206-ND EPS207-ND	64.62 64.62	58.16 58.16	53.64 53.64	W2405-760 W2412-760
2	12V @ 4.0A 24V @ 2.1A	— —	— —	48W 50W	4.10 x 2.20 x 1.20 (104.14 x 55.88 x 30.48) 4.10 x 2.20 x 1.20 (104.14 x 55.88 x 30.48)	EPS168-ND EPS169-ND*	82.80 82.80	74.52 74.52	68.73 68.73	W4012-760 W4024-760
3	5V @ 3.0A 5V @ 3.0A 5V @ 4.8A	12V @ 2.5A 12V @ 1.5A 12V @ 1.5A	— -12V @ 0.5A -12V @ 0.5A	42W 42W 42W	5.80 x 3.30 x 1.50 (147.32 x 83.82 x 38.10) 5.80 x 3.30 x 1.50 (147.32 x 83.82 x 38.10) 5.80 x 3.30 x 1.50 (147.32 x 83.82 x 38.10)	EPS170-ND EPS171-ND EPS172-ND	138.00 138.00 138.00	124.20 124.20 124.20	114.54 114.54 114.54	W4221-D5 W4231-D5 W4232-D5
4	5V @ 3.5A 12V @ 1.7A	— —	— —	18W 20W	4.30 x 2.30 x 1.30 (109.22 x 58.42 x 33.02) 4.30 x 2.30 x 1.30 (109.22 x 58.42 x 33.02)	EPS173-ND EPS174-ND	74.00 47.28	66.60 42.56	61.42 39.25	W42005-760 W42012-760
5	12V @ 6.0A 24V @ 3.0A	— —	— —	72W 72W	6.50 x 3.86 x 2.60 (165.10 x 98.04 x 66.04) 6.50 x 3.86 x 2.60 (165.10 x 98.04 x 66.04)	EPS175-ND EPS176-ND	100.00 100.00	90.00 90.00	83.00 83.00	W7212-D5 W7224-D5
Panel Mount - International Power Supply										
6	12V @ 8.3A 24V @ 4.2A	— —	— —	100W 100W	11.10 x 6.90 x 1.80 (281.94 x 175.26 x 45.72) 11.10 x 6.90 x 1.80 (281.94 x 175.26 x 45.72)	EPS177-ND† EPS178-ND†	203.66 203.66	183.30 183.30	169.04 169.04	W100-11 W100-13

***** Minimum load of 2 watts required to fully regulated **.** † Minimum load of 20 watts required to fully regulate.

FW Series

Features: Wide range AC input. Fully enclosed plastic case. Fully regulated output. High efficiency. Five year Warranty. Operating temperature: 0° to 40°C. Storage temperature: -55° to 85°C.
EMI: Meets FCC class B, CISPR 22 class B.
Safety: UL1950 CSA22.2 No. 950 EN60950 CE Marked.

DIN PINOUT MATRIX					
POLARITY	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5
FW72	COM	COM	+V	COM	+V
FW100	COM	COM	+V	COM	+V



DC Outputs Single	Max. Power	Dimensions - Inch (mm) L x W x H	Digi-Key Part No.	Price Each			Elpac Part No.
				1	5	10	
FW 18 Series							
5V @ 3A	15W	3.35 x 1.97 x 1.30 (85.0 x 50.0 x 33.0)	EPS262-ND	33.08	29.78	27.46	FW1805-760
12V @ 1.5A	18W	3.3 5 x 1.97 x 1.30 (85.0 x 50.0 x 33.0)	EPS263-ND	32.56	29.31	27.03	FW1812-760
24V @ 0.75A	18W	3.3 5 x 1.97 x 1.30 (85.0 x 50.0 x 33.0)	EPS264-ND	32.56	29.31	27.03	FW1824-760
FW 30 Series							
12V @ 2.5A	30W	4.25 x 2.50 x 1.30 (108.0 x 64.5 x 33.0)	EPS265-ND	46.80	42.12	38.85	FW3012-760
15V @ 2.0A	30W	4.25 x 2.50 x 1.30 (108.0 x 64.5 x 33.0)	EPS266-ND	46.80	42.12	38.85	FW3015-760
24V @ 1.25A	30W	4.25 x 2.50 x 1.30 (108.0 x 64.5 x 33.0)	EPS267-ND	46.80	42.12	38.85	FW3024-760
FW 50 Series							
12V @ 4.15A	50W	5.0 x 3.0 x 1.30 (127.0 x 76.2 x 33.0)	EPS268-ND	54.00	48.60	44.82	FW5012-760
24V @ 2.10A	50W	5.0 x 3.0 x 1.30 (127.0 x 76.2 x 33.0)	EPS269-ND	54.00	48.60	44.82	FW5024-760
FW 72 Series - 5 Pin DIN							
12V @ 6.0A	72W	6.50 x 3.85 x 2.60 (165.0 x 98.0 x 66.0)	EPS270-ND	70.82	63.74	58.79	FW7212-D5
24V @ 3.0A	72W	6.50 x 3.85 x 2.60 (165.0 x 98.0 x 66.0)	EPS271-ND	70.82	63.74	58.79	FW7224-D5
FW 100 Series - 5 Pin DIN							
12V @ 8.0A	96W	6.50 x 3.85 x 2.60 (165.0 x 98.0 x 66.0)	EPS272-ND	72.78	65.51	60.41	FW10012-D5
24V @ 4.0A	96W	6.50 x 3.85 x 2.60 (165.0 x 98.0 x 66.0)	EPS273-ND	72.78	65.51	60.41	FW10024-D5

Domestic

WP06 Series: • **Input Voltage:** 100-240 VAC (wide range) • **Current:** 0.2 Amp • **Frequency:** 47-63Hz • **Short Circuit Protection:** Pulsing mode, auto recovery • **Operating Temperature Range:** 0°C to +40°C • **EMI:** Meets FCC class B, CISPR 22 class B • **Agency Approvals:** UL 1950, cUL Listed to CSA 22.2

WP11 and WP12 Series: • **A/C Input:** 100-240VAC • **Input Protection:** Internal input line fuse • **Overload Protection:** Output protected against overload and short circuit • **Min. Load:** 0 Watts • **Operating Temperature Range:** 0°C to +40°C • **Output Cable:** 6 foot with 760 type barrel plug ID = 2.5mm, OD = 5 5mm, Barrel Length 10.00mm - Inside Positive • **Two-Year Warranty** • **Agency Approvals:** NRTL (UL) and CSA • **EMI:** FCC Class B

Fig.	DC Outputs Single	Max. Power	Dimensions - Inch (mm) L x W x H	Digi-Key Part No.	Price Each			Elpac Part No.
					1	5	10	
Wall Mount - Domestic Power Supply								
1	5V @ 1.2A	6W	2.25 x 1.88 x 1.03 (57.15 x 58.42 x 26.16)	EPS197-ND	29.96	26.97	24.87	WP0605-760
1	12V @ 0.5A	6W	2.25 x 1.88 x 1.03 (57.15 x 58.42 x 26.16)	EPS198-ND	31.04	27.94	25.77	WP0612-760
1	5V @ 1.5A	8W	2.20 x 1.80 x 1.10 (55.88 x 45.72 x 27.94)	EPS160-ND	31.04	27.94	25.77	WP1105-760
1	12V @ 0.8A	10W	2.20 x 1.80 x 1.10 (55.88 x 45.72 x 27.94)	EPS161-ND	32.10	28.89	26.65	WP1112-760
2	5V @ 2.4A	12W	3.00 x 2.00 x 1.00 (76.20 x 50.80 x 25.40)	EPS162-ND	32.50	29.25	26.98	WP1205-760
2	12V @ 1A	12W	3.00 x 2.00 x 1.00 (76.20 x 50.80 x 25.40)	EPS163-ND	32.50	29.25	26.98	WP1212-760
2	24V @ 0.5A	12W	3.60 x 2.30 x 1.30 (91.44 x 58.42 x 33.02)	EPS164-ND	82.80	74.52	68.73	WP1224-760

Fig. 1 — WP06 and WP11 Series

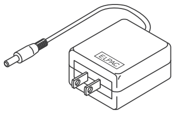
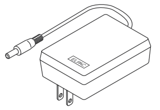


Fig. 2 — WP12 Series



Weidmüller NEW! Din-Rail Mounted Switchmode Power Supplies

Features:

- TS35 Din Rail Mounted
- AC or DC Input
- Wide AC Input Voltage Range
- Interferance suppressed
- Electronic short circuit regulation on output
- CSA, UL, CE
- 26-12 AWG input/output conductor size

Fig. 1

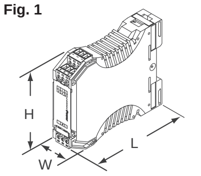


Fig. 2

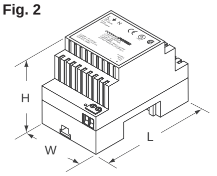


Fig. 3

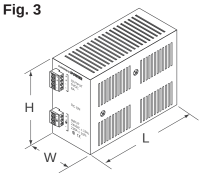


Fig. 4

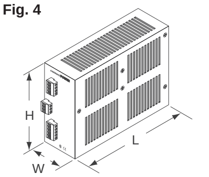


Fig. 5

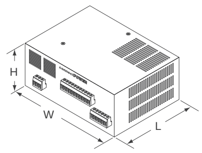
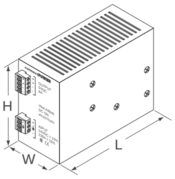


Fig.	Input Voltage Range VAC	Input Voltage Range VDC	Dimensions L x W X H (mm)	DC Output Voltage	Max. Current Output (A)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Weidmuller Part No.
1	85 - 265V	120 - 300V	112.5 x 18 x 90	24V	0.5	281-2002-ND	94.50	86.40	67.50	9918840024
2	85 - 265V	120 - 300V	62.5 x 52 x 90.5	5V	2.0	281-1556-ND	63.00	57.60	45.00	9928890005
				12V	1.5	281-1557-ND	63.00	57.60	45.00	9928890012
				15V	1.5	281-1558-ND	63.00	57.60	45.00	9928890015
				24V	1.0	281-1563-ND*	63.00	57.60	45.00	9928890024
				28V	1.0	281-1559-ND	63.00	57.60	45.00	9928890028
3	85 - 265V	120 - 300V	131 x 57 x 98	24V - 28V	2.3	281-2005-ND*	105.00	96.00	75.00	9927480024
				48V	1.04	281-2006-ND	141.75	129.60	101.25	9927480048
				12V - 15V	3.0	281-2004-ND	141.75	129.60	101.25	9927480012
				5V	3.0	281-2003-ND	141.75	129.60	101.25	9927480005
	306 - 550V	—	160 x 60 x 108	24	2.3	281-2009-ND†	147.00	134.40	105.00	9917790324
4	85 - 138V	195 - 250V	175 x 57 x 127	24V - 28V	6.5	281-2007-ND	189.00	172.80	135.00	9925340024
5	86 - 265V	100 - 200V	155 x 242 x 104	24V	12.5	281-2008-ND	399.00	364.80	285.00	9916250000

† 3-Phase input   * Class 1 Division 2 approved

NEW! Din-Rail Mounted DC-DC Converters



The CP-DCDC 50W is a compact 50W DIN rail mounted DC to DC converter family. This family is available in 2 input versions and 4 output versions, making it very versatile.

Features: • 12V and 24V input versions • 5V, 12V, 15V and 24V output variations • User adjustable output voltage • Input and output plug-socket connectors • Output status LED • DIN rail (TS35) mountable • Chassis mountable with optional hardware • Just 57mm (2.24") wide • Robust metal housing

Specifications: Temp range: -10°C to +50°C **Wire Size:** 26-12AWG **Approvals/Certifications:** CSA, UL, CE **Fused Input Protections:** 6.3A Slow Blow

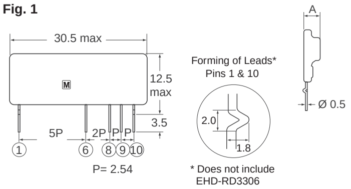
Input Current	Output Volt/Current	Output Adj. Range	Dimension L x W x H (mm)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Price Each 50	Weidmuller Part No.
12VDC Input Version with 10.2 - 13.8VDC Input Range									
4.53A	5V@8A	4.6V - 5.6V	98 x 57 x 131	281-2010-ND	207.00	186.30	179.40	175.95	9919371205
3.88A	12V@3A	10.5V - 14.5V		281-2011-ND	207.00	186.30	179.40	175.95	9919371212
4.70A	15V@3A	13V - 18V		281-2012-ND	207.00	186.30	179.40	175.95	9919371215
4.96A	24V@2A	20.5V - 29.5V		281-2013-ND	207.00	186.30	179.40	175.95	9919371224
24VDC Input Version with 20.4 - 27.6VDC Input Range									
2.3A	5V@8A	4.6V - 5.6V	98 x 57 x 131	281-2014-ND	207.00	186.30	179.40	175.95	9919372405
1.93A	12V@3A	10.5V - 14.5V		281-2015-ND	207.00	186.30	179.40	175.95	9919372412
2.37A	15V@3A	13V - 18V		281-2016-ND	207.00	186.30	179.40	175.95	9919372415
2.49A	24V@2A	20.5V - 29.5V		281-2017-ND	207.00	186.30	179.40	175.95	9919372424
Chassis Mounting Kit			—	281-2018-ND	1.85	1.43	1.14	—	7920560000

Panasonic

DC-DC Converters

Miniature, light and high efficiency Hybrid IC style switching type DC/DC converters. The DC/DC converter is accomplished by means of switching mode control without a transformer. When used with a simple rectifier circuit they can be connected directly to AC. **Features:** • With over current protector. **Recommended Applications:** • Power supply for microcomputer, fan motor, LED, buzzer and sensor circuit of house-hold electric equipment.

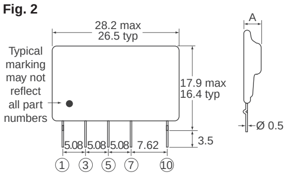
Fig. 1



* Does not include EHD-RD3306

No.	Function
1	IN
2	—
3	—
4	—
5	—
6	GND
7	—
8	L1-1
9	OUT
10	L1-2

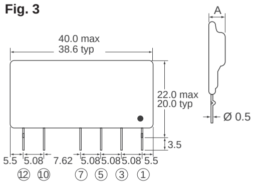
Fig. 2



No.	Function
1	OUT
2	—
3*	L1-1
4	—
5*	L1-2
6	—
7	GND
8	—
9	—
10	IN

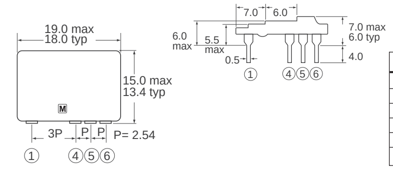
*EHD-RD3363 Pins 3 & 5 Reversed

Fig. 3



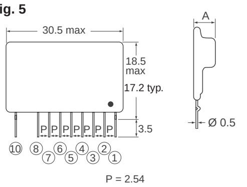
No.	Function	No.	Function
1	OUT	2	—
3	L1-1	4	—
5	L1-2	6	—
7	GND	8	—
9	—	10	NC
11	—	12	IN

Fig. 4



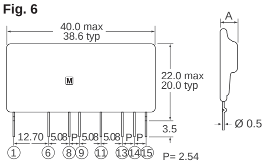
No.	Function
1	IN
2	—
3	—
4	GND
5	TP
6	OUT

Fig. 5



No.	Function
1	OUT
2	NC
3	NC
4	NC
5	GND
6	NC
7	NC
8	NC
9	—
10	IN

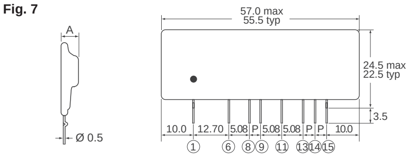
Fig. 6



No.	Function	No.	Function
1	NC	2	—
3	—	4	—
5	—	6	IN
7	—	8	NC
9	GND	10	—
11	L1-1	12	—
13	L1-2	14	NC
15	OUT		

Fig.	Input Voltage (VDC) (Min.)	Input Voltage (VDC) (Typ.)	Input Voltage (VDC) (Max.)	Output Voltage (VDC) (Min.)	Output Voltage (VDC) (Typ.)	Output Voltage (VDC) (Max.)	Output Current (Max.)	Dimensions (A) (Typ.)	Dimensions (A) (Max.)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 25	Panasonic Part No.
1	113	141	170	4.75	5.10	5.35	100mA	—	6.0	P11447-ND	7.44	5.45	5.10	EHD-RD3303
2	113	141	170	11.0	12.0	13.0	200mA	4.3	6.0	P11448-ND	7.52	5.51	5.16	EHD-RD3324
	113	141	170	23.0	24.6	25.5	200mA	4.3	6.0	P11449-ND	9.08	6.64	6.22	EHD-RD3362A
	-113	-141	-170	-31.5	-32.0	-32.5	-100mA	6.5	8.0	P11450-ND	5.46	4.00	3.74	EHD-RD3470
	-113	-141	-170	-31.4	-32.0	-32.6	-150mA	6.5	9.0	P11451-ND	5.68	4.16	3.90	EHD-RD3471
	-113	-141	-200	-22.5	-24.0	-25.5	-180mA	4.3	6.0	P11452-ND	5.85	4.29	4.01	EHD-RD3363
	-113	-141	-170	-11.0	-12.0	-13.0	-200mA	4.3	6.0	P11453-ND	6.90	5.05	4.73	EHD-RD3320
3	113	141	170	11.0	12.0	13.0	300mA	4.5	7.0	P11454-ND	7.64	5.59	5.23	EHD-RD3326
4	-113	-141	-170	-4.75	-5.10	-5.35	-30mA	—	—	P11455-ND	6.67	4.89	4.57	EHD-RD3306
5	90	141	170	11.0	12.0	13.0	100mA	—	10.0	P11456-ND	6.87	5.03	4.71	EHD-RD3323
	113	141	170	18.5	20.0	21.5	100mA	—	11.0	P11457-ND	9.81	7.18	6.72	EHD-RD3353
6	225	310	391	22.0	24.0	26.0	100mA	4.7	7.0	P11458-ND	9.25	6.77	6.34	EHD-RD3360
7	225	282	338	11.0	12.0	13.0	400mA	4.7	7.0	P11459-ND	12.16	8.90	8.33	EHD-RD3371
	225	282	338	23.0	24.0	25.0	400mA	4.7	7.0	P11460-ND	10.27	7.51	7.03	EHD-RD3364

Fig. 7



No.	Function	No.	Function	No.	Function
1	NC	2	—	3	—
4	—	5	—	6	IN
7	—	8	NC	9	GND
10	—	11	L1-1	12	—
13	L1-2	14	NC	15	OUT

V·INFINITY
A CUI INC. COMPANY

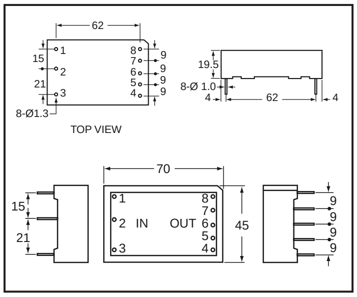
AC-DC Converters – FSK15 Series

FEATURES:

- Encapsulated, compact case
- Industry standard pin out
- Universal input
- HI-POT tested
- Inrush current limiting
- Over-load protection
- Over-temp. protection
- Built-in EMI filter
- Fixed switching freq.
- High efficiency
- 2 year warranty

Pin Assignments
Single Output
1. FG 2. AC(N) 3. AC(L)
4. No pin 5. +Vout 6. No pin 7. -Vout 8. No pin

Input Voltage		
	Min.	Max.
AC	85	264
DC	110	340



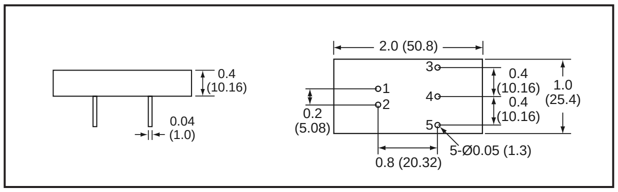
Output Power (Max.)	Output Volt.	Output Current (Max.)	Digi-Key Part No.	Price Each 1	10	25	50	V-Infinity Part No.
Single Output								
15.0W	5	3.0A	102-1164-ND	43.06	41.99	40.91	38.76	FSK-S15-5U
15.6W	12	1.3A	102-1165-ND	43.06	41.99	40.91	38.76	FSK-S15-12U
15.0W	15	1.0A	102-1166-ND	43.06	41.99	40.91	38.76	FSK-S15-15U
15.6W	24	0.65A	102-1167-ND	43.06	41.99	40.91	38.76	FSK-S15-24U

DC-DC Converters – PTK10 Series

FEATURES:

- Industry standard pin out
- Wide 4:1 input range
- Fully isolated
- Over-current protection
- Over-voltage protection
- Agency Standards: Designed to meet, UL1950, EN60950, CISPR22, CE
- Six-sided EMI shielding
- Constant switching frequency
- High efficiency
- Compact size 2.0" x 1.0" x 0.4"
- 3 year warranty

Pin Assignments	
Single Output	Dual Output
1. +Vin 2. -Vin	1. +Vin 2. -Vin
3. +Vout 4. No pin 5. -Vout	3. +Vout 4. Com 5. -Vout



Input Voltage	Output Voltage	Output Current (Max.)	Digi-Key Part No.	Price Each 1	10	25	50	V-Infinity Part No.
Single Output								
10-36	3.3	2.4A	102-1070-ND	37.78	36.84	35.90	34.01	PTK10-Q24-S3
10-36	5	2.0A	102-1071-ND	37.78	36.84	35.90	34.01	PTK10-Q24-S5
10-36	12	0.9A	102-1072-ND	37.78	36.84	35.90	34.01	PTK10-Q24-S12
20-72	3.3	2.4A	102-1073-ND	37.78	36.84	35.90	34.01	PTK10-Q48-S3
20-72	5	2.0A	102-1074-ND	37.78	36.84	35.90	34.01	PTK10-Q48-S5
20-72	12	0.9A	102-1075-ND	37.78	36.84	35.90	34.01	PTK10-Q48-S12

DC-DC Converters – PTK15 Series and PTK25 Series

FEATURES:

- Industry standard pin out
- Fully isolated
- Output voltage trimmable
- Output On/Off control
- Over-current protection
- Agency Standards: Designed to meet, UL1950, EN60950, CISPR22, CE
- Over-voltage protection
- Six-sided EMI shielding
- Constant switching frequency
- High efficiency
- Compact size 2.0" x 2.0" x 0.4"
- 3 year warranty

INPUT:

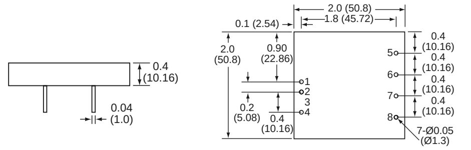
- Parameter: Switching frequency
- PTK15; Nom: 250 KHz
- PTK25; Nom: 300 KHz

OUTPUT:

- Parameter: Output trim range
- Conditions/Description: With external trim resistors
- Min: -10%
- Max: +10%

Pin Assignments		
Single Output	Dual Output	Triple Output
1. +Vin 2. -Vin 3. No pin 4. CNT	1. +Vin 2. -Vin 3. No pin 4. CNT	1. +Vin 2. -Vin 3. No pin 4. CNT
5. NC 6. +Vout 7. -Vout 8. Trim	5. +Vout 6. Com 7. -Vout 8. Trim	5. +Vaux 6. +Vout 7. Com 8. -Vaux

PTK15 and PTK25 Series



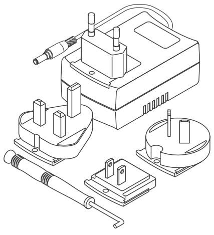
Input Voltage	Output Voltage	Output Current (Max.)	Digi-Key Part No.	Price Each 1	10	25	50	V-Infinity Part No.
PTK15 Series — Wide 4:1 Input Range								
Single Output								
10-36	3.3	4.0A	102-1076-ND	47.04	45.87	44.69	42.34	PTK15-Q24-S3
10-36	5	3.0A	102-1077-ND	47.04	45.87	44.69	42.34	PTK15-Q24-S5
10-36	12	1.25A	102-1078-ND	47.04	45.87	44.69	42.34	PTK15-Q24-S12
Dual Output								
10-36	±5	1.5A	102-1079-ND	49.58	48.35	47.11	44.63	PTK15-Q24-D5
10-36	±12	0.625A	102-1080-ND	49.58	48.35	47.11	44.63	PTK15-Q24-D12
Triple Output								
10-36	3.3/±12	2.0A/0.31A	102-1081-ND	49.58	48.35	47.11	44.63	PTK15-Q24-T312
10-36	5/±12	1.5A/0.31A	102-1082-ND	49.58	48.35	47.11	44.63	PTK15-Q24-T512
10-36	3.3/±15	2.0A/0.25A	102-1083-ND	49.58	48.35	47.11	44.63	PTK15-Q24-T315
10-36	5/±15	1.5A/0.25A	102-1084-ND	49.58	48.35	47.11	44.63	PTK15-Q24-T515
Single Output								
20-72	3.3	4.0A	102-1085-ND	47.04	45.87	44.69	42.34	PTK15-Q48-S3
20-72	5	3.0A	102-1086-ND	47.04	45.87	44.69	42.34	PTK15-Q48-S5
20-72	12	1.25A	102-1087-ND	47.04	45.87	44.69	42.34	PTK15-Q48-S12
Dual Output								
20-72	±5	1.5A	102-1088-ND	49.58	48.35	47.11	44.63	PTK15-Q48-D5
20-72	±12	0.625A	102-1089-ND	49.58	48.35	47.11	44.63	PTK15-Q48-D12
Triple Output								
20-72	3.3/±12	2.0A/0.31A	102-1090-ND	49.58	48.35	47.11	44.63	PTK15-Q48-T312
20-72	5/±12	1.5A/0.31A	102-1091-ND	49.58	48.35	47.11	44.63	PTK15-Q48-T512
20-72	3.3/±15	2.0A/0.25A	102-1092-ND	49.58	48.35	47.11	44.63	PTK15-Q48-T315
20-72	5/±15	1.5A/0.25A	102-1093-ND	49.58	48.35	47.11	44.63	PTK15-Q48-T515
PTK25 Series — Wide 2:1 Input Range								
Single Output								
18-36	3.3	6.0A	102-1094-ND	71.00	69.23	67.45	63.90	PTK25-D24-S3
18-36	5	5.0A	102-1095-ND	71.00	69.23	67.45	63.90	PTK25-D24-S5
18-36	12	2.0A	102-1096-ND	71.00	69.23	67.45	63.90	PTK25-D24-S12
Dual Output								
18-36	±5	2.5A	102-1097-ND	74.78	72.92	71.05	67.31	PTK25-D24-D5
18-36	±12	1.0A	102-1098-ND	74.78	72.92	71.05	67.31	PTK25-D24-D12
Triple Output								
18-36	3.3/±12	3.5A/0.35A	102-1099-ND	74.78	72.92	71.05	67.31	PTK25-D24-T312
18-36	5/±12	3.5A/0.35A	102-1100-ND	74.78	72.92	71.05	67.31	PTK25-D24-T512
18-36	3.3/±15	3.5A/0.28A	102-1101-ND	74.78	72.92	71.05	67.31	PTK25-D24-T315
18-36	5/±15	3.5A/0.25A	102-1102-ND	74.78	72.92	71.05	67.31	PTK25-D24-T515
Single Output								
36-72	3.3	6.0A	102-1103-ND	71.00	69.23	67.45	63.90	PTK25-D48-S3
36-72	5	5.0A	102-1104-ND	71.00	69.23	67.45	63.90	PTK25-D48-S5
36-72	12	2.0A	102-1105-ND	71.00	69.23	67.45	63.90	PTK25-D48-S12
Dual Output								
36-72	±5	2.5A	102-1106-ND	74.78	72.92	71.05	67.31	PTK25-D48-D5
36-72	±12	1.0A	102-1107-ND	74.78	72.92	71.05	67.31	PTK25-D48-D12
Triple Output								
36-72	3.3/±12	3.5A/0.35A	102-1108-ND	74.78	72.92	71.05	67.31	PTK25-D48-T312
36-72	5/±12	3.5A/0.35A	102-1109-ND	74.78	72.92	71.05	67.31	PTK25-D48-T512
36-72	3.3/±15	3.5A/0.28A	102-1110-ND	74.78	72.92	71.05	67.31	PTK25-D48-T315
36-72	5/±15	3.5A/0.25A	102-1111-ND	74.78	72.92	71.05	67.31	PTK25-D48-T515

CUI INC

Wall Transformers and Power Supplies

- Cord Lengths are 6 feet (1.83 meters); T805 has a 4 foot (1.22 meter) cord.
- All transformers are UL listed and most are also CSA approved.
- **For Connectors and Mating Connectors refer to the Connector Section**

Fig. 1 — Ambassador Series – Changeable Input Plugs *NEW!*



SPECIFICATIONS: • **AC Input Voltage Range:** 90VAC to 265 VAC • **Frequency:** 47 Hz to 63 Hz

Safety Requirements: • UL 1950 • cUL • TUV EN60950 •CE

Fig. 2 — US/Canada Transformer

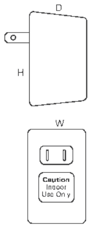


Fig. 3 — European Transformer TUV Approved

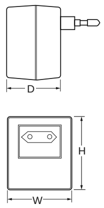
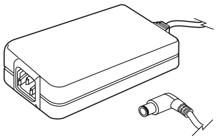


Fig. 4 — Switching Desk-Top Power Supply

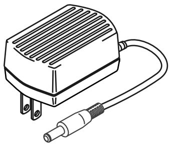


SPECIFICATIONS: • **AC Input Voltage Range:** 90VAC to 264VAC Universal • **AC Input Frequency:** 47 Hz to 63 Hz • **Maximum In-rush Current:** 26 A max @ 115 VAC, 50 A max @ 230 VAC at 25°C ambient cold start • **Minimum Load Current:** 0A • **Output Ripple and Noise:** 5V = 50 mVP-P, 12V = 120mVP-P, 24V = 240mVP-P • **Operating Temperature:** 0°C to 40°C

Safety Requirements: **(1)** UL 1950, **(2)** CSA 22.2, No. 950, **(3)** CSA 22.2, No. 234 LEVEL 3, **(4)** IEC 950 **(5)** TUV/CS, EN60950.

EMI Requirement: FCC class "B" rules. VDE 243/1991 class "B" rules

Fig. 5 — Switching Wall-Mount Power Supply



SPECIFICATIONS: • **AC Input Voltage Range:** 100VAC to 120 VAC (T930-ND & T931-ND: 100VAC to 240VAC Universal) • **AC Input Frequency:** 50 Hz to 60 Hz • **Switching Frequency:** 65KHz Typical • **Protection Type:** Short circuit protection • **Hold up time:** 16ms after loss of nominal AC input under full load condition • **Operating Temperature:** 0°C to 40°C

Safety Requirements: **(1)** UL 1950 **(2)** CSA 22.2 **(3)** TUV, EN60950 (T930-ND & T931-ND) **(4)** Comply with CE Directives (T930-ND & T931-ND).

Output: No Minimum Load

Fig. 6 — EI-28 Core Size Adapter

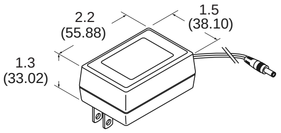
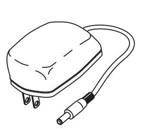


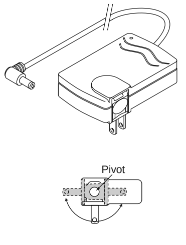
Fig. 7 — POWER PUP Thin, Low-Profile Case Wall Transformer



SPECIFICATIONS: • **AC Input Voltage:** 120VAC/60Hz • **Operating Temperature:** -10°C to 40°C • **Hi-Pot Test - 1mA for 1 Minute:** 1,500VAC Primary to Secondary and Primary to Core, 1,000VAC Secondary to Core • **Protection Type:** Thermal

Safety Requirements: • UL/cUL Approvals

Fig. 8 — 10 Watt Flip Out Series

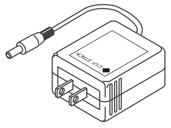


SPECIFICATIONS: • **AC Input Voltage Range:** 90VAC to 264VAC • **AC Input Frequency:** 47 Hz to 63 Hz • **Minimum Load Current:** 0A • **Total Regulations:** ±5%

FEATURES: • **Short Circuit:** Output equipped with short circuit protection, auto restart • **Over Voltage Protection:** 15.6V Maximum by Zener Diode Clamping • **Overload Protection:** Limited to 1.5 A typical (1.8A Maximum) at 240 VAC Input Voltage

Safety Requirements: • UL • cUL

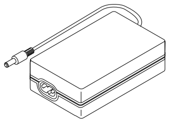
Fig. 9 — 10 Watt Power Strip Type



SPECIFICATIONS: • **Input Voltage:** AC90V-264V • **Frequency:** 50 Hz to 60Hz • **Minimum Load Current:** 0A • **Load Regulation:** ±5% • **Short Circuit and Overcurrent Protection:** Shutoff and Auto Restart

Safety Requirements: • UL • cUL

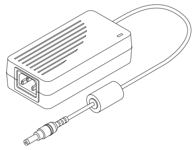
Fig. 10 — 60 Watt Small Desk-Top



SPECIFICATIONS: • **Input Voltage Range:** AC90V-264V • **Frequency:** 50 Hz to 60 Hz • **Load Regulation:** ±5% • **Minimum Load Current:** 0A • **Short Circuit and Overcurrent Protection:** Shutoff and Auto Restart

Safety Requirements: • UL • cUL • TUV • CE

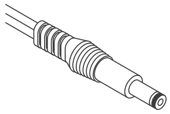
Fig. 11 — 60 Watt Desk-Top *NEW!*



SPECIFICATIONS: • **Input Voltage Range:** AC90V-264V • **Frequency:** 50 Hz to 60 Hz • **Load Regulation:** ±5% • **Minimum Load Current:** 0A • **Short Circuit and Overcurrent Protection:** Shutoff and Auto Restart

Safety Requirements: • UL • cUL • TUV • CE • DEMKO • FIMKO • SMEKO • NEMCO • LPS

Additional plug options



NOW AVAILABLE! Digi-Key can have CUI Stack overmold a new P5, P6, or P7 plug onto ANY of the CUI power supplies we carry. If the power supply you want does not have the plug or polarity you need, you can get a new plug put on that looks like it came right out of the factory, without the full factory minimum order quantity or lead time.

Build part number:

DPS120125U- ☐ ☐ ☐

Z 5 P
6 N
7

Choose power supply from CUI Stack stock
Z: special overmolding code
5/6/7: Choose P5, P6, or P7 plug
P or N: Choose center positive or center negative polarity

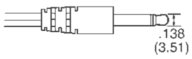
Turn around time: 2 weeks, including 100% testing.

Non-standard shaft lengths available upon special request.

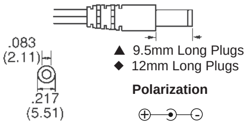
Minimum order: 100 pieces

P-1 (3.5mm Male)

Tip is Positive, Sleeve is Negative



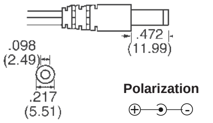
P-5 (2.1mm Female)



▲ 9.5mm Long Plugs
◆ 12mm Long Plugs

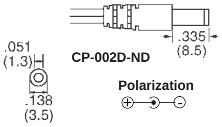
Polarization

P-6 (2.5mm Female)



Polarization

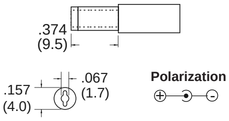
P-7 (1.3mm Female)



CP-002D-ND

Polarization

P-13 (1.7mm Female)



Polarization

Fig.	Ratings			Dimensions Inches (mm)	Cord	Digi-Key	Price Each				CUI Inc.
	Volt.	mA	Reg.	H x W x D	Plug	Part No.	1	10	50	100	Part No.
				NEW! Ambassador Series NEW!							
1	3.3VDC	2000	10%	1.38 x 1.96 x 2.99 (35 x 50 x 76)	P-5	T350-P5P-ND	19.58	15.66	13.70	13.04	DMS033200-P5-ET
	5VDC	2000	10%	1.38 x 1.96 x 2.99 (35 x 50 x 76)	P-5	T351-P5P-ND	19.20	15.36	13.44	12.79	DMS050200-P5-ET
	6VDC	1670	10%	1.38 x 1.96 x 2.99 (35 x 50 x 76)	P-5	T352-P5P-ND	19.20	15.36	13.44	12.79	DMS060167-P5-ET
	9VDC	1100	10%	1.38 x 1.96 x 2.99 (35 x 50 x 76)	P-5	T353-P5P-ND	18.93	15.14	13.25	12.61	DMS090110-P5-ET
	12VDC	1250	10%	1.38 x 1.96 x 2.99 (35 x 50 x 76)	P-5	T354-P5P-ND	19.95	15.96	13.97	13.29	DMS120125-P5-ET
				US/Canada Transformer 110VAC/60Hz Input							
2	5VDC	300	5%	2.38 x 2.00 x 1.65 (60.45 x 50.80 x 41.91)	P-6	T309-P6P-ND	8.10	6.48	5.67	5.38	DPR050030-P6P
	5VDC	1000	5%	3.35 x 2.68 x 2.20 (85.09 x 68.07 x 55.88)	P-1	T310-P1P-ND•	18.83	15.06	13.18	12.50	DTR050100-P1P
	5VDC	1500	5%	4.72 x 3.07 x 2.48 (119.89 x 77.98 x 62.99)	P-5◆	T311-P5P-ND•	46.78	37.42	32.75	31.06	DTR050150-P5P
	5.5VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T301-P1P-ND	5.95	4.76	4.17	3.96	DPD055050-P1P
	6VDC	200	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T305-P1P-ND	4.23	3.38	2.96	2.81	DPD060020-P1P-SZ
	6VDC	500	No	2.32 x 1.97 x 1.63 (58.93 x 50.04 x 41.40)	P-1	T307-P1P-ND	4.68	3.74	3.28	3.11	DPD060050-P1P-SZ
	9VDC	100	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T406-P1P-ND	4.03	3.22	2.82	2.68	DPD090010-P1P-SZ
	9VDC	200	No	2.19 x 1.69 x 1.48 (55.63 x 42.93 x 37.59)	P-1	T401-P1P-ND	4.18	3.34	2.93	2.78	DPD090020-P1P
	9VDC	200	No	2.19 x 1.69 x 1.48 (55.63 x 42.93 x 37.59)	P-5◆	T402-P5P-ND	4.18	3.34	2.93	2.78	DPD090020-P5P
	9VDC	300	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T407-P1P-ND	4.30	3.44	3.01	2.86	DPD090030-P1P-SZ
	9VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T403-P1P-ND	5.08	4.06	3.56	3.37	DPD090050-P1P
	9VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-5◆	T405-P5P-ND	5.08	4.06	3.56	3.37	DPD090050-P5P
	9VDC	650	No	2.59 x 1.96 x 1.59 (66.00 x 50.00 x 40.50)	P-5▲	T514-P5P-ND *NEW!*	6.10	4.88	4.27	4.06	DPD090065-P5P-SZ
	9VDC	800	5%	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-5◆	T410-P5P-ND	13.08	10.46	9.16	8.69	DPR090080-P5P
	9VDC	1000	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-1	T404-P1P-ND	7.48	5.98	5.24	4.97	DPD090100-P1P
	12VDC	50	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T508-P1P-ND	3.78	3.59	3.14	2.88	DPD120005-P1P-SZ
	12VDC	200	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T509-P1P-ND	4.35	3.48	3.05	2.89	DPD120020-P1P-SZ
	12VDC	300	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T501-P1P-ND	5.08	4.06	3.56	3.37	DPD120030-P1P
	12VDC	300	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-5◆	T505-P5P-ND	5.08	4.06	3.56	3.25	DPD120030-P5P

(Continued)

CUI INC Wall Transformers and Power Supplies *(Cont.)*

	Ratings			Dimensions Inches (mm)	Cord	Digi-Key	Price Each				CUI Inc.
Fig.	Volt.	mA	Reg.	H x W x D	Plug	Part No.	1	10	50	100	Part No.
2	12VDC	500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T502-P1P-ND	5.48	4.38	3.84	3.64	DPD120050-P1P
		500	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-5◆	T506-P5P-ND	5.48	4.38	3.84	3.64	DPD120050-P5P
		800	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-1	T503-P1P-ND	6.48	5.18	4.54	4.30	DPD120080-P1P
		800	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-5◆	T507-P5P-ND	6.48	5.18	4.54	4.30	DPD120080-P5P
	24VDC	400	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-1	T521-P1P-ND	7.88	6.30	5.52	5.23	DPD240040-P1P
		400	No	2.38 x 2.38 x 1.91 (60.45 x 60.45 x 48.51)	P-6	T520-P6P-ND	7.88	6.30	5.52	5.23	DPD240040-P6P
	9VAC	100	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	S/T	T701-ND†	3.98	3.18	2.79	2.64	DPA090010-S/T-SZ
		600	No	2.32 x 1.99 x 1.61 (58.93 x 50.55 x 40.89)	S/T	T702-ND†	5.30	4.24	3.71	3.52	DPA090060-S/T-SZ
	12VAC	300	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	S/T	T601-ND†	4.13	3.30	2.89	2.74	DPA120030-S/T-SZ
		400	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	S/T	T611-ND†	4.88	4.64	4.05	3.72	DPA120040-S/T-SZ
		500	No	2.32 x 1.99 x 1.61 (58.93 x 50.55 x 40.89)	S/T	T612-ND†	5.40	4.32	3.78	3.59	DPA120050-S/T-SZ
		600	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	S/T	T602-ND†	4.90	3.92	3.43	3.26	DPA120060-S/T
		1000	No	2.76 x 1.97 x 1.54 (70.10 x 50.04 x 39.12)	S/T	T603-ND†	5.48	4.38	3.84	3.64	DPA120100-S/T
		1500	No	3.20 x 2.21 x 1.89 (81.28 x 56.13 x 48.01)	S/T	T613-ND†	13.38	10.70	9.37	8.89	DPA120150-S/T
		2000	No	3.30 x 2.48 x 2.16 (83.82 x 62.99 x 54.86)	S/T	T604-ND†	14.28	11.42	10.00	9.48	DPA120200-S/T
		3300	No	3.50 x 2.68 x 2.16 (88.90 x 68.07 x 54.86)	S/T	T605-ND§†	23.60	18.88	16.52	15.68	DPA120333C-S/T
		200	No	2.15 x 1.67 x 1.46 (54.61 x 42.42 x 37.08)	P-1	T606-ND	4.05	3.24	2.84	2.69	DPA120020-P1-SZ
		600	No	2.38 x 2.00 x 1.46 (60.45 x 50.80 x 37.08)	P-1	T607-P1P-ND	4.90	3.92	3.43	3.26	DPA120060-P1P
		1000	No	2.75 x 1.97 x 1.54 (69.85 x 50.04 x 39.12)	P-1	T608-P1P-ND	5.48	4.38	3.84	3.64	DPA120100-P1P
		2000	No	3.30 x 2.48 x 2.16 (83.82 x 62.99 x 54.86)	P-1	T609-P1P-ND	14.28	11.42	10.00	9.48	DPA120200-P1P
	24VAC	1670	No	3.50 x 2.68 x 2.16 (88.90 x 68.07 x 54.86)	S/T	T620-ND§†	23.60	18.88	16.52	15.68	DPA240167C-S/T
European Transformer 220VAC/50Hz Input											
3	9VDC	500	No	2.32 x 1.99 x 1.61 (58.93 x 50.55 x 40.89)	P-5◆	T408-P5P-ND	6.88	5.50	4.82	4.57	DPD090050E-P5P
	12VDC	800	No	3.19 x 2.20 x 1.89 (81.03 x 55.88 x 48.01)	P-5◆	T511-P5P-ND	10.80	8.64	7.56	7.18	DPD120080E-P5P
Switching Desk-Top Power Supply											
4	5VDC	2400	5%	1.38 x 1.97 x 3.94 (35.05 x 50.04 x 100.08)	P-5◆	T805-P5P-ND‡	19.30	15.45	13.52	12.87	DTS050240U/AC1-P5P
	12VDC	1500	5%	1.38 x 1.97 x 3.94 (35.05 x 50.04 x 100.08)	P-5◆	T806-P5P-ND‡	19.30	15.45	13.52	12.87	DTS120150U/AC1-P5P
Switching Wall-Mount Power Supply											
5	5VDC	2400	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T920-P5P-ND	14.03	11.22	9.82	9.35	DPS050240-P5P
	6VDC	2000	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T921-P5P-ND	14.03	11.22	9.82	9.35	DPS060200-P5P
	9VDC	1500	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T922-P5P-ND	14.03	11.22	9.82	9.35	DPS090150-P5P
	12VDC	1250	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T923-P5P-ND	14.03	11.22	9.82	9.35	DPS120125-P5P
	15VDC	1000	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T924-P5P-ND	14.03	11.22	9.82	9.35	DPS150100-P5P
	5VDC	2800	5%	1.65 x 2.09 x 3.19 (41.91 x 53.09 x 81.03)	P-5◆	T930-P5P-ND††	15.30	12.24	10.71	10.20	DPS050280U-P5P
	12VDC	1500	5%	1.65 x 2.09 x 3.19 (41.91 x 53.09 x 81.03)	P-5◆	T931-P5P-ND††	15.30	12.24	10.71	10.20	DPS120150U-P5P
	24VDC	750	5%	1.38 x 2.09 x 3.19 (35.05 x 53.09 x 81.03)	P-5◆	T932-P5P-ND††	15.30	12.24	10.71	10.20	DPS240075U-P5P
EI-28 Core Size Adapters											
6	3VDC	400	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T201-P7P-ND	4.77	3.98	2.79	2.64	DPD030040-P7P-DK
	4.5VDC	300	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T202-P7P-ND	4.86	4.05	2.84	2.69	DPD045030-P7P-DK
	6VDC	250	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T203-P7P-ND	5.01	4.18	2.93	2.78	DPD060025-P7P-DK
	9VDC	150	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T205-P7P-ND	4.86	4.05	2.84	2.69	DPD090015-P7P-DK
	12VDC	100	No	2.2 x 1.5 x 1.33 (55.88 x 38.10 x 33.78)	P-7	T206-P7P-ND	4.77	3.98	2.79	2.64	DPD120010-P7P-DK
POWER PUP											
7	5VDC	550	No	2.63 x 1.65 x 1.17 (66.7 x 41.8 x 29.6)	P-13	T312-P13P-ND	5.95	4.76	4.17	3.96	DPD050055-P13P-TC
	9VDC	200	No	2.63 x 1.65 x 1.17 (66.7 x 41.8 x 29.6)	P-5◆	T412-P5P-ND	4.18	3.34	2.93	2.78	DPD090020-P5P-TC
	9VDC	500	No	3.07 x 1.91 x 1.33 (78 x 48.5 x 33.9)	P-5◆	T413-P5P-ND	5.08	4.06	3.56	3.37	DPD090050-P5P-TC
	9VDC	1000	No	3.7 x 2.32 x 1.81 (94 x 59 x 46)	P-5◆	T414-P5P-ND	7.48	5.98	5.24	4.97	DPD090100-P5P-TC
	12VDC	300	No	3.07 x 1.91 x 1.33 (78 x 48.5 x 33.9)	P-13	T510-P13P-ND	5.08	4.06	3.56	3.37	DPD120030-P13P-TC
	12VDC	500	No	3.07 x 1.91 x 1.33 (78 x 48.5 x 33.9)	P-5◆	T512-P5P-ND	5.48	4.38	3.84	3.64	DPD120050-P5P-TC
	12VDC	800	No	3.72 x 2.32 x 1.81 (94.5 x 59 x 46)	P-5◆	T513-P5P-ND	6.48	5.18	4.54	4.30	DPD120080-P5P-TC
	12VAC	1000	No	3.72 x 2.32 x 1.81 (94.4 x 59 x 46)	P-5◆	T614-P5P-ND	6.98	5.58	4.89	4.64	DPA120100-P5P-TC
10 Watt Flip Out Series											
8	5VDC	2000	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T321-P5P-ND	35.50	28.40	24.86	23.68	DPS050200U-P5P-DF
	9VDC	1100	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T322-P5P-ND	35.50	28.40	24.86	23.68	DPS090110U-P5P-DF
	12VDC	830	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T323-P5P-ND	35.50	28.40	24.86	23.68	DPS120083U-P5P-DF
	15VDC	670	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T324-P5P-ND	35.50	28.40	24.86	23.68	DPS150067U-P5P-DF
	24VDC	420	5%	3.35 x 2.13 x .78 (85 x 54 x 19.8)	P-5▲	T325-P5P-ND	35.50	28.40	24.86	23.68	DPS240042U-P5P-DF
10 Watt Power Strip Type											
9	5VDC	2000	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T450-P5P-ND	15.88	12.70	11.12	10.59	DPS050200UPS-P5P
	6VDC	2000	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T451-P5P-ND	15.88	12.70	11.12	10.59	DPS060200UPS-P5P
	9VDC	1100	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T452-P5P-ND	15.88	12.70	11.12	10.59	DPS090110UPS-P5P
	12VDC	850	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T453-P5P-ND	15.88	12.70	11.12	10.59	DPS120085UPS-P5P
	18VDC	550	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T454-P5P-ND	15.88	12.70	11.12	10.59	DPS180055UPS-P5P
	24VDC	500	5%	2.36 x 1.73 x .98 (60 x 44 x 25)	P-5▲	T455-P5P-ND	15.88	12.70	11.12	10.59	DPS240050UPS-P5P
12 Watt Small Desk-Top											
10	5VDC	2500	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T850-P5P-ND‡	18.58	14.86	13.01	12.39	DTS050250SUDC-P5P
	6VDC	2000	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T851-P5P-ND‡	18.58	14.86	13.01	12.39	DTS060200SUDC-P5P
	9VDC	1330	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T852-P5P-ND‡	18.58	14.86	13.01	12.39	DTS090133SUDC-P5P
	12VDC	1000	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T853-P5P-ND‡	18.58	14.86	13.01	12.39	DTS120100SUDC-P5P
	18VDC	670	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T854-P5P-ND‡	18.58	14.86	13.01	12.39	DTS180067SUDC-P5P
	24VDC	500	5%	2.91 x 1.81 x .98 (74 x 46 x 25)	P-5▲	T855-P5P-ND‡	18.58	14.86	13.01	12.39	DTS240050SUDC-P5P
15 Watt Two-Prong Inlet Type											
10	5VDC	3000	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T550-P5P-ND‡	21.45	17.16	15.02	14.31	DTS050300UDC-P5P
	6VDC	2500	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T551-P5P-ND‡	21.45	17.16	15.02	14.31	DTS060250UDC-P5P
	9VDC	1660	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T552-P5P-ND‡	21.45	17.16	15.02	14.31	DTS090166UDC-P5P
	12VDC	1250	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T553-P5P-ND‡	21.45	17.16	15.02	14.31	DTS120125UDC-P5P
	24VDC	620	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T554-P5P-ND‡	21.45	17.16	15.02	14.31	DTS240062UDC-P5P
20 Watt Two-Prong Inlet Type											
10	5VDC	4000	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T560-P5P-ND‡	24.38	19.50	17.07	16.26	DTS050400UDC-P5P
	6VDC	3300	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T561-P5P-ND‡	24.38	19.50	17.07	16.26	DTS060330UDC-P5P
	9VDC	2200	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T562-P5P-ND‡	24.38	19.50	17.07	16.26	DTS090220UDC-P5P
	12VDC	1660	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T563-P5P-ND‡	24.38	19.50	17.07	16.26	DTS120166UDC-P5P
	15VDC	1330	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T564-P5P-ND‡	24.38	19.50	17.07	16.26	DTS150133UDC-P5P
	24VDC	830	5%	3.54 x 2.28 x 1.10 (90 x 58 x 28)	P-5▲	T565-P5P-ND‡	24.38	19.50	17.07	16.26	DTS240083UDC-P5P
30 Watt Low Cost / Desk-Top Series											
4	5VDC	4000	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T807-P5P-ND‡	59.63	47.70	41.76	29.82	DTS050400U2/AC1-P5P
	9VDC	2200	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T808-P5P-ND‡	59.63	47.70	41.76	29.82	DTS090220U2/AC1-P5P
	12VDC	2500	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T809-P5P-ND‡	59.63	47.70	41.76	29.82	DTS120250U2/AC1-P5P
	48VDC	625	5%	4.33 x 2.36 x 1.34 (110 x 60 x 34)	P-5▲	T813-P5P-ND‡	59.63	47.70	41.76	39.76	DTS480063U2/AC1-P5P
60 Watt Desk-Top Series											
10	19VDC	3160	4%	4.02 x 2.5 x 1.26 (102 x 63.5 x 32)	P-5▲	T822-P5P-ND‡	67.88	54.30	47.53	45.26	DTS190316UD/AC5-P5P
11	12VDC	5.0A	5%	4.76 x 2.36 x 1.36 (121 x 60 x 34.5)	P-5▲	T824-P5P-ND *NEW!*	37.95	34.50	30.19	28.75	DTS120500UC-P5-ET
	15VDC	4.0A	5%	4.76 x 2.36 x 1.36 (121 x 60 x 34.5)	P-5▲	T825-P5P-ND *NEW!*	37.95	34.50	30.19	28.75	DTS150400UC-P5-ET
	18VDC	3.3A	5%	4.76 x 2.36 x 1.36 (121 x 60 x 34.5)	P-5▲	T826-P5P-ND *NEW!*	37.95	34.50	30.19	28.75	DTS180330UC-P5-ET
	24VDC	2.5A	5%	4.76 x 2.36 x 1.36 (121 x 60 x 34.5)	P-5▲	T827-P5P-ND *NEW!*	37.95	34.50	30.19	28.75	DTS240250UC-P5-ET

• Table Top Style. † "S/T" = Stripped/Tinned. ‡ AC Cord Included. § Center Tapped. †† AC Input Voltage Range: 90VAC to 265VAC Universal. ▲ 9.5mm Long Plugs. ◆ 12mm Long Plugs.

★ ***For additional plug options available, please call 1-800-344-4539 and request technical assistance to build your part number. A minimum order and lead time will apply.***

Optoelectronic Products

Photo Transistor Output Optoisolators

Fig.	Isolation Voltage	Current Transfer Ratio - Typ.	VCEO (Max.)	Typ. t_{on}/t_{off} (µsec.)	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel	
										1	10	100		Size	Pricing
1	5000	80-600%	80	3/5	5.1	6.5	2.54	Dip	PS2501-1-ND	.42	.35	.30	—	—	—
2	5000	80-600%	80	3/5	10.2	6.5	2.54	Dip	PS2501-2-ND	.87	.73	.62	—	—	—
3	5000	80-600%	80	3/5	20.3	6.5	2.54	Dip	PS2501-4-ND	1.47	1.23	1.04	—	—	—
1	5000	80-600%	80	3/5	5.1	6.5	2.54	SMT	PS2501L-1-ND	.51	.43	.36	—	—	—
2	5000	80-600%	80	3/5	10.2	6.5	2.54	SMT	PS2501L-2-ND	1.02	.85	.72	—	—	—
3	5000	80-600%	80	3/5	20.3	6.5	2.54	SMT	PS2501L-4-ND	1.92	1.60	1.36	—	—	—
4	5000	200-2000+%	40	100/100	5.1	6.5	2.54	Dip	PS2502-1-ND	.60	.50	.43	—	—	—
5	5000	200-2000+%	40	100/100	10.2	6.5	2.54	Dip	PS2502-2-ND	1.44	1.20	1.02	—	—	—
6	5000	200-2000+%	40	100/100	20.3	6.5	2.54	Dip	PS2502-4-ND	2.15	1.94	1.65	—	—	—
7	5000	80-600%	80	3/5	5.1	6.5	2.54	Dip	PS2505-1-ND	.51	.43	.36	—	—	—
8	5000	80-600%	80	3/5	10.2	6.5	2.54	Dip	PS2505-2-ND	1.17	.98	.83	—	—	—
9	5000	80-600%	80	3/5	20.3	6.5	2.54	Dip	PS2505-4-ND	2.37	1.98	1.67	—	—	—
7	5000	80-600%	80	3/5	5.1	6.5	2.54	SMT	PS2505L-1-ND	.60	.50	.43	—	—	—
8	5000	80-600%	80	3/5	10.2	6.5	2.54	SMT	PS2505L-2-ND	1.23	1.03	.87	—	—	—
9	5000	80-600%	80	3/5	20.3	6.5	2.54	SMT	PS2505L-4-ND	2.13	1.92	1.63	—	—	—
10	5000	200-2000+%	40	100/100	5.1	6.5	2.54	Dip	PS2506-1-ND	.78	.65	.55	—	—	—
11	5000	200-2000+%	40	100/100	10.2	6.5	2.54	Dip	PS2506-2-ND	1.56	1.30	1.10	—	—	—
12	5000	200-2000+%	40	100/100	20.3	6.5	2.54	Dip	PS2506-4-ND	2.60	2.34	2.00	—	—	—
13	5000	1500-6500%	300	100/100	5.1	6.5	2.54	Dip	PS2532-1-ND	.84	.70	.60	—	—	—
14	5000	1500-6500%	300	100/100	10.2	6.5	2.54	Dip	PS2532-2-ND	1.77	1.48	1.25	—	—	—
15	5000	1500-6500%	300	100/100	20.3	6.5	2.54	Dip	PS2532-4-ND	2.75	2.48	2.11	—	—	—
13	5000	1500-6500%	300	100/100	5.1	6.5	2.54	SMT	PS2532L-1-ND	.93	.78	.66	—	—	—
14	5000	1500-6500%	300	100/100	10.2	6.5	2.54	SMT	PS2532L-2-ND	2.10	1.75	1.48	—	—	—
15	5000	1500-6500%	300	100/100	20.3	6.5	2.54	SMT	PS2532L-4-ND	3.55	3.20	2.73	—	—	—
13	5000	1500-6500%	350	100/100	5.1	6.5	2.54	Dip	PS2533-1-ND	1.50	1.25	1.06	—	—	—
14	5000	1500-6500%	350	100/100	10.2	6.5	2.54	Dip	PS2533-2-ND	2.98	2.68	2.29	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	Dip	PS2561-1-V-ND‡	.57	.48	.41	—	—	—
2	5000	80-400%	80	3/5	10.2	6.5	2.54	Dip	PS2561-2-V-ND‡	1.14	.95	.81	—	—	—
3	5000	80-400%	80	3/5	20.3	6.5	2.54	Dip	PS2561-4-V-ND‡	2.65	2.39	2.04	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	SMT	PS2561L-1-V-ND‡	.63	.53	.45	—	—	—
2	5000	80-400%	80	3/5	10.2	6.5	2.54	SMT	PS2561L-2-V-ND‡	1.23	1.03	.87	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	Dip	PS2561L1-1-V-ND*‡	.63	.53	.45	—	—	—
1	5000	80-400%	80	3/5	5.1	6.5	2.54	SMT	PS2561L2-1-V-ND*‡	.63	.53	.45	—	—	—
7	5000	80-400%	80	3/5	5.1	6.5	2.54	Dip	PS2565-1-V-ND‡	.69	.58	.49	—	—	—
8	5000	80-400%	80	3/5	10.2	6.5	2.54	Dip	PS2565-2-V-ND‡	1.41	1.18	1.00	—	—	—
7	5000	80-400%	80	3/5	5.1	6.5	2.54	SMT	PS2565L-1-V-ND‡	.72	.60	.51	—	—	—
8	5000	80-400%	80	3/5	10.2	6.5	2.54	SMT	PS2565L-2-V-ND‡	1.44	1.20	1.02	—	—	—
1	3750	50-300%	40	3/5	4.5	4.4	2.54	SMT	PS2701-1-ND	.60	.50	.43	PS2701-1TR-ND	3,500	333.00/M
2	3750	50-300%	40	3/5	9.3	4.4	2.54	SMT	PS2701-2-ND	1.44	1.20	1.02	—	—	—
4	3750	200-2000+%	40	200/200	4.5	4.4	2.54	SMT	PS2702-1-ND	.90	.75	.64	PS2702-1TR-ND	900	450.00
5	3750	200-2000+%	40	200/200	9.3	4.4	2.54	SMT	PS2702-2-ND	1.53	1.28	1.08	—	—	—
6	3750	200-2000+%	40	200/200	19.5	4.4	2.54	SMT	PS2702-4-ND	2.55	2.30	1.96	—	—	—
1	3750	50-400%	120	10/10	4.5	4.4	2.54	SMT	PS2703-1-ND	.66	.55	.47	PS2703-1TR-ND	3,500	367.00/M
2	3750	50-400%	120	10/10	9.3	4.4	2.54	SMT	PS2703-2-ND	1.44	1.20	1.02	—	—	—
3	3750	50-400%	120	10/10	19.5	4.4	2.54	SMT	PS2703-4-ND	2.43	2.19	1.86	—	—	—
7	3750	50-300%	40	3/5	4.5	4.4	2.54	SMT	PS2705-1-ND	.69	.58	.49	PS2705-1TR-ND	3,500	383.00/M
8	3750	50-300%	40	3/5	9.3	4.4	2.54	SMT	PS2705-2-ND	1.53	1.28	1.08	—	—	—
9	3750	50-300%	40	3/5	19.5	4.4	2.54	SMT	PS2705-4-ND	2.55	2.30	1.96	—	—	—
1	3750	50-400+%	40	4/5	4.0	4.4	2.54	SMT	PS2761-1-ND *NEW!*	.60	.50	.43	PS2761-1TR-ND *NEW!*	3,500	367.50/M
7	3750	50-400+%	40	4/5	4.0	4.4	2.54	SMT	PS2765-1-ND *NEW!*	.72	.60	.51	PS2765-1TR-ND *NEW!*	3,500	345.00/M
1	2500	80-600%	80	3/5	2.7	4.4	1.27	SMT	PS2801-1CT-ND†	.75	.63	.53	PS2801-1TR-ND	3,500	417.00/M
3	2500	80-600%	80	3/5	10.3	4.4	1.27	SMT	PS2801-4-ND	2.88	2.59	2.21	PS2801-4TR-ND	2,500	1773.00/M
4	2500	200-2000+%	40	200/200	2.7	4.4	1.27	SMT	PS2802-1CT-ND† *NEW!*	1.65	1.38	1.17	PS2802-1TR-ND *NEW!*	3,500	825.00/M
6	2500	200-2000+%	40	200/200	10.3	4.4	1.27	SMT	PS2802-4-ND *NEW!*	2.75	2.48	2.11	PS2802-4TR-ND *NEW!*	2,500	1443.00/M
7	2500	80-600%	80	3/5	2.7	4.4	1.27	SMT	PS2805-1CT-ND†	.93	.78	.66	PS2805-1TR-ND	3,500	517.00/M
9	2500	80-600%	80	3/5	10.3	4.4	1.27	SMT	PS2805-4-ND	3.50	3.15	2.69	—	—	—
10	2500	200-2000+%	40	200/200	2.7	4.4	1.27	SMT	PS2806-1CT-ND† *NEW!*	1.50	1.25	1.06	PS2806-1TR-ND *NEW!*	3,500	750.00/M
12	2500	200-2000+%	40	200/200	10.3	4.4	1.27	SMT	PS2806-4-ND *NEW!*	4.50	4.05	3.45	PS2806-4TR-ND *NEW!*	2,500	2353.00/M
1	2500	100-400+%	40	4/5	2.7	4.4	1.27	SMT	PS2811-1CT-ND† *NEW!*	.75	.63	.53	PS2811-1TR-ND *NEW!*	3,500	975.00/M
3	2500	100-400+%	40	4/5	10.3	4.4	1.27	SMT	PS2811-4-ND *NEW!*	2.75	2.48	2.11	PS2811-4TR-ND *NEW!*	2,500	1443.00/M
7	2500	100-400+%	40	4/5	2.7	4.4	1.27	SMT	PS2815-1CT-ND† *NEW!*	1.32	1.10	.93	PS2815-1TR-ND *NEW!*	3,500	660.00/M
9	2500	100-400+%	40	4/5	10.3	4.4	1.27	SMT	PS2815-4-ND *NEW!*	2.75	2.48	2.11	PS2815-4TR-ND *NEW!*	2,500	1443.00/M
13	2500	400-2000+%	300	100/100	2.7	4.4	1.27	SMT	PS2832-1CT-ND† *NEW!*	1.47	1.23	1.04	PS2832-1TR-ND *NEW!*	3,500	735.00/M
15	3750	400-2000+%	300	100/100	10.3	4.4	1.27	SMT	PS2832-4-ND *NEW!*	4.93	4.44	3.78	PS2832-4TR-ND *NEW!*	2,500	2587.00/M
13	2500	400-2000+%	350	100/100	2.7	4.4	1.27	SMT	PS2833-1CT-ND† *NEW!*	2.10	1.75	1.48	PS2833-1TR-ND *NEW!*	3,500	1050.00/M
1	2500	50-400+%	40	4/5	2.7	4.4	1.27	SMT	PS2861-1CT-ND† *NEW!*	.96	.80	.68	PS2861-1TR-ND *NEW!*	3,500	480.00/M
7	2500	50-400+%	40	4/5	2.7	4.4	1.27	SMT	PS2865-1CT-ND† *NEW!*	1.02	.85	.72	PS2865-1TR-ND *NEW!*	3,500	510.00/M
1	2500	100-400+%	40	4/5	2.5	4.5	1.27	SMT	PS2911-1CT-ND† *NEW!*	.96	.80	.68	PS2911-1TR-ND *NEW!*	3,500	480.00/M
7	2500	100-400+%	40	4/5	2.5	4.5	1.27	SMT	PS2915-1CT-ND† *NEW!*	1.35	1.13	.95	PS2915-1TR-ND *NEW!*	3,500	675.00/M
13	2500	400-4500+%	300	20/5	2.5	4.5	1.27	SMT	PS2932-1CT-ND† *NEW!*	1.95	1.63	1.38	PS2932-1TR-ND *NEW!*	3,500	975.00/M

† Cut Tape pricing * 10.16mm (0.4") wide row spacing; standard spacing is 7.62mm (0.3") ‡ VDE Approved

High Speed Analog Output Optoisolators

Fig.	Isolation Voltage	CTRR	Vcc (Max.)	Typ. Prop Delay (µsec.)	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each		
										1	10	100
16	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	Dip	PS8601-ND	1.98	1.65	1.40
16	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	SMT	PS8601L-ND	2.07	1.73	1.46
17	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	Dip	PS8602-ND	1.95	1.63	1.38
17	5000	>15%	35	0.3/0.5	10.16	6.5	2.54	SMT	PS8602L-ND	2.10	1.75	1.48
18	2500	15%-35%	35	0.5/0.6	4.5	4.4	1.27	SMT	PS8701-ND	2.25	2.03	1.73

High Speed Digital

Fig.	Output Type	Isolation Voltage	Prop Delay		Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel	
			t_{PHL}	t_{PLH}						1	10	100		Size	Pricing
19	OC	5000	50ns	50ns	10.16	6.5	2.54	Dip	PS9601-ND	2.31	1.93	1.63	—	—	—
19	OC	5000	50ns	50ns	10.16	6.5	2.54	SMT	PS9601L-ND	2.34	1.95	1.65	—	—	—
20	TP	3750	50ns	50ns	10.16	6.5	2.54	Dip	PS9611-ND	2.22	1.85	1.57	—	—	—
20	OC	5000	250ns	520ns	10.16	6.5	1.27	Dip	PS9613-ND *NEW!*	2.35	2.12	1.81	—	—	—
20	OC	5000	250ns	520ns	10.16	6.5	1.27	SMT	PS9613L-ND *NEW!*	2.38	2.14	1.83	—	—	—
21	OC	2500	50ns	50ns	4.5	4.4	1.27	SMT	PS9701-ND	2.31	1.93	1.63	—	—	—
21	TP	2500	35ns	40ns	4.5	4.4	1.27	SMT	PS9711-ND	2.38	2.14	1.83	—	—	—
21	OC	2500	250ns	520ns	4.5	4.4	1.27	SMT	PS9713CT-ND§ *NEW!*	2.53	2.28	1.94	PS9713TR-ND *NEW!*	3,500	1313.00/M
21	TP	2500	35ns	40ns	4.5	4.4	1.27	SMT	PS9715CT-ND§ *NEW!*	2.65	2.39	2.04	PS9715TR-ND *NEW!*	3,500	1378.00/M

§ Cut Tape pricing

Coupler For IGBT Driver

Fig.	Isolation Voltage	Prop Delay	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each		
								1	10	100
22	5000	3µs	10.2	6.5	2.54	Dip	PS9634-ND	1.86	1.55	1.31
22	5000	3µs	10.2	6.5	2.54	SMT	PS9634L-ND	1.86	1.55	1.31

High Linearity Diode Output Optoisolator (Surface Mount)

Fig.	Isolation Voltage	Transfer Gain (K2/K1)	Transfer Gain Linearity ∆ (K2/K1) (for Vcc=15V, If=2-10mA)	Length L (mm)	Width W (mm)	Pitch P (mm)	Digi-Key Part No.	Price Each		
								1	10	100
23	1500	.733-1.072	<1%	10.3	4.4	1.27	PS8741-ND	4.25	3.83	3.26

Fig. 1

Photo Transistor Output Dip or SMT

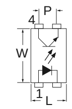


Fig. 2

Dual Photo Transistor Output Dip or SMT

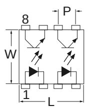
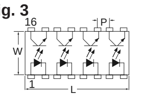


Fig. 3



Quad Photo Transistor Output Dip or SMT

Fig. 4

Photo Darlington Output Dip or SMT

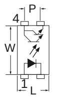
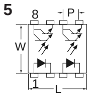
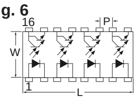


Fig. 5



Dual Photo Darlington Output Dip or SMT

Fig. 6



Quad Photo Darlington Output Dip or SMT

Fig. 7

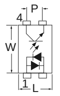
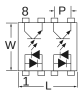


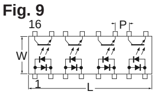
Photo Transistor Output Dip or SMT

Fig. 8



Dual Photo Transistor Output Dip or SMT

Fig. 9



Quad Photo Transistor Output Dip or SMT

Fig. 10

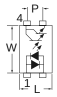
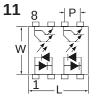


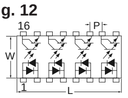
Photo Darlington Output Dip

Fig. 11



Dual Photo Darlington Output Dip

Fig. 12



Quad Photo Darlington Output Dip

Fig. 13

Photo Darlington Output Dip or SMT

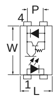


Fig. 14

Dual Photo Darlington Output Dip or SMT

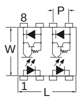
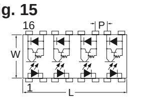
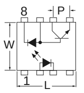


Fig. 15



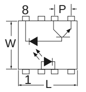
Quad Photo Darlington Output Dip or SMT

Fig. 16



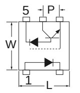
Dip or Lead-Bent

Fig. 17



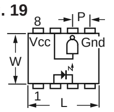
Dip or Lead-Bent

Fig. 18



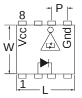
SMT

Fig. 19



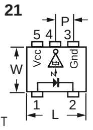
DIP and Lead-Bent

Fig. 20



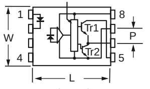
Dip

Fig. 21



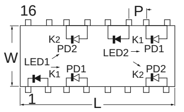
SMT

Fig. 22



DIP and Lead-Bent

Fig. 23



TOSHIBA Transistor Output Optoisolators

Fig.	Pkg.	Current Transfer Ratio				Collector	Isolation		Price Each				Tape & Reel	
		Min. (%)	Max. (%)	@IF (ma)	VCE (V)	Breakdown V(BR)	Voltage (Vrms)	Digi-Key Part No.	1	10	100	Digi-Key Part No.	Size	Pricing
1	Dip	100	1200	1	0.5	55	5000	TLP331-ND	1.08	.90	.72	—	—	—
	Dip	50	600	5	5	55	5000	TLP631-ND	.75	.63	.50	—	—	—
	Dip	100	600	5	5	55	5000	TLP631GB-ND	.75	.63	.50	—	—	—
	Dip	50	600	5	5	80	4000	TLP731D4-GR-ND*	.86	.72	.57	—	—	—
	Dip	20	—	10	10	30	2500	4N25ASHORT-ND	.60	.45	.34	—	—	—
	Dip	20	—	10	10	30	2500	4N25SHORT-ND	.48	.36	.27	—	—	—
	Dip	20	100	10	10	30	2500	4N26SHORT-ND	.60	.45	.34	—	—	—
	Dip	100	—	10	10	30	2500	4N35SHORT-ND	.48	.36	.27	—	—	—
	Dip	100	—	10	10	30	2500	4N36SHORT-ND	.60	.45	.34	—	—	—
	Dip	20	100	10	10	30	2500	4N37SHORT-ND	.64	.49	.37	—	—	—
	Dip	10	—	10	10	80	2500	4N38SHORT-ND	.64	.49	.37	—	—	—
2	Dip	100	1200	1	0.5	55	5000	TLP332-ND	1.08	.90	.72	—	—	—
	Dip	50	600	5	5	55	5000	TLP632-ND	1.07	.89	.71	—	—	—
	Dip(.4)	50	600	5	5	80	4000	TLP732D4-GR-LF2-ND	1.14	.95	.76	—	—	—
3	Dip	100	600	5	0.5	55	5000	TLP630GB-TAIE-ND	.75	.63	.50	—	—	—
	Dip	50	600	±5	5	55	5000	TLP630TAIE-ND	1.20	1.01	.81	—	—	—
4	SMD	100	1200	1	0.5	80	3750	TLP124-ND	.88	.66	.50	TLP124TR-ND	3,000	286.00/M
	SMD	200	1200	1	0.5	80	3750	TLP124BV-ND	.92	.69	.52	TLP124BVTR-ND	3,000	299.00/M
	SMD	200	600	5	5	80	3750	TLP181BLCT-ND†	.48	.36	.27	TLP181BLTR-ND	3,000	156.00/M
	SMD	50	600	5	5	80	3750	TLP181CT-ND†	.48	.36	.27	TLP181TR-ND	3,000	156.00/M
	SMD	50	600	5	5	80	3750	TLP181-ND	.48	.36	.27	—	—	—
	SMD	100	600	5	5	80	3750	TLP181GB-ND	.48	.36	.27	—	—	—
	SMD	100	600	5	5	80	3750	TLP181GBCT-ND†	.48	.36	.27	TLP181GBTR-ND	3,000	156.00/M
	SMD	100	300	5	5	80	3750	TLP181GRCT-ND†	.48	.36	.27	TLP181GRTR-ND	3,000	156.00/M
	SMD	50	150	5	5	80	3750	TLP181YCT-ND†	.52	.39	.30	TLP181YTR-ND	3,000	169.00/M
5	SMD	50	600	5	5	80	3750	TLP131-ND	.90	.75	.60	—	—	—
	SMD	100	600	5	5	80	3750	TLP131GB-ND	.90	.75	.60	—	—	—
	SMD	100	600	5	5	80	3750	TLP131GBCT-ND†	.90	.75	.60	TLP131GBTR-ND	3,000	390.00/M
	SMD	100	1200	1	0.5	80	3750	TLP137-ND	.84	.70	.56	—	—	—
6	Dip	50	600	5	—	55	5000	TLP621-ND	.69	.52	.39	—	—	—
	Dip	200	600	5	—	55	5000	TLP621BLT-ND	.56	.42	.32	—	—	—
	SMD	50	600	5	5	55	5000	TLP621D4-TP1CT-ND*†	.75	.63	.50	—	—	—
	Dip	50	150	5	5	55	5000	TLP621D4-Y-ND*	.80	.60	.45	—	—	—
	Dip(.4)	50	150	5	5	55	5000	TLP621D4-Y-LF2-ND*	.60	.45	.34	—	—	—
	Dip(.4)	50	150	5	5	55	5000	TLP621D4-Y-LF2T-ND*	.56	.42	.32	—	—	—
	Dip	100	600	5	—	55	5000	TLP621GBT-ND	.52	.39	.30	—	—	—
	Dip	100	300	5	—	55	5000	TLP621GRT-ND	.52	.39	.30	—	—	—
	Dip	50	600	5	—	55	5000	TLP621-2-ND	1.38	1.16	.93	—	—	—
	Dip	100	600	5	—	55	5000	TLP621-2GB-ND	1.38	1.16	.93	—	—	—
	Dip	100	300	5	5	55	5000	TLP621-2GRT-ND	1.05	.88	.70	—	—	—
	SMD	50	600	5	0.5	55	5000	TLP621LF1T-ND	.92	.69	.52	—	—	—
	Dip	50	600	5	—	55	5000	TLP621-4-ND	2.13	1.70	1.28	—	—	—
	Dip	100	600	5	—	55	5000	TLP621-4GB-ND	2.13	1.70	1.28	—	—	—
	SMD	100	1200	1	0.5	55	5000	TLP624LF1-ND	.75	.63	.50	—	—	—
	Dip	100	1200	1	—	55	5000	TLP624-ND	.96	.72	.54	—	—	—
	Dip	100	1200	1	—	55	5000	TLP624-2-ND	1.25	1.00	.75	—	—	—
	Dip	100	1200	1	—	55	5000	TLP624-4-ND	2.25	1.80	1.40	—	—	—
	Dip	100	1200	±1	—	55	5000	TLP626-ND	1.16	.97	.78	—	—	—
	Dip	200	1200	1	0.5	55	5000	TLP626BV-ND	1.40	1.12	.84	—	—	—
7	Dip	50	600	±5	—	55	5000	TLP620-ND	.72	.54	.41	—	—	—
	Dip	100	600	±5	—	55	5000	TLP620GB-ND	.84	.63	.48	—	—	—
	Dip	100	300	±5	—	55	5000	TLP620GR-ND	1.04	.78	.59	—	—	—
	Dip	50	600	±5	—	55	5000	TLP620-2-ND	1.26	1.05	.84	—	—	—
	Dip	100	600	±5	—	55	5000	TLP620-2GB-ND	1.46	1.22	.98	—	—	—
	Dip	50	600	±5	—	55	5000	TLP620-4-ND	2.32	1.86	1.39	—	—	—
	Dip	100	600	±5	—	55	5000	TLP620-4GB-ND	1.63	1.30	.98	—	—	—
	Dip	100	1200	±1	—	55	5000	TLP626-2-ND	2.55	2.04	1.53	—	—	—
	Dip	100	1200	±1	—	55	5000	TLP626-4-ND	3.87	3.10	2.41	—	—	—
8	SMD	100	600	5	5	80	2500	TLP280-4GB-ND	2.13	1.70	1.28	TLP280-4GBTR-ND	2,500	1100.80/M
9	SMD	100	600	5	5	80	2500	TLP280GB-ND	.88	.66	.50	TLP280GBTR-ND	2,500	286.00/M
10	SMD	100	600	5	5	80	2500	TLP281-4GB-ND	1.75	1.40	1.05	TLP281-4GBTR-ND	2,500	896.00/M
11	SMD	100	600	5	5	80	2500	TLP281GB-ND	.72	.54	.41	TLP281GBTR-ND	2,500	234.00/M
	SMD	50	600	5	5	80	2500	TLP281GR-ND	.72	.54	.41	—	—	—
	Dip	100	300	5	5	55	4000	TLP721D4-GRLT-ND*	.64	.48	.36	—	—	—
	Dip	100	300	5	5	80	5000	TLP421GR-ND	.50	.40	.30	—	—	—
12	Dip	50	600	5	5	55	2500	TLP504A-ND	1.26	1.05	.84	—	—	—
	Dip	50	600	5	5	55	2500	TLP504AGB-ND	1.26	1.05	.84	—	—	—
13	Dip	50	600	5	5	55	2500	TLP504A-2-ND	2.10	1.68	1.26	—	—	—
	Dip	100	600	5	5	55	2500	TLP504A-2GB-ND	2.10	1.68	1.26	—	—	—
14	SMD	50	600	5	5	80	3750	TLP180CT-ND†	.80	.60	.45	TLP180TR-ND	3,000	260.00/M
	SMD	100	600	5	5	80	3750	TLP180GB-ND	.80	.60	.45	—	—	—
	SMD	100	1200	±1	0.5	80	3750	TLP126-ND	.90	.75	.60	—	—	—
15	SMD	100	600	±5	5	80	3750	TLP130GB-ND	1.13	.94	.75	—	—	—

* VDE Approved   † Cut Tape Pricing

Fig. 1

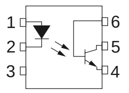
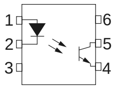


Fig. 2



No Base Connection

Fig. 3

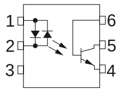


Fig. 4

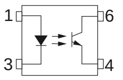


Fig. 5

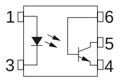


Fig. 6

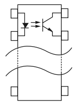


Fig. 7

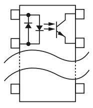


Fig. 8

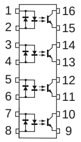


Fig. 9

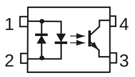


Fig. 10

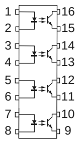


Fig. 11

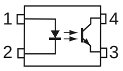


Fig. 12

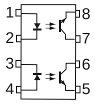


Fig. 13

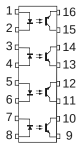


Fig. 14

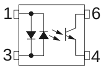
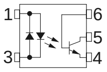


Fig. 15



Darlington Transistor Output

Fig. 1

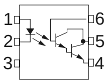


Fig. 2

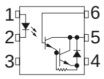
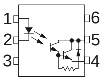


Fig. 3



No Base Connection

Fig. 4

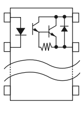


Fig. 5

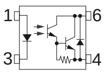


Fig.	Pkg.	Current Transfer Ratio			Saturation Voltage			Collector	Iso-		Price Each				Tape & Reel	
		Min. (%)	@IF (ma)	VCE (V)	Max. (V)	@IC (ma)	@IF (ma)	Break-down V(BR)	lation Volt.	Digi-Key Part No.	1	10	100	Digi-Key Part No.	Size	Pricing
1	Dip	100	10	10	1	2	8	30	2500	4N29ASHORT-ND	.72	.54	.41	—	—	—
	Dip	100	10	10	1	2	8	30	2500	4N29SHORT-ND	.64	.48	.36	—	—	—
	Dip	500	10	10	1	2	8	30	2500	4N32SHORT-ND	.72	.54	.41	—	—	—
	Dip	500	10	10	1	2	8	30	2500	4N33SHORT-ND	.72	.54	.41	—	—	—
	Dip	1000	1	1	1.2	100	10	300	5000	TLP371-ND	.81	.68	.54	—	—	—
2	SMD	1000	1	1	1.2	100	10	300	5000	TLP371TP1CT-ND†	.87	.73	.58	TLP371TP1TR-ND	1,500	385.70/M
3	Dip	1000	1	1	1.2	100	10	300	5000	TLP372-ND	.90	.75	.60	—	—	—
4	Dip	1000	1	1	1.2	100	10	300	5000	TLP627-ND	.84	.70	.56	—	—	—
	Dip	1000	1	1	1.2	100	10	300	5000	TLP627-2-ND	1.30	1.04	.78	—	—	—
	Dip	1000	1	1	1.2	100	10	300	5000	TLP627-4-ND	2.25	1.80	1.35	—	—	—
	SMD	1000	1	1	1.2	100	10	300	5000	TLP627TP1CT-ND†	.87	.73	.58	TLP627TP1TR-ND	1,500	385.70/M
	SMD	1000	1	1	1.2	100	10	300	5000	TLP627TP1TCT-ND†	.84	.63	.48	TLP627TP1TTR-ND	1,000	279.30
5	SMD	1000	1	1	1.2	100	10	300	2500	TLP127-ND	.84	.70	.56	—	—	—
	SMD	1000	1	1	1.2	100	10	300	2500	TLP127CT-ND†	.84	.70	.56	TLP127TR-ND	3,000	364.00/M

† Cut Tape Pricing

TOSHIBA

Thyristor Output Optoisolators

Fig.	Pkg.	LED Trigger Current Max. (ma)	dv/dt Typical (V/uS)	Blocking Voltage	Isolation Voltage	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	Dip	10	10	400	4000	TLP741GTAIE-ND‡	1.03	.86	.69	—	—	—
	Dip	10	10	600	4000	TLP741JTAIE-ND‡	1.13	.95	.76	—	—	—
	Dip	10	10	400	4000	TLP741GD4-TAIE-ND*‡	1.13	.95	.76	—	—	—
	Dip	10	10	400	4000	TLP741GN-ND	1.50	1.20	.90	—	—	—
	Dip	10	10	400	4000	TLP741GTAIEN-ND	1.03	.86	.69	—	—	—
2	SMD	10	500	400	2500	TLP160G-ND	1.02	.85	.68	—	—	—
	SMD	10	500	600	2500	TLP160J-ND	1.05	.88	.70	—	—	—
	Dip	10	500	400	5000	TLP3022S-ND	.78	.65	.52	—	—	—
	Dip	5	500	400	5000	TLP3023S-ND	.81	.68	.54	—	—	—
	Dip	10	—	600	5000	TLP3052-ND	.96	.80	.64	—	—	—
	SMD	10	500	400	2500	TLP160GCT-ND†	1.02	.85	.68	TLP160GTR-ND	3,000	442.00/M
	Dip	10	500	400	5000	TLP3022-ND	.97	.81	.65	—	—	—
	Dip	5	500	400	5000	TLP3023-ND	1.07	.90	.72	—	—	—
	Dip	10	500	600	5000	TLP3052D4N-ND*	1.05	.88	.70	—	—	—
	Dip	10	500	600	4000	TLP762JFD4-ND*	.99	.83	.66	—	—	—
	Dip	10	500	600	4000	TLP762JD4-ND*	.96	.80	.64	—	—	—
3	SMD	10	500	400	2500	TLP161G-ND	.90	.75	.60	—	—	—
	SMD	10	500	600	2500	TLP161J-ND	.90	.75	.60	TLP161JTR-ND	3,000	390.00/M
	Dip	10	500	400	5000	TLP3042S-ND#	.78	.65	.52	—	—	—
	Dip	5	500	400	5000	TLP3043S-ND#	.78	.65	.52	—	—	—
	Dip	10	500	600	5000	TLP3062S-ND#	.84	.70	.56	—	—	—
	Dip	5	500	600	5000	TLP3063S-ND#	.84	.70	.56	—	—	—
	SMD	3	500	600	2500	TLP168JCT-ND†	1.29	1.08	.86	TLP168JTR-ND	3,000	559.00/M
	Dip	10	500	400	5000	TLP3042-ND	.97	.81	.65	—	—	—
	Dip	5	500	400	5000	TLP3043-ND	1.03	.86	.69	—	—	—
	Dip	5	500	600	5000	TLP3063-ND	.96	.80	.64	—	—	—
	SMD	5	500	600	5000	TLP3063D4-LF2-ND*	1.26	1.05	.84	—	—	—
	SMD	5	500	600	5000	TLP3063D4CT-ND*	1.25	1.00	.75	TLP3063D4TR-ND*	1,500	650.00/M
	Dip	5	500	600	5000	TLP3063D4-ND*	1.11	.93	.74	—	—	—
	Dip	5	500	600	5000	TLP3063D4S-ND*	.96	.80	.64	—	—	—
	SMD	5	500	600	5000	TLP3063LF1S-ND	.96	.80	.64	—	—	—
	SMD	5	500	600	5000	TLP3063D4TSCT-ND†*	1.05	.88	.70	TLP3063D4TSTR-ND*	1,500	465.50/M
	SMD	5	500	600	5000	TLP3063TP1CT-ND†	1.08	.90	.72	TLP3063TP1TR-ND	1,500	478.80/M
	SMD	5	500	600	5000	TLP3063TP1SCT-ND†	.96	.80	.64	TLP3063TP1STR-ND	1,500	425.60/M
	Dip	10	500	600	4000	TLP763JD4-ND*	.96	.80	.64	—	—	—
4	SMD	10	10	400	2500	TLP141GCT-ND†	1.38	1.15	.92	TLP141GTR-ND	3,000	598.00/M
	SMD	10	10	400	2500	TLP141G-ND	1.35	1.13	.90	—	—	—
5	Dip	10	500	400	2500	TLP525G-ND	.90	.75	.60	—	—	—
	Dip	10	500	400	2500	TLP525G-2-ND	1.50	1.20	.90	—	—	—

Fig. 1

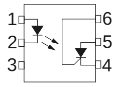
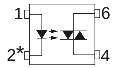


Fig. 2



*Pin 3 for TLP160

Fig. 3

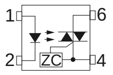


Fig. 4

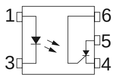
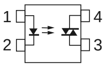


Fig. 5



* VDE Approved # Zero Crossing
† Cut Tape Pricing ‡ SCR Output

High Speed Output Optoisolators

Fig.	Pkg.	Output Current Min. (ma)	@IF (ma)	@VO (V)	Data Rate Typical (bit/s)	Max. Supply Voltage (V)	Isolation Voltage (Vrms)	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No	Tape & Reel Size	Pricing
1	Dip	1.12	16	0.4	1M	15	2500	TLP2530-ND	3.38	2.70	2.10	—	—	—
	Dip	3.04	16	0.4	1M	15	2500	TLP2531-ND	3.38	2.70	2.10	—	—	—
2	Dip	13	5	0.6	10M	5	2500	TLP2630-ND	3.38	2.70	2.10	—	—	—
	Dip	13	5	0.6	10M	5	2500	TLP2631-ND	3.38	2.70	2.10	—	—	—
3	SMD	1.6	16	0.4	1M	15	2500	TLP112-ND	1.61	1.29	.97	TLP112TR-ND	3,000	825.60/M
	SMD	3.2	16	0.4	1M	15	2500	TLP112A-ND	1.61	1.29	.97	TLP112ATR-ND	3,000	921.60/M
	SMD	3.2	16	0.4	1M	30	3750	TLP114ACT-ND†	2.13	1.70	1.28	TLP114ATR-ND	3,000	1088.00/M
4	SMD	13	10	0.4	10M	5	2500	TLP113CT-ND†	1.75	1.40	1.05	TLP113TR-ND	3,000	896.00/M
	SMD	13	10	0.4	10M	5	2500	TLP115-ND	2.66	2.13	1.66	TLP115TR-ND	3,000	1544.76/M
	SMD	13	5	0.4	10M	5	2500	TLP115A-ND	3.15	2.52	1.96	TLP115ATR-ND	3,000	1815.66/M
5	Dip	1.6	16	0.4	1M	15	2500	TLP550-ND	1.38	1.10	.83	—	—	—
6	Dip	3.2	16	0.4	1M	15	2500	TLP559-ND	1.75	1.40	1.05	—	—	—
7	Dip	1.12	16	0.4	1M	15	2500	6N135T-ND	1.20	1.00	.80	—	—	—
	Dip	3.04	16	0.4	1M	15	2500	6N136T-ND	.96	.80	.64	—	—	—
8	Dip	13	5	0.6	10M	5	2500	6N137T-ND	.96	.80	.64	—	—	—
	Dip	13	5	0.6	10M	5	2500	TLP2601-ND	2.25	1.80	1.35	—	—	—
9	Dip	4.8	1.6	0.4	100K	7	2500	6N138T-ND	1.08	.90	.72	—	—	—
	Dip	2	0.5	0.4	100K	18	2500	6N139T-ND	.96	.80	.64	—	—	—
10	Dip Dip	6.4 -2.6	1.6 0	0.4 2.4	5M	20	2500	TLP558-ND	3.60	2.88	2.24	—	—	—
11	Dip Dip	6.4 -2.6	0 1.6	0.5 2.4	5M	20	2500	TLP2200-ND	2.48	1.98	1.54	—	—	—

† Cut Tape pricing

Fig. 1

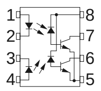


Fig. 2

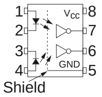


Fig. 3

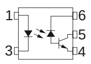


Fig. 4

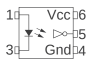


Fig. 5

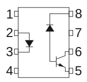


Fig. 6

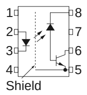


Fig. 7

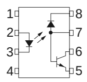


Fig. 8

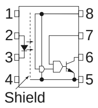


Fig. 9

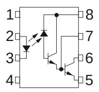


Fig. 10

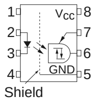
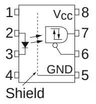


Fig. 11



Photovoltaic Coupler

Fig.	Pkg.	Short Current Min. (uA)	@IF (ma)	Open Voltage Typ. (V)	Switching Time (@UF=20 mA, CL=1000pF) T on (ms)	T off(ms)	Isolation Voltage (VRMS)	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing
1	SMD	12	10	8	0.2	2	2500	TLP190B-ND	2.70	2.16	1.68	—	—	—
	SMD	12	10	8	0.2	2	2500	TLP190BCT-ND†	2.70	2.16	1.68	TLP190BTR-ND	3,000	1512.00/M
2	SMD	24	20	8	0.2	2	2500	TLP191B-ND	2.93	2.34	1.82	TLP191BTR-ND	3,000	1638.00/M

† Cut Tape Pricing

Fig. 1

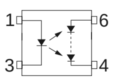
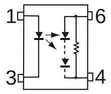


Fig. 2



Power Transistor Outputs

Fig.	Pkg.	Output Current IO (A)	@IF (ma)	Propagation Delay Typical (us)	Max. Supply Voltage (V)	Isolation Voltage (VRMS)	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500
1	Dip	0.25	5	1	16	2500	TLP557-ND	1.80	1.44	1.08	—	—
2	Dip	±0.5	5	0.2	35	2500	TLP250-ND	1.88	1.50	1.13	—	—
	SMD	±1.5	5	0.15 @ 8mA	35	2500	TLP250CT-ND†	2.25	1.80	1.35	TLP250TR-ND	1170.00/M
	SMD	±0.4	5	0.25 @ 8mA	35	2500	TLP251CT-ND†	1.88	1.50	1.13	TLP251TR-ND	975.00/M

† Cut Tape pricing

Fig. 1

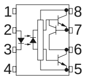
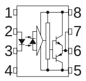


Fig. 2



Solid State Relays

Fig.	Input Current Vf (led)	Imin (mA)	Imax	Vrange	Output Circuit Imax	Ton/Toff	Pkg.	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,500
1	1.15	5	25	0-280V	120	1ms/1ms	4-Dip	TLP227G-ND	1.88	1.50	1.13	—	—
2	1.15	7.5	25	0-320V	100	4ms/4ms	8-SMT	TLP296GTACT-ND†	4.95	3.96	3.08	TLP296GTATR-ND	2805.00/M
3	1.4	10	20	0-400V	150	1ms/1ms	6-Dip	TLP595G-ND	5.32	4.26	3.32	—	—
3	1.4	10	20	0-320V	150	1ms/1ms	6-Dip	TLP598G-ND	2.81	2.25	1.75	—	—

† Cut Tape pricing

Fig. 1

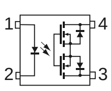


Fig. 2

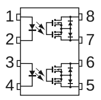
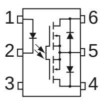


Fig. 3



FAIRCHILD
SEMICONDUCTOR

Optoisolators

Fig. 1

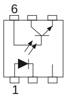


Photo-Transistor Output

Fig. 2

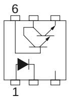
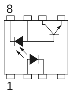


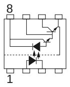
Photo-Darlington Output

Fig. 3



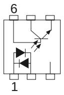
High-Speed Transistor Output

Fig. 4



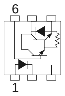
High Gain Split Darlington Output

Fig. 5



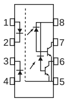
AC Input Photo-Transistor Output

Fig. 6



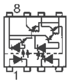
High Voltage Photo-Darlington Output

Fig. 7



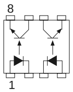
Dual Channel High Speed Transistor Output

Fig. 8



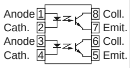
Dual Split Darlington Output

Fig. 9



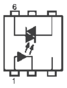
Dual Photo Transistor Output

Fig. 10



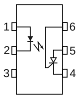
SMT Dual Photo Transistor Output MCT9001QT-ND not SMT

Fig. 11



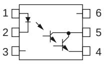
Non-zero Crossing Triac Output

Fig. 12



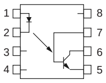
SCR Output

Fig. 13



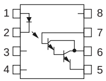
Darlington Output

Fig. 14



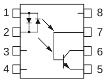
SMT. Transistor Output

Fig. 15



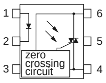
SMT. Darlington Output

Fig. 16



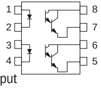
SMT. AC Input Transistor Output

Fig. 17



Zero-Cross Triac Output

Fig. 18 SMT



Dual Channel Darlington Output

Fig. 19

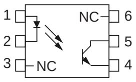


Photo Transistor Output Optoisolators

Fig.	Iso. Volt.	Current Transfer Ratio - Typ. (%)			V_{CEO} (Max.)	Typ. t_{on}/t_{off} (µsec.)	Pkg. Type	Digi-Key Part No.	Price Each		
		(Min.	Typ.	Max.)					1	10	100
1	2500	20	50	—	30	2.5/2.6	DIP	4N25FS-ND	.55	.44	.33
1	5300	20	70	—	30	2.8/4.5	SMT	4N25SM-ND	.55	.44	.33
1	5300	20	70	—	30	2.8/4.5	DIP	4N25MFS-ND	.55	.44	.33
1	2500	20	50	—	30	3.0/3.0	DIP	4N26FS-ND	.55	.44	.33
1	5300	20	70	—	30	2.8/4.5	DIP	4N26MFS-ND	.55	.44	.33
1	2500	20	50	—	30	3.0/3.0	DIP	4N27-ND	.55	.44	.33
1	5300	10	50	—	30	2.8/4.5	DIP	4N27MFS-ND	.55	.44	.33
1	2500	20	50	—	30	2.5/2.6	DIP	4N28-ND	.55	.44	.33
1	5300	10	50	—	30	2.8/4.5	DIP	4N28MFS-ND	.55	.44	.33
2	2500	100	—	—	30	5.0/40	DIP	4N29-ND	.55	.44	.33
2	2500	100	—	—	30	5.0/40	DIP	4N30-ND	.55	.44	.33
2	2500	50	—	—	30	5.0/40	DIP	4N31-ND	.55	.44	.33
2	2500	500	—	—	30	5.0/100	DIP	4N32-ND	.55	.44	.33
2	5300	500	—	—	30	5.0/100	SMT	4N32S-ND	.55	.44	.33
2	2500	500	—	—	30	5.0/100	DIP	4N33-ND	.55	.44	.33
1	3550	100	300	—	30	5.0/5.0	DIP	4N35FS-ND	.55	.44	.33
1	5300	100	—	—	30	5.0/5.0	SMT	4N35SFS-ND	.55	.44	.33
1	5300	100	300	—	30	7.5/5.7	SMT	4N35SM-ND	.55	.44	.33
1	5300	100	300	—	30	7.5/5.7	DIP	4N35MFS-ND	.55	.44	.33
1	5300	100	—	—	30	5.0/5.0	DIP	4N35300-ND†	.55	.44	.33
1	2500	100	300	—	30	5.0/5.0	DIP	4N36-ND	.55	.44	.33
1	5300	100	300	—	30	7.5/5.7	DIP	4N36M-ND	.55	.44	.33
1	1500	100	300	—	30	5.0/5.0	DIP	4N37FS-ND	.55	.44	.33
1	5300	100	300	—	30	7.5/5.7	DIP	4N37MFS-ND	.55	.44	.33
1	5300	20	—	—	80	—	DIP	4N38-ND	.96	.72	.54
3	2500	7	18	50	15V	1.5/1.5	DIP	6N135QT-ND	.95	.79	.63
3	2500	19	27	50	15V	.8/.8	DIP	6N136QT-ND	.95	.79	.63
4	2500	300	1300	—	7V	10/35	DIP	6N138QT-ND	.95	.79	.63
4	2500	400	1100	—	18V	1/7	DIP	6N139QT-ND	.95	.79	.63
19	5300	40	—	80	70	6.0/5.5	DIP	CNY17F1FS-ND	.52	.39	.30
19	5300	63	—	125	70	6.0/5.5	DIP	CNY17F2FS-ND	.52	.39	.30
19	5300	100	—	200	70	6.0/5.5	DIP	CNY17F3FS-ND	.52	.39	.30
1	5300	40	—	80	70	6.0/5.5	DIP	CNY171FS-ND	.52	.39	.30
1	5300	40	60	80	70	4.0/3.0	DIP	CNY171MFS-ND	.52	.39	.30
1	5300	63	100	125	70	4.0/3.0	DIP	CNY172M-ND	.52	.39	.30
1	5300	100	150	200	70	4.0/3.0	DIP	CNY173M-ND	.52	.39	.30
1	5300	40	60	80	70	2.0/11	DIP	CNY171300-ND †	.52	.39	.30
1	5300	63	100	125	70	10/10	DIP	CNY172FS-ND	.52	.39	.30
1	5300	63	100	125	70	3.0/14	DIP	CNY172300-ND †	.52	.39	.30
1	5300	100	150	200	70	10/10	DIP	CNY173FS-ND	.52	.39	.30
1	5300	100	150	200	70	3.0/14	DIP	CNY173300-ND †	.52	.39	.30
1	5300	160	—	320	70	10/10	DIP	CNY174FS-ND	.52	.39	.30
1	5300	160	—	320	70	3.0/14	DIP	CNY174300-ND †	.52	.39	.30
1	5300	50	120	—	70	—	DIP	H11A1FS-ND	.54	.43	.33
1	5300	50	120	—	30	2.8/4.5	SMT	H11A1SM-ND	.54	.43	.33
1	5300	50	120	—	30	2.8/4.5	DIP	H11A1MFS-ND	.54	.43	.33
1	5300	50	120	—	30	2.0/2.0	DIP	H11A1300-ND †	.54	.43	.33
1	5300	20	—	—	70	—	DIP	H11A2FS-ND	.54	.43	.33
1	5300	20	—	—	30	2.3/4.4	DIP	H11A3FS-ND	.54	.43	.33
1	2500	30	—	—	30	2.0/2.0	DIP	H11A5FS-ND	.54	.43	.33
5	5300	20	50	—	30	—	DIP	H11AA1300-ND †	.74	.56	.42
5	2500	20	50	—	30	2.0/2.0	DIP	H11AA1-ND	.74	.56	.42
5	2500	10	20	—	30	2.0/2.0	DIP	H11AA2-ND	.74	.56	.42
5	2500	50	100	—	30	2.0/2.0	DIP	H11AA3-ND	.74	.56	.42
5	2500	100	150	—	30	2.0/2.0	DIP	H11AA4-ND	.80	.60	.45
1	4000	300	—	—	30	5.0/5.0	DIP	H11AG1-ND	.97	.73	.55
1	5300	100	150	300	70	5.0/4.0	DIP	H11AV1AM-ND*	.81	.68	.54
1	5300	100	150	300	70	5.0/4.0	DIP	H11AV1M-ND	.81	.68	.54
2	5300	500	—	—	25	—	DIP	H11B1-ND	.63	.48	.36
2	5300	500	—	—	25	—	DIP	H11B1300-ND †	.63	.48	.36
2	5300	200	—	—	25	—	DIP	H11B2-ND	.63	.48	.36
2	5300	100	—	—	55	25.0/18.0	DIP	H11B255-ND	.63	.48	.36
1	4000	100	—	300	70	3.0/2.5	DIP	CNW11AV1-ND	.96	.80	.64
1	4000	50	—	—	70	3.0/2.5	DIP	CNW11AV2-ND	1.02	.86	.69
1	5300	20	—	—	300	—	DIP	H11D1FS-ND	.97	.73	.55
1	5300	20	—	—	300	5.0/5.0	DIP	H11D1300-ND †	.97	.73	.55
1	5300	20	—	—	300	—	DIP	H11D2-ND	.97	.73	.55
1	5300	20	—	—	300	5.0/5.0	DIP	H11D2300-ND †	.97	.73	.55
1	5300	20	—	—	200	—	DIP	H11D3-ND	.92	.69	.52
6	4000	1000	—	—	100	5/100	DIP	H11G1-ND	.86	.65	.49
6	5300	500	—	—	100	5.0/100	SMT	H11G1S-ND	.86	.65	.49
6	4000	1000	—	—	80	5/100	DIP	H11G2-ND	.86	.65	.49
6	5300	200	—	—	25	—	DIP	H11G3-ND	.80	.60	.45
6	4000	—	250	—	55	50/500	DIP	H11G45QT-ND	1.40	1.12	.84
3	2500	12	27	—	15V	.8/.8	DIP	HCPL2503QT-ND	1.03	.86	.69
7	2500	16	18	—	—	1.5/1.5	DIP	HCPL2530-ND	1.86	1.49	1.12
7	2500	19	27	—	—	.8/.8	DIP	HCPL2531-ND	1.97	1.58	1.19
8	2500	300	—	—	7V	20/35	DIP	HCPL2730QT-ND	1.79	1.43	1.08
8	2500	400	—	—	18V	2/10	DIP	HCPL2731QT-ND	1.97	1.58	1.19
1	2500	150	225	—	30	5/5	DIP	MCT210-ND	.84	.63	.48
1	5300	20	60	—	30	6/5	DIP	MCT2200300-ND †	.60	.45	.34
1	2500	20	50	—	30	5/5	DIP	MCT26QT-ND	.33	.31	.28
1	2500	100	300	—	30	10/10	DIP	MCT270QT-ND	.43	.40	.37
1	2500	45	67	—	30	7/7	DIP	MCT271-ND	.60	.45	.34

Fig.	Volt.	Current Transfer Iso.Ratio - Typ. (%)			V_{CEO} (Max.)	Typ. t_{on}/t_{off} (µsec.)	Pkg. Type	Digi-Key Part No.	Price Each		
		(Min.	Typ.	Max.)					1	10	100
1	2500	20	60	—	30	5/5	DIP	MCT2E-ND	.52	.39	.30
1	5300	20	70	—	30	2.8/4.5	DIP	MCT2EM-ND	.52	.39	.30
1	2500	20	70	—	30	5/5	DIP	MCT2-ND	.48	.36	.27
1	5300	20	70	—	30	2.8/4.5	DIP	MCT2M-ND	.48	.36	.27
1	2500	120	225	—	30	6/19	DIP	MCT5201-ND	.75	.63	.50
1	2500	70	400	—	30	10/12	DIP	MCT5210-ND	.75	.63	.50
1	2500	150	350	—	30	20/20	DIP	MCT5211-ND	.81	.68	.54
9	2500	50	—	—	30	2.4/15	DIP	MCT61-ND	.84	.63	.48
9	2500	100	—	—	30	2.4/15	DIP	MCT62-ND	.88	.66	.50
9	2500	10	—	—	30	5.0/25.0	SMT	MCT62S-ND	.88	.66	.50
9	2500	20	—	—	30	2.4/15	DIP	MCT6-ND	.84	.63	.48
10	2500	50	—	600	55	2.4/2.4	DIP	MCT9001-ND	.96	.72	.54
1	5300	100	300	—	70	10/10	DIP	TIL111-ND	.53	.40	.30
13	5300	300	450	—	30	3.5/95	DIP	MOC119-ND	.63	.48	.36
14	3000	40	60	80	70	3.0/2.8	SMT	MOC205M-ND	.86	.65	.49
14	3000	63	94	125	70	3.0/2.8	SMT	MOC206M-ND	.86	.65	.49
14	3000	100	150	200	70	3.0/2.8	SMT	MOC207M-ND	.86	.65	.49
14	3000	40	80	125	70	3.0/2.8	SMT	MOC208M-ND	.86	.65	.49
14	3000	20	65	—	30	7.5/5.7	SMT	MOC211M-ND	.86	.65	.49
14	3000	50	90	—	30	7.5/5.7	SMT	MOC212M-ND	.86	.65	.49
14	3000	100	140	—	30	7.5/5.7	SMT	MOC213M-ND	.86	.65	.49
14	3000	20	50	—	30	7.5/5.7	SMT	MOC215M-ND	.86	.65	.49
14	3000	50	80	—	30	7.5/5.7	SMT	MOC216M-ND	.92	.69	.52
14	3000	100	130	—	30	7.5/5.7	SMT	MOC217M-ND	.92	.69	.52
15	3000	500	1000	—	30	3.5/95	SMT	MOC223M-ND	.92	.69	.52
16	3000	20	150	—	30	—	SMT	MOC256M-ND	.82	.68	.55
13	5300	500	—	—	50	3.5/95	DIP	MOC8020-MQT-ND	1.05	.99	.91
13	5300	500	—	—	50	3.5/95	DIP	MOC8020-ND	.63	.48	.36
13	5300	1000	—	—	50	3.5/95	DIP	MOC8021-ND	.63	.48	.36
13	5300	300	—	—	80	3.5/95	DIP	MOC8030-ND	.63	.48	.36
13	5300	500	—	—	80	3.5/95	DIP	MOC8050-ND	.88	.66	.50
1	5300	50	100	—	30	9.0/7.0	DIP	MOC8100M-ND	.52	.39	.30
19	5300	50	65	80	30	7.5/5.7	DIP	MOC8101-ND	.63	.48	.36
19	5300	50	—	150	70	7.5/5.7	DIP	MOC8106-ND	.52	.39	.30
19	5300	20	—	—	70	6.0/5.5	DIP	MOC8111-ND	.57	.46	.35
19	5300	50	—	—	70	6.0/5.5	DIP	MOC8112-ND	.57	.46	.35
19	5300	100	—	—	70	6.0/5.5	DIP	MOC8113-ND	.57	.46	.35
10	3000	100	150	200	70	3.0/2.8	SMT	MOCD207M-ND	.99	.83	.66
10	3000	40	—	125	70	3.0/2.8	SMT	MOCD208M-ND	.99	.83	.66
10	3000	20	65	—	30	7.5/5.7	SMT	MOCD211M-ND	.86	.72	.58
10	3000	100	—	—	70	3.0/2.8	SMT	MOCD213M-ND	.95	.79	.63
10	3000	100	130	—	30	7.5/5.7	SMT	MOCD217M-ND	1.03	.86	.69
18	3000	500	1000	—	30	3.5/95	SMT	MOCD223M-ND	.99	.83	.66

† VDE approval * .4” Lead Spacing

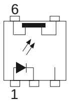
SCR and Triac Output Optoisolators

Fig.	Iso. Volt.	Max I_F Trigger (mA)	Min. Blocking Voltage	Max. I_{DRM}	Pkg. Type	Digi-Key Part No.	Price Each		
							1	10	100
11	5300	15	250V	.100	DIP	MOC3010M-ND	.80	.60	.45
11	5300	10	250V	.100	DIP	MOC3011M-ND	.86	.65	.49
11	5300	5	250V	.100	DIP	MOC3012M-ND	.97	.73	.55
11	5300	5	250V	.100	SMT	MOC3012SM-ND	.97	.73	.55
11	5300	30	400V	.100	DIP	MOC3020MFS-ND	.80	.60	.45
11	5300	15	400V	.100	DIP	MOC3021MFS-ND	.86	.65	.49
11	5300	10	400V	.100	DIP	MOC3022MFS-ND	.92	.69	.52
11	5300	10	400V	.100	DIP	MOC3022VM-ND †	.92	.69	.52
11	5300	5	400V	.100	SMT	MOC3023SM-ND	.77	.65	.52
11	5300	5	400V	.100	DIP	MOC3023TM-ND*	.77	.65	.52
11	5300	5	400V	.100	DIP	MOC3023MFS-ND	.77	.65	.52
12	5300	30	200V	50	DIP	4N39-ND	1.20	1.00	.80
12	5300	14	400V	150	DIP	4N40QT-ND	1.20	1.00	.80
12	5300	20	200V	50	DIP	H11C1-ND	1.16	.97	.78
12	5300	20	200V	50	DIP	H11C2-ND	1.03	.86	.69
12	5300	30	200V	50	DIP	H11C3-ND	1.03	.86	.69
12	5300	20	400V	150	DIP	H11C4-ND	1.20	1.00	.80
12	5300	20	400V	150	DIP	H11C5-ND	1.16	.97	.78
12	5300	30	400V	150	DIP	H11C6-ND	1.07	.90	.72
17	5300	15	250V	.100	DIP	MOC3031M-ND	.90	.75	.60
17	5300	10	250V	.100	DIP	MOC3032M-ND	.95	.79	.63
17	5300	5	250V	.100	DIP	MOC3033M-ND	.99	.83	.66
17	5300	15	400V	.100	DIP	MOC3041M-ND	.99	.83	.66
17	5300	10	400V	.100	DIP	MOC3042M-ND	.99	.83	.66
17	5300	5	400V	.100	DIP	MOC3043M-ND	.99	.83	.66
11	5300	15	600V	.100	DIP	MOC3051M-ND	.90	.75	.60
11	5300	10	600V	.100	DIP	MOC3052M-ND	.95	.79	.63
17	5300	15	600V	.500	DIP	MOC3061M-ND	1.03	.86	.69
17	5300	10	600V	.500	DIP	MOC3062M-ND	1.03	.86	.69
17	5300	5	600V	.500	DIP	MOC3063M-ND	1.16	.97	.78
17	5300	5	600V	.500	DIP	MOC3063TM-ND*	1.16	.97	.78
17	5300	15	800V	.500	DIP	MOC3081M-ND	1.25	1.01	.76
17	5300	10	800V	.500	DIP	MOC3082M-ND	1.29	1.03	.78
17	5300	5	800V	.500	DIP	MOC3083M-ND	1.43	1.15	.86
17	5300	10	600V	.100	DIP	MOC3162M-ND	1.72	1.38	1.03
17	5300	5	600V	.100	DIP	MOC3163M-ND	1.75	1.41	1.06

† VDE approval *.4” Lead Spacing

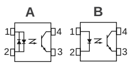
FAIRCHILD SEMICONDUCTOR Optoisolators

Fig. 1



Bilateral Analog FET Output

Fig. 2



4-Pin Transistor Output

Fig. 3

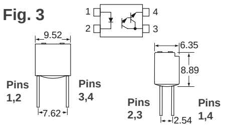
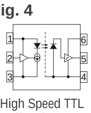
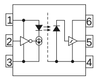


Fig. 4



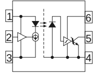
High Speed TTL Buffered Output

Fig. 5



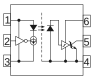
High Speed TTL Inverted Output

Fig. 6



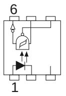
High Speed CMOS Buffered Output

Fig. 7



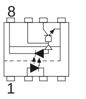
High Speed CMOS Inverted Output

Fig. 8



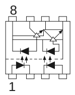
Schmitt Trigger Inverted OC Output

Fig. 9



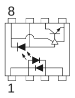
Very High Speed TTL, 5V CMOS Output

Fig. 10



Dual Very High Speed TTL, 5V CMOS Output

Fig. 11



AC Line Monitor TTL Output

4-Pin Couplers

Fig.	Isolation Voltage	Current Transfer Ratio	VCEO (Max.)	Typ. t_{on}/t_{off} (µsec.)	Pkg. Type	Digi-Key Part No.	Price Each		
							1	10	100
2A	5300	20-300%	35	2.4/2.4	DIP	H11AA814-ND	.52	.39	.30
	5300	50-150%	35	2.4/2.4	DIP	H11AA814A-ND	.52	.39	.30
2B	5300	50-600%	35	2.4/2.4	DIP	H11A817-ND	.43	.35	.26
	5300	80-160%	35	2.4/2.4	DIP	H11A817A-ND	.47	.38	.28
	5300	130-260%	35	2.4/2.4	DIP	H11A817B-ND	.47	.38	.28
	5300	200-400%	35	2.4/2.4	DIP	H11A817C-ND	.47	.38	.28
	5300	300-600%	35	2.4/2.4	DIP	H11A817D-ND	.52	.39	.30
3	5300	100% (Min.)	30	9.0/4.0	DIP	H24A1-ND	2.38	1.91	1.49

Logic Output Optoisolators

Fig.	Function	Input: LSTTL Output	15M Baud Rt. Output Configuration	Pkg. Type	Digi-Key Part No.	Price Each		
						1	10	100
4	Buff.	TTL	Totem Pole	DIP	74OL6000-ND	2.81	2.25	1.75
	Buff.	TTL	Totem Pole	SMT	74OL6000S-ND	2.84	2.27	1.77
5	Inv.	TTL	Totem Pole	DIP	74OL6001-ND	2.81	2.25	1.75
6	Buff.	CMOS	Open Collect.	DIP	74OL6010-ND	2.81	2.25	1.75
7	Inv.	CMOS	Open Collect.	DIP	74OL6011-ND	2.81	2.25	1.75

Fig.	Iso. Volt.	$I_{f_{on}}$ Current (Max.) mA	I_{CCL} (Max.)	Oper. Voltage (Max.)	Pkg. Type	Digi-Key Part No.	Price Each			Tape & Reel Pricing 1,000
							1	10	100	
8	5300	1.6	5	16V	SMT	H11L1SM-ND	.95	.79	.63	—
	5300	1.6	5	16V	DIP	H11L1-MQT-ND	.94	.79	.63	—
	5300	1.6	5	16V	DIP	H11L1V-MQT-ND †	.94	.79	.63	—
	5300	10	5	16V	DIP	H11L2-ND	.86	.72	.58	—
	5300	10	5	16V	SMT	H11L2S-ND	.86	.72	.58	—
	5300	10	5	16V	DIP	H11L2-MQT-ND	.86	.72	.58	—
	5300	5	5	16V	DIP	H11L3-MQT-ND	.90	.76	.61	—
	5300	3.2	10	16V	DIP	H11N1-ND	3.84	3.07	2.39	—
	5300	3.2	10	16V	DIP	H11N1-MQT-ND	3.84	3.07	2.39	—
	5300	10	10	16V	DIP	H11N3-ND	2.60	2.08	1.62	—
	5300	10	10	16V	DIP	H11N3-MQT-ND	2.60	2.08	1.62	—
	5300	4.0	5	16V	DIP	MOC5008M-ND	.90	.76	.61	—
	5300	10.0	5	16V	DIP	MOC5009M-ND	.86	.72	.58	—
8	7500	1.6	5	15V	DIP	H11L1M-ND *NEW!*	.95	.79	.63	—
	7500	60	5	15V	DIP	H11L1SR2MCT-ND* *NEW!*	.97	.81	.65	428.26
	7500	1.6	5	15V	SMD	H11L1SR2VMCT-ND* *NEW!*	.97	.81	.65	427.99
	7500	1.6	5	15V	SMD	H11L1SVM-ND *NEW!*	.95	.79	.63	—
	7500	1.6	5	15V	DIP	H11L1TM-ND *NEW!*	.95	.79	.63	—
	7500	1.6	5	15V	DIP	H11L1TVM-ND *NEW!*	.95	.79	.63	—
	7500	1.6	5	15V	DIP	H11L1VM-ND *NEW!*	.95	.79	.63	—
	7500	10.0	5	15V	DIP	H11L2M-ND *NEW!*	.86	.72	.58	—
	7500	10.0	5	15V	SMD	H11L2SM-ND *NEW!*	.86	.72	.58	—
	7500	10.0	5	15V	SMD	H11L2SR2MCT-ND* *NEW!*	.88	.74	.59	389.69
	7500	10.0	5	15V	SMD	H11L2SR2VMCT-ND* *NEW!*	.88	.74	.59	389.69
	7500	10.0	5	15V	SMD	H11L2SVM-ND *NEW!*	.86	.72	.58	—
	7500	10.0	5	15V	DIP	H11L2TM-ND *NEW!*	.86	.72	.58	—
	7500	10.0	5	15V	DIP	H11L2TVM-ND *NEW!*	.86	.72	.58	—
	7500	10.0	5	15V	DIP	H11L2VM-ND *NEW!*	.86	.72	.58	—
	7500	60	5	15V	DIP	H11L3M-ND *NEW!*	.90	.75	.60	—

* For Tape and Reel change CT-ND to TR-ND.   † VDE approval

Fig.	Isol. Volt.	Max. Prop. Delay (nS)	Typ. CMR V/µsec.	I_F (mA)	Pkg. Type	Digi-Key Part No.	Price Each		
							1	10	100
9	2500	75	10,000	5	DIP	HCPL2601QT-ND	1.25	1.01	.76
	2500	75	10,000	5	DIP	HCPL2611-ND	1.43	1.15	.86
10	2500	75	10,000	5	DIP	HCPL2630QT-ND	2.33	1.86	1.40
	2500	75	10,000	5	DIP	HCPL2631QT-ND	2.25	1.81	1.41
9	2500	75	10,000	5	DIP	6N137QT-ND	1.16	.97	.78

Fig.	Isolation Voltage	BV_{CEO} (Min.)	Typ. t_{on}/t_{off} (µsec.)	Pkg. Type	Digi-Key Part No.	Price Each		
						1	10	100
11	2500	5V	1/1	DIP	MID400-ND	2.81	2.25	1.75

FET Outputs

Fig.	Isolation Voltage	Rds ON (ohm)	Vbr (Min.)	Typ. t_{on}/t_{off} (µS)	Pkg. Type	Digi-Key Part No.	Price Each		
							1	10	100
1	5300	200	30	25/25	DIP	H11F1-ND	2.25	1.81	1.36
	5300	330	30	25/25	DIP	H11F2-ND	2.25	1.81	1.36
	5300	470	15	25/25	DIP	H11F3-ND	1.97	1.58	1.19

LITEON Optoisolators

Fig. 1

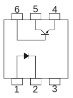


Fig. 2

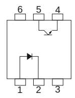


Fig. 3

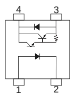


Fig. 4

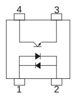


Fig. 5

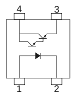


Fig. 6

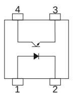


Fig. 7

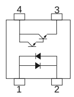


Fig. 8

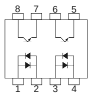


Fig. 9

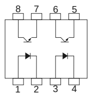


Fig. 10

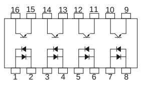


Fig. 11

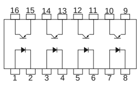


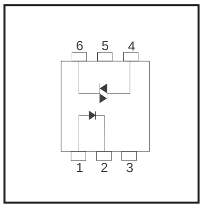
Fig.	Isola-tion Volt.	Current Transfer Ratio		VCEO (Max.)	Typ. t_{on}/t_{off} (µsec.)	Pkg. Type	Digi-Key Part No.	Price Each			Lite-On Part No.
		Min.	Max.					1	10	100	
1	2500	20%	–	30	3.0/3.0	DIP	160-1300-5-ND	.44	.33	.25	4N25
	2500	20%	–	30	3.0/3.0	SMT	160-1301-5-ND	.50	.38	.29	4N25S
	1500	20%	–	30	3.0/3.0	DIP	160-1302-5-ND	.44	.33	.25	4N26
	1500	20%	–	30	3.0/3.0	SMT	160-1303-5-ND	.50	.38	.29	4N26S
	3550	100%	–	30	3.0/3.0	DIP	160-1304-5-ND	.44	.33	.25	4N35
1	3550	100%	–	30	3.0/3.0	SMT	160-1305-5-ND	.50	.38	.29	4N35S
	1500	100%	–	30	3.0/3.0	DIP	160-1306-5-ND	.44	.33	.25	4N37
	1500	100%	–	30	3.0/3.0	SMT	160-1307-5-ND	.50	.38	.29	4N37S
	5000	40%	80%	70	5.0/5.0	DIP	160-1308-5-ND	.44	.33	.25	CNY17-1
	5000	40%	80%	70	5.0/5.0	SMT	160-1309-5-ND	.50	.38	.29	CNY17-1S
1	5000	63%	125%	70	5.0/5.0	DIP	160-1310-5-ND	.44	.33	.25	CNY17-2
	5000	63%	125%	70	5.0/5.0	SMT	160-1311-5-ND	.50	.38	.29	CNY17-2S
	5000	100%	200%	70	5.0/5.0	DIP	160-1312-5-ND	.44	.33	.25	CNY17-3
	5000	100%	200%	70	5.0/5.0	SMT	160-1313-5-ND	.50	.38	.29	CNY17-3S
	5000	160%	320%	70	5.0/5.0	DIP	160-1314-5-ND	.44	.33	.25	CNY17-4
1	5000	160%	320%	70	5.0/5.0	SMT	160-1315-5-ND	.50	.38	.29	CNY17-4S
2	5000	40%	80%	70	5.0/5.0	DIP	160-1316-5-ND	.44	.33	.25	CNY17F-1
2	5000	40%	80%	70	5.0/5.0	SMT	160-1317-5-ND	.50	.38	.29	CNY17F-1S
2	5000	63%	125%	70	5.0/5.0	DIP	160-1318-5-ND	.44	.33	.25	CNY17F-2
2	5000	63%	125%	70	5.0/5.0	SMT	160-1319-5-ND	.50	.38	.29	CNY17F-2S
2	5000	100%	200%	70	5.0/5.0	DIP	160-1320-5-ND	.44	.33	.25	CNY17F-3
2	5000	100%	200%	70	5.0/5.0	SMT	160-1321-5-ND	.50	.38	.29	CNY17F-3S
2	5000	160%	320%	70	5.0/5.0	DIP	160-1322-5-ND	.44	.33	.25	CNY17F-4
2	5000	160%	320%	70	5.0/5.0	SMT	160-1323-5-ND	.50	.38	.29	CNY17F-4S
1	5000	50%	–	30	2.8/4.5	DIP	160-1324-5-ND	.54	.41	.31	H11A1

Fig.	Isola-tion Volt.	Current Transfer Ratio		VCEO (Max.)	Typ. t_{on}/t_{off} (µsec.)	Pkg. Type	Digi-Key Part No.	Price Each			Lite-On Part No.
		Min.	Max.					1	10	100	
1	5000	50%	–	30	2.8/4.5	SMT	160-1325-5-ND	.60	.45	.34	H11A1S
	5000	20%	–	30	2.8/4.5	DIP	160-1326-5-ND	.54	.41	.31	H11A2
	5000	20%	–	30	2.8/4.5	SMT	160-1327-5-ND	.60	.45	.34	H11A2S
	5000	20%	–	300	5.0/5.0	DIP	160-1328-5-ND	.87	.66	.49	H11D1
	5000	20%	–	300	5.0/5.0	SMT	160-1329-5-ND	.93	.70	.53	H11D1S
3	3750	1000%	–	300	100/20	SMT	160-1331-1-ND	.64	.53	.43	LTV-352T
3	3750	1000%	–	300	100/20	SMT	160-1331-2-ND*		238.50/750		LTV-352T
4	3750	20%	400%	35	4.0/3.0	SMT	160-1333-1-ND	.44	.37	.29	LTV-354T
4	3750	20%	400%	35	4.0/3.0	SMT	160-1333-2-ND*		163.13/750		LTV-354T
5	3750	600%	7500%	35	60/53	SMT	160-1335-1-ND	.44	.37	.29	LTV-355T
5	3750	600%	7500%	35	60/53	SMT	160-1335-2-ND*		163.13/750		LTV-335T
6	3750	50%	600%	80	4.0/3.0	SMT	160-1337-1-ND	.35	.30	.24	LTV-356T
6	3750	50%	600%	80	4.0/3.0	SMT	160-1337-2-ND*		132.75/750		LTV-356T
6	3750	50%	600%	35	4.0/3.0	SMT	160-1339-1-ND	.35	.30	.24	LTV-357T
6	3750	50%	600%	35	4.0/3.0	SMT	160-1339-2-ND*		132.75/750		LTV-357T
2	5000	40%	320%	70	2.0/2.0	DIP	160-1340-5-ND	.86	.65	.49	LTV-702F
2	5000	40%	320%	70	2.0/2.0	SMT	160-1341-5-ND	.92	.69	.52	LTV-702FS
1	5000	40%	320%	70	2.0/2.0	DIP	160-1342-5-ND	.80	.60	.45	LTV-702V
1	5000	40%	320%	70	2.0/2.0	SMT	160-1343-5-ND	.86	.65	.49	LTV-702VS
4	5000	20%	300%	35	4.0/3.0	DIP	160-1344-5-ND	.72	.54	.41	LTV-814
4	5000	20%	300%	35	4.0/3.0	SMT	160-1345-5-ND	.78	.59	.44	LTV-814S
8	5000	20%	300%	35	4.0/3.0	DIP	160-1346-5-ND	1.44	1.08	.81	LTV-824
8	5000	20%	300%	35	4.0/3.0	SMT	160-1347-5-ND	1.50	1.13	.85	LTV-824S
10	5000	20%	300%	35	4.0/3.0	DIP	160-1348-5-ND	2.88	2.16	1.62	LTV-844
10	5000	20%	300%	35	4.0/3.0	SMT	160-1349-5-ND	3.12	2.34	1.76	LTV-844S
4	5000	20%	80%	35	4.0/3.0	DIP	160-1350-5-ND	.84	.63	.48	LTV-814H
4	5000	20%	80%	35	4.0/3.0	SMT	160-1351-5-ND	.90	.68	.51	LTV-814HS
8	5000	20%	80%	35	4.0/3.0	DIP	160-1352-5-ND	1.68	1.26	.95	LTV-824H
8	5000	20%	80%	35	4.0/3.0	SMT	160-1353-5-ND	1.74	1.31	.98	LTV-824HS
10	5000	20%	80%	35	4.0/3.0	DIP	160-1354-5-ND	3.36	2.52	1.89	LTV-844H
10	5000	20%	80%	35	4.0/3.0	SMT	160-1355-5-ND	3.48	2.61	1.96	LTV-844HS
7	5000	600%	7500%	35	60/53	DIP	160-1356-5-ND	.96	.72	.54	LTV-8141
7	5000	600%	7500%	35	60/53	SMT	160-1357-5-ND	1.02	.77	.58	LTV-8141S
5	5000	600%	7500%	35	60/53	DIP	160-1358-5-ND	.80	.60	.45	LTV-815
5	5000	600%	7500%	35	60/53	SMT	160-1359-5-ND	.88	.66	.50	LTV-815S
6	5000	50%	600%	80	4.0/3.0	DIP	160-1360-5-ND	.56	.42	.32	LTV-816
6	5000	50%	600%	80	4.0/3.0	SMT	160-1361-5-ND	.62	.47	.35	LTV-816S
9	5000	50%	600%	80	4.0/3.0	DIP	160-1362-5-ND	1.12	.84	.63	LTV-826
9	5000	50%	600%	80	4.0/3.0	SMT	160-1363-5-ND	1.18	.89	.67	LTV-826S
11	5000	50%	600%	80	4.0/3.0	DIP	160-1364-5-ND	2.24	1.68	1.26	LTV-846
11	5000	50%	600%	80	4.0/3.0	SMT	160-1365-5-ND	2.30	1.73	1.30	LTV-846S
6	5000	50%	600%	35	4.0/3.0	DIP	160-1366-5-ND	.44	.33	.25	LTV-817
6	5000	50%	600%	35	4.0/3.0	SMT	160-1367-5-ND	.50	.38	.29	LTV-817S
9	5000	50%	600%	35	4.0/3.0	DIP	160-1368-5-ND	.88	.66	.50	LTV-827
9	5000	50%	600%	35	4.0/3.0	SMT	160-1369-5-ND	.94	.71	.53	LTV-827S
11	5000	50%	600%	35	4.0/3.0	DIP	160-1370-5-ND	1.76	1.32	.99	LTV-847
	5000	50%	600%	35	4.0/3.0	SMT	160-1371-5-ND	1.82	1.37	1.03	LTV-847S

*Tape and Reel Part No.

LITEON

Triac Output Optoisolators



Isolation Voltage	Max. IF Trigger (mA)	Min. Blocking Voltage	Max. IR (µA)	Package Type	Digi-Key Part No.	Price Each 1	10	100	Lite-On Part No.
5000	30	400V	10	DIP	160-1372-5-ND	.66	.50	.38	MOC3020
5000	30	400V	10	SMT	160-1373-5-ND	.70	.53	.40	MOC3020S
5000	15	400V	10	DIP	160-1374-5-ND	.66	.50	.38	MOC3021
5000	15	400V	10	SMT	160-1375-5-ND	.70	.53	.40	MOC3021S
5000	10	400V	10	DIP	160-1376-5-ND	.66	.50	.38	MOC3022
5000	10	400V	10	SMT	160-1377-5-ND	.70	.53	.40	MOC3022S
5000	5	400V	10	DIP	160-1378-5-ND	.70	.53	.40	MOC3023
5000	5	400V	10	SMT	160-1379-5-ND	.74	.56	.42	MOC3023S

FAIRCHILD
SEMICONDUCTOR

Infrared Photosensors and Emitters

Fig. 1

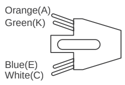


Fig. 2

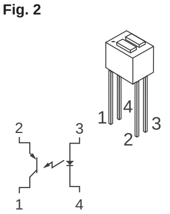


Fig. 3 – TO-46 2 Lead

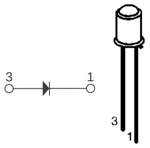


Fig. 4 – TO-46 Flat Window 2 Lead

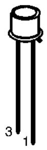


Fig. 5

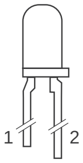


Fig. 6

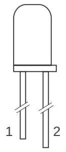


Fig. 7

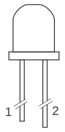
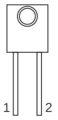


Fig. 8



Reflective Photosensors

Fig.	Output Type	Min/Max Output Ic @ If	Optimum Sensing Distance	Termi-nation	Digi-Key Part No.	Price Each 1	10	100	500
1	Transistor	.6/3 @ 40mA	3.81mm	Leads	QRB1114-ND	1.35	1.13	.90	.63
1	Transistor	.6/3 @ 40mA	3.81mm	Wires	QRB1134-ND	1.95	1.56	1.17	1.06
2	Transistor	1/5 @ 20mA	1.27mm	Leads	QRD1114-ND	.93	.78	.62	.44

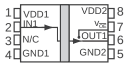
Semiconductor Infrared Emitters (IRED LEDs)

Fig.	For. Volt. (V)	Max. Forward Current (mA)	Min. Power Output	Beam Angle +/-	Peak Wave-Length (nm)	Pkg. Type	Digi-Key Part No.	Price Each 1	10	100	500
3	1.7	100	6.0mW/sr	8	940	TO-46	1N6264-ND	1.88	1.50	1.13	1.02
4	1.7	100	6.0mW	40	940	TO-46	1N6265-ND	1.83	1.46	1.10	.99
3	1.7	100	25.0mW/sr	10	940	TO-46	1N6266-ND	2.43	1.94	1.46	1.31
3	1.7	100	5.4mW	10	940	TO-46	CQX14-ND	1.83	1.46	1.10	.99
4	1.7	100	5.4mW	40	940	TO-46	CQX15-ND	1.83	1.46	1.10	.99
3	1.7	100	12.0mW	10	880	TO-46	F5D1-ND	2.05	1.64	1.23	1.11
3	1.7	100	9.0mW	10	880	TO-46	F5D2-ND	1.90	1.52	1.14	1.03
3	1.7	100	10.5mW	10	880	TO-46	F5D3-ND	1.95	1.56	1.17	1.06
4	1.7	100	12.0mW	40	880	TO-46	F5E1-ND	2.05	1.64	1.23	1.11
4	1.7	100	10.5mW	40	880	TO-46	F5E3-ND	1.95	1.56	1.17	1.06
3	1.7	100	1.5mW/sr	10	940	TO-46	LED56-ND	1.79	1.43	1.08	.97
4	1.7	100	3.5mW/sr	40	940	TO-46	LED55BF-ND	1.79	1.43	1.08	.97
3	1.7	100	3.5mW/sr	10	940	TO-46	LED55B-ND	1.82	1.46	1.10	.99
3	1.7	100	5.4mW/sr	8	940	TO-46	LED55C-ND	1.86	1.49	1.12	1.01
5	1.7	50	14mW/sr	8	940	T-1	QEC113-ND	.50	.40	.30	.17
5	1.7	50	27mW/sr	8	880	T-1	QEC122-ND	.52	.39	.30	.19
6	1.5	100	80mW/sr	9	880	T-1 3/4	QED123-ND	.60	.45	.34	.21
6	1.7	100	16mW/sr	20	880	T-1 3/4	QED222-ND	.52	.39	.30	.19
6	1.7	100	25mW/sr	20	880	T-1 3/4	QED223-ND	.60	.45	.34	.21
6	1.5	100	10mW/sr	20	940	T-1 3/4	QED233-ND	.45	.36	.27	.15
6	1.5	100	27mW/sr	20	940	T-1 3/4	QED234-ND	.50	.40	.30	.17
7	1.7	100	18mW/sr	30	880	Plastic TO-46	QED423-ND	.60	.45	.34	.21
7	1.7	100	20mW/sr	15	880	Plastic TO-46	QED522-ND	.52	.39	.30	.19
7	1.7	100	40mW/sr	15	880	Plastic TO-46	QED523-ND	.60	.45	.34	.21
8	1.5	50	3mW/sr	25	940	SIDELOOK	QEE113-ND	.50	.40	.30	.17
8	1.7	50	8mW/sr	25	880	SIDELOOK	QEE123-ND	.52	.39	.30	.19

NVE
NVE CORPORATION

IsoLoop® High Performance Digital Isolators

IL710



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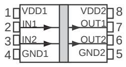

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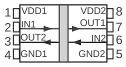

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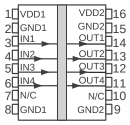

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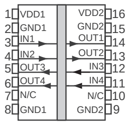

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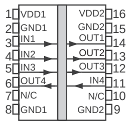
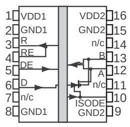
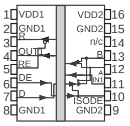


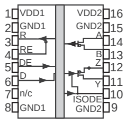
IL485



IL485W



IL422



IsoLoop® digital isolators from NVE are superior performance alternatives to traditional opto-couplers or optoisolators. These highly integrated devices deliver up to 100MBd of data per channel with only 2ns Pulse Width Distortion. They are available in single, dual and quad channel form factors. IsoLoop® bus isolators offer the designer highly compact, isolated RS 485 and RS 422 complaint devices. These high-speed products are ideal for many industrial communication applications, including PROFIBUS.

Features:

IL710, IL711, and IL712: • 100 MBaud Data Rate • 2nS Pulse Width Distortion • 10ns Propagation Delay • 20kV/ms Transient Immunity • 2500 Vrms (1min.) • Dip & SOIC Package

IL715, IL716 and IL717: • 100 MBaud Data Rate • 2nS Pulse Width Distortion • 10ns Propagation Delay • 20kV/ms Transient Immunity • 2500 Vrms (1min.) • Wide Body SOIC Package

IL422: • 2500 Vrms Isolation (1 min) • 25nS Propagation Delay • 25 Mbaud Data Rate • 1 nS Skew • ±60 mA Driver Output Capability • Thermal Shutdown Protection • Meets or Exceeds EIA 422-B, EIA 485-A and ITU Recommendation VII • 16 Pin SOIC Package • UL 1577 Approval (pending)

IL485/IL485W: • 35 MBaud Data Rate • 25ns Propagation Delay • 2500 Vrms Isolation (1 min.) • Wide Body SOIC Package· 20kV/ms Transient Immunity

Supply Voltage	Package Type	Temperature Range	Digi-Key Part No.	Price Each 1	10	25	100	NVE Part No.
3.3/5.0V	8-Dip	-40°C to +100°C	390-1003-ND	3.40	3.15	2.74	2.36	IL710-2
3.3/5.0V	8-SOIC	-40°C to +100°C	390-1004-ND	3.40	3.15	2.74	2.36	IL710-3
3.3/5.0V	8-Dip	-40°C to +100°C	390-1005-ND	5.78	5.35	4.66	4.01	IL711-2
3.3/5.0V	8-SOIC	-40°C to +100°C	390-1006-ND	5.78	5.35	4.66	4.01	IL711-3
3.3/5.0V	8-Dip	-40°C to +100°C	390-1007-ND	5.78	5.35	4.66	4.01	IL712-2
3.3/5.0V	8-SOIC	-40°C to +100°C	390-1008-ND	5.78	5.35	4.66	4.01	IL712-3
3.3/5.0V	16-SOICW	-40°C to +100°C	390-1009-ND	7.46	6.91	6.02	5.18	IL715
3.3/5.0V	16-SOICW	-40°C to +100°C	390-1010-ND	7.46	6.91	6.02	5.18	IL716
3.3/5.0V	16-SOICW	-40°C to +100°C	390-1011-ND	7.46	6.91	6.02	5.18	IL717
3.3/5.0V	16-SOIC	-40°C to +85°C	390-1012-ND	7.46	6.91	6.02	5.18	IL715-3
3.3/5.0V	16-SOIC	-40°C to +85°C	390-1013-ND	7.46	6.91	6.02	5.18	IL716-3
3.3/5.0V	16-SOIC	-40°C to +85°C	390-1014-ND	7.46	6.91	6.02	5.18	IL717-3
5.0V	16-SOICW	-40°C to +85°C	390-1000-ND	8.66	8.02	6.98	6.01	IL422
5.0V	16-SOICW	-40°C to +85°C	390-1001-ND	8.42	7.79	6.79	5.85	IL485
5.0V	16-SOICW	-40°C to +85°C	390-1002-ND	8.90	8.24	7.18	6.18	IL485W

NEW! **SHARP** MICROELECTRONICS OF THE AMERICAS

Photocoupler

Fig. 1

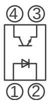


Fig. 2

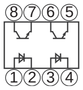


Fig. 3

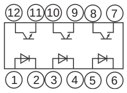
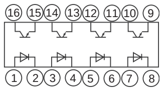


Fig. 4



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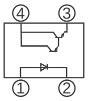

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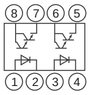

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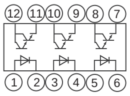


Fig. 8

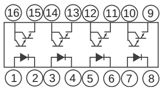


Fig. 9

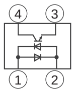


Fig. 10

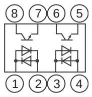


Fig. 11

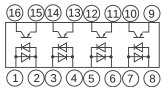


Fig. 12

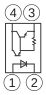


Fig. 13

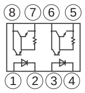


Fig. 14

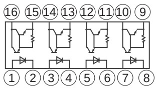


Fig. 15

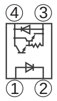


Fig. 16

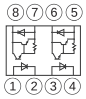
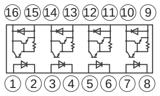


Fig. 17



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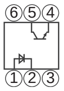
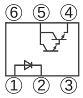


Fig. 19



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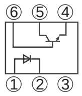

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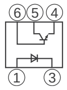


Fig. 22

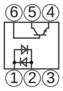


Fig. 23

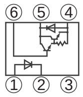


Fig. 24

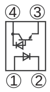
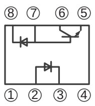


Fig. 25



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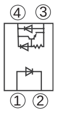

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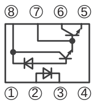

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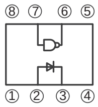


Fig.	Output		Current Transfer Ratio				Isolation Voltage (Vrms)	Dimensions - mm			Package Type	Digi-Key Part No.	Tube Price Each			Sharp Part No.
	V_{CEO} (V) Max.	IC (mA) Max.	Min. (%)	Max. (%)	@ I_F (mA)	@ Vce (V)		Length	Width	Pitch			1	10	100	
Tube																
1	35	20	10	100	20	5	5000	6.0	16.2	2.54	4-Dip	425-1406-5-ND*	2.18	1.74	1.44	PC512
	35	50	10	100	1	0.4	5000	4.58	6.5	2.54	4-Dip	425-1472-5-ND	1.28	1.02	.85	PC818
	35	50	10	100	1	0.4	5000	4.58	6.5	2.54	4-SMT	425-1473-5-ND	1.02	.85	.68	PC818I
	35	50	10	100	1	0.4	5000	4.58	6.5	2.54	4-Dip	425-1475-5-ND*	1.60	1.28	1.06	PC818Y
	35	50	10	100	1	0.4	5000	4.58	6.5	2.54	4-SMT	425-1474-5-ND*	1.17	.98	.78	PC818IY
	35	50	20	200	1	5	5000	9.66	6.5	2.54	8-Dip	425-1476-5-ND†	2.90	2.39	1.94	PC823
	35	50	50	600	5	5	5000	4.58	6.5	2.54	4-Dip	425-1464-5-ND	.44	.31	.22	PC817X
	35	50	50	600	5	5	5000	4.58	6.5	2.54	4-SMD	425-1455-5-ND	.48	.33	.24	PC817XI
	35	50	60	120	1	0.4	5000	4.58	6.5	2.54	4-SMD	425-1435-5-ND	1.50	1.25	1.00	PC810AI
	35	50	60	200	1	0.4	5000	4.58	6.5	2.54	6-Dip	425-1434-5-ND	1.35	1.13	.90	PC810
	35	50	60	200	1	0.4	5000	4.58	6.5	2.54	4-SMD	425-1436-5-ND	1.43	1.14	.95	PC810I
	35	50	80	160	5	5	5000	4.58	6.5	2.54	4-Dip	425-1465-5-ND	.48	.33	.24	PC817X1
	35	50	80	160	5	5	5000	4.58	6.5	2.54	4-SMD	425-1470-5-ND	.52	.36	.26	PC817XI1
	35	50	130	260	5	5	5000	4.58	6.5	2.54	4-Dip	425-1466-5-ND	.48	.33	.24	PC817X2
	35	50	130	260	5	5	5000	4.58	6.5	2.54	4-SMD	425-1471-5-ND	.52	.36	.26	PC817XI2
	35	50	200	400	5	5	5000	4.58	6.5	2.54	4-Dip	425-1467-5-ND	.48	.33	.24	PC817X3
	35	50	200	600	5	5	5000	4.58	6.5	2.54	4-Dip	425-1469-5-ND	.52	.36	.26	PC817X7
	35	50	300	600	5	5	5000	4.58	6.5	2.54	4-Dip	425-1468-5-ND	.48	.33	.24	PC817X4
	70	50	50	150	0.5	5	5000	4.58	6.5	2.54	4-Dip	425-1311-5-ND	.68	.47	.34	PC123A
	70	50	50	150	5	5	5000	4.58	6.5	2.54	4-Dip	425-1318-5-ND*	.80	.55	.40	PC123Y1
	70	50	50	400	0.5	5	5000	4.58	6.5	2.54	4-Dip	425-1310-5-ND	.72	.50	.36	PC12311NSZ
	70	50	50	400	0.5	5	5000	4.58	6.5	2.54	4-Dip	425-1309-5-ND	.68	.47	.34	PC12310NSZ
	70	50	50	400	5	5	5000	4.58	6.5	2.54	4-Dip	425-1308-5-ND	.60	.42	.30	PC123
	70	50	50	400	5	5	5000	4.58	6.5	2.54	4-Dip	425-1317-5-ND*	.76	.53	.38	PC123Y
	70	50	100	200	0.5	5	5000	4.58	6.5	2.54	4-Dip	425-1316-5-ND	.76	.53	.38	PC123S
	70	50	100	200	5	5	5000	4.58	6.5	2.54	4-Dip	425-1320-5-ND*	.84	.58	.42	PC123YS
	70	50	100	250	0.5	5	5000	4.58	6.5	2.54	4-Dip	425-1312-5-ND	.68	.47	.34	PC123B
	70	50	100	250	5	5	5000	4.58	6.5	2.54	4-Dip	425-1319-5-ND*	.80	.55	.40	PC123Y2
	70	50	100	500	.1	5	5000	4.58	6.5	2.54	4-Dip	425-1463-5-ND	.76	.53	.38	PC81720NSZ
	70	50	100	600	.5	5	5000	4.58	6.5	2.54	4-Dip	425-1456-5-ND	.64	.44	.32	PC81710NSZ
	70	50	120	300	.5	5	5000	4.58	6.5	2.54	4-Dip	425-1458-5-ND	.64	.44	.32	PC81711NSZ
	70	50	160	400	.5	5	5000	4.58	6.5	2.54	4-Dip	425-1460-5-ND	.64	.44	.32	PC81712NSZ
	70	50	200	500	.5	5	5000	4.58	6.5	2.54	4-Dip	425-1462-5-ND	.64	.44	.32	PC81713NSZ
	350	50	40	80 Typ.	5	5	5000	4.58	6.5	2.54	4-Dip	425-1503-5-ND	.80	.55	.40	PC851X
	350	50	40	80 Typ.	5	5	5000	4.58	6.5	2.54	4-SMD	425-1504-5-ND	.88	.61	.44	PC851XI
2	35	50	50	400	5	5	5000	9.66	6.5	2.54	8-Dip	425-1486-5-ND	1.32	1.10	.88	PC829
	35	50	50	400	5	5	5000	9.66	6.5	2.54	8-Dip	425-1487-5-ND*	1.35	1.08	.90	PC829Y
	35	50	50	600	5	5	5000	9.66	6.5	2.54	8-Dip	425-1481-5-ND	.84	.70	.56	PC827
	35	50	80	260	5	5	5000	9.66	6.5	2.54	8-Dip	425-1482-5-ND	.93	.78	.62	PC827AB
	35	50	80	600	5	5	5000	9.66	6.5	2.54	8-Dip	425-1483-5-ND	.87	.73	.58	PC827AD
	35	50	130	600	5	5	5000	9.66	6.5	2.54	8-Dip	425-1484-5-ND	.87	.73	.58	PC827BD
	35	50	200	600	5	5	5000	9.66	6.5	2.54	8-Dip	425-1485-5-ND	.90	.75	.60	PC827CD
	80	50	100	—	1	.5	5000	9.66	6.5	2.54	8-Dip	425-1514-5-ND	1.20	1.00	.80	PC8D66
	80	50	100	—	1	.5	5000	9.66	6.5	2.54	8-Dip	425-1515-5-ND‡	1.35	1.13	.90	PC8D66Q
	80	50	1000	—	1	.5	5000	4.58	6.5	2.54	4-Dip	425-1509-5-ND	.76	.53	.38	PC866
	80	50	1000	—	1	.5	5000	4.58	6.5	2.54	4-Dip	425-1510-5-ND‡	.88	.61	.44	PC866Q
3	35	50	50	600	5	5	5000	14.74	6.5	2.54	12-Dip	425-1490-5-ND	1.44	1.20	.96	PC837
	35	50	50	600	5	5	5000	14.74	6.5	2.54	12-Dip	425-1492-5-ND*	1.55	1.24	1.03	PC837Y
	35	50	200	600	5	5	5000	14.74	6.5	2.54	12-Dip	425-1491-5-ND	1.40	1.12	.93	PC837CD
4	35	50	50	400	5	5	5000	19.82	6.5	2.54	16-Dip	425-1501-5-ND	2.20	1.76	1.46	PC849
	35	50	50	400	5	5	5000	19.82	6.5	2.54	16-Dip	425-1502-5-ND*	2.43	2.00	1.62	PC849Y
	70	50	50	600	5	5	5000	19.82	6.5	2.54	16-Dip	425-1499-5-ND	1.35	1.13	.90	PC847X
	70	50	200	600	5	5	5000	19.82	6.5	2.54	16-Dip	425-1500-5-ND	1.35	1.13	.90	PC847X7
	80	50	100	—	1	.5	5000	19.82	6.5	2.54	16-Dip	425-1518-5-ND	2.03	1.62	1.34	PC8Q66
	80	50	100	—	1	.5	5000	19.82	6.5	2.54	16-Dip	425-1519-5-ND‡	2.23	1.78	1.47	PC8Q66Q
	300	50	40	80 Typ.	5	5	5000	19.82	6.5	2.54	16-Dip	425-1516-5-ND	6.12	5.04	4.08	PC8Q51

† AC Input # Darlington Output * Din/VDE 0884 ‡ Burn-in type

(Continued)

	Output		Current Transfer Ratio				Isolation	Dimensions - mm			Package	Digi-Key	Tube Price Each			Sharp
Fig.	VCEO (V) Max.	IC (mA) Max.	Min. (%)	Max. (%)	@ IF (mA)	@ Vce (V)	Voltage (Vrms)	Length	Width	Pitch	Type	Part No.	1	10	100	Part No.
5	35	80	600	7500	1	2	5000	4.58	6.5	2.54	4-Dip	425-1450-5-ND#	.93	.78	.62	PC815
	35	80	600	7500	1	2	5000	4.58	6.5	2.54	4-SMD	425-1452-5-ND#	.96	.80	.64	PC815I
	35	80	600	7500	1	2	5000	4.58	6.5	2.54	4-SMD	425-1453-5-ND*#	1.28	1.02	.85	PC815IY
	35	80	600	7500	1	2	5000	4.58	6.5	2.54	4-SMD	425-1454-5-ND*#	1.29	1.08	.86	PC815Y
	35	80	600	12000	.5	2	5000	4.58	6.5	2.54	4-Dip	425-1451-5-ND#	.96	.66	.48	PC81510NSZ
6	35	80	600	7500	1	2	5000	9.66	6.5	2.54	8-Dip	425-1479-5-ND#	1.43	1.14	.95	PC825
	35	80	600	7500	1	2	5000	9.66	6.5	2.54	8-Dip	425-1480-5-ND*#	1.83	1.46	1.21	PC825Y
7	35	80	600	7500	1	2	5000	14.74	6.5	2.54	12-Dip	425-1488-5-ND#	2.20	1.76	1.46	PC835
	35	80	600	7500	1	2	5000	14.74	6.5	2.54	12-Dip	425-1489-5-ND*#	2.54	2.10	1.70	PC835Y
8	35	80	600	7500	1	2	5000	19.82	6.5	2.54	16-Dip	425-1496-5-ND#	2.79	2.30	1.86	PC845
	35	80	600	7500	1	2	5000	19.82	6.5	2.54	16-SMD	425-1497-5-ND#	2.32	1.91	1.55	PC845I
	35	80	600	7500	1	2	5000	19.82	6.5	2.54	16-Dip	425-1498-5-ND*#	3.08	2.54	2.06	PC845Y
9	35	50	20	300	1	5	5000	4.58	6.5	2.54	4-Dip	425-1446-5-ND†	.56	.39	.28	PC814X
	35	50	50	150	1	5	5000	4.58	6.5	2.54	4-Dip	425-1447-5-ND†	.60	.42	.30	PC814X1
	70	50	50	400	.5	5	5000	4.58	6.5	2.54	4-Dip	425-1444-5-ND†	.88	.61	.44	PC81410NSZ
	70	50	100	300	.5	5	5000	4.58	6.5	2.54	4-Dip	425-1445-5-ND†	.88	.61	.44	PC81411NSZ
10	35	50	20	300	1	5	5000	9.66	6.5	2.54	8-Dip	425-1477-5-ND†	1.32	1.10	.88	PC824
	35	50	50	150	1	5	5000	9.66	6.5	2.54	8-Dip	425-1478-5-ND†	1.08	.90	.72	PC824A
11	35	50	20	300	1	5	5000	19.82	6.5	2.54	16-SMD	425-1493-5-ND	1.40	1.12	.93	PC844IJ1
	35	50	20	300	1	5	5000	19.82	6.5	2.54	16-Dip	425-1494-5-ND	1.38	1.10	.91	PC844X
	35	50	150	300	1	5	5000	19.82	6.5	2.54	16-Dip	425-1495-5-ND	1.48	1.18	.98	PC844X1
12	70	80	1000	8000	1	2	5000	4.58	6.5	2.54	4-Dip	425-1508-5-ND#	.96	.80	.64	PC865
13	70	80	1000	8000	1	2	5000	9.66	6.5	2.54	8-Dip	425-1511-5-ND	1.65	1.32	1.09	PC875
14	70	80	1000	8000	1	2	5000	19.82	6.5	2.54	16-Dip	425-1512-5-ND	2.97	2.45	1.98	PC895
15	350	150	1000	15000	1	2	5000	4.58	6.5	2.54	4-Dip	425-1773-5-ND#	.88	.61	.44	PC852X
	350	150	1000	15000	1	2	5000	4.58	6.5	2.54	4-SMD	425-1505-5-ND#◊	.96	.66	.48	PC852XI
	350	150	1000	15000	1	2	5000	4.58	6.5	2.54	4-Dip	425-1506-5-ND#	.92	.64	.46	PC853X
	350	150	1000	15000	1	2	5000	4.58	6.5	2.54	4-SMD	425-1507-5-ND#◊	1.00	.69	.50	PC853XI
16	300	150	1000	15000	1	2	5000	9.66	6.5	2.54	8-Dip	425-1513-5-ND	2.81	2.32	1.88	PC8D52
17	300	150	1000	15000	1	2	5000	19.82	6.5	2.54	16-Dip	425-1517-5-ND#	4.59	3.78	3.06	PC8Q52
18	35	50	50	600	5	5	5000	7.12	6.5	2.54	6-Dip	425-1418-5-ND	.76	.53	.38	PC714V0NSZX
	35	50	50	600	5	5	5000	7.12	6.5	2.54	6-Dip	425-1419-5-ND*	.84	.58	.42	PC714V0YSZX
	35	80	20	80	100	2	5000	7.12	6.5	2.54	6-Dip	425-1426-5-ND*	.88	.61	.44	PC724V0NSZX
19	35	80	600	7500	1	2	5000	7.12	6.5	2.54	6-Dip	425-1420-5-ND#	.88	.61	.44	PC715V0NSZX
	35	80	600	7500	1	2	5000	7.12	6.5	2.54	6-Dip	425-1421-5-ND*#	.96	.66	.48	PC715V0YSZX
	35	200	1000	15000	1	2	5000	7.12	6.5	2.54	6-Dip	425-1422-5-ND#	.81	.68	.54	PC716V0NSZX
	35	200	1000	15000	1	2	5000	7.12	6.5	2.54	6-Dip	425-1423-5-ND*#	.84	.70	.56	PC716V0YSZX
20	35	50	50	600	5	5	5000	7.12	6.5	2.54	6-Dip	425-1416-5-ND	.80	.55	.40	PC713V0NSZX
	35	50	50	600	5	5	5000	7.12	6.5	2.54	6-Dip	425-1417-5-ND*	.84	.58	.42	PC713V0YSZX
	70	50	40	320	10	5	5000	7.12	6.5	2.54	6-Dip	425-1411-5-ND	.88	.61	.44	PC702V0NSZX
	70	50	40	320	10	5	5000	7.12	6.5	2.54	6-Dip	425-1412-5-ND*	.96	.66	.48	PC702V0YSZX
	70	50	40	320	10	5	5000	7.12	6.5	2.54	6-SMD	425-1413-5-ND	.92	.64	.46	PC703V0NIZX
	70	50	40	320	10	5	5000	7.12	6.5	2.54	6-Dip	425-1414-5-ND	.88	.61	.44	PC703V0NSZX
	70	50	40	320	10	5	5000	7.12	6.5	2.54	6-Dip	425-1415-5-ND*	.92	.64	.46	PC703V0YSZX
	80	50	50	400	5	5	5000	7.12	6.5	2.54	6-Dip	425-1424-5-ND	.96	.66	.48	PC723V0NSZX
	80	50	50	400	5	5	5000	7.12	6.5	2.54	6-Dip	425-1425-5-ND*	1.00	.69	.50	PC723V0YSZX
	300	150	1000	15000	1	2	5000	7.12	6.5	2.54	6-SMD	425-1427-5-ND#	1.20	1.00	.80	PC725V0NIZX
22	35	50	15	300	1	5	5000	9.22	6.5	2.54	6-Dip	425-1431-5-ND†	1.35	1.08	.90	PC733
	35	80	20	80	100	2	5000	9.22	6.5	2.54	6-Dip	425-1432-5-ND†	1.53	1.22	1.01	PC733H
	35	80	20	80	100	2	5000	9.22	6.5	2.54	6-SMD	425-1433-5-ND†	1.53	1.22	1.01	PC733HI
23	300	150	1000	15000	1	2	5000	7.12	6.5	2.54	6-Dip	425-1428-5-ND#	1.17	.98	.78	PC725V0NSZX
	300	150	1000	15000	1	2	5000	7.12	6.5	2.54	6-Dip	425-1429-5-ND*	1.20	1.00	.80	PC725V0YSZX
	300	150	1000	15000	1	2	5000	7.12	6.5	2.54	6-SMD	425-1430-5-ND*	1.23	1.03	.82	PC725V0YUZX
25	15VCC	25	19	40 Typ.	16	4.5	2500	9.22	6.5	2.54	8-Dip	425-1798-5-ND	1.75	1.40	1.16	PC6N136X
26	70	30	50	400	5	5	5000	4.58	6.5	2.54	4-Dip	425-1437-5-ND	.84	.58	.42	PC81100NSZ
	70	30	60	120	5	5	5000	4.58	6.5	2.54	4-Dip	425-1438-5-ND	.88	.61	.44	PC81101NSZ
	70	30	60	200	5	5	5000	4.58	6.5	2.54	4-Dip	425-1441-5-ND	.84	.58	.42	PC81105NSZ
	70	30	60	300	5	5	5000	4.58	6.5	2.54	4-Dip	425-1443-5-ND	.84	.58	.42	PC81108NSZ
	70	30	100	200	5	5	5000	4.58	6.5	2.54	4-Dip	425-1439-5-ND	.88	.61	.44	PC81102NSZ
	70	30	100	300	5	5	5000	4.58	6.5	2.54	4-Dip	425-1442-5-ND	.84	.58	.42	PC81106NSZ
	70	30	150	300	5	5	5000	4.58	6.5	2.54	4-Dip	425-1440-5-ND	.88	.61	.44	PC81103NSZ
27	7VCC	20	300	—	1.6	4.5	2500	9.22	6.5	2.54	8-Dip	425-1800-5-ND	1.98	1.58	1.31	PC6N138X
	18VCC	20	500	—	1.6	4.5	2500	9.22	6.5	2.54	8-Dip	425-1801-5-ND	1.88	1.50	1.24	PC6N139X
28	7VCC	20	—	—	—	—	2500	9.22	6.5	2.54	8-Dip	425-1799-5-ND	1.78	1.42	1.18	PC6N137X

† AC Input # Darlington Output * Din/VDE 0884 ‡ Burn-in type ◊ Power dissipation: PC852XI: 200 and PC853XI: 320

	Output		Current Transfer Ratio				Isolation	Dimensions - mm			Package	Digi-Key	Cut Tape Price Each			Digi-Key	Tape & Reel		Sharp
Fig.	VCEO (V) Max.	IC (mA) Max.	Min. (%)	Max. (%)	@ IF (mA)	@ Vce (V)	Voltage (Vrms)	Length	Width	Pitch	Type	Part No.	1	10	100	Part No.	Size	Pricing	Part No.
											Cut Tape / Tape & Reel								
1	35	50	50	600	5	5	3750	3.6	4.4	2.54	4-SMD	425-1328-1-ND	.48	.40	.32	425-1328-2-ND	3,000	224.00/M	PC357N
	35	50	50	600	5	5	3750	3.6	4.4	2.54	4-SMD	425-1334-1-ND	.51	.43	.34	425-1334-2-ND	750	178.50	PC357NT
	35	50	80	160	5	5	3750	3.6	4.4	2.54	4-SMD	425-1330-1-ND	.51	.43	.34	425-1330-2-ND	3,000	238.00/M	PC357N1
	35	50	80	600	5	5	3750	3.6	4.4	2.54	4-SMD	425-1329-1-ND	.51	.43	.34	425-1329-2-ND	3,000	238.00/M	PC357N0
	35	50	130	260	5	5	3750	3.6	4.4	2.54	4-SMD	425-1331-1-ND	.51	.43	.34	425-1331-2-ND	3,000	238.00/M	PC357N2
	35	50	200	400	5	5	3750	3.6	4.4	2.54	4-SMD	425-1332-1-ND	.51	.43	.34	425-1332-2-ND	3,000	238.00/M	PC357N3
	35	50	300	600	5	5	3750	3.6	4.4	2.54	4-SMD	425-1333-1-ND	.51	.43	.34	425-1333-2-ND	3,000	238.00/M	PC357N4
	70	50	20	400	1	5	2500	2.6	4.4	1.27	4-SMD	425-1341-1-ND†	.51	.43	.34	425-1341-2-ND†	3,000	238.00/M	PC3H4
	70	50	20	400	1	5	2500	2.6	4.4	1.27	4-SMD	425-1347-1-ND	.45	.38	.30	425-1347-2-ND	3,000	210.00/M	PC3H7
	70	50	35	70	1	5	2500	2.6	4.4	1.27	4-SMD	425-1352-1-ND	.48	.40	.32	425-1352-2-ND	3,000	224.00/M	PC3H7A
	70	50	50	100	1	5	2500	2.6	4.4	1.27	4-SMD	425-1353-1-ND	.51	.43	.34	425-1353-2-ND	3,000	238.00/M	PC3H7B
	70	50	50	400	0.5	5	5000	4.58	6.5	2.54	4-SMD	425-1313-1-ND	.48	.40	.32	425-1313-2-ND	2,000	224.00/M	PC123P
	70	50	50	400	5	5	5000	4.58	6.5	2.54	4-SMD	425-1321-1-ND*	.48	.40	.32	425-1321-2-ND*	2,000	224.00/M	PC123ZY2
	70	50	80	160	1	5	2500	2.6	4.4	1.27	4-SMD	425-1354-1-ND	.51	.43	.34	425-1354-2-ND	3,000	238.00/M	PC3H7C
	70	50	100	250	0.5	5	5000	4.58	6.5	2.54	4-SMD	425-1315-1-ND*	.72	.60	.48	425-1315-2-ND*	2,000	336.00/M	PC123PY2
	70	50	100	250	0.5	5	5000	4.58	6.5	2.54	4-SMD	425-1314-1-ND	.51	.43	.34	425-1314-2-ND	2,000	238.00/M	PC123P2
	70	50	100	500	0.1	5	3750	3.6	4.4	2.54	4-SMD	425-1327-1-ND	.66	.55	.44	425-1327-2-ND	750	231.00	PC35720NIT
	70	50	100	500	0.5	5	3750	3.6	4.4	2.54	4-SMD	425-1338-1-ND	.51	.43	.34	425-1338-2-ND	3,000	238.00/M	PC367N
	70	50	100	600	0.5	5	5000	4.58	6.5	2.54	4-SMD	425-1383-1-ND	.57	.48	.38	425-1383-2-ND	2,000	266.00/M	PC81710NIP
	70	50	100	600	0.5	5	2500	10.3	4.4	1.27	16-SMD	425-1361-1-ND	2.04	1.79	1.43	425-1361-2-ND	1,000	1291.32	PC3Q710NIP
	70	50	100	700	0.5	5	2500	2.6	4.4	1.27	4-SMD	425-1348-1-ND	.54	.45	.36	425-1348-2-ND	3,000	252.00/M	PC3H710NIP
	70	50	120	240	1	5	2500	2.6	4.4	1.27	4-SMD	425-1355-1-ND	.51	.43	.34	425-1355-2-ND	3,000	238.00/M	PC3H7D

† AC Input # Darlington Output * Din/VDE 0884

(Continued)

NEW! SHARP MICROELECTRONICS OF THE AMERICAS Photocoupler *(Cont.)*

Fig.	Output		Current Transfer Ratio				Isolation Voltage (Vrms)	Dimensions - mm			Package Type	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Sharp Part No.
	VCEO (V) Max.	IC (mA) Max.	Min. (%)	Max. (%)	@ IF (mA)	@ Vce (V)		Length	Width	Pitch			1	10	100		Size	Pricing	
Cut Tape / Tape & Reel (cont.)																			
1	70	50	120	300	0.5	5	5000	4.58	6.5	2.54	4-SMD	425-1457-1-ND	.60	.50	.40	425-1457-2-ND	2,000	280.00/M	PC81711NIP
	70	50	140	350	0.5	5	2500	2.6	4.4	1.27	4-SMD	425-1349-1-ND	.60	.50	.40	425-1349-2-ND	3,000	280.00/M	PC3H711NIP
	70	50	140	500	0.5	5	2500	2.6	4.4	1.27	4-SMD	425-1351-1-ND	.60	.50	.40	425-1351-2-ND	3,000	280.00/M	PC3H715NIP
	70	50	150	300	0.5	5	3750	3.6	4.4	2.54	4-SMD	425-1339-1-ND	.57	.48	.38	425-1339-2-ND	3,000	266.00/M	PC367NI
	70	50	160	400	0.5	5	5000	4.58	6.5	2.54	4-SMD	425-1459-1-ND	.60	.50	.40	425-1459-2-ND	2,000	280.00/M	PC81712NIP
	70	50	200	400	0.5	5	3750	3.6	4.4	2.54	4-SMD	425-1340-1-ND	.54	.45	.36	425-1340-2-ND	3,000	252.00/M	PC367N2
	70	50	200	500	0.5	5	2500	2.6	4.4	1.27	4-SMD	425-1350-1-ND	.60	.50	.40	425-1350-2-ND	3,000	280.00/M	PC3H712NIP
	70	50	200	500	0.5	5	5000	4.58	6.5	2.54	4-SMD	425-1461-1-ND	.57	.48	.38	425-1461-2-ND	2,000	266.00/M	PC81713NIP
	350	50	40	80 Typ.	5	5	3750	3.6	4.4	2.54	4-SMD	425-1525-1-ND	.99	.83	.66	425-1525-2-ND	3,000	429.00/M	PC451
	350	50	40	240	5	5	2500	2.6	4.4	1.27	4-SMD	425-1378-1-ND	.69	.58	.46	425-1378-2-ND	3,000	322.00/M	PC4H510NIP
4	35	50	50	600	5	5	2500	10.3	4.4	1.27	16-SMD	425-1360-1-ND	2.10	1.84	1.47	425-1360-2-ND	1,000	1329.30	PC3Q67
5	35	80	600	7500	1.0	2	3750	3.6	4.4	2.54	4-SMD	425-1326-1-ND#	.72	.60	.48	425-1326-2-ND#	3,000	336.00/M	PC355N
	35	80	600	7500	1	2	2500	2.6	4.4	1.27	4-SMD	425-1345-1-ND#	.63	.53	.42	425-1345-2-ND#	3,000	294.00/M	PC3H5
	35	80	600	12000	0.5	2	3750	3.6	4.4	2.54	4-SMD	425-1337-1-ND#	.60	.50	.40	425-1337-2-ND#	3,000	280.00/M	PC365N
	35	80	600	12000	0.5	2	2500	2.6	4.4	1.27	4-SMD	425-1346-1-ND#	.69	.58	.46	425-1346-2-ND#	3,000	322.00/M	PC3H510NIP
8	35	80	600	7500	1	2	2500	10.3	4.4	1.27	16-SMD	425-1359-1-ND#	2.12	1.86	1.49	425-1359-2-ND#	1,000	1341.96	PC3Q65
	35	80	600	12000	0.5	2	2500	10.3	4.4	1.27	16-SMD	425-1357-1-ND#	2.26	1.98	1.59	425-1357-2-ND#	1,000	1430.58	PC3Q510NIP
9	35	50	20	300	1	5	5000	4.58	6.5	2.54	4-SMD	425-1448-1-ND†	.63	.53	.42	425-1448-2-ND†	2,000	294.00/M	PC814XP
	35	50	20	400	1.0	5	3750	3.6	4.4	2.54	4-SMD	425-1324-1-ND†	.51	.43	.34	425-1324-2-ND†	3,000	238.00/M	PC354N
	35	50	50	150	1.0	5	3750	3.6	4.4	2.54	4-SMD	425-1325-1-ND†	.72	.60	.48	425-1325-2-ND†	3,000	336.00/M	PC354N1
	35	50	50	150	1	5	5000	4.58	6.5	2.54	4-SMD	425-1449-1-ND	.63	.53	.42	425-1449-2-ND	2,000	294.00/M	PC814XP1
	70	50	50	400	0.5	5	3750	3.6	4.4	2.54	4-SMD	425-1335-1-ND†	.69	.58	.46	425-1335-2-ND†	3,000	322.00/M	PC364N
	70	50	50	400	0.5	5	2500	2.6	4.4	1.27	4-SMD	425-1342-1-ND†	.69	.58	.46	425-1342-2-ND†	3,000	322.00/M	PC3H410NIP
	70	50	100	300	0.5	5	3750	3.6	4.4	2.54	4-SMD	425-1336-1-ND†	.69	.58	.46	425-1336-2-ND†	3,000	322.00/M	PC364N1
	70	50	100	300	0.5	5	2500	2.6	4.4	1.27	4-SMD	425-1343-1-ND†	.69	.58	.46	425-1343-2-ND†	3,000	322.00/M	PC3H411NIP
11	35	50	20	400	1	5	2500	10.3	4.4	1.27	16-SMD	425-1358-1-ND†	2.54	2.23	1.78	425-1358-2-ND†	1,000	1607.82	PC3Q64
	70	50	50	150	1	5	2500	2.6	4.4	1.27	4-SMD	425-1344-1-ND†	.54	.45	.36	425-1344-2-ND†	3,000	252.00/M	PC3H4A
	70	50	50	400	0.5	5	2500	10.3	4.4	1.27	16-SMD	425-1356-1-ND†	2.54	2.23	1.78	425-1356-2-ND†	1,000	1607.82	PC3Q410NIP
15	300	150	1000	—	1	2	3750	3.6	4.4	2.54	4-SMD	425-1526-1-ND	1.17	.98	.78	425-1526-2-ND	3,000	507.00/M	PC452
	350	120	1000	12000	1	2	2500	2.6	4.4	1.27	4-SMD	425-1379-1-ND	.78	.65	.52	425-1379-2-ND	3,000	338.00/M	PC4H520NIP
18	35	80	20	80	100	2	5000	7.12	6.5	2.54	6-SMD	425-1382-1-ND	.78	.65	.52	425-1382-2-ND	1,000	338.00	PC724V0NIPX
21	80	50	50	600	5	5	3750	3.6	4.4	1.27	5-SMD	425-1323-1-ND	.93	.78	.62	425-1323-2-ND	750	302.25	PC353T
24	6	150	1500	—	5	2	3750	3.6	4.4	2.54	4-SMD	425-1524-1-ND	1.23	1.03	.82	425-1524-2-ND	750	399.75	PC450T11

† AC Input   # Darlington Output   * Din/VDE 0884

NEW! OPIC™ Photocoupler

Fig. 1

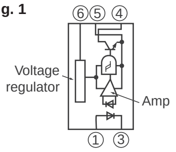


Fig. 2

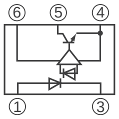


Fig. 3

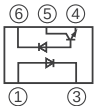


Fig. 4

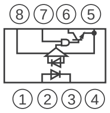


Fig. 5

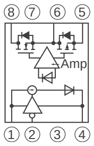


Fig. 6

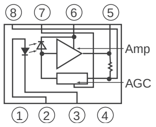


Fig. 7

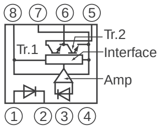


Fig. 8

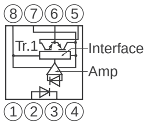


Fig. 9

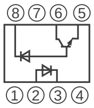


Fig. 10

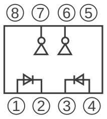


Fig. 11

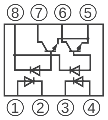


Fig. 12

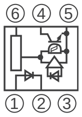


Fig.	Vcc Max. (V)	Prop Delay (us) Typ.		Isolation Voltage (Vrms)	Dimensions- mm			Package Type	Digi-Key Part No.	Tube Price Each			Sharp Part No.
		H-L	L-H		Length	Width	Pitch			1	10	100	
Tube													
4	7	.048	.05	5000	9.66	6.5	2.54	8-Dip	425-1533-5-ND	1.53	1.22	1.01	PC910L0NSZ
	7	.048	.05	5000	9.66	6.5	2.54	8-Dip	425-1534-5-ND*	1.58	1.26	1.04	PC910L0YSZ
5	5.5	.02	.023	5000	9.66	6.5	2.54	8-Dip	425-1535-5-ND	3.94	3.24	2.63	PC912L0NSZ
6	13	—	—	5000	9.66	6.5	2.54	8-Dip	425-1536-5-ND	2.50	2.06	1.67	PC915
7	13	2	2	5000	9.66	6.5	2.54	8-SMD	425-1537-5-ND	1.43	1.14	.95	PC922XI
	30	1	1	5000	9.66	6.5	2.54	8-Dip	425-1541-5-ND	1.50	1.20	.99	PC924X
	30	1	1	5000	9.66	6.5	2.54	8-SMD	425-1542-5-ND	1.68	1.34	1.11	PC924XI
	13	2	2	5000	9.66	6.5	2.54	8-Dip	425-1545-5-ND	1.20	1.00	.80	PC942
8	30	.3	.3	5000	9.66	6.5	2.54	8-Dip	425-1538-5-ND	2.08	1.66	1.37	PC923X
	30	.3	.3	5000	9.66	6.5	2.54	8-SMD	425-1540-5-ND	2.30	1.84	1.52	PC923XI
9	30	.2	.6	5000	9.66	6.5	2.54	8-Dip	425-1546-5-ND	1.33	1.06	.88	PC957L0NSZ
	30	.2	.6	5000	9.66	6.5	2.54	8-Dip	425-1547-5-ND*	1.38	1.10	.91	PC957L0YSZ
10	7	.050	.050	2500	9.22	6.5	2.54	8-Dip	425-1548-5-ND	4.50	3.70	3.00	PC9D10
11	15	.3	.3	2500	9.22	6.5	2.54	8-Dip	425-1549-5-ND	3.24	2.67	2.16	PC9D17
12	15	1	2	5000	7.12	6.5	2.54	6-SMD	425-1529-5-ND	1.17	.98	.78	PC900V0NIZX
	15	1	2	5000	7.12	6.5	2.54	6-Dip	425-1530-5-ND#	.87	.73	.58	PC900V0NSZX
	15	1	2	5000	7.12	6.5	2.54	6-Dip	425-1531-5-ND*	1.17	.98	.78	PC900V0YSZX
	15	1	2	5000	7.12	6.5	2.54	6-Dip	425-1532-5-ND†	1.20	1.00	.80	PC901V0NSZX
13	30	1	1	4000	9.22	6.5	1.27	14-SMD	425-1543-5-ND	2.50	2.06	1.67	PC928
14	30	.3	.3	4000	9.22	6.5	1.27	14-SMD	425-1544-5-ND	2.93	2.41	1.95	PC929

Fig. 13

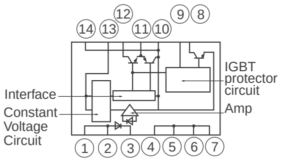


Fig. 14

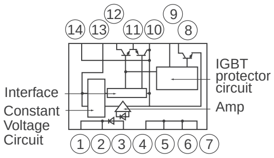


Fig.	Vcc (V) Max.	Prop Delay (us) Typ.		Isolation Voltage (Vrms)	Dimensions- mm			Package Type	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Sharp Part No.
		H-L	L-H		Length	Width	Pitch			1	10	100		Reel Size	Pricing	
Cut Tape / Tape & Reel																
1	15	1 2	2 1	3750	3.6	4.4	1.27	6-SMD	425-1520-1-ND 425-1521-1-ND	1.70 1.70	1.36 1.36	1.02 1.02	425-1520-2-ND 425-1521-2-ND	3,000 3,000	867.00/M 867.00/M	PC400 PC401
2	7	.048	.05	3750	3.6	4.4	1.27	6-SMD	425-1522-1-ND 425-1523-1-ND*	1.50 1.53	1.20 1.22	.90 .92	425-1522-2-ND 425-1523-2-ND*	3,000 3,000	765.00/M 777.75/M	PC410L0NIP PC410L0YIP
3	30	.2	.6	3750	3.6	4.4	1.27	6-SMD	425-1527-1-ND 425-1528-1-ND*	1.38 1.65	1.10 1.32	.83 .99	425-1527-2-ND* 425-1528-2-ND*	3,000 3,000	701.25/M 841.50/M	PC457L0NIP PC457L0YIP

* Din/VDE 0884   # Output, IccH (typ.): 1.0   † Output, IccH (typ.): 2.7

NEW! SHARP MICROELECTRONICS OF THE AMERICAS

Photocoupler - Thyristor Output

Fig.	Input			Output			Isolation Voltage Max. (Vrms)	Dimensions - mm			Package Type	Digi-Key Part No.	Price Each			Sharp Part No.
	Voltage Typ.	Current Min. (mA)	Current Max. (mA)	Voltage Vrms Max.	Current IT (RMS) Max. (mA)	Holding Current Max. (mA)		Length	Width	Pitch			1	10	100	
Tube																
1	1.2	10	50	280	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1322-5-ND#	.81	.68	.54	PC2SD11NTZA
		5	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1363-5-ND	.93	.78	.62	PC3SD11NTZC
		5	50	420	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1364-5-ND	.99	.83	.66	PC3SD11NXZC
		7	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1362-5-ND	.93	.78	.62	PC3SD11NTZB
		7	50	420	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1365-5-ND	.96	.80	.64	PC3SD11NXZB
		10	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1366-5-ND	.87	.73	.58	PC3SD12NTZA
		10	50	420	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1367-5-ND	.90	.75	.60	PC3SD12NXZA
		10	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1772-5-ND†	1.68	1.40	.98	S21MD3YY
		15	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1270-5-ND†	1.58	1.26	1.04	S21MD3VY
2	1.2	10	50	280	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1232-5-ND*	1.33	1.06	.88	S11ME6
		10	50	280	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1233-5-ND*†	1.75	1.40	1.16	S11ME6Y
		3	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1370-5-ND*	1.08	.90	.72	PC3SD21NTZD
		3	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1373-5-ND*†	1.11	.93	.74	PC3SD21YTZD
		3	50	420	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1375-5-ND*†	1.14	.95	.76	PC3SD21YXZD
		5	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1369-5-ND*	.96	.80	.64	PC3SD21NTZC
		5	50	420	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1371-5-ND*	.99	.83	.66	PC3SD21NXZC
		5	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1372-5-ND*†	.99	.83	.66	PC3SD21YTZC
		5	50	420	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1374-5-ND*†	1.02	.85	.68	PC3SD21YXZC
		5	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1300-5-ND†	1.04	.88	.60	S2S3LY
		5	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1306-5-ND*†	1.14	.97	.65	S2S4LY
		7	50	420	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1368-5-ND*	.93	.78	.62	PC3SD21NTZB
		7	50	420	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1271-5-ND◊	1.58	1.26	1.04	S21ME3
		7	50	420	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1274-5-ND#†	1.68	1.34	1.11	S21ME3Y
		7	50	420	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1275-5-ND*	2.03	1.62	1.34	S21ME4
		7	50	420	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1276-5-ND*#	1.85	1.48	1.23	S21ME4F
		7	50	420	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1277-5-ND*†	1.93	1.54	1.28	S21ME4Y
		7	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1301-5-ND†	1.01	.86	.58	S2S3RY
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1282-5-ND*	1.44	1.20	.96	S21ME6
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1283-5-ND*#	1.47	1.23	.98	S21ME6F
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1284-5-ND*#†	1.30	1.04	.86	S21ME6FY
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-SMD	425-1285-5-ND*†	1.43	1.14	.95	S21ME6IY
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1286-5-ND*†	1.28	1.02	.85	S21ME6Y
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1292-5-ND*	1.11	.93	.74	S21MT2
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1297-5-ND	.91	.77	.52	S2S3
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1302-5-ND†	.85	.72	.49	S2S3Y
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1303-5-ND*	1.14	.97	.65	S2S4
		3	50	560	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1405-5-ND*	1.41	1.18	.94	PC4SD21NTZD
		3.0	15	560	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1287-5-ND*	2.33	1.86	1.54	S21ME8
		3.0	15	560	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1288-5-ND*#†	2.38	1.90	1.57	S21ME8FY
		3.0	15	560	100	3.5	5000	9.22	6.5	2.54	6-Dip	425-1289-5-ND*†	2.48	1.98	1.64	S21ME8Y
		5	50	560	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1403-5-ND	1.26	1.05	.84	PC4SD11NTZC
		5	50	560	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1404-5-ND*	1.32	1.10	.88	PC4SD21NTZC
		7	50	560	100	3.5	5000	7.12	6.5	2.54	6-Dip	425-1402-5-ND	1.17	.98	.78	PC4SD11NTZB
3	1.2	10	50	420	50	3.5	3750	4.4	3.6	2.54	4-SMD	425-1376-5-ND	1.40	1.12	.93	PC3SG11YIZ
		10	50	420	50	3.5	3750	4.4	3.6	2.54	4-SMD	425-1377-5-ND*	1.53	1.22	1.01	PC3SG21YIZ
4	1.2	10	50	280	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1230-5-ND	1.44	1.20	.96	S11ME5
		10	50	280	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1231-5-ND†	1.50	1.20	.99	S11ME5Y
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1278-5-ND	1.23	1.03	.82	S21ME5
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1279-5-ND#	1.44	1.20	.96	S21ME5F
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1280-5-ND†#	1.41	1.18	.94	S21ME5FY
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1281-5-ND†	1.35	1.13	.90	S21ME5Y
		10	50	420	100	3.5	5000	6.5	4.58	2.54	4-Dip	425-1291-5-ND	.93	.78	.62	S21MT1
5	1.2	15	50	280	200	1.0	5000	7.12	6.5	2.54	6-Dip	425-1774-5-ND	1.41	1.18	.94	S12MD1V
		15	50	280	200	1.0	5000	7.12	6.5	2.54	6-SMD	425-1236-5-ND	1.41	1.18	.94	S12MD1VI
		10	50	420	200	1.0	5000	7.12	6.5	2.54	6-Dip	425-1775-5-ND	1.40	1.12	.93	S22MD1V
		10	50	420	200	1.0	5000	7.12	6.5	2.54	6-SMD	425-1293-5-ND	1.45	1.16	.96	S22MD1VI
6	1.2	10	50	280	200	1.0	4000	9.22	6.5	2.54	6-Dip	425-1239-5-ND†#	1.70	1.36	1.13	S12ME1FY
		15	50	280	200	1.0	5000	9.22	6.5	2.54	6-Dip	425-1238-5-ND	2.41	1.98	1.61	S12MD3
		10	50	420	200	1.0	2500	9.22	6.5	2.54	8-Dip	425-1296-5-ND	2.43	2.00	1.62	S22MD3
7	1.2	8	50	420	200	1.0	5000	9.22	6.5	2.54	8-Dip	425-1295-5-ND	4.57	3.76	3.05	S22MD2
Cut Tape																
1	1.2	10	50	280	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1229-1-ND	1.92	—	1.08	S11MD5P
2	1.2	7	50	420	100	3.5	5000	9.22	6.5	2.54	6-SMD	425-1272-1-ND#	1.85	1.48	1.11	S21ME3FP
		7	50	420	100	3.5	5000	9.22	6.5	2.54	6-SMD	425-1273-1-ND	1.85	1.48	1.11	S21ME3P
		5	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1299-1-ND	1.16	—	.66	S2S3LB
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1305-1-ND*†	1.40	—	.79	S2S4BY
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1307-1-ND	.66	.55	.44	S2S5A
4	1.2	10	50	420	100	3.5	5000	6.5	4.58	2.54	4-SMD	425-1381-1-ND†	1.44	1.20	.96	S21ME5PY

Fig.	Input			Output			Isolation Voltage Max. (Vrms)	Dimensions - mm			Package Type	Digi-Key Part No.	Tape & Reel		Sharp Part No.
	Voltage Typ.	Current Min. (mA)	Current Max. (mA)	Voltage Vrms Max.	Current IT (RMS) Max. (mA)	Holding Current Max. (mA)		Length	Width	Pitch			Reel Size	Pricing	
Tape & Reel															
1	1.2	10	50	280	100	3.5	5000	7.12	6.5	2.54	6-SMD	425-1229-2-ND	1,000	624.00	S11MD5P
2	1.2	7	50	420	100	3.5	5000	9.22	6.5	2.54	6-SMD	425-1272-2-ND#	1,000	943.50	S21ME3FP
		7	50	420	100	3.5	5000	9.22	6.5	2.54	6-SMD	425-1273-2-ND	1,000	943.50	S21ME3P
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1297-2-ND	750	273.00	S2S3B
		5	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1299-2-ND	3,000	377.00/M	S2S3LB
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1303-2-ND*	750	341.25	S2S4B
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1305-2-ND*†	3,000	455.00/M	S2S4BY
		10	50	420	500	3.5	3750	4.4	3.6	2.54	4-SMD	425-1307-2-ND	3,000	308.00/M	S2S5A
4	1.2	10	50	420	100	3.5	5000	6.5	4.58	2.54	4-SMD	425-1381-2-ND†	2,000	624.00/M	S21ME5PY
5	1.2	15	50	280	200	1.0	5000	7.12	6.5	2.54	6-SMD	425-1236-2-ND	1,000	650.00	S12MD1P
		10	50	420	200	1.0	5000	7.12	6.5	2.54	6-SMD	425-1293-2-ND	1,000	701.25	S22MD1P

* Built-in zero cross circuit   # Wide formate   † Din/VDE 0884   ◊ VDE 68328

Fig. 1

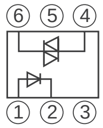
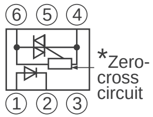
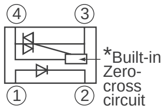


Fig. 2



*PC3SD21 series
PC4SD21 series
S21ME8 series
S11ME6 series
S21ME4 series
S21ME6 series
S21MT2 series
S2S4 series

Fig. 3



*The Zero-cross circuit is PC3SG21YIZ

Fig. 4

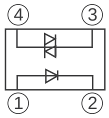


Fig. 5

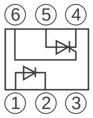


Fig. 6

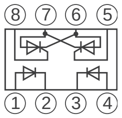
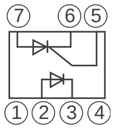


Fig. 7



NEW! SHARP MICROELECTRONICS OF THE AMERICAS Photointerrupter

Fig. 1

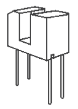


Fig. 2

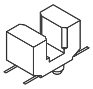


Fig. 3

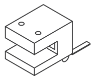


Fig. 4

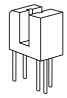


Fig. 5

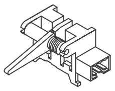


Fig. 6

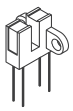


Fig. 7

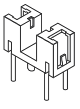


Fig. 8

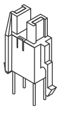


Fig. 9

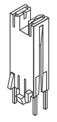


Fig. 10

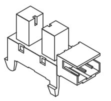


Fig.	Detector Vceo (V) Max.	IC (mA) Max.	Rise/Fall (µs) Typ.	Sensing Distance (mm)	Term-inal Type	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	35	20	3/4	3.0	PCB	425-1050-5-ND	.90	.75	.60	GP1S52V
			3/4	4.2	PCB	425-1058-5-ND	1.14	.95	.76	GP1S59
			3/4	5.0	PCB	425-1051-5-ND	.87	.73	.58	GP1S53V
			35/35	1.6	PCB	425-1062-5-ND	1.23	1.03	.82	GP1S95
			38/48	2.0	PCB	425-1052-5-ND	1.47	1.23	.98	GP1S560
	35	20	38/48	2.0	PCB	425-1056-5-ND	.99	.83	.66	GP1S56T
			50/50	1.0	PCB	425-1041-5-ND	.56	.39	.28	GP1S096HCZ
			50/50	1.2	PCB	425-1044-5-ND	1.02	.85	.68	GP1S34
			50/50	2.0	PCB	425-1039-5-ND*	.56	.39	.28	GP1S093HCZ
			50/50	2.0	PCB	425-1042-5-ND	.56	.39	.28	GP1S097HCZ
	35	20	50/50	3.0	PCB	425-1040-5-ND	.56	.39	.28	GP1S094HCZ
		40	80/70	5.0	PCB	425-1035-5-ND	1.02	.85	.68	GP1L53V
		40	130/100	10	PCB	425-1036-5-ND	1.75	1.40	1.16	GP1L57
2	35	20	50/50	2.0	SMD	425-1038-1-ND‡ 425-1038-2-ND#	.54 504.00/2,000	.45	.36	GP1S092HCPI
3	35	20	35/35	1.6	PCB	425-1043-5-ND	1.29	1.08	.86	GP1S25
		40	80/70	3.0	PCB	425-1034-5-ND	1.14	.95	.76	GP1L52V
4	35	20	50/50	1.5	PCB	425-1046-5-ND	1.33	1.06	.88	GP1S39
5	35	20	—	—	Conn.	425-1047-ND†$	2.48	1.98	1.64	GP1S44S1
6	35	20	3/4	3.0	PCB	425-1048-5-ND	1.05	.88	.70	GP1S51V
7	35	20	3/4	3.0	PCB	425-1053-5-ND	.99	.83	.66	GP1S561
				5.0	PCB	425-1057-5-ND	.90	.75	.60	GP1S58V
8	35	20	3/4	3.0	PCB	425-1054-5-ND	1.20	1.00	.80	GP1S562
9	35	20	3/4	3.0	PCB	425-1055-5-ND	.81	.68	.54	GP1S563
10	35	20	3/4	5.0	Conn.	425-1059-5-ND	1.29	1.08	.86	GP1S73P

* Low profile † Tray (not a tube) ‡ Cut Tape # Tape & Reel $ With actuator

Reflective Photointerrupter

Fig. 1

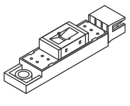


Fig. 2

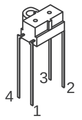


Fig. 3

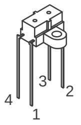


Fig. 4

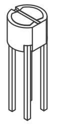


Fig. 5

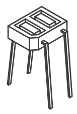


Fig. 6

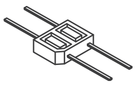


Fig. 7

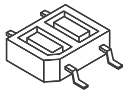


Fig. 8

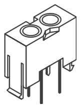


Fig. 9

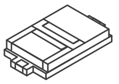


Fig.	Detector Vceo (V) Max.	IC (mA) Max.	Rise/Fall (µs) Typ.	Sensing Distance (mm)	Terminal Type	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	7 VCC	30	1000	5-15	PCB	425-1086-5-ND	4.66	3.83	3.11	GP2A200LCS
				3-7	PCB	425-1087-5-ND	4.46	3.67	2.97	GP2A25
2	35	20	80/70	13	PCB	425-1088-5-ND*	1.85	1.48	1.23	GP2L20L
3	35	20	80/70	13	PCB	425-1089-5-ND*	1.90	1.52	1.26	GP2L20R
4	35	50	80/70	.6	PCB	425-1090-5-ND*	1.35	1.08	.90	GP2L22
5	35	20	20/20	.6 to .8	PCB	425-1093-5-ND	.84	.70	.56	GP2S24
		20	50/50	1.5 to 6.5	PCB	425-1096-5-ND	1.60	1.28	1.06	GP2S40
		50	80/70	.6 to .8	PCB	425-1091-5-ND*	.96	.80	.64	GP2L24
6	35	50	80/70	.6 to .8	SMD	425-1092-5-ND*	1.11	.93	.74	GP2L26
7	35	20	20/20	.6 to .8	SMD	425-1094-1-ND ‡ 425-1094-2-ND#	1.11 481.00/1,000	.93	.74	GP2S27T
8	35	20	20/30	6	PCB	425-1095-5-ND	1.28	1.02	.85	GP2S28
9	35	20	20/20	1	SMD	425-1097-1-ND ‡ 425-1097-2-ND#	.51 476.00/2,000	.43	.34	GP2S60

* Darlington ‡ Cut Tape # Tape & Reel

OPIC™ Photointerrupter

Fig. 1

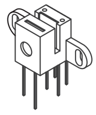


Fig. 2

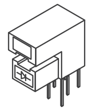


Fig. 3

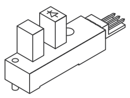


Fig. 4

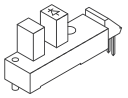


Fig. 5

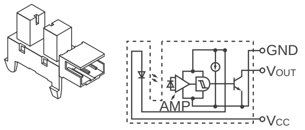


Fig. 6

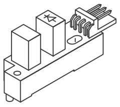


Fig. 7

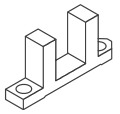


Fig. 8

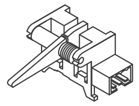


Fig. 9

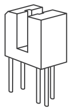


Fig. 10

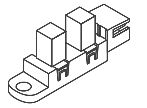


Fig. 11

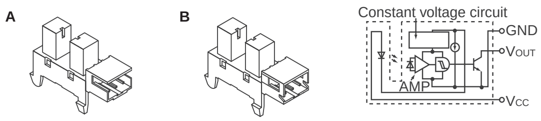


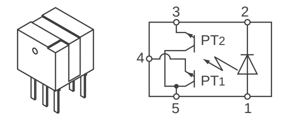
Fig.	Detector VCC (V) Typ.	Icc (mA) Max.	Sensing Distance (mm)	Terminal Type	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	5	20	3.5	PCB	425-1063-5-ND	7.16	5.89	4.77	GP1A30R
			3.4	PCB	425-1064-ND†	6.37	5.24	4.25	GP1A35RV
			3.0	PCB	425-1074-5-ND	1.41	1.18	.94	GP1A51HR
2	5	20	2.0	PCB	425-1065-5-ND‡	3.83	3.15	2.55	GP1A70R
					425-1066-5-ND‡	4.59	3.78	3.06	GP1A71R
3	5	30	5.0	Connector	425-1067-5-ND	2.25	1.80	1.49	GP1A05
4	5	30	5.0	Connector	425-1071-5-ND	3.71	3.06	2.48	GP1A23LC
5	5	16.5	5.0	Connector	425-1068-5-ND	1.17	.98	.78	GP1A073HCS
					425-1771-5-ND$	1.17	.98	.78	GP1A073LCS
6	24	30	5.0	Connector	425-1069-5-ND	3.26	2.69	2.18	GP1A10
7	5	50	3.0	PCB	425-1073-5-ND	1.28	1.02	.85	GP1A50HR
7	5	50	10.0	PCB	425-1070-5-ND	2.88	2.37	1.92	GP1A17
8	5	20	—	Connector	425-1072-5-ND*	2.48	2.04	1.65	GP1A44E1
9	5	—	10.0	PCB	425-1078-5-ND	1.95	1.56	1.29	GP1A57HR
		2.0	1.2	PCB	425-1084-5-ND◊	1.02	.85	.68	GP1A91LC
		2.0	1.2	PCB	425-1085-5-ND	1.02	.85	.68	GP1A91LR
		20	5.0	PCB	425-1079-5-ND	1.55	1.24	1.03	GP1A58HR
		50	3.0	PCB	425-1075-5-ND	1.50	1.25	1.00	GP1A52HR
		50	3.0	PCB	425-1076-5-ND#	1.50	1.25	1.00	GP1A52LR
11A	5	16.5	5.0	Connector	425-1081-5-ND	1.35	1.08	.90	GP1A73A
11B	5	16.5	5.0	Connector	425-1082-5-ND	1.41	1.18	.94	GP1A74A1
10	5	20	5.0	Connector	425-1083-5-ND	1.41	1.18	.94	GP1A75E

† Tray (not tube) ‡ GP1A70R: 1.14mm disk slit pitch & GP1A71R: 0.7mm disk slit pitch $ Inverted
* With actuator ◊Internal 15K resistor # Inverted type of the HR

Tilt Sensor

Features: • Subminiature • 2-phase output type • Able to detect the tilt direction of both side (±90°) by the position of rolling ball • High reliability due to non-contact structure

Applications: • Digital cameras • Camcoders



Detector Vceo (V) Max.	Ic (mA) Max.	Rise/Fall (µs) Typ.	Terminal Type	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
35	20	50/50	PCB	425-1037-5-ND* 425-1045-5-ND	2.45 1.95	1.96 1.56	1.62 1.29	GP1S036HEZ GP1S36

* 4-way tilt

N

NEW! **SHARP MICROELECTRONICS OF THE AMERICAS**

IR Emitters, Photo Transistors and Diodes

Fig. 1

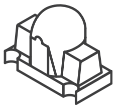


Fig. 2

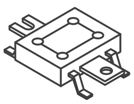


Fig. 3

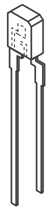


Fig. 4

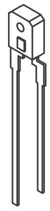


Fig. 5

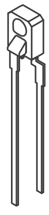
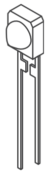


Fig. 6



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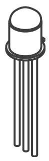


Fig. 8

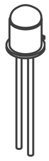


Fig. 9

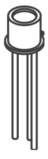
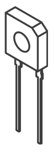


Fig. 10



IR Emitters

Fig.	Forward Volt. (V) Typ.	Forward Current (mA) Max.	Optical Power Output (mW) Max.	Beam Angle (2x Theta)	Peak Wave-length (nm) Typ.	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	1.2	50	3.0	20	940	425-1022-1-ND‡ 425-1022-2-ND#	.36 336.00/2,000	.30	.24	GL100MN0MP
	1.2	50	6.0	20	940	425-1023-1-ND‡ 425-1023-2-ND#	.54 504.00/2,000	.45	.36	GL100MN1MP
3	1.2	50	2.0	180	950	425-1024-5-ND†	.56	.39	.28	GL4100
4	1.2	50	3.0	60	950	425-1026-5-ND*	.48	.33	.24	GL4800
5	1.2	50	3.0	26	950	425-1025-5-ND*	.48	.33	.24	GL480

‡ Cut Tape # Tape & Reel † Pale red trans. resin * Pink trans. resin

Photo Tranistors

Fig.	Vceo Max. (V)	Ic Max. (mA)	Peak Sensitivity Wavelength (nm) Typ.	Rise/Fall Typ. (us)	Beam Angle (2x Theta)	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	35	20	900	5.0/6.0	30	425-1005-1-ND‡ 425-1005-2-ND#	.36 336.00/2,000	.30	.24	PT100MC0MP
	35	20	910	5.0/6.0	30	425-1006-1-ND‡◊ 425-1006-2-ND#	.36 336.00/2,000	.30	.24	PT100MF0MP
	35	20	910	5.0/6.0	30	425-1007-1-ND‡◊ 425-1007-2-ND#	.36 252.00/1,500	.30	.24	PT100MF0MP1
4	35	20	800	3.0/3.5	70	425-1009-5-ND	.48	.33	.24	PT4800
	35	20	860	3.0/3.5	70	425-1010-5-ND◊	.56	.39	.28	PT4800F
	35	50	800	80/70	70	425-1014-5-ND*$	.60	.42	.30	PT4810
	35	50	860	80/70	70	425-1015-5-ND*◊	.60	.42	.30	PT4810F
5	35	20	800	3.0/3.5	26	425-1008-5-ND	.48	.33	.24	PT480
		20	860	3.0/3.5	26	425-1012-5-ND◊	.52	.36	.26	PT480F
		50	800	80/70	26	425-1013-5-ND$	.52	.36	.26	PT481
		50	860	80/70	26	425-1016-5-ND◊	.60	.42	.30	PT481F
7	35	20	800	2/3	12	425-1019-5-ND	2.43	2.00	1.62	PT510
		100	800	350/300	12	425-1020-5-ND	8.57	7.05	5.72	PT550
8	45	10	800	10/10	12	425-1017-5-ND	2.38	1.90	1.57	PT501
		80	800	10/10	12	425-1018-5-ND	2.13	1.70	1.41	PT501A
9	35	100	800	350/300	100	425-1021-5-ND◊	7.43	6.11	4.95	PT550F

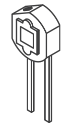
‡ Cut Tape # Tape & Reel $ Trans. blue resin ◊ Visible Light cut-off resin (black) * Darlington

Photo Diodes

Fig.	Vr Max. (V)	Short Circuit Current Is (uA) Typ.	Dark Current Id Max. (nA)	Peak Sensitivity Wavelength (nm) Typ.	Rise/Fall Typ. (ns)	Beam Angle (2x Theta)	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	20	.9	10	820	10	40	425-1027-1-ND‡ 425-1027-2-ND#	.36 336.00/2,000	.30	.24	PD100MC0MP
	20	.6	10	850	10	40	425-1028-1-ND‡◊ 425-1028-2-ND#◊	.36 336.00/2,000	.30	.24	PD100MF0MP
2	30	9.2	2.0	940	5	—	425-1030-5-ND	1.11	.93	.74	PD3122F
3	—	.45	1.0	820	—	—	425-1029-5-ND	1.14	.95	.76	PD101SC0SS
5	20	1.7	10	950	100	40	425-1032-5-ND	.96	.80	.64	PD480PI
6	32	5.4	10	960	200	90	425-1031-5-ND	.92	.64	.46	PD413PI
10	32	5	30	960	—	115	425-1033-5-ND	1.05	.88	.70	PD481PI

‡ Cut Tape # Tape & Reel ◊ Visible Light cut-off resin (black)

Blue Sensitive Photodiodes



Features:

• Spectral sensitivity characteristics akin to that of human eye • Compact flat package • Low dark current • Infrared light cut-off type

Applications:

• AE (automatic exposure) system and ES (electronic shutter) system for cameras • Stroboscopes • Precise optical instruments

Short Cir. Current Is Typ. (uA)	Dark Current Id Typ. (A)	Peak Sensitivity Wavelength Typ. (nm)	Reverse Voltage Vr (V) Max.	Active Area (mm sq.)	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
0.16	$3x10^{-12}$	560	10	1.55	425-1001-5-ND	1.95	1.56	1.29	BS120
0.55	$3x10^{-12}$	560	10	5.34	425-1004-5-ND	2.27	1.87	1.52	BS520

OPIC™ Light Detector

Fig. 1

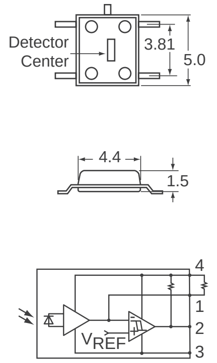


Fig. 2

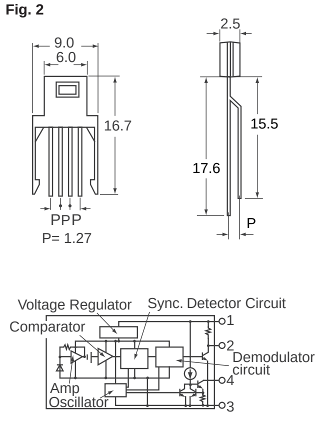


Fig. 3

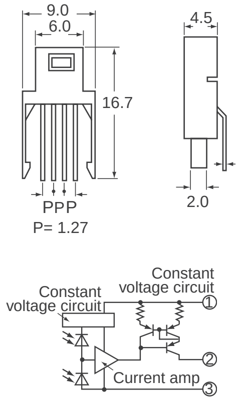


Fig. 4

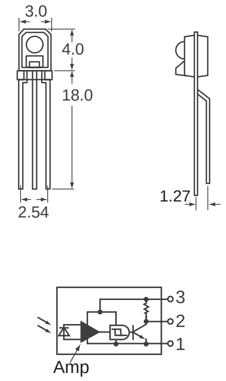


Fig.	Vcc (V)	Output Current Max. (ma)	Rise/Fall Typ. (us)	Beam Angle (2x Theta)	Peak Wave-length (nm) Typ.	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	5	—	.06/.02	—	660	425-1177-5-ND	2.54	2.10	1.70	IS456
2	4.5 to 16	50	400/400	110	940	425-1178-5-ND*	2.72	2.24	1.82	IS471F
3	5	-10	12/30	70	550	425-1179-5-ND	2.63	2.17	1.76	IS474
						425-1180-5-ND†	2.95	2.43	1.97	IS474SI
4	1.4 to 7.0	2	0.1/.06	30	900	425-1181-5-ND	.92	.64	.46	IS489

† Straight lead version * Visible light cut-off resin (black)

Compact Dust Sensor

Features: • Compact, thin type (58 x 38 x 20.7mm) • Low dissipation current (Icc: MAX. 20mA) • Single-shot detection of house dust **Applications:** • Air conditioners • Air cleaner

Vcc (V)	Digi-Key Part No.	Price Each 1	25	50	Sharp Part No.
12	425-1169-ND	13.75	11.00	9.63	GP2Y1001AU

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Distance Measuring Sensor

Fig. 1

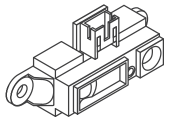


Fig. 2

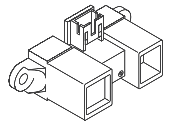


Fig.	Vcc (V)	Distance Measuring Range (cm) Typ.	Diff. of Output Voltage (V) Typ.	Output Current ICC (mA) Typ.	Output Type	Digi-Key Part No.	Tray Price Each 1	25	50	Sharp Part No.
1	5	4 to 30	2.25	33	Analog	425-1162-ND	10.58	8.46	7.41	GP2D120
		10 to 80	2.0	33		425-1161-ND	10.58	8.46	7.41	GP2D12
		10 to 80	1.9	30		425-1166-ND	8.75	7.00	6.13	GP2Y0A21YK
		15	—	33	Digital	425-1164-5-ND†	10.58	8.46	7.41	GP2D150A
		24	—	33		425-1163-ND	10.58	8.46	7.41	GP2D15
		24	—	30		425-1168-ND	8.75	7.00	6.13	GP2Y0D21YK
2	5	20 to 150	2.05	33	Analog	425-1165-ND	12.50	10.00	8.75	GP2Y0A02YK
		80	—	33	Digital	425-1167-ND	12.50	10.00	8.75	GP2Y0D02YK

† Tube (not a tray)

Fiber Optics

Fig. 1

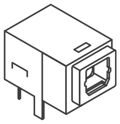


Fig. 2

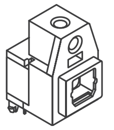


Fig. 3

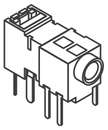


Fig. 4

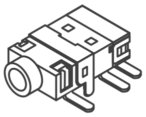
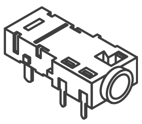


Fig. 5



Transmitters

Fig.	Vcc Typ. (V)	ViH Min. (V)	ViL Max. (V)	Peak Wave-length (nm) Typ.	Operating Transfer Rate (Mbps) Max.	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	5	2	0.8	660	8	425-1098-5-ND	4.32	3.56	2.88	GP1F31T
						425-1103-5-ND*	1.70	1.36	1.13	GP1FH500TZ
2	2.7 to 3.6	—	—	—	8	425-1099-5-ND	1.90	1.52	1.26	GP1FA350TZ
	5	2	0.8	660	8	425-1100-5-ND#	1.25	1.00	.83	GP1FA511TZ
	5	2.1	0.8	660	13.2	425-1101-5-ND	1.75	1.40	1.16	GP1FA551TZ
3	5	2	0.8	660	8	425-1102-ND†	2.52	2.08	1.68	GP1FE500TK

* Low profile † Tray (not a tube) # With shutter

Receivers

Fig.	Vcc Typ. (V)	VoH Min. (V)	VoL Max. (V)	Peak Wave-length (nm) Typ.	Operating Transfer Rate (Mbps) Max.	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
1	5	2.7	0.4	700	8	425-1104-5-ND	4.28	3.52	2.85	GP1F31R
						425-1111-5-ND*	2.50	2.06	1.67	GP1FH500RZ
2	2.7 to 3.6	—	—	—	8	425-1107-5-ND	2.48	1.98	1.64	GP1FA350RZ
	5	2.7	0.4	700	8	425-1105-5-ND	2.68	2.21	1.79	GP1F37R
	5	2.7	0.4	700	8	425-1108-5-ND#	1.73	1.38	1.14	GP1FA511RZ
	5	2.7	0.4	700	13.2	425-1109-5-ND	2.38	1.90	1.57	GP1FA551RZ
3	5	2.7	0.4	700	8	425-1110-ND†	3.24	2.67	2.16	GP1FE500RK
4	2.5	2.0	0.5	700	8	425-1106-5-ND	5.72	4.70	3.81	GP1F595R

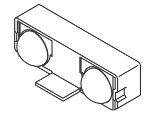
* Low profile † Tray (not a tube) # With shutter

Mini-Jack for Digital Audio (electrical and optical transmission)

Fig.	Vcc (V)	Peak Wavelength (nm) Typ.	Operating Transfer Rate (Mbps) Max.	Digi-Key Part No.	Tube Price Each 1	10	100	Sharp Part No.
Transmitter								
5	2.3 to 2.8	660	8	425-1112-5-ND	2.72	2.24	1.82	GP1FD210TP
	2.7 to 3.6			425-1113-5-ND	2.72	2.24	1.82	GP1FD310TP
Receiver								
5	2.3 to 2.8	700	8	425-1114-5-ND	3.29	2.71	2.19	GP1FD210RP
	2.7 to 3.6			425-1115-ND†	4.46	3.67	2.97	GP1FD300RK

† Tray (not a tube)

IrDA Transceiver Module



Sharp's opto-wireless transceiver module is compatible with IrDA standard. **Applications:** • Cellular phones • PDA • Personal computers

Data Vcc (V)	Transfer Rate SIR (kbps)	FIR (Mbps)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel† 2,000 Pricing	Sharp Part No.
IrDA 115 Kbit/s, 1 Meter								
2.4 to 5.5	2.4 to 115.2	—	425-1170-1-ND	2.38	2.09	1.67	1506.54/M	GP2W0004YP
IrDA 115 Kbit/s, 1 Meter and 4 Mbit/s, 1 Meter								
2.7 to 5.5	9.6 to 115.2	1.152 to 4	425-1171-1-ND	3.96	3.47	2.78	2506.68/M	GP2W1001YP
IrDA 115 Kbit/s, 20cm								
2.0 to 3.6	2.4 to 115.2	1.152 to 4	425-1172-1-ND	2.48	1.98	1.49	1262.25/M	GP2W0110YPS
1.7 to 2.5	2.4 to 115.2	1.152 to 4	425-1173-1-ND	2.16	1.89	1.52	1367.28/M	GP2W0112YP
IrDA 4 Mbit/s, 20cm								
2.7 to 5.5	2.4 to 115.2	1.152 to 4	425-1174-1-ND	3.88	3.40	2.72	2456.04/M	GP2W1301YP

† For Tape & Reel part number change 1-ND to 2-ND

Remote Control Receivers

Supply Voltage 2.7 to 5.5V

Fig. 1

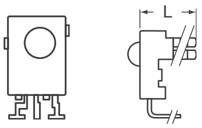


Fig. 2

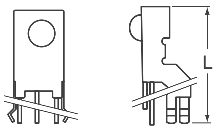


Fig. 3

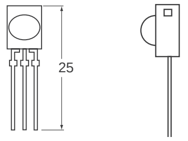


Fig. 4

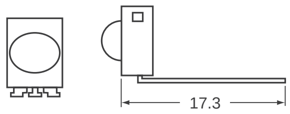


Fig.	Detecting Window	B.P.F. fo (kHz) Typ.	Current Dissipation Icc (mA) Max.	Length (mm)	Digi-Key Part No.	Price Each 1	10	100	Sharp Part No.
1	Top	36.7	.2	8.8	425-1117-ND	1.26	1.05	.84	GP1UD262XK
		36.7	1.5	8.8	425-1134-ND	1.26	1.05	.84	GP1UM262XK
		36.7	1.5	13.8	425-1141-ND#	1.26	1.05	.84	GP1UM272RK
		36.7	1.5	13.8	425-1142-ND	1.26	1.05	.84	GP1UM272XK
		36.7	.2	14	425-1121-ND	1.38	1.15	.92	GP1UD272XK
		36.7	1.5	17.8	425-1150-ND#	1.26	1.05	.84	GP1UM282RK
		36.7	1.5	17.8	425-1151-ND	1.26	1.05	.84	GP1UM282XK
		36.7	.2	18	425-1126-ND	1.26	1.05	.84	GP1UD282XK
		38	.2	8.8	425-1116-ND	1.26	1.05	.84	GP1UD261XK
		38	1.5	8.8	425-1132-ND#	1.26	1.05	.84	GP1UM261RK
		38	1.5	8.8	425-1133-ND	1.26	1.05	.84	GP1UM261XK
		38	1.5	13.8	425-1139-ND#	1.26	1.05	.84	GP1UM271RK
		38	1.5	13.8	425-1140-ND	1.26	1.05	.84	GP1UM271XK
		38	.2	14	425-1120-ND	1.26	1.05	.84	GP1UD271XK
		38	.2	18	425-1124-ND	1.26	1.05	.84	GP1UD281XK
		40	.2	8.8	425-1119-ND	1.26	1.05	.84	GP1UD26XK
		40	1.5	8.8	425-1137-ND#	1.35	1.13	.90	GP1UM26RK
		40	1.5	8.8	425-1138-ND	1.26	1.05	.84	GP1UM26XK
		40	1.5	13.8	425-1145-ND#	1.26	1.05	.84	GP1UM27RK
		40	1.5	13.8	425-1146-ND	1.26	1.05	.84	GP1UM27XK
		40	.2	14	425-1123-ND	1.38	1.15	.92	GP1UD27XK
		40	1.5	17.8	425-1158-ND#	1.26	1.05	.84	GP1UM28RK
		40	1.5	17.8	425-1159-ND	1.26	1.05	.84	GP1UM28XK
		40	.2	18	425-1130-ND	1.26	1.05	.84	GP1UD28XK
		56.8	.2	8.8	425-1118-ND	1.26	1.05	.84	GP1UD267XK
		56.8	1.5	8.8	425-1135-ND#	1.35	1.13	.90	GP1UM267RK
		56.8	1.5	8.8	425-1136-ND	1.26	1.05	.84	GP1UM267XK
		56.8	1.5	13.8	425-1143-ND#	1.35	1.13	.90	GP1UM277RK
		56.8	1.5	13.8	425-1144-ND	1.26	1.05	.84	GP1UM277XK
		56.8	.2	14	425-1122-ND	1.38	1.15	.92	GP1UD277XK
		56.8	1.5	17.8	425-1154-ND#	1.26	1.05	.84	GP1UM287RK
		56.8	1.5	17.8	425-1155-ND	1.26	1.05	.84	GP1UM287XK
		56.8	.2	18	425-1128-ND	1.26	1.05	.84	GP1UD287XK
2	Side	36.7	1.5	16.1	425-1149-ND#	1.26	1.05	.84	GP1UM282QK
		36.7	1.5	16.1	425-1152-ND	1.26	1.05	.84	GP1UM282YK
		36.7	.2	16.6	425-1127-ND	1.26	1.05	.84	GP1UD282YK
		38	1.5	16.1	425-1147-ND#	1.26	1.05	.84	GP1UM281QK
		38	1.5	16.1	425-1148-ND	1.26	1.05	.84	GP1UM281YK
		38	.2	16.6	425-1125-ND	1.26	1.05	.84	GP1UD281YK
		40	1.5	16.1	425-1157-ND#	1.26	1.05	.84	GP1UM28QK
		40	1.5	16.1	425-1160-ND	1.26	1.05	.84	GP1UM28YK
		40	.2	16.6	425-1131-ND	1.26	1.05	.84	GP1UD28YK
		56.8	1.5	16.1	425-1153-ND#	1.26	1.05	.84	GP1UM287QK
		56.8	1.5	16.1	425-1156-ND	1.26	1.05	.84	GP1UM287YK
		56.8	.2	16.6	425-1129-ND	1.26	1.05	.84	GP1UD287YK
3	Side	38	4.5	25	425-1175-5-ND†	2.25	1.80	1.49	IS1U621
4	Top	38	4.5	17.3	425-1176-5-ND†*	2.03	1.62	1.34	IS1U621L

† Tube * Bent Leads # With mesh

LUMEX
We Tame Photons To Work For You

Optolinks

Fig. 1

Photo
Transistor
Output
Dip or SMT

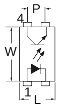


Fig. 2

Dual Photo
Transistor
Output
Dip or SMT

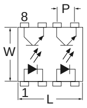


Fig. 3

Quad Photo
Transistor Output
Dip or SMT

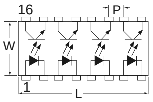


Fig. 4

Photo
Transistor
Output
Dip or SMT

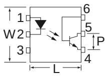


Fig. 5

Photo
Transistor
Output
Dip or SMT

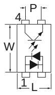


Fig. 6

Quad Photo
Transistor
Output
Dip or SMT

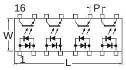
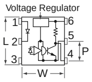


Fig. 7

Photo IC
Output
Dip or SMT



Optoisolators with Photo-Transistor Output

SPECIFICATIONS: • **Isolation Voltage:** 5000 • **VCEO (Max.):** 60V • **Typ. tr/tf:** 5 µs/4 µs

Fig.	Current Transfer Ratio Min-Max.	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each 1	10	Tape and Reel Pricing‡ 1,000	Lumex Part No.
1	60-600%	4.60	6.50	2.54	Dip	67-1560-5-ND	.51	.43	—	OCP-PCT114/E
	60-600%	4.60	6.50	2.54	SMT	67-1613-1-ND	.51	.43	282.20	OCP-PCT114/E-TR
2	60-600%	9.68	6.50	2.54	Dip	67-1561-5-ND	1.05	.88	—	OCP-PCT218/E
	60-600%	9.68	6.50	2.54	SMT	67-1614-1-ND	1.05	.88	581.00	OCP-PCT218/E-TR
3	60-600%	19.84	6.50	2.54	Dip	67-1562-5-ND	1.83	1.53	—	OCP-PCT4116/E
	60-600%	19.84	6.50	2.54	SMT	67-1618-5-ND	1.83	1.53	—	OCP-PCT4116/E-TR
4	60-600%	7.30	6.50	2.54	Dip	67-1563-5-ND	.39	.33	—	OCP-PCTB116/E
	60-600%	7.30	6.50	2.54	SMT	67-1615-1-ND	.39	.33	215.80	OCP-PCTB116/E-TR
5	60-600%	4.60	6.50	2.54	Dip	67-1564-5-ND	.63	.53	—	OCP-PCT124/A
	60-600%	4.60	6.50	2.54	SMT	67-1616-1-ND	.63	.53	348.60	OCP-PCT124/A-TR
6	60-600%	19.84	6.50	2.54	Dip	67-1565-5-ND	2.89	2.41	—	OCP-PCT4216/A
	60-600%	19.84	6.50	2.54	SMT	67-1619-5-ND	2.89	2.41	—	OCP-PCT4216/A-TR

Optoisolators with Photo-IC Output

Fig.	Isolation Voltage	Prop Delay t_{PHL}/t_{PLH} (µS)	Length L (mm)	Width W (mm)	Pitch P (mm)	Pkg.	Digi-Key Part No.	Price Each 1	10	Tape and Reel Pricing‡ 1,000	Lumex Part No.
7	5000	5/3	7.3	6.5	2.54	Dip	67-1566-5-ND	1.64	1.37	—	OCP-PCP116
	5000	5/3	7.3	6.5	2.54	SMT	67-1617-1-ND	1.64	1.37	904.70	OCP-PCP116-TR

‡ For Tape and Reel part number, change -1-ND to -2-ND

FAIRCHILD
SEMICONDUCTOR

Semiconductor Interrupter Modules

Fig.	Circuit	Output Type	Ic (on) (mA) min.	Test Conditions If/Vce	Slot Width (mm)	Lead Spacing (mm)	Digi-Key Part No.	Price Each 1	10	100	500
5	A	Darlington	3.0	5mA @ 5V	3.99	10.16	QCK4-ND	1.32	1.10	.88	.62
3	B	Transistor	1.0	20mA @ 5V	3.18	5.59	QVA11134-ND	1.17	.98	.78	.55
2	B	Transistor	1.0	20mA @ 5V	3.18	5.59	QVB11134-ND	1.11	.93	.74	.52
2	B	Transistor	1.0	20mA @ 5V	3.18	7.62	QVB11234-ND	1.13	.94	.75	.53
4	C	Transistor	0.5	20mA @ 5V	3.81	7.62	QVE11233-ND	.99	.83	.66	.47
1	B	Transistor	1.0	20mA @ 5V	3.15	7.24	H21A1-ND	.95	.79	.63	.45
1	B	Transistor	2.0	20mA @ 5V	3.15	7.24	H21A2-ND	.99	.83	.66	.47
1	B	Transistor	4.0	20mA @ 5V	3.15	7.24	H21A3-ND	1.03	.86	.69	.49
3	B	Transistor	1.0	20mA @ 5V	3.15	7.24	H22A1-ND	.82	.68	.55	.39
3	B	Transistor	2.0	20mA @ 5V	3.15	7.24	H22A2-ND	.86	.72	.58	.41
3	B	Transistor	4.0	20mA @ 5V	3.15	7.24	H22A3-ND	.90	.75	.60	.42
1	A	Darlington	2.5	5mA @ 1.5V	3.15	7.24	H21B1-ND	1.03	.86	.69	.49
3	A	Darlington	2.5	5mA @ 1.5V	3.15	7.24	H22B1-ND	.82	.68	.55	.39

Optologic Interrupter Modules

Fig.	Circuit	Output Type	VCC	Max Output Current (mA)	Rise/ Fall (ns)	Digi-Key Part No.	Price Each 1	10	100	500
14	M	T.P. BUFF	4.5-16.0	50	70	H21LTB-ND	1.16	.97	.78	.55
14	N	T.P. INV	4.5-16.0	50	70	H21LTI-ND	1.16	.97	.78	.55
14	O	O.C. BUFF	4.5-16.0	50	70	H21LOB-ND	1.16	.97	.78	.55
14	P	O.C. INV	4.5-16.0	50	70	H21LOI-ND	1.16	.97	.78	.55
15	M	T.P. BUFF	4.5-16.0	50	70	H22LTB-ND	1.12	.93	.75	.53
15	N	T.P. INV	4.5-16.0	50	70	H22LTI-ND	1.12	.93	.75	.53
15	O	O.C. BUFF	4.5-16.0	50	70	H22LOB-ND	1.12	.93	.75	.53
15	P	O.C. INV	4.5-16.0	50	70	H22LOI-ND	1.12	.93	.75	.53

Semiconductor Matched Emitter Detector Pairs

Fig.	Circuit	Output Type	Ic Min (mA)	Forward Voltage	Separation (mm)	Digi-Key Part No.	Price Each 1	10	100	500
6	E	Transistor	1.5	1.7	3.94	H23A1-ND	.75	.63	.50	.35
6	F	Darlington	7.5	1.7	3.94	H23B1-ND	.90	.75	.60	.42

Semiconductor Infrared Photo Detectors

Fig.	Circuit	BV_{CEO} (V)	Min. Ic @ 5Vce (mA)	Rise/Fall (µ sec)	Reception Angle +/-	Peak Wavelength Sensitivity	Digi-Key Part No.	Price Each 1	10	100	500
7	H	45	6	8/7	—	880	BPW36-ND	1.73	1.38	1.04	.94
7	H	45	3	8/7	—	880	BPW37-ND	1.73	1.38	1.04	.94
8	H	50	1	5/5	60	880	L14C1-ND	1.72	1.38	1.03	.93
8	H	50	0.5	5/5	60	880	L14C2-ND	1.65	1.32	.99	.89
7	H	45	6	8/7	—	880	L14G1-ND	1.65	1.32	.99	.89
7	H	45	3	8/7	—	880	L14G2-ND	1.61	1.29	.97	.87
7	H	45	12	8/7	—	880	L14G3-ND	1.68	1.35	1.01	.91
8	H	30	3	10/12	30	880	L14N1-ND	1.68	1.35	1.01	.91
8	H	30	6	14/16	30	880	L14N2-ND	1.79	1.43	1.08	.97
7	H	30	4	10/12	12	880	L14P1-ND	1.72	1.38	1.03	.93
7	H	30	8	14/16	12	880	L14P2-ND	1.79	1.43	1.08	.97
7	G	25	3	300/250	8	880	BPW38-ND	1.83	1.46	1.10	.99
7	G	25	3	300/250	8	880	L14F1-ND	1.75	1.41	1.06	.95
7	G	25	1	300/250	8	880	L14F2-ND	1.61	1.29	.97	.87
9	D	30	1	5/5	8	880	QSC112-ND	.40	.32	.24	.14
9	D	30	2	5/5	8	880	QSC113-ND	.45	.36	.27	.15
9	D	30	4	5/5	8	880	QSC114-ND	.50	.40	.30	.17
10	D	30	1.6	7/7	12	880	QSD122-ND	.55	.44	.33	.19
10	D	30	3.2	7/7	12	880	QSD123-ND	.48	.36	.27	.17
10	D	30	7.5	7/7	12	880	QSD124-ND	.52	.39	.30	.19
11	D	30	1.2	8/8	12	880	QSD722-ND	.55	.44	.33	.19
11	D	30	3	8/8	12	880	QSD723-ND	.48	.36	.27	.17
12	D	30	0.64	8/8	8	880	QSE113-ND	.50	.40	.30	.17
12	D	30	1.28	8/8	8	880	QSE114-ND	.50	.40	.30	.17

Logic Detectors

Fig.	Circuit	Output Type	VCC	Isink (mA)	Isource (mA)	Rise/Fall (ns)	Reception Angle +/-	Peak Wavelength Sensitivity	Digi-Key Part No.	Price Each 1	10	100	500
13	I	T.P. BUFF	4.5 - 16	50	10	70	25	935	QSE156-ND	.88	.66	.50	.31
13	K	T.P. INV.	4.5 - 16	50	10	70	25	935	QSE157-ND	.88	.66	.50	.31
13	J	O.C. BUFF	4.5 - 16	50	—	100	25	935	QSE158-ND	.88	.66	.50	.31
13	L	O.C. INV.	4.5 - 16	50	—	100	25	935	QSE159-ND	.88	.66	.50	.31

Fig. 1

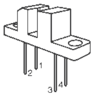


Fig. 2

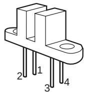


Fig. 3

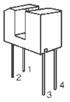


Fig. 4

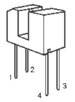


Fig. 5

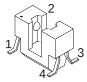


Fig. 6

Side View

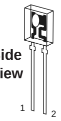
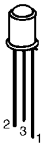


Fig. 7



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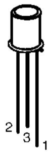


Fig. 9

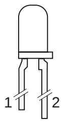


Fig. 10

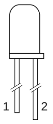


Fig. 11

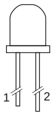


Fig. 12

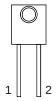


Fig. 13

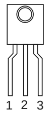


Fig. 14

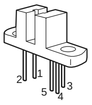
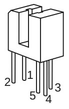
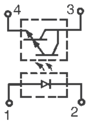


Fig. 15

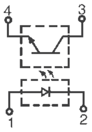


Circuits

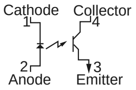
A



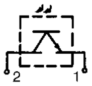
B



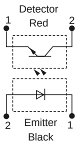
C



D



E



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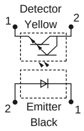
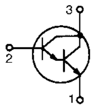
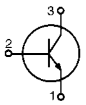


G



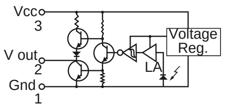
TO-18 3 Lead

H

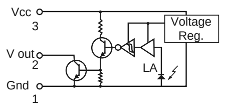


TO-18, Flat Window, 3 Lead

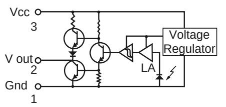
I



J



K



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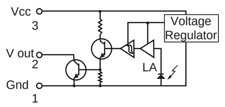

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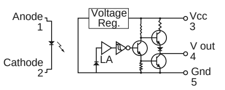

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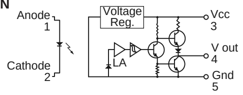

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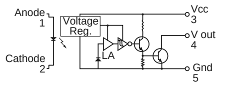

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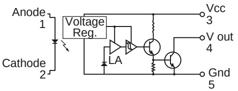


Infrared Photo Detectors and Emitters

Fig. 1 – Ceramic, Epoxy Globe

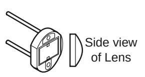


Fig. 2 – Ceramic, Epoxy Filled

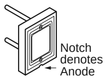


Fig. 3 – Solderable Photo Cell

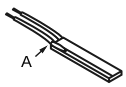


Fig. 4 – Solderable Photo Cell

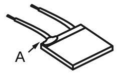


Fig. 5 – 16 Element Array

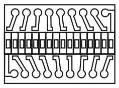


Fig. 6 – 32 Element Array

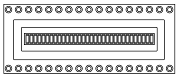


Fig. 7 – TO-46 Flat Window

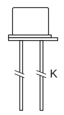


Fig. 8 – TO-46 Lens Window

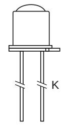


Fig. 9 – TO-46 Epoxy Globe

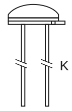


Fig. 10 – TO-46 Plastic Lens

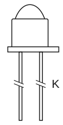


Photo Detectors

Fig.	Short Circuit Current I_S	Dark Current I_D	Peak Sensitivity Wavelength	Breakdown Voltage V_{BR}	Active Area (mm sq.)	Digi-Key Part No.	Price Each 1	25	100	250
Blue Enhanced Photovoltaic Detectors										
1	235µA	5.0nA	950nm	100V	17	PDB-V107-ND	2.20	1.85	1.80	1.70
1	80µA	0.3nA	950nm	50V	7.75	PDB-V113-ND	1.40	1.30	1.20	1.10
2	1200µA	0.2nA	950nm	30V	100	PDB-V110-ND	42.00	34.00	29.00	27.00
Blue Enhanced Photoconductive Detectors										
1	235µA	5nA	950nm	100V	17	PDB-C107-ND	2.25	1.90	1.85	1.75
1	110µA	5nA	950nm	100V	7.75	PDB-C113-ND	1.65	1.50	1.40	1.30
1	400µA	10nA	940nm	75V	29	PDB-C140-ND	4.00	3.60	3.25	2.90
2	1300µA	10nA	950nm	50V	100	PDB-C110-ND	46.31	37.06	32.94	30.88
Blue Enhanced Solderable Photo Cells										
3	185µA	15nA	950nm	50V	14.5	PDB-C607-2-ND	4.40	4.18	4.07	3.95
3	900µA	75nA	950nm	50V	69	PDB-C612-2-ND	8.85	8.50	7.95	7.70
3	2800µA	350nA	950nm	50V	232	PDB-C615-2-ND	26.40	24.75	22.00	19.80
4	545µA	30nA	950nm	50V	42	PDB-C609-2-ND	8.50	8.25	7.97	7.70
4	1000µA	90nA	950nm	50V	86	PDB-C613-2-ND	11.00	10.45	10.15	9.90
Blue Enhanced Multi-Element Detector Arrays										
7*	50µA	0.5nA	350-1100nm	75V	6.4	PDB-C203-ND	29.00	26.00	22.00	18.75
5	28µA	1.0nA	350-1100nm	35V	2.5	PDB-C216-ND	45.00	38.00	28.00	24.00
6	10µA	20nA	350-1100nm	30V	1.4	PDB-C232-ND	125.00	106.00	90.00	75.00
Detector-Amplifier Hybrid (TO-5 Package)										
8*	45µA	5nA	350-1100nm	10V	5.1	PDB-715-100-ND	43.00	38.00	35.00	25.00

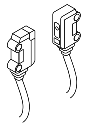
High Power Infrared Emitters

Fig.	Continuous Forward Current	Typ. Rev. Breakdown Voltage	Peak Sensitivity Wavelength	Output Power	Beam Angle +/-	Digi-Key Part No.	Price Each 1	25	100	250
7*	100mA	30V	880nm	22mW	40°	PDI-E801-ND	2.80	2.35	2.00	1.75
8*	100mA	30V	880nm	24mW	20°	PDI-E802-ND	2.80	2.35	2.00	1.75
8*	100mA	30V	880nm	24mW	4°	PDI-E803-ND	2.80	2.35	2.00	1.75
9*	100mA	30V	880nm	32mW	40°	PDI-E804-ND	2.20	1.85	1.80	1.70
10*	100mA	30V	880nm	24mW	2.5°	PDI-E805-ND	3.00	2.55	2.53	2.15

* Tab denotes cathode

9297B-ND Omron Industrial Opto Sensor, Data Book . . . **$2.00**

Amplified Mini Optical Sensors with Pin Point Beam



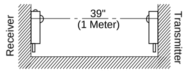
Miniature optical sensor with "Pin-point" beam for sensing minute objects (1-2mm dia.). Use both indoors or outdoors for detecting where small body size is desired. Perfect for security, conveyor detection as well as emergency stop detection and limit control and more. Sensor not affected by ambient light. Comes standard with 2 meter molded cords attached.

Terminal Type: 2m Cable

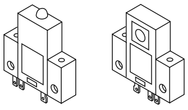
Sensing Method	Mounting Type/Features	Dist. In.	(max.) (M/mm)	Digi-Key Part No.	Price Each 1	25	100	Omron Part No.
Through-Beam	Side/Light-On	393.7	1M	OR591-ND	102.48	92.24	87.11	E3T-ST11
Through-Beam	Side/Dark-On	393.7	1M	OR592-ND	102.48	92.24	87.11	E3T-ST12
Reflect., Retro	Side/Light-On	7.87	200mm	OR593-ND	95.76	86.19	81.40	E3T-SR11
Reflect, Retro	Side/Dark-On	7.87	200mm	OR594-ND	95.76	86.19	81.40	E3T-SR12
Reflect, Diff.	Flat/Light-On	1.18	30mm	OR595-ND	93.52	84.17	79.50	E3T-FD11N
Reflect, Diff.	Flat/Dark-On	1.18	30mm	OR596-ND	90.16	81.15	76.64	E3T-FD12N
Convergent Beam	Light-On	.59	15mm	Z1104-ND	63.50	58.80	50.96	E3T-SL11
Convergent Beam	Dark-On	.59	15mm	Z1105-ND	63.50	58.80	50.96	E3T-SL12

Amplified Optical Sensors *1 Meter (39 Inches) Sensing Distance!*

- One meter sensing distance
- Supply voltage of 5 to 24 VDC for easy interface with TTL circuits, relays and programmable controllers
- IP60 sealability rating. Comes with two — 2m cables with connectors



Sensor Side View



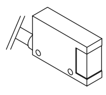
Description	Digi-Key Part No.	Price Each	Omron Part No.
Through-Beam Receiver/Transmitter Pair - Dark on	OR544-ND	99.49	EE-SPW311
Through-Beam Receiver/Transmitter Pair - Light on	OR545-ND	99.49	EE-SPW411

Long Distance Amplified Optical Sensors

9297B-ND Omron Industrial Opto Sensor, Data Book **$2.00**

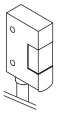
These General Purpose Optical Sensors are small DC Sensors (10-30VDC Input) available in both a transmitter-receiver pair or a reflected beam type with sensing distances of 23 feet (7 meters). Ideal for conveyor systems and doorway sensing with direct interface to PLC's. Meets NEMA 4X, 6 and IP67 standards. Through-beam sensors include separate transmitter and receiver. Reflective sensors include transceiver and E39-R1 reflector. Horizontal mount sensors include mounting bracket. All sensors include mounting hardware.

Fig. 1



Horizontal

Fig. 2



Vertical

Fig.	Sensing Method	Mounting/Type Features	Dist.(max.) Ft.	(M)	Terminal Type	Digi-Key Part No.	Price Each 1	25	100	Omron Part No.
1	Through-Beam	Horizontal	22.97	7	2m Cable	OR584-ND	153.44	138.10	130.43	E3S-AT11
1	Reflective	Horizontal	6.56	2	2m Cable	OR585-ND	131.04	117.94	111.39	E3S-AR11
2	Through-Beam	Vertical	22.97	7	2m Cable	OR586-ND	153.44	138.10	130.43	E3S-AT61
2	Reflective	Vertical	6.56	2	2m Cable	OR587-ND	131.04	117.94	111.39	E3S-AR61
—	Mounting Bracket for Vertical Sensors (2 required for Through-Beam Type)					OR588-ND	5.04	4.54	4.29	E39-L59
—	Light Reflector for Confirming Optical Alignment during Setup (Clips onto Receiver)					OR589-ND	14.46	13.02	12.30	E39-R5
—	Light Interference Filter Eliminates Ambient Light Problems (Snaps onto Receiver)					OR590-ND	25.48	22.94	21.66	E39-E6

Amplified Optical Sensors

EE-SPX74/84 series of optical sensors feature a snap in connector which provides excellent shock and vibration resistance and prevents accidental disconnection of the sensor.

Fig. 1

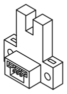


Fig. 2

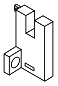


Fig. 3

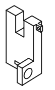


Fig. 4

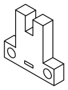


Fig.	Sensing Method	Sensing Distance	Output Type	Output	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Slot	3.6mm	NPN	Dark-On	OR615-ND	80.02	72.02	64.02	EE-SPX740
1	Slot	3.6mm	NPN	Light-On	OR616-ND	80.02	72.02	64.02	EE-SPX840
2	Slot	3.6mm	NPN	Dark-On	OR617-ND	80.02	72.02	64.02	EE-SPX742
2	Slot	3.6mm	NPN	Light-On	OR618-ND	80.02	72.02	64.02	EE-SPX842
3	Slot	3.6mm	NPN	Dark-On	OR619-ND	80.02	72.02	64.02	EE-SPX743
3	Slot	3.6mm	NPN	Light-On	OR620-ND	80.02	72.02	64.02	EE-SPX843
4	Slot	3.6mm	NPN	Dark-On	OR621-ND	80.02	72.02	64.02	EE-SPX741
4	Slot	3.6mm	NPN	Light-On	OR622-ND	80.02	72.02	64.02	EE-SPX841
Snap-In connector with cable for EE-SPX74/84 Series					OR623-ND	5.13	4.62	4.10	EE-1013

Non-Amplified Optical Sensors

Fig. 1

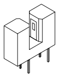


Fig. 2

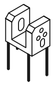


Fig. 3

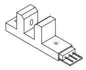
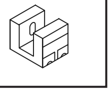


Fig.	Sensing Method	Sensing Distance	Terminal Type	Type On/Off	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Slot	5mm	PC Board	4/4	OR627-ND	1.75	1.58	1.40	EE-SX1081
1	Slot	2mm	PC Board	4/4	OR624-ND	1.75	1.58	1.40	EE-SX1018
1	Slot	5mm	PC Board	4/4	OR625-ND	1.75	1.58	1.40	EE-SX1041
1	Slot	3.4mm	PC Board	4/4	OR626-ND	1.75	1.58	1.40	EE-SX1071
1	Slot	3mm	PC Board	4/4	OR631-ND	1.75	1.58	1.40	EE-SX198
1	Slot	3mm	PC Board	4/4	OR632-ND	1.75	1.58	1.40	EE-SX199
2	Slot	2mm	PC Board	10/10	OR633-ND	1.28	1.15	1.02	EE-SX1103
2	Slot	2mm	PC Board	10/10	OR634-ND	1.28	1.15	1.02	EE-SX1105
2	Slot	3mm	PC Board	10/10	OR635-ND	1.28	1.15	1.02	EE-SX1106
3	Slot	5mm	Amp Connect	3Khz	OR629-ND	3.78	3.40	3.02	EE-SX4009-P1
3	Slot	5mm	Molex Connect	3Khz	OR630-ND	4.68	4.21	3.74	EE-SX4009-P10

Fig. 4



SMT compact size makes these sensors ideal for use in applications with restricted space.

Dual channel model (EE-SX1131) is ideal for encoder applications.

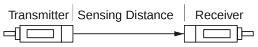
Fig.	Sensing Method	Sensing Dist.	Term. Type	Type On/Off	Digi-Key Part No.	Cut Tape Price Each 1	25	50	Digi-Key Part No.	Tape & Reel Size	Pricing	Omron Part No.
4	Slot (Dual)	2mm	SMT	10/10	OR628CT-ND	1.28	1.15	1.02	OR628TR-ND	2,000	637.50/M	EE-SX1131
4	Slot	1mm	SMT	10/10	OR636CT-ND	1.28	1.15	1.02	OR636TR-ND	2,500	637.50/M	EE-SX1107
4	Slot	2mm	SMT	10/10	OR637CT-ND	1.28	1.15	1.02	OR637TR-ND	2,000	637.50/M	EE-SX1108
4	Slot	3mm	SMT	10/10	OR638CT-ND	1.28	1.15	1.02	OR638TR-ND	1,000	637.50	EE-SX1109

OMRON

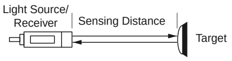
9136B-ND Omron Photo Microsensors Data Book **$2.95**

Non-Amplified Optical Sensors

Omron's optical sensors are designed to meet the needs of positioning, detection of components and objects, cam-timer switching-control and robotic control. Available in two types: nonamplified optical sensors are low cost, fast response optical sensors used mainly in design-in processes. Amplified optical sensors are ideal for plug and play applications where external light does not affect performance and wide input voltages can be applied.



Through-Beam Slot Type



Reflective Type

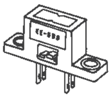
Fig. 1


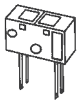
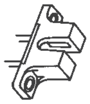
Fig. 2


Fig. 3


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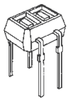


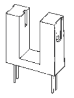
Fig. 5


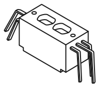
Fig. 6

Low Profile

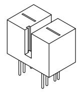
Fig. 7

Dual Channel

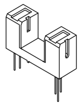
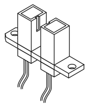
Fig. 8


Fig. 9


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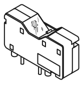

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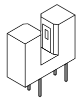

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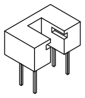

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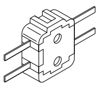

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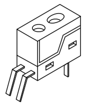

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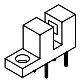


Fig.	Sensing Method	Sensing Distance	Terminal Type	Typ. t_{on}/t_{off} (µsec.)	Digi-Key Part No.	Price Each 1	25	100	Omron Part No.
1	Reflective	5mm	Solder	30/30	OR500-ND	4.78	4.30	3.44	EE-SB5
1	Reflective	5mm	PC Board	30/30	OR501-ND	4.78	4.30	3.44	EE-SB5-B
2	Reflective	5mm	Solder	30/30	OR502-ND	4.70	4.23	3.39	EE-SF5
2	Reflective	5mm	PC Board	30/30	OR503-ND	4.70	4.23	3.39	EE-SF5-B
3	Slot	3.6mm	Solder	4/4	OR504-ND	3.58	3.22	2.58	EE-SG3
3	Slot	3.6mm	PC Board	4/4	OR505-ND	3.58	3.22	2.58	EE-SG3-B
4	Reflective	1mm	PC Board	35/25	OR520-ND	1.90	1.71	1.37	EE-SY124
4	Reflective	1mm	SMT	35/25	OR557-ND	1.90	1.71	1.37	EE-SY125
5	Slot	5mm	PC Board	4/4	OR518-ND	1.68	1.51	1.21	EE-SX1042
5	Slot	4.6mm	PC Board	500 Hz	OR556-ND	1.95	1.76	1.41	EE-SX1061
5	Slot	3mm	PC Board	70/70	OR601-ND	1.95	1.76	1.41	EE-SX298
6	Reflective	5mm	PC Board	50 Hz	OR525-ND	3.45	3.11	2.49	EE-SY310
6	Reflective	5mm	PC Board	50 Hz	OR526-ND	3.45	3.11	2.49	EE-SY410
6	Reflective	4.4mm	PC Board	3/20	OR603-ND	3.68	3.31	2.65	EE-SY313
6	Reflective	4.4mm	PC Board	3/20	OR604-ND	3.68	3.31	2.65	EE-SY413
7	Slot	3.4mm	PC Board	4/4	OR523-ND	4.08	3.67	2.94	EE-SX1031
8	Slot	8mm	PC Board	3 KHz	OR524-ND	1.93	1.74	1.39	EE-SX4070
8	Slot	8mm	PC Board	3 KHz	OR571-ND	1.68	1.51	1.21	EE-SX1070
9	Vert Slot	3.4mm	61cm Wires	4/4	OR562-ND	7.08	6.37	5.10	EE-SX1088-W1
9	Horz Slot	3.4mm	61cm Wires	4/4	OR563-ND	6.68	6.01	4.81	EE-SX1096-W1
10	Reflect/Vert	4.5mm	PC Board	30/30	OR564-ND	8.68	7.81	6.25	EE-SY190
10	Reflect/Horz	4.5mm	PC Board	30/30	OR565-ND	8.68	7.81	6.25	EE-SY191
11	Slot	3.4mm	PC Board	4/4	OR569-ND	3.18	2.86	2.29	EE-SJ3-D
11	Slot	2.8mm	PC Board	4/4	OR598-ND	2.03	1.83	1.46	EE-SX1025
11	Slot	5.2mm	PC Board	4/4	OR599-ND	2.13	1.92	1.53	EE-SX1035
12	Slot	3mm	PC Board	4/4	OR570-ND	2.90	2.61	2.09	EE-SX1046
12	Slot	2mm	PC Board	3/20	OR600-ND	2.93	2.64	2.11	EE-SX493
13	Reflective	4 mm	PC Board	180/60	OR578-ND	3.53	3.18	2.54	EE-SY201
14	Red LED Reflect	4 mm	PC Board	30/30	OR581-ND	10.53	9.48	7.58	EE-SY169
14	IR Reflective	4 mm	PC Board	30/30	OR582-ND	9.40	8.46	6.77	EE-SY169A
15	Slot	3mm	PC Board	70/70	OR602-ND	3.05	2.75	2.20	EE-SK3W-B

Amplified Optical Sensors

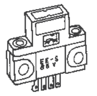
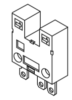
Fig. 1


Fig. 2


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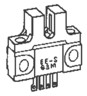

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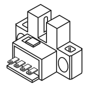

L-Shape

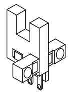
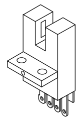
Fig. 5

T-Shape

Fig. 6


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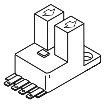

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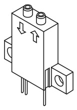

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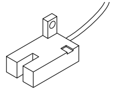
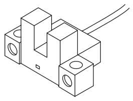

Right Mount Shown

Fig. 10


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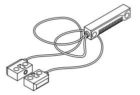

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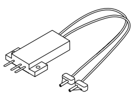

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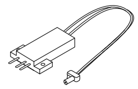

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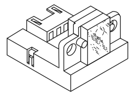

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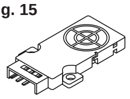
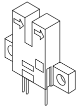

Inductive Type

Fig. 16


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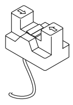

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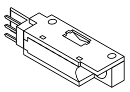

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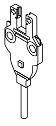

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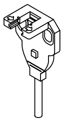

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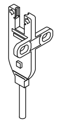
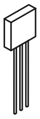


Fig.	Sensor Type/Features	Sensing Distance	Config-uration	Digi-Key Part No.	Price Each 1	25	Omron Part No.
1	Reflective (General Purpose)	5mm	Light-On	OR506-ND	13.45	12.11	EE-SB5V
1	Reflective (General Purpose)	5mm	Dark-On	OR507-ND	13.45	12.11	EE-SB5VC
1	Reflective (General Purpose)	19mm	Light-On	OR519-ND	18.80	16.92	EE-SB5V-E
1	Reflective (Side Detecting)	5mm	Light-On	OR535-ND*	42.89	38.60	EE-SPY311
1	Reflective (Side Detecting)	5mm	Light-On	OR536-ND*	42.89	38.60	EE-SPY411
1	Reflective (Top Detecting)	5mm	Dark-On	OR572-ND*	42.89	38.60	EE-SPY312
1	Reflective (Top Detecting)	5mm	Light-On	OR573-ND*	42.89	38.60	EE-SPY412
1	Reflective (Side Detecting)	5mm	Light/Dark-On	OR531-ND†	21.90	19.71	EE-SY671
1	Reflective (Top Detecting)	5mm	Light/Dark-On	OR532-ND†	21.90	19.71	EE-SY672
2	Wide Slot (13mm Slot)	13mm	Dark-On	OR533-ND*	45.94	41.35	EE-SPX303
2	Wide Slot (13mm Slot)	13mm	Light-On	OR534-ND*	45.94	41.35	EE-SPX403
3	Slot (Dust Proof Slit)	5mm	Light/Dark-On	OR528-ND	18.13	16.32	EE-SX670
3	Slot (Dust Proof Slit)	5mm	Light/Dark-On	OR611-ND	18.10	16.29	EE-SX670A
4	Slot (L-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR529-ND	21.70	19.54	EE-SX671
4	Slot (L-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR612-ND	21.70	19.54	EE-SX671A
5	Slot (T-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR530-ND	21.96	19.77	EE-SX672
5	Slot (T-Shaped, Dust Proof Slit)	5mm	Light/Dark-On	OR613-ND	21.96	19.77	EE-SX672A
6	Slot (Close Mounting Style)	5mm	Light/Dark-On	OR549-ND	19.38	17.44	EE-SX673
6	Slot (Close Mounting Style)	5mm	Light/Dark-On	OR614-ND	19.38	17.44	EE-SX673A
7	Slot (Close Mount)	5mm	Light/Dark-On	OR597-ND	23.39	21.06	EE-SX674
8	Reflective (Long Distance)	200mm	Dark-On	OR538-ND*	57.72	51.95	EE-SPZ301A
8	Reflective (Long Distance)	200mm	Light-On	OR539-ND*	57.72	51.95	EE-SPZ401A
9	Slot (Left Mount w/1M Cable)	3.6mm	Dark-On	OR541-ND*	65.38	58.85	EE-SPX302-W2A
9	Slot (Right Mount w/1M Cable)	3.6mm	Dark-On	OR542-ND*	70.66	63.60	EE-SPX304-W2A
10	Slot (Top Mount w/1M Cable)	3.6mm	Dark-On	OR543-ND*	73.33	66.00	EE-SPX305-W2A
11	Slot (Wide Sensing Distance)	30mm	Dark-On	OR546-ND*	169.78	152.81	EE-SPW321
11	Slot (Wide Sensing Distance)	30mm	Light-On	OR547-ND*	169.78	152.81	EE-SPW421
12	Fiber (19” Optical Fiber)	30mm	Dark-On	OR552-ND*	78.91	71.02	EE-SPZ301W-01
12	Fiber (19” Optical Fiber)	30mm	Light-On	OR553-ND*	78.91	71.02	EE-SPZ401W-01
13	Reflective (11”Optical Fiber)	1-3mm	Dark-On	OR554-ND*	82.52	74.27	EE-SPZ301Y-01
13	Reflective (11” Optical Fiber)	1-3mm	Light-On	OR555-ND*	82.52	74.27	EE-SPZ401Y-01
14	Reflective (External A-D Needed)	7.5mm	10 Bit A/D	OR548-ND	54.90	49.41	Z4D-A01
15	Inductive (Detects Ferrous Metal)	5mm	N/O Output	OR560-ND	23.70	21.33	E2R-A01
16	Slot (General Purpose)	3.6mm	Dark-On	OR574-ND*	44.18	39.76	EE-SPX301
16	Slot (General Purpose)	3.6mm	Light-On	OR575-ND*	44.18	39.76	EE-SPX401
17	Slotted Liquid Level Detector	6-13mm	Dark/Light-On	OR579-ND*	126.18	113.56	EE-SPX613
18	Reflective (General Purpose)	11mm	Dark-On	OR580-ND*	11.70	10.53	EE-SPY415
19	Slot Type w/2M Cable	5mm	Dark-On	OR605-ND*	28.44	25.60	EE-SX770
19	Slot Type w/2M Cable	5mm	Light-On	OR606-ND*	28.44	25.60	EE-SX870
20	L-Shaped w/2M Cable	5mm	Dark-On	OR607-ND*	30.11	27.10	EE-SX771
20	L-Shaped w/2M Cable	5mm	Light-On	OR608-ND*	30.11	27.10	EE-SX871
21	T-Shaped w/2M Cable	5mm	Dark-On	OR609-ND*	31.37	28.24	EE-SX772
21	T-Shaped w/2M Cable	5mm	Light-On	OR610-ND*	31.37	28.24	EE-SX872
—	IR Reflector for Fig. 8 above, 60 x 40mm			OR540-ND	12.00	10.80	E39-R1
—	3 Pin Conn. w/ 1 Meter Cable for Fig. 15 above			OR561-ND	6.35	5.72	E22-01
—	Converter from NPN to PNP Output for Amp Sensors			OR550-ND	28.12	25.31	EE-2001
—	Converter from NPN to PNP Output for AMP Sensors			OR551-ND	28.12	25.31	EE-2002
—	4 Pin Connector for Fig. 1-6 above			OR527-ND	2.43	2.19	EE-1001
—	4 Pin Conn. w/ 2 Meter Cable for Fig. 1-6 above			OR559-ND	11.58	10.42	EE-1006
—	Panel Mount Holder Clip for OR559-ND			OR576-ND	3.45	3.11	EE-1006A
—	3 Pin Connector for 8, 12, 13 and 16 above			OR537-ND	2.43	2.19	EE-1002
—	3 Pin Conn. w/ 2 Meter Cable for 4, 12 and 13 above			OR558-ND	4.35	3.92	EE-1003
—	Panel Mount Holder Clip for OR558-ND			OR583-ND	1.35	1.22	EE-1003A

* Sensors not influenced by external light.   † Built-in sensitivity adjuster.

Sensors

Fig. 1


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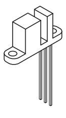

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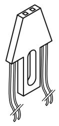
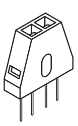


Fig. 4

Fig. 5


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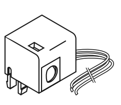

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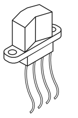


Hallogic® Hall Effect Sensors

Fig.	Operate Point* Min. / Typ. / Max. (Gauss - B)	Release Point Min. / Typ. / Max. (Gauss - B)	Hysteresis Typ. / Max. (Gauss - B)	Supply Cur. Typ. / Max. (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	0 / 90 / 180	-100 / 65 / 100	25 - 100	6 / 9	365-1001-ND	2.94	2.36	1.88	OH090U
	70 / — / 200	50 / — / 180	20	4 / 7	365-1003-ND	3.15	2.53	2.02	OHS3140U

***** South pole facing symbolized surface.

Fig.	Output Current (mA)	Output DC Voltage	Output Rise Typ. / Max.	Ouput Fall Time Typ. / Max.	Supply Curr. Typ. / Max. (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
2	25	25	0.21 / 1.00 µs	0.25 / 1.00 µs	4 - 7	365-1002-ND	9.64	7.71	6.17	OHB900

Reflective Object Sensors

Fig.	Continuous Forward Curr. (mA)	Reverse DC Voltage	V (BR)ECO Voltage (Min.)	Min. Lead Wire Length Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
3	100	2.0	5.0	4.0" (101.6)	365-1010-ND	9.89	7.01	6.65	OPB700
	100	2.0	5.0	18.0" (457.2)	365-1011-ND	13.10	9.29	8.81	OPB701AL
4	50	3.0	5.0	—	365-1012-ND	7.67	5.44	5.16	OPB710
5	40	2.0	5.0	—	365-1014-ND*	2.88	2.04	1.94	OPB742
	40	2.0	5.0	—	365-1015-ND*	3.61	2.56	2.43	OPB745

***** Collector Emitter Voltage 30V - OPB742 and 15V - OPB745

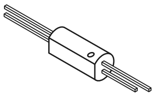
Photologic® Reflective Object Sensors

Fig.	Supply Voltage	Output Voltage	Operating DC Supply Voltage	Min. Lead Wire Length Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
6	10	35	4.75 - 5.25	18.0" (457.2)	365-1013-ND	8.58	6.08	5.77	OPB716
7	10	35	4.75 - 5.25	12.0" (304.8)	365-1016-ND	8.95	6.34	6.02	OPB770T

Optoisolators

OPI1264 Series: Optically coupled isolators, each consisting of an infrared emitting diode coupled to an NPN silicon phototransistor and sealed in a precast opaque housing.

OPI155 Series: Contains a high speed monolithic photo-IC comprised of a photodiode and DC amplifier driving an open collector output Schottky transistor.

Fig. 1


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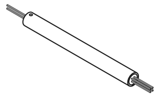
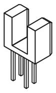


Fig.	Isolation Voltage	Forward DC Voltage (mA)	Reverse DC Voltage	DC Current Transfer Ratio (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	±10k	40	2.0	2.5	365-1031-ND	2.75	1.95	1.85	OPI1264A
	±10k	40	2.0	5.0	365-1032-ND	2.81	1.99	1.89	OPI1264B
	±10k	40	2.0	10.0	365-1033-ND	2.86	2.03	1.92	OPI1264C
2	±50k	50	3.0	25	365-1034-ND	67.49	47.86	45.40	OPI155

Switches

Fig. 1


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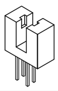

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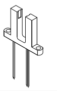

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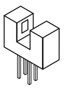

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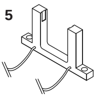

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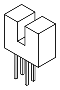

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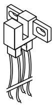

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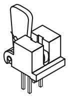


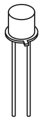
Slotted Optical Switches

Fig.	Output Type	Slot Width Inch (mm)	Lead Spacing Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	Transistor	.200 (5.08)	.325 (8.26)	365-1008-ND	1.57	1.11	1.05	OPB620
2	Transistor	.160 (4.06)	.310 (7.87)	365-1017-ND	1.97	1.40	1.33	OPB804
3	Transistor	.20 (5.08)	—	365-1018-ND	5.09	3.61	3.43	OPB817
	Photologic®	.20 (5.08)	—	365-1022-ND	5.78	4.10	3.89	OPB917B
4	Transistor	.210 (5.33)	.410 (10.41)	365-1019-ND	2.37	1.68	1.59	OPB818
5	Transistor	1.26 (32)	—	365-1020-ND	7.12	5.05	4.80	OPB819
6	Transistor	2.10 (5.33)	.310 (7.87)	365-1021-ND	2.12	1.50	1.42	OPB848
7	Photologic®	.130 (3.30)	—	365-1023-ND	6.49	4.60	4.37	OPB930W55

Slotted Optical Flag Switches

Fig.	Output Type	Slot Width Inch (mm)	Lead Spacing Inch (mm)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
8	Transistor	.090 (2.16)	.280 (7.11)	365-1009-ND	2.86	2.03	1.92	OPB680

Diodes and Receivers

Fig. 1


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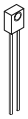

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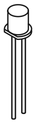


Fig. 4

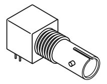
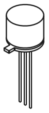
Fig. 5
(Panel Mount)


Fig. 6


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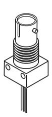


Infrared Light-Emitting Diodes

• Reverse Voltage: 2.0V • Rise/Fall Time: 10ns

Fig.	Style Package	Continuous Forward DC Current (mA)	Peak Emission (nm)	Apertured Irrad. Min. / Max. (mW / cm²)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
1	TO-46	100	850	.5 / —	365-1004-ND	3.48	2.90	2.61	OP230WPS
2	Side View	50	850	.10 / .90	365-1005-ND	1.98	1.65	1.49	OP245PS
3	T-1	50	850	.055 / .55	365-1006-ND	1.68	1.40	1.26	OP265WPS
4	End-Looking	50	850	.10 / .90	365-1007-ND	1.80	1.50	1.35	OP268FPS

Fiber Optic (850nm) Light-Emitting Diodes

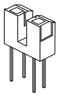
Fig.	Optical Power Output Min. / Typ.	Output Rise Time - Typ. (ns)	Continuous Forward DC Current (mA)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
5	-17.3 µW / -13.8µW	4.0	100	365-1024-ND	12.81	10.48	9.61	OPF1414T
6	25.0dBm / 29.0dBm	6.0	100	365-1026-ND	8.89	7.27	6.67	OPF370A
7	15.0dBm / 19dBm	6.0	100	365-1027-ND	17.42	14.26	13.07	OPF372B

Fiber Optic Pin Photodiodes and Receivers

Fig.	Output Current (mA)	Responsivity Min. / Typ.	Output Rise Time - Typ. (ns)	Digi-Key Part No.	Price Each 1	100	250	Optek Part No.
5	25	5.3mV / 7µW	3.3	365-1025-ND	13.86	11.34	10.40	OPF2416T
6	—	0.45AW / 0.55AW	6.0	365-1028-ND	7.44	6.08	5.58	OPF470
	—	0.45AW / 0.55AW	1.0	365-1029-ND	7.30	5.98	5.48	OPF480
7	—	0.45AW / 0.55AW	1.0	365-1030-ND	15.49	12.67	11.62	OPF482

Photo Interrupter

Photo Interrupters are a transmissive photosensor series in which a high efficiency GaAs infrared light emitting diode is used as the light emitting element, and a high sensitivity phototransistor is used as the light detecting element. The two elements are arranged so as to face each other, and objects passing between them are detected.

Fig. 1


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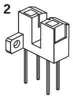

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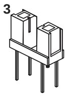

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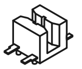

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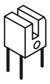

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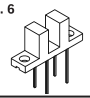

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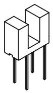

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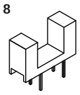
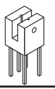


Fig. 9
Normally ON Type


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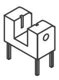


Fig.	Sensing Method	Sensing Distance	Terminal Type	Typ. t_{on}/t_{off} (µsec.)	Digi-Key Part No.	Price Each 1	10	100	Panasonic Part No.
1	Slot	3mm	PC Board	5/5	ON1021-ND	1.39	1.16	.93	ON1021
2	Slot	3mm	PC Board	5/5	ON1023-ND	1.33	1.07	.80	ON1023
3	Slot	5mm	PC Board	5/5	ON1024-ND	1.26	1.05	.85	ON1024
4	Slot	1.4mm	SMD	35/35	CNA1301H-ND	.82	.69	.55	CNA1301H
5	Slot	0.9mm	PC Board	35/35	ON1002-ND	.87	.73	.59	ON1002
5	Slot	1.2mm	PC Board	35/35	ON1003-ND	.87	.73	.59	ON1003
5	Slot	2mm	PC Board	35/35	ON1004-ND	.87	.73	.59	ON1004
6	Slot	5mm	PC Board	6/6	ON1111-ND	2.65	2.12	1.65	ON1111
7	Slot	5mm	PC Board	6/6	ON1112-ND	2.02	1.62	1.22	ON1112
8	Slot	10mm	PC Board	6/6	ON1120-ND	1.86	1.49	1.12	ON1120
9	Slot	1.2mm	PC Board	3/8	ON1414A-ND	1.46	1.17	.88	ON1414A
10	Slot	1.0mm	PC Board	50/50	CNA1311K0TLC-ND	.98	.82	.66	CNA1311K0TLC
10	Slot	2.0mm	PC Board	50/50	CNA1312K0TLC-ND	.98	.82	.66	CNA1312K0TLC

Optoisolators

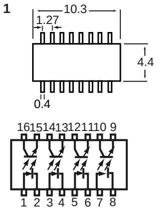
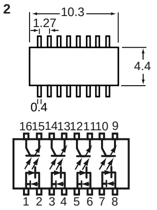
Fig. 1


Fig. 2


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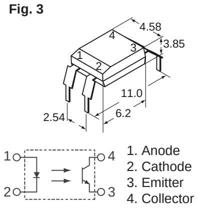


Fig.	Current Transfer Ratio Min. (%)	Max. (%)	@ IF (ma)	VCE (V)	V_{CEO}	Isolation Voltage (Vrms)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,500
DC Input Type, SMD, 16-Pin												
1	100	600	50	0.2	80	2500	CNC1H001CT-ND	1.89	1.51	1.14	CNC1H001TR-ND	966.00/M
AC Input Type, SMD, 16-Pin												
2	100	600	±50	0.2	80	2500	CNC7H001CT-ND	2.10	1.68	1.26	CNC7H001TR-ND	1074.00/M
DC Input Type, HD4-1 Package												
3	50	600	50	0.2	80	5000	ON3171-ND	.71	.54	.40	—	—

Panasonic Infrared Photosensors

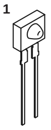
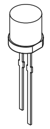
Fig. 1


Fig. 2


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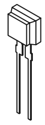

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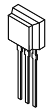

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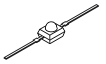

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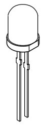

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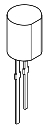

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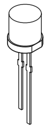

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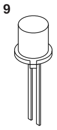

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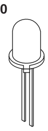

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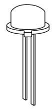

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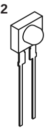

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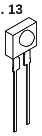

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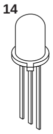

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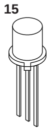

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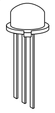
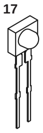


Fig. 17


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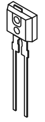

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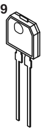

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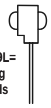
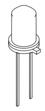


*NL59L=
Long
Leads

Fig. 21


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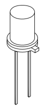


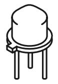
Fig. 23


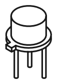
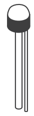
Fig. 24


Fig. 25


Infrared Light Emitting Diode

Style/ Pkg.	Fig.	Pulse Forward Current	Optical Power Output	Peak Emission Wavelength	Beam Angle	Digi-Key Part No.	Pricing			Panasonic Part No.
							1	10	100	
Side View	1	1A	4.6mW	950nm	17°	LN54PA-ND	1.00	8.37	66.96	LN54
Top View	2	1.5A	7mW	950nm	45°	LN64PA-ND	.91	7.56	60.48	LN64
T-1 3/4	6	1.5A	3-8mW	950nm	25°	LN66-ND	.95	7.13	53.46	LN66R
Side View	3	2A	12mW	900nm	115°	LN175PA-ND	1.81	14.47	108.54	LN175
T-1 3/4	6	1.5A	10mW/sr	950nm	20°	LN166-ND	.89	7.42	59.33	LN166
TO-18 Flat	9	2A	3-6mW	950nm	32°	LN51F-ND	3.63	29.02	225.70	LN51F
TO-18	10	2A	3-6mW	950nm	8°	LN51L-ND	3.63	29.02	225.70	LN51L
TO-18 Small	11	2A	3.5-6mW	950nm	100°	LN52-ND	3.05	24.38	189.59	LN52
Side View	12	1A	1.8-3.5mW	950nm	35°	LN55-ND	.97	8.06	64.49	LN55
Axial	5	1A	3-4.5mW	950nm	18°	LN57-ND	1.35	11.29	90.28	LN57
Side View	13	1A	1.8-3.5mW	950nm	35°	LN58-ND	.97	8.06	64.49	LN58
Side View x2	20	1A	1.8mW	950nm	23°	LN59-ND	1.10	9.13	73.01	LN59
Side View x2	20	1A	1.8mW	950nm	23°	LN59L-ND*	1.01	8.40	67.18	LN59L
Side View x2	20	1A	1.2mW/sr	940nm	23°	LN159-ND	1.32	10.96	87.70	LN159
T-1 3/4	6	1.5A	9mW/sr	950nm	25°	LN66A-ND	.45	3.61	27.08	LN66A
T-1	6	1A	2.5-5mW	950nm	20°	LN68-ND	.45	3.61	27.08	LN68
T-1 3/4	6	1A	10-18mW	860nm	20°	LN77L-ND	1.45	11.61	87.06	LN77L
Side View	13	1A	6-10mW	880nm	40°	LN78-ND	5.37	42.95	334.04	LN78
T-1	6	1A	6mW/sr	940nm	15°	LNA2801L-ND	.67	5.03	37.73	LNA2801L
Side View	3	1.5A	3-6mW	940nm	80°	LN155-ND	1.27	10.12	75.90	LN155
Side View	12	1.5A	4.3-5.5mW	950nm	35°	LN65-ND	1.29	10.34	77.52	LN65
T-1 3/4	6	1.5A	13mW/sr	950nm	15°	LN66F-ND	.61	4.60	34.52	LN66F

* Long Leads

Pin Photo Diode

Style/ Pkg.	Fig.	V_R	Peak Sensitivity Wavelength	tr/tf	Beam Angle	Digi-Key Part No.	Pricing			Panasonic Part No.
							1	10	100	
Side View	7	30V	960nm	50ns	70°	PN323BPA-ND	.91	7.56	60.48	PN323B
Top View	8	50V	900nm	2ns	70°	PN334PA-ND	1.46	12.15	97.20	PN334
TO-18 Small	11	30V	850nm	2ns	70°	PN330CL-ND	2.99	23.90	185.91	PN330CL
Side View	3	30V	850nm	2ns	70°	PN335-ND	1.26	10.12	75.88	PN335
TO-18	21	50V	800nm	1ns	10°	PN300-ND	6.14	49.10	414.27	PN300
TO-18	22	50V	800nm	1ns	40°	PN300F-ND	6.14	49.10	414.27	PN300F
TO-18	23	30V	900nm	2ns	70°	PN331CL-ND	3.66	29.31	227.95	PN331CL
TO-18	24	30V	900nm	—	40°	PN331F-ND	7.11	56.85	479.68	PN331F

NPN Photo Transistor

Style/ Pkg.	Fig.	V_{CEO}	I_c	Peak Sensitivity Wavelength	tr/tf	Digi-Key Part No.	Pricing			Panasonic Part No.
							1	10	100	
Side View	4	20V	10mA	900nm	8µs	PN116PA-ND	1.51	12.10	90.72	PN116
Axial	5	20V	20mA	800nm	2.5/3.5µs	PN127-SPA-ND	1.20	9.99	79.92	PN127S
Side View	1	20V	20mA	800nm	4µs	PN154PA-ND	1.39	11.61	92.88	PN154
T-1	6	30V	20mA	800nm	4µs	PN168PA-ND	.65	4.86	36.45	PN168
TO-18	10	30V	50mA	800nm	3µs	PN101-ND	3.56	28.46	221.32	PN101
TO-18 Flat	9	30V	50mA	800nm	3µs	PN101F-ND	3.56	28.46	221.32	PN101F
TO-18	14	40V*	50mA	800nm	3µs	PN102-ND	3.56	28.46	221.32	PN102
TO-18 Flat	15	30V*	50mA	800nm	3µs	PN102F-ND	3.56	28.46	221.32	PN102F
TO-18	14	30V*	30mA	900nm	5/6µs	PN108-ND	3.56	28.46	221.32	PN108
TO-18 Flat	15	30V*	30mA	900nm	8/9µs	PN108F-ND	3.56	28.46	221.32	PN108F
TO-18 Small	16	30V*	20mA	900nm	5/6µs	PN108CL-ND	2.99	23.90	185.91	PN108CL
TO-18 Flat	15	30V*	30mA	900nm	8/9µs	PN109F-ND	3.56	28.46	221.32	PN109F
TO-18 Small	16	30V*	20mA	900nm	5/6µs	PN109CL-ND	2.99	23.90	185.91	PN109CL
TO-18	14	30V*	30mA	900nm	5/6µs	PN109L-ND	3.56	28.46	221.32	PN109L
Axial	5	20V	20mA	800nm	3-10µs	PN147-ND	1.58	12.65	94.85	PN147
Side View	12	20V	20mA	800nm	4-10µs	PN150-ND	1.06	8.85	70.82	PN150
Side View	17	20V	20mA	800nm	4µs	PN150L-ND	1.06	8.85	70.82	PN150L
Side View	3	20V	10mA	800nm	4µs	PN155-ND	1.25	10.43	83.47	PN155
Side View	13	20V	20mA	800nm	4-10µs	PN158-ND	1.06	8.85	70.82	PN158
Side View	18	20V	20mA	850nm	4µs	PN163NC-ND	1.06	8.85	70.82	PN163-(NC)
Side View	19	20V	20mA	850nm	4µs	PN166-ND	1.06	8.85	70.82	PN166
Side View	12	20V	30mA	800nm	100µs	PN205-ND**	1.14	9.49	75.88	PN205
Side View	17	20V	30mA	850nm	150µs	PN205LNC-ND**	1.14	9.49	75.88	PN205L-(NC)
Axial	5	20V	30mA	800nm	200µs	PN207-ND**	1.58	12.65	94.85	PN207
Side View	13	20V	30mA	800nm	100µs	PN208-ND**	1.14	9.49	75.88	PN208
Side View	18	20V	30mA	850nm	150µs	PN263LNC-ND**	1.14	9.49	75.88	PN263L-(NC)
T-1	6	20V	30mA	850nm	150µs	PN268NC-ND**	.91	6.83	51.22	PN268-(NC)
T-1	25	30V	20mA	800nm	3µs	PN120S-ND	1.41	11.75	93.96	PN120S-RL
T-1	25	20V	10mA	800nm	1/1.3µs	PN121S-ND	1.24	10.37	82.94	PN121S-R

* VCBO (This device has signal mixing capability using the base pin.) ** Darlington

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Reflective Photosensors

Reflective Photosensors consist of a high efficiency GaAs infrared light emitting diode which is integrated with a high sensitivity phototransistor in a single resin package.

Features:

- Reflow-compatible reflective photosensor
- Ultraminiature thin type: 2.7 x 3.4 mm (height: 1.5 mm)
- Visible light cutoff resin is used
- CNB1001/ON2180 has Si phototransistor
- CNB2001 has Darlington phototransistor / High current-transfer ratio
- Reflective Sensing method; 1mm Sensing distance

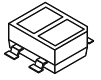
Fig. 1


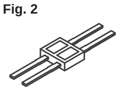
Fig. 2


Fig.	Typ. t on/ t off (µsec.)	Input V_R	Input I_F	Output I_C	Output V_{CEO}	Digi-Key Part No.	Cut Tape Price Each				Digi-Key Part No.	Tape & Reel Pricing 1,000
							1	10	100	500		
1	30/40	6V	50mA	20mA	35V	CNB1001CT-ND	.99	.83	.67	.47	CNB1001TR-ND	440.00
	120/115	6V	50mA	30mA	35V	CNB2001CT-ND	1.02	.85	.68	.48	CNB2001TR-ND	451.00
2	20/20	3V	50mA	20mA	30V	ON2180-ND	1.02	.85	.68	.48	—	—

Bipolar Integrated Circuit with Photodetection Function

FEATURES:

PNA4602M/PNA4701M Series *(For infrared remote control systems.)*
• Extension distance is 8 m or more • External parts not required • Adoption of visible light cutoff resin

PNA4611M Series *(For infrared remote control systems.)*
• High sensitivity (extension distance is 11 m or more) • External parts not required • Resin to cutoff visible light is used

PNA4603H Series *(For brightness control systems.)*
• Wavelength characteristics close to human visual sensitivity • External parts not required • Good output voltage linearity with respect to incident illuminance

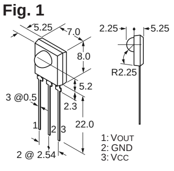
Fig. 1


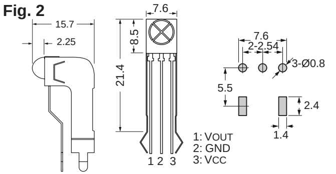
Fig. 2


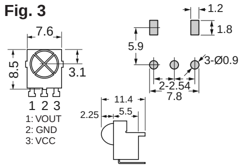
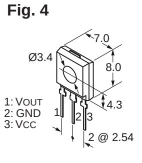
Fig. 3


Fig. 4


PNA4603H Series Main Characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Supply Voltage	V_{CC}	—	4.5	5.0	5.5	V
Current Consumption	I_{CC}	V_{CC} = 5.25V	0.5	1.0	1.5	mA
Output Voltage	V_{OFF}	L = 0 lx, V_{CC} = 5.0V	0.1	0.5	0.8	V
	V_{01}	L = 10 lx, V_{CC} = 5.0V*	2.0	2.7	3.4	V
	V_{02}	L = 800 lx, V_{CC} = 5.0V*	3.9	4.1	4.9	V
	η	V_{01}-V_{OFF}, V_{CC} = 5.0V	1.65	1.9	4.9	V
Output Impedance	Z	—	—	10	—	kΩ
Peak Sensitivity Wavelength	λp	—	—	540	—	nm

* Halogen lamp light source.

Fig.	Operating Supply Voltage Typ. (V)	Current Consumption Typ. (mA)	Max. Recep. Distance (m) min.	Max. Recep. Distance (m) Typ.	Carrier Frequency Typ. (kHz)	Digi-Key Part No.	Pricing			Panasonic Part No.
							1	10	100	
1	5.0	2.4	8	10	38.0	PNA4602M-ND	1.28	10.21	76.58	PNA4602M
	3.3	0.8	7.0	—	36.7	PNA4701M-ND	1.47	11.75	88.13	PNA4701M
2	5.0	2.4	11	16	36.7	PNA4611M00YB-ND	1.43	11.46	85.98	PNA4611M00YB
	5.0	2.4	11	16	38.0	PNA4612M00YB-ND	1.43	11.46	85.98	PNA4612M00YB
	5.0	2.4	11	16	40.0	PNA4613M00YB-ND	1.43	11.46	85.98	PNA4613M00YB
	5.0	2.4	11	16	56.9	PNA4614M00YB-ND	1.43	11.46	85.98	PNA4614M00YB
3	5.0	2.4	11	16	36.7	PNA4611M00XD-ND	1.43	11.46	85.98	PNA4611M00XD
	5.0	2.4	11	16	38.0	PNA4612M00XD-ND	1.43	11.46	85.98	PNA4612M00XD
	5.0	2.4	11	16	40.0	PNA4613M00XD-ND	1.43	11.46	85.98	PNA4613M00XD
	5.0	2.4	11	16	56.9	PNA4614M00XD-ND	1.43	11.46	85.98	PNA4614M00XD
4	See PNA4603A Main Characteristics Chart					PNA4603H-ND	3.16	25.31	196.86	PNA4603H

SenSym ICT Solid State Pressure Sensors

For use in medical equipment, pneumatic controls, computer peripherals and pressure instrumentation, process and flow control.

Fig. 1 — Sensor AMP

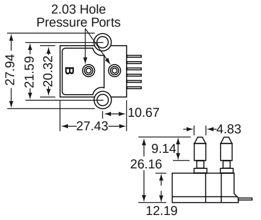


Fig. 2 — SDX A4, D4

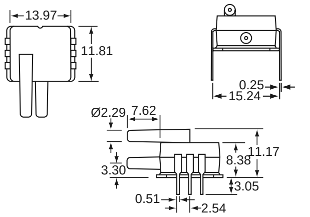


Fig. 3 — SDX A2/G2/D2

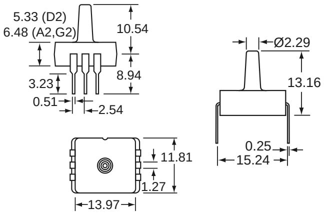
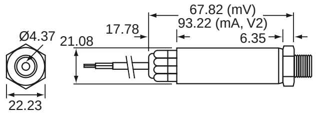


Fig. 4 — Pigtail



Note: 4-Conductor Cable. 24 AWG conductors shielded with drain wire 24" (61cm) long.

Fig. 5 — Button Sensor

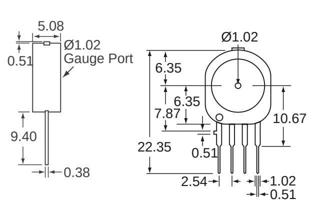
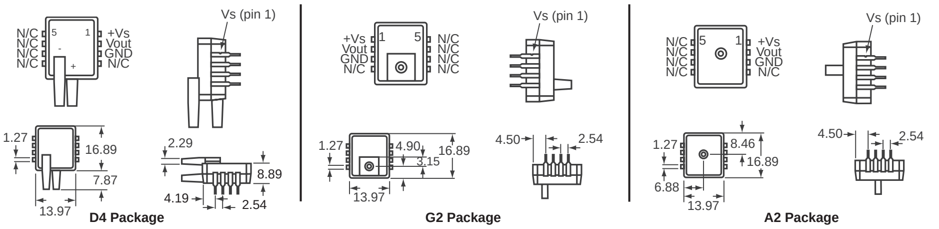


Fig. 6 — *NEW!* ASDX Pressure Sensors



D4 Package G2 Package A2 Package

Fig.	Pressure	Pressure Type	Output	Pkg.	Supply (VDC)	Response Time*	Operating Temp.	Digi-Key Part No.	Price Each 1	25	100	SenSym ICT Part No.
Signal Conditioned Pressure Sensors												
1	0-1 PSID	Differential/Gauge	0.25 to 4.5V	SIP	+4.5 to +16	100µSec	-25°C to +105°C	287-1002-ND	47.70	34.20	27.50	ASCX01DN
	0-5 PSID	Differential/Gauge						287-1003-ND	47.70	34.20	27.50	ASCX05DN
	0-15 PSIA	Absolute						287-1008-ND	47.70	34.20	27.50	ASCX15AN
	0-15 PSID	Differential/Gauge						287-1009-ND	47.70	34.20	27.50	ASCX15DN
	0-30 PSIA	Absolute						287-1010-ND	47.70	34.20	27.50	ASCX30AN
	0-30 PSID	Differential/Gauge						287-1011-ND	47.70	34.20	27.50	ASCX30DN
	0-100 PSIA	Absolute						287-1004-ND	47.70	34.20	27.50	ASCX100AN
	0-100 PSID	Differential/Gauge						287-1005-ND	47.70	34.20	27.50	ASCX100DN
	0-150 PSIA	Absolute						287-1006-ND	47.70	34.20	27.50	ASCX150AN
	0-150 PSID	Differential/Gauge						287-1007-ND	47.70	34.20	27.50	ASCX150DN
Precision Compensated Pressure Sensors												
1	0-1 PSID	Differential/Gauge	0-18mV	SIP	+20	100µSec	-40°C to +85°C	287-1017-ND	54.90	36.30	34.66	SCX01DN
	0-5 PSID	Differential/Gauge	0-60mV		+20	100µSec	-40°C to +85°C	287-1018-ND	44.70	31.70	28.36	SCX05DN
	0-15 PSIA	Absolute	0-90mV		+20	100µSec	-40°C to +85°C	287-1023-ND	44.70	31.70	28.36	SCX15AN
	0-15 PSID	Differential/Gauge	0-90mV		+20	100µSec	-40°C to +85°C	287-1024-ND	44.70	31.70	28.36	SCX15DN
	0-30 PSIA	Absolute	0-90mV		+20	100µSec	-40°C to +85°C	287-1025-ND	44.70	31.70	28.36	SCX30AN
	0-30 PSID	Differential/Gauge	0-90mV		+20	100µSec	-40°C to +85°C	287-1026-ND	44.70	31.70	28.36	SCX30DN
	0-100 PSIA	Absolute	0-100mV		+20	100µSec	-40°C to +85°C	287-1019-ND	54.90	36.30	34.66	SCX100AN
	0-100 PSID	Differential/Gauge	0-100mV		+20	100µSec	-40°C to +85°C	287-1020-ND	54.90	36.30	34.66	SCX100DN
	0-150 PSIA	Absolute	0-90mV		+20	100µSec	-40°C to +85°C	287-1021-ND	54.90	36.30	34.66	SCX150AN
	0-150 PSID	Differential/Gauge	0-90mV		+20	100µSec	-40°C to +85°C	287-1022-ND	54.90	36.30	34.66	SCX150DN
	0-4" H2O	WC	Ratio		+18	500µSec	0°C to 70°C	287-1027-ND	78.80	57.80	41.70	SCXL004DN
2	0-1 PSID	Differential/Gauge	0-18mV	DIP	+20	100µSec	-40°C to +85°C	287-1028-ND	25.00	19.43	17.02	SDX01D4
	0-5 PSID	Differentia/Gauge	0-60mV					287-1030-ND	25.00	19.43	17.02	SDX05D4
	0-15 PSIA	Absolute	0-90mV					287-1037-ND	25.00	19.43	17.02	SDX15A4
	0-15 PSID	Differential/Gauge	0-90mV					287-1038-ND	25.00	19.43	17.02	SDX15D4
	0-30 PSIA	Absolute	0-90mV					287-1041-ND	25.00	19.43	17.02	SDX30A4
	0-30 PSID	Differential/Gauge	0-90mV					287-1042-ND	25.00	19.43	17.02	SDX30D4
	0-100 PSIA	Absolute	0-100mV					287-1033-ND	25.00	19.43	17.02	SDX100A4
	0-100 PSID	Differential/Gauge	0-100mV					287-1034-ND	25.00	19.43	17.02	SDX100D4
	0-5" H2O	WC	0-25mV					287-1044-ND	42.60	32.18	30.24	SDXL005D4
	0-10" H2O	WC	0-25mV					287-1045-ND	42.60	32.18	30.24	SDXL010D4
3	0-1 PSIG	Gauge	0-18mV	DIP	+20	100µSec	-40°C to +85°C	287-1029-ND	25.00	19.43	17.02	SDX01G2
	0-5 PSIG	Gauge	0-60mV					287-1031-ND	25.00	19.43	17.02	SDX05G2
	0-15 PSIA	Absolute	0-90mV					287-1036-ND	25.00	19.43	17.02	SDX15A2
	0-15 PSIG	Gauge	0-90mV					287-1039-ND	25.00	19.42	17.02	SDX15G2
	0-30 PSIA	Absolute	0-90mV					287-1040-ND	25.00	19.43	17.02	SDX30A2
	0-30 PSIG	Gauge	0-90mV					287-1043-ND	25.00	19.43	17.02	SDX30G2
	0-100 PSIA	Absolute	0-100mV					287-1032-ND	25.00	19.43	17.02	SDX100A2
	0-100 PSIG	Gauge	0-100mV					287-1035-ND	25.00	19.43	17.02	SDX100G2
NEW! Pressure Sensors Calibrated and Temperature Compensated NEW!												
6	0-1 PSIG	Gauge	0.5 to 4.5mV	DIP	4.75 to 5.25†	8ms	-20°C to +105°C	287-1923-ND	28.00	21.00	19.30	ASDX001G24R
	0-1 PSID	Differential/Gauge						287-1918-ND	28.00	21.00	19.30	ASDX001D44R
	0-5 PSIG	Gauge						287-1924-ND	28.00	21.00	19.30	ASDX005G24R
	0-5 PSID	Differential/Gauge						287-1919-ND	28.00	21.00	19.30	ASDX005D44R
	0-15 PSIA	Absolute						287-1915-ND	28.00	21.00	19.30	ASDX015A24R
	0-15 PSIG	Gauge						287-1925-ND	28.00	21.00	19.30	ASDX015G24R
	0-15 PSID	Differential/Gauge						287-1920-ND	28.00	21.00	19.30	ASDX015D44R
	0-30 PSIA	Absolute						287-1916-ND	28.00	21.00	19.30	ASDX030A24R
	0-30 PSIG	Gauge						287-1926-ND	28.00	21.00	19.30	ASDX030G24R
	0-30 PSID	Differential/Gauge						287-1921-ND	28.00	21.00	19.30	ASDX030D44R
	0-100 PSIA	Absolute						287-1917-ND	28.00	21.00	19.30	ASDX100A24R
	0-100 PSIG	Gauge						287-1927-ND	28.00	21.00	19.30	ASDX100G24R
	0-100 PSID	Differential/Gauge						287-1922-ND	28.00	21.00	19.30	ASDX100D44R
Calibrated and Temperature Compensated Steel Sensors												
4	0-5 PSIG	Gauge	1-5VDC	Steel 1/4" (6.35mm) 18NPT (Male)	+12 to +30	100µSec	-40°C to +125°C	287-1090-ND	116.00	90.01	85.20	SPT4V0005PG5W02
	0-15 PSIG		1-5VDC		+12 to +30			287-1091-ND	116.00	90.01	85.20	SPT4V0015PG5W02
	0-30 PSIG		1-5VDC		+12 to +30			287-1092-ND	116.00	90.01	85.20	SPT4V0030PG5W02
	0-100 PSIG		1-5VDC		+12 to +30			287-1093-ND	116.00	90.01	85.20	SPT4V0100PG5W02
	0-300 PSIG		1-5VDC		+12 to +30			287-1094-ND	116.00	90.01	85.20	SPT4V0300PG5W02
	0-500 PSIG		1-5VDC		+12 to +30			287-1095-ND	116.00	90.01	85.20	SPT4V0500PG5W02
	0-5 PSIG		4-20mA		+12.5 to +30			287-1096-ND	116.00	90.01	85.20	SPTMA0005PG5W02
	0-15 PSIG		4-20mA		+12.5 to +30			287-1097-ND	116.00	90.01	85.20	SPTMA0015PG5W02
	0-30 PSIG		4-20mA		+12.5 to +30			287-1098-ND	116.00	90.01	85.20	SPTMA0030PG5W02
	0-100 PSIG		4-20mA		+12.5 to +30			287-1099-ND	116.00	90.01	85.20	SPTMA0100PG5W02

* Response time for a 0 psi to full scale span pressure step change, 10% to 90% rise time. † Sensor is not reverse polarity protected.

(Continued)

SenSym ICT Solid State Pressure Sensors *(Cont.)*

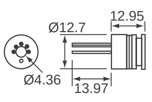
Fig.	Pressure	Pressure Type	Output	Pkg.	Supply (VDC)	Response Time*	Operating Temp.	Digi-Key Part No.	Price Each 1	25	100	SenSym ICT Part No.
4	0-300 PSIG	Gauge	4-20mA	2" (61cm) Pigtail Electrical Connection	+12.5 to +30	100µSec	-40°C to +125°C	287-1100-ND	116.00	90.01	85.20	SPTMA0300PG5W02
	0-500 PSIG		4-20mA		+12.5 to +30			287-1101-ND	116.00	90.01	85.20	SPTMA0500PG5W02
	0-5 PSIG		0-100mV		+15			287-1102-ND	99.00	81.01	76.80	SPTMV0005PG5W02
	0-15 PSIG		0-100mV		+15			287-1103-ND	99.00	81.01	76.80	SPTMV0015PG5W02
	0-30 PSIG		0-100mV		+15			287-1104-ND	99.00	81.01	76.80	SPTMV0030PG5W02
	0-100 PSIG		0-100mV		+15			287-1105-ND	99.00	81.01	76.80	SPTMV0100PG5W02
	0-300 PSIG		0-100mV		+15			287-1106-ND	99.00	81.01	76.80	SPTMV0300PG5W02
	0-500 PSIG		0-100mV		+15			287-1107-ND	99.00	81.01	76.80	SPTMV0500PG5W02
High-Impedance Bridge Sensors												
2	0-1 PSID	Differential	0-20mV	DIP	+12	100µSec	-40°C to +85°C	287-1065-ND	23.30	16.70	14.20	SX01DD4
	0-5 PSID	Differential	0-75mV					287-1068-ND	18.90	13.20	12.30	SX05DD4
	0-15 PSIA	Absolute	0-110mV					287-1080-ND	18.90	13.20	12.30	SX15AD4
	0-15 PSID	Differential	0-110mV					287-1082-ND	18.90	13.20	12.30	SX15DD4
	0-30 PSIA	Absolute	0-110mV					287-1086-ND	18.90	13.20	12.30	SX30AD4
	0-30 PSID	Differential	0-110mV					287-1088-ND	18.90	13.20	12.30	SX30DD4
	0-100 PSIA	Absolute	0-150mV					287-1072-ND	23.30	16.70	14.20	SX100AD4
	0-100 PSID	Differential	0-150mV					287-1074-ND	23.30	16.70	14.20	SX100DD4
3	0-1 PSIG	Gauge	0-20mV	DIP	+12	100µSec	-40°C to +85°C	287-1066-ND	25.50	21.00	15.20	SX01GD2
	0-5 PSIG	Gauge	0-75mV					287-1069-ND	22.10	16.20	12.30	SX05GD2
	0-15 PSIA	Absolute	0-110mV					287-1079-ND	18.90	13.20	12.30	SX15AD2
	0-15 PSIG	Gauge	0-110mV					287-1083-ND	18.90	13.20	12.30	SX15GD2
	0-30 PSIA	Absolute	0-110mV					287-1085-ND	18.90	13.20	12.30	SX30AD2
	0-30 PSIG	Gauge	0-110mV					287-1089-ND	18.90	13.20	12.30	SX30GD2
	0-100 PSIA	Absolute	0-150mV					287-1071-ND	23.30	16.70	14.20	SX100AD2
	0-100 PSIG	Gauge	0-150mV					287-1075-ND	23.30	16.70	14.20	SX100GD2
5	0-1 PSID	Differential	0-20mV	Button	+12	100µSec	-40°C to +85°C	287-1064-ND	23.30	16.70	14.20	SX01D
	0-5 PSID	Differential	0-75mV					287-1067-ND	18.90	13.20	12.30	SX05D
	0-15 PSID	Differential	0-110mV					287-1081-ND	18.90	13.20	12.30	SX15D
	0-15 PSIA	Absolute	0-110mV					287-1078-ND	18.90	13.20	12.30	SX15A
	0-30 PSID	Differential	0-110mV					287-1087-ND	18.90	13.20	12.30	SX30D
	0-30 PSIA	Absolute	0-110mV					287-1084-ND	18.90	13.20	12.30	SX30A
	0-100 PSIA	Absolute	0-150mV					287-1070-ND	23.30	16.70	14.20	SX100A
	0-100 PSID	Differential	0-150mV					287-1073-ND	23.30	16.70	14.20	SX100D
	0-150 PSIA	Absolute	0-110mV					287-1076-ND	23.30	16.70	14.20	SX150A
	0-150 PSID	Differential	0-110mV					287-1077-ND	23.30	16.70	14.20	SX150D
Handbook								287-1001-ND	5.00	—	—	DA-B-7/96-15K

* Response time for a 0 psi to full scale span pressure step change, 10% to 90% rise time.

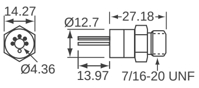
Stainless Steel Isolated Pressure Sensors and Compensated Sensors

Features:
- Response Time: 100 µSec • Operating Temperature: -40°C to +125°C

13mm Cell Package

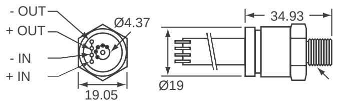


13mm Ported Male Package



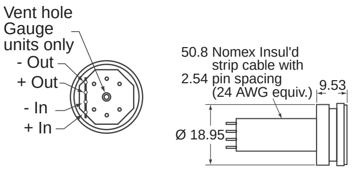
Note: Ø 0.22" ±0.001" (0.56mm ±0.03mm) Pins on Ø 0.230" (5.84mm) pin circle.

19mm Male Port Package



Note: 2" (50.8mm) NOMEX ribbon cable with 0.100" (2.54mm) pin spacing (24 AWG wire size).

Flush Mount Package



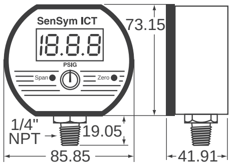
Pressure	Pressure Type	Output mV	Package	Max. Supply	Digi-Key Part No.	Price Each 1	25	100	SenSym ICT Part No.
Sensors — 13mm Steel									
0-1000 PSIA	Absolute	0-200	Male Port Cell	+12VDC	287-1123-ND	76.00	61.00	57.60	13C1000PA4K
0-5000 PSIA					287-1124-ND	76.00	61.00	57.60	13C5000PA4K
Calibrated Compensated Sensors — 19mm Steel									
0-15 PSIA	Absolute	0-100	1/8" (3.18mm) 27 NPT	+15VDC	287-1108-ND	77.00	58.50	55.20	19C015PA4K
0-15 PSIG	Gauge			+15VDC	287-1109-ND	77.00	58.50	55.20	19C015PG4K
0-15 PSIV	Vacuum			+15VDC	287-1938-ND *NEW!*	77.00	58.50	55.20	19C015PV4K
0-15 PSIV	Vacuum			+2.0mA	287-1939-ND *NEW!*	77.00	58.50	55.20	19C015PV4L
0-15 PSIV	Vacuum		1/4" (6.35mm) 18 NPT	+15VDC	287-1940-ND *NEW!*	77.00	58.50	55.20	19C015PV5K
0-15 PSIV	Vacuum			+2.0mA	287-1941-ND *NEW!*	77.00	58.50	55.20	19C015PV5L
0-30 PSIA	Absolute	0-100	1/8" (3.18mm) 27 NPT	+15VDC	287-1110-ND	77.00	58.50	55.20	19C030PA4K
0-30 PSIG	Gauge			+15VDC	287-1111-ND	77.00	58.50	55.20	19C030PG4K
0-30 PSIV	Vacuum			+15VDC	287-1944-ND *NEW!*	77.00	58.50	55.20	19C030PV4K
0-30 PSIV	Vacuum			+2.0mA	287-1945-ND *NEW!*	77.00	58.50	55.20	19C030PV4L
0-30 PSIV	Vacuum		1/4" (6.35mm) 18 NPT	+15VDC	287-1946-ND *NEW!*	77.00	58.50	55.20	19C030PV5K
0-30 PSIV	Vacuum			+2.0mA	287-1947-ND *NEW!*	77.00	58.50	55.20	19C030PV5L
0-50 PSIA	Absolute	0-100	1/8"(3.18mm) 27 NPT	+15VDC	287-1112-ND	77.00	58.50	55.20	19C050PA4K
0-50 PSIG	Gauge				287-1113-ND	77.00	58.50	55.20	19C050PG4K
0-100 PSIA	Absolute	0-100	1/8" (3.18mm) 27NPT	+15VDC	287-1114-ND	77.00	58.50	55.20	19C100PA4K
0-100 PSIG	Gauge			+15VDC	287-1115-ND	77.00	58.50	55.20	19C100PG4K
0-100 PSIV	Vacuum			+15VDC	287-1950-ND *NEW!*	77.00	58.50	55.20	19C100PV4K
0-100 PSIV	Vacuum			+2.0mA	287-1951-ND *NEW!*	77.00	58.50	55.20	19C100PV4L
0-100 PSIV	Vacuum		1/4" (6.35mm) 18 NPT	+15VDC	287-1952-ND *NEW!*	77.00	58.50	55.20	19C100PV5K
0-100 PSIV	Vacuum			+2.0mA	287-1953-ND *NEW!*	77.00	58.50	55.20	19C100PV5L
0-200 PSIA	Absolute	0-100	1/8" (3.18mm) 27 NPT	+15VDC	287-1116-ND	77.00	58.50	55.20	19C200PA4K
0-200 PSIG	Gauge				287-1117-ND	77.00	58.50	55.20	19C200PG4K
0-300 PSIA	Absolute	0-100	1/8" (3.18mm) 27 NPT	+15VDC	287-1118-ND	77.00	58.50	55.20	19C300PA4K
0-300 PSIG	Gauge				287-1119-ND	77.00	58.50	55.20	19C300PG4K
0-500 PSIA	Absolute	0-100	1/8" (3.18mm) 27 NPT	+15VDC	287-1120-ND	77.00	58.50	55.20	19C500PA4K
0-500 PSIG	Gauge				287-1121-ND	77.00	58.50	55.20	19C500PG4K
NEW! Flush Mount Sensors NEW!									
0-15 PSIV	Vacuum	0-100	N/A	+15VDC	287-1936-ND	72.00	53.50	50.40	19C015PV2K
0-15 PSIV				+2.0mA	287-1937-ND	72.00	53.50	50.40	19C015PV2L
0-30 PSIV	Vacuum	0-100	N/A	+15VDC	287-1942-ND	72.00	53.50	50.40	19C030PV2K
0-30 PSIV				+2.0mA	287-1943-ND	72.00	53.50	50.40	19C030PV2L
0-100 PSIV	Vacuum	0-100	N/A	+15VDC	287-1948-ND	72.00	53.50	50.40	19C100PV2K
0-100 PSIV				+2.0mA	287-1949-ND	72.00	53.50	50.40	19C100PV2L

* Response time for a 0 psi to full scale span pressure step change, 10% to 90% rise time.

NEW! Digital Pressure Gauges

SDPGB Series

Features:
- ±0.25% Test Gauge Accuracy • 316 Stainless Steel Sensor • Long Battery Life (Two AA Alkaline approximately 2,500 hours) • Rugged Design • Display: 3 1/2" digit LCD, 1/2" Digit Height • Auto Shutoff Time • Low Battery Indication • Media Compatibility: All wetted parts are 316 SS compatible with most liquids and gases



Pressure Range	Resolution PSIG	Operating Temperature	Pressure Port	Digi-Key Part No.	Price Each 1	SenSym ICT Part No.
-30.0 inHg/100.0 PSIG	0.1	-20 to =85°C	1/4" NPT Male, 316 Stainless Steel	287-1928-ND	249.00	SDPGB-30+100PG5
15.00 PSIG	0.01			287-1929-ND	249.00	SDPGB0015PG5
30.0 PSIG	0.1			287-1930-ND	249.00	SDPGB0030PG5
100.0 PSIG	0.1			287-1931-ND	249.00	SDPGB0100PG5
199.9 PSIG	0.1			287-1932-ND	249.00	SDPGB0200PG5
300 PSIG	1.0			287-1933-ND	249.00	SDPGB0300PG5
500 PSIG	1.0			287-1934-ND	249.00	SDPGB0500PG5
1,000 PSIG	1.0			287-1935-ND	249.00	SDPGB1000PG5

Closed Loop Current Transducers

Fig. 1

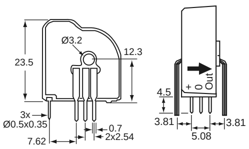


Fig. 2

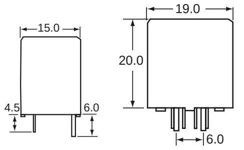


Fig. 3

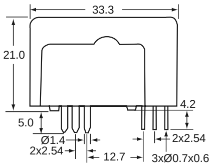


Fig. 4

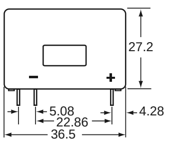
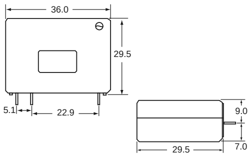


Fig. 5



LTS 6-NP, LTS 15-NP and LTS 25-NP:

Closed loop (compensated) multi-range current transducer using the Hall effect, unipolar voltage supply, compact design for PCB mounting, insulated plastic case recognized according to UL 94-VO, incorporated measuring resistance, and extended measuring range.

LA 03-PB, LA 05-PB, LA 10-PB, and LA 20-PB:

Closed loop (compensation) current transducer using the Hall effect, voltage output, and printed circuit board mounting.

LAH 25-NP, LAH 50-P, LAH 100-P, LA 55-P, and LA 100-P:

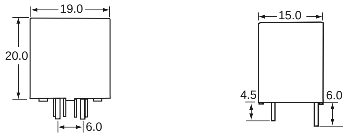
Closed loop (compensated) multi-range current transducer using the Hall effect, printed circuit board mounting, insulated plastic case recognized according to UL 94-VO.

LA 150-P:

Closed loop (compensated) current transducer using the Hall effect, and printed circuit board mounting.

Fig.	Supply Voltage	Primary Nominal r.m.s. Current	Sec. Nom. r.m.s Current/ Output Voltage	Frequency Range (kHz)	Digi-Key Part No.	Price Each 1	10	25	LEM USA Inc. Part No.
1	5V	6A	2.5±V	200	398-1000-ND	19.20	15.36	12.29	LTS 6-NP
	5V	15A	2.5±V	200	398-1001-ND	19.20	15.36	12.29	LTS 15-NP
	5V	25A	2.5±V	200	398-1002-ND	19.20	15.36	12.29	LTS 25-NP
2	±15V	3A	±4V	150	398-1003-ND	38.00	30.40	24.32	LA 03-PB
	±15V	5A	±4V	150	398-1004-ND	38.00	30.40	24.32	LA 05-PB
	±15V	10A	±4V	150	398-1005-ND	38.00	30.40	24.32	LA 10-PB
	±15V	20A	±4V	150	398-1006-ND	38.00	30.40	24.32	LA 20-PB
3	±12 to 15V	25A	25mA	200	398-1007-ND	26.80	21.44	17.16	LAH 25-NP
	±12 to 15V	50A	25mA	200	398-1008-ND	28.80	23.04	18.44	LAH 50-P
	±12 to 15V	100A	50mA	200	398-1009-ND	31.40	25.12	20.10	LAH 100-P
4	±12 to 15V	50A	50mA	200	398-1010-ND	24.60	19.68	15.75	LA 55-P
	±12 to 15V	100A	50mA	200	398-1011-ND	30.80	24.64	19.72	LA 100-P
5	±15V	150A	75mA	150	398-1012-ND	38.40	30.72	24.58	LA 150-P

Open Loop Current Transducers

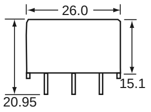


HAW 03-P, HAW 05-P, HAW 07-P, HAW 10-P, HAW 15-P, and HAW 20-P:

Hall effect measuring principle, galvanic isolation between primary and secondary circuit, isolation voltage 2000 V, low power consumption, and extended measuring range (2.5 x IPN).

Supply Voltage	Primary Nominal r.m.s. Current	Sec. Nom. r.m.s Current/ Output Voltage	Overall Accuracy	Digi-Key Part No.	Price Each 1	10	25	LEM USA Inc. Part No.
±15V	3A	±4V	<±1% of IPN	398-1013-ND	22.20	17.76	14.21	HAW 03-P
±15V	5A	±4V	<±1% of IPN	398-1014-ND	22.20	17.76	14.21	HAW 05-P
±15V	7.5A	±4V	<±1% of IPN	398-1015-ND	22.20	17.76	14.21	HAW 07-P
±15V	10A	±4V	<±1% of IPN	398-1016-ND	22.20	17.76	14.21	HAW 10-P
±15V	15A	±4V	<±1% of IPN	398-1017-ND	22.20	17.76	14.21	HAW 15-P
±15V	20A	±4V	<±1% of IPN	398-1018-ND	22.20	17.76	14.21	HAW 20-P

Closed Loop Voltage Transducers



LV 25-P and LV 20-P:

Closed loop (compensated) voltage transducer using the Hall effect, and insulated plastic case recognized according to UL 94-VO.

Supply Voltage	Primary Nominal r.m.s. Current	Sec. Nom. r.m.s Current/ Output Voltage	Overall Accuracy	Digi-Key Part No.	Price Each 1	10	25	LEM USA Inc. Part No.
±12 to 15V	10mA	25mA	±0.9%	398-1019-ND	60.00	48.00	38.40	LV 25-P
±12 to 15V	10mA	25mA	±1.1%	398-1020-ND	34.80	27.84	22.28	LV 20-P

UltraStable™ Stainless Steel Pressure Sensors Ribbon Cable with Connector

Features:

• Gage Pressure type • -20°C to +85°C Compensated temp. range • ±1.0% Interchangeable Span (provided by gain set resistor) • High performance • Small profile • Solid State reliability • Low power • +0.1% Pressure non-linearity **Specifications:** • **Output:** 0-100mV • **Supply Current:** 1.5mA typ. (guarantees output/input ratio-metricity) • **Operating Temperature:** -40°C to +125°C

Model 85 – 316L:

This micro-machined piezoresistive silicon pressure sensor is designed for applications where compatibility with corrosive media must be maintained. The sensor chip is mounted on a TO style header, which is resistance welded to a 316 stainless steel package, sealing a small volume of silicone oil between the diaphragm and the sensor chip. The ISO pressure housing utilizes the oil column to couple the piezoresistive sensor to the isolation diaphragm. A thick film ceramic compensation board with laser trimmed resistors, and an additional gain set resistor to normalize pressure sensitivity are an integral part of the sensor package.

Model 86 – 316L:

This is a small profile, media compatible, piezoresistive silicon pressure sensor packaged in a 316L stainless steel housing and is designed for O-ring mounting. The sensing package utilizes silicone oil to transfer pressure from the 316L stainless steel diaphragm to the sensing element. It is designed for high performance, low pressure applications. A ceramic substrate is attached to the package that contains laser-trimmed resistors for temperature compensation and offset correction. An additional laser-trimmed resistor is included which can be used to adjust an interchangeability to within ±1%.

Fig. 1

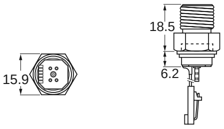


Fig. 2

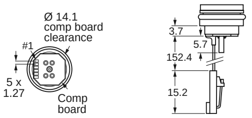


Fig.	Pressure	Output Load Res.	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
Model 85 — 1/4 - 18 NPT							
1	0-15 PSIG	5mW Min.	MSP6853-ND	126.00	96.00	70.01	85-015G-4C
	0-30 PSIG		MSP6854-ND	126.00	96.00	70.01	85-030G-4C
	0-50 PSIG		MSP6855-ND	126.00	96.00	70.01	85-050G-4C
	0-100 PSIG		MSP6856-ND	126.00	96.00	70.01	85-100G-4C
	0-300 PSIG		MSP6857-ND	126.00	96.00	70.01	85-300G-4C
	0-500 PSIG		MSP6858-ND	126.00	96.00	70.01	85-500G-4C
Model 86 — O-Ring Flush Mount							
2	0-15 PSIG	1mW Min.	MSP6859-ND	105.00	74.00	54.01	86-005G-C
	0-15 PSIG		MSP6860-ND	105.00	74.00	54.01	86-015G-C
	0-30 PSIG		MSP6861-ND	105.00	74.00	54.01	86-030G-C
	0-50 PSIG		MSP6862-ND	105.00	74.00	54.01	86-050G-C
	0-100 PSIG		MSP6863-ND	105.00	74.00	54.01	86-100G-C
	0-300 PSIG		MSP6864-ND	105.00	74.00	54.01	86-300G-C
	0-500 PSIG		MSP6865-ND	105.00	74.00	54.01	86-500G-C

MEASUREMENT SPECIALTIES

PC Board Mountable Pressure Sensors Temperature Compensated, Dip/TO-8 Package

These pressure sensors are intended for cost sensitive applications where excellent performance and long-term stability are required. Integral temperature compensation is provided using laser-trimmed resistors. An additional laser-trimmed resistor is included to normalize pressure sensitivity variations by programming the gain of an external differential amplifier. This provides sensitivity interchangeability of ±1%.

Features: • ±0.1% Non-linearity • ±1.0% Interchangeable Span (provided by gain set resistor) • Solid State Reliability • Low Power

Specifications: • **Output:** 0-100mV typ. (full scale) • **Supply Current:** 1.5mA typ. • **Response Time:** 1.0mSec typ. (For a zero-to-full scale pressure step change) • **Operating Temp.:** -40°C to +125°C

Model 1210/1220 – Low Pressure • 0-50°C Temp. Compensation • 1.0% Temp. Performance

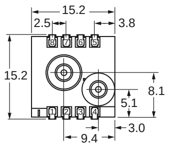
Model 1230/1240 – UltraStable™ • -20°C to +85°C Temp. Compensation • ±0.5% Temp. Performance

Model 1210/1220 – Medium Pressure • 0-50°C Temp. Compensation • 0.5-1% Temp. Performance

Models 13, 23, 33, 43 – Medium Pressure • 0-50°C Temp. Compensation • ±0.5% Temp. Performance

Models 17, 27, 37 – UltraStable™ • -20°C to +85°C Temp. Compensation Range • ±0.5% Temp. Performance

Dual-In-Line Package



TO-8 Package

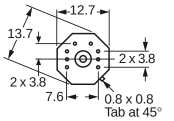
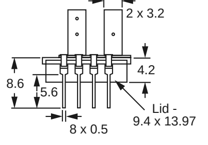


Fig. 1



Tube Length: 470 (±5mil.)

Fig. 2

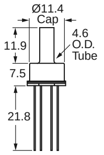


Fig. 3

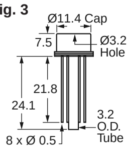


Fig. 4

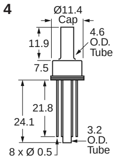


Fig. 5

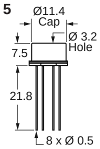
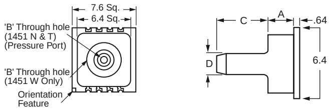


Fig.	Pressure	Pressure Type	Package	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
Model 1210 / 1220 - Low and Medium Pressure								
1	0-2-PSID	Differential	8-Pin Dip	MSP6814-ND	39.00	28.00	18.00	1210A-002D-3L
	0-5 PSID	Differential	8-Pin Dip	MSP6816-ND	39.00	28.00	18.00	1220A-005D-3L
Model 1230 / 1240 - Ultrastable™								
1	0-15 PSID	Differential	8-Pin Dip	MSP6819-ND	33.00	28.00	18.00	1240-015D-3L
	0-30 PSID	Differential	8-Pin Dip	MSP6822-ND	33.00	28.00	18.00	1230-030D-3L
	0-100 PSID	Differential	8-Pin Dip	MSP6828-ND	33.00	28.00	18.00	1230-100D-3L
	0-100 PSID	Differential	8-Pin Dip	MSP6829-ND	33.00	28.00	18.00	1240-100D-3L
Model 13 - Low and Medium Pressure								
2	0-1 PSIG	Gage	TO-8	MSP6830-ND	72.00	53.00	38.00	13A-001G
	0-5 PSIG	Gage	TO-8	MSP6833-ND	72.00	53.00	38.00	13A-005G
Model 17 - Ultrastable™								
2	0-15 PSIG	Gage	TO-8	MSP6834-ND	60.00	53.00	38.00	17-015G
	0-30 PSIG	Gage	TO-8	MSP6835-ND	60.00	53.00	38.00	17-030G
	0-50 PSIG	Gage	TO-8	MSP6836-ND	60.00	53.00	38.00	17-050G
	0-100 PSIG	Gage	TO-8	MSP6837-ND	60.00	53.00	38.00	17-100G
Model 23 - Low and Medium Pressure								
3	0-1 PSIG	Gage	TO-8	MSP6831-ND	90.00	61.00	50.00	23A-001G
	0-5 PSIG	Gage	TO-8	MSP6838-ND	90.00	61.00	50.00	23A-005G
Model 27 - Ultrastable™								
3	0-15 PSIG	Gage	TO-8	MSP6839-ND	69.00	61.00	50.00	27-015G
	0-30 PSIG	Gage	TO-8	MSP6840-ND	69.00	61.00	50.00	27-030G
	0-50 PSIG	Gage	TO-8	MSP6841-ND	69.00	61.00	50.00	27-050G
	0-100 PSIG	Gage	TO-8	MSP6842-ND	69.00	61.00	50.00	27-100G
Model 33 - Low and Medium Pressure								
4	0-1 PSID	Differential	TO-8	MSP6832-ND	90.00	61.00	50.00	33A-001D
	0-5 PSID	Differential	TO-8	MSP6843-ND	90.00	61.00	50.00	33A-005D
Model 37 - Ultrastable™								
4	0-15 PSID	Differential	TO-8	MSP6844-ND	69.00	61.00	50.00	37-015D
	0-30 PSID	Differential	TO-8	MSP6845-ND	69.00	61.00	50.00	37-030D
	0-50 PSID	Differential	TO-8	MSP6846-ND	69.00	61.00	50.00	37-050D
	0-100 PSID	Differential	TO-8	MSP6847-ND	69.00	61.00	50.00	37-100D
Model 43 - Low and Medium Pressure								
5	0-15 PSIA	Absolute	TO-8	MSP6848-ND	60.00	53.00	38.00	43-015A
	0-30 PSIA	Absolute	TO-8	MSP6849-ND	60.00	53.00	38.00	43-030A
	0-50 PSIA	Absolute	TO-8	MSP6850-ND	60.00	53.00	38.00	43-050A
	0-100 PSIA	Absolute	TO-8	MSP6851-ND	60.00	53.00	38.00	43-100A

PC Board Mountable Pressure Sensors

Model 1451 This pressure sensor is intended for high volume applications where small size, light weight, low cost, and compatibility with automated assembly equipment are required. **Features:** • Surface Mount Package • ±0.25% Pressure Non-linearity • 3 Pressure Port Options • Solid State Reliability • Low Power **Specifications:** • **Output:** 0-60mV • **Supply Voltage:** 3VDC • **Response Time:** 1.0mSec typ. • **Operating Temperature:** -40°C to +125°C



Package	Dimensions (mm) A	B	C	D
Narrow Hole	2.79	0.78	—	—
Wide Hole	2.79	4.06	—	—
Tube	2.79	0.78	5.59	2.29

Pressure	Pressure Type	Package	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
0-5 PSIG	Gage	Tube	MSP6800-ND	20.00	19.00	11.00	1451-005G-T
0-5 PSIA	Absolute	Wide	MSP6801-ND	20.00	19.00	11.00	1451-005A-W
0-15 PSIA	Absolute	Narrow	MSP6802-ND	20.00	19.00	11.00	1451-015A-N
0-15 PSIG	Gage	Tube	MSP6803-ND	20.00	19.00	11.00	1451-015G-T
0-15 PSIA	Absolute	Wide	MSP6804-ND	20.00	19.00	11.00	1451-015A-W
0-30 PSIA	Absolute	Narrow	MSP6805-ND	20.00	19.00	11.00	1451-030A-N
0-30 PSIG	Gage	Tube	MSP6806-ND	20.00	19.00	11.00	1451-030G-T
0-30 PSIA	Absolute	Wide	MSP6807-ND	20.00	19.00	11.00	1451-030A-W
0-50 PSIA	Absolute	Narrow	MSP6808-ND	20.00	19.00	11.00	1451-050A-N
0-50 PSIG	Gage	Tube	MSP6809-ND	20.00	19.00	11.00	1451-050G-T
0-50 PSIA	Absolute	Wide	MSP6810-ND	20.00	19.00	11.00	1451-050A-W
0-100 PSIA	Absolute	Narrow	MSP6811-ND	20.00	19.00	11.00	1451-100A-N
0-100 PSIG	Gage	Tube	MSP6812-ND	20.00	19.00	11.00	1451-100G-T
0-100 PSIA	Absolute	Wide	MSP6813-ND	20.00	19.00	11.00	1451-100A-W

Accelerometers – PC Board Mountable

Description:
These piezoresistive silicon accelerometers consist of a micro machined silicon mass suspended by multiple beams from a silicon frame. Piezoresistors located in the beams change their resistance as the motion of the suspended mass changes the strain in the beams. Silicon caps on the top and bottom of the devices are added to provide over-range stops. This design provides for a very low profile, high shock resistance, durability and built-in damping over a wide usable bandwith.

Features:
• ±0.5% Non-linearity, (typ.), ±2% max. (Best fit straight line; for full scale range of 10g or less) • DC Response • Built-in damping • Built-in overrange stops • Low power

Model 3031 - Surface Mount A piezoresistive silicon accelerometer intended for high volume applications where small size, light weight, and low cost are required. **Specifications:** • ±1.0% Temp. Performance (with comp resistors, typical) • Supply: 5.0 VDC (typ.) • Operating Temp.: -40°C to +125°C

Model 3022 - Adhesive Mount A piezoresistive silicon accelerometer packaged on a ceramic substrate with an epoxy sealed ceramic cover and is designed for adhesive mounting. **Specifications:** • ±1.0% Temp. Performance (with comp resistors, typical) • Supply (typ.): 5.0 VDC • Operating Temp.: -40°C to +125°C

Model 3052 - Adhesive Mount A piezoresistive silicon accelerometer with integral temp. compensation packaged on a ceramic substrate with an epoxy sealed ceramic cover and is designed for adhesive mounting. **Specifications:** • ±1.0% Temp. Performance (typ.) • Supply (typ.): 5.0 VDC • Operating Temp.: -40°C to +125°C

Model 3140 - Bolt Mount A high performance accelerometer intended for instrumentation applications provides a fully signal conditioned output with performance similar to traditional instrumentation accelerometers but at a much lower cost. The accelerometer consists of a silicon micro machined accelerometer with signal conditioning electronics in a lightweight Valox™ housing that can be easily attached to a mounting surface. The sensing element is a micro machined silicon mass suspended by multiple beams from a silicon frame. **Specifications:** • ±2.0% Temp. Performance • Supply (typ.) 12 VDC @ 5mA • Operating Temp.: -20°C to +85°C

Fig. 1 — Model 3031

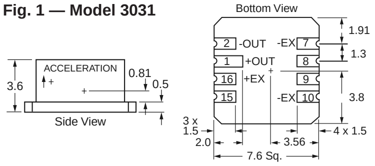


Fig. 2 — Models 3022 and 3052

Dim. (mm)	A	B
2g to 10g	7.62	6.35
20g to 500g	6.73	6.10

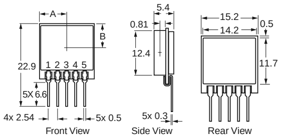
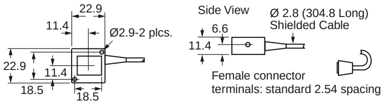


Fig. 3 — Model 3140



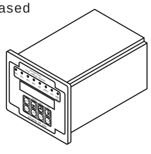
Dimensions in mm

Fig.	Acceleration Range	Sensitivity (Min./Max.)	Acceleration Output Max.	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
1	±0-50 G	0.6/1.5 mV/g	±25.0mV	MSP6869-ND	77.00	74.00	42.00	3031-050
2	±2 G	8.0.20.0 mV/g	±25.0mV	MSP6871-ND	150.00	108.00	80.00	3022-002-P
	±5 G	6.0/15.0 mV/g	±25.0mV	MSP6872-ND	150.00	108.00	80.00	3022-005-P
	±10 G	3.0/6.0 mV/g	±25.0mV	MSP6873-ND	150.00	108.00	80.00	3022-010-P
	±50 G	0.6/1.5 mV/g	±25.0mV	MSP6875-ND	123.00	95.00	65.01	3022-050-P
	±100 G	0.3/0.6 mV/g	±25.0mV	MSP6876-ND	123.00	95.00	65.01	3022-100-P
2	±2 G	6.0/9.0 mV/g*	±2mV	MSP6877-ND	195.00	136.00	102.00	3052-002-P
	±5 G	2.4/3.6 mV/g*	±2mV	MSP6878-ND	195.00	136.00	102.00	3052-005-P
	±10 G	1.2/1.8 mV/g*	±2mV	MSP6879-ND	195.00	136.00	102.00	3052-010-P
	±50 G	0.24.0.36 mV/g*	±2mV	MSP6881-ND	144.00	124.00	90.00	3052-050-P
	±100 G	0.12/0.18 mV/g*	±2mV	MSP6882-ND	144.00	124.00	90.00	3052-100-P
3	±2 G	1 V/g	2.54V	MSP6883-ND	495.00	345.00	280.01	3140-002
	±5 G	400mV/g	2.54V	MSP6884-ND	495.00	345.00	280.01	3140-005
	±10 G	200mV/g	2.54V	MSP6885-ND	495.00	345.00	280.01	3140-010
	±50 G	40mV/g	2.54V	MSP6887-ND	495.00	345.00	280.01	3140-050
	±100 G	20mV/g	2.54V	MSP6888-ND	495.00	345.00	280.01	3140-100

* Positive voltage change for positive acceleration: negative voltage change for negative acceleration.

SCHAEVITZ SENSORS

Sensors MP1000 Readout/Controller



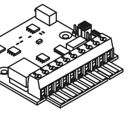
The Schaevitz microprocessor-based LVDT indicator and set-point controller is designed for industrial and process control applications utilizing any LVDT/RVDT based measurement device. A 16-bit analog to digital converter provides high speed performance and resolution. An RS-232 output will communicate data to any standard PLC or computer serial port. 1/4 DIN case.

Application: RS-232 data collection for SPC

Features: • Simultaneous dual channel display • Opto-isolated set-point outputs • Digitally scaled analog output • Digitally controlled analog zero suppression • CE approval pending (mid 1998) • Programmable digital filtering

Description	Operating Temp.	Power Requirements	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
Single Channel LVDT	0° to 55°C	100 - 250 VAC, 50-60Hz	356-1000-ND	899.00	845.00	802.00	02291328-000

DC Powered Voltage Module

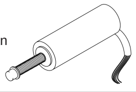


The LVM-110 Module is a DC-powered LVDT signal conditioner board consisting of a carrier oscillator, AC amplifier, demodulator, filter, and DC amplifier.

Features: • DC powered • Zero and span controls • Six jumper selectable gains • Plug-in, card edge, or stand-off installation • 2.5 kHz, 5 kHz or 10 kHz excitation

Description	Operating Range	Power Range	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
LVDT Signal Conditioner Board	3.5 ± 10% Vrms	2.5kHz, 5kHz, 10kHz	356-1001-ND	177.00	165.00	155.00	04171776-000

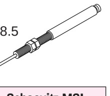
PCA-116 Series Economy Gage Heads



PCA-116 gage heads incroporate a standardized LVDT with repeatability better than 0.0001" (0.0025 mm) and linearity within 0.5% of full range output. The probe shaft is externally sprung and is carried on low friction nylon sleeve bearings.

PCA-116 Series Model No.	Linear Range Inches (mm)	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
PCA-116-100	±0.10 (2.54)	356-1002-ND	105.00	95.00	88.80	02350531-000
PCA-116-200	±0.20 (5.08)	356-1003-ND	124.00	111.00	104.40	02350532-000
PCA-116-300	±0.30 (7.62)	356-1004-ND	146.00	131.00	122.40	02350533-000

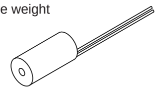
GCD-SE Series Gage Heads - Precision Spring-Loaded



Features:
• CE compliance • Heavy-duty, all welded construction • Unipolar ranges: 0.1" to 2.0" • 8.5 to 28 VDC operation • Low power consumption • May be battery operated • 0 to 5 and 1 to 6 VDC outputs • New heavy duty front end • Hermetically sealed design

GCD-SE Series Model No.	Linear Range Inches (mm)	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
GCD-SE-100	0.10 (2.54)	356-1005-ND	480.00	429.01	403.20	02351006-000
GCD-SE-250	0.25 (6.35)	356-1006-ND	544.00	486.00	457.20	02351007-000
GCD-SE-500	0.50 (12.7)	356-1007-ND	617.00	552.00	518.40	02351008-000
GCD-SE-1000	1.0 (25.4)	356-1008-ND	704.00	630.00	591.60	02351009-000
GCD-SE-2000	2.0 (50.8)	356-1009-ND	800.00	716.00	672.00	02351010-000

LVDT MHR Series

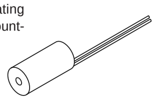


The MHR series of miniature LVDT's is ideal for applications where excessive core weight could influence the motion of sensitive mechanisms.

Features: • For applications where installation space or weight is limited • Lightweight core • Calibration certificate supplied with all models • Compatible with all Schaevitz™ signal conditioners • High temperature (220°C) and high pressure (vented case) available - consult factory

MHR Series Model No.	Nominal Linear Range Inches (mm)	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
025 MHR	±0.025 (±0.64)	356-1010-ND	106.00	96.00	89.00	02560407-000
050 MHR	±0.50 (±1.27)	356-1011-ND	115.00	104.00	97.20	02560408-000
100 MHR	±0.100 (±2.54)	356-1012-ND	135.00	122.00	114.00	02560409-000
250 MHR	±0.250 (±6.35)	356-1013-ND	174.00	157.00	146.40	02560410-000
500 MHR	±0.500 (±12.70)	356-1014-ND	231.00	208.00	194.40	02560411-000
1000 MHR	±1.000 (±25.40)	356-1015-ND	272.00	245.00	228.00	02560412-000

E Series LVDT

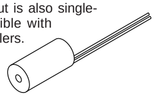


The low cost AC operated E series is particularly suitable for moderate operating temperatures. Its rugged construction will resist the shocks and vibrations encountered in most industrial applications.

Features: • Customary LVDT performance at minimal cost • Magnetically shielded case • Compatible with all Schaevitz™ signal conditioners

E Series Model No.	Nominal Linear Range Inches (mm)	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
E100	±0.100 (±2.54)	356-1016-ND	42.00	38.00	35.00	02560541-000
E200	±0.200 (±5.08)	356-1017-ND	50.00	46.00	42.00	02560542-000
E300	±0.300 (±7.62)	356-1018-ND	67.00	62.00	57.00	02560543-000
E500	±0.500 (±12.70)	356-1019-ND	105.00	97.00	88.80	02560544-000
E1000	±1.00 (±25.4)	356-1020-ND	147.00	135.00	124.00	02560545-000
E2000	±2.00 (±50.8)	356-1021-ND	207.00	190.00	174.00	02560546-000

DC-SE Series LVDT

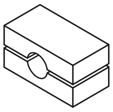


The new Schaevitz™ General Purpose DC operated DC-SE series has been designed to meet today's requirements for operation from a single-ended power supply. The output is also single-ended over the full range displacement of the LVDT making the unit compatible with unipolar inputs on the analog-to-digital converters and programmable logic controllers.

Features: • CE certified • Operates from single-ended, unregulated 8.5 - 28 VDC supply • 0 - 5 VDC or 1 - 6 VDC output voltage, depending on customer hook up • Low power consumption • 200 Hz frequency response • 1 meter shielded cable

DC-SE Series Model No.	Nominal Linear Range Inches (mm)	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
250DC-SE	0.250 (6.35)	356-1022-ND	300.00	267.00	252.00	02560991-000
500DC-SE	0.500 (12.7)	356-1023-ND	348.00	313.00	292.80	02560992-000
1000DC-SE	1.000 (25.4)	356-1024-ND	402.00	362.01	337.20	02560993-000
2000DC-SE	2.000 (50.8)	356-1025-ND	449.00	403.00	376.80	02560994-000
4000DC-SE	4.00 (101.6)	356-1026-ND	512.00	461.00	429.60	02560995-000

Accessories Mounting Blocks

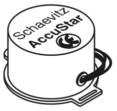


Model No.	Digi-Key Part No.	Price Each 1	5	10	Schaevitz MSI Part No.
MB-OD-0.375	356-1027-ND	24.00	22.00	20.40	04560954-000
MB-OD-0.750	356-1028-ND	24.00	22.00	20.40	04560950-000

Core Extension Rods

Description	Digi-Key Part No.	Price Each 1	10	Schaevitz MSI Part No.
1-72unf X 6" Non-Magnetic Stainless Steel	356-1029-ND	12.00	10.00	05282945-006
4-40oz X 6" Non-Magnetic Stainless Steel	356-1030-ND	12.00	10.00	05282946-006
4-40oz X 12" Non-Magnetic Stainless Steel	356-1031-ND	24.00	20.00	05282946-012

AccuStar® Electronic Clinometers

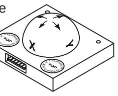


The AccuStar® Electronic Clinometer is and extremely accurate angle measurement device. This compact and rugged sensor is ideal where space is critical and environmental conditions are serious design concerns.

Features: • CE certified • Just 2" in diameter • Rugged plastic housing • Extremely accurate • Weighs only 2 oz.

Description	Linear Range	Operating Temp. Range	Digi-Key Part No.	Price Each 1	10	25	Schaevitz MSI Part No.
Single Axis Ratiometric Vertical Flange	±45°	-30° to 65°C	356-1032-ND	139.00	128.00	117.01	02110002-000
Single Axis Ratiometric Horizontal Flange	±45°	-30° to 65°C	356-1033-ND	139.00	128.00	117.01	02110102-000

AccuStar® II Clinometers

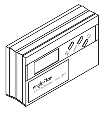


AccuStar® II combines the function of two clinometers in one package. The unique dome shaped design features a capacitance based sensor which produces output signals directly proportional to the relative tilt in two axis.

Features:
• Two clinometers in one package • Adaptable design DC powered • Ratiometric and PW digital output in one model • Trimmable DC output

Description	Linear Range	Operating Temp. Range	Digi-Key Part No.	Price Each 1	10	25	Schaevitz MSI Part No.
Dual Axis Clinometer	±20°	-20° to 75°C	356-1034-ND	100.00	95.00	90.00	02119011-000

AngleStar® Digital Protractor

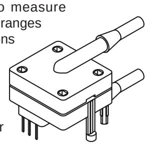


The AngleStar® Digital Protractor Model DP-45 provides instant digital display of level, angle and tilt.

Features: • Reads in degrees • Alternate reference (floating zero) • Display hold • High impact plastic carrying case

Description	Linear Range	Operating Temp. Range	Digi-Key Part No.	Price Each 1	5	20	Schaevitz MSI Part No.
Digital Protractor Model DP-45	±45°	0° to 65°C	356-1035-ND	309.00	291.00	263.00	02475-01

Ares Series Pressure Transducers



The Ares Series is a small, low cost pressure transducer, which is able to measure pressures as low as 0 to 5, 0 to 10, 0 to 15 inches of water, and 0 to 1 psig. The ranges combined with the small physical size make the device ideally suited for applications such as HVAC, medical equipment and flow monitoring. The ASIC is a mixed signal CMOS sensor interface that uses differential switched capacitor architecture, and was specifically designed to compensate for the errors associated with piezoresistive silicon sensors.

Features: • Very low pressure ranges • Small size • PCB mountable • Solder reflow capability • Barbed pressure ports

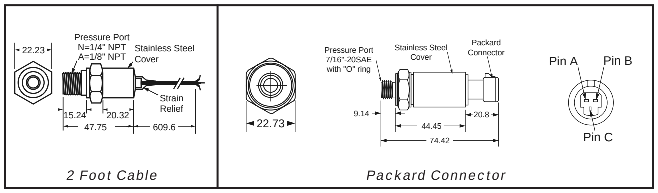
Description	Standard Pressure Range	Accuracy % FSO	Digi-Key Part No.	Price Each 1	10	25	Schaevitz MSI Part No.
PCB Mount 0.5-4.5V	5" H_2O	0.25	356-1036-ND	40.00	32.25	27.30	GA100-005WD
PCB Mount 0.5-4.5V	10" H2O	0.50	356-1037-ND	40.00	32.25	27.30	GA100-010WD
PCB Mount 0.5-4.5V	15" H_2O	0.50	356-1038-ND	40.00	32.25	27.30	GA100-015WD
PCB Mount 0.5-4.5V	1 PSI	0.75	356-1039-ND	40.00	32.25	27.30	GA100-001PD
PCB Mount 0.250-4.5V	5" H_2O	0.25	356-1040-ND	40.00	32.25	27.30	GA200-005WD
PCB Mount 0.250-4.5V	10" H_2O	0.50	356-1041-ND	40.00	32.25	27.30	GA200-010WD
PCB Mount 0.250-4.5V	15" H_2O	0.50	356-1042-ND	40.00	32.25	27.30	GA200-015WD
PCB Mount 0.250-4.5V	1 PSI	0.75	356-1043-ND	40.00	32.25	27.30	GA200-001PD

MEASUREMENT
SPECIALTIES

Rugged Stainless Steel Pressure Transducers Featuring Microfused Technology

The MSP pressure transducer is designed for high-volume, low-cost commercial, industrial and off road applications which require accurate measurement of gases or liquids. Operating ranges up to 10,000 psi is available with your choice of output signal in volts, millivolts, or milliamps. The MSP uses a micro machined silicon strain gauge inorganically bonded to a machined stainless steel diaphragm; no welds, no 0-rings, no silicone oil. All wetted surfaces are stainless steel and all signal conditioning electronics are housed in a stainless steel cover which provides protection from hostile environments. The housing is sealed and requires no maintenance. Each transducer is thoroughly tested and calibrated before shipment.

Applications: Pumps and Compressors • Hydraulic / Pneumatic Systems • Energy and Water Management • Pressure Instrumentation • Process Control, Off Road Refrigeration, HVAC.



2 Foot Cable

Packard Connector

	MSP-300	MSP-310	MSP-320	MSP-400	MSP-600
Pressure Range (PSIG)	0-100 to 10,000	0-100 to 10,000	0-25 to 75	0-100 to 10,000	0-25 to 10,000
Temperature Output	None	10mV/K	None	None	None
Accuracy (combined linearity, hysteresis & repeatability)	±1% of FS	±1% of FS	±1% of FS	±0.5% of FS	±0.25% BSL
Pressure Overload	2X	2X	2X	2X	2X
Burst Pressure	5x or 20,000 PSI whichever is less		10x or 500 PSI whichever is less	5x or 20,000 PSI whichever is less	
Outputs VDC or mA	0-100mV, 1-5V 4-20mA	0-100mV —	1-5V 4-20mA	0.5-4.5V, 1-5V, 4-20mA	0.5-4.5V 1-5V, 4-20mA
Zero Offset (millivolt output) (amplified output)	±3% of FS ±2% of FS	±3% of FS —	— ±2% of FS	— ±2% of FS	— —
Span Tolerance	±2% of FS	±2% of FS	±2% of FS	±2% of FS	—
Long-Term Stability, Typical (1 year)	±.25%	±.25%	±.5%	±.25%	±0.25%
Operating Temperature (°F) (°C)	(-4 to 185) (-20 to 85)	(-4 to 185) (-20 to 85)	(-4 to 185) (-20 to 85)	(-40 to 185) (-40 to 85)	(-40 to 257) (-40 to 125)
Compensated Range (°F) (°C)	30 to 130 0 to 55	30 to 130 0 to 55	30 to 130 0 to 55	30 to 158 0 to 70	(-4 to 185) (-20 to 85)
Thermo Zero Shift	<±2% of FS	<±2% of FS	<±2% of FS	<±1.5% of FS	—
Thermo Span Shift	<±2% of FS	<±2% of FS	<±2% of FS	<±1.5% of FS	—
Total Error Band	N/A	N/A	N/A	N/A	1.5% of FS
EMI/RFI Protection, CE Mark	No	No	No	Yes	Yes
UL Listed	Yes	No	Yes	Yes	Yes

MSP Series	Op. Pressure Range PSIG	Supply	Digi-Key Part No.	Price Each 1	Price Each 10	MSI Part No.
0-100mV Output — 4 Wire Unamplified 1/4” NPT, 2 ft. Cable						
300	100	5 VDC	MSP3101P1-ND	70.00	59.50	2000130
	250		MSP3251P1-ND	70.00	59.50	2000199
	500		MSP3501P1-ND	70.00	59.50	2000255
	1000		MSP3102P1-ND	70.00	59.50	2000045
	2500		MSP3252P1-ND	70.00	59.50	2000222
	5000		MSP3502P1-ND	70.00	59.50	2000096
	10000		MSP3103P1-ND	70.00	59.50	2000157
0.5-4.5 V Output — Ratiometric output voltage to input voltage 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
300	100	5 VDC	MSP3101P2-ND	90.00	72.00	2000131
	250		MSP3251P2-ND	90.00	72.00	2000202
	500		MSP3501P2-ND	90.00	72.00	2000260
	1000		MSP3102P2-ND	90.00	72.00	2000046
	2500		MSP3252P2-ND	90.00	72.00	2000223
	5000		MSP3502P2-ND	90.00	72.00	2000099
	10000		MSP3103P2-ND	90.00	72.00	2000158
1-5 V Output — Fixed - 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P3-ND	95.00	76.00	2000133
	250		MSP3251P3-ND	95.00	76.00	2000204
	500		MSP3501P3-ND	95.00	76.00	2000262
	1000		MSP3102P3-ND	95.00	76.00	2000048
	2500		MSP3252P3-ND	95.00	76.00	2000226
	5000		MSP3502P3-ND	95.00	76.00	2000100
	10000		MSP3103P3-ND	95.00	76.00	2000159
1-5V Output 1/8” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P4A1-ND	95.00	76.00	2000132
	250		MSP3251P4A1-ND	95.00	76.00	2000203
	500		MSP3501P4A1-ND	95.00	76.00	2000261
	1000		MSP3102P4A1-ND	95.00	76.00	2000047
4-20mA Output — 2 Wire regulated supply 1/4” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P4-ND	100.00	80.00	2000137
	250		MSP3251P4-ND	100.00	80.00	2000207
	500		MSP3501P4-ND	100.00	80.00	2000264
	1000		MSP3102P4-ND	100.00	80.00	2000050
	2500		MSP3252P4-ND	100.00	80.00	2000227
	5000		MSP3502P4-ND	100.00	80.00	2000101
	10000		MSP3103P4-ND	100.00	80.00	2000160
4-20mA Output 1/8” NPT, 2 ft. Cable						
300	100	10-32 VDC	MSP3101P5A1-ND	100.00	80.00	2000136
	250		MSP3251P5A1-ND	100.00	80.00	2000206
	500		MSP3501P5A1-ND	100.00	80.00	2000263
	1000		MSP3102P5A1-ND	100.00	80.00	2000049
0-100mV with Temperature Output — 5 Wire 1/4” NPT, 2 ft. Cable						
310	100	5 VDC	MSP1101P1-ND	100.00	81.50	2000290
	250		MSP1251P1-ND	100.00	81.50	2000295
	500		MSP1501P1-ND	100.00	81.50	2000299
	1000		MSP1102P1-ND	100.00	81.50	2000286
	2500		MSP1252P1-ND	100.00	81.50	2000296
	5000		MSP1502P1-ND	100.00	81.50	2000658
	10000		MSP1103P1-ND	100.00	81.50	2000291
1-5 V Output — Fixed — 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
320	25	10-30 VDC	MSP2025P3-ND	110.00	88.00	2000314
	50		MSP2050P3-ND	110.00	88.00	2000329
	75		MSP2075P3-ND	110.00	88.00	2000335
4-20mA Output — 2 Wire regulated supply 1/4” NPT, 2 ft. Cable						
320	25	10-30 VDC	MSP2025P4-ND	115.00	98.00	2000316
	50		MSP2050P4-ND	115.00	98.00	2000330
	75		MSP2075P4-ND	115.00	98.00	2000336
0.5-4.5 V Output — Ratiometric output voltage to input voltage 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
400	100	5 VDC	MSP4101P2-ND	100.50	86.00	2000473
	250		MSP4251P2-ND	100.50	86.00	2000519
	500		MSP4501P2-ND	100.50	86.00	2000550
	1000		MSP4102P2-ND	100.50	86.00	2000415
	2500		MSP4252P2-ND	100.50	86.00	2000527
	5000		MSP4502P2-ND	100.50	86.00	2000454
	10000		MSP4103P2-ND	100.50	86.00	2000497
1-5 V Output — Fixed – 3 Wire supply current 10mA max. 1/4” NPT, 2 ft. Cable						
400	100	10-32 VDC	MSP4101P3-ND	106.00	99.50	2000484
	250		MSP4251P3-ND	106.00	99.50	2000521
	500		MSP4501P3-ND	106.00	99.50	2000553
	1000		MSP4102P3-ND	106.00	99.50	2000416
	2500		MSP4252P3-ND	106.00	99.50	2000528
	5000		MSP4502P3-ND	106.00	99.50	2000455
	10000		MSP4103P3-ND	106.00	99.50	2000498
4-20mA Output — 2 Wire regulated supply 1/4” NPT, 2 ft. Cable						
400	100	10-32 VDC	MSP4101P4-ND	152.00	121.25	2000486
	250		MSP4251P4-ND	152.00	121.25	2000522
	500		MSP4501P4-ND	152.00	121.25	2000554
	1000		MSP4102P4-ND	152.00	121.25	2000417
	2500		MSP4252P4-ND	152.00	121.25	2000531
	5000		MSP4502P4-ND	152.00	121.25	2000457
	10000		MSP4103P4-ND	152.00	121.25	2000499
0.5-4.5VDC Output — 1/4” NPT, 2 ft. Cable						
600	25	5 VDC	MSP6025P3-1-ND	110.50	96.00	2000871
	50		MSP6050P3-1-ND	110.50	96.00	2000877
	75		MSP6075P3-1-ND	110.50	96.00	2000883
	100		MSP6101P3-1-ND	110.50	96.00	2000889
	250		MSP6251P3-1-ND	110.50	96.00	2000895
	500		MSP6501P3-1-ND	110.50	96.00	2000901
	1000		MSP6102P3-1-ND	110.50	96.00	2000907
	2500		MSP6252P3-1-ND	110.50	96.00	2000913
	5000		MSP6502P3-1-ND	110.50	96.00	2000919
	7500		MSP6752P3-1-ND	110.50	96.00	2000925
	10000		MSP6103P3-1-ND	110.50	96.00	2000931
0.5-4.5VDC Output — 7/16” SAE, Packard Connector						
600	25	5 VDC	MSP6025P3-4-ND	110.50	96.00	2000964
	50		MSP6050P3-4-ND	110.50	96.00	2000965
	75		MSP6075P3-4-ND	110.50	96.00	2000966
	100		MSP6101P3-4-ND	110.50	96.00	2000967
	250		MSP6251P3-4-ND	110.50	96.00	2000968
	500		MSP6501P3-4-ND	110.50	96.00	2000969
	1000		MSP6102P3-4-ND	110.50	96.00	2000970
	2500		MSP6252P3-4-ND	110.50	96.00	2000971
	5000		MSP6502P3-4-ND	110.50	96.00	2000972
	7500		MSP6752P3-4-ND	110.50	96.00	2001116
	10000		MSP6103P3-4-ND	110.50	96.00	2000973
1-5VDC Output — 1/4” NPT, 2 ft. Cable						
600	25	10-30 VDC	MSP6025P4-1-ND	116.00	109.50	2000872
	50		MSP6050P4-1-ND	116.00	109.50	2000878
	75		MSP6075P4-1-ND	116.00	109.50	2000884
	100		MSP6101P4-1-ND	116.00	109.50	2000890
	250		MSP6251P4-1-ND	116.00	109.50	2000896
	500		MSP6501P4-1-ND	116.00	109.50	2000902
	1000		MSP6102P4-1-ND	116.00	109.50	2000908
	2500		MSP6252P4-1-ND	116.00	109.50	2000914
	5000		MSP6502P4-1-ND	116.00	109.50	2000920
	7500		MSP6752P4-1-ND	116.00	109.50	2000926
	10000		MSP6103P4-1-ND	116.00	109.50	2000932
4-20mA Output— 1/4” NPT, 2 ft. Cable						
600	25	10-30 VDC	MSP6025P5-1-ND	162.00	131.25	2000873
	50		MSP6050P5-1-ND	162.00	131.25	2000879
	75		MSP6075P5-1-ND	162.00	131.25	2000885
	100		MSP6101P5-1-ND	162.00	131.25	2000891
	250		MSP6251P5-1-ND	162.00	131.25	2000897
	500		MSP6501P5-1-ND	162.00	131.25	2000903
	1000		MSP6102P5-1-ND	162.00	131.25	2000909
	2500		MSP6252P5-1-ND	162.00	131.25	2000915
	5000		MSP6502P5-1-ND	162.00	131.25	2000921
	7500		MSP6752P5-1-ND	162.00	131.25	2000927
	10000		MSP6103P5-1-ND	162.00	131.25	2000933

HOBO® H8 Family

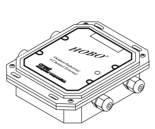
Single and multi-channel loggers for recording temperature in indoor and outdoor environments.

Features: • User-selectable sampling intervals: 0.5 seconds to 9 hours, recording times up to 1 year • Programmable start time/date • Memory modes stop when full, wrap-around when full • Nonvolatile EEPROM memory retains data even if battery fails • Blinking LED light confirms operation • User-replaceable battery lasts 1 year • Battery level indication at launch

Fig. 1

(341-1011-ND shown)

Fig. 2



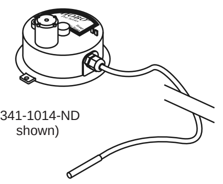
Specifications: • **Relative Humidity:** 25% to 95% (±5%) • **External Input:** Accepts sensors and input cables for temperature, AC current, 4-20mA and 0-2.5V DC • **Light Intensity:** 2 to 600 lumens/ft^2 (±2) • **Temperature Range:** -4°F to +158°F (-20°C to +70°C, ±0.7°C); accuracy at 70°F: ±1.27°F (±0.7°C) • **Resolution:** 0.7°F (0.4°C) at +70°F • **Time Accuracy:** ±1 minute per week at +68°F (+20°C)

Fig.	No. of Channels	Environment	Measurement Capacity	Digi-Key Part No.	Price Each	Onset Part No.
1	1	Indoor	7,943	341-1006-ND	59.00	H08-001-02
1	2	Indoor	7,943	341-1007-ND	65.00	H08-002-02
1	2	Indoor	7,943	341-1008-ND	85.00	H08-003-02
1	4	Indoor	32,520	341-1010-ND	95.00	H08-006-04
1	4	Indoor	7,943	341-1009-ND	95.00	H08-004-02
1	4	Indoor	7,943	341-1011-ND	95.00	H08-007-02
2	4	Indoor/Outdoor	32,520	341-1012-ND	179.00	H08-008-04

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the H8 Family loggers.

HOBO® H8 Pro Series

Features: • Indoor/Outdoor Environment • User-selectable sampling intervals: 0.5 seconds to 9 hours, recording times up to 3 years • Programmable start time/date • Memory mode: stop when full • Non-volatile EEPROM memory retains data even if battery fails • Blinking LED light confirms operation (visible through communication jack) • User-replaceable battery lasts 3 years; battery life is substantially less if the HOBO Pro is constantly used below 0°F (-18°C) • Battery check at launch



(341-1014-ND shown)

Specifications: • **Relative Humidity:** 0% to 100% condensing • **Temperature Range:** -22°F to +122°F (-30°C to +50°C) • **Temperature Accuracy (at 70°F):** ±0.33°F (±0.2°C) in high resolution mode; ±0.7°F (±0.38°C) in standard resolution mode • **Resolution (at 70°F):** 0.4°F (0.02°C) in high resolution mode; ±0.68°F (0.38°C) in standard resolution mode • **Time Accuracy:** ±1 minute per week at +68°F (+20°C)

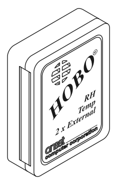
Description	No. of Channels	Measurement Capacity	Digi-Key Part No.	Price Each	Onset Part No.
HOBO Pro Temp	1	65,291	341-1013-ND	129.00	H08-030-08
HOBO Pro RH/Temp	2	65,291	341-1015-ND	159.00	H08-032-08
HOBO Pro Temp/External Temp	2	65,291	341-1014-ND	169.00	H08-031-08

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the HOBO Pro Series loggers.

HOBO® H6 Family

The HOBO H6 Family of loggers record when devices change between on and off or open and closed, storing the time, date, and state for each change.

Features: • Motor on/off • Light on/off • State open/closed • External contact closure • Programmable start time/date • Memory modes: stop when full, wrap-around when full • Nonvolatile EEPROM memory retains data even if battery fails • Blinking LED light shows current state • User-replaceable battery lasts 1 year • Battery check at launch

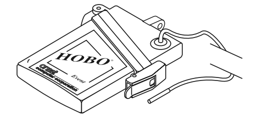


Specifications: • **Time Resolution:** 0.5 seconds • **Measurement Capacity:** 2,000 state changes • **Operating Temperature Range:** -4°F to +158°F (-20°C to +70°C) • **Relative Humidity:** 0 to 95%, non-condensing, non-fogging • **Time Accuracy:** ±1 minute per week at +68°F (+20°C)

Description	Measurement Range	Digi-Key Part No.	Price Each	Onset Part No.
HOBO State (includes cable & magnet)	—	341-1001-ND	69.00	H06-001-02
HOBO Light On/Off Logger	10 to 300 lumens/ft^2	341-1002-ND	69.00	H06-002-02
HOBO Motor On/Off Logger (AC field sensor)	~2 Gauss at 60 Hz	341-1004-ND	69.00	H06-004-02
HOBO Motor On/Off Logger (vibration sensor)	adjustable ~0.05 G to 0.5 G at 60 Hz	341-1003-ND	69.00	H06-003-02

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the H6 Family loggers.

HOBO® Event



The reusable HOBO Event records when momentary contact-closure events happen, storing the time and date of each event. Only one time per event is stored to minimize memory usage for applications where the event duration is not needed.

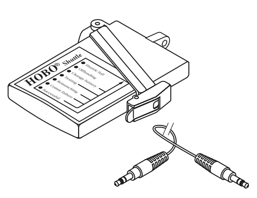
Features: • 1-Channel • Indoor/Outdoor environment • Programmable start time/date • Memory modes: stop when full or wrap-around when full • Non-volatile EEPROM memory retains data even if battery fails • Blinking LED light inside case confirms operation • User-replaceable battery lasts 1 year • Battery check at launch

Specifications: • **Event Resolution:** 0.5 seconds • **Capacity:** 8,000 events • **Time Accuracy:** ±1 minute per week at +68°F (+20°C) • **Operating Temp. (logger):** -4°F to +158°F (-20°C to +70°C)

Note: A BoxCar® Pro or BoxCar 3.6+ starter kit is required to operate the HOBO Event logger.

341-1005-ND	HOBO Event Logger (H07-002-04)	**$85.00**

HOBO® Shuttle Data Transporter



The pocket-sized HOBO Shuttle provides a convenient way to readout and relaunch HOBO data loggers and bring the data back to your host PC.

Features: • Verifies operation of HOBO H6 Family and HOBO Event data loggers • One-foot connector cable fits inside case • Data offload time from logger: 90 sec. typical from 8K logger, about 5 min. from 32K logger and about 1 min. from 64K HOBO Pro Logger • Data readout time to PC: 2 minutes typical for full shuttle • Operating humidity range when case is open: 0 to 95% relative humidity, non-condensing • Clear styrene case (weatherproof when closed) • Size: 3.5" x 4.3" x 0.8" (108mm x 89mm x 19 mm); with attached adjustable cord

Specifications: • **Time Accuracy:** ±1 minute per week at +68°F (+20°C). The shuttle's clock is synchronized to the computer clock when the Shuttle is read out or launched • **Operating Temp. Range:** -4°F to +158°F (-20°C to +70°C)

341-1016-ND	HOBO Shuttle (H09-002-08)	**$159.00**

External Sensors/Input Cables

Wide Range Temperature Sensors:

• **Temperature Range:** -40°F to +212°F (-40°C to +100°C), in air • **Accuracy:** ±0.9°F at +70°F (±0.5°C at +20°C) • **Resolution:** 0.7°F at +70°F (0.41°C at +20°C) • **Dimensions:** 0.2" (5.08mm) diameter sensor (fits in 1/4" holes)

High Accuracy Temperature Sensors:

• **Temperature Range:** -32°F to +110°F (-0°C to +44°C), in air • **Accuracy:** ±0.7°F at +70°F (±0.4°C at +20°C) • **Resolution:** 0.3°F at +70°F (0.2°C at +20°C) • **Dimensions:** 0.3" (7.62mm) diameter sensor (fits in 3/8" holes)

Stainless Steel Temperature Sensors:

• **Temperature Range:** -40°F to +212°F (-40°C to +100°C), in air or water • **Accuracy:** ±0.9°F at +70°F (±0.5°C at +20°C) • **Resolution:** 0.7°F at +70°F (0.41°C at +20°C) • **Dimensions:** 4" food-grade stainless-steel probe with pointed tip; 0.12" (3.05) diameter

4-20mA Cable:

• 18" cable with 3.5" tinned braided wire leads • **Loop Current Range:** 0 to 20.1mA • **Accuracy:** ±0.1mA ±1% of reading • **Resolution:** 0.4% of full scale

Voltage Input Cable:

• 6' cable with 0.5" tinned braided wire leads • For voltage input specifications, refer to the HOBO H8 specifications for the model you will be using.

Fig. 1

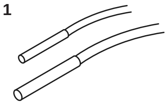


Fig. 2

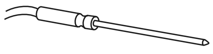


Fig. 3

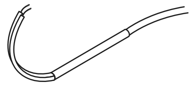


Fig. 4

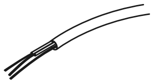


Fig.	Product	Digi-Key Part No.	Price Each	Onset Part No.
1	1' (.30 M) Wide Range Temperature Sensors *	341-1019-ND	23.00	TMC1-HA
	6' (1.83 M) Wide Range Temperature Sensors *	341-1020-ND	25.00	TMC6-HA
	20' (6.1 M) Wide Range Temperature Sensors *	341-1021-ND	30.00	TMC20--HA
	50' (15.24 M) Wide Range Temperature Sensors *	341-1022-ND	35.00	TMC50-HA
1	6' (1.83 M) High Accuracy Temperature Sensor *	341-1023-ND	40.00	TMC6-HB
2	6' (1.83 M) Stainless Steel Temperature Probe	341-1024-ND	70.00	TMC6-HC
3	4-20mA Cable	341-1031-ND	13.00	CABLE-4-20mA
4	Voltage Input Cable	341-1030-ND	6.00	CABLE-2.5-STEREO

* Not recommended for prolonged use in water. Do not use for more than 3 months total in water less than +90°F (+30°C), or more than 1 month total in water over +90°F (+30°C).

(Continued)

Windows Software Starter Kits

BoxCar 3.6 provides basic launch, data readout, plotting and data export capabilities. BoxCar Pro 4.0 is a powerful enhanced version of BoxCar 3.6 that adds new features for graphing, data analysis, data export and management of multiple loggers. BoxCar Pro 4.0 and BoxCar 3.6 support all currently available HOBO and StowAway loggers. Each starter kit includes software, computer interface cable and software manual.

BoxCar® 3.6 for Windows

Export Data Files to Spreadsheets: • Microsoft Excel, Lotus 1-2-3 or any ASCII-compatible program

System Requirements for BoxCar 3.6: 386 or better processor with at least 4M of RAM running Windows 3.1x or Windows 95/98/NT, with at least one available serial port.

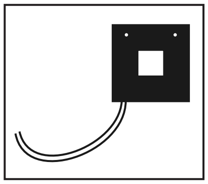
BoxCar® Pro 4.0 for Windows

Export Data to other Programs: • Control bar tool for Microsoft Excel export (.TXT format) • Lotus 1-2-3 and custom export • International data format options • Batch export utility

System Requirements for BoxCar Pro 4.0: Minimum system requirement is 486/66Mhz with at least 16M of RAM running Windows 95/98/NT4 or later with 16-bit color. A Pentium 90 or higher with 24M of RAM is recommended. The system must have at least one available serial COM port and a CD-ROM drive.

Description	Digi-Key Part No.	Price Each	Onset Part No.
BoxCar 3.6 Starter Kit	341-1018-ND	14.00	BC3.7-DL
BoxCar Pro 4.0 Starter Kit	341-1017-ND	95.00	BCP4.0-ON

Split-core AC Current Sensors



The CTV's are UL listed but not CE approved. They have a pivoting leg for easier installations, and the A, B, and C units have spacer flaps that center the wire being monitored. The CTV's do not require any adapter to work with all HOBO H8 external channel models. Simply plug them in and choose the appropriate model (the Software will not show the "V" but the letters of the models correspond).

Specifications: • **Length:** 6' (1.83 M) Cable • **Input Current:** AC current, sine wave, single phase 50Hz or 60Hz, load power factor 0.5 to 1.0 lead or lag • **Voltage Rating:** 600 Vac tested with full wave 10 KV impulse for 60 seconds • **Ratio and Linear Accuracy:** ±3.0 % of full scale (includes logger accuracy) • **Response Time:** Approximately 250 milliseconds from 10% to 90% of amplitude

Range (AC Amps)	Window Inch (mm)	Outer Length Inch (mm)	Outer Width Inch (mm)	Digi-Key Part No.	Price Each	Onset Part No.
0-20 A ac	0.5 (12.70)	2.8 (71.12)	2.8 (71.12)	341-1049-ND	84.00	CTV-A
0-50 A ac	0.75 (19.05)	2.8 (71.12)	2.8 (71.12)	341-1050-ND	84.00	CTV-B
0-100 A ac	1.0 (25.40)	2.8 (71.12)	3.3 (83.82)	341-1051-ND	84.00	CTV-C
0-200 A ac	1.5 (38.10)	4.0 (101.60)	3.8 (96.52)	341-1053-ND	100.00	CTV-D
0-600 A ac	2.0 (50.80)	4.5 (114.30)	4.5 (114.30)	341-1052-ND	100.00	CTV-E

Thermocouple Sensors

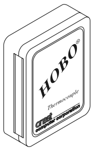
HOBO Wide-range Temperature (Thermocouples)

Each logger includes cold-junction compensation, and two software-selectable measurement ranges for optimal resolution and accuracy. The loggers also have an internal temperature sensor which can be used to record ambient temperatures. Thermocouples are popular for their wide temperature range and specialized probes.

Thermocouples: **Features and Specifications:** • Capacity: 32,520 measurements total • Mounting kit included (hook/loop. Magnet and tape) • Programmable start time/date • Memory modes: stop when full, wrap-around when full • Nonvolatile EEPROM memory retains data even if battery fails • User-replaceable battery lasts 1 year • User-selectable sampling intervals: 0.5 seconds to 9 hours, recording times up to 1 year • Operating range: 0°C to +50°C (+32°F to +122°F), 0 to 95% relative humidity, non-condensing, non-fogging • Time accuracy: ±1 minute per week at +20°C (+68°F)

Subminiature Connectors: **Features and Specifications:** • Accept stranded or solid wire up to 20 AWG • Internal silicone grommet for strain relief

Fig. 1



Type J: Iron-Constantan
+32°F to +482°F
+32°F to +1382°F

Type K: Chromel-Alumel
+32°F to +932°F
+32°F to +2282°F

Type T: Copper-Constantan
-328°F to +122°F
-94°F to +356°F

Fig. 2

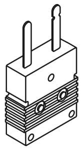


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Onset Part No.
	Thermocouple Logger					
1	HOBO, Type J HOBO, Type K HOBO, Type T	341-1032-ND 341-1033-ND 341-1034-ND	94.98 95.00 95.00	88.99 89.00 89.00	81.99 82.01 82.01	H12-001 H12-002 H12-003
	Subminiature Connector					
2	Type J, Black Type K, Yellow Type T, Blue	341-1035-ND 341-1036-ND 341-1037-ND	4.00 4.00 4.00	3.94 3.94 3.94	— — —	SMC-J SMC-K SMC-T

Note: A BoxCar® Pro 4.0 starter kit is required to operate the HOBO Pro Series loggers.

Thermocouple Wire

Specifications: 100' (30.48 meters) coils of insulated 24-AWG thermocouple wire

Type J: **Wire:** • Range: +32°F to +482°F (0°C to +250°C) • Initial Accuracy: ±4°F (±2.2°C)
Teflon Insulation: Rated up to +400°F (+200°C) continuous, and +482°F (+250°C) for 24 hours.

Type K: **Wire:** • Range: +32°F to +545°F (0°C to +250°C). Initial Accuracy: ±4°F (±2.2°C)
• Range: +545°F to +900°F (+285°C to +482°C). Initial Accuracy: ±0.75%*
Glass Braid Insulation: Rated up to +900°F (+482°C) continuous, and +1000°F (+537°C) for single exposure.

Type T: **Wire:** • Range: -330°F to -85°F (-200°C to -65°C). Initial Accuracy: ±1.5%*
• Range: -85°F to +270°F (-65°C to +130°C). Initial Accuracy: ±1.8°F* (±1°C)
• Range: +270°F to +356°F (+130°C to +180°C). Initial Accuracy: ±0.75%*
Teflon Insulation: Rated up to +400°F (+200°C) continuous, and +482°F (+250°C) for 24 hours.

* Percentage is of degrees above or below ice point (+32°F or 0°C)

Description	Digi-Key Part No.	Price Each 1	10	Onset Part No.
Type J, Teflon Insulation, 100'	341-1038-ND	55.00	54.12	TCW100-J
Type K, Glass Braid Insulation, 100'	341-1039-ND	55.00	54.12	TCW100-K
Type T, Teflon Insulation, 100'	341-1040-ND	55.00	54.12	TCW100-T

Water Temperature

Optic StowAway:

Features and Specifications: • Waterproof to 100 feet • 10-year factory-replaceable battery • Capacity: 7,943 or 32,520 measurements • Two measurement ranges†: +24°F to +99°F (-4°C to +37°C), -32°F to +167°F (-35°C to +75°C) • User-selectable sampling interval: 0.5 seconds to 9 hours, recording times up to several years • Uses optic communications through Optic Base Station for launch and readout • Programmable start time/date • Time accuracy: ±1 minute per week at +68°F (+20°C)

StowAway TidbiT:

Features and Specifications: • Waterproof to 1000 feet • 5-year, non-replaceable battery • Capacity: 32,520 measurements • Completely sealed in epoxy; very durable • Small size: 1.2" wide x 1.6" tall x 0.65" thick (30 x 41 x 17mm) and 0.8 oz. • Two measurement ranges†: +24°F to 99°F (-4°C to +37°C) and -4°F to +122°F (-20°C to +50°C) • User-selectable sampling interval: 0.5 seconds to 9 hours, recording times up to several years • Uses optic communications through Optic Base Station for launch and readout • Time accuracy: ±1 minute per week at +68°F (+20°C)

† Specified range is narrower than nominal range due to precision calibration process.

Fig. 1

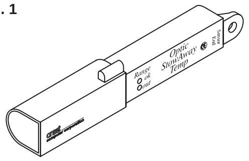


Fig. 2

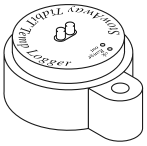
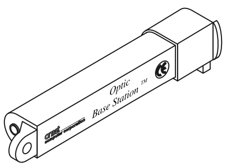


Fig.	Description	Digi-Key Part No.	Price Each 1	10	100	Onset Part No.
	Optic StowAway					
1	8K Capacity, Temp. (-4°C to +37°C) 8K Capacity, Temp. (-39°C to +75°C) 32K Capacity, Temp. (-5°C to +37°C) 32K Capacity, Temp. (-39°C to +75°C)	341-1041-ND 341-1042-ND 341-1043-ND 341-1044-ND	129.00 129.00 189.00 189.00	119.00 119.00 174.00 174.00	110.01 110.01 161.00 161.00	WTA08-05+37 WTA08-39+75 WTA32-05+37 WTA32-39+75
	StowAway TidbiT					
2	32K, (-5°C to +37°C) 32K, (-20°C to +50°C)	341-1045-ND 341-1046-ND	119.00 119.00	109.39 109.39	100.97 100.97	TBI32-05+37 TBI32-20+50

Optic Shuttle Data Transporter



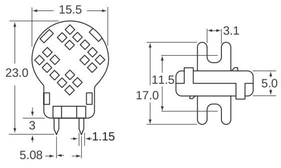
The Optic Base Station is used to communicate between the host computer and Optic data logger, Optic Shuttle, Optic StowAway or StowAway Tidbit. The Optic Base Station connects to the computer interface cable included with the windows software starter kits (sold separately).

Features and Specifications: • Used for readout of the Optic StowAway and the StowAway TidbiT loggers • Includes Optic Coupler and TidbiT Coupler for connecting the base station loggers • 128K capacity enough for 16 full 8K loggers or 4 full 32K loggers • Waterproof to 30 ft (15 psi) • 10-year, factory-replaceable battery • Optic Coupler and TidbiT Coupler included

Description	Digi-Key Part No.	Price Each 1	10	100	Onset Part No.
Optic Base Station	341-1047-ND	80.00	73.15	68.58	DSA
Optic Shuttle	341-1048-ND	199.00	183.01	169.00	DTA128B

Capacitive Humidity Sensor

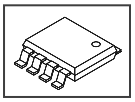
The capacitive atmospheric humidity sensor consists of a non-conductive foil, which is covered on both sides with a layer of gold. The dielectric constant of the foil changes as a function of the relative humidity of the ambient atmosphere and, accordingly, the capacitance value of the sensor is a measure for relative humidity.



Humidity Range (RH)	Cap.* (pF)	Sensitivity Between 12-75% RH (pF/%RH)	Frequency (kHz)	Max. AC / DC Voltage (V)	Storage Humidity Range (RH)	Ambient Temp. Range (°C) (Operating)	(Storage)	Digi-Key Part No.	Price Each 1	10	100	BC Components Part No.
10-90%	122 ±15%	0.4 ±0.05	1-1000	15	0-100%	0 to +85°	-25° to +85°	BC1333-ND	11.94	10.23	8.53	2322 691 90001

* Capacitance at +25 °C; 43% RH; 100 kHz

Honeywell Sensors



1- and 2-Axis Magnetoresistive Microcircuits –

HMC1001/1002, HMC1021/1022, HMC1052, HMC1051

Configured as a 4-element wheatstone bridge, these highly sensitive sensors convert magnetic fields to a differential output voltage, capable of sensing magnetic fields as low as 30 µgauss.

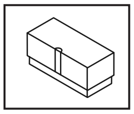
Features: • Field range up to ±6 gauss, (earth's field = 0.5 gauss) • Small package designed for 1- and 2-axis to work together to provide 3-axis (x, y, z) sensing • Solid state devices reduce board assembly costs, improve reliability and ruggedness compared to mechanical fluxgates • Patented on-chip set/reset straps to reduce effects of temperature drift, non-linearity errors and loss of signal output due to the presence of high magnetic fields • Patented on-chip offset straps for elimination of the effects of hard iron distortion. **Applications:** • Compassing • Navigation Systems • Attitude Reference • Traffic Detection • Medical Devices • Non-Contact Switch

SPECIFICATIONS: ***(See notes below)***	**Digi-Key Part No.**			**Conditions**
	342-1001-5-ND **342-1002-5-ND**	**342-1003-5-ND** **342-1004-5-ND** **342-1005-5-ND**	**342-1034-5-ND** **342-1029-5-ND**	
Operating Temp.	-40°C to +85°C (∗)	-40°C to +85°C	-40°C to + 125°C	Ambient
Field Range	±2 gauss (†Δ∗)	±6 gauss	-6 to +6 gauss	Full scale (FS) - total applied field
Linearity Error Typ	1% FS (†Δ*)	1.6% FS	0.4%FS	Best fit straight line (at 25°C) ±2 Gauss (±6 Gauss for 342-1003/1004/1005-5-ND) Best fit straight line ±3 gauss for 342-1029-5-ND
Hysteresis Error Typ	0.05% FS (†Δ*)	0.08% FS	0.10%	3 sweeps across ±2 Gauss @ 25°C (±3 Gauss for 342-1003/1004/1005-5-ND) 3 sweeps across ±6 gauss at -40°C to +125°C for 342-1029-5-ND
Sensitivity Typ	3.2 mV/V/gauss († Δ)	1.0mV/V/gauss	1.0mV/Vgauss	At IOFFSET = ±50mA, Vbridge=8V (Vbridge=5V for 342-1003/1004/1005-5-ND) Set/Rest Current=0.5A for 342-1029-5-ND
Resolution Typ	27 µgauss	85 µgauss	85 µgauss	Bandwidth = 10Hz, Vbridge=5V
Bandwidth	5MHz	5MHz	5MHz	Magnetic signal (lower limit=DC)
Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma.				

Notes:
† VBridge = 4.3V, IS/R = 3.2A, T = 25°C . VOUT = VSET - VRESET
Δ If VBridge = 8.0V, IS/R = 2.0A, T = 25°C, lower S/R current leads to greater output variation.
∗ Not tested, guaranteed by characterization.

Description	**Digi-Key Part No.**	**Price Each** 1	5	25	**Honeywell Part No.**
8-Pin SIP, Single Axis	342-1001-5-ND	33.00	24.75	22.00	HMC1001
20-Pin SOIC, Double Axis	342-1002-5-ND	45.00	33.75	30.00	HMC1002
8-Pin SOIC, Single Axis	342-1003-5-ND	24.00	18.00	16.00	HMC1021S
8-Pin SIP, Single Axis	342-1004-5-ND	24.00	18.00	16.00	HMC1021Z
16-Pin SOIC, Double Axis	342-1005-5-ND	27.00	20.25	18.00	HMC1022
10-Pin MSOP, Double Axis	342-1029-5-ND	18.00	—	—	HMC1052
8-Pin SIP, Single Axis	342-1034-5-ND	18.00	—	—	HMC1051Z

3-Axis Magnetoresistive Sensor – HMC1023



Configured as three magnetoresistive sensors in x, y and z orientation, these highly sensitive sensors convert all three magnetic field axes to a differential output voltage.

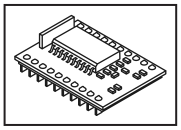
Features: • Field range of ±6 gauss, (earth's field = 0.5 gauss) while maintaining high sensitivity with a minimal detectable field down to 85 µgauss • Small package designed to work as a single stand-alone three-axis (x, y, z) magnetoresistive sensing system • Custom Ball Grid Array (BGA), 1mm pitch, 16-pin miniature package provides a small footprint and accurate sensor placement for orthogonal three-axis sensing applications • Solid state device reduces board assembly costs, improves reliability and ruggedness compared to mechanical fluxgates • Patented on-chip set/reset and offset straps have been improved and now require 50% less power to drive the set-reset and offset functions • Operates with a 3V to 25V power supply, lowering power consumption and reducing support circuitry.

Applications: • Compassing • Navigation Systems • Attitude Reference • Virtual Reality • Traffic Detection • Proximity Detection • Medical Devices

Specifications: • **Operating Temp.:** -40°C to +125°C, Ambient • **Field Range:** ±6 gauss; Full scale (FS) - total applied field • **Typ. Linearity Error:** 1.6% FS; Best fit straight line (at 25°C) ±6 Gauss • **Typ. Hysteresis Error:** 0.08% FS; 3 sweeps across ±3 Gauss @ 25°C • **Typ. Sensitivity:** 1.0mV/V/gauss; At Vbridge +5V • **Typ. Resolution:** 85 µgauss; Bandwidth=10Hz, Vbridge=5V • **Bandwidth**: 5MHz; Magnetic signal (lower limit=DC). (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma.)

Description	**Digi-Key Part No.**	**Price Each**	**Honeywell Part No.**
3-Axis Magnetoresistive Sensor	342-1006-ND	75.00	HMC1023
HMC Mounted on 16-Pin DIP Socket Demo Kit	342-1007-ND	100.00	HMC1023 Demo Kit

3-Axis Magnetic Sensor Hybrid – HMC2003



A complete 3-axis magnetometer with analog output in a 20-Pin hybrid DIP package.

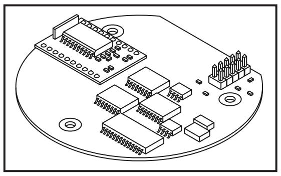
Features: • DIP-20 footprint (1” x .75”) allows easy insertion into system-level boards, reducing development costs • Solid state components improve reliability and ruggedness compared to mechanical fluxgates • Accurately measures fields from 40 micro-gauss to ±2 gauss at 1V/gauss • Low noise instrumentation amplifiers with 1kHz low pass filters, reject unwanted noise • No flux concentrators used in this design that can lead to hysteresis and non-repeatability • An externally accessible +2.5V reference improves measurement accuracy and stability • On-board excitation current source reduces temperatures errors and regulates the power supply input • Magnetic field offsets or closed loop circuits can be applied using the built-in straps • Output signal accuracy may be enhanced by using the integral set/reset straps • All components selected and packaged in nonmagnetic material to reduce magnetic distortion and offsets.

Applications: • Compassing • Navigation Systems • Attitude Reference • Traffic Detection • Proximity Detection • Medical Devices

Specifications (Power Supply: +15VDC; Set/Reset switching is active): • **Operating Temp.:** -40°C to +85°C, Ambient @ 25°C • **Supply Voltage**: 6 to 15 VDC; Transient protection circuitry should be added across V+ and Gnd if an unregulated power supply is used • **Supply Current:** 20mA • **Output Voltage:** 0.5V to 4.5V • **Field Range:** ±2 gauss • **Typ. Linearity Error:** 1%FS; ±2 gauss Applied Field Sweep • **Typ. Hysteresis Error:** 0.05% FS; 3 sweeps across ±2 gauss • **Sensitivity Typ**.: 1.0mV/V/gauss; At Vbridge +5V • **Typ. Resolution:** 40 µgauss • **Bandwidth:** 1KHz (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma.)

Description	**Digi-Key Part No.**	**Price Each**	**Honeywell Part No.**
3-Axis Magnet Sensor Hybrid	342-1011-ND	199.00	HMC2003

3-Axis Strapdown Magnetometer – HMR2300r



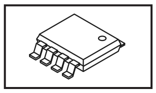
The three-axis strapdown magnetometer detects the strength and direction of the earth's magnetic field and communicates the x, y, and z component directly via serial bus. It provides an excellent replacement for conventional fluxvalve sensors commonly used in aviation systems. It offers higher reliability since it has no moving parts to damage or wear out during severe flight conditions. Low cost, high sensitivity, fast response, small size, and reliability are advantages over mechanical or other magnetometer alternatives.

Features: • Strapdown magnetometer replaces bulky fluxvalves • Microprocessor-based Smart Sensor • Range of ±2 Gauss: <70 µGauss Resolution • Readings can achieve heading resolution of 0.02° • Rate Selectable: 10 to 154 samples/sec. • Small Size: 2.83”, fits in ML-1 Style enclosure • Repeatable & Reliable: MTBF >50,000 hours. **Applications:** • Navigation Systems (Avionics and Marine) • Fluxvalve Replacement • Can be slaved to AHRS System • GPS Backup Systems • Remote Vehicle Monitoring • Unpiloted Air Vehicles (UAVs) • Navigation/Attitude for Satellites. **Specifications:** • **Supply Voltage:** 6.5 to 15V; Pin 9 referenced to Pin 5 • **Typ. Supply Current:** 45mA; Vsupply=15V, (with 120W termination) • **Operating Temp:** -40°C to +85°C; Ambient • **Field Range:** ±2 gauss; Full scale (FS) - total applied field • **Typ. Linearity Error:** 0.1 / 1%FS; Best fit straight line ±1 Gauss • **Typ. Hystereis Error:** 0.01%FS; 3 sweeps across ±2 Gauss @ 25°C • **Min. Resolution:** 67µgauss; Applied field to change output. (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma)

Serial Output	**Description**	**Digi-Key Part No.**	**Price Each**	**Honeywell Part No.**
RS-422	Round	342-1021-ND	850.00	HMR2300r-422
RS-485	Round	342-1020-ND	850.00	HMR2300r-485

Linear / Angular / Rotary Displacement Sensors –

HMC1501 / HMC1512

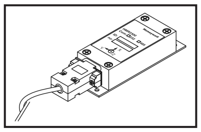


High resolution, low power MR sensor capable of measuring the angle direction of a magnetic field from a magnet with <0.07° resolution. Output is typical Wheatstone Bridge **Features:** • No “rare earth” magnets; functions with Alnico or ceramic type magnets • Linear range of 8mm with two sensors mounted on two ends; range may be increased through multiple sensor arrays operating together • Absolute sensing ability to know exact position and require no indexing for proper positional output • No moving parts to wear out • 8-pin SMT package • Case dimensions (exclusive of pins) of 5mm x 4mm x 1.2mm total mounting envelope, with pins of less than 6mm square • Full scale output range of 120mV with 5V of power supply. **Applications:** • Linear Displacement • Angular Displacement • Motor Control • Valve Position • Proximity Detection • Current Spike Detection. **Specifications (**at 25°C except stated otherwise)**:** • **Typ. Bridge Supply:** 5V, Vbridge referenced to GND • **Sensitivity** Vbridge =5V, field 80 Oe**:** 2.1mV/° @ zerocrossing; 1.8mV/° @ zero crossing, averaged in the range of 45° • **Typ. Peak-to-Peak Voltage:** 120mV, Vbridge=5V, field=80 Oe • **Bandwidth:** 0 to 5MHz, Magnetic signal • **Typ. Hysteresis Error:** 30µV°, 1.7x10^{-2} mV°, Magnetic field ≥saturation field, Vbridge = 5V

Typ. Bridge Resistance @ 1mA	**Angle Range ≥ Saturation Field**	**Typ. Resolution 10Hz Bandwidth Vbridge=5V <0.07°**	**Digi-Key Part No.**	**Price Each**	**Honeywell Part No.**
5KΩ	±45°	<0.07°	342-1008-5-ND	27.00	HMC1501
2.1KΩ	±90°	<0.05°	342-1010-5-ND	27.00	HMC1512

Smart Digital Magnetometer –

HMR2300



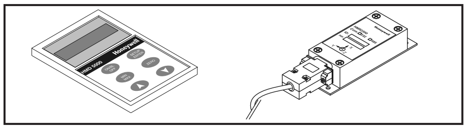
Microcontroller-Based Smart Sensor with range of ±2 Gauss; <70µGauss Resolution. Has high accuracy over ±1 Gauss; <0.5%FS; and Output Rate Selectable of 10 to 154 Samples/Sec. This sensor has a three-axis digital output, BCD ASCII or Binary, RS-232 Serial Output (9600 or 19200), and a 9-pin D-Sub connector.

Applications: • Compassing – Avionics and Marine • Remote Vehicle Monitoring (Roll/Pitch/Yaw) • Process Control • Laboratory Instrumentation • Anomaly Detection • Traffic and Vehicle Detection • Security Systems. **Specifications:** • **Supply Voltage:** 6.5 to 15V; Pin 9 referenced to Pin 5 • **Typ. Supply Current:** 27mA; Vsupply=15V, with S/R=ON • **Operating Temp:** -40°C to 85°C; Ambient • **Field Range:** ±2 gauss; Full scale (FS) - total applied field • **Typ. Linearity Error:** 1%FS; Best fit straight line at 25°C ±2 Gauss • **Typ. Hystereis Error:** 0.01%FS; 3 sweeps across ±2 Gauss @ 25°C • **Min. Resolution:** 67µgauss; Applied field to change output. (Units: 1 gauss (G) = 1 Oersted (in air), 1G=79.58A/m, 1G=10E-4 Tesla, 1G=10E5 gamma)

Serial Output	**Description**	**Digi-Key Part No.**	**Price Each**	**Honeywell Part No.**
RS-232	Without Enclosure	342-1014-ND	675.00	HMR2300-D00-232
RS-232	Flush Mount Enclosure, Aluminum, 3.25” x 1.50” x 1.13” (82.55 x 38.1 x 28.70mm)	342-1015-ND	699.00	HMR2300-D20-232
RS-232	Extended Enclosure, Aluminum, 4.00” x 1.50” x 1.13” (101.60 x 38.1 x 28.70mm)	342-1016-ND	699.00	HMR2300-D21-232
RS-485	Without Enclosure	342-1017-ND	675.00	HMR2300-D00-485
RS-485	Flush Mount Enclosure, Aluminum, 3.25” x 1.50” x 1.13” (82.55 x 38.1 x 28.70mm)	342-1018-ND	699.00	HMR2300-D20-485
RS-485	Extended Enclosure, Aluminum, 4.00” x 1.50” x 1.13” (101.60 x 38.1 x 28.70mm)	342-1019-ND	699.00	HMR2300-D21-485
RS-232	HMR2300 Development Kit with RS-232 Output, Cables, Manual	342-1012-ND	750.00	HMR2300-Demo-232

Hand Held Display Module –

HMD5000



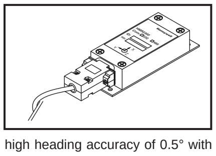
This Hand Held Display Module for digital magnetic sensor products displays heading, pitch, and roll information when connected to the HMR3000 Digital Compass Module. If used with the HMR2300 Smart Digital Magnetometer, magnetic field readings in the X, Y and Z directions, as well as the magnitude of all three axes combined are shown. This small hand held unit has actual case dimensions of 3.60” x 5.70” x 2.09” and weighs 0.54 pounds. The interface cable is 3 feet long and has a female 9-pin “D” connector. The accuracy and resolution of the HMD500 is dependent on the instrument with which it is used (the HMR3000 or the HMR2300).

Features: • Portable, runs on batteries, easy to use in field applications. **Input Power Requirements:** • **Supply Voltage:** 6-15 Vdc Unregulated • **Power:** 72mA @ 9 Vdc (300mA at Power Up). **Applications:** • Compassing • Navigation Systems • Attitude Reference • Magnetic Anomoly Detection • Proximity Detection • Laboratory Instrumentation • Traffic and Vehicle Detection

Description	**Digi-Key Part No.**	**Price Each**	**Honeywell Part No.**
HMD5000 Hand Held Display Module	342-1028-ND	569.00	HMD5000

Honeywell

Sensors



Digital Compass Module – HMR3000

Electronic compass module that provides heading, pitch and roll output for navigation and guidance systems. This solid state magnetoresistive sensors make this strapdown compass both rugged and reliable. This compass provides fast response time up to 20Hz and high heading accuracy of 0.5° with 0.1° resolution.

Features: • Built with solid state magnetic sensors and no moving parts improves response time, allowing faster updates compared to gimballed fluxgates • Available as a circuit board 1.2" x 2.95", weighing less than one ounce, or in an aluminum enclosure • Operates with less than 35mA, allowing for long operation with a battery • Accuracy better than 0.5° with 0.1° resolution for critical positioning applications • Tilt range of ±40° for both the roll and pitch allows operation for most applications • Calibration routines to compensate for distortion due to nearby ferrous objects and stray fields, such as vehicles • User settings of baud rate, update rate, output format, units, filter settings, deviation angles, alarms, and warnings are stored internally in non-volatile memory.

Specifications: • **Typ. Supply Voltage:** 5.0Vdc regulated, 6-15Vdc unregulated • **Typ. Power:** 35mA @ 6Vdc Normal Operation, 13mA STOP Mode, 2.0mA SLEEP Mode • **Serial:** RS-232 / RS-485 (Half Duplex) • **Baud Rate:** 1200 to 38400 bps • **Standard:** NMEA 0183 • **Update Modes:** Continuous: 1/min to 20Hz per sentence; Strobed: selectable averaging • **Operating Temperature:** Meets or exceeds -20°C to 70°C • **Storage Temp.:** Meets or exceeds -35°C to +100°C • **Shock:** Meets or exceeds 30" drop (MIL-STD-810E:TM 516.4) • **Vibration:** Meets or exceeds 20-2000Hz Random 2 hrs/axis (MIL-STD-810E:TM 514.4).

Applications: • Oceanographic (Marine compassing; Positioning of buoys, underwater structures) • Drilling (down hole and directional) • Attitude Reference • Heading (Navigation of unmanned vehicles; Avionic compassing) • Integration with GPS (Dead Reckoning) • Satellite Antenna Positioning • Laser Range Finders (surveying applications)

Serial Output	Description	Digi-Key Part No.	Price Each	Honeywell Part No.
RS-232	Without Enclosure	342-1024-ND	675.00	HMR3000-D00-232
RS-232	Enclosure, Extended Base	342-1025-ND	675.00	HMR3000-D21-232
RS-485	Without Enclosure	342-1026-ND	675.00	HMR3000-D00-485
RS-485	Enclosure, Extended Base	342-1027-ND	699.00	HMR3000-D21-485
HMR 3000 Development Kit, with RS-232 Output, Cables, Manual		342-1022-ND	750.00	HMR3000-Demo-232

Digital Compass Module – HMR3200/3300

Electronic compassing solutions that provide heading information for use in navigation and guidance systems. Magnetoresistive sensors are utilized to provide the reliability and accuracy of these small, solid state compass designs. These compass solutions are easily integrated into systems using a UART interface in ASCII format.

Features:

Accuracy: 1° heading accuracy, 0.1° resolution and 0.5 degrees repeatability.

Tilt Range: The HMR3300 may be operated up to a ±60° tilt range for both pitch and roll. Accuracy and performance are enhanced over a wider range of operating conditions and applications with this feature. The HMR3200 is not tilt compensated. Performance is optimized in horizontal or vertical orientations.

Low Power: Typical operating current is 18 mA for the HMR3200.

Response Time: The HMR3200 has 15Hz response time for faster updates compared to gimballed, mechanical fluxgate compasses.

Specificatons:

- **Magnetic Field:** Range: ±2 gauss typical, Resolution: 0.1 mgauss
- **Electrical:** Input Voltage: Unregulated: 6 to 15 VDC, Regulated: 5.0 Vdc
- **Interface:** UART - User selectable baud rate 2400 to 19200 baud
- **Physical:** Dimensions - Conditions: Circuit board, 1.0" x 1.45" x 0.4" (25.4 x 36.8 x 1.1 mm)

Header Pin Assignment	
Pin No.	**Pin Name**
1	SCK
2	RX/SDI
3	TX/SDO
4	CS
5	CAL
6	5V
7	GND
8	+V

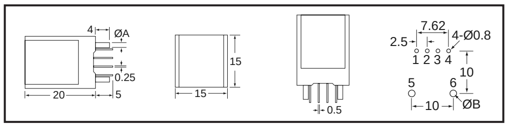
Serial Output	Description	Digi-Key Part No.	Price Each	Honeywell Part No.
UART	Digital Compass Module 2-axis	342-1030-ND	335.00	HMR3200
UART	Digital Compass Module 3-axis	342-1032-ND	450.00	HMR3300
HMR 3200 Development Kit, with RS232 Output, Cables, Manual		342-1031-ND	399.00	HMR3200-Demo-232
HMR 3300 Development Kit, with RS232 Output, Cables, Manual		342-1033-ND	499.00	HMR3300-Demo-232

CUI INC

Current Sensors

The SCD series current sensors are PC board mounted, Hall effect, open-loop devices which output a voltage equivalent to the magnitude of current sensed. Two basic sensing types are offered. Both are capable of measuring AC currents:

1. -XXN for detecting DC current and AC currents where ± input currents are represented as a + voltage only.
2. -XXR for detecting DC current and AC currents. ± input currents are represented as ± voltage.



Pin Assignment	
Pin No.	**Pin Name**
1	+5V
2	NC
3	Output
4	0V
5	Input (+)
6	Input (-)

Mounting Hole Dimensions		
Part No.	**øA**	**øB**
SCD03	0.7	1.2
SCD05	1.0	1.5
SCD10	1.2	1.7
SCD15	1.5	2.0
SCD20	1.8	2.3

Rated Current	Output Voltage	Supply Voltage	Input Current Polarity	Response	Operating Temperature	Digi-Key Part No.	Price Each 1	10	25	CUI Part No.
+3A	2.3V	5V	+DC only	7µS typ.	-10° to +75°C	102-1050-ND	24.90	18.68	16.60	SCD03PUN
+5A	2.3V	5V	+DC only	7µS typ.	-10° to +75°C	102-1051-ND	24.90	18.68	16.60	SCD05PUN
+10A	2.3V	5V	+DC only	7µS typ.	-10° to +75°C	102-1052-ND	24.90	18.68	16.60	SCD10PUN
+15A	2.3V	5V	+DC only	7µS typ.	-10° to +75°C	102-1053-ND	24.90	18.68	16.60	SCD15PUN
+20A	2.3V	5V	+DC only	7µS typ.	-10° to +75°C	102-1054-ND	24.90	18.68	16.60	SCD20PUN
±3A	2.3V	5V	bipolar	7µS typ.	-10° to +75°C	102-1055-ND	24.90	18.68	16.60	SCD03PUR
±5A	2.3V	5V	bipolar	7µS typ.	-10° to +75°C	102-1056-ND	24.90	18.68	16.60	SCD05PUR
±10A	2.3V	5V	bipolar	7µS typ.	-10° to +75°C	102-1057-ND	24.90	18.68	16.60	SCD10PUR
±15A	2.3V	5V	bipolar	7µS typ.	-10° to +75°C	102-1058-ND	24.90	18.68	16.60	SCD15PUR
±20A	2.3V	5V	bipolar	7µS typ.	-10° to +75°C	102-1059-ND	24.90	18.68	16.60	SCD20PUR
+3A	5V	12V	+DC only	3µS typ.	-10° to +75°C	102-1060-ND	24.90	18.68	16.60	SCD03PSN
+5A	5V	12V	+DC only	3µS typ.	-10° to +75°C	102-1061-ND	24.90	18.68	16.60	SCD05PSN
+10A	5V	12V	+DC only	3µS typ.	-10° to +75°C	102-1062-ND	24.90	18.68	16.60	SCD10PSN
+15A	5V	12V	+DC only	3µS typ.	-10° to +75°C	102-1063-ND	24.90	18.68	16.60	SCD15PSN
+20A	5V	12V	+DC only	3µS typ.	-10° to +75°C	102-1064-ND	24.90	18.68	16.60	SCD20PSN
±3A	5V	12V	bipolar	3µS typ.	-10° to +75°C	102-1065-ND	24.90	18.68	16.60	SCD03PSR
±5A	5V	12V	bipolar	3µS typ.	-10° to +75°C	102-1066-ND	24.90	18.68	16.60	SCD05PSR
±10A	5V	12V	bipolar	3µS typ.	-10° to +75°C	102-1067-ND	24.90	18.68	16.60	SCD10PSR
±15A	5V	12V	bipolar	3µS typ.	-10° to +75°C	102-1068-ND	24.90	18.68	16.60	SCD15PSR
±20A	5V	12V	bipolar	3µS typ.	-10° to +75°C	102-1069-ND	24.90	18.68	16.60	SCD20PSR

OMRON

Inductive Proximity Sensors

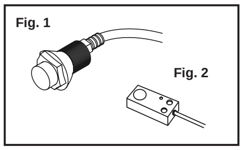


Fig. 1

Fig. 2

Omron's line of inductive sensors are designed for detecting the presence or absence of ferrous metal close to the sensor and provide an output when detected.

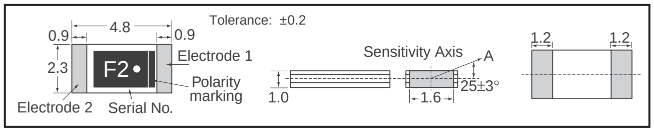
Because inductive sensors use electromagnetic fields, they excel over photo type sensors in environments containing water, oil, dust and dirt.

Shielded sensors are made with a shielding plate around the ferrite core to focus ferrous metal sensing at the sensors head. It also allows sensor to be located or mounted close to surrounding metals.

Fig.	Sensing Distance Max.	Description	Terminal Type	Output Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	1.5mm	M8, Short Barrel DC Proxy, Nickel Plated Brass, Shielded	3-wire	NPN	Z1062-ND	57.15	52.92	49.40	E2E-X1R5E1-N
	1.5mm	M8, Short Barrel AC Proxy, Nickel Plated Brass, Shielded	2-wire	NPN	Z1063-ND	68.04	63.00	58.80	E2E-X1R5Y1-N
	2mm	M8, Short Barrel DC Proxy, Nickel Plated Brass, Shielded	2-wire	NPN	Z1064-ND	58.97	54.60	50.96	E2E-X2D1-N-N
	2mm	M12, Short Barrel DC Proxy, Nickel Plated Brass, Shielded	3-wire	NPN	Z1065-ND	57.15	52.92	49.40	E2E-X2E1-N
	2mm	M12, Short Barrel AC Proxy, Nickel Plated Brass, Shielded	2-wire	NPN	Z1066-ND	68.04	63.00	58.80	E2E-X2Y1-US-N
	3mm	M12, Short Barrel DC Proxy, Nickel Plated Brass, Shielded	2-wire	NPN	Z1067-ND	59.88	55.44	51.75	E2E-X3D1-N-N
	5mm	M18, Short Barrel DC Proxy, Nickel Plated Brass, Shielded	3-wire	NPN	Z1068-ND	58.97	54.60	50.96	E2E-X5E1-N
	5mm	M18, Short Barrel AC Proxy, Nickel Plated Brass, Shielded	2-wire	NPN	Z1069-ND	72.58	67.20	62.72	E2E-X5Y1-US-N
	7mm	M18, Short Barrel DC Proxy, Nickel Plated Brass, Shielded	2-wire	NPN	Z1070-ND	61.69	57.12	53.32	E2E-X7D1-N-N
	1.5mm	M8, Short Barrel DC Proxy, Plastic Body, Shielded	3-wire	NPN	Z1075-ND	55.34	51.24	47.83	E2F-X1R5E1
	1.5mm	M8, Short Barrel AC Proxy, Plastic Body, Shielded	2-wire	NPN	Z1076-ND	69.85	64.68	60.37	E2F-X1R5Y1
	10mm	M30, Short Barrel DC Proxy, Plastic Body, Shielded	3-wire	NPN	Z1077-ND	59.42	55.02	51.36	E2F-X10E1
	2mm	M12, Short Barrel DC Proxy, Plastic Body, Shielded	3-wire	NPN	Z1078-ND	53.52	49.56	46.26	E2F-X2E1
	2mm	M12, Short Barrel AC Proxy, Plastic Body, Shielded	2-wire	NPN	Z1079-ND	69.85	64.68	60.37	E2F-X2Y1
	5mm	M18, Short Barrel DC Proxy, Plastic Body, Shielded	3-wire	NPN	Z1080-ND	54.43	50.40	47.04	E2F-X5E1
	5mm	M18, Short Barrel AC Proxy, Plastic Body, Shielded	2-wire	NPN	Z1081-ND	71.67	66.36	61.94	E2F-X5Y1-US
2	1.5mm	Flat Low Profile DC Proxy, Aluminum Body, Unshielded	3-wire	PNP	Z1082-ND	45.81	42.42	39.60	TL-W1R5MB1
	1.5mm	Flat Low Profile DC Proxy, Aluminum Body, Unshielded	3-wire	NPN	Z1083-ND	45.81	42.42	39.60	TL-W1R5MC1
	3mm	Flat Low Profile DC Proxy, Plastic Body, Unshielded	3-wire	NPN	Z1084-ND	48.54	44.94	41.95	TL-W3MC1
	5mm	Flat Low Profile DC Proxy, Plastic Body, Unshielded	3-wire	PNP	Z1085-ND	42.64	39.48	36.85	TL-W5MB1
	5mm	Flat Low Profile DC Proxy, Plastic Body, Unshielded	3-wire	NPN	Z1086-ND	42.64	39.48	36.85	TL-W5MC1
	3mm	Flat Low Profile DC Proxy, Plastic Body, Unshielded	3-wire	PNP	Z1189-ND	48.54	44.94	41.95	TL-W3MB1

Panasonic

Piezoelectric Sensor for Mechanical Shock

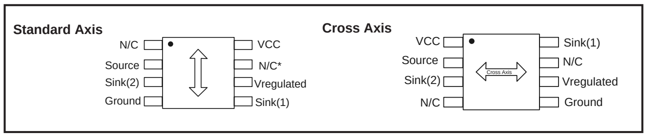


Usage: • Detect external shock applied to HDD • Prevents tracking error due to vibration of audio equipment
Features: • Small size and light weight • Wide range frequency response 80 ~ 10,000Hz (Rin=10Mµ) • Voltage sensitivity 0.1mV/(m/s2) typ • Incident angle 0, 25, 45°

Description	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 2,000	Panasonic Part No.
Shock Sensor	P11437CT-ND	1.71	1.29	.99	P11437TR-ND	799.40/M	EFJ-G25EF01

NVE
NVE CORPORATION

GMR Digital Magnetic Sensors



The GMR Switch will accurately and reliably sense magnetic fields, with less error than any other magnetic sensor on the market today.

In addition, there is minimal shift in the magnetic field operate point of the GMR Switch over both voltage and temperature extremes. This gives the manufacturer the ability to make a high precision, high tolerance magnetic sensing assembly.

Features:

Absolute Maximum Ratings:

Parameters:

- Supply Voltage: 33V
- Reverse Battery Voltage: -33V
- Continuous Output Current: 24 mA
- Operating Temperature Range: -40°C to -125°C
- Magnetic Field: Unlimited Oersteds

Electrical Specifications:

Parameter:

- Supply Voltage: 4.5-30V
- Supply Current, Single Output GMR Switch: 2.5-4.5mA
- Current Sinking Output: 0-20mA
- Current Sourcing Output: 0-20mA
- Output Leakage Current: 10mA
- Sinking Output Saturation Voltage: 0.4V
- Sourcing Output Saturation Voltage: -2.5V
- Regulated Output Voltage: 3.5-6.0V

Sensitivity	Direction of Sensitivity	Output Type	Package	Digi-Key Part No.	Price Each 1	10	25	100	NVE Part No.
20 Gauss	Standard	Sink	8-TSSOP	391-1005-ND	4.35	3.27	2.90	1.89	AD004-00
40 Gauss	Standard	Sink	8-TSSOP	391-1006-ND	4.35	3.27	2.90	1.89	AD005-00
80 Gauss	Standard	Sink	8-TSSOP	391-1007-ND	4.35	3.27	2.90	1.89	AD006-00
28 Gauss	Standard	Sink	8-TSSOP	391-1008-ND	4.35	3.27	2.90	1.89	AD020-00
20 Gauss	Cross Axis	Sink	8-TSSOP	391-1009-ND	4.35	3.27	2.90	1.89	AD021-00
40 Gauss	Cross Axis	Sink	8-TSSOP	391-1010-ND	4.35	3.27	2.90	1.89	AD022-00
80 Gauss	Cross Axis	Sink	8-TSSOP	391-1011-ND	4.35	3.27	2.90	1.89	AD023-00
28 Gauss	Cross Axis	Sink	8-TSSOP	391-1012-ND	4.35	3.27	2.90	1.89	AD024-00
20 Gauss	Cross Axis	Source & Sink	8-TSSOP	391-1013-ND	4.77	3.58	3.18	2.07	AD221-00
28 Gauss	Cross Axis	2 Sink	8-TSSOP	391-1014-ND	4.77	3.58	3.18	2.07	AD324-00
20 Gauss	Cross Axis	Source & Sink + Ext. V. Reg.	8-TSSOP	391-1015-ND	5.13	3.85	3.42	2.23	AD621-00
28 Gauss	Cross Axis	2 Sink + Ext. V. Reg.	8-TSSOP	391-1016-ND	5.13	3.85	3.42	2.23	AD724-00
10 Gauss	Cross Axis	Sink	8-TSSOP	391-1018-ND	2.67	2.01	1.78	1.16	ADH025-00

GMR Current Sensor Evaluation Assembly

The NVE GMR Current Sensor Evaluation Assembly (PN AG003-01) was created to facilitate laboratory experimentation and development using GMR current sensors.

The kit consists of (4) four NVE current sensors (PN AC004-01) assembled to a printed circuit board (PN AG002-01). The PCB has (4) four trace geometries to simulate various PCB current ranges.

Description	Digi-Key Part No.	Price Each	NVE Part No.
Current Sensor Evaluation Assembly	391-1004-ND	43.00	AG003-01

GMR Analog Magnetic Field Sensors

NVE's Giant Magnetoresistive Field Sensors offer unique and unparallel magnetic sensing capabilities.

The high sensitivity and ability to sense static magnetic fields provides superior performance which set them apart from other sensors on the market today.

NVE's sensors provide high sensitivity, temperature stability, low power consumption, and small size.

Features:

- Input Voltage Range: Max: ±25V
- Operating Frequency: Minimum: DC, Maximum: ±25MHz
- Temperature Range: Minimum: -50°C, Maximum: 125°C
- Maximum Output: Nominal: 45mV/V
- Magnetic Characteristics: (5k ±20% bridge)

Pkg.	Saturation Field (Oe)	Specified Linear Range Oe Min.	Max.	Sensitivity (mV/V/Oe) Min.	Max.	Digi-Key Part No.	Price Each 1	10	25	100	NVE Part No.
8-SOIC	15	0	10.5	3	4.2	391-1000-ND	14.58	10.94	9.72	6.32	AA002-02
8-SOIC	50	0	35	0.9	1.3	391-1001-ND	8.10	6.08	5.40	3.51	AA004-02
8-SOIC	100	0	70	0.45	0.65	391-1002-ND	8.10	6.08	5.40	3.51	AA005-02

GMR Evaluation Kit

The NVE GMR Engineering Evaluation Kit (PN AG001-01) was created as an aid to the technical user of GMR sensors to facilitate laboratory experimentation and development.

The kit consists of an assortment of NVE sensors, printed circuit boards and permanent magnets sufficient to demonstrate sensor functionality in the laboratory.

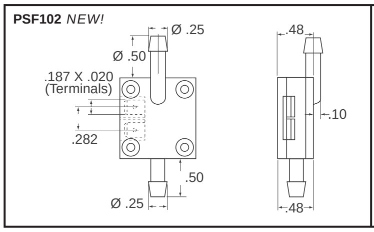
Description	Digi-Key Part No.	Price Each	NVE Part No.
Engineering Evaluation Kit	391-1003-ND	60.00	AG001-01

WORLD MAGNETICS

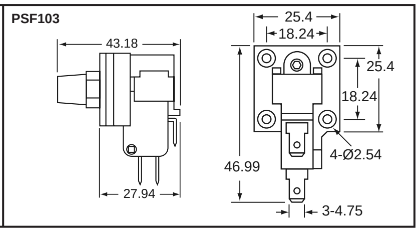
Ultra Sensitive Pressure Switches

PSF102 Series: Field adjustable pressure set point from 0.004 to 3.606 PSI. Switch type SPST normally open. Electrical connections are terminals 0.187" x 0.020" tab-type recessed for use with quick disconnects (ref. AMP# 2-520182-2 or equivalent). Current rating: 40mA @ 30V AC/DC. **PSF103 Series:** Field adjustable pressure set point from 0.1 to 60 PSI. Switch type SPDT normally open or normally closed. Electrical connections are terminals 0.187" x 0.020" tab-type for use with quick disconnects (ref. AMP# 2-520182-2 or equivalent). Current rating: 25A 125/250 VAC. Applications: Hysteresis (deadband) for compressor or refill motor control.

PSF102 *NEW!*



PSF103



In. H_2O	mbar	PSI	Proof Pressure	Operating Current/ Voltage	Digi-Key Part No.	Price Each 1	10	100	World Magnetics Part No.
NEW! **PSF102 Series** *NEW!*									
0.1–0.5	0.25–1.25	.004–.018	2 PSI	40mA 30V AC/DC	384-1015-ND	13.79	13.10	9.79	7651-710
0.5–2	1.25–4.98	.018–.072	4 PSI	40mA 30V AC/DC	384-1016-ND	13.79	13.10	9.79	7651-711
2–15	4.98–37.37	.072–.541	8 PSI	40mA 30V AC/DC	384-1017-ND	13.79	13.10	9.79	7651-712
15–100	37.37–249.10	.541–3.606	15 PSI	40mA 30V AC/DC	384-1018-ND	13.79	13.10	9.79	7651-713
PSF103 Series									
2–10	5–25	0.1–0.4	30 PSI	3A 125/250VAC	384-1010-ND	13.19	12.60	9.19	9011-902
10–28	25–69	0.4–1.0	30 PSI	10A 125/250VAC	384-1011-ND	13.19	12.60	9.19	9011-903
28–111	69–276	1.0–4.0	30 PSI	15A 125/250VAC	384-1012-ND	13.19	12.60	9.19	9011-904
111–416	276–1034	4.0–15.0	100 PSI	15A 125/250VAC	384-1013-ND	13.19	12.60	9.19	9061-905
416–1664	1034–4137	15.0–60.0	100 PSI	15A 125/250VAC	384-1014-ND	13.19	12.60	9.19	9061-906

Ultra Sensitive Pressure Switches

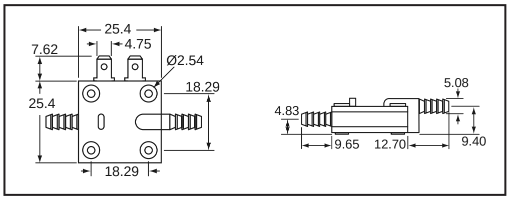
PSFA100A Series

Pressure switches utilize a patented double diaphragm/contact configuration to protect against false actuation due to shock and vibration. Switch type is SPST normally open, double-make/double break.

Current Rating is 40mA resistive for life in excess of 20 Million cycles.

Operating Voltage AC/DC-30V or less with resistive load; 120 VAC neon lamp load.

Electrical connections are terminals at .187" x .020" tab-type for use with quick disconnects (ref. AMP 2-520182-2 or equivalent).



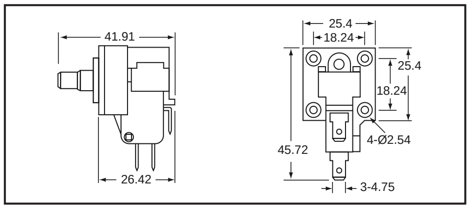
PSI	Digi-Key Part No.	Price Each 1	10	100	World Magnetics Part No.
.018	384-1000-ND	18.56	17.63	13.18	PSF100A-0.5
.054	384-1001-ND	18.56	17.63	13.18	PSF100A-1.5
.108	384-1002-ND	18.56	17.63	13.18	PSF100A-3.0
.217	384-1003-ND	17.37	16.50	12.33	PSF100A-6.0
.361	384-1004-ND	17.37	16.50	12.33	PSF100A-10.0
.541	384-1005-ND	17.37	16.50	12.33	PSF100A-15.0
1.804	384-1006-ND	17.37	16.50	12.33	PSF100A-50.0

Ultra Sensitive Vacuum Switches

PSF109 Series

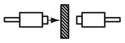
Vacuum switch with Hysteresis (deadband) for motor control. Field adjustable vacuum set point, from 3" H2O to 12 PSI.
Switch type is SPDT normally open, normally closed.
Electrical connections are terminals at .187" x .020 tab-type for use with AMP 2-520182-2 or equivalent.

Contact Rating	PSI	Digi-Key Part No.	Price Each 1	10	100	World Magnetics Part No.
3A, 125/250 VAC	0.1–0.3	384-1007-ND	16.24	15.43	11.53	PSF109S-3-8
10A, 125/250 VAC	0.3–2.9	384-1008-ND	16.24	15.43	11.53	PSF109S-9-80
15A, 125/250 VAC	2.9–11.9	384-1009-ND	16.24	15.43	11.53	PSF109S-81-330



OMRON

Photoelectric Sensors


Through Beam

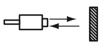

Reflective/ Diffuse

Fig. 1

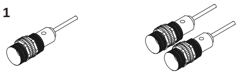

Reflective/ Diffuse **Through Beam**

Fig. 2

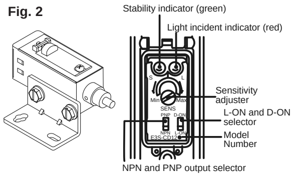
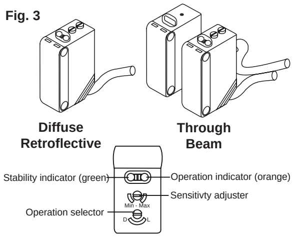


Fig. 3


Diffuse Retroflective **Through Beam**

Photoelectric sensors consist of a light source and detector for object detection.

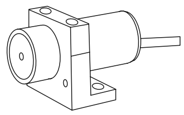
Through-beam sensors use a separate transmitter and receiver, which an object must pass between to block the light.

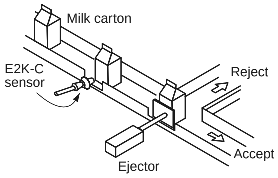
Retroflective sensors is a combined transmitter/receiver in one body and is reflected. A reflector typically is used to return the beam from the x-mitter back to the receiver. Once an object is moved between the reflector and emitter/detector, the receiver output turns on.

Diffuse reflective is a combined transmitter/receiver in one body. Objects are detected by moving an object closer to the sensor directly from the front, rather than from the side. Once an object has come within the sensing distance, the amount of reflected light is sufficient to trigger the receiver output.

Fig.	Description	Sensing Distance	Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	M18, Diffused Photoelectric Sensor, 10-30VDC Nickel Plated Brass	3.94” (10cm)	NPN	Z1087-ND	58.51	54.18	50.57	E3F2-DS10C4-N
	M18, Diffused Photoelectric Sensor, 24-240VAC, Plastic Housing	3.94” (10cm)	NPN	Z1088-ND	68.04	63.00	58.80	E3F2-DS10Z1-N
	M18, Retroflective Photoelectric Sensor, 10-30VDC, Plastic Housing	6.56’ (2m)	NPN	Z1089-ND	60.33	55.86	52.14	E3F2-R2C4
	M18, Retroflective Photoelectric Sensor, 10-30VDC, Plastic Housing	6.56’ (2m)	Light - On	Z1090-ND	69.85	64.68	60.37	E3F2-R2Z1
	M18, Through Beam Photoelectric Sensor, 10-30VDC, Plastic Housing	9.84’ (3m)	Light - On	Z1091-ND	101.61	94.08	87.81	E3F2-3Z1
	M18, Through Beam Photoelectric Sensor, 10-30VDC, Plastic Housing	22.97’ (7m)	NPN	Z1092-ND	77.57	71.82	67.04	E3F2-7C4
	M18, Through Beam Photoelectric Sensor, 10-30VDC, Nickel Plated Brass	22.97’ (7m)	NPN	Z1093-ND	89.36	82.74	77.23	E3F2-7C4-C
	M18, Diffused Photoelectric Sensor, 10-30VDC, Nickel Plated Brass	3.94” (10cm)	PNP	Z1094-ND	69.85	64.68	60.37	E3F2-DS10C4-C
	M18, Retroflective Photoelectric Sensor, 10-30VDC, Nickel Plated Brass	6.56’ (2m)	Light - On	Z1095-ND	74.84	69.30	64.68	E3F2-R2RC4-C
2	Diffused Photoelectric Sensor, 10-30VDC, Metal Body Horz.	27.6” (70cm)	NPN/PNP	Z1096-ND	141.52	131.04	122.31	E3S-CD11
	Diffused Photoelectric Sensor, 10-30VDC, Metal Body Horz.	6.56’ (2m)	NPN/PNP	Z1097-ND	151.50	140.28	130.93	E3S-CD12
	Diffused Photoelectric Sensor, 10-30VDC, Metal Body Vertical	27.6” (70cm)	NPN/PNP	Z1098-ND	141.52	131.04	122.31	E3S-CD61
	Diffused Photoelectric Sensor, 10-30VDC, Metal Body Vertical	6.56’ (2m)	NPN/PNP	Z1099-ND	151.50	140.28	130.93	E3S-CD62
	Retroflective Photoelectric Sensor, 10-30VDC, Metal Body, Horz.	9.84’ (3m)	NPN/PNP	Z1100-ND	141.52	131.04	122.31	E3S-CR11
	Retroflective Photoelectric Sensor, 10-30VDC, Metal Body, Vertical	9.84’ (3m)	NPN/PNP	Z1101-ND	141.52	131.04	122.31	E3S-CR61
	Through Beam Photoelectric Sensor, 10-30VDC, Metal Body, Horz.	98.43’ (30m)	NPN/PNP	Z1102-ND	171.46	158.76	148.18	E3S-CT11
	Through Beam Photoelectric Sensor, 10-30VDC, Metal Body, Vertical	98.43’ (30m)	NPN/PNP	Z1103-ND	171.46	158.76	148.18	E3S-CT61
3	Compact Long Distance, Photoelectric Sensor, IR Through Beam	49.21’ (15m)	NPN	Z1106-ND	92.53	85.68	79.97	E3Z-T61
	Compact Long Distance, Photoelectric Sensor, IR Retroflective	13.12’ (4m)		Z1107-ND	73.94	68.46	63.90	E3Z-R61
	Compact Long Distance, Photoelectric Sensor, IR Diffused	3.94” (100mm)	NPN	Z1108-ND	64.86	60.06	56.06	E3Z-D61
	Compact Long Distance, Photoelectric Sensor, IR Diffused	3.28’ (1m)	NPN	Z1109-ND	69.40	64.26	59.98	E3Z-D62

Capacitive Proximity Sensors

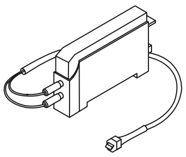


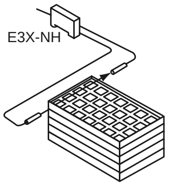


Capacitive sensors operate similar to Inductive sensors except that a plate is used instead of a coil in the sensors head. This plate develops a capacitive field between the sensor and ground. When an object comes within sensing distance of the sensor, the capacitive field changes which gets detected by the sensor and turns on the output. Perfect for detecting both metallic and non-metallic objects such as glass, wood, water, oils and plastics. Also works well for detecting liquids and solids in containers.

Sensing Distance	Description	Output Type	Digi-Key Part No.	Price Each	Omron Part No.
3-25mm	Amplified Sensor, Adjustable, NO, 10-40VDC	NPN	Z1071-ND	110.68	E2K-C25ME1
3-25mm	Amplified Sensor, Adjustable, NC, 10-40VDC	NPN	Z1072-ND	110.68	E2K-C25ME2
3-25mm	Amplified Sensor, Adjustable, NC, 90-250VAC	SCR	Z1073-ND	110.68	E2K-C25MY1
3-25mm	Amplified Sensor, Adjustable, NC, 90-250VAC	SCR	Z1074-ND	110.68	E2K-C25MY2

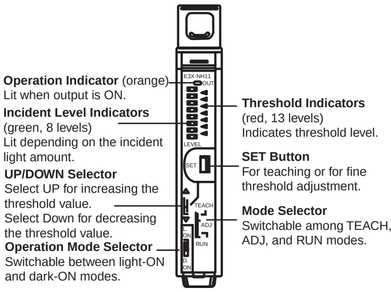
Optical Fiber Optic Amplifiers





Omron's E3X-NH series of High performance Fiber Optic Amplifiers contain true 16 Bit processor which allows a very fine tuning sensitivity feature. Three separate teach modes for hassle free setup for different applications. Ideal for detecting very small objects or fine wires.

The E3X series feature high performance, fast switching response times. Set-mode blinking output aids in alignment. Sensing distances vary with the type of fiber used.



Operation Indicator (orange)
Lit when output is ON.

Incident Level Indicators
(green, 8 levels)
Lit depending on the incident light amount.

UP/DOWN Selector
Select UP for increasing the threshold value.
Select Down for decreasing the threshold value.

Operation Mode Selector
Switchable between light-ON and dark-ON modes.

Threshold Indicators
(red, 13 levels)
Indicates threshold level.

SET Button
For teaching or for fine threshold adjustment.

Mode Selector
Switchable among TEACH, ADJ, and RUN modes.

Description	Output Type	Features	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
High Precision General Purpose Fiber Optic Amplifier, 12-24VDC	NPN	None	Z1110-ND	155.13	143.64	134.07	E3X-NH11
High Precision General Purpose Fiber Optic Amplifier, 12-24VDC	PNP	None	Z1111-ND	155.13	143.64	134.07	E3X-NH41
High Precision GP Fiber Optic Amplifier w/timer 12-24VDC	NPN	W/Delay Off	Z1112-ND	155.13	143.64	134.07	E3X-NH21
High Precision GP Fiber Optic Amplifier w/timer 12-24VDC	PNP	W/Delay Off	Z1113-ND	155.13	143.64	134.07	E3X-NH51
High Performance GP Fiber Optic Amplifier 10-30VDC	NPN	None	Z1114-ND	104.33	96.60	90.16	E3X-A11
High Performance GP Fiber Optic Amplifier 10-30VDC	PNP	None	Z1115-ND	116.12	107.52	100.36	E3X-A41
High Performance GP Fiber Optic Amplifier w/timer 10-30VDC	NPN	W/Delay Off	Z1116-ND	104.33	96.60	90.16	E3X-A21
High Performance GP Fiber Optic Amplifier w/timer 10-30VDC	PNP	W/Delay Off	Z1117-ND	116.12	107.52	100.36	E3X-A51

Fiber Cables for E3X Amplifiers

Premade fiber optic cables that enable very confined mounting spaces and very fast target detection.
Use **Through-beam** for long distance detection where your transmit and receive cable are separated.
Use **Concentric Beam** to detect depth or very targets where eliminating background objects is required. Periscope sensing heads (Side Beam) save space in right angle detecting. Most fiber cables offer IP67 protection and temperature ratings of -40°C to +70°C.

Fig. 1

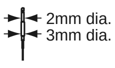


Fig. 2

Fig. 3

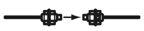


Fig. 4

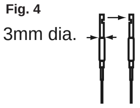


Fig.	Description	Distance Max.	Terminal Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1	Diffuse Side Beam Fiber Optic Cable, 2mm dia.	.6" (1.5cm)	2m Cable	Z1118-ND	92.53	85.68	79.97	E32-D24
	Diffuse Top Beam Fiber Optic Cable, Concentric Beam, 2mm dia.	.79" (2cm)	2m Cable	Z1119-ND	63.50	58.80	54.88	E32-D32
2	Diffuse Top Beam Fiber Optic Cable, Low Cost, M6 THD	.79" (2cm)	2m Cable	Z1120-ND	44.00	40.74	38.03	E32-DC200
	Diffuse Top Beam Fiber Optic Cable, Mini, M3 THD	.71" (1.8cm)	2m Cable	Z1121-ND	53.52	49.56	46.26	E32-DC200E
	Diffuse Top Beam Fiber Optic Cable, Concentric Beam, M6 THD	3" (7.5cm)	2m Cable	Z1122-ND	48.54	44.94	41.95	E32-CC200
	Cable Fiber Optic, Top Beam, High Temp, M6 THD	1.8" (4.5cm)	2m Cable	Z1187-ND	194.14	179.76	167.78	E32-D61
3	Diffuse Top Beam Fiber Optic Cable, Through Beam, M3 THD	4.72" (12cm)	2m Cable	Z1123-ND	44.00	40.74	38.03	E32-TC200A
	Through Beam Fiber Optic Cable, High Temp, M4 THD	5.9" (15cm)	2m Cable	Z1125-ND	224.08	207.48	193.65	E32-T61
	Cable Fiber Optic, Through Beam, Low Cost, M4 THD	7.88" (20cm)	2m Cable	Z1188-ND	44.00	40.74	38.03	E32-TC200
4	Through Beam Fiber Optic Cable, Side Beam, 3mm dia.	4.72" (12cm)	2m Cable	Z1124-ND	73.31	67.88	63.35	E32-T41L

NEW! QUANTUM RESEARCH GROUP Sensors

QProx™ / QTouch™ Charge-Transfer ("QT") General Description: These are self-contained digital capacitance ICs capable of detecting proximity, touch, and fluid level. With appropriate electrodes they can sense through sealed surfaces made of glass, plastic, stone, ceramic, and wood, up to thicknesses of several inches. This capability coupled with an ability to continuously calibrate leads to new product concepts. They are designed specifically for control panels in home appliances, PC peripherals, machinery, security systems, lighting controls, or anywhere a mechanical switch or button may be found. Versions also available for fluid sensing.

Features: • Projects a 'touch button' through sealed panels • Use with simple foil or PCB electrodes • 100% Autocal for life - no adjustments required • Only one external part, an inexpensive capacitor • Less expensive than many mechanical switches.

QT110: QTouch sensor IC having 10s and 60s recalibration timeouts, 3 gain settings, normal, pulse, or toggle mode outputs, a Heartbeat™ health indication, and a piezo driver for audible feedback of touch. 20µA typical current. Evaluation board: E110.

QT111: A QT110 variant having recalibration times of 5 minutes and infinity. Evaluation board: E111.

QT112: A QT110 variant having a faster response time of 49ms worst case, 25ms typical. No piezo drive. Evaluation board: E112.

QT113: A highly popular QT110 variant having extremely high variable sensitivity and faster response time. No piezo drive. Evaluation board: E113.

QT114: This QuickLevel™ IC is designed to detect fluid level. It can even sense fluid level from the exterior of a vessel. Has a 'slosh filter' for moving fluids. Evaluation board: E114.

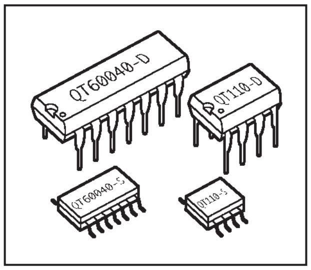
QT115: A highly popular QT110 variant with variable sensitivity and daisy-chain capability, allowing multiple electrodes to be used next to each other to create multi-key touch panels. No piezo drive. Evaluation board: E115.

QT118H: This QT110 variant has the basic features of the QT110 but also has the gain capabilities of the popular QT113, at only 20µA of current drain. Active-high output, with piezo drive. Evaluation board: E118H or E110 + QT118H-D chip.

QT310: A 2nd-generation QProx chip with user-definable setups loadable from a PC via the QTM300CA adapter. Does everything the QT113, QT114, and QT115 can do plus many further advanced features like learn-by-example calibration, variable threshold and hysteresis, fully configurable outputs, and user-defined recalibration timeouts and response time. Especially useful for difficult fluid point-level sensing and prox applications. Evaluation board: E3B.

QT320: A 2-channel, 2nd-generation QTouch chip with user-definable setups loadable from a PC via the QTM300CA adapter. Does everything the QT113 can do but in two independent channels plus further advanced features like variable threshold and hysteresis, fully configurable outputs, and user-defined recalibration timeouts and response times. Evaluation board: E3B

QT60040 4-Key QMatrix™ IC: A 14-pin, 4-key matrix IC requiring only 1 inexpensive capacitor. Has 4 logic outputs. Works through almost any dielectric, like glass, plastic, stone, ceramic, and wood up to 6mm thick. Evaluation board: E604. See Digi-Key website for higher key-count QMatrix™ devices (16, 32, 48, 64 keys), and the E6S3 and E6325 evaluation board series below.



Available Options

TA	SOIC	8-Pin Dip
0°C to +70°C -40°C to +85°C	QT110-S QT110-IS	QT110-D —
0°C to +70°C -40°C to +85°C	QT114-S QT114-IS	QT114-D —
0°C to +70°C -40°C to +85°C	QT118H-S QT118H-IS	QT118H-D —
0°C to +70°C -40°C to +85°C	QT310-S QT310-IS	QT310-D —
0°C to +70°C -40°C to +85°C	QT320-S QT320-IS	QT320-D —
0°C to +70°C -40°C to +85°C	QT60040-S QT60040-IS	QT60040-D —

Description	Supply Voltage Min.	Supply Voltage Max.	Supply Current µA Type	Package	Digi-Key Part No.	Price Each 1	Price Each 50	Price Each 100	Quantum Part No.
QT110 QProx™ 8-Pin IC	2.45	5.25	20	8-Dip	427-1000-ND	2.53	2.28	1.97	QT110-D
QT110 QProx™ 8-Pin IC				8-SOIC	427-1001-ND	2.53	2.28	1.97	QT110-S
QT110 QProx™ 8-Pin IC				8-SOIC	427-1002-ND	3.29	2.97	2.56	QT110-IS
QT111 QProx™ 8-Pin IC	2.45	5.25	60	8-Dip	427-1003-ND	2.53	2.28	1.97	QT111-D
QT111 QProx™ 8-Pin IC				8-SOIC	427-1004-ND	2.53	2.28	1.97	QT111-S
QT111 QProx™ 8-Pin IC				8-SOIC	427-1005-ND	3.29	2.97	2.56	QT111-IS
QT112 QProx™ 8-Pin IC	2.45	5.25	60	8-Dip	427-1006-ND	2.53	2.28	1.97	QT112-D
QT112 QProx™ 8-Pin IC				8-SOIC	427-1007-ND	2.53	2.28	1.97	QT112-S
QT112 QProx™ 8-Pin IC				8-SOIC	427-1008-ND	3.29	2.97	2.56	QT112-IS
QT113 QProx™ 8-Pin IC	2.45	5.25	700	8-Dip	427-1009-ND	2.53	2.28	1.97	QT113-D
QT113 QProx™ 8-Pin IC				8-SOIC	427-1010-ND	2.53	2.28	1.97	QT113-S
QT113 QProx™ 8-Pin IC				8-SOIC	427-1011-ND	3.29	2.97	2.56	QT113-IS
QT113H QProx™ 8-Pin IC				8-Dip	427-1012-ND	2.53	2.28	1.97	QT113H-D
QT113H QProx™ 8-Pin IC				8-SOIC	427-1013-ND	2.53	2.28	1.97	QT113H-S
QT113H QProx™ 8-Pin IC				8-SOIC	427-1014-ND	3.29	2.97	2.56	QT113H-IS
QT114 QLevel™ 8-Pin IC	2.50	5.25	20	8-Dip	427-1015-ND	2.53	2.28	1.97	QT114-D
QT114 QLevel™ 8-Pin IC				8-SOIC	427-1016-ND	2.53	2.28	1.97	QT114-S
QT114 QLevel™ 8-Pin IC				8-SOIC	427-1017-ND	3.29	2.97	2.56	QT114-IS
QT115 QProx™ 8-Pin IC	2.45	5.25	700	8-Dip	427-1018-ND	2.53	2.28	1.97	QT115-D
QT115 QProx™ 8-Pin IC				8-SOIC	427-1019-ND	2.53	2.28	1.97	QT115-S
QT115 QProx™ 8-Pin IC				8-SOIC	427-1020-ND	3.29	2.97	2.56	QT115-IS
QT118H QProx™ 8-Pin IC	2.45	5.25	20	8-Dip	427-1021-ND	2.53	2.28	1.97	QT118H-D
QT118H QProx™ 8-Pin IC				8-SOIC	427-1022-ND	3.29	2.97	2.56	QT118H-IS
QT310 QProx™ 8-Pin IC	1.80	5.25	60-300	8-Dip	427-1026-ND	2.91	2.62	2.27	QT310-D
QT310 QProx™ 8-Pin IC				8-SOIC	427-1027-ND	2.91	2.62	2.27	QT310-S
QT310 QProx™ 8-Pin IC				8-SOIC	427-1028-ND	3.78	3.41	2.96	QT310-IS
QT320 2-Key QProx™ 8-Pin IC	1.80	5.25	60-300	8-Dip	427-1029-ND	3.35	3.02	2.61	QT320-D
QT320 2-Key QProx™ 8-Pin IC				8-SOIC	427-1030-ND	3.35	3.02	2.61	QT320-S
QT320 2-Key QProx™ 8-Pin IC				8-SOIC	427-1031-ND	4.35	3.92	3.40	QT320-IS
QT60040 4-Key QMatrix™ IC	2.75	5.25	650	14-Dip	427-1032-ND	4.81	4.33	3.74	QT60040-D
QT60040 4-Key QMatrix™ IC				14-SOIC	427-1033-ND	4.81	4.33	3.74	QT60040-S
QT60040 4-Key QMatrix™ IC				14-SOIC	427-1034-ND	5.77	5.19	4.86	QT60040-IS

NEW! QProx™ Evaluation Boards and Modules

Note: All evaluation boards and modules are fully assembled and include all necessary chips, cables, and documentation. All evaluation boards run on batteries, included as noted.

QTM1001AS/QTM1001AHS Sensor Module: An advanced ready-to-use sensing module designed for applications such as fluid level and prox sensing in industrial equipment. This "smart sensor" module employs the superior QT method, and incorporates a unique 'cloning' feature that permits user-defined setups to be loaded in from an E2SR board (QTM1001CA also required). Has both analog and switched outputs. QTM1001AHS also has a Heartbeat™ output signal for critical applications.

QTM1001CA Cloning Adapter: An interface adapter which allows the module to have its option setups programmed from either an E2SR or E97S board. This device has ATE-style spring 'pogo pins' which mate to the QTM1001AS for rapid, effortless configuration.

QTM300CA Cloning Adapter: Designed to load setups to the QT310 and QT320 sensor ICs from a PC to modify operating modes and parameters in these chips. The supplied cable allows it to plug directly into an E3B evaluation board. It also works in a stand-alone mode without a PC, and can also clone in-circuit. 8 – 15VDC.

QTM2000 Sensor Module: A ready-to-use 24-pin DIP module employing the feature-rich QT9701B2 IC and related circuitry. Uses an E297S board to load in setups from a PC. The QTM2000 is a complete industrial-grade solution that can be embedded onto a PCB. Includes analog and switched outputs, and SPI and UART serial ports for digital signal data. 5VDC.

E297S Programmer Board: This board is used to program the QTM2000's behavior from a PC using included QTWinView software. The E297S also operates the QTM2000 as a fully functional sensor for testing purposes. The board has a ZIF socket for insertion of the QTM2000. 8 – 15VDC.

E2SR R&D Sensor: Designed specifically for development and experimentation, it incorporates a large variety of user-definable modes and processing options. The unit also acts as a programming device for QTM1001A modules when used with a QTM1001CA cloning adapter. Uses QTWinView PC software, included. 8 – 15VDC.

E97S Evaluation Board: Designed for rapid evaluation and prototyping of the QT9701B2 IC in capacitance detection systems; includes all circuitry required for a fully functioning sensor system. Has analog and switched outputs, and SPI and RS232 interfaces for digital signal data; QTWinView PC software included. 8 – 15VDC.

E604 Evaluation Board: Designed for rapid evaluation of the QT60040 4-key QMatrix™ IC. Includes 4 piano-style keys with corresponding LEDs to show touch. Battery included.

E616 16-Key Evaluation Board: Designed for development of QT60161 based 16-key 'glass touch' scanned matrix circuits. Includes everything required to make a fully functioning through-panel matrix control, including an actual 4x4 matrix and plastic panel. Has an RS232 interface for connection to a PC for operation setup and signal viewing; uses QmBtn PC software, included. 8 – 15VDC.

E6S3 32-Key Evaluation Board: Designed for development of QT60320-based 32-key 'glass touch' scanned matrix circuits. Includes everything required to make a fully functioning through-panel matrix control including an actual 4x8 flex matrix and plastic panel. Has an RS232 interface for connection to a PC for operation setup and signal viewing; uses QmBtn PC software, included. For actual QT60320 chips please visit the Digi-Key website. 8 – 15VDC.

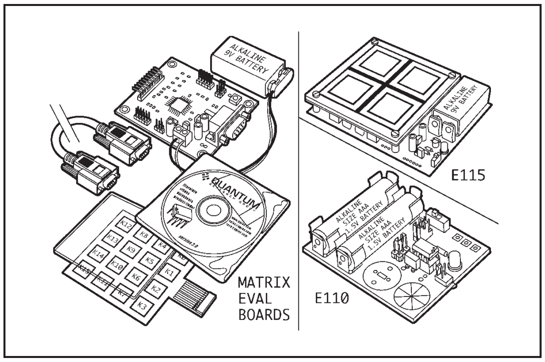
E6325 / E6485 / E6645 QMatrix™ Evaluation Boards: Designed for development of QT60325 / QT60485 / QT60645 based 32, 48, and 64-key 'glass touch' scanned matrix circuits. Includes everything required to make a fully functioning through-panel matrix control including an actual flex matrix and plastic panel. These chips use SPI interfaces but a converter chip on the evaluation board converts this to RS232; RS232 allows connection to a PC for operation setup and signal viewing. Uses QmBtn PC software, included. 8 – 15VDC. For actual chips please visit the Digi-Key website.

E110, E111, E112, E113 Evaluation Boards: These boards work with Quantum's QT110, QT111, QT112, and QT113 QTouch ICs respectively. Jumpers allow changing of all options for each chip type. Batteries included.

E114 Evaluation Board: The E114 demonstrates Quantum's QT114 fluid level sensor IC. The IC requires only a single external capacitor (plus the probe of course) to operate. The E114 includes the probe and indicator LEDs. Batteries included.

E115 Evaluation Board: Designed for rapid evaluation of the QT115H 'sync chip' IC. Includes four keys with backlighting to indicate touch on each key. A dramatic demonstration of the capabilities of QProx technology. Battery included.

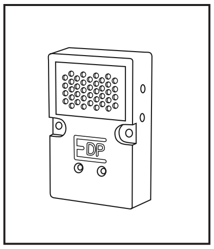
E3B Evaluation/Development Board: For evaluation and development with Quantum's QT310 and QT320 ICs. Either can be inserted into the 8-pin DIP socket (one of each included). Both parts can be cloned with user-defined setup information from a QTM300CA board using a PC via QT3View software. Batteries and software included.



Description	Digi-Key Part No.	Price Each	Quantum Part No.
QTM1001AS Sealed Sensor Module, Clonable	427-1035-ND	195.00	QTM1001AS
QTM1001AHS Sealed Module, Clonable, with Heartbeat™	427-1036-ND	235.00	QTM1001AHS
QTM1001CA Cloning Adapter for QTM1001 Modules	427-1037-ND	49.00	QTM1001CA
QTM300CA Cloning Adapter for QT300, QT310, and QT320 ICs, with Software	427-1038-ND	49.00	QTM300CA
QTM2000 High-Performance QProx 24-pin DIP Module	427-1039-ND	89.00	QTM2000
E297S Programmer for QTM2000 Modules, with Software	427-1040-ND	190.00	E297S
E2SR QProx Development Board, with Software	427-1041-ND	295.00	E2SR
E97S Evaluation Board, with Software	427-1042-ND	215.00	E97S
E604 Evaluation Board for QT60040 4-Key QMatrix IC	427-1043-ND	30.00	E604
E616 Evaluation Board for QT60161 16-Key QMatrix IC, with Software	427-1044-ND	180.00	E616
E6S3 Evaluation Board for QT60320 32-Key QMatrix IC, with Software	427-1045-ND	185.00	E6S3
E6325 Evaluation Board for QT60325 32-Key QMatrix IC, with Software	427-1046-ND	185.00	E6325
E6485 Evaluation Board for QT60485 48-Key QMatrix IC, with Software	427-1047-ND	190.00	E6485
E6645 Evaluation Board for QT60645 64-Key QMatrix IC, with Software	427-1048-ND	195.00	E6645
E110 Evaluation Board for QT110 QTouch™ IC	427-1049-ND	15.00	E110
E111 Evaluation Board for QT111 QTouch™ IC	427-1050-ND	15.00	E111
E112 Evaluation Board for QT112 QTouch™ IC	427-1051-ND	15.00	E112
E113 Evaluation Board for QT113 QTouch™ IC	427-1052-ND	15.00	E113
E114 Evaluation Board for QT114 QLevel™ IC	427-1053-ND	20.00	E114
E115 4-Key Evaluation Board for QT115, with Backlighting	427-1054-ND	75.00	E115
E3B Evaluation Board for QT310 and QT320 QProx™ ICs	427-1056-ND	20.00	E3B

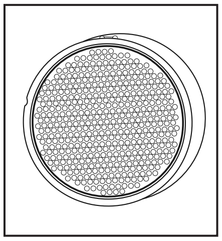
SonaSwitch® Ultrasonic, Intelligent Proximity Sensors

Series 1650A & 1650S



Outputs:
- **Model 1650A:** One 0-5 VDC or 0-10 VDC 8-bit analog output with fully independent zero and span adjustments over entire operating range.
- **Model 1650S:** Two adjustable Form C relay outputs (NO/NC).
- **Environment:** Indoor or protected outdoor environments; Highly insensitive to temperature, humidity and pressure changes; Withstands high audio and EMI/RFI levels; Must be protected from excessive moisture in outdoor applications.
- **Size:** 5.72cm W x 8.89cm H x 2.29cm D (2.25" W x 3.50" H x 0.90" D).
- **Mounting:** Two No. 10 (5/32") machine screws mounted flat on 1.85" centers; Supplied with a 6' cable.
- **Applications:** Vehicle Detection, Anti-Collision Sensor, Automatic Door Opening, Absence/Presence Sorting, Loading Dock Proximity Sensor, People Detection, Distance Measurement, Level Detection and Measurement, and Loop Control.

Series Mini-A & Mini-S

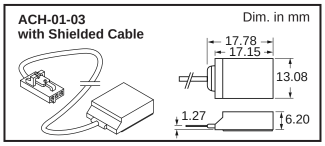


Outputs:
- **Model Mini-A:** One 0-5 VDC or 0-10 VDC 10-bit analog output with fully independent zero and span adjustments over entire operating range.
- **Model Mini-S:** Two adjustable NPN open collector outputs; transistors are continuously energized during detection period.

Output Response Time:
- **Model Mini-S:** Three consecutive target hits before turn on; three consecutive misses before turn off.
- **Model Mini-A:** 0-5 VDC or 0-10VDC analog output is filtered to the approximate formula: V out = 0.9 (Vnew value) + 0.1 (Vpast avg. value).
- **Operating Temperature:** Operating -40 to 85° C (-40 to 185° F).
- **Size:** 1.700" overall diameter; 0.950" depth; 1.525" transducer face diameter.
- **Mounting:** Mount in 1.575" diameter hole; use RTV silicone or edge clips to secure in place.
- **Applications:** Vehicle Detection, Anti-Collision Sensor, Automatic Door Opening, Absence/Presence Sorting, Loading Dock Proximity Sensor, People Detection, Distance Measurement, Level Detection and Measurement, and Loop Control.

Range	Beam Angle	Power Requirements	Output Type	Digi-Key Part No.	Pricing 1	10	25	50	EDP Part No.
6" to 10' adjustable, ±0.1% accuracy	15 degree nominal	12-30 VDC or 12-24 VAC; 0.15 amps maximum current; 0.08 amps average current.	0-5 or 0-10 VDC 8-bit Analog	387-1002-ND	233.95	226.93	222.25	210.56	1650A
6" to 10' adjustable, ±0.1% accuracy	15 degree nominal	12-30 VDC or 12-24 VAC; 0.15 amps maximum current; 0.08 amps average current.	2 Form C Relays NO/NC	387-1003-ND	217.22	210.70	206.35	195.90	1650S
6" to 10' adjustable, ±0.1% accuracy	15 degree nominal	8-16 VDC: 30 ma maximum current	0-5 or 0-10 VDC 10-bit Analog	387-1000-ND	69.00	66.93	65.55	62.10	MINI-A
6" to 10' adjustable, ±0.1% accuracy	15 degree nominal	8-16 VDC: 30 ma maximum current	2 NPN open collector outputs	387-1001-ND	65.00	63.05	61.75	58.50	MINI-S

Accelerometer

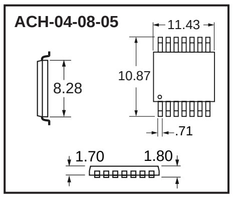


The ACH-01 Accelerometer is a robust, general purpose, linear single axis accelerometer featuring buffered electronic output. **Specifications:** • **Sensitivity:** 10mV/g • **Lower Frequency Limit (-3dB):** 2Hz • **Upper Frequency Limit (+3dB):** 20kHz • **Dynamic Range:** ±150g • **Linearity:** 0.1% • **Resonant Frequency:** 35kHz • **Operating Temp.:** -40°C to +85°C • **Max. Shock Level:** 1000g

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
ACH-01-03 Sensor Accelerometer with 40" Single Coax Cable and Female Connector	MSP1001-ND	19.95	18.00	17.00	1-1001220-0
ACH-01-04 Sensor Accelerometer with Wires	MSP1002-ND	19.95	18.00	17.00	1-1001497-0

3-Axis Accelerometer/Shock Sensor

Dim. in mm



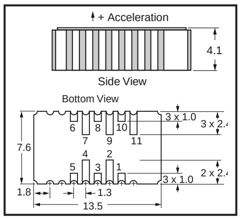
The ACH-04-08-05 accelerometer/shock sensor contains three piezoelectric sensing elements oriented to measure acceleration in three orthogonal, linear axes. "Internal JFET's provide for a low impedance, buffered output with a wide variety of possible application specific signal conditioning circuitry. It can be used in a wide range of applications including motional measurement and control systems, speaker feedback systems, vibration switches, shipment monitor and material handling systems, security systems, computer input/output devices and data loggers."

Specifications: • **Sensitivity:** 1.8mV/g Typ. • **Frequency Limit (±3dB):** .35Hz to 5kHz • **Dynamic Range:** ±250g • **Linearity:** 0.1% • **Resonant Frequency:** 9.2kHz • **Operating Temperature:** -40°C to +85°C • **Max. Shock Level:** 1000g

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
ACH-04-08-05 — Surface Mount 3-Axis Sensor Accelerometer	MSP1004-ND	25.00	23.00	21.25	0-1003800-5
ACH-04-08-05 PCB — Surface Mount 3-Axis Sensor Accelerometer with PCB	MSP1005-ND	50.00	45.00	35.00	0-1005685-1

2-Chip Accelerometer

Dim. in mm



The Model 3255 is a two-chip accelerometer designed for low cost surface mount applications. The package can be mounted in one of two orientations, allowing the measurement axis to be either parallel or perpendicular to the mounting surface without the use of costly brackets. It consists of a micro machined silicon mass suspended by multiple beams from a silicon frame. Piezoresistors located in the beams change their resistance as the motion of the suspended mass changes the strain in the beams. Silicon caps on the top and bottom of the device are added to provide over-range stops. This design provides for a very low profile, high shock resistance, durability and built-in damping over a wide usable bandwidth. Each sensor is individually serialized.

Features: • Surface Mount Pkg. • ±0.5% Non-linearity Typ. • Self Test Function • DC Response • Built-in Damping • Built-in Over-range Stops

Acceleration Range	Sensitivity Typ.†	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
±50G	40.0 mV/g	MSP6890-ND	105.00	99.00	65.00	3255-050
±100G	20.0 mV/g	MSP6891-ND	105.00	99.00	65.00	3255-100

† The output voltage increases from the Zero Acceleration Output for positive acceleration and decreases for negative acceleration. Best Fit Straight Line.

Amplifier Box

For use with ACH-01-03 and ACH-01-04

Characteristics:

• **Gain:** 10X • **Power Supply:** 9V Battery • **Supply Current:** 4.0mA • **Input Interface:** FET for ACH-01 • **Output Impedance:** 100Ω • **Output Connector:** BNC

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
IB-ACH-01 — Amplifier Box	MSP1003-ND	100.00	85.50	70.00	0-1003058-0

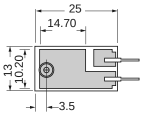
LDT Vibration Sensor

Dim. in mm

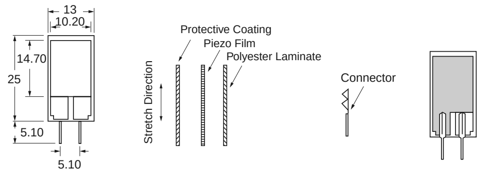
Typically, a 0.005" (125µm) polyester layer is laminated to a 28µm piezo film element. When used in a "bending" mode, laminated film elements develop much higher voltage output when flexed than non-laminated elements. The piezo film is off the neutral axis in the laminate, and is strained more when flexed.

LDTM

Also available with a mass (M) which provides higher output (mv/g) for higher sensitivity applications.

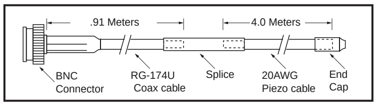


LDT0-028K
High
Sensitivity



Description	Cap (nF)	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
LDT0-028K, with Solder Tabs	.500	MSP1006-ND	.75	.73	.70	1002794-0
LDTM-028K, with Mass and Solder Tabs	.420	MSP1007-ND	1.00	.85	.75	0-1005447-1

Piezo Polymer Coax Cable Assembly



4 meters of piezo cable plus splice and BNC connector

Description	Digi-Key Part No.	Price Each 1	10	100	MSI Part No.
Piezo Polymer Coaxial Cable Assembly	MSP1009-ND	80.00	68.40	56.00	0-1005707-1

Basic Design Kit

This kit demonstrates the use of MSI piezo film sensors as microphones, speakers, switches and acoustic pickups. All components and film samples in the kit can be used for experimentation. Kit includes seven sensor elements, one piezo cable, one PCB for ACH-04-08, application/instruction specs, and technical manual.

Description	Digi-Key Part No.	Price Each	MSI Part No.
Basic Design Kit	MSP1010-ND	135.00	0-1004308-0

Sensors – Float Type Level Switches

LS-3 Series: • Small size engineered plastics • High reliability • Compact Size • Ideal for shallow tanks or restricted spaces. **Part No. 376-1010-ND (46999)**: For external mounting on tanks too small to accommodate internally mounted switches. **Part No. 376-1011-ND (76707):** For detecting levels as low as 5/8" tank bottom. Use in water, gasoline, some oils and chemicals

LS-7 Series: • Small size engineered plastics • Compact side mounts • Ideal for high volume use in small tanks and vessels • Engineered plastics construction offers broad compatibility in water, oils and chemicals

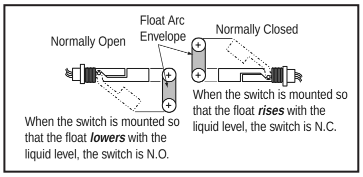
LS-1700, LS-1750, LS-1755 Series: • Small size alloys • Rugged durability with broad heat and pressure capabilities, are hallmarks of these compact switches • Ideal for shallow tanks or restricted spaces

LS-77700 Series: • Bent stem switches • Provide greatest buoyancy of any side mount version • These units perform in liquids with specific gravities as low as .45; switches protrude into tank less than 3 inches

LS-1800, LS-1900 Series: • Large size alloys • A step above our plastic units for pressure capabilities • Excellent stability for general use in oils and water

LS-74780, LS-1900TFE Series: • Large size engineered plastics • For aggressive or ultra-pure liquids • The LS-74780 series is particularly well suited for rough service. Ideal for use in chemical and plating applications • The LS-1900TFE series resists build-up of foreign material or sticky media. Float travel remains uninhibited in viscous or corrosive liquids

LS-1850, LS-1950 Series: • Large size alloys • All stainless steel switches deliver highest pressure/temp. performance • Materials of construction comply with FDA food contact regulations • The LS-1850 series is ultra-light. For use in liquids with specific gravities as low as 0.40 to 0.70. Excellent in a wide range of chemical applications • The LS-1950 Series is exceptionally accurate and rugged for higher temperatures and in pressurized or corrosive liquids. For oils, water and chemicals.



When the switch is mounted so that the float *lowers* with the liquid level, the switch is N.O.

When the switch is mounted so that the float *rises* with the liquid level, the switch is N.C.

LS-800-5 Series: • Large size alloys • Bottle type level switches are ideal for large or small tanks or where access to the inside is impractical or impossible • These units mount completely outside of the tank, at the level actuation point

LS-2050, LS-52100 Series: • Large size alloys • These side mounting units solve the problem of point level sensing in tanks with inaccessible tops or bottoms, or at intermediate locations in larger tanks • Operation is positive and dependable • The float pivots with changing liquid level, displacing a shuttle with magnetically actuates a hermetically sealed switch within the unit • Installation is through the tank side at the detection point

TH-800, LS-270 Series: • Specialty Switches • Ideal for use in oils and water • The TH-800 series temperature/level switch in a single unit. Intermediate in size; single-setting temperature sensor is in bottom of stem • The LS-270 series bracket mounting slosh shield. Small, lightweight, and extremely stable in nonstatic, highly contaminated liquids. Slosh Shielding minimizes effects of turbulence and helps prevent interference by foreign material.

LS-10 Series: • Slim profile for interstitial liquid sensing • Accurately detects the presence of liquid in fiberglass double-wall tanks, containment sumps and double-wall pipes • Dry contact switching ensure dependability throughout its long service life • Reusable sensor easily fits small, interstitial spaces and senses liquid hydrocarbons or water • Unaffected by hydrocarbon vapor, thereby reducing the risk of false alarms • Round design makes it easy to remove, clean and reinstall after an alarm condition is triggered, or for maintenance

Fig. 1

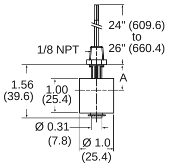


Fig. 2

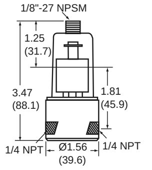


Fig. 3

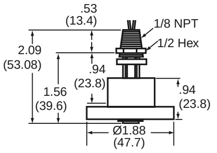


Fig. 4 Internal Mounting

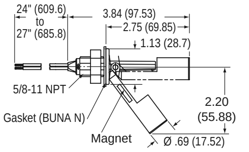


Fig. 5 External Mounting

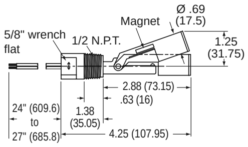


Fig. 6 External Mounting

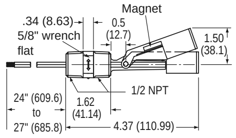


Fig. 7 External Mounting

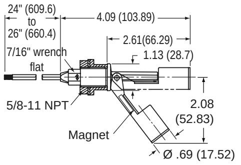


Fig. 8 External Mounting

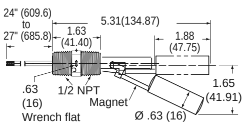


Fig. 9

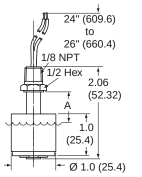


Fig. 10

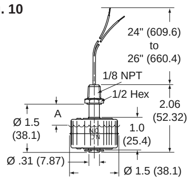


Fig. 11

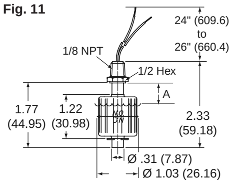


Fig. 12

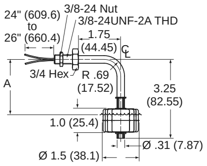


Fig. 13

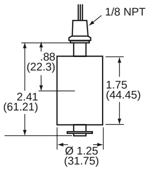


Fig. 14

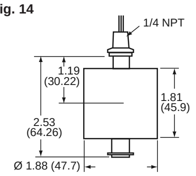


Fig. 15

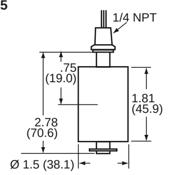


Fig. 16

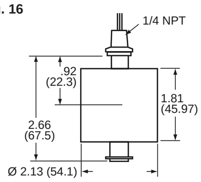


Fig. 17

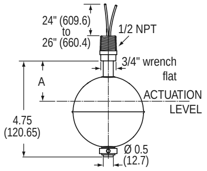


Fig. 18

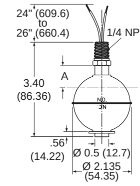


Fig. 19

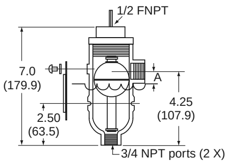


Fig. 20

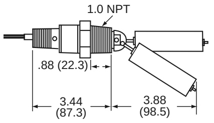


Fig. 21

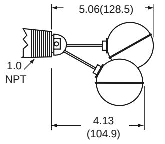


Fig. 22

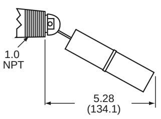


Fig. 23

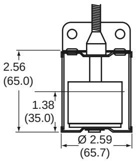


Fig. 24

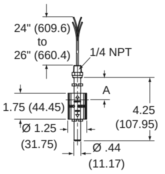


Fig. 25

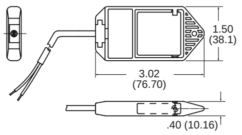


Fig.	Series	Switch Rating	Switch Type	Material Stem & Mounting/Float	Min. Liquid Sp. Gr.	Dim. A - Switch Act. N.O./N.C.- Inch (mm)	Operating Temperature	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
1	LS-3	20VA, 120-240VAC	SPST	Polysulfone	.75	.750 (19.05) / —	-40°F to +225°F (-40°C to +107°C)	376-1007-ND	23.95	19.14	16.83	42295
1				Polypropylene/ Polypropylene (Hollow)	.60	.813 (20.65) / —	-40°F to +225°F (-40°C to +107°C)	376-1008-ND	23.95	19.14	16.83	142505
1				Polypropylene/ Polypropylene (Solid)	.90	.563 (14.30) / —	-40°F to +150°F (-40°C to +66°C)	376-1009-ND	23.95	19.14	16.83	116826
2				Polysulfone	.75	—	-40°F to +120°F (-40°C to +48.9°C)	376-1010-ND	97.95	71.69	65.76	46999
3				Polysulfone/Buna N	—	—	-40°F to +180°F (-40°C to +82.2°C)	376-1011-ND	35.95	28.71	25.25	76707
4	LS-7	130VAC 20VA	SPST	Polypropylene (20% Glass)	.55	—	-40°F to +225°F (-40°C to +107.2°C)	376-1012-ND	25.95	20.74	18.24	164520
5				Polypropylene (20% Glass)	.55	—	-40°F to +225°F (-40°C to +107.2°C)	376-1013-ND	23.95	19.14	16.83	131100
5				Nylon (13% Glass)	.65	—	-40°F to +250°F (-40°C to +121.1°C)	376-1014-ND	23.95	19.14	16.83	140620
5				Versaplast®	.80	—	-40°F to +300°F (-40°C to +149°C)	376-1015-ND	26.95	21.54	18.94	177100
6				Polypropylene	.55	—	-40°F to +225°F (-40°C to +107.2°C)	376-1016-ND	23.95	19.14	16.83	160450
6				Nylon	.65	—	-40°F to +250°F (-40°C to +121.1°C)	376-1017-ND	23.95	19.14	16.83	160460
7				Polypropylene (20% Glass)	.55	—	-40°F to +225°F (-40°C to +107.2°C)	376-1018-ND	25.95	20.74	18.24	165800
8				316 Stainless Steel	.80	—	-40°F to +300°F (-40°C to +149°C)	376-1019-ND	153.95	112.66	103.34	164870
9	LS-1700	20VA, 120-240VAC	SPST	Brass/Buna N 316 Stainless Steel/Buna N	.45	.563 / .813 (14.30) /(20.65)	Water: to 180°F (82.2°C) Oil: -40°F to +230°F (-40°C to +110°C)	376-1020-ND 376-1021-ND	29.95 50.95	23.93 40.68	21.04 35.77	01701 01702
10	LS-1750	20VA, 120-240VAC	SPST	316 Stainless Steel	.70	.625 / .750 (15.88) / (19.05)	-40°F to +300°F (-40°C to +148.9°C) -40°F to +480°F (-40°C to +248.9°C)	376-1022-ND 376-1023-ND	57.95 77.95	46.26 62.21	40.68 54.70	01750 79990

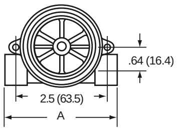
(Continued)

Sensors – Float Type Level Switches *(Cont.)*

Fig.	Series	Switch Rating	Switch Type	Material Stem & Mounting/Float	Min. Liquid Sp. Gr.	Dim. A - Switch Act. N.O./N.C.- Inch (mm)	Operating Temperature	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
11	LS-1755	20VA, 120-240VAC	SPST	316 Stainless Steel	.90	.578 (14.68) / .828 (21.03)	-40°F to +300°F (-40°C to +148.9°C)	376-1024-ND	58.95	47.06	41.38	01755
12	LS-77700	20VA, 120-240VAC	SPST	316 Stainless Steel	.70	2.00 (50.80)±.188 (4.78)	-40°F to +300°F (-40°C to +148.9°C)	376-1025-ND	83.95	66.99	58.91	117716
13	LS-1800	20VA, 120-240VAC 100VA, 120-240VAC 20VA, 120-240VAC	SPST	Brass/Buna N Brass/Buna N 316 Stainless Steel/Buna N	.75	—	Water: to 180°F (82.2°C) Oil: -40°F to +230°F (-40°C to +110°C)	376-1026-ND 376-1027-ND 376-1028-ND	34.95 42.95 55.95	27.92 34.30 44.66	24.55 30.16 39.27	01801 35651 01807
14	LS-1900	20VA, 120-240VAC 100VA, 120-240VAC 20VA, 120-240VAC	SPST	Brass/Buna N Brass/Buna N 316 Stainless Steel/Buna N	.55	—	Water: to 180°F (82.2°C) Oil: -40°F to +230°F (-40°C to +110°C)	376-1029-ND 376-1030-ND 376-1031-ND	41.95 49.95 60.95	33.50 39.88 48.65	29.46 35.07 42.78	01901 35676 01907
15	LS-74780	20VA, 120-240VAC	SPST	CPVC	.85	—	-40°F to +180°F (-40°C to +82.2°C)	376-1033-ND	53.95	43.07	37.87	74780
16	LS-1900TFE	20VA, 120-240VAC	SPDT	Teflon®	.80	—	-40°F to +300°F (-40°C to +148.9°C)	376-1032-ND	321.95	225.81	212.52	133299
17	LS-1850	20VA, 120-240VAC	SPST	316 Stainless Steel	.40	2.500 (63.50) / —	-40°F to +300°F (-40°C to +148.9°C)	376-1034-ND	259.95	182.33	171.60	113820
18	LS-1950	20VA, 120-240VAC 100VA, 120-240VAC 20VA, 120-240VAC	SPST	316 Stainless Steel	.80	1.094 (27.79) / —	-40°F to +300°F (-40°C to +148.9°C) -40°F to +300°F (-40°C to +148.9°C) -40°F to +480°F (-40°C to +248.9°C)	376-1035-ND 376-1036-ND 376-1037-ND	60.95 68.95 98.95	48.65 55.03 72.42	42.78 48.39 66.43	01950 26717 79999
19	LS-800-5	20VA, 120-240VAC	SPST	Brass/316 Stainless Steel 316 Stainless Steel	.75	.750 (19.05) / — .438 (11.13) / —	-40°F to +300°F (-40°C to +148.9°C)	376-1169-ND 376-1170-ND	168.95 558.95	123.63 392.00	113.40 368.94	172625 172635
20 21	LS-2050	20VA, 120-240VAC	SPDT	Brass/Buna N 316 Stainless Steel	.8	—	Water: to 180°F (82.2°C) Oil: -40°F to +250°F (-40°C to +121°C)	376-1038-ND 376-1039-ND	149.95 229.95	109.73 161.29	100.65 151.80	30288 30290
22	LS-52100	20VA, 120-240VAC 20VA, 120-240VAC 100VA,120-240VAC	SPDT SPDT SPST	316 Stainless Steel/304 Stainless Steel	.85	—	-40°F to +300°F (-40°C to +148.9°C)	376-1040-ND 376-1041-ND* 376-1042-ND	222.95 325.95 244.95	156.38 228.61 171.81	147.18 215.16 161.70	52100 121753 116971
23	LS-270	20VA, 120-240VAC 20VA, 120-240VAC 50VA, 120-240VAC 50VA, 120-240VAC	SPST	304 Stainless Steel/Buna N	.55	—	-40°F to +140°F (-40°C to +60°C)	376-1046-ND† 376-1047-ND‡ 376-1048-ND◊ 376-1049-ND§	90.95 90.95 98.95 98.95	66.57 66.57 72.42 72.42	61.07 61.07 66.43 66.43	43765 43760 43980 43982
24	TH-800	20VA, 120-240VAC	SPST	Brass/Buna N	.75	1.500 (38.10) / —	Water: to 180°F (82.2°C) Oil: -40°F to +230°F (-40°C to +110°C)	376-1050-ND 376-1051-ND	65.95 65.95	52.64 52.64	46.29 46.29	57143 57144
25	LS-10	10W, 50-120VDC	SPST	Valox® Housing/Polyethylene	—	—	-40°F to +176°F (-40°C to +80°C)	376-1052-ND	68.95	55.03	48.39	156000

* Explosion-Proof † N.C., open on +150F° ±10°F (83.3°C ±5.6°C) incr. ‡ N.C., open on +150F° ±10°F (83.3°C ±5.6°C) incr. ◊ N.O. § N.C.

Flow Sensors



Features: Operating Temperature: Brass: -20°F to 212°F (-29°C to 100°C), Polypropylene Body: -20°F to 180°F (-29°C to 82°C)

RFS Series - Flow Set Point Switching: Combines visual confirmation of flow with dynamic, electronic switch operation. Easy, adjustable switch point calibration: a local LED signals when set point is reached.

RFO Type - Flow Rate Monitoring: Output signal for RFO Types is an on/off pulse of the DC voltage supplied to the unit, it is compatible with all digital logic families. Frequency of the output pulse is proportional to the flow rate and ranges from approximately 25Hz at low flow to 225Hz at high flow.

RFI Type - Visual Indicators: A bright orange rotor turning with fluid flow. Simple, direct and reliable. Flow rate is estimated, or simply confirmed, by viewing the speed of the turning rotor. Either port may be used for incoming flow, and bayonet mounting lens is easily removed for quick clean out.

Series	Input Voltage	Flow Range GPM	Body Material	Port NPT	Dimension A Inch (mm)	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
RFS Type SPDT	24VDC	0.5 to 5.0	Polypropylene	1/4"	3.06 (77.7)	376-1079-ND	144.95	106.07	97.30	155425
	110VAC	0.5 to 5.0	Polypropylene	1/4"	3.06 (77.7)	376-1080-ND	164.95	120.70	110.72	155876
	24VDC	4.0 to 20.0	Polypropylene	1/2"	3.06 (77.7)	376-1081-ND	144.95	106.07	97.30	155485
	110VAC	4.0 to 20.0	Polypropylene	1/2"	3.06 (77.7)	376-1082-ND	164.95	120.70	110.72	155886
	24VDC	0.5 to 5.0	Brass	1/4"	3.01 (76.4)	376-1083-ND	189.95	133.24	125.40	156265
	110VAC	0.5 to 5.0	Brass	1/4"	3.01 (76.4)	376-1084-ND	209.95	147.27	138.60	156266
	24VDC	4.0 to 20.0	Brass	1/2"	3.01 (76.4)	376-1085-ND	189.95	133.24	125.40	156268
	110VAC	4.0 to 20.0	Brass	1/2"	3.01 (76.4)	376-1086-ND	209.95	147.27	138.60	156269
	24VDC	5.0 to 30.0	Brass	3/4"	3.94 (100)	376-1087-ND	194.95	136.75	128.70	180395
	110VAC	5.0 to 30.0	Brass	3/4"	3.94 (100)	376-1088-ND	214.95	150.77	141.90	180396
	24VDC	8.0 to 60.0	Brass	1"	3.94 (100)	376-1089-ND	199.95	140.25	132.00	181688
	115VAC	8.0 to 60.0	Brass	1"	3.94 (100)	376-1090-ND	219.95	154.28	145.20	181689
RFO Type	4.5-24VDC	0.5 to 5.0	Polypropylene	1/4"	3.06 (77.7)	376-1091-ND	79.95	63.80	56.10	155421
		4.0 to 20.0	Polypropylene	1/2"	3.06 (77.7)	376-1092-ND	79.95	63.80	56.10	155481
		0.5 to 5.0	Brass	1/4"	3.01 (76.4)	376-1093-ND	129.95	95.10	87.23	156261
		4.0 to 20.0	Brass	1/2"	3.01 (76.4)	376-1094-ND	129.95	95.10	87.23	156262
		5.0 to 30.0	Brass	3/4"	3.94 (100)	376-1095-ND	139.95	102.41	93.94	194761
		8.0 to 60.0	Brass	1"	3.94 (100)	376-1096-ND	139.95	102.41	93.94	194762
RFI Type	Visual Indicator	0.5 to 5.0	Polypropylene	1/4"	3.06 (77.7)	376-1097-ND	37.95	30.31	26.65	155420
		4.0 to 20.0	Polypropylene	1/2"	3.01 (76.4)	376-1098-ND	37.95	30.31	26.65	155480
		0.5 to 5.0	Brass	1/4"	3.01 (76.4)	376-1099-ND	79.95	63.80	56.10	142541
		4.0 to 20.0	Brass	1/2"	3.01 (76.4)	376-1100-ND	79.95	63.80	56.10	142542
		5.0 to 30.0	Brass	3/4"	3.94 (100)	376-1101-ND	89.95	71.78	63.12	180392
		8.0 to 60.0	Brass	1"	3.94 (100)	376-1102-ND	89.95	71.78	63.12	181681

Electromechanical Controls

Series 1- Electromechanical Controls: Series 1 electromechanical controls offer 2 or 3 pole output contacts with 16 amp rating. Versatile controls can be configured for single level service, differential control, low water cutoff (with manual reset or lock out capability) control and many other functions. **Specifications:** • Contact Rating (110VAC) - 16A Resistive 1 hp • Temperature: -30°F to 130°F.

Series 3E - Conductive Switches: Attachment to vessels is accomplished with external pipe threading. Fittings require the use of 3R rigid wire suspended electrodes. **Specifications:** • Pressure/Temp.: 125 psig @ 353°F (cast iron); 250 psig @ 406°F (brass)

Series 3B - Two Piece Threaded Coupling: These fittings incorporate a 1/4-20 female thread that must be combined with a Series 3R rigid electrode wire suspended electrode to make a complete assembly. **Specifications:** • Two-Piece Threaded Coupling • Teflon® Insulation Sleeve • Pressure/Temperature: 400 psig @ 406°F • Body Material - 316 Stainless Steel

Series 3R - General Purpose 1/4" (.64cm) Threaded Rod: Metallic rods with threaded ends that screw into a fitting that extends vertically down into the liquid

Fig. 1

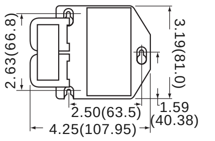


Fig. 2

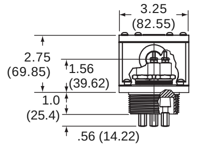


Fig. 3

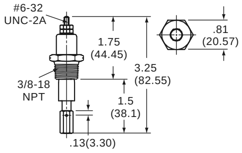
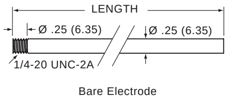


Fig. 4



Series 1 - Electromechanical Controls

Fig.	Primary Voltage	Secondary Voltage /Sensitivity	Contact Configuration	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
1	115VAC	300VAC / 7K Ohm	2 (N.O.), 0 (N.C.)	376-1060-ND	111.95	81.93	75.16	1C1DO
	115VAC	300VAC / 7K Ohm	1 (N.O.), 1 (N.C.)	376-1061-ND	111.95	81.93	75.16	1D1DO
	115VAC	500VAC / 20K Ohm	1 (N.O.), 1 (N.C.)	376-1062-ND	111.95	81.93	75.16	1D1EO
	230VAC	300VAC / 7K Ohm	1 (N.O.), 1 (N.C.)	376-1063-ND	111.95	81.93	75.16	1D2DO
	115VAC	300VAC / 7K Ohm	2 (N.O.), 1 (N.C.)	376-1064-ND	121.95	89.25	81.87	1G1DO
	115VAC	500VAC / 20K Ohm	2 (N.O.), 1 (N.C.)	376-1065-ND	121.95	89.25	81.87	1G1EO
	230VAC	300VAC / 7K Ohm	2 (N.O.), 1 (N.C.)	376-1066-ND	121.95	89.25	81.87	1G2DO

Series 3E - Conductive Switches

Fig.	Vessel/Boss Thread	Terminal Housing Size WxDxH - Inches (mm)	No. of Probes	Body Material	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
2	1" NPT/ 1/2" NPT	2-1/4 x 2-1/4 x 2-1/4 (57.15 x 57.15 x 57.15)	1	Red Brass	376-1069-ND	71.95	57.42	50.49	3E1B
	1" NPT/ 1/2" NPT		1	Cast Iron	376-1073-ND	58.95	47.06	41.38	3E1A
	2" NPT/ 1/2" NPT	3-1/4 x 3-1/4 x 2-3/8" (82.55 x 82.55 x 60.33)	2	Red Brass	376-1070-ND	109.95	80.47	73.81	3E2B
	2" NPT/ 1/2" NPT		3	Red Brass	376-1071-ND	132.95	97.29	89.25	3E3B
	2-1/2" NPT/ 1/2" NPT		4	Red Brass	376-1072-ND	155.95	114.12	104.68	3E4B
	2" NPT/ 1/2" NPT		2	Cast Iron	376-1074-ND	89.95	71.78	63.12	3E2A
	2" NPT/ 1/2" NPT		3	Cast Iron	376-1075-ND	112.95	82.66	75.83	3E3A
	2-1/2" NPT/ 1/2" NPT		4	Cast Iron	376-1076-ND	135.95	99.49	91.26	3E4A

Series 3B - Two Piece Threaded Coupling

Fig.	Thread / Probes Required	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
3	3/8"-18NPT / 3R Series	376-1067-ND	25.95	20.74	18.24	3B1B
	5/8"-24NEF / 3R Series	376-1068-ND	22.95	18.35	16.13	3B3B

Series 3R - General Purpose Threaded Rod

Fig.	Length (Feet)	Probe Material	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
4	1	316 Stainless Steel	376-1077-ND	7.95	7.31	5.61	3R1CO
	3		376-1078-ND	23.95	19.14	16.83	3R3CO

Sensors – Flow Switches

Specifications: SPST; N.O. 20VA 120-240 VAC or VDC
SPDT; N.O./N.C. 20VA 120-240 VAC or VDC

Fig. 1

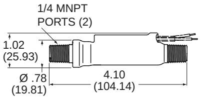


Fig. 2

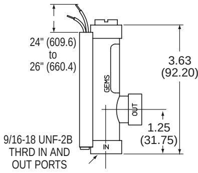


Fig. 3

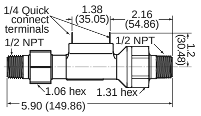


Fig. 4

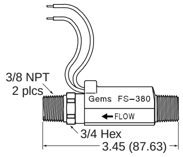


Fig. 5

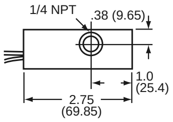


Fig. 6

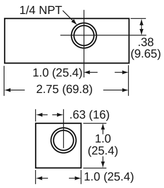
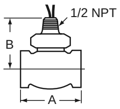


Fig. 7



Port Size NPT	Dimensions - Inch (mm) A	B
1"	3-1/4 (82.6)	3 (76.2)
1-1/2"	4-1/4 (114.3)	3-1/2 (88.9)
2"	5-3/8 (136.5)	4 (101.6)

Fig. 8

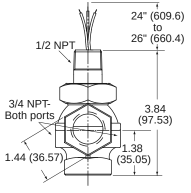


Fig. 9

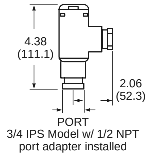


Fig. 10

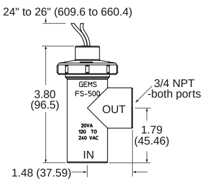


Fig. 11

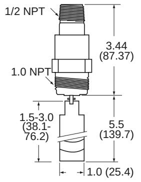


Fig. 12

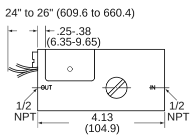


Fig.	Series	Housing	Piston	Spring	Switch Set Point - GPM	Switch	Operating Temperature	Port	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
1	FS-3 Piston Type Compact, Low Flow Units	Noryl®	Noryl® & Epoxy	316 Stainless Steel	0.05	SPST	0°F to 212° F (100°C), Max	1/4" MNPT	376-1103-ND	29.95	23.93	21.04	165840
					0.25				376-1104-ND	29.95	23.93	21.04	165841
					0.50				376-1105-ND	29.95	23.93	21.04	165842
					1.00				376-1106-ND	29.95	23.93	21.04	165843
2	FS-4 Piston Type Molded Plastic Construction	Ryton® R4	316 Stainless Steel	316 Stainless Steel	0.1	SPST	0°F to 225° F (17°C to +107°C)	9/16"-18 UNF	376-1107-ND	59.95	47.85	42.08	122340
					0.25				376-1108-ND	59.95	47.85	42.08	122341
					0.5				376-1109-ND	59.95	47.85	42.08	122342
					1.00				376-1110-ND	59.95	47.85	42.08	122344
3	FS-150 Piston Type Straight-through Flow Path with Low Pressure Drop	Polypropylene	Ryton® R4 316 SS	316 Stainless Steel	0.50	SPST	0°F to 212° F (-17.8°C to +100°C)	1/2" NPT	376-1111-ND	64.95	51.84	45.59	129660
					1.00				376-1112-ND	64.95	51.84	45.59	129661
					2.00				376-1113-ND	64.95	51.84	45.59	129662
4	FS-380 Piston Type Compact Flow Switch for High Inline Pressures	Brass	PPS Composite	316 Stainless Steel	0.25	SPST	-20°F to +275° F (-28.8°C to +135°C)	3/8" NPT	376-1114-ND	79.95	63.80	56.10	168432
		Brass			0.50				376-1115-ND	79.95	63.80	56.10	168433
		Brass			1.00				376-1116-ND	79.95	63.80	56.10	168434
		316 SS			0.25				376-1117-ND	164.95	120.70	110.72	179992
5	FS-925 Piston Type General Purpose	Brass	Poysulfone for Water Brass for Oil or Air	316 Stainless Steel	0.10 ±10%	SPDT	-20°F to +300° F (-29°C to +148.9°C)	1/4 " NPT	376-1118-ND	139.95	102.41	93.94	26914
					0.25 ±10%				376-1119-ND	139.95	102.41	93.94	26915
					0.50 ±10%				376-1120-ND	139.95	102.41	93.94	26916
					1.00 ±10%				376-1121-ND	139.95	102.41	93.94	26918
		316 SS	316 Stainless Steel		0.10 ±10%				376-1122-ND	289.95	203.37	191.40	26926
					0.25 ±10%				376-1123-ND	289.95	203.37	191.40	26927
6	FS-927 Piston Type Compact Brass Switches	Brass	Brass	316 Stainless Steel	0.10	SPST	-20°F to +200° F (-29°C to +93.3°C)	1/4 " NPT	376-1124-ND	74.95	59.82	52.60	70820
					0.25				376-1125-ND	74.95	59.82	52.60	70821
					0.50				376-1126-ND	74.95	59.82	52.60	70822
					1.00				376-1127-ND	74.95	59.82	52.60	70824
7	FS-200 Shuttle Type General Purpose, Straight-Through Flow Path	Bronze	Ceramic	316 Stainless Steel	0.5	SPDT	-20°F to +200° F (-29°C to +93.3°C)	1" NPT	376-1134-ND	139.95	102.41	93.94	27051
		Bronze			1			1" NPT	376-1135-ND	139.95	102.41	93.94	27052
		Bronze			2			1" NPT	376-1136-ND	139.95	102.41	93.94	27053
		Bronze			3			1" NPT	376-1137-ND	139.95	102.41	93.94	27054
		Bronze			4			1" NPT	376-1138-ND	144.95	106.07	97.30	27055
		Bronze			5			1" NPT	376-1139-ND	139.95	102.41	93.94	27056
		Bronze			1.5			1-1/2" NPT	376-1140-ND	299.95	210.38	198.00	27085
		316 SS			2.0			2" NPT	376-1141-ND	674.95	473.35	445.50	27109
		Bronze			1.0 to 6.0 Adj.			1" NPT	376-1142-ND	154.95	113.39	104.01	26615
		Bronze			5.0 to 15.0 Adj.			1" NPT	376-1143-ND	154.95	113.39	104.01	26616
		Bronze			2.0 to 8.0 Adj.			1" NPT	376-1144-ND	154.95	113.39	104.01	26838
8	FS-400 Shuttle Type General Purpose, 90° Flow Path	Bronze	Ceramic	316 Stainless Steel	0.75 to 4.0 Adj.	SPDT	-20°F to +180° F (-29°C to +82.2°C)	3/4" NPT	376-1145-ND	149.95	109.73	100.65	26600
					2.0 to 8.0 Adj.				376-1146-ND	149.95	109.73	100.65	26601
					0.75				376-1147-ND	119.95	87.78	80.52	26440
9	FS-400P Shuttle Type for Plastic Piping	PVC	Epoxy	—	0.5 ±20%	SPST	+120°F Max. (+48.9°C)	1/2" NPT	376-1148-ND†	59.95	47.85	42.08	135805
					0.5 ±20%			3/4" IPS	376-1149-ND	49.95	39.88	35.07	135810
					2.0 ±20%			1" IPS	376-1150-ND	49.95	39.88	35.07	135815
10	FS-500 Paddle Type for Threaded Plastic Piping	Polypropylene	Polypropylene (Bonnet - not a spring)	316 SS	1.00	SPST	0°F to 212°F Max. (100°C)	—	376-1151-ND	49.95	39.88	35.07	170233
11	FS-550 Paddle Type High Pressure Metal Paddle Switch	Brass	Ceramic & Teflon®	316 Stainless Steel	Long	SPDT	-30°F to +300° F (-34.4°C to +148.9°C)	1/2" NPT/1" NPT	376-1152-ND	149.95	109.73	100.65	29609
		316 SS			Long				376-1153-ND	234.95	164.80	155.10	29608
		Brass			Short				376-1154-ND	149.95	109.73	100.65	30641
		316 SS			Short				376-1155-ND	234.95	164.80	155.10	30640

† 3/4" IPS model with 1/2" NPT port adapter installed.

Fig.	Series	Housing	Piston	Spring	Switch Set Point GPM	Switch	Port	Interface	Operating Temperature	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
12	FS-10798 Piston Type Externally Adjustable for Water, Oils and Gases	Brass	Polysulfone (water)	316 Stainless Steel	0.5 to 20.0 Adj.	SPDT	1/2" NPT	1/2" Conduit Connector	-20°F to +225°F (-29°C to +107.2°C)	376-1128-ND	309.95	217.39	204.60	25363
		316SS	316 Stainless Steel					1/2" Conduit Connector	-20°F to +300°F (-29°C to +148.9°C)	376-1129-ND	479.95	336.60	316.80	25364
		Brass	Polysulfone (water)					Wire Leads	-20°F to +225°F (-29°C to +107.2°C)	376-1130-ND	284.95	199.86	188.10	25357
		Brass	Brass					1/2" Conduit Connector	-20°F to +300°F (-29°C to +148.9°C)	376-1131-ND	309.95	217.39	204.60	25365
		Brass	Brass for Oils					1/2" Conduit Connector	-20°F to +300°F (-29°C to +148.9°C)	376-1132-ND	309.95	217.39	204.60	49073
		Brass	Brass					Wire Leads	-20°F to +300°F (-29°C to +148.9°C)	376-1133-ND	284.95	199.86	188.10	25359

FABRI-LEVEL™ Kits

FABRI-LEVEL Switch Kits contain all components for complete assembly of a 1- or 2-station level switch unit for pipe-plug mounting in your tank. N.O. or N. C. operation of the SPST switch is selectable by inverting the float(s) on the unit stem.

Each Kit Contains:
- 1 Tube Connector
- 1 Mounting Plug
- 2 Extension Tubes
- 1 Tube End Fitting
- 3 Tube Unions
- 2 Level Stations (Switch,Tube,Float)

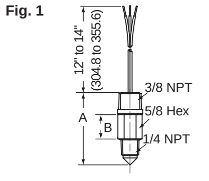
Fittings	Floats	Mounting Port	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
Brass	Buna N	1-1/4"	376-1043-ND	271.95	190.74	179.52	26128
Brass	Buna N	2"	376-1044-ND	285.95	200.56	188.76	24576
316 Stainless Steel	316 Stainless Steel	2"	376-1045-ND	596.95	418.65	394.02	24577

Electro-Optic Sensors

Compact, Electro-Optic Liquid Level Switches and Controllers **Features:** • Small size • Built-in, solid-state electronics • No moving parts • Simple, one-unit installation **Specifications:** Max. Operating Pressure: 0 to 150 PSI **(Not recommended for use in any liquid that crystallizes or leaves a solid residue.)** **ELS-1100**: Output: TTL/CMOS compatible, Open collector **ELS-1100HT:** Output: TTL/-CMOS compatible, Transistor output w/10K pull-up resistor **ELS-1100TFE:** Output: TTL/CMOS compatible, Open collector

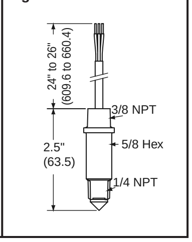
Fig.	Series	Input Volt. (VDC)	Probe Cond. @ Cur. Sink	Material Housing/Prism	Operating Temperature	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
1	ELS-1100	10-28	Dry	Polysulfone	0°F to +176°F 17.8°C to +80°C	376-1000-ND	73.95	59.02	51.90	143570
		5	Wet			376-1001-ND	64.95	51.84	45.59	138167
		10-28	Wet			376-1002-ND	73.95	59.02	51.90	142700
		10-28	Wet			376-1003-ND	81.95	65.40	57.51	143585
	ELS-1100HT	12	Wet	Isoplast®	-40°F to +212°F 40°C to +100°C	376-1004-ND	69.95	55.83	49.09	153063
		12	Dry			376-1005-ND	72.95	58.22	51.20	153064
2	ELS-1100TFE	10-28	Dry	Teflon®	0°F to 176°F (-17.8°C to +80°C)	376-1006-ND	198.95	139.55	131.34	173700

Fig. 1



Series	Dimensions - Inch (mm) A	B (Hex.)
ELS-1100	2-5/32 (54.7)	5/8 (15.9)
ELS-1100HT	2 (50.8)	3/4 (19.0)

Fig. 2



Non-Intrinsically Safe Relays

Boosts Your Sensor's Load Handling Ability

Features: • Operating Temperature: -0°F to +120°F (-17.8°C to 48.9°C) • SPST, N.O. Operation • Amplify current handling capability of sensors for controlling high power loads • Compact polysulfone bodies are totally encapsulated • Impervious to shock or vibration • Solid State Reliability • Max Current 5A AC

FLIP-PAKS: Provide low current. "Start-stop" or "on-off" switching for industrial motor, liquid level and other control systems. Units hold operational state up to 1/2 second during momentary power loss to cut nuisance shutdowns; low voltage protection is inherent.

LOAD-PAKS: Integrated, solid-state switches that amplify current handling capabilities of sensors for controlling high power loads.

Fig.	Relay Style	Operating Voltage	Operating Temperature	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
1	FLIP-PAK	100 to 130VAC	-0°F to +120°F	376-1167-ND	93.95	68.77	63.08	28196
2	LOAD-PAK	24 to 260VAC	(-17.8°C to 48.9°C)	376-1168-ND	56.95	45.46	39.98	20173

Fig. 1

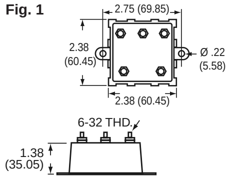
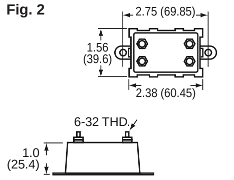


Fig. 2



Intrinsically Safe Control Relays

Series 27: • Cannot ignite flammable materials • Solid state reliability • Internal surge suppression • Can be used for single level or differential service

Series 67: • Inverse or direct acting, field selectable • Solid state reliability • Compact size • Four independent channels - 2 single, 2 differential • Field adjustable • LED channel indicators • Built-in silence/acknowledge circuit • U.L. "intrinsically safe"

Series 16VM: • Compact Size • Modular plug-in design • LED monitoring • Surge protection • Various time delays • Low voltage sensor • Solid state reliability • Up to 1 million ohms/cm sensitivity • 11-pin octal or DIN style plug • CSA approved • U.L. "motor control"

Series 16M: • Compact Size • Modular plug-in design • LED monitoring • Surge protection • Various time delays • Low voltage sensor • Solid state reliability • Up to 5.5 million ohms/cm sensitivity • 8-pin plugs • CSA approved • U.L. "motor control"

Fig. 1

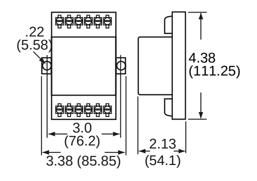


Fig. 2

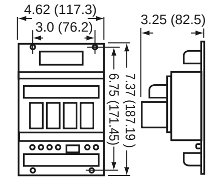


Fig. 3

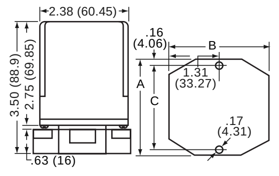


Fig.	Series (SPDT)	Primary Voltage	Secondary Voltage	Sensitivity	Mode of Operation	Contact Rating	Dimensions - Inches (cm) A	B	C	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
1	27	120VAC 60Hz	11VAC 2.3mA	3K Ohm	Direct	8 Amp Resistive	—	—	—	376-1053-ND	200.95	140.96	132.66	27A1D0
				10K Ohm	Direct		—	—	—	376-1054-ND	200.95	140.96	132.66	27A1E0
2	67	120VAC 60Hz	12VAC 6mA RMS	26K Ohm	—	10 Amp DC, 5 Amp AC	—	—	—	376-1055-ND	489.95	343.62	323.40	67C1C0A
				10K Ohm	—		—	—	—	376-1056-ND	489.95	343.62	323.40	67B1C0A
3	16VM	120VAC 60Hz	12VAC 1.5mA	10K Ohm	Direct	10 Amp Resistive	2.50 (63.50)	2.625 (66.68)	2.50 (63.50)	376-1059-ND	146.95	107.54	98.64	16VMB1A0
	16M	120VAC 60Hz	12VAC 1.5mA	26K Ohm	Inverse	10 Amp Resistive	2.00 (50.80)	2.312 (58.72)	1.687 (42.85)	376-1057-ND	111.95	81.93	75.16	16MM1B0
				26K Ohm	Direct					376-1058-ND	111.95	81.93	75.16	16MC1B0

SAFE-PAK® Relays

Amplify Sensor Load-Handling Capabilities

Costly explosion-proof enclosure with their mounting requirements are unnecessary. No purging is required.

SAFE-PAK: Less than 100mA at 9 VDC actuates the unit to control loads to 5A at 120 VAC. Resistive (up to 100,000W) or short-circuiting sensors operate the unit.

Low Sensitivity SAFE-PAK: Sensor closures up to 1000W resistance control resistive loads to 5A at 120VAC.

Latching SAFE-PAK: Momentary actuation, "start-stop" or differential control switching for resistive loads to .3A. Used on any differential control switch for level, flow, pressure or temperature.

Programmable SAFE-PAK: Provide N.O., N.C. or latching output with variable time delays. Designed for use with switches or sensors monitoring flow, pressure, level, etc. Render non-voltage-producing sensors intrinsically safe for operation in potentially hazardous areas. Streamlined housing suited for group-mounting on a common earth-grounded plate for multiple installation.

Fig. 1

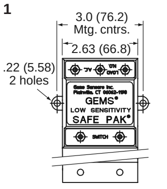


Fig. 2

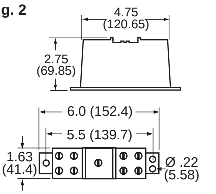
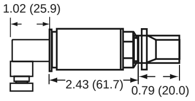


Fig.	Relay Style	Load Voltage	Load Current	Operating Voltage	Switch	Operating Temperature	Digi-Key Part No.	Price Each 1	10	100	GEMS Part No.
1	SAFE-PAK	100 to 135VAC	5A	100 to 135VAC	SPST	0°F to +120°F (-17.8°C to +48.9°C)	376-1158-ND	169.95	124.36	114.07	25872
		200 to 250VAC		200 to 250VAC			376-1159-ND	169.95	124.36	114.07	25873
	Low Sensitivity SAFE-PAK	100 to 135VAC	5A	100 to 135VAC	SPST	0°F to +120°F (-17.8°C to +48.9°C)	376-1160-ND	169.95	124.36	114.07	44075
		110 to 130VAC	.5@20/.05@200VAC	110 to 130VAC		-10°F to +140°F (-23.3°C to +60°C)	376-1161-ND	169.95	124.36	114.07	64101
		105 to 125VAC	5A	105 to 125VAC		-40°F to +120°F (-40°C to +48.9°C)	376-1162-ND	132.95	97.29	89.25	144600
	LATCHING SAFE-PAK	105 to 125VAC	0.3A	105 to 125VAC	SPST	+32°F to +120°F (0°C to +48.9°C)	376-1163-ND	217.95	152.88	143.88	41705
2	Programmable SAFE-PAK	25 to 250VAC	2A	95 to 125VAC	Latching	+32°F to +140°F (0°C to +60°C)	376-1164-ND	209.95	147.27	138.60	54820
		0 to 250VAC	.5@20/.05@200VAC				376-1165-ND	209.95	147.27	138.60	54825

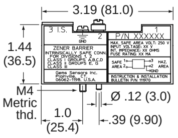
General Purpose Industrial Pressure Transducers - 2200 Series



Features: • Submersible, general purpose and wash down enclosures • High stability achieved by CVD sensing element **Specifications:** • 4-20mA Output • 1/4" NPT Pressure Port • Operating Temperature: -22°F to 260°F (-40°C to 125°C)

Pressure	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
0-100PSIG	376-1156-ND	244.95	171.81	161.70	2200BGG1002A3UA
0-200PSIG	376-1157-ND	244.95	171.81	161.70	2200BGG2002A3UA

Single Channel Zener Barrier Switch - Series 65800



Render Switches or Signal Conditioners Intrinsically Safe

Features: • Intrinsic safety with solid-state reliability • Compact size streamlines installation • Space-saving in multiples • Encapsulated construction is impervious to dust and moisture **Spec.:** • Max. Voltage 30VDC • Max. Current 250mA • Resistance 303 Ohms • Channels - 1

Operating Temperature	Digi-Key Part No.	Price Each 1	10	100	Gems Part No.
-40°F to +140°F (-40°C to +60°C)	376-1166-ND	96.95	70.96	65.09	113000

OPTREX DOT MATRIX Type LCD Modules

Optrex Numbering System

DMC – 50000 N Y H U – S E B 1
1 2 3 4 5 6 7 8 9 10

1. Type of Display: Character Dot Matrix
2. Development Number: Successive Number (3 digits to 5 digits)
3. LCD TYPE: Nil = TN N = STN
4. Background Color: Nil = Neutral Y = Yellow B = Blue K = Dark Blue
5. Operating Temp.: Nil = Normal H = Extended
6. Viewing Direction: Nil = 6:00 U = 12:00 L = 9:00 R = 3:00
7. Display Mode: Nil = Reflective, Transmissive with Backlight S = Transflective T = Transmissive without Backlight
8. Backlight: Nil = Without Backlight E = EL L = LED
9. Backlight Color: Nil = Without Backlight W = White B = Blue Y = Yellow
10. Supplemented Specification: Successive Number (No. 1 to 99)

40x4 Pin Connections

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	DB7	7	DB1	13	Vss
2	DB6	8	DB0	14	Vcc
3	DB5	9	E1	15	E2
4	DB4	10	R/W	16	NC
5	DB3	11	RS	17	K
6	DB2	12	VEE	18	A

Standard Pin Connections

Pin No.	Symbol	Pin No.	Symbol
1	Vss	8	DB1
2	Vcc	9	DB2
3	VEE	10	DB3
4	RS	11	DB4
5	R/W	12	DB5
6	E	13	DB6
7	DB0	14	DB7

FEATURES: • Interface with 8-bit or 4-bit MPU is available • 192 kinds of characters, numerals, symbols and special characters can be displayed by built-in character generator (ROM) • Other preferred characters can be displayed by character generator (RAM) • Various functions of instruction are available by programming: clear display, cursor at home, on/off cursor, blink character, shift display, shift cursor, read/write display data, etc. • Compact and lightweight design • Low power consumption

Inverter Needed	Display Format	Matching Bezel ‡	Character Format	Outline Dimension W x H x D (mm)	Viewing Area W x H (mm)	Character Size W x H (mm)	Dot Size W x H (mm)	Operating Temp. (°C)	Storage Temp. (°C)	Supply Voltage (V)	Digi-Key Part No.	Price Each 1	100	Optrex Part No.
Twisted Nematic (TN) LCD Dot Matrix Modules														
—	16x1	PRD250LPW1-ND	5x8 dots	80 x 36 x 10	64.5 x 13	3.2 x 5.95	.6 x .7	0 to +50	-20 to +70	5	73-1012-ND	11.15	8.32	DMC-16117A
—	16x1	N/A	5x7 CURS	122 x 33 x 11	99 x 13	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1013-ND	15.33	11.43	DMC-16128
—	16x1	N/A	5x7 CURS	122 x 33 x 11	99 x 13	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1015-ND	18.21	13.58	DMC-16129
—	16x2	PRD250LPW-ND	5x8 dots	80 x 40 x 10.9	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1033-ND•	15.93	11.88	DMC-16204
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	0 to +50	-20 to +70	5	73-1025-ND	15.33	11.44	DMC-16207
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	-20 to +70	-30 to +80	+5, -7	73-1036-ND	16.39	12.22	DMC-16207H
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	0 to +50	-20 to +70	5	73-1054-ND	15.93	11.88	DMC-16207U
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1026-ND	19.80	14.77	DMC-16230AAE-DW
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	-20 to +70	-30 to +80	+5, -7	73-1041-ND	19.05	14.21	DMC-16230H
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .5	0 to +50	-20 to +70	5	73-1037-ND	14.34	10.70	DMC-16249B
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .5	0 to +50	-20 to +70	5	73-1039-ND	14.34	10.70	DMC-16249UB
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1080-ND	29.59	22.08	DMC-16433
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1056-ND	20.94	15.62	DMC-20261
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1058-ND	19.35	14.43	DMC-50218
—	24x2	PRD360LPW1-ND	5x8 dots	118 x 36 x 11	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1064-ND	22.76	16.98	DMC-24227
—	40x2	N/A	5x8 dots	182 x 33.5 x 11	152 x 16.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1069-ND	36.42	27.16	DMC-40218
Super-Twisted Nematic (STN) LCD Modules														
—	8x2	N/A	5x8 dots	40 x 35.4 x 8.2	30.4 x 13.9	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1106-ND	9.79	7.30	DMC-50448N-E-AE
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1044-ND	18.21	13.58	DMC-16207N
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .50	0 to +50	-20 to +70	5	73-1038-ND	17.07	12.73	DMC-16249N
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1083-ND	31.87	23.77	DMC-16433N
—	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1091-ND	42.11	31.41	DMC-20434N
High Contrast Super-Twisted Nematic (STN) LCD Modules														
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1045-ND	18.21	13.58	DMC-16207N-B
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1061-ND	21.40	15.96	DMC-50218N-B
—	20x4	N/A	5x8 dots	98.5 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1092-ND	36.42	27.16	DMC-20434N-B
—	24x2	PRD360LPW1-ND	5x8 dots	118 x 36 x 11	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1066-ND	23.90	17.83	DMC-24227N-B
Film Super-Twisted Nematic (FSTN) LCD Modules														
—	16x2	PRD250LPW-ND	5x7 dots	64.2 x 27.6 x 2.2	60.2 x 16.6	2.95 x 4.85	.48 x .7	0 to +50	-20 to +70	+3, -7	73-1177-ND†	13.66	10.19	DMC-50747NF-AK
—	16x2	PRD250LPW-ND	5x8 dots	65 x 27.7 x 2.13	61 x 15.7	2.95 x 5.85	.55 x .69	0 to +50	-20 to +70	5	73-1222-ND*	16.61	11.12	C-51313GNF-S-AA
Super-Twisted Nematic (STN) LCD Modules With Yellow LED Backlighting														
—	16x1	N/A	5x7 CURS	122 x 33 x 15.7	99 x 13	4.84 x 9.66	.92 x 1.10	0 to +50	-20 to +70	5	73-1011-ND	25.04	18.68	DMC-16128NY-LY
—	16x1	PRD250LPW1-ND	5x8 dots	80 x 36 x 15	64.5 x 13	3.2 x 5.85	.6 x .7	0 to +50	-20 to +70	5	73-1018-ND	21.85	16.30	DMC-16105NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1048-ND	22.76	16.98	DMC-16202NY-LY-ADE-BF
—	16x2	PRD250LPW-ND	5x8 dots	80 x 40 x 16.1	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1034-ND•	19.57	14.60	DMC-16204NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	88 x 34 x 16.1	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1035-ND	21.62	16.13	DMC-16205NY-LY
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1051-ND	25.56	19.81	DMC-16230NY-LY
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1053-ND	30.05	22.42	DMC-16230NYU-LY-AZE-WEA
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1094-ND	32.00	23.87	DMC-20481NY-LY-ABE
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1097-ND	39.83	29.72	DMC-20481NYU-LY-ACE-BG
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	152.5 x 16.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1076-ND	59.18	44.14	DMC-40267NY-LY
High Contrast Super-Twisted Nematic (STN) LCD Modules with Yellow LED Backlighting														
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1047-ND	17.24	12.86	DMC-16202N-LY-AME
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1043-ND	17.24	12.86	DMC-16202NY-LY-AGE
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	-20 to +70	-30 to +80	+5, -7	73-1032-ND	22.76	16.98	DMC-16202NYJ-LY-AKE-BG
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.10	0 to +50	-20 to +70	5	73-1052-ND	31.18	23.26	DMC-16230NY-LY-B
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.10	-20 to +70	-30 to +80	+5, -7	73-1050-ND	31.87	23.77	DMC-16230NYJ-LY-CGE-EB
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 15.7	83 x 18.6	3.20 x 5.55	.60 x .65	0 to +50	-20 to +70	5	73-1057-ND	21.76	16.24	DMC-20261NY-LY-AXE
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 15.7	83 x 18.6	3.20 x 5.55	.60 x .65	-20 to +70	-30 to +80	+5, -7	73-1063-ND	22.76	16.98	DMC-20261NYJ-LY-BCE
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1095-ND	32.00	23.87	DMC-20481NY-LY-AGE
—	24x2	PRD360LPW1-ND	5x8 dots	121.5 x 33.5 x 16.1	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1024-ND	39.83	29.72	DMC-50149NYU-LY-B
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	147.5 x 11.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1179-ND	40.37	30.11	DMC-40202NY-LY-AFE
—	40x4	N/A	5x8 dots	190 x 54 x 13.6	147 x 29.5	2.78 x 4.89	.5 x .55	0 to +50	-20 to +70	5	73-1101-ND	113.00	82.10	DMC-40457NY-LY-B
High Contrast Super-Twisted LCD Modules With Blue-Green EL Backlighting (must order inverter)														
289-1028-ND	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1088-ND	45.52	33.96	DMC-20434N-EB
Super-Twisted LCD Modules With White EL Backlighting (must order inverter)														
289-1031-ND	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1093-ND	45.52	33.96	DMC-20434N-SEW
High Contrast Super-Twisted LCD Modules With White EL Backlighting (must order inverter)														
289-1029-ND	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.5	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1109-ND	37.56	28.01	DMC-16433N-SEW-B
Inverters For EL Backlighting (Converts 5 VDC to 100 VAC 400Hz)														
Inverter for use with EL Backlit Character Modules											289-1031-ND	11.90	—	NDL-204

‡ Bezels can be found under PRD Plastics in the manufacturer's index ***** Chip on glass display, uses FCS2314AK-006 controller

• Pin to Pin spacing = 2.0mm † Chip on glass display, uses SED1233DGB controller

TFT Active Matrix Color LCD Modules

Optrex TFT (Thin Film Transistor) Active Matrix LCD Modules are ideal for a wide range of AV (Audio Visual) and Industrial/Office applications.

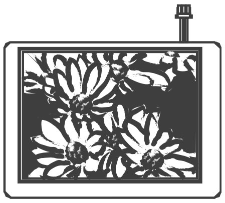
Unlike Passive Matrix LCDs, TFT LCDs are capable of displaying moving video.

Note: Display modules require an external decoder unless noted otherwise.

AV applications include:
- Automotive TV or Game monitors
- GPS
- Automotive PC
- Digital Cameras
- Camcorders
- Mobile TV
- Home Security

Industrial and Office Applications include:
- Computer Peripherals
- Industrial Meters
- Industrial Imaging
- PDAs
- POS (Point of Sale) Devices
- Smart Hand-Held Devices

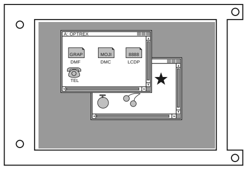
These modules work with one or more of the following input signals:
- NTSC – the US television video standard
- PAL – the European television video standard
- Digital CMOS – PCs and Laptops
- Digital LVDS - PCs and Laptops

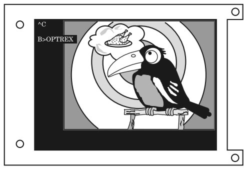


Size (in)	Dot Pixels W x H	Input System	On-Board Decoder	Viewing Area (mm) W x H	Dot Pitch (mm) W x H	Power Consumption (W)	Brightness (cd/m2)	CR Ratio	Outline Dim. (mm) W x H x D	Digi-Key Part No.	Price Each 1	100	Optrex Part No.
1.6	240 x 234	NTSC/PAL Analog	No	32.4 x 24.34	0.135 x 0.104	0.8	200	150:1	45 x 37.2 x 5.9	73-1212-ND	41.40	30.89	T-51431L016J-FW-P-AA
2.5	480 x 234	NTSC/PAL Analog	No	50.21 x 37.67	0.105 x 0.161	0.83	200	120:1	61.6 x 49.3 x 5.9	73-1213-ND	89.42	66.73	T-51378L025J-FW-P-AA
3.5	600 x 234	NTSC/PAL Analog	No	71.7 x 52.4	0.119 x .224	0.9	200	120:1	83.7 x 68.6 x 6.0	73-1211-ND	105.43	78.64	T-51379L035J-FW-P-AA
5	960 x 234	NTSC/PAL Analog	No	102.72 x 74.53	0.107 x 0.319	6	350	150:1	127.4 x 92.8 x 12.9	73-1204-ND	190.58	142.23	T-51380L050J-FW-P-AA
5	960 x 234	NTSC/PAL Analog	Yes	102.72 x 74.53	0.107 x 0.319	6	350	150:1	127.4 x 92.8 x 12.9	73-1205-ND	291.78	217.64	T-51380L050J-FW-P-AB
6.4	960 x 234	NTSC/PAL Analog	No	130.06 x 97.30	0.136 x 0.416	6.5	330	120:1	156.3 x 119.8 x 14.3	73-1201-ND	264.81	197.53	T-51381L064J-FW-P-AA
6.4	960 x 234	NTSC/PAL Analog	Yes	130.06 x 97.30	0.136 x 0.416	6.5	330	120:1	156.3 x 119.8 x 19.2	73-1200-ND	350.63	261.54	T-51381L064J-FW-P-AD
7	1440 x 234	NTSC/PAL Analog	No	154.08 x 87.048	0.107 x 0.327	6	350	150:1	167.1 x 102.0 x 12.0	73-1202-ND	304.04	226.78	T-51383L070J-FW-P-AA
7.9	1440 x 234	NTSC/PAL Analog	No	161.28 x 117.936	0.112 x 0.504	7	300	150:1	191.4 x 144.6 x 11.5	73-1206-ND	379.30	283.07	T-51384L079J-FW-P-AA
10.4	800 x 600	LVDS	No	211.2 x 158.4	0.264 x 0.264	8	450	180:1	243 x 185.1 x 11	73-1217-ND	564.70	421.41	T-51410D104-FW-P-AD

Supertwist® LCD Graphic Modules

Color Display: 73-1178-ND





Optrex Numbering System

DMF – 50000 N Y U – S E B 1
1 2 3 4 5 6 7 8 9

FEATURES: • Low voltage drive and low power consumption • Compact, light, and thin • Graphic, Figure, and Character display • STN fluid allows high contrast and wide viewing angle • Large area display like CRT.

APPLICATIONS: • Personal Computer • Musical Instrument • Word Processor • Electronic Typewriter • Copying Machine • Instrument Device • Telecommunication Equipment • POS Terminal • Fish Finder • Oscillograph • Medical Instrument • Other Peripherals

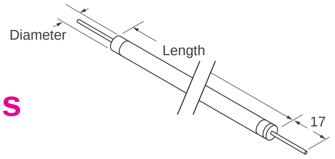
1. Type of Display: Full Dot Matrix
2. Development Number: Successive Number (3 digits to 5 digits)
3. LCD TYPE: Nil = TN N = STN
4. Background Color: Nil = Neutral B = Blue C = Color
   F = FSTN K = Dark Blue
   W = DSTN Y = Yellow
5. Viewing Direction: Nil = 6:00 U = 12:00 L = 9:00 R = 3:00
6. Display Mode: Nil = Reflective, Transmissive with Backlight
   S = Transflective
   T = Transmissive without Backlight
7. Backlight: Nil = Without Backlight
   E = EL F = CFL L = LED
8. Backlight Color: Nil = Without Backlight B = Blue
   W = White Y = Yellow
9. Supplemented Specification: Successive Number (No. 1 to 99)

Controller Needed	Inverter Needed	Dot Pixels W x H	Outline Dim. (mm) W x H x D	Viewing Area (mm) W x H	Dot Size (mm) W x H	Dot Pitch (mm) W x H	Display Type	Digi-Key Part No.	Price Each 1	100	Optrex Part No.
Color Graphic Modules											
Built-in	Built-in	240 x 64	180.0 x 59.6 x 14.0	132.0 x 39.0	.166 x .52	.176 x .53	CFL	73-1210-ND	220.24	164.38	F-51168NCU-FW-AA
SED1353	—	240 x 160	113.0 x 67.5 x 11.3	81.8 x 55.2	.095 x .315	.110 x .330	CFL	73-1209-ND	226.82	169.19	F-51161NCU-FW-AA
Built-in	—	256 x 64	146.2 x 39.3 x 17.0	106.66 x 27.62	.115 x .365	.135 x .385	CFL	73-1208-ND†	241.36	180.04	F-51136NCWHU-FW-AA
SED1353	—	320 x 240	167.1 x 109.0 x 8.0	122.0 x 92.0	.10 x .34	.12 x .36	CFL	73-1215-ND	206.93	190.51	F-51167NCU-FW-AA
SED1353	—	320 x 240	167.1 x 109.0 x 8.0	122.0 x 92.0	.10 x .34	.12 x .36	CFL	73-1214-ND‡	302.25	225.45	F-51167NCU-FW-AB
Monochrome Graphic Modules											
Built-in	—	128 x 64	89.7 x 49.8 x 6.0	66.8 x 35.5	.48 x .48	.50 x .50	LED (Blue/White)	73-1219-ND	36.66	27.36	F-51320GNB-LW-AB
Built-in	—	128 x 64	89.7 x 49.8 x 11.8	66.8 x 35.5	.48 x .48	.50 x .50	LED (Yellow)	73-1220-ND	35.42	26.42	F-51320GNY-LY-AA
Built-in	—	240 x 128	170.0 x 95.0 x 16.7	126.0 x 70.0	.47 x .47	.50 x .50	LED (Yellow/Green)	73-1199-ND	167.14	124.68	DMF-50773NF-SLY
Built-in	73-1176-ND	240 x 64	180 x 65 x 12	132 x 39	.49 x .49	.53 x .53	EL Backlighting	73-1118-ND	104.70	78.11	DMF-5005N-EB
Built-in	—	240 x 64	180 x 65 x 17.6	132 x 39	.49 x .49	.53 x .53	LED Backlighting	73-1157-ND	80.61	60.14	DMF-5005NY-LY-AKE-CN
Built-in	—	240 x 64	180 x 65 x 17.6	132 x 39	.49 x .49	.53 x .53	LED Backlighting	73-1126-ND	112.44	83.87	DMF-5001NYJ-LY-AQE-AZ
Built-in	73-1007-ND	240 x 64	200 x 66 x 23	132 x 39	.49 x .49	.53 x .53	CFL Backlighting	73-1132-ND	132.02	98.48	DMF-5010NBU-FW-BD
Built-in	73-1007-ND	240 x 64	200 x 66 x 23	132 x 39	.49 x .49	.53 x .53	CFL Backlighting	73-1133-ND	134.29	100.17	DMF-5010NF-FW
E-1330BA	73-1176-ND	256 x 128	147 x 116 x 12	127 x 70	.43 x .43	.47 x .47	EL Backlighting	73-1145-ND	127.46	95.07	DMF-682ANY-EB
E-1330BA	73-1176-ND	256 x 128	147 x 116 x 12	127 x 70	.43 x .43	.47 x .47	EL Backlighting	73-1144-ND	127.46	95.07	DMF-682ANF-EW
E-1330BA	289-1024-ND	320 x 240	167.1 x 109 x 11	120 x 90	.33 x .33	.36 x .36	CFL Backlighting	73-1194-ND	108.39	80.84	DMF-50840NF-FW-ABEAU
Inverters for CFL Backlighting (Converts 12 VDC to 900VAC 30 KHz)											
Inverter for use with CFL Backlit Graphic Modules								289-1036-ND	25.76	—	BXA-12565-6M
Inverter for use with CFL Backlit Graphic Modules								289-1027-ND	15.12	—	BXA-24529
Inverters for EL Backlighting (Converts 5 VDC to 100VAC 400 Hz)											
Inverter for use with EL Backlit Graphic Modules								289-1030-ND	12.20	—	NDL-203
Inverter for use with EL Backlit Graphic Modules								289-1031-ND	11.90	—	NDL-204

† Built-in heater for cold temperature. ‡ Wide Angle Film.

O

JKL Components Corporation Cold Cathode Fluorescent Lamps and Inverters



Cold Cathode Fluorescent Lamp

Tri-Phosphor RGB White Lamps

Dia. (mm)	Length (mm)	Start Volt (V)	Lamp Volt (V)	Lamp Curr. (mA)	Intensity (Cd./m2)	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
2.2	140	730	340	5	38,000	289-1053-ND	10.29	9.31	7.84	BF22140-24B
2.2	258	1700	720	5	38,000	289-1059-ND	10.29	9.31	7.84	BF22258-25B
2.6	180	1000	400	5	38,000	289-1054-ND	10.29	9.31	7.84	BF26180-24B
2.6	188	1300	525	5	30,000	289-1039-ND	10.29	9.31	7.84	BF26188-20B
2.6	214	1450	620	5	30,000	289-1060-ND	10.29	9.31	7.84	BF26214-20B
2.6	240	1250	505	5	30,000	289-1055-ND	12.76	11.55	9.72	BF26240-24B
2.6	250	1300	525	5	30,000	289-1056-ND	12.76	11.55	9.72	BF26250-24B
2.6	285	1500	725	5	30,000	289-1057-ND	12.76	11.55	9.72	BF26285-20B
3.2	25	400	165	5	19,000	289-1002-ND	10.29	9.31	7.84	BF325-22B
3.2	50	500	195	5	28,000	289-1003-ND	10.29	9.31	7.84	BF350-20B
3.2	75	525	210	5	28,000	289-1058-ND	10.29	9.31	7.84	BF375-20B
3.2	86	540	220	5	28,000	289-1004-ND	10.29	9.31	7.84	BF386-20B
3.2	100	665	270	5	28,000	289-1005-ND	10.29	9.31	7.84	BF3100-20B
3.2	160	850	345	5	28,000	289-1006-ND	10.29	9.31	7.84	BF3160-20B
3.2	216	1100	440	5	28,000	289-1040-ND	10.29	9.31	7.84	BF3216-20B
3.2	228	1150	460	5	28,000	289-1007-ND	10.29	9.31	7.84	BF3228-21B
3.2	250	1200	520	5	28,000	289-1008-ND	10.29	9.31	7.84	BF3250-20B
3.2	300	1350	665	5	28,000	289-1041-ND	12.76	11.55	9.72	BF3300-20B
3.2	360	1500	785	5	28,000	289-1042-ND	12.76	11.55	9.72	BF3360-20B
4.1	183	900	365	5	16,000	289-1043-ND	10.29	9.31	7.84	BF4183-20B
4.1	418	1400	765	5	15,000	289-1061-ND	13.69	12.39	10.44	BF4418-20B
5.6	118	600	305	5	7,000	289-1009-ND	10.29	9.31	7.84	BF5118-20B
5.6	165	800	400	5	7.000	289-1044-ND	10.29	9.31	7.84	BF5165-20B
5.6	200	850	445	5	7,000	289-1010-ND	10.29	9.31	7.84	BF5200-20B
6.5	50	390	170	5	6,500	289-1011-ND	10.29	9.31	7.84	BF650-20B
6.5	100	550	230	5	6,500	289-1012-ND	10.29	9.31	7.84	BF6100-20B
6.5	144	600	245	5	6,500	289-1045-ND	10.29	9.31	7.84	BF6144-20B
6.5	150	600	250	5	6,500	289-1013-ND	10.29	9.31	7.84	BF6150-20B
6.5	165	600	255	5	6,500	289-1046-ND	10.29	9.31	7.84	BF6165-20B
6.5	178	650	270	5	6,500	289-1014-ND	10.29	9.31	7.84	BF6178-20B
6.5	200	680	290	5	6,500	289-1015-ND	10.29	9.31	7.84	BF6200-20B
6.5	225	750	340	5	6,500	289-1016-ND	10.29	9.31	7.84	BF6225-20B
6.5	262	850	350	5	6,500	289-1017-ND	10.29	9.31	7.84	BF6262-20A

Narrow Spectrum UltraViolet (UV) Lamps

Dia. (mm)	Length (mm)	Start Volts (V)	Operating Volts (V)	Watts @ 5mA	Output uW/cm2@1”	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
3.0	25	350	140	0.70	0.30	289-1018-ND	10.29	9.31	7.84	BF325-UV1
3.0	50	500	195	0.98	0.30	289-1019-ND	10.29	9.31	7.84	BF350-UV1
3.0	100	675	270	1.35	0.25	289-1020-ND	10.29	9.31	7.84	BF3100-UV1
3.0	120	865	280	1.35	0.25	289-1021-ND	10.29	9.31	7.84	BF3120-UV1
3.0	240	950	500	2.50	0.25	289-1022-ND	10.29	9.31	7.84	BF3240-UV1
9.0	59	375	150	0.75	0.15	289-1023-ND	10.29	9.31	7.84	BF959-UV1/3

Inverters for CCFL and UV Lamps

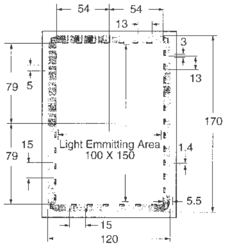
Input Volts	Output Volts (V)	Output I (mA)	Inverter Characteristics	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
3.0	650	4.5	Fixed Single Output	289-1062-ND	13.23	11.97	10.08	BXA-302
5.0	700	5.0	Fixed Single Output	289-1024-ND	15.12	13.86	11.97	BXA-501/KIT
5.0	650	4.5	Fixed Single Output	289-1047-ND	15.12	13.86	11.97	BXA-502
6.0	1200	5.0	Fixed Single Output	289-1064-ND	14.95	13.53	11.40	BXA-503/INV
12.0	850	5.5	Fixed Dual Output	289-1025-ND	15.12	13.86	11.97	BXA-12529
12.0	850	5.5	Fixed Dual Output	289-1048-ND†	16.17	14.63	12.32	BXA-12529/PSI
12.0	700	5.5	Fixed Single Output	289-1049-ND	15.12	13.86	11.97	BXA-12553
12.0	800	4.0	Fixed Single Output	289-1050-ND	15.12	13.86	11.97	BXA-12576
12.0	800	4.0	Fixed Single Output	289-1051-ND	15.12	13.86	11.97	BXA-12577
12.0	1200	6.2	Fixed Single Output	289-1065-ND	14.95	13.53	11.40	BXA-12617C-6M
12.0	1500	5.0	Fixed Dual Output	289-1026-ND	15.12	13.86	11.97	BXA-12579/INV
24.0	1000	5.5	Fixed Dual Output	289-1027-ND	15.12	13.86	11.97	BXA-24529
12.0	1000	6.0	Dimming Single Output	289-1034-ND	27.72	24.95	22.18	BXA-12562-6M
12.0	1000	5.0	Dimming Single Output	289-1035-ND	24.72	22.25	19.78	BXA-12564-6M
12.0	1000	6.0	Dimming Single Output	289-1036-ND	25.76	23.19	20.61	BXA-12565-6M
12.0	1200	6.0	Dimming Dual Output	289-1063-ND	29.32	26.53	22.34	BXA-12549-6M
Accessories								
Input Connector Assembly for BXA-12579/INV				289-1037-ND	2.00	—	—	BXA-12580/CONN
Output Connector Assembly for BXA-12579/INV				289-1038-ND	2.50	—	—	BXC-10569
Output Connector Assembly for BXA-12553				289-1052-ND	2.00	—	—	BXA-12552/CONN
Input Connector for BXA-12549-6M				289-1066-ND	2.63	2.38	2.00	BXC-10550
Output Connector for BXA-12549-6M				289-1067-ND	2.63	2.38	2.00	BXC-10655
Input Connector for BXA-12617C-6M				289-1068-ND	2.63	2.38	2.00	BXC-10580
Ouput Connector for BXA-12617C-6M				289-1069-ND	2.63	2.38	2.00	BXC-10643
Input Connector for BXA-503/INV				289-1070-ND	2.63	2.38	2.00	BXA-12568/CONN
Ouput Connector for BXA-503/INV				289-1071-ND	2.63	2.38	2.00	BXA-503/OCONN
End Cap for 3MM Fluorescent Lamp				289-1072-ND	.53	.48	.40	BF3/RC

† Potted inverter

Inverters for Electroluminescent (EL) Backlighting

Input Voltage Range (dc)	EL Element Area (cm^2)	Digi-Key Part No.	Price Each 1	10	50	JKL Part No.
3.0 - 5.5	10 - 19	289-1028-ND	12.20	10.98	9.76	NDL-201
3.0 - 5.5	19 - 38	289-1029-ND	12.20	10.98	9.76	NDL-202
3.0 - 5.5	25 - 43	289-1030-ND	12.20	10.98	9.76	NDL-203
3.0 - 5.5	41 - 70	289-1031-ND	11.90	10.71	9.52	NDL-204
3.0 - 5.5	50 - 83	289-1032-ND	11.90	10.71	9.52	NDL-205
3.0 - 5.5	100 - 170	289-1033-ND	11.20	10.08	8.96	NDL-217

Panasonic® EL Elements for Backlighting Applications

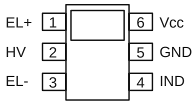


Panasonic’s new high brightness EL backlighting sheets are thin and flexible. They may be trimmed to size or cut in almost any shape, making them ideal for many of today’s backlighting applications. Multiple terminals around the entire outside edge provide numerous power input options. Terminals can not be soldered to, but may be used with conductive epoxy, pressure contacts, or stitched terminals. Requires inverter which is sold separately.

SPECIFICATIONS: Sheet Size: 120mm x 170mm **Lighted Area:** 100mm x 150mm **Rated Input:** 100Vrms @ 400Hz **Maximum Input:** 120Vrms, 1KHz (100Vrms) **Current Consumption:** .3mA/cm^2 max **Normal Operating Temperature:** 15°C to 35°C **Maximum Operating Temperature:** -30°C to 50°C **Storage Temperature:** -30°C to 60°C **Humidity:** 25 to 75% **Maximum Bend:** 180 degrees, radius of 10mm or more

Color On	Color Off	Brightness cd/m^2 (Min)	Digi-Key Part No.	Price Each 1	10	50	Panasonic Part No.
Blue	Milky White	35	P11051-ND	31.63	28.47	26.57	ESPS1111030A
Green	Milky White	45	P11052-ND	31.63	28.47	26.57	ESPS1311030A
White	Pink	30	P11053-ND	31.63	28.47	26.57	ESPS1411030A
Yellow/Orange	Orange	35	P11054-ND	31.63	28.47	26.57	ESPS1511030A
Yellow/Green	Yellow	45	P11055-ND	31.63	28.47	26.57	ESPS1611030A
Red	Red	10	P11056-ND	31.63	28.47	26.57	ESPS1711030A
Blue	White	45	P11057-ND	36.90	33.21	31.00	ESPTL111029A
Green	White	60	P11058-ND	36.90	33.21	31.00	ESPTL311029A
White	Pink	40	P11059-ND	36.90	33.21	31.00	ESPTL411029A
Yellow/Orange	Orange	50	P11060-ND	36.90	33.21	31.00	ESPTL511029A
Yellow/Green	Yellow	65	P11061-ND	36.90	33.21	31.00	ESPTL611029A
Red	Red	15	P11062-ND	36.90	33.21	31.00	ESPTL711029A

TOKO EL Lamp Drivers



The TK659 Electroluminescent (EL) Lamp Driver has been optimized for battery controlled systems where power consumption and size are primary concerns. The miniature device size (SOT23L-6), together with the miniature Toko EL coils (D32FU, D31FU, D52FU), further helps system designers reduce the space required to drive the small EL panels.

Low 2.7 to 6 volt input voltage is ideal for battery operation. The TK659 provides a constant output power to the lamp, independent of variations in the battery voltage. This architecture allows the output voltage to remain relatively constant as battery voltages decay, without the need for directly sensing the high voltage output of the EL driver. The capacitance of the EL Panel is typically proportional to the size of the lamp (a 1 square inch EL Panel typically exhibits approximately 5nF of capacitance load).

The TK6591 series of devices has been optimized to drive EL panels which are approximately 1-2 square inches in size. The TK6592 series of devices has been optimized to drive EL panels which are approximately 2-4 square inches in size. The TK6593 series of devices has been optimized to drive EL panels which are approximately 3-6 square inches in size (1 square inch = 645 mm^2).

Description	Lamp Freq. Code	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 1,300	Toko Part No.
Small, Optimized for 3.5nF to 12.5nF Panel Capacitance	200Hz	TKS3640CT-ND	3.54	3.00	2.50	TKS3640TR-ND	1742.00	TK65911MTL
	250Hz	TKS3641CT-ND	3.54	3.00	2.50	TKS3641TR-ND	1742.00	TK65913MTL
	350Hz	TKS3642CT-ND	3.54	3.00	2.50	TKS3642TR-ND	1742.00	TK65917MTL
	400Hz	TKS3643CT-ND	3.54	3.00	2.50	TKS3643TR-ND	1742.00	TK65919MTL
Medium, Optimized for 9nF to 27nF Panel Capacitance	250Hz	TKS3644CT-ND	3.54	3.00	2.50	TKS3644TR-ND	1742.00	TK65923MTL
	350Hz	TKS3645CT-ND	3.54	3.00	2.50	TKS3645TR-ND	1742.00	TK65927MTL
	400Hz	TKS3646CT-ND	3.54	3.00	2.50	TKS3646TR-ND	1742.00	TK65929MTL
Large, Optimized for 15nF to 45nF Panel Capacitance	250Hz	TKS3647CT-ND	3.54	3.00	2.50	TKS3647TR-ND	1742.00	TK65933MTL
	350Hz	TKS3648CT-ND	3.54	3.00	2.50	TKS3648TR-ND	1742.00	TK65937MTL
	400Hz	TKS3649CT-ND	3.54	3.00	2.50	TKS3649TR-ND	1742.00	TK65939MTL

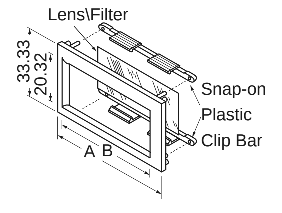
PRD Plastics

Bezels

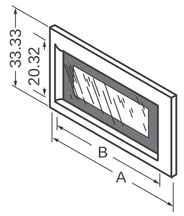
Bezel material is polystyrene plastic. Recommended panel thickness for mounting snap-fit bezel is 8.13mm to 3.18mm.

Digi-Key Part No.	Dimensions (mm) A	Dimensions (mm) B	Panel Cut-Out For Snap Fit Bezel Height	Panel Cut-Out For Snap Fit Bezel Width
PRD180☐-ND	58.74	45.72	26.99	52.39
PRD250☐-ND	76.20	63.50	26.99	69.85
PRD360☐-ND†	104.78	91.44	26.99	98.43

† PRD360B-ND has 4 snap-on plastic clip bars



Snap-Fit Bezel
(Lenses must be ordered separately)



Lo-Profile Polycarbonate/ABS with Non-Removable Lens (requires adhesive strips)

Description	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
Snap Fit Bezels (Lenses Must Be Ordered Separately)					
45.72mm Wide Bezel Black Plastic	PRD180B-ND	1.62	1.35	1.08	6101010
63.50mm Wide Bezel Black Plastic	PRD250B-ND	1.98	1.65	1.32	6102010
91.44mm Wide Bezel Black Plastic	PRD360B-ND	2.30	1.92	1.54	6103010
For Use With LCDs					
Clear Lens for 45.72mm Bezel	PRD180C-ND	1.44	1.20	.96	6201010
Clear Lens for 63.50mm Bezel	PRD250C-ND	1.62	1.35	1.08	6202010
Clear Lens for 91.44mm Bezel	PRD360C-ND	1.80	1.50	1.20	6203010
For Use With LEDs					
Smoke Lens for 45.72mm Bezel	PRD180S-ND	1.44	1.20	.96	6201020
Smoke Lens for 63.50mm Bezel	PRD250S-ND	1.62	1.35	1.08	6202020
Smoke Lens for 91.44mm Bezel	PRD360S-ND	1.80	1.50	1.20	6203020
Red Lens for 45.72mm Bezel	PRD180R-ND	1.44	1.20	.96	6201030
Red Lens for 63.50mm Bezel	PRD250R-ND	1.62	1.35	1.08	6202030
Red Lens for 91.44mm Bezel	PRD360R-ND	1.80	1.50	1.20	6203030
Green Lens for 45.72mm Bezel	PRD180G-ND	1.44	1.20	.96	6201040
Green Lens for 63.50mm Bezel	PRD250G-ND	1.62	1.35	1.08	6202040
Green Lens for 91.44mm Bezel	PRD360G-ND	1.80	1.50	1.20	6203040
Masked Lenses					
25.40mm x 22.23mm Window for 45.72mm	PRD180W-ND	1.44	1.20	.96	6201050
60.96mm x 16.00mm Window for 63.50mm	PRD250W-ND	1.62	1.35	1.08	6202050
65.41mm x 13.79mm Window for 63.50mm	PRD250W1-ND	1.62	1.35	1.08	6202060
83.01mm x 18.59mm Window for 91.44mm	PRD360W-ND	1.80	1.50	1.20	6203050
93.35mm x 15.80mm Window for 91.44mm	PRD360W1-ND	1.80	1.50	1.20	6203060

Description	Digi-Key Part No.	Price Each 1	10	100	Mfg. Part No.
Lo-Profile Polycarbonate/ABS					
*Lo-Profile For LCDs **					
45.72mm Bezel with Clear Lens	PRD180LP-ND	3.06	2.55	2.04	6301010
45.72mm Bezel and Clear Lens with 25.40mm x 22.23mm Window	PRD180LPW-ND	3.06	2.55	2.04	6301020
63.50mm Bezel with Clear Lens	PRD250LP-ND	3.60	3.00	2.40	6302010
63.50mm Bezel with Clear Lens with 60.96mm x 16.00mm Window	PRD250LPW-ND	3.60	3.00	2.40	6302020
63.50mm Bezel with Clear Lens with 65.41mm x 13.79mm Window	PRD250LPW1-ND	3.60	3.00	2.40	6302030
91.44mm Bezel with Clear Lens	PRD360LP-ND	4.10	3.42	2.74	6303010
91.44mm Bezel with Clear Lens with 83.01mm x 18.59mm Window	PRD360LPW-ND	4.10	3.42	2.74	6303020
91.44mm Bezel with Clear Lens with 93.35mm x 15.80mm Window	PRD360LPW1-ND	4.10	3.42	2.74	6303030
*Lo-Profile For LEDs **					
45.72mm Bezel with Smoke Lens	PRD180LPS-ND	3.06	2.55	2.04	6301040
45.72mm Bezel with Red Lens	PRD180LPR-ND	3.06	2.55	2.04	6301050
45.72mm Bezel with Green Lens	PRD180LPG-ND	3.06	2.55	2.04	6301060
63.50mm Bezel with Smoke Lens	PRD250LPS-ND	3.60	3.00	2.40	6302040
63.50mm Bezel with Red Lens	PRD250LPR-ND	3.60	3.00	2.40	6302050
63.50mm Bezel with Green Lens	PRD250LPG-ND	3.60	3.00	2.40	6302060
91.44mm Bezel with Smoke Lens	PRD360LPS-ND	4.10	3.42	2.74	6303040
91.44mm Bezel with Red Lens	PRD360LPR-ND	4.10	3.42	2.74	6303050
91.44mm Bezel with Green Lens	PRD360LPG-ND	4.10	3.42	2.74	6303060
Accessories					
Adhesive Strips 2/Pad	PRDAS-ND	.30	.29	.27	6000010

* Requires Adhesive Strips (recommend 2 pads for the 91.44mm Bezel)

Noritake Vacuum Fluorescent Display Modules

VFD OVER LCD ADVANTAGES: • Higher Brightness • Wider Viewing Angle • Wider Temperature Range **FEATURES:** • LCD compatible interface • Same mounting locations as LCD • +5V single power supply • Power save mode (display off) • 4 level brightness control (by code) • 8-bit or 4-bit interface • Wide operating temperature range • 8 user definable fonts • Power consumption similar to LCD with LED backlight • 5mm or 9mm character height • Color: Blue-Green

Pin Connections

Pin No.	Symbol	Pin No.	Symbol
1	Vss	8	DB1
2	Vcc	9	DB2
3	NC	10	DB3
4	RS	11	DB4
5	RW (WR)	12	DB5
6	E (RD)	13	DB6
7	DB0	14	DB7

Display Format	Character Format	Outline Dim. W x H x D (mm)	Viewing Area W x H (mm)	Char. Size W x H (mm)	Dot Size W x H (mm)	Operating Temp. (°C)	Storage Temp. (°C)	Supply Volt. (V)	Digi-Key Part No.	Price Each 1	10	50	Noritake Part No.
16 x 2	5 x 7 CURS	80 x 36 x 19.6	51.36 x 11.4	2.46 x 5.46	.38 x .56	-20 to +70	-40 to +85	5	286-1002-ND	54.20	50.14	40.65	CU16025ECPB-U5J
16 x 2	5 x 7 CURS	80 x 36 x 19.6	51.36 x 11.4	2.46 x 5.46	.38 x .56	-40 to +85	-50 to +85	5	286-1003-ND	57.80	53.47	43.35	CU16025ECPB-W1J
16 x 2	5 x 8 Dots	122 x 44 x 20.2	82.70 x 19.0	3.85 x 8.0	.53 x .89	-40 to +85	-50 to +85	5	286-1017-ND	92.00	85.10	69.00	CU16029ECPB-W1J
20 x 2	5 x 7 CURS	116 x 37 x 16	70.8 x 11.5	2.4 x 5.4	.4 x .5	-20 to +70	-40 to +85	5	286-1004-ND	58.80	54.39	44.10	CU20025ECPB-U1J
20 x 2	5 x 7 CURS	116 x 37 x 16	70.8 x 11.5	2.4 x 5.4	.4 x .5	-40 to +85	-50 to +85	5	286-1005-ND	61.40	56.80	46.05	CU20025ECPB-W1J
20 x 2	5 x 7 CURS	146 x 43 x 19	102.6 x 18.8	3.8 x 9.2	.6 x .98	-20 to +70	-40 to +85	5	286-1006-ND	95.80	88.62	71.85	CU20029ECPB-U1J
24 x 2	5 x 7 CURS	125 x 36 x 13	85.2 x 11.5	2.4 x 5.4	.4 x .5	-20 to +70	-40 to +85	5	286-1007-ND	65.60	60.68	49.20	CU24025ECPB-U1J
20 x 4	5 x 7 Dots	98 x 60 x 17	70.8 x 20.9	2.4 x 4.7	.4 x .5	-20 to +70	-40 to +85	5	286-1008-ND	91.40	84.55	68.55	CU20045SCPB-U2J
20 x 4	5 x 8 Dots	146 x 62.5 x 23	99.6 x 37.6	3.65 x 8.8	.57 x .84	-40 to +85	-50 to +85	5	286-1018-ND	142.00	131.35	106.50	CU20049SCPB-W2J
40 x 2	5 x 7 CURS	182 x 33.5 x 20.5	138.8 x 11.5	2.3 x 5.4	.38 x .5	-20 to +70	-40 to +85	5	286-1009-ND	92.20	85.29	69.15	CU40025SCPB-U1J

Graphics Vacuum Fluorescent Display Modules

GRAPHICS DEVELOPMENT SOFTWARE:

Help for the Development Engineer - Development Software on CD

(Save 80% of the effort to develop new graphics software for Noritake displays)

Includes: • Software Library of Source C Code (see API Library) • DOS demo • Graphics Windows™ Demo Application • Font editor • Other useful software

Noritake Display API Library (1.1 Introduction): The Noritake Display API library is a portable C language library of routines which will provide an application programming interface (API) to a user application. This API will allow the user application to call functions to perform useful graphics operations, such as “draw a line”, or “put text”, and will convert these functions to the appropriate bit-level operations for a Noritake VFD display. The library will, in turn, call a lower level interface to actually manipulate the hardware. This I/O access layer will convert the API layer bit-level data to actual hardware I/O accesses.

The primary purpose of this library is to provide Noritake customers with a portable library to allow them to use Noritake VFD displays in their products with a minimum of effort. In order for a customer to port the library to their platform, they must provide, in addition to their application, the I/O Access Layer and the Digital I/O Hardware. The I/O Access Layer will be just a few simple functions that will allow the hardware to write or read to the command or data port on the VFD display. In the demonstration software, these functions will communicate with a digital I/O board attached to a PC. In a microcontroller-based system, the Digital I/O hardware may consist of simply an address decode, or it could be a couple of latches or buffers and associated address decode logic.

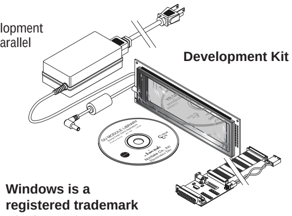
The Display API Library can be broken into four main parts: graphics primitives, text primitives, glyph-based text primitives and display control.

GRAPHICS SOFTWARE DEVELOPMENT KIT:

Demonstrate Your Application from Your PC - Easily create text, boxes, lines and freehand drawings:
• Load the Noritake Software onto your Window 95™ or 98 PC • Connect the graphics display to the interface card • Connect the power supply to the interface board • Connect the interface card to your parallel port

Using the Noritake software on your PC: • Download BMP files and illustrate them on the graphics display • Enter text • Create boxes, lines and freehand drawings easily.

Noritake Development Kit Includes: • Noritake Graphics Development Software • Power Supply • Interface board from display to PC parallel port (parallel port cable not included - recommend AE1012-ND)

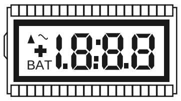


Development Kit

Windows is a registered trademark of Microsoft Corp.

Number Of Dots	Display Char.	Dot Pitch (mm)	Display Area W x H (mm)	PCB Size W x H (mm)	Power (v/mA) (all dots on)	Operating Temp. (°C)	Storage Temp. (°C)	Digi-Key Part No.	Price Each 1	10	50	Noritake Part No.
Graphic Vacuum Fluorescent Display Modules												
256 x 64	8 x 42	0.65 x 0.65	166.3 x 41.50	222 x 78	5.0/2000	-20 to +70	-40 to +85	286-1010-ND	300.40	277.87	225.30	GU256X64-372
128 x 32	4 x 21	0.65 x 0.65	83.05 x 20.65	130 x 38.5	5.0/450	-40 to +85	-40 to +85	286-1011-ND	128.20	118.59	96.15	GU128X32-800A
128 x 64	8 x 21	0.65 x 0.65	83.05 x 41.45	140 x 68	5.0/750	-40 to +85	-40 to +85	286-1012-ND	159.60	147.63	119.70	GU128X64-800
256 x 32	4 x 42	0.65 x 0.65	166.25 x 20.65	220 x 50	5.0/650	-40 to +85	-40 to +85	286-1013-ND	163.80	151.52	122.85	GU256X32-800
Graphics Development Kit Without Display								286-1015-ND	200.00	185.00	150.00	GUD-ND
Graphics Software On CD-ROM								286-1016-ND	25.00	23.13	18.75	GUCD-1.0

Varitronix Limited LCDs



Electrical/Optical Char.	Static	HV†	Units
Oper. Temperature Range	-10°–+60°	-10°–+60°	°C
Operational Voltage, RMS	3.0	3.9 - 4.7	V-RMS
Drive Frequency	30-300	60-300	Hz
Current Consumption	15	15	nA/mm²
Turn-On Time	120	80	ms
Turn-Off Time	100	80	ms

Reflective and Transflective

(Transflective Denoted by "FC" in Varitronix Part No.)

Features: • Long Life/High Reliability • Excellent Optical Quality • High Contrast Ratio • Wide Viewing Angle • Large Useful Viewing Area • Fast Response • Low Power Consumption • Data Sheet Included

Format	Digit Size (mm)	No. Of Digits	Type (mm)	Conn. No. Of Pins	Dual Row Spacing (mm)	Driver ICs (Not Included) (Applies to both P/N)	LED Black-light	Matching Bezel ‡	Digi-Key Part No.	Price Each 1	5	10	Varitronix Part No.
.8.8	12.70	2	2.54 Dip	18	33.02	4543B(2)	—	PRD180LPW-ND	153-1003-ND	4.30	3.98	3.57	VI-201-DP-RC-S
							—	PRD180LPW-ND	153-1002-ND*	4.50	4.17	3.74	VI-201-DP-FC-S
▲~ + BAT 1.8:8.8	12.70	3 1/2	2.54 Dip	40	33.02	4543B(4)	—	PRD180LP-ND	153-1005-ND	5.70	5.28	4.74	VI-322-DP-RC-S
							1	PRD180LP-ND	153-1004-ND*	6.80	6.29	5.65	VI-322-DP-FC-S
▲ 8.8:8.8	12.70	4	2.54 Dip	40	33.02	4543B(4)	—	PRD180LP-ND	153-1007-ND	5.70	5.28	4.74	VI-422-DP-RC-S
							1	PRD180LP-ND	153-1006-ND*	6.80	6.29	5.65	VI-422-DP-FC-S
÷1.8:8:8.8	10.16	4 1/2	2.54 Dip	40	33.02	4543B(5)	—	PRD180LP-ND	153-1009-ND	5.70	5.28	4.74	VI-502-DP-RC-S
							1	PRD180LP-ND	153-1008-ND*	6.80	6.29	5.65	VI-502-DP-FC-S
8.8:8.8:8.8	12.70	6	2.54 Dip	50	33.02	4543B(6)	—	PRD250LP-ND	153-1011-ND	9.30	8.61	7.72	VI-602-DP-RC-S
							2	PRD250LP-ND	153-1010-ND*	11.30	10.46	9.38	VI-602-DP-FC-S
8.8:8.8:8.8:8.8	12.70	8	2.54 Dip	68	33.02	4543B(8)	—	PRD360LP-ND	153-1013-ND	13.20	12.21	10.96	VI-804-DP-RC-S
							3	PRD360LP-ND	153-1012-ND*	15.10	13.97	12.54	VI-804-DP-FC-S
▲~ + BAT 1.8:8.8	17.78	3 1/2	2.54 Dip	40	40.64	4543B(4)	—	N/A	153-1015-ND	10.50	9.72	8.72	VI-319-DP-RC-S
							2	N/A	153-1014-ND*	14.30	13.23	11.87	VI-319-DP-FC-S
8.8:8.8	17.78	4	2.54 Dip	40	40.64	4543B(4)	—	N/A	153-1017-ND	11.80	10.92	9.80	VI-415-DP-RC-S
							2	N/A	153-1016-ND*	14.30	13.23	11.87	VI-415-DP-FC-S
8:8:8.8.8	10.16	5	2.54 Dip	40	33.02	4543B(5)	—	PRD180LP-ND	153-1019-ND	5.70	5.28	4.74	VI-508-DP-RC-S
							2	PRD180LP-ND	153-1018-ND*	6.80	6.29	5.65	VI-508-DP-FC-S
8.8:8.8:8.8	17.78	6	2.54 Dip	50	40.64	4543B(6)	—	N/A	153-1021-ND	15.70	14.53	13.04	VI-607-DP-RC-S
							3	N/A	153-1020-ND*	19.80	18.32	16.44	VI-607-DP-FC-S
LO BAT ÷1.8:8.8	12.70	3 1/2	2.54 Dip	40	33.02	4543B(4)	—	PRD180LP-ND	153-1023-ND	5.70	5.28	4.74	VI-302-DP-RC-S
							1	PRD180LP-ND	153-1022-ND*	6.80	6.29	5.65	VI-302-DP-FC-S
LO BAT ÷1.8:8:8.8	10.16	4 1/2	2.54 Dip	40	33.02	4543B(5)	—	PRD180LP-ND	153-1025-ND	5.70	5.28	4.74	VI-509-DP-RC-S
							1	PRD180LP-ND	153-1024-ND*	6.80	6.29	5.65	VI-509-DP-FC-S
8.8.8.8	12.70	4	2.54 Dip	20	33.02	—	—	PRD180LP-ND	153-1046-ND†	6.40	5.92	5.32	VIM-404-DP-RC-S-H
							2	PRD180LP-ND	153-1047-ND†*	6.80	6.29	5.65	VIM-404-DP-FC-S-HV
LOW BATTERY CONTINUITY -1.8.8.8.8	10.16	4 1/2	2.54 Dip	15	33.02	ICL7129A	—	PRD180LP-ND	153-1054-ND†	5.90	5.46	4.90	VIM-503-DP-RC-S-HV
							2	PRD180LP-ND	153-1055-ND†*	6.80	6.29	5.65	VIM-503-DP-FC-S-HV
8.8:8.8:8.8:8.8	12.70	8	2.54 Dip	42	33.02	—	—	PRD360LP-ND	153-1056-ND†	11.70	10.83	9.72	VIM-808-DP-RC-S-HV
							3	PRD360LP-ND	153-1057-ND†*	17.00	15.73	14.11	VIM-808-DP-FC-S-HV

‡ Bezels can be found under PRD Plastics in the manufacture index. † Multiplexed Display * Transflective

Backlight For Transflective LCDs

LED Backlight	Overall Size (mm) L x W x H	Active Size (mm) LE x WE	Forward Current mA at 4.1V Typ.	Max.	Digi-Key Part No.	Price Each 1	5	10	Varitronix Part No.
1	565 x 19.5 x 3.5	49 x 12	70	140	153-1026-ND	7.30	6.76	6.06	LED4-16264
2	75 x 26.6 x 3.8	60 x 22	135	270	153-1027-ND	11.20	10.36	9.30	LED4-20464B
3	94 x 24 x 4	84 x 19	180	360	153-1028-ND	9.50	8.79	7.89	LED4-20265

Varitronix Limited LCD Modules

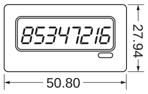
Display Format	Matching Bezel ‡	Character Format	Outline Dim. (mm) W x H x D	Display Area Dim. (mm) W x H	Character Size (mm) W x H	Operating Temperature (°C)	Storage Temperature (°C)	Supply Voltage (V)	Digi-Key Part No.	Price Each 1	5	10	Varitronix Part No.
Standard LCD Module (Data Book Sold Separately)													
16 x 2	PRD250LPW-ND	5 x 8 dots	84 x 44 x 10	61.0 x 15.8	2.95 x 5.55	-5° to +50°	-20° to +60°	5	153-1036-ND	20.50	18.97	17.02	MDL-16265-LV
24 x 2	PRD360LPW1-ND	5 x 8 dots	118 x 36 x 10	93.5 x 15.8	3.2 x 5.15	-5° to +50°	-20° to +60°	5	153-1041-ND	33.10	30.62	27.48	MDL-24265-LV
Supertwist LCD Module (Data Book Sold Separately)													
16 x 1	PRD250LPW1-ND	5 x 8 dots	80 x 36 x 11	64.5 x 13.8	3.15 x 6.30	-5° to +50°	-20° to +60°	5	153-1032-ND	17.90	16.56	14.86	MDLS-16166-LV-G
16 x 4	N/A	5 x 8 dots	87 x 60 x 10	61.8 x 25.2	2.95 x 4.75	-5° to +50°	-20° to +60°	5	153-1048-ND	49.00	45.33	40.67	MDLS-16465-LV-G
20 x 1	N/A	5 x 8 dots	182 x 33.5 x 11	154 x 15.3	6.7 x 11.50	-5° to +50°	-20° to +60°	5	153-1034-ND	52.90	48.94	43.91	MDLS-20189-LV-G
20 x 2	PRD360LPW-ND	5 x 8 dots	116 x 37 x 11	83.0 x 18.6	3.2 x 5.55	-5° to +50°	-20° to +60°	5	153-1039-ND	32.60	30.16	27.06	MDLS-20265-LV-G
20 x 4	N/A	5 x 8 dots	98 x 60 x 12	76.0 x 25.2	2.95 x 4.75	-5° to +50°	-20° to +60°	5	153-1051-ND	47.40	43.85	39.35	MDLS-20464-LV-G
24 x 2	PRD360LPW1-ND	5 x 8 dots	118 x 36 x 10	93.5 x 15.8	3.2 x 5.15	-5° to +50°	-20° to +60°	5	153-1042-ND	35.00	32.38	29.05	MDLS-24265-LV-G
40 x 2	N/A	5 x 8 dots	182 x 33.5 x 11	154.0 x 15.8	3.15 x 5.50	-5° to +50°	-20° to +60°	5	153-1044-ND	53.00	49.03	43.99	MDLS-40266K-LV-G
40 x 4	N/A	5 x 8 dots	196 x 56 x 11	154.4 x 27.6	3.15 x 6.30	-5° to +50°	-20° to +60°	+5/-5	153-1052-ND	96.00	88.80	79.68	MDLS-40466-G-HV
Supertwist LCD Module w/LED Backlighting (Data Book Sold Separately)													
8 x 1	PRD250LPW-ND	5 x 8 dots	84 x 44 x 15.2	61.0 x 15.8	6.45 x 10.75	-5° to +50°	-20° to +60°	5	153-1030-ND*	34.10	31.55	28.31	MDLS-81809-LV-G-LED-04
16 x 1	PRD250LPW1-ND	5 x 8 dots	80 x 36 x 14.2	64.5 x 13.8	3.15 x 6.30	-5° to +50°	-20° to +60°	5	153-1033-ND*	24.50	22.67	20.34	MDLS-16166-LV-G-LED-04
16 x 2	PRD250LPW-ND	5 x 8 dots	84 x 44 x 13	61.0 x 15.8	2.95 x 5.55	-5° to +50°	-20° to +60°	5	153-1038-ND	28.80	26.64	23.91	MDLS16265LVGLED4G14
16 x 2	PRD250LPW-ND	5 x 8 dots	84 x 44 x 13	61.0 x 15.8	2.95 x 5.55	-5° to +50°	-20° to +60°	5	153-1072-ND†	28.80	26.64	23.91	MDLS16265LVGLED4G16
20 x 1	N/A	5 x 8 dots	182 x 33.5 x 13.3	154 x 15.3	6.7 x 11.50	-5° to +50°	-20° to +60°	5	153-1071-ND*	69.00	63.83	57.27	MDLS-20189-LV-G-LED-04
20 x 2	PRD360LPW-ND	5 x 8 dots	116 x 37 x 14.4	83.0 x 18.6	3.2 x 5.55	-5° to +50°	-20° to +60°	5	153-1040-ND*	41.60	38.48	34.53	MDLS-20265-LV-G-LED-04
40 x 2	N/A	5 x 8 dots	182 x 33.5 x 15.04	154.0 x 15.8	3.15 x 5.50	-5° to +50°	-20° to +60°	5	153-1045-ND	70.70	65.40	58.69	MDLS-40266-LV-G-LED4G
40 x 4	N/A	5 x 8 dots	196 x 56 x 16	154.4 x 27.6	3.15 x 6.30	-5° to +50°	-20° to +60°	+5/-5	153-1053-ND	117.80	108.97	97.78	MDLS-40466-GHVLED4G

***** The LED chips are distributed over the whole lit area, bonded in a pattern which gives the most uniform illumination. Power connection is made by two solder holes, marked "A" for +5V and "K" for Ground. ‡ Bezels can be found under PRD Plastics in the manufacture index. † 16 Pin Version

Chip on Glass (Pinned Version)

Display Format	STN Mode	Character Format	Outline Dim. (mm) W x H x D	Display Area Dim. (mm) W x H	Character Size (mm) W x H	Operating Temperature (°C)	Storage Temperature (°C)	Supply Voltage (V)	Digi-Key Part No.	Price Each 1	5	10	Varitronix Part No.
Transflective Polarizer													
16 x 2	Green	5 X 8 dots	66 x 27.7 x 2.8	66 x 15.7	2.95 x 5.15	-10° to + 60°	-20° to + 70°	5	153-1073-ND	15.00	13.88	12.45	COGS-16265S-DP-FC-LV-G
16 x 2	Silver	5 X 8 dots	66 x 27.7 x 2.8	66 x 15.7	2.95 x 5.15	-10° to + 60°	-20° to + 70°	5	153-1074-ND	15.00	13.88	12.45	COGS-16265S-DP-FC-LV-S
Reflective Polarizer													
16 x 2	Green	5 X 8 dots	66 x 27.7 x 2.8	66 x 15.7	2.95 x 5.15	-10° to + 60°	-20° to + 70°	5	153-1075-ND	15.00	13.88	12.45	COGS-16265S-DP-RC-LV-G
16 x 2	Silver	5 X 8 dots	66 x 27.7 x 2.8	66 x 15.7	2.95 x 5.15	-10° to + 60°	-20° to + 70°	5	153-1076-ND	15.00	13.88	12.45	COGS-16265S-DP-RC-LV-S

CUB7 Series Miniature Electronic 8-Digit Counter



CUB7 / CUB7W (with Voltage Input)

• Replaceable internal lithium battery provides up to 7 years of uninterrupted operation • Front panel reset or remote reset • Wire connection made via screw clamp type terminals • Fits DIN standard cut-out 1.77" (45 mm) x 0.874" (22.2 mm) • Low speed count to 30Hz from switch closure or O.C. transistor. High speed count to 10 KHz (CUB7)

DESCRIPTION:

The *CUB7* and *CUB7W* are an 8-digit miniature counter with large 0.35 inch (8.89 mm) high digits. They have an LCD read-out available in Positive Image Reflective, Negative Image Transmissive with yellow/green or red LED backlighting. The backlight versions require an external 9 to 28 VDC power supply. The *CUB7* series is housed in a lightweight, high impact plastic case with a clear viewing window. The sealed front panel with the silicone rubber reset button meets NEMA 4X/IP65 specifications for wash-down and/or dusty environments, when properly installed. The *CUB7W* accepts most machine control voltage signals. The input accepts AC (50/60 Hz) or DC control voltages from 10 to 300 V at count speeds up to 30 counts per second (cps).

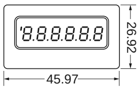
CUB7T

• 10 programmable timer ranges • 8-digit LCD reflective display with "Timer Active" annunciator • .35" (8.89mm) high digits • Available in either contact or voltage versions • Replaceable internal lithium battery provides up to 6 years of uninterrupted operation • Both front panel program and rest buttons are individually enabled • Wire connections via screw clamp type terminals • Front panel and remote reset input • NEMA 4X/IP65 sealed front bezel

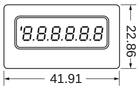
Description	Digi-Key Part No.	Price Each	Red Lion Part No.
CUB7 8-Digit Reflective Display	RLC700-ND	48.00	CUB70000
CUB7 8-Digit Yellow/Green Backlight	RLC701-ND	68.00	CUB70010
CUB7 8-Digit Red Backlight	RLC702-ND	68.00	CUB70020
CUB7W 8-Digit Reflective w/Voltage Input	RLCW70-ND	52.00	CUB7W000
CUB7W 8-Digit Yellow Backlight w/Voltage Input	RLCW71-ND	72.00	CUB7W010
CUB7W 8-Digit Red Backlight w/Voltage Input	RLCW72-ND	72.00	CUB7W020
CUB7T 8-Digit Reflective w/Contact Input	RLC7T0-ND	44.00	CUB7T000
CUB7T 8-Digit Reflective with Voltage Input	RLC7T1-ND	44.00	CUB7T100

MDMU Miniature Electronic 6-Digit Counter/Timer/Tach

Panel Mount



Circuit Board Mount



• LCD, Positive Image Reflective or Negative Image Transmissive with yellow/green or red LED backlighting • Counter, timer and tach all in a single unit • Rate multiplier/prescaler from 0.0001 to 1.9999 in count and tach modes • 10 ranges in timer mode • Selectable decimal points • 5 VDC powered • Panel mount or PC board mount

DESCRIPTION

The MDMU is a complete 6-digit counter/timer/tach in a small panel or printed circuit board mounted package. It is designed to operate from a 5 VDC power supply. It has a 6-digit LCD with 0.35" (8.89mm) high digits and 5 selectable decimal points. In the timer modes, a flashing annunciator is supplied to indicate that the signal input of the MDMU is active. The displays are available in Positive Image Reflective (black digits, reflective background) or Negative Image Transmissive (illuminated digits, dark background) with red or yellow/green backlighting.

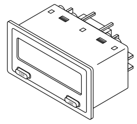
The **Counter** mode can be selected by setting the Mode Select Inputs to the appropriate levels (Hardware selection). A rate multiplier of 0.0001 to 1.9999 and a decimal point of 0 through 0.00000 can be selected using the *Program* mode. Decimal points may also be set using the DP Inputs (Hardware selection). Both the Count (CNT) and LSC Inputs can be used. (Using the *Program* mode options causes the counter to increment on the opposite edge of the Input signal.)

The **Timer** mode and range can be selected by either setting the Mode Select Inputs to the appropriate levels (Hardware selection) or by selecting the range in the *Program* mode. The timing range increments available are 1 msec, 10 msec, 100 msec, 1 sec, 0.1 min., 1 min., 0.01 hr, 0.1 hr, 1 hr, and hr:min:sec. The *Timer Active* annunciator will flash at a 2 Hz rate when the input to the timer is activated. Both the CNT and the LSC inputs can be used. The Inhibit (INH) Input can be used to enable or disable Leading Zero Blanking (LZB).

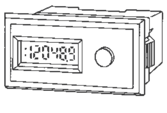
The **Tach** mode can be selected by setting the Mode Select Inputs to the appropriate levels (Hardware selection). In the **Tach** mode, the MDMU operates as a fixed 1 second time base tachometer. In the *Program* mode, the time base can be set 1 through 7 seconds (in whole second increments). The rate multiplier can also be programmed from 0.0001 through 1.9999. Decimal points can be set from 0 through 0.00000. Decimal points may also be set using the DP Inputs. Both the CNT and the LSC Inputs can be used.

Description	Digi-Key Part No.	Price Each	Red Lion Part No.
MDMU 6-Digit Panel Mount, Reflective Display	RLCU00-ND	35.00	MDMU0000
MDMU 6-Digit Panel Mount, Yellow Backlight	RLCU01-ND	45.00	MDMU0010
MDMU 6-Digit Panel Mount, Red Backlight	RLCU02-ND	45.00	MDMU0020
MDMU 6-Digit PCB Mount, Reflective Display	RLCU10-ND	32.00	MDMU0100
MDMU 6-Digit PCB Mount, Yellow Backlight	RLCU11-ND	42.00	MDMU0110
MDMU 6-Digit PCB Mount, Red Backlight	RLCU12-ND	42.00	MDMU0120
MDM Cable Assembly	RLC70-ND	12.00	HWK70000

Counters and Timers

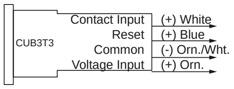


CUB 5 — LCD, Positive reflective or negative transmissive with yellow-green or red LED backlighting • 0.46" (11.7mm) high digits • Programmable decimal point • Front panel and remote reset • Count speeds up to 20KHz (high speed input) • Operates from 9 to 28 VDC power source • Programmable prescaler for totaling • Bi-directional counting, up/down control • Quadrature sensing (up to 4 times resolution) • Anti-coincidence counting (Add/Add and Add/Sub) • Separate count and rate input mode • Wire connections made via screw clamp type terminals • Dual counter mode • Count input voltage up to +28VDC • NEMA 4X/IP65 sealed front bezel.

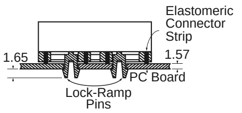


CUB III — Operates from switch contact or NPN open collector inputs • Self powered, 2-wire connection, eliminates power wiring. **Description:** Nylon case snap-fits into a standard rectangular opening without screws or other hardware. Hook-up is simply a matter of connecting two wires. No external power, internal batteries provide year of uninterruptible service. **Specifications:** • 6-digit, LCDm 0.2" (5.08mm) high • **Power:** 2 replaceable Alkaline "N" cells. Nominal battery life 4 years. Front panel reset button • **Count Input:** Switch contact of solid-state transistor switch. Counter increments on negative going edge of input. • **Count Speed:** 100 counts/sec. Batteries not supplied with counter, order separately.

CUB 3T3 — The CUB3T3 is designed to be used as hour, tenth hour, hundredth hour or tenth minute timers. The timing function can be activated by either a contact closure or the application of 10 to 300 (AC 50/60 Hz or DC) and is equipped with a remote reset. Time is displayed on a 6-digit LCD that will wrap around from a full display of "999999" to "000000" when an overflow occurs. **Specifications:** • **Display:** 6-digit, LCD, 0.2" (5.08mm) high. • **Power:** 3 volts supplied by a non-replaceable lithium battery. Nominal battery life is 7 years. • **Remote Reset:** 15 msec min. pulse width (active low) from 3.0 V bi-polar output, an open collector transistor, or a switch contact to common. • **Signal Input:** Contact Connections: Switch Contact or Solid-State Transistor Switch. A maintained closed switch will actuate the timer. • **10 to 300 V Connections:** 10 V min. to 300 V max. Constant voltage applied to the inputs will actuate the timer.

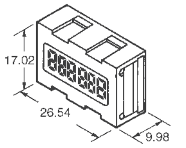


SUPER SUB CUB — True quadrature — with resolutions up to 4 times the encoded input • Bi-directional counting with up/down control • Anti-coincidence addition and subtraction • Polarity indication • 8-digit counting capability (6-digit display) • Decimal point and leading zero blanking selection • Solderless, elastomeric interconnects (snap mounts directly on P.C. board) • Ultra low power, 25µA at 5V (typical). **Description:** The Super Sub Cub provides all the capabilities and features of the Sub Cub 2 plus four "built-in" modes of operation: Bi-direction counting with up/down control, quadrature counting, coincidence summing and anti-coincidence add/subtract counting. *For dimensions, see Sub Cub 2.*



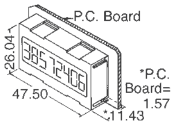
SUB CUB I — Complete 6-Digit Component Counters

• LSI counter chip with LCD display • Snap mounts directly on P.C. board • 0.2" (5.08mm) high display • Solderless, elastomeric interconnects • Ultra-low power, 5V at 15µA typical • Latchable display with leading zero blanking • Count rates to 500 KHZ • Ideal in applications for: Register, status and usage counting, frequency, EPUT, and RPM indication timer, pulse-width and period readout. **Description:** The modules contain a custom monolithic counter/driver chip that performs all the counting functions together with a 6-digit LCD readout. To be used as frequency or rate meters, timers, phase-angle or pulse width indicators and for other complex readout requirements in addition to simple high speed counting.



SUB CUB II — Complete 6-Digit Component Counters

• LSI counter chip with LCD display • Snap mounts directly on P.C. board • 0.35" (8.89mm) high display • Solderless, elastomeric interconnects • Ultra-low power, 5V at 15µA typical • Latchable display with leading zero blanking • Count rates to 500 KHZ • Ideal in applications for: Register, status and usage counting, frequency, INPUT, and RPM indication timer, pulse-width and period readout. **Description:** The modules contain a custom monolithic counter/driver chip that performs all the counting functions together with a 6-digit LCD readout. To be used as frequency or rate meters, timers, phase-angle or pulse width indicators and for other complex readout requirements in addition to simple high speed counting.



SUB CUB 2-8A • LSI counter chip and 0.30" (7.62mm) high LCD display • Solderless, elastomeric interconnects (snap mounts directly onto PC board) • Latchable display with selectable leading zero blanking • Count rates to 750KHz • Low power, 30µA at 5V (typical) **Description:** 8-digit LCD component up-counter • Test feature allows all decades to count in parallel to provide rapid testing. *For dimensions, see Sub Cub 2.*

SUB CUB D • True quadrature with resolutions up to 4 times the encoded input • Bi-directional counting with up/down control • Polarity indication • 3 position decimal point with selectable leading zero blanking • Solderless, elastomeric interconnects (snap mounts directly onto P.C. board) • Ultra low power, 15UA at 5.0V (typical). **Description:** The Sub Cub D provides all of the capabilities of the Sub Cub 2 with two additional modes of operation: Bi-directional counting with up/down control and quadrature counting. *For dimensions, see Sub Cub 2.*

SUB CUB T • LSI timer/counter chip with crystal controlled oscillator and .35" (8.89mm) high LCD display • Snap mounts directly onto P.C. board • Solderless, elastomeric interconnect • Ultra low power, 15UA at 5.0 VDC typical • Times in hours, 0.1 hours, 0.01 hours, and 0.1 minutes • Counts in X1, :10, :100, and :1000 • Debounce selectable in counter modes • Counts rates up to 500 KHz • Annunciator to indicate timer running • Accepts AC voltage on signal input directly through input resistor. **Description:** Completely self-contained timer/counter/display module. Ideal for internal "on board" applications where a readout of elapsed time or count is needed. *For dimensions, see Sub Cub 2.*

SUB CUB R • LSI counter chip with time base chip and .35" (8.89mm) high LCD display • Snap mounts directly onto P.C. board • Solderless, elastomeric interconnects • Ultra low power, 25UA at 3V • Selectable time base from 3.9 msec to 15.9 sec • Frequency doubling capability • Selectable decimal point positions • Master reset to synchronize time base with external functions. **Description:** Completely self-contained tachometer/display module. Contains a custom monolithic counter/driver chip, a custom time base chip, and a 6-digit liquid crystal display. Ideal for internal "on board" applications where readout of rate or frequency is needed. *For dimensions, see Sub Cub 2.*

Description	Digi-Key Part No.	Price Each	Red Lion Part No.
CUB 5			
CUB 5 Dual Counter & Rate Indicator Positive Image Reflective	RLC500-ND	92.05	CUB50000
CUB 5 Dual Counter & Rate Indicator with Yellow-Green Backlighting	RLC510-ND	103.00	CUB50010
CUB 5 Dual Counter & Rate Indicator with Red Backlighting	RLC520-ND	103.00	CUB50020
Micro Line/Sensor Power Supply	RLCMLPS-ND	27.00	MLPS0000
CUB III and CUB 3T3			
CUB III (Requires 2 N-Cell Batteries)	RLC03-ND	28.00	CUB III
CUB III w/Lithium Battery (Battery life 10 yrs. depending on usage)	RLC04-ND	33.00	CUB3L000/A
N-Cell Battery	P147-ND	1.08	AM5X
CUB 3T300 Timer, Remote Reset, 1 hour	RLC3TR-30-ND	48.00	CUB3T300
CUB 3T310 Timer, Remote Reset, 0.1 hour	RLC3TR-31-ND	48.00	CUB3T310
CUB 3T320 Timer, Remote Reset, 0.01 hour	RLC3TR-32-ND	48.00	CUB3T320
CUB 3T330 Timer, Remote Reset, 0.1 minute.	RLC3TR-33-ND	48.00	CUB3T330
SUPER SUB CUB			
Super Sub-Cub Display/Counter Module	RLC200A-ND	38.00	SSCUB200
Super Sub-Cub Prototype P.C. Board	RLC08-ND	14.00	DM-0SC-B03/A
SUB CUB I and II			
Evaluation Kit (batteries included, RLC02-ND & display counter needed)	RLC01-ND	52.00	DM-OSC-B01/A
Mounting PCB for Display Counter to Evaluation Kit	RLC02-ND	10.00	DM-OSC-B02/A

Description	Digi-Key Part No.	Price Each	Red Lion Part No.
Display Counter .2" (5.08mm) High Digits	RLC1000-ND	22.00	SCUB-1000
Display Counter .35" (8.89mm) High Digits	RLC2000-ND	28.00	SCUB-2000
SUB CUB 2-8A			
8 Digit LCD component up-counter	RLC2-8A-ND	40.00	SCUB28A0
SUB CUB D			
8 Digit Bi-directional Module w/6 Digit LCD Display	RLC05-ND	30.00	SCUBD-200/A
Sub Cub D Prototype P.C. Board	RLC09-ND	14.00	DM-0SC-B04/A
SUB CUB T			
Timer/Counter 5 Digit	RLC07-ND	29.00	SCUBT-200/A
SUB CUB R			
6 Digit Rate Indicator Module	RLC06-ND	37.00	SCUBR-200/A
Bezels			
Bezel Kit w/P.C. Board & Cable (For RLC05-ND, RLC06-ND, RLC07-ND)	RLC10-ND	24.00	HWK-60-000/A
Panel Bezel Kit w/P.C. Board & Cable (For RLC2-8-ND)	RLC28-ND	26.40	HWK-28-000/A
Panel Bezel Kit w/o P.C. Board & Cable (For RLC05-ND, RLC07-ND, RLC2-8-ND, RLC200A-ND, RLC2000-ND)	RLC30-ND	10.00	HWK-30-000/A
Panel Bezel Kit w/P.C. Board & Cable (For RLC2000-ND)	RLC40-ND	20.00	HWK-40-000/A
Super Sub-Cub Panel Bezel Kit w/P.C. Board & Cable (For RLC200A-ND)	RLC50A-ND*	24.00	HWK-50-000/A

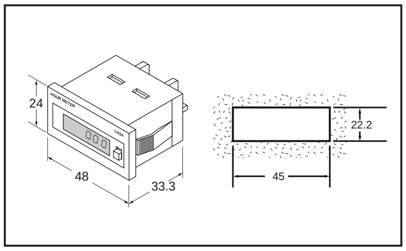
* Does not include SUPER SUB-CUB Display/Counter Module. Order SUPER SUB-CUB Module separately.

Aromat Corporation
NAiS Your Partner for the 21st Century

Timers, Counters and Hour Meters

9278B-ND	Aromat Timers, Counters Data Book	**$2.95**

LCD Hour Meters



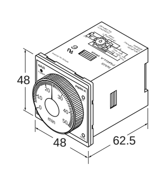
Aromat hour meters display total time when the signal input terminal is connected either together (No-Voltage, using a switch or relay) or the rated input voltage is applied directly to the input terminal (AC/DC Volt type).

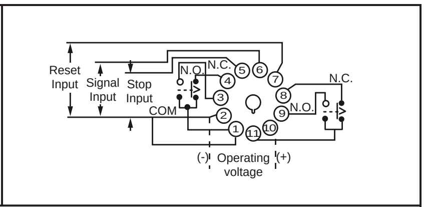
All hour meters feature a built-in 10 year battery for long life and screw terminals for easy connections.

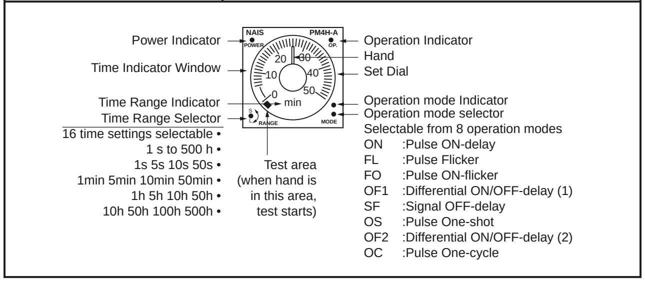
Features: • Large 7-digit LCD display value reading • Wide range of measurement: 0 to 3999 days, 23.9 hours; 0 to 99999.99 hours; 0 to 9999 hours, 59.9 min.

Input Type	Time Range	Reset	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-120VAC	0-3999 days, 23.9 hrs.	Manual PB	255-1180-ND	62.70	59.40	56.10	LH24-F-DH-AL
200-240VAC	0-3999 days, 23.9 hrs	Manual PB	255-1183-ND	62.70	59.40	56.10	LH24-F-DH-AH
200-240VAC	0-99999.99 hrs	Manual PB	255-1184-ND	62.70	59.40	56.10	LH24-F-H-AH
200-240VAC	0-9999 hrs, 59.9 min.	Manual PB	255-1185-ND	62.70	59.40	56.10	LH24-F-HM-AH

PM4H-A Analog Timer







16 time settings selectable •
1 s to 500 h •
1s 5s 10s 50s •
1min 5min 10min 50min •
1h 5h 10h 50h •
10h 50h 100h 500h •

Selectable from 8 operation modes

ON	:Pulse ON-delay
FL	:Pulse Flicker
FO	:Pulse ON-flicker
OF1	:Differential ON/OFF-delay (1)
SF	:Signal OFF-delay
OS	:Pulse One-shot
OF2	:Differential ON/OFF-delay (2)
OC	:Pulse One-cycle

Aromat's PM4H-A series of analog timers operates in one of eight different modes. Available in 11 pin octal base or built-in screw terminals for easy connection. All are IP65 sealed for water and dust and are capable of switching 5A @ 250 VAC with a DPDT timed out relay. Screw terminal types include gasket and mounting bracket.

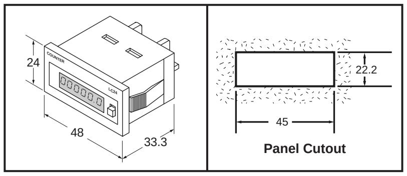
Features: • Front panel of IP65 type is protected against water-splash and dust • 100-240V AC free-voltage input • Built-in screw terminals • 8 different operation modes • Multiple time ranges—1 s to 500 h

Operating Voltage	Terminal	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-240VAC	11 pin octal	255-1198-ND	48.45	45.90	43.35	PM4HA-H-AC240VW
100-240VAC	Screw	255-1199-ND	52.73	49.95	47.18	PM4HA-H-AC240VSW
24VAC/DC	11 pin octal	255-1200-ND	41.80	39.60	37.40	PM4HA-H-24VW
24VAC/DC	Screw	255-1201-ND	46.08	43.65	41.23	PM4HA-H-24VSW
12VDC	11 pin octal	255-1202-ND	39.90	37.80	35.70	PM4HA-H-DC12VW
12VDC	Screw	255-1203-ND	44.18	41.85	39.53	PM4HA-H-DC12VSW

Relay Accessories

Description	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
Snap-in Bezel, Gray for PM4HA Series	255-1206-ND	2.00	1.89	1.79	AT7811
Snap-in Bezel, Black for PM4HA Series	255-1207-ND	2.00	1.89	1.79	AT7812
Snap-in Bezel, Silver for PM4HA Series	255-1208-ND	2.00	1.89	1.79	AT7813
Clear Protective Cover for Timers & Counters	255-1223-ND	4.20	3.78	3.57	N-TC-48
Clear Protective Cover for PM4HA Series	255-1209-ND	3.99	3.78	3.57	N-TC
40" Din Rail Mounting Track for Track Sockets	255-1210-ND	6.08	5.76	5.44	AT8-DLA1
End Stop Plate for Din Rail Mounting Track	255-1211-ND	2.00	1.89	1.79	ATA4806

LCD Up Totalize Counters



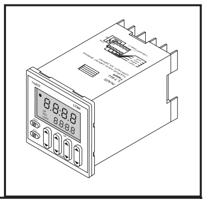
Aromat LCD Up Counters will display a totalized count when the input terminals have the proper input applied. AC input types have a maximum count of 30 cps and DC input types have a maximum count of 70 cps.

All counters are powered by a 10 year internal battery and feature screw terminals for easy connection.

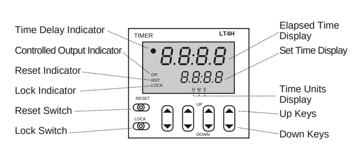
Features: • Large 7-digit LCD display • Unnecessary "0"s are eliminated from the upper digits of elapsed value for easy reading. • Wide counting range

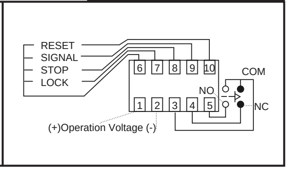
Input Type	Max. Count	Reset	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
200-240VAC	30cps	Manual PB	255-1192-ND	57.95	54.90	51.85	LC24-F-AH

LT4H Digital Timer



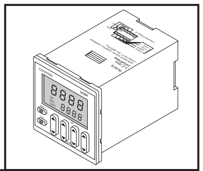
Aromat's LT4H Digital Timer is intended for process control for applications requiring duration time control such as delay-on/off, repeat cycle and start/stop time accumulation. The LT4H has features such as a bright 2 color back-lit display and EE-Prom memory, keeping your program settings without the need of an internal battery. The waterproof front panel keeps out dirt and water under poor operating conditions. Timing from .001 sec. to 999.9 hours, with 8 modes of operation and built-in timed SPDT relay (5A 250VAC).





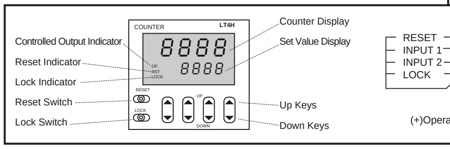
Operating Voltage	Terminal	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-240VAC	11 pin octal	255-1214-ND	104.00	93.60	88.40	LT4H-AC240V
100-240VAC	Screw Term.	255-1215-ND	104.00	93.60	88.40	LT4H-AC240VS
12-24VDC	11 pin octal	255-1216-ND	104.00	93.60	88.40	LT4H-DC24V
12-24VDC	Screw Term.	255-1217-ND	104.00	93.60	88.40	LT4H-DC24VS

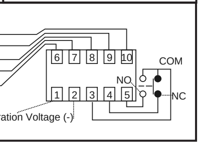
LC4H Digital Counters



Aromat's LC4H Digital Counters are presettable counters that will count up or count down until your preset count is reached, then trigger the internal relay to switch in one of seven output modes.

Features such as 2 color back-lit display and waterproof front panel display allow this counter to be used in extreme environments.

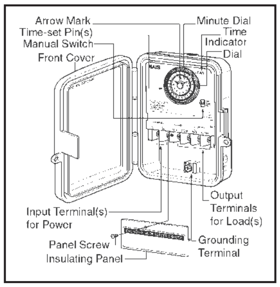




Operating Voltage	Terminal	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
100-240VAC	11 pin octal	255-1218-ND	106.00	95.40	90.10	LC4H-R4-AC240V
100-240VAC	Screw Term.	255-1219-ND	110.50	99.45	93.93	LC4H-R4-AC240VS
12-24VDC	11 pin octal	255-1220-ND	101.00	90.90	85.85	LC4H-R4-DC24V
12-24VDC	Screw Term.	255-1221-ND	105.50	94.95	89.68	LC4H-R4-DC24VS

Low Cost Universal Timer

c UL us LISTED



User presettable in 15 minute intervals for permanent setting points of On-Off cycles. Easy to read direct view clock face and durable plastic enclosure (NEMA 3R rated) commonly used for indoor and outdoor applications. Perfect for applications such as: interior/exterior lighting, heating/ventilation systems, sign/display lighting, pool heaters, fans and conveyors, filters, pumps and refrigeration.

Specifications: Available in 120VAC or 208 to 277VAC versions. SPST and DPST output with 30A@277VAC - Resistive; 15A@125VAC/5A@250VAC - Tungsten. Minimum load 100mA@12VDC. Nema 3R rated case for indoors/outdoors, safety lock compatible for security after programming.

Operating Voltage	Switching Circuit	Digi-Key Part No.	Price Each 1	25	50	Aromat Part No.
120VAC	SPST	255-1242-ND	51.00	45.90	43.35	TB1001R
208-277VAC	DPST	255-1244-ND	59.60	53.64	50.66	TB1004R

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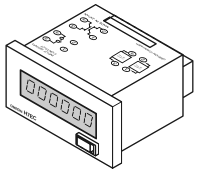
9248B-ND	Omron Counters Full Line Catalog..........$2.00

Totalize Counter



Omron's self-powered totalizing counters feature either no-voltage inputs, DC voltage only or combined AC/DC voltage inputs. Offered in both 1KHz input for high speed, no chatter input signals or 30/20Hz inputs for relay and switch (high chatter) inputs. • Operating mode: up count • Display: LCD Digital, 0.2 in. high. New Blackcase. Replaceable battery.

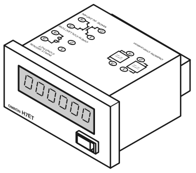
Specifications:

• Supply voltage: Not required (powered by built-in battery) • Input: AC/DC voltage — 24 to 240VAC/VDC ±10%, 50/60Hz, or 6 to 240VDC ±10% at "High" (logic) level, 0 to 2.4VAC ±10%, 50/60 Hz, or 0 to 2VDC at "Low" (logic) level • DC voltage — 4.5 to 30VDC at "High" (logic) level, 0 to 2VDC at "Low" (logic) level • No-voltage — Maximum short-circuit impedance: 10kΩ max. • Reset time: 20ms reset signal. • Instruction Sheet Included.

No. of Digits	Type of Input	Counting Speed	Terminal Type	Reset Type	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
8	No-voltage	30/1 kHz	Screw	Electrical	Z861-ND	46.04	42.63	39.79	H7EC-B
8	DC volt.	30/1 kHz	Screw	Electrical	Z865-ND	46.04	42.63	39.79	H7EC-NV-B
8	AC/DC volt.	20 Hz	Screw	Electrical	Z867-ND	63.89	59.16	55.22	H7EC-FBV
8	DC voltage input	30/1kHz	Screw	External/ Manual	Z1144-ND*	53.56	49.59	46.29	H7EC-NV-BH

*Backlight 24 VDC

Timer Counter



Omron's self-powered time totalizers displays cumulative time by counting the output signals received from a sensor. When the proper input has been applied, the timing circuit is enabled allowing the timer to start, disabling the inputs will stop the timing sequence. Key protect Switch to prevent front resetting. New blackcase. Replaceable Battery.

Specifications:

• Supply voltage: Not required (powered by built-in battery) • Input: AC/DC voltage — 24 to 240VAC, or 6 to 240VDC at "High" (logic) level, 0 to 1.5VAC, or 0 to 2VDC at "Low" (logic) level. DC voltage — 4.5 to 30VDC at "High" (logic) level, 0 to 2VDC at "Low" (logic) level. No-voltage — Max. short-circuit impedance: 10kΩ max. Short-circuit residual voltage: 0.5Vmax. Minimum open impedance: 500kΩ min. • Reset time: 20 ms reset signal. • Terminal: Screw type • Instruction Sheet Included.

Type of Input	Time Range	Features	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
No-voltage	0 to 999999.9h	w/o backlight	Z870-ND	53.56	49.59	46.29	H7ET-B
DC voltage only	0 to 999999.9h	w/o backlight	Z872-ND	53.56	49.59	46.29	H7ET-BV
AC/DC voltage	0 to 99h.59m.59s	w/o backlight	Z874-ND	68.62	63.54	59.31	H7ET-FBV1
AC/DC voltage	0 to 999999.9h	w/o backlight	Z875-ND	71.41	66.12	61.72	H7ET-FBV
DC voltage input	9999h59.9m	w/o backlight	Z1149-ND	53.56	49.59	46.29	H7ET-NV1-B
DC voltage input	999h59M59S	w/ backlight	Z1150-ND	59.19	54.81	51.16	H7ET-NV1-BH

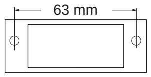
Tachometer Counter

Omrons self powered tachometers offer a large display (8.6mm) with various input types available. Selectable multiplier/divider network allows either RPM or RPS measurement. Comes with waterproofing gasket and panel mounting bracket. Screw Terminal Connections. 4 digits.

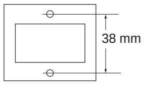
Max. Counting Speed	24 VDC Backlight	Type of Input	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
1kHz	—	No Voltage	Z1145-ND	58.26	53.94	50.35	H7ER-N-B
1kHz	—	DC Voltage	Z1146-ND	58.26	53.94	50.35	H7ER-NV-B
1kHz	Yes	DC Voltage	Z1147-ND	65.30	60.47	56.44	H7ER-NV-BH

Counter Accessories

Horizontal

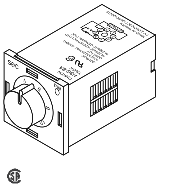


Vertical



Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Horizontal Panel Mounting Adapter for H7 Series	Z998-ND	2.82	2.61	Y92F-75
Vertical Panel Mounting Adapter for H7 Series	Z999-ND	2.82	2.61	Y92F-76

ON-Delay Timer Series H3G



Features: • DPDT contact Form • Fits standard 8-pin sockets • Ideal replacement for time relays • LED power-ON indictor • On-delay only

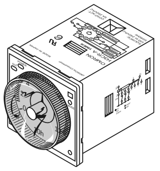
Specifications: • Supply Voltage: 100/110/120VAC • Operating Voltage: 85 to 110% of rated voltage • Timing Functions: ON-delay • Control Output, DPDT: Max. load - 5A, 125/250VAC (resistive lead), Min. load - 100mA, 5VDC • Repeat accuracy: ±2% maximum • Indicators: Power ON (LED) • Operating Temperature: 14°F to 131°F (-10°C to 55°C) • Variation due to voltage change: ±2% maximum • Variation due to temperature change: ±5% maximum • Mechanical Service Life: 10 million operations minimum • Electrical Service Life: 100,000 operations minimum at maximum ratings

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Analog Timer 120VAC 1-10 Second DPDT	Z877-ND	37.11	34.37	32.08	H3G8CAC100/110/12010S
Analog Timer 120VAC 6-60 Second DPDT	Z930-ND	37.11	34.37	32.08	H3G8CAC10011012060S
Analog Timer 120VAC 1-10 Minute DPDT	Z931-ND	37.11	34.37	32.08	H3G8CAC10011012010M
Analog Timer 120VAC 6-60 Minute DPDT	Z932-ND	37.11	34.37	32.08	H3G8CAC10011012060M
Back Mount Relay Socket for H3G/H5CR Series	Z883-ND	9.95	8.96	7.96	P3G-08
Panel Mount Adapter for H3G Series	Z886-ND	5.53	4.98	4.42	Y92F-31

Solid State Relay Timers

9249B-ND	Omron Solid State Timers Catalog.....$1.00

Series H3CR—Analog

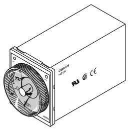


Features: • Field-selectable time ranges from 0.05 second to 300 hours • Wide range AC supply voltage models (100 to 240VAC) fits most applications and reduces spare parts inventories • Three external signal inputs for remote control of the timer. • Timing functions: ON-delay, Repeat cycle (B, B2), Signal ON/OFF delay. Signal OFF-delay, Interval.

Specifications: • Supply voltage: 100 to 240VAC, 50/60Hz • Operating voltage: 85%–110% of rated supply voltage • Timing functions: ON-delay, Repeat cycle signal OFF start, Repeat cycle signal ON start, Signal ON/OFF delay, Signal OFF-delay, Interval • Control output: Type - DPDT relay, Max. load - 5A, 250VAC, Min. load - 10mA, 5VDC • Repeat Accuracy: ±0.3% full scale max., except in 1.2 s range ±0.3%, ±10ms.

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Analog Timer 120/240VAC Time Select DPDT	Z876-ND	55.44	51.33	47.91	H3CRAAC100240DC10012
Analog Timer 24VDC/AC Time Selectable DPDT	Z997-ND	55.44	51.33	47.91	H3CRAAC24-48/DC12-48
Track Mount Relay Socket for H3CR Series	Z884-ND	11.58	10.42	9.26	P2CF-11
Protective Panel Cover, Black For H3CR	Z929-ND	3.56	3.30	3.08	Y92P-48GB

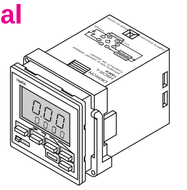
Relay Timers Series H3YN—Analog



Features: • DPDT and 4PDT control output • LED power-ON and time-UP indicators • Sockets, hold-down clips and mounting accessories • Operating mode: ON-delay, interval, repeat cycle ON-start/OFF-start (selectable with DIP switch) • Control outputs: DPDT: 5 A at 250VAC, resistive load; 4PDT: 3A at 250VAC, resistive load • Repeat Accuracy: ±1% FS max. • Setting Error: ±10%±50ms FS max. • Operating Temperature: -10°C to 50°C • Mechanical Service Life: 10,000,000 operations min. • Electrical Service Life: DPDT: 500,000 operations min.; 4PDT: 200,000 operations min. For mounting socket, use Z882-ND (DPDT) or Z811-ND (4PDT).

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Relay Timer Analog 0-10 Minute DPDT	Z1134-ND	40.40	37.41	34.92	H3YN-2 AC100-120
Relay Timer Analog 0-10 Hours DPDT	Z1135-ND	41.34	38.28	35.73	H3YN-21 AC100-120
Relay Timer Analog 0-10 Minute 4PDT	Z1136-ND	41.34	38.28	35.73	H3YN-4 AC100-120
Relay Timer Analog 0-10 Hours 4PDT	Z1137-ND	41.34	38.28	35.73	H3YN-41 AC100-120

Relay Timers Series H5CR—Digital

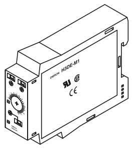


Features: • Nine field-selectable output modes accommodate a wide variety of applications • All parameters set by scroll-through menus accessed from the front panel • Field-selectable time ranges from 0.001 second to 9999 hours • High-visibility alphanumeric LCD display has 8mm high characters and built-in backlight • Precision control possible to 0.001 second • 10-year battery back-up • Selectable elapsed time (UP) and time remaining (DOWN) display • Timing functions: 9 selectable, including ON-delay, repeat cycle, OFF-delay, interval, and one-shot • Contact type: SPDT relay.

Specifications: • Supply voltage: 100 to 240VAC, 50/60Hz • Operating voltage: 85%–110% of rated voltage • Relay control output: Max. load - 5A, 250VAC; Min. load - 10mA, 5VDC • Repeat accuracy: Power start - ±0.01%, Signal start - ±0.005% • Indicators: H5CR-L: 4-digit LCD alphanumeric display, 8mm; H5CR-B: 4-digit LCD alphanumeric display with backlighting, 8mm • Memory function: Retains preset values for 10 years at 25°C • Operating Temp.: 14° to 131°F (-10°C to 55°C) • Mechanical service life: 10 million operations min. • Electrical service life: 100,000 operations min. at 5A, 240VAC, resistive load (p.f. = 1).

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No.
Digital Timer 120/240VAC Time Select SPDT	Z880-ND	126.85	117.45	109.62	H5CR-L-AC100-240
Digital Timer w/Backlight 120/240VAC Time Select	Z881-ND	140.00	129.63	120.99	H5CR-B-AC100-240
Panel Mount Adapter for H3CR/H5CR Series	Z885-ND	9.13	8.22	7.30	Y92F-30
Back Mount Relay Socket for H3G/H5CR Series	Z883-ND	9.95	8.96	7.96	P3G-08

H3DE Relay Timers DIN Rail

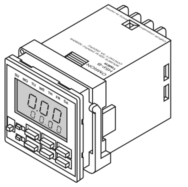


Features:

• Slim design for track mounting • Wide AC/DC power supply range (24 to 230VAC/DC) • Eight operating modes (H3DE-M) and four operating modes (H3DE-S) to cover a wide range of applications • Finger protection terminal block • Operating Mode: A: ON-delay (Signal or Power); B: Flicker OFF start (Signal or Power); B2: Flicker ON start (Signal or Power); C: Signal ON/OFF-delay; D: Signal OFF-delay; E: Interval (Signal or Power); G: Signal ON/OFF-delay; J: One-shot (Single or Power). For mounting track, use Z840-ND or Z841-ND.

Description	Digi-Key Part No.	Price Each 1	25	50	Omron Part No
DIN Mnt. Timer – 8 Mode DPDT	Z1138-ND	38.52	35.67	33.30	H3DE-M1 AC/DC 24-230
DIN Mnt. Timer – 8 Mode SPDT	Z1139-ND	47.92	44.37	41.42	H3DE-M2 AC/DC 24-230
DIN Mnt. Timer – 4 Mode DPDT	Z1140-ND	29.13	26.97	25.18	H3DE-S1 AC/DC 24-230
DIN Mnt. Timer – 4 Mode SPDT	Z1141-ND	38.52	35.67	33.30	H3DE-S2 AC/DC 24-230

Digital Daily Timer



• Precise control of both regular and special ON/OFF times. • Can be set for timed or pulsed operation, and for multiple-day operation.

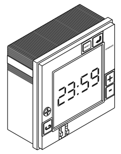
Specifications:

• Operation: 1) Daily operation (Multiple-day operation possible) 2) Pulse-output operation (pulse width can be set in units of 1 second from 1 to 59 seconds and in units of 1 minute from 1 to 60 minutes. 3) Partial operation on specified day. 4) Forced ON/OFF operation. • Repeat accuracy: ±0.01% • Memory protection: 5 years min • Life expectancy: 50,000 operations min (15A, 250VAC, resistive load) • Operating temperature: -10° to 55°C

Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Timer Digital Daily 100-240VAC	Z1142-ND	143.76	133.11	H5F-B

OMRON

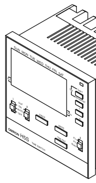
Programmable Weekly Timer



Large LCD display with 7 day x 24 hour programming. Perfect for controlling On-Off cycles for lighting, industrial and security. Two independent 15A control circuits and 16 step front program options allows fast and easy program changes. Wire connections are made by screw terminals from either the front or the back. Timer may be wall mounted, recessed into panel or Din rail mounted. All mounting hardware and instructions are included. Optional protective hard plastic cover prevents accidental resetting and protects from dirt and water.

Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Programmable Timer 100-240VAC w/Manual Override	Z1000-ND	177.58	164.43	H5L-A
Clear Protective Cover (Hard Plastic) for H5L-A	Z1001-ND	9.03	8.08	Y92A-96A

Programmable Daily/Weekly Timer

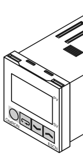


- AM/PM display • Field- adjustable ON/OFF, cycle, and pulse output • A different program possible each day • Wide supply voltage range • Two independent 15A control circuits with manual override • Battery backup for memory protection • Automatic or manual operation following power failure

SPECIFICATIONS:
- Supply voltage: AC 100 to 240V • Long-term error: ±15 seconds per month • Max load: 15A, 250VAC resistive load • Connections: Terminal screws • Min. load: 100mA, 5VDC • Operating temperature: -10° to 55°C • Repeat accuracy: ±0.01% • 50,000 operations minimum, 15A, 250VAC, resistive load

Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Digital Weekly Timer 100-240VAC	Z1143-ND	183.22	169.65	H5S-B

Digital Temperature Controller

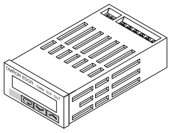


- Compact and Intelligent Temperature Controller • Heating control • Water-resistant: Construction: NEMA4

SPECIFICATIONS:
- Supply voltage: 100 to 240VAC, 50/60Hz • Control method: PID or ON/OFF control • Sensor input: Thermocouple: K, J, T, E, L, U, N, R, S, B • Operating temperature: -10°C to 55°C • Voltage output: 12VDC (PNP), max. load current: 21mA, • Short-circuit protection • Protective structure: Front Panel: NEMA4 for indoor use (equivalent to IP66) • Alarm output: SPST-NO, 250VAC, 1A • Memory protection: EEPROM (non-volatile memory)

Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Digital Temp. Controller Volt Out	Z1126-ND	143.76	133.11	E5CN-QMTC-500 AC/DC24
Digital Temp. Controller Volt Out	Z1127-ND	143.76	133.11	E5CN-QMTC-500 AC100-240
Digital Temp. Controller Relay Out	Z1128-ND	143.76	133.11	E5CN-RMTC-500 AC/DC24
Digital Temp. Controller Relay Out	Z1129-ND	143.76	133.11	E5CN-RMTC-500 AC100-240

Digital Temperature Controller



- Compact and Intelligent 1/32 DIN Temperature Controller
- Water-resistant: Construction: NEMA4

SPECIFICATIONS:
- Supply voltage: 100 to 240 VAC, 50/60 Hz • Operating temperature: -10°C to 55°C • Sensor input: Thermocouple: K, J, T, E, L, U, N, R, S, B • Control output: Relay output: SPST-NO, 250 VAC 2 A (resistive load) • Indication accuracy: Thermocouple: (±0.5% of indicated value) • Voltage output: 12 VDC (PNP), max. load current: 21 mA, with short-circuit protection

Description	Digi-Key Part No.	Price Each 1	25	Omron Part No.
Digital Temperature Controller Volt Output	Z1130-ND	134.36	124.41	E5GN-Q1TC AC/DC24
Digital Temperature Controller Volt Output	Z1131-ND	134.36	124.41	E5GN-Q1TC AC100-240
Digital Temperature Controller Relay Output	Z1132-ND	134.36	124.41	E5GN-R1TC AC/DC24
Digital Temperature Controller Relay Output	Z1133-ND	134.36	124.41	E5GN-R1TC AC100-240

Jewell Instruments MODUTEC

Big - Little Digital Panel Meters

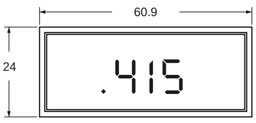


Fig. 1

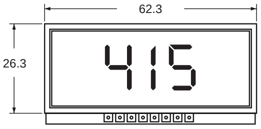


Fig. 2

BL Series Specifications:

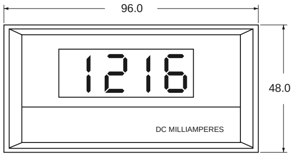
Display • Digits: 3 1/2 digits, 7 segments backlit LCD (1999) • Digit Height: 0.5" (12.7mm) • Polarity: Automatic (-) displayed • Decimal Point: Three positions, external selection • Overload: Three lower digits blank for readings greater than 1999 • Low battery: "Low Bat" indicator for <7.2V (9V power only)

Performance • Accuracy: ±(0.1% rdg + 2 count) with + 5 and ±5V power ± (0.1% rdg + 1 count) with 9V power 2.5 per second • Conversion Rate: 2.5 per second • Common Mode Voltage Range: ± 1V maximum • Common Mode Rejection: > 86db • Zero Adjust: Automatic • Tempco: 100PPM/°C typical

Standard Analog Inputs • Full Scale Range: Choice ±200mV, ±2V, or ±20V (Special ranges and engineering units available) • Configuration: True differential input and references • Ratiometric Operation: Available on models BL-100, -130, -300, -330, -400, -430, -500, -530, -600, and -630 • Protection: 250V DC or 150V RMS continuous 300V intermittent maximum • Bias Current: 1pA typical, 10pA maximum • All backlighting power is + 5VDC

Display	Mounting	DPM Power	Input	Digi-Key Part No.	Price Each 1	5	10	Modutec Part No.
Fig. 1 — 13 Pin Terminals Backlit Power 5VDC								
Neg. Red Backlit	Bezel	+5VDC	0 - 2VDC	180-1002-ND	86.94	84.77	82.60	BL-530302-01-U
Neg. Red Backlit	Bezel	+5VDC	0 - 200mVDC	180-1003-ND	86.94	84.77	82.60	BL-530301-01-U
Neg. Red Backlit	Window	+5VDC	0 - 2VDC	180-1004-ND	83.36	81.28	79.20	BL-500302-01-U
Neg. Red Backlit	Window	+5VDC	0 - 200mVDC	180-1005-ND	83.36	81.28	79.20	BL-500301-01-U
Neg. Red Backlit	Window	9VDC	0 - 2VDC	180-1006-ND	83.36	81.28	79.20	BL-500102-01-U
Neg. Red Backlit	Window	9VDC	0 - 200mVDC	180-1007-ND	83.36	81.28	79.20	BL-500101-01-U
Neg. Green Backlit	Window	+5VDC	0 - 2VDC	180-1008-ND	80.96	78.94	76.92	BL-400302-01-U
Neg. Green Backlit	Window	+5VDC	0 - 200mVDC	180-1009-ND	80.96	78.94	76.92	BL-400301-01-U
Neg. Green Backlit	Window	9VDC	0 - 2VDC	180-1010-ND	80.96	78.94	76.92	BL-400102-01-U
Neg. Green Backlit	Window	9VDC	0 - 200mVDC	180-1011-ND	80.96	78.94	76.92	BL-400101-01-U
Pos. Green Backlit	Bezel	+5VDC	0 - 2VDC	180-1012-ND	80.16	78.16	76.16	BL-330302-01-U
Pos. Green Backlit	Bezel	+5VDC	0 - 200mVDC	180-1013-ND	80.16	78.16	76.16	BL-330301-01-U
Pos. Green Backlit	Window	+5VDC	0 - 2VDC	180-1014-ND	77.40	75.47	73.53	BL-300302-01-U
Pos. Green Backlit	Window	+5VDC	0 - 200mVDC	180-1015-ND	77.40	75.47	73.53	BL-300301-01-U
Pos. Green Backlit	Window	9VDC	0 - 2VDC	180-1016-ND	77.40	75.47	73.53	BL-300102-01-U
Pos. Green Backlit	Window	9VDC	0 - 200mVDC	180-1017-ND	77.40	75.47	73.53	BL-300101-01-U
Std. Reflective LCD	Bezel	+5VDC	0 - 20VDC	180-1021-ND	65.60	63.96	62.32	BL-130303-U
Std. Reflective LCD	Bezel	+5VDC	0 - 2VDC	180-1022-ND	58.40	56.94	55.48	BL-130302-U
Std. Reflective LCD	Bezel	+5VDC	0 - 200mVDC	180-1023-ND	65.60	63.96	62.32	BL-130301-U
Std. Reflective LCD	Window	+5VDC	0 - 20VDC	180-1024-ND	62.02	60.47	58.92	BL-100303-U
Std. Reflective LCD	Window	+5VDC	0 - 2VDC	180-1025-ND	62.02	60.47	58.92	BL-100302-U
Std. Reflective LCD	Window	+5VDC	0 - 200mVDC	180-1026-ND	62.02	60.47	58.92	BL-100301-U
Std. Reflective LCD	Window	9VDC	0 - 2VDC	180-1027-ND	62.02	60.47	58.92	BL-100102-U
Std. Reflective LCD	Window	9VDC	0 - 200mVDC	180-1028-ND	62.02	60.47	58.92	BL-100101-U
Fig. 2 — Flat Pack								
Std. Reflective LCD	Window	+5VDC	20VDC	180-1018-ND	54.72	53.36	51.99	BL-176303-U
Std. Reflective LCD	Window	+5VDC	2VDC	180-1019-ND	54.72	53.36	51.99	BL-176302-U
Std. Reflective LCD	Window	+5VDC	200mVDC	180-1020-ND	54.72	53.36	51.99	BL-176301-U
Bezel Kit	—	—	—	180-1001-ND	6.38	6.22	6.07	176-BK-U

Industrial Digital Panel Instruments 2000 Series



Specifications: Performance:
- Conversion Rate: 2.5 per second • Common Mode Rejection: ≥100db 50Hz-60Hz • Tempco: ±200PPM/°C typical except thermocouple inputs which are .1°/ degree zero tempco for selectable process ranges is only ± .2 count/°C • Normal Mode Rejection: ≥40db 50Hz-60Hz
- Zero Adjust: Automatic • Warmup: 10 minutes

Environment: • Operating Range: -4°F to 140°F (-20°C to + 60°C) • Storage Range: -22°F to 150°F (-30°C to + 70°C)

Power Options: • 115V + 10%, -15% 50Hz to 400Hz at 2VA • 230V +10%, -15% 50Hz to 400Hz at 2VA

Backlighting Options: • Positive Green (Green Background, Black Characters) • Negative Red (Black Background, Red Characters)

FCC Compliance: • Complies with the class B limits of FCC rules and regulations, part 15, sub part J for conducted and radiated emissions. • Except isolated DC powered which is ≥ 80db 50Hz-60Hz

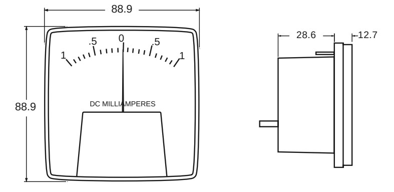
Display	DPM Power	Input†	Backlit Power††	Digi-Key Part No.	Price Each 1	5	10	Modutec Part No.
TRMS (Power) - Universal Selectable True RMS - Power Ranges								
Neg. Red Backlit	115 or 230VAC	250VAC	115 or 230VAC	180-1036-ND	216.96	211.54	206.12	2353-1026-10-U
Neg. Red Backlit		200.0VAC	115 or 230VAC	180-1037-ND	216.96	211.54	206.12	2353-1024-10-U
UPM - Universal Selectable Process, IDC Voltage or DC Current								
Neg. Red Backlit	115VAC	4/20mADC scaled 0/100.0 percent	115VAC	180-1038-ND	146.88	143.21	139.54	2153-3419-04-U
Neg. Red Backlit		10VDC scaled 0/10.00VDC		180-1039-ND	146.88	143.21	139.54	2153-3406-04-U
1/8 DIN								
Neg. Red Backlit	115VAC	Type J Thermocouple	115VAC	180-1040-ND	96.00	93.60	91.20	2053-3480-04-U
Neg. Red Backlit		100 Ohms Pt 1° Resolution		180-1041-ND	96.00	93.60	91.20	2053-3470-04-U
Neg. Red Backlit		0-50AAC/ Avg		180-1042-ND	96.00	93.60	91.20	2053-3439-04-U
Neg. Red Backlit		80-260VAC Avg		180-1043-ND	96.00	93.60	91.20	2053-3429-04-U
Pos. Green Backlit		0-200VDC		180-1044-ND	96.00	93.60	91.20	2033-3404-04-U
Pos. Green Backlit		0-20VDC		180-1045-ND	96.00	93.60	91.20	2033-3403-04-U
Pos. Green Backlit		0-2VDC scaled 0 to 1.999		180-1046-ND	96.00	93.60	91.20	2033-3402-04-U
Pos. Green Backlit		0-200mVDC scaled 0 - 199.9		180-1047-ND	96.00	93.60	91.20	2033-3401-04-U
Non Backlit	Loop Power	4 to 20mADC scaled 0 - 100.0	No Backlight	180-1048-ND	122.40	119.34	116.28	2013-3019-00-U

† Rated for use with 5A or 50A external current transformer supplied with DPM.
†† Backlight power must be same as selected DPM power.

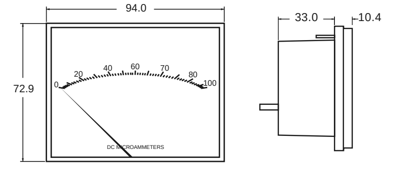
Jewell Instruments MODUTEC

Analog Panel Meters

PB Series



S Series

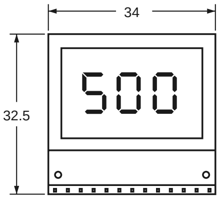


DC Ammeters - Taut band, 50mV, moving coil: Zero left, shunt rated.
DC Voltmeters - Taut band, moving coil: Zero left.
AC Ammeters - Iron vane: Self-contained, 60Hz nominal input (50-400Hz range).
AC Ammeters - Iron vane: transformer rated, 0-5A.
AC Voltmeters - Iron vane Self-contained, 60Hz nominal input (50Hz with slightly reduced accuracy.

Description	Series	Range	Resistance (ohms)	Digi-Key Part No.	Price Each			Modutec Part No.
					1	5	10	
DC Ammeters Shunt Rated	S	0-25ADC	10	180-1054-ND	67.20	65.52	63.84	R3SS-DAA-025-U
		0-50ADC	10	180-1055-ND	67.20	65.52	63.84	R3SS-DAA-050-U
		0-100ADC	10	180-1056-ND	67.20	65.52	63.84	R3SS-DAA-100-U
	PB	0-25ADC	10	180-1071-ND	67.20	65.52	63.84	R3PBS-DAA-025-U
		0-50ADC	10	180-1072-ND	67.20	65.52	63.84	R3PBS-DAA-050-U
		0-100ADC	10	180-1073-ND	67.20	65.52	63.84	R3PBS-DAA-100-U
DC Voltmeters	S	0-10VDC	1000 per V	180-1057-ND	69.50	67.77	66.03	R3S-DVV-010-U
		0-50VDC	1000 per V	180-1058-ND	69.50	67.77	66.03	R3S-DVV-050-U
		0-100VDC	1000 per V	180-1059-ND	69.50	67.77	66.03	R3S-DVV-100-U
	PB	0-10VDC	1000 per V	180-1074-ND	69.50	67.77	66.03	R3PB-DVV-010-U
		0-50VDC	1000 per V	180-1075-ND	69.50	67.77	66.03	R3PB-DVV-050-U
		0-100VDC	1000 per V	180-1076-ND	69.50	67.77	66.03	R3PB-DVV-100-U
AC Ammeters	S	0-15AAC	0.003	180-1060-ND	71.80	70.01	68.21	R3S-AAC-015-U
		0-25AAC	0.002	180-1061-ND	71.80	70.01	68.21	R3S-AAC-025-U
		0-50AAC	0.001	180-1062-ND	71.80	70.01	68.21	R3S-AAC-050-U
	PB	0-15AAC	0.003	180-1077-ND	71.80	70.01	68.21	R3PB-AAC-015-U
		0-25AAC	0.002	180-1078-ND	71.80	70.01	68.21	R3PB-AAC-025-U
		0-50AAC	0.001	180-1079-ND	71.80	70.01	68.21	R3PB-AAC-050-U
AC Ammeters Trans. Rated	S	0-100AAC	0.022	180-1063-ND	71.80	70.01	68.21	R3S-AACX-100-U
	PB	0-100AAC	0.022	180-1080-ND	71.80	70.01	68.21	R3PB-AACX-100-U
AC Voltmeters	S	0-50VAC	3K	180-1064-ND	76.40	74.49	72.58	R3S-AVC-050-U
		0-150VAC	30K	180-1065-ND	76.40	74.49	72.58	R3S-AVC-150-U
		0-300VAC	30.25K	180-1066-ND	76.40	74.49	72.58	R3S-AVC-300-U
		0-600VAC	114.7K	180-1067-ND	76.40	74.49	72.58	R3S-AVC-600-U
	PB	0-50VAC	3K	180-1081-ND	76.40	74.49	72.58	R3PB-AVC-050-U
		0-150VAC	30K	180-1082-ND	76.40	74.49	72.58	R3PB-AVC-150-U
		0-300VAC	30.25K	180-1083-ND	76.40	74.49	72.58	R3PB-AVC-300-U
		0-600VAC	114.7K	180-1084-ND	76.40	74.49	72.58	R3PB-AVC-600-U

Series	Freq. Range	Input V	Accuracy	Digi-Key Part No.	Price Each			Modutec Part No.
					1	5	10	
Frequency Meters Pointer Type Electronic								
S	45-65Hz	120VAC	±.6Hz	180-1068-ND	193.56	188.73	183.89	R3S-FRQ-55/120-20-U
	45-55Hz		±.3Hz	180-1069-ND	193.56	188.73	183.89	R3S-FRQ-50/120-10-U
	55-65Hz		±.3Hz	180-1070-ND	193.56	188.73	183.89	R3S-FRQ-60/120-10-U
PB	45-65Hz	120VAC	±.6Hz	180-1085-ND	193.56	188.73	183.89	R3PB-FRQ-55/120-20-U
	45-55Hz		±.3Hz	180-1086-ND	193.56	188.73	183.89	R3PB-FRQ-50/120-10-U
	55-65Hz		±.3Hz	180-1087-ND	193.56	188.73	183.89	R3PB-FRQ-60/120-10-U

Miniature Backlit 1000 Series



Specifications:

Display: • Digits: 3 1/2 digits (1999) • Digit Height: 0.3" (7.6mm) • Decimal Point: 3 positions, external selection • Type: 7 Segment Backlit LCD • Polarity: Automatic (-) displayed • Overload: Three lower digits blank for readings greater than 1999

Input: • Full Scale Range: ± 2V or ± 200m VDC • Input Resistance: ± 100 Meg Ohms • Overvoltage Protection: 100V DC or peak AC conditions

Performance: • Accuracy: = (0.25% + 1 count) Maximum • Common Mode Rejection: ≥ 86db 50Hz-60Hz • Zero Adjust: Automatic • Conversion Rate: 2.5 Per Second • Tempco: 100 PPM/°C

Environment: • Operating Range: -0°C to +60°C • Storage Range: -20°C to +70°C

Extended Temperature (option): • Operating Range: -30°C to + 80°C • Storage Range: -40°C to + 85°C

Power Options: • + 5VDC and -5VDC ± 10% @ 150ua DC or 9VDC (7.2 to 12VDC isolated @ 150µADC)

"Note 1: For the battery powered DPM, the input must either be fully isolated from the power source, or, if referenced to the source, the IN LO terminal must be no closer than 2.3V for the 200mV range (3.5V for the 2V range) to either battery terminal."

Display	Mounting	Terminals	DPM Power	Input	Digi-Key Part No.	Price Each			Modutec Part No.
						1	5	10	
Pos. Red Backlight	Window	Uncased with 13 pins	+5 & -5VDC	0-200mVDC	180-1049-ND	44.08	42.98	41.88	1060-0201-U
Pos. Red Backlight	Window		9VDC	0-200mVDC	180-1050-ND	44.08	42.98	41.88	1060-0101-U
Pos. Red Backlight	Window		Loop Powered	4 to 20mADC	180-1051-ND	121.44	118.41	115.37	1060-0019-U
Pos. Green Backlight	Window		9VDC	0-200mVDC	180-1052-ND	44.08	42.98	41.88	1030-0101-U
Pos. Green Backlight	Window		Loop Powered	4 to 20mADC	180-1053-ND	115.60	112.71	109.82	1030-0019-U

CURTIS

Timers/Counters 700 Series Solid State (Hour Meters and Counters)

Fig. 1

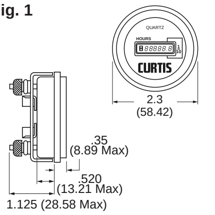


Fig. 2

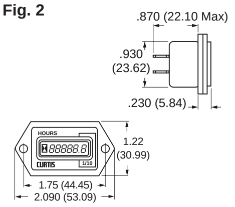


Fig. 3

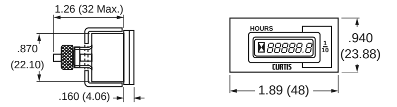


Fig. 4

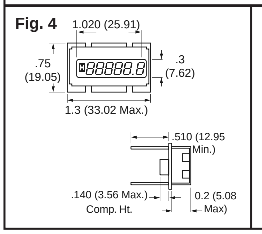
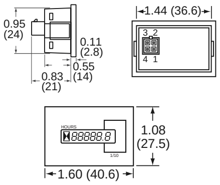


Fig. 5



Curtis Modules are ideally suited for OEM's panel makers and contract manufacturers to measure equipment usage for preventive maintenance scheduling, warranty validation and renting/leasing. These unique modules can be used as timers/counters in vending machines, medical equipment, fuel pumps, office equipment, flow instruments, consumer products and many other applications.

FEATURES: • Attractive and easy to read 6-digit Liquid Crystal Displays with 5 mm digit height • Compact size ideal for electronic subassemblies • Wide voltage range • AC/DC operation on most products • Input Frequency of 500 Hz on DC counters; 1 Hz on AC/DC counters • Exceptional reliability due to non-volatile (EEPROM) memory which can retain data for 25+ years • Resettable option.

700 and 701 Series: 6-digit Hour Meter module with 5mm (.197") high digits, non-backlit. **SPECIFICATIONS: Resolution:** 99,999.9 hours. **Accuracy:** ±0.1% hours. **Mechanical Shock:** SAE J1378 55g. **Operating Temperature:** -40°C to +85°C. **Storage Temperature:** -50°C to +90°C.

703 Series: 6-digit Pulse Counter module with 5mm (.197") high digits, non-backlit. **SPECIFICATIONS: Resolution:** 999,999 Counts. **Accuracy:** ±1 count. **Mechanical Shock:** SAE J1378 55g. **Operating Temperature:** -40°C to +85°C. **Storage Temperature:** -50°C to +90°C.

Fig.	Operating Mode	Operating Voltage		Reset	Digi-Key Part No.	Price Each		Curtis Part No.
		DC	AC			1	10	
1	Hour Meter	12-48	20-60	Elect	267-1001-ND	34.00	30.60	701QR1248D2060A
	Hour Meter	48-150	100-230	Elect	267-1002-ND	34.00	30.60	701QR48150D100230A
2	Hour Meter	12-48	20-60	Elect	267-1003-ND	34.00	30.60	701FR1248D2060A
	Hour Meter	48-150	100-230	Elect	267-1004-ND	34.00	30.60	701FR48150D100230A
3	Hour Meter	12-48	20-60	Elect	267-1005-ND	34.00	30.60	701DR1248D2060A
	Hour Meter	48-150	100-230	Elect	267-1006-ND	34.00	30.60	701DR48150D100230A
	Counter	12-48	20-60	Elect	267-1007-ND	34.00	30.60	703DR1248D2060A
	Counter	48-150	100-230	Elect	267-1008-ND	34.00	30.60	703DR48150D100230A
4	Hour Meter	5-12	—	Elect	267-1009-ND	25.50	22.95	701PR-102
	Hour Meter	12-48	—	Elect	267-1010-ND	25.50	22.95	701PR-112
	Counter	5-12	—	Elect	267-1011-ND	25.50	22.95	703PR-102
	Counter	12-48	—	Elect	267-1012-ND	25.50	22.95	703PR-112
5	Hour Meter	48-150	100-230	Non	267-1026-ND†	20.26	18.24	700LN001N48150D100230A
	Hour Meter	12-48	—	Non	267-1027-ND†	20.26	18.24	701LN001N1248D
	Hour Meter	12-48	20-60	Non	267-1028-ND†	20.26	18.24	700LN001N1248D2060A

† Order Mating Connector separately. Housing WM1784-ND. Contacts: 20AWG - 24AWG - WM1837-ND; 26AWG - 30 AWG - WM1838-ND.

C-Ton Industries

Digital Panel Meter

Fig. 1 — 1/8 Din BIG DIGIT Series

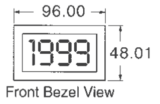


Fig. 2 — Surface Mount 3.5 Digit LCD

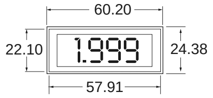


Fig. 3 — Snap-in LCD

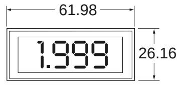


Fig. 4 — Snap-in 3.5 Digit LCD

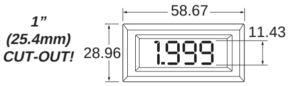


Fig. 5 — Mini 3.5 Digit LCD

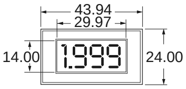


Fig. 6 — 4.5 Digit LCD Window/Surface Mount

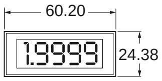
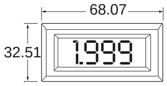


Fig. 7 — 3.5 Digit LED



General LCD Specifications:

• **Type:** 7-segment, liquid crystal display (LCD) • **Polarity:** Displays (–) automatically • **Over/Under Range:** Over-range displays "1" and under-range displays "-1" • **Configuration:** True differential input and reference • **Protection:** 250 VDC or 150V RMS continuous 300 VDC intermittent max. • **Gnd Differential (Source to Input) :** ±1V max. • **Com Mode Reject:** >86 decibels • **Zeroing:** Automatic • **Operating Temperature:** Standard 0 to 50°C • **5-Year Unconditional Warranty**

1/8 DIN Big Digit Series ***Specifications:*** • 3-1/2 digit 7-segment LED or LCD • +5 VDC powered • Over range indication and automatic zero • **Height:** 20.32mm LED, 24.89mm LCD • **Input:** Single ended or true differential • **Polarity:** (–) displayed for negative reading • **Current Draw:** 80mA LED, 2.2mA LCD • **Operating Temperature:** -10° to 50°C LED, 0 to 50°C LCD • **Connection:** Screw terminals

3.5 Digit LCD ***Specifications:*** • **Annunciators:** 9 VDC powered meters have "LO BAT" when power <7.2 VDC • **Decimal Point:** User selectable 3-position • **Full Scale Ranges:** ±200 mVDC, ±2 VDC, ±20 VDC • **Power:** 9 VDC isolated @ 180 µA, 5 VDC @ 3 mA • **Conversion Rate:** 2.5 per second • **Storage Temperature:** -20° to 70°C • **Type:** Surface Mount • **Pins:** 13 or 10 pins, .64mm square on 2.54mm centers • **Backlit Power Options:** +5 VDC, ±5%, Red 165 mA typical (200 mA max.); Green 115 mA typical (160 mA max.) • **Backlit Connections:** Standard 2 solder pads • **Styles:** Surface/window or snap-in bezel

Miniature LCD ***Specifications:*** • **Annunciators:** 11 different user selectable annunciators: BAT, °C, °F, ~, m, µ, MΩ, KΩ, V, A, HOLD • **Decimal Point:** User selectable 3-position • **Full Scale Range:** Standard ±200 mVDC, ±2 VDC • **Power:** 9 VDC isolated (7.2-15V) at 150 µA, 5 VDC @ 5 mA • **Conversion Rate:** 2.5 per second • **Storage Temperature:** -20° to 70°C • **Type:** Snap-in Bezel Mount • **Pins:** Standard 26 pins, .46mm square, DIP style

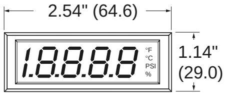
4.5 Digit LCD ***Specifications:*** • **Annunciators:** 9 VDC powered meters have "BT" when power <7.2 VDC • **Decimal Point:** User selectable 4-position • **Hold:** Standard feature • **Full Scale Range:** ±200 mVDC and ±2 VDC • **Power:** 9 VDC isolated @ 1mA, 5 VDC @ 3.5 mA • **Conversion Rate:** 2 per second • **Storage Temperature:** -10° to 60°C • **Types:** Surface/window mount • **Pins:** 13 pins, .64mm square on 2.54mm centers

3.5 Digit LED ***Specifications:*** • **Type:** 7-segment light emitting diode (LED) • **Digits:** 0.56" (12.7mm) height • **Color:** Green or Red • **Polarity:** Displays (–) automatically • **Decimal Point:** User selectable 3-position • **Over/Under Range:** Over range displays "1" and under-range displays "-1" • **Hold:** Standard feature • **Full Scale Ranges:** ±200 mVDC, ±2 VDC, ±20 VDC • **Configuration:** Bipolar, fully differential • **Power:** +5 VDC, ±5% at 200 mA • **Conversion Rate:** 3 per second • **Zeroing:** Automatic • **Operating Temperature:** 0 to 50°C • **Storage Temperature:** -20° to 70°C • **Relative Humidity:** 0 to 95% non-condensing • **Type:** Bezel Mount • **Pins:** Standard10 pins, .64mm square on 2.54mm centers • **5-Year Unconditional Warranty**

Process Meter ***Specifications:*** • Meter and loop powered/controlled PCB in one unit • 3.5 or 4.5 digit • LCD and red or green LED • Fully scalable • 300Ω Impedance, nominal

Epic Series

3 1/2 and 4 1/2 Digit, Voltage and Process Meters



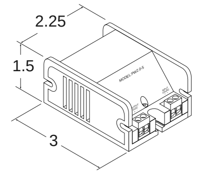
FEATURES: • RF/EMI resistant • Snap-in panel mounting • Engineering units (user selectable) • 1" cut out required • Multiple colors available • **5 year Unconditional Warranty**

COMMON SPECIFICATIONS: • **Power:** 5Vdc @ 3.5mA • **Digits:** .45" (11.43mm) seven segment LCD • **Annunciators:** User selectable °F, °C, PSI, % • **Decimal Point:** User selectable • **Colors:** Amber numerals, Green numerals, Red numerals, Green background • **Backlight Power:** 5Vdc • **Input Ranges:** ±200mV, ±2V, ±20V • **Conversion Rate:** 3 per second • **Operating Temperature:** 0°C to 50°C • **Storage Temperature:** -10° to 60°C • **Over/under Range Indication:** 1.... / -1.... • **Pins:** 13 ins, 0.025" (.64mm) square on 0.100" (2.54mm) centers • **Configuration:** Bipolar, true differential • **Panel Clearance Required:** 1.25" (31.75mm) • **Case Style:** Snap-in bezel mounting

PROCESS COMMON SPECIFICATIONS: • Meter and loop powered PCB in one package • Backlight (if selected) powered by separate terminals • **Power:** Powered by the 4-20mA process loop • **Optional Backlight Power:** 5Vdc, 24Vdc • **Range:** Fully scalable • **Digits:** .45" (11.43mm) seven segment LCD • **Colors:** Standard LCD, Amber numerals, Green numerals, Red numerals, Black numerals with Green background • **Annunciators:** User selectable °F, °C, PSI, % • **Operating Temperature:** 0° to 50°C • **Storage Temperature:** -10° to 60°C • **Over/under Range Indication:** 1.... / -1.... • **Wiring:** 2 pin screw terminals (4 pin with optional backlights) • **Panel Clearance Required:** 1.75" (44.45mm) • **Case Style:** Snap-in bezel mounting

NOTE: The products shown include 200mVdc, 2Vdc, and 20Vdc input, standard non-backlighted LCDs, and 200mVdc and 2Vdc input, negative backlighted (numerals lighted) LCDs. Also available, as non-catalog items, are 20Vdc input negative backlighted (numerals lighted) and 200mVdc, 2Vdc, and 20Vdc input, positive backlighted (black numerals with lighted background) LCDs.

Power Supply for C-Ton Displays



Cable Assembly for C-Ton Displays

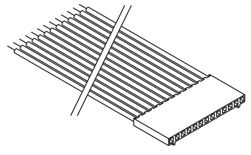
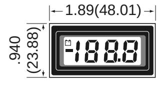


Fig.	Supply	Input	Color	Digi-Key Part No.	Price Each 1	10	50	C-Ton Part No.	Use Cable Assy.
Digital Panel Meters									
1/8 DIN Big 3.5 Digit LCD									
1	+5	2V	—	CDPM802-ND	70.80	67.26	61.95	DK802	—
	Loop	4-20mA	—	CDPM807-ND	70.80	67.26	61.95	DK807	—
1/8 DIN Big 3.5 Digit LED									
1	+5	200mV	Red	CDPM851-ND	70.80	67.26	61.95	DK851	—
	+5	2V	Red	CDPM852-ND	70.80	67.26	61.95	DK852	—
	Loop	4-20mA	Red	CDPM857-ND	70.80	67.26	61.95	DK857	—
1	+5	200mV	Green	CDPM951-ND	70.80	67.26	61.95	DK951	—
	+5	2V	Green	CDPM952-ND	70.80	67.26	61.95	DK952	—
	Loop	4-20mA	Green	CDPM957-ND	70.80	67.26	61.95	DK957	—
Surface Mount 3.5 Digit LCD									
2	+9	200mV	—	CDPM101-ND	39.90	37.91	34.92	DK101	J4C13
	+9	2V	—	CDPM102-ND	39.90	37.91	34.92	DK102	J4C13
	+9	20V	—	CDPM103-ND	39.90	37.91	34.92	DK103	J4C13
2	+5	200mV	—	CDPM301-ND	39.90	37.91	34.92	DK301	J1C13
	+5	2V	—	CDPM302-ND	39.90	37.91	34.92	DK302	J1C13
	+5	20V	—	CDPM303-ND	39.90	37.91	34.92	DK303	J1C13
2	+5	200mV	+ Green	CDPM331-ND	49.90	47.41	43.67	DK331	J1C13
	+5	2V	+ Green	CDPM332-ND	49.90	47.41	43.67	DK332	J1C13
2	+5	200mV	- Green	CDPM431-ND	49.90	47.41	43.67	DK431	J1C13
	+5	2V	- Green	CDPM432-ND	49.90	47.41	43.67	DK432	J1C13
2	+5	200mV	- Red	CDPM531-ND	49.90	47.41	43.67	DK531	J1C13
	+5	2V	- Red	CDPM532-ND	49.90	47.41	43.67	DK532	J1C13
Snap-in 3.5 Digit LCD									
3	+5	200mV	—	CDPM500-ND	39.90	37.91	34.92	DK500	J1C13
	+5	2V	—	CDPM501-ND	39.90	37.91	34.92	DK501	J1C13
	+5	20V	—	CDPM502-ND	39.90	37.91	34.92	DK502	J1C13
Snap-in 3.5 Digit LCD — 25.40mm Cutout									
4	+5	200mV	—	CDPM110-ND	39.90	37.91	34.92	DK110	J1C10
	+5	2V	—	CDPM111-ND	39.90	37.91	34.92	DK111	J1C10
	+5	20V	—	CDPM112-ND	39.90	37.91	34.92	DK112	J1C10
Miniature 3.5 Digit LCD									
5	+5	200mV	—	CDPM201-ND	39.90	37.91	34.92	DK201	—
	+5	2V	—	CDPM202-ND	39.90	37.91	34.92	DK202	—
	+9	200mV	—	CDPM203-ND	39.90	37.91	34.92	DK203	—
	+9	2V	—	CDPM204-ND	39.90	37.91	34.92	DK204	—
Window/Surface Mount 4.5 Digit LCD									
6	+5	200mV	—	CDPM702-ND	49.90	47.41	43.67	DK702	J4C13
	+5	2V	—	CDPM703-ND	49.90	47.41	43.67	DK703	J4C13
	+9	200mV	—	CDPM704-ND	49.90	47.41	43.67	DK704	J4C13
	+9	2V	—	CDPM705-ND	49.90	47.41	43.67	DK705	J4C13
Snap-in 4.5 Digit LCD									
3	+5	200mV	—	CDPM710-ND	49.90	47.41	43.67	DK710	J4C13
	+5	2V	—	CDPM711-ND	49.90	47.41	43.67	DK711	J4C13
	+5	20V	—	CDPM712-ND	49.90	47.41	43.67	DK712	J4C13
3.5 Digit LED									
7	+5	200mV	Green	CDPM601-ND	39.90	37.91	34.92	DK601	J1C10
	+5	2V	Green	CDPM602-ND	39.90	37.91	34.92	DK602	J1C10
	+5	20V	Green	CDPM603-ND	39.90	37.91	34.92	DK603	J1C10
7	+5	200mV	Red	CDPM604-ND	39.90	37.91	34.92	DK604	J1C10
	+5	2V	Red	CDPM605-ND	39.90	37.91	34.92	DK605	J1C10
	+5	20V	Red	CDPM606-ND	39.90	37.91	34.92	DK606	J1C10
Process Meter									
3	Loop	4-20mA	—	CDPM590-ND	65.00	61.75	56.88	DK590	—
4	Loop	4-20mA	—	CDPM190-ND	65.00	61.75	56.88	DK190	—
7	+5	4-20mA	Red	CDPM694-ND	65.00	61.75	56.88	DK694	—
7	+5	4-20mA	Green	CDPM691-ND	65.00	61.75	56.88	DK691	—
6	Loop	4-20mA	—	CDPM792-ND	120.00	114.00	105.00	DK792	—
Epic Series Voltage and Process Meters									
3.5 Digit LCD									
—	+5	200mV	—	CDPM541-ND	39.90	37.91	34.92	DK541	J4C13
—	+5	2V	—	CDPM542-ND	39.90	37.91	34.92	DK542	J4C13
—	+5	20V	—	CDPM543-ND	39.90	37.91	34.92	DK543	J4C13
—	+5	200mV	Amber	CDPM551-ND	49.90	47.41	43.67	DK551	J4C13
—	+5	2V	Amber	CDPM552-ND	49.90	47.41	43.67	DK552	J4C13
—	+5	20V	Amber	CDPM553-ND	49.90	47.41	43.67	DK553	J4C13
—	+5	200mV	Green	CDPM561-ND	49.90	47.41	43.67	DK561	J4C13
—	+5	2V	Green	CDPM562-ND	49.90	47.41	43.67	DK562	J4C13
—	+5	20V	Green	CDPM563-ND	49.90	47.41	43.67	DK563	J4C13
—	+5	200mV	Red	CDPM571-ND	49.90	47.41	43.67	DK571	J4C13
—	+5	2V	Red	CDPM572-ND	49.90	47.41	43.67	DK572	J4C13
—	+5	20V	Red	CDPM573-ND	49.90	47.41	43.67	DK573	J4C13
3.5 Digit Process									
—	Loop	4-20mA	—	CDPM191-ND	72.00	68.40	63.00	DK191	—
4.5 Digit LCD									
—	+5	200mV	—	CDPM741-ND	49.90	47.41	43.67	DK741	J4C13
—	+5	2V	—	CDPM742-ND	49.90	47.41	43.67	DK742	J4C13
—	+5	20V	—	CDPM743-ND	49.90	47.41	43.67	DK743	J4C13
—	+5	200mV	Amber	CDPM751-ND	59.90	56.91	52.42	DK751	J4C13
—	+5	2V	Amber	CDPM752-ND	59.90	56.91	52.42	DK752	J4C13
—	+5	20V	Amber	CDPM753-ND	59.90	56.91	52.42	DK753	J4C13
—	+5	200mV	Green	CDPM761-ND	59.90	56.91	52.42	DK761	J4C13
—	+5	2V	Green	CDPM762-ND	59.90	56.91	52.42	DK762	J4C13
—	+5	20V	Green	CDPM763-ND	59.90	56.91	52.42	DK763	J4C13
—	+5	200mV	Red	CDPM771-ND	59.90	56.91	52.42	DK771	J4C13
—	+5	2V	Red	CDPM772-ND	59.90	56.91	52.42	DK772	J4C13
—	+5	20V	Red	CDPM773-ND	59.90	56.91	52.42	DK773	J4C13
4.5 Digit Process									
—	Loop	4-20mA	—	CDPM790-ND	90.00	85.50	78.75	DK790	—

Description	Digi-Key Part No.	Price Each 1	10	50	C-Ton Part No.
Power Supplies					
5VDC Out, 300mA	CDPM1000-ND	19.90	18.91	17.42	PW2-5
24VDC Out, 100mA	CDPM1002-ND	19.90	18.91	17.42	PW2-24
Cable Assemblies					
10 Pin Connector with Wires 26AWG	CDPM1003-ND	3.00	2.85	2.63	J1C10
13 Pin Connector with Wires 26AWG	CDPM1004-ND	3.00	2.85	2.63	J1C13
13 Pin Connector with Wires 26AWG	CDPM1005-ND	3.00	2.85	2.63	J4C13

Digital Panel Meters

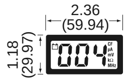
When choosing a Martel Panel Meter for your application, be aware of the difference between standard versions and "single-ended" versions designated by the suffix "S". Use standard versions with floating (isolated) input signals and use single-ended (S-type) versions when the signal to be measured shares the same ground as the meter's power supply. If in question, contact Digi-Key to obtain full data sheets before ordering.



Panel Cutout:
.87" x 1.77"
22.10mm x 44.96mm

DPM125 LCD Series

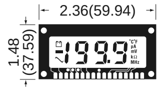
The DPM125 features auto-zero, auto-polarity, 200mV fsr, 12.5mm digit height, low battery indication, and selectable decimal points. The meter will plug directly into a 12-pin SIL socket or can be panel mounted using snap-in bezel provided.



Panel Cutout:
1.06" x 2.24"
26.92mm x 56.90mm

DPM500 LCD Series

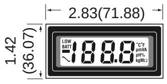
The DPM500 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 12.5mm digit height, low battery indication, selectable decimal points, and 10 user-selected annunciators. The meter will plug into a 40-pin DIL socket or can be panel mounted using snap-in bezel provided. Also available with LED backlight.



Panel Cutout:
1.26" x 2.44"
32.00mm x 61.98mm
External Bezel

DPM600 LCD Series

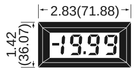
The DPM600 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 12.5mm digit height, adjustable low battery indication, selectable decimal points, and 12 user-selected annunciators. The meter has 36 pins for PCB mounting or can be panel mounted with optional bezel (p/n MB10).



Panel Cutout:
1.3" x 2.68"
33.02mm x 68.07mm

DPM2000 LCD Series

The DPM2000 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 15mm digit height, adjustable low battery indication, selectable decimal points, and 12 user-selected annunciators. The meter will plug into a 40-pin DIL socket or can be panel mounted using snap-in bezel provided.



Panel Cutout:
1.3" x 2.68"
33.02mm x 68.07mm

DPM40 LED Series

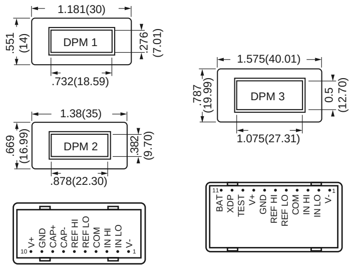
The DPM40 features auto-zero, auto-polarity, 200mV-2V-20V fsr, 11mm LED digit height, and selectable decimal points. The meter is supplied with a bezel and filter to give a high contrast display.

Specification		Min.	Typ.	Max.	Unit
Accuracy			0.05	0.1	% (+1 count)
Linearity				+1	count
Sample Rate			3		per sec
Temperature Stability			100		ppm/°C
Temperature Range		0		50	°C
Supply Voltage	DPM125/500	7.5	9	14	V
	DPM500S	3.5	5	6.5	V
	DPM600	5	9	14	V
	DPM2000	5	9	15	V
	DPM40	4.5	5	5.5	V
Supply Current	LCD normal		150		µA
	LCD S-type		450		µA
	LED		100	200	mA
Input Leakage Current		1		10	pA
Low Battery Threshold	DPM125/500		7.5		V
	DPM500S		3.7		V
	DPM600		7		V
	DPM2000		6.4		V
Backlight	DPM500		5		V @ 30mA

Supply	Input	Digi-Key Part No.	Price Each 1	5	10	Martel Part No.
7.5-15	200mV	227-1007-ND	65.70	62.42	59.13	DPM125
7.5-15	200mV	227-1008-ND	82.24	78.13	74.02	DPM125L
7.5-15	20V	227-1011-ND	68.62	65.19	61.76	DPM500-20
3.6-6.5	2V	227-1016-ND	79.84	75.85	71.86	DPM500S-2
3.6-6.5	20V	227-1017-ND	79.84	75.85	71.86	DPM500S-20
5-15	200mV	227-1021-ND	68.62	65.19	61.76	DPM600
5-15	20V	227-1023-ND	68.62	65.19	61.76	DPM600-20
5-15	200mV	227-1027-ND	71.92	68.33	64.73	DPM2000
5-15	2V	227-1028-ND	71.92	68.33	64.73	DPM2000-2
5-15	20V	227-1029-ND	71.92	68.33	64.73	DPM2000-20
5	200mV	227-1030-ND	87.90	83.51	79.11	DPM40
5	2V	227-1031-ND	87.90	83.51	79.11	DPM40-2
5	20V	227-1032-ND	87.90	83.51	79.11	DPM40-20
Bezel for DPM 600		227-1033-ND	3.08	2.93	2.78	MB10

Universal Volt/Ammeter

When choosing a Martel Panel Meter for your application, be aware of the difference between standard versions and "single-ended" versions designated by the suffix "S". Use standard versions with floating (isolated) input signals and use single-ended (S-type) versions when the signal to be measured shares the same ground as the meter's power supply. If in question, contact Digi-Key to obtain full data sheets before ordering.



Rear View
DPM 1 & 2

Rear View
DPM 3

Martel uses advanced components and the latest miniaturization techniques to produce the world's smallest DPM module. Miniature size means the module can be integrated into the smallest of enclosures for local indication. Its low cost means it will suit high and low volume applications. The snap-in integral bezel makes mounting easy.

The "Normal" DPM features true differential input, auto-zero, auto-polarity, programmable decimal points, and a 200mV Full Scale Reading (F.S.R). The FSR is adjustable with the use of external resistors.

Very low power consumption allows long battery life making it very useful in hand held equipment. For single rail use, the "S-type" DPM features a built in negative rail generator enabling the meter to measure a signal referenced to its own power supply 0V.

Specification		Min.	Typ.	Max.	Unit
Accuracy (overall error)			0.1		% (±1 count)
Linearity				±1	count
Sample Rate			3		per/sec
Temperature Range		0		50	°C
Temperature Stability	Normal		200		ppm/°C
	S-type		100		
Supply Voltage	Normal (V+ to V-)	7	9	14	V
	S-type (V+ to GND)	3	5	7	
Supply Current	Normal		150		µA
	S-type		250		
Input Leakage Current (Vin = 0V)			1	10	pA

Panel Cutout Inch (mm)	Digi-Key Part No.	Price Each 1	5	10	Martel Part No.
1.11" x .44" (28.19 x 11.18)	227-1001-ND	46.08	43.78	41.48	DPM1
	227-1002-ND	58.36	55.45	52.53	DPM1S
1.29" x .59" (32.77 x 14.99)	227-1003-ND	46.08	43.78	41.48	DPM2
	227-1004-ND	58.36	55.45	52.53	DPM2S
1.49" x .70" (37.85 x 17.78)	227-1005-ND	46.08	43.78	41.48	DPM3
	227-1006-ND	58.36	55.45	52.53	DPM3S

Miniature Digital Panel Meters

SPECIFICATIONS: **DISPLAY:** • **Digits:** 3-1/2 Digits (=1999 counts) • **Polarity:** Automatic "-" displayed • **Decimal Points:** 3-position user selectable • **Overload:** Three lower order digits for inputs >1999 and <1999 • **Hold:** Display hold function is standard.

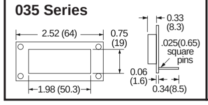
INPUTS: • **Ranges:** ±200.0mV, ±2.000V, ±20.00V • **Configuration:** 035 Series: Bipolar differential; 065xS Series: Bipolar, single-ended; (INLO internally referenced to supply GND) • **Protection:** ±350V DC (±100VDC on 200mV range) • **Impedance:** >1 Megohm (>10 Megohm on 200mV range)

PERFORMANCE: • **Accuracy:** ±(0.1% +1 count) typical; ±(0.2% +2 counts) maximum • **Temperature Coefficient:** ±100 ppm per °C typical • **Operating Range:** 0°C to 50°C • **Storage Range:** -10°C to 60°C

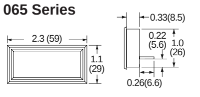
POWER SUPPLY: • **Voltage:** +5V DC (±5%)

MOUNTING: • **035 Series:** Window mount or bezel mount with optional bezel • **065 Series:** Snap-in bezel mount • **Connection:** 10 pins, 0.025" (.635mm) square on 0.1" (2.54mm) centers

035 Series

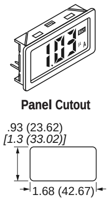


065 Series



Description	Digi-Key Part No.	Price Each 1	5	10	Martel Part No.
035 Series DPM, Red LED	227-1034-ND	38.00	36.75	35.70	DPM35R
035 Series DPM, Green LED	227-1035-ND	38.00	36.75	35.70	DPM35G
065 Series DPM, Reflective LCD	227-1036-ND	38.00	36.75	35.70	DPM65
065 Series DPM, S-Rail LCD	227-1037-ND	38.00	36.75	35.70	DPM65S
Bezel for DPM35 Series	227-1038-ND	3.17	3.07	2.98	BEZ35

Miniature Display Module D.C. Voltmeter



Panel Cutout

Dimensions in [ ] are for CUB4V Series

MDMV Series: ***SPECIFICATIONS:*** • **Display:** 3-1/2-digit, .4" (10.2mm) high digits. A minus (-) sign is displayed when voltage is negative • **Decimal Points:** Selectable decimal points are activated at the rear terminal pins to allow the display to be read in tenths, hundredths or thousandths • **Annunciators:** 5 selectable annunciators, BAT, V, A, µ and m are activated at the appropriate rear terminal • **Power Requirements:** 4.8VDC to 6VDC @ 5mA Max. • **Input Range:** 0 to ±199.9m VDC • **Over-range Indication:** Over-range is indicated by a "1" displayed in the most significant digit and the blanking of the three least significant digits • **Reading Rate:** 2 1/2 readings per second • **Common Mode Rejection Ratio:** 70dB • **Input Impedance:** 1000MΩ • **Operating Range:** 0°C to 60°C

CUB4V Series: ***SPECIFICATIONS:*** • LCD, positive reflective or negative transmissive with yellow/green or red backlighting • Four selectable D.C. ranges (0-199.9 mV, 1.999 V, 19.99 V, 199.9 V) • 0.6" (15.24mm) high LCD digits • Built-in scaling provided • Auto-zeroing circuit • Selectable decimal points • Wire connections made via screw clamp type terminals • Fits DIN standard cut-out 2.68" (68mm) x 1.30" (33mm) • NEMA 4X/IP65 sealed front panel bezel • 9 to 28 VDC powered

Description	Digi-Key Part No.	Price Each 1	5	Red Lion Part No.
MDMV Series				
Panel Mount, Reflective Display	RLC000-ND	35.90	35.01	MDMV0000
Panel Mount, Yellow/Green Backlight Display	RLC010-ND	51.40	50.12	MDMV0010
Panel Mount, Red Backlight Display	RLC020-ND	51.40	50.12	MDMV0020
PC Board Mount, Reflective Display	RLC100-ND	35.90	35.01	MDMV0100
PC Board Mount, Yellow/Green Backlight Display	RLC110-ND	51.40	50.12	MDMV0110
PC Board Mount, Red Backlight Display	RLC120-ND	51.40	50.12	MDMV0120
MDM Cable Assembly	RLC70-ND	12.00	11.70	HWK70000
CUB4V Series				
DC Voltmeter	RLC4V0-ND	89.00	—	CUB4V000
DC Voltmeter, Yellow/Green Backlight Display	RLC4V1-ND	99.00	—	CUB4V010
DC Voltmeter, Red Backlight Display	RLC4V2-ND	99.00	—	CUB4V020
Micro Line/Sensor Power Supply	RLCMLPS-ND	27.00	—	MLPS0000

Single Hole Mounting LCD Meters

5.5mm / 7/32" Hole in the Panel

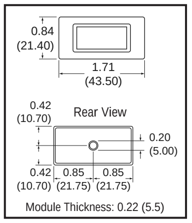
QM-100V ***SPECIFICATIONS:*** • 2 Wire Voltmeter • 3 Digit LCD with reverse polarity protection up to 30VDC for up to 30 seconds • **Sample Rate**: 3 sample/seconds • **Full Scale Reading**: 4 to 25VDC • **Accuracy**: 0.2V (±1 count) Typical • **Linearity**: ±1VDC • **Temperature Stability**: 100ppm/°C • **Operating Temperature Range**: 0 to 50°C • **Supply**: 3 to 50VDC @ 3mA

QM-110T ***SPECIFICATIONS:*** • 5 Wire Thermometer • 3 Digit LCD with reverse polarity protection up to 30VDC for up to 30 seconds • **Sample Rate**: 3 sample/seconds • **Temperature Range**: -10 to +50°C (Internal); -20 to +220°C (External) • **Accuracy**: 1°C (±2 count) Typical • **Temperature Stability**: 100ppm/°C • **Operating Temperature Range**: 0 to 50°C • **Supply**: 4 to 28VDC

QM-120C ***SPECIFICATIONS:*** • 8 Wire Elapsed Hour Meter • 5 Digit LCD • **Input**: 0 to 1VIL‡, 2 to V+VIH‡ (‡*Applies to V-SENSE, RESET, LZB, RANGE, TRIP/TOTAL, and PULSE connections*) • **Resolution**: Range 9999.9=0.1 Hour Typical; Range 99999=1 Hour Typical • **Operating Temperature Range**: 0 to 50°C • **Supply**: 5 to 27VDC @ 2.5mA

QM-130M ***SPECIFICATIONS:*** • 3 Wire DC Voltmeter • 9 Segment Analog LCD with auto zero • **Sample Rate**: 10 sample/seconds • **Full Scale Reading**: 1VDC • **Accuracy**: 1 Segment (±1 count) Typical • **Resolution**: 125mV Typical • **Operating Temperature Range**: 0 to 50°C • **Supply**: 5 to 12VDC (9VDC Typical) @ 1.5mA

QM-140V ***SPECIFICATIONS:*** • 10 Wire DC Voltmeter • 3-1/2 Digit LCD • **Sample Rate**: 3 sample/seconds • **Full Scale Input**: 200mV • **Accuracy**: 0.05% Typical; 0.1% Max. (±1 count) • **Temperature Stability**: 100ppm/°C • **Operating Temperature Range**: 0 to 50°C • **Supply**: 7.5 to 15VDC (9VDC Typical) @ 150µA

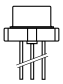


Module Thickness: 0.22 (5.5)

Specifications	
Accuracy	0.2 V (±1 count)
Linearity	±1VDC
Temp. Stability	100ppm/°C
Temp. Range	0-50°C

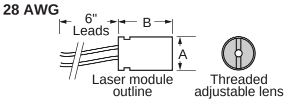
Digi-Key Part No.	Price Each	Martel Part No.
227-1042-ND	44.21	QM100V
227-1043-ND	44.21	QM110T
227-1044-ND	44.21	QM120C
227-1045-ND	35.37	QM130M
227-1046-ND	44.21	QM140V

NVG Inc. Adjustable Focus Laser Diode Modules



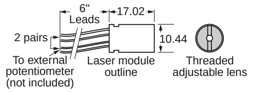
DANGER
VISIBLE LASER LIGHT
AVOID DIRECT EYE EXPOSURE

Fig. 1 — Adjustable Focus Laser Module



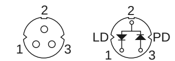
	10.4mm	6.4mm
Po:	5mW	
Class:	IIIa	
Supply Voltage, Up to 12V:	2.7-3 Continuous	
Dimension A:	10.44mm	6.4mm
Dimension B:	17.02mm	17.25mm

Fig. 2 — Adjustable Output Laser Module



Po = 1 to 4.8mW
Recommended Pot = approx. 150K to 500K

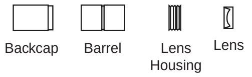
Fig. 3 — Visible Laser Diode



1. Laser cathode
2. Common case(laser anode)
3. PD anode (standard pinout)

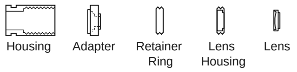
Po: 5mW
Class IIIa
Wide Spectrum Range,
Standard Pinout

Fig. 4 — 6.4mm Laser Diode Housing Kit



Includes: Backcap, barrel, lens housing and lens

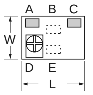
Fig. 5 — 10.4mm Laser Diode Housing Kit



Includes: Housing/Heatsink, 5.6mm to 9mm Adapter, Retaining Ring, Adjustable Focus Lens

Fig. 6 — APC Laser Power Supply

Adjustable Output Power via On-Board Potentiometer



▨ ⬚ Soldering pads
A: Laser diode cathode
B: Laser/pd common (+)
C: Photodiode anode
D: Potentiometer
E: Negative lead (-)

	Dimensions W	Dimensions L
10.4mm	5.4	7.8
6.4mm	9.0	5.0

Fig.	Description	Wave-length (nm)	Iop (mA)	Size (mm)	Digi-Key Part No.	Price Each	NVG Part No.
1	Visible Laser Module*	660	10-30	17.02 x 10.44	38-1002-ND	32.66	M6605I
1	Visible Laser Module*	650	25-40	17.02 x 10.44	38-1003-ND	37.00	M6505I
1	Visible Laser Module*	640	55-70	17.02 x 10.44	38-1004-ND	72.00	M6405I
1	Visible Laser Module*	635	45-70	17.02 x 10.44	38-1017-ND	76.00	M6355I
1	Infrared Laser Module*	780	45-70	17.02 x 10.44	38-1018-ND	56.00	M7805I
1	Infrared Laser Module*	808	60-70	17.02 x 10.44	38-1005-ND	64.00	M8085I
1	Infrared Laser Module*	850	45-65	17.02 x 10.44	38-1019-ND	68.00	M8505I
1	Visible Laser Micro Module*	660	12-30	17.25 x 6.4	38-1020-ND	52.00	MM6605I
1	Visible Laser Micro Module*	650	25-40	17.25 x 6.4	38-1021-ND	57.00	MM6505I
1	Visible Laser Micro Module*	640	55-70	17.25 x 6.4	38-1022-ND	92.00	MM6405I
1	Visible Laser Micro Module*	635	45-70	17.25 x 6.4	38-1023-ND	96.00	MM6355I
1	Infrared Laser Micro Module*	780	45-70	17.25 x 6.4	38-1024-ND	76.00	MM7805I
1	Infrared Laser Micro Module*	808	60-70	17.25 x 6.4	38-1025-ND	80.00	MM8085I
1	Infrared Laser Micro Module*	850	45-65	17.25 x 6.4	38-1026-ND	88.00	MM8505I
2	Adj. Output Visible Laser Module*	660	12-30	17.02 x 10.44	38-1010-ND	52.00	EPM6605I
2	Adj. Output Visible Laser Module*	650	25-40	17.02 x 10.44	38-1011-ND	56.00	EPM6505I
2	Adj. Output Visible Laser Module*	640	55-70	17.02 x 10.44	38-1012-ND	112.00	EPM6405I
2	Adj. Output Visible Laser Module*	635	45-70	17.02 x 10.44	38-1013-ND	116.00	EPM6355I
2	Adj. Output Infrared Laser Module*	780	45-70	17.02 x 10.44	38-1014-ND	96.00	EPM7805I
2	Adj. Output Infrared Laser Module*	808	60-70	17.02 x 10.44	38-1015-ND	100.00	EPM8085I
2	Adj. Output Infrared Laser Module*	850	45-65	17.02 x 10.44	38-1016-ND	108.00	EPM8505I
3	Visible Laser Diode	660	12-20	5.6	38-1006-ND	9.00	D6605I
3	Visible Laser Diode	650	25-40	5.6	38-1007-ND	13.00	D6505I
3	Visible Laser Diode	640	55-70	5.6	38-1008-ND	30.00	D6405I
3	Visible Laser Diode	635	45-70	5.6	38-1027-ND	30.00	D6355I
3	Infrared Laser Diode	780	45-70	5.6	38-1028-ND	24.00	D7805I
3	Infrared Laser Diode	808	60-70	5.6	38-1029-ND	28.00	D8085I
3	Infrared Laser Diode	850	45-65	5.6	38-1030-ND	32.00	D8505I
4	Housing Kit, 6.4mm................................			17.25 x 6.4	38-1032-ND	20.00	HK-6.4
5	Housing Kit, 10.4mm			17.02 x 10.44	38-1000-ND	18.00	HK-10.4
6	Laser Driver Circuit (APC) for 10.4mm Housing ...			5.4 x 7.8	38-1009-ND†	14.00	NS102-200K
6	Laser Driver Circuit (APC) for 6.4mm Housing			5.0 x 9.0	38-1031-ND†	14.00	NS102A-200K
—	5.6mm to 9mm Adapter, Non-threaded				38-1033-ND	4.00	AD 5.6-9MM
—	5.6mm to 9mm Adapter, Threaded................................				38-1001-ND	5.00	THAD 5.6-9mm

* Module denotes complete assembly. † For use with 660, 650, 640 and 635nm diodes only.

Quarton Inc. Visible Laser Diode Modules

FEATURES: • Built-in driver circuit. Small size • Class IIIa laser product • Operating Temperature: +10° to +40°C • Storage Temperature Range: -20° to +65°C • Typical Operating Voltage: 3.0V

Fig. 1

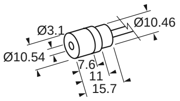


Fig. 2

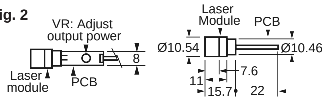


Fig. 3

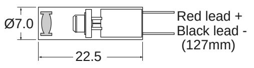
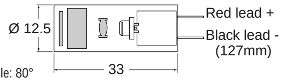


Fig. 4 — Line Generator



Beam Angle: 80°

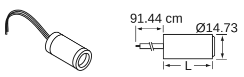
Fig.	Emission Wavelength Typ. (nm)	Cw Optical Power (mW)	Operating Current (mA)	Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100
1	655	3±1	50±15	VLM-650-01LPA-ND	30.80	27.72	25.88
	635	3±1	50±15	VLM-635-01LPA-ND	70.40	63.36	59.14
2	655	≤5	50±15	VLM-650-02LPA-ND	35.20	31.68	29.57
	635	≤5	50±15	VLM-635-02LPA-ND	76.67	69.00	64.40
3	650	≤ 2.5	40±15	VLM-650-003-LPA-ND	19.80	17.82	16.64
4	650	≤ 3	30±15	VLM-650-27-LPA-ND	52.95	47.66	44.48

COHERENT® AUBURN GROUP Visible Laser Diode Modules

DANGER
VISIBLE LASER LIGHT
AVOID DIRECT EYE EXPOSURE

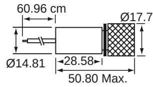
Features: • Fully collimated lens • 2-year limited warranty • ESD protection (over 2200 volts) • Reverse polarity protection • Visual ON/OFF indicator • Regulated output power • Diode life of 100,000 hours. ***Specifications:*** • Operating Temperature: -10°C to +40°C • Storage Temperature: -40°C to +80°C • Laser Operation: Continuous Wave

Fig. 1



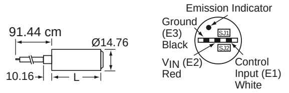
Side View

Fig. 2 – Variable Focus



Side View

Fig. 3 – Modulation & Variable Power



Side View **Back View**

Fig. 4 – Industrial Housing

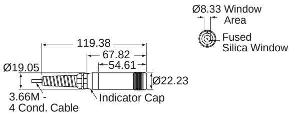


Fig. 5 – Adjustable Mount

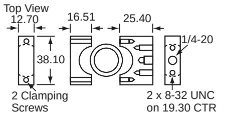
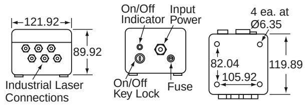


Fig. 6



Front View **Back View** **Bottom View**

Fig.	Length (mm)	Emission Wavelength (nm)	Vop (Vdc)	Iop (mA)	Output Power (mW)	Laser Class	Beam Size/Angle (mm)	Digi-Key Part No.	Price Each	Coherent Part No.
	Fixed Focus Visible Laser Module									
4	119.38	635	5-10	80-100	4.2	IIIa	5.0 x 1.2	188-1005-ND	272.40	0221-535-00
	Fixed Focus Visible Module — Round Beam									
1	31.62	635	5-10	60-90	4.9	IIIa	1.4 Dia.	188-1013-ND	548.40	0221-700-01
	Variable Focus Visible Laser Module									
2	50.80 Max	635	5-10	80-100	2.5	IIIa	5.0 x 1.2	188-1010-ND	205.20	0220-843-00
2	50.80 Max	635	5-10	80-100	.95	II	3.0 Dia.	188-1011-ND	250.80	0221-691-00
	Modulation & Variable Power Visible Module									
3	46.86	670	6-10	—	4.2	IIIa	4.0 x 1.0	188-1015-ND	304.80	0221-202-00
3	60.35	670	6-10	—	.95	II	3.0 Dia.	188-1016-ND	336.00	0221-460-00
3	46.86	635	6-10	—	4.2	IIIa	5.0 x 1.2	188-1017-ND	325.20	0221-763-00
	Fixed Focus Visible Line Generator									
4	119.38	635	5-10	80-100	1.4	II	60°	188-1007-ND	297.60	0220-976-00
	Accessories									
5	Adjustable mount for Fig. 4 lasers......................................							188-1019-ND	38.40	0221-449-00
6	Industrial laser power supply for up to six lasers							188-1022-ND	252.00	0221-183-00

LUMEX Visible and Infrared Diodes

67-1542-ND
Lumex Master Catalog
CD-ROM **$1.95**

Fig. 1

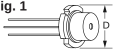


Fig. 2

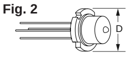
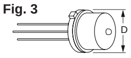


Fig. 3



Wave-length λ Typ. (nm)	Output Power (mW) max.	Current (mA) Ith	Current (mA) Iop	Oper. Voltage (V)	Operating Temp. (°C)	Dia. D (mm)	Digi-Key Part No.	Price Each	Lumex Part No.
Visible Laser Diodes — Fig. 1									
650	5	20	35	2.2	-10° to +40°	5.60	67-1500-ND	5.37	OED-LDP65001E
650	5	18	25	2.1	-10° to +70°	5.60	67-1501-ND	15.00	OED-LD65001E
658	50	40	125	2.5	-10° to +40°	5.60	67-1646-ND	136.90	OED-LDH66003E
Infrared Laser Diodes — Fig. 2									
1550	5 (CW)	8	—	1.2	-40° to +85°	5.60	67-1504-ND	124.84	OED-LDC15001E

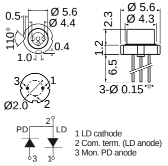
Detection Range λ (nm)	Rise/Fall Time (ns)	Forward Current (mA)	Reverse Voltage (V)	Operating Temp. (°C)	Diameter D (mm)	Digi-Key Part No.	Price Each	Lumex Part No.
Pin Photo Diode — Fig. 3								
1100/1600	0.3	2	25	-40° to +85°	5.35	67-1505-ND	35.26	OED-PPD11075G-B

Panasonic® Visible Red Laser Diodes

FEATURES: • Oscillating wavelength 670nm: Luminous efficiency 2000 times a conventional laser • Low threshold oscillation: 25mA • Stable single transverse oscillation • Low astigmatism characteristics: ≤10µm. ***SPECIFICATIONS:*** **Max. Optical Power Output:** 5mW. **Oscillating Wavelength:** 670nm. **Threshold Current:** 25mA. **Operating Current:** 35mA. **LD Operating Voltage:** 2.5V. **Radiation Horizontal Angle:** 8°. **Radiation Perpendicular Angle:** 30°

Digi-Key Part No.	Price Each 1	Price Each 10	Price Each 100	Price Each 250	Panasonic Part No.
P460-ND	33.75	30.38	28.35	26.33	LN9R05MS

5.6mm type



LED 7-Segment Displays

67-1542-ND
Lumex Master Catalog
CD-ROM **$1.95**

Fig. 1 —
Surface Mount
NEW!

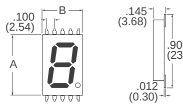


Fig. 2

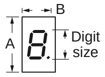


Fig. 3

Only .56" (14.20mm) and .80" (20.32mm) have active decimal points

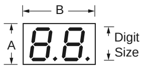


Fig. 4

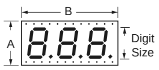


Fig. 5

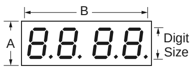


Fig. 6 —
Right Angle

Multiplexed

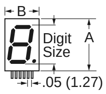
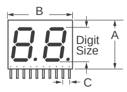


Fig. 7 —
Right Angle

Multiplexed.
Only .56"
(14.20mm) has
decimal points



Size	No. of Pins	Dim. C In. (mm)
.56"	10	.10 (2.49)
.30"	9	.05 (1.27)

Surface Mount 7-Segment Displays

Fig.	Emitted Color	Digit Size In. (mm)	Dimensions - Inch (mm) A x B	VF (V)	If (mA)	Io (ucd)	Digi-Key Part No. Common Anode	Digi-Key Part No. Common Cathode	Cut Tape Price Each			T &R Pricing*	Lumex Part No. Common Anode	Lumex Part No. Common Cathode
									1	10	100	1,000		
1	Red	.56 (14.22)	.748 x .50 (19.0 x 12.70)	2.1	10	3200	67-1651-1-ND	67-1652-1-ND	4.04	3.54	3.03	1676.60	LDS-SMA5604RD-TR	LDS-SMC5604RD-TR
	Green	.56 (14.22)	.748 x .50 (19.0 x 12.70)	2.2	10	1800	67-1649-1-ND	67-1650-1-ND	3.89	3.41	2.92	1613.52	LDS-SMA5602RD-TR	LDS-SMC5602RD-TR

*For Tape & Reel Part No., change -1 to -2

Through-Hole 7-Segment Displays

Fig.	Emitted Color	Digit Size In. (mm)	Dimensions - Inch (mm) A x B	VF (V)	If (mA)	Io (ucd)	Digi-Key Part No. Common Anode	Digi-Key Part No. Common Cathode	Price Each			Lumex Part No. Common Anode	Lumex Part No. Common Cathode
									1	10	100		
2	Red/Orng	.30 (7.62)	.75 x .40 (19.05 x 10.16)	2.0	10	5600	67-1403-ND	67-1406-ND	1.57	1.43	1.23	LDS-A304RI	LDS-C304RI
	Green	.30 (7.62)	.75 x .40 (19.05 x 10.16)	2.2	10	3500	67-1404-ND	67-1407-ND	1.57	1.43	1.23	LDS-A302RI	LDS-C302RI
	Yellow	.30 (7.62)	.75 x .40 (19.05 x 10.16)	2.1	10	3500	67-1405-ND	67-1408-ND	1.57	1.43	1.23	LDS-A303RI	LDS-C303RI
	Super-Red	.30 (7.62)	.75 x .40 (19.05 x 10.16)	1.8	10	9800	67-1413-ND	67-1414-ND	2.31	2.10	1.81	LDS-A306RI	LDS-C306RI
2	Red/Orng	.36 (9.14)	.55 x .30 (13.97 x 7.49)	2.0	10	2250	67-1415-ND	67-1417-ND	1.84	1.68	1.45	LDS-A324RI	LDS-C324RI
	Green	.36 (9.14)	.55 x .30 (13.97 x 7.49)	2.2	10	2250	67-1416-ND	67-1418-ND	1.84	1.68	1.45	LDS-A322RI	LDS-C322RI
2	Red/Orng	.43 (10.92)	.74 x .50 (18.90 x 12.60)	2.0	10	3900	67-1431-ND	67-1434-ND	1.57	1.43	1.23	LDS-A414RI	LDS-C414RI
	Green	.43 (10.92)	.74 x .50 (18.90 x 12.60)	2.2	10	2500	67-1432-ND	67-1435-ND	1.57	1.43	1.23	LDS-A412RI	LDS-C412RI
	Yellow	.43 (10.92)	.74 x .50 (18.90 x 12.60)	2.1	10	2500	67-1433-ND	67-1436-ND	1.57	1.43	1.23	LDS-A413RI	LDS-C413RI
	Super-Red	.43 (10.92)	.74 x .50 (18.90 x 12.60)	1.8	10	12300	67-1445-ND	67-1446-ND	2.31	2.10	1.81	LDS-A416RI	LDS-C416RI
2	Red/Orng	.50 (12.70)	.75 x .50 (19.00 x 12.70)	2.0	10	3900	67-1451-ND	67-1453-ND	1.84	1.68	1.45	LDS-A504RI	LDS-C504RI
	Green	.50 (12.70)	.75 x .50 (19.00 x 12.70)	2.2	10	3900	67-1452-ND	67-1454-ND	1.84	1.68	1.45	LDS-A502RI	LDS-C502RI
2	Red/Orng	.56 (14.22)	.75 x .48 (19.05 x 12.19)	2.0	10	3900	67-1463-ND	67-1466-ND	1.57	1.43	1.23	LDS-A514RI	LDS-C514RI
	Green	.56 (14.22)	.75 x .48 (19.05 x 12.19)	2.2	10	3900	67-1464-ND	67-1467-ND	1.57	1.43	1.23	LDS-A512RI	LDS-C512RI
	Yellow	.56 (14.22)	.75 x .48 (19.05 x 12.19)	2.1	10	3900	67-1465-ND	67-1468-ND	1.57	1.43	1.23	LDS-A513RI	LDS-C513RI
	Super-Red	.56 (14.22)	.75 x .48 (19.05 x 12.19)	1.8	10	13300	67-1475-ND	67-1476-ND	2.31	2.10	1.81	LDS-A516RI	LDS-C516RI
2	Red/Orng	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	2.0	10	5600	67-1477-ND	67-1480-ND	2.28	2.08	1.79	LDS-A814RI	LDS-C814RI
	Green	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	2.2	10	2500	67-1478-ND	67-1481-ND	2.28	2.08	1.79	LDS-A812RI	LDS-C812RI
	Yellow	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	2.1	10	2500	67-1479-ND	67-1482-ND	2.28	2.08	1.79	LDS-A813RI	LDS-C813RI
	Super-Red	.80 (20.32)	1.09 x .788 (27.71 x 20.02)	1.8	10	15000	67-1483-ND	67-1484-ND	3.14	2.85	2.46	LDS-A816RI	LDS-C816RI
2	Red/Orng	1.0 (25.40)	1.34 x .95 (34.04 x 24.00)	4.0	10	9800	67-1485-ND	67-1487-ND	3.08	2.80	2.41	LDS-AA14RI	LDS-CA14RI
	Green	1.0 (25.40)	1.34 x .95 (34.04 x 24.00)	4.4	10	6300	67-1486-ND	67-1488-ND	3.08	2.80	2.41	LDS-AA12RI	LDS-CA12RI
2	Red/Orng	2.25 (57.15)	2.76 x 1.89 (70.10 x 48.01)	8.0	10	9000	67-1489-ND	67-1491-ND	9.46	8.60	7.40	LDS-AD14RI	LDS-CD14RI
	Green	2.25 (57.15)	2.76 x 1.89 (70.10 x 48.01)	8.4	10	6300	67-1490-ND	67-1492-ND	9.46	8.60	7.40	LDS-AD12RI	LDS-CD12RI
	Super-Red	2.25 (57.15)	2.76 x 1.89 (70.10 x 48.01)	6.8	10	22500	67-1493-ND	67-1494-ND	10.84	9.85	8.48	LDS-AD16RI	LDS-CD16RI
3	Red/Orng	.30 (7.62)	.60 x .61 (15.24 x 15.49)	2.0	10	3900	67-1409-ND†	67-1411-ND†	2.50	2.28	1.96	LDD-E304NI	LDD-F304NI
	Green	.30 (7.62)	.60 x .61 (15.24 x 15.49)	2.2	10	3900	67-1410-ND†	67-1412-ND†	2.50	2.28	1.96	LDD-E302NI	LDD-F302NI
3	Red/Orng	.40 (10.16)	.63 x .80 (16.00 x 20.22)	2.0	10	3900	67-1437-ND	67-1438-ND	2.39	2.18	1.88	LDD-A404NI	LDD-C404NI
	Green	.40 (10.16)	.63 x .80 (16.00 x 20.22)	2.2	10	3900	67-1419-ND	67-1421-ND	2.39	2.18	1.88	LDD-A402NI	LDD-C402NI
	Yellow	.40 (10.16)	.63 x .80 (16.00 x 20.22)	2.1	10	3900	67-1420-ND	67-1422-ND	2.39	2.18	1.88	LDD-A403NI	LDD-C403NI
	Super-Red	.40 (10.16)	.63 x .80 (16.00 x 20.22)	1.8	10	6300	67-1447-ND	67-1448-ND	3.69	3.35	2.89	LDD-A406NI	LDD-C406NI
3	Red/Orng	.56 (14.22)	.75 x .98 (19.05 x 24.89)	2.0	10	3900	67-1455-ND	67-1458-ND	2.39	2.18	1.88	LDD-A514RI	LDD-C514RI
	Green	.56 (14.22)	.75 x .98 (19.05 x 24.89)	2.2	10	3900	67-1456-ND	67-1459-ND	2.39	2.18	1.88	LDD-A512RI	LDD-C512RI
	Yellow	.56 (14.22)	.75 x .98 (19.05 x 24.89)	2.1	10	3900	67-1457-ND	67-1460-ND	2.39	2.18	1.88	LDD-A513RI	LDD-C513RI
	Super-Red	.56 (14.22)	.75 x .98 (19.05 x 24.89)	1.8	10	13300	67-1461-ND	67-1462-ND	3.69	3.35	2.89	LDD-A516RI	LDD-C516RI
3	Red/Orng	.80 (20.32)	1.01 x 1.41 (25.65 x 35.81)	2.0	10	5600	67-1469-ND	67-1472-ND	3.99	3.63	3.12	LDD-A814RI	LDD-C814RI
	Green	.80 (20.32)	1.01 x 1.41 (25.65 x 35.81)	2.2	10	2500	67-1470-ND	67-1473-ND	3.99	3.63	3.12	LDD-A812RI	LDD-C812RI
	Yellow	.80 (20.32)	1.01 x 1.41 (25.65 x 35.81)	2.1	10	2500	67-1471-ND	67-1474-ND	3.99	3.63	3.12	LDD-A813RI	LDD-C813RI
4	Red/Orng	.56 (14.22)	.75 x 1.48 (19.05 x 37.59)	2.1	10	5600	67-1423-ND	67-1425-ND	5.09	4.63	3.98	LDT-A514RI	LDT-C514RI
	Green	.56 (14.22)	.75 x 1.48 (19.05 x 37.59)	2.2	10	3500	67-1424-ND	67-1426-ND	5.09	4.63	3.98	LDT-A512RI	LDT-C512RI
5	Red/Orng	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	2.0	10	5000	67-1427-ND†•	—	7.40	6.73	5.79	LDQ-M284RI	—
	Green	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	2.2	10	2200	67-1428-ND†•	—	7.40	6.73	5.79	LDQ-M282RI	—
	Yellow	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	2.1	10	3000	67-1429-ND†•	—	7.40	6.73	5.79	LDQ-M283RI	—
	Super-Red	.28 (7.11)	.40 x 1.264 (10.11 x 32.11)	1.8	10	9000	67-1430-ND†•	—	14.16	12.88	11.08	LDQ-M286RI	—
5	Red/Orng	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	2.1	10	3900	67-1439-ND†	67-1442-ND†	7.40	6.73	5.79	LDQ-M514RI	LDQ-N514RI
	Green	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	2.2	10	3900	67-1440-ND†	67-1443-ND†	7.40	6.73	5.79	LDQ-M512RI	LDQ-N512RI
	Yellow	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	2.1	10	3900	67-1441-ND†	67-1444-ND†	7.40	6.73	5.79	LDQ-M513RI	LDQ-N513RI
	Super-Red	.56 (14.22)	.75 x 1.98 (19.00 x 50.29)	1.8	10	12000	67-1449-ND†	67-1450-ND†	7.40	6.73	5.79	LDQ-M516RI	LDQ-N516RI
6	Red	.56 (14.22)	.75 x .49 (19.05 x 12.50)	2.1	10	3400	67-1512-ND†	67-1513-ND†	1.98	1.80	1.55	LDS-M514RI-RA	LDS-N514RI-RA
	Green	.56 (14.22)	.75 x .49 (19.05 x 12.50)	2.1	10	2250	67-1514-ND†	67-1515-ND†	1.98	1.80	1.55	LDS-M512RI-RA	LDS-N512RI-RA
7	Red	.30 (7.62)	.59 x .61 (15.00 x 15.50)	2.0	10	3900	67-1516-ND†‡	67-1517-ND†‡	3.38	3.08	2.65	LDD-E304NI-RA	LDD-F304NI-RA
	Green	.30 (7.62)	.59 x .61 (15.00 x 15.50)	2.0	10	3900	67-1518-ND†‡	67-1519-ND†‡	3.38	3.08	2.65	LDD-E302NI-RA	LDD-F302NI-RA
	Red	.56 (14.20)	.75 x .98 (19.00 x 25.00)	2.0	10	3900	67-1520-ND†	67-1521-ND†	3.33	3.03	2.61	LDD-M514RI-RA	LDD-N514RI-RA
	Green	.56 (14.20)	.75 x .98 (19.00 x 25.00)	2.2	10	3900	67-1522-ND†	67-1523-ND†	3.33	3.03	2.61	LDD-M512RI-RA	LDD-N512RI-RA

† Multiplexed Display • Inactive colon on display ‡ Non standard segment connections

Large Liquid Crystal 7-Segment Displays

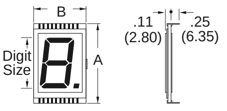
Digit Size In. (mm)	Dim. - Inch (mm) A x B	Driving Method	Digi-Key Part No.	Price Each			Lumex Part No.
				1	25	100	
1.36 (34.54)	1.97 x 1.30 (50.00 x 33.00)	Static, 1/2 Bias	67-1506-ND	4.65	3.88	3.10	LCD-S101D14TR
2.21 (56.13)	3.00 x 2.20 (76.20 x 55.88)	Static	67-1507-ND	10.56	8.80	7.04	LCD-S101D22TR
2.99 (76.00)	4.03 x 3.00 (102.40 x 76.20)	Static	67-1508-ND	17.66	14.13	12.37	LCD-S101D30TR
4.00 (101.60)	4.83 x 3.20 (122.56 x 81.28)	Static, 1/2 Bias	67-1509-ND	22.86	18.29	16.01	LCD-S101D40TR

SPECIFICATIONS:

- **Fluid Type:** TN
- **Background Color:** Gray
- **Viewing Direction:** 6:00
- **Display Mode:** Reflective
- **Operating Voltage:** 3.0 to 5.0 VAC
- **Operating Temperature:** 0°C to +50°C
- **Storage Temperature:** -20°C to +70°C
- Can be driven with the CD4543BE

Note:

4" display does not have decimal point. Pin count varies with display height.



LEDs

67-1542-ND
Lumex Master Catalog
CD-ROM **$1.95**

Fig. 1

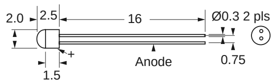
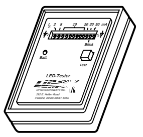


Fig. 2



Features:
- Allows quick testing of LEDS at 2, 5, 10, 20, 30, or 50 mA drive current levels with the push of a button.
- Requires: 9 Volt Battery (not included).

Fig. 3

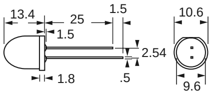


Fig. 4

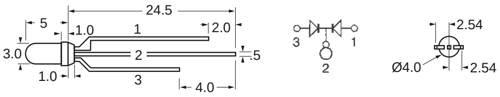


Fig.	LED Dia. (mm)	Emitted Color	Oper Current MA	Oper Type Volt(v)	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
Ceramic Stem LEDs									
1	2	Orange/Red	20	2.0	67-1197-ND	1.02	.85	.68	SSL-LX203CIT
	2	Green	20	2.1	67-1198-ND	1.02	.85	.68	SSL-LX203CGT
	2	Yellow	20	2.1	67-1199-ND	1.02	.85	.68	SSL-LX203CYT
	2	Red	20	1.6	67-1200-ND	1.26	1.05	.84	SSL-LX203CSRT
2	LED Tester Box......................................				67-1398-ND	38.00	—	—	LED Tester Box

Fig.	Emitted Color	Epoxy Lens Color	Typical mCD Intensity @ 20mA If	Emission Total Angle	Peak Wave-length	Vf @ 20mA If Typ.	Max.	Steady If Max.	Digi-Key Part No.	Price Each 1	10	25	Lumex Part No.
10MM Mega-Brite Lites													
3	Or/Red	Clear	3000	18°	620nm	1.8	2.4	25mA	67-1399-ND	2.37	1.98	1.78	SSL-LX100133XOC
	Green	Clear	500	18°	568nm	2.1	2.7	25mA	67-1400-ND	.72	.60	.54	SSL-LX100133XGC
	Yellow	Clear	2000	18°	590nm	1.8	2.4	25mA	67-1401-ND	2.61	2.18	1.96	SSL-LX100133XYC/B

Fig.	Color Pin 1	Pin 3	Vf	Io mcd	View Angle	If mA	Digi-Key Part No.	Price Each 1	25	100	250	Lumex Part No.
Bi-Color LEDs												
4	Green	Yellow	2.0	30/30	60°	20	67-1329-ND	.75	.63	.51	.44	SSL-LX3059GYW
	Red	Green	2.0	35/35	60°	20	67-1327-ND	.75	.63	.51	.44	SSL-LX3059IGW
	Red	Yellow	2.0	40/30	60°	20	67-1328-ND	.75	.63	.51	.44	SSL-LX3059IYW

Low Battery Indicators

Emitted Color: Red. **Wavelength (NM):** 660.
Intensity: 3mcd. **Standby Current:** 5µA

Fig. 1

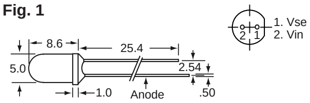
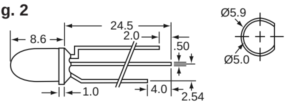


Fig. 2



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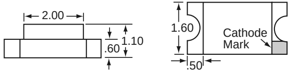

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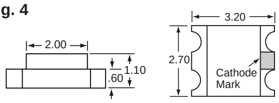


Fig.	Detection Voltage (V)	View-ing Angle	Digi-Key Part No.	Cut Tape Price Each 1	10	25	100	Lumex Part No.
1	2.5	60	67-1195-ND	1.11	—	.93	.74	SSL-LX5093LBI-SRD
2	3.75 - 7.5	60	67-1196-ND	1.44	—	1.20	.96	SSL-LX5099LBI-SRD
3	2.5	140	67-1193-1-ND	1.80	1.58	—	1.35	SML-LX1206LBI-SRD
4	3.75 - 7.5	140	67-1194-1-ND	2.28	2.00	—	1.71	SML-LX1210LBI-SRD

Infrared LEDs

Fig. 1

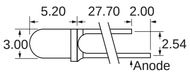


Fig. 2

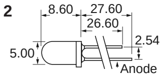
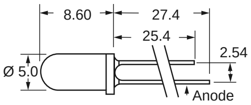


Fig.	LED Dia. (mm)	Peak Wave-Length	Lens Color	Oper. Curr. (mA)	Typ. Forward Voltage	Digi-Key Part No.	Price Each 1	10	100	Lumex Part No.
1	3	940 nm	Clear	60	1.2	67-1000-ND	.25	.23	.20	OED-EL-8L
2	5	940 nm	Clear	100	1.5	67-1001-ND	.27	.25	.22	OED-EL-1L2

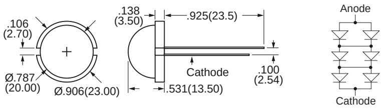
T-1 3/4 Flashing LED Lamps



Features:
- Operating Voltage: 3.0 to 14.0
- Blinking Frequency: 1.5 to 2.5Hz
- Operating Temperature Range: -55°C to 100°C

Color	Color Source	Io @ VF=9V (mcd)	Viewing Angle	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
Red/Diff.	Brt. Red	10.0	40°	67-1499-ND	.93	.78	.62	SSL-LX5093BSRD
Dark Red/Diff.	Red	4.0	40°	67-1497-ND	.84	.71	.57	SSL-LX5093BHD
Red/Diff.	Red	8.0	40°	67-1498-ND	.84	.71	.57	SSL-LX5093BID
Green/Diff.	Green	8.0	40°	67-1496-ND	.84	.71	.57	SSL-LX5093BGD
Yellow/Diff.	Yellow	8.0	40°	67-1495-ND	.84	.71	.57	SSL-LX5093BYD

20mm 6-Element LED Dome



Color	Wave-length λ (nm)	Vf Typ. (V)	If Max. (mA)	Io @ If = 20mA (mcd)	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
Green	565	6.0	25	25	67-1526-ND	1.74	1.45	1.16	SSL-LX20R6GD
Red	635	5.7	30	35	67-1527-ND	1.74	1.45	1.16	SSL-LX20R6ID
Red	660	5.1	30	60	67-1528-ND	2.22	1.85	1.48	SSL-LX20R6SRD
Yellow	585	5.85	30	23	67-1529-ND	1.74	1.45	1.16	SSL-LX20R6YD

PC Mount LED Arrays / Light Bars

Fig. 1

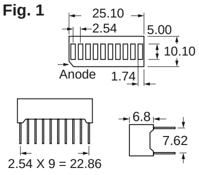


Fig. 2

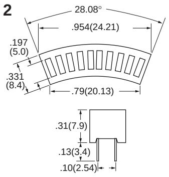


Fig. 3

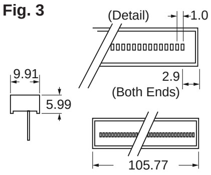


Fig. 4

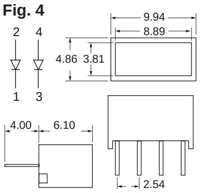


Fig. 5

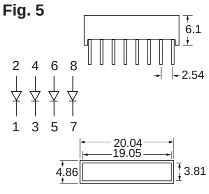


Fig. 6

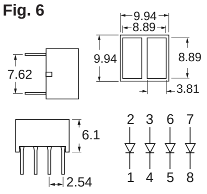


Fig. 7

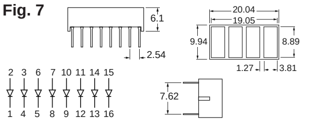


Fig. 8

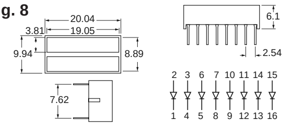


Fig. 9

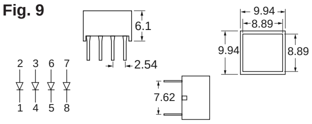


Fig. 10

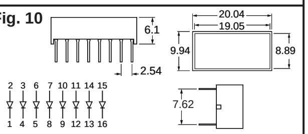


Fig.	Emitted Color	Vf	Io mcd	If mA	Digi-Key Part No.	Price Each 1	25	100	Lumex Part No.
1	Green	2.1	10	25	67-1008-ND	2.85	2.38	1.90	SSA-LXB10GW-GF/LP
1	Red	2.1	4	30	67-1009-ND	2.13	1.78	1.42	SSA-LXB10HW-GF/LP
1	Red	2.1	10	30	67-1010-ND	2.85	2.38	1.90	SSA-LXB10IW-GF/LP
2	Green	2.1	10	30	67-1524-ND	3.90	3.25	2.60	SSA-LXB10GW-10652
2	Red	1.7	40	30	67-1525-ND	6.72	5.60	4.48	SSA-LXB10SRW-10652
3	Red	2.3	60	100(Ip)	67-1011-ND	58.06	51.23	47.81	SSA-LXB8825
3	Green	2.3	70	100(Ip)	67-1012-ND	58.06	51.23	47.81	SSA-LXB8835
4	Red	2.1	25	30	67-1013-ND	.91	.76	.61	SSB-LX2300IW
5	Red	2.1	50	30	67-1014-ND	1.36	1.14	.91	SSB-LX2350IW
4	Yellow	2.1	18	30	67-1015-ND	.91	.76	.61	SSB-LX2400YW
5	Yellow	2.1	38	30	67-1016-ND	1.36	1.14	.91	SSB-LX2450YW
4	Green	2.1	25	25	67-1017-ND	.91	.76	.61	SSB-LX2500SGW
6	Red	2.1	25	30	67-1018-ND	1.49	1.25	1.00	SSB-LX2600IW
7	Red	2.1	25	30	67-1019-ND	2.36	1.97	1.57	SSB-LX2620IW
8	Red	2.0	50	30	67-1020-ND	2.36	1.97	1.57	SSB-LX2635IW
9	Red	2.1	45	30	67-1021-ND	1.49	1.25	1.00	SSB-LX2655IW
10	Red	2.1	80	30	67-1022-ND	2.36	1.97	1.57	SSB-LX2685IW
6	Yellow	2.1	18	30	67-1023-ND	1.49	1.25	1.00	SSB-LX2700YW
7	Yellow	2.1	18	30	67-1024-ND	2.36	1.97	1.57	SSB-LX2720YW
8	Yellow	2.1	40	30	67-1025-ND	2.36	1.97	1.57	SSB-LX2735YW
9	Yellow	2.1	35	30	67-1026-ND	1.49	1.25	1.00	SSB-LX2755YW
10	Yellow	2.1	70	30	67-1027-ND	2.36	1.97	1.57	SSB-LX2785YW
9	Red/Yel	2.1	25	30	67-1028-ND	2.49	2.08	1.66	SSB-LX2950IYW
9	Red/Grn	2.1	25	30/25	67-1029-ND	2.49	2.08	1.66	SSB-LX2965IGW
4	Red	1.7	40	30	67-1030-ND	1.04	.87	.70	SSB-LXA100SRW
5	Red	1.7	80	30	67-1031-ND	1.53	1.28	1.03	SSB-LXB100SRW
9	Red	1.7	80	30	67-1032-ND	2.35	1.96	1.57	SSB-LXC100SRW
6	Red	1.7	40	30	67-1033-ND	2.35	1.96	1.57	SSB-LXD100SRW
7	Red	1.7	40	30	67-1034-ND	2.72	2.27	1.81	SSB-LXE100SRW
8	Red	1.7	80	30	67-1035-ND	2.72	2.27	1.81	SSB-LXF100SRW
10	Red	1.7	150	30	67-1036-ND	2.72	2.27	1.81	SSB-LXH100SRW

LEDs

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Fig. 1

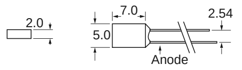


Fig. 2

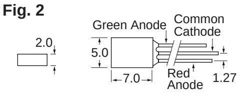


Fig. 3

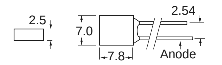


Fig. 4

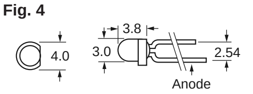


Fig. 5

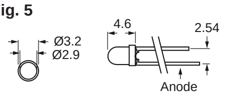


Fig. 6

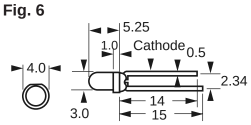


Fig. 7

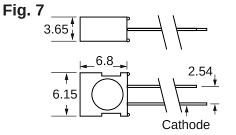


Fig. 8

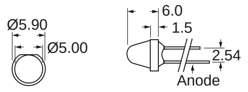


Fig. 9

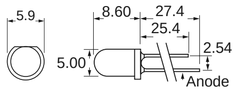
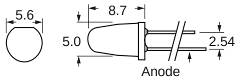


Fig. 10



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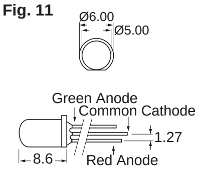


Fig. 12

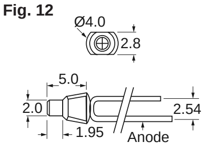


Fig. 13

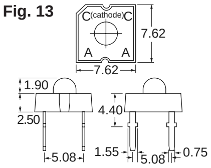


Fig. 14

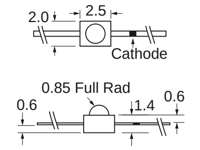


Fig. 15

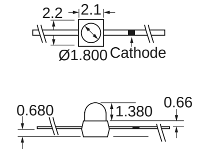


Fig. 16

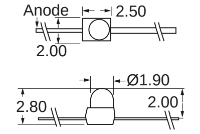


Fig.	LED Dia. (mm)	Emitted Color	Lens Color	Oper. Curr. (mA)	Typ. For. Volt.	Digi-Key Part No.	Price Each				Lumex Part No.
							1	10	100	200	
1	2x5	Amber	Diff.	30	2.1	67-1045-ND	.26	—	.18	—	SSL-LX2573AD
	2x5	Green	Diff.	25	2.1	67-1046-ND	—	.13	—	.11	SSL-LX2573GD
	2x5	Red	Diff.	30	2.0	67-1047-ND	—	.14	—	.11	SSL-LX2573ID
	2x5	Green	Diff.	25	2.1	67-1048-ND	—	.18	—	.15	SSL-LX2573PGD
	2x5	Red	Diff.	30	1.7	67-1049-ND	—	.22	—	.18	SSL-LX2573SRD
	2x5	Yellow	Diff.	30	2.1	67-1050-ND	—	.15	—	.12	SSL-LX2573YD
2	2x5	Red/Grn	Diff.	30/25	2.1	67-1051-ND	.49	—	.33	—	SSL-LX2577IGW
3	2.5x7	Green	Diff.	25	2.0	67-1052-ND	—	.15	—	.12	SSL-LX25783GD
	2.5x7	Red	Diff.	30	2.0	67-1053-ND	—	.15	—	.12	SSL-LX25783ID
	2.5x7	Red	Diff.	30	1.7	67-1054-ND	.26	—	.18	—	SSL-LX25783SRD
	2.5x7	Yellow	Diff.	30	2.1	67-1055-ND	—	.15	—	.12	SSL-LX25783YD
4	3	Green	Diff.	25	2.1	67-1056-ND	—	.18	—	.15	SSL-LX3034GD
	3	Yellow	Diff.	30	2.1	67-1057-ND	—	.20	—	.17	SSL-LX3034YD
5	3	Amber	Diff.	30	2.1	67-1058-ND	—	.15	—	.13	SSL-LX3044AD
	3	Green	Clear	25	2.1	67-1059-ND	—	.15	—	.12	SSL-LX3044GC
	3	Green	Diff.	25	2.1	67-1060-ND	—	.14	—	.11	SSL-LX3044GD
	3	Green	Diff.	20	12	67-1061-ND	.32	—	.21	—	SSL-LX3044GD-12V
	3	Green	Diff.	20	5	67-1062-ND	.40	—	.27	—	SSL-LX3044GD-5V
	3	Green	Trans.	25	2.1	67-1063-ND	—	.15	—	.12	SSL-LX3044GT
	3	Red	Diff.	25	2.0	67-1064-ND	—	.12	—	.10	SSL-LX3044HD
	3	Red	Clear	30	2.1	67-1065-ND	—	.15	—	.13	SSL-LX3044IC
	3	Red	Diff.	30	2.0	67-1066-ND	—	.17	—	.14	SSL-LX3044ID
	3	Red	Diff.	20	12	67-1067-ND	.32	—	.21	—	SSL-LX3044ID-12V
	3	Red	Diff.	20	5	67-1068-ND	.40	—	.27	—	SSL-LX3044ID-5V
	3	Red	Trans.	30	2.0	67-1069-ND	—	.15	—	.13	SSL-LX3044IT
	3	Green	Diff.	25	2.1	67-1070-ND	—	.13	—	.11	SSL-LX3044LGD
	3	Red	Diff.	30	2.0	67-1071-ND	—	.14	—	.12	SSL-LX3044LID
	3	Yellow	Diff.	30	2.0	67-1072-ND	—	.14	—	.12	SSL-LX3044LYD
	3	Green	Diff.	25	2.1	67-1073-ND	—	.17	—	.14	SSL-LX3044PGD
	3	Orange	Clear	50	1.8	67-1074-ND	.99	—	.66	—	SSL-LX3044SOC
	3	Red	Clear	30	1.8	67-1647-ND	.33	—	.23	—	SSL-LX3044SRC/D
	3	Yellow	Clear	30	2.0	67-1076-ND	.86	—	.58	—	SSL-LX3044SYC
	3	Yellow	Clear	30	2.1	67-1077-ND	—	.16	—	.13	SSL-LX3044YC
	3	Yellow	Diff.	30	2.1	67-1078-ND	—	.15	—	.12	SSL-LX3044YD
	3	Yellow	Diff.	20	12	67-1079-ND	.32	—	.21	—	SSL-LX3044YD-12V
	3	Yellow	Diff.	20	5	67-1080-ND	.40	—	.27	—	SSL-LX3044YD-5V
	3	Yellow	Trans.	30	2.1	67-1081-ND	—	.21	—	.18	SSL-LX3044YT
6	3	Red	Diff.	20	2.1	67-1402-ND	—	.18	—	.15	SSL-LX3052ID
	3	Green	Diff.	20	2.1	67-1396-ND	—	.18	—	.15	SSL-LX3052GD
	3	Yellow	Diff.	20	2.1	67-1397-ND	—	.18	—	.15	SSL-LX3052YD
7	4x7	Green	Diff.	25	2.1	67-1082-ND	.31	—	.21	—	SSL-LX4673GD-LA20
	4x7	Red	Diff.	20	2.0	67-1083-ND	.31	—	.21	—	SSL-LX4673ID-LA20
	4x7	Yellow	Diff.	30	2.1	67-1084-ND	.31	—	.21	—	SSL-LX4673YD-LA20
8	5	Green	Clear	30	2.0	67-1085-ND	—	.24	—	.20	SSL-LX5063GC
	5	Green	Diff.	25	2.0	67-1086-ND	—	.15	—	.12	SSL-LX5063GD
	5	Green	Trans.	25	2.0	67-1087-ND	—	.16	—	.13	SSL-LX5063GT
	5	Red	Diff.	25	2.0	67-1088-ND	—	.14	—	.12	SSL-LX5063HD
	5	Red	Clear	30	2.0	67-1089-ND	—	.18	—	.15	SSL-LX5063IC
	5	Red	Diff.	30	2.0	67-1090-ND	—	.16	—	.13	SSL-LX5063ID
	5	Red	Trans.	30	2.0	67-1091-ND	—	.18	—	.15	SSL-LX5063IT
8	5	Green	Trans.	25	2.0	67-1092-ND	—	.24	—	.20	SSL-LX5063LGT
	5	Yellow	Clear	30	2.1	67-1093-ND	—	.22	—	.18	SSL-LX5063YC
	5	Yellow	Diff.	30	2.1	67-1094-ND	—	.18	—	.15	SSL-LX5063YD
	5	Yellow	Trans.	30	2.1	67-1095-ND	—	.18	—	.15	SSL-LX5063YT
9	5	Red	Diff.	25	2.0	67-1096-ND	—	.12	—	.10	SSL-LX5091HD
	5	Amber	Diff.	30	2.1	67-1097-ND	—	.15	—	.13	SSL-LX5093AD
	5	Green	Diff.	25	2.0	67-1098-ND	—	.13	—	.11	SSL-LX5093GD
	5	Green	Diff.	12	12	67-1099-ND	.40	—	.27	—	SSL-LX5093GD-12V
	5	Green	Diff.	12	5	67-1100-ND	.32	—	.21	—	SSL-LX5093GD-5V
	5	Green	Trans.	25	2.2	67-1101-ND	—	.15	—	.12	SSL-LX5093GT
	5	Red	Diff.	25	2.1	67-1102-ND	—	.12	—	.10	SSL-LX5093HD
	5	Red	Diff.	10	5	67-1103-ND	.32	—	.21	—	SSL-LX5093HD-5V
	5	Red	Trans.	25	2.0	67-1104-ND	—	.16	—	.13	SSL-LX5093HT
	5	Red	Diff.	30	2.0	67-1105-ND	—	.13	—	.11	SSL-LX5093ID
	5	Red	Diff.	12	5	67-1106-ND	.32	—	.21	—	SSL-LX5093ID-5V
	5	Red	Trans.	30	2.0	67-1107-ND	—	.15	—	.13	SSL-LX5093IT
	5	Green	Diff.	25	2.0	67-1108-ND	—	.13	—	.11	SSL-LX5093LGD
	5	Green	Trans.	30	2.1	67-1109-ND	—	.15	—	.13	SSL-LX5093LGT
	5	Red	Diff.	30	2.0	67-1110-ND	—	.14	—	.12	SSL-LX5093LID
	5	Yellow	Diff.	30	2.1	67-1111-ND	—	.14	—	.12	SSL-LX5093LYD
	5	Green	Diff.	25	2.1	67-1112-ND	—	.15	—	.12	SSL-LX5093PGD
	5	Orange	Clear	50	1.8	67-1113-ND	.99	—	.66	—	SSL-LX5093SOC
	5	Red	Diff.	30	1.7	67-1648-ND	—	.19	—	.16	SSL-LX5093SRD/D
	5	Yellow	Clear	30	2.0	67-1115-ND	.71	—	.48	—	SSL-LX5093SYC
	5	Yellow	Diff.	30	2.1	67-1116-ND	—	.14	—	.12	SSL-LX5093YD
	5	Yellow	Trans.	30	2.1	67-1117-ND	—	.15	—	.13	SSL-LX5093YT
10	5	Amber	Clear	25	2.1	67-1118-ND	.29	—	.20	—	SSL-LX5093XAC
	5	Green	Clear	25	2.1	67-1119-ND	—	.20	—	.17	SSL-LX5093XGC
	5	Red	Clear	25	2.1	67-1120-ND	—	.18	—	.15	SSL-LX5093XIC
	5	Green	Clear	25	2.1	67-1121-ND	.30	—	.20	—	SSL-LX5093XPGC
	5	Red	Clear	30	1.7	67-1122-ND	.57	—	.39	—	SSL-LX5093XRC/4
	5	Yellow	Clear	30	2.0	67-1123-ND	1.00	—	.67	—	SSL-LX5093XYC
11	5	Red/Grn	Diff.	30/25	2.1	67-1124-ND	.44	—	.30	—	SSL-LX5097IGW
12	2	Red	Diff.	30	2.1	67-1125-ND	—	.18	—	.15	SSL-LX20465ID
	2	Yellow	Diff.	30	2.1	67-1126-ND	—	.18	—	.15	SSL-LX20465YD
	2	Green	Diff.	25	2.1	67-1127-ND	—	.17	—	.14	SSL-LX20465GD
13	3	Yellow	Clear	70	2.25	67-1128-ND	.81	—	.55	—	SSL-LX30448SYC
14	1.7	Red	Diff.	30	2.1	67-1129-ND	.36	—	.24	—	SSL-LXA223HD
15	1.8	Green	Diff.	30	5	67-1130-ND	.62	—	.42	—	SSL-LXA227GD-5V
	1.8	Red	Diff.	30	5	67-1131-ND	.62	—	.42	—	SSL-LXA227ID-5V
	1.8	Yellow	Diff.	20	5	67-1132-ND	.62	—	.42	—	SSL-LXA227YD-5V
16	1.9	Green	Diff.	25	2.1	67-1133-ND	.27	—	.18	—	SSL-LXA228GD
	1.9	Red	Clear	30	2.0	67-1134-ND	.29	—	.20	—	SSL-LXA228IC
	1.9	Red	Diff.	30	2.0	67-1135-ND	.27	—	.18	—	SSL-LXA228ID
	1.9	Green	Clear	30	2.1	67-1136-ND	.35	—	.24	—	SSL-LXA228SGC
	1.9	Red	Clear	30	1.7*	67-1137-ND	.41	—	.28	—	SSL-LXA228SRC
	1.9	Red	Diff.	30	1.7*	67-1138-ND	.46	—	.31	—	SSL-LXA228SRD
	1.9	Yellow	Clear	20	2.0	67-1139-ND	1.27	—	.85	—	SSL-LXA228SYC
	1.9	Yellow	Clear	20	2.0	67-1140-ND	.31	—	.21	—	SSL-LXA228YC

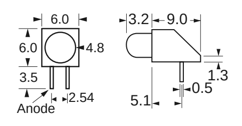
* Note Anode Mark

O

PC Mount LEDs

67-1542-ND
Lumex Master Catalog CD-ROM........**$1.95**

Fig. 1



• Lens height for part numbers
67-1308/09/10/11/12/13-ND = 4.75mm not 3.2mm

Fig. 2

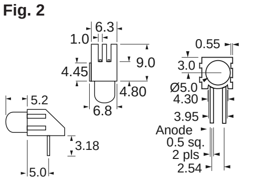


Fig. 3

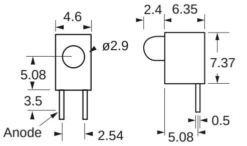


Fig. 4

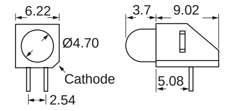


Fig. 5

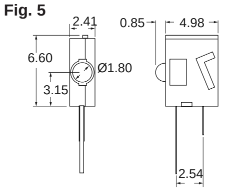


Fig. 6

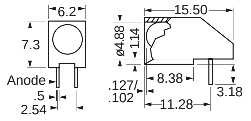


Fig. 7

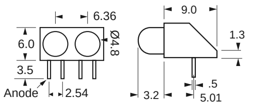


Fig. 8

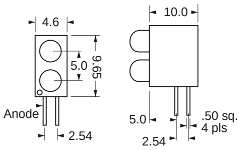
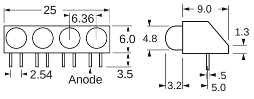


Fig. 9



***** Lens height for
part # 67-1322-ND = 4.75mm not 3.2mm

Fig. 10

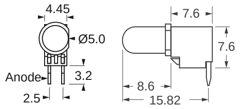


Fig.	Description	Emitted Color	Lens	Peak Wavelength (nm)	Vf (V) Typ.	If (mA) Max.	Io (mcd)	Viewing Angle (2x Theta)	Digi-Key Part Number	Price Each 1	25	100	Lumex Part Number
1	5mm	Red/Green	White Diff.	695/565	2.1	25	4	60	67-1221-ND	.72	.60	.48	SSF-LXH100HGW
		Red	Red Diff.	635	5.0	12	30	60	67-1222-ND	.72	.60	.48	SSF-LXH100ID-5V
		Green	Green Diff.	565	5.0	12	10	60	67-1223-ND	.72	.60	.48	SSF-LXH100GD-5V
		Red	Red Diff.	695	2.1	25	6	60	67-1308-ND	.48	.40	.32	SSF-LXH100HD-01
		Red	Red Diff.	660	1.8	30	40	60	67-1225-ND	.72	.60	.48	SSF-LXH100SRD
		Red	Red Diff.	635	2.1	30	30	60	67-1309-ND	.84	.70	.56	SSF-LXH100ID-01
		Red	Red Diff.	635	2.1	30	8	60	67-1217-ND	.45	.38	.30	SSF-LXH100ID
		Yellow	Yellow Diff.	585	2.1	30	30	60	67-1311-ND	.84	.70	.56	SSF-LXH100YD-01
		Yellow	Yellow Diff.	585	2.1	30	8	60	67-1224-ND	.45	.38	.30	SSF-LXH100YD
		Green	Green Diff.	565	2.1	25	40	60	67-1310-ND	.84	.70	.56	SSF-LXH100GD-01
		Green	Green Diff.	565	2.1	25	30	60	67-1218-ND	.45	.38	.30	SSF-LXH100GD
		Red	Red Diff.	635	2.1	30	40	60	67-1312-ND†	.84	.70	.56	SSF-LXH100LID-01
		Red	Red Diff.	635	2.1	30	40	60	67-1219-ND†	.57	.48	.38	SSF-LXH100LID
		Green	Green Diff.	565	2.1	25	30	60	67-1313-ND†	.84	.70	.56	SSF-LXH100LGD-01
		Green	Green Diff.	565	2.1	25	30	60	67-1220-ND†	.57	.48	.38	SSF-LXH100LGD
2	5mm	Red/Green	White Diff.	700/565	2.0/2.2	30	6/20	60	67-1226-ND	.72	.60	.48	SSF-LXH100MHGW
		Red	Red Diff.	635	5.0	12	20	30	67-1233-ND	.72	.60	.48	SSF-LXH100MID-5V
		Green	Green Diff.	565	5.0	30	20	60	67-1234-ND	.72	.60	.48	SSF-LXH100MGD-5V
		Red	Red Diff.	660	1.8	30	100	60	67-1230-ND	.72	.60	.48	SSF-LXH100MSRD
		Red	Red Diff.	635	2.0	30	30	60	67-1227-ND	.45	.38	.30	SSF-LXH100MID
		Yellow	Yellow Diff.	585	2.1	30	30	60	67-1229-ND	.45	.38	.30	SSF-LXH100MYD
		Green	Green Diff.	565	2.2	25	30	60	67-1228-ND	.45	.38	.30	SSF-LXH100MGD
		Red	Red Diff.	635	2.0	30	30	60	67-1231-ND†	.57	.48	.38	SSF-LXH100MLID
		Green	Green Diff.	565	2.2	25	30	60	67-1232-ND†	.57	.48	.38	SSF-LXH100MLGD
3	3mm	Red	Red Diff.	635	5.0	12	9	80	67-1241-ND	.66	.55	.44	SSF-LXH103ID-5V
		Green	Green Diff.	565	5.0	12	80	8	67-1242-ND	.66	.55	.44	SSF-LXH103GD-5V
		Red	Red Diff.	660	1.8	30	80	60	67-1238-ND	.54	.45	.36	SSF-LXH103SRD
		Red	Red Diff.	635	2.0	30	30	80	67-1235-ND	.39	.33	.26	SSF-LXH103ID
		Yellow	Yellow Diff.	585	2.1	30	15	80	67-1237-ND	.39	.33	.26	SSF-LXH103YD
		Green	Green Diff.	565	2.1	25	80	15	67-1236-ND	.39	.33	.26	SSF-LXH103GD
		Red	Red Diff.	635	2.0	30	40	60	67-1239-ND†	.54	.45	.36	SSF-LXH103LID
		Green	Green Diff.	565	2.1	25	15	80	67-1240-ND†	.54	.45	.36	SSF-LXH103LGD
4	4.7mm	Red	Red Diff.	695	5.0	12	3	60	67-1038-ND	.95	.79	.64	SSF-LXH104HD-5V
		Red	Red Diff.	635	2.0	30	20	60	67-1039-ND	.32	.27	.22	SSF-LXH104ID
		Yellow	Yellow Diff.	585	2.1	30	20	60	67-1040-ND	.32	.27	.22	SSF-LXH104YD
		Green	Green Diff.	565	2.2	25	30	60	67-1037-ND	.32	.27	.22	SSF-LXH104GD
5	1.8mm	Red	Red Diff.	635	2.0	30	8	60	67-1042-ND	.72	.61	.49	SSF-LXH555ID
		Yellow	Yellow Diff.	585	2.1	30	8	60	67-1043-ND	.72	.61	.49	SSF-LXH555YD
		Green	Green Diff.	565	2.1	25	8	60	67-1041-ND	.72	.61	.49	SSF-LXH555GD
6	5mm	Red/Green	White Diff.	700/565	2.1	30	5/8	80	67-1243-ND	.81	.68	.54	SSF-LXH1071HGW
		Red	Red Diff.	660	1.7	30	40	80	67-1247-ND	.72	.60	.48	SSF-LXH1071SRD
		Red	Red Diff.	635	2.1	30	40	60	67-1244-ND	.54	.45	.36	SSF-LXH1071ID
		Yellow	Yellow Diff.	585	2.1	30	20	80	67-1246-ND	.54	.45	.36	SSF-LXH1071YD
		Green	Green Diff.	565	2.1	30	20	80	67-1245-ND	.54	.45	.36	SSF-LXH1071GD
		Green	Green Diff.	565	1.9	30	20	80	67-1249-ND†	.66	.55	.44	SSF-LXH1071LGD
		Red	Red Diff.	635	1.9	30	20	80	67-1248-ND†	.66	.55	.44	SSF-LXH1071LID
7	5mm	Red	Red Diff.	660	1.8	30	100	60	67-1253-ND	1.08	.90	.72	SSF-LXH2100SRD
		Red	Red Diff.	635	2.0	30	40	60	67-1250-ND	.90	.75	.60	SSF-LXH2100ID
		Yellow	Yellow Diff.	585	2.1	30	30	60	67-1252-ND	.90	.75	.60	SSF-LXH2100YD
		Green	Green Diff.	565	2.2	25	30	60	67-1251-ND	.90	.75	.60	SSF-LXH2100GD
8	3mm	Red	Red Diff.	635	5.0	12	20	60	67-1260-ND	1.35	1.13	.90	SSF-LXH2103IID-5V/4
		Green	Green Diff.	565	5.0	12	20	60	67-1261-ND	1.35	1.13	.90	SSF-LXH2103GGD-5V/4
		Sup. Red	Red Diff.	660	1.7	30	130	60	67-1257-ND	1.56	1.30	1.04	SSF-LXH2103SRSRD/4
		Red	Red Diff.	635	2.0	30	40	60	67-1254-ND	.99	.83	.66	SSF-LXH2103IID/4
		Yellow	Yellow Diff.	585	2.1	30	30	60	67-1256-ND	.99	.83	.66	SSF-LXH2103YYD/4
		Green	Green Diff.	565	2.2	25	30	60	67-1255-ND	.99	.83	.66	SSF-LXH2103GGD/4
		Red	Red Diff.	635	2.0	30	40	60	67-1258-ND†	1.20	1.00	.80	SSF-LXH2103LIID/4
		Green	Green Diff.	565	2.2	25	30	60	67-1259-ND†	1.20	1.00	.80	SSF-LXH2103LGGD/4

† Low Current Version, Lights at (2mA)

(Continued)

PC Mount LEDs *(Cont.)*

Fig. 11

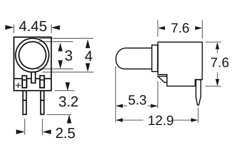


Fig. 12

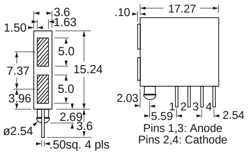


Fig. 13

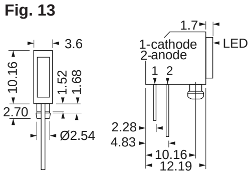


Fig. 14

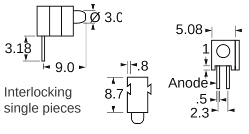


Fig. 15

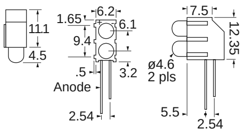


Fig. 16

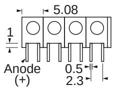


Fig. 17

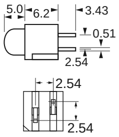


Fig. 18

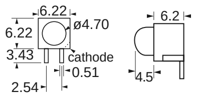


Fig. 19

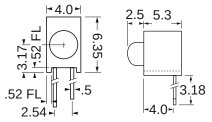


Fig. 20

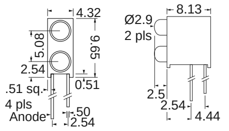


Fig. 21

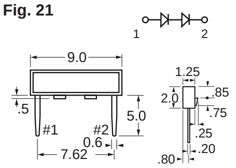


Fig.	Description	Emitted Color	Lens	Peak Wavelength (nm)	Vf (V) Typ.	If (mA) Max.	Io (mcd)	Viewing Angle (2x Theta)	Digi-Key Part Number	Price Each			Lumex Part Number
										1	25	100	
9	5mm	Red/Green	White Diff.	695/565	2.1	25	25	60	67-1289-ND	2.34	1.95	1.56	SSF-LXH400HGW
		Red	Red Diff.	635	5.0	12	8	60	67-1290-ND	2.34	1.95	1.56	SSF-LXH400ID-5V
		Green	Green Diff.	565	5.0	12	20	60	67-1291-ND	2.34	1.95	1.56	SSF-LXH400GD-5V
		Red	Red Diff.	660	1.7	30	100	60	67-1288-ND	2.34	1.95	1.56	SSF-LXH400SRD
		Red	Red Diff.	635	2.0	30	20	60	67-1285-ND	1.26	1.05	.84	SSF-LXH400ID
		Yellow	Yellow Diff.	585	2.1	30	20	60	67-1287-ND	1.26	1.05	.84	SSF-LXH400YD
		Green	Green Diff.	565	2.1	25	20	60	67-1322-ND	2.22	1.85	1.48	SSF-LXH400GD-01
		Green	Green Diff.	565	2.1	25	20	60	67-1286-ND	1.26	1.05	.84	SSF-LXH400GD
10	5mm	Red/Green	White Diff.	695/565	2.1	25	4	60	67-1292-ND	1.38	1.15	.92	SSF-LXH4RA5HGW
		Red (blinking)	Red Diff.	635	3.5	70	20	60	67-1301-ND	2.64	2.20	1.76	SSF-LXH4RA5BID
		Red	Red Diff.	635	5.0	12	30	60	67-1299-ND	1.38	1.15	.92	SSF-LXH4RA5ID-5V
		Green	Green Diff.	565	5.0	12	15	60	67-1300-ND	1.38	1.15	.92	SSF-LXH4RA5GD-5V
		Red	Red Diff.	660	1.7	30	80	60	67-1296-ND	1.38	1.15	.92	SSF-LXH4RA5SRD
		Red	Red Diff.	635	2.1	30	40	60	67-1293-ND	.96	.80	.64	SSF-LXH4RA5ID
		Yellow	Yellow Diff.	585	2.1	30	30	60	67-1295-ND	.96	.80	.64	SSF-LXH4RA5YD
		Green	Green Diff.	565	2.1	25	30	60	67-1294-ND	.96	.80	.64	SSF-LXH4RA5GD
		Red	Red Diff.	635	2.1	30	40	60	67-1297-ND†	.96	.80	.64	SSF-LXH4RA5LID
		Green	Green Diff.	565	2.1	25	30	60	67-1298-ND†	.96	.80	.64	SSF-LXH4RA5LGD
11	3mm	Red/Green	White Diff.	700/565	2.1	25	3/4	60	67-1302-ND	1.38	1.15	.92	SSF-LXH4RAHGW
		Red (blinking)	Red Diff.	635	3.5	20	6	60	67-1307-ND	2.64	2.20	1.76	SSF-LXH4RABID
		Red	Red Diff.	660	1.7	30	80	60	67-1306-ND	1.38	1.15	.92	SSF-LXH4RASRD
		Red	Red Diff.	635	2.1	30	40	60	67-1303-ND	.96	.80	.64	SSF-LXH4RAID
		Yellow	Yellow Diff.	585	2.1	30	30	60	67-1305-ND	.96	.80	.64	SSF-LXH4RAYD
		Green	Green Diff.	565	2.1	25	30	60	67-1304-ND	.96	.80	.64	SSF-LXH4RAGD
12	5.0x1.63mm	Red	Red Diff.	660	1.7	30	80	110	67-1265-ND	1.56	1.30	1.04	SSF-LXH22573SRSRD
		Red	Red Diff.	635	2.0	30	10	110	67-1262-ND	1.14	.95	.76	SSF-LXH22573IID
		Yellow	Yellow Diff.	585	2.1	30	10	110	67-1264-ND	1.14	.95	.76	SSF-LXH22573YYD
		Green	Green Diff.	565	2.2	25	10	110	67-1263-ND	1.14	.95	.76	SSF-LXH22573GGD
		Red	Red Diff.	635	2.0	30	10	80	67-1266-ND†	1.44	1.20	.96	SSF-LXH22573LIID
		Green	Green Diff.	565	2.2	25	10	80	67-1267-ND†	1.44	1.20	.96	SSF-LXH22573LGGD
13	2.5x7mm	Red/Green	White Diff.	695/565	2.0/2.2	25	2/9	110	67-1268-ND	.93	.78	.62	SSF-LXH25780HGW
		Red	Red Diff.	660	1.7	30	50	110	67-1272-ND	.93	.78	.62	SSF-LXH25780SRD
		Red	Red Diff.	635	2.0	30	15	110	67-1269-ND	.63	.53	.42	SSF-LXH25780ID
		Yellow	Yellow Diff.	585	2.1	30	9	110	67-1271-ND	.63	.53	.42	SSF-LXH25780YD
		Green	Green Diff.	565	2.2	25	9	110	67-1270-ND	.63	.53	.42	SSF-LXH25780GD
14	3mm	Sup. Red	Red Diff.	660	1.8	30	100	60	67-1276-ND	.78	.65	.52	SSF-LXH2300SRD-LM
		Red	Red Diff.	635	5.0	30	30	60	67-1279-ND	.78	.65	.52	SSF-LXH2300ID-5V-LM
		Green	Green Diff.	565	5.0	25	30	60	67-1280-ND	.78	.65	.52	SSF-LXH2300GD-5V-LM
		Red	Red Diff.	635	2.0	30	50	60	67-1273-ND	.54	.45	.36	SSF-LXH2300ID-LM
		Yellow	Yellow Diff.	585	2.1	30	50	60	67-1275-ND	.54	.45	.36	SSF-LXH2300YD-LM
		Green	Green Diff.	565	2.2	25	50	60	67-1274-ND	.54	.45	.36	SSF-LXH2300GD-LM
		Red	Red Diff.	635	2.0	25	50	60	67-1277-ND†	.72	.60	.48	SSF-LXH2300LID-LM
		Green	Green Diff.	565	2.2	25	50	60	67-1278-ND†	.72	.60	.48	SSF-LXH2300LGD-LM
15	5mm	Red/Green	White Diff.	635/565	2.0/2.2	30/25	30/25	60	67-1281-ND	1.62	1.35	1.08	SSF-LXH250MIGIGW
		Red	Red Diff.	635	2.0	30	40	60	67-1282-ND	.96	.80	.64	SSF-LXHM250IID
		Yellow	Yellow Diff.	585	2.1	30	30	60	67-1284-ND	.96	.80	.64	SSF-LXH250MYYD
		Green	Green Diff.	565	2.2	25	30	60	67-1283-ND	.96	.80	.64	SSF-LXHM250GGD
16	3mm	Red	Red Diff.	635	2.0	30	40	60	67-1315-ND	2.04	1.70	1.36	SSF-LXH2300/4ID
17	5mm	Green	Green Diff.	565	2.2	25	30	60	67-1316-ND	.84	.70	.56	SSF-LXH101GD-1SL
18	5mm	Red	Red Diff.	635	2.0	30	40	60	67-1317-ND	.84	.70	.56	SSF-LXH101ID-01
		Green	Greed Diff.	565	2.2	25	30	60	67-1318-ND	.84	.70	.56	SSF-LXH101GD-01
19	3mm	Red	Red Diff.	635	2.1	30	40	60	67-1320-ND	.84	.70	.56	SSF-LXH303ID
20	3mm	Red	Red Diff.	635	2.0	30	15	80	67-1319-ND	1.20	1.00	.80	SSF-LXH240IID
		Green	Green Diff.	565	2.1	25	15	80	67-1321-ND	1.20	1.00	.80	SSF-LXH240GGD
21	9.0x2.0mm	Red	Red Trans.	660	3.6	30	50	160	67-1326-ND	1.08	.90	.72	SSB-LX02SRC
		Red	Red Trans.	635	4.5	30	16	160	67-1323-ND	.87	.73	.58	SSB-LX02IC
		Yellow	Yellow Trans.	590	4.2	30	170	160	67-1325-ND	.87	.73	.58	SSB-LX02YC
		Green	Green Trans.	565	4.4	25	10	160	67-1324-ND	.87	.73	.58	SSB-LX02GC

† Low Current Version, Lights at (2mA)

Surface Mount LEDs

67-1542-ND
Lumex Master Catalog
CD-ROM **$1.95**

Fig. 1 — SOT-23

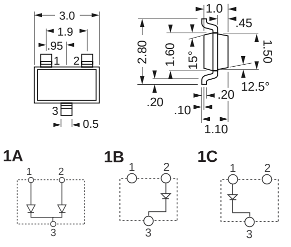


Fig. 2 — SOT-23 Footprint

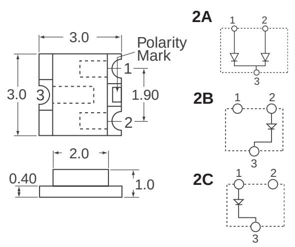
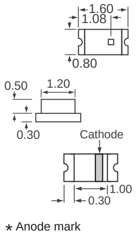
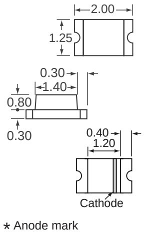


Fig. 3 — 0603



* Anode mark on 67-1551-1-ND

Fig. 4 — 0805



* Anode mark on 67-1555-1-ND

Fig. 5 — 1206

* Anode mark on 67-1359-1-ND 67-1004-1-ND

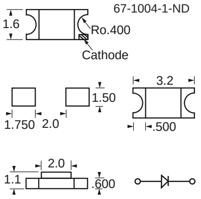


Fig. 6 — 1210

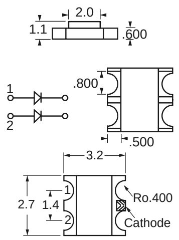
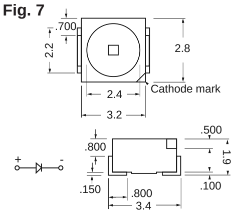


Fig. 7



* Anode mark on 67-1366-ND

Fig. 8

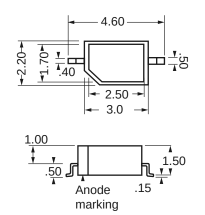


Fig. 9

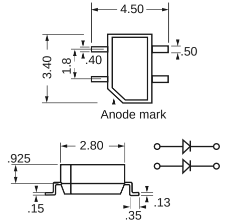
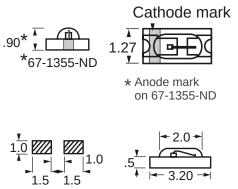


Fig. 10



* Anode mark on 67-1355-ND

Fig. 11

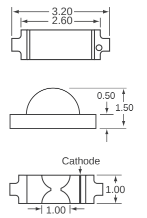


Fig. 12

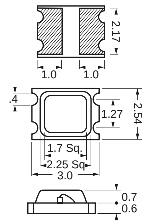


Fig. 13

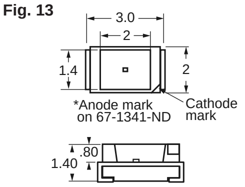


Fig. 14

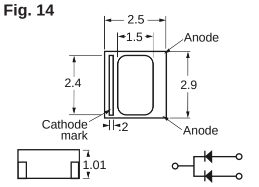


Fig. 15

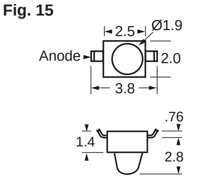


Fig. 16

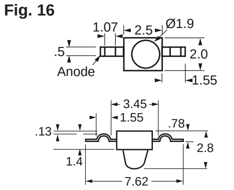


Fig. 17

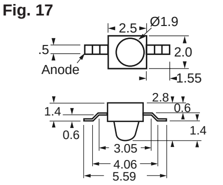


Fig. 18

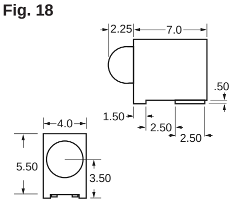


Fig. 19

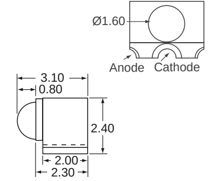


Fig. 20 — Interlocking, Re-Lampable

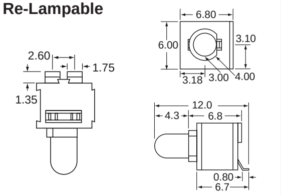


Fig. 21 — Interlocking, Re-Lampable

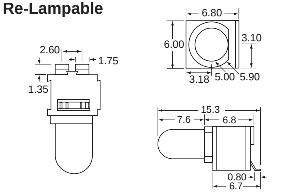


Fig. 22

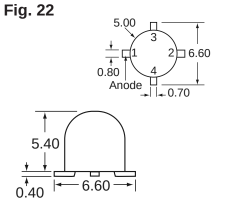


Fig.	Emitted Color	Vf	Io (mcd)	View Angle	If (mA)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing	Lumex Part No.
1A	Red/Red	2.1	8	140°	40	67-1334-1-ND	.96	.84	.72	67-1334-2-ND	3,000	398.00/M	SSL-LX15IIC-RP-TR
	Green/Green	2.1	8	140°	40	67-1336-1-ND	.96	.84	.72	67-1336-2-ND	3,000	398.00/M	SSL-LX15GGC-RP-TR
	Yellow/Yellow	2.1	8	140°	40	67-1337-1-ND	.96	.84	.72	67-1337-2-ND	3,000	398.00/M	SSL-LX15YYC-RP-TR
	Red/Green	2.1	4/4	140°	20/20	67-1335-1-ND	.88	.77	.66	67-1335-2-ND	3,000	365.00/M	SSL-LX15IGC-RP-TR
1B	Red	2.1	4	140°	20	67-1381-1-ND	.64	.56	.48	67-1381-2-ND	3,000	265.60/M	SSL-LX15IC-TR
	Green	2.1	3	140°	20	67-1382-1-ND	.64	.56	.48	67-1382-2-ND	3,000	265.60/M	SSL-LX15GC-TR
	Yellow	2.1	3	140°	20	67-1383-1-ND	.64	.56	.48	67-1383-2-ND	3,000	265.60/M	SSL-LX15YC-TR
1C	Red	2.1	4	140°	20	67-1378-1-ND	.64	.56	.48	67-1378-2-ND	3,000	265.60/M	SSL-LX15IC-RP-TR
	Green	2.1	3	140°	20	67-1379-1-ND	.64	.56	.48	67-1379-2-ND	3,000	265.60/M	SSL-LX15GC-RP-TR
	Yellow	2.1	3	140°	20	67-1380-1-ND	.64	.56	.48	67-1380-2-ND	3,000	265.60/M	SSL-LX15YC-RP-TR
2A	Red/Red (635mm)	2.0	10	140°	20/20	67-1654-1-ND	.83	.73	.63	67-1654-2-ND	3,000	343.62/M	SML-LX15IIC-RP-TR
	Green/Green (565mm)	2.1	10	140°	20/20	67-1657-1-ND	.83	.73	.63	67-1657-2-ND	3,000	343.62/M	SML-LX15GGC-RP-TR
	Yellow/Yellow (585mm)	2.1	10	140°	20/20	67-1672-1-ND	.83	.73	.63	67-1672-2-ND	3,000	343.62/M	SML-LX15YYC-RP-TR
	Red/Green (635/565mm)	2.0/2.1	10	140°	20/20	67-1655-1-ND	.83	.73	.63	67-1655-2-ND	3,000	343.62/M	SML-LX15IGC-RP-TR
	Yellow/Green (585/565mm)	2.1/2.2	10	140°	20/20	67-1674-1-ND	.83	.73	.63	67-1674-2-ND	3,000	343.62/M	SML-LX15YGC-RP-TR
2B	Red (635mm)	2.0	10	140°	20	67-1684-1-ND	.52	.46	.40	67-1684-2-ND	3,000	217.63/M	SML-LX15IC-TR
	Super Red (660mm)	1.7	20	140°	20	67-1660-1-ND	.56	.50	.43	67-1660-2-ND	3,000	234.06/M	SML-LX15SRC-TR
	Green (565mm)	2.1	10	140°	20	67-1685-1-ND	.52	.46	.40	67-1685-2-ND	3,000	217.46/M	SML-LX15GC-TR
	Super Ultra Green (574mm)	2.2	45	140°	20	67-1662-1-ND	.58	.51	.44	67-1662-2-ND	3,000	240.70/M	SML-LX15SUGC-TR
	Ultra Pure Green (525mm)	3.5	45	140°	20	67-1666-1-ND	3.13	2.75	2.35	67-1666-2-ND	3,000	1299.78/M	SML-LX15UPGC-TR
	Yellow (585mm)	2.1	10	140°	20	67-1670-1-ND	.52	.46	.40	67-1670-2-ND	3,000	217.46/M	SML-LX15YC-TR
	Super Yellow (590mm)	2.1	60	140°	20	67-1664-1-ND	.58	.51	.44	67-1664-2-ND	3,000	240.70/M	SML-LX15SYC-TR
	Ultra Super Blue (470mm)	3.5	120	140°	20	67-1668-1-ND	3.13	2.75	2.35	67-1668-2-ND	3,000	1299.78/M	SML-LX15USBC-TR
2C	Red (635mm)	2.0	10	140°	20	67-1653-1-ND	.52	.46	.40	67-1653-2-ND	3,000	217.46/M	SML-LX15IC-RP-TR
	Super Red (660mm)	1.7	20	140°	20	67-1661-1-ND	.56	.50	.43	67-1661-2-ND	3,000	234.06/M	SML-LX15SRC-RP-TR
	Green (565mm)	2.1	10	140°	20	67-1656-1-ND	.52	.46	.40	67-1656-2-ND	3,000	217.46/M	SML-LX15GC-RP-TR
	Super Ultra Green (574mm)	2.2	45	140°	20	67-1663-1-ND	.58	.51	.44	67-1663-2-ND	3,000	240.70/M	SML-LX15SUGC-RP-TR
	Ultra Pure Green (525mm)	3.5	45	140°	20	67-1667-1-ND	3.13	2.75	2.35	67-1667-2-ND	3,000	1299.78/M	SML-LX15UPGC-RP-TR
	Yellow (585mm)	2.1	10	140°	20	67-1671-1-ND	.52	.46	.40	67-1671-2-ND	3,000	217.46/M	SML-LX15YC-RP-TR
	Super Yellow (590mm)	2.1	60	140°	20	67-1665-1-ND	.58	.51	.44	67-1665-2-ND	3,000	240.70/M	SML-LX15SYC-RP-TR
	Ultra Super Blue (470mm)	3.5	120	140°	20	67-1669-1-ND	3.13	2.75	2.35	67-1669-2-ND	3,000	1299.78/M	SML-LX15USBC-RP-TR

(Continued)

LUMEX Surface Mount LEDs *(Cont.)*

Fig.	Emitted Color	Vf	Io (mcd)	View Angle	If (mA)	Digi-Key Part No.	Cut Tape Price Each			Digi-Key Part No.	Tape & Reel		Lumex Part No.
							1	10	100		Size	Pricing	
3	Red	2.0	14	160°	20	67-1548-1-ND	.20	.17	.14	67-1548-2-ND	4,000	111.22/M	SML-LX0603IW-TR
	Green	2.2	18	160°	20	67-1549-1-ND	.17	.14	.12	67-1549-2-ND	4,000	92.96/M	SML-LX0603GW-TR
	Yellow	2.1	12	160°	20	67-1550-1-ND	.19	.16	.13	67-1550-2-ND	4,000	106.24/M	SML-LX0603YW-TR
	Super Red	1.8	30	160°	20	67-1551-1-ND*	.20	.17	.14	67-1551-2-ND*	4,000	112.88/M	SML-LX0603SRW-TR
4	Red	2.0	11	140°	20	67-1552-1-ND	.18	.15	.12	67-1552-2-ND	4,000	97.94/M	SML-LXT0805IW-TR
	Green	2.0	11	140°	20	67-1553-1-ND	.15	.13	.10	67-1553-2-ND	4,000	81.34/M	SML-LXT0805GW-TR
	Yellow	2.1	10	140°	20	67-1554-1-ND	.19	.16	.13	67-1554-2-ND	4,000	106.24/M	SML-LXT0805YW-TR
	Super Red	1.8	21	140°	20	67-1555-1-ND*	.18	.15	.12	67-1555-2-ND*	4,000	99.60/M	SML-LXT0805SRW-TR
	Super Red (636nm)	2.0	60	140°	20	67-1636-1-ND	.36	.30	.24	67-1636-2-ND	3,000	199.20/M	SML-LX0805SIC-TR
	Super Orange (610nm)	2.0	60	140°	20	67-1637-1-ND	.36	.30	.24	67-1637-2-ND	3,000	199.20/M	SML-LX0805SOC-TR
	Ultra Green (525nm)	3.5	45	140°	20	67-1640-1-ND	5.28	4.40	3.52	67-1640-2-ND	3,000	2921.60/M	SML-LX0805UPGC-TR
	Super Blue (470nm)	3.5	25	140°	20	67-1638-1-ND	3.18	2.65	2.12	67-1638-2-ND	3,000	1759.60/M	SML-LX0805USBC-TR
5	Red	2.0	6	140°	20	67-1356-1-ND	.36	.32	.27	67-1356-2-ND	3,000	149.40/M	SML-LX1206IC-TR
	Green	2.1	10	140°	20	67-1357-1-ND	.36	.32	.27	67-1357-2-ND	3,000	149.40/M	SML-LX1206GC-TR
	Yellow	2.0	6	140°	20	67-1358-1-ND	.36	.32	.27	67-1358-2-ND	3,000	149.40/M	SML-LX1206YC-TR
	Super Red	1.7	15	140°	20	67-1359-1-ND*	.60	.53	.45	67-1359-2-ND*	3,000	249.00/M	SML-LX1206SRC-TR
	Green	2.2	10	160°	25	67-1002-1-ND	.27	.24	.21	67-1002-2-ND	3,000	112.88/M	SML-LX1206GW-TR
	Red	2.0	6	160°	25	67-1003-1-ND	.28	.25	.22	67-1003-2-ND	3,000	117.86/M	SML-LX1206IW-TR
	Super Red	1.8	15	160°	30	67-1004-1-ND*	.29	.26	.22	67-1004-2-ND*	3,000	119.52/M	SML-LX1206SRW-TR
6	Red/Green	2.0	6/10	140°	20	67-1361-1-ND	.76	.67	.57	67-1361-2-ND	3,000	315.40/M	SML-LX1210IGC-TR
	Green/Green	2.0	10	140°	20	67-1362-1-ND	.76	.67	.57	67-1362-2-ND	3,000	315.40/M	SML-LX1210GGC-TR
	Yellow/Green	2.0	6/10	140°	20	67-1363-1-ND	.76	.67	.57	67-1363-2-ND	3,000	315.40/M	SML-LX1210YGC-TR
	Super Red/Super Red	1.7	15	140°	20	67-1360-1-ND	1.16	1.02	.87	67-1360-2-ND	3,000	481.40/M	SML-LX1210SRSRC-TR
7	Red	2.0	12	120°	20	67-1364-1-ND	.64	.56	.48	67-1364-2-ND	2,000	265.60/M	SML-LX2832IC-TR
	Green	2.1	25	120°	20	67-1365-1-ND	.64	.56	.48	67-1365-2-ND	2,000	265.60/M	SML-LX2832GC-TR
	Yellow	2.0	12	120°	20	67-1367-1-ND	.64	.56	.48	67-1367-2-ND	2,000	265.60/M	SML-LX2832YC-TR
	Super Red	1.7	40	120°	20	67-1366-1-ND*	.80	.70	.60	67-1366-2-ND*	2,000	332.00/M	SML-LX2832SRC-TR
8	Red	2.1	12	130°	20	67-1368-1-ND	.60	.53	.45	67-1368-2-ND	2,000	249.00/M	SSL-LXA1725IC-TR
	Green	2.0	25	130°	20	67-1369-1-ND	.60	.53	.45	67-1369-2-ND	2,000	249.00/M	SSL-LXA1725GC-TR
	Yellow	2.1	12	130°	20	67-1370-1-ND	.60	.53	.45	67-1370-2-ND	2,000	249.00/M	SSL-LXA1725YC-TR
	Super Red	1.7	40	130°	20	67-1371-1-ND	.80	.70	.60	67-1371-2-ND	2,000	332.00/M	SSL-LXA1725SRC-TR
9	Red/Green	2.0	12/20	125°	20	67-1372-1-ND	1.08	.95	.81	67-1372-2-ND	1,000	448.20	SSL-LXA3025IGC-TR
	Yellow/Green	2.1	20	90°	20	67-1373-1-ND	1.08	.95	.81	67-1373-2-ND	1,000	448.20	SSL-LXA3025YGC-TR
10	Red	2.1	7.2	180°	20	67-1352-1-ND	.84	.74	.63	67-1352-2-ND	3,000	336.00/M	CCL-LX45IT
	Green	2.0	7	180°	20	67-1353-1-ND	.84	.74	.63	67-1353-2-ND	3,000	336.00/M	CCL-LX45GT
	Yellow	2.3	7	180°	20	67-1354-1-ND	.84	.74	.63	67-1354-2-ND	3,000	336.00/M	CCL-LX45YT
	Super Red	1.8	8	180°	20	67-1355-1-ND*	1.28	1.12	.96	67-1355-2-ND*	3,000	512.00/M	CCL-LX45SRT
11	Red	2.0	12	130°	20	67-1556-1-ND	.26	.22	.17	67-1556-2-ND	3,000	141.10/M	SML-LXR85IC-TR
	Green	2.2	12	130°	20	67-1557-1-ND	.23	.19	.16	67-1557-2-ND	3,000	126.16/M	SML-LXR85GC-TR
	Yellow	2.1	10	130°	20	67-1558-1-ND	.24	.20	.16	67-1558-2-ND	3,000	131.14/M	SML-LXR85YC-TR
	Super Red	1.8	30	130°	20	67-1559-1-ND	.26	.22	.17	67-1559-2-ND	3,000	141.10/M	SML-LXR85SRC-TR
12	Red	2.1	4	180°	20	67-1342-1-ND	.70	.62	.53	67-1342-2-ND	3,000	290.50/M	CCL-CRS10R
	Green	2.1	10	180°	20	67-1343-1-ND	.70	.62	.53	67-1343-2-ND	3,000	290.50/M	CCL-CRS10G
	Yellow	2.1	5	180°	20	67-1344-1-ND	.70	.62	.53	67-1344-2-ND	3,000	290.50/M	CCL-CRS10Y
	Super Red	1.7	14	180°	20	67-1345-1-ND	1.04	.91	.78	67-1345-2-ND	3,000	431.60/M	CCL-CRS10SR
13	Red	2.0	20	90°	20	67-1338-1-ND	.59	.52	.45	67-1338-2-ND	2,000	245.68/M	SML-LX23IC-TR
	Green	2.1	20	90°	20	67-1339-1-ND	.59	.52	.45	67-1339-2-ND	2,000	245.68/M	SML-LX23GC-TR
	Yellow	2.1	20	90°	20	67-1340-1-ND	.59	.52	.45	67-1340-2-ND	2,000	245.68/M	SML-LX23YC-TR
	Super Red	1.7	100	90°	20	67-1341-1-ND*	.77	.68	.58	67-1341-2-ND*	2,000	318.72/M	SML-LX23SRC-TR
14	Green/Green	2.0	20	90°	20	67-1350-1-ND	.96	.84	.72	67-1350-2-ND	2,000	398.40/M	CCL-LX253GGC
	Yellow/Green	2.1	20	90°	20	67-1351-1-ND	.96	.84	.72	67-1351-2-ND	2,000	398.40/M	CCL-LX253YGC
	Super Red/Super Red	1.7	40	90°	20	67-1349-1-ND	1.48	1.30	1.11	67-1349-2-ND	2,000	614.20/M	CCL-LX253SRSRC
15	Red	2.0	60	25°	20	67-1384-1-ND	.47	.42	.36	67-1384-2-ND	1,000	195.88	SSL-LXA228IC-TR11
	Green	2.1	30	25°	20	67-1385-1-ND	.47	.42	.36	67-1385-2-ND	1,000	195.88	SSL-LXA228GC-TR11
	Yellow	2.0	30	25°	20	67-1386-1-ND	.47	.42	.36	67-1386-2-ND	1,000	195.88	SSL-LXA228YC-TR11
	Super Red	1.7	170	25°	20	67-1393-1-ND	.78	.69	.59	67-1393-2-ND	1,000	323.70	SSL-LXA228SRC-TR11
	Green	2.1	4	50°	30	67-1141-1-ND	.48	.42	.36	67-1141-2-ND	1,000	197.54	SSL-LXA228GD-TR11
	Yellow	2.0	12	50°	20	67-1145-1-ND	.48	.42	.36	67-1145-2-ND	1,000	197.54	SSL-LXA228YD-TR11
16	Red	2.0	60	25°	20	67-1387-1-ND	.47	.42	.36	67-1387-2-ND	1,000	195.88	SSL-LXA228IC-TR21
	Green	2.1	30	25°	20	67-1388-1-ND	.47	.42	.36	67-1388-2-ND	1,000	195.88	SSL-LXA228GC-TR21
	Yellow	2.0	30	25°	20	67-1389-1-ND	.47	.42	.36	67-1389-2-ND	1,000	195.88	SSL-LXA228YC-TR21
	Super Red	1.7	170	25°	20	67-1394-1-ND	.78	.69	.59	67-1394-2-ND	1,000	323.70	SSL-LXA228SRC-TR21
	Green	2.1	4	50°	30	67-1142-1-ND	.50	.44	.38	67-1142-2-ND	1,000	207.50	SSL-LXA228GD-TR21
	Red	2.0	12	50°	30	67-1143-1-ND	.50	.44	.38	67-1143-2-ND	1,000	207.50	SSL-LXA228ID-TR21
	Red	2.0	12	50°	30	67-1144-1-ND	.52	.46	.39	67-1144-2-ND	1,000	215.80	SSL-LXA228LID-TR21
	Yellow	2.0	12	50°	20	67-1146-1-ND	.48	.42	.36	67-1146-2-ND	1,000	197.54	SSL-LXA228YD-TR21
17	Red	2.0	60	25°	20	67-1390-1-ND	.47	.42	.36	67-1390-2-ND	1,000	195.88	SSL-LXA228IC-TR31
	Green	2.1	30	25°	20	67-1391-1-ND	.47	.42	.36	67-1391-2-ND	1,000	195.88	SSL-LXA228GC-TR31
	Yellow	2.0	30	25°	20	67-1392-1-ND	.47	.42	.36	67-1392-2-ND	1,000	195.88	SSL-LXA228YC-TR31
	Super Red	1.7	170	25°	20	67-1395-1-ND	.78	.69	.59	67-1395-2-ND	1,000	323.70	SSL-LXA228SRC-TR31
18	Red	2.0	40	60°	20	67-1374-1-ND	.76	.67	.57	67-1374-2-ND	1,000	315.40	SSF-LXH305ID-TR
	Green	2.1	30	60°	20	67-1375-1-ND	.76	.67	.57	67-1375-2-ND	1,000	315.40	SSF-LXH305GD-TR
	Yellow	2.1	30	60°	20	67-1376-1-ND	.76	.67	.57	67-1376-2-ND	1,000	315.40	SSF-LXH305YD-TR
	Super Red	1.7	80	60°	20	67-1377-1-ND	1.00	.88	.75	67-1377-2-ND	1,000	415.00	SSF-LXH305SRD-TR
19	Super Red (636nm)	2.0	60	110°	20	67-1634-1-ND	.51	.45	.39	67-1634-2-ND	500	105.41	SMF-2432SIC-TR
	Super Yellow (590nm)	2.1	170	110°	20	67-1630-1-ND	.51	.45	.39	67-1630-2-ND	500	106.24	SMF-2432SYC-TR
	Yellow (585nm)	2.0	14	110°	20	67-1632-1-ND	.35	.31	.27	67-1632-2-ND	500	72.21	SMF-2432YC-TR
	Green (565nm)	2.2	14	110°	20	67-1631-1-ND	.34	.31	.26	67-1631-2-ND	500	71.38	SMF-2432GC-TR
	Ultra Green (525nm)	3.5	40	110°	20	67-1635-1-ND	6.40	5.60	4.80	67-1635-2-ND	500	1328.00	SMF-2432UPGC-TR
	Super Blue (430nm)	3.8	120	110°	20	67-1633-1-ND	2.04	1.79	1.54	67-1633-2-ND	500	424.13	SMF-2432SBC-TR
20	Super Red (660nm)	1.7	80	60°	20	67-1644-ND	.80	.71	.61	—	—	—	SMF-HM1530SRD-305
	Red (635nm)	2.0	30	60°	20	67-1641-ND	.70	.62	.53	—	—	—	SMF-HM1530ID-305
	Yellow (585nm)	2.1	30	60°	20	67-1642-ND	.70	.62	.53	—	—	—	SMF-HM1530YD-305
	Green (565nm)	2.2	30	60°	20	67-1643-ND	.70	.62	.53	—	—	—	SMF-HM1530GD-305
21	Super Red (660nm)	1.7	100	60°	20	67-1622-ND	.80	.71	.61	—	—	—	SMF-HM1530SRD-509
	Red (635nm)	2.0	30	60°	20	67-1645-ND	.70	.62	.53	—	—	—	SMF-HM1530ID-509
	Yellow (585nm)	2.1	30	60°	20	67-1620-ND	.70	.62	.53	—	—	—	SMF-HM1530YD-509
	Green (565nm)	2.2	30	60°	20	67-1621-ND	.70	.62	.53	—	—	—	SMF-HM1530GD-509
22	Super Red (660nm)	1.7	400	30°	20	67-1623-1-ND	.72	.63	.54	67-1623-2-ND	500	148.57	SML-LXL505SRC-TR
	Super Int. Red (636nm)	2.0	1200	30°	20	67-1625-1-ND	.72	.63	.54	67-1625-2-ND	500	148.57	SML-LXL505SIC-TR
	Super Orange (610nm)	2.0	1500	30°	20	67-1626-1-ND	.72	.63	.54	67-1626-2-ND	500	148.57	SML-LXL505SOC-TR
	Super Yellow (590nm)	2.1	1200	30°	20	67-1624-1-ND	.72	.63	.54	67-1624-2-ND	500	148.57	SML-LXL505SYC-TR
	Ultra Green (525nm)	3.5	500	30°	20	67-1628-1-ND	3.85	3.38	2.89	67-1628-2-ND	500	799.29	SML-LXL505UPGC-TR
	Ultra Super Blue (470nm)	3.5	800	30°	20	67-1629-1-ND	3.52	3.09	2.65	67-1629-2-ND	500	731.23	SML-LXL505USBC-TR

Panel Mount LEDs

67-1542-ND
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Fig. 1

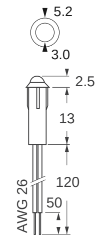


Fig. 2

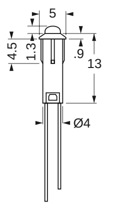


Fig. 3

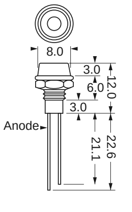


Fig. 4

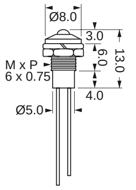


Fig. 5

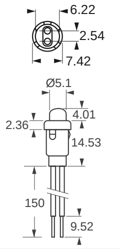
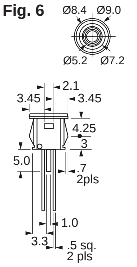


Fig. 6



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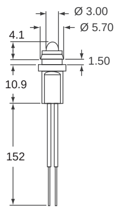
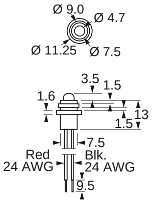


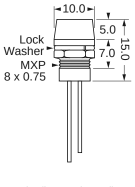
(rear panel mount)

Fig. 8



(rear panel mount)

Fig. 9



(reflector bezel)

Fig. 10

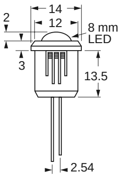


Fig. 11

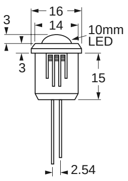


Fig. 12

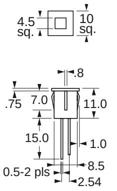


Fig. 13

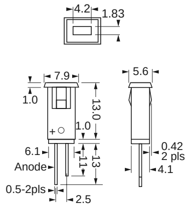


Fig. 14

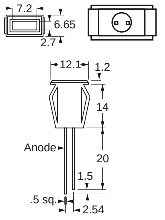


Fig. 15

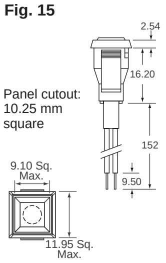


Fig. 16

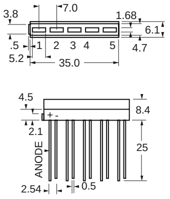


Fig. 17

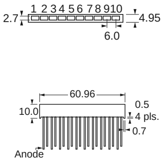


Fig. 18

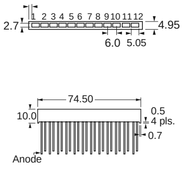


Fig. 19

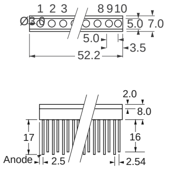


Fig. 20

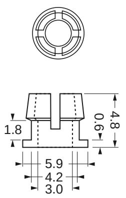


Fig. 21

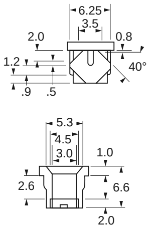


Fig. 22

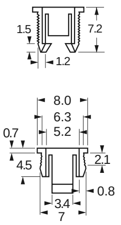


Fig. 23

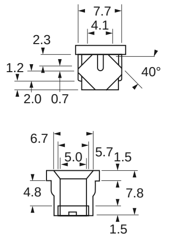


Fig. 24

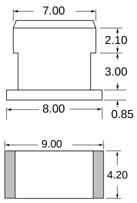


Fig.	LED Dia. (mm)	Emitted Color	Oper. Curr. mA	Oper. Type Volt(v)	Digi-Key Part No.	Price Each 1	10	50	Lumex Part No.
1	3	Red	10-25	2.1	67-1190-ND	1.20	.96	.84	SSI-LXH312ID-150
	3	Green	10-25	2.1	67-1191-ND	1.20	.96	.84	SSI-LXH312GD-150
2	3	Red	30	2.0	67-1192-ND	.63	.50	.44	SSI-LXH312ID
3	3	Red	10-25	2.1	67-1147-ND	1.00	.80	.70	SSI-LXR1612ID
	3	Green	10-25	2.1	67-1148-ND	1.00	.80	.70	SSI-LXR1612GD
	3	Yellow	10-25	2.1	67-1149-ND	1.00	.80	.70	SSI-LXR1612YD
	3	Bright Red	10-25	1.7	67-1150-ND	1.25	1.00	.88	SSI-LXR1612SRD
4	3	Red	10-25	2.1	67-1151-ND	1.00	.80	.70	SSI-LXR3612ID
	3	Green	10-25	2.1	67-1152-ND	1.00	.80	.70	SSI-LXR3612GD
	3	Yellow	10-25	2.1	67-1153-ND	1.00	.80	.70	SSI-LXR3612YD
	3	Bright Red	10-25	1.7	67-1154-ND	1.25	1.00	.88	SSI-LXR3612SRD
5	5	Red	10-25	2.1	67-1188-ND	1.15	.92	.81	SSI-LXH600ID-150
	5	Green	10-25	2.1	67-1189-ND	1.15	.92	.81	SSI-LXH600GD-150
	5	Red/Green	10-25	2.1	67-1187-ND	1.88	1.50	1.32	SSI-LXH600HGW-150
6	5	Red	10-25	2.1	67-1155-ND	1.13	.90	.79	SSI-LXH387ID
	5	Green	10-25	2.1	67-1156-ND	1.13	.90	.79	SSI-LXH387GD
	5	Yellow	10-25	2.1	67-1157-ND	1.13	.90	.79	SSI-LXH387YD
	5	Bright Red	10-25	1.7	67-1158-ND	1.30	1.04	.91	SSI-LXH387SRD
7	3	Red	30	2.0	67-1676-ND	2.16	1.73	1.52	SSI-RM3091ID-150
	3	Green	25	2.2	67-1675-ND	2.16	1.73	1.52	SSI-RM3091GD-150
	3	Yellow	30	2.1	67-1678-ND	2.16	1.73	1.52	SSI-RM3091YD-150
	3	Bright Red	30	1.7	67-1677-ND	2.44	1.96	1.71	SSI-RM3091SRD-150
	3	AlInGap Red	30	2.0	67-1679-ND	2.60	2.08	1.82	SSI-RM3091SID-150
	3	Super Orange	30	2.0	67-1680-ND	2.49	1.99	1.75	SSI-RM3091SOD-150
	3	Super Yellow	30	2.1	67-1682-ND	2.49	1.99	1.75	SSI-RM3091SYD-150
	3	Ultra Super Blue	30	3.5	67-1683-ND	4.55	3.64	3.19	SSI-RM3091USBD-150
8	5	Red	10-25	2.1	67-1159-ND	1.00	.80	.70	SSI-LXH9ID/-150
	5	Green	10-25	2.1	67-1160-ND	1.00	.80	.70	SSI-LXH9GD-150
	5	Yellow	10-25	2.1	67-1161-ND	1.00	.80	.70	SSI-LXH9YD-150
	5	Bright Red	10-25	1.7	67-1162-ND	1.15	.92	.81	SSI-LXH9SRD-150
9	5	Red	10-25	2.1	67-1163-ND	1.05	.84	.74	SSI-LXR4815ID
	5	Green	10-25	2.1	67-1164-ND	1.05	.84	.74	SSI-LXR4815GD
	5	Yellow	10-25	2.1	67-1165-ND	1.05	.84	.74	SSI-LXR4815YD
	5	Bright Red	10-25	1.7	67-1166-ND	1.18	.94	.83	SSI-LXR4815SRD
10	8	Red	10-25	2.1	67-1167-ND	.70	.56	.49	SSI-LXH8080ID
	8	Green	10-25	2.1	67-1168-ND	.70	.56	.49	SSI-LXH8080GD
	8	Yellow	10-25	2.1	67-1169-ND	.70	.56	.49	SSI-LXH8080YD
	8	Bright Red	10-25	1.7	67-1170-ND	.85	.68	.60	SSI-LXH8080SRD
11	10	Red	10-25	2.1	67-1171-ND	.85	.68	.60	SSI-LXH1090ID
	10	Green	10-25	2.1	67-1172-ND	.85	.68	.60	SSI-LXH1090GD
	10	Yellow	10-25	2.1	67-1173-ND	.85	.68	.60	SSI-LXH1090YD
	10	Bright Red	10-25	1.7	67-1174-ND	.98	.78	.69	SSI-LXH1090SRD

Fig.	LED Dia. (mm)	Emitted Color	Oper. Curr. mA	Oper. Type Volt(v)	Digi-Key Part No.	Price Each 1	10	50	Lumex Part No.
12	5	Red	10-25	2.1	67-1175-ND	.65	.52	.46	SSI-LXH55ID
	5	Green	10-25	2.1	67-1176-ND	.65	.52	.46	SSI-LXH55GD
	5	Yellow	10-25	2.1	67-1177-ND	.65	.52	.46	SSI-LXH55YD
	5	Bright Red	10-25	1.7	67-1178-ND	.80	.64	.56	SSI-LXH55SRD
13	2 x 5	Red	10-25	2.1	67-1179-ND	.95	.76	.67	SSI-LXMP059ID
	2 x 5	Green	10-25	2.1	67-1180-ND	.95	.76	.67	SSI-LXMP059GD
	2 x 5	Yellow	10-25	2.1	67-1181-ND	.95	.76	.67	SSI-LXMP059YD
	2 x 5	Bright Red	10-25	1.7	67-1182-ND	1.15	.92	.81	SSI-LXMP059SRD
14	2.5 x 7	Red	10-25	2.1	67-1183-ND	.85	.68	.60	SSI-LXH072ID
	2.5 x 7	Green	10-25	2.1	67-1184-ND	.85	.68	.60	SSI-LXH072GD
	2.5 x 7	Yellow	10-25	2.1	67-1185-ND	.85	.68	.60	SSI-LXH072YD
	2.5 x 7	Bright Red	10-25	1.7	67-1186-ND	1.00	.80	.70	SSI-LXH072SRD
15	9 x 9	Green	5-25	2.2	67-1543-ND	1.50	1.20	1.05	SSI-LXMP5011GC-150
	9 x 9	Red	5-25	2.0	67-1544-ND	1.50	1.20	1.05	SSI-LXMP5011IC-150
	9 x 9	Super Red	5-25	1.7	67-1545-ND	1.65	1.32	1.16	SSI-LXMP5011SRC-150
	9 x 9	Yellow	5-25	2.1	67-1546-ND	1.50	1.20	1.05	SSI-LXMP5011YC-150
16	2 x 5	Red	5-25	2.2	67-1201-ND	1.53	1.22	1.07	SSA-LXB525ID
	2 x 5	Green	5-25	2.2	67-1202-ND	1.53	1.22	1.07	SSA-LXB525GD
	2 x 5	Yellow	5-25	2.2	67-1203-ND	1.60	1.28	1.12	SSA-LXB525YD
	2 x 5	Bright Red	5-25	1.7	67-1204-ND	2.48	1.98	1.74	SSA-LXB525SRD
17	2.5 x 5	Red	5-25	2.2	67-1205-ND	3.10	2.48	2.17	SSA-LXH1025ID
	2.5 x 5	Green	5-25	2.2	67-1206-ND	3.10	2.48	2.17	SSA-LXH1025GD
	2.5 x 5	Yellow	5-25	2.2	67-1207-ND	3.48	2.78	2.44	SSA-LXH1025YD
	2.5 x 5	Bright Red	5-25	1.7	67-1208-ND	4.45	3.56	3.12	SSA-LXH1025SRD
18	2.5 x 5	Red	5-25	2.2	67-1209-ND	4.55	3.64	3.19	SSA-LXH1225ID
	2.5 x 5	Green	5-25	2.2	67-1210-ND	4.55	3.64	3.19	SSA-LXH1225GD
	2.5 x 5	Yellow	5-25	2.2	67-1211-ND	4.78	3.82	3.35	SSA-LXH1225YD
	2.5 x 5	Bright Red	5-25	1.7	67-1212-ND	6.63	5.30	4.64	SSA-LXH1225SRD
19	3	Red	5-25	2.2	67-1213-ND	3.73	2.98	2.61	SSA-LXB102ID
	3	Green	5-25	2.2	67-1214-ND	3.73	2.98	2.61	SSA-LXB102GD
	3	Yellow	5-25	2.2	67-1215-ND	3.48	2.78	2.44	SSA-LXB102YD
	3	Bright Red	5-25	1.7	67-1216-ND	5.48	4.38	3.84	SSA-LXB102SRD

Panel Mount LED Holders

Fig.	Description	Panel Hole	Digi-Key Part No.	Pricing 5	25	100	Lumex Part No.
20	T1 Black Nylon	.160" (4.06)	67-1330-ND	.60	2.25	7.50	SSH-LX3050
21	T1 Black Nylon	.225" (5.71)	67-1331-ND	.60	2.25	7.50	SSH-LXH301
22	T1-3/4 Black Nylon	.250" (6.35)	67-1332-ND	.40	1.50	5.00	SSH-LX5091
23	T1-3/4 Black Nylon	.330" (8.38)	67-1333-ND	.60	2.25	7.50	SSH-LXH501
24	Mounting Clip and Ring for T1-3/4	.250" (6.35)	67-1044-ND	.36	1.35	4.50	SSH-LX5090

Poly LEDS

Completely Encapsulated LED Clusters with Water Clear Lenses

Fig.	Emitted Color	Typical Intensity @20mA Per LED (mcd)	Typical Forward Voltage Vf	Max. Oper. Current mA per LED	Typical Peak Wave Length nm	Digi-Key Part No.	Price Each 1	10	100	Lumex Part No.
1	Super Yellow	1200	6.3	30	590	67-1571-ND	1.53	1.28	1.02	SSP-LXC0433S3
	Super Green	300	6.6	25	565	67-1578-ND	.72	.60	.48	SSP-LXC0432S3
	Super Red	2000	5.4	30	660	67-1585-ND	.76	.63	.51	SSP-LXC04363
	Ultra Red	2000	5.4	30	626	67-1592-ND	1.53	1.28	1.02	SSP-LXC0436U3
	Super Red/ Super Green	2000/300	1.8/2.2	30/25	660/565	67-1599-ND	.74	.62	.49	SSP-LXC04362S3A
2	Super Yellow	1200	4.2	30	590	67-1572-ND	2.03	1.70	1.36	SSP-LXC0473S4
	Super Green	300	4.4	25	565	67-1579-ND	.91	.76	.61	SSP-LXC0472S4
	Super Red	2000	3.6	30	660	67-1586-ND	.97	.81	.65	SSP-LXC04764
	Ultra Red	2000	3.6	30	626	67-1593-ND	2.03	1.70	1.36	SSP-LXC0476U4
	Super Red/ Super Green	2000/300	3.6/4.4	30/25	660/565	67-1600-ND	.95	.79	.63	SSP-LXC04762S4A
3	Super Yellow	1200	6.3/4.2	30	590	67-1573-ND	3.39	2.83	2.26	SSP-LXC0673S7A
	Super Green	300	6.6/4.4	25	565	67-1580-ND	1.53	1.28	1.02	SSP-LXC0672S7A
	Super Red	2000	5.4/3.6	30	660	67-1587-ND	1.61	1.35	1.08	SSP-LXC06767A
	Ultra Red	2000	5.4/3.6	30	626	67-1594-ND	3.39	2.83	2.26	SSP-LXC0676U7A
	Super Red/ Super Green	2000/300	5.4/4.4	30/25	660/565	67-1601-ND	1.55	1.30	1.04	SSP-LXC06762S7A
4	Super Yellow	1200	10.5/8.4	30	590	67-1574-ND	5.30	4.24	3.71	SSP-LXC0943S13A
	Super Green	300	11/8.8	25	565	67-1581-ND	2.88	2.41	1.93	SSP-LXC0942S13A
	Super Red	2000	9.0/7.2	30	660	67-1588-ND	3.06	2.55	2.04	SSP-LXC094613A
	Ultra Red	2000	9.0/7.2	30	626	67-1595-ND	5.30	4.24	3.71	SSP-LXC0946U13A
	Super Red/ Super Green	2000/300	9.0/8.8	30/25	660/565	67-1602-ND	2.93	2.45	1.96	SSP-LXC09462S13A
5	Super Yellow	1200	12.6	30	590	67-1575-ND	9.58	7.66	6.71	SSP-LXC1283S24
	Super Green	300	13.2	25	565	67-1582-ND	5.10	4.25	3.40	SSP-LXC1282S24
	Super Red	2000	10.8	30	660	67-1589-ND	5.43	4.53	3.62	SSP-LXC128624
	Ultra Red	2000	10.8	30	626	67-1596-ND	9.58	7.66	6.71	SSP-LXC1286U24
6	Super Yellow	1200	6.3	30	590	67-1576-ND	4.26	3.55	2.84	SSP-LXS0673S9
	Super Green	300	6.6	25	565	67-1583-ND	1.92	1.60	1.28	SSP-LXS0672S9
	Super Red	2000	5.4	30	660	67-1590-ND	1.99	1.66	1.33	SSP-LXS06769
	Ultra Red	2000	5.4	30	626	67-1597-ND	4.26	3.55	2.84	SSP-LXS0676U9
	Super Red/ Super Green	2000/300	5.4/6.6	30/25	660/565	67-1603-ND	1.90	1.59	1.27	SSP-LXS06762S9A
7	Super Yellow	1200	2.1	30	590	67-1577-ND	7.83	6.26	5.48	SSP-LXS1823S16A
	Super Green	300	2.2	25	565	67-1584-ND	5.13	4.28	3.42	SSP-LXS1822S16A
	Super Red	2000	1.8	30	660	67-1591-ND	5.35	4.46	3.57	SSP-LXS182616A
	Ultra Red	2000	1.8	30	626	67-1598-ND	7.83	6.26	5.48	SSP-LXS1826U16A
8	Super Yellow	700	2.1	30	590	67-1567-ND	9.40	7.52	6.58	SSP-LXS2443S16A
	Super Green	300	2.2	25	565	67-1568-ND	5.88	4.70	4.12	SSP-LXS2442S16A
	Super Red	1800	1.8	30	660	67-1569-ND	6.05	4.84	4.24	SSP-LXS244616A
	Ultra Red	1800	1.8	30	626	67-1570-ND	7.40	5.93	5.19	SSP-LXS2446U16A

Fig. 1

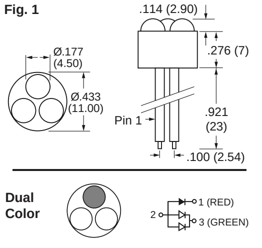


Fig. 2

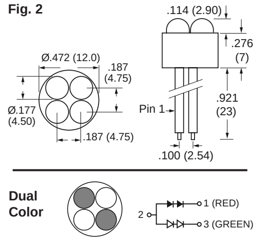


Fig. 3

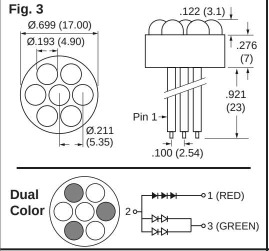


Fig. 4

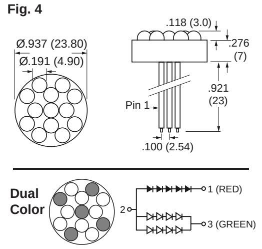


Fig. 5

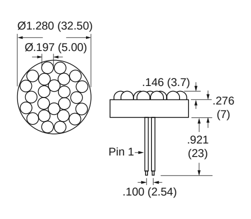


Fig 6

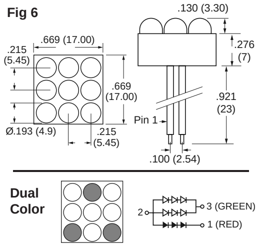


Fig. 7

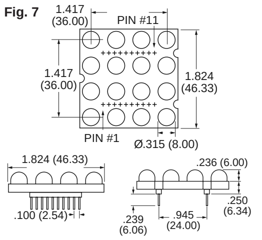
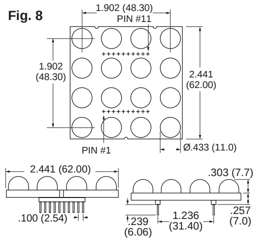


Fig. 8



Bright White LEDs

Fig. 1

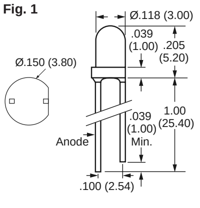


Fig. 2

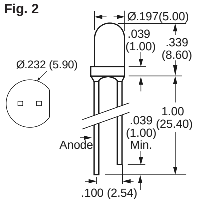


Fig. 3

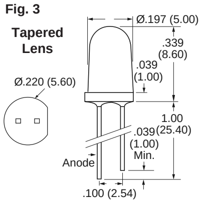


Fig. 4

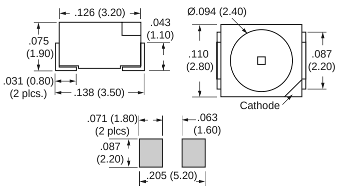


Fig. 5

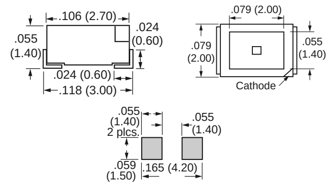
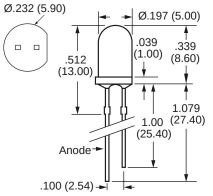


Fig.	Pkg. Type	Typical Intensity @ 20mA (mcd)	Typical Forward Voltage	Max. Oper. Current mA	Digi-Key Part N0.	Price Each 1	10	100	Digi-Key Part No.	Tape and Reel Size	Tape and Reel Pricing	Lumex Part No.
1	3mm	1100	3.6	30	67-1606-ND	3.00	2.78	2.49	—	—	—	SSL-LX3054UWC/A
2	5mm	740	3.6	30	67-1605-ND	3.00	2.78	2.49	—	—	—	SSL-LX5093UWC/A
3	5mm	2300	3.6	30	67-1604-ND	3.00	2.78	2.49	—	—	—	SSL-LX5093XUWC
4	SMD	150	3.6	30	67-1608-1-ND	3.00	2.78	2.49	67-1608-2-ND	1,500	2100.00/M	SML-LX2832UWC-TR
5	SMD	40	3.6	30	67-1607-1-ND	2.86	2.65	2.38	67-1607-2-ND	2,000	2002.00/M	SML-LX23UWC-TR

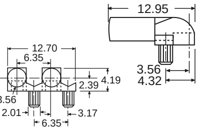
High Brightness Red LEDs

Emitted Color	Typical Intensity @ 20mA (mcd)	Typical Forward Voltage	Max. Oper. Current mA	Typical Peak Wave Length nm	Digi-Key Part No.	Price Each 1	10	100	Lumex Part No.
Super Red	1500	1.7	20	660	67-1610-ND	.28	.24	.19	SSL-LX5093SRC/DV
Super Red	1800	1.7	20	660	67-1611-ND	.55	.46	.37	SSL-LX5093SRC/DW
Super Red	2800	1.7	20	660	67-1612-ND	.54	.45	.36	SSL-LX5093SRC/E



Dialight

Optical Light Pipe



No. of Ports	Dimension (mm)	Digi-Key Part No.	Price Each 1	25	100	Dialight Part No.
2	3	350-1000-ND	1.20	1.00	.80	515-1071

Dialight LEDs

Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each			Digi-Key Part No.	Tape & Reel		Dialight Part No.
							1	25	100		Size	Pricing	
1	AlGaAs Red	660	17.0	1.7	20.0	350-1344-1-ND	.45	.38	.30	350-1344-2-ND	2,500	199.50/M	597-3111-407
	Green	560	7.5	2.1	20.0	350-1345-1-ND	.45	.38	.30	350-1345-2-ND	2,500	199.50/M	597-3311-407
	Yellow	580	6.0	2.2	20.0	350-1346-1-ND	.45	.38	.30	350-1346-2-ND	2,500	199.50/M	597-3401-407
2	Red	630	4.0	2.0	20.0	350-1347-1-ND	.54	.45	.36	350-1347-2-ND	3,000	239.40/M	597-3001-107
	Green	565	12.0	2.0	20.0	350-1348-1-ND	.54	.45	.36	350-1348-2-ND	3,000	239.40/M	597-3301-107
	Yellow	585	8.0	2.1	20.0	350-1349-1-ND	.60	.50	.40	350-1349-2-ND	3,000	266.00/M	597-3401-107
3	Red/Green	630/565	4.0/12.0	2.0/2.0	20.0	350-1350-1-ND	.78	.65	.52	350-1350-2-ND	3,000	345.80/M	597-7701-107
	Yellow/Green	585/565	8.0/12.0	2.1/2.0	20.0	350-1351-1-ND	.87	.73	.58	350-1351-2-ND	3,000	385.70/M	597-7721-107
	Red/Yellow	630/585	4.0/8.0	2.0/2.1	20.0	350-1352-1-ND	.78	.65	.52	350-1352-2-ND	3,000	345.80/M	597-7731-107
4	Green	565	8.0	2.1	20.0	350-1353-1-ND	.54	.45	.36	350-1353-2-ND	2,000	239.40/M	597-3301-207
	AlGaAs Red	660	20.0	1.75	10.0	350-1354-1-ND	.66	.55	.44	350-1354-2-ND	2,000	292.60/M	597-3121-207
	Yellow	586	6.0	2.1	20.0	350-1355-1-ND	.54	.45	.36	350-1355-2-ND	2,000	239.40/M	597-3401-207
	Red	635	8.0	2.0	20.0	350-1356-1-ND	.54	.45	.36	350-1356-2-ND	2,000	239.40/M	597-3001-207
5	Red/Green	635/565	6.0/9.4	2.0/2.0	10.0	350-1357-1-ND	.81	.68	.54	350-1357-2-ND	2,000	400.00/M	597-7701-207
	Yellow/Green	585/565	4.0/9.4	2.0/2.0	10.0	350-1358-1-ND	.81	.68	.54	350-1358-2-ND	2,000	359.10/M	597-7721-207
	Red/Yellow	635/586	7.3/6.8	2.0/2.0	10.0	350-1359-1-ND	.81	.68	.54	350-1359-2-ND	2,000	359.10/M	597-7731-207
6	AlGaAs Red	640	25.0	1.7	20.0	350-1341-1-ND	1.35	1.13	.90	350-1341-2-ND	600	378.00	595-2101-007
	Green	567	11.0	2.1	20.0	350-1342-1-ND	1.35	1.13	.90	350-1342-2-ND	600	378.00	595-2301-007
	Yellow	588	9.0	2.2	20.0	350-1343-1-ND	1.35	1.13	.90	350-1343-2-ND	600	378.00	595-2401-007
7	Red	628	5.0	2.0	10.0	350-1334-1-ND	1.29	1.08	.86	350-1334-2-ND	1,600	602.00/M	591-2001-013
	AlGaAs Red	645	14.0	1.75	10.0	350-1335-1-ND	1.35	1.13	.90	350-1335-2-ND	1,600	630.00/M	591-2101-013
	Green	570	4.0	2.0	10.0	350-1336-1-ND	1.29	1.08	.86	350-1336-2-ND	1,600	602.00/M	591-2301-013
	Yellow	590	5.0	2.0	10.0	350-1337-1-ND	1.29	1.08	.86	350-1337-2-ND	1,600	602.00/M	591-2401-013
8	Green	570	8.0	2.0	10.0	350-1360-1-ND	1.29	1.08	.86	350-1360-2-ND	1,600	571.90/M	591-2301-113
	AlGaAs Red	645	24.0	1.75	10.0	350-1361-1-ND	1.35	1.13	.90	350-1361-2-ND	1,600	598.50/M	591-2101-113
	Yellow	590	8.0	2.0	10.0	350-1362-1-ND	1.29	1.08	.86	350-1362-2-ND	1,600	571.90/M	591-2401-113
9	Red/Green	628/570	6.5/8.0	2.0/2.0	20.0	350-1338-1-ND	2.40	2.00	1.60	350-1338-2-ND	1,600	1120.00/M	591-3001-013
	Yellow/Green	586/570	6.5/8.0	2.0/2.0	20.0	350-1339-1-ND	2.40	2.00	1.60	350-1339-2-ND	1,600	1120.00/M	591-3101-013
	Red/Yellow	628/586	6.5/6.5	2.0/2.0	20.0	350-1340-1-ND	2.40	2.00	1.60	350-1340-2-ND	1,600	1120.00/M	591-3201-013

Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each				Dialight Part No.
							1	10	25	100	
10	Red	635	10.0	2.0	20.0	350-1363-ND	.60	—	.50	.40	521-9216
	Orange	600	7	2.2	20.0	350-1364-ND	.39	—	.33	.26	521-9498
	Green	565	12.6	2.1	20.0	350-1365-ND	.60	—	.50	.40	521-9210
	Yellow	583	10.0	2.2	20.0	350-1366-ND	.60	—	.50	.40	521-9211
11	Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1367-ND	1.50	—	1.25	1.00	521-9450
12	Red	650	1.2	1.6	20.0	350-1137-ND	1.02	—	.85	.68	555-2001
	Green	565	1.0	2.4	20.0	350-1147-ND	1.05	—	.88	.70	555-2301
	Yellow	583	2.0	2.2	20.0	350-1149-ND	1.05	—	.88	.70	555-2401
	Red	650	1.9	5.0	6.0	350-1139-ND	1.14	—	.95	.76	555-2003
	Red	650	0.9	5.0	3.0	350-1143-ND	1.14	—	.95	.76	555-2007
	Red	650	0.6	5.0	1.0	350-1145-ND	1.20	—	1.00	.80	555-2009
	Green	565	2.5	5.0	4.7	350-1148-ND	1.20	—	1.00	.80	555-2303
	Yellow	583	2.1	5.0	4.7	350-1150-ND	1.20	—	1.00	.80	555-2403
	Red	650	4.2	10.0	14.0	350-1141-ND	1.14	—	.95	.76	555-2005
	Red	650	0.9	24.0	3.0	350-1144-ND	1.14	—	.95	.76	555-2008
	Red	650	0.9	15.0	3.0	350-1146-ND	1.20	—	1.00	.80	555-2010
13	Red	650	1.2	1.6	20.0	350-1151-ND	1.50	—	1.25	1.00	555-3001
	Green	565	1.0	2.4	20.0	350-1160-ND	1.80	—	1.50	1.20	555-3301
	Yellow	583	2.0	2.2	20.0	350-1162-ND	1.80	—	1.50	1.20	555-3401
	Red	650	1.9	5.0	6.0	350-1153-ND	1.65	—	1.38	1.10	555-3003
	Red	650	0.9	5.0	3.0	350-1156-ND	1.65	—	1.38	1.10	555-3007
	Red	650	0.6	5.0	1.0	350-1158-ND	1.74	—	1.45	1.16	555-3009
	Green	565	2.5	5.0	4.7	350-1161-ND	1.95	—	1.63	1.30	555-3303
	Yellow	583	2.1	5.0	4.7	350-1163-ND	1.95	—	1.63	1.30	555-3403
	Red	650	6.2	3.6	20.0	350-1152-ND	1.65	—	1.38	1.10	555-3002
	Red	650	0.9	24.0	3.0	350-1157-ND	1.65	—	1.38	1.10	555-3008
14	Red	650	1.2	1.6	20.0	350-1373-ND	4.14	—	3.45	2.76	555-4001
	Green	565	1.0	2.4	20.0	350-1374-ND	4.80	—	4.00	3.20	555-4301
	Yellow	583	2.0	2.2	20.0	350-1375-ND	4.80	—	4.00	3.20	555-4401
	Red	650	1.9	5.0	6.0	350-1368-ND	4.68	—	3.90	3.12	555-4003
	Red	650	0.9	5.0	3.0	350-1369-ND	4.68	—	3.90	3.12	555-4007
	Green	565	2.5	5.0	4.7	350-1370-ND	4.80	—	4.00	3.20	555-4303
	Yellow	583	2.1	5.0	4.7	350-1371-ND	4.80	—	4.00	3.20	555-4403
15	Red	650	1.9	5.0	6.0	350-1376-ND	6.93	—	5.78	4.62	555-5003
	Red	650	1.2	1.6	20.0	350-1377-ND	6.09	—	5.08	4.06	555-5001
	Green	565	1.0	2.4	20.0	350-1378-ND	7.20	—	6.00	4.80	555-5301
	Yellow	583	2.0	2.2	20.0	350-1379-ND	7.20	—	6.00	4.80	555-5401
16	Green	565	8.7	2.1	20.0	350-1380-ND	2.55	—	2.13	1.70	570-0100-222
	Red	635	12.6	2.0	20.0	350-1381-ND	2.55	—	2.13	1.70	570-0100-111
	Yellow	585	12.6	2.1	20.0	350-1382-ND	2.55	—	2.13	1.70	570-0100-333
	Red/Ylw./Grn.	635/585/565	12.6/12.6/8.7	2.0/2.1/2.1	20.0	350-1383-ND	2.55	—	2.13	1.70	570-0100-132
17	Green	563	16.0	2.1	10.0	350-1384-ND	.69	—	.58	.46	551-0207
	Yellow	585	6.3	2.1	10.0	350-1385-ND	.69	—	.58	.46	551-0307
	Red	650	10.0	2.0	10.0	350-1386-ND	.69	—	.58	.46	551-0407
	Green	565	8.0	5.0	12.0	350-1387-ND	1.05	—	.88	.70	551-0607
	Red	635	4.0	5.0	10.0	350-1388-ND	1.05	—	.88	.70	551-0507
	Yellow	583	8.0	5.0	10.0	350-1389-ND	1.05	—	.88	.70	551-0707
	Red	635	1.8	1.8	2.0	350-1390-ND	.90	—	.75	.60	551-1107
	Green	565	1.6	1.8	2.0	350-1391-ND	.90	—	.75	.60	551-1307
	Yellow	583	1.6	1.9	2.0	350-1392-ND	.90	—	.75	.60	551-1207
	Red/Green	635/565	5.0	2.0	10.0	350-1393-ND	1.65	—	1.38	1.10	551-3007
	Yellow/Green	585/565	4.3/6.3	2.1/2.1	10.0	350-1394-ND	1.65	—	1.38	1.10	551-3107
18	Green	563	16.0	2.1	10.0	350-1084-ND	.81	—	.68	.54	551-0209
	Yellow	585	6.3	2.1	10.0	350-1086-ND	.81	—	.68	.54	551-0309
	Red	650	10.0	2.0	10.0	350-1088-ND	.81	—	.68	.54	551-0409
	Orange	600	6.5	2.2	10.0	350-1102-ND	.90	—	.75	.60	551-2509
	Red	635	4.0	5.0	10.0	350-1090-ND	1.17	—	.98	.78	551-0509
	Green	565	8.0	5.0	12.0	350-1092-ND	1.17	—	.98	.78	551-0609
	Yellow	583	8.0	5.0	10.0	350-1094-ND	1.17	—	.98	.78	551-0709
	Red	635	1.8	1.8	2.0	350-1096-ND	.90	—	.75	.60	551-1109
	Yellow	583	1.6	1.9	2.0	350-1098-ND	.90	—	.75	.60	551-1209
	Green	565	1.6	1.8	2.0	350-1100-ND	.90	—	.75	.60	551-1309
	Red/Green	635/565	5.0	2.0	10.0	350-1104-ND	1.53	—	1.28	1.02	551-3009
	Yellow/Green	585/565	4.3/6.3	2.1	20.0	350-1106-ND	1.77	—	1.48	1.18	551-3109
19	Green	563	16.0	2.1	10.0	350-1083-ND	3.12	—	2.60	2.08	551-0207-004
	Yellow	585	6.3	2.1	10.0	350-1085-ND	3.12	—	2.60	2.08	551-0307-004
	Red	650	10.0	2.0	10.0	350-1087-ND	3.12	—	2.60	2.08	551-0407-004
	Orange	600	6.5	2.2	10.0	350-1101-ND	3.12	—	2.60	2.08	551-2507-004
	Red	635	4.0	5.0	10.0	350-1089-ND	4.47	—	3.73	2.98	551-0507-004
	Green	565	8.0	5.0	12.0	350-1091-ND	4.47	—	3.73	2.98	551-0607-004
	Yellow	583	8.0	5.0	10.0	350-1093-ND	4.47	—	3.73	2.98	551-0707-004

Fig. 1

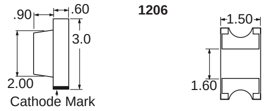


Fig. 2

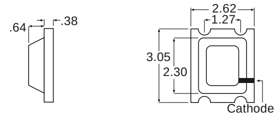


Fig. 3 **Bi-Color**

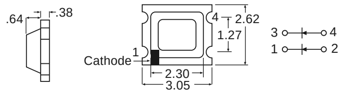


Fig. 4

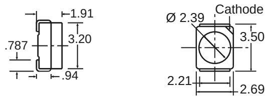


Fig. 5 **Bi-Color**

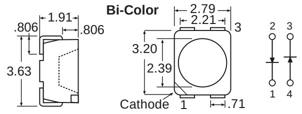


Fig. 6

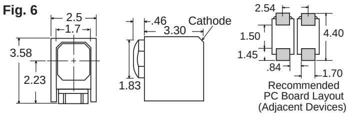


Fig. 7

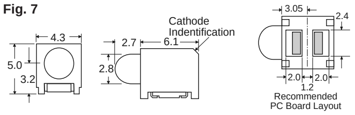


Fig. 8

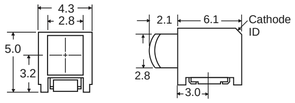


Fig. 9 **Bi-Color**

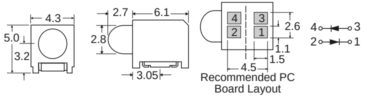


Fig. 10

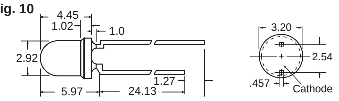


Fig. 11

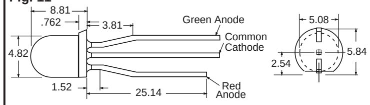


Fig. 12

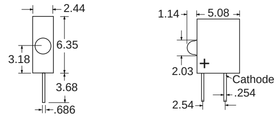


Fig. 13

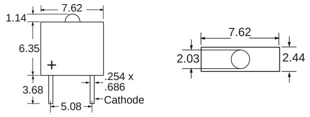
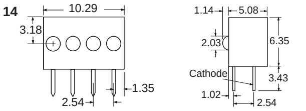


Fig. 14



(Continued)

LEDs *(Cont.)*

Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each 1	10	25	100	Dialight Part No.
19	Red	635	1.8	1.8	2.0	350-1095-ND	4.05	—	3.38	2.70	551-1107-004
	Yellow	583	1.6	1.9	2.0	350-1097-ND	4.05	—	3.38	2.70	551-1207-004
	Green	565	1.6	1.8	2.0	350-1099-ND	4.05	—	3.38	2.70	551-1307-004
	Red/Green	635/565	5.0	2.0	10.0	350-1103-ND	7.41	—	6.18	4.94	551-3007-004
	Yellow/Green	585/565	4.3/6.3	2.1	20.0	350-1105-ND	7.41	—	6.18	4.94	551-3107-004
20	Red	650	10.0	2.0	10.0	350-1395-ND	1.53	—	1.28	1.02	553-0111
	Green	563	16.0	2.1	10.0	350-1399-ND	1.53	—	1.28	1.02	553-0122
	Yellow	585	6.3	2.1	10.0	350-1400-ND	1.53	—	1.28	1.02	553-0133
	Grn.(top) / Red(bot)	563/650	16.0/10.0	2.1/2.0	10.0	350-1396-ND	1.53	—	1.28	1.02	553-0121
	Grn.(top) / Ylw.(bot)	563/585	16.0/6.3	2.1/2.1	10.0	350-1397-ND	1.53	—	1.28	1.02	553-0123
	Ylw.(top) / Grn.(bot)	585/563	6.3/16.0	2.1/2.1	10.0	350-1398-ND	1.53	—	1.28	1.02	553-0132
	Red	635	1.8	1.8	2.0	350-1401-ND	1.68	—	1.40	1.12	553-0211
	Green	565	1.6	1.8	2.0	350-1402-ND	1.68	—	1.40	1.12	553-0222
	Yellow	583	1.6	1.9	2.0	350-1404-ND	1.68	—	1.40	1.12	553-0233
	Grn.(top) / Ylw.(bot)	565/583	1.6/1.6	1.8/1.9	2.0	350-1403-ND	1.68	—	1.40	1.12	553-0223
	Green	565	8.0	5.0	12.0	350-1405-ND	1.80	—	1.50	1.20	553-0322
	Red	635	4.0	5.0	10.0	350-1406-ND	1.80	—	1.50	1.20	553-0311
	Yellow	583	8.0	5.0	10.0	350-1407-ND	1.80	—	1.50	1.20	553-0333
	2x Red/Green	635/565	5.0	2.0	10.0	350-1408-ND	2.25	—	1.88	1.50	553-0711
	2x Ylw./Green	585/565	4.3/6.3	2.1/2.1	10.0	350-1409-ND	2.25	—	1.88	1.50	553-0744
21	Red	650	10.0	2.0	10.0	350-1122-ND	1.53	—	1.28	1.02	553-0111-300
	Green	563	16.0	2.1	10.0	350-1123-ND	1.53	—	1.28	1.02	553-0122-300
	Yellow	585	6.3	2.1	10.0	350-1124-ND	1.53	—	1.28	1.02	553-0133-300
	Orange	600	6.5	2.2	10.0	350-1125-ND	1.53	—	1.28	1.02	553-0177-300
	Red	635	1.8	1.8	2.0	350-1126-ND	1.68	—	1.40	1.12	553-0211-300
	Green	565	1.6	1.8	2.0	350-1127-ND	1.68	—	1.40	1.12	553-0222-300
	Yellow	583	1.6	1.9	2.0	350-1128-ND	1.68	—	1.40	1.12	553-0233-300
	Red	635	4.0	5.0	10.0	350-1129-ND	1.80	—	1.50	1.20	553-0311-300
	Green	565	8.0	5.0	12.0	350-1130-ND	1.80	—	1.50	1.20	553-0322-300
	Yellow	583	8.0	5.0	10.0	350-1131-ND	1.80	—	1.50	1.20	553-0333-300
	2x Red/Green	635/565	5.0	2.0	10.0	350-1132-ND	2.25	—	1.88	1.50	553-0711-300
	2x Yellow/Green	585/565	4.3/6.3	2.1	10.0	350-1133-ND	2.25	—	1.88	1.50	553-0744-300
	Red Clear	635	12.0	2.2	10.0	350-1134-ND	1.68	—	1.40	1.12	553-2211-300
	Green Clear	565	12.0	2.3	10.0	350-1135-ND	1.68	—	1.40	1.12	553-2222-300
	Yellow Clear	583	12.0	2.2	10.0	350-1136-ND	1.68	—	1.40	1.12	553-2233-300
22	Red	635	10.0	2.2	10.0	350-1330-ND	1.65	—	1.38	1.10	569-0111-100
	Green	565	8.5	2.3	10.0	350-1331-ND	1.65	—	1.38	1.10	569-0112-200
	Yellow	583	10.0	2.2	10.0	350-1332-ND	1.65	—	1.38	1.10	569-0113-300
	Orange	600	6.5	2.2	10.0	350-1333-ND	1.65	—	1.38	1.10	569-0117-700
23	Red	635	10.0	2.2	10.0	350-1326-ND	2.55	—	2.13	1.70	569-0101-111
	Green	565	8.5	2.3	10.0	350-1327-ND	2.55	—	2.13	1.70	569-0102-222
	Yellow	583	10.0	2.2	10.0	350-1328-ND	2.55	—	2.13	1.70	569-0103-333
	Orange	600	6.5	2.2	10.0	350-1329-ND	2.55	—	2.13	1.70	569-0107-777
24	Red	635	10.0	2.2	10.0	350-1274-ND	2.55	—	2.13	1.70	564-0100-111
	Red/Ylw./Grn.	635/583/565	10.0/10.0/8.5	2.2/2.2/2.3	10.0	350-1275-ND	2.55	—	2.13	1.70	564-0100-132
	Green	565	8.5	2.3	10.0	350-1276-ND	2.55	—	2.13	1.70	564-0100-222
	Orange	600	6.5	2.2	10.0	350-1277-ND	2.55	—	2.13	1.70	564-0100-777
	Red	635	1.8	1.8	2.0	350-1278-ND	2.82	—	2.35	1.88	564-0200-111
	Red/Ylw./Grn.	635/583/565	1.8/1.6/1.6	1.8/1.9/1.8	2.0	350-1279-ND	2.82	—	2.35	1.88	564-0200-132
	Green	565	1.6	1.8	2.0	350-1280-ND	2.82	—	2.35	1.88	564-0200-222
	Red	635	4.0	5.0	10.0	350-1281-ND	2.88	—	2.40	1.92	564-0300-111
	Red/Ylw./Grn.	635/583/565	4.0/8.0/8.0	5.0	10.0/10.0/12.0	350-1282-ND	2.88	—	2.40	1.92	564-0300-132
	Green	565	8.0	5.0	12.0	350-1283-ND	2.88	—	2.40	1.92	564-0300-222
	3x Red/Green	635/565	5.0	2.0	10.0	350-1284-ND	3.75	—	3.13	2.50	564-0700-111
	3x Yellow/Green	585/565	4.3/6.3	2.1	20.0	350-1285-ND	3.75	—	3.13	2.50	564-0700-444
25	Red/Green	630/560	4.0	2.0/2.1	20.0	350-1410-ND	1.80	—	1.50	1.20	551-3508
26	Green	565	12.3	2.1	20.0	350-1003-ND	.69	—	.58	.46	550-0207
	Yellow	585	12.3	2.1	20.0	350-1007-ND	.69	—	.58	.46	550-0307
	Red	635	12.3	2.0	20.0	350-1011-ND	.69	—	.58	.46	550-0407
	Red	655	2.0	5.0	13.0	350-1015-ND	.96	—	.80	.64	550-0507
	Green	565	8.0	5.0	12.0	350-1019-ND	.96	—	.80	.64	550-0707
	Yellow	583	8.0	5.0	10.0	350-1023-ND	.96	—	.80	.64	550-0807
	Red	635	2.0	1.8	2.0	350-1027-ND	.90	—	.75	.60	550-1107
	Yellow	583	1.8	1.9	2.0	350-1031-ND	.90	—	.75	.60	550-1207
	Green	565	1.8	1.8	2.0	350-1035-ND	.90	—	.75	.60	550-1307
	Green	563	10.0	2.1	10.0	350-1039-ND	.75	—	.63	.50	550-2207
	Yellow	585	6.3	2.1	10.0	350-1043-ND	.75	—	.63	.50	550-2307
	Red	650	7.0	2.2	10.0	350-1047-ND	.75	—	.63	.50	550-2407
	Orange	600	7.0	1.9	10.0	350-1051-ND	.75	—	.63	.50	550-2507
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1055-ND	1.68	—	1.40	1.12	550-3007
	Red	650	34.0	2.1	20.0	350-1061-ND	.90	—	.75	.60	550-5107
	Green	563	34.0	2.2	20.0	350-1065-ND	.90	—	.75	.60	550-5207
	Yellow	585	34.0	2.2	20.0	350-1069-ND	.90	—	.75	.60	550-5307
	Red Clear	635	125.0	2.2	20.0	350-1073-ND	.96	—	.80	.64	550-5507
	Green Clear	565	120.0	2.3	20.0	350-1077-ND	.96	—	.80	.64	550-5607
	Yellow Clear	583	140.0	2.2	20.0	350-1081-ND	.96	—	.80	.64	550-5707
27	Green	565	12.3	2.1	20.0	350-1002-ND	.69	—	.58	.46	550-0205
	Yellow	585	12.3	2.1	20.0	350-1006-ND	.69	—	.58	.46	550-0305
	Red	635	12.3	2.0	20.0	350-1010-ND	.69	—	.58	.46	550-0405
	Red	655	2.0	5.0	13.0	350-1014-ND	.96	—	.80	.64	550-0505
	Green	565	8.0	5.0	12.0	350-1018-ND	.96	—	.80	.64	550-0705
	Yellow	583	8.0	5.0	10.0	350-1022-ND	.96	—	.80	.64	550-0805
	Red	635	2.0	1.8	2.0	350-1026-ND	.90	—	.75	.60	550-1105
	Yellow	583	1.8	1.9	2.0	350-1030-ND	.90	—	.75	.60	550-1205
	Green	565	1.8	1.8	2.0	350-1034-ND	.90	—	.75	.60	550-1305
	Green	563	10.0	2.1	10.0	350-1038-ND	.75	—	.63	.50	550-2205
	Yellow	585	6.3	2.1	10.0	350-1042-ND	.75	—	.63	.50	550-2305
	Red	650	7.0	2.2	10.0	350-1046-ND	.75	—	.63	.50	550-2405
	Orange	600	7.0	1.9	10.0	350-1050-ND	.75	—	.63	.50	550-2505
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1054-ND	1.68	—	1.40	1.12	550-3005
	Red	650	34.0	2.1	20.0	350-1060-ND	.90	—	.75	.60	550-5105
	Green	563	34.0	2.2	20.0	350-1064-ND	.90	—	.75	.60	550-5205
	Yellow	585	34.0	2.2	20.0	350-1068-ND	.90	—	.75	.60	550-5305
	Red Clear	635	125.0	2.2	20.0	350-1072-ND	.96	—	.80	.64	550-5505
	Green Clear	565	120.0	2.3	20.0	350-1076-ND	.96	—	.80	.64	550-5605
	Yellow Clear	583	140.0	2.2	20.0	350-1080-ND	.96	—	.80	.64	550-5705
28	Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1057-ND	2.01	—	1.68	1.34	550-3509
	Yellow/Green	583/565	5.0/8.0	2.1/2.1	10.0	350-1058-ND	2.01	—	1.68	1.34	550-3609
29	Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1411-ND	2.01	—	1.68	1.34	550-3505
	Yellow/Green	583/565	5.0/8.0	2.1/2.1	10.0	350-1412-ND	2.01	—	1.68	1.34	550-3605
30	Green	565	12.3	2.1	20.0	350-1004-ND	3.18	—	2.65	2.12	550-0207-004
	Yellow	585	12.3	2.1	20.0	350-1008-ND	3.18	—	2.65	2.12	550-0307-004
	Red	635	12.3	2.0	20.0	350-1012-ND	3.18	—	2.65	2.12	550-0407-004
	Red	655	2.0	5.0	13.0	350-1016-ND	4.02	—	3.35	2.68	550-0507-004
	Green	565	8.0	5.0	12.0	350-1020-ND	4.02	—	3.35	2.68	550-0707-004
	Yellow	583	8.0	5.0	10.0	350-1024-ND	4.02	—	3.35	2.68	550-0807-004
	Red	635	2.0	1.8	2.0	350-1028-ND	3.75	—	3.13	2.50	550-1107-004
	Yellow	583	1.8	1.9	2.0	350-1032-ND	3.75	—	3.13	2.50	550-1207-004
	Green	565	1.8	1.8	2.0	350-1036-ND	3.75	—	3.13	2.50	550-1307-004
	Green	563	10.0	2.1	10.0	350-1040-ND	3.30	—	2.75	2.20	550-2207-004
	Yellow	585	6.3	2.1	10.0	350-1044-ND	3.30	—	2.75	2.20	550-2307-004

Fig. 15

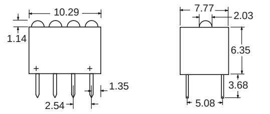


Fig. 16

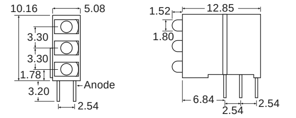


Fig. 17

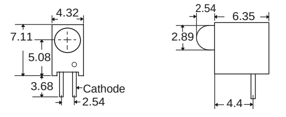


Fig. 18

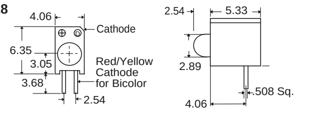


Fig. 19

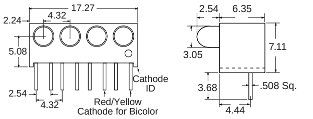


Fig. 20

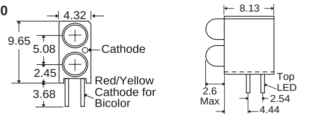


Fig. 21

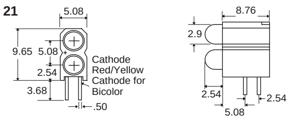


Fig. 22

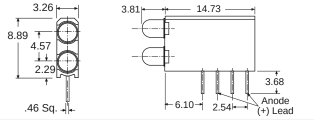


Fig. 23

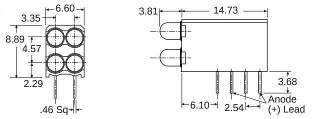


Fig. 24

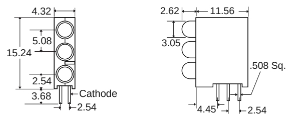


Fig. 25

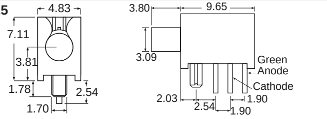
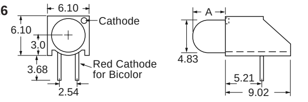
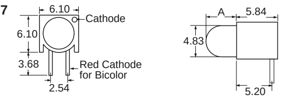


Fig. 26



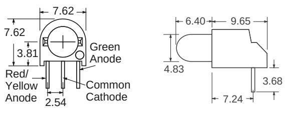
Dim. A: 3.43 for 550-0207 to 0407, 5.0 for all others

Fig. 27



Dim. A: 3.43 for 550-0205 to 0405, 5.0 for all others

Fig. 28



(Continued)

Fig.	Color	Wave Length pk(nm)	Typ. Io (mcd)	Typ. Vf (V)	Typ. If (mA)	Digi-Key Part No.	Price Each				Dialight Part No.
							1	10	25	100	
30	Red	650	7.0	2.2	10.0	350-1048-ND	3.30	—	2.75	2.20	550-2407-004
	Orange	600	7.0	1.9	10.0	350-1052-ND	3.30	—	2.75	2.20	550-2507-004
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1056-ND	7.38	—	6.15	4.92	550-3007-004
	Red	650	34.0	2.1	20.0	350-1062-ND	3.75	—	3.13	2.50	550-5107-004
	Green	563	34.0	2.2	20.0	350-1066-ND	3.75	—	3.13	2.50	550-5207-004
	Yellow	585	34.0	2.2	20.0	350-1070-ND	3.75	—	3.13	2.50	550-5307-004
	Red Clear	635	125.0	2.2	20.0	350-1074-ND	4.02	—	3.35	2.68	550-5507-004
	Green Clear	565	120.0	2.3	20.0	350-1078-ND	4.02	—	3.35	2.68	550-5607-004
	Yellow Clear	583	140.0	2.2	20.0	350-1082-ND	4.02	—	3.35	2.68	550-5707-004
31	Red	650	7.0	2.2	10.0	350-1107-ND	1.53	—	1.28	1.02	552-0211
	Green	563	10.0	2.1	10.0	350-1108-ND	1.53	—	1.28	1.02	552-0222
	Yellow	585	6.3	2.1	10.0	350-1109-ND	1.53	—	1.28	1.02	552-0233
	Orange	600	7.0	1.9	10.0	350-1110-ND	1.53	—	1.28	1.02	552-0277
	Red	655	2.0	5.0	13.0	350-1111-ND	1.80	—	1.50	1.20	552-0311
	Green	565	8.0	5.0	12.0	350-1112-ND	1.80	—	1.50	1.20	552-0322
	Yellow	583	8.0	5.0	10.0	350-1113-ND	1.80	—	1.50	1.20	552-0333
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1114-ND	2.25	—	1.88	1.50	552-0711
	Yellow/Green	585/565	8.7/8.7	2.1/2.1	20.0	350-1115-ND	2.25	—	1.88	1.50	552-0744
	Red	650	34.0	2.1	20.0	350-1116-ND	1.68	—	1.40	1.12	552-0811
	Green	563	34.0	2.2	20.0	350-1117-ND	1.68	—	1.40	1.12	552-0822
	Yellow	585	34.0	2.2	20.0	350-1118-ND	1.68	—	1.40	1.12	552-0833
	Red	635	2.0	1.8	2.0	350-1119-ND	1.68	—	1.40	1.12	552-0911
	Green	565	1.8	1.8	2.0	350-1120-ND	1.68	—	1.40	1.12	552-0922
	Yellow	583	1.8	1.9	2.0	350-1121-ND	1.68	—	1.40	1.12	552-0933
32	2x Red/Green	635/565	5.0/8.0	2.1/2.3	10.0	350-1413-ND	3.75	—	3.13	2.50	552-3511
	2x Yellow/Green	583/565	5.0/8.0	2.1/2.1	10.0	350-1414-ND	3.75	—	3.13	2.50	552-3544
33	Green	565	12.3	2.1	20.0	350-1001-ND	.84	—	.70	.56	550-0204
	Yellow	585	12.3	2.1	20.0	350-1005-ND	.84	—	.70	.56	550-0304
	Red	635	12.3	2.0	20.0	350-1009-ND	.84	—	.70	.56	550-0404
	Red	655	2.0	5.0	13.0	350-1013-ND	1.17	—	.98	.78	550-0504
	Green	565	8.0	5.0	12.0	350-1017-ND	1.17	—	.98	.78	550-0704
	Yellow	583	8.0	5.0	10.0	350-1021-ND	1.17	—	.98	.78	550-0804
	Red	635	2.0	1.8	2.0	350-1025-ND	1.08	—	.90	.72	550-1104
	Yellow	583	1.8	1.9	2.0	350-1029-ND	1.08	—	.90	.72	550-1204
	Green	565	1.8	1.8	2.0	350-1033-ND	1.08	—	.90	.72	550-1304
	Green	563	10.0	2.1	10.0	350-1037-ND	.99	—	.83	.66	550-2204
	Yellow	585	6.3	2.1	10.0	350-1041-ND	.99	—	.83	.66	550-2304
	Red	650	7.0	2.2	10.0	350-1045-ND	.99	—	.83	.66	550-2404
	Orange	600	7.0	1.9	10.0	350-1049-ND	.75	—	.63	.50	550-2504
	Red/Green	660/565	90/40	1.8/2.1	20.0	350-1053-ND	1.92	—	1.60	1.28	550-3004
	Red	650	34.0	2.1	20.0	350-1059-ND	1.08	—	.90	.72	550-5104
	Green	563	34.0	2.2	20.0	350-1063-ND	1.08	—	.90	.72	550-5204
	Yellow	585	34.0	2.2	20.0	350-1067-ND	1.08	—	.90	.72	550-5304
	Red Clear	635	125.0	2.2	20.0	350-1071-ND	1.14	—	.95	.76	550-5504
	Green Clear	565	120.0	2.3	20.0	350-1075-ND	1.14	—	.95	.76	550-5604
	Yellow Clear	583	140.0	2.2	20.0	350-1079-ND	1.14	—	.95	.76	550-5704
34	Red	635	8.0	5.0	10.0	350-1171-ND	.84	—	.70	.56	561-0104-100
	Red	635	2.0	1.8	2.0	350-1183-ND	.78	—	.65	.52	561-1101-100
	Green	565	1.8	1.8	2.0	350-1195-ND	.78	—	.65	.52	561-1301-100
	Yellow	583	1.8	1.9	2.0	350-1189-ND	.78	—	.65	.52	561-1201-100
	Orange	600	7.0	1.9	10.0	350-1177-ND	1.14	—	.95	.76	561-0901-100
	Red	635	7.0	2.2	10.0	350-1201-ND	.72	—	.60	.48	561-2101-100
	Green	565	32.0	2.0	20.0	350-1207-ND	.78	—	.65	.52	561-2201-100
	Yellow	590	10.0	2.4	20.0	350-1213-ND	.72	—	.60	.48	561-2301-100
	Red Tinted	635	60.0	2.2	10.0	350-1219-ND	.72	—	.60	.48	561-2401-100
	Green Tinted	565	70.0	2.3	10.0	350-1225-ND	.72	—	.60	.48	561-2501-100
	Yellow Tinted	583	50.0	2.2	10.0	350-1231-ND	.72	—	.60	.48	561-2601-100
	Red	650	34.0	2.1	20.0	350-1243-ND	.78	—	.65	.52	561-5101-100
	Green	563	34.0	2.2	20.0	350-1249-ND	.78	—	.65	.52	561-5201-100
	Yellow	585	34.0	2.2	20.0	350-1255-ND	.78	—	.65	.52	561-5301-100
	Red Clear	635	125.0	2.2	20.0	350-1261-ND	.84	—	.70	.56	561-5501-100
	Green Clear	565	120.0	2.3	20.0	350-1267-ND	.84	—	.70	.56	561-5601-100
	Yellow Clear	583	140.0	2.2	20.0	350-1273-ND	.84	—	.70	.56	561-5701-100
35	Green	565	4.0	2.2	20.0	350-1286-ND	1.23	—	1.03	.82	566-0206
	Yellow	583	3.5	2.1	20.0	350-1288-ND	1.23	—	1.03	.82	566-0306
	Red	635	6.0	2.0	20.0	350-1164-ND	1.23	—	1.03	.82	566-0406
36	Green	565	4.0	2.2	20.0	350-1287-ND	1.17	—	.98	.78	566-0207
	Yellow	583	3.5	2.1	20.0	350-1289-ND	1.17	—	.98	.78	566-0307
	Red	635	7.4	2.0	20.0	350-1165-ND	1.17	—	.98	.78	566-0407
37	Red/Green	635/565	3.5/4.0	1.9/2.1	20.0	350-1290-ND	2.34	—	1.95	1.56	566-3507
38	Red	635	5.0	1.9	20.0	350-1232-ND	.84	—	.70	.56	561-4101-055
	Green	565	2.5	2.3	20.0	350-1234-ND	1.83	—	1.53	1.22	561-4201-055
	Yellow	583	5.0	2.1	20.0	350-1236-ND	1.62	—	1.35	1.08	561-4301-055
	Red	635	5.0	1.9	20.0	350-1233-ND	1.71	—	1.43	1.14	561-4101-081
	Green	565	2.5	2.3	20.0	350-1235-ND	1.71	—	1.43	1.14	561-4201-081
	Yellow	583	5.0	2.1	20.0	350-1237-ND	1.71	—	1.43	1.14	561-4301-081
39	Red	635	10.0	2.2	10.0	350-1291-ND	2.63	2.10	—	1.84	568-0101-111
	Green	565	8.5	2.3	10.0	350-1292-ND	2.63	2.10	—	1.84	568-0102-222
	Grn./Ylw./Grn./Ylw.	565/583	8.5/10.0	2.1/2.2	10.0	350-1293-ND	2.63	2.10	—	1.84	568-0102-323
	Ylw./Grn./Ylw./Grn.	583/565	10.0/8.5	2.1/2.2	10.0	350-1294-ND	2.63	2.10	—	1.84	568-0103-232
	Orange	600	6.5	2.2	10.0	350-1295-ND	2.63	2.10	—	1.84	568-0107-777
	Red	635	1.8	1.8	2.0	350-1299-ND	2.93	2.34	—	2.05	568-0201-111
	Green	565	1.6	1.8	2.0	350-1300-ND	2.93	2.34	—	2.05	568-0202-222
	Grn./Ylw./Grn./Ylw.	565/583	1.6	1.8/1.9	2.0	350-1301-ND	2.93	2.34	—	2.05	568-0202-323
	Ylw./Grn./Ylw./Grn.	583/565	1.6	1.9/1.8	2.0	350-1302-ND	2.93	2.34	—	2.05	568-0203-232
	Red	635	4.0	5.0	10.0	350-1306-ND	3.13	2.50	—	2.19	568-0301-111
	Green	565	8.0	5.0	12.0	350-1307-ND	3.13	2.50	—	2.19	568-0302-222
	Grn./Ylw./Grn./Ylw.	565/583	8.0	5.0	12.0/10.0	350-1308-ND	3.13	2.50	—	2.19	568-0302-323
	Ylw./Grn./Ylw./Grn.	583/565	8.0	5.0	10.0/12.0	350-1309-ND	3.13	2.50	—	2.19	568-0303-232
	Bi-Color Red/Green	635/565	5.0	2.0	10.0	350-1313-ND	3.90	3.12	—	2.73	568-0701-111
	Bi-Color Ylw./Grn.	585/565	4.3/6.3	2.1	10.0	350-1314-ND	3.90	3.12	—	2.73	568-0704-444
40	Red	635	8.7	2.0	20.0	350-1317-ND	5.25	4.20	—	3.68	568-2231-1112
	Green	565	32.0	2.1	20.0	350-1319-ND	5.25	4.20	—	3.68	568-2232-2222
	Yellow	585	10.0	2.1	20.0	350-1321-ND	5.25	4.20	—	3.68	568-2233-3332
41	Red	635	8.7	2.0	20.0	350-1318-ND	10.50	8.40	—	7.35	568-2231-1114
	Green	565	32.0	2.1	20.0	350-1320-ND	10.50	8.40	—	7.35	568-2232-2224
	Yellow	585	10.0	2.1	20.0	350-1322-ND	10.50	8.40	—	7.35	568-2233-3334
42	Red	635	7.4	2.0	20.0	350-1296-ND	7.88	6.30	—	5.52	568-0141-1113
	Green	565	4.7	2.1	20.0	350-1297-ND	7.88	6.30	—	5.52	568-0142-2223
	Yellow	585	7.4	2.1	20.0	350-1298-ND	7.88	6.30	—	5.52	568-0143-3333
	Red	635	1.0	1.7	2.0	350-1303-ND	8.78	7.02	—	6.15	568-0241-1113
	Green	565	1.0	1.9	2.0	350-1304-ND	8.78	7.02	—	6.15	568-0242-2223
	Yellow	585	1.0	1.8	2.0	350-1305-ND	8.78	7.02	—	6.15	568-0243-3333
	Red	635	8.7	5.0	10.0	350-1310-ND	9.38	7.50	—	6.57	568-0341-1113
	Green	565	5.6	5.0	10.0	350-1311-ND	9.38	7.50	—	6.57	568-0342-2223
	Yellow	585	3.7	5.0	10.0	350-1312-ND	9.38	7.50	—	6.57	568-0343-3333
	Bi-Color Red/Green	635/565	5.0	2.0	10.0	350-1315-ND	11.70	9.36	—	8.19	568-0741-1113
	Bi-Color Ylw./Grn.	585/565	4.3/6.3	2.1	10.0	350-1316-ND	11.70	9.36	—	8.19	568-0744-4443
	Red	635	8.7	2.0	20.0	350-1323-ND	7.88	6.30	—	5.52	568-2241-1113
	Green	565	32.0	2.1	20.0	350-1324-ND	7.88	6.30	—	5.52	568-2242-2223
	Yellow	585	10.0	2.1	20.0	350-1325-ND	7.88	6.30	—	5.52	568-2243-3333

Fig. 29

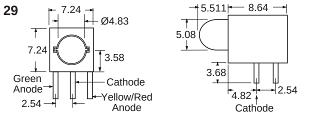
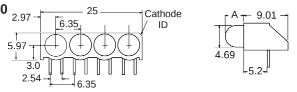


Fig. 30



Dim. A: 3.4 for 550-0207 to 0407, 4.95 for all others

Fig. 31

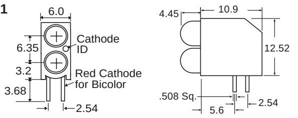


Fig. 32

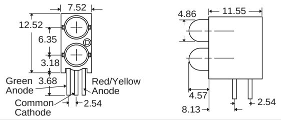
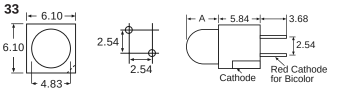


Fig. 33



Dim. A: 3.43 for 550-0204 to 0404, 5.0 for all others

Fig. 34

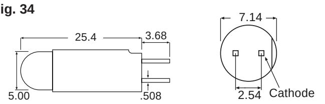


Fig. 35

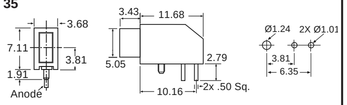


Fig. 36

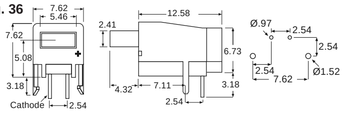


Fig. 37

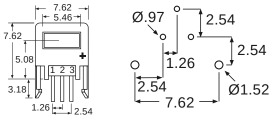
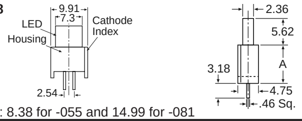


Fig. 38



Dim A: 8.38 for -055 and 14.99 for -081

Fig. 39

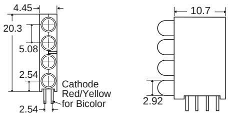


Fig. 40

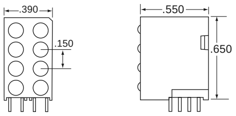


Fig. 41

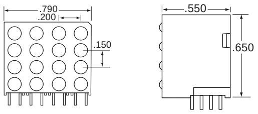
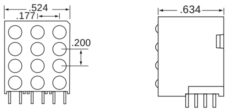


Fig. 42



LED 7-Segment Displays

Fig. 1

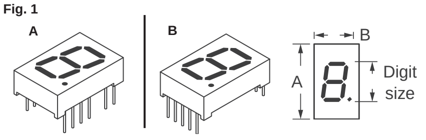


Fig. 2

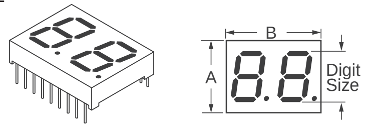


Fig. 3

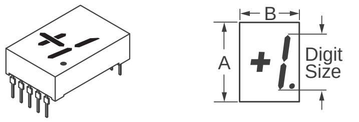


Fig.	Emitted Color	Digit Size In. (mm)	Dimensions (mm) A x B	Forward Voltage TYP. @ If	Iv µcd	Digi-Key Part No. Common Anode	Digi-Key Part No. Common Cathode	Price Each 1	25	100	Stanley Part No. Common Anode	Stanley Part No. Common Cathode
1A	Red	.30 (7.5)	11.0 x 7.0	1.7 10	2800	404-1118-ND	404-1119-ND	1.92	1.07	.87	NAR131SB	NKR131SB
	Red	.40 (10)	13.0 x 9.6	1.7 10	6400	—	404-1120-ND	1.88	.95	.85	—	NKR141SC
	Red Green	.40 (10) .40 (10)	19.0 x 12.5 19.0 x 12.5	1.7 20 2.2 20	8000 2000	404-1121-ND —	404-1122-ND 404-1123-ND	2.44 2.44	1.44 1.44	1.22 1.22	NAR141B —	NKR141B NKG141PB
1B	Red	.60 (15)	19.0 x 12.5	1.7 20	12000	404-1124-ND	404-1125-ND	1.96	.99	.89	NAR161B	NKR161B
	Red Green	1.0 (25) 1.0 (25)	33.0 x 22.8 33.0 x 22.8	3.4 20 4.4 20	20000 8000	404-1126-ND 404-1128-ND	404-1127-ND 404-1129-ND	5.52 5.49	3.40 3.38	3.01 2.99	NAR105B NAG105PB	NKR105B NKG105PB
2	Red	.60 (15)	19.0 x 25.2	1.7 20	12000	404-1130-ND	404-1131-ND	3.42	2.11	1.87	NAR261B	NKR261B
1A	Bicolor Red/Green	.40 (10) .60 (15) 1.00 (25)	19.0 x 10.0 19.0 x 12.5 33.0 x 22.8	1.7/2.0 10/10 1.7/2.0 10/10 3.4/4.0 10/10	2400 2400 4000	404-1132-ND 404-1133-ND 404-1134-ND	— — —	5.37 5.31 5.37	3.31 3.27 5.04	2.93 2.90 4.46	NARG141 NARG161 NARG105	— — —

Fig.	Emitted Color	Digit Size In. (mm)	Dimensions mm A x B	Forward Voltage TYP. @ If	Iv µcd	Digi-Key Part No.	Price Each 1	25	100	Stanley Part No.
3	Red	.40 (10) .60 (15)	19.0 x 12.5 19.0 x 12.5	1.7 20 1.7 20	6400 12000	404-1135-ND 404-1136-ND	2.02 2.23	1.20 1.32	1.01 1.11	NSR145B NSR161B

Super Bright LED Light Bar Module

Fig. 1

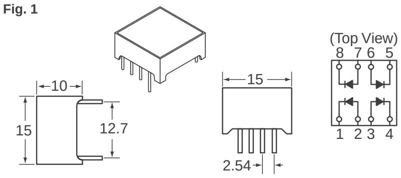


Fig. 2

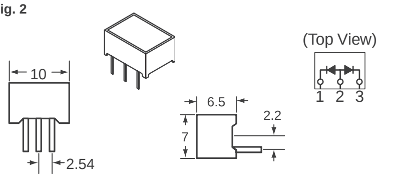


Fig. 3

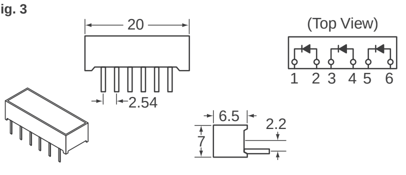


Fig. 4

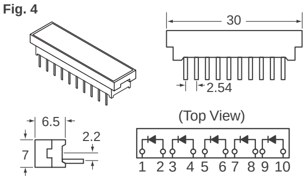


Fig. 5

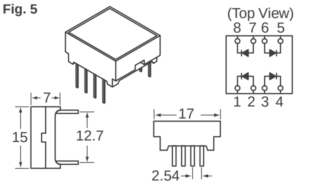


Fig. 6

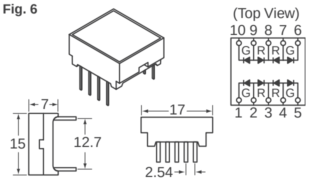


Fig. 7

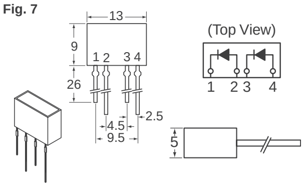


Fig.	Emitted Color	Wavelength λpk TYP (nm)	Forward Voltage TYP. @ If	Iv mcd	Digi-Key Part No.	Price Each 1	25	100	Stanley Part No.
1	Red Orange Yellow Pure Green	660 605 570 555	1.7 20 2.2 20 2.1 20 2.2 20	42 20 42 20	404-1137-ND 404-1138-ND 404-1139-ND 404-1140-ND	1.52 1.64 1.55 1.72	.85 .83 .86 .87	.69 .74 .71 .78	MU02-2201 MU02-3201 MU02-4201 MU02-5201
2	Red Orange Yellow Pure Green	660 605 570 555	1.7 20 2.2 20 2.1 20 2.2 20	20 10 20 7	404-1141-ND 404-1142-ND 404-1143-ND 404-1144-ND	1.14 1.18 1.12 1.26	.51 .52 .50 .56	.46 .48 .45 .51	MU03-2201 MU03-3201 MU03-4201 MU03-5201
3	Red Yellow Green	660 570 560	1.7 20 2.1 20 2.1 20	32 32 20	404-1145-ND 404-1146-ND 404-1147-ND	1.32 1.30 1.31	.73 .72 .73	.60 .59 .60	MU04-2101 MU04-4101 MU04-5102
4	Red Orange Yellow Pure Green	660 605 570 555	1.7 20 2.2 20 2.1 20 2.2 20	40 20 40 20	404-1148-ND 404-1149-ND 404-1150-ND 404-1151-ND	1.76 1.49 1.76 2.00	.89 .83 .89 1.01	.80 .68 .80 .91	MU07-2101 MU07-3101 MU07-4101 MU07-5101
5	Red Yellow Pure Green	660 570 560	1.7 20 2.2 20 2.2 20	40 40 20	404-1152-ND 404-1153-ND 404-1154-ND	1.59 1.30 1.46	.89 .72 .81	.73 .59 .66	MU08-2201 MU08-4201 MU08-5201
6	Red/Pure Green	660/555	1.7/2.2 20/20	12/12	404-1155-ND	2.85	1.69	1.42	MU08-9301
7	Red Yellow Pure Green	660 570 555	1.7 20 2.1 20 2.2 20	16 16 8	404-1156-ND 404-1157-ND 404-1158-ND	1.07 1.31 1.17	.60 .58 .52	.49 .48 .47	MU16-2101 MU16-4101 MU16-5101

IrDA Transceiver Module

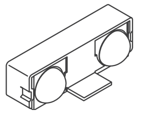
Stanley's opto-wireless transceiver module is compatible with IrDA standard. It consists of all of the devices necessary for wireless transmission including infrared LED, PIN photodiode, driver, amplifier, and wave shape rectifier.

Features:

- LED current: 35mA
- Receiving Current Consumption: 85µA TYP.
- Low Operating Voltage: 2.7 ~ 3.6V
- Complete Power Down Feature
- Standby Current Consumption: 0.2 µA Max.
- Transmission Radiant Intensity: 3.6mW/sr
- Light Pulse Rise/Fall Time: 200nSec.
- Operating Temperature: -30°C~+85°C

404-1159-ND............................**$4.35**

HRM1200L



STANLEY
Stanley Electric Sales of America

Surface Mount LEDs

Fig. 1 — 0603 Ultra Compact

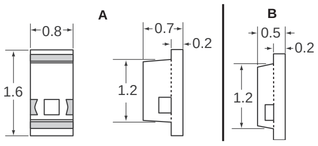


Fig. 2 — 0805 Thin Type

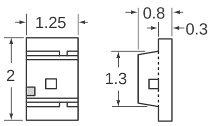


Fig. 3 — 1206 Standard and Reverse Mount Dome Lens

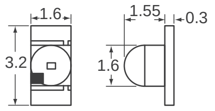


Fig. 4 — 1206 Standard Flat Lens

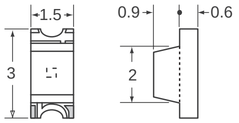


Fig. 5 — 1206 Standard Inner Lens

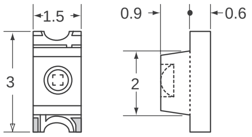


Fig. 6 — 1206 Reverse Mount

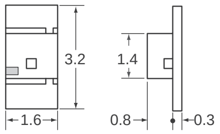


Fig. 7 — Right Angle SMT LED

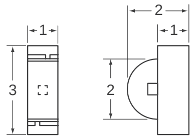


Fig. 8 — Right Angle SMT LED

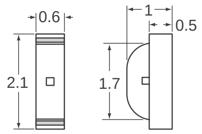


Fig. 9 — 1210 Bi-Color Standard Flat Lens Type SMT LED

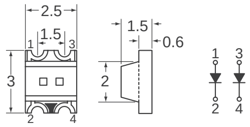


Fig. 10 — 1210 Bi-Color Two Inner Lens Type SMT LED

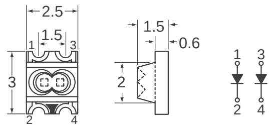


Fig. 11 — Bi-Color Ultra Compact SMT LED

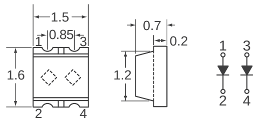


Fig. 12 — Bi-Color Right Angle SMT LED

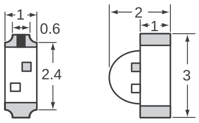


Fig.	Source Color	Lens	Wavelength λpk (nm)	Forward Voltage		Iv (mcd)	Viewing Angle	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel		Stanley Part No.
				TYP	@ mA				1	25	100		Size	Pricing	
								0603 Ultra Compact							
1A	Red	Milky White	660	1.7	20	11.7	140º	404-1000-1-ND	.34	4.13	12.42	404-1000-2-ND	4,000	79.75/M	BR1111C-TR
	Orange		605	2.2	20	3.4	150º	404-1001-1-ND	.37	4.50	13.55	404-1001-2-ND	4,000	87.00/M	AA1111C-TR
	Yellow		580	2.2	20	3.4	150º	404-1002-1-ND	.33	3.98	11.97	404-1002-2-ND	4,000	76.85/M	AY1111C-TR
	Yellow/Green		570	2.1	20	11.7	150º	404-1003-1-ND	.31	3.75	11.30	404-1003-2-ND	4,000	72.50/M	PY1111C-TR
	Green		560	2.1	20	6.4	150º	404-1004-1-ND	.31	3.75	11.30	404-1004-2-ND	4,000	72.50/M	PG1111C-TR
	Pure Green		555	2.1	20	2.4	150º	404-1005-1-ND	.40	4.88	14.68	404-1005-2-ND	4,000	94.25/M	BG1111C-TR
	Red	Milky White	635	1.9	20	50	140º	404-1006-1-ND	1.04	13.89	50.50	404-1006-2-ND	4,000	295.73/M	FR1111C-TR
	Orange		609	1.9	20	65	140º	404-1007-1-ND	.92	12.38	45.00	404-1007-2-ND	4,000	263.52/M	FA1111C-TR
	Yellow		590	1.9	20	65	140º	404-1008-1-ND	.93	12.44	45.25	404-1008-2-ND	4,000	264.99/M	FY1111C-TR
	Green		522	3.3	10	40	130º	404-1009-1-ND	3.45	50.97	171.69	404-1009-2-ND	4,000	1266.08/M	DG1111C-TR
	Bluish-Green		502	3.3	10	34	130º	404-1010-1-ND	3.19	47.07	158.55	404-1010-2-ND	4,000	1169.18/M	DC1111C-TR
	Blue		467	3.3	10	14	130º	404-1011-1-ND	3.14	46.35	156.13	404-1011-2-ND	4,000	1151.33/M	DB1111C-TR
1B	Red	Milky White	635	1.9	20	45	130º	404-1012-1-ND	.55	6.75	20.33	404-1012-2-ND	4,000	137.70/M	FR1112C-TR
	Orange		609	1.9	20	50	130º	404-1013-1-ND	.55	6.75	20.33	404-1013-2-ND	4,000	137.70/M	FA1112C-TR
	Yellow		590	1.9	20	50	130º	404-1014-1-ND	.55	6.75	20.33	404-1014-2-ND	4,000	137.70/M	FY1112C-TR
	Green		560	2.2	20	7.6	150º	404-1015-1-ND	.38	4.58	13.78	404-1015-2-ND	4,000	99.62/M	PG1112C-TR
	Yellow-Green		570	2.1	20	11.7	150º	404-1016-1-ND	.38	4.58	13.78	404-1016-2-ND	4,000	99.62/M	PY1112C-TR
								0805 Thin Type							
2	Red	Milky White	660	1.7	20	11.7	150º	404-1017-1-ND	.39	4.73	14.23	404-1017-2-ND	4,000	91.35/M	BR1112H-TR
	Orange		605	2.2	20	3.7	160º	404-1018-1-ND	.36	4.43	13.33	404-1018-2-ND	4,000	85.55/M	AA1112H-TR
	Yellow		580	2.2	20	3.7	160º	404-1019-1-ND	.35	4.28	12.88	404-1019-2-ND	4,000	82.65/M	AY1112H-TR
	Yellow-Green		570	2.1	20	11.7	160º	404-1020-1-ND	.33	3.98	11.97	404-1020-2-ND	4,000	76.85/M	PY1112H-TR
	Green		560	2.1	20	6.4	160º	404-1021-1-ND	.34	4.13	12.42	404-1021-2-ND	4,000	79.75/M	PG1112H-TR
	Pure Green		555	2.1	20	2.7	160º	404-1022-1-ND	.41	5.03	15.14	404-1022-2-ND	4,000	97.15/M	BG1112H-TR
	Red	Milky White	635	1.9	20	50	150º	404-1023-1-ND	.88	12.20	44.34	404-1023-2-ND	4,000	287.28/M	FR1112H-TR
	Orange		609	1.9	20	65	150º	404-1024-1-ND	.95	11.68	37.98	404-1024-2-ND	4,000	246.05/M	FA1112H-TR
	Yellow		592	1.9	20	65	150º	404-1025-1-ND	1.00	12.25	39.83	404-1025-2-ND	4,000	258.02/M	FY1112H-TR
	Green		522	3.3	10	40	150º	404-1026-1-ND	3.42	50.50	170.13	404-1026-2-ND	4,000	1254.60/M	DG1112H-TR
	Bluish-Green		502	3.3	10	34	150º	404-1027-1-ND	3.34	49.32	166.16	404-1027-2-ND	4,000	1225.28/M	DC1112H-TR
	Blue		467	3.3	10	14	150º	404-1028-1-ND	3.30	48.71	164.08	404-1028-2-ND	4,000	1209.98/M	DB1112H-TR
								1206 Standard and Reverse Mount Dome Lens							
3	Red	Water Clear	660	1.8	20	150	30º	404-1032-1-ND	.74	9.90	36.00	404-1032-2-ND	2,000	220.32/M	HKR1105W-TR
	Red		660	1.7	20	50	50º	404-1033-1-ND	.43	5.25	15.81	404-1033-2-ND	2,000	114.31/M	HBR1105W-TR
	Orange		605	2.2	20	20	40º	404-1034-1-ND	.55	6.75	20.33	404-1034-2-ND	2,000	146.97/M	HAA1105W-TR
	Yellow		580	2.2	20	20	40º	404-1035-1-ND	.57	6.98	21.01	404-1035-2-ND	2,000	151.87/M	HAY1105W-TR
	Yellow-Green		570	2.1	20	50	40º	404-1036-1-ND	.25	3.08	9.26	404-1036-2-ND	2,000	66.96/M	HPY1105W-TR
	Green		560	2.1	20	30	40º	404-1037-1-ND	.40	4.88	14.68	404-1037-2-ND	2,000	106.15/M	HPG1105W-TR
	Pure Green		555	2.1	20	12	40º	404-1038-1-ND	.47	5.78	17.39	404-1038-2-ND	2,000	125.74/M	HBG1105W-TR
	Red	Water Clear	635	1.9	20	180	50º	404-1029-1-ND	.85	11.34	41.25	404-1029-2-ND	2,000	252.45/M	FR1105W-TR
	Orange		609	1.9	20	200	50º	404-1030-1-ND	.85	11.34	41.25	404-1030-2-ND	2,000	252.45/M	FA1105W-TR
	Yellow		592	1.9	20	180	50º	404-1031-1-ND	.71	9.49	34.50	404-1031-2-ND	2,000	211.14/M	FY1105W-TR
	Green		522	3.3	10	140	40º	404-1039-1-ND	4.00	53.10	187.80	404-1039-2-ND	2,000	1618.05/M	HDG1105W-TR
	Bluish-Green		502	3.3	10	140	40º	404-1040-1-ND	4.04	53.56	189.43	404-1040-2-ND	2,000	1632.12/M	HDC1105W-TR
	Blue		467	3.3	10	70	40º	404-1041-1-ND	4.00	53.10	187.80	404-1041-2-ND	2,000	1618.05/M	HDB1105W-TR
								1206 Standard Flat Lens							
4	Red	Water Clear	660	1.7	20	12.8	150º	404-1042-1-ND	.43	5.25	15.81	404-1042-2-ND	2,500	114.32/M	BR1101W-TR
	Orange		605	2.2	20	5.6		404-1043-1-ND	.44	5.33	16.04	404-1043-2-ND	2,500	115.95/M	AA1101W-TR
	Yellow		580	2.2	20	4.0		404-1044-1-ND	.40	4.88	14.68	404-1044-2-ND	2,500	106.15/M	AY1101W-TR
	Yellow Green		570	2.1	20	8.0		404-1045-1-ND	.38	4.65	14.01	404-1045-2-ND	2,500	101.25/M	PY1101W-TR
	Green		560	2.1	20	4.8		404-1046-1-ND	.40	4.88	14.68	404-1046-2-ND	2,500	106.15/M	PG1101W-TR
	Pure Green		555	2.1	20	2.0		404-1047-1-ND	.47	5.70	17.17	404-1047-2-ND	2,500	124.11/M	BG1101W-TR
								1206 Standard Inner Lens							
5	Red	Water Clear	660	1.7	20	33.6	70º	404-1048-1-ND	.43	5.25	15.81	404-1048-2-ND	2,500	114.32/M	BR1102W-TR
	Orange		605	2.2	20	10.0		404-1049-1-ND	.44	5.33	16.04	404-1049-2-ND	2,500	115.95/M	AA1102W-TR
	Yellow		580	2.2	20	8.4		404-1050-1-ND	.40	4.88	14.68	404-1050-2-ND	2,500	106.15/M	AY1102W-TR
	Yellow Green		570	2.1	20	24.0		404-1051-1-ND	.38	4.65	14.01	404-1051-2-ND	2,500	101.25/M	PY1102W-TR
	Green		560	2.1	20	12.0		404-1052-1-ND	.40	4.88	14.68	404-1052-2-ND	2,500	106.15/M	PG1102W-TR
	Pure Green		555	2.1	20	4.8		404-1053-1-ND	.47	5.70	17.17	404-1053-2-ND	2,500	124.11/M	BG1102W-TR

(Continued)

Surface Mount LEDs *(Cont.)*

Fig.	Source Color	Lens	Wavelength λpk (nm)	Forward Voltage TYP @ mA	Iv (mcd)	Viewing Angle	Digi-Key Part No.	Cut Tape Pricing			Digi-Key Part No.	Tape & Reel		Stanley Part No.
								1	25	100		Size	Pricing	
1206 Reverse Mount														
6	Red	Milky White	660	1.7 20	12.7	140º	404-1054-1-ND*	.42	5.10	15.36	404-1054-2-ND	3,000	111.05/M	BR1111R-TR
	Orange		605	2.2 20	3.7	150º	404-1055-1-ND	.40	4.88	14.68	404-1055-2-ND	3,000	106.15/M	AA1111R-TR
	Yellow		580	2.2 20	3.7	150º	404-1056-1-ND	.40	4.88	14.68	404-1056-2-ND	3,000	106.15/M	AY1111R-TR
	Yellow Green		570	2.1 20	12.7	150º	404-1057-1-ND	.35	4.28	12.88	404-1057-2-ND	3,000	93.08/M	PY1111R-TR
	Green		560	2.1 20	6.9	150º	404-1058-1-ND	.37	4.50	13.55	404-1058-2-ND	3,000	97.98/M	PG1111R-TR
	Pure Green		555	2.1 20	2.7	150º	404-1059-1-ND	.41	5.03	15.14	404-1059-2-ND	3,000	109.41/M	BG1111R-TR
Right Angle SMT LED														
7	Red	Water Clear	635	1.9 20	50	140º	404-1060-1-ND	1.08	15.12	48.58	404-1060-2-ND	3,000	385.04/M	FR1101F-TR
	Orange		609	1.9 20	65	140º	404-1061-1-ND	.83	11.14	40.50	404-1061-2-ND	3,000	247.86/M	FA1101F-TR
	Yellow		592	1.9 20	65	140º	404-1062-1-ND	1.18	15.81	57.50	404-1062-2-ND	3,000	336.72/M	FY1101F-TR
	Red	Water Clear	660	1.7 20	12.4	170º	404-1063-1-ND	.46	5.63	16.94	404-1063-2-ND	3,000	122.48/M	BR1101F-TR
	Orange		605	2.2 20	3.0	150º	404-1064-1-ND	.46	5.63	16.94	404-1064-2-ND	3,000	122.48/M	AA1101F-TR
	Yellow		580	2.2 20	3.0	150º	404-1065-1-ND	.44	5.33	16.04	404-1065-2-ND	3,000	115.95/M	AY1101F-TR
	Yellow Green		570	2.1 20	8.8	150º	404-1066-1-ND	.41	5.03	15.14	404-1066-2-ND	3,000	109.41/M	PY1101F-TR
	Green		560	2.1 20	5.2	150º	404-1067-1-ND	.41	5.03	15.14	404-1067-2-ND	3,000	109.41/M	PG1101F-TR
	Pure Green		555	2.1 20	2.4	150º	404-1068-1-ND	.44	5.33	16.04	404-1068-2-ND	3,000	115.95/M	BG1101F-TR
Right Angle SMT LED														
8	Red	Milky White	660	1.7 20	11.7	130º	404-1069-1-ND	.34	4.13	12.42	404-1069-2-ND	4,000	89.82/M	BR1113F-TR
	Yellow-Green		570	2.1 20	11.7	150º	404-1070-1-ND	.35	4.28	12.88	404-1070-2-ND	4,000	93.08/M	PY1113F-TR
	Green		560	2.1 20	6.4	150º	404-1071-1-ND	.37	4.50	13.55	404-1071-2-ND	4,000	97.98/M	PG1113F-TR
	Red	Milky White	635	1.9 20	50	130º	404-1072-1-ND	.66	8.80	32.00	404-1072-2-ND	4,000	187.40/M	FR1113F-TR
	Orange		609	1.9 20	65	130º	404-1073-1-ND	.78	10.38	37.75	404-1073-2-ND	4,000	221.07/M	FA1113F-TR
	Yellow		592	1.9 20	65	130º	404-1074-1-ND	.70	9.35	34.00	404-1074-2-ND	4,000	199.11/M	FY1113F-TR
	Green		522	3.3 10	40	130º	404-1075-1-ND	3.89	51.58	182.41	404-1075-2-ND	4,000	1496.78/M	DG1113F-TR
	Bluish-Green		502	3.3 10	34	130º	404-1076-1-ND	3.31	43.96	155.46	404-1076-2-ND	4,000	1275.68/M	DC1113F-TR
	Blue		467	3.3 10	14	130º	404-1077-1-ND	3.24	42.99	152.03	404-1077-2-ND	4,000	1247.54/M	DB1113F-TR
1210 Bi-Color Standard Flat Lens Type SMT LED														
9	Red/Yellow-Green	Water Clear	660/570	1.7/2.1 20/20	12.8/8	160º/160º	404-1078-1-ND	.62	8.25	30.00	404-1078-2-ND	2,500	183.60/M	BRPY1201W-TR
	Red/Green		660/560	1.7/2.1 20/20	12.8/4.8		404-1079-1-ND	.62	8.25	30.00	404-1079-2-ND	2,500	183.60/M	BRPG1201W-TR
	Red/Pure Green		660/555	1.7/2.1 20/20	12.8/2		404-1080-1-ND	.72	9.63	35.00	404-1080-2-ND	2,500	214.20/M	BRBG1201W-TR
1210 Bi-Color Two Inner Lens SMT LED														
10	Red/Yellow-Green	Water Clear	660/570	1.7/2.1 20/20	33.6/24	100º/80º	404-1081-1-ND	.62	8.25	30.00	404-1081-2-ND	2,500	183.60/M	BRPY1204W-TR
	Red/Green		660/560	1.7/2.1 20/20	33.6/12	100º/80º	404-1082-1-ND	.62	8.25	30.00	404-1082-2-ND	2,500	183.60/M	BRPG1204W-TR
	Red/Pure Green		660/555	2.2/2.1 20/20	33.6/4.8	100º/80º	404-1083-1-ND	.72	9.63	35.00	404-1083-2-ND	2,500	214.20/M	BRBG1204W-TR
	Orange/Yellow-Green		605/570	2.2/2.1 20/20	9/12	80º/80º	404-1084-1-ND	.85	11.34	41.25	404-1084-2-ND	2,500	252.46/M	AAPY1204W-TR
Bi-Color Ultra Compact SMT LED														
11	Red/Yellow-Green	Milky White	660/570	1.7/2.1 20/20	11.7/11.7	170º/150º	404-1085-1-ND	.55	6.75	20.33	404-1085-2-ND	4,000	137.70/M	BRPY1211C-TR
	Red/Green		660/560	1.7/2.1 20/20	11.7/6.4		404-1086-1-ND	.55	6.75	20.33	404-1086-2-ND	4,000	137.70/M	BRPG1211C-TR
	Red/Pure Green		660/555	1.7/2.1 20/20	11.7/2.4		404-1087-1-ND	.57	6.90	20.78	404-1087-2-ND	4,000	140.76/M	BRBG1211C-TR
Bi-Color Right Angle SMT LED														
12	Yellow/Green	Milky White	580/560	2.2/2.1 20/20	3.0/5.2	150º	404-1088-1-ND	.56	7.56	27.50	404-1088-2-ND	3,000	168.30/M	AYPG1211F-TR
	Red/Yellow-Green		660/570	1.7/2.1 20/20	17.6/8.8		404-1089-1-ND	.62	8.25	30.00	404-1089-2-ND	3,000	183.60/M	BRPY1211F-TR

*Reversed Polarity

Through-Hole LEDs

Fig. 1

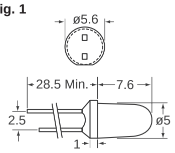


Fig. 2

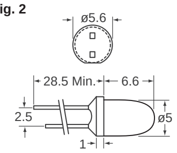


Fig. 3

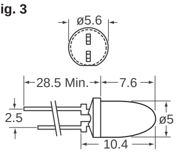


Fig. 4

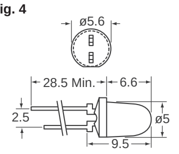


Fig. 5

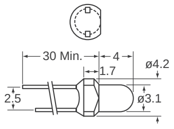


Fig. 6

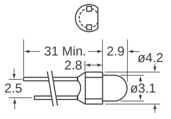


Fig.	Description	Source Color	Lens	Wavelength λpk (nm)	Forward Voltage TYP @ mA	Iv (mcd)	Viewing Angle	Digi-Key Part No.	Price Each			Stanley Part No.
									1	25	100	
1	5mm	Red	Clear Pastel Red	635	1.9 20	3600	10º	404-1090-ND	.77	.38	.31	EFR5366X
		Orange	Clear Pastel Orange	609	1.9 20	5000	10º	404-1091-ND	.77	.38	.31	EFA5366X
		Yellow	Clear Pastel Yellow	592	1.9 20	4000	10º	404-1092-ND	.82	.41	.33	EFY5366X
		Green	Water Clear	522	3.5 20	2400	10º	404-1093-ND	3.39	2.00	1.69	DG5306X
		Blue Green	Water Clear	502	3.5 20	2400	10º	404-1094-ND	3.28	1.94	1.63	DC5306X
		Blue	Water Clear	467	3.5 20	1000	10º	404-1095-ND	3.18	1.88	1.59	DB5306X
2	5mm	Red	Clear Pastel Red	635	1.9 20	880	45º	404-1096-ND	.82	.41	.33	EFR5365S
		Orange	Clear Pastel Orange	609	1.9 20	1160	45º	404-1097-ND	.82	.41	.33	EFA5365S
		Yellow	Clear Pastel Yellow	592	1.9 20	1000	45º	404-1098-ND	.82	.41	.33	EFY5365S
		Green	Water Clear	522	3.5 20	800	30º	404-1099-ND	3.38	2.00	1.69	DG5305S
		Blue Green	Water Clear	502	3.5 20	800	30º	404-1100-ND	3.27	1.93	1.63	DC5305S
		Blue	Water Clear	467	3.5 20	240	30º	404-1101-ND	3.18	1.88	1.58	DB5305S
3	5mm	Red	Water Clear	660	1.8 20	1000	10º	404-1102-ND	1.28	.71	.58	H-1000L
						2000	10º	404-1103-ND	1.89	1.05	.86	H-2000L
						3000	10º	404-1104-ND	2.84	1.43	1.29	H-3000L
4	5mm	Red	Water Clear	660	1.8 20	300	25º	404-1105-ND	.89	.44	.36	KR5005S
5	3mm Flush Mount	Red	Clear Pastel Red	635	1.9 20	1280	20º	404-1106-ND	.83	.41	.34	EFR3863X
		Orange	Clear Pastel Orange	609	1.9 20	1600	20º	404-1107-ND	.93	.46	.38	EFA3863X
		Yellow	Clear Pastel Yellow	592	1.9 20	1440	20º	404-1108-ND	.82	.41	.33	EFY3863X
		Green	Water Clear	522	3.5 20	1200	20º	404-1109-ND	3.44	2.04	1.71	DG3803X
		Blue Green	Water Clear	502	3.5 20	1200	20º	404-1110-ND	3.25	1.92	1.62	DC3803X
		Blue	Water Clear	467	3.5 20	500	20º	404-1111-ND	3.16	1.87	1.57	DB3803X
6	3mm Flush Mount	Red	Clear Pastel Red	635	1.9 20	440	70º	404-1112-ND	.83	.41	.34	EFR3864X
		Orange	Clear Pastel Orange	609	1.9 20	560	70º	404-1113-ND	.93	.46	.38	EFA3864X
		Yellow	Clear Pastel Yellow	592	1.9 20	500	70º	404-1114-ND	.77	.38	.31	EFY3864X
		Green	Water Clear	522	3.5 20	480	50º	404-1115-ND	3.37	1.99	1.68	DG3804X
		Blue Green	Water Clear	502	3.5 20	480	50º	404-1116-ND	3.25	1.92	1.62	DC3804X
		Blue	Water Clear	467	3.5 20	120	50º	404-1117-ND	3.17	1.88	1.58	DB3804X

LEDs

Fig. 1

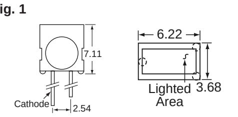


Fig. 2

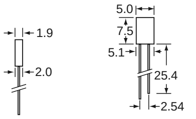


Fig. 3

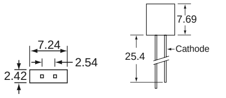


Fig. 4

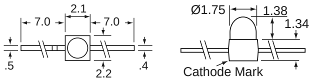


Fig. 5

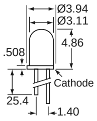


Fig. 6

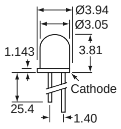


Fig. 7

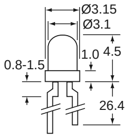


Fig. 8

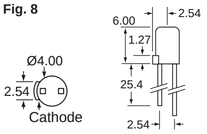


Fig. 9

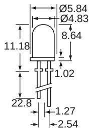


Fig. 10

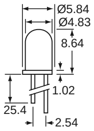


Fig. 11

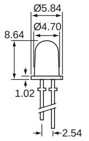


Fig. 12

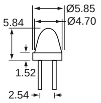


Fig. 13

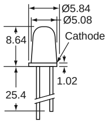


Fig. 14

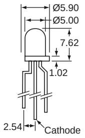


Fig. 15

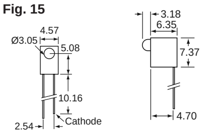


Fig. 16

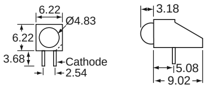


Fig. 17

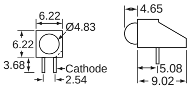


Fig. 18

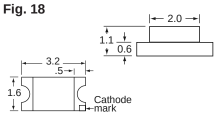


Fig. 19

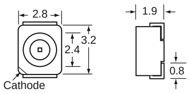


Fig. 20

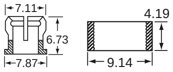


Fig. 21

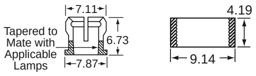


Fig. 22

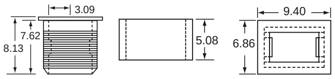


Fig.	Size	Color	Wave-Length pk (nm)	Lens	Vf (V) Typ.	If (mA) Typ.	View-ing Angle	Intensity (mcd) Typ.	Digi-Key Part No.	Price Each 1	10	100
Standard LED's												
1	5.59x3.18mm	Hi. Eff. Red	635	Diffused	2.0	20	100º	6.0	MV57124A-ND	.40	.32	.24
	5.59x3.18mm	Green	562	Diffused	2.2	20	100º	6.0	MV54124A-ND	.40	.32	.24
	5.59x3.18mm	Yellow	585	Diffused	2.0	20	100º	6.0	MV53124A-ND	.40	.32	.24
	5.59x3.18mm	Green/AlGaAs Red	562/660	Diffused	2.2°	20	100º	6.0	MV49124A-ND	.50	.40	.30
2	2x5 mm	Hi. Eff. Red	635	Diffused	2.0	20	100º	4.0	MV57123-ND	.34	.27	.19
	2x5 mm	Green	562	Diffused	2.2	20	100º	4.0	MV54123-ND	.34	.27	.19
	2x5 mm	Yellow	585	Diffused	2.1	20	100º	4.0	MV53123-ND	.34	.27	.19
3	2.5x7.4 mm	Hi. Eff. Red	635	Diffused	2.1	20	100º	2.5	HLMP0300-ND	.38	.31	.22
	2.5x7.4 mm	Hi. Eff. Red	635	Diffused	2.1	20	100º	5.0	HLMP0301-ND	.38	.31	.22
	2.5x7.4 mm	Green	565	Diffused	2.3	20	100º	5.0	HLMP0504-ND	.38	.31	.22
	2.5x7.4 mm	Yellow	585	Diffused	2.2	20	100º	5.0	HLMP0401-ND	.38	.31	.22
4	1.9mm	Green	565	Diffused	2.0	10	50º	3.0	MV6400A-ND	.40	.32	.24
	1.9mm	Green	565	Water Clear	2.0	10	25º	12.0	HLMP6505A-ND	.40	.32	.24
	1.9mm	AlGaAs Red	660	Diffused	1.6	10	50º	1.8	HLMPQ150A-ND	.43	.34	.26
	1.9mm	AlGaAs Red	660	Water Clear	1.8	10	25º	50.0	HLMPQ105A-ND	.40	.32	.24
5	3mm	Red	660	Clear	1.6	20	70º	2.5	MV5074C-ND	.34	.27	.19
	3mm	Red	660	Diffused	1.6	20	90º	1.5	MV5075C-ND	.34	.27	.19
	3mm	Hi. Eff. Red	635	Diffused	2.0	20	90º	9.0	MV5774C-ND	.34	.27	.19
	3mm	Green	565	Diffused	2.2	20	90º	9.0	MV5474C-ND	.34	.27	.19
	3mm	Yellow	585	Diffused	2.1	20	90º	9.0	MV5374C-ND	.34	.27	.19
6	3mm	Hi. Eff. Red	635	Diffused	2.0	20	180º	7.0	MV5777C-ND	.34	.27	.19
	3mm	Green	565	Diffused	2.2	20	180º	7.0	MV5477C-ND	.34	.27	.19
7	3mm	H I Red	660	Clear	1.8	20	45º	65.0	HLMPK105-ND	.33	.26	.19
	3mm	Hi. Eff. Red	635	Pale Tint	2.2	20	45º	60.0	HLMP1340-ND	.33	.26	.19
	3mm	Yellow	585	Pale Tint	2.2	20	45º	60.0	HLMP1440-ND	.33	.26	.19
	3mm	Hi. Eff. Green	565	Pale Tint	2.2	20	45°	60.0	HLMP1540-ND	.33	.26	.19
	3mm	Red	660	Diffused	1.6	10	90º	1.5	MV50640-ND	.34	.27	.19
	3mm	Hi. Eff. Red	635	Diffused	2.0	10	90º	2.0	HLMP1300-ND	.33	.26	.19
	3mm	Hi. Eff. Red	635	Diffused	2.0	10	90º	4.0	HLMP1302-ND	.33	.26	.19
	3mm	Hi. Eff. Green	562	Diffused	2.2	20	90º	5.0	HLMP1503-ND	.33	.26	.19
	3mm	Hi. Eff. Green	562	Diffused	2.2	20	90°	10.0	HLMP1523-ND	.33	.26	.19
	3mm	Yellow	585	Diffused	2.1	10	90º	4.5	MV53642-ND	.34	.27	.19
	3mm	AlGaAs Red	660	Diffused	1.6	1.0	60º	2.0	HLMPK150-ND	.33	.26	.19
	3mm	Yellow	585	Diffused	1.9	2.0	50º	2.0	HLMP1719-ND	.33	.26	.19
	3mm	Green	565	Diffused	1.9	2.0	50º	2.0	HLMP1790-ND	.33	.26	.19
	3mm	Hi. Eff. Red	635	Diffused	1.8	2.0	50º	2.0	HLMP1700-ND	.33	.26	.19
	3mm	Green/Red	567/650	Diffused	2.1	20	100º	10.0	MV6461A-ND	.50	.40	.30
8	4mm	Hi. Eff. Red	635	Diffused	2.2	20	135º	7.0	HLMPM201-ND	.33	.26	.19
	4mm	Green	565	Diffused	2.3	20	135º	10.0	HLMPM501-ND	.33	.26	.19
	4mm	Yellow	585	Diffused	2.2	20	135º	7.0	HLMPM301-ND	.33	.26	.19
9	5mm	Hi. Eff. Red	635	Tint	2.2	20	24º	150.0	HLMP3750AFS-ND	.33	.26	.19
	5mm	Green	565	Tint	2.2	20	24º	150.0	HLMP3950AFS-ND	.33	.26	.19
	5mm	Yellow	585	Tint	2.2	20	24º	150.0	HLMP3850AFS-ND	.33	.26	.19
10	5mm	Hi. Eff. Red	635	Clear	2.2	20	24º	150.0	MV3750-ND	.34	.27	.19
	5mm	Hi. Eff. Red	635	Clear	2.0	20	28º	100.0	MV5752-ND	.34	.27	.19
	5mm	Green	565	Clear	2.2	20	24º	150.0	MV3450-ND	.34	.27	.19
	5mm	Hi. Eff. Green	562	Clear	2.2	20	35º	25.0	MV5452-ND	.34	.27	.19
	5mm	Hi. Eff. Green	562	Clear	2.2	20	35º	100.0	MV64521-ND	.34	.27	.19
	5mm	Yellow	585	Clear	2.1	20	28º	90.0	MV5352-ND	.34	.27	.19
	5mm	Red	660	Diffused	2.2	10	24º	1.0	MV5054A1-ND	.34	.27	.19
	5mm	Red	660	Diffused	2.2	10	24º	2.0	MV5054A2-ND	.34	.27	.19
	5mm	Red	660	Diffused	2.2	10	24º	3.0	MV5054A3-ND	.34	.27	.19
	5mm	Hi. Eff. Red	635	Diffused	2.0	20	24º	25.0	MV5754A-ND	.34	.27	.19
	5mm	Green	562	Diffused	2.2	20	24º	30.0	MV5454A-ND	.34	.27	.19
	5mm	Yellow	585	Diffused	2.1	20	24º	25.0	MV5354A-ND	.34	.27	.19
	5mm	Red	660	Diffused	2.2	20	80º	0.5	MV5053-ND**	.34	.27	.19
	5mm	Red	660	Diffused	2.2	20	80º	0.5	MV6053-ND	.34	.27	.19
	5mm	Hi. Eff. Red	635	Amber Diffused	2.0	20	65º	15.0	MV5153-ND**	.34	.27	.19
	5mm	Hi. Eff. Red	635	Diffused	2.0	20	65º	15.0	MV5753-ND**	.34	.27	.19
	5mm	Hi. Eff. Red	635	Diffused	2.0	20	65º	15.0	MV6753-ND	.34	.27	.19

(Continued)

FAIRCHILD SEMICONDUCTOR LEDs *(Cont.)*

Fig.	Size	Color	Wave-Length pk (nm)	Lens	Vf (V) Typ.	If (mA) Typ.	View-ing Angle	Intensity (mcd) Typ.	Digi-Key Part No.	Price Each 1	10	100
10	5mm	Green	562	Diffused	2.2	20	75º	20.0	MV5453-ND**	.34	.27	.19
	5mm	Green	562	Diffused	2.2	20	75º	20.0	MV64531-ND	.34	.27	.19
	5mm	Yellow	585	Diffused	2.1	20	65º	15.0	MV5353-ND**	.34	.27	.19
	5mm	Red	660	Diffused	1.6	10	70º	3.0	FLV110-ND	.40	.32	.22
	5mm	AlGaAs Red	650	Diffused	2.4	20	70°	12.0	MV6951-ND	.34	.27	.19
	5mm	Yellow	585	Diffused	1.9	2.0	35°	2.0	HLMP4719-ND	.33	.26	.19
	5mm	Hi. Eff. Green	565	Diffused	1.9	2.0	35°	3.0	MV2454-ND	.34	.27	.19
	5mm	Red	660	Diffused	1.6	1.0	65º	3.0	HLMPD150A-ND	.33	.26	.19
	5mm	Hi. Eff. Red	635	Diffused	1.8	2.0	35°	2.0	HLMP4700-ND	.33	.26	.19
	5mm	Hi. Eff. Red	635	Diffused	2.2	10	65º	3.0	HLMP3300-ND	.33	.26	.19
	5mm	Hi. Eff. Red	635	Diffused	2.2	10	65º	7.0	HLMP3301-ND	.33	.26	.19
11	5mm	Red	660	White Diffused	1.65	20	90º	1.6	MV5021A-ND	.34	.27	.19
	5mm	Red	660	Diffused	1.65	20	90º	1.6	MV5023A-ND	.34	.27	.19
	5mm	Red	660	Diffused	1.65	20	60º	3.0	MV5024A-ND	.34	.27	.19
	5mm	Red	660	Diffused	1.65	20	180º	0.4	MV5025A-ND	.34	.27	.19
12	5mm	Red	660	Diffused	1.6	10	50º	1.5	MV50154-ND	.34	.27	.19
9	5mm	AlGaAs Red/Hi. Eff. Red	660/635	Diffused	2.0/2.0	20	75°	5.0/5.0	MV5094A-ND	.50	.40	.30
9	5mm	AlGaAs Red/Green	660/562	Diffused	2.0/2.0	20	75°	5.0/.5.0	MV5491A-ND	.40	.32	.24
14	5mm	Green/Hi. Eff. Red	565/635	Diffused	2.1/2.1	20	100º	6.0/6.0	MV5437-ND	.40	.32	.24
Super Bright LEDs												
10	5mm	Super Red	660	Diffused	1.7	20	40º	200.0	MV8191-ND	.40	.32	.24
	5mm	Super Red	660	Clear	1.7	20	40º	370.0	MV8141-ND	.50	.40	.30
	5mm	Super Red	660	Clear	1.7	20	20º	370.0	MV8102-ND	.46	.37	.26
	5mm	Super Red	660	Clear	1.7	20	20º	940.0	MV8103-ND	.46	.37	.26
	5mm	Super Red	660	Clear	1.7	20	20º	1500.0	MV8104-ND	.46	.37	.26
	5mm	Super Yellow	590	Clear	2.1	20	20º	2400.0	MV8305-ND	.77	.58	.44
13	5mm	Super Red	660	Clear	1.7	20	12º	940.0	MV8112-ND	.46	.37	.26
	5mm	Super Red	660	Clear	1.7	20	12º	2400.0	MV8114-ND	.46	.37	.26
	5mm	Super Yellow	590	Clear	2.1	20	12º	3500.0	MV8316-ND	.80	.60	.45
	5mm	Super Green	565	Clear	2.1	20	12º	600.0	MV8412-ND	.57	.46	.35
Integrated T-1 3/4 Resistor Lamps												
10	5mm	Red	655	Diffused	5.0	13	60º	2.0	MR3050-ND	.53	.40	.30
	5mm	Red	655	Diffused	12.0	13	60º	2.0	MR3051-ND	.53	.40	.30
	5mm	Green	565	Diffused	5.0	12	60º	4.0	MR3450-ND	.53	.40	.30
	5mm	Green	565	Diffused	12.0	13	60º	4.0	MR3451-ND	.53	.40	.30
	5mm	Yellow	583	Diffused	5.0	10	60º	4.0	MR3350-ND	.53	.40	.30
	5mm	Yellow	583	Diffused	12.0	13	60º	4.0	MR3351-ND	.53	.40	.30
PC Mount LEDs												
15	3mm	Red	660	Diffused	1.6	20	60º	1.5	MV5064MP4B-ND	.48	.36	.27
	3mm	Yellow	585	Diffused	2.1	10	60º	2.0	MV5364MP4B-ND	.48	.36	.27
	3mm	Green	565	Diffused	2.2	20	60º	5.0	MV5464MP4B-ND	.48	.36	.27
16	5mm	Red	660	Diffused	1.7	20	65º	2.0	MV60538MP7-ND	.52	.39	.30
	5mm	Yellow	585	Diffused	2.1	20	65º	18.0	MV63538MP7-ND	.56	.42	.32
	5mm	Green	565	Diffused	2.2	20	65º	26.0	MV64538MP7-ND	.56	.42	.32
17	5mm	Red	660	Diffused	1.7	20	65º	3.2	MV60539MP7-ND	.52	.39	.30
	5mm	Yellow	585	Diffused	2.1	20	65º	20.0	MV63539MP7-ND	.56	.42	.32
	5mm	Green	565	Diffused	2.2	20	65º	28.0	MV64539MP7-ND	.56	.42	.32
	5mm	Hi. Eff. Red	635	Diffused	2.1	20	65º	15.0	MV67539MP7-ND	.56	.42	.32
	5mm	Red/Green	660/565	Diffused	2.3	20	100º	6.0	MV54919MP7-ND	.88	.66	.50
Panel Mount LED Holders												
20	5mm Standard Lens LED Holder								MP52-ND	.24	.18	.13
21	5mm Tapered Lens LED Holder								MP22-ND	.24	.18	.13
22	MV5X124A Rectangular LED Holder								MP65-ND	.38	.30	.22

** Long lead is cathode

Surface Mount LEDs

Fig.	Size	Color	Wave-Length pk (nm)	Lens	Vf (V) Typ.	If (mA) Typ.	View-ing Angle	Intensity (mcd) Typ.	Digi-Key Part No.	Price Each 1	10	100	Digi-Key Part No.	Reel Size	Tape and Reel Pricing
18	1206	Hi.Eff. Red	635	Clear	2.0	20	140º	6.0	QTLP650C2TRCT-ND	.46	.37	.26	QTLP650C2TRTR-ND	2,000	126.00/M
	1206	Yellow	585	Clear	2.0	20	140º	6.0	QTLP650C3TRCT-ND	.46	.37	.26	QTLP650C3TRTR-ND	2,000	126.00/M
	1206	Green	565	Clear	2.1	20	140º	10.0	QTLP650C4TRCT-ND	.46	.37	.26	QTLP650C4TRTR-ND	2,000	126.00/M
	1206	Hi.Eff. Red	635	Diffused	2.0	20	160º	4.0	QTLP650D2TRCT-ND	.46	.37	.26	QTLP650D2TRTR-ND	2,000	126.00/M
	1206	Yellow	585	Diffused	2.0	20	160°	4.0	QTLP650D3TRCT-ND	.46	.37	.26	QTLP650D3TRTR-ND	2,000	126.00/M
	1206	Green	565	Diffused	2.1	20	160º	6.5	QTLP650D4TRCT-ND	.46	.37	.26	QTLP650D4TRTR-ND	2,000	126.00/M
19	PLCC	Hi. Eff. Red	635	Clear	2.0	20	120°	10.0	QTLP670C2TRCT-ND	.40	.32	.24	QTLP670C2TRTR-ND	2,000	112.00/M
	PLCC	Yellow	585	Clear	2.0	20	120º	10.0	QTLP670C3TRCT-ND	.40	.32	.24	QTLP670C3TRTR-ND	2,000	112.00/M
	PLCC	Green	565	Clear	2.1	20	120º	25.0	QTLP670C4TRCT-ND	.40	.32	.24	QTLP670C4TRTR-ND	2,000	112.00/M

FAIRCHILD SEMICONDUCTOR LED 7 Segment Displays

Fig.	Color Wavelength (nm)	Digit Size In. (mm)	Dimensions Inch (mm) AxB	VF (V)	If (mA)	Io (µcd)	Digi-Key Part No. Common Anode	Digi-Key Part No. Common Cathode	Price Each 1	10	100
1	Red (660)	.30 (7.62)	.74 x .39 (18.75 x 9.80)	1.6	20	350	MAN71A-ND	MAN74A-ND	1.14	.95	.76
	Hi.Eff. Red (635)	.30 (7.62)	.74 x .39 (18.75 x 9.80)	2.2	20	1900	MAN3910A-ND	MAN3940A-ND	.96	.80	.64
	Hi.Eff. Red (635)	.30 (7.62)	.74 x .39 (18.75 x 9.80)	2.2	20	1900	—	MAN3980A-ND	1.29	1.08	.86
	Red/Orange (630)	.40 (10.16)	.74 x .39 (18.75 x 9.80)	2.2	20	1800	MAN4610A-ND	MAN4640A-ND	.96	.80	.64
	Red (660)	.40 (10.16)	.74 x .39 (18.75 x 9.80)	1.6	20	350	MAN4710A-ND	MAN4740A-ND	1.14	.95	.76
	Hi.Eff. Red (635)	.40 (10.16)	.74 x .39 (18.75 x 9.80)	2.2	20	1900	—	MAN4940A-ND	.96	.80	.64
	Green (562)	.40 (10.16)	.74 x .39 (18.75 x 9.80)	2.2	20	3200	MAN4410A-ND	MAN4440A-ND	1.02	.85	.68
	Green(562)	.56 (14.22)	.75 x .48 (19.05 x 12.20)	2.2	20	3300	MAN6460-ND	MAN6480-ND	1.08	.90	.72
	Red/Orange (630)	.56 (14.22)	.75 x .48 (19.05 x 12.20)	2.2	20	2200	MAN6660-ND	MAN6680-ND	1.02	.85	.68
	Red (650)	.56 (14.22)	.75 x .48 (19.05 x 12.20)	1.6	20	420	MAN6760-ND	MAN6780-ND	1.20	1.00	.80
	Hi.Eff. Red (635)	.56 (14.22)	.75 x .48 (19.05 x 12.20)	2.2	20	2200	MAN6960-ND	MAN6980-ND	1.02	.85	.68
	Red/Orange (630)	.80 (20.32)	.99 x .74 (25.02 x 18.67)	2.2	20	2200	MAN8610-ND	MAN8640-ND	1.53	1.22	.92
2	Green (562)	.56 (14.22)	.75 x .99 (19.05 x 25.02)	2.2	20	3300	MAN6410-ND	MAN6440-ND	1.53	1.22	.92
	Red/Orange (630)	.56 (14.22)	.75 x .99 (19.05 x 25.02)	2.2	20	2200	MAN6610-ND	MAN6640-ND	1.38	1.10	.83
	Red (650)	.56 (14.22)	.75 x .99 (19.05 x 25.02)	1.6	20	420	MAN6710-ND	MAN6740-ND	1.50	1.20	.90
	Hi.Eff. Red (635)	.56 (14.22)	.75 x .99 (19.05 x 25.02)	2.2	20	2200	MAN6910-ND	MAN6940-ND	1.43	1.14	.86

Fig. 1

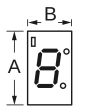
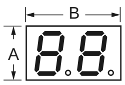


Fig. 2



FAIRCHILD
SEMICONDUCTOR

Fig. 1

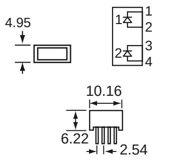


Fig. 2

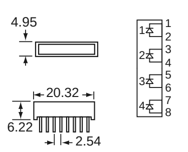


Fig. 3

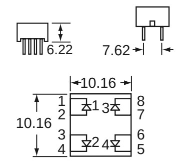


Fig. 4

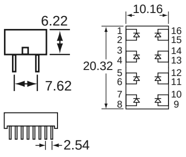


Fig. 5

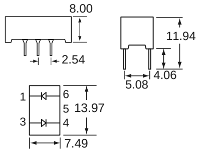
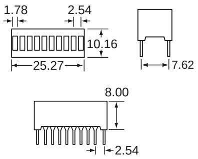


Fig. 6



LED Arrays/Light Bars

Fig.	Emitted Color	Vf	Io Typ. (mcd)	If (mA)	Digi-Key Part No.	Price Each 1	10	100
1	Red	2.0	23	20	HLMP2300-ND	.92	.69	.52
1	Yellow	2.1	20	20	HLMP2400-ND	.92	.69	.52
1	Green	2.2	25	20	HLMP2500-ND	.92	.69	.52
2	Red	2.0	45	20	HLMP2350-ND	.86	.72	.58
2	Yellow	2.1	38	20	HLMP2450-ND	.86	.72	.58
2	Green	2.2	50	20	HLMP2550-ND	.86	.72	.58
3	Red	2.0	43	20	HLMP2655-ND	.92	.69	.52
3	Yellow	2.1	35	20	HLMP2755-ND	.78	.65	.52
3	Green	2.2	50	20	HLMP2855-ND	.96	.72	.54
4	Red	2.0	80	20	HLMP2685FS-ND	.95	.79	.63
4	Yellow	2.1	70	20	HLMP2785-ND	1.11	.93	.74
4	Green	2.2	100	20	HLMP2885-ND	1.01	.84	.68
5	Red	2.0	4.5	20	MV57173-ND	.88	.66	.50
5	Yellow	2.0	4.5	20	MV53173-ND	.88	.66	.50
5	Green	2.2	4.5	20	MV54173-ND	.96	.72	.54

LED Bar Graph Arrays

Fig.	Emitted Color	Vf	Io Typ. (µcd)	If (mA)	Digi-Key Part No.	Price Each 1	10	100
6	Yellow	2.0	1800	10	MV53164-ND	1.08	.90	.72
6	Green	2.2	1800	10	MV54164-ND	1.08	.90	.72
6	Red	2.0	1800	10	MV57164-ND	1.08	.90	.72

LITEON

LED, Dot Matrix Displays

Fig. 1 – 0.3" 5 x 7 Matrix

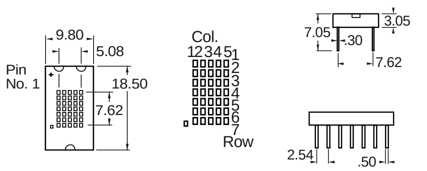


Fig. 2 – 0.7" 5 x 7 Matrix

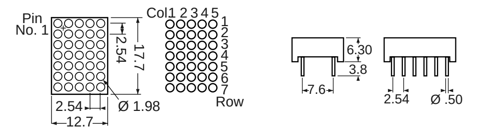


Fig. 3 – 1.2" 5 x 7 Matrix

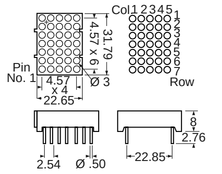
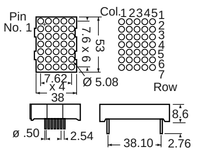


Fig. 4 – 2.0" 5 x 7 Matrix



†† For Digi-Key Part Number 160-1009-ND (Green/Orange LED), Use this dimension.

Fig. 5 – 2.3" 5 x 8 Matrix

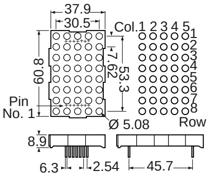


Fig. 6 – 2.0" 4 x 4 Bicolor Matrix

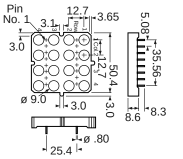


Fig. 7 – 4.0" 5 x 7 Matrix

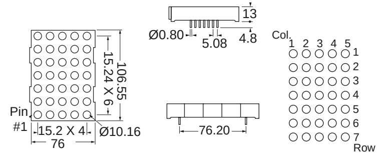
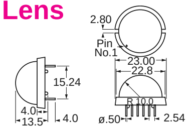


Fig.	Color	Peak Wavelength l	Typ. Vf (V) (If = 20mA)	Max Average If (mA)	Typ. Iv (mcd)	Digi-Key Part No. Anode Row/ Cathode Column	Digi-Key Part No. Cathode Row/ Anode Column	Price Each 1	25	50	Lite-On Part No. Anode Row/ Cathode Column	Lite-On Part No. Cathode Row/ Anode Column
Standard LED Dot Matrix Displays												
1	Red	655	1.7	14	400*	—	160-1000-ND	2.88	2.59	2.30	—	LTP-305R
2	Green	565	2.1	11	2000*	160-1002-ND	—	4.00	3.60	3.20	LTP-757G	—
2	Hi. Eff. Red	635	2.0	10	1600*	160-1003-ND	—	4.25	3.83	3.40	LTP-757HR	—
4	Green/Red-Orange	565/630	2.1/2.0	13/13	4000/4800*	160-1009-ND††	—	9.50	8.55	7.60	LTP-2757AA	—
5	Hi. Eff. Red	635	2.1	10	4000*	160-1014-ND	—	5.88	5.29	4.70	LTP-2158AHR	—
5	Green	565	2.1	13	4800*	160-1016-ND	—	5.88	5.29	4.70	LTP-2158AG-RD	—
6	Green/Red-Orange	565/630	6.3/6.3	18/18	11,000/11,000†	160-1015-ND	—	13.45	12.11	10.76	LTP-2044A3-NB	—
7	Yellow	585	4.2	16	8000†	160-1118-ND	—	21.73	19.56	17.38	LTP-4157AY	—
AlInGaP LED Dot Matrix Displays												
2	Super Red	639	2.0	13	3400‡	160-1555-5-ND	160-1554-5-ND	4.00	3.60	3.20	LTP-757KR	LTP-747KR
2	Red-Orange	621	2.05	13	3400‡	160-1553-5-ND	160-1552-5-ND	4.00	3.60	3.20	LTP-757KA	LTP-747KA
2	Yellow	595	2.05	13	3400‡	160-1557-5-ND	160-1556-5-ND	4.00	3.60	3.20	LTP-757KY	LTP-747KY
3	Super Red	639	2.1	13	3800‡	160-1567-5-ND	160-1566-5-ND	4.50	4.05	3.60	LTP-1557AKR	LTP-1457AKR
3	Red-Orange	621	2.05	13	3800‡	160-1565-5-ND	160-1564-5-ND	4.50	4.05	3.60	LTP-1557AKA	LTP-1457AKA
3	Yellow	595	2.05	13	3800‡	160-1569-5-ND	160-1568-5-ND	4.50	4.05	3.60	LTP-1557AKY	LTP-1457AKY
4	Super Red	639	2.0	13	4600‡	160-1561-5-ND	160-1560-5-ND	4.88	4.39	3.90	LTP-2157AKR	LTP-2057AKR
4	Red-Orange	621	2.05	13	4600‡	160-1559-5-ND	160-1558-5-ND	4.88	4.39	3.90	LTP-2157AKA	LTP-2057AKA
4	Yellow	595	2.05	13	4600‡	160-1563-5-ND	160-1562-5-ND	4.88	4.39	3.90	LTP-2157AKY	LTP-2057AKY

* 80mA, 1/16 duty cycle † 48mA, 1/8 duty cycle ‡ 32mA 1/16 duty cycle †† See Physical Dimension Under Fig. 4

.8" Big Lamps with Universal Sphere Lens

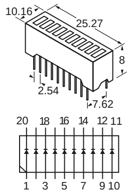


FEATURES: • High luminous intensity • Categorized for luminous intensity • Excellent on-off contrast • Operating Temperature Range: -25°C to +85°C.

Color	If Peak per chip (mA)	If Cont. per chip (mA)	Digi-Key Part No.	Pricing 1	10	100
Green	100	25	160-1025-ND	2.10	17.50	140.00
Hi. Eff. Red	100	25	160-1026-ND	2.10	17.50	140.00
Yellow	80	20	160-1027-ND	2.10	17.50	140.00

Absolute Max. Ratings at T_A = 25°C, VF = 2.1, VR = 5V

Bar Graph Array



Color	Continuous Forward Current	Forward Voltage (Vf)	Digi-Key Part No.	Pricing 1	10	100
Hi. Eff. Red	25	2.1	160-1066-ND	2.10	17.50	140.00
Green	25	2.1	160-1067-ND	2.10	17.50	140.00
Yellow	20	2.1	160-1068-ND	2.22	18.50	148.00

LITEON

T-1 and T-1 3/4 Integrated Resistor LEDs

Fig. 1

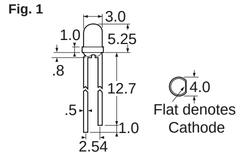
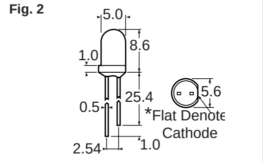


Fig. 2



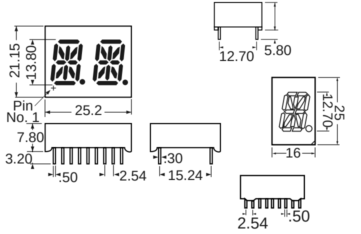
Absolute Max. Rat. at T_A = 25°C

Fig.	Description	Lens	Source Color	VR	Io (mcd)	Viewing Angle	If (mA)	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100
1	T-1 5V	Red Diff.	Red	7.5	0.8	40°	10	160-1045-ND	.23	1.88	15.00
	T-1 5V	Green Diff.	Green	7.5	5.6	40°	10	160-1049-ND	.23	1.88	15.00
	T-1 5V	Yellow Diff.	Yellow	7.5	5.6	40°	10	160-1053-ND	.25	2.08	16.60
1	T-1 12V	Red Diff.	Red	15	0.9	40°	12	160-1046-ND	.23	1.88	15.00
	T-1 12V	Green Diff.	Green	15	5.8	40°	12	160-1050-ND	.23	1.88	15.00
	T-1 12V	Yellow Diff.	Yellow	15	5.7	40°	12	160-1054-ND	.25	2.08	16.60
2	T-1 3/4 5V	Green Diff.	Green	7.5	8.7	36°	10	160-1051-ND	.26	2.18	17.40
	T-1 3/4 5V	Yellow Diff.	Yellow	7.5	8.7	36°	10	160-1055-ND	.27	2.25	18.00
	T-1 3/4 12V	Green Diff.	Green	15	8.9	36°	12	160-1052-ND	.26	2.18	17.40
1	T-1 12V	Orange Diff.	Orange	15	5.7	40°	12	160-1110-ND	.26	2.18	17.40
2	T-1 3/4 5V	Red Diff.	Hi. Eff. Red	7.5	8.7	36°	10	160-1111-ND	.26	2.18	17.40
	T-1 3/4 12V	Red Diff.	Hi. Eff. Red	15	8.9	36°	12	160-1112-ND	.26	2.18	17.40

Alphanumeric Displays

FEATURES:

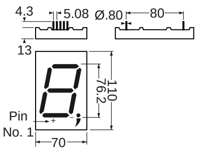
- Low power requirements
- Excellent character appearance
- High contrast & brightness
- Wide viewing angle
- Categorized for luminous intensity



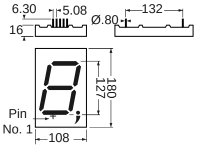
Ultra-Large 7-Segment Display

FEATURES:

- Continuous uniform segments
- Excellent character appearance
- High contrast & brightness
- Wide viewing angle
- Categorized for luminous intensity



3” (76.20mm) Size



5” (127.00mm) Size

Description	If Peak per segment (mA)*	If Cont. per segment (mA)	Rev. Volt. per segment (V)	Vf Typ. per segment	Oper. Temp. Range	Digi-Key Part No.	Pricing 1	Pricing 25	Pricing 50
2-Digit LED Alphanumeric Displays									
0.54” (13.72mm) Multiplex Common Cathode, Right Hand Decimal, Orange	100	25	5	2.1	-25°C-+85°C	160-1010-ND	3.88	87.19	155.00
0.54” (13.72mm) Multiplex Common Anode, Right Hand Decimal, Orange	100	25	5	2.1	-25°C-+85°C	160-1011-ND	3.88	87.19	155.00
0.54” (13.72mm) Multiplex Common Cathode, Right Hand Decimal, Green	100	25	5	2.1	-25°C-+85°C	160-1012-ND	3.88	87.19	155.00
0.54” (13.72mm) Multiplex Common Anode, Right Hand Decimal, Green	100	25	5	2.1	-25°C-+85°C	160-1013-ND	3.88	87.19	155.00
1-Digit LED Alphanumeric Display									
0.5” (12.70mm) Common Anode, Right Hand Decimal, Green	100	25	5	2.1	-25°C-+85°C	160-1106-ND	2.38	53.44	95.00
0.5” (12.70mm) Common Anode, Right Hand Decimal, Yellow	80	20	5	2.1	-25°C-+85°C	160-1107-ND	2.38	53.44	95.00
0.5” (12.70mm) Common Anode, Right Hand Decimal, High Efficiency Red	100	25	5	2.1	-25°C-+85°C	160-1108-ND	2.38	53.44	95.00
Ultra-Large 7-Segment LED Numeric Display									
3” (76.20mm) Common Cathode, High Efficiency Red	160	40	30	12.6	-25°C-+85°C	160-1017-ND	16.80	304.50	558.60
3” (76.20mm) Common Anode, High Efficiency Red	160	40	30	12.6	-25°C-+85°C	160-1018-ND	16.80	304.50	558.60
3” (76.20mm) Common Cathode, Green	160	40	30	12.6	-25°C-+85°C	160-1019-ND	16.94	307.04	563.26
3” (76.20mm) Common Anode, Green	160	40	30	12.6	-25°C-+85°C	160-1020-ND	16.80	304.50	558.60
5” (127.00mm) Common Cathode, High Efficiency Red	180	60	50	21	-25°C-+85°C	160-1021-ND	38.70	701.44	1286.78
5” (127.00mm) Common Anode, High Efficiency Red	180	60	50	21	-25°C-+85°C	160-1022-ND	38.70	701.44	1286.78
5” (127.00mm) Common Cathode, Green	180	60	50	21	-25°C-+85°C	160-1023-ND	38.70	701.44	1286.78
5” (127.00mm) Common Anode, Green	180	60	50	21	-25°C-+85°C	160-1024-ND	38.70	701.44	1286.78

Absolute Max. Ratings at T_A = 25°C   * 1/10 duty cycle, 0.1 ms pulse width.

Seven Segment Displays

Fig.1

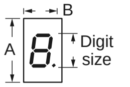


Fig.2

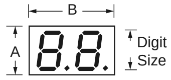


Fig.3

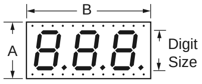


Fig.4

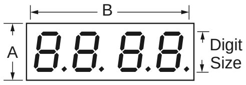


Fig.	Color (Peak Wavelength)	Digit Size In. (mm)	Dimensions A x B (mm)	Typ. VF (V)	Max Continuous IF (mA)	Typ. IV (ucd)	@ IF (mA)	Digi-Key Part No. Common Anode	Digi-Key Part No. Common Cathode	Price Each 1	Price Each 25	Price Each 100	Lite-On Part No. (CA)	Lite-On Part No. (CC)
Blue Seven-Segment Single-Digit Displays														
1	Blue (428)	.28 (7.11)	10.00 x 7.40	3.80	15	3000	10	160-1513-5-ND	160-1514-5-ND	4.68	3.40	2.93	LTS-2801AB	LTS-2301AB
	Blue (428)	.40 (10.00)	12.90 X 9.70	3.80	15	3600	10	160-1515-5-ND	160-1516-5-ND	4.78	3.47	2.99	LTS-4801B	LTS-4301B
	Blue (428)	.56 (14.22)	17.10 X 12.40	3.80	15	4300	10	160-1517-5-ND	160-1518-5-ND	4.82	3.50	3.02	LTS-5501AB	LTS-5503AB
Blue Seven-Segment Dual-Digit Displays														
2	Blue (428)	.28 (7.11)	10.00 x 15.02	3.80	15	3000	10	160-1519-5-ND*	160-1520-5-ND*	9.46	6.86	5.91	LTS-2601B	LTS-2701B
	Blue (428)	.40 (10.00)	12.80 x 19.86	3.80	15	3600	10	160-1521-5-ND*	160-1522-5-ND*	9.58	6.95	5.99	LTS-4608B	LTS-4708B
	Blue (428)	.56 (14.22)	17.10 x 25.00	3.80	15	4300	10	160-1523-5-ND*	160-1524-5-ND*	9.56	6.94	5.98	LTD-5521AB	LTD-5523AB
AlInGaP Seven-Segment Single-Digit Displays														
1	Yellow (588)	.40 (10.00)	12.90 x 9.70	2.05	25	650	1	160-1525-5-ND	—	1.30	.95	.82	LTS-4802BJS-H1	—
	Yellow-Orange (611)	.40 (10.00)	12.90 X 9.70	2.05	25	650	1	160-1526-5-ND	—	1.30	.95	.82	LTS-4802BJF-H1	—
	Super Red (639)	.40 (10.00)	12.90 x 9.70	2.00	25	650	1	160-1527-5-ND	—	1.30	.95	.82	LTS-4802BJR-H1	—
	Yellow (588)	.40 (10.00)	12.80 x 9.70	2.05	25	650	1	160-1528-5-ND	160-1529-5-ND	1.30	.95	.82	LTS-4801JS	LTS-4301JS
	Yellow-Orange (611)	.40 (10.00)	12.80 x 9.70	2.05	25	650	1	160-1530-5-ND	160-1531-5-ND	1.30	.95	.82	LTS-4801JF	LTS-4301JF
	Super Red (639)	.40 (10.00)	12.80 x 9.70	2.00	25	650	1	160-1532-5-ND	160-1533-5-ND	1.30	.95	.82	LTS-4801JR	LTS-4301JR
AlInGaP Seven-Segment Dual-Digit Displays														
2	Yellow (588)	.40 (10.00)	12.80 x 19.86	2.05	25	650	1	160-1534-5-ND*	160-1535-5-ND*	1.56	1.14	.98	LTD-4608JS	LTD-4708JS
	Yellow-Orange (611)	.40 (10.00)	12.80 x 19.86	2.05	25	650	1	160-1536-5-ND*	160-1537-5-ND*	1.56	1.14	.98	LTD-4608JF	LTD-4708JF
	Super Red (639)	.40 (10.00)	12.80 x 19.86	2.00	25	650	1	160-1538-5-ND*	160-1539-5-ND*	1.56	1.14	.98	LTD-4608JR	LTD-4708JR
AlInGaP Seven-Segment Triple-Digit Displays														
3	Yellow (588)	.40 (10.00)	12.80 x 30.02	2.05	25	650	1	160-1540-5-ND*	160-1541-5-ND*	2.40	1.74	1.50	LTC-4624JS	LTC-4724JS
	Yellow-Orange (611)	.40 (10.00)	12.80 x 30.02	2.05	25	650	1	160-1542-5-ND*	160-1543-5-ND*	2.40	1.74	1.50	LTC-4624JF	LTC-4724JF
	Super Red (639)	.40 (10.00)	12.80 x 30.02	2.00	25	650	1	160-1544-5-ND*	160-1545-5-ND*	2.40	1.74	1.50	LTC-4624JR	LTC-4724JR
AlInGaP Seven-Segment Quad-Digit Displays														
4	Yellow (588)	.40 (10.00)	12.80 x 40.18	2.05	25	650	1	160-1546-5-ND*	160-1547-5-ND*	2.86	2.08	1.79	LTC-4627JS	LTC-4727JS
	Yellow-Orange (611)	.40 (10.00)	12.80 x 40.18	2.05	25	650	1	160-1548-5-ND*	160-1549-5-ND*	2.86	2.08	1.79	LTC-4627JF	LTC-4727JF
	Super Red (639)	.40 (10.00)	12.80 x 40.18	2.00	25	650	1	160-1550-5-ND*	160-1551-5-ND*	2.86	2.08	1.79	LTC-4627JR	LTC-4727JR

* Multiplexed Display

Surface Mount LEDs

160-1190-ND **Surface Mount LED Demo Kit**. Contains a sampling of 13 popular styles of SMD LEDs that you can light with the push of a button..................$4.95

Fig. 1 — 1206

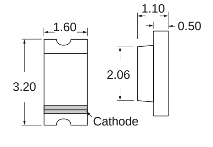


Fig. 2 — 1210

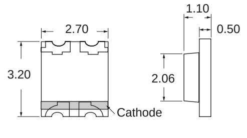
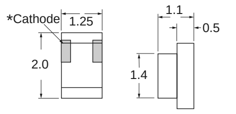


Fig. 3 — 0805



* Anode on parts 160-1174 and 160-1176

Fig. 4 —0805 Super Thin

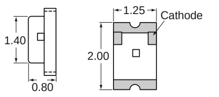
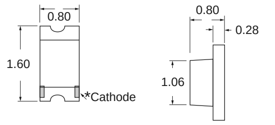


Fig. 5 — 0603



* Anode on part 160-1181

Fig. 6 — 0603 Super Thin

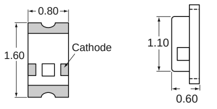


Fig. 7 — 0605 Dual LED

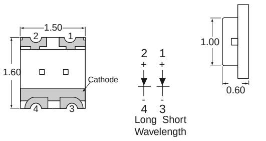


Fig. 8 — 1206 (Rear Mount)

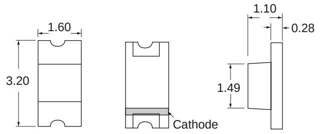
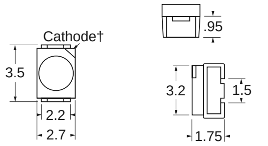


Fig. 9



† Anode on part 160-1123

Fig. 10— 0805 Right Angle

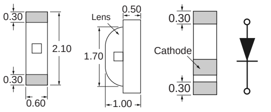


Fig. 11— 0603 Right Angle

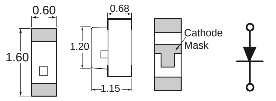


Fig. 12 — 1206 Right Angle

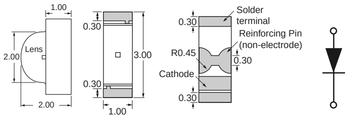


Fig. 13 — Domed

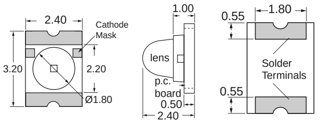


Fig.	Lens	Source Color	Wavelength λpk(nm)	VF (V)	If (mA)	Io (mcd)	Viewing Angle	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing	Liteon Part No.
1	Clear	Red	660	1.8	20	20	130	160-1167-1-ND	.28	2.35	18.80	160-1167-2-ND	3,000	141.00/M	LTST-C150CKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1168-1-ND	.17	1.38	11.00	160-1168-2-ND	3,000	82.50/M	LTST-C150EKT
	Clear	Amber	610	2.1	20	6	130	160-1166-1-ND	.17	1.38	11.00	160-1166-2-ND	3,000	82.50/M	LTST-C150AKT
	Clear	Yellow	585	2.1	20	6	130	160-1170-1-ND	.17	1.38	11.00	160-1170-2-ND	3,000	82.50/M	LTST-C150YKT
	Clear	Green	565	2.1	20	6	130	160-1169-1-ND	.17	1.38	11.00	160-1169-2-ND	3,000	82.50/M	LTST-C150GKT
2	Clear	Green/Yellow	565/585	2.1/2.1	20/20	6/6	130/130	160-1171-1-ND	.21	1.73	13.80	160-1171-2-ND	3,000	103.50/M	LTST-C155GYKT
	Clear	Green/Red	565/635	2.1/2.0	20/20	6/6	130/130	160-1172-1-ND	.21	1.73	13.80	160-1172-2-ND	3,000	103.50/M	LTST-C155GEKT
3	Clear	Red	660	1.8	20	90	130	160-1174-1-ND	.54	4.50	36.00	160-1174-2-ND	3,000	270.00/M	LTST-C170UKT
	Clear	Red	660	1.8	20	20	130	160-1176-1-ND	.30	2.50	20.00	160-1176-2-ND	3,000	150.00/M	LTST-C170CKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1178-1-ND	.17	1.38	11.00	160-1178-2-ND	3,000	82.50/M	LTST-C170EKT
	Clear	Amber	610	2.1	20	6	130	160-1177-1-ND	.17	1.38	11.00	160-1177-2-ND	3,000	82.50/M	LTST-C170AKT
	Clear	Yellow	585	2.1	20	6	130	160-1175-1-ND	.17	1.38	11.00	160-1175-2-ND	3,000	82.50/M	LTST-C170YKT
	Clear	Green	565	2.1	20	14.2	130	160-1173-1-ND	.17	1.38	11.00	160-1173-2-ND	3,000	82.50/M	LTST-C170FKT
	Clear	Green	565	2.1	20	6	130	160-1179-1-ND	.17	1.38	11.00	160-1179-2-ND	3,000	82.50/M	LTST-C170GKT
4	Clear	AlGaAs Red	660	1.8	20	20	130	160-1421-1-ND	.38	2.82	23.50	160-1421-2-ND	3,000	141.00/M	LTST-C171CKT
	Clear	Red/Orange	630	2.0	20	6	130	160-1422-1-ND	.22	1.65	13.75	160-1422-2-ND	3,000	82.50/M	LTST-C171EKT
	Clear	Amber	610	2.1	20	6	130	160-1419-1-ND	.22	1.65	13.75	160-1419-2-ND	3,000	82.50/M	LTST-C171AKT
	Clear	Yellow	585	2.1	20	6	130	160-1431-1-ND	.22	1.65	13.75	160-1431-2-ND	3,000	82.50/M	LTST-C171YKT
	Clear	Green	565	2.1	20	6	130	160-1423-1-ND	.22	1.65	13.75	160-1423-2-ND	3,000	82.50/M	LTST-C171GKT
5	Clear	Red	660	1.8	20	20	130	160-1181-1-ND	.28	2.35	18.80	160-1181-2-ND	3,000	141.00/M	LTST-C190CKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1182-1-ND	.17	1.38	11.00	160-1182-2-ND	3,000	82.50/M	LTST-C190EKT
	Clear	Amber	610	2.1	20	6	130	160-1180-1-ND	.17	1.38	11.00	160-1180-2-ND	3,000	82.50/M	LTST-C190AKT
	Clear	Yellow	585	2.1	20	6	130	160-1184-1-ND	.17	1.38	11.00	160-1184-2-ND	3,000	82.50/M	LTST-C190YKT
	Clear	Green	565	2.1	20	6	130	160-1183-1-ND	.17	1.38	11.00	160-1183-2-ND	3,000	82.50/M	LTST-C190GKT
6	Clear	Red/Orange	630	2.0	20	4.5	130	160-1442-1-ND	.22	1.65	13.75	160-1442-2-ND	5,000	82.50/M	LTST-C191EKT
	Clear	Amber	610	2.1	20	4.5	130	160-1440-1-ND	.22	1.65	13.75	160-1440-2-ND	5,000	82.50/M	LTST-C191AKT
	Clear	Yellow	585	2.1	20	4.5	130	160-1449-1-ND	.22	1.65	13.75	160-1449-2-ND	5,000	82.50/M	LTST-C191YKT
	Clear	Green	565	2.1	20	12	130	160-1443-1-ND	.22	1.65	13.75	160-1443-2-ND	5,000	82.50/M	LTST-C191GKT
7	Clear	Green/Orange Red	565/630	2.1/2.0	20/20	10/4.5	130/130	160-1450-1-ND	.28	2.07	17.25	160-1450-2-ND	4,000	103.50/M	LTST-C195GEKT
	Clear	Green/Yellow	565/565	2.1/2.1	20/20	10/4.5	130/130	160-1451-1-ND	.28	2.07	17.25	160-1451-2-ND	4,000	103.50/M	LTST-C195GYKT
8	Clear	Red	660	1.8	20	20	130	160-1186-1-ND	.28	2.35	18.80	160-1186-2-ND	3,000	141.00/M	LTST-C230CKT
	Clear	Red/Orange	635	2.0	20	6	130	160-1187-1-ND	.17	1.38	11.00	160-1187-2-ND	3,000	82.50/M	LTST-C230EKT
	Clear	Amber	610	2.1	20	6	130	160-1185-1-ND	.17	1.38	11.00	160-1185-2-ND	3,000	82.50/M	LTST-C230AKT
	Clear	Yellow	585	2.1	20	6	130	160-1189-1-ND	.17	1.38	11.00	160-1189-2-ND	3,000	82.50/M	LTST-C230YKT
	Clear	Green	565	2.1	20	6	130	160-1188-1-ND	.17	1.38	11.00	160-1188-2-ND	3,000	82.50/M	LTST-C230GKT
9	Water Clear	Red/Orange	630	2.0	20	10	120	160-1119-1-ND	.27	2.28	18.20	160-1119-2-ND	1,500	137.00/M	LTL-94PEKTA
	Water Clear	Amber	610	2.1	20	10	120	160-1121-1-ND	.27	2.28	18.20	160-1121-2-ND	1,500	137.00/M	LTL-94PAKTA
	Water Clear	Yellow	585	2.1	20	7	120	160-1122-1-ND	.27	2.28	18.20	160-1122-2-ND	1,500	137.00/M	LTL-94PYKTA
	Water Clear	Green	565	2.1	20	10	120	160-1120-1-ND	.27	2.28	18.20	160-1120-2-ND	1,500	137.00/M	LTL-94PGKTA
10	Clear	Red/Orange	630	2.0	20	4	130	160-1220-1-ND	.22	1.65	13.75	160-1220-2-ND	4,000	82.50/M	LTST-S220EKT
	Clear	Yellow	585	2.1	20	4	130	160-1219-1-ND	.22	1.65	13.75	160-1219-2-ND	4,000	82.50/M	LTST-S220YKT
	Clear	Green	565	2.1	20	10	130	160-1218-1-ND	.22	1.65	13.75	160-1218-2-ND	4,000	82.50/M	LTST-S220GKT
11	Clear	AlGaAs Red	660	1.8	20	16	130	160-1473-1-ND	.38	2.82	23.50	160-1473-2-ND	4,000	141.00/M	LTST-S270CKT
	Clear	Red/Orange	630	2.0	20	4	130	160-1474-1-ND	.22	1.65	13.75	160-1474-2-ND	4,000	82.50/M	LTST-S270EKT
	Clear	Amber	610	2.1	20	4	130	160-1472-1-ND	.22	1.65	13.75	160-1472-2-ND	4,000	82.50/M	LTST-S270AKT
	Clear	Yellow	585	2.1	20	4	130	160-1482-1-ND	.22	1.65	13.75	160-1482-2-ND	4,000	82.50/M	LTST-S270YKT
	Clear	Green	565	2.1	20	10	130	160-1475-1-ND	.22	1.65	13.75	160-1475-2-ND	4,000	82.50/M	LTST-S270GKT
12	Clear	Red/Orange	635	2.0	20	4	130	160-1208-1-ND	.22	1.65	13.75	160-1208-2-ND	3,000	82.50/M	LTST-S320EKT
	Clear	Yellow	585	2.1	20	4	130	160-1207-1-ND	.22	1.65	13.75	160-1207-2-ND	3,000	82.50/M	LTST-S320YKT
	Clear	Green	565	2.1	20	10	130	160-1206-1-ND	.22	1.65	13.75	160-1206-2-ND	3,000	82.50/M	LTST-S320GKT
13	Clear	Red/Orange	635	2.0	20	25	25	160-1214-1-ND	.22	1.65	13.75	160-1214-2-ND	1,500	82.50/M	LTST-C930EKT
	Clear	Yellow	585	2.1	20	16	25	160-1213-1-ND	.22	1.65	13.75	160-1213-2-ND	1,500	82.50/M	LTST-C930YKT
	Clear	Green	565	2.1	20	40	25	160-1212-1-ND	.22	1.65	13.75	160-1212-2-ND	1,500	82.50/M	LTST-C930GKT

(Continued)

Blue Surface Mount LEDs

Fig.	Lens	Source Color	Wavelength λpk(nm)	VF (V)	If (mA)	Io (mcd)	Viewing Angle	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Liteon Part No.
1	Clear	Blue	468	3.7	20	25	130	160-1401-1-ND	1.94	14.58	121.50	160-1401-2-ND	3,000	729.00/M	LTST-C150CBKT
3	Clear	Blue	468	3.5	20	22.4	130	160-1411-1-ND	1.94	14.58	121.50	160-1411-2-ND	3,000	729.00/M	LTST-C170CBKT
4	Clear	Blue	468	3.7	20	25	130	160-1420-1-ND	1.94	14.58	121.50	160-1420-2-ND	3,000	729.00/M	LTST-C171CBKT
5	Clear	Blue	468	3.7	20	20	130	160-1432-1-ND	1.94	14.58	121.50	160-1432-2-ND	3,000	729.00/M	LTST-C190CBKT
6	Clear	Blue	468	3.7	20	25	130	160-1441-1-ND	1.94	14.58	121.50	160-1441-2-ND	5,000	729.00/M	LTST-C191CBKT
8	Clear	Blue	468	3.7	20	25	130	160-1454-1-ND	1.94	14.58	121.50	160-1454-2-ND	3,000	729.00/M	LTST-C230CBKT
10	Clear	Blue	468	3.7	20	25	130	160-1466-1-ND	1.94	14.58	121.50	160-1466-2-ND	4,000	729.00/M	LTST-S220CBKT
12	Clear	Blue	468	3.7	20	25	130	160-1483-1-ND	1.94	14.58	121.50	160-1483-2-ND	3,000	729.00/M	LTST-S320CBKT
13	Clear	Blue	468	3.7	20	180	25	160-1460-1-ND	2.28	17.10	142.50	160-1460-2-ND	1,500	855.00/M	LTST-C930CBKT

Ultra-Bright AlInGaP Surface Mount LEDs

Fig.	Lens	Source Color	Wavelength λpk(nm)	VF (V)	If (mA)	Io (mcd)	Viewing Angle	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Liteon Part No.
1	Clear	Super Red	639	2.0	20	80	130	160-1405-1-ND	.22	1.65	13.75	160-1405-2-ND	3,000	82.50/M	LTST-C150KRKT
	Clear	Red/Orange	621	2.0	20	80	130	160-1402-1-ND	.22	1.65	13.75	160-1402-2-ND	3,000	82.50/M	LTST-C150KAKT
	Clear	Yellow/Orange	611	2.0	20	80	130	160-1403-1-ND	.22	1.65	13.75	160-1403-2-ND	3,000	82.50/M	LTST-C150KFKT
	Clear	Amber/Yellow	598	2.0	20	80	130	160-1407-1-ND	.22	1.65	13.75	160-1407-2-ND	3,000	82.50/M	LTST-C150KYKT
	Clear	Yellow	591	2.0	20	50	130	160-1406-1-ND	.22	1.65	13.75	160-1406-2-ND	3,000	82.50/M	LTST-C150KSKT
	Clear	Green	574	2.0	20	35	130	160-1404-1-ND	.30	2.25	18.75	160-1404-2-ND	3,000	112.50/M	LTST-C150KGKT
2	Clear	Green/Red	574/639	2.0/2.0	20/20	35/25	130/130	160-1409-1-ND	.37	2.79	23.25	160-1409-2-ND	3,000	139.50/M	LTST-C155KGJRKT
	Clear	Green/Yellow	574/591	2.0/2.0	20/20	35/30	130/130	160-1410-1-ND	.37	2.79	23.25	160-1410-2-ND	3,000	139.50/M	LTST-C155KGJSKT
3	Clear	Super Red	639	2.0	20	80	130	160-1415-1-ND	.22	1.65	13.75	160-1415-2-ND	3,000	82.50/M	LTST-C170KRKT
	Clear	Red/Orange	621	2.0	20	80	130	160-1412-1-ND	.26	1.95	16.25	160-1412-2-ND	3,000	97.50/M	LTST-C170KAKT
	Clear	Yellow/Orange	611	2.0	20	80	130	160-1413-1-ND	.22	1.65	13.75	160-1413-2-ND	3,000	82.50/M	LTST-C170KFKT
	Clear	Amber/Yellow	598	2.0	20	80	130	160-1417-1-ND	.22	1.65	13.75	160-1417-2-ND	3,000	82.50/M	LTST-C170KYKT
	Clear	Yellow	591	2.0	20	50	130	160-1416-1-ND	.22	1.65	13.75	160-1416-2-ND	3,000	82.50/M	LTST-C170KSKT
	Clear	Green	574	2.0	20	35	130	160-1414-1-ND	.22	1.65	13.75	160-1414-2-ND	3,000	82.50/M	LTST-C170KGKT
4	Clear	Super Red	639	2.0	20	54	130	160-1427-1-ND	.22	1.65	13.75	160-1427-2-ND	3,000	82.50/M	LTST-C171KRKT
	Clear	Red/Orange	621	2.0	20	55	130	160-1424-1-ND	.22	1.65	13.75	160-1424-2-ND	3,000	82.50/M	LTST-C171KAKT
	Clear	Yellow/Orange	611	2.0	20	60	130	160-1425-1-ND	.22	1.65	13.75	160-1425-2-ND	3,000	82.50/M	LTST-C171KFKT
	Clear	Amber/Yellow	595	2.0	20	50	130	160-1429-1-ND	.22	1.65	13.75	160-1429-2-ND	3,000	82.50/M	LTST-C171KYKT
	Clear	Yellow	588	2.0	20	60	130	160-1428-1-ND	.22	1.65	13.75	160-1428-2-ND	3,000	82.50/M	LTST-C171KSKT
	Clear	Green	574	2.0	20	35	130	160-1426-1-ND	.30	2.25	18.75	160-1426-2-ND	3,000	112.50/M	LTST-C171KGKT
5	Clear	Super Red	639	2.0	20	80	130	160-1436-1-ND	.22	1.65	13.75	160-1436-2-ND	3,000	82.50/M	LTST-C190KRKT
	Clear	Red/Orange	621	2.0	20	80	130	160-1433-1-ND	.26	1.95	16.25	160-1433-2-ND	3,000	97.50/M	LTST-C190KAKT
	Clear	Yellow/Orange	611	2.0	20	80	130	160-1434-1-ND	.22	1.65	13.75	160-1434-2-ND	3,000	82.50/M	LTST-C190KFKT
	Clear	Amber/Yellow	598	2.0	20	80	130	160-1438-1-ND	.26	1.95	16.25	160-1438-2-ND	3,000	97.50/M	LTST-C190KYKT
	Clear	Yellow	591	2.0	20	50	130	160-1437-1-ND	.22	1.65	13.75	160-1437-2-ND	3,000	82.50/M	LTST-C190KSKT
	Clear	Green	574	2.0	20	35	130	160-1435-1-ND	.22	1.65	13.75	160-1435-2-ND	3,000	82.50/M	LTST-C190KGKT
6	Clear	Super Red	639	2.0	20	54	130	160-1447-1-ND	.22	1.65	13.75	160-1447-2-ND	5,000	82.50/M	LTST-C191KRKT
	Clear	Red/Orange	621	2.0	20	55	130	160-1444-1-ND	.22	1.65	13.75	160-1444-2-ND	5,000	82.50/M	LTST-C191KAKT
	Clear	Yellow/Orange	611	2.0	20	60	130	160-1445-1-ND	.22	1.65	13.75	160-1445-2-ND	5,000	82.50/M	LTST-C191KFKT
	Clear	Yellow	591	2.0	20	60	130	160-1448-1-ND	.22	1.65	13.75	160-1448-2-ND	5,000	82.50/M	LTST-C191KSKT
	Clear	Green	574	2.0	20	35	130	160-1446-1-ND	.30	2.25	18.75	160-1446-2-ND	5,000	112.50/M	LTST-C191KGKT
7	Clear	Green/Red	574/639	2.0/2.0	20/20	35/25	130/130	160-1452-1-ND	.37	2.79	23.25	160-1452-2-ND	4,000	139.50/M	LTST-C195KGJRKT
	Clear	Green/Yellow	574/591	2.0/2.0	20/20	35/30	130/130	160-1453-1-ND	.37	2.79	23.25	160-1453-2-ND	4,000	139.50/M	LTST-C195KGJSKT
8	Clear	Super Red	639	2.0	20	54	130	160-1457-1-ND	.22	1.65	13.75	160-1457-2-ND	3,000	82.50/M	LTST-C230KRKT
	Clear	Red/Orange	621	2.0	20	55	130	160-1455-1-ND	.22	1.65	13.75	160-1455-2-ND	3,000	82.50/M	LTST-C230KAKT
	Clear	Yellow	588	2.0	20	60	130	160-1458-1-ND	.22	1.65	13.75	160-1458-2-ND	3,000	82.50/M	LTST-C230KSKT
	Clear	Green	574	2.0	20	35	130	160-1456-1-ND	.30	2.25	18.75	160-1456-2-ND	3,000	112.50/M	LTST-C230KGKT
10	Clear	Super Red	639	2.0	20	54	130	160-1469-1-ND	.22	1.65	13.75	160-1469-2-ND	4,000	82.50/M	LTST-S220KRKT
	Clear	Red/Orange	621	2.0	20	55	130	160-1467-1-ND	.22	1.65	13.75	160-1467-2-ND	4,000	82.50/M	LTST-S220KAKT
	Clear	Yellow	588	2.0	20	60	130	160-1470-1-ND	.22	1.65	13.75	160-1470-2-ND	4,000	82.50/M	LTST-S220KSKT
	Clear	Green	574	2.0	20	35	130	160-1468-1-ND	.30	2.25	18.75	160-1468-2-ND	4,000	112.50/M	LTST-S220KGKT
11	Clear	Super Red	639	2.0	20	54	130	160-1479-1-ND	.22	1.65	13.75	160-1479-2-ND	4,000	82.50/M	LTST-S270KRKT
	Clear	Red/Orange	621	2.0	20	55	130	160-1476-1-ND	.22	1.65	13.75	160-1476-2-ND	4,000	82.50/M	LTST-S270KAKT
	Clear	Yellow/Orange	611	2.0	20	60	130	160-1477-1-ND	.22	1.65	13.75	160-1477-2-ND	4,000	82.50/M	LTST-S270KFKT
	Clear	Amber/Yellow	595	2.0	20	50	130	160-1481-1-ND	.22	1.65	13.75	160-1481-2-ND	4,000	82.50/M	LTST-S270KYKT
	Clear	Yellow	591	2.0	20	60	130	160-1480-1-ND	.22	1.65	13.75	160-1480-2-ND	4,000	82.50/M	LTST-S270KSKT
	Clear	Green	574	2.0	20	35	130	160-1478-1-ND	.30	2.25	18.75	160-1478-2-ND	4,000	112.50/M	LTST-S270KGKT
12	Clear	Super Red	639	2.0	20	54	130	160-1487-1-ND	.22	1.65	13.75	160-1487-2-ND	3,000	82.50/M	LTST-S320KRKT
	Clear	Red/Orange	621	2.0	20	55	130	160-1484-1-ND	.22	1.65	13.75	160-1484-2-ND	3,000	82.50/M	LTST-S320KAKT
	Clear	Yellow/Orange	611	2.0	20	60	130	160-1485-1-ND	.22	1.65	13.75	160-1485-2-ND	3,000	82.50/M	LTST-S320KFKT
	Clear	Amber/Yellow	595	2.0	20	50	130	160-1489-1-ND	.22	1.65	13.75	160-1489-2-ND	3,000	82.50/M	LTST-S320KYKT
	Clear	Yellow	588	2.0	20	60	130	160-1488-1-ND	.22	1.65	13.75	160-1488-2-ND	3,000	82.50/M	LTST-S320KSKT
	Clear	Green	574	2.0	20	35	130	160-1486-1-ND	.30	2.25	18.75	160-1486-2-ND	3,000	112.50/M	LTST-S320KGKT
13	Clear	Super Red	639	2.0	20	850	25	160-1463-1-ND	.26	1.95	16.25	160-1463-2-ND	1,500	97.50/M	LTST-C930KRKT
	Clear	Red/Orange	621	2.0	20	1050	25	160-1461-1-ND	.26	1.95	16.25	160-1461-2-ND	1,500	97.50/M	LTST-C930KAKT
	Clear	Yellow	591	2.0	20	800	25	160-1464-1-ND	.26	1.95	16.25	160-1464-2-ND	1,500	97.50/M	LTST-C930KSKT
	Clear	Green	574	2.0	20	365	25	160-1462-1-ND	.30	2.25	18.75	160-1462-2-ND	1,500	112.50/M	LTST-C930KGKT

Infrared Emitting Diodes, Photodetectors and Photodiodes

Features of Infrared Emitting Diodes: • Selected to specific on-line intensity and radiant intensity ranges • Low cost plastic end looking package • Made with gallium aluminum arsenide window layer on gallium arsenide infrared emitting diodes

Features of Photodetectors and Photodiodes: • Lensed for high sensitivity • Low cost plastic package

Fig. 1

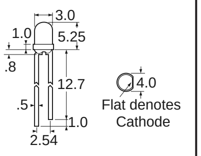


Fig. 2

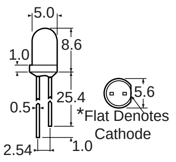


Fig. 3

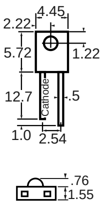
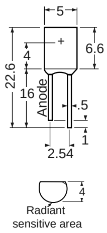


Fig. 4



Infrared Emitting Diodes

Fig.	Vf	Vr	I (ma)	Ipk amps	Viewing angle	Digi-Key Part No.	Pricing 1	10	100
1	1.2	5	50	3	20°	160-1028-ND	.26	2.13	17.00
2	1.2	5	50	3	20°	160-1029-ND	.26	2.13	17.00
2	1.2	5	50	3	40°	160-1061-ND	.26	2.13	17.00
2	1.3	7.2	150	3	35°	160-1062-ND	.30	2.50	20.00
3	1.2	5	50	3	40°	160-1063-ND	.29	2.38	19.00

Matching Photodetectors

Fig.	Vce	Vec	On-State I (ma)	Rise/Fall (us)	Digi-Key Part No.	Pricing 1	10	100
1	30	5	2	5	160-1030-ND	.41	3.38	27.00
2	30	5	2	5	160-1031-ND	.42	3.50	28.00
3	30	5	1	5	160-1065-ND	.27	2.25	18.00

Photodiodes

Fig.	Description	Digi-Key Part No.	Pricing 1	10	100
4	Black Plastic Diode	160-1032-ND	.47	3.88	31.00

Absolute Max. Ratings at $T_A = 25°C$, $\lambda = 940nm$

Fig. 1

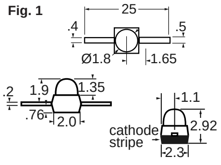


Fig. 2

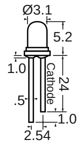


Fig. 3

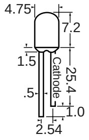


Fig. 4

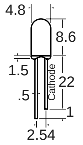


Fig. 5

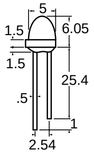


Fig. 6

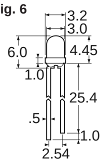


Fig. 7

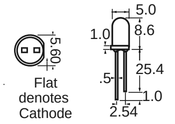


Fig. 8

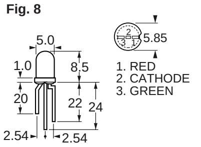


Fig. 9

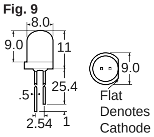


Fig. 10

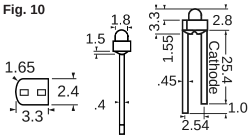


Fig. 11

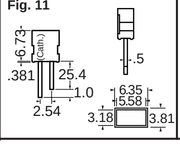


Fig. 12

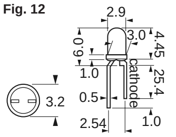


Fig. 13

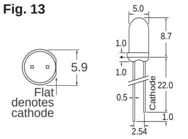
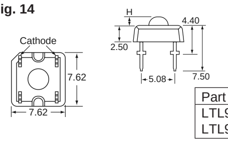


Fig. 14



Part No.	H
LTL911xxx	1.50
LTL912xxx	1.90

Fig.	Description	Lens	Source Color (Peak Wavelength)	VF	Io (mcd)	Viewing Angle	If (mA)	Digi-Key Part No.	Pricing 1	Pricing 10	Pricing 100	Liteon Part No.
Standard LEDs												
1	Sub-Mini	Water Clear	Green	2.1	15.0	34	30	160-1070-ND	.26	2.13	17.00	LTL-93BGK1
	Sub-Mini	Green Diff.	Green	2.1	2.5	90	30	160-1073-ND	.29	2.38	19.00	LTL-93BGA1
2	T-1 Double Flange	Red Diff.	Hi. Eff. Red	2.0	19.0	60	30	160-1078-ND	—	.98	7.80	LTL-16KE
	T-1 Double Flange	Yellow Diff.	Yellow	2.1	12.6	60	20	160-1079-ND	—	.98	7.80	LTL-16KY
	T-1 Double Flange	Green Diff.	Green	2.1	12.6	60	30	160-1080-ND	—	.98	7.80	LTL-16KG
	T-1 Double Flange	Red	Hi. Eff. Red	2.0	29.0	45	30	160-1081-ND	—	.98	7.80	LTL-16KEE
	T-1 Double Flange	Yellow	Yellow	2.1	19.0	45	20	160-1082-ND	—	.98	7.80	LTL-16KYE
	T-1 Double Flange	Green	Green	2.1	40.0	45	30	160-1083-ND	—	.98	7.80	LTL-16KGE
3	T-1 3/4 No Flange	Red Diff.	Hi. Eff. Red	2.0	5.6	60	30	160-1087-ND	—	.98	7.80	LTL-10223W
	T-1 3/4 No Flange	Yellow Diff.	Yellow	2.1	12.6	60	20	160-1088-ND	—	.98	7.80	LTL-10253W
	T-1 3/4 No Flange	Green Diff.	Green	2.1	5.6	60	30	160-1089-ND	—	.98	7.80	LTL-10233W
4	T-1 3/4 No Flange	Red Diff.	Hi. Eff. Red	2.0	19	45	30	160-1090-ND	—	1.43	11.40	LTL-307ENF-D
	T-1 3/4 No Flange	Green Diff.	Green	2.1	8.7	60	30	160-1091-ND	—	1.43	11.40	LTL-307GNF-D
5	Lo Profile T-1 3/4	Red Diff.	Hi. Eff. Red	2.0	4.0	64	30	160-1093-ND	—	1.15	9.20	LTL-5223
	Lo Profile T-1 3/4	Yellow Diff.	Yellow	2.2	4.0	64	20	160-1094-ND	—	1.15	9.20	LTL-5253
	Lo Profile T-1 3/4	Green Diff.	Green	2.2	4.0	64	30	160-1095-ND	—	1.15	9.20	LTL-5233
	Lo Profile T-1 3/4	Red	Hi. Eff. Red	2.0	8.0	44	30	160-1096-ND	—	1.15	9.20	LTL-5224
	Lo Profile T-1 3/4	Yellow	Yellow	2.1	12.6	44	20	160-1097-ND	—	1.15	9.20	LTL-5254
	Lo Profile T-1 3/4	Green	Green	2.2	14.0	44	30	160-1098-ND	—	1.15	9.20	LTL-5234
6	T-1 Ultrabright	Water Clear	Red	2.4	80	45	40	160-1034-ND	.21	1.78	14.20	LTL-4266N
	T-1 Ultrabright	Red Diff.	Red	2.4	48	60	40	160-1035-ND	.21	1.78	14.20	LTL-4261N
	T-1 B-Color	White Diff.	H.E. Red/Grn.	2.0/2.1	4.8/4.8	200	30	160-1058-ND	.36	3.00	24.00	LTL-14CHJ
7	T-1 3/4 Bi-Color	White Diff.	Red/Green	2.0/2.8	1.2/8.7	50	40/30	160-1036-ND	.39	3.25	26.00	LTL-298VJ
	T-1 3/4 Bi-Color	White Diff.	Green/Red	2.1/2.0	8.7/5.5	50	30	160-1037-ND	.39	3.25	26.00	LTL-298WJ
	T-1 3/4 Ultrabright Bi-Color	White Diff.	Red/Green	1.8/2.1	35/16	80	40/30	160-1038-ND	.47	3.88	31.00	LTL-293SJW
	T-1 3/4 Super Bright	Water Clear	Red	1.8	1500	16	40	160-1104-ND*	.45	3.75	30.00	LTL-4268UR
8	T-1 3/4 Ultrabright Bi-Color	White Diff.	Green/Red	2.0/2.1	40/20	30	30	160-1057-ND	.39	3.25	26.00	LTL-30EHJ
9	8mm	Red Diff.	Hi. Eff. Red	2.8	12.6	46	30	160-1039-ND	.27	2.28	18.20	LTL-327HR
	8mm	Green Diff.	Green	2.8	12.6	46	30	160-1040-ND	.27	2.28	18.20	LTL-327G
	8mm	Yellow Diff.	Yellow	2.8	12.6	46	20	160-1041-ND	.27	2.28	18.20	LTL-327Y
10	1.8mm Dot Point	Red	Hi. Eff. Red	2.0	3.0	38	30	160-1084-ND	.19	1.58	12.60	LTL-709E
	1.8mm Dot Point	Yellow	Yellow	2.1	1.5	38	30	160-1085-ND	.20	1.63	13.00	LTL-709Y
	1.8mm Dot Point	Green	Green	2.1	3.5	38	20	160-1086-ND	.20	1.63	13.00	LTL-709L
11	Rectangular	Red	Hi. Eff. Red	2.0	3.8	100	30	160-1099-ND	.35	2.90	23.20	LTL-33221AA
	Rectangular	Green	Green	2.1	5.6	100	30	160-1100-ND	.35	2.90	23.20	LTL-33231AA
	Rectangular	Yellow	Yellow	2.1	5.6	100	20	160-1101-ND	.35	2.90	23.20	LTL-33251AA
7	T-1 3/4	Red Diff.	Red	1.7	0.8	36	20	160-1124-ND	.23	1.75	12.25	LTL-4203
	T-1 3/4	Red Trans.	Red	1.7	5.5	16	20	160-1125-ND	.23	1.75	12.25	LTL-4204
	T-1 3/4	Clear	Red	1.7	5.5	16	20	160-1126-ND	.23	1.75	12.25	LTL-4208
	T-1 3/4	Red Diff.	Hi Eff. Red	2.0	8.7	36	20	160-1127-ND	.23	1.75	12.25	LTL-4223
	T-1 3/4	Red Trans.	Hi Eff. Red	2.0	40	16	20	160-1128-ND	.23	1.75	12.25	LTL-4224
	T-1 3/4	Green Diff.	Green	2.1	8.7	36	20	160-1130-ND	.23	1.75	12.25	LTL-4233
	T-1 3/4	Green Trans.	Green	2.1	40	16	20	160-1131-ND	.23	1.75	12.25	LTL-4234
	T-1 3/4	Clear	Green	2.1	60	16	20	160-1132-ND	.23	1.75	12.25	LTL-4238
	T-1 3/4	Yellow Diff.	Yellow	2.1	8.7	36	20	160-1133-ND	.23	1.75	12.25	LTL-4253
	T-1 3/4	Yellow Trans.	Yellow	2.1	40	16	20	160-1134-ND	.23	1.75	12.25	LTL-4254
12	T-1	Red Diff.	Red	1.7	0.8	60	20	160-1136-ND	.23	1.75	12.25	LTL-4201N
	T-1	Clear	Red	1.7	3.7	45	20	160-1138-ND	.23	1.75	12.25	LTL-4206N
	T-1	Red Diff.	Hi Eff. Red	2.0	5.6	60	20	160-1139-ND	.23	1.75	12.25	LTL-4221N
	T-1	Red Trans.	Hi Eff. Red	2.0	12.6	45	20	160-1140-ND	.23	1.75	12.25	LTL-4222N
	T-1	Clear	Orange	2.0	12.6	45	20	160-1141-ND	.23	1.75	12.25	LTL-4296N
	T-1	Green Diff.	Green	2.1	5.6	60	20	160-1142-ND	.23	1.75	12.25	LTL-4231N
	T-1	Green Trans.	Green	2.1	12.6	45	20	160-1143-ND	.23	1.75	12.25	LTL-4232N
	T-1	Clear	Green	2.1	12.6	45	20	160-1144-ND	.23	1.75	12.25	LTL-4236N
	T-1	Yellow Diff.	Yellow	2.1	5.6	60	20	160-1145-ND	.23	1.75	12.25	LTL-4251N
	T-1	Yellow Trans.	Yellow	2.1	12.6	45	20	160-1146-ND	.23	1.75	12.25	LTL-4252N
	T-1	Clear	Yellow	2.1	12.6	45	20	160-1147-ND	.23	1.75	12.25	LTL-4256N
Super Bright AlInGaP LEDs												
13	T-1 3/4	Water Clear	Super Red (639)	1.9	6800	8	50	160-1491-ND	.43	3.60	28.80	LTL-2F3VRKNT
	T-1 3/4	Water Clear	Red (632)	2.0	8500	8	50	160-1492-ND	.43	3.60	28.80	LTL-2F3VEKNT
	T-1 3/4	Water Clear	Red-Orange (624)	2.0	9000	8	50	160-1493-ND	.43	3.60	28.80	LTL-2F3VHKNT
	T-1 3/4	Water Clear	Super Orange (621)	2.0	9000	8	50	160-1494-ND	.43	3.60	28.80	LTL-2F3VAKNT
	T-1 3/4	Water Clear	Yellow-Orange (611)	2.0	9000	8	50	160-1495-ND	.43	3.60	28.80	LTL-2F3VFKNT
	T-1 3/4	Water Clear	Amber-Yellow (595)	2.0	9000	8	50	160-1496-ND	.43	3.60	28.80	LTL-2F3VYKNT
	T-1 3/4	Water Clear	Yellow (588)	2.0	8500	8	50	160-1497-ND	.43	3.60	28.80	LTL-2F3VSKNT
	T-1 3/4	Water Clear	Super Red (639)	1.9	1150	30	50	160-1498-ND	.43	3.60	28.80	LTL-2R3VRKNT
	T-1 3/4	Water Clear	Red (632)	2.0	1500	30	50	160-1499-ND	.43	3.60	28.80	LTL-2R3VEKNT
	T-1 3/4	Water Clear	Red-Orange (624)	2.0	1600	30	50	160-1500-ND	.43	3.60	28.80	LTL-2R3VHKNT
	T-1 3/4	Water Clear	Super Orange (621)	2.0	1600	30	50	160-1501-ND	.43	3.60	28.80	LTL-2R3VAKNT
	T-1 3/4	Water Clear	Yellow-Orange (611)	2.0	1600	30	50	160-1502-ND	.43	3.60	28.80	LTL-2R3VFKNT
	T-1 3/4	Water Clear	Amber-Yellow (595)	2.0	1600	30	50	160-1503-ND	.43	3.60	28.80	LTL-2R3VYKNT
	T-1 3/4	Water Clear	Yellow (588)	2.0	1500	30	50	160-1504-ND	.43	3.60	28.80	LTL-2R3VSKNT
14	7.62mm Sq	Water Clear	Super Red (639)	2.15	940	90	70	160-1505-ND	.53	4.38	35.00	LTL-911VRKSA
	7.62mm Sq	Water Clear	Red (632)	2.15	1250	90	70	160-1506-ND	.53	4.38	35.00	LTL-911VEKSA
	7.62mm Sq	Water Clear	Red-Orange (624)	2.15	1250	90	70	160-1507-ND	.53	4.38	35.00	LTL-911VHKSA
	7.62mm Sq	Water Clear	Amber-Yellow (595)	2.15	1250	90	70	160-1508-ND	.53	4.38	35.00	LTL-911VYKSA
	7.62mm Sq	Water Clear	Super Red (639)	2.15	1880	60	70	160-1509-ND	.53	4.38	35.00	LTL-912VRKSA
	7.62mm Sq	Water Clear	Red (632)	2.15	2500	60	70	160-1510-ND	.53	4.38	35.00	LTL-912VEKSA
	7.62mm Sq	Water Clear	Red-Orange (624)	2.15	2500	60	70	160-1511-ND	.53	4.38	35.00	LTL-912VHKSA
	7.62mm Sq	Water Clear	Amber-Yellow (595)	2.15	2500	60	70	160-1512-ND	.53	4.38	35.00	LTL-912VYKSA

* For part number 160-1104-ND, flat denotes anode

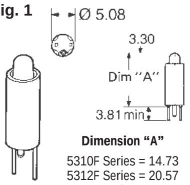
CHICAGO MINIATURE LAMP, INC.
WHERE INNOVATION COMES TO LIGHT

PC Board Mounted LEDs

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Pricing 1	25	100	250	Chicago Miniature Part No.
T1									
1	Red	10	2.0	L20261-ND	1.10	22.33	64.60	142.50	5310F1
	Green	20	2.2	L20265-ND	1.10	22.33	64.60	142.50	5310F5
	Yellow	20	2.1	L20267-ND	1.10	22.33	64.60	142.50	5310F7
	Green	20	2.2	L20275-ND	1.10	22.33	64.60	142.50	5312F5
	Yellow	20	2.1	L20277-ND	1.10	22.33	64.60	142.50	5312F7
	Red	10	2.0	L20281-ND	1.10	22.33	64.60	142.50	5315F1
	Green	20	2.2	L20285-ND	1.10	22.33	64.60	142.50	5315F5
2	Red	10	2.0	L20151-ND	2.23	45.24	130.90	288.75	5360F1
	Green	20	2.2	L20155-ND	2.23	45.24	130.90	288.75	5360F5
	Yellow	20	2.1	L20157-ND	2.23	45.24	130.90	288.75	5360F7
3	Red	10	2.0	L20321-ND	.58	11.75	34.00	75.00	5600F1
	Green	20	2.2	L20325-ND	.58	11.75	34.00	75.00	5600F5
	Yellow	20	2.1	L20327-ND	.58	11.75	34.00	75.00	5600F7
	Red	10	5.0	L20331-ND	.84	17.04	49.30	108.75	5602F1-5V
	Amber	10	5.0	L20333-ND	.84	17.04	49.30	108.75	5602F3-5V
	Green	12	5.0	L20335-ND	.84	17.04	49.30	108.75	5602F5-5V
4	Red	20	1.8	L20191-ND	1.02	20.56	59.50	131.25	5608F1
	Green	20	2.3	L20195-ND	1.02	20.56	59.50	131.25	5608F5
	Yellow	20	2.2	L20197-ND	1.02	20.56	59.50	131.25	5608F7
5	Red	10	2.0	L20361-ND	.55	11.16	32.30	71.25	5650F1
	Green	20	2.2	L20365-ND	.55	11.16	32.30	71.25	5650F5
	Yellow	20	2.1	L20367-ND	.55	11.16	32.30	71.25	5650F7
	Red	2.0	1.8	L20371-ND	.70	14.10	40.80	90.00	5650F1LC
	Red	13	5.0	L20381-ND	.84	17.04	49.30	108.75	5652F1-5V
6	Red	10	2.0	L20401-ND	.90	18.21	52.70	116.25	5680F1;1
	Green	20	2.2	L20405-ND	.90	18.21	52.70	116.25	5680F5;5
	Yellow	20	2.1	L20407-ND	.90	18.21	52.70	116.25	5680F7;7
7	Red	10	2.2	L20411-ND	.90	18.21	52.70	116.25	6321F1
	Green	10	2.3	L20415-ND	.90	18.21	52.70	116.25	6321F5
	Yellow	10	2.2	L20417-ND	.90	18.21	52.70	116.25	6321F7
8	Red	10	2.0	L20421-ND	1.10	22.33	64.60	142.50	5322F1
	Green	20	2.2	L20425-ND	1.10	22.33	64.60	142.50	5322F5
	Yellow	20	2.1	L20427-ND	1.10	22.33	64.60	142.50	5322F7
	Red	10	2.0	L20431-ND	1.10	22.33	64.60	142.50	5320F1
	Yellow	20	2.1	L20437-ND	1.10	22.33	64.60	142.50	5320F7
	Red	10	2.0	L20441-ND	1.10	22.33	64.60	142.50	5321F1
	Green	20	2.2	L20445-ND	1.10	22.33	64.60	142.50	5321F5
9	Red	10	2.2	L2045111-ND	2.58	52.29	151.30	333.75	5693F1;1;1-A
	Green	10	2.3	L2045555-ND	2.58	52.29	151.30	333.75	5693F5;5;5-A
	Yellow	10	2.2	L2045777-ND	2.58	52.29	151.30	333.75	5693F7;7;7-A
10	Red	10	2.2	L20461111-ND	3.60	72.85	210.80	465.00	5694F1;1;1;1-A
	Green	10	2.3	L20465555-ND	3.60	72.85	210.80	465.00	5694F5;5;5;5-A
	Yellow	10	2.2	L20467777-ND	3.60	72.85	210.80	465.00	5694F7;7;7;-A
T 1 3/4									
11	Red	20	1.7	L20001-ND	.61	12.34	35.70	78.75	5300E1
	Red	20	2.0	L20011-ND	.44	8.81	25.50	56.25	5300H1
	Green	20	2.2	L20015-ND	.44	8.81	25.50	56.25	5300H5
	Yellow	20	2.1	L20017-ND	.44	8.81	25.50	56.25	5300H7
	Red	10	5.0	L20021-ND	.84	17.04	49.30	108.75	5302H1-5V
	Amber	10	5.0	L20023-ND	.84	17.04	49.30	108.75	5302H3-5V
	Green	20	5.0	L20025-ND	.84	17.04	49.30	108.75	5302H5-5V
	Red	2	1.8	L20031-ND	.58	11.75	34.00	75.00	5300H1LC
	Green	2	1.8	L20035-ND	.58	11.75	34.00	75.00	5300H5LC
	Yellow	2	1.9	L20037-ND	.58	11.75	34.00	75.00	5300H7LC
	Red	35	3.0	L20041-ND	.75	15.28	44.20	97.50	5308H1
	Green	20	2.5	L20045-ND	.75	15.28	44.20	97.50	5308H5
	Yellow	20	2.1	L20047-ND	.75	15.28	44.20	97.50	5308H7
11	Red/Green	10	2.2	L20048-ND	1.07	21.74	62.90	138.75	5300H1/5
12	Red	20	2.0	L20171-ND	.78	15.86	45.90	101.25	5306H1
	Amber	20	2.0	L20173-ND	.78	15.86	45.90	101.25	5306H3
	Green	20	2.2	L20175-ND	.78	15.86	45.90	101.25	5306H5
	Yellow	20	2.1	L20177-ND	.78	15.86	45.90	101.25	5306H7
13	Red	20	2.0	L20051-ND	.78	15.86	45.90	101.25	5307H1
	Green	20	2.2	L20055-ND	.78	15.86	45.90	101.25	5307H5
14	Red	20	2.0	L20061-ND	.78	15.86	45.90	101.25	5330H1
	Green	20	2.2	L20065-ND	.78	15.86	45.90	101.25	5330H5
	Yellow	20	2.2	L20067-ND	.78	15.86	45.90	101.25	5330H7
14	Red	20	2.0	L20731-ND	.78	15.86	45.90	101.25	5331H1
	Green	20	2.1	L20735-ND	.78	15.86	45.90	101.25	5331H5
	Yellow	20	2.1	L20737-ND	.78	15.86	45.90	101.25	5331H7
15	Red	20	2.0	L20251-ND	1.19	24.09	69.70	153.75	5341H1
	Green	20	2.1	L20255-ND	1.19	24.09	69.70	153.75	5341H5
	Yellow	20	2.1	L20257-ND	1.19	24.09	69.70	153.75	5341H7
16	Red	20	1.7	L20301-ND	.61	12.34	35.70	78.75	5380E1
	Red	20	2.0	L20311-ND	.61	12.34	35.70	78.75	5380H1
	Green	20	2.2	L20315-ND	.61	12.34	35.70	78.75	5380H5
	Yellow	20	2.1	L20317-ND	.61	12.34	35.70	78.75	5380H7
17	Red	20	2.0	L20161-ND	.67	13.51	39.10	86.25	5381H1
	Green	20	2.2	L20165-ND	.67	13.51	39.10	86.25	5381H5
	Yellow	20	2.1	L20167-ND	.67	13.51	39.10	86.25	5381H7
18	Red	20	1.7	L20341-ND	2.52	51.11	147.90	326.25	5640E1
	Red	20	2.0	L20351-ND	2.52	51.11	147.90	326.25	5640H1
	Green	20	2.2	L20355-ND	2.52	51.11	147.90	326.25	5640H5
	Yellow	20	2.1	L20357-ND	2.52	51.11	147.90	326.25	5640H7
19	Red	20	2.0	L20391-ND	1.39	28.20	81.60	180.00	5670H1;1
	Green	20	2.2	L20395-ND	1.39	28.20	81.60	180.00	5670H5;5
	Yellow	20	2.1	L20397-ND	1.39	28.20	81.60	180.00	5670H7;7
20	Red	20	2.0	L20491-ND	.78	15.86	45.90	101.25	5332H1
	Green	20	2.1	L20495-ND	.78	15.86	45.90	101.25	5332H5
	Yellow	20	2.1	L20497-ND	.78	15.86	45.90	101.25	5332H7
21	Red/Green	15	2.1	L20488-ND	1.94	39.36	113.90	251.25	5305H1/5
	Amber/Green	15	2.1	L205935-ND	1.94	39.36	113.90	251.25	5305H3/5
2mm									
22	Red	10	2.2	L20081-ND	.93	18.80	54.40	120.00	5350T1
	Green	10	2.3	L20085-ND	.93	18.80	54.40	120.00	5350T5
	Yellow	10	2.2	L20087-ND	.93	18.80	54.40	120.00	5350T7
	Red	9.6	5.0	L20091-ND	1.04	21.15	61.20	135.00	5352T1-5V
	Amber	10	5.0	L20093-ND	1.04	21.15	61.20	135.00	5352T3-5V
	Green	10	5.0	L20095-ND	1.04	21.15	61.20	135.00	5352T5-5V
	Red	2	1.8	L20101-ND	1.10	22.33	64.60	142.50	5350T1LC
	Green	2	1.8	L20105-ND	1.10	22.33	64.60	142.50	5350T5LC
	Yellow	2	1.9	L20107-ND	1.10	22.33	64.60	142.50	5350T7LC
	Red	3.5	5.0	L20111-ND	1.10	22.33	64.60	142.50	5352T1-5VLC
	Amber	3.5	5.0	L20113-ND	1.10	22.33	64.60	142.50	5352T3-5VLC
	Green	3.5	5.0	L20115-ND	1.10	22.33	64.60	142.50	5352T5-5VLC

NOTE: Figures 1-10 are T1's; Figures 11-21 are T1 3/4's

Fig. 1



Dimension "A"
5310F Series = 14.73
5312F Series = 20.57
5315F Series = 13.97
5313F Series = 34.29

Fig. 2

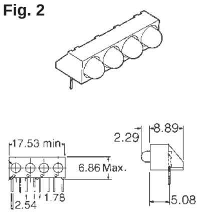


Fig. 3

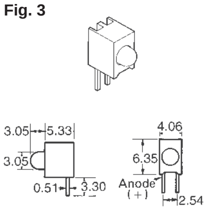
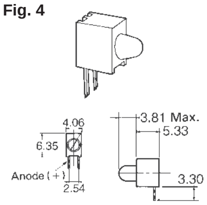


Fig. 4



Clear Lens

Fig. 5

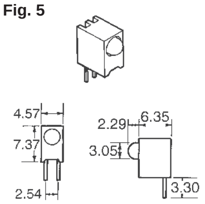


Fig. 6

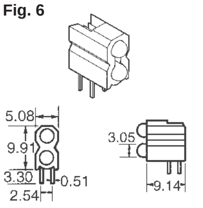
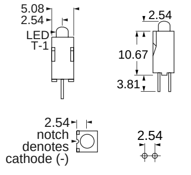
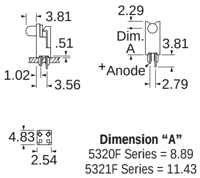


Fig. 7



"Stackable"

Fig. 8



Dimension "A"
5320F Series = 8.89
5321F Series = 11.43
5322F Series = 6.35

Fig. 9

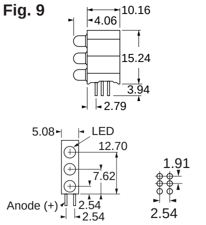


Fig. 10

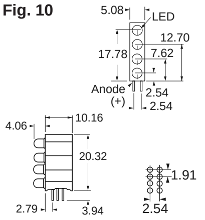
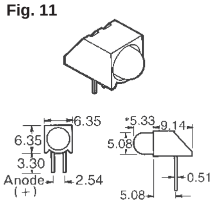


Fig. 11



* 3.3 for Part No. L20001-ND

Fig. 12

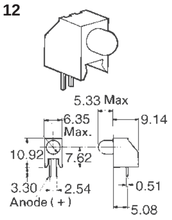


Fig. 13

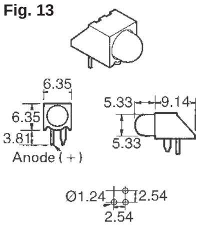


Fig. 14

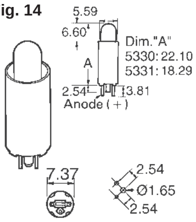


Fig. 15

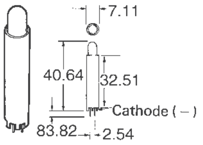


Fig. 16

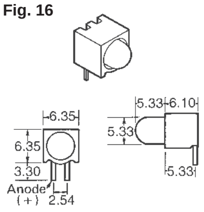


Fig. 17

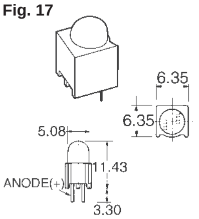


Fig. 18

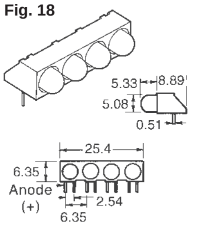


Fig. 19

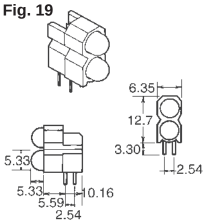


Fig. 20

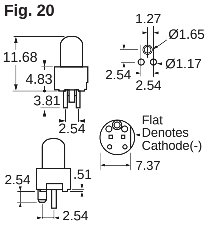
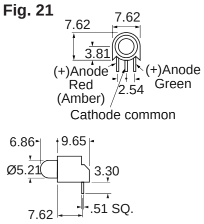


Fig. 21



(Continued)

PC Board Mounted LEDs *(Cont.)*

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Pricing 1	25	100	250	Chicago Miniature Part No.
2mm									
23	Red	10	2.2	L20121-ND	1.57	31.73	91.80	202.50	5370T1
	Green	10	2.3	L20125-ND	1.57	31.73	91.80	202.50	5370T5
	Yellow	10	2.2	L20127-ND	1.57	31.73	91.80	202.50	5370T7
	Red	9.5	5.0	L20131-ND	1.71	34.66	100.30	221.25	5372T1-5V
	Amber	10	5.0	L20133-ND	1.71	34.66	100.30	221.25	5372T3-5V
	Green	10	5.0	L20135-ND	1.71	34.66	100.30	221.25	5372T5-5V
	Red	2	1.8	L20141-ND	1.74	35.25	102.00	225.00	5370T1LC
	Green	2	1.8	L20145-ND	1.74	35.25	102.00	225.00	5370T5LC
	Yellow	2	1.9	L20147-ND	1.74	35.25	102.00	225.00	5370T7LC
	Red	3.5	5.0	L20291-ND	1.74	35.25	102.00	225.00	5372T1-5VLC
	Amber	3.5	5.0	L20293-ND	1.74	35.25	102.00	225.00	5372T3-5VLC
	Green	3.5	5.0	L20295-ND	1.74	35.25	102.00	225.00	5372T5-5VLC
Rectangular									
24	Red	20	2.1	L20541-ND	1.31	26.44	76.50	168.75	5636D1
	Green	20	2.1	L20545-ND	1.31	26.44	76.50	168.75	5636D5
	Yellow	20	2.2	L20547-ND	1.31	26.44	76.50	168.75	5636D7
25	Red	10	2.1	L20571-ND	6.26	126.90	367.20	810.00	5638D1

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Cut Tape Pricing 1	10	100	Digi-Key Part No.	Tape & Reel Pricing 750	Chicago Miniature Part No.
PC Board Mount on Tape and Reel										
26	Red	10	2.0	L60011CT-ND	1.09	9.30	77.50	L60011TR-ND	348.75	5655F1
	Green	20	2.2	L60015CT-ND	1.09	9.30	77.50	L60015TR-ND	348.75	5655F5

NOTE: Figures 22-23 are 2mm Diameter LED's; Figure 26 is Tape & Reel.

Fig. 22

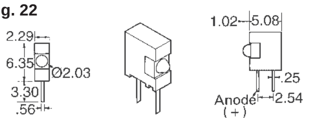


Fig. 23

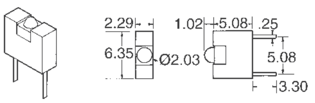


Fig. 24

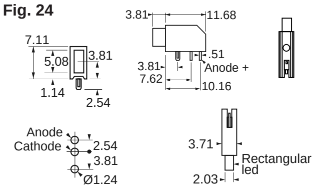


Fig. 25

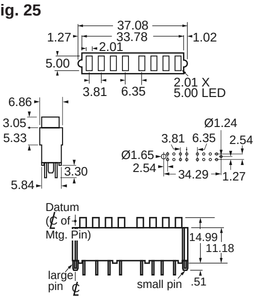
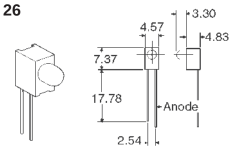


Fig. 26



Panel Mount LED Assemblies

Fig.	Color	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Pricing 1	25	100	250	Chicago Miniature Part No.
1	Red	20	2.0	L10001-ND	1.33	27.03	78.20	172.50	5100H1
	Green	20	2.2	L10005-ND	1.33	27.03	78.20	172.50	5100H5
	Yellow	20	2.1	L10007-ND	1.33	27.03	78.20	172.50	5100H7
	Red	2	1.8	L10011-ND	1.71	34.66	100.30	221.25	5100H1LC
	Yellow	2	1.9	L10017-ND	1.71	34.66	100.30	221.25	5100H7LC
	Red	10	5.0	L10021-ND	1.86	37.60	108.80	240.00	5102H1-5V
	Amber	10	5.0	L10023-ND	1.86	37.60	108.80	240.00	5102H3-5V
	Green	12	5.0	L10025-ND	1.86	37.60	108.80	240.00	5102H5-5V
	Red/Green	20	2.2	L10008-ND	2.18	44.06	127.50	281.25	5100H1/5
2	Red	20	2.0	L10031-ND	1.22	24.68	71.40	157.50	5101H1
	Green	20	2.2	L10035-ND	1.22	24.68	71.40	157.50	5101H5
	Yellow	20	2.1	L10037-ND	1.22	24.68	71.40	157.50	5101H7
3	Red	10	2.0	L10041-ND	1.51	30.55	88.40	195.00	5110F1
	Green	20	2.2	L10045-ND	1.51	30.55	88.40	195.00	5110F5
	Yellow	20	2.1	L10047-ND	1.51	30.55	88.40	195.00	5110F7
	Red	2	1.8	L10051-ND	2.00	40.54	117.30	258.75	5110F1LC
	Yellow	2	1.9	L10057-ND	2.00	40.54	117.30	258.75	5110F7LC
4	Red	10	2.0	L10061-ND	.84	17.04	49.30	108.75	5111F1
	Green	20	2.2	L10065-ND	.84	17.04	49.30	108.75	5111F5
	Yellow	20	2.1	L10067-ND	.84	17.04	49.30	108.75	5111F7
5	Red	10	2.0	L10091-ND	2.06	41.71	120.70	266.25	5210F1
	Green	20	2.2	L10095-ND	2.06	41.71	120.70	266.25	5210F5
	Yellow	20	2.1	L10097-ND	2.06	41.71	120.70	266.25	5210F7
6	Red	20	2.0	L10071-ND	2.58	52.29	151.30	333.75	5400A1
	Green	20	2.1	L10075-ND	2.58	52.29	151.30	333.75	5400A5
	Yellow	20	2.1	L10077-ND	2.58	52.29	151.30	333.75	5400A7
7	Red	10	2.0	L50381-ND	2.96	59.93	173.40	382.50	3990A1
	Amber	10	2.0	L50383-ND	2.96	59.93	173.40	382.50	3990A3
	Green	20	2.2	L50385-ND	2.96	59.93	173.40	382.50	3990A5
	Yellow	20	2.1	L50387-ND	2.96	59.93	173.40	382.50	3990A7

Fig.	Dia. (mm)	Volts	Termination	Digi-Key Part No.	Pricing 1	25	100	C.M. Part No.
8	12.70	6	Wire	L5014☐-ND	3.92	79.31	229.50	1091M☐-6V
	12.70	12	Wire	L5015☐-ND	3.92	79.31	229.50	1091M☐-12V
	12.70	24	Wire	L5016☐-ND	3.92	79.31	229.50	1091M☐-24V
	12.70	12	4.75mm Terminal	L5017☐-ND	4.15	84.01	243.10	1091QM☐-12V
	12.70	24	4.75mm Terminal	L5018☐-ND	4.15	84.01	243.10	1091QM☐-24V
9	7.87	6	Wire	L5025☐-ND	3.94	79.90	231.20	2191L☐-6V
	7.87	12	Wire	L5026☐-ND	3.94	79.90	231.20	2191L☐-12V
	7.87	24	Wire	L5027☐-ND	3.94	79.90	231.20	2191L☐-24V
	7.87	12	4.75mm Terminal	L5028☐-ND	4.15	84.01	243.10	2191QL☐-12V
	7.87	24	4.75mm Terminal	L5029☐-ND	4.15	84.01	243.10	2191QL☐-24V
10	7.87	6	Wire	L5030☐-ND	3.94	79.90	231.20	2191U☐-6V
	7.87	12	Wire	L5031☐-ND	3.94	79.90	231.20	2191U☐-12V
	7.87	24	Wire	L5032☐-ND	3.94	79.90	231.20	2191U☐-24V
	7.87	12	4.75mm Terminal	L5033☐-ND	4.15	84.01	243.10	2191QU☐-12V
	7.87	24	4.75mm Terminal	L5034☐-ND	4.15	84.01	243.10	2191QU☐-24V

For ☐ in Digi-Key Part No. choose one of the following: **1**=Red; **5**=Green; **7**=Yellow

Fig. 1

Mounting: Will snap-fit in 6.32/6.45mm dia. hole in panels .79/1.57mm thick. **Wire Leads:** 24 AWG, 152.40mm long. **Housing:** Black nylon. **Anode:** (+): Red lead. **Anode for L10008-ND:** (+): Yellow lead for red light, blue lead for green light.

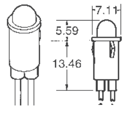


Fig. 2

Mounting: Will snap-fit in 6.32/6.45mm dia. hole in panels .79/1.57mm thick. **Terminals:** .51mm Sq. **Housing:** Black nylon.

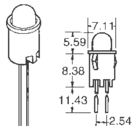


Fig. 3

Mounting: Will snap-fit in 3.94/4.01mm dia. hole in panels .79/1.57mm thick. **Wire Leads:** 24 AWG, 152.40mm long, stripped 4.57/8.13mm. **Anode** (+): Red lead. **Housing:** Black nylon.

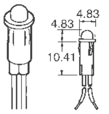


Fig. 4

Mounting: Will snap-fit in 3.94/4.01mm dia. hole in panels .79/1.57mm thick. **Terminals:** .51mm Sq. **Housing:** Black nylon.

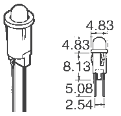


Fig. 5

Mounting: Will snap-fit into 4.75/4.88mm diameter hole in panel .51/2.46mm thick. **Wire Leads:** 26 AWG, 111.76/121.92mm long stripped. **Anode** (+): Red lead. **Lens:** Polycarbonate. **Housing:** Polycarbonate.

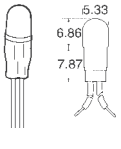


Fig. 6

Mounting: Will snap-fit into 7.92/8.05mm dia. hole in panel .51/2.49mm thick. **Wire Leads:** 24 AWG, 111.76/121.92mm long, stripped: 10.92/14.48mm. **Anode** (+): Red lead. **Lens:** Polycarbonate. **Housing:** Natural nylon.

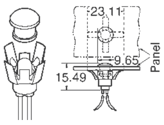


Fig. 7

Mounting: Will snap-fit into 5.51/5.61mm dia. hole in panels .79/1.57mm thick. **Wire Leads:** 26 AWG, 111.76/121.92mm long stripped. **Anode** (+): Red lead. **Lens:** Polycarbonate. **Housing:** White nylon.

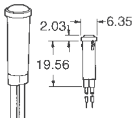


Fig. 8

Wire Leads: 22 AWG, 111.76 /121.92mm long, stripped: 10.92/14.48mm. **Anode** (+) Red Lead or Quick Connect 4.75mm Term Anode (+) marked above terminal

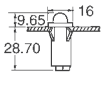


Fig. 9

Wire Leads: 22 AWG, 111.76 /121.92mm long, stripped: 10.92/14.48mm. **Anode** (+) Red Lead or Quick Connect 4.75mm Term Anode (+) marked above terminal

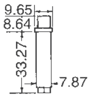
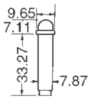


Fig. 10

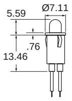
Wire Leads: 22 AWG, 111.76 /121.92mm long, stripped: 10.92/14.48mm. **Anode** (+) Red Lead or Quick Connect 4.75mm Term Anode (+) marked above terminal



Flashers

Series 5100H Flasher

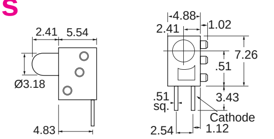
Features: • Built-in flashing circuit • Flashing rate: 1.5 - 2.5 Hz • No external resistor required **Mounting:** Will snap fit in 6.32/6.45mm dia. hole in panels .79/1.57mm. **Wire Leads:** No. 24 AWG, 152.40mm insulated, bonded strands, stripped 12.70mm. **Anode (+):** Red Lead **Housing:** Black Nylon



Color	I_V mcd	Current mA	V_F (V)	Digi-Key Part No.	Pricing 1	25	100	C.M. Part No.
Red	12.5	20	13	L20691-ND	2.70	54.64	158.10	5100H1FL
Green	8.0	20	13	L20695-ND	2.70	54.64	158.10	5100H5FL
Yellow	12.5	20	13	L20697-ND	2.70	54.64	158.10	5100H7FL

T1 Modular LEDs

FEATURES:
• Mount up to 12 LEDs in one operation • Unitized vibration resistant package • Black housing for high contrast background • Wide viewing angle • Vertical or horizontal positioning • Interlocking construction • Hi brite diffused LEDs • Speeds mounting for increased productivity and reduced cost



Mount from 1 to 12 circuit board indicators, as a single unit. Unique snap-together feature.

LED/Lens	Forward Voltage Typ.	If=(mA)	Min. V_R	Max. I_F (mA)	Typ. I_O (mcd)	View Angle	Digi-Key Part No.	Pricing 1	10	C.M. Part No.
Red/Clear	2.2	20	5.0	30	60.0	40°	CMC01R-ND	.46	3.68	CMC01R
Yellow/Clear	2.2	20	5.0	20	60.0	40°	CMC01Y-ND	.46	3.68	CMC01Y
Green/Clear	2.2	20	5.0	30	60.0	40°	CMC01G-ND	.46	3.68	CMC01G
Red/Diff.	2.0	20	5.0	30	20.0	90°	CMW01R-ND	.54	4.32	CMW01R
Yellow/Diff.	2.1	20	5.0	30	12.5	90°	CMW01Y-ND	.54	4.32	CMW01Y
Green/Diff.	2.2	20	5.0	30	12.5	90°	CMW01G-ND	.54	4.32	CMW01G

CHICAGO MINIATURE LAMP, INC.
WHERE INNOVATION COMES TO LIGHT

Optical Light Pipes for SMD-Style LED

Fig. 1

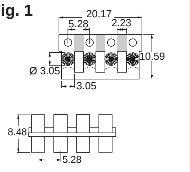


Fig. 2

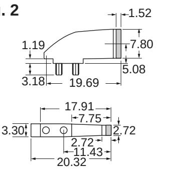


Fig. 3

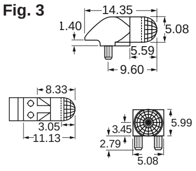


Fig. 4

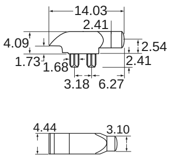


Fig. 5

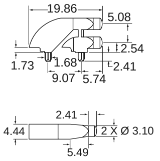


Fig. 6

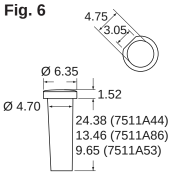


Fig. 7

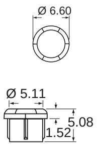


Fig.	Color	Digi-Key Part No.	Price Each 1	25	100	250	500	Chicago Mini. Part No.
1	Clear	L71200-ND	2.32	1.88	1.36	1.20	1.16	7640D2
2	Clear	L71300-ND	.55	.45	.33	.29	.28	7610D2
3	Clear	L71400-ND	1.33	1.09	.79	.69	.67	7511G2
4	Clear	L70510-ND	.84	.69	.50	.44	.42	7511A85
5	Clear	L70520-ND	.93	.76	.55	.48	.47	7511A62
6	Clear	L70540-ND	.67	.55	.40	.35	.34	7511A44
6	Clear	L70550-ND	.61	.50	.36	.32	.31	7511A86
6	Clear	L70560-ND	.61	.50	.36	.32	.31	7511A53
7	Clear	L70570-ND	.61	.50	.36	.32	.31	7511A18

PC Board Mount T-1 LEDs

Fig. 1

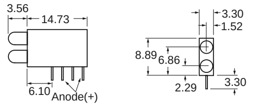


Fig. 2

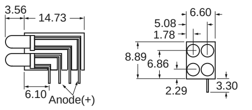
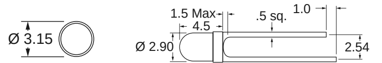


Fig.	Color	Typ. mcd	Forward Voltage mA	Typ. (V)	Digi-Key Part No.	Price Each 1	25	100	Chicago Miniature Part No.
1	Red	10.0	10	2.2	L206011-ND	1.94	1.58	1.14	5682F1;1
	Green	8.5	10	2.3	L206055-ND	1.94	1.58	1.14	5682F5;5
	Yellow	10.0	10	2.2	L206077-ND	1.94	1.58	1.14	5682F7;7
2	Red	10.0	10	2.2	L206111-ND	3.60	2.92	2.11	5684F1;1;1;1
	Green	8.5	10	2.3	L206555-ND	3.60	2.92	2.11	5684F5;5;5;5
	Yellow	10.0	10	2.2	L206777-ND	3.60	2.92	2.11	5684F7;7;7;7

High Brightness LEDs



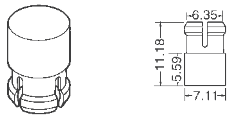
* Blue Diffused Lens

Dia. (mm)	Color	Wave-length (nm)	V_f Typ (V)	I_f Typ (mA)	I_v Typ (mcd)	Digi-Key Part No.	Price Each 1	10	100	Chicago Miniature Part No.
3	Blue	430	5	20	100	L14006-ND*	1.43	1.30	1.04	CMD264-UBD

LED Lenses

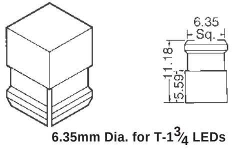
These LED lenses provide quick, economical panel mounting as well as ESD protection. Molded in Fresnel rings provide a wide viewing angle.

Fig. 1



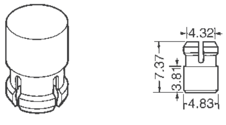
6.35mm Dia. for T-1¾ LEDs

Fig. 2



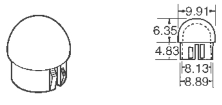
6.35mm Dia. for T-1¾ LEDs

Fig. 3



4.37mm Dia. for T-1 LEDs

Fig. 4



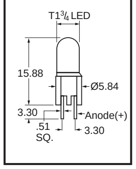
9.13mm Dia. for T-1¾ LEDs

Fig.	Digi-Key Part No.	Price Each 1	25	100	250	Chicago Mini. Part No.
1	L3000☐-ND	.38	.31	.23	.20	431 ☐
2	L3001☐-ND	.46	.38	.28	.24	432 ☐
3	L3002☐-ND	.38	.31	.23	.20	433 ☐
4	L3003☐-ND	.46	.38	.28	.24	434 ☐

For ☐ in Digi-Key Part No., choose one of the following: **1**=Red; **2**=Clear; **3**=Amber; **5**=Green; **6**=Blue; **7**=Yellow

Circuit Board Indicator

Super Bright

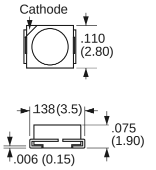


Color	Typ. mcd	Forward Volt mA	Typ. (V)	Digi-Key Part No.	Price Each 1	25	100	Chicago Mini. Part No.
Super Bright								
Red	30.0	20	2.0	L20651-ND	.90	.73	.53	5340H1
Green	30.0	20	2.2	L20655-ND	.90	.73	.53	5340H5
Yellow	25.0	20	2.2	L20657-ND	.90	.73	.53	5340H7
Red	2.0	2	1.8	L20661-ND	.99	.80	.58	5340H1LC
Green	2.5	2	1.8	L20665-ND	.99	.80	.58	5340H5LC
Yellow	2.0	2	1.9	L20667-ND	.99	.80	.58	5340H7LC

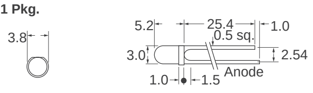
Bright•White™ LEDs

• Peak Forward Current: Surface Mount: 100mA Through-Hole: 80mA • Continuous Forward Current: Surface Mount: 30mA Through-Hole: 25mA • Emitted Color: White • Lens Color: Water Clear

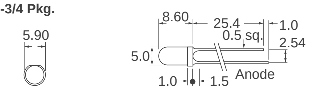
SMD Pkg.



T-1 Pkg.



T1-3/4 Pkg.

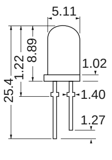


Pkg. Type	V_t Typ.	mcd Typ.	I_f (mA) Typ.	View Angle	Digi-Key Part No.	Price Each 1	10	100	T & R* Pricing 2,000	Chicago Miniature Part No.
SMD	3.6	150	20	120°	CMD67-21UWCCT-ND†	3.00	2.78	2.49	1875.00/M	CMD67-21UWC/TR8
T-1	3.70	1000	20	20°	CMD204UWC-ND	3.00	2.78	2.49	—	CMD204UWC
T1-3/4	3.75	2300	20	20°	CMD333UWC-ND	3.00	2.78	2.49	—	CMD333UWC

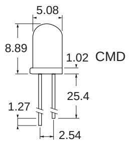
* For Tape & Reel part number, change CT-ND to TR-ND † Cut Tape Price

LEDs

T-1 ¾ UltraBright



HLMP With Stand-off



FEATURES: • Min. 80 mcd. • Pale tint avoids mix problems. • With or without stand-off.

Lens Color	Source Color	P_D (mW)	Min. I_V mcd	Max. V_F (V)	Typ. I_p (nm)	View Angle	Digi-Key Part No.	Pricing 1	10	100	Chicago Miniature Part No.
Clear †	Hi. Eff. Red	135	80	2.2	635	24°	HLMP3750ACM-ND	.20	1.60	14.50	HLMP-3750A
Clear	Hi. Eff. Red	135	80	2.2	635	24°	CMD3750-ND	.16	1.28	11.60	CMD3750
Clear †	Hi. Eff. Green	135	80	2.2	565	24°	HLMP3950ACM-ND	.24	1.92	17.40	HLMP-3950A
Clear	Hi. Eff. Green	135	80	2.2	565	24°	CMD3450-ND	.18	1.44	13.05	CMD3450
Clear †	Yellow	85	80	2.2	585	24°	HLMP3850ACM-ND	.24	1.92	17.40	HLMP-3850A
Clear	Yellow	85	80	2.2	585	24°	CMD3350-ND	.16	1.28	11.60	CMD3350

† With Stand-off

Surface Mount LEDs

Fig.	Wave-length	Color	Lens Color	TYP mcd	Forward Voltage TYP	@ mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing*	Chicago Miniature Part No.
CMD11-21 Series												
1	640	Red	Clear	6	2.0	20	L62001CT-ND	.39	.33	.28	330.00/2000	CMD11-21VRC/TR8
	570	Green	Clear	7.5	2.1	20	L62005CT-ND	.37	.32	.27	315.00/2000	CMD11-21VGC/TR8
	585	Yellow	Clear	6	2.0	20	L62007CT-ND	.37	.32	.27	315.00/2000	CMD11-21VYC/TR8
	660	Super Red	Clear	17	1.7	20	L62011CT-ND	.37	.32	.27	—	CMD11-21SRC/TR8
CMDA1 Series												
1	660	Red	Clear	33.6	1.7	20	L71501CT-ND	.32	.27	.23	337.50/2500	CMDA1DR7A1Z
	580	Yellow	Clear	6.0	2.2	20	L71502CT-ND	.32	.27	.23	337.50/2500	CMDA1CY7A1Z
	570	Yellow	Clear	24.0	2.1	20	L71503CT-ND	.32	.27	.23	337.50/2500	CMDA1AY7A1Z
	560	Green	Clear	12.0	2.1	20	L71504CT-ND	.32	.27	.23	337.50/2500	CMDA1CG7A1Z
CMD12-21 Series												
2	640	Red	Clear	5	2.0	20	L62101CT-ND	.39	.33	.28	330.00/2000	CMD12-21VRC/TR8
	570	Green	Clear	8.8	2.1	20	L62105CT-ND	.39	.33	.28	—	CMD12-21VGC/TR8
	585	Yellow	Clear	3	2.0	20	L62107CT-ND	.39	.33	.28	330.00/2000	CMD12-21VYC/TR8
	660	Super Red	Clear	12.4	1.7	20	L62111CT-ND	.50	.43	.36	426.00/2000	CMD12-21SRC/TR8
	570	Ultra Green	Clear	14.9	2.1	20	L62115CT-ND	.49	.42	.35	420.00/2000	CMD12-21UGC/TR8
CMDA7 Series												
2	660	Red	Clear	12.4	1.7	20	L71509CT-ND	.32	.27	.23	405.00/3000	CMDA7DR7A1Z
	580	Yellow	Clear	3.0	2.1	20	L71510CT-ND	.32	.27	.23	405.00/3000	CMDA7CY7A1Z
	570	Yellow	Clear	8.8	2.1	20	L71511CT-ND	.32	.27	.23	405.00/3000	CMDA7AY7A1Z
	560	Green	Clear	5.2	2.1	20	L71512CT-ND	.32	.27	.23	405.00/3000	CMDA7CG7A1Z
CMD15-21 Series												
3	640	Red	Clear	6	2.0	20	L62201CT-ND	.35	.30	.25	300.00/2000	CMD15-21VRC/TR8
	570	Green	Clear	10	2.1	20	L62205CT-ND	.32	.27	.23	270.00/2000	CMD15-21VGC/TR8
	430	Ultra Blue	Clear	45	4.9	20	L62206CT-ND	3.43	2.94	2.45	2940.00/2000	CMD15-21UBC/TR8
	581	Yellow	Clear	6	2.0	20	L62207CT-ND	.39	.33	.28	330.00/2000	CMD15-21VYC/TR8
	660	Super Red	Clear	15	1.7	20	L62211CT-ND	.46	.39	.33	390.00/2000	CMD15-21SRC/TR8
	565	Ultra Green	Clear	12	2.1	20	L62215CT-ND	.42	.36	.30	360.00/2000	CMD15-21UGC/TR8
	640	Red	Diff	4	2.0	20	L62301CT-ND	.28	.24	.20	240.00/2000	CMD15-21VRD/TR8
	570	Green	Diff	5.6	2.1	20	L62305CT-ND	.28	.24	.20	240.00/2000	CMD15-21VGD/TR8
	585	Yellow	Diff	4	2.0	20	L62307CT-ND	.28	.24	.20	240.00/2000	CMD15-21VYD/TR8
CMD15-22 Series												
4	640/570	Red/Grn.	Clear	6.0/10.0	2.0/2.1	20	L622015CT-ND	.67	.57	.48	570.00/2000	CMD15-22VRVGC/TR8
	660/565	Red/Grn.	Clear	15.0/12.0	1.7/2.1	20	L6221115CT-ND	.81	.69	.58	690.00/2000	CMD15-22RUGC/TR8
CMD17-21 Series												
5	640	Red	Clear	13	2.0	20	L62401CT-ND	.28	.24	.20	360.00/3000	CMD17-21VRC/TR8
	570	Green	Clear	35	2.1	20	L62405CT-ND	.29	.26	.21	378.00/3000	CMD17-21VGC/TR8
	585	Yellow	Clear	12	2.0	20	L62407CT-ND	.29	.26	.21	378.00/3000	CMD17-21VYC/TR8
	660	Super Red	Clear	45	1.7	20	L62411CT-ND	.50	.43	.36	643.50/3000	CMD17-21SRC/TR8
	570	Ultra Green	Clear	50	2.1	20	L62415CT-ND	.32	.27	.23	405.00/3000	CMD17-21UGC/TR8
	640	Red	Diff	3	2.0	20	L62501CT-ND	.32	.27	.23	405.00/3000	CMD17-21VRD/TR8
	570	Green	Diff	5	2.1	20	L62505CT-ND	.32	.27	.23	405.00/3000	CMD17-21VGD/TR8
	585	Yellow	Diff	4	2.0	20	L62507CT-ND	.39	.33	.28	495.00/3000	CMD17-21VYD/TR8
CMDA5 Series												
6	660	Red	Clear	11.7	1.7	20	L71505CT-ND	.32	.27	.23	540.00/4000	CMDA5DR7D1Z
	580	Yellow	Clear	3.7	2.2	20	L71506CT-ND	.32	.27	.23	540.00/4000	CMDA5CY7D1Z
	570	Yellow	Clear	11.7	2.1	20	L71507CT-ND	.32	.27	.23	540.00/4000	CMDA5AY7D1Z
	560	Green	Clear	6.4	2.1	20	L71508CT-ND	.32	.27	.23	540.00/4000	CMDA5CG7D1Z
CMD28-21 Series												
7	640	Red	Clear	3	2.0	20	L62601CT-ND	.39	.33	.28	330.00/2000	CMD28-21VRC/TR8
	570	Green	Clear	5.5	2.1	20	L62605CT-ND	.39	.33	.28	330.00/2000	CMD28-21VGC/TR8
	660	Super Red	Clear	17	1.7	20	L62611CT-ND	.46	.39	.33	390.00/2000	CMD28-21SRC/TR8
	640	Red	Clear	0.16	2.0	1	L62701CT-ND	.39	.33	.28	330.00/2000	CMD28-21VRC/TR8/T1
	570	Green	Clear	0.16	2.1	1	L62705CT-ND	.39	.33	.28	330.00/2000	CMD28-21VGC/TR8/T1
	660	Super Red	Clear	1.6	1.7	1	L62711CT-ND	.53	.45	.38	450.00/2000	CMD28-21SRC/TR8/T1
CMD67-21 Series												
8	640	Red	Clear	10	2.0	20	L62801CT-ND	.56	.48	.40	480.00/2000	CMD67-21VRC/TR8
	570	Green	Clear	25	2.1	20	L62805CT-ND	.42	.36	.30	360.00/2000	CMD67-21VGC/TR8
	585	Yellow	Clear	10	2.0	20	L62807CT-ND	.49	.42	.35	420.00/2000	CMD67-21VYC/TR8
	660	Super Red	Clear	40	1.7	20	L62811CT-ND	.63	.54	.45	540.00/2000	CMD67-21SRC/TR8
	660	Ultra Red	Clear	62	1.7	20	L628111CT-ND†	.88	.75	.63	750.00/2000	CMD67-21URC/TR8
CMD67-22 Series												
9	640/570	Red/Grn.	Clear	10.0/25.0	2.0/2.1	20	L628015CT-ND	1.16	.99	.83	990.00/2000	CMD67-22VRVGC/TR8
	660/565	Red/Grn.	Clear	40.0/25.0	1.7/2.1	20	L6281115CT-ND	1.16	.99	.83	990.00/2000	CMD67-22SRUGC/TR8
CMD91-21/TR7 Series												
10	640	Red	Clear	80	2.0	20	L62901CT-ND	.42	.36	.30	180.00/1000	CMD91-21VRC/TR7
	565	Green	Clear	50	2.1	20	L62905CT-ND	.42	.36	.30	180.00/1000	CMD91-21VGC/TR7
	585	Yellow	Clear	30	2.0	20	L62907CT-ND	.42	.36	.30	180.00/1000	CMD91-21VYC/TR7
	660	Super Red	Clear	170	1.7	20	L62911CT-ND	.49	.42	.35	210.00/1000	CMD91-21SRC/TR7
CMD91-21/TR9 Series												
11	640	Red	Clear	80	2.0	20	L63001CT-ND	.42	.36	.30	180.00/1000	CMD91-21VRC/TR9
	565	Green	Clear	50	2.1	20	L63005CT-ND	.42	.36	.30	180.00/1000	CMD91-21VGC/TR9
	585	Yellow	Clear	30	2.0	20	L63007CT-ND	.49	.42	.35	210.00/1000	CMD91-21VYC/TR9
	660	Super Red	Clear	170	1.7	20	L63011CT-ND	.49	.42	.35	210.00/1000	CMD91-21SRC/TR9

Fig. 1

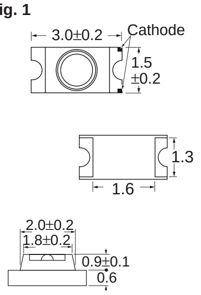


Fig. 2

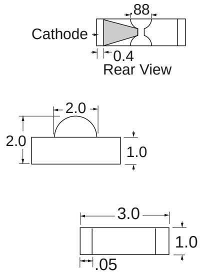


Fig. 3 — 1206

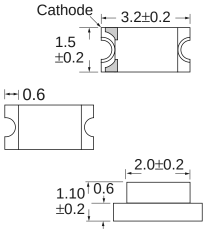


Fig. 4

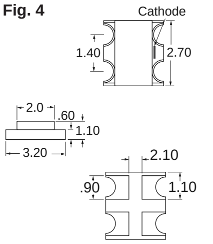


Fig. 5 — 0805

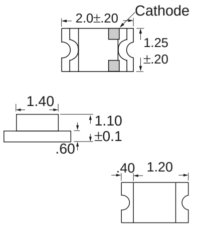


Fig. 6 — 0805

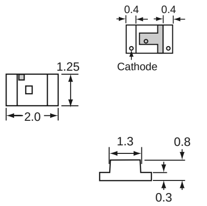


Fig. 7

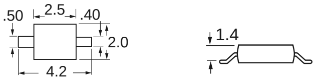
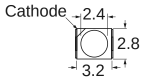


Fig. 8



†Anode mark on L628111-ND

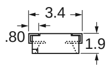


Fig. 9

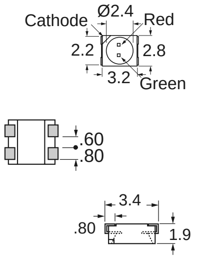


Fig. 10

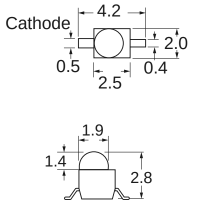
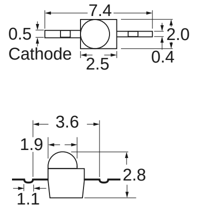


Fig. 11



* For Tape & Reel Part No., change CT to TR.

(Continued)

Fig.	Wave-length	Color	Lens Color	TYP mcd	Forward Voltage TYP @	mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing*	Chicago Miniature Part No.
							CMD91-21/TR10 Series					
12	640	Red	Clear	80	2.0	20	L63101CT-ND	.42	.36	.30	180.00/1000	CMD91-21VRC/TR10
	565	Green	Clear	50	2.1	20	L63105CT-ND	.42	.36	.30	180.00/1000	CMD91-21VGC/TR10
	585	Yellow	Clear	30	2.0	20	L63107CT-ND	.42	.36	.30	180.00/1000	CMD91-21VYC/TR10
	660	Super Red	Clear	170	1.7	20	L63111CT-ND	.49	.42	.35	210.00/1000	CMD91-21SRC/TR10
							CMD93-21/F8 Series					
13	640	Red	Clear	12	2.0	20	L63201CT-ND	.56	.48	.40	480.00/2000	CMD93-21VRC/TR8
	570	Green	Clear	25	2.1	20	L63205CT-ND	.49	.42	.35	420.00/2000	CMD93-21VGC/TR8
							CMD93-22/F8 Series					
14	660/570	Red/Grn.	Clear	40.0/20.0	1.7/2.1	20	L632115CT-ND	1.02	.87	.73	435.00/1000	CMD93-22SRVGC/TR8
							CMD95-21/TR7 Series					
15	640	Red	Clear	25	2.0	20	L63301CT-ND	.42	.36	.30	180.00/1000	CMD95-21VRC/TR7
	570	Green	Clear	19.5	2.1	20	L63305CT-ND	.46	.39	.33	195.00/1000	CMD95-21VGC/TR7
	585	Yellow	Clear	25	2.0	20	L63307CT-ND	.46	.39	.33	195.00/1000	CMD95-21VYC/TR7
	660	Super Red	Clear	100	1.7	20	L63311CT-ND	.49	.42	.35	210.00/1000	CMD95-21SRC/TR7
							CMD95-21/TR9 Series					
16	640	Red	Clear	25	2.0	20	L63401CT-ND	.42	.36	.30	180.00/1000	CMD95-21VRC/TR9
	570	Green	Clear	19.5	2.1	20	L63405CT-ND	.46	.39	.33	195.00/1000	CMD95-21VGC/TR9
							CMD95-21/TR10 Series					
17	640	Red	Clear	25	2.0	20	L63501CT-ND	.46	.39	.33	195.00/1000	CMD95-21VRC/TR10
	570	Green	Clear	19.5	2.1	20	L63505CT-ND	.46	.39	.33	195.00/1000	CMD95-21VGC/TR10
	585	Yellow	Clear	25	2.0	20	L63507CT-ND	.49	.42	.35	210.00/1000	CMD95-21VYC/TR10
	660	Super Red	Clear	100	1.7	20	L63511CT-ND	.49	.42	.35	210.00/1000	CMD95-21SRC/TR10

* For Tape & Reel Part No., change CT to TR.

Fig. 12

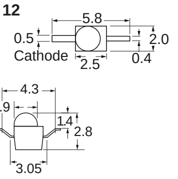


Fig. 13

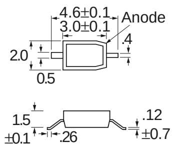


Fig. 14

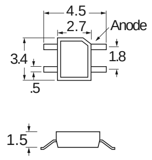


Fig. 15

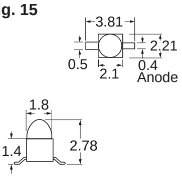


Fig. 16

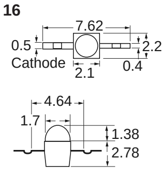
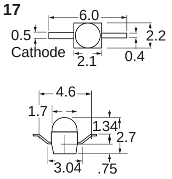
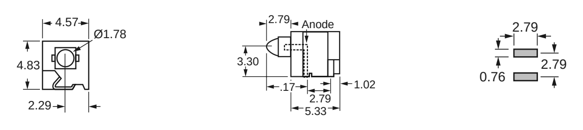


Fig. 17

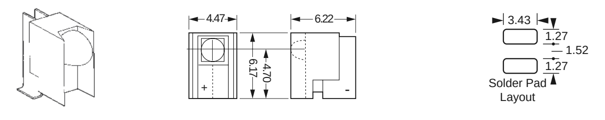


Sub-Miniature Surface Mount LED Assemblies



Color	Typ. mcd	Forward Voltage Typ. (V)	mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel 750	Chicago Miniature Part No.
Red	5.0	2.2	10	L60041CT-ND	1.37	1.17	.98	L60041TR-ND	438.75	6255T1
Green	4.0	2.3	10	L60045CT-ND	1.37	1.17	.98	L60045TR-ND	438.75	6255T5
Yellow	3.8	2.2	10	L60047CT-ND	1.37	1.17	.98	L60047TR-ND	438.75	6255T7
Red	5.0	5.0	9.6	L60061CT-ND	1.51	1.29	1.08	L60061TR-ND	483.75	6255T1-5V
Amber	5.0	5.0	10	L60063CT-ND	1.51	1.29	1.08	L60063TR-ND	483.75	6255T3-5V
Green	5.0	5.0	10	L60065CT-ND	1.51	1.29	1.08	L60065TR-ND	483.75	6255T5-5V
Red	0.5	1.8	2.0	L60051CT-ND	1.58	1.35	1.13	L60051TR-ND	506.25	6255T1LC
Green	1.2	1.8	2.0	L60055CT-ND	1.58	1.35	1.13	L60055TR-ND	506.25	6255T5LC
Yellow	0.5	1.9	2.0	L60057CT-ND	1.58	1.35	1.13	L60057TR-ND	506.25	6255T7LC
Red	2.0	5.0	3.5	L60071CT-ND	1.58	1.35	1.13	L60071TR-ND	506.25	6255T1-5VLC
Amber	4.0	5.0	3.5	L60073CT-ND	2.10	1.80	1.50	L60073TR-ND	675.00	6255T3-5VLC
Green	2.0	5.0	3.5	L60075CT-ND	1.58	1.35	1.13	L60075TR-ND	506.25	6255T5-5VLC

Right Angle Surface Mount LEDs

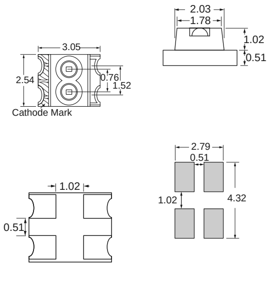


Color	Wave-length	Rated Current (mA)	Forward Voltage Typ. (V)	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Tape & Reel Pricing* 1,000	Chicago Miniature Part No.
Red	—	10	2.2	L60001CT-ND	1.44	1.23	1.03	615.00	6200T1
Amber	—	10	2.0	L60003CT-ND	1.44	1.23	1.03	615.00	6200T3
Green	—	10	2.3	L60005CT-ND	1.44	1.23	1.03	615.00	6200T5
Yellow	—	10	2.2	L60007CT-ND	1.44	1.23	1.03	615.00	6200T7
Red	635	2	1.8	L60101CT-ND	1.65	1.41	1.18	705.00	6200T1LC
Green	565	2	1.8	L60105CT-ND	1.65	1.41	1.18	705.00	6200T5LC
Yellow	583	2	1.9	L60107CT-ND	1.65	1.41	1.18	705.00	6200T7LC
Red	635	9.6	5.0	L60201CT-ND	1.75	1.50	1.25	750.00	6202T1-5V
Amber	583	10	5.0	L60203CT-ND	1.75	1.50	1.25	750.00	6202T3-5V
Green	565	10	5.0	L60205CT-ND	1.75	1.50	1.25	750.00	6202T5-5V
Red	635	3.5	5.0	L60301CT-ND	1.75	1.50	1.25	750.00	6202T1-5VLC

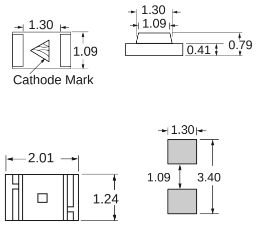
* For Tape & Reel Part No., change CT to TR.

Surface Mount LEDs

7011X Series



7012X Series

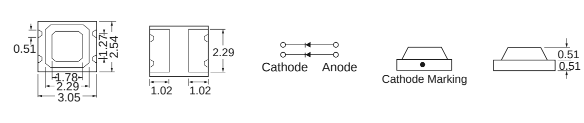


Source (Dice)	Typ. mcd	Forward Voltage Typ. (V)	mA	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Pricing	Chicago Miniature Part No.
Red/Grn	17.0	1.7	20	L61015CT-ND	1.02	.87	.73	L61015TR-ND	1087.50/2500	7011X1/5
Grn/Yel	7.5	2.1	20	L61057CT-ND	1.02	.87	.73	L61057TR-ND	1087.50/2500	7011X5/7
Red	9.0	1.7	25	L61101CT-ND	.49	.42	.35	L61101TR-ND	840.00/4000	7012X1
Green	6.8	2.1	25	L61105CT-ND	.49	.42	.35	L61105TR-ND	840.00/4000	7012X5
Yellow	6.8	2.1	25	L61107CT-ND	.49	.42	.35	L61107TR-ND	840.00/4000	7012X7

Dual Chip-Surface Mount LED for Use with Light Pipes

FEATURES:

- Compatible with automated placement equipment
- Compatible with infrared and vapor phase reflow soldering process
- Low power consumption
- View angle 100°
- Lens color Clear.



Source Color	Typ. mcd	Forward Voltage Typ. (V)	mA	Digi-Key Part No.	Cut Tape Price Each 1	10	Chicago Miniature Part No.
Yellow	14.0	2.1	20	CMD11304YCT-ND	1.25	1.11	CMD11304Y

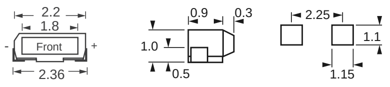
Panasonic®

Surface Mount LEDs

The chip LEDs have thin and compact features available for surface mount technology. It makes super brightness, wide viewing angle and it is suitable for compact and multi-function equipment.

Features: • Compact and thin package • Super bright and high reliability • Surface mount technology available • Wide product range **Cleaning:** • The surface of the LED may change when organic solvents such as trichloroethylene and acetone comes in contact with the surface of the LED • Avoid using organic solvents

Fig. 1 — Leadless-Side View



(P11139TR-ND Polarity Reversed)

Fig. 2 — 0402 Leadless

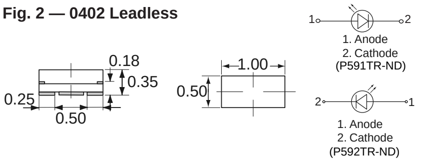


Fig. 3 — 0603 Leadless-TSS Type

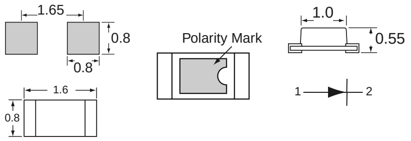


Fig. 4 — 0603 Leadless-SS Type

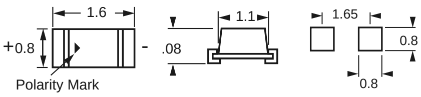
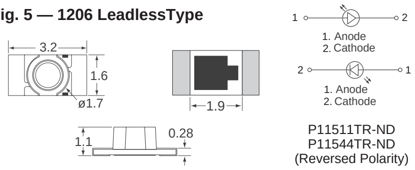
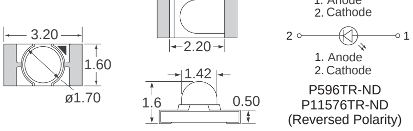


Fig. 5 — 1206 LeadlessType



P11511TR-ND
P11544TR-ND
(Reversed Polarity)

Fig. 6 — 1206 Leadless Type, 30° Dome Lens



P596TR-ND
P11576TR-ND
(Reversed Polarity)

Fig.	Lighting Color	Lens	Process Tech.	Absolute Max. Ratings (mW) PD	(mA) IF	(V) VR	(°C) Topr	Io (mcd) Typ.	(mcd) Min.	(mA) IF	VF(V) Typ.	VF(V) Max.	λP Typ.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Tape & Reel Pricing	Panasonic Part No.
1	Red	Clear	GaP	60	20	4	-25~+80	0.7	0.25	10	2.03	2.6	700	P11138CT-ND	.40	.37	.34	P11138TR-ND	3,000	163.00/M	LNJ210C6RRA
	Red	Clear Non Diffused	InGaAIP	55	20	4	-25~+85	23	12	20	1.92	2.5	645	P11583CT-ND	.72	.68	.62	P11583TR-ND	3,000	293.00/M	LNJ210C62RA
	High Bright Red	Clear	GaAIAs	60	20	3	-30~+80	8.0	2.6	10	1.72	2.5	660	P11139CT-ND	.40	.37	.34	P11139TR-ND	3,000	182.00/M	LNJ210C6ARA
	Green	Clear Non Diffused	GaP	60	20	4	-25~+85	3.2	1.7	20	2.1	2.6	560	P11581CT-ND	.50	.45	.41	P11581TR-ND	3,000	163.00/M	LNJ310C64RA
	Green	Clear Non Diffused	InGaAIP	50	20	4	-25~+80	15	7.7	20	2.0	2.5	575	P11588CT-ND	.72	.68	.62	P11588TR-ND	3,000	293.00/M	LNJ310C63RA
	Pure Green	Clear Non Diffused	GaP	60	20	4	-25~+85	1.1	0.6	20	2.03	2.6	555	P11582CT-ND	.56	.50	.45	P11582TR-ND	3,000	182.00/M	LNJ310C6PRA
	High Bright Green	Clear	GaP	60	20	4	-25~+85	8.0	3.00	10	2.03	2.6	565	P520CT-ND	.39	.36	.33	P520TR-ND	3,000	163.00/M	LNJ310M6URA
	Amber	Yellow Clear	GaAsP	60	20	4	-25~+80	2.5	0.8	10	2.00	2.6	590	P11140CT-ND	.40	.37	.34	P11140TR-ND	3,000	172.00/M	LNJ410Q6YRA
	Amber	Clear Non Diffused	InGaAIP	50	20	4	-25~+80	22.5	8.5	20	2.0	2.5	595	P11587CT-ND	.72	.68	.62	P11587TR-ND	3,000	293.00/M	LNJ410C64RA
	Orange	Red Clear	GaAsP	60	20	3	-25~+80	2.5	.8	10	1.93	2.6	630	P519CT-ND	.39	.36	.33	P519TR-ND	3,000	172.00/M	LNJ810L6DRA
	Orange	Clear Non Diffused	InGaAIP	55	20	4	-25~+85	48	25	20	2.03	2.5	630	P11584CT-ND	.72	.68	.62	P11584TR-ND	3,000	293.00/M	LNJ810C63RA
	Orange	Clear Non Diffused	InGaAIP	55	20	4	-25~+85	45	24	20	1.95	2.5	620	P11585CT-ND	.72	.68	.62	P11585TR-ND	3,000	293.00/M	LNJ810C68RA
	Soft Orange	Red Clear Non Diff.	GaAsP	60	20	3	-25~+85	1.8	0.75	20	1.93	2.6	610	P11580CT-ND	.53	.48	.43	P11580TR-ND	3,000	172.00/M	LNJ810L6SRA
	Soft Orange	Clear Non Diffused	InGaAIP	50	20	4	-25~+80	30	12	20	1.95	2.5	615	P11586CT-ND	.72	.68	.62	P11586TR-ND	3,000	293.00/M	LNJ810C67RA
2	Yellow/Green	Y/G Diffused	GaP	40	15	4	-30~+85	3.7	2.0	10	2.03	2.6	565	P591CT-ND	.75	.69	.63	P591TR-ND	5,000	197.00/M	LNJ319G9TRA
	High Bright Red	Red Diffused	GaAIAs	40	15	3	-30~+85	4.2	2.2	10	1.72	2.5	655	P592CT-ND	.75	.69	.63	P592TR-ND	5,000	197.00/M	LNJ219R9ARA
3	Red	Red Diffused	GaAIAs	50	20	3	-30~+85	6.7	2.2	10	1.72	2.5	655	P11133CT-ND	.33	.31	.28	P11133TR-ND	5,000	104.00/M	LNJ212R8ARA
	Red	Red Diffused	InGaAIP	55	20	4	-30~+85	15	8	20	1.92	2.5	645	P11475CT-ND	.52	.49	.44	P11475TR-ND	5,000	190.00/M	LNJ212R82RA
	Green	Green Diffused	GaP	60	20	4	-30~+85	2.1	1.1	20	2.1	2.6	560	P11474CT-ND	.29	.26	.24	P11474TR-ND	5,000	86.00/M	LNJ312G84RA
	Green	Green Diffused	GaP	30	10	4	-30~+85	3.0	1.8	10	1.9	2.4	565	P11473CT-ND	.29	.26	.24	P11473TR-ND	5,000	86.00/M	LNJ312G8LRA
	Green	Green Diffused	Gap	50	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11134CT-ND	.33	.31	.28	P11134TR-ND	5,000	86.00/M	LNJ312G8TRA
	Green	Green Diffused	InGaAIP	55	20	4	-30~+85	12	6.4	20	2.03	2.5	575	P11480CT-ND	.52	.49	.44	P11480TR-ND	5,000	190.00/M	LNJ312G83RA
	Pure Green	White Diffused	GaN	40	10	5	-25~+85	34	10.3	10	3.0	3.7	525	P11481CT-ND	4.15	3.90	3.64	P11481TR-ND	5,000	1724.00/M	LNJ612W8WRA
	Amber	Yellow Diffused	GaAsP	50	20	4	-30~+85	1.5	0.6	10	2.00	2.6	590	P11135CT-ND	.33	.31	.28	P11135TR-ND	5,000	95.00/M	LNJ412K8YRA
	Amber	Yellow Diffused	InGaAIP	55	20	4	-30~+85	26	14	20	2.1	2.5	595	P11479CT-ND	.52	.49	.44	P11479TR-ND	5,000	190.00/M	LNJ412K84RA
	Orange	Red Diffused	GaAsP	50	20	3	-30~+85	1.0	0.4	20	1.93	2.6	630	P11594CT-ND	.32	.29	.26	P11594TR-ND	5,000	95.00/M	LNJ812R8DRA
	Orange	Red Diffused	InGaAIP	55	20	4	-30~+85	30	16	20	1.95	2.5	620	P11477CT-ND	.52	.49	.44	P11477TR-ND	5,000	190.00/M	LNJ812R88RA
	Orange	Red Diffused	InGaAIP	55	20	4	-30~+85	32	17	20	2.03	2.5	630	P11476CT-ND	.52	.49	.44	P11476TR-ND	5,000	190.00/M	LNJ812R83RA
	Soft Orange	Yellow Diffused	GaAsP	50	20	3	-30~+85	1.0	0.5	20	1.93	2.6	610	P11472CT-ND	.32	.29	.26	P11472TR-ND	5,000	95.00/M	LNJ812K8SRA
	Soft Orange	Yellow Diffused	InGaAIP	55	20	4	-30~+85	21	7	20	1.95	2.5	615	P11478CT-ND	.52	.49	.44	P11478TR-ND	5,000	190.00/M	LNJ812K87RA
	Pure Blue	White Diffused	GaN	40	10	5	-25~+85	8.5	3.2	10	3.2	3.7	470	P11482CT-ND	4.15	3.90	3.64	P11482TR-ND	5,000	1724.00/M	LNJ912W8BRA
	Pure Blue	White Diffused	GaN	65	20	2	-30~+85	30	15	5	3.0	3.7	470	P11483CT-ND	4.15	3.90	3.64	P11483TR-ND	5,000	1724.00/M	LNJ920W9BRAS
4	Red	Red Diffused	InGaAIP	40	15	4	-30~+85	15	8	15	1.92	2.5	645	P11466CT-ND	.56	.53	.48	P11466TR-ND	5,000	208.00/M	LNJ214R82RA
	Red	Red Diffused	InGaAIP	55	20	4	-25~+85	15	8	20	1.92	2.5	645	P11486CT-ND	.52	.49	.44	P11486TR-ND	4,000	209.00/M	LNJ208R82RA
	(High) Red	Red Diffused	GaAIAs	40	15	3	-30~+85	6.7	2.2	15	1.72	2.5	655	P11461CT-ND	.38	.34	.31	P11461TR-ND	5,000	113.00/M	LNJ214R8ARA
	Ultra Bright Red	Red Diffused	GaAIAs	50	20	3	-25~+85	6.7	2.2	10	1.72	2.5	660	P524CT-ND	.33	.31	.28	P524TR-ND	4,000	114.00/M	LNJ208R8ARA
	Green	Green Diffused	GaP	30	10	4	-25~+85	2.1	0.70	5	1.90	2.4	565	P521CT-ND*	.33	.31	.28	P521TR-ND	4,000	95.00/M	LNJ308G8LRA
	Green	Green Diffused	GaP	60	20	4	-25~+85	2.1	1.1	20	2.1	2.6	560	P11484CT-ND	.29	.26	.24	P11484TR-ND	4,000	95.00/M	LNJ308G84RA
	Green	Green Diffused	GaP	50	20	4	-25~+85	5.0	1.80	10	2.03	2.6	565	P525CT-ND	.33	.31	.28	P525TR-ND	4,000	95.00/M	LNJ308G8TRA
	Green	Green Diffused	GaP	40	15	4	-30~+85	5	1.8	15	2.03	2.6	565	P11465CT-ND	.32	.29	.26	P11465TR-ND	5,000	95.00/M	LNJ314G8TRA
	Green	Green Diffused	InGaAIP	40	15	4	-30~+85	12	6.4	15	2.03	2.5	575	P11471CT-ND	.56	.53	.48	P11471TR-ND	5,000	208.00/M	LNJ314G83RA
	Green	Green Diffused	InGaAIP	55	20	4	-25~+85	12	6.4	20	2.03	2.5	575	P11489CT-ND	.52	.49	.44	P11489TR-ND	4,000	209.00/M	LNJ308G83RA
	Pure Green	Green Diffused	GaP	50	20	4	-25~+85	0.7	0.25	20	2.03	2.6	555	P11485CT-ND	.35	.32	.29	P11485TR-ND	4,000	114.00/M	LNJ308G8PRA
	Amber	Yellow Diffused	GaAsP	30	10	4	-25~+85	0.9	0.40	5	1.90	2.4	590	P522CT-ND*	.33	.31	.28	P522TR-ND	4,000	104.00/M	LNJ408K8ZRA
	Amber	Yellow Diffused	GaAsP	50	20	4	-25~+85	1.5	0.6	10	2.00	2.6	590	P11129CT-ND	.33	.31	.28	P11129TR-ND	4,000	104.00/M	LNJ408K8YRA
	Amber	Yellow Diffused	GaAsp	40	15	3	-30~+85	1.5	0.6	15	2.0	2.6	590	P11464CT-ND	.35	.32	.29	P11464TR-ND	5,000	104.00/M	LNJ414K8YRA
	Amber	Yellow Diffused	InGaAIP	50	20	4	-25~+85	10.5	4.0	10	2.00	2.3	595	P11130CT-ND	.53	.49	.45	P11130TR-ND	4,000	209.00/M	LNJ408K84RA
	Amber	Yellow Diffused	InGaAIP	40	15	4	-30~+85	26	14	15	2.1	2.5	595	P11470CT-ND	.56	.53	.48	P11470TR-ND	5,000	208.00/M	LNJ414K84RA
	Orange	Red Diffused	GaAsP	40	15	3	-30~+85	1.0	0.5	15	1.93	2.6	630	P11462CT-ND	.35	.32	.29	P11462TR-ND	5,000	104.00/M	LNJ814R8DRA
	Orange	Orange Diffused	GaAsP	30	10	3	-25~+85	1.1	0.40	5	1.80	2.4	630	P523CT-ND*	.33	.31	.28	P523TR-ND	4,000	104.00/M	LNJ808R8ERA
	Orange	Red Diffused	InGaAIP	50	20	4	-25~+85	6.5	2.5	10	1.90	2.3	620	P11131CT-ND	.53	.49	.45	P11131TR-ND	4,000	209.00/M	LNJ808R88RA
	Orange	Red Diffused	InGaAIP	40	15	4	-30~+85	30	16	15	1.95	2.5	620	P11468CT-ND	.56	.53	.48	P11468TR-ND	5,000	208.00/M	LNJ814R88RA
	Orange	Red Diffused	InGaAIP	40	15	4	-30~+85	32	17	15	2.03	2.5	630	P11467CT-ND	.56	.53	.48	P11467TR-ND	5,000	208.00/M	LNJ814R83RA
	Orange	Red Diffused	InGaAIP	55	20	4	-25~+85	32	17	20	2.03	2.5	630	P11487CT-ND	.52	.49	.44	P11487TR-ND	4,000	209.00/M	LNJ808R83RA
	Soft Orange	Yellow Diffused	GaAsP	50	20	3	-25~+85	1.0	0.4	10	1.93	2.6	610	P11132CT-ND	.33	.31	.28	P11132TR-ND	4,000	104.00/M	LNJ808K8SRA
	Soft Orange	Yellow Diffused	GaAsP	40	15	3	-30~+85	1.0	0.5	15	1.93	2.6	610	P11463CT-ND	.35	.32	.29	P11463TR-ND	5,000	104.00/M	LNJ814K8SRA
	Soft Orange	Yellow Diffused	InGaAIP	40	15	4	-30~+85	21	8.7	15	1.95	2.5	615	P11469CT-ND	.56	.53	.48	P11469TR-ND	5,000	208.00/M	LNJ814K87RA
	Soft Orange	Yellow Diffused	InGaAIP	55	20	4	-25~+85	21	7	20	1.95	2.5	615	P11488CT-ND	.52	.49	.44	P11488TR-ND	4,000	209.00/M	LNJ808K87RA
5	Red	Red Diffused	InGaAIP	55	20	4	-30~+85	15	8	20	1.92	2.5	645	P11532CT-ND	.63	.59	.54	P11532TR-ND	3,000	256.00/M	LNJ211R82RA
	Red	Clear Non Diffused	InGaAIP	55	20	4	-30~+85	24	12.8	20	1.92	2.5	645	P11518CT-ND	.63	.59	.54	P11518TR-ND	3,000	256.00/M	LNJ216C82RA
	Red	Clear Non Diffused	GaAIAs	60	20	3	-30~+85	10.5	4.0	20	1.72	2.5	660	P11544CT-ND†	.42	.38	.35	P11544TR-ND†	3,000	138.00/M	LNJ216C8ARU
	Red	Clear Non Diffused	GaAIAs	60	20	3	-30~+85	10.5	4.0	20	1.72	2.5	660	P11511CT-ND	.42	.38	.35	P11511TR-ND	3,000	138.00/M	LNJ216C8ARA
	High Bright Red	Red Diffused	GaAIAs	60	20	3	-30~+85	7.0	2.3	10	1.72	2.5	660	P11141CT-ND	.33	.31	.28	P11141TR-ND	3,000	138.00/M	LNJ211R8ARA
	High Bright Red	Red Diffused	GaAIAs	60	20	3	-30~+85	7.0	2.3	10	1.72	2.5	660	P541CT-ND†	.33	.31	.28	P541TR-ND†	3,000	138.00/M	LNJ211R8ARU
	Green	Green Diffused	GaP	60	20	4	-30~+85	2.1	1.1	20	2.1	2.6	560	P11530CT-ND	.36	.33	.30	P11530TR-ND	3,000	118.00/M	LNJ311G84RA
	Green	Clear Non Diffused	GaP	60	20	4	-30~+85	3.2	1.6	20	2.1	2.6	560	P11516CT-ND	.36	.33	.30	P11516TR-ND	3,000	118.00/M	LNJ316C84RA
	Green	Green Diffused	GaP	60	20	4	-30~+85	5.5	1.8	20	2.03	2.6	565	P11529CT-ND	.36	.33	.30	P11529TR-ND	3,000	118.00/M	LNJ311G8TRA
	Green	Clear Non Diffused	GaP	60	20	4	-30~+85	8.8	3.3	20	2.03	2.6	565	P11547CT-ND†	.36	.33	.30	P11547TR-ND†	3,000	118.00/M	LNJ316C8TRU
	Green	Clear Non Diffused	GaP	60	20	4	-30~+85	8.8	3.3	20	2.03	2.6	565	P11515CT-ND	.36	.33	.30	P11515TR-ND	3,000	118.00/M	LNJ316C8TRA
	Green	Green Diffused	InGaAIP	55	20	4	-30~+85	12	6.4	20	2.03	2.5	575	P11537CT-ND	.63	.59	.54	P11537TR-ND	3,000	256.00/M	LNJ311G83RA
	Green	Clear Non Diffused	InGaAIP	55	20	4	-30~+85	22	11	20	2.03	2.5	575	P11548CT-ND†	.63	.59	.54	P11548TR-ND†	3,000	256.00/M	LNJ316C83RU
	Green	Clear Non Diffused	InGaAIP	55	20	4	-30~+85	22	11	20	2.03	2.5	575	P11523CT-ND	.63	.59	.54	P11523TR-ND	3,000	256.00/M	LNJ316C83RA
	Pure Green	Clear Non Diffused	GaP	60	20	4	-30~+85	1.0	0.4	20	2.03	2.6	555	P11517CT-ND	.42	.38	.35	P11517TR-ND	3,000	138.00/M	LNJ316C8PRA

* Low current LED, same brightness as previous design with half the power, ideal for battery powered equipment.

† Thru-Board type

(Continued)

Fig. 7 — 1206 Leadless Type, 80° Dome Lens

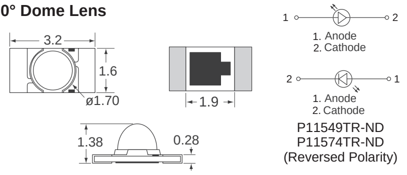


Fig. 8 — Gull Wing-S Type

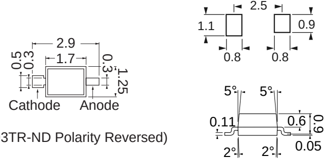


Fig. 9 — Gull Wing-GW Type

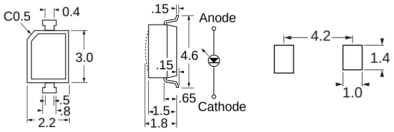


Fig. 10 — Gull Wing-S Type (Bi-Color)

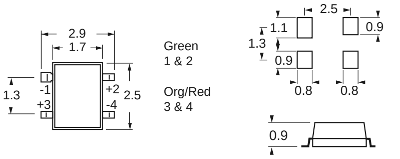


Fig. 11 — Gull Wing-GW Type (Bi-Color)

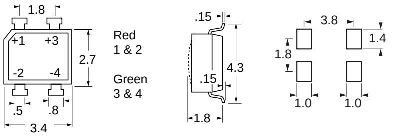


Fig. 12 — J-Lead-S Type

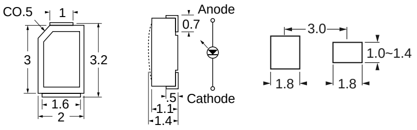


Fig.	Lighting Color	Lens	Process Tech.	Absolute Max. Ratings (mW) PD	(mA) IF	(V) VR	(°C) Topr	Io (mcd) Typ.	(mcd) Min.	(mA) IF	VF(V) Typ.	Max.	λP Typ.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
5	Pure Green	Green Diffused	GaP	60	20	4	-30~+85	0.7	0.25	20	2.03	2.6	555	P11531CT-ND	.42	.38	.35	P11531TR-ND	3,000	138.00/M	LNJ311G8PRA
	Pure Green	White Diffused	GaN	40	10	5	-25~+85	34	14.4	10	3.0	3.7	525	P11542CT-ND†	4.15	3.90	3.64	P11542TR-ND†	3,000	1895.00/M	LNJ611W8WRU
	Pure Green	White Diffused	GaN	40	10	5	-25~+85	34	14.4	10	3.0	3.7	525	P11538CT-ND	4.15	3.90	3.64	P11538TR-ND	3,000	1895.00/M	LNJ611W8WRA
	Pure Green	Clear Non Diffused	GaN	40	10	5	-25~+85	51	27.2	10	3.0	3.7	525	P11524CT-ND	4.15	3.90	3.64	P11524TR-ND	3,000	1895.00/M	LNJ616C8WRA
	High Bright Green	Green Diffused	GaP	60	20	4	-30~+85	5.5	1.8	10	2.03	2.6	565	P540CT-ND†	.33	.31	.28	P540TR-ND†	3,000	118.00/M	LNJ311G8TRU
	Amber	Yellow Diffused	GaAsP	60	20	4	-30~+85	2.2	0.75	20	2.0	2.6	590	P11596CT-ND†	.39	.36	.32	P11596TR-ND†	3,000	128.00/M	LNJ411K8YRU
	Amber	Yellow Diffused	GaAsP	60	20	4	-30~+85	2.2	0.75	20	2.0	2.6	590	P11528CT-ND	.39	.36	.32	P11528TR-ND	3,000	128.00/M	LNJ411K8YRA
	Amber	Yellow Clear Non Diff.	GaAsP	60	20	4	-30~+85	3.3	1.2	20	2.0	2.6	590	P11514CT-ND	.39	.36	.32	P11514TR-ND	3,000	128.00/M	LNJ416Q8YRA
	Amber	Yellow Clear Non Diff.	GaAsP	60	20	4	-30~+85	3.3	1.2	20	2.0	2.6	590	P11546CT-ND†	.39	.36	.32	P11546TR-ND†	3,000	128.00/M	LNJ416Q8YRU
	Amber	Yellow Diffused	InGaAlP	55	20	4	-30~+85	17	9.0	20	2.0	2.5	595	P11541CT-ND†	.63	.59	.54	P11541TR-ND†	3,000	256.00/M	LNJ411K84RU
	Amber	Yellow Diffused	InGaAlP	55	20	4	-30~+85	17	9.0	20	2.0	2.5	595	P11536CT-ND	.63	.59	.54	P11536TR-ND	3,000	256.00/M	LNJ411K84RA
	Orange	Red Diffused	GaAsP	60	20	3	-30~+85	1.8	0.7	20	1.93	2.6	630	P11540CT-ND†	.39	.36	.32	P11540TR-ND†	3,000	128.00/M	LNJ811R8DRU
	Orange	Red Diffused	GaAsP	60	20	3	-30~+85	1.8	0.7	20	1.93	2.6	630	P11526CT-ND	.39	.36	.32	P11526TR-ND	3,000	128.00/M	LNJ811R8DRA
	Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	2.1	1.1	20	1.93	2.6	630	P11545CT-ND†	.39	.36	.32	P11545TR-ND†	3,000	128.00/M	LNJ816C8DRU
	Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	2.1	1.1	20	1.93	2.6	630	P11512CT-ND	.39	.36	.32	P11512TR-ND	3,000	128.00/M	LNJ816C8DRA
	Orange	Red Diffused	InGaAlP	50	20	4	-30~+85	6.5	3.5	20	1.9	2.5	620	P11534CT-ND	.63	.59	.54	P11534TR-ND	3,000	256.00/M	LNJ811R88RA
	Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	9.8	5.2	20	1.9	2.5	620	P11520CT-ND	.63	.59	.54	P11520TR-ND	3,000	256.00/M	LNJ816C88RA
	Orange	Red Diffused	InGaAlP	55	20	4	-30~+85	32	17	20	2.03	2.5	630	P11533CT-ND	.63	.59	.54	P11533TR-ND	3,000	256.00/M	LNJ811R83RA
	Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	48	25	20	2.03	2.5	630	P11519CT-ND	.63	.59	.54	P11519TR-ND	3,000	256.00/M	LNJ816C83RA
	Soft Orange	Yellow Diffused	GaAsP	60	20	3	-30~+85	1.0	0.5	20	1.93	2.6	610	P11527CT-ND	.39	.36	.32	P11527TR-ND	3,000	128.00/M	LNJ811K8SRA
	Soft Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	1.5	0.8	20	1.93	2.6	610	P11513CT-ND	.39	.36	.32	P11513TR-ND	3,000	128.00/M	LNJ816C8SRA
	Soft Orange	Red Diffused	InGaAlP	55	20	4	-30~+85	21	10	10	1.95	2.5	615	P11535CT-ND	.63	.59	.54	P11535TR-ND	3,000	256.00/M	LNJ811K87RA
	Soft Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	26	13.8	20	2.0	2.5	595	P11522CT-ND	.63	.59	.54	P11522TR-ND	3,000	256.00/M	LNJ416C84RA
	Soft Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	30	16	20	1.95	2.5	615	P11521CT-ND	.63	.59	.54	P11521TR-ND	3,000	256.00/M	LNJ816C87RA
	Blue	White Diffused	GaN	40	10	5	-25~+85	8.5	4.5	10	3.2	3.7	470	P11539CT-ND	4.15	3.90	3.64	P11539TR-ND	3,000	1895.00/M	LNJ911W8BRA
	Blue	White Diffused	GaN	40	10	5	-25~+85	8.5	4.5	10	3.2	3.7	470	P11543CT-ND†	4.15	3.90	3.64	P11543TR-ND†	3,000	1895.00/M	LNJ911W8BRU
	Blue	Clear Non Diffused	GaN	40	10	5	-25~+85	12.8	6.8	10	3.2	3.7	470	P11525CT-ND	4.15	3.90	3.64	P11525TR-ND	3,000	1895.00/M	LNJ916C8BRA
6	Yellow/Green	Clear	GaP	60	20	4	-30~+85	25	10	10	2.03	2.6	565	P595CT-ND	.73	.67	.61	P595TR-ND	2,000	231.00/M	LNJ318C8TRA
	Red	Clear Non Diffused	GaAlAs	60	20	3	-30~+85	32	17	20	1.72	2.5	660	P11576CT-ND†	.52	.49	.45	P11576TR-ND†	2,000	212.00/M	LNJ218C8ARU
	Red	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	75	40	20	1.92	2.5	645	P11568CT-ND	1.00	.94	.85	P11568TR-ND	2,000	404.00/M	LNJ218C82RA
	High Bright Red	Clear	GaAlAs	60	20	3	-30~+85	32	17	10	1.72	2.5	660	P596CT-ND	.73	.67	.61	P596TR-ND	2,000	231.00/M	LNJ218C8ARA
	Green	Clear Non Diffused	GaP	60	20	4	-30~+85	10.5	5.6	20	2.1	2.6	560	P11566CT-ND	.47	.45	.41	P11566TR-ND	2,000	192.00/M	LNJ318C84RA
	Green	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	110	58	20	2.03	2.5	575	P11579CT-ND†	1.00	.94	.85	P11579TR-ND†	2,000	404.00/M	LNJ318C83RU
	Green	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	110	58	20	2.03	2.5	575	P11573CT-ND	1.00	.94	.85	P11573TR-ND	2,000	404.00/M	LNJ318C83RA
	Pure Green	Clear Non Diffused	GaP	60	20	4	-30~+85	3.5	2.0	20	2.03	2.6	555	P11567CT-ND	.52	.49	.45	P11567TR-ND	2,000	212.00/M	LNJ318C8PRA
	Amber	Yellow Clear Non Diff.	GaAsP	60	20	4	-30~+85	7.0	3.7	20	2.0	2.6	590	P11578CT-ND†	.50	.47	.43	P11578TR-ND†	2,000	202.00/M	LNJ418Q8YRU
	Amber	Yellow Clear Non Diff.	GaAsP	60	20	4	-30~+85	7.0	3.7	20	2.0	2.6	590	P11565CT-ND	.50	.47	.43	P11565TR-ND	2,000	202.00/M	LNJ418Q8YRA
	Amber	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	85	45	20	2.0	2.5	595	P11572CT-ND	1.00	.94	.85	P11572TR-ND	2,000	404.00/M	LNJ418C84RA
	Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	33	17.6	20	1.9	2.5	620	P11570CT-ND	1.00	.94	.85	P11570TR-ND	2,000	404.00/M	LNJ818C88RA
	Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	9.0	4.5	20	1.93	2.6	630	P11563CT-ND	.50	.47	.43	P11563TR-ND	2,000	202.00/M	LNJ818C8DRA
	Orange	Non Diffused	InGaAlP	55	20	4	-30~+85	160	85	20	2.03	2.5	630	P11569CT-ND	1.00	.94	.85	P11569TR-ND	2,000	404.00/M	LNJ818C83RA
	Soft Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	5.0	2.7	20	1.93	2.6	610	P11564CT-ND	.50	.47	.43	P11564TR-ND	2,000	202.00/M	LNJ818C8SRA
	Soft Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	5.0	2.7	10	1.03	2.6	610	P11577CT-ND†	.50	.47	.43	P11577TR-ND†	2,000	202.00/M	LNJ818C8SRU
	Soft Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	100	56	20	1.95	2.5	615	P11571CT-ND	1.00	.94	.85	P11571TR-ND	2,000	404.00/M	LNJ818C87RA
7	Red	Clear Non Diffused	GaAlAs	60	20	3	-30~+85	14	7.4	20	1.72	2.5	660	P11574CT-ND†	.51	.46	.42	P11574TR-ND†	2,500	168.00/M	LNJ218C8ARU1
	Red	Clear Non Diffused	GaAlAs	60	20	3	-30~+85	14	7.4	20	1.72	2.5	660	P11549CT-ND	.51	.46	.42	P11549TR-ND	2,500	168.00/M	LNJ218C8ARA1
	Red	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	37	19.7	20	1.92	2.5	645	P11556CT-ND	.78	.73	.66	P11556TR-ND	2,500	315.00/M	LNJ218C82RA1
	Green	Clear Non Diffused	GaP	60	20	4	-30~+85	5.2	2.8	20	2.1	2.6	560	P11554CT-ND	.45	.41	.37	P11554TR-ND	2,500	148.00/M	LNJ318C84RA1
	Green	Clear Non Diffused	GaP	60	20	4	-30~+85	12	6.4	20	2.03	2.6	565	P11575CT-ND†	.45	.41	.37	P11575TR-ND†	2,500	148.00/M	LNJ318C8TRU1
	Green	Clear Non Diffused	GaP	60	20	4	-30~+85	12	6.4	20	2.03	2.6	565	P11553CT-ND	.45	.41	.37	P11553TR-ND	2,500	148.00/M	LNJ318C8TRA1
	Green	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	30	16	20	2.03	2.5	575	P11561CT-ND	.78	.73	.66	P11561TR-ND	2,500	315.00/M	LNJ318C83RA1
	Pure Green	Clear Non Diffused	GaP	60	20	4	-30~+85	1.7	0.9	20	2.03	2.6	555	P11555CT-ND	.51	.46	.42	P11555TR-ND	2,500	168.00/M	LNJ318C8PRA1
	Pure Green	Clear Non Diffused	GaN	40	10	5	-25~+85	85	45.3	10	3.0	3.7	525	P11562CT-ND	4.15	3.90	3.64	P11562TR-ND	2,500	1895.00/M	LNJ618C8WRA1
	Amber	Yellow Clear Non Diff.	GaAsP	60	20	3	-30~+85	4.5	2.4	20	2.0	2.6	610	P11552CT-ND	.48	.44	.39	P11552TR-ND	2,500	158.00/M	LNJ418Q8YRA1
	Amber	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	42.5	22.7	20	2.0	2.5	595	P11560CT-ND	.78	.73	.66	P11560TR-ND	2,500	315.00/M	LNJ418C84RA1
	Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	4.5	2.1	20	1.93	2.6	630	P11550CT-ND	.48	.44	.39	P11550TR-ND	2,500	158.00/M	LNJ818C8DRA1
	Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	16.3	8.7	20	1.9	2.5	620	P11558CT-ND	.78	.73	.66	P11558TR-ND	2,500	315.00/M	LNJ818C88RA1
	Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	80	42	20	2.03	2.5	630	P11557CT-ND	.78	.73	.66	P11557TR-ND	2,500	315.00/M	LNJ818C83RA1
	Soft Orange	Clear Non Diffused	GaAsP	60	20	3	-30~+85	2.5	1.3	20	1.93	2.6	610	P11551CT-ND	.48	.44	.39	P11551TR-ND	2,500	158.00/M	LNJ818C8SRA1
	Soft Orange	Clear Non Diffused	InGaAlP	55	20	4	-30~+85	52.5	28.0	20	1.95	2.5	615	P11559CT-ND	.78	.73	.66	P11559TR-ND	2,500	315.00/M	LNJ818C87RA1
8	Red	Red Diffused	GaP	60	20	4	-25~+85	0.4	0.15	10	2.03	2.6	700	P490CT-ND	—	.31	.28	P490TR-ND	6,000	99.00/M	LN1271R-(TR)
	Red	Red Diffused	GaAlAs	60	20	3	-25~+85	5.0	1.7	20	1.72	2.5	660	P11505CT-ND	.38	.34	.31	P11505TR-ND	3,000	124.00/M	LN1271RALTRP
	Ultra Bright Red	Red Diffused	GaAlAs	60	20	3	-25~+85	5.0	1.70	10	1.72	2.5	660	P493CT-ND†	—	.41	.37	P493TR-ND	6,000	113.00/M	LN1271RAL-(TR)
	Green	Green Diffused	GaP	30	10	4	-30~+85	2.0	.7	5	1.9	2.4	565	P516CT-ND*	.33	.31	.28	P516TR-ND	6,000	113.00/M	LN1371SG-(TR)
	Green	Green Diffused	GaP	30	10	4	-25~+85	2.0	0.7	10	1.9	2.4	565	P11510CT-ND	.35	.32	.28	P11510TR-ND	3,000	113.00/M	LN1371SGTRP
	Green	Green Diffused	GaP	60	20	4	-25~+85	2.6	0.90	10	2.03	2.6	565	P491CT-ND	—	.31	.28	P491TR-ND	6,000	99.00/M	LN1371G-(TR)
	Green	Green Diffused	GaP	60	20	4	-25~+85	2.6	0.9	20	2.03	2.6	565	P11509CT-ND	.33	.30	.27	P11509TR-ND	3,000	108.00/M	LN1371GTRP
	Green	Green Diffused	GaP	60	20	4	-25~+85	5.0	3.0	20	2.03	2.6	565	P11595CT-ND	.35	.32	.28	P11595TR-ND	3,000	113.00/M	LNJ306G5TUWQ
	High Bright Green	Green Diffused	GaP	60	20	4	-25~+85	5.0	3.00	10	2.03	2.6	565	P494CT-ND	—	.33	.30	P494TR-ND	6,000	103.00/M	LN1371G(H)-6U(TR)
	Amber	Yellow Diffused	GaAsP	60	20	4	-25~+85	1.0	0.4	10	2.00	2.6	590	P11125CT-ND	.36	.33	.30	P11125TR-ND	6,000	104.00/M	LN1471Y-(TR)
	Amber	Yellow Diffused	GaAsP	30	10	4	-30~+85	1.0	.4	5	1.9	2.4	590	P517CT-ND*	.33	.31	.28	P517TR-ND	6,000	119.00/M	LN1471SY-(TR)
	Amber	Yellow Diffused	GaAsP	30	10	4	-30~+85	1.0	0.4	10	1.9	2.4	590	P11508CT-ND	.35	.32	.29	P11508TR-ND	3,000	114.00/M	LN1471SYTRP
	Orange	Yellow Diffused	GaAsP	30	10	3	-30~+85	1.0	.4	5	1.8	2.4	630	P518CT-ND*	.33	.31	.28	P518TR-ND	6,000	119.00/M	LN1871SR-(TR)
	Orange	Red Diffused	GaAsP	30	10	3	-30~+85	1.0	0.4	10	1.8	2.4	630	P11506CT-ND	.37	.33	.30	P11506TR-ND	3,000	119.00/M	LN1871SRTRP
	Soft Orange	Yellow Diffused	GaAsP	60	20	3	-25~+85	0.8	0.30	10	1.93	2.6	610	P492CT-ND	—	.31	.29	P492TR-ND	6,000	104.00/M	LN1871Y5-(TR)
	Soft Orange	Yellow Diffused	GaAsP	60	20	3	-25~+85	0.8	0.3	20	1.93	2.6	610	P11507CT-ND	.35	.32	.29	P11507TR-ND	3,000	114.00/M	LN1871Y5TRP

* Low current LED, same brightness as previous design with half the power, ideal for battery powered equipment. † Thru-Board type

(Continued)

Fig. 13 — J-Lead-S Type

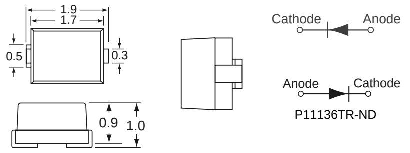


Fig. 14 — TSS Bi-Color Type

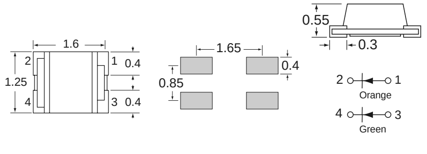


Fig. 15 — TSS Tri-Color Type

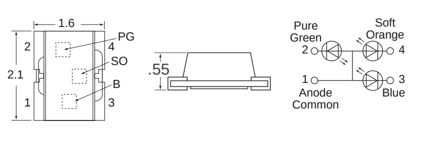


Fig. 16 — Dome Lens (Bi-Color)

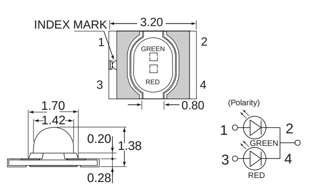


Fig. 17 — Side view (Bi-Color)

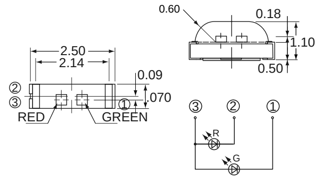


Fig. 18 — Tri-Color Leadless

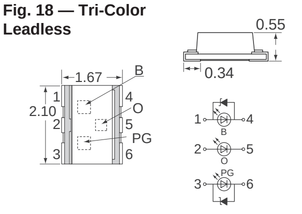


Fig. 19 — Tri-Color Leadless

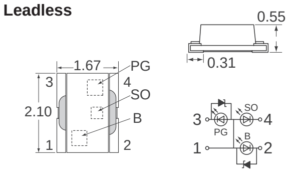


Fig.	Lighting Color	Lens	Process Tech.	Absolute Max. Ratings (mW) PD	(mA) IF	(V) VR	(°C) Topr	Io (mcd) Typ.	(mcd) Min.	(mA) IF	VF(V) Typ.	VF(V) Max.	λP Typ.	Digi-Key Part No.	Cut Tape Price Each 1	10	100	Digi-Key Part No.	Tape & Reel Size	Pricing	Panasonic Part No.
9	Green	Clear	GaP	60	20	4	-25~+80	7.5	2.80	20	2.20	2.8	565	P504CT-ND	.33	.31	.28	P504TR-ND	2,000	128.00/M	LN1361C-(TR)
	Green	Clear	GaP	60	20	4	-25~+80	15.0	8	20	2.2	2.8	565	P514CT-ND	.38	.35	.32	P514TR-ND	2,000	128.00/M	LN1361C(UY)-(TR)
	Amber	Clear	GaAsP	60	20	4	-25~+80	4.5	1.60	20	2.20	2.8	590	P512CT-ND	.34	.31	.29	P512TR-ND	2,000	138.00/M	LN1461C-(TR)
	Amber	Clear	InGaAlP	50	20	4	-25~+85	18.0	6.5	10	2.00	2.3	595	P11128CT-ND	.58	.53	.49	P11128TR-ND	2,000	276.00/M	LNJ461C34RA
	Orange	Clear	GaAsP	60	20	3	-25~+80	5.0	1.90	20	2.10	2.8	630	P505CT-ND	.33	.31	.28	P505TR-ND	2,000	138.00/M	LN1861C-(TR)
	Ultra Bright Red	Clear	GaAlAs	50	20	3	-25~+80	12.0	5.00	20	1.80	2.6	660	P513CT-ND	.44	.41	.37	P513TR-ND	2,000	148.00/M	LN1261CAL-(TR)
	Red	Clear	GaP	60	20	4	-25~+80	1.4	0.50	15	2.20	2.8	700	P503CT-ND	.33	.31	.28	P503TR-ND	2,000	128.00/M	LN1261C-(TR)
10	High Bright Green	White Diffused	GaP	60	20	4	-25~+85	5.0	3.00	10	2.03	2.6	565	P526CT-ND	.75	.69	.63	P526TR-ND	3,000	237.00/M	LNJ107W5PRW
	Ultra Bright Red	White Diffused	GaAlAs	60	20	3	-25~+85	5.0	1.70	10	1.72	2.5	660								
	Green	White Diffused	GaP	60	20	4	-25~+85	2.6	0.90	10	2.03	2.6	565	P515CT-ND	.75	.69	.63	P515TR-ND	3,000	217.00/M	LNJ107W5ARA1
	Orange	White Diffused	GaAsP	60	20	3	-25~+85	1.0	0.40	10	1.93	2.6	630								
11	Green	Clear	GaP	45	15	4	-25~+80	4.0	1.50	10	2.05	2.8	565	P507CT-ND	.75	.69	.63	P507TR-ND	1,000	256.00	LN2162C13-(TR)
	Red	Clear	GaAsP	45	15	3	-25~+80	1.8	0.65	10	2.00	2.8	650								
	Pure Green	Clear	GaAsP	45	15	3	-25~+65	2.5	12.0	10	2.05	2.8	555	P11147CT-ND	.80	.74	.67	P11147TR-ND	1,000	256.00	LN2162C68-(TR)
	Orange	Clear	GaAsP	45	15	3	-25~+65	2.1	0.8	10	1.95	2.8	630								
12	Blue	Clear	InGaN	40	10	5	-25~+85	9.0	3.0	5	3.20	3.7	470	P11127CT-ND	3.83	3.51	3.19	P11127TR-ND	3,000	1895.00/M	LNJ951C4BRA
	Green	Clear	GaP	45	15	4	-25~+80	5.0	1.90	10	2.10	2.8	565	P501CT-ND	.33	.31	.28	P501TR-ND	3,000	128.00/M	LN1351C-(TR)
	Amber	Clear	GaAsP	45	15	4	-25~+80	2.2	0.80	10	2.10	2.8	590	P511CT-ND	.33	.31	.28	P511TR-ND	3,000	138.00/M	LN1451C-(TR)
	Orange	Clear	GaAsP	45	15	3	-25~+80	3.5	1.30	10	.05	2.8	630	P502CT-ND	.33	.31	.28	P502TR-ND	3,000	138.00/M	LN1851C-(TR)
	Red	Clear	GaAlAs	45	15	3	-25~+85	9.0	3.3	10	1.75	2.6	660	P11126CT-ND	.44	.41	.38	P11126TR-ND	3,000	148.00/M	LN1251CAL-(TR)
	Red	Clear	GaAsP	45	15	4	-25~+80	1.2	0.45	10	2.10	2.8	700	P500CT-ND	.33	.31	.28	P500TR-ND	3,000	128.00/M	LN1251C-(TR)
13	Red	Red Diffused	GaP	60	20	4	-25~+85	0.4	0.15	20	2.03	2.6	700	P11496CT-ND	.33	.30	.27	P11496TR-ND	3,000	108.00/M	LNJ206R5RUX
	Red	Red Diffused	GaP	60	20	4	-25~+85	0.4	0.15	20	2.03	2.6	700	P11490CT-ND	.33	.30	.27	P11490TR-ND	6,000	99.00/M	LNJ206R5RRX
	Red	Red Diffused	GaAlAs	60	20	3	-25~+85	5.0	1.7	20	1.72	2.5	660	P11497CT-ND	.38	.34	.31	P11497TR-ND	3,000	124.00/M	LNJ206R5AUX
	High Bright Red	Red Diffused	GaAlAs	60	20	3	-25~+85	5.0	1.7	10	1.72	2.5	660	P11136CT-ND	.33	.31	.28	P11136TR-ND	6,000	113.00/M	LNJ206R5ARA
	Green	Green Diffused	GaP	60	20	4	-25~+85	2.6	0.9	10	2.03	2.6	565	P11137CT-ND	.33	.31	.28	P11137TR-ND	6,000	99.00/M	LNJ306G5URA
	Green	Green Diffused	GaP	60	20	4	-25~+85	3.5	1.35	20	2.03	2.6	565	P11500CT-ND	.33	.30	.27	P11500TR-ND	3,000	108.00/M	LNJ306G5UUX
	Pure Green	Green Diffused	GaP	60	20	4	-25~+85	0.65	0.25	20	2.03	2.6	555	P11501CT-ND	.38	.34	.31	P11501TR-ND	3,000	124.00/M	LNJ306G5PUX
	Pure Green	Green Diffused	GaP	60	20	4	-25~+85	0.65	0.25	20	2.03	2.6	555	P11493CT-ND	.38	.34	.31	P11493TR-ND	6,000	113.00/M	LNJ306G5PRX
	Amber	Yellow Diffused	GaAsP	60	20	4	-25~+85	1.0	0.4	20	2.0	2.6	590	P11499CT-ND	.35	.32	.29	P11499TR-ND	3,000	114.00/M	LNJ406K5YUX
	Amber	Yellow Diffused	GaAsP	60	20	4	-25~+85	1.0	0.4	20	2.0	2.6	590	P11492CT-ND	.35	.32	.29	P11492TR-ND	6,000	104.00/M	LNJ406K5YRX
	Amber	Yellow Diffused	InGaAlP	50	20	4	-25~+85	8.5	3.5	20	2.0	2.3	595	P11503CT-ND	.56	.53	.48	P11503TR-ND	3,000	229.00/M	LNJ406K54UX
	Amber	Yellow Diffused	InGaAlP	50	20	4	-25~+85	8.5	3.5	20	2.0	2.3	595	P11495CT-ND	.56	.53	.48	P11495TR-ND	6,000	208.00/M	LNJ406K54RX
	Orange	Red Diffused	InGaAlP	50	20	4	-25~+85	5.0	2.0	20	1.9	2.3	620	P11494CT-ND	.56	.53	.48	P11494TR-ND	6,000	208.00/M	LNJ806R58RX
	Orange	Red Diffused	InGaAlP	50	20	4	-25~+85	5.0	2.0	20	1.9	2.3	620	P11502CT-ND	.56	.53	.48	P11502TR-ND	3,000	229.00/M	LNJ806R58UX
	Soft Orange	Yellow Diffused	GaAsP	60	20	3	-25~+85	0.8	0.3	20	1.93	2.6	610	P11491CT-ND	.35	.32	.29	P11491TR-ND	6,000	104.00/M	LNJ806K5SRX
	Soft Orange	Yellow Diffused	GaAsP	60	20	3	-25~+85	0.8	0.3	20	1.93	2.6	610	P11498CT-ND	.35	.32	.29	P11498TR-ND	3,000	114.00/M	LNJ806K5SUX
	Blue	White Diffused	GaN	40	10	5	-25~+85	5.5	2.0	10	3.2	3.7	470	P11504CT-ND	4.15	3.90	3.64	P11504TR-ND	3,000	1895.00/M	LNJ906W5BUX
14	Green	White Diffused	GaP	60	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11143CT-ND	.80	.74	.67	P11143TR-ND	5,000	188.00/M	LNJ115W8PRA
	Red	White Diffused	GaAlAs	50	20	3	-30~+85	6.7	2.2	10	1.72	2.5	655								
	Green	White Diffused	GaN	40	10	5	-30~+85	34	12.9	10	3.0	3.7	525	P11590CT-ND	5.62	5.27	4.92	P11590TR-ND	5,000	2331.00/M	LNJ115W86RA
	Red	White Diffused	GaAlAs	55	20	3	-30~+85	6.7	2.8	20	1.72	2.5	655								
	Green	White Diffused	GaP	60	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11144CT-ND	1.11	1.02	.93	P11144TR-ND	5,000	448.00/M	LNJ115W88RA
	Amber	White Diffused	InGaAlP	55	20	4	-30~+85	21.0	7.0	10	2.10	2.6	595								
	Green	White Diffused	GaP	60	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P11142CT-ND	.80	.74	.67	P11142TR-ND	5,000	170.00/M	LNJ115W8ARA
	Soft Orange	White Diffused	GaAsP	60	20	3	-30~+85	1.0	0.4	10	1.93	2.6	630								
	Green	White Diffused	GaP	60	20	4	-30~+85	5.0	1.8	20	2.03	2.6	565	P11591CT-ND	1.22	1.14	1.03	P11591TR-ND	5,000	448.00/M	LNJ115W89RA
	Soft Orange	White Diffused	InGaAlP	55	20	4	-30~+85	21	7.0	20	1.95	2.5	615								
	Pure Green	White Diffused	InGaN	40	10	5	-30~+85	34.0	10.3	5	3.00	3.7	525	P11145CT-ND	5.78	5.31	4.83	P11145TR-ND	5,000	2331.00/M	LNJ115W8VRA
	Soft Orange	White Diffused	InGaAlP	55	20	4	-30~+85	23.0	7.0	10	1.95	2.5	615								
	Blue	White Diffused	GaN	40	10	5	-30~+85	8.5	4.0	10	3.2	3.7	470	P11589CT-ND	5.62	5.27	4.92	P11589TR-ND	5,000	2331.00/M	LNJ115W8HRA
	Red	White Diffused	GaAlAs	55	20	3	-30~+85	6.7	2.8	20	1.72	2.5	655								
15	Blue	White Diffused	InGaN	40	15	5	-30~+85	10.0	5.0	5	3.00	3.7	470	P11146CT-ND	11.12	10.20	9.27	P11146TR-ND	2,000	4533.00/M	LNJ717W80RA
	Pure Green	White Diffused	InGaN	40	15	5	-30~+85	34.0	28.0	5	3.00	3.7	525								
	Soft Orange	White Diffused	InGaAlP	55	20	4	-30~+85	23.0	10.0	10	1.95	2.5	615								
16	Yellow/Green	White Diffused	GaP	60	20	4	-30~+85	10	5.0	10	2.03	2.6	565	P594CT-ND	.85	.79	.72	P594TR-ND	2,500	378.00/M	LNJ121W84RA
	High Bright Red	White Diffused	InGaAlP	55	20	4	-30~+85	13.4	7.0	10	1.92	2.5	645								
17	Yellow/Green	White Diffused	GaP	60	20	4	-30~+85	5.0	1.8	10	2.03	2.6	565	P593CT-ND	.85	.79	.72	P593TR-ND	4,000	378.00/M	LNJ123W8PRZ
	High Bright Red	White Diffused	GaAlAs	50	20	3	-30~+85	4.0	1.5	10	1.72	2.5	655								
18	Blue	White Diffused	GaN	65	15	4	-30~+85	35	10	15	3.1	3.7	470	P11592CT-ND	10.47	9.82	9.16	P11592TR-ND	2,000	4776.00/M	LNJ717W83RAS
	Pure Green	White Diffused	GaN	65	15	4	-30~+85	85	50	15	3.1	3.7	525								
	Orange	White Diffused	InGaAlP	70	20	4	-30~+85	45	15	20	2.0	2.5	630								
19	Blue	White Diffused	GaN	65	15	4	-30~+85	30	18	15	3.1	3.7	470	P11593CT-ND	10.47	9.82	9.16	P11593TR-ND	2,000	4776.00/M	LNJ717W80RA1
	Pure Green	White Diffused	GaN	65	15	4	30~+85	30	18	15	3.1	3.7	525								
	Soft Orange	White Diffused	InGaAlP	70	20	4	30~+85	45	20	20	1.95	2.5	615								

* Low current LED, same brightness as previous design with half the power, ideal for battery powered equipment. † Thru-Board type

Panasonic® Designer LEDs

Fig. 1

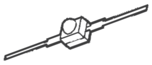


Fig. 2

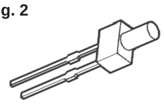


Fig. 3

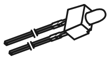


Fig. 4

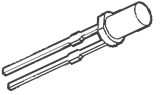


Fig. 5

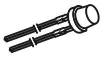
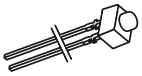


Fig. 6



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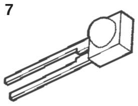


Fig. 8

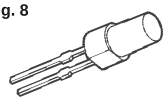


Fig. 9

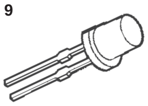


Fig. 10

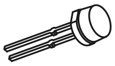


Fig. 11

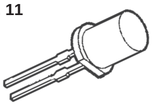


Fig. 12

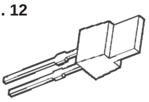


Fig. 13

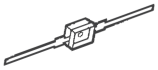


Fig. 14

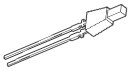


Fig. 15

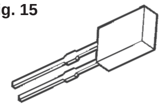


Fig. 16

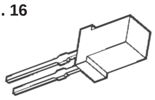


Fig. 17

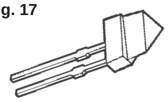
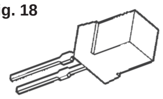


Fig. 18



				Electro-Optical Characteristics (Ta=25°C)					Dimensions (mm)							
Fig.	Lens Size	Color	Process Technology	P_D (mW)	I_F (mA)	V_R (V)	I_O (mcd)	λp (nm)	Lens Height	Lead Length	Lead Spacing	Digi-Key Part No.	Price Each 10	200	1,000	Panasonic Part No.
1	Ø1.8	Red Diffused	Gap	70	25	4	0.7	700	2.8	8.6, 8.6	—	P421-ND	.37	.30	.23	LN247RP
	Ø1.8	Green Diffused	Gap	90	30	4	4.5	565	2.8	8.6, 8.6	—	P422-ND	.42	.34	.26	LN347GP
	Ø1.8	Amber Diffused	GaAsP	90	30	4	4.0	590	2.8	8.6, 8.6	—	P423-ND	.48	.39	.30	LN447YP
2	Ø2.0	Red Diffused	Gap	70	20	4	1.0	700	8.0	14, 15.5	2.54	P424-ND	.22	.18	.12	LN222RP
	Ø2.0	Green Diffused	Gap	90	20	4	1.0	565	8.0	14, 15.5	2.54	P425-ND	.23	.18	.15	LN322GP
	Ø2.0	Amber Diffused	GaAsP	90	20	4	2.5	590	8.0	14, 15.5	2.54	P426-ND	.28	.23	.15	LN422YP
	Ø2.0	Red Diffused	Gap	70	25	4	1.0	700	8.0	27.0, 28.5	2.54	P544-ND	.35	.31	.19	LN222RPH
	Ø2.0	Green Diffused	Gap	90	30	4	1.0	565	8.0	27.0, 28.5	2.54	P545-ND	.35	.31	.19	LN322GPH
	Ø2.0	Amber Diffused	GaAsP	90	30	4	2.5	590	8.0	27.0, 28.5	2.54	P546-ND	.36	.31	.20	LN422YPH
3	Ø2.0	Red Diffused	Gap	70	25	4	1.0	700	7.7	32.0, 33.5	2.54	P547-ND	.35	.31	.19	LN282RPX
	Ø2.0	Green Diffused	Gap	90	30	4	1.2	565	7.7	32.0, 33.5	2.54	P548-ND	.35	.31	.19	LN382GPX
	Ø2.0	Amber Diffused	GaAsP	90	30	4	2.0	590	7.7	32.0, 33.5	2.54	P549-ND	.35	.31	.22	LN482YPX
	Ø2.0	Orange/Red Diff	GaAsP	90	30	3	6.0	630	7.7	32.0, 33.5	2.54	P550-ND	.35	.31	.22	LN882RPX
4	Ø2.8	Red Clear†	Gap	70	25	4	0.6	700	5.5	15.5, 17.0	2.54	P376-ND	.22	.18	.12	LN263CPP
	Ø2.8	Green Clear	Gap	90	30	4	0.8	565	5.5	15.5, 17.0	2.54	P377-ND	.23	.18	.13	LN363GCPP
	Ø2.8	Amber Clear	GaAsP	90	30	4	0.8	590	5.5	15.5, 17.0	2.54	P378-ND	.28	.23	.14	LN463YCPP
	Ø2.8	Orange Clear	GaAsP	90	30	3	1.0	630	5.5	15.5, 17.0	2.54	P379-ND	.28	.23	.14	LN863RCPP
5	Ø3.0	Red Diffused	Gap	70	25	4	0.7	700	3.8	24.5, 26.0	2.54	P551-ND	.28	.23	.14	LN277RPX
	Ø3.0	Green Diffused	Gap	90	30	4	5.0	565	3.8	24.5, 26.0	2.54	P552-ND	.29	.23	.14	LN377GPX
	Ø3.0	Orange/Red Diff	GaAsP	90	30	3	5.0	630	3.8	24.5, 26.0	2.54	P553-ND	.32	.26	.16	LN877RPX
6	Ø3.0	Red Diffused	Gap	70	25	4	2.0	700	6.0	27.0, 28.5	2.54	P554-ND	.27	.22	.14	LN238RPH
	Ø3.0	Green Diffused	Gap	90	30	4	4.0	565	6.0	27.0, 28.5	2.54	P555-ND	.29	.23	.14	LN338GPH
	Ø3.0	Amber Diffused	GaAsP	90	30	4	3.0	590	6.0	27.0, 28.5	2.54	P556-ND	.35	.31	.19	LN438YPH
7	Ø3.5	Red Diffused	Gap	70	25	4	0.7	700	2.3	12.5, 12.5	2.54	P441-ND	.31	.25	.19	LN25RP
	Ø3.5	Green Diffused	Gap	90	30	4	1.2	565	2.3	12.5, 12.5	2.54	P442-ND	.40	.32	.20	LN35GP
	Ø3.5	Amber Diffused	GaAsP	90	30	4	0.8	590	2.3	12.5, 12.5	2.54	P443-ND	.40	.32	.20	LN45YP
	Ø3.5	Orange Diffused	GaAsP	90	30	3	1.5	630	2.3	12.5, 12.5	2.54	P444-ND	.40	.32	.20	LN85RP
8	Ø3.7	Red Diffused	Gap	70	25	4	1.0	700	8.65	13.0, 14.5	2.54	P428-ND	.22	.18	.12	LN253RP
	Ø3.7	Green Diffused	Gap	90	30	4	3.0	565	8.65	13.0, 14.5	2.54	P429-ND	.23	.18	.13	LN353GP
	Ø3.7	Amber Diffused	GaAsP	90	30	4	3.0	590	8.65	13.0, 14.5	2.54	P430-ND	.28	.23	.14	LN453YP
9	Ø4.4	Red Clear†	Gap	70	25	4	2.0	700	5.0	14.5, 16.0	2.54	P431-ND	.22	.18	.12	LN240CP
	Ø4.4	Green Clear†	Gap	90	30	4	10.0	565	5.0	14.5, 16.0	2.54	P432-ND	.23	.18	.13	LN340CP
	Ø4.4	Orange/Pink Tint	GaAsP	90	30	3	6.0	630	5.0	14.5, 16.0	2.54	P434-ND	.28	.23	.17	LN840RCP
10	Ø4.4	Green Clear	Gap	90	30	4	10.0	565	5.0	14.5, 16.0	2.54	P557-ND	.29	.23	.14	LN340GCP
	Ø4.4	Amber Clear	GaAsP	90	30	4	5.0	590	5.0	14.5, 16.0	2.54	P558-ND	.35	.31	.19	LN440YCP
	Ø4.4	Red Diffused	Gap	70	25	4	0.8	700	5.0	27.3, 28.8	2.54	P559-ND	.28	.23	.14	LN240RPX
	Ø4.4	Green Diffused	Gap	90	30	4	2.5	565	5.0	27.3, 28.8	2.54	P560-ND	.29	.23	.14	LN340GPX
	Ø4.4	Orange/Red Diff	GaAsP	90	30	3	4.5	630	5.0	27.3, 28.8	2.54	P561-ND	.32	.26	.16	LN840RPX
11	Ø5.0	Red Clear†	Gap	70	25	4	0.6	700	6.7	13.3, 14.8	2.54	P380-ND	.22	.18	.12	LN264CP
	Ø5.0	Green Clear	Gap	90	30	4	2.0	565	6.7	13.3, 14.8	2.54	P381-ND	.23	.18	.13	LN364GCP
	Ø5.0	Amber Clear	GaAsP	90	30	4	1.0	590	6.7	13.3, 14.8	2.54	P382-ND	.28	.23	.14	LN464YCP
	Ø5.0	Orange Clear	GaAsP	90	30	3	1.0	630	6.7	13.3, 14.8	2.54	P383-ND	.29	.24	.18	LN864RCP
12	□ 1.0x5.0	Red Diffused	Gap	70	25	4	0.6	700	8.5	13.0, 14.5	2.54	P315-ND*	.22	.18	.12	LN224RP
	□ 1.0x5.0	Green Diffused	Gap	90	30	4	2.5	565	8.5	13.0, 14.5	2.54	P316-ND*	.23	.18	.12	LN324GP
	□ 1.0x5.0	Amber Diffused	GaAsP	90	30	4	2.0	590	8.5	13.0, 14.5	2.54	P317-ND	.28	.23	.13	LN424YP
13	□ 1.7x2.5	Red Clear†	Gap	60	20	4	1.5	700	—	8.5 Typ.	—	P417-ND	.28	.23	.16	LN01201C
	□ 1.7x2.5	Green Clear†	Gap	60	20	4	10.0	565	—	8.5 Typ.	—	P418-ND	.31	.25	.16	LN01301C
	□ 1.7x2.5	Amber Clear†	GaAsP	60	20	4	5.0	590	—	8.5 Typ.	—	P419-ND	.34	.27	.17	LN01401C
	□ 1.7x2.5	Orange Clear†	GaAsP	60	20	4	8.0	630	—	8.5 Typ.	—	P420-ND	.34	.27	.17	LN01801C
14	□ 1.8x1.8	Red Diffused	Gap	80	25	4	0.5	700	10.0	25.5, 27.0	2.54	P385-ND	.22	.18	.12	LN265RPH
	□ 1.8x1.8	Green Diffused	Gap	90	30	4	1.0	565	10.0	25.5, 27.0	2.54	P386-ND	.23	.18	.13	LN365GPH
	□ 1.8x1.8	Amber Diffused	GaAsP	90	30	4	2.5	590	10.0	25.5, 27.0	2.54	P387-ND	.28	.23	.17	LN465YP
15	□ 2.0x5.0	Red Diffused	Gap	70	20	4	0.4	700	7.5	14.5, 16.0	2.54	P437-ND	.22	.18	.12	LN242RP
	□ 2.0x5.0	Green Diffused	Gap	70	20	4	1.0	565	7.5	14.5, 16.0	2.54	P438-ND	.23	.18	.12	LN342GP
	□ 2.0x5.0	Amber Diffused	GaAsP	90	20	4	2.0	590	7.5	14.5, 16.0	2.54	P439-ND	.28	.23	.13	LN442YP
	□ 2.0x5.0	Orange Diffused	GaAsP	90	30	3	2.5	630	7.5	14.5, 16.0	2.54	P440-ND	.32	.26	.13	LN842RP
16	□ 4.0x4.0	Red Diffused	Gap	70	20	4	0.6	700	8.5	13.3, 14.8	2.54	P445-ND	.22	.18	.12	LN252RP
	□ 4.0x4.0	Green Diffused	Gap	90	30	4	1.0	565	8.5	13.3, 14.8	2.54	P446-ND	.23	.18	.12	LN352GP
	□ 4.0x4.0	Amber Diffused	GaAsP	90	40	4	1.0	590	8.5	13.3, 14.8	2.54	P447-ND	.28	.23	.13	LN452YP
17	∆ 4.0x4.5	Red Diffused	Gap	70	25	4	0.4	700	5.5	15.0, 16.5	2.54	P318-ND*	.22	.18	.12	LN212RP
	∆ 4.0x4.5	Green Diffused	Gap	90	30	4	1.0	565	5.5	15.0, 16.5	2.54	P319-ND*	.23	.18	.12	LN312GP
18	□ 5.0x5.0	Red Diffused	Gap	70	30	4	2.0	700	9.0	13.6, 15.1	2.54	P448-ND	.22	.18	.12	LN250RP
	□ 5.0x5.0	Green Diffused	Gap	90	30	4	2.0	545	9.0	13.6, 15.1	2.54	P449-ND	.23	.18	.12	LN350GP
	□ 5.0x5.0	Amber Diffused	GaAsP	90	30	4	1.5	590	9.0	13.6, 15.1	2.54	P450-ND	.28	.23	.13	LN450YP

* **LED-KIT-ND** ***Digi-Key® LED Kit*** 10 each of 18 popular LEDs (180 total pieces), remaining 14 part numbers shown on back cover **$33.98**

† Water Clear Lens when off

Panasonic LEDs — Level Meters High Brightness GA AlAs Red Light-Emitting Diodes

Fig. 1

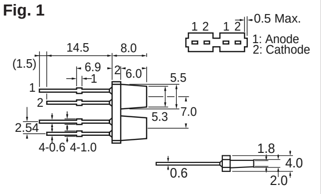


Fig. 2 – 1.75 x 7.0 rectangular

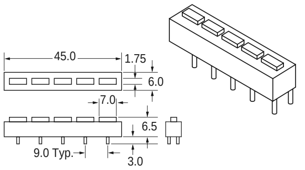


Fig. 3 – 2.8mm round

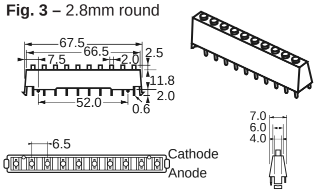


Fig. 4 – 10 Segment End to End Stackable

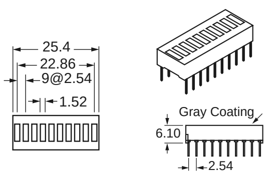


Fig. 5 – **T-1** 3mm dia.

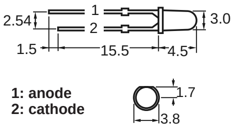


Fig. 6 – **T-1¾** 5mm dia.

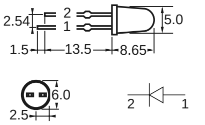


Fig. 7 – **T-1¾** 5mm dia.

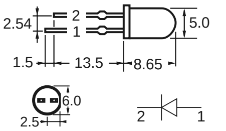


Fig. 8 – **T-1¾** 5mm dia.

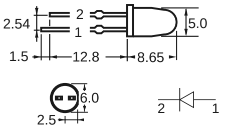


Fig. 9 – **T-1¾** 5mm dia.

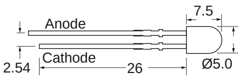


Fig.	Package	Color (Diffused)	IO (mcd @5mA) Typ.	Electro-Optical Characteristics (Ta=25°C) PD (mW)	VR (V)	IF (mA)	IO (mcd)	λp (nm)	Lens Size	Dimensions (mm) Lens Height	Lead Length	Digi-Key Part No.	Price Each 1	10	200	Panasonic Part No.
1	2 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P516-ND	.50	.45	.39	LN02202P
	2 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P517-ND	.66	.60	.52	LN02302P
	3 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P519-ND	.74	.68	.59	LN03202P
	3 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P520-ND	.98	.90	.77	LN03302P
	3 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P521-ND	.98	.90	.77	LN03402P
	4 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P522-ND	.91	.83	.71	LN04202P
	4 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P523-ND	1.31	1.20	1.03	LN04302P
	5 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P525-ND	1.25	1.14	.98	LN05202P
	5 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P526-ND	1.64	1.49	1.28	LN05302P
	5 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P527-ND	1.64	1.49	1.28	LN05402P
	6 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P528-ND	1.50	1.37	1.18	LN06202P
	6 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P529-ND	1.95	1.78	1.53	LN06302P
	6 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P530-ND	1.95	1.78	1.53	LN06402P
	7 Elements	Red	—	70	4	25	0.6	700	□1.8x5.3	6.0	14.5, 16.0	P531-ND	1.75	1.60	1.37	LN07202P
	7 Elements	Green	—	90	4	30	1.5	565	□1.8x5.3	6.0	14.5, 16.0	P532-ND	2.28	2.08	1.79	LN07302P
	7 Elements	Amber	—	90	4	30	1.5	590	□1.8x5.3	6.0	14.5, 16.0	P533-ND	2.45	2.23	1.92	LN07402P
2	—	Red	—	70	4	25	0.4	700	□1.75x7.0	7.65	24.1, 25.6, 27.1	P397-ND	1.45	1.32	1.14	LN05201P
3	—	Red	—	70	4	25	1.0	700	Ø2.0	2.5	2.0	P321-ND	3.55	3.23	2.78	LN10204P
	—	Green	—	90	4	30	1.0	565	Ø2.0	2.5	2.0	P401-ND	3.85	3.50	3.01	LN10304P
4	10 Elements	Green	—	60	5	20	1900	565	□1.52x5.08	—	4.6	P10722-ND	6.28	5.71	4.91	LNV310105A
	10 Elements	Red	—	60	3	20	1000	630	□1.52x5.08	—	4.6	P10723-ND	6.28	5.71	4.91	LNV810105A
HIGH BRIGHTNESS LEDs																
5	—	Red	6	70	3	30	50	665	Ø3.0	5.0	15.0, 16.5	P403-ND	.38	.35	.31	LN28RAL(US)
	—	Red (White)	14	70	3	30	50	665	Ø3.0	5.0	15.0, 16.5	P404-ND	.38	.35	.31	LN28WAL(US)
	—	Red†	20	70	3	30	85	665	Ø3.0	5.0	15.0, 16.5	P405-ND	.38	.35	.31	LN28CAL(US)
6	—	Red†	110	70	3	30	300	665	Ø5.0	8.65	12.0, 13.5	P406-ND	.39	.35	.31	LN21CAL(US)-2
7	—	Red†	190	70	3	30	1000	665	Ø5.0	8.65	12.0, 13.5	P407-ND	.69	.63	.54	LN21CAL(URS)
	—	Red†	470	70	3	30	2000	665	Ø5.0	8.65	12.0, 13.5	P408-ND	.96	.88	.76	LN261CAL(UR)
8	—	Red	20	70	3	30	200	660	Ø5.0	8.65	12.0, 13.5	P458-ND	.69	.63	.54	LN21RUQ
	—	Red†	20	70	3	30	85	665	Ø5.0	8.65	12.0, 13.5	P410-ND	.38	.35	.31	LN21CAL(U)
9	—	Green†	—	90	4	30	120	565	Ø5.0	7.5	26, 27.5	P461-ND	.30	.28	.24	LNG305CFT

† Nondiffused lens. Water clear lens when off.

Optoelectronics LEDs — Two Color

Fig. 1

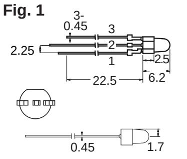


Fig. 2

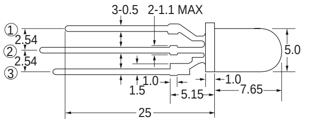


Fig. 3

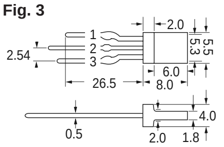


Fig. 4

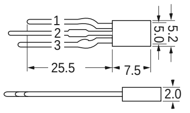


Fig. 5

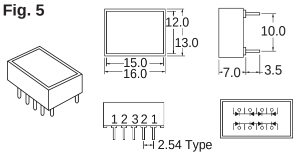
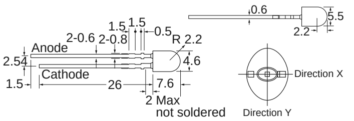


Fig.	Radiation Color/ Lens Color	Electro-Optical Characteristics (Ta=25°C) PD (mW)	IF (mA)	VR (V)	IO (mcd)	λp (nm)	Dimensions (mm) Lens Size	Lead Length	Digi-Key Part No.	Pricing 1	10	200	1,000	Panasonic Part No.
1	*1. Green/3. Orange/White Diffused	90/90	30/30	4/3	8.0/8.0	565/630	Ø3.0	22.5, 24.5, 26.5	P509-ND	.66	6.00	103.20	240.84	LN086WP38
2	*1. Green/3. Red/White Diffused	70	25	4	3.0	700	Ø5.0	24.1, 25.6, 27.1	P391-ND	.59	5.40	92.88	240.84	LN11WP23
	*1. Green/3. Red/Clear	70	25	4	3.0	700	Ø5.0	24.1, 25.6, 27.1	P392-ND	.59	5.40	92.88	240.84	LN11CP23
	*1. Amber/3. Red/White Diffused	70	25	4	3.0	700	Ø5.0	24.1, 25.6, 27.1	P393-ND	.66	6.00	103.20	240.84	LN11WP24
	*1. Amber/3. Green/White Diffused	90	30	4	15.0	565	Ø5.0	24.1, 25.6, 27.1	P395-ND	.66	6.00	103.20	240.84	LN11WP34
	*1. Orange/3. Green/White Diffused	90	30	4	15.0	565	Ø5.0	24.1, 25.6, 27.1	P399-ND	.66	6.00	103.20	240.84	LN11WP38
3	*1. Green/3. Red/White Diffused	70/90	25/30	4/4	.6/4.5	700/565	□1.8x5.3	26.5, 28.0, 29.5	P435-ND	.59	5.40	92.88	240.84	LN117WP23
4	*1. Orange/3. Green/White Diffused	90/90	30/30	4/3	3/2.5	565/630	□2.0x5.0	25.5, 27.0, 28.5	P436-ND	.66	6.00	103.20	240.84	LN142WP38
5	*1. Orange/3. Green/White Diffused	60	20	3	8.0	565	□12.0x15.0	3.5 typ.	P396-ND	3.22	29.24	502.95	2164.57	LN0801WP38

* Common Cathode

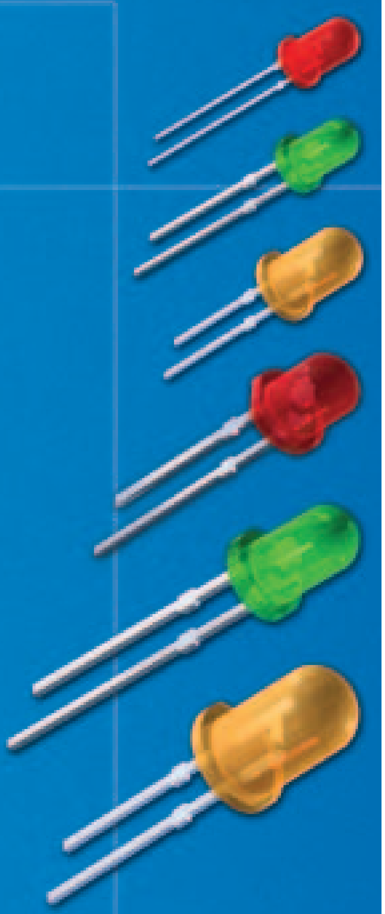
Wide Angle LEDs



Color	Io mcd Typ	Io mcd Min	(mA) IF	VF (V) Max	VF (V) Typ	λp Typ	Δλ Typ	(mA) IF	IR (μA) Max	IR (V) VR	Viewing Angle (deg) x	Viewing Angle (deg) y	IFDC Max	IFP* Max	Digi-Key Part No.	Pricing 1	10	200	Panasonic Part No.
Red	300	120	20	2.6	1.8	660	20	20	100	3	15	35	30	150	P462-ND	.59	5.40	92.88	LNG295LFCP2U
Green	120	75	20	2.8	2.2	565	30	20	10	4	17	35	30	150	P463-ND	.30	2.75	47.30	LNG395MFTP5U
Blue	370	145	20	4.0	3.5	470	30	20	10	5	15	35	30	100	P468-ND	2.67	24.95	463.32	LNG995PFBW

* The condition of IFP is duty 10%, pulse width 1ms.

Panasonic® LEDs



Package	Lens Size	Color	Electro-Optical Character (Ta=25°C)					Dimensions (mm)		Lead Spacing	Digi-Key Part No.	Pricing				Panasonic Part No.
			P_D (mW)	I_F (mA)	V_R (V)	I_O (mcd)	λ_p (nm)	Lens Height	Lead Length			10	200	1,000	5,000	
T-1	ϕ3.0	Red Diffused	70	25	4	0.8	700	5.0	15.0, 16.5	2.54	P363-ND	1.68	27.00	105.46	97.17/M	LN28RP
	ϕ3.0	Red Clear	70	25	4	1.5	700	5.0	15.0, 16.5	2.54	P308-ND•	1.68	27.00	107.85	99.37/M	LN28RCP
	ϕ3.0	Green Diffused	90	30	4	2.0	565	5.0	15.0, 16.5	2.54	P364-ND	2.15	34.50	112.64	103.78/M	LN38GP
	ϕ3.0	Green Clear	90	30	4	4.0	565	5.0	15.0, 16.5	2.54	P309-ND•	2.15	34.50	112.64	103.78/M	LN38GCP
	ϕ3.0	Amber Diffused	90	30	4	4.0	590	5.0	15.0, 16.5	2.54	P365-ND	2.24	36.00	122.23	112.61/M	LN48YP
	ϕ3.0	Amber Clear	90	30	4	6.0	590	5.0	15.0, 16.5	2.54	P310-ND•	2.24	36.00	122.23	112.61/M	LN48YCP
	ϕ3.0	Orange Diffused	90	30	4	6.0	630	5.0	15.0, 16.5	2.54	P366-ND	2.24	36.00	122.23	112.61/M	LN88RP
	ϕ3.0	Red Diffused	70	25	4	0.8	700	5.0	15.0, 16.5	2.54	P363-ND	1.68	27.00	105.46	97.17/M	LN28RP
	ϕ3.0	Red Clear	70	25	4	3.0	700	5.0	15.0, 16.5	2.54	P562-ND	2.24	36.00	124.62	114.82/M	LN28RCPP
	ϕ3.0	Red Diffused	70	25	4	2.8	700	5.5	26.5, 28.0	2.54	P563-ND	2.24	36.00	124.62	114.82/M	LN28RPX
	ϕ3.0	Green Diffused	90	30	4	10.0	565	5.5	26.5, 28.0	2.54	P564-ND	2.84	45.57	139.01	128.08/M	LN38GPX
	ϕ3.0	Amber Diffused	90	30	4	5.0	590	5.5	26.5, 28.0	2.54	P565-ND	3.50	60.20	187.32	171.29/M	LN48YPX
	ϕ3.0	Orange Red Diff.	90	30	3	5.0	630	5.5	26.5, 28.0	2.54	P566-ND	3.18	51.07	155.79	143.54/M	LN88RPX
	ϕ3.2	Red Diffused	70	25	4	1.0	700	4.6	24.5, 26.0	2.54	P567-ND	2.70	43.44	131.81	121.45/M	LN276RPX
	ϕ3.2	Red Clear	70	25	4	1.5	700	4.6	24.5, 26.0	2.54	P568-ND	2.70	43.44	131.81	121.45/M	LN276RCX
	ϕ3.2	Green Diffused	90	30	4	5.0	565	4.6	24.5, 26.0	2.54	P569-ND	2.84	45.57	139.01	128.08/M	LN376GPX
	ϕ3.2	Green Clear	90	30	4	15.0	565	4.6	24.5, 26.0	2.54	P570-ND	2.84	45.57	139.01	128.08/M	LN376GCPX
	ϕ3.2	Orange Red Clear	90	30	3	10.0	630	4.6	24.5, 26.0	2.54	P571-ND	3.18	51.07	155.79	143.54/M	LN876RCPX
T-1¹/₂	ϕ4.0	Red Diffused	70	25	4	2.0	700	6.0	26.45, 27.95	2.54	P572-ND	2.24	36.00	124.62	114.82/M	LN29RPX
	ϕ4.0	Green Diffused	90	30	4	6.0	565	6.0	26.45, 27.95	2.54	P573-ND	2.84	45.57	139.01	128.08/M	LN39GPX
	ϕ4.0	Amber Diffused	90	30	4	10.0	590	6.0	26.45, 27.95	2.54	P574-ND	3.50	60.20	187.32	171.29/M	LN49YPX
	ϕ4.0	Red Diffused	70	25	4	1.5	700	6.0	15.0, 16.5	2.54	P367-ND	1.68	27.00	107.85	99.37/M	LN29RPP
	ϕ4.0	Red Clear	70	25	4	1.5	700	6.0	15.0, 16.5	2.54	P311-ND•	1.68	27.00	107.85	99.37/M	LN29RCP
	ϕ4.0	Green Diffused	90	30	4	5.0	565	6.0	15.0, 16.5	2.54	P368-ND	2.15	34.50	112.64	103.78/M	LN39GPP
	ϕ4.0	Green Clear	90	30	4	3.0	565	6.0	15.0, 16.5	2.54	P312-ND•	2.15	34.50	112.64	103.78/M	LN39GCP
	ϕ4.0	Amber Diffused	90	30	4	10.0	590	6.0	15.0, 16.5	2.54	P369-ND	2.24	36.00	122.23	112.61/M	LN49YPP
	ϕ4.0	Amber Diffused	90	30	4	5.0	590	6.0	15.0, 16.5	2.54	P314-ND•	2.24	36.00	122.23	112.61/M	LN49YP
	ϕ4.0	Orange Diffused	90	30	3	10.0	630	6.0	15.0, 16.5	2.54	P370-ND	2.24	36.00	122.23	112.61/M	LN89RPP
	ϕ4.0	Orange Clear	90	30	3	30.0	630	6.0	15.0, 16.5	2.54	P371-ND	2.24	36.00	122.23	112.61/M	LN89RCPP
	ϕ4.8	Red Clear	70	25	4	4.0	700	6.7	12.5, 14.0	2.54	P575-ND	2.15	34.51	119.83	110.41/M	LN21RCPSS
T-1³/₄	ϕ5.0	Red Diffused	70	25	4	3.0	700	8.65	12.0, 13.5	2.54	P300-ND•	1.68	27.00	107.85	99.37/M	LN21RPHL
	ϕ5.0	Red Clear	70	25	4	5.0	700	8.65	12.0, 13.5	2.54	P301-ND•	1.68	27.00	107.85	99.37/M	LN21RCPHL
	ϕ5.0	Green Diffused	90	30	4	15.0	565	8.65	12.0, 13.5	2.54	P303-ND•	2.15	34.50	112.64	103.78/M	LN31GPHL
	ϕ5.0	Green Clear	90	30	4	20.0	565	8.65	12.0, 13.5	2.54	P302-ND•	2.15	34.50	112.64	103.78/M	LN31GCPHL
	ϕ5.0	Amber Diffused	90	30	4	8.0	590	8.65	12.0, 13.5	2.54	P306-ND•	2.24	36.00	122.23	112.61/M	LN41YPHL
	ϕ5.0	Amber Clear	90	30	4	20.0	590	8.65	12.0, 13.5	2.54	P304-ND•	2.24	36.00	122.23	112.61/M	LN41YCPHL
	ϕ5.0	Orange Diffused	90	30	3	10.0	630	8.65	12.0, 13.5	2.54	P307-ND•	2.24	36.00	122.23	112.61/M	LN81RPHL
	ϕ5.0	Orange Red Clear	90	30	3	20.0	630	8.65	12.0, 13.5	2.54	P305-ND•	2.24	36.00	122.23	112.61/M	LN81RCPHL
	ϕ5.0	Orange Clear †	90	30	3	25.0	630	8.65	12.0, 13.5	2.54	P457-ND	2.24	36.00	122.23	112.61/M	LN81CPHL
	ϕ5.0	Red Diffused	70	25	4	3.0	700	8.65	25.0, 26.5	2.54	P374-ND	1.68	27.00	107.85	99.37/M	LN21RPH
	ϕ5.0	Green Diffused	90	30	4	15.0	565	8.65	25.0, 26.5	2.54	P375-ND	2.15	34.50	112.64	103.78/M	LN31GPH
	ϕ5.0	Amber Diffused	90	30	4	8.0	590	8.65	25.0, 26.5	2.54	P372-ND	2.24	36.00	122.23	112.61/M	LN41YPH
	ϕ5.0	Orange Diffused	90	30	3	10.0	630	8.65	25.0, 26.5	2.54	P373-ND	2.24	36.00	122.23	112.61/M	LN81RPH
	ϕ5.0	Red Clear †	70	25	4	5.0	700	8.65	12.0, 13.5	2.54	P576-ND	2.24	36.00	124.62	114.82/M	LN21CPHL
	ϕ5.0	Green Clear	90	30	4	7.5	555	8.65	12.0, 13.5	2.54	P577-ND	2.70	43.41	127.03	117.04/M	LN31GCPHLG
	ϕ5.0	Orange Diffused#	90	30	3	15.0	630	8.65	12.0, 13.5	2.54	P578-ND	3.50	60.20	187.32	171.29/M	LN81WPHL
	ϕ5.0	Red Diffused	70	25	4	3.0	700	7.5	13.0, 14.5	2.54	P579-ND	2.65	42.59	124.62	114.82/M	LN21RPSL
	ϕ5.0	Green Diffused	90	30	4	15.0	565	7.5	13.0, 14.5	2.54	P580-ND	2.70	43.41	127.03	117.04/M	LN31GPSL
	ϕ5.0	Red Clear	70	25	4	5.0	700	8.65	25.0, 26.5	2.54	P581-ND	2.15	34.51	119.83	110.41/M	LN21RCPH
	ϕ5.0	Red Diffused#	70	25	4	3.0	700	8.65	25.0, 26.5	2.54	P582-ND	2.15	34.51	119.83	110.41/M	LN21WPH
	ϕ5.0	Red Clear †	70	25	4	5.0	700	8.65	25.0, 26.5	2.54	P583-ND	2.15	34.51	119.83	110.41/M	LN21CPH
	ϕ5.0	Green Clear	90	30	4	20.0	565	8.65	25.0, 26.5	2.54	P584-ND	2.70	43.41	127.03	117.04/M	LN31GCPH
	ϕ5.0	Green Yellow Clear	90	30	4	56.0	563	8.65	25.0, 26.5	2.54	P585-ND	2.70	43.41	127.03	117.04/M	LN31YCPH
	ϕ5.0	Amber Clear	90	30	4	20.0	590	8.65	25.0, 26.5	2.54	P586-ND	2.75	44.23	129.42	119.24/M	LN41YCPH
	ϕ5.0	Orange Red Clear	90	30	3	20.0	630	8.65	25.0, 26.5	2.54	P587-ND	2.80	45.02	136.62	125.87/M	LN81RCPH
	ϕ5.0	Orange Clear †	90	30	3	25.0	630	8.65	25.0, 26.5	2.54	P588-ND	2.80	45.02	136.62	125.87/M	LN81CPH
	ϕ5.0	Red Diffused	70	25	4	3.0	700	8.65	27.0, 28.5	2.54	P589-ND	2.24	36.00	124.62	114.82/M	LN21RPX
	ϕ5.0	Green Diffused	90	30	4	15.0	565	8.65	27.0, 28.5	2.54	P590-ND	2.70	43.41	127.03	117.04/M	LN31GPX

• **LED-KIT-ND** ***Digi-Key® LED Kit*** 10 ea. of 14 popular LEDs indicated above plus P315-ND, P316-ND, P318-ND and P319-ND (180 total pieces) **$33.98**

† Water clear lens when off. # White diffused lens when off.

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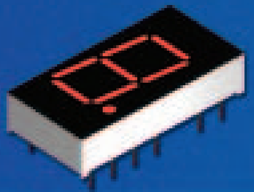
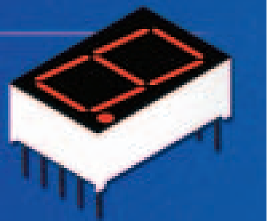
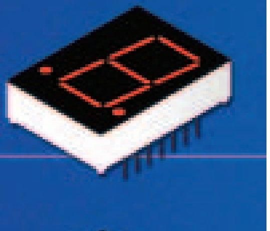
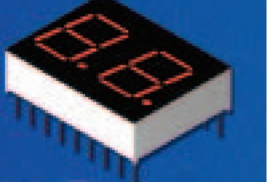
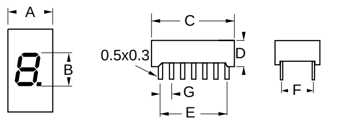






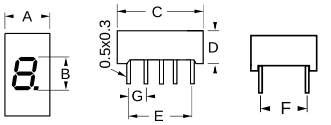


P322-P329, P343-P350

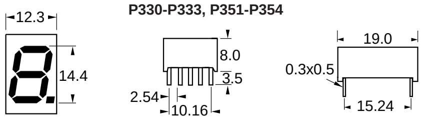


Size	A	B	C	D	E	F	G
0.3A	7.0	8.0	11.0	5.0	8.0	5.3	2.0
0.3B	10.0	7.6	19.0	5.5	15.24	7.6	2.54
.43	11.0	11.0	19.0	5.5	15.24	7.6	2.54

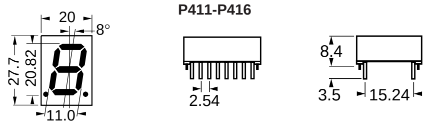
P510-P515



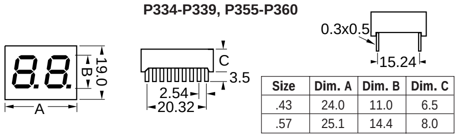
P330-P333, P351-P354



P411-P416

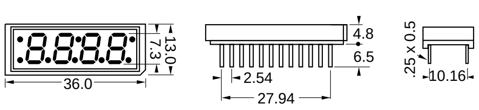


P334-P339, P355-P360



Size	Dim. A	Dim. B	Dim. C
.43	24.0	11.0	6.5
.57	25.1	14.4	8.0

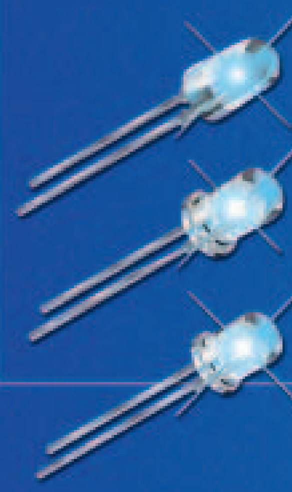
P453-P456



	Absolute Max. Ratings (Ta = 25°C)					Characteristics (Ta = 25°C)					Digi-Key Part No.		Pricing				Panasonic Part No.	
Color	Size	V_R (V)	I_F (mA)	I_{FP}† (mA)	P_D (mW)	at I_F (mA)	IO Typ. (seg.) (µcd)	Typ. (D.P.) (µcd)	at I_F (mA)	VF Typ. (V)	Common Anode	Common Cathode	1	10	200	1000	Common Anode	Common Cathode
Red	0.3A	5	15	80	40	5	200	70	10	2.1	P510-ND	P511-ND	2.09	18.97	326.24	1404.07	LN513RAM	LN513RKM
Green	0.3A	5	15	80	40	10	1,000	300	10	2.1	P512-ND	P513-ND	2.39	21.68	372.97	1605.20	LN513GAM	LN513GKM
Amber	0.3A	5	15	80	40	10	300	100	10	2.0	P514-ND	P515-ND	2.70	24.50	421.40	1813.62	LN513YAM	LN513YKM
Red	0.3B	5	20	100	60	5	400	150	20	2.2	P322-ND	P343-ND	1.56	14.18	243.81	1049.31	LN513RA	LN513RK
Green	0.3B	5	20	100	60	10	1,200	400	20	2.2	P323-ND	P344-ND	1.95	17.75	305.30	1313.95	LN513GA	LN513GK
Amber	0.3B	5	20	100	60	10	600	200	20	2.2	P324-ND	P345-ND	1.90	17.25	296.70	1276.93	LN513YA	LN513YK
Orange	0.3B	3	20	100	60	10	1,000	400	20	2.1	P325-ND	P346-ND	1.95	17.72	304.76	1311.63	LN513OA	LN513OK
Red	.43	5	20	100	60	5	450	150	20	2.2	P326-ND	P347-ND	1.57	14.25	245.10	1054.86	LN514RA	LN514RK
Green	.43	5	20	100	60	10	1,500	500	20	2.2	P327-ND	P348-ND	1.75	15.90	273.42	1176.72	LN514GA	LN514GK
Amber	.43	5	20	100	60	10	600	200	20	2.2	P328-ND	P349-ND	2.11	19.17	329.72	1419.06	LN514YA	LN514YK
Orange	.43	3	20	100	60	10	1,200	500	20	2.1	P329-ND	P350-ND	2.11	19.17	329.72	1419.06	LN514OA	LN514OK
Red	.57	5	20	100	60	5	600	250	20	2.2	P330-ND	P351-ND	1.62	14.72	253.10	1089.28	LN516RA	LN516RK
Green	.57	5	20	100	60	10	1,500	500	20	2.2	P331-ND	P352-ND	1.87	17.00	292.40	1258.43	LN516GA	LN516GK
Amber	.57	5	20	100	60	10	800	300	20	2.2	P332-ND	P353-ND	2.27	20.66	355.27	1528.99	LN516YA	LN516YK
Orange	.57	3	20	100	60	10	1,200	500	20	2.1	P333-ND	P354-ND	2.27	20.66	355.27	1528.99	LN516OA	LN516OK
Red	.82	5	20	100	60	5	450	150	20	2.2	P411-ND	P415-ND	3.16	28.75	494.50	2128.22	LN518RA	LN518RK
Green	.82	5	20	100	60	10	1,500	500	20	2.2	P412-ND	P416-ND	3.82	34.70	596.75	2568.30	LN518GA	LN518GK
Amber	.82	5	20	100	60	10	800	300	20	2.2	P413-ND	—	4.07	37.00	636.40	2738.93	LN518YA	—
Orange	.82	3	20	100	60	10	1,200	500	20	2.1	P414-ND	—	4.07	37.00	636.40	2738.93	LN518OA	—
Red	.43	5	20	100	60	5	450	150	20	2.2	P334-ND	P355-ND	2.11	19.17	329.72	1419.06	LN524RA	LN524RK
Green	.43	5	20	100	60	10	1,500	500	20	2.2	P335-ND	P356-ND	2.44	22.14	380.81	1638.92	LN524GA	LN524GK
Amber	.43	5	20	100	60	10	600	200	20	2.2	P336-ND	P357-ND	2.89	26.25	451.50	1943.16	LN524YA	LN524YK
Red	.57	5	20	100	60	5	600	250	20	2.2	P337-ND	P358-ND	2.06	18.75	322.50	1387.97	LN526RA	LN526RK
Green	.57	5	20	100	60	10	1,500	500	20	2.2	P338-ND	P359-ND	2.44	22.14	380.81	1638.92	LN526GA	LN526GK
Amber	.57	5	20	100	60	10	800	300	20	2.2	P339-ND	P360-ND	2.97	27.00	464.40	1998.68	LN526YA	LN526YK
Red	.28	5	10	60	30	5	200	100	10	2.03	P453-ND*	P454-ND*	9.76	88.75	1526.50	6569.74	LN543RAN8	LN543RKN8
Green	.28	5	10	60	30	10	200	80	10	2.03	P455-ND*	P456-ND*	10.48	95.25	1638.30	7050.90	LN543GAN8	LN543GKN8

* Multiplexed display † The condition of I_{FP} is duty 10%, pulse width is 1 msec.

Blue LEDs



High Brightness

Max Ratings:

Power Consumption: 120mW
Forward Current: 30mA
Reverse Voltage: 5V
Operating Ambient Temperature: -25 ~ +80°C.
Storage Temperature: -30 ~ +100°C
Water clear lens when off.

Blue LED Precautions in Handling:

A blue LED is sensitive to static electricity and care should be fully taken in handling it. Particularly, when an overvoltage is applied, which exceeds the absolute maximum rating of the blue LED, its energy damages the LED.

Fig. 1 T-1 3/4

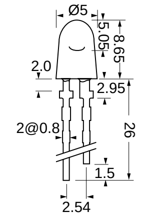


Fig. 2 T-1 3/4

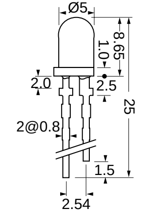
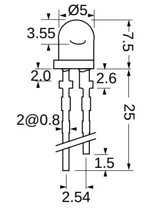


Fig. 3 T-1 3/4



	Io								IR								
	mcd	mcd	(mA)	VF (V)		λp	Δλ	(mA)	(µA)	(V)	Viewing Angle	Digi-Key	Pricing				Panasonic
Fig.	Typ	Min	I_F	Max	Typ	Typ	Typ	I_F	Max	V_R	(deg)	Part No.	1	10	200	1,000	Part No.
1	1500	640	20	4.0	3.5	470	30	20	10	5	15	P465-ND	2.67	24.95	463.32	1797.50	LNG992CFBW
2	650	260	20	4.0	3.5	470	30	20	10	5	30	P466-ND	2.67	24.95	463.32	1797.50	LNG901CFBW
3	350	140	20	4.0	3.5	470	30	20	10	5	45	P467-ND	2.67	24.95	463.32	1797.50	LNG91LCFBW

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